# Circular sensor

connectors





## M12 cables & connectors

The M12 series features sensor and actuator connectors with a locking thread for electronics automation, process control, and commercial electronics. We offer many different cable connectors, panel mounted receptacles, field attachable/installable connectors and various accessories. Our connectors have industry-standard A,B,C, and D cording, for both screw-locking and quick-locking styles.

- Design as per IEC 61076-2-101
- IP67, IP68, IP69K and UL approvals
- 360° Shielded or non-shielded versions are available
- 2~17 poles are available
- A,B,C,D,S,T,X,K,L,Y codings are available
- Right angled PCB panel connector is available
- TPU over molded, PA+GF or metal shell
- T-splitter and Y-splitter are available
- Anti-vibration locking screw design
- Cable length customized, PUR and PVC cable options



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	Available Coding	A-	coding	B-	-coding	C-	-coding	A-co	oding	B–coding		C–coding	D-co	oding	S–codir		T–coding	0	Quick-lock	A-coding		B-coding		C-coding	K–coding	L	-coding	C-coding	Y1-coding Y3		Quick-lock	A-coo	ding	X-coding		ding Y4-coding			coding
	Rated Current Voltage				4A 250V						4A 250V					12A(40°C) 630V			4A 250V		4A			2A 60V	16A 690V(A/C), NC		16A /C), 63V(D/C)	2A	10A (Power),0.5	5A(Signal)	4A 60V	2A 30'		0.5A 50V / 60V	6A (Pov	wer),0.5A(Signal)	1.5A		.5A 30V
	Wire Gauge / size				250V /G / 0.34mm <sup>2</sup>	2				22	250V AWG / 0.34m	m <sup>2</sup>				16AWG / 1.5m	m <sup>2</sup>	2201	250V WG / 0.34mm <sup>2</sup>	-	2AWG / 0.34m	m <sup>2</sup>	24/	4WG / 0.25mm <sup>2</sup>	14AWG / 2.0r		/C, 63V(D/C) $/G / 0.25 mm^2$	30V	16/26/10/0 1 25	5/0 15mm <sup>2</sup>	22AWG / 0.34mm <sup>2</sup>	24AWG / 0		50V / 60V 27~24AWG / 0.14~0.2	25mm <sup>2</sup> 20/26A	50V	30V 26AWG / 0.14m	1m <sup>2</sup> 26AWG /	
Quick Search Table																													10/20AVVG, 1.23				<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>						
		4. • • 3	30 04	4. • • 3	30 04	PE®	OPE	40 03	30 04	40 03	04 PEG		40 032	530 04				0 20 0	<b>30 0</b> 2	40 03	(30 04) (4		30 04		69) (6	9) (?				6 • • 5   (z		68 5 84	40 5 06						50 0 0 0 0 0 0 0 0 0 0 0
	Pin layout	10			// \				20 01									Ø/ \ \•••	40 01	10 02			20 01	•1/ 10 05			1 00						20 8 01	66 6	157   WE	y   \```	101002 3011012 2010r		0.000
		Male	Female	Male	Female	Male	Female	e Male	Female	Male Fe	male Ma	le Female	Male	Female	Male	Female M	ale Fema	ale Male	e Female	Male	Female	Male Fe	emale Ma	le Female	Male Fe	emale Male	Female	Male Female	Male	Male	Male Female	Male	Female	Male Fe	male Mak	e Male	Male Fema	nale Male	Female
M12 cables & conne	ectors			3	3 Pins							1	4	Pins										5 Pins					6 Pins					8 Pins			12 Pins	17	Pins
Molded Cable																																							
Molded Gable	Male Molded Cable Straight	07	-	07		07		07		07	0.	7	07		117	1	7 -			07		07	0	7				97 -				07					97 -	- 07	-
	Male Molded Cable Straight Male Molded Cable Straight Shielded	101		101		101		101	-	101	- 10	-	101		17	- 1				101		101	- 9	7 -	126	- 120	-	101 -	140	1/2		97		121	- 14	1 1/2	101 -		
I I I I I I	Micro-change Male Molded Cable Straight	101	-	101		100		-		-	- 10		101		121	- 1.				101		-	- 10		150	- 136		101 -	140	142		101			141	-		101	-
	Female Molded Cable Straight		99		99	-	99		99		99 -	99		99		119	12	8 -		_	99	_	99 -	99				- 99					99				- 99		99
	Female Molded Cable Straight Shielded		102	-	102	-	102	-	102	- 1	02 -	102		102	-	172	. 130	0 -	-	-	102	-	102 -	102		137 -	139	- 102	-	-		-	102	- 137	2/133 -	_	- 102	· · · · · · · · · · · · · · · · · · ·	102
8° 8° 8° 8° 8°	Micro-change Female Molded Cable Straight		-	_			110		-			110		-		122		-		_	-	_		110	-		-	- 110					-	-					-
	Male Molded Cable Angled	103	-	103	-	103	-	103	-	103	- 10	3 -	103	-	123	-		-	-	103	-	103	- 10	3 -	-		_	103 -	-	-		103	· · ·			_	103 -	102	
	Male Molded Cable Angled Shielded	107	-	107	-	107	_	107	-	107	- 10	7 -	107	-	125	-		-	-	107	-	107	- 10	)7 -	-		-	107 -	-	-		107		134		-	107 -	107	
	Female Molded Cable Angled	-	105	-	105	-	105	-	105	- 1	05 -	105	-	105	-	124		-	-	-	105	-	105 -	105	-		-	- 105	-	-		-	105	-		-	- 105	)5 -	105
	Female Molded Cable Angled Shielded	-		-	108	-	108	-	108	- 1	08 -	108	-	108	-	126	-	-	-	-	108	-	108 -	108	-		-	- 108	-	-		-	108	- 1	35 -	-	- 108		108
	Female Molded Cable Angled with LED (PNP)	-	111	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-		-		-	-		-		-		-		-	-
	Female Molded Cable Angled with LED (NPN)	-	112	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-		-		-	-		-	- 7	-		-			-
	Male Molded 2 Cables Straight	113	-	113	-	113	-	113	-	113	- 11	3 -	113	-	-	-	· -	-	-	113	-	113	- 11	3 -	-		-	113 -	-	-		113	- /	-		-		-	-
	Female Molded 2 Cables Straight	-	114	-	114	-	114	-	114	- 1	14 -	114	-	114	-	-	-	-	-	-	114	-	114 -	114	-		-	- 114	-	-		-	114	-		-		-	-
I I I I I I I I I I I I I I I I I I I	Male Molded 2 Cables Angled	115	-	115	-	115	-	115	-	115	- 11	5 -	115	-	-	-		-	-	115	-	115	- 11	5 -	-		-	115 -	-	-		-	-	-		-		-	-
	Female Molded 2 Cables Angled	-	116	-	116	-	116	-	116	- 1	16 -	116	-	116	-	-	-	-	-	-	116	-	116 -	116	-		-	- 116	-	-		-	- /	-		-		-	-
	Male Molded Cable Straight Plastic Screw	98	-	98	-	98	-	98	-	98	- 98	3 -	98	-	118	-	-	-	-	98	-	98	- 98	8 -	-		-	98 -	-	-		98	- /	-		-	98 -	98	-
	Male Molded Cable Angled Plastic Screw	104	-	104	-	104	-	104	-	104	- 10	4 -	104	-	-	-	-	-	-	104	-	104	- 10		-		-	104 -	-	-		104	- /	-		-	104 -	. 104	-
6 6 V V V V V	Female Molded Cable Straight Plastic Nut	-	100	-	100	-	100	-	100	- 1	- 00	100	-	100	-	120		-	-	-	100	-	100 -	100	-		-	- 100	-	-		-	100	-		-	- 100	- 00	100
	Female Molded Cable Angled Plastic Nut	-	106	-	106	-	106	-	106	- 1	06 -	106	-	106	-	-	· _	-	-	-	106	-	106 -	106	-		-	- 106	-	-		-	106	-		-	- 106	- 06	106
	Male Molded Cables Straight Snap-in Type	144	-	144	-	-	-	144	-	144		-	144	-	-	-	· _	-	-	144	-	144		-	-		-		-	-		144		-		-		-	-
	Male Molded Cables Straight Quick-lock Type with Fix Cap	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	146	5 -	-	-	-		-	-		-		-	-	146 -	-		-		-			-
6 6 9 9 9 9 6	Female Molded Cables Straight Snap-in Type	-	-	-	-	-	-	-	145	- 1	45 -	-	-	145	-	-		-	-	-	145	-	145 -	-	-		-		-	-		-	145	-		-			-
	Female Molded Cables Straight Quick-lock Type	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	147	-	-	-		-	-		-		-	-	- 147	-	-			-			-
	Female Molded Cables Straight Quick-lock Type with Fix Cap	-	-	-	-	-	-	-	-	-	-   -	-	-	-	-	-		-	148	-	-	-		-	-		-		-	-	- 148	-	-			-		-	-
Assembly Type															, ,																								
	Male Field Wirable Assembly, Straight, Solder			149		149	-	149	-	149	- 14	.9 -	149		-	-	· _	-	-	149	-	149	- 14	-	-		-	149 -	-	-		149				-	149 -	-	-
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P V P V	Female Field Wirable Assembly, Straight, Solder		150	-	150		150		150		50 -	150	-	150	-	-	-	-	-	-	150	-	150 -	150	-		-	- 150	-	-		-	150	-		-	- 150		-
	Female Field Wirable Assembly, Angled, Solder		152	-	152	-			152		52 -	152	-	152	-		-		-	-	152	-		152	-		-	- 152	-			-	152						-
	Male Field Wirable Assembly, Straight, Screw joint, Shielded	153		153	-		-		-	153		-	153	-	-		· -		-	153		153		-	-				-			153	-						-
$\beta \land \land \land \land$	Male Field Assembly, Shielded Crimp Type			-			-		-	155		-	155		-		-		-	155	-	155		-	-		-		-	-		155						· -	
AT STAND ON ON	Male Field Wirable Assembly, Straight, Piercing, Shielded		-	-	-		-		-	- 1		-	-	-	-		· -		-	-	- 154	-		-	-		-		-	-		-							-
<b>A</b> the <i>i</i> <b>a a a a a a a a a a</b>	Female Field Wirable Assembly, Straight, Screw joint, Shielded		154	-			-				-	-	-		-	-	-	-	-	-	154	-	154 -	-	-		-		-	-		-							-
	Female Field Assembly, Shielded Crimp Type	- 160	- 156	- 160	156	160	-	160	156	- 1	56 -	-	- 160	156	164	- 4	-	-	-	- 160	001	-	- 001	-	-		-		-	-		- 160	156						-
	Male Field Wirable Assembly, Straight, Screw joint           Male Field Wirable Assembly, Straight, Screw joint, Plastic Screw		-	160	-	160	-	160	-	160		-	160	-	104	-		-	-	160		161		-	-		-		-			161					· ·		-
	Female Field Wirable Assembly, Straight, Screw Joint, Plastic Screw		162	-	162	101	- 162		- 162	-		-		- 162	-		- 16		-	-	- 162	-		-	-		-		-			-	- 162						-
en en en en	Female Field Wirable Assembly, Straight, Screw joint Female Field Wirable Assembly, Straight, Screw joint, Plastic Nut		162	-			162		162			-	-				- 10	-	_	-	162			-	-				-	_		-							-
	Male Field Wirable Assembly, Angled, Screw joint			168		168	103	168	-	168		-		-	172			-	-	168	-	168		-	-		-			-		168	-						-
	Male Field Wirable Assembly, Angled, Screw joint Male Field Wirable Assembly, Angled, Screw joint, Plastic Screw	169	-	169	-	169	-	169	-	169		-	169	-	-		· _	_	-	169	_	169			-				-	-		169							-
		158	-	158	-	158	-	158	-	158		-	158	-	-		· 17:	5 -	-	158	-	158			-		-		-	-		158							-
** **	Female Field Wirable Assembly, Angled, Screw joint		170	-	170	-	170		170		70 -	-	-	170	-	-		-	-	-	170	-	170 -	-	-		-		-	-		-	170						-
	Female Field Wirable Assembly, Angled, Screw joint, Plastic Nut		170	-		-	-	-	170	- 1		-	-	170	-	-		-	-	-	171	-	171 -	_	-		-		-	-		-	171						-
	Female Field Wirable Assembly Angled Screw Joint Shielded with Die-cast body		159	-		-	159	-	159			-	-	159	-		· –	-	-	-	159		159 -	-	-		-		-	-		-	159						-
	Male Field Wirable Assembly, Straight, Quick-lock Type, With Fix-cap		-				-		-			-	-	-	-			176	5 -	-	-	-			-		-		-	-		-							-
and an an	Female Field Wirable Assembly, Straight, Quick-lock Type		-				-		-	-		-		-	-		· -			-		-		-	-				-			-	-						-
s () ()	Female Field Wirable Assembly, Straight, Quick-lock Type, With Fix-cap		-				-		-	-		-	-	-	-	-	-	-	178			-			-		-		-	-		-	- 1						
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	Available Coding Rated Current	A-coding B-coding	C-coding A-coding	B-coding C-coding D-coding	S-coding T-coding	Quick-lock A-coding B–coding	C-coding K-coding	L-coding         C-coding         Quick-lock         Y1-coding           16A         2A         4A         12A (Power),0	Y3-coding A-coding X-coding .5A(Signal) 2A 0.5A	Y2-coding         Y4-coding         A-coding           6A (Power),0.5A(Signal)         1.5A         1.5A
	Voltage	250V	250V	250V	630V	250V 60V	60V 690V(A/C), NC(D/C)	NC(A/C), 63V(D/C) 30V 60V 50V	30V 50V / 60V	50V 30V 30V
Quick Search Table	Wire Gauge / size	22AWG / 0.34mm <sup>2</sup>	22AWG / 0.34mm <sup>2</sup>	22AWG / 0.34mm <sup>2</sup>	16AWG / 1.5mm <sup>2</sup>	22AWG / 0.34mm <sup>2</sup> 22AWG / 0.34mm <sup>2</sup>	24AWG / 0.25mm <sup>2</sup> 14AWG / 2.0mm <sup>2</sup>	24AWG / 0.25mm <sup>2</sup> 24AWG / 0.25mm <sup>2</sup> 22AWG / 0.34mm <sup>2</sup> 16/26AWG, 1.2	25/0.15mm <sup>2</sup> 24AWG / 0.25mm <sup>2</sup> 27~24AWG / 0.14~0.25mm <sup>2</sup>	<sup>2</sup> 20/26AWG, 0.6/0.15mm <sup>2</sup> 26AWG / 0.14mm <sup>2</sup> 26AWG / 0.14mm <sup>2</sup>
	Dis laugut		$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ 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\bullet 2 \end{array} \right) \left( \begin{array}{c} \mathfrak{s} \bullet \\ \mathfrak{s} \bullet 2 \end{array} \right) \left( \begin{array}{c} \mathfrak{s}$				$ \left( \begin{array}{c} \textcircled{\textcircled{0}} \textcircled{\textcircled{0}} \textcircled{\textcircled{0}} \\ \textcircled{\textcircled{0}} \textcircled{\textcircled{0}} \end{array} \right) \left( \begin{array}{c} \textcircled{\textcircled{0}} \textcircled{\textcircled{0}} \\ (1 ) \\ (1$		
	Pin layout									
M12 cables & conr	lectors	Male Female Male Fema 3 Pins	le Male Female Male Female	Male Female Male Female Male Female 4 Pins	e Male Female Male Female	Male Female Male Female Male Fe	male Male Female Male Female	Male Female Male Female Male Female Female 6 Pins	Female Male Female Male Female 8 Pins	Female         Female         Male         Female           12 Pins         17 Pins
Panel Mount Type										
	Male Panel Mount Die-cast Solder Front fastened	179 - 179 -	179 -	<u>179 - 179 - 179 -</u>	· · · · · ·	179	- 179	179	- 179	· · · · · · ·
o 🕋 🤗	Male Panel Mount Die-cast Solder Rear fastened Male Panel Mount Solder Front fastened	<u>    183       183           183         </u>	<u> 183 -</u> 185 -	183         -         183         -         183         -           185         -         185         -         185         -		<u> 183</u> - 185	<u>- 183</u> - 185	<u> 183</u> - 185	<u>- 183</u> - 185	<u> </u>
	Male Panel Mount Solder Rear fastened Male Panel Mount Solder Rear fastened Adjustable Nut	<u>    188          188                  </u>	<u> 188 -</u> 191 - 191 -	<u>188</u> - <u>188</u> - <u>188</u> - <u>191</u> - <u>191</u> - <u>191</u> -		188 191	- 188 - 191		- 188 - 191	<u>188</u> - <u>188</u> - - 191 - 191 -
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<b>8 4 8 8</b>	Female Panel Mount Die-cast Screw Solder Rear fastened Female Panel Mount Plastic Screw Nut Solder Front fastened	- 184 - 184 - 182 - 182		<u>- 184 - 184 - 184</u> - 182 - 182 - 182		<u> 184 -</u> 182 -	- <u> </u>	<u> 184</u>	<u>- 184</u> - 182	
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	Male Panel Mount Die-cast Screw PCB Type Front fastened Male Panel Mount Plastic Screw Nut PCB Type Front fastened	<u>    199                               </u>	<u>    199                               </u>	199         -         199         -         199         -           200         -         200         -         200         -		- <u>199</u> - 200	- <u>199</u>	<u> 199 </u>	- <u>199</u> - 200	· · · · · · ·
٨ الله الله الله الله الله الله الله الل	Male Panel Mount Die-cast Screw PCB Type Rear fastened Male Panel Mount Die-cast Screw PCB Type Front fastened Shielded	203 - 203 -	203 - 203 -	203 - 203 - 203 -		- 203	- 203	- 203	- 203	
	Male Panel Mount PCB Type Front fastened	205         -         205         -           207/208         -         207/208         -	207/208 - 207/208 -	205         -         205         -         205         -           207/208         -         207/208         -         207/208         -		- <u>205</u> - <u>207/208</u> - <u>-</u>	- 205 - 207/208 - 228 -	-         205         -	- 205 - 207/208	<u> </u>
- <u></u>	Male Panel Mount PCB Type Front fastened Shielded Male Panel Mount PCB Type Rear fastened	<u>211/212</u> - <u>211/212</u> - 	<u>211/212</u> - <u>211/212</u> - 	<u>211/212</u> - <u>211/212</u> - <u>211/212</u> -		- <u>- 211/212</u>	- <u>211/212</u> - <u>-</u> - - <u>-</u> 230 -	<u> 211/212</u> 238 - <u>-</u> - <u>-</u> 240	<u>- 211/212 - 220 -</u>	-         -         211/212         -         211/212         -           241         -         -         -         -         -         -
1997 I. 👾 🦀	Male Panel Mount Angled PCB Type Front fastened Female Panel Mount Die-cast Screw PCB Type Front fastened		<u> 215 -</u>	215 215 -		<u> 215</u>	- <u>-</u> - <u>-</u> -		- 215 201	
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<b>()</b>	Female Panel Mount Die-cast Screw PCB Type Front fastened Shielded	<u>- 204</u> - 204 - 206 - 206		-         204         -         204         -         204           -         206         -         206         -         206		<u> 204</u> - <u>- 206</u> - <u></u>	- <u>204</u> - <u>206</u>	206	206	
چ 🌍 🥥	Female Panel Mount PCB Type Front fastened Female Panel Mount PCB Type Front fastened Shielded	- <u>210</u> - <u>210</u> - <u>213</u> - <u>213</u>		- <u>210</u> - <u>210</u> - <u>210</u> - <u>213</u> - <u>213</u> - <u>213</u>		<u>-</u> 210 - 213 -	- <u>210</u> - <u>229</u> - <u>213</u>	<u>- 237 - 210</u>	<u>- 210</u> 242 - 213 - 221/244	-         -         210         -         210           -         243         -         213         -         213
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	Female Panel Mount Angled PCB Type Front fastened	- <u>214</u> - <u>214</u> - <u>-</u> -	4 - 214 - 214 216	- 216 216			14 - 214 16		216 - 217	· · · · · ·
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	Female Panel Mount Crimp Front fastened					· · · · ·	<u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u>	<u>- 233 </u>	· · · · ·	· · · · · ·
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	Male to Female Panel Mount A-Coding Male to Female Panel Mount X-Coding Shielded						· · · · · · · · · · · · · · · · · · ·			
	Ternale to remaie rane mount A-county shielded						· · · · · ·			· · · · · · ·
	Male Panel Mount Solder with Flange Female Panel Mount Solder with Flange						· · · · · ·		· · · · ·	
	Male Panel Mount Solder Front fastened Quick lock Type Male Panel Mount PCB Type Front fastened Quick lock Type	· · · · · ·	· · · · · · · ·	· · · · · · · ·		245         -         -         -         -           247         -         -         -         -         -           -         246         -         -         -         -	- <u>-</u> - <u>-</u> -	<u> 245</u> <u>245</u> - <u>-</u> <u>-</u> <u>247</u> - <u>-</u>	· · · · · ·	
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	I-Adapter Male-Female	255 255	- 255	255 - 255		- 255 255	· · ·	· · · · · · ·		· · · ·
Jii 🔊 🔊	I-Adapter Male-Male Plastic I-Adapter Male-Female	257 257 256 256	- <u>257</u> - <u>256</u>	<u>257</u> - 257 256 - 256		- <u>257</u> <u>257</u> - <u>256</u> <u>256</u>		· · · · ·		· · · ·
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	Y-Splitter Male-2Female	260 260	- 260	260 - 260		- 260 260		· · · · · ·		· · ·
	Y-Splitter Female-Male-Female T-Splitter Female-Male-Female	261         261           262         262	- 261 - 262	261         -         261           262         -         262		- 261 261 - 262 262		· · · · · ·		· · · ·
	Plastic T-Splitter Female-Male-Female T-Splitter Female-Male-Female Shielded	263 263 264 264	- 263 - 264	263 - 263 264 - 264		- 263 263 - 264 264		· · · · · · · · · · · · · · · · · · ·		· · · ·
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	Plastic T-Splitter Male with Molded Cable T-Splitter Female with Molded Cable	266 266 267 267	- 266 - 267	266         -         266           267         -         267		- 266 266 - 267 267		· · · · · · ·		
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	Plastic Multi-Way 41-Splitter Male-3Female	271 271 272 272	- 272	272 - 272		- 272 272				· · · · ·
and the second second	Multi-Way 6T-Splitter Male-5Female Plastic Multi-Way 6T-Splitter Male-5Female	273 273 274 274	- 273 - 274	<u>273</u> - 273 274 - 274		- 273 273 - 274 274		· · · · · ·		
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	Plastic Female Terminator	- 278 - 278	8 - 278	- 278 - 278	) -   -	278 - 2	278	278	- 278 -	278 - 278









