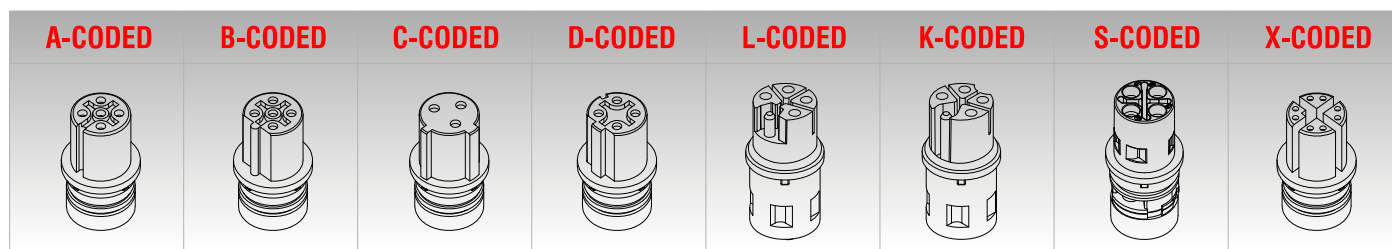


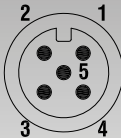
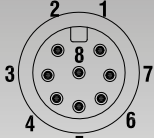
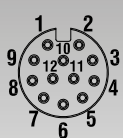
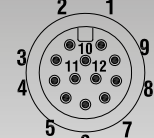


M12 CIRCULAR CONNECTORS

• CODING OF M12 CONNECTORS:



• M12 A-CODED I/O NETWORKS:

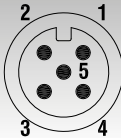
FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
					
3 POLES: 1 : BROWN ● 3 : BLUE ● 4 : BLACK ●		8 POLES: 1 : WHITE ○ 2 : BROWN ● 3 : GREEN ● 4 : YELLOW ● 5 : GREY ● 6 : PINK ● 7 : BLUE ● 8 : RED ●		12 POLES: 1 : BROWN ● 2 : BLUE ● 3 : WHITE ○ 4 : GREEN ● 5 : PINK ● 6 : YELLOW ● 7 : BLACK ● 8 : GREY ● 9 : RED ● 10 : PURPLE ● 11 : PINK/GREY ● 12 : RED/BLUE ●	
4POLES: 1 : BROWN ● 2 : WHITE ○ 3 : BLUE ● 4 : BLACK ●					
5POLES: 1 : BROWN ● 2 : WHITE ○ 3 : BLUE ● 4 : BLACK ● 5 : GREY ●					

NOTE:

All the connector coding can be used in I/O (Input/Output) networks to prevent connection mistakes using different coupling keys or to be used in many applications when the connectors get coupling with a different cables.

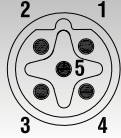
• M12 A-CODED DEVICENET NETWORKS:



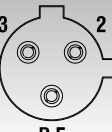
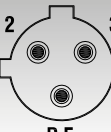
FEMALE	MALE	5 POLES:
		1 : SHIELD ● 2 : RED ● 3 : BLACK ● 4 : WHITE ○ 5 : BLUE ●

• M12 B-CODED PROFIBUS NETWORKS:



FEMALE	MALE	5 POLES:
		2 : GREEN ● 4 : RED ● 5 : SHIELD ● TOTALLY SHIELDED CONNECTOR 360°

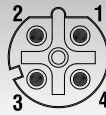
• M12 C-CODED I/O NETWORKS:

FEMALE	MALE	3 POLES (2P+P.E.):
		1 (P.E.) : YELLOW/GREEN ● 2 : BLUE ● 3 : BROWN ●
P.E.	P.E.	

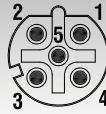
M12 CIRCULAR CONNECTORS

Technical informations

M12 D-CODED PROFINET/ETHERCAT NETWORKS:

FEMALE 	MALE 	5 POLES: 1 : YELLOW 2 : WHITE 3 : ORANGE 4 : BLUE TOTALLY SHIELDED CONNECTOR 360°	
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M12 D-CODED ETHERNET NETWORKS:

FEMALE 	MALE 	5 POLES: 1 : WHITE -ORANGE 2 : ORANGE 3 : WHITE/GREEN 4 : GREEN 5 : SHIELD TOTALLY SHIELDED CONNECTOR 360°	
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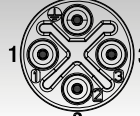
M12 K-CODED POWER CONNECTOR :

FEMALE P.E. 	MALE P.E. 	5 POLES (4P+P.E.): 1 : BLACK 1 2 : BLACK 2 3 : BLACK 3 4 : BLACK 4 5(P.E.) : YELLOW/GREEN	5 POLES TOTALLY SHIELDED (4P+P.E.): 1 : BLACK 1 2 : BLACK 2 3 : BLACK 3 4 : BLACK 4 5(P.E.) : YELLOW/GREEN TOTALLY SHIELDED CONNECTOR 360° + SHIELD CONNECTED TO P.E.
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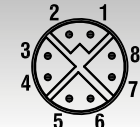
M12 L-CODED POWER CONNECTOR :

FEMALE F.E. 	MALE F.E. 	5 POLES (4P+FE): 1 : BROWN 2 : WHITE 3 : BLUE 4 : BLACK FE : GREY	5 POLES TOTALLY SHIELDED (4P+FE): 1 : BROWN 2 : WHITE 3 : BLUE 4 : BLACK FE : GREY TOTALLY SHIELDED CONNECTOR 360°
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M12 S-CODED POWER CONNECTOR :

FEMALE P.E. 	MALE P.E. 	4 POLES (3P+P.E.): 1 : BLACK 1 2 : BLACK 2 3 : BLACK 3 4(P.E.) : YELLOW/GREEN	4 POLES TOTALLY SHIELDED (3P+P.E.): 1 : BLACK 1 2 : BLACK 2 3 : BLACK 3 4(P.E.) : YELLOW/GREEN TOTALLY SHIELDED CONNECTOR 360°
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M12 X-CODED ETHERNET NETWORKS:

FEMALE 	MALE 	8 POLES: 1 : WHITE -ORANGE 2 : ORANGE 3 : WHITE/GREEN 4 : GREEN 5 : WHITE/BROWN 6 : BROWN 7 : WHITE/BLUE 8 : BLUE TOTALLY SHIELDED CONNECTOR 360°	
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• GENERAL FEATURES OF FIELD ATTACHABLE CONNECTORS:

Cable Gland :

Plastic Housing

PG7 : Ø CABLE 4-6mm.

PG9 : Ø CABLE 6-8mm.

PG11 : Ø CABLE 6-10mm.

PG11 double exit: Ø5.5mm max.

SK : Ø CABLE 4-8.6mm.

Metal Housing : Ø CABLE 4-8mm.

Max. screw torque IEC60947-1 :

Contact screw torque 0.2N*m.

M12 coupling nut torque 0.4N*m.

ATEX coupling nut torque 0.6N*m.

Type of terminations :

Screw.

Solder wires (12 poles).

Internal core material :

PA66 UL94-V2.

PA66 UL94-V0 (ATEX approved).

Coupling nut material :

Brass + Nickel plated.

Stainless steel AISI304 (upon request).

Stainless steel AISI316 (upon request).

Protection class :

IP65/67 (assembled).

Operating temperature :

-40°C +90°C.

-25°C +85°C (metal housing).

-20°C +85°C ATEX approved.

Conductor cross section :

0.14(26AWG)...0.75mm²(18AWG).

Contact material and treatment :

Brass + Gold flash.

Flammability resistance :

UL94-V2 - Standard.

UL94-V0 - ATEX approved.

Fixing system :

