

Circular connectors

Vibration- and torsion-proof connectors with 360° shielding



Functional and fail-safe solution thanks to a special cable connector design Fast and easy field assembly through pre-assembled units and crimp snap-in contacts Crimp flange / crimp barrel system: Torsion and vibration-proof cable strain relief and shield transfer

Validated versions for different cable diameters

Cable gland: Wide cable clamping area with good strain relief and shield transfer Vibration and shock test according to DIN 61373 for railway technology and increased requirements

M8 coding: D, A-3 and A-4

M12 codings: A-5, A-8, B, D and X

Cable connectors and bulkhead connectors for cabinet door and panel mounting Panel mount connectors with crimp contacts

Technical data

Nominal voltage/current	
M8 Coding A	30 V / 4 A
M12 Coding A-5, B, D	50 V / 4 A
M12 Coding A-8	30 V / 2 A
M12 Coding X	48 V / 0,5 A
Resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
	250 Mating cycles
Temperature range	w/o grip cap: - 40° C to + 85° C
	with grip cap: - 40° C bis + 70° C
Protection class	IP 67 (screw-locked)
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated



M12 B-Code







M12 B-code cable connectors

- Functional and fail-safe solution thanks to a special cable connector design

- Quick and easy field assembly through pre-assembled units and crimp snap-in contacts

- Full metal housing for high quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Cable connectors with crimp flange / crimp sleeve system for the highest requirements Torsion and vibration-proof cable strain relief and shield transfer

- Cable connectors with cable gland

- Wide cable clamping range 4 9 mm for various Profibus cables
- Versions with cable outlet 180 $^{\circ}$ and versions with cable outlet 90 $^{\circ}$
- Version 90 $^{\rm o}$ with 8 (8 x 45 $^{\rm o})$ adjustable cable outlet directions
- Pin and socket versions
- Certified test according to DIN 61373 vibration and shock test
- M12 B-code panel mount connectors
- Full metal housing for high quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Custom made lengths of the singel wires fit the application through crimp contacts
- Functionally reliable
- No potential faults due to cold solder joints
- Versions for front panel mounting and for rear panel mounting
- Protection class IP 67 screw-locked
- Optional versions with encapsulation for protection class IP 67 with open mating face

Technical data

Nominal voltage/current	50 V / 4 A
Resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Protection class	IP 67 (screw-locked)
Temperature range	w/o grip cap: - 40° C to + 85° C
	with grip cap: - 40° C to + 70° C
Mechanical lifetime	250 Mating cycles
Wire size	AWG 18 - 28
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated
Grip cap	TPE S3/ST2/SR2 acc. to DIN 5510-2



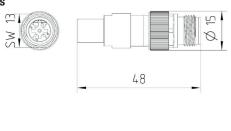


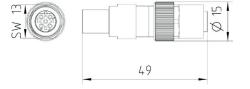
M12 B connector crimp flange

360° Shielding and vibration-/torsion-proof

- · The most reliable M12 Profibus field assembly connector
- Reliable fault-free data transmission for high demands
- · High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange / crimp sleeve
- Certified qualification acc. to DIN EN 61373 for railway applications
- · Very compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in harsh environment
- · Easy assembly due to only a few single parts

Dimensions





Technical data (mutual data on pages 7 & 10)

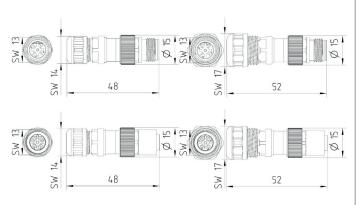
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-100021	M12 Male Profibus NEXANS 44484889
42-100022	M12 Female Profibus NEXANS 44484889

M12 B Profibus connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable M12 Profibus field assembly connector
- Reliable fault-free data transmission for high demands
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- Compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in rough environment
- Easy assembly due to only a few single parts
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 10)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-100120	M12 Female crimp KV Ø 4-6,5 mm
42-100121	M12 Male crimp KV Ø 4-6,5 mm
42-100122	M12 Female crimp KV Ø 5,5 - 9 mm
42-100123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

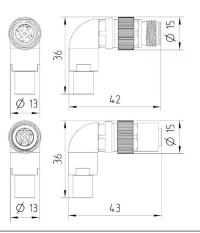




360° Shielding and vibration-/torsion-proof

- The compact right angle M12 Profibus field assembly connector
- Reliable fault-free data transmission for high demands
- Vibration-proof shield connection and strain relief with crimp flange system
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- Simple setting of the desired cable exit during assembly
- High safety in the network with machined crimp contacts
- Full metal housing protects against malfunction in rough environment
- Very compact dimensions for applications with small installation space

Dimensions



Technical data (mutual data on pages 7 & 10)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-120001	M12 Male 90° Nexans 44848xx
42-120002	M12 Female 90° Nexans 44848xx

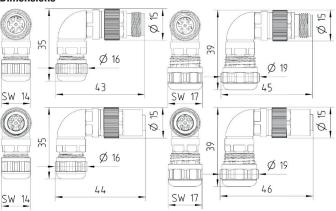


M12 B Profibus 90° connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The compact M12 Profibus 90° field assembly connector
- Reliable fault-free data transmission for high demands
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- Simple setting of the desired cable exit during assembly
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- Full metal housing protects against malfunction in rough environment
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 10)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-120120	M12 Female crimp KV Ø 4-6,5 mm
42-120121	M12 Male crimp KV Ø 4-6,5 mm
42-120122	M12 Female crimp KV Ø 5,5 - 9 mm
42-120123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

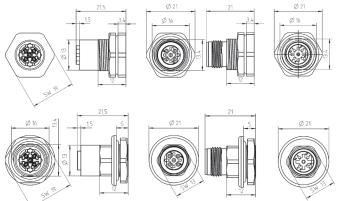


M12 B Profibus Panel mount crimp connector

Custom made solutions offering choice for wire length

- · Versions for front panel and rear panel mounting
- Rotation-proof assembly due to flat faces on housing
- Reliable termination with vibration-proof crimp technology
- Full metal housing and crimp contacts protect against malfunction
- Easy snap-in assembly of harnesses wired with free length
- Mounting thread M16x1,5 for wall thickness up to 3 mm
- Contacts not included in delivery
- Harnessed versions with potting upon request

Dimensions



Technical data (mutual data on pages 7 & 10)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-100110	M12 Female rear panel
42-100111	M12 Female front panel
42-100112	M12 Male rear panel
42-100113	M12 Male front panel
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

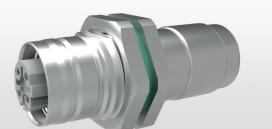


M12 D-Code

Vibration- and torsion-proof connectors with 360° shielding









M12 D-code cable connectors

- Functional and fail-safe solution thanks to a special cable connector design
- Quick and easy field assembly through pre-assembled units and crimp snap-in contacts
- Full metal housing for high-quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Cable connectors with crimp flange / crimp sleeve system for the highest requirements Torsion and vibration proof cable strain relief and shield transfer Safe shield contact through crimp flange / crimp sleeve
- M12 Mini: Most compact cable connector with cable gland
- Wide cable clamping range 4 9 mm for various Profibus cables
- Versions with cable outlet 180 ° and versions with cable outlet 90 °
- Version 90 $^{\circ}$ with 8 (8 x 45 $^{\circ}$) adjustable cable outlet directions
- Pin and socket versions
- Certified test according to DIN 61373 vibration and shock test
- M12 D-code panel mount connectors
- Full metal housing for high quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Custom made lengths of the single wires match the application through crimp contacts
- Functionally reliable
- No potential faults due to cold solder joints
- Versions for front panel mounting and for rear panel mounting
- Protection class IP 67 screw-locked
- Optional versions with encapsulation for protection class IP 67 with open mating face

Technical data

Nousing I would be a forward	501////
Nominal voltage/current	50 V / 4 A
Resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Transmission properties	Class D acc. to IEC 11801:2002
Transmission rate	10/100 Mbit/s
Protection class	IP 67 (screw-locked)
Temperature range	w/o grip cap: - 40° C to + 85° C
	with grip cap: - 40° C to + 70° C
Mechanical lifetime	250 Mating cycles
Wire size	AWG 18 - 28
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated
Grip cap	TPE S3/ST2/SR2 acc. to DIN 5510-2

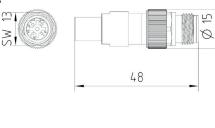


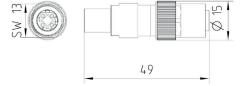
M12 D Ethernet connector crimp flange

360° Shielding and vibration-/torsion-proof

- The vibration-proof and reliable M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange
- Very compact dimensions for applications with small installation space
- Certified plastics acc. to EN 45545-2 for railway applications
- Certified qualification acc. to EN 61373 for railway applications
- Easy assembly due to only a few single parts

