

M12 Circular Connector,B-code



- Cable Connector

- Shielded / unshielded series
- Installable series and moulded cable series
- Thread locking M12X1
- Screw terminal
- Shielding ring and ring spring shielding connection
- Cable length 1.5m and 5m
- Other cable length upon request, minimum order quantity 200 pieces
- Cable material can be customized according to requirements
- Degree of protection IP67
- Anti-loose spring with nut

M12-B Circular Connector

125/250V 4A

Technical characteristics

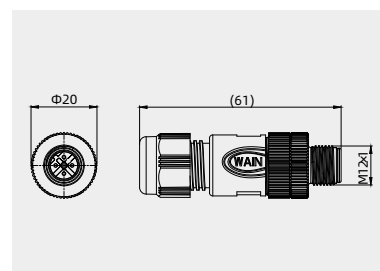
	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	screw	screw
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8 mm	4-6,6-8 mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	III	III
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT	PA/PBT

Straight cable connectors Remark: SPQ is 5pcs

Male cable connector, plastic locking system, screw clamp connection



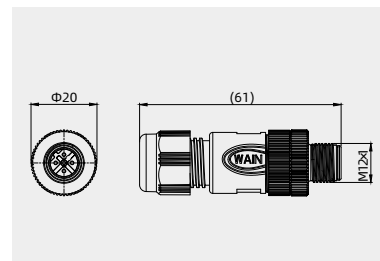
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12P-M04B-T-D6	163 004 411 3105
	6-8 mm	M12P-M04B-T-D8	163 004 411 3106
5	4-6 mm	M12P-M05B-T-D6	163 005 411 3105
	6-8 mm	M12P-M05B-T-D8	163 005 411 3106



Male cable connector, metal locking system, screw clamp connection

Recommended use

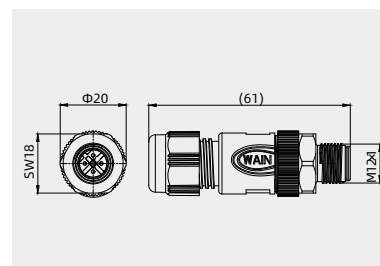
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-M04B-T-D6	163 004 411 1001
	6-8 mm	M12-M04B-T-D8	163 004 411 1002
5	4-6 mm	M12-M05B-T-D6	163 005 411 1001
	6-8 mm	M12-M05B-T-D8	163 105 411 3002



Male cable connector, stainless steel locking system, screw clamp connection



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12S-M04B-T-D6	163 004 411 1003
	6-8 mm	M12S-M04B-T-D8	163 004 411 1004
5	4-6 mm	M12S-M05B-T-D6	163 005 411 1003
	6-8 mm	M12S-M05B-T-D8	163 005 411 1004



M12-B

M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	screw	screw	screw
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-8mm	4-8mm	4-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Contact material	copper alloy	copper alloy	copper alloy
Surface finishes	Au	Au	Au
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Straight cable connectors

Remark: SPQ is 5pcs

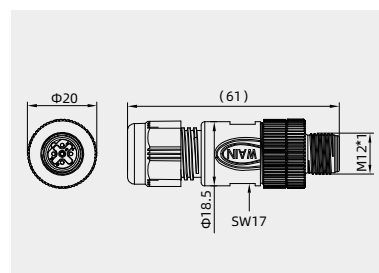
Male cable connector, plastic locking system, screw clamp connection



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-MST03B-T-D6	163 003 413 3506
	6-8 mm	M12P-MST03B-T-D8	163 003 413 3507
4	4-6 mm	M12P-MST04B-T-D6	163 004 413 3511
	6-8 mm	M12P-MST04B-T-D8	163 004 413 3512
5	4-6 mm	M12P-MST05B-T-D6	163 005 413 3511
	6-8 mm	M12P-MST05B-T-D8	163 005 413 3512



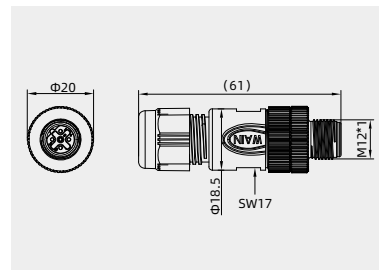
Male cable connector, metal locking system, screw clamp connectionsystem



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03B-T-D6	163 003 413 3508
	6-8 mm	M12-MST03B-T-D8	163 003 413 3509
4	4-6 mm	M12-MST04B-T-D6	163 004 413 3513
	6-8 mm	M12-MST04B-T-D8	163 004 413 3514
5	4-6 mm	M12-MST05B-T-D6	163 005 413 3513
	6-8 mm	M12-MST05B-T-D8	163 005 413 3510



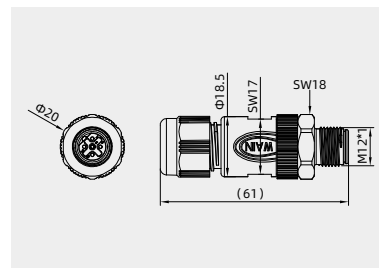
Male cable connector, stainless steel locking system, screw clamp connection



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-MST03B-T-D6	163 003 413 3510
	6-8 mm	M12S-MST03B-T-D8	163 003 413 3511
4	4-6 mm	M12S-MST04B-T-D6	163 004 413 3515
	6-8 mm	M12S-MST04B-T-D8	163 004 413 3516
5	4-6 mm	M12S-MST05B-T-D6	163 005 413 3514
	6-8 mm	M12S-MST05B-T-D8	163 005 413 3515



M12-B Circular Connector

125/250V 2/8A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	Contacts:1-4 8A; Contacts:5 2A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	screw	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.1.5mm ² (max.AWG16)/max.0.75mm ² (max.AWG18)
Cable outlet	8-10mm	8-10mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Straight cable connectors

Remark: SPQ is 5pcs

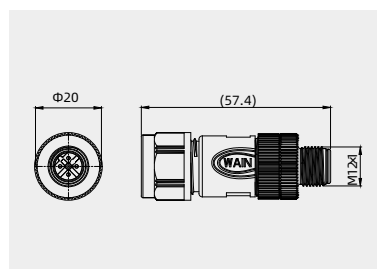
Male cable connector, plastic locking system, screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12P-M05B-T-D10	163 005 411 3107

B-Code



5pin



Male cable connector, metal locking system, screw clamp connection

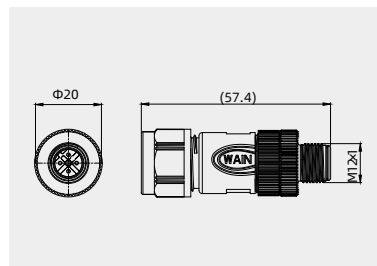
Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12-M05B-T-D10	163 005 411 1002

Recommended use

B-Code



5pin



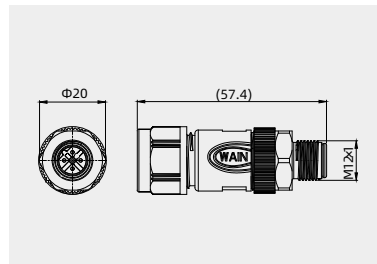
Male cable connector, stainless steel locking system, screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12S-M05B-T-D10	163 005 411 1005

B-Code



5pin



Male cable connector, metal locking system, solde terminal

Contacts	Cable outlet	Designation	Order No.
4	8-10 mm	M12-MST04B-T-D10	163 004 413 3517
5	8-10 mm	M12-MST05B-T-D10	163 005 413 3516

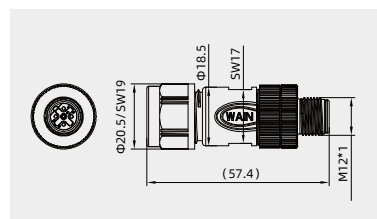
B-Code



4pin



5pin



M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-10mm	4-10mm	4-10mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Straight cable connectors, shielded Remark: SPQ is 5pcs

Male cable connector, shielded,

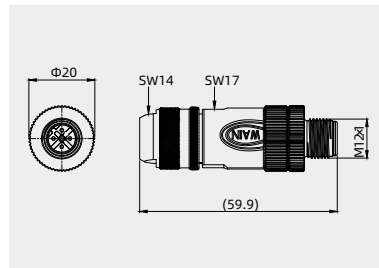
screw clamp connection,
with shielding ringRecommended use

B-Code



4pin 5pin

Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-M04B-T-D6-SH	163 004 411 2006
	6-8 mm	M12-M04B-T-D8-SH	163 004 411 2007
	8-10 mm	M12-M04B-T-D10-SH	163 004 411 2504
5	4-6 mm	M12-M05B-T-D6-SH	163 005 411 2007
	6-8 mm	M12-M05B-T-D8-SH	163 005 411 2008
	8-10 mm	M12-M05B-T-D10-SH	163 005 411 2503



Male cable connector, shielded,

solde terminal, with shielding ring

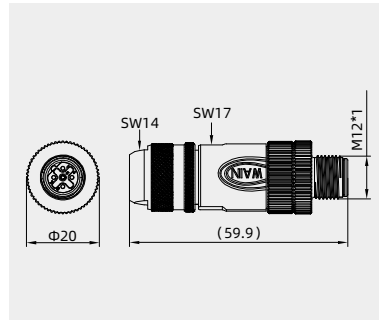


B-Code



3pin 4pin 5pin

Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03B-T-D6-SH	163 003 413 3512
	6-8 mm	M12-MST03B-T-D8-SH	163 003 413 3513
	8-10 mm	M12-MST03B-T-D10-SH	163 003 413 2505
4	4-6 mm	M12-MST04B-T-D6-SH	163 004 413 2500
	6-8 mm	M12-MST04B-T-D8-SH	163 004 413 2501
	8-10 mm	M12-MST04B-T-D10-SH	163 004 413 2504
5	4-6 mm	M12-MST05B-T-D6-SH	163 005 413 2500
	6-8 mm	M12-MST05B-T-D8-SH	163 005 413 2501
	8-10 mm	M12-MST05B-T-D10-SH	163 005 413 2505