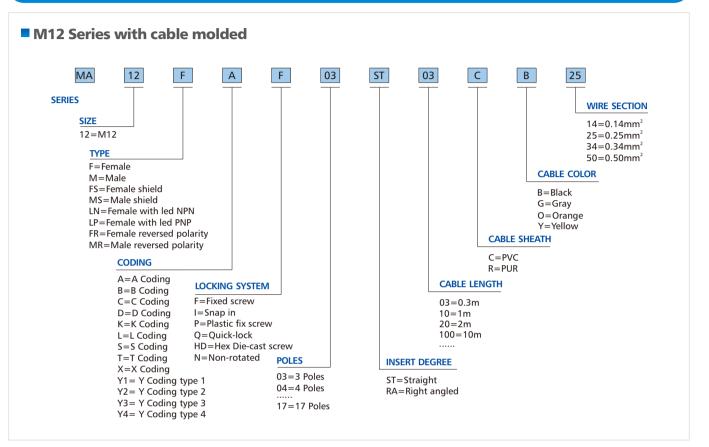


	Available Coding	A-coding	B-cod		A-codir	ig B-coo	ing C-o	coding D–codi	<u> </u>	T-coding	Quick-lock	A-coding	B-coding	C-coding	K-coding	L-coding	C-coding	Quick-lock	Y1–coding Y3–codin	5	X-coding	Y2-coding Y4-coding	A-coding	A-coding
	Rated Current Voltage	4,	1A 50V	4A 250V			4A 250V		12A( 63	(40°C) 80V	4A 250V		4A 60V	2A 60V	16A 690V(A/C), NC(D/C)	16A NC(A/C), 63V(D/C)	2A 30V	4A 60V	12A (Power),0.5A(Signal) 50V	) 2A 30V	0.5A 50V / 60V	6A (Power),0.5A(Signal) 50V	1.5A 30V	1.5A 30V
ble	Wire Gauge / size	22AWG /		22AWG / 0.34	nm²		22AWG / 0.34mm <sup>2</sup>		16AWG		22AWG / 0.34mr	n² 22AW	G / 0.34mm <sup>2</sup>	24AWG / 0.25mm <sup>2</sup>	14AWG / 2.0mm <sup>2</sup>	24AWG / 0.25mm <sup>2</sup>	24AWG / 0.25mm <sup>2</sup>	22AWG / 0.34mm <sup>2</sup>	16/26AWG, 1.25/0.15mm	24AWG / 0.25mm		20/26AWG, 0.6/0.15mm <sup>2</sup>	26AWG / 0.14mm <sup>2</sup>	26AWG / 0.14mm <sup>2</sup>
	Pin layout	(40 03)     (30 04)       10     01       Male     Female				30 04 20 01 Female Male	30         04           20         01           Female         Male	Female Male	Female Male Female	Male Female			Male Female		Male Female	Male Female		$ \begin{array}{c} ( \begin{array}{c} & & \\ & & \\ ( \begin{array}{c} & \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	Female		e Male Female	Image: Second	$\begin{array}{c} \begin{pmatrix} & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$	Male Female
conne	ctors		3 Pir	S				4 Pin	IS				5 Pins				6 Pins				8 Pins		12 Pins	17 Pins
e	Male Panel Mount Die-cast Solder Front fastened	170	179		. 179	- 179	- 179	- 179		-   -		170		179 -	1		179 -			179 -				
	Male Panel Mount Die-cast Solder Profit Tastened Male Panel Mount Solder Front fastened Male Panel Mount Solder Rear fastened Male Panel Mount Solder Rear fastened Adjustable Nut Male Panel Mount Plastic Screw Nut Solder Front fastened Male Panel Mount Plastic Screw Solder Rear fastened Female Panel Mount Die-cast Solder Front fastened Female Panel Mount Die-cast Solder Front fastened	173     -       183     -       185     -       188     -       191     -       180     -       -     -       -     181	173 183 185 188 191 180 -		173 183 185 185 188 191 180/186 189 31 -	- 183 - 185 - 185 - 188 - 191 - 180  181 -	- 173 - 183 - 185 - 188 - 191 - 180  181 -	- 175 - 183 - 185 - 188 - 191 - 180  - 181 	      181			175 - 183 - 185 - 188 - 191 - 180/186 - 189 - - 181		173         -           183         -           185         -           188         -           191         -           180         -           -         -           -         181		· · · · · · · · · · · · · · · · · · ·	173         -           183         -           185         -           188         -           191         -           180         -           -         -           -         181			175 183 - 185 - 188 - 191 - 180/186 - 189 - 181			 185 - 188 - 191 -  	 185 - 188 - 191 -   
	Female Panel Mount Die-cast Screw Solder Rear fastened         Female Panel Mount Plastic Screw Nut Solder Front fastened         Female Panel Mount Solder Front fastened         Female Panel Mount Solder Rear fastened         Female Panel Mount Solder Rear fastened         Male Panel Mount Die-cast Screw PCB Type Front fastened         Male Panel Mount Plastic Screw Nut PCB Type Front fastened         Male Panel Mount Die-cast Screw PCB Type Rear fastened	- 184 - 182 - 187 - 190 - 192 199 - 200 - 203 	- - - - 199 200 203	182         -         1           187         -         1           190         -         1	34         -           32         -           37         -           90         -           92         -           199         -           200         -           201         -	184         -           182         -           187         -           190         -           192         -           -         199           -         200           -         203	184         -           182         -           187         -           190         -           192         -           -         199           -         200           -         203	184         -           182         -           187         -           190         -           192         -           -         199           -         200           -         203	184     -     -       182     -     -       187     -     -       190     -     -       192     -     -       -     -     -       -     -     -       -     -     -	· · · · · · · · · · · · · · · · · · ·	- · · · · · · · · · · · · · · · · · · ·	- 182 - 187 - 190	-         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	- 184 - 182 - 187 - 190 - 192 199 - 200 - 203 -			-         184           -         182           -         187           -         190           -         192           199         -           200         -           203         -			- 184 - 182 - 187 - 190 - 192 199 - 200 - 203 -			 - 187 - 190 - 192    	 - 187 - 190 - 192    
	Male Panel Mount PCB Type Rear fastened Male Panel Mount Angled PCB Type Front fastened	205         -           207/208         -           211/212         -           -         -           -         -	205 207/208 211/212 - -	- 205 - 207/208 - 211/212 	· 205 · 207/208 · 211/212 ·	- 205 - 207/208 - 211/212  - 215	- 205 - 207/208 - 211/212  	- 205 - 207/208 - 211/212  - 215		   		205         -           207/208         -           211/212         -           -         -           215         -		205         -           207/208         -           211/212         -           -         -           -         -		 236 -  238 - 	205         -           207/208         -           211/212         -           -         -           -         -			205         -           207/208         -           211/212         -           -         -           215         -	220		 207/208 - 211/212 -  	 207/208 - 211/212 -  
	Female Panel Mount Die-cast Screw PCB Type Front fastened         Female Panel Mount Plastic Screw Nut PCB Type Front fastened         Female Panel Mount Die-cast Screw PCB Type Rear fastened         Female Panel Mount Die-cast Screw PCB Type Front fastened Shielded         Female Panel Mount PCB Type Front fastened         Female Panel Mount Angled PCB Type Front fastened         Female Panel Mount Angled PCB Type Rear fastened Shielded         Female Panel Mount Angled PCB Type Rear fastened Shielded shell without fixed holes         Female Panel Mount Angled PCB Type Rear fastened Shielded shell with fixed holes	- 201 - 202 - 204 - 206 - 210 - 213 214     		201     -     2       202     -     2       204     -     2       206     -     2       210     -     2       213     -     2       -     -     -       214     -     2       -     -     -       -     -     -       -     -     -       -     -     -		201     -       202     -       204     -       206     -       210     -       213     -       -     -       214     -       216     -       -     -       -     -       -     -       -     -	201         -           202         -           204         -           206         -           210         -           213         -           -         -           214         -           216         -           -         -           -         -           -         -           -         -		201     -     -       202     -     -       204     -     -       206     -     -       210     -     -       213     -     -       214     -     -       216     -     -       218     -     -       219     -     -			- 202 - 204 - 206 - 210 - 213  - 214 - 216 	   	- 201 - 202 - 204 - 206 - 210 - 213 214    	   - 229  - 231       	  - 237  - 239       	-         201           -         202           -         204           -         206           -         210           -         213           -         -           -         214           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	- · · · · · · · · · · · · · · · · · · ·	            	- 201 - 202 - 204 - 206 - 210 - 213 - 213 - 214 - 216  	   - 221/244 - 222  - 217        -		           	         
	Female Panel Mount PCB Type without Screw X-coding Shielded         Male Panel Mount Crimp Front fastened         Female Panel Mount Crimp Rear fastened         Female Panel Mount Crimp Front fastened         Female Panel Mount Crimp Rear fastened         Female Panel Mount Crimp Rear fastened         Male to Female Panel Mount A-Coding         Male to Female Panel Mount X-Coding Shielded         Female to Female Panel Mount X-Coding Shielded         Female to Remale Panel Mount X-Coding Shielded         Female Top Image         Female Panel Mount Solder with Flange		- - - - - - - - - - - - - - - - - - -					· ·	- 195 - 196 196       	 197 - - 198 - - 198 -      	- · · · · · · · · · · · · · · · · · · ·	-         -           -         -	-         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	-         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	-         -           224         -           226         -           -         225           -         -           -         227           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	-         -           232         -           234         -           -         233           -         -           -         235           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -	-         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -           -         -							         
	Male Panel Mount Solder Front fastened Quick lock Type         Male Panel Mount PCB Type Front fastened Quick lock Type         Female Panel Mount Solder Front fastened Quick lock Type         Female Panel Mount PCB Type Front fastened Quick lock Type         Male Plastic Housing with O-ring Solder         Male Plastic Housing with PCB O-ring Solder	   249 - 250 -	- - - 249 250			    - 249 - 250	     	    - 249 - 250			245         -           247         -           -         246           -         248           -         248           -         -           -         -           -         -	249 -	-         -           -         -           -         -           -         -           249         -           250         -					245     -       247     -       -     246       -     248       -     -       -     -       -     -	· · · · · · · · · · · · · · · · · · ·	   249 - 250 -		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	     
er	I-Adapter Male-Female	255	255		255	25		- 255	-	-	-	255	255	-	-	-	-	-	-	-	-	-	-	-
	I-Adapter Male-Male Plastic I-Adapter Male-Female I-Adapter Male-Female Plastic L-Adapter Male-Female Y-Splitter Male-ZFemale Y-Splitter Female-Male-Female T-Splitter Female-Male-Female Plastic T-Splitter Female-Male-Female	257 256 258 259 260 261 261 262 263	253 257 256 258 259 260 261 262 263		257 256 258 259 260 261 262 263	25 25 25 26 26 26 26 26 26 26	7 5 5 3 9 5 1 5 2 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	- 257 - 256 - 258 - 259 - 260 - 261 - 262 - 262 - 263		- - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	257 256 258 259 260 261 262 263	257 256 258 259 260 261 261 262 263	- - - - - - - - - - - - - - -	- - - - - - - - -	- - - - - - - - - - -			- - - - - - - - - -	- - - - - - - - - - - - - - -		- - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - - - - -
	T-Splitter Female-Male-Female Shielded T-Splitter Male with Molded Cable Plastic T-Splitter Male with Molded Cable T-Splitter Female with Molded Cable Plastic T-Splitter Male with Molded Cable T-Splitter Male-Female Molded Cable Plastic T-Splitter Male-Female Molded Cable Multi-Way 4T-Splitter Male-3Female	264 265 266 267 268 269 270 271	264 265 266 267 268 269 270 271		264 265 266 267 268 269 269 270 271	26 26 26 26 26 26 26 26 26 27 27	* 55 7 8 9 9	- 264 - 265 - 266 - 267 - 268 - 269 - 270 - 271		- - - - - - - - - -		264 265 266 267 268 269 270 271	264 265 266 267 268 269 270 271		- - - - - - - - - -	- - - - - - - - -			- - - - - - - - - - -			- - - - - - - - -	- - - - - - - - -	- - - - - - - - -
	Plastic Multi-Way 4T-Splitter Male-SFemale Multi-Way 6T-Splitter Male-SFemale Plastic Multi-Way 6T-Splitter Male-SFemale Male Terminator Plastic Male Terminator Female Terminator	272           273           274           275           276           -           277	2772 2773 2774 2775 2776		277 273 273 274 275 276	27 27 27 - 275 - 276 277 -	2 3 4 -	- 271 - 272 - 273 - 274 - 275 - 276 				277 272 273 274 275 276 - 277	277 272 273 274 275 276 - 277 - 277				275 - 276 - 277			275 - 276 - 277 - 277		- - - - - - - -		- - 275 - 276 -
9	Plastic Female Terminator	- 278	-	278 -	-	278 -	278		278 -	-	-	- 278		-	-	-	- 278	-	-	- 278		-	- 278	- 277 - 278

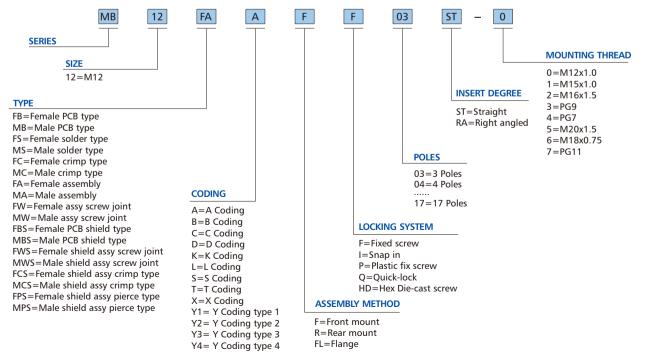
#### 94 www.finecables.com



## **How to Order Part Number**









## M12 Male Molded Cable, Straight

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12M\*HD\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated

#### Electrical data & Mechanical data

	REF 42.0
9.41 M12x1.0 —	



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Insulation resistance:	≥100MΩ
insulation resistance.	
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

Contacts		Available	e Coding		Rated	Volt	age	Wire gau	ıge / size	Cable	Part No.
Contacts	А	В	C	D	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
03 pins	4. •3		(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAHD03ST <u>XXX</u> B34 MA12MBHD03ST <u>XXX</u> B34 MA12MCHD03ST <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAHD04ST <u>XXX</u> B34 MA12MBHD04ST <u>XXX</u> B34 MA12MCHD04ST <u>XXX</u> B34 MA12MDHD04ST <u>XXX</u> B34
05 pins			(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MAHD05ST <u>XXX</u> B34 MA12MBHD05ST <u>XXX</u> B34 MA12MCHD05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MCHD06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MAHD08ST <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAHD12ST <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA17MAHD17ST <u>XXX</u> B14
*17pin with	n different ov	ermold fror	n above oth	ner pins.						No	ote: <u>X</u> refers to cable specification

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



REF 42

## M12 Male Molded Cable, Straight, Plastic Screw

M12x1.0

#### • Connector series: M12

- Gender: Male
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MA12M\*P\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	PA+GF

#### Electrical data & Mechanical data

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

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Contacts		Available	e Coding		Rated	Volt	age	Wire gau	ıge / size	Cable	Part No.
Contacts	A	В	С	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins			(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAP03ST <u>XXX</u> B34 MA12MBP03ST <u>XXX</u> B34 MA12MCP03ST <u>XXX</u> B34
04 pins		(40 03) 10 02)	(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAP04ST <u>XXX</u> B34 MA12MBP04ST <u>XXX</u> B34 MA12MCP04ST <u>XXX</u> B34 MA12MDP04ST <u>XXX</u> B34
05 pins	(40 03 05 10 02		(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MAP05ST <u>XXX</u> B34 MA12MBP05ST <u>XXX</u> B34 MA12MCP05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MCP06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MAP08ST <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAP12ST <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAP17ST <u>XXX</u> B14
*17pin with	different o	vermold fror	n above oth	er pins.						No	ote: <u>X</u> refers to cable specification

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

REF 41.0

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M12x1.0



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## M12 Female Molded Cable, Straight

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12F\*HD\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU; PA
TPU
Zinc alloy with nickel plated
FKM

#### Electrical data & Mechanical data

Connector contacts:	Brass with gold plated
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

		Available	e Coding			Volt	age	Wire gau	ide / size		
Contacts	A	B	C	D	Rated current	A/C	D/C	AWG	mm <sup>2</sup>	Cable jacket	Part No.
03 pins			OPE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAHD03ST <u>XXX</u> B34 MA12FBHD03ST <u>XXX</u> B34 MA12FCHD03ST <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAHD04ST <u>XXX</u> B34 MA12FBHD04ST <u>XXX</u> B34 MA12FCHD04ST <u>XXX</u> B34 MA12FDHD04ST <u>XXX</u> B34
05 pins			(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FAHD05ST <u>XXX</u> B34 MA12FBHD05ST <u>XXX</u> B34 MA12FCHD05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FCHD06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FAHD08ST <u>XXX</u> B25
12 pins	(50 <sup>6</sup> 0 <sup>7</sup> ) (40 0 0 08) 30 <sup>1</sup> 0 <sup>1</sup> 209) 20 <sup>1</sup> 01				1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAHD12ST <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAHD17ST <u>XXX</u> B14
*17pin with	different ov	vermold fror	n above oth	er pins.						Nc	ote: <u>X</u> refers to cable specificatior

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



**REF 41** 

## M12 Female Molded Cable, Straight, Plastic Nut

M12x1.0

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MA12F\*P\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU; PA
TPU
PA+GF
FKM

#### Electrical data & Mechanical data

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Connector contacts:	Brass with gold plated
Insulation resistance:	≥100ΜΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition

>500 cycles

Mating endurance:

		A	. Carlinan		Rated Voltage V			14/:			
Contacts	A	Available B		D	Rated current	A/C	age D/C	Wire gau AWG	ige / size	Cable jacket	Part No.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAP03ST <u>XXX</u> B34 MA12FBP03ST <u>XXX</u> B34 MA12FCP03ST <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAP04ST <u>XXX</u> B34 MA12FBP04ST <u>XXX</u> B34 MA12FCP04ST <u>XXX</u> B34 MA12FDP04ST <u>XXX</u> B34
05 pins			(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FAP05ST <u>XXX</u> B34 MA12FBP05ST <u>XXX</u> B34 MA12FCP05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FCP06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FAP08ST <u>XXX</u> B25
12 pins	(50 <sup>6</sup> 0 <sup>7</sup> ) (40 0 008) 30 <sup>1</sup> 0 <sup>1</sup> 209) 20 <sup>1</sup> 01				1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAP12ST <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAP17ST <u>XXX</u> B14

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, Shielded

- Connector series: M12
- Gender: Male

- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MS\*HD\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated
coupling had below	

#### Electrical data & Mechanical data

REF48.2	
M12x1.0-/	



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

Contacto	Contacts Available Codin		e Coding		Rated	Voltage		Wire gau	uge / size	Cable	Part No.
Contacts	A	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins			(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MSAHD03ST <u>XXX</u> B34 MA12MSBHD03ST <u>XXX</u> B34 MA12MSCHD03ST <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MSAHD04ST <u>XXX</u> B34 MA12MSBHD04ST <u>XXX</u> B34 MA12MSCHD04ST <u>XXX</u> B34 MA12MSDHD04ST <u>XXX</u> B34
05 pins		(40 03) 0 5 10 02	(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MSAHD05ST <u>XXX</u> B34 MA12MSBHD05ST <u>XXX</u> B34 MA12MSCHD05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MSCHD06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MSAHD08ST <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MSAHD12ST <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MSAHD17ST <u>XXX</u> B14

\*12pin, 17pin with different overmold from above other pins.

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

• Please refer to Page 96 for products' part number encoding rule.

Note:  $\underline{X}$  refers to cable specification



## M12 Female Molded Cable, Straight, Shielded

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FS\*HD\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

REF46.9	
M12x1.0	
	$\leq$



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Standard:	IEC 61076-2-101
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

#### Electrical data & Mechanical data

Connector contacts:	Brass with gold plated
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

		Δvailable	e Coding		Deterl	Voltage		Wire gauge / size			
Contacts	A	B	C	D	Rated current	A/C	D/C	AWG	mm <sup>2</sup>	Cable jacket	Part No.
03 pins			OPE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FSAHD03ST <u>XXX</u> B34 MA12FSBHD03ST <u>XXX</u> B34 MA12FSCHD03ST <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FSAHD04ST <u>XXX</u> B34 MA12FSBHD04ST <u>XXX</u> B34 MA12FSCHD04ST <u>XXX</u> B34 MA12FSDHD04ST <u>XXX</u> B34
05 pins			PE 20 04 10 05 (4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FSAHD05ST <u>XXX</u> B34 MA12FSBHD05ST <u>XXX</u> B34 MA12FSCHD05ST <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FSCHD06ST <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FSAHD08ST <u>XXX</u> B25
12 pins	(50°0°) (40°0°08) (30°0209) (20°00) (20°00)				1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FSAHD12ST <u>XXX</u> B14
17 pins	000000 000000 000000				1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FSAHD17ST <u>XXX</u> B14

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Angled

- Connector series: M12
- Gender: Male

Contacts

03 pins

04 pins

05 pins

06 pins

08 pins

12 pins

17 pins

- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12M\*HD\*\*RAXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
-20°C ~ +80°C(flexible installation)
TPU
Brass with gold plated
TPU
Zinc alloy with nickel plated

#### Electrical data & Mechanical data

	REF 36
REF 29.7	
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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

		Available Coding			Rated	Volt	age	Wire gau	uge / size	Cable	Part No.
•	А	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
	(40 03) 10		(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAHD03RA <u>XXX</u> B34 MA12MBHD03RA <u>XXX</u> B34 MA12MCHD03RA <u>XXX</u> B34
		(4® @3) 1@ @2	(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAHD04RA <u>XXX</u> B34 MA12MBHD04RA <u>XXX</u> B34 MA12MCHD04RA <u>XXX</u> B34 MA12MDHD04RA <u>XXX</u> B34
		(40 03) 0 5 10 02	(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MAHD05RA <u>XXX</u> B34 MA12MBHD05RA <u>XXX</u> B34 MA12MCHD05RA <u>XXX</u> B25
			PE (4⊕ ⊕ 02 5⊕ <sup>6</sup> ⊕1) (5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MCHD06RA <u>XXX</u> B25
					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MAHD08RA <u>XXX</u> B25
					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAHD12RA <u>XXX</u> B14
					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAHD17RA <u>XXX</u> B14

\*12pin, 17pin with different overmold from above other pins.

Note:  $\underline{X}$  refers to cable specification

#### Remarks

1<sup>8</sup>1 8128: 1<sup>811</sup> 82/

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Angled, Plastic Screw

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Right angled
- Part No.: MA12M\*P\*\*RAXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

## General information

eneral information	
Standard:	IEC 61076-2-101
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	PA+GF

#### Electrical data & Mechanical data

	REF 36
REF 29.7	
•	Φ14.5 Φ14.5



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

Contacts		Available	e Coding		Rated	Volt	age	e Wire gauge / size		Cable	Daut Ma
Contacts	A	В	С	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins	40 03		(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAP03RA <u>XXX</u> B34 MA12MBP03RA <u>XXX</u> B34 MA12MCP03RA <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAP04RA <u>XXX</u> B34 MA12MBP04RA <u>XXX</u> B34 MA12MCP04RA <u>XXX</u> B34 MA12MDP04RA <u>XXX</u> B34
05 pins		(4) (8) (8) (1) (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MAP05RA <u>XXX</u> B34 MA12MBP05RA <u>XXX</u> B34 MA12MCP05RA <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MCP06RA <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MAP08RA <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAP12RA <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MAP17RA <u>XXX</u> B14

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Angled

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12F\*HD\*\*RAXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
-20°C ~ +80°C(flexible installation)
TPU; PA
TPU
Zinc alloy with nickel plated
FKM

#### Electrical data & Mechanical data

	REF 36
REF 28	
-	Φ14.5 M12x1.0



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Brass with gold plated
≥100MΩ
≤5mΩ
Unavailable
IP68, IP69K in locked condition
>500 cycles

Contacts		Available	e Coding		Rated	Voltage		Wire gauge / size		Cable	De et Ma
Contacts	A	В	С	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAHD03RA <u>XXX</u> B34 MA12FBHD03RA <u>XXX</u> B34 MA12FCHD03RA <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAHD04RA <u>XXX</u> B34 MA12FBHD04RA <u>XXX</u> B34 MA12FCHD04RA <u>XXX</u> B34 MA12FDHD04RA <u>XXX</u> B34
05 pins			(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FAHD05RA <u>XXX</u> B34 MA12FBHD05RA <u>XXX</u> B34 MA12FCHD05RA <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FCHD06RA <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FAHD08RA <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAHD12RA <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAHD17RA <u>XXX</u> B14
*12pin, 17p	in with diffe	erent overme	old from ab	ove other pi	ns.			II		No	ote: <u>X</u> refers to cable specification

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



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Φ14.5

REF 36

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M12x1.0

## M12 Female Molded Cable, Angled, Plastic Nut

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D •

- Locking type: Plastic fix screw
- Mounting type: Right angled
- Part No.: MA12F\*P\*\*RAXXXXXX
  - refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU; PA
Connector overmold:	TPU
Coupling nut/screw:	PA+GF
Seal / O-ring:	FKM

#### Connector contacts: Brass with gold plated ≥100MΩ Insulation resistance: ≤5mΩ Contact resistance : Shielding: Unavailable IP68, IP69K in locked condition IP rating: Mating endurance: >500 cycles

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#### Electrical data & Mechanical data

c		Available	e Coding		Rated	Volt	age	Wire gau	uge / size	Cable	
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins			OPE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAP03RA <u>XXX</u> B34 MA12FBP03RA <u>XXX</u> B34 MA12FCP03RA <u>XXX</u> B34
04 pins			0PE 30 01 20 (3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAP04RA <u>XXX</u> B34 MA12FBP04RA <u>XXX</u> B34 MA12FCP04RA <u>XXX</u> B34 MA12FDP04RA <u>XXX</u> B34
05 pins			PE 20 04 10 05 (4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FAP05RA <u>XXX</u> B34 MA12FBP05RA <u>XXX</u> B34 MA12FCP05RA <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FCP06RA <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FAP08RA <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAP12RA <u>XXX</u> B14
17 pins	00000000000000000000000000000000000000				1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FAP17RA <u>XXX</u> B14
		erent overm	old from ab	ove other pi		30V	30V	26AWG	0.14		MA12FAP17RA <u>XXX</u> B14

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.





## M12 Male Molded Cable, Angled, Shielded

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12MS\*HD\*\*RAXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
PA
Brass with gold plated
TPU
Zinc alloy with nickel plated

#### Electrical data & Mechanical data

	REF 37.5
29.7	
REF29.7	M12x1.0
	Φ14.5



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

Country ato		Available	e Coding		Rated	Volt	age	Wire gau	ıge / size	Cable	Devt Ne
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins		(40 03) 10	(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MSAHD03RA <u>XXX</u> B34 MA12MSBHD03RA <u>XXX</u> B34 MA12MSCHD03RA <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MSAHD04RA <u>XXX</u> B34 MA12MSBHD04RA <u>XXX</u> B34 MA12MSCHD04RA <u>XXX</u> B34 MA12MSCHD04RA <u>XXX</u> B34
05 pins		(40 03) 0 5 10 02	(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12MSAHD05RA <u>XXX</u> B34 MA12MSBHD05RA <u>XXX</u> B34 MA12MSCHD05RA <u>XXX</u> B25
06 pins			PE (4⊕ ⊕ 02) 5⊕ <sup>6</sup> ⊕1) (5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MSCHD06RA <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MSAHD08RA <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MSAHD12RA <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12MSAHD17RA <u>XXX</u> B14
*12pin, 17p	oin with diffe	erent overm	old from ab	ove other pi	ns.					No	ote: <u>X</u> refers to cable specification

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

• Please refer to Page 96 for products' part number encoding rule.

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## M12 Female Molded Cable, Angled, Shielded

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12FS\*HD\*\*RAXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

	REF 37.5
REF28.7	
1	Φ14.5 Φ14.5



## c 🕄 us ( E RoHS 🛞

IEC 61076-2-101
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
PA
TPU
Zinc alloy with nickel plated
FKM

#### Electrical data & Mechanical data

Brass with gold plated
≥100MΩ
≤5mΩ
Available
IP68, IP69K in locked condition
>500 cycles

Contacts		Available	e Coding		Rated	Voltage		Wire gauge / size		Cable	Part No.
contacts	А	В	C	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Fait NO.
03 pins			(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FSAHD03RA <u>XXX</u> B34 MA12FSBHD03RA <u>XXX</u> B34 MA12FSCHD03RA <u>XXX</u> B34
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FSAHD04RA <u>XXX</u> B34 MA12FSBHD04RA <u>XXX</u> B34 MA12FSCHD04RA <u>XXX</u> B34 MA12FSDHD04RA <u>XXX</u> B34
05 pins			PE 20 04 10 05 (4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MA12FSAHD05RA <u>XXX</u> B34 MA12FSBHD05RA <u>XXX</u> B34 MA12FSCHD05RA <u>XXX</u> B25
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FSCHD06RA <u>XXX</u> B25
08 pins					2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FSAHD08RA <u>XXX</u> B25
12 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FSAHD12RA <u>XXX</u> B14
17 pins					1.5A	30V	30V	26AWG	0.14	PUR / PVC	MA12FSAHD17RA <u>XXX</u> B14

Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

Insulation resistance:

Contact resistance :

Mating endurance:

Shielding:

IP rating:



## Micro-change 1/2"-20UNF Male Molded Cable, Straight

1/2"-20UNF-2A

- Connector series: Micro-change
- Gender: Male
- Coding: C
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MC-WM\*\*STMF-XXXXXX
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Brass with nickel plated

#### Electrical data & Mechanical data

Con	tacts	Rated	Volt	age	Wire gau	uge / size	Cable jacket	Part No.
Con	ldClS	current	A/C	D/C	AWG	mm²	jacket	Part NO.
02 pins		4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WM02STMF- <u>XXX</u> B34
03 pins	PE@ 2@ @3	4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WM03STMF- <u>XXX</u> B34
04 pins		4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WM04STMF- <u>XXX</u> B34
05 pins		2A	60V	60V	24AWG	0.25	PUR / PVC	MC-WM05STMF- <u>XXX</u> B25
06 pins		2A	60V	60V	24AWG	0.25	PUR / PVC	MC-WM06STMF- <u>XXX</u> B25

REF42

Note:  $\underline{X}$  refers to cable specification

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

• Please refer to Page 96 for products' part number encoding rule.



