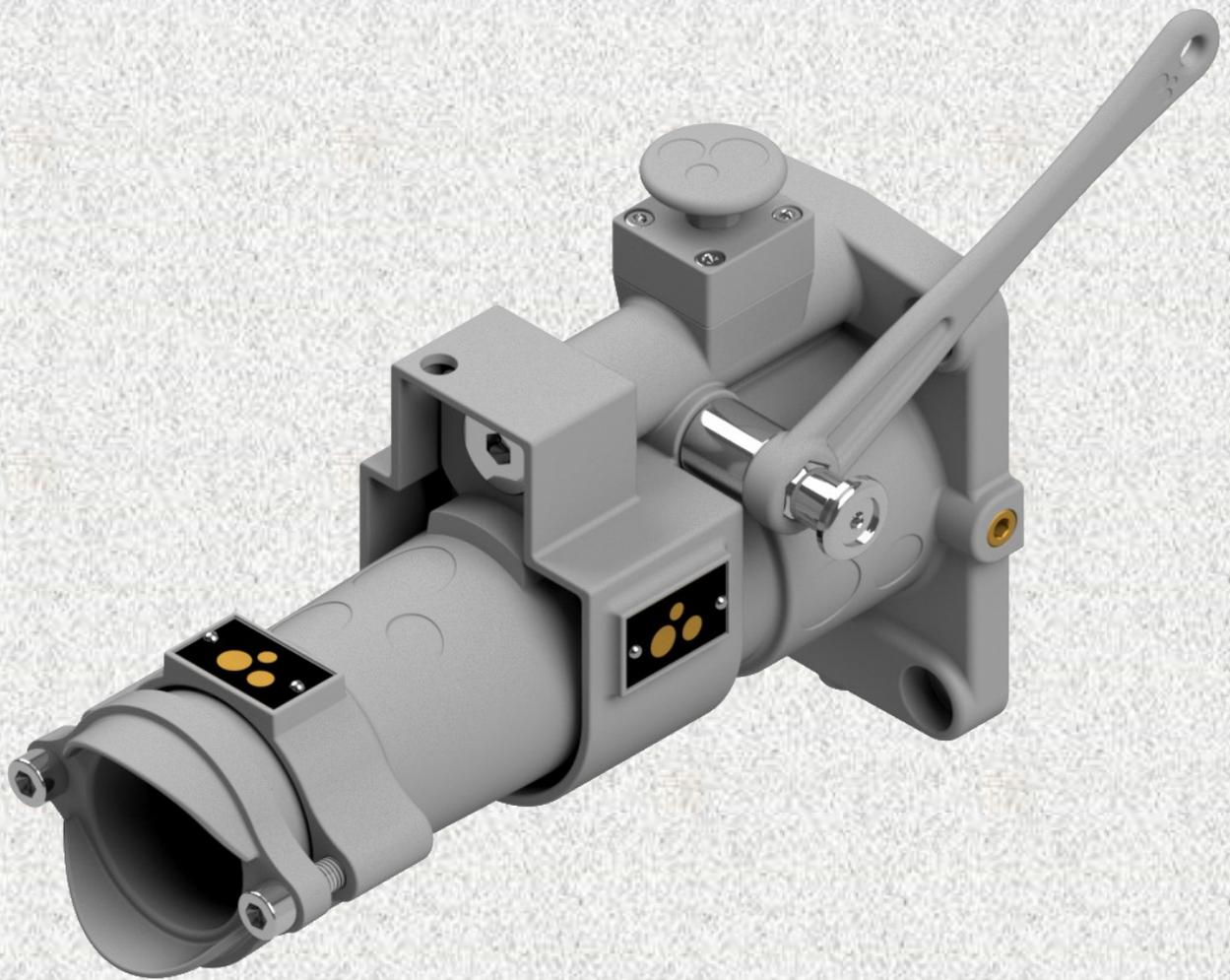




Restrained Plugs And Sockets

PSZA Range

1,100V 250A





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Pilot Orientation

Pre-Built To Suit Cable Type



Plug Type To Suit Cable Type with Grub Style Contact Set								
(mm ²)	*Ref.	Trackless Mining	*Ref.	Type 41	*Ref.	Type 61A	*Ref.	Type 61B
4	-	-	(D)	RS3462	-	-	-	-
6	-	-	(D)	RS3463	-	-	-	-
10	-	-	(E)	RS3464	-	-	-	-
16	(E)	RS3465	(E)	RS3465	(E)	RS3465	-	-
25	(F)	RS3466	(F)	RS3466	(F)	RS3466	-	-
35	(F)	RS3467	-	-	(G)	RS3468	(F)	RS3467
50	(G)	RS3469	-	-	(H)	RS3470	(G)	RS3469
70	-	-	-	-	-	-	-	-
95	-	-	-	-	-	-	-	-

*Gland Reference Letter

*For Crimp Contact style to 95mm² refer to page 14

Part Breakdown For Customized Cables; One Of Each Type Required



12 / 20 Style Contact Sets			
(mm ²)	ID (mm)	Stock No Crimp.	Stock No Grub.
10	4.7	RS3537	RS3538
16	6.5	RS3636	RS3538
25	7.7	RS3637	RS3539
35	9.0	RS3638	RS3540
50	10.5	RS3639	RS3541
70	12.5	RS3542	-
95	14.0	RS3543	-

2 Front Cage
Stock No: RS1280



Compression Gland Type		
*Ref.	Gland ID	Stock No.
(A)	10-15	RS2216
(B)	15-20	RS2217
(C)	20-25	RS2218
(D)	25-30	RS2219
(E)	30-35	RS2220
(F)	35-40	RS1592
(G)	40-45	RS1593
(H)	45-50	RS1594
(I)	50-55	RS1595
(J)	55-60	RS1596

3 1100V 250A Plug Body
Stock No: RS1267



*Gland Reference Letter

1100V 250A Socket (Grub Style Contacts)