M12-B Circular Connector

125V 4A

Technical characteristics

	5-pole
Rated current(40°C)	4A
Rated voltage	125V
Rated impulse voltage	1500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	Crimp terminal
Wire gauge	max.0.82mm ² (max.AWG18)
Cable outlet	4-6,6-8,8-10mm
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-40°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	zinc diecasting nickel plated

Straight cable connectors, shielded



Male cable connector, Crimp terminal,
with shielding ring

Order crimp contacts separately

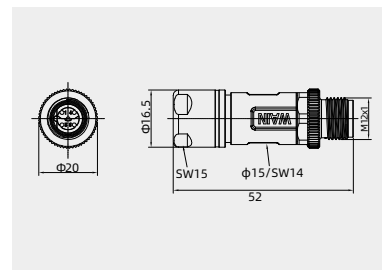


B-Code



5pin

Contacts	Cable outlet	Designation	Order No.
5	4-6 mm	M12-MC05B-T-D6-SH	163 005 410 2509
	6-8 mm	M12-MC05B-T-D8-SH	163 005 410 2503
	8-10 mm	M12-MC05B-T-D10-SH	163 005 410 2511



Crimp contacts

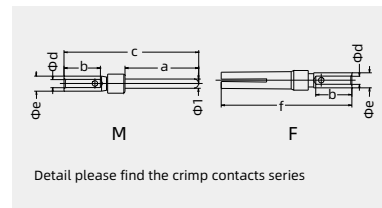
Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated



Remark: SPQ is 1000pcs

Wire gauge(mm ²)	Male	Order No.	Female	Order No.
0.09-0.25	CSGM-0.25	101 014 210 0101	CSGF-0.25	101 014 220 0101
0.13-0.33	CSGM-0.33	101 014 210 0201	CSGF-0.33	101 014 220 0201
0.33-0.52	CSGM-0.52	101 014 210 0501	CSGF-0.52	101 014 220 0501
0.52-0.82	CSGM-0.82	101 014 210 0701	CSGF-0.82	101 014 220 0701



Detail please find the crimp contacts series

Tools

Crimping tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	screw	screw
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8 mm	4-6,6-8 mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT	PA/PBT

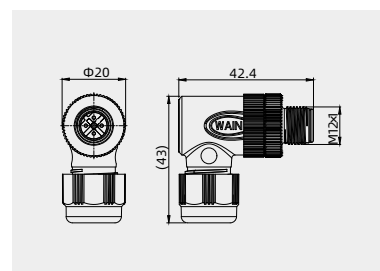
Angled cable connectors

Remark: SPQ is 1pc

Male cable connector, plastic locking system, screw clamp connection



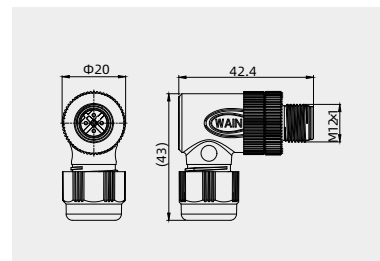
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12P-M04B-S-D6	163 004 511 3105
	6-8 mm	M12P-M04B-S-D8	163 004 511 3106
5	4-6 mm	M12P-M05B-S-D6	163 005 511 3105
	6-8 mm	M12P-M05B-S-D8	163 005 511 3106



Male angled connector, metal locking system, screw clamp connection



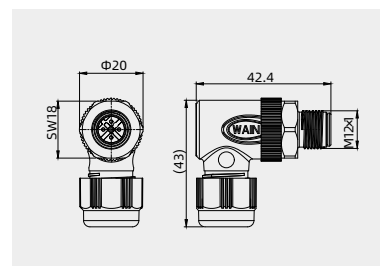
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-M04B-S-D6	163 004 511 1001
	6-8 mm	M12-M04B-S-D8	163 004 511 1002
5	4-6 mm	M12-M05B-S-D6	163 005 511 1001
	6-8 mm	M12-M05B-S-D8	163 005 511 1002



Male cable connector, stainless steel locking system, screw clamp connection



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12S-M04B-S-D6	163 004 511 1003
	6-8 mm	M12S-M04B-S-D8	163 004 511 1004
5	4-6 mm	M12S-M05B-S-D6	163 005 511 1004
	6-8 mm	M12S-M05B-S-D8	163 005 511 1005



M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	solde terminal	solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-8mm	4-8mm	4-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Contact material	copper alloy	copper alloy	copper alloy
Surface finishes	Au	Au	Au
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Angled cable connectors

Remark: SPQ is 1pc

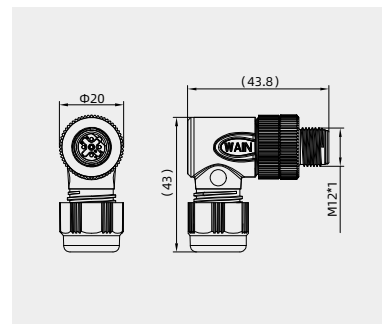
Male cable connector, plastic locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-MST03B-S-D6	163 003 513 3506
	6-8 mm	M12P-MST03B-S-D8	163 003 513 3507
4	4-6 mm	M12P-MST04B-S-D6	163 004 513 3508
	6-8 mm	M12P-MST04B-S-D8	163 004 513 3509
5	4-6 mm	M12P-MST05B-S-D6	163 005 513 3508
	6-8 mm	M12P-MST05B-S-D8	163 005 513 3509



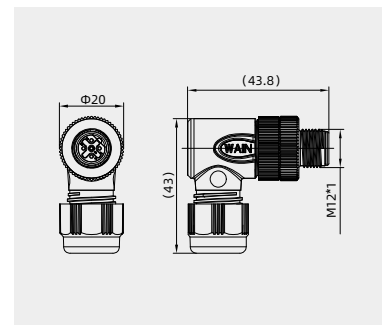
Male cable connector, metal locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03B-S-D6	163 003 513 3508
	6-8 mm	M12-MST03B-S-D8	163 003 513 3509
4	4-6 mm	M12-MST04B-S-D6	163 004 513 3510
	6-8 mm	M12-MST04B-S-D8	163 004 513 3511
5	4-6 mm	M12-MST05B-S-D6	163 005 513 3510
	6-8 mm	M12-MST05B-S-D8	163 005 513 3511



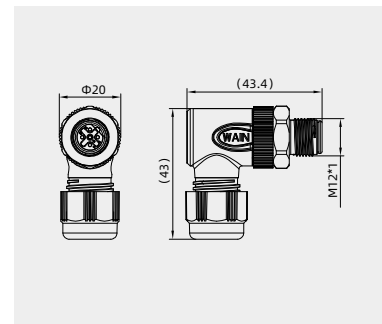
Male cable connector, stainless steel locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-MST03B-S-D6	163 003 513 3510
	6-8 mm	M12S-MST03B-S-D8	163 003 513 3511
4	4-6 mm	M12S-MST04B-S-D6	163 004 513 3512
	6-8 mm	M12S-MST04B-S-D8	163 004 513 3513
5	4-6 mm	M12S-MST05B-S-D6	163 005 513 3512
	6-8 mm	M12S-MST05B-S-D8	163 005 513 3513



M12-B

M12-B Circular Connector

125/250V 2/8A

Technical characteristics

	5-pole
Rated current(40°C)	Contacts:1-4 8A; Contacts:5 2A
Rated voltage	125V
Rated impulse voltage	1500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	screw
Wire gauge	max.1.5mm ² (max.AWG16)
Cable outlet	8-10mm
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-40°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	PA/PBT

Angled cable connectors

Remark: SPQ is 1pc

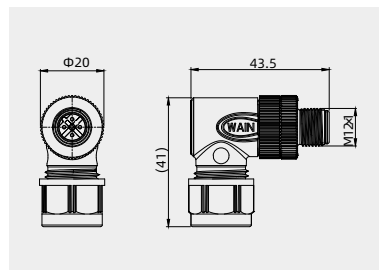
Male cable connector, plastic locking system, screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12P-M05B-S-D10	163 005 511 3107

B-Code



5pin



Male cable connector, metal locking system, screw clamp connection

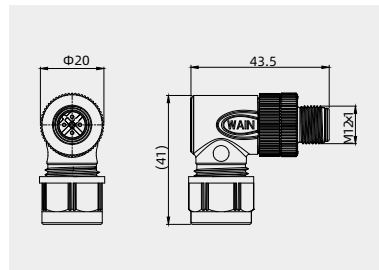
Recommended use

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12-M05B-S-D10	163 005 511 1003

B-Code



5pin



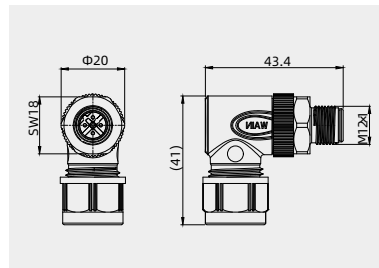
Male cable connector, stainless steel locking system, screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12S-M05B-S-D10	163 005 511 1006

B-Code



5pin



M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-8mm	4-8mm	4-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloyw

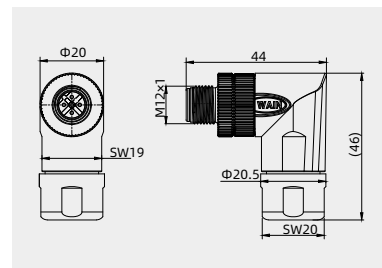
Angled cable connectors, shielded Remark: SPQ is 1pc

Male cable connector, shielded,
screw clamp connection,
with shielding ring

B-Code



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-M04B-S-D6-SH	163 004 511 2003
	6-8 mm	M12-M04B-S-D8-SH	163 004 511 2004
5	4-6 mm	M12-M05B-S-D6-SH	163 005 511 2003
	6-8 mm	M12-M05B-S-D8-SH	163 005 511 2004