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IP68, IP69k in locked condition

≥100MΩ

Unavailable

>500 cycles

≤5mΩ



## Micro-change 1/2"-20UNF Female Molded Cable, Straight

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1/2"-20UNF-2B

REF39.2

- Connector series: Micro-change
- Gender: Female
- Coding: C
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MC-WF\*\*STMF-XXXXXX
  - \*\* refers to pins number X refers to cable specification

#### Gene

eneral information	
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68, IP69K in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Rated Vo current A/C		Voltage A/C D/C		Wire gauge / size           AWG         mm²		Part No.
02 pins	20	4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WF02STMF- <u>XXX</u> B34
03 pins	0PE 30 02	4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WF03STMF- <u>XXX</u> B34
04 pins		4A	250V	250V	22AWG	0.34	PUR / PVC	MC-WF04STMF- <u>XXX</u> B34
05 pins	PE 20 04 10 05	2A	60V	60V	24AWG	0.25	PUR / PVC	MC-WF05STMF- <u>XXX</u> B25
06 pins	(10°05)	2A	30V	30V	24AWG	0.25	PUR / PVC	MC-WF06STMF- <u>XXX</u> B25

Note: X refers to cable specification

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



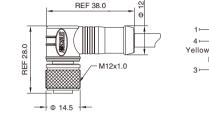
## M12 Female Molded Cable, Angled, with LED Indicator(PNP)

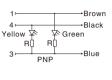
- Connector series: M12
- Gender: Female
- Coding: A
- Locking type: Fix screw

\*\* refers to pins number X refers to cable specification

General information

- Mounting type: Right angled
- Part No.: MA12LPAF\*\*RAXXXXXX







## c 🕄 us ( E RoHS 🛞

# Standard:IEC 61076-2-101Ambient temperature:-40°C ~ +80°C(fixed installation)<br/>-20°C ~ +80°C(flexible installation)Connector insert:PA+GFConnector contacts:Brass with gold platedConnector overmold:Transparent TPUConnector nut/screw:Brass with nickel platedSeal / O-ring:FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Con	tacts	Rated	Volt	age	Wire gau	ıge / size	Cable	Part No.	
con	lacts	current	A/C	D/C	AWG	mm²	jacket		
03 pins	Blind hole	4A	30V	30V	22AWG	0.34	PUR / PVC	MA12LPAF03RA <u>XXX</u> B34	

Note:  $\underline{X}$  refers to cable specification

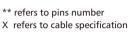
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

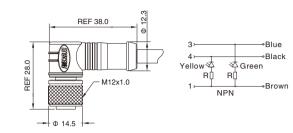


## M12 Female Molded Cable, Angled, with LED Indicator(NPN)

- Connector series: M12
- Gender: Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12LNAF\*\*RAXXXXXX



General information





## c 🕄 us ( E RoHS 🕮

Standard:	IEC 61076-2-101
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector overmold:	Transparent TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Rated	Volt A/C	age	-	ige / size	Cable jacket	Part No.
		current		D/C AWO		mm <sup>2</sup>	Jucket	
03 pins	Blind hole	4A	30V	30V	22AWG	0.34	PUR / PVC	MA12LNAF03RA <u>XXX</u> B34

Note: X refers to cable specification

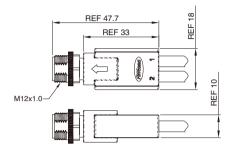
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded 2 Cables, Straight

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-015~021; MT-049~052; MT-079





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

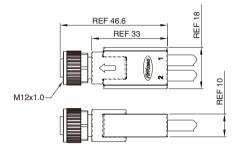
Contosta		Available	e Coding		Rated	Volt	age	Wire gau	uge / size	Cable	Part No.
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins		(40 03) 10	(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-015 (A-Coding) MT-018 (B-Coding) MT-049 (C-Coding)
04 pins		(4® @3) 1® @2)	(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-016 (A-Coding) MT-019 (B-Coding) MT-050 (C-Coding) MT-021 (D-Coding)
05 pins			(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MT-017 (A-Coding) MT-020 (B-Coding) MT-051 (C-Coding)
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MT-052 (C-Coding)
08 pins	( ( ( ( ( ( ( ( ( ( ( ( ( (				2A	30V	30V	24AWG	0.25	PUR / PVC	MT-079 (A-Coding)

#### Remarks



## M12 Female Molded 2 Cables, Straight

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-029~035; MT-057~060; MT-080





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU;PA
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

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#### Electrical data & Mechanical data

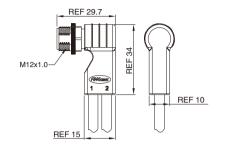
Contacts		Available	e Coding		Rated	Volt	age	Wire gau	uge / size	Cable	Part No.
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-029 (A-Coding) MT-032 (B-Coding) MT-057 (C-Coding)
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-030 (A-Coding) MT-033 (B-Coding) MT-058 (C-Coding) MT-035 (D-Coding)
05 pins			PE 20 04 10 05 (4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MT-031 (A-Coding) MT-034 (B-Coding) MT-059 (C-Coding)
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MT-060 (C-Coding)
08 pins	40 5 06 30 0 07 20 8 01 Available				2A	30V	30V	24AWG	0.25	PUR / PVC	MT-080 (A-Coding)

#### Remarks



## M12 Male Molded 2 Cables, Angled

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MT-022~028; MT-053~056





( E RoHS

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

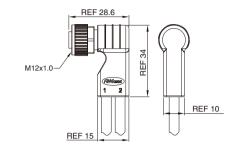
Contosta		Available	e Coding		Rated	Volt	age	Wire gau	uge / size	Cable	Dant Ma
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Part No.
03 pins		(4® ®3) 1®	(2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-022 (A-Coding) MT-025 (B-Coding) MT-053 (C-Coding)
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-023 (A-Coding) MT-026 (B-Coding) MT-054 (C-Coding) MT-028 (D-Coding)
05 pins		(40 03 0 5 10 02	(4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MT-024 (A-Coding) MT-027 (B-Coding) MT-055 (C-Coding)
06 pins			(5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MT-056 (C-Coding)

#### Remarks



## M12 Female Molded 2 Cables, Angled

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MT-036~042; MT-061~064





( E RoHS

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU; PA
Connector overmold:	TPU
Coupling nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

Connector contacts:	Brass with gold plated
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

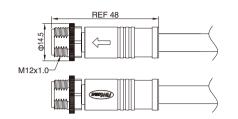
Contosta		Available	e Coding		Rated	Volt	age	Wire gau	uge / size	Cable	Dout No.
Contacts	А	В	С	D	current	A/C	D/C	AWG	mm²	jacket	Part No.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-036 (A-Coding) MT-039 (B-Coding) MT-061 (C-Coding)
04 pins			(3+PE)		4A	250V	250V	22AWG	0.34	PUR / PVC	MT-037 (A-Coding) MT-040 (B-Coding) MT-062 (C-Coding) MT-042 (D-Coding)
05 pins			PE 20 04 10 05 (4+PE)		4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC	MT-038 (A-Coding) MT-041 (B-Coding) MT-063 (C-Coding)
06 pins			PE 20004 10 <sup>6</sup> 05 (5+PE)		2A	30V	30V	24AWG	0.25	PUR / PVC	MT-064 (C-Coding)

#### Remarks



## M12 Male Molded Cable, Straight, S-coding

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSHD04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🏨

#### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Zinc alloy with nickel plated

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
>500 cycles

#### Electrical data & Mechanical data

Cor	ntacts	Rated	Rated	Wire gau	ıge / size	Cable	Part No.
con	lucio	current	Voltage	AWG	mm²	jacket	rurrio.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSHD04ST <u>XXX</u> B150

Note: X refers to cable specification

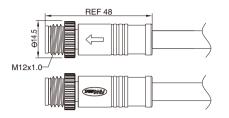
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, S-coding, Plastic Screw

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSP04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🛞

#### General information

Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Coupling nut/screw:	PA+GF

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSP04ST <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

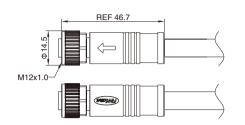
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, S-coding

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSHD04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

#### General information

-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU; PA
Brass with gold plated
TPU
Zinc alloy with nickel plated
FKM

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
>500 cycles

#### Electrical data & Mechanical data

Con	Contacts		Rated	Wire gau	uge / size	Cable	Part No.
Con	lacts	current Voltage	Voltage	AWG	mm²	jacket	rait NO.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSHD04ST <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

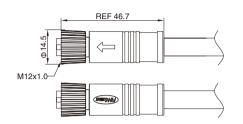
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, S-coding, Plastic Nut

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSP04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🛞

#### General information

-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU
Brass with gold plated
TPU
PA+GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Co	ntacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSP04ST <u>XXX</u> B150

Note: X refers to cable specification

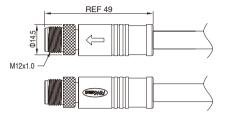
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, S-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSSF04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🏨

#### General information

Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Cor	itacts	Rated	Rated	Wire gauge / size		Cable	Part No.
con		current	Voltage	AWG	mm²	jacket	rurrio.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSSF04ST <u>XXX</u> B150

Note: X refers to cable specification

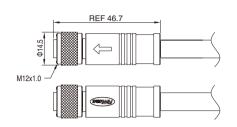
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, S-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSSF04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

#### General information

Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSSF04ST <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

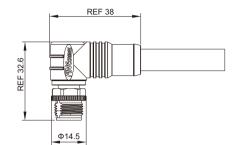
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Angled, S-coding

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12MSHD04RAXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🛞

#### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Zinc alloy with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Cont	tacts	Rated	Rated	Wire gau	ıge / size	Cable	Part No.
	Com	ldClS	current	Voltage	current Voltage AWG mm <sup>2</sup>	jacket Part No.	Part NO.	
04 pi	ns	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSHD04RA <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

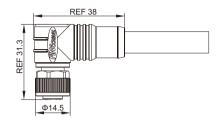
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Angled, S-coding

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12FSHD04RAXXXXXX
  - X refers to cable specification





## CALUS ( E ROHS

#### General information

-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU; PA
Brass with gold plated
TPU
Zinc alloy with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Co	ntacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSHD04RA <u>XXX</u> B150

Note: X refers to cable specification

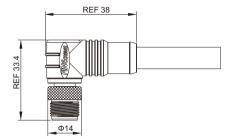
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Angled, S-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12MSSF04RAXXXXXX
  - X refers to cable specification





CANUS (E ROHS

#### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Cont	tacts	Rated	Rated	Wire gau	ıge / size	Cable	Part No.
CON	lacis	current	Voltage	AWG	mm²	jacket	Fart NO.
04 pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSSF04RA <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

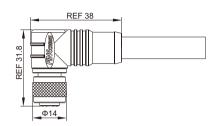
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Angled, S-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12FSSF04RAXXXXXX
  - X refers to cable specification





c 🕄 us ( E RoHS 🛞

#### General information

-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
TPU; PA
Brass with gold plated
TPU
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Con	tacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04	l pins	(3+PE)	12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSSF04RA <u>XXX</u> B150

Note: X refers to cable specification

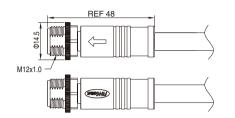
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, T-coding

- Connector series: M12
- Gender: Male
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MTHD04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

#### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)		
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)		
Connector insert:	TPU+GF		
Connector contacts:	Brass with gold plated		
Connector overmold:	TPU		
Connector nut/screw:	Zinc alloy with nickel plated		

Contact resistance :≤ 5mΩShielding:UnavailableIP rating:IP68 in locked condition	Insulation resistance:	≥100MΩ
IP rating: IP68 in locked condition		
IP rating: IP68 in locked condition	Shieldina:	Unavailable
5		IP68 in locked condition
	Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Contacts		Rated	Rated	Wire gauge / size		Cable	Part No.
	COIL	lacis	current	nt Voltage AWG		mm²	jacket	Fait NO.
-	04 pins		12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MTHD04ST <u>XXX</u> B150

Note:  $\underline{X}$  refers to cable specification

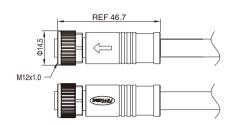
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, T-coding

- Connector series: M12
- Gender: Female
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FTHD04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

#### General information

Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)		
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)		
Connector insert:	TPU+GF		
Connector contacts:	Brass with gold plated		
Connector overmold:	TPU		
Connector nut/screw:	Zinc alloy with nickel plated		
Seal / O-ring:	FKM		

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Co	ontacts	Rated current	Rated Voltage	Wire gau AWG	uge / size mm²	Cable jacket	Part No.
04 pins		12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FTHD04ST <u>XXX</u> B150

Note: X refers to cable specification

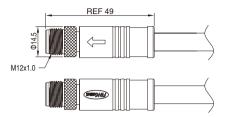
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, T-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSTF04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🏨

### General information

Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated current	Rated			Cable jacket	Part No.
		cullent	voltage	AWG	mm <sup>+</sup>	jucket	
04 pins		12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12MSTF04ST <u>XXX</u> B150

Note: X refers to cable specification

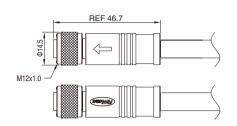
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, T-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSTF04STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

## General information

Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated current	Rated Voltage	Wire gauge / size       AWG     mm <sup>2</sup>		Cable jacket	Part No.
04 pins		12A(40℃)	630V	16AWG	1.5	PUR / PVC	MA12FSTF04ST <u>XXX</u> B150

Note: X refers to cable specification

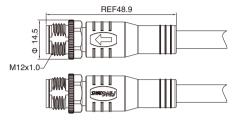
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, X-coding, Shielded

- Connector series: M12
- Gender: Male
- $\bullet \ \ \text{Coding: } X$
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSXHD08STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

### General information

Standard:	IEC 61076-2-109
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector screw:	Zinc alloy with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6A/CAT 7
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated	Voltage		Wire gauge / size		Cable	Part No.
Con	lacis	current	A/C	D/C	AWG	mm²	jacket	Fait NO.
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	CAT 6A /CAT 7	MA12MSXHD08ST <u>XXXXXX</u>

Note:  $\underline{X}$  refers to cable specification

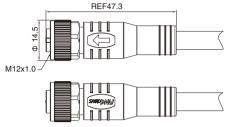
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSXHD08STXXXXXX
  - X refers to cable specification





## c 🕄 us ( E Rohs 🛞

### General information

Standard:	IEC 61076-2-109
Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector screw:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6A /CAT 7
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated	Voltage		Wire gauge / size		Cable	Part No.
Con	lacis	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Tart NO.
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	CAT 6A /CAT 7	MA12FSXHD08ST <u>XXXXXX</u>

Note: X refers to cable specification

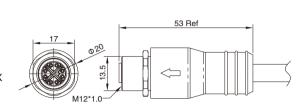
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Molded Cable, Straight, X-coding, Shielded

- Connector series: M12
- Gender: Female
- $\bullet \ \ \text{Coding: } X$
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSXN08STXXXXXX X refers to cable specification





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### General information

Standard:	IEC 61076-2-109
Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
	-20°C ~ +80°C(flexible installation)
Connector insert:	PA / TPU
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6A/CAT 7
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	Contacts		Volt	age	Wire gau	uge / size	Cable	Part No.
Con	Idelis	current	A/C	D/C	AWG	mm²	jacket	Part NO.
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	CAT 6A /CAT 7	MA12FSXN08ST <u>XXXXXX</u>

Note: X refers to cable specification

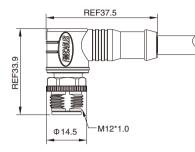
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Angled, X-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: X
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12MSXHD08RAXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-109
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector screw:	Zinc alloy with nickel plated

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6A /CAT 7
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	Contacts		Rated		Voltage		Wire gauge / size		Cable	Part No.
Con	lacis	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Fart NO.		
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	Cat 6a /Cat 7	MA12MSXHD08RA <u>XXXXXX</u>		

Note:  $\underline{X}$  refers to cable specification

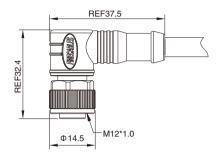
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Molded Cable, Angled, X-coding, Shielded

- Connector series: M12
- Gender: Female
- $\bullet \ \ \text{Coding: } X$
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MA12FSXHD08RAXXXXXX
  - X refers to cable specification





## c 🕄 us ( E RoHS 🏨

### General information

Standard:	IEC 61076-2-109
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector screw:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6A /CAT 7
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated	Volt	age	Wire gau	uge / size	Cable	Part No.
Con	lacis	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Fait NO.
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	CAT 6A /CAT 7	MA12FSXHD08RA <u>XXXXXX</u>

Note:  $\underline{X}$  refers to cable specification

### Remarks

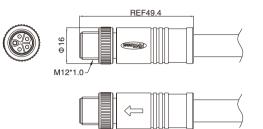
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, K-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: K
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSKF05STXXXX200

X refers to cable specification





## c 🕄 us ( E Rohs 🛞

### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated Voltage Wire gauge		uge / size	Cable	Part No.		
Com	lacis	current	A/C	D/C	AWG	mm²	jacket	
05 pins	(4+PE)	16A	690V	NC	14AWG	2.0	PUR / PVC	MA12MSKF05ST <u>XXXX</u> 200

Note:  $\underline{X}$  refers to cable specification

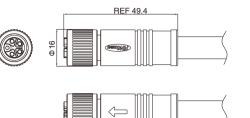
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Molded Cable, Straight, K-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: K
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSKF05STXXXX200
  - X refers to cable specification





## c 🕄 us ( E RoHS 👜

## General information

Standard:	IEC 61076-2-111
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated	Voltage		Wire gauge / size		Cable	Part No.
Con	Idelis	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
05 pins	(4+PE)	16A	690V	NC	14AWG	2.0	PUR / PVC	MA12FSKF05ST <u>XXXX</u> 200

Note:  $\underline{X}$  refers to cable specification

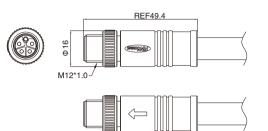
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, L-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: L
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSLF05STXXXX200
  - X refers to cable specification





## c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	-20°C ~ +80°C(flexible installation)
Connector insert:	TPU+PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Cont	Rated		Voltage		Wire gauge / size		Cable	Part No.
Com	lacts	current	A/C	D/C	AWG	mm²	jacket	Fait NO.
05 pins	(4+PE)	16A	NC	63V	14AWG	2.0	PUR / PVC	MA12MSLF05ST <u>XXXX</u> 200

Note: X refers to cable specification

## Remarks

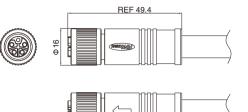
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Molded Cable, Straight, L-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: L
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12FSLF05STXXXX200

X refers to cable specification





## c 🕄 us ( E Rohs 🛞

### General information

Connector nut/screw: Seal / O-ring:	Brass with nickel plated
Connector overmold:	TPU
Connector contacts:	Brass with gold plated
Connector insert:	TPU+PA
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
Standard:	IEC 61076-2-111

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated Voltage		Wire gau	uge / size	Cable	Part No.	
Con	Idels	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
05 pins	(4+PE)	16A	NC	690V	14AWG	2.0	PUR / PVC	MA12FSLF05ST <u>XXXX</u> 200

Note:  $\underline{X}$  refers to cable specification

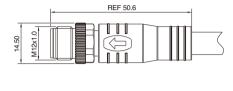
## Remarks

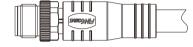
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, Y1-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: Y1
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSY1F06STXXXXXX
  - X refers to cable specification







## c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-113
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Cont	taete	Rated	Volt	age	Wire gau	ıge / size	Cable	Wire	Part No.
Com	ntacts current		A/C	D/C	AWG	mm²	jacket	insulation	Part NO.
06 pins		10A (Power pins) 0.5A (Signal pins)	50V	50V	16AWG (Power pins) 26AWG (Signal pins)	1.25 (Power pins) 0.15 (Signal pins)	PUR / PVC	РР	MA12MSY1F06ST <u>XXXXXX</u>

Note: X refers to cable specification

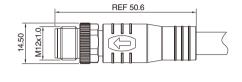
### Remarks

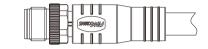
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, Y2-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: Y2
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSY2F08STXXXXXX
  - X refers to cable specification







## c 🕄 us ( E RoHS 🛞

## General information

Standard:	IEC 61076-2-113
Ambient temperature:	$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

	Con	tacts	Rated	Volt	age	Wire gau	ıge / size	Cable	Wire	Part No.
	CON	lacis	current	A/C	D/C	AWG	mm²	jacket	insulation	Part NO.
-	08 pins		6A (Power pins) 0.5A (Signal pins)	50V	50V	20AWG (Power pins) 26AWG (Signal pins)	0.6 (Power pins) 0.15 (Signal pins)	PUR / PVC	РР	MA12MSY2F08ST <u>XXXXXX</u>

Note:  $\underline{X}$  refers to cable specification

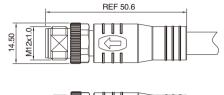
## Remarks

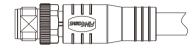
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, Y3-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: Y3
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSY3F06STXXXXXX
  - X refers to cable specification







## c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-113
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

≥100MΩ
≤10mΩ
Available
IP67 in locked condition
>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated	Volt	tage	Wire gau	uge / size	Cable	Wire	Part No.
Con	ldClS	current	A/C	D/C	AWG	mm²	jacket	insulation	Part NO.
06 pins		12A (Power pins) 0.5A (Signal pins)	50V	50V	16AWG (Power pins) 26AWG (Signal pins)	1.25 (Power pins) 0.15 (Signal pins)	PUR / PVC	PE+PP	MA12MSY3F06ST <u>XXXXXX</u>

Note: X refers to cable specification

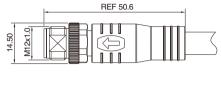
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, Y4-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: Y4
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12MSY4F08STXXXXXX
  - X refers to cable specification







## c 🕄 us ( E Rohs 🛞

### General information

Standard:	IEC 61076-2-113
Ambient temperature:	$-40^{\circ}$ C ~ $+80^{\circ}$ C (fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:     ≥100MΩ       Contact resistance :     ≤10mΩ       Shielding:     Available       IP rating:     IP67 in locked condition
Shielding: Available
IP rating: IP67 in locked condition
Mating endurance: >500 cycles

## Electrical data & Mechanical data

Co	ntacts	Rated	Volt	tage	Wire gau	ıge / size	Cable	Wire	Part No.
C	macis	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	insulation	Fart NO.
08 pins		6A (Power pins) 0.5A (Signal pins)	50V	50V	20AWG (Power pins) 26AWG (Signal pins)	0.6 (Power pins) 0.15 (Signal pins)	PUR / PVC	PE+PP	MA12MSY4F08ST <u>XXXXXX</u>

Note: X refers to cable specification

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Molded Cable, Straight, Snap-in Type

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: MA12M\*I\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

### General information

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## c 🕄 us ( E RoHS 🛞

-40°C ~ +80°C(fixed installation)
-20°C ~ +80°C(flexible installation)
TPU
Brass with gold plated
TPU

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts	Available Coding		Available Coding Rated		Volt	Voltage		Wire gauge / size		Part No.
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins	(40 03) 10			4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAl03ST <u>XXX</u> B34 MA12MBl03ST <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR / PVC	MA12MAl04ST <u>XXX</u> B34 MA12MBl04ST <u>XXX</u> B34 MA12MCl04ST <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR / PVC	MA12MAl05ST <u>XXX</u> B34 MA12MBl05ST <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR / PVC	MA12MAl03ST <u>XXX</u> B25

Note: X refers to cable specification

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Molded Cable, Straight, Snap-in Type

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: MA12F\*I\*\*STXXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

### General information

Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C(flexible installation)
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector overmold:	TPU

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## c 🕄 us ( E RoHS 🏨

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contosta	Ava	ailable Cod	ling	Rated	Volt	age	Wire gau	uge / size	Cable	Davit Na
Contacts	А	В	D	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
03 pins				4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAl03ST <u>XXX</u> B34 MA12FBl03ST <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAI04ST <u>XXX</u> B34 MA12FBI04ST <u>XXX</u> B34 MA12FCI04ST <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR / PVC	MA12FAI05ST <u>XXX</u> B34 MA12FBI05ST <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR / PVC	MA12FAI03ST <u>XXX</u> B25

Note:  $\underline{X}$  refers to cable specification

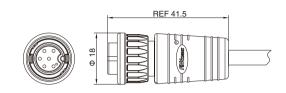
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Molded Cable, Straight, Quick-lock Type, With Fix-cap

- Connector series: M12
- Gender: Male
- Locking type: Quick-lock
- Mounting type: Straight
- Part No.: MA12MAQ\*\*STXXXX34
  - \*\* refers to pins number X refers to cable specification





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## General information

Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Quick-lock Fix-cap:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated	Voltage		Wire gau	ıge / size	Cable	Part No.
Con	ldClS	current	A/C	D/C	AWG mm <sup>2</sup>		jacket	Fart NO.
04 pins		4A	250V	250V	22AWG	0.34	pur / pvc	MA12MAQ04ST <u>XXX</u> B34
06 pins		4A	60V	60V	22AWG	0.34	PUR / PVC	MA12MAQ06ST <u>XXX</u> B34

Note:  $\underline{X}$  refers to cable specification

## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

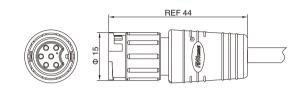


# M12 Female Molded Cable, Straight, Quick-lock Type

- Connector series: M12
- Gender: Female
- Locking type: Quick-lock
- Mounting type: Straight

\*\* refers to pins number X refers to cable specification

• Part No.: MA12FAQ\*\*STXXXX34





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### General information

Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C(flexible installation)
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated Voltage		Wire gau	uge / size	Cable	Part No.	
CON	lacis	current	A/C D/C AWG mm <sup>2</sup>		jacket			
04 pins		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FAQ04ST <u>XXX</u> B34
06 pins		4A	60V	60V	22AWG	0.34	PUR / PVC	MA12FAQ06ST <u>XXX</u> B34

Note:  $\underline{X}$  refers to cable specification

## Remarks

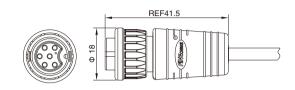
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Molded Cable, Straight, Quick-lock Type, With Fix-cap

#### • Connector series: M12

- Gender: Female
- Locking type: Quick-lock
- Mounting type: Straight
- Part No.: MA12FRAQ\*\*STXXXX34
  - \*\* refers to pins number X refers to cable specification



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## General information

Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C(flexible installation)
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Quick-lock Fix-cap:	PA + GF
Seal / O-ring:	FKM

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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Con	tacts	Rated	Rated V	Voltage	Wire gau	uge / size	Cable	Part No.
Con	ldClS	current	A/C	D/C	AWG	mm²	jacket	Part NO.
05 pins		4A	250V	250V	22AWG	0.34	PUR / PVC	MA12FRAQ04ST <u>XXX</u> B34
06 pins		4A	60V	60V	22AWG	0.34	PUR / PVC	MA12FRAQ06ST <u>XXX</u> B34

Note:  $\underline{X}$  refers to cable specification

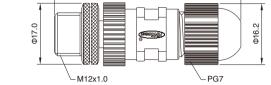
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Solder

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MA\*FF\*\*ST
  - \* refers to coding type\*\* refers to pins number



REF 51



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### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	4~5.5mm
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	tage	Wire gau	ge/size	Cable	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins	(40 03) 10		(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MAAFF03ST MB12MABFF03ST MB12MACFF03ST
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MAAFF04ST MB12MABFF04ST MB12MACFF04ST MB12MADFF04ST
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR/PVC or customized	MB12MAAFF05ST MB12MABFF05ST MB12MACFF05ST
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MACFF05ST
08 pins					Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MAAFF05ST
12 pins					Solder version	1.5A	30V	30V	26AWG	0.14	PUR/PVC or customized	MB12MAAFF05ST

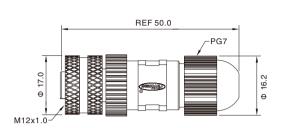
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Field Wirable Assembly, Straight, Solder

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FA\*FF\*\*ST
  - \* refers to coding type
  - \*\* refers to pins number





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## General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	4~5.5mm
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Vol	tage	Wire gau	ge / size	Cable	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part NO.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FAAFF03ST MB12FABFF03ST MB12FACFF03ST
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FAAFF04ST MB12FABFF04ST MB12FACFF04ST MB12FADFF04ST
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR/PVC or customized	MB12FAAFF05ST MB12FABFF05ST MB12FACFF05ST
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FACFF05ST
08 pins					Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FAAFF05ST
12 pins	( 40 0 0 0 30 0 20 10 10 10 10 10 10 10 10 10 1				Solder version	1.5A	30V	30V	26AWG	0.14	PUR/PVC or customized	MB12FAAFF05ST

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Angled, Solder

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MA\*FF\*\*RA
  - \* refers to coding type
  - \*\* refers to pins number

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF 36.0
REF 40.0	PG7
1	Φ 17.0 -M15x1.0



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	4~5.5mm
IP rating:	IP68 in locked condition
Assembly Instruction:	Refer to page 282
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts	Available Coding				Contacts Rated		Volt	Voltage		Wire gauge / size		Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part NO.
03 pins		(40 03) 10	(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR / PVC or customized	MB12MAAFF03RA MB12MABFF03RA MB12MACFF03RA
04 pins		(4® @3) 1® @2)	(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR / PVC or customized	MB12MAAFF04RA MB12MABFF04RA MB12MACFF04RA MB12MADFF04RA
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR / PVC or customized	MB12MAAFF05RA MB12MABFF05RA MB12MACFF05RA
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	PUR / PVC or customized	MB12MACFF05RA
08 pins					Solder version	2A	30V	30V	24AWG	0.25	PUR / PVC or customized	MB12MAAFF05RA

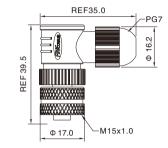
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Field Wirable Assembly, Angled, Solder

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FA\*FF\*\*RA
  - \* refers to coding type
  - \*\* refers to pins number





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## General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
uitable cable Dia:	4~5.5mm
P rating:	IP68 in locked condition
ssembly Instruction:	Refer to page 283
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ge / size	Cable	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part NO.
03 pins			0PE 30 02 (2+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FAAFF03RA MB12FABFF03RA MB12FACFF03RA
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FAAFF04RA MB12FABFF04RA MB12FACFF04RA MB12FADFF04RA
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	PUR/PVC or customized	MB12FAAFF05RA MB12FABFF05RA MB12FACFF05RA
06 pins			PE 20004 10 <sup>6</sup> 05 (5+PE)		Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FACFF06RA
08 pins					Solder version	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FAAFF08RA

## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Field Wirable Assembly, Straight, Screw joint, Shielded

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MWS\*FF\*\*ST-A MB12MWS\*FF\*\*ST-B
  - refers to coding type
  - \*\* refers to pins number
  - suitable cable Dia: A:4~6mm B:6~8mm

### General information

IEC 61076-2-101
-25°C ~ +90°C
TPU
Brass with gold plated
Brass with nickel plated
Zinc alloy with nickel plated
FKM

	REF 63
M12x1.0	
Φ 20.0	



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≥100MΩ
≤5mΩ
Available
A: 4~6mm; B: 6~8mm
IP68 in locked condition
Refer to page 285
>500 cycles

## Electrical data & Mechanical data

Contosta	Ava	Available Coding		Contacts	Rated	d Voltage		Wire gauge / size		Cable jacket	De et Nie
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins		(40 03) 10		Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF03ST-A/B MB12MWSBFF03ST-A/B
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF04ST-A/B MB12MWSBFF04ST-A/B MB12MWSDFF04ST-A/B
05 pins		(40 03) 0 5 10 02		Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF05ST-A/B MB12MWSBFF05ST-A/B
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWSAFF08ST-A/B

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Field Wirable Assembly, Straight, Screw joint, Shielded

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FWS\*FF\*\*ST-A MB12FWS\*FF\*\*ST-B
  - IVID I ZEVVS FE
  - \* refers to coding type
  - \*\* refers to pins number
  - suitable cable Dia: A:4~6mm B:6~8mm

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Zinc alloy with nickel plated
Seal / O-ring:	FKM
· J	

	REF 58
M12x1.0-	



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≥100MΩ
≤5mΩ
Available
A: 4~6mm; B: 6~8mm
IP68 in locked condition
Refer to page 285
>500 cycles

