因联结而喜悦!!
Delight Through Connections

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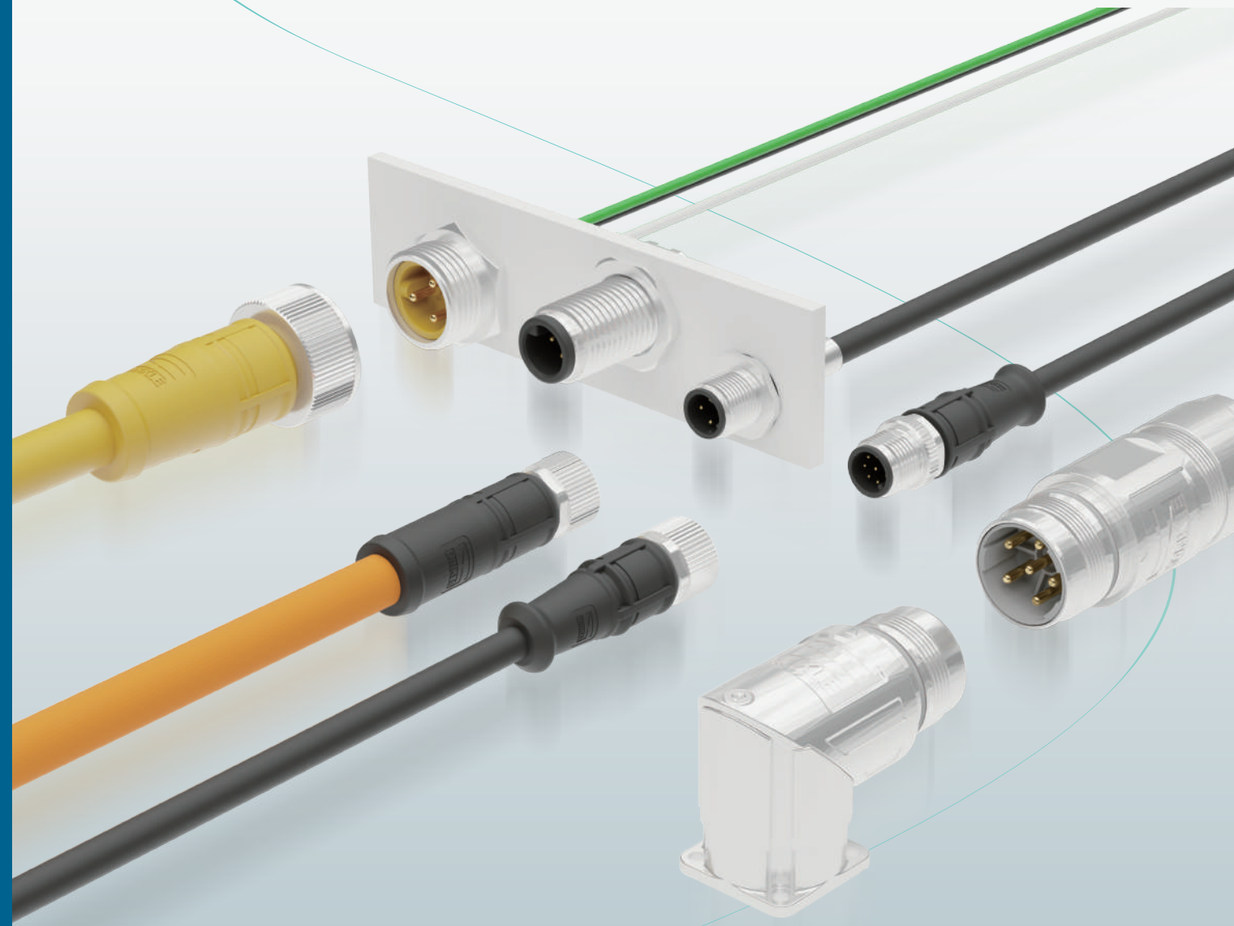
Web : www.dinkle.com

APR./2025_V.02

Circular Connector

M5 / M8 / M12 / M23 / 7/8" 圓形連接器



DINKLE 町洋企業股份有限公司
DINKLE ENTERPRISE CO., LTD.

DC-39.1Te

Delight Through Connections

Dinkle Group was established in 1983, and since that time has insisted on constant innovation and preserving an excellent craftsman's spirit. Starting with a core business of terminal block manufacturing, Dinkle has expanded to provide many outstanding products, deliver highly efficient global service, and promote close connections with end users.

Dinkle has accumulated extensive experience through close cooperation with global customers and application of advanced technologies in the market. Attentively listening to customers, correctly understanding their needs and accurately providing solutions are the key to Dinkle's success and creates end users' satisfaction. Customer support and trust increases our continuous passion and motivation to continue innovating.

Dinkle appreciates our role as an ideal win-win partner for your diverse needs; let us **Delight Through Connections!!**

M5 / M8 / M12 / M23 / 7/8" Circular Connector

Product Feature

- Fully gold-plated contacts
- Pre-assembled cables, fast connection
- IP68 protection - waterproof and dustproof
- Vibration and shock resistance
- Shielded option available, 360° protection
- International Specification
- RoHS and CE compliant

Effortless and Simple On-site Wiring Solution

With the growing industrial automation system, need a reliable power, signal and data transmission; a standardized connector but personalized cable and wiring solutions. Whether you need signal cables for sensor, or Ethernet cables for data communication, Dinkle is able to provide the best solution for every application.

Dinkle standard M5-7/8” circular connector features high stability and tightness. Meeting IP67 rating and higher,our connectors allow reliable connection solution in extreme environments with humidity, large temperature changes, and vibrations. Dinkle provides single and double-ended straight and angled molded connector with PVC and PUR cables for quick field wiring and improves the overall productivity.

Product Advantage

Easy to Assemble; Universal Interface
- Fully gold-plated contacts, effectively transmit signal without interruption
- IP68 Rating

High Shock Resistance Design
- Meets UL2237/UL2238 safety test requirement
- Designed in accordance with IEC 61076-2-101/104/111, 360° fully shielded

Customized Service
- Multiple color options
- Cable lengths and prints can be customized, PUR and PVC cables available.

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Universal Signal & Power

Industrial Ethernet

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Industrial Ethernet

Functional

M5 Circular Connector

Dinkle's M5 circular connectors are designed with high reliability and airtightness. With a compact form factor, they are ideal for more compact devices, offering additional communication points within limited spaces.

To meet the needs of various industrial applications, Dinkle provides high-quality PVC and PUR cables. PVC cables are an excellent choice for chemical washdown applications common in the food and beverage industry. Meanwhile, PUR cables are resistant to cutting fluids, oil, and other harsh chemicals. They also feature high tensile strength, abrasion resistance, and flexibility, making them ideal for high-frequency movement applications like robotic arms.

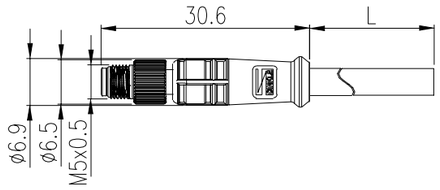
Dinkle's M5 panel-mounted circular connectors are equipped with sealing rings during installation, enabling high airtightness and waterproof performance. They are well-suited for harsh industrial automation environments. Structurally, Dinkle offers panel-mounted products with two installation options: front-mount and rear-mount designs.

Additionally, Dinkle provides M5 one-piece PCB circular connectors, where the housing and internal structure are integrated. This simplifies the installation process while enhancing connection stability and structural integrity. They are particularly suitable for industrial automation and miniature electronic equipment applications.

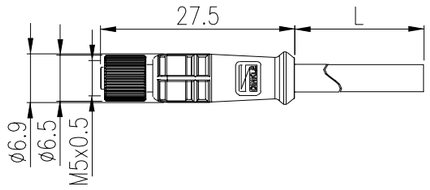
The M5 circular connectors include A-Code encoding, making them ideal for data and signal transmission in automation control systems. They are available in 3-pin and 4-pin options, offering flexible solutions for your equipment requirements.

M5 A-Code Molded Circular Connector

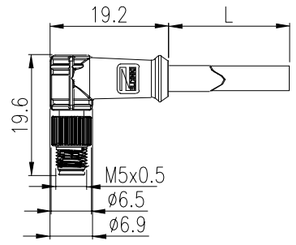
Single-ended straight male



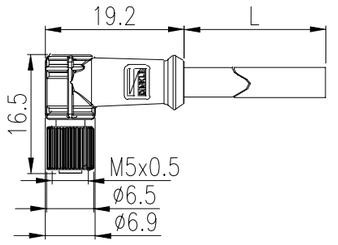
Single-ended straight female



Single-ended angled male



Single-ended angled female



Unit：mm

M5 A-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PUR
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Fixed installation)	Cable gland material	Copper alloy, nickel-plated
Fasten torque	0.3 Nm	UL94 Flammability rating	HB
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	60VDC / 1A (3 Pin)	Cable Jacket	PUR / PVC, BLACK
	60VDC / 1A (4 Pin)	UL AWM style	Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
Rated Impulse Voltage	1.5kV (3 Pin)		No Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
	1.5kV (4 Pin)	Conductor cross section	0.14mm^2 / 26AWG (3 Pin)
Insulation resistance	Min. 100MΩ		0.14mm^2 / 26AWG (4 Pin)
Overvoltage Category	II	Material conductor insulation	PP
Pollution Degree	3	Flame resistance	FT-2 / VW-1
		Dielectric strength	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-105: Detail specification for M5 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M5 A-Code Molded Connector (No Shield)

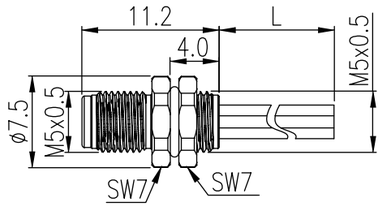
Coding and contacts	Code	A	A
	Contact	3	4
Rated voltage / current		60V / 1A	60V / 1A
Contact arrangement		Male: ① ③ ④ / Female: ① ④ ③	Male: ② ① ③ ④ / Female: ① ② ④ ③

Connector style	Cable	Length(m)	Part number	
Single-ended straight male 	PVC	2	101-A3010-20S020	101-A4010-20S020
		5	101-A3010-20S050	101-A4010-20S050
		10	101-A3010-20S100	101-A4010-20S100
	PUR	2	101-A3010-00S020	101-A4010-00S020
		5	101-A3010-00S050	101-A4010-00S050
		10	101-A3010-00S100	101-A4010-00S100
Single-ended straight female 	PVC	2	102-A3010-20S020	102-A4010-20S020
		5	102-A3010-20S050	102-A4010-20S050
		10	102-A3010-20S100	102-A4010-20S100
	PUR	2	102-A3010-00S020	102-A4010-00S020
		5	102-A3010-00S050	102-A4010-00S050
		10	102-A3010-00S100	102-A4010-00S100
Single-ended angled male 	PVC	2	103-A3010-20S020	103-A4010-20S020
		5	103-A3010-20S050	103-A4010-20S050
		10	103-A3010-20S100	103-A4010-20S100
	PUR	2	103-A3010-00S020	103-A4010-00S020
		5	103-A3010-00S050	103-A4010-00S050
		10	103-A3010-00S100	103-A4010-00S100
Single-ended angled female 	PVC	2	104-A3010-20S020	104-A4010-20S020
		5	104-A3010-20S050	104-A4010-20S050
		10	104-A3010-20S100	104-A4010-20S100
	PUR	2	104-A3010-00S020	104-A4010-00S020
		5	104-A3010-00S050	104-A4010-00S050
		10	104-A3010-00S100	104-A4010-00S100

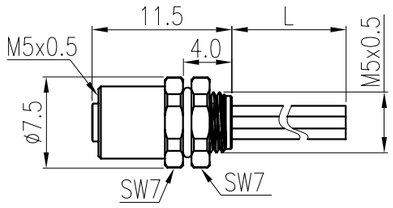
M5 A-Code Device Circular Connector

Front mounting with 0.5m wire

Male

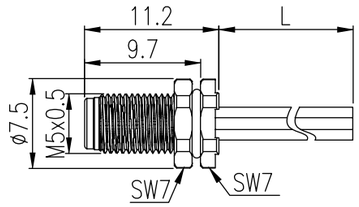


Female

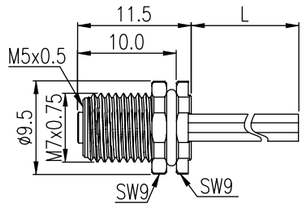


Rear mounting with 0.5m wire

Male



Female



Pin assignments and wire colors

Pin arrangement				
	3P		4P	
	A code			
Pin out	1	Brown	1	Brown
	2	-	2	White
	3	Blue	3	Blue
	4	Black	4	Black

M5 A-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Copper alloy, nickel-plated
Fasten torque	0.3 N·m	O-ring	NBR
Mounting torque	0.6 N·m	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	60VDC / 1A (3 Pin)	Cable Jacket	PVC
	60VDC / 1A (4 Pin)	UL AWM style	PVC : UL 1061
Rated Impulse Voltage	1.5kV (3 Pin)	Conductor cross section	0.14mm^2 / 26AWG (3 Pin)
	1.5kV (4 Pin)		0.14mm^2 / 26AWG (4 Pin)
Insulation resistance	Min. 100MΩ	Material conductor insulation	PVC
Overvoltage Category	II	Flame resistance	FT-2 / VW-1
Pollution Degree	3	Dielectric strength	NA
Standards and Regulations			
Design reference	IEC 61076-2-105: Detail specification for M5 connectors with screw-locking		
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods		
	IEC 60529: Degree of protection provided by enclosures (IP Code)		
Certification reference	UL 2238		

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M5 A-Code Device Connector (No Shield)

Coding and contacts	Code	A	A
	Contact	3	4
Rated voltage / current		60V / 1A	60V / 1A
Contact arrangement		Male 	Female 	Male 	Female 

Front mounting with 0.5m conductor

Connector style	Mount thread	Part number	
Male 	M5 X 0.5	118-A3010-0VSL50	118-A4010-0VSL50
Female 	M5 X 0.5	119-A3010-0VSL50	119-A4010-0VSL50

Rear mounting with 0.5m conductor

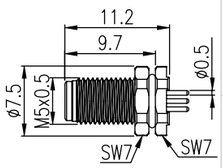
Connector style	Mount thread	Part number	
Male 	M5 X 0.5	120-A3010-0VSL50	120-A4010-0VSL50
Female 	M7 X 0.75	121-A3011-0VSL50	121-A4011-0VSL50

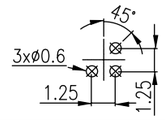
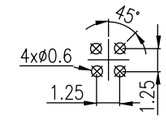
The wire length can be customized. For more details, please contact Dinkle

M5 A-Code One-piece PCB Circular Connector

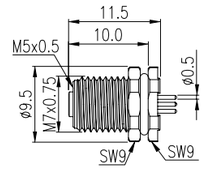
180° Rear mounting, straight(NonShielded)

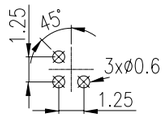
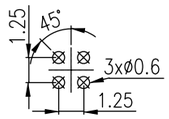
Male



	PCB Layout	
Pin out		
Pin arrangement	 3P	 4P
	A code	

Female



	PCB Layout	
Pin out		
Pin arrangement	 3P	 4P
	A code	

M5 A-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Copper alloy, nickel-plated
Fasten torque	0.3 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	60VDC / 1A (3 Pin)	
	60VDC / 1A (4 Pin)	
Rated Impulse Voltage	1.5kV (3 Pin)	
	1.5kV (4 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-105: Detail specification for M5 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

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M5 A-Code One-piece PCB Connector (No Shield)

Coding and contacts	Code	A		A	
	Contact	3		4	
Rated voltage / current		60V / 1A		60V / 1A	
Contact arrangement		Male 	Female 	Male 	Female 
Rear mounting, straight					
Connector style	**Mount thread**	**Part number**			
Male 	M5 X 0.5	126-A3010-1		126-A4010-1	
Female 	M7 X 0.75	127-A3011-1		127-A4011-1	

M8 Circular Connector

Dinkle's M8 circular connectors with cables combine miniaturization, high protection, durability, and ease of installation, making them ideal for industrial automation, sensor, and control system applications. Their corrosion-resistant materials and various coding options allow for stable operation and high-quality signal transmission in harsh industrial environments. To meet the needs of different industrial applications, Dinkle offers high-quality PVC and PUR cables. Additionally, shielded cables with tinned copper wire braiding are available, enhancing electromagnetic shielding and noise resistance, effectively preventing interference in high-noise environments, and ensuring the communication reliability of sensors and actuators.

If you require a more compact solution with higher power density within a limited enclosure space, Dinkle's M8 panel-mounted circular connectors perform excellently under demanding conditions and provide a minimum IP65 dustproof and waterproof rating. Structurally, the panel-mounted product line offers front-locking and rear-locking housings to accommodate different installation requirements. These connectors also include terminals with solder cups, allowing customers to customize wiring based on the internal space of their equipment.

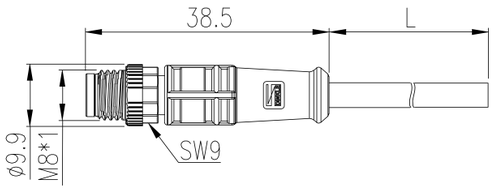
Dinkle's M8 one-piece PCB circular connectors feature industry-standard metric thread structures and IP68 high protection ratings, enabling simple and secure direct transmission of signals, data, and power to PCBs. Whether it's M5, M8, or M12 PCB circular connectors, all use corrosion-resistant nickel-plated metal housings combined with sealing rings, offering the most reliable protection for your equipment.

The M8 two-piece PCB circular connectors employ SMT (Surface-Mount Technology), distinguishing them from earlier through-hole parts that used wave soldering. SMT significantly reduces the size of electronic products, achieving lighter, thinner, shorter, and more compact designs. SMT technology also boasts high reliability, strong vibration resistance, low solder joint defect rates, good high-frequency characteristics, high assembly density, small electronic product sizes, and ease of automation.

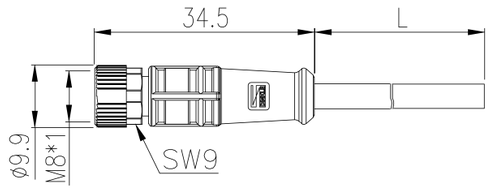
Dinkle's M8 circular connector series also includes A and B coding options, providing greater flexibility for your equipment solutions.

M8 A-Code Molded Circular Connector

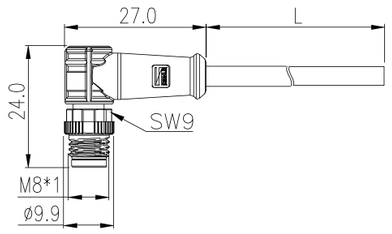
Single-ended straight male



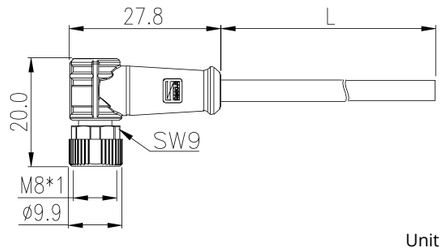
Single-ended straight female



Single-ended angled male

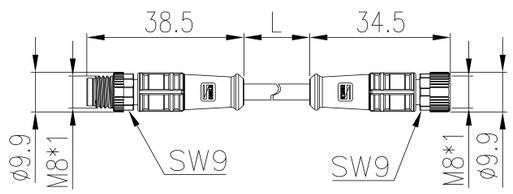


Single-ended angled female

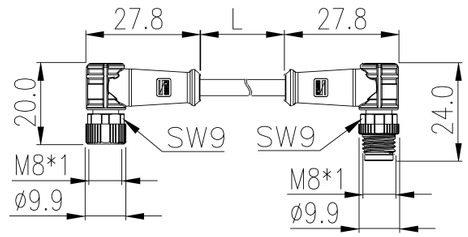


Unit：mm

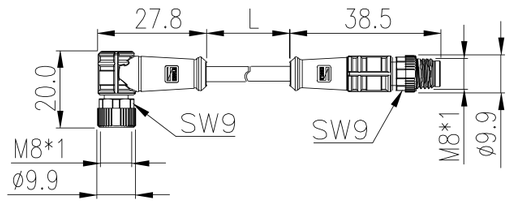
Single male to Single female



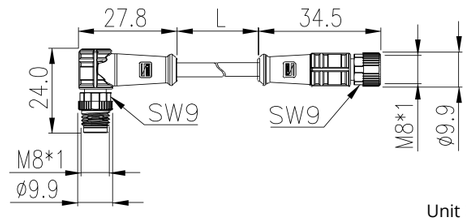
Angled male to angled female



Single male to angled female



Angled male to straight female



Unit：mm

M8 A-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PUR / PUR
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Fixed installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.3 Nm	UL94 Flammability rating	HB
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	60VAC / 4A (≤4 Pin)	Cable Jacket	PUR / PVC, BLACK
	30VAC / 1.5A (6 Pin)	UL AWM style	Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
	30VAC / 1.5A (8 Pin)		No Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
Rated Impulse Voltage	1.5kV (≤4 Pin)	Conductor cross section	0.20mm² / 24AWG (≤4 Pin)
	0.8kV (6 Pin)		0.14mm² / 26AWG (6 Pin)
	0.8kV (8 Pin)		0.14mm² / 26AWG (8 Pin)
Insulation resistance	Min. 100MΩ	Material conductor insulation	PP
Overvoltage Category	II	Flame resistance	FT-2 / VW-1
Pollution Degree	3	Dielectric strength	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 A-Code Molded Connector (Shield)

Coding and contacts	Code	A		A		A		A	
	Contact	3		4		6		8	
Rated voltage / current		60V / 4A		60V/ 4A		30V / 1.5A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female

Connector style	Cable	Length(m)	Part number			
Single-ended straight male	PVC	2	351-A3000-15S020	351-A4000-15S020	351-A6000-15S020	351-A8000-15S020
		5	351-A3000-15S050	351-A4000-15S050	351-A6000-15S050	351-A8000-15S050
		10	351-A3000-15S100	351-A4000-15S100	351-A6000-15S100	351-A8000-15S100
	PUR	2	351-A3000-05S020	351-A4000-05S020	351-A6000-05S020	351-A8000-05S020
		5	351-A3000-05S050	351-A4000-05S050	351-A6000-05S050	351-A8000-05S050
		10	351-A3000-05S100	351-A4000-05S100	351-A6000-05S100	351-A8000-05S100
Single-ended straight female	PVC	2	352-A3000-15S020	352-A4000-15S020	352-A6000-15S020	352-A8000-15S020
		5	352-A3000-15S050	352-A4000-15S050	352-A6000-15S050	352-A8000-15S050
		10	352-A3000-15S100	352-A4000-15S100	352-A6000-15S100	352-A8000-15S100
	PUR	2	352-A3000-05S020	352-A4000-05S020	352-A6000-05S020	352-A8000-05S020
		5	352-A3000-05S050	352-A4000-05S050	352-A6000-05S050	352-A8000-05S050
		10	352-A3000-05S100	352-A4000-05S100	352-A6000-05S100	352-A8000-05S100
Single-ended angled male	PVC	2	353-A3000-15S020	353-A4000-15S020	353-A6000-15S020	353-A8000-15S020
		5	353-A3000-15S050	353-A4000-15S050	353-A6000-15S050	353-A8000-15S050
		10	353-A3000-15S100	353-A4000-15S100	353-A6000-15S100	353-A8000-15S100
	PUR	2	353-A3000-05S020	353-A4000-05S020	353-A6000-05S020	353-A8000-05S020
		5	353-A3000-05S050	353-A4000-05S050	353-A6000-05S050	353-A8000-05S050
		10	353-A3000-05S100	353-A4000-05S100	353-A6000-05S100	353-A8000-05S100
Single-ended angled female	PVC	2	354-A3000-15S020	354-A4000-15S020	354-A6000-15S020	354-A8000-15S020
		5	354-A3000-15S050	354-A4000-15S050	354-A6000-15S050	354-A8000-15S050
		10	354-A3000-15S100	354-A4000-15S100	354-A6000-15S100	354-A8000-15S100
	PUR	2	354-A3000-05S020	354-A4000-05S020	354-A6000-05S020	354-A8000-05S020
		5	354-A3000-05S050	354-A4000-05S050	354-A6000-05S050	354-A8000-05S050
		10	354-A3000-05S100	354-A4000-05S100	354-A6000-05S100	354-A8000-05S100
Straight male mate straight female	PVC	0.6	356-A3000-15SL60	356-A4000-15SL60	356-A6000-15SL60	356-A8000-15SL60
		1.5	356-A3000-15S015	356-A4000-15S015	356-A6000-15S015	356-A8000-15S015
		3	356-A3000-15S030	356-A4000-15S030	356-A6000-15S030	356-A8000-15S030
	PUR	0.6	356-A3000-05SL60	356-A4000-05SL60	356-A6000-05SL60	356-A8000-05SL60
		1.5	356-A3000-05S015	356-A4000-05S015	356-A6000-05S015	356-A8000-05S015
		3	356-A3000-05S030	356-A4000-05S030	356-A6000-05S030	356-A8000-05S030
Angled male mate angled female	PVC	0.6	359-A3000-15SL60	359-A4000-15SL60	359-A6000-15SL60	359-A8000-15SL60
		1.5	359-A3000-15S015	359-A4000-15S015	359-A6000-15S015	359-A8000-15S015
		3	359-A3000-15S030	359-A4000-15S030	359-A6000-15S030	359-A8000-15S030
	PUR	0.6	359-A3000-05SL60	359-A4000-05SL60	359-A6000-05SL60	359-A8000-05SL60
		1.5	359-A3000-05S015	359-A4000-05S015	359-A6000-05S015	359-A8000-05S015
		3	359-A3000-05S030	359-A4000-05S030	359-A6000-05S030	359-A8000-05S030

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M8 A-Code Molded Connector (No Shield)

Coding and contacts	Code	A		A		A		A	
	Contact	3		4		6		8	
Rated voltage / current		60V / 4A		60V/ 4A		30V / 1.5A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female

Connector style	Cable	Length(m)	Part number			
Single-ended straight male	PVC	2	**301-A3000-10S020**	**301-A4000-10S020**	301-A6000-10S020	**301-A8000-10S020**
		5	**301-A3000-10S050**	**301-A4000-10S050**	301-A6000-10S050	**301-A8000-10S050**
		10	**301-A3000-10S100**	**301-A4000-10S100**	301-A6000-10S100	**301-A8000-10S100**
	PUR	2	**301-A3000-00S020**	**301-A4000-00S020**	301-A6000-00S020	**301-A8000-00S020**
		5	**301-A3000-00S050**	**301-A4000-00S050**	301-A6000-00S050	**301-A8000-00S050**
		10	**301-A3000-00S100**	**301-A4000-00S100**	301-A6000-00S100	**301-A8000-00S100**
Single-ended straight female	PVC	2	**302-A3000-10S020**	**302-A4000-10S020**	302-A6000-10S020	**302-A8000-10S020**
		5	**302-A3000-10S050**	**302-A4000-10S050**	302-A6000-10S050	**302-A8000-10S050**
		10	**302-A3000-10S100**	**302-A4000-10S100**	302-A6000-10S100	**302-A8000-10S100**
	PUR	2	**302-A3000-00S020**	**302-A4000-00S020**	302-A6000-00S020	**302-A8000-00S020**
		5	**302-A3000-00S050**	**302-A4000-00S050**	302-A6000-00S050	**302-A8000-00S050**
		10	**302-A3000-00S100**	**302-A4000-00S100**	302-A6000-00S100	**302-A8000-00S100**
Single-ended angled male	PVC	2	**303-A3000-10S020**	**303-A4000-10S020**	303-A6000-10S020	**303-A8000-10S020**
		5	**303-A3000-10S050**	**303-A4000-10S050**	303-A6000-10S050	**303-A8000-10S050**
		10	**303-A3000-10S100**	**303-A4000-10S100**	303-A6000-10S100	**303-A8000-10S100**
	PUR	2	**303-A3000-00S020**	**303-A4000-00S020**	303-A6000-00S020	**303-A8000-00S020**
		5	**303-A3000-00S050**	**303-A4000-00S050**	303-A6000-00S050	**303-A8000-00S050**
		10	**303-A3000-00S100**	**303-A4000-00S100**	303-A6000-00S100	**303-A8000-00S100**
Single-ended angled female	PVC	2	**304-A3000-10S020**	**304-A4000-10S020**	304-A6000-10S020	**304-A8000-10S020**
		5	**304-A3000-10S050**	**304-A4000-10S050**	304-A6000-10S050	**304-A8000-10S050**
		10	**304-A3000-10S100**	**304-A4000-10S100**	304-A6000-10S100	**304-A8000-10S100**
	PUR	2	**304-A3000-00S020**	**304-A4000-00S020**	304-A6000-00S020	**304-A8000-00S020**
		5	**304-A3000-00S050**	**304-A4000-00S050**	304-A6000-00S050	**304-A8000-00S050**
		10	**304-A3000-00S100**	**304-A4000-00S100**	304-A6000-00S100	**304-A8000-00S100**
Straight male mate straight female	PVC	0.6	**306-A3000-10SL60**	**306-A4000-10SL60**	306-A6000-10SL60	**306-A8000-10SL60**
		1.5	**306-A3000-10S015**	**306-A4000-10S015**	306-A6000-10S015	**306-A8000-10S015**
		3	**306-A3000-10S030**	**306-A4000-10S030**	306-A6000-10S030	**306-A8000-10S030**
	PUR	0.6	**306-A3000-00SL60**	**306-A4000-00SL60**	306-A6000-00SL60	**306-A8000-00SL60**
		1.5	**306-A3000-00S015**	**306-A4000-00S015**	306-A6000-00S015	**306-A8000-00S015**
		3	**306-A3000-00S030**	**306-A4000-00S030**	306-A6000-00S030	**306-A8000-00S030**
Angled male mate angled female	PVC	0.6	**309-A3000-10SL60**	**309-A4000-10SL60**	309-A6000-10SL60	**309-A8000-10SL60**
		1.5	**309-A3000-10S015**	**309-A4000-10S015**	309-A6000-10S015	**309-A8000-10S015**
		3	**309-A3000-10S030**	**309-A4000-10S030**	309-A6000-10S030	**309-A8000-10S030**
	PUR	0.6	**309-A3000-00SL60**	**309-A4000-00SL60**	309-A6000-00SL60	**309-A8000-00SL60**
		1.5	**309-A3000-00S015**	**309-A4000-00S015**	309-A6000-00S015	**309-A8000-00S015**
			309-A3000-00S030	**309-A4000-00S030**	309-A6000-00S030	**309-A8000-00S030**

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified

M8 A-Code Molded Connector (No Shield, Drag, chain)

Coding and contacts	Code	A		A		A		A	
	Contact	3		4		6		8	
Rated voltage / current		60V / 4A		60V/ 4A		30V / 1.5A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female
Connector style	Cable	Length(m)	Part number						
Single-ended straight male	PUR	2	301-A3000-02S020		301-A4000-02S020		301-A6000-02S020		301-A8000-02S020
		5	301-A3000-02S050		301-A4000-02S050		301-A6000-02S050		301-A8000-02S050
		10	301-A3000-02S100		301-A4000-02S100		301-A6000-02S100		301-A8000-02S100
Single-ended straight female	PUR	2	302-A3000-02S020		302-A4000-02S020		302-A6000-02S020		302-A8000-02S020
		5	302-A3000-02S050		302-A4000-02S050		302-A6000-02S050		302-A8000-02S050
		10	302-A3000-02S100		302-A4000-02S100		302-A6000-02S100		302-A8000-02S100
Single-ended angled male	PUR	2	303-A3000-02S020		303-A4000-02S020		303-A6000-02S020		303-A8000-02S020
		5	303-A3000-02S050		303-A4000-02S050		303-A6000-02S050		303-A8000-02S050
		10	303-A3000-02S100		303-A4000-02S100		303-A6000-02S100		303-A8000-02S100
Single-ended angled female	PUR	2	304-A3000-02S020		304-A4000-02S020		304-A6000-02S020		304-A8000-02S020
		5	304-A3000-02S050		304-A4000-02S050		304-A6000-02S050		304-A8000-02S050
		10	304-A3000-02S100		304-A4000-02S100		304-A6000-02S100		304-A8000-02S100
Straight male mate straight female	PUR	0.6	306-A3000-02SL60		306-A4000-02SL60		306-A6000-02SL60		306-A8000-02SL60
		1.5	306-A3000-02S015		306-A4000-02S015		306-A6000-02S015		306-A8000-02S015
		3	306-A3000-02S030		306-A4000-02S030		306-A6000-02S030		306-A8000-02S030
Angled male mate angled female	PUR	0.6	309-A3000-02SL60		309-A4000-02SL60		309-A6000-02SL60		309-A8000-02SL60
		1.5	309-A3000-02S015		309-A4000-02S015		309-A6000-02S015		309-A8000-02S015
		3	309-A3000-02S030		309-A4000-02S030		309-A6000-02S030		309-A8000-02S030

Cables with drag chain function are guaranteed to withstand 5 million bending times(R=28mm, L=1m, V=1m/s)
The configuration of connectors and the cable length can be ustomized. For more details, please contact Dinkle

M8 mate M12 A-Code Molded Connector (Shielded)

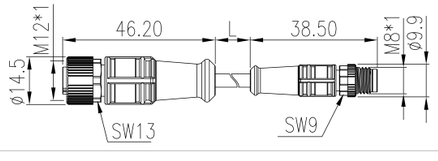
Coding and contacts	Code	A		A	
	Contact	3		4	
Rated voltage / current		60V / 4A		60V/ 4A	
Contact arrangement		Male	Female	Male	Female
Connector style	Cable	Length(m)	Part number		
M8 straight male mate M12 straight female	PVC	0.6	350-13000-10SL60		350-14000-10SL60
		1.5	350-13000-10S015		350-14000-10S015
		3	350-13000-10S030		350-14000-10S030
	PUR	0.6	350-13000-00SL60		350-14000-00SL60
		1.5	350-13000-00S015		350-14000-00S015
		3	350-13000-00S030		350-14000-00S030
M8 angled male mate M12 angled female	PVC	0.6	350-73000-10SL60		350-74000-10SL60
		1.5	350-73000-10S015		350-74000-10S015
		3	350-73000-10S030		350-74000-10S030
	PUR	0.6	350-73000-00SL60		350-74000-00SL60
		1.5	350-73000-00S015		350-74000-00S015
		3	350-73000-00S030		350-74000-00S030

The connector on both sides can be customized, such as straight/angled, male/female
The cable length can be customized, please contacts with Dinkle

M8 mate M12 A-Code Molded Connector (No Shielded)

Coding and contacts	Code	A		A	
	Contact	3		4	
Rated voltage / current		60V / 4A		60V/ 4A	
Contact arrangement		Male	Female	Male	Female
Connector style	Cable	Length(m)	Part number		
M8 straight male mate M12 straight female	PUR	0.6	350-13000-02SL60		350-14000-02SL60
		1.5	350-13000-02S015		350-14000-02S015
		3	350-13000-02S030		350-14000-02S030
M8 angled male mate M12 angled female	PUR	0.6	350-73000-02SL60		350-74000-02SL60
		1.5	350-73000-02S015		350-74000-02S015
		3	350-73000-02S030		350-74000-02S030

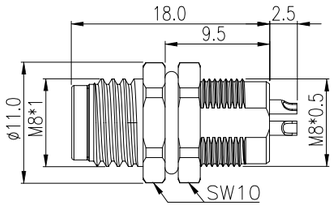
The connector on both sides can be customized, such as straight/angled, male/female
The cable length can be customized, please contacts with Dinkle



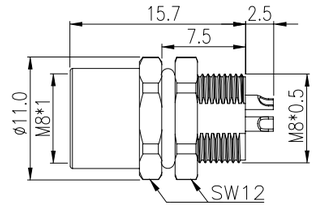
M8 A-Code Device Circular Connector

Front mounting with 0.5m wire

Male

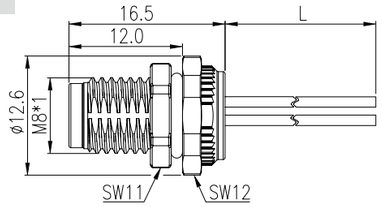


Female

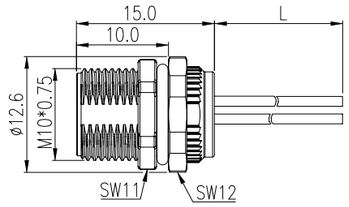


Front mounting with solder cup

Male

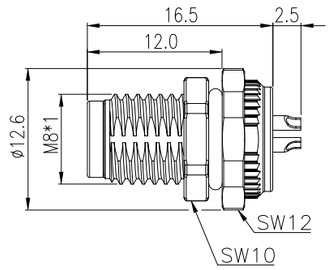


Female

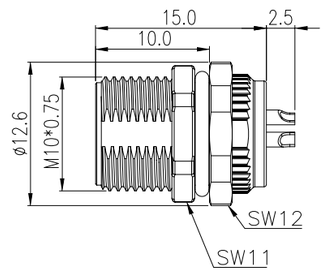


Rear mounting with 0.5m wire

Male



Female



Pin assignments and wire colors

Pin arrangement								
	3P		4P		6P		8P	
	A code							
Pin out	1	Brown	1	Brown	1	Brown	1	White
	2	-	2	White	2	White	2	Brown
	3	Blue	3	Blue	3	Blue	3	Green
	4	Black	4	Black	4	Black	4	Yellow
					5	Gray	5	Gray
					6	Pink	6	Pink
							7	Blue
							8	Red

M8 A-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.3 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	60VAC / 4A (≤4 Pin)	Cable Jacket	PVC
	30VAC / 1.5A (6 Pin)	UL AWM style	PVC : UL 1061
	30VAC / 1.5A (8 Pin)	Conductor cross section	0.25mm^2 / 24AWG (≤4 Pin)
Rated Impulse Voltage	1.5kV (≤4 Pin)		0.14mm^2 / 26AWG (6 Pin)
	0.8kV (6 Pin)		0.14mm^2 / 26AWG (8 Pin)
	0.8kV (8 Pin)	Material conductor insulation	SR-PVC
Insulation resistance	Min. 100MΩ	Flame resistance	VW-1/FT-1
Overvoltage Category	II	Dielectric strength	NA
Pollution Degree	3		

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 A-Code Device Connector (No Shield)

Coding and contacts	Code	A	A	A	A
	Contact	3	4	6	8
Rated voltage / current		60V / 4A	60V/ 4A	30V / 1.5A	30V / 1.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female

Front mounting with 0.5m wire					
Connector style	**Mount thread**	**Part number**			
Male	M8 X 0.5	**318-A3000-0VSL50**	**318-A4000-0VSL50**	318-A6000-0VSL50	318-A8000-0VSL50
Female	M8 X 0.5	**319-A3000-0VSL50**	**319-A4000-0VSL50**	319-A6000-0VSL50	319-A8000-0VSL50
Rear mounting with 0.5m wire					
Connector style	**Mount thread**	**Part number**			
Male	M8 x 1	**320-A3001-0VSL50**	**320-A4001-0VSL50**	320-A6001-0VSL50	320-A8001-0VSL50
Female	M10 x 0.75	**321-A3002-0VSL50**	**321-A4002-0VSL50**	321-A6002-0VSL50	321-A8002-0VSL50
Front mounting with solder cup					
Connector style	**Mount thread**	**Part number**			
Male	M8 X 0.5	**332-A3000-S**	**332-A4000-S**	332-A6000-S	332-A8000-S
Female	M8 X 0.5	**333-A3000-S**	**333-A4000-S**	333-A6000-S	333-A8000-S
Rear mounting with solder cup					
Connector style	**Mount thread**	**Part number**			
Male	M8 x 1	**330-A3001-S**	**330-A4001-S**	330-A6001-S	330-A8001-S
Female	M10 x 0.75	**331-A3002-S**	**331-A4002-S**	331-A6002-S	331-A8002-S

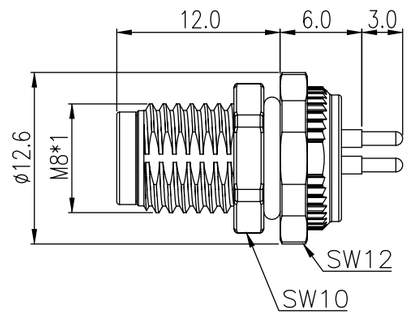
Bolded part number is cULus certified.