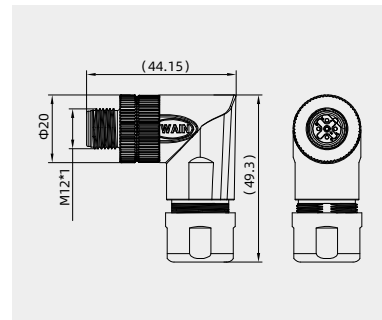


Male cable connector, shielded,
solde terminal, with shielding ring

B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03B-S-D6-SH	163 003 513 2502
	6-8 mm	M12-MST03B-S-D8-SH	163 003 513 2503
4	4-6 mm	M12-MST04B-S-D6-SH	163 004 513 2502
	6-8 mm	M12-MST04B-S-D8-SH	163 004 513 2503
5	4-6 mm	M12-MST05B-S-D6-SH	163 005 513 3516
	6-8 mm	M12-MST05B-S-D8-SH	163 005 513 2502



M12-B

M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	screw	screw
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8 mm	4-6,6-8 mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	III	III
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT	PA/PBT

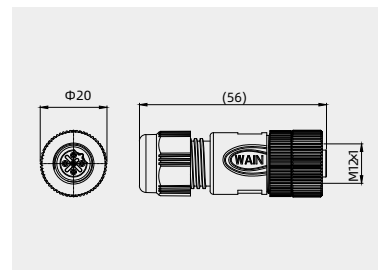
Straight cable connectors

Remark: SPQ is 5pcs

Female cable connector,
plastic locking system,
screw clamp connection



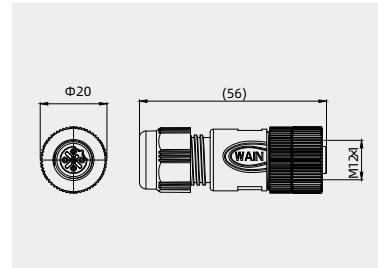
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12P-F04B-T-D6	163 004 421 3106
	6-8 mm	M12P-F04B-T-D8	163 004 421 3107
5	4-6 mm	M12P-F05B-T-D6	163 005 421 3106
	6-8 mm	M12P-F05B-T-D8	163 005 421 3107



Female cable connector,
metal locking system,
screw clamp connection
Recommended use



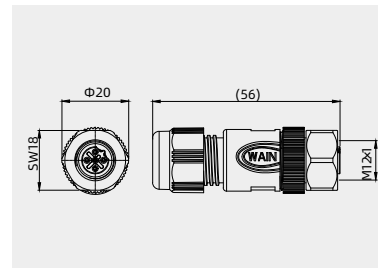
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-F04B-T-D6	163 004 421 1001
	6-8 mm	M12-F04B-T-D8	163 004 421 1002
5	4-6 mm	M12-F05B-T-D6	163 005 421 1001
	6-8 mm	M12-F05B-T-D8	163 105 421 3002



Female cable connector,
stainless steel locking system,
screw clamp connection,



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12S-F04B-T-D6	163 004 421 1003
	6-8 mm	M12S-F04B-T-D8	163 004 421 1004
5	4-6 mm	M12S-F05B-T-D6	163 005 421 1003
	6-8 mm	M12S-F05B-T-D8	163 005 421 1004



M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	solde terminal	solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-8mm	4-10mm	4-10mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Contact material	copper alloy	copper alloy	copper alloy
Surface finishes	Au	Au	Au
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Straight cable connectors

Remark: SPQ is 5pcs

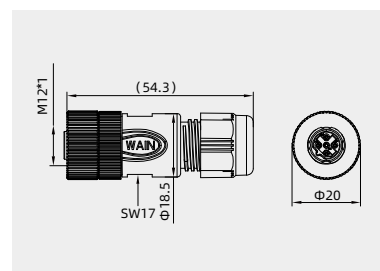
Male cable connector, plastic locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-FST03B-T-D6	163 003 423 3506
	6-8 mm	M12P-FST03B-T-D8	163 003 423 3507
4	4-6 mm	M12P-FST04B-T-D6	163 004 423 3510
	6-8 mm	M12P-FST04B-T-D8	163 004 423 3511
5	4-6 mm	M12P-FST05B-T-D6	163 005 423 3511
	6-8 mm	M12P-FST05B-T-D8	163 005 423 3512



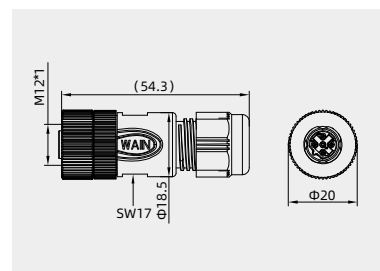
Male cable connector, metal locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03B-T-D6	163 003 423 3508
	6-8 mm	M12-FST03B-T-D8	163 003 423 3509
4	4-6 mm	M12-FST04B-T-D6	163 004 423 3512
	6-8 mm	M12-FST04B-T-D8	163 004 423 3513
5	4-6 mm	M12-FST05B-T-D6	163 005 423 3513
	6-8 mm	M12-FST05B-T-D8	163 005 423 3510



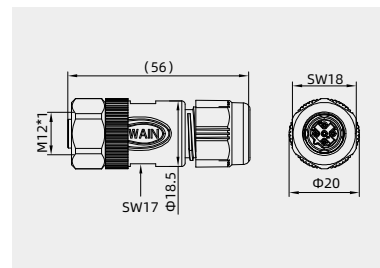
Male cable connector, stainless steel locking system,solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-FST03B-T-D6	163 003 423 3510
	6-8 mm	M12S-FST03B-T-D8	163 003 423 3511
4	4-6 mm	M12S-FST04B-T-D6	163 004 423 3514
	6-8 mm	M12S-FST04B-T-D8	163 004 423 3515
5	4-6 mm	M12S-FST05B-T-D6	163 005 423 3514
	6-8 mm	M12S-FST05B-T-D8	163 005 423 3515



M12-B

M12-B Circular Connector

125/250V 2/8A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	Contacts:1-4 8A; Contacts:5 2A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	8-10mm	8-10mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Straight cable connectors

Remark: SPQ is 5pcs

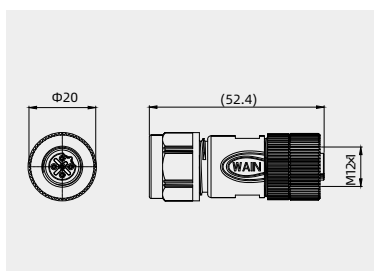
Female cable connector,
plastic locking system,
screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12P-F05B-T-D10	163 005 421 3108

B-Code



5pin



Female cable connector,
metal locking system,
screw clamp connection

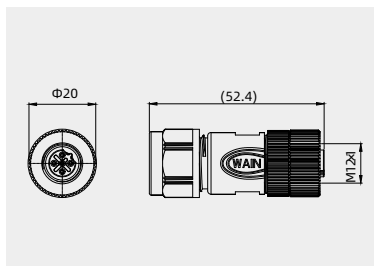
Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12-F05B-T-D10	163 005 421 1002

Recommended use

B-Code



5pin



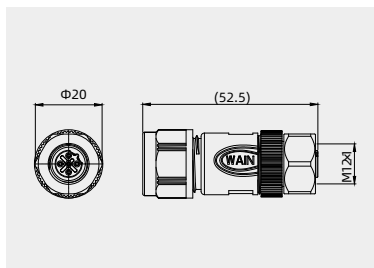
Female cable connector,
stainless steel locking system,
screw clamp connection

Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12S-F05B-T-D10	163 005 421 1005

B-Code



5pin



Female cable connector,
stainless steel locking system,
solde terminal

Contacts	Cable outlet	Designation	Order No.
4	8-10 mm	M12-FST04B-T-D10	163 004 423 3516
5	8-10 mm	M12-FST05B-T-D10	163 005 423 3516

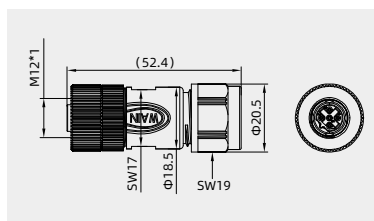
B-Code



4pin



5pin



M12-B Circular Connector

125/250V 4A

Technical characteristics

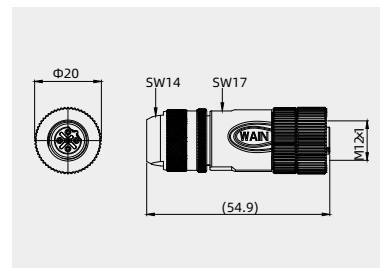
	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-10mm	4-10mm	4-10mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	zinc diecasting nickel plated, brass nickel plated	zinc diecasting nickel plated, brass nickel plated	zinc diecasting nickel plated, brass nickel plated

Straight cable connectors, shielded Remark: SPQ is 5pcs

Female cable connector, shielded,

screw clamp connection,
with shielding ringRecommended use

Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-F04B-T-D6-SH	163 104 421 2001
	6-8 mm	M12-F04B-T-D8-SH	163 004 421 2005
	8-10 mm	M12-F04B-T-D10-SH	163 004 421 2503
5	4-6 mm	M12-F05B-T-D6-SH	163 005 421 2006
	6-8 mm	M12-F05B-T-D8-SH	163 105 421 3003
	8-10 mm	M12-F05B-T-D10-SH	163 005 421 2503

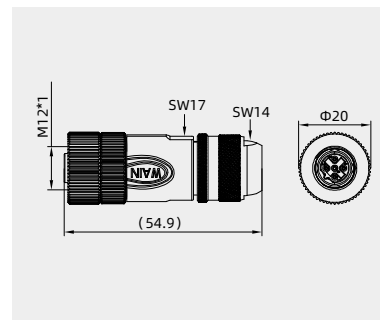


Female cable connector, shielded,

solde terminal, with shielding ring



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03B-T-D6-SH	163 003 423 2502
	6-8 mm	M12-FST03B-T-D8-SH	163 003 423 2503
	8-10 mm	M12-FST03B-T-D10-SH	163 003 423 2507
4	4-6 mm	M12-FST04B-T-D6-SH	163 004 423 2501
	6-8 mm	M12-FST04B-T-D8-SH	163 004 423 2502
	8-10 mm	M12-FST04B-T-D10-SH	163 004 423 2506
5	4-6 mm	M12-FST05B-T-D6-SH	163 005 423 2500
	6-8 mm	M12-FST05B-T-D8-SH	163 005 423 2501
	8-10 mm	M12-FST05B-T-D10-SH	163 005 423 2505