3 Phase 1 Pilot



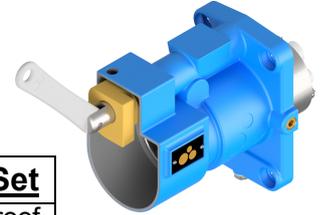
Pilot Orientation



Ratchet Release Style



Quick Release Style



Jack In Style

Socket Type to Suit mm ² Cable Tails with Grub Style Contact Set				
(mm ²)	Jack In Stock No.	Quick Release Stock No.	Ratchet Release Stock No.	Tamper Proof Stock No.
4	RS3489	RS3489QR	RS3489RR	RS3489TP
6	RS3490	RS3490QR	RS3490RR	RS3490TP
10	RS3491	RS3491QR	RS3491RR	RS3491TP
16	RS3492	RS3492QR	RS3492RR	RS3492TP
25	RS3493	RS3493QR	RS3493RR	RS3493TP
35	RS3494	RS3494QR	RS3494RR	RS3494TP
50	RS3495	RS3495QR	RS3495RR	RS3495TP
70	-	-	-	-
95	-	-	-	-

*For Crimp Contact style to 95mm² refer to page 13

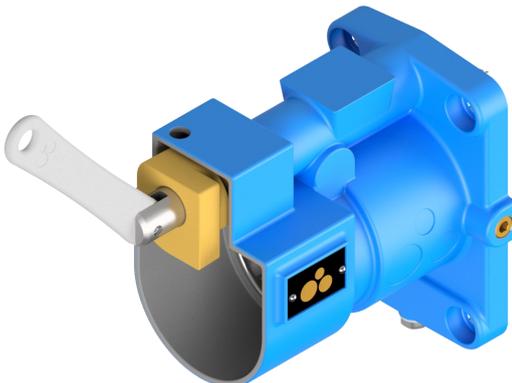
Part Breakdown For Customized Cables; One Of Each Type Required

① 1100V 250A Socket Body

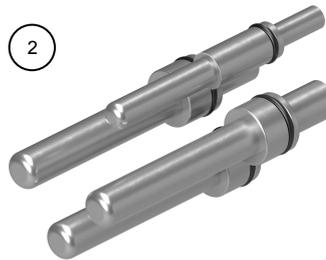
Jack In Style:
Stock No. RS1359

Quick Release Style
Stock No: RS1359QR

Ratchet Release Style
Stock No. RS1359RR



②



12 / 68 Style Contact Sets			
(mm ²)	ID (mm)	Stock No Crimp.	Stock No Grub.
10	4.7	RS3704	RS3545
16	6.5	RS3640	RS3545
25	7.7	RS3641	RS3546
35	9.0	RS3642	RS3547
50	10.5	RS3643	RS3548
70	12.5	RS3549	N/A
95	14.0	RS3550	N/A

③ Socket Cage
Stock No: RS1270



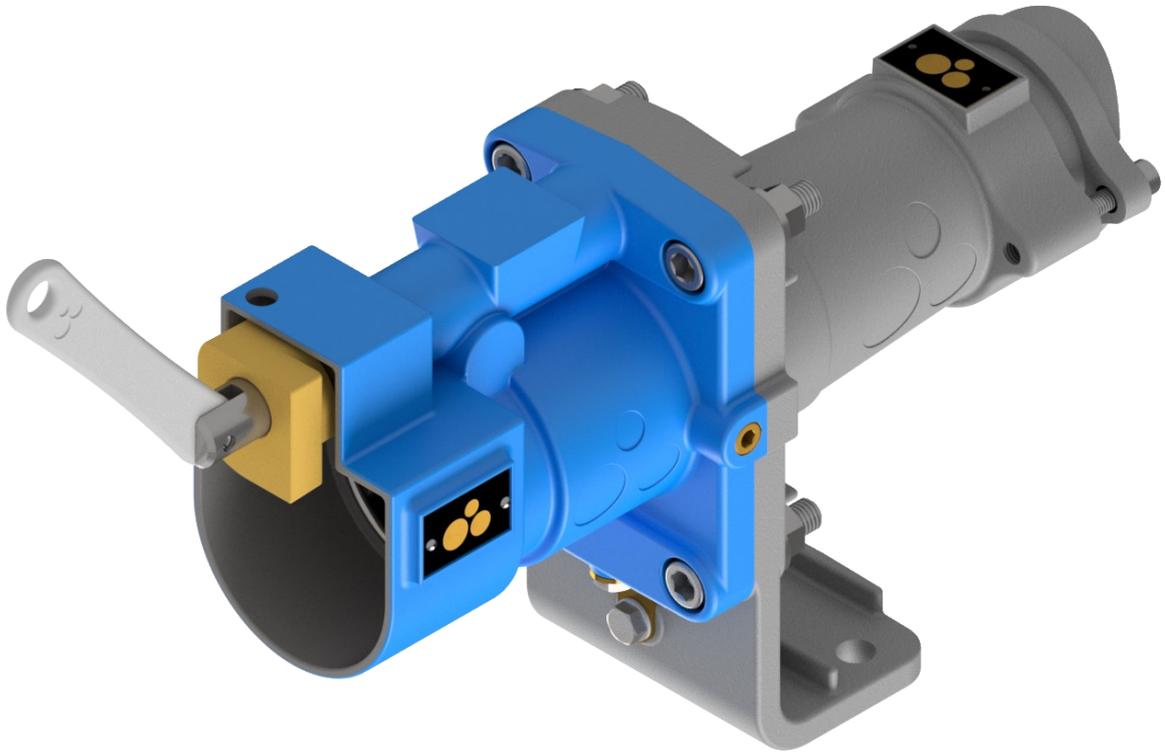
1100V 250A Socket Gland Bracket (SGB)