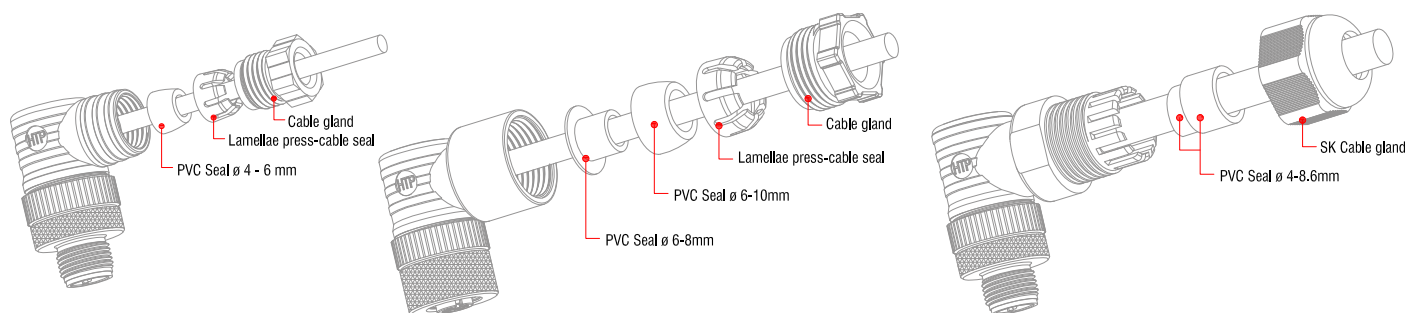
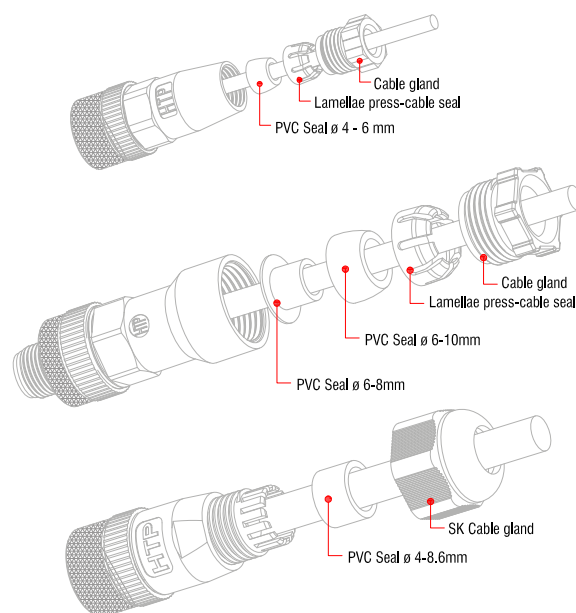
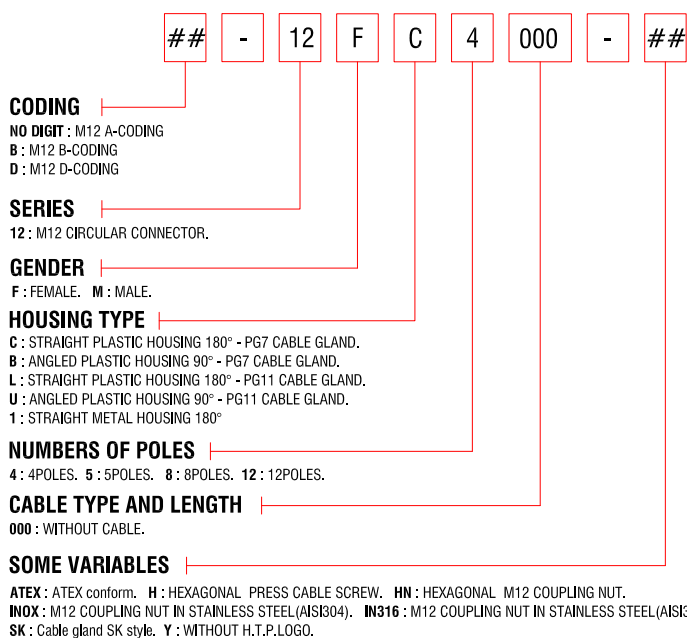
M12 coupling nut.

Housing material :

PA66 UL94-V2.

PA66 UL94-V0 ATEX approved.

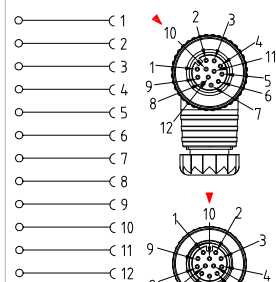
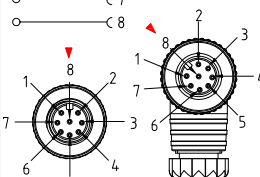
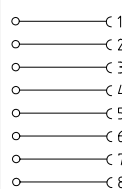
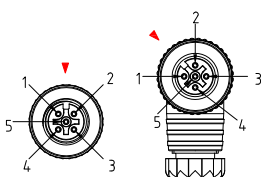
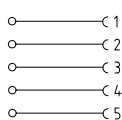
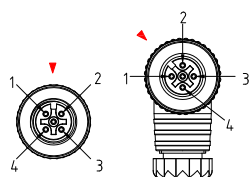
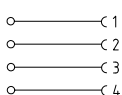
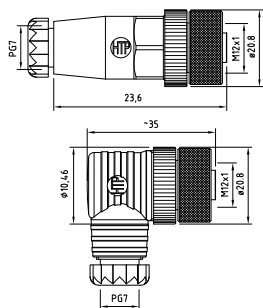
Brass + Nickel plated.



M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12FC4000	12FB4000	12FC5000	12FB5000	12FC8000	12FB8000	12FC12000	12FB12000
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Description	Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	250V AC/DC	60V AC/DC	30V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1.5A
Temperature range	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

Notes:

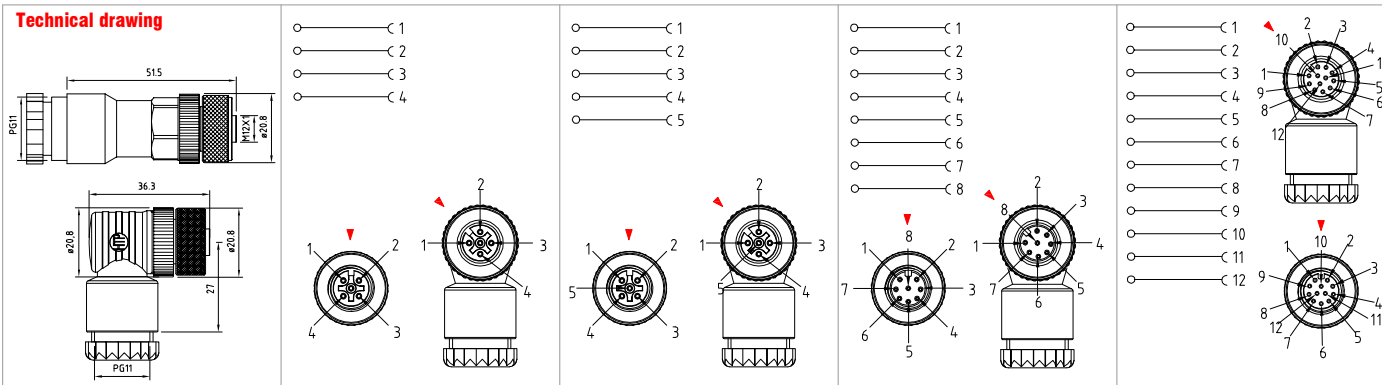
Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12FL4000	12FU4000	12FL5000	12FU5000	12FL8000	12FU8000	12FL12000	12FU12000
Housing type	Straight 180° Angled 90°		Straight 180° Angled 90°		Straight 180° Angled 90°		Straight 180° Angled 90°	
Cable gland	PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit	
Description	Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Housing material	PA66 UL94-V2		PA66 UL94-V2		PA66 UL94-V2		PA66 UL94-V2	
Contacts material	Brass + Gold flash		Brass + Gold flash		Brass + Gold flash		Brass + Gold flash	
Coupling nut type	Knurl round		Knurl round		Knurl round		Knurl round	
M12 coupling nut material	Brass + Nickel plated		Brass + Nickel plated					
M12 coupling nut torque	0.4 N*m		0.4 N*m		0.4 N*m		0.4 N*m	
Rated voltage	250V AC/DC		60V AC/DC		30V AC/DC		30V AC/DC	
Rated current	4A		4A		2A		1.5A	
Temperature range	-40°C + 90°C		-40°C + 90°C		-40°C + 90°C		-40°C + 90°C	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	Ø cable 6-10mm Double exit Ø5mm(max.)		Ø cable 6-10mm Double exit Ø5mm(max.)		Ø cable 6-10mm Double exit Ø5mm(max.)		Ø cable 6-10mm Double exit Ø5mm(max.)	

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

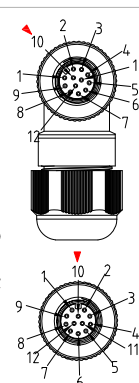
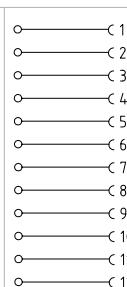
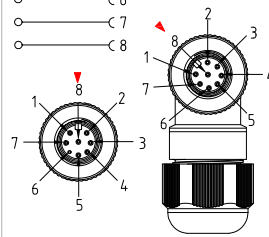
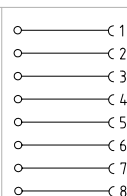
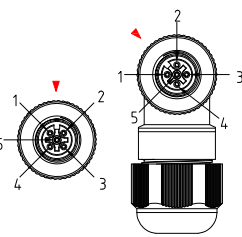
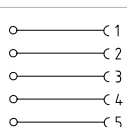
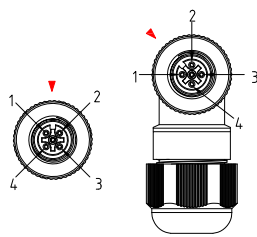
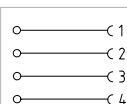
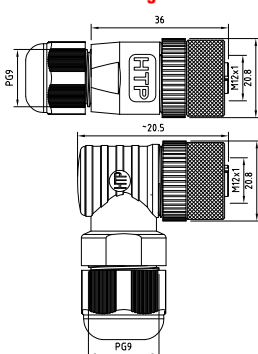
Notes:

Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12FC4000-SK	12FB4000-SK	12FC5000-SK	12FB5000-SK	12FC8000-SK	12FB8000-SK	12FC12000-SK	12FB12000-SK
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG9 SK model		PG9 SK model		PG9 SK model		PG9 SK model	
Description	Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M8 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M8 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	250V AC/DC	60V AC/DC	30V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1.5A
Temperature range	-40°C +90°C	-40°C +90°C	-40°C +90°C	-40°C +90°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 8.6mm	ø 4 - 8.6mm	ø 4 - 8.6mm	ø 4 - 8.6mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

Notes:

