

M12 Circular Connector,D-code



- Cable Connector
- Shielded / unshielded series
- Installable series and cast 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
- Protection grade IP67
- Anti-loose spring with nut

M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder 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 alloy

Straight cable connectors

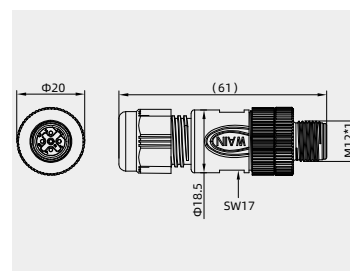
Remark: SPQ is 5pcs

Male cable connector,plastic
locking system, solder

D-Code



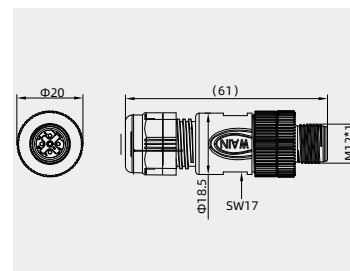
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-MST03D-T-D6	163 003 413 3514
	6-8 mm	M12P-MST03D-T-D8	163 003 413 3515
4	4-6 mm	M12P-MST04D-T-D6	163 004 413 3521
	6-8 mm	M12P-MST04D-T-D8	163 004 413 3522
5	4-6 mm	M12P-MST05D-T-D6	163 005 413 3521
	6-8 mm	M12P-MST05D-T-D8	163 005 413 3522

Male cable connector,metal
locking system, solder

D-Code



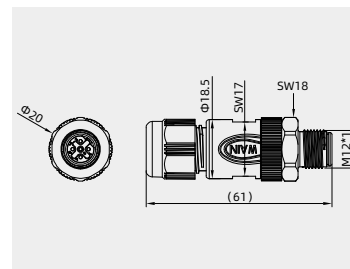
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03D-T-D6	163 003 413 3516
	6-8 mm	M12-MST03D-T-D8	163 003 413 3517
4	4-6 mm	M12-MST04D-T-D6	163 004 413 3523
	6-8 mm	M12-MST04D-T-D8	163 004 413 3524
5	4-6 mm	M12-MST05D-T-D6	163 005 413 3523
	6-8 mm	M12-MST05D-T-D8	163 005 413 3520

Male cable connector,stainless
steel locking system, solder

D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-MST03D-T-D6	163 003 413 3518
	6-8 mm	M12S-MST03D-T-D8	163 003 413 3519
4	4-6 mm	M12S-MST04D-T-D6	163 004 413 3525
	6-8 mm	M12S-MST04D-T-D8	163 004 413 3526
5	4-6 mm	M12S-MST05D-T-D6	163 005 413 3524
	6-8 mm	M12S-MST05D-T-D8	163 005 413 3525



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder 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

Male cable connector,metal
locking system, solder

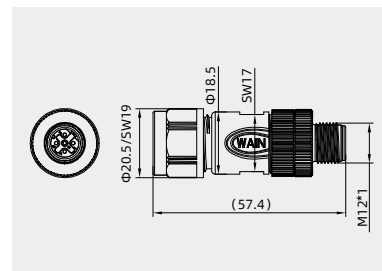
D-Code



4pin

5pin

Contacts	Cable outlet	Designation	Order No.
4	8-10 mm	M12-MST04D-T-D10	163 004 413 3527
5	8-10 mm	M12-MST05D-T-D10	163 005 413 3526



M12-D Circular Connector

250V 4A

Technical characteristics

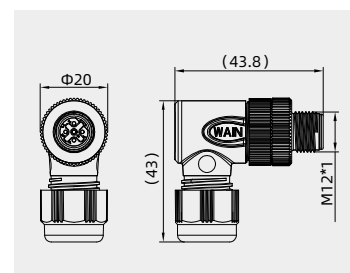
Number of contacts	3-pole	4-pole	5-pole
Rated current(40°C)	4A	4A	4A
Rated voltage	250V	250V	125V
Rated impulse voltage	2500V	2500V	1500V
Pollution degree	3	3	3
Overvoltage categorie	II	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	screw M12x1	screw M12x1	screw M12x1
Termination	Solder terminal	Solder terminal	Solder 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 alloy

Angled cable connectors Remark: SPQ is 1pcMale cable connector,plastic
locking system, solder

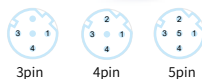
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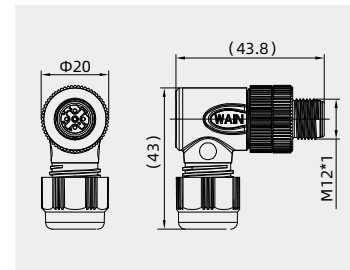
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-MST03D-S-D6	163 003 513 3512
	6-8 mm	M12P-MST03D-S-D8	163 003 513 3513
4	4-6 mm	M12P-MST04D-S-D6	163 004 513 3516
	6-8 mm	M12P-MST04D-S-D8	163 004 513 3517
5	4-6 mm	M12P-MST05D-S-D6	163 005 513 3517
	6-8 mm	M12P-MST05D-S-D8	163 005 513 3518

Male cable connector,metal
locking system, solder

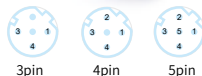
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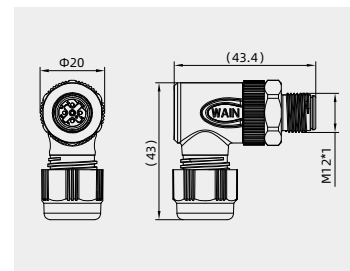
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03D-S-D6	163 003 513 3514
	6-8 mm	M12-MST03D-S-D8	163 003 513 3515
4	4-6 mm	M12-MST04D-S-D6	163 004 513 3518
	6-8 mm	M12-MST04D-S-D8	163 004 513 3519
5	4-6 mm	M12-MST05D-S-D6	163 005 513 3519
	6-8 mm	M12-MST05D-S-D8	163 005 513 3520

Male cable connector,stainless
steel locking system, solder

D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-MST03D-S-D6	163 003 513 3516
	6-8 mm	M12S-MST03D-S-D8	163 003 513 3517
4	4-6 mm	M12S-MST04D-S-D6	163 004 513 3520
	6-8 mm	M12S-MST04D-S-D8	163 004 513 3521
5	4-6 mm	M12S-MST05D-S-D6	163 005 513 3521
	6-8 mm	M12S-MST05D-S-D8	163 005 513 3522



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder terminal
Wire gauge	max.0.75mm²(max.AWG18)	max.0.75mm²(max.AWG18)	max.0.75mm²(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 alloy

Angled cable connectors

Remark: SPQ is 1pc

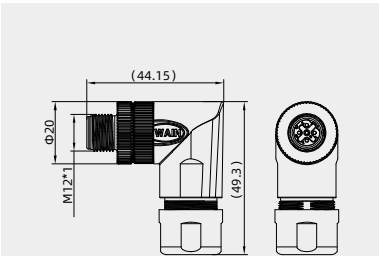
Male cable connector,metal
locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03D-S-D6-SH	163 003 513 2504
	6-8 mm	M12-MST03D-S-D8-SH	163 003 513 2505
4	4-6 mm	M12-MST04D-S-D6-SH	163 004 513 2504
	6-8 mm	M12-MST04D-S-D8-SH	163 004 513 2505
5	4-6 mm	M12-MST05D-S-D6-SH	163 005 513 2503
	6-8 mm	M12-MST05D-S-D8-SH	163 005 513 2504



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	screw, crimp
Wire gauge	max.0.75mm ² (max.AWG18), max.0.82mm²(max.AWG18)
Cable outlet	4-6mm,6-8mm,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 Remark: SPQ is 5pcs

Male cable connector, shielded,
Cat.5e Screw terminal,
with shielding ring
Recommended use