Dimensions





Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300051	M12 Male Cat 5 Radox 6,6 H+S 12584038
42-300052	M12 Female Cat 5 Radox 6,6 H+S 12584038
42-300053	M12 Male Cat 5 Radox 7,3 H+S 12568935
42-300054	M12 Female Cat 5 Radox 7,3 H+S 12568935
42-300055	M12 Male Cat 5 Radox 8,3 H+S 12585489
42-300056	M12 Female Cat 5 Radox 8,3 H+S 12585489
42-300067	M12 Male Cat 5 6,7 Profinet Type C HELU 800655
42-300068	M12 Female Cat 5 6,7 Profinet Type C HELU 800655
42-300073	M12 Male Cat 5 Betatrans 6,6 Leoni 303195
42-300074	M12 Female Cat 5 Betatrans 6,6 Leoni 303195

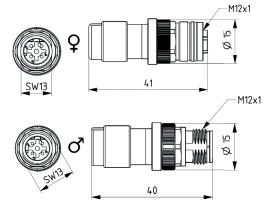


M12 Mini D Ethernet connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The most compact, reliable M12 Ethernet and Profinet field connection
- Functionally reliable, error-free data transmission with high requirements
- Safe strain relief and shield connection with cable gland
- Large cable clamping range of 4 9 mm
- · Full metal housing protects against interference and in harsh environments
- · Simple assembly with few individual parts
- Contacts not included
- · Certified plastics according to EN 45545-2 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300124	M12 Female Crimp KV Ø 4- 9 mm
42-300125	M12 Male Crimp KV Ø 4- 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20



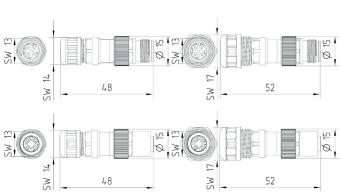


M12 D Ethernet connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable M12 Ethernet and Profinet field assembly connector
- Reliable fault-free data transmission for high demands
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- Compact dimensions for applications with small installation space applications with small installation space
- Full metal housing protects against malfunction in rough environment
- Easy assembly due to only a few single parts

Dimensions



Technical data (mutual data on pages 7 & 14)

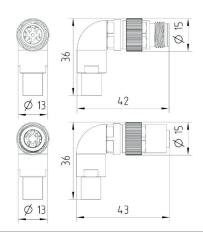
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300120	M12 Female crimp KV Ø 4-6,5 mm
42-300121	M12 Male crimp KV Ø 4-6,5 mm
42-300122	M12 Female crimp KV Ø 5,5 - 9 mm
42-300123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

M12 D Ethernet 90° connector crimp flange

360° Shielding and vibration-/torsion-proof

- The compact right angle M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof crimp technology for shield and signals
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- · Simple setting of the desired cable exit during assembly
- Certified plastics acc. to EN 45545-2 for railway applications
- · Very compact dimensions for applications with small installation space

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
40.000051	M10 Mala Cat E Daday 6 6 LL 6 10504000
42-320051	M12 Male Cat 5 Radox 6,6 H+S 12584038
42-320052	M12 Female Cat 5 Radox 6,6 H+S 12584038
42-320053	M12 Male Cat 5 Radox 7,3H+S 12568935
42-320054	M12 Female Cat 5 Radox 7,3 H+S 12568935
42-320055	M12 Male Cat 5 Radox 8,3 H+S 12585489
42-320056	M12 Female Cat 5 Radox 8,3 H+S 12585489
42-320065	M12 Male Cat 5 6,7 Belden BE 43769
42-320066	M12 Female Cat 5 6,7 Belden BE 43769
42-320073	M12 Male Cat 5 Betatrans 6,6 Leoni 303195
42-320074	M12 Female Cat 5 Betatrans 6,6 Leoni 303195

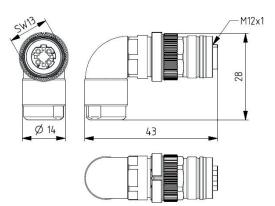




Fully shielded and wide cable clamp range 4 - 9 mm

- The most compact angled M12 Ethernet and Profinet field connection
- Functionally reliable, error-free data transmission with high requirements
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- Simple setting of the desired cable exit during assembly
- Safe strain relief and shield connection with cable gland
- Full metal housing protects against interference and in harsh environments
- Certified plastics according to EN 45545-2 for railway applications
- Contacts not included

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-320124	M12 Female Crimp KV Ø 4- 9 mm
42-320125	M12 Male Crimp KV Ø 4- 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20

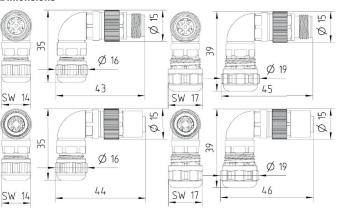


M12 D Ethernet 90° connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The compact right angle M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- Vibration-proof crimp technology for signals
- Full metal housing protects against malfunction in rough environment
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- Simple setting of the desired cable exit during assembly
- · Easy assembly due to only a few single parts
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-320120	M12 Female crimp KV Ø 4-6,5 mm
42-320121	M12 Male crimp KV Ø 4-6,5 mm
42-320122	M12 Female crimp KV Ø 5,5 - 9 mm
42-320123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

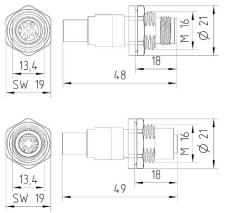


M12 D Ethernet bulkhead crimp flange

360° Shielding and vibration-/torsion-proof

- The reliable M12 field assembly connector for bulkhead applications
- Reliable due to crimp technology for contact and cable shield
- 360° EMI/RFI shielding due to crimp flange and crimp sleeve system
- Vibration- and torsion-proof shield connection and strain relief
- Rotation-proof mounting due to plane faces on housing
- Full metal housing protects against malfunction in rough environment
- Certified plastics acc. to EN 61373 for railway applications
- Mounting thread M16x1,5 for wall thickness up to 3 mm

Dimensions



Technical data (mutual data on pages 7 & 14)

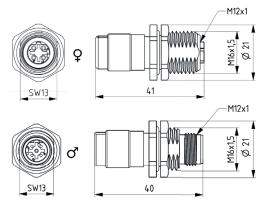
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300069	M12 HM Male Cat 5 Radox 7,3H+S 12568935
42-300070	M12 HM Female Cat 5 Radox 7,3 H+S 12568935

M12 Mini D Ethernet bulkhead connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- Very compact M12 field connection for control cabinet door
- Functionally reliable, error-free data transmission with high requirements
- Safe strain relief and shield connection with cable gland
- Large cable clamping range of 4 9 mm
- Rotation-proof mounting due to plane faces on housing
- Mounting thread M16x1,5 for wall thickness up to 3 mm
- Certified plastics according to EN 45545-2 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300224	M12 Female Crimp KV Ø 4- 9 mm
42-300225	M12 Male Crimp KV Ø 4- 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20

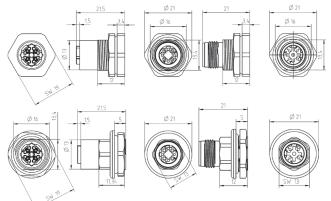


M12 D Ethernet panel mount crimp connectors

Custom made solutions offering choice for wire length

- · Versions for front panel and rear panel mounting
- Rotation-proof assembly due to flat faces on housing
- Reliable termination with vibration-proof crimp technology
- Full metal housing and crimp contacts protect against malfunction
- · Easy snap-in assembly of harnessed wires with free length
- Mounting thread M16x1,5 for wall thickness up to 3 mm
- Contacts not included in delivery
- · Harnessed versions with potting upon request

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
40.000110	M10 Female rear namel
42-300110	M12 Female rear panel
42-300111	M12 Female front panel
42-300112	M12 Male rear panel
42-300113	M12 Male front panel
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

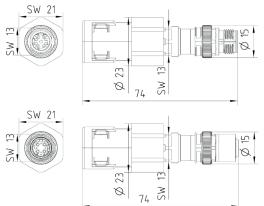


M12 D Ethernet connector crimp flange conduit NW10

Connector and cable protection for extremely high requirements

- PMA conduit adapter NW10 with IP 68 (conduit side) and EN 45545-2
- The reliable M12 Ethernet field assembly connector for conduits
- High safety in the network with machined crimp contacts
- Reliable fault-free data transmission for high demands
- Vibration-proof shield connection and strain relief with crimp flange
- Certified plastics acc. to EN 45545-2 for railway applications
- Recommended conduit: PMA PCST-10B.50

Dimensions



Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked) / IP 68 (conduit side)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300051-1	M12 Male Cat 5 Radox 6,6 H+S 12584038 WR
42-300052-1	M12 Female Cat 5 Radox 6,6 H+S 12584038 WR
42-300053-1	M12 Male Cat 5 Radox 7,3 H+S 12568935 WR
42-300054-1	M12 Female Cat 5 Radox 7,3 H+S 12568935 WR
42-300055-1	M12 Male Cat 5 Radox 8,3 H+S 12585489 WR
42-300056-1	M12 Female Cat 5 Radox 8,3 H+S 12585489 WR
42-300067-1	M12 Male Profinet Type C HELU 800655 WR
42-300068-1	M12 Female Profinet Type C HELU 800655 WR
42-300073-1	M12 Male Cat 5 Betatrans 6,6 Leoni 303195 WR
42-300074-1	M12 Female Cat 5 Betatrans 6,6 Leoni 303195 WR