M12-B

M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8mm	4-6,6-8mm	4-6,6-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	zinc diecasting nickel plated	zinc diecasting nickel plated	zinc diecasting nickel plated

Straight cable connectors, shielded



Female cable connector, shielded,

screw clamp connection,
with shielding ring

Recommended use

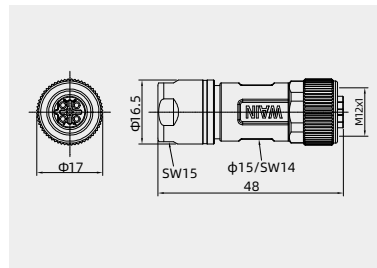


B-Code



4pin 5pin

Contacts	Cable outlet	Designation	Order No.
5	4-6 mm	M12-FC05B-T-D6-SH	163 005 420 2508
	6-8 mm	M12-FC05B-T-D8-SH	163 005 420 2504
	8-10 mm	M12-FC05B-T-D10-SH	163 005 420 2506



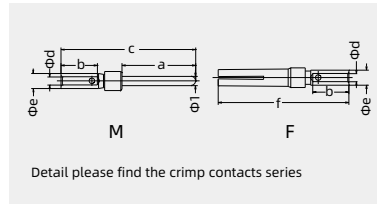
Crimp contacts

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated

Remark: SPQ is 1000pcs

Wire gauge(mm ²)	Male	Order No.	Female	Order No.
0.09-0.25	CSGM-0.25	101 014 210 0101	CSGF-0.25	101 014 220 0101
0.13-0.33	CSGM-0.33	101 014 210 0201	CSGF-0.33	101 014 220 0201
0.33-0.52	CSGM-0.52	101 014 210 0501	CSGF-0.52	101 014 220 0501
0.52-0.82	CSGM-0.82	101 014 210 0701	CSGF-0.82	101 014 220 0701



Detail please find the crimp contacts series

Tools

Crimping tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	screw	screw
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8 mm	4-6,6-8 mm
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	PA/PBT	PA/PBT

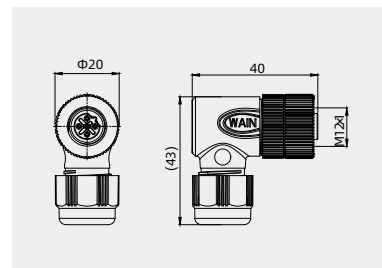
Angled cable connectors

Remark: SPQ is 1pc

Female cable connector,
plastic locking system,
screw clamp connection



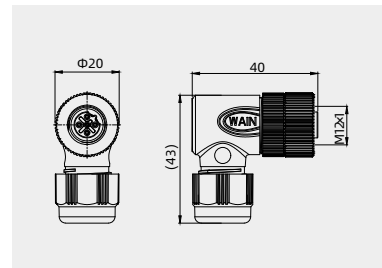
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12P-F04B-S-D6	163 004 521 3105
	6-8 mm	M12P-F04B-S-D8	163 004 521 3106
5	4-6 mm	M12P-F05B-S-D6	163 005 521 3103
	6-8 mm	M12P-F05B-S-D8	163 005 521 3104



Female cable connector,
metal locking system,
screw clamp connection



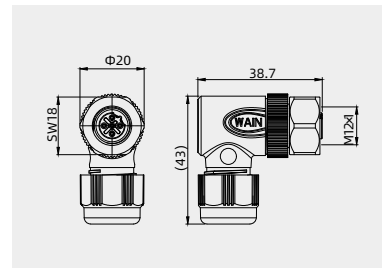
Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-F04B-S-D6	163 004 521 1001
	6-8 mm	M12-F04B-S-D8	163 004 521 1002
5	4-6 mm	M12-F05B-S-D6	163 005 521 1001
	6-8 mm	M12-F05B-S-D8	163 005 521 1002



Female cable connector,
stainless steel locking system,
screw clamp connection,



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12S-F04B-S-D6	163 004 521 1003
	6-8 mm	M12S-F04B-S-D8	163 004 521 1004
5	4-6 mm	M12S-F05B-S-D6	163 005 521 1004
	6-8 mm	M12S-F05B-S-D8	163 005 521 1005



M12-B

M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	solde terminal	solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-8mm	4-8mm	4-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Contact material	copper alloy	copper alloy	copper alloy
Surface finishes	Au	Au	Au
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Angled cable connectors

Remark: SPQ is 1pc

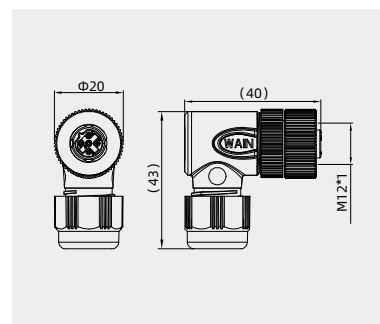
Female cable connector,
plastic locking system,
solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-FST03B-S-D6	163 003 523 3506
	6-8 mm	M12P-FST03B-S-D8	163 003 523 3507
4	4-6 mm	M12P-FST04B-S-D6	163 004 523 3508
	6-8 mm	M12P-FST04B-S-D8	163 004 523 3509
5	4-6 mm	M12P-FST05B-S-D6	163 005 523 3508
	6-8 mm	M12P-FST05B-S-D8	163 005 523 3509



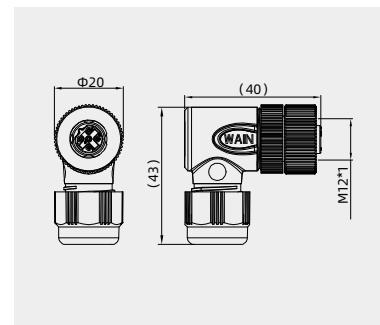
Female cable connector,
metal locking system,
solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03B-S-D6	163 003 523 3508
	6-8 mm	M12-FST03B-S-D8	163 003 523 3509
4	4-6 mm	M12-FST04B-S-D6	163 004 523 3510
	6-8 mm	M12-FST04B-S-D8	163 004 523 3511
5	4-6 mm	M12-FST05B-S-D6	163 005 523 3510
	6-8 mm	M12-FST05B-S-D8	163 005 523 3511



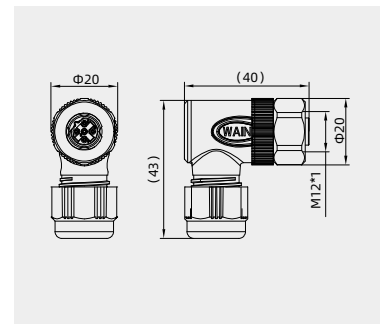
Female cable connector,
stainless steel locking system,
solde terminal



B-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-FST03B-S-D6	163 003 523 3510
	6-8 mm	M12S-FST03B-S-D8	163 003 523 3511
4	4-6 mm	M12S-FST04B-S-D6	163 004 523 3512
	6-8 mm	M12S-FST04B-S-D8	163 004 523 3513
5	4-6 mm	M12S-FST05B-S-D6	163 005 523 3512
	6-8 mm	M12S-FST05B-S-D8	163 005 523 3513



M12-B Circular Connector

125/250V 2/8A

Technical characteristics

	5-pole
Rated current(40°C)	Contacts:1-4 8A; Contacts:5 2A
Rated voltage	125V
Rated impulse voltage	1500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	screw
Wire gauge	max.1.5mm ² (max.AWG16)
Cable outlet	8-10mm
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-40°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	PA/PBT

Angled cable connectors

Remark: SPQ is 1pc

Female cable connector,
plastic locking system,
screw clamp connection

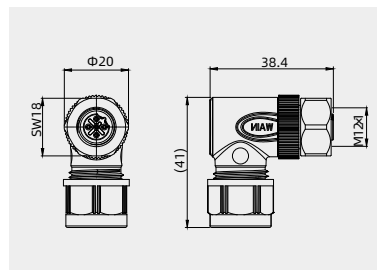
B-Code



5pin



Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12P-F05B-S-D10	163 005 521 3105



Female cable connector,
metal locking system,
screw clamp connection

Recommended use

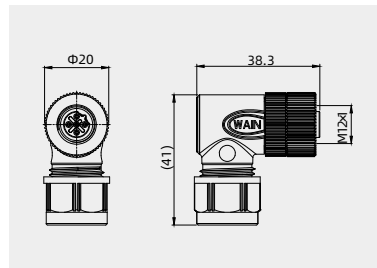
B-Code



5pin



Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12-F05B-S-D10	163 005 521 1003



Female cable connector,
stainless steel locking system,
screw clamp connection,

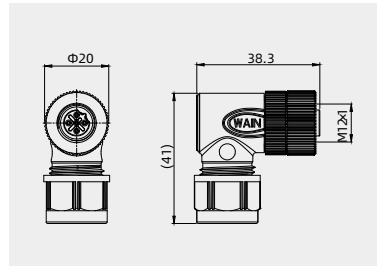
B-Code



5pin



Contacts	Cable outlet	Designation	Order No.
5	8-10 mm	M12S-F05B-S-D10	163 005 521 1006



M12-B

M12-B Circular Connector

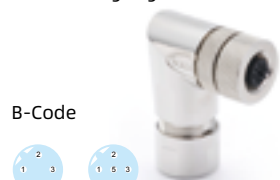
125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	solde terminal	screw terminal/solde terminal	screw terminal/solde terminal
Wire gauge	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)	max.0.75mm ² (max.AWG18)
Cable outlet	4-6,6-8mm	4-6,6-8mm	4-6,6-8mm
Degree of protection	IP67	IP67	IP67
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

Angled cable connectors, shielded Remark: SPQ is 1pc

Female cable connector, shielded,
screw clamp connection,
with shielding ring

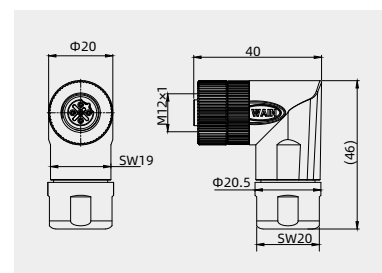


B-Code



4pin 5pin

Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-F04B-S-D6-SH	163 004 521 2003
	6-8 mm	M12-F04B-S-D8-SH	163 004 521 2004
5	4-6 mm	M12-F05B-S-D6-SH	163 005 521 2003
	6-8 mm	M12-F05B-S-D8-SH	163 005 521 2004



