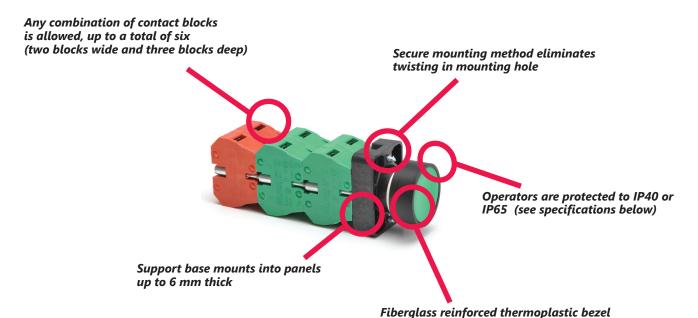
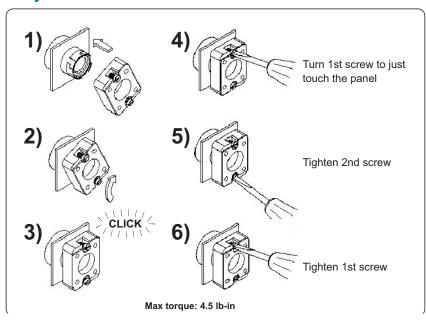
GCX Series 22mm Plastic Pilot Devices

Features



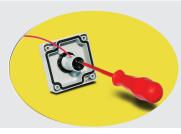
Easy installation







All indicators offer side wire entry with back screw terminals for easy wiring



Self-cleaning silver contacts provide reliable, low-energy switching

> Contacts rated A300 (Refer to E22 Series mounting/contact rating section for details)

Pressure plate wiring terminals for easy, secure wiring, accepting up to 14 AWG wire

Clear contact block for illustration purposes. Clear contact blocks are not available for sale from www.AutomationDirect.com

www.automationdirect.com Pilot Devices †PIL-1

GCX/ECX Series 22mm Plastic Pilot Devices Selection Guide



Flush

- Momentary 30 mm operators
- · Available in six colors: black, red, yellow, blue, white and green
- One contact block included

Illuminated

and green

• ON/OFF models also available



Extended

- · Momentary 30 mm operators
- · Available in six colors: black, red, yellow, blue, white and green
- · One contact block included



Two way

- Two way on/off control
- · With or without illuminated indicators
- One N.O. and one N.C. contact block included





• Available in clear, red, yellow, blue, white

• Momentary and push-push styles

• 24 and 120-volt models • Incandescent and LED models · One contact block included

• Flush or extended operators available

Mushroom

- Available in momentary, twist-to-release, and key release models
- · One contact block included
- Also available in incandescent and LED illuminated models



Selector switches

- Two and three-position in spring return and maintained, non-illuminated and illuminated
- Incandescent and LED models
- · Contact block included



Key switches

- Two and three-position
- · Contact blocks included



Joysticks

- Two and four-position, maintained and momentary
- · Contact blocks included



Indicator lights

- · Available in popular colors
- 24 and 120-volt models
- Frosted diffuser for even lighting
- Incandescent or LED indicators

Accessories







· Bulbs and LEDs

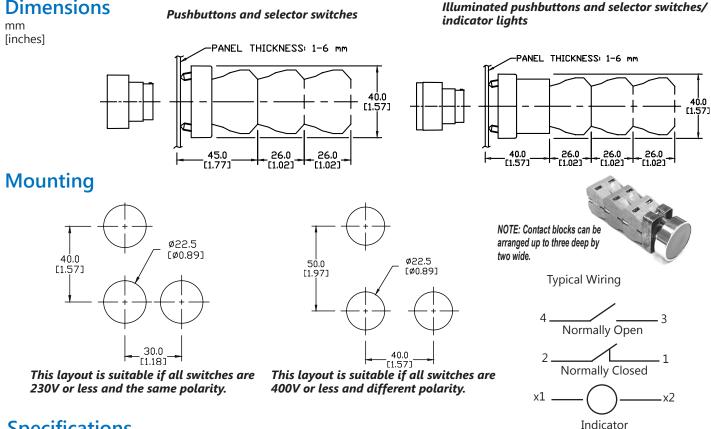


• Protective actuator caps

GCX Series 22mm Plastic Pilot Devices Specifications

Assembly information

These pushbuttons and indicator lights are supplied with the appropriate contact blocks, unless otherwise indicated. Use these drawings as a guide to make sure there is adequate clearance behind the panel.



Specifications

These specifications apply to all the GCX and ECX 22mm plastic pushbuttons and switches.

Phy	sical Specifications
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14
Approvals	UL File E189258, IMQ (where specified)
Enclosure Material	Fiberglass reinforced thermoplastic
Contacts Material	Silver
Protection Degree	IP40 for GCX3151-24, GCX3151-120, GCX3153-24 and GCX3153-120. IP65 for all others.(See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.)
Electric Shock Protection	IEC 536, Class II
Temperature Ratings	Storage: -40 -to 80°C (-40 to 176° F) Operating: -25° to +70°C (-13° to 158° F)
Working Positions	All working positions are allowed
Mechanical Life	Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Emergency mushrooms and push-push pushbuttons: 300,000 operations
Positive Opening Operation	(according to IEC 947-5-1) All functions incorporating an NC contact are positive opening operation

Electrical Specifications						
Rated Thermal Current (contact block)	A300, Q300 (Refer to E22 Series mounting/contact rating section for details)					
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508					
Dielectric Strength	3kV (1 second)					
Insulation Resistance	2MΩ min. (500VDC)					
Initial Contact Resistance	≤ 25mΩ					
Short-Circuit Protection*	Cartridge fuses gl 10 A-500V 10, 3x38l1 100 KA					
Terminal Markings	According to CENELEC EN 50013					
Connections	Single screw with non-loosening plate clamp,14AWG max.,Tighten to 0.8Nm max					
Contacts Operation	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening					
Operation Frequency	3600 operations per hour max.					
Utilization Category	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps					

*Note: Recommended, not supplied

www.automationdirect.com **Pilot Devices** tPIL-3

GCX Series 22mm Plastic Pushbuttons

Momentary Flush Pushbuttons with protective plastic ring (30mm dia. actuator)



GCX3102

	Momentary Flush Pushbuttons									
Part Number	Color	Price	Drawing Link	Description						
GCX3100	Black	\$5.50	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole						
GCX3101	Red	\$5.50	PDF	One N.C. contact block, 30mm dia. actuator, mounts in 22mm hole						
GCX3102	Green	\$5.50	PDF							
GCX3103	Yellow	\$5.50	<u>PDF</u>	Over N.O. and the little of 20 and the contract of the contrac						
GCX3104	Blue	\$5.50	<u>PDF</u>	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole						
GCX3105	White	\$5.50	<u>PDF</u>							

Momentary Flush ON/OFF Pushbuttons with protective plastic ring (30mm dia. actuator)



GCX3106



GCX3107

	Momentary Flush ON/OFF Pushbuttons										
Part Number Color Price Drawing Link Description											
GCX3106	Red with OFF symbol (O) on actuator	\$6.25	PDF	One N.C. contact block,30mm dia. actuator, mounts in 22mm hole							
GCX3107	Green with ON symbol (I) on actuator	\$6.25	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole							

GCX Series 22mm Plastic Pushbuttons

Momentary Extended Pushbuttons



GCX3113

	Momentary Extended Pushbuttons								
Part Number	Color	Price	Drawing Link	Description					
GCX3110	Black	\$6.25	PDF	One N.O. contact block, extended 30mm dia. actuator, mounts in 22mm hole					
GCX3111	Red	\$6.25	PDF	One N.C. contact block, extended 30mm dia. actuator, mounts in 22mm hole					
GCX3112	Green	\$6.25	PDF						
GCX3113	Yellow	\$6.25	PDF	One N.O. contact block, extended 30mm disc actuator, mounts in 22mm hole					
GCX3114	Blue	\$6.25	PDF	One N.O. contact block, extended 30mm dia. actuator, mounts in 22mm hole					
GCX3115	White	\$6.25	<u>PDF</u>						

Double-Headed Momentary Pushbuttons



GCX3152 (with on/off symbols)



GCX3151-24

Double-headed Momentary Pushbuttons Description								
Part Number	Price	Drawing Link	Description					
GCX3150	\$11.50	<u>PDF</u>	Double-headed for on/off control, One N.O. and one N.C. contact block, fits in 22mm dia. hole, without symbols					
GCX3151-24	\$18.00	<u>PDF</u>	24VDC/VAC double-headed with indicator, faces without symbols. One N.O. and one N.C. contact block, fits in 22mm dia. hole					
GCX3151-120	\$18.50	PDF 120VDC/VAC double-headed with indicator, faces without symbols. One N N.C. contact block, fits in 22mm dia. hole						
GCX3152	\$12.50	PDF	Double-headed for on/off control. One N.O. and one N.C. contact block, fits in 22mm dia. hole. With "ON" (I) and "OFF" (0) symbols					
GCX3153-24	\$18.50	<u>PDF</u>	24VDC/VAC double-headed with indicator, with ON (1) and OFF (0) symbols. One N.O. and one N.C. contact block					
GCX3153-120	\$19.50	<u>PDF</u>	120VDC/AC double-headed with indicator, with ON (1) and OFF (0) symbols. One N.O. and one N.C. contact block					

^{*} Note: Lamp data in 22mm Plastic Pilot Device Accessories in this section.

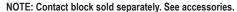
For accessories, see 22mm Plastic Pilot Device Accessories in this section.

www.automationdirect.com Pilot Devices †PIL-5

GCX Series 22mm Plastic Pushbuttons without Contact Block

Momentary Flush Pushbutton Operator (without contact block) (30mm dia. actuator)

	Momentary Flush Pushbutton Operators								
Part Number Color Price Drawing Link				Description					
GCX3100-SC	Black	\$2.75	PDF	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.					
GCX3101-SC	Red	\$2.75	PDF	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.					
GCX3102-SC	Green	\$2.75	PDF	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.					





GCX3100-SC



GCX3101-SC

Momentary Extended Pushbutton Operator (without contact block)(30mm dia. actuator)

Momentary Extended Pushbutton Operators								
Part Number Color Price Drawing Link Description								
GCX3110-SC	Black	\$2.75	PDF	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.				
GCX3111-SC	Red	\$2.75	PDF	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.				
GCX3112-SC	Green	\$2.75	PDF	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.				

NOTE: Contact block sold separately. See accessories.



GCX3111-SC

Contact Blocks

Contact blocks are available for all these products. See accessories.



GCX Series 22mm Plastic Illuminated Pushbuttons

Momentary Pushbuttons with protective plastic ring

All pushbuttons include operator, support base, indicating bulb, and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.

24 models available:

- Protective plastic ring for flush mount pushbutton functionality
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- · Available in six colors



GCX3202-24

Momentary Pushbuttons with Protective Plastic Ring									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]			
Incandescent									
GCX3201-24	Red	\$11.50	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA			
GCX3201-120	Red	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA			
GCX3202-24	Green	\$11.50	<u>PDF</u>	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA			
GCX3202-120	Green	\$13.00	<u>PDF</u>	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA			
GCX3203-24	Yellow	\$11.50	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA			
GCX3203-120	Yellow	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA			
GCX3204-24	Blue	\$11.50	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA			
GCX3204-120	Blue	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA			
GCX3205-24	Clear	\$11.50	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX3205-120	Clear	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA			
GCX3206-24	White	\$11.50	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX3206-120	White	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA			
LED									
GCX3201-24L	Red	\$17.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA			
GCX3201-120L	Red	\$18.50	PDF	22mm plastic LED illuminated pushbutton,120 VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA			
GCX3202-24L	Green	\$21.00	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA			
GCX3202-120L	Green	\$21.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA			
GCX3203-24L	Yellow	\$17.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26m/			
GCX3203-120L	Yellow	\$18.50	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA			
GCX3204-24L	Blue	\$21.00	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA			
GCX3204-120L	Blue	\$21.00	<u>PDF</u>	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA			
GCX3205-24L	Clear	\$22.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26m/			
GCX3205-120L	Clear	\$23.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA			
GCX3206-24L	White	\$22.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26m/			
GCX3206-120L	White	\$23.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA			

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GCX Series 22mm Plastic Illuminated Pushbuttons

Momentary Pushbuttons with extended actuator

All pushbuttons include operator, support base, indicating bulb, and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.

24 models available:

- Illuminated pushbuttons and indicators come complete with bulbs
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- Available in six colors



GCX3214-120

	Momentary Pushbuttons with Extended Actuator									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]				
Incandescent										
GCX3211-24	Red	\$11.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3211-120	Red	\$12.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3212-24	Green	\$11.50	PDF	22mm plastic extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3212-120	Green	\$12.50	PDF	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3213-24	Yellow	\$11.50	PDF	22mm plastic extended incandescent illuminated pushbutton,24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3213-120	Yellow	\$12.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3214-24	Blue	\$11.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3214-120	Blue	\$12.50	PDF	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3215-24	Clear	\$11.50	PDF	22mm plastic extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3215-120	Clear	\$12.50	PDF	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA				
GCX3216-24	White	\$11.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3216-120	White	\$12.50	<u>PDF</u>	22mm plastic extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA				
LED										
GCX3211-24L	Red	\$17.50	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3211-120L	Red	\$18.50	PDF	22mm plastic extended LED illuminated pushbutton, 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3212-24L	Green	\$22.00	PDF	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3212-120L	Green	\$21.00	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton,120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3213-24L	Yellow	\$17.50	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3213-120L	Yellow	\$18.50	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3214-24L	Blue	\$22.00	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3214-120L	Blue	\$21.00	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3215-24L	Clear	\$23.50	PDF	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3215-120L	Clear	\$25.00	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA				
GCX3216-24L	White	\$23.50	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3216-120L	White	\$25.00	<u>PDF</u>	22mm plastic extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA				

GCX Series 22mm Plastic Illuminated Pushbuttons

Push-Push Style Pushbuttons with protective plastic ring

All switches in this series use replacement contact block ECX1042-2 (Brown, N.O.) or ECX1030-5 or ECX1030-2 (Red, N.C.), sold separately.

24 models available:

- Latching Push-ON, Push-OFF actuator
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- Available in six colors
- These switches are supplied with a special N.O. contact block designed for use with this actuator, but they also work with standard N.C. contacts.



GCX3194-24

						5CX3194-24
			Push-	Push Style Pushbuttons with Protective Plastic I	Ring	
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]
Incandescent						
GCX3191-24	Red	\$13.00	<u>PDF</u>	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX3191-120	Red	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX3192-24	Green	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX3192-120	Green	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX3193-24	Yellow	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX3193-120	Yellow	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX3194-24	Blue	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX3194-120	Blue	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX3195-24	Clear	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3195-120	Clear	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1925-2, 5mA
GCX3196-24	White	\$13.00	PDF	22mm plastic incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3196-120	White	\$14.50	PDF	22mm plastic incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1925-2, 5mA
LED						
GCX3191-24L	Red	\$20.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX3191-120L	Red	\$21.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX3192-24L	Green	\$23.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX3192-120L	Green	\$25.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX3193-24L	Yellow	\$20.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX3193-120L	Yellow	\$21.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX3194-24L	Blue	\$23.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX3194-120L	Blue	\$25.00	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX3195-24L	Clear	\$25.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3195-120L	Clear	\$26.50	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1925-2, 5mA
GCX3196-24L	White	\$25.50	PDF	22mm plastic LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3196-120L	White	\$26.50	PDF	22mm plastic LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1925-2, 5mA
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GCX Series 22mm Plastic Illuminated Pushbuttons

Mushroom-Style Illuminated Pushbuttons

All pushbuttons include operator, support base, indicating bulb (if applicable) and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.



GCX3221-24

	Mushroom-Style Illuminated Pushbuttons									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]				
Incandescent										
GCX3221-24	Red	\$14.00	PDF	22mm plastic momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3221-120	Red	\$16.00	PDF	22mm plastic momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 120VDC/VAC,one N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3226-24	Red	\$16.00	PDF	22mm plastic pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3226-120	Red	\$17.50	PDF	22mm plastic pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				
LED										
GCX3221-24L	Red	\$19.50	PDF	22mm plastic momentary pushbutton with LED illuminated 40mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3221-120L	Red	\$21.00	PDF	22mm plastic momentary pushbutton with LED illuminated 40mm mushroom actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3226-24L	Red	\$22.00	PDF	22mm plastic pushbutton with LED illuminated 40mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3226-120L	Red	\$23.00	PDF	22mm plastic pushbutton with LED illuminated 40mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA				

Non-Illuminated Mushroom Pushbuttons

Feature large 60mm dia. actuator and mount in standard 22mm hole.

Non-illuminated Mushroom Pushbuttons									
Part Number Color Price Drawing Description									
GCX3131	Red	\$11.50	PDF	Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
GCX3134	Black	\$9.25	<u>PDF</u>	Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
GCX3135	Red	\$9.25	PDF	Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. EMERGENCY legend plate available (see Accessories).					
GCX3136	Red	\$14.50	PDF	Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole. 60mm dia. mushroom-style actuator.					
GCX3137	Red	\$11.50	PDF	Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 60mm dia. mushroom-style. EMERGENCY legend plate available (see Accessories).					
GCX3139	Yellow	\$9.25	PDF	Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
GCX3141	Red	\$17.00	<u>PDF</u>	Key operated release with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. EMERGENCY legend plate available (see Accessories).					



GCX3137



GCX3141 (key operated)



Note: Keyed switches come with two keys. All plastic 22mm keyed switches are keyed alike. Replacement keys are available. Order part no. <u>ECX1067-2</u> (pkg. of 2).

GCX Series 22mm Plastic Key Switches and Selector Switches

Key-Operated Selector Switches



	Key-Operated Selector Switches							
Part Number	Price	Drawing Link	Description					
GCX3420	\$17.00	PDF	AutomationDirect selector switch, 22mm, 2-position, maintained, key removable in all positions, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, key, 30mm, round, plastic.					
GCX3430	\$17.00	<u>PDF</u>	AutomationDirect selector switch, IP65, 22mm, 2-position, spring return from right, key removable left position, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, key, 30mm, round, plastic.					
GCX3470-22	\$25.00	PDF	AutomationDirect selector switch, 22mm, 3-position, maintained, key removable in all positions, (2) N.O./(2) N.C. contact(s), plastic base, plastic bezel, Operator: black, key, 30mm, round, plastic.					



Note: Keyed switches come with two keys. All plastic 22mm keyed switches are keyed the same. Replacement keys are available. Order part no. <u>ECX1067-2</u> (pkg. of 2). Keys for plastic 22mm keyed switches are not compatible with Cutler-Hammer key switches.



Note: When using switches having two-deep contact blocks (such as, Model <u>GCX3470-22</u>) with the 22mm plastic enclosures, be sure to use enclosures that are 74mm deep. 51 mm-deep enclosures are too shallow and the switch body will not fit.

Two-Position Selector Switches



GCX3300 Knob version

Two-Position Selector Switches								
Part Number Price Drawing Link Description								
GCX3300	\$9.00	PDF	AutomationDirect selector switch, 22mm, 2-position, maintained, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, knob, 30mm, round, plastic.					
GCX3310	\$10.00	PDF	AutomationDirect selector switch, 22mm, 2-position, spring return from right, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, knob, 30mm, round, plastic.					
GCX3350	\$10.00	PDF	AutomationDirect selector switch, 22mm, 2-position, maintained, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, lever, 30mm, round, plastic.					
GCX3360			AutomationDirect selector switch, 22mm, 2-position, spring return from right, (1) N.O. contact(s), plastic base, plastic bezel, Operator: black, lever, 30mm, round, plastic.					



GCX3350 Lever version

Contact Closure Sequence - 2-Position Switch								
Contact		Arrangement from front)	Switch Position (viewed from front)					
Blocks	Left	Right	Left (Note 1)	Right (Note 2)				
1 x N.C.	N.C.		Х					
I X N.C.		N.C.	Х					
1 x N.O.	N.O.			Х				
I X N.O.		N.O.		Х				
2 x N.C.	N.C.	N.C.	XX					
2 x N.O.	N.O.	N.O.		XX				

Note 1: Left switch position deactivates all contacts. Note 2: Right switch position activates all contacts.

GCX Series 22mm Plastic Selector Switches

Three-Position Selector Switches







GCX3370-22 Lever version

	Three-Position Selector Switches								
Part Number Price Drawing Link Description									
GCX3320-22	\$17.50	<u>PDF</u>	AutomationDirect selector switch, 22mm, 3-position, maintained, (2) N.O./(2) N.C. contact(s), plastic base, plastic bezel, Operator: black, knob, 30mm, round, plastic.						
GCX3330-22	\$18.00	PDF	AutomationDirect selector switch, 22mm, 3-position, spring return to center, (2) N.O./(2) N.C. contact(s), plastic base, plastic bezel, Operator: black, knob, 30mm, round, plastic.						
		PDF	AutomationDirect selector switch, 22mm, 3-position, maintained, (2) N.O./(2) N.C. contact(s), plastic base, plastic bezel, Operator: black, lever, 30mm, round, plastic.						
GCX3380-22	\$18.50	PDF	AutomationDirect selector switch, 22mm, 3-position, spring return to center, (2) N.O./(2) N.C. contact(s), plastic base, plastic bezel, Operator: black, lever, 30mm, round, plastic.						



Note: When using switches having two-deep contact blocks with the 22mm plastic enclosures, be sure to use enclosures that are 74 mm deep; 51 mm-deep enclosures are too shallow and the switch body will not fit

Contact Closure Sequence for Three-Position Switches

Contact Closure Sequence - 3-Position Switches									
Contact		Arrangement I from front)	Switch Position (viewed from front)						
Blocks	Left	Right	Left (Note 1)	Center (Note 2)	Right (Note 3)				
1 x N.C.	N.C.			х —	Х				
I X N.C.		N.C.	х —	— х					
1 x N.O.	N.O.		X						
I X N.O.		N.O.			Х				
2 x N.C.	N.C.	N.C.	Х	х	— Х				
2 x N.O.	N.O.	N.O.	Х		Х				

Note 1: Left switch position activates left side contacts (viewed from front).

Note 2: Center switch position deactivates all contacts.

Note 2: Right switch position activates right side contacts (viewed from front).

Illuminated Two-Position Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- Available in spring-return and maintained styles
- Replacement knobs are available



GCX3245-24

	Illuminated Spring Return Two-Position Selector Switches									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]				
Incandescent										
GCX3241-24	Red	\$14.00	<u>PDF</u>	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26m/				
GCX3241-120	Red	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3242-24	Green	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26m/				
GCX3242-120	Green	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3243-24	Yellow	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3243-120	Yellow	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3244-24	Blue	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26m/				
GCX3244-120	Blue	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3245-24	Clear	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26m/				
GCX3245-120	Clear	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				
LED	'	<u> </u>								
GCX3241-24L	Red	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26m/				
GCX3241-120L	Red	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3242-24L	Green	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26m/				
GCX3242-120L	Green	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3243-24L	Yellow	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26m/				
GCX3243-120L	Yellow	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3244-24L	Blue	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26m/				
GCX3244-120L	Blue	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3245-24L	Clear	\$23.50	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26m/				
GCX3245-120L	Clear	\$25.00	PDF	22mm plastic LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				

For accessories, see 22mm Plastic Pilot Device Accessories in this section.

www.automationdirect.com Pilot Devices tPIL-13

Illuminated Two-Position Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- · Available in spring-return and maintained styles
- Replacement knobs are available



GCX3251-24

	Illuminated Maintained Two-Position Selector Switches									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [2 per pack]				
Incandescent										
GCX3251-24	Red	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3251-120	Red	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3252-24	Green	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3252-120	Green	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3253-24	Yellow	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3253-120	Yellow	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3254-24	Blue	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3254-120	Blue	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3255-24	Clear	\$14.00	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3255-120	Clear	\$14.50	PDF	22mm plastic incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				
LED										
GCX3251-24L	Red	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3251-120L	Red	\$20.00	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3252-24L	Green	\$22.00	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3252-120L	Green	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3253-24L	Yellow	\$19.50	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3253-120L	Yellow	\$20.00	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3254-24L	Blue	\$22.00	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3254-120L	Blue	\$22.50	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3255-24L	Clear	\$23.50	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3255-120L	Clear	\$25.00	PDF	22mm plastic LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				

Illuminated Three-Position Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- Available in spring-return and maintained styles
- Replacement knobs are available



GCX3263-24

	Illuminated Maintained Three-Position Selector Switches									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Bulb [2 per pack]				
Incandescent										
GCX3261-24	Red	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3261-120	Red	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3262-24	Green	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3262-120	Green	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3263-24	Yellow	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3263-120	Yellow	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3264-24	Blue	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3264-120	Blue	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3265-24	Clear	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3265-120	Clear	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA				
LED										
GCX3261-24L	Red	\$27.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX3261-120L	Red	\$27.50	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX3262-24L	Green	\$29.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX3262-120L	Green	\$31.00	<u>PDF</u>	22mm plastic LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA				
GCX3263-24L	Yellow	\$27.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX3263-120L	Yellow	\$27.50	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX3264-24L	Blue	\$29.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX3264-120L	Blue	\$31.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX3265-24L	Clear	\$31.50	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX3265-120L	Clear	\$32.00	PDF	22mm plastic LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA				

For accessories, see 22mm Plastic Pilot Device Accessories in this section.

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Illuminated Three-Position Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- Available in spring-return and maintained styles
- Replacement knobs are available



GCX3283-120

		Illum	inated	Spring Return to Center Three-Position Selecto	r Switches	
Part Number	Lamp Color	Price	Drawing Link	Description	Standard Incandescent Bulb [5 per pack]	Standard LED Bulb [2 per pack]
Incandescent						
GCX3281-24	Red	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX3281-120	Red	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX3282-24	Green	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX3282-120	Green	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX3283-24	Yellow	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX3283-120	Yellow	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX3284-24	Blue	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX3284-120	Blue	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX3285-24	Clear	\$22.50	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3285-120	Clear	\$23.00	PDF	22mm plastic incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA
LED						
GCX3281-24L	Red	\$27.00	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX3281-120L	Red	\$27.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX3282-24L	Green	\$30.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX3282-120L	Green	\$31.00	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX3283-24L	Yellow	\$27.00	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX3283-120L	Yellow	\$27.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX3284-24L	Blue	\$30.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX3284-120L	Blue	\$31.00	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX3285-24L	Clear	\$31.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX3285-120L	Clear	\$32.50	PDF	22mm plastic LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA

For accessories, see 22mm Plastic Pilot Device Accessories in this section.

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ECX Series 22mm Plastic Joystick Selector Switches

Joystick Selector Switches

Four models available





ECX3510, ECX3512 Moving the joystick UP will close contact on one side. Moving it DOWN will close contact on other side.



ECX3520, ECX3524

- Moving the joystick UP will close Green contact on one side and moving it DOWN will close Gray contact located behind it.
- Moving the joystick RIGHT will close Green contact on other side and moving it LEFT will close Gray contact located behind it.

	22mm Joystick Selector Switches								
Part Number	Price	Drawing Link	Description						
ECX3510	\$25.50	PDF	22mm plastic joystick-style selector switch, two-position momentary, two N.O. contact blocks						
ECX3512	\$25.50	PDF	22mm plastic joystick-style selector switch, two-position maintained, two N.O. contact blocks						
ECX3520	\$33.50	PDF	22mm plastic joystick-style selector switch, four-position momentary, four N.O. contact blocks						
ECX3524	\$33.50	<u>PDF</u>	22mm plastic joystick-style selector switch, four-position maintained, four N.O. contact blocks						



Note: Four-position switches use two special contact blocks which are not replaceable. Note: When using switches having two-deep contact blocks (4-position joysticks) with the 22mm plastic enclosures, use enclosures that are 74mm deep; 51mm-deep enclosures are too shallow.





ECX Series 22mm Plastic Indicator Lights

Plastic Incandescent Indicator Lights

These indicators have a key to prevent rotation when mounted.

12 models available:

- Available in six colors
- 24V and 120V models
- Incandescent bulbs included
- Accepts LED replacement lamps
- Monoblock design for easy mounting
- Side wire entry with back screw terminals for easy wiring and maintenance
- IP20 rated before installation
- IP65 rated after installation

Note: When using LED replacement lamps with these indicators, it may be necessary to remove the frosted diffuser for enhanced illumination.



ECX1051-24

	Plastic Incandescent Indicator Lights									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement Lamp [2 per pack]				
ECX1051-24	Red	\$7.00	<u>PDF</u>	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1911-2, 26mA				
ECX1051-120	Red	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1921-2, 5mA				
ECX1052-24	Green	\$7.00	PDF	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1912-2, 26mA				
ECX1052-120	Green	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1922-2, 5mA				
ECX1053-24	Yellow	\$7.00	PDF	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1913-2, 26mA				
ECX1053-120	Yellow	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1923-2, 5mA				
ECX1054-24	Blue	\$7.00	PDF	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1914-2, 26mA				
ECX1054-120	Blue	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1924-2, 5mA				
ECX1055-24	Clear	\$7.00	PDF	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1915-2, 26mA				
ECX1055-120	Clear	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1925-2, 5mA				
ECX1056-24	White	\$7.00	PDF	22mm monoblock incandescent indicator light, 24VDC/VAC	ECX1902-5, 80mA	ECX1915-2, 26mA				
ECX1056-120	White	\$8.25	PDF	22mm monoblock incandescent indicator light, 120VDC/VAC	ECX1904-5, 20mA	ECX1925-2, 5mA				

Plastic LED indicator lights



10 models available:

- Available in five colors
- 24V and 120V models
- Non-replaceable LEDs
- Side wire entry with back screw terminals for easy wiring and maintenance
- IP20 rated before installation
- IP65 rated after installation
- 16mA @ 127V, 18mA @ 24V

	Plastic LED Indicator Lights							
Part Number Lamp Color Pr		Price	Drawing Link	Description				
ECX2051-24L	Red	\$6.25	PDF	22mm non-metal monoblock LED indicator light, 24VDC/VAC				
ECX2051-127L	Red	\$7.75	PDF	22mm non-metal monoblock LED indicator light, 120VDC/VAC				
ECX2052-24L	Green	\$6.25	PDF	22mm non-metal monoblock LED indicator light, 24VDC/VAC				
ECX2052-127L	Green	\$7.75	PDF	22mm non-metal monoblock LED indicator light, 120VDC/VAC				
ECX2053-24L	Yellow	\$6.25	PDF	22mm non-metal monoblock LED indicator light, 24VDC/VAC				
ECX2053-127L	Yellow	\$7.75	PDF	22mm non-metal monoblock LED indicator light, 120VDC/VAC				
ECX2054-24L	Blue	\$10.50	PDF	22mm non-metal monoblock LED indicator light, 24VDC/VAC				
ECX2054-127L	Blue	\$10.50	PDF	22mm non-metal monoblock LED indicator light, 120VDC/VAC				
ECX2055-24L	Clear	\$10.50	PDF	22mm non-metal monoblock LED indicator light, 24VDC/VAC				
ECX2055-127L	Clear	\$10.50	PDF	22mm non-metal monoblock LED indicator light, 120VDC/VAC				

Replacement **Incandescent Bulbs**



ECX1902-5

Replacement LED Lamps



ECX1915-2

Hole Plug



ECX1490

Protective Covers for Pushbuttons



ECX1703-5

Knockout Punches



Replacement Keys



ECX1067-2

	Replacement Incandescent Bulbs								
Part Number	Quantity	Price	Rating	Description					
ECX1900-5	5	\$10.50	6V@ 200mA 1.2 watts	6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					
ECX1902-5	5	\$10.50	24V@ 80mA 2 watts	24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					
ECX1904-5	5	\$22.00	130V@20mA 2.6 watts	120V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					

Note: Bulb removal tool available. Order part number HT8LAMPTOOL.

	Replacement LED Lamps									
Part Number	Color	Quantity	Price	Rating	Description					
ECX1911-2	Red		\$19.00							
ECX1912-2	Green		\$24.00	041/0004						
ECX1913-2	Yellow		\$19.00	24V@26mA 0.6 watts						
ECX1914-2	Blue		\$26.00		LED replacement lamp for miniature bayonet base: Works with 22mm switches and indicators, but illumination will not be as even when used with the ECX 22mm indicators					
ECX1915-2	White	2	\$31.00							
ECX1921-2	Red		\$19.00							
ECX1922-2	Green		\$24.00	4001/05 4	Note: Will not replace sealed Cutler-Hammer monoblock LED indicators.					
ECX1923-2	Yellow		\$19.00	120V@5mA 0.6 watts	MONOBIOCK LED MUICA(OIS.					
ECX1924-2	Blue		\$26.00	0.0 Walls						
ECX1925-2	White		\$31.00							

Note: LED modules have very low current draw and should not be used with triac output devices like PLC triac output modules. It is recommended that dry contact outputs be used to switch 120 volt AC LED modules.

Hole Plug				
Part Number	Color	Price	Description	
ECX1490	Black	\$3.00	Plastic hole plug for 22.5 mm openings in panels and enclosures; supplied with O-ring and mounting screw. Two plugs per package.	

		Protec	tive C	overs for Pushbuttons
Part Number	Color	Quantity	Price	Description
ECX1700-5	Black		\$8.25	
ECX1701-5	Red	5	\$8.25	Silicone protective covers for use with 22mm standard-size flush
ECX1702-5	Green		\$8.25	pushbuttons.
ECX1703-5	Yellow		\$8.25	Will not work with Cutler-Hammer pushbuttons, 22mm plastic illuminated or extended pushbuttons, or 22mm plastic pushbuttons
ECX1704-5	Blue		\$8.25	with 40mm actuator face.
ECX1705-5	Clear		\$8.25	
ECX1706-5	Clear		\$14.50	Clear silicone protective covers for use with 22mm illuminated and extended pushbuttons only. Will not work with Cutler-Hammer pushbuttons or 22mm mushroom pushbuttons.

Ruko's knockout punch hole-cutting tool includes punch, die and draw bolt (without ball bearing). Use for sheet steel, stainless-steel sheets, non-ferrous and light metals, and plastics up to 0.16" (8 ga.) thick. Replacement bolts are offered in three of the most popular sizes. See the Tools section of the catalog for details.

Note: Part number 109225 is recommended when punching holes for 22mm pilot devices.

Replacement Keys				
Part Number	Quantity	Price	Description	
ECX1067-2	2	\$7.25	Replacement key for GCX series key-actuated selector switches, pack of 2 sets (2 keys each). NOTE: Will not work with Cutler-Hammer 22mm switches.	

Note: All key-actuated 22mm plastic selector switches are keyed alike.

Replacement 22mm Support Base

Replacement 22mm Support Base						
Part Number	Quantity	Price	Drawing Link	Description		
ECX3029-2	1	\$2.00	PDF	22mm plastic support base Note: This item is supplied as a replacement part and is not required with any switch assembly. Will not work with Cutler-Hammer 22mm switches sold by AutomationDirect		



ECX3029-2

Replacement Contact Blocks

	Replacement Contact Blocks										
Part Number	Quantity	Price	Drawing Link	Contacts	Description						
ECX1030-2	2	\$8.00	PDF	Red,	Replacement contact block for 22mm pushbuttons and						
ECX1030-5	5	\$18.50	PDF	normally-closed (N.C.)	selector switches. Tightening Torque, terminal screw: 0.8 N⋅m max						
ECX1040-2	2	\$8.00	PDF	Green,	mounting screw: 0.5 N·m max Note: Will not work with Cutler-Hammer 22mm switches						
ECX1040-5	5	\$18.50	PDF	normally-open (N.O.)	sold by AutomationDirect						
ECX1042-2	2	\$8.00	<u>PDF</u>	Brown, normally-open (N.O.), push-push	Use on lighted Push-push button only						



ECX1030-2

Note: See electrical specifications on GCX Series 22mm Plastic Pilot Devices

EMERGENCY STOP Legend Plate

	EMERGENCY STOP Legend Plate							
Part Number Quantity Price Drawing Link			Description					
ECX1651	1	\$3.00	PDF	Oversize yellow circular EMERGENCY STOP legend plate for 22mm E-stop type mushroom pushbuttons, 60mm outside diameter.				



Two-Position Short Lever Pperator

Short Lever Replacement Operator								
Part Number	Lamp Color	Price	2-Position	Use with				
<u>GR1172PR-5</u>	Red	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk					
GR1172PV-5	Green	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with				
GR1172PG-5	Yellow	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	GCX124, GCX125				
GR1172PB-5	Blue	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	GCX324, GCX325				
GR1172PN-5	Clear	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk					



GR1172PR-5

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Three-Position Short Lever Operator

Short Lever Replacement Operator								
Part Number	Lamp Color	Price	3-Position	Use with				
GR1288PR-5	Red	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					
GR1288PV-5	Green	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					
GR1288PG-5	Yellow	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with GCX126, GCX128				
GR1288PB-5	Blue	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	GCX326, GVX328				
GR1288PN-5	Clear	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					



GR1288PR-5

Mushroom Switch Replacement Operator

	Mushroom Switch Replacement Operator									
Part Number	Lamp Color	Price	Description	Use with						
PL1171PR-5	Red	\$8.00	22mm, illuminated momentary Mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1221, GCX3221 mushroom-style illuminated pushbuttons						
PL1298P-5	Red	\$8.00	22mm illuminated twist-to-release mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1226, GCX3226 mushroom-style illuminated pushbuttons						



Flush Pushbutton Replacement Operator

	Flush Pushbutton Replacement Operator								
Part Number	Lamp Color	Price	Description	Use with					
<u>GR1168PR-5</u>	Red	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PV-5</u>	Green	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PG-5</u>	Yellow	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk	Part numbers starting with					
GR1168PB-5	Blue	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk	GCX119, GCX120 GCX319, GCX320					
<u>GR1168PN-5</u>	Clear	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PW-5</u>	White	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						



Extended Pushbutton Replacement Operator

	Extended Pushbutton Replacement Operator								
Part Number	Lamp Color	Use with							
PL1308PR-5	Red	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk						
PL1308PV-5	Green	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk						
PL1308PG-5	Yellow	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk	Part numbers starting with					
PL1308PB-5	Blue	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk	GCX121, GCX321					
PL1308PN-5	Clear	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk						
PL1308PW-5	White	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk						



Legend Plates

Plastic legend plates for use with 22mm pilot devices. White engraved text on colored background. O-ring included.





P	lastic	Legend Plate	S	
Legend	Color of Field	Part Number	Price	Drawing Link
AUTO OFF HAND	Black	ECX1670-B46	\$4.25	PDF
Blank Plate	Black	ECX1670-B	\$3.25	PDF
Blank Plate	Red	ECX1670-R	\$3.25	<u>PDF</u>
CLAMP	Black	ECX1670-B24	\$4.25	PDF
CLOSE	Black	ECX1670-B01	\$3.25	PDF
DOWN	Black	ECX1670-B02	\$3.25	PDF
EMERG. STOP	Red	ECX1670-R03	\$3.25	PDF
EXTEND	Black	ECX1670-B51	\$4.25	PDF
FEEDER OFF	Black	ECX1670-B26	\$4.25	PDF
FEEDER ON	Black	ECX1670-B25	\$4.25	PDF
FOR OFF REV	Black	ECX1670-B19	\$3.25	PDF
FOR-REV	Black	ECX1670-B13	\$3.25	PDF
FORWARD	Black	ECX1670-B04	\$3.25	PDF
GRIP	Black	ECX1670-B53	\$4.25	PDF
HAND-AUTO	Black	ECX1670-B14	\$3.25	PDF
HAND OFF AUTO	Black	ECX1670-B20	\$3.25	PDF
HIGH	Black	ECX1670-B27	\$4.25	PDF
HIGH LOW	Black	ECX1670-B43	\$4.25	PDF
IN	Black	ECX1670-B28	\$4.25	PDF
INCH	Black	ECX1670-B29	\$4.25	PDF
JOG	Black	ECX1670-B05	\$3.25	PDF
JOG FOR	Black	ECX1670-B30	\$4.25	PDF
JOG REV	Black	ECX1670-B31	\$4.25	PDF
JOG-RUN	Black	ECX1670-B15	\$3.25	<u>PDF</u>
LOW	Black	ECX1670-B32	\$4.25	PDF
LOWER	Black	ECX1670-B33	\$4.25	<u>PDF</u>

Note: Legend plate text is 3mm in height

Plastic Legend Plates							
Legend	Color of Field	Part Number	Price	Drawing Link			
MAN AUTO	Black	ECX1670-B44	\$4.25	PDF			
MAN OFF AUTO	Black	ECX1670-B47	\$4.25	PDF			
MOTOR RUN	Black	ECX1670-B22	\$3.25	PDF			
MOTOR STOP	Black	ECX1670-B23	\$3.25	PDF			
OFF	Black	ECX1670-B34	\$4.25	PDF			
OFF-ON	Black	ECX1670-B16	\$3.25	PDF			
ON	Black	ECX1670-B06	\$3.25	PDF			
OPEN	Black	ECX1670-B07	\$3.25	PDF			
OPEN OFF CLOSE	Black	ECX1670-B48	\$4.25	PDF			
OPEN-CLOSE	Black	ECX1670-B17	\$3.25	PDF			
OUT	Black	ECX1670-B35	\$4.25	PDF			
POWER ON	Black	ECX1670-B21	\$3.25	PDF			
PULL ON PUSH OFF	Black	ECX1670-B50	\$4.25	PDF			
RAISE	Black	ECX1670-B36	\$4.25	PDF			
READY	Black	ECX1670-B37	\$4.25	<u>PDF</u>			
RELEASE	Black	ECX1670-B54	\$4.25	PDF			
RESET	Black	ECX1670-B38	\$4.25	PDF			
RETRACT	Black	ECX1670-B52	\$4.25	PDF			
REVERSE	Black	ECX1670-B08	\$3.25	PDF			
RUN	Black	ECX1670-B09	\$3.25	PDF			
SAFE RUN	Black	ECX1670-B45	\$4.25	PDF			
START	Black	ECX1670-B10	\$3.25	PDF			
STOP	Black	ECX1670-B11	\$3.25	PDF			
STOP	Red	ECX1670-R11	\$3.25	PDF			
TEST	Black	ECX1670-B39	\$4.25	PDF			
TRANSFER	Black	ECX1670-B40	\$4.25	PDF			
TRIP	Black	ECX1670-B41	\$4.25	PDF			
UNCLAMP	Black	ECX1670-B42	\$4.25	PDF			
UP	Black	ECX1670-B12	\$3.25	PDF			
UP OFF DOWN	Black	ECX1670-B49	\$4.25	PDF			
UP-DOWN	Black	ECX1670-B18	\$3.25	PDF			

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ECX1690-B16

ECX1690-R11

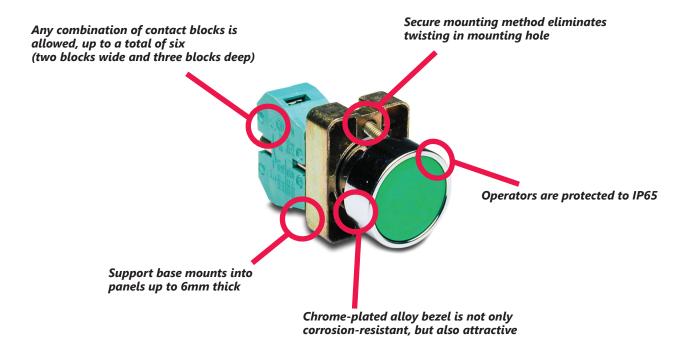
Jumbo Plastic Legend Plates								
Legend	Color of Field			Drawing Link				
Blank Plate	Black	ECX1690-B	\$4.25	PDF				
Blank Plate	Red	ECX1690-R	\$4.25	<u>PDF</u>				
EMERG. STOP	Red	ECX1690-R03	\$4.25	PDF				
HAND-OFF-AUTO	Black	ECX1690-B20	\$4.25	PDF				
JOG	Black	ECX1690-B05	\$4.25	<u>PDF</u>				
OFF-ON	Black	ECX1690-B16	\$4.25	PDF				
OPEN-CLOSE	Black	ECX1690-B17	\$4.25	PDF				
POWER ON	Black	ECX1690-B21	\$4.25	PDF				
START	Black	ECX1690-B10	\$4.25	PDF				
STOP	Red	ECX1690-R11	\$4.25	PDF				

Note: Legend plate text is 3mm in height

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GCX Series 22mm Metal Pilot Devices

Features



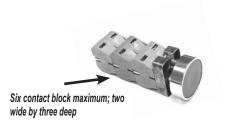
Easy installation

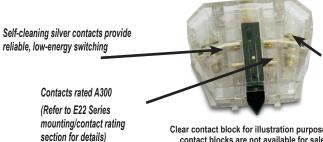


To remove operator, press toward support base and twist counterclockwise.



To install switch, place support base against rear of panel (not shown here), insert the operator and twist clockwise until it clicks into place. Carefully tighten the securing screws. Do not over-tighten.



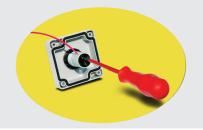


Clear contact block for illustration purposes. Clear contact blocks are not available for sale from AutomationDirect.

Pressure plate wiring terminals for easy, secure wiring, accepting up to 14 AWG wire

> Minimum current rating 15mA @ 24vdc

All indicators offer side wire entry with back screw terminals for easy wiring



GCX/ECX Series 22mm Metal Pilot Devices Selection Guide



Flush

- Momentary 30 or 40mm operators
- Available in six colors: black, red, yellow, blue, white and green
- One contact block included
- ON/OFF models also available



Extended

- Momentary 30mm operators
- Available in six colors: black, red, yellow, blue, white and green
- One contact block included



Two way

- Two way on/off control
- With or without illuminated indicators
- One N.O. and one N.C. contact block included



Illuminated

- Available in clear, red, yellow, blue, white and green; 24 and 120-volt models
- · Momentary and push-push styles
- Flush or extended operators available
- Incandescent and LED models
- One contact block included



Mushroom

- Available in momentary, twist-to-release, and key release models
- One contact block included
- Also available in incandescent and LED illuminated models



Audible annunciators and potentiometers

- Audible annunciators with or without LED indicator
- 5 and 10 K Ω potentiometers



Selector switches

- Two and three-position in spring return and maintained, non-illuminated and illuminated; incandescent and LED models
- · Contact block included



Key switches

- Two and three-position
- Contact blocks included



Joysticks

- Two and four-position, maintained and momentary
- · Contact blocks included



Pilot lights

- Available in six colors: red, green, white, clear, yellow and blue
- 24 and 120-volt models with LED
- · Frosted diffuser for even lighting
- Incandescent or LED indicators

Accessories







• Bulbs and LEDs



Protective actuator caps

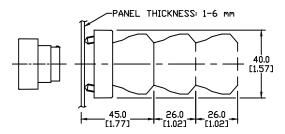
GCX Series 22mm Metal Pilot Devices Specifications

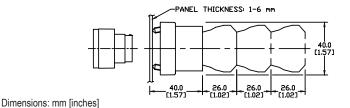
Assembly information

These pushbuttons and indicator lights are supplied with the appropriate contact blocks, unless otherwise indicated. Use these drawings as a guide to make sure there is adequate clearance behind the panel.

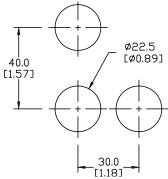
Pushbuttons and selector switches

Illuminated pushbuttons and selector switches/pilot lights

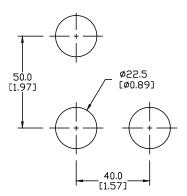




Mounting

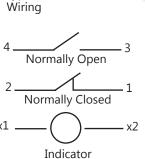


This layout is suitable if all switches are 230V or less and the same polarity.



This layout is suitable if all switches are 400V or less and different polarity.

NOTE: Contact blocks can be arranged up to three deep by two wide. Typical



Specifications

These specifications apply to all GCX and ECX 22 mm metal pushbuttons and switches.

Physical Specifications					
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14				
Approvals	CSA, IMQ (where specified), UL File E189258				
Enclosure Material	Zn + Al + Mg alloy, chromium plated				
Contacts Material	Silver				
Protection Degree	IP40 for GCX3151-24,GCX3151-120, GCX3153-24 and GCX3153-120. IP65 for all others. (See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.)				
Temperature Ratings	Storage: -40 -to 80°C (-40 to 176° F) Operating: -25 to +70°C (-13 to 158° F)				
Working Positions	All working positions are allowed				
Mechanical Life	Pushbuttons, selector switches: Joy stick switches: 1,000,000 operations Mushroom pushbuttons: 300,000 operations				

Electrica	Electrical Specifications					
Rated Thermal Current (contact block)	A300, Q300 (Refer to E22 Series mounting/contact rating section for details)					
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14					
Dielectric Strength	3kV (1 second)					
Insulation Resistance	2MΩ min. (500VDC)					
Initial Contact Resistance	≤ 25mΩ					
Short-Circuit Protection*	Cartridge fuses gl 10A - 500V 10,3x38l1 100kA					
Terminal Markings	According to CENELEC EN 50013					
Connections	Single screw with non-loosening plate clamp,14AWG max.					
Contacts Operation	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening					
Operation Frequency	3600 operations per hour max.					
Utilization Category	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps					

*Note: Recommended, not supplied

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GCX Series 22mm Metal Pushbuttons

Momentary Flush Pushbuttons with protective metal ring (30mm dia. actuator)



GCX1102

Momentary Flush ON/OFF Pushbuttons with protective metal ring (30mm dia. actuator)





GCX1106

GCX1107

Momentary Pushbuttons Flush with Protective Metal Ring								
Part Number	Color	Price	Drawing Link	Description				
<u>GCX1100</u>	Black	\$8.25	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole				
GCX1101	Red	\$8.25	PDF	One N.C. contact block, 30mm dia. actuator, mounts in 22mm hole				
GCX1102	Green	\$8.25	PDF					
GCX1103	Yellow	\$8.25	PDF	One N.O. contact block, 30mm dia. actuator, mounts				
GCX1104	Blue	\$8.25	PDF	in 22mm hole				
GCX1105	White	\$8.25	<u>PDF</u>					

Momentary Pushbuttons Flush ON/OFF									
Part Number	Color	Price	Drawing Link	Description					
GCX1106	Red with "Off" symbol (O) on actuator	\$9.00	PDF	One N.C. contact block, 30mm dia. actuator, mounts in 22mm hole					
GCX1107	Green with "On" symbol (I) on actuator	\$9.00	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole					

Momentary Pushbuttons with protective metal ring (40mm dia. actuator)



Momentary Pushbuttons with Protective Metal Ring								
Part Number	Color	Price	Drawing Link	Description				
GCX1120	Black	\$9.75	PDF	One N.O. contact block, 40mm dia. actuator, mounts in 22mm hole				
GCX1121	Red	\$9.75	PDF	One N.C. contact block, 40mm dia. actuator, mounts in 22mm hole				
GCX1122	Green	\$9.75	PDF					
GCX1123	Yellow	\$9.75	PDF	One N.O. contact block, 40mm dia. actuator,				
GCX1124	Blue	\$9.75	PDF	mounts in 22mm hole				
GCX1125	White	\$9.75	PDF					

Note: Protective silicone covers are not available for this pushbutton.

GCX Series 22mm Metal Pushbuttons

Momentary Extended Pushbuttons

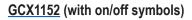


GCX1113

	Momentary Extended Pushbuttons								
Part Number	Color	Price	Drawing Link	Description					
GCX1110	Black	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: black, extended, 30mm, round, plastic.					
GCX1111	Red	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.C. contact(s), metal base, metal bezel, Operator: red, extended, 30mm, round, plastic.					
GCX1112	Green	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: green, extended, 30mm, round, plastic.					
GCX1113	Yellow	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: yellow, extended, 30mm, round, plastic.					
GCX1114	Blue	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: blue, extended, 30mm, round, plastic.					
GCX1115	White	\$9.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: white, extended, 30mm, round, plastic.					

