



## Power Connector PC3/PC4 Size K3/K4 – 1.1kV

### INTRODUCTION

Cavotec offers a new range of Low Voltage Cable Coupler Systems designed and manufactured for use in various mining (OP/UG), tunneling, power generation, sea port/shore and general industry operations to distribute power to mobile/portable, electric equipment. While maintaining current market standards, numerous design improvements have been integrated into the new coupler designs in order to increase safety, durability and reliability in the field.

### 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.
- One piece Insulator is 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

- Durable, Powder-Coat Finish (various colors)
- Various Amperage (170 or 250A)
- Heavy-Duty, Bronze Version
- MSHA approval pending
- Adapter Boxes, Splitter Boxes, Angle Adapters

### PRODUCT SPECIFICATIONS

- Maximum voltage 1.1kV; maximum amperage 170A and 250A
- Standard ambient temperature: -40°C to +80°C (-40°F to +146°F)
- Standard body finish: Aluminum alloy A365.2 and Bronze alloy
- Standard hardware: Stainless Steel / Brass
- Standard contacts: Silver plated Cu alloy
- 170A Available in Cable Range from 10 - 35mm<sup>2</sup> (# 8 – # 2)
- 250A Available in Cable Range from 35 - 70mm<sup>2</sup> (# 2 – 2/O AWG)



1,1kV Eye-bolt Plug



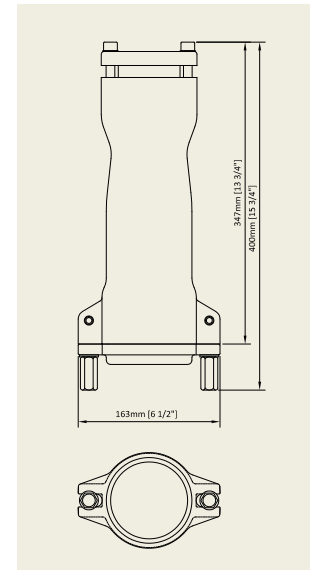
1,1kV Eye-bolt Socket



1,1kV Eye-bolt Plug and Socket

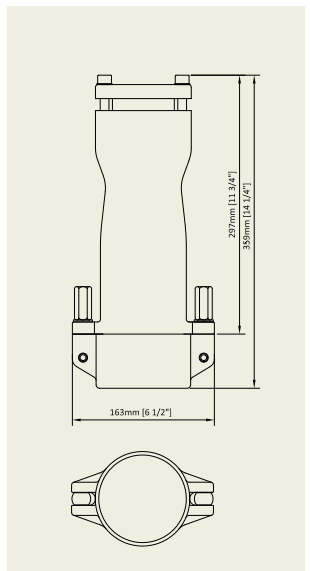
## PLUG

No Pins (P&E+pil)	Max current A	Weight kg	Housing Material	Incoming cable size/Rec. current	Plug
3+2+1	170A	3,6	Aluminium	25mm <sup>2</sup> /130A	PC3-SK04-025001
3+2+2	170A	3,6	Aluminium	25mm <sup>2</sup> /130A	PC3-SK04-025002
3+2+1	170A	6	Bronze	25mm <sup>2</sup> /130A	PC3-SK04-025001Z
3+2+2	170A	6	Bronze	25mm <sup>2</sup> /130A	PC3-SK04-025002Z
3+2+1	170A	3,6	Aluminium	35mm <sup>2</sup> /160A	PC3-SK04-035001
3+2+2	170A	3,6	Aluminium	35mm <sup>2</sup> /160A	PC3-SK04-035002
3+2+1	170A	6	Bronze	35mm <sup>2</sup> /160A	PC3-SK04-035001Z
3+2+2	170A	6	Bronze	35mm <sup>2</sup> /160A	PC3-SK04-035002Z
3+2+1	170A	3,6	Aluminium	50mm <sup>2</sup> /170A	PC3-SK04-050001
3+2+2	170A	3,6	Aluminium	50mm <sup>2</sup> /170A	PC3-SK04-050002
3+2+1	170A	6	Bronze	50mm <sup>2</sup> /170A	PC3-SK04-050001Z
3+2+2	170A	6	Bronze	50mm <sup>2</sup> /170A	PC3-SK04-050002Z
3+2+1	250A	5,2	Aluminium	50mm <sup>2</sup> /200A	PC4-SK04-050001
3+2+2	250A	5,2	Aluminium	50mm <sup>2</sup> /200A	PC4-SK04-050002
3+2+1	250A	8,9	Bronze	50mm <sup>2</sup> /200A	PC4-SK04-050001Z
3+2+2	250A	8,9	Bronze	50mm <sup>2</sup> /200A	PC4-SK04-050002Z
3+2+1	250A	5,2	Aluminium	70mm <sup>2</sup> /250A	PC4-SK04-070001
3+2+2	250A	5,2	Aluminium	70mm <sup>2</sup> /250A	PC4-SK04-070002
3+2+1	250A	8,9	Bronze	70mm <sup>2</sup> /250A	PC4-SK04-070001Z
3+2+2	250A	8,9	Bronze	70mm <sup>2</sup> /250A	PC4-SK04-070002Z



