

WIRING ACCESSORIES

Insulated ferrules

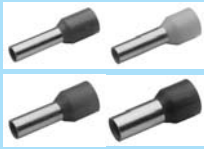
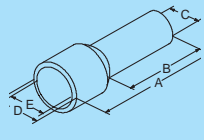

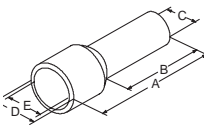
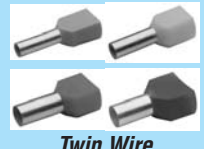
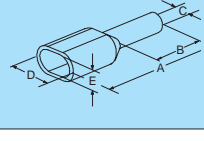

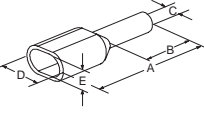
Ferrules are cylindrically-shaped copper tubes crimped to the ends of stranded wire to create a secure, reliable connection. They are primarily used to consolidate wire strands for the purpose of eliminating wire fraying and resulting shorts, as well as for allowing easier insertion and removal of wires from terminal blocks or other termination devices, especially in areas of confined space or when using small wires. Ferrules also create a reliable connection by ensuring that each wire strand conducts current. Two-wire ferrules allow two individual stranded conductors to be connected to the same termination, which can be especially useful in jumpering applications. Our ferrules are made from electrolytically tin-plated copper (99.9%) with either standard or DIN color polypropolyne insulation rated to 105°C. When selecting ferrules for use with *DINnectors*, choose the longest length version where available.

Note: See PLC Compatibility Chart.

Ferrule crimping tools

Our industrial quality ferrule crimping tools crimp insulated and uninsulated single or two wire ferrules. They are manufactured from pressed steel with plastic insulated handles, and feature a controlled cycle ratcheting mechanism to guarantee uniform quality in every crimp.

Ferrule Crimping Tools			
Part #	Description	Pcs/Pkg	Price/Pkg
BM-537	Crimping tool, 22-12 AWG for ferrules 0.5-4mm ²	1	check
BM-539	Crimping tool, 10-6 AWG, for ferrules 6-16mm ²	1	check
BM-533	Crimping tool, 8-2 AWG, for ferrules 6-16mm ²	1	check
BM-534	Crimping tool, 22-10 AWG, for ring, spade, and disconnect terminals	1	check
BM-5345	Crimping tool kit; includes crimping tool, case, and 4 dies for ferrules, ring, fork, and disconnect terminals.	1	check

