



Product brochure



ELECTRICAL POWER CONNECTORS

 **CAVOTEC**
Inspired Engineering

Cavotec is a global engineering group that manufactures power transmission, distribution and control technologies that form the link between fixed and mobile equipment in the Ports & Maritime, Airports, Mining & Tunnelling and General Industry sectors.

Working closely with customers and industry bodies, Cavotec develops long-term relationships that drive projects forward and help improve safety, efficiency and sustainability at applications worldwide.



Our Market Units



Ports & Maritime

Ports & Maritime Market Unit develops and manufactures innovative automation and electrification technologies for the global ports and shipping sectors. These include MoorMaster™ automated mooring, Automatic Plug-In System (APS), a comprehensive range of shore power systems, motorised cable reels, Marine Slipping System, Panzerbelt cable protection systems, cable chains, Radio Remote Controls and Human Operator Interface (HOI).



Airports

Airports Market Unit is a leading OEM and system integrator for the global market. The Market Unit offers a comprehensive range of advanced Ground Support Equipment (GSE), including 400Hz GPU, PCA, underground pit solutions, fuelling pits, tunnel systems, 400Hz aircraft connectors and mobile 400Hz caddies.



Mining & Tunnelling

Mining & Tunnelling Market Unit's product offering incorporates Radio Remote Controls, motorised cable reels, power connectors, spring driven cable reels and Human Operator Interface (HOI). Working closely with the world's major mining and tunnelling OEMs, the Mining & Tunnelling Market Unit, and its innovative systems, ensure that applications are safe, efficient and minimise environmental impact.



General Industry

General Industry Market Unit covers a wide variety of sectors and technology niches for a global customer base. The unit's offering includes spring driven cable reels, motorised cable reels, Radio Remote Controls, slip ring columns, power connectors, rotating electrical connectors and cable chains.

Our Centres of Excellence

Cavotec's R&D and manufacturing activities are conducted at its Centres of Excellence:

Cavotec Alfo

Overath, Germany

Cavotec Connectors

Staffanstorp, Sweden

Cavotec Fladung

Dietzenbach, Germany

Cavotec Dabico/INET

Cypress, CA, USA

Cavotec Micro-control

Hell, Norway

Cavotec MoorMaster

Christchurch, New Zealand

Cavotec Specimas

Nova Milanese, Italy

CAVOTEC CONNECTORS

Based in Staffanstorps, southern Sweden, and one of Cavotec's eight Centres of Excellence, Cavotec Connectors develops and manufactures high quality, heavy duty industrial power connectors, power units and automatic plug-in systems for applications worldwide. Technologies that help customers improve safety, reduce environmental impact and operate more efficiently.



Cavotec connectors are widely used at the ports, mines, tunnel construction sites, steel mills, train applications, and elsewhere; and are certified to ISO9001 and ISO14001.

Cavotec Connectors offers extensive expertise and experience - as well as the capacity to develop systems that meet customers' specific challenges and requirements.

Product Range

Plugs & Sockets

Cavotec Connectors are designed for safe and frequent connection and disconnection. They incorporate ergonomic push & pull handles, bayonets, and Eye-bolt or screw ring functionality. Cavotec Connectors are also readily integrated with fibre optic assemblies.

Power Units

Cavotec Power Units are designed for easy use in harsh conditions over many years with minimal downtime or service requirements. Only high quality components are used and all units are equipped with Cavotec Push & Pull sockets that allow safe and simple connection.

Automatic Plug-in System (APS)

Cavotec Connectors has pioneered a range of Automatic Plug-in Systems, (APS), for applications ranging from steel manufacturing to shore power connection. These units feature high self-centring tolerances between plug and socket.

Contents

Plugs & Sockets	2
P & S Connectors product overview	6
PC1 – Screw Ring • Size S1 – 690V	8
PC1-EX • Size S1-EX	10
PC2 – Push & Pull • Size X2 – 690V	12
PC2-EX • Size B2-EX	16
PC4 – Push & Pull • Size X4 – 1.1kV	18
PC4 – Screw ring • Size S4 – 1.1kV	20
PC5 – Push & Pull • Size X5 – 1.1kV	22
PC5 – Push & Pull • Size X5 – 7.2kV	24
PC5 – Screw ring • Size S5 – 1.1kV	26
PC5 – Screw ring • Size S5 – 7.2kV	28
PC6 – Push & Pull • Size X6 – 1.1kV	30
PC6 – Push & Pull • Size X6 – 7.2kV	32
PC6 – Push & Pull • Size X6 – 12kV	34
PC6 – Push & Pull • Size X6 – 15kV	36
PC7 • Size K7 – 8kV	38
PC8 • Size K8 – 15kV	40
PC9 • Size K9 – 25kV	42
Multipin connectors • 500V	44
Power Units	48
Power units product range table	50
Wall mounted/Mechanical interlock	52
Wall mounted/Electrical interlock	54
Ground mounted/Electrical interlock	56
Automatic Plug-in System (APS)	60
APS for E-RTG	61
APS for E-ferry	62
APS for General Industry Applications	63
Installation & Maintenance	64
Reference List	64



PLUGS & SOCKETS







Cavotec connectors feature a variety of cutting edge technologies that ensure optimal performance throughout product lifetimes.

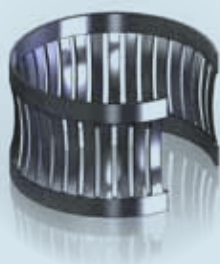
These features include electrical interlocking of pilot contacts, lamellar, Multi-Way Technology, and Push & Pull systems.

All Cavotec connectors are IP 66 protected, and have a standard maximum operating temperature of 80°C - which can be extended to withstand temperatures of up to 400°C.



Terminology

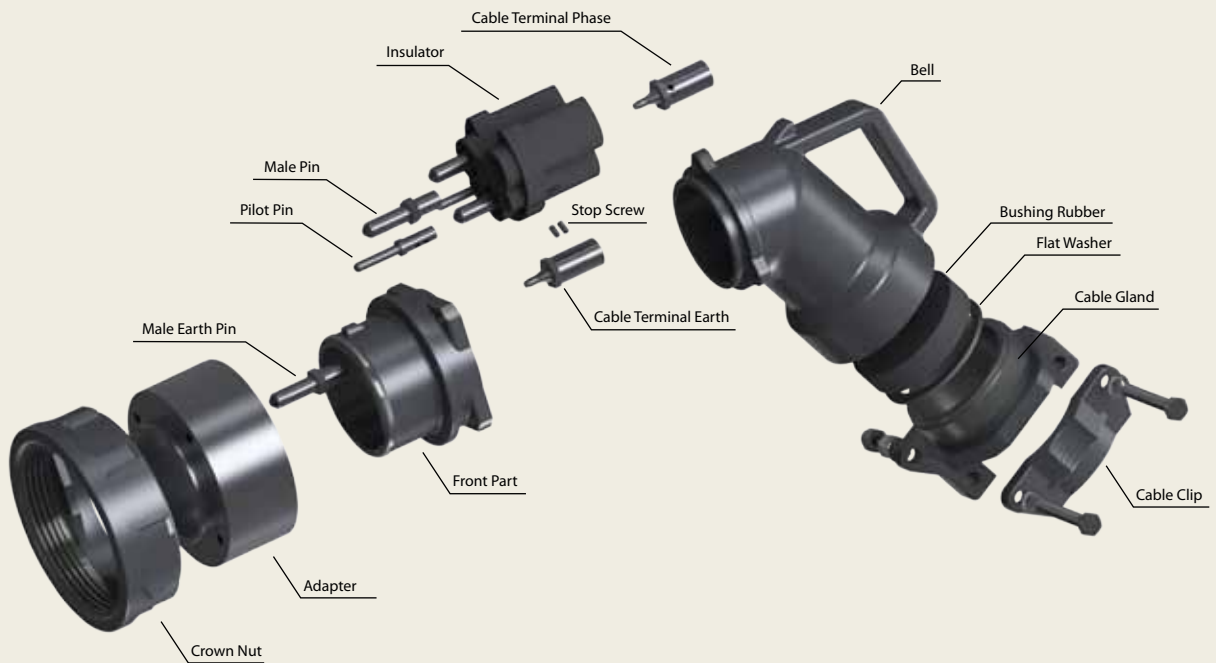
<i>Standard</i>	<i>Inverted</i>
Plug (Cable mounted plug) 	Plug 
Socket (Gear mounted socket) 	Socket (Inlet) 
Connector (Cable mounted socket) 	Connector 



MWT lamella

Multi-Way Technology

Cavotec power connectors feature lamellar, Multi-Way Technology, (MWT). MWT greatly improves the contact between male and female pins. As the MWT becomes warm, it expands thus increasing contact pressure between the surfaces. This additional contact pressure greatly enhances current-carrying capacity relative to the size of the contacts, and makes connecting and disconnecting the plug and socket significantly easier.



Declaration of Conformity

Standards

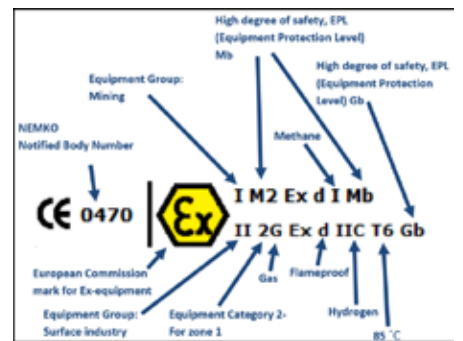
All Cavotec Power Connectors conform to the following standards, as applicable:

- NFC 63300 rules
- IEC 60309/IEC 62613 - for plugs, socket-outlets and couplers for industrial purposes, low and high voltage
- IEC 60529 - standards for protection against dust, water at minimum mechanical load
- IEC 60079 - standard for Explosive Atmospheres
- IEC 80005:1, IEC 80005:3, IEC 62613-2 - AMP standards
- All housing is in marine grade aluminum Al-Si7MgFe or Bronze CuSn5Pb5An5
- Harsh marine environments
- Fasteners are in A4 or AISI 316
- Insulators are made in PPO, POM, PP and PTFE

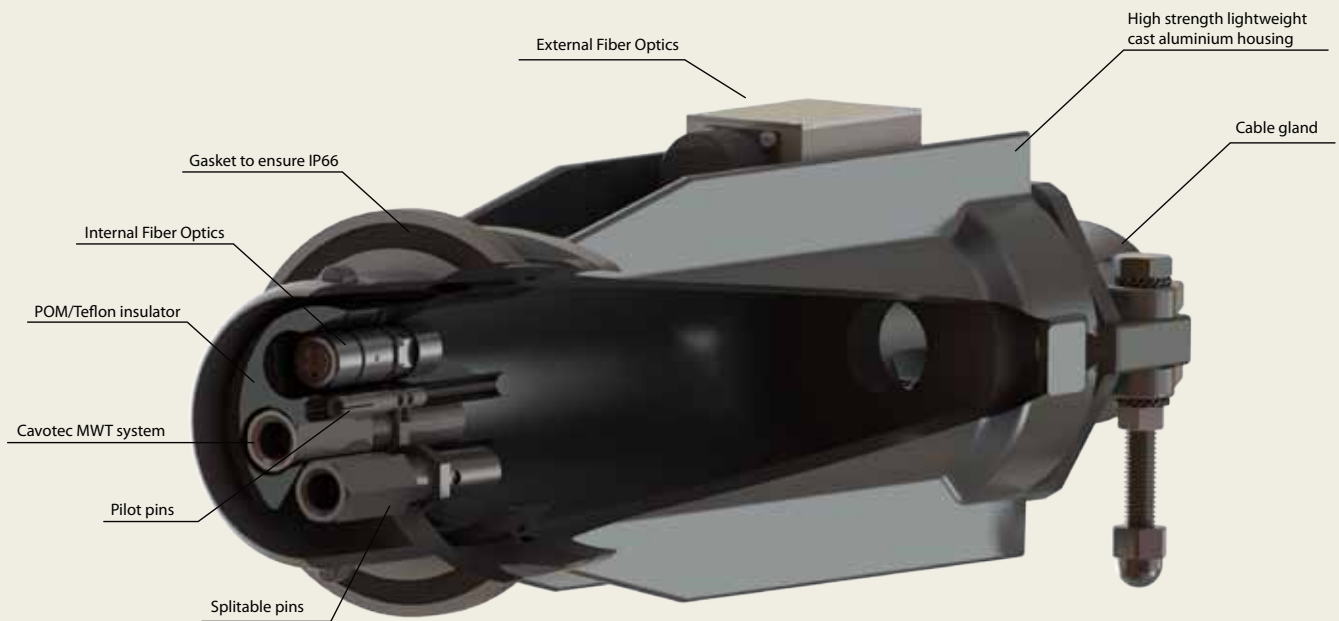
Definition of material criteria

The minimum required creepage distances over an insulating material between electrically conducting parts in apparatus, especially between parts with a high voltage and parts that can be touched by human users, is dependent on the insulators' Comparative Tracking Index, (CTI).

- PPO have a CTI = 400 moulded std insulators
- POM have a CTI > 400 < 600 tooled insulators
- PP have a CTI > 600 moulded insulators for IEC 309-2

















CAVOTEC	WWW.CAVOTEC.COM	Certificate ATEX No: 13ATEX1571
Manufactured by Cavotec Connectors AB, 249 34, Sweden		Certificate IECEx No: 06000000000
Code: PC1-EX-TS05-0025		Temp: -20°C to +80°C
Amperage: 30A	Voltage: 690V	- WARNING -
CE 0470	II 2G Ex d IIC T6 Gb	EX-ENRICEZTTE ALLI COMPONENTI SECONDO INDIRIZIONE
	Model: 0025	Serial No: EX-20140018





Product features

- From low voltage products from 50V up to 25kV
- Up to 680A
- IP 66
- Max ambient temperature of 80°C, optional configuration with maximum of 400°C
- Cable size from 1,5mm² to 300mm²
- All contacts using Cavotec MWT system
- Large number of pin configurations for power, pilot pins, control signal & fiber optics channels
- Pins:
 - Interchangeable pins without dismantling the connector
 - Female contacts, male pins and cable terminals are made of silver plated brass
 - High safety standard with pilot pin being shorter than the phase pins ensuring they must be connected to a circuit
- Fiber optics for plug and socket, both as Integrated or as separate contact. With configurations between 4 - 24 channels in multi or single-mode communication
- Easy wiring with male and female insulators fully interchangeable between plug and socket
- Cable terminals suit for cables of class 5, IEC 60228 – Screwed-in design for a quick and easy mounting procedure
- Connection Type:
 - Push & Pull** – Offers a safe way for connecting and disconnecting via an ergonomic push & pull handle which could be critical in case of emergency.
 - Screw Ring** – Optimized connection when having a limited space, e.g. Distribution panel with several plugs and sockets with a narrow space – or when using plug and connectors as an extension cord.
 - Bayonet** – only a ¼ turn for quick and secure connection.
 - Eye-bolt** – a quick and easy way to make a secure connection, very useful in trailing cable applications.

P & S Connectors product overview

Size	PC1		PC2		PC4	
						
Connection type	Screw Ring	Screw Ring	Push & Pull	Bayonet	Push & Pull	Screw Ring
Model Name	S1	S1	X2	B2	X4	S4
Keying position	12	2, 4, 6, 8, 10, 12	2, 3, 4, 5, 6, 7, 8, 9, 10, 12 Insulator keying: 1-11	Double keying 1-11 55 options	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Accessories	Wall bracket	Wall bracket	Low interlocking (PC2-VL) Wall bracket Screw terminals		External FO 6ch Screw terminals	Short bell
Certifications		ATEX & IECEx  		ATEX & IECEx  		
1-pole			660A 690V 300mm ²	660A 690V 300mm ²		
3-pole			250A 690V 70mm ²	250A 690V 70mm ²		
4-pole			200A 690V 50mm ²	200A 690V 50mm ²	250A 1,1kV 70mm ²	250A 1,1kV 70mm ²
5-pole	30A 690V 4mm ²	30A 690V 4mm ²	200A 500V 50mm ²	200A 500V 50mm ²	200A 1,1kV 70mm ²	200A 1,1kV 70mm ²
8-pole	10A 415V 2,5mm ²					
13-pole	6A 230V 1,5mm ²					
18-pole			40A 500V 4mm ²	40A 500V 4mm ²		
25-pole			40A 50V 4mm ²	40A 50V 4mm ²		
24, 30 & 37-pole					40A 500V 4mm ²	
50-pole						

PC5		PC6		PC7	PC8	PC9	Size
							
Push & Pull	screw Ring	Push & Pull	Screw Ring	Eye Bolt	Eye Bolt	Eye Bolt	Connection type
X5	S5	X6	S6	K7	K8	K9	Model Name
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1,2,3,4,5,6,7,8,9,10,11,12	6.12	6.12				Keying position
External FO 18ch Internal FO 8ch Screw terminals Kirk Key interlock Wall bracket	Internal FO 8ch Screw terminals	External FO 18ch Internal FO 12ch Screw terminals Kirk Key interlock Wall bracket					Accessories
 EAC	EAC	EAC	EAC				Certifications
							1-pole
							3-pole
420A 1,1kV 185mm ² Internal fiber optic	420A 1,1kV 185mm ² Internal fiber optic	660A 1,1kV 300mm ² Internal fiber optic	660A 1,1kV 300mm ²	400A 8kV 185mm ²	440A 15kV 120mm ²	440A 25kV 150mm ²	4-pole
350A 7,2kV 150mm ² 	350A 7,2kV 150mm ²	480A 7,2kV 185mm ² Internal fiber optic					
		500A 15kV 185mm ²					
320A 1,1kV 185mm ²	320A 1,1kV 185mm ²	540A 1,1kV 300mm ²	660A 1,1kV 300mm ²				5-pole
							8-pole
							13-pole
							18-pole
							25-pole
							24, 30 & 37-pole
40A 500V 4mm ²							50-pole

PC1

Screw Ring • Size S1 – 690V

Applications:

- Oil and gas
- Petro-chemical
- Mining
- Offshore
- Airports



The Cavotec PC1 connector's hard-wiring, quick disconnect features are ideal for top drives, pumps and motors, as well as low current applications such as portable lights, hand tools and signalling.