The wire length can be customized. For more details, please contact Dinkle

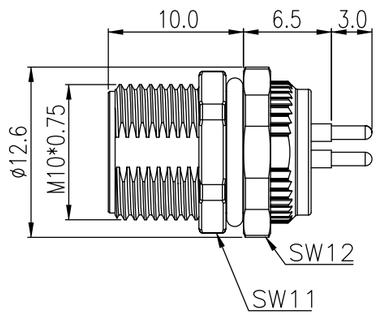
M8 A-Code One-piece PCB Circular Connector

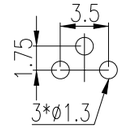
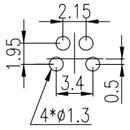
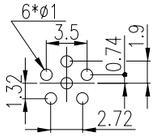
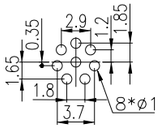
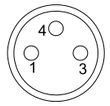
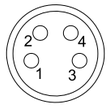
180° Rear mounting, straight

Male



Female



PCB Layout				
Pin out				
Pin arrangement				
	3P	4P	6P	8P
	A code			

M8 A-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	60VAC / 4A (≤4 Pin)	
	30VAC / 1.5A (6 Pin)	
	30VAC / 1.5A (8 Pin)	
Rated Impulse Voltage	1.5kV (≤4 Pin)	
	0.8kV (6 Pin)	
	0.8kV (8 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 A-Code One-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	A	A	A	A
	Contact	3	4	6	8
Rated voltage / current		60V / 4A	60V/ 4A	30V / 1.5A	30V / 1.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female

Rear mounting, straight, No shield

Connector style	Mount thread	Part number			
Male 	M8 X 1	**326-A3001-4**	**326-A4001-4**	326-A6001-4	326-A8001-4
Female 	M10 x 0.75	**327-A3002-4**	**327-A4002-4**	327-A6002-4	327-A8002-4

Rear mounting, angled, shield

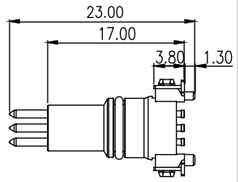
Connector style	Mount thread	Part number			
Male 	M8 X 1	328-A3001-4	328-A4001-4	328-A6001-4	328-A8001-4
Female 	M10 x 0.75	329-A3002-4	329-A4002-4	329-A6002-4	329-A8002-4

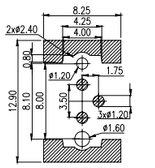
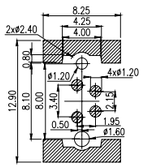
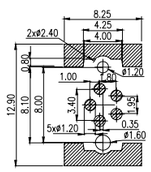
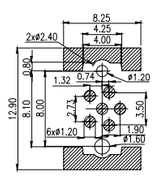
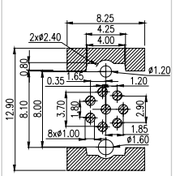
Bolded part number is cULus certified.

M8 A-Code Two-piece PCB Circular Connector

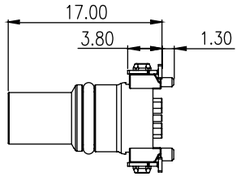
180° Rear mounting, straight (Shielded)

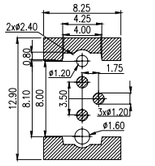
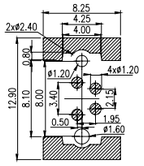
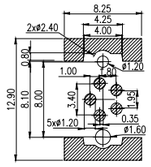
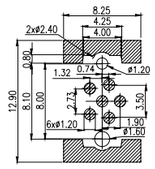
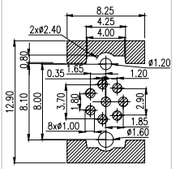
Male



	PCB Layout				
Pin out					
Pin arrangement					
	3P	4P	5P	6P	8P
	A code				

Female



	PCB Layout				
Pin out					
Pin arrangement					
	3P	4P	5P	6P	8P
	A code				

M8 A-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-25°C ~ 80°C	O-ring	SILICONE
Soldering method	THR	Moisture Sensitivity Levels	1
		UL94 Flammability rating	V0

電氣特性		線材資訊
Rated voltage / current (contacts)	60VAC / 4A (≤4 Pin)	
	30VAC / 3A (5 Pin)	
	30VAC / 1.5A (6 Pin)	
	30VAC / 1.5A (8 Pin)	
Rated Impulse Voltage	1.5kV (≤4 Pin)	
	0.8kV (5 Pin)	
	0.8kV (6 Pin)	
	0.8kV (8 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 A-Code Two-piece PCB Connector (No Shield)

Coding and contacts	Code	A	A	A	A	A
	Contact	3	4	5	6	8
Rated voltage / current		60V / 4A	60V/ 4A	60V/ 4A	30V / 1.5A	30V / 1.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female	Male / Female

SMT Soldering, straight, No shield

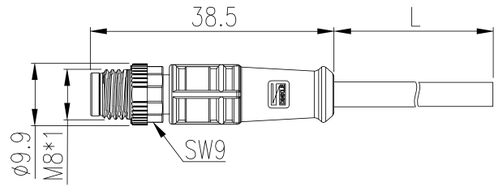
Connector style	package	Part number				
Male 	Tray	381-A3S00U-1	381-A4S00U-1	-	-	-
	Tape-and reel	381-A3S00U-2	381-A4S00U-2	-	-	-
Female 	Tray	382-A3S00U-1	382-A4S00U-1	382-A5S00U-1	382-A6S00U-1	382-A8S00U-1
	Tape-and reel	382-A3S00U-2	382-A4S00U-2	382-A5S00U-2	382-A6S00U-2	382-A8S00U-2

Style	Mount thread	Part number
Male use 	M12 X 1	383-S1200
Female use 	M12 X 1	384-S1200

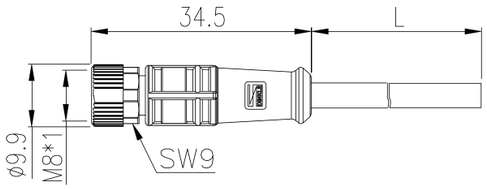
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M8 B-Code Molded Circular Connector

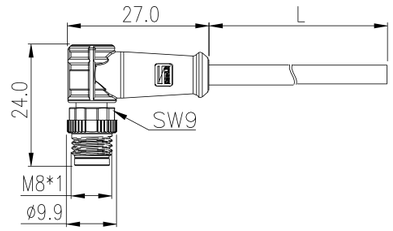
Single-ended straight male



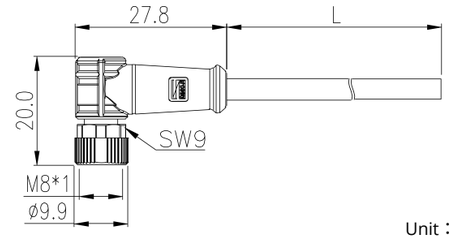
Single-ended straight female



Single-edned angled male

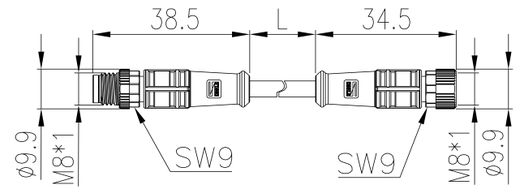


Single-ended angled female

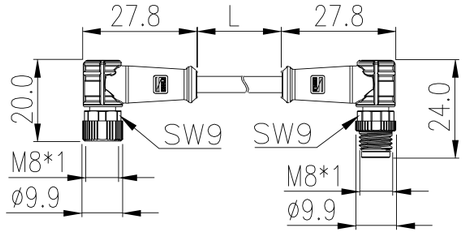


Unit：mm

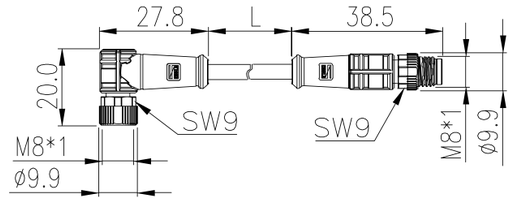
Straight male to straight female



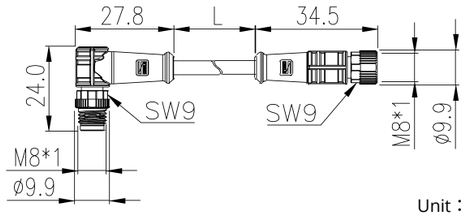
Angled male to angled female



Straight male to angled female



Angled male to straight female



Unit：mm

M8 B-Code Molded Connector

Mechanical Properties		Material Properties		
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated	
Degree of protection	IP67	Contact carrier / overmolding	PUR / PUR	
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR	
	-25°C ~ 80°C (Fixed installation)	Cable gland material	Zinc die-cast, nickel-plated	
Fasten torque	0.3 Nm	UL94 Flammability rating	HB	
Electrical Properties		**Cable Information**		
Rated voltage / current (contacts)	30VAC / 3A (5 Pin)	Cable Jacket	PUR / PVC, BLACK	
Rated Impulse Voltage	0.8kV (5 Pin)	UL AWM style	Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
Insulation resistance	Min. 100MΩ		No Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
Overvoltage Category	II	Conductor cross section	0.20mm^2 / 24AWG (5 Pin)	
Pollution Degree	3	Material conductor insulation	PP	
		Flame resistance	FT-2 / VW-1	
		Dielectric strength	2.0KV/1min	

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 B-Code Molded Connector (Shield)

Coding and contacts	Code	B	
	Contact	5	
Rated voltage / current		30V / 3A	
Contact arrangement		Male 	Female 

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PVC	2	351-B5000-15S020
		5	351-B5000-15S050
		10	351-B5000-15S100
	PUR	2	351-B5000-05S020
		5	351-B5000-05S050
		10	351-B5000-05S100
Single-ended straight female 	PVC	2	352-B5000-15S020
		5	352-B5000-15S050
		10	352-B5000-15S100
	PUR	2	352-B5000-05S020
		5	352-B5000-05S050
		10	352-B5000-05S100
Single-ended angled male 	PVC	2	353-B5000-15S020
		5	353-B5000-15S050
		10	353-B5000-15S100
	PUR	2	353-B5000-05S020
		5	353-B5000-05S050
		10	353-B5000-05S100
Single-ended angled female 	PVC	2	354-B5000-15S020
		5	354-B5000-15S050
		10	354-B5000-15S100
	PUR	2	354-B5000-05S020
		5	354-B5000-05S050
		10	354-B5000-05S100
Straight male mate straight female 	PVC	0.6	356-B5000-15SL60
		1.5	356-B5000-15S015
		3	356-B5000-15S030
	PUR	0.6	356-B5000-05SL60
		1.5	356-B5000-05S015
		3	356-B5000-05S030
Angled male mate angled female 	PVC	0.6	359-B5000-15SL60
		1.5	359-B5000-15S015
		3	359-B5000-15S030
	PUR	0.6	359-B5000-05SL60
		1.5	359-B5000-05S015
			359-B5000-05S030

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M8 B-Code Molded Connector (No Shield)

Coding and contacts	Code	B	
	Contact	5	
Rated voltage / current		30V / 3A	
Contact arrangement		Male 	Female 

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PVC	2	301-B5000-10S020
		5	301-B5000-10S050
		10	301-B5000-10S100
	PUR	2	301-B5000-00S020
		5	301-B5000-00S050
		10	301-B5000-00S100
Single-ended straight female 	PVC	2	302-B5000-10S020
		5	302-B5000-10S050
		10	302-B5000-10S100
	PUR	2	302-B5000-00S020
		5	302-B5000-00S050
		10	302-B5000-00S100
Single-ended angled male 	PVC	2	303-B5000-10S020
		5	303-B5000-10S050
		10	303-B5000-10S100
	PUR	2	303-B5000-00S020
		5	303-B5000-00S050
		10	303-B5000-00S100
Single-ended angled female 	PVC	2	304-B5000-10S020
		5	304-B5000-10S050
		10	304-B5000-10S100
	PUR	2	304-B5000-00S020
		5	304-B5000-00S050
		10	304-B5000-00S100
Straight male mate straight female 	PVC	0.6	306-B5000-10SL60
		1.5	306-B5000-10S015
		3	306-B5000-10S030
	PUR	0.6	306-B5000-00SL60
		1.5	306-B5000-00S015
		3	306-B5000-00S030
Angled male mate angled female 	PVC	0.6	309-B5000-10SL60
		1.5	309-B5000-10S015
		3	309-B5000-10S030
	PUR	0.6	309-B5000-00SL60
		1.5	309-B5000-00S015
			309-B5000-00S030

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M8 B-Code Molded Connector (No Shield, Drag, chain)

Coding and contacts	Code	B	
	Contact	5	
Rated voltage / current		30V / 3A	
Contact arrangement		Male 	Female 

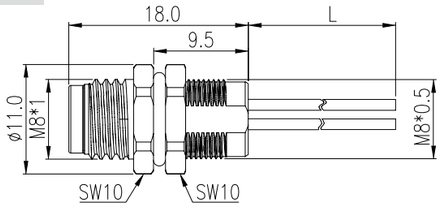
Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	301-B5000-02S020
		5	301-B5000-02S050
		10	301-B5000-02S100
Single-ended straight female 	PUR	2	302-B5000-02S020
		5	302-B5000-02S050
		10	302-B5000-02S100
Single-ended angled male 	PUR	2	303-B5000-02S020
		5	303-B5000-02S050
		10	303-B5000-02S100
Single-ended angled female 	PUR	2	304-B5000-02S020
		5	304-B5000-02S050
		10	304-B5000-02S100
Straight male mate straight female 	PUR	0.6	306-B5000-02SL60
		1.5	306-B5000-02S015
		3	306-B5000-02S030
Angled male mate angled female 	PUR	0.6	309-B5000-02SL60
		1.5	309-B5000-02S015
			309-B5000-02S030

Cables with drag chain function are guaranteed to withstand 5 million bending times(R=28mm, L=1m, V=1m/s)
The configuration of connectors and the cable length can be ustomized. For more details, please contact Dinkle

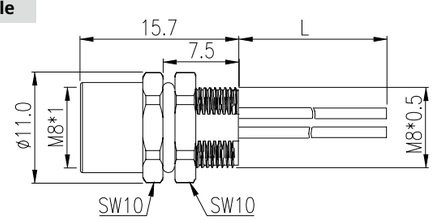
M8 B-Code Device Circular Connector

Front mounting with 0.5m wire

Male

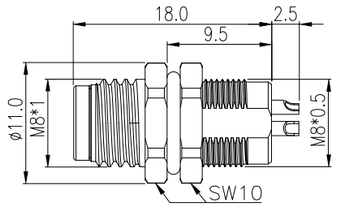


Female

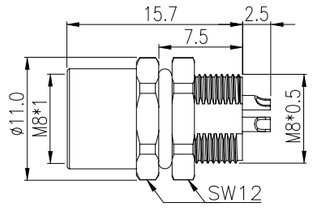


Front mounting with solder cup

Male

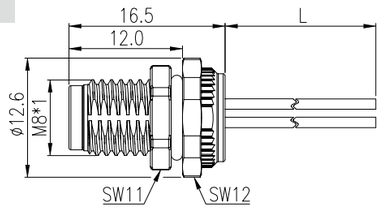


Female

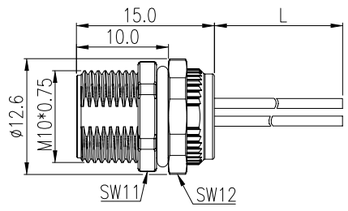


Rear mounting with 0.5m wire

Male

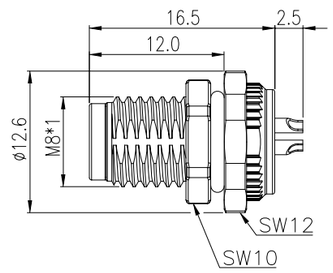


Female

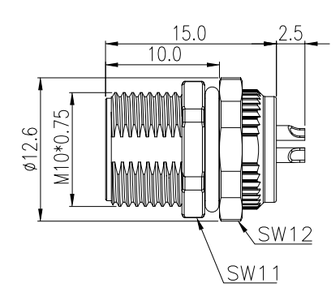


Rear mounting with solder cup

Male



Female



Pin assignments and wire colors

Pin arrangement		
	5P	
	B code	
Pin out	1	Brown
	2	White
	3	Blue
	4	Black
	5	Gray

M8 B-Code Device Connector

Mechanical Properties		Mechanical Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.3 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	30VAC / 3A (5 Pin)	Cable Jacket	PVC
Rated Impulse Voltage	0.8kV (5 Pin)	UL AWM style	PVC : UL 1061
Insulation resistance	Min. 100MΩ	Conductor cross section	0.25mm² / 24AWG (5 Pin)
Overvoltage Category	II	Material conductor insulation	SR-PVC
Pollution Degree	3	Flame resistance	VW-1 / FT-1
		Dielectric strength	NA

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 B-Code Device Connector (No Shield)

Coding and contacts	**Code**	**B**	
	Contact	**5**	
Rated voltage / current		30V / 3A	
Contact arrangement		Male 	Female 

Front mounting with 0.5m wire		
Connector style	**Mount thread**	**Part number**
Male 	M8 X 0.5	318-B5000-0VSL50
Female 	M8 X 0.5	319-B5000-0VSL50

Rear mounting with 0.5m wire		
Connector style	**Mount thread**	**Part number**
Male 	M8 x 1	320-B5001-0VSL50
Female 	M10 x 0.75	321-B5002-0VSL50

Front mounting with solder cup		
Connector style	**Mount thread**	**Part number**
Male 	M8 X 0.5	332-B5000-S
Female 	M8 X 0.5	333-B5000-S

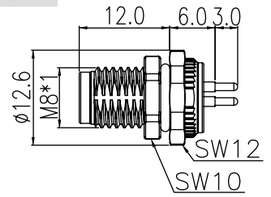
Rear mounting with solder cup		
Connector style	**Mount thread**	**Part number**
Male 	M8 x 1	330-B5001-S
Female 	M10 x 0.75	331-B5002-S

The wire length can be customized. For more details, please contact Dinkle

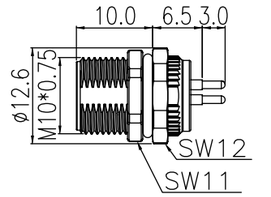
M8 B-Code One-piece PCB Circular Connector

180° Rear mounting, straight

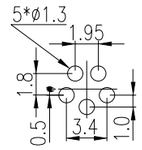
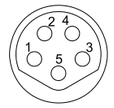
Male



Female



PCB Layout

Pin out	
Pin arrangement	 5P B code

M8 B-Code One-piece PCB Connector

Mechanical Properties		**Material Properties**	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		**Cable Information**
Rated voltage / current (contacts)	30VAC / 3A (5 Pin)	
Rated Impulse Voltage	0.8kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-104: Detail specification for M8 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M8 A-Code One / Two-piece PCB Connector (Shield / No Shield)

Coding and contacts	**Code**	**B**	
	Contact	**5**	
Rated voltage / current		30V / 3A	
Contact arrangement		Male 	Female 
Rear mounting, straight, No shield			
Connector style	**Mount thread**	**Part number**	
Male 	M8 X 1	**326-B5001-4**	
Female 	M10 x 0.75	**327-B5002-4**	
Rear mounting, angled, shield			
Connector style	**Mount thread**	**Part number**	
Male 	M8 X 1	**328-B5001-4**	
Female 	M10 x 0.75	**329-B5002-4**	
SMT Soldering, straight, No shield			
Connector style	**package**	**Part number**	
Male 	Tray	381-B5S00U-1	
		381-B5S00U-2	
Female 	Tape-and reel	382-B5S00U-1	
		382-B5S00U-2	
Connector style	**Mount thread**	**Part number**	
Male 	M12 X 1	383-S1200	
Female 	M12 X 1	384-S1200	

Bolded part number is cULus certified.

Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 Circular Connector

Dinkle’s M12 circular connectors with overmolded cable assemblies offer high stability and sealing performance. They provide waterproof and dustproof protection (IP67/IP68) when mated, making them a reliable solution for environments with moisture, large temperature variations, and vibrations. Dinkle offers high-quality PVC and PUR cables to meet your needs and shielded cables for additional options. The cable options also include drag chain cables with bending resistance guaranteed for 5 million cycles (R=28mm, L=1m, V=1m/s).

Dinkle's M12 panel-mounted connectors support shielded cables and use PUR cables with higher tensile strength, tear resistance, and wear resistance. These connectors are available in front-locking and rear-locking versions to suit varying installation requirements. Unshielded panel-mounted connectors, when paired with a sealing ring, provide excellent airtightness and waterproofing for equipment. Designed to be installed on equipment enclosures or panels, these connectors come in both front-locking and rear-locking configurations. Additionally, versions with solder cup contacts are available for customization alongside standard PVC wires.

The M12 one-piece PCB circular connectors cater to enclosure and PCB placement needs, offering 180-degree (Straight) and 90-degree (Angled) solder pin options for flexible installation orientations. For additional functionality, shielded one-piece PCB connectors are also available, equipped with pins connected to the metal housing for functional grounding (FE).

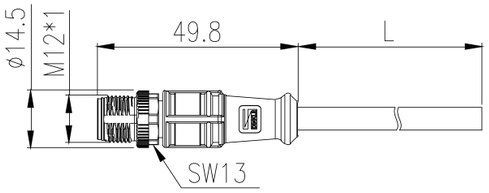
Dinkle's M12 two-piece PCB circular connectors consist of separate parts: a conductor carrier and a metal shell. The conductor carrier is made of high-temperature-resistant plastic, allowing for reflow soldering (THR) processes directly onto PCBs. With automated pick-and-place compatibility, the connectors are packaged in either tape-on-reel or tray options, reducing production costs in automated assembly.

Dinkle also offers field-assembly circular connectors that do not require factory pre-wiring. These connectors allow users to cut cable lengths and install connectors based on actual needs. In addition to convenience, Dinkle provides shielded options for addressing signal interference concerns.

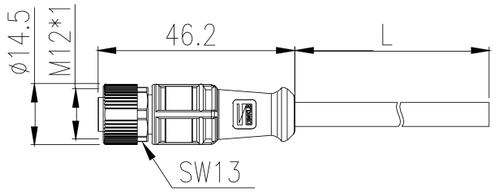
For the M12 circular connector series, Dinkle offers a wide variety of codings (A, B, D, X, S, T, L, K, M, etc.) to accommodate diverse application requirements, including high-voltage and high-current environments.

M12 A-Code Molded Circular Connector

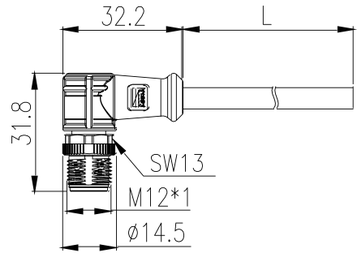
Single-ended straight male



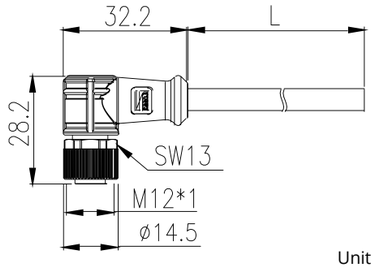
Single-ended straight female



Single-ended angled male

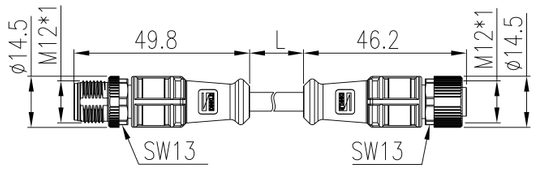


Single-ended angled female

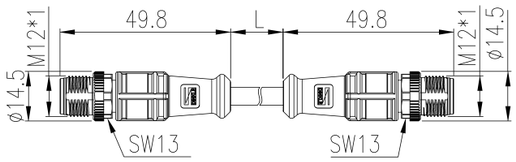


Unit：mm

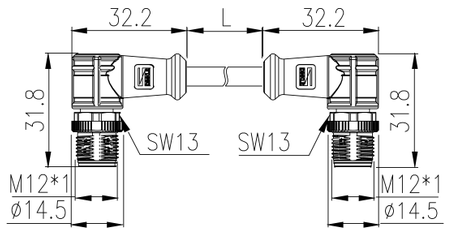
Straight male to straight female



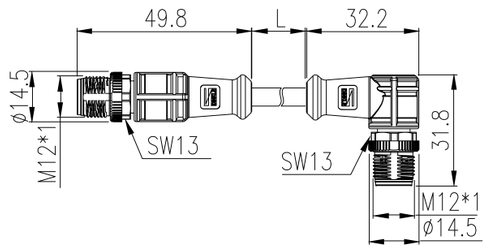
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 A-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67/IP68	Contact carrier / overmolding	PUR
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Fixed installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	HB

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Cable Jacket	PUR/PVC, BLACK	
	250VAC / 4A (5 Pin)	UL AWM style	Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
	250VAC / 2A (8 Pin)		No Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
	250VAC / 2.5A (12 Pin)		Drag chain	PUR : UL AWM 20549
Rated Impulse Voltage	2.5kV (≤4 Pin)	Conductor cross section	0.34mm²/22AWG (≤4 Pin)	
	1.5kV (5 Pin)		0.34mm²/22AWG (5 Pin)	
	0.8kV (8 Pin)		0.25mm²/24AWG (8 Pin)	
	0.8kV (12 Pin)		0.14mm²/26AWG (12 Pin)	
Insulation resistance	Min. 100MΩ	Material conductor insulation	PE/PVC	
Overvoltage Category	II	Flame resistance	FT-2 / VW-1	
Pollution Degree	3	Dielectric strength	2.0KV/1min	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code Molded Connector (Shield)

Coding and contacts	Code	A	A	A	A	A
	Contact	3	4	5	8	12
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A	30V / 2A	30V / 1.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female	Male / Female

Connector style	Cable	Length (m)	Part number				
Single-ended straight male 	PVC	2	**251-A3000-25S020**	**251-A4000-25S020**	**251-A5000-25S020**	251-A8000-25S020	251-AC000-25S020
		5	**251-A3000-25S050**	**251-A4000-25S050**	**251-A5000-25S050**	251-A8000-25S050	251-AC000-25S050
		10	**251-A3000-25S100**	**251-A4000-25S100**	**251-A5000-25S100**	251-A8000-25S100	251-AC000-25S100
	PUR	2	**251-A3000-05S020**	**251-A4000-05S020**	**251-A5000-05S020**	251-A8000-05S020	251-AC000-05S020
		5	**251-A3000-05S050**	**251-A4000-05S050**	**251-A5000-05S050**	251-A8000-05S050	251-AC000-05S050
		10	**251-A3000-05S100**	**251-A4000-05S100**	**251-A5000-05S100**	251-A8000-05S100	251-AC000-05S100
Single-ended straight female 	PVC	2	**252-A3000-25S020**	**252-A4000-25S020**	**252-A5000-25S020**	252-A8000-25S020	252-AC000-25S020
		5	**252-A3000-25S050**	**252-A4000-25S050**	**252-A5000-25S050**	252-A8000-25S050	252-AC000-25S050
		10	**252-A3000-25S100**	**252-A4000-25S100**	**252-A5000-25S100**	252-A8000-25S100	252-AC000-25S100
	PUR	2	**252-A3000-05S020**	**252-A4000-05S020**	**252-A5000-05S020**	252-A8000-05S020	252-AC000-05S020
		5	**252-A3000-05S050**	**252-A4000-05S050**	**252-A5000-05S050**	252-A8000-05S050	252-AC000-05S050
		10	**252-A3000-05S100**	**252-A4000-05S100**	**252-A5000-05S100**	252-A8000-05S100	252-AC000-05S100
Single-ended angled male 	PVC	2	**253-A3000-25S020**	**253-A4000-25S020**	**253-A5000-25S020**	253-A8000-25S020	253-AC000-25S020
		5	**253-A3000-25S050**	**253-A4000-25S050**	**253-A5000-25S050**	253-A8000-25S050	253-AC000-25S050
		10	**253-A3000-25S100**	**253-A4000-25S100**	**253-A5000-25S100**	253-A8000-25S100	253-AC000-25S100
	PUR	2	**253-A3000-05S020**	**253-A4000-05S020**	**253-A5000-05S020**	253-A8000-05S020	253-AC000-05S020
		5	**253-A3000-05S050**	**253-A4000-05S050**	**253-A5000-05S050**	253-A8000-05S050	253-AC000-05S050
		10	**253-A3000-05S100**	**253-A4000-05S100**	**253-A5000-05S100**	253-A8000-05S100	253-AC000-05S100
Single-ended angled female 	PVC	2	**254-A3000-25S020**	**254-A4000-25S020**	**254-A5000-25S020**	254-A8000-25S020	254-AC000-25S020
		5	**254-A3000-25S050**	**254-A4000-25S050**	**254-A5000-25S050**	254-A8000-25S050	254-AC000-25S050
		10	**254-A3000-25S100**	**254-A4000-25S100**	**254-A5000-25S100**	254-A8000-25S100	254-AC000-25S100
	PUR	2	**254-A3000-05S020**	**254-A4000-05S020**	**254-A5000-05S020**	254-A8000-05S020	254-AC000-05S020
		5	**254-A3000-05S050**	**254-A4000-05S050**	**254-A5000-05S050**	254-A8000-05S050	254-AC000-05S050
		10	**254-A3000-05S100**	**254-A4000-05S100**	**254-A5000-05S100**	254-A8000-05S100	254-AC000-05S100
Straight male mate straight female 	PVC	0.6	**256-A3000-25SL60**	**256-A4000-25SL60**	**256-A5000-25SL60**	256-A8000-25SL60	256-AC000-25SL60
		1.5	**256-A3000-25S015**	**256-A4000-25S015**	**256-A5000-25S015**	256-A8000-25S015	256-AC000-25S015
		3	**256-A3000-25S030**	**256-A4000-25S030**	**256-A5000-25S030**	256-A8000-25S030	256-AC000-25S030
	PUR	0.6	**256-A3000-05SL60**	**256-A4000-05SL60**	**256-A5000-05SL60**	256-A8000-05SL60	256-AC000-05SL60
		1.5	**256-A3000-05S015**	**256-A4000-05S015**	**256-A5000-05S015**	256-A8000-05S015	256-AC000-05S015
		3	**256-A3000-05S030**	**256-A4000-05S030**	**256-A5000-05S030**	256-A8000-05S030	256-AC000-05S030
Angled male mate angled female 	PVC	0.6	**259-A3000-25SL60**	**259-A4000-25SL60**	**259-A5000-25SL60**	259-A8000-25SL60	259-AC000-25SL60
		1.5	**259-A3000-25S015**	**259-A4000-25S015**	**259-A5000-25S015**	259-A8000-25S015	259-AC000-25S015
		3	**259-A3000-25S030**	**259-A4000-25S030**	**259-A5000-25S030**	259-A8000-25S030	259-AC000-25S030
	PUR	0.6	**259-A3000-05SL60**	**259-A4000-05SL60**	**259-A5000-05SL60**	259-A8000-05SL60	259-AC000-05SL60
		1.5	**259-A3000-05S015**	**259-A4000-05S015**	**259-A5000-05S015**	259-A8000-05S015	259-AC000-05S015
			259-A3000-05S030	**259-A4000-05S030**	**259-A5000-05S030**	259-A8000-05S030	259-AC000-05S030

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

M12 A-Code Molded Connector (No Shield)

Coding and contacts	Code	A	A	A	A	A
	Contact	3	4	5	8	12
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A	30V / 2A	30V / 1.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female	Male / Female

Connector style	Cable	Length (m)	Part number				
Single-ended straight male 	PVC	2	**201-A3000-20S020**	**201-A4000-20S020**	**201-A5000-20S020**	**201-A8000-20S020**	**201-AC000-20S020**
		5	**201-A3000-20S050**	**201-A4000-20S050**	**201-A5000-20S050**	**201-A8000-20S050**	**201-AC000-20S050**
		10	**201-A3000-20S100**	**201-A4000-20S100**	**201-A5000-20S100**	**201-A8000-20S100**	**201-AC000-20S100**
	PUR	2	**201-A3000-00S020**	**201-A4000-00S020**	**201-A5000-00S020**	**201-A8000-00S020**	**201-AC000-00S020**
		5	**201-A3000-00S050**	**201-A4000-00S050**	**201-A5000-00S050**	**201-A8000-00S050**	**201-AC000-00S050**
		10	**201-A3000-00S100**	**201-A4000-00S100**	**201-A5000-00S100**	**201-A8000-00S100**	**201-AC000-00S100**
Single-ended straight female 	PVC	2	**202-A3000-20S020**	**202-A4000-20S020**	**202-A5000-20S020**	**202-A8000-20S020**	**202-AC000-20S020**
		5	**202-A3000-20S050**	**202-A4000-20S050**	**202-A5000-20S050**	**202-A8000-20S050**	**202-AC000-20S050**
		10	**202-A3000-20S100**	**202-A4000-20S100**	**202-A5000-20S100**	**202-A8000-20S100**	**202-AC000-20S100**
	PUR	2	**202-A3000-00S020**	**202-A4000-00S020**	**202-A5000-00S020**	**202-A8000-00S020**	**202-AC000-00S020**
		5	**202-A3000-00S050**	**202-A4000-00S050**	**202-A5000-00S050**	**202-A8000-00S050**	**202-AC000-00S050**
		10	**202-A3000-00S100**	**202-A4000-00S100**	**202-A5000-00S100**	**202-A8000-00S100**	**202-AC000-00S100**
Single-ended angled male 	PVC	2	**203-A3000-20S020**	**203-A4000-20S020**	**203-A5000-20S020**	**203-A8000-20S020**	**203-AC000-20S020**
		5	**203-A3000-20S050**	**203-A4000-20S050**	**203-A5000-20S050**	**203-A8000-20S050**	**203-AC000-20S050**
		10	**203-A3000-20S100**	**203-A4000-20S100**	**203-A5000-20S100**	**203-A8000-20S100**	**203-AC000-20S100**
	PUR	2	**203-A3000-00S020**	**203-A4000-00S020**	**203-A5000-00S020**	**203-A8000-00S020**	**203-AC000-00S020**
		5	**203-A3000-00S050**	**203-A4000-00S050**	**203-A5000-00S050**	**203-A8000-00S050**	**203-AC000-00S050**
		10	**203-A3000-00S100**	**203-A4000-00S100**	**203-A5000-00S100**	**203-A8000-00S100**	**203-AC000-00S100**
Single-ended angled female 	PVC	2	**204-A3000-20S020**	**204-A4000-20S020**	**204-A5000-20S020**	**204-A8000-20S020**	**204-AC000-20S020**
		5	**204-A3000-20S050**	**204-A4000-20S050**	**204-A5000-20S050**	**204-A8000-20S050**	**204-AC000-20S050**
		10	**204-A3000-20S100**	**204-A4000-20S100**	**204-A5000-20S100**	**204-A8000-20S100**	**204-AC000-20S100**
	PUR	2	**204-A3000-00S020**	**204-A4000-00S020**	**204-A5000-00S020**	**204-A8000-00S020**	**204-AC000-00S020**
		5	**204-A3000-00S050**	**204-A4000-00S050**	**204-A5000-00S050**	**204-A8000-00S050**	**204-AC000-00S050**
		10	**204-A3000-00S100**	**204-A4000-00S100**	**204-A5000-00S100**	**204-A8000-00S100**	**204-AC000-00S100**
Straight male mate straight female 	PVC	0.6	**206-A3000-20SL60**	**206-A4000-20SL60**	**206-A5000-20SL60**	**206-A8000-20SL60**	**206-AC000-20SL60**
		1.5	**206-A3000-20S015**	**206-A4000-20S015**	**206-A5000-20S015**	**206-A8000-20S015**	**206-AC000-20S015**
		3	**206-A3000-20S030**	**206-A4000-20S030**	**206-A5000-20S030**	**206-A8000-20S030**	**206-AC000-20S030**
	PUR	0.6	**206-A3000-00SL60**	**206-A4000-00SL60**	**206-A5000-00SL60**	**206-A8000-00SL60**	**206-AC000-00SL60**
		1.5	**206-A3000-00S015**	**206-A4000-00S015**	**206-A5000-00S015**	**206-A8000-00S015**	**206-AC000-00S015**
		3	**206-A3000-00S030**	**206-A4000-00S030**	**206-A5000-00S030**	**206-A8000-00S030**	**206-AC000-00S030**
Angled male mate angled female 	PVC	0.6	**209-A3000-20SL60**	**209-A4000-20SL60**	**209-A5000-20SL60**	**209-A8000-20SL60**	**209-AC000-20SL60**
		1.5	**209-A3000-20S015**	**209-A4000-20S015**	**209-A5000-20S015**	**209-A8000-20S015**	**209-AC000-20S015**
		3	**209-A3000-20S030**	**209-A4000-20S030**	**209-A5000-20S030**	**209-A8000-20S030**	**209-AC000-20S030**
	PUR	0.6	**209-A3000-00SL60**	**209-A4000-00SL60**	**209-A5000-00SL60**	**209-A8000-00SL60**	**209-AC000-00SL60**
		1.5	**209-A3000-00S015**	**209-A4000-00S015**	**209-A5000-00S015**	**209-A8000-00S015**	**209-AC000-00S015**
		3	**209-A3000-00S030**	**209-A4000-00S030**	**209-A5000-00S030**	**209-A8000-00S030**	**209-AC000-00S030**

Bolded part number is cULus certified. The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 A-Code Molded Connector (No Shield, Drag, chain)

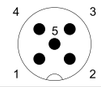
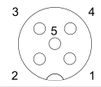
Coding and contacts	Code	A		A		A		A		A	
	Contact	3		4		5		8		12	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A		30V / 2A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female

Connector style	Cable	Length(m)	Part number				
Single-ended straight male 	PUR	2	201-A3000-02S020	201-A4000-02S020	201-A5000-02S020	201-A8000-02S020	201-AC000-02S020
		5	201-A3000-02S050	201-A4000-02S050	201-A5000-02S050	201-A8000-02S050	201-AC000-02S050
		10	201-A3000-02S100	201-A4000-02S100	201-A5000-02S100	201-A8000-02S100	201-AC000-02S100
Single-ended straight female 	PUR	2	202-A3000-02S020	202-A4000-02S020	202-A5000-02S020	202-A8000-02S020	202-AC000-02S020
		5	202-A3000-02S050	202-A4000-02S050	202-A5000-02S050	202-A8000-02S050	202-AC000-02S050
		10	202-A3000-02S100	202-A4000-02S100	202-A5000-02S100	202-A8000-02S100	202-AC000-02S100
Single-ended angled male 	PUR	2	203-A3000-02S020	203-A4000-02S020	203-A5000-02S020	203-A8000-02S020	203-AC000-02S020
		5	203-A3000-02S050	203-A4000-02S050	203-A5000-02S050	203-A8000-02S050	203-AC000-02S050
		10	203-A3000-02S100	203-A4000-02S100	203-A5000-02S100	203-A8000-02S100	203-AC000-02S100
Single-ended angled female 	PUR	2	204-A3000-02S020	204-A4000-02S020	204-A5000-02S020	204-A8000-02S020	204-AC000-02S020
		5	204-A3000-02S050	204-A4000-02S050	204-A5000-02S050	204-A8000-02S050	204-AC000-02S050
		10	204-A3000-02S100	204-A4000-02S100	204-A5000-02S100	204-A8000-02S100	204-AC000-02S100
Straight male mate straight female 	PUR	0.6	206-A3000-02SL60	206-A4000-02SL60	206-A5000-02SL60	206-A8000-02SL60	206-AC000-02SL60
		1.5	206-A3000-02S015	206-A4000-02S015	206-A5000-02S015	206-A8000-02S015	206-AC000-02S015
		3	206-A3000-02S030	206-A4000-02S030	206-A5000-02S030	206-A8000-02S030	206-AC000-02S030
Angled male mate angled female 	PUR	0.6	209-A3000-02SL60	209-A4000-02SL60	209-A5000-02SL60	209-A8000-02SL60	209-AC000-02SL60
		1.5	209-A3000-02S015	209-A4000-02S015	209-A5000-02S015	209-A8000-02S015	209-AC000-02S015
			209-A3000-02S030	209-A4000-02S030	209-A5000-02S030	209-A8000-02S030	209-AC000-02S030

Cables with drag chain function are guaranteed to withstand 5 million bending times(R=28mm, L=1m, V=1m/s)
The configuration of connectors and the cable length can be ustomized. For more details, please contact Dinkle

M12 A-Code Molded Y-splitter (No Shield)

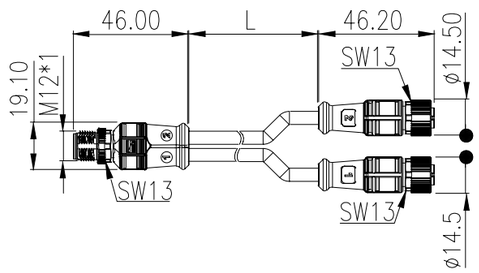
DINKLE Y-Splitter connectors are ideal for space-constrained industrial environments, offering great flexibility. The connector adopts an unshielded A-Code design, which can power two sensor/actuators simultaneously, which greatly simplifies the wiring time and reduces the installation costs while avoiding potential errors. The plastic-coated cable assemblies provide high structural stability and tightness, making connectors waterproof and dustproof with IP67 protection. This provides a rugged and reliable connection solution in harsh environments.