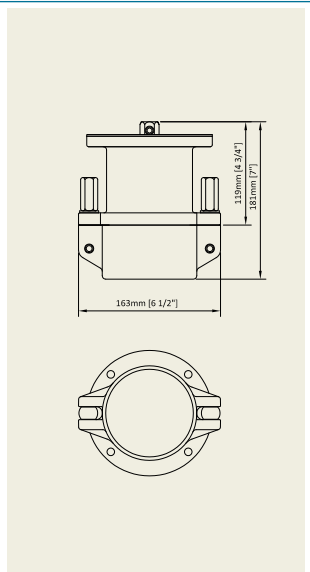
## CONNECTOR

No Pins (P&E+pil)	Max current A	Weight kg	Housing Material	Incoming cable size/Rec. current	Connector
3+2+1	170A	3,6	Aluminium	25mm <sup>2</sup> /130A	PC3-RK04-025001
3+2+2	170A	3,6	Aluminium	25mm <sup>2</sup> /130A	PC3-RK04-025002
3+2+1	170A	6	Bronze	25mm <sup>2</sup> /130A	PC3-RK04-025001Z
3+2+2	170A	6	Bronze	25mm <sup>2</sup> /130A	PC3-RK04-025002Z
3+2+1	170A	3,6	Aluminium	35mm <sup>2</sup> /160A	PC3-RK04-035001
3+2+2	170A	3,6	Aluminium	35mm <sup>2</sup> /160A	PC3-RK04-035002
3+2+1	170A	6	Bronze	35mm <sup>2</sup> /160A	PC3-RK04-035001Z
3+2+2	170A	6	Bronze	35mm <sup>2</sup> /160A	PC3-RK04-035002Z
3+2+1	170A	3,6	Aluminium	50mm <sup>2</sup> /170A	PC3-RK04-050001
3+2+2	170A	3,6	Aluminium	50mm <sup>2</sup> /170A	PC3-RK04-050002
3+2+1	170A	6	Bronze	50mm <sup>2</sup> /170A	PC3-RK04-050001Z
3+2+2	170A	6	Bronze	50mm <sup>2</sup> /170A	PC3-RK04-050002Z
3+2+1	250A	5,2	Aluminium	50mm <sup>2</sup> /200A	PC4-RK04-050001
3+2+2	250A	5,2	Aluminium	50mm <sup>2</sup> /200A	PC4-RK04-050002
3+2+1	250A	8,9	Bronze	50mm <sup>2</sup> /200A	PC4-RK04-050001Z
3+2+2	250A	8,9	Bronze	50mm <sup>2</sup> /200A	PC4-RK04-050002Z
3+2+1	250A	5,2	Aluminium	70mm <sup>2</sup> /250A	PC4-RK04-070001
3+2+2	250A	5,2	Aluminium	70mm <sup>2</sup> /250A	PC4-RK04-070002
3+2+1	250A	8,9	Bronze	70mm <sup>2</sup> /250A	PC4-RK04-070001Z
3+2+2	250A	8,9	Bronze	70mm <sup>2</sup> /250A	PC4-RK04-070002Z




















## SOCKET

No Pins (P&E+pil)	Max current A	Weight kg	Housing Material	Incoming cable size/Rec. current	Socket
3+2+1	170A	1,8	Aluminium	25mm <sup>2</sup> /130A	PC3-VK04-025001
3+2+2	170A	1,8	Aluminium	25mm <sup>2</sup> /130A	PC3-VK04-025002
3+2+1	170A	3,4	Bronze	25mm <sup>2</sup> /130A	PC3-VK04-025001Z
3+2+2	170A	3,4	Bronze	25mm <sup>2</sup> /130A	PC3-VK04-025002Z
3+2+1	170A	1,8	Aluminium	35mm <sup>2</sup> /160A	PC3-VK04-035001
3+2+2	170A	1,8	Aluminium	35mm <sup>2</sup> /160A	PC3-VK04-035002
3+2+1	170A	3,4	Bronze	35mm <sup>2</sup> /160A	PC3-VK04-035001Z
3+2+2	170A	3,4	Bronze	35mm <sup>2</sup> /160A	PC3-VK04-035002Z
3+2+1	170A	1,8	Aluminium	50mm <sup>2</sup> /170A	PC3-VK04-050001
3+2+2	170A	1,8	Aluminium	50mm <sup>2</sup> /170A	PC3-VK04-050002
3+2+1	170A	3,4	Bronze	50mm <sup>2</sup> /170A	PC3-VK04-050001Z
3+2+2	170A	3,4	Bronze	50mm <sup>2</sup> /170A	PC3-VK04-050002Z
3+2+1	250A	4,2	Aluminium	50mm <sup>2</sup> /200A	PC4-VK04-050001
3+2+2	250A	4,2	Aluminium	50mm <sup>2</sup> /200A	PC4-VK04-050002
3+2+1	250A	7,4	Bronze	50mm <sup>2</sup> /200A	PC4-VK04-050001Z
3+2+2	250A	7,4	Bronze	50mm <sup>2</sup> /200A	PC4-VK04-050002Z
3+2+1	250A	4,2	Aluminium	70mm <sup>2</sup> /250A	PC4-VK04-070001
3+2+2	250A	4,2	Aluminium	70mm <sup>2</sup> /250A	PC4-VK04-070002
3+2+1	250A	7,4	Bronze	70mm <sup>2</sup> /250A	PC4-VK04-070001Z
3+2+2	250A	7,4	Bronze	70mm <sup>2</sup> /250A	PC4-VK04-070002Z



## 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