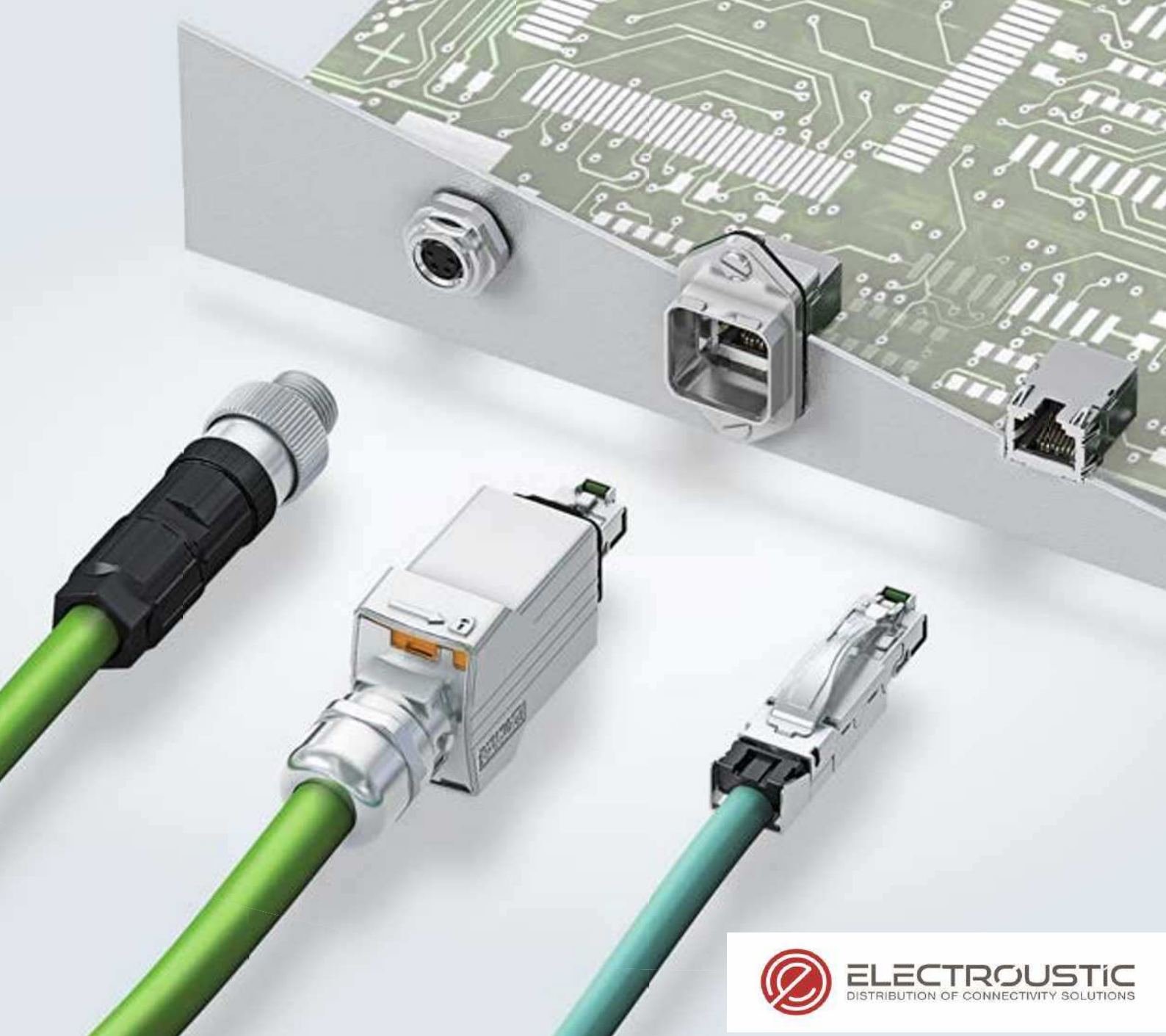




ELECTROUSTIC
DISTRIBUTION OF CONNECTIVITY SOLUTIONS

Data connectors

Product overview 2016/2017



Data connectors for copper and fiber-optic cabling

PLUSCON data is the connector range from Phoenix Contact for secure and reliable data transmission. Benefit from innovative connection technologies and a design that's perfectly suited for industrial applications. The product range includes assembled cables, device connectors, and connectors for field assembly, as well as special, tool-free connector systems for copper-based and fiber-optic-based cabling.

Find out more with the web code

You can find web codes in this brochure: a pound sign followed by a four-digit number combination.



Web code: #1234 (example)

This allows you to access information on our website quickly.

It couldn't be simpler:

1. Go to the Phoenix Contact website
2. Enter # and the number combination in the search field
3. Get more information and product versions

Or use the direct link:

phoenixcontact.net/webcode/#1234

Solutions for copper cabling

- Transmission rates up to 10 Gbps
- Protection class IP20 to IP69K
- Spring, pierce, and IDC displacement connection
- 360° shielding concept
- For all common networks and fieldbuses

Solutions for fiber-optic cabling

- Transmission rates up to 40 Gbps
- Protection class IP20, IP65/67 and IP68
- For POF, PCF, and GOF
- For all common fiber-optic interfaces



Web code:
#0296



Cu



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Order overview

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Unique variety for copper and fiber-optic cabling

Create consistent solutions for reliable data transmission up to 40 Gbps with our range of designs, coding, and pin assignments.