3 Phase 1 Pilot



Pilot Orientation

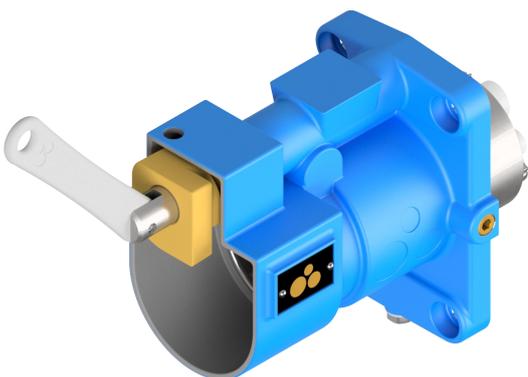
Built To Suit Cable Type



Part Breakdown For Customized Cables; One Of Each Type Required

1 1100V 250A Socket
Stock No: Refer to Socket Page

2 PSZA Gland Bracket Body Kit
Stock No: RS3515

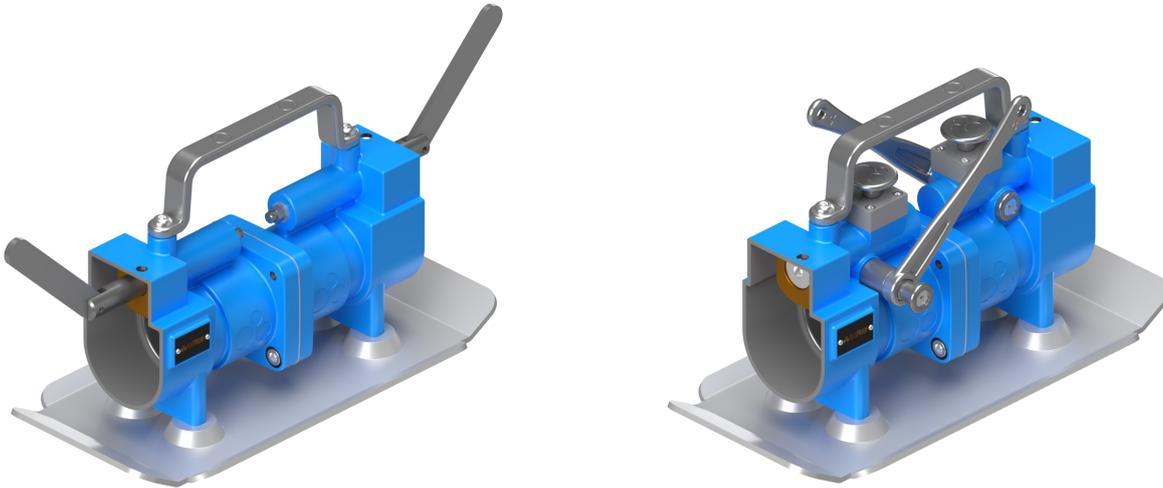


Compression Gland Type		
*Ref.	Gland ID	Stock No.
(A)	10-15	RS2216
(B)	15-20	RS2217
(C)	20-25	RS2218
(D)	25-30	RS2219
(E)	30-35	RS2220
(F)	35-40	RS1592
(G)	40-45	RS1593
(H)	45-50	RS1594
(I)	50-55	RS1595
(J)	55-60	RS1596

*Gland Reference Letter

1100V 250A Back to Back (B2B)

3 Phase 1 Pilot



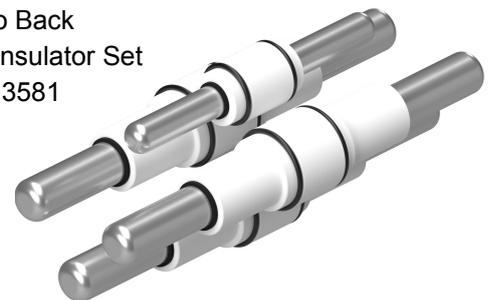
Complete Back to Back		
Jack-In Stock No.	Quick Release Stock No.	Ratchet Release Stock No.
RS3517	RS3517QR	RS3517RR

Part Breakdown For Repairs; One Of Each Type Required

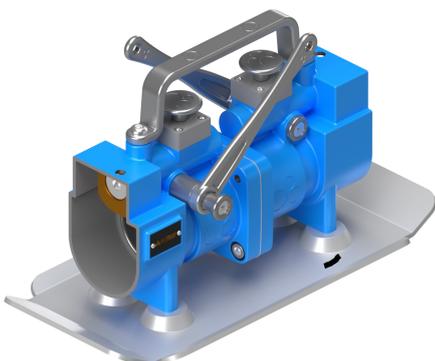
- ① PSZA Back to Back Body Kit
Jack-In Style
Stock No: RS3518