## Electrical data & Mechanical data

Contonto	Ava	Available Coding Contacts		Rated	Voltage		Wire gauge / size		Cable jacket	Davit Na	
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF03ST-A/B MB12FWSBFF03ST-A/B
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF04ST-A/B MB12FWSBFF04ST-A/B MB12FWSDFF04ST-A/B
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF05ST-A/B MB12FWSBFF05ST-A/B
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWSAFF08ST-A/B

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

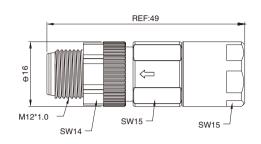


# M12 Male Field Assembly, Shielded Crimp Type

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MCS\*FF\*\*ST-A MB12MCS\*FF\*\*ST-B
  - 1010121010011
  - \* refers to coding type\*\* refers to pins number
  - suitable cable Dia: A:4~6mm B:6~8mm

### General information

IEC 61076-2-101
-25℃ ~ +90℃
PA
Brass with gold plated
Brass with nickel plated
Zinc alloy with nickel plated
FKM





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≥100MΩ
≤5mΩ
Available
A: 4~6mm; B:6~8mm
IP68 in locked condition
>500 cycles

## Electrical data & Mechanical data

Contacts	Ava				Contacts Rated		age	Wire gau	ıge / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²	Cable Jacket	Fart NO.
03 pins		(40 03) 10		Crimp type	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MCSAFF03ST-A/B MB12MCSBFF03ST-A/B
04 pins				Crimp type	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MCSAFF04ST-A/B MB12MCSBFF04ST-A/B MB12MCSDFF04ST-A/B
05 pins		(40 03) 0 5 10 02		Crimp type	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MCSAFF05ST-A/B MB12MCSBFF05ST-A/B
08 pins				Crimp type	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MCSAFF08ST-A/B

## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Field Assembly, Shielded Crimp Type

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FCSxFF\*\*ST-A MB12FCSxFF\*\*ST-B

  - \* refers to coding type

Seal / O-ring:

- \*\* refers to pins number - suitable cable Dia: A:4~6mm B:6~8mm
- Gene

General information	
Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Zinc alloy with nickel plated

FKM

	REF:46.5	
ф Ф M12*1.0 —	SW14 SW15 SW15	



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Mating endurance:	>500 cycles
IP rating:	IP68 in locked condition
Suitable cable Dia:	A: 4~6mm; B: 6~8mm
Shielding:	Available
Contact resistance :	≤5mΩ
Insulation resistance:	≥100MΩ

## Electrical data & Mechanical data

Contacts	Ava	Available Coding			Contacts Rated		age	Wire gau	ige / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Cable Jacket	Fart NO.
03 pins				Crimp type	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FCSAFF03ST-A/B MB12FCSBFF03ST-A/B
04 pins				Crimp type	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FCSAFF04ST-A/B MB12FCSBFF04ST-A/B MB12FCSDFF04ST-A/B
05 pins				Crimp type	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FCSAFF05ST-A/B MB12FCSBFF05ST-A/B
08 pins				Crimp type	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FCSAFF08ST-A/B

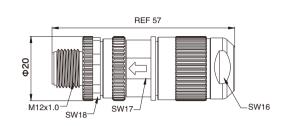
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Piercing, X-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: X
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MPSXFF08ST





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## General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass/Zinc with nickel plated
Connector body:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
Suitable cable Dia:	5.5~9.0mm
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT 6 <sub>A</sub> /CAT 7
Mating endurance:	>500 cycles
-	

## Electrical data & Mechanical data

Conta	acts	Contacts termination	Rated current	Volt A/C	tage D/C	Wire gau AWG	uge / size mm²	Cable spec	Part No.
08 pins		Piercing	0.5A	50V	60V	27~24	0.14~0.34	CAT 6A/CAT 7	MB12MPSXFF08ST

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



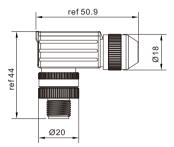
## M12 Male Field Wirable Assembly, Angled, Screw joint, Shielded with Die-cast body

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MWS\*FF\*\*RA-A MB12MWS\*FF\*\*RA-B

  - \* refers to coding type
  - \*\* refers to pins number
  - suitable cable Dia: A:4~6mm B:6~8mm

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Zinc alloy with nickel plated
Seal / O-ring:	FKM





## c¶Us (€ RoHS ∰

≤5mΩ
Available
A:4~6mm; B:6~8mm
IP68 in locked condition
>500 cycles

## Electrical data & Mechanical data

Contosta	Ava	Available Coding		ding Contacts Ra		Volt	Voltage		ige / size	Cable jacket	Dart No.
Contacts	А	В	D	D termination current A/C D/C AWG mm <sup>2</sup>		Part No.					
03 pins	(40 03) 10	(40 03) 10		Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF03RA-A/B MB12MWSBFF03RA-A/B
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF04RA-A/B MB12MWSBFF04RA-A/B MB12MWSDFF04RA-A/B
05 pins		(40 03) 0 5 10 02		Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWSAFF05RA-A/B MB12MWSBFF05RA-A/B
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWSAFF08RA-A/B

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

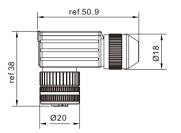


## M12 Female Field Wirable Assembly, Angled, Screw joint, Shielded with Die-cast body

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FWS\*FF\*\*RA-A MB12FWS\*FF\*\*RA-B
  - . . .
  - refers to coding typerefers to pins number
  - suitable cable Dia: A:4~6mm B:6~8mm

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Zinc alloy with nickel plated
Seal / O-ring:	FKM





## c 🕄 us ( E Rohs 🛞

≥100MΩ
≤5mΩ
Available
A:4~6mm; B:6~8mm
IP68 in locked condition
>500 cycles

## Electrical data & Mechanical data

Contosta	Ava	ilable Cod	ling	Contacts	Rated	Volt	age	Wire gau	uge / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part NO.
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF03RA-A/B MB12FWSBFF03RA-A/B
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF04RA-A/B MB12FWSBFF04RA-A/B MB12FWSDFF04RA-A/B
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWSAFF05RA-A/B MB12FWSBFF05RA-A/B
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWSAFF08RA-A/B

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Screw joint

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MW\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Aluminum Alloy anodized
Connector body:	PA+GF
Seal / O-ring:	FKM

REF	60.0
M12x1.0	PG7 or PG9



## c 🕄 us ( E Rohs 🛞

≥100MΩ
≤5mΩ
Unavailable
PG7:4~6mm/PG9:6~8mm
IP68 in locked condition
Refer to page 284
>500 cycles

## Electrical data & Mechanical data

Contonto	Available Coding		Contacts	Rated	Voltage		Wire gauge / size		Cable jacket	Davit Nia	
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins	(40 03) 10	(40 03) 10		Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF03ST- <u>X</u> MB12MWBFF03ST- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF04ST- <u>X</u> MB12MWBFF04ST- <u>X</u> MB12MWCFF04ST- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF05ST- <u>X</u> MB12MWBFF05ST- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWAFF08ST- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Field Wirable Assembly, Straight, Screw joint, Plastic Screw

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MB12MW\*FP\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector body:	PA+GF
Seal / O-ring:	FKM

	RE	F 60.0
	M12x1.0	PG7 or PG9 —
Φ 20.0		



## c 🕄 us ( E Rohs 🛞

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG7:4~6mm / PG9:6~8mm
IP rating:	IP68 in locked condition
Assembly Instruction:	Refer to page 284
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contosta	Available Coding		Available Coding Contac		Rated	ted Voltage		Wire gauge / size		Cable jacket	De et Me
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP03ST- <u>X</u> MB12MWBFP03ST- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP04ST- <u>X</u> MB12MWBFP04ST- <u>X</u> MB12MWCFP04ST- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP05ST- <u>X</u> MB12MWBFP05ST- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWAFP08ST- <u>X</u>

Note: <u>X</u> refers to Cable gland size: 3=PG9, 4=PG7

### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Field Wirable Assembly, Straight, Screw joint

Ν

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FW\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Aluminum Alloy anodized
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF 54.0
M12x1.0	PG7 or PG9
0 00 0 00	



## c 🕄 us ( E RoHS 🛞

≥100MΩ
≤5mΩ
Unavailable
PG7:4~6mm / PG9:6~8mm
IP68 in locked condition
Refer to page 284
>500 cycles

## Electrical data & Mechanical data

Contosta	Ava	ilable Cod	ling	Contacts	Rated	Volt	oltage Wire		uge / size	Cable jacket	Dout No.
Contacts	А	В	D	termination	current	A/C	VC D/C AWG mm <sup>2</sup>		Part No.		
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF03ST- <u>X</u> MB12FWBFF03ST- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF04ST- <u>X</u> MB12FWBFF04ST- <u>X</u> MB12FWCFF04ST- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF05ST- <u>X</u> MB12FWBFF05ST- <u>X</u>
08 pins	(40 5 06) (30 0 9 07) 20 9 01			Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWAFF08ST- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Straight, Screw joint, Plastic Nut

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MB12FW\*FP\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7



Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF 54.0	
	PG7 or PG9 —	
0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02		



## c 🕄 us ( E RoHS 🕮

≥100MΩ
≤5mΩ
Unavailable
PG7:4~6mm/PG9:6~8mm
IP68 in locked condition
Refer to page 284
>500 cycles

## Electrical data & Mechanical data

Contacto	Ava	ilable Cod	ling	Contacts	Rated	Volt	Voltage		uge / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	rrent A/C D/C AWG mm <sup>2</sup>	mm²		Part NO.		
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP03ST- <u>X</u> MB12FWBFP03ST- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP04ST- <u>X</u> MB12FWBFP04ST- <u>X</u> MB12FWCFP04ST- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP05ST- <u>X</u> MB12FWBFP05ST- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWAFP08ST- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

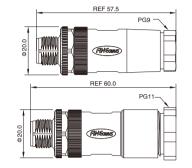
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Screw joint, S-coding

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MWSFHD\*\*ST-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





## c 🕄 us ( E RoHS 🛞

## General information

IEC 61076-2-111
-25℃~ +90℃
PA
Brass with gold plated
Zinc alloy with nickel plated
PA+GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	Refer to page 284
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contosta		Contacts	Rated	Rated Voltage		Wire gauge / size		Cable jacket	Dout No.
Con	Contacts		current	A/C	D/C	AWG mm <sup>2</sup>		Cable Jacket	Part No.
03 pins	(2+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWSFHD03ST-3
04 pins	(3+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWSFHD04ST-7

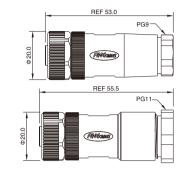
## Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Straight, Screw joint, S-coding

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FWSFHD\*\*ST-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





# c 🕄 us ( E Rohs 🛞

#### General information

IEC 61076-2-111
-25℃~ +90℃
PA
Brass with gold plated
Zinc alloy with nickel plated
PA+GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	Refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts	Rated	Rated V	/oltage	Wire gau	uge / size	Cable jacket	Part No.
Con	ldClS	termination	current	A/C	D/C	AWG	mm²	Cable Jacket	Part NO.
03 pins	(2+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWSFHD03ST-3
04 pins	(3+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWSFHD04ST-7

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Screw joint, T-coding

- Connector series: M12
- Gender: Male
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12MWTFHD\*\*ST-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11

# REF 60.0 PG11



# c 🕄 us ( E RoHS 🛞

#### General information

IEC 61076-2-111
-25℃~ +90℃
PA
Brass with gold plated
Zinc alloy with nickel plated
PA+GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	Refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts	Rated	Rated \	/oltage	Wire gau	uge / size	Cable jacket	Part No.
Con		termination	current	A/C	D/C	AWG	mm <sup>2</sup>		Fait NO.
02 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD02ST-3
03 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD03ST-3
04 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD04ST-7

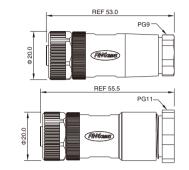
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Straight, Screw joint, T-coding

- Connector series: M12
- Gender: Female
- Coding: T
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FWTFHD\*\*ST-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





# c 🕄 us ( E Rohs 🛞

#### General information

IEC 61076-2-111
-25℃~ +90℃
PA
Brass with gold plated
Zinc alloy with nickel plated
PA+GF
FKM

≥100MΩ
≤5mQ
Unavailable
PG9: 6-8mm / PG11: 8-10mm
IP68 in locked condition
Refer to page 284
>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts	Rated	Rated V	/oltage	Wire gau	uge / size	Cable jacket	Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Cable Jacket	Fait NO.
02 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD02ST-3
03 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD03ST-3
04 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD04ST-7

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Angled, Screw joint

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MW\*FF\*\*RA-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Aluminum Alloy anodized
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF40.0
REF43.0	PG7 or PG9



# c 🕄 us ( E RoHS 🛞

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG7:4~6mm/PG9:6~8mm
IP rating:	IP68 in locked condition
Assembly Instruction:	Refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts	Ava	ilable Cod	ling	Contacts	Rated	Volt	age	Wire gau	ige / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²	Cable Jacket	Part NO.
03 pins	(40 03) 10	(40 03) 10		Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF03RA- <u>X</u> MB12MWBFF03RA- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF04RA- <u>X</u> MB12MWBFF04RA- <u>X</u> MB12MWCFF04RA- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWAFF05RA- <u>X</u> MB12MWBFF05RA- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWAFF08RA- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Angled, Screw joint, Plastic Screw

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: Right angled
- Part No.: MB12MW\*FP\*\*RA-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF40.0
REF43.0	PG7 or PG9 



# c 🕄 us ( E Rohs 🛞

≤5mΩ Unavailable
Linguailabla
Unavallable
PG7:4~6mm / PG9:6~8mm
IP68 in locked condition
Refer to page 284
>500 cycles

#### Electrical data & Mechanical data

Contacts	Ava	ilable Cod	ling	Contacts	Rated	Volt	age	Wire gau	ige / size	Cable jacket	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²	Cable Jacket	Part NO.
03 pins	(40 03) 10	(40 03) 10		Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP03RA- <u>X</u> MB12MWBFP03RA- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP04RA- <u>X</u> MB12MWBFP04RA- <u>X</u> MB12MWCFP04RA- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12MWAFP05RA- <u>X</u> MB12MWBFP05RA- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12MWAFP08RA- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Angled, Screw joint

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FW\*FF\*\*RA-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Aluminum Alloy anodized
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF40.0
REF37.0	PG7 or PG9
BE	
<u>1</u>	Φ 20.0 M12x1.0



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG7:4~6mm / PG9:6~8mm
IP rating:	IP68 in locked condition
Assembly Instruction:	Refer to page 282
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contosta	Ava	ilable Cod	ling	Contacts	Rated	Volt	age	Wire gau	ige / size	Cable jacket	Dout No
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF03RA- <u>X</u> MB12FWBFF03RA- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF04RA- <u>X</u> MB12FWBFF04RA- <u>X</u> MB12FWCFF04RA- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWAFF05RA- <u>X</u> MB12FWBFF05RA- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWAFF08RA- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Angled, Screw joint, Plastic Nut

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: Right angled
- Part No.: MB12FW\*FP\*\*RA-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Cable gland size: 3=PG9, 4=PG7

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector body:	PA+GF
Seal / O-ring:	FKM

	REF40.0
REF37.0	PG7 or PG9



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≥100MΩ
≤5mΩ
Unavailable
PG7:4~6mm / PG9:6~8mm
IP68 in locked condition
Refer to page 282
>500 cycles

#### Electrical data & Mechanical data

Contosta	Ava	ilable Cod	ling	Contacts	Rated	Volt	age	Wire gau	ige / size	Cable jacket	Dout No
Contacts	А	В	D	termination	current	A/C	D/C	AWG	mm²		Part No.
03 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP03RA- <u>X</u> MB12FWBFP03RA- <u>X</u>
04 pins				Screw joint	4A	250V	250V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP04RA- <u>X</u> MB12FWBFP04RA- <u>X</u> MB12FWCFP04RA- <u>X</u>
05 pins				Screw joint	4A	60V	60V	22AWG	0.34	PUR/PVC or customized	MB12FWAFP05RA- <u>X</u> MB12FWBFP05RA- <u>X</u>
08 pins				Screw joint	2A	30V	30V	24AWG	0.25	PUR/PVC or customized	MB12FWAFP08RA- <u>X</u>

Note: X refers to Cable gland size: 3=PG9, 4=PG7

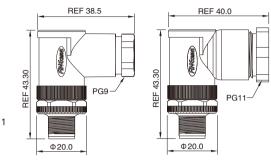
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Angled, Screw joint, S-coding

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MWSFHD\*\*RA-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





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#### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-25℃~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Contacts	Rated	Voltage		Wire gauge / size		Cable jacket	Devit Nie
Con	ldClS	termination	current	A/C	D/C	AWG	mm <sup>2</sup>		Part No.
03 pins	(2+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWSFHD03RA-3
04 pins	(3+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWSFHD04RA-7

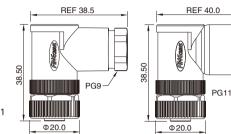
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Angled, Screw joint, S-coding

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FWSFHD\*\*RA-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





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#### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-25℃~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	Contacts		Rated	Voltage		Wire gauge / size		Cable jacket	Dout No.
Con	ldClS	termination	current	current A/C		AWG mm <sup>2</sup>		Cable Jacket	Part No.
03 pins	(2+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWSFHD03RA-3
04 pins	(3+PE)	Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWSFHD04RA-7

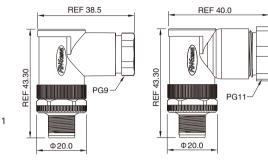
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Angled, Screw joint, T-coding

- Connector series: M12
- Gender: Male
- Coding: T
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MWTFHD\*\*RA-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





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#### General information

IEC 61076-2-111
-25°C~ +90°C
PA
Brass with gold plated
Zinc alloy with nickel plated
PA+GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts	Rated	Volt	age	Wire gau	uge / size	Cable jacket	Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Cable Jacket	Fait NO.
02 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD02RA-3
03 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD03RA-3
04 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12MWTFHD04RA-7

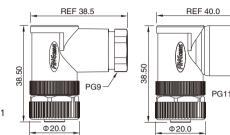
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Angled, Screw joint, T-coding

- Connector series: M12
- Gender: Female
- Coding: T
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FWTFHD\*\*RA-X
- \*\* refers to pins number X refers to cable gland size: 3=PG9, 7=PG11





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#### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-25℃~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector body:	PA+GF
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	PG9: 6-8mm / PG11: 8-10mm
IP rating:	IP68 in locked condition
Assembly instruction:	refer to page 284
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	Contacts		Rated	Volt	age	Wire gau	uge / size	Cable jacket	Part No.
			current	A/C	D/C	AWG	mm²		Fait NO.
02 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD02RA-3
03 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD03RA-3
04 pins		Screw joint	12A(40℃)	630V	630V	16AWG	1.5	PUR/PVC or customized	MB12FWTFHD04RA-7

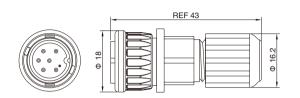
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Field Wirable Assembly, Straight, Quick-lock Type, With Fix-cap

- Connector series: M12
- Gender: Male
- Locking type: Quick-lock
- Mounting type: Plastic mounting
- Part No.: MB12MAAFQ\*\*ST
  - \*\* refers to pins number





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#### General information

-25℃ ~ +90℃
PA + GF
Brass with gold plated
PA + GF
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	3.0~6.0mm
IP rating:	IP65, IP68 in locked condition
Mating endurance:	>500 cycles
-	

#### Electrical data & Mechanical data

Con	Contacts		Contacts Rated	Voltage		Wire gauge / size		Cable	De ut NI -
Con	lacis	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PUR / PVC	MB12MAAFQ04ST
06 pins		Solder version	4A	60V	60V	22AWG	0.34	PUR / PVC	MB12MAAFQ06ST

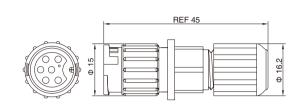
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Straight, Quick-lock Type

- Connector series: M12
- Gender: Female
- Locking type: Quick-lock
- Mounting type: Plastic mounting
- Part No.: MB12FAAFQ\*\*ST
  - \*\* refers to pins number





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#### General information

Ambient temperature:	-25℃ ~ +90℃
Connector insert/body:	PA + GF
Connector contacts:	Brass with gold plated
O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
Suitable cable Dia:	3.0~6.0mm
IP rating:	IP65, IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	Contacts		ntacts Rated	Voltage		Wire gauge / size		Cable	Dout No.
Con	ldClS	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PUR / PVC	MB12FAAFQ04ST
06 pins		Solder version	4A	60V	60V	22AWG	0.34	PUR / PVC	MB12FAAFQ06ST

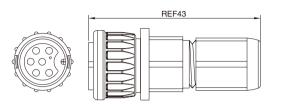
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Field Wirable Assembly, Straight, Quick-lock Type, With Fix-cap

- Connector series: M12
- Gender: Female
- Locking type: Quick-lock
- Mounting type: Plastic mounting
- Part No.: MB12FARAFQ\*\*ST
  - \*\* refers to pins number





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#### General information

Ambient temperature:	-25℃ ~ +90℃
Connector insert/body:	PA+GF
Connector contacts:	Brass with gold plated
Quick-lock Fix-cap:	PA+GF
O-ring:	FKM

≥100MΩ
≤5mΩ
Unavailable
3.0~6.0mm
IP65, IP68 in locked condition
>500 cycles

#### Electrical data & Mechanical data

Com	Contacts		Contacts Rated	Rated Voltage		Wire gauge / size		Cable	De ut Nie
Con	lacis	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	jacket	Part No.
05 pins		Solder version	4A	250V	250V	22AWG	0.34	PUR / PVC	MB12FARAFQ04ST
06 pins		Solder version	4A	60V	60V	22AWG	0.34	PUR / PVC	MB12FARAFQ06ST

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Die-cast Screw, Solder, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MS\*FHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

M	12x1.0 - PG9
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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Fart NO.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFHD03ST-3 MB12MSBFHD03ST-3 MB12MSCFHD03ST-3
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFHD04ST-3 MB12MSBFHD04ST-3 MB12MSCFHD04ST-3 MB12MSDFHD04ST-3
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSAFHD05ST-3 MB12MSBFHD05ST-3 MB12MSCFHD05ST-3
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCFHD06ST-3
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSAFHD08ST-3

#### Remarks

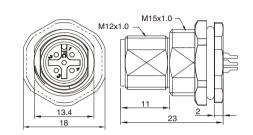
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Plastic Screw/Nut, Solder, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12MS\*FP\*\*ST-1
  - \* refers to coding type
  - \*\* refers to pins number

#### General information





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Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contosta		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part NO.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFP03ST-1 MB12MSBFP03ST-1 MB12MSCFP03ST-1
04 pins		(4® @3) 1® @2)	(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFP04ST-1 MB12MSBFP04ST-1 MB12MSCFP04ST-1 MB12MSDFP04ST-1
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSAFP05ST-1 MB12MSBFP05ST-1 MB12MSCFP05ST-1
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCFP06ST-1
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSAFP08ST-1

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel Mount, Die-cast Screw, Solder, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FS\*FHD\*\*ST-3
  - \* refers to coding type

General information

\*\* refers to pins number

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Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contosta		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	uge / size	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm²	Part NO.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFHD03ST-3 MB12FSBFHD03ST-3 MB12FSCFHD03ST-3
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFHD04ST-3 MB12FSBFHD04ST-3 MB12FSCFHD04ST-3 MB12FSDFHD04ST-3
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSAFHD05ST-3 MB12FSBFHD05ST-3 MB12FSCFHD05ST-3
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCFHD06ST-3
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSAFHD08ST-3

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel Mount, Plastic Screw/Nut, Solder, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12FS\*FP\*\*ST-1
- \* refers to coding type
- \*\* refers to pins number

# 



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# General information

IEC 61076-2-101
-25°C ~ +90°C
PA
Brass with gold plated
PA+GF
Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part NO.
03 pins			0PE 30 02 (2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFP03ST-1 MB12FSBFP03ST-1 MB12FSCFP03ST-1
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFP04ST-1 MB12FSBFP04ST-1 MB12FSCFP04ST-1 MB12FSDFP04ST-1
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSAFP05ST-1 MB12FSBFP05ST-1 MB12FSCFP05ST-1
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCFP06ST-1
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSAFP08ST-1

#### Remarks

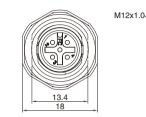
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

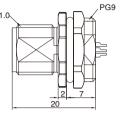


# M12 Male Panel Mount, Die-cast Screw, Solder, Rear fastened

#### • Connector series: M12

- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MS\*RHD\*\*ST-3
  - \* refers to coding type\*\* refers to pins number







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## General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	Part No.
Contacts	А	В	С	D	termination	ermination current	A/C	D/C	AWG	mm <sup>2</sup>	Fait NO.
03 pins	(40 03) 10		(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARHD03ST-3 MB12MSBRHD03ST-3 MB12MSCRHD03ST-3
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARHD04ST-3 MB12MSBRHD04ST-3 MB12MSCRHD04ST-3 MB12MSDRHD04ST-3
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSARHD05ST-3 MB12MSBRHD05ST-3 MB12MSCRHD05ST-3
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCRHD06ST-3
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSARHD08ST-3

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel Mount, Die-cast Screw, Solder, Rear fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FS\*RHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

PG9 2 8 19.5
19.5



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Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

Contacts	Available Coding			Available Coding		Available Coding			Available Coding		Contacts Rated		Voltage		Wire gauge / size		De et Nie
Contacts	А	В	С	D	termination current	A/C	D/C	AWG	mm²	Part No.							
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARHD03ST-3 MB12FSBRHD03ST-3 MB12FSCRHD03ST-3						
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARHD04ST-3 MB12FSBRHD04ST-3 MB12FSCRHD04ST-3 MB12FSDRHD04ST-3						
05 pins			PE 20 0 04 10 05 (4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSARHD05ST-3 MB12FSBRHD05ST-3 MB12FSCRHD05ST-3						
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCRHD06ST-3						
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSARHD08ST-3						

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Solder, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MS\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

IEC 61076-2-101
-20℃ ~ +90℃
TPU
Brass with gold plated
Brass with nickel plated
Epoxy resin / FKM

#### Electrical data & Mechanical data

M16x1	.5 or PG9 —
M12x1.0~	
H19	19.5



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

Carata ata		Available	e Coding		Contacts	Contacts Rated		age	Wire gau	uge / size	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part No.
03 pins	(40 03) 10	(4® @3) 1®	(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFF03ST- <u>X</u> MB12MSBFF03ST- <u>X</u> MB12MSCFF03ST- <u>X</u>
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFF04ST- <u>X</u> MB12MSBFF04ST- <u>X</u> MB12MSCFF04ST- <u>X</u> MB12MSDFF04ST- <u>X</u>
05 pins		(40 03) 0 5 10 02	(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSAFF05ST- <u>X</u> MB12MSBFF05ST- <u>X</u> MB12MSCFF05ST- <u>X</u>
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCFF06ST- <u>X</u>
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSAFF08ST- <u>X</u>
12 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSAFF12ST- <u>X</u>
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB17MSAFF17ST- <u>X</u>
										Note: X	refers to Chasis-side thread size

#### Remarks

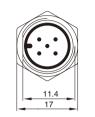
Note:  $\underline{X}$  refers to Chasis-side thread size

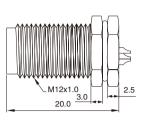
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Plastic Screw/Nut, Solder, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12MSAFP\*\*ST-0
  - \*\* refers to pins number







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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector body:	PA+ GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Seal / O-ring:	Epoxy resin/FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	Contacts		Rated	Voltage		Wire gauge / size		Wire	Part No.
			current	A/C	D/C	AWG	mm²	insulation	Tart No.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PVC wire or customized	MB12MSAFP04ST-0
05 pins		Solder version	4A	60V	60V	22AWG	0.34	PVC wire or customized	MB12MSAFP05ST-0
08 pins		Solder version	2A	30V	30V	24AWG	0.25	PVC wire or customized	MB12MSAFP08ST-0

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

18.5

Insulation resistance: Contact resistance :

Shielding:

IP rating:

Panel cut-out:

Mating endurance:

M12x1 0

13.4

18.0

PG9 or M16 × 1.5



# M12 Female Panel Mount, Solder, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FS\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

		Available	Cadina				Valt		Mine and		
ontacts					Contacts termination	Rated current		age	Wire gau	-	Part No.
	A	В	C	D	termination	current	A/C	D/C	AWG	mm²	
)3 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFF03ST- <u>X</u> MB12FSBFF03ST- <u>X</u> MB12FSCFF03ST- <u>X</u>
)4 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFF04ST- <u>X</u> MB12FSBFF04ST- <u>X</u> MB12FSCFF04ST- <u>X</u> MB12FSDFF04ST- <u>X</u>
)5 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSAFF05ST- <u>X</u> MB12FSBFF05ST- <u>X</u> MB12FSCFF05ST- <u>X</u>
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCFF06ST- <u>X</u>
)8 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSAFF08ST- <u>X</u>
12 pins	$( \begin{array}{c} 5 \\ 50 \\ 0 \\ 30 \\ 30 \\ 20 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$				Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSAFF12ST- <u>X</u>
7 pins	00000000000000000000000000000000000000				Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSAFF17ST- <u>X</u>

#### Remarks

Note:  $\underline{X}$  refers to Chasis-side thread size

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

• Please refer to Page 96 for products' part number encoding rule.