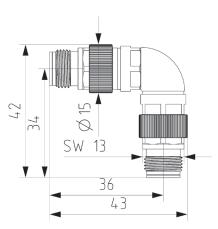




Fully shielded compact versions

- Use of straight cable assemblies for small installation depth
- Functionally reliable connection with vibration-proof crimp technology
- Secure due to fully shielded metal housing •
- Compact dimensions: 43 x 42 •
- Pin assignment 1:1 (customized versions on request)
- Standard coding: coding position on top (0 h) •
- 8 Coding positions possible •
- M12 Couping nut with combined hex knurl for defined tightening torque

Dimensions



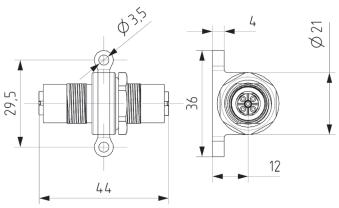
Technical data (mutual data on pages 7 & 14)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-320130	Mating side: male / 90° cable exit: male
42-320131	Mating side: male / 90° cable exit: female
42-320140	Mating side: female / 90° cable exit: male
42-320141	Mating side: female / 90° cable exit: female



- Interference-free data transmission at interconnection points like cabinets
- Functionally reliable connection with vibration-proof crimp technology •
- Secure due to fully shielded metal housing
- Compact dimensions: 44 x ø 21 ٠
- Rotaion-proof mounting due to plane surfaces on housing
- Certified plastics acc. to EN 45545-2 for railway applications •
- •
- Rear panel mounting (w/o flange) or wall mounting (with flange) •
- Rear panel mounting:mounting thread M16x1,5 for wall size up to 3 mm

Dimensions



Technical data (mutual data on pages 7 & 14)

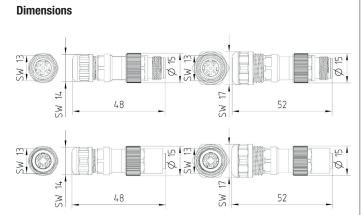
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-300141	Female/female wall mounting (on request)
42-300140	Female/female rear panel mounting



M12 V4A D Ethernet Connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable M12 V4A Ethernet and Profinet field assembly connector
- Reliable fault-free data transmission for high demands
- V4A for maritime plus process and food rechnology applications
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
 V4A full metal housing protects against malfunction in rough envir
- V4A full metal housing protects against malfunction in rough environment
 Compact dimensions for applications with small installation space
- Compact dimensions for applications with small installation sp
 Contacts not included in delivery



Technical data (mutual data on pages 7 & 14)

50 V / 4 A
-40 °C to +85 °C
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
M12 Female crimp KV Ø 4-6,5 mm
M12 Male crimp KV Ø 4-6,5 mm
M12 Female crimp KV Ø 5,5 - 9 mm
M12 Male crimp KV Ø 5,5 - 9 mm
M12 Crimp contact male AWG 22 - 24
M12 Crimp contact male AWG 20 - 22
M12 Crimp contact male AWG 26 - 28
M12 Crimp contact female AWG 22 - 24
M12 Crimp contact female AWG 20 - 22
M12 Crimp contact female AWG 26 - 28

PROVERTHA® CONNECTORS, CABLES & SOLUTIONS

M12 A-Code, 5 pole

Vibration- and torsion-proof connectors with 360° shielding



- M12 A-5 code cable connectors
- Functional and fail-safe solution thanks to a special cable connector design
- Quick and easy field assembly through pre-assembled units and crimp snap-in contacts
- Full metal housing for high-quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Cable connectors with crimp flange / crimp barrel system for the highest requirements Torsion and vibration proof cable strain relief and shield transfer Safe shield contact through crimp flange / crimp sleeve
- M12 Mini: Most compact cable connector with cable gland
- Wide cable clamping range 4 9 mm for various cable types
- Versions with cable outlet 180 ° and versions with cable outlet 90 °
- Version 90 ° with 8 (8 x 45 °) adjustable cable outlet directions
- Pin and socket versions
- Certified test according to DIN 61373 vibration and shock test
- M12 A-5 code panel mount connectors
- Full metal housing for high quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Custom made lengths of the single wires match the application through crimp contacts
- Functionally reliable
- No potential faults due to cold solder joints
- Versions for front panel mounting and for rear panel mounting
- Protection class IP 67 screw-locked
- Optional versions with encapsulation for protection class IP 67 with open mating face





Technical data

Nominal voltage/current	50 V / 4 A
Resistance	≤5mΩ
Insulation resistance	≥ 100 MΩ
Protection class	IP 67 (screw-locked)
Temperature range	w/o grip cap: - 40° C to + 85° C
	with grip cap: - 40° C to + 70° C
Mechanical lifetime	250 Mating cycles
Wire size	AWG 18 - 28
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated
Grip cap	TPE S3/ST2/SR2 acc. to DIN 5510-2

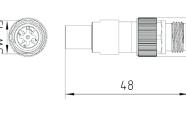


M12 A-5 connector crimp flange

360° Shielding and vibration-/torsion-proof

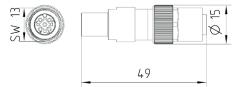
- The vibration-proof and reliable M12 CAN-Bus/DeviceNet field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange / crimp sleeve
- Certified plastics acc. to EN 45545-2 for railway applications
- Very compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in harsh environment
- Easy assembly due to only a few single parts

Dimensions



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Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-500033	M12 Male CAN drag chain 7,5 Helu 802339
42-500034	M12 Female CAN drag chain 7,5 Helu 802339
42-500041	M12 Male Cat 5 Radox 7,3 H+S 12568935
42-500042	M12 Female Cat 5 Radox 7,3 H+S 12568935
42-500043	M12 Male Cat 5 Radox 8,3 H+S 12585489
42-500044	M12 Female Cat 5 Radox 8,3 H+S 12585489
42-500047	M12 Male DeviceNet DN 658 6,6 SAB 06582242
42-500048	M12 Female DeviceNet DN 658 6,6 SAB 06582241
42-500053	M12 Male Dataflamm-C 6,6 Helu 52414
42-500054	M12 Female Dataflamm-C 6,6 Helu 52414

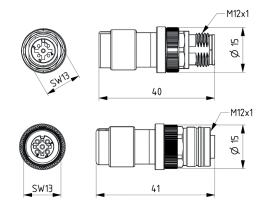


M12 Mini A-5 connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The most compact, reliable M12 CAN/DeviceNet and Power field connection
- Functionally reliable, error-free data transmission with high requirements
- Safe strain relief and shield connection with cable gland
- Large cable clamping range of 4 9 mm
- Full metal housing protects against interference and in harsh environments
- Simple assembly with few individual parts
- Certified plastics according to EN 45545-2 for railway applications
- Contacts not included

Dimensions



Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-500124	M12 Female Crimp KV Ø 4- 9 mm
42-500125	M12 Male Crimp KV Ø 4- 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20

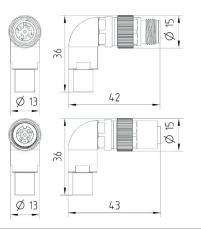


M12 A-5 90° connector crimp flange

360° Shielding and vibration-/torsion-proof

- The compact right angle M12 CAN/DeviceNet field assembly connector
- Reliable fault-free data transmission for high demands
- Vibration-proof shield connection and strain relief with crimp flange system
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- High safety in the network with machined crimp contacts
- Full metal housing protects against malfunction in rough environment
- Certified plastics acc. to EN 45545-2 for railway applications
- Very compact dimensions for applications with small installation space

Dimensions



Technical data (mutual data on pages 7 & 22)

50 V / 4 A
-40 °C to +85 °C
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
M12 Male CAN Schlepp 7,5 Helu 802339
M12 Female CAN Schlepp 7,5 Helu 802339
M12 Male Cat 5 Radox 7,3 H+S 12568935
M12 Female Cat 5 Radox 7,3 H+S 12568935
M12 Male Cat 5 Radox 8,3 H+S 12585489
M12 Female Cat 5 Radox 8,3 H+S 12585489
M12 Male DeviceNet DN 658 6,6 SAB 06582242
M12 Female DeviceNet DN 658 6,6 SAB 06582241
M12 Male Dataflamm-C 6,6 Helu 52414
M12 Female Dataflamm-C 6,6 Helu 52415

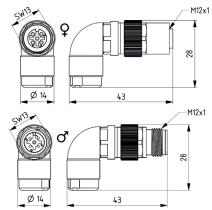


M12 Mini A-5 90° connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The most compact angled M12 CAN/DeviceNet and Power field connection
- Functionally reliable, error-free data transmission with high requirements
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- Simple setting of the desired cable exit during assembly
- Safe strain relief and shield connection with cable gland
- Full metal housing protects against interference and in harsh environments
- Certified plastics acc. to EN 45545-2 for railway applications
- Contacts not included

