



## Power Connector PC6 - Push & Pull Size X6 – 12kV



Plug straight Push & Pull



Connector Plug, straight Push&Pull



Socket, Push & Pull

### INTRODUCTION

Cavotec Connectors develops electrical connectors that improve performance and protect critical applications in demanding environments. The Cavotec PC6-X6 size 12kV 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 X6, a safe and easy power supply device for applications such as:

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

Cavotec PC6 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 12kV (400V in pilot circuit), currents up to 500A
- Up to 4 pole insulator assembly as standard covering cable sizes up to 240mm<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 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 - 110 mm
- 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 10-35mm<sup>2</sup>, IXSU F3111: PEE-07062-850
- 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
- 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 Raychem Guroflex D035-1: PCX-89502-351

## SPECIAL TOOLS

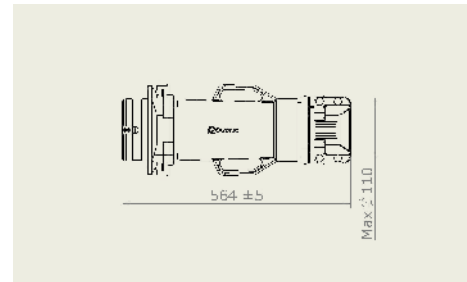
Allen key 5 mm (PCX-93003-005)

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 <sup>2</sup> / Max rec. Amp	Plug: Male Pins Product Code
4+2	12000V/400V	16mm / 500A	11	25 mm <sup>2</sup> / 125A*	PC6-SX04-L0250
				35 mm <sup>2</sup> / 160A	PC6-SX04-L0350
				50 mm <sup>2</sup> / 200A	PC6-SX04-L0500
				70 mm <sup>2</sup> / 250A	PC6-SX04-L0700
				95 mm <sup>2</sup> / 300A	PC6-SX04-L0950
				120 mm <sup>2</sup> / 350A	PC6-SX04-L1200
				150 mm <sup>2</sup> / 420A	PC6-SX04-L1500
				185 mm <sup>2</sup> / 480A**	PC6-SX04-L1850
				240 mm <sup>2</sup> / 500A**	PC6-SX04-L2400

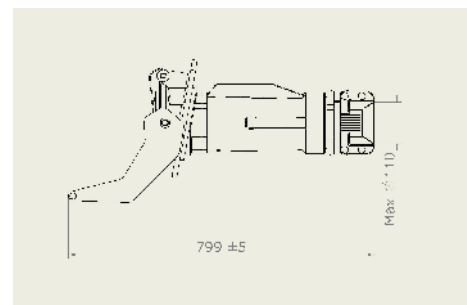


\*For smaller sizes, please contact your local Cavotec sales office

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

## 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 <sup>2</sup> / Max rec. Amp	Connector: Female Contacts Product Code
4+2	12000V/400V	16mm / 500A	20	25 mm <sup>2</sup> / 125A*	PC6-RX04-L0250
				35 mm <sup>2</sup> / 160A	PC6-RX04-L0350
				50 mm <sup>2</sup> / 200A	PC6-RX04-L0500
				70 mm <sup>2</sup> / 250A	PC6-RX04-L0700
				95 mm <sup>2</sup> / 300A	PC6-RX04-L0950
				120 mm <sup>2</sup> / 350A	PC6-RX04-L1200
				150 mm <sup>2</sup> / 420A	PC6-RX04-L1500
				185 mm <sup>2</sup> / 480A**	PC6-RX04-L1850
				240 mm <sup>2</sup> / 500A**	PC6-SX04-L2400

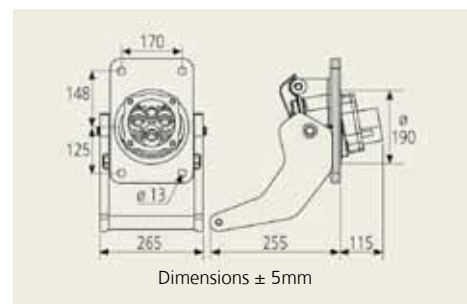


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## SOCKET/INVERTED SOCKET, PUSH & PULL



















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



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## 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