Product features

Maximum voltage 690V, currents up to 30A

- 5, 8 and 13 pole insulator assembly covering cable sizes 1,5mm², 2,5mm² and 4mm²
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Plug & socket connection through a bronze screw ring
- Standard finishes: anodized aluminium and bronze
- Pins:
 - High safety standard with pilot pin being shorter than the phase pins ensuring they must be connected to a circuit breaker and touching live pins
 - Interchangeable pins without dismantling the connector
- Easy wiring with male and female insulators fully interchangeable (between plug and socket)
- Cable terminals suit for cables of class 5, IEC 60228

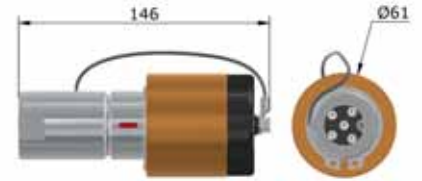
- Cable glands: IP66 and a continuous operating temperature up to +70°C – To be ordered separately (depending on the cable type specification)
- 1 clock option, 12 o'clock (for more options please contact Cavotec)

Special tools

- Socket wrench, NV5 440/5, machined, for multipole/PC1 (PCX-92001-0051)
- Tool for pins (PCX-97003-5020)
- 5 mm tool for female contacts, machined for multi pole, ¼"DR.5 (PCX-92003-0051)

Plug/inverted plug, Screw Ring

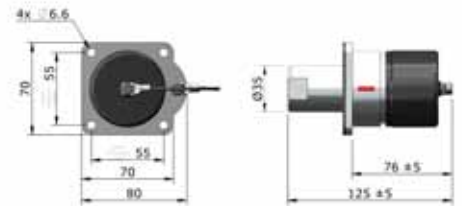
Nr of Pins	Max voltage (V)	Max current (A)	Incoming cable size	Plug Male pins	Inverted Plug Female pins
5 pin	690	10A	1,5mm ²	PC1-SS05-0015-001K	PC1-TS05-0015-001K
5 pin	690	16A	2,5mm ²	PC1-SS05-0025-001K	PC1-TS05-0025-001K
5 pin	690	30A	4mm ²	PC1-SS05-0040-001K	PC1-TS05-0040-001K
8 pin	415	10A	1,5mm ²	PC1-SS08-0015-001K	PC1-TS08-0015-001K
13 pin	230	6A	1,5mm ²	PC1-SS13-0015-001K	PC1-TS13-0015-001K



Dimensions ± 5mm

Socket/inverted socket

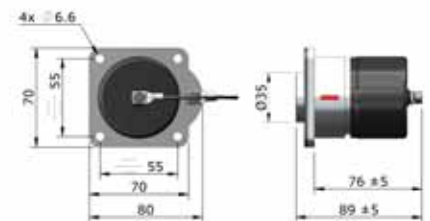
Nr of Pins	Max voltage (V)	Max current (A)	Incoming cable size	Socket Female pins	Inverted Socket Male pins
5 pin	690	10A	1,5mm ²	PC1-VS05-0015-001K	PC1-WS05-0015-001K
5 pin	690	16A	2,5mm ²	PC1-VS05-0025-001K	PC1-WS05-0025-001K
5 pin	690	30A	4mm ²	PC1-VS05-0040-001K	PC1-WS05-0040-001K
8 pin	415	10A	1,5mm ²	PC1-VS08-0015-001K	PC1-WS08-0015-001K
13 pin	230	6A	1,5mm ²	PC1-VS13-0015-001K	PC1-WS13-0015-001K



Socket

Flange Mounted socket/inverted flange mounted socket

Nr of Pins	Max voltage (V)	Max current (A)	Incoming cable size	Flange mounted socket Female pins	Inverted Flange mounted socket Male pins
5 pin	690	10A	1,5mm ²	PC1-VS05-0015-002K	PC1-WS05-0015-002K
5 pin	690	16A	2,5mm ²	PC1-VS05-0025-002K	PC1-WS05-0025-002K
5 pin	690	30A	4mm ²	PC1-VS05-0040-002K	PC1-WS05-0040-002K
8 pin	415	10A	1,5mm ²	PC1-VS08-0015-002K	PC1-WS08-0015-002K
13 pin	230	6A	1,5mm ²	PC1-VS13-0015-002K	PC1-WS13-0015-002K



Flange mounted socket



PC1-EX

Size S1-EX

Applications:

- Oil and gas
- Petro-chemical
- Mining
- Offshore
- Airports



The Cavotec PC1-Ex has been specifically designed for use in highly hazardous environments.

Product features

- Maximum voltage 690V, currents up to 30A
- 5 pole insulator assembly covering cable sizes 1,5mm², 2,5mm² and 4mm²
- Certifications/Compliances: NEMKO 13ATEX1571; IECEx NEM 14.0009 / EN 60079-0: 2012, EN 60079-1: 2007
- Ex Classification:
 - I M2 Ex d I Mb, -20°C ≤ Tamb ≤ +60°C
 - II 2G Ex d IIC T6 Gb, -20°C ≤ Tamb ≤ +60°C
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Plug & socket connection through the nut, interlocked by the stopper and screw
- Standard finishes: bronze – Hardware in stainless steel
- Pins:
 - Female contacts, male pins and cable terminals are made of silver plated brass
 - High safety standard with pilot pin being shorter than the phase pins ensuring they must be connected to a circuit breaker and touching live pins
 - Interchangeable pins without dismantling the connector
- De-energize all circuits before separating
- Easy wiring with male and female insulators fully interchangeable (between plug and socket) made in Grivory HTV-4H1
- Cable terminals suit for cables of class 5, IEC 60228 – Screwed-in design for a quick and easy mounting procedure
- Cable glands: selected with sufficient Ex rating, IP66 and a continuous operating temperature up to +70°C – To be ordered separately (depending on the cable type specification)

Certification and norms

The ATEX/IECEx certification has been made according to ATEX Directive 94/9/EC and IECEx 02, EN 60079-1, IEC 60309-2, and the certifying body is NEMKO of Norway.

The issued certificates are:

- NEMKO 05ATEX4254Q - (Cavotec Connectors)
- NEMKO 13ATEX1571 - (PC1 - Ex - S1)
- IECEx NEM 14.0009
- The classification is:

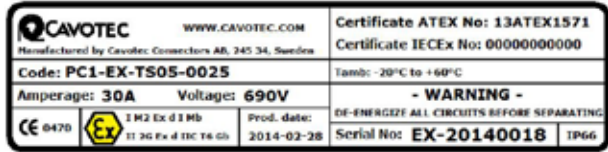


I M2 Ex d I Mb, -20°C ≤ Tamb ≤ +60°C
 II 2G Ex d IIC T6 Gb, -20°C ≤ Tamb ≤ +60°C

Special tools

- Socket wrench, NV5 440/5, machined, for multipole/PC1 (PCX-92001-0051)
- Tool for pins (PCX-97003-5020)
- 5 mm tool for female contacts, machined for multi pole, ¼"DR.5 (PCX-92003-0051)

Marking plate



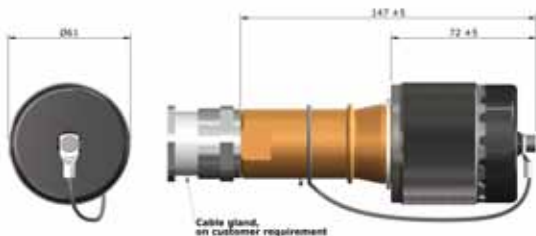
Plug/inverted plug, Screw Ring

No Pins (P&E+pil)	Max voltage (AC) Phase	Pin Ø / Max current mm/A	Weigh kg	Cross section	Current limitations recommended CC A	Plug Male Pins Product Code	Inv. Plug: Female Female Contacts Product Code
3ph+N/P+E	690	3/30	1	1,5mm ²	20	PC1-EX-SS05-0015	PC1-EX-TS05-0015
				2,5mm ²	30	PC1-EX-SS05-0025	PC1-EX-TS05-0025
				4mm ²	30	PC1-EX-SS05-0040	PC1-EX-TS05-0040

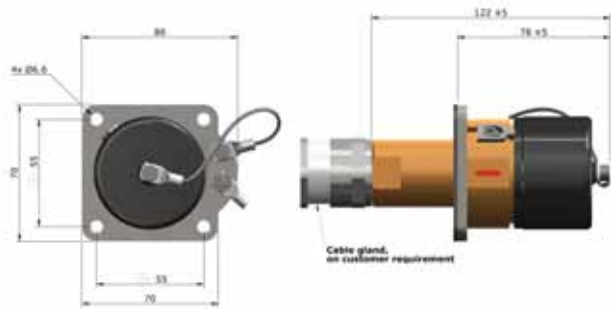
Socket/inverted socket

No Pins (P&E+pil)	Max voltage (AC) Phase	Pin Ø / Max current mm/A	Weigh kg	Cross section	Current limitations recommended CC A	Socket Female Contacts Product Code	Inv. Socket: Female Male Pins Product Code
3ph+N/P+E	690	3/30	1.1	1,5mm ²	20	PC1-EX-VS05-0015	PC1-EX-WS05-0015
				2,5mm ²	30	PC1-EX-VS05-0025	PC1-EX-WS05-0025
				4mm ²	30	PC1-EX-VS05-0040	PC1-EX-WS05-0040

Technical drawings



Overall dimensions of the plug



Overall dimensions of the socket

PC2

Push & Pull • Size X2 – 690V

Applications:

- Oil rigs
- Ports
- Steel mills
- Mining & tunnelling
- Railways



The Cavotec PC2-X2 is designed for frequent connection and disconnection, and features Cavotec's Push & Pull system.

Product features

- Maximum voltage 690V, currents up to 660A (800A)
- Up to 7 pole insulator assembly as standard (See Multipin connectors data sheet for more pole) covering cable sizes up to 300mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector with integrated cover operated by the push & pull arms (Socket available in straight or 30° bent version)
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable (between plug and socket) made in POM or Grivory HTV-4H1 Max temp. 150 °C (250°C short term)
- Interchangeable pins and contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Available in a wide variety of types and sizes (supplied by external manufacturers)

Optional features

- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- Plug cover: PCX-01612-006
- Wall mounting bracket for Connector: PCX-49260-1002
- Individual keying to prevent inserting a plug in the wrong socket
- Cable terminals: Screw type with 2 set of screws and cable sleeves
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting

Special tools

Male pin Dia. 8, 10, 20mm	Female contact Dia. 8, 10, 20mm	Key width	Socket wrench (Part numb.)
PCX-11008-XXXX	PCX-12008-XXXX	12/13	PCX-92102-012
PCX-11010-XXXX	PCX-12010-XXXX	14/15	PCX-92102-0141
PCX-11020-XXXX	PCX-12020-XXXX	30/32	PCX-92102-030

Plug/inverted plug, straight Push & Pull

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv.Plug: Female Contacts Product code
1+2	10mm / 250A	1,1	35mm ² / 160A ***	PC2-SX01-0350/XX	PC2-TX01-0350/XX
	10mm / 250A		50mm ² / 200A	PC2-SX01-0500/XX	PC2-TX01-0500/XX
	10mm / 250A		70mm ² / 250A	PC2-SX01-0700/XX	PC2-TX01-0700/XX
1+2	20mm / 800A	1,5	95mm ² / 300A	PC2-SX01-0950/XX	PC2-TX01-0950/XX
	20mm / 800A		120mm ² / 350A	PC2-SX01-1200/XX	PC2-TX01-1200/XX
	20mm / 800A		150mm ² / 420A	PC2-SX01-1500/XX *	PC2-TX01-1500/XX *
	20mm / 800A		185mm ² / 480A	PC2-SX01-1850/XX *	PC2-TX01-1850/XX *
	20mm / 800A		240mm ² / 540A	PC2-SX01-2400/XX *	PC2-TX01-2400/XX *
	20mm / 800A		300mm ² / 660A	PC2-SX01-3000/XX *	PC2-TX01-3000/XX *
	20mm / 800A		350mm ² / 700A	PC2-SX01-3500/XX *	PC2-TX01-3500/XX *
3+3	10mm / 250A	1,3	35mm ² / 160A ***	PC2-SX03-S350/XX	PC2-TX03-S350/XX
	10mm / 250A		50mm ² / 200A	PC2-SX03-0500/XX *	PC2-TX03-0500/XX *
	10mm / 250A		70mm ² / 250A	PC2-SX03-0700/XX	PC2-TX03-0700/XX
4+2	8mm / 200A	1,4	25mm ² / 125A***	PC2-SX04-0250/XX	PC2-TX04-0250/XX
	8mm / 200A		35mm ² / 160A	PC2-SX04-0350/XX	PC2-TX04-0350/XX
	8mm / 200A		50mm ² / 200A	PC2-SX04-0500/XX *	PC2-TX04-0500/XX *
5+2**	8mm / 200A	1,5	25mm ² / 125***	PC2-SX05-0250/XX	PC2-TX05-0250/XX
	8mm / 200A		35mm ² / 160A	PC2-SX05-0350/XX	PC2-TX05-0350/XX
	8mm / 200A		50mm ² / 200A	PC2-SX05-0500/XX *	PC2-TX05-0500/XX *



Dimensions ± 5mm

Connector/inverted connector straight Push & Pull

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Inv.Connector: Male Pins Product Code
1+2	10mm / 250A	1,1	35mm ² / 160A***	PC2-RX01-0350/XX	PC2-PX01-0350/XX
	10mm / 250A		50mm ² / 200A	PC2-RX01-0500/XX	PC2-PX01-0500/XX
	10mm / 250A		70mm ² / 250A	PC2-RX01-0700/XX	PC2-PX01-0700/XX
1+2	20mm / 800A	1,5	95mm ² / 300A	PC2-RX01-0950/XX	PC2-PX01-0950/XX
	20mm / 800A		120mm ² / 350A	PC2-RX01-1200/XX	PC2-PX01-1200/XX
	20mm / 800A		150mm ² / 420A	PC2-RX01-1500/XX *	PC2-PX01-1500/XX *
	20mm / 800A		185mm ² / 480A	PC2-RX01-1850/XX *	PC2-PX01-1850/XX *
	20mm / 800A		240mm ² / 540A	PC2-RX01-2400/XX *	PC2-PX01-2400/XX *
	20mm / 800A		300mm ² / 660A	PC2-RX01-3000/XX *	PC2-PX01-3000/XX *
	20mm / 800A		350mm ² / 700A	PC2-RX01-3500/XX *	PC2-PX01-3500/XX *
3+3	10mm / 250A	2,4	35mm ² / 160A***	PC2-RX03-0350/XX	PC2-PX03-0350/XX
	10mm / 250A		50mm ² / 200A	PC2-RX03-0500/XX *	PC2-PX03-0500/XX *
	10mm / 250A		70mm ² / 250A	PC2-RX03-0700/XX	PC2-PX03-0700/XX
4+2	8mm / 200A	2,5	25mm ² / 125A***	PC2-RX04-0250/XX	PC2-PX04-0250/XX
	8mm / 200A		35mm ² / 160A	PC2-RX04-0350/XX	PC2-PX04-0350/XX
	8mm / 200A		50mm ² / 200A	PC2-RX04-0500/XX *	PC2-PX04-0500/XX *
5+2**	8mm / 200A	1,5	25mm ² / 125A***	PC2-RX05-0250/XX	PC2-PX05-0250/XX
	8mm / 200A		35mm ² / 160A	PC2-RX05-0350/XX	PC2-PX05-0350/XX
	8mm / 200A		50mm ² / 200A	PC2-RX05-0500/XX *	PC2-PX05-0500/XX *



* Dimension varies according to cable gland
Dimensions ± 5mm

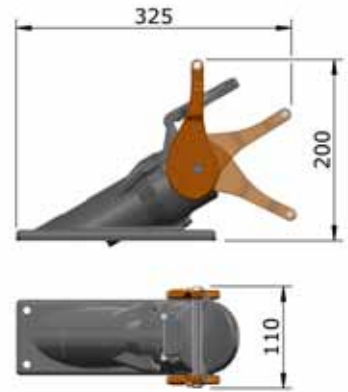
* Screw type cable not available; ** Max nominal voltage 500VAC

*** For smaller sizes, please contact your local Cavotec sales office

XX Additional product code depending on type of cable glands, keying or anodizing.

Socket/inverted socket 30° Push & Pull

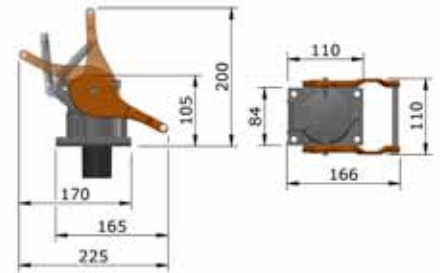
No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product Code
1+2	10mm / 250A	2,2	35mm ² / 160A***	PC2-VX01-0350	PC2-WX01-0350
	10mm / 250A		50mm ² / 200A	PC2-VX01-0500	PC2-WX01-0500
	10mm / 250A		70mm ² / 250A	PC2-VX01-0700	PC2-WX01-0700
1+2	20mm / 800A	2,4	95mm ² / 300A	PC2-VX01-0950	PC2-WX01-0950
	20mm / 800A		120mm ² / 350A	PC2-VX01-1200	PC2-WX01-1200
	20mm / 800A		150mm ² / 420A	PC2-VX01-1500 *	PC2-WX01-1500 *
	20mm / 800A		185mm ² / 480A	PC2-VX01-1850 *	PC2-WX01-1850 *
	20mm / 800A		240mm ² / 540A	PC2-VX01-2400 *	PC2-WX01-2400 *
3+3	10mm / 250A	2,4	35mm ² / 160A	PC2-VX03-0350	PC2-WX03-0350
	10mm / 250A		50mm ² / 200A	PC2-VX03-0500	PC2-WX03-0500
	10mm / 250A		70mm ² / 250A	PC2-VX03-0700 *	PC2-WX03-0700 *
	8mm / 200A		25mm ² / 125A***	PC2-VX04-0250	PC2-WX04-0250
	8mm / 200A		35mm ² / 160A	PC2-VX04-0350	PC2-WX04-0350
4+2	8mm / 200A	2,5	50mm ² / 200A	PC2-VX04-0500 *	PC2-WX04-0500 *
	8mm / 200A		50mm ² / 200A	PC2-VX05-0250	PC2-WX05-0250
	8mm / 200A		35mm ² / 160A	PC2-VX05-0350	PC2-WX05-0350
5+2**	8mm / 200A	2,6	50mm ² / 200A	PC2-VX05-0500 *	PC2-WX05-0500 *
	8mm / 200A		50mm ² / 200A	PC2-VX05-0500 *	PC2-WX05-0500 *
	8mm / 200A		50mm ² / 200A	PC2-VX05-0500 *	PC2-WX05-0500 *



Dimensions ± 5mm

Socket/inverted socket, 90° Push & Pull

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product Code
1+2	10mm / 250A	1,8	35mm ² /160A***	PC2-VX01-0350R	PC2-WX01-0350R
	10mm / 250A		50mm ² / 200A	PC2-VX01-0500R	PC2-WX01-0500R
	10mm / 250A		70mm ² / 250A	PC2-VX01-0700R	PC2-WX01-0700R
1+2	20mm / 800A	2	95mm ² / 300A	PC2-VX01-0950R	PC2-WX01-0950R
	20mm / 800A		120mm ² / 350A	PC2-VX01-1200R	PC2-WX01-1200R
	20mm / 800A		150mm ² / 420A	PC2-VX01-1500R *	PC2-WX01-1500R *
	20mm / 800A		185mm ² / 480A	PC2-VX01-1850R *	PC2-WX01-1850R *
	20mm / 800A		240mm ² / 540A	PC2-VX01-2400R *	PC2-WX01-2400R *
3+3	10mm / 250A	2	35mm ² / 160A***	PC2-VX03-0350R	PC2-WX03-0350R
	10mm / 250A		50mm ² / 200A	PC2-VX03-0500R *	PC2-WX03-0500R *
	10mm / 250A		70mm ² / 250A	PC2-VX03-0700R	PC2-WX03-0700R
	8mm / 200A		25mm ² / 125A***	PC2-VX04-0250R	PC2-WX04-0250R
	8mm / 200A		35mm ² / 160A	PC2-VX04-0350R	PC2-WX04-0350R
4+2	8mm / 200A	2,1	50mm ² / 200A	PC2-VX04-0500R *	PC2-WX04-0500R *
	8mm / 200A		50mm ² / 200A	PC2-VX05-0250R	PC2-WX05-0250R
	8mm / 200A		35mm ² / 160A	PC2-VX05-0350R	PC2-WX05-0350R
5+2**	8mm / 200A	2,6	50mm ² / 200A	PC2-VX05-0500R	PC2-WX05-0500R
	8mm / 200A		50mm ² / 200A	PC2-VX05-0500R	PC2-WX05-0500R
	8mm / 200A		50mm ² / 200A	PC2-VX05-0500R	PC2-WX05-0500R



Dimensions ± 5mm

* Screw type cable not available; ** Max nominal voltage 500VAC
 *** For smaller sizes, please contact your local Cavotec sales office
 XX Additional product code depending on type of cable glands, keying or anodizing.