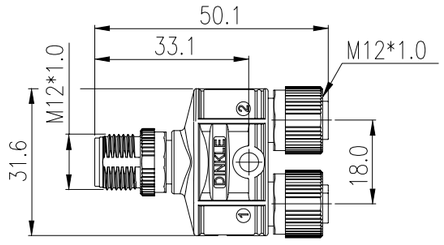
Coding and contacts	Code	A	
	Contact	5	
Rated voltage / current		60V / 4A	
Contact arrangement		Male 	Female 

Connector style (1 x Straight male to 2 x straight female)	Cable	Part number
With cable (length : 15cm) 	PUR	222-A5530-00SL15
	PVC	222-A5530-20SL15
Without cable 	-	224-2A5100

The cable length of 222 series can be customized. For more details, please contact Dinkle

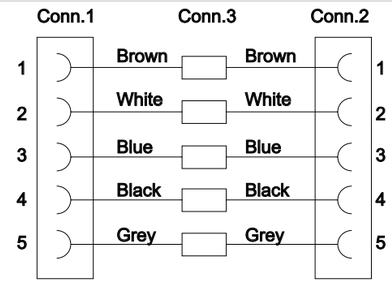
Dimension Drawing





Wiring diagram

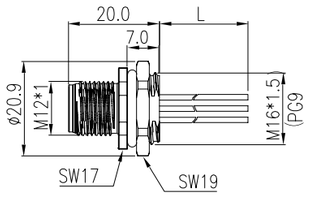
Pin out	5	5	Grey	5	Grey
	4	4	Black	4	Black
	3	3	Blue	3	Blue
	2	2	White	2	White
	1	1	Brown	1	Brown
Pin arrangement					
	conn.3	conn.2		conn.1	
	5P	5P		5P	
	A code				



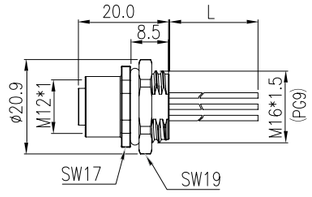
M12 A-Code Device Circular Connector

Front mounting with 0.5m wire

Male

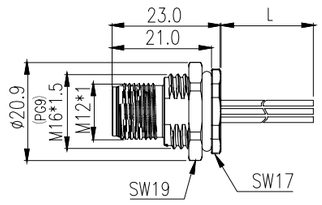


Female

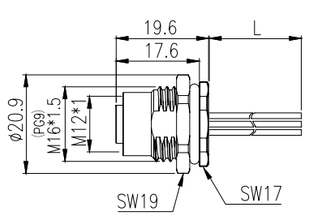


Front mounting with solder pin

Male

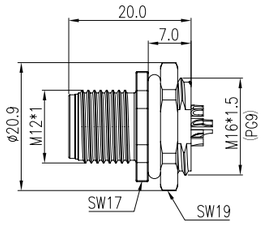


Female

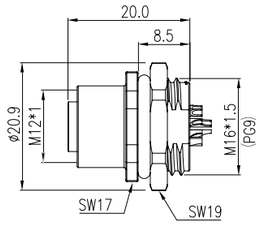


Rear mounting with 0.5m wire

Male

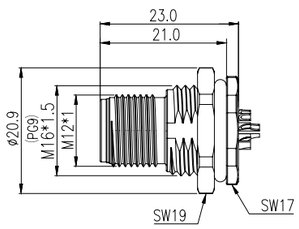


Female

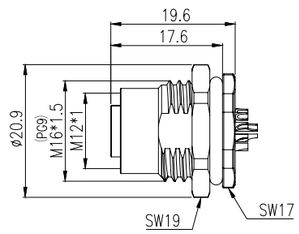


Rear mounting with cup pin

Male



Female



Pin assignments and wire colors

Pin arrangement										
	3P		4P		5P		8P		12P	
	A code									
Pin out	1	Brown	1	Brown	1	Brown	1	Brown	1	Brown
	2	-	2	White	2	White	2	White	2	Blue
	3	Blue	3	Blue	3	Blue	3	Blue	3	White
	4	Black	4	Black	4	Black	4	Black	4	Green
	5	-	5	-	5	Gray	5	Gray	5	Pink
							6	Pink	6	Yellow
							7	Blue	7	Black
							8	Red	8	Gray
									9	Red
									10	Violet
									11	Gray / Pink
									12	Red / Blue

M12 A-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Cable Jacket	Shield	PUR / PVC, BLACK
	60VAC / 4A (5 Pin)		No Shield	PVC
	30VAC / 2A (8 Pin)	UL AWM style	Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
	30VAC / 1.5A (12 Pin)		No Shield	PVC : UL AWM 1061
Rated Impulse Voltage	2.5kV (≤4 Pin)	Conductor cross section		0.34mm^2 / 22AWG (≤4 Pin)
	1.5kV (5 Pin)			0.34mm^2 / 22AWG (5 Pin)
	0.8kV (8 Pin)			0.25mm^2 / 24AWG (8 Pin)
	0.8kV (12 Pin)			0.14mm^2 / 26AWG (12 Pin)
Insulation resistance	Min. 100MΩ	Material conductor insulation	Shield	PE / PVC
Overvoltage Category	II	Flame resistance		FT-2 / VW-1
Pollution Degree	3	Dielectric strength		2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code Device Connector (Shield)

Coding and contacts	Code	A		A		A		A		A	
	Contact	3		4		5		8		12	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A		30V / 2A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female	Female	Female

2m PUR cable

Connector style	Mount thread	Part number				
Male	M16 X 1.5	268-A3000-15S020	268-A4000-15S020	268-A5000-15S020	268-A8000-15S020	268-AC000-15S020
	Pg9	268-A3002-15S020	268-A4002-15S020	268-A5002-15S020	268-A8002-15S020	268-AC002-15S020
Female	M16 X 1.5	269-A3000-15S020	269-A4000-15S020	269-A5000-15S020	269-A8000-15S020	269-AC000-15S020
	Pg9	269-A3002-15S020	269-A4002-15S020	269-A5002-15S020	269-A8002-15S020	269-AC002-15S020
Male 	M16 X 1.5	270-A3000-15S020	270-A4000-15S020	270-A5000-15S020	270-A8000-15S020	270-AC000-15S020
	Pg9	270-A3002-15S020	270-A4002-15S020	270-A5002-15S020	270-A8002-15S020	270-AC002-15S020
Female	M16 X 1.5	271-A3000-15S020	271-A4000-15S020	271-A5000-15S020	271-A8000-15S020	271-AC000-15S020
	Pg9	271-A3002-15S020	271-A4002-15S020	271-A5002-15S020	271-A8002-15S020	271-AC002-15S020

The wire length can be customized. For more details, please contact Dinkle

M12 A-Code Device Connector (No Shield)

Coding and contacts	Code	A		A		A		A		A	
	Contact	3		4		5		8		12	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A		30V / 2A		30V / 1.5A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female

Front mounting with 0.5m wire

Connector style	Mount thread	Part number				
Male 	M16 X 1.5	**218-A3000-0VSL50**	**218-A4000-0VSL50**	**218-A5000-0VSL50**	**218-A8000-0VSL50**	**218-AC000-0VSL50**
	Pg9	**218-A3002-0VSL50**	**218-A4002-0VSL50**	**218-A5002-0VSL50**	**218-A8002-0VSL50**	**218-AC002-0VSL50**
Female 	M16 X 1.5	**219-A3000-0VSL50**	**219-A4000-0VSL50**	**219-A5000-0VSL50**	**219-A8000-0VSL50**	**219-AC000-0VSL50**
	Pg9	**219-A3002-0VSL50**	**219-A4002-0VSL50**	**219-A5002-0VSL50**	**219-A8002-0VSL50**	**219-AC002-0VSL50**

Rear mounting with 0.5m wire

Connector style	Mount thread	Part number				
Male 	M16 X 1.5	**220-A3000-0VSL50**	**220-A4000-0VSL50**	**220-A5000-0VSL50**	**220-A8000-0VSL50**	**220-AC000-0VSL50**
	Pg9	**220-A3002-0VSL50**	**220-A4002-0VSL50**	**220-A5002-0VSL50**	**220-A8002-0VSL50**	**220-AC002-0VSL50**
Female 	M16 X 1.5	**221-A3000-0VSL50**	**221-A4000-0VSL50**	**221-A5000-0VSL50**	**221-A8000-0VSL50**	**221-AC000-0VSL50**
	Pg9	**221-A3002-0VSL50**	**221-A4002-0VSL50**	**221-A5002-0VSL50**	**221-A8002-0VSL50**	**221-AC002-0VSL50**

Front mounting with solder cup

Connector style	Mount thread	Part number				
Male 	M16 X 1.5	**232-A3000-S**	**232-A4000-S**	**232-A5000-S**	**232-A8000-S**	**232-AC000-S**
	Pg9	**232-A3002-S**	**232-A4002-S**	**232-A5002-S**	**232-A8002-S**	**232-AC002-S**
Female 	M16 X 1.5	**233-A3000-S**	**233-A4000-S**	**233-A5000-S**	**233-A8000-S**	**233-AC000-S**
	Pg9	**233-A3002-S**	**233-A4002-S**	**233-A5002-S**	**233-A8002-S**	**233-AC002-S**

Rear mounting with solder cup

Connector style	Mount thread	Part number				
Male 	M16 X 1.5	**230-A3000-S**	**230-A4000-S**	**230-A5000-S**	**230-A8000-S**	**230-AC000-S**
	Pg9	**230-A3002-S**	**230-A4002-S**	**230-A5002-S**	**230-A8002-S**	**230-AC002-S**
Female 	M16 X 1.5	**231-A3000-S**	**231-A4000-S**	**231-A5000-S**	**231-A8000-S**	**231-AC000-S**
	Pg9	**231-A3002-S**	**231-A4002-S**	**231-A5002-S**	**231-A8002-S**	**231-AC002-S**

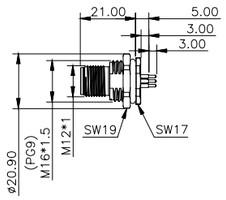
Bolded part number is cULus certified

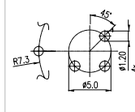
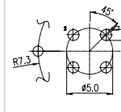
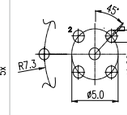
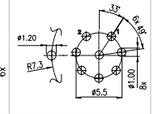
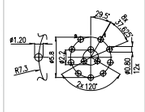
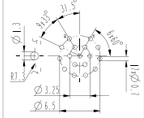
The wire length can be customized. For more details, please contact Dinkle

M12 A-Code One-piece PCB Circular Connector

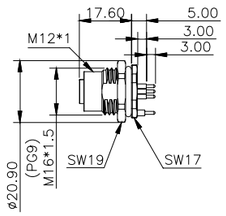
180° Rear mounting, straight (Shielded)

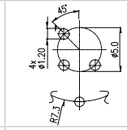
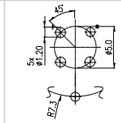
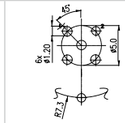
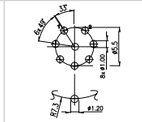
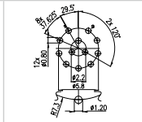
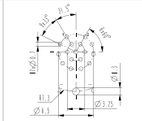
Male



PCB Layout						
Pin out						
Pin arrangement						
	3P	4P	5P	8P	12P	17P
	A code					

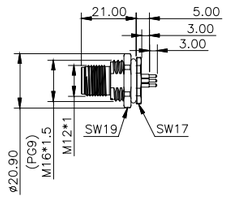
Female

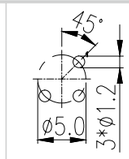
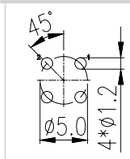
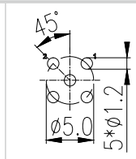
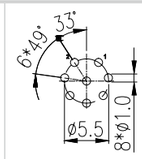
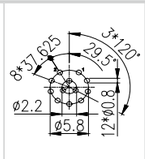
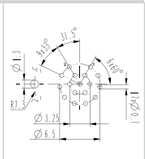


PCB Layout						
Pin out						
Pin arrangement						
	3P	4P	5P	8P	12P	17P
	A code					

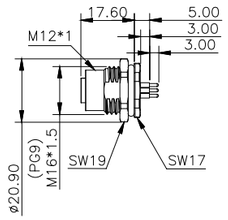
180° Rear mounting, straight (NonShielded)

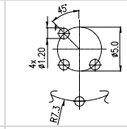
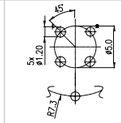
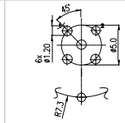
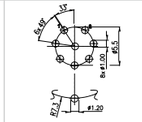
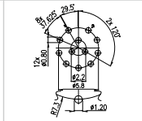
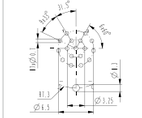
Male



PCB Layout						
Pin out						
Pin arrangement						
	3P	4P	5P	8P	12P	17P
	A code					

Female

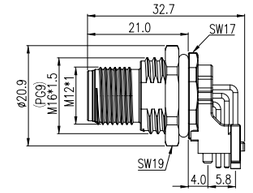


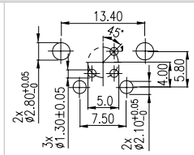
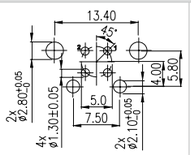
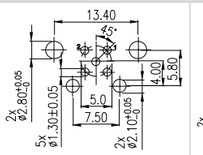
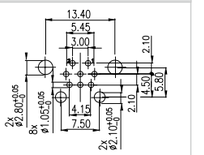
PCB Layout						
Pin out						
Pin arrangement						
	3P	4P	5P	8P	12P	17P
	A code					

M12 A-Code One-piece PCB Circular Connector

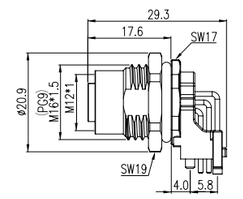
90° Rear mounting, straight (Shielded)

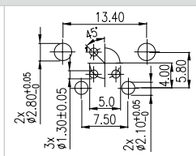
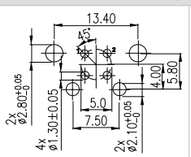
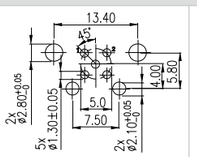
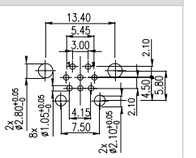
Male



PCB Layout				
Pin out				
Pin arrangement				
	3P	4P	5P	8P
	A code			

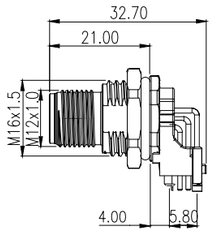
Female

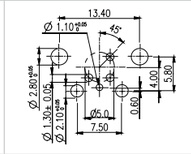
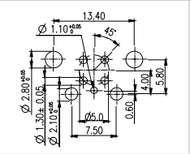
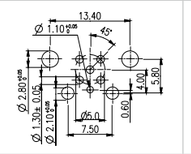
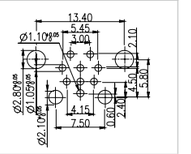


PCB Layout				
Pin out				
Pin arrangement				
	3P	4P	5P	8P
	A code			

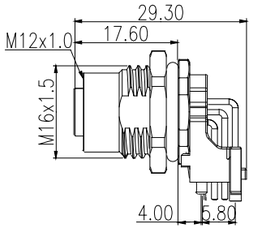
90° Rear mounting, straight (NonShielded)

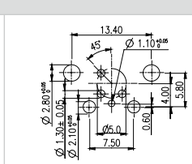
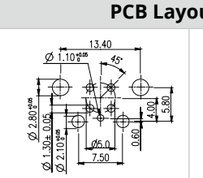
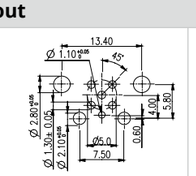
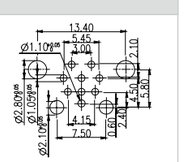
Male



PCB Layout				
Pin out				
Pin arrangement				
	3P	4P	5P	8P
	A code			

Female



PCB Layout				
Pin out				
Pin arrangement				
	3P	4P	5P	8P
	A code			

M12 A-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Contact / contact surface	250VAC / 4A (≤4 Pin)	
	60VAC / 4A (5 Pin)	
	30VAC / 2A (8 Pin)	
	30VAC / 1.5A (≥12 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
	1.5kV (5 Pin)	
	0.8kV (8 Pin)	
	0.8kV (≥12 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code One-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	A	A	A	A	A	A
	Contact	3	4	5	8	12	17
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A	30V / 2A	30V / 1.5A	30V /1.5A
Contact arrangement		Male Female	Male Female	Male Female	Male Female	Male Female	Male Female

Rear mounting, straight, Shield

Connector style	Mount thread	Part number					
Male	M16 X 1.5	**276-A3000-6**	**276-A4000-6**	**276-A5000-6**	**276-A8000-6**	**276-AC000-6**	276-AH000-6
	Pg9	**276-A3002-6**	**276-A4002-6**	**276-A5002-6**	**276-A8002-6**	**276-AC002-6**	276-AH002-6
Female	M16 X 1.5	**277-A3000-6**	**277-A4000-6**	**277-A5000-6**	**277-A8000-6**	**277-AC000-6**	277-AH000-6
	Pg9	**277-A3002-6**	**277-A4002-6**	**277-A5002-6**	**277-A8002-6**	**277-AC002-6**	277-AH002-6

Rear mounting, straight, No Shield

Connector style	Mount thread	Part number					
Male	M16 X 1.5	**226-A3000-6**	**226-A4000-6**	**226-A5000-6**	**226-A8000-6**	**226-AC000-6**	226-AH000-6
	Pg9	**226-A3002-6**	**226-A4002-6**	**226-A5002-6**	**226-A8002-6**	**226-AC002-6**	226-AH002-6
Female	M16 X 1.5	**227-A3000-6**	**227-A4000-6**	**227-A5000-6**	**227-A8000-6**	**227-AC000-6**	227-AH000-6
	Pg9	**227-A3002-6**	**227-A4002-6**	**227-A5002-6**	**227-A8002-6**	**227-AC002-6**	227-AH002-6

Rear mounting, angled, Shield

Connector style	Mount thread	Part number					
Male	M16 X 1.5	278-A3000-3	278-A4000-3	278-A5000-3	278-A8000-3	-	-
	Pg9	278-A3002-3	278-A4002-3	278-A5002-3	278-A8002-3	-	-
Female	M16 X 1.5	279-A3000-3	279-A4000-3	279-A5000-3	279-A8000-3	-	-
	Pg9	279-A3002-3	279-A4002-3	279-A5002-3	279-A8002-3	-	-

Rear mounting, angled, No Shield

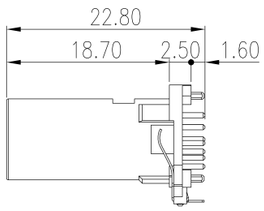
Connector style	Mount thread	Part number					
Male	M16 X 1.5	228-A3000-3	228-A4000-3	228-A5000-3	228-A8000-3	-	-
	Pg9	228-A3002-3	228-A4002-3	228-A5002-3	228-A8002-3	-	-
Female	M16 X 1.5	229-A3000-3	229-A4000-3	229-A5000-3	229-A8000-3	-	-
	Pg9	229-A3002-3	229-A4002-3	229-A5002-3	229-A8002-3	-	-

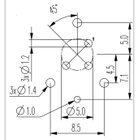
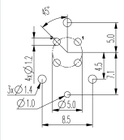
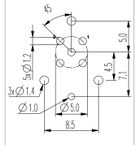
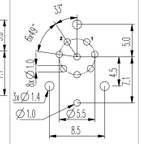
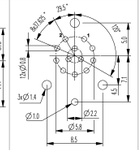
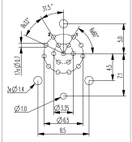
Bolded part number is cULus certified.

M12 A-Code Two-piece PCB Circular Connector

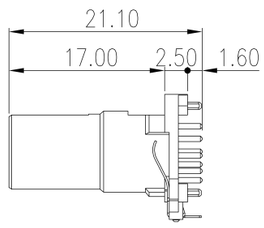
180° Rear mounting, straight (Shielded)

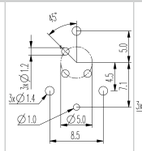
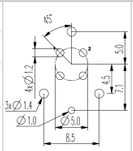
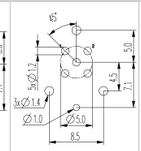
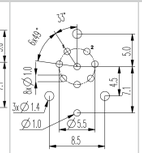
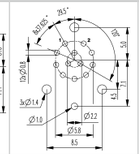
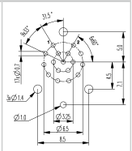
Male



PCB Layout						
Pin out						
Pin arrangement						
3P	4P	5P	8P	12P	17P	
A-code						

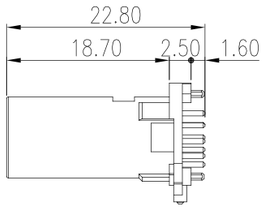
Female

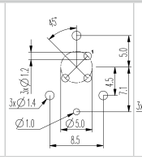
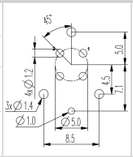
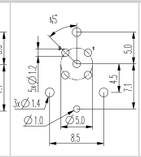
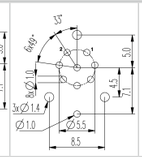
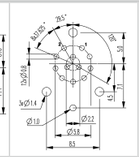
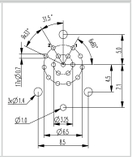


PCB Layout						
Pin out						
Pin arrangement						
3P	4P	5P	8P	12P	17P	
A-code						

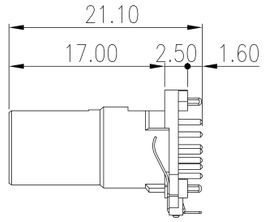
180° Rear mounting, straight (NonShielded)

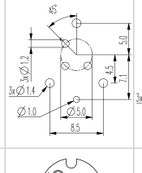
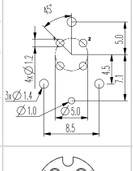
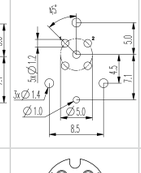
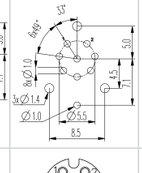
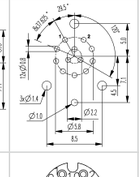
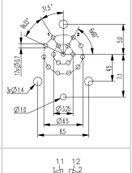
Male



PCB Layout						
Pin out						
Pin arrangement						
3P	4P	5P	8P	12P	17P	
A-code						

Female



PCB Layout						
Pin out						
Pin arrangement						
3P	4P	5P	8P	12P	17P	
A-code						

M12 A-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-40°C ~ 125°C	O-ring	SILICONE
		Moisture Sensitivity Levels	1
Soldering method	THR / SMT	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	
	60VAC / 4A (5 Pin)	
	30VAC / 2A (8 Pin)	
	30VAC / 1.5A (≥12 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
	1.5kV (5 Pin)	
	0.8kV (8 Pin)	
	0.8kV (≥12 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code Two-piece PCB Connector (Shield / No Shield)

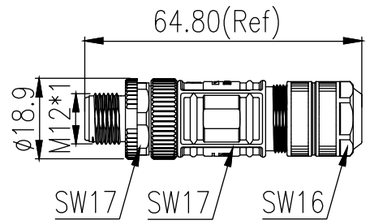
Coding and contacts	Code	A	A	A	A	A	A
	Contact	3	4	5	8	12	17
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A	30V / 2A	30V / 1.5A	30V / 0.5A
Contact arrangement		Male / Female	Male / Female	Male / Female	Male / Female	Male / Female	Male / Female
THR Soldering, straight, shield							
Connector style	**package**	**Part number**					
Male 	Tray	**281-A3T00S-1**	**281-A4T00S-1**	**281-A5T00S-1**	**281-A8T00S-1**	**281-AC100S-1**	281-AH100S-1
	Tape-and reel	**281-A3T00S-2**	**281-A4T00S-2**	**281-A5T00S-2**	**281-A8T00S-2**	**281-AC100S-2**	281-AH100S-2
Female 	Tray	**282-A3T00S-1**	**282-A4T00S-1**	**282-A5T00S-1**	**282-A8T00S-1**	**282-AC100S-1**	282-AH100S-1
	Tape-and reel	**282-A3T00S-2**	**282-A4T00S-2**	**282-A5T00S-2**	**282-A8T00S-2**	**282-AC100S-2**	282-AH100S-2
THR Soldering, straight, No shield							
Connector style	**package**	**Part number**					
Male 	Tray	**281-A3T00U-1**	**281-A4T00U-1**	**281-A5T00U-1**	**281-A8T00U-1**	**281-AC100U-1**	281-AH100U-1
	Tape-and reel	**281-A3T00U-2**	**281-A4T00U-2**	**281-A5T00U-2**	**281-A8T00U-2**	**281-AC100U-2**	281-AH100U-2
Female 	Tray	**282-A3T00U-1**	**282-A4T00U-1**	**282-A5T00U-1**	**282-A8T00U-1**	**282-AC100U-1**	282-AH100U-1
	Tape-and reel	**282-A3T00U-2**	**282-A4T00U-2**	**282-A5T00U-2**	**282-A8T00U-2**	**282-AC100U-2**	282-AH100U-2
SMT Soldering, straight, No shield							
Connector style	**package**	**Part number**					
Female 	Tray	-	-	**282-A5S00U-1**	-	-	-
	Tape-and reel	-	-	**282-A5S00U-2**	-	-	-
Metal housing							
Connector style	**Mount thread**	**Part number**					
Male use 	M16 X 1.5	283-T1100					
Female use 	M16 X 1.5	284-T1100					

Bolded part number is cULus certified.

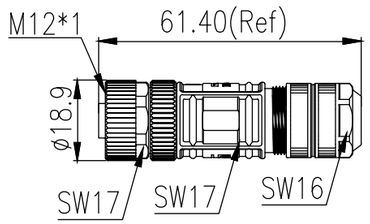
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 A-Code Field Attachable Circular Connector

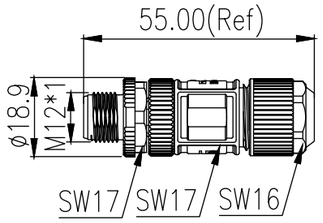
180° Male (Shield)



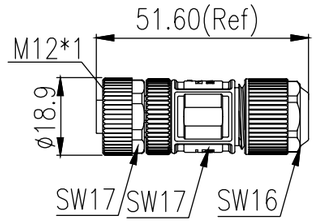
180° Female (shield)



180° Male (Nonshielded)



180° Female (Nonshielded)



Unit：mm

M12 A-Code Field Attachable Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / push switch	PA / NA
Operating Temperature	-40°C ~ 125°C	O-ring	NBR
Soldering method	Manual soldering	Outer Shield	PA66 / Zinc die-cast
		UL94 Flammability rating	V0

Electrical Properties		Cable Information	
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Wiring diameter	18AWG~26AWG
	60VAC / 4A (5 Pin)	Applicable cable diameter	φ4~φ8
Rated Impulse Voltage	2.5kV (≤4 Pin)		
	1.5kV (5 Pin)		
Insulation resistance	Min. 100MΩ		
Overvoltage Category	II		
Pollution Degree	3		

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

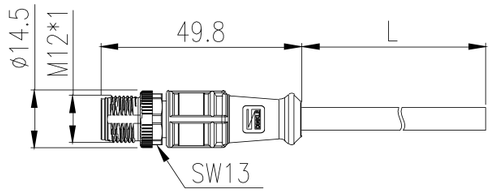
The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code Field Attachable Connector (Shield / No Shield)

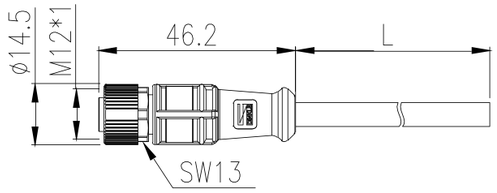
Coding and contacts	Code	A		A		A	
	Contact	3		4		5	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A	
Contact arrangement		Male	Female	Male	Female	Male	Female
Shield							
Connector style	**Wiring method**	**Part number**					
Male 	Soldering Type	293-A3A1		293-A4A1		293-A5A1	
Female 	Soldering Type	294-A3A1		294-A4A1		294-A5A1	
No Shield							
Male 	Soldering Type	243-A3A0		243-A4A0		243-A5A0	
Female 	Soldering Type	244-A3A0		244-A4A0		244-A5A0	

M12 B-Code Molded Circular Connector

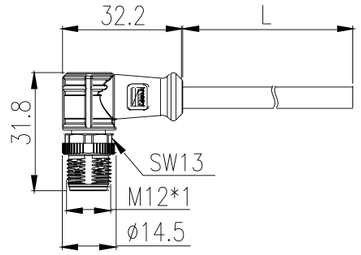
Single-ended straight male



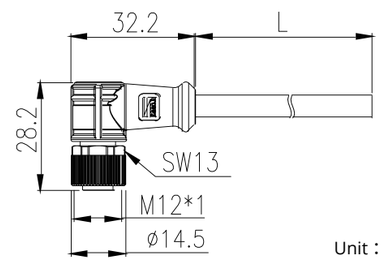
Single-ended straight female



Single-ended angled male

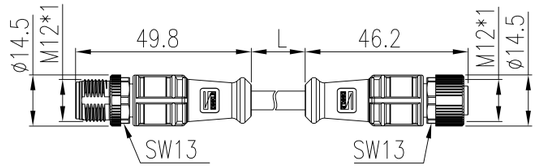


Single-ended angled female

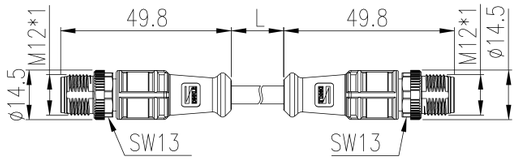


Unit：mm

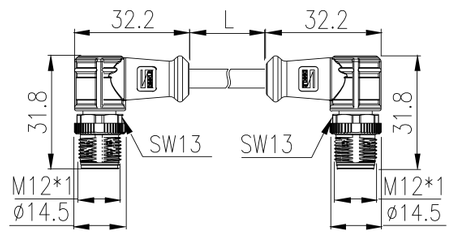
Straight male to straight female



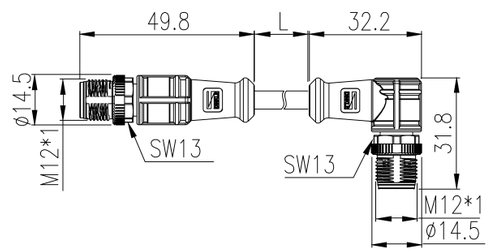
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 B-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67/IP68	Contact carrier / overmolding	PUR / PUR
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	HB

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Cable Jacket	PUR/PVC, BLACK	
	250VAC / 4A (5 Pin)	UL AWM style	Shield	PUR : UL AWM 20549 PVC : UL AWM 2464
Rated Impulse Voltage	2.5kV (≤4 Pin)		No Shield	PUR : UL AWM 20549 PVC : UL AWM 2464
	1.5kV (5 Pin)		Drag chain	PUR : UL AWM 20549
Insulation resistance	Min. 100MΩ	Conductor cross section	0.34mm²/22AWG (≤4 Pin)	
Overvoltage Category	II		0.34mm²/22AWG (5 Pin)	
Pollution Degree	3	Material conductor insulation	PE/PVC	
		Flame resistance	FT-2 / VW-1	
		Dielectric strength	2.0KV/1min	

Standards and Regulations

Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 B-Code Molded Connector (Shield)

Coding and contacts	Code	B		B		B	
	Contact	3		4		5	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 	Male 	Female 

