PHŒNIX CONTACT

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

Circular connectors (cable-side), Range of articles: PRC, Coupler connector, type: Release with tool or by hand (see accessories), housing material: PPE, color: black, number of positions: 5, min. conductor cross section: 1.5 mm², max. conductor cross section: 6 mm², nom. voltage: 690 V AC, rated current: 35 A, Connection method: Screw connection, Type of contact: Socket, min. cable diameter: 8 mm, max. cable diameter: 12 mm. Variant for manual release

Your advantages

☑ Up to 75% smaller in size than industrial connectors with the same rating

☑ Locking mechanism can be unlocked manually or using a tool

☑ Suitable for applications in atmospheres containing salt and in direct sunlight

☑ Ideal for indoor and outdoor use due to weatherproof materials

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 500683
GTIN	4055626500683

Technical data

General data

Number of positions	5
Protection class	II
Color	black
Locking type	Snap-in locking
Insertion/withdrawal cycles	2000
Pull-out-force	175 N ± 50 N
Insertion force	40 N ±10 N
Degree of protection (when plugged in)	IP66 / IP68 (2m / 24h) / IP69K
Width	37.6 mm
Height	37.6 mm
Length	107.5 mm

Connection data

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Technical data

Connection data

Rated current	35 A (With 6 mm² conductor cross section in accordance with IEC 61984)
	30 A (With 6 mm²/AWG 10, in accordance with UL 2238)
Nominal voltage ATD	690 V AC (in accordance with IEC 61984)
	600 V AC (In accordance with UL 2238)
Rated voltage (III/2)	690 V
Stripping length	12 mm
Torque	max. 1 Nm (Contact screw)
Type of contact	Socket
Stripping length of the sheath	50 mm
Conductor cross section flexible, with ferrule without plastic sleeve min.	1.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	1.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm²
Conductor cross section solid min.	1.5 mm²
Conductor cross section solid max.	6 mm²
Conductor cross section flexible min.	4 mm²
Conductor cross section flexible max.	6 mm²
Type	Release with tool or by hand (see accessories)
Connection method	Screw connection
Degree of protection	IP66 / IP68 (2m / 24h) / IP69K
Insertion force	40 N ±10 N
Stripping length of the individual wire	12 mm (Lay PE conductor 8 mm leading)
Overvoltage category	III
Insulating material group	I / CTI 600
Pull-out-force	175 N ± 50 N
Cable diameter1	8 mm ... 12 mm

Material data

Contact material	Cu
Contact surface material	silver-plated
Contact carrier material	PPE
Housing material	PPE
Seal material	EPDM
O-ring material	EPDM
Cable seal material	EPDM
Cable gland material	PPE
Color of the housing part	black
Knurl material	PPE

