



## Power Connector PC5 - Push & Pull Size X5 – 7,2kV

### INTRODUCTION

Cavotec Connectors develops electrical connectors that improve performance and protect critical applications in demanding environments. The Cavotec PC5-X5 size 7,2kV is a non-Ex rated medium voltage connector designed for frequent connections and disconnections. Designed with Cavotec Push & Pull system, it offers a safe way for connecting and disconnecting via an ergonomic push & pull handle which could be critical in case of emergency.

Cavotec X5, a safe and easy power supply device for applications such as:

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

Cavotec PC5 compact and light design was possible with Cavotec's MWT technology enabling smaller pins to take high current with a minimal voltage drop.

### 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 185mm<sup>2</sup>
- 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.



Plug straight Push & Pull



Connector/Inverted, connector straight Push & Pull



Connector/Inverted connector straight Push & Pull

### OPTIONAL FEATURES

- Plug cover: PCX-01615-006
- Finger protection female socket: PCX-24570-404K
- Finger protection male plug: PCX-24571-404K
- Termination kit 3M 95-185mm<sup>2</sup>: PCX-89007-031
- Termination kit Raychem 25-95mm<sup>2</sup>, IXSU F3121: PEE-07062-860
- Termination kit Raychem 95-240mm<sup>2</sup>, 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

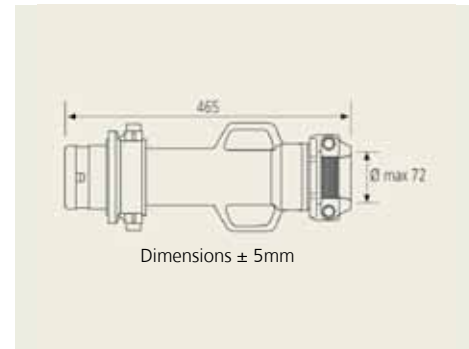
## SPECIAL TOOLS

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



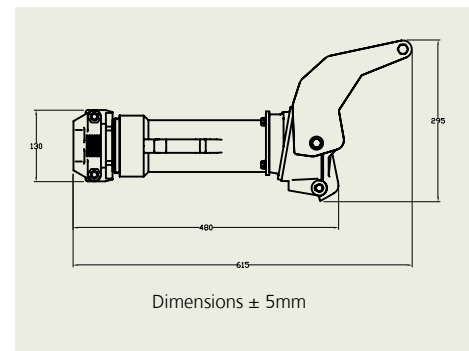
## PLUG/INVERTED PLUG, STRAIGHT PUSH & PULL

No poles (P&E+pil)	Max. voltage phase / pilot	Pin $\varnothing$ (mm) Max. Amp	Weight kg	Cross section mm <sup>2</sup> / Rec. Amp	Connector: Female ContacTX Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	6	50 mm <sup>2</sup> / 200A*	PC5-SX04-K0500	PC5-TX04-K0500
				70 mm <sup>2</sup> / 250A	PC5-SX04-K0700	PC5-TX04-K0700
				95 mm <sup>2</sup> / 300A	PC5-SX04-K0950	PC5-TX04-K0950
				150 mm <sup>2</sup> / 350A	PC5-SX04-K1500	PC5-TX04-K1500
				185 mm <sup>2</sup> / 350A	PC5-SX04-K1850	PC5-TX04-K1850
4+3	7200V / 400V	12mm / 350A	6	50 mm <sup>2</sup> / 200A*	PC5-SX04-K05003	PC5-TX04-K05003
				70 mm <sup>2</sup> / 250A	PC5-SX04-K07003	PC5-TX04-K07003
				95 mm <sup>2</sup> / 300A	PC5-SX04-K09503	PC5-TX04-K09503
				150 mm <sup>2</sup> / 350A	PC5-SX04-K15003	PC5-TX04-K15003
				185 mm <sup>2</sup> / 350A	PC5-SX04-K18503	PC5-TX04-K18503



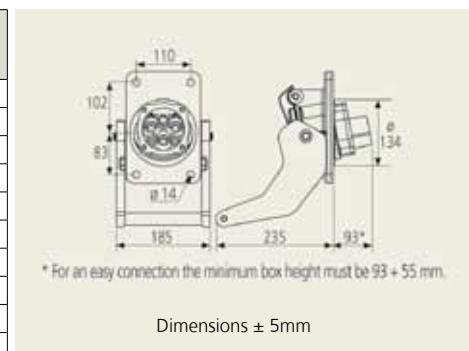
## CONNECTOR/INVERTED CONNECTOR PUSH & PULL

No poles (P&E+pil)	Max. voltage phase / pilot	Pin $\varnothing$ (mm) Max. Amp	Weight kg	Cross section mm <sup>2</sup> / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	9.4	50 mm <sup>2</sup> / 200A*	PC5-RX04-K0500RD	PC5-PX04-K0500RD
				70 mm <sup>2</sup> / 250A	PC5-RX04-K0700RD	PC5-PX04-K0700RD
				95 mm <sup>2</sup> / 300A	PC5-RX04-K0950RD	PC5-PX04-K0950RD
				150 mm <sup>2</sup> / 350A	PC5-RX04-K1500RD	PC5-PX04-K1500RD
				185 mm <sup>2</sup> / 350A	PC5-RX04-K1850RD	PC5-PX04-K1850RD
4+3	7200V / 400V	12mm / 350A	9.4	50 mm <sup>2</sup> / 200A*	PC5-RX04-K05003RD	PC5-PX04-K05003RD
				70 mm <sup>2</sup> / 250A	PC5-RX04-K07003RD	PC5-PX04-K07003RD
				95 mm <sup>2</sup> / 300A	PC5-RX04-K09503RD	PC5-PX04-K09503RD
				150 mm <sup>2</sup> / 350A	PC5-RX04-K15003RD	PC5-PX04-K15003RD
				185 mm <sup>2</sup> / 350A	PC5-RX04-K18503RD	PC5-PX04-K18503RD




