Always the right connection



For compact device connection



For flexible on-site connection



For easy cabling

ST



FSMA



SC DUPLEX



LC DUPLEX



SC-RJ



SC-RJ
version 6



SC-RJ
version 14

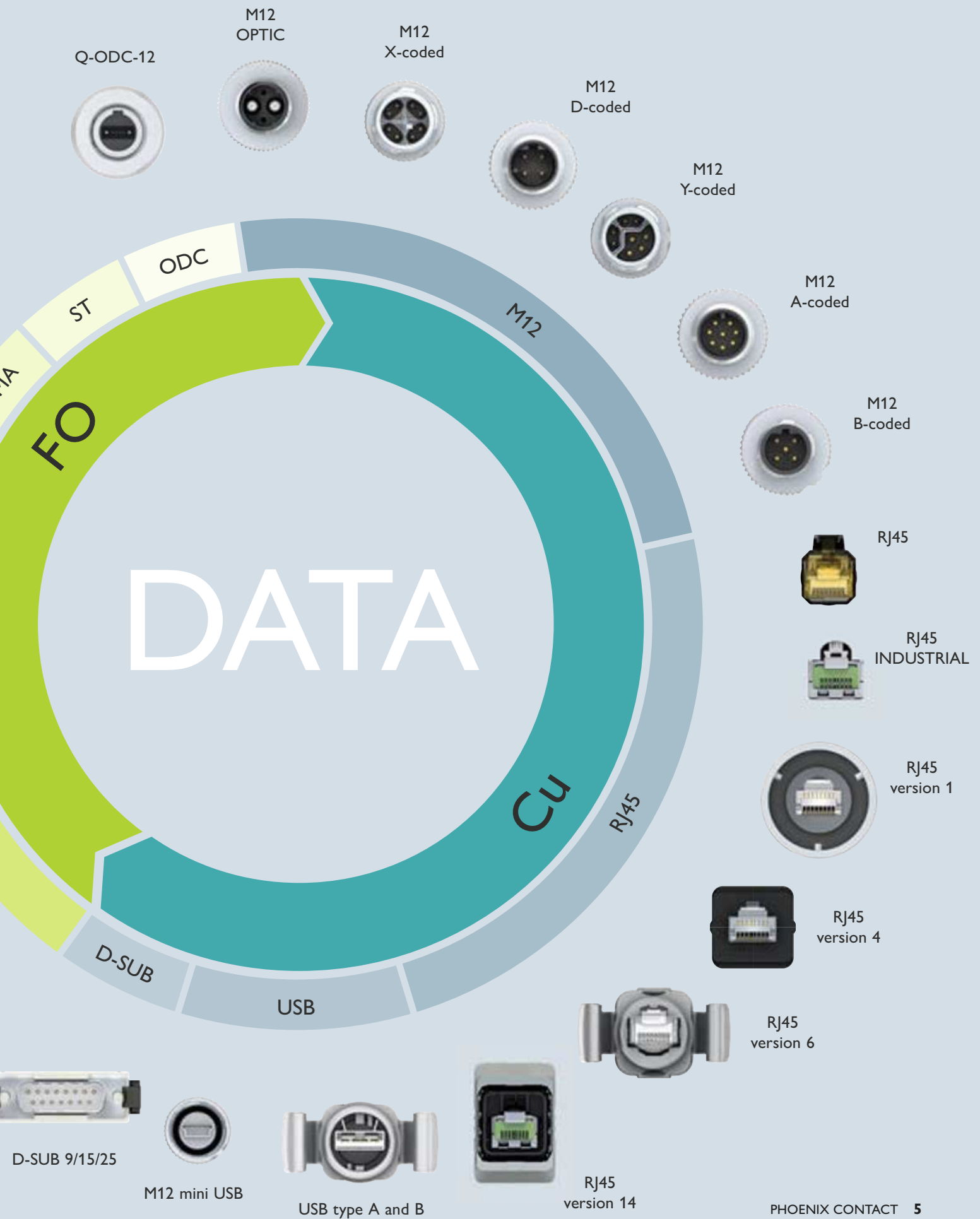


FSMA

SC

LC

SC-RJ



Copper-based data cabling for networks and fieldbuses

Complex automation processes call for high volumes of data at ever-increasing transmission speeds. Benefit now from high-performance connectors and cables for on-site assembly.

Whether it's future-proof high-speed cabling up to 10 Gbps or innovative, efficient hybrid cabling – we will find the perfect solution for your automation network.



Web code:
#0297

Main features

- Transmission rates up to 10 Gbps
- Solutions from IP20 to IP69K
- Spring, pierce, and IDC connection
- 360° shielding concepts

EtherNet/IP™

Ethernet



EtherCAT®

PROFI®
NET

sercos
the automation bus



PROFI®
BUS

CANopen®

DeviceNet™

CC-Link

Choose a flexible cabling type

Whether for machine building and systems manufacturing, building automation or process automation – with copper-based data connectors from Phoenix Contact, you are opting for a flexible type of cabling that supports a wide range of bus systems:

- Ethernet/IP, Ethernet, VARAN
- EtherCAT®, PROFINET, Sercos®
- INTERBUS, PROFIBUS, CANopen®
- DeviceNet™, CC-Link

Advantages at a glance



Fast assembly without special tools – with IDC and pierce fast connection



Wide range of connectors from RJ45 to USB and D-SUB to M12



Flexible device connection thanks to versatile housing feed-throughs for devices and control cabinets



Reliable protection against extreme temperatures, liquids, vibrations, and UV light



Fast data transmission thanks to data rates up to 10 Gbps and components that meet the CAT6A standard



Special shielding concepts with 360° EMC shielding guarantee a high level of resistance to EMC and ESD

Fiber-optic-based data cabling for networks and fieldbuses

High transmission speed, low attenuation, resistance to electromagnetic interference: fiber-optic cables are among the modern transmission media for industrial systems and infrastructure applications. Whatever the fiber type or interface – you can choose the right connection technology from our extensive portfolio.

Main features

- Transmission rates up to 40 Gbps
- Solutions from IP20 to IP65/IP67 and IP68
- For all common fiber types
- Maximum protection against the effects of EMC and ESD



Web code:
#0298

EtherNet/IP™

Ethernet

EtherCAT®

PROFI®
NET

sercos
the automation bus



PROFI®
BUS

CANopen®

DeviceNet™

Modbus

Choose the right fiber type for your application

- POF (polymer optical fiber) for short transmission paths up to 100 m and maximum data rates of up to 100 Mbps
- PCF (polymer-clad fiber) for medium-length transmission paths up to 500 m and maximum data rates of up to 1 Gbps
- GOF (glass optical fiber) multi mode for long transmission paths up to 550 m at 10 Gbps
- GOF single mode for up to 50 km and data rates of up to 40 Gbps

Advantages at a glance



Wide choice of versions from SC-RJ, LC, SC, FSMA to ST, plus POF, PCF, and GOF fiber types



Extensive range of cables for all applications, networks, and standard interfaces



Fast assembly in the field using professional tools



Reliable protection against extreme temperatures, liquids, and UV light



High data rates up to 40 Gbps



Integrated locking prevents accidental disconnection

Data connectors for outdoor applications

High requirements are placed on components used for outdoor data transmission, in fields such as telecommunications and renewable energies. Phoenix Contact offers special connectors for outdoor applications. These can withstand aggressive environmental conditions such as large differences in temperature, humidity, UV rays, and vibrations.