Female cable connector, shielded,
solde terminal, with shielding ring

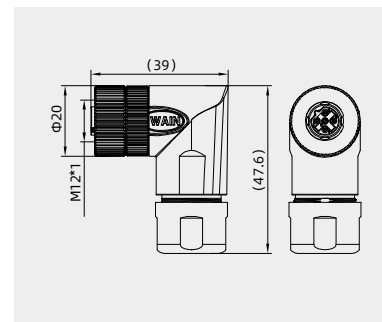


B-Code



3pin 4pin 5pin

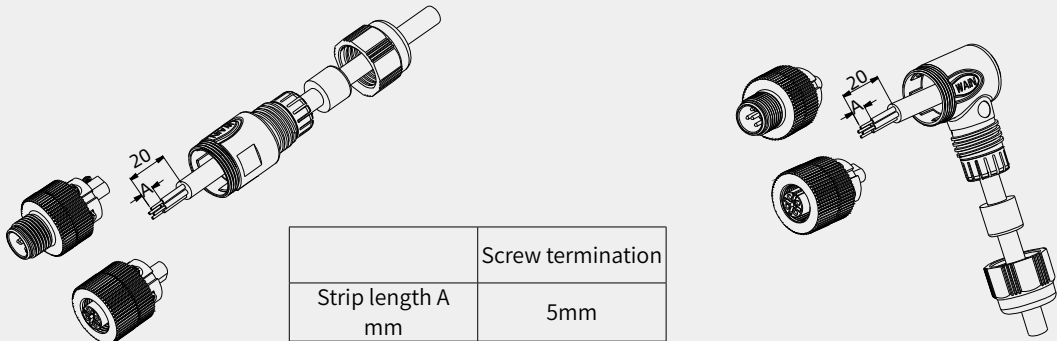
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03B-S-D6-SH	163 003 523 3512
	6-8 mm	M12-FST03B-S-D8-SH	163 003 523 4500
4	4-6 mm	M12-FST04B-S-D6-SH	163 004 523 2502
	6-8 mm	M12-FST04B-S-D8-SH	163 004 523 2503
5	4-6 mm	M12-FST05B-S-D6-SH	163 005 523 2502
	6-8 mm	M12-FST05B-S-D8-SH	163 005 523 2503



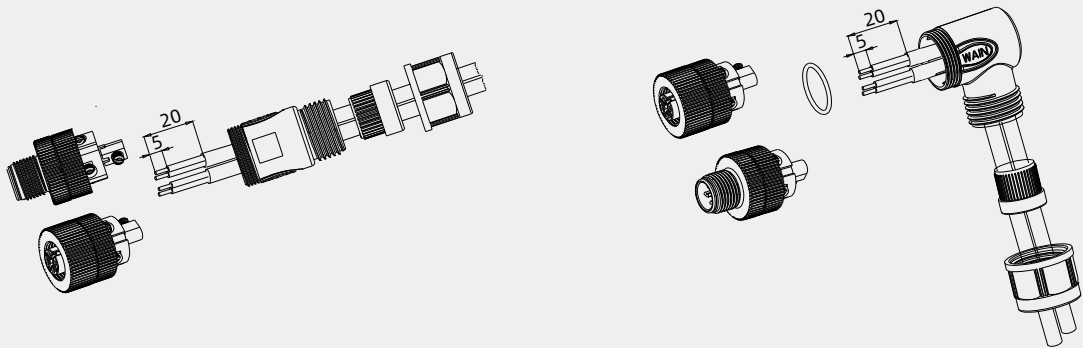
Assembly instruction

• Assembly instruction

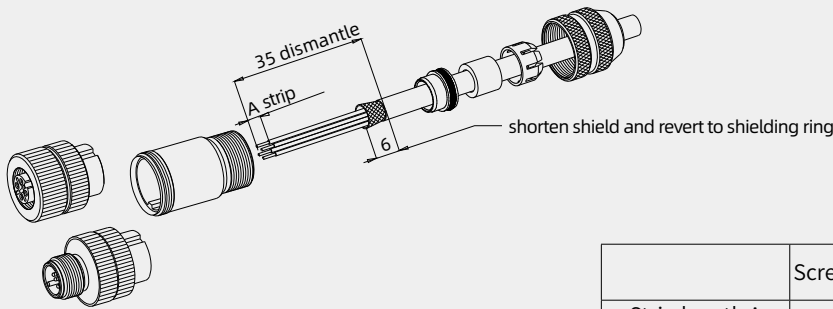
- Strip length male/female cable connector, male/female angled connector, **not shielded**



- Strip length male/female cable duo connector, male/female angled duo connector, **not shielded**

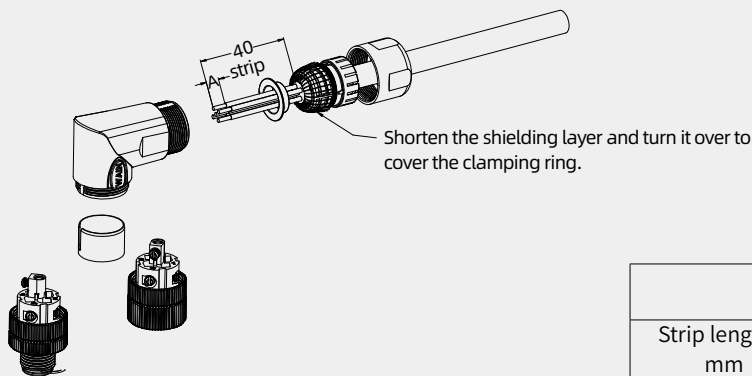


- Strip length male/female cable connector, **with shielding ring**



• Assembly instruction

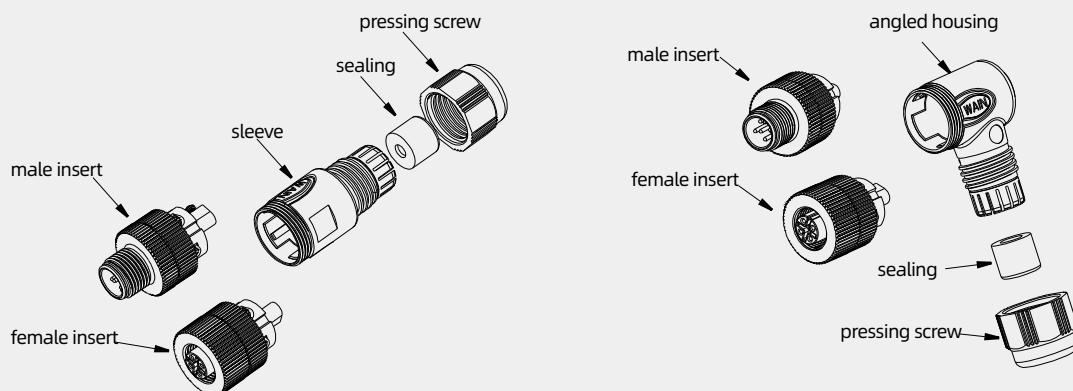
- Stripping length of male/female angled cable connector , [with shielded ring](#).



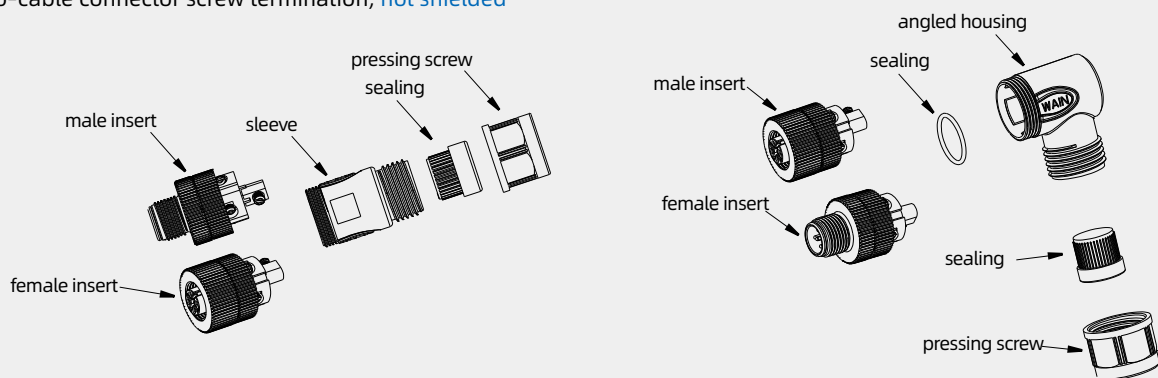
	Screw termination
Strip length A mm	5mm