Socket/inverted socket stainless steel arm 30°

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product Code
1+2	10mm / 250A	2,2	35mm ² / 160A***	PC2-VL01-0350	PC2-WL01-0350
	10mm / 250A		50mm ² / 200A	PC2-VL01-0500	PC2-WL01-0500
	10mm / 250A		70mm ² / 250A	PC2-VL01-0700	PC2-WL01-0700
	20mm / 800A		95mm ² / 300A	PC2-VL01-0950	PC2-WL01-0950
	20mm / 800A		120mm ² / 350A	PC2-VL01-1200	PC2-WL01-1200
	20mm / 800A		150mm ² / 420A	PC2-VL01-1500*	PC2-WL01-1500*
	20mm / 800A		185mm ² / 480A	PC2-VL01-1850*	PC2-WL01-1850*
	20mm / 800A		240mm ² / 540A	PC2-VL01-2400*	PC2-WL01-2400*
	20mm / 800A		300mm ² / 660A	PC2-VL01-3000*	PC2-WL01-3000*
3+3	10mm / 250A	2,4	35mm ² / 160A***	PC2-VL03-0350	PC2-WL03-0350
	10mm / 250A		50mm ² / 200A	PC2-VL03-0500	PC2-WL03-0500
	10mm / 250A		70mm ² / 250A	PC2-VL03-0700 *	PC2-WL03-0700 *
4+2	8mm / 200A	2,5	25mm ² / 125A***	PC2-VL04-0250	PC2-WL04-0250
	8mm / 200A		35mm ² / 160A	PC2-VL04-0350	PC2-WL04-0350
	8mm / 200A		50mm ² / 200A	PC2-VL04-0500 *	PC2-WL04-0500 *
5+2**	8mm / 200A	2,6	25mm ² / 125A***	PC2-VL05-0250	PC2-WL05-0250
	8mm / 200A		35mm ² / 160A	PC2-VL05-0350	PC2-WL05-0350
	8mm / 200A		50mm ² / 200A	PC2-VL05-0500 *	PC2-WL05-0500 *



Dimensions ± 5mm

Socket/inverted socket stainless steel arm 90°

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product Code
1+2	10mm / 250A	1,8	35mm ² / 160A***	PC2-VL01-0350R	PC2-WL01-0350R
	10mm / 250A		50mm ² / 200A	PC2-VL01-0500R	PC2-WL01-0500R
	10mm / 250A		70mm ² / 250A	PC2-VL01-0700R	PC2-WL01-0700R
	20mm / 800A		95mm ² / 300A	PC2-VL01-0950R	PC2-WL01-0950R
	20mm / 800A		120mm ² / 350A	PC2-VL01-1200R	PC2-WL01-1200R
	20mm / 800A		150mm ² / 420A	PC2-VL01-1500R *	PC2-WL01-1500R *
	20mm / 800A		185mm ² / 480A	PC2-VL01-1850R *	PC2-WL01-1850R *
	20mm / 800A		240mm ² / 540A	PC2-VL01-2400R *	PC2-WL01-2400R *
	20mm / 800A		300mm ² / 660A	PC2-VL01-3000R *	PC2-WL01-3000R *
3+3	10mm / 250A	2	35mm ² / 160A***	PC2-VL03-0350R	PC2-WL03-0350R
	10mm / 250A		50mm ² / 200A	PC2-VL03-0500R *	PC2-WL03-0500R *
	10mm / 250A		70mm ² / 250A	PC2-VL03-0700R	PC2-WL03-0700R
4+2	8mm / 200A	2,1	25mm ² / 125A***	PC2-VL04-0250R	PC2-WL04-0250R
	8mm / 200A		35mm ² / 160A	PC2-VL04-0350R	PC2-WL04-0350R
	8mm / 200A		50mm ² / 200A	PC2-VL04-0500R *	PC2-WL04-0500R *
5+2**	8mm / 200A	2,6	25mm ² / 125A***	PC2-VL05-0250R	PC2-WL05-0250R
	8mm / 200A		35mm ² / 160A	PC2-VL05-0350R	PC2-WL05-0350R
	8mm / 200A		50mm ² / 200A	PC2-VL05-0500R *	PC2-WL05-0500R *



Dimensions ± 5mm

Cable gland

Metric Cable Glands	Cable outer Ø (mm)	PG Cable Glands	Cable outer Ø (mm)
M12 x1,5	3.0-6.5	11	5-10
M16 x1,5	5.0-10.0	13,5	6-12
M20 x1,5	6.0-12.0	16	10-14
M25 x1,5	11.0-17.0	21	13-18
M32 x1,5	15.0-21.0	29	18-25
M40 x1,5	19.0-28.0	36	22-32
M50 x1,5	28.0-38.0	42	32-28
M63 x1,5	34.0-44.0	48	37-44

* Screw type cable not available; ** Max nominal voltage 500VAC

*** For smaller sizes, please contact your local Cavotec sales office

XX Additional product code depending on type of cable glands, keying or anodizing.



PC2-EX

Size B2-EX

Applications:

- Oil and gas
- Petro-chemical
- Offshore
- Airports



The Cavotec PC2-Ex provides safe and easy power supply in the harshest of environments.

Product features


- Maximum voltage 690V, currents up to 660A
- Up to 25 pole insulator assembly covering cable size from 1,5mm² and up to 300mm²
- Certifications/Compliances: NEMKO 07ATEX1268X / EN 60079-0 :2011, IECEx NEM 14.0011X, EN 60079-1 :2007
- Ex Classification:
 - II 2G Ex d IIB T3 Gb, - 40°C ≤ Tamb ≤ +60°C
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Plug & socket connection with a ¼ turn bayonet ring and a set screw to secure the bayonet ring from loosening
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel – For extreme conditions, the body can be anodized and painted (e.g. Offshore oil rigs)
- Pins:
 - Female contacts, male pins and cable terminals are made of silver plated brass
 - High safety standard with pilot pin being shorter than the phase pins ensuring they must be connected to a circuit breaker and touching live pins (except for multi pin)
 - Interchangeable pins without dismantling the connector
- De-energize all circuits before separating
- Easy wiring with male and female insulators fully interchangeable (between plug and socket) made in POM or Grivory HTV-4H1
- Cable terminals suit for cables of class 5, IEC 60228 – Screwed-in design for a quick and easy mounting procedure

- Cable glands: selected with sufficient Ex rating, IP66 and a continuous operating temperature up to +115°C – Must be mounted on the plug and socket and chosen carefully (depending on the cable type specification)
- An extra M16 cable gland for a pilot pin cable can be mounted on the socket

Certification and norms

The ATEX/IECEx certification has been made according to ATEX Directive 94/9/EC and IECEx 02, IEC 60079-1:2007, EN 60079-0:2011, and the certifying body is NEMKO of Norway. The issued certificates are:

- NEMKO 05ATEX4254Q - (Cavotec Connectors)
- NEMKO 07ATEX1268X - (PC2 - Ex - B2)
- IECEx NEM 14.0011X
- The classification is:

 II 2G Ex d IIB T3 Gb, - 40°C ≤ Tamb ≤ +60°C

Plug/inverted plug straight bayonet fit

No Pins (P&E+pil)	Max voltage (AC)	Pin ø (mm) Max Amp	Weight kg	Cross Section / mm ²	Recommended Amperage	Plug: Male Pins Product Code	Inv.plug: Female Contacts Product Code
1+2	690/230	10/250	2.2	10 **	80	PC2-EX-SB01-S100/XX	PC2-EX-TB01-S100/XX
				16	100	PC2-EX-SB01-0160/XX	PC2-EX-TB01-0160/XX
				25	125	PC2-EX-SB01-0250/XX	PC2-EX-TB01-0250/XX
				35	160	PC2-EX-SB01-0350/XX	PC2-EX-TB01-0350/XX
				50	200	PC2-EX-SB01-0500/XX	PC2-EX-TB01-0500/XX
				70*	250	PC2-EX-SB01-0700/XX	PC2-EX-TB01-0700/XX
				95*	250	PC2-EX-SB01-0950/XX	PC2-EX-TB01-0950/XX
1+2	690/230	20/800	2.3	95	300	PC2-EX-SB01-0950/XX	PC2-EX-TB01-0950/XX
				120	350	PC2-EX-SB01-1200/XX	PC2-EX-TB01-1200/XX
				150	420	PC2-EX-SB01-1500/XX	PC2-EX-TB01-1500/XX
				185	480	PC2-EX-SB01-1850/XX	PC2-EX-TB01-1850/XX
				240	540	PC2-EX-SB01-2400/XX	PC2-EX-TB01-2400/XX
				300	660	PC2-EX-SB01-3000/XX	PC2-EX-TB01-3000/XX
				4+2	690/230	8/200	2.2
				16	100	PC2-EX-SB04-0160/XX	PC2-EX-TB04-0160/XX
				25	125	PC2-EX-SB04-0250/XX	PC2-EX-TB04-0250/XX
				35	160	PC2-EX-SB04-0350/XX	PC2-EX-TB04-0350/XX
				50*	200	PC2-EX-SB04-0500/XX	PC2-EX-TB04-0500/XX
				70 (Earth 50 mm ²)	200	PC2-EX-SB04-0701/XX	PC2-EX-TB04-0701/XX
				5+2	500/230	8/200	2.2
				16	100	PC2-EX-SB05-0160/XX	PC2-EX-TB05-0160/XX
				25	125	PC2-EX-SB05-0250/XX	PC2-EX-TB05-0250/XX
				35*	160	PC2-EX-SB05-0350/XX	PC2-EX-TB05-0350/XX
				50*	200	PC2-EX-SB05-0500/XX	PC2-EX-TB05-0500/XX
18	500	3/40	2.2	1.5	20	PC2-EX-SB18-0015/XX	PC2-EX-TB18-0015/XX
				2.5	30	PC2-EX-SB18-0025/XX	PC2-EX-TB18-0025/XX
				4	40	PC2-EX-SB18-0040/XX	PC2-EX-TB18-0040/XX
25	50	3/40	2.2	1.5	20	PC2-EX-SB25-0015/XX	PC2-EX-TB25-0015/XX
				2.5	30	PC2-EX-SB25-0025/XX	PC2-EX-TB25-0025/XX

XX Additional product code depending on type of cable glands, keying or anodizing.

* Screw type cable terminal not available

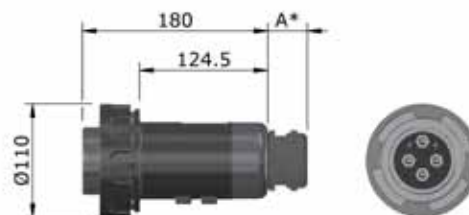
** Available only with screw termina

Ex cable gland

Size	Cable Range Øy (mm)
	Typical
M20s	9,5 - 15,9
M20	12,5 - 20,9
M25s	14,0 - 22,0
M25	18,2 - 26,2
M32	23,7 - 33,9
M40	27,9 - 40,4
M50s	35,2 - 46,7
M50	40,4 - 53,1
M63s	45,6 - 59,4



Plug/inverted plug



* Dimension A varies according to cable gland
Dimensions ± 5mm

Typical used cable glands; can be changed without further notice.



Connector/inverted connector



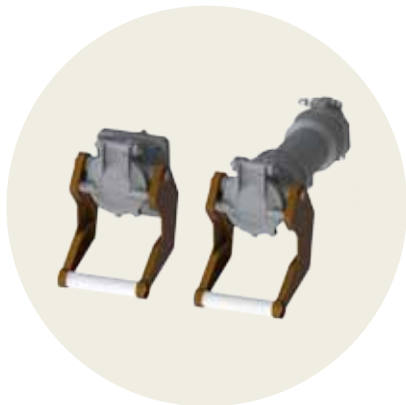
* Dimension A varies according to cable gland
Dimensions ± 5mm

PC4

Push & Pull • Size X4 – 1.1kV

Applications:

- Ports
- Steel mills
- Mining & tunnelling
- Energy
- Railways



Featuring Cavotec's Push & Pull system, the PC4-X4 is designed for safe and frequent connection and disconnection.

Product features

- Maximum voltage 1,1kV (400V in pilot circuit), currents up to 250A
- 4 or 5 pole insulator assembly as standard (See Multipin connectors data sheet for more pole)
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Plug & socket connection with integrated cover operated by the push & pull arms (Plug available in straight or bent version)
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable made in PPO (Polyphenylene Oxide)
- Interchangeable pins without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 25-55 mm

Optional features

- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- Plug cover: PCX-01614-006
- External fiber optic plug and socket
- Wall mounting bracket for Connector: PCX-49455-2204
- Wide variety of other insulator configurations available in machined POM (Polyoxymethylene)
- Cable terminals: Screw type with 2 set of screws and cable sleeves
- Finishes: Colour or non-colour anodizing / Clear coat
- Mechanical interlock & additional pilot pins

Special tools

Male pin Dia. 8, 10mm	Female contact Dia. 8, 10mm	Key width	Socket wrench (Part numb.)
PCX-11008-XXXX	PCX-12008-XXXX	12/13	PCX-92102-012
PCX-11010-XXXX	PCX-12010-XXXX	14/15	PCX-92102-0141

Plug/inverted plug, bent Push & Pull

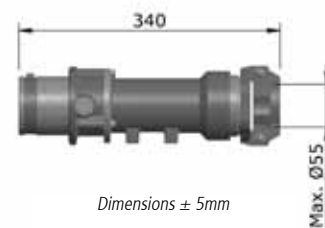
No pins (P&E+pil)	Pin ø (mm) Max Amp	Weight kg	Cross section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product code
4 + 2	10mm / 250A	1,9	35mm ² / 160A**	PC4-SX04-0350	PC4-TX04-0350
			50mm ² / 200A	PC4-SX04-0500	PC4-TX04-0500
			70mm ² / 250A	PC4-SX04-0700	PC4-TX04-0700
5 + 2	8mm / 200A	1,9	25mm ² / 125A**	PC4-SX05-0250	PC4-TX05-0250
			35mm ² / 160A	PC4-SX05-0350	PC4-TX05-0350
			50mm ² / 200A	PC4-SX05-0500	PC4-TX05-0500
			70mm ² / 200A	PC4-SX05-0700*	PC4-TX05-0700*



Dimensions ± 5mm

Plug/inverted plug, straight Push & Pull

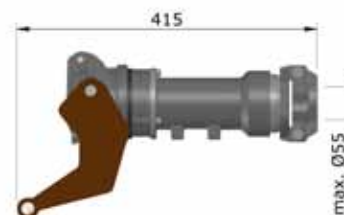
No pins (P&E+pil)	Pin ø (mm) Max Amp	Weight kg	Cross section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product code
4 + 2	10mm / 250A	1,8	35mm ² / 160A**	PC4-SX04-0350R	PC4-TX04-0350R
			50mm ² / 200A	PC4-SX04-0500R	PC4-TX04-0500R
			70mm ² / 250A	PC4-SX04-0700R	PC4-TX04-0700R
5 + 2	8mm / 200A	1,8	25mm ² / 125A**	PC4-SX05-0250R	PC4-TX05-0250R
			35mm ² / 160A	PC4-SX05-0350R	PC4-TX05-0350R
			50mm ² / 200A	PC4-SX05-0500R	PC4-TX05-0500R
			70mm ² / 200A	PC4-SX05-0700R*	PC4-TX05-0700R*



Dimensions ± 5mm

Connector/inverted connector Push & Pull

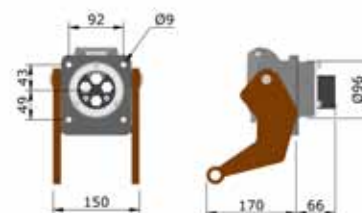
No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product code	Inv. connector: Male Pins Product Code
4 + 2	10mm / 250A	4,8	35mm ² / 160A**	PC4-RX04-0350	PC4-PX04-0350
			50mm ² / 200A	PC4-RX04-0500	PC4-PX04-0500
			70mm ² / 250A	PC4-RX04-0700	PC4-PX04-0700
5 + 2	8mm / 200A	4,8	25mm ² / 125A**	PC4-RX05-0250	PC4-PX05-0250
			35mm ² / 160A	PC4-RX05-0350	PC4-PX05-0350
			50mm ² / 200A	PC4-RX05-0500	PC4-PX05-0500
			70mm ² / 200A	PC4-RX05-0700*	PC4-PX05-0700*



Dimensions ± 5mm

Socket/inverted socket Push & Pull

No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Socket: Female Contacts Product code	Socket: Male Contacts Product code
4 + 2	10mm / 250A	3,5	35mm ² / 160A**	PC4-VX04-0350	PC4-WX04-0350
			50mm ² / 200A	PC4-VX04-0500	PC4-WX04-0500
			70mm ² / 250A	PC4-VX04-0700	PC4-WX04-0700
5 + 2	8mm / 200A	3,5	25mm ² / 125A**	PC4-VX05-0250	PC4-WX05-0250
			35mm ² / 160A	PC4-VX05-0350	PC4-WX05-0350
			50mm ² / 200A	PC4-VX05-0500	PC4-WX05-0500
			70mm ² / 200A	PC4-VX05-0700*	PC4-WX05-0700*



Dimensions ± 5mm

* Screw type cable terminal not available

** For smaller sizes, please contact your local Cavotec sales office

PC4

Screw ring • Size S4 – 1.1kV

Applications:

- Ports
- Steel mills
- Mining & tunnelling
- Energy
- Railways



The Cavotec PC4-S4 is fitted with a screw ring connection that ensures safe and easy connection in applications where space is limited.

Product features

- Maximum voltage 1,1kV (400V in pilot circuit), currents up to 250A
- 4 or 5 pole insulator assembly as standard (See Multipin connectors data sheet for more pole)
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Screw ring material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable made in PPO (Polyphenylene Oxide)
- Interchangeable pins without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 25-55 mm

Optional features

- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- External fiber optic plug and socket
- Plug available in straight or bent version
- Plug cover: PCX-01604-006
- Short straight bell for plug and connector on request
- Wide variety of other insulator configurations available in machined POM (Polyoxymethylene)
- Cable terminals: Screw type with 2 set of screws and cable sleeves
- Finishes: Colour or non-colour anodizing / Clear coat
- Housings available in bronze
- Additional pilot pins

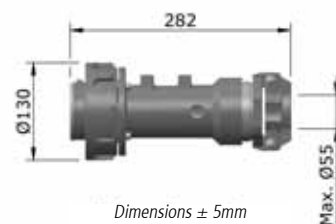
Special tools

Spanner tool for screw ring PCX-92120-130

Male pin Dia. 8, 10mm	Female contact Dia. 8, 10mm	Key width	Socket wrench (Part numb.)
PCX-11008-XXXX	PCX-12008-XXXX	12/13	PCX-92102-012
PCX-11010-XXXX	PCX-12010-XXXX	14/15	PCX-92102-0141

Plug/inverted plug, straight Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv.plug: Female Contacts Product Code
4+2	10mm / 250A	2,4	35mm ² / 160A**	PC4-SS04-0350	PC4-TS04-0350
			50mm ² / 200A	PC4-SS04-0500	PC4-TS04-0500
			70mm ² / 250A	PC4-SS04-0700	PC4-TS04-0700
5+2	8mm / 200A	2,4	25mm ² / 125A**	PC4-SS05-0250	PC4-TS05-0250
			35mm ² / 160A	PC4-SS05-0350	PC4-TS05-0350
			50mm ² / 200A	PC4-SS05-0500	PC4-TS05-0500
			70mm ² / 200A	PC4-SS05-0700*	PC4-TS05-0700*



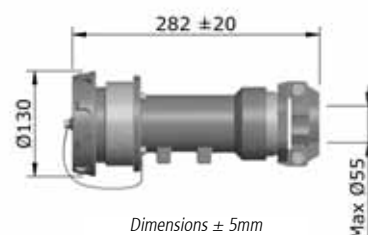
Plug/inverted plug, bent Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv.plug: Female Contacts Product Code
4+2	10mm / 250A	2,5	35mm ² / 160A**	PC4-SS04-0350B	PC4-TS04-0350B
			50mm ² / 200A	PC4-SS04-0500B	PC4-TS04-0500B
			70mm ² / 250A	PC4-SS04-0700B	PC4-TS04-0700B
5+2	8mm / 200A	2,5	25mm ² / 125A**	PC4-SS05-0250B	PC4-TS05-0250B
			35mm ² / 160A	PC4-SS05-0350B	PC4-TS05-0350B
			50mm ² / 200A	PC4-SS05-0500B	PC4-TS05-0500B
			70mm ² / 200A	PC4-SS05-0700B*	PC4-TS05-0700B*