Dimensions



Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-520124	M12 Female Crimp KV Ø 4- 9 mm
42-520125	M12 Male Crimp KV Ø 4- 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20

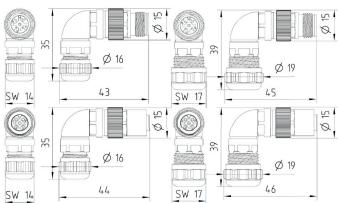


M12 A-5 Connector 90° cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- · The compact right angle M12 CAN/DeviceNet field assembly connector
- Reliable fault-free data transmission for high demands
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- Simple setting of the desired cable exit during assembly
- · Full metal housing protects against malfunction in rough environment
- Easy assembly due to only a few single parts
- Certified plastics acc. to EN 45545-2 for railway applications
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 22)

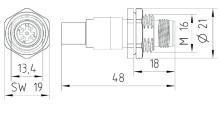
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-520120	M12 Female crimp KV Ø 4-6,5 mm
42-520121	M12 Male crimp KV Ø 4-6,5 mm
42-520122	M12 Female crimp KV Ø 5,5 - 9 mm
42-520123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

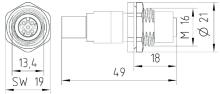
M12 A-5 bulkhead crimp flange

360° Shielding and vibration-/torsion-proof

- The reliable M12 field assembly connector for bulkhead applications
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange
- Rotation-proof mounting due to plane faces on housing
- Full metal housing protects against malfunction in rough environment
- Certified plastics acc. to EN 45545-2 for railway applications
- Mounting thread M16x1,5 for wall thickness up to 3 mm

Dimensions





Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-500049	M12 HM Male Cat 5 Radox 7,3 H+S 12568935
42-500050	M12 HM Female Cat 5 Radox 7,3 H+S 12568935

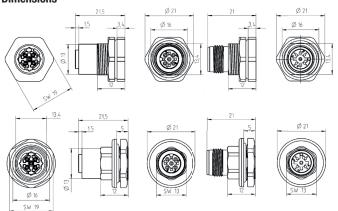


M12 A-5 panel mount crimp connectors

Custom made solutions offering choice for wire length

- · Versions for front panel and rear panel mounting
- Rotation-proof assembly due to flat faces on housing
- Reliable termination with vibration-proof crimp technology
- Full metal housing and crimp contacts protect against malfunction
- · Easy snap-in assembly of harnessed wires with free length
- Mounting thread M16x1,5 for wall thickness up to 3 mm
- · Contacts not included in delivery
- · Harnessed versions with potting upon request

Dimensions



Technical data (mutual data on pages 7 & 22)

	501// 4 4
Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-500110	M12 Female rear panel
42-500111	M12 Female front panel
42-500112	M12 Male rear panel
42-500113	M12 Male front panel
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20

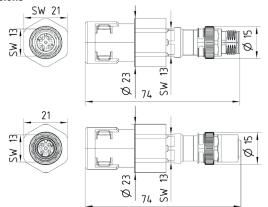


M12 A-5 Connector crimp flange conduit NW10

Connector and cable protection for extremely high requirements

- PMA conduit adapter NW10 with IP 68 (conduit side) and EN 45545-2
- The reliable M12 CAN/DeviceNet field assembly connector for conduit
- High safety in the network with machined crimp contacts
- Reliable fault-free data transmission for high demands
- Vibration-proof shield connection and strain relief with crimp flange
- Certified plastics acc. to EN 45545-2 for railway applications
- Recommended conduit: PMA PCST-10B.50
- Easy assembly due to only a few single parts

Dimensions



Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked) / IP 68 (conduit side)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-500033-1	M12 Male CAN Schlepp 7,5 Helu 802339 WR
42-500034-1	M12 Female CAN Schlepp 7,5 Helu 802339 WR
42-500041-1	M12 Male Cat 5 Radox 7,3 H+S 12568935 WR
42-500042-1	M12 Female Cat 5 Radox 7,3 H+S 12568935 WR
42-500043-1	M12 Male Cat 5 Radox 8,3 H+S 12585489 WR
42-500044-1	M12 Female Cat 5 Radox 8,3 H+S 12585489 WR
42-500047-1	M12 Male DN 658 6,6 SAB 06582241 WR
42-500048-1	M12 Female DN 658 6,6 SAB 06582241 WR
42-500053-1	M12 Male Dataflamm-C 6,6 Helu 52414 WR
42-500054-1	M12 Female Dataflamm-C 6,6 Helu 52414 WR

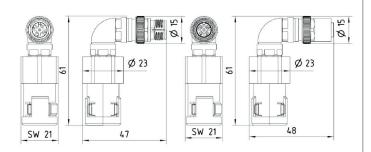


M12 A-5 90° Connector crimp flange conduit NW10

Connector and cable protection for extremely high requirements

- PMA conduit adapter NW10 with IP 68 (conduit side) and EN 45545-2
- The reliable M12 CAN/DeviceNet field assembly connector for conduit
- · High safety in the network with machined crimp contacts
- Reliable fault-free data transmission for high demands
- · Vibration-proof shield connection and strain relief with crimp flange
- Certified plastics acc. to EN 45545-2 for railway applications
- Recommended conduit: PMA PCST-10B.50
- · Easy assembly due to only a few single parts

Dimensions



Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked) / IP 68 (conduit side)

Technical data (mutual data on pages 7 & 22)

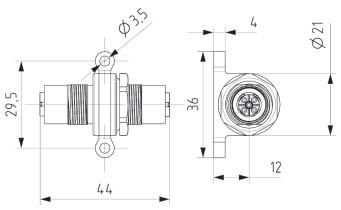
Degree of protection	
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-520033-1	M12 Male CAN Schlepp 7,5 Helu 802339 WR
42-520034-1	M12 Female CAN Schlepp 7,5 Helu 802339 WR
42-520041-1	M12 Male Cat 5 Radox 7,3 H+S 12568935 WR
42-520042-1	M12 Female Cat 5 Radox 7,3 H+S 12568935 WR
42-520043-1	M12 Male Cat 5 Radox 8,3 H+S 12585489 WR
42-520044-1	M12 Female Cat 5 Radox 8,3 H+S 12585489 WR
42-520047-1	M12 Male DN 658 6,6 SAB 06582241 WR
42-520048-1	M12 Female DN 658 6,6 SAB 06582241 WR
42-520053-1	M12 Male Dataflamm-C 6,6 Helu 52414 WR
42-520054-1	M12 Female Dataflamm-C 6,6 Helu 52414 WR

M12 A-5 Gender Changer

Fully shielded rear panel version female/female

- Interference-free data transmission at interconnection points like cabinets
- Functionally reliable connection with vibration-proof crimp technology
- Secure due to fully shielded metal housing
- Compact dimensions: 44 x ø 21
- · Rotaion-proof mounting due to plane surfaces on housing
- Certified plastics acc. to EN 45545-2 for railway applications
- Rear panel mounting (w/o flange) or wall mounting (with flange)
- Rear panel mounting:mounting thread M16x1,5 for wall size up to 3 mm

Dimensions



Technical data (mutual data on pages 7 & 22)

50 V / 4 A -40 °C to +85 °C IP 67 (screw-locked)
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
emale/female wall mounting (on request)

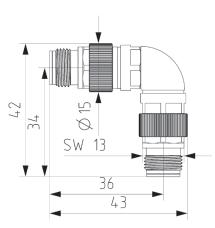




Fully shielded compact versions

- Use of straight cable assemblies for small installation depth
- Functionally reliable connection with vibration-proof crimp technology
- Secure due to fully shielded metal housing
- Compact dimensions: 43 x 42
- Pin assignment 1:1 (customized versions on request)
- Standard coding: coding position on top (0 h)
- 8 Coding positions possible
- M12 Couping nut with combined hex knurl for defined tightening torque

Dimensions



Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-520130	Mating side: male / 90° cable exit: male
42-520131	Mating side: male / 90° cable exit: female
42-520140	Mating side: female / 90° cable exit: male
42-520141	Mating side: female / 90° cable exit: female

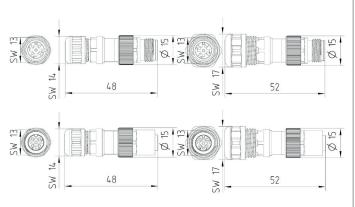


M12 V4A A-5 Connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable V4A M12 CAN/DeviceNet und Ethernet Power field assembly connector
- Reliable fault-free data transmission for high demands
- V4A for maritime plus process and food rechnology applications
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- V4A full metal housing protects against malfunction in rough environment
- Compact dimensions for applications with small installation space
- Easy assembly due to a few single parts

Dimensions



Technical data (mutual data on pages 7 & 22)

Nominal voltage/ current	50 V / 4 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
44-500120	M12 Female crimp KV Ø 4-6,5 mm
44-500121	M12 Male crimp KV Ø 4-6,5 mm
44-500122	M12 Female crimp KV Ø 5,5 - 9 mm
44-500123	M12 Male crimp KV Ø 5,5 - 9 mm
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-0000330G2	M12 Crimp contact male AWG 18 - 20
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-0000340G2	M12 Crimp contact female AWG 18 - 20