Double-Headed Momentary Pushbuttons







GCX1151-24

	Double-Headed Momentary Pushbuttons							
Part Number	Price	Drawing Link	Description					
GCX1150	\$16.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic.					
GCX1151-24	\$23.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 60mm, rectangular, plastic, 24 VAC/VDC, full voltage.					
GCX1151-120	\$25.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 60mm, rectangular, plastic, 120 VAC/VDC, full voltage.					
GCX1152	\$17.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)".					
GCX1153-24*	\$25.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)", 24 VAC/VDC, full voltage.					
GCX1153-120*	\$26.00	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)", 120 VAC/VDC, full voltage.					

 $^{^{\}star}$ Note: Lamp data in 22 mm Metal Pilot Accessories in this section.

GCX Series 22mm Metal Pushbuttons without Contact Block

Momentary Flush Pushbutton Operator (without contact block) (30mm dia. actuator)

Momenta	Momentary Flush Pushbuttons Operators (without contact block)								
Part Number	Color	Price	Drawing Link	Description					
GCX1100-SC	Black	\$5.50	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.					
GCX1101-SC	Red	\$5.50	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.					
GCX1102-SC	Green	\$5.50	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.					



Momentary Extended Pushbutton Operator (without contact block) (30mm dia. actuator)

Momentary Extended Pushbutton Operators (without contact block)								
Part Number Color Price Drawing Link Description		Description						
GCX1110-SC	Black	\$5.50	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole				
<u>GCX1111-SC</u>	Red	\$5.50	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole				
GCX1112-SC	Green	\$5.50	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole				



Contact blocks are available for these products.



ECX1042-2 ECX1030-2

GCX Series 22mm Metal Illuminated Pushbuttons

Momentary Pushbuttons with protective plastic ring

All pushbuttons include operator, mounting adapter, chrome plated alloy bezel, indicating bulb (if applicable), and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.

24 models available:

- Protective plastic ring for flush mount pushbutton functionality
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- · Available in six colors



GCX1202-24

Momentary Pushbuttons with Protective Plastic Ring								
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [5 per pack]		
Incandescent								
GCX1201-24	Red	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA		
GCX1201-120	Red	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA		
GCX1202-24	Green	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26m/		
GCX1202-120	Green	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA		
GCX1203-24	Yellow	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA		
GCX1203-120	Yellow	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA		
GCX1204-24	Blue	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA		
GCX1204-120	Blue	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA		
GCX1205-24	Clear	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA		
GCX1205-120	Clear	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA		
GCX1206-24	White	\$16.00	PDF	22mm metal incandescent illuminated pushbutton 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA		
GCX1206-120	White	\$17.50	PDF	22mm metal incandescent illuminated pushbutton 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA		
LED		<u> </u>	<u>I</u>			ļ.		
GCX1201-24L	Red	\$24.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA		
GCX1201-120L	Red	\$29.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA		
GCX1202-24L	Green	\$24.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA		
GCX1202-120L	Green	\$29.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA		
GCX1203-24L	Yellow	\$24.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA		
GCX1203-120L	Yellow	\$29.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA		
GCX1204-24L	Blue	\$24.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.O. contact block	ECX1902-5,80mA	ECX1914-2, 26mA		
GCX1204-120L	Blue	\$29.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA		
GCX1205-24L	Clear	\$28.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA		
GCX1205-120L	Clear	\$31.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA		
GCX1206-24L	White	\$28.00	PDF	22mm metal LED illuminated pushbutton 24 VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26m/		
GCX1206-120L	White	\$31.00	PDF	22mm metal LED illuminated pushbutton120 VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA		

For accessories, see 22mm Metal Pilot Device Accessories in this section.

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GCX Series 22mm Metal Illuminated Pushbuttons

Momentary Pushbuttons with extended actuator

25 models available:

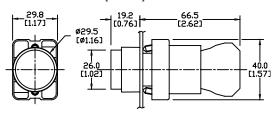
- Protective plastic ring for flush mount pushbutton functionality
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- Available in six colors

All pushbuttons include operator, mounting adapter, chrome plated alloy bezel, indicating bulb (if applicable), and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.



GCX1214-24

Dimensions: mm [inches]



	Momentary Pushbuttons with Extended Actuator									
Part Number	Lamp Color Price		Price Description		Replacement LED Lamp [5 per pack]					
Incandescent										
GCX1211-24	Red	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA					
GCX1211-120	Red	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2, 5mA					
GCX1212-24	Green	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA					
GCX1212-120	Green	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA					
GCX1213-24	Yellow	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA					
GCX1213-120	Yellow	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA					
GCX1214-24	Blue	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA					
GCX1214-120	Blue	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA					
GCX1215-24	Clear	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA					
GCX1215-120	Clear	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA					
GCX1216-24	White	\$15.50	22mm metal extended incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA					
GCX1216-120	White	\$17.00	22mm metal extended incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA					
LED										
GCX1211-24L	Red	\$20.50	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.C. contact block	ECX1902-5, 80mA	ECX1911-2, 26mA					
GCX1211-120L	Red	\$22.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.C. contact block	ECX1904-5, 20mA	ECX1921-2,5mA					
GCX1211-120LA	Red	\$22.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1912-2,5mA					
GCX1212-24L	Green	\$23.00	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1912-2, 26mA					
GCX1212-120L	Green	\$16.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1922-2, 5mA					
GCX1213-24L	Yellow	\$20.50	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1913-2, 26mA					
GCX1213-120L	Yellow	\$22.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1923-2, 5mA					
GCX1214-24L	Blue	\$23.50	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1914-2, 26mA					
GCX1214-120L	Blue	\$25.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1924-2, 5mA					
GCX1215-24L	Clear	\$26.00	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA					
GCX1215-120L	Clear	\$27.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA					
GCX1216-24L	White	\$26.00	22mm metal extended LED illuminated pushbutton, 24VDC/VAC. One N.O. contact block	ECX1902-5, 80mA	ECX1915-2, 26mA					
GCX1216-120L	White	\$27.00	22mm metal extended LED illuminated pushbutton, 120VDC/VAC. One N.O. contact block	ECX1904-5, 20mA	ECX1925-2, 5mA					

GCX Series 22mm Metal Illuminated Pushbuttons

Push-Push Style Pushbuttons with protective plastic ring

24 models available:

- Protective plastic ring for flush mount pushbutton functionality
- Includes incandescent bulb or LED lamp
- 24V and 120V models
- Available in six colors
- These switches are supplied with a special N.O. contact block designed for use with this actuator, but they also work with standard N.C. contacts



GCX1194-24

Push-Push Style Pushbuttons with Protective Plastic Ring								
Part Number	Lamp Color			Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [5 per pack]		
Incandescent								
GCX1191-24	Red	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1911-2, 26mA		
GCX1191-120	Red	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1921-2, 5mA		
GCX1192-24	Green	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1912-2, 26mA		
GCX1192-120	Green	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1922-22, 5mA		
GCX1193-24	Yellow	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1913-2, 26mA		
GCX1193-120	Yellow	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1923-2, 5mA		
GCX1194-24	Blue	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1914-2, 26mA		
GCX1194-120	Blue	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1924-2, 5mA		
GCX1195-24	Clear	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1915-2, 26mA		
GCX1195-120	Clear	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1925-2,5mA		
GCX1196-24	White	\$18.00	PDF	22mm metal incandescent illuminated pushbutton, 24VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1902-5, 80mA	ECX1915-2, 26mA		
GCX1196-120	White	\$18.50	PDF	22mm metal incandescent illuminated pushbutton, 120VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring.	ECX1904-5, 20mA	ECX1925-2, 5mA		

All switches in this series use replacement contact block <u>ECX1042-2</u> (Brown, N.O.) or <u>ECX1030-5</u> or <u>ECX1030-2</u> (Red, N.C.), sold separately. LED on the following page.

GCX Series 22mm Metal Illuminated Pushbuttons

	Push-Push Style Pushbuttons with Protective Plastic Ring									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb [5 per pack]	Replacement LED Lamp [5 per pack]				
LED										
GCX1191-24L	Red	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX1191-120L	Red	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX1192-24L	Green	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX1192-120L	Green	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1922-22, 5mA				
GCX1193-24L	Yellow	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX1193-120L	Yellow	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX1194-24L	Blue	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX1194-120L	Blue	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX1195-24L	Clear	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX1195-120L	Clear	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1925-2,5mA				
GCX1196-24L	White	\$28.50	PDF	22mm metal LED illuminated pushbutton, 24 VDC/VAC. One N.O. contact block. Flush Push ON - Push OFF operator with colored plastic ring	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX1196-120L	White	\$31.00	PDF	22mm metal LED illuminated pushbutton, 120 VDC/VAC. One N.O. contact block.Flush Push ON - Push OFF operator with colored plastic ring	ECX1904-5, 20mA	ECX1925-2, 5mA				

All switches in this series use replacement contact block ECX1042-2 (Brown, N.O.) or ECX1030-5 or ECX1030-2 (Red, N.C.), sold separately.

GCX Series 22mm Metal Illuminated Pushbuttons

Mushroom-Style Illuminated Pushbuttons

All pushbuttons include operator, mounting adapter, chrome plated alloy bezel, indicating bulb (if applicable), and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.



GCX1221-24

	Mushroom Style Illuminated Pushbuttons								
Part Number Lamp Color Price Drawing Link				Description	Replacement Bulbs				
Incandescent									
GCX1221-24	Red	\$18.00	PDF	22mm metal incandescent momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5 5/pk 80mA				
GCX1221-120	Red	\$20.00	PDF	22mm metal incandescent momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5, 5/pk 20mA				
GCX1226-24	Red	\$20.50	PDF	22mm metal incandescent pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5 5/pk 80mA				
GCX1226-120	Red	\$22.50	PDF	22mm metal incandescent pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5, 5/pk 20mA				
LED									
GCX1221-24L	Red	\$23.00	<u>PDF</u>	22 mm metal momentary pushbutton with LED illuminated 40 mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1911-2 2/pk 26mA				
GCX1221-120L	Red	\$25.00	PDF	22 mm metal momentary pushbutton with LED illuminated 40 mm mushroom actuator, 120VDC/VAC, one N.C. contact block	ECX1921-2 2/pk 5mA				
GCX1226-24L	Red	\$25.50	PDF	22 mm metal pushbutton with LED illuminated 40 mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1911-2 2/pk 26mA				
GCX1226-120L	Red	\$27.50	PDF	22 mm metal pushbutton with LED illuminated 40 mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1921-22 2/pk 5mA				

Non-Illuminated Mushroom Pushbuttons

60mm dia. actuator and mounts in standard 22mm hole

	Non-Illuminated Mushroom Pushbuttons								
Part Number	I'olor Price								
GCX1131	Red	\$16.00	<u>PDF</u>	Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
<u>GCX1134</u>	Black	\$13.00	<u>PDF</u>	Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
<u>GCX1135</u>	Red	\$13.00	<u>PDF</u>	Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. "Emergency" legend plate available (see Accessories).					
GCX1136	Red	\$19.50	PDF	Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole. 60mm mushroom-style actuator.					
GCX1137	Red	\$16.00	PDF	Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 60mm dia. mushroom-style. "Emergency" legend plate available (see Accessories).					
GCX1139	Yellow	\$13.00	PDF	Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.					
<u>GCX1141</u>	Red	\$22.00	<u>PDF</u>	Key operated release with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. "Emergency" legend plate available (see Accessories).					



GCX1137



GCX1141 (key operated)



Note: Keyed switches come with two keys. All metal 22mm keyed switches are keyed alike. Replacement keys are available.

Order part no. ECX1067-2 (pkg. of 2).

GCX Series 22mm Metal Selector Switches

Two-Position Selector Switches

Two-Position Selector Switches							
Part Number	Price	Drawing Link	Description				
GCX1300	\$11.50	PDF	22mm metal selector switch, two-position maintained, black knob. One N.O. contact block				
GCX1310	\$14.00	PDF	22mm metal selector switch, two-position spring-return from right, black knob .One N.O. contact block				
GCX1350	\$14.00	PDF	22mm metal selector switch, two-position maintained, black lever. One N.O. contact block				
GCX1360	\$14.50	PDF	22mm metal selector switch, two-position spring-return from right, black lever. One N.O. contact block				



GCX1300 Knob version



GCX1350 Lever version

Contact Closure Sequence - 2-Position Switch									
Contact	Contact Arrai (viewed fron		Switch Position (viewed from front)						
Blocks	Left	Right	Left (Note 1)	Right (Note 2)					
1 x N.C.	N.C.		X						
I X IV.C.		N.C.	X						
1 x N.O.	N.O.			Х					
I X N.O.		N.O.		Х					
2 x N.C.	N.C.	N.C.	XX						
2 x N.O.	N.O.	N.O.		XX					

Note 1: Left switch position deactivates all contacts. Note 2: Right switch position activates all contacts.

Three-Position Selector Switches

Three-position Selector Switches							
Part Number	Price	Drawing Link	Description				
GCX1320-22	\$23.50	<u>PDF</u>	22mm metal selector switch, three-position maintained, black knob. Two N.O. and two N.C. contact blocks				
GCX1330-22	\$24.00	<u>PDF</u>	22mm metal selector switch, three-position spring-return to center, black knob. Two N.O. and two N.C. contact blocks				
GCX1370-22	\$24.00	<u>PDF</u>	22mm metal selector switch, three-position maintained. black lever. Two N.O. and two N.C. contact blocks				
GCX1380-22	\$25.00	PDF	22mm metal selector switch, three-position spring-return to center, black lever. Two N.O. and two N.C. contact blocks				



GCX1320-22 Knob version



Contact Closure Sequence - 3-Position Switch									
Contact Blocks	Arrang	ntact gement rom front)	Switch Position (viewed from front)						
	Left	Right	Left (Note 1)	Center (Note 2)	Right (Note 3)				
1 x N.C.	N.C.			х —	x				
I X IV.C.		N.C.	х —	х					
1 N O	N.O.		X						
1 x N.O.		N.O.			Х				
2 x N.C.	N.C.	N.C.	х —	xx	x				
2 x N.O.	N.O.	N.O.	X		Х				



Note: When using switches having two-deep contact blocks with the 22mm plastic enclosures, be sure to use enclosures that are 74mm deep; 51mm-deep enclosures are too shallow and the switch body will not fit.

Note 1: Left switch position activates left side contacts (viewed from front).

Note 2: Center switch position deactivates all contacts.

Note 2: Right switch position activates right side contacts (viewed from front).

Illuminated Two-Position Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- · Available in spring-return and maintained styles
- Replacement knobs are available



GCX1245-24

Illuminated Two-position Spring-Return Selector Switches						
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb 5 per pack	Replacement LED Lamp 2 per pack
Incandescent						
GCX1241-24	Red	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX1241-120	Red	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX1242-24	Green	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX1242-120	Green	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-22, 5mA
GCX1243-24	Yellow	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX1243-120	Yellow	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX1244-24	Blue	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX1244-120	Blue	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX1245-24	Clear	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX1245-120	Clear	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA
LED						
GCX1241-24L	Red	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX1241-120L	Red	\$23.00	<u>PDF</u>	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX1242-24L	Green	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX1242-120L	Green	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-22, 5mA
GCX1243-24L	Yellow	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX1243-120L	Yellow	\$23.00	<u>PDF</u>	22mm meta LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX1244-24L	Blue	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX1244-120L	Blue	\$28.00	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX1245-24L	Clear	\$28.00	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX1245-120L	Clear	\$28.00	PDF	22mm metal LED illuminated 2-position selector switch. Spring-return from right. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA

For accessories, see 22mm Metal Pilot Device Accessories in this section.

www.automationdirect.com Pilot Devices tPIL-36

GCX Series 22mm Metal Illuminated Selector Switches

Illuminated Two-Position Maintained Selector Switches

20 models available:

- Available in five colors
- 24V and 120V models
- Available in spring-return and maintained styles
- Replacement knobs are available



GCX1251-2

	Illuminated Two-Position Maintained Selector Switches									
Part Number	Lamp Color	Price	Drawing Link	Description	Replacement Incandescent Bulb 5 per pack	Replacement LED Lamp 2 per pack				
Incandescent										
GCX1251-24	Red	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX1251-120	Red	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX1252-24	Green	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX1252-120	Green	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-22, 5mA				
GCX1253-24	Yellow	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX1253-120	Yellow	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX1254-24	Blue	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX1254-120	Blue	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX1255-24	Clear	\$18.00	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX1255-120	Clear	\$19.50	PDF	22mm metal incandescent illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				
LED										
GCX1251-24L	Red	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1911-2, 26mA				
GCX1251-120L	Red	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1921-2, 5mA				
GCX1252-24L	Green	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1912-2, 26mA				
GCX1252-120L	Green	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1922-22, 5mA				
GCX1253-24L	Yellow	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1913-2, 26mA				
GCX1253-120L	Yellow	\$23.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1923-2, 5mA				
GCX1254-24L	Blue	\$25.50	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1914-2, 26mA				
GCX1254-120L	Blue	\$28.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1924-2, 5mA				
GCX1255-24L	Clear	\$28.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 24VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1902-5, 80mA	ECX1915-2, 26mA				
GCX1255-120L	Clear	\$29.00	PDF	22mm metal LED illuminated 2-position selector switch. Maintained. 120VDC/VAC. One N.O. contact block. Illuminated colored knob.	ECX1904-5, 20mA	ECX1925-2, 5mA				

For accessories, see 22mm Metal Pilot Device Accessories in this section.

GCX Series 22mm Metal Illuminated Selector Switches

Illuminated Three-Position Maintained Selector Switch

20 models available:

- · Available in five colors
- 24V and 120V models
- Available in spring-return and maintained styles
- Replacement knobs are available



GCX1263-24

	Illuminated Three-Position Maintained Selector Switches								
Part Number	Lamp Price Drawing Link		Drawing	Description	Replacement Incandescent Bulb 5 per pack	Replacement LED Lamp 2 per pack			
Incandescent									
GCX1261-24	Red	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA			
GCX1261-120	Red	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA			
GCX1262-24	Green	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA			
GCX1262-120	Green	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-22, 5mA			
GCX1263-24	Yellow	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA			
GCX1263-120	Yellow	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA			
GCX1264-24	Blue	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA			
GCX1264-120	Blue	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA			
GCX1265-24	Clear	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX1265-120	Clear	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA			
LED									
GCX1261-24L	Red	\$34.00	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA			
GCX1261-120L	Red	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA			
GCX1262-24L	Green	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA			
GCX1262-120L	Green	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-22, 5mA			
GCX1263-24L	Yellow	\$34.00	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA			
GCX1263-120L	Yellow	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA			
GCX1264-24L	Blue	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA			
GCX1264-120L	Blue	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA			
GCX1265-24L	Clear	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX1265-120L	Clear	\$39.00	PDF	22mm metal LED illuminated 3-position selector switch. Maintained. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA			

For accessories, see 22mm Metal Pilot Device Accessories in this section.

GCX Series 22mm Metal Illuminated Selector Switches

Illuminated Three-Position Spring Return Selector Wwitches

20 models available:

- Available in five colors
- 24V and 120V models
- · Available in spring-return and maintained styles
- Replacement knobs are available



GCX1283-24

		Illu	minated	d Three-Position Spring-Return Selector Switch	les	
Part Number	ber Lamp Price Drawin Color Price Link		Drawing	Description	Replacement Incandescent Bulb 5 per pack	Replacement LED Lamp 2 per pack
Incandescent						
GCX1281-24	Red	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX1281-120	Red	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX1282-24	Green	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX1282-120	Green	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX1283-24	Yellow	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX1283-120	Yellow	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX1284-24	Blue	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX1284-120	Blue	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX1285-24	Clear	\$29.00	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX1285-120	Clear	\$30.50	PDF	22mm metal incandescent illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA
LED						
GCX1281-24L	Red	\$34.00	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1911-2, 26mA
GCX1281-120L	Red	\$35.00	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1921-2, 5mA
GCX1282-24L	Green	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1912-2, 26mA
GCX1282-120L	Green	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1922-2, 5mA
GCX1283-24L	Yellow	\$34.00	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1913-2, 26mA
GCX1283-120L	Yellow	\$31.00	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1923-2, 5mA
GCX1284-24L	Blue	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1914-2, 26mA
GCX1284-120L	Blue	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1924-2, 5mA
GCX1285-24L	Clear	\$39.00	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 24VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1902-5, 80mA	ECX1915-2, 26mA
GCX1285-120L	Clear	\$37.50	PDF	22mm metal LED illuminated 3-position selector switch. Spring-return to Center. 120VDC/VAC. Two N.O. and Two N.C. contact blocks.	ECX1904-5, 20mA	ECX1925-2, 5mA

For accessories, see 22mm Metal Pilot Device Accessories in this section.

ECX Series 22mm Metal Joystick Selector Switches

Joystick Selector Switches

• Four models available

	Joystick Selector Switches							
Part Number	Price	Drawing Link	Description					
ECX1510	\$32.50	PDF	22mm metal joystick-style selector switch, two-position momentary, two N.O. contact blocks					
ECX1512	\$32.50	PDF	22mm metal joystick-style selector switch, two-position maintained, two N.O. contact blocks					
ECX1520	\$43.00	PDF	22mm metal joystick-style selector switch, four-position momentary, four N.O. contact blocks					
ECX1524	\$43.00	PDF	22mm metal joystick-style selector switch, four-position maintained, four N.O. contact blocks					



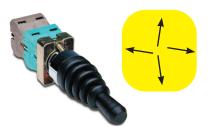
Note: Four-position switches use two special contact blocks which are not replaceable.

Note: When using switches having two-deep contact blocks (4-position joysticks) with the 22mm plastic enclosures, use enclosures that are 74mm deep; 51mm-deep enclosures are too shallow.



ECX1510 (Two-position momentary) ECX1512 (Two-position maintained)

- Moving the joystick UP will close contact on one side.
- Moving the joystick DOWN will close contact on other side.



ECX1520 (Four-position momentary) ECX1524 (Four-position maintained)

- Moving the joystick UP will close Green contact on one side and moving it DOWN will close Gray contact located behind it.
- Moving the joystick RIGHT will close Green contact on other side and moving it LEFT will close Gray contact located behind it.

Important Installation Note

It is very important that the joystick be assembled correctly to ensure proper operation.



Insert operator into support base (panel is not shown).



Twist clockwise until it clicks into place. Carefully tighten the securing screws. Do not over-tighten. (4.5 lb·in) If the operator is not "clicked" into position before the screws are tightened, the switch will not work properly.

GCX Series 22mm Metal Pilot Lights and Key Switches

LED Pilot Light

12 models available

- Available in six colors
- 24V and 120V models
- · LED lamps are included
- Accepts incandescent replacement bulbs



GCX1231-24L

	22mm LED Pilot Lights								
Part Number	Lamp Color			Replacement Incandescent Bulb 5 per pack	Replacement LED Lamp 2 per pack				
LED									
GCX1231-24L	Red	\$18.00	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1911-2, 26mA			
GCX1231-120L	Red	\$19.50	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1921-2, 5mA			
GCX1232-24L	Green	\$18.00	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1912-2, 26mA			
GCX1232-120L	Green	\$19.50	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1922-22, 5mA			
GCX1233-24L	Yellow	\$18.00	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1913-2, 26mA			
GCX1233-120L	Yellow	\$19.50	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1923-2, 5mA			
GCX1234-24L	Blue	\$18.00	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1914-2, 26mA			
GCX1234-120L	Blue	\$19.50	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1924-2, 5mA			
GCX1235-24L	Clear	\$20.50	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX1235-120L	Clear	\$22.00	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1925-2, 5mA			
GCX1236-24L	White	\$20.50	PDF	22mm metal LED illuminated pilot light. 24VDC/VAC	ECX1902-5, 80mA	ECX1915-2, 26mA			
GCX1236-120L	White	\$22.00	PDF	22mm metal LED illuminated pilot light. 120VDC/VAC	ECX1904-5, 20mA	ECX1925-2, 5mA			

Key-Operated Selector Switches

22mm Key-operated Selector Switches						
Part Number	Price	Drawing Link	Description			
GCX1420	\$22.50	PDF	22mm metal selector switch, key-operated, two-position maintained, key can be removed in all positions. One N.O. contact block. Replacement keys available			
GCX1430	\$22.50	PDF	22mm metal selector switch, key-operated, two-position spring-return from right. One N.O. contact block. Replacement keys available			
GCX1470-22	\$32.50	PDF	22mm metal selector switch, key-operated, three-position maintained, key can be removed in all positions. Two N.O. and two N.C. contact blocks. Replacement keys available			



GCX1420



Note: Keyed switches come with two keys. All metal 22mm keyed switches are keyed the same. Replacement keys are available. Order part no. <u>ECX1067-2</u> (pkg. of 2). Keys for metal 22mm keyed switches are not compatible with Cutler-Hammer key switches.



Note: When using switches having two-deep contact blocks (such as, Model <u>GCX1470-22</u>) with the 22mm plastic enclosures, be sure to use enclosures that are 74mm deep. 51mm-deep enclosures are too shallow and the switch body will not fit. Note: For contact closure sequence, refer to beginning of selector switches in this section.

For accessories, see 22mm Metal Pilot Device Accessories in this section.

ECX Series 22mm Metal Pilot Devices

Audible Annunciator

- 80dB @ 10cm
- 25mA @ 24V
- Intermittent sound when energized
- IP20 before installation
- IP65 after installation



	22mm Audible Annunciators								
Part Number	ber Color Price Drawing Link			Description					
ECX2070-24	Black	\$8.25	PDF	AutomationDirect audible alarm buzzer, 80 dB at 10cm, 2.4 kHz tone frequency, pulse tone(s), 24 VAC/VDC, 22mm, panel mount, plastic housing, black, IP65.					
ECX2070-127	Black	\$8.25	PDF	AutomationDirect audible alarm buzzer, 80 dB at 10cm, 2.4 kHz tone frequency, pulse tone(s), 120 VAC/VDC, 22mm, panel mount, plastic housing, black, IP65.					
ECX2071-24R	Red	\$10.50	PDF	AutomationDirect audible alarm buzzer, 80 dB at 10cm, 2.8 kHz tone frequency, pulse tone(s), 24 VAC/VDC, permanent LED indicator(s), red, 22mm, panel mount, plastic housing, red, IP65.					
ECX2071-127R	Red	\$10.50	PDF	AutomationDirect audible alarm buzzer, 80 dB at 10cm, 2.8 kHz tone frequency, pulse tone(s), 120 VAC/VDC, permanent LED indicator(s), red, 22mm, panel mount, plastic housing, red, IP65.					

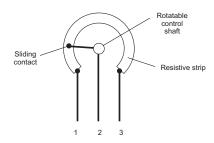
22mm Potentiometer

• IP65





	22mm Potentiometers								
Part Number	Quantity	Price	Drawing Link	Description					
ECX2300-5K	1	\$45.50	<u>PDF</u>	22mm potentiometer with $5k\Omega$ resistance, $\pm 10\%$. Nominal voltage: 250V. Rated dissipation: 2W at 25°C. Temperature range -40 to 70°C. Black handle. Connection type is screw terminal, 3-pole, 22-14 AWG.					
ECX2300-10K	1	\$45.50	<u>PDF</u>	22mm potentiometer with 10kΩ resistance, ±10%.Nominal voltage: 250V. Rated dissipation: 2W at 25°C. Temperature range -40 to 70°C. Black handle. Connection type is screw terminal, 3-pole, 22-14 AWG.					
ECX2640	1	\$4.25	NA	22mm legend plate for potentiometer with 0% to 100% marking, 50mm square. 50 x 50 x 1mm with 24.5 mm cutout.					



For accessories, see 22mm Metal Pilot Device Accessories in this section.

Replacement Incandescent Bulbs

	Replacement Incandescent Bulbs								
Part Number	Quantity	Price	Rating	Description					
ECX1900-5	5	\$10.50	6V@ 200mA , 1.2 watts	6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					
ECX1902-5	5	\$10.50	24V@ 80mA 2 watts	24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					
ECX1904-5	5	\$22.00	130V@20mA 2.6 watts	120V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4					



Note: Bulb removal tool available. Order part number HT8LAMPTOOL.

Replacement LED Lamps

	Replacement LED Lamps									
Part Number	Color	Quantity	Price	Rating	Description					
ECX1911-2	Red		\$19.00							
ECX1912-2	Green		\$24.00							
ECX1913-2	Yellow		\$19.00	24V@26mA 0.6 watts	LED replacement lamp for miniature bayonet bases Works with 22mm switches and indicators, but					
ECX1914-2	Blue		\$26.00							
ECX1915-2	White	2	\$31.00		illumination will not be as even when used with the					
ECX1921-2	Red	2	\$19.00		ECX 22mm indicators					
ECX1922-2	Green		\$24.00		Note: Will not replace sealed Cutler-Hammer monoblock LED indicators.					
ECX1923-2	Yellow		\$19.00	120V@5mA 0.6 watts	monopioon EED indicators.					
ECX1924-2	Blue		\$26.00	0.0 Walls						
ECX1925-2	White		\$31.00	1						



Hole plug

Hole Plug						
Part Number	Color	Price	Description			
ECX1490	Black	\$3.00	Plastic hole plug for 22.5 mm openings in panels and enclosures; supplied with O-ring and mounting screw. Two plugs per package.			



Pilot Light Replacement Lens

	Pilot Light Replacement Lens								
Part Number	art Number Lamp Price Description		Use with						
PL1170PR-5	Red	\$7.75	22mm metallic series pilot light replacement lens, 5/pk						
PL1170PV-5	Green	\$7.75	22mm metallic series pilot light replacement lens, 5/pk						
PL1170PG-5	Yellow	\$7.75	22mm metallic series pilot light replacement lens, 5/pk	Part numbers starting with					
PL1170PB-5	Blue	\$7.75	22mm metallic series pilot light replacement lens, 5/pk	GCX123					
PL1170PN-5	Clear	\$7.75	22mm metallic series pilot light replacement lens, 5/pk						
PL1170PW-5	White	\$7.75	22mm metallic series pilot light replacement lens, 5/pk						



Protective Covers for Pushbuttons

	Protective Covers for Pushbuttons									
Part Number	Color	Quantity	Price	Description						
ECX1700-5	Black		\$8.25							
ECX1701-5	Red		\$8.25	Ciliana protective covers for use with 20mm standard size flush pushbuttons						
ECX1702-5	Green		\$8.25	Silicone protective covers for use with 22mm standard-size flush pushbuttons.						
ECX1703-5	Yellow		\$8.25	Will not work with Cutler-Hammer pushbuttons, 22mm plastic illuminated or						
ECX1704-5	Blue	5	\$8.25	extended pushbuttons, or 22mm plastic pushbuttons with 40mm actuator face.						
ECX1705-5	Clear		\$8.25							
ECX1706-5	Clear		\$14.50	Clear silicone protective covers for use with 2 mm illuminated and extended pushbuttons only. Will not work with Cutler-Hammer pushbuttons or 22mm mushroom pushbuttons.						



ECX1703-5

Replacement 22mm Support Base

Replacement 22mm Support Base							
Part Number	Quantity	Price	Drawing Link	Description			
ECX1029-2	1	\$7.75	<u>PDF</u>	22mm metal support base Note: This item is supplied as a replacement part and is not required with any switch assembly. Will not work with Cutler-Hammer 22mm switches sold by AutomationDirect			



ECX1029-2

Replacement Contact Blocks

	Replacement Contact Blocks										
Part Number	Quantity	Price	Drawing Link	Contacts	Description						
ECX1030-2	2	\$8.00	PDF	Red,	Replacement contact block for 22mm pushbuttons and selector						
ECX1030-5	5	\$18.50	PDF	normally-closed (N.C.)	switches.						
ECX1040-2	2	\$8.00	PDF	Green,	Tightening Torque, terminal screw: 0.8Nm max mounting screw: 0.5Nm max						
ECX1040-5	5	\$18.50	PDF	normally-open (N.O.)	Note: Will not work with Cutler-Hammer 22mm switches.						
ECX1042-2	2	\$8.00	<u>PDF</u>	Brown, normally-open (N.O.), push-push	Replacement normally open push-push contact blocks for 22mm pushbutton and selector switches, pack of 2. Note: Will not work with Cutler-Hammer 22mm switches.						



ECX1030-2

Note: See electrical specifications on ECX Series 22mm Metal Pilot Devices Specifications page at beginning of this section.

Replacement Keys

Replacement Keys					
Part Number	Quantity	Price	Description		
ECX1067-2	Pkg of 2 sets (2 keys per set)	\$7.25	Replacement key for GCX series key-actuated selector switches, pack of 2 sets (2 keys each). NOTE: Will not work with Cutler-Hammer 22mm switches.		



ECX1067-2

Note: All key-actuated 22mm metal selector switches are keyed alike.

EMERGENCY STOP Legend Plate

EMERGENCY STOP Legend Plate							
Part Number	Quantity	Price	Drawing Link	Description			
ECX1651	1	\$3.00	PDF	Oversize yellow circular EMERGENCY STOP legend plate for 22mm E-stop type mushroom pushbuttons, 60mm outside diameter.			



Knockout Punches

Ruko's knockout punch hole-cutting tool includes punch, die and draw bolt (without ball bearing). Use for sheet steel, stainless-steel sheets, non-ferrous and light metals, and plastics up to 0.16'' (8 ga.) thick.

Replacement bolts are offered in three of the most popular sizes.

Note: Part number 109225 is recommended when punching holes for 22mm pilot devices.



Two-Position Short Lever Operator

	2-Position Short Lever Replacement Operator								
Part Number Lamp Color Price			2-Position	Use with					
<u>GR1172PR-5</u>	Red	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk						
<u>GR1172PV-5</u>	Green	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with					
<u>GR1172PG-5</u>			22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	GCX124, GCX125 GCX324, GCX325					
<u>GR1172PB-5</u>			22mm 2-position selector switch illuminated short lever replacement operator, 5/pk						
<u>GR1172PN-5</u>	Clear	\$18.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk						



Three-Position Short Lever Operator

3-Position Short Lever Replacement Operator								
Part Number Lamp Color Price			3-Position	Use with				
GR1288PR-5	Red	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					
GR1288PV-5	Green	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					
<u>GR1288PG-5</u>	Yellow	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with GCX126, GCX128 GCX326, GCX328				
GR1288PB-5	R1288PB-5 Blue \$18.00		22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	- GCA320, GCA320				
GR1288PN-5	Clear	\$18.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk					



GR1288PR-5

Mushroom Switch Replacement Operator

Mushroom Switch Replacement Operator									
Part Number	Lamp Color	Price	Description	Use with					
<u>PL1171PR-5</u>	Red	\$8.00	22mm, illuminated momentary Mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1221, GCX3221 mushroom-style illuminated pushbuttons					
PL1298P-5	Red	\$8.00	22mm illuminated twist-to-release mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1226, GCX3226 mushroom-style illuminated pushbuttons					



Flush Pushbutton Replacement Operator

	Flush Pushbutton Replacement Operator								
Part Number	Lamp Color	Price	Description	Use with					
<u>GR1168PR-5</u>	Red	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PV-5</u>	Green	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PG-5</u>	Yellow	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk	Part numbers starting with					
<u>GR1168PB-5</u>	Blue	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk	GCX119, GCX120 GCX319, GCX320					
<u>GR1168PN-5</u>	Clear	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						
<u>GR1168PW-5</u>	White	\$10.00	22mm illuminated flush pushbutton replacement operator, 5/pk						



Extended Pushbutton Replacement Operator

	Extended Pushbutton Replacement Operator									
Part Number	Lamp Color	Price	Description	Use with						
PL1308PR-5	Red	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk							
PL1308PV-5	Green	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk							
PL1308PG-5	Yellow	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk	Part numbers starting with						
PL1308PB-5	Blue	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk	GCX121, GCX321						
PL1308PN-5	Clear	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk							
PL1308PW-5	White	\$7.75	22mm illuminated extended pushbutton, replacement operator, 5/pk							



Legend Plates

Aluminum legend plates for use with 22mm pilot devices. Black or red field with silver background. O-ring included.







ECX1670A-R03

	Aluminum Legend Plates									
Legend	Color of Field	Text Color	Background Color	Part Number	Price	Drawing Link				
AUTO OFF HAND	Black	Black	Silver	ECX1670A-B46	\$4.25	PDF				
Blank Plate	Black	-	Silver	ECX1670A-B	\$4.25	PDF				
Blank Plate	Red	-	Silver	ECX1670A-R	\$4.25	PDF				
CLAMP	Black	Black	Silver	ECX1670A-B24	\$4.25	PDF				
CLOSE	Black	Black	Silver	ECX1670A-B01	\$4.25	PDF				
DOWN	Black	Black	Silver	ECX1670A-B02	\$4.25	PDF				
EMERG. STOP	Red	Red	Silver	ECX1670A-R03	\$4.25	PDF				
EXTEND	Black	Black	Silver	ECX1670A-B51	\$4.25	PDF				
FEEDER OFF	Black	Black	Silver	ECX1670A-B26	\$4.25	PDF				
FEEDER ON	Black	Black	Silver	ECX1670A-B25	\$4.25	PDF				
FOR OFF REV	Black	Black	Silver	ECX1670A-B19	\$4.25	PDF				
FOR REV	Black	Black	Silver	ECX1670A-B13	\$4.25	PDF				
FORWARD	Black	Black	Silver	ECX1670A-B04	\$4.25	PDF				
GRIP	Black	Black	Silver	ECX1670A-B53	\$4.25	PDF				
HAND-AUTO	Black	Black	Silver	ECX1670A-B14	\$4.25	PDF				
HAND OFF AUTO	Black	Black	Silver	ECX1670A-B20	\$4.25	PDF				
HIGH	Black	Black	Silver	ECX1670A-B27	\$4.25	PDF				
HIGH LOW	Black	Black	Silver	ECX1670A-B43	\$4.25	PDF				
IN	Black	Black	Silver	ECX1670A-B28	\$4.25	PDF				
INCH	Black	Black	Silver	ECX1670A-B29	\$4.25	PDF				
JOG	Black	Black	Silver	ECX1670A-B05	\$4.25	PDF				
JOG FOR	Black	Black	Silver	ECX1670A-B30	\$4.25	PDF				
JOG REV	Black	Black	Silver	ECX1670A-B31	\$4.25	PDF				
JOG RUN	Black	Black	Silver	ECX1670A-B15	\$4.25	PDF				
LOW	Black	Black	Silver	ECX1670A-B32	\$4.25	PDF				
LOWER	Black	Black	Silver	ECX1670A-B33	\$4.25	PDF				
MAN AUTO	Black	Black	Silver	ECX1670A-B44	\$4.25	PDF				

Note: Legend plate text is 3mm in height

Continued on next page





<u>48</u> <u>ECX1670A-R11</u>

	Alumin	um Leg	end Plates (c	ontinued)		
Legend	Color of Field	Text Color	Background Color	Part Number	Price	Drawing Link
MAN OFF AUTO	Black	Black	Silver	ECX1670A-B47	\$4.25	PDF
MOTOR RUN	Black	Black	Silver	ECX1670A-B22	\$4.25	PDF
MOTOR STOP	Black	Black	Silver	ECX1670A-B23	\$4.25	PDF
OFF	Black	Black	Silver	ECX1670A-B34	\$4.25	PDF
OFF ON	Black	Black	Silver	ECX1670A-B16	\$4.25	PDF
ON	Black	Black	Silver	ECX1670A-B06	\$4.25	PDF
OPEN	Black	Black	Silver	ECX1670A-B07	\$4.25	PDF
OPEN OFF CLOSE	Black	Black	Silver	ECX1670A-B48	\$4.25	PDF
OPEN CLOSE	Black	Black	Silver	ECX1670A-B17	\$4.25	PDF
OUT	Black	Black	Silver	ECX1670A-B35	\$4.25	PDF
POWER ON	Black	Black	Silver	ECX1670A-B21	\$4.25	PDF
PULL ON PUSH OFF	Black	Black	Silver	ECX1670A-B50	\$4.25	PDF
RAISE	Black	Black	Silver	ECX1670A-B36	\$4.25	PDF
READY	Black	Black	Silver	ECX1670A-B37	\$4.25	PDF
RELEASE	Black	Black	Silver	ECX1670A-B54	\$4.25	PDF
RESET	Black	Black	Silver	ECX1670A-B38	\$4.25	PDF
RETRACT	Black	Black	Silver	ECX1670A-B52	\$4.25	PDF
REVERSE	Black	Black	Silver	ECX1670A-B08	\$4.25	PDF
RUN	Black	Black	Silver	ECX1670A-B09	\$4.25	PDF
SAFE RUN	Black	Black	Silver	ECX1670A-B45	\$4.25	PDF
START	Black	Black	Silver	ECX1670A-B10	\$4.25	PDF
STOP	Black	Black	Silver	ECX1670A-B11	\$4.25	PDF
STOP	Red	Red	Silver	ECX1670A-R11	\$4.25	PDF
TEST	Black	Black	Silver	ECX1670A-B39	\$4.25	PDF
TRANSFER	Black	Black	Silver	ECX1670A-B40	\$4.25	PDF
TRIP	Black	Black	Silver	ECX1670A-B41	\$4.25	<u>PDF</u>
UNCLAMP	Black	Black	Silver	ECX1670A-B42	\$4.25	PDF
UP	Black	Black	Silver	ECX1670A-B12	\$4.25	PDF
UP OFF DOWN	Black	Black	Silver	ECX1670A-B49	\$4.25	PDF
UP DOWN	Black	Black	Silver	ECX1670A-B18	\$4.25	<u>PDF</u>

Note: Legend plate text is 3mm in height





	Jum	bo Alu	minum Legei	nd Plates		
Legend	Color of Field	Text Color	Background Color	Part Number	Price	Drawing Link
Blank Plate	Black	-	Silver	ECX1680A-B	\$4.75	PDF
Blank Plate	Red	-	Silver	ECX1680A-R	\$4.75	PDF
EMERG. STOP	Red	Red	Silver	ECX1680A-R03	\$4.75	PDF
HAND OFF AUTO	Black	Black	Silver	ECX1680A-B20	\$4.75	PDF
JOG	Black	Black	Silver	ECX1680A-B05	\$4.75	PDF
OFF ON	Black	Black	Silver	ECX1680A-B16	\$4.75	PDF
OPEN CLOSE	Black	Black	Silver	ECX1680A-B17	\$4.75	PDF
POWER ON	Black	Black	Silver	ECX1680A-B21	\$4.75	PDF
START	Black	Black	Silver	ECX1680A-B10	\$4.75	PDF
STOP	Red	Red	Silver	ECX1680A-R11	\$4.75	PDF

Note: Legend plate text is 3mm in height



Comepi Control Stations -

Precision, Durability, and Performance

Unmatched Control and Safety for Industrial Applications

Comepi Control Stations deliver high-performance control solutions designed to optimize machine operation, safety, and efficiency in demanding industrial environments. Available in single-function, multi-function, and emergency stop (E-Stop) configurations, these control stations meet the diverse needs of industrial automation, machinery control, and safety applications. Additionally, M12 quick-connect versions allow for fast, tool-free installation, reducing wiring complexity and improving system efficiency. Whether you need basic pushbutton control, selector switches, or advanced safety mechanisms, Comepi has a solution to meet your requirements.

Features

- Rugged Construction Built with polycarbonate fiberglass reinforcement, these control stations offer high impact resistance, ensuring long-lasting performance in industrial settings.
- Pre-Assembled Convenience Delivered as ready-to-install units, Comepi control stations eliminate assembly time, increasing operational efficiency.
- Superior Protection Rated IP65, these stations are dusttight and resistant to water jets, making them suitable for harsh environments.
- Double Insulation for Safety Class II insulation enhances electrical safety, reducing the risk of failures.
- Versatile Operation Available in momentary, maintained, and key-operated configurations, catering to various control requirements.
- User-Friendly Design The ergonomic pushbuttons, knobs, and levers ensure effortless operation and precise control.
- Quick & Secure Installation Can be mounted using four M4 screws or GR CA-001 magnets (not included), providing flexibility in mounting options.
- M12 Quick-Connect Options Pre-wired M12 connector versions simplify installation and enable plug-and-play connectivity for industrial automation systems.

Approvals

- cULus
- CE





SB114-042-G



SB414-01B-G

€ ⊂○⋈≡⊃ Control Station Selection

			C	ontrol Stati	on Sele	ction Chart					
Part Number	Price	Drawing Link	Operator Color	Operator Legend	Legend Plate Marking	Operator Type	Action	Contact Type	Number of Operators		
<u>SB114-011-G</u>	\$24.00	PDF	White	START		Flush		(1) N.O.			
<u>SB114-021-G</u>	\$24.00	PDF	D	STOP		Extended		(1) N.O.			
SB114-022-G	\$24.00	PDF	Black	STOP		Extended		(1) N.C.			
<u>SB114-031-G</u>	\$23.00	PDF	Green	(I)	N/A	Flush	Momentary	(1) N.O.			
SB114-042-G	\$23.00	PDF	Red	(O)		Flush		(1) N.C.	1		
<u>SB114-081-G</u>	\$22.00	PDF		N/A -				Flush		(1) N.O.	
<u>SB114-051-G</u>	\$26.00	PDF	B		N/A	0 - 1	Knob		(1) N.O.		
<u>SB114-073-G</u>	\$28.00	PDF	Black			O -I -2	Knob	Maintained	(2) N.O.		
SB114-061-G	\$39.00	PDF			0 - 1	Key-operated		(1) N.O.			
SB214-013-G	\$34.00	PDF	Black/black	up arrow and down arrow		Flush/flush		(1) N.O. and (1) N.O.			
SB214-024-G	\$34.00	PDF		(I) and (0)	N/A	Flush/flush		(1) N.O. and (1) N.C.			
SB214-034-G	\$32.00	PDF	Red/green			Flush/flush	Momentary	(1) N.O. and (1) N.C.	2		
SB214-044-G	\$37.00	PDF		N/A	START / STOP	Flush/extended		(1) N.O. and (1) N.C.			
SB314-017-G	\$43.00	PDF	Green/red/ green	(I), (O) and (II)		Flush/extended/ flush		(1) N.O., (1) N.C. and (1) N.O.	3		
<u>SB414-01B-G</u>	\$68.00	<u>PDF</u>	Red/white/ black/blue	arrow, up arrow, down arrow and RESET	N/A	Mushroom/flush/ flush/flush	Twist-to- release/ momentary	(1) N.C., (1) N.O., (1) N.O. and (1) N.O.	4		



Approvals



• CE, cULus • IP65

	Technical S	Specifications Specification S				
Connection		Screw with captive cable clamp				
Body Material		Polycarbonate fiberglass reinforced				
Construction Form		Pre-assembled enclosure				
Max. Switching Freque	ency [cycles/hr]	3600				
Operating Temperature	e	- 40 to +158°F [- 4 to 70°C]				
Degree of Protection		IP65				
Protection Against Ele	ctrical Shocks	Class II - Double insulation				
Pollution Degree		3				
Rated Impulsive Voltag	ge [kV]	8				
Short Circuit Protection type gG (gl)) [A]	n (EU min 500VAC - fuses	10				
Colors		Gray cover black box				
	Ie - AC-15 (50-60 Hz) [VAC - A]	24V - 10A / 240V - 6A / 400V - 4A				
Operating Currents	DC-13 operating currents [VDC - A]	24V - 2,8 A / 125V - 0.55A / 250V - 0.27A				
Marking Terminals		According to EN 60947 - 5-1				
B10d		2 (million of operations)				
Mechanical Durability		1 (millions of operations)				
Number of Holes		1 to 4				
Mounting		Four M4 screws or optional GR CA-001 magnets				
Rated Insulating Voltage	ge Ui [VDC]	690				
Agency Approvals		CE, cULus				





SB314-017-G-M

Features

- M12 connectors
- Polycarbonate fiberglass reinforced
- Pre-assembled enclosure
- Class II Double insulation

Approvals

- CE, cULus
- IP65



			M1	2 Control	Station	Selection	on Char			
Part Number	Price	Drawing Link	Operator Color	Operator Legend	Legend Plate Marking	Operator Type	Action	Contact Type	Number of Operators	Pin Count
<u>SB114-011-G-M</u>	\$39.00	PDF	White	START		Flush		(A) N O		
<u>SB114-021-G-M</u>	\$39.00	PDF	Dist	OTOD		Extended		(1) N.O.		
<u>SB114-022-G-M</u>	\$39.00	PDF	Black	STOP		Extended		(1) N.C.		
<u>SB114-031-G-M</u>	\$38.00	<u>PDF</u>	Green	(1)		Flush	Momentary	(1) N.O.		
<u>SB114-042-G-M</u>	\$38.00	<u>PDF</u>	Red	(O) N/A	Flush		(1) N.C.	1		
<u>SB114-081-G-M</u>	\$38.00	PDF			NI/A	Flush	Maintained	(1) N.O.	-	5-pin female M12 cable
<u>SB114-051-G-M</u>	\$41.00	PDF	Diode		IN/A	Knob		(1) 14.0.		
<u>SB114-073-G-M</u>	\$46.00	PDF	Black	IN/A		Knob Ma		(2) N.O.		
<u>SB114-061-G-M</u>	\$55.00	PDF				Key- operated		(1) N.O.		
<u>SB214-013-G-M</u>	\$51.00	PDF	Black/black	up arrow and down arrow		Flush/flush		(1) N.O. and (1) N.O.		
<u>SB214-024-G-M</u>	\$51.00	PDF		(I) and (0)		Flush/flush			2	
SB214-034-G-M	\$50.00	PDF	Red/green	N1/A		Flush/flush	Momentary	(1) N.O. and (1) N.C.	2	
SB214-044-G-M	\$54.00	PDF		N/A	START / STOP	Flush/ extended				
SB314-017-G-M	\$70.00	<u>PDF</u>	Green/red/ green	(I), (O) and (II)	N/A	Flush/ extended/ flush		(1) N.O., (1) N.C. and (1) N.O.	3	8-pin female
SB414-01B-G-M	\$96.00	PDF	Red/white/ black/blue	arrow, up arrow, down arrow and RESET	IN/A	Mushroom/ flush/flush/ flush	Twist-to- release/ momentary	(1) N.C., (1) N.O., (1) N.O. and (1) N.O.	4	M12 cable



	M12 Control S	Station Specifications				
Operating Currents	le - AC-15 (50-60 Hz) [VAC - A]	24V - 4A				
'	DC-13 [VDC - A]	24V - 4A				
Rated Insulating Vol	tage Ui [VDC]	125				
Body Material		Polycarbonate fiberglass reinforced				
Construction Form		Pre-wired enclosure				
Operating Temperat	ure	- 40 to +158°F [- 4 to 70°C]				
Degree of Protection	1	IP65				
Reference Regulation	ns	Class II - Double insulation				
Pollution Degree		3				
Rated Impulsive Vol	tage [kV]	2.5				
Short Circuit Protect type gG (gl)) [A]	tion (EU min 500VAC - fuses	4				
Marking Terminals		According to EN 60947 - 5-1				
Mechanical Durabili	ty	1 (millions of operations)				
B10d		2 (millions of operations)				
Colors		Gray cover black box				
Mounting		Four M4 screws or optional GR CA-001 magnets				
Connection		M12x1.0 5-pole connector and 8-pin				
Number of Holes		1 to 4				
Agency Approvals		CE, cULus				

tPIL-55

E-Stop Control Stations





- IP65





SB115-012-G

SB115-102-G

	E-Stop Selection Chart												
Part Number	Price	Drawing Link	Operator Color	Operator Legend	Operator Type	Action	Operator Protection	Contact Type					
<u>SB115-012-G</u>	\$31.00	PDF						(1) N.C.					
<u>SB115-013-G</u>	\$34.00	PDF				n Twist-to-release	N/A	(1) N.O./(1) N.C.					
<u>SB115-015-G</u>	\$34.00	PDF						(2) N.C.					
<u>SB115-102-G</u>	\$34.00	PDF	Red	Arrow	Mushroom			(1) N.C.					
<u>SB115-103-G</u>	\$37.00	PDF					Guarded and Padlockable	(1) N.O./(1) N.C.					
<u>SB115-105-G</u>	\$37.00	<u>PDF</u>						(2) N.C.					