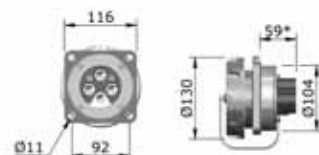
Connector/inverted connector, straight Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Inv.connector: Male Pins Product Code
4+2	10mm / 250A	2,7	35mm ² / 160A**	PC4-RS04-0350	PC4-PS04-0350
			50mm ² / 200A	PC4-RS04-0500	PC4-PS04-0500
			70mm ² / 250A	PC4-RS04-0700	PC4-PS04-0700
5+2	8mm / 200A	2,7	25mm ² / 125A**	PC4-RS05-0250	PC4-PS05-0250
			35mm ² / 160A	PC4-RS05-0350	PC4-PS05-0350
			50mm ² / 200A	PC4-RS05-0500	PC4-PS05-0500
			70mm ² / 200A	PC4-RS05-0700*	PC4-PS05-0700*



Socket/inverted socket, Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv.socket: Male Pins Product Code
4+2	10mm / 250A	1,7	35mm ² / 160A**	PC4-VS04-0350	PC4-WS04-0350
			50mm ² / 200A	PC4-VS04-0500	PC4-WS04-0500
			70mm ² / 250A	PC4-VS04-0700	PC4-WS04-0700
5+2	8mm / 200A	1,7	25mm ² / 125A**	PC4-VS05-0250	PC4-WS05-0250
			35mm ² / 160A	PC4-VS05-0350	PC4-WS05-0350
			50mm ² / 200A	PC4-VS05-0500	PC4-WS05-0500
			70mm ² / 200A	PC4-VS05-0700*	PC4-WS05-0700*



* Screw type cable terminal not available

** For smaller sizes, please contact your local Cavotec sales office

PC5

Push & Pull • Size X5 – 1.1kV

Applications:

- RTG cranes
- Steel mills
- Mining & tunnelling
- Energy
- Railways



Product features

- Maximum voltage 1,1kV (400V in pilot circuit), currents up to 420A
- 4 or 5 pole insulator assembly as standard (See Multipin connectors data sheet for more pole)
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms (Plug available in straight or bent version)
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable made in PPO (Polyphenylene Oxide)
- Interchangeable pins without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 35-72 mm

Optional features

- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- Wide variety of other insulator configurations available in machined POM (Polyoxymethylene)
- Plug cover: PCX-01615-006
- Integrated 4-channel fiberoptic or 4, 6, 8 or 12 channel external fiberoptics for plug and socket.
- Wall mounting bracket for Connector: PCX-49555-2204
- Wide variety of other insulator configurations available in machined POM (Polyoxymethylene)
- Cable terminals: Screw type with 2 set of screws and cable sleeves
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Mechanical interlock & additional pilot pins
- 240mm² cable terminal available for 4 pin, straight plug & socket max. 420A
- 4-pin insulator available with 16mm pins, 500V, 500A

Special tools

Male pin Dia. 12, 14mm	Female contact Dia. 12, 14mm	Key width	Socket wrench (Part numb.)
PCX-11012-XXXX	PCX-12012-XXXX	16/17	PCX-92102-0171
PCX-11014-XXXX		18/19	PCX-92102-019
	PCX-12014-XXXX	21/23	PCX-92102-021

Plug/inverted plug, bent Push & Pull

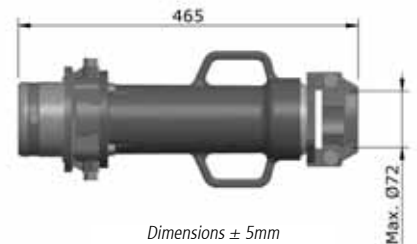
No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product code
4+2	14mm / 420A	4,5	70 mm ² / 250A **	PC5-SX04-0700	PC5-TX04-0700
			95 mm ² / 300A	PC5-SX04-0950	PC5-TX04-0950
			150 mm ² / 420A	PC5-SX04-1500*	PC5-TX04-1500*
			185 mm ² / 420A	PC5-SX04-1850*	PC5-TX04-1850*
5+2	12mm / 320A	4,5	70 mm ² / 250A **	PC5-SX05-0700	PC5-TX05-0700
			95 mm ² / 300A	PC5-SX05-0950	PC5-TX05-0950
			150 mm ² / 320A	PC5-SX05-1500*	PC5-TX05-1500*
			185 mm ² / 320A	PC5-SX05-1850*	PC5-TX05-1850*



Dimensions ± 5mm

Plug/inverted plug, straight Push & Pull

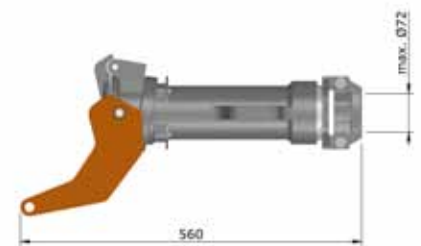
No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product code
4+2	14mm / 420A	4,5	70 mm ² / 250A**	PC5-SX04-0700R	PC5-TX04-0700R
			95 mm ² / 300A	PC5-SX04-0950R	PC5-TX04-0950R
			150 mm ² / 420A	PC5-SX04-1500R*	PC5-TX04-1500R*
			185 mm ² / 420A	PC5-SX04-1850R*	PC5-TX04-1850R*
5+2	12mm / 320A	4,5	70 mm ² / 250A**	PC5-SX05-0700R	PC5-TX05-0700R
			95 mm ² / 300A	PC5-SX05-0950R	PC5-TX05-0950R
			150 mm ² / 320A	PC5-SX05-1500R*	PC5-TX05-1500R*
			185 mm ² / 320A	PC5-SX05-1850R*	PC5-TX05-1850R*



Dimensions ± 5mm

Connector/inverted connector, straight Push & Pull

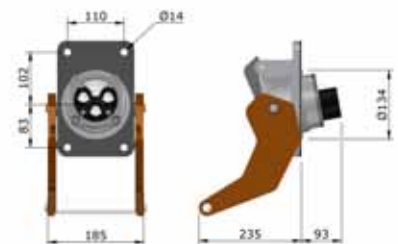
No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Inv. Connector: Male Pins Product code
4+2	14mm / 420A	9,4	70 mm ² / 250A**	PC5-RX04-0700	PC5-PX04-0700
			95 mm ² / 300A	PC5-RX04-0950	PC5-PX04-0950
			150 mm ² / 420A	PC5-RX04-1500*	PC5-PX04-1500*
			185 mm ² / 420A	PC5-RX04-1850*	PC5-PX04-1850*
5+2	12mm / 320A	9,4	70 mm ² / 250A**	PC5-RX05-0700	PC5-PX05-0700
			95 mm ² / 300A	PC5-RX05-0950	PC5-PX05-0950
			150 mm ² / 320A	PC5-RX05-1500*	PC5-PX05-1500*
			185 mm ² / 320A	PC5-RX05-1850*	PC5-PX05-1850*



Dimensions ± 5mm

Socket/inverted socket Push & Pull

No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product code
4+2	14mm / 420A	7,8	70 mm ² / 250A**	PC5-VX04-0700	PC5-WX04-0700
			95 mm ² / 300A	PC5-VX04-0950	PC5-WX04-0950
			150 mm ² / 420A	PC5-VX04-1500*	PC5-WX04-1500*
			185 mm ² / 420A	PC5-VX04-1850*	PC5-WX04-1850*
5+2	12mm / 320A	7,8	70 mm ² / 250A**	PC5-VX05-0700	PC5-WX05-0700
			95 mm ² / 300A	PC5-VX05-0950	PC5-WX05-0950
			150 mm ² / 320A	PC5-VX05-1500*	PC5-WX05-1500*
			185 mm ² / 320A	PC5-VX05-1850*	PC5-WX05-1850*



Dimensions ± 5mm

*Screw type cable terminal not available

** For smaller sizes, please contact your local Cavotec sales office

PC5

Push & Pull • Size X5 – 7.2kV

Applications:

- RTG cranes
- Ports
- Steel mills
- Mining & tunnelling
- Railways



Product features

- Maximum voltage 7,2kV (400V in pilot circuit), currents up to 350A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 185mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass/copper
- Easy wiring with male and female insulators fully interchangeable made in machined POM (Polyoxymethylene) as standard
- Interchangeable pins & contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 35-72 mm
- For termination of the cable terminals, industry approved termination kits for 7,2kV must be used. Termination kits may be supplied by Cavotec on request.

Optional features

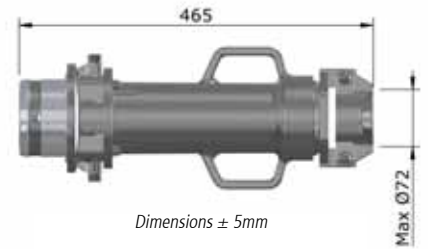
- Plug cover: PCX-01615-006
- Finger protection female socket: PCX-24570-404K
- Finger protection male plug: PCX-24571-404K
- Termination kit 3M 95-185mm²: PCX-89007-031
- Termination kit Raychem 25-95mm², IXSU F3121: PEE-07062-860
- Termination kit Raychem 95-240mm², IXSU F3131: PEE-07062-880
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Wall mounting bracket for Connector: PCX-49555-2204
- Mechanical interlock through different type of key locking system & additional pilot pins
- External fiber optic plug and socket

Special tools

Male pin Dia. 12mm	Female contact Dia. 12mm	Key width	Socket wrench (Part numb.)
PCX-11012-XXXX	PCX-12012-XXXX	16/17	PCX-92102-0171

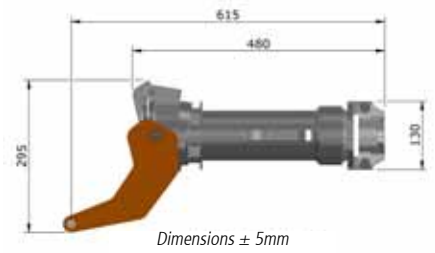
Plug/inverted plug, straight Push & Pull

No poles (P&E+pil)	Max. voltage phase / pilot	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Male Pins Product Code	Connector: Female Contacts Product Code
4+2	7200V / 400V	12mm / 350A	6	50 mm ² / 200A*	PC5-SX04-K0500	PC5-TX04-K0500
				70 mm ² / 250A	PC5-SX04-K0700	PC5-TX04-K0700
				95 mm ² / 300A	PC5-SX04-K0950	PC5-TX04-K0950
				150 mm ² / 350A	PC5-SX04-K1500	PC5-TX04-K1500
4+3	7200V / 400V	12mm / 350A	6	50 mm ² / 200A*	PC5-SX04-K05003	PC5-TX04-K05003
				70 mm ² / 250A	PC5-SX04-K07003	PC5-TX04-K07003
				95 mm ² / 300A	PC5-SX04-K09503	PC5-TX04-K09503
				150 mm ² / 350A	PC5-SX04-K15003	PC5-TX04-K15003
				185 mm ² / 350A	PC5-SX04-K18503	PC5-TX04-K18503



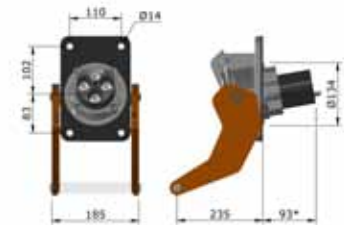
Connector/inverted connector Push & Pull

No poles (P&E+pil)	Max. voltage phase / pilot	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	9.4	50 mm ² / 200A*	PC5-RX04-K0500RD	PC5-PX04-K0500RD
				70 mm ² / 250A	PC5-RX04-K0700RD	PC5-PX04-K0700RD
				95 mm ² / 300A	PC5-RX04-K0950RD	PC5-PX04-K0950RD
				150 mm ² / 350A	PC5-RX04-K1500RD	PC5-PX04-K1500RD
4+3	7200V / 400V	12mm / 350A	9.4	50 mm ² / 200A*	PC5-RX04-K05003RD	PC5-PX04-K05003RD
				70 mm ² / 250A	PC5-RX04-K07003RD	PC5-PX04-K07003RD
				95 mm ² / 300A	PC5-RX04-K09503RD	PC5-PX04-K09503RD
				150 mm ² / 350A	PC5-RX04-K15003RD	PC5-PX04-K15003RD
				185 mm ² / 350A	PC5-RX04-K18503RD	PC5-PX04-K18503RD



Socket/inverted socket Push & Pull

No poles (P&E+pil)	Max. voltage phase / pilot	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	7.8	50 mm ² / 200A*	PC5-VX04-K0500	PC5-WX04-K0500
				70 mm ² / 250A	PC5-VX04-K0700	PC5-WX04-K0700
				95 mm ² / 300A	PC5-VX04-K0950	PC5-WX04-K0950
				150 mm ² / 350A	PC5-VX04-K1500	PC5-WX04-K1500
4+3	7200V / 400V	12mm / 350A	7.8	50 mm ² / 200A*	PC5-VX04-K05003	PC5-WX04-K05003
				70 mm ² / 250A	PC5-VX04-K07003	PC5-WX04-K07003
				95 mm ² / 300A	PC5-VX04-K09503	PC5-WX04-K09503
				150 mm ² / 350A	PC5-VX04-K15003	PC5-WX04-K15003
				185 mm ² / 350A	PC5-VX04-K18503	PC5-WX04-K18503



* For smaller sizes, please contact your local Cavotec sales office

PC5

Screw ring • Size S5 – 1.1kV

Applications:

- Ports
- Steel mills
- Mining & tunnelling
- Railways



Product features

- Maximum voltage 1,1kV (400V in pilot circuit), currents up to 420A
- 4 or 5 pole insulator assembly as standard (See Multipin connectors data sheet for more pole) covering cable sizes up to 185mm²
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Screw ring material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable made in PPO (Polyphenylene Oxide)
- Interchangeable pins without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 35-72 mm

Optional features

- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- Integrated 4-channel fiberoptic or 4, 6, 8 or 12 channel external fiberoptics for plug and socket
- Plug available in straight or bent version
- Plug cover: PCX-01605-006
- Wide variety of other insulator configurations available in machined POM (Polyoxymethylene)
- Cable terminals: Screw type with 2 set of screws and cable sleeves
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Housings available in bronze
- Additional pilot pins
- 240mm² cable terminal available for 4 pin, straight plug & socket max. 420A
- 4-pin insulator available with 16mm pins, 500V, 500A

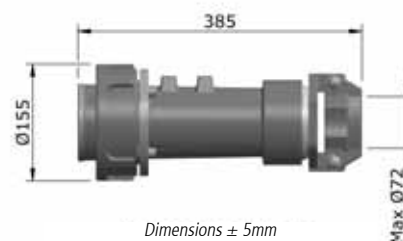
Special tools

Spanner tool for screw ring PCX-92135-145

Male pin Dia. 12, 14mm	Female contact Dia. 12, 14mm	Key width	Socket wrench (Part numb.)
PCX-11012-XXXX	PCX-12012-XXXX	16/17	PCX-92102-0171
PCX-11014-XXXX		18/19	PCX-92102-019
	PCX-12014-XXXX	21/23	PCX-92102-021

Plug/inverted plug, straight Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv.Plug: Female Contacts Product Code
4+2	14mm / 420A	4,6	70mm ² / 250A**	PC5-SS04-0700	PC5-TS04-0700
			95mm ² / 300A	PC5-SS04-0950	PC5-TS04-0950
			150mm ² / 420A	PC5-SS04-1500*	PC5-TS04-1500*
			185mm ² / 420A	PC5-SS04-1850*	PC5-TS04-1850*
5+2	12mm / 320A	4,6	70mm ² / 250A**	PC5-SS05-0700	PC5-TS05-0700
			95mm ² / 300A	PC5-SS05-0950	PC5-TS05-0950
			150mm ² / 320A	PC5-SS05-1500*	PC5-TS05-1500*
			185mm ² / 320A	PC5-SS05-1850*	PC5-TS05-1850*



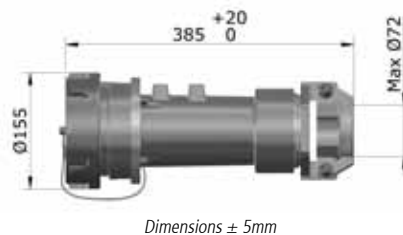
Plug/inverted plug, bent Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv.Plug: Female Contacts Product Code
4+2	14mm / 420A	4,8	70mm ² / 250A**	PC5-SS04-0700B	PC5-TS04-0700B
			95mm ² / 300A	PC5-SS04-0950B	PC5-TS04-0950B
			150mm ² / 420A	PC5-SS04-1500B*	PC5-TS04-1500B*
			185mm ² / 420A	PC5-SS04-1850B*	PC5-TS04-1850B*
5+2	12mm / 320A	4,8	70mm ² / 250A**	PC5-SS05-0700B	PC5-TS05-0700B
			95mm ² / 300A	PC5-SS05-0950B	PC5-TS05-0950B
			150mm ² / 320A	PC5-SS05-1500B*	PC5-TS05-1500B*
			185mm ² / 320A	PC5-SS05-1850B*	PC5-TS05-1850B*



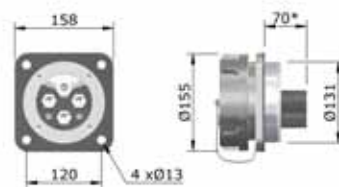
Connector/inverted connector, straight Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Inv.Connector: Male Pins Product Code
4+2	14mm / 420A	5,1	70mm ² / 250A**	PC5-RS04-0700	PC5-PS04-0700
			95mm ² / 300A	PC5-RS04-0950	PC5-PS04-0950
			150mm ² / 420A	PC5-RS04-1500*	PC5-PS04-1500*
			185mm ² / 420A	PC5-RS04-1850*	PC5-PS04-1850*
5+2	12mm / 320A	5,1	70mm ² / 250A**	PC5-RS05-0700	PC5-PS05-0700
			95mm ² / 300A	PC5-RS05-0950	PC5-PS05-0950
			150mm ² / 320A	PC5-RS05-1500*	PC5-PS05-1500*
			185mm ² / 320A	PC5-RS05-1850*	PC5-PS05-1850*



Socket/inverted socket, Screw Ring

No Pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv.Socket: Male Pins Product Code
4+2	14mm / 420A	3,3	70mm ² / 250A**	PC5-VS04-0700	PC5-WS04-0700
			95mm ² / 300A	PC5-VS04-0950	PC5-WS04-0950
			150mm ² / 420A	PC5-VS04-1500*	PC5-WS04-1500*
			185mm ² / 420A	PC5-VS04-1850*	PC5-WS04-1850*
5+2	12mm / 320A	3,3	70mm ² / 250A**	PC5-VS05-0700	PC5-WS05-0700
			95mm ² / 300A	PC5-VS05-0950	PC5-WS05-0950
			150mm ² / 320A	PC5-VS05-1500*	PC5-WS05-1500*
			185mm ² / 320A	PC5-VS05-1850*	PC5-WS05-1850*



* For an easy connection
the minimum box height must be 70+55mm
Dimensions ± 5mm

* Screw type cable terminal not available

** For smaller sizes, please contact your local Cavotec sales office

PC5

Screw ring • Size S5 – 7.2kV

Applications:

- Ports
- Steel mills
- Construction
- Mining & tunnelling
- Energy
- Oil industry



Product features

- Maximum voltage 7,2kV (400V in pilot circuit), currents up to 350A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 185mm²
- IP66 (when mated or capped – if not, protection with covers secured with a retention wire)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Screw ring material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass/copper
- Easy wiring with male and female insulators fully interchangeable made in machined POM as standard
- Interchangeable pins & contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Cavotec “onion ring” gasket and strain relief covering cable outer diameters from Ø 35-72 mm
- For termination of the cable terminals, industry approved termination kits for 7,2kV must be used. Termination kits may be supplied by Cavotec on request.