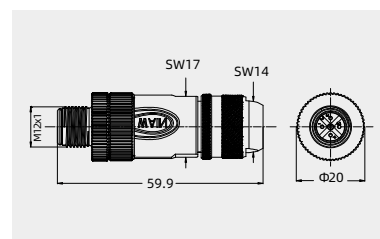
D-Code



4pin



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-M04D-T-D6-SH	163 204 411 2001
	6-8 mm	M12-M04D-T-D8-SH	163 204 411 2002
	8-10 mm	M12-M04D-T-D10-SH	163 004 411 2502



Male cable connector, shielded,
Cat.5e Screw terminal,
with shielding ring
Order crimp contacts separately

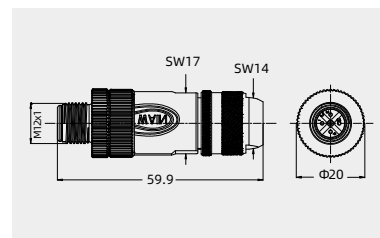
D-Code



4pin



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-MC04D-T-D6-SH	163 004 010 2001
	6-8 mm	M12-MC04D-T-D8-SH	163 004 010 2002
	8-10 mm	M12-MC04D-T-D10-SH	163 004 411 2501



Male cable connector,Screw terminal,
with shielding ring,Metal Coding
Order crimp contacts separately

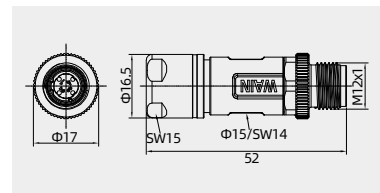
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4pin



Contacts	Cable outlet	Designation	Order No.
4	6-8 mm	M12-MC04D-TR-D8-SH	163 004 110 2500



Crimp contacts

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated



Tools

Crimping tool

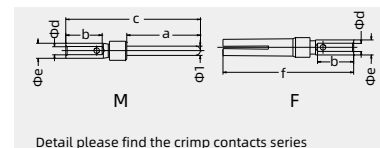


Remark: SPQ is 100pcs

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

Remark: SPQ is 1pc

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



Detail please find the crimp contacts series

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

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder 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 alloy

Straight cable connectors

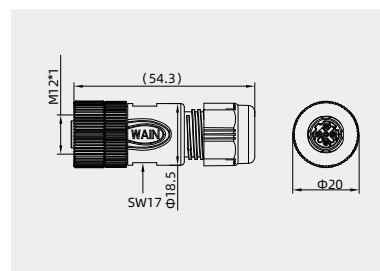
Remark: SPQ is 5pcs

Female cable connector,plastic
locking system, solder

D-Code



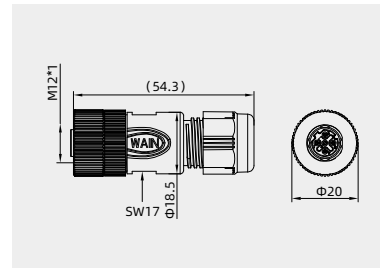
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-FST03D-T-D6	163 003 423 3512
	6-8 mm	M12P-FST03D-T-D8	163 003 423 3513
4	4-6 mm	M12P-FST04D-T-D6	163 004 423 3520
	6-8 mm	M12P-FST04D-T-D8	163 004 423 3521
5	4-6 mm	M12P-FST05D-T-D6	163 005 423 3521
	6-8 mm	M12P-FST05D-T-D8	163 005 423 3522

Female cable connector,metal
locking system, solder

D-Code



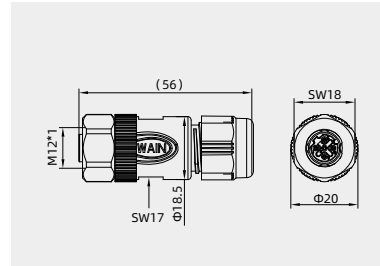
Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03D-T-D6	163 003 423 3514
	6-8 mm	M12-FST03D-T-D8	163 003 423 3515
4	4-6 mm	M12-FST04D-T-D6	163 004 423 3522
	6-8 mm	M12-FST04D-T-D8	163 004 423 3523
5	4-6 mm	M12-FST05D-T-D6	163 005 423 3523
	6-8 mm	M12-FST05D-T-D8	163 005 423 3520

Female cable connector,stainless
steel locking system, solder

D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-FST03D-T-D6	163 003 423 3516
	6-8 mm	M12S-FST03D-T-D8	163 003 423 3517
4	4-6 mm	M12S-FST04D-T-D6	163 004 423 3524
	6-8 mm	M12S-FST04D-T-D8	163 004 423 3525
5	4-6 mm	M12S-FST05D-T-D6	163 005 423 3524
	6-8 mm	M12S-FST05D-T-D8	163 005 423 3525



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder 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,metal
locking system, solder

D-Code

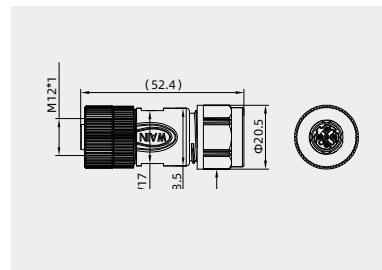


4pin



5pin

Contacts	Cable outlet	Designation	Order No.
4	8-10 mm	M12-FST04D-T-D10	163 004 423 3526
5	8-10 mm	M12-FST05D-T-D10	163 005 423 3526



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder 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	4-8mm
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	
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

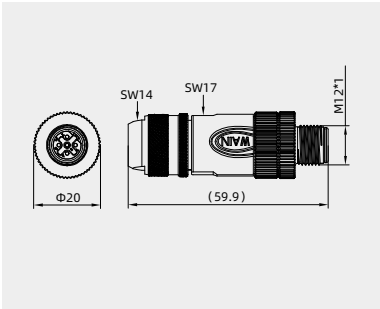
Male cable connector,metal
locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-MST03D-T-D6-SH	163 003 413 2502
	6-8 mm	M12-MST03D-T-D8-SH	163 003 413 2503
	8-10 mm	M12-MST03D-T-D10-SH	163 003 413 2506
4	4-6 mm	M12-MST04D-T-D6-SH	163 204 413 2001
	6-8 mm	M12-MST04D-T-D8-SH	163 004 413 2502
	8-10 mm	M12-MST04D-T-D10-SH	163 004 413 2505
5	4-6 mm	M12-MST05D-T-D6-SH	163 005 413 2502
	6-8 mm	M12-MST05D-T-D8-SH	163 005 413 2503
	8-10 mm	M12-MST05D-T-D10-SH	163 005 413 2506



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder 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 alloy

Angled cable connectors

Remark: SPQ is 1pc

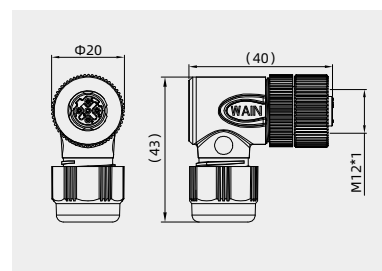
Female cable connector,plastic locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12P-FST03D-S-D6	163 003 523 3513
	6-8 mm	M12P-FST03D-S-D8	163 003 523 3514
4	4-6 mm	M12P-FST04D-S-D6	163 004 523 3516
	6-8 mm	M12P-FST04D-S-D8	163 004 523 3517
5	4-6 mm	M12P-FST05D-S-D6	163 005 523 3516
	6-8 mm	M12P-FST05D-S-D8	163 005 523 3517



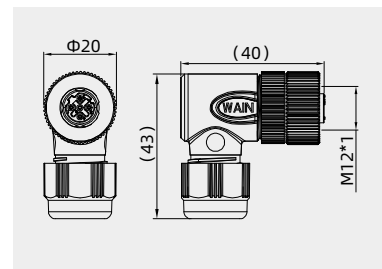
Female cable connector,metal locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03D-S-D6	163 003 523 3515
	6-8 mm	M12-FST03D-S-D8	163 003 523 3516
4	4-6 mm	M12-FST04D-S-D6	163 004 523 3518
	6-8 mm	M12-FST04D-S-D8	163 004 523 3519
5	4-6 mm	M12-FST05D-S-D6	163 005 523 3518
	6-8 mm	M12-FST05D-S-D8	163 005 523 3519