Standards and Regulations

Halogen-free	yes

PHŒNIX
CONTACT

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Technical data

Standards and Regulations

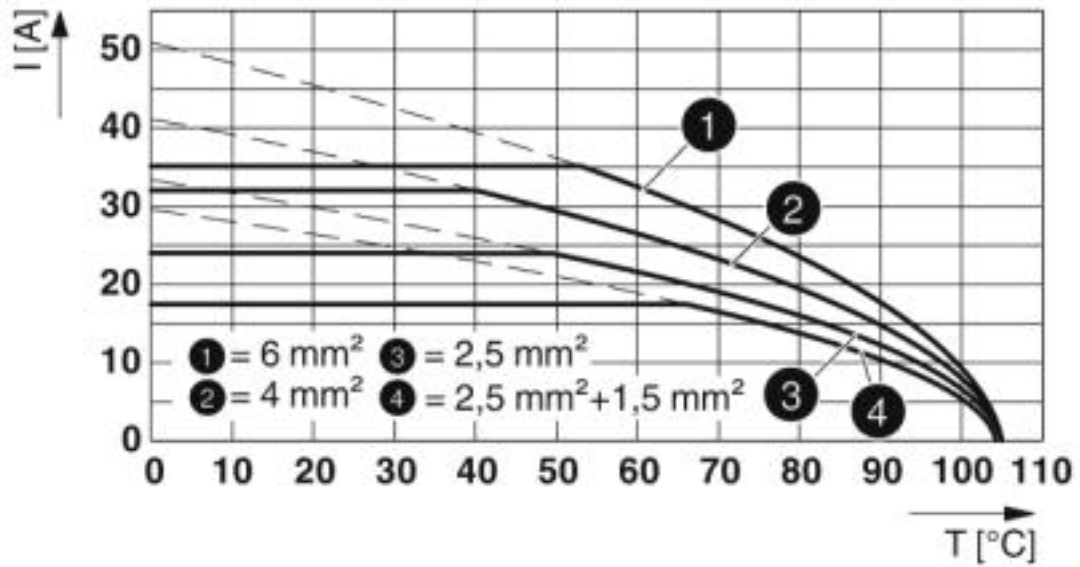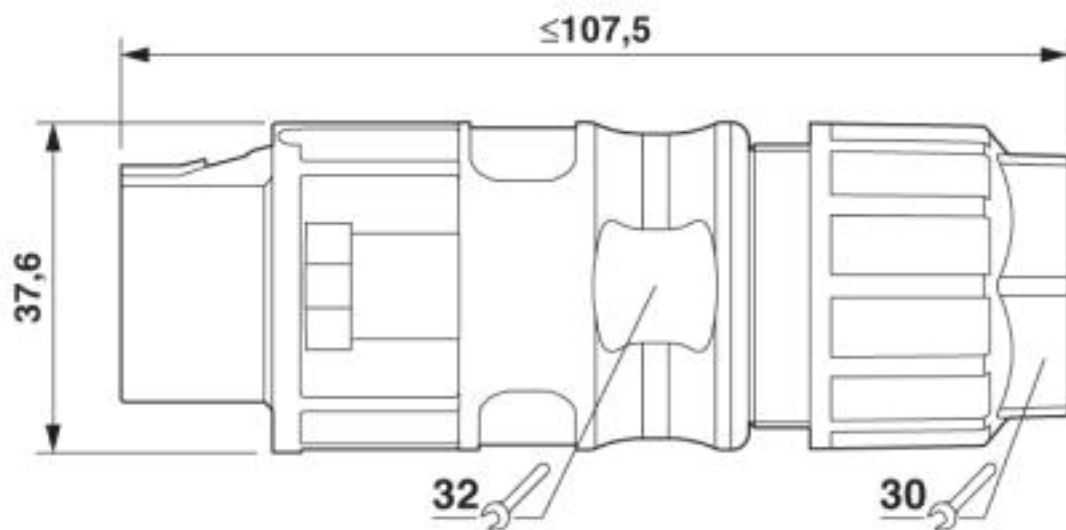|	
Flammability rating according to UL 94	V0
Safety note	• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• Assembled products may not be manipulated or improperly opened.
	• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that the protective or functional ground has been properly connected.
	• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	• Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	• Only use tools recommended by Phoenix Contact
	• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
	• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	• Operate the connector only when it is fully plugged in.
	• Operate the connector only when it is fully plugged in and interlocked.
	• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	• Observe the minimum bending radius of the cable. Lay the cable without twisting it.
	• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Drawings