	Part #	Color	AWG (mm ²)	Pcs/Pkg	Price/Pkg	Dimensions (mm)					
						A	B	C	D	E	
Standard Color Single Wire  	BM-00501	Orange	22 (.5)	500	check	14	8	1	3.1	2.6	
	BM-00502	White	20 (.75)	500	check	14	8	1.2	3.3	2.8	
	BM-00503	Yellow	18 (1)	500	check	14	8	1.4	3.5	3	
	BM-00504	Red	16 (1.5)	500	check	14	8	1.7	4	3.5	
	BM-005041	Red	16 (1.5)	500	check	16	10	1.7	4	3.5	
	BM-00506	Blue	14 (2.5)	250	check	14	8	2.2	4.7	4.2	
	BM-005061	Blue	14 (2.5)	250	check	18	12	2.2	4.7	4.2	
	BM-00508	Gray	12 (4)	200	check	17	10	2.8	5.4	4.8	
	BM-005081	Gray	12 (4)	200	check	20	12	2.8	5.4	4.8	
	BM-00510	Black	10 (6)	100	check	20	12	3.5	6.9	6.3	
	BM-00511	Black	10 (6)	100	check	26	18	3.5	6.9	6.3	
	BM-00512	Ivory	8 (10)	50	check	22	12	4.5	8.4	7.6	
	BM-00513	Ivory	8 (10)	50	check	28	18	4.5	8.4	7.6	
	BM-00514	Green	6 (16)	50	check	24	12	5.8	9.6	8.8	
	BM-00515	Green	6 (16)	50	check	28	18	5.8	9.6	8.8	
	BM-00516	Brown	4 (25)	100	check	30	16	7.3	12	11.2	
	BM-00517	Beige	2 (35)	100	check	30	16	8.3	13.5	12.7	
	BM-00518	Olive	1 (50)	100	check	36	20	10.3	16	15	
DIN 46228/4-Color Single Wire  	BM-00601	White	22 (.5)	500	check	14	8	1	3.1	2.6	
	BM-00602	Grey	20 (.75)	500	check	14	8	1.2	3.3	2.8	
	BM-00603	Red	18 (1)	500	check	14	8	1.4	3.5	3	
	BM-00604	Black	16 (1.5)	500	check	14	8	1.7	4	3.5	
	BM-006041	Black	16 (1.5)	500	check	16	10	1.7	4	3.5	
	BM-00506	Blue	14 (2.5)	250	check	14	8	2.2	4.7	4.2	
	BM-005061	Blue	14 (2.5)	250	check	18	12	2.2	4.7	4.2	
	BM-00508	Gray	12 (4)	200	check	17	10	2.8	5.4	4.8	
	BM-005081	Gray	12 (4)	200	check	20	12	2.8	5.4	4.8	
	BM-00610	Yellow	10 (6)	100	check	20	12	3.5	6.9	6.3	
	BM-00611	Yellow	10 (6)	100	check	26	18	3.5	6.9	6.3	
	BM-00612	Red	8 (10)	50	check	22	12	4.5	8.4	7.6	
	BM-00613	Red	8 (10)	50	check	28	18	4.5	8.4	7.6	
	BM-00614	Blue	6 (16)	50	check	24	12	5.8	9.6	8.8	
	BM-00615	Blue	6 (16)	50	check	28	18	5.8	9.6	8.8	
	BM-00616	Yellow	4 (25)	100	check	30	16	7.3	12	11.2	
	BM-00617	Red	2 (35)	100	check	30	16	8.3	13.5	12.7	
	BM-00618	Blue	1 (50)	100	check	36	20	10.3	16	15	
Standard Color Twin Wire  	BM-00551	Orange	2x22 (.5)	200	check	15	8	1.4	4.7	2.5	
	BM-00552	White	2x20 (.75)	200	check	15	8	1.7	5	2.8	
	BM-00553	White	2x20 (.75)	200	check	17	10	1.7	5	2.8	
	BM-00554	Yellow	2x18 (1)	200	check	15	8	1.95	5.4	3.4	
	BM-00555	Yellow	2x18 (1)	200	check	17	10	1.95	5.4	3.4	
	BM-00556	Red	2x16 (1.5)	200	check	16	8	2.2	6.6	3.6	
	BM-00557	Red	2x16 (1.5)	200	check	20	12	2.2	6.6	3.6	
	BM-00558	Blue	2x14 (2.5)	100	check	18.5	10	2.8	7.8	4.2	
	BM-00559	Blue	2x14 (2.5)	100	check	21.5	13	2.8	7.8	4.2	
	BM-00560	Grey	2x12 (4)	100	check	23	12	3.7	8.8	4.9	
	BM-00561	Black	2x10 (6)	50	check	26	14	4.8	10	6.9	
	BM-00562	Ivory	2x8 (10)	100	check	26	14	6.4	13	7.2	
	BM-00563	Green	2x6 (16)	50	check	30	14	8.2	18.4	9.6	
	DIN 46228/4-Color Twin Wire  	BM-00651	White	2x22 (.5)	200	check	15	8	1.4	4.7	2.5
		BM-00652	Grey	2x20 (.75)	200	check	15	8	1.7	5	2.8
		BM-00653	Grey	2x20 (.75)	200	check	17	10	1.7	5	2.8
		BM-00654	Red	2x18 (1)	200	check	15	8	1.95	5.4	3.4
		BM-00655	Red	2x18 (1)	200	check	17	10	1.95	5.4	3.4
BM-00656		Black	2x16 (1.5)	200	check	16	8	2.2	6.6	3.6	
BM-00657		Black	2x16 (1.5)	200	check	20	12	2.2	6.6	3.6	
BM-00558		Blue	2x14 (2.5)	100	check	18.5	10	2.8	7.8	4.2	
BM-00559		Blue	2x14 (2.5)	100	check	21.5	13	2.8	7.8	4.2	
BM-00560		Grey	2x12 (4)	100	check	23	12	3.7	8.8	4.9	
BM-00661	Yellow	2x10 (6)	50	check	26	14	4.8	10	6.9		
BM-00662	Red	2x8 (10)	100	check	26	14	6.4	13	7.2		
BM-00663	Blue	2x6 (16)	50	check	30	14	8.2	18.4	9.6		