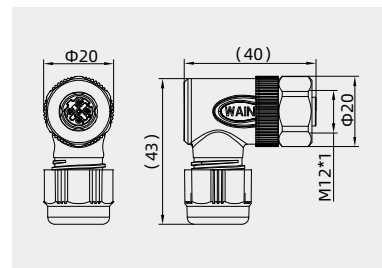
Female cable connector,stainless steel locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12S-FST03D-S-D6	163 003 523 3517
	6-8 mm	M12S-FST03D-S-D8	163 003 523 3518
4	4-6 mm	M12S-FST04D-S-D6	163 004 523 3520
	6-8 mm	M12S-FST04D-S-D8	163 004 523 3521
5	4-6 mm	M12S-FST05D-S-D6	163 005 523 3520
	6-8 mm	M12S-FST05D-S-D8	163 005 523 3521



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	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	Solder terminal	Solder terminal	Solder 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	
Material of housing	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy	PA/PBT/zinc alloy/copper alloy

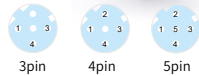
Angled cable connectors

Remark: SPQ is 1pc

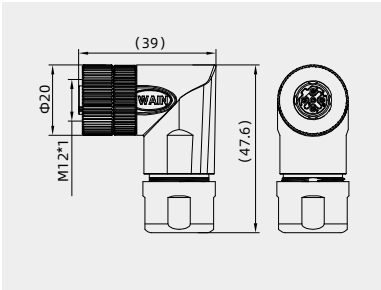
Female cable connector,metal locking system, solder



D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03D-S-D6-SH	163 003 523 2500
	6-8 mm	M12-FST03D-S-D8-SH	163 003 523 2501
4	4-6 mm	M12-FST04D-S-D6-SH	163 004 523 2504
	6-8 mm	M12-FST04D-S-D8-SH	163 004 523 2505
5	4-6 mm	M12-FST05D-S-D6-SH	163 005 523 2504
	6-8 mm	M12-FST05D-S-D8-SH	163 005 523 2505



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	screw, crimp
Wire gauge	max.0.75mm ² (max.AWG18), max.0.82mm²(max.AWG18)
Cable outlet	4-6mm, 6-8mm, 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

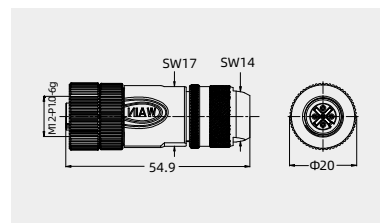
Remark: SPQ is 5pcs

Female cable connector, shielded,
Cat.5e Screw terminal,
with shielding ring
Recommended use

D-Code



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-F04D-T-D6-SH	163 204 421 2001
	6-8 mm	M12-F04D-T-D8-SH	163 204 421 2002
	8-10 mm	M12-F04D-T-D10-SH	163 004 421 2500

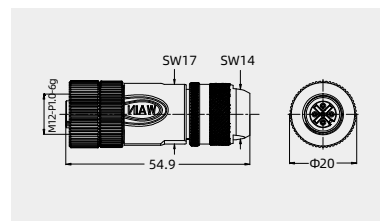


Female cable connector, shielded,
Cat.5e Crimp terminal,
with shielding ring
Order crimp contacts separately

D-Code



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-FC04D-T-D6-SH	163 004 020 2001
	6-8 mm	M12-FC04D-T-D8-SH	163 004 020 2002
	8-10 mm	M12-FC04D-T-D10-SH	163 004 421 2501

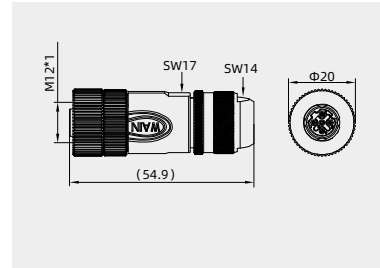


Female cable connector, shielded,
solder

D-Code



Contacts	Cable outlet	Designation	Order No.
3	4-6 mm	M12-FST03D-T-D6-SH	163 003 423 2504
	6-8 mm	M12-FST03D-T-D8-SH	163 003 423 2505
	8-10 mm	M12-FST03D-T-D10-SH	163 003 423 2508
4	4-6 mm	M12-FST04D-T-D6-SH	163 004 423 2503
	6-8 mm	M12-FST04D-T-D8-SH	163 004 423 2504
	8-10 mm	M12-FST04D-T-D10-SH	163 004 423 2507
5	4-6 mm	M12-FST05D-T-D6-SH	163 005 423 2502
	6-8 mm	M12-FST05D-T-D8-SH	163 005 423 2503
	8-10 mm	M12-FST05D-T-D10-SH	163 005 423 2506



Crimp contacts

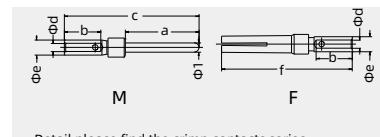
Remark: SPQ is 100pcs

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated



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-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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
Wire gauge	max.0.82mm ² (max.AWG18)
Cable outlet	6-8mm
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

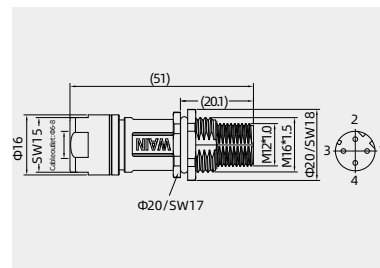
Flange base cable connector, shielded Remark: SPQ is 5pcs

Male cable connector, shielded,
Cat.5e Crimp terminal ,
with shielding ring
Order crimp contacts separately
Recommended use

D-Code



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-MC04D-CCT/R-M16-D8-SH	163 004 510 2001



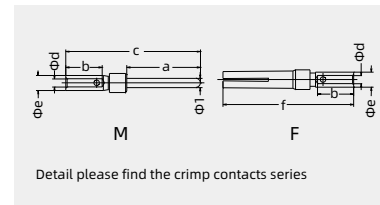
Crimp contacts

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated

Remark: SPQ is 100pcs

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



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-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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
Wire gauge	max.0.82mm ² (max.AWG18)
Cable outlet	6-8mm
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

Flange base cable connector, shielded Remark: SPQ is 5pcs

Female cable connector, shielded,

Cat.5e Crimp terminal ,

with shielding ring

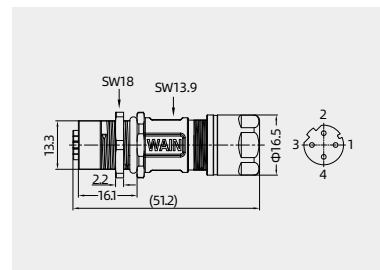
Order crimp contacts separately

Recommended use

D-Code



Contacts	Cable outlet	Designation	Order No.
4	4-6 mm	M12-FC04D-CCT/R-M16-D8-SH	163 004 520 2003

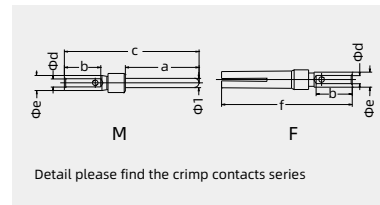


Crimp contacts

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold platedRemark: SPQ is 100pcs

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

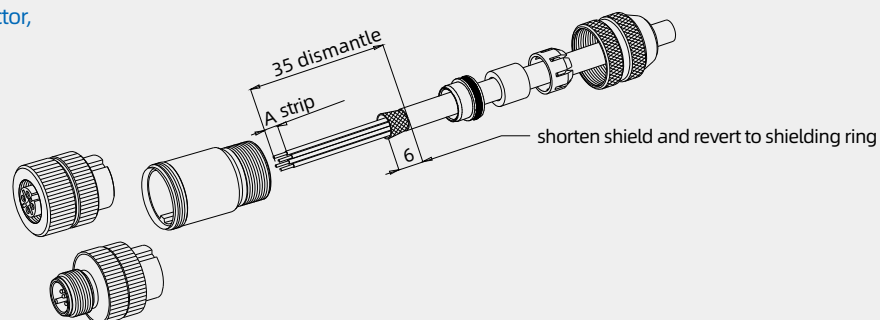
Wire gauge	Designation	Order No.
0.09-0.82mm ²	TL03	198 001 001 0002

