



Power Connector PC1 - Size S1

INTRODUCTION

Cavotec Connectors develops electrical connectors that improve performance and protect critical applications in demanding environments.

The Cavotec PC1 connector is designed for tough environment and provides a safe and easy power supply in applications such as:

- Oil and gas – Petro-chemical – Mining – Offshore – Airport

Cavotec S1 compact and light design was possible with Cavotec's MWT technology enabling smaller pins to take high current with a minimal voltage drop. Its quick disconnect features are well appreciated for the power supply of 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 40A
- 5, 8, 13 and 18 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 o'clock option, 12 o'clock (for more options please contact Cavotec)

* Compatible with Power Connector PC1-Ex Size S1-Ex



Plug & socket 5 pin



Plug & socket 8 pin



Plug & socket 18 pin



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	40A	4mm ²	PC1-SS05-0040-001K	PC1-TS05-0040-001K
8 pin	500	10A	1,5mm ²	PC1-SS08-0015-001K	PC1-TS08-0015-001K
8 pin	500	16A	2,5mm ²	PC1-SS08-0025-001K	PC1-TS08-0025-001K
13 pin	230	10A	1,5mm ²	PC1-SS13-0015-001K	PC1-TS13-0015-001K
18 pin	230	10A	1,5mm ²	PC1-SS18-0015-001K	PC1-TS18-0015-001K

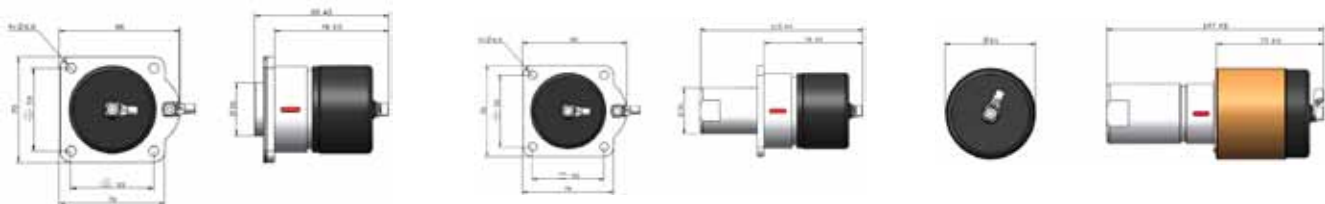
SOCKET/INVERTED SOCKET

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	40A	4mm ²	PC1-VS05-0040-001K	PC1-WS05-0040-001K
8 pin	500	10A	1,5mm ²	PC1-VS08-0015-001K	PC1-WS08-0015-001K
8 pin	500	16A	2,5mm ²	PC1-VS08-0025-001K	PC1-WS08-0025-001K
13 pin	230	10A	1,5mm ²	PC1-VS13-0015-001K	PC1-WS13-0015-001K
18 pin	230	10A	1,5mm ²	PC1-VS18-0015-001K	PC1-WS18-0015-001K

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	40A	4mm ²	PC1-VS05-0040-002K	PC1-WS05-0040-002K
8 pin	500	10A	1,5mm ²	PC1-VS08-0015-002K	PC1-WS08-0015-002K
8 pin	500	16A	2,5mm ²	PC1-VS08-0025-002K	PC1-WS08-0025-002K
13 pin	230	10A	1,5mm ²	PC1-VS13-0015-002K	PC1-WS13-0015-002K
18 pin	230	10A	1,5mm ²	PC1-VS18-0015-002K	PC1-WS18-0015-002K

TECHNICAL DRAWING




















Flange mounted socket

Socket

Plug

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 ²	20A 415V 2,5mm ²	10A 230V 1,5mm ²	10A 230V 1,5mm ²					
	Screw Ring	S1	2, 4, 6, 8, 10, 12		ATEX & IECEx 						30A 690V 4mm ²	20A* 415V* 2,5mm ²	10A* 230V* 1,5mm ²	10A* 230V* 1,5mm ²					
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 ²	250A 690V 70mm ²	200A 690V 50mm ²			200A 415V 50mm ²			40A 500V 4mm ²	40A 50V 4mm ²				
	Bayonet	B2	Double keying 1-11 55 options		ATEX & IECEx 	660A 690V 300mm ²	250A 690V 70mm ²	200A 690V 50mm ²			200A 415V 50mm ²			40A 500V 4mm ²	40A 50V 4mm ²				
PC3	Eye Bolt	K3						170A 1,1kV 50mm ²											
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 ²			200A 1,1kV 70mm ²					40A 500V 4mm ²			
	Screw Ring	S4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Short bell				250A 1,1kV 70mm ²			200A 1,1kV 70mm ²								
	Eye Bolt	K4						250A 1,1kV 70mm ²											
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 ² Internal fiber optic	350A 7,2kV 150mm ² 								40A 500V 4mm ²		
	Screw Ring	S5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	Internal FO 8ch Screw terminals				420A 1,1kV 185mm ² Internal fiber optic	350A 7,2kV 150mm ²		350A 1,1kV 185mm ²								
PC6	Push&Pull	X6	6.12	External FO 18ch Internal FO 12ch Screw terminals Kirk Key interlock Wall bracket				660A 1,1kV 300mm ² Internal fiber optic	480A 7,2kV 240mm ² Internal fiber optic	500A 12kV 185mm ²	480A 1,1kV 300mm ²								
	Screw Ring	S6	6.12					660A 1,1kV 300mm ²			660A 1,1kV 300mm ²								
PC7	Eye Bolt	K7						400A 8kV 185mm ²											
PC8	Eye Bolt	K8						440A 15kV 120mm ²											
PC9	Eye Bolt	K9						440A 25kV 150mm ²											

*Available Q2 2015