Quick Release Style
Stock No. RS3518QR

- ② PSZA Back to Back
Contact and Insulator Set
Stock No: RS3581

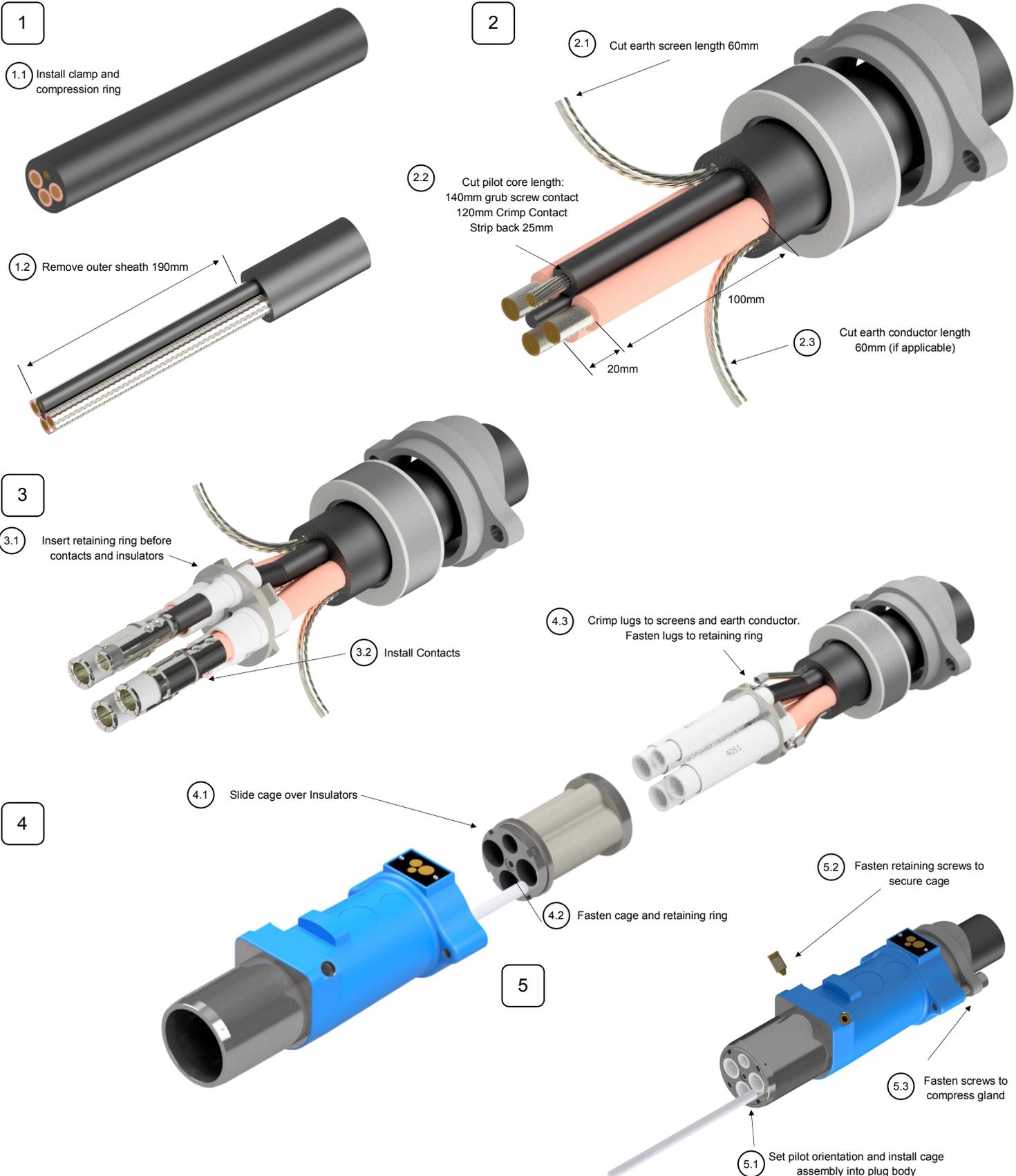


- ③ PSZA Back to Back
Cage Kit
Stock No: RS2436



PSZA Range Termination Procedure

1100V 250A Plug; 3 Phase 1 Pilot

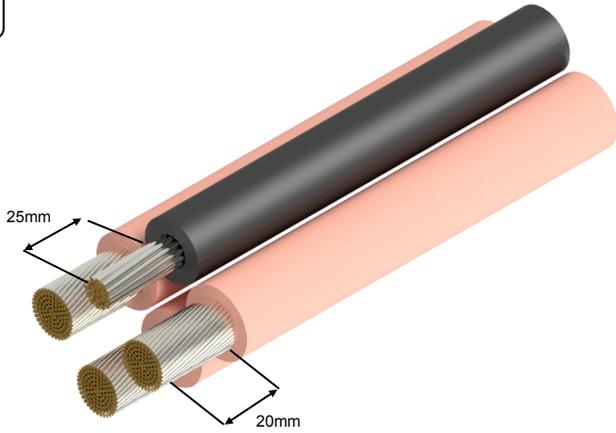


PSZA Range Termination Procedure

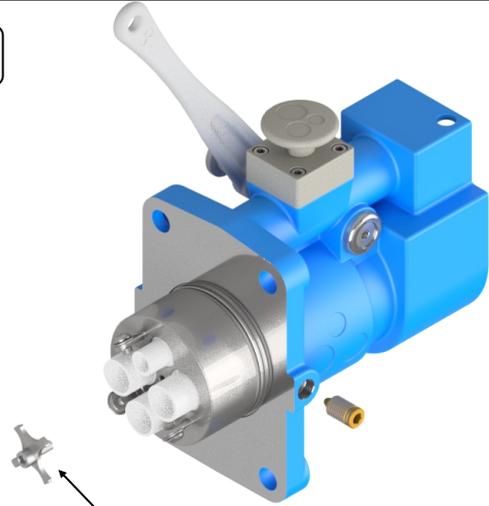
1100V 250A Socket; 3 Phase 1 Pilot



1

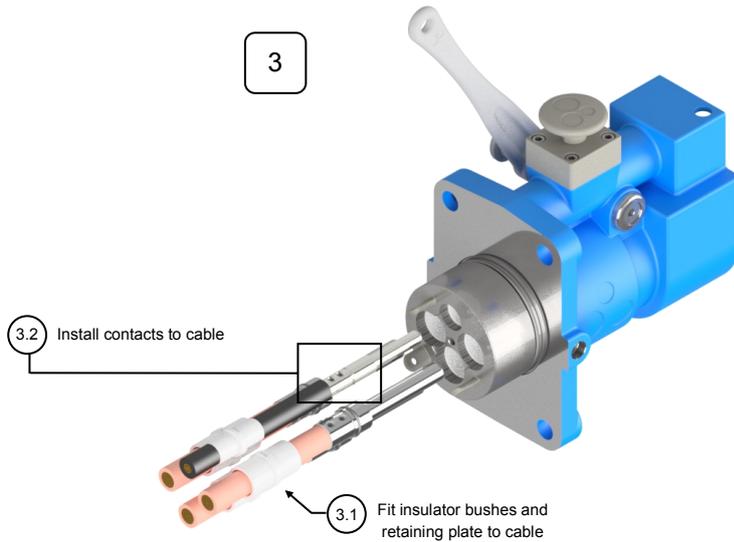


2



2.1 Remove star retaining plate from cage