• Component part drawing

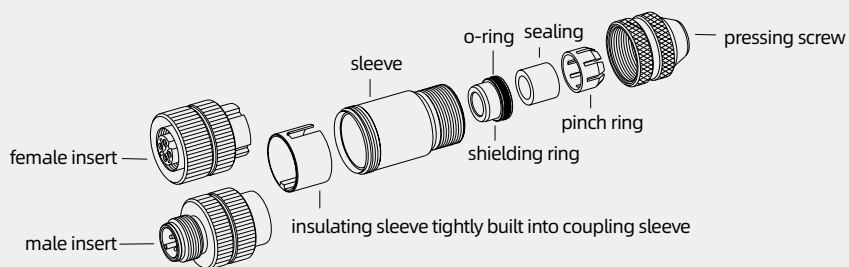
- Cable connector **not shielded**



- Duo-cable connector screw termination, **not shielded**

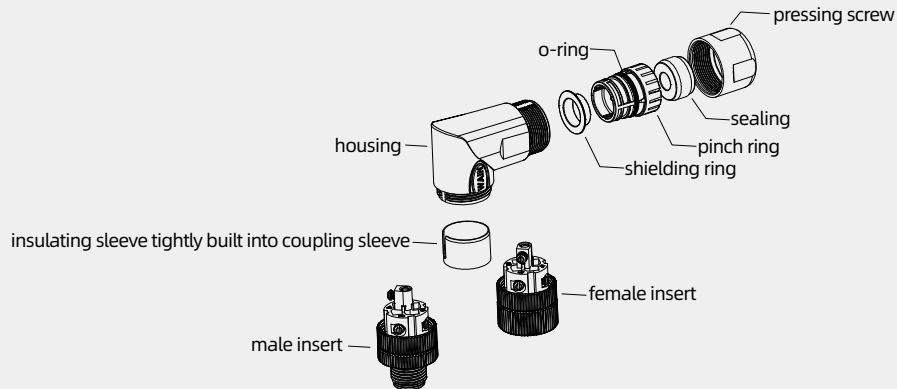


- Cable connector **with shielding ring**



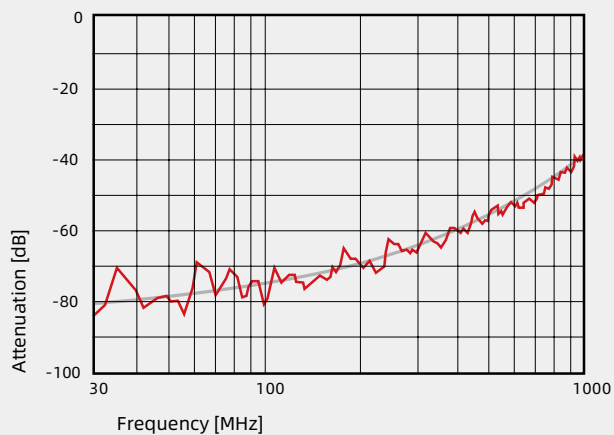
• Component part drawing

- Angled connector Screw termination, **shielded**

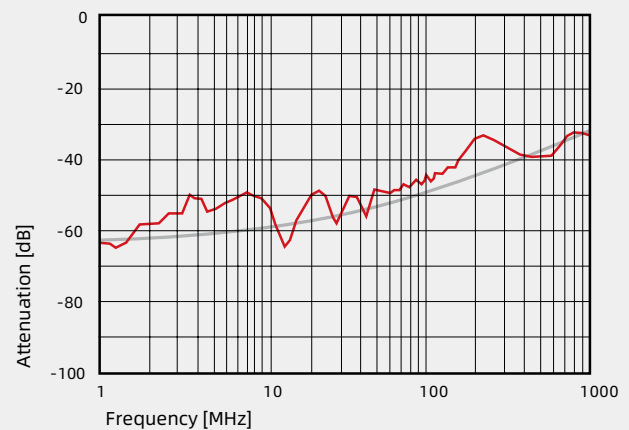


• Rating

- Attenuation curve according to DIN 47250-6
- For straight cable connectors, with shielding ring

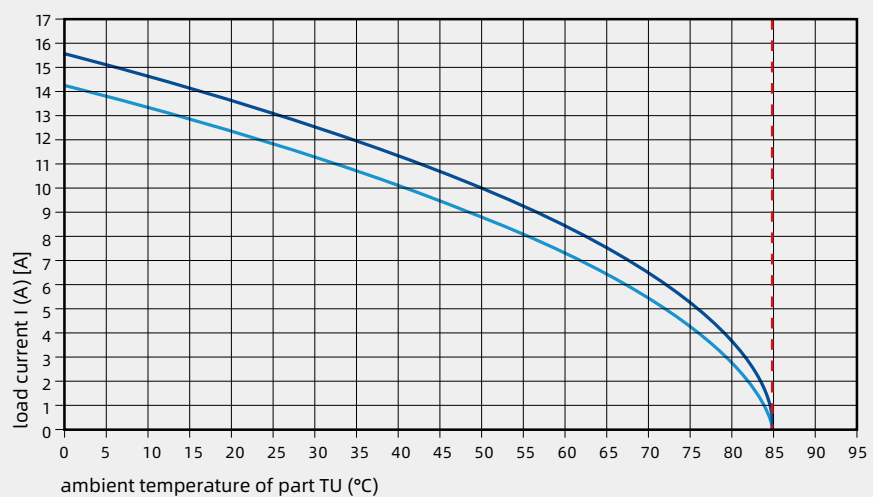


- Attenuation curve according to DIN 47250-6
- For straight cable connectors, with iris type spring



- Derating curve according to DIN EN 60512 for POWER cable connectors

- 4 pole version
- 5 pole version



M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	crimp, moulded	crimp, moulded	crimp, moulded
Wire gauge	max.0.34mm ² (AWG22)	max.0.34mm ² (AWG22)	max.0.25mm ² AWG24)
Cable outlet	-	-	-
Degree of protection	IP67 shielded	IP67 shielded	IP67 shielded
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-25°C ...+85°C	-25°C ...+85°C	-25°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	TPU	TPU	TPU

Straight cable connectors,cable Remark: SPQ is 1pc

Male connector moulded,screw shielded

Recommended use



Contacts	Cable	Cable length	Designation	Order No.
3	3x0.34PVC	1.5 m	M12-M03B-T-1.5-PVC-SH	163 003 401 4045
		5.0 m	M12-M03B-T-5.0-PVC-SH	163 003 401 4046
	3x0.34PUR	1.5 m	M12-M03B-T-1.5-PUR-SH	163 003 401 4043
		5.0 m	M12-M03B-T-5.0-PUR-SH	163 003 401 4044
4	4x0.34PVC	1.5 m	M12-M04B-T-1.5-PVC-SH	163 004 401 4047
		5.0 m	M12-M04B-T-5.0-PVC-SH	163 004 401 4048
	4x0.34PUR	1.5 m	M12-M04B-T-1.5-PUR-SH	163 004 401 4045
		5.0 m	M12-M04B-T-5.0-PUR-SH	163 004 401 4046
5	5x0.25PVC	1.5 m	M12-M05B-T-1.5-PVC-SH	163 005 401 4043
		5.0 m	M12-M05B-T-5.0-PVC-SH	163 005 401 4044
	5x0.25PUR	1.5 m	M12-M05B-T-1.5-PUR-SH	163 005 401 4063
		5.0 m	M12-M05B-T-5.0-PUR-SH	163 005 401 4064

B-Code



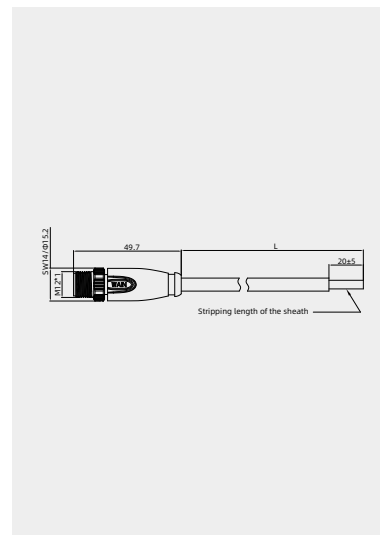
3pin



4pin



5pin



M12-B

•Further cable length upon request.

M12-B Circular Connector

125/250V 4A

Technical characteristics

	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	crimp, moulded	crimp, moulded	crimp, moulded
Wire gauge	max.0.34mm ² (AWG22)	max.0.34mm ² (AWG22)	max.0.25mm ² AWG24)
Cable outlet	-	-	-
Degree of protection	IP67 shielded	IP67 shielded	IP67 shielded
Mechanical operation	> 100	> 100	> 100
Limiting temperature	-25°C ...+85°C	-25°C ...+85°C	-25°C ...+85°C
Material group	II	II	II
Material of contact	copper alloy	copper alloy	copper alloy
Contact plating	Au	Au	Au
Insulating material	PA	PA	PA
Material of housing	TPU	TPU	TPU

Straight cable connectors,cable Remark: SPQ is 1pc

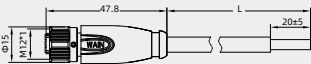
Female connector moulded,screw shielded

Recommended use



Contacts	Cable	Cable length	Designation	Order No.
3	3x0.34PVC	1.5 m	M12-F03B-T-1.5-PVC-SH	163 003 402 4046
		5.0 m	M12-F03B-T-5.0-PVC-SH	163 003 402 4047
	3x0.34PUR	1.5 m	M12-F03B-T-1.5-PUR-SH	163 003 402 4043
		5.0 m	M12-F03B-T-5.0-PUR-SH	163 003 402 4044
4	4x0.34PVC	1.5 m	M12-F04B-T-1.5-PVC-SH	163 004 402 4046
		5.0 m	M12-F04B-T-5.0-PVC-SH	163 004 402 4047
	4x0.34PUR	1.5 m	M12-F04B-T-1.5-PUR-SH	163 004 402 4045
		5.0 m	M12-F04B-T-5.0-PUR-SH	163 004 402 4044
5	5x0.25PVC	1.5 m	M12-F05B-T-1.5-PVC-SH	163 005 402 4046
		5.0 m	M12-F05B-T-5.0-PVC-SH	163 005 402 4044
	5x0.25PUR	1.5 m	M12-F05B-T-1.5-PUR-SH	163 005 402 4064
		5.0 m	M12-F05B-T-5.0-PUR-SH	163 005 402 4065

B-Code



•Further cable length upon request.

M12-B Circular Connector

250V 4A

Technical characteristics

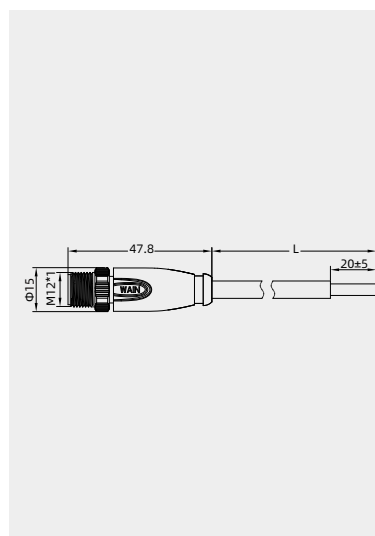
	2-pole
Rated current(40°C)	4A
Rated voltage	250V
Rated impulse voltage	2500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	crimp, moulded
Wire gauge	max.0.34mm ² (AWG22)
Cable outlet	-
Degree of protection	IP67 shielded
Mechanical operation	> 100
Limiting temperature	-25°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	TPU

Straight cable connectors,cable Remark: SPQ is 1pcMale connector moulded,screw
shieldedRecommended use

Contacts	Cable	Cable length	Designation	Order No.
2	2x0.25PVC	1.5 m	M12-M02B-T-1.5-PVC-DP	163 002 401 4005
		5.0 m	M12-M02B-T-5.0-PVC-DP	163 002 401 4007
	2x0.25PUR	1.5 m	M12-M02B-T-1.5-PUR-DP	163 002 401 4006
		5.0 m	M12-M02B-T-5.0-PUR-DP	163 002 401 4008



B-Code



M12-B

•Further cable length upon request.