Main features

- Connectors for outdoor applications with IP65/67/69K degree of protection
- Fiber-optic connectors with a robust design
- High-quality and UV-resistant connectors and cables
- Robust connectors made of 1.4404 stainless steel
- Data rates up to 40 Gbps
- GL-approval for offshore applications





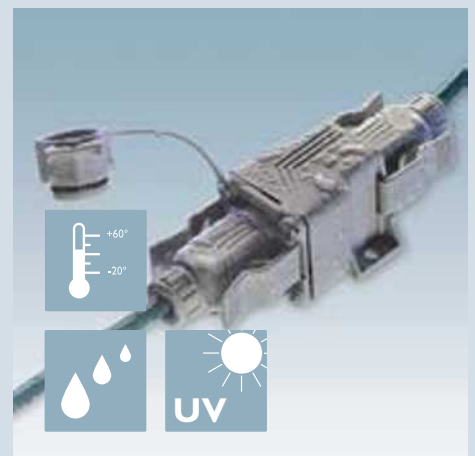
Advantages at a glance



Corrosion-resistant materials such as 1.4404 stainless steel guarantee reliable operation in extreme environmental conditions



High IP protection classes up to IP69K guarantee reliable protection against external weather conditions



Guaranteed durability through the use of high-quality materials and intensive testing processes

Data connectors for data centers and building technology

Phoenix Contact offers an extensive and forward-looking product range for modern building cabling.

Our patch cables and patch fields allow you to install flexible and fault-tolerant cabling.

Main features

- Consistent cabling systems for 19" technology
- Connection technology for either copper or fiber-optic cabling
- Connection solutions for indoor and outdoor applications
- Consistent range of data connectors, right up to active components for building cabling
- GHMT-certified products



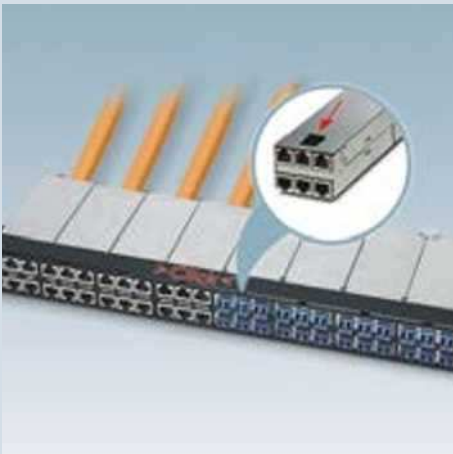
Web code:
#0322





Comfort, flexibility, and versatility are the requirements for modern building cabling. Completely pre-assembled splice boxes with removable front drawer, high-quality individual parts and individual measurement logs save time during installations.

Advantages at a glance



Fast installation of 19" components thanks to the Plug and Play principle and pre-assembled modules



Individual cabling solutions for any area of application



Shielded CAT6_A cable connectors for structured building cabling for easy assembly

Data connectors for industrial automation

Special shielding concepts and torsion-resistant components are essential for the reliable operation of robots and conveying systems.

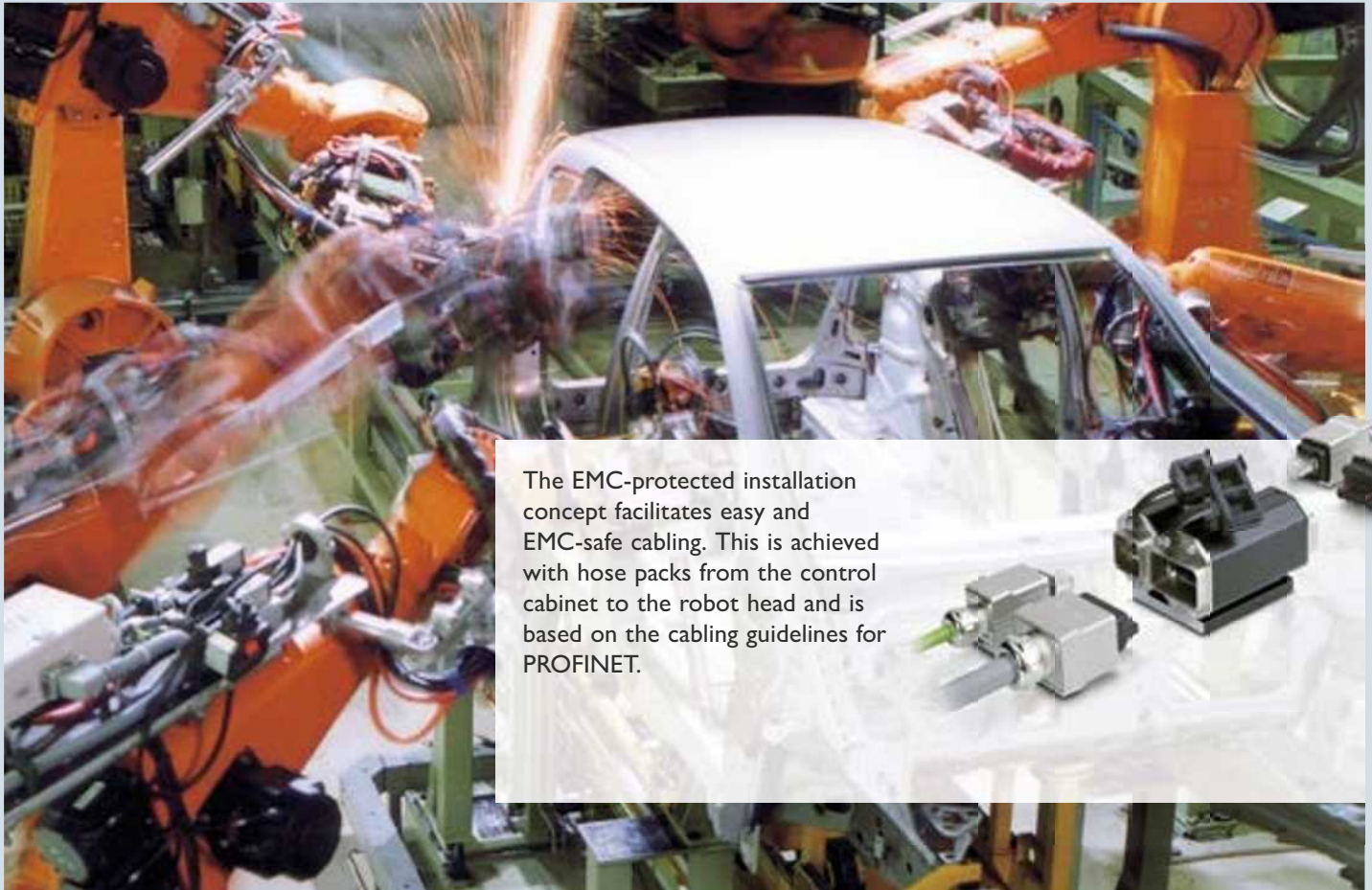
Put your trust in the reliable and consistent product range from Phoenix Contact for fault-free data transmission.

Main features

- Tested connection technology according to the PROFINET standard
- Maximum immunity to EMC and ESD interference thanks to consistent shielding
- Convenient push-pull connection system for data and power up to 400 volts
- Individual solutions for copper and fiber-optic cabling
- Connectors for assembly and pre-assembled cables available



Web code:
#0323



The EMC-protected installation concept facilitates easy and EMC-safe cabling. This is achieved with hose packs from the control cabinet to the robot head and is based on the cabling guidelines for PROFINET.