	E-Sto	p Specifications					
Mounting		Four M4 screws or GR CA-001 magnets					
Body Material		Reinforced thermoplastic					
Construction Form		Pre-assembled enclosure					
Connection		Screw with captive cable clamp					
Operating Tempera	ture	- 40 to +158°F [- 4 to 70°C]					
EN 60947-5-5 EN IS	O 13850	Compliant					
Reference Regulati	ons	Class II - Double insulation					
Degree of Protection	on	IP65					
Colors		Yellow cover black box					
Rated Insulating Vo	oltage Ui [VDC]	690					
Pollution Degree		3					
Rated Impulsive Vo	ltage [kV]	8					
Short Circuit Prote - fuses type gG (gl)	ction (EU min 500Vac) [A]	10					
Operating Currents	Ie - AC-15 (50-60 Hz) [VAC - A]	24V - 10A / 240V - 6A / 400V - 4A					
Currents	DC-13 [VDC - A]	24V - 2.8 A / 125V - 0.55A / 250V - 0.27A					
Max. Switching Frequency [cycles/hr]		3600					
Marking Terminals		According to EN 60947 - 5-1					
Mechanical Durability		0.3 (millions of operations)					
B10d		0.6 (millions of operations)					
Agency Approvals		CE, cULus					

tPIL-56

OM≡ M12 E-Stop Control Stations





Approvals • CE, cULus

- IP65



SB115-012-G-M

SB115-105-G-M

	M12 E-Stop Selection Chart												
Part Number	Price	Drawing Link	Operator Color	Operator Legend	Operator Type	Requires	Action	Operator Protection	Contact Type				
<u>SB115-012-G-M</u>	\$46.00	<u>PDF</u>							(1) N.C.				
<u>SB115-013-G-M</u>	\$51.00	PDF			Mushroom			N/A	(1) N.O./(1) N.C.				
<u>SB115-015-G-M</u>	\$51.00	PDF	Dad			5-pin female	Tuint to release		(2) N.C. (1) N.C. (1) N.O./(1) N.C.				
<u>SB115-102-G-M</u>	\$50.00	PDF	Red	Arrow		M12 cable	Twist-to-release						
<u>SB115-103-G-M</u>	\$55.00	PDF						Guarded and Padlockable					
<u>SB115-105-G-M</u>	\$55.00	PDF							(2) N.C.				

	M12 E-9	Stop Specifications			
Mounting		Four M12 screws or GR CA-001 magnets			
Body Material		Reinforced thermoplastic			
Construction Form	n	Pre-wired enclosure			
Connection		M12x1.0 5-pole connector			
Operating Temper	ature	- 40 to +158°F [- 4 to 70°C]			
Degree of Protecti	ion	IP65			
EN 60947-5-5 EN I	SO 13850	Compliant			
Reference Regula	tions	Class II - Double insulation			
Rated Insulating V	/oltage Ui [VDC]	125			
Pollution Degree		3			
Rated Impulsive V	oltage [kV]	2.5			
Short Circuit Prote 500Vac - fuses typ		4			
Operating	Ie - AC-15 (50-60 Hz) [VAC - A]	24V - 4A			
Currents	DC-13 operating currents [VDC - A]	24V - 4A			
Max. Switching Fr	equency [cycles/hr]	3600			
Marking Terminals		According to EN 60947 - 5-1			
B10d		0.6 (millions of operations)			
Colors		Yellow cover with black box			
Mechanical Durab	ility	0.3 (millions of operations)			
Agency Approvals	3	CE, cULus			

€ Contact Blocks





ECX1030N-2

ECX1040N-2

Approvals

- CE, cULus
- IMQ, EAC, CCC



	Contact Block Selection Chart								
Part Number	Price	Drawing Link	Contact Type	Description	Color				
ECX1030N-2	\$4.00	PDF	(1) N.C.	Comepi contact block, replacement, 22mm, (1) N.C. contact(s). Package of 2. For use with ECX4029-2 mounting flange.	Red				
ECX1040N-2	\$4.00	PDF	(1) N.O.	Comepi contact block, replacement, 22mm, (1) N.O. contact(s). Package of 2. For use with ECX4029-2 mounting flange.	Green				

	Contact I	Block Specifications					
Docitivo Openina	Ountact 1	IFC 60947-5-1					
Positive Opening		120 000 11 0 1					
Material		Plastic					
Color		Red or Green					
Rated Insulation Voltage	Ui	IEC 60947-1 and EN 60947-1 UL 508 and CSA C22-2 n°14 / 690					
Rated Impulse withstand	Voltage Uimp [kV]	IEC 60947-1 and EN 60947-1 / 8					
Contact Rating UL 508		A600, Q300					
Pollution Degree		3					
Conditional Short-Circuit	Current	IEC 60947-1 and EN 60947-1					
Conventional Free Air The	ermal Current Ith	EC 60947-5-1 and EN 60947-5-1 θ < 40°C					
Short-Circuit Protection U (gl) fuses [A]	le min 500Vac-gG	< 500 VAC – gG (gl) type fuses / 10					
Rated Operational	e / AC-15:	24VAC - 50/60 Hz 240VAC - 50/60 Hz 400VAC - 50/60 Hz					
Current [IEC 60947-5-1]	le / DC-13:	24VDC 125VDC 250VDC					
Switching Frequency [cyc	cles/hr]	3600					
Resistance between Cont	acts	Less than or equal to 25 mΩ					
Protection Degree IEC 60529 and EN 60529		IP20					
Connecting Terminals		Screw with captive cable clamp 1 or 2 conductors - 0.5 to 2.5					
Agency Approvals		cULus, CE					

□□M≡□ Operator Selection







Applications • IEC 60947-5 -1





ECX4101 ECX4410

ECX4102

Approvals

• CE, UL508

			Operator Selection Chart				
Part Number	Price	Drawing Link	Description	Operator Color	Operator Legend	Action	Туре
ECX4105-91	\$4.00	<u>PDF</u>	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: white, flush, 30mm, round, plastic, operator text "START". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	White	START		Flush
ECX4110-91	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: black, extended, 30mm, round, plastic, operator text "STOP". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Black	STOP		
ECX4111	\$3.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: red, extended, 30mm, round, plastic. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Red			Extended
ECX4111-01	\$4.00	<u>PDF</u>	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: red, extended, 30mm, round, plastic, operator text "(O)". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Neu	(O)	Momontony	
ECX4107-90	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: green, flush, 30mm, round, plastic, operator text "(I)". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Green	(1)	Momentary	
ECX4107-91	\$4.00	<u>PDF</u>	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: green, flush, 30mm, round, plastic, operator text "(II)". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Green	(II)		Flush
ECX4106	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: red, flush, 30mm, round, plastic, operator text "(O)". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Red	(O)		Flusii
ECX4100	\$3.00	<u>PDF</u>	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: black, flush, 30mm, round, plastic. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.				
ECX4300	\$4.00	PDF	Comepi selector switch, IP65, 22mm, 2-position, maintained, operator only, thermoplastic base, thermoplastic bezel, Operator: black, knob, 30mm, round. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Dist			Knob
ECX4320	\$4.00	PDF	Comepi selector switch, IP65, 22mm, 3-position, maintained, operator only, thermoplastic base, thermoplastic bezel, Operator: black, knob, 30mm, round. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Black	N/A	Maintained	Knob
ECX4410	\$13.00	PDF	Comepi selector switch, IP65, 22mm, 2-position, maintained, key removable left position, operator only, thermoplastic base, thermoplastic bezel, Operator: black, key-operated, 30mm, round. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.				Key-operated
ECX4101	\$3.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: red, flush, 30mm, round, plastic. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Red			
ECX4102	\$3.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: green, flush, 30mm, round, plastic. Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Green			
ECX4108-01-B	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: white, flush, 30mm, round, plastic, operator text "up arrow". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	White	up arrow	Manager	El al
ECX4108	\$4.00	<u>PDF</u>	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: black, flush, 30mm, round, plastic, operator text "down arrow". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Dist	down arrow	Momentary	Flush
ECX4108-01	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: black, flush, 30mm, round, plastic, operator text "up arrow". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Black	up arrow		
ECX4104-92	\$4.00	PDF	Comepi pushbutton, IP65, 22mm, momentary, operator only, thermoplastic base, thermoplastic bezel, Operator: blue, flush, 30mm, round, plastic, operator text "RESET". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Blue	RESET		
ECX4580	\$14.00	PDF	Comepi emergency stop pushbutton, IP65, 22mm, twist-to-release, operator only, thermoplastic base, thermoplastic bezel, Operator: red, mushroom, 40mm, mushroom, plastic, operator text "arrow". Requires ECX4029-2 mounting flange and ECX10x0N-2 contact block.	Red	arrow	Twist-to- release	Mushroom

Operator Specifications			
Operator Diameter [mm]	30		
Mounting Hole [mm]	22		
Body Material	Plastic		
Degree of Protection	IP65		
Reference Regulations	IEC 60947-5 -1 / IEC 60947-5-5		
Approvals CE,UL			

© □□M≡□ Accessories









<u>GRCA-001</u> <u>ECX4029-2</u> <u>ECX2790</u> <u>ECX1669-G</u>

	Accessory Selection Chart						
Part Number	Price	Drawing Link	Used with	Color	Description		
ECX4029-2	\$2.00	PDF	Comepi 22mm pushbuttons	Black	Comepi mounting flange, thermoplastic, black. Package of 2. For use with Comepi 22mm pushbuttons.		
<u>GRCA-001</u>	\$18.00	PDF	Comepi control stations and pushbutton enclosures	N/A	Comepi SB series mounting magnets, package of 4. For use with Comepi control stations and pushbutton enclosures. Mounting hardware included.		
ECX1670-B10-90	\$3.00	<u>PDF</u>	22mm pilot devices	Black	Comepi legend plate, plastic, rectangular, black field, black background, white engraved text, legend plate marking "START". For use with 22mm pilot devices.		
ECX1670-R11-90	\$3.00	PDF	22mm pilot devices	Red	Comepi legend plate, plastic, rectangular, red field, red background, white engraved text, legend plate marking "STOP". For use with 22mm pilot devices.		
ECX1670-B55	\$3.00	PDF	22mm pilot devices	Black	Comepi legend plate, plastic, rectangular, black field, black background, white engraved text, legend plate marking "0-1". For use with 22mm pilot devices.		
ECX1670-B56	\$3.00	PDF	22mm pilot devices	Black	Comepi legend plate, plastic, rectangular, black field, black background, white engraved text, legend plate marking "0-1-2". For use with 22mm pilot devices.		
ECX2790	\$4.00	PDF	Comepi 22mm pushbuttons	Yellow	Comepi SB series guard, yellow. For use with Comepi 22mm pushbuttons. For emergency stop applications.		
ECX1608	\$2.00	PDF	Comepi 22mm pushbuttons	N/A	Comepi SB series installation/removal tool, for use with Comepi 22mm pushbuttons.		
ECX1669-G	\$2.00	<u>PDF</u>	22mm pilot devices	Yellow	Comepi legend plate, plastic, round, yellow field, yellow background, black engraved text, legend plate marking "EMERGENCY STOP". For use with 22mm pilot devices.		



Enclosure Selection and Specifications

Description

Comepi SB enclosures are made of fiberglass reinforced polycarbonate. Assembled to the Comepi command and control units, they are the ideal complement to be used as high quality human-machine interfaces. The SB line has been designed for applications in harsh environments, it can reach IP67 and IP69K protection degree, thanks also to gasket on deposit. The enclosure has numerous aesthetic, structural and use strengths, which distinguish it from the competition and place it among the top of the range.

Features/Applications

- Black body with gray cover or black body with yellow cover
- Pre-assembled enclosure
- Class II Double insulation
- Polycarbonate fiberglass reinforced
- · Mounting hardware included
- Form-in-place gasket for best sealing performance
- Rated IP67 and IP69K
- Contacts may be mounted on the enclosure body.
- May be mounted using four M4 screws or GR CA-001 magnets (not included), providing flexibility in mounting options.

Listings

- UL Listed
- CE, cULus
- IP67, IP69K







SB114



SB414

	Enclosures Selection Chart					
Part Number	Price	Drawing Link	Color	Description	Dimensions (HxWxD) mm [in]	
<u>SB114</u>	\$13.00	PDF	black body / gray cover	Comepi SB series pushbutton enclosure, 1 hole, 22mm, 83 x 72 x 53mm (HxWxD), wall mount, with knockouts, fiberglass-reinforced polycarbonate, black body / gray cover, screw cover.	83 x 72 x 53	
<u>SB115</u>	\$13.00	PDF	black body / yellow cover	Comepi SB series pushbutton enclosure, 1 hole, 22mm, 83 x 72 x 53mm (HxWxD), wall mount, with knockouts, fiberglass-reinforced polycarbonate, black body / yellow cover, screw cover.	[3.3 X 2.8 X 2.1]	
<u>SB214</u>	\$16.00	PDF	black body / gray cover	Comepi SB series pushbutton enclosure, 2 holes, 22mm, 123 x 72 x 53mm (HxWxD), wall mount, with knockouts, fiberglass-reinforced polycarbonate, black body / gray cover, screw cover.	123 x 72 x 53 [4.8 x 2.8 x 2.1]	
<u>SB314</u>	\$17.00	PDF	black body / gray cover	Comepi SB series pushbutton enclosure, 3 holes, 22mm, 156 x 72 x 53mm (HxWxD), wall mount, with knockouts, fiberglass-reinforced polycarbonate, black body / gray cover, screw cover.	156 x 72 x 53 [6.1 x 2.8 x 2.1]	
<u>SB414</u>	\$20.00	PDF	black body / gray cover	Comepi SB series pushbutton enclosure, 4 holes, 22mm, 189 x 72 x 53mm (HxWxD), wall mount, with knockouts, fiberglass-reinforced polycarbonate, black body / gray cover, screw cover.	189 x 72 x 53 [7.4 X 2.8 X 2.1]	

Enclosures Specifications				
Body Material	Polycarbonate fiberglass reinforced			
Construction Form	Pre-assembled enclosure			
Mounting	Fixing Four M4 screws or option of GR CA-001 magnets (not included)			
Operating Temperature	- 40 to +158°F [- 4 to 70°C]			
Degree of Protection	IP67, IP69K			
Colors	Gray cover with black box or yellow cover with black box			
Standards	CE, cULus			

	Connection Knockout Holes			
<u>SB114</u>	2 M20/PG13.5, 2 M20/M25 on the sides, 2 M16 on the bottom			
<u>SB115</u>	2 M20/PG13.5, 2 M20/M25 on the sides, 2 M16 on the bottom			
SB214 2 M20/PG13.5, 2 M20/M25 on the sides, 2 M16 on the bottom				
SB314 6 M20/M25 on the sides, 2 M16 on the bottom				
<u>SB414</u>	6 M20/M25 on the sides, 2 M16 on the bottom			



Features

- 3-pole positive guided contacts
- Plastic housings (IP67) or stainless steel 316 housings (IP69K/NEMA 6)
- 40mm twist-to-release mushroom head operator
- Conformance to ISO 13850, IEC 60947-5-1 and IEC 60947-5-5
- 2 conduit entries (all entries sealed)

- UL File E365665
- · Lid safety trip mechanism ensures that safety contacts will open if the lid is removed
- · Models available with button protection guard and
- Includes one tamper-proof T20 Torx bit for stainless steel versions

-25 to +80°C (-13 to +176°F)

0.35 mm @ 10-500 Hz

15g @ 11ms

ISO13850, ISO13849-1





	3-Pole Emergency Stop Control Stations							
Part Number	Housing Type	Contacts	Wiring Diagram	Conduit Entry	Price	Drawing Link		
ES-P-230001		2 N.C., 1 N.O.	Figure 1	Knockout	\$43.50	PDF		
ES-P-230002	Plastic	3 N.C.	Figure 2	(2) M20 (2) ½" NPT	\$43.50	PDF		
ES-SS-231002	Stainless steel 316	2 N.C., 1 N.O.	Figure 1	(2) 1/" NDT	\$202.00	PDF		
ES-SS-231004	Stairliess steer 3 to	3 N.C.	Figure 2	(2) ½" NPT	\$202.00	PDF		
ES-SSP-231006	Stainless steel 316 with button protection guard and	2 N.C., 1 N.O.	Figure 1	(O) 1/" NDT	\$215.00	PDF		
ES-SSP-231008	padlock holes	3 N.C.	Figure 2	(2) ½" NPT	\$215.00	<u>PDF</u>		



ES-P-230001

Safety Classification and Reliability Data		
Mechanical Reliability B10d	1.5 x 10 ⁶ operations at 100mA load	
ISO 13849-1	Up to PLe depending upon system architecture	
EN 62061	Up to SIL3 depending upon system architecture	
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days	
PFHd	< 1.0 x 10 ⁷	
Proof Test Interval (Life)	21 years	
MTTFd	214 years	
Floatrie	val and Canaval Chapitications	

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	(6)

ES-SS-231002

Electrical and General Specifications				
Enclosure / Cover	Polyester or Stainless Steel 316			
IP Rating / NEMA	IP67 Plastic / IP69K Stainless Steel / NEMA 6			
Mounting	(4) M4			
Mounting Position	Any			
Conduit Entries	(2) ½" NPT for Stainless Steel housing Knockout (2) M20 / (2) ½" for Plastic housing			
Torque Settings	Mounting: M4 4.0 N·m Lid: T20 Torx M4 1.5 N·m Terminals: 1.0 N·m			



ES-SSP-231006

Plastic: 250g (0.55 lb) Weight Stainless Steel: 1000g (2.20 lb) IEC 947-5-1 double break type Zb Contact Type Snap action up to 3 N.C. (positive break) 1 N.O. (Auxiliary)

Contact Material **Termination** Clamp up to 2.5 mm² conductors IEC / NEMA Contact Rating **Operational Rating** 240VAC 3A / 120VAC 6A

Utilization category: AC15 / A300 Thermal Current (Ith) 10A Rated Insulation Voltage (Ui) 500V Withstand Voltage (Uimp) 2500V **Short Circuit Overload Protection** Fuse externally 10A (fuse type FF) IEC 60947-5-1, IEC 60947-5-5, EN62061, UL508,



Type ESL-SSLP with button protection guard and padlock holes

(Padlock hole diameter 1/4". Padlock shaft must exceed 2" closed)

Note: To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

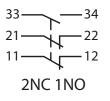
Ambient Temperature

Vibration Resistance

Shock Resistance

Approvals

Wiring Diagrams





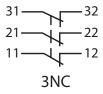


Figure 2



Features

- 4-pole positive guided contacts
- Stainless Steel 316 housings (IP69K/NEMA 6)
- Conformance to ISO 13850,
- IEC 60947-5-1 and IEC 60947-5-5
- 3 conduit entries (all entries sealed)
- Emergency stop legend plate included
- UL File E365665
- Lid safety trip mechanism ensures that safety • 40mm twist-to-release mushroom head operator contacts will open if the lid is removed
 - Models available with button protection guard and padlock holes
 - Models available with 2-color LED
 - Includes one tamper-proof T20 Torx bit for stainless steel versions







ESL-SSP-232010



ESL-SSL-232018-AS



ESL-SSLP-232024-AS

4-Pole Emergency Stop Control Stations						
Part Number	Housing Type	Contacts	Wiring Diagram	Conduit Entry	Price	Drawing Link
ESL-SS-232002		2 N.C., 2 N.O.	Figure 1		\$212.00	PDF
ESL-SS-232004	Stainless steel 316	3 N.C., 1 N.O.	Figure 2		\$212.00	PDF
ESL-SS-232006		4 N.C.	Figure 3		\$212.00	PDF
ESL-SSP-232010		2 N.C., 2 N.O.	Figure 1		\$224.00	PDF
ESL-SSP-232012	Stainless steel 316 with protection guard and padlock holes	3 N.C., 1 N.O.	Figure 2	(3) ½" NPT	\$224.00	PDF
ESL-SSP-232014	Holes	4 N.C.	Figure 3		\$224.00	PDF
ESL-SSL-232018-AS	Stainless steel 316 with 2-color 24VDC LED	2 N.C., 2 N.O.	Figure 1		\$256.00	PDF
ESL-SSL-232020-AS	(steady green, steady red)	3 N.C., 1 N.O.	Figure 2		\$256.00	PDF
ESL-SSL-232018-BS	Stainless steel 316 with 2-color	2 N.C., 2 N.O.	Figure 1		\$262.00	PDF
ESL-SSL-232020-BS	110VAC LED (steady green, steady red)	3 N.C., 1 N.O.	Figure 2		\$262.00	PDF
ESL-SSLP-232024-AS	Stainless steel 316 with 2-color 24VDC LED and	2 N.C., 2 N.O.	Figure 1		\$270.00	PDF
ESL-SSLP-232026-AS	protection guard with padlock holes	3 N.C., 1 N.O.	Figure 2		\$270.00	PDF
ESL-SSLP-232024-BS	Stainless 316 steel with 2-color 110VAC LED and	2 N.C., 2 N.O.	Figure 1		\$275.00	PDF
ESL-SSLP-232026-BS	protection guard with padlock holes	3 N.C., 1 N.O.	Figure 2		\$275.00	PDF

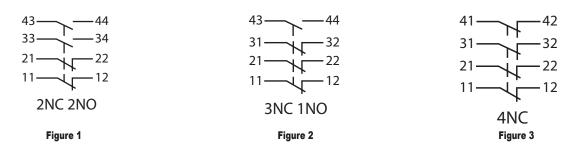


Type ESL-SSLP with button protection guard and padlock holes

(Padlock hole diameter 1/4". Padlock shaft must exceed 2" closed)

Safety	Classification and Reliability Data			
Mechanical Reliability B10d	1.5 x 106 operations at 100mA load			
ISO 13849-1	Up to PLe depending upon system architecture			
EN 62061	Up to SIL3 depending upon system architecture			
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days			
PFHd	< 1.0 x 10-7			
Proof Test Interval (Life)	21 years			
MTTFd	214 years			
Elect	rical and General Specifications			
Enclosure / Cover	Stainless Steel 316			
IP Rating / NEMA	IP69K / NEMA 6			
Mounting	(4) M4			
Mounting Position	Any			
Conduit Entries	(3) ½" NPT			
Torque Settings	Mounting: M4 4.0 N⋅m Lid: T20 Torx M4 1.5 N⋅m Terminals: 1.0 N⋅m			
Ambient Temperature	-25 to +80°C (-13F to +176°F)			
Vibration Resistance	0.35 mm @ 10-500 Hz			
Shock Resistance	15g @ 11ms			
Weight	820g (1.81 lb)			
Contact Type	IEC 947-5-1 double break type Zb Snap action up to 4 N.C. (positive break) 2 N.O. (Auxiliary)			
Contact Material	Silver			
Termination	Clamp up to 2.5 mm ² conductors			
IEC / NEMA Contact Rating	Utilization category: AC15 / A300			
Operational Rating	240VAC 3A / 120VAC 6A			
Thermal Current (_{Ith)}	10A			
Rated Insulation Voltage (_{ui})	500V			
Withstand Voltage (U _{imp})	2500V			
Short Circuit Overload Protection	Fuse externally 10A (fuse type FF)			
Approvals	IEC 60947-5-1, IEC 60947-5-5, EN62061, UL508, ISO13850, ISO13849-1			

Wiring Diagrams



LED Wiring Note: Black (or Terminal 2) is 0V (or Neutral for 110V AC versions). When power is applied to the Red wire (or Terminal 1), the LED will illuminate Red. When power is applied to the Green wire (or Terminal 3), the LED will illuminate Green.

Foot Switches



APS1211-V0



<u>APS1151-V0</u>

Description

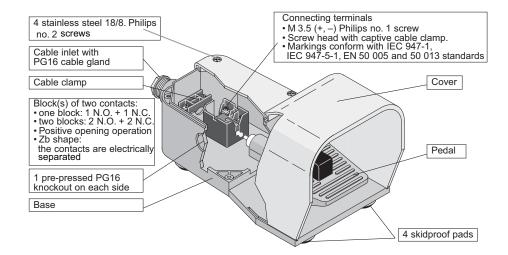
- Plastic Unit Material
- Base, cover and pedal of shock-resistant ABS plastic material
- Aluminum Unit Materials Base and pedal of shock-resistant
 ABS plastic material; cover of die-cast aluminum
- Double switches include a 16" carrying rod

Applications

Choose these switches for foot switchoperated machines such as shearing machines, spinning machines, spinning lathes, machine tools, wrapping machines, riveting machines, and riveting presses.

AutomationDirect stocks foot switches in these operational formats:

- Free movement (momentary): Contact position follows pedal movement; actuated when the pedal is pushed down, released when pedal is in state of rest.
- Foot switch locked in neutral position (safety anti-trip momentary):
 Same operation as above, after unlocking the pedal with the foot.
- Foot switch latched in low position (maintained):
 Same operation as free movement, except that a state of rest is obtained only after pedal is unlatched.



Foot Switches

All foot switches have heavy duty ABS plastic bases.

ABS Plastic Foot Switch Selection					
Part Number	Cover Color	Price	Drawing Link	Description	
APS1211-V0	Yellow	\$49.00	PDF	Single, ABS plastic, safety actuating lever, 1 N.O. and 1 N.C. snap action contacts	
APS1213-V0	Yellow	\$55.00	PDF	Single, ABS plastic, safety actuating lever, 2 N.O. and 2 N.C. snap action contacts	
APS1151-V0	Half Red	\$49.00	PDF	Single, ABS plastic, free-moving mounting, 1 N.O. and 1 N.C. snap action contacts	
<u>APD1231-V0</u>	One Yellow One Gray	\$107.00	PDF	Double, ABS plastic, safety actuating lever, 1 N.O. and 1 N.C. snap action contacts for each switch	



			D	ie-cast Aluminum Foot Switch Selection
Part Number	Cover Color	Price	Drawing Link	Description
<u>APS1113-V0-M</u>	Yellow	\$73.00	PDF	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
<u>APS1114-V0-M</u>	Yellow	\$73.00	PDF	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1123-V0-M	Gray	\$73.00	PDF	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1124-V0-M	Gray	\$73.00	PDF	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1143-V0-M	Red	\$73.00	PDF	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1144-V0-M	Red	\$73.00	<u>PDF</u>	Single, die-cast aluminum, free moving momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1213-V0-M	Yellow	\$81.00	<u>PDF</u>	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1214-V0-M	Yellow	\$81.00	<u>PDF</u>	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1223-V0-M	Gray	\$81.00	PDF	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1224-V0-M	Gray	\$81.00	PDF	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1243-V0-M	Red	\$81.00	PDF	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1244-V0-M	Red	\$81.00	<u>PDF</u>	Single, die-cast aluminum, safety anti-trip momentary actuating pedal, 2 N.O. and 2 N.C. slow action contacts
<u>APS1313-V0-M</u>	Yellow	\$81.00	<u>PDF</u>	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1314-V0-M	Yellow	\$81.00	<u>PDF</u>	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1323-V0-M	Gray	\$81.00	PDF	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1324-V0-M	Gray	\$81.00	PDF	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. slow action contacts
APS1343-V0-M	Red	\$81.00	PDF	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. snap action contacts
APS1344-V0-M	Red	\$81.00	PDF	Single, die-cast aluminum, free moving maintained actuating pedal, 2 N.O. and 2 N.C. slow action contacts
<u>APD1113-V0-M</u>	Yellow	\$172.00	<u>PDF</u>	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
<u>APD1114-V0-M</u>	Yellow	\$172.00	PDF	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts
<u>APD1123-V0-M</u>	Gray	\$172.00	PDF	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
<u>APD1124-V0-M</u>	Gray	\$172.00	PDF	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts
<u>APD1133-V0-M</u>	One Yellow One Gray	\$172.00	<u>PDF</u>	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
<u>APD1134-V0-M</u>	One Yellow One Gray	\$172.00	<u>PDF</u>	Double, die-cast aluminum, 2 free moving momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts
<u>APD1213-V0-M</u>	Yellow	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
APD1214-V0-M	Yellow	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts
APD1223-V0-M	Gray	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
<u>APD1224-V0-M</u>	Gray	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts
<u>APD1233-V0-M</u>	One Yellow One Gray	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. snap action contacts
<u>APD1234-V0-M</u>	One Yellow One Gray	\$177.00	PDF	Double, die-cast aluminum, 2 safety anti-trip momentary actuating pedals, each with 2 N.O. and 2 N.C. slow action contacts



APS1243-V0-M APS1213-V0-M





APD1223-V0-M

Foot Switches Technical Specifications

Foot Switch Ge	neral Technical Data	
Standards	IEC 947-5-1	
Certifications - Approvals	UL/CUL file E191072, CE, RoHS	
Temperature	Operating (ambient) air temperature: – 10 to + 70°C [14 to 158°F] Storage (non-operating) air temperature: – 30 to + 80°C [-22 - 176°F]	
Environmental	According to IEC 68-2-3 and salty mist according to IEC 68-2-11	
Shock (according to IEC 68-2-27 and EN 60 068-2-27)	50g (1/2 sinusoidal shock for 11 ms) no change in contact position	
Degree of Protection (according to IEC 529 and EN 60 529)	IP 65	
Operating Torque	0.25 N·m (2.2 lb·in)	
Torque - Terminal Screw	Recommended: 0.8 N·m (7.0 lb.in); Maximum 0.9 N·m (8.0 lb·in)	
Torque - Cover Screw	Recommended: 5.0 N·m (4.3 lb.in); Maximum 0.8 N·m (7.0 lb·in)	
Operating Angle	15 Degree	
Cable Inlet	Pg 16 x 1.41 knockout	
Foot Switc	h Electrical Data	
Rated Insulation voltage U _i	690V (according to IEC 947-1 and EN 60-947-1) Degree of pollution 3	
Rated Impulse Withstand Voltage U _{imp}	6kV (according to IEC 947-1 and EN 60 947-1)	
Conventional Free Air Thermal Current I_{th} Θ < 40 °C	10A (according to IEC 947-1)	
Short-circuit Protection Ue < 500V AC gG (gl) type fuses	10A	
Rated Operational Current	A 600 (according to UL 508 and CSA C22-2 n° 14) Q 600 (according to UL 508 and CSA C22-2 n° 14	
AC-15 (according to IEC 947-5-1) 24V 120V 230V 240V 400V DC-13 (according to IEC 947-5-1) 24V 125V 250V	6A 3.1 A 3A 1.8 A 2.8 A	
Resistance Between Contacts	25mΩ	
Connecting Terminals	M3.5 (±) Philips head #1 with cable clamp	
Positive Opening Operation (according to IEC 947-5-1)	Yes marked by \ominus	
Connecting Capacity	(1 or 2 x mm²) 0.75 to 2.5	
Terminal Marking	According to EN 50 013	
Life Expectancy	Mechanical: 30 million operations Electrical Operations: Utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves)	

Wiring

Snap-action contact: A contact element in which the contact motion is independent of the speed of the actuator. This feature ensures reliable electrical performance even in applications involving very slow moving actuators.

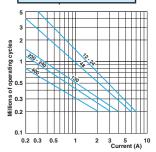
Slow-make/slow-break contact: A contact element in which the contact motion is dependent on the actuator speed.

Snap Action or Slow Action 1 N.O. and 1 N.C.

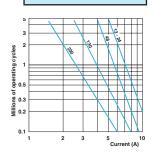


Note: See contact block accessories for <u>AGZ11-SWITCH</u> and <u>AGX11-SWITCH</u> replacement contact block (contact blocks have adjustable screw actuator).

AC-15 - Snap Action



AC-15 - Slow Action



DC-13	Snap Action	Slow Action
Power breaking for	or a durability of 5 million	on operating cycles
Voltage 24V	9.5 W	12W
Voltage 48V	6.8 W	9W
Voltage 110V	3.6 W	6W

Plastic Enclosures for 22mm Pilot Devices

Switch Enclosures

Switch Enclosures								
Specification Standard Enclosure Material Gasket Material Degree of Protection								
CEI EN 60947-5-1	Thermoplastic ABS, conforms to UL94/HB	Caoutchouc (rubber) foam	IP65 according to CEI EN 60529					

Also check out our metal pushbutton enclosures in the Enclosures section.



SA107-40SL SA105-40SL SA100SL Enclosures have molded knock-outs for 1/2" conduit fittings.

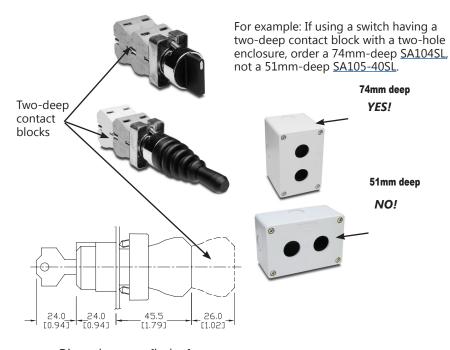
Important notes about enclosure depth and over-tightening

Switches with two-deep contact blocks require enclosures that are 74mm deep: 51mm-deep enclosures are too shallow and the switch contact block will not fit.

For switches with one-deep contact blocks, either 51mm-deep or 74mm-deep enclosures can be used.

Also, do not over-tighten when securing switch in the enclosure body. Over-tightening will crack the plastic body of the enclosure.

When installing pushbutton, switches, and joysticks with securing screws, ensure that they have good purchase on area away from the perforated key-way slots made for other switch types. Securing screws should be tightened to 4.5 lb-in or less.



Dimensions: mm [inches]

No-Hole Model

No Hole Model									
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions				
SA111-00	Gray	\$15.50	<u>PDF</u>	No Holes	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.				

Note: This enclosure works with most 22mm pushbuttons but may not work with Cutler-Hammer E22 series pushbuttons. Check your pushbutton dimensions before ordering.



74mm deep: SA111-00

Plastic Enclosures for 22mm Pilot Devices

Single-Hole Models



51mm deep: <u>SA100SL</u> <u>SA101SL</u>



74mm deep: SA103SL SA104SL

Single-Hole Models								
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions			
SA100SL	Gray	\$8.25	PDF	Hole size fits 22mm devices,				
SA101SL	Gray body/yellow top	\$8.75	PDF	51mm depth accommodates single-deep contact block switches	Tighten 22mm devices only as needed to provide proper sealing			
SA103SL	Gray	\$9.25	PDF	TOTE SIZE HIS ZZIHIH GEVICES.	Over-tightening will crack plastic			
SA104SL	Gray body/yellow top	\$9.75	PDF	74mm depth accommodates two-deep contact block switches	body.			

Two-Hole Models



51mm deep: SA105-40SL

Two-Hole Models								
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions			
<u>SA105-40SL</u>	Gray	\$10.00	PDF	Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches	Tighten 22mm devices only as needed to provide proper sealing.			
<u>SA106-40SL</u>	Gray	\$11.00	PDF	Hole size fits 22mm devices 74mm depth accommodates two-deep contact block switches	Over-tightening will crack plastic body.			

Three-Hole Models



51mm deep: SA107-40SL

Three-Hole Models							
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions		
<u>SA107-40SL</u>	Gray	\$12.50	PDF	Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches	Tighten 22mm devices only as needed to provide proper sealing. Over-		
<u>SA108-40SL</u>		\$14.50	PDF	Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches	tightening will crack plastic body.		

Plastic Enclosures for 22mm Pilot Devices

Four-Hole Models



Four-Hhole Models							
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions		
<u>SA109-40SL</u>	Gray	\$14.50	<u>PDF</u>	Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches	Tighten 22mm devices only as needed to provide proper		
<u>SA110-40SL</u>		\$17.00	<u>PDF</u>	Hole size fits 22mm devices, 74mm depth accommodates two- deep contact block switches	sealing. Over-tightening will crack plastic body.		

Five-and Six-Hole Models





Five-and Six-Hole Models								
Part Number	Color	Price	Drawing Link	Hole Size/Depth	Mounting Instructions			
<u>SA111</u>		\$15.50	<u>PDF</u>	Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches	Tighten 22mm devices only as needed to provide proper sealing.			
<u>SA112</u>	Gray	\$16.00	PDF	Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches	Over-tightening will crack plastic body.			

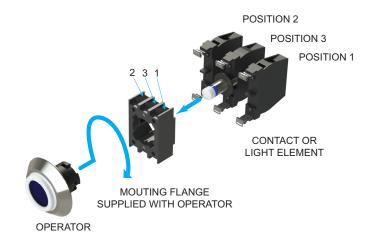
Note: These enclosures work with most 22mm pushbuttons, but may not work with Cutler-Hammer E22 series pushbuttons. Check your pushbutton dimensions before ordering.

S SCHMERSAL Control and Signaling Devices 22mm IP69K

Schmersal control and signaling devices have a number of special design features that make the devices suitable for food processing, pharmaceutical, and medical applications. When utilized in food processing machines, these devices comply with the special cleaning requirements of the industry to prevent crosscontamination, particularly when used in machines that process raw goods. With an ingress protection rating of IP69K, Schmersal control and signaling devices are also suitable for marine applications, traffic systems, commercial vehicles, and in dusty and dirty environments.

Features

- Special seals prevent product residue from penetrating in the gaps between the fixed and moving device parts, thus preventing the collection of dirt and bacteria in places that are not easily accessible for cleaning.
- Smooth designs make the devices easy to clean
- Modular contact and light terminal blocks make the devices easy to install.



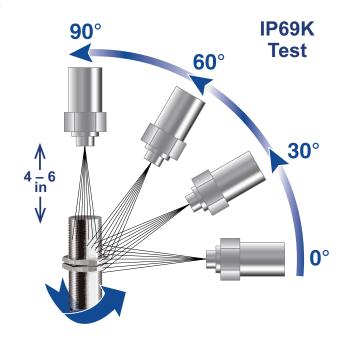
IP69K Ingress Protection Rating Overview

IP69K high-pressure cleaning test

This rating applies to devices tested in accordance with DIN 40050-9. The goal of this test is to duplicate pressure cleaning conditions on a plant floor. In the test fixture, the devices are exposed to a 1450psi spray of water at a temperature of 175°F. The duration of each cleaning cycle is 30 seconds. The test is performed at specified angles using a spray nozzle located at a distance of 4" from the devices. Devices with this rating must withstand test conditions and still be operable. This rating ensures water proofing protection that exceeds NEMA 4X rating.

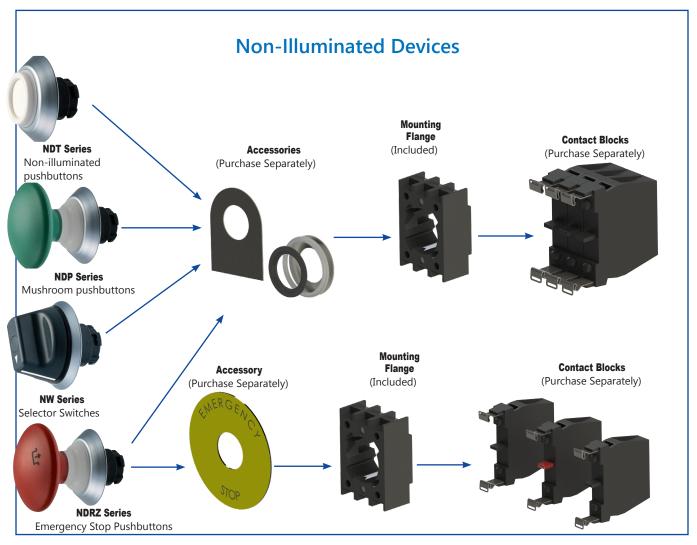
Thermal endurance

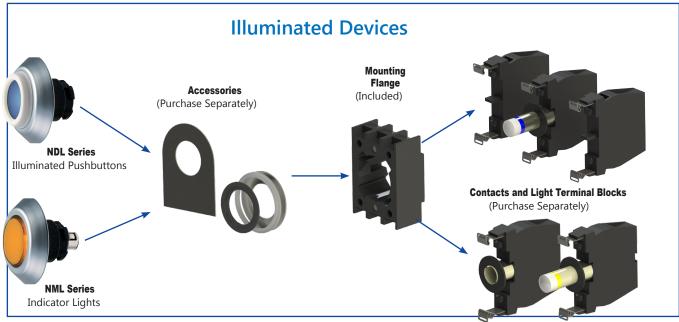
In pressure environments, controls and signaling devices can be exposed to extreme temperature conditions. To meet the criteria for IP69K rating, devices must undergo a thermal shock test by cycling the environmental temperature to ensure consistent high reliability.





S SCHMERSAL Modular Design Flexibility





S SCHMERSAL Non-Illuminated 22mm IP69K Plastic Pushbuttons









NDTBL

<u>NDTGB</u>

NDTGN

NDTGR



NDTRT



NDTSW



Non-Illu	Non-Illuminated 22mm IP69K Plastic Pushbuttons*							
Part Number	<u>NDTBL</u>	<u>NDTGB</u>	<u>NDTGN</u>	<u>NDTGR</u>	<u>NDTRT</u>	<u>NDTSW</u>	<u>NDTWS</u>	
Color	Blue	Yellow	Green	Gray	Red	Black	White	
Price	\$18.50	\$18.50	\$18.50	\$18.50	\$18.50	\$18.50	\$18.50	
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF	PDF	
Description	N	lomentary acti	on non-illumina	ated IP69K pus	shbuttons with	mounting flang	је	
Mounting diameter			2	2.3 mm [0.88 i	n]			
Actuating stroke				5mm				
Dome material				ABS				
Front ring material			ABS	S, chromium-pl	ated			
Front panel thickness				1.5 to 6 mm				
Weight				25g [0.88 oz]				
Mounting screws tightening torque			0.	6 N·m [0.44 lb	·ft]			
Ambient temperature			-25 to +	+80°C [-13 to +	-176°F1			

<50g

5g IP67 and IP69K

EN 60947-5-1; IEC/EN 60947-1; UL File E57648, CE

Shock resistance

Standards

Vibration resistance

Ingress protection rating

^{*}Operator only. Purchase contact blocks separately.

S SCHMERSAL Illuminated 22mm IP69K Plastic Pushbuttons







NDI GE

NDLGN

tPIL-75



NDLRT



Illumin	ated 22mn	n IP69K Pl	astic Push	buttons*		
Part Number	<u>NDLBL</u>	<u>NDLGB</u>	<u>NDLGN</u>	<u>NDLRT</u>	<u>NDLWS</u>	
Color	Blue	Yellow	Green	Red	White	
Price	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00	
Drawing Link	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	
Description	Momen	tary action illumina	ted IP69K pushbut	ttons with mounting	g flange	
Mounting diameter			22.3 mm [0.88 in]			
Actuating stroke			5mm			
Dome material	ABS					
Front ring material		Al	3S, chromium-plate	ed		
Front panel thickness			1.5 to 6 mm			
Weight			30g [1.06 oz]			
Mounting screws tightening torque			0.6 N·m [0.44 lb·ft]			
Ambient temperature		-25 to	+80°C [-13 to +1]	76°F]		
Shock resistance			< 50g			
Vibration resistance			5g			
Ingress protection			IP67 and IP69K			
Standards		EN 60947-5-1; IE	C/EN 60947-1; UL	. File E57648, CE		

^{*}Operator only. Purchase contact and light blocks separately.

S SCHMERSAL Non-Illuminated 22mm IP69K Mushroom Pushbuttons









NDP50SW



Non-Illumina	Non-Illuminated 22mm IP69K Mushroom Pushbuttons*							
Part Number	NDP50BL	NDP50BL NDP50GB NDP50GN NDP50SW NDP50WS						
Color	Blue	Yellow	Green	Black	White			
Price	\$28.50	\$28.50	\$28.50	\$28.50	\$28.50			
Drawing Link	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	PDF			
Description	Momentary acti	on non-illuminated	IP69K mushroom	pushbuttons with	mounting flange			
Mounting diameter			22.3 mm [0.88 in]					
Actuating stroke			5mm					
Dome material	ABS							
Front ring material	ABS, chromium-plated							
Front panel thickness			1.5 to 6 mm					
Weight			50g [1.76 oz]					
Mounting screws tightening torque			0.6 N·m [0.44 lb·ft]					
Ambient temperature		-25 to	+80°C [-13 to +1	76°F]				
Shock resistance			< 50g					
Vibration resistance	5g							
Ingress protection rating			IP67 and IP69K					
Standards		EN 60947-5-1; IE	C/EN 60947-1; UL	File E57648, CE				

^{*}Operator only. Purchase contact blocks separately.

S SCHMERSAL IP69K Emergency Stop **Pushbuttons**





NDRZ50RT-2905-1

IP69K E	mergency Stop Pushbi	uttons*			
Part Number	NDRZ50RT	NDRZ50RT-2905-1			
Front ring color	Silver	Yellow			
Price	\$36.00	\$36.00			
Drawing Link	<u>PDF</u>	<u>PDF</u>			
Description	IP69K emergency pushbuttons with mounting flange, push to latch and pull to unlatch, front plate mounting				
Mounting	22.3 mm [0.88 in]				
Actuating stroke	5mm				
Dome material	ABS				
Front ring material	ABS, chromium-plated				
Front panel thickness	1.5 to 6 mm				
Weight	50g [1.	.76 oz]			
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]			
Ambient temperature	-25 to +80°C [-	-13 to +176°F]			
Shock resistance	30g /	18ms			
Ingress protection rating	IP67 an	d IP69K			
Mechanical life	100,000 c	pperations			
Standards	EN 60947-5-1; IEC/EN 6	60947-1; UL File E57648			

^{*}Operator only. Purchase contact blocks separately.

S SCHMERSAL 22mm IP69K Indicator Lights











	22mm IP69	K Indicato	r Lights*				
Part Number	<u>NMLBL</u>	NMLBL NMLGB NMLGN NMLRT NMLWS					
Dome color	Blue	Yellow	Green	Red	White		
Price	\$17.50	\$17.50	\$17.50	\$17.50	\$17.50		
Drawing Link	PDF	PDF	PDF	PDF	PDF		
Description	Indic	cator light (purchas	se light block and L	ED or bulb separa	itely)		
Mounting diameter			22.3 mm [0.88 in]				
Dome material	Polyamide-12						
Front ring material		Al	BS, chromium-plate	ed			
Front panel thickness			1.5 to 6 mm				
Weight			30g [1.06 oz]				
Mounting screws tightening torque			0.6 N·m [0.44 lb·ft]				
Ambient temperature		-25 to	o +80°C [-13 to +1	76°F]			
Shock resistance			< 50g				
Vibration resistance	5g						
Ingress protection rating			IP67 and IP69K				
Standards		IEC 60947-5-1;	IEC 60947-1; UL F	File E57648, CE			

^{*}Operator only. Purchase contact and light blocks separately.

S SCHMERSAL Non-Illuminated 22mm IP69k Plastic Selector Switches



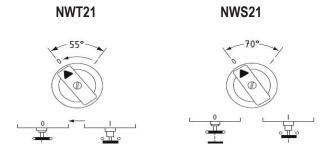
Black



Non-III	umina	ted 22r	nm Sel	ector Switches*
Part Number	Price	Color	Drawing Link	Operation
NWS21GR	\$27.00	Black	<u>PDF</u>	2-position
NWS21WS	\$27.00	White	PDF	maintained
NWT21	\$27.00	Black	<u>PDF</u>	2-position,
NWT21WS	\$27.00	White	<u>PDF</u>	spring return from right
NWS32	\$36.00	Black	<u>PDF</u>	3-position
NWS32WS	\$36.00	White	<u>PDF</u>	maintained
NWT32	\$36.00	Black	<u>PDF</u>	3-position,
NWT32WS	\$36.00	White	<u>PDF</u>	spring return to center from right or left
NWTS32	\$36.00	Black	<u>PDF</u>	3-position, spring return to center
NWTS32WS	\$36.00	White	<u>PDF</u>	from right, maintained left
<u>NWTS321</u>	\$36.00	Black	<u>PDF</u>	3-position,
NWTS321WS	\$36.00	White	PDF	spring return to center from left, maintained right

Front ring material	ABS, chrome-plated			
Front panel thickness	1.5 to 6 mm			
Mechanical operations	300,000			
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]			
Ambient temperature	0 to +80°C [32 to +176°F]			
Shock resistance	< 50g			
Vibration resistance	5g			
Ingress protection rating	IP67 and IP69K			
Standards *	IEC 60947-5-1; IEC 60947-1; UL File E57648,CE			
* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.				

Selector switches with 2-positions

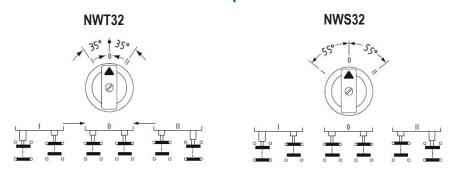


Contact Blocks							
		Mounting F	Position 1	Mounting	Position 3	Mounting Position 2	
Left (0)	Right (I)	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact
X		1	0	1	0	1	0
	Χ	0	1	0	1	0	1

^{*}Operator only. Purchase contact blocks separately.

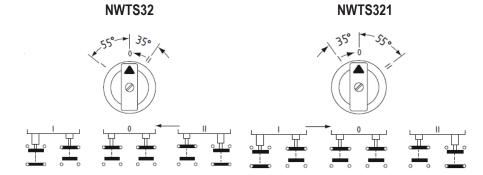
S SCHMERSAL Non-Illuminated 22mm IP69k Plastic Selector Switches

Selector switches with 3-positions



	Contact Blocks									
Mounting Position					Mounting Position 3	Mountin	g Position 2			
Left (1)	Middle (0)	Right (11)	N.C. Contact	N.O. Contact		N.C. Contact	N.O. Contact			
Х			0	1	Free	1	0			
	X		1	0		1	0			
		Χ	1	0		0	1			

Selector switches with 3-positions (mix with latching and spring return)

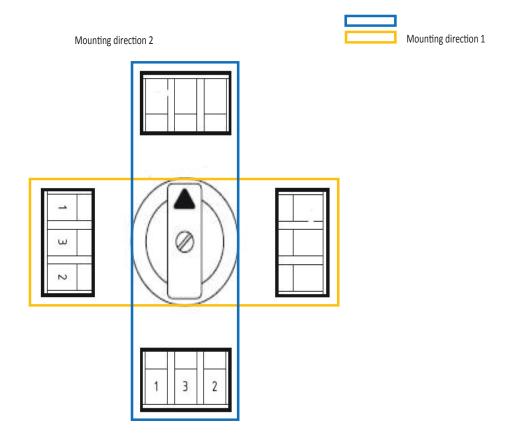


Contact Blocks									
			Mounting Position 1 Mounting Position 3			Mounting Position 2			
Left (1)	Middle (0)	Right (11)	N.C. Contact	N.O. Contact		N.C. Contact	N.O. Contact		
Χ			0	1	Free	1	0		
	X		1	0		1	0		
		Х	1	0		0	1		

S SCHMERSAL Selector Switches

Important: The mounting flange can be mounted in 4 directions. Please have a look on the position of the mounting flange. Only in the two shown directions the truth table is right.

Note: Only on one side are the numbers for the mounting position of the contact blocks.