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≥100MΩ

Unavailable

>500 cycles

IP68 in locked condition

Refer to page 287

≤5mΩ



# M12 Male Panel Mount, Solder, Rear fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MS\*RF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

	M12x1.0	5
13.4		-

20



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IEC 61076-2-101
-20°C ~ +90°C
TPU
Brass with gold plated
Brass with nickel plated
Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

c	Available Coding			Contacts	Rated	Volt	age	Wire gau	uge / size	2.11	
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part No.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARF03ST- <u>X</u> MB12MSBRF03ST- <u>X</u> MB12MSCRF03ST- <u>X</u>
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARF04ST- <u>X</u> MB12MSBRF04ST- <u>X</u> MB12MSCRF04ST- <u>X</u> MB12MSDRF04ST- <u>X</u>
05 pins		(4) (3) (1) (1	(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSARF05ST- <u>X</u> MB12MSBRF05ST- <u>X</u> MB12MSCRF05ST- <u>X</u>
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCRF06ST- <u>X</u>
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSARF08ST- <u>X</u>
12 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSARF12ST- <u>X</u>
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSARF17ST- <u>X</u>

#### Remarks

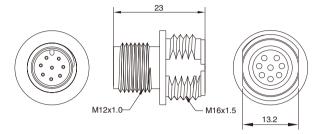
Note: X refers to Chasis-side thread size

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Plastic Screw, Solder, Rear fastened

- Connector series: M12
- Gender: Male
- Coding: A
- Locking type: Plastic fix screw
- Mounting type: Rear fastened
- Part No.: MB12MSARP\*\*ST-2
  - \*\* refers to pins number





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector body:	PA+ GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Contacts	Rated	Voltage		Wire gauge / size		Wire	Part No.
		termination	current	A/C	D/C	AWG	mm²	insulation	Fait NO.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PVC wire or customized	MB12MSARP04ST-2
05 pins		Solder version	4A	60V	60V	22AWG	0.34	PVC wire or customized	MB12MSARP05ST-2
08 pins		Solder version	2A	30V	30V	24AWG	0.25	PVC wire or customized	MB12MSARP08ST-2

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel Mount, Solder, Rear fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FS\*RF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

2.5	
13.4 18 M12x1.0 PG9 or M16x1.5	



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

<b>C</b> + +		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	
Contacts	А	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part No.
03 pins			0PE 30 02 (2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARF03ST- <u>X</u> MB12FSBRF03ST-X MB12FSCRF03ST- <u>X</u>
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARF04ST- <u>X</u> MB12FSBRF04ST- <u>X</u> MB12FSCRF04ST- <u>X</u> MB12FSDRF04ST- <u>X</u>
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSARF05ST- <u>X</u> MB12FSBRF05ST- <u>X</u> MB12FSCRF05ST- <u>X</u>
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCRF06ST- <u>X</u>
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSARF08ST- <u>X</u>
12 pins	$( \begin{array}{c} & & & \\ & & & \\ 50 & 0 & 0' \\ (40 & 0 & 0 & 0' \\ 30 & 0' & 0' & 20 \\ 20 & 0 & 0 & 1 \\ 20 & 0 & 0 & 1 \\ \end{array} )$				Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSARF12ST- <u>X</u>
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSARF17ST- <u>X</u>

#### Remarks

Note: X refers to Chasis-side thread size

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

Insulation resistance: Contact resistance :

Shielding:

IP rating:

Panel cut-out:

Mating endurance:



# M12 Male Panel Mount, Solder, Rear fastened, Adjustable Nut

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MS\*RF\*\*ST-X(Adjustable)
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data

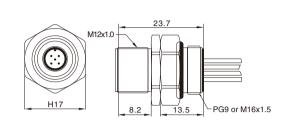
Contacts		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ige / size	Part No.
contacts	A	В	C	D	termination	current	A/C	D/C	AWG	mm²	Tart No.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARF03ST- <u>X(</u> adj) MB12MSBRF03ST- <u>X(</u> adj) MB12MSCRF03ST- <u>X(</u> adj)
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSARF04ST- <u>X</u> (adj) MB12MSBRF04ST- <u>X</u> (adj) MB12MSCRF04ST- <u>X</u> (adj) MB12MSDRF04ST- <u>X</u> (adj)
05 pins	(4) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	(40 03) 0 5 10 02	(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSARF05ST- <u>X(</u> adj) MB12MSBRF05ST- <u>X(</u> adj) MB12MSCRF05ST- <u>X(</u> adj)
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCRF06ST- <u>X(</u> adj)
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSARF08ST- <u>X(</u> adj)
12 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSARF12ST- <u>X(</u> adj)
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSARF17ST- <u>X(</u> adj)

#### Remarks

Note: X refers to Chasis-side thread size

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

• Please refer to Page 96 for products' part number encoding rule.





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≥100MΩ

Unavailable

>500 cycles

IP68 in locked condition

Refer to page 287

≤5mΩ



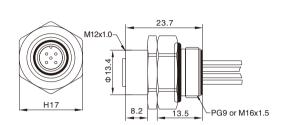
## M12 Female Panel Mount, Solder, Rear fastened, Adjustable Nut

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FS\*RF\*\*ST-X(Adjustable)
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data





Insulation resistance: $\geq 100M\Omega$ Contact resistance : $\leq 5m\Omega$ Shielding:UnavailableIP rating:IP68 in locked conditionPanel cut-out:Refer to page 287Mating endurance:>500 cycles

<b>c</b>		Available	e Coding		Contacts Rated		Volt	age	Wire gau	ıge / size	<b>D</b> ( <b>N</b> )
Contacts	А	В	C	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part No.
03 pins			0PE 30 02 (2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARF03ST- <u>X(</u> adj) MB12FSBRF03ST- <u>X(</u> adj) MB12FSCRF03ST- <u>X(</u> adj)
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSARF04ST- <u>X</u> (adj) MB12FSBRF04ST- <u>X(</u> adj) MB12FSCRF04ST- <u>X(</u> adj) MB12FSDRF04ST- <u>X(</u> adj)
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSARF05ST- <u>X(</u> adj) MB12FSBRF05ST- <u>X(</u> adj) MB12FSCRF05ST- <u>X(</u> adj)
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCRF06ST- <u>X(</u> adj)
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSARF08ST- <u>X(</u> adj)
12 pins	$( \begin{array}{c} & & & \\ & & & \\ \hline & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$				Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSARF12ST- <u>X(</u> adj)
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSARF17ST- <u>X(</u> adj)

#### Remarks

Note: X refers to Chasis-side thread size

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

x+03.0

. M12x1.0

Φ14.3

16.5

24

9

18.5

2.5



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# M12 Male Panel Mount, Solder, with Flange

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- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Flange
- Part No.: MB12MS\*FLF\*\*ST
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +80°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

# Insulation resistance: ≥100MΩ Contact resistance : ≤5mΩ Shielding: Unavailable IP rating: IP68 in locked condition Mating endurance: >500 cycles

#### Electrical data & Mechanical data

<b>C L L</b>		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	
Contacts	A	В	C	D	termination	current	A/C	D/C	AWG	mm²	Part No.
03 pins			(2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFLF03ST MB12MSBFLF03ST MB12MSCFLF03ST
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12MSAFLF04ST MB12MSBFLF04ST MB12MSCFLF04ST MB12MSDFLF04ST
05 pins	(40 03 05 10 02		(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12MSAFLF05ST MB12MSBFLF05ST MB12MSCFLF05ST
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12MSCFLF06ST
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12MSAFLF08ST
12 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSAFLF12ST
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12MSAFLF17ST

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel Mount, Solder, with Flange

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Flange
- Part No.: MB12FS\*FLF\*\*ST
- \* refers to coding type
- \*\* refers to pins number

#### General information

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Seal / O-ring:	Epoxy resin / FKM
Connector nut/screw:	Brass with nickel plated
Connector contacts:	Brass with gold plated
Connector insert:	PA+GF
Ambient temperature:	-20°C ~ +80°C
Standard:	IEC 61076-2-101

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Cantata		Available	e Coding		Contacts	Rated	Volt	age	Wire gau	ıge / size	Devit Nie
Contacts	A	В	С	D	termination	current	A/C	D/C	AWG	mm <sup>2</sup>	Part No.
03 pins			0PE 30 02 (2+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFLF03ST MB12FSBFLF03ST MB12FSCFLF03ST
04 pins			(3+PE)		Solder version	4A	250V	250V	22AWG	0.34	MB12FSAFLF04ST MB12FSBFLF04ST MB12FSCFLF04ST MB12FSDFLF04ST
05 pins			(4+PE)		Solder version	4A 2A (C-code)	60V	60V	22AWG 24AWG (C-code)	0.34 0.25 (C-code)	MB12FSAFLF05ST MB12FSBFLF05ST MB12FSCFLF05ST
06 pins			(5+PE)		Solder version	2A	30V	30V	24AWG	0.25	MB12FSCFLF06ST
08 pins					Solder version	2A	30V	30V	24AWG	0.25	MB12FSAFLF08ST
12 pins	50°07 (40°0°08) 30°10'209 20°10'1				Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSAFLF12ST
17 pins					Solder version	1.5A	30V	30V	26AWG	0.14	MB12FSAFLF17ST

#### Remarks

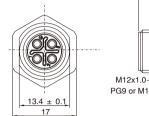
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

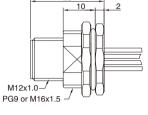


# M12 Male Panel Mount, Crimp, Front fastened, S-coding

- Connector series: M12
- Gender: Male
- Coding: S
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MCSFF\*\*ST-XXXX

\*\* refers to pins number <u>X</u> refers to Chasis-side thread size XXX refers to cable specification





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Note: X refers to Chasis-side thread size

#### General information

Ambient temperature:	-20°C ~ +80°C	Insulation resistance:	≥100MΩ
Connector insert:	PA	Contact resistance :	≤5mΩ
Connector contacts:	Brass with gold plated	Shielding:	Unavailable
Connector screw/nut:	Brass with nickel plated	IP rating:	IP68 in locked condition
Seal / O-ring:	Epoxy resin / FKM	Panel cut-out:	Refer to page 287
		Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Cc	ontacts	Contacts termination	Rated current	Rated voltage	Wire gau AWG	uge / size mm²	Wire insulation	Part No.
04 pins	(3+PE)	Crimp version	12A(40°C)	630V	16AWG	1.5	PVC wire or customized	MB12MCSFF04ST- <u>X</u> 150

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel Mount, Crimp, Front fastened, S-coding

- Connector series: M12
- Gender: Female
- Coding: S
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FCSFF\*\*ST-<u>X</u>XXX
- \*\* refers to pins number <u>X</u> refers to Chasis-side thread size XXX refers to cable specification

General information

# $\begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & &$



# c 🕄 us ( E Rohs 🚇

Ambient temperature:	-20℃ ~ +80℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
Refer to page 287
>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts termination	Rated current	Rated voltage	Wire gau AWG	uge / size mm²	Wire insulation	Part No.
04 pins	(3+PE)	Crimp version	12A(40°C)	630V	16AWG	1.5	PVC wire or customized	MB12FCSFF04ST- <u>X</u> 150

Note: X refers to Chasis-side thread size

#### Remarks

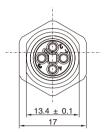
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

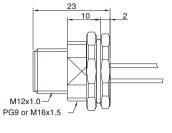


# M12 Male Panel Mount, Crimp, Front fastened, T-coding

- Connector series: M12
- Gender: Male
- Coding: T
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MCTFF\*\*ST-<u>X</u>XXX

\*\* refers to pins number <u>X</u> refers to Chasis-side thread size XXX refers to cable specification







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#### General information

Ambient temperature:	-20°C ~ +80°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
Refer to page 287
>500 cycles

#### Electrical data & Mechanical data

Со	ntacts	Contacts termination	Rated current	Rated voltage	Wire gau AWG	uge / size mm²	Wire insulation	Part No.
04 pins		Crimp version	12A(40°C)	60V	16AWG	1.5	PVC wire or customized	MB12MCTFF04ST- <u>X</u> 150

Note:  $\underline{X}$  refers to Chasis-side thread size

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel Mount, Crimp, Front fastened, T-coding

- Connector series: M12
- Gender: Female
- Coding: T
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FCTFF\*\*ST-<u>X</u>XXX
- \*\* refers to pins number  $\underline{X}$  refers to Chasis-side thread size XXX refers to cable specification

General information

Seal / O-ring:

# M12x1.0 PG9 or M16x1.5



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Ambient temperature:	-20℃ ~ +80℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass with nickel plated

Epoxy resin / FKM

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
Refer to page 287
>500 cycles

#### Electrical data & Mechanical data

Con	tacts	Contacts termination	Rated current	Rated voltage	Wire gau AWG	uge / size mm²	Wire insulation	Part No.
04 pins		Crimp version	12A(40°C)	60V	16AWG	1.5	PVC wire or customized	MB12FCTFF04ST- <u>X</u> 150

Note: X refers to Chasis-side thread size

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Die-cast Screw, PCB Type, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MB\*FHD\*\*ST-3
  - refers to coding typerefers to pins number

# General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

M12	03Pin-05Pin:Φ 1.0 08Pin:Φ 0.8
13.4	



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts	Available Coding			Contacts	Rated	Voltage		Part No.	
contacts	А	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins	(40 03) 10	(4® ®3) 1®	(2+PE)		PCB version	4A	250V	250V	MB12MBAFHD03ST-3 MB12MBBFHD03ST-3 MB12MBCFHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12MBAFHD04ST-3 MB12MBBFHD04ST-3 MB12MBCFHD04ST-3 MB12MBDFHD04ST-3
05 pins		(4⊛ ⊛3) ⊕ 5 1⊛ ⊛2)	(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBAFHD05ST-3 MB12MBBFHD05ST-3 MB12MBCFHD05ST-3
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBCFHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12MBAFHD08ST-3

#### Remarks



# M12 Male Panel Mount, Plastic Screw/Nut, PCB Type, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12MB\*FP\*\*ST-1
  - \* refers to coding type
  - \*\* refers to pins number



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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Seal / O-ring:	Epoxy resin / FKM
-	

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts	Available Coding			Contacts	Rated	Voltage		Part No.	
contacts	A	В	С	D	termination	current	A/C	D/C	Tart NO.
03 pins	(40 03) 10	(4® ®3) 1®	(2+PE)		PCB version	4A	250V	250V	MB12MBAFP03ST-1 MB12MBBFP03ST-1 MB12MBCFP03ST-1
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12MBAFP04ST-1 MB12MBBFP04ST-1 MB12MBCFP04ST-1 MB12MBDFP04ST-1
05 pins		(40 03) (05) (10) 02)	(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBAFP05ST-1 MB12MBBFP05ST-1 MB12MBCFP05ST-1
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBCFP06ST-1
08 pins					PCB version	2A	30V	30V	MB12MBAFP08ST-1

#### Remarks



### M12 Female Panel Mount, Die-cast Screw, PCB Type, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FB\*FHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

General information

#### M12x1.0 PG9 OBPIn: © 0.8 OB



### c 🕄 us ( E Rohs 🕮

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM
•	, ,

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles
-	

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	Fait NO.
03 pins			0PE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBAFHD03ST-3 MB12FBBFHD03ST-3 MB12FBCFHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12FBAFHD04ST-3 MB12FBBFHD04ST-3 MB12FBCFHD04ST-3 MB12FBDFHD04ST-3
05 pins			PE 20 04 10 05 (4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBAFHD05ST-3 MB12FBBFHD05ST-3 MB12FBCFHD05ST-3
06 pins			PE 20004 10 <sup>6</sup> 05 (5+PE)		PCB version	2A	30V	30V	MB12FBCFHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12FBAFHD08ST-3

#### Remarks



### M12 Female Panel Mount, Plastic Screw/Nut, PCB Type, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12FB\*FP\*\*ST-1
  - \* refers to coding type
  - \*\* refers to pins number

M12x1.0 M12x1.0 M15x1.0 OBPIn-06Pin:0 1.0 OBPIn:0 0.8 03Pin-06Pin:0 1.0 OBPIn:0 0.8 1.0 03Pin-06Pin:0 1.0 03Pin-06Pin:



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#### General information

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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	А	В	C	D	termination	current	A/C	D/C	Tart NO.
03 pins			0PE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBAFP03ST-1 MB12FBBFP03ST-1 MB12FBCFP03ST-1
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12FBAFP04ST-1 MB12FBBFP04ST-1 MB12FBCFP04ST-1 MB12FBDFP04ST-1
05 pins			PE 20 04 10 05 (4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBAFP05ST-1 MB12FBBFP05ST-1 MB12FBCFP05ST-1
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12FBCFP06ST-1
08 pins					PCB version	2A	30V	30V	MB12FBAFP08ST-1

#### Remarks



### M12 Male Panel Mount, Die-cast Screw, PCB Type, Rear fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MB\*RHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

General information

#### M12x1.0 PG9 03Pin-05Pin:0 1.0 00Pin:0 0.8 03Pin-05Pin:0 1.0 00Pin:0 0.8 1.0 02Pin:0 0.8 03Pin-05Pin:0 0



### c 🕄 us ( E RoHS 🏨

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	Fait NO.
03 pins		(40 03) 10	(2+PE)		PCB version	4A	250V	250V	MB12MBARHD03ST-3 MB12MBBRHD03ST-3 MB12MBCRHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12MBARHD04ST-3 MB12MBBRHD04ST-3 MB12MBCRHD04ST-3 MB12MBDRHD04ST-3
05 pins		(40 03) 0 5 10 02	(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBARHD05ST-3 MB12MBBRHD05ST-3 MB12MBCRHD05ST-3
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBCRHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12MBARHD08ST-3

#### Remarks



### M12 Female Panel Mount, Die-cast Screw, PCB Type, Rear fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FB\*RHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

M12x1.0	PG9 03Pin:05Pin:0 1.0 08Pin:00.8
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### c 🕄 us ( E RoHS 🛞

IEC 61076-2-101
-25℃ ~ +90℃
PA
Brass with gold plated
Zinc alloy with nickel plated
Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mQ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts	Available Coding				Contacts Rated		Volt	tage	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	Fait NO.
03 pins			0PE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBARHD03ST-3 MB12FBBRHD03ST-3 MB12FBCRHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12FBARHD04ST-3 MB12FBBRHD04ST-3 MB12FBCRHD04ST-3 MB12FBDRHD04ST-3
05 pins			PE 20 04 10 05 (4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBARHD05ST-3 MB12FBBRHD05ST-3 MB12FBCRHD05ST-3
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12FBCRHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12FBARHD08ST-3

#### Remarks



### M12 Male Panel, Die-cast Screw, PCB Type, Front fastened, Shielded

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBS\*FHD\*\*ST-3
  - \* refers to coding type\*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	А	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins			(2+PE)		PCB version	4A	250V	250V	MB12MBSAFHD03ST-3 MB12MBSBFHD03ST-3 MB12MBSCFHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12MBSAFHD04ST-3 MB12MBSBFHD04ST-3 MB12MBSCFHD04ST-3 MB12MBSDFHD04ST-3
05 pins		(40 03) 0 5 10 02	(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBSAFHD05ST-3 MB12MBSBFHD05ST-3 MB12MBSCFHD05ST-3
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBSCFHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12MBSAFHD08ST-3

#### Remarks



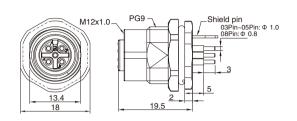
### M12 Female Panel, Die-cast Screw, PCB Type, Front fastened, Shielded

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBS\*FHD\*\*ST-3
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data





### c¶Nus ( € RoHS 🛞

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

Contacts	Available Coding				Contacts	Rated	Volt	age	Part No.
Contacts	A	В	C	D	termination	current	A/C	D/C	Tart No.
03 pins			(2+PE)		PCB version	4A	250V	250V	MB12FBSAFHD03ST-3 MB12FBSBFHD03ST-3 MB12FBSCFHD03ST-3
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12FBSAFHD04ST-3 MB12FBSBFHD04ST-3 MB12FBSCFHD04ST-3 MB12FBSDFHD04ST-3
05 pins			PE 20 0 04 10 05 (4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBSAFHD05ST-3 MB12FBSBFHD05ST-3 MB12FBSCFHD05ST-3
06 pins			PE 20 0 04 10 <sup>6</sup> 05 (5+PE)		PCB version	2A	30V	30V	MB12FBSCFHD06ST-3
08 pins					PCB version	2A	30V	30V	MB12FBSAFHD08ST-3

#### Remarks



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≥100MΩ

≤5mΩ

### M12 Male Panel Mount, PCB Type, Front fastened

13.4

H19

PG9 or M16 ×1.5

M12x1.0

19.5

- Connector series: M12
- Gender: Male

Contacts

- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MB\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

А

IEC 61076-2-101
-20°C ~ +90°C
TPU
Brass with gold plated
Brass with nickel plated
Epoxy resin / FKM

С

• Please refer to Page 96 for products' part number encoding rule.

#### Electrical data & Mechanical data

В

Available Coding

		Shield	ing:	Unavailable	2	
th gold p	lated	IP rati	ng:	IP68 in lock	ed condition	
th nickel	plated	Panel	cut-out:	Refer to page	ge 287	
sin / FKM		PCB la	yout:	Refer to page	ge 286	
		Matin	g endurance:	>500 cycles	;	
data						
	Contacts	Rated	Volt	tage		
D	termination	current	A/C	D/C	Part No.	
	PCB version	4A	250V	250V	MB12MBAFF03ST- <u>X</u> MB12MBBFF03ST- <u>X</u> MB12MBCFF03ST- <u>X</u>	
	PCB	4A	250V	250V	MB12MBAFF04ST- <u>X</u> MB12MBBFF04ST- <u>X</u> MB12MBCFF04ST-X	

Insulation resistance: Contact resistance :

03 pins			(2+PE)		PCB version	4A	250V	250V	MB12MBBFF03ST- <u>X</u> MB12MBCFF03ST- <u>X</u>
04 pins	(4@ @3) 1@ @2)	(4® ®3) 1® ®2	(3+PE)		PCB version	4A	250V	250V	MB12MBAFF04ST- <u>X</u> MB12MBBFF04ST- <u>X</u> MB12MBCFF04ST- <u>X</u> MB12MBDFF04ST- <u>X</u>
05 pins			(4+PE)		PCB version	4A 2A (C-code)	60V	60V	MB12MBAFF05ST- <u>X</u> MB12MBBFF05ST- <u>X</u> MB12MBCFF05ST- <u>X</u>
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBCFF06ST- <u>X</u>
08 pins					PCB version	2A	30V	30V	MB12MBAFF08ST- <u>X</u>
12 pins	5 (8 • • • • • • • • • • • • • • • • • • •				PCB version	1.5A	30V	30V	MB12MBAFF12ST- <u>X</u>
17 pins					PCB version	1.5A	30V	30V	MB12MBAFF17ST- <u>X</u>
Note: X refers to Chasis side thread size									

#### Remarks

Note:  $\underline{X}$  refers to Chasis-side thread size

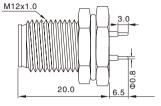
M12 cables & connectors



### M12 Male Panel Mount, PCB Type, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MB\*FF\*\*ST-0
  - \* refers to coding type
    \*\* refers to pins number







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#### General information

Standard:	IEC 61076-2-101	
Ambient temperature:	-20℃ ~ +90℃	
Connector insert:	TPU	
Connector contacts:	Brass with gold plated	
Connector nut/screw:	Brass with nickel plated	
Seal / O-ring:	Epoxy resin / FKM	

#### Electrical data & Mechanical data

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

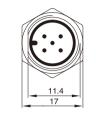
Contacts		Available	e Coding		Contacts	Part No.			
Contacts	A	В	C	D	termination	current	A/C	D/C	Part NO.
03 pins			(2+PE)		PCB version	4A	250V	250V	MB12MBAFF03ST-0 MB12MBBFF03ST-0 MB12MBCFF03ST-0
04 pins	(40 03) 10 02		(3+PE)		PCB version	4A	250V	250V	MB12MBAFF04ST-0 MB12MBBFF04ST-0 MB12MBCFF04ST-0 MB12MBDFF04ST-0
05 pins	(4) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	(40 03) 0 5 10 02	(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBAFF05ST-0 MB12MBBFF05ST-0 MB12MBCFF05ST-0
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBCFF06ST-0
08 pins					PCB version	2A	30V	30V	MB12MBAFF08ST-0
12 pins					PCB version	1.5A	30V	30V	MB12MBAFF12ST-0
17 pins					PCB version	1.5A	30V	30V	MB12MBAFF17ST-0

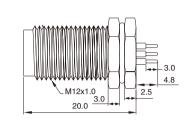
#### Remarks



### M12 Male Panel Mount, Plastic Screw/Nut, PCB Type, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A
- Locking type: Plastic fix screw
- Mounting type: Front fastened
- Part No.: MB12MBAFP\*\*ST-0
  - \*\* refers to pins number







#### General information

Seal / O-ring:	Epoxy resin / FKM	
Connector nut/screw:	PA + GF	
Connector contacts:	Brass with gold plated	
Connector insert:	PA + GF	
Ambient temperature:	-25℃ ~ +90℃	
Standard:	IEC 61076-2-101	

#### Electrical data & Mechanical data

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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

Con	tacts	Contacts			age	Part No.
		termination	current	A/C	D/C	Tart NO.
04 pins		PCB version	4A	250V	250V	MB12MBAFP04ST-0
05 pins		PCB version	4A	60V	60V	MB12MBAFP05ST-0
08 pins		PCB version	2A	30V	30V	MB12MBAFP08ST-0

#### Remarks



### M12 Female Panel Mount, PCB Type, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FB\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

M12x1.0 H12x1.0 H12x1.0 H12x1.0 H12x1.0	
---	--

6.5 ± 0.5

18.5



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Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

с. н. н.		Available	e Coding		Contacts	Rated	Volt	tage	
Contacts	А	В	С	D	termination	current	A/C	D/C	Part No.
03 pins			0PE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBAFF03ST- <u>X</u> MB12FBBFF03ST- <u>X</u> MB12FBCFF03ST- <u>X</u>
04 pins			0°E 30 01 20 (3+PE)		PCB version	4A	250V	250V	MB12FBAFF04ST- <u>X</u> MB12FBBFF04ST- <u>X</u> MB12FBCFF04ST- <u>X</u> MB12FBDFF04ST- <u>X</u>
05 pins			(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBAFF05ST- <u>X</u> MB12FBBFF05ST- <u>X</u> MB12FBCFF05ST- <u>X</u>
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12FBCFF06ST- <u>X</u>
08 pins					PCB version	2A	30V	30V	MB12FBAFF08ST- <u>X</u>
12 pins	$(50^{\circ}0^{\circ})^{(40^{\circ}0^{\circ}0^{\circ})}_{(30^{\circ}10^{\circ}208)}_{(30^{\circ}10^{\circ}208)}_{(30^{\circ}10^{\circ}208)}_{(10^{\circ}10^{\circ})}_{(10^{\circ}10^$				PCB version	1.5A	30V	30V	MB12FBAFF12ST- <u>X</u>
17 pins					PCB version	1.5A	30V	30V	MB12FBAFF17ST- <u>X</u>

#### Remarks

Note:  $\underline{X}$  refers to Chasis-side thread size

-shielded pin

00



### M12 Male Panel Mount, PCB Type, Front fastened, Shielded

H15

M12x1.0

20.7

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBS\*FF\*\*ST-0
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mech