Advantages at a glance



Components that are resistant to welding beads for use with robots



Consistent shielding concept for protection against EMC and ESD interference



Guaranteed torsion resistance thanks to the special cable design

Data connectors for the railway industry

Phoenix Contact offers reliable connection solutions to meet specific requirements in the railway industry.

Choose the right M12 or RJ45 components and cable solutions for Ethernet applications for your data transmission system.

Main features

- Consistent product range for data transmission up to 10 Gbps (CAT6A)
- Connectors for assembly without special tools
- Individual solutions can be implemented for copper-based data cabling
- SPEEDCON fast locking technology for easy insertion and removal in the field
- Phoenix Contact is IRIS-certified (as of 2015)
- Secure locking thanks to a special vibration brake tested in accordance with EN 50155



 Web code:
#0324



Whether in the railway industry, for controller tasks or inside rail vehicles – connectors and cables from Phoenix Contact can be installed flexibly.

Advantages at a glance



Fast assembly without additional tools, thanks to a QUICKON IDC fast connection



Special material selection for the most stringent fire emergency requirements



Shock and vibration-resistant connectors ensure permanently secure connections

RJ45 connectors

i Web code: #0325

IP20 connectors							
RJ45							
 ETHERNET		 ETHERNET PROFINET			 ETHERNET PROFINET ETHERNET		
IDC fast connection	Insert + sleeve housing, gray	Insert + sleeve housing, green	Sleeve housing, black	Sleeve housing, gray	Sleeve housing, gray	Metal, AWG 23 to 22	Metal, AWG 26 to 24
Up to 1 Gbps CAT5			1658008	1656725	1658435	1421126	1421607
Up to 10 Gbps CAT6 _A			1419001				
Crimp connection (1653265 tool required)							
Up to 1 Gbps CAT5	1652716 + 1654743	1652716 + 1654756					
Up to 1 Gbps CAT6	1652729 + 1654743	1652729 + 1654756					
Up to 10 Gbps CAT6 _A	1418853 + 1654743	1418853 + 1654756					

				IP65/67 connectors					
RJ45 INDUSTRIAL				Version 6		Version 14			
 ETHERNET PROFINET		 ETHERNET		 ETHERNET		 ETHERNET PROFINET		 ETHERNET PROFINET	
Metal TOP, AWG 23 to 22	Metal TOP, AWG 26 to 24	Metal BOTTOM, AWG 23 to 22	Metal BOTTOM, AWG 26 to 24	Insert + sleeve housing, gray	Insert + sleeve housing, black	Plastic sleeve housing, black, AWG 23 to 22	Plastic sleeve housing, black, AWG 26 to 24	Metal, AWG 23 to 22	Metal, AWG 26 to 24
1421128	1421877	1421127	1421876	1656990	1658493	1608126	1657834	1403366	1403367
							1422205		1422108
				1652716 + 1652732	1652716 + 1658671				
				1652729 + 1652732	1652729 + 1658671				
				1418853 + 1652732	1418853 + 1658671				

Assembled cables for PROFINET, 4-pos., shielded

i Web code: #0326

		IP20 cables		
		RJ45 connector, straight	RJ45 connector, angled	RJ45 connector, version 14, metal
				
IP20 cables	Open cable end			
				
	Cable length			
	1 m			
	2 m			
	5 m			
	10 m			
	Variable	1411857	1411858	1411859
	RJ45 connector, straight			
				
IP65/67 cables	Cable length			
	1 m	1408968	1418248	
	2 m	1408969	1418277	
	5 m	1408970		1416138
	10 m	1408971		
	Variable	1411861	1411862	1411863
	RJ45 connector, angled			
				
	Cable length			
	1 m		1409002	
	2 m		1409003	
	5 m		1409004	
	10 m		1409005	
	Variable		1411865	
	RJ45 connector, version 14, metal			
				
	Cable length			
	1 m			1408974
	2 m			1408975
	5 m			1408972
	10 m			1408976
	Variable			1411866
	RJ45 connector, version 14, plastic			
				
	Cable length			
	1 m			
	2 m			
	5 m			
	10 m			
	Variable			
	M12 connector, SPEEDCON, straight			
				
	Cable length			
	1 m			
	2 m			
	5 m			
	10 m			
	Variable			
	M12 connector, SPEEDCON, angled			
				
	Cable length			
	1 m			
	2 m			
	5 m			
	10 m			
	Variable			

IP65/67 cables

RJ45 connector, version 14, plastic	M12 connector, SPEEDCON, straight	M12 connector, SPEEDCON, angled	M12 socket, SPEEDCON, straight	M12 socket, SPEEDCON, angled	M12 flush-type socket, rear mounting
					
	1407495		1407528		1437779
	1407496		1407529		1437782
1416168	1407497		1407530		1437795
	1407498		1407531		
1411860	1408640	1408633	1408623	1408615	
	1407499		1407532		
	1407500		1407533		
1416141	1407501		1407534		
	1407502		1407535		
1411864	1408639	1408632	1408622	1408613	
	1407508		1407536		
	1407509		1407537		
	1407510		1407538		
	1407511		1407539		
	1408638	1408631	1408621	1408612	
	1407516		1407544		
	1407517		1407545		
	1407518		1407546		
	1407519		1407547		
	1408636	1408628	1408619	1408610	
1408978	1407520		1407548		
1408979	1407521		1407549		
1408977	1407522		1407551		
1408980	1407523		1407552		
1411867	1408635	1408626	1408618	1408609	
	1407524		1407553		
	1407525		1407554		
	1407526		1407555		
	1407527		1407556		
	1408634	1408625	1408617	1408608	
		1408624	1408616	1408607	

Assembled cables for Ethernet, 8-pos., shielded, up to 1 Gbps

i Web code: #0327

			IP20 cables		
			RJ45 connector	RJ45 connector, version 6	RJ45 connector, version 14, metal
					
IP20 cables	Open cable end	Cable length			
		1 m			
		2 m			
		5 m	1407699		
		10 m			
		Variable	1411838	1411839	1411840
	RJ45 connector				
		1 m			
		2 m			
		5 m			1407990
		10 m			
		Variable	1411842	1411843	1411844
IP65/67 cables	RJ45 connector, version 6				
		1 m			
		2 m			
		5 m			
		10 m			
		Variable		1411846	
	RJ45 connector, version 14, metal				
		1 m			
		2 m			
		5 m			
		10 m			
		Variable			1411847
	RJ45 connector, version 14, plastic				
		1 m			
		2 m			
		5 m			
		10 m			
		Variable			
	M12 connector, SPEEDCON, straight				
		1 m			
		2 m			
		5 m			
		10 m			
		Variable			
	M12 connector, SPEEDCON, angled				
		1 m			
		2 m			
		5 m			
		10 m			
		Variable			