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

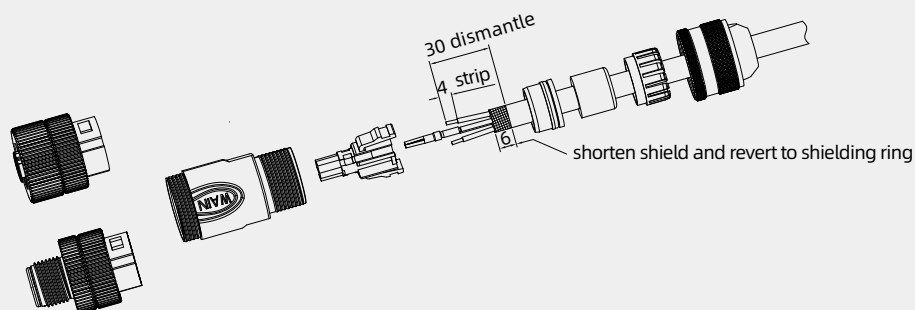
M12-D Circular Connector

- assembly instruction/Component part drawing

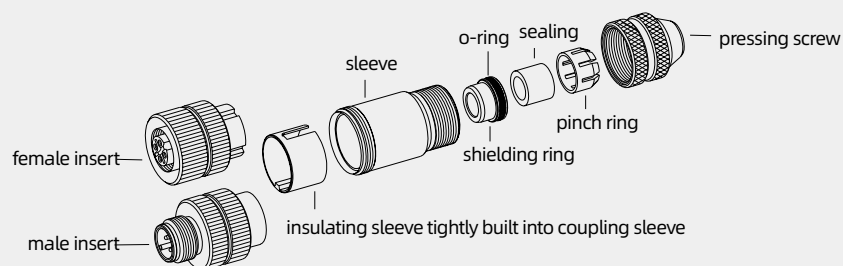
- Assembly instruction
- Strip length male/female cable connector, with shielding ring, screw terminal



- Assembly instruction
- Strip length male/female cable connector, with shielding ring, crimp terminal

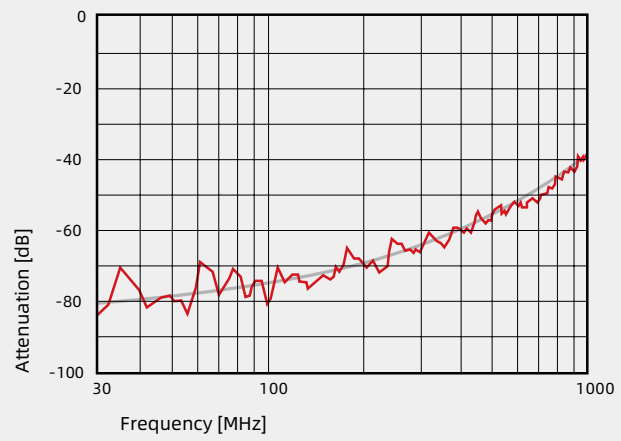


- Component part drawing
- Cable connector with shielding ring



- Rating

- Attenuation curve according to DIN 47250-6 for straight cable connectors screw termination (cable version IEEE 802.3)



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	0.34mm ² (AWG22)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 500
Limiting temperature	-20°C ...+60°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

Male cable connector, PROFINET

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T-1.5-PUR-PFN	163 204 401 4081
	5.0 m	M12-M04D-T-5.0-PUR-PFN	163 204 401 4082



D-Code

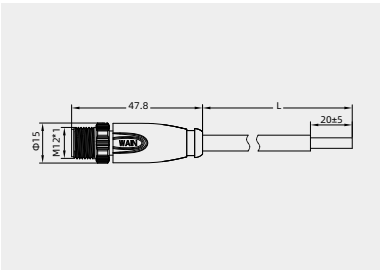
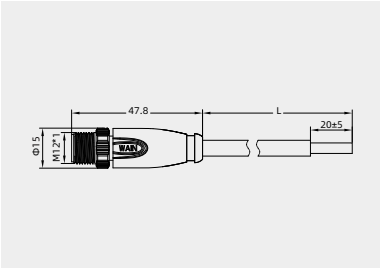


Male cable connector, Cat.5e Ethernet

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T-1.5-PUR-Cat.5e	163 204 401 4091
	5.0 m	M12-M04D-T-5.0-PUR-Cat.5e	163 204 401 4092



D-Code



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	0.34mm ² (AWG22)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 500
Limiting temperature	-20°C ...+60°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 cable connector, PROFINET

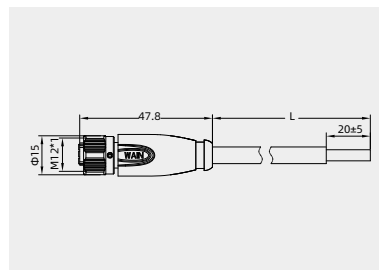


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T-1.5-PUR-PFN	163 204 402 4081
	5.0 m	M12-F04D-T-5.0-PUR-PFN	163 204 402 4082



Female cable connector, Cat.5e

Ethernet

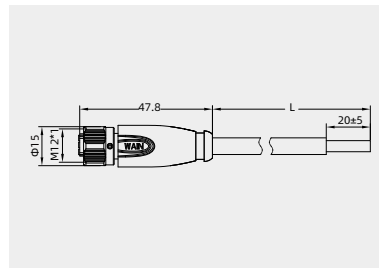


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T-1.5-PUR-Cat.5e	163 204 402 4091
	5.0 m	M12-F04D-T-5.0-PUR-Cat.5e	163 204 402 4092



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	0.34mm ² (AWG22)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 500
Limiting temperature	-20°C ...+60°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	TPU

Cable connectors-wire jumper

Remark: SPQ is 1pc

Male cable connector, PROFINET

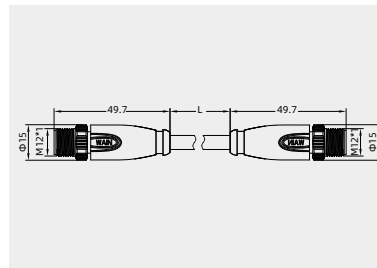


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/M04D-T-1.5-PUR-PFN	163 004 401 4508
	5.0 m	M12-M04D-T/M04D-T-5.0-PUR-PFN	163 004 401 4507



Female cable connector, PROFINET

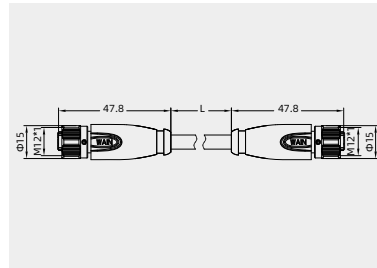


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T/F04D-T-1.5-PUR-PFN	163 004 402 4510
	5.0 m	M12-F04D-T/F04D-T-5.0-PUR-PFN	163 004 402 4509



Male,Female, PROFINET



D-Code

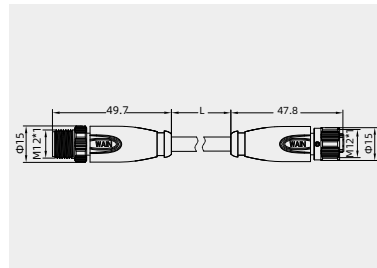


4pin



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/F04D-T-1.5-PUR-PFN	163 004 400 4016
	5.0 m	M12-M04D-T/F04D-T-5.0-PUR-PFN	163 004 401 4502



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	0.14mm ² (AWG26)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 500
Limiting temperature	-20°C ...+60°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	TPU