IFC 610	76-2-101		Insula	tion resistance:	≥100MΩ		
-25°C ~ +90°C				ct resistance :	≤5mΩ		
TPU	150 0		Shield		Available		
Brass w	vith gold p	lated	IP rati	5	IP68 in lock	ed condition	
	vith nickel			cut-out:	Refer to page	ge 287	
Epoxy r	esin / FKM	•	PCB la	yout:	Refer to page		
			Matin	g endurance:	>500 cycles	-	
nanica	l data				-		
Coding		Contacts	Rated	Voltage			
C	D	termination	current	A/C	D/C	Part No.	
(2+PE)		PCB version	4A	250V	250V	MB12MBSAFF03ST- MB12MBSBFF03ST- MB12MBSCFF03ST-	
(3+PE)		PCB version	4A	250V	250V	MB12MBSAFF04ST- MB12MBSBFF04ST- MB12MBSCFF04ST- MB12MBSDFF04ST-	
(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBSAFF05ST- MB12MBSBFF05ST- MB12MBSCFF05ST-	

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Contosta		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	A	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins			(2+PE)		PCB version	4A	250V	250V	MB12MBSAFF03ST-0 MB12MBSBFF03ST-0 MB12MBSCFF03ST-0
04 pins			(3+PE)		PCB version	4A	250V	250V	MB12MBSAFF04ST-0 MB12MBSBFF04ST-0 MB12MBSCFF04ST-0 MB12MBSDFF04ST-0
05 pins	(40 03 05 10 02		(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBSAFF05ST-0 MB12MBSBFF05ST-0 MB12MBSCFF05ST-0
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBSCFF06ST-0
08 pins					PCB version	2A	30V	30V	MB12MBSAFF08ST-0
12 pins	5 (8 • • • • • • • • • • • • • • • • • • •				PCB version	1.5A	30V	30V	MB12MBSAFF12ST-0
17 pins					PCB version	1.5A	30V	30V	MB12MBSAFF17ST-0

#### Remarks



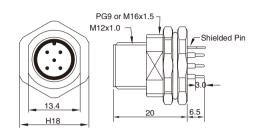
### M12 Male Panel Mount, PCB Type, Front fastened, Shielded

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBS\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data





### c 🕄 us ( E RoHS 🏨

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
P rating:	IP68 in locked condition
anel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

Contacts	Available Coding			Contacts Rated		Volt	age	Part No.	
Contacts	A	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins			(2+PE)		PCB version	4A	250V	250V	MB12MBSAFF03ST- <u>X</u> MB12MBSBFF03ST- <u>X</u> MB12MBSCFF03ST- <u>X</u>
04 pins		(40 03) 10 02	(3+PE)		PCB version	4A	250V	250V	MB12MBSAFF04ST- <u>X</u> MB12MBSBFF04ST- <u>X</u> MB12MBSCFF04ST- <u>X</u> MB12MBSDFF04ST- <u>X</u>
05 pins			(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12MBSAFF05ST- <u>X</u> MB12MBSBFF05ST- <u>X</u> MB12MBSCFF05ST- <u>X</u>
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12MBSCFF06ST- <u>X</u>
08 pins					PCB version	2A	30V	30V	MB12MBSAFF08ST- <u>X</u>
12 pins					PCB version	1.5A	30V	30V	MB12MBSAFF12ST- <u>X</u>
17 pins					PCB version	1.5A	30V	30V	MB12MBSAFF17ST- <u>X</u>

#### Remarks

Note:  $\underline{X}$  refers to Chasis-side thread size



### M12 Female Panel Mount, PCB Type, Front fastened, Shielded

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBS\*FF\*\*ST-X
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin / FKM

#### Electrical data & Mechanical data

	18.5 6.5 ± 0.5
	PG9 or M16x1.5
<u>13.4</u> 18.0	M12x1.0



### c 🕄 us ( E RoHS 🛞

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
P rating:	IP68 in locked condition
anel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

Contacts		Available	e Coding		Contacts	Rated	Volt	age	Part No.
Contacts	A	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins			OPE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBSAFF03ST- <u>X</u> MB12FBSBFF03ST- <u>X</u> MB12FBSCFF03ST- <u>X</u>
04 pins			0PE 30 01 20 (3+PE)		PCB version	4A	250V	250V	MB12FBSAFF04ST- <u>X</u> MB12FBSBFF04ST- <u>X</u> MB12FBSCFF04ST- <u>X</u> MB12FBSDFF04ST- <u>X</u>
05 pins			(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBSAFF05ST- <u>X</u> MB12FBSBFF05ST- <u>X</u> MB12FBSCFF05ST- <u>X</u>
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12FBSCFF06ST- <u>X</u>
08 pins					PCB version	2A	30V	30V	MB12FBSAFF08ST- <u>X</u>
12 pins	$( \begin{array}{c} 5 \\ 5 \\ 0 \\ 4 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$				PCB version	1.5A	30V	30V	MB12FBSAFF12ST- <u>X</u>
17 pins					PCB version	1.5A	30V	30V	MB12FBSAFF17ST- <u>X</u>
Note: <u>X</u> refers to Chasis-side thread siz									

#### Remarks

• Please refer to Page 96 for products' part number encoding rule.

M12 cables & connectors



## M12 Female Panel Mount, PCB Type, Front Fastened, with Shielded Terminal

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBS\*FF\*\*ST-X-s
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to Chasis-side thread size
  - s refers to shielded pin

#### General information

,	
Seal / O-ring:	Epoxy resin / FKM
Connector nut/screw:	Brass with nickel plated
Connector contacts:	Brass with gold plated
Connector insert:	PA+GF
Ambient temperature:	-20°C ~ +90°C
Standard:	IEC 61076-2-101

	18.5	6.5 ± 0.5
PG9 or	M16x1.5	- Shield Terminal
13.4		·



### c 🕄 us ( E RoHS 🛞

≥100MΩ
≤5mΩ
Available
IP68 in locked condition
Refer to page 287
Refer to page 286
>500 cycles

#### Electrical data & Mechanical data

Contosta		Available	e Coding		Contacts	Rated	Volt	tage	Part No.
Contacts	A	В	С	D	termination	current	A/C	D/C	Part NO.
03 pins			0PE 30 02 (2+PE)		PCB version	4A	250V	250V	MB12FBSAFF03ST- <u>X</u> -s MB12FBSBFF03ST- <u>X</u> -s MB12FBSCFF03ST- <u>X</u> -s
04 pins			0PE 30 01 20 (3+PE)		PCB version	4A	250V	250V	MB12FBSAFF04ST- <u>X</u> -s MB12FBSBFF04ST- <u>X</u> -s MB12FBSCFF04ST- <u>X</u> -s MB12FBSDFF04ST- <u>X</u> -s
05 pins			(4+PE)		PCB version	4A 2A(C-code)	60V	60V	MB12FBSAFF05ST- <u>X</u> -s MB12FBSBFF05ST- <u>X</u> -s MB12FBSCFF05ST- <u>X</u> -s
06 pins			(5+PE)		PCB version	2A	30V	30V	MB12FBSCFF06ST- <u>X</u> -s
08 pins					PCB version	2A	30V	30V	MB12FBSAFF08ST- <u>X</u> -s
12 pins					PCB version	1.5A	30V	30V	MB12FBSAFF12ST- <u>X</u> -s
17 pins					PCB version	1.5A	30V	30V	MB12FBSAFF17ST- <u>X</u> -s

#### Remarks

Note:  $\underline{X}$  refers to Chasis-side thread size



### M12 Male Panel Mount, Angled, PCB Type, Front fastened

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12MB\*FF\*\*RA-0 (Unshielding) MB12MBS\*FF\*\*RA-0 (Shielding)
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Connector nut/screw:	Brass with nickel plated
Connector contacts:	Brass with gold plated
Connector insert:	PA+GF
Ambient temperature:	-25℃ ~ +90℃
Standard:	IEC 61076-2-101

#### Electrical data & Mechanical data

|--|



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable / Available
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

Contacts	Available Coding		Contacts	Rated	Voltage		Part No.	
Contacts	А	В	D	termination	current	A/C	D/C	Fart NO.
04 pins				PCB version	4A	250V	250V	MB12MBAFF04RA-0 MB12MBSAFF04RA-0 MB12MBSFF04RA-0 MB12MBSBFF04RA-0 MB12MBDFF04RA-0 MB12MBSDFF04RA-0 MB12MBSDFF04RA-0
05 pins				PCB version	4A	60V	60V	MB12MBAFF05RA-0 MB12MBSAFF05RA-0 MB12MBBFF05RA-0 MB12MBSBFF05RA-0
08 pins				PCB version	2A	30V	30V	MB12MBAFF08RA-0 MB12MBSAFF08RA-0

#### Remarks

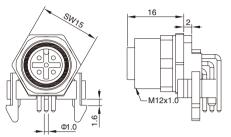


### M12 Female Panel Mount, Angled, PCB Type, Front fastened

- Connector series: M12
- Gender: Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FB\*FF\*\*RA-0(Unshielding) MB12FBS\*FF\*\*RA-0 (Shielding)
  - \* refers to coding type
  - \*\* refers to pins number

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM





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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable / Available
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

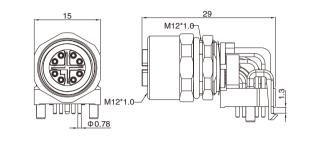
Contacts	Available Coding	Contacts	Rated		age	Part No.		
Contacts	А	В	D	termination	current	A/C	D/C	Fait NO.
04 pins				PCB version	4A	250V	250V	MB12FBAFF04RA-0 MB12FBSAFF04RA-0 MB12FBSFF04RA-0 MB12FBSBFF04RA-0 MB12FBSBFF04RA-0 MB12FBSDFF04RA-0 MB12FBSDFF04RA-0
05 pins				PCB version	4A	60V	60V	MB12FBAFF05RA-0 MB12FB5AFF05RA-0 MB12FB5FF05RA-0 MB12FB5BFF05RA-0
08 pins				PCB version	2A	30V	30V	MB12FBAFF08RA-0 MB12FBSAFF08RA-0

#### Remarks



### M12 Female Panel Mount, Angled PCB Type, Rear fastened, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FBSXFF08RA-2





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#### General information

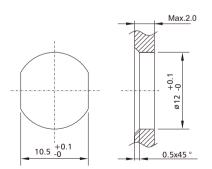
Standard:	IEC 61076-2-109
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA / TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass / Stainless steel
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

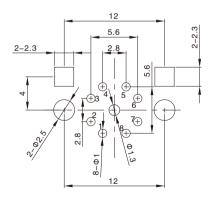
#### Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Volt A/C	tage D/C	Part No.
08 pins		PCB version	0.5A	50V	60V	MB12FBSXFF08RA-2

#### Panel Cut-out Dimensions



#### PCB Layout

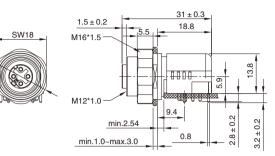


#### Remarks



## M12 Female Panel Mount, Angled, PCB Type, Shielded Shell, Whithout Fixed Holes

- Connector series: M12
- Gender: Female
- Coding: D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FBSDFF04RA-20





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Brass with nickel plated
Shield Shell:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

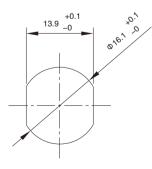
Ø

≥100MΩ
≤5mΩ
Available
IP20 in locked condition
Cat. 5,D level: up to 100 MHz
>500 cycles

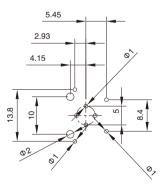
### Electrical data & Mechanical data

	Contacts		Contacts termination	Rated current	Volt A/C	tage D/C	Part No.
-	04 pins		PCB version	4A	50V	50V	MB12FBSDFF04RA-20

#### Panel Cut-out Dimensions



#### PCB Layout



Recommended PCB thickness:1.6mm

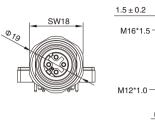
### Remarks

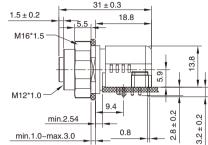




### M12 Female Panel Mount, Angled, PCB Type, Shielded Shell, Whith Fixed Holes

- Connector series: M12
- Gender: Female
- Coding: D
- Locking type: Fix screw
- Mounting type: Right angled
- Part No.: MB12FBSDFF04RA-21







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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-40°C ~ +90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector body:	Brass with nickel plated
Shield Shell:	Zinc alloy with nickel plated
Seal / O-ring:	FKM

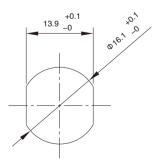
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP20 in locked condition
Transmission characteristics:	Cat. 5,D level: up to 100 MHz
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

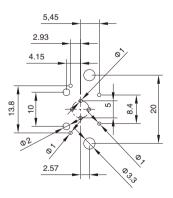
Contacts		Contacts termination	Rated current	Volt A/C	tage D/C	Part No.
04 pins		PCB version	4A	50V	50V	MB12FBSDFF04RA-21

#### Panel Cut-out Dimensions

Remarks



#### PCB Layout

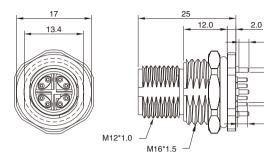


Recommended PCB thickness:1.6mm



### M12 Male Panel Mount, PCB Type, Front fastened, X-coding, Shielded

- Connector series: M12
- Gender: Male
- Coding: X
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBSXFF08ST-2





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#### General information

Standard:	IEC 61076-2-109
Ambient temperature:	-25℃~ + 90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass/Zinc with nickel plated
Seal / O-ring:	FKM/Epoxy resin

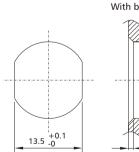
Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

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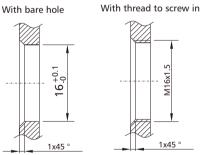
#### Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Volt A/C	age D/C	Part No.
08 pins		PCB version	0.5A	50V	60V	MB12MBSXFF08ST-2

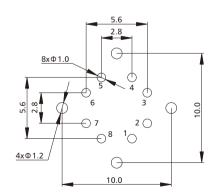
#### Panel Cut-out Dimensions







#### PCB Layout

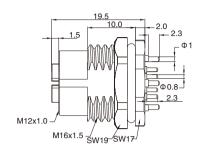


#### Remarks



### M12 Female Panel Mount, PCB Type, Front fastened, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBSXFF08ST-2





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#### General information

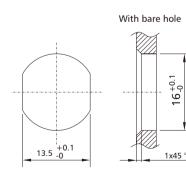
Standard:	IEC 61076-2-109
Ambient temperature:	-25°C~ + 90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass/Zinc with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Con	Contacts Contact		Rated current	Voltage A/C D/C		Part No.
		terrindtorr	current	AVC	D/C	
08 pins		PCB version	0.5A	50V	60V	MB12FBSXFF08ST-2

#### Panel Cut-out Dimensions



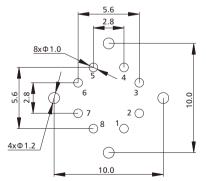


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6<u>×</u>1

1x45 °





#### Remarks

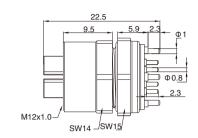
• Please refer to Page 96 for products' part number encoding rule.

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## M12 Female Panel Mount, PCB Type, Rear fastened, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FBSXFF08ST-0





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#### General information

Standard:	IEC 61076-2-109
Ambient temperature:	-25°C~ + 90°C
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass/Zinc with nickel plated
Seal / O-ring:	FKM

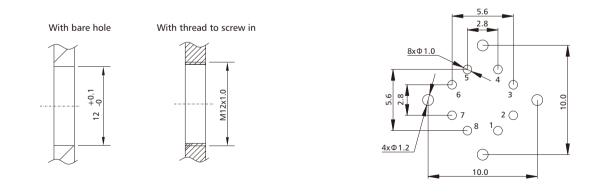
Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Contacts Contacts		Volt	Part No.	
Con	lacis	termination	current A/C		D/C	Fait NO.
08 pins		PCB version	0.5A	50V	60V	MB12FBSXFF08ST-0

#### Panel Cut-out Dimensions

#### PCB Layout



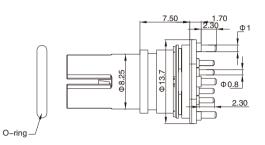
#### Remarks



### M12 Female Panel Mount, PCB Type, Without Screw, X-coding, Shielded

#### • Connector series: M12

- Gender: Female
- $\bullet \ \ \text{Coding: } X$
- Locking type: Snap-in
- Mounting type: Front fastened
- Part No.: MB12FBSXFI08ST





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#### General information

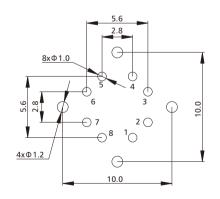
Standard:	IEC 61076-2-109
Ambient temperature:	-25℃~ + 90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector screw/nut:	Brass/Zinc with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Co	ntacts	Contacts termination	Rated current	Volt A/C	age D/C	Part No.
08 pins		PCB version	0.5A	50V	60V	MB12FBSXFI08ST

#### PCB Layout

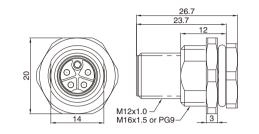


#### Remarks



### M12 Male Panel, Solder & Crimp, Front fastened, K-coding

- Connector series: M12
- Gender: Male
- Coding: K
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12M\*KFF05ST-X
- refer to terminal type
   X refers to Chasis–side thread size





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#### General information

IEC 61076-2-111
-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Contacts		Contacts	Rated	Volt	age	Wire gau	ıge / size	Part No.
com	lacts	termination	current	A/C	D/C	AWG	mm²	
05 pins	(4+PE)	Crimp & Solder	16A	690V	NC	14AWG	2.0	MB12M <u>S</u> KFF05ST- <u>X</u> MB12M <u>C</u> KFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size,  $\underline{S}$ : Solder  $\underline{C}$ : Crimp

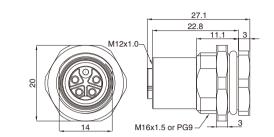
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, Solder & Crimp, Front fastened, K-coding

- Connector series: M12
- Gender: Female
- Coding: K
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12F\*KFF05ST-X
  - refer to terminal type
     X refers to Chasis–side thread size





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#### General information

IEC 61076-2-111
$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Contacts		Contacts	Rated	Volt	age	Wire gau	uge / size	Part No.
	CON	lacis			current A/C D/		AWG mm <sup>2</sup>		Fait NO.
-	05 pins	(4+PE)	Crimp & Solder	16A	690V	NC	14AWG	2.0	MB12F <u>S</u> KFF05ST- <u>X</u> MB12F <u>C</u> KFF05ST- <u>X</u>

Note: <u>X</u> refers to Chasis-side thread size, <u>S</u>: Solder <u>C</u>: Crimp

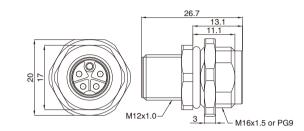
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Panel, Solder & Crimp, Rear fastened, K-coding

- Connector series: M12
- Gender: Male
- Coding: K
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12M\*KRF05ST-X
- refer to terminal type
   X refers to Chasis–side thread size





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# General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Cont	tacts	Contacts termination	Rated current	Volt A/C	tage D/C	Wire gau AWG	uge / size mm²	Part No.
05 pins	(4+PE)	Crimp & Solder	16A	690V	NC	14AWG	2.0	MB12M <u>S</u> KRF05ST- <u>X</u> MB12M <u>C</u> KRF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size,  $\underline{S}$ : Solder  $\underline{C}$ : Crimp

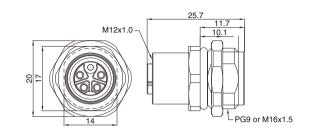
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, Solder & Crimp, Rear fastened, K-coding

- Connector series: M12
- Gender: Female
- Coding: K
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12F\*KRF05ST-X
- refer to terminal type
   X refers to Chasis–side thread size





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#### General information

IEC 61076-2-111
$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
-20°C ~ +80°C(flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		taete	Contacts	Rated	Volt	age	Wire gau	uge / size	Part No.
	Com	lacis	termination	current	A/C	D/C	AWG	mm²	Fart NO.
	05 pins	(4+PE)	Crimp & Solder	16A	690V	NC	14AWG	2.0	MB12F <u>S</u> KRF05ST- <u>X</u> MB12F <u>C</u> KRF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size,  $\underline{S}$ : Solder  $\underline{C}$ : Crimp

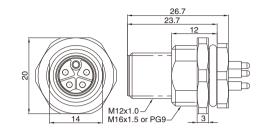
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Male Panel, PCB Type, Front fastened, K-coding

- Connector series: M12
- Gender: Male
- Coding: K
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBKFF05ST-X
- X refers to Chasis-side thread size





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#### General information

Ambient temperature:	$-40^{\circ}$ $\sim +80^{\circ}$ (fixed installation)				
	$-20^{\circ}$ C ~ $+80^{\circ}$ C(flexible installation)				
Connector insert:	PA				
Connector contacts:	Brass with gold plated				
Connector nut/screw:	Brass with nickel plated				
Seal / O-ring:	FKM				

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		tacts	Contacts Rated		Voltage		Wire gauge / size		Part No.
	Com	lacts	termination	current	A/C	D/C	AWG	mm²	Tart No.
	05 pins	(4+PE)	РСВ	16A	690V	NC	14AWG	2.0	MB12MBKFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

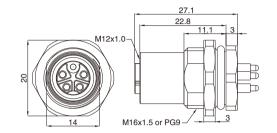
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, PCB Type, Front fastened, K-coding

- Connector series: M12
- Gender: Female
- Coding: K
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBKFF05ST-X
  - X refers to Chasis-side thread size





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#### General information

Standard:	IEC 61076–2–111
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		taete	Contacts Rated		Voltage		Wire gauge / size		Part No.
	CON	lacis	termination	current	A/C	D/C	AWG	mm²	Fait NO.
	05 pins	(4+PE)	РСВ	16A	690V	NC	14AWG	2.0	MB12FBKFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

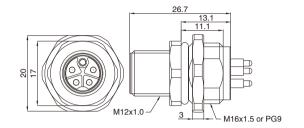
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Male Panel, PCB Type, Rear fastened, K-coding

- Connector series: M12
- Gender: Male
- Coding: K
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MBKRF05ST-X
- X refers to Chasis-side thread size





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#### General information

IEC 61076-2-111				
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)				
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)				
PA				
Brass with gold plated				
Brass with nickel plated				
FKM				

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Contacts	Rated	Voltage		Wire gauge / size		Part No.
	lacis	termination	current	A/C	D/C	AWG	mm²	Tart No.
05 pins	(4+PE)	РСВ	16A	690V	NC	14AWG	2.0	MB12MBKRF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

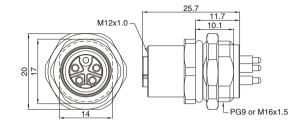
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, PCB Type, Rear fastened, K-coding

- Connector series: M12
- Gender: Female
- Coding: K
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FBKRF05ST-X
  - X refers to Chasis-side thread size





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#### General information

IEC 61076-2-111
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
-20°C ~ +80°C(flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤8mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		Contacts	Rated	Rated Voltage		Wire gauge / size		Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm²	Fart NO.
05 pins	(4+PE)	РСВ	16A	690V	NC	14AWG	2.0	MB12FBKRF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Male Panel, Solder & Crimp, Front fastened, L-coding

- Connector series: M12
- Gender: Male
- Coding: L
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12M\*LFF\*\*ST-X
  - \* refer to terminal type
  - \*\* refers to pins number X refers to Chasis–side thread size

#### General information

xed installation)
exible installation)
plated
l plated

ſ	26.7
M12x	
	1.5 or PG93



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Contacts		Contacts	Rated Voltag		tage Wire gauge / size			Part No.
	Com	lacts	termination	current	A/C	D/C	AWG	mm²	Tart No.
_	05 pins	(4+PE)	Crimp & Solder	16A	NC	63V	14AWG	2.0	MB12M <u>S</u> LFF05ST- <u>X</u> MB12M <u>C</u> LFF05ST- <u>X</u>

Note: <u>X</u> refers to Chasis-side thread size, <u>S</u>: Solder <u>C</u>: Crimp

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, Solder & Crimp, Front fastened, L-coding

- Connector series: M12
- Gender: Female
- Coding: L
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12F\*LFF\*\*ST-XX
  - \* refer to terminal type
  - \*\* refers to pins number X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	-20°C ~ +80°C(flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

	27.2
M12x1.	
14	M16x1.5 or PG9 3 _



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		tacts Contacts		Volt	Voltage		uge / size	Part No.
CON	lacis	termination	current	A/C	D/C	AWG	mm²	Part NO.
05 pins	(4+PE)	Crimp & Solder	16A	NC	63V	14AWG	2.0	MB12F <u>S</u> LFF05ST- <u>X</u> MB12F <u>C</u> LFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size,  $\underline{S}$ : Solder  $\underline{C}$ : Crimp

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Panel, Solder & Crimp, Rear fastened, L-coding

- Connector series: M12
- Gender: Male
- Coding: L
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12M\*LRF\*\*ST-X
- \* refer to terminal type
   \*\* refers to pins number
- X refers to Chasis-side thread size

#### General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

26.7
M12x1.0- SW14 M16x1.5 or PG9



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

Contacts		tacts	Contacts	Rated		tage	Wire gau	uge / size	Part No.
			termination curr	current	A/C	D/C	AWG	mm²	
05 pi	ins	(4+PE)	Crimp & Solder	16A	NC	63V	14AWG	2.0	MB12M <u>S</u> LRF05ST- <u>X</u> MB12M <u>C</u> LRF05ST- <u>X</u>

Note: <u>X</u> refers to Chasis-side thread size, <u>S</u>: Solder <u>C</u>: Crimp

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Female Panel, Solder & Crimp, Rear fastened, L-coding

- Connector series: M12
- Gender: Female
- Coding: L
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12F\*LRF\*\*ST-XX
- refer to terminal type
   refers to pins number
   X refers to Chasis-side thread size
- General information

Standard:	IEC 61076-2-111
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

21.2
11.7 10.1 3.0 SW14 PG9 or M16x1.5

07.0



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Contacts		Contacts	Rated	Volt	age	Wire gau	uge / size	Part No.
			termination	current	A/C	D/C	AWG	mm²	Fart NO.
	05 pins	(4+PE)	Crimp & Solder	16A	NC	63V	14AWG	2.0	MB12F <u>S</u> LRF05ST- <u>X</u> MB12F <u>C</u> LRF05ST- <u>X</u>

Note: <u>X</u> refers to Chasis-side thread size, <u>S</u>: Solder <u>C</u>: Crimp

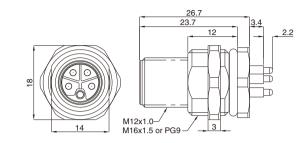
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



### M12 Male Panel, PCB Type, Front fastened, L-coding

- Connector series: M12
- Gender: Male
- Coding: L
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12MBLFF05ST-X
- X refers to Chasis-side thread size





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#### General information

IEC 61076–2–111
-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

#### Electrical data & Mechanical data

	Contacts		Contacts termination	Rated current	Volt A/C	tage D/C	Wire gau AWG	uge / size mm²	Part No.
05 pi	ins	(4+PE)	РСВ	16A	NC	63V	NC	NC	MB12MBLFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

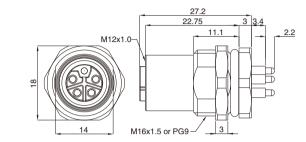
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel, PCB Type, Front fastened, L-coding

- Connector series: M12
- Gender: Female
- Coding: L
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FBLFF05ST-X
  - X refers to Chasis-side thread size





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#### General information

IEC 61076-2-111
-40°C ~ +80°C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Contacts	Rated	Vol	tage	Wire gau	uge / size	Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm²	Fait NO.
05 pins	(4+PE)	РСВ	16A	NC	63V	NC	NC	MB12FBLFF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

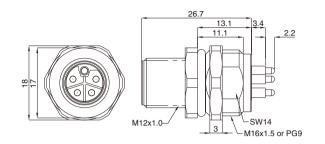
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Male Panel, PCB Type, Rear fastened, L-coding

- Connector series: M12
- Gender: Male
- Coding: L
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12MBLRF05ST-X
- X refers to Chasis-side thread size





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#### General information

IEC 61076-2-111
$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Cor	ntacts	Contacts	Rated	Voltage		Wire gauge / size		Part No.	
		termination	current	A/C	D/C	AWG	mm²		
05 pins	(4+PE)	РСВ	16A	NC	63V	NC	NC	MB12MBLRF05ST <u>-X</u>	

Note:  $\underline{X}$  refers to Chasis-side thread size

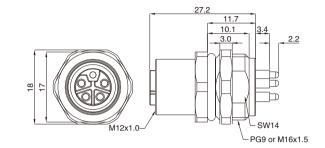
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel, PCB Type, Rear fastened, L-coding

- Connector series: M12
- Gender: Female
- Coding: L
- Locking type: Fix screw
- Mounting type: Rear fastened
- Part No.: MB12FBLRF05ST-X
  - X refers to Chasis-side thread size