IP65/67 cables					
RJ45 connector, version 14, plastic	M12 connector, SPEEDCON, straight	M12 connector, SPEEDCON, angled	M12 socket, SPEEDCON, straight	M12 socket, SPEEDCON, angled	M12 flush-type socket, rear mounting
					
	1407404		1407439		
	1407405		1407440		
	1407406		1407441		1407877
	1407407		1407442		
1411841	1408682	1408675	1408665	1408657	
	1407414		1407443		
	1407415		1407444		
1412024	1407416		1407445		1412082
	1407417		1407446		
1411845	1408681	1408674	1408664	1408655	
	1407422		1407451		
	1407423		1407452		
	1407424		1407453		1412231
	1407425		1407454		
	1408679	1408671	1408662	1408653	
	1407426		1407455		
	1407427		1407456		
	1407428		1407457		1412503
	1407429		1407458		
	1408678	1408670	1408661	1408652	
	1407430		1407459		
	1407431		1407460		
	1407432		1407461		1412590
	1407433		1407462		
1411848	1408677	1408668	1408660	1408651	
	1407434		1407463		
	1407435		1407464		
	1407436		1407465		
	1407438		1407466		
	1408676	1408667	1408659	1408650	
		1408666	1408658	1408649	

Assembled cables for Ethernet, 8-pos., shielded, up to 10 Gbps

i Web code: #0328

		IP20 cables	
		RJ45 connector, plastic	RJ45 connector, version 6, plastic
			
IP20 cables	Open cable end		
			
	Cable length		
	1 m		
	2 m		
	5 m		
	10 m		
	Variable	1411853	1415639
IP20 cables	RJ45 connector		
			
	1 m	1418866	
	2 m	1408360	
	5 m	1418879	
	10 m	1408367	
IP65/67 cables	Variable	1411854	1414321
	RJ45 connector, version 6, plastic		
			
	1 m		
	2 m		
	5 m		
	10 m		
	Variable		1414322
IP65/67 cables	RJ45 connector, version 14, metal		
			
	1 m		
	2 m		
	5 m		
	10 m		
IP65/67 cables	Variable		
	RJ45 connector, version 14, plastic		
			
	1 m		
	2 m		
	5 m		
IP65/67 cables	10 m		
	Variable		
	M12 connector, SPEEDCON		
			
	CAT6 _A		
	CAT5		
	1 m		
	2 m		
	5 m		
	10 m		
	Variable		

IP65/67 cables

RJ45 connector, version 14, metal	RJ45 connector, version 14, plastic	M12 connector, SPEEDCON	
			
		CAT6 _A	CAT5
		1407467	1407487
		1407468	1407488
		1407469	1407489
		1407470	1407490
1415637	1415638	1408648	1408642
		1407471	
		1407472	
		1407473	
		1407474	
1411855	1411856	1408647	
		1407475	
		1407476	
		1407477	
		1407478	
1414323		1408646	
		1407479	
		1407480	
		1407481	
		1407482	
	1414324	1408645	
		1407483	1407491
		1407484	1407492
		1407485	1407493
		1407486	1407494
		1408644	1408641

RJ45 panel mounting frames and socket inserts

i Web code: #0329

		IP20 panel mounting frame	
			
		1-way, for modular socket inserts	For a round mounting cutout Push-pull interlocking
Socket inserts	Module inserts		
Cable connection		Plastic, gray	Plastic, gray
	Keystone, CAT6 _A	1419021	1689433
	Freenet, CAT5	1652936	1689844
	Freenet, CAT6 _A	1418984	1653744
Printed-circuit board solder connection			
	Straight, CAT6	1653090	
	Angled, CAT5	1688586	
	Angled, CAT6	1653087	
	Angled, CAT6 _A	1420401	
	Straight, CAT5	1407409	
	Angled, CAT5	1407408	
Socket to socket			
	Keystone, CAT5	1689064	1689433
	Keystone, CAT6	1653155	1689844
	Freenet, CAT6	1419022	1653744

IP65/67 panel mounting frames

Version 6			Version 14		
 For a round mounting cutout Push-pull interlocking			 For a square mounting cutout Push-pull interlocking		
Plastic, black	Plastic, gray	Plastic, black	Metal, round panel cutout	Metal, square panel cutout	Plastic, square panel cutout
1658053	1689080	1658642			
1658668			1405222	1405358	1608197
1658668			1405222	1405358	1608197
	1689446	1658655			
	1689446	1658655			
	1689446	1658655			
				1608029	1657847
1658053	1689080	1658642			
1658053	1689080	1658642			
1658668			1405222	1405358	1608197

RJ45 patch panels, bulkheads and terminal outlets

i Web code: #0330

IP20 RJ45 patch panels			
Components for 19" technology	Modular distribution panel, 19" mounting	Patch panel, 19" mounting, with 16 slots	RJ45 patch panel, for DIN rail mounting
19" frame, empty (gray, black)	1407986 / 1409140		
Jumpering panel, 19"	1407994 / 1409283 / 1409284		
Dummy frame, size of one module, for use in the frame	1407988		
RJ45 module, 6 x RJ45 to 6 x RJ45, 10 Gbps, can be unlocked from the front, variable length	1407995		
19" frame, for 16 Freenet modules		1652994	
Patch fields			
IDC CAT6 _A patch panel			1419024
CAT6 patch panel coupler			1418094
Distributor boxes			
Surface-mounted without module			
Flush-mounted without module			
Module inserts			
Socket to cable, CAT6 _A			
Socket to cable, CAT5			
Socket to socket, CAT6			

i Web code: #0331

Version 6		
Connections	RJ45 coupling, gray	RJ45 coupling, black
1 x RJ45, cable diameter 5 mm – 8 mm		
1 x RJ45, cable diameter 7 mm – 10.5 mm		
1 x RJ45/1 x power, cable diameter 5 mm – 8 mm		
1 x RJ45/1 x power, cable diameter 7 mm – 10.5 mm		
1 x RJ45/RJ45	1689268	1658684
1 x power/power		
2 x RJ45		
1 x RJ45/1 x power		