Connector style	Cable	Length(m)	Part number		
Single-ended straight male 	PVC	2	**251-B3000-25S020**	**251-B4000-25S020**	**251-B5000-25S020**
		5	**251-B3000-25S050**	**251-B4000-25S050**	**251-B5000-25S050**
		10	**251-B3000-25S100**	**251-B4000-25S100**	**251-B5000-25S100**
	PUR	2	**251-B3000-05S020**	**251-B4000-05S020**	**251-B5000-05S020**
		5	**251-B3000-05S050**	**251-B4000-05S050**	**251-B5000-05S050**
		10	**251-B3000-05S100**	**251-B4000-05S100**	**251-B5000-05S100**
Single-ended straight female 	PVC	2	**252-B3000-25S020**	**252-B4000-25S020**	**252-B5000-25S020**
		5	**252-B3000-25S050**	**252-B4000-25S050**	**252-B5000-25S050**
		10	**252-B3000-25S100**	**252-B4000-25S100**	**252-B5000-25S100**
	PUR	2	**252-B3000-05S020**	**252-B4000-05S020**	**252-B5000-05S020**
		5	**252-B3000-05S050**	**252-B4000-05S050**	**252-B5000-05S050**
		10	**252-B3000-05S100**	**252-B4000-05S100**	**252-B5000-05S100**
Single-ended angled male 	PVC	2	**253-B3000-25S020**	**253-B4000-25S020**	**253-B5000-25S020**
		5	**253-B3000-25S050**	**253-B4000-25S050**	**253-B5000-25S050**
		10	**253-B3000-25S100**	**253-B4000-25S100**	**253-B5000-25S100**
	PUR	2	**253-B3000-05S020**	**253-B4000-05S020**	**253-B5000-05S020**
		5	**253-B3000-05S050**	**253-B4000-05S050**	**253-B5000-05S050**
		10	**253-B3000-05S100**	**253-B4000-05S100**	**253-B5000-05S100**
Single-ended angled female 	PVC	2	**254-B3000-25S020**	**254-B4000-25S020**	**254-B5000-25S020**
		5	**254-B3000-25S050**	**254-B4000-25S050**	**254-B5000-25S050**
		10	**254-B3000-25S100**	**254-B4000-25S100**	**254-B5000-25S100**
	PUR	2	**254-B3000-05S020**	**254-B4000-05S020**	**254-B5000-05S020**
		5	**254-B3000-05S050**	**254-B4000-05S050**	**254-B5000-05S050**
		10	**254-B3000-05S100**	**254-B4000-05S100**	**254-B5000-05S100**
Straight male mate straight female 	PVC	0.6	**256-B3000-25SL60**	**256-B4000-25SL60**	**256-B5000-25SL60**
		1.5	**256-B3000-25S015**	**256-B4000-25S015**	**256-B5000-25S015**
		3	**256-B3000-25S030**	**256-B4000-25S030**	**256-B5000-25S030**
	PUR	0.6	**256-B3000-05SL60**	**256-B4000-05SL60**	**256-B5000-05SL60**
		1.5	**256-B3000-05S015**	**256-B4000-05S015**	**256-B5000-05S015**
		3	**256-B3000-05S030**	**256-B4000-05S030**	**256-B5000-05S030**
Angled male mate angled female 	PVC	0.6	**259-B3000-20SL60**	**259-B4000-20SL60**	**259-B5000-20SL60**
		1.5	**259-B3000-20S015**	**259-B4000-20S015**	**259-B5000-20S015**
		3	**259-B3000-20S030**	**259-B4000-20S030**	**259-B5000-20S030**
	PUR	0.6	**259-B3000-00SL60**	**259-B4000-00SL60**	**259-B5000-00SL60**
		1.5	**259-B3000-00S015**	**259-B4000-00S015**	**259-B5000-00S015**
		3	**259-B3000-00S030**	**259-B4000-00S030**	**259-B5000-00S030**

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

M12 B-Code Molded Connector (No Shield)

Coding and contacts	Code	B	B	B
	Contact	3	4	5
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A
Contact arrangement		Male / Female	Male / Female	Male / Female

Connector style	Cable	Length(m)	Part number		
Single-ended straight male 	PVC	2	**201-B3000-20S020**	**201-B4000-20S020**	**201-B5000-20S020**
		5	**201-B3000-20S050**	**201-B4000-20S050**	**201-B5000-20S050**
		10	**201-B3000-20S100**	**201-B4000-20S100**	**201-B5000-20S100**
	PUR	2	**201-B3000-00S020**	**201-B4000-00S020**	**201-B5000-00S020**
		5	**201-B3000-00S050**	**201-B4000-00S050**	**201-B5000-00S050**
		10	**201-B3000-00S100**	**201-B4000-00S100**	**201-B5000-00S100**
Single-ended straight female 	PVC	2	**202-B3000-20S020**	**202-B4000-20S020**	**202-B5000-20S020**
		5	**202-B3000-20S050**	**202-B4000-20S050**	**202-B5000-20S050**
		10	**202-B3000-20S100**	**202-B4000-20S100**	**202-B5000-20S100**
	PUR	2	**202-B3000-00S020**	**202-B4000-00S020**	**202-B5000-00S020**
		5	**202-B3000-00S050**	**202-B4000-00S050**	**202-B5000-00S050**
		10	**202-B3000-00S100**	**202-B4000-00S100**	**202-B5000-00S100**
Single-ended angled male 	PVC	2	**203-B3000-20S020**	**203-B4000-20S020**	**203-B5000-20S020**
		5	**203-B3000-20S050**	**203-B4000-20S050**	**203-B5000-20S050**
		10	**203-B3000-20S100**	**203-B4000-20S100**	**203-B5000-20S100**
	PUR	2	**203-B3000-00S020**	**203-B4000-00S020**	**203-B5000-00S020**
		5	**203-B3000-00S050**	**203-B4000-00S050**	**203-B5000-00S050**
		10	**203-B3000-00S100**	**203-B4000-00S100**	**203-B5000-00S100**
Single-ended angled female 	PVC	2	**204-B3000-20S020**	**204-B4000-20S020**	**204-B5000-20S020**
		5	**204-B3000-20S050**	**204-B4000-20S050**	**204-B5000-20S050**
		10	**204-B3000-20S100**	**204-B4000-20S100**	**204-B5000-20S100**
	PUR	2	**204-B3000-00S020**	**204-B4000-00S020**	**204-B5000-00S020**
		5	**204-B3000-00S050**	**204-B4000-00S050**	**204-B5000-00S050**
		10	**204-B3000-00S100**	**204-B4000-00S100**	**204-B5000-00S100**
Straight male mate straight female 	PVC	0.6	**206-B3000-20SL60**	**206-B4000-20SL60**	**206-B5000-20SL60**
		1.5	**206-B3000-20S015**	**206-B4000-20S015**	**206-B5000-20S015**
		3	**206-B3000-20S030**	**206-B4000-20S030**	**206-B5000-20S030**
	PUR	0.6	**206-B3000-00SL60**	**206-B4000-00SL60**	**206-B5000-00SL60**
		1.5	**206-B3000-00S015**	**206-B4000-00S015**	**206-B5000-00S015**
		3	**206-B3000-00S030**	**206-B4000-00S030**	**206-B5000-00S030**
Angled male mate angled female 	PVC	0.6	**209-B3000-20SL60**	**209-B4000-20SL60**	**209-B5000-20SL60**
		1.5	**209-B3000-20S015**	**209-B4000-20S015**	**209-B5000-20S015**
		3	**209-B3000-20S030**	**209-B4000-20S030**	**209-B5000-20S030**
	PUR	0.6	**209-B3000-00SL60**	**209-B4000-00SL60**	**209-B5000-00SL60**
		1.5	**209-B3000-00S015**	**209-B4000-00S015**	**209-B5000-00S015**
		3	**209-B3000-00S030**	**209-B4000-00S030**	**209-B5000-00S030**

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

M12 B-Code Molded Connector (No Shield, Drag, chain)

Coding and contacts	Code	B	B	B
	Contact	3	4	5
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A
Contact arrangement		Male / Female	Male / Female	Male / Female

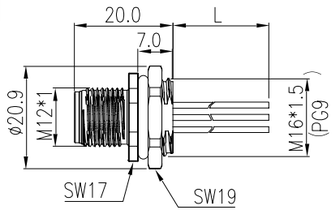
Connector style	Cable	Length(m)	Part number		
Single-ended straight male 	PUR	2	201-B3000-02S020	201-B4000-02S020	201-B5000-02S020
		5	201-B3000-02S050	201-B4000-02S050	201-B5000-02S050
		10	201-B3000-02S100	201-B4000-02S100	201-B5000-02S100
Single-ended straight female 	PUR	2	202-B3000-02S020	202-B4000-02S020	202-B5000-02S020
		5	202-B3000-02S050	202-B4000-02S050	202-B5000-02S050
		10	202-B3000-02S100	202-B4000-02S100	202-B5000-02S100
Single-ended angled male 	PUR	2	203-B3000-02S020	203-B4000-02S020	203-B5000-02S020
		5	203-B3000-02S050	203-B4000-02S050	203-B5000-02S050
		10	203-B3000-02S100	203-B4000-02S100	203-B5000-02S100
Single-ended angled female 	PUR	2	204-B3000-02S020	204-B4000-02S020	204-B5000-02S020
		5	204-B3000-02S050	204-B4000-02S050	204-B5000-02S050
		10	204-B3000-02S100	204-B4000-02S100	204-B5000-02S100
Straight male mate straight female 	PUR	0.6	206-B3000-02SL60	206-B4000-02SL60	206-B5000-02SL60
		1.5	206-B3000-02S015	206-B4000-02S015	206-B5000-02S015
		3	206-B3000-02S030	206-B4000-02S030	206-B5000-02S030
Angled male mate angled female 	PUR	0.6	209-B3000-02SL60	209-B4000-02SL60	209-B5000-02SL60
		1.5	209-B3000-02S015	209-B4000-02S015	209-B5000-02S015
		3	209-B3000-02S030	209-B4000-02S030	209-B5000-02S030

Cables with drag chain function are guaranteed to withstand 5 million bending times(R=28mm, L=1m, V=1m/s)
The configuration of connectors and the cable length can be ustomized. For more details, please contact Dinkle

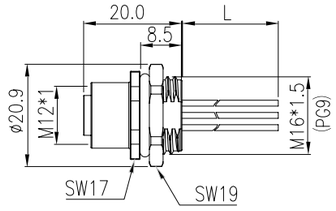
M12 B-Code Device Circular Connector

Front mounting with 0.5m wire

Male

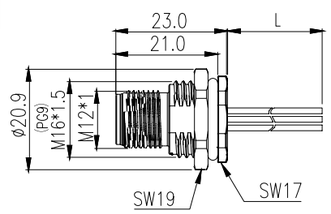


Female

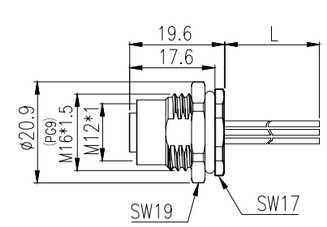


Front mounting with solder cup pin

Male

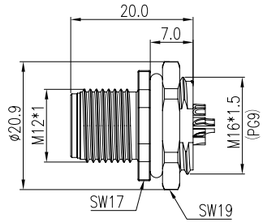


Female

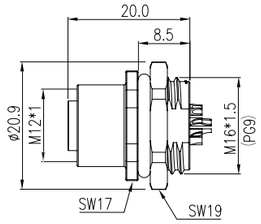


Rear mounting with 0.5m wire

Male

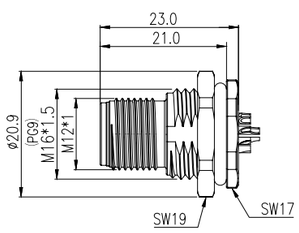


Female

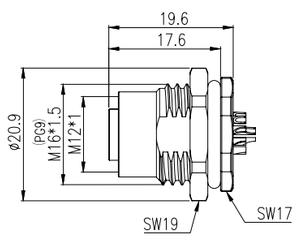


Rear mounting with solder pin

Male



Female



Pin assignments and wire colors

Pin arrangement						
	3P		4P		5P	
	B code					
Pin out	1	Brown	1	Brown	1	Brown
	2	-	2	White	2	White
	3	Blue	3	Blue	3	Blue
	4	Black	4	Black	4	Black
	5	-	5	-	5	Gray

M12 B-Code Device Connector

Mechanical Properties		Material Properties		
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated	
Degree of protection	IP67	Contact carrier	PA	
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated	
Fasten torque	0.4 Nm	O-ring	NBR	
Mounting torque	0.8 Nm	UL94 Flammability rating	V0	
Electrical Properties		**Cable Information**		
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Cable Jacket	Shield	PUR / PVC, BLACK
	60VAC / 4A (5 Pin)		No Shield	PVC
Rated Impulse Voltage	2.5kV (≤4 Pin)	UL AWM style	Shield	PUR : UL AWM 20549 / PVC : UL AWM 2464
	1.5kV (5 Pin)		No Shield	PVC : UL AWM 1061
Insulation resistance	Min. 100MΩ	Conductor cross section	0.34mm² / 22AWG (≤4 Pin)	
Overvoltage Category	II		0.34mm² / 22AWG (5 Pin)	
Pollution Degree	3	Material conductor insulation	Shield	PE / PVC
		Flame resistance	Shield	FT-2 / VW-1
		Dielectric strength	Shield	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 B-Code Device Connector (Shield)

Coding and contacts	Code	B		B		B	
	Contact	3		4		5	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 	Male 	Female 
2m PUR cable							
Connector style	**Mount thread**	**Part number**					
Male 	M16 X 1.5	268-B3000-15S020		268-B4000-15S020		268-B5000-15S020	
	Pg9	268-B3002-15S020		268-B4002-15S020		268-B5002-15S020	
Female 	M16 X 1.5	269-B3000-15S020		269-B4000-15S020		269-B5000-15S020	
	Pg9	269-B3002-15S020		269-B4002-15S020		269-B5002-15S020	
Male 	M16 X 1.5	270-B3000-15S020		270-B4000-15S020		270-B5000-15S020	
	Pg9	270-B3002-15S020		270-B4002-15S020		270-B5002-15S020	
Female 	M16 X 1.5	271-B3000-15S020		271-B4000-15S020		271-B5000-15S020	
	Pg9	271-B3002-15S020		271-B4002-15S020		271-B5002-15S020	

The wire length can be customized. For more details, please contact Dinkle

M12 A-Code Device Connector (No Shield)

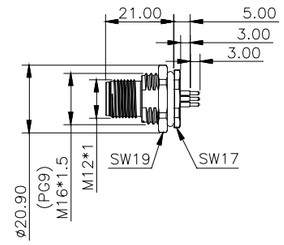
Coding and contacts	Code	B		B		B	
	Contact	3		4		5	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 	Male 	Female 
Front mounting with 0.5m wire							
Connector style	**Mount thread**	**Part number**					
Male 	M16 X 1.5	**218-B3000-0VSL50**		**218-B4000-0VSL50**		**218-B5000-0VSL50**	
	Pg9	**218-B3002-0VSL50**		**218-B4002-0VSL50**		**218-B5002-0VSL50**	
Female 	M16 X 1.5	**219-B3000-0VSL50**		**219-B4000-0VSL50**		**219-B5000-0VSL50**	
	Pg9	**219-B3002-0VSL50**		**219-B4002-0VSL50**		**219-B5002-0VSL50**	
Rear mounting with 0.5m wire							
Connector style	**Mount thread**	**Part number**					
Male 	M16 X 1.5	**220-B3000-0VSL50**		**220-B4000-0VSL50**		**220-B5000-0VSL50**	
	Pg9	**220-B3002-0VSL50**		**220-B4002-0VSL50**		**220-B5002-0VSL50**	
Female 	M16 X 1.5	**221-B3000-0VSL50**		**221-B4000-0VSL50**		**221-B5000-0VSL50**	
	Pg9	**221-B3002-0VSL50**		**221-B4002-0VSL50**		**221-B5002-0VSL50**	
Front mounting with solder cup							
Connector style	**Mount thread**	**Part number**					
Male 	M16 X 1.5	**232-B3000-S**		**232-B4000-S**		**232-B5000-S**	
	Pg9	**232-B3002-S**		**232-B4002-S**		**232-B5002-S**	
Female 	M16 X 1.5	**233-B3000-S**		**233-B4000-S**		**233-B5000-S**	
	Pg9	**233-B3002-S**		**233-B4002-S**		**233-B5002-S**	
Rear mounting with solder cup							
Connector style	**Mount thread**	**Part number**					
Male 	M16 X 1.5	**230-B3000-S**		**230-B4000-S**		**230-B5000-S**	
	Pg9	**230-B3002-S**		**230-B4002-S**		**230-B5002-S**	
Female 	M16 X 1.5	**231-B3000-S**		**231-B4000-S**		**231-B5000-S**	
	Pg9	**231-B3002-S**		**231-B4002-S**		**231-B5002-S**	

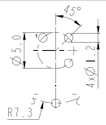
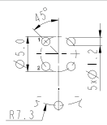
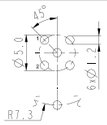
The wire length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

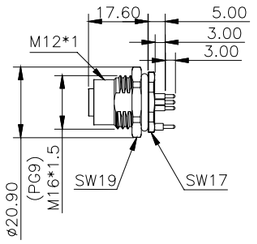
180° Rear mounting, straight (Shieleded)

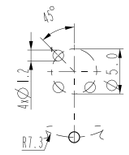
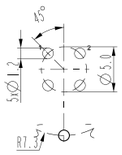
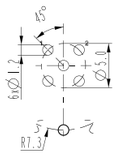
Male



PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

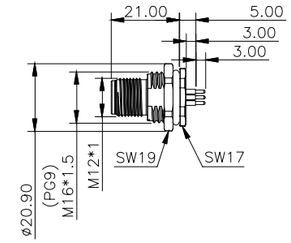
Female

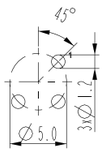
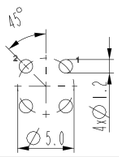
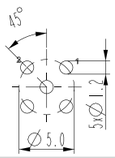


PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

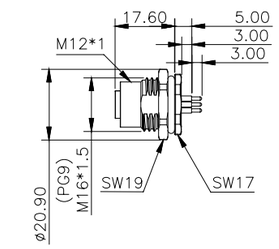
180° Rear mounting, straight (NonShieleded)

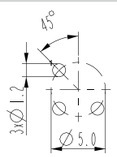
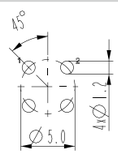
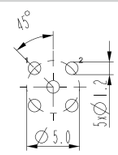
Male



PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

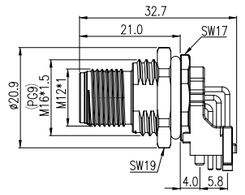
Female

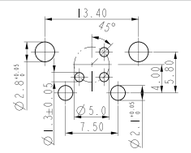
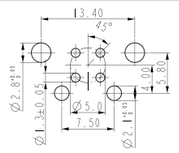
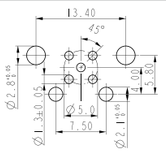


PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

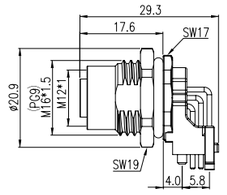
90° Rear mounting, straight (NonShielded)

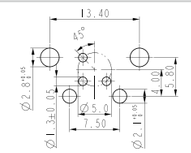
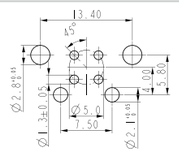
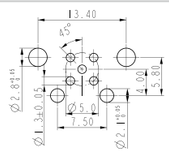
Male



PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

Female



PCB Layout			
Pin out			
Pin arrangement			
	3P	4P	5P
	B-code		

M12 B-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	
	60VAC / 4A (5 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
	1.5kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-lockin IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 B-Code One-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	B	B	B
	Contact	3	4	5
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A
Contact arrangement		Male / Female	Male / Female	Male / Female

Rear mounting, straight, Shield

Connector style	Mount thread	Part number		
Male 	M16 X 1.5	**276-B3000-6**	**276-B4000-6**	**276-B5000-6**
	Pg9	**276-B3002-6**	**276-B4002-6**	**276-B5002-6**
Female 	M16 X 1.5	**277-B3000-6**	**277-B4000-6**	**277-B5000-6**
	Pg9	**277-B3002-6**	**277-B4002-6**	**277-B5002-6**

Rear mounting, straight, No Shield

Connector style	Mount thread	Part number		
Male 	M16 X 1.5	**226-B3000-6**	**226-B4000-6**	**226-B5000-6**
	Pg9	**226-B3002-6**	**226-B4002-6**	**226-B5002-6**
Female 	M16 X 1.5	**227-B3000-6**	**227-B4000-6**	**227-B5000-6**
	Pg9	**227-B3002-6**	**227-B4002-6**	**227-B5002-6**

Rear mounting, angled, No Shield

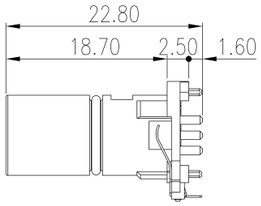
Connector style	Mount thread	Part number		
Male 	M16 X 1.5	228-B3000-3	228-B4000-3	228-B5000-3
	Pg9	228-B3002-3	228-B4002-3	228-B5002-3
Female 	M16 X 1.5	229-B3000-3	229-B4000-3	229-B5000-3
	Pg9	229-B3002-3	229-B4002-3	229-B5002-3

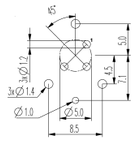
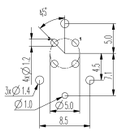
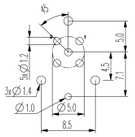
Bolded part number is cULus certified.

M12 B-Code Two-piece PCB Circular Connector

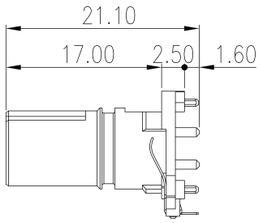
180° Rear mounting, straight (Shielded)

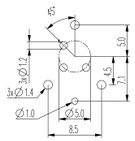
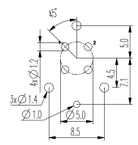
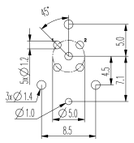
Male



PCB Layout			
Pin out			
Pin arrangement			
3P	4P	5P	
B-code			

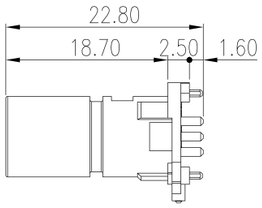
Female

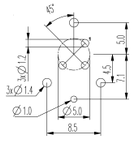
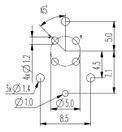
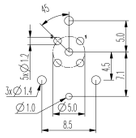


PCB Layout			
Pin out			
Pin arrangement			
3P	4P	5P	
B-code			

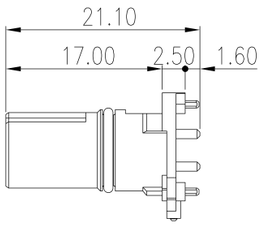
180° Rear mounting, straight (NonShielded)

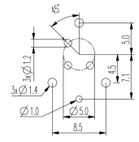
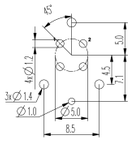
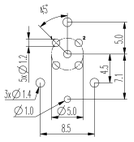
Male



PCB Layout			
Pin out			
Pin arrangement			
3P	4P	5P	
B-code			

Female



PCB Layout			
Pin out			
Pin arrangement			
3P	4P	5P	
B-code			

M12 B-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-40°C ~ 125°C	O-ring	SILICONE
Soldering method	THR	Moisture Sensitivity Levels	1
		UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	
	60VAC / 4A (5 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
	1.5kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

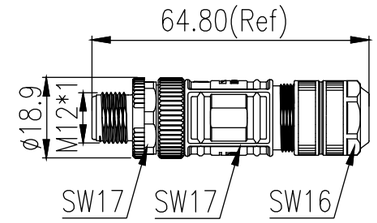
M12 B-Code Two-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	B		B		B	
	Contact	3		4		5	
Rated voltage / current		250V / 4A		250V / 4A		60V / 4A	
Contact arrangement		Male	Female	Male	Female	Male	Female
							
THR Soldering, straight, shield							
Connector style	**package**	**Part number**					
Male 	Tray	281-B3T00S-1		281-B4T00S-1		281-B5T00S-1	
	Tape-and reel	281-B3T00S-2		281-B4T00S-2		281-B5T00S-2	
Female 	Tray	282-B3T00S-1		282-B4T00S-1		282-B5T00S-1	
	Tape-and reel	282-B3T00S-2		282-B4T00S-2		282-B5T00S-2	
THR Soldering, straight, No shield							
Connector style	**package**	**Part number**					
Male 	Tray	281-B3T00U-1		281-B4T00U-1		281-B5T00U-1	
	Tape-and reel	281-B3T00U-2		281-B4T00U-2		281-B5T00U-2	
Female 	Tray	282-B3T00U-1		282-B4T00U-1		282-B5T00U-1	
	Tape-and reel	282-B3T00U-2		282-B4T00U-2		282-B5T00U-2	
Metal housing							
Connector style	**Mount thread**	**Part number**					
Male use 	M15 x 1	283-T1100					
Female use 	M15 x 1	284-T1100					

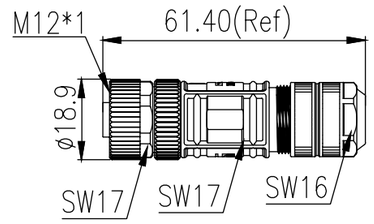
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 B-Code Field Attachable Circular Connector

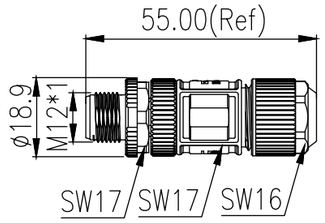
180° Male (Shield)



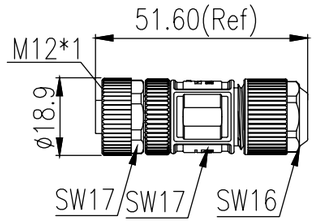
180° Female (Shield)



180° Male (Nonshielded)



180° Female (Nonshield)



Unit：mm

M12 B-Code Field Attachable Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / push switch	PA / NA
Operating Temperature	-40℃ ~ 85℃	O-ring	NBR
Soldering method	Manual soldering	Outer Shield	PA66 / Zinc die-cast
		UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Wiring diameter	18AWG~26AWG
	60VAC / 4A (5 Pin)	Applicable cable diameter	φ4~φ8
Rated Impulse Voltage	2.5kV (≤4 Pin)		
	1.5kV (5 Pin)		
Insulation resistance	Min. 100MΩ		
Overvoltage Category	II		
Pollution Degree	3		

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 B-Code Field Attachable Connector (Shield / No Shield)

Coding and contacts	Code	B	B	B
	Contact	3	4	5
Rated voltage / current		250V / 4A	250V / 4A	60V / 4A
Contact arrangement		Male / Female	Male / Female	Male / Female

Shield

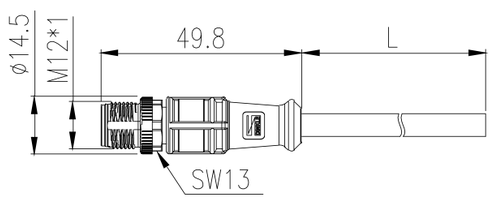
Connector style	Wiring method	Part number		
Male 	Soldering Type	293-B3A1	293-B4A1	293-B5A1
Female 	Soldering Type	294-B3A1	294-B4A1	294-B5A1

No Shield

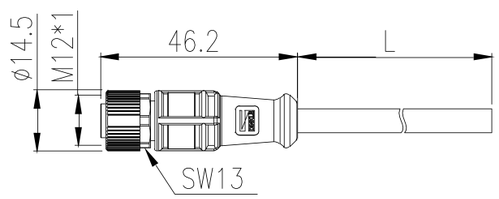
Connector style	Wiring method	Part number		
Male 	Soldering Type	243-B3A0	243-B4A0	243-B5A0
Female 	Soldering Type	244-B3A0	244-B4A0	244-B5A0

M12 D-Code Molded Circular Connector

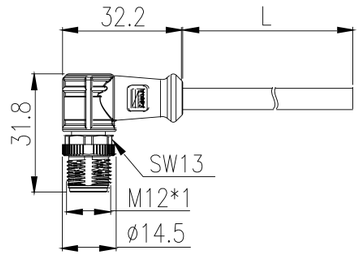
Single-ended straight male



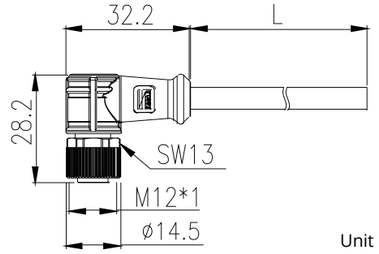
Single-ended straight female



Single-ended angled male

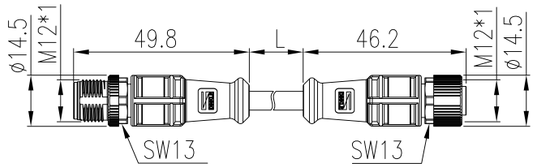


Single-ended angled female

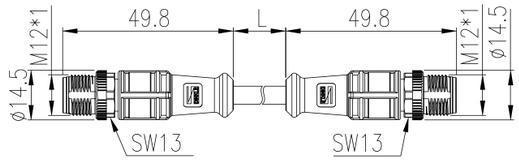


Unit：mm

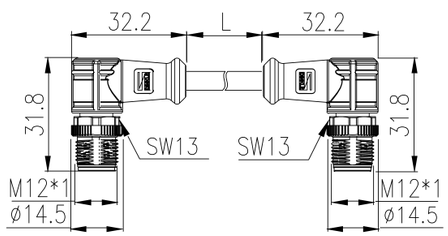
Straight male to straight female



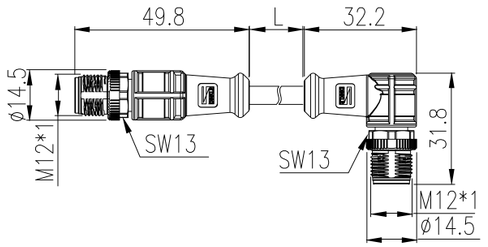
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 D-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67/IP68	Contact carrier / overmolding	PUR / PUR
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	HB
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	Cable Jacket	PUR/PVC, BLACK
		UL AWM style	Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
Rated Impulse Voltage	2.5kV (≤4 Pin)		No Shield: PUR : UL AWM 20549 / PVC : UL AWM 2464
			Drag chain: PUR : UL AWM 20549
Insulation resistance	Min. 100MΩ	Conductor cross section	0.34mm²/22AWG (≤4 Pin)
Overvoltage Category	II	Material conductor insulation	PE/PVC
Pollution Degree	3	Flame resistance	FT-2 / VW-1
		Dielectric strength	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 D-Code Molded Connector (Shield)

Coding and contacts	Code	D	
	Contact	4	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PVC	2	**251-D4000-25S020**
		5	**251-D4000-25S050**
		10	**251-D4000-25S100**
	PUR	2	**251-D4000-05S020**
		5	**251-D4000-05S050**
		10	**251-D4000-05S100**
Single-ended straight female 	PVC	2	**252-D4000-25S020**
		5	**252-D4000-25S050**
		10	**252-D4000-25S100**
	PUR	2	**252-D4000-05S020**
		5	**252-D4000-05S050**
		10	**252-D4000-05S100**
Single-ended angled male 	PVC	2	**253-D4000-25S020**
		5	**253-D4000-25S050**
		10	**253-D4000-25S100**
	PUR	2	**253-D4000-05S020**
		5	**253-D4000-05S050**
		10	**253-D4000-05S100**
Single-ended angled female 	PVC	2	**254-D4000-25S020**
		5	**254-D4000-25S050**
		10	**254-D4000-25S100**
	PUR	2	**254-D4000-05S020**
		5	**254-D4000-05S050**
		10	**254-D4000-05S100**
Straight male mate straight female 	PVC	0.6	**256-D4000-25SL60**
		1.5	**256-D4000-25S015**
		3	**256-D4000-25S030**
	PUR	0.6	**256-D4000-05SL60**
		1.5	**256-D4000-05S015**
		3	**256-D4000-05S030**
Angled male mate angled female 	PVC	0.6	**259-D4000-25SL60**
		1.5	**259-D4000-25S015**
		3	**259-D4000-25S030**
	PUR	0.6	**259-D4000-05SL60**
		1.5	**259-D4000-05S015**
		3	**259-D4000-05S030**

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

M12 D-Code Molded Connector (No Shield)

Coding and contacts	Code	D	
	Contact	4	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PVC	2	**201-D4000-20S020**
		5	**201-D4000-20S050**
		10	**201-D4000-20S100**
	PUR	2	**201-D4000-00S020**
		5	**201-D4000-00S050**
		10	**201-D4000-00S100**
Single-ended straight female 	PVC	2	**202-D4000-20S020**
		5	**202-D4000-20S050**
		10	**202-D4000-20S100**
	PUR	2	**202-D4000-00S020**
		5	**202-D4000-00S050**
		10	**202-D4000-00S100**
Single-ended angled male 	PVC	2	**203-D4000-20S020**
		5	**203-D4000-20S050**
		10	**203-D4000-20S100**
	PUR	2	**203-D4000-00S020**
		5	**203-D4000-00S050**
		10	**203-D4000-00S100**
Single-ended angled female 	PVC	2	**204-D4000-20S020**
		5	**204-D4000-20S050**
		10	**204-D4000-20S100**
	PUR	2	**204-D4000-00S020**
		5	**204-D4000-00S050**
		10	**204-D4000-00S100**
Straight male mate straight female 	PVC	0.6	**206-D4000-20SL60**
		1.5	**206-D4000-20S015**
		3	**206-D4000-20S030**
	PUR	0.6	**206-D4000-00SL60**
		1.5	**206-D4000-00S015**
		3	**206-D4000-00S030**
Angled male mate angled female 	PVC	0.6	**209-D4000-20SL60**
		1.5	**209-D4000-20S015**
		3	**209-D4000-20S030**
	PUR	0.6	**209-D4000-00SL60**
		1.5	**209-D4000-00S015**
		3	**209-D4000-00S030**

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

M12 D-Code Molded Connector (No Shield, Drag, chain)

Coding and contacts	Code	D	
	Contact	4	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 

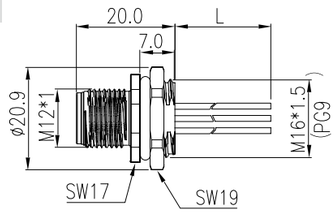
Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	201-D4000-02S020
		5	201-D4000-02S050
		10	201-D4000-02S100
Single-ended straight female 	PUR	2	202-D4000-02S020
		5	202-D4000-02S050
		10	202-D4000-02S100
Single-ended angled male 	PUR	2	203-D4000-02S020
		5	203-D4000-02S050
		10	203-D4000-02S100
Single-ended angled female 	PUR	2	204-D4000-02S020
		5	204-D4000-02S050
		10	204-D4000-02S100
Straight male mate straight female 	PUR	0.6	206-D4000-02SL60
		1.5	206-D4000-02S015
		3	206-D4000-02S030
Angled male mate angled female 	PUR	0.6	209-D4000-02SL60
		1.5	209-D4000-02S015
		3	209-D4000-02S030

Cables with drag chain function are guaranteed to withstand 5 million bending times(R=28mm, L=1m, V=1m/s)
The configuration of connectors and the cable length can be ustomized. For more details, please contact Dinkle

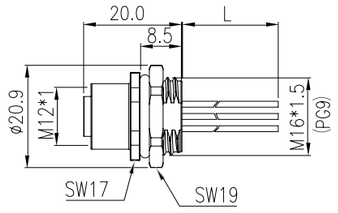
M12 D-Code Device Circular Connector

Front mounting with 0.5m wire

Male

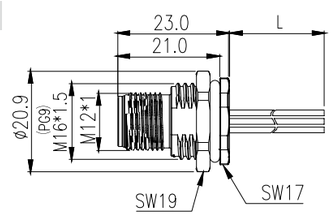


Female

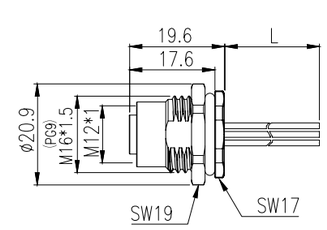


Front mounting with solder cup pin

Male

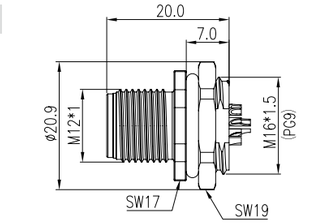


Female

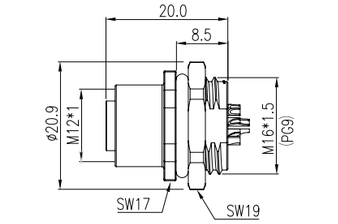


Rear mounting with 0.5m wire

Male

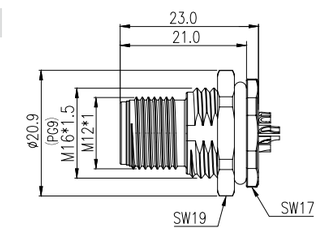


Female

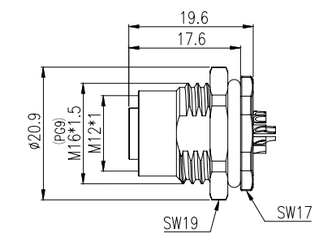


Rear mounting with solder cup pin

Male



Female



Pin assignments and wire colors

Pin arrangement		
	4P	
	D code	
Pin out	1	Yellow
	2	White
	3	Orange
	4	Blue

M12 D-Code Device Connector

Mechanical Properties		**Material Properties**	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0

Electrical Properties		**Cable Information**		
Rated voltage / current (contacts)	30VAC / 4A (≤4 Pin)	Cable Jacket	Shield	PUR, BLUE
			No Shield	PVC
Rated Impulse Voltage	2.5kV (≤4 Pin)	UL AWM style	Shield	PUR : UL20963
			No Shield	PVC : UL 1061
Insulation resistance	Min. 100MΩ	Conductor cross section	Shield	0.14mm² / 26AWG (≤4 Pin)
Overvoltage Category	II		No Shield	0.34mm² / 22AWG (≤4 Pin)
Pollution Degree	3	Material conductor insulation	Shield	HD-PE
		Flame resistance	Shield	FT2
		Dielectric strength	Shield	1.0KV/1min DC

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 D-Code Device Connector (Shield)

Coding and contacts	Code	D
	Contact	4
Rated voltage / current		250V / 4A
Contact arrangement		Male  Female 

2m PUR cable

Connector style	Mount thread	Part number
Male 	M16 X 1.5	268-D4000-15S020
	Pg9	268-D4002-15S020
Female 	M16 X 1.5	269-D4000-15S020
	Pg9	269-D4002-15S020
Male 	M16 X 1.5	270-D4000-15S020
	Pg9	270-D4002-15S020
Female 	M16 X 1.5	271-D4000-15S020
	Pg9	271-D4002-15S020

The wire length can be customized. For more details, please contact Dinkle

M12 D-Code Device Connector (No Shield)

Coding and contacts	Code	D
	Contact	4
Rated voltage / current		250V / 4A
Contact arrangement		Male  Female 

Front mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**218-D4000-0VSL50**
	Pg9	**218-D4002-0VSL50**
Female 	M16 X 1.5	**219-D4000-0VSL50**
	Pg9	**219-D4002-0VSL50**

Rear mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**220-D4000-0VSL50**
	Pg9	**220-D4002-0VSL50**
Female 	M16 X 1.5	**221-D4000-0VSL50**
	Pg9	**221-D4002-0VSL50**

Front mounting with solder cup

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**232-D4000-S**
	Pg9	**232-D4002-S**
Female 	M16 X 1.5	**233-D4000-S**
	Pg9	**233-D4002-S**

Rear mounting with solder cup

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**230-D4000-S**
	Pg9	**230-D4002-S**
Female 	M16 X 1.5	**231-D4000-S**
	Pg9	**231-D4002-S**

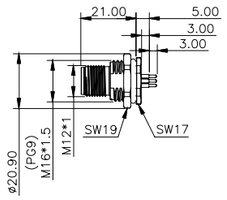
The wire length can be customized. For more details, please contact Dinkle

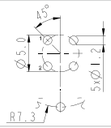
Bolded part number is cULus certified.