S SCHMERSAL Non-Illuminated 22mm IP69K Joystick Selector Switches

Features

- Spring-return (momentary)
- 22mm mounting hole
- Knurled mounting nut
- 6mm front plate thickness
- Front ring material: Plastic
- Bellows material: Silicone
- IP69K





		G
		_

Non-Illuminated 22mm IP69K Joystick Selector Switches						
Part Number	Price	Drawing Link	Color	Operation		
NK-T-21-1ST8-2	\$112.00	PDF		Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 2-position, momentary, (2) N.O. contact(s), plastic base, plastic bezel, Operator: blue, joystick, round, plastic.		
NK-T-41-1ST8-2	\$125.00	<u>PDF</u>	blue	Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 4-position, momentary, (4) N.O. contact(s), plastic base, plastic bezel, Operator: blue, joystick, round, plastic.		
NK-T-22-2ST8-2	\$118.00	<u>PDF</u>	bellows	Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 2-position, momentary, (4) N.O. contact(s), plastic base, plastic bezel, Operator: blue, joystick, round, plastic.		
NK-T-42-2ST8-2	\$131.00	<u>PDF</u>		Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 4-position, momentary, (8) N.O. contact(s), plastic base, plastic bezel, Operator: blue, joystick, round, plastic.		
RK-T-21-1ST8-2	\$112.00	<u>PDF</u>		Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 2-position, momentary, (2) N.O. contact(s), plastic base, plastic bezel, Operator: gray, joystick, round, plastic.		
RK-T-41-1ST8-2	\$125.00	<u>PDF</u>	gray	Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 4-position, momentary, (4) N.O. contact(s), plastic base, plastic bezel, Operator: gray, joystick, round, plastic.		
RK-T-22-2ST8-2	\$118.00	<u>PDF</u>	bellows	Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 2-position, momentary, (4) N.O. contact(s), plastic base, plastic bezel, Operator: gray, joystick, round, plastic.		
RK-T-42-2ST8-2	\$131.00	PDF		Schmersal selector switch, IP65, IP67, IP69, and IP69k, 22mm, 4-position, momentary, (8) N.O. contact(s), plastic base, plastic bezel, Operator: gray, joystick, round, plastic.		

	Joystick Selection							
			Number of					
Part Number	Service Conditions	Switch Positions	Contacts / Switch Position	Connectors	Color			
NK-T-21-1ST8-2	Food processing industry	2	1 (N.O.)	1 (M12, 8-pin)	black ring & blue bellows			
NK-T-41-1ST8-2		4						
NK-T-22-2ST8-2		2	2 (N.O.)	2 (M12, 8-pin)				
NK-T-42-2ST8-2		4						
RK-T-21-1ST8-2		2	1 (N O)	1 (M10 0 mim)				
RK-T-41-1ST8-2	Rough ambient conditions	4	1 (N.O.)	1 (M12, 8-pin)	black ring &			
RK-T-22-2ST8-2		2	2 (N.O.)	2 (M12, 8-pin)	gray bellows			
RK-T-42-2ST8-2		4						

S SCHMERSAL Non-Illuminated 22mm IP69K Joystick Selector Switches

Joystick Selector Switches Specifications					
Rated operating voltage U	max. 30 VDC				
Operating current I	max. 0.3 A				
Rated insulation voltage U	30 V				
Rated impulse withstand voltage U _{imp}	0.5 kV				
Degree of pollution	2				
Protection class	ll x				
Switching capacity	max. 7.2 W				
Total actuating travel/switching angle	20°				
Switching point	13° ± 4°				
Actuating frequency	1200/h				
Mechanical life	4-spring return positions: 1 x 10 ⁶				
Mechanical ine	Per spring return position: 2.5 x 10 ⁶				
Ambient temperature	-40 to 80°C [-40 to 176°F]				
Temperature changes	max 10°C / minute				
Resistance to shock	30g / 11ms				
Continuous shock	10g / 16ms				
	Front: IP65, IP67, IP69/IP69K				
Protection class	Contact chamber: IP67 (with connector attached)				
	Switch rod area: IP30				
Spacing	90 x 90 mm				
Switch functions	2 to 4 switching directions				
Type of switching functions	Button				
Number of reed contacts	1 to 2 per switching direction				
Connection	8-pin M12 connector				
Number of terminals	1 2				
Type of contact	N.O. contacts, shape A				
Front plate thickness	6 mm				
Securing tool	Box spanner AF41				
Mechanical data at room temperature in new state	Mechanical strength: >200 N				
·	Actuating force: <20 N				
Switching principle	Magnetic				
Utilization category	DC-12				
Max fuse rating	0.5 A FF				
Required short-circuit current	100 A				
Standards *	IEC 60947-1, IEC 60947-5-1				

^{*}To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL 30mm IP65 Emergency Stop Pushbuttons





EDRR40.VHRT

EDRZ40.VHRT

3	Omm IP65 Emergency Stop Pushbu	ttons*				
Part Number	EDRR40.VHRT	EDRZ40.VHRT				
Price	\$42.00 \$45.00					
Front ring color	Gold	Gold				
Drawing Link	<u>PDF</u>	<u>PDF</u>				
Description	Schmersal emergency stop pushbutton, IP65, 30mm, twist-to-release, operator only, plastic base, metal bezel, Operator: red, mushroom, 40mm, round, metal. Requires contact blocks and EFR spring element. Schmersal emergency stop pushbutton, IP65, 30mm push-lock pull-reset, operator only, plastic base, metal b Operator: red, mushroom, 40mm, round, metal. Requires contact blocks.					
Mounting diameter	30.5 mm [1.20 in]					
Actuating stroke	4 to 5 mm					
Dome material	Anodized aluminum					
Front ring material	Anodized aluminum					
Front panel thickness	1 to 6 mm					
Weight	91g [3.20 oz]					
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]					
Ambient temperature	-25 to +75°C [-13 to +167°F]					
Shock resistance	> 20g / 10 to 200Hz					
Ingress protection rating	IP65					
Mechanical life	100,000 operations					
Standards **	IEC 60947-5-1; IEC 60	947-1; UL File E57648				

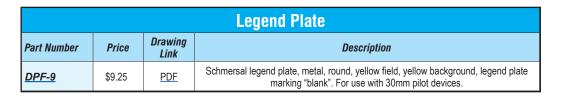
^{*}Operator only. Purchase contact blocks separately.

^{**} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

Spring Element						
Part Number	Price	Description				
<u>EFR</u>	\$24.00	Schmersal spring element, for use with Schmersal EDRR40 series emergency stop pushbuttons.				



EFR





S SCHMERSAL 30mm IP65 Round Indicator Lights











EML.VBL

EML.VGB

EML.VGN

EML.VRT

30mm IP65 Round Indicator Lights * Part Number Price Description **Drawing Link** Color Schmersal illuminated indicating light, permanent light function, IP65, 30mm, blue, 34.5mm, EML.VBL \$23.00 Blue **PDF** round, plastic base, metal bezel. Requires light block and LED or incandescent bulb. Schmersal illuminated indicating light, permanent light function, IP65, 30mm, yellow, 34.5mm, EML.VGB \$23.00 Yellow **PDF** round, plastic base, metal bezel. Requires light block and LED or incandescent bulb. Schmersal illuminated indicating light, permanent light function, IP65, 30mm, green, 34.5mm, EML.VGN \$23.00 Green PDF round, plastic base, metal bezel. Requires light block and LED or incandescent bulb. Schmersal illuminated indicating light, permanent light function, IP65, 30mm, red, 34.5mm, **EML.VRT** \$23.00 Red PDF round, plastic base, metal bezel. Requires light block and LED or incandescent bulb. Schmersal illuminated indicating light, permanent light function, IP65, 30mm, white, 34.5mm, EML.VWS \$23.00 White PDF round, plastic base, metal bezel. Requires light block and LED or incandescent bulb.

^{*}Operator only. Purchase light blocks separately.

30mm IP65 Round Indicator Lights Specifications						
Mounting diameter	30.5 mm [1.20 in]					
Dome material	Glass					
Front ring material	Aluminum					
Front panel thickness	1 to 6 mm					
Weight	30g [1.06 oz]					
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]					
Ambient temperature	-25 to +75°C [-13 to +167°F]					
Shock resistance	< 50g					
Vibration resistance	5g					
Ingress protection rating	IP65					
Standards *	IEC 60947-5-1; IEC 60947-1; UL File E57648					

^{*} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL 30mm IP65 Dome Indicator Lights











EMLH.VBL

EMLH.VGB

EMLH.VGN

EMLH.VRT

EMLH.VWS

	30mm IP65 Dome Indicator Lights *								
Part Number	Price	Color	Description Dr.						
EMLH.VBL	\$24.00	Blue	Schmersal illuminated indicating light, permanent light function, IP65, 30mm, blue, 34.5mm, dome, plastic base, metal bezel. Requires light block and LED or incandescent bulb.	<u>PDF</u>					
EMLH.VGB	\$24.00	Yellow	Schmersal illuminated indicating light, permanent light function, IP65, 30mm, yellow, 34.5mm, dome, plastic base, metal bezel. Requires light block and LED or incandescent bulb.	<u>PDF</u>					
EMLH.VGN	\$24.00	Green	Schmersal illuminated indicating light, permanent light function, IP65, 30mm, green, 34.5mm, dome, plastic base, metal bezel. Requires light block and LED or incandescent bulb.	<u>PDF</u>					
EMLH.VRT	\$24.00	Red	Schmersal illuminated indicating light, permanent light function, IP65, 30mm, red, 34.5mm, dome, plastic base, metal bezel. Requires light block and LED or incandescent bulb.	<u>PDF</u>					
EMLH.VWS	\$24.00	White	Schmersal illuminated indicating light, permanent light function, IP65, 30mm, white, 34.5mm, dome, plastic base, metal bezel. Requires light block and LED or incandescent bulb.	<u>PDF</u>					

^{*}Operator only. Purchase light blocks separately.

30mm IP65 Dome Indicator Lights Specifications						
Mounting diameter	30.5 mm [1.20 in]					
Dome material	Glass					
Front ring material	Aluminum					
Front panel thickness	1 to 6 mm					
Weight	30g [1.06 oz]					
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]					
Ambient temperature	-25 to +75°C [-13 to +167°F]					
Shock resistance	< 50g					
Vibration resistance	5g					
Ingress protection rating	IP65					
Standards *	IEC 60947-5-1; IEC 60947-1; UL File E57648					

^{*} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL Non-Illuminated 30mm IP65 Plastic Selector Switches









EWS21.V

EWS32.V

EWT21.V

EWT32.V

Non-Illuminated 30mm IP65 Plastic Selector Switches*							
Part Number	Price	Color	Drawing Link	Operation			
EWS21.V	\$43.00	Black	PDF	2 position maintained			
EWS21.1.V	\$43.00	Black	PDF	2-position maintained			
EWS32.V	\$52.00	Black	PDF	3-position maintained			
EWS32.1V	\$52.00	Black	PDF	3-position maintaineu			
<u>EWT21.V</u>	\$44.00	Black	PDF	2 position enring return from right			
<u>EWT21.1V</u>	\$44.00	Black	PDF	2-position, spring return from right			
<u>EWT32.V</u>	\$52.00	Black	PDF	2 notifies assign ration to contact from right or left			
EWT32.1V	\$52.00	Black	PDF	3-position, spring return to center from right or left			

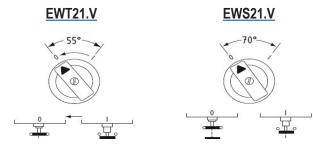
^{*}Operator only. Purchase contact blocks separately.

Selector Switches Specifications					
Toggle material	Thermoplastic				
Front ring material	Aluminum				
Front panel thickness	1 to 6 mm				
Mechanical operations	300,000				
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]				
Ambient temperature	-25 to +75°C [-13 to +167°F]				
Shock resistance	< 50g				
Vibration resistance	5g				
Ingress protection rating	IP65				
Standards *	IEC 60947-5-1; IEC 60947-1; UL File E57648				

^{*} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

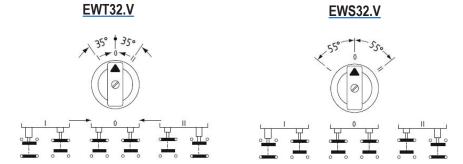
S SCHMERSAL Non-Illuminated 30mm IP65 Plastic Selector Switches

Selector Switches with 2-Positions



Contact Blocks								
		Mounting I	Mounting	Position 3	Mounting F	Position 2		
Left (0)	Right (I)	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact	
Х		1	0	1	0	1	0	
	Χ	0	1	0	1	0	1	

Selector Switches with 3-Positions



Contact Blocks									
			Mounting	Position 1	Mounting Position 3	Mounting Position 2			
Left (1)	Middle (0)	Right (11)	N.C. Contact	N.O. Contact		N.C. Contact	N.O. Contact		
Χ			0	1	Free	1	0		
	Χ		1	0		1	0		
		Χ	1	0		0	1		

S SCHMERSAL Non-Illuminated 30mm IP65 Plastic Key Selector Switches





ESS21S1.V

ESS32S1.V

Non-Illuminated 30mm IP65 Plastic Key Selector Switches*								
Part Number	Price	Color	Drawing Link	Operation				
ESS21S1.V	\$113.00	Black	PDF	2-position, maintained, key removable left position				
ESS21S12.V	\$113.00	Black	PDF	2-position, maintained, key removable left and right position				
ESS21S2.V	\$113.00	Black	PDF	2-position, maintained, key removable right position				
ESS32S1.V	\$121.00	Black	PDF	3- position, maintained, key removable left position				
ESS32S123.V	\$121.00	Black	PDF	3- position, maintained, key removable left, right and center position				
ESS32S2.V	\$121.00	Black	PDF	3-position, maintained, key removable center position				
ESS32S3.V	\$121.00	Black	PDF	3-position, maintained, key removable right position				

^{*}Operator only. Purchase contact blocks separately.

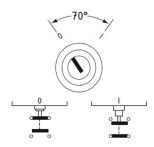
30mm IP65 Select	30mm IP65 Selector Switches Specifications							
Toggle material	Aluminum							
Front ring material	Aluminum							
Front panel thickness	1 to 6 mm							
Mechanical operations	300,000							
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]							
Ambient temperature	-25 to +75°C [-13 to +167°F]							
Shock resistance	< 50g							
Vibration resistance	5g							
Ingress protection rating	IP65							
Standards *	IEC 60947-5-1; IEC 60947-1; UL File E57648							

^{*} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL Non-Illuminated 30mm IP65 Plastic Key Selector Switches

Key Selector Switches with 2-Positions

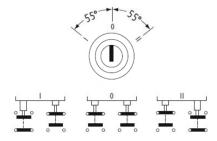
ESS21.V



	Contact Blocks									
	Mounting Position 1 Mounting Position 3 Mounting Position 2									
Left (0)	Right (I)	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact	N.C. Contact	N.O. Contact			
Х		1	0	1	0	1	0			
	X	0	1	0	1	0	1			

Key Selector Switches with 3-Positions

ESS32.V



	Contact Blocks										
	Mounting Position 1 Mounting Position 3 Mounting Position 2										
Left (1)	Middle (0)	Right (11)	N.C. Contact	N.O. Contact		N.C. Contact	N.O. Contact				
Х			0	1	Free	1	0				
	X		1	0		1	0				
		Х	1	0		0	1				

S SCHMERSAL Illuminated 30mm IP65 **Plastic Pushbuttons**











EDL.VBL

EDL.VGB

EDL.VGN

EDL.VRT

EDL.VWS

Illuminate	d 30mm I	P65 Plasti	c Pushbut	tons*			
Part Number	EDL.VBL	EDL.VGB	EDL.VGN	EDL.VRT	<u>EDL.VWS</u>		
Price	\$26.50	\$26.50	\$26.50	\$26.50	\$26.50		
Color	Blue	Yellow	Green	Red	White		
Drawing Link	PDF	PDF	PDF	PDF	PDF		
Description	Moi	mentary action illu	minated IP65 push	buttons with flush	mount		
Mounting diameter			30.5 mm [1.20 i	n]			
Actuating stroke			4 to 5 mm				
Dome material			Glass				
Front ring material			Aluminum				
Front panel thickness			1 to 6 mm				
Weight			30g [1.06 oz]				
Mounting screws tightening torque			0.6 N·m [0.44 lb·	ft]			
Ambient temperature		-25	to +75°C [-13 to +	167°F]			
Shock resistance			< 50g				
Vibration resistance	5g						
Ingress protection rating			IP65				
Standards **		IEC 60947-5	5-1; IEC 60947-1;	UL File E57648			

^{*}Operator only. Purchase contact and light blocks separately.

**To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL Non-Illuminated 30mm IP65 Plastic Pushbuttons



Non	-Illuminated	30mm IP	65 Plastic F	ushbutton	S *	
Part Number	EDT.VBL	EDT.VGB	EDT.VGN	EDT.VRT	EDT.VSW	EDT.VWS
Price	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00
Color	Blue	Yellow	Green	Red	Black	White
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF
Description		Momentary	action non-illuminat	ed IP65 pushbutto	ns flush mount	
Mounting diameter			30.5 mn	n [1.20 in]		
Actuating stroke			4 to	5 mm		
Dome material			Alur	ninum		
Front ring material			Alur	ninum		
Front panel thickness			1 to	6 mm		
Weight			30g [1.06 oz]		
Mounting screws tightening torque			0.6 N·m	[0.44 lb·ft]		
Ambient temperature			-25 to +75°C	[-13 to +167°F]		
Shock resistance			<	50g		
Vibration resistance				5g		
Ingress protection rating			IF	P65		
Standards **		IE	C 60947-5-1; IEC 6	0947-1; UL File E5	57648	

^{*}Operator only. Purchase contact blocks separately.

^{**} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL Non-Illuminated 30mm IP65 **Mushroom Pushbuttons**













EDP40.VBL

EDP40.VGB

EDP40.VGN

EDP40.VRT

EDP40.VSW

EDP40.VWS

Non	-Illuminate	d 30mm IP	65 Mushroo	m Pushbut	tons*					
Part Number	EDP40.VBL	EDP40.VBL EDP40.VGB EDP40.VGN EDP40.VRT EDP40.VSW EDP40.VWS								
Price	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00				
Color	Blue	Yellow	Green	Red	Black	White				
Drawing Link	PDF	PDF	<u>PDF</u>	<u>PDF</u>	<u>PDF</u>	PDF				
Description	Momentary act	ion 30mm non-illum	inated IP65 mushroo	m pushbuttons with	1 40mm operator and	mounting flange				
Mounting diameter			30.5 mm	[1.20 in]						
Actuating stroke			4 to	5 mm						
Dome material			Alum	ninum						
Front ring material			Alum	ninum						
Front panel thickness			1 to	6 mm						
Weight			68g [2	.40 oz]						
Mounting screws tightening torque			0.6 N·m	[0.44 lb·ft]						
Ambient temperature			-25 to +75°C [[-13 to +167°F]						
Shock resistance			< ;	50g						
Vibration resistance		5g								
Ingress protection rating			IP	65						
Standards **		I	EC 60947-5-1; IEC 60)947-1; UL File E57	7648					

^{*}Operator only. Purchase contact blocks separately.

** To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

S SCHMERSAL Non-Illuminated 30mm IP65 Mushroom Pushbuttons













EDP55.VBL

EDP55.VGB

EDP55.VGN

EDP55.VRT

EDP55.VSW

EDP55.VWS

Non-	Non-Illuminated 30mm IP65 Mushroom Pushbuttons*									
Part Number	EDP55.VBL	EDP55.VGB	EDP55.VGN	EDP55.VRT	EDP55.VSW	EDP55.VWS				
Price	\$57.00	\$57.00	\$57.00	\$57.00	\$57.00	\$57.00				
Color	Blue	Yellow	Green	Red	Black	White				
Drawing Link	PDF	PDF	PDF	PDF	PDF	PDF				
Description	Momentary a	ction non-illuminated	d IP65 mushroom p	ushbuttons with 55	mm operator and m	ounting flange				
Mounting diameter			30.5 mm	[1.20 in]						
Actuating stroke			4 to 5	5 mm						
Dome material		Aluminum								
Front ring material			Alum	inum						
Front panel thickness			1 to 6	3 mm						
Weight			91g [3.	20 oz]						
Mounting screws tightening torque			0.6 N·m [0.44 lb·ft]						
Ambient temperature			-25 to +75°C [-	-13 to +167°F]						
Shock resistance			< 5	0g						
Vibration resistance			5	g						
Ingress protection rating			IP	65						
Standards **		IEC	0 60947-5-1; IEC 60	947-1; UL File E57	7648					

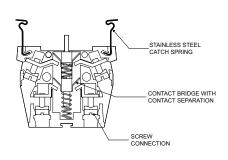
^{*}Operator only. Purchase contact blocks separately.
** To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

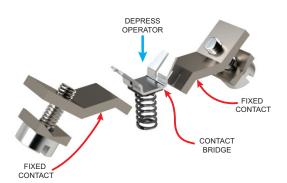


SCHMERSAL Contact Blocks and Light **Terminal Blocks Overview**

Features

- A self-cleaning contact bridge system, known as Elan four-way system, which is particularly suitable for low voltage applications and has a lower switching capacity of 5VDC/3.2 mA (max. 400VAC/8A). It is designed in the form of a bent twin contact bridge, with parallel and also diagonal operation.
- Block mounting via snap-on stainless steel springs.
- Complete terminal designations visible at a glance in compliance with IEC 60 947-1 (VDE 0660, Part 100) with a complete function and sequence number (refer also to product ranges). The function number identifies the N.C. and N.O. contact. The sequence number specifies the number and the order of the contacts on the complete switching device.
- N.C. contacts with positive opening in compliance with IEC 60 947-5-1 (VDE 0660
- Galvanically isolated contact circuits in 2-pole blocks.
- High resistance to shock and vibrations.





	Technical Specific	ations					
	Contact Blocks	Light Blocks (ELE)	Light Blocks (ELDE)				
General description	Contact element	Light terminal block w/Ba9S base	Light terminal block w/LED				
Enclosure material	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced				
Contact material	Fine-silver, phosphor bronze or brass carrier	-	_				
Utilization category	AC-15: 250 V / 8 A DC-13: 24 V / 5 A	-	-				
Suitability for low voltages	≥ 5VDC / 3.2 mA	-	_				
Rated insulation voltage Ui	400V	440V	440V				
Rated impulse withstand voltage U _{imp}	4kV	-	-				
Thermal test current Ithe	10A	-	-				
Max. fuse rating	10A gG D-fuse slow blow	10A gG T-slow blow	10A gG T-slow blow				
Wire size	0.5 mm² to 2.5 mm² (20 - 14 AWG)						
Tightening torque wire connection		Maximum 1 N·m (0.74 lb·ft)					
NEMA contact rating	A300 / P300	-	_				
Switching frequency	1200 s/h	_	_				
Switching capacity	5VDC / 3.2 mA (max 400VAC / 8A)	-	_				
Mechanical life	10,000,000 operation	_	_				
Resistance to shock	110 g/4ms to 30 g/18ms no bouncing	-	_				
Resistance to vibration	> 20 g/10ms to 200Hz	-					
Ambient temperature		-25 to +80°C [-13 to +176°F]					
Ingress protection rating	IP20 terminals / IP40 switching compartment	IP20 terminals	IP20 terminals				
Standards	IEC 60	947-5-1; IEC 60947-1; UL File E57648					

NEMA Contact Rating Designation									
Thermal Current Voltage Volt amperes									
A300	10	300 AC	N/A						
P300 5 300 DC 138									

S SCHMERSAL Contact Blocks



EF03.2



EF10.



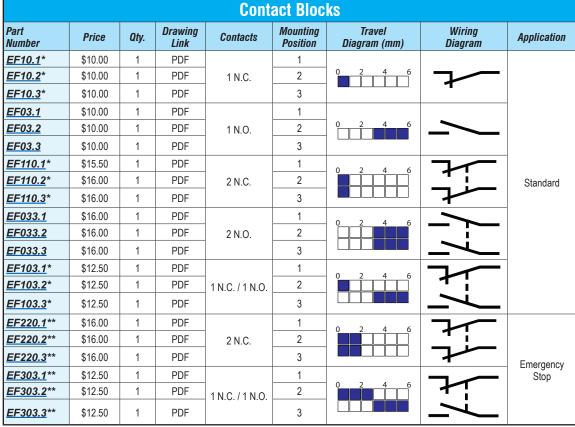
EF103.2



EF220.2



EF303.2



^{*}Not suitable for Emergency Stop devices

Travel Diagram Legend

= contact closed

= contact open

Numbers indicate distance in mm





^{**}Not suitable for maintained selector switches NWS/NWT

S SCHMERSAL Light Terminal Blocks









ELDE.Nxx230

FLDF.Nxx2

ELE

ELE230

	Light Terminal Blocks									
Part Number	Color	Price	Drawing Link	Voltage	Wattage	Diagram	Function			
ELDE.NBL230	Blue	\$50.00	PDF	115-230 VAC	4					
ELDE.NBL24	blue	\$27.00	PDF	24 VAC/VDC	0.4					
ELDE.NGB230	Yellow	\$50.00	PDF	115-230 VAC	4					
ELDE.NGB24	reliow	\$27.00	PDF	24 VAC/VDC	0.4		Integrated LED			
ELDE.NGN230	Green	\$50.00	<u>PDF</u>	115-230 VAC	4					
ELDE.NGN24	Green	\$27.00	PDF	24 VAC/VDC	0.4	X1∘				
ELDE.NRT230	Dad	\$50.00	PDF	115-230 VAC	4					
ELDE.NRT24	Red	\$27.00	PDF	24 VAC/VDC	0.4					
ELDE.NWS230	White	\$50.00	PDF	115-230 VAC	4					
ELDE.NWS24	vvriite	\$27.00	PDF	24 VAC/VDC	0.4					
ELE	-	\$11.50	<u>PDF</u>	24 VAC/VDC	1	X10 	Ba9S Lamp			
ELE230	-	\$31.00	<u>PDF</u>	115-230 VAC	1	X10	holder			

Ba9S Bulbs for ELE and ELE230 Light Terminal Blocks									
Part Number	Color	Price	Qty	Lamp Voltage	Current Consumption	Power Consumption	Lamp Durability		
APX510-24R	Red	\$18.50							
APX510-24G	Green	\$18.50			12mA AC 11mA DC	0.8 W	30,000h		
APX510-24Y	Yellow	\$18.50	2	24V AC/DC					
APX510-24S	Blue	\$68.00		710/20	111112.20				
APX510-240	Orange	\$18.50							



APX510-24R

Replacement LED Lamps for ELE and ELE230 Light Terminal Blocks									
Part Number	Color	Price	Qty	Lamp Voltage	Current Consumption	Power Consumption	Lamp Durability		
ECX1911-2	Red	\$19.00			14mA		100,000h		
ECX1912-2	Green	\$24.00		0.01	13mA	0.6 W			
ECX1913-2	Yellow	\$19.00	2	24V AC/DC	13.3 mA				
ECX1914-2	Blue	\$26.00		7.0/20	13mA				
ECX1915-2	White	\$31.00			19mA				



NOTE: ELE230 has transformer to step down to 24V

Mounting Flange						
Part Number	Price	Description	Drawing Link			
<u>ELM</u>	\$5.50	Schmersal mounting flange, replacement. For use with E and N series illuminated pushbuttons.	<u>PDF</u>			



ELM

S SCHMERSAL Accessories





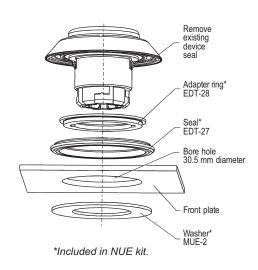




NZSO-V4A

	IP69K Accessories						
Part Number	Price	Drawing Link	Description				
<u>NB</u>	\$12.50	PDF	Schmersal pilot device hole seal, 22mm, silver.				
<u>NDP-70-ES</u>	\$10.00	N/A	Schmersal legend plate, metal, round, yellow field, yellow background, black engraved text, legend plate marking "Emergency Stop". For use with 22mm pilot devices.				
NUE	\$7.25	N/A	Schmersal pilot device hole adapter, reduces from 30.5 mm to 22.3 mm. Adapter ring, seal and washer included.				
EDT-25-5ST	\$7.50	N/A	Schmersal pilot device seal, replacement. Package of 5.				
NZSO-V4A	\$4.25	N/A	Schmersal legend plate, metal, rectangular, gray field, gray background, legend plate marking "blank". For use with 22mm pilot devices.				





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Pilot Devices

F:T·N E22 Series 22mm Pilot Devices Overview*

22mm Non-Metal **Operator and Pilot Devices**

Cutler-Hammer's 22mm industrial pushbutton line offers a wide array of functional, smartly-styled illuminated and non-illuminated pushbuttons, selector switches, and more. We offer transformer, full voltage, resistor, or LED light units. The operators feature a matte black bezel. The space-saving design and modular construction of the E22 line makes on-the-job installation fast and easy.

Complete assembled devices

The devices listed are shipped complete with operator, contact blocks and light (if applicable).





^{*} Cutler-Hammer products are available for sale to North America locations only.

E22 Series Selection Guide

Cutler-Hammer



Indicating Lights

Complete assembly includes:

- Illuminated operator, including optically enhanced lens
- Incandescent or LED light units
- (Order legend plate separately)



Selector Switches

Complete assembly includes:

- Selector operator
- Contact block(s) one or two normally open or normally closed
- Black bezel
- (Order legend plate separately)



Pushbuttons

Complete assembly includes:

- Flush or extended momentary operators
- One normally open or normally closed contact
- Push-push models also available
- 120VAC light (if illuminated)
- (Order legend plate separately)



40 and 50mm Mushroom Pushbuttons

- Push-Pull trigger action
- Illuminated or non-illuminated
- (Order legend plate separately)



Double Headed Pushbutton

On/Off control



Control Station

• For Start/Stop applications



Illuminated Pushbuttons

- · Red, green or amber
- 120VAC or 24 VAC/DC
- Order legend plate separately



Push-to-Test Indicating Lights

- Red, green or amber
- · Order legend plate separately



Tools and Accessories

- · Legend plates
- Hole plugs
- Bulb tools
- Replacement bulbs



E22 Series Technical Specifications

Cutler-Hammer

In	gress Protection (IP) Rating
(IP65, IP66 ratings to IEC 529) UL L	isted (NEMA) Types 1, 2, 3, 3R, 4, 4X, 12, and 13 when mounted in an enclosure
rated for those same applications.	Floatrical Credifications
	Electrical Specifications UL508; UL File E131568. CSA certified class 3211 03, LR 68551.
Electrical Rating	NEMA ICS5-2000: A600, Q600 (refer to page 90). IEC 60947-5-1: AC15, DC13.
Max	kimum Frequency of Operation
22mm Pushbuttons	6,000 operations/hour IEC 60947-5-1: AC15, DC13.
Key and Lever Selector Switches	3,000 operations/hour
Twist-to-Release Devices	1,200 operations/hour
Push-Pull Operators	3,000 operations/hour
	Mechanical Life
Pushbutton	5 million operations
Selector Switches	500,000 operations
Push-Pull and Twist-to- Release	300,000 operations
Contact Block	3 million operations
E	nvironmental Specifications
Operating Temperature	Maximum 60°C at 95% RH, -20 to 60°C (-14 to 140°F), altitude 2000 meters
Storage Temperature	Maximum 60°C at 95% RH, -40 to 80°C (-40 to 176°F)
	Vibration
Vibration	5G/0.7 mm peak-to-peak 10 sweeps, 10-500 Hz
Shock	18G, 18ms
Витр	25G, 6ms for 1,000 cycles
	Construction
Components	Materials
Housing, Bezel, Mounting Rings	Glass-filled nylon
Internal Seal	Nitrate rubber
Panel Gasket	Nitrate rubber
Illuminated Lenses	Polycarbonate
Buttons	Polyester or polycarbonate
Springs	Stainless steel
Contacts	Silver
Terminal Screws/ Terminals	Brass
Pa	nel Thickness - mm (inches)
Nominal	6.8 (0.2)1
Aluminum Legend Plates	1.3 (0.05)
Large Yellow Round Legend Plates	1.0 (0.04)
Minimum	1.0 (0.04)
	increase the total (overall) panel thickness by the amount shown. The total panel thickness seed the maximum allowable nominal dimensions of 6.8 mm (0.27 in.).
	Wire Specifications
Minimum/Maximum	18AWG (0.75 mm²) / 12AWG (2.5 mm²)
Tightening Torque	7 Ib·in

Electrical life

• AC15 durability: 120V 6A 1 X 10⁶ operations

• DC13 durability:

0.15 X 106 operations 24V, 8A

660V, .1A

Logic-level operation

5 VDC, 1mA (minimum recommended)

Contacts feature a pointed surface called "Reliability Nib." The projection penetrates through any oxidation providing unmatched low-level operation without using exotic metals or sealed contacts.

Standards and approvals

- UL listed UL 508 electrical/environmental;
- UL 486E terminal secureness. File E131568
- CSA Certified CSA 22.2 #14
- NEMA ICS-1, ICS-2
- IEC 144, 337, 529, 947
- IP65 when mounted in enclosure
- Lloyds No. 4 and 5
- M.T.T.A.
- CE

IEC utilization categories & ratings

(Control of AC electromagnetic loads)

- 24 volts AC at 10 amps
- 130 volts AC at 6.5 amps

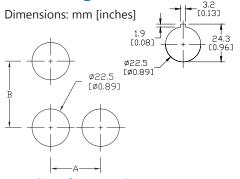
(Control of DC electromagnetic loads)

- 24 volts DC at 1.5 amps
- 110 volts DC at .5 amps



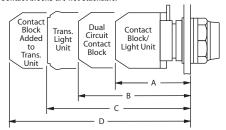
E22 Mounting / NEMA Aux Contact Ratings

Mounting



Back-of-panel extensions

Note: This view is to show dimensions only. Contact blocks are not stackable.

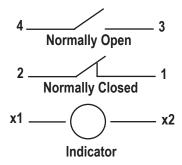


Minimum Spacing — mm [inches]					
Cine/Turn of Organian	Dimensions				
Size/Type of Operator		В			
All types up to 30 (1.18) dia. including knob and key operated selector switches — except those listed below Three-way adapter	30 (1.18)	50 (1.97)			
50 (1.97) dia. operators	55 (2.16)	55 (2.16)			
Large yellow round legend plate - 70 (2.76) diameter	75 (2.95)	50 (1.97)			

Approximate Dimensions — mm [inches]							
А	В	С	D				
Single circuit block — full voltage and resistor units	Dual circuit contact block	Transformer light unit	Transformer light unit and single circuit contact block				
Pushbuttons (All Types an	d Push-Pull)						
51 [2.0]	66 (2.6)	74 (2.91)	94 (3.7)				
Key and Knob Selector Switches							
57 [2.2]	72 (2.83)	80 (3.15)	99 (3.9)				

Control Circuit Contact Electrical Ratings and Wiring

Typical Wiring



NEMA Mechanical Switching Ratings and Test Values for DC Control Circuit Contacts

Control Circuit Contacts									
	Thermal	Maximum	Make or Brea	k DC Current (A)					
Contact Rating Designation	Continuous Test Current (A)	125 Volts	250 Volts	301 to 600 Volts	Volt amperes				
P300	5.0	1.1	0.55		138				
P600	5.0	1.1	0.55	0.20	138				
Q300	2.5	0.55	0.27		69				
Q600	2.5	0.55	0.27	0.10	69				
R300	1.0	0.22	0.11		28				

This chart is provided as a guideline only, and the ratings and values are not guaranteed to be accurate. It is the users' responsibility to properly size their control circuit devices. The chart values are from NEMA Standard ICS 5-2000, Table 1-4-2.

NEMA	NEMA Mechanical Switching Ratings and Test Values for AC Control Circuit Contacts										
	Thermal			Maxii	mum AC Cui	rent, 50/60F	Hz (A)			Volt or	nnoroo
Contact Rating Designation	Continuous Test Current	120	Volts	240	Volts	480	Volts	600 Volts		Volt amperes	
Doorgination	(A)	Make	Break	Make	Break	Make	Break	Make	Break	Make Break	Break
A300	10	60	6.00	30	3.00					7200	720
A600	10	60	6.00	30	3.00	15	1.50	12	1.20	7200	720
B300	5	30	3.00	15	1.50					3600	360
B600	5	30	3.00	15	1.50	7.5	0.75	6	0.60	3600	360
C600	2.5	15	1.5	7.5	0.75	3.75	0.375	3.00	0.30	1800	180

This chart is provided as a guideline only, and the ratings and values are not guaranteed to be accurate. It is the users' responsibility to properly size their control circuit devices. The chart values are from NEMA Standard ICS 5-2000, Table 1-4-1.



E22 Non-Illuminated Pushbuttons

Cutler-Hammer

Flush Pushbuttons

Approximate dimensions in mm (in). See dimensions for "back-of-panel extensions" at the beginning of the E22 series section.



	Non-Illuminated Pushbuttons								
Color	Part Number	Description	Price	Drawing Link					
Flush Button	with Bezel								
Black	E22PB1A	Momentary pushbutton, black bezel, flush black button with one N.O. contact	\$30.50	PDF					
Green	E22PB3A	Momentary pushbutton, black bezel, flush green button with one N.O. contact	\$30.50	PDF					
Push - Push	Push - Push Flush Button, Operator Only								
Black	E22PPB1	Push to open, push to close, flush, operator only	\$15.00	PDF					
White	E22PPB5	Push to open, push to close, flush, operator only	\$15.00	PDF					
Extended Bu	tton								
Red	<u>E22EB2B</u>	Momentary pushbutton, black bezel, extended red button with one N.C. contact	\$29.00	N/A					
Control Stati	on - One Extende	d Button, One Flush Button							
Green- Red	E22ASB204	Control station: Flush, Momentary, green button (START) with one N.O. contact; Extended, Momentary, red button (STOP) with one N.C. contact Dimensions: mm(inches) H x W x D 120(4.72) x 80(3.15) x 60(2.36)	\$150.00	PDF					

See specifications and mounting data at the beginning of this E22 series section.

Note: Contact blocks sold separately, see E22 accessories section.

Extended Pushbuttons

Approximate dimensions in mm (in). See dimensions for "back-of-panel extensions" at the beginning of the E22 series section.



Push-Push Flush Pushbuttons



Control Station





E22 Illuminated Pushbuttons

Cutler-Hammer

Illuminated Pushbuttons



Note: Bulb removal tool available. See replacement bulbs on the accessories page.

Illuminated Pushbuttons						
Color	Part Number	umber Description		Drawing Link		
24V AC/0	OC Full Voltage					
Red	E22TB2X4B	Momentary illuminated pushbutton, black bezel, extended red button with one N.C. contact, 24V full voltage light unit	\$82.00	PDF		
Green	E22TB3X4A	Momentary illuminated pushbutton, black bezel, extended green button with one N.O. contact 24V full voltage light unit	\$82.00	PDF		
Amber	E22TB9X4A	Momentary illuminated pushbutton, black bezel, extended amber button with one N.O. contact, 24V full voltage light unit	\$82.00	PDF		
120V AC	Resistor *					
Red	E22TB2X10B	Momentary illuminated pushbutton, black bezel, extended red button with one N.C. contact, 120V resistor light unit	\$95.00	PDF		
Green	E22TB3X10A	Momentary illuminated pushbutton, black bezel, extended green button with one N.O. contact, 120V resistor light unit	\$95.00	PDF		
Amber	E22TB9X10A	Momentary Illuminated pushbutton, black bezel, extended amber button with one N.O. contact, 120V resistor light unit	\$91.00	PDF		

See specifications and mounting data at the beginning of this E22 series section. * Use 60V replacement lamp (W1226) for 120 VAC resistor models

Illuminated Double-Headed Pushbutton



Illuminated Double-Headed Pushbutton								
Color	Part Number	Description	Price	Drawing Link				
Double-headed Pushbutton **								
Green-Red	E22DB1B20X11C	Momentary illuminated double-headed pushbutton with clear lens, O and I legend markings, 120V transformer light unit, one N.O. and one N.C. contact	\$161.00	PDF				

See specifications and mounting data at the beginning of this section.

Note: This IP65 or UL (NEMA) Type 3, 3R, 4, 4X, 12, 13 pushbutton includes a protective clear silicone boot.

** Use 6V replacement lamp (ECX1900-5)

Mushroom Pushbutton Station



Mushroom Pushbutton Station								
Color	Part Number	Description	Price	Drawing Link				
Emergency Stop	Emergency Stop Station							
Red/Yellow	E22ASB106	Latch in, twist-to-release 40mm red mushroom pushbutton, black bezel, with one N.C. contact.	\$170.00	PDF				



E22 Emergency Stop Mushroom Pushbuttons

The European Machinery Safety Directive EN 418 requires all emergency OFF devices to be self-latching types and to have positive (direct) opening operation. Devices have to be manually reset. EN 418 states that actuators shall be mushroom head type and colored RED. The background immediately around the device actuator should be colored YELLOW (see the E22 accessories in this section to order legend plate part number E22VA8 or guard part number E22MGTA).





The <u>E22LTA2QB</u> Emergency Stop pushbutton, in conjunction with direct-opening action contact blocks and either a yellow nameplate or yellow guard, is fully compliant with this safety directive, and is third-party certified by DEMKO.

CE EN 418 Compliant Non-illuminated Emergency Stop Mushroom Pushbuttons						
Color	Part Number	Description	Price	Drawing Link		
(A) Red	E22LTA2QB	Trigger action twist-to-release Maintained 40mm red mushroom pushbutton, Emergency Stop. black bezel, with one N.C. contact	\$72.00	PDF		
(B) Red	E22LPB2B	Push-Pull Maintained 40mm red mushroom pushbutton, Emergency Stop. black bezel, with one N.C. contact	\$47.00	PDF		
(C) Red	E22JLB2N8B	Push-Pull Maintained 50 mm red aluminum mushroom pushbutton, Emergency Stop engraved, black bezel, with one N.C. contact	\$78.00	N/A		
(D) Red	E22JPLB2B	Push-Pull Maintained 50 mm red mushroom pushbutton, not engraved, black bezel, with one N.C. contact	\$60.00	PDF		

See specifications and mounting data at the beginning of this E22 series section.

Note: E22MGTA fits E22LTA2QB.

It is not recommended for use with devices that are not EN-418 compliant.

Non-illuminated Mushroom Pushbuttons (NOT CE EN 418 Compliant)					
Color	olor Part Number Description		Price	Drawing Link	
(E) Red	<u>E22JPB2B</u>	Momentary 50 mm red mushroom pushbutton, black bezel, with one N.C. contact	\$49.50	PDF	
(F) Red	Red E22LB2B Momentary 40 mm red mushroom pushbutton, black bezel, with one N.C. contact		\$47.50	PDF	
(G) Red	E22LLB2B	Twist release Maintained 40mm red mushroom pushbutton, black bezel, with one N.C. contact	\$51.00	<u>PDF</u>	

See specifications and mounting data at the beginning of this E22 series section.



Α



В



C



D, E



G

E22 Monoblock Indicating Lights





Monoblock Indicating Lights							
Color	Part Number	Description		Drawing Link			
24V AC/D	24V AC/DC Full Voltage Incandescent						
Red	E22HV2X4	E22HV2X4 Monoblock indicating light, red optically enhanced lens, 24V full voltage incandescent		PDF			
Green	E22HV3X4	Monoblock indicating light, green optically enhanced lens, 24V full voltage incandescent	\$34.50	PDF			
Amber	E22HV9X4	Monoblock indicating light, amber optically enhanced lens, 24V full voltage incandescent	\$34.50	<u>PDF</u>			
120V AC Full Voltage Incandescent							
Red	E22HV2X8 Monoblock indicating light, red optically enhanced lens, 120V full voltage incandescent		\$34.50	<u>PDF</u>			
Green	E22HV3X8	V3X8 Monoblock indicating light, green optically enhanced lens, 120V full voltage incandescent		<u>PDF</u>			
Amber	ber <u>E22HV9X8</u> Monoblock indicating light, amber optically enhanced lens, 120V full voltage incandescent		\$34.50	<u>PDF</u>			
24V AC/E	24V AC/DC Full Voltage LED*						
Red	E22HL2X4 Monoblock indicating light, red optically enhanced lens, 24V full voltage LED		\$43.00	<u>PDF</u>			
Green	E22HL3X4	E22HL3X4 Monoblock indicating light, green optically enhanced lens, 24V full voltage LED		<u>PDF</u>			
Amber	E22HL9X4	.9X4 Monoblock indicating light, amber optically enhanced lens, 24V full voltage LED		PDF			
120V AC Full Voltage LED*							
Red	E22HL2X8 Monoblock indicating light, red optically enhanced lens, 120V full voltage LED		\$43.00	<u>PDF</u>			
Green	E22HL3X8	22HL3X8 Monoblock indicating light, green optically enhanced lens, 120V full voltage LED		PDF			
Amber	ber <u>E22HL9X8</u> Monoblock indicating light, amber optically Enhanced lens, 120V full voltage LED		\$43.00	PDF			
120V AC Transformer Incandescent**							
Red	E22H2X11 Monoblock Indicating light, red optically enhanced lens, 120V transformer incandescent		\$91.00	PDF			
Green	E22H3X11	Monoblock indicating light, green optically enhanced lens, 120V transformer incandescent	\$91.00	PDF			
Amber	E22H9X11	E22H9X11 Monoblock indicating light, amber optically enhanced lens, 120V transformer incandescent		PDF			

See also specifications and mounting data at the beginning of this E22 series section.

Note: * Cutler-Hammer 22mm LED indicators feature an LED cluster module.

See the E22 accessories in this section for replacement lamp information.

The LED clusters are permanently installed and are non-replaceable.

^{**}Use 6V replacement lamp (ECX1900-5) for 120VAC transformer models.



E22 Lights and Selector Switches

Cutler-Hammer

Push-to-Test Indicating Lights



Push-to-Test Indicating Lights						
These are	designed to illur	ninate for bulb test when operator is pressed. Otherwise, they function as indi	cator light	S.		
Color	Part Number	Description	Price	Drawing Link		
120V AC Resistor *						
Amber	E22TB9X26	Push-to-Test indicating light, amber optically enhanced lens, 120V resistor incandescent	\$108.00	PDF		
120V AC Transformer **						
Red	E22TB2X27	Push-to-Test indicating light, red optically enhanced lens, 120V transformer incandescent	\$121.00	PDF		

See specifications and mounting data at the beginning of this E22 series section.

Notes: Bulb removal tool available. See replacement bulbs on the E22 accessories page in this section.

Selector Switches



Two-Position



Three-Position

Selector Switches					
Two-Position	Part Number	Description	Price	Drawing Link	
Left Right	E22XB51A	Selector switch, black bezel ,two position, black knob, "OFF ON" with one N.O. contact block	\$39.00	<u>PDF</u>	
Maintained Left Maintained Right	E22XB51C	Selector switch, black bezel, two-position, black knob, "ON ON" with one N.O. and one N.C. contact block	\$57.00	PDF	
Three-Position					
Left Center Right M M M Maintained Left Maintained Center Maintained Right	E22XBG1RR	Selector switch, black bezel, 3-position, black knob, "ON ON ON" with two contact blocks, each having one N.O. and one N.C. contact. (Contact part number <u>E22B11</u>)	\$86.00	<u>PDF</u>	
Three-Position Spring-Return to Center Position					
S M S Spring return Left Maintained Center Spring return Right	E22XBL1D	Selector switch, black bezel, 3-position, black knob. "ON OFF ON", spring return to center, with two N.O. contact blocks	\$65.00	<u>PDF</u>	

See specifications and mounting data at the beginning of this E22 series section.

^{*} Use 60V replacement lamp (<u>W1226</u>) for 120VAC resistor models.
** Use 6V replacement lamp (<u>ECX1900-5</u>) for 120VAC transformer models.



E22 Key Switches and Accessories

Two-Position Key Switches



Key Switches				
Part Number	Part Number Description		Drawing Link	
E22KB53A	Selector switch, black bezel, 2-position key, "OFF ON" with one N.O. contact block	\$105.00	PDF	
E22KB62A	Selector switch, black bezel, 2-position key, spring from right "OFF ON" with one N.O. contact block	\$105.00	PDF	

See specifications and mounting data at the beginning of this E22 series section.

All E22 series key switches are keyed alike. The key is not compatible with the metal 22mm key switches.

All E22 series key switches will hold only one single row of (2) contacts (non-stackable).

Key can be removed in all positions.

Replacement Contact Blocks







F22R2



E22CB1M

Replacement Contact Blocks					
Part Number	Description	Price	Drawing Link		
E22B1*	One N.C. contact (Direct Opening Action)	\$20.50	PDF		
E22B2	One N.O. contact	\$20.50	PDF		
<u>E22B11</u> *	One N.O., One N.C. contact (N.C. Direct Opening Action)	\$36.50	PDF		
E22B20	Two N.O. contacts	\$36.50	PDF		
E22CB1M*	Self-monitoring contact block (N.C. Direct Opening Action)	\$47.00	PDF		

Note: See contact electrical ratings on E22 series mounting and contact ratings page in this E22 series section.

^{*}All N.C. contact blocks are EN 418 compliant when used with compliant operators.



E22 Accessories

Cutler-Hammer

Octagonal Wrench



Bulb Removal Tool



Guard for E22 E-Stop



Replacement Incandescent Bulbs



Replacement LED Lamps



Hole Plug



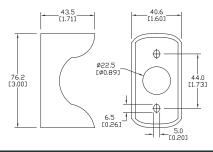
Dimensions: mm [inches]







Accessories							
Part number	Description	Price					
HT8WRENCH	Octagonal wrench for tightening back-of-panel mounting nut on all Cutler-Hammer operators.	\$19.00					
E22BHP	Hole plug for unused 22mm panel holes.	\$14.00					
HT8LAMPTOOL	Lamp extraction tool for removing lamps from switches, indicators and stacklights	\$10.00					
E22MGTA	22mm yellow guard for E22LTA2QB and E22LPB2B for emergency stop applications.	\$30.50					
E22LRM	Eaton optional metal locking ring, package of 10. For use with E22 operators.	\$6.50					



		Replacement Incandescent Bulbs		
Part Number	Rating	Description	Quantity	Price
ECX1900-5	6V, 1.2 watts	6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4.	5	\$10.50
ECX1902-5	24V@ 80mA	24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4.	5	\$10.50
ECX1904-5	130V@20mA	120V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4.	5	\$22.00
<u>W1121</u>	120V@20mA	Replacement bulb for Cutler-Hammer E22 full voltage indicators and switches. Does not replace the LED monoblock indicators.	4	\$38.50
<u>W1226</u>	60V@20mA	Replacement bulb for Cutler-Hammer E22 resistor indicators, switches and pushbuttons. Does not replace the LED monoblock indicators.	4	\$38.50
<u>W1819</u>	24V@20mA	Replacement bulb for Cutler-Hammer E22 indicators and pushbuttons. Does not replace the LED monoblock indicators.	4	\$37.50

	Replacement LED Lamps								
Part Number	Color	Rating	Description	Quantity	Price				
ECX1911-2	Red				\$19.00				
ECX1912-2	Green				\$24.00				
ECX1913-2	Yellow	24V@26mA	LED replacement lamp for miniature bayonet bases Works with 22mm switches and indicators, but illumination will not be as even when used with the ECX 22mm indicators	2	\$19.00				
ECX1914-2	Blue				\$26.00				
ECX1915-2	White				\$31.00				
ECX1921-2	Red				\$19.00				
ECX1922-2	Green		Note: Will not replace sealed Cutler-Hammer monoblock LED indicators.		\$24.00				
ECX1923-2	Yellow	120V@5mA			\$19.00				
ECX1924-2	Blue				\$26.00				
ECX1925-2	White				\$31.00				

E22 Legend Plates

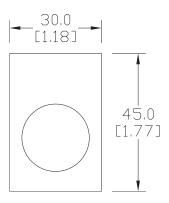
Cutler-Hammer

Legend Plates

Aluminum legend plates feature a plastisol backing to help prevent rotation of the operator.