Cable connectors-wire jumper

Remark: SPQ is 1pc

Male cable connector,Cat.5e

Ethernet

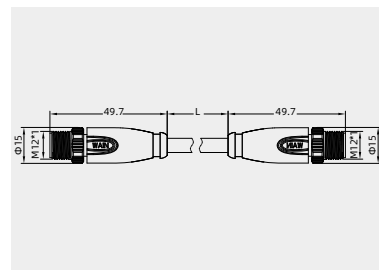


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/M04D-T-1.5-PUR-Cat.5e	163 004 401 4510
	5.0 m	M12-M04D-T/M04D-T-5.0-PUR-Cat.5e	163 004 401 4509



Female cable connector, Cat.5e

Ethernet

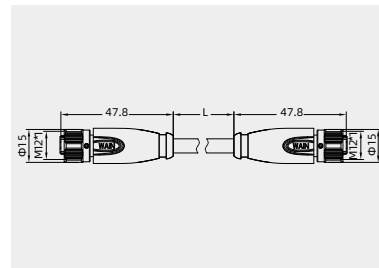


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T/F04D-T-1.5-PUR-Cat.5e	163 004 402 4512
	5.0 m	M12-F04D-T/F04D-T-5.0-PUR-Cat.5e	163 004 402 4511



Cat.5e Ethernet



D-Code

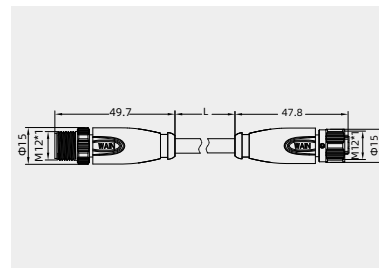


4pin



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/F04D-T-1.5-PUR-Cat.5e	163 004 400 4017
	5.0 m	M12-M04D-T/F04D-T-5.0-PUR-Cat.5e	163 004 001 4013



•Further cable length upon request, minimum order quantity is 200 pcs.

M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	0.14mm ² (AWG26)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 500
Limiting temperature	-20°C ...+60°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

Male cable connector, Cat.5e

Ethernet

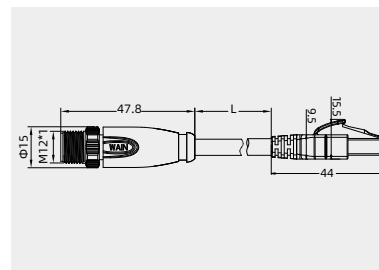


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/RJ45-T-1.5-PUR-Cat.5e	163 004 001 4021
	5.0 m	M12-M04D-T/RJ45-T-5.0-PUR-Cat.5e	163 004 001 4004



Female cable connector, Cat.5e

Ethernet

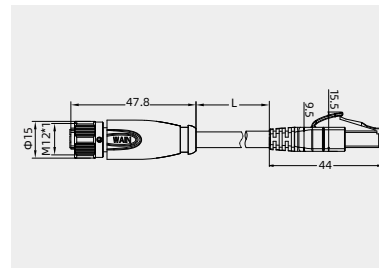


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T/RJ45-T-1.5-PUR-Cat.5e	163 004 402 4506
	5.0 m	M12-F04D-T/RJ45-T-5.0-PUR-Cat.5e	163 004 402 4507

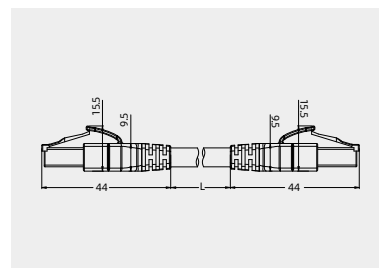


Cat.5e Ethernet

Ethernet, Cat.5e



Contacts	Cable length	Designation	Order No.
4	1.5 m	2RJ45-T-M04-T-1.5-PUR-Cat.5e	172 004 000 4002
	5.0 m	2RJ45-T-M04-T-5.0-PUR-Cat.5e	172 004 000 4001



M12-D Circular Connector

60V 1A

Technical characteristics

Number of contacts	4
Rated current (40°C)	1A
Rated voltage	60V
Rated impulse voltage	2500V
Pollution degree	3
Overvoltage categorie	II
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	crimp, moulded
Wire gauge	0.34mm ² (AWG22)
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-20°C ...+60°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

Male cable connector, PROFINET

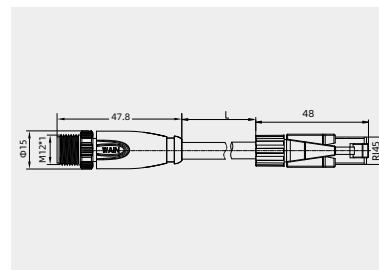


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-M04D-T/RJ45P-T-1.5-PUR-PFN	163 004 001 4056
	5.0 m	M12-M04D-T/RJ45P-T-5.0-PUR-PFN	163 004 001 4057



Female cable connector, PROFINET

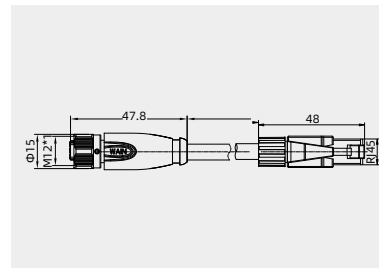


D-Code



4pin

Contacts	Cable length	Designation	Order No.
4	1.5 m	M12-F04D-T/RJ45P-T-1.5-PUR-PFN	163 004 002 4004
	5.0 m	M12-F04D-T/RJ45P-T-5.0-PUR-PFN	163 004 002 4005



M12-D

M12-D Circular Connector

30V 1.5A

Technical characteristics



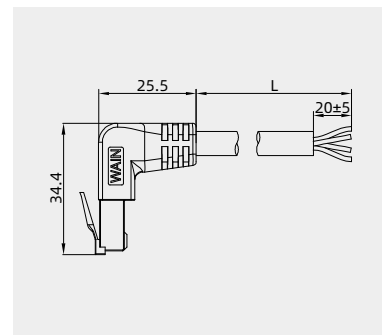
Number of contacts	4	8
Rated current (40°C)	1.5A	1.5A
Rated voltage	30V	30V
Rated impulse voltage	-	-
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	-	-
Termination	-	-
Wire gauge	0.14mm ² (26AWG)	0.14mm ² -0.25mm ² (24-26AWG)
Cable outlet	-	-
Degree of protection	IP20	IP20
Mechanical operation	≥ 750	≥ 750
Limiting temperature	-20°C ...+60°C	-20°C ...+60°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PC	PC
Material of housing	TPU	TPU

Elbow Connector

Male cable connector,
Upward elbow



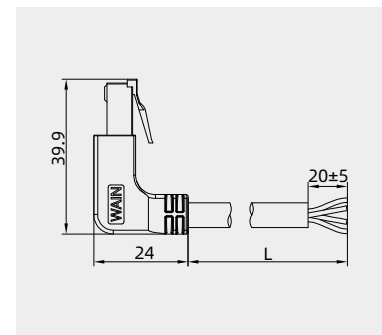
Contacts	Cable length	Designation	Order No.
4	1.5 m		172 004 501 4500
	5.0 m	RJ45-M04-SU-5.0-PUR-Cat.5e	172 004 501 4501
8	1.5 m	RJ45-M08-SU-1.5-PUR-Cat.5e	172 008 501 4500
	5.0 m	RJ45-M08-SU-5.0-PUR-Cat.5e	172 008 501 4501
8	1.5 m	RJ45-M08-SU-1.5-PUR-Cat.6a	172 008 501 4502
	5.0 m	RJ45-M08-SU-5.0-PUR-Cat.6a	172 008 501 4503



Male cable connector,
Downward elbow



Contacts	Cable length	Designation	Order No.
4	1.5 m	RJ45-M04-SD-1.5-PUR-Cat.5e	172 004 501 4502
	5.0 m	RJ45-M04-SD-5.0-PUR-Cat.5e	172 004 501 4503
8	1.5 m	RJ45-M08-SD-1.5-PUR-Cat.5e	172 008 501 4504
	5.0 m	RJ45-M08-SD-5.0-PUR-Cat.5e	172 008 501 4505
8	1.5 m	RJ45-M08-SD-1.5-PUR-Cat.6a	172 008 501 4506
	5.0 m	RJ45-M08-SD-5.0-PUR-Cat.6a	172 008 501 4507