M12 D-Code One-piece PCB Circular Connector

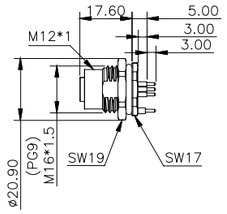
180° Rear mounting, straight (Shielded)

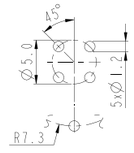
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

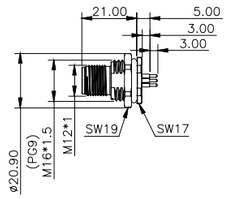
Female

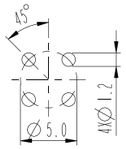


PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

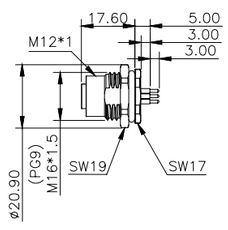
180° Rear mounting, straight (NonShielded)

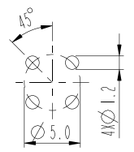
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

Female

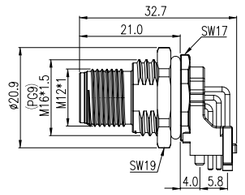


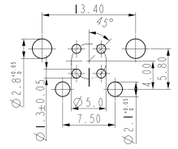
PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

M12 D-Code One-piece PCB Circular Connector

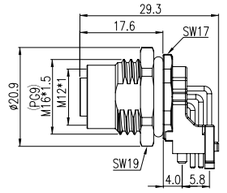
90° Rear mounting, straight (NonShielded)

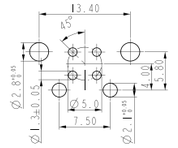
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

Female



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

M12 D-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 D-Code One-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	D	
	Contact	4	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 

Rear mounting, straight, Shield

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**276-D4000-6**
	Pg9	**276-D4002-6**
Female 	M16 X 1.5	**277-D4000-6**
	Pg9	**277-D4002-6**

Rear mounting, straight, No Shield

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**226-D4000-6**
	Pg9	**226-D4002-6**
Female 	M16 X 1.5	**227-D4000-6**
	Pg9	**227-D4002-6**

Rear mounting, angled, No Shield

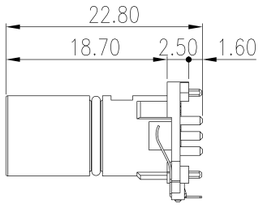
Connector style	Mount thread	Part number
Male 	M16 X 1.5	228-D4000-3
	Pg9	228-D4002-3
Female 	M16 X 1.5	229-D4000-3
	Pg9	229-D4002-3

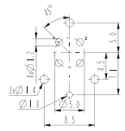
Bolded part number is cULus certified.

M12 D-Code Two-piece PCB Circular Connector

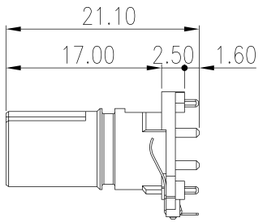
180° Rear mounting, straight (Shielded)

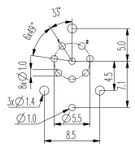
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D-code	

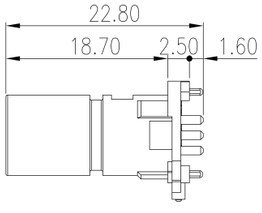
Female

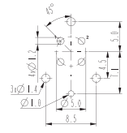


PCB Layout	
Pin out	
Pin arrangement	
4P	
D-code	

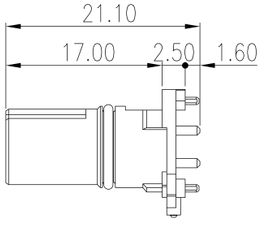
180° Rear mounting, straight (NonShielded)

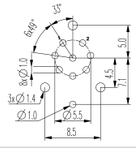
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D-code	

Female



PCB Layout	
Pin out	
Pin arrangement	
4P	
D-code	

M12 D-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-40℃ ~ 125℃	O-ring	SILICONE
Soldering method	THR / SMT	Moisture Sensitivity Levels	1
		UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (4 Pin)	
Rated Impulse Voltage	2.5kV (4 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

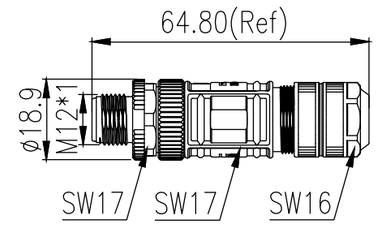
M12 D-Code Two-piece PCB Connector (Shield / No Shield)

Coding and contacts	**Code**	**D**	
	Contact	**4**	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
THR Soldering, straight, shield			
Connector style	**package**	**Part number**	
Male 	Tray	281-D4T00S-1	
	Tape-and reel	281-D4T00S-2	
Female 	Tray	282-D4T00S-1	
	Tape-and reel	282-D4T00S-2	
THR Soldering, straight, No shield			
Connector style	**package**	**Part number**	
Male 	Tray	281-D4T00U-1	
	Tape-and reel	281-D4T00U-2	
Female 	Tray	282-D4T00U-1	
	Tape-and reel	282-D4T00U-2	
SMT Soldering, straight, No shield			
Connector style	**package**	**Part number**	
Female 	Tray	282-D4S00U-1	
	Tape-and reel	282-D4S00U-2	
Metal housing			
Connector style	**Mount thread**	**Part number**	
Male use 	M15 x 1	283-T1100	
Female use 	M15 x 1	284-T1100	

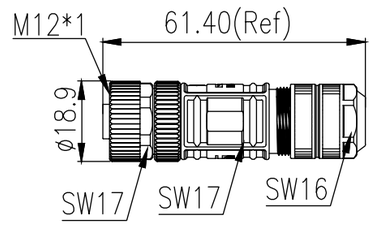
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 D-Code Field Attachable Circular Connector

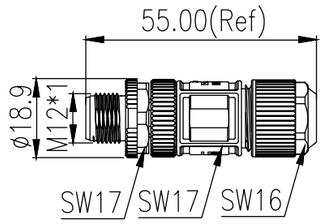
180° Male (Shield)



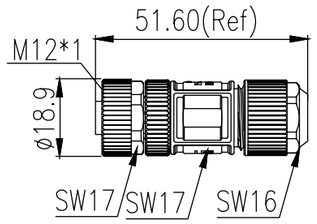
180° Female (Shield)



180° Male (Nonshielded)



180° Female (Nonshielded)



Unit：mm

M12 D-Code Field Attachable Connector

Mechanical Properties		**Material Properties**	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / push switch	PA / NA
Operating Temperature	-40℃ ~ 125℃	O-ring	NBR
Soldering method	Manual soldering	Outer Shield	PA66 / Zinc die-cast
		UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	250VAC / 4A (4 Pin)	Wiring diameter	18AWG~26AWG
Rated Impulse Voltage	2.5kV (4 Pin)	Applicable cable diameter	φ4~φ8
Insulation resistance	Min. 100MΩ		
Overvoltage Category	II		
Pollution Degree	3		

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

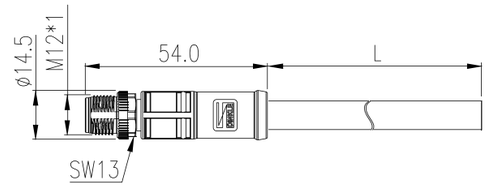
The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 D-Code Field Attachable Connector (Shield / No Shield)

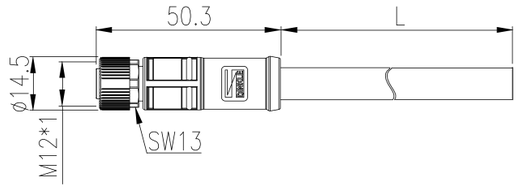
Coding and contacts	**Code**	**D**	
	Contact	**4**	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 
Shield			
Connector style	**Wiring method**	**Part number**	
Male 	Soldering Type	293-D4A1	
Female 		294-D4A1	
No Shield			
Connector style	**Wiring method**	**Part number**	
Male 	Soldering Type	243-D4A0	
Female 		244-D4A0	

M12 S-Code Molded Circular Connector

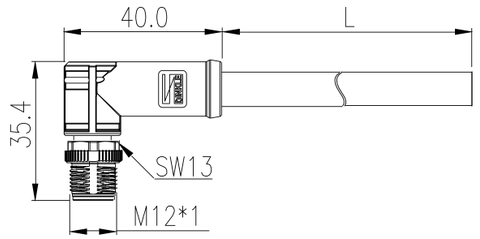
Single-ended straight male



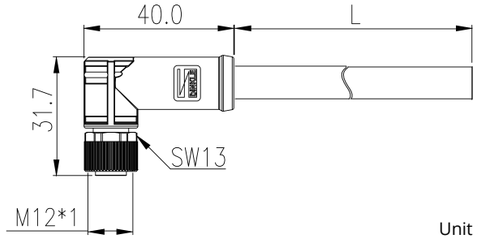
Single-ended straight female



Single-ended angled male

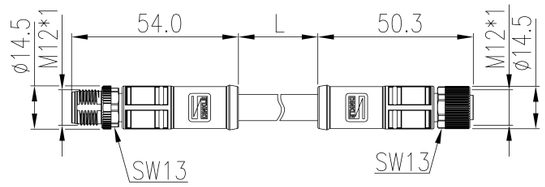


Single-ended angled female

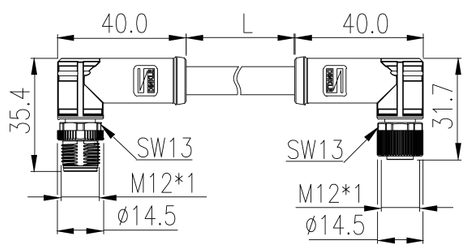


Unit：mm

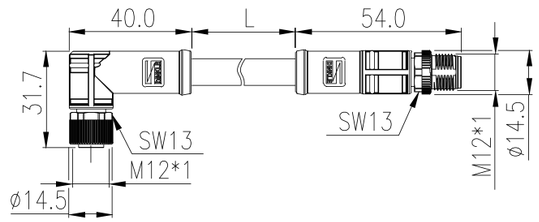
Straight male to straight female



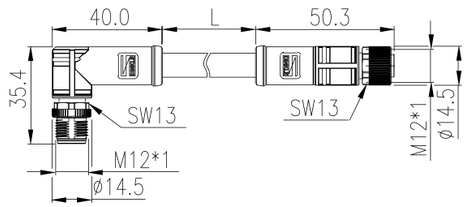
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 S-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PUR / PP
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	630VAC / 16A (3 Pin)	Cable Jacket	PUR, BLACK
	630VAC / 12A (4 Pin)	UL AWM style	No Shield: PUR : UL AWM 20234
Rated Impulse Voltage	6kV (3 Pin)	Conductor cross section	1.5mm²/16AWG (3 Pin)
	6kV (4 Pin)		1.5mm²/16AWG (4 Pin)
Insulation resistance	Min. 100MΩ	Material conductor insulation	PP
Overvoltage Category	III	Flame resistance	VW-1/FT1
Pollution Degree	3	Dielectric strength	4.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 S-Code Molded Connector (No Shield)

Coding and contacts		Code	S		S	
		Contact	3(2+PE)		4(3+PE)	
Rated voltage / current			630V / 16A		630V / 12A	
Contact arrangement			Male 	Female 	Male 	Female 
Connector style	**Cable**	**Length(m)**	**Part number**			
Single-ended straight male 	PUR	2	**201-S3303-02S020**		**201-S4303-02S020**	
		5	**201-S3303-02S050**		**201-S4303-02S050**	
		10	**201-S3303-02S100**		**201-S4303-02S100**	
Single-ended straight female 	PUR	2	**202-S3303-02S020**		**202-S4303-02S020**	
		5	**202-S3303-02S050**		**202-S4303-02S050**	
		10	**202-S3303-02S100**		**202-S4303-02S100**	
Single-ended angled male 	PUR	2	**203-S3303-02S020**		**203-S4303-02S020**	
		5	**203-S3303-02S050**		**203-S4303-02S050**	
		10	**203-S3303-02S100**		**203-S4303-02S100**	
Single-ended angled female 	PUR	2	**204-S3303-02S020**		**204-S4303-02S020**	
		5	**204-S3303-02S050**		**204-S4303-02S050**	
		10	**204-S3303-02S100**		**204-S4303-02S100**	
Straight male mate straight female	PUR	0.6	**206-S3303-02SL60**		**206-S4303-02SL60**	
		1.5	**206-S3303-02S015**		**206-S4303-02S015**	
		3	**206-S3303-02S030**		**206-S4303-02S030**	
Angled male mate angled female	PUR	0.6	**209-S3303-02SL60**		**209-S4303-02SL60**	
		1.5	**209-S3303-02S015**		**209-S4303-02S015**	
			209-S3303-02S030		**209-S4303-02S030**	

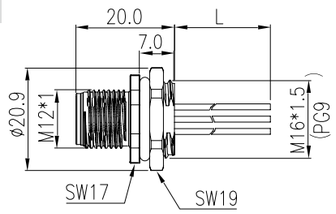
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

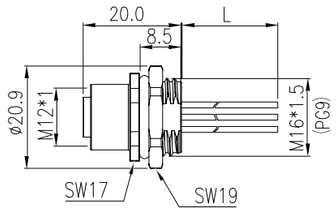
M12 S-Code Device Circular Connector

Front mounting with 0.5 wire

Male

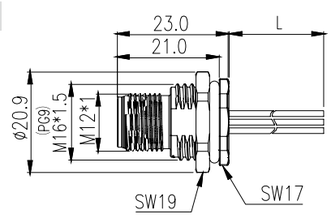


Female

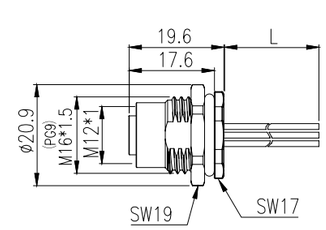


Front mounting with solder cup pin

Male

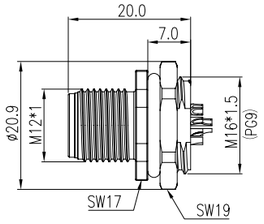


Female

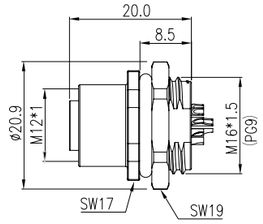


Rear mounting with 0.5m wire

Male

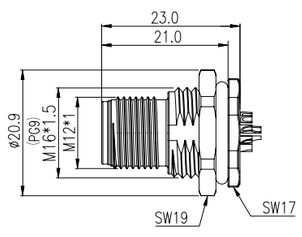


Female

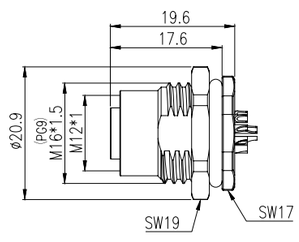


Rear mounting with solder cup pin

Male



Female



Pin assignments and wire color

Pin arrangement				
	3P		4P	
	S code			
Pin out	1	Black	1	Black
	2	-	2	Black
	3	Black	3	Black
	PE	Yellow / Green	PE	Yellow / Green

M12 S-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	630VAC / 16A (3 Pin)	Cable Jacket	MPPE	
	630VAC / 12A (4 Pin)	UL AWM style	No Shield	MPPE : AWM 11029
Rated Impulse Voltage	6kV (3 Pin)	Conductor cross section	1.5mm^2/16AWG (3 Pin)	
	6kV (4 Pin)		1.5mm^2/16AWG (4 Pin)	
Insulation resistance	Min. 100MΩ	Material conductor insulation	MPPE	
Overvoltage Category	III	Flame resistance	VW-1 / FT1	
Pollution Degree	3	Dielectric strength	NA	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 S-Code Device Connector (No Shield)

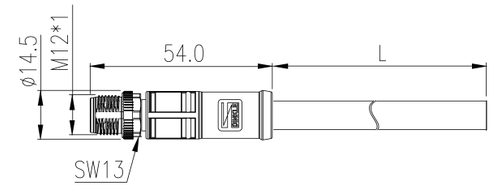
Coding and contacts	Code	S		S	
	Contact	3 (2+PE)		3 (2+PE)	
Rated voltage / current		630V / 16A			
Contact arrangement		Male 	Female 	Male 	Female 
Front mounting with 0.5m wire					
Connector style	**Mount thread**	**Part number**			
Male 	M16 X 1.5	**218-S3300-0MSL50**		**218-S4300-0MSL50**	
	Pg9	**218-S3302-0MSL50**		**218-S4302-0MSL50**	
Female 	M16 X 1.5	**219-S3300-0MSL50**		**219-S4300-0MSL50**	
	Pg9	**219-S3302-0MSL50**		**219-S4302-0MSL50**	
Rear mounting with 0.5m wire					
Connector style	**Mount thread**	**Part number**			
Male 	M16 X 1.5	**220-S3300-0MSL50**		**220-S4300-0MSL50**	
	Pg9	**220-S3302-0MSL50**		**220-S4302-0MSL50**	
Female 	M16 X 1.5	**221-S3300-0MSL50**		**221-S4300-0MSL50**	
	Pg9	**221-S3302-0MSL50**		**221-S4302-0MSL50**	

The wire length can be customized. For more details, please contact Dinkle

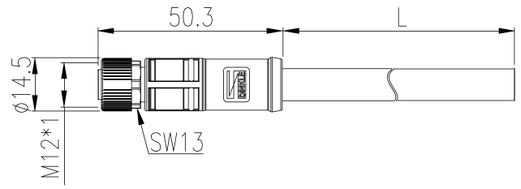
Bolded part number is cULus certified.

M12 T-Code Molded Circular Connector

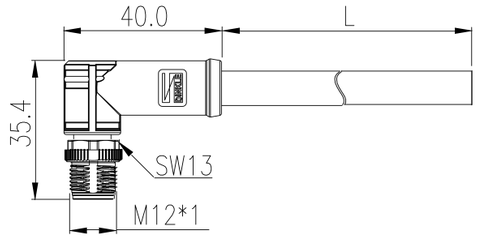
Single-ended straight male



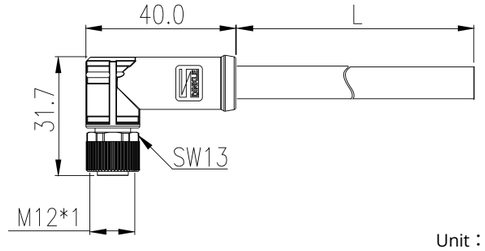
Single-ended straight female



Single-ended angled male

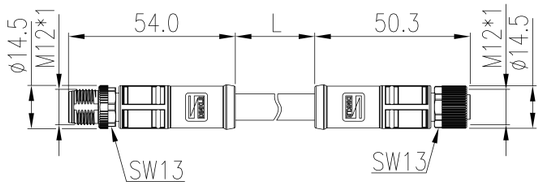


Single-ended angled female

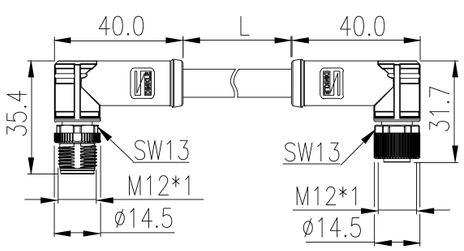


Unit：mm

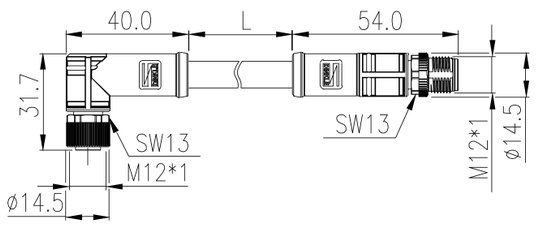
Straight male to straight female



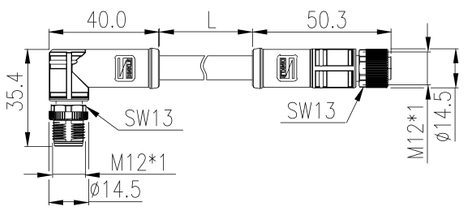
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 T-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PUR / PP
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
鎖緊扭矩	0.4 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	63VAC / 12A (4 Pin)	Cable Jacket	PUR, BLACK
Rated Impulse Voltage	1.5kV (4 Pin)	UL AWM style	No Shield / PUR : UL AWM 20936
Insulation resistance	Min. 100MΩ	Conductor cross section	1.5mm²/16AWG (4 Pin)
Overvoltage Category	III	Material conductor insulation	PP
Pollution Degree	3	Flame resistance	VW-1/FT1
		Dielectric strength	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 T-Code Molded Connector (No Shield)

Coding and contacts	Code	T	
	Contact	4	
Rated voltage / current		63V / 12A	
Contact arrangement		Male 	Female 

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	**201-T4303-02S020**
		5	**201-T4303-02S050**
		10	**201-T4303-02S100**
Single-ended straight female 	PUR	2	**202-T4303-02S020**
		5	**202-T4303-02S050**
		10	**202-T4303-02S100**
Single-ended angled male 	PUR	2	**203-T4303-02S020**
		5	**203-T4303-02S050**
		10	**203-T4303-02S100**
Single-ended angled female 	PUR	2	**204-T4303-02S020**
		5	**204-T4303-02S050**
		10	**204-T4303-02S100**
Straight male mate straight female 	PUR	0.6	**206-T4303-02SL60**
		1.5	**206-T4303-02S015**
		3	**206-T4303-02S030**
Angled male mate angled female 	PUR	0.6	**209-T4303-02SL60**
		1.5	**209-T4303-02S015**
			209-T4303-02S030

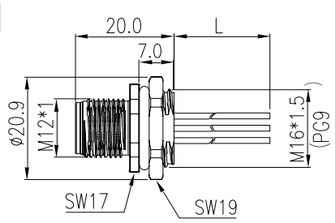
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

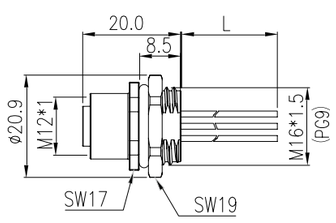
M12 T-Code Device Circular Connector

Front mounting with 0.5m wire

Male

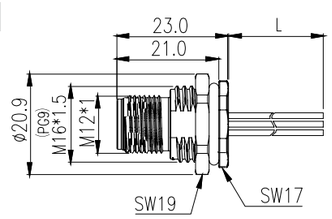


Feale

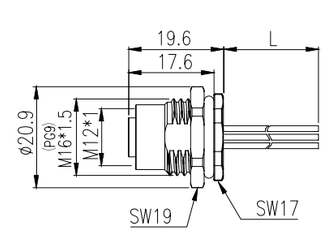


Front mounting with solder cup pin

Male

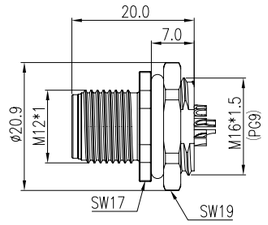


Female

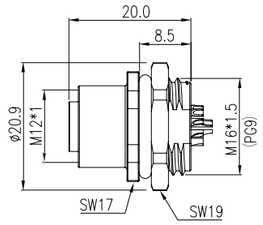


Rear mounting with 0.5m wire

Male

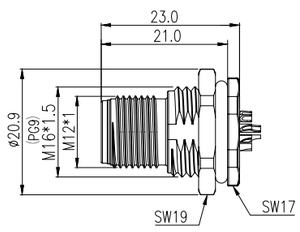


Female

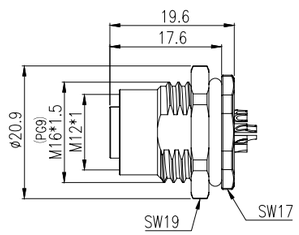


Rear mounting with solder cup pin

Male



Female



Pin assignments and wire colors

Pin arrangement		
	4P	
	T code	
Pin out	1	Brown
	2	White
	3	Blue
	4	Black

M12 T-Code Device Connector

Mechanical Properties		**Material Properties**	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	63VAC / 12A (4 Pin)	Cable Jacket	MPPE
Rated Impulse Voltage	1.5kV (4 Pin)	UL AWM style	MPPE : AWM 11027
Insulation resistance	Min. 100MΩ	Conductor cross section	1.5mm^2 / 16AWG (4 Pin)
Overvoltage Category	III	Material conductor insulation	MPPE
Pollution Degree	3	Flame resistance	VW-1 / FT1
		Dielectric strength	NA

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 T-Code Device Connector (No Shield)

Coding and contacts	**Code**	**T**	
	Contact	**4**	
Rated voltage / current		63V / 12A	
Contact arrangement		Male 	Female 

Front mounting with 0.5m wire		
Connector style	**Mount thread**	**Part number**
Male 	M16 X 1.5	**218-T4300-0MSL50**
	Pg9	**218-T4302-0MSL50**
Female 	M16 X 1.5	**219-T4300-0MSL50**
	Pg9	**219-T4302-0MSL50**

Rear mounting with 0.5m wire		
Connector style	**Mount thread**	**Part number**
Male 	M16 X 1.5	**220-T4300-0MSL50**
	Pg9	**220-T4302-0MSL50**
Female 	M16 X 1.5	**221-T4300-0MSL50**
	Pg9	**221-T4302-0MSL50**

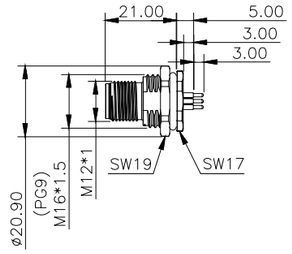
The wire length can be customized. For more details, please contact Dinkle

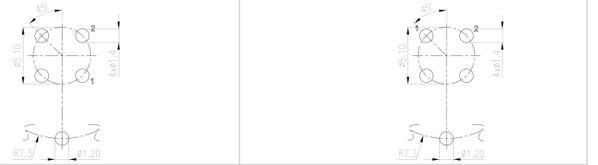
Bolded part number is cULus certified.

M12 T-Code One-piece PCB Circular Connector

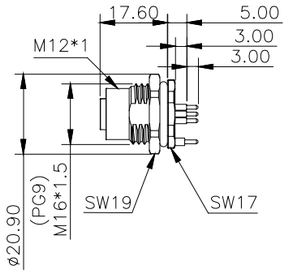
180° Rear mounting, straight (Shielded)

Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
T-code	

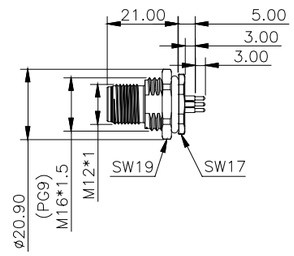
Female

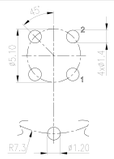


PCB Layout	
Pin out	
Pin arrangement	
4P	
T-code	

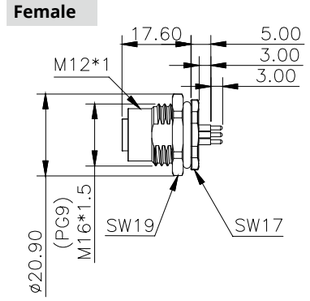
180° Rear mounting, straight (NonShielded)

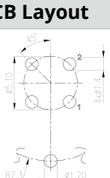
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
T-code	

Female



PCB Layout	
Pin out	
Pin arrangement	
4P	
T-code	

M12 T-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	63VAC / 12A (4 Pin)	
Rated Impulse Voltage	1.5kV (4 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	III	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 T-Code One-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	T	
	Contact	4	
Rated voltage / current		63V / 12A	
Contact arrangement		Male 	Female 

Rear mounting, straight, Shield

Connector style	Mount thread	Part number
Male 	M16 X 1.5	**276-T4300-6**
	Pg9	**276-T4302-6**
Female 	M16 X 1.5	**277-T4300-6**
	Pg9	**277-T4302-6**

Rear mounting, straight, No Shield

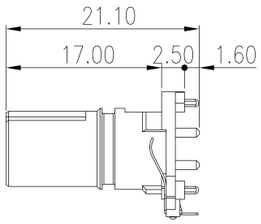
Connector style	Mount thread	Part number
Male 	M16 X 1.5	**226-T4300-6**
	Pg9	**226-T4302-6**
Female 	M16 X 1.5	**227-T4300-6**
	Pg9	**227-T4302-6**

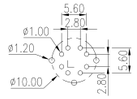
Bolded part number is cULus certified.

M12 X-Code Two-piece PCB Circular Connector

180° Rear mounting, straight (Shielded)

Female



PCB Layout	
Pin out	
Pin arrangement	
	8P
	X-code

M12 X-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-40℃ ~ 125℃	O-ring	NBR
Soldering method	THR	Moisture Sensitivity Levels	1
		UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	50VAC / 0.5A (8 Pin)	
Rated Impulse Voltage	0.8kV (8 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 X-Code Two-piece PCB Connector (Shield / No Shield)

Coding and contacts	**Code**	**X**
	Contact	**8**
Rated voltage / current		60V/0.5A
Contact arrangement		Female 

THR Soldering, straight, shield

Connector style	package	Part number
Male 	Tray	-
	Tape-and reel	-
Female 	Tray	**282-X8100S-1**
	Tape-and reel	**282-X8100S-2**

THR Soldering, straight, No shield

Connector style	package	Part number
Male 	Tray	-
	Tape-and reel	-
Female 	Tray	-
	Tape-and reel	-

Metal housing

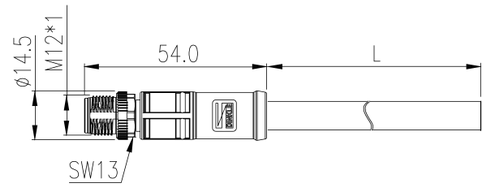
Connector style	Mount thread	Part number
Male use 	M15 x 1	-
Female use 	M15 x 1	284-T2220

Bolded part number is cULus certified.

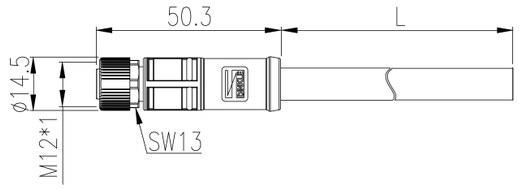
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 L-Code Molded Circular Connector

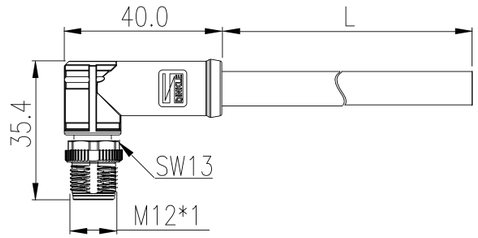
Single-ended straight male



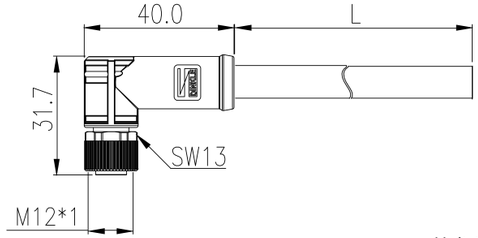
Single-ended straight female



Single-ended angled male

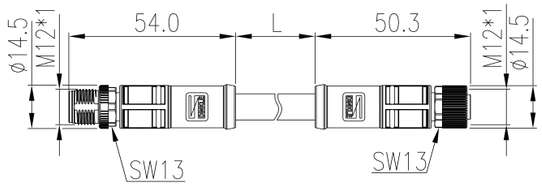


Single-ended angled female

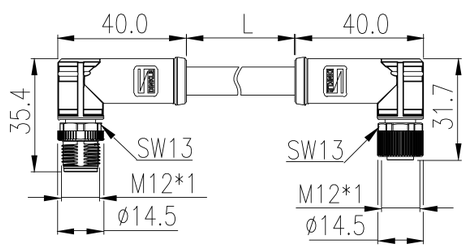


Unit：mm

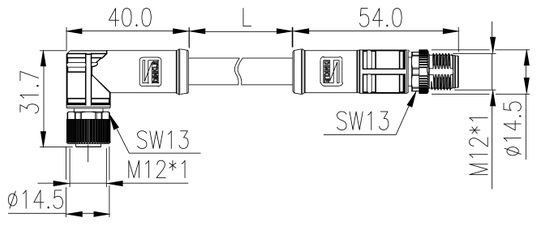
Straight male to straight female



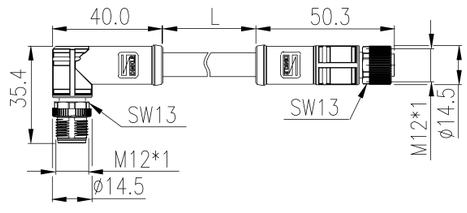
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 L-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PA / PP
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	63VAC / 16A (4 Pin)	Cable Jacket	PUR, GREY
	63VAC / 16A (5 Pin)	UL AWM style	UL AWM 20233 (4 Pin)
Rated Impulse Voltage	1.5kV (4 Pin)		UL AWM 20233 (5 Pin)
	1.5kV (5 Pin)	Conductor cross section	2.5mm^2 / 14AWG (4 Pin)
Insulation resistance	Min. 100MΩ		2.5mm^2 / 14AWG (5 Pin)
Overvoltage Category	III	Material conductor insulation	PE
Pollution Degree	3	Flame resistance	FT2
		Dielectric strength	2.0KV/1min

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 L-Code Molded Connector (No Shield)

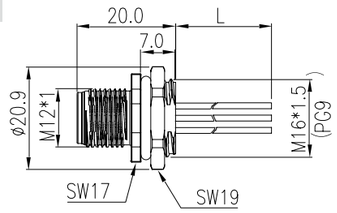
Coding and contacts		Code	L		L	
		Contact	4		5(4+FE)	
Rated voltage / current			63V / 16A		63V / 16A	
Contact arrangement			Male 	Female 	Male 	Female 
Connector style	**Cable**	**Length(m)**	**Part number**			
Single-ended straight male 	PUR	2	201-L4103-02S020		201-L5103-02S020	
		5	201-L4103-02S050		201-L5103-02S050	
		10	201-L4103-02S100		201-L5103-02S100	
Single-ended straight female 	PUR	2	202-L4103-02S020		202-L5103-02S020	
		5	202-L4103-02S050		202-L5103-02S050	
		10	202-L4103-02S100		202-L5103-02S100	
Single-ended angled male 	PUR	2	203-L4103-02S020		203-L5103-02S020	
		5	203-L4103-02S050		203-L5103-02S050	
		10	203-L4103-02S100		203-L5103-02S100	
Single-ended angled female 	PUR	2	204-L4103-02S020		204-L5103-02S020	
		5	204-L4103-02S050		204-L5103-02S050	
		10	204-L4103-02S100		204-L5103-02S100	
Straight male mate straight female 	PUR	0.6	206-L4103-02SL60		206-L5103-02SL60	
		1.5	206-L4103-02S015		206-L5103-02S015	
		3	206-L4103-02S030		206-L5103-02S030	
Angled male mate angled femal" 	PUR	0.6	209-L4103-02SL60		209-L5103-02SL60	
		1.5	209-L4103-02S015		209-L5103-02S015	
		3	209-L4103-02S030		209-L5103-02S030	

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

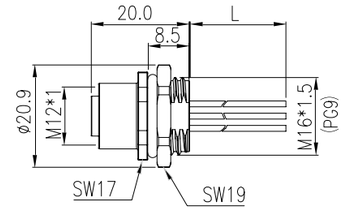
M12 L-Code Device Circular Connector

Front mounting with 0.5m wire

Male

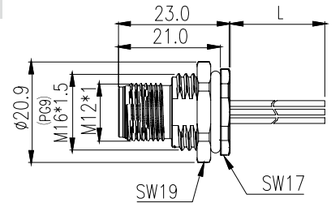


Female

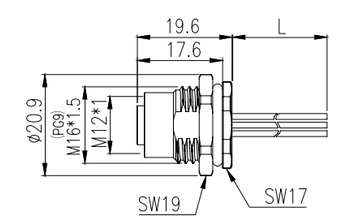


Front mounting with solder cup pin

Male

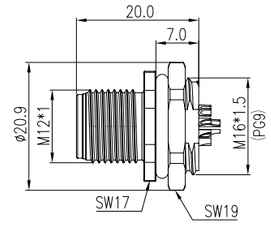


Female

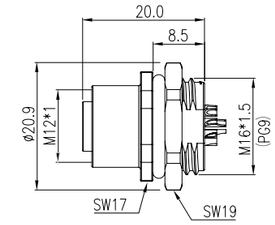


Rear mounting with 0.5m wire

Male

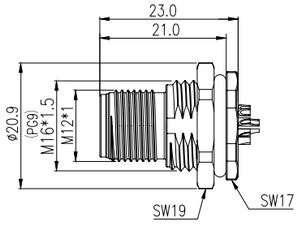


Female

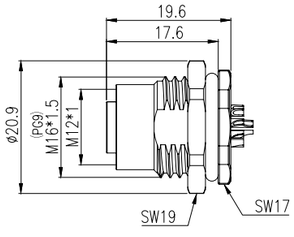


Rear mounting with solder cup pin

Male



Female



Pin assignments and wire colors

Pin arrangement				
				
	4P		5P	
	L code			
Pin out	1	Brown	1	Brown
	2	White	2	White
	3	Blue	3	Blue
	4	Black	4	Black
			FE	Pink

