F- Fuji Electric Command 22mm Buzzers







DR22B5-HB

Command 22mm Buzzers									
Part Number	Qty	Price	Drawing Link	Sound Type	Sound Level LED Indicato		Operating Voltage		
DR22B8-EB	1	\$35.00	PDF	Intermittent/continuous	80dB @ 0.1 m 60dB @ 1m		12-24V AC/DC		
DR22B8-HB	1	\$35.00	PDF	electronic sound		_	100-110VAC		
DR22B5-EB	1	\$48.00	PDF	Intermittent/continuous	90dB @ 0.1 m	Dad	12-24V AC/DC		
DR22B5-HB	1	\$48.00	PDF	electronic sound	70dB @ 1m	Red	100-110VAC		

Specifications								
	DR22B5	DR22B8						
Rated insulation voltage	Without transformer: 60V AC/DC With transformer: 250VAC							
Durability	1000h							
Frequency	2.4 to 3.3 kHz							
Intermittent cycle	Approx. 1	70-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 mr Constant: 16.7 Hz, double amplitude 3.0 mm							
Shock	Mechanical durability: 500 m/s ²							
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

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	30-45 N – Emergency stop pushbuttons Less than 100N							
Positive opening operation	All functions in	corporating a N.C. contact are positive-opening	ng operation.						
Dielectric strength	2,500VAC, 1 minute (w/o transformer 2000VAC)	2000VAC, 1 minute (Pilot light with t	ransformer: 2500 VAC, 1minute)						
Insulation resistance		100M Ω or more (500VDC megger)							
Rated impulse dielectric strength	6kV	6kV –							
Conditional short-circuit current	10	00A	_						
Short-circuit protective device	Fuse 15A (recommended, not supplied)	Fuse 1A (recommended, not supplied)	_						
Pollution degree	3								
Vibration	Resonance: 10 to 55Hz, dou	tz, double amplitude 3mm							
Shock	Malfunction durability: 100 m/s² **	Mechanical durability: 500 m/s ²	Mechanical durability: 500 m/s ²						
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	Self	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 600VAC)						
Materials	Enclosure: Polyamide / Contacts: silver, nickel								
Standards	UL 508, CSA C22.2, No.14, TUV - EN60947-5-1								
* Emergancy stop type; 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)

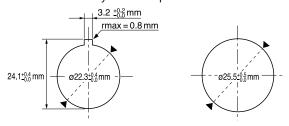
^{**} Emergency stop type: 150 m/s² ***Illuminated type without transformer

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.



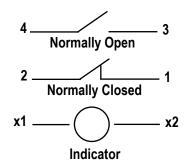
Note: If key washer or legend plate is not used, 3.2 mm-wide location holes do not need to be cut out.

[•] Key type 10,000



Control Circuit Contact Electrical Ratings and Wiring

Typical Wiring



NEMA Mechanical Switching Ratings and Test Values for DC Control Circuit Contacts									
October Barrier	Thermal	Maximum							
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 Mechanical Switching Ratings and Test Values for AC Control Circuit Contacts											
Contact Rating Designation	Thermal Continuous Test Current (A)	Maximum AC Current, 50/60Hz (A)								Vall amazara	
		120 Volts		240 Volts		480 Volts		600 Volts		Volt amperes	
		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.

www.automationdirect.com

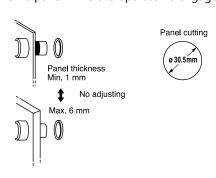
Fuji Electric 22mm Pilot Devices Overview

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



AR22V0R-01R

Illuminated Pushbuttons



AR22F0L-10E3YZA

Selector Switches



AR22PR-210BZA

Pilot Lights



DR22E3L-E3SZA

Buzzers



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.

1N.O. Blue, 1N.C. Red

Lamp terminal and transformer unit: black

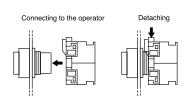


Short depth

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

Quick contact block and transformer replacement

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).