Dimensions: mm [inches]





			Legend Plates	
Part Number	Price	Color	Legend	Drawing Link
E22NS11	\$7.50	Black	"CLOSE"	PDF
E22NS12	\$7.50	Black	"DOWN"	<u>PDF</u>
E22NS13	\$7.50	Red	"EMERG. STOP"	<u>PDF</u>
E22NS15	\$7.50	Black	"FORWARD"	<u>PDF</u>
E22NS19	\$7.50	Black	"JOG"	<u>PDF</u>
E22NS25	\$7.50	Black	"ON"	<u>PDF</u>
E22NS26	\$7.50	Black	"OPEN"	<u>PDF</u>
E22NS30	\$7.50	Black	"REVERSE"	<u>PDF</u>
E22NS31	\$7.50	Black	"RUN"	<u>PDF</u>
E22NS33	\$7.50	Black	"START"	<u>PDF</u>
E22NS34	\$7.50	Red	"STOP"	<u>PDF</u>
E22NS35	\$7.50	Black	"UP"	<u>PDF</u>
E22NS36	\$7.50	Black	Blank plate	<u>PDF</u>
E22NS37	\$7.50	Red	Blank plate	<u>PDF</u>
E22NS38	\$7.50	Black	"FOR-REV"	<u>PDF</u>
E22NS39	\$7.50	Black	"HAND-AUTO"	<u>PDF</u>
E22NS41	\$7.50	Black	"JOG-RUN"	<u>PDF</u>
E22NS42	\$7.50	Black	"OFF-ON"	<u>PDF</u>
E22NS43	\$7.50	Black	"OPEN-CLOSE"	<u>PDF</u>
E22NS48	\$7.50	Black	"UP-DOWN"	<u>PDF</u>
E22NS50	\$7.50	Black	"FOR-OFF-REV"	<u>PDF</u>
E22NS51	\$7.50	Black	"HAND-OFF-AUTO"	<u>PDF</u>
E22NS80	\$7.50	Black	"POWER ON"	<u>PDF</u>
E22NS81	\$7.50	Black	"MOTOR RUN"	<u>PDF</u>
E22NS82	\$7.50	Black	"MOTOR STOP"	PDF
E22NL36	\$7.50	Black	Jumbo alum. blank plate (1.57 in wide x 1.85 in tall)	<u>PDF</u>
E22NL37	\$7.50	Red	Jumbo alum. blank plate (1.57 in wide x 1.85 in tall)	<u>PDF</u>
E22NSP77	\$7.50	Red /black	Plastic blank plate; red on one side, black on other side; either side can have letters engraved down into white plastic	<u>PDF</u>
E22VA8	\$12.50	Yellow	"EMERGENCY STOP" oversize yellow legend plate, 2.76" (70mm), printed	N/A

NOTE: Legend plates also work with the GCX/ECX series 22mm metal switches. The removal of the locator tab on the legend plate is required. This is easily accomplished with a round file or small grinder.

	Pushbutton,	Indicator Light, and Selector S	witch Cross Referen	ce
Cutler-Hammer	Allen-Bradley	Telemecanique XB2B (chrome bezel) XA2B (black bezel)	GE C-2000	Siemens
		Non-Illuminated Pushbuttons		
<u>E22PB1A</u>	800EPF2 800E3LX10	ZA2BA2 ZA2BZ101	P9XPNNG10N0	3SB1000-0AB01 3SB02-CBH 3SB1400-0B
<u>E22PB3A</u>	800EPF3 800E3LX10	ZA2BA3 ZA2BZ101	P9XPNVG10N0	3SB1000-0AE01 3SB02-CBH 3SB1400-0B
E22EB2B	800EPE4 800E3LX01	ZA2BL4 ZA2BZ102	P9XPNRS20N0	3SB1000-0LC01 3SB02-CBH 3SB1400-0B
E22ASB204	ENCLSR: 800E-2P 800EP-F3 800E-2LX10 800EP-E4 800E-2LX01 800E-34BE208 800E-34R212	XALB211 Both flush - stop is not extended	P9CPNRSN20NO P9CPNVGN10NO P9EPB02 P9AEPN201 P9AEPN202	3SB02-S21
		Illuminated Pushbuttons		
<u>E22TB2X4B</u>	800EPLE4 800E3DL3 800E3X01	ZA2BW14 ZA2BW06224	P9XPLRSDN12NADI	3SB1001-OLC01 3SB02-CBH 3SB1400-0C 3SB1400-2H
E22TB3X4A	800EPLE3 800E3DL3 800E3X10	ZA2B213 AZ2B206124	P9XPLVSDN12NADI	3SB1001-0LE01 3SB02-CBH 3SB1400-0B 3SB1440-2H
E22TB9X4A	800EPLE5 800E3DL3 800E3X10	ZA2BW15 ZA2BW06124	P9XPLASDN12NADI	3SB1001-0LD01 3SB02-CBH 3SB1400-0B 3SB1400-2H
E22TB2X10B	800EPLE4 800E2RL5 800E3X01	ZA2BW14 ZA2BW062120	P9XPLRSB P9PRNVJ P9PDNVD	3SB1001-0LC01 3SB02-CBH 3SB1400-0C
E22TB3X10A	800EPLE3 800E2RL5 800E3X10	ZA2BW13 ZA2BW061120	P9XPLVSD P9PRNVJ P9PDNVD	3SB02-UPR1P 3SB1910-0DE 3SB1400-0B
E22TB9X10A	800DPLE5 800E2RL5 800E3X10	ZA2BW15 ZA2B2061120	P9XPLASD P9PRNVJ P9PDNVD	3SB02-UPR1P 3SB1910-0DD 3SB1400-0B

P	ushbutton, In	dicator Light, and Selector Sw	itch Cross Referen	ce (cont'd)
Cutler-Hammer	Allen-Bradley	Telemecanique XB2B (chrome bezel) XA2B (black bezel)	GE C-2000	Siemens
		Non-Illuminated Mushroom Push	buttons	
<u>E22LB2B</u>	800EPM4 800E3LX01	ZA2BC4 ZA2BZ102	P9XEM4RNN20N0	3SB1000-1RC01 3SB02-CBH 3SB1400-0C
E22LLB2B	800EPMT4 800E3LX01	ZA2BS54 ZA2BZ102	P9XER4RAN20N0	3SB1000-1AC01 3SB02-CBH 3SB1400-0C
E22JPB2B	800EPMJ4 800E3LX01	ZA2BR4 ZA2BZ102	P9XEMGRN (60mm) P9BO1VN	3SB1000-1VC01 (70MM) 3SB1400 0C
E22JLB2N8B	800EPMJP28 800E3LX01	NO EQUAL	NO EQUAL	NO EQUAL
E22JPLB2B	800EPMJP24 800E3LX01	ZA2BX4 ZA2BZ102	P9XET4RN1200	3SB1000-0KC01 (40mm) 3SB1400 0C
E22ASB106	800EP-MT4 800E-2LX01 800E-1P 800E-15YE112	XALJ174 No Nameplate +Yellow Cover	P9XER4RAN20N0 P9EPB01 P9AEPNEN	3SB02-S13 No Nameplate + Yellow Cover
		Indicating Lights	1	
		Use ZA2 or ZB2 for these indicating lights		
E22HV2X4	800EPPL4 800E3DL3	ZA2BV04 ZA2BV624	P9XURRD0 BA9S24	N/A
E22HV3X4	800EPPL3 800E3DL3	ZA2BV03 ZA2BV624	P9XUGRD0 BA9S24	N/A
E22HV9X4	800EPPL5 800E3DL3	ZA2BVO5 ZA2BV624	P9XUARD0 BA9S24	N/A
E22HV2X8	800EPPL4 800E3DL5	ZA2BV04 ZA2BV6120	B9XURRD0 BA9S130	N/A
E22HV3X8	800EPPL3 800E3DL5	ZA2BV03 ZA2BV6120	B9XUGRD0 BA9S130	N/A
E22HV9X8	800EPPL5 800E3DL5	ZA2BV05 ZA2BV6120	B9XUARD0 BA9S130	N/A
E22HL2X4	800EPPL4 800E3DL3R	ZA2BV043 ZA2BV624 DL1CJUS0244	B9XURRD0 080BA9S24LR	N/A
E22HL3X4	800EPPL3 800E3DL3G	ZA2BV033 ZA2BV624 DL1CJUS0243	B9XUGRD0 080BA9S24LG	N/A
E22HL9X4	800EPPL5 800E3DL3A	ZA2BV053 ZA2BV624 DL1CJUS0245	B9XUARD0 080BA9S24LA	N/A
E22HL2X8	800EPPL4 800E3DL5R	ZA2BV043 ZA2BV620 DL1CJUS1204	B9XURRD0 080BA9S120LR	N/A
E22HL3X8	800EPPL3 800E3DL5G	ZA2BV033 ZA2BV6120 DL1CJUS1203	B9XUGRD0 080BA9S120LG	N/A
E22HL9X8	800EPPL5 800E3DL5A	ZA2BV053 ZA2BV6120 DL1CJUS1205	B9XUARD0 080BA9S120LA	N/A

Pus	hbutton, Indic	ator Light, and Selector Switch	Cross Reference ((cont'd)
Cutler-Hammer	Allen-Bradley	Telemecanique XB2B (chrome bezel) XA2B (black bezel)	GE C-2000	Siemens
		Indicating Lights (cont'd)		
		Use ZA2 or ZB2 for these indicating lights		
E22H2X11	800EPPL4 800E3TL5	ZA2BV04 ZA2BV3	P9XLRGJI	3SB1001-6CC06 3SB02-CBH 3SB1400-5M
E22H3X11	800EPPL3 800E3TL5	ZA2BV03 ZA2BVB3	P9XLGGJI	3SB1001-6CE06 3SB02-CBH 3SB1400-5M
E22H9X11	800EPPL5 800E3TL5	ZA2BV05 ZA2BV3	P9XLAGJI	3SB1001-6CD06 3SB02-CBH 3SB1400-5M
E22TB9X26	800DPLE5 800ETLT5X11	ZA2B215 ZA2BW065120	P9XPLASDN30NKJI	3SB02-UPR1P 3SB1910-0DD 3SB1400-0B
E22TB2X27	800EPLE4 800E3TLT5X11	ZA2BW14 ZA2BW035	P9XPLRSDN30NHJI	3SB100-0QC01 3SB02-CBH 3SB1400-5M
E22TB9X27	800EPLE5 800E3TLT5X11	ZA2BW15 ZA2BW035	P9XPLASDN30NHJI	3SB1001-0QA01 3SB02-CBH 3SB1400-5M
		Selector Switches		
<u>E22XB51A</u>	800EPSM22 800E3LX10	ZA2BD2 ZA2BZ101	P9XSMD0N P9B10VN	3SB02-2MKBP 3SB1400-0B
E22XB51C	800EPSM22 800E3LX11	ZA2BD2 ZA2BZ105	P9XSMD0N P9B11VN	3SB02-2MKBP 3SB1400-0C
E22XBG1RR	800EPSM32 800E3LX20 800E3LX02	ZA2BD3 ZA2BZ103 ZA2BZ104	P9XSMZ0N P9B11VN	3SB02-3MKBP 3SB1400-0G 3SB1400-0H
E22KB53A	800EPKM2Z1 800E3LX11	ZA2BG4 ZA2BZ101	P9XSCD0K95 P9B10VN	3XB02-2MHC1P 3SB1400-0B
E22KB62A	800EPKR2Z1 800E3LX10	ZA2BG6 ZA2BZ101	P9XSCD0K95 P9B10VN	3SB02-2LHC1P 3SB1400-0B

Pushbu	tton, Indicator Ligh	t, and Selector Switc	h Cross Reference	(cont'd)
Cutler-Hammer	Allen-Bradley	Telemecanique XB2B (chrome bezel) XA2B (black bezel)	GE C-2000	Siemens
		Accessories		
E22B1	800E3X01	ZA2BZ102	P9B01VN	3SB1400-0C
E22B2	800E3X10	ZA2BZ101	P9B10VN	3SB1400-0B
E22NS33	800E13BE208	ZA2BZ32303	P9ACP2N202	P22MPS03
E22NS34	800E13BE212	ZA2BZ32304	P9ACP2N201	P22MPS04
E22NS19	800E13BE138	ZA2BZ32101 + custom text	P9ACP2N210	P22MPS28
E22NS11	800E13BE107	ZA2BZ32314	P9ACP2N205	P22MPS19
E22NS12	800E13BE110	ZA2BZ32308	P9ACP2N203	P22MPS17
E22NS50	800E13BE261	ZA2BZ32101+ custom text	P9ACP2N239	P22MPS81
E22NS15	800E13BE120	ZA2BZ32305	P9ACP2N214	P22MPS07
E22NS38	800E1BE253	ZA2BZ32101+ custom text	P9ACP2N231	P22MPS57
E22NS39	800E13BE127	ZA2BZ32101 + custom text	P9ACP2N243	P22MPS52
E22NS51	800E13BE128	ZA2BZ32387	P9ACP2N261	P22MPS80
E22NS41	800E13BE142	ZA2BZ32101 + custom text	P9ACP2N245	P22MPS65
E22NS81	800E13B	ZA2BZ32101 + custom text	P9ACP2NFEN	P22MPS38
E22NS82	800E13B	ZA2BZ32101 + custom text	P9ACP2NFEN	P22MPSBB + custom text
E22NS25	800E13BE166	ZA2BZ32311	P9ACP2R212	P22MPS01
E22NS26	800E13BE170	ZA2BZ32313	P9ACP2N206	P22MPS18
E22NS43	800E13BE171	ZA2BZ32101 + custom text	P9ACP2N234	P22MPS60
E22NS30	80013BE188	ZA2BZ32306	P9ACP2N215	P22MPS08
E22NS31	800E13BE193	ZA2BZ32334	P9ACP2N211	P22MPS06
E22NS35	800E13BE22	ZA2BZ32307	P9ACP2N204	P22MPS16
E22NS48	80013BE224	ZA2BZ32101 + custom text	P9ACP2N256	P22MPS61
E22NS13	800E13BE112	ZA2BZ32330	P9ACP2R229	P22MPS27
E22VA8	800E16Y	ZB2BY9303	080XTG802	3SX1348



NEMA Ruggedness at IEC Prices

Cutler-Hammer

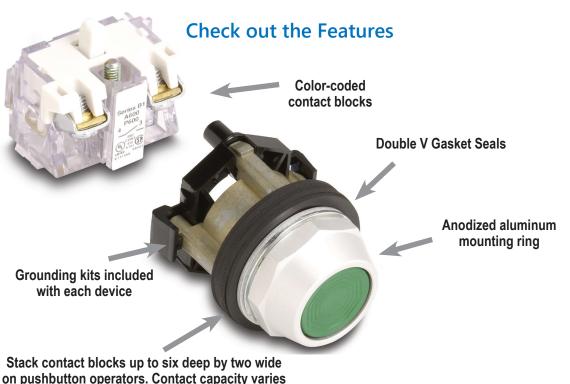
Overview

We took advantage of the experience of Cutler-Hammer engineering to take existing product technology and make it better. From the corrosion-resistant anodized mounting rings to the optically-enhanced lenses on our indicators, the HT800 30mm line finishes out your control panel in style. Extended lamps and LEDs provide better side illumination in our indicators and illuminated pushbuttons. Watertight double V gaskets stand between the environment and your control system. Use them indoors or out. They're protected to NEMA 1, 2, 3, 3R, 4, 4X, 12, and 13.

30mm Pushbuttons



Illuminated (in seven colors)





Guarded Illuminated (in seven colors)



Push-pull Illuminated



Mushroom

30mm Selector Switches

with operator.



(in knob or lever versions)

30mm Indicating Lights



(in seven colors)

30mm Push-to-Test Indicators



^{*} Cutler-Hammer products are available for sale to North America locations only.



HT800 30mm Pushbuttons Specifications

Overview

The HT800 family of 30.5 mm pushbutton devices includes momentary, illuminated and mushroom-head pushbuttons, selector switches, indicating lights and push-pull switches.

Features

- · Anodized aluminum mounting rings
- Watertight double V-gasket seals
- · Extended height bulbs
- Transparent housing contact blocks
- · Color-coded contact blocks
- Gold-plated contacts (on low voltage contact block)
- Reliability ridge on movable contact
- Stackable screw-mounted contact blocks
- Contact blocks can be mounted in left/right or top/bottom positions
- Standard N.C. contact opens before N.O. contact closes (break before make operation)
- Bright and long lasting LED indicating lights in six colors
- Field convertible maintained selector switches from two-position to three-position and vice versa
- Field selectable knob/lever mounting positions at any 22.5° increment

Benefits

- Corrosion resistant NEMA 4X finish
- Watertight and oil-tight NEMA 4, 13 ingress protection
- Increased side illumination of indicating lights and illuminated pushbuttons
- Easy visual inspection of contact conditions
- Easily identifiable N.O. (white) or N.C. black) contact blocks
- Gold-plated contacts suitable for logic level circuits
- Reliability ridge penetrates contamination buildup on stationary contacts
- Left/right or top/bottom mounted contact blocks allow correct positioning in retrofit applications
- All-purpose selector switches are convertible and can rotate in 22.5° increments to suit panel layouts

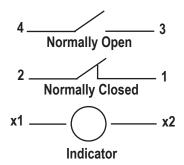
Standards and Certifications

- UL508, File No. E131568
- CSA C22.2 No. 14, File No. LR68551

Ingress Protection

 UL (NEMA) 1, 2, 3, 3R, 4, 4X, 12 and 13 when mounted in similarly rated enclosures

Typical Wiring



www.automationdirect.com

Cutler-Hammer

HT800 30mm Pushbuttons Specifications

	HT800 — Specifications				
	Mechanical Ratings				
Frequency of Operation					
Pushbuttons	6,000 Operations per hour				
Selector Switches	3,000 Operations per hour				
Push-Pull Operators	3,000 Operations per hour				
Mechanical Endurance/Life					
Pushbuttons	10×10^6 Operations 6K Ops/Hr with 6 N.O. on left and 6 N.C. on right				
Selector Switches	250 x 10³ Operations 3K Ops/Hr with 2 N.O. on left and 2 N.C. on right				
Push-Pull Operators	250 x 10³ Operations 3K Ops/Hr with 6 N.O. on left and 6 N.C. on right				
Environmental Specifications					
Operating Temperature	10 to 140°F (-12° to 60°C)				
Storage Temperature	-40 to 176°F (-40° to 80°C)				
Altitude	6,562 ft. (2,000m)				
Humidity	95% RH @ 60°C				
Terminals					
Contact Blocks	#6-32 posi-drive saddle clamp type, 1 x 16 AWG to 2 x 14 AWG, 12 in-lbs max.				
Light Units	#6-32 posi-drive saddle clamp type, 1 x 22 AWG to 2 x 14 AWG, 7 in-lbs max.				

HT800 Standard Contact Blocks UL (NEMA) Rating							
Electrical Ratings Description/Function	Contact Type	Catalog Number	AC	DC			
Standard Normally Open contact	N.O.	HT8A	A600	P600			
Standard Normally Closed contact	N.C.	HT8B	A600	P600			
Normally Open Early Make Contact will make circuit before standard N.O. contact. DC ratings do not apply.	N.O.E.M.	HT8C	A600	_			
Normally Closed Late Break contact will open after standard N.C. contact. DC ratings do not apply.	N.C.L.B.	HT8D	A600	_			
Logic level, low voltage N.O .contact. Gold plated contacts.	N.O.	HT8E	5V 1mA (minimum) 28V 500mA (maximum				

UL (NEMA) A600 and P600 Ratings								
Book district		Its AC	50/60	Hz	Volts DC 1			
Description	120	240	480	600	125	250	600	
Make and Emerg. Interrupting Capacity (Amp)	60	30	15	12	1.1	0.55	0.2	
Normal Load Break (Amp)	6	3	1.5	1.2	1.1	0.55	0.2	
Thermal Current (Amp)	10	10	10	10	5	5	5	
Volt amperes								
Make and Emerg. Interrupting Capacity	7200	7200	7200	7200	138²	138²	138²	
Normal Load Break	720	720	720	720	138	138	138	

Note: 1: DC ratings do not apply to N.O.E.M. (Normally Open Early Make) and N.C.L.B. (Normally Closed Late Break) contact blocks HT8C and HT8D.

2: Maximum make or break volt-amperes at 300V or less



FAT-N HT800 30mm Momentary **Pushbuttons**







HT800 30mm Momentary Pushbuttons								
Contact Type	Button Color	Flush Head Momentary		Extended He Momentar		Mushroom Head Momentary		
		Part Number	Price	Part Number	Price	Part Number	Price	
	Black	HT8AAH	\$29.50	HT8ABH	\$29.50	HT8AEH	\$61.00	
Operator Only, No Contacts	Red	HT8AAR	\$29.50	HT8ABR	\$29.50	HT8AER	\$61.00	
	Green	HT8AAG	\$29.50	HT8ABG	\$29.50	HT8AEG	\$61.00	
	Black	HT8AAHA	\$46.00	*HT8ABHA	\$46.00	*HT8AEHA	\$79.00	
1 N.O.	Red	*HT8AARA	\$46.00	*HT8ABRA	\$46.00	*HT8AERA	\$79.00	
	Green	* <u>HT8AAGA</u>	\$44.50	*HT8ABGA	\$46.00	*HT8AEGA	\$79.00	
	Black	* <u>HT8AAHB</u>	\$46.00	*HT8ABHB	\$46.00	* <u>HT8AEHB</u>	\$79.00	
1 N.C.	Red	* <u>HT8AARB</u>	\$46.00	* <u>HT8ABRB</u>	\$46.00	* <u>HT8AERB</u>	\$79.00	
	Green	*HT8AAGB	\$46.00	*HT8ABGB	\$46.00	*HT8AEGB	\$79.00	
	Black	* <u>HT8AAHAB</u>	\$61.00	*HT8ABHAB	\$61.00	*HT8AEHAB	\$96.00	
1 N.O. and 1 N.C.	Red	* <u>HT8AARAB</u>	\$61.00	*HT8ABRAB	\$61.00	*HT8AERAB	\$96.00	
	Green	*HT8AAGAB	\$61.00	*HT8ABGAB	\$61.00	*HT8AEGAB	\$96.00	
2 N.O. and 2 N.C.	Black	* <u>HT8AAHF1Q1</u>	\$96.00	* <u>HT8ABHF1Q1</u>	\$96.00	* <u>HT8AEHF1Q1</u>	\$125.00	
	Red	*HT8AARF1Q1	\$96.00	*HT8ABRF1Q1	\$96.00	*HT8AERF1Q1	\$125.00	
	Green	* <u>HT8AAGF1Q1</u>	\$96.00	*HT8ABGF1Q1	\$96.00	*HT8AEGF1Q1	\$125.00	

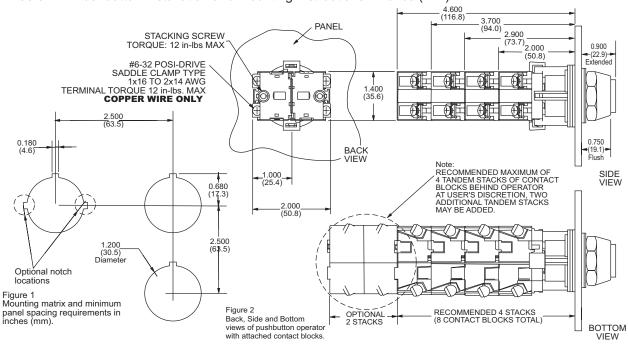
Notes: A grounding kit is included with each operator or switch assembly.

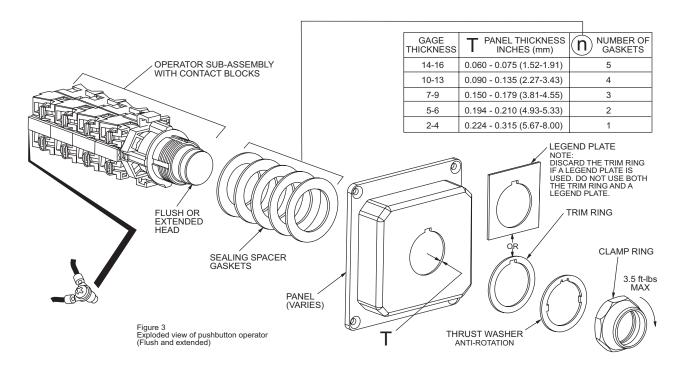
Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer.

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EAT-N HT800 30mm Momentary Pushbuttons

30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)







HT800 30mm Two-position Push-pull Button

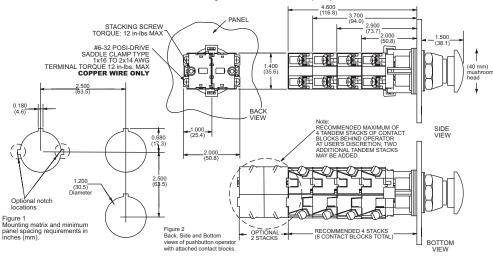


Contact	Operator	Operator Position		Two-position Maintained Push-Pull			
Configuration	Out	In	Color	Part Number	Price		
Operator Only			Red	HT8CBR	\$96.00		
1 N.C.	Х	0	Red	*HT8CBRB	\$112.00		
1 N.O. and 1 N.C.	"O X"	" X O"	Red	*HT8CBRAB	\$125.00		

Notes: A grounding kit is included with each operator or switch assembly.

Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer.

30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)



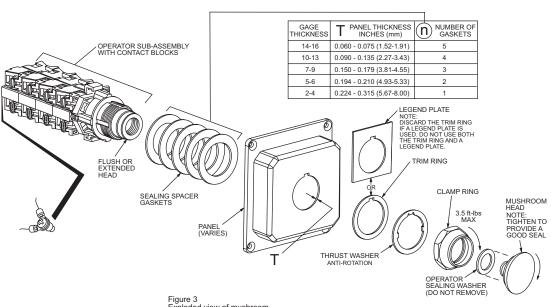


Figure 3 Exploded view of mushroom head operator



HT800 30mm Push-Pull Illuminated Pushbutton

Contact Configuration	24 Volt Incandescent full Voltage Lamp 50mA @ 24 Volts	Price	120 Volt Incandescent Full Voltage Lamp 19mA @ 120 Volts	Price	24 Volt LED full Voltage Lamp	Price	120 Volt LED full Voltage Lamp	Price
Red Lens								
Operator only	HT8FBRV3	\$166.00	HT8FBRV7	\$166.00	HT8FBRF3	\$182.00	HT8FBRF7	\$182.00
1 N.O.	*HT8FBRAV3	\$159.00	*HT8FBRAV7	\$159.00	*HT8FBRAF3	\$175.00	*HT8FBRAF7	\$175.00
1 N.C.	*HT8FBRBV3	\$159.00	*HT8FBRBV7	\$159.00	*HT8FBRBF3	\$175.00	*HT8FBRBF7	\$175.00
Green Lens								
Operator only	HT8FBGV3	\$166.00	HT8FBGV7	\$166.00	HT8FBGF3	\$182.00	HT8FBGF7	\$182.00
1 N.O.	*HT8FBGAV3	\$159.00	*HT8FBGAV7	\$159.00	*HT8FBGAF3	\$175.00	*HT8FBGAF7	\$175.00
1 N.C.	* <u>HT8FBGBV3</u>	\$159.00	* <u>HT8FBGBV7</u>	\$159.00	* <u>HT8FBGBF3</u>	\$175.00	*HT8FBGBF7	\$175.00



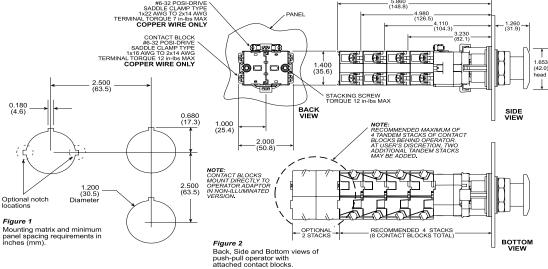
HT8FBRV3

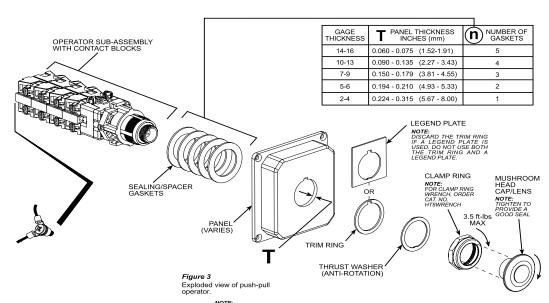


HT8FBGF3

Notes: A grounding kit is included with each operator or switch assembly.
*Part numbers with an * are kitted from individual components at AutomationDirect.
The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer.

30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)





FOR EASY BULB REMOVAL FROM FRONT OF PANEL USE BULB REMOVAL TOOL CATNO. HT8LAMPTOOL

FAT•N

HT800 30mm Selector Switches

Cutler-Hammer



HT8JAH3A knob version

	Two-position Selector Switches						
Contact Type	Operator Type M=Maintained	Standard Black Know	b Operator	Standard Black Lever Operator			
	S=Spring Return	Part Number	Price	Part Number	Price		
No	ММ	HT8JAH3A	\$39.00	HT8JDH3A	\$39.00		
Contacts	M <s< th=""><th>HT8JNH3A</th><th>\$62.00</th><th>HT8JPH3A</th><th>\$62.00</th></s<>	HT8JNH3A	\$62.00	HT8JPH3A	\$62.00		
1 N.O.	ММ	* <u>HT8JAH3AA5</u>	\$56.00	* <u>HT8JDH3AA5</u>	\$56.00		
1 N.O.	M <s< th=""><th>*<u>HT8JNH3AA5</u></th><th>\$79.00</th><th>*<u>HT8JPH3AA5</u></th><th>\$79.00</th></s<>	* <u>HT8JNH3AA5</u>	\$79.00	* <u>HT8JPH3AA5</u>	\$79.00		



HT8JDH3A lever version

Switch Part Numbers	Contact Blocks		Cam Code 3A		
			Switch Position		
HT8JAH3A, HT8JNH3A, HT8JAH3AA5, HT8JNH3AA5, HT8JDH3A, HT8JDH3AA5, HT8JPH3AA5 (Contact block configuration varies with part number)	Left	Right			
	N.O.		X	0	
Two-position Selector Switch	N.C.		0	X	
Two-position Selector Switch		N.O.	0	X	
		N.C.	X	0	
Note: AutomationDirect only offers cam code 3A for two pos	switches.	X = On	O = Off		

Notes: A grounding kit is included with each operator or switch assembly.

Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer.





HT8JBH1D knob version

	Three-position Selector Switches							
Contact Type	Operator Type M=Maintained S=Spring	Standard Black Know	b Operator	Standard Black Lever Operator				
	Return	Part Number	Price	Part Number	Price			
	MMM	HT8JBH1D	\$39.00	HT8JEH1D	\$39.00			
No Contacts	M M < S	HT8JUH1D	\$62.00	HT8JVH1D	\$62.00			
	S > M < S	HT8JXH1D	\$62.00	HT8JYH1D	\$62.00			
	MMM	HT8JBH1DAA5	\$73.00	*HT8JEH1DAA5	\$73.00			
2 N.O.	M M < S	*HT8JUH1DAA5	\$96.00	*HT8JVH1DAA5	\$96.00			
	S > M < S	*HT8JXH1DAA5	\$96.00	*HT8JYH1DAA5	\$96.00			



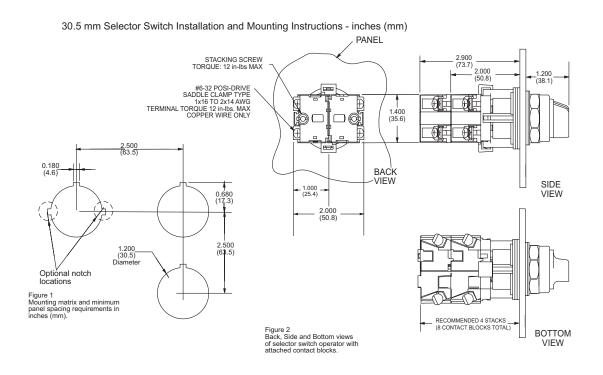
HT8JEH1D lever version

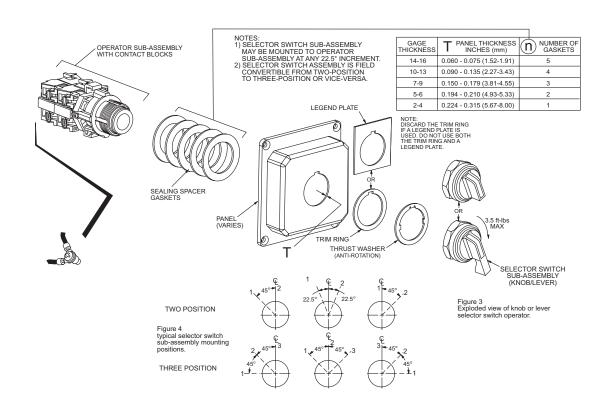
Switch Part Numbers	Contact Blocks		Cam Code 1D			
HT8JBH1D, HT8JUH1D, HT8JXH1D, HT8JBH1DAA5, HT8JUH1DAA5, HT8JXH1DAA5,			Switch Position			
HT8JEH1D, HT8JVH1D, HT8JYH1D, HT8JEH1DAA5, HT8JVH1DAA5, HT8JYH1DAA5 (Contact block configuration varies with part number)	Left	Right				
	N.O.		X	0	0	
	N.C.		0	Χ	X	
Three position Salastar Switch		N.O.	0	0	X	
Three-position Selector Switch		N.C.	X	Χ	0	
	*N.0	N.0.	X	0	X	
	**N.C	N.C.	0	Χ	0	
* Indicates contact blocks wired in parallel ** Indicates contact blocks wired in series			X = On	O = Off		

Note: AutomationDirect only offers cam code 1D for three-position selector switches. Note: For additional contact blocks, see HT800 accessories in this section.



HT800 30mm Three-position Selector Switches







HT800 30mm Extended **Illuminated Pushbuttons**





HT8GBGV7



HT8GBAV7



HT8GBCV7

HT80	0 30mm Extended	Illumi	nated Pushbuttons	
Contact Configuration	24 Volt Incandescent full Voltage Lamp 50mA @ 24 Volts	Price	120 Volt Incandescent Full Voltage Lamp 19mA @ 120 Volts	Price
Red Lens				
Operator only	HT8GBRV3	\$96.00	HT8GBRV7	\$96.00
1 N.O.	*HT8GBRAV3	\$112.00	*HT8GBRAV7	\$112.00
1 N.C.	*HT8GBRBV3	\$112.00	*HT8GBRBV7	\$112.00
Green Lens				
Operator only	HT8GBGV3	\$96.00	HT8GBGV7	\$96.00
1 N.O.	*HT8GBGAV3	\$112.00	*HT8GBGAV7	\$112.00
1 N.C.	*HT8GBGBV3	\$112.00	*HT8GBGBV7	\$112.00
Amber Lens				
Operator only	HT8GBAV3	\$96.00	HT8GBAV7	\$96.00
1 N.O.	*HT8GBAAV3	\$112.00	*HT8GBAAV7	\$112.00
1 N.C.	*HT8GBABV3	\$112.00	*HT8GBABV7	\$112.00
Clear Lens	<u>'</u>			
Operator only	HT8GBCV3	\$96.00	HT8GBCV7	\$96.00
1 N.O.	*HT8GBCAV3	\$112.00	*HT8GBCAV7	\$112.00
1 N.C.	*HT8GBCBV3	\$112.00	*HT8GBCBV7	\$112.00
White Lens				
Operator only	HT8GBWV3	\$96.00	HT8GBWV7	\$96.00
1 N.O.	*HT8GBWAV3	\$112.00	*HT8GBWAV7	\$112.00
1 N.C.	*HT8GBWBV3	\$112.00	*HT8GBWBV7	\$112.00
Yellow Lens				
Operator only	HT8GBYV3	\$96.00	HT8GBYV7	\$96.00
1 N.O.	*HT8GBYAV3	\$112.00	*HT8GBYAV7	\$112.00
1 N.C.	*HT8GBYBV3	\$112.00	*HT8GBYBV7	\$112.00
Blue Lens				
Operator only	HT8GBBV3	\$96.00	HT8GBBV7	\$96.00
1 N.O.	*HT8GBBAV3	\$112.00	*HT8GBBAV7	\$112.00
1 N.C.	*HT8GBBBV3	\$112.00	*HT8GBBBV7	\$112.00
	Spare Incandescent	Lamps Fo	r HT8 Series	
Spare lamp	HT8BULBV3	\$14.00	HT8BULBV7	\$14.00

Notes: A grounding kit is included with each operator or switch assembly.

Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer. Lens not sold separately.









HT800 30mm Extended Illuminated Pushbuttons

30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)

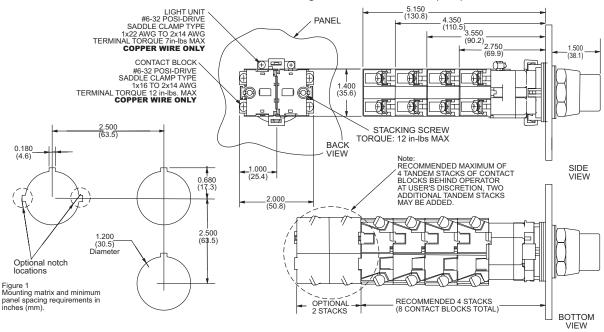
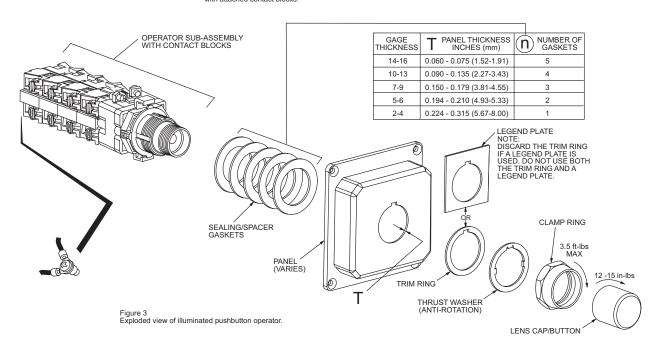


Figure 2 Back, Side and Bottom views of pushbutton operator with attached contact blocks.



HT800 30mm Push-to-Test Indicators



HT8GVRV7

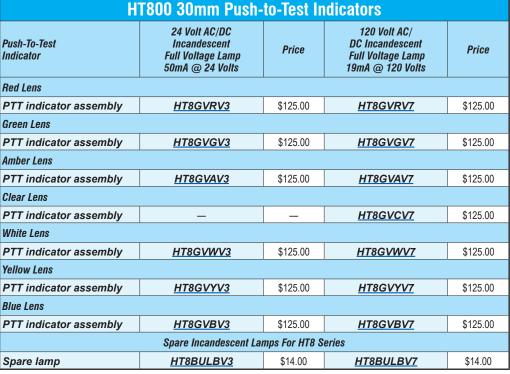


HT8GVGV7



HT8GVAV7





See HT800 accessories in this section.

Notes: A grounding kit is included with each operator or switch assembly.

Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer. Lens not sold separately.



HT8GVWV7



HT8GVYV7



HT8GVBV7

FIT-N HT800 30mm Push-to-Test Indicators

Cutler-Hammer

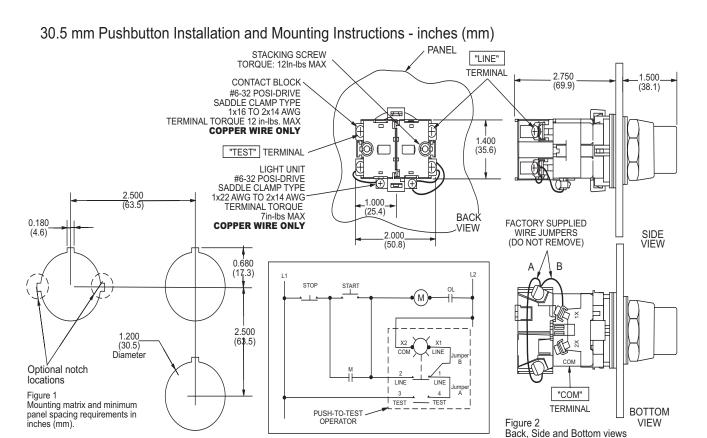
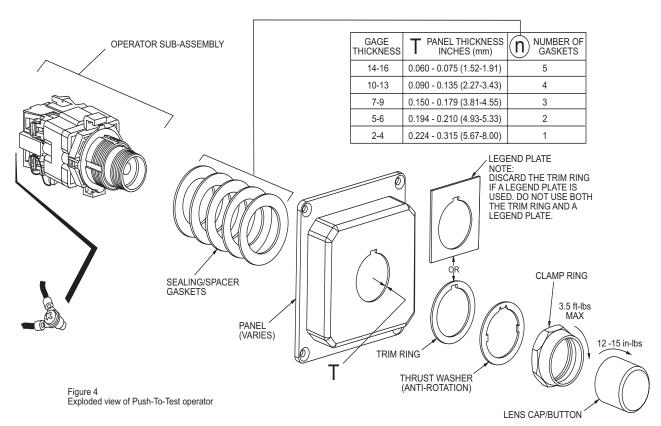


Figure 3 Typical Connection Diagram



of Push-To-Test operator

FIT-N HT800 30mm Incandescent Indicators

Cutler-Hammer



HT8HFRV7



HT8HFGV7



HT8HFAV7

ŀ	HT800 30mm Incandescent Indicators							
Incandescent Indicator	24 Volt Incandescent Full Voltage Lamp 50mA @ 24 Volts	Price	120 Volt Incandescent Full Voltage Lamp 19mA @ 120 Volts	Price				
Red Lens								
Indicator assembly	HT8HFRV3	\$96.00	HT8HFRV7	\$96.00				
Green Lens								
Indicator assembly	HT8HFGV3	\$96.00	HT8HFGV7	\$96.00				
Amber Lens								
Indicator assembly	HT8HFAV3	\$96.00	HT8HFAV7	\$96.00				
Clear Lens								
Indicator assembly	HT8HFCV3	\$96.00	HT8HFCV7	\$96.00				
White Lens								
Indicator assembly	HT8HFWV3	\$96.00	HT8HFWV7	\$96.00				
Yellow Lens								
Indicator assembly	HT8HFYV3	\$96.00	HT8HFYV7	\$96.00				
Blue Lens								
Indicator assembly	HT8HFBV3	\$96.00	HT8HFBV7	\$96.00				
	Spare Incandescent I	Lamps For HT8	S Series					
Spare lamp	HT8BULBV3	\$14.00	HT8BULBV7	\$14.00				

See HT800 accessories in this section.

Notes: A grounding kit is included with each operator or switch assembly.

Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in the same shipping box. Final assembly of the individual components must be done by the customer. Lens not sold separately.



HT8HFCV7



HT8HFWV7



HT8HFYV7

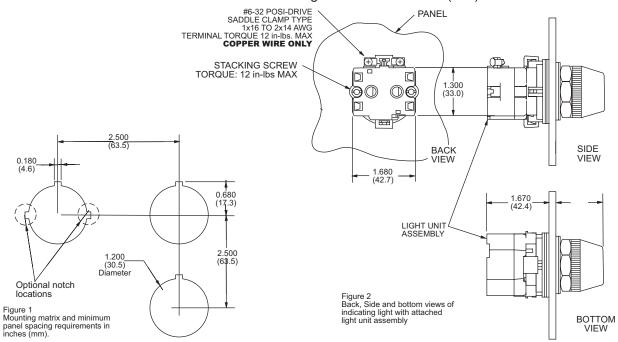


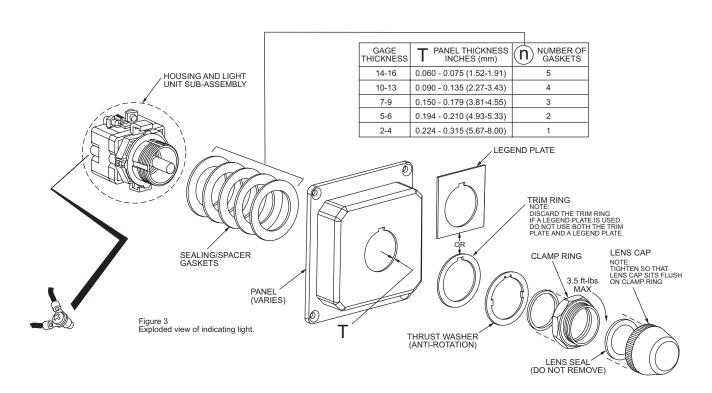
HT8HFBV7

HT800 30mm Incandescent Indicators

Cutler-Hammer

30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)







FAT·N HT800 30mm Guarded Flush **Pushbuttons**



HT8GDRV3



HT8GDGV3



HT8GDAV3



HT8GDCV3



HT8GDWV3



HT8GDYV3



HT8GDBV3

	HT800 30mm Guarded Flush Pushbuttons							
Contact Configuration	24 Volt AC/DC Incandescent Full Voltage Lamp 50mA @ 24 Volts	Price	120 Volt AC/DC Incandescent Full Voltage Lamp 19mA @ 120 Volts	Price	24 Volt LED Full Voltage Lamp	Price	120 Volt LED Full Voltage Lamp	Price
Red Lens								
Operator only	HT8GDRV3	\$105.00	HT8GDRV7	\$105.00	HT8GDRF3	\$123.00	HT8GDRF7	\$123.00
1 N.O.	*HT8GDRAV3	\$112.00	*HT8GDRAV7	\$112.00	*HT8GDRAF3	\$133.00	*HT8GDRAF7	\$133.00
1 N.C.	*HT8GDRBV3	\$112.00	*HT8GDRBV7	\$112.00	*HT8GDRBF3	\$133.00	*HT8GDRBF7	\$133.00
Green Lens								
Operator only	HT8GDGV3	\$105.00	HT8GDGV7	\$105.00	HT8GDGF3	\$123.00	HT8GDGF7	\$123.00
1 N.O.	*HT8GDGAV3	\$112.00	*HT8GDGAV7	\$112.00	*HT8GDGAF3	\$133.00	*HT8GDGAF7	\$133.00
1 N.C.	*HT8GDGBV3	\$112.00	*HT8GDGBV7	\$112.00	*HT8GDGBF3	\$133.00	*HT8GDGBF7	\$133.00
Amber Lens								
Operator only	HT8GDAV3	\$105.00	HT8GDAV7	\$105.00	HT8GDAF3	\$123.00	HT8GDAF7	\$123.00
1 N.O.	*HT8GDAAV3	\$112.00	*HT8GDAAV7	\$112.00	*HT8GDAAF3	\$133.00	*HT8GDAAF7	\$133.00
1 N.C.	*HT8GDABV3	\$112.00	*HT8GDABV7	\$112.00	*HT8GDABF3	\$133.00	*HT8GDABF7	\$133.00
Clear Lens								
Operator only	HT8GDCV3	\$105.00	HT8GDCV7	\$105.00	HT8GDCF3	\$123.00	HT8GDCF7	\$123.00
1 N.O.	*HT8GDCAV3	\$112.00	*HT8GDCAV7	\$112.00	*HT8GDCAF3	\$133.00	*HT8GDCAF7	\$133.00
1 N.C.	*HT8GDCBV3	\$112.00	*HT8GDCBV7	\$112.00	*HT8GDCBF3	\$133.00	*HT8GDCBF7	\$133.00
White Lens								
Operator only	HT8GDWV3	\$105.00	HT8GDWV7	\$105.00	HT8GDWF3	\$123.00	HT8GDWF7	\$123.00
1 N.O.	*HT8GDWAV3	\$112.00	*HT8GDWAV7	\$112.00	*HT8GDWAF3	\$133.00	*HT8GDWAF7	\$133.00
1 N.C.	*HT8GDWBV3	\$112.00	*HT8GDWBV7	\$112.00	*HT8GDWBF3	\$133.00	*HT8GDWBF7	\$133.00
Yellow Lens								
Operator only	HT8GDYV3	\$105.00	HT8GDYV7	\$105.00	HT8GDYF3	\$123.00	HT8GDYF7	\$123.00
1 N.O.	*HT8GDYAV3	\$112.00	*HT8GDYAV7	\$112.00	*HT8GDYAF3	\$133.00	*HT8GDYAF7	\$133.00
1 N.C.	*HT8GDYBV3	\$112.00	*HT8GDYBV7	\$112.00	*HT8GDYBF3	\$133.00	*HT8GDYBF7	\$133.00
Blue Lens								
Operator only	HT8GDBV3	\$105.00	HT8GDBV7	\$105.00	HT8GDBF3	\$123.00	HT8GDBF7	\$123.00
1 N.O.	*HT8GDBAV3	\$112.00	*HT8GDBAV7	\$112.00	*HT8GDBAF3	\$133.00	*HT8GDBAF7	\$133.00
1 N.C.	*HT8GDBBV3	\$112.00	*HT8GDBBV7	\$112.00	*HT8GDBBF3	\$133.00	*HT8GDBBF7	\$133.00
	Spai	re Incand	escent and LED Lamps	For HT8 S	eries - starting Prid	es		
	HT8BULBV3	\$14.00	HT8BULBV7	\$14.00	HT8LED**F3	\$39.00	HT8LED**F7	\$39.00
			30mm Guard for Illumin	nated Pusi	hbuttons			
								\$16.50
See HT800 accessories in this section.								

See HT800 accessories in this section.

Notes: A grounding kit is included with each operator or switch assembly.

www.automationdirect.com

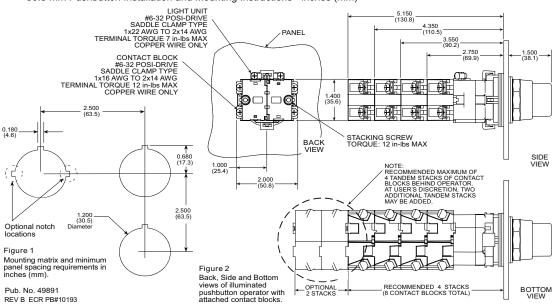
^{*} Part numbers with an * are kitted from individual components at AutomationDirect. The individual components are picked and shipped in

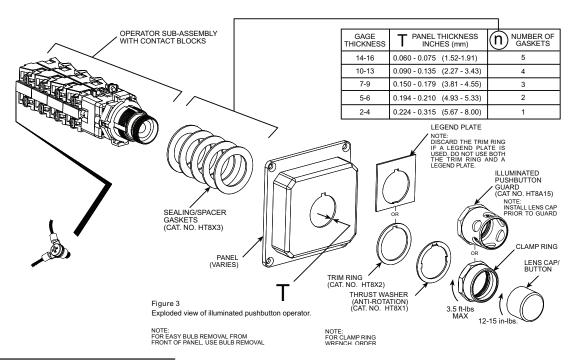
the same shipping box. Final assembly of the individual components must be done by the customer. Lens not sold separately.
**Insert letter of color bulb needed; for example, HT8LEDYF3 is the part number for a yellow 24 volt LED replacement bulb. See the accessories page at the end of this section for the complete listing of LED replacement bulbs.