M12 L-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	63VAC / 16A (4 Pin)	Cable Jacket	MPPE
	63VAC / 16A (5 Pin)	Cable Jacket	MPPE : AWM 11027
Rated Impulse Voltage	1.5kV (4 Pin)	Conductor cross section	2.5mm^2 / 14AWG (4 Pin)
	1.5kV (5 Pin)		2.5mm^2 / 14AWG (5 Pin)
Insulation resistance	Min. 100MΩ	Material conductor insulation	MPPE
Overvoltage Category	III	Flame resistance	VW-1
Pollution Degree	3	Dielectric strength	2.0kV/1min
Standards and Regulations			
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking		
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods		
	IEC 60529: Degree of protection provided by enclosures (IP Code)		
Certification reference	UL 2238		

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 L-Code Device Connector (No Shield)

Coding and contacts	Code	L		L	
	Contact	4		5(4+FE)	
Rated voltage / current		63V / 16A		63V / 16A	
Contact arrangement		Male 	Female 	Male 	Female 

Front mounting with 0.5m wire

Connector style	Mount thread	Part number	
Male 	M16 X 1.5	218-L4100-0MSL50	218-L5100-0MSL50
	Pg9	218-L4102-0MSL50	218-L5102-0MSL50
Female 	M16 X 1.5	219-L4100-0MSL50	219-L5100-0MSL50
	Pg9	219-L4102-0MSL50	219-L5102-0MSL50

Rear mounting with 0.5m wire

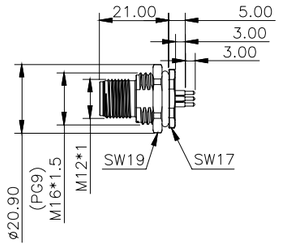
Connector style	Mount thread	Part number	
Male 	M16 X 1.5	220-L4100-0MSL50	220-L5100-0MSL50
	Pg9	220-L4102-0MSL50	220-L5102-0MSL50
Female 	M16 X 1.5	221-L4100-0MSL50	221-L5100-0MSL50
	Pg9	221-L4102-0MSL50	221-L5102-0MSL50

The wire length can be customized. For more details, please contact Dinkle

M12 L-Code One-piece PCB Circular Connector

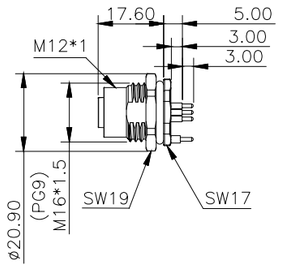
180° Rear mounting, straight (Shielded)

Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
L-code	

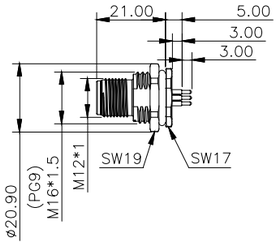
Female



PCB Layout	
Pin out	
Pin arrangement	
4P	
L-code	

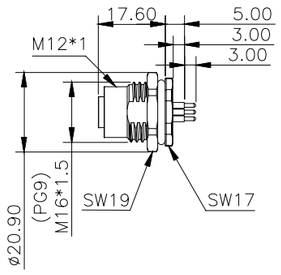
180° Rear mounting, straight (NonShielded)

Male



PCB Layout		
Pin out		
Pin arrangement		
4P		5P
L-code		

Female



PCB Layout		
Pin out		
Pin arrangement		
4P		5P
L-code		

M12 L-Code One-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	63VAC / 12A (4 Pin)	
	63VAC / 12A (5 Pin)	
Rated Impulse Voltage	1.5kV (4 Pin)	
	1.5kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	III	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

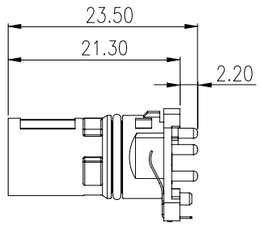
M12 L-Code One-piece PCB Connector (Shield / No Shield)

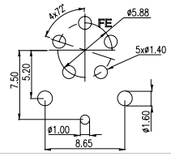
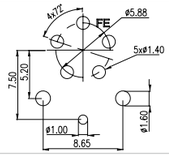
Coding and contacts	Code	L		L	
	Contact	4		5	
Rated voltage / current		63V / 16A		63V / 16A	
Contact arrangement		Male 	Female 	Male 	Female 
Rear mounting, straight, Shield					
Connector style	**Mount thread**	**Part number**			
Male 	M16 X 1.5	276-L4100-6		276-L5100-6	
	Pg9	276-L4102-6		276-L5102-6	
Female 	M16 X 1.5	277-L4100-6		277-L5100-6	
	Pg9	277-L4102-6		277-L5102-6	
Rear mounting, straight, No Shield					
Connector style	**Mount thread**	**Part number**			
Male 	M16 X 1.5	226-L4100-6		226-L5100-6	
	Pg9	226-L4102-6		226-L5102-6	
Female 	M16 X 1.5	227-L4100-6		227-L5100-6	
	Pg9	227-L4102-6		227-L5102-6	

M12 L-Code Two-piece PCB Circular Connector

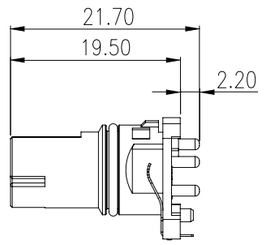
180° Rear mounting, straight (Shielded)

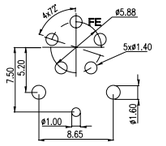
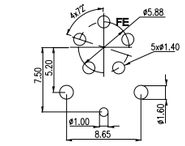
Male



PCB Layout		
Pin out		
Pin arrangement		
	4P	5P
	A-code	

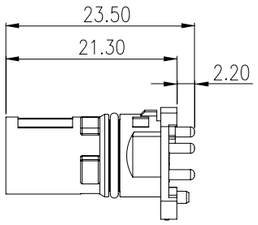
Female

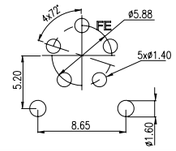
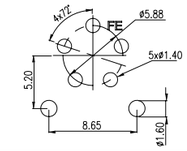


PCB Layout		
Pin out		
Pin arrangement		
	4P	5P
	A-code	

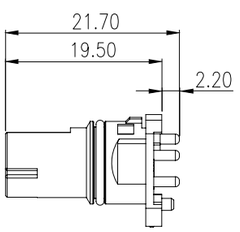
180° Rear mounting, straight (NonShielded)

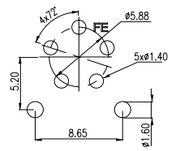
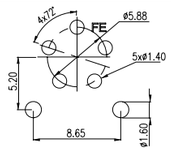
Male



PCB Layout		
Pin out		
Pin arrangement		
	4P	5P
	A-code	

Female



PCB Layout		
Pin out		
Pin arrangement		
	4P	5P
	A-code	

M12 L-Code Two-piece PCB Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	LCP
Operating Temperature	-40℃ ~ 125℃	O-ring	SILICONE
Soldering method	THR	Moisture Sensitivity Levels	1
		UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	63VAC / 16A (4 Pin)	
	63VAC / 16A (5 Pin)	
Rated Impulse Voltage	1.5kV (4 Pin)	
	1.5kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	III	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 L-Code Two-piece PCB Connector (Shield / No Shield)

Coding and contacts	Code	L		L	
	Contact	4		5	
Rated voltage / current		250V / 4A		250V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 

THR Soldering, straight, shield

Connector style	package	Part number	
Male 	Tray	281-L4T01S-1	281-L5T01S-1
	Tape-and ree	281-L4T01S-2	281-L5T01S-2
Female 	Tray	282-L4T01S-1	282-L5T01S-1
	Tape-and ree	282-L4T01S-2	282-L5T01S-2

THR Soldering, straight, No shield

Connector style	package	Part number	
Male 	Tray	281-L4T01U-1	281-L5T01U-1
	Tape-and ree	281-L4T01U-2	281-L5T01U-2
Female 	Tray	282-L4T01U-1	282-L5T01U-1
	Tape-and ree	282-L4T01U-2	282-L5T01U-2

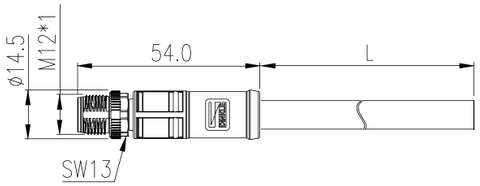
Metal housing

Connector style	Mount thread	Part number
Male use 	M15 x 1	283-P1100
Female use 	M15 x 1	284-P1100

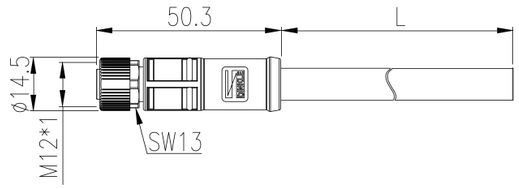
Package unit, Tray : 60 pcs; Tape-and-Reel : 100 pcs

M12 K-Code Molded Circular Connector

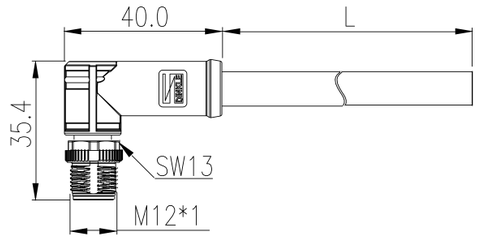
Single-ended straight male



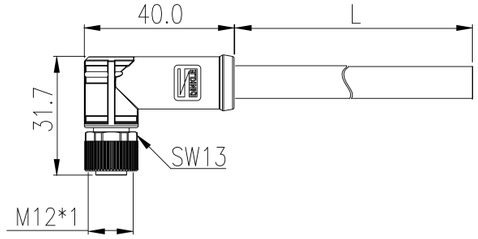
Single-ended straight female



Single0ended angled male

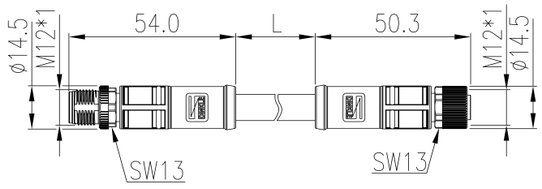


Single-ended angled female

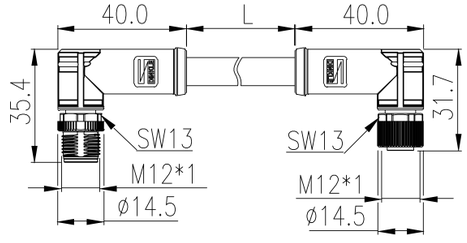


Unit：mm

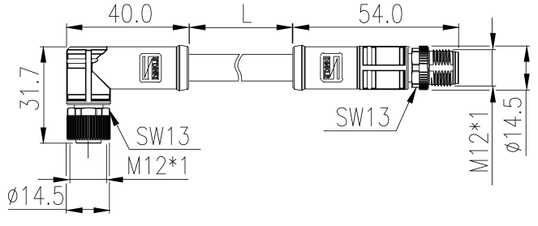
Straight male to straight female



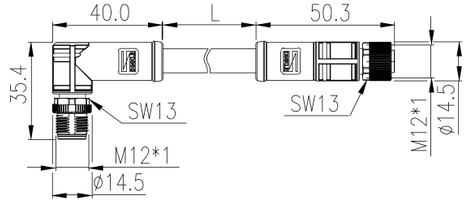
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 K-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PA / PP
Operating Temperature	-40°C ~ 80°C (Fixed installation)	O-ring	NBR
	-25°C ~ 80°C (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4Nm	UL94 Flammability rating	V0

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	630VAC / 16A (5 Pin)	Cable Jacket	No Shield	PUR, BLACK
Rated Impulse Voltage	4kV (5 Pin)		Shield	PUR, ORANGE
Insulation resistance	Min. 100MΩ	UL AWM style	No Shield	UL AWM 21223
Overvoltage Category	II		Shield	UL AWM 21223
Pollution Degree	3	PUR，ORANGE	1.5mm^2 / 14AWG (5 Pin)	
		Material conductor insulation	PP	
		Flame resistance	VW-1 / FT1	
		Dielectric strength	3kV/1min	

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 K-Code Molded Connector (Shield / No Shield)

Coding and contacts	Code	K	
	Contact	5(4+PE)	
Rated voltage / current		630V / 16A	
Rated voltage / current		Male 	Female 

Shield

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	251-K5103-02S020
		5	251-K5103-02S050
		10	251-K5103-02S100
Single-ended straight female 	PUR	2	252-K5103-02S020
		5	252-K5103-02S050
		10	252-K5103-02S100

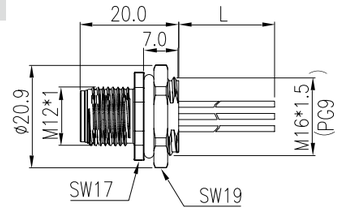
No Shield

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	201-K5103-02S020
		5	201-K5103-02S050
		10	201-K5103-02S100
Single-ended straight female 	PUR	2	202-K5103-02S020
		5	202-K5103-02S050
		10	202-K5103-02S100
Single-ended angled male 	PUR	2	203-K5103-02S020
		5	203-K5103-02S050
		10	203-K5103-02S100
Single-ended angled female 	PUR	2	204-K5103-02S020
		5	204-K5103-02S050
		10	204-K5103-02S100

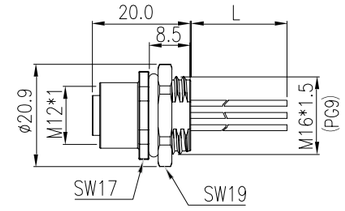
M12 K-Code Device Circular Connector

Front mounting with 0.5m wire

Male

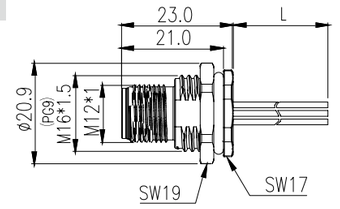


Female

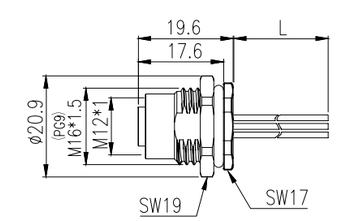


Rear mounting with 0.5m wire

Male



Female



Pin assignments and wire colors

Pin arrangement		
	5P	
	K code	
Pin out	1	Black
	2	Black
	3	Black
	4	Black
	FE	Yellow Green

M12 K-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Mounting torque	0.8 Nm	UL94 Flammability rating	V0
Electrical Properties		**Electrical Properties**	
Rated voltage / current (contacts)	630VAC / 16A (5 Pin)	Cable Jacket	XLPE
Rated Impulse Voltage	4kV (5 Pin)	UL AWM style	UL AWM 3994
Insulation resistance	Min. 100MΩ	Conductor cross section	1.5mm^2 / 14AWG (5 Pin)
Overvoltage Category	III	Material conductor insulation	XLPE
Pollution Degree	3	Flame resistance	FT2
		Dielectric strength	6kV/1min

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 K-Code Device Connector (No Shield)

Coding and contacts	Code	K	
	Contact	5(4+PE)	
Rated voltage / current		630V / 16A	
Contact arrangement		Male 	Male 

Front mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16x1.5	218-K5100-0MSL50
Female 	M16x1.5	219-K5100-0MSL50

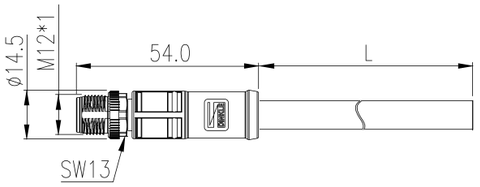
Rear mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16x1.5	220-K5100-0MSL50
Female 	M16x1.5	221-K5100-0MSL50

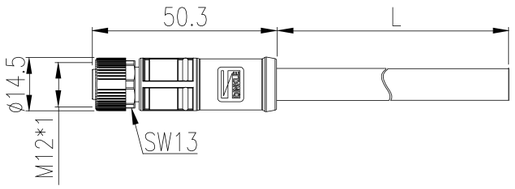
The wire length can be customized. For more details, please contact Dinkle

M12 M-Code Molded Circular Connector

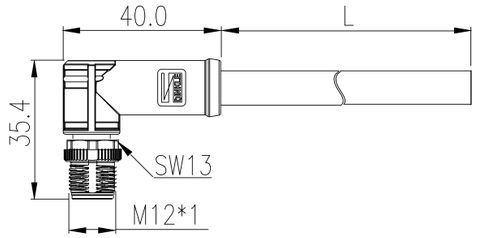
Single-ended straight male



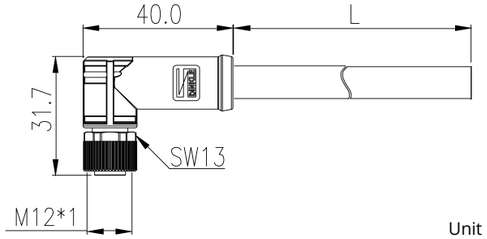
Single-ended straight female



Single-ended angled male

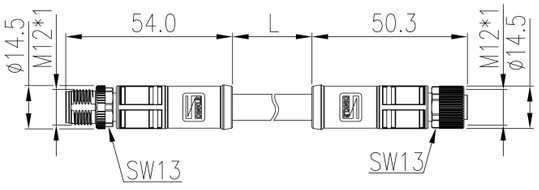


Single-ended angled female

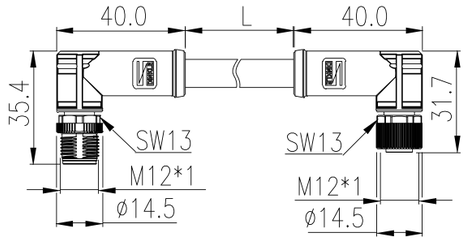


Unit：mm

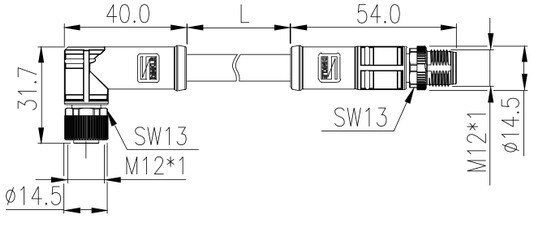
Straight male to straight female



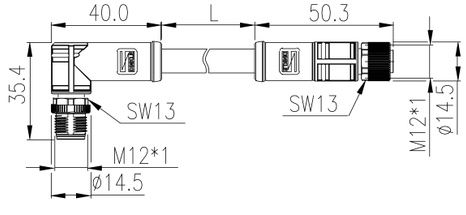
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 M-Code Molded Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier / overmolding	PA / PP
Operating Temperature	-40℃ ~ 80℃ (Fixed installation)	O-ring	NBR
	-25℃ ~ 80℃ (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	0.4 Nm	UL94 Flammability rating	V0

Electrical Properties		Cable Information		
Rated voltage / current (contacts)	630VAC / 8A (6 Pin)	Cable Jacket	No Shield	PUR, BLACK
Rated Impulse Voltage	6kV(6 Pin)		Shield	PUR,ORANGE
Insulation resistance	Min. 100MΩ	UL AWM style	No Shield	UL AWM 21223
Overvoltage Category	III		Shield	UL AWM 21223
Pollution Degree	3	Conductor cross section	1.5mm^2 / 16AWG(6 Pin)	
		Material conductor insulation	PP	
		Flame resistance	VW-1/FT1	
		Dielectric strength	3kV/min	

Standards and Regulations	
Design reference	IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 M-Code Molded Connector (Shield / No Shield)

Coding and contacts	Code	M	
	Contact	6(5+PE)	
Rated voltage / current		630V / 8A	
Contact arrangement		Male 	Female 

Shield

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	251-M6103-02S020
		5	251-M6103-02S050
		10	251-M6103-02S100
Single-ended straight female 	PUR	2	252-M6103-02S020
		5	252-M6103-02S050
		10	252-M6103-02S100

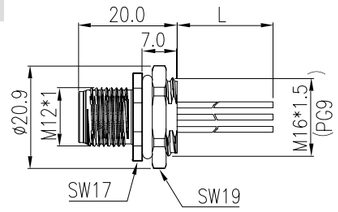
No Shield

Connector style	Cable	Length(m)	Part number
Single-ended straight male 	PUR	2	201-M6103-02S020
		5	201-M6103-02S050
		10	201-M6103-02S100
Single-ended straight female 	PUR	2	202-M6103-02S020
		5	202-M6103-02S050
		10	202-M6103-02S100
Single-ended angled male 	PUR	2	203-M6103-02S020
		5	203-M6103-02S050
		10	203-M6103-02S100
Single-ended angled female 	PUR	2	204-M6103-02S020
		5	204-M6103-02S050
		10	204-M6103-02S100

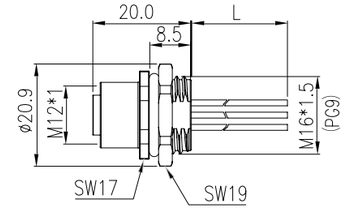
M12 M-Code Device Circular Connector

Front mounting with 0.5m wire

Male

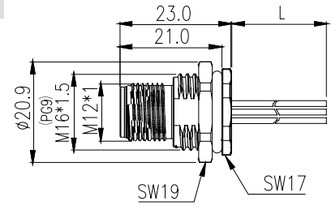


Female

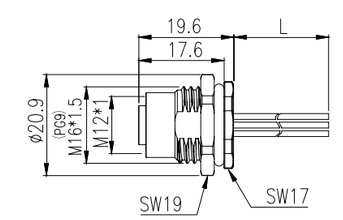


Rear mounting with 0.5m wire

Male



Female



Pin assignments and wire colors

Pin arrangement		
	6P	
	M code	
Pin out	1	Black
	2	Black
	3	Black
	4	Black
	FE	Yellow Green

M12 M-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	0.4Nm	O-ring	NBR
Mounting torque	0.8Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	630VAC / 8A(6 Pin)	Cable Jacket	MPPE
Rated Impulse Voltage	6kV(6 Pin)	UL AWM style	UL 11029
Insulation resistance	Min. 100MΩ	Conductor cross section	1.5mm^2 / 16AWG(6 Pin)
Overvoltage Category	III	Material conductor insulation	MPPE
Pollution Degree	3	Flame resistance	VW-1 / FT1
		Dielectric strength	3kV/1min

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 M-Code Device Connector (No Shield)

Coding and contacts	Code	M	
	Contact	6(5+PE)	
Rated voltage / current		630V / 8A	
Rated voltage / current		Male 	Female 

Front mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16x1.5	218-M6100-0MSL50
Female 	M16x1.5	219-M6100-0MSL50

Rear mounting with 0.5m wire

Connector style	Mount thread	Part number
Male 	M16x1.5	220-M6100-0MSL50
Female 	M16x1.5	221-M6100-0MSL50

The wire length can be customized. For more details, please contact Dinkle

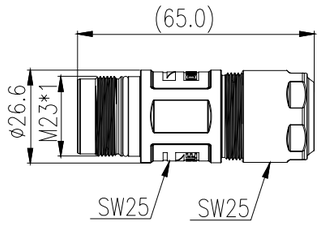
M23 Circular Connector

The M23 circular connectors offer a versatile industrial connection solution, primarily used for integrating electrical drives and servo motors into industrial automation equipment. These connectors are equally suitable for applications involving signal or power transmission, thanks to their high current and voltage carrying capabilities. They are designed to withstand harsh environments and complex application scenarios.

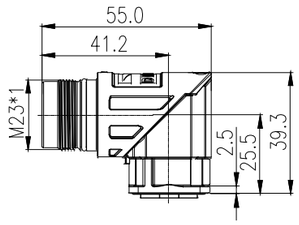
Additionally, Dinkle provides a variety of pin configurations, including 6, 12, 17, and 19 pins, to meet your application needs, whether for power or signal adaptation.

M23 N-Code Circular Connector

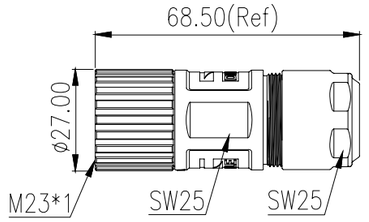
Straight male - power



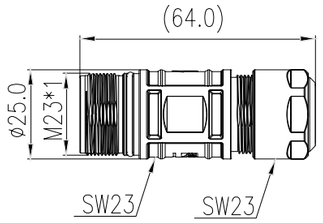
Angled male - power



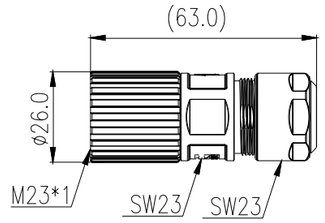
Straight female - power



Straight male - Signal



Straight female - Signal



Unit：mm

M23 N-Code Circular Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 125℃	Outer Shield	Zinc Alloy
Fasten torque	Crimping	O-ring	NBR
		UL94 Flammability rating	V0

Electrical Properties		Cable Information		
Electrical Properties	630VAC / 30A(6 Pin)	Wiring diameter	Power	0.25mm² ~4.0mm²
	200VAC / 8A (12 Pin)		Signal	0.08mm² ~1.0mm²
	200VAC / 8A (17 Pin)	Applicable cable diameter	Power	5.5mm²~17.0mm²
	48VAC (19 Pin) / 8A(φ1.0mm²) & 10A(φ1.5mm²)		Signal	3.0mm²~14.0mm²
	78VDC (19 Pin) / 8A(φ1.0mm²) & 10A(φ1.5mm²)			
Electrical Properties	6kV(6 Pin)			
	1.5kV(12, 17, 19 Pin)			
Insulation resistance	Min. 100MΩ			
Overvoltage Category	III			
Pollution Degree	3			

Standards and Regulations	
Certification reference	UL1977 / UL2238 (Circular Connector Signal)

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M23 N-Code Circular Connector Power

Coding and contacts	Code	N	
	Contact	6(5+PE)	
Rated voltage / current		630V/30A	
Contact arrangement		Male 	Female 

Cable end

Connector style	terminal	Part number
Straight male thread 	turning soldering male terminal	401-P0061
Straight female thread 	turning soldering female terminal	402-P0062

Device side

Connector style	terminal	Part number
Angled male thread 	turning soldering male terminal	426-P0061

Crimp terminal

	Crimp wiring diameter mm²	Part number	
		Turning male terminal	Turning female terminal
Terminal diameter Ø 2 mm	0.25 - 1.0	0304-0304	0304-1304
	1.5 - 2.5	0304-0305	0304-1305
	2.5 - 4	0304-0306	0304-1306

M23 N-Code Circular Connector Signal

Coding and contacts	Code	N	N	N
	Contact	12	17	19
Rated voltage / current		200V/8A	200V/8A	78V/10A
Rated voltage / current		Male  Female 	Male  Female 	Male  Female 
Cable end				
Connector style	**terminal**	**Part number**		
Straight male thread 	turning soldering male terminal	401-S0123	401-S0173	401-S0193
	turning soldering female terminal	401-S0124	401-S0174	401-S0194
Straight female thread 	turning soldering male terminal	402-S0123	402-S0173	402-S0193
	turning soldering female terminal	402-S0124	402-S0174	402-S0194

Crimp terminals are available in different sizes depending on the crimpable wire size and can be sold separately

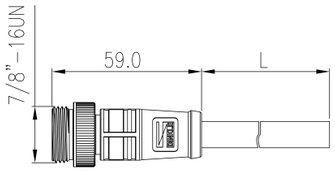
7/8" Circular Connector

Dinkle’s 7/8'' circular connector series is specifically designed for power supply in industrial automation fieldbus networks. The series offers 2 to 6 terminals, with a maximum capacity of 600V/13A, making it a reliable power source for industrial communication equipment. For example, 5-pin connectors are commonly used for PROFIBUS/PROFINET, while 4-pin ones are suited for DeviceNet applications. These connectors maximize power delivery within limited space and provide stable transmission and power sources for components and equipment used in factory and warehouse automation applications.

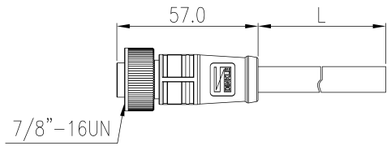
Dinkle's overmolded circular connectors simplify fieldbus installation, reduce wiring errors during field connections, and ensure proper component connectivity and reliable communication. Panel-mounted circular connectors, fixed to equipment or enclosures using nuts, achieve IP68 protection for excellent environmental resistance. The one-piece PCB circular connectors, with their integrated design and high protection rating, have become a preferred choice in industrial connection solutions.

7/8" A-Code Molded Circular Connector

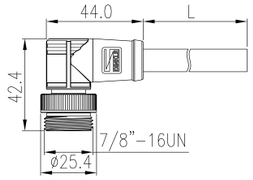
Straight male



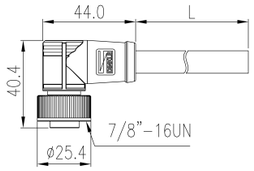
Straight male



Angled male



Angled male



Unit：mm

7/8" A-Code Molded Connector

Mechanical Properties		Rated Impulse Voltage	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP68	Contact carrier / overmolding	PVC / PVC
Operating Temperature	-30℃ ~ 105℃ (Fixed installation)	O-ring	NBR
	-40℃ ~ 105℃ (Flexible installation)	Cable gland material	Zinc die-cast, nickel-plated
Fasten torque	1.12 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Electrical Properties	600VAC / 13A (≤3 Pin)	Cable Jacket	PVC, Yellow
	600VAC / 10A (4 Pin)	UL AWM style	No Shield PVC : STOOW
	600VAC / 8A (5 Pin)	Conductor cross section	16AWG (≤6 Pin)
	600VAC / 8A (6 Pin)	Material conductor insulation	PVC
Rated Impulse Voltage	2.5kV	Flame resistance	VW-1
Insulation resistance	Min. 100MΩ	Dielectric strength	NA
Overvoltage Category	II		
Pollution Degree	3		
Standards and Regulations			
Certification reference	UL2238		

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

7/8" A-Code Molded Connector (No Shield)

Coding and contacts	Code	A	A	A	A	A
	Contact	2	3	4	5	6
Rated voltage / current		600V / 13A	600V / 13A	600V / 10A	600V / 8A	600V / 8A
Rated voltage / current		Male / Female	Male / Female	Male / Female	Male / Female	Male / Female

Connector style	Cable	Length(m)	Part number				
Single-ended straight male 	PVC	2m	451-2000-0020	451-3000-0020	**451-4000-0020**	**451-5000-0020**	451-6000-0020
		5m	451-2000-0050	451-3000-0050	**451-4000-0050**	**451-5000-0050**	451-6000-0050
		10m	451-2000-0100	451-3000-0100	**451-4000-0100**	**451-5000-0100**	451-6000-0100
Single-ended straight female 	PVC	2m	452-2000-0020	452-3000-0020	**452-4000-0020**	**452-5000-0020**	452-6000-0020
		5m	452-2000-0050	452-3000-0050	**452-4000-0050**	**452-5000-0050**	452-6000-0050
		10m	452-2000-0100	452-3000-0100	**452-4000-0100**	**452-5000-0100**	452-6000-0100
Single-ended angled male 	PVC	2m	453-2000-0020	453-3000-0020	**453-4000-0020**	**453-5000-0020**	453-6000-0020
		5m	453-2000-0050	453-3000-0050	**453-4000-0050**	**453-5000-0050**	453-6000-0050
		10m	453-2000-0100	453-3000-0100	**453-4000-0100**	**453-5000-0100**	453-6000-0100
Single-ended angled female 	PVC	2m	454-2000-0020	454-3000-0020	**454-4000-0020**	**454-5000-0020**	454-6000-0020
		5m	454-2000-0050	454-3000-0050	**454-4000-0050**	**454-5000-0050**	454-6000-0050
		10m	454-2000-0100	454-3000-0100	**454-4000-0100**	**454-5000-0100**	454-6000-0100
Straight male mate straight female 	PVC	0.6m	456-2000-0L60	456-3000-0L60	**456-4000-0L60**	**456-5000-0L60**	456-6000-0L60
		1.5m	456-2000-0015	456-3000-0015	**456-4000-0015**	**456-5000-0015**	456-6000-0015
		3m	456-2000-0030	456-3000-0030	**456-4000-0030**	**456-5000-0030**	456-6000-0030
Angled male mate angled female 	PVC	0.6m	459-2000-0L60	459-3000-0L60	**459-4000-0L60**	**459-5000-0L60**	459-6000-0L60
		1.5m	459-2000-0015	459-3000-0015	**459-4000-0015**	**459-5000-0015**	459-6000-0015
		3m	459-2000-0030	459-3000-0030	**459-4000-0030**	**459-5000-0030**	459-6000-0030

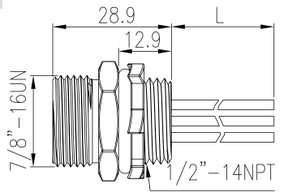
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Bolded part number is cULus certified.

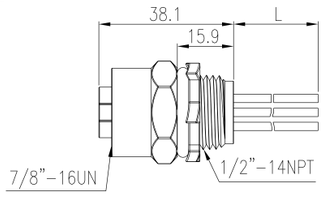
7/8" A-Code Device Circular Connector

Front mounting with 0.5m wire

Male



Female



Pin assignments and wire colors

Pin arrangement								
	2P		3P		4P		5P	
	A code							
Pin out	1	White	1	Green	1	Black	1	White
	2	Black	2	Black	2	White	2	Red
			3	White	3	Red	3	Green
					4	Green	4	Orange
							5	Black

7/8" A-Code Device Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated
Fasten torque	1.1Nm	O-ring	NBR
Mounting torque	1.5 Nm	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	600VAC / 13A (≤3 Pin)	Cable Jacket	MPPE
	600VAC / 10A (4 Pin)	Cable Jacket	MPPE : UL11029
	600VAC / 8A (5 Pin)	Cable Jacket	16AWG (≤6 Pin)
	600VAC / 8A (6 Pin)	Material conductor insulation	MPPE
Rated Impulse Voltage	2.5kV	Flame resistance	VW-1
Insulation resistance	Min. 100MΩ	Dielectric strength	NA
Overvoltage Category	II		
Pollution Degree	3		
Standards and Regulations			
Certification reference	UL2238		

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

7/8" A-Code Device Connector (No Shield)

Coding and contacts	**Code**	**A**		**A**		**A**		**A**		**A**	
	Contact	**2**		**3**		**4**		**5**		**6**	
Rated voltage / current		600V / 13A		600V / 13A		600V / 10A		600V / 8A		600V / 8A	
Contact arrangement		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
											
Front mounting with 0.5m wire											
Connector style	**Mount thread**	**Part number**									
Male 	1/2”-14NPT	468-2006-0L50		468-3006-0L50		**468-4006-0L50**		**468-5006-0L50**		468-6006-0L50	
Male 	1/2”-14NPT	469-2006-0L50		469-3006-0L50		**469-4006-0L50**		**469-5006-0L50**		469-6006-0L50	

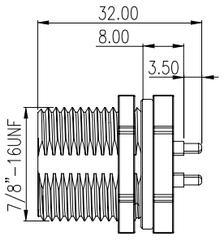
The wire length can be customized. For more details, please contact Dinkle

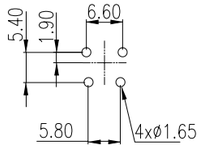
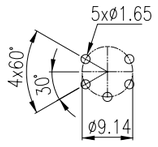
Bolded part number is cULus certified.

7/8" A-Code One-piece PCB Circular Connector

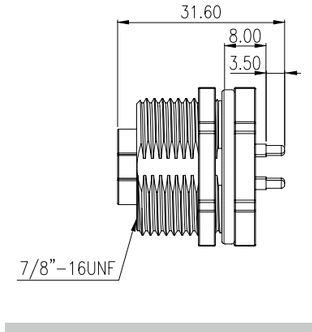
180° Rear mounting, straight (NonShielded)

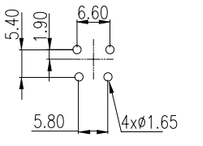
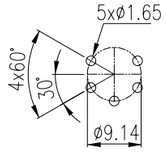
Male



PCB Layout	
Pin out	
	
Pin arrangement	
	
	4P / 5P
	A-code

Female



PCB Layout	
Pin out	
	
Pin arrangement	
	
	4P / 5P
	A-code

7/8" A-Code One-piece PCB Connector (No Shield)

Coding and contacts	Code	A	A
	Contact	4	5
Rated voltage / current		600V / 10A	600V / 8A
Contact arrangement		Male  / Female 	Male  / Female 

Rear mounting, straight, No Shield

Connector style	Mount thread	Part number	
Male 	1/2"-14NPT	476-4000-8	476-5000-8
Female 	1/2"-14NPT	477-4000-8	477-5000-8

7/8" A-Code One-piece PCB Circular Connector

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP68	Contact carrier	PVC
Operating Temperature	-40°C ~ 105°C	Hexigonal nut / Outer Shield	Brass alloy, nickel-plated / Zinc die-cast, nickel-plated
Fasten torque	1.12Nm	O-ring	Zinc die-cast, nickel-plated
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	600VAC / 10A (4 Pin)	
	600VAC / 8A (5 Pin)	
Rated Impulse Voltage	2.5kV (≤6 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Certification reference	UL2238

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

Distribution Box

Effective and flexible cabling

Status indicator

Single / Double slots and 4 / 6 / 8 sockets are available.

M12 connector

Standardized M12 A-Code connector according to IEC 61076-2-101.

Clear marking

Quick and convenient marking with DINKLE TM-R series.

High quality cable

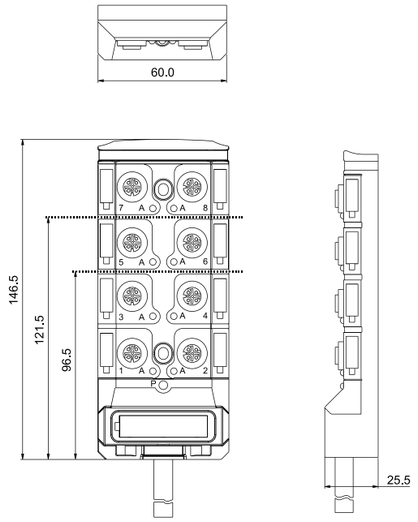
PUR/PVC sheathed cables for various industrial environment.