PROVERTHA® CONNECTORS, CABLES & SOLUTIONS

M12 A-Code, 8 pole

Vibration- and torsion-proof connectors with 360° shielding







M12 A-8 code cable connectors

- Functional and fail-safe solution thanks to a special cable connector design
- Quick and easy field assembly through pre-assembled units and crimp snap-in contacts
- Full metal housing for high-quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Cable connectors with crimp flange / crimp barrel system for the highest requirements Torsion and vibration proof cable strain relief and shield transfer Safe shield contact through crimp flange / crimp sleeve
- Cable connectors with cable gland
- Wide cable clamping range 4 9 mm for various cable types
- Versions with cable outlet 180 $^\circ$ and versions with cable outlet 90 $^\circ$
- Version 90 ° with 8 (8 x 45 °) adjustable cable outlet directions
- Pin and socket versions
- Certified test according to DIN 61373 vibration and shock test
- M12 A-8 code panel mount connectors
- Full metal housing for high quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Custom made lengths of the single wires match the application through crimp contacts
- Functionally reliable
- No potential faults due to cold solder joints
- Versions for front panel mounting and for rear panel mounting
- Protection class IP 67 screw-locked
- Optional versions with encapsulation for protection class IP 67 with open mating face

Technical data

Nominal voltage/current	30 V / 2 A
Nominal Voltage/current	30 V / Z A
Resistance	≤5mΩ
Insulation resistance	≥ 100 MΩ
Protection class	IP 67 (screw-locked)
Temperature range	w/o grip cap: - 40° C to + 85° C
	with grip cap: - 40° C to + 70° C
Mechanical lifetime	250 Mating cycles
Wire size	AWG 22 - 28
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated
Grip cap	TPE S3/ST2/SR2 acc. to DIN 5510-2

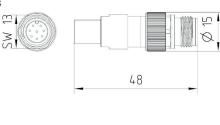


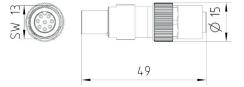
M12 A-8 Ethernet connector crimp flange

360° Shielding and vibration-/torsion-proof

- The very compact reliable M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange
- Very compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in rough environment
- Certified plastics acc. to EN 45545-2 for railway applications
- Easy assembly due to only a few single parts

Dimensions





Technical data (mutual data on pages 7 & 30)

Nominal voltage/ current	30 V / 2 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-800001	M12 Male Cat 5 Radox 7,3 H+S 12568935
42-800002	M12 Female Cat 5 Radox 7,3 H+S 12568935
42-800013	M12 Male Cat 7 Radox 8,2 H+S 84124806
42-800014	M12 Female Cat 7 Radox 8,2 H+S 84124806
42-800015	M12 Male Cat 7 Betatrans 8,8 Leoni 302834
42-800016	M12 Female Cat 7 Betatrans 8,8 Leoni 302834
42-800017	M12 Male Cat 5 Radox 6,6 H+S 12584038
42-800018	M12 Female Cat 5 Radox 6,6 H+S 12584038
42-800019	M12 Male Cat 5 Megaline 5,3 Leoni 20123
42-800020	M12 Female Cat 5 Cat 5 Megaline 5,3 Leoni 20123

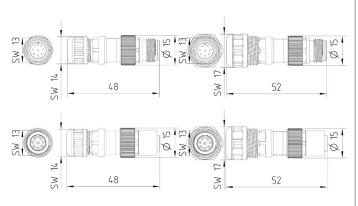


M12 A-8 Ethernet connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable M12 Ethernet und DRIVE-CLiQ field assembly connector
- Reliable fault-free data transmission for high demands
- Secure strain relief and shield termination with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- Compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in rough environment
- Easy assembly due to only a few single parts
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 30)

30 V / 2 A
-40 °C to +85 °C
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
M12 Female Crimp KV Ø 4-6,5 mm
M12 Male Crimp KV Ø 4-6,5 mm
M12 Female Crimp KV Ø 5,5 - 9 mm
M12 Male Crimp KV Ø 5,5 - 9 mm
M12 Crimp contact female AWG 22 - 24
M12 Crimp contact female AWG 26 - 28
M12 Crimp contact male AWG 22 - 24
M12 Crimp contact male AWG 26 - 28

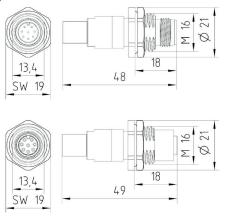


M12 A-8 Ethernet bulkhead crimp flange

360° Shielding and vibration-/torsion-proof

- The reliable M12 field assembly connector for bulkhead applications
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof shield connection and strain relief with crimp flange
- Very compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in rough environment
- Certified plastics acc. to EN 45545-2 for railway applications
- Mounting thread M16x1,5 for wall thickness up to 3 mm

Dimensions



Technical data (mutual data on pages 7 & 30)

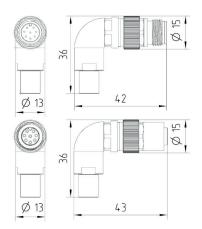
Nominal voltage/ current	30 V / 2 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-800023	M12 HM Male Cat 5 Megaline 5,3 Leoni 20123
42-800024	M12 HM Female Cat 5 Cat 5 Megaline 5,3 Leoni 20123
42-800025	M12 HM Male Cat 7 Radox 8,2 H+S 84124806
42-800026	M12 HM Female Cat 7 Radox 8,2 H+S 84124806

M12 A-8 Ethernet 90° connector crimp flange

360° Shielding and vibration-/torsion-proof

- The compact right angle M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Vibration-proof crimp technology for shield and signals
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- · Simple setting of the desired cable exit during assembly
- Certified plastics acc. to EN 45545-2 for railway applications
- Very compact dimensions for applications with small installation space

Dimensions



Technical data (mutual data on pages 7 & 30)

Nominal voltage/ current	30 V / 2 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-820013	M12 90° Male Cat 7 Radox 8,2 H+S 84124806
42-820014	M12 90° Female Cat 7 Radox 8,2 H+S 84124806

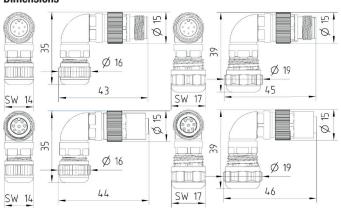


M12 A-8 Ethernet 90° connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The compact right angle M12 Ethernet field assembly connector
- Reliable fault-free data transmission for high demands
- Free choice for 90° cable exit with 8 coding positions (8x45°)
- Simple setting of the desired cable exit during assembly
- Secure strain relief and shield connection with cable gland
- Wide cable clamping range from 4 9mm / 4 6,5 und 5,5 9 mm
- Compact dimensions for applications with small installation space
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 30)

Nominal voltage/ current	30 V / 2 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-820120	M12 Female Crimp KV Ø 4-6,5 mm
42-820121	M12 Male Crimp KV Ø 4-6,5 mm
42-820122	M12 Female Crimp KV Ø 5,5 - 9 mm
42-820123	M12 Male Crimp KV Ø 5,5 - 9 mm
42-000151G2	M12 Crimp contact female AWG 22 - 24
42-000139G2	M12 Crimp contact female AWG 26 - 28
42-000135G2	M12 Crimp contact male AWG 22 - 24
42-000136G2	M12 Crimp contact male AWG 26 - 28

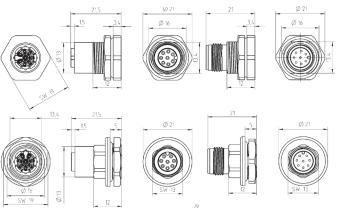


M12 A-8 Ethernet Panel mount crimp connectors

Custom made solutions offering choice for wire length

- Versions for front panel and rear panel mounting
- Rotation-proof assembly due to flat faces on housing
- Reliable termination with vibration-proof crimp technology
- Full metal housing and crimp contacts protect against malfunction
- Easy snap-in assembly of harnessed wires with free length
- Mounting thread M16x1,5 for wall thickness up to 3 mm
- Contacts not included in delivery
- Harnessed versions with potting upon request

Dimensions



Technical data (mutual data on pages 7 & 30)

Nominal voltage/ current	30 V / 2 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-800110	M12 Female rear panel
42-800111	M12 Female front panel
42-800112	M12 Male rear panel
42-800113	M12 Male front panel
42-000151G2	M12 Crimp contact female AWG 22 - 24
42-000139G2	M12 Crimp contact female AWG 26 - 28
42-000135G2	M12 Crimp contact male AWG 22 - 24
42-000136G2	M12 Crimp contact male AWG 26 - 28



M12 X-Code

Vibration- and torsion-proof connectors with 360° shielding



M12 X-code cable connectors

- Functional and fail-safe solution thanks to a special cable connector design
- Quick and easy field assembly through pre-assembled units and crimp snap-in contacts
- Full metal housing for high-quality shielding and harsh environmental requirements
- Machined crimp contacts with 4-point crimp for vibration-proof connection
- Cable connectors with crimp flange / crimp barrel system for the highest requirements Torsion and vibration proof cable strain relief and shield transfer Safe shield contact through crimp flange / crimp sleeve
- M12 Mini: Most compact cable connector with cable gland
- Wide cable clamping range 4 9 mm for various cable types
- Versions with cable outlet 180 ° and versions with cable outlet 90 °
- Version 90 ° with 8 (8 x 45 °) adjustable cable outlet directions
- Pin and socket versions

.

