



Wiring Accessories

Single Insulated Wire Ferrules

These tin-plated copper single insulated ferrules are designed to accommodate conductors with cross-sections ranging from 20AWG to 1AWG (0.5 to 50 mm²). Tolerances according to DIN 46228 part 4.

- Heat resistant from -5 to 105°C [23 to 221°F]
- CE / RoHS 2011/65/EU
- UL E333905
- CSA-US 1176867
- Insulating Collar: Polypropylene-fluoropolymer
- Tube: Copper (Cu-DHP)
- Tin Plating: Galvanically tin-plated, bright finish



Single Insulated Wire Ferrules											
Part Number		Cross Section		Dimensions [mm]						Qty	Price
Standard	DIN	AWG	mm ²	L1	L2	D1	D2	S1	S2		
V30AE000006	V30AE000038	20	0.5	14	8	1	2.6	0.15	0.25	500	\$7.25
V30AE000009	V30AE000041	18	0.75	14	8	1.2	2.8	0.15	0.25	500	\$7.25
V30AE000013	V30AE000045	18	1.0	14	8	1.4	3.0	0.15	0.25	500	\$7.25
V30AE000016	V30AE000048	16	1.5	14	8	1.7	3.5	0.15	0.25	500	\$7.25
V30AE000017	V30AE000049	16	1.5	16	10	1.7	3.5	0.15	0.25	500	\$12.00
V30AE000052	V30AE000052	14	2.5	15	8	2.2	4.2	0.15	0.25	500	\$9.00
V30AE000053	V30AE000053	14	2.5	19	12	2.2	4.2	0.15	0.25	500	\$14.00
V30AE000055	V30AE000055	12	4	18	10	2.8	4.8	0.2	0.3	500	\$13.00
V30AE000056	V30AE000056	12	4	20	12	2.8	4.8	0.2	0.3	500	\$16.50
V30AE000025	V30AE000058	10	6	20	12	3.5	6.3	0.2	0.3	100	\$3.50
V30AE000026	V30AE000059	10	6	26	18	3.5	6.3	0.2	0.3	100	\$4.75
V30AE000027	V30AE000060	8	10	22	12	4.5	7.6	0.2	0.4	100	\$4.75
V30AE000028	V30AE000061	8	10	28	18	4.5	7.6	0.2	0.4	100	\$5.25
V30AE000029	V30AE000062	6	16	22	12	5.8	8.8	0.2	0.4	100	\$5.25
V30AE000030	V30AE000063	6	16	28	18	5.8	8.8	0.2	0.4	100	\$8.00
V30AE000031	V30AE000064	4	25	30	16	7.3	11.2	0.2	0.4	50	\$6.50
V30AE000033*	V30AE000067	2	35	30	16	8.3	12.7	0.2	0.4	50	\$8.50
V30AE000035	V30AE000070	1/0	50	36	20	10.3	15	0.3	0.5	50	\$12.00

* Not UL Certified

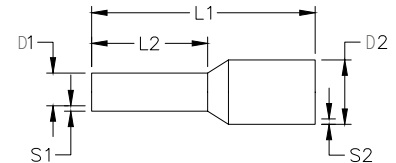
Twin Insulated Wire Ferrules

These tin-plated copper twin insulated ferrules are designed to accommodate conductors with cross-sections ranging from 20 AWG to 6 AWG (0.5 to 16 mm²). Tolerances according to DIN 46228 part 4.