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### General information

IEC 61076-2-111
-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
PA
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

	Contacts		Contacts	Rated	Vol	tage	Wire gau	uge / size	Part No.
			termination	current	A/C	D/C	AWG	mm²	Fait NO.
	05 pins	(4+PE)	РСВ	16A	NC	63V	NC	NC	MB12FBLRF05ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

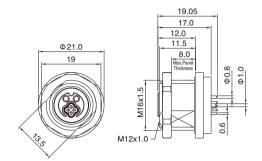
### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel, PCB, Front fastened, Y1-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: Y1
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FBSY106ST-2





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#### General information

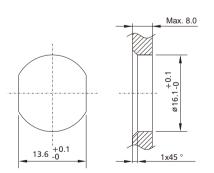
Standard:	IEC 61076-2-113
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	$-20^{\circ}C \sim +80^{\circ}C$ (flexible installation)
Connector insert:	PA+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Con	tacts	Contacts termination	Rated current	Voltage A/C D/C		Part No.
06 pins		РСВ	12A	50V	50V	MB12FBSY106ST-2

### Panel Cut-out Dimensions



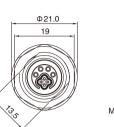
#### Remarks

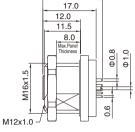
• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel, PCB, Front fastened, Y2-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: Y2
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FBSY208ST-2





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#### General information

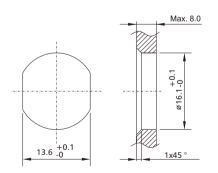
IEC 61076-2-113
-40°C ~ +80°C(fixed installation)
-20°C ~ +80°C(flexible installation)
PA+GF
Brass with gold plated
TPU
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Volt A/C	age D/C	Part No.
08 pins		РСВ	6A	50V	50V	MB12FBSY208ST-2

### Panel Cut-out Dimensions



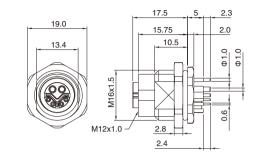
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel, PCB, Front fastened, Y3-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: Y3
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FBSY306ST-2





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#### General information

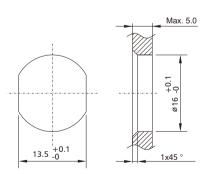
Standard:	IEC 61076-2-113
Ambient temperature:	-40 $^{\circ}$ C ~ +80 $^{\circ}$ C(fixed installation)
	$-20^{\circ}$ C ~ $+80^{\circ}$ C (flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Contacts		Contacts termination			Part No.	
06 pins		РСВ	12A	50V	50V	MB12FBSY306ST-2

### Panel Cut-out Dimensions



#### Remarks

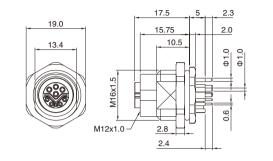
242 www.finecables.com

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



## M12 Female Panel, PCB, Front fastened, Y4-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: Y4
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MB12FBY408ST-2





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### General information

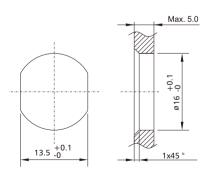
Standard:	IEC 61076-2-113
Ambient temperature:	-40°C ~ +80°C(fixed installation)
	-20°C ~ +80°C(flexible installation)
Connector insert:	TPU+GF
Connector contacts:	Brass with gold plated
Connector overmold:	TPU
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Contacts termination	Rated current	Volt A/C	age D/C	Part No.
08 pins		РСВ	6A	50V	50V	MB12FBSY408ST-2

### Panel Cut-out Dimensions



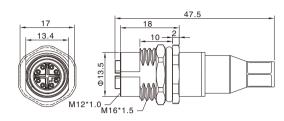
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Female Panel, Crimp, Front fastened, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Front fastened
- Part No.: MB12FCSXFF08ST-X
- X refers to Chasis-side thread size





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#### General information

IEC 61076-2-109
$-40^{\circ}C \sim +80^{\circ}C$ (fixed installation)
-20°C ~ +80°C(flexible installation)
PA / TPU
Brass with gold plated
Brass with nickel plated
FKM

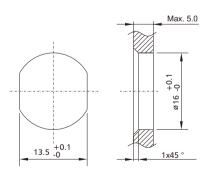
Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Transmission characteristic:	CAT6A / CAT7
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Contacts		Rated	Volt	tage	Wire gau	uge / size	Cable spec	Part No.
		current	A/C	D/C	AWG	AWG mm <sup>2</sup>		rarrio.
08 pins		0.5A	50V	60V	27~24AWG	0.14~0.25	CAT64/CAT7	MB12FCSXFF08ST- <u>X</u>

Note:  $\underline{X}$  refers to Chasis-side thread size

### Panel Cut-out Dimensions



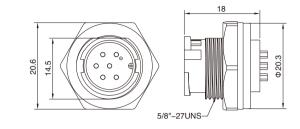
#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.



# M12 Male Panel Mount, Solder, Front fastened, Quick-lock Type

- Connector series: M12
- Gender: Male
- Locking type: Quick-lock
- Mounting type: Front fastened
- Part No.: MB12MSAFQ\*\*ST
  - \*\* refers to pins number





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#### General information

Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Seal / O-ring:	Epoxy resin / FKM
sear / O-mig.	Epoxy resin/ FKIVI

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

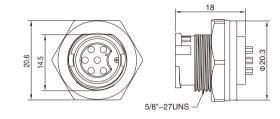
Contacts		Contacts Rated		Voltage		Wire gauge / size		Wire	Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm²	insulation	Fait NO.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PVC wire or customized	MB12MSAFQ04ST
06 pins		Solder version	4A	60V	60V	22AWG	0.34	PVC wire or customized	MB12MSAFQ06ST

### Remarks



# M12 Female Panel Mount, Solder, Front fastened, Quick-lock Type

- Connector series: M12
- Gender: Female
- Locking type: Quick-lock
- Mounting type: Front fastened
- Part No.: MB12FSAFQ\*\*ST
  - \*\* refers to pins number





## c 🕄 us ( E Rohs 🛞

### General information

-25℃ ~ +90℃
PA + GF
Brass with gold plated
PA+GF
Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

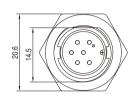
Contacts		Contacts Rated		Voltage		Wire gauge / size		Wire	Part No.
Con	lacis	termination	current	A/C	D/C	AWG	mm²	insulation	Fait NO.
04 pins		Solder version	4A	250V	250V	22AWG	0.34	PVC wire or customized	MB12FSAFQ04ST
06 pins		Solder version	4A	60V	60V	22AWG	0.34	PVC wire or customized	MB12FSAFQ06ST

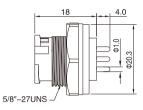
## Remarks



# M12 Male Panel Mount, PCB Type, Front fastened, Quick-lock Type

- Connector series: M12
- Gender: Male
- Locking type: Quick-lock
- Mounting type: Front fastened
- Part No.: MB12MBAFQ\*\*ST
  - \*\* refers to pins number







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### General information

-25°C ~ +90°C
PA + GF
Brass with gold plated
PA+GF
Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

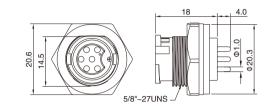
Con	tacts	Contacts Rated		Volt	Part No.	
Con	lacis	termination	current	A/C	D/C	
04 pins		PCB version	4A	250V	250V	MB12MBAFQ04ST
06 pins		PCB version	4A	60V	60V	MB12MBAFQ06ST

### Remarks



# M12 Female Panel Mount, PCB Type, Front fastened, Quick-lock Type

- Connector series: M12
- Gender: Female
- Locking type: Quick-lock
- Mounting type: Front fastened
- Part No.: MB12FBAFQ\*\*ST
  - \*\* refers to pins number





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### General information

Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA + GF
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Seal / O-ring:	Epoxy resin / FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP65, IP68 in locked condition
Panel cut-out:	Refer to page 287
PCB layout:	Refer to page 286
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

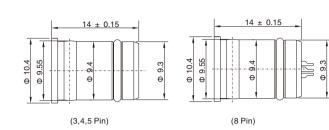
Com	tacts	Contacts Rated		Volt	Part No.	
Con	lacis	termination	current	A/C	D/C	Part NO.
04 pins		PCB version	4A	250V	250V	MB12FBAFQ04ST
06 pins		PCB version	4A	60V	60V	MB12FBAFQ06ST

## Remarks



# M12 Male Plastic Housing with O-ring, Solder

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: M12H-MS\*XX
  - \* refers to coding typeXX refers to pins number





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## General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA
Connector contacts:	Brass with gold plated
Seal / O-ring:	Epoxy resin/FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP67 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Contonto	Ava	Available Coding		Contacts	Contacts Rated		age	Wire gau	uge / size	Part No.
Contacts	A	В	D	termination current	A/C	D/C	AWG	mm²	Part NO.	
03 pins				Solder version	4A	250V	250V	22AWG	0.34	M12H-MSA03 M12H-MSB03
04 pins				Solder version	4A	250V	250V	22AWG	0.34	M12H-MSA04 M12H-MSB04 M12H-MSD04
05 pins				Solder version	4A	60V	60V	22AWG	0.34	M12H-MSA05 M12H-MSB05
08 pins				Solder version	2A	30V	30V	24AWG	0.25	M12H-MSA08

#### Remarks



# M12 Male Plastic Housing with O-ring, PCB Type

- Connector series: M12
- Gender: Male
- Coding: A,B,D
- Locking type: Snap-in
- Mounting type: Straight
- Part No.: M12H-MB\*XX
  - refers to coding type
     XX refers to pins number

#### General information

	14 ± 0.15
1 1	
0 10.4 0 9.55	e 6 3 3



## c 🕄 us ( E Rohs 🛞

IEC 61076-2-101
-25℃ ~ +90℃
PA
Brass with gold plated
Epoxy resin/FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
P rating:	IP68 in locked condition
Mating endurance:	>500 cycles

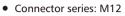
## Electrical data & Mechanical data

Contacts	Ava	ailable Cod	ling	Contacts	Rated	Volt	tage	Part No.
Contacts	А	В	D	termination	current	A/C	D/C	Part NO.
03 pins		(40 03) 10		PCB version	4A	250V	250V	M12H-MBA03 M12H-MBB03
04 pins				PCB version	4A	250V	250V	M12H-MBA04 M12H-MBB04 M12H-MBD04
05 pins				PCB version	4A	60V	60V	M12H-MBA05 M12H-MBB05
08 pins				PCB version	2A	30V	30V	M12H-MBA08

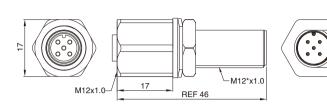
### Remarks



# M12 Male to Female Panel Mount, A-coding



- Gender: Male&Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-007~008





## ( 🗧 RoHS 🏨

### General information

Standard:	IEC 61076-2-101	Insu
Ambient temperature:	-25°C ~ +90°C	Con
Connector insert:	PA+GF/TPU	Shie
Connector contacts:	Brass with gold plated	IP ra
Connector nut/screw:	Brass with nickel plated	Pan
Seal / O-ring:	Epoxy resin/FKM	Mat

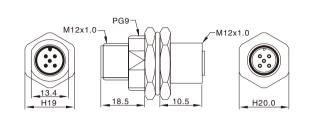
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

Contacto	Available	e Coding	Rated	Volt	Part No.	
Contacts	Male	Female	current	A/C	D/C	Fait NO.
04 pins			4A	250V	250V	MT-007
05 pins			4A	60V	60V	MT-008



# M12 Male to Female Panel Mount, A-coding

- Connector series: M12
- Gender: Male&Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-009~010





#### General information

## ( 🗧 RoHS 🚇

Standard:	IEC 61076-2-101	Insul
Ambient temperature:	-25°C ~ +90°C	Cont
Connector insert:	PA+GF/TPU	Shiel
Connector contacts:	Brass with gold plated	IP rat
Connector nut/screw:	Brass with nickel plated	Pane
Seal / O-ring:	Epoxy resin/FKM	Mati

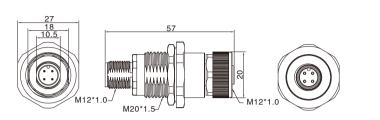
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Panel cut-out:	Refer to page 287
Mating endurance:	>500 cycles

Contosta	Available Coding		Rated	Voltage		Part No.
Contacts	Male	Female	current	A/C	D/C	Part NO.
04 pins			4A	250V	250V	MT-009
05 pins			4A	60V	60V	MT-010



# M12 Male to Female Panel Mount, A-coding, Shielded

- Connector series: M12
- Gender: Male & Female
- Coding: A
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-076~77





( E RoHS

### General information

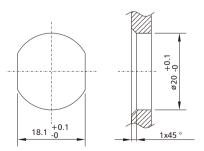
Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	PA / TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Seal / O-ring:	Epoxy resin/ FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

	Contacto	Rated	Volt	Part No.	
	Contacts Current		A/C	D/C	Fait NO.
04 pins	Male Female	4A	250V	250V	MT-076
05 pins	(40 03) (10 02) Male Female	4A	60V	60V	MT-077

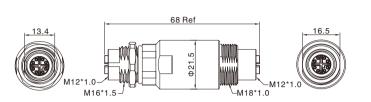
### Panel Cut-out Dimensions





# M12 Female to Female Panel Mount, X-coding, Shielded

- Connector series: M12
- Gender: Female
- Coding: X
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MT-078





( E RoHS

### General information

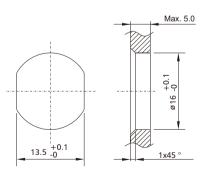
IEC 61076-2-109
-25℃ ~ +90℃
PA / TPU
Brass with gold plated
Brass with nickel plated
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤10mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts		Rated current	Volt A/C	tage D/C	Part No.
08 pins		0.5A	50V	60V	MT-078

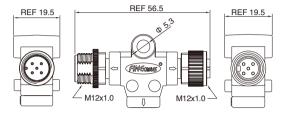
### Panel Cut-out Dimensions





# M12 I-Adapter, Male-Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: I type
- Part No.: MI-\*XX
  - \* refers to coding type XX refers to pins number





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### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

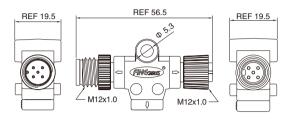
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	tage	Part No.
Contacts	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(40 03) (10) Male Female	Male Female		4A	250V	250V	MI-A03 MI-B03
04 pins	(40 03) (10 02) Male Female	Male Female	Male Female	4A	250V	250V	MI-A04 MI-B04 MI-D04
05 pins	(49 03) (10 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 \circledast & \circledast \\ \$ & \$ \\ 1 \circledast & \$ \\ \hline \end{bmatrix} \\ \hline \\ Male \\ \hline \\ Female \\ \end{array} $		4A	60V	60V	MI-A05 MI-B05
08 pins	$\begin{array}{c} \hline (  0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $			2A	30V	30V	MI-A08



# M12 Plastic I-Adapter, Male-Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: I type
- Part No.: MIP-\*XX
  - \* refers to coding type XX refers to pins number





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### General information

IEC 61076-2-101
-20°C~ + 80°C
TPU; PA
Brass with gold plated
PA+GF
TPU
FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
Contacts	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Male Female		4A	250V	250V	MIP-A03 MIP-B03
04 pins	(40 03) (10 02) Male Female	(49 03) (10 02) Male Female	Male Female	4A	250V	250V	MIP-A04 MIP-B04 MIP-D04
05 pins	(40 03) (10 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 & \bullet & \bullet \\ \bullet & \bullet \\ 1 & \bullet & \bullet \\ \hline \end{bmatrix} \\ \hline \\ Male \\ \hline \\ Female \\ \hline \end{array} $		4A	60V	60V	MIP-A05 MIP-B05
08 pins	$\begin{array}{c} (\bigcirc \circ \ \circ $			2A	30V	30V	MIP-A08



# M12 I-Adapter, Male-Male

- Connector series: M12
- Gender: Male&Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: I type
- Part No.: MI-\*XX–0
  - \* refers to coding type XX refers to pins number (0) without mounting hole

### Gene

General information	
Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 90°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	Epoxy resin / FKM

REF 13.5

112*1.0		

REF 58.0



# c 🕄 us ( E RoHS 🛞

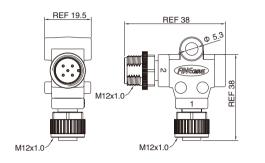
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
Contacts	А	В	D	current	A/C	D/C	Fart NO.
03 pins	(4) (1) (1) Male	(10) Male		4A	250V	250V	MI-A03-0 MI-B03-0
04 pins	(40 03) 10 02) Male	(10 03) 10 02 Male	Male	4A	250V	250V	MI-A04-0 MI-B04-0 MI-D04-0
05 pins	(40 03) 10 02) Male	(10 03) 10 02 Male		4A	60V	60V	MI-A050 MI-B050
08 pins	(60 5 04) (10 8 03) (10 8 03) Male			2A	30V	30V	MI-A08-0



# M12 L-Adapter, Male-Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: L type
- Part No.: ML-\*XX
  - \* refers to coding type XX refers to pins number





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### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20℃~ + 80℃
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

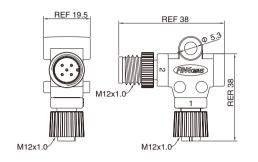
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
Contacts	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(40 03) (10) Male Female		4A	250V	250V	ML-A03 ML-B03
04 pins	(40 03) (10 02) Male Female	Male Female	Male Female	4A	250V	250V	ML-A04 ML-B04 ML-D04
05 pins	(49 03) (19 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 & \bullet & \bullet \\ \bullet & \bullet \\ \bullet & \bullet \\ \bullet & \bullet \\ \hline \end{pmatrix} \\ \hline \\ Male \\ \hline \\ Female \\ \hline \end{array} $		4A	60V	60V	ML-A05 ML-B05
08 pins	(60 \$ 04)           (10 \$ 05) <td< td=""><td></td><td></td><td>2A</td><td>30V</td><td>30V</td><td>ML-A08</td></td<>			2A	30V	30V	ML-A08



# M12 Plastic L-Adapter, Male-Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: L type
- Part No.: MLP-\*XX
  - \* refers to coding type XX refers to pins number





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20℃~ + 80℃
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

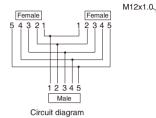
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

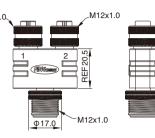
Contacts		Available Coding		Rated	Volt	age	Part No.
Contacts	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Male Female		4A	250V	250V	MLP-A03 MLP-B03
04 pins	(40 03) (10 02) Male Female	Male Female	Male Female	4A	250V	250V	MLP-A04 MLP-B04 MLP-D04
05 pins	(49 03) (19 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 & & & \\ & & 5 \\ & & & \\ 1 & & & \\ & & & \\ \end{array} \end{array} $ Male Female		4A	60V	60V	MLP-A05 MLP-B05
08 pins	$\begin{array}{c} \hline (  0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $			2A	30V	30V	MLP-A08



## M12 Y-Splitter, Male-2\*Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Y type
- Part No.: MY1-\*XX
  - refers to coding type
     XX refers to pins number







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#### General information

Connector insert:TPU; PAConnector contacts:Brass with gold platedConnector nut/screw:Brass with nickel platedConnector overmold:PVCScal/O ring:EVM	Ambient temperature:	-20℃~ + 80℃
Connector nut/screw: Brass with nickel plated Connector overmold: PVC	Connector insert:	TPU; PA
Connector overmold: PVC	Connector contacts:	Brass with gold plated
	Connector nut/screw:	Brass with nickel plated
Soal/O ring: EKM	Connector overmold:	PVC
	Seal/O-ring:	FKM

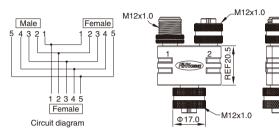
≥100MΩ
≤5mΩ
Available / Unavailable
IP68 in locked condition
>500 cycles

Contacts		Available Coding		Rated Voltage		Rated Voltage	
Contacts	А	В	D	current	A/C	D/C	Part No.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(1) Male Female		4A	250V	250V	MY1-A03 MY1-B03
04 pins	(40 03) (10 02) Male Female	(49 03) (19 02) Male Female	(4) (2) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	4A	250V	250V	MY1-A04 MY1-B04 MY1-D04
05 pins	(40 03) (10 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 & \bullet & \bullet \\ \bullet & \bullet \\ 1 & \bullet & \bullet \\ \hline \end{pmatrix} \\ \hline \\ Male \\ \hline \end{array} \begin{array}{c} \hline 3 & \bullet & \bullet \\ 0 & \circ $		4A	60V	60V	MY1-A05 MY1-B05
08 pins	(60 \$ 04)           (10 \$ 05) <td< td=""><td></td><td></td><td>2A</td><td>30V</td><td>30V</td><td>MY1-A08</td></td<>			2A	30V	30V	MY1-A08



# M12 Y-Splitter, Female-Male-Female

- Connector series: M12
- Gender: Female&Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: Y type
- Part No.: MY2-\*XX
  - \* refers to coding type XX refers to pins number





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### General information

Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Brass with nickel plated
Connector overmold:	PVC
Seal/O-ring:	FKM

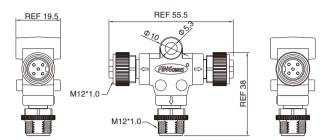
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available / Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(40 03) (10) Male Female		4A	250V	250V	MY2-A03 MY2-B03
04 pins	(40 03) (10 02) Male Female	Male Female	Male Female	4A	250V	250V	MY2-A04 MY2-B04 MY2-D04
05 pins	(40 03) (10 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 & & & \\ & & 5 \\ & & & \\ 1 & & & \\ & & & \\ \end{array} \end{array} \left( \begin{array}{c} 3 & & & \\ 3 & & & \\ 0 & & \\ 2 & & & \\ 0 & & \\ \end{array} \right) $ Male Female		4A	60V	60V	MY2-A05 MY2-B05
08 pins	$\begin{array}{c} \hline (  0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $			2A	30V	30V	MY2-A08



# M12 T-Splitter, Female-Male-Female

- Connector series: M12
- Gender: Female&Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: MT-\*XX
  - \* refers to coding typeXX refers to pins number





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### General information

Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

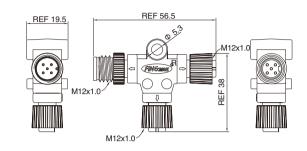
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
	А	В	D	current	A/C	D/C	Part NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		4A	250V	250V	MT-A03 MT-B03
04 pins	(40 03) (10 02) Male Female	(40 03) (10 02) Male Female	Male Female	4A	250V	250V	MT-A04 MT-B04 MT-D04
05 pins	(40 03) (10 02) Male Female	(49) (49) (49) (49) (49) (49) (49) (49)		4A	60V	60V	MT-A05 MT-B05
08 pins	$\begin{array}{c} (\bigcirc \circ \ \circ $			2A	30V	30V	MT-A08



# M12 Plastic T-Splitter, Female-Male-Female

- Connector series: M12
- Gender: Female&Male
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: MTP-\*XX
  - \* refers to coding typeXX refers to pins number





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#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

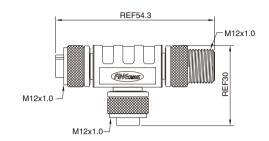
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated Voltage				Part No.
Contacts	А	В	D	current	A/C	D/C	Part NO.	
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		4A	250V	250V	MTP-A03 MTP-B03	
04 pins	(40 03) (10 02) Male Female	(49 03) (19 02) Male Female	Male Female	4A	250V	250V	MTP-A04 MTP-B04 MTP-D04	
05 pins	(49 03) (19 02) Male Female	$ \begin{array}{c} \hline \begin{pmatrix} 4 \circledast & \circledast \\ \$ & \$ \\ 1 \circledast & \circledast \\ \end{pmatrix} \\ \hline \\ Male \\ \hline \\ Female \\ \end{array} $		4A	60V	60V	MTP-A05 MTP-B05	
08 pins	$\begin{array}{c} \hline (  \circ $			2A	30V	30V	MTP-A08	



# M12 T-Splitter, Female-Male-Female, Shielded

- Connector series: M12
- Gender: Female&Male
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: MTS-\*XX
  - \* refers to coding typeXX refers to pins number





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### General information

IEC 61076-2-101
-25°C~ + 90°C
TPU; PA
Brass with gold plated
Brass with nickel plated
TPU
Epoxy resin/FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Available
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contacts		Available Coding		Rated	Volt	age	Part No.
Contacts	А	В	D	current	A/C	D/C	Fait NO.
03 pins	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(4) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		4A	250V	250V	MTS-A03 MTS-B03
04 pins	Male Female	(49 03) (19 02) Male Female	(4) (1) Male Female	4A	250V	250V	MTS-A04 MTS-B04 MTS-D04
05 pins	(40 03) (10 02) Male Female	(49) (49) (49) (49) (49) (49) (49) (49)		4A	60V	60V	MTS-A05 MTS-B05
08 pins	$\begin{array}{c} (\bigcirc \circ \ \circ $			2A	30V	30V	MTS-A08



# M12 T-Splitter, Male with Molded Cable

- Connector series: M12
- Gender: Male&Cable
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: MTC-M\*HD\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

IEC 61076-2-101
-20°C ~ +80°C
TPU
Brass with gold plated
Zinc alloy with nickel plated
TPU
FKM

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M12x1.0



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts	Available Coding		Available Coding		Rated Volt		age Wire gauge / s		Cable	Part No.
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins		(40 03) 10		4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MAHD03- <u>XXX</u> B34 MTC-MBHD03- <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MAHD04- <u>XXX</u> B34 MTC-MBHD04- <u>XXX</u> B34 MTC-MDHD04- <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-MAHD05- <u>XXX</u> B34 MTC-MBHD05- <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-MAHD08- <u>XXX</u> B25

Note:  $\underline{X}$  refers to cable specification

### Remarks



# M12 Plastic T-Splitter, Male with Molded Cable

- Connector series: M12
- Gender: Male&Cable
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: MTC-M\*P\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

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M12x1.0



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Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +80°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contonto	Available Coding		Rated	Volt	Voltage		Wire gauge / size		Part No.	
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MAP03- <u>XXX</u> B34 MTC-MBP03- <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MAP04- <u>XXX</u> B34 MTC-MBP04- <u>XXX</u> B34 MTC-MDP04- <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-MAP05- <u>XXX</u> B34 MTC-MBP05- <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-MAP08- <u>XXX</u> B25

Note:  $\underline{X}$  refers to cable specification

### Remarks



# M12 T-Splitter, Female with Molded Cable

- Connector series: M12
- Gender: Female&Cable
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: MTC-F\*HD\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +80°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

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M12x1.0		



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

Contacts	Ava	ailable Cod	ling	Rated	Volt	tage	Wire gau	ıge / size	Cable	Part No.
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Tart NO.
03 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-FAHD03- <u>XXX</u> B34 MTC-FBHD03- <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-FAHD04- <u>XXX</u> B34 MTC-FBHD04- <u>XXX</u> B34 MTC-FDHD04- <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-FAHD05- <u>XXX</u> B34 MTC-FBHD05- <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-FAHD08- <u>XXX</u> B25

Note:  $\underline{X}$  refers to cable specification

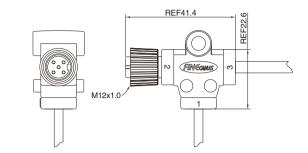
### Remarks



# M12 Plastic T-Splitter, Female with Molded Cable

- Connector series: M12
- Gender: Female&Cable
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: MTC-F\*P\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information





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Standard:	IEC 61076-2-101
Ambient temperature:	-20°C ~ +80°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

≥100MΩ
≤5mΩ
Unavailable
IP68 in locked condition
>500 cycles

### Electrical data & Mechanical data

Contacts	Ava	ailable Cod	ling	Rated	Volt	tage	Wire gau	ıge / size	Cable	Part No.
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
03 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-FAP03 <u>-XXX</u> B34 MTC-FBP03- <u>XXX</u> B34
04 pins				4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-FAP04- <u>XXX</u> B34 MTC-FBP04- <u>XXX</u> B34 MTC-FDP04- <u>XXX</u> B34
05 pins				4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-FAP05- <u>XXX</u> B34 MTC-FBP05- <u>XXX</u> B34
08 pins				2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-FAP08- <u>XXX</u> B25

Note:  $\underline{X}$  refers to cable specification

### Remarks



# M12 T-Splitter, Male-Female, Molded Cable

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: MTC-MF\*HD\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

REF 56.5	



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Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

### Electrical data & Mechanical data

Contacts		Available Coding	g	Rated	Volt	age	Wire gau	ige / size	Cable	Part No.
Contacts	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Part NO.
03 pins	(10) Male (10) Male (10) Female	(10 04) 10 Female		4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MFAHD03- <u>XXX</u> B34 MTC-MFBHD03- <u>XXX</u> B34
04 pins	(10 01) (10 02) (10 02) (10 01) (10 01) Female	(10 02) 10 02) (20 01) Female	$ \begin{pmatrix}                                    $	4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MFAHD04- <u>XXX</u> B34 MTC-MFBHD04- <u>XXX</u> B34 MTC-MFDHD04- <u>XXX</u> B34
05 pins	(10 04) (10 02) (10 02) (10 04) (20 01) Female	$\begin{pmatrix} 4 & \phi \\ \phi & \phi \\ 1 & \phi \\ 1 & \phi \\ 0 & \phi \\ 0 & \phi \\ 2 & \phi \\ 0 $		4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-MFAHD05- <u>XXX</u> B34 MTC-MFBHD05- <u>XXX</u> B34
08 pins	(10 2 0 0) (10 2 0)			2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-MFAHD08- <u>XXX</u> B25

#### Remarks

• Please refer to Page 578 for the Conversion between American Wire Gauge AWG and Wire Cross-section mm<sup>2</sup>.