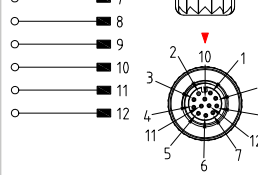
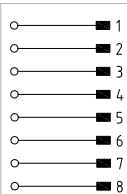
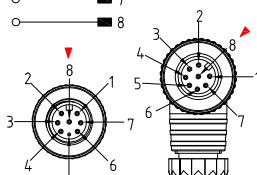
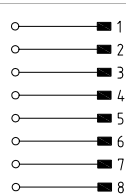
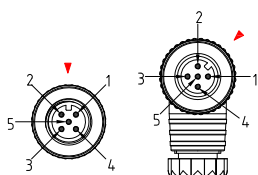
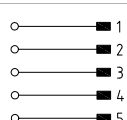
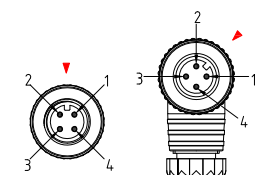
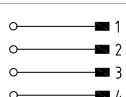
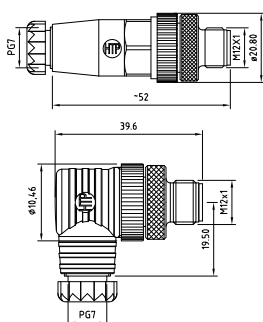
Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12MC4000	12MB4000	12MC5000	12MB5000	12MC8000	12MB8000	12MC12000	12MB12000
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Description	Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable	
Contacts type	Male		Male		Male		Male	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	250V AC/DC	60V AC/DC	30V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1.5A
Temperature range	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

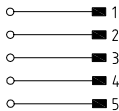
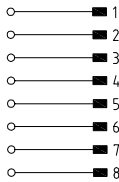
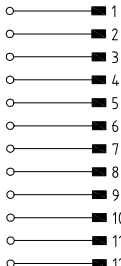
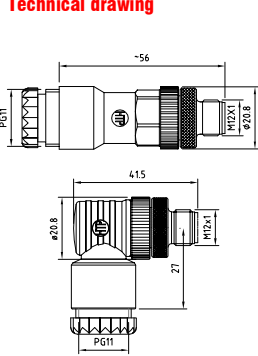
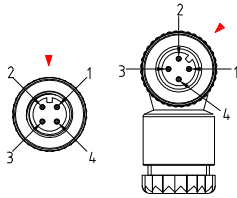
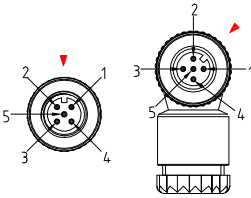
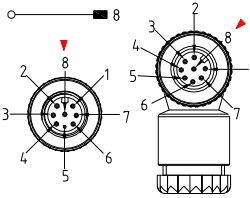
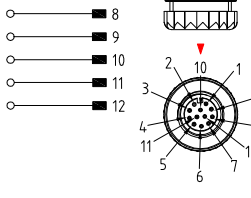
Notes:

Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



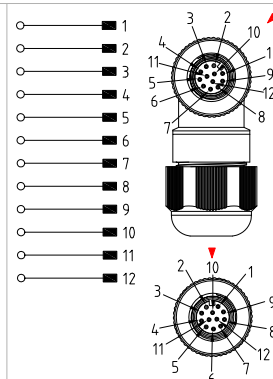
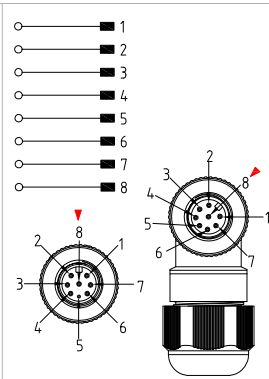
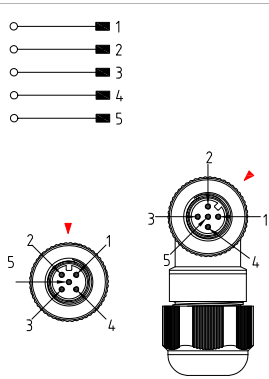
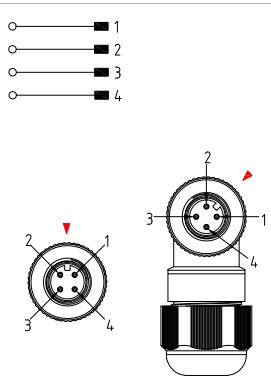
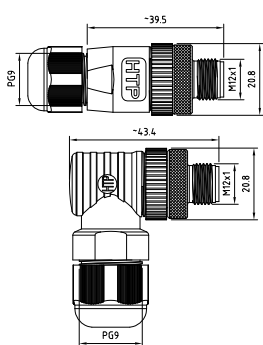
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Product description									
Connector type	Circular connector field attachable			Circular connector field attachable			Circular connector field attachable		
Conforms to	IEC 61076-2-101			IEC 61076-2-101			IEC 61076-2-101		
Construction type	M12 A-Coded			M12 A-Coded			M12 A-Coded		
Part number	12ML4000	12MU4000	12ML5000	12MU5000	12ML8000	12MU8000	12ML12000	12MU12000	
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	
Cable gland	PG9-11 unified /Double cable exit			PG9-11 unified /Double cable exit			PG9-11 unified /Double cable exit		
Description	Circular connector M12 series field attachable			Circular connector M12 series field attachable			Circular connector M12 series field attachable		
Contacts type	Male			Male			Male		
Number of contacts	4poles			5poles			8poles		
Housing colour	Black			Black			Black		
Technical data									
Type of termination	Screw contacts			Screw contacts			Screw contacts		
Contact screw torque	0.2 N*m			0.2 N*m			0.2 N*m		
Housing material	PA66 UL94-V2			PA66 UL94-V2			PA66 UL94-V2		
Contacts material	Brass + Gold flash			Brass + Gold flash			Brass + Gold flash		
Coupling nut type	Knurl round			Knurl round			Knurl round		
M8 coupling nut material	Brass + Nickel plated			Brass + Nickel plated			Brass + Nickel plated		
M8 coupling nut torque	0.4 N*m			0.4 N*m			0.4 N*m		
Rated voltage	250V AC/DC			60V AC/DC			30V AC/DC		
Rated current	4A			4A			2A		
Temperature range	-40°C + 90°C			-40°C + 90°C			-40°C + 90°C		
O-ring material	NBR			NBR			NBR		
Suitable cable	ø cable 6-10mm Double exit ø5mm(max.)			ø cable 6-10mm Double exit ø5mm(max.)			ø cable 6-10mm Double exit ø5mm(max.)		
Packaging									
Qty/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									

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12MC4000-SK	12MB4000-SK	12MC5000-SK	12MB5000-SK	12MC8000-SK	12MB8000-SK	12MC12000-SK	12MB12000-SK
Housing type	Straight 180° Angled 90°		Straight 180° Angled 90°		Straight 180° Angled 90°		Straight 180° Angled 90°	
Cable gland	PG9 SK model		PG9 SK model		PG9 SK model		PG9 SK model	
Description	Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable		Circular connector M12 series field attachable	
Contacts type	Male		Male		Male		Male	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Housing material	PA66 UL94-V2		PA66 UL94-V2		PA66 UL94-V2		PA66 UL94-V2	
Contacts material	Brass + Gold flash		Brass + Gold flash		Brass + Gold flash		Brass + Gold flash	
Coupling nut type	Knurl round		Knurl round		Knurl round		Knurl round	
M12 coupling nut material	Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated	
M12 coupling nut torque	0.4 N*m		0.4 N*m		0.4 N*m		0.4 N*m	
Rated voltage	250V AC/DC		60V AC/DC		30V AC/DC		30V AC/DC	
Rated current	4A		4A		2A		1.5A	
Temperature range	-40°C + 90°C		-40°C + 90°C		-40°C + 90°C		-40°C + 90°C	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 4 - 8.6mm		ø 4 - 8.6mm		ø 4 - 8.6mm		ø 4 - 8.6mm	

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

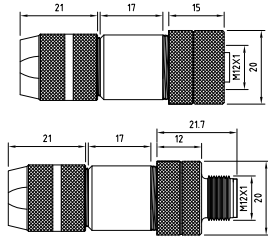
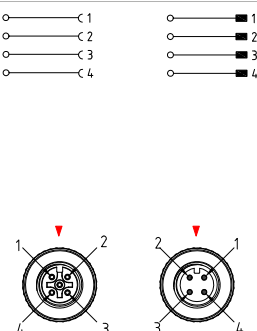
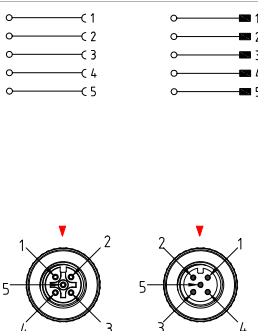
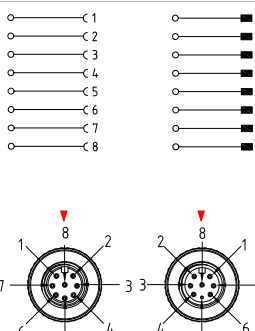
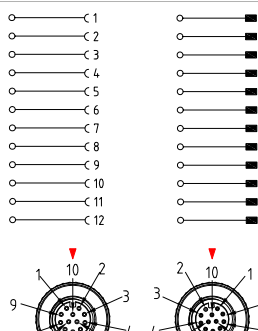
Notes:

Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



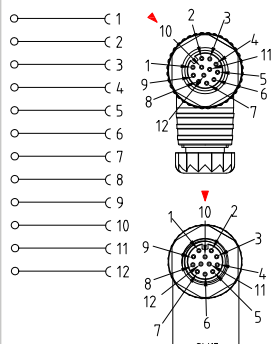
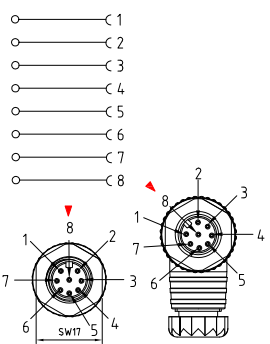
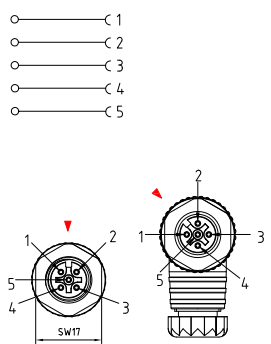
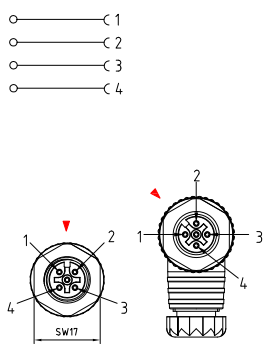
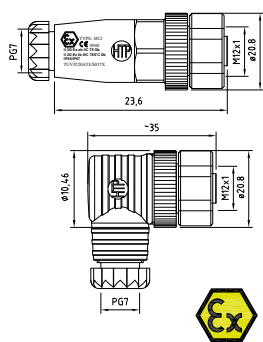
Technical drawing											
Product description											
Connector type		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type		M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number		12F14000 12M14000		12F15000 12M15000		12F18000 12M18000		12F112000 12M112000			
Housing type		Straight 180°		Straight 180°		Straight 180°		Straight 180°		Straight 180°	
Cable gland		PG9 standard		PG9 standard		PG9 standard		PG9 standard		PG9 standard	
Description		Circular connector M12 series field attachable TOTALLY SHIELDED		Circular connector M12 series field attachable TOTALLY SHIELDED		Circular connector M12 series field attachable TOTALLY SHIELDED		Circular connector M12 series field attachable TOTALLY SHIELDED		Circular connector M12 series field attachable TOTALLY SHIELDED	
Contacts type		Female Male		Female Male		Female Male		Female Male		Female Male	
Number of contacts		4poles		5poles		8poles		12poles			
Housing colour		Black		Black		Black		Black			
Technical data											
Type of termination		Screw contacts		Screw contacts		Screw contacts		Solder contacts			
Contact screw torque		0.2 N*m		0.2 N*m		0.2 N*m		-			
Housing material		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated			
Contacts material		Brass + Gold flash		Brass + Gold flash		Brass + Gold flash		Brass + Gold flash			
Coupling nut type		Knurl round		Knurl round		Knurl round		Knurl round			
M8 coupling nut material		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated			
M8 coupling nut torque		0.4 N*m		0.4 N*m		0.4 N*m		0.4 N*m			
Rated voltage		250V AC/DC		60V AC/DC		30V AC/DC		30V AC/DC			
Rated current		4A		4A		2A		1.5A			
Temperature range		-25°C + 85°C		-25°C + 85°C		-25°C + 85°C		-25°C + 85°C			
O-ring material		NBR		NBR		NBR		NBR			
Suitable cable		ø 4 - 8mm		ø 4 - 8mm		ø 4 - 8mm		ø 4 - 8mm			
Packaging											
Qty/Bag		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											

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12FC4000-ATEX	12FB4000-ATEX	12FC5000-ATEX	12FB5000-ATEX	12FC8000-ATEX	12FB8000-ATEX	12FC12000-ATEX	12FB12000-ATEX
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Description	Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	PA66 UL94-V0	PA66 UL94-V0	PA66 UL94-V0	PA66 UL94-V0
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.6 N*m	0.6 N*m	0.6 N*m	0.6 N*m
Rated voltage	250V AC/DC	125V AC/DC	60V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1A
Temperature range	-20°C + 85°C	-20°C + 85°C	-20°C + 85°C	-20°C + 85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	Ø 4 - 6mm	Ø 4 - 6mm	Ø 4 - 6mm	Ø 4 - 6mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

Notes:

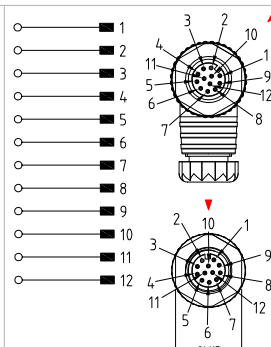
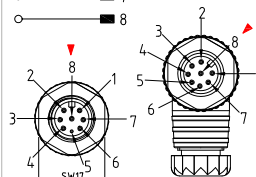
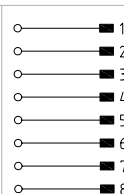
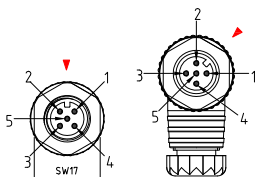
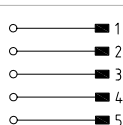
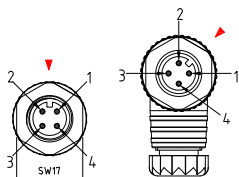
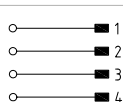
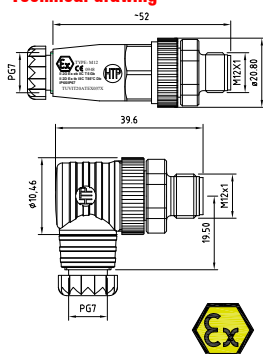
Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12MC4000-ATEX	12MB4000-ATEX	12MC5000-ATEX	12MB5000-ATEX	12MC8000-ATEX	12MB8000-ATEX	12MC12000-ATEX	12MB12000-ATEX
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Description	Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.		Circular connector M12 series field attachable,ATEX conform.	
Contacts type	Male		Male		Male		Male	
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Black		Black		Black		Black	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	PA66 UL94-V0	PA66 UL94-V0	PA66 UL94-V0	PA66 UL94-V0
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.6 N*m	0.6 N*m	0.6 N*m	0.6 N*m
Rated voltage	250V AC/DC	125V AC/DC	60V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1A
Temperature range	-20°C +85°C	-20°C +85°C	-20°C +85°C	-20°C +85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm	ø 4 - 6mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

Note:

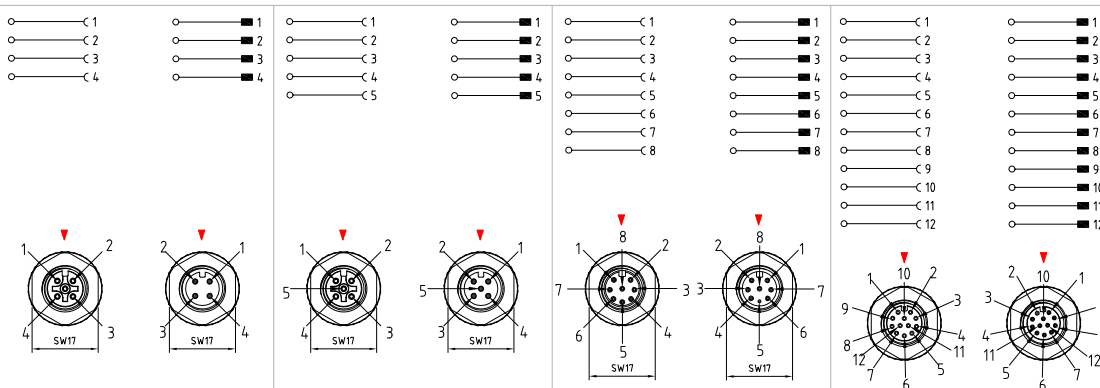
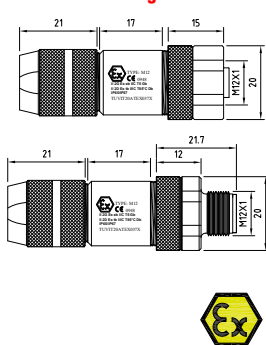
Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS

A-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	12F14000-ATEX	12M14000-ATEX	12F15000-ATEX	12M15000-ATEX	12F18000-ATEX	12M18000-ATEX	12F112000-ATEX	12M112000-ATEX
Housing type	Straight 180°		Straight 180°		Straight 180°		Straight 180°	
Cable gland	PG9 standard		PG9 standard		PG9 standard		PG9 standard	
Description	Circular connector M12 series field attachable TOTALLY SHIELDED, ATEX conform.		Circular connector M12 series field attachable TOTALLY SHIELDED, ATEX conform.		Circular connector M12 series field attachable TOTALLY SHIELDED, ATEX conform.		Circular connector M12 series field attachable TOTALLY SHIELDED, ATEX conform.	
Contacts type	Female	Male	Female	Male	Female	Male	Female	Male
Number of contacts	4poles		5poles		8poles		12poles	
Housing colour	Metal		Metal		Metal		Metal	

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Solder contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	-
Housing material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)	Hexagonal (SW17)
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.6 N*m	0.6 N*m	0.6 N*m	0.6 N*m
Rated voltage	250V AC/DC	125V AC/DC	60V AC/DC	30V AC/DC
Rated current	4A	4A	2A	1A
Temperature range	-20°C + 85°C	-20°C + 85°C	-20°C + 85°C	-20°C + 85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 8mm	ø 4 - 8mm	ø 4 - 8mm	ø 4 - 8mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

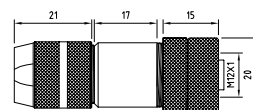
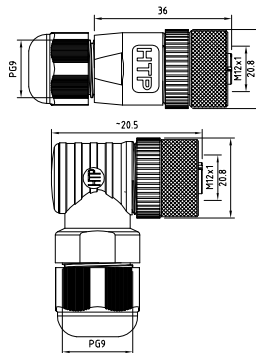
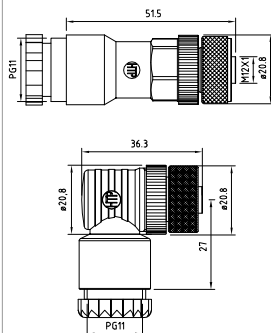
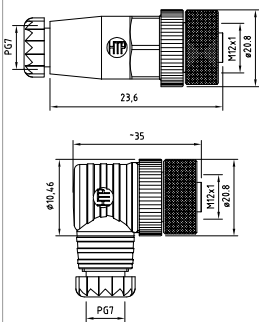
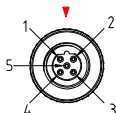
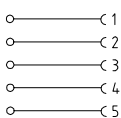
Notes:

Connectors available with different features:
See the general features and codification scheme page

M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101
Construction type	M12 B-Coded		M12 B-Coded		M12 B-Coded		M12 B-Coded
Part number	B-12FC5000	B-12FB5000	B-12FL5000	B-12FU5000	B-12FC5000-SK	B-12FB5000-SK	B-12F15000
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°
Cable gland	PG7 standard		PG9-11 unified /Double cable exit		SK model		PG9 standard
Description	Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable
Contacts type	Female		Female		Female		Female
Number of contacts	5poles		5poles		5poles		5poles
Housing colour	Black		Black		Black		Metal

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Screw contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	0.2 N*m
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	Brass + Nickel plated
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	60V AC/DC	60V AC/DC	60V AC/DC	60V AC/DC
Rated current	4A	4A	4A	4A
Temperature range	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C	-25°C + 85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø cable 6-10mm Double exit ø5mm(max.)	ø 4 - 8.6mm	ø 4 - 8mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

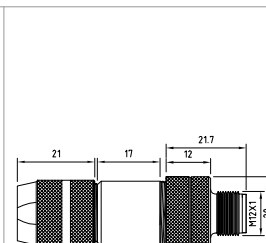
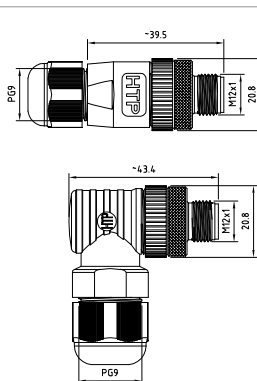
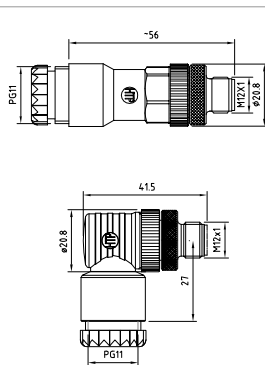
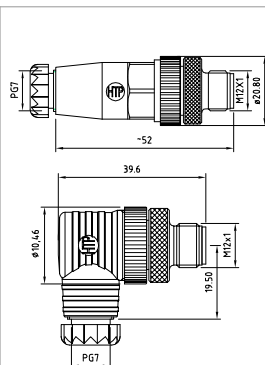
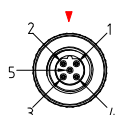
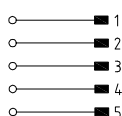
Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101
Construction type	M12 B-Coded		M12 B-Coded		M12 B-Coded		M12 B-Coded
Part number	B-12MC5000	B-12MB5000	B-12ML5000	B-12MU5000	B-12MC5000-SK	B-12MB5000-SK	B-12M15000
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°
Cable gland	PG7 standard		PG9-11 unified /Double cable exit		SK model		PG9 standard
Description	Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable		Circular connector M12 series B-coded,field attachable
Contacts type	Male		Male		Male		Male
Number of contacts	5poles		5poles		5poles		5poles
Housing colour	Black		Black		Black		Metal

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Screw contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	0.2 N*m
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	Brass + Nickel plated
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	60V AC/DC	60V AC/DC	60V AC/DC	60V AC/DC
Rated current	4A	4A	4A	4A
Temperature range	-40°C +90°C	-40°C +90°C	-40°C +90°C	-25°C +85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø cable 4-8mm ø cable 6-10mm Double exit ø5mm(max.)	ø 4 - 8.6mm	ø 4 - 8mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

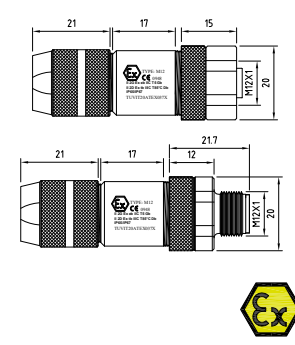
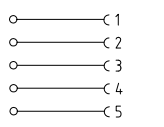
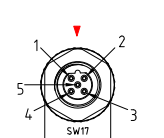
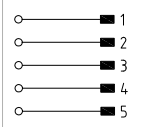
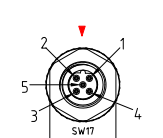
Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS

B-coded - Field attachable connectors



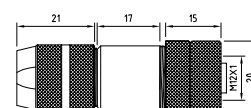
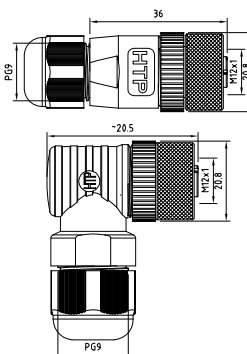
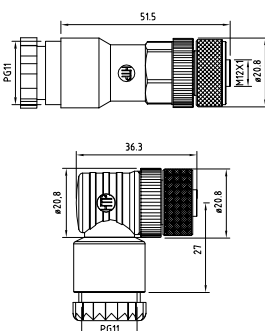
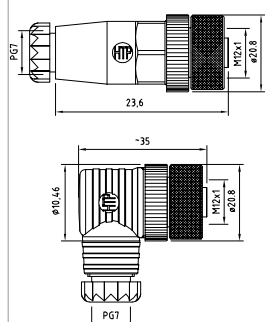
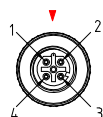
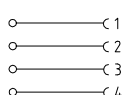
Technical drawing     																																																			
Product description <table> <tr> <td>Connector type</td><td>Circular connector field attachable</td><td>Circular connector field attachable</td><td></td></tr> <tr> <td>Conforms to</td><td>IEC 61076-2-101</td><td>IEC 61076-2-101</td><td></td></tr> <tr> <td>Construction type</td><td>M12 B-Coded</td><td>M12 B-Coded</td><td></td></tr> <tr> <td>Part number</td><td>B-12F15000-ATEX</td><td>B-12M15000-ATEX</td><td></td></tr> <tr> <td>Housing type</td><td>Straight 180°</td><td>Straight 180°</td><td></td></tr> <tr> <td>Cable gland</td><td>PG9 standard</td><td>PG9 standard</td><td></td></tr> <tr> <td>Description</td><td>Circular connector M12 series B-coded,ATEX conf.,field attachable</td><td>Circular connector M12 series B-coded,ATEX conf.,field attachable</td><td></td></tr> <tr> <td>Contacts type</td><td>Female</td><td>Male</td><td></td></tr> <tr> <td>Number of contacts</td><td>5poles</td><td>5poles</td><td></td></tr> <tr> <td>Housing colour</td><td>Metal</td><td>Metal</td><td></td></tr> </table>				Connector type	Circular connector field attachable	Circular connector field attachable		Conforms to	IEC 61076-2-101	IEC 61076-2-101		Construction type	M12 B-Coded	M12 B-Coded		Part number	B-12F15000-ATEX	B-12M15000-ATEX		Housing type	Straight 180°	Straight 180°		Cable gland	PG9 standard	PG9 standard		Description	Circular connector M12 series B-coded,ATEX conf.,field attachable	Circular connector M12 series B-coded,ATEX conf.,field attachable		Contacts type	Female	Male		Number of contacts	5poles	5poles		Housing colour	Metal	Metal									
Connector type	Circular connector field attachable	Circular connector field attachable																																																	
Conforms to	IEC 61076-2-101	IEC 61076-2-101																																																	
Construction type	M12 B-Coded	M12 B-Coded																																																	
Part number	B-12F15000-ATEX	B-12M15000-ATEX																																																	
Housing type	Straight 180°	Straight 180°																																																	
Cable gland	PG9 standard	PG9 standard																																																	
Description	Circular connector M12 series B-coded,ATEX conf.,field attachable	Circular connector M12 series B-coded,ATEX conf.,field attachable																																																	
Contacts type	Female	Male																																																	
Number of contacts	5poles	5poles																																																	
Housing colour	Metal	Metal																																																	
Technical data <table> <tr> <td>Type of termination</td><td>Screw contacts</td><td>Screw contacts</td><td></td></tr> <tr> <td>Contact screw torque</td><td>0.2 N*m</td><td>0.2 N*m</td><td></td></tr> <tr> <td>Housing material</td><td>Brass+Nickel plated</td><td>Brass+Nickel plated</td><td></td></tr> <tr> <td>Contacts material</td><td>Brass+Gold flash</td><td>Brass+Gold flash</td><td></td></tr> <tr> <td>Coupling nut type</td><td>Hexagonal (SW17)</td><td>Hexagonal (SW17)</td><td></td></tr> <tr> <td>M12 coupling nut material</td><td>Brass+Nickel plated</td><td>Brass+Nickel plated</td><td></td></tr> <tr> <td>M12 coupling nut torque</td><td>0.6 N*m</td><td>0.6 N*m</td><td></td></tr> <tr> <td>Rated voltage</td><td>125V AC/DC</td><td>125V AC/DC</td><td></td></tr> <tr> <td>Rated current</td><td>4A</td><td>4A</td><td></td></tr> <tr> <td>Temperature range</td><td>-20°C +85°C</td><td>-20°C +85°C</td><td></td></tr> <tr> <td>O-ring material</td><td>NBR</td><td>NBR</td><td></td></tr> <tr> <td>Suitable cable</td><td>ø 4 - 8mm</td><td>ø 4 - 8mm</td><td></td></tr> </table>				Type of termination	Screw contacts	Screw contacts		Contact screw torque	0.2 N*m	0.2 N*m		Housing material	Brass+Nickel plated	Brass+Nickel plated		Contacts material	Brass+Gold flash	Brass+Gold flash		Coupling nut type	Hexagonal (SW17)	Hexagonal (SW17)		M12 coupling nut material	Brass+Nickel plated	Brass+Nickel plated		M12 coupling nut torque	0.6 N*m	0.6 N*m		Rated voltage	125V AC/DC	125V AC/DC		Rated current	4A	4A		Temperature range	-20°C +85°C	-20°C +85°C		O-ring material	NBR	NBR		Suitable cable	ø 4 - 8mm	ø 4 - 8mm	
Type of termination	Screw contacts	Screw contacts																																																	
Contact screw torque	0.2 N*m	0.2 N*m																																																	
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Packaging <table> <tr> <td>Qty/Bag</td><td>1 pc / bag</td><td>1 pc / bag</td><td></td></tr> </table>				Qty/Bag	1 pc / bag	1 pc / bag																																													
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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																																																			