- Heat resistant from -5 to 105°C [23 to 221°F]
- CE / RoHS 2011/65/EU
- UL E333905
- CSA-US 1176867
- Insulating Collar: Polypropylene-fluoropolymer
- Tube: Copper (Cu-DHP)
- Tin Plating: Galvanically tin-plated, bright finish

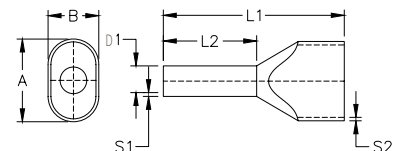


Available Colors	
Orange	White
Blue	Ivory
Black	Green
Gray	Brown
Yellow	Beige
Red	Olive



Twin Insulated Wire Ferrules												
Part Number		Cross Section		Dimensions [mm]							Qty	Price
Standard	DIN	AWG	mm²	L1	L2	D1	S1	S2	A	B		
V30AE001134	V30AE001145	2 x 20	2 x 0.5	14	8	1.4	0.15	0.3	5	3	500	\$17.50
V30AE000606	V30AE000607	2 x 18	2 x 0.75	14	8	1.7	0.15	0.3	5.5	3	500	\$18.00
V30AE000733	V30AE000734	2 x 18	2 x 0.75	16	10	1.7	0.15	0.3	5.5	3	500	\$22.00
V30AE000608	V30AE000609	2 x 18	2 x 1	15	8	2	0.15	0.3	5.8	3.2	500	\$18.00
V30AE000735	V30AE000736	2 x 18	2 x 1	19	12	2	0.15	0.3	5.8	3.2	500	\$22.00
V30AE000623	V30AE000625	2 x 16	2 x 1.5	16	8	2.2	0.15	0.3	6.5	3.6	500	\$18.00
V30AE000737	V30AE000738	2 x 16	2 x 1.5	20	12	2.2	0.15	0.3	6.5	3.6	500	\$22.00
V30AE000611	V30AE000611	2 x 14	2 x 2.5	19	10	2.8	0.15	0.4	8	4.5	500	\$20.00
V30AE000748	V30AE000748	2 x 14	2 x 2.5	21	12	2.8	0.15	0.4	8	4.5	100	\$4.25
V30AE001148	V30AE001148	2 x 12	2 x 4	22	12	3.5	0.2	0.5	9	5.2	100	\$10.50
V30AE001139	V30AE001150	2 x 10	2 x 6	23	12	4.5	0.2	0.5	11.4	6.2	100	\$12.00
V30AE001141	V30AE001152	2 x 8	2 x 10	24	12	5.8	0.2	0.5	13.4	7.6	100	\$16.00
V30AE001143	V30AE001154	2 x 6	2 x 16	29	16	8.3	0.3	0.6	17.2	9.5	50	\$9.75

Available Colors		
Orange	Green	Gray
Blue	Ivory	Yellow
Black	Red	White



Crimp Terminals

Partially insulated crimp terminals are constructed from high quality tin-plated copper and PVC. Heat resistant from -4°F [-20°C] up to +167°F [+75°C]. Flammability classification UL 94-V0.

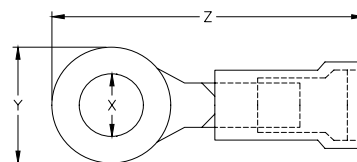


- Insulation: polyvinyl chloride
- Sleeve material: copper

Ring Terminals



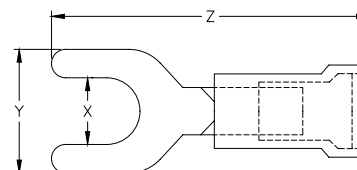
Partially Insulated PVC Ring Terminals							
Part Number	Cross Section		Dimension [mm]			Qty	Price
	AWG	mm ²	X	Y	Z		
V70RK004004	20 - 18	0.5 - 1	4.0	8.0	22.2	100	\$10.50
V70RK004005	20 - 18	0.5 - 1	5.0	8.0	22.2	100	\$10.50
V70RK004011	16 - 14	1.5 - 2.5	4.0	8.6	23.0	100	\$11.00
V70RK004012	16 - 14	1.5 - 2.5	5.0	8.6	23.0	100	\$12.00
V70RK004017	12 - 10	4 - 6	4.0	9.5	26.9	100	\$17.50
V70RK004018	12 - 10	4 - 6	5.0	9.5	26.9	100	\$17.50