CONNECTION



CRIMPING TERMINALS

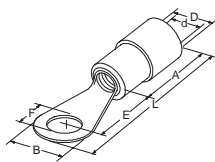
Our PVC insulated crimping terminals are manufactured using high quality electrolytically tin plated (99.9%) copper, and are rated up to 105°C. Our ring and fork terminals feature a special easy entry wire guide design to speed and ease wiring.

Crimping tools

Our industrial quality crimping tools crimp insulated and uninsulated crimping terminals. They are manufactured from pressed steel with plastic insulated handles, and feature a controlled cycle ratcheting mechanism to guarantee uniform quality in every crimp. The

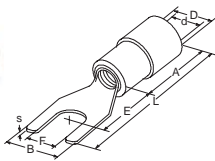
crimping force can be regulated using the adjustable eccentric cam. The crimping terminals are loaded into the side of the tool for maximum operator ease.

Ring terminals



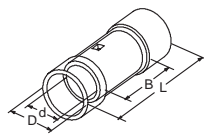
PVC Ring Terminal Specifications														
Part # (BM-)	AWG	Color	Bolt Hole Size	Pcs/Pkg	Price/Pkg	Screw Dia. (mm)	Dimensions (mm)							
							F	B	A	E	L	d	D	s
BM-00119	22-16	Red	#6-8	100	check	4	4.2	8.0	10.4	7.5	22.0	1.95	4.2	0.8
BM-00125	22-16	Red	#10	100	check	5	5.2	8.0	10.4	8.0	22.4	1.95	4.2	0.8
BM-00219	16-14	Blue	#6-8	100	check	4	4.2	8.0	11.0	8.0	23.0	2.45	4.8	0.8
BM-00225	16-14	Blue	#10	100	check	5	5.2	9.0	11.0	7.5	23.6	2.5	4.8	0.8
BM-00319	12-10	Yellow	#6-8	50	check	4	4.2	8.0	14.0	8.4	26.5	3.5	6.6	1.0
BM-00325	12-10	Yellow	#10	50	check	5	5.2	10.0	14.0	8.5	27.5	3.5	6.6	1.0

Fork terminals



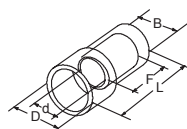
PVC Fork Terminal Specifications														
Part #	AWG	Color	Bolt Hole Size	Pcs/Pkg	Price/Pkg	Screw Dia. (mm)	Dimensions (mm)							
							F	B	A	E	L	d	D	s
BM-00120	22-16	Red	#6-8	100	check	4.0	4.2	6.4	10.4	6.3	20.9	1.95	4.2	0.8
BM-00126	22-16	Red	#10	100	check	5.0	5.2	8.0	10.4	8.0	21.2	1.95	4.2	0.8
BM-00220	16-14	Blue	#6-8	100	check	4.0	4.2	6.6	11.0	5.3	20.3	2.45	4.8	0.8
BM-00226	16-14	Blue	#10	100	check	5.0	5.2	9.1	11.0	9.5	25.0	2.45	4.8	0.8
BM-00320	12-10	Yellow	#6-8	50	check	4.0	4.2	8.1	14.0	7.2	26.0	3.50	6.6	1.0
BM-00326	12-10	Yellow	#10	50	check	5.0	5.2	9.0	14.0	10.5	28.5	3.50	6.6	1.0