M12-B Circular Connector

250V 4A

Technical characteristics

	2-pole
Rated current(40°C)	4A
Rated voltage	250V
Rated impulse voltage	2500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	crimp, moulded
Wire gauge	max.0.34mm²(AWG22)
Cable outlet	-
Degree of protection	IP67 shielded
Mechanical operation	> 100
Limiting temperature	-25°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	TPU

Straight cable connectors,cable Remark: SPQ is 1pc

Female connector moulded,screw shielded

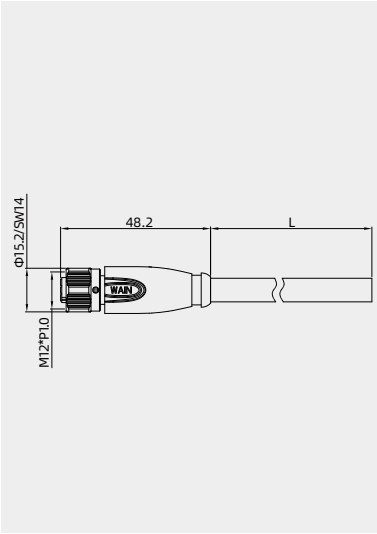
Recommended use

Contacts	Cable	Cable length	Designation	Order No.
2	2x0.25PVC	1.5 m	M12-F02B-T-1.5-PVC-DP	163 002 402 4001
		5.0 m	M12-F02B-T-5.0-PVC-DP	163 002 402 4003
	2x0.25PUR	1.5 m	M12-F02B-T-1.5-PUR-DP	163 002 402 4002
		5.0 m	M12-F02B-T-5.0-PUR-DP	163 002 402 4004



M12-B

B-Code



•Further cable length upon request.

M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	single-strand wires	single-strand wires
Wire gauge	max.0.75mm ² (AWG18)	max.0.75mm ² (AWG18)
Cable outlet	-	-
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	zinc diecasting nickel plated	zinc diecasting nickel plated

Socket

Male panel mount connector
with single wires, 0.25mm²
length 0.2m

Recommended use



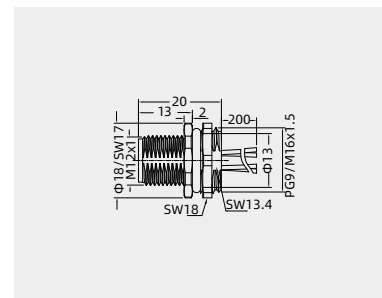
B-Code



Remark: SPQ is 1pc

Contacts	Thread	Designation	Order No.
4	PG9	M12-M04B-BK-PG9-W0.25	163 004 301 4004
	M16x1.5	M12-M04B-BK-M16-W0.25	163 004 301 4005
5	PG9	M12-M05B-BK-PG9-W0.25	163 005 301 4002
	M16x1.5	M12-M05B-BK-M16-W0.25	163 005 301 4003

Customized cable length upon request



Male panel mount connector, solder

Recommended use

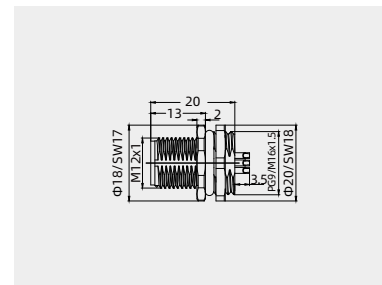


B-Code



Remark: SPQ is 10pcs

Contacts	Thread	Designation	Order No.
4	PG9	M12-M04B-BK-PG9-C	163 004 313 1002
	M16x1.5	M12-M04B-BK-M16-C	163 004 313 1003
5	PG9	M12-M05B-BK-PG9-C	163 005 313 1002
	M16x1.5	M12-M05B-BK-M16-C	163 005 313 1003



Male panel mount connector, dip solder

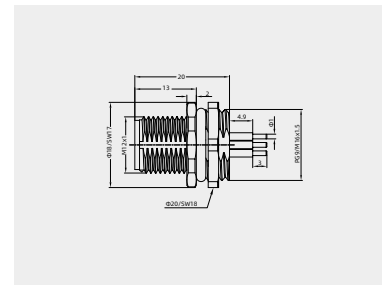


B-Code



Remark: SPQ is 10pcs

Contacts	Thread	Designation	Order No.
4	PG9	M12-M04B-BK-PG9-D	163 004 314 1003
	M16x1.5	M12-M04B-BK-M16-D	163 004 314 1004
5	PG9	M12-M05B-BK-PG9-D	163 005 314 1003
	M16x1.5	M12-M05B-BK-M16-D	163 005 314 1004



M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1
Termination	single-strand wires	single-strand wires
Wire gauge	max.0.75mm ² (AWG18)	max.0.75mm ² (AWG18)
Cable outlet	-	-
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	zinc diecasting nickel plated	zinc diecasting nickel plated

Socket

Male panel mount connector

with single wires, 0,25mm²

length 0.2m, front fastened

Recommended use



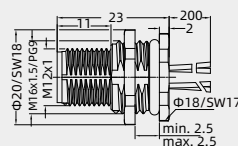
B-Code



Remark: SPQ is 1pc

Contacts	Thread	Designation	Order No.
4	PG9	M12-M04B-BKR-PG9-W0.25	163 004 301 4012
	M16x1.5	M12-M04B-BKR-M16-W0.25	163 004 301 4015
5	PG9	M12-M05B-BKR-PG9-W0.25	163 005 301 4012
	M16x1.5	M12-M05B-BKR-M16-W0.25	163 005 301 4013

Customized cable length upon request



Male panel mount connector,

front fastened, dip solder

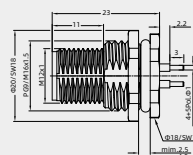


B-Code



Remark: SPQ is 10pcs

Contacts	Thread	Designation	Order No.
4	PG9	M12-M04B-BKR-PG9-D	163 004 314 1012
	M16x1.5	M12-M04B-BKR-M16-D	163 004 314 1013
5	PG9	M12-M05B-BKR-PG9-D	163 005 314 1012
	M16x1.5	M12-M05B-BKR-M16-D	163 005 314 1013



M12-B Circular Connector

125/250V 4A

Technical characteristics



	5-pole
Rated current(40°C)	4A
Rated voltage	125V
Rated impulse voltage	1500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	Crimp terminal
Wire gauge	max.0.82mm ² (max.AWG18)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-40°C ...+85°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	zinc diecasting nickel plated

Socket

Male cable connector, Crimp terminal

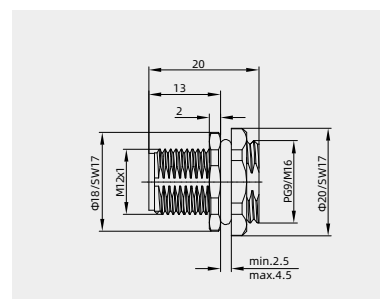


B-Code



5pin

Contacts	Thread	Designation	Order No.
5	PG9	M12-MC05B-BK-PG9	163 005 310 1502
	M16x1.5	M12-MC05B-BK-M16	163 005 310 1503



Male cable connector, Crimp terminal, front fastened

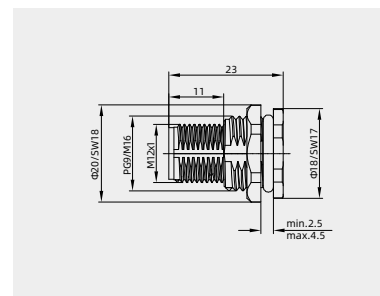


B-Code



5pin

Contacts	Thread	Designation	Order No.
5	PG9	M12-MC05B-BKR-PG9	163 005 310 1508
	M16x1.5	M12-MC05B-BKR-M16	163 005 310 1509



Male insert

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated

Contacts	Designation	Order No.
male	M12-MC4G-0.25	101 013 210 0150
	M12-MC4G-0.33	101 013 210 0250
	M12-MC4G-0.52	101 013 210 0550
	M12-MC4G-0.82	101 013 210 0750

a	b	c	d	e	f
8.10	4.0	13.7	0.64	1.66	11.7
8.10	4.0	13.7	0.9	1.66	11.7
8.10	4.0	13.7	1.12	1.66	11.7
8.23	4.0	13.7	1.35	1.75	11.7
Wire gauge					
Strip length					
0.09-0.25mm ²	AWG28-24		4mm		
0.13-0.33mm ²	AWG26-22		4mm		
0.33-0.52mm ²	AWG22-20		4mm		
0.52-0.82mm ²	AWG22-18		4mm		

Tools

Crimping tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

M12-B Circular Connector

125/250V 4A

Technical characteristics

	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	Thread	Thread
Termination	solder,single-strand wires	solder,single-strand wires
Wire gauge	max.0.75mm ² (AWG18)	max.0.75mm ² (AWG18)
Cable outlet	-	-
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	zinc diecasting nickel plated	zinc diecasting nickel plated