Optional features

- Plug cover: PCX-01605-006
- Finger protection female socket: PCX-24570-404K
- Finger protection male plug: PCX-24571-404K
- Termination kit 3M 95-185mm²: PCX-89007-031
- Termination kit Raychem 25-95mm², IXSU 3121: PEE-07062-860
- Termination kit Raychem 95-240mm², IXSU 3131: PEE-07062-880
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Additional pilot pins
- External fiber optic plug and socket
- 240mm² cable terminal available for 4 pin, straight plug & socket max. 420A
- 4-pin insulator available with 16mm pins, 500V, 500A

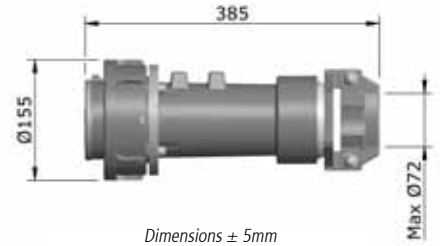
Special tools

Spanner tool for screw ring PCX-92135-145

Male pin Dia. 12mm	Female contact Dia. 12mm	Key width	Socket wrench (Part numb.)
PCX-11012-XXXX	PCX-12012-XXXX	16/17	PCX-92102-0171

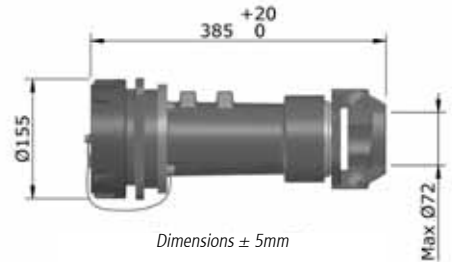
Plug/inverted plug, straight Screw Ring

No poles (P&E+pil)	Max. voltage phase / pilot	Pin Ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	4.6	50 mm ² / 200A*	PC5-SS04-K0500	PC5-TS04-K0500
				70 mm ² / 250A	PC5-SS04-K0700	PC5-TS04-K0700
				95 mm ² / 300A	PC5-SS04-K0950	PC5-TS04-K0950
				150 mm ² / 350A	PC5-SS04-K1500	PC5-TS04-K1500
				185 mm ² / 350A	PC5-SS04-K1850	PC5-TS04-K1850
4+3	7200V / 400V	12mm / 350A	4.6	50 mm ² / 200A*	PC5-SS04-K05003	PC5-TS04-K05003
				70 mm ² / 250A	PC5-SS04-K07003	PC5-TS04-K07003
				95 mm ² / 300A	PC5-SS04-K09503	PC5-TS04-K09503
				150 mm ² / 350A	PC5-SS04-K15003	PC5-TS04-K15003
				185 mm ² / 350A	PC5-SS04-K18503	PC5-TS04-K18503



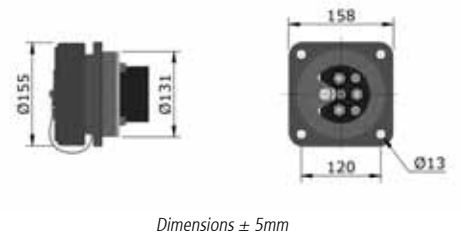
Connector/inverted connector straight Screw Ring

No poles (P&E+pil)	Max. voltage phase / pilot	Pin Ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	5.1	50 mm ² / 200A*	PC5-RS04-K0500	PC5-PS04-K0500
				70 mm ² / 250A	PC5-RS04-K0700	PC5-PS04-K0700
				95 mm ² / 300A	PC5-RS04-K0950	PC5-PS04-K0950
				150 mm ² / 350A	PC5-RS04-K1500	PC5-PS04-K1500
				185 mm ² / 350A	PC5-RS04-K1850	PC5-PS04-K1850
4+3	7200V / 400V	12mm / 350A	5.1	50 mm ² / 200A*	PC5-RS04-K05003	PC5-PS04-K05003
				70 mm ² / 250A	PC5-RS04-K07003	PC5-PS04-K07003
				95 mm ² / 300A	PC5-RS04-K09503	PC5-PS04-K09503
				150 mm ² / 350A	PC5-RS04-K15003	PC5-PS04-K15003
				185 mm ² / 350A	PC5-RS04-K18503	PC5-PS04-K18503



Socket/inverted socket, Screw Ring

No poles (P&E+pil)	Max. voltage phase / pilot	Pin Ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	2.9	50 mm ² / 200A*	PC5-VS04-K0500	PC5-WS04-K0500
				70 mm ² / 250A	PC5-VS04-K0700	PC5-WS04-K0700
				95 mm ² / 300A	PC5-VS04-K0950	PC5-WS04-K0950
				150 mm ² / 350A	PC5-VS04-K1500	PC5-WS04-K1500
				185 mm ² / 350A	PC5-VS04-K1850	PC5-WS04-K1850
4+3	7200V / 400V	12mm / 350A	2.9	50 mm ² / 200A*	PC5-VS04-K05003	PC5-WS04-K05003
				70 mm ² / 250A	PC5-VS04-K07003	PC5-WS04-K07003
				95 mm ² / 300A	PC5-VS04-K09503	PC5-WS04-K09503
				150 mm ² / 350A	PC5-VS04-K15003	PC5-WS04-K15003
				185 mm ² / 350A	PC5-VS04-K18503	PC5-WS04-K18503



* For smaller sizes, please contact your local Cavotec sales office

PC6

Push & Pull • Size X6 – 1.1kV

Applications:

- RTG cranes
- Steel mills
- Mining & tunnelling
- Energy
- Railways



Product features

- Maximum voltage 1,1kV, currents up to 660A
- 4 or 5 pole insulator assembly as standard covering cable sizes up to 300mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable made in POM (Polyoxymethylene)
- Interchangeable pins & female contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 45-110mm

Optional features

- Plug cover: PCX-01616-006
- Wall mounting bracket for Connector: PCX-49X10-2002
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Mechanical interlock & additional pilot pins
- Up to 12ch integrated (EB) or up to 18ch externally (butt joint)

Special tools

Male pin Dia. 14, 16, 20mm	Female contact Dia. 14, 16, 20mm	Key width	Socket wrench (Part numb.)
PCX-11014-XXXX		18/19	PCX-92102-019
	PCX-12014-XXXX	21/23	PCX-92102-021
PCX-11016-XXXX		18/19	PCX-92102-019
	PCX-12016-XXXX	21/23	PCX-92102-021
PCX-11020-XXXX	PCX-12020-XXXX	30/32	PCX-92102-030

Plug/inverted plug, straight Push & Pull

No pins (P&E+pil)	Pin ø (mm) Max Amp	Weight kg	Cross section mm ² / Rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product code
4+2	20mm / 800A	10	95 mm ² / 300A*	PC6-SX04-0950	PC6-TX04-0950
			120 mm ² / 350A	PC6-SX04-1200	PC6-TX04-1200
			150 mm ² / 420A	PC6-SX04-1500	PC6-TX04-1500
			185 mm ² / 480A	PC6-SX04-1850	PC6-TX04-1850
			240 mm ² / 540A	PC6-SX04-2400	PC6-TX04-2400
5+2	16mm / 500A	10	95 mm ² / 300A*	PC6-SX05-0950	PC6-TX05-0950
			120 mm ² / 350A	PC6-SX05-1200	PC6-TX05-1200
			150 mm ² / 420A	PC6-SX05-1500	PC6-TX05-1500
			185 mm ² / 480A	PC6-SX05-1850	PC6-TX05-1850
			240 mm ² / 500A	PC6-SX05-2400	PC6-TX05-2400



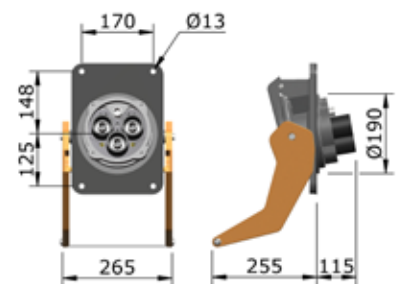
Connector/inverted connector, straight Push & Pull

No pins (P&E+pil)	Pin ø (mm) Max Amp	Weight kg	Cross section mm ² / Rec. Amp	Connector Female Contacts Product Code	Inv. Connector: Male Pins Product Code
4+2	20mm/800A	18	95 mm ² / 300A*	PC6-RX04-0950	PC6-PX04-0950
			120 mm ² / 350A	PC6-RX04-1200	PC6-PX04-1200
			150 mm ² / 420A	PC6-RX04-1500	PC6-PX04-1500
			185 mm ² / 480A	PC6-RX04-1850	PC6-PX04-1850
			240 mm ² / 540A	PC6-RX04-2400	PC6-PX04-2400
5+2	16mm/500A	18	95 mm ² / 300A*	PC6-RX05-0950	PC6-PX05-0950
			120 mm ² / 350A	PC6-RX05-1200	PC6-PX05-1200
			150 mm ² / 420A	PC6-RX05-1500	PC6-PX05-1500
			185 mm ² / 480A	PC6-RX05-1850	PC6-PX05-1850
			240 mm ² / 500A	PC6-RX05-2400	PC6-PX05-2400



Socket/inverted socket Push & Pull

No pins (P&E+pil)	Pin ø (mm) Max. Amp	Weight kg	Cross section mm ² / Rec. Amp	Socket: Female Contacts Product Code	Inv. Socket: Male Pins Product code
4+2	20mm/800A	12	95 mm ² / 300A*	PC6-VX04-0950	PC6-WX04-0950
			120 mm ² / 350A	PC6-VX04-1200	PC6-WX04-1200
			150 mm ² / 420A	PC6-VX04-1500	PC6-WX04-1500
			185 mm ² / 480A	PC6-VX04-1850	PC6-WX04-1850
			240 mm ² / 540A	PC6-VX04-2400	PC6-WX04-2400
5+2	16mm/500A	12	95 mm ² / 300A*	PC6-VX05-0950	PC6-WX05-0950
			120 mm ² / 350A	PC6-VX05-1200	PC6-WX05-1200
			150 mm ² / 420A	PC6-VX05-1500	PC6-WX05-1500
			185 mm ² / 480A	PC6-VX05-1850	PC6-WX05-1850
			240 mm ² / 500A	PC6-VX05-2400	PC6-WX05-2400



Dimensions ± 5mm

*For smaller sizes, please contact your local Cavotec sales office

PC6

Push & Pull • Size X6 – 7.2kV

Applications:

- RTG cranes
- Steel mills
- Mining & tunnelling
- Energy
- Railways



Product features

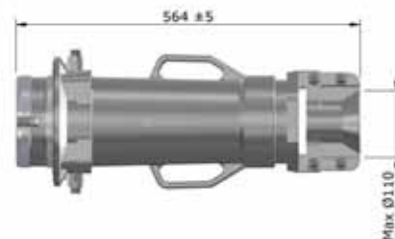
- Maximum voltage 7,2kV (400V in pilot circuit), currents up to 500A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 300mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass/copper
- Easy wiring with male and female insulators fully interchangeable made in POM (Polyoxymethylene)
- Interchangeable pins & female contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 45-110mm
- For termination of the cable terminals, industry approved termination kits for 7,2kV must be used. Termination kits may be supplied by Cavotec on request.
- Standard cable terminals for crimping with hexagonal crimping tool

Optional features

- Plug cover: PCX-01616-006
- Finger protection female socket: PCX-24670-404K (7,2kV)
- Termination kit Raychem 10-35mm², IXSU F3111: PEE-07062-850
- Termination kit Raychem 25-95mm², IXSU F3121: PEE-07062-860
- Termination kit Raychem 95-240mm², IXSU F3131: PEE-07062-880
- Wall mounting bracket for Connector: PCX-49X10-2002
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Mechanical interlock through different type of key locking system & additional pilot pins or multipin signal pins
- Up to 12ch integrated (EB) or up to 18ch externally (butt joint)

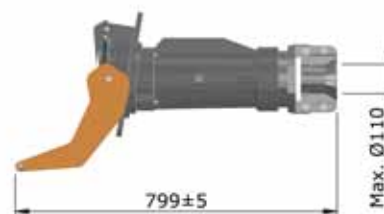
Plug/inverted plug, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Plug: Male Pins Product Code	Inv. Plug: Female Contacts Product Code
4+2	7200/400	16mm / 500A	10	25 mm ² / 125A*	PC6-SX04-K0250	PC6-TX04-K0250
				35 mm ² / 160A	PC6-SX04-K0350	PC6-TX04-K0350
				50 mm ² / 200A	PC6-SX04-K0500	PC6-TX04-K0500
				70 mm ² / 250A	PC6-SX04-K0700	PC6-TX04-K0700
				95 mm ² / 300A	PC6-SX04-K0950	PC6-TX04-K0950
				120 mm ² / 350A	PC6-SX04-K1200	PC6-TX04-K1200
				150 mm ² / 420A	PC6-SX04-K1500	PC6-TX04-K1500
				185mm ² / 500A	PC6-SX04-K1850	PC6-TX04-K1850
				240mm ² / 500A	PC6-SX04-K2400	PC6-TX04-K2400
				300mm ² / 500A	PC6-SX04-K3000	PC6-TX04-K3000
4+3	7200/400	16mm / 500A	10	25 mm ² / 125A*	PC6-SX04-K02503	PC6-TX04-K02503
				35 mm ² / 160A	PC6-SX04-K03503	PC6-TX04-K03503
				50 mm ² / 200A	PC6-SX04-K05003	PC6-TX04-K05003
				70 mm ² / 250A	PC6-SX04-K07003	PC6-TX04-K07003
				95 mm ² / 300A	PC6-SX04-K09503	PC6-TX04-K09503
				120 mm ² / 350A	PC6-SX04-K12003	PC6-TX04-K12003
				150 mm ² / 420A	PC6-SX04-K15003	PC6-TX04-K15003
				185mm ² / 500A	PC6-SX04-K18503	PC6-TX04-K18503
				240mm ² / 500A	PC6-SX04-K24003	PC6-TX04-K24003
				300mm ² / 500A	PC6-SX04-K30003	PC6-TX04-K30003



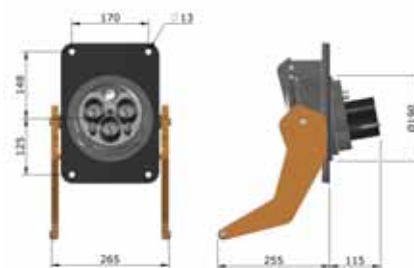
Connector/inverted connector, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Connector: Female Contacts Product Code	Inv. Connector: Male Pins Product Code
4+2	7200/400	16mm / 500A	19	25 mm ² / 125A*	PC6-RX04-K0250	PC6-PX04-K0250
				35 mm ² / 160A	PC6-RX04-K0350	PC6-PX04-K0350
				50 mm ² / 200A	PC6-RX04-K0500	PC6-PX04-K0500
				70 mm ² / 250A	PC6-RX04-K0700	PC6-PX04-K0700
				95 mm ² / 300A	PC6-RX04-K0950	PC6-PX04-K0950
				120 mm ² / 350A	PC6-RX04-K1200	PC6-PX04-K1200
				150 mm ² / 420A	PC6-RX04-K1500	PC6-PX04-K1500
				185mm ² / 500A	PC6-RX04-K1850	PC6-PX04-K1850
				240mm ² / 500A	PC6-RX04-K2400	PC6-PX04-K2400
				300mm ² / 500A	PC6-RX04-K3000	PC6-PX04-K3000
4+3	7200/400	16mm / 500A	19	25 mm ² / 125A*	PC6-RX04-K02503	PC6-PX04-K02503
				35 mm ² / 160A	PC6-RX04-K03503	PC6-PX04-K03503
				50 mm ² / 200A	PC6-RX04-K05003	PC6-PX04-K05003
				70 mm ² / 250A	PC6-RX04-K07003	PC6-PX04-K07003
				95 mm ² / 300A	PC6-RX04-K09503	PC6-PX04-K09503
				120 mm ² / 350A	PC6-RX04-K12003	PC6-PX04-K12003
				150 mm ² / 420A	PC6-RX04-K15003	PC6-PX04-K15003
				185mm ² / 500A	PC6-RX04-K18503	PC6-PX04-K18503
				240mm ² / 500A	PC6-RX04-K24003	PC6-PX04-K24003
				300mm ² / 500A	PC6-RX04-K30003	PC6-PX04-K30003



Socket/inverted socket Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Socket Female Contacts Product Code	Inv. Socket: Male Pins Product Code
4+2	7200/400	16mm / 500A	12	25 mm ² / 125A*	PC6-VX04-K0250	PC6-WX04-K0250
				35 mm ² / 160A	PC6-VX04-K0350	PC6-WX04-K0350
				50 mm ² / 200A	PC6-VX04-K0500	PC6-WX04-K0500
				70 mm ² / 250A	PC6-VX04-K0700	PC6-WX04-K0700
				95 mm ² / 300A	PC6-VX04-K0950	PC6-WX04-K0950
				120 mm ² / 350A	PC6-VX04-K1200	PC6-WX04-K1200
				150 mm ² / 420A	PC6-VX04-K1500	PC6-WX04-K1500
				185mm ² / 500A	PC6-VX04-K1850	PC6-WX04-K1850
				240mm ² / 500A	PC6-VX04-K2400	PC6-WX04-K2400
				300mm ² / 500A	PC6-VX04-K3000	PC6-WX04-K3000
4+3	7200/400	16mm / 500A	12	95 mm ² / 300A	PC6-VX04-K09503	PC6-WX04-K09503
				35 mm ² / 160A	PC6-VX04-K03503	PC6-WX04-K03503
				50 mm ² / 200A	PC6-VX04-K05003	PC6-WX04-K05003
				70 mm ² / 250A	PC6-VX04-K07003	PC6-WX04-K07003
				95 mm ² / 300A	PC6-VX04-K09503	PC6-WX04-K09503
				120 mm ² / 350A	PC6-VX04-K12003	PC6-WX04-K12003
				150 mm ² / 420A	PC6-VX04-K15003	PC6-WX04-K15003
				185mm ² / 500A	PC6-VX04-K18503	PC6-WX04-K18503
				240mm ² / 500A	PC6-VX04-K24003	PC6-WX04-K24003
				300mm ² / 500A	PC6-VX04-K30003	PC6-WX04-K30003



Dimensions ± 5mm

* For smaller sizes, please contact your local Cavotec sales office

PC6

Push & Pull • Size X6 – 12kV

Applications:

- RTG cranes
- Shore
- Mining & tunnelling
- Energy
- Ports



Product features

- Maximum voltage 12kV (400V in pilot circuit), currents up to 500A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 240mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated copper
- Easy wiring with male and female insulators made in PTFE (Teflon)
- Interchangeable pins & female contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 45-110mm
- For termination of the cable terminals, industry approved termination kits for 12kV must be used. Termination kits and gel may be supplied by Cavotec on request.
- Standard cable terminals for crimping with hexagonal crimping tool
- Back parts of insulators has to be gel fitted "potted"

Optional features

- Plug cover: PCX-01616-006
- Finger protection female socket: PCX-21670-4X4L
- Termination kit Raychem 10-35mm², IXSU F3111: PEE-07062-850
- Termination kit Raychem 25-95mm², IXSU F3121: PEE-07062-860
- Termination kit Raychem 95-240mm², IXSU F3131: PEE-07062-880
- Wall mounting bracket for Connector: PCX-49X10-2002
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Mechanical interlock through different type of key locking system & additional pilot pins or multipin signal pins
- Up to 18ch external fiber optics (butt joint)
- Gel Raychen Guroflex D035-1: PCX-89502-351

Special tools

Allen key 5 mm (PCX-93003-005)

Male pin Dia. 14, 16mm	Female contact Dia. 14, 16mm	Key width	Socket wrench (Part numb.)
PCX-11014-XXXX		18/19	PCX-92102-019
	PCX-12014-XXXX	21/23	PCX-92102-021
PCX-11016-082	PCX-12016-XXXX	21/23	PCX-92102-021

Plug/inverted plug, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Plug: Male Pins Product Code
4+2	12000V/400V	16mm / 500A	11	25 mm ² / 125A*	PC6-SX04-L0250
				35 mm ² / 160A	PC6-SX04-L0350
				50 mm ² / 200A	PC6-SX04-L0500
				70 mm ² / 250A	PC6-SX04-L0700
				95 mm ² / 300A	PC6-SX04-L0950
				120 mm ² / 350A	PC6-SX04-L1200
				150 mm ² / 420A	PC6-SX04-L1500
				185 mm ² / 480A**	PC6-SX04-L1850
				240 mm ² / 500A**	PC6-SX04-L2400



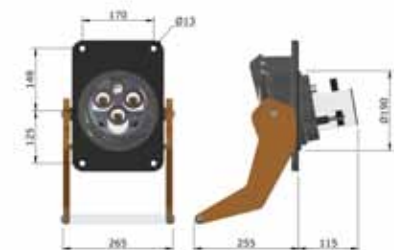
Connector/inverted connector, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Connector: Female Contacts Product Code
4+2	12000V/400V	16mm / 500A	20	25 mm ² / 125A*	PC6-RX04-L0250
				35 mm ² / 160A	PC6-RX04-L0350
				50 mm ² / 200A	PC6-RX04-L0500
				70 mm ² / 250A	PC6-RX04-L0700
				95 mm ² / 300A	PC6-RX04-L0950
				120 mm ² / 350A	PC6-RX04-L1200
				150 mm ² / 420A	PC6-RX04-L1500
				185 mm ² / 480A**	PC6-RX04-L1850
				240 mm ² / 500A**	PC6-SX04-L2400



Socket/inverted socket Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Socket: Female Contacts Product Code
4+2	12000V/400V	16mm / 500A	13	25 mm ² / 125A	PC6-VX04-L0250
				35 mm ² / 160A	PC6-VX04-L0350
				50 mm ² / 200A	PC6-VX04-L0500
				70 mm ² / 250A	PC6-VX04-L0700
				95 mm ² / 300A	PC6-VX04-L0950
				120 mm ² / 350A	PC6-VX04-L1200
				150 mm ² / 420A	PC6-VX04-L1500
				185 mm ² / 480A**	PC6-VX04-L1850
				240 mm ² / 500A**	PC6-SX04-L2400



Dimensions ± 5mm

*For smaller sizes, please contact your local Cavotec sales office

** This option is only available if the cable core including termination doesn't exceed 34mm diameter

PC6

Push & Pull • Size X6 – 15kV

Applications:

- RTG cranes
- Shore
- Mining & tunnelling
- Ports



Product features

- Maximum voltage 15kV (400V in pilot circuit), currents up to 500A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 240mm²
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector connection with integrated cover operated by the push & pull arms
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated copper
- Easy wiring with male and female insulators made in PTFE (Teflon)
- Interchangeable pins & female contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Cable glands: Cavotec "onion ring" gasket and strain relief covering cable outer diameters from Ø 45-110mm
- For termination of the cable terminals, industry approved termination kits for 15kV must be used. Termination kits may be supplied by Cavotec on request.
- Standard cable terminals for crimping with hexagonal crimping tool
- Back parts of insulators have to be filed with non-reenterable epoxy compound.