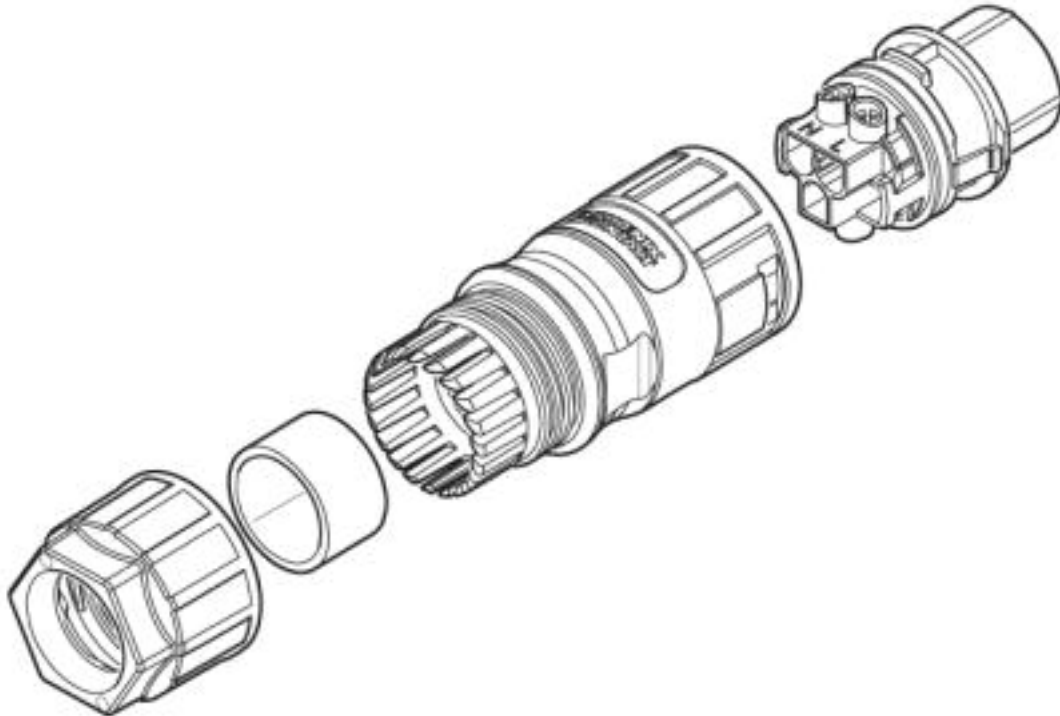# Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631
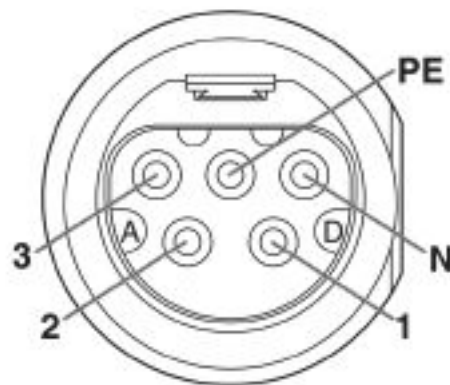
Diagram

Dimensional drawing

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Schematic diagram

Schematic design

Schematic diagram

Connector pin assignment

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 8.0	27440102
eCl@ss 9.0	27440102

PHŒNIX CONTACT

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Classifications

ETIM

ETIM 5.0	EC002061
ETIM 6.0	EC002061

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC	EAC	B.01687

Accessories

Accessories

Circular connector (cable-side)

Accessories - PRC FC RELEASE LATCH GY - 1002292

Circular connectors (cable-side), Range of articles: PRC, Accessories, housing material: PA 6.6-FR, color: black. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

---

Accessories - PRC FC RELEASE LATCH GN - 1002290

Circular connectors (cable-side), Range of articles: PRC, Accessories, housing material: PA 6.6-FR, color: black. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

---

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Accessories

Accessories - PRC FC RELEASE LATCH BU - 1002293

Circular connectors (cable-side), Range of articles: PRC, Accessories, housing material: PA 6.6-FR, color: black. If you are using the release latch, then the PRC approvals in accordance with IEC 61535 and 2PfG 1915 are not required

Protective cover

Protective cap - PRC COVER F - 1409236

Protective cover, Range of articles: PRC, Protective cap, housing material: PPE, color: black. Suitable for couplings (FS)

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Screwdriver - SZF 0-0,4X2,5 - 1204504

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Philips screwdriver - SF-PH 1-80 S-VDE - 1212693

Screwdriver, crosshead PH (lasered), insulated, size: PH 1 x 80, 2-component handle, with non-slip grip

Universal tools

Coupler connector - PRC 5-FC-FS6 8-12 HR - 1017631

Accessories

Tool - UNIFOX-WRENCH - 1212835

Screw pliers, with fast adjustment, for wrench size 10 mm ... 36 mm, size: 260 mm

http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com