Fork Terminals



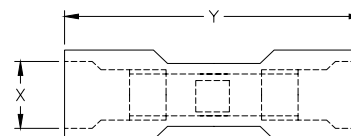
Partially Insulated PVC Fork Terminals							
Part Number	Cross Section		Dimension [mm]			Qty	Price
	AWG	mm ²	X	Y	Z		
V70GK004003	20 - 18	0.5 - 1	4.0	7.3	22.3	100	\$10.50
V70GK004004	20 - 18	0.5 - 1	5.0	8.0	21.7	100	\$11.00
V70GK004008	16 - 14	1.5 - 2.5	4.0	7.3	22.3	100	\$10.50
V70GK004009	16 - 14	1.5 - 2.5	5.0	8.1	22.3	100	\$12.00
V70GK004011	12 - 10	4 - 6	4.0	9.1	25.8	100	\$16.00
V70GK004012	12 - 10	4 - 6	5.0	9.1	25.8	100	\$16.00



Butt Connectors



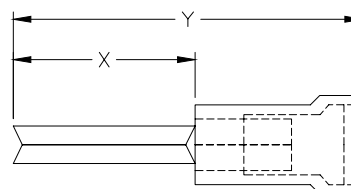
Fully Insulated PVC Butt Connectors						
Part Number	Cross Section		Dimension [mm]		Qty	Price
	AWG	mm ²	X	Y		
V70SV004001	20 - 18	0.5 - 1	5.4	26.0	100	\$11.00
V70SV004002	16 - 14	1.5 - 2.5	6.1	26.0	100	\$12.50
V70SV004003	12 - 10	4 - 6	8.0	26.0	100	\$18.00



Pin Terminals



Partially Insulated PVC Pin Terminals						
Part Number	Cross Section		Dimension [mm]		Qty	Price
	AWG	mm ²	X	Y		
V70SS004001	20 - 18	0.5 - 1	12.0	23.3	100	\$12.00
V70SS004002	16 - 14	1.5 - 2.5	12.0	23.4	100	\$12.50
V70SS004003	12 - 10	4 - 6	14.0	28.2	100	\$19.00



Note: Dimensions are approximate. Please visit our website www.AutomationDirect.com for complete engineering drawings.



Wiring Accessories

Disconnect Terminals

Disconnect terminals are constructed from copper-enhanced PVC and brass. Heat resistant from -4°F [-20°C] up to +167°F [+75°C]. Flammability classification UL 94-V0.

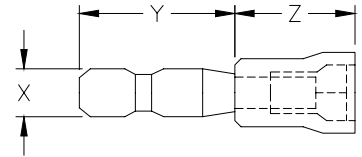
- Insulation: polyvinyl chloride strengthened with copper
- Sleeve material: brass



Male Bullet Disconnect Terminals



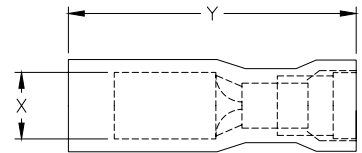
Partially Insulated Male Bullet Disconnect Terminals							
Part Number	Cross Section		Dimension [mm]			Qty	Price
	AWG	mm ²	X	Y	Z		
V70RS004001	20 - 18	0.5 - 1	4.0	11.3	9.8	100	\$9.75
V70RS004002	16 - 14	1.5 - 2.5	5.0	11.8	11.7	100	\$11.00
V70RS004003	12 - 10	4 - 6	5.0	11.0	10.2	100	\$12.50



Female Bullet Disconnect Terminals



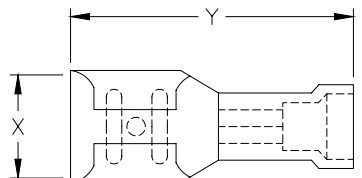
Fully Insulated Female Bullet Disconnect Terminals							
Part Number	Cross Section		Dimension [mm]		Qty	Price	
	AWG	mm ²	X	Y			
V70RV004001	20 - 18	0.5 - 1	4.0	23.9	100	\$12.50	
V70RV004002	16 - 14	1.5 - 2.5	5.0	23.9	100	\$12.50	
V70RV004003	12 - 10	4 - 6	5.0	27.8	100	\$22.50	