- Certified test according to DIN 61373 vibration and shock test



Technical data	
Nominal voltage/current	48 V / 0,5 A
Resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Overvoltage category	III
Degree of pollution	3
Category	Cat. 6A
Transmission rate	10Gbit acc. to IEC 802.3an
Protection class	IP 67 (screw-locked)
Temperature range	w/o grip cap: - 40° C to + 85° C/ with grip cap: - 40° C to + 70° C
Mechanical lifetime	250 Mating cycles
Wire size	AWG 22 - 26
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated
Grip cap	TPE S3/ST2/SR2 acc. to DIN 5510-2



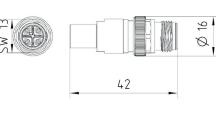


M12 X 10 Gbit Ethernet connector crimp flange

360° Shielding and vibration-/torsion-proof

- The vibration-proof 10 Gbit Ethernet and Profinet M12 field assembly connector
- Reliable fault-free data transmission for high demands
- Vibration-/shock-proof shield connection and strain relief with crimp flange / crimp sleeve
- Torsion-proof shield connection and strain relief with crimp flange
- Very compact dimensions for applications with small installation space
- Certified plastics acc. to EN 45545-2 for railway applications
- Full metal housing protects against malfunction in harsh environment

Dimensions





Technical data (mutual data on pages 7 & 34)

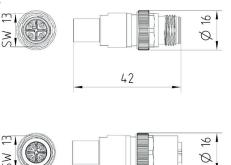
48 V / 0.5 A
-40 °C to +85 °C
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
M12 Male X8/8 H+S 84124806 PVH
M12 Female X8/8 H+S 84124806 PVH
M12 Male X8/8 TE TECC0011C7 PVH
M12 Female X8/8 TECC0011C7 PVH
M12 Male X8/8 Leoni 307704 PVH
M12 Female X8/8 Leoni 307704 PVH
M12 Male X8/8 LAPP 2170483 PVH
M12 Female X8/8 LAPP 2170483 PVH
M12 Male X8/8 LAPP 2170931 PVH
M12 Female X8/8 LAPP 2170931 PVH

M12 X 10 Gbit Ethernet crimp flange Crossover

360° Shielding and vibration-/torsion-proof

- The vibration-proof 10 Gbit Ethernet and Profinet M12 field assembly connector
- Reliable fault-free data transmission for high demands
- Vibration-/shock-proof shield connection and strain relief with crimp flange / crimp sleeve
- Crossover version for 1:1 wiring for patch cords
- Very compact dimensions for applications with small installation space
- · Full metal housing protects against malfunction in harsh environment
- Easy assembly due to only a few single parts

Dimensions



43

Technical data (mutual data on pages 7 & 34)

Nominal voltage/ current	48 V / 0.5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-900001-X	M12 Male X8/8POL H+S 84124806 PVH
42-900003-X	M12 Male X8/8POL TE TECC0011C7 PVH
42-900005-X	M12 Male X8/8POL Leoni 307704 PVH
42-900005-X 42-900011-X	M12 Male X8/8POL Leoni 307704 PVH M12 Male X8/8POL LAPP 2170483 PVH



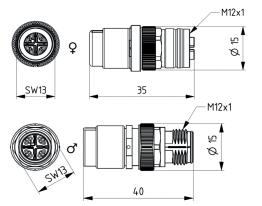




Fully shielded and wide cable clamp range 4 - 9 mm

- 10Gbit Ethernet M12 field connection in Mini design:35 x ø 15
- Functionally reliable, error-free data transmission with high requirements
- Safe strain relief and shield connection with cable gland
- Large cable clamping range of 4 9 mm
- · Full metal housing protects against interference and in harsh environments
- Simple assembly with few individual parts
- Contacts not included
- Certified plastics according to EN 45545-2 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 34)

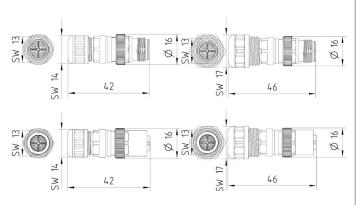
Nominal voltage/ current	48 V / 0,5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-900125	M12 X-8 Male Crimp KV Ø 4 - 9 mm
42-900124	M12 X-8 Female Crimp KV Ø 4 - 9 mm
42-000901G2	M12 X Crimp contact Male AWG 22 - 26
42-000902G2	M12 X Crimp contact Female AWG 22 - 26

M12 X 10 Gbit Ethernet connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable10Gbit Ethernet und Profinet M12 field assembly connector
- Reliable fault-free data transmission for high demands
- High safety in the network with machined crimp contacts
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- · Compact dimensions for applications with small installation space
- Full metal housing protects against malfunction in harsh environment
- Easy assembly due to a few single parts
- Contacts not included in delivery

Dimensions



Technical data (mutual data on pages 7 & 34)

Nominal voltage/ current	48 V / 0,5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-900120	M12 X-8 Female crimp KV Ø 4-6,5 mm
42-900121	M12 X-8 Male crimp KV Ø 4-6,5 mm
42-900122	M12 X-8 Female crimp KV Ø 5,5 - 9 mm
42-900123	M12 X-8 Male crimp KV Ø 5,5 - 9 mm
42-000901G2	M12 X Crimp contact male AWG 22 - 26
42-000902G2	M12 X Crimp contact female AWG 22 - 26



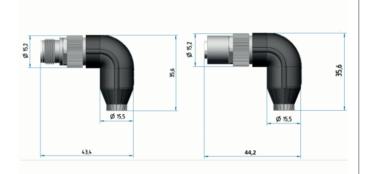


M12 X 90° 10 Gbit Ethernet Crimp CF

360° Shielding and vibration-/torsion-proof

- The vibration-proof right angle 10 Gbit Ethernet and Profinet M12 field connector
- Reliable fault-free data transmission for high demands
- Vibration-/shock-proof shield connection and strain relief with crimp flange / crimp sleeve
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- Simple setting of the desired cable exit during assembly
- Full metal housing protects against malfunction in harsh environment
- Easy assembly due to only a few single parts

Dimensions



Technical data (mutual data on pages 7 & 34)

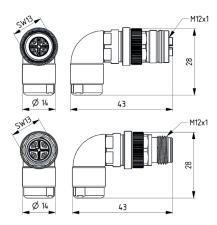
Nominal voltage/ current	48 V / 0.5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-920001	M12 Male X8/8POL H+S 84124806 PVH
42-920002	M12 Female X8/8POL H+S 84124806 PVH
42-920003	M12 Male X8/8POL TE TECC0011C7 PVH
42-920004	M12 Female X8/8 TE TECC0011C7 PVH
42-920005	M12 Male X8/8POL Leoni 307704 PVH
42-920006	M12 Female X8/8 Leoni 307704 PVH
42-920011	M12 Female X8/8POL LAPP 2170483 PVH
42-920012	M12 Female X8/8POL LAPP 2170483 PVH
42-920013	M12 Male X8/8POL LAPP 2170931 PVH
42-920014	M12 Female X8/8POL LAPP 2170931 PVH

M12 Mini X 10GB Ethernet connector 90° cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The vibration-proof compact right angle 10 Gbit Ethernet and Profinet M12 field connector
- Reliable fault-free data transmission for high demands
- Safe strain relief and shield connection with cable gland
- Large cable clamping range of 4 9 mm
- Free choice for 90° cable exit with 8 coding positions(8x45°)
- · Full metal housing protects against malfunction in harsh environment

Dimensions



Technical data (mutual data on pages 7 & 34)

Nominal voltage/ current	48 V / 0,5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
42-920125	M12 X-8 Male Crimp KV Ø 4 - 9 mm
42-920124	M12 X-8 Female Crimp KV Ø 4 - 9 mm
42-000901G2	M12 X Crimp contact male AWG 22 - 26
42-000902G2	M12 X Crimp contact female AWG 22 - 26

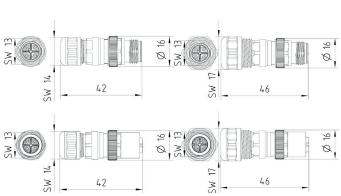


M12 X V4A 10 Gbit Ethernet connector cable gland

Fully shielded and wide cable clamp range 4 - 9 mm

- The reliable V4A10Gbit Ethernet und Profinet M12 field assembly connector
- Reliable fault-free data transmission for high demands
- V4A for maritime as well as process and food technology applications
- Secure shielding and strain relief with cable gland
- Wide cable clamp range 4 9 mm / 4 6,5 und 5,5 9 mm
- V4A full metal housing protects against malfunction in harsh environment
- Easy assembly due to a few single parts
- Contacts not included in delivery