M12-D Circular Connector

30V 1.5A

Technical characteristics



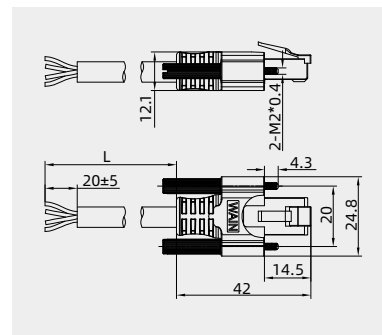
Number of contacts	4	8
Rated current (40°C)	1.5A	1.5A
Rated voltage	30V	30V
Rated impulse voltage	-	-
Pollution degree	3	3
Overvoltage categorie	II	II
Contact resistance	≤ 10 mΩ	≤ 10 mΩ
Connector locking system	-	-
Termination	-	-
Wire gauge	0.14mm ² (26AWG)	0.14mm ² -0.25mm ² (24-26AWG)
Cable outlet	-	-
Degree of protection	IP20	IP20
Mechanical operation	≥ 750	≥ 750
Limiting temperature	-20°C ...+60°C	-20°C ...+60°C
Material group	II	II
Material of contact	copper alloy	copper alloy
Contact plating	Au	Au
Insulating material	PC	PC
Material of housing	TPU	TPU

Double Locking Connector

Male cable connector



Contacts	Cable length	Designation	Order No.
4	1.5 m	RJ45-M04-TM2-1.5-PUR-Cat.5e	172 004 101 4501
	5.0 m	RJ45-M04-TM2-5.0-PUR-Cat.5e	172 004 101 4502
8	1.5 m	RJ45-M08-TM2-1.5-PUR-Cat.5e	172 008 401 4638
	5.0 m	RJ45-M08-TM2-5.0-PUR-Cat.5e	172 008 401 4639
8	1.5 m	RJ45-M08-TM2-1.5-PUR-Cat.6a	172 008 401 4640
	5.0 m	RJ45-M08-TM2-5.0-PUR-Cat.6a	172 008 401 4641

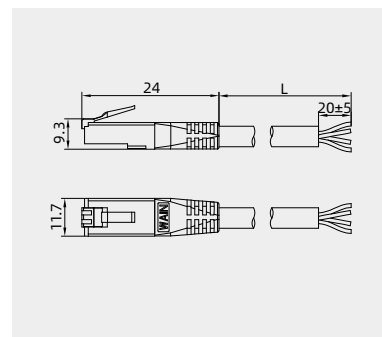


compact connector

Male cable connector



Contacts	Cable length	Designation	Order No.
4	1.5 m	SRJ45-M04-T-1.5-PUR-Cat.5e	172 004 101 4503
	5.0 m	SRJ45-M04-T-5.0-PUR-Cat.5e	172 004 101 4504
8	1.5 m	SRJ45-M08-T-1.5-PUR-Cat.5e	172 008 401 4642
	5.0 m	SRJ45-M08-T-5.0-PUR-Cat.5e	172 008 401 4643
8	1.5 m	SRJ45-M08-T-1.5-PUR-Cat.6a	172 008 401 4644
	5.0 m	SRJ45-M08-T-5.0-PUR-Cat.6a	172 008 401 4645



M12-D

M12-D Circular Connector

70V 1.5A

Technical characteristics



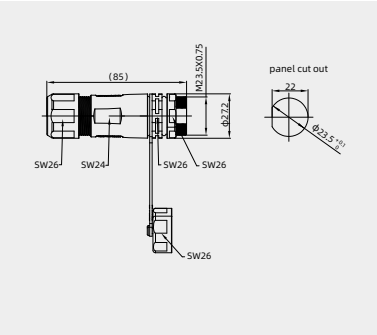
Transmission performance	Category 6 /Class E up to 500 MHz; acc. to ISO/IEC 11801:2002 and EN 50 173-1
material	Meets UL 94 V-0 flammability standard
Rated current	1.5A
Rated voltage	70V
Rated impulse voltage	1kV
Contact resistance	≤ 20 mΩ
Insulation resistance	≥ 500mΩ
Colour	black
Ambient temperature	-40°C ...+105°C
Cable-diameters	-
Degree of protection	IP68
Mechanical operation	≥ 200
Insertion and Extraction Force	≤ 160N
Ambient Humidity	≤ 95%
Installation method	nut tightening
Insulating material	-
Material of housing	-

Energy Storage Connector

Category 6



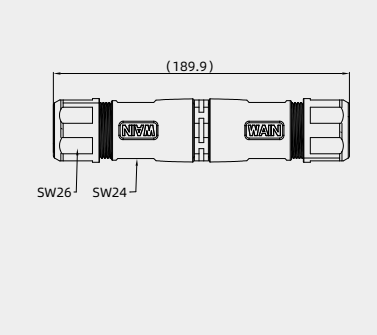
Contacts	Cable length	Designation	Order No.
8	4.5-7.5mm	RJ45-2F08-M24-T-D7.5	172 008 402 3500



Category 6



Contacts	Cable length	Designation	Order No.
8	4.5-7.5mm	2RJ45-2F08-M24-T-D7.5	172 008 402 3501



Cable Technical characteristics

Ethernet cable

Number of contacts	4
Wire gauge mm ²	2 x 2 x AWG 22
Material jacket	PUR
Insulation wire	Polyolefin
Design of wire (mm)	7 x 0,25 (AWG 22)
Cable jacket (mm)	6.7
Resistance of wire	55 Ω/Km
Temperature range (cable in move)	- 5 ° C / + 60 ° C
Temperature range (cable not in move)	- 20 ° C / + 60 ° C
Bending radius (cable in move)	min. 100 mm
Bending radius (cable not in move)	min. 35 mm
Approval	Profinet, UL 20236

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	PUR-cable
Wire gauge	AWG 22
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-20°C ...+60°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	zinc diecasting nickel plated

Receptacles

Remark: SPQ is 1pc

Male panel mount connector ,
PROFINET-cable, shielded

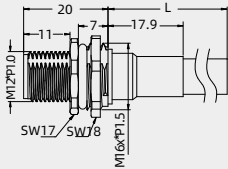


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-M04D-BK-PG9-PFN	163 004 301 4017
	0.5m	M16x1.5	M12-M04D-BK-M16-PFN	163 204 301 4022



Male panel mount connector ,
PROFINET-cable, shielded

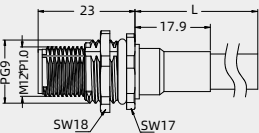


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-M04D-BKR-PG9-PFN	163 204 301 4012
	0.5m	M16x1.5	M12-M04D-BKR-M16-PFN	163 004 301 4018



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	PUR-cable
Wire gauge	AWG 22
Cable outlet	-
Degree of protection	IP67
Mechanical operation	> 100
Limiting temperature	-20°C ...+60°C
Material group	II
Material of contact	copper alloy
Contact plating	Au
Insulating material	PA
Material of housing	zinc diecasting nickel plated

Receptacles

Remark: SPQ is 1pc

Female panel mount connector ,
PROFINET-cable, shielded

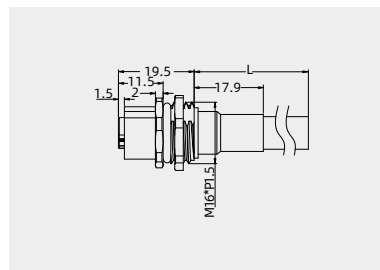


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-F04D-BK-PG9-PFN	163 004 302 4022
	0.5m	M16x1.5	M12-F04D-BK-M16-PFN	163 204 302 4022



Female panel mount connector ,
PROFINET-cable, shielded

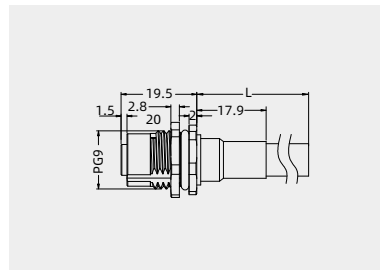


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-F04D-BKR-PG9-PFN	163 204 302 4012
	0.5m	M16x1.5	M12-F04D-BKR-M16-PFN	163 004 302 4023



