



## Power Connector PC5 - Push & Pull Size X5 – 1.1kV

### INTRODUCTION

Cavotec Connectors develops electrical connectors that improve performance and protect critical applications in demanding environments. The Cavotec PC5-X5 is a non-Ex rated 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 – Steel mills – Mining & tunnelling – Energy – 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 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
- 240mm<sup>2</sup> cable terminal available for 4 pin, straight plug & socket max. 420A
- 4-pin insulator available with 16mm pins, 500V, 500A



Plug/Inverted Plug, bent Push & Pull



Plug/Inverted Plug, straight Push & Pull



Connector/Inv. connector  
Socket/Inv. socket Push & Pull

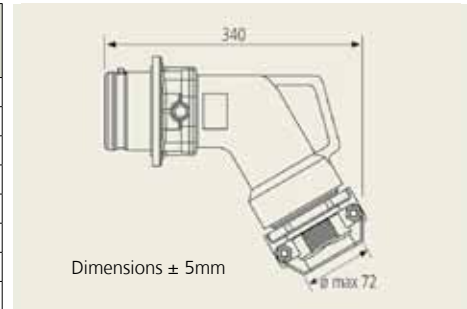
## SPECIAL TOOLS

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



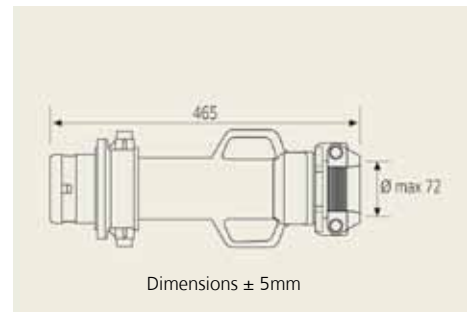
## PLUG/INVERTED PLUG, BENT PUSH & PULL

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



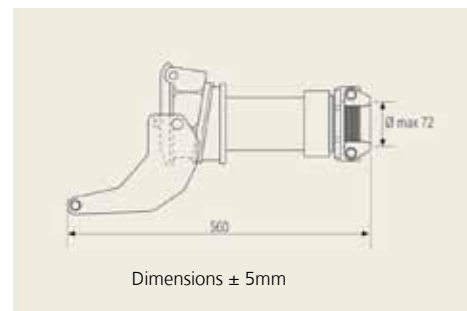
## PLUG/INVERTED PLUG, STRAIGHT PUSH & PULL

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



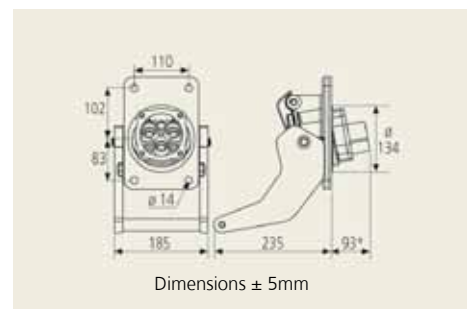
## CONNECTOR/INVERTED CONNECTOR, STRAIGHT PUSH & PULL

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



## SOCKET/INVERTED SOCKET, PUSH & PULL

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




















\*Screw type cable terminal not available

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

For further information please visit [www.cavotec.com](http://www.cavotec.com)

Disclaimer: specifications are subject to change without notice

## 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