Zipcord glass fiber cables for assembly

i Web code: #0333

IP20 Zipcord glass fiber cables for assembly, multi mode

		FSMA	SC-RJ connector	SC duplex connector	B-FOC(ST) connector	LC duplex connector
						
FSMA connector, IP20	Cable length	OM1/OM2/ OM3/OM4	OM1/OM2/ OM3/OM4	OM1/OM2/ OM3/OM4	OM1/OM2/ OM3/OM4	OM1/OM2/ OM3/OM4
	1 m	1409855/-/ -/-				
	Variable	1406532/-/ -/-				
SC-RJ connector IP20						
	1 m		-/1409813/ 1409814/1409815	-/1409810/ 1409811/1409812	-/1409822/ 1409823/-	-/1409793/ 1409796/1409797
	2 m		-/1400697/ 1400699/1400700	-/1400690/ 1400691/1400695	-/1400706/ 1400711/-	-/1400682/ 1400683/1400684
	Variable		-/1405703/ 1405704/1405705	-/1405700/ 1405701/1405702	-/1405710/ 1405711/-	-/1405694/ 1405695/1405696
SC duplex connector, IP20						
	1 m	1409857/-/ -/-		1413828/1409798/ 1409799/1409801	1413830/1409819/ 1409821/-	
	2 m			-/1400685/ 1400688/1400689	-/1400703/ 1400705/-	
	Variable	1406536/-/ -/-		1413790/1405697/ 1405698/1405699	1413791/1405708/ 1405709/-	
B-FOC(ST) connector, IP20						
	1 m	1409856/-/ -/-			1413832/1409824/ -/-	
	2 m				-/1404768/ -/-	
	Variable	1406535/-/ -/-			1413821/1405712/ -/-	
LC duplex connector, IP20						
	1 m	1413825/-/ -/-		1413827/1409790/ 1409791/1409792	1413831/1409816/ 1409818/-	1413826/1409787/ 1409788/1409789
	2 m			-/1400639/ 1400673/1400681	-/1400701/ 1400702/-	-/1400604/ 1400621/1400622
	Variable	1413787/-/ -/-		1413789/1405691/ 1405692/1405693	1413792/1405706/ 1405707/-	1413788/1405688/ 1405689/1405690

i Web code: #0333

IP20 Zipcord glass fiber cables for assembly, single mode

		LC duplex connector	SC duplex connector	B-FOC(ST) connector
				
LC duplex connector, IP20	Cable length	OS2	OS2	OS2
	1 m	2989187		
	2 m	2989284		
	3 m	2901826		
SC duplex connector, IP20				
	1 m	2989190	2901829	
	2 m	2989297	2901830	
	3 m	2901827	2901831	
B-FOC(ST) connector, IP20				
	1 m	2989242	2901832	2901836
	2 m	2989349	2901833	2901837
	3 m	2901828	2901834	2901838

D-SUB connector

i Web code: #0340

Contact inserts						
		Connection technology	Contact arrangement	Shell size	Pin	Socket
Signal		Screw connection	9 x signal	1	1688379	1688395
			15 x signal	2	1688078	1688094
			25 x signal	3	1689789	1689776
		Solder cup	9 x signal	1	1688793	1688803
			15 x signal	2	1688874	1688887
			25 x signal	3	1689899	1689909
		Straight solder pin	9 x signal	1	1418717	1418726
			15 x signal	2	1418718	1418728
			25 x signal	3	1418725	1418729
		Angled solder pin	9 x signal	1	1688382	1688405
			15 x signal	2	1688081	1688120
			25 x signal	3	1689873	1689886
		Contact carrier, without contacts	9 x signal	1	1688858	1688861
			15 x signal	2	1688939	1688942
			25 x signal	3	1689954	1689967
		Flat-ribbon cable	9 x signal	1	1688816	1688829
			15 x signal	2	1688890	1688900
			25 x signal	3	1689912	1689925
		Flat-ribbon cable 4-40 UNC thread	9 x signal	1	1418739	1418742
			15 x signal	2	1418740	1418744
			25 x signal	3	1418741	1418745
		Gender changer	9 x signal	1	1652651	1688722
			15 x signal	2	1652677	1652664
			25 x signal	3	1652693	1652680
Hybrid		Solder cup	1 x power / 4 x signal	1	1689006	1689019
			2 x power / 5 x signal	2	1688227	1688230
			3 x power / 10 x signal	3	1689996	1690008
			4 x power / 5 x signal	3	1655386	1655373
			1 x power / 10 x signal	2	1418755	1418759
			2 x power / 15 x signal	3	1418757	1418760
			1 x power / 20 x signal	3	1418758	1418761
			1 x power / 4 x signal	1	1418762	1418766
		Straight solder pin	2 x power / 5 x signal	2	1418763	1418767
			1 x power / 10 x signal	2	1418771	1418775
			2 x power / 15 x signal	3	1418773	1418776
			1 x power / 20 x signal	3	1418774	1418777
			3 x power / 10 x signal	3	1418764	1418768
			4 x power / 5 x signal	3	1418765	1418770
			1 x power / 10 x signal	2	1418778	1418781
			2 x power / 15 x signal	3	1418779	1418782
		Angled solder pin	1 x power / 20 x signal	3	1418780	1418783
			2 x power	1	1655292	1655289
Power		Angled contact carrier, without contacts	3 x power	2	1655331	1655328
			5 x power	3	1655441	1655438
			2 x power	1	1688418	1688421
		Straight contact carrier, without contacts	3 x power	2	1688201	1688214
			5 x power	3	1689970	1689983

Panel mounting frame/sleeve housing

IP20 solid metal				IP20 metal-plated				IP67 plastic	
									
Straight		Angled		Straight		Angled		Panel mounting frame	Sleeve housing
Screw locking	Snap-in locking	Screw locking	Snap-in locking	Screw locking	Snap-in locking	Screw locking	Snap-in locking		
								1688366	1688353
								1688036	1688052
								1689750	1689792
1419722	1419746	1419723	1419754	1419705	1419729	1419706	-	1688366	1688353
1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419757	1688036	1688052
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
								1688366	
								1688036	
								1689750	
								1688366	
								1688036	
								1689750	
1419722	1419746	1419723	1419754	1419705	1419729	1419706	-	1688366	1688353
1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419757	1688036	1688052
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
								1688366	
								1688036	
								1689750	
								1688366	
								1688036	
								1689750	
								1688366	
								1688036	
								1689750	
1419722	1419746	1419723	1419754	1419705	1419729	1419706	-	1688366	1688353
1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419757	1688036	1688052
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419757	1688036	1688052
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792
								1688366	
								1688036	
								1688036	
								1689750	
								1689750	
								1689750	
								1689750	
								1689750	
								1688036	
								1689750	
								1689750	
								1688366	
								1688036	
								1689750	
1419722	1419746	1419723	1419754	1419705	1419729	1419706	-	1688366	1688353
1419724	1419756	1419725	1419757	1419710	1419731	1419718	1419757	1688036	1688052
1419727	1419758	1419728	1419759	1419719	1419736	1419721	1419741	1689750	1689792