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	single wires
Wire gauge	max.0.75mm²(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

Receptacles

Remark: SPQ is 1pc

Male panel mount connector
with single wires, 0.25mm²

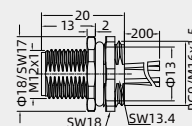


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-M04D-BK-PG9-W0.25	163 004 301 4003
	0.5m	M16x1.5	M12-M04D-BK-M16-W0.25	163 204 301 4021



Male panel mount connector
with single wires, 0.25mm²

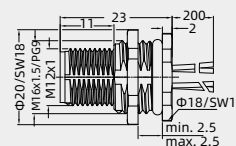


D-Code



4pin

Contacts	Cable length	screw	Designation	Order No.
4	0.5m	PG9	M12-M04D-BKR-PG9-W0.25	163 004 301 4014
	0.5m	M16x1.5	M12-M04D-BKR-M16-W0.25	163 004 301 4016



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	dip solder
Wire gauge	-
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

Remark: SPQ is 10pcs

Male panel mount connector, solder

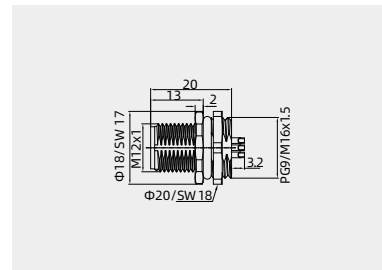


D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-M04D-BK-PG9-C	163 004 301 1006
	M16x1.5	M12-M04D-BK-M16-C	163 004 301 1007



Male panel mount connector, dip solder

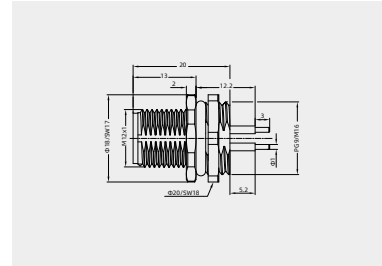


D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-M04D-BK-PG9-D	163 004 314 1005
	M16x1.5	M12-M04D-BK-M16-D	163 004 314 1006



Male panel mount connector, dip solder

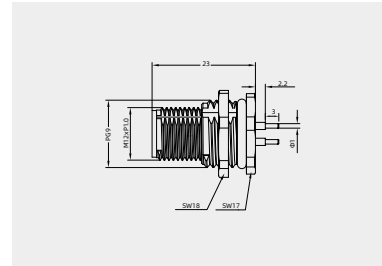


D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-M04D-BKR-PG9-D	163 004 314 1007
	M16x1.5	M12-M04D-BKR-M16-D	163 004 314 1008



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics



Number of contacts	4
Rated current (40°C)	4A
Rated voltage	250V
Rated impulse voltage	2500V
Pollution degree	3
Overvoltage categorie	-
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

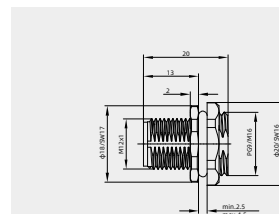
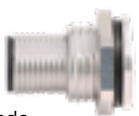
Male cable connector,
Crimp terminal

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-MC04D-BK-PG9	163 005 310 1504
	M16x1.5	M12-MC04D-BK-M16	163 005 310 1505

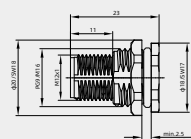
Male cable connector, Crimp terminal
Front fastened

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-MC04D-BKR-PG9	163 005 310 1510
	M16x1.5	M12-MC04D-BKR-M16	163 005 310 1511



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					
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.

M12-D Circular Connector

250V 4A

Technical characteristics



Number of contacts	4
Rated current (40°C)	4A
Rated voltage	250V
Rated impulse voltage	1.5V
Pollution degree	3
Overvoltage categorie	-
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	Crimp terminal
Wire gauge	-
Cable outlet	-
Degree of protection	IP67
Mechanical operation	≥ 100
Limiting temperature	-40°C ...+85°C
Material group	-
Material of contact	-
Insert material	PA
Contact material	copper alloy
Material of housing	Gold

Socket

Male panel mount connector,
Crimp terminal

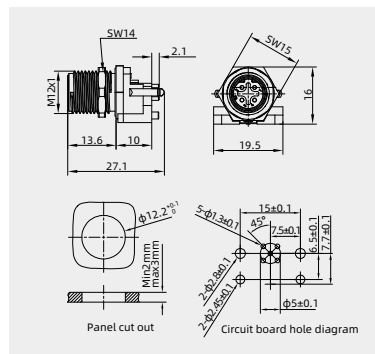
Contacts	Designation	Order No.
4	M12-M04D-BKR-M12-CTD	163 004 314 2505



D-Code



4pin

Male panel mount connector ,
Crimp terminal , Shielding

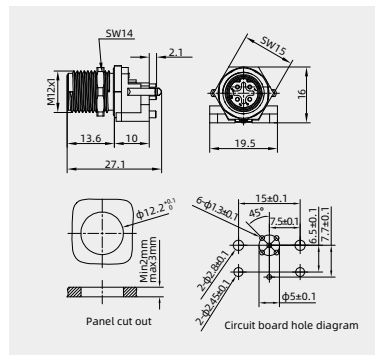
Contacts	Designation	Order No.
4	M12-M04D-BKR-M12-CTD-SH	163 004 314 2504



D-Code



4pin



M12-D

M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	dip solder
Wire gauge	max.0.75mm ² (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

Receptacles

Female panel mount connector
with single wires,0.25mm²

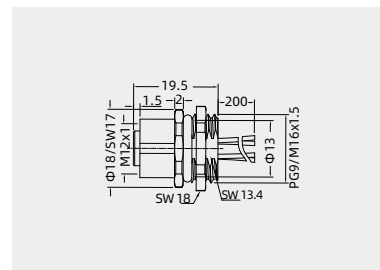
D-Code



4pin

Remark: SPQ is 1pc

Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BK-PG9-W0.25	163 204 302 4001
	M16x1.5	M12-F04D-BK-M16-W0.25	163 204 302 4021

Female panel mount connector
with single wires,0.25mm²

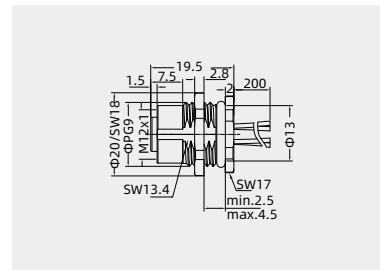
D-Code



4pin

Remark: SPQ is 1pc

Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BKR-PG9-W0.25	163 204 302 4011
	M16x1.5	M12-F04D-BKR-M16-W0.25	163 204 302 4031

Female panel mount connector,
dip solder

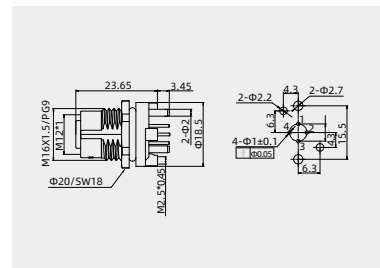
D-Code



4pin

Remark: SPQ is 10pcs

插针数	螺纹	型号	订货号
4	PG9	M12-F04D-BKR-PG9-DPE	163 004 324 2505
	M16x1.5	M12-F04D-BKR-M16-DPE	163 004 324 2504



M12-D Circular Connector

250V 4A

Technical characteristics

Number of contacts	4
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	dip solder
Wire gauge	-
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

Receptacles

Remark: SPQ is 10pcs

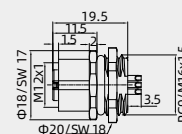
Female panel mount connector,
solder

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BK-PG9-C	163 204 324 1002
	M16x1.5	M12-F04D-BK-M16-C	163 004 302 1006