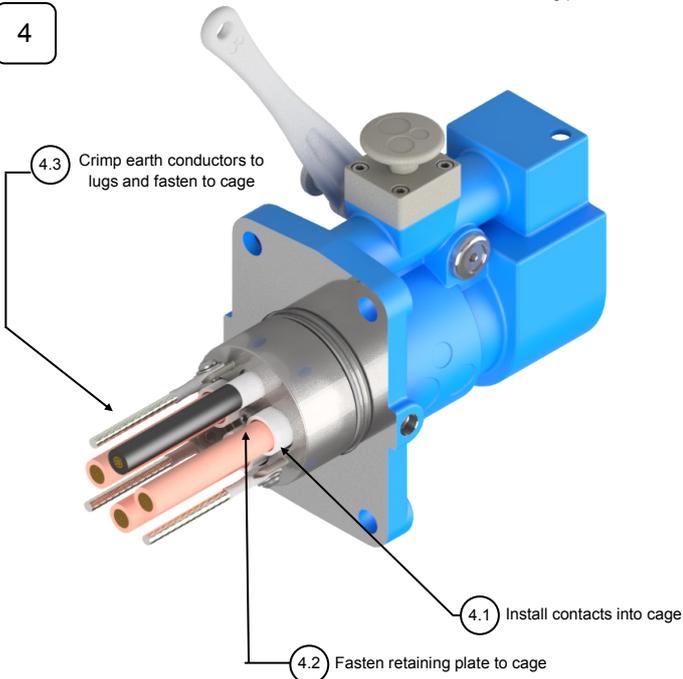
3



3.2 Install contacts to cable

3.1 Fit insulator bushes and retaining plate to cable

4

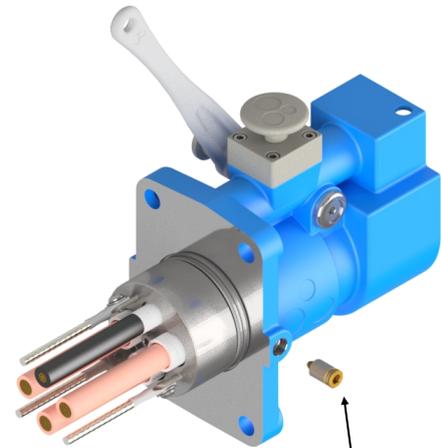


4.3 Crimp earth conductors to lugs and fasten to cage

4.1 Install contacts into cage

4.2 Fasten retaining plate to cage

5



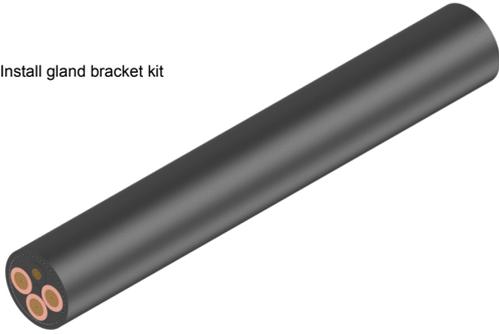
5.1 Fasten retaining screws to secure cage

PSZA Range Termination Procedure

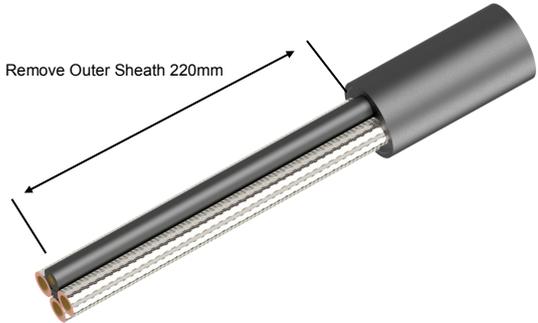
1100V 250A Socket Gland Bracket; 3 Phase 1 Pilot