Related products

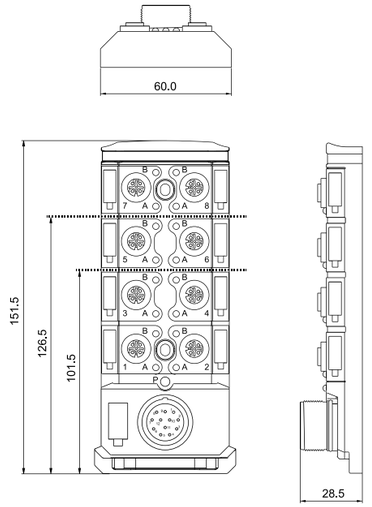
Style	Sheath	Length (m)	Part number	Style	Sheath	Length (m)	Part number
M12 – Single-ended straight male 	PUR	2	201-A5000-00S020	M12 – Single-ended angled male 	PUR	2	203-A5000-00S020
		5	201-A5000-00S050			5	203-A5000-00S050
		10	201-A5000-00S100			10	203-A5000-00S100
	PVC	2	201-A5000-20S020		PVC	2	203-A5000-20S020
		5	201-A5000-20S050			5	203-A5000-20S050
		10	201-A5000-20S100			10	203-A5000-20S100
M12 – Straight male to straight female 	PUR	0.6	206-A5000-00SL60	M12 – Angled male to angled female 	PUR	0.6	209-A5000-00SL60
		1.5	206-A5000-00S015			1.5	209-A5000-00S015
		3	206-A5000-00S030			3	209-A5000-00S030
	PVC	0.6	206-A5000-20SL60		PVC	0.6	209-A5000-20SL60
		1.5	206-A5000-20S015			1.5	209-A5000-20S015
		3	206-A5000-20S030			3	209-A5000-20S030
M12 – Straight male to angled female 	PUR	0.6	212-A5000-00SL60	M12 – Angled male to straight female 	PUR	0.6	214-A5000-00SL60
		1.5	212-A5000-00S015			1.5	214-A5000-00S015
		3	212-A5000-00S030			3	214-A5000-00S030
	PVC	0.6	212-A5000-20SL60		PVC	0.6	214-A5000-20SL60
		1.5	212-A5000-20S015			1.5	214-A5000-20S015
		3	212-A5000-20S030			3	214-A5000-20S030
M12 - Y-splitter with cable 	PUR	0.15	222-A5530-00SL15	M12 - Y-splitter without cable 	Part number		
	PVC	0.15	222-A5530-20SL15		224-2A5100		
M23 – Cable side connector 	Contacts	Suitable Slot	Part number	M12 – Plastic sealing cap 	Part number		
	12	Single	402-S0124		200-A002		
	19	Double	402-S0194				
Thermal printer 	Part number			Continuous flat marking label 	Width(mm)	Part number	
	TMP-004				7.4	TM-R100	
					9.8	TM-R200	

Distribution Box

Molded Master Cable

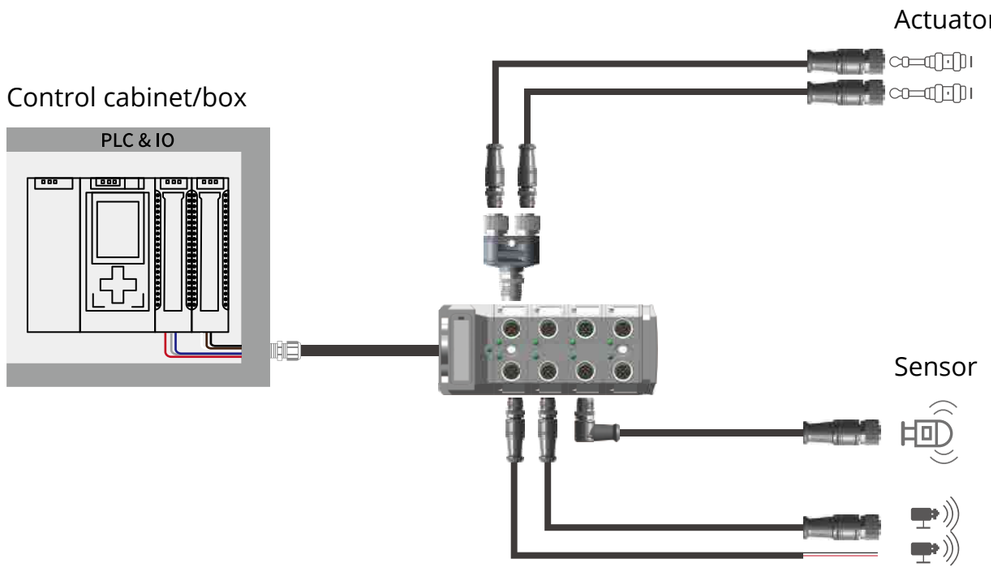


Pluggable M23 Connector



Application

Optimize the wiring of I/O module and PLC in the control cabinet/box. Distribution boxes bundle 4/6/8 sensors or actuators into one master connection. Minimizing the risk of error to wire in the field.



Distribution Box

Molded Master Cable

Ease of the installation process in the field.
The cable length can be customized.

Sheath	Slot style	Single			Double		
	Sockets		6	8	4	6	8
	Length(m)	Part number					
PUR	5	953-04P-0050	953-06P-0050	953-08P-0050	954-04P-0050	954-06P-0050	954-08P-0050
PUR	10	953-04P-0100	953-06P-0100	953-08P-0100	954-04P-0100	954-06P-0100	954-08P-0100
PVC	5	953-04P-3050	953-06P-3050	953-08P-3050	954-04P-3050	954-06P-3050	954-08P-3050
PVC	10	953-04P-3100	953-06P-3100	953-08P-3100	954-04P-3100	954-06P-3100	954-08P-3100
General parameter							
Socket style		M12 A-Code sockets			Shielded	No	
Status indicator		Power: Green LED, I/O: Yellow LED			Signal type	PNP	
Operation temp.		-25 ~ 80°C			IP rating	IP68	
Electric parameter							
Rated voltage		24 VDC			Total rated current		12A
Max. current per path		2A			Max. current per slot		4A
Cable parameter							
Cable cores		7	10	12	11	15	19
Conductor size		4 x 0.34mm^2 3 x 0.75mm^2	4 x 0.34mm^2 6 x 0.75mm^2	4 x 0.34mm^2 8 x 0.75mm^2	8 x 0.5mm^2 3 x 1mm^2	12 x 0.5mm^2 3 x 1mm^2	16 x 0.5mm^2 3 x 1mm^2

Pluggable M23 Connector

Suitable for frequent connection or module replacement

Slot style	Single			Single		
Sockets	4	6	8	4	6	8
	Part number					
	951-04P	951-06P	951-08P	952-04P	952-06P	952-08P
General parameter						
Socket style	M12 A-Code sockets			Shielded	No	
Status indicator	Power: Green LED, I/O: Yellow LED			Signal type	PNP	
Operation temp.	-25 ~ 80°C			IP rating	IP68	
Electric parameter						
Rated voltage	24 VDC			Total rated current		12A
Max. current per path	2A			Max. current per slot		4A
Contacts of M23 connector	12			Contacts of M23 connector		19

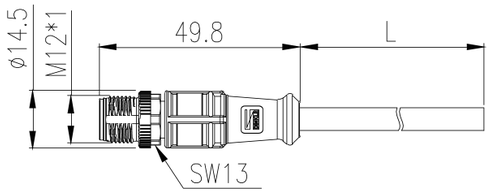
M12 Circular Connector - Industrial Ethernet

Dinkle offers M12 connectors designed for industrial communication protocols (such as CC-Link, DeviceNet/CANopen, Profibus DP, Profinet, Ethernet, EtherCAT5), meeting the demands of sensors and actuators in industrial automation systems and ensuring stable network communication. Its high-quality industrial network cables feature excellent shielding and transmission performance, offering IP67 protection to effectively prevent environmental interference. Additionally, Dinkle provides panel-mounted circular connectors with IP68 protection and one-piece PCB circular connectors that offer easy installation, reliable performance, and durability, making them suitable for various industrial environments.

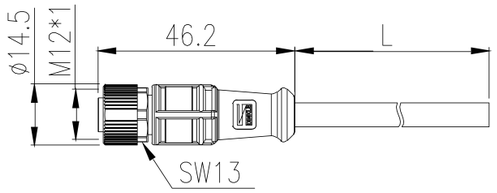
Protocol		Code	Contact	Application	Data transfer rate	Cable profile	Connector Pinout
Networks	Ethernet CAT5e	A	8	All industrial environment	Up to 1 Gbps		Pin / Conductor color / Signal 1 WH/BU D3- 2 WH/BN D4+ 3 BN D4- 4 OG D1- 5 WH/GN D2+ 6 WH/OG D1+ 7 BU D3+ 8 GN D2-
	PROFINET CAT5	D	4	Production in the automotive industry, process automation	100 Mbps		Pin / Conductor color / Signal 1 YE TD+ 2 WH RD+ 3 OG TD- 4 BU RD-
	Ethernet CAT5 EtherNet/IP	D	4	Industrial automation and process control environments	Up to 100 Mbps		Pin / Conductor color / Signal 1 WH/OG TD+ 2 WH/GN RD+ 3 OG TD- 4 GN RD- Shield on housing
	"Ethernet CAT6A"	X	8	Camera, CCTV and high speed data acquisition	Up to 10 Gbps		Pin / Conductor color / Signal 1 WHOG D1+ 2 OG D1- 3 WHGN D2+ 4 N D2- 5 WHBN D4+ 6 BN D4- 7 WHBU D3- 8 BU D3+
Fieldbuses	CC-Link	A	4	Field of process	Up to 10 Mbps		Pin / Conductor color / Signal 1 Shield SLD 2 WH DS 3 YE DG 4 BU DA
	DeviceNet CANopen	A	5	Automation and device control	DeviceNet: Up to 500kbaud Canopen: 10 kbaud to 1 Mbaud		Pin / Conductor color / Signal 1 Shield Drain 2 RD V+ 3 BK V- 4 WH CAN_H 5 BU CAN_L Shield on housing
	PROFIBUS DP	B	5	Distributed I/O device	Up to 12 Mbp		Pin / Conductor color / Signal 1 - - 2 GN A cable 3 - - 4 RD B cable 5 Flexible filler Shield on housing

M12 A-Code Molded Circular Connector - Industrial Ethernet

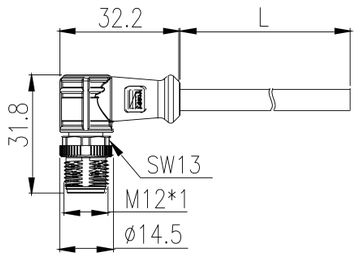
Single-ended straight male



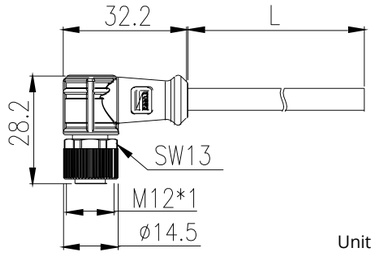
Single-ended straight female



Singled-ended angled male

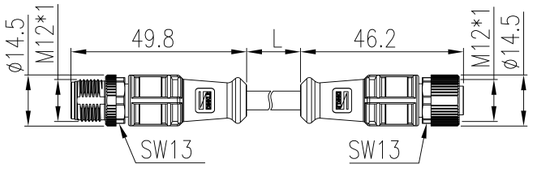


Single-ended angled female

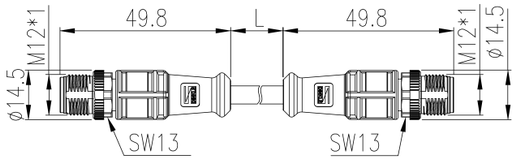


Unit：mm

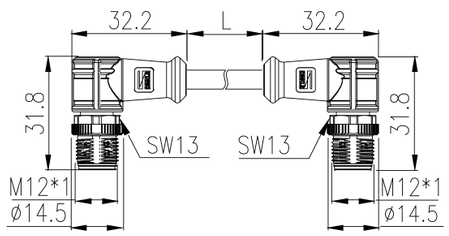
Straight male to straight female



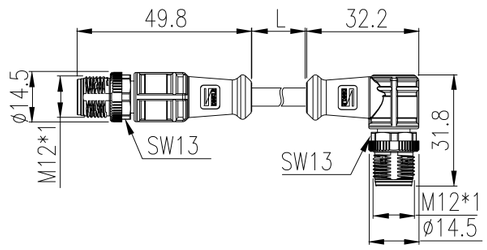
Straight male to straight male



Angled male to angled male

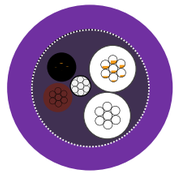
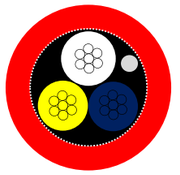


Straight male to angled male



Unit：mm

M12 A-Code Molded Connector - Industrial Ethernet

	Ethernet	DeviceNet / CANopen	CC-Link
Protocols	 Ethernet	 DeviceNet CANopen	 CC-Link
Cross-section			
Communication	Ethernet CAT5e (1 Gbps)	CANopen® DeviceNet™	CC-Link (10 Mbps)
Coding	A	A	A
Number of cores	8	5	4
Outer sheath, material	PUR	PUR	PVC
Outer sheath, color	Blue (RAL 5021)	Violet	Red
Outer sheath, diameter	6.0 ± 0.3 mm	6.6 ± 0.3 mm	7.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield	AL-mylar, tinned copper braided shield	AL-Foil, tin-plated copper braided shield
Conductor material	Stranded bare copper	Stranded tinned copper	Stranded bare copper
AWG signal line	26AWG	2 x 22AWG + 2 x 24AWG	1 x 22AWG + 3 x 20AWG
Wire colors	White/Blue, Blue, White/Orange, Orange, White/Green, Green,White/Brown, Brown	24AWG: White, Blue 22AWG: Red, Black	White, Blue, Yellow
Core diameter including insulation	0.92 ± 0.05 mm	24AWG: 1.9 ± 0.05 mm 22AWG: 1.4 ± 0.05 mm	2.2 ± 0.1 mm
Conductor resistance	< 148 Ω/km	22AWG: < 57.4 Ω/km 24AWG: < 91.8 Ω/km	37.8 Ω/km(@20 °C)
Standards / Regulations	ISO/IEC 11801	UL 1581	IEC 61158-2
	UL 1581	UL 758	-
	UL 758	-	-
UL AWM style	20963	21329	-
Flammability test	IEC 60332-1, FT2	IEC 60332-1, FT2	IEC 60332-1

M12 A-Code Molded Connector (Shield) - Networks

Coding and contacts	Code	A	
	Contact	8	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Ethernet CAT5e (1Gbps)	
Connector style	**Length(m)**	**Part number**	
Single-ended straight male 	2	251-A8000-0ES020	
	5	251-A8000-0ES050	
	10	251-A8000-0ES100	
Single-ended straight female 	2	252-A8000-0ES020	
	5	252-A8000-0ES050	
	10	252-A8000-0ES100	
Single-ended angled male 	2	253-A8000-0ES020	
	5	253-A8000-0ES050	
	10	253-A8000-0ES100	
Single-ended angled female 	2	254-A8000-0ES020	
	5	254-A8000-0ES050	
	10	254-A8000-0ES100	
Straight male mate straight female 	0.6	256-A8000-0ESL60	
	1.5	256-A8000-0ES015	
	3	256-A8000-0ES030	
Straight male mate straight male 	0.6	257-A8000-0ESL60	
	1.5	257-A8000-0ES015	
	3	257-A8000-0ES030	
Power over Ethernet			
Straight male mate straight female 	25	256-A8000-0EP250	
Straight male mate straight male 	25	257-A8000-0EP250	

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 A-Code Molded Connector (Shield) - Fieldbuses

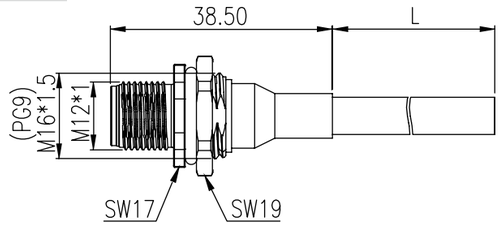
Coding and contacts	Code	A		A	
	Contact	4		5	
Rated voltage / current		250V / 4A		60V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 
Cable		PVC		PUR	
Protocols		CC-Link		DeviceNet CANopen	
Connector style	**Length(m)**	**Part number**			
Single-ended straight male 	2	251-A4000-2CS020		251-A5000-0DS020	
	5	251-A4000-2CS050		251-A5000-0DS050	
	10	251-A4000-2CS100		251-A5000-0DS100	
Single-ended straight female 	2	252-A4000-2CS020		252-A5000-0DS020	
	5	252-A4000-2CS050		252-A5000-0DS050	
	10	252-A4000-2CS100		252-A5000-0DS100	
Single-ended angled male 	2	253-A4000-2CS020		253-A5000-0DS020	
	5	253-A4000-2CS050		253-A5000-0DS050	
	10	253-A4000-2CS100		253-A5000-0DS100	
Single-ended angled female 	2	254-A4000-2CS020		254-A5000-0DS020	
	5	254-A4000-2CS050		254-A5000-0DS050	
	10	254-A4000-2CS100		254-A5000-0DS100	
Straight male mate straight female 	0.6	256-A4000-2CSL60		256-A5000-0DSL60	
	1.5	256-A4000-2CS015		256-A5000-0DS015	
	3	256-A4000-2CS030		256-A5000-0DS030	
Angled male mate angled female 	0.6	259-A4000-2CSL60		259-A5000-0DSL60	
	1.5	259-A4000-2CS015		259-A5000-0DS015	
	3	259-A4000-2CS030		259-A5000-0DS030	

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

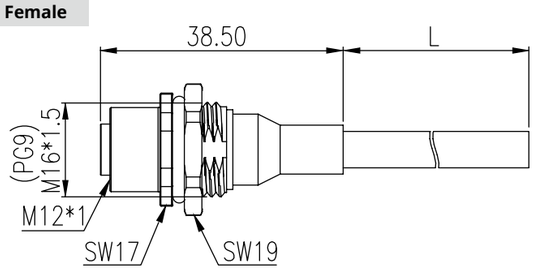
M12 A-Code Device Circular Connector - Industrial Ethernet

Front mounting with 2m PUR cable

Male

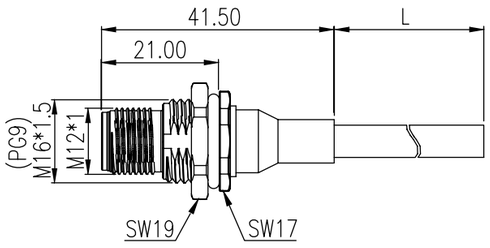


Female

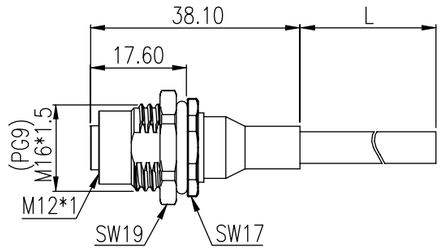


Rear mounting with 2m PUR cable

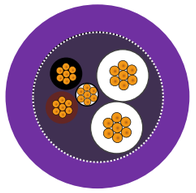
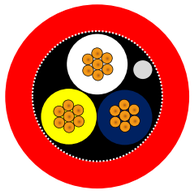
Male



Female



M12 A-Code Device Connector - Industrial Ethernet

	Ethernet	DeviceNet / CANopen	CC-Link
Protocols	 **Ethernet**	 DeviceNet CANopen	 CC-Link
Cross-section			
Communication	Ethernet CAT5e (1 Gbps)	CANopen® DeviceNet™	CC-Link (10 Mbps)
Coding	A	A	A
Number of cores	8	5	4
Outer sheath, material	PUR	PUR	PVC
Outer sheath, color	Blue (RAL 5021)	Violet	Red
Outer sheath, diameter	6.0 ± 0.3 mm	6.6 ± 0.3 mm	7.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield	AL-mylar, tinned copper braided shield	AL-Foil, tin-plated copper braided shield
Conductor material	Stranded bare copper	Stranded tinned copper	Stranded bare copper
AWG signal line	26AWG	2 x 22AWG + 2 x 24AWG	1 x 22AWG + 3 x 20AWG
Wire colors	White/Blue, Blue, White/Orange, Orange, White/Green, Green,White/Brown, Brown	24AWG: White, Blue 22AWG: Red, Black	White, Blue, Yellow
Core diameter including insulation	0.92 ± 0.05 mm	24AWG: 1.9 ± 0.05 mm 22AWG: 1.4 ± 0.05 mm	2.2 ± 0.1 mm
Conductor resistance	< 148 Ω/km	22AWG: < 57.4 Ω/km 24AWG: < 91.8 Ω/km	37.8 Ω/km(@20 °C)
Standards / Regulations	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
	IEC 60512	IEC 60512	IEC 60512
	IEC 60529	IEC 60529	IEC 60529
UL AWM style	UL 2238	UL 2238	UL 2238
Flammability test	V0	V0	V0

M12 A-Code Device Connector (Shield) - Networks

Coding and contacts	Code	A	
	Contact	8	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Ethernet CAT5e (1Gbps)	
Front mounting with 2m cable			
Connector style	**Mount thread**	**Part number**	
Male 	M16 x 1.5	268-A8000-1ES020	
	Pg9	268-A8002-1ES020	
Female 	M16 x 1.5	269-A8000-1ES020	
	Pg9	269-A8002-1ES020	
Rear mounting with 2m cable			
Connector style	**Mount thread**	**Part number**	
Male 	M16 x 1.5	270-A8000-1ES020	
	Pg9	270-A8002-1ES020	
Female 	M16 x 1.5	271-A8000-1ES020	
	Pg9	271-A8002-1ES020	

The wire length can be customized. For more details, please contact Dinkle

M12 A-Code Device Connector (Shield) - Fieldbuses

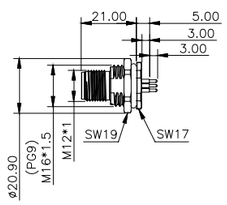
Coding and contacts	Code	A	A
	Contact	4	5
Rated voltage / current		250V / 4A	60V / 4A
Contact arrangement		Male  Female 	Male  Female 
Cable		PVC	PUR
Protocols		CC-Link	DeviceNet CANopen
Front mounting with 2m cable			
Connector style	**Mount thread**	**Part number**	
Male 	M16 x 1.5	268-A4000-3CS020	268-A5000-1DS020
	Pg9	268-A4002-3CS020	268-A5002-1DS020
Female 	M16 x 1.5	269-A4000-3CS020	269-A5000-1DS020
	Pg9	269-A4002-3CS020	269-A5002-1DS020
Rear mounting with 2m cable			
Connector style	**Mount thread**	**Part number**	
Male 	M16 x 1.5	270-A4000-3CS020	270-A5000-1DS020
	Pg9	270-A4000-3CS020	270-A5002-1DS020
Female 	M16 x 1.5	271-A4000-3CS020	271-A5000-1DS020
	Pg9	271-A4002-3CS020	271-A5002-1DS020

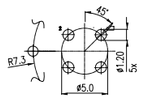
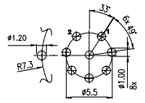
The wire length can be customized. For more details, please contact Dinkle

M12 A-Code One-piece PCB Circular Connector - Industrial Ethernet

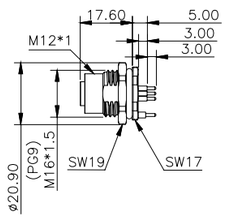
180° Rear mounting, straight (Shielded)

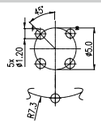
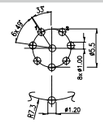
Male



PCB Layout		
Pin out		
Pin arrangement		
	4P	8P
	A-code	

Female



PCB Layout		
Pin out		
Pin arrangement		
	4P	8P
	A-code	

M12 A-Code One-piece PCB Connector - Industrial Ethernet

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)	
	30VAC / 2A (8 Pin)	
Rated Impulse Voltage	2.5kV (≤4 Pin)	
	0.8kV (8 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238 / UL2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 A-Code One-piece PCB Connector (Shield) - Networks

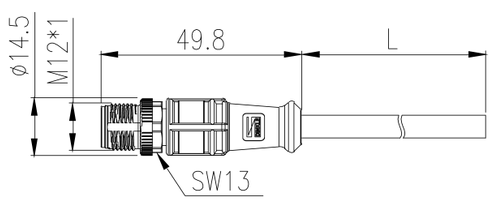
Coding and contacts	Code	A	
	Contact	8	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Protocols		Ethernet CAT5e	
Rear mounting, straight, Shield			
Connector style	Mount thread	Part number	
Male 	M16 X 1.5	276-A8000-E	
	Pg9	276-A8002-E	
Female 	M16 X 1.5	277-A8000-E	
	Pg9	277-A8002-E	

M12 A-Code One-piece PCB Connector (Shield) - Fieldbuses

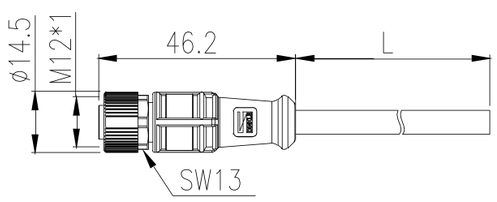
Coding and contacts	Code	A	A
	Contact	4	5
Rated voltage / current		60V / 4A	60V / 4A
Rated voltage / current		Male  Female 	Male  Female 
Protocols		CC-Link	DeviceNet/CANopen
Rear mounting, straight, Shield			
Connector style	Mount thread	Part number	
Male 	M16 X 1.5	276-A4000-C	276-A5000-D
	Pg9	276-A4002-C	276-A5002-D
Female 	M16 X 1.5	277-A4000-C	277-A5000-D
	Pg9	277-A4002-C	277-A5002-D

M12 B-Code Molded Circular Connector - Industrial Ethernet

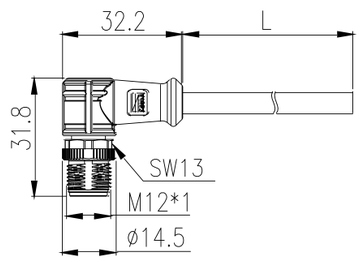
Single-ended straight male



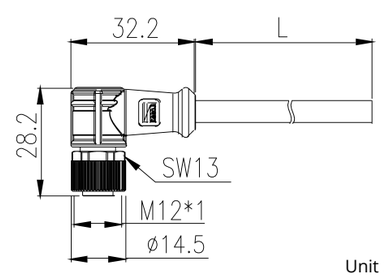
Single-ended straight female



Single-ended angled male

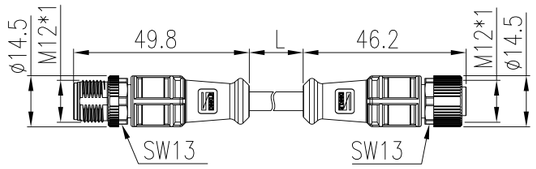


Single-ended angled female

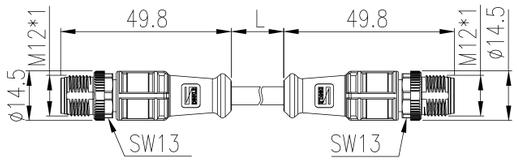


Unit：mm

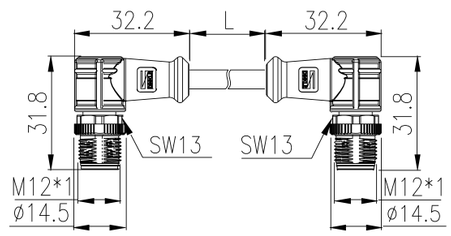
Straight male to straight female



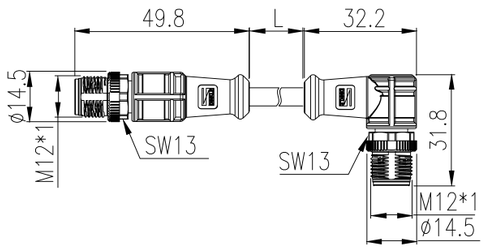
Straight male to straight male



Angled male to angled male

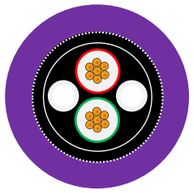


Straight male to angled male



Unit：mm

M12 B-Code Molded Connector - Industrial Ethernet

Protocols	PROFIBUS
	
Cross-section	
Communication	Profibus DP (12 Mbps)
Coding	B
Number of cores	5
Outer sheath, material	PUR
Outer sheath, color	Violet
Outer sheath, diameter	7.8 ± 0.2 mm
"Ambient temperature (operation)"	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper
AWG signal line	22AWG
Wire colors	Green, Red
Core diameter including insulation	2.7 ± 0.1 mm
Conductor resistance	59.4 Ω/km(@20 °C)
Standards / Regulations	IEC 61158-2
	UL 758
	-
UL AWM style	20233
Flammability test	VW-1

M12 B-Code Molded Connector (Shield) - Fieldbuses

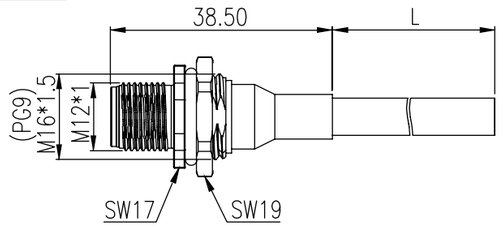
Coding and contacts	**Code**	**B**	
	Contact	**5**	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Profibus	
Connector style	**Length(m)**	**Part number**	
Single-ended straight male 	2	251-B5000-0BS020	
	5	251-B5000-0BS050	
	10	251-B5000-0BS100	
Single-ended straight female 	2	252-B5000-0BS020	
	5	252-B5000-0BS050	
	10	252-B5000-0BS100	
Single-ended angled male 	2	253-B5000-0BS020	
	5	253-B5000-0BS050	
	10	253-B5000-0BS100	
Single-ended angled female 	2	254-B5000-0BS020	
	5	254-B5000-0BS050	
	10	254-B5000-0BS100	
Straight male mate straight female 	0.6	256-B5000-0BSL60	
	1.5	256-B5000-0BS015	
	3	256-B5000-0BS030	
Angled male mate angled female 	0.6	259-B5000-0BSL60	
	1.5	259-B5000-0BS015	
	3	259-B5000-0BS030	

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

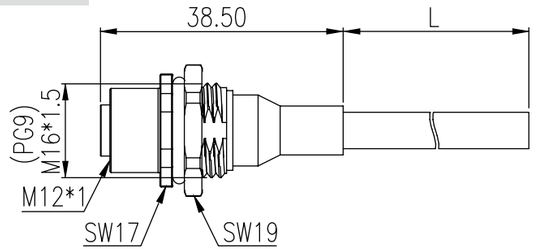
M12 B-Code Device Circular Connector - Industrial Ethernet

Front mounting with 2m PUR cable

Male

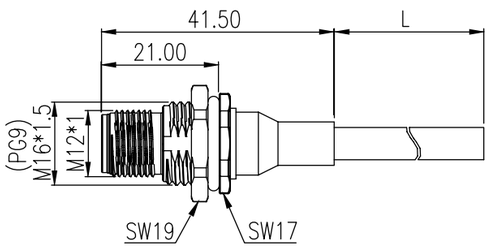


Female

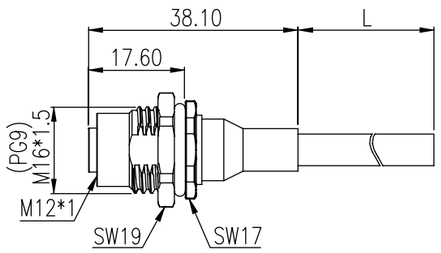


Rear mounting with 2m PUR cable

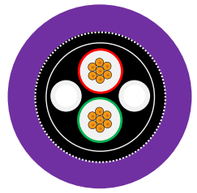
Male



Female



M12 B-Code Device Connector - Industrial Ethernet

Protocols	PROFIBUS
	
Cross-section	
Communication	Profibus DP (12 Mbps)
Coding	B
Number of cores	5
Outer sheath, material	PUR
Outer sheath, color	Violet
Outer sheath, diameter	7.8 ± 0.2 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper
AWG signal line	22AWG
Wire colors	Green, Red
Core diameter including insulation	2.7 ± 0.1 mm
Conductor resistance	59.4 Ω/km(@20 °C)
Standards / Regulations	IEC 61158-2
	UL 758
	-
UL AWM style	20233
Flammability test	VW-1

M12 B-Code Device Connector (Shield) - Fieldbuses

Coding and contacts	**Code**	**B**	
	Contact	**5**	
Rated voltage / current		250V / 4A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Profibus	

Front mounting with 2m cable

Connector style	Mount thread	Part number
Male 	M16 x 1.5	268-B5000-1BS020
	Pg9	268-B5002-1BS020
Female 	M16 x 1.5	269-B5000-1BS020
	Pg9	269-B5002-1BS020

Rear mounting with 2m cable

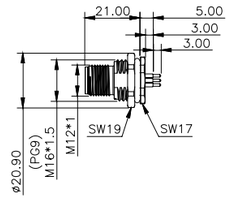
Connector style	Mount thread	Part number
Male 	M16 x 1.5	270-B5000-1BS020
	Pg9	270-B5002-1BS020
Female 	M16 x 1.5	271-B5000-1BS020
	Pg9	271-B5002-1BS020

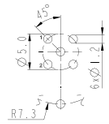
The wire length can be customized. For more details, please contact Dinkle

M12 B-Code One-piece PCB Circular Connector - Industrial Ethernet

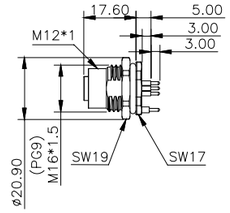
180° Rear mounting, straight (Shielded)

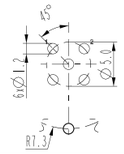
Male



PCB Layout	
Pin out	
Pin arrangement	
	5P
	B-code

Female



PCB Layout	
Pin out	
Pin arrangement	
	5P
	B-code

M12 B-Code One-piece PCB Connector - Industrial Ethernet

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	60VAC / 4A (5 Pin)	
Rated Impulse Voltage	1.5kV (5 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238 / UL2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 B-Code One-piece PCB Connector (Shield) - Fieldbuses

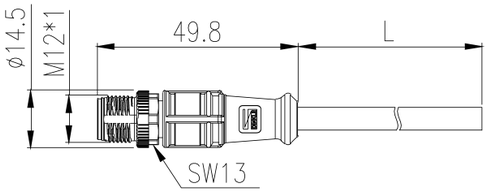
Coding and contacts	**Code**	**B**	
	Contact	**5**	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Protocols		Profibus	

Rear mounting, straight, Shield

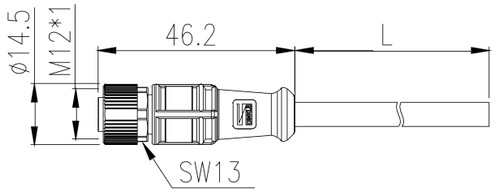
Connector style	Mount thread	Part number
Male 	M16 X 1.5	276-B5000-B
	Pg9	276-B5002-B
Female 	M16 X 1.5	277-B5000-B
	Pg9	277-B5002-B

M12 D-Code Molded Circular Connector - Industrial Ethernet

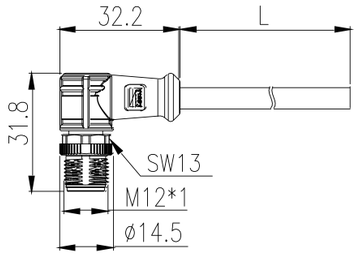
Single-ended straight male



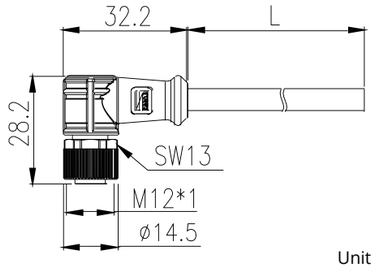
Single-ended straight female



Single-ended angled male

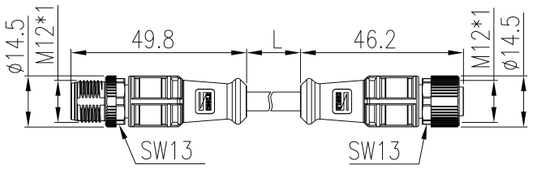


Single-ended angled female

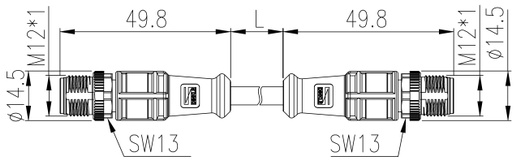


Unit：mm

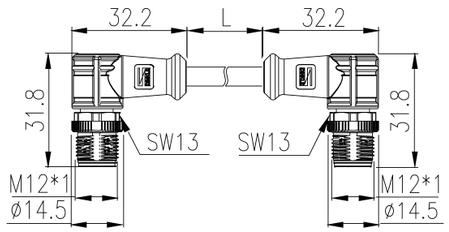
Straight male to straight female



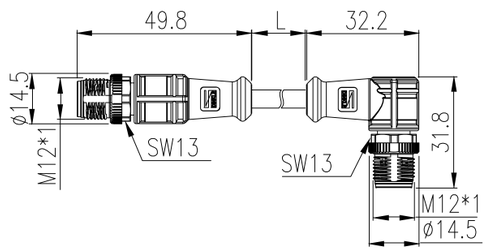
Straight male to straight male



Angled male to angled male

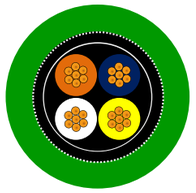


Straight male to angled male

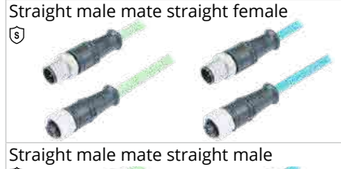


Unit：mm

M12 D-Code Molded Connector - Industrial Ethernet

	Profinet	Ethernet
Protocols	 PROFINET	 Ethernet
Cross-section		
Communication	PROFINET (100 Mbps)	Ethernet CAT5 (100 Mbps)
Coding	D	D
Number of cores	4	4
Outer sheath, material	PVC	PUR
Outer sheath, color	Green (RAL 6008)	Blue (RAL 5021)
Outer sheath, diameter	6.5 ± 0.2 mm	6.0 ± 0.25 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-Foil, tin-plated copper braided shield	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper	Stranded bare copper
AWG signal line	22 AWG	26 AWG
Wire colors	White, Yellow, Blue, Orange	White/Orange, Orange, White/Green, Green
Core diameter including insulation	1.5 ± 0.1 mm	0.9 ± 0.05 mm
Conductor resistance	59.4 Ω / km (@20 °C)	< 148 Ω / km
Standards / Regulations	IEC 61156-6	ISO / IEC 11801
	ISO / IEC 11801	UL 1581
	UL 758	UL 758
UL AWM style	21694	20963
Flammability test	IEC 60332-1, FT2	IEC 60332-1, FT2