USB connectors, panel mounting frames and cables

i Web code: #0340

Contact inserts

		IP65/67 panel mounting frames	
		Version 6	M12 USB panel-mount connector
			
		For round panel cutout	M12 fastening thread, wave solder contacts, integrated shield contact
	Panel mounting frame with USB socket A/socket B	1411904	
	Panel mounting frame with USB socket B/socket A	1411905	
	Type A socket to post connector, Freetnet system	1653854	1653744
	Type B socket to post connector, Freetnet system	1653867	1653744
	M12 with USB mini B		1440711

i Web code: #0340

Assembled USB cables, type A

		Assembled USB cables, type A	
		IP20	IP67
		 	 
		Length	
IP20	 Open end	1 m	1655771
		2 m	1655784
		5 m	1655797
IP20	 USB connector type B	1 m	1654853
		2 m	1653935
		5 m	1653948
IP67	 USB connector type B	2 m	1653919
		5 m	1653922
	 M12 mini USB, SPEEDCON	1 m	1420168
		2 m	1420171
		4 m	1420184

Fiber-optic connectors for assembly

i Web code: #0332

Fiber-optic connectors for assembly for cleave technology

Tool sets		GOF	PCF
	Complete with cleave tools, for field assembly of multi mode und single mode connectors	1411049	
	Complete with cleave tools, for field assembly of PCF/(HCS) connectors		1411051
Ferrule cleaner, approx. 500 cleaning cycles			
	1.25 mm, for LC	1407032	
	2.5 mm, for ST, SC, FC	1407029	
LC duplex, for field assembly, reusable			
	Multi mode (50/125 µm)	1411052	
	Single mode PC (9/125 µm)	1411053	
	Single mode APC (9/125 µm)	1412472	
LC duplex, advantage pack (10 pc.), for field assembly, reusable			
	Multi mode (50/125 µm)	1411298	
	Single mode PC (9/125 µm)	1411299	
	Single mode APC (9/125 µm)	1412479	
LC pigtail, for field assembly, reusable			
	Multi mode (50/125 µm)	1411294	
	Single mode PC (9/125 µm)	1411295	
	Single mode APC (9/125 µm)	1412476	
SC duplex, for field assembly, reusable			
	Multi mode (50/125 µm)	1411292	
	Single mode PC (9/125 µm)	1411293	
	Single mode APC (9/125 µm)	1412474	
	PCF (200/230 µm)		1411305
SC duplex, advantage pack (10 pc.), for field assembly, reusable			
	Multi mode (50/125 µm)	1411302	
	Single mode PC (9/125 µm)	1411303	
	Single mode APC (9/125 µm)	1412481	
SC pigtail, for field assembly, reusable			
	Multi mode (50/125 µm)	1411296	
	Single mode PC (9/125 µm)	1411297	
	Single mode APC (9/125 µm)	1412478	
SC-RJ, for field assembly, reusable			
	Multi mode (50/125 µm)	1411290	
	Single mode PC (9/125 µm)	1411291	
	Single mode APC (9/125 µm)	1412473	
	PCF (200/230 µm)		1411304
SC-RJ, advantage pack (10 pc.), for field assembly, reusable			
	Multi mode (50/125 µm)	1411300	
	Single mode PC (9/125 µm)	1411301	
	Single mode APC (9/125 µm)	1412480	

Fiber-optic connectors, panel mounting frames and socket inserts

i Web code: #0334

Description	Connectors			
	IP20	IP65/67		
		M12 OPTIC	Version 6	Version 14
				
	SC-RJ, fast connection technology	M12, patch cable	SC-RJ, snap-in locking	SC-RJ, push-pull
Polymer fiber 980/1000 µm (POF)		Plastic	Plastic	Plastic
SC-RJ	1654879		1657009	1657850
Freenet system, SC-RJ to SC-RJ				
M12 to M12, pre-assembled cable, 1/2/5 m		1408871 / 1408870 / 1416680		
M12 to SC-RJ, pre-assembled cable, 1/2/5 m		1408865 / 1408864 / 1416648		
For use in the AVAGO transceiver (type: AFBR5978Z)				
Polymer-clad fiber 200/230 µm (PCF)				
SC-RJ				
SC-RJ single-wire diameter 2.9 mm	1654866			
SC-RJ single-wire diameter 2.2 mm	1404087		1657012	1608045 / 1657863
F-SMA set, 4 connectors, single-wire diameter 2.9 mm	2799487			
B-FOC(ST) set, 4 connectors, single-wire diameter 2.9 mm	2708481			
Freenet system, SC-RJ to SC-RJ				
M12 to M12, pre-assembled cable, 1/2/5 m		1408873 / 1408872 / 1416693		
M12 to SC-RJ, pre-assembled cable, 1/2/5 m		1408867 / 1408866 / 1416651		
For use in the AVAGO transceiver (type: AFBR5978Z)				
Glass optical fiber: MM 50/125 µm, SM 9/125 µm (GOF)				
SC-RJ, multi mode	1657070		1657083	
SC-RJ, single mode				
SC duplex, multi mode	1658529			
LC duplex, multi mode				
LC duplex, single mode				
Freenet system, SC-RJ to SC-RJ				
M12 to M12, pre-assembled cable, 1/2/5 m		1408875 / 1408874 / 1416703		
M12 to LC duplex, pre-assembled cable, 1/2/5 m		1408869 / 148868 / 1416664		
For use in the AVAGO transceiver (type: AFBR5978Z)				

	Panel mounting frame				Socket insert
	IP65/67				Freenet system
Version 14	Version 6		Version 14		
 SC-RJ, push-pull	 Snap-in locking, round panel cutout	 Snap-in locking, round panel cutout	 Push-pull, round panel cutout	 Push-pull, square panel cutout	 SC-RJ to SC-RJ
Metal	Plastic	Plastic	Metal	Metal/plastic	
1407896					
	1653744	1658668	1405235	1405374 / 1608210	1652978
		1658545		1608061 / 1657889	
1608045					
	1653744	1658668	1405235	1405374 / 1608210	1652978
		1658545		1608061 / 1657889	
1407898					
	1653744	1658668			1652978
		1658545			

Fiber-optic terminal outlets, splice boxes, and couplings



Web code: #0335

IP20 patch panels and couplings

Patch panel		
	SC-RJ, 1 slot, DIN rail mounting	1658121
	SC-RJ, 16 slots, 19" mounting, for Freenet contact inserts	1652994
Outlet box		
	Surface-mounted socket, two slots	1653003
	Surface-mounted socket, six slots	1653029
	Flush-type socket, two slots	1653016
Couplings		
	2 x F-SMA/F-SMA	2799416
	2 x B-FOC(ST®)/B-FOC(ST®)	2799429
	1 x SC-RJ/SC-RJ (duplex)	1652978
	1 x LC duplex/LC duplex (multi mode)	2700312
	1 x LC duplex/LC duplex (single mode)	2700313
	1 x SC duplex/SC duplex	2901788