1

1.1 Install gland bracket kit

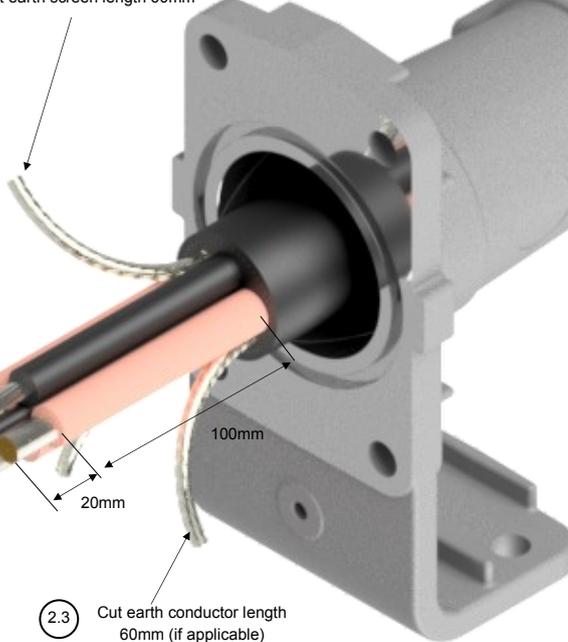


1.2 Remove Outer Sheath 220mm



2

2.1 Cut earth screen length 60mm



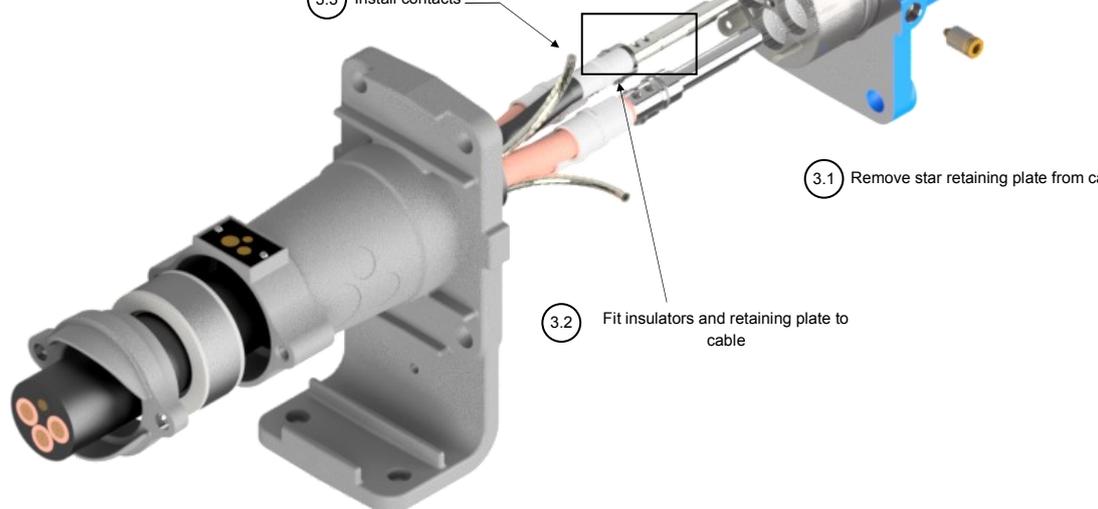
2.2 Cut pilot core length:
140mm grub screw contact
120mm Crimp Contact
Strip back 25mm

100mm
20mm

2.3 Cut earth conductor length
60mm (if applicable)

3

3.3 Install contacts



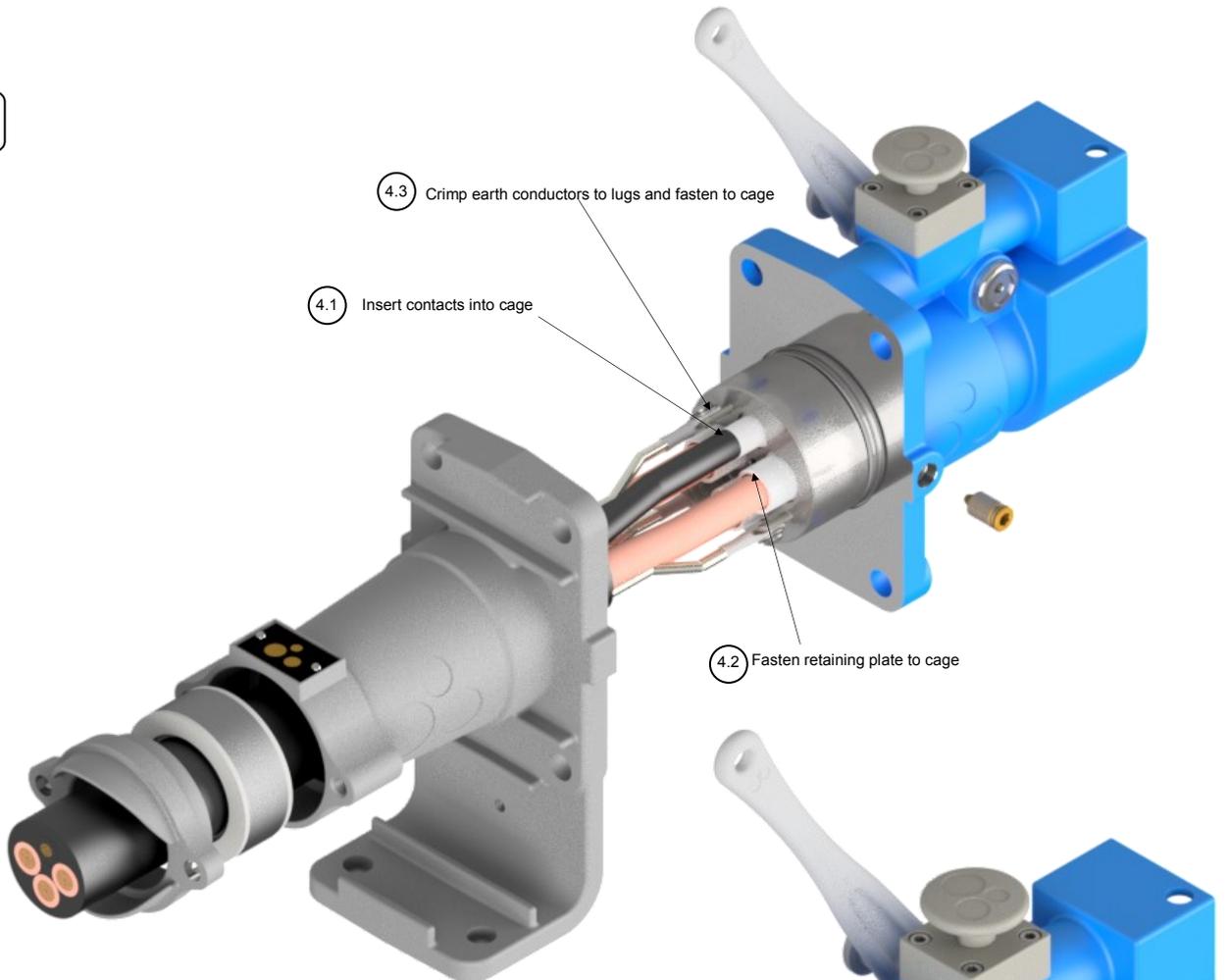
3.1 Remove star retaining plate from cage