M12 CIRCULAR CONNECTORS

D-coded - Field attachable connectors



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101
Construction type	M12 D-Coded		M12 D-Coded		M12 D-Coded
Part number	D-12FC4000	D-12FB4000	D-12FL4000	D-12FU4000	D-12FC4000-SK D-12FB4000-SK D-12F14000
Housing type	Straight 180° Angled 90°		Straight 180° Angled 90°		Straight 180°
Cable gland	PG7 standard		PG9-11 unified /Double cable exit		PG9 standard
Description	Circular connector M12 series D-coded, field attachable		Circular connector M12 series D-coded, field attachable		Circular connector M12 series D-coded, field attachable
Contacts type	Female		Female		Female
Number of contacts	4poles		4poles		4poles
Housing colour	Black		Black		Metal

Technical data

Type of termination	Screw contacts		Screw contacts		Screw contacts
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m
Housing material	PA66 UL94-V2		PA66 UL94-V2		Brass + Nickel plated
Contacts material	Brass + Gold flash		Brass + Gold flash		Brass + Gold flash
Coupling nut type	Knurl round		Knurl round		Knurl round
M12 coupling nut material	Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated
M12 coupling nut torque	0.4 N*m		0.4 N*m		0.4 N*m
Rated voltage	250V AC/DC		250V AC/DC		250V AC/DC
Rated current	4A		4A		4A
Temperature range	-40°C + 90°C		-40°C + 90°C		-25°C + 85°C
O-ring material	NBR		NBR		NBR
Suitable cable	ø 4 - 6mm		ø cable 6-10mm Double exit ø5mm(max.)		ø 4 - 8mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

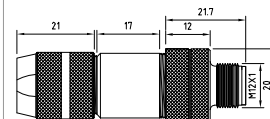
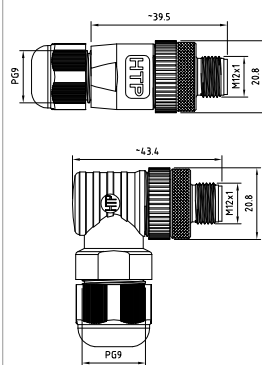
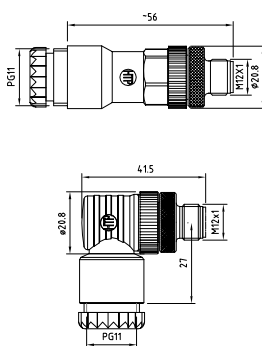
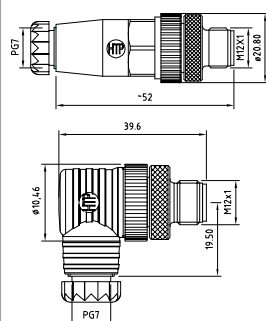
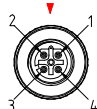
Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101
Construction type	M12 D-Coded		M12 D-Coded		M12 D-Coded		M12 D-Coded
Part number	D-12MC4000	D-12MB4000	D-12ML4000	D-12MU4000	D-12MC4000-SK	D-12MB4000-SK	D-12M14000
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°
Cable gland	PG7 standard		PG9-11 unified /Double cable exit		SK model		PG9 standard
Description	Circular connector M12 series D-coded,field attachable		Circular connector M12 series D-coded,field attachable		Circular connector M12 series D-coded,field attachable		Circular connector M12 series D-coded,field attachable
Contacts type	Male		Male		Male		Male
Number of contacts	4poles		4poles		4poles		4poles
Housing colour	Black		Black		Black		Metal

Technical data

Type of termination	Screw contacts	Screw contacts	Screw contacts	Screw contacts
Contact screw torque	0.2 N*m	0.2 N*m	0.2 N*m	0.2 N*m
Housing material	PA66 UL94-V2	PA66 UL94-V2	PA66 UL94-V2	Brass + Nickel plated
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
Rated current	4A	4A	4A	4A
Temperature range	-40°C + 90°C	-40°C + 90°C	-40°C + 90°C	-25°C + 85°C
O-ring material	NBR	NBR	NBR	NBR
Suitable cable	ø 4 - 6mm	ø cable 6-10mm Double exit ø5mm(max.)	ø 4 - 8.6mm	ø 4 - 8mm

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

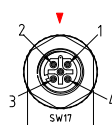
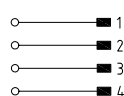
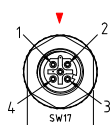
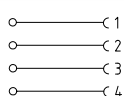
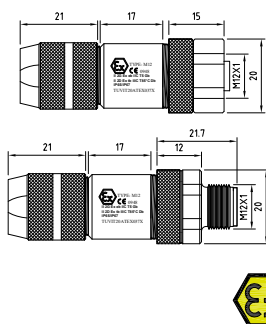
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section



Technical drawing



Product description

Connector type	Circular connector field attachable	Circular connector field attachable	
Conforms to	IEC 61076-2-101	IEC 61076-2-101	
Construction type	M12 D-Coded	M12 D-Coded	
Part number	D-12F14000-ATEX	D-12M14000-ATEX	
Housing type	Straight 180°	Straight 180°	
Cable gland	PG9 standard	PG9 standard	
Description	Circular connector M12 series D-coded, ATEX conf., field attachable	Circular connector M12 series D-coded, ATEX conf., field attachable	
Contacts type	Female	Male	
Number of contacts	4poles	4poles	
Housing colour	Metal	Metal	

Technical data

Type of termination	Screw contacts	Screw contacts	
Contact screw torque	0.2 N*m	0.2 N*m	
Housing material	Brass + Nickel plated	Brass + Nickel plated	
Contacts material	Brass + Gold flash	Brass + Gold flash	
Coupling nut type	Hexagonal (SW17)	Hexagonal (SW17)	
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	
M12 coupling nut torque	0.6 N*m	0.6 N*m	
Rated voltage	250V AC/DC	250V AC/DC	
Rated current	4A	4A	
Temperature range	-20°C + 85°C	-20°C + 85°C	
O-ring material	NBR	NBR	
Suitable cable	ø 4 - 8mm	ø 4 - 8mm	

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	
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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

M12 CIRCULAR CONNECTORS

Moulded cable connectors - General features and codification scheme



• 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 Standard. -25°C + 120°C (UL approved connectors).
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).	

##

-

12

F

D

3

A

1Z

12

M

D

-

##

CODING
NO DIGIT : M12 A-CODING
B : M12 B-CODING
C : M12 C-CODING
D : M12 D-CODING
K : M12 K-CODING
L : M12 L-CODING
S : M12 S-CODING
X : M12 X-CODING

SERIES
12 : M12 CIRCULAR CONNECTOR

GENDER
F : FEMALE M : MALE

CONNECTOR TYPE
A : ANGLED 90°.
D : STRAIGHT 180°.
E : ANGLED 90° WITH 2 LED NPN.
F : ANGLED 90° WITH 2 LED PNP.
G : STRAIGHT 180° WITH 2 LED PNP.
H : STRAIGHT 180° WITH 2 LED NPN.
I : STRAIGHT 180° WITH 3 LED PNP.
J : STRAIGHT 180° TOTALLY SHIELDED.
V : ANGLED 90° TOTALLY SHIELDED.

NUMBERS OF POLES
3 : 3POLES 4 : 4POLES 5 : 5POLES 8 : 8POLES 12 : 12POLES

CABLE TYPE
SEE CABLES FEATURES PAGE ##

CABLE LENGTH
1Z : 1m A : +10cm
2Z : 2m B : +20cm
3Z : 3m C : +30cm
... I : +90cm

EXTENSION
SPECIFY OTHER CONNECTOR'S SIDE

SOME VARIABLES
INOX or IN : M12 COUPLING NUT IN STAINLESS STEEL(AISI304). IN316 : M12 COUPLING NUT IN STAINLESS STEEL(AISI316).
HN : HEXAGONAL M12 COUPLING NUT. S : SPECIAL STRIPPING/PEELING-TINNING. Y : WITHOUT H.T.P.LOGO. UL : UL APPROVED.

