

M12 CIRCULAR CONNECTORS

● GENERAL FEATURES OF MOULDED CONNECTORS:

Conductor cross section :
0,08(28AWG)...0,75mm²(18AWG).

Contact material and treatment :
Brass + Gold flash.

Protection class :
IP67/IP69K.

Fixing system :
M12 coupling nut.

Housing material :
Polyurethane.

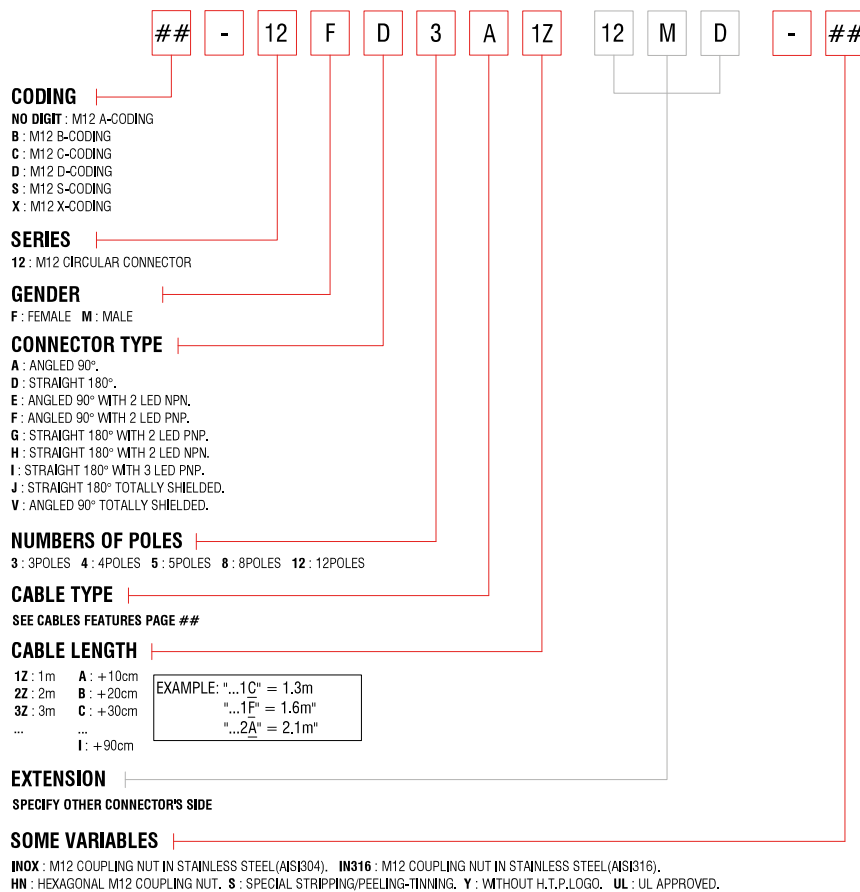
Operating temperature :
-25°C +90°C.

Max. screw torque IEC60947-1
M12 coupling nut torque 0,4N*m

Internal core material :
PA66.

Type of terminations :
Crimped wires,
Solder wires (8 poles - 12 poles).

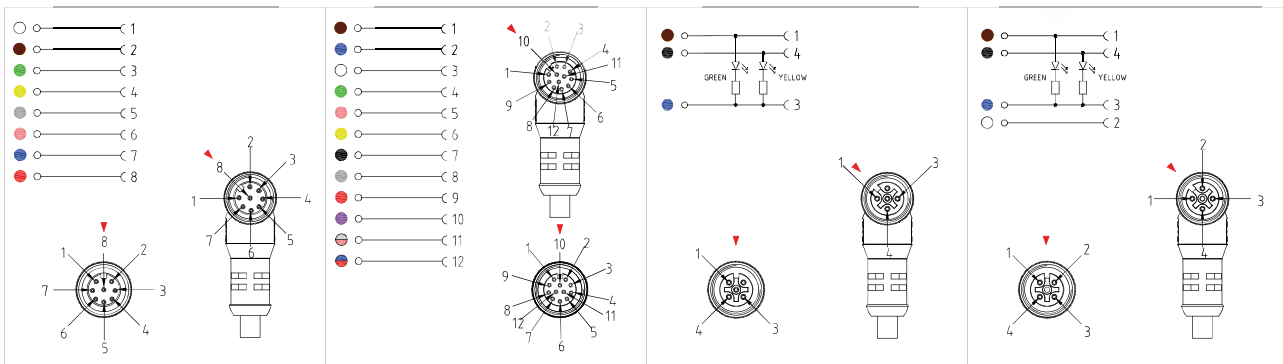
Coupling nut material :
Brass + Nickel plated.
Stainless steel AISI304 (upon request).
Stainless steel AISI316 (upon request).