Butt connectors



PVC Butt Connector Specifications								
Part #	AWG	Color	Pcs/Pkg	Price/Pkg	Dimensions (mm)			
					B	L	d	D
BM-00160	22-16	Red	100	check	15.0	26	1.8	4.2
BM-00260	16-14	Blue	100	check	15.0	26	2.5	4.8
BM-00360	12-10	Yellow	50	check	15.0	27	3.7	6.5

End connectors



Nylon End Connector Specifications									
Part #	AWG	Color	Pcs/Pkg	Price/Pkg	Dimensions (mm)				
					B	F	L	d	D
BM-00170	22-16	Clear	100	check	5.6	6.8	15.2	2.6	6.2
BM-00270	16-14	Clear	100	check	5.9	7.0	15.2	3.2	6.5
BM-00370	12-10	Clear	50	check	7.3	8.5	17.8	4.0	9.4



CRIMPING TERMINALS CROSS REFERENCE

Please note:

We no longer offer ring terminals, fork terminals or butt connectors in Nylon material. Please refer to the following tables for the new product in PVC material. (The old part number had an “8” as the first digit after the dash.)

PVC Ring Terminals	
PVC	Description
BM-00119	Ring terminals PVC insulated 22-16 - #8 Red. 100 pcs/pkg
BM-00125	Ring terminals PVC insulated 22-16 - #10 Red. 100 pcs/pkg
BM-00219	Ring terminals PVC insulated 16-14 - #8 Blue. 100 pcs/pkg
BM-00225	Ring terminals PVC insulated 16-14 - #10 Blue. 100 pcs/pkg
BM-00319	Ring terminals PVC insulated 12-10 - #8 Yellow. 50 pcs/pkg
BM-00325	Ring terminals PVC insulated 12-10 - #10 Yellow. 50 pcs/pkg

PVC Fork Terminals	
PVC	Description
BM-00120	Fork terminals PVC insulated 22-16 - #8 Red. 100 pcs/pkg
BM-00126	Fork terminals PVC insulated 22-16 - #10 Red. 100 pcs/pkg
BM-00220	Fork terminals PVC insulated 16-14 - #8 Blue. 100 pcs/pkg
BM-00226	Fork terminals PVC insulated 16-14 - #10 Blue. 100 pcs/pkg
BM-00320	Fork terminals PVC insulated 12-10 - #8 Yellow. 50 pcs/pkg
BM-00326	Fork terminals PVC insulated 12-10 - #10 Yellow. 50 pcs/pkg

PVC Connectors	
PVC	Description
BM-00160	Butt connector PVC Insulated 16-14 - Blue. 100 pcs/pkg
BM-00260	Butt connector PVC Insulated 16-14 - Blue. 100 pcs/pkg
BM-00360	Butt connector PVC Insulated 16-14 - Blue. 50 pcs/pkg



Ferrule - wire size chart for DirectLogic PLCs

Ferrule - Wire Size Chart for DirectLogic PLC's						
Terminal Block	AWG	20	18	16	14	12
	Ferrule Part#		BM-00502	BM-00503	BM-00504	BM00506
Crimping Tool		BM-537	BM-537	BM-537	BM-537	BM-537
DL05		Y	N	N	N	N
DL06		Y	Y	N	N	N
DL105		Y	Y	N	N	N
205 8 pt		Y	Y	Y	N	N
205 16 pt		Y	Y	N	N	N
305 8 pt		Y	Y	Y	Y	N
305 16 pt		Y	Y*	N	N	N
405 8 pt		Y	Y	Y	Y	N
405 16 pt		Y	Y	Y	Y	N
Terminator I/O screwless**		Y	Y	Y	Y	N
Terminator I/O screw		Y	Y	Y	Y	N

*Note: Y for D3 Series; N for F3 series

**Orient ferrule with crimp flat side facing outward from terminal block to prevent pop-out.

WIRING KITS

Kit	Description	Price
BM-5345	CONTENTS: Crimping tool, case, and 5 dies for insulated or non-insulated 22-12AWG ferrules, 10-6AWG ring, fork, butt and end terminals, and 22-10 AWG disconnect terminals	check
BM-80409	CONTENTS: PVC Ring, fork and butt connector assortment kit with crimping tool	check
BM-80418	CONTENTS: Insulated ferrule assortment kit with crimping tool	check