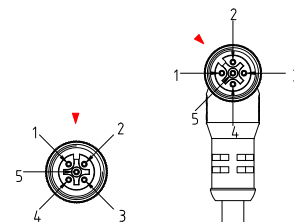
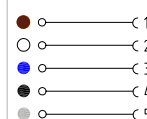
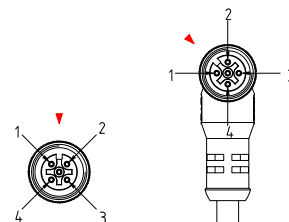
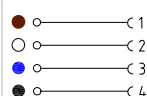
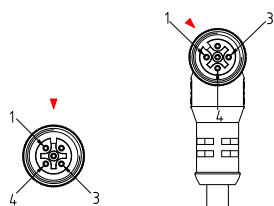
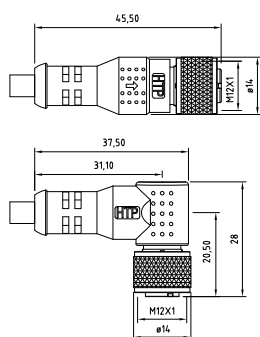
EXAMPLE: "...1C" = 1.3m
"...1F" = 1.6m
"...2A" = 2.1m

ANTI-VIBRATION SYSTEM:

175



Technical drawing



Product description

Connector type	Circular connector with moulded cable		Circular connector with moulded cable		Circular connector with moulded cable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded	
Description	Circular connector M12 series with moulded cable		Circular connector M12 series with moulded cable		Circular connector M12 series with moulded cable	
Part number	12FD3B1Z	12FA3B1Z	12FD4B1Z	12FA4B1Z	12FD5B1Z	12FA5B1Z
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	Moulded cable		Moulded cable		Moulded cable	
Contacts type	Female		Female		Female	
Number of contacts	3poles		4poles		5poles	
Housing colour	Black		Black		Black	

Technical data

Type of termination	Contacts to crimp wires		Contacts to crimp wires		Contacts to crimp wires	
Contacts material	Brass + Gold flash		Brass + Gold flash		Brass + Gold flash	
Coupling nut type	Knurl round		Knurl round		Knurl round	
M12 coupling nut material	Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated	
M12 coupling nut torque	0.4 N*m		0.4 N*m		0.4 N*m	
Rated voltage	250V AC/DC		250V AC/DC		60V AC/DC	
Rated current	4A		4A		4A	
O-ring material	NBR		NBR		NBR	
Cable type	PVC/PVC CEI2022		PVC/PVC CEI2022		PVC/PVC CEI2022	
Cable jacket colour	Black		Black		Black	
No.Conductors / Section	3x0.34mm ²		4x0.34mm ²		5x0.34mm ²	
Conductor colours	Brown; Blue; Black		Brown; White; Blue; Black		Brown; White; Blue; Black; Grey	
Cable diameter	ø4.8mm (±0.3)		ø5.2mm (±0.3)		ø5.5mm (±0.3)	
Cable length	1m		1m		1m	

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

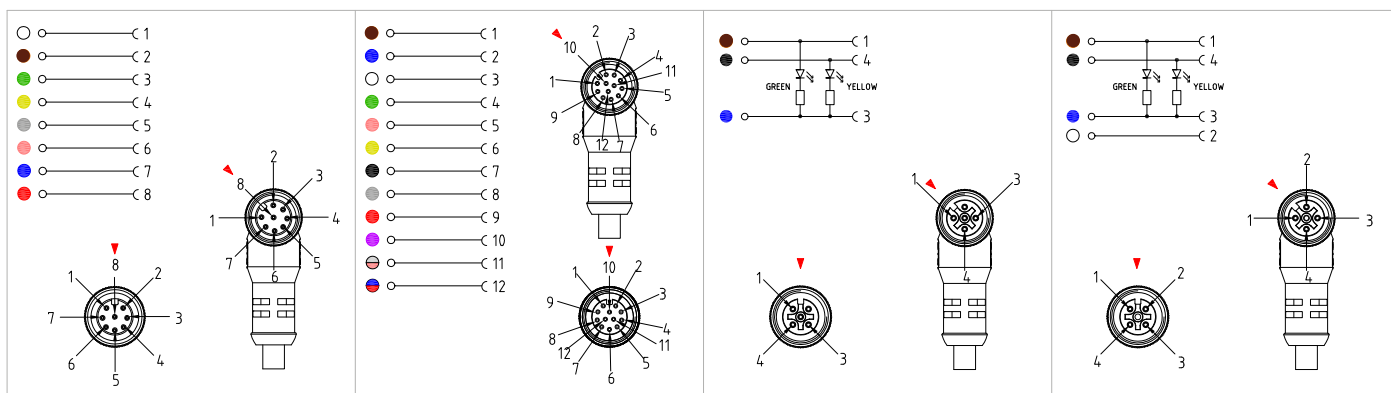
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS

Moulded cable connectors - A-coded



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
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Other accessories options

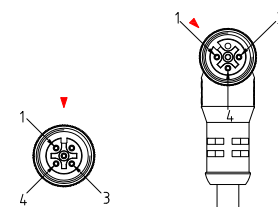
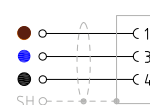
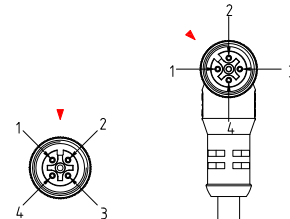
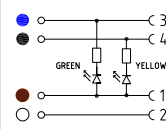
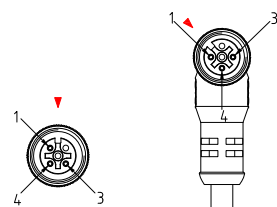
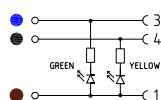
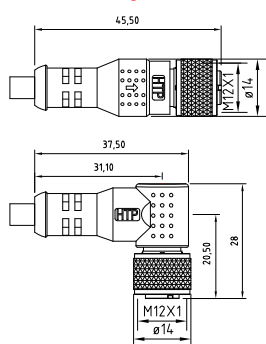
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section



Technical drawing



Product description

Connector type	Circular connector with moulded cable		Circular connector with moulded cable	Circular connector with moulded cable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101	IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded	M12 A-Coded	
Description	Circular connector M12 series n.2 Led NPN circuit (PIN3: GN;PIN4:YE)with moulded cable		Circular connector M12 series n.2 Led NPN circuit (PIN3: GN;PIN4:YE)with moulded cable	Circular connector M12 series TOTALLY SHIELDED with moulded cable	
Part number	12FH3B1Z	12FE3B1Z	12FH4B1Z	12FE4B1Z	12FJ3F1Z 12FV3F1Z
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180° Angled 90°
Cable gland	Moulded cable		Moulded cable	Moulded cable	
Contacts type	Female		Female	Female	
Number of contacts	3poles		4poles	3poles	
Housing colour	Transparent		Transparent	Black	

Technical data

Type of termination	Contacts to solder PCB		Contacts to solder PCB	Contacts to crimp wires	
Contacts material	Brass + Gold flash		Brass + Gold flash	Brass + Gold flash	
Coupling nut type	Knurl round		Knurl round	Knurl round	
M12 coupling nut material	Brass + Nickel plated		Brass + Nickel plated	Brass + Nickel plated	
M12 coupling nut torque	0.4 N*m		0.4 N*m	0.4 N*m	
Rated voltage	10-30V DC		10-30V DC	250V AC/DC	
Rated current	3A		3A	4A	
O-ring material	NBR		NBR	NBR	
Cable type	PVC/PVC CEI2022		PVC/PVC CEI2022	PVC/PVC CEI2022 SHIELDED	
Cable jacket colour	Black		Black	Black	
No.Conductors / Section	3x0.34mm ²		4x0.34mm ²	3x0.34mm ²	
Conductor colours	Brown; Blue; Black		Brown; White; Blue; Black	Brown; Blue; Black	
Cable diameter	ø4.8mm (±0.3)		ø5.2mm (±0.3)	ø5.2mm (±0.3)	
Cable length	1m		1m	1m	

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

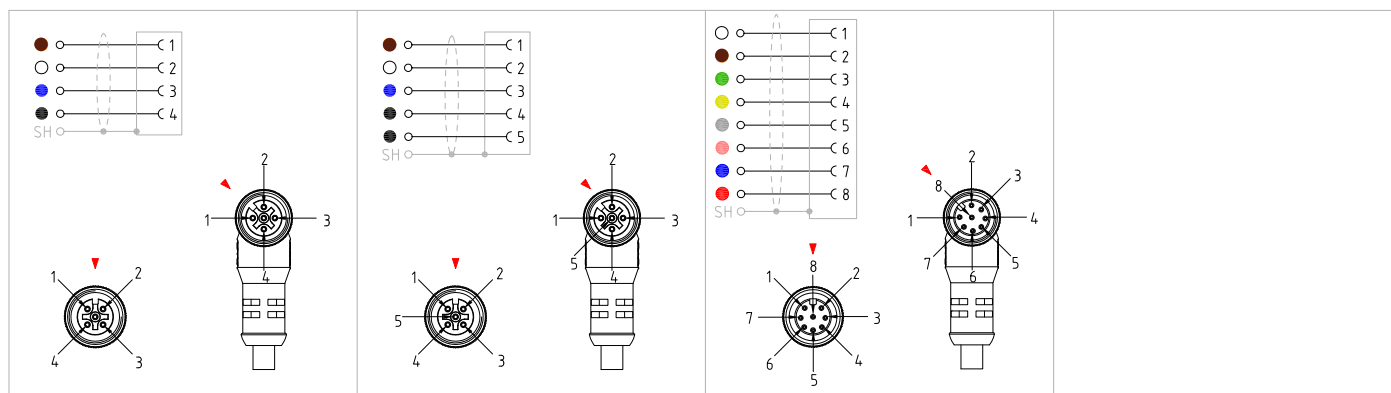
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS

Moulded cable connectors - A-coded



Product description

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	
M12 A-Coded		M12 A-Coded		M12 A-Coded	
Circular connector M12 series TOTALLY SHIELDED with moulded cable		Circular connector M12 series TOTALLY SHIELDED with moulded cable		Circular connector M12 series with moulded cable	
12FJ4F1Z	12FV4F1Z	12FJ5F1Z	12FV5F1Z	12FJ8J1Z	12FV8J1Z
Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Moulded cable		Moulded cable		Moulded cable	
Female		Female		Female	
4poles		5poles		8poles	
Black		Black		Black	

Technical data

Contacts to crimp wires		Contacts to crimp wires		Contacts to solder wires	
Brass + Gold flash		Brass + Gold flash		Brass + Gold flash	
Knurl round		Knurl round		Knurl round	
Brass + Nickel plated		Brass + Nickel plated		Brass + Nickel plated	
0.4 N*m		0.4 N*m		0.4 N*m	
250V AC/DC		60V AC/DC		30V AC/DC	
4A		4A		2A	
NBR		NBR		NBR	
PVC/PVC CEI2022 SHIELDED		PVC/PVC CEI2022 SHIELDED		PVC/PVC CEI2022 SHIELDED	
Black		Black		Black	
4x0.34mm ²		5x0.34mm ²		8x0.25mm ²	
Brown; White; Blue; Black		Brown; White; Blue; Black; Grey		White; Brown; Green; Yellow; Grey; Pink; Blue; Red	
ø5.5mm (±0.3)		ø6mm (±0.3)		ø6.5mm (±0.3)	
1m		1m		1m	

Packaging

1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

See accessories section

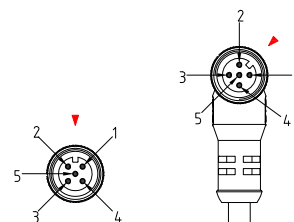
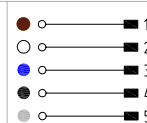
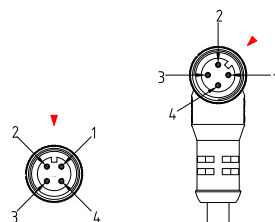
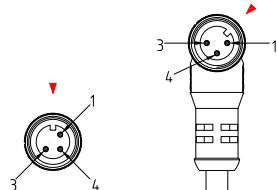
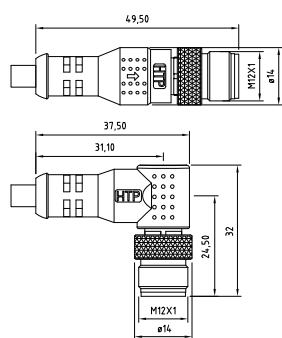
Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS



Technical drawing



Product description

Connector type	Circular connector with moulded cable		Circular connector with moulded cable		Circular connector with moulded cable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded	
Description	Circular connector M12 series with moulded cable		Circular connector M12 series with moulded cable		Circular connector M12 series with moulded cable	
Part number	12MD3B1Z	12MA3B1Z	12MD4B1Z	12MA4B1Z	12MD5B1Z	12MA5B1Z
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	Moulded cable		Moulded cable		Moulded cable	
Contacts type	Male		Male		Male	
Number of contacts	3poles		4poles		5poles	
Housing colour	Black		Black		Black	

Technical data

Type of termination	Contacts to crimp wires	Contacts to crimp wires	Contacts to crimp wires
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m	0.4 N*m
Rated voltage	250V AC/DC	250V AC/DC	60V AC/DC
Rated current	4A	4A	4A
O-ring material	-	-	-
Cable type	PVC/PVC CEI2022	PVC/PVC CEI2022	PVC/PVC CEI2022
Cable jacket colour	Black	Black	Black
No. Conductors / Section	3x0.34mm ²	4x0.34mm ²	5x0.34mm ²
Conductor colours	Brown; Blue; Black	Brown; White; Blue; Black	Brown; White; Blue; Black; Grey
Cable diameter	ø4.8mm (±0.3)	ø5.2mm (±0.3)	ø5.5mm (±0.3)
Cable length	1m	1m	1m

Packaging

Qty/Bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

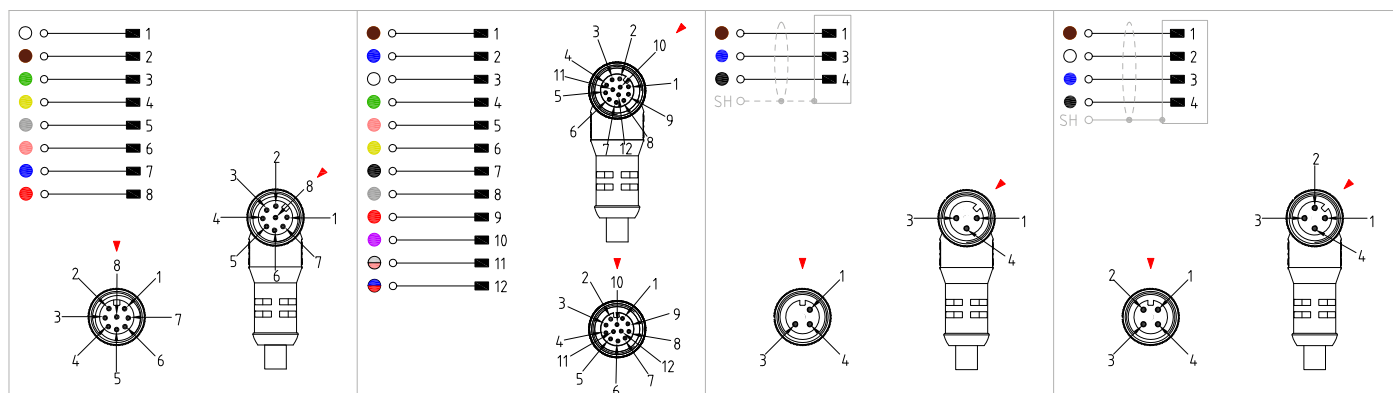
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section

M12 CIRCULAR CONNECTORS

Moulded cable connectors - A-coded



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 TOTALLY SHIELDED with moulded cable		Circular connector M12 series TOTALLY SHIELDED with moulded cable	
12MD8A1Z	12MA8A1Z	12MD12K1Z	12MA12K1Z	12MJ3F1Z	12MV3F1Z	12MJ4F1Z	12MV4F1Z
Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Moulded cable		Moulded cable		Moulded cable		Moulded cable	
Male		Male		Male		Male	
8poles		12poles		3poles		4poles	
Black		Black		Black		Black	

Technical data

Contacts to solder wires		Contacts to solder wires		Contacts to crimp wires		Contacts to crimp wires	
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		250V AC/DC		250V AC/DC	
2A		1.5A		4A		4A	
-		-		-		-	
PVC/PVC CEI2022		PVC/PVC CEI2022		PVC/PVC CEI2022 SHIELDED		PVC/PVC CEI2022 SHIELDED	
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)		ø5.2mm (±0.3)		ø5.5mm (±0.3)	
1m		1m		1m		1m	

Packaging

1 pc / bag	1 pc / bag	1 pc / bag	1 pc / bag
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Other accessories options

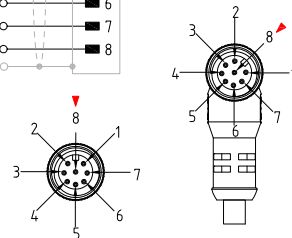
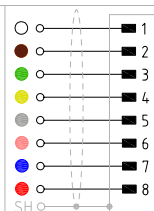
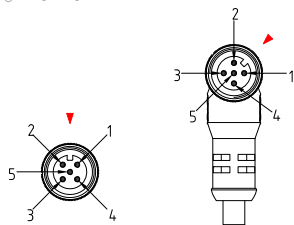
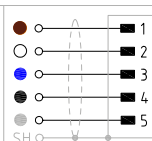
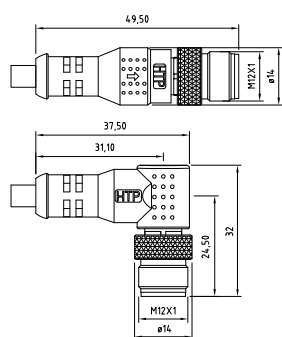
See accessories section

Notes:

Connectors available with different features:
See the general features and codification scheme page
See the cables list section



Technical drawing



Product description

Connector type	Circular connector with moulded cable		Circular connector with moulded cable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded	
Description	Circular connector M12 series TOTALLY SHIELDED with moulded cable		Circular connector M12 series TOTALLY SHIELDED with moulded cable	
Part number	12MJ5F1Z	12MV5F1Z	12MJ8J1Z	12MV8J1Z
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	Moulded cable		Moulded cable	
Contacts type	Male		Male	
Number of contacts	5poles		8poles	
Housing colour	Black		Black	

Technical data

Type of termination	Contacts to crimp wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Knurl round	Knurl round
M12 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M12 coupling nut torque	0.4 N*m	0.4 N*m
Rated voltage	60V AC/DC	30V AC/DC
Rated current	4A	2A
O-ring material	-	-
Cable type	PVC/PVC CEI2022 SHIELDED	PVC/PVC CEI2022 SHIELDED
Cable jacket colour	Black	Black
No. Conductors / Section	5x0.34mm ²	8x0.25mm ²
Conductor colours	Brown; White; Blue; Black; Grey	White; Brown; Green; Yellow; Grey; Pink; Blue; Red
Cable diameter	ø6mm (±0.3)	ø6.5mm (±0.3)
Cable length	1m	1m

Packaging

Qty/Bag	1 pc / bag	1 pc / bag
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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