ANTI-VIBRATION SYSTEM:



M12 CIRCULAR CONNECTORS







Product description							
Circular connector with moulded cable		Circular connector with moulded cable		Circular connector with moulded cable		Circular connector with moulded cable	
IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Circular connector M12 series with moulded cable		Circular connector M12 series with moulded cable		Circular connector M12 series n,2 Led PNP circuit (PIN1: GN;PIN4:YE)with moulded cable		Circular connector M12 series n,2 Led PNP circuit (PIN1: GN;PIN4:YE)with moulded cable	
12FD8A1Z	12FA8A1Z	12FD12K1Z	12FA12K1Z	12FG3B1Z	12FF3B1Z	12FG4B1Z	12FF4B1Z
Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Moulded cable		Moulded cable		Moulded cable		Moulded cable	
Female		Female		Female		Female	
8poles		12poles		3poles		4poles	
Black		Black		Transparent		Transparent	
Technical data							
Contacts to solder wires		Contacts to solder wires		Contacts to solder PCB		Contacts to solder PCB	
Brass + Gold flash		Brass + Gold flash		Brass + Gold flash		Brass + Gold flash	
Knurl round		Knurl round		Knurl round		Knurl round	
Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated	
0,4 N*m		0,4 N*m		0,4 N*m		0,4 N*m	
30V AC/DC		30V AC/DC		10-30V DC		10-30V DC	
2A		1,5A		3A		3A	
NBR		NBR		NBR		NBR	
PVC/PVC CEI2022		PVC/PVC CEI2022		PVC/PVC CEI2022		PVC/PVC CEI2022	
Black		Black		Black		Black	
8x0,25mm ²		12x0,14mm ²		3x0,34mm ²		4x0,34mm ²	
White;Brown;Green;Yellow;Grey;Pink;Blue;Red		Bn;Bu;Wh;Gn;Pk;Ye;Bk;Gy;Rd;Vt;Pk;Gy;Rd;Bu		Brown; Blue; Black		Brown; White; Blue; Black;	
ø6mm (±0,3)		ø6,5mm (±0,3)		ø4,8mm (±0,3)		ø5,2mm (±0,3)	
1m		1m		1m		1m	
Packaging							
1 pc / bag		1 pc / bag		1 pc / bag		1 pc / bag	
Other accessories options							
See accessories section							
Notes:							
Connectors available with different features: See the general features and codification scheme page See the cables list section							

CABLE LIST

Code	Material	Type of cable	Colour	Section	No.core	Cable g mm ± 0.3	Temperature range °C	Form A - B	Form C
01	PVC/PVC	IEC332-1 H03VVF	Black	0.50mm ²	3	ø5mm	-20°C / +80°C	●	●
A1	PVC/PVC	IEC332-1 H03VVF	Black	0.50mm ²	2	ø5mm	-20°C / +80°C	●	●
B1	PVC/PVC	IEC332-1 H03VVF	Black	0.50mm ²	4	ø6mm	-20°C / +80°C	●	●
02	PVC/PVC	IEC332-1 H05VVF	Black	0.75mm ²	3	ø6,7mm	-20°C / +80°C	●	
A2	PVC/PVC	IEC332-1 H05VVF	Black	0.75mm ²	2	ø6mm	-20°C / +80°C	●	
B2	PVC/PVC	IEC332-1 H05VVF	Black	0.75mm ²	4	ø7mm	-20°C / +80°C	●	
C2	PVC/PVC	IEC332-1 H05VVF	Black	0.75mm ²	5	ø8,3mm	-20°C / +80°C	●	
03	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.75mm ²	3	ø5,5mm	-20°C / +80°C	●	
A3	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.75mm ²	2	ø6mm	-20°C / +80°C	●	
04	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.50mm ²	3	ø5mm	-20°C / +80°C	●	●
A4	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.50mm ²	2	ø5mm	-20°C / +80°C	●	●
B4	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.50mm ²	4	ø6mm	-20°C / +80°C	●	●
05	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.75mm ²	4	ø7mm	-20°C / +80°C	●	
C5	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	0.75mm ²	5	ø8,3mm	-20°C / +80°C	●	
06	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	1mm ²	3	ø6,7mm	-20°C / +80°C	●	
A6*	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	1mm ²	2	ø6,7mm	-20°C / +80°C	●	
B6*	PVC/PVC	CEI2022 II F.R.O.R.	Grey RAL7032	1mm ²	4	ø7,2mm	-20°C / +80°C	●	
07*	PVC/PVC	CEI2022 II F.R.O.R. SHIELDED	Grey RAL7032	1mm ²	3	ø7,2mm	-20°C / +80°C	●	
A7*	PVC/PVC	CEI2022 II F.R.O.R. SHIELDED	Grey RAL7032	1mm ²	2	ø6,7mm	-20°C / +80°C	●	
B7*	PVC/PVC	CEI2022 II F.R.O.R. SHIELDED	Grey RAL7032	1mm ²	4	ø8,3mm	-20°C / +80°C	●	
08*	PUR/PVC		Black	0.50mm ²	3	ø5mm	-40°C / +80°C	●	●
A8*	PUR/PVC		Black	0.50mm ²	2	ø5mm	-40°C / +80°C	●	●
B8*	PUR/PVC		Black	0.50mm ²	4	ø6mm	-40°C / +80°C	●	●
C8*	PUR/PVC		Black	0.50mm ²	5	ø6,5mm	-40°C / +80°C	●	
09*	PUR/PVC		Black	0.75mm ²	3	ø6mm	-40°C / +80°C	●	
A9	PUR/PVC		Black	0.75mm ²	2	ø6mm	-40°C / +80°C	●	
B9*	PUR/PVC		Black	0.75mm ²	4	ø7,2mm	-40°C / +80°C	●	
10*	PUR/PUR	Li-YY11Y	Black	0.50mm ²	3	ø5mm	-40°C / +80°C	●	●
AA*	PUR/PUR	Li-YY11Y	Black	0.50mm ²	2	ø5mm	-40°C / +80°C	●	●
AB*	PUR/PUR	Li-YY11Y	Black	0.50mm ²	4	ø6,7mm	-40°C / +80°C	●	●
11*	PUR/PUR	Li-YY11Y	Black	0.75mm ²	3	ø6,7mm	-40°C / +80°C	●	
BA*	PUR/PUR	Li-YY11Y	Black	0.75mm ²	2	ø6,5mm	-40°C / +80°C	●	
BB*	PUR/PUR	Li-YY11Y	Black	0.75mm ²	4	ø7,2mm	-40°C / +80°C	●	
13*	PVC/PVC	IEC332-1 H03VVF	Black	1mm ²	2	ø6mm	-20°C / +80°C	●	
14*	PVC/PVC	CEI2022 II F.R.O.R.	Black	1mm ²	3	ø6,7mm	-20°C / +80°C	●	
16*	PVC/PVC	UL style 21179	Black	18 AWG	3	ø6,7mm	-20°C / +105°C	●	