M12 D-Code Molded Connector (Shield) - Networks

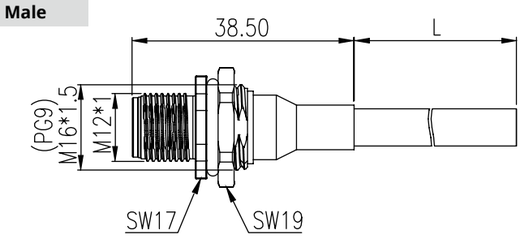
Coding and contacts	Code	D	D
	Contact	4	4
Rated voltage / current		250V / 4A	30V / 2A
Contact arrangement		Male / Female 	Male / Female 
Cable		PVC	PUR
Protocols		Profinet (100Mbps)	Ethernet CAT5 (100Mbps)
Connector style	**Length(m)**	**Part number**	
Single-ended straight male 	2	251-D4000-2PS020	251-D4000-0ES020
	5	251-D4000-2PS050	251-D4000-0ES050
	10	251-D4000-2PS100	251-D4000-0ES100
Single-ended straight female 	2	252-D4000-2PS020	252-D4000-0ES020
	5	252-D4000-2PS050	252-D4000-0ES050
	10	252-D4000-2PS100	252-D4000-0ES100
Single-ended angled male 	2	253-D4000-2PS020	253-D4000-0ES020
	5	253-D4000-2PS050	253-D4000-0ES050
	10	253-D4000-2PS100	253-D4000-0ES100
Single-ended angled female 	2	254-D4000-2PS020	254-D4000-0ES020
	5	254-D4000-2PS050	254-D4000-0ES050
	10	254-D4000-2PS100	254-D4000-0ES100
Straight male mate straight female 	0.6	256-D4000-2PSL60	256-D4000-0ESL60
	1.5	256-D4000-2PS015	256-D4000-0ES015
	3	256-D4000-2PS030	256-D4000-0ES030
Straight male mate straight male 	0.6	257-D4000-2PSL60	257-D4000-0ESL60
	1.5	257-D4000-2PS015	257-D4000-0ES015
	3	257-D4000-2PS030	257-D4000-0ES030
Power over Ethernet			
Straight male mate straight female 	25	256-D4000-2PP250	256-D4000-0EP250
Straight male mate straight male 	25	257-D4000-2PP250	257-D4000-0EP250

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

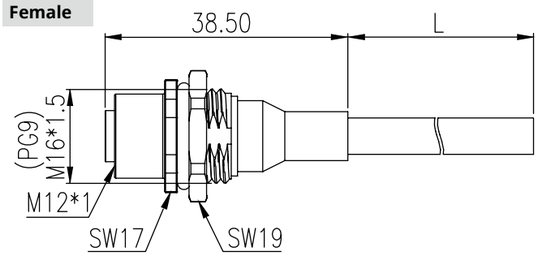
M12 D-Code Device Circular Connector - Industrial Ethernet

Front mounting with 2m PUR cable

Male

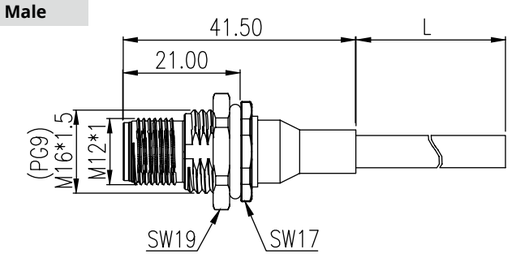


Female

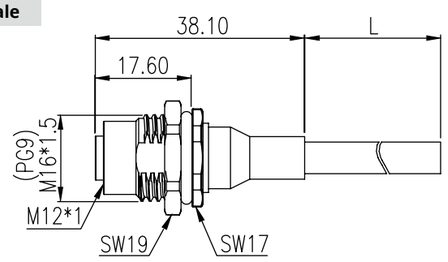


Rear mounting with 2m PUR cable

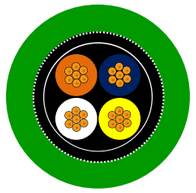
Male



Female



M12 D-Code Device Connector - Industrial Ethernet

	Profinet	Ethernet
Protocols		 Ethernet
Cross-section		
Communication	Profinet (100 Mbps)	Ethernet CAT5 (100 Mbps)
Coding	D	D
Number of cores	4	4
Outer sheath, material	PVC	PUR
Outer sheath, color	Green (RAL 6008)	Blue (RAL 5021)
Outer sheath, diameter	6.5 ± 0.2 mm	6.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-Foil, tin-plated copper braided shield	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper	Stranded bare copper
AWG signal line	22AWG	26AWG
Wire colors	White, Yellow, Blue, Orange	White/Orange, Orange, White/Green, Green
Core diameter including insulation	1.5 ± 0.1 mm	0.9 ± 0.05 mm
Conductor resistance	59.4 Ω/km(@20 °C)	< 148 Ω/km
Standards / Regulations	IEC 61156-6	ISO/IEC 11801
	ISO/IEC 11801	UL 1581
	UL 758	UL 758
UL AWM style	21694	20963
Flammability test	IEC 60332-1, FT2	IEC 60332-1, FT2

M12 D-Code Device Connector (Shield) - Networks

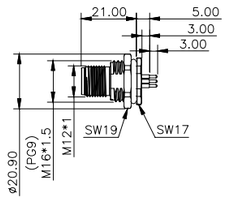
Coding and contacts	**Code**	**D**		**D**	
	Contact	**4**		**4**	
Rated voltage / current		250V / 4A		30V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 
Cable		PVC		PUR	
Protocols		Profinet (100Mbps)		Ethernet CAT5 (100Mbps)	
Front mounting with 2m cable					
Connector style	**Mount thread**	**Part number**			
Male 	M16 x 1.5	268-D4000-3PS020		268-D4000-1ES020	
	Pg9	268-D4002-3PS020		268-D4002-1ES020	
Female 	M16 x 1.5	269-D4000-3PS020		269-D4000-1ES020	
	Pg9	269-D4002-3PS020		269-D4002-1ES020	
Rear mounting with 2m cable					
Connector style	**Mount thread**	**Part number**			
Male 	M16 x 1.5	270-D4000-3PS020		270-D4000-1ES020	
	Pg9	270-D4002-3PS020		270-D4002-1ES020	
Female 	M16 x 1.5	271-D4000-3PS020		271-D4000-1ES020	
	Pg9	271-D4002-3PS020		271-D4002-1ES020	

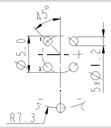
The wire length can be customized. For more details, please contact Dinkle

M12 D-Code One-piece PCB Circular Connector - Industrial Ethernet

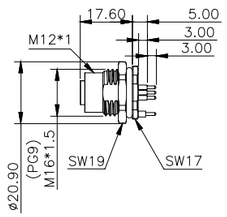
180° Rear mounting, straight (Shielded)

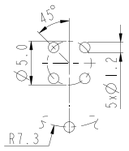
Male



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

Female



PCB Layout	
Pin out	
Pin arrangement	
4P	
D- code	

M12 D-Code One-piece PCB Connector - Industrial Ethernet

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40℃ ~ 80℃	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0
Electrical Properties		**Cable Information**	
Rated voltage / current (contacts)	250VAC / 4A (≤4 Pin)		
Rated Impulse Voltage	2.5kV (≤4 Pin)		
Insulation resistance	Min. 100MΩ		
Overvoltage Category	II		
Pollution Degree	3		
Standards and Regulations			
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking		
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods		
	IEC 60529: Degree of protection provided by enclosures (IP Code)		
Certification reference	UL 2238 / UL2237		

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 D-Code One-piece PCB Connector (Shield) - Networks

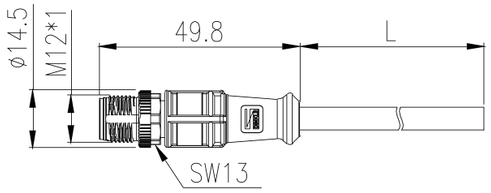
Coding and contacts	Code	D		D	
	Contact	4		4	
Rated voltage / current		60V / 4A		60V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 
Protocols		PROFINET		Ethernet CAT5e	

Rear mounting, straight, Shield

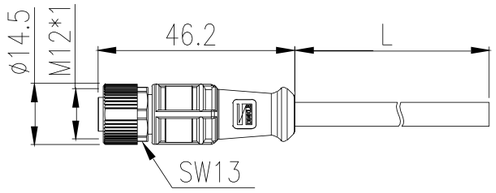
Connector style	Mount thread	Part number	
Male 	M16 X 1.5	276-D4000-P	276-D4000-E
	Pg9	276-D4002-P	276-D4002-E
Female 	M16 X 1.5	277-D4000-P	277-D4000-E
	Pg9	277-D4002-P	277-D4002-E

M12 X-Code Molded Circular Connector - Industrial Ethernet

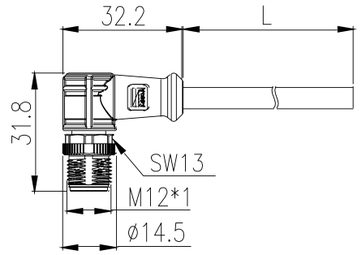
Single-ended straight male



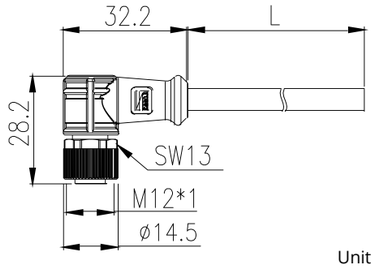
Single-ended straight female



Single-end angled male

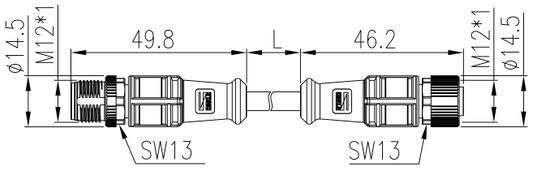


Single-ended angled female

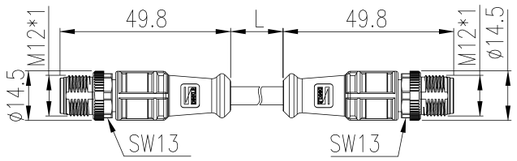


Unit：mm

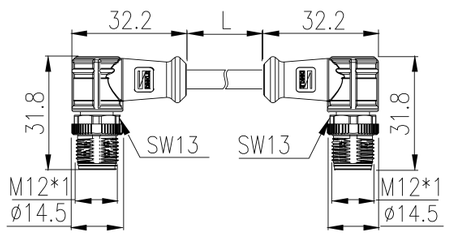
Straight male to straight female



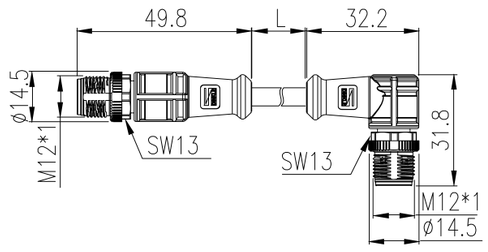
Straight male to straight male



Angled male to angled male



Straight male to angled male



Unit：mm

M12 X-Code Molded Connector - Industrial Ethernet

Protocols	Ethernet
	 **Ethernet**
Cross-section	
Communication	Ethernet CAT6A (10 Gbps)
Coding	X
Number of cores	8
Outer sheath, material	PUR
Outer sheath, color	Blue (RAL 5021)
Outer sheath, diameter	6.45± 0.2 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded bare copper
AWG signal line	26AWG
Wire colors	White/Orange, Orange, White/Green, Green, White/Brown, Brown, White/Blue, Blue
Core diameter including insulation	1.08 ± 0.2 mm
Conductor resistance	148 Ω/km
Standards / Regulations	ISO/IEC 11801
	EIA/TIA 568
	IEC 60754-1
UL AWM style	20549
Flammability test	IEC 60332-1, FT2

M12 X-Code Molded Connector (Shield) - Networks

Coding and contacts	Code	X
	Contact	8
Rated voltage / current		50V / 0.5A
Contact arrangement		Male 
Cable		PUR
Protocols		Ethernet CAT6A (10Gbps)

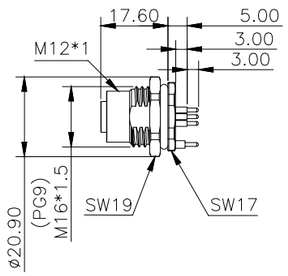
Connector style	Length(m)	Part number
Single-ended straight male 	2	251-X8300-0AS020
	5	251-X8300-0AS050
	10	251-X8300-0AS100

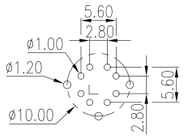
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 X-Code One-piece PCB Circular Connector - Industrial Ethernet

180° Rear mounting, straight (Shielded)

Female



PCB Layout	
Pin out	
Pin arrangement	 8P X-code

M12 X-Code One-piece PCB Circular Connector - Industrial Ethernet

Mechanical Properties		Material Properties	
Min. Insertion/withdrawal cycles	100	Contact / contact surface	Copper alloy / Gold plated
Degree of protection	IP67	Contact carrier	PA
Operating Temperature	-40°C ~ 80°C	Hexigonal nut / Outer Shield	Zinc die-cast, nickel-plated / Brass, nickel-plated
Fasten torque	0.4 Nm	O-ring	NBR
Soldering method	Wave Soldering	UL94 Flammability rating	V0

Electrical Properties		Cable Information
Rated voltage / current (contacts)	30VAC / 2A (8 Pin)	
Rated Impulse Voltage	0.8kV (8 Pin)	
Insulation resistance	Min. 100MΩ	
Overvoltage Category	II	
Pollution Degree	3	

Standards and Regulations	
Design reference	IEC 61076-2-101: Detail specification for M12 connectors with screw-locking IEC 61076-2-111: Circular connectors - Detail specification for power connectors with M12 screw-locking
	IEC 60512: Electromechanical components for electronic equipment; basic testing procedure and measuring methods
	IEC 60529: Degree of protection provided by enclosures (IP Code)
Certification reference	UL 2238 / UL2237

Notice

The mechanical and electrical data performance can be ensured when the connector pair is correctly locked and fasten by specified torque. If the connector is not locked and or exposured in th contaminated enviroment, the connector must be sealed by the protective cover. Also, the influences from conductor, cable or PCB assembly must be taken into consideration.

M12 X-Code One-piece PCB Connector (Shield) - Networks

Coding and contacts	**Code**	**X**
	Contact	**8**
Rated voltage / current		30V / 1.5A
Contact arrangement		Female 
Protocols		Ethernet CAT6A
Rear mounting, straight, Shield		
Connector style	**Mount thread**	**Part number**
Male 	M16 X 1.5	-
	Pg9	-
Female 	M16 X 1.5	277-X8300-3
	Pg9	277-X8302-3

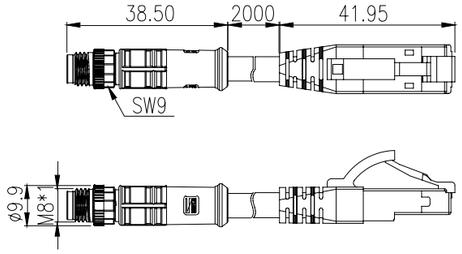
Functional class

Dinkle provides high-quality M8 and M12 circular connector mate RJ45 adapter solutions designed specifically for the demanding network communication needs of industrial automation and harsh environments. These circular connectors securely encapsulate the RJ45 network interface in an IP67-rated metal housing, offering waterproof and dustproof protection while maintaining stable data transmission even in conditions with moisture, oil, and dust.

With excellent vibration resistance and durability, these connectors are particularly suited for applications such as factory automation equipment, robotic arms, and intelligent warehousing systems, ensuring stable and reliable Ethernet connections. Dinkle's circular connector mate RJ45 series is easy to install and maintain, effectively reducing wiring errors during network installation, enhancing overall production efficiency, and providing dependable network connection protection for your equipment.

M8 A-Code Molded Circular Connector Mate RJ45 Connector

Male



Unit：mm

M8 A-Code Molded Connector Mate RJ45 Connector

Protocols	Profinet
	 **Ethernet**
Cross-section	
Communication	Ethernet CAT5e
Coding	A
Number of cores	4
Outer sheath, material	PUR
Outer sheath, color	Blue (RAL 5021)
Outer sheath, diameter	6.0 ± 0.2 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-Foil, tin-plated copper braided shield
Conductor material	Stranded tinned copper
AWG signal line	26AWG
Wire colors	White/Orange, Orange, White/Green, Green
Core diameter including insulation	0.9 ± 0.05 mm
Conductor resistance	< 148 Ω/km
Standards / Regulations	ISO / IEC 11801
	UL 1581
	UL 758
UL AWM style	20963
Flammability test	IEC 60332-1, FT2

M8 A-Code Molded Connector Mate RJ45 Connector

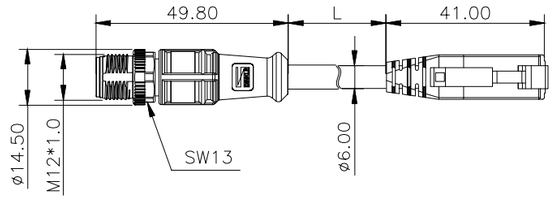
Coding and contacts	Code	A	
	Contact	8	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Ethernet CAT5e (1Gbps)	

Connector style	Length(m)	Part number
Straight male mate RJ45 	0.6	399-A4EML60
	1.5	399-A4EM015
	3	399-A4EM030
Straight female mate RJ45 	0.6	399-A4EFL60
	1.5	399-A4EF015
	3	399-A4EF030
Angled male mate RJ45 	0.6	398-A4EML60
	1.5	398-A4EM015
	3	398-A4EM030
Angled male mate RJ45 	0.6	398-A4EFL60
	1.5	398-A4EF015
	3	398-A4EF030

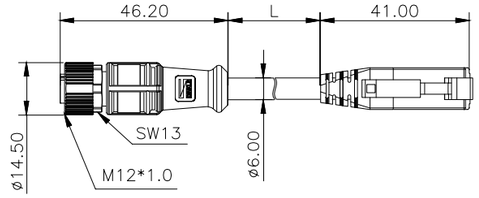
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 A-Code Molded Circular Connector Mate RJ45 Connector

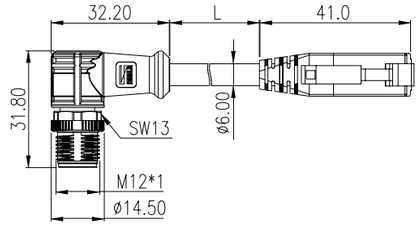
Straight male mate RJ45 (Shielded)



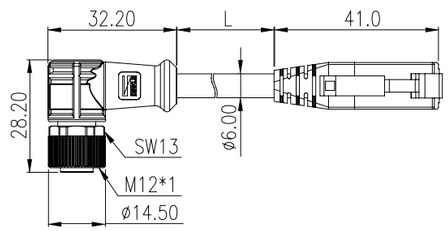
Straight female mate RJ45 (Shielded)



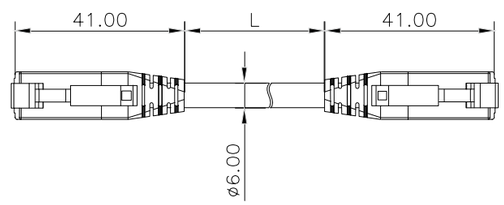
Angled male mate RJ45 (Shielded)



Angled female mate RJ45 (Shielded)



RJ45+RJ45



Unit：mm

M12 A-Code Molded Connector Mate RJ45 Connector

Protocols	Ethernet
	 **Ethernet**
Cross-section	
Communication	Ethernet CAT5e (1 Gbps)
Coding	A
Number of cores	8
Outer sheath, material	PUR
Outer sheath, color	Blue (RAL 5021)
Outer sheath, diameter	6.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded bare copper
AWG signal line	26AWG
Wire colors	White/Blue, Blue, White/Orange,Orange, White/Green, Green,White/Brown, Brown
Core diameter including insulation	0.92 ± 0.05 mm
Conductor resistance	< 148 Ω/km
Standards / Regulations	ISO/IEC 11801
	UL 1581
	UL 758
UL AWM style	20963
Flammability test	IEC 60332-1, FT2

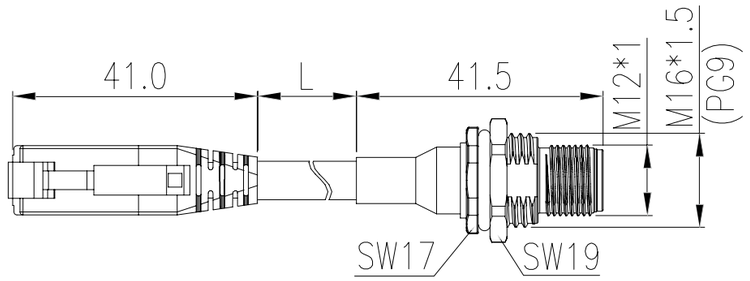
M12 A-Code Molded Connector Mate RJ45 Connector (Shield) - Networks

Coding and contacts	**Code**	**A**	
	Contact	**8**	
Rated voltage / current		30V / 1A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Ethernet CAT5e (1Gbps)	
Connector style	**Length(m)**	**Part number**	
Straight male mate RJ45 	0.6	299-A8EML60	
	1.5	299-A8EM015	
	3	299-A8EM030	
Straight female mate RJ45 	0.6	299-A8EFL60	
	1.5	299-A8EF015	
	3	299-A8EF030	
Angled male mate RJ45 	0.6	298-A8EML60	
	1.5	298-A8EM015	
	3	298-A8EM030	
Angled female mate RJ45 	0.6	298-A8EFL60	
	1.5	298-A8EF015	
	3	298-A8EF030	
RJ45 + RJ45 	1	0206-0301	
	3	0206-0303	
	5	0206-0305	

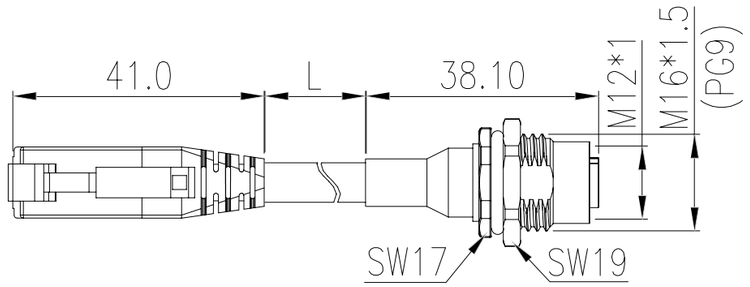
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 A-Code Device Circular Connector Mate RJ45 Connector

Rear mounting male mate RJ45 (Shielded)



Rear mounting female mate RJ45 (Shielded)



Unit：mm

M12 A-Code Device Connector Mate RJ45 Connector

Protocols	Ethernet
	 **Ethernet**
Cross-section	
Communication	Ethernet CAT5e (1 Gbps)
Coding	A
Number of cores	8
Outer sheath, material	PUR
Outer sheath, color	Blue (RAL 5021)
Outer sheath, diameter	6.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded bare copper
AWG signal line	26AWG
Wire colors	White/Blue, Blue, White/Orange, Orange, White/Green, Green, White/Brown, Brown
Core diameter including insulation	0.92 ± 0.05 mm
Conductor resistance	< 148 Ω/km
Standards / Regulations	IEC 61076-2-101
	IEC 60512
	IEC 60529
UL AWM style	UL 2238
Flammability test	V0

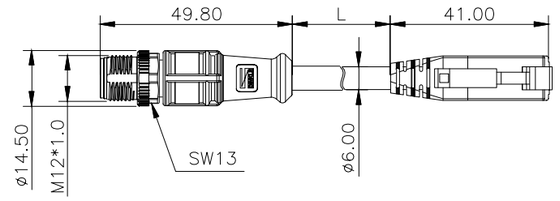
M12 A-Code Device Connector Mate RJ45 Connector (Shield) - Networks

Coding and contacts	**Code**	**A**	
	Contact	**8**	
Rated voltage / current		30V / 2A	
Contact arrangement		Male 	Female 
Cable		PUR	
Protocols		Ethernet CAT5e (1Gbps)	
Rear mounting mate RJ45 with 2m cable			
Connector style	**Mount thread**	**Part number**	
Male 	M16 x 1.5	0206-700-0302	
	Pg9	0206-702-0302	
Female 	M16 x 1.5	0206-710-0302	
	Pg9	0206-712-0302	

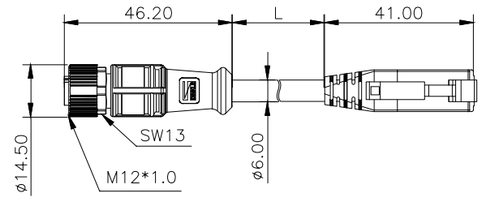
The wire length can be customized. For more details, please contact Dinkle

M12 D-Code Molded Circular Connector Mate RJ45 Connector

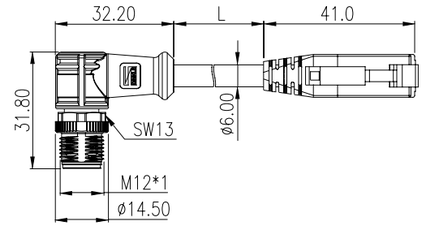
Straight male mate RJ45 (Shielded)



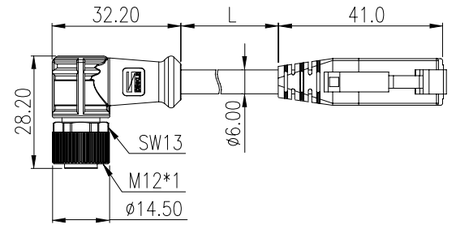
Straight fmale mate RJ45 (Shielded)



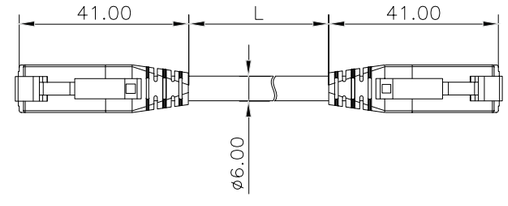
Angled male mate RJ45 (Shielded)



Angled female mate RJ45 (shielded)

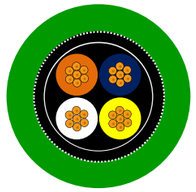


RJ45+RJ45



Unit：mm

M12 D-Code Molded Connector Mate RJ45 Connector

	Profinet	Ethernet
Protocols		 Ethernet
Cross-section		
Communication	Profinet (100 Mbps)	Ethernet CAT5 (100 Mbps)
Coding	D	D
Number of cores	4	4
Outer sheath, material	PVC	PUR
Outer sheath, color	Green (RAL 6008)	Blue (RAL 5021)
Outer sheath, diameter	6.5 ± 0.2 mm	6.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-Foil, tin-plated copper braided shield	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper	Stranded bare copper
AWG signal line	22AWG	26AWG
Wire colors	White, Yellow, Blue, Orange	White/Orange, Orange, White/Green, Green
Core diameter including insulation	1.5 ± 0.1 mm	0.9 ± 0.05 mm
Conductor resistance	59.4 Ω/km(@20 °C)	< 148 Ω/km
Standards / Regulations	IEC 61156-6	ISO/IEC 11801
	ISO/IEC 11801	UL 1581
	UL 758	UL 758
UL AWM style	21694	20963
Flammability test	IEC 60332-1, FT2	IEC 60332-1, FT2

M12 D-Code Molded Connector Mate RJ45 Connector (Shield) - Networks

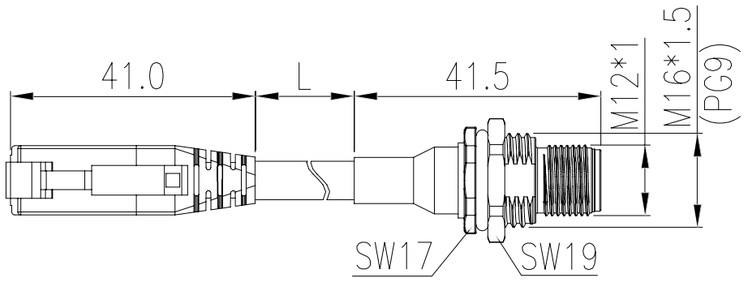
Coding and contacts	Code	D	D
	Contact	4	4
Rated voltage / current		250V / 4A	30V / 2A
Contact arrangement		Male / Female 	Male / Female 
Cable		PVC	PUR
Protocols		Profinet (100Mbps)	Ethernet CAT5 (100Mbps)

Connector style	Length(m)	Part number	
Straight male mate RJ45 	0.6	299-D4PML60	299-D4EML60
	1.5	299-D4PM015	299-D4EM015
	3	299-D4PM030	299-D4EM030
Straight female mate RJ45 	0.6	299-D4PFL60	299-D4EFL60
	1.5	299-D4PF015	299-D4EF015
	3	299-D4PF030	299-D4EF030
Angled male mate RJ45 	0.6	298-D4PML60	298-D4EML60
	1.5	298-D4PM015	298-D4EM015
	3	298-D4PM030	298-D4EM030
Angled female mate RJ45 	0.6	298-D4PFL60	298-D4EFL60
	1.5	298-D4PF015	298-D4EF015
	3	298-D4PF030	298-D4EF030
RJ45 + RJ45 	1	0206-0101	0206-0201
	3	0206-0103	0206-0203
	5	0206-0105	0206-0205

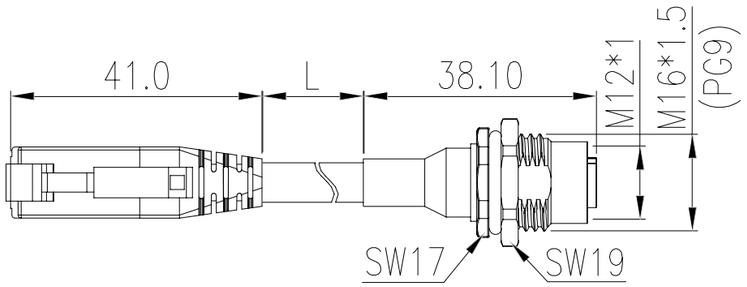
The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

M12 D-Code Device Circular Connector Mate RJ45 Connector

Rear mounting male mate RJ45 (Shielded)

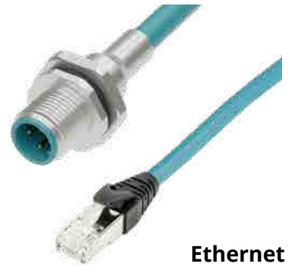
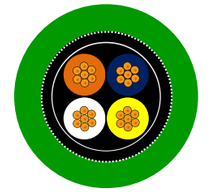


Rear mounting female mate RJ45 (Shielded)



Unit：mm

M12 D-Code Device Connector Mate RJ45 Connector

	Profinet	Ethernet
Protocols		
Cross-section		
Communication	Profinet (100 Mbps)	Ethernet CAT5 (100 Mbps)
Coding	D	D
Number of cores	4	4
Outer sheath, material	PVC	PUR
Outer sheath, color	Green (RAL 6008)	Blue (RAL 5021)
Outer sheath, diameter	6.5 ± 0.2 mm	6.0 ± 0.3 mm
Ambient temperature (operation)	-40 °C ~ +80 °C	-40 °C ~ +80 °C
Shielding	AL-Foil, tin-plated copper braided shield	AL-mylar, tinned copper braided shield
Conductor material	Stranded tinned copper	Stranded bare copper
AWG signal line	22AWG	26AWG
Wire colors	White, Yellow, Blue, Orange	White/Orange, Orange, White/Green, Green
Core diameter including insulation	1.5 ± 0.1 mm	0.9 ± 0.05 mm
Conductor resistance	59.4 Ω/km(@20 °C)	< 148 Ω/km
Standards / Regulations	IEC 61156-6	ISO/IEC 11801
	UL AWM style	UL 1581
	Flammability test	UL 758
UL AWM style	21694	20963
Flammability test	IEC 60332-1, FT2	IEC 60332-1, FT2

M12 D-Code Device Connector Mate RJ45 Connector (Shield) - Networks

Coding and contacts	Code	D		D	
	Contact	4		4	
Rated voltage / current		250V / 4A		30V / 4A	
Contact arrangement		Male 	Female 	Male 	Female 
Cable		PVC		PUR	
Protocols		PROFINET CAT5 (100Mbps)		Ethernet CAT5 (100Mbps)	

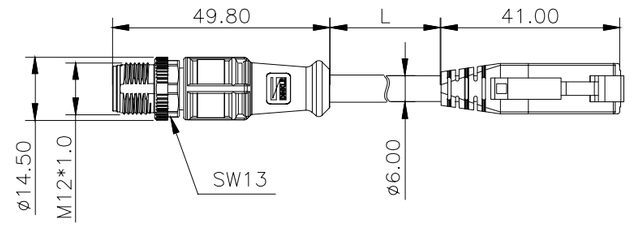
Rear mounting mate RJ45 with 2m cable

Connector style	Mount thread	Part number	
Male 	M16 x 1.5	0206-700-0102	0206-700-0202
	Pg9	0206-702-0102	0206-702-0202
Female 	M16 x 1.5	0206-710-0102	0206-710-0202
	Pg9	0206-712-0102	0206-712-0202

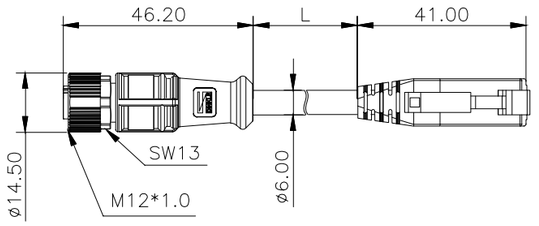
The wire length can be customized. For more details, please contact Dinkle

M12 X-Code Molded Circular Connector Mate RJ45 Connector

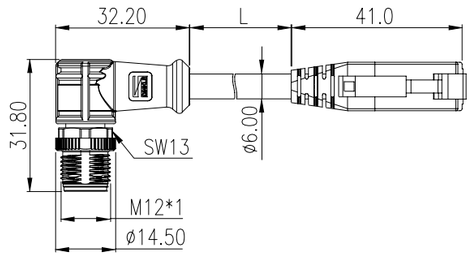
Straight male mate RJ45 (Shielded)



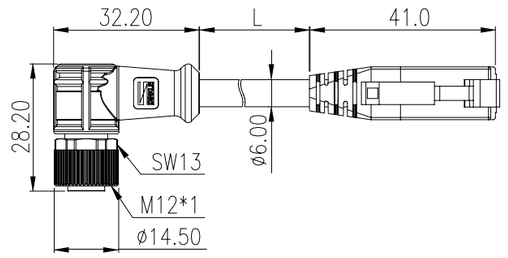
Straight female mate RJ45 (Shielded)



Angled male mate RJ45 (Shielded)



Angled female maate RJ45 (Shielded)



Unit：mm

M12 X-Code Molded Connector Mate RJ45 Connector

Protocols	Ethernet
	 **Ethernet**
Cross-section	
Communication	Ethernet CAT6A (10 Gbps)
Coding	X
Number of cores	8
Outer sheath, material	PUR
Outer sheath, color	Blue (RAL 5021)
Outer sheath, diameter	6.45 ± 0.2 mm
Ambient temperature (operation)	-40 °C ~ +80 °C
Shielding	AL-mylar, tinned copper braided shield
Conductor material	Stranded bare copper
AWG signal line	26AWG
Wire colors	White/Orange, Orange, White/Green, Green, White/Brown, Brown, White/Blue, Blue
Core diameter including insulation	1.08 ± 0.2 mm
Conductor resistance	148 Ω/km
Standards / Regulations	ISO/IEC 11801
	UL AWM style
	Flammability test
UL AWM style	20549
Flammability test	IEC 60332-1, FT2

M12 X-Code Molded Connector Mate RJ45 Connector (Shield) - Networks

Coding and contacts	**Code**	**X**
	Contact	**8**
Rated voltage / current		50V / 0.5A
Contact arrangement		Male 
Cable		PUR
Protocols		Ethernet CAT6A (10Gbps)

Connector style	Length(m)	Part number
Straight male mate RJ45 	0.6	299-X8AML60
	1.5	299-X8AM015
	3	299-X8AM030

The configuration of connectors and the cable length can be customized. For more details, please contact Dinkle

Accessories

For sensor/actuator cables, receptacles, and connectors not yet used by field I/O devices, DINKLE offers M8 and M12 plastic sealing caps to increase the IP rating of unmated connectors. Especially for panel and PCB applications, you can also choose a waterproof cover with a rubber strap to avoid the risk of losing the cover during use.

Product	Size	M8		M12	
	Suitable mounting thread	For male	For female	For male	For female
		Part number			
Plastic sealing cap 	-	-	-	-	200-A002
	-	-	-	200-A001	-
	-	300-A003	-	-	-
	-	-	300-A005	-	-
Plastic sealing cap with 	M16 x 1.5, Pg9	-	-	200-A003	-
	retaining chain	-	-	-	200-A004
	M12	-	300-A001	-	-
	M8	300-A004	300-A002	-	-

For unused connection endpoints of sensor/actuator cables, sockets, and field I/O devices, Dinkle has introduced the M8 and M12 series plastic sealing caps to enhance the IP rating of unpaired connectors. Specifically, for panel and PCB connectors on the device side, you can also choose waterproof caps with rubber chains to prevent the risk of loss due to dropping during use.