BM-5345 Crimping tool kit with dies



BM-80418 Contents	
Part #	Quantity
BM-00501	50
BM-00502	50
BM-00503	50
BM-00504	50
BM-005401	50
BM-00506	50
BM-005061	50
BM-00508	50
BM-005081	50
BM-5341	1

BM-80409 PVC ring, fork, butt terminal kit



BM-80409 Contents	
Part #	Quantity
BM-00119	25
BM-00125	25
BM-00120	25
BM-00126	25
BM-00160	25
BM-00170	25
BM-00225	25
BM-00220	25
BM-00226	25
BM-00260	25
BM-00319	25
BM-00325	25
BM-00326	25
BM-00360	25
BM-00270	25
BM-00370	25
BM-534	1



MULTIPLE WIRE COMBINATIONS

The following table shows the possible multiple wire combinations for stranded copper conductors of the same cross section:

Multiple Wire Connection Combinations																	
		Wire Size AWG (mm ²)															
		#24	#22	#20	#18	#16	#14	#12	#10	#8	#6	#4	#2	#1	1/0	2/0	3/0
		(.5)	(.75)	(1)	(1.5)	(2.5)	(4)	(6)	(10)	(16)	(25)	(35)	(50)	(50)	(70)	(80)	
Part Number	UL Rating	Number of the Same Size Wires Per Terminal Block															
DN-D10	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-D10DR	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-D10L110	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-D10L24	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-D10LED1	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-D10X	24-10	4	4	3	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-DIS10	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-F10	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-F10L110	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-F10L220	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-F10L24	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-F6	20-6	-	-	4	4	3	3	2	2	1	1	-	-	-	-	-	-
DN-F6L110	20-6	-	-	4	4	3	3	2	2	1	1	-	-	-	-	-	-
DN-F6L220	20-6	-	-	4	4	3	3	2	2	1	1	-	-	-	-	-	-
DN-F6L24	20-6	-	-	4	4	3	3	2	2	1	1	-	-	-	-	-	-
DN-FM6	14-6	-	-	-	-	-	2	2	1	1	1	-	-	-	-	-	-
DN-FM6L	14-6	-	-	-	-	-	2	2	1	1	1	-	-	-	-	-	-
DN-G1/0	14-2	-	-	-	-	-	3	2	2	2	1	1	1	1	1	-	-
DN-G10	24-10	4	4	4	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-G4	14-4	-	-	-	-	-	4	3	2	2	1	1	-	-	-	-	-
DN-G6	20-8	-	-	4	4	3	2	2	1	1	-	-	-	-	-	-	-
DN-G8	22-8	-	4	4	4	3	2	2	1	1	-	-	-	-	-	-	-
DN-KBD12	22-12	-	3	3	2	2	1	1	-	-	-	-	-	-	-	-	-
DN-M10	24-10	4	3	3	2	2	1	1	1	-	-	-	-	-	-	-	-
DN-MG10	18-10	-	-	-	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-T1/0	14-1/0	-	-	-	-	-	3	2	2	2	1	1	1	1	1	-	-
DN-T10	24-10	4	4	4	3	2	2	1	1	-	-	-	-	-	-	-	-
DN-T12	24-12	4	4	3	2	2	1	1	-	-	-	-	-	-	-	-	-
DN-T3/0	4-3/0	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
DN-T4	14-4	-	-	-	-	-	4	3	2	2	1	1	-	-	-	-	-
DN-T6	20-6	-	-	4	4	3	3	2	2	1	1	-	-	-	-	-	-
DN-T8	22-8	-	4	4	4	3	2	2	1	1	-	-	-	-	-	-	-
DN-TL14	26-14	4	3	2	2	1	1	-	-	-	-	-	-	-	-	-	-
DN-TL14S	26-14	4	3	2	2	1	1	-	-	-	-	-	-	-	-	-	-
DN-TL14SLP	26-14	4	3	2	2	1	1	-	-	-	-	-	-	-	-	-	-
DN-TL14SLN	26-14	4	3	2	2	1	1	-	-	-	-	-	-	-	-	-	-