IP20 splice boxes

Splice boxes		Empty	Completely assembled and splice-ready
	6 x LC duplex, DIN rail mounting, robust metal housing	1411901	1420318
	6 x SC duplex, DIN rail mounting, robust metal housing	1411902	
	12 x ST, DIN rail mounting, robust metal housing	1411903	
	12x LC duplex OM2, 19" mounting, removable from the front, light gray		1418815
	24x LC duplex OM2, 19" mounting, removable from the front, light gray		1418816
	12x LC duplex OM4, 19" mounting, removable from the front, jet black		1418817
	24x LC duplex OM4, 19" mounting, removable from the front, jet black		1418818

IP65/67 terminal outlets and couplings

Couplings		
	1 x M12 OPTIC coupling	1416677
	1 x SC-RJ/SC-RJ, version 6	1410050
	1 x SC-RJ/SC-RJ, version 14	1405206
Terminal outlets		
	2 x SC-RJ, version 14	1404320
	2 x SC-RJ, version 6	1404317
	1 x SC-RJ/1 x power	1404346
Robot interfaces		
	1 x SC-RJ, cable diameter 5 mm – 8 mm	1404319
	1 x SC-RJ, cable diameter 7 mm – 10.5 mm	1404324
	1 x SC-RJ/1 x power, cable diameter 5 mm – 8 mm	1404321
	1 x SC-RJ/1 x power, cable diameter 7 mm – 10.5 mm	1404325
M12 transceiver for POF		
	Transceiver with 650 nm	1416716
	Transceiver with 1300 nm	1416729

M12 connectors and device connectors for assembly

i Web code: #0338

IP65/67 M12 connectors



IDC connection



Spring connection



Piercecon connection



Screw connection

Networks		Straight	Angled	Straight	Angled	Straight	Angled	Straight	Angled
Ethernet CAT5, 4-pos.	Pin	1411066	1553624					1521261	
	Socket	1411069	1553637						
Ethernet 8-pos.	Pin	1421679	1553653						
	Socket	1421680	1553666						
Ethernet CAT6 _A , 8-pos.	Pin	1411043				1417430	1417443		
	Socket	1414586							
	Pin	1411068	1554539	1436738	1436754			1521261	
	Socket	1411071	1554542	1436741	1436767				
	Pin	1429130	1429156						
	Socket	1429143	1429169						
Fieldbuses									
	Pin			1432800	1432813			1507764	1430417
	Socket			1432826	1432839			1507777	1430420
	Pin	1413931		1432842	1432855			1507764	1430417
	Socket	1413932		1432868	1432871			1507777	1430420
DeviceNet	Pin			1432761	1432774			1508352	
	Socket			1432787	1432790			1508365	
	Pin			1559767					
	Socket			1559770					

IP65/67 M8/M12 device connectors



M12 for networks		Pin	Socket	Pin	Socket	Pin	Socket	Length	Pin	Socket	Pin	Socket	
Ethernet	CAT5, 4-pos.	1456514	1456527	1552214*	1551451*	1411956*	1411950*				1411592	1411585	
	CAT5, 4-pos., cable type 93E							2 m		1405866			
	CAT5, 8-pos.	1456530	1456543	1557578	1557549								
	CAT5, 8-pos., cable type 94B							5 m		1407877			
	CAT5, 8-pos., cable type 94C							2 m		1412820			
	CAT6A, 8-pos.		1424177		1402457*		1411964*						
	CAT6A, 8-pos., cable type 94F								0.5 m		1424135		
									1 m		1424148		
									2 m		1424151		
									5 m		1424164		
	CAT5, 8-pos., hybrid		1407503		1405225*		1411965*					1407618	
	CAT5, 8-pos., hybrid, cable type 94H								0.5 m		1407504		
									1 m		1407505		
									2 m		1407506		
									5 m		1407507		
	4-pos.	1456556	1456569	1552175	1542648								
	4-pos., cable type 93B							0.5 m	1427805	1437766			
								1 m	1437818	1437779			
								2 m	1437821	1437782			
								5 m	1437834	1437795			
	4-pos., cable type 93C							2 m		1416209			
4-pos., cable type 93R							3 m		1416263				
	4-pos.	1457979	1457966										
	4-pos., cable type 93K							0.5 m	1410158	1419154			
								1 m	1419159	1419155			
								2 m	1419160	1419156			
								5 m	1419161	1419157			
	4-pos.	1456556	1456569										
	4-pos., cable type 93K							0.5 m	1419138	1419134			
								1 m	1419139	1419135			
								2 m	1419140	1419136			
								5 m	1419141	1419137			
M12 for fieldbuses													
	5-pos.	1456475	1456488					0.5 m	1534342	1534384			
	5-pos.	1456572	1456585					0.5 m	1534504	1534546			
CANopen / EtherNet/IP		5-pos.	1456491	1456501				0.5 m	1534423	1534465			
	4-pos.	1457856	1457869										
 Foundation Fieldbus	4-pos.	1457872	1457885								1431432	1431429	
M8 for fieldbuses													
DeviceNet™	5-pos.	1424242	1424241				1412237*				1424234	1424233	

* Two-piece versions. Associated housing connections can be found under the respective item accessories at phoenixcontact.com.

Push-pull Power connectors, panel mounting frames, and distributors

i Web code: #0341

Connectors



Connection technology	Voltage	Contact insert	Metal	Plastic	Metal, square panel cutout
Solder connection, angled	24 V	1657915			1608087
Solder connection, straight	24 V	1609565			1608087
Solder connection, angled	400 V	1609549			1608087
Solder connection, straight	400 V	1609581			1608087
Spring connection, fixed coding	24 V		1608074	1657892	
Spring connection, fixed coding	400 V			1608236	
Spring connection, variable coding	24 V		1408234		
Y-distributor with push-pull rectangular connector (MSTB)	24 V				
Y-distributor with circular connector (7/8")	24 V				
H-distributor for push-pull rectangular connector (MSTB)	24 V				

Panel mounting frame				Y-distributors	H-distributors
IP65/67, version 14					
					
Plastic, square panel cutout	Metal, round panel cutout	Metal, square panel cutout	Plastic, square panel cutout	Metal	Metal
1608281					
1608281					
1608281					
1608281					
	1405248	1608249	1608294		
	1405167	1608252	1608304		
	1409036	1408235			
				1404799	
				1404812	
					1405387



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