Optional features

- Plug cover: PCX-01616-006
- Finger protection female socket: PCX-21670-4X4L
- Termination kit Raychem 10-35mm², IXSU F3111: PEE-07062-850
- Termination kit Raychem 25-95mm², IXSU F3121: PEE-07062-860
- Termination kit Raychem 95-240mm², IXSU F3131: PEE-07062-880
- Wall mounting bracket for Connector: PCX-49X10-2002
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting
- Mechanical interlock through different type of key locking system & additional pilot pins or multipin signal pins
- Up to 18ch external fibre optics (butt joint)

Special tools

Allen key 5 mm (PCX-93003-005)

Male pin Dia. 14, 16mm	Female contact Dia. 14, 16mm	Key width	Socket wrench (Part numb.)
PCX-11014-XXXX		18/19	PCX-92102-019
	PCX-12014-XXXX	21/23	PCX-92102-021
PCX-11016-082	PCX-12016-XXXX	21/23	PCX-92102-021

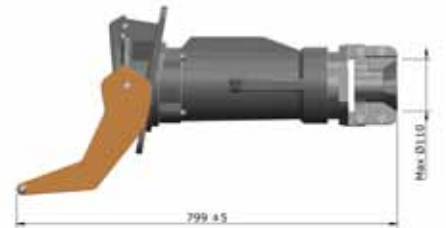
Plug/inverted plug, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Plug: Male Pins Product Code
4+2	15000V/400V	16mm / 500A	11	25 mm ² / 125A*	PC6-SX04-M0250
				35 mm ² / 160A	PC6-SX04-M0350
				50 mm ² / 200A	PC6-SX04-M0500
				70 mm ² / 250A	PC6-SX04-M0700
				95 mm ² / 300A	PC6-SX04-M0950
				120 mm ² / 350A	PC6-SX04-M1200
				150 mm ² / 420A	PC6-SX04-M1500
				185 mm ² / 480A**	PC6-SX04-M1850
				240 mm ² / 500A**	PC6-SX04-M2400



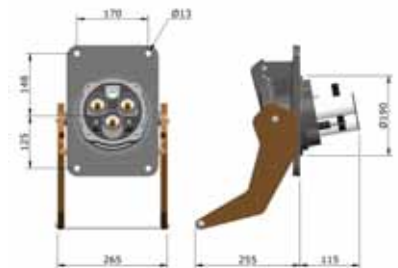
Connector/inverted connector, straight Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Connector: Female Contacts Product Code
4+2	15000V/400V	16mm / 500A	20	25 mm ² / 125A*	PC6-RX04-M0250
				35 mm ² / 160A	PC6-RX04-M0350
				50 mm ² / 200A	PC6-RX04-M0500
				70 mm ² / 250A	PC6-RX04-M0700
				95 mm ² / 300A	PC6-RX04-M0950
				120 mm ² / 350A	PC6-RX04-M1200
				150 mm ² / 420A	PC6-RX04-M1500
				185 mm ² / 480A**	PC6-RX04-M1850
				240 mm ² / 500A**	PC6-RX04-M2400



Socket/inverted socket Push & Pull

No pins (P&E+pil)	Max. voltage phase / pilot	Pin Size (mm) Max. Amp	Weight kg	Cross section mm ² / Max rec. Amp	Socket: Female Contacts Product Code
4+2	15000V/400V	16mm / 500A	13	25 mm ² / 125A	PC6-VX04-M0250
				35 mm ² / 160A	PC6-VX04-M0350
				50 mm ² / 200A	PC6-VX04-M0500
				70 mm ² / 250A	PC6-VX04-M0700
				95 mm ² / 300A	PC6-VX04-M0950
				120 mm ² / 350A	PC6-VX04-M1200
				150 mm ² / 420A	PC6-VX04-M1500
				185 mm ² / 480A**	PC6-VX04-M1850
				240 mm ² / 500A**	PC6-VX04-M2400



Dimensions ± 5mm

*For smaller sizes, please contact your local Cavotec sales office

** This option is only available if the cable core including termination doesn't exceed 34mm diameter

PC7

Size K7 – 8kV

Applications:

- Mining (OP/UG)
- Power generation
- Tunnelling
- Sea port/shore



Cavotec High Voltage Cable Coupler Systems are designed and manufactured to distribute power to mobile/portable, electric equipment.

Product features & benefits

- Wedge type method of Wire Termination ensures a secure contact and connection between wires and pin/socket contacts.
- Stainless Steel Wire Spring Band on Female Sockets ensures a secure and lasting connection between male & female contacts.
- Silicon Stress Control Termination Kit is re-usable and provides air-free termination.
- Three separate Phase Insulators VS one moulded insulator piece.
- Phase Insulators are made from rigid, thermoset material ensuring durability, heat resistance and high insulation properties.
- New type of Cable Entrance assembly is designed to seal and clamp cable to coupler with one action.
- Live-Line LED Indication System that provided an operator with visible indication of an energized coupler.

Product options

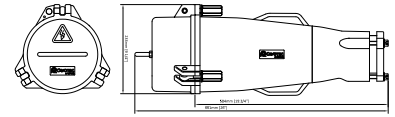
- Male-to-Female or Male-Adapter-Male versions available.
- Durable, Powder-Coat Finish (various colors).
- Standard and/or Lock-out Key Interlock Systems.
- Adapter Boxes, Splitters & Adapter Bodies c/w Skid.
- Optional 'Key Interlock' system is an additional optional feature in the 8kV systems that prevents coupler disconnection without prior switch house lock-out.
- Optional Safe Eye-Bolt System, ensures delay for pilot circuit separation prior to uncoupling thus reducing potential phase arcing.

Product specifications

- Maximum voltage 8kV; maximum amperage 400A
- Standard ambient temperature: -40°C to +80°C (-40°F to +176°F)
- Standard body finish: Bare aluminum alloy A365.2
- Standard hardware: Stainless Steel / Brass
- Standard contacts: Silver plated Cu alloy
- Available in Cable Range from 35 - 185mm² (#2 – 350MCM)
- Reusable Termination Kit

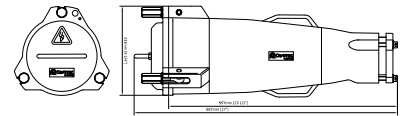
Plug

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Plug
3+2+1	400A	17,5	70mm ² /250A	PC7-SK04-K070001
3+2+1	400A	17,5	95mm ² /300A	PC7-SK04-K095001
3+2+1	400A	17,5	120mm ² /350A	PC7-SK04-K120001
3+2+1	400A	17,5	150mm ² /400A	PC7-SK04-K150001
3+2+1	400A	17,5	185mm ² /400A	PC7-SK04-K185001



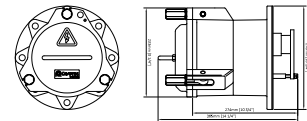
Connector

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Connector
3+2+1	400A	17,5	70mm ² /250A	PC7-RK04-K070001
3+2+1	400A	17,5	95mm ² /300A	PC7-RK04-K095001
3+2+1	400A	17,5	120mm ² /350A	PC7-RK04-K120001
3+2+1	400A	17,5	150mm ² /400A	PC7-RK04-K150001
3+2+1	400A	17,5	185mm ² /400A	PC7-RK04-K185001



Socket

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Socket
3+2+1	400A	12,5	70mm ² /250A	PC7-VK04-K070001
3+2+1	400A	12,5	95mm ² /300A	PC7-VK04-K095001
3+2+1	400A	12,5	120mm ² /350A	PC7-VK04-K120001
3+2+1	400A	12,5	150mm ² /400A	PC7-VK04-K150001
3+2+1	400A	12,5	185mm ² /400A	PC7-VK04-K185001



PC8

Size K8 – 15kV

Applications:

- Mining (OP/UG)
- Power generation
- Tunnelling
- Sea port/shore



Product features & benefits

- Wedge type of Wire Termination ensures a secure contact and connection between wires and pin/socket contacts.
- Stainless Steel Wire Spring Band on Female Sockets ensures a secure and lasting connection between male & female contacts.
- Stress Control Adapter Termination Kit is reusable and provides air-free termination.
- Phase Insulators are made from rigid, thermoset material ensuring durability, heat resistance and high insulation properties.
- Cable Entrance assembly is designed to seal and clamp cable to coupler with one action.
- Live-Line LED Indication System that provided an operator with visible indication of an energized coupler.

Product options

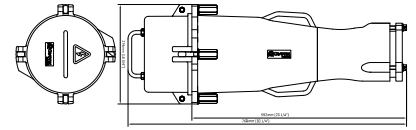
- Male-to-Female or Male-Adapter-Male versions available
- Durable, Powder-Coat Finish (various colors)
- Crimping Termination c/w MWT System
- Standard and/or Lock-out Key Interlock Systems
- Adapter Boxes, Splitters & Adapter Bodies c/w Skid
- Optional 'Key Interlock' system is an additional optional feature in the 15kV systems that prevents coupler disconnection without prior switch house lock-out.
- Optional Safe Eye-Bolt System, ensures delay for pilot circuit separation prior to uncoupling thus reducing potential phase arcing.

Product specifications

- Maximum voltage 15kV; maximum amperage 440A
- Standard ambient temperature: -40°C to +80°C (-40°F to +176°F)
- Standard body finish: Bare aluminum alloy A365.2
- Standard hardware: Stainless Steel / Brass
- Standard contacts: Silver plated Cu alloy
- Available in Cable Range from 35 - 120mm² (#2 – 350MCM)
- Reusable Termination Kit

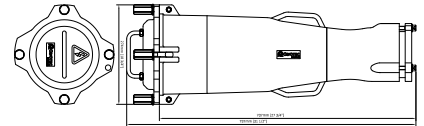
Plug

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Plug
3+2+1	440A	18	70mm ² /250A	PC8-SK04-M070001
3+2+1	440A	18	95mm ² /300A	PC8-SK04-M095001
3+2+1	440A	18	120mm ² /350A	PC8-SK04-M120001



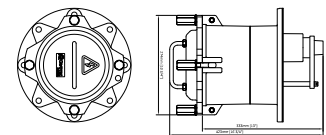
Connector

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Connector
3+2+1	440A	19	70mm ² /250A	PC8-RK04-M070001
3+2+1	440A	19	95mm ² /300A	PC8-RK04-M095001
3+2+1	440A	19	120mm ² /350A	PC8-RK04-M120001



Socket

No Pins (P&E+pil)	Max current A	Weight kg	Incoming cable size/Rec. current	Socket
3+2+1	440A	12,5	70mm ² /250A	PC8-VK04-M070001
3+2+1	440A	12,5	95mm ² /300A	PC8-VK04-M095001
3+2+1	440A	12,5	120mm ² /350A	PC8-VK04-M120001



PC9

Size K9 – 25kV

Applications:

- Mining (OP/UG)
- Power generation
- Tunnelling
- Sea port/shore



Product features & benefits

- Crimping method of Wire Termination ensures a secure contact and connection between wires and pin/socket contacts.
- MWT System on Female Sockets ensures a secure and lasting connection between male & female contacts.
- Stress Controlled Adapters are re-usable and provides air-free termination.
- Aluminum tube shield on phase insulators prevents phase-to-phase faults.
- Phase Insulators are made from rigid, thermoset material ensuring durability, heat resistance and high insulation properties.
- Cable Entrance assembly is designed to seal and clamp cable to coupler with one action.

Product options

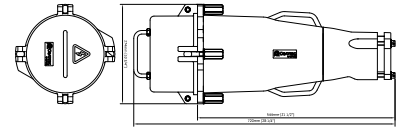
- Male-to-Female or Male-Adapter-Male versions available.
- Durable, Powder-Coat Finish (various colors).
- Standard and/or Lock-out Key Interlock Systems.
- Adapter Boxes, Splitters & Adapter Bodies c/w Skid.
- Optional 'Key Interlock' system is an additional optional feature in the 15kV systems that prevents coupler disconnection without prior switch house lock-out.
- Optional Safe Eye-Bolt System, ensures pilot circuit separation prior to uncoupling thus reducing potential phase arcing.

Product specifications

- Maximum voltage 25kV; maximum amperage 400A
- Standard ambient temperature: -40°C to +80° C (-40°F to +176°F)
- Standard body finish: Bare aluminum alloy A365.2
- Standard hardware: Stainless Steel / Brass
- Standard contacts: Silver plated Cu alloy
- Available in Cable Range from 35 - 150mm² (#2 – 350MCM)
- Reusable Termination Kit

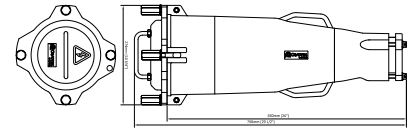
Plug

Nr of Pins (Phase+Earth+Pilot)	Max current A	Weight kg	Incoming cable size	Plug
3+2+1	400A	19	70mm ² /250A	PC9-SK04-N070001
3+2+1	400A	19	95mm ² /300A	PC9-SK04-N095001
3+2+1	400A	19	120mm ² /350A	PC9-SK04-N120001
3+2+1	400A	19	150mm ² /400A	PC9-SK04-N150001



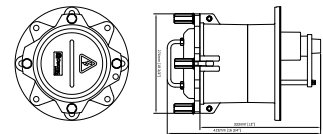
Connector

Nr of Pins (Phase+Earth+Pilot)	Max current A	Weight kg	Incoming cable size	Connector
3+2+1	400A	20	70mm ² /250A	PC9-RK04-N070001
3+2+1	400A	20	95mm ² /300A	PC9-RK04-N095001
3+2+1	400A	20	120mm ² /350A	PC9-RK04-N120001
3+2+1	400A	20	150mm ² /400A	PC9-RK04-N150001



Socket

Nr of Pins (Phase+Earth+Pilot)	Max current A	Weight kg	Incoming cable size	Socket
3+2+1	400A	14	70mm ² /250A	PC9-VK04-N070001
3+2+1	400A	14	95mm ² /300A	PC9-VK04-N095001
3+2+1	400A	14	120mm ² /350A	PC9-VK04-N120001
3+2+1	400A	14	150mm ² /400A	PC9-VK04-N150001



Multipin connectors

500V

Applications:

- Land based oil rigs
- Ports
- Steel mills
- Mining & tunnelling
- Railways



Product features

- Maximum voltage up to 500V, currents up to 40A.
- Up to 50 pole insulator assembly.
- IP66 (when connected or with covers closed)
- Standard ambient temperature: -40°C to +80°C or -40°F to +176°F
- Socket & connector with integrated cover operated by the push & pull arms (Socket available in straight or 30° bent version) (PC4 and PC5 plug available in straight or 60 degree bent version)
- Standard finishes: marine grade aluminium ISO 3522 - Hardware in stainless steel
- Push & Pull arm material: Bronze ISO 1338:1977
- Female contact, male pin and cable terminal material: silver plated brass
- Easy wiring with male and female insulators fully interchangeable (between plug and socket) made in POM Max temp. 90 °C.
- Interchangeable pins and contacts without dismantling the connector
- All cable terminals suits for cables of class 5, IEC 60228
- Standard cable terminals for crimping with hexagonal crimping tool
- Cable glands: Available in a wide variety of types and sizes (supplied by external manufacturers)
- Standard cable gland for PC4 and PC5: Cavotec "onion ring" with strain relief covering cable outer diameters from Ø25-70mm
- For screw ring connection please contact your Cavotec company.