Dimensions



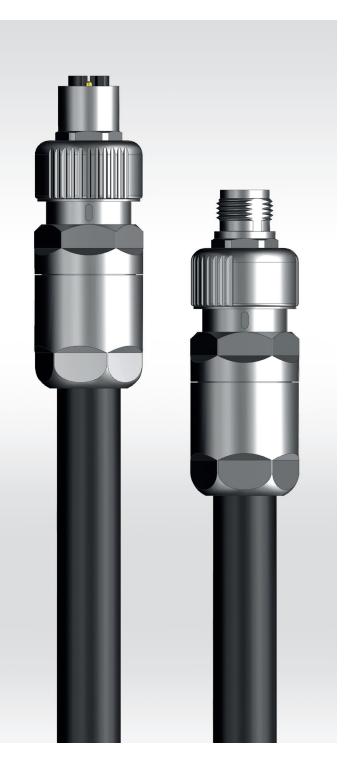
Technical data (mutual data on pages 7 & 34)

Nominal voltage/ current	48 V / 0,5 A
Temperature range	-40 °C to +85 °C
Degree of protection	IP 67 (screw-locked)
Plastics	Thermoplast, HL3 acc. to EN 45545-2
Order information	
44-900120	M12 X-8 Female Crimp KV Ø 4-6,5 mm
44-900121	M12 X-8 Male Crimp KV Ø 4-6,5 mm
42-900122	M12 X-8 Female Crimp KV Ø 5,5 - 9 mm
42-900123	M12 X-8 Male KV Ø 5,5 - 9 mm
42-000901G2	M12 X Crimp contact Male AWG 22 - 26
42-000902G2	M12 X Crimp contact Female AWG 22 - 26



M12 Power

Fully shielded connectors with reliable crimp technology for cables up to 14 mm



The PROVERTHA M12 Power connectors with L-Codierung 4+ PE are standardized in the IEC 61076-4-111. The PROVERTHA M12 Power connectors characterised by a full metal housing and the vibration-proof crimp techology for the power contacts. The connectors are designed for a wide cable clamping range für cables with wire sizes up to 2,5 qmm and outer diameters up to 14 mm. The connectors are the right solution for applications with

shielding requirements and especially for applications with cables with large outer diameter.

Technical data	
Connector	M12 L-Code acc. to IEC 61076-4-111
Pin number	4 + PE
Nominal voltage	63 V DC
Nominal current	16 A
Protection class	IP 67 (screw-locked)
Temperature range	- 40° C to + 85° C
Mechanical lifetime	250 or 500 Mating cycles
Wire size	0,5 qmm - 2,5 qmm (AWG 20 - 14)
Cable diameter	7 - 14 mm
Housing	Cu alloy or Zn alloy Ni-plated
Insulator + contact holder	Themoplast HL3 acc. to EN 45545-2
Contacts	Cu alloy Au-plated

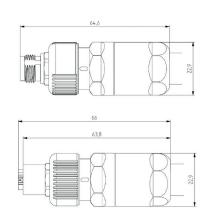


M12 Power L-code with cable gland

360° Shielding for cables 7 - 14 mm / wires 0,5 -2,5 mm2

- M12 Power L-coding 4+PE (leading)
- Pin layout and dimensions acc. to. IEC 61076-2-111
- Full metal housing with 360° shielding
- Vibration-proof crimp technology for the wire termination
- Cable strain relief for cable-diameter 7-14 mm
- Wire size: 0,5 2,5 qmm / AWG 20 14
- Certified plastics acc. to EN 45545-2 for railway applications
- Easy assembly due to only a few single parts

Dimensions



Technical data (mutual data on pages 7 & 40)

63 V DC / 16 A
-40° C to +85° C
IP 67 (screw-locked)
Thermoplast, HL3 acc. to EN 45545-2
M12 Power L-Code male
M12 Power L-Code female



Accessories for circular connectors



For the M12 Crimp connectors with the codings A,-5, A-8, B and D plus X machined crimp contacts are available for the cable gland versions and as replacement parts separate delivered. For the M8 Crimp connectors machined crimp contacts are available for the cable gland versions and as replacement parts separate delivered.

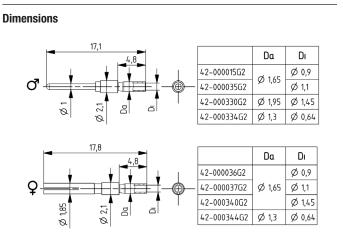
Technical data



M12 Crimp contacts for M12 A-5, M12 B, M12 D

Machined versions with pin diameter 1mm

- Machined precision contacts made from Cu alloy
- Gold-plated over Ni barrier layer
- Plating for 250 mating cycles
- · Best quality and long life due to specified contact area
- Wire size: AWG 18 AWG 28



Technical data (mutual data on pages 7 & 42)

Nominal current	max. 7 A
Wire size	AWG 18 - AWG 28
Resistance	≤10 mΩ
Contact	Cu alloy gold-plated
Order information	1
42-000015G2	M12 Crimp contact male AWG 22 - 24
42-000035G2	M12 Crimp contact male AWG 20 - 22
42-000330G2	M12 Crimp contact maleAWG 18 - 20
42-000334G2	M12 Crimp contact male AWG 26 - 28
42-000036G2	M12 Crimp contact female AWG 22 - 24
42-000037G2	M12 Crimp contact female AWG 20 - 22
42-000340G2	M12 Crimp contact female AWG 18 - 20
42-000344G2	M12 Crimp contact female AWG 26 - 28

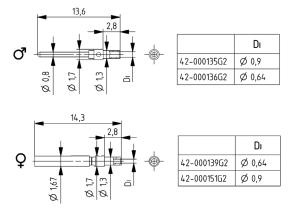


M12 Crimp contacts for M12 A-8

Machined versions with pin diameter 0.8 mm

- Machined precision contacts made from Cu alloy
- Gold-plated over Ni barrier layer
- Plating for 250 mating cycles
- Best quality and long life due to specified contact area
- Wire size: AWG 22 AWG 28

Dimensions



Technical data (mutual data on pages 7 & 42)

Nominal current	max. 3 A
Wire size	AWG 22 - AWG 28
Resistance	≤10 mΩ
Contact	Cu alloy gold-plated
Order information	
42-000135G2	M12 Crimp contact male AWG 22 - 24
42-000136G2	M12 Crimp contact male AWG 26 - 28
42-000139G2	M12 Crimp contact female AWG 26 - 28
42-000151G2	M12 Crimp contact female AWG 22 - 24

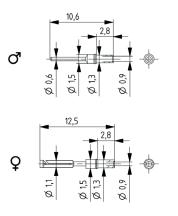


M12 Crimp contacts for M12 X

Machined versions with pin diameter 0.6 mm

- Machined precision contacts made from Cu alloy
- Gold-plated over Ni barrier layer
- Plating for 250 mating cycles
- · Best quality and long life due to specified contact area
- Wire size: AWG 22 AWG 26

Dimensions



Technical data (mutual data on pages 7 & 42)

Nominal current	max. 1A
Wire size	AWG 22 - AWG 26
Resistance	≤10 mΩ
Contact	Cu alloy gold-plated
Order information	
42-000901G2	M12 Crimp contact male AWG 22 - 26
42-000902G2	M12 Crimp contact female AWG 22 - 26

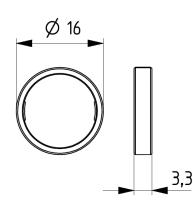


M12 color ring for unmistakable connection

Easy snap-in assembly

- Unmistakable connection achieved by different colors
- Colors: black, white, red, green, yellow, and blue
- Easy retrofitting by snap-in assemly into the housing
- Simple assembly thanks to snap-in design
- Thermoplastic UL 94-V0
- Thermoplastic certified acc. to EN 45545-2 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 42)

Material	Thermoplast	
UL fire behavior	UL 94-V0	
Railway fire protection	EN 45545-2 R22: HL1/R23: HL 1-HL2	

Order information	
42-000304BL	Color ring blue
42-000304GE	Color ring yelb
42-000304GN	Color ring green
42-000304R	Color ring red
42-000304SW	Color ring black
42-000304WE	Color ring white



M12 Cable assemblies



Assembled and overmolded versions Special design for interference-free data transmission 360 ° EMI / RFI shielding through a full metal housing Vibration and torsion-proof shield contact Vibration-proof crimping technology for signal and shield contact Vibration and torsion-proof strain relief Safe solution for increased requirements such as in rail and transport technology as well as in factory, automation for automatic nunching machines and robot and

as well as in factory automation for automatic punching machines and robot applications.