Cutler-Hammer

HT800 30mm Guarded Flush Pushbuttons

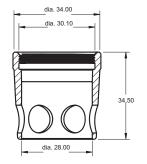
30.5 mm Pushbutton Installation and Mounting Instructions - inches (mm)

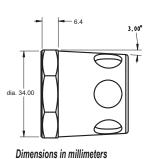




Guard dimensions







FAT•N **Cutler-Hammer**

HT800 30mm Contact Blocks & **Accessories**

Contact blocks





HT8A

HT8 Series Contact Blocks					
Part Number	Description	Price			
HT8A	Normally open contact block for HT8 series switches. NEMA Rated A600, P6001	\$16.50			
<u>HT8B</u>	Normally closed contact block for HT8 series switches. NEMA Rated A600, P6001	\$16.50			
HT8C	Early closing normally open contact block for HT8 series switches. NEMA Rated A6001	\$40.00			
HT8D	Late opening normally closed contact block for HT8 series switches. NEMA Rated A6001	\$16.50			
<u>HT8E</u>	Logic level normally open contact block for HT8 series switches. Gold plated contacts for reliable low energy switching. Power Rating: Min 1mA @ 5V; Max 500mA 28V.	\$33.00			

- See HT800 specifications in this section for typical contact wiring diagram.
 NEMA ICS 5-2000. For more information, refer to HT800 technical specifications and control circuit. contact electrical ratings at the beginning of this section.

Spare parts and tools







HT8LAMPTOOL



109305



HT8BULBV3



HT8LEDYF3

	HT8 Series Spare Parts and Tools	
Part Number	Description	Price
HT8WRENCH	Installation wrench for Cutler-Hammer HT8 series and E22 series pushbuttons, switches, and indicators	\$19.00
HT8LAMPTOOL	Bulb extraction tool for removing bulbs from switches, indicators and stacklights	\$10.00
<u>109305</u>	Knockout punch hole cutting tool for 30.5 mm mounting hole. Includes punch, die and draw stud	\$34.50
<u>HT8X1</u>	Spare anti-rotation ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
<u>HT8X2</u>	Spare trim ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
<u>HT8X3</u>	Spare sealing/spacing ring for HT8 series. Included with each HT8 device. (not shown)	\$3.25
HT8GR1	Spare grounding kit for HT8 series devices except non-PTT indicators. Included with each HT8 device. (not shown)	\$3.25
HT8GR2	Spare grounding kit for HT8 series non-PTT indicators. Included with each HT8 device. (not shown)	\$3.25
HT8BULBV3	24 volt incandescent bulb for HT8 illuminated devices. This is an extended bulb for enhanced illumination with HT8 devices. 50mA at 24 volts.	\$14.00
HT8BULBV7	120 volt incandescent bulb for HT8 illuminated devices. This is an extended bulb for enhanced illumination with HT8 devices. 19mA at 120 volts.	\$14.00
HT8LEDRF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Red	\$38.50
HT8LEDYF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Yellow	\$38.50
HT8LEDGF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Green	\$40.00
HT8LEDBF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Blue	\$44.00
HT8LEDWF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: White	\$48.50
HT8LEDAF3	24 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Amber	\$39.00
HT8LEDRF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Red	\$38.50
HT8LEDYF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Yellow	\$38.50
HT8LEDGF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Green	\$40.00
HT8LEDBF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Blue	\$44.00
HT8LEDWF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: White	\$48.50
HT8LEDAF7	120 volt replacement LED bulb for HT800 30mm pushbuttons. Color: Amber	\$39.00

NOTE: LED modules have very low current draw and should not be used with triac output devices like PLC triac output modules.

30mm Legend Plates

Cutler-Hammer

E D	h	0	
For Push			rs and
<u>I</u> IN	dicating	Lights	
Legend	Color of Field	Catalog Number	Price
Clamp	Black	<u>HT8SP90</u>	\$7.75
Close	Black	HT8SP73	\$7.75
Down	Black	HT8SP74	\$7.75
Emergency Stop	Red	HT8SP13	\$7.75
Fast	Black	<u>HT8SP75</u>	\$7.75
Faster	Black	<u>HT8SP87</u>	\$7.75
Feeder On	Black	HT8SP94	\$7.75
Feeder Off	Black	<u>HT8SP95</u>	\$7.75
Forward	Black	HT8SP15	\$7.75
High	Black	<u>HT8SP16</u>	\$7.75
In	Black	<u>HT8SP17</u>	\$7.75
Inch	Black	<u>HT8SP18</u>	\$7.75
Jog	Black	<u>HT8SP19</u>	\$7.75
Jog Forward	Black	HT8SP20	\$7.75
Jog Reverse	Black	HT8SP21	\$7.75
Low	Black	<u>HT8SP22</u>	\$7.75
Lower	Black	<u>HT8SP23</u>	\$7.75
Lube-fail	Black	HT8SP92	\$7.75
Motor Run	Black	<u>HT8SP81</u>	\$7.75
Motor Stop	Black	<u>HT8SP82</u>	\$7.75
Off	Red	<u>HT8SP24</u>	\$7.75
On	Black	<u>HT8SP25</u>	\$7.75
Open	Black	<u>HT8SP26</u>	\$7.75
Out	Black	<u>HT8SP27</u>	\$7.75
Power On	Black	<u>HT8SP80</u>	\$7.75
Raise	Black	HT8SP28	\$7.75
Ready	Black	HT8SP86	\$7.75
Reset	Black	<u>HT8SP29</u>	\$7.75
Reverse	Black	<u>HT8SP30</u>	\$7.75
Run	Black	<u>HT8SP31</u>	\$7.75
Safe	Black	<u>HT8SP85</u>	\$7.75
Slow	Black	<u>HT8SP32</u>	\$7.75
Slower	Black	<u>HT8SP88</u>	\$7.75
Start	Black	<u>HT8SP33</u>	\$7.75
Stop	Red	HT8SP34	\$7.75
Test	Black	<u>HT8SP83</u>	\$7.75
Transfer	Black	<u>HT8SP93</u>	\$7.75
Trip	Black	HT8SP84	\$7.75
Unclamp	Black	HT8SP91	\$7.75
Up	Black	HT8SP35	\$7.75

*Note: Dimensions: 1.77" (45mm) x1.77" (45mm)



For Selector Switch Operators/ Two-Position								
Legend	Color of Field	Catalog Number	Price					
Forward Reverse	Black	HT8SP38	\$7.75					
Hand Auto	Black	HT8SP39	\$7.75					
High Low	Black	HT8SP40	\$7.75					
Jog Run	Black	HT8SP41	\$7.75					
Manual Auto	Black	HT8SP67	\$7.75					
Off On	Black	HT8SP42	\$7.75					
Open Close	Black	HT8SP43	\$7.75					
Run Jog	Black	HT8SP44	\$7.75					
Safe Run	Black	HT8SP45	\$7.75					
Start Jog	Black	HT8SP46	\$7.75					
Start Stop	Black	HT8SP47	\$7.75					
Up Down	Black	HT8SP48	\$7.75					

	For Selector Switch Operators/ Three-Position								
Legend	Color of Field	Catalog Number	Price						
Auto Off Hand	Black	<u>HT8SP49</u>	\$7.75						
For. Off Rev	Black	HT8SP50	\$7.75						
For. Safe Rev.	Black	HT8SP69	\$7.75						
Hand Off Auto	Black	HT8SP51	\$7.75						
Man. Off Auto	Black	HT8SP68	\$7.75						
Open Off Close	Black	HT8SP53	\$7.75						
Run Safe Jog	Black	<u>HT8SP70</u>	\$7.75						
Up Off Down	Black	HT8SP54	\$7.75						
On Stop Safe	Black	HT8SP71	\$7.75						

For PUSH/PULL Units							
Legend 3/32" lettering	Price						
ON/OFF	Black	HT8PP5	\$7.75				
OPEN/CLOSE	Black	HT8PP8	\$7.75				
UP/DOWN	Black	HT8PP11	\$7.75				

Square Blank Plastic Legend Plates								
Lettering Color of Catalog Price								
Black	White/Silver	HT8SP76	\$7.75					
White Red/Black HT8SP77 \$7.75								

Round	Plastic	Legend P	lates
Legend	Color of Field	Catalog Number	Price
ESTOP	Yellow	HT8RP79	\$7.75

NOTE: 70 mm / 2-3/4" diameter

NOTE: All 30 mm legend plates are plastic.

F- Fuji Electric Command Series Pilot Devices

Fuji Electric Command Series pilot devices are used in machine tools, industrial machines, control panels, distribution panels, and instrumentation panels. Pushbuttons improve interfacing by allowing better layout and wiring, easier installation and increased safety. Reliability is also built in to handle complex multi-functional controls.

The AR16, AR22 and AR30 series are configurable with a wide range of choices. Our selection of 16mm, 19mm, 22mm and 30mm pushbuttons include non-illuminated as well as

illuminated models with flush round heads, extended round heads, and mushroom style heads. Other 16mm, 22mm and 30mm pilot devices available include emergency stop pushbuttons, selector switches, pilot lights, joystick selector switches, and buzzers.

We also offer a wide array of accessories to complement our selection of Fuji 16mm, 19mm, 22mm and 30mm Command Series pilot devices.

AR16 Series Features

- 16.2 or 19.2 mm diameter hole
- Fits 1 to 6mm max panel thickness
- Integrated structure with built-in contacts that reduce control panel depth
- Offered in Thin-type profile with only 2mm of panel protrusion for high-density mounting and attractive panel designs
- Bright LED-illuminated surface with less power consumption
- Gold-plated contacts and snap-action mechanism with low 1mA at 5V switching
- Oil- and dust-proof operator modules (IP65)

AR22 Series Features

- 22.3 mm diameter hole
- Fits 1 to 6mm max panel thickness
- Mountable in either a 22.3 or 25.5 mm diameter cutout (except for joysticks and buzzers)
- · Provided with release arm
- · Terminal cover included for added safety
- Wiring possible in vertical and horizontal directions
- Oil- and dust-proof operator modules (IP65), except for buzzers DR22B5 (IP00), DR22B8 (IP54)

AR30 Series Features

- 30.5 mm diameter hole
- Fits 1mm to 6mm max panel thickness
- Quick snap-on replacement of contact blocks
- Double-break self-cleaning contacts
- Terminal cover included for added safety
- Wiring possible in vertical and horizontal directions
- Oil- and dust-proof operator modules (IP65) except for buzzer DR30B5 (IP00)



















Pushbuttons

E-Stop Pushbuttons

Selector Switches







Electronic Buzzers





Joysticks

Command Series Accessories





























TO OBTAIN THE MOST CURRENT AGENCY APPROVAL INFORMATION, SEE THE AGENCY COMPLIANCE & CERTIFICATIONS CHECKLIST SECTION ON THE SPECIFIC PART NUMBER'S WEB PAGE.



Fuji Electric Command LED-Illuminated **16mm Plastic Pushbuttons**











AR16F0N-C2E3G

AF16F0N-C2E3R

AR16F5N-C2E3W

AF16F5N-C2E3Y

AF16F5N-C2E3S

		Comma	nd I FD.	-Illuminated 16mn	n Plastic	Pushbutto	ne		
Part Number	Color	Price	Drawing Link	Operator	Type*	Voltage	Protection	Contacts	Material
AR16F0N-C2E3G	Green	\$19.00	PDF						
AR16F0N-C2E3R	Red	\$19.00	PDF	Momentary,					
AR16F0N-C2E3W	White	\$19.00	PDF	Flush,	Standard				
AR16F0N-C2E3Y	Yellow	\$19.00	PDF	24.0 x 18.0 mm, rectangular	Standard				
AR16F0N-C2E3S	Blue	\$19.00	<u>PDF</u>						
AR16F0N-C2E3A	Orange	\$19.00	PDF						
AF16F0N-C2E3G	Green	\$22.00	PDF						
AF16F0N-C2E3R	Red	\$22.00	PDF	Momentary,					
AF16F0N-C2E3W	White	\$22.00	PDF	Flush, 28.0 x 22.0 mm.	Thin				
AF16F0N-C2E3Y	Yellow	\$22.00	PDF	rectangular	111111				
AF16F0N-C2E3S	Blue	\$22.00	PDF						
AF16F0N-C2E3A	Orange	\$22.00	PDF						
AR16F5N-C2E3G	Green	\$20.00	PDF]			
AR16F5N-C2E3R	Red	\$20.00	PDF	Push ON - push OFF,					
AR16F5N-C2E3W	White	\$20.00	PDF	Flush,	Standard				
AR16F5N-C2E3Y	Yellow	\$20.00	PDF	24.0 x 18.0 mm,					
AR16F5N-C2E3S	Blue	\$20.00	PDF	rectangular					
AR16F5N-C2E3A	Orange	\$20.00	<u>PDF</u>			24 VAC/VDC	IP65	DPDT	wBase: Plastic
AF16F5N-C2E3G	Green	\$23.00	PDF			full voltage	" 00	0.01	Bezel: Plastic
AF16F5N-C2E3R	Red	\$23.00	PDF	Push ON - push OFF,					
AF16F5N-C2E3W	White	\$23.00	PDF	Flush,	Thin				
AF16F5N-C2E3Y	Yellow	\$23.00	PDF	28.0 x 22.0 mm	111111				
AF16F5N-C2E3S	Blue	\$23.00	PDF	rectangular					
AF16F5N-C2E3A	Orange	\$23.00	PDF						
AR16G0N-C2E3G	Green	\$19.00	PDF						
AR16G0N-C2E3R	Red	\$19.00	PDF	Momentary,					
AR16G0N-C2E3W	White	\$19.00	PDF	Flush, 24.0 x 18.0 mm,	Standard				
AR16G0N-C2E3Y	Yellow	\$19.00	<u>PDF</u>	rectangular,	Stanuaru				
AR16G0N-C2E3S	Blue	\$19.00	PDF	guarded					
AR16G0N-C2E3A	Orange	\$19.00	PDF						
AR16G5N-C2E3G	Green	\$20.00	PDF	D. I. ON. J. OFF					
AR16G5N-C2E3R	Red	\$20.00	<u>PDF</u>	Push ON - push OFF, Flush,					
AR16G5N-C2E3W	White	\$20.00	<u>PDF</u>	24.0 x 18.0 mm,	Standard				
AR16G5N-C2E3Y	Yellow	\$20.00	<u>PDF</u>	rectangular,	Stariuaru				
AR16G5N-C2E3S	Blue	\$20.00	<u>PDF</u>	guarded					
AR16G5N-C2E3A	Orange	\$20.00	PDF						

^{*} Type: Standard = 28.4 mm deep, Thin - 35.9 mm deep

F- Fuji Electric Command Non-Illuminated **16mm Plastic Pushbuttons**







AR16F5T-C2W



AF16F5T-C2Y



ARTOI OT OLO	<u>A</u>	1 101 01-0	<u> </u>	AICIOI 31-02W	ALI	01 31-021	All	110031-025
	C	omman	d Non-IIIu	minated 16mm F	Plastic Push	buttons		
Part Number	Color	Price	Drawing Link	Operator	Type*	Protection	Contacts	Material
AR16F0T-C2G	Green	\$16.00	PDF					
AR16F0T-C2R	Red	\$16.00	PDF					
AR16F0T-C2W	White	\$16.00	PDF	Momentary				
AR16F0T-C2Y	Yellow	\$16.00	PDF	Flush, 24.0 x 18.0 mm	Standard			
AR16F0T-C2S	Blue	\$16.00	<u>PDF</u>	rectangular				
AR16F0T-C2A	Orange	\$16.00	PDF					
AR16F0T-C2B	Black	\$16.00	PDF					
AF16F0T-C2G	Green	\$20.00	PDF					
AF16F0T-C2R	Red	\$20.00	PDF					
AF16F0T-C2W	White	\$20.00	PDF	Momentary				
AF16F0T-C2Y	Yellow	\$20.00	PDF	Flush, 24.0 x 18.0 mm	Thin			
AF16F0T-C2S	Blue	\$20.00	<u>PDF</u>	rectangular				
AF16F0T-C2A	Orange	\$20.00	PDF				P65 DPDT	
AF16F0T-C2B	Black	\$20.00	PDF					Base: Plastic Bezel: Plastic
AR16F5T-C2G	Green	\$16.00	PDF					
AR16F5T-C2R	Red	\$16.00	PDF					
AR16F5T-C2W	White	\$16.00	PDF	Push ON - push OFF, Flush,				
AR16F5T-C2Y	Yellow	\$16.00	PDF	24.0 x 18.0 mm	Standard			
AR16F5T-C2S	Blue	\$16.00	PDF	rectangular				
AR16F5T-C2A	Orange	\$16.00	PDF					
<u>AR16F5T-C2B</u>	Black	\$16.00	PDF			IP65		
<u>AF16F5T-C2G</u>	Green	\$20.00	PDF					
<u>AF16F5T-C2R</u>	Red	\$20.00	PDF					
<u>AF16F5T-C2W</u>	White	\$20.00	<u>PDF</u>	Push ON - push OFF, Flush.				
AF16F5T-C2Y	Yellow	\$20.00	PDF	28.0 x 22.0 mm	Thin			
AF16F5T-C2S	Blue	\$20.00	<u>PDF</u>	rectangular				
AF16F5T-C2A	Orange	\$20.00	PDF					
AF16F5T-C2B	Black	\$20.00	PDF					
AR16G0T-C2G	Green	\$16.00	PDF					
AR16G0T-C2R	Red	\$16.00	PDF	Momentary				
AR16G0T-C2W	White	\$16.00	PDF	Flush,				
AR16G0T-C2Y	Yellow	\$16.00	PDF	24.0 x 18.0 mm rectangular	Standard			
AR16G0T-C2S	Blue	\$16.00	PDF	guarded				
AR16G0T-C2A	Orange	\$16.00	PDF PDF			tondard		
AR16G0T-C2B	Black	\$16.00	PDF					
<u>AR16G5T-C2G</u> <u>AR16G5T-C2R</u>	Green Red	\$16.00 \$16.00	PDF PDF					
AR16G5T-C2W	White	\$16.00	PDF	Push ON - push OFF,				
AR16G5T-C2Y	Yellow	\$16.00	PDF	Flush, 24.0 x 18.0 mm	Standard			
AR16G5T-C2S	Blue	\$16.00	PDF	rectangular	Standard			
AR16G5T-C2A	Orange	\$16.00	PDF	guarded				
AR16G5T-C2B	Black	\$16.00	PDF					
	Diack	ψ10.00	<u> </u>	<u> </u>	I.		1	

^{*} Type: Standard = 28.4 mm deep, Thin - 35.9 mm deep



Fuji Electric Command 16mm LED Plastic **Indicating Lights**







DR16F0N-E3G

DF16F0N-E3S

DR16E0L-E3A

	Command 16mm LED Plastic Indicating Lights									
Part Number	Color	Price	Drawing Link	Operator	Туре*	Protection	Voltage	Power Consumption	Material	
DR16F0N-E3G	Green	\$14.00	PDF							
DR16F0N-E3R	Red	\$14.00	PDF							
DR16F0N-E3W	White	\$14.00	PDF	Permanent, flush,	Ctondord					
DR16F0N-E3Y	Yellow	\$14.00	PDF	24.0 x 18.0 mm rectangular	Standard					
DR16F0N-E3A	Amber	\$14.00	PDF							
DR16F0N-E3S	Blue	\$14.00	PDF							
DF16F0N-E3G	Green	\$20.00	PDF							
DF16F0N-E3R	Red	\$20.00	PDF		Thin	IP65	24 VAC/VDC full voltage	Green, Red, Amber, Blue: 7.5 mA AC, 7.5 mA DC Orange, Yellow: 9 mA AC, 8.5 mA DC	Base: Plastic Bezel: Plastic	
DF16F0N-E3W	White	\$20.00	PDF	Permanent, flush,						
DF16F0N-E3Y	Yellow	\$20.00	PDF	28.0 x 22.0 mm rectangular						
DF16F0N-E3A	Amber	\$20.00	PDF							
DF16F0N-E3S	Blue	\$20.00	PDF					0.5 111/2 00		
DR16E0L-E3G	Green	\$14.00	PDF							
DR16E0L-E3R	Red	\$14.00	PDF	Permanent.						
DR16E0L-E3W	White	\$14.00	PDF	extended,	Ctendend					
DR16E0L-E3Y	Yellow	\$14.00	PDF	18.0 mm, round	Standard					
DR16E0L-E3A	Amber	\$14.00	PDF							
DR16E0L-E3S	Blue	\$14.00	<u>PDF</u>							

^{*} Type: Standard = 28.4 mm deep, Thin - 35.9 mm deep



Fuji Electric Command 16mm **Emergency Stop Pushbuttons**









AR16V0R-11R

AR16V1R-01R

AR16V0L-01E3R

AR16V1L-01E3R

		C	ommand 16n	ım Emer	gency Sto	p Pushbu	ıttons			
Part Number	Price	Drawing Link	Contacts	Operator	Voltage	Bulb Type	Action	Legend	Protection	Material
<u>AR16V0R-11R</u>	\$23.00	PDF	(1) N.O./(1) N.C.	32.0 mm,						
AR16V0R-02R	\$23.00	<u>PDF</u>	(2) N.C.	mushroom, Red						
AR16V1R-01R	\$21.00	PDF	(1) N.C.							
AR16V1R-11R	\$25.00	PDF	(1) N.O./(1) N.C.							
AR16V1R-02R	\$25.00	PDF	(2) N.C.	40.0 mm.	_	_		Arrow	IP65	Base: Plastic Bezel: Plastic
AR16V1R-12R	\$27.00	PDF	(1) N.O./(2) N.C.	mushroom,			Push to lock, pull or turn to reset			
<u>AR16V1R-03R</u>	\$27.00	PDF	(3) N.C.	Red						
<u>AR16V1R-13R</u>	\$31.00	PDF	(1) N.O./(3) N.C.							
<u>AR16V1R-04R</u>	\$31.00	PDF	(4) N.C.							
AR16V0L-01E3R	\$26.00	PDF	(1) N.C.							
<u>AR16V0L-11E3R</u>	\$29.00	PDF	(1) N.O./(1) N.C.	32.0 mm.						
AR16V0L-02E3R	\$29.00	PDF	(2) N.C.	mushroom,						
AR16V0L-12E3R	\$32.00	PDF	(1) N.O./(2) N.C.	Red						
AR16V0L-13E3R	\$35.00	PDF	(1) N.O./(3) N.C.		24 VAC/VDC	LED				
AR16V1L-01E3R	\$27.00	PDF	(1) N.C.		full voltage	illuminated				
AR16V1L-11E3R	\$29.00	PDF	(1) N.O./(1) N.C.	40.0 mm.						
AR16V1L-02E3R	\$29.00	PDF	(2) N.C.	mushroom,						
AR16V1L-12E3R	\$33.00	PDF	(1) N.O./(2) N.C.	Red						
AR16V1L-13E3R	\$36.00	PDF	(1) N.O./(3) N.C.							

Accessory								
Part Number	Price	Drawing Link	Description					
AR6P719-5A	\$9.50	<u>PDF</u>	Fuji Electric legend plate, plastic, round, yellow field, yellow background, black engraved text, legend plate marking "EMERGENCY STOP". For use with 16mm pilot devices.					





Fuji Electric Command Non-Illuminated 19mm Knob Plastic Selector **Switches**







AF16PR-6C2B

	Command Non-Illuminated 19mm Knob Plastic Selector Switches									
Part Number	Price	Drawing Link	Operator	Operation	Type*	Contacts	Protection	Material		
<u>AF16PR-2C1B</u>	\$20.00	PDF		2-pos maintained		SPDT				
AF16PR-2C2B	\$22.00	PDF		z-pos maintained		DPDT				
<u>AF16PR-0C1B</u>	\$20.00	PDF		O man and an art was from sight		SPDT				
AF16PR-0C2B	\$22.00	PDF		2-pos spring return from right		DPDT				
<u>AF16PR-3C2B</u>	\$22.00	PDF	22mm round	3-pos maintained	Thin	DPDT	IP65	Base: Plastic		
<u>AF16PR-6C2B</u>	\$22.00	<u>PDF</u>	Knob	3-pos spring return to center from left, maintained right		DPDT	1503	Bezel: Plastic		
<u>AF16PR-7C2B</u>	\$22.00	<u>PDF</u>		3-pos spring return to center from right, maintained left		DPDT				
<u>AF16PR-1C2B</u>	\$22.00	PDF		3-pos spring return to center from right or left		DPDT				

^{*} Type: Thin - 35.9 mm deep

Contact Operation Table

No. of positions	Operator action	Code
2-position (90°)	Maintained	2
	Spring return (Right to left) 🖔	0
3-position (45°)	Maintained	3
	Spring/manual return (Left to center) ①	6
	Spring/manual return (Right to center) ①	7
	Spring return	1
	(Left or right to center) (1)	

Key position and contact operation

2-position

Operator action (View form the front)		Contact	Contact unit		Operator position *2		
2	0	arrangement			1	2	
		SPDT	Left	COM < NC	•		
1 2	1 2		Leit	NO		•	
	Spring return/90°	2PDT	Left	COM < NC	•		
			Leit	NO		•	
			Dielet	NC NC	•		
			Right	NO		•	

Terminal arrangement View from the terminal side (the back)



3-position

Operator action (V	Contact unit		Operator position *2						
3	6	7	1	arrangement			1	2	3
2	2	2	2	2PDT		NC NC			
				L	Left	COM <		! !	•
Maintained/each	Spring/manual	Spring/manual	Spring return/		Right	COM < NC			
45°	return/each 45°	return/each 45°	each 45°		riigiii	NO	•	i ! !	

Note: *2 •, means the contact closed (ON).



F- Fuji Electric Command Non-Illuminated 19mm Key Plastic Selector **Switches**





AF	่ 16.	JR-7	Έ(C2A

		Comm	and No	on-Illuminated 19	nm Ke	y Plastic Selector Switches	S																																
Part Number	Price	Drawing Link	Operator	Operation	*Туре	Key Removable Position	Contacts	Protection	Material																														
AF16JR-2AC1A	\$28.00	PDF				Key removable left position	SPDT																																
AF16JR-2AC2A	\$31.00	PDF						key removable left position	DPDT																														
AF16JR-2BC1A	\$28.00	PDF		2-pos maintained		IZ	SPDT																																
AF16JR-2BC2A	\$31.00	PDF		2-pos maintaineu		Key removable left and right position	DPDT																																
AF16JR-2DC1A	\$28.00	PDF					SPDT																																
AF16JR-2DC2A	\$31.00	PDF				Key removable right position	DPDT																																
AF16JR-0AC1A	\$28.00	PDF		2-pos spring return from right		Variable left and the	SPDT																																
AF16JR-0AC2A	\$31.00	<u>PDF</u>			2-pos spring return from right	z-pos spring return from right		Key removable left position	DPDT																														
AF16JR-3AC2A	\$31.00	PDF								Key removable left position	DPDT																												
AF16JR-3BC2A	\$31.00	PDF				Key removable left and right position	DPDT		Base:																														
AF16JR-3CC2A	\$31.00	PDF	22mm	3-pos maintained	nd 3-nos maintained		Key removable left, right and center position	DPDT		Plastic																													
AF16JR-3DC2A	\$31.00	PDF	round 3-pos maintained			3-pos maintained	3-pos maintained	3-pos maintained	3-pos maintained	3-pos maintained	3_noc maintained	ound Key 3-pos maintained	Thin	Key removable right position	DPDT	IP65	Bezel:																						
AF16JR-3EC2A	\$31.00	PDF	licy																								Ney	tcy					y						Key removable center position
AF16JR-3FC2A	\$31.00	PDF									Key removable center and right position	DPDT																											
AF16JR-3GC2A	\$31.00	PDF				Key removable left and center position	DPDT	1																															
AF16JR-6DC2A	\$31.00	PDF				Key removable right position	DPDT																																
AF16JR-6EC2A	\$31.00	PDF		3-pos spring return to center from left, maintained right		Key removable center position	DPDT																																
AF16JR-6FC2A	\$31.00	PDF				Key removable center and right position	DPDT																																
AF16JR-7AC2A	\$31.00	PDF				Key removable left position	DPDT																																
AF16JR-7EC2A	\$31.00	PDF		3-pos spring return to center						3-pos spring return to center from right, maintained left				Key removable center position	DPDT		ļ																						
AF16JR-7GC2A	\$31.00	PDF				Key removable left and center position	DPDT																																
AF16JR-1EC2A	\$31.00	PDF		3-pos spring return to center from right or left		Key removable center position	DPDT																																

^{*} Type: Thin - 35.9 mm deep

Accessory										
Part Number	Price	Drawing Link	Description							
AR6C662-A	\$7.00	PDF	Fuji Electric key, replacement, metal. Package of 2. For use with AF16JR series selector switches with key actuation.							





Fuji Electric Command Non-Illuminated 19mm Key Plastic Selector **Switches**

Contact **Operation Table**

No. of	Operator action	Code
positions		
2-position (90°)	Maintained	2
	Spring return	0
	(Right to left) 🖔	
3-position (45°)	Maintained	3
	Spring/manual return	6
	(Left to center) ①	
	Spring/manual return	7
	(Right to center) ①	
	Spring return	1
	(Left or right to center)	

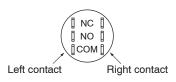
Key removable	Applicable operator action						Code
position	2	0	3	6	7	1	
Left ⊙		0	0	_	0	-	Α
Left and right⊗	0	_	0	_	_	_	В
Left, center and right ®	_	_	0	_	_	_	С
Right Ø	0	_	0	0	_	_	D
Center ①	_	_	0	0	0	0	E
Center and right ⑦	_	_	0	0	_	_	F
Left and center ®	_	_	0	_	0	_	G

· Key position and contact operation

2-position

Operator action (View form the front)		Contact	Contact unit		Operator position *3		
2	0	arrangement			1	2	
		SPDT	NC NC		•		
1 2	1 _ 2		Left	COM <		•	
		2PDT	Left	COM < NC	•		
			Leit	NO		•	
Maintained/90° Sprin	Spring return/90°		Right	NC NC	•		
			nigiii	NO		•	

Terminal arrangement View from the terminal side (the back)



3-position

Operator action (V	Contact Contact unit Operator position		oosition *3						
3	6	7	1	arrangement			1	2	3
2	2	2	2	2PDT		/NC			
1 3	3	1 3	3		Left	COM < ····		;	•
Maintained/each	Spring/manual	Spring/manual	Spring return/		D:l-4	NC			
45°	return/each 45°	return/each 45°	each 45°		Right	NO	•	! !	

Note: *3 ●, ■ : means the contact closed (ON).



Fruji Electric Command Series 16mm/19mm **Pilot Devices Specifications**

Specifications (Indoor Use)								
	Pushbuttons / Selector Switches / Indicating Lights	Emergency Stop Pushbuttons						
Rated thermal current (contact block)	D300	C300 / R300						
Mechanical durability	Pushbuttons: Momentary 1 million operations Alternate: 250,000 operations Selector Switch: 250,000 operations Indicating Lights: NA	100,000 operations						
Electrical durability	100,000 operations (220 VAC 0.7A)	100,000 operations (AC-15, AC-13, AC-12, DC-13, DC-12)						
Operating frequency	1200 operations/hour	(On-load factor: 40%)						
Operating force (Avg)	Pushbuttons: 10N max Selector switches 0.1 N·m max	Push to lock: 25N max Pull to reset: 20N max Turn to reset: 0.3 N·m max						
Dielectric strength	2000 VAC	c for 1 min						
Insulation resistance	100ΜΩ (500)							
Rated impulse dielectric strength	2.5	skV						
Conditional short-circuit current	100	00A						
Short-circuit protective device	2A	6A						
Pollution degree	3 (inside the							
Vibration	Resonance: 10 to 55Hz, double amplitude 0.1 mm							
Shock	Malfunction: 100 m/s ² Mechanical: 500 m/s ²	Malfunction:150m/s² Durability: 1000 m/s²						
Ambient temperature	-10 to +55°C [+14 to +131°F]	(no icing or no condensation)						
Temperature ratings	Storage: -40 to +70	0°C [-40 to +158°F]						
Humidity	45 to 85% RH (within -5° to +40°	°C) (no icing or no condensation)						
Degree of protection	IP	65						
Initial contact resistance	50mΩ max 6VD0							
Connections	0.3 to 0.75 mm² Stripping leng Solder connection or 2.8 mm o	gth: 11 ± 1mm						
Mounting tightening torque	0.6 to 1.0 N•m,	5.3 to 8.8 in·lb						
Contacts operation	Self-cleaning types. Slow	action. Positive opening.						
Operation frequency	1,200 cycle/hour (Ap	oplication ratio 40%)						
Utilization category/contact ratings	120 VAC 1A (AC-13), 24 VDC 0.7 A (DC-13, to 0.95 = 21ms) 240 VAC 0.7 A (AC-13), 125 VDC 0.15 A (DC-13, to 0.95 = 21ms)	_						
Rated insulation voltage	250V A	AC/DC						
Materials	Enclosure: Polyamide /	Contacts: silver, nickel						
Standards	UL 508, CSA TUV - EN Pushbutton, Illuminated Selector: F Pilot lights:	60947-5-1 pushbutton: R50116757 R50116759						
Approvals	cURus File Num	ber E44592, CE						

To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

www.automationdirect.com

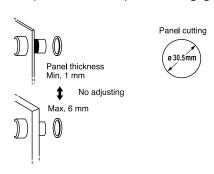
Fuji Electric 22mm Pilot Devices Overview

Pushbuttons, Selectors, Pilot Lights, Joysticks, Buzzers

Fuji Electric AR22 pilot devices can be mounted on panels up to 6mm thick by securing the operator with a locking nut from behind the panel without needing any adjustment.

Easy mounting

Fuji AR22 pilot devices can be mounted on panels between 1 and 6mm thick and are mountable in panel cutouts of 22.3 or 25.5 mm. The button and lens can be mounted on a panel while the operator is engaged.



Pushbuttons



AR22F0R-01RZA

E-Stop Pushbuttons



Illuminated Pushbuttons

AR22F0L-10E3YZA



Pilot Lights

DR22E3L-E3SZA

Buzzers

Selector Switches



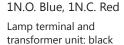
AR22PR-210BZA



DR22B8-EB

Wiring

These pilot devices can be wired in both vertical and lateral directions making wiring in narrow spaces easier. Contact block color coding makes wiring even easier.





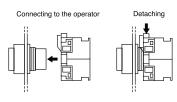
Short depth

Fuji AR22 pilot devices are designed to occupy less space than traditional 22mm devices.

Quick contact block and transformer replacement

AR22V0R-01R

Fuji AR22 pilot devices have a snap-on mounting that makes replacing or adding a contact block and transformer unit easier.



Snap-fitting of contact blocks



Safety

AR22 pilot devices include terminal covers for added safety and security. Emergency stop pushbuttons include a trigger action mechanism that prevents the contacts from moving until the button is pushed and locked.

Protection

AR22 pilot devices feature oil and dust-tight operator construction (IP65), except for buzzers DR22B5 (IP00), DR22B8 (IP54).















Fruji Electric Command Non-Illuminated **22mm Metal Pushbuttons**



AR22F0R-01RZA



AR22M0R-10YZA

Comm	Command Non-Illuminated 22mm Metal Pushbuttons										
Part Number	Color	Price	Drawing Link	Operator	Contacts						
AR22F0R-10BZA	Black	\$12.00	PDF		N.O.						
AR22F0R-01RZA	Red	\$12.00	PDF		N.C.						
AR22F0R-10GZA	Green	\$12.00	PDF	Momentary	N.O.						
AR22F0R-10YZA	Yellow	\$12.00	PDF	30mm flush round head	N.O.						
AR22F0R-10SZA	Blue	\$12.00	<u>PDF</u>		N.O.						
AR22F0R-10WZA	White	\$12.00	PDF		N.O.						
AR22FAR-01C01ZA	White	\$14.50	<u>PDF</u>	Momentary 30mm flush round head w/OFF imprint (red)	N.C.						
AR22FAR-10C03ZA	White	\$14.50	<u>PDF</u>	Momentary 30mm flush round head w/ON imprint (green)	N.O.						
AR22M0R-10BZA	Black	\$14.00	<u>PDF</u>		N.O.						
AR22M0R-01RZA	Red	\$14.00	<u>PDF</u>		N.C.						
AR22M0R-10GZA	Green	\$14.00	PDF	Momentary	N.O.						
AR22M0R-10YZA	Yellow	\$14.00	PDF	40mm mushroom head	N.O.						
AR22M0R-10SZA	Blue	\$14.00	PDF		N.O.						
AR22M0R-10WZA	White	\$14.00	<u>PDF</u>		N.O.						
AR22E0R-10BZA	Black	\$12.00	<u>PDF</u>		N.O.						
AR22E0R-01RZA	Red	\$12.00	PDF		N.C.						
AR22E0R-10GZA	Green	\$12.00	PDF	Momentary	N.O.						
AR22E0R-10YZA	Yellow	\$12.00	<u>PDF</u>	30mm extended round head	N.O.						
AR22E0R-10SZA	Blue	\$12.00	PDF		N.O.						
AR22E0R-10WZA	White	\$12.00	PDF		N.O.						







AR22FAR-01C01ZA



AR22FAR-10C03ZA



Fuji Electric Command Illuminated 22mm **Metal and Plastic Pushbuttons**



AR22F0L-10E3YZA



AR22F5L-10L3SZA



AR22E0L-10E3GZA



AR22V5L-01L3R



AR22M0L-01E3RZA



AR22M0L-01L3RZA

	Comn	nand Li	ED Illumin	ated 22mm	Pushbut	tons	
Part Number	Color	Price	Drawing Link	Operator	Material	Lamp Voltage	Contacts
AR22F0L-01E3RZA	Red	\$26.50	PDF				N.C.
AR22F0L-10E3GZA	Green	\$26.50	PDF				N.O.
AR22F0L-10E3YZA	Yellow	\$26.50	PDF			24V AC/DC (without transformer)	N.O.
AR22F0L-10E3SZA	Blue	\$34.00	PDF			(without transformer)	N.O.
AR22F0L-10E3WZA	White	\$25.00	PDF	30mm momentary	Matal		N.O.
AR22F0L-01L3RZA	Red	\$34.50	PDF	flush round head	Metal		N.C.
AR22F0L-10L3GZA	Green	\$34.50	PDF				N.O.
AR22F0L-10L3YZA	Yellow	\$34.50	PDF			115-127 VAC (with transformer)	N.O.
AR22F0L-10L3SZA	Blue	\$38.00	PDF			(with transformer)	N.O.
AR22F0L-10L3WZA	White	\$34.50	PDF				N.O.
AR22F5L-10E3RZA	Red	\$33.00	PDF				N.O.
AR22F5L-10E3GZA	Green	\$33.00	PDF			0.074.5.7-5	N.O.
AR22F5L-10E3YZA	Yellow	\$33.00	PDF			24V AC/DC (without transformer)	N.O.
AR22F5L-10E3SZA	Blue	\$33.00	<u>PDF</u>			(without transformer)	N.O.
AR22F5L-10E3WZA	White	\$33.00	<u>PDF</u>	30mm push-push	Matal		N.O.
AR22F5L-10L3RZA	Red	\$38.00	PDF	flush round head	Metal		N.O.
AR22F5L-10L3GZA	Green	\$38.00	PDF				N.O.
AR22F5L-10L3YZA	Yellow	\$38.00	PDF			115-127 VAC (with transformer)	N.O.
AR22F5L-10L3SZA	Blue	\$38.00	<u>PDF</u>			(with transformer)	N.O.
AR22F5L-10L3WZA	White	\$38.00	PDF				N.O.
AR22E0L-01E3RZA	Red	\$21.50	PDF				N.C.
AR22E0L-10E3GZA	Green	\$21.50	PDF				N.O.
AR22E0L-10E3YZA	Yellow	\$21.50	PDF			24V AC/DC (without transformer)	N.O.
AR22E0L-10E3SZA	Blue	\$34.50	<u>PDF</u>			(without transformer)	N.O.
AR22E0L-10E3WZA	White	\$21.50	PDF	30mm momentary			N.O.
AR22E0L-01L3RZA	Red	\$29.50	<u>PDF</u>	extended	Metal		N.C.
AR22E0L-10L3RZA	Red	\$29.50	PDF	round head			N.O.
AR22E0L-10L3GZA	Green	\$29.50	PDF			115-127 VAC	N.O.
AR22E0L-10L3YZA	Yellow	\$29.50	<u>PDF</u>			(with transformer)	N.O.
AR22E0L-10L3SZA	Blue	\$38.00	PDF				N.O.
AR22E0L-10L3WZA	White	\$33.00	<u>PDF</u>				N.O.
AR22M0L-01E3RZA	Red	\$25.00	<u>PDF</u>	40mm momentary	Metal	24V AC/DC (without transformer)	N.C.
AR22M0L-01L3RZA	Red	\$31.00	<u>PDF</u>	mushroom head	ivietai	115-127 VAC (with transformer)	N.C.
<u>AR22V5L-01E3R</u>	Red	\$25.00	<u>PDF</u>	40mm push-lock, twist release.	Plastic	24V AC/DC (without tranformer)	N.C.
AR22V5L-01L3R	Red	\$39.00	<u>PDF</u>	with white arrow	Flasiic	115-127 VAC (with transformer)	N.C.





Fuji Electric Command 22mm **Emergency Stop Pushbuttons**









AR22VQL-12EAR



	Command 22mm Emergency Stop Pushbuttons														
Part Number	Price	Drawing Link	Contacts	Operator	Voltage	Bulb type	Action	Legend	Protection	Material					
AR22VQR-01R	\$31.00	<u>PDF</u>	(1) N.C.	40.0 mm, mushroom, Red											
AR22VQR-12R	\$39.00	PDF	(1) N.O./(2) N.C.												
AR22VPR-01R	\$39.00	<u>PDF</u>	(1) N.C.		_	_	Push to lock,	Arrour	IDCE	Base: Plastic					
AR22VPR-12R	\$47.00	PDF	(1) N.O./(2) N.C.	mushroom, Red											
AR22VQL-01E3R	\$41.00	PDF	(1) N.C.			pull or turn to reset	Arrow	IP65	Bezel: Plastic						
AR22VQL-12E3R	\$49.00	<u>PDF</u>	(1) N.O./(2) N.C.	40.0 mm,	24 VAC/VDC	illuminated									
AR22VQL-01EAR	\$49.00	PDF	(1) N.C.	mushroom, Red	· · · · · · · · · · · · · · · · · · ·	,	,	,	,	full voltage	Interlocked				
AR22VQL-12EAR	\$57.00	PDF	(1) N.O./(2) N.C.			LED illuminated									









AR22V0R-01R

AR22V7R-01R

AR22Q2R-01R

AR22V0L-01E3R

			Command	22mm Eı	nergency	Stop Pus	hbuttons			
Part Number	Price	Drawing Link	Contacts	Operator	Voltage	Bulb Type	Action	Legend	Protection	Material
AR22V0R-01R	\$24.50	<u>PDF</u>	(1) N.C.	40.0 mm, Mushroom Red			Twist-to- release	Arrow		
<u>AR22V7R-01R</u>	\$33.00	<u>PDF</u>	(1) N.C.			_	_	Key operated release		
AR22Q2R-01R	\$29.00	<u>PDF</u>	(1) N.C.	35.0 mm, Mushroom, Red			Push to lock, pull to reset	_	IP65	Base: Plastic Bezel: Plastic
AR22V0L-01E3R	\$37.00	PDF	(1) N.C.	40.0 mm,	24 VAC/VDC full voltage	LED	Twist-to-	Arrow		
<u>AR22V0L-01L3R</u>	\$43.00	PDF	(1) N.C.	Mushroom, Red	115–127 VAC transformer	illuminated	release			
				A	ccessory					
<u>AR9P719-5A</u>	\$9.75	PDF	Fuji Electric ove	ersized legend p	late, aluminum, ro "EMERGENO		l, yellow backgro se with 22mm pi		ived text, legend	plate marking





Fuji Electric Command Non-Illuminated **22mm Metal Selector Switches**









AR22PR-210BZA

AR22JR-2B10AZA

AR22WR-210BZA

AR9C022-A

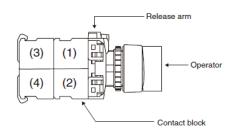
Comr	nand N	on-Illum	inated 2	22mm Metal	Selector Switc	hes			
Part Number	Price	Drawing Link	Operator	Operation	Key Removable Position	Contacts			
AR22PR-210BZA	\$14.00	PDF		2-pos maintained		N.O.			
AR22PR-010BZA	\$14.00	PDF	knob	2-pos spring return		N.O.			
AR22PR-322BZA	\$20.00	PDF	KHOD	3-pos maintained	_	2 N.O. + 2 N.C.			
AR22PR-122BZA	\$20.00	PDF		3-pos spring return		2 N.O. + 2 N.C.			
AR22JR-2B10AZA	\$24.50	<u>PDF</u>		2-pos maintained	Left and right	N.O.			
AR22JR-0A10AZA	\$27.50	PDF	key	2-pos spring return	Left	N.O.			
AR22JR-3C22AZA	\$35.00	<u>PDF</u>		3-pos maintained	Left, right, center	2 N.O. + 2 N.C.			
AR22WR-210BZA	\$15.00	PDF		2-pos maintained		N.O.			
AR22WR-010BZA	\$15.00	<u>PDF</u>	laver	2-pos spring return		N.O.			
AR22WR-322BZA	\$23.00	PDF	lever	3-pos maintained	_	2 N.O. + 2 N.C.			
AR22WR-122BZA	\$21.00	<u>PDF</u>		3-pos spring return		2 N.O. + 2 N.C.			
			Acc	essory					
Part Number	Price	Drawing Link	Description						
AR9C022-A	\$7.75	<u>PDF</u>	Fuji Electi	Fuji Electric key, replacement, metal. Package of 4. For use with AR22JR and AR30JR series selector switches with key actuation.					