Optional features

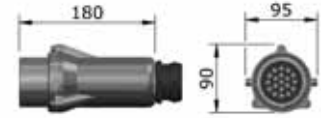
- High temperature version for +80°C - +250°C or +176°F - +482°F
- Insulator material: machined PTFE (Teflon)
- Plug covers: (PC2) PCX-01612-006, (PC4) PCX-01614-006, (PC5) PCX-01615-006
- Wall mounting bracket for Connector: (PC2) PCX-49260-1002, (PC4) PCX-49455-2204, (PC5) PCX-49555-2204
- Individual keying to prevent inserting a plug in the wrong socket
- Finishes: Colour or non-colour anodizing / Clear coat or solid color painting

Special tools

Male pin Dia. 3mm	Female contact Dia. 3mm	Key width	Socket wrench (Part numb.)
PCX-11003-XXXX	PCX-12003-XXXX	5	PCX-92001-0051 PCX-92003-0051

Plug/inverted plug, straight, push & pull

Type Size	No. Pins (P&E)	Pin Ø (mm) Max. Amp	Weight (kg)	Cross Section mm ² / Rec. Amp	Plug Male Pins Product Code	Inv. plug Femal Contact Product Code
2	18	3mm / 40A	1,4	1,5mm ² / 20A	PC2-SX18-0015	PC2-TX18-0015
				2,5mm ² / 30A	PC2-SX18-0025	PC2-TX18-0025
				4mm ² / 40A	PC2-SX18-0040	PC2-TX18-0040
2	25*	3mm / 40A	1,4	1,5mm ² / 20A	PC2-SX25-0015	PC2-TX25-0015
				2,5mm ² / 30A	PC2-SX25-0025	PC2-TX25-0025
				4mm ² / 40A	PC2-SX25-0040	PC2-TX25-0040
4	24	3mm / 40A	1,8	1,5mm ² / 20A	PC4-SX24-0015R	PC4-TX24-0015R
				2,5mm ² / 30A	PC4-SX24-0025R	PC4-TX24-0025R
				4mm ² / 40A	PC4-SX24-0040R	PC4-TX24-0040R
4	30	3mm / 40A	1,8	1,5mm ² / 20A	PC4-SX30-0015R	PC4-TX30-0015R
				2,5mm ² / 30A	PC4-SX30-0025R	PC4-TX30-0025R
				4mm ² / 40A	PC4-SX30-0040R	PC4-TX30-0040R
4	37	3mm / 40A	1,9	1,5mm ² / 20A	PC4-SX37-0015R	PC4-TX37-0015R
				2,5mm ² / 30A	PC4-SX37-0025R	PC4-TX37-0025R
				4mm ² / 40A	PC4-SX37-0040R	PC4-TX37-0040R
5	50	3mm / 40A	4,4	1,5mm ² / 20A	PC5-SX50-0015R	PC5-TX50-0015R
				2,5mm ² / 30A	PC5-SX50-0025R	PC5-TX50-0025R
				4mm ² / 40A	PC5-SX50-0040R	PC5-TX50-0040R



PC2, Dimensions ± 5mm



PC4, Dimensions ± 5mm

*Max. nominal voltage 50 VAC

Plug/inverted plug, bent, push & pull

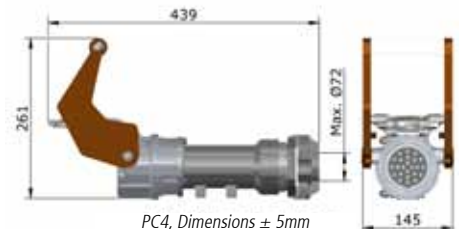
Type Size	No. Pins (P&E)	Pin Ø (mm) Max. Amp	Weight (kg)	Cross Section mm ² / Rec. Amp	Plug Male Pins Product Code	Inv. plug Femal Contact Product Code
4	24	3mm / 40A	1,8	1,5mm ² / 20A	PC4-SX24-0015	PC4-TX24-0015
				2,5mm ² / 30A	PC4-SX24-0025	PC4-TX24-0025
				4mm ² / 40A	PC4-SX24-0040	PC4-TX24-0040
4	30	3mm / 40A	1,8	1,5mm ² / 20A	PC4-SX30-0015	PC4-TX30-0015
				2,5mm ² / 30A	PC4-SX30-0025	PC4-TX30-0025
				4mm ² / 40A	PC4-SX30-0040	PC4-TX30-0040
4	37	3mm / 40A	2,0	1,5mm ² / 20A	PC4-SX37-0015	PC4-TX37-0015
				2,5mm ² / 30A	PC4-SX37-0025	PC4-TX37-0025
				4mm ² / 40A	PC4-SX37-0040	PC4-TX37-0040
5	50	3mm / 40A	4,4	1,5mm ² / 20A	PC5-SX50-0015	PC5-TX50-0015
				2,5mm ² / 30A	PC5-SX50-0025	PC5-TX50-0025
				4mm ² / 40A	PC5-SX50-0040	PC5-TX50-0040



PC5, Dimensions ± 5mm

Connector/inverted connector, push & pull

Type Size	No. Pins (P&E)	Pin Ø (mm) Max. Amp	Weight kg	Cross Section mm ² / Rec. Amp	Connector:Female Product Code	Inv.Conenctor: Male Pin Product code
2	18	3mm / 40A	1,4	1,5mm ² / 20Amp	PC2-RX18-0015	PC2-PX18-0015
				2,5mm ² / 30Amp	PC2-RX18-0025	PC2-PX18-0025
				4mm ² / 40Amp	PC2-RX18-0040	PC2-PX18-0040
2	25*	3mm / 40A	1,4	1,5mm ² / 20Amp	PC2-RX25-0015	PC2-PX25-0015
				2,5mm ² / 30Amp	PC2-RX25-0025	PC2-PX25-0025
				4mm ² / 40Amp	PC2-RX25-0040	PC2-PX25-0040
4	24	3mm / 40A	3,5	1,5mm ² / 20Amp	PC4-RX24-0015	PC4-PX24-0015
				2,5mm ² / 30Amp	PC4-RX24-0025	PC4-PX24-0025
				4mm ² / 40Amp	PC4-RX24-0040	PC4-PX24-0040
4	30	3mm / 40A	3,5	1,5mm ² / 20Amp	PC4-RX30-0015	PC4-PX30-0015
				2,5mm ² / 30Amp	PC4-RX30-0025	PC4-PX30-0025
				4mm ² / 40Amp	PC4-RX30-0040	PC4-PX30-0040
4	37	3mm / 40A	3,6	1,5mm ² / 20Amp	PC4-RX37-0015	PC4-PX37-0015
				2,5mm ² / 30Amp	PC4-RX37-0025	PC4-PX37-0025
				4mm ² / 40Amp	PC4-RX37-0040	PC4-PX37-0040
5	50	3mm / 40A	7,8	1,5mm ² / 20Amp	PC5-RX50-0015	PC5-PX50-0015
				2,5mm ² / 30Amp	PC5-RX50-0025	PC5-PX50-0025
				4mm ² / 40Amp	PC5-RX50-0040	PC5-PX50-0040



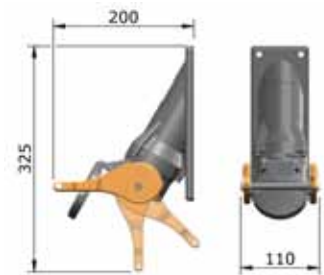
PC4, Dimensions ± 5mm

*Max. nominal voltage 50 VAC

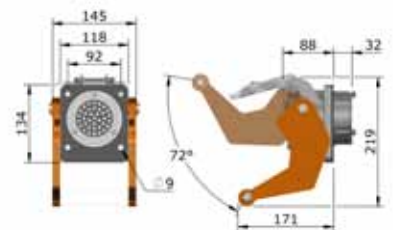
Socket/Inverted socket, push & pull

Type Size	(P&E+pil)	Pin Size (mm) phase	Weight (kg)	Cross Section mm ² / Rec. Amp	Socket Female Contact Product Code	Inv. socket Male pin Product Code
2	18	3	1,4	1,5mm ² / 20A	PC2-VX18-0015**	PC2-WX18-0015**
		3		2,5mm ² / 30A	PC2-VX18-0025**	PC2-WX18-0025**
		3		4mm ² / 40A	PC2-VX18-0040**	PC2-WX18-0040**
2	18	3	1,4	1,5mm ² / 20A	PC2-VX18-0015R***	PC2-WX18-0015R***
		3		2,5mm ² / 30A	PC2-VX18-0025R***	PC2-WX18-0025R***
		3		4mm ² / 40A	PC2-VX18-0040R***	PC2-WX18-0040R***
2	25*	3	1,4	1,5mm ² / 20A	PC2-VX25-0015**	PC2-WX25-0015**
		3		2,5mm ² / 30A	PC2-VX25-0025**	PC2-WX25-0025**
		3		4mm ² / 40A	PC2-VX25-0040**	PC2-WX25-0040**
2	25*	3	1,4	1,5mm ² / 20A	PC2-VX25-0015R***	PC2-WX25-0015R***
		3		2,5mm ² / 30A	PC2-VX25-0025R***	PC2-WX25-0025R***
		3		4mm ² / 40A	PC2-VX25-0040R***	PC2-WX25-0040R***
4	24	3	3,5	1,5mm ² / 20A	PC4-VX24-0015	PC4-WX24-0015
		3		2,5mm ² / 30A	PC4-VX24-0025	PC4-WX24-0025
		3		4mm ² / 40A	PC4-VX24-0040	PC4-WX24-0040
4	30	3	3,5	1,5mm ² / 20A	PC4-VX30-0015	PC4-WX30-0015
		3		2,5mm ² / 30A	PC4-VX30-0025	PC4-WX30-0025
		3		4mm ² / 40A	PC4-VX30-0040	PC4-WX30-0040
4	37	3	3,6	1,5mm ² / 20A	PC4-VX37-0015	PC4-WX37-0015
		3		2,5mm ² / 30A	PC4-VX37-0025	PC4-WX37-0025
		3		4mm ² / 40A	PC4-VX37-0040	PC4-WX37-0040
5	50	3	7,8	1,5mm ² / 20A	PC5-VX50-0015	PC5-WX50-0015
		3		2,5mm ² / 30A	PC5-VX50-0025	PC5-WX50-0025
		3		4mm ² / 40A	PC5-VX50-0040	PC5-WX50-0040

*Max. nominal voltage 50VAC; **30 degree inclined; *** straight 900



PC2, Dimensions ± 5mm



PC4, Dimensions ± 5mm

Cable gland code for size 2 plug/connector

Metric	Cable outer	PG	Cable outer
Cable Glands	Ø (mm)	Cable Glands	Ø (mm)
M12 x1,5	3-6,5	11	5-10
M16 x1,5	5-10	13,5	6-12
M20 x1,5	6-12	16	10-14
M25 x1,5	11-17	21	13-18
M32 x1,5	15-21	29	18-25
M40 x1,5	19-28	36	22-32
M50 x1,5	28-38	42	32-38
M63 x1,5	34-44	48	37-44





POWER UNITS

Cavotec Power Units are used in the harshest of conditions over many years with minimal downtime or service requirements. Only high quality components are used, and all units are equipped with Cavotec power connector sockets that allow safe and simple connection.

Standards

All Cavotec Power Units are made with hot-dipped galvanised or stainless steel AISI316, and conform to the following standards, where applicable:

Power Units

- IEC 60947 - standard regarding low-voltage circuit breakers
- IEC 62271 - standard regarding low-voltage circuit breakers
- SS-EN_61439 - Low-voltage switchgear and controlgear assemblies
- IEC 60204 - Machinery Directive, CE
- IEC 60529 - standards for protection against dust, water at minimum mechanical load



Product features

Galvanized steel (Hot-dip) Domex

- Exceptional strength and rugged durability
- Cost effective enclosure solutions
- High level of corrosion resistance due to zinc coating

Stainless steel AISI.316 (acid resistant)

- Superior corrosion resistance
- Excellent chemical protection
- Type 316 is durable, clean, weld and finish
- Pickling required to avoid surface corrosion

Advantage modular enclosure system

- Short lead-time
- Quality
- Costs-effective
- Several configurations
- Flexible
- 3mm hot dip galvanized steel
- Different flange opening
- Different cable glands
 - Attaching and secure end of cable
 - Provider of strain relief
 - EMC
 - Sealing cables
 - Material:
 - Plastic
 - Brass, Nickel plated
 - Aluminum
 - Stainless steel
- Type of Cable glands:
 - Standard
 - EMC
 - FL21
 - Strain relief

Applications:

- Electrified RTGs, STS cranes and other electrified cranes
- Boomers and other equipment in mining and tunnelling applications
- Mobile generators, transformer oil filtration, steel mills, etc.

Indicating lamps

- Indicate phase sequence
- Indicate trip/power on / power off
- Warning signal

Buzzer

- Sound indicating for power ON/trip

Emergency stop

- Block all power inside power consuming box

Micro switch

- Circuit breaker when doors accidentally opens

Heating cable

- Self regulating heating cable to regulate the cabinet temperature

Fiber optics

- Signal and communication transporter

Volt / Amp meters

- Display volt/amp consumed or used

Pressure relief valve

- Reduce pressure inside cabinet

Eye bolt

- Lifting PU and JB easier

PRODUCT DOCUMENTATION

Test certificate

- Overall inspection
- Assembly
- Mating test
- Electrical test

As build drawing

- Quote drawing approved by customer
- Always ends with file extension /B

Circuit diagram

- According to customers requirement
- File extension is /C

Spare part list

- Content of ordered item
- Part number, description, amount
- File extension is /A

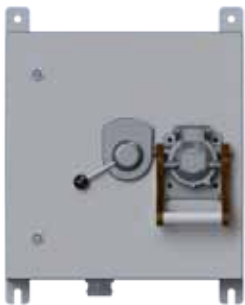











Internal components specification

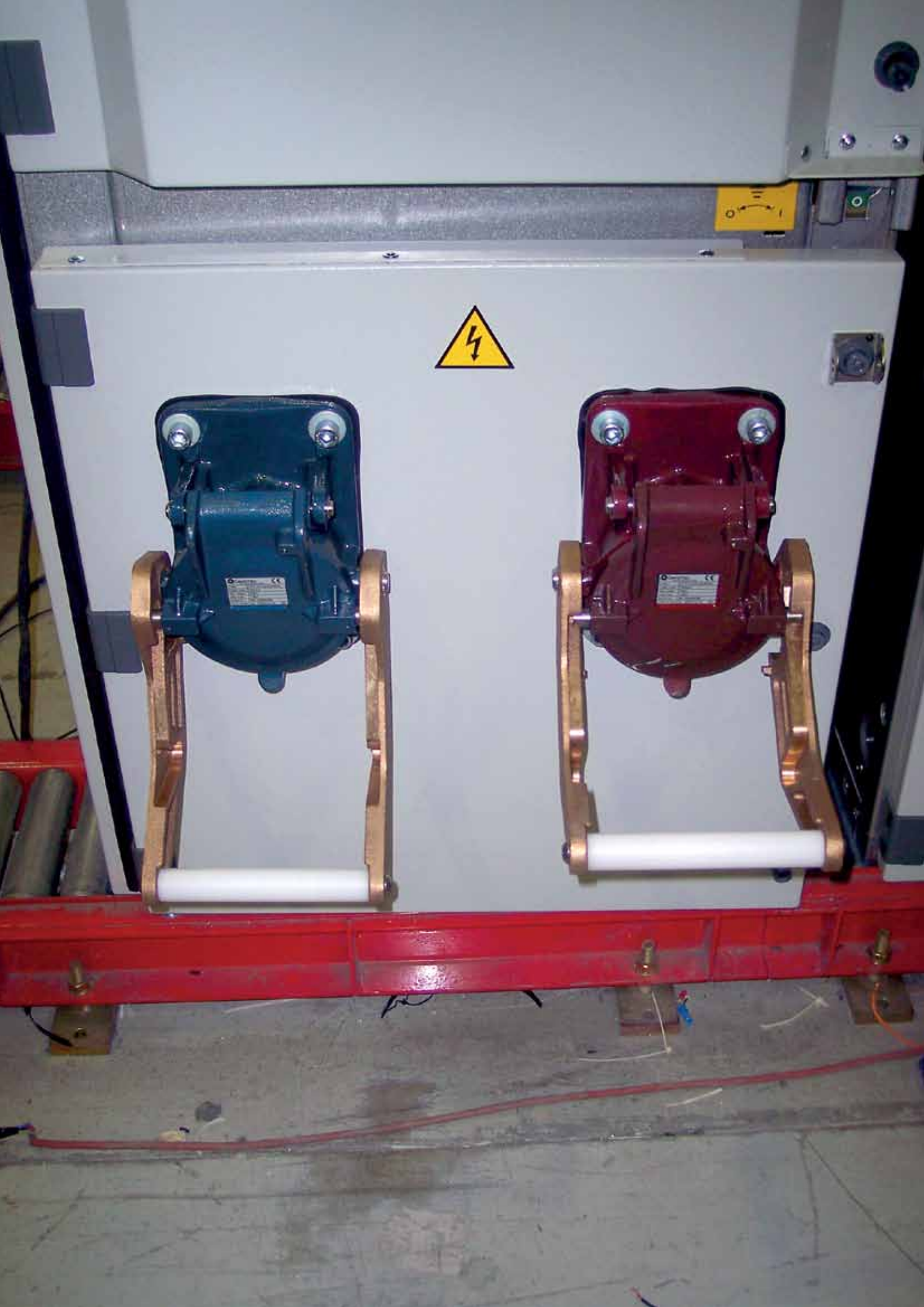
- Suppliers special specification

User/Safety manual

- Maintenance and operating document

POWER UNITS PRODUCT RANGE TABLE

	Wall Mounted Power Unit				Ground Mounted Power Unit			
Interlocking	Mechanical		Electrical		Electrical			
								
Application	   		   					
Standards & Norms	IEC60309, IEC60529, SS-EN_61439		IEC60309, IEC60529, SS-EN_61439		IEC60309, IEC60529, SS-EN_61439			
Cabinet material	Stainless steel 316		Stainless steel 316		Stainless steel 316			
Ingress protection	IP66		IP56		IP56			
Optional cable glands	Garo (28-60mm) M50 M63 M75		Garo (28-60mm) M50 M63 M75		Various options			
Features	Load breaker, fuses, Cavotec Push&Pull Socket		MCCB with overload and short circuit, UVT, Cavotec Push&Pull Socket		Fiber optics, Kirk Key, MCCB with overload and short circuit, UVT, Earth fault relay, Indication lamps, Buzzer, Emergency stop, Door micro switch, lifting rings, Different socket placement, Cavotec Push&Pull Socket			
Nr of sockets	1		1		1,2,4	1,2,4	1,2,3	1,2,3
Nr of pins (+2 pilots)	4+2	5+2	4+2	5+2	4+2	4+2	4+2	4+2
Max Voltage	690V or 1000V	690V or 1000V	690V or 1000V	690V or 1000V	400V	1000V	7,2kV	12kV
Max current - Socket type	160A-X4 200A-X4 250A-X5 400A-X5	125A-X4 160A-X4 250A-X5 400A-X5	160A-X4 200A-X4 250A-X5 400A-X5	160A-X4 200A-X4 250A-X5 320A-X5	400A-X5 right 400A-2x X5 right 400A-2x X5 left 400A-2x X5 400A-4x X5 630A-X6 right	400A-X5 right 400A-2x X5 right 400A-2x X5 left 400A-2x X5 400A-4x X5 630A-X6 right	200A-X5 left 250A-2x X5 left 250A-3x X5 left	200A-X5 left 250A-2x X5 left 250A-3x X5 left

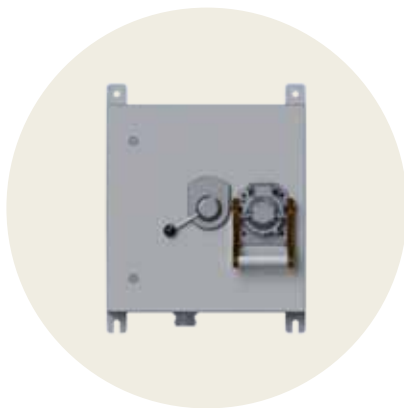


Wall mounted/ Mechanical interlock

Power unit range

Applications:

- Boomers and other equipment in mines or in tunnel construction
- Cranes in ports
- Various applications in power plants (transformer oil filtration, etc.)



Product features

- Protection class for connected plug and socket, or plug or socket with cover closed: IP66
- Standard ambient temperature: -25°C to +70°C (-13°F to + 158°F)
- Socket with integrated cover operated by the push & pull arms
- Socket housing material: Marine grade aluminium ISO 3522
- Push & Pull arm material: Bronze ISO 1338:1977
- All contacts using Cavotec MWT system
- Separate cable terminals allowing fast and easy exchange of contacts
- Cable terminals for crimping with hexagonal crimping tool only
- Contacts and cable terminal material: silver plated brass
- Standard insulator material: injection molded PPO
- All hardware in stainless steel
- High quality gaskets and sealings with a minimum life span of 10 years
- External handle on the cabinet door to operate the mechanical interlock
- Connection to terminal ground on mounting plate.
- Label with serial number placed by socket
- Wall mounted
- IP 66
- PC4 Cabinet size: 480x500x250mm³
- PC5 Cabinet size: 580x600x300mm³
- Cabinet material: 2mm stainless acid proof steel

Power units range

Int. Fuses	Nr of Pins (P&E-Pilot)	Load Breaker/ Internal cabling	Max Amp	Cabinet Material	690V Female Socket
No	4+2	200A/70mm ²	200A	2mm Stainless	PC4-MX04-0762
No	4+2	250A/95mm ²	250A	2mm Stainless	PC5-MX04-9562
No	4+2	400A/120mm ²	400A	2mm Stainless	PC5-MX04-1262
No	5+2	160A/70mm ²	200A	2mm Stainless	PC4-MX05-0762
No	5+2	250A/95mm ²	250A	2mm Stainless	PC5-MX05-9562
No	5+2	400A/120mm ²	320A	2mm Stainless	PC5-MX05-1262
Yes	5+2	200A/50mm ²	200A	2mm Stainless	PC4-MX05-0525/5
Yes	5+2	400A/120mm ²	315A	2mm Stainless	PC5-MX05-12052/7

Cable gland code

Cable Gland	
Bottom mounted	Top mounted
/G (Garo 28-60mm cable Ø)	/GT (Garo 28-60mm cable Ø)
/M5 (M50 28-38mm cable Ø)	/M5T (M50 28-38mm cable Ø)
/M6 (M63 37-44mm cable Ø)	/M6T (M63 37-44mm cable Ø)
/M7 (M75 40-58mm cable Ø)	/M7T (M75 40-58mm cable Ø)



Optional features

- Self regulating heating cable
- Control lamps in red, green, yellow or blue to indicate power on, power off, MCCB trip or other events
- Pressure valve and handle protection for mine blasts



Power Unit Example

- 690V
 - 400A
 - 2mm Stainless Steel
 - Cabinet size 580x600x300mm
 - X5 Female socket Push & Pull
 - Cable Gland: Garo, Bottom mounted
 - IP66
- Article nr. PC5-MX04-1262/G
Please contact your local Cavotec sales office for quotation



Wall mounted/ Electrical interlock

Power unit range

Applications:

- Boomers and other equipment in mines or in tunnel construction
- Cranes in ports
- Various applications in power plants (transformer oil filtration, etc.)