Note: X refers to cable specification



## M12 Plastic T-Splitter, Male-Female, Molded Cable

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: MTC-MF\*P\*\*-XXXXXX
  - \* refers to coding type
  - \*\* refers to pins number
  - X refers to cable specification

#### General information

REF 56.5	
M12x1.0 M12x1.0	



## c 🕄 us ( E RoHS 🛞

Note: X refers to cable specification

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM
-	

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

## Electrical data & Mechanical data

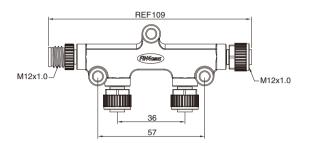
Contacts	Available Coding			Rated	Voltage		Wire gauge / size		Cable	Part No.
	А	В	D	current	A/C	D/C	AWG	mm²	jacket	Fart NO.
03 pins	(10 04) 10 Female	(10) Male (10) Male (10) Female		4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MFAP03- <u>XXX</u> B34 MTC-MFBP03- <u>XXX</u> B34
04 pins	(10 02) 10 02) (30 04) 20 01) Female	(10 01) 10 02) (20 01) Female	Male (10) (2)) (2))	4A	250V	250V	22AWG	0.34	PUR/PVC	MTC-MFAP04- <u>XXX</u> B34 MTC-MFBP04- <u>XXX</u> B34 MTC-MFDP04- <u>XXX</u> B34
05 pins	$\begin{pmatrix} 4 & 0 & 0 \\ 0 & 0 & 2 \\ 10 & 0 & 2 \\ 0 & 0 & 0 \\ 20 & 0 & 0 \\ 20 & 0 & 1 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 &$	(10 01) (10 02) (10 02) (10 02) (10 01) (10 01) Female		4A	60V	60V	22AWG	0.34	PUR/PVC	MTC-MFAP05- <u>XXX</u> B34 MTC-MFBP05- <u>XXX</u> B34
08 pins	( ( ( ( ( ( ( ( ( ( ( ( ( (			2A	30V	30V	24AWG	0.25	PUR/PVC	MTC-MFAP08- <u>XXX</u> B25

#### Remarks



# M12 Multi-Way 4T-Splitter, Male-3\*Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: M4T-\*XX
  - \* refers to coding type XX refers to pins number





## c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

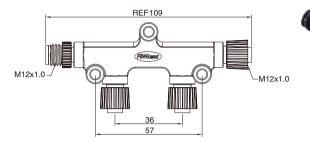
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contosta		Available Coding	g	Rated	Volt	Dout No	
Contacts	А	В	D	current	A/C	D/C	Part No.
03 pins	(10) Male (10) Male (10) Female	(10) Male (10) Male (10) Female		4A	250V	250V	M4T-A03 M4T-B03
04 pins	(10 01) (10 02) (10 02) (10 01) (10 01) Female	(10 02) (10 02) (20 01) Female	Male (10) (2)) (2))	4A	250V	250V	M4T-A04 M4T-B04 M4T-D04
05 pins	Male (10 02) (10 02	$ \begin{pmatrix} 4 & 0 \\ 1 & 0 \\ 1 & 0 \\ 0 & 0 \\ 0 & 0 \\ 2 & 0 \\ 0$		4A	60V	60V	M4T-A05 M4T-B05
08 pins	(10 0 0) (10 0) (10)			24	30V	30V	M4T-A08



# M12 Plastic Multi-Way 4T-Splitter, Male-3\*Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: M4TP-\*XX
  - \* refers to coding type XX refers to pins number





## c 🕄 us ( E RoHS 🕮

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

Contosta		Available Coding	g	Rated	Volt	De st Nie	
Contacts	А	В	D	current	A/C	D/C	Part No.
03 pins	(10 04) 10 04) 10 Female	(10 04) (10 04) (10 04) Female		4A	250V	250V	M4TP-A03 M4TP-B03
04 pins	(10 02) (10 02) (10 02) (10 02) (10 02) (10 02) Female	(10 02) 10 02) (30 04) Female	$ \begin{array}{c}                                     $	4A	250V	250V	M4TP-A04 M4TP-B04 M4TP-D04
05 pins	(40 05) 10 02) 10 020 10 00	(40 03) 10 02) (30 04) 20 01) Female		4A	60V	60V	M4TP-A05 M4TP-B05
08 pins	(0,0,0) (0,0,0,0) (0,0,0,0) (0,0,0,0) (0,0,0,0) (0,0,0,0) Female			2A	30V	30V	M4TP-A08



# M12 Multi-Way 6T-Splitter, Male-5\*Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Fix screw
- Mounting type: T type
- Part No.: M6T-\*XX
  - \* refers to coding type XX refers to pins number

M12x1.0



# c 🕄 us ( E RoHS 🏨

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	Zinc alloy with nickel plated
Connector overmold:	TPU
Seal/O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

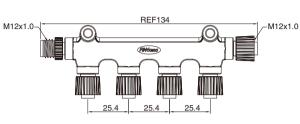
# Electrical data & Mechanical data

Contacts		Available Coding	g	Rated	Volt	Dant Ma	
Contacts	А	В	D	current	A/C	D/C	Part No.
03 pins	(10) Male (10) Male (10) Female	(10) Male (10) Male (10) Female		4A	250V	250V	M6T-A03 M6T-B03
04 pins	(10 01) (10 02) (10 02) (10 01) (10 01) Female	(10 02) (10 02) (20 01) Female	$ \begin{pmatrix} 4 & \bullet \\ 10 & \bullet \\ 20 & 0^4 \end{pmatrix} $ Male $ \begin{pmatrix} 5^3 \circ \circ^4 \\ 20 & 01 \end{pmatrix} $ Female	4A	250V	250V	M6T-A04 M6T-B04 M6T-D04
05 pins	Male (10 02) (10 02	(40 05) 10 02) (20 04) 20 05) Female		4A	60V	60V	M6T-A05 M6T-B05
08 pins	(10 0 0) (10 0) (1			2A	30V	30V	M6T-A08



# M12 Plastic Multi-Way 6T-Splitter, Male-5\*Female

- Connector series: M12
- Gender: Male&Female
- Coding: A,B,D
- Locking type: Plastic fix screw
- Mounting type: T type
- Part No.: M6TP-\*XX
  - \* refers to coding typeXX refers to pins number





# c 🕄 us ( E RoHS 🛞

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-20°C~ + 80°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector nut/screw:	PA+GF
Connector overmold:	TPU
Seal/O-ring:	FKM

Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

# Electrical data & Mechanical data

Contosta		Available Codin	g	Rated	Volt	Dout No.	
Contacts	А	В	D	current	A/C	D/C	Part No.
03 pins	(40 03) 10 (30 04) Female	(10) Male (10) Male (10) Female		4A	250V	250V	M6TP-A03 M6TP-B03
04 pins	(10 02) (10 02) (10 02) (10 04) (10 04) Female	(10 04) (10 02) (20 04) Female	(10) Male (10) Male (20) Other Female	4A	250V	250V	M6TP-A04 M6TP-B04 M6TP-D04
05 pins	Male (10 02) (10 02	Male		4A	60V	60V	M6TP-A05 M6TP-B05
08 pins	(10 0 0) (10 0) (10)			2A	30V	30V	M6TP-A08



# **M12 Male Terminator**

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12M\*HD\*\*ST-T
  - \* refers to coding type
  - \*\* refers to pins number

# M12x1.0 (Connection Diagram: Customized )

Seal/O-ring:

Shielding:

IP rating:

Insulation resistance:

Contact resistance :

Mating endurance:

REF 42.0



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FKM

≥100MΩ

Unavailable

>500 cycles

IP68 in locked condition

≤5mΩ

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector screw:	Zinc alloy with nickel plated
Connector overmold:	TPU

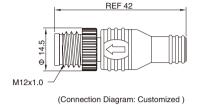
# Electrical data & Mechanical data

Contacts		Available	e Coding		Rated	Volt	age	Part No.
Contacts	A	В	С	D	current	A/C	D/C	Tart NO.
03 pins			(2+PE)		4A	250V	250V	MA12MAHD03ST-T MA12MBHD03ST-T MA12MCHD03ST-T
04 pins	(40 03) 10 02)	(40 03) 10 02	(3+PE)		4A	250V	250V	MA12MAHD04ST-T MA12MBHD04ST-T MA12MCHD04ST-T MA12MDHD04ST-T
05 pins	(4) (3) (5) 10) (2) (1) (2)		(4+PE)		4A 2A(C-code)	60V	60V	MA12MAHD05ST-T MA12MBHD05ST-T MA12MCHD05ST-T
06 pins			(5+PE)		2A	30V	30V	MA12MCHD06ST-T
08 pins					2A	30V	30V	MA12MAHD08ST-T
12 pins					1.5A	30V	30V	MA12MAHD12ST-T
17 pins					1.5A	30V	30V	MA12MAHD17ST-T



# **M12 Plastic Male Terminator**

- Connector series: M12
- Gender: Male
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MA12M\*P\*\*ST-T
- \* refers to coding type
- \*\* refers to pins number



Seal/O-ring:

Shielding:

IP rating:

Insulation resistance:

Contact resistance :

Mating endurance:



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FKM

≥100MΩ

Unavailable

>500 cycles

IP68 in locked condition

≤5mΩ

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU
Connector contacts:	Brass with gold plated
Connector screw:	PA+GF
Connector overmold:	TPU

Electrical	data	&	Mechanical	data

		Available Coding Rated Voltage							
Contacts	A			D	Rated current	A/C	D/C	Part No.	
03 pins			(2+PE)		4A	250V	250V	MA12MAP03ST-T MA12MBP03ST-T MA12MCP03ST-T	
04 pins			(3+PE)		4A	250V	250V	MA12MAP04ST-T MA12MBP04ST-T MA12MCP04ST-T MA12MDP04ST-T	
05 pins		(4) (3) (1) (1	(4+PE)		4A 2A(C-code)	60V	60V	MA12MAP05ST-T MA12MBP05ST-T MA12MCP05ST-T	
06 pins			PE (4⊕ ⊕ 02 5⊕ <sup>6</sup> ⊕1) (5+PE)		2A	30V	30V	MA12MCP06ST-T	
08 pins					2A	30V	30V	MA12MAP08ST-T	
12 pins					1.5A	30V	30V	MA12MAP12ST-T	

REF 41.0

(Connection Diagram: Customized )

Φ 14.5

M12x1.0



# **M12 Female Terminator**

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Fix screw
- Mounting type: Straight
- Part No.: MA12F\*HD\*\*ST-T
  - \* refers to coding type
  - \*\* refers to pins number

### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25℃ ~ +90℃
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector screw:	Zinc alloy with nickel plated
Connector overmold:	TPU

# Seal/O-ring:FKMInsulation resistance: $\geq 100M\Omega$ Contact resistance : $\leq 5m\Omega$ Shielding:UnavailableIP rating:IP68 in locked conditionMating endurance:>500 cycles

# Electrical data & Mechanical data

Country ato		Available	e Coding		Rated	Volt	tage	Davit Ma
Contacts	А	В	С	D	current	A/C	D/C	Part No.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	MA12FAHD03ST-T MA12FBHD03ST-T MA12FCHD03ST-T
04 pins			(3+PE)		4A	250V	250V	MA12FAHD04ST-T MA12FBHD04ST-T MA12FCHD04ST-T MA12FDHD04ST-T
05 pins			(4+PE)		4A 2A(C-code)	60V	60V	MA12FAHD05ST-T MA12FBHD05ST-T MA12FCHD05ST-T
06 pins			(5+PE)		2A	30V	30V	MA12FCHD06ST-T
08 pins					2A	30V	30V	MA12FAHD08ST-T
12 pins	$( \begin{array}{c} 5 \\ 5 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$				1.5A	30V	30V	MA12FAHD12ST-T
17 pins					1.5A	30V	30V	MA12FAHD17ST-T



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# M12 Plastic Female Terminator

- Connector series: M12
- Gender: Female
- Coding: A,B,C,D
- Locking type: Plastic fix screw
- Mounting type: Straight
- Part No.: MA12F\*P\*\*ST-T
  - \* refers to coding type
  - \*\* refers to pins number

# M12x1.0 (Connection Diagram: Customized )



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### General information

Standard:	IEC 61076-2-101
Ambient temperature:	-25°C ~ +90°C
Connector insert:	TPU; PA
Connector contacts:	Brass with gold plated
Connector screw:	PA+GF
Connector overmold:	TPU

Seal/O-ring:	FKM
Insulation resistance:	≥100MΩ
Contact resistance :	≤5mΩ
Shielding:	Unavailable
IP rating:	IP68 in locked condition
Mating endurance:	>500 cycles

# Electrical data & Mechanical data

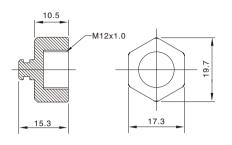
Contacts		Available	e Coding		Rated	Volt	age	Davit Nia
Contacts	А	В	С	D	current	A/C	D/C	Part No.
03 pins			0PE 30 02 (2+PE)		4A	250V	250V	MA12FAP03ST-T MA12FBP03ST-T MA12FCP03ST-T
04 pins			(3+PE)		4A	250V	250V	MA12FAP04ST-T MA12FBP04ST-T MA12FCP04ST-T MA12FDP04ST-T
05 pins			(4+PE)		4A 2A(C-code)	60V	60V	MA12FAP05ST-T MA12FBP05ST-T MA12FCP05ST-T
06 pins			(5+PE)		2A	30V	30V	MA12FCP06ST-T
08 pins					2A	30V	30V	MA12FAP08ST-T
12 pins	( ( ( ( ( ( ( ( ( ( ( ( ( (				1.5A	30V	30V	MA12FAP12ST-T

M12 cables & connectors



# M12 Protection Cap for Male Connector

- Cover series: M12
- Gender: for Male
- Locking type: Fix screw
- Part No.: PCNM12x1.0-0



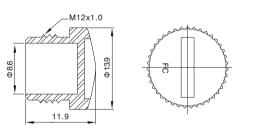


### General information

Material:	PA+GF
O-ring:	FKM
Color:	Black
Degree of protection:	IP68 in locked condition

# M12 Protection Cap for Female Connector

- Cover series: M12
- Gender: for Female
- Locking type: Fix screw
- Part No.: PCSM12x1.0-1



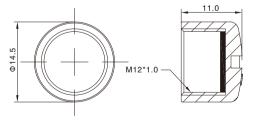


### General information

Material:	PA+GF
Color:	Black
Degree of protection:	IP68 in locked condition

# M12 Protection Cap for Male Connector

- Cover series: M12
- Gender: for Male
- Locking type: Fix screw
- Part No.: PCNM12x1.0-2





### General information

Material:	PA+GF
O-ring:	FKM
Color:	Black
Degree of protection:	IP68 in locked condition



# M12 Protection Cap for Male Molded Cable Connector

- Cover series: M12
- Gender: for Male
- Locking type: Fix screw
- Part No.: PCNM12x1.0-3



### General information

Color:	Black	Loop:	TPU	
nut/screw:	PA+GF	IP rating:	IP68 in locked condition	
Gasket:	FKM			

# M12 Protection Cap for Female Molded Cable Connector

- Cover series: M12
- Gender: for Female
- Locking type: Fix screw
- Part No.: PCSM12x1.0-2



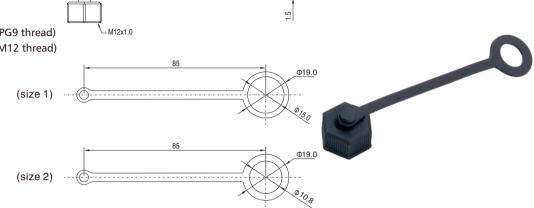
## General information

Color:	Black	Loop:	TPU
nut/screw:	PA+GF	IP rating:	IP68 in locked condition



# M12 Protection Cap for Male Panel-mount Connector

- Cover series: M12
- Gender: for Male
- Locking type: Fix screw
- Part No.: PCNM12x1.0-4(for PG9 thread) PCNM12x1.0-1(for M12 thread)

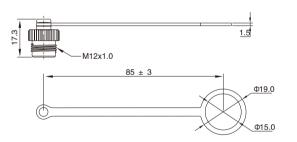


### General information

Material:	PA+GF
O-ring:	FKM
Color:	Black
Degree of protection:	IP68 in locked condition

# M12 Protection Cap for Female Panel-mount Connector

- Cover series: M12
- Gender: for Male
- Locking type: Fix screw
- Part No.: PCSM12x1.0-3



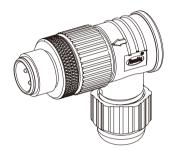


### General information

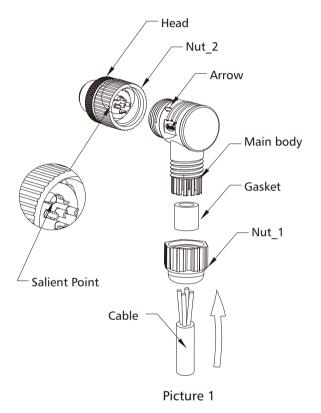
Color:	Black	Loop:	TPU
nut/screw:	PA+GF	IP rating:	IP68 in locked condition

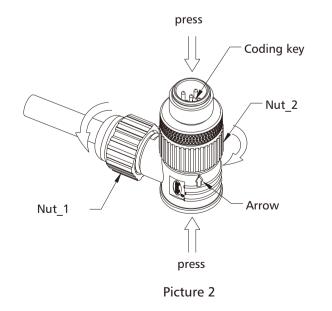


# M12 Male Wirable Assembly Instruction



- 1) Put the cable through the nut, gasket and main body one by one;
- 2) And then solder the wires to the right pin of the head;
- Make the salient point align with the arrow of main body, meanwhile pull the cable back untill the nut\_2 contacted with main body;

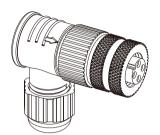




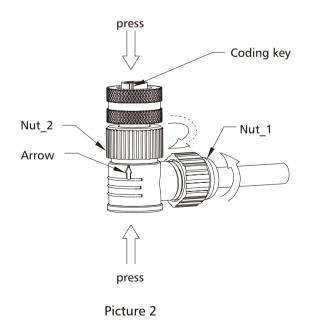
- Press the connector lightly, like the picture 2. And the coding key will be aligned with the arrow, if not, just repeat step 3;
- 5) Pull back the cable lightly again after locking the nut\_2 as tight as possible;
- 6) Push the gasket to the right position and lock the nut\_1.

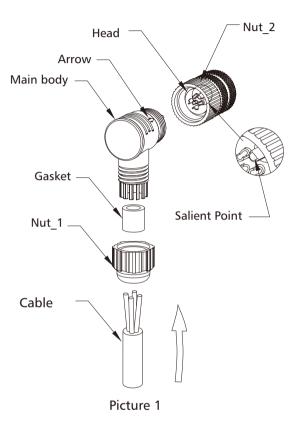


# M12 Female Wirable Assembly Instruction



- 1) Put the cable through the nut, gasket and main body one by one;
- 2) And then solder the wires to the right pin of the head;
- Make the salient point align with the arrow of main body, meanwhile pull the cable back untill the nut\_2 contacted with main body;

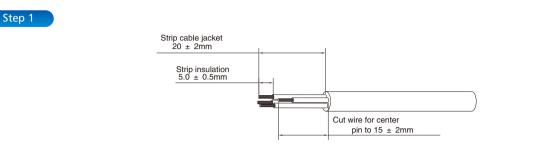




- Press the connector lightly, like the picture 2. And the coding key will be aligned with the arrow, if not, just repeat step 3;
- 5) Pull back the cable lightly again after locking the nut\_2 as tight as possible;
- 6) Push the gasket to the right position and lock the nut\_1.



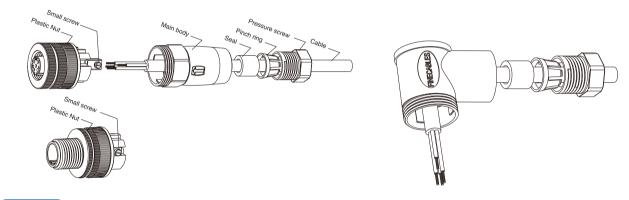
# M12 Field Wirable Assembly with Screw Joint Instruction



### Step 2

Assemble all components on cable as following.

Right angled sketch



### Step 3

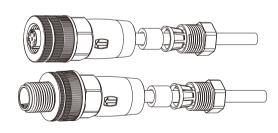
Connect all wires to insert according to wirelist, then tighten all small screws. The torque for small screws is 0.2Nm.

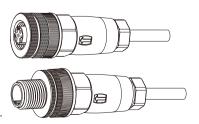
### Step 4

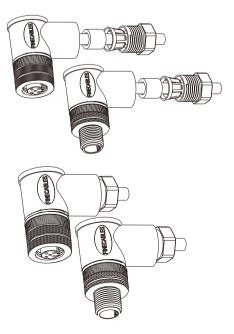
Assemble plastic nut to main body. Recommended torque:1.0Nm. (Note: The key inside the main body must go straight to slot of insert.)

### Step 5

Push the cable seal, pinch ring into the main body, then tighten the pressure screw into the body with recommended torque: 1.0Nm.

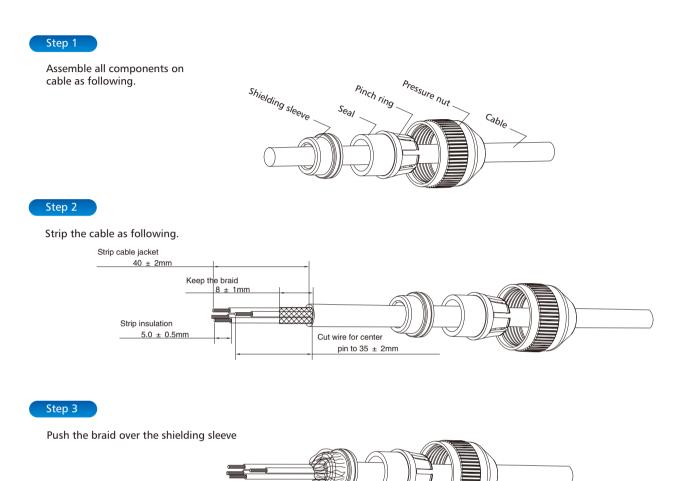






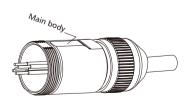


# M12 Field Wirable Assembly with Screw Joint Instruction, Shield



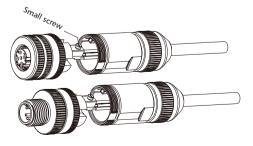


Insert the cable in the main body and assemble the pressure nut tightly on the main body. Recommended torque:1.0Nm.



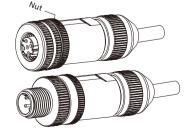


Connect all wires to insert according to wirelist, then tighten all small screws. The torque for small screws is 0.2Nm.





Insert the Female/male housing in the main body and assemble the nut to main body. Recommended torque:1.0Nm. (Note: The key inside the main body must go straight to slot of insert.)

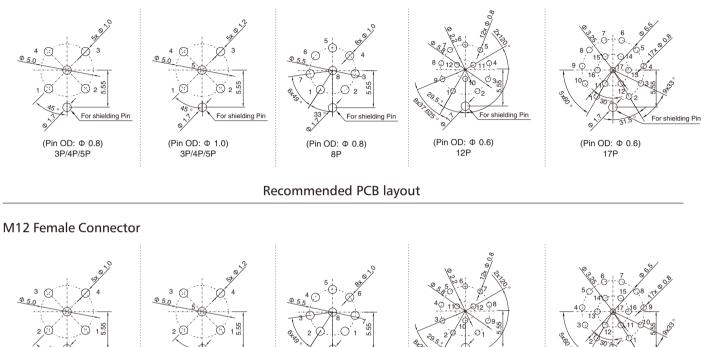


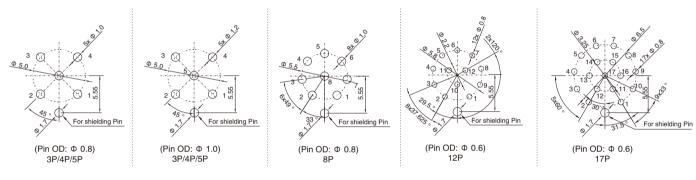


# M12 PCB Layout & Panel cut-out

### ■ PCB Layout

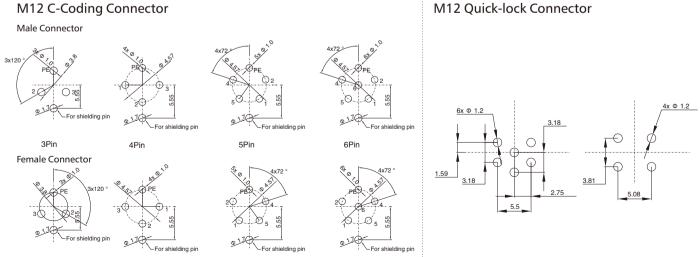
### M12 Male Connector





## Recommended PCB layout

# M12 Quick-lock Connector

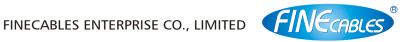


6Pin

3Pin

4Pin

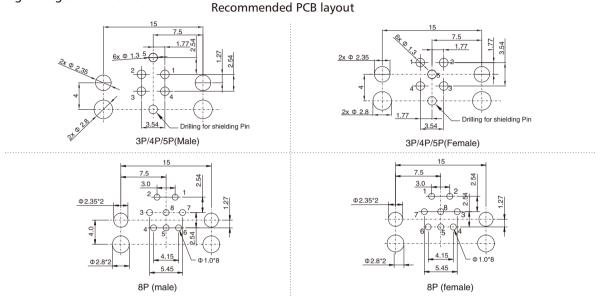
5Pin



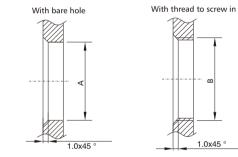
# M12 PCB Layout & Panel cut-out

# PCB Layout

M12 Right Angled Connector



### Panel cut-out

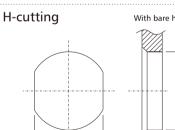


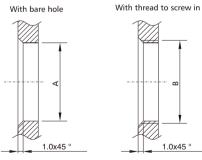
ľ	<u> </u>	_	1	1			
 			ß				
		_					
	_	1.	0x4	15	0		
_							

M16 16 <sup>+0.1</sup> <sub>-0</sub> M16x1.5		A	В	
	M12	12 <sup>+0.1</sup> -0	M12x1.0	
10.4	M16	16 <sup>+0.1</sup>	M16x1.5	
PG9 15.3 <sup>+0.1</sup> PG9	PG9	15.3 <sup>+0.1</sup> -0	PG9	

	А	В	С
M16	16 <sup>+0.1</sup> -0	M16x1.5	13.5 <sup>+0.1</sup>
PG9	15.3 <sup>+0.1</sup> -0	PG9	13.5 <sup>+0.1</sup> -0

	А	В	С
M16	16 <sup>+0.1</sup>	M16x1.5	14.3 <sup>+0.1</sup>
PG9	15.3 <sup>+0.1</sup>	PG9	14.3 <sup>+0.1</sup>
5/8"-27UNS	15.7 <sup>+0.1</sup>	5/8"-27UNS	14.6 <sup>+0.1</sup>
M12	12 <sup>+0.1</sup>	M12x1.0	11.3 <sub>-0</sub> <sup>+0.1</sup>





1.0x45 °