3.2 Fit insulators and retaining plate to cable

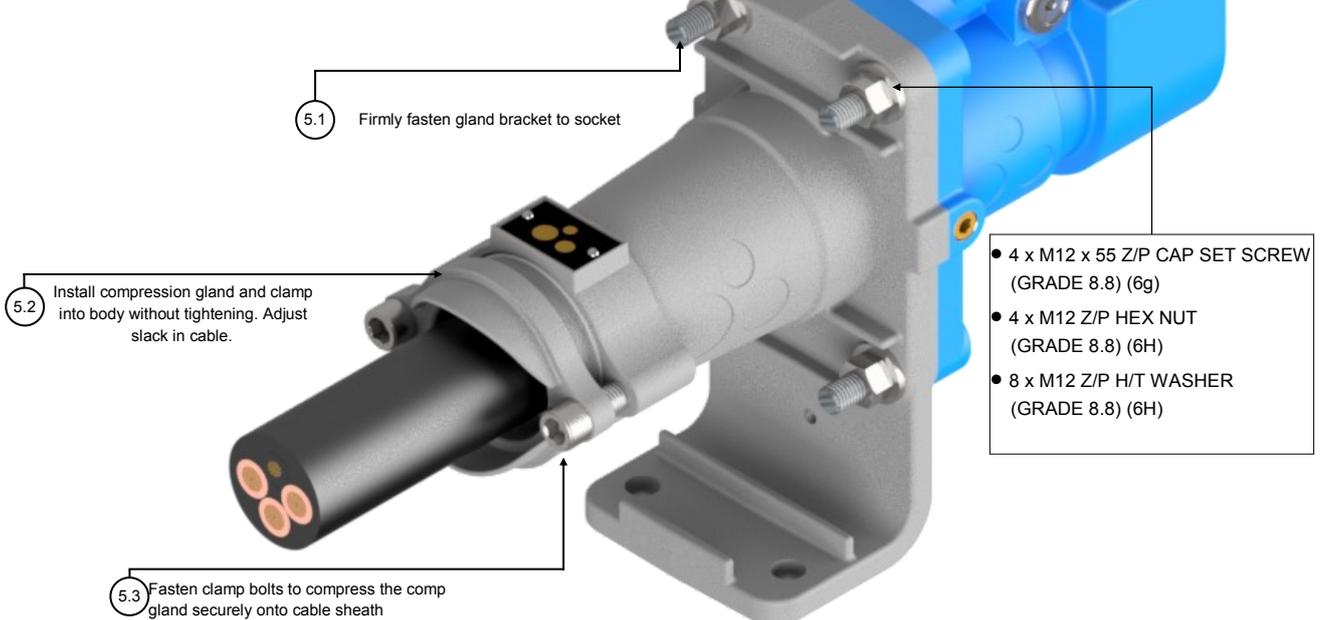
PSZA Range Termination Procedure

1100V 250A Socket Gland Bracket; 3 Phase 1 Pilot

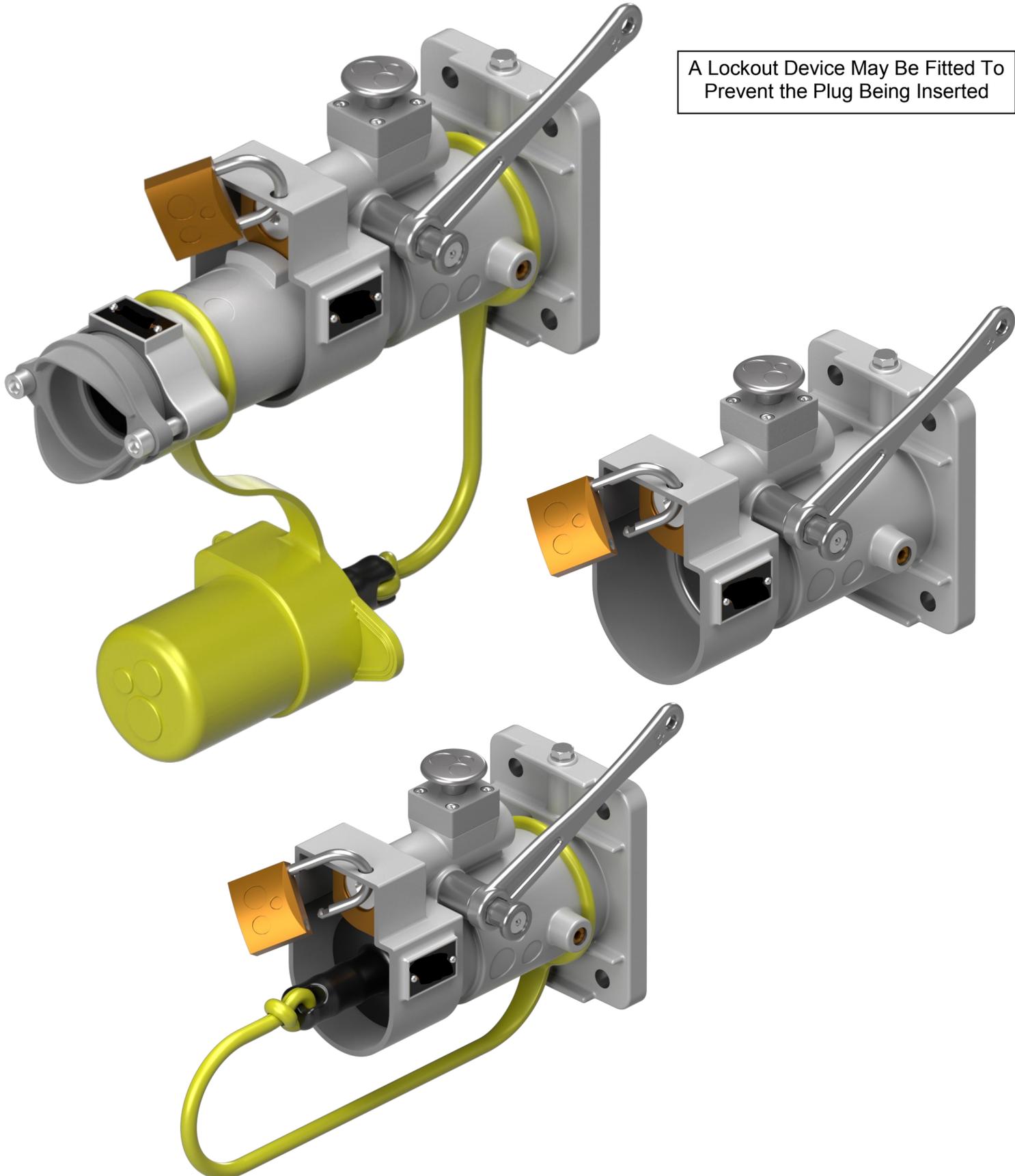
4



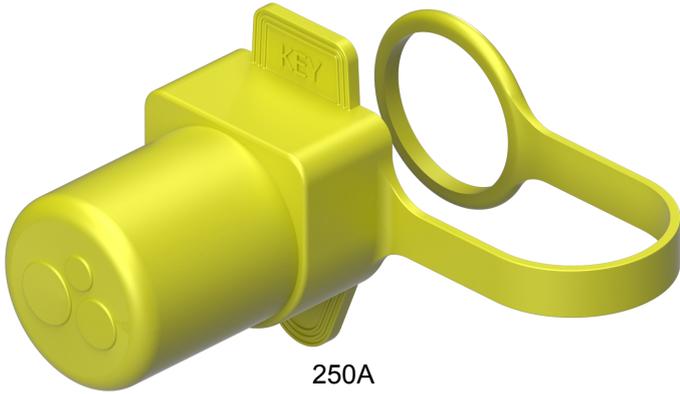
5



PSZA Range Lockout Device Location



PSZA Range Plug Accessories



250A
PSZA Plug Cover
Part No: 3199



PSZA OIF Plug Kit
(O-ring, Insulator Fastener Kit)
Stock No: RS3519



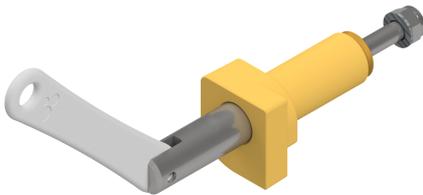
Guide Stick
Part No: 1766



PSZA Socket Protective Bung
Stock No: RS1768



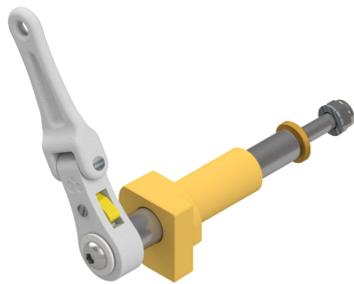
PSZA OIF Socket Kit
(O-ring, Insulator Fastener Kit)
Stock No: RS3520



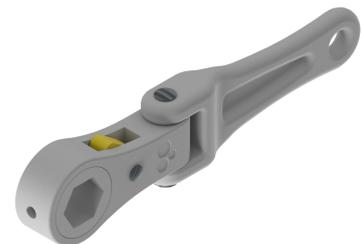
PSZA Jack in Repair Kit
Stock No: RS1609



PSZA Quick Release Repair Kit
Stock No: RS1183



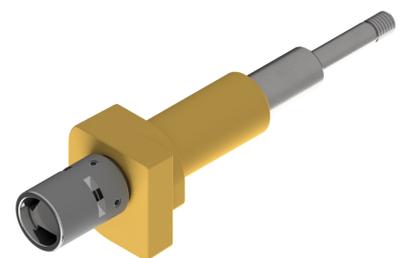
PSZA Ratchet Release Repair Kit
Stock No: RS3759



PSZA Ratchet Release Repair Kit
Stock No: RS2725



PSZA Socket Tamper Proof Handle
Assembly
Stock No: RS3511



PSZA Socket Tamper Proof Pawl
Screw Jack In Assembly
Stock No: RS3512



Pilot Orientation

Pre-Built To Suit Cable Type



Plug Type To Suit Cable Type with Crimp Style Contact Set								