Partially Insulated PVC Female Disconnect Terminals



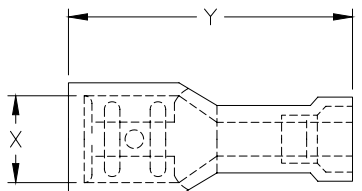
Partially Insulated Female Disconnect Terminals							
Part Number	Cross Section		Dimension [mm]		Qty	Price	
	AWG	mm ²	X	Y			
V70FH004001	20 - 18	0.5 - 1	2.8 x 0.5	19.5	100	\$9.25	
V70FH004002	20 - 18	0.5 - 1	2.8 x 0.8	18.8	100	\$9.25	
V70FH004003	20 - 18	0.5 - 1	4.8 x 0.5	19.5	100	\$9.25	
V70FH004004	20 - 18	0.5 - 1	4.8 x 0.8	19.5	100	\$9.25	
V70FH004005	20 - 18	0.5 - 1	6.3 x 0.8	20.9	100	\$10.50	
V70FH004006	16 - 14	1.5 - 2.5	2.8 x 0.5	18.8	100	\$9.75	
V70FH004007	16 - 14	1.5 - 2.5	2.8 x 0.8	18.8	100	\$9.75	
V70FH004008	16 - 14	1.5 - 2.5	4.8 x 0.5	19.5	100	\$9.75	
V70FH004009	16 - 14	1.5 - 2.5	4.8 x 0.8	19.5	100	\$9.75	
V70FH004010	16 - 14	1.5 - 2.5	6.3 x 0.8	20.9	100	\$11.00	
V70FH004011	12 - 10	4 - 6	6.3 x 0.8	23.8	100	\$18.00	



Fully Insulated PVC Female Disconnect Terminals



Fully Insulated Female Disconnect Terminals							
Part Number	Cross Section		Dimension [mm]		Qty	Price	
	AWG	mm ²	X	Y			
V70FV004003	20 - 18	0.5 - 1	2.8 x 0.5	18.6	100	\$12.00	
V70FV004004	20 - 18	0.5 - 1	2.8 x 0.8	18.6	100	\$12.00	
V70FV004005	20 - 18	0.5 - 1	4.8 x 0.5	20.4	100	\$12.50	
V70FV004006	20 - 18	0.5 - 1	4.8 x 0.8	20.3	100	\$12.50	
V70FV004001	20 - 18	0.5 - 1	6.3 x 0.8	22.5	100	\$12.50	
V70FV004007	16 - 14	1.5 - 2.5	4.8 x 0.5	18.8	100	\$12.50	
V70FV004008	16 - 14	1.5 - 2.5	4.8 x 0.8	20.5	100	\$12.50	
V70FV004002	16 - 14	1.5 - 2.5	6.3 x 0.8	22.5	100	\$14.00	
V70FV004009	12 - 10	4 - 6	6.3 x 0.8	24.2	100	\$22.00	



Note: Dimensions are approximate. Please visit our website www.AutomationDirect.com for complete engineering drawings.



Wiring Accessories

Disconnect Terminals

Disconnect terminals are constructed from copper-enhanced PVC and brass. Heat resistant from -4°F [-20°C] up to +167°F [+75°C]. Flammability classification UL 94-V0.