High-quality UL-certified drag chain cables

Special version for railway technology with railway-certified cable types Standard types available from lengths of 0.3 m to 10 m Customer-specific lengths and designs are available on request

Techn	nical	da	ita

Nominal voltage/current	50 V / 4 A
Temperature range	- 20° C to +70 ° C
Protection class	IP 67 (screw-locked)
Mating cycles	250
Cable specification	
Profinet	Highly flexible Profinet C UL drag chain cable
Outer diameter and color	$6,5 \pm 0,2$ mm green
Profibus	Highly flexible UL drag chain cable
Outer diameter and color	8 ± 0.2 mm violet
CAN-Bus	Highly flexible CAN/DeviceNet UL cable
Outer diameter and color	$6,6 \pm 0,5$ mm Red lila (RAL 4001)
Railcat	RADOX RAILCAT CAT5e XM S H+S-Nr.12568935
Outer diameter and color	$7,25 \pm 0,3$ mm schwarz



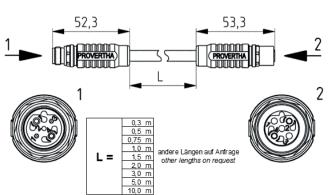


Profibus M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Profibus M12 cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Highly flexible Profibus UL drag chain cable
- M12 couping nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0
- 100 % tested M12 Profibus cable assemblies

Dimensions



Technical data (mutual data on pages 7 & 46)

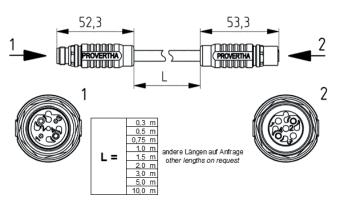
Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Profibus highly flexible UL drag chain
Order information	
420-100000	Profibus male-female 0,3m
420-100001	Profibus Vmale-female 0,5m
420-100003	Profibus male-female 1m
420-100050	Profibus female-female 0,3m
420-100051	Profibus female-female 0,5m
420-100053	Profibus female-female 1m
420-100100	Profibus male-male 0,3m
420-100101	Profibus male-male 0,5m
420-100103	Profibus male-male 1m

Overmolded Profibus IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Profibus M12 cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Highly flexible Profibus UL drag chain cable
- M12 coupling nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0
- 100 % tested M12 Profibus cable assemblies

Dimensions



Technical data (mutual data on pages 7 & 46)

Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Profibus highly flexible UL drag chain
Order information	
420-110000	Profibus male-female 0.3m
420-110001	Profibus Vmale-female 0,5m
420-110003	Profibus male-female 1m
420-110050	Profibus female-female 0,3m
420-110051	Profibus female-female 0,5m
420-110053	Profibus female-female 1m
420-110100	Profibus male-male 0,3m
420-110101	Profibus male-male 0,5m
420-110103	Profibus male-male 1m

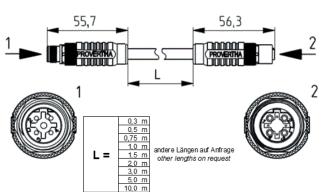


Profinet IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Profinet M12
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Profinet Type C UL drag chain cable for high requirements
- M12 coupling nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0
- 100 % tested M12 Profinet cable assemblies

Dimensions



Technical data (mutual data on pages 7 & 46)

Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Profinet Type C PUR UL drag chain
Order information	
420-300000	Profinet male-female 0,3M
420-300001	Profinet male-female 0,5M
420-300003	Profinet male-female 1,0M
420-300050	Profinet female-female 0,3M
420-300051	Profinet female-female 0,5M
420-300053	Profinet female-female 1,0M
420-300100	Profinet male-male 0,3M
420-300101	Profinet male-male 0,5M
420-300103	Profinet male-male 1,0M

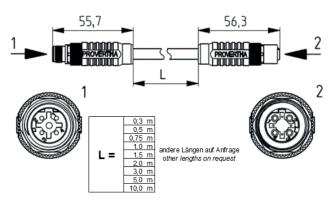


Overmolded Profinet IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Profinet M12 cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Profinet Type C UL drag chain cable for high requirements
- M12 coupling nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0
- 100 % tested M12 Profinet cable assemblies

Dimensions



Technical data (mutual data on pages 7 & 46)

Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Profinet Type C PUR UL drag chain
Order information	
400 010000	Durfinationale formale 0.0M
420-310000	Profinet male-female 0,3M
420-310001	Profinet male-female 0,5M
420-310003	Profinet male-female 1,0M
420-310050	Profinet female-female 0,3M
420-310051	Profinet female-female 0,5M
420-310053	Profinet female-female 1,0M
420-310100	Profinet male-male 0,3M
420-310101	Profinet male-male 0,5M
420-310103	Profinet male-male 1,0M



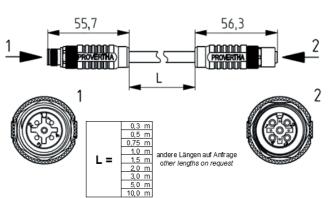


CAN/DeviceNet IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded CAN/DeviceNet M12 A-5 cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Highly flexible CAN/DeviceNet UL drag chain cable
- M12 coupling nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0
- 100 % tested CAN-/DeviceNet M12 cable assemblies

Dimensions



Technical data (mutual data on pages 7 & 46)

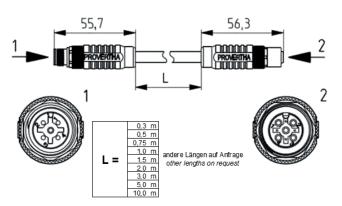
Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	CAN/DecviceNet highly flexible UL drag chain
Order information	
420-500000	CAN bus male-female 0,3m
420-500001	CAN bus Vmale-female 0,5m
420-500003	CAN bus male-female 1m
420-500050	CAN bus female-female 0,3m
420-500051	CAN bus female-female 0,5m
420-500053	CAN bus female-female 1m
420-500100	CAN bus male-male 0,3m
420-500101	CAN bus male-male 0,5m
420-500103	CAN bus male-male 1m

Overmolded CAN/DeviceNet IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded CAN/DeviceNet M12 A-5 cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- Highly flexible CAN/DeviceNet UL drag chain cable
- M12 coupling nut with combined hex knurl for defined tightening torque
- Certified plastics acc. to EN 45545-2 and UL 94 V-0

Dimensions



Technical data (mutual data on pages 7 & 46)

Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	CAN/DecviceNet highly flexible UL drag chain
Order information	
420-510000	CAN bus male-female 0,3m
420-510001	CAN bus Vmale-female 0,5m
420-510003	CAN bus male-female 1m
420-510050	CAN bus female-female 0,3m
420-510051	CAN bus female-female 0,5m
420-510053	CAN bus female-female 1m
420-510100	CAN bus male-male 0,3m
420-510101	CAN bus male-male 0,5m
420-510103	CAN bus male-male 1m



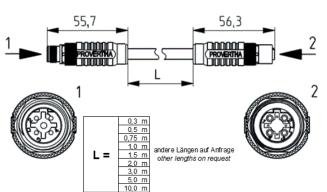


Railcat IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Railcat M12 D-coded Cat 5e cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- M12 coupling nut with combined hex knurl for defined tightening torque
- Railway cable RADOX RAILCAT CAT5e XM S
- Certified plastics acc. to EN 45545-2 and NFF 16-101
- Certified qualification acc. to DIN EN 61373 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 46)

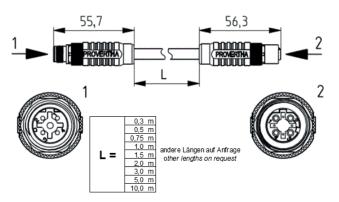
Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Radox RailCat CAT5 7,3mm H+S-Nr. 12568935
Order information	
420-301000	RAILCAT male-female 0,3M
420-301001	RAILCAT male-female 0,5M
420-301003	RAILCAT male-female 1,0M
420-301050	RAILCAT female-female 0,3M
420-301051	RAILCAT female-female 0,5M
420-301053	RAILCAT female-female 1,0M
420-301100	RAILCAT male-male 0,3M
420-301101	RAILCAT male-male 0,5M
420-301103	RAILCAT male-male 1,0M

Overmolded Railcat IP67 M12 Cable assemblies

Reliable and vibration-proof with crimp technology

- Fully shielded Railcat M12 D-coded Cat 5e cable assemblies
- 360° EMI/RFI shielding due to crimp flange / crimp sleeve system
- Functionally reliable with crimp technolgy for signals and cable shield
- Torsion- and vibration-proof strain relief and shield connection
- M12 coupling nut with combined hex knurl for defined tightening torque
- Railway cable RADOX RAILCAT CAT5e XM S
- Certified plastics acc. to EN 45545-2 and NFF 16-101
- Certified qualification acc. to DIN EN 61373 for railway applications

Dimensions



Technical data (mutual data on pages 7 & 46)

Nominal voltage/ current	50 V / 4 A
Temperature range	- 20° C to +70 °C
Degree of protection	IP 67 (screw-locked)
Cable	Radox RailCat CAT5 7,3mm H+S-Nr. 12568935
Order information	
420-311000	RAILCAT male-female 0,3M
420-311001	RAILCAT male-female 0,5M
420-311003	RAILCAT male-female 1,0M
420-311050	RAILCAT female-female 0,3M
420-311051	RAILCAT female-female 0,5M
420-311053	RAILCAT female-female 1,0M
420-311100	RAILCAT male-male 0,3M
420-311101	RAILCAT male-male 0,5M
420-311103	RAILCAT male-male 1,0M