* = Cables with minimum quantity required.

CABLE LIST

Code	Material	Type of cable	Colour	Section	No.core	Cable \varnothing mm ± 0.3	Temperature range °C	M8	M12	M9	M8 	M12 
K	PVC/PVC	CEI2022	Black	0,14mm ²	3 *	ø2,6mm	-20°C / +80°C	●	●			
					12	ø6,5mm	-20°C / +80°C		●			
A	PVC/PVC	CEI2022	Black	0,25mm ²	2 *	ø3,5mm	-20°C / +80°C	●	●			
					3	ø 4mm	-20°C / +80°C	●	●			
					4	ø 4,4mm	-20°C / +80°C	●	●			
					5	ø 4,7mm	-20°C / +80°C		●			
					8	ø 6mm	-20°C / +80°C		●			
B	PVC/PVC	CEI2022	Black	0,34mm ²	2 *	ø 4,8mm	-20°C / +80°C	●	●			
					3 *	ø 4,8mm	-20°C / +80°C	●	●			
					4	ø 5,2mm	-20°C / +80°C	●	●			
					5 *	ø 5,5mm	-20°C / +80°C		●			
					8	ø 6,5mm	-20°C / +80°C		●			
					2	ø3,5mm	-20°C / +80°C	●	●			
					3	ø 4mm	-20°C / +80°C	●	●			
					4	ø 4,4mm	-20°C / +80°C	●	●			
N	PVC/PVC	CEI2022	Grey RAL7032	0,25mm ²	5 *	ø 4,7mm	-20°C / +80°C		●			
					8 *	ø 6mm	-20°C / +80°C		●			
					2 *	ø 4,8mm	-20°C / +80°C	●	●			
					3	ø 4,8mm	-20°C / +80°C	●	●			
L	PVC/PVC	CEI2022	Grey RAL7032	0,34mm ²	4	ø 5,2mm	-20°C / +80°C	●	●			
					5	ø 5,5mm	-20°C / +80°C		●			
					8 *	ø 6,5mm	-20°C / +80°C		●			
					3 *	ø 4mm	-40°C / +80°C	●	●			
H	PUR/PUR		Black	0,14mm ²	3 *	ø2,6mm	-40°C / +80°C	●	●			
					12 *	ø6mm	-40°C / +80°C		●			
C	PUR/PUR		Black	0,25mm ²	2 *	ø 3,5mm	-40°C / +80°C	●	●			
					3 *	ø 4mm	-40°C / +80°C	●	●			
					4 *	ø 4,4mm	-40°C / +80°C	●	●			
					5 *	ø 4,7mm	-40°C / +80°C		●			
					8 *	ø 6mm	-40°C / +80°C		●			
C-K6-IS	PUR/TPO	 	Black	0,25mm ²	3	ø4,1mm	-30°C / +80°C	●	●		●	
					4	ø4,7mm	-30°C / +80°C	●	●			
					5	ø5,1mm	-30°C / +80°C		●			
					8	ø6,3mm	-30°C / +80°C		●			●
D	PUR/PUR		Black	0,34mm ²	2 *	ø 4,8mm	-40°C / +80°C	●	●			
					3 *	ø 4,8mm	-40°C / +80°C	●	●			
					4 *	ø 5,2mm	-40°C / +80°C		●			
					5 *	ø 5,5mm	-40°C / +80°C		●			
					8 *	ø 6,5mm	-40°C / +80°C		●			