Contact Operation Table

For Selector Types: AR22PR-1, AR22WR-1,

Selector Switch Type (3-position)								
Contact Arrangement	Conta	ct Block	Operator Position					
	Mounting		Left	Center	Right			
	Mounting Position	Туре	©	①	Ø			
	1	N.C.			-			
2 N.O. + 2 N.C.	2	N.C.	-					
2 N.O. + 2 N.C.	3	N.O.	-	_	•			
	4	N.O.	•	_	_			

Position of contact block



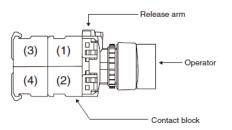
Fruji Electric Command Non-Illuminated 22mm Metal Selector Switches

Contact Operation Table

For Selector Types: AR22PR-2, AR22PR-0, AR22WR-2, AR22WR-0, AR22JR-2, AR22JR-0

Select	or Switch	1 Type (2-p	osition)	
		ct Block	Operator	
Contact Arrangement	Mounting Position	Туре	Left 🕥	Right
1 N.O.	1	N.O.	_	•
1 N.C.	1	N.C.	•	_
	1	N.O.	_	•
2 N.O.	2	N.O.	_	•
440 . 440	1	N.O.	-	•
1 N.O. + 1 N.C.	2	N.C.	•	_
2 N.C.	1	N.C.	•	-
Z 14.C.	2	N.C.	•	-
	1	N.O.	-	•
3 N.O.	2	N.O.	_	•
	3	N.O.	-	•
	1	N.O.	-	•
2 N.O. + 1 N.C.	2	N.C.	•	_
	3	N.O.	-	•
1 N.O. + 2 N.C.	1	N.O.	-	•
	2	N.C.	•	-
	4	N.C.	•	-
	1	N.C.	•	-
3 N.C.	2	N.C.	•	_
	3	N.C.	•	_
	1	N.O.	-	•
4 N.O.	2	N.O.	-	•
	3	N.O.	-	•
	4	N.O.	-	•
	1	N.O.	-	•
3 N.O. + 1 N.C.	2	N.C.	•	-
	3	N.O.	-	•
	4	N.O.	-	•
	1	N.O.	-	•
2 N.O. + 2 N.C.	2	N.C.	•	_
	3	N.O.	-	•
	4	N.C.	•	_
		N.O.	_	•
1 N.O. + 3 N.C.	3	N.C.	•	_
	4	N.C.	•	_
	1	N.C.	•	_
	2	N.C N.C	•	_
4 N.C.	3	N.C N.C	•	_
	4	N.C N.C	•	_

Position of contact block



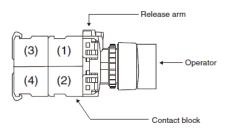
F- Fuji Electric Command Non-Illuminated 22mm Metal Selector Switches

Contact Operation Table

For Selector Types: AR22PR-3, AR22WR-3, AR22JR-3

Se	elector Sy	vitch Type	(3-nosi	tion)	
		ct Block		erator Positi	on
Contact	Conta	or Brook	Left	Center	Right
Arrangement	Mounting Position	Туре	©	1	Ø
1 N.O.	1	N.O.	•	_	-
1 N.C.	1	N.C.	_	_	•
2 N.O.	1	N.O.	•	_	_
2 N.O.	2	N.O.	•	-	_
1 N.O. + 1 N.C.	1	N.O.	•	-	_
7 N.O. 1 TN.O.	2	N.C.	-	-	•
2 N.C.	1	N.C.	-	-	•
	2	N.C.	-	_	•
	1	N.O.	•	-	-
3 N.O.	2	N.O.	•	-	-
	3	N.O.	•	-	-
2 N.O. + 1 N.C.	1	N.O.	•	-	-
	2	N.C.	-	-	•
	3	N.O.	•	-	-
1 N.O. + 2 N.C.	1	N.O.	•	-	-
	2	N.C.	-	-	•
	4	N.C.	-	-	•
	1	N.C.	-	_	•
3 N.C.	2	N.C.	-	-	•
	3	N.C.	-	-	•
	1	N.O.	•	-	-
4 N.O.	2	N.O.	•	-	-
4 14.0.	3	N.O.	•	-	_
	4	N.O.	•	_	_
	1	N.O.	•	-	_
3 N.O. + 1 N.C.	2	N.C.	-	-	•
3 N.O. + 1 N.C.	3	N.O.	•	-	_
	4	N.O.	•	-	-
	1	N.O.	•	-	_
2 N.O. + 2 N.C.	2	N.C.	_	_	•
2 N.O. + 2 N.C.	3	N.O.	•	_	_
	4	N.C.	_	_	•
	1	N.O.	•	_	_
1 N.O. + 3 N.C.	2	N.C.	_	_	•
1 N.O. + 3 N.C.	3	N.C.	_	-	•
	4	N.C.	_	-	•
	1	N.C	_	_	•
4 N.C.	2	N.C	_	_	•
4 IV.C.	3	N.C	_	_	•
	4	N.C	_	_	•

Position of contact block





Fuji Electric Command Illuminated **22mm Metal Selector Switches**



AR22PL-010E3RZA



AR22PL-210E3GZA



AR22PL-322E3YZA



AR22PL-322E3SZA

Comma	nd LED	Illumina	ated 22	mm Metal Sel	ector Switcl	nes	
Part Number	Color	Price	Drawing Link	Operation	Contacts	Lamp Voltage	
AR22PL-010E3RZA	Red	\$26.50	PDF				
AR22PL-010E3GZA	Green	\$26.50	PDF	2-pos spring return	N.O.	24V AC/DC	
AR22PL-010E3YZA	Yellow	\$26.50	PDF	2-pos spring return	N.O.	24V AC/DC	
AR22PL-010E3SZA	Blue	\$38.00	PDF				
AR22PL-210E3RZA	Red	\$26.50	PDF				
AR22PL-210E3GZA	Green	\$26.50	PDF	2 non maintained	N.O.	24V AC/DC	
AR22PL-210E3YZA	Yellow	\$26.50	PDF	2-pos maintained	N.O.	24V AC/DC	
AR22PL-210E3SZA	Blue	\$38.00	PDF				
AR22PL-322E3RZA	Red	\$40.00	PDF				
AR22PL-322E3GZA	Green	\$40.00	PDF	3 position maintained	2 N.O. + 2 N.C.	24V AC/DC	
AR22PL-322E3YZA	Yellow	\$40.00	PDF	3-position maintained	2 IN.U. + 2 IN.U.	24V AU/DU	
AR22PL-322E3SZA	Blue	\$40.00	PDF				
AR22PL-611E3RZA	Red	\$38.00	PDF				
AR22PL-611E3GZA	Green	\$38.00	PDF	3-position	1 N O . 1 N O	24V AC/DC	
AR22PL-611E3YZA	Yellow	\$38.00	PDF	spring/manual return (left to center)	1 N.O. + 1 N.C.	Z4V AC/DC	
AR22PL-611E3SZA	Blue	\$38.00	PDF				
AR22PL-010L3RZA	Red	\$34.50	PDF				
AR22PL-010L3GZA	Green	\$34.50	PDF	0	NO	445 407 \ (A)	
AR22PL-010L3YZA	Yellow	\$34.50	PDF	2-pos spring return	N.O.	115-127 VAC	
AR22PL-010L3SZA	Blue	\$46.50	PDF				
AR22PL-210L3RZA	Red	\$31.50	PDF				
AR22PL-210L3GZA	Green	\$31.50	PDF	0			
AR22PL-210L3YZA	Yellow	\$31.50	PDF	2-pos maintained	N.O.	115-127 VAC	
AR22PL-210L3SZA	Blue	\$46.50	PDF				
AR22PL-311L3RZA	Red	\$38.00	PDF				
AR22PL-311L3GZA	Green	\$38.00	PDF	2 position resistative t	1 N O : 4 N O	115 107 1/40	
AR22PL-311L3YZA	Yellow	\$38.00	PDF	3-position maintained	1 N.O. + 1 N.C.	115-127 VAC	
AR22PL-311L3SZA	Blue	\$46.50	PDF				
AR22PL-611L3RZA	Red	\$40.00	PDF				
AR22PL-611L3GZA	Green	\$40.00	PDF	3-position	1 N O : 4 N O	115 107 1/40	
AR22PL-611L3YZA	Yellow	\$40.00	PDF	spring/manual return (left to center)	1 N.O. + 1 N.C.	115-127 VAC	
AR22PL-611L3SZA	Blue	\$46.50	PDF				
	2	-Positio	n Repla	cement Knob	S		
		Color	Drawing Link	Part Number	Qty	Price	
		Red	PDF	AR9M005-R		\$4.00	
		Green	PDF	AR9M005-G	-	\$4.00	
		Yellow	PDF	AR9M005-Y	5	\$4.00	

www.automationdirect.com **Pilot Devices** tPIL-150

Blue

PDF

AR9M005-S

\$4.00

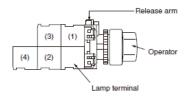
Fruji Electric Command Illuminated 22mm Metal Selector Switches

Contact Operation Table

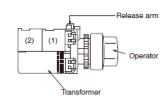
Selecto	r Switch Typ	e: AR22P	L-0 (2-pos	ition)	
		Conta	ct Block	Operator	Position
Transformer	Contact	Mounting		Left	Right
Transformer	Arrangement	Mounting Position	Туре	•	Ø
With/without	1 N.O.	1	N.O.	-	•
With/without	1 N.C.	1	N.C.	•	_
Without	1 N.O. + 1 N.C.	1	N.O.	_	•
Without	TN.O. + TN.C.	2	N.C.	•	_
With	1 N.O. + 1 N.C.	1	N.C.	•	_
VVICII	T N.O. + T N.C.	2	N.O.	_	•
With/without	2 N.O.	1	N.O.	_	•
	2 N.O.	2	N.O.	_	•
With/without	2 N.C.	1	N.C.	•	_
with/without	2 N.C.	2	N.C.	•	_
		1	N.O.	_	•
Without	3 N.O.	2	N.O.	_	•
		3	N.O.	_	•
		1	N.O.	_	•
Without	2 N.O. + 1 N.C.	2	N.C.	•	_
		3	N.O.	_	•
		1	N.O.	_	•
Without	1 N.O. + 2 N.C.	2	N.C.	•	_
		3	N.C.	•	_
		1	N.C.	•	_
Without	3 N.C.	2	N.C.	•	_
		3	N.C.	•	_

Position of contact block

Without transformer







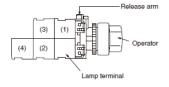
Fruji Electric Command Illuminated 22mm Metal Selector Switches

Contact Operation Table

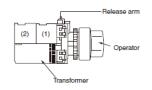
Select	or Switch Typ	e: AR22P	L-2 (2-po	sition)	
		Contac	ct Block	Operator	Position
T	Contact			Left	Right
Transformer	Arrangement	Mounting Position	Туре	©	Ø
With/without	1 N.O.	1	N.O.	_	•
With/without	1 N.C.	1	N.C.	•	_
Mithaut	1 N.O. + 1 N.C.	1	N.O.	_	•
Without	1 N.O. + 1 N.C.	2	N.C.	•	_
With	1 N.O. + 1 N.C.	1	N.C.	•	_
VVICII	110.0. + 110.0.	2	N.O.	-	•
With/without	2 N.O.	1	N.O.	-	•
	211101	2	N.O.	-	•
With/without	2 N.C.	1	N.C.	•	-
		2	N.C.	•	_
		1	N.O.	_	•
With/without	3 N.O.	2	N.O.	_	•
		3	N.O.	-	•
		1	N.O.	-	•
Without	2 N.O. + 1 N.C.	2	N.C.	•	-
		3	N.O.	-	•
		1	N.C.	•	-
With	2 N.O. + 1 N.C.	2	N.O.	-	•
		3	N.O.	-	•
Without	4.11.0	1	N.O.	-	•
	1 N.O. + 2 N.C.	2	N.C.	•	-
		3	N.C.	•	-
1424	1 N.O. + 2 N.C	1	N.C.	•	-
With		2	N.C	•	-
		3	N.O.	-	•
14/34/2 / 4	2 N C	1	N.C.	•	_
With/without	3 N.C.	2	N.C.	•	-
		3	N.C.	•	-
		1	N.O.	-	•
Without	4 N.O.	2	N.O.	-	•
		3	N.O.	-	•
		4	N.O.	-	•
		1	N.O.	-	•
Without	3 N.O. + 1 N.C.	2	N.C.	•	-
		3 4	N.O.		•
		1	N.O.	_	•
		2	N.O. N.C.	•	-
Without	2 N.O. + 2 N.C.	3	N.O.		+
		4	N.C.	-	•
		1	N.O.	_	•
		2	N.C.	•	_
Without	1 N.O. + 3 N.C.	3	N.C.	•	_
		4	N.C.	•	_
		1	N.C	•	_
		2	N.C	•	_
Without	4 N.C.	3	N.C	•	_
		4	N.C	•	_

Position of contact block

Without transformer



With transformer



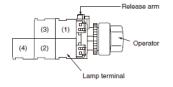
F- Fuji Electric Command Illuminated 22mm Metal Selector Switches

Contact Operation Table

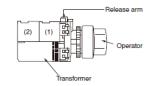
Transformer With/without With/without Without With With With/without With/without	1 N.O. 1 N.C. 1 N.O. + 1 N.C. 1 N.O. + 1 N.C.	Mounting Position 1 1 1 2 1	Type N.O. N.C. N.O.	Left Open	Center	Right
With/without With/without Without With With With	1 N.O. 1 N.C. 1 N.O. + 1 N.C.	1 1 1 2	N.O. N.C. N.O.	•		_
With/without With/without Without With With With	1 N.O. 1 N.C. 1 N.O. + 1 N.C.	1 1 1 2	N.O. N.C. N.O.	•	①	_
With/without Without With With	1 N.C. 1 N.O. + 1 N.C.	1 1 2	N.C. N.O.			
Without With With/without	1 N.O. + 1 N.C.	1 2	N.O.	-	_	_
With With/without		2			-	•
With With/without				•	-	_
With/without	1 N.O. + 1 N.C.	1	N.C.	-	_	•
			N.C.	-	-	•
		2	N.O.	•	_	_
With/without	2 N.O.	1 2	N.O.	•	_	_
With/without		1	N.O. N.C.	-	_	-
	2 N.C.	2		+		•
			N.C.	-	_	•
With/without	3 N.O.	2	N.O.	•	_	_
vvidi/WitiiOUt	J IN.U.	3	N.O.	•	_	_
		1	N.O.	•	_	_
Without	2 N.O. + 1 N.C.	2	N.C.	_	_	•
Millout	211.0.1111.0.	3	N.O.	•	_	_
With	1	N.C.	_	_	•	
	2 N.O. + 1 N.C.	2	N.O.	•	_	_
	211.0.	3	N.O.	•	_	_
		1	N.O.	•	_	_
Without	1 N.O. + 2 N.C.	2	N.C.	_	_	•
		3	N.C.	_	_	•
	1 N.O. + 2 N.C	1	N.C.	-	_	•
With		2	N.C	-	_	•
		3	N.O.	•	-	_
		1	N.C.	-	-	•
With/without	3 N.C.	2	N.C.	-	_	•
		3	N.C.	-	-	•
		1	N.O.	•	-	_
Without	4 N.O.	2	N.O.	•	-	-
vitilout	4 N.O.	3	N.O.	•	-	-
		4	N.O.	•	-	_
		1	N.O.	•	-	-
Without	3 N.O. + 1 N.C.	2	N.C.	-	_	•
	3	3	N.O.	•	_	_
		4	N.O.	•	-	-
		1	N.O.	•	-	-
Without	2 N.O. + 2 N.C.	2	N.C.	-	-	•
		3	N.O.	•	_	_
		4	N.C.	-	-	•
		1 2	N.O.	•	-	_
Without	1 N.O. + 3 N.C.	3	N.C.	_	_	•
		4	N.C.	_	_	•
		1	N.C.	_	_	•
		2	N.C N.C	_	_	
Without	4 N.C.	3	N.C N.C	_	_	•
		4	N.C N.C	_	_	•

Position of contact block

Without transformer



With transformer



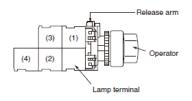
For Fuji Electric Command Illuminated 22mm Metal Selector Switches

Contact Operation Table

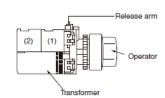
Se	lector Switch	Type: AR	22PL-6 (3-	-position	1)	
		Conta	ct Block	Орс	erator Positi	on
Transformer	Contact	Manutina		Left	Center	Right
Transformor	Arrangement	Mounting Position	Туре	•	①	Ø
With/without	1 N.O.	1	N.O.	•	_	_
With/without	1 N.C.	1	N.C.	_	-	•
Without	1 N.O. + 1 N.C.	1	N.O.	•	_	_
vvitnout	1 N.O. + 1 N.C.	2	N.C.	_	_	•
With	1 N.O. + 1 N.C.	1	N.C.	_	_	•
VVILII	1 N.O. + 1 N.C.	2	N.O.	•	_	_
With/without	2 N.O.	1	N.O.	•	_	_
witn/witnout	2 N.O.	2	N.O.	•	_	_
With/without	2 N C	1	N.C.	_	_	•
with/without	2 N.C.	2	N.C.	_	_	•
		1	N.O.	•	_	_
Without	3 N.O.	2	N.O.	•	_	_
		3	N.O.	•	-	_
		1	N.O.	•	-	_
Without	2 N.O. + 1 N.C.	2	N.C.	-	-	•
		3	N.O.	•	_	-
		1	N.O.	•	-	_
Without	1 N.O. + 2 N.C.	2	N.C.	-	-	•
		3	N.C.	-	_	•
		1	N.C	-	_	•
Without	3 N.C.	2	N.C	_	_	•
		3	N.C	_	_	•

Position of contact block

Without transformer



With transformer



For Fuji Electric Command 22mm Pilot Lights



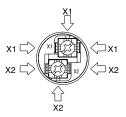




DR22E3L-L3SZA

	Command 22mm Pilot Lights									
Part Number	Color	Price	Drawing Link	Lens	Lamp Voltage					
DR22E3L-E3RZA	Red	\$20.00	PDF							
DR22E3L-E3GZA	Green	\$20.00	PDF							
DR22E3L-E3YZA	Yellow	\$20.00	PDF		24V AC/DC without transformer					
DR22E3L-E3SZA	Blue	\$28.50	PDF							
DR22E3L-E3WZA	White	\$20.00	PDF	extended round						
DR22E3L-L3RZA	Red	\$25.00	PDF	extended round						
DR22E3L-L3GZA	Green	\$25.00	PDF							
DR22E3L-L3YZA	Yellow	\$25.00	PDF		115-127 VAC with transformer					
DR22E3L-L3SZA	Blue	\$38.00	PDF							
DR22E3L-L3WZA	White	\$25.00	PDF							

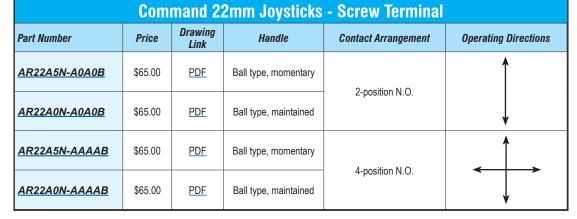
DR22E3L-E3xxx Terminal Layout



Fruji Electric Command 22mm Joysticks



AR22A5N-A0A0B

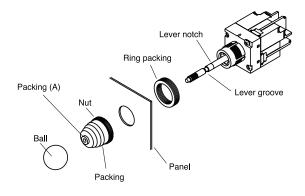




AR22A0N-AAAAB

Joystick selector switch mounting on panel

- Twist and remove the ball from the operator.
- If no locking nut is provided, loosen the nut and remove the switch after the packing part (A) shown in the illustration is stretched to the lever groove.
- Mount the switch in the order opposite of removal. Set the packing to the notch on the lever as a reference. Do not separate the nut from the packing.
- Use a torque wrench to tighten the nut from the front of the panel. Recommended tightening torque is 1 to 1.5 N·m.



Fruji Electric Command 22mm Buzzers







DR22B5-HB

	Command 22mm Buzzers										
Part Number	Qty	Price	Drawing Link	Sound Type	Sound Level	LED Indicator	Operating Voltage				
DR22B8-EB	1	\$38.00	PDF	Intermittent/continuous	80dB @ 0.1 m 60dB @ 1m		12-24V AC/DC				
DR22B8-HB	1	\$38.00	PDF	electronic sound		_	100-110VAC				
DR22B5-EB	1	\$52.00	PDF	Intermittent/continuous	90dB @ 0.1 m	Dad	12-24V AC/DC				
DR22B5-HB	1	\$52.00	PDF	electronic sound	70dB @ 1m	Red	100-110VAC				

S	pecifications				
	DR22B5	DR22B8			
Rated insulation voltage		rmer: 60V AC/DC ormer: 250VAC			
Durability	1000h				
Frequency	2.4 to 3.3 kHz				
Intermittent cycle	Approx. 170-cycle/min				
Dielectric strength	Without transformer: 1000VAC 1 minute With transformer: 2000VAC 1 minute				
Insulation resistance	100MΩ or more (500VDC megger)				
Pollution degree		3			
Vibration		, double amplitude 0.1 mm ouble amplitude 3.0 mm			
Shock	Mechanical du	rability: 500 m/s²			
Ambient temperature	-20 to +60°C [-4 to +140°F] no condensation or no icing				
Storage temperature	-30 to +70°C [-22 to +158°F]				
Humidity	45 to 85% RH (within -5 to 40°C [23 to 104°F]				
Degree of protection	IP00	IP54			

Current Consumption						
24V AC/DC	40mA AC, 25mA DC					
110VAC	30mA AC					

www.automationdirect.com Pilot Devices tPIL-157

Max 6 contacts for non-illuminated momentary devices. Max

*Exceeding the maximum number of contacts could affect the

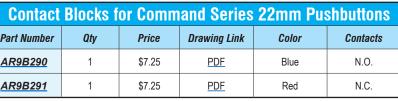
4 for alternate action non-illuminated devices. Max 5 contacts for illuminated momentary devices. Max 3 for alternate action illuminated devices.

mechanical durability of the operators.

Fuji Electric Accessories for 22mm **Command Series Pilot Devices**



AR9B290



Minimum current requirement AC/DC is 5mA

Terminal Layout





Terminal No.3, 4

Terminal No.1, 2

AR9B291

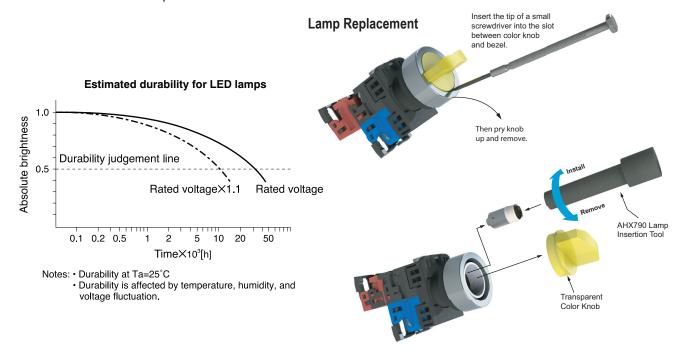
2 AR9B290

AR9B291

APX510-24R

LED Bulbs for Command Series 22mm Pilot Devices															
Part Number	Color	Qty	Price	Use With	Lamp Voltage	Current Consumption	Power Consumption	Lamp Durability							
APX510-24R	Red	2	\$18.50												
APX510-24G	Green	2	\$18.50	AR22 /											
APX510-24Y	Yellow	2	\$18.50	DR22	,			DR22	DR22	DR22	DR22	24V AC/DC	12mA AC 11mA DC	0.8 W	30,000h
APX510-24S	Blue	2	\$68.00	Series		TilliABO									
APX510-240	Orange	2	\$18.50												

*Lamp base: Ba9s/13





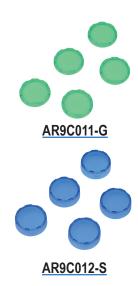
Fuji Electric Accessories for 22mm **Command Series Pilot Devices**



AR9C016-R



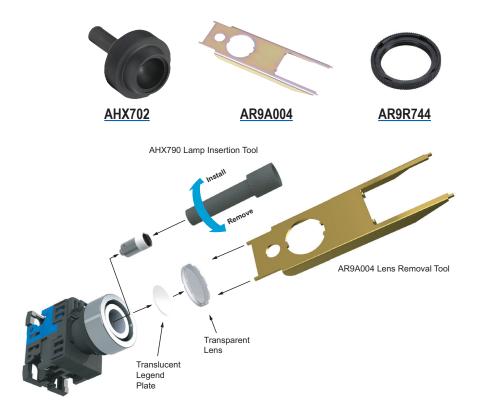
Lenses for Command Series 22mm Illuminated Pushbuttons								
Part Number	Color	Qty	Price	Drawing Link	Use With			
AR9C016-R	Red	5	\$5.75	PDF	AR22MOL, AR22M5L			
AR9C021-R	Red	5	\$17.50	PDF	AR22VOR, AR22VOL			
AR9C011-R	Red	5	\$2.75	PDF				
AR9C011-G	Green	5	\$2.75	PDF				
AR9C011-Y	Yellow	5	\$2.75	PDF	AR22FOL AR22F5L			
AR9C011-S	Blue	5	\$2.75	PDF	7 11 1227 02			
AR9C011-C	Clear	5	\$2.75	PDF				
AR9C012-R	Red	5	\$2.75	PDF				
AR9C012-G	Green	5	\$2.75	PDF				
AR9C012-Y	Yellow	5	\$2.75	PDF	AR22EOL			
AR9C012-S	Blue	5	\$2.75	PDF				
AR9C012-C	Clear	5	\$2.75	PDF				





AHX790

Tools and Lock Nut for Use with Command Series 22mm Pilot Devices							
Part Number Qty Price Drawing Link Description							
<u>AHX790</u>	1	\$4.00	PDF	Bulb removal tool			
AHX702	1	\$7.00	N/A	Wrench/lamp removal tool			
AR9A004	1	\$5.75	N/A	Wrench			
AR9R744	5	\$2.75	<u>PDF</u>	Lock nut			



Fruji Electric Command Series 22mm Pilot Devices Specifications

Specifications (Indoor Use)									
	Pushbuttons Emergency stop pushbuttons Selector switches	Joysticks	Pilot Lights						
Rated thermal current (contact block)	A600 / P600	-	-						
Mechanical durability	See durability table below	250,000 operations	_						
Electrical durability	500,000 operations at 220V AC 6A 1 million operations at 220V AC 3A	100,000 operations at 220V AC 1A (Res. load)	-						
Operating frequency	1200 operations/hour	(On-load factor: 40%)	_						
Operating force (Avg)	9N – Pushbuttons 30-45 N – Emergency stop pushbuttons 0.15 - 0.1 N·m – Selector switches	Less than	100N						
Positive opening operation	All functions in	corporating a N.C. contact are positive-opening	g operation.						
Dielectric strength	2,500VAC, 1 minute (w/o transformer 2000VAC) 2000VAC, 1 minute (Pilot light with transformer: 2500 VAC, 1 minute								
Insulation resistance	100MΩ or more (500VDC megger)								
Rated impulse dielectric strength	6kV	_	6kV						
Conditional short-circuit current	10	_							
Short-circuit protective device	Fuse 15A (recommended, not supplied)	Fuse 1A (recommended, not supplied)	_						
Pollution degree		3							
Vibration	Resonance: 10 to 55Hz, dou	ble amplitude 0.1 mm* / Constant: 16.7 F	tz, double amplitude 3mm						
Shock	Malfunction durability: 100 m/s² **	Mechanical durability: 500 m/s ²	Mechanical durability: 500 m/s²						
Ambient temperature (no condensation or no icing)	-20 to +70°C [-4 to +158°F] Illuminated type: -20 to -50°C [-4 to -58°F]	-5 to +60°C [+23 to +140°F]	-2 to +50°C [-4 to +122°F]						
Temperature ratings		Storage: -40 to +80°C [-40 to +176°F]							
Humidity		45 to 85% RH (within -5° to +40°C)							
Degree of protection		IP65							
Initial contact resistance	≤ 50mΩ	_	_						
Terminal markings	IEC 60445	_	_						
Connections		th: 8mm to 11mm / Tightening torque: 0.8	· · · · · · · · · · · · · · · · · · ·						
Contacts operation	Seli	f-cleaning types. Slow action. Positive opening	j.						
Operation frequency	1,200 cycle/hour (Application ratio 40%)	-	-						
Utilization category/contact ratings	AC-15: 24VAC at 6A, 110VAC at 6A DC-13: 24VDC at 4A, 110VDC at 1.3 A	AC-1: 110VAC at 0.3 A DC-13: 24VDC at 0.7 A, 110VDC at 0.15 A	-						
Rated insulation voltage	600V AC/DC*** 250V AC/DC 250V AC/DC (w/transformer 600V								
Materials	Enc	losure: Polyamide / Contacts: silver, nick	el						
Standards	UL	. 508, CSA C22.2, No.14, TUV - EN60947-5-1							
* Emergancy aton types 40 to 500 Hz, double		UL file E44592, CSA file LR20479							

^{*} Emergency stop type: 10 to 500 Hz, double amplitude 0.7mm(acceleration 50m/s²), according to test condition of EN60947-5-5 (1998)

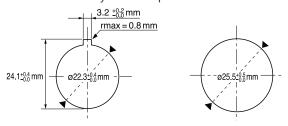
^{**} Emergency stop type: 150 m/s² ***Illuminated type without transformer

9								
Med	Mechanical Durability							
		Operations						
Pushbutton switch Illuminated pushbutton switch E-stop pushbutton switch E-stop illuminated pushbutton	Momentary action Alternate action Push-lock, turn-reset Push-lock, pull-reset	5 million 1 million 100,000 30,000						
Selector switch	Maintained 1, 2, 3, 4-contact Maintained 5, 6-contact Spring return, spring/manual return	1 million 500,000 200,000						
Illuminated selector switch	Maintained Without transformer 1, 2, 3-contact 4-contact With transformer 1, 2-contact 3-contact Spring return, spring/manual return	1 million 500,000 1 million 500,000 200,000						

Note: Key insertion/removal durability for selector switch key types

22mm Pilot Devices Cutouts

AR22 pilot devices can be mounted in either 22.3 or 25.5 mm diameter holes as shown in the figure below without any extra adapter.



Note: If key washer or legend plate is not used, 3.2 mm-wide location holes do not need to be cut out.

[•] Key type 10,000



Fuji Electric Command Series 22mm **Emergency Stop Pushbuttons Specifications**

22mm Emergency Stop Pushbuttons Specifications (Indoor Use)									
Series	AR22 - VOR, V7R, Q2R, VOL	AR22 VQR, VPR, VQL							
Rated thermal current (contact block)	A600 / P600	B300 / R300							
Mechanical durability	See durability table	250,000 operations							
Electrical durability	500,000 operations at 220 VAC 6A 1 million operations at 220 VAC 3A	100,000 operations							
Operating frequency	1200 operations/hour (On-load factor: 40%)	900 operations/hour (On-load factor: 40%)							
Operating force (Avg)	30-45N	Push to Lock: 40N, Pull to reset: 33N Turn to reset: 0.3 N⋅m							
Positive opening operation	All functions incorporating a N.C. cor	ntact are positive-opening operation.							
Dielectric strength	2,500VAC, 1 minute (w/o transformer 2000VAC)	2000 VAC 1 min							
Insulation resistance	100MΩ or more (500VDC megger)							
Rated impulse dielectric strength	6kV	2.5 kV							
Conditional short-circuit current	100	0A							
Short-circuit protective device	Fuse 15A (recommended, not supplied)	Fuse 10A							
Pollution degree	3	3							
Vibration	Resonance: 10 to 55Hz, double amplitude 0.1 mm* Constant: 16.7 Hz, double amplitude 3mm	10 to 55Hz, double amplitude 0.7 mm/s ²							
Shock	Malfunction durability: 100 m/s ² ** Mechanical durability: 500 m/s ²	Malfunction:150m/s ² Durability: 1000 m/s ²							
Ambient temperature (no condensation or no icing)	Non-illuminated -20 to +70°C [-4 to +158°F] Illuminated -20 to -50°C [-4 to -58°F]	Non-illuminated -20 to +60°C [-4 to 140°F] Illuminated -20 to +50°C [-4 to 122°F]							
Temperature ratings	Storage: -40 to +80	°C [-40 to +176°F]							
Humidity	45 to 85% RH (wit	thin -5° to +40°C)							
Degree of protection	IPG	65							
Initial contact resistance	≤ 50	lmΩ							
Terminal markings	IEC 6	0445							
Connections	AWG 18 to 14; Stripping length: 8mm to 11mm Tightening torque: 0.8 to 1.0 N·m, 7.1 to 8.8 in·lb	Stranded wire: up to 1.25 mm², 24 to 16 AWG-CU Solid wire: up to ø1.2 mm, 24 to 16 AWG-CU Tightening torque: 1.0 to 1.5 N·m, 8.8 to 13.2 in·lb							
Contacts operation	Self-cleaning types. Slow	action. Positive opening.							
Operation frequency	1,200 cycle/hour (Application ratio 40%)	900 operations/hour (On-lard factor: 40 %)							
Utilization category/ contact ratings	AC-15: 24VAC at 6A, 110VAC at 6A DC-13: 24VDC at 4A, 110VDC at 1.3 A	DC-13: 24VDC at 1A DC-12 24VDC at 2A B300 120VAC Make 30A Break 3A 240VAC Make 15A Break 1.5 A							
Rated insulation voltage	600 VAC/VDC***	250 VAC/VDC							
Materials	Enclosure: Polyamide /	Contacts: silver, nickel							
Standards	UL 508, CSA C22.2, No.	14, TUV - EN60947-5-1							
Approvals	UL file E44592, C	SA file LR20479							

^{*} Emergency stop type: 10 to 500 Hz, double amplitude 0.7mm (acceleration 50m/s²), according to test condition of EN60947-5-5 (1998)

To obtain the most current agency approval information, see the Agency Compliance & Certifications checklist section on the specific part number's web page.

^{**} Emergency stop type: 150 m/s²

^{***}Illuminated type without transformer

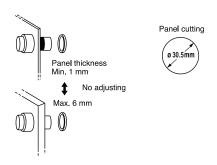
Fuji Electric 30mm Pilot Devices Overview

Pushbuttons, Selectors, Pilot Lights, Joysticks, Buzzers

Fuji Electric AR30 pilot devices can be mounted on panels up to 6mm thick by securing the operator with a locking nut from behind the panel without needing any adjustment.

Easy mounting

Fuji Electric AR30 pilot devices can be mounted on panels between 1 and 6mm thick and are mountable in panel cutouts of 30.5 mm.



Wiring

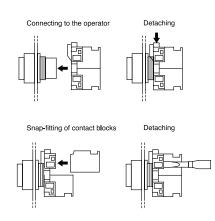
These pilot devices can be wired in both vertical and lateral directions making wiring in narrow spaces easier. Contact block color coding makes wiring even easier.

1N.O. Blue, 1N.C. Red Lamp terminal and transformer unit: black



Quick contact block and transformer replacement

Fuji AR30 pilot devices have a snap-on mounting that makes replacing or adding a contact block and transformer unit easier.



Pushbuttons



AR30F0R-01RZC

Illuminated Pushbuttons



AR30E0L-10L3GZC

Pilot Lights

DR30D0L-L9SZC

E-Stop Pushbuttons



AR30Q2R-01RZC

Selector Switches



AR30PR-210BZC

Buzzers



DR30B5-EBZC

Short depth

Fuji AR30 pilot devices are designed to occupy less space than traditional 30mm devices.

Safety

AR30 pilot devices include terminal covers for added safety and security. Emergency stop pushbuttons include a trigger action mechanism that prevents the contacts from moving until the button is pushed and locked

Protection

AR30 pilot devices feature oil- and dust-tight operator construction (IP65), except for buzzers DR30B5 (IP00).















TO OBTAIN THE MOST CURRENT AGENCY APPROVAL INFORMATION. SEE THE AGENCY COMPLIANCE & CERTIFICATIONS CHECKLIST SECTION ON THE SPECIFIC PART NUMBER'S WEB PAGE.



Fuji Electric Command Non-Illuminated **30mm Metal Pushbuttons**

Non-Illuminated Metal Mushroom-Style Pushbuttons

These pushbuttons feature large 65mm diameter plastic actuator and mount in standard 30.5 mm hole. All pushbuttons include operator, support base and contact block(s).

All switches in this series use replacement contact block AR9B290 (Blue, N.O.) or AR9B291 (Red, N.C.), sold separately in packages of one.



Command Non-Illuminated 30mm Metal Pushbuttons								
Part Number	Color	Price	Drawing Link	Operator	Material	Contacts		
AR30B0R-10G	Green	\$28.00	PDF			N.O.		
AR30B0R-10B	Black	\$28.00	PDF			N.O.		
AR30B0R-10Y	Yellow	\$28.00	PDF			N.O.		
AR30B0R-01R	Red	\$28.00	PDF	Momentary		N.C.		
AR30B0R-11G	Green	\$35.50	PDF	65mm giant mushroom head	Metal	1 N.O. + 1 N.C.		
AR30B0R-11B	Black	\$35.50	PDF			1 N.O. + 1 N.C.		
AR30B0R-11Y	Yellow	\$35.50	PDF			1 N.O. + 1 N.C.		
AR30B0R-11R	Red	\$35.50	PDF			1 N.O. + 1 N.C.		

www.automationdirect.com **Pilot Devices** tPIL-163



F- Fuji Electric Command Non-Illuminated **30mm Metal and Plastic Pushbuttons**



AR30F0R-10GZC



AR30E0R-10RZC



AR30M0R-10SZC

Comi	mand N	on-Illun	ninated	30mm Push	buttons	
Part Number	Color	Price	Drawing Link	Operator	Material	Contacts
AR30F0R-10GZC	Green	\$15.00	PDF			N.O.
AR30F0R-10BZC	Black	\$15.00	PDF			N.O.
AR30F0R-10RZC	Red	\$15.00	PDF			N.O.
AR30F0R-01RZC	Red	\$15.00	PDF	35mm momentary		N.C.
AR30F0R-10SZC	Blue	\$15.00	PDF	ilasii rouna noaa		N.O.
AR30F0R-10WZC	White	\$15.00	PDF			N.O.
AR30F0R-10YZC	Yellow	\$15.00	PDF			N.O.
AR30E0R-10GZC	Green	\$15.00	PDF			N.O.
AR30E0R-10BZC	Black	\$15.00	PDF			N.O.
AR30E0R-10RZC	Red	\$15.00	PDF	35mm momentary		N.O.
AR30E0R-01RZC	Red	\$15.00	PDF	extended round	Base: Plastic Bezel: Metal	N.C.
AR30E0R-10SZC	Blue	\$15.00	PDF	head		N.O.
AR30E0R-10WZC	White	\$15.00	PDF			N.O.
AR30E0R-10YZC	Yellow	\$15.00	PDF			N.O.
AR30M0R-10GZC	Green	\$16.00	PDF			N.O.
AR30M0R-10BZC	Black	\$16.00	PDF			N.O.
AR30M0R-10RZC	Red	\$16.00	PDF	40mm momentary		N.O.
AR30M0R-01RZC	Red	\$16.00	PDF	mushroom		N.C.
AR30M0R-10SZC	Blue	\$16.00	PDF	round head		N.O.
AR30M0R-10WZC	White	\$16.00	PDF			N.O.
AR30M0R-10YZC	Yellow	\$16.00	PDF			N.O.

www.automationdirect.com **Pilot Devices** tPIL-164

Fuji Electric Command Illuminated 30mm **Metal and Plastic Pushbuttons**



AR30Q7L-11E3RZC



AR30E0L-10E3AZC



AR30G2L-10L3GZC



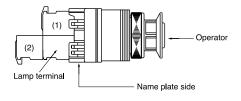
AR30G2L-01E3RZC

	Con	nmand	LED Illum	inated 30mm	Pushbut	tons	
Part Number	Color	Price	Drawing Link	Operator	Material	Lamp Voltage	Contacts*
AR30Q7L-11E3RZC	Red	\$105.00	PDF	35mm push-pull/		24V AC/DC	1 N.O. + 1 N.C.
AR30Q7L-11E3GZC	Green	\$105.00	PDF	momentary		(without transformer)	1 N.O. + 1 N.C.
AR30Q7L-11L3RZC	Red	\$128.00	PDF	mushroom round		115-127 VAC	1 N.O. + 1 N.C.
AR30Q7L-11L3GZC	Green	\$128.00	PDF	head		(with transformer)	1 N.O. + 1 N.C.
AR30E0L-10E3RZC	Red	\$29.00	<u>PDF</u>				N.O.
AR30E0L-01E3RZC	Red	\$29.00	<u>PDF</u>				N.C.
AR30E0L-10E3GZC	Green	\$29.00	PDF			0.41.4.0./7.0	N.O.
AR30E0L-10E3AZC	Orange	\$29.00	PDF			24V AC/DC (without transformer)	N.O.
AR30E0L-10E3WZC	White	\$29.00	<u>PDF</u>			(maroat aariotormor)	N.O.
AR30E0L-10E3YZC	Yellow	\$29.00	PDF				N.O.
AR30E0L-10E3SZC	Blue	\$41.50	PDF	35mm momentary extended round			N.O.
AR30E0L-10L3RZC	Red	\$42.50	PDF	head			N.O.
AR30E0L-01L3RZC	Red	\$42.50	PDF				N.C.
AR30E0L-10L3GZC	Green	\$42.50	PDF			445 407 \ (4.0)	N.O.
AR30E0L-10L3AZC	Orange	\$42.50	PDF			I .	N.O.
AR30E0L-10L3WZC	White	\$42.50	PDF		Base: Plastic		N.O.
AR30E0L-10L3YZC	Yellow	\$42.50	PDF		Bezel: Metal		N.O.
AR30E0L-10L3SZC	Blue	\$53.00	PDF				N.O.
AR30G2L-10E3RZC	Red	\$46.00	PDF				N.O.
AR30G2L-01E3RZC	Red	\$46.00	PDF				N.C.
AR30G2L-10E3GZC	Green	\$46.00	PDF			0.41/4.0/D.0	N.O.
AR30G2L-10E3AZC	Orange	\$46.00	PDF			24V AC/DC (without transformer)	N.O.
AR30G2L-10E3WZC	White	\$46.00	PDF			(N.O.
AR30G2L-10E3YZC	Yellow	\$46.00	PDF	35mm momentary			N.O.
AR30G2L-10E3SZC	Blue	\$92.00	PDF	extended with full			N.O.
AR30G2L-10L3RZC	Red	\$59.00	PDF	guard, round head			N.O.
AR30G2L-01L3RZC	Red	\$59.00	PDF	round nead			N.C.
AR30G2L-10L3GZC	Green	\$59.00	PDF			445 407 \ (A O	N.O.
AR30G2L-10L3AZC	Orange	\$59.00	PDF			115-127 VAC (with transformer)	N.O.
AR30G2L-10L3WZC	White	\$59.00	PDF			(2: 22:::2::://	N.O.
AR30G2L-10L3YZC	Yellow	\$59.00	PDF				N.O.
AR30G2L-10L3SZC	Blue	\$83.00	PDF				N.O.
* AR30Q7L series pushbut	tone include	2 N.C. conf	acte When acc	ambled one of the N	C contacts are	hold open becoming	on N.O. contact

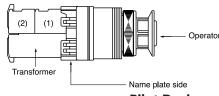
^{*} AR30Q7L series pushbuttons include 2 N.C. contacts. When assembled, one of the N.C. contacts are held open, becoming an N.O. contact.

Į.	AR30Q7L Contact Operation									
	Contact Block Mounting Position Button Position									
No.	Туре	Pull	Free	Push						
(1)	N.C.	Х	0	0						
(2)	(2) N.C. X X O									
	O = Contact (Open, X = Contac	t Closed							

AR30Q7L Contact Position without Transformer



AR30Q7L Contact Position with Transformer



Fuji Electric Command 30mm **Emergency Stop Pushbuttons**









- AR30VPR-01R
- AR30VPL-01E3R
- Support for Padlock
- To avoid a restart due to careless reset of a pushbutton switch in case of emergency stop, make use of Padlock or HASP.



Equivalent of 6835KARFRED manufactured by Master Lock Up to two mountable

The total mass should be 1500 g or less.

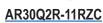


	Command 30mm Emergency Stop Pushbuttons											
Part Number	Price	Drawing Link	Contacts	Operator	Voltage	Bulb Type	Action	Legend	Protection	Material		
AR30VPR-01R	\$78.00	<u>PDF</u>	(1) N.C.									
AR30VPR-12R	\$85.00	PDF	(1) N.O./(2) N.C.	44.0 mm, mushroom,	44.0 mm, mushroom,	44.0 mm	_	_				
AR30VPL-01E3R	\$89.00	PDF	(1) N.C.				LED	Push to lock,	Arrow	IDCE	Base: Plastic	
AR30VPL-12E3R	\$96.00	PDF	(1) N.O./(2) N.C.	Red padlock	24 VAC/VDC	illuminated	turn to reset	Arrow	IP65	Bezel: Metal		
AR30VPL-01EAR	\$96.00	PDF	(1) N.C.	support	full voltage	Interlocked						
AR30VPL-12EAR	\$105.00	PDF	(1) N.O./(2) N.C.			LED illuminated						











AR30V0L-01E3RZC







AR30V0R-01RZC

	Command 30mm Emergency Stop Pushbuttons											
Part Number	Price	Drawing Link	Contacts	Operator	Voltage	Bulb Type	Action	Legend	Protection	Material		
AR30Q2R-01RZC	\$41.50	PDF	(1) N.C.	35.0 mm,			Push to lock,					
AR30Q2R-11RZC	\$47.00	PDF	(1) N.O./(1) N.C.	Mushroom, Red	_	_	pull to reset	_				
AR30V0L-01E3RZC	\$45.00	PDF	(1) N.C.	40.0 mm, Mushroom,	40.0 mm	24 VAC/VDC	LED			IP65	Base: Plastic Bezel: Metal	
AR30V0L-01L3RZC	\$50.00	PDF	(1) N.C.		115-127 VAC	illuminated	Twist-to- release	Arrow				
AR30V0R-01RZC	\$41.50	PDF	(1) N.C.	Red	_	_						

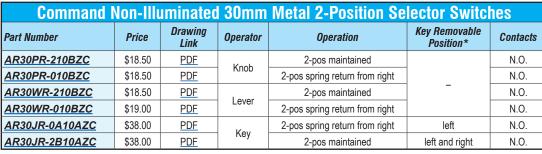
F- Fuji Electric Command Non-Illuminated 30mm Metal Selector Switches



Knob Operator AR30PR Series

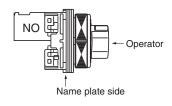
Lever Operator

AR30WR Series



^{*} Keys are only removable in the listed maintained or "at-rest" positions.

	Contact Block Position	Mounting	Operator i	2-Position
)	Тор	Bottom		
	N.O.		0	Х



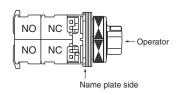
2-pos Contact Positions



Key Operator AR30JR Series

Command Non-Illuminated 30mm Metal 3-Position Selector Switches								
Part Number	Price	Drawing Link	Operator	Operation	Key Removable Position*	Contacts		
AR30PR-311BZC	\$21.50	PDF		3-pos maintained		1 N.O. + 1 N.C.		
AR30PR-711BZC	\$21.50	<u>PDF</u>	Knob	3-pos spring return from right, manual return from left		1 N.O. + 1 N.C.		
AR30PR-120BZC	\$21.50	PDF			3-pos spring return from left and right		2 N.O.	
AR30WR-311BZC	\$22.00	<u>PDF</u>		3-pos maintained	_	1 N.O. + 1 N.C.		
AR30WR-711BZC	\$23.00	<u>PDF</u>	Lever	Lever	3-pos spring return from right, manual return from left		1 N.O. + 1 N.C.	
AR30WR-120BZC	\$22.00	PDF		3-pos spring return from left and right		2 N.O.		
AR30JR-1E22AZC	\$53.00	PDF	Vov	3-pos spring return from left and right	center	2 N.O. + 2 N.C.		
AR30JR-3C22AZC	\$53.00	PDF	Key	3-pos maintained	left, right, and center	2 N.O. + 2 N.C.		

^{*} Keys are only removable in the listed maintained or "at-rest" positions.



3-pos Contact Positions

Contact Block Mounting Positio	n	Operator 3-Position			
Тор	Bottom				
N.O.		Х	0	0	
N.C.		0	0	Х	
	N.O.	Х	0	0	
	N.C.	0	0	Χ	
	X	= On, O = Off			

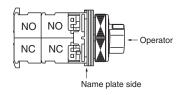
Part Numbers: <u>AR30PR-711BZC</u> <u>AR30WR-711BZC</u> <u>AR30JR-1E22AZC</u> AR30JR-3C22AZC

Continue on following page.

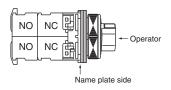
F- Fuji Electric Command Non-Illuminated 30mm Metal Selector Switches

Continued from previous page.

Part Numbers: AR30PR-311BZC AR30WR-311BZC



Part Numbers: AR30PR-120BZC AR30WR-120BZC



3-pos Contact Positions

Contact Block Mounting Positio	n	Operator 3-Position			
Тор	Bottom				
N.O.		Х	0	0	
N.O.		Χ	0	0	
	N.C.	0	0	X	
	N.C.	0	0	Χ	
	X	= On, O = Off			

Contact Block Mounting Positio	n	Operator 3-Position						
Тор	Bottom							
N.O.		0	0	Х				
N.C.		X	0	0				
	N.O.	Х	Χ	0				
	N.C.	0	Χ	Х				
	X = On, O = Off							

Command Non-Illuminated 30mm Metal 4-Position Selector Switches									
Part Number	Part Number Price Drawing Link Operator Operation Contacts								
AR30PCR-441CBZC	\$19.50	<u>PDF</u>	Knob	4-pos maintained	2 N.O. + 2 N.C.				
AR30WCR-441CBZC	\$18.50	PDF	Lever	4-pos maintained	2 N.O. + 2 N.C.				

Contact Block Mounting Posit	ion		Operator 4-Position (40 degree sweep)					
Тор	Bottom	S 0 0						
N.C.		0	0	Х	0			
N.O.		0	Х	0	0			
	N.C.	X	0	0	0			
	N.O.	N.O. O O X						
	X = On, O = Off							

NO	NC P	
NO	NC Dera	tor
u	Name plate side	

4- and 5-pos Contact Positions

Command Non-Illuminated 30mm Metal 5-Position Selector Switches							
Part Number	Price	Drawing Link	Operator	Operation	Contacts		
AR30PCR-551CBZC	\$19.50	<u>PDF</u>	Knob	5-pos maintained	2 N.O. + 2 N.C.		
AR30WCR-551CBZC	\$18.50	<u>PDF</u>	Lever	5-pos maintained	2 N.O. + 2 N.C.		

Contact Block Mounting Position			Operator 5-Position (30 degree sweep)				
Тор	Bottom						
N.O.		Х	0	0	0	0	
N.C.		0	0	0	Х	0	
	N.O.	0	0	0	0	X	
	N.C	0	X	0	0	0	
	X = On, O = Off						

Fruji Electric Command LED Illuminated 30mm Metal Selector Switches



AR30PL-010E3RZC



AR30PL-311E3GZC

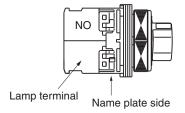


AR30PL-210L3SZC

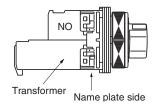
Command LEG) Illumir	nated 30)mm M	etal 2-Positio	n Selector	Switches
Part Number	Color	Price	Drawing Link	Operation	Contacts	Lamp Voltage
AR30PL-010E3RZC	Red	\$36.00	PDF			
AR30PL-010E3GZC	Green	\$36.00	<u>PDF</u>			
AR30PL-010E3WZC	White	\$36.00	PDF	2-pos spring return	N.O.	24V AC/DC
AR30PL-010E3SZC	Blue	\$55.00	<u>PDF</u>	from right	N.O.	24V AC/DC
AR30PL-010E3YZC	Yellow	\$36.00	PDF			
AR30PL-010E3AZC	Orange	\$36.00	PDF			
AR30PL-210E3RZC	Red	\$35.50	PDF			
AR30PL-210E3GZC	Green	\$35.50	PDF		N.O.	24V AC/DC
AR30PL-210E3WZC	White	\$35.50	PDF	2 non maintained		
AR30PL-210E3SZC	Blue	\$53.00	PDF	2-pos maintained		
AR30PL-210E3YZC	Yellow	\$35.50	PDF			
AR30PL-210E3AZC	Orange	\$35.50	PDF			
AR30PL-010L3RZC	Red	\$46.00	PDF		N.O.	
AR30PL-010L3GZC	Green	\$46.00	PDF			
AR30PL-010L3WZC	White	\$46.00	PDF	2-pos spring return		115-127 VAC
AR30PL-010L3SZC	Blue	\$63.00	PDF	from right		115-127 VAC
AR30PL-010L3YZC	Yellow	\$46.00	PDF			
AR30PL-010L3AZC	Orange	\$46.00	PDF			
AR30PL-210L3RZC	Red	\$48.50	PDF			
AR30PL-210L3GZC	Green	\$48.50	PDF			
AR30PL-210L3WZC	White	\$48.50	PDF	2 non maintair - d	N.O.	115-127 VAC
AR30PL-210L3SZC	Blue	\$65.00	PDF	2-pos maintained	N.U.	115-127 VAC
AR30PL-210L3YZC	Yellow	\$48.50	PDF			
AR30PL-210L3AZC	Orange	\$48.50	PDF			

Contact Block Position	Mounting	Operator 2-Position			
Тор	Bottom				
N.O.		0	Х		
X = On, O = Off					

Note: Selector switches with transformers do not allow contact blocks in the bottom positions.



2-pos Contact Positions



2-pos Contact Positions (with transformer)

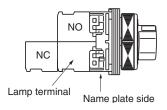
Fuji Electric Command LED Illuminated **30mm Metal Selector Switches**

Command I	ED Illu	minated	30mm I	Metal 3-Positio	n Selector S	witches
Part Number	Color	Price	Drawing Link	Operation	Contacts	Lamp Voltage
AR30PL-311E3RZC	Red	\$41.50	PDF			
AR30PL-311E3GZC	Green	\$41.50	PDF			
AR30PL-311E3WZC	White	\$41.50	PDF	3-position maintained	1 N.O. + 1 N.C.	24V AC/DC
AR30PL-311E3SZC	Blue	\$57.00	PDF	3-position maintained	T N.O. + T N.O.	24V AC/DC
AR30PL-311E3YZC	Yellow	\$41.50	PDF			
AR30PL-311E3AZC	Orange	\$41.50	PDF			
AR30PL-611E3RZC	Red	\$43.00	PDF			
AR30PL-611E3GZC	Green	\$43.00	PDF	2	1 N.O. + 1 N.C.	24V AC/DC
AR30PL-611E3WZC	White	\$43.00	PDF	3-position spring return from left to		
AR30PL-611E3SZC	Blue	\$59.00	PDF	center / manual return from right to center		
AR30PL-611E3YZC	Yellow	\$43.00	PDF	Trom right to center		
AR30PL-611E3AZC	Orange	\$43.00	PDF			
AR30PL-311L3RZC	Red	\$50.00	PDF		1 N.O. + 1 N.C.	
AR30PL-311L3GZC	Green	\$50.00	PDF			
AR30PL-311L3WZC	White	\$50.00	PDF	2		115-127 VAC
AR30PL-311L3SZC	Blue	\$67.00	PDF	3-position maintained		115-127 VAC
AR30PL-311L3YZC	Yellow	\$50.00	PDF			
AR30PL-311L3AZC	Orange	\$50.00	PDF			
AR30PL-611L3RZC	Red	\$53.00	PDF			
AR30PL-611L3GZC	Green	\$53.00	PDF]		
AR30PL-611L3WZC	White	\$53.00	PDF	3-position spring return from left to	4 11 0 4 11 0	445 407 1/40
AR30PL-611L3SZC	Blue	\$69.00	PDF	center / manual return	1 N.O. + 1 N.C.	115-127 VAC
AR30PL-611L3YZC	Yellow	\$53.00	PDF	from right to center		
AR30PL-611L3AZC	Orange	\$53.00	PDF			

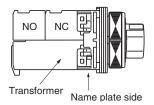
Contact Block Mounting Position		Operator 3-Position			
Тор	Bottom				
N.O.		Х	0	0	
N.C.*		0	0	X	
	N.C.**	0	0	X	
		X = On, O = Off			

^{*}Models with transformers

Note: Selector switches with transformers do not allow contact blocks in the bottom position.