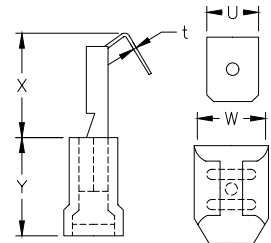
- Insulation: polyvinyl chloride strengthened with copper
- Sleeve material: brass



Partially Insulated Piggy Back Disconnect Terminals



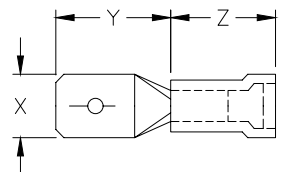
Piggy Back Disconnect Terminals									
Part Number	Cross Section		Dimension [mm]					Qty	Price
	AWG	mm ²	w	u	t	x	y		
V70FP004001	20 - 18	0.5 - 1	6.6	6.3	0.8	13.4	10.0	100	\$12.50
V70FP004002	16 - 14	1.5 - 2.5	6.6	6.3	0.8	13.4	11.0	100	\$12.50
V70FP004003	12 - 10	4 - 6	6.6	6.3	0.8	13.4	12.0	100	\$19.00



Partially Insulated PVC Male Disconnect Terminals



Partially Insulated Male Disconnect Terminals							
Part Number	Cross Section		Dimension [mm]			Qty	Price
	AWG	mm ²	X	Y	Z		
V70FS004001	20 - 18	0.5 - 1	2.8 x 0.5	8.0	10	100	\$9.25
V70FS004002	20 - 18	0.5 - 1	2.8 x 0.8	9.0	9.5	100	\$9.25
V70FS004003	20 - 18	0.5 - 1	4.8 x 0.5	9.0	9.9	100	\$9.25
V70FS004004	20 - 18	0.5 - 1	4.8 x 0.8	9.4	10	100	\$9.25
V70FS004005	20 - 18	0.5 - 1	6.3 x 0.8	10.8	10	100	\$9.75
V70FS004008	16 - 14	1.5 - 2.5	4.8 x 0.5	8.7	10	100	\$9.25
V70FS004009	16 - 14	1.5 - 2.5	4.8 x 0.8	9.2	10	100	\$9.75
V70FS004010	16 - 14	1.5 - 2.5	6.3 x 0.8	10.8	10	100	\$10.00
V70FS004011	12 - 10	4 - 6	6.3 x 0.8	10.8	13	100	\$17.50



Note :Dimensions are approximate. Please visit our website www.AutomationDirect.com for complete engineering drawings.

Crimping Tools

Crimping Tools			
Part Number	Description	Weight	Price
<u>K70ZA000113</u>	Crimping tool for use with single ferrules AWG 20 - 10 [0.5 - 6 mm ²] and twin ferrules AWG 2 x 18 - 2 x 12 [2 x 0.75 - 2 x 4 mm ²]. 5 crimping positions. With and without insulating collar. Conforms to DIN 46228 part 1 and 2.	0.74 lb [335g]	\$115.00
<u>K70ZA000117</u>	Crimping tool for use with single ferrules AWG 10 - 4 [6 - 25 mm ²] and twin ferrules AWG 2 x 12 - 2 x 8 [2 x 4 - 2 x 10 mm ²]. 4 crimping positions. Conforms to DIN 46228 part 1 and 4.	1.19 lb [540g]	\$124.00
<u>K70ZA000130</u>	Crimping tool for PVC-insulated terminals AWG 20 - 10 [0.5 - 6 mm ²]. 3 crimping positions.	1.12 lb [510g]	\$115.00

Note: Z&F crimping tools recommended by the ferrule manufacturer before terminating in terminal blocks, wire connectors, or end-product terminals (such as starters, etc.).

[K70ZA000113](#)



[K70ZA000117](#)



[K70ZA000130](#)