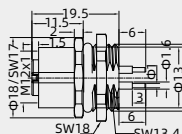
Female panel mount connector,
dip solder

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BK-PG9-D	163 204 324 1001

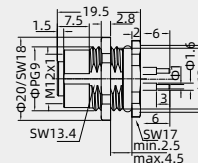
Female panel mount connector,
dip solder

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BKR-PG9-D	163 204 324 1011



M12-D

M12-D Circular Connector

50V 4A

Technical characteristics

Number of contacts	4
Rated current (40°C)	4A
Rated voltage	50V
Rated impulse voltage	1500V
Pollution degree	3
Overvoltage categorie	III
Contact resistance	≤ 10 mΩ
Insulation resistance	≥ 100 mΩ
Connector locking system	screw M12x1
Termination	dip solder
Wire gauge	-
Cable outlet	-
Degree of protection	IP20
Mechanical operation	> 100
Limiting temperature	-40°C ...+85°C
Contact material	copper alloy
Surface finishes	gold
Insert material	PBT
Material of housing	zinc diecasting nickel plated

PCB connector

Remark: SPQ is 10pcs

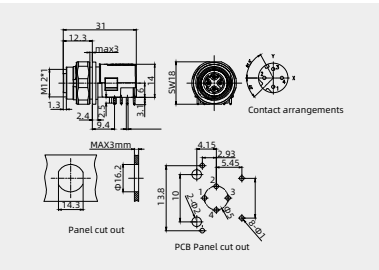
Female panel mount connector,
solder



D-Code



Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BKR-PG9-SD	163 004 324 2508
	M16x1.5	M12-F04D-BKR-M16-SD	163 004 302 4534



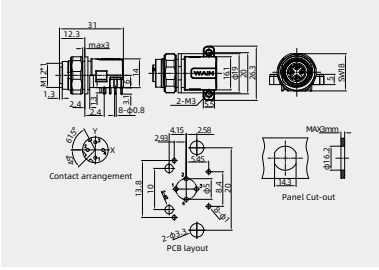
Female panel mount connector,
solder



D-Code



Contacts	screw	Designation	Order No.
4	PG9	M12-F04D-BKR-PG9/2M3-SD	163 004 324 1506
	M16x1.5	M12-F04D-BKR-M16/2M3-SD	163 004 324 1501



M12-D Circular Connector

250V 4A

Technical characteristics



Number of contacts	4
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 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

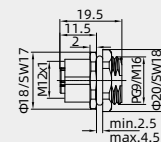
Female cable connector,
Crimp terminal

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-FC04D-BK-PG9	163 005 320 1506
	M16x1.5	M12-FC04D-BK-M16	163 005 320 1507

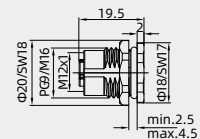
Female cable connector,
Crimp terminal, front fastened

D-Code



4pin

Contacts	screw	Designation	Order No.
4	PG9	M12-FC04D-BKR-PG9	163 005 320 1512
	M16x1.5	M12-FC04D-BKR-M16	163 005 320 1513

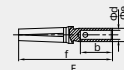


Male insert

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	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-D Circular Connector

50V 4A

Technical characteristics



Number of contacts	4
Rated current (40°C)	4A
Rated voltage	250V
Rated impulse voltage	1.5V
Pollution degree	3
Overvoltage categorie	-
Contact resistance	≤ 10 mΩ
Connector locking system	screw M12x1
Termination	Crimp terminal
Wire gauge	-
Cable outlet	-
Degree of protection	IP67
Mechanical operation	≥ 100
Limiting temperature	-40°C ...+85°C
Material group	-
Material of contact	-
Insert material	PA
Contact material	copper alloy
Material of housing	Gold

Socket

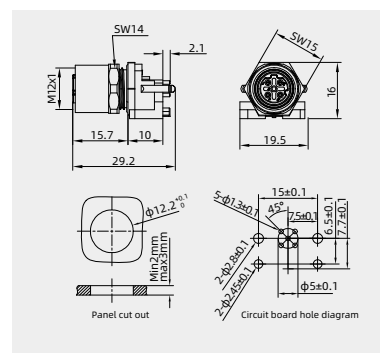
Male panel mount connector,
Crimp terminal



D-Code



Contacts	Designation	Order No.
4	M12-F04D-BKR-M12-CTD	163 004 324 3500



M12-D

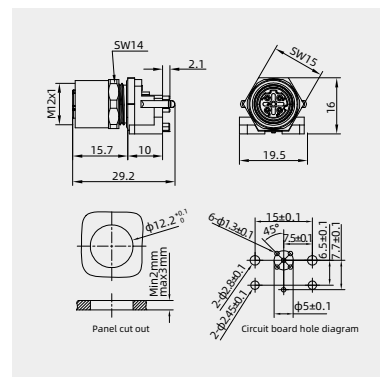
Male panel mount connector ,
Crimp terminal , Shielding



D-Code



Contacts	Designation	Order No.
4	M12-F04D-BKR-M12-CTD-SH	163 004 324 2510



Accessories

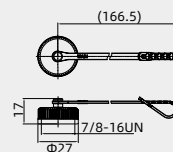
Protection cap IP67

Protection cover
for male cable connector



Remark: SPQ is 10pcs

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

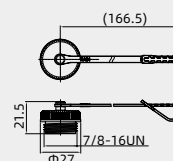


Protection cover
for female cable connector



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

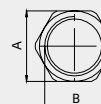


Hexagonal nut for fixing thread



Remark: SPQ is 1pc

screw	Designation	Order No.
PG9	WNA-PG9/S	102 105 002 1101
M16X1.5	WNA-M16/S	102 105 013 1101



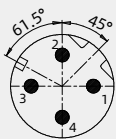
A	B
SW18	PG9
SW19	M16x1,5

Contact arrangements

• Contact arrangements

• Male insert (mating side)

4contacts



	X	Y
1	2.50	0.00
2	0.00	2.50
3	-2.50	0.00
4	0.00	-2.50

PROFINET cat.5e
 1 yellow 1 Orange white
 2 white 2 Green and white
 3 orange 3 Orange
 4 blue 4 green

• Female insert (mating side)

4contacts



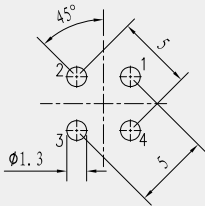
	X	Y
1	-2.50	0.00
2	0.00	2.50
3	2.50	0.00
4	0.00	-2.50

PROFINET cat.5e
 1 yellow 1 Orange white
 2 white 2 Green and white
 3 orange 3 Orange
 4 blue 4 green

• Panel cut out

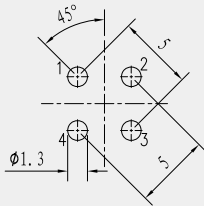
• Drilling schemes male insert (PCB),
receptaclesReceptacles

4contacts



• Drilling schemes female insert (PCB),
receptaclesReceptacles

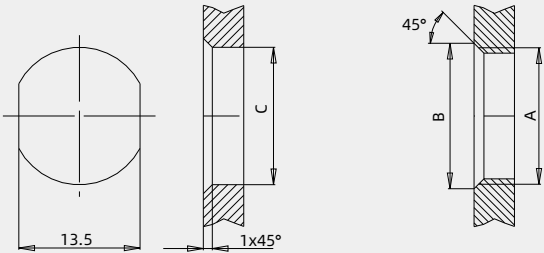
4contacts



• Panel cut out

• Panel mount connectors

- Through-hole mounting
- Screw mounting

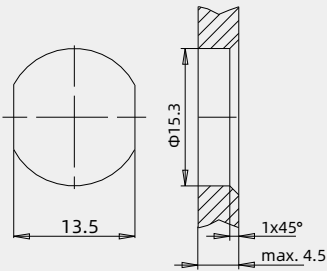


	A	B	C
PG9	PG9	16.2	15.3
PG13.5	PG13.5	21.5	20.5
M16x1.5	M16x1.5	17.0	16.1
M20x1.5	M20x1.5	21.0	20.1

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



Tightening torque 6.25 Nm