3-pos Contact Positions



3-pos Contact Positions (with transformer)

^{**}Models without transformers

Fruji Electric Command 30mm Indicating Lights







DR30E3L-E3SZC

Command 30mm Indicating Lights							
Part Number	Color	Price	Drawing Link	Lens	Lamp Voltage		
DR30D0L-E3AZC	Orange	\$24.50	<u>PDF</u>				
DR30D0L-E3SZC	Blue	\$34.50	<u>PDF</u>				
DR30D0L-E3GZC	Green	\$24.50	PDF		24V AC/DC		
DR30D0L-E3RZC	Red	\$24.50	<u>PDF</u>		without transformer		
DR30D0L-E3WZC	White	\$24.50	<u>PDF</u>				
DR30D0L-E3YZC	Yellow	\$24.50	<u>PDF</u>	Dome			
DR30D0L-L9AZC	Orange	\$40.00	<u>PDF</u>	Dome			
DR30D0L-L9SZC	Blue	\$50.00	<u>PDF</u>				
DR30D0L-L9GZC	Green	\$40.00	PDF		115-127 VAC		
DR30D0L-L9RZC	Red	\$40.00	PDF		with transformer		
DR30D0L-L9WZC	White	\$40.00	PDF				
DR30D0L-L9YZC	Yellow	\$40.00	PDF				
DR30E3L-E3GZC	Green	\$24.50	<u>PDF</u>				
DR30E3L-E3RZC	Red	\$24.50	<u>PDF</u>				
DR30E3L-E3WZC	White	\$24.50	<u>PDF</u>		24V AC/DC		
DR30E3L-E3YZC	Yellow	\$24.50	PDF		without transformer		
DR30E3L-E3AZC	Orange	\$24.50	PDF				
DR30E3L-E3SZC	Blue	\$42.00	PDF	Extended			
DR30E3L-L3GZC	Green	\$28.50	<u>PDF</u>	round			
DR30E3L-L3RZC	Red	\$28.50	PDF				
DR30E3L-L3WZC	White	\$28.50	PDF		115-127 VAC		
DR30E3L-L3YZC	Yellow	\$28.50	PDF		with transformer		
DR30E3L-L3AZC	Orange	\$28.50	PDF				
DR30E3L-L3SZC	Blue	\$42.00	PDF				

www.automationdirect.com Pilot Devices tPIL-171

Fruji Electric Command 30mm Joysticks



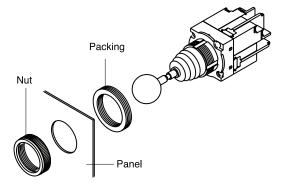


Command 30mm Joysticks - Screw Terminal							
Part Number	Price	Drawing Link	Handle	Contact Arrangement	Operating Directions		
AR30A5N-A0A0BZC	\$83.00	<u>PDF</u>	Ball type, momentary	2 position N.O.	†		
AR30A0N-A0A0BZC	\$83.00	PDF	Ball type, maintained	2-position N.O.	\		
AR30A5N-AAAABZC	\$92.00	<u>PDF</u>	Ball type, momentary	4 position N.O.			
AR30A0N-AAAABZC	\$92.00	PDF	Ball type, maintained	4-position N.O.			

Joystick selector switch mounting on panel

- Twist and remove the ball from the operator.
- If no locking nut is provided, loosen the nut and remove the switch after the packing part (A) shown in the illustration is stretched to the lever groove.
- Mount the switch in the order opposite of removal.
 Set the packing to the notch on the lever as a reference.
 Do not separate the nut from the packing.
- Tighten the nut from the front of the panel.

Note: Recommended tightening torque is 1 to 1.5 N·m.



Fruji Electric Command 30mm Buzzers







DR30B5-HBZC

Command 30mm Buzzers							
Part Number	Qty	Price	Drawing Link	Sound Type	Sound Level	LED Indicator	Operating Voltage
DR30B5-EBZC	1	\$62.00	PDF	Intermittent/continuous 90d	90dB @ 0.1 m	Red	12-24V AC/DC
DR30B5-HBZC	1	\$62.00	PDF	electronic sound	70dB @ 1m		100-110VAC

S	Specifications			
	DR30B5-xBZC			
Rated insulation voltage	Without transformer: 60V AC/DC With transformer: 250VAC			
Durability	1000h			
Frequency	2.4 to 3.3 kHz			
Intermittent cycle	Approx. 170-cycle/min			
Dielectric strength	Without transformer: 1000VAC 1 minute With transformer: 2000VAC 1 minute			
Insulation resistance	100MΩ or more (500VDC megger)			
Pollution degree	3			
Vibration	Resonance: 10 to 55Hz, double amplitude 0.1 mm Constant: 16.7 Hz, double amplitude 3.0 mm			
Shock	Mechanical durability: 500 m/s²			
Ambient temperature	-20 to +60°C [-4 to +140°F] no condensation or no icing			
Storage temperature	-30 to +70°C [-22 to +158°F]			
Humidity	45 to 85% RH (within -5 to 40°C [23 to 104°F])			
Degree of protection	IP00			

Current Consumption				
24V AC/DC 40mA AC, 25mA DC				
110VAC	30mA AC			

Fruji Electric Accessories for 30mm Command Series Pilot Devices





Legend	Plates	tor Com	imand Serie	s Jumm L	levices		
Part Number	Price	Drawing Link	Legend	Material	Color		
<u>AHX177-00</u>	\$2.75	<u>PDF</u>	Blank		Silver field, silver background		
AHX177-0B	\$2.75	PDF	OFF				
AHX177-0A	\$2.75	PDF	ON	Brass	Silver field, silver background, black text		
AHX177-0C	\$2.75	PDF	START				
AHX177-0D	\$2.75	PDF	STOP				
AHX177-2A	\$2.75	PDF	OFF-ON				
<u>AHX720-5A</u>	\$10.50	<u>PDF</u>	EMERGENCY STOP	Aluminum	Yellow field, yellow background, black text		



Tools and Lock Nut for Use with Command Series 30mm Pilot Devices							
Part Number	Price	Description					
<u>AR9A006</u>	\$37.00	Fuji Electric mounting wrench. For use with AR22, AR30, DR22 and DR30 series pushbuttons, switches, indicators and buzzers.					
AR9R055	\$19.50	Fuji Electric guard ring, replacement, 30mm, metal. Package of 5. For use with AR30G2L series pushbuttons.					
<u>AHX082</u>	\$1.25	Fuji Electric key washer, replacement, 30mm, metal. Package of 5. For use with AR30 and DR30 series pushbuttons, switches, indicators and buzzers.					
<u>AHX088</u>	\$6.25	Fuji Electric lock nut, replacement, 30mm, metal. Package of 5. For use with AR30F0R, DR30D0L, E0L, E0R and Q7L series pushbuttons, switches and indicators.					
<u>AHX093</u>	\$6.25	Fuji Electric lock nut, replacement, 30mm, metal. Package of 5. For use with AR30M0R, A_N, JR, PL, PR, Q2R and WR series pushbuttons, switches and indicators.					
<u>AHX282</u>	\$1.25	Fuji Electric sealing/spacer washer, replacement, 30mm. Package of 5. For use with AR30 and DR30 series pushbuttons, switches, indicators and buzzers.					



AR9R055



AHX082



AHX088



Fuji Electric Accessories for 30mm **Command Series Pilot Devices**

Contact Blocks



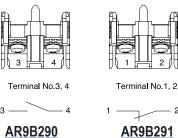
AR9B290



Contact Blocks for Command Series 30mm Pushbuttons							
Part Number	Qty	Price	Drawing Link	Color	Contacts		
AR9B290	1	\$7.25	PDF	Blue	N.O.		
AR9B291	1	\$7.25	PDF	Red	N.C.		

Minimum current requirement AC/DC is 5mA

Terminal Layout



AR9B291

Max 6 contacts for non-illuminated momentary devices. Max 4 for alternate action non-illuminated devices.

Max 5 contacts for illuminated momentary devices.

Max 3 for alternate action illuminated devices.

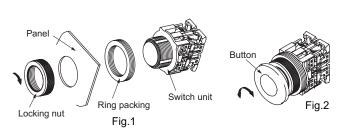
*Exceeding the maximum number of contacts could affect the mechanical durability of the operators.

www.automationdirect.com **Pilot Devices** tPIL-175

Filot Devices Specifications

Assembly Information

These pushbuttons are supplied with the appropriate contact blocks, unless otherwise indicated. Use these drawings as a guide to make sure there is adequate clearance behind the panel. Insert the switch unit in the panel hole at the back of the panel and secure it with a locking nut at the panel front.

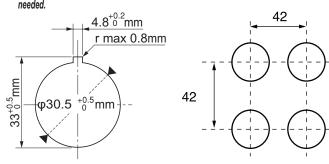


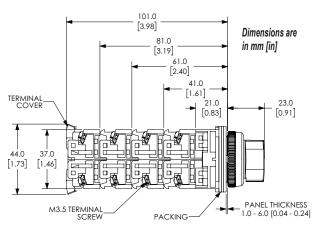
Example mounting diagram for AR30M0R

Panel Holes

For safe operation, use these mounting hole drawings to ensure that there is adequate space between switches.

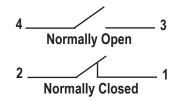
Note: Location hole 4.8mm x 33mm is for use with a key washer or legend plate. If key-washer or legend plate are not used, this location hole is not needed. ADC does not currently carry an appropriate 4.8mm punch if the hole is





NOTE: Contact blocks can be arranged up to four deep by two wide.

Typical Wiring



Mechanical Durability							
		Operations					
Pushbutton switch Illuminated pushbutton switch E-stop pushbutton switch E-stop illuminated pushbutton	ed pushbutton switch ushbutton switch Push-lock, turn-reset						
Selector switch	Maintained 1, 2, 3, 4-contact Maintained 5, 6-contact Spring return, spring/manual return	1 million 500,000 200,000					
Illuminated selector switch	Maintained Without transformer 1, 2, 3-contact 4-contact With transformer 1, 2-contact 3-contact Spring return, spring/manual return	1 million 500,000 1 million 500,000 200,000					

Note: Key insertion/removal durability for selector switch key types Key type 10,000

Fruji Electric Command Series 30mm Pilot Devices Specifications

	Specifications (In	door Use)			
	Pushbuttons Selector switches	Joysticks	Pilot Lights		
Rated thermal current (contact block)	A600 P600	_	_		
Mechanical durability	See mechanical durability table	250,000 operations	_		
Electrical durability	500,000 operations at 220VAC 6A 1,000,000 operations at 220VAC 3A	100,000 operations at 220VAC 1A (res. load)	-		
Operating frequency	1200 operations/hour	(on-load factor: 40%)	_		
Operating force (Avg)	9N – Pushbuttons 0.15 - 0.1 N·m – Selector switches	Less that	in 100N		
Positive opening operation	All	functions incorporating an N.C. contact a positive-opening operation.	re		
Dielectric strength	2,000VAC, 1 minute*** 2,500VAC, 1 minute****	2,000VAC	, 1 minute		
Insulation resistance		$100 M\Omega$ or more (500VDC megger)			
Rated impulse dielectric strength	6kV	-	6kV		
Conditional short-circuit current	100	00A	_		
Short-circuit protective device	Fuse 15A Fuse 1A		_		
Pollution degree	3				
Vibration	Resonance: 10 to 55 Hz, d	ouble amplitude 0.1mm*, Constant: 16.7	Hz, double amplitude 3mm		
Shock	Malfunction Mechanica		Mechanical: 500m/s ²		
Ambient temperature (no condensation or no icing)	-20 to 70°C [-4 to 158°F]	-5 to 60°C [23 to 140°F]	-20 to 50°C [-4 to 122°F]		
Temperature ratings		Storage: -40 to 80°C [-40 to 176°F]			
Humidity		45 to 85% RH [within -5°C to 40°C]			
Degree of protection		IEC IP65			
Initial contact resistance	≥ 50mΩ	_	_		
Terminal markings	IEC 60445	_	_		
Connections		4 to 18 AWG; Stripping length: 5 to 11mm tening torque: 0.8 to 1.0 N·m, 7.1 to 8.8 in			
Contacts operation	Self-cleaning types. Slow action. Positive opening.				
Operation frequency	1,200 cycle/hour				
Utilization category/ contact ratings	AC-15: 24VAC at 6A, 110VAC at 6A DC-13: 24VDC at 4A, 110VDC at 1.3 A	AC-1: 110VAC at 0.3 A DC-13: 24VDC at 0.7 A, 110VDC at 0.15 A	-		
Rated insulation voltage	250V AC/DC*** 600V AC/DC 250V AC/DC 250V AC/DC 250V AC/DC*** 600VAC w/transformer				
Materials	En	closure: Polyamide, Contacts: Silver, nick	cel		
Standards	UL 508, CSA C22.2, No.14, TUV - EN60947-5-1				
Approvals	UL file E44592, CSA file LR20479				

^{*} Emergency stop type: 10 to 500 Hz, double amplitude 0.7mm (acceleration 50m/s²), according to test condition of EN60947-5-5 (1998)

^{**} Emergency stop type: 150 m/s²

^{***} Illuminated type without transformer

^{****} Illuminated type with transformer

To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.



F- Fuji Electric Command 30mm **Emergency Stop Pushbuttons Specifications**

30mm Emerge	ncy Stop Pushbuttons Specifications	s (Indoor Use)	
	AR30 Q2R, VOL, VOR	AR30 VPR, VPL	
Rated thermal current (contact block)	A600 P600	B300 R300	
Mechanical durability	See mechanical durability table	250,000 operations	
Electrical durability	500,000 operations at 220VAC 6A 1,000,000 operations at 220VAC 3A	100,000 operations AC12, DC13, DC12	
Operating frequency	1200 operations/hour (on-load factor: 40%)	900 operations/hour (on-load factor: 40%)	
Operating force (Avg)	30-45 N	Push to Lock: 40N Turn to reset: 0.5 N·m	
Positive opening operation	All functions incorporating positive-opening		
Dielectric strength	2,000VAC, 1 minute*** 2,500VAC, 1 minute***	2,000 VAC, 1 minute	
Insulation resistance	100MΩ or more (50	0VDC megger)	
Rated impulse dielectric strength	6kV	2.5 kV	
Conditional short-circuit current	1000A	A	
Short-circuit protective device	Fuse 15A	Fuse 10A	
Pollution degree	3		
Vibration	Resonance: 10 to 55 Hz, double amplitude 0.1mm*, Constant: 16.7 Hz, double amplitude 3mm	Malfunction: max double amplitude: 0.7 mm (max: 50 m/s2), frequency: 10 to 500 Hz Durability: max double amplitude: 0.7 mm (max: 50 m/s2), frequency: 10 to 500 Hz*	
Shock	Malfunction: 100m/s ² Mechanical: 500m/s ²	Malfunction:150m/s² Durability: 1000 m/s² **	
Ambient temperature (no condensation or no icing)	-20 to 70°C [-4 to 158°F]	Non-illuminated -20 to +60°C [-4 to 140°F] Illuminated -20 to +50°C [-4 to 122°F]	
Temperature ratings	Storage: -40 to 80°C	C [-40 to 176°F]	
Humidity	45 to 85% RH [within	n -5°C to 40°C]	
Degree of protection	IEC IP6	65	
Initial contact resistance	≥ 50mΩ	1000mΩ	
Terminal markings	IEC 604	45	
Connections	14 to 18 AWG; Stripping length: 5 to 11mm Tightening torque: 0.8 to 1.0 N·m, 7.1 to 8.8 in·lb Stranded wire: up to 1.25 mm², 24 to Solid wire: up to ø1.2 mm², 24 to Tightening torque: 1.5 to 2.5 N·m, 13		
Contacts operation	Self-cleaning types. Slow action. Positive opening.		
Operation frequency	1,200 cycle/hour 900 operations/hour (Application ratio 40%) (On-load factor: 40%)		
Utilization category/ contact ratings	AC-15: 24VAC at 6A, 110VAC at 6A DC-13: 24VDC at 1A DC-13: 24VDC at 4A, 110VDC at 1.3 A DC-12 24VDC at 2A		
Rated insulation voltage	250 VAC/VDC*** 600 VAC/VDC 250 VAC/VDC		
Materials	Enclosure: Polyamide, Contacts: Silver, nickel		
Standards	UL 508, CSA C22.2, No.14	I, TUV - EN60947-5-1	
Approvals	UL file E44592, CSA file LR20479	cUL Listed, CE, UL Category Emergency Stop Device	

^{*} Emergency stop type: 10 to 500 Hz, double amplitude 0.7mm (acceleration 50m/s²), according to test condition of EN60947-5-5 (1998)

^{**} Except when the switch is mounted upside down

^{***} Illuminated type without transformer

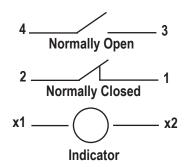
^{****} Illuminated type with transformer

To obtain the most current agency approval information, see the Agency Compliance & Certifications section on the specific part number's web page.

F- Fuji Electric NEMA Aux Contact Ratings

Control Circuit Contact Electrical Ratings and Wiring

Typical Wiring



NEMA Mechanical Switching Ratings and Test Values for DC Control Circuit Contacts							
	Thermal	Maximum	Make or Brea	k DC Current (A)			
Contact Rating Designation	Continuous Test Current (A)	rrent 125 Volts 250 Volts 301 to 600 Volts					
P300	5.0	1.1	0.55		138		
P600	5.0	1.1	0.55	0.20	138		
Q300	2.5	0.55	0.27		69		
Q600	2.5	0.55	0.27	0.10	69		
R300	1.0	0.22	0.11		28		

This chart is provided as a guideline only, and the ratings and values are not guaranteed to be accurate. It is the users' responsibility to properly size their control circuit devices. The chart values are from NEMA Standard ICS 5-2000, Table 1-4-2.

NEMA	NEMA Mechanical Switching Ratings and Test Values for AC Control Circuit Contacts											
	Thermal			Maxii	mum AC Cui	rent, 50/60F	Hz (A)			l/o# or		
Contact Rating Designation	Continuous Test Current	120	Volts	240	Volts	480	Volts	600 Volts		Volt amperes		
Boorgination	(A)	Make	Break	Make	Break	Make	Break	Make	Break	Make	Break	
A300	10	60	6.00	30	3.00					7200	720	
A600	10	60	6.00	30	3.00	15	1.50	12	1.20	7200	720	
B300	5	30	3.00	15	1.50					3600	360	
B600	5	30	3.00	15	1.50	7.5	0.75	6	0.60	3600	360	
C600	2.5	15	1.5	7.5	0.75	3.75	0.375	3.00	0.30	1800	180	

This chart is provided as a guideline only, and the ratings and values are not guaranteed to be accurate. It is the users' responsibility to properly size their control circuit devices. The chart values are from NEMA Standard ICS 5-2000, Table 1-4-1.

molex Pendant Switches

Overview

Molex pendant switches with quick connectors are designed for demanding conditions where reliable ON/OFF actuation is essential, providing a flexible means to control equipment during production, material handling, changeovers, setup, inspection, cleaning and troubleshooting.

Features

- Switch cover available in nitrile/PVC rubber or silicone rubber
- Nitrile/PVC rubber is uniquely suited to withstand chemical abuse and exposure in the petrochemical environment.
- Silicone rubber/PVC repels and inhibits bacterial growth and is ideal for any indoor or outdoor wet location, such as in food and beverage processing.



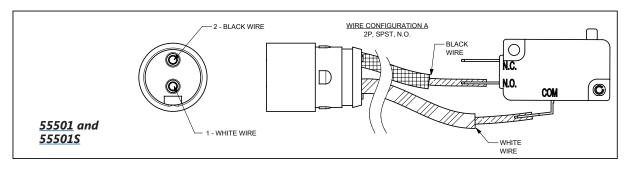
	Pendant Switches							
Part Number	Price	Switch Type	Contact	Action	Connector	Color	Housing Material	Drawing Link
<u>55501</u>	\$61.00	Momentary	(1) N.O.	Snap Action	7/8in - 16 UN2 2-pin male	Yellow	nitrile rubber/PVC	PDF
<u>55502</u>	\$58.00	Momentary	(1) N.C.	Snap Action	7/8in - 16 UN2 2-pin male	Yellow	nitrile rubber/PVC	PDF
<u>55503</u>	\$61.00	Momentary	(1) N.O./(1) N.C.	Snap Action	7/8in - 16 UN2 3-pin male	Yellow	nitrile rubber/PVC	PDF
<u>55504</u>	\$58.00	Momentary	(1) N.O.	Snap Action	7/8in - 16 UN2 3-pin male	Yellow	nitrile rubber/PVC	<u>PDF</u>
<u>55501S</u>	\$58.00	Momentary	(1) N.O.	Snap Action	7/8in - 16 UN2 2-pin male	Yellow	silicone rubber/PVC	PDF
<u>55502S</u>	\$58.00	Momentary	(1) N.C.	Snap Action	7/8in - 16 UN2 2-pin male	Yellow	silicone rubber/PVC	<u>PDF</u>
55503S	\$58.00	Momentary	(1) N.O./(1) N.C.	Snap Action	7/8in - 16 UN2 3-pin male	Yellow	silicone rubber/PVC	PDF
<u>55504S</u>	\$58.00	Momentary	(1) N.O.	Snap Action	7/8in - 16 UN2 3-pin male	Yellow	silicone rubber/PVC	PDF

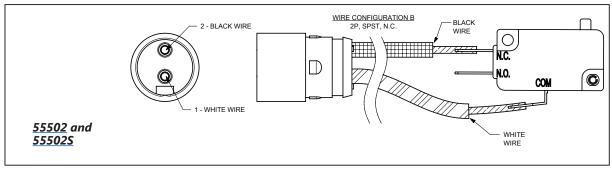
Pendant Switch Specifications						
Electrical Specifications	10A (AC), 125	/250 VAC, ½ HP				
Wire Conductor Size	16 AWG	(1.5 mm²)				
Environmental Rating	NEMA Type 3R rainpr	roof ; IP24 wet-locations				
Operating Temperature Range	-20 to 85°C [-4 to 185°F]					
Operating Force	0.75 N to 1.2 N					
Permissible Operating Speed	0.1 mm to 1 m/s max.					
Permissible Operating Frequency	Mechanical: 600 operations per minute (max.)	Electrical: 60 operations per minute				
Operating Life (Electrical Life at Rated Load 85°C)	6000 hours					
Vibration Resistance (Malfunction)	10 to 55Hz, 1.5 mm double amplitude					
Shock Resistance	Durability: 1000 m/s² (approx. 100G) max. Malfunction: 200 m/s² (approx. 20G) max.					
Weight	100g / 0.22 lbs.					
Agency Approval	cULus LISTED [ALL models]; CSA (LR44136) [nitrile rubber/PVC models only]					

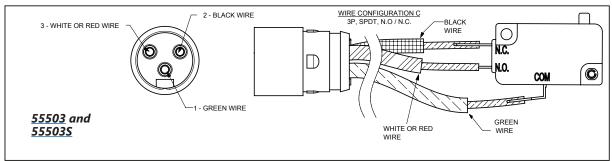
To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

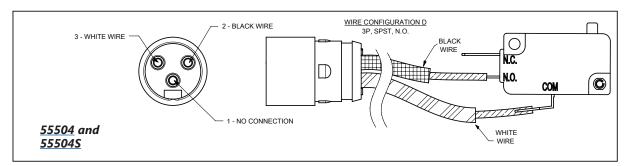
molex Pendant Switches

Wiring Diagrams









www.automationdirect.com

CAPTRON Capacitive Switches

Overview

SENSORswitches are capacitive pushbuttons that are activated without pressure, using a hand or other parts of the body. The buttons have a determinate sensing distance, which may be altered by varying the approach speed and/or damping factor. A quickly approaching finger will achieve a higher sensing distance than a slowly approaching finger. A hand, with its larger damping surface, will achieve a greater sensing distance than a finger at the same speed. The sensitivity of the buttons is specified by the electronic circuit and cannot be changed. All sensors are checked for consistent sensitivity values, which have been determined by long-standing experience.



Switch Type

Statio

- The output signal is continuously on as long as the sensor area is activated.

Dynamic

- The output signal length is limited to x milliseconds when the sensor area is activated.

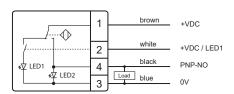
Toggle

- The output signal turns on when the sensor area is activated and stays on until the sensor area is activated again.

LED Control

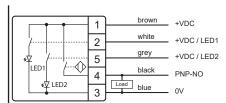
Semi-Automatic

Semi-Automatic (4-Pin) LED1 can be controlled separately. Ideal for when the system designer would like to display a flashing signal to prompt the user to activate and or touch the switch.



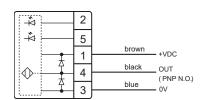
Manual

Manual (5-Pin) LED1 and LED2 can be controlled separately. Ideal for use when the user would like to show optical feedback acting like a signal indicator (e.g. CDL series or CML series indicator lights).



Automatic

Automatic (3-Pin) LED1 turns off and the LED2 lights up when the operating surface is touched. Ideal choice for all Human-Machine Interface (HMI) applications that require an intuitive and clearly visible status display.





CAPTRON 22mm IP69K Capacitive **Switches**













CHT1-158X-XX (Hygienic)

CHT1-XXXX-XX-CPM20

CHT1-159X-XX

CHT3-456X-X-XXXXX

CHT3-456X-X-XXXX

		22 n	nm IP69	OK Capa	citive Swi	tches, PN	P, N.O.				
Part Number	Price	LED Color (Idle/Active)	Switch Type	Diameter mm	LED Control	Legend	Symbol Illuminated	Connection (M8)	Agency Approvals	Weight Ibs	Drawing Link
CHT1-158B-30	\$104.00			40.0 mm	Manual	-		5-pole		0.09	<u>PDF</u>
CHT1-158B-30-CPM20	\$129.00			28.5 mm	iviaituai	-		J-pole		0.07	<u>PDF</u>
CHT1-158P-30	\$85.00			40.0 mm	Semi-automatic	-		4-pole		0.08	PDF
CHT1-158P-30-CPM20	\$85.00		Static		Semi-automatic	-		4-poie		0.06	<u>PDF</u>
CHT1-159B-29	Retired		Static		Manual	START		5-pole		0.07	PDF
CHT1-159B-30	Retired				Wallual	-		э-роге		0.06	PDF
CHT1-159P-29	Retired				Cami autamatia	START		4 nole		0.05	PDF
CHT1-159P-30	\$70.00			28.5 mm	Semi-automatic	-		4-pole		0.05	PDF
CHT12-159B-30	\$93.00				Manual -	-		5-pole		0.06	PDF
CHT12-159B-64	\$93.00		Tanala			START/STOP				0.06	PDF
CHT12-159P-30	\$81.00		Toggle		Cami autamatia	-		4 note		0.05	PDF
CHT12-159P-64	\$81.00	radlaraan			Semi-automatic	START/STOP	No	4-pole	CE. CSA	0.05	PDF
CHT3-456B-29-TGSR	\$152.00	red/green	Dynamic			START	INO		CE, CSA	0.22	PDF
CHT3-456B-29-TGSRS	\$152.00		Static			START				0.22	PDF
CHT3-456B-30-TGSR	\$152.00		Dynamic		Manual	-				0.22	PDF
CHT3-456B-30-TGSRS	\$152.00		Static		Manual	-		5-pole		0.22	PDF
CHT3-456B-H-TGSR	\$152.00		Dynamic			Hand Symbol				0.22	PDF
CHT3-456B-H-TGSRS	\$152.00		Static	60.0		Hand Symbol				0.22	PDF
CHT3-456P-29-TGSR	\$133.00		Dynamic	60.0 mm		START				0.22	PDF
CHT3-456P-29-TGSRS	\$133.00		Static			START				0.22	PDF
CHT3-456P-30-TGSR	\$133.00		Dynamic		0	-		4 1		0.22	PDF
CHT3-456P-30-TGSRS	\$133.00		Static		Semi-automatic	-		4-pole		0.22	PDF
CHT3-456P-H-TGSR	\$133.00		Dynamic			Hand Symbol				0.22	PDF
CHT3-456P-H-TGSRS	\$133.00		Static			Hand Symbol				0.22	<u>PDF</u>

Purchase cable separately.

CAPTRON 50 and 60mm IP69K Capacitive **Switches C** € ∰







CHT3-15XX-XX-XXXX

CHT4-25XX-XX-XXXX

CHT4-25XX-X-XXXX

*50	and 6	0mm IP6	9K Cap	acitiv	e Switch	nes (Re	quire AR	3 or AR4	Cover F	Ring)		
Part Number	Price	LED Color (Idle/Active)	Switch Type	Barrel Size mm	Diameter (w/Cover ring) mm	LED Control	Legend	Symbol Illuminated	Connection (M8)	Agency Approvals	Weight Ibs	Drawing Link
CHT3-15XB-29-TGSR	\$137.00		Dynamic				START					PDF
CHT3-15XB-29-TGSRS	\$137.00		Static				START					<u>PDF</u>
<u>CHT3-15XB-30-TGSR</u>	\$137.00		Dynamic			Manual	-	No	5-pole			<u>PDF</u>
CHT3-15XB-30-TGSRS	\$137.00		Static			Manual	-					<u>PDF</u>
CHT3-15XB-H-TGSR	\$137.00		Dynamic				Hand Symbol					<u>PDF</u>
CHT3-15XB-H-TGSRS	\$137.00		Static	50.0	88.0 mm		Hand Symbol				0.18	PDF
<u>CHT3-15XP-29-TGSR</u>	\$127.00		Dynamic	mm	00.0 111111		START			CE, CSA	0.10	PDF
CHT3-15XP-29-TGSRS	\$127.00		Static				START					<u>PDF</u>
<u>CHT3-15XP-30-TGSR</u>	\$127.00	rod/aroon	Dynamic			Semi-	-		4-pole			<u>PDF</u>
CHT3-15XP-30-TGSRS	\$127.00	red/green	Static			automatic	-					PDF
CHT3-15XP-H-TGSR	\$127.00		Dynamic				Hand Symbol					<u>PDF</u>
CHT3-15XP-H-TGSRS	\$127.00		Static				Hand Symbol					<u>PDF</u>
CHT4-25XB-29-TGSR	\$175.00						START					PDF
CHT4-25XB-30-TGSR	\$175.00					Manual	-		5-pole			PDF
CHT4-25XB-H-TGSR	\$175.00		Dimami-	60.0	100.0 mm		Hand Symbol				0.21	PDF
CHT4-25XP-29-TGSR	\$137.00		Dynamic mm	100.0 mm		START				0.21	<u>PDF</u>	
CHT4-25XP-30-TGSR	\$137.00					Semi- automatic	-		4-pole			PDF
CHT4-25XP-H-TGSR	\$137.00					automatio	Hand Symbol					<u>PDF</u>

^{*}Purchase cable separately.

CAPTRON Capacitive Switches Specifications

	Specifications												
Part Number	Supply Voltage	Output	Output Pulse	Load Current	Current Consumption	Operating Temperature	Storage Temperature	IP Rating	Material				
CHT1			Continuous when actuated			-30 to70°C	-35 to 75°C		CHT1-158 Plastic and				
CHT12	10–30 VDC	DND N O	Toggle	Max 400mA	Max 20mA @24V	[-22 to158°F]	[-31 to 167°F]	- IP69K	Stainless Steel CHT1-159 and CHT12 Plastic and Aluminum				
CHTX-XXXX-XX-TGSR	24VDC	PNP-N.O.	Approx. 300ms			-30 to 80°C [-22 to176°F]	-35 to 85°C		CHT3-456X Plastic and Delrin				
CHTX-XXXX-XX-TGSRS	(21.6–26.4 V)		Continuous when actuated		Max 30mA @24V	0 to 55°C [32 to131°F]	[-31 to 185°F]		CHT3-15XX and CHT4 Plastic and Polycarbonate				

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CAPTRON Cover Rings and Indicator Lights

AR3 Cove	r Ring	(Fits	All CHT3 Switches)
Part Number	Price	Color	Image
<u>AR3-1X0</u>	\$24.50	Red	
<u>AR3-1X1</u>	\$24.50	Green	
AR3-1X5	\$24.50	Yellow	
<u>AR3-1X6</u>	\$24.50	Black	0

AR4 Cover	Ring (Fits A	II CHT4 Switches)
Part Number	Price	Color	Image
<u>AR4-BX0</u>	\$24.50	Red	
<u>AR4-BX1</u>	\$24.50	Green	
<u>AR4-BX5</u>	\$24.50	Yellow	
AR4-BX6	\$24.50	Black	0

	*IP6K 22mm CDL and CML Series IP69K Indicator Lights													
Part Number	Price	Color	Material	Supply Voltage	Load Current	Current Consumption	Operating Temperature	Storage Temperature	Agency Approvals	Weight lbs	Drawing Links			
CDL1-158-30-GR	\$76.00	Pod/groop	Plastic And Stainless Steel			Max 20mA	-20 to 50°C [-4 to 122°F]	-25 to 55°C [-13 to 131°F]	CE, CSA	0.08	PDF			
CDL1-159-30-GR	\$52.00	Red/green	Plastic And Aluminum 24VDC	24VDC	Max	@24V				0.05	PDF			
CML1-158-30	\$79.00	Red/yellow/ green/blue/	Plastic And Stainless Steel	[21.6–26.4 V]	400mA	Max 30mA			OE, OSA	0.08	<u>PDF</u>			
CML1-159-30	\$53.00	white/orange/ violet	Plastic And Aluminum			@24V				0.05	PDF			

^{*}Purchase cable separately.



CDL1-158-30-GR CML1-158-30 (Hygienic)





CAPTRON CANEO Series 10 Standard Capacitive Switches







IO-Link

CS10KMLDT-C12-00AE

CS10KMLDT-C20-00BB

CS10KMLDT-B14-054A

		*22mm	Series10	Standard	Capacitiv	e Switche	es		
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link
CS10KMLDT-C10-00A6	\$63.00		Dynamic					Approx. 300ms	PDF
CS10KMLDT-C10-00A7	\$63.00	green/red	Static		START			Continuous when actuated	PDF
CS10KMLDT-C11-0543	\$63.00		Dynamic					Approx. 300ms	PDF
CS10KMLDT-C11-0547	\$63.00	red/green	Static		STOP			Continuous when actuated	PDF
CS10KMLDT-C12-00AE	\$63.00		Dynamic					Approx. 300ms	PDF
CS10KMLDT-C12-00AF	\$63.00	green/red	Static	Semi-automatic	ON/OFF		4-pole	Continuous when actuated	PDF
CS10KMLDT-C12-00B0	\$63.00		Toggle	Ocini-automatic		N.	4-μοιε	Toggle	PDF
CS10KMLDT-C16-0548	\$63.00	red/green			Power Symbol	No		Continuous when	PDF
CS10KMLDT-C16-0549	\$63.00		Static					actuated	PDF
CS10KMLDT-C17-00B7	\$63.00		Dynamic					Approx. 300ms	PDF
CS10KMLDT-C17-00B8	\$63.00		Static		START			Continuous when actuated	PDF
CS10KMLDT-C20-00BB	\$63.00		Dunania					Anney 200ma	PDF
CS10KMLDT-C20-00BC	\$63.00	green/red	Dynamic	Manual			5-pole	Approx. 300ms	PDF
CS10KMLDT-C20-00BD	\$63.00		Static	Semi-automatic	-		4-pole	Continuous when	PDF
CS10KMLDT-C20-00BE	\$63.00		Static	Manual			5-pole	actuated	PDF
CS10KMLDT-B10-00C7	\$63.00		Dynamic					Approx. 300ms	PDF
CS10KMLDT-B10-00C8	\$63.00		Static		START			Continuous when actuated	PDF
CS10KMLDT-B11-00C9	\$63.00	rod/groop	Dynamic	Semi- automaticSemi-	STOP	Yes	4-pole	Approx. 300ms	PDF
CS10KMLDT-B11-00CA	\$63.00	red/green		automatic	3108				PDF
CS10KMLDT-B14-054A	\$63.00	green/red	Static		Power Symbol			Continuous when actuated	PDF
CS10KMLDT-B14-054B	\$63.00	red/green			rower Symbol				PDF

^{*}Purchase cable separately.

22mm Series10 Standard Capacitive Switches											
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link		
CS10KMMDU-B13-092D	\$63.00	blue/off	dynamic	automatic	RESET	Yes		Approx. 300ms	PDF		
CS10KMMDU-B14-0A5F	\$63.00	green/red	static	semi-automatic	Power Symbol	No	7.87in (200mm) pigtail	Continuous when actuated	PDF		
CS10KMMDU-C20-0793	\$63.00	3	dynamic		-	Yes	pigtali	Approx. 300ms	PDF		
Note: An additional pigtail connection makes these part numbers distinguishable from other parts in this series.											

CAPTRON CANEO Series 10 Standard **Capacitive Switches**

22mm Series10 Standa	ard Capacitive Switches Specifications
Supply Voltage	24VDC [8.4 to 32V]
Output	PNP-N.O.
Load Current	Max 200mA
Current Consumption	Max 40mA @24V
Operating Temperature	-30 to 65°C [-22 to 149°F]
Storage Temperature	-30 to 65°C [-22 to 149°F]
IP Rating	IP69K
Material	Housing: Polycarbonate (PC) Switch surface: Polycarbonate (PC)
Weight (lbs)	0.1
Agency Approvals	CE, CSA



IO-Link Specifications						
IO-Link	v1.1					
Port Speed	COM2					
SIO Supported	Yes					
ISDU Supported	Yes					
Data Storage	Yes					
Block Parameter	No					

Wiring Diagrams

Plug M12, 4-pin

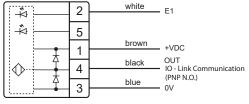


4-pin





5-pin



General safety

All work on electrical systems or operating equipment may only be carried out by a specially qualified electrician according to the applicable electrotechnical regulations.

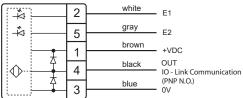
The safety of the system in which the SENSORswitch is integrated is the responsibility of the operator.

WARNING

Improper work on electrical systems!

Electric shock can result in death or life-threatening injuries.

- Before working on electrical systems, disconnect them from their voltage supply and secure them against being
- Wear appropriate personal protective equipment (PPE).



CAPTRON CANEO Series 10 Hygienic Capacitive Switches

Overview

MEETS THE HIGHEST OF HYGIENE STANDARDS AS THE FIRST EHEDG-CERTIFIED SWITCH

The CANEO Series10 Hygienic is the first EHEDG-certified switch (European Hygienic Engineering and Design Group). It also meets FDA requirements, making it perfect for all industries with high requirements for hygienic cleaning, such as the food & beverages and medicine & pharmaceuticals sectors.







IO-Link

CS10HMSDT-C20-030B

CS10HMSDT-B14-0475

		*22m	m Serie	s10 Hygier	nic Capacit	ive Switch	ies		
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection (M12)	Output Pulse	Drawing Link
CS10HMSDT-C10-02F1	\$85.00		Dynamic					Approx. 300ms	PDF
CS10HMSDT-C10-02F2	\$85.00	green/red	Static		START			Continuous when actuated	<u>PDF</u>
CS10HMSDT-C11-054C	\$85.00		Dynamic	Semi-automatic				Approx. 300ms	PDF
CS10HMSDT-C11-054D	\$85.00	red/green	Static		STOP			Continuous when actuated	<u>PDF</u>
CS10HMSDT-C12-02F9	\$85.00		Dynamic		ON/OFF Power Symbol START		4-pole	Approx. 300ms	PDF
CS10HMSDT-C12-02FA	\$85.00	green/red	Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C12-02FB	\$85.00		Toggle			No		Toggle	PDF
CS10HMSDT-C16-0469	\$85.00		Static					Continuous when	PDF
CS10HMSDT-C16-054E	\$85.00	red/green	Static					actuated	PDF
CS10HMSDT-C17-0306	\$85.00		Dynamic					Approx. 300ms	PDF
CS10HMSDT-C17-0307	\$85.00		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C17-030A	\$85.00		Dynamic	Manual			5-pole	Approx. 300ms	PDF
CS10HMSDT-C20-030B	\$85.00	green/red	Static	Semi-automatic			4-pole	Continuous when	PDF
CS10HMSDT-C20-020C	\$85.00		Static	Manual			5-pole	actuated	PDF
CS10HMSDT-B10-0314	\$85.00		Dynamic					Approx. 300ms	PDF
CS10HMSDT-B10-0315	\$85.00		Static		START			Continuous when actuated	<u>PDF</u>
CS10HMSDT-B11-0316	\$85.00	red/green	Dynamic	Semi-automatic	STOP	Yes	4-pole	Approx. 300ms	PDF
CS10HMSDT-B11-0473	\$85.00	reu/green	Static		3105			Continuous when	PDF
CS10HMSDT-B14-0475	\$85.00	green/red	Static		Power Symbol			actuated	PDF

22mm Series10 Hygienic Capacitive Switches												
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link			
CS10HMODU-C16-0A60	\$85.00	green/red		Semi-automatic	Power Symbol	Yes			PDF			
CS10HMODU-C19-0A3F	\$85.00	teal/red	Static	Automatic	RESET	NI-	7.87in (200mm) pigtail	Continuous when actuated	PDF			
CS10HMODU-C20-0A61	\$85.00	green/red		Semi-automatic	-	No	pigtan	dottatiod	PDF			
ote: An additional pigtail connection makes these part numbers distinguishable from other parts in this series.												

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CAPTRON CANEO Series 10 Hygienic Capacitive Switches

22mm Series10 Hygienic Capacitive Switches Specifications						
Supply Voltage	24VDC [8.4 to 32V]					
Output	PNP-N.O.					
Load Current	Max 200mA					
Current Consumption	Max 40mA @24V					
Operating Temperature	-30 to 65°C [-22 to 149°F]					
Storage Temperature	-30 to 65°C [-22 to 149°F]					
IP Rating	IP69K					
Material	Housing: Stainless Steel (V4A) Switch surface:Polycarbonate (PC)					
Weight (lbs)	0.1					
Agency Approvals	CE, CSA					









IO-Link Specifications				
IO-Link	v1.1			
Port Speed	COM2			
SIO Supported	Yes			
ISDU Supported	Yes			
Data Storage	Yes			
Block Parameter	No			

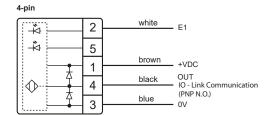
Wiring Diagrams

Plug M12, 4-pin



Plug M12, 5-pin





WARNING



Improper work on electrical systems! Electric shock can result in death or life-threatening injuries.

- Before working on electrical systems, disconnect them from their voltage supply and secure them against being switched on again.
- Work on electrical installations should be carried out only by qualified personnel in compliance with local and national electrical regulations and specifications.

Intended use

The SENSORswitch is intended for use in accordance with the items listed here, the values from the "Technical specifications" chapter and the product description.

CAPTRON CANEO Series 10 Stainless Steel Capacitive Switches







IO-Link

CS10SMTDT-C12-044C

CS10SMTDT-C20-0453

CS10SMTDT-B14-045E

		*22mm	Series1	0 Stainless	Steel Cap	acitive Sw	itches												
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection (M12)/	Output Pulse	Drawing Link										
CS10SMTDT-C10-0448	\$78.00		Dynamic					Approx. 300ms	PDF										
CS10SMTDT-C10-0449	\$78.00	green/red	Static		START			Continuous when actuated	PDF										
CS10SMTDT-C11-054F	\$78.00		Dynamic					Approx. 300ms	<u>PDF</u>										
CS10SMTDT-C11-0550	\$78.00	red/green	Static		STOP			Continuous when actuated	<u>PDF</u>										
CS10SMTDT-C12-044C	\$78.00		Dynamic					Approx. 300ms	<u>PDF</u>										
<u>CS10SMTDT-C12-044D</u>	\$78.00	green/red	Static	Semi-automatic	ON/OFF		4-pole	Continuous when actuated	<u>PDF</u>										
CS10SMTDT-C12-044E	\$78.00]	Toggle			,		Toggle	PDF										
CS10SMTDT-C16-044F	\$78.00		Static		Power Symbol			Continuous when actuated	PDF										
CS10SMTDT-C16-0551	\$78.00	red/green	Static						<u>PDF</u>										
CS10SMTDT-C17-0451	\$78.00		Dynamic					Approx. 300ms	PDF										
CS10SMTDT-C17-0452	\$78.00		Static		START			Continuous when actuated	<u>PDF</u>										
CS10SMTDT-C20-0453	\$78.00		Dynamic					Approx. 300ms	PDF										
CS10SMTDT-C20-0454	\$78.00	green/red	Manual Semi-automatic	Manual	_		5-pole	Approx. 300ms	<u>PDF</u>										
CS10SMTDT-C20-0455	\$78.00	greenined		Ctotio	Statio	Static	Static	Static	Static	Static	Static	Static	Statio	Statio	Semi-automatic			4-pole	Continuous when
CS10SMTDT-C20-0456	\$78.00		Static	Manual				actuated	<u>PDF</u>										
CS10SMTDT-B10-0457	\$78.00		Dynamic					Approx. 300ms	<u>PDF</u>										
CS10SMTDT-B10-0458	\$78.00		Static		START		4-pole	Continuous when actuated	<u>PDF</u>										
CS10SMTDT-B11-045B	\$78.00	red/green	Dynamic	Semi-automatic	STOP	Yes		Approx. 300ms	<u>PDF</u>										
CS10SMTDT-B11-045C	\$78.00	reu/green			3105				PDF										
CS10SMTDT-B14-045E	\$78.00	green/red	Static		Power Symbol			Continuous when actuated	PDF										
CS10SMTDT-B14-0460	\$78.00	red/green			i owei oyiiiboi				PDF										

^{*}Purchase cable separately.

CAPTRON CANEO Series 10 Stainless **Steel Capacitive Switches**

22mm Series10 Stainless	Steel Capacitive Switches Specifications
Supply Voltage	24VDC [8.4 to 32V]
Output	PNP-N.O.
Load Current	Max 200mA
Current Consumption	Max 40mA @24V
Operating Temperature	-30 to 65°C [-22 to 149°F]
Storage Temperature	-30 to 65°C [-22 to 149°F]
IP Rating	IP69K
Material	Housing: Stainless Steel (V4A) Switch surface: Polycarbonate (PC)
Weight (lbs)	0.1
Agency Approvals	CE, CSA

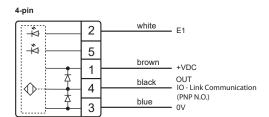


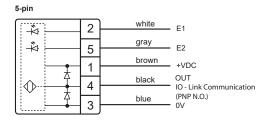
IO-Link Specifications				
IO-Link	v1.1			
Port Speed	COM2			
SIO Supported	Yes			
ISDU Supported	Yes			
Data Storage	Yes			
Block Parameter	No			

Wiring Diagrams

Plug M12, 4-pin







CAPTRON CANEO Series41 and Series40 Standard Capacitive Switches







IO-Link

CS41KCRBK-P10-01E7

CS41KCRBK-P11-029F

CS41KCRBK-P20-0253

	*22mm Series41 and Series40 Standard Capacitive Switches								
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link
CS40KMSBN-P20-063A	\$171.00			Automatic	-				PDF
CS40KMSBN-P10-05BC	\$171.00			Semi-automatic			3-pole		PDF
CS41KCRBK-P10-01E7	\$152.00			Automatic	Lland Cumbal				PDF
CS41KCRBK-P10-029A	\$152.00	aroon/rod		Semi-automatic	Hand Symbol		4-pole		PDF
CS41KCRBK-P10-029B	\$152.00	green/red		Manual			5-pole		PDF
CS41KCRBK-P11-029F	\$152.00			Automatic			4-pole	Approx. 300ms	PDF
CS41KCRBK-P11-02A0	\$152.00			Semi-automatic	Power Symbol		4-pole		PDF
CS41KCRBK-P11-02A1	\$152.00			Manual			5-pole		PDF
CS41KDMBL-P11-0552	\$152.00			Automatic			3-pole		PDF
CS41KDMBL-P11-0553	\$152.00		Dunamia	Semi-automatic		No	No 4-pole		PDF
CS41KDMBL-P11-0554	\$152.00		Dynamic	Manual		NU	5-pole		PDF
CS41KDMBL-P12-0555	\$152.00	red/green		Automatic			3-pole		PDF
CS41KDMBL-P12-0556	\$152.00			Semi-automatic	STOP		4-pole		PDF
CS41KDMBL-P12-0557	\$152.00			Manual			5-pole		PDF
CS41KCRBK-P13-02AB	\$152.00			Automatic			3-pole		PDF
CS41KDMBL-P13-0591	\$152.00			Semi-automatic	START		4-pole		PDF
CS41KDMBL-P13-0594	\$152.00	aro on /ro cl		Manual			5-pole		PDF
CS41KCRBK-P20-0253	\$152.00	green/red		Automatic			3-pole		PDF
CS41KDMBL-P20-0595	\$152.00			Semi-automatic	-		4-pole		PDF
CS41KDMBL-P20-0596	\$152.00			Manual			5-pole		PDF

^{*}Purchase cable separately.

CAPTRON CANEO Series41 and Series40 **Standard Capacitive Switches**

22mm Series41 and Series40 Standard Capacitive Switches Specifications						
Supply Voltage	24VDC [19.2 to 28.8 V]					
Output	PNP-N.O.					
Load Current	Max 200mA					
Current Consumption	Max 90mA @24V					
Operating Temperature	-25 to 50°C [-13 to 122°F]					
Storage Temperature	-25 to 50°C [-13 to 122°F]					
IP Rating	IP69K					
Material	Housing : Polycarbonate (PC) Switch surface Polycarbonate (PC)					
Weight (lbs)	0.1					
Agency Approvals	CE, CSA					



IO-Link Specifications					
IO-Link	v1.1				
Port Speed	COM2				
SIO Supported	Yes				
ISDU Supported	Yes				
Data Storage	Yes				
Block Parameter	No				

Wiring Diagrams



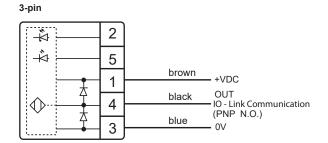
Plug M12, 4-pin

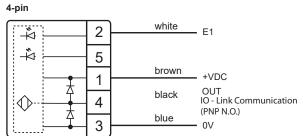
Plug M12, 5-pin

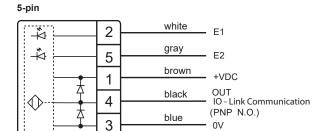














CAPTRON CANEO Series41 and Series40 **Standard Display Capacitive Switches**







CD41KCRBK-P20-0254

*Series41 and Series40 Standard Display Capacitive Switches														
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Output Pulse	Connection	Agency Approvals	Weight (lbs)	Drawing Link			
CD40KMSBN-P20-050F	\$188.00	teal/red	Static	Automatic			Continuous when actuated	3-pole			<u>PDF</u>			
CD41AARBK-P20-0256	\$273.00				Automatic				3-pole			PDF		
CD41KCRBK-P20-0254	\$183.00	green/red	green/red D					-	No	Approx		CE, CSA	0.25	PDF
CD41KCRBK-P20-0597	\$183.00			Dynamic	Dynamic	nic Semi- automatic			300ms	4-pole			PDF	
CD41KCRBK-P20-0598	\$183.00			Manual				5-pole			PDF			

^{*}Purchase cable separately.

	Series41 and Series40 Standard Display Capacitive Switches Specifications							
Supply Voltage	Output	Output Pulse	Load Current	Current Consumption	Operating Temperature	Storage Temperature	IP Rating	Material
24VDC [19.2 to 28.8 V]	PNP - N.O.	Approx. 300ms	Max 200mA	Max 90mA @24V	-25 to 50°C [-13 to 122°F]	-25 to 50°C [-13 to 122°F]	IP69K	Housing: Polycarbonate [PC] Switch surface: Polycarbonate [PC]

Wiring Diagrams

Plug M12, 3-pin

Plug M12, 4-pin

Plug M12, 5-pin

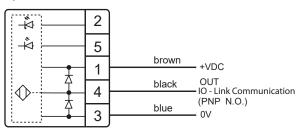




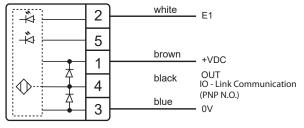


IO-Link Specifications					
IO-Link	v1.1				
Port Speed	COM2				
SIO Supported	Yes				
ISDU Supported	Yes				
Data Storage	Yes				
Block Parameter	No				

3-pin







5-pin