## SOCKET/INVERTED SOCKET, PUSH & PULL

No poles (P&E+pil)	Max. voltage phase / pilot	Pin $\varnothing$ (mm) Max. Amp	Weight kg	Cross section mm <sup>2</sup> / Rec. Amp	Connector: Female Contacts Product Code	Connector: Male Pins Product Code
4+2	7200V / 400V	12mm / 350A	7.8	50 mm <sup>2</sup> / 200A*	PC5-VX04-K0500	PC5-WX04-K0500
				70 mm <sup>2</sup> / 250A	PC5-VX04-K0700	PC5-WX04-K0700
				95 mm <sup>2</sup> / 300A	PC5-VX04-K0950	PC5-WX04-K0950
				150 mm <sup>2</sup> / 350A	PC5-VX04-K1500	PC5-WX04-K1500
				185 mm <sup>2</sup> / 350A	PC5-VX04-K1850	PC5-WX04-K1850
4+3	7200V / 400V	12mm / 350A	7.8	50 mm <sup>2</sup> / 200A*	PC5-VX04-K05003	PC5-WX04-K05003
				70 mm <sup>2</sup> / 250A	PC5-VX04-K07003	PC5-WX04-K07003
				95 mm <sup>2</sup> / 300A	PC5-VX04-K09503	PC5-WX04-K09503
				150 mm <sup>2</sup> / 350A	PC5-VX04-K15003	PC5-WX04-K15003
				185 mm <sup>2</sup> / 350A	PC5-VX04-K18503	PC5-WX04-K18503



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

## POWER CONNECTORS PRODUCT RANGE

Size	Connection type	Model name	Keying position	Accessories	Certifications	1-pole	3-pole	4-pole			5-pole	8-pole	13-pole	18-pole	25-pole	24, 30 & 37-pole	50-pole		
PC1	Screw Ring	S1	12								40A 690V 4mm <sup>2</sup>	20A 415V 2,5mm <sup>2</sup>	10A 230V 1,5mm <sup>2</sup>	10A 230V 1,5mm <sup>2</sup>					
	Screw Ring	S1	2, 4, 6, 8, 10, 12		ATEX & IECEx 						30A 690V 4mm <sup>2</sup>	20A* 415V* 2,5mm <sup>2</sup>	10A* 230V* 1,5mm <sup>2</sup>	10A* 230V* 1,5mm <sup>2</sup>					
PC2	Push&Pull	X2	2, 3, 4, 5, 6, 7, 8, 9, 10, 12 Insulator keying: 1-11	Low interlocking (PC2-VL) Wall bracket Screw terminals		660A 690V 300mm <sup>2</sup>	250A 690V 70mm <sup>2</sup>	200A 690V 50mm <sup>2</sup>			200A 415V 50mm <sup>2</sup>			40A 500V 4mm <sup>2</sup>	40A 50V 4mm <sup>2</sup>				
	Bayonet	B2	Double keying 1-11 55 options		ATEX & IECEx 	660A 690V 300mm <sup>2</sup>	250A 690V 70mm <sup>2</sup>	200A 690V 50mm <sup>2</sup>			200A 415V 50mm <sup>2</sup>			40A 500V 4mm <sup>2</sup>	40A 50V 4mm <sup>2</sup>				
PC3	Eye Bolt	K3						170A 1,1kV 50mm <sup>2</sup>											
PC4	Push&Pull	X4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	External FO 6ch Screw terminals				250A 1,1kV 70mm <sup>2</sup>			200A 1,1kV 70mm <sup>2</sup>					40A 500V 4mm <sup>2</sup>			
	Screw Ring	S4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Short bell				250A 1,1kV 70mm <sup>2</sup>			200A 1,1kV 70mm <sup>2</sup>								
	Eye Bolt	K4						250A 1,1kV 70mm <sup>2</sup>											
PC5	Push&Pull	X5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	External FO 12ch Internal FO 8ch Screw terminals Kirk Key interlock Wall bracket				420A 1,1kV 185mm <sup>2</sup> Internal fiber optic	350A 7,2kV 150mm <sup>2</sup> 								40A 500V 4mm <sup>2</sup>		
	Screw Ring	S5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Internal FO 8ch Screw terminals				420A 1,1kV 185mm <sup>2</sup> Internal fiber optic	350A 7,2kV 150mm <sup>2</sup>		350A 1,1kV 185mm <sup>2</sup>								
PC6	Push&Pull	X6	6.12	External FO 18ch Internal FO 12ch Screw terminals Kirk Key interlock Wall bracket				660A 1,1kV 300mm <sup>2</sup> Internal fiber optic	480A 7,2kV 240mm <sup>2</sup> Internal fiber optic	500A 12kV 185mm <sup>2</sup>	480A 1,1kV 300mm <sup>2</sup>								
	Screw Ring	S6	6.12					660A 1,1kV 300mm <sup>2</sup>			660A 1,1kV 300mm <sup>2</sup>								
PC7	Eye Bolt	K7						400A 8kV 185mm <sup>2</sup>											
PC8	Eye Bolt	K8						440A 15kV 120mm <sup>2</sup>											
PC9	Eye Bolt	K9						440A 25kV 150mm <sup>2</sup>											

\*Available Q2 2015