Socket

Female panel mount connector
with single wires, /0.25mm²/length
0.2m



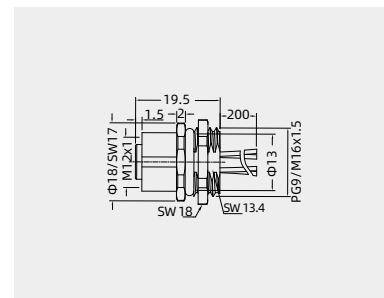
B-Code



Remark: SPQ is 1pc

Contacts	Thread	Designation	Order No.
4	PG9	M12-F04B-BK-PG9-W0.25	163 004 302 4003
	M16x1.5	M12-F04B-BK-M16-W0.25	163 004 302 4004
5	PG9	M12-F05B-BK-PG9-W0.25	163 005 302 4007
	M16x1.5	M12-F05B-BK-M16-W0.25	163 005 302 4008

Customized cable length upon request



Female panel mount connector, solder
PG9/M16x1.5

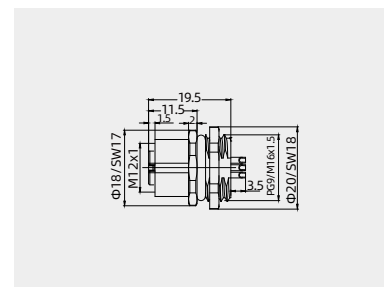


B-Code



Remark: SPQ is 10pcs

Contacts	Thread	Designation	Order No.
4	PG9	M12-F04B-BK-PG9-C	163 004 323 1002
	M16x1.5	M12-F04B-BK-M16-C	163 004 323 1003
5	PG9	M12-F05B-BK-PG9-C	163 005 323 1002
	M16x1.5	M12-F05B-BK-M16-C	163 005 323 1003



Female panel mount connector,
dip solder

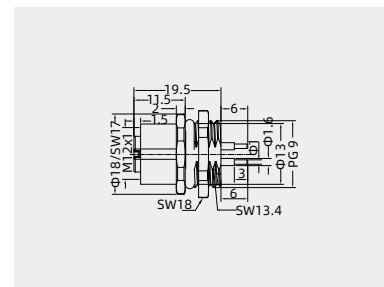


B-Code



Remark: SPQ is 10pcs

Contacts	Thread	Designation	Order No.
4	PG9	M12-F04B-BK-PG9-D	163 004 324 1003
	M16x1.5	M12-F04B-BK-M16-D	163 004 324 1004
5	PG9	M12-F05B-BK-PG9-D	163 005 324 1003
	M16x1.5	M12-F05B-BK-M16-D	163 005 324 1004



M12-B Circular Connector

125/250V 4A

Technical characteristics



	4-pole	5-pole
Rated current(40°C)	4A	4A
Rated voltage	250V	125V
Rated impulse voltage	2500V	1500V
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	Thread	Thread
Termination	solder,single-strand wires	solder,single-strand wires
Wire gauge	max.0.75mm ² (AWG18)	max.0.75mm ² (AWG18)
Cable outlet	-	-
Degree of protection	IP67	IP67
Mechanical operation	> 100	> 100
Limiting temperature	-40°C ...+85°C	-40°C ...+85°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PA	PA
Material of housing	zinc diecasting nickel plated	zinc diecasting nickel plated

Socket

Female cable connector, Crimp terminal

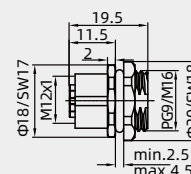


B-Code



5pin

Contacts	Thread	Designation	Order No.
5	PG9	M12-FC05B-BK-PG9	163 005 320 1504
	M16x1.5	M12-FC05B-BK-M16	163 005 320 1505



Female cable connector, Crimp terminal, front fastened

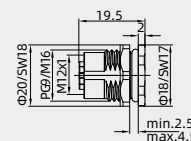


B-Code



5pin

Contacts	Thread	Designation	Order No.
5	PG9	M12-FC05B-BKR-PG9	163 005 320 1510
	M16x1.5	M12-FC05B-BKR-M16	163 005 320 1511

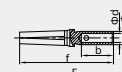


Male insert

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated

Contacts	Designation	Order No.
female	M12-FC4G-0.25	101 013 220 0150
	M12-FC4G-0.33	101 013 220 0250
	M12-FC4G-0.52	101 013 220 0550
	M12-FC4G-0.82	101 013 220 0750



a	b	c	d	e	f
8.10	4.0	13.7	0.64	1.66	11.7
8.10	4.0	13.7	0.9	1.66	11.7
8.10	4.0	13.7	1.12	1.66	11.7
8.23	4.0	13.7	1.35	1.75	11.7
Wire gauge					
0.09-0.25mm ² AWG28-24					
0.13-0.33mm ² AWG26-22					
0.33-0.52mm ² AWG22-20					
0.52-0.82mm ² AWG22-18					
Strip length					
4mm					
4mm					
4mm					
4mm					

Tools

Crimping tool



Remark: SPQ is 1pc

Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002

Notes: The tools for crimp terminal may influence the product quality and stability. Please select the tools recognized by our company.

Accessories

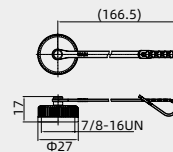
Protection covers IP67

Protection cover
for male cable connector



备注：标准包装量 10pcs

Description	Designation	Order No.
Without cord	M12-MCV	163 000 001 9003
With cord	M12-MCV/1	163 000 001 9001

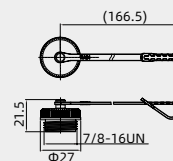


Protection cover
for female cable connector



Remark: SPQ is 10pcs

Description	Designation	Order No.
Without cord	M12-FCV	163 000 002 9003
With cord	M12-FCV/1	163 000 002 9001

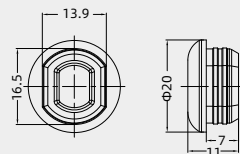


Protection covers, for flange
mount panel



Remark: SPQ is 10pcs

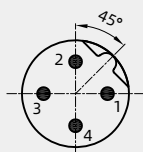
Description	Designation	Order No.
Dust-proof	M12-WNPP-M16/BK	163 000 000 9001



• Contact arrangements

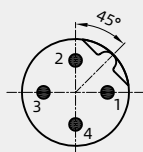
• Male insert (mating side)

2 contacts



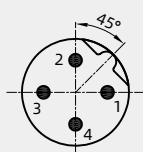
	X	Y	
1			1. n.C
2	0.00	2.50	2. green
3			3. n.C
4	0.00	-2.50	4. red

3 contacts



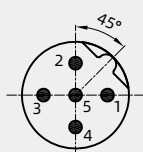
	X	Y	
1	2.50	0.00	1. brown
2			2. n.C
3	-2.50	0.00	3. blue
4	0.00	-2.50	4. black

4 contacts



	X	Y	
1	2.50	0.00	1. brown
2	0.00	2.50	2. white
3	-2.50	0.00	3. blue
4	0.00	-2.50	4. black

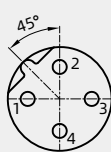
5 contacts



	X	Y	
1	2.50	0.00	1. brown
2	0.00	2.50	2. white
3	-2.50	0.00	3. blue
4	0.00	-2.50	4. black
5	0.00	0.00	5. grey

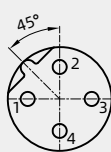
• Female insert (mating side)

2 contacts



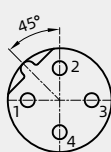
	X	Y	
1			1. n.C
2	0.00	2.50	2. green
3			3. n.C
4	0.00	-2.50	4. red

3 contacts



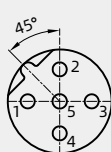
	X	Y	
1	-2.50	0.00	1. brown
2			2. n.C
3	2.50	0.00	3. blue
4	0.00	-2.50	4. black

4 contacts



	X	Y	
1	-2.50	0.00	1. brown
2	0.00	2.50	2. white
3	2.50	0.00	3. blue
4	0.00	-2.50	4. black

5 contacts

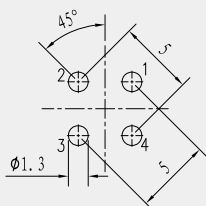


	X	Y	
1	-2.50	0.00	1. brown
2	0.00	2.50	2. white
3	2.50	0.00	3. blue
4	0.00	-2.50	4. black
5	0.00	0.00	5. grey

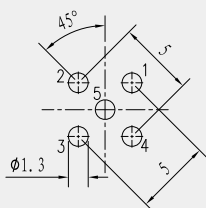
- Panel cut out

- Opening hole drawing male insert(PCB),
Panel mount connectors

4 contacts

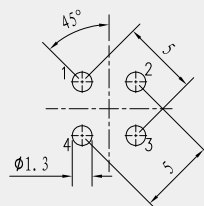


5 contacts

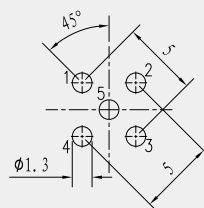


- Opening hole drawing female insert(PCB),
Panel mount connectors

4 contacts



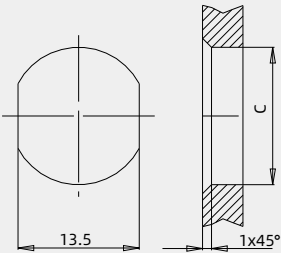
5 contacts



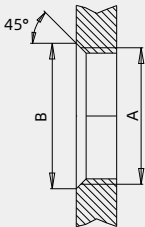
• Panel cut out

• Panel mount connectors

• Through-hole mounting



• Screw mounting



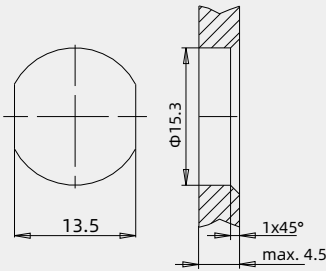
	A	B	C
PG9	PG9	16.2	15.3
PG13.5	PG13.5	21.5	20.5
M16x1.5	M16x1.5	17.0	16.1
M20x1.5	M20x1.5	21.0	20.1

Tightening torque according to
DIN VDE 0619
Metal housing 6,25 Nm
Plastic housing 3,75 Nm

• Panel mount connectors

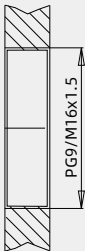
• Rear panel mounting,
front tighten

• Through-hole mounting



• Panel mount connectors
front tighten

• Through-hole mounting



Tightening torque 6,25 Nm

M12-B



M12-B