Crimping Tools Cross Reference				
	Part Number		<u>K70ZA000113</u>	<u>K70ZA000117</u>
	Standard	DIN		
Single Ferrules	<u>V30AE000006</u>	<u>V30AE000038</u>	X	—
	<u>V30AE000009</u>	<u>V30AE000041</u>	X	—
	<u>V30AE000013</u>	<u>V30AE000045</u>	X	—
	<u>V30AE000016</u>	<u>V30AE000048</u>	X	—
	<u>V30AE000017</u>	<u>V30AE000049</u>	X	—
	<u>V30AE000052</u>	<u>V30AE000052</u>	X	—
	<u>V30AE000053</u>	<u>V30AE000053</u>	X	—
	<u>V30AE000055</u>	<u>V30AE000055</u>	X	—
	<u>V30AE000056</u>	<u>V30AE000056</u>	X	—
	<u>V30AE000025</u>	<u>V30AE000058</u>	X	X
	<u>V30AE000026</u>	<u>V30AE000059</u>	X	X
	<u>V30AE000027</u>	<u>V30AE000060</u>	—	X
	<u>V30AE000028</u>	<u>V30AE000061</u>	—	X
	<u>V30AE000029</u>	<u>V30AE000062</u>	—	X
	<u>V30AE000030</u>	<u>V30AE000063</u>	—	X
	<u>V30AE000031</u>	<u>V30AE000064</u>	—	X
	<u>V30AE000033</u>	<u>V30AE000067</u>	—	—
	<u>V30AE000035</u>	<u>V30AE000070</u>	—	—
Twin Ferrules	<u>V30AE001134</u>	<u>V30AE001145</u>	X	—
	<u>V30AE000606</u>	<u>V30AE000607</u>	X	—
	<u>V30AE000733</u>	<u>V30AE000734</u>	X	—
	<u>V30AE000608</u>	<u>V30AE000609</u>	X	—
	<u>V30AE000735</u>	<u>V30AE000736</u>	X	—
	<u>V30AE000623</u>	<u>V30AE000625</u>	X	—
	<u>V30AE000737</u>	<u>V30AE000738</u>	X	—
	<u>V30AE000611</u>	<u>V30AE000611</u>	X	—
	<u>V30AE000748</u>	<u>V30AE000748</u>	X	—
	<u>V30AE001148</u>	<u>V30AE001148</u>	X	X
	<u>V30AE001139</u>	<u>V30AE001150</u>	—	X
	<u>V30AE001141</u>	<u>V30AE001152</u>	—	X
	<u>V30AE001143</u>	<u>V30AE001154</u>	—	X

Wiring Accessories – Crimping Tools

Crimping Tools Overview

Our high-quality industrial crimping tools are designed to crimp a wide range of insulated and non-insulated crimping terminals, ferrules, and connectors. They feature ergonomic handles and controlled-cycle ratcheting mechanisms to guarantee a uniform crimp every time. Choose from fixed or interchangeable die tools or tool/die sets with multiple dies.

Interchangeable-Die Crimping Tools			
Part #	Description *	Qty	Price
<u>DN-CT-HDL</u>	Crimping tool handle for DN-CT-Dx dies (dies NOT included) Approximate dimensions: 9.75 x 2.52 x 0.95 in (234 x 64 x 24 mm); 16.2 oz (460g)	1	\$67.00
<u>DN-CT-D1</u>	Die set for DN-CT-HDL; 26-22 & 12-10 AWG (0.1-0.4 & 4-6 mm ²) green & yellow insulated terminals	1	\$73.00
<u>DN-CT-D2</u>	Die set for DN-CT-HDL; 22-14 AWG (0.5-2.5 mm ²) red & blue insulated terminals	1	\$73.00
<u>DN-CT-D3</u>	Die set for DN-CT-HDL; 22-10 AWG (0.5-6 mm ²) non-insulated terminals	1	\$63.00
<u>DN-CT-D4</u>	Die set for DN-CT-HDL; 24-8 AWG (0.25-10 mm ²) wire ferrules	1	\$63.00
<u>DN-CT-D5</u>	Die set for DN-CT-HDL; 6-4 AWG (16-25 mm ²) wire ferrules	1	\$63.00
<u>DN-CT-D6</u>	Die set for DN-CT-HDL; 2-1/0 AWG (35-50 mm ²) wire ferrules	1	\$63.00
<u>DN-CT-D7</u>	Die set for DN-CT-HDL; 22-10 AWG (0.5-6 mm ²) open barrel non-insulated terminals	1	\$99.00
<u>DN-CT-D8</u>	Die set for DN-CT-HDL; 8-pin (RJ45) modular plugs	1	\$63.00
<u>DN-CT-D9</u>	Die set for DN-CT-HDL; 6-pin (RJ11/RJ12) modular plugs	1	\$63.00
<u>DN-CT-SET</u>	Crimping tool modular system; includes handle and three die sets (DN-CT-HDL + DN-CT-D2 + DN-CT-D4 + DN-CT-D5) The die pairs are held together for easy handling, and interchange without separate tools.	1	\$188.00