Product features

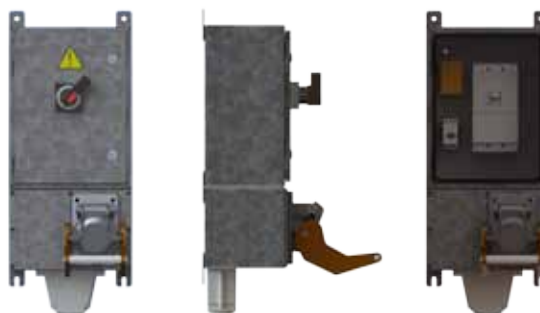
- Protection class for connected plug and socket, or plug or socket with cover closed: IP56
- Standard ambient temperature: -25°C to +70°C (-13°F to + 158°F)
- Socket with integrated cover operated by the push & pull arms
- Socket housing material: Marine grade aluminium ISO 3522
- Push & Pull arm material: Bronze ISO 1338:1977
- All contacts using Cavotec MWT system
- Separate cable terminals allowing fast and easy exchange of contacts
- Cable terminals for crimping with hexagonal crimping tool only
- Contacts and cable terminal material: silver plated brass
- Standard insulator material: injection molded PPO
- All hardware in stainless steel
- High quality gaskets and sealings with a minimum life span of 10 years
- External handle on the cabinet door to operate the electrical interlock
- Connection to terminal ground on mounting plate
- Label with serial number placed by socket
- Wall mounted
- IP 56
- 690V Cabinet size: 750x380x250mm
- 1000V Cabinet size: 1000x480x250mm
- Cabinet material: 3mm galvanized steel or 2mm stainless acid proof steel

Power unit defined range

Nr of Pins (P&E-Pilot)	MCCB Size/ Internal cabling	Max Amp	Cabinet Material	690V Female Socket	1000V Female Socket
4+2	200A/70mm ²	200A	3mm Galvanized	PC4-AX04-0760	PC4-AX04-0790
			2mm Stainless	PC4-AX04-0762	PC4-AX04-0792
4+2	250A/95mm ²	250A	3mm Galvanized	PC5-AX04-9560	PC5-AX04-9590
			2mm Stainless	PC5-AX04-9562	PC5-AX04-9592
4+2	400A/120mm ²	400A	3mm Galvanized	PC5-AX04-1560	PC5-AX04-1590
			2mm Stainless	PC5-AX04-1562	PC5-AX04-1592
5+2	200A/70mm ²	200A	3mm Galvanized	PC4-AX05-0760	PC4-AX05-0790
			2mm Stainless	PC4-AX05-0762	PC4-AX05-0792
5+2	250A/95mm ²	250A	3mm Galvanized	PC5-AX05-9560	PC5-AX05-9590
			2mm Stainless	PC5-AX05-9562	PC5-AX05-9592
5+2	400A/120mm ²	320A	3mm Galvanized	PC5-AX05-1560	PC5-AX05-1590
			2mm Stainless	PC5-AX05-1562	PC5-AX05-1592

Cable gland code

Cable Gland	
Bottom mounted	Top mounted
/G (Garo 28-60mm cable Ø)	/GT (Garo 28-60mm cable Ø)
/M5 (M50 28-38mm cable Ø)	/M5T (M50 28-38mm cable Ø)
/M6 (M63 37-44mm cable Ø)	/M6T (M63 37-44mm cable Ø)
/M7 (M75 40-58mm cable Ø)	/M7T (M75 40-58mm cable Ø)



Optional features

- Self regulating heating cable
- Control lamps in red, green, yellow or blue to indicate power on, power off, MCCB trip or other events
- Pressure valve and handle protection for mine blasts
- IP 66 with special rotary handle



Power Unit Example

- 690V
 - 400A
 - 3mm Galvanized Steel
 - Cabinet size 1000x380x250mm
 - X5 Female socket Push & Pull
 - Cable Gland: Garo, Single Bottom
 - IP56
- Article nr. PC5-AX04-1560/G
Please contact your local Cavotec sales office for quotation



Ground mounted/ Electrical interlock

Power unit range

Applications:

- Electrified RTG runs in ports and terminals



Product features

- Protection class for connected plug and socket, or plug or socket with cover closed: IP56
- Standard ambient temperature: -25°C to +70°C (-13°F to + 158°F)
- Socket with integrated cover operated by the push & pull arms
- Socket housing material: Marine grade aluminium ISO 3522
- Push & Pull arm material: Bronze ISO 1338:1977
- All contacts using Cavotec MWT system
- Separate cable terminals allowing fast and easy exchange of contacts
- Cable terminals for crimping with hexagonal crimping tool only
- Contacts and cable terminal material: silver plated brass
- Standard insulator material: injection molded PPO
- All hardware in stainless steel
- High quality gaskets and sealings with a minimum life span of 10 years
- External handle on the cabinet door to operate the electrical interlock
- Connection to terminal ground on mounting plate
- Label with serial number placed by socket
- Ground mounted
- IP 56
- Available in 4 configurations: 400V, 1kV, 7,2kV and 12kV
- Cabinet material: 2mm or 3mm stainless acid proof steel

400V

Nr of Pins (P&E+Pilot)	Nr of Sockets	MCCB Size/ Internal cabling	Max Amp	400V Female Socket
4+2	1	400A/120mm ²	400A	PC5-AX04-1274
4+2	2 Left side	400A/120mm ²	400A	PC5-AX04-155314
4+2	2 Right side	400A/120mm ²	400A	PC5-AX04-15534
4+2	2	400A/120mm ²	400A	PC5-AX04-15524
4+2	4	200A/95mm ²	250A	PC5-AX04-09944
4+2	1	800A/240mm ²	630A	PC6-AX04-24421

1kV

Nr of Pins (P&E+Pilot)	Nr of Sockets	MCCB Size/ Internal cabling	Max Amp	1000V Female Socket
4+2	1	400A/120mm ²	400A	PC5-AX04-1275
4+2	2 Left side	400A/120mm ²	400A	PC5-AX04-15531
4+2	2 Right side	400A/120mm ²	400A	PC5-AX04-1553
4+2	2	400A/120mm ²	400A	PC5-AX04-1552
4+2	4	200A/95mm ²	250A	PC5-AX04-09954
4+2	1	630A/240mm ²	630A	PC6-AX04-3076
4+2+18ch FO	3	250A/70mm ²	250A	PC5-AX04-3151FO18

7,2kV

Nr of Pins (P&E+Pilot)	Nr of Sockets	Load Breaker Size/ Internal cabling	Max Amp	7200V Female socket
4+2	1	630A/50mm ²	200A	PC5-AX04-K0555
4+2	2	630A/35mm ²	125A	PC5-AX04-K0301/M6
4+2	3	630A/35mm ²	125A	PC5-AX04-K0201/M6

12kV

Nr of Pins (P&E+Pilot)	Nr of Sockets	MCCB Size/ Internal cabling	Max Amp	12000V Female socket
4+2	1	630A/50mm ²	200A	PC6-AX04-L0505
4+2	2	630A/70mm ²	125A	PC6-AX04-L0201/M6
4+2	3	630A/70mm ²	125A	PC6-AX04-L0301/M6

Optional features

- Self regulating heating cable
- Control lamps in red, green, yellow or blue to indicate power on, power off, MCCB trip or other events
- Pressure valve and handle protection for mine blasts
- IP 66 with special rotary handle
- Fiber optics available
 - Integrated 4 and 8 channels
 - External 4, 6, 8, 12 and 24 channels





2 sockets left side

- 1000V
- 400A
- 2 x 4pin socket, 2 pilots
- Emergency stop
- Micro switch for door
- Earth terminal
- Green power on indicator
- Red power off indicator
- Yellow trip indicator
- Buzzer
- Lifting rings
- Vermin ventilation

Article number: PC5-AX04-15531
 Please contact your local Cavotec Sales representative for more information



1 socket 7,2kV

- 7,2kV
- 200A
- 4pin socket, 2 pilots
- Emergency stop
- Micro switch for door
- Earth terminal
- Green power on indicator
- Red power off indicator
- Yellow trip indicator
- Buzzer
- Lifting rings

Article number: PC5-AX04-K0555
 Please contact your local Cavotec Sales representative for more information



4 sockets

- 1000V
- 400A
- 4 x 4pin socket, 2 pilots
- Emergency stop
- Micro switch for door
- Earth terminal
- Green power on indicator
- Red power off indicator
- Yellow trip indicator
- Buzzer
- Lifting rings

Article number: PC5-AX04-09954
 Please contact your local Cavotec Sales representative for more information



3 sockets with 18ch FO

- 18ch Fiber Optics
- 1kV
- 250A
- 4pin socket, 2 pilots
- Emergency stop
- Micro switch for door
- Earth terminal
- Green power on indicator
- Red power off indicator
- Yellow trip indicator
- Buzzer
- Lifting rings

Article number: PC5-AX04-3151F018
 Please contact your local Cavotec Sales representative for more information



CAVOTEC



AUTOMATIC PLUG-IN SYSTEM (APS)

Automated connection, system integration

Cavotec Automatic Plug-in System, (APS), automates the connection of cranes, ships and other mobile equipment to the power grid for operations or battery charging. APS offers key advantages in terms of safety, environmental performance, and operational efficiency at ports, terminals, and elsewhere. APS is also readily integrated with other systems including Cavotec core technologies related to the transfer of electrical power, controls, cable management and the alignment of moving parts with large tolerances in customised solutions.

APS incorporates two major system concepts:

- *Cavotec Push & Go* – automatic connection in a horizontal alignment
- *Cavotec Drop & Go* – automatic connection in a vertical alignment

APS Applications

APS platforms consist of a guiding system and springs to allow substantial tolerances and to maintain operations in a variety of ambient conditions. Cavotec has developed several APS systems for specific requirements of a variety of applications across the two product groups:

- Push & Go: E-RTG applications
- Push & Go: E-ferris
- Push & Go: Electric loaders
- Drop & Go: Steel Industry/Stirrer (AQC)
- Drop & Go: Automatic Spreaders
- Drop & Go: E-ferris

The APS platform is modularised and is based on Cavotec systems that have proven track record such as Cavotec Connectors Plug&Socket technology, Rackmatic, Cable Management Systems/Reels and Moormaster™.



APS for E-RTG

APS automatically connects and disconnects E-RTGs to electrical power. It is the world's first cable connection system that allows cranes fitted with cable reels to automatically connect to an electrical power source.

APS is the interface equipment between the terminal electrical grid and the cranes' electrical system.

Ideal for new E-RTGs, ARTGs and retrofitted RTGs, APS - which uses our proven motorised cable reel technologies - is set to become a key feature of the safest, most efficient and environmentally friendly terminals.

APS can be used in low or medium voltage applications, and includes fibre optic connectivity which ensures reliable data transmission between cranes and the terminal.

Push plate

The push plate is part of the APS installed at the yard, and it enables the connection of the RTG through its mobile turn over anchor to the terminal's power supply. The push plate consists of the following parts:

- A female connector (socket) hard-wired to the yard's power grid
- Centring vertical guides
- Sensors to ensure optimal positioning of the mobile turn over anchor
- Status indication lights

Arm and mobile turnover anchor

The arm and mobile turn over anchor, (TOA), are installed on the E-RTG. The APS arm is telescopic and typically mounted below the main E-RTG lower girder. It connects and disconnects the mobile TOA from the push plate.

The mobile TOA ensures the optimal anchoring of the yard end of the RTG reeling cable, which

is wired to the male connector (plug) enclosed in the TOA. When the TOA is connected to the push plate, the crane can be powered by the yard electrical grid.

Connectors

The connectors used in APS are manufactured by Cavotec Connectors in Sweden. These units feature specialised X5 and X6 inserts that allow use in applications ranging from 400V to 7,200V. Two pilot pins ensure safe connection. Inserts can house expanded beams for use with optical fibres.

These units are also fitted with socket cover status indicators, and electrical safety locks to ensure the cover is closed when the connector is disconnected.





APS for E-ferries

APS is also revolutionizing the maritime industry for electrical and battery powered ships with the automatic connection to the grid.

APS's automated connection of ships to electrical power ensures optimal recharging times, thereby maximising operational efficiency and minimising emissions.

Our fully automated cable handling system ensures the optimal deployment of electrical plugs for safe and fast connection and recharging operations.

APS has been integrated with our automated mooring system, MoorMaster™, at applications in Norway - the first application of its kind anywhere in the world.

Tower

The tower is a vertical steel structure, (composed of pre-assembled blocks), placed on the quay which permits the lowering of the plug inside the ship receptacle.

The primary parts of the tower are the electro winch which allows the up and down movement of the plug; and the top arm which permits the extension of the plug to the ship.

The tower is also fitted with an inspection door and a protective roof that covers the entire outreach of the top arm.

Ship receptacle

The ship receptacle is designed as an integrated part of the fast opening pivoting hatch on board the ship. The female connectors matching the ones of the ship plug are housed in the ship receptacle.

Special covers fitted to the connectors guarantee the IP degree, even during connection operations, enabling safe and reliable power transmission.

Plug unit

The shore side connection plug is a unique feature of APS for ships. It consists of a special body where males connectors are embedded.

The number and size of connectors can be adapted to match the required voltage and amperage up to 7.2kV and 2000A.

The shape and weight of the plug body permits the ship plug to be placed in the ship receptacle even if slightly misaligned, and to maintain the required power connection even in demanding sea states and weather conditions.





APS for General Industry applications

The versatility of APS makes its suitable for industrial applications such as steel mills, slab casting, aluminium plants and foundries where equipment is connected and disconnected frequently.

The APS for use in General Industrial Application is also known as the Automatic Quick Connector (AQC) with is based on the Drop&Go product family. The overall system includes:

- The front part of the Power Connectors Size 5 complete with insulator and socket complete with insulator.
- Angular flange for incoming cables on both side.
- A 35mm self-centering tolerance for connection between the plug and socket side.
- Lower part (socket side) is floating with help of ball ended thrust screws.
- Manual covers to protect sockets.

Upper Model

AQC Upper model is composed of two sub-models. AQC upper profile and AQC force reducing plate.

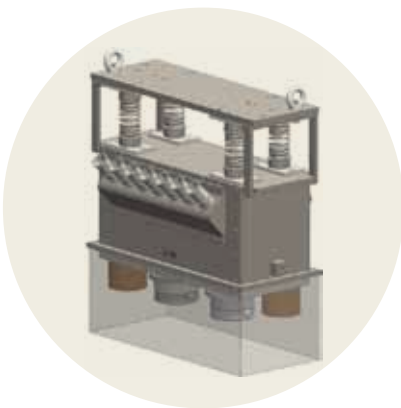
- The force reducing plate makes the upper profile movable through attached spring assembly. It also locks the upper profile so it's not removable once it's installed through installed interlocking arms.
- Incoming connection with cable glands are possible from both sides of the Upper model; incoming cable glands are mounted on an angular plate to facilitate coupling.
- Force reducing plate and upper profile are marked for fail-safe when assembly.
- Ground connection is made externally thru ground connection block.

- Dust protection protects plug/socket connection once the AQC is coupled.
- Air connection nipple installed from opposite side of the ground block.

Base Model

AQC Base model is composed of two sub-models. AQC Lower profile and AQC platform locking.

- The platform locking makes the lower profile model movable through ball ended thrust screws. It also locks the lower profile so it's not removable once installed.
- The guide pins make it possible to make smoother alignment with upper profiles once AQC is installed.
- Incoming connection with cable glands and drainage nipples are mounted on a movable mounting plate, to facilitate coupling.
- The sockets are coloured different to distinguish the items from each other (AC/DC power supply).



Installation and maintenance

Expert customer service is a critical component of Cavotec's approach.

Our sales offices around the world offer our customers local expertise, and are backed by our global network of engineering Centres of Excellence.



Cavotec personnel also provide on-site commissioning and training, as well as dedicated training classes at the Group's Centres of Excellence.

Using detailed manuals and system documentation, highly qualified Cavotec engineers provide all training and maintenance instruction, according to relevant operational requirements.

References

Ports & Maritime:

ABB
Schneider
POLA
POLB
Port of Shenzhen
PSA
DPW
Stockholm
Ystad
Trelleborg
Gothenburg
Helsinki
Swedish Navy
USCG
Finnish Coast Guard
Marseille
Port of Georgia
La Rochelle
Port of Riga
Prince Rubert
NYK

Airports:

Dubai Airport
Pudong Airport
Doha Airport
Muscat Airport
Ångelholm Airport
Fornebu Airport
Schipol Airport
Fraport
London Heathrow

Mining & Tunnelling:

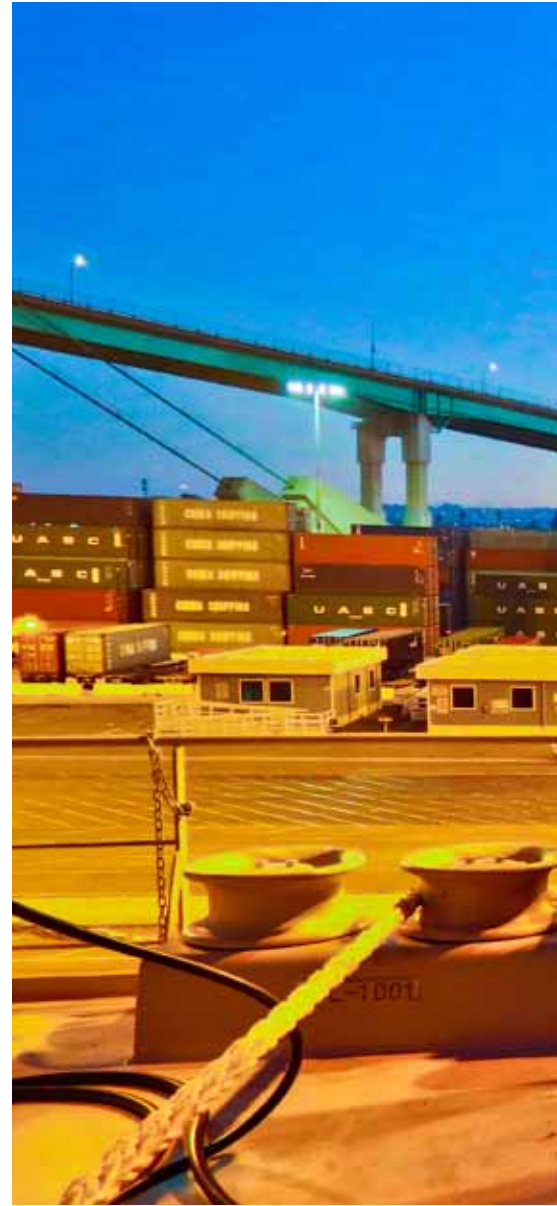
ABB
LKAB Seden
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Tata Steel
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Infra Nord
Thyssen Krupp
Mittal Steel
Kiwi Rails
Siderar
Siderca
Bao Steel
Nippon Steel

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