* The DN-CT-xx series features a crimping tool with multiple interchangeable dies separately available. The die pairs are held together for easy handling, and can be interchanged without separate tools.



DN-CT-HDL
Crimping Tool



DN-CT-SET
Crimping Tool & Die Set

Wiring Accessories – Crimping Tool

DN-CT-Dx Interchangeable Crimping Dies (for DN-CT-xxx crimping tool only)

These dies are held together for easy handling, and can be interchanged without additional tools.

All DN-CT-Dx dies have been tested on leading brands of connectors to ensure quality connections.

Dies come in modular holders that can be connected together when not in use.



DN-CT-Dx die & holder



DN-CT-D1 (4300-3128)

Insulated Terminals & Connectors
26–22 AWG & 12–10 AWG

[Green & Yellow] (0.1–0.4 & 4–6 mm²)



DN-CT-D2 (4300-3129)

Insulated Terminals & Connectors
22–14 AWG

[Red & Blue] (0.5–2.5 mm²)



DN-CT-D3 (4300-3142)

Non-Insulated Terminals & Connectors
22–10 AWG (0.5–6 mm²)



DN-CT-D4 (4300-3127)

Wire Ferrules
24–8 AWG (0.25–10 mm²)



DN-CT-D5 (4300-3153)

Wire Ferrules
6–4 AWG (16–25 mm²)



DN-CT-D6 (4300-3154)

Wire Ferrules
2–1/0 AWG (35–50 mm²)



DN-CT-D7 (4300-3146)

Non-Insulated Open-Barrel Terminals
22–10 AWG (0.5–6 mm²)



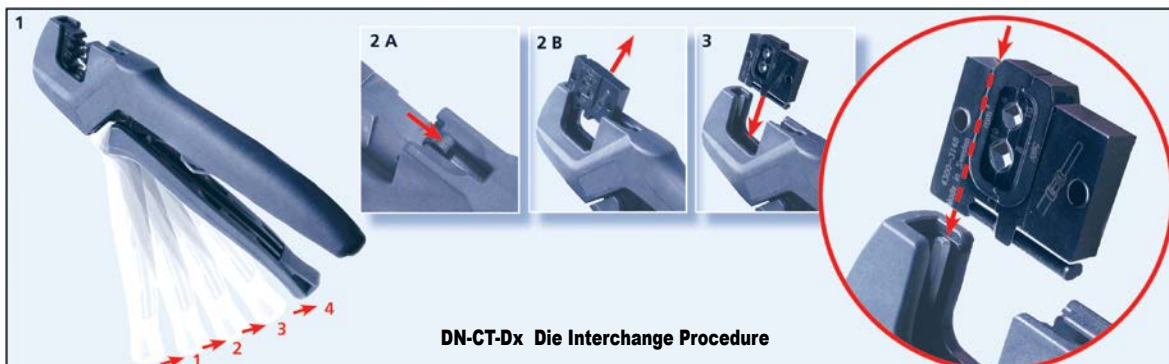
DN-CT-D8 (4300-3144)

8-pin Modular Plugs
RJ45



DN-CT-D9 (4300-3132)

6-pin Modular Plugs
RJ11/RJ12



DN-CT-Dx Die Interchange Procedure