(mm ²)	*Ref.	Trackless Mining	*Ref.	Type 41	*Ref.	Type 61A	*Ref.	Type 61B
4	-	-	(D)	RS3680	-	-	-	-
6	-	-	(D)	RS3681	-	-	-	-
10	-	-	(E)	RS3682	-	-	-	-
16	(E)	RS3683	(E)	RS3683	(E)	RS3683	-	-
25	(F)	RS3684	(F)	RS3684	(F)	RS3684	-	-
35	(F)	RS3685	-	-	(G)	RS3686	(F)	RS3685
50	(G)	RS3687	-	-	(H)	RS3688	(G)	RS3687
70	(I)	RS3689	-	-	(I)	RS3689	(I)	RS3689
95	-	-	-	-	(J)	RS3690	(J)	RS3690

*Gland Reference Letter

*For Grub Contact style refer to page 2

Part Breakdown For Customized Cables; One Of Each Type Required



12 / 20 Style Contact Sets			
(mm ²)	ID (mm)	Stock No Crimp.	Stock No Grub.
10	4.7	RS3537	RS3538
16	6.5	RS3636	RS3538
25	7.7	RS3637	RS3539
35	9.0	RS3638	RS3540
50	10.5	RS3639	RS3541
70	12.5	RS3542	N/A
95	14.0	RS3543	N/A

② Front Cage
Stock No: RS1280



Compression Gland Type		
*Ref.	Gland ID	Stock No.
(A)	10-15	RS2216
(B)	15-20	RS2217
(C)	20-25	RS2218
(D)	25-30	RS2219
(E)	30-35	RS2220
(F)	35-40	RS1592
(G)	40-45	RS1593
(H)	45-50	RS1594
(I)	50-55	RS1595
(J)	55-60	RS1596

③ 1100V 250A Plug Body
Stock No: RS1267



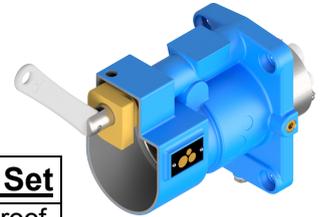
*Gland Reference Letter

1100V 250A Socket (Crimp Style Contacts)

3 Phase 1 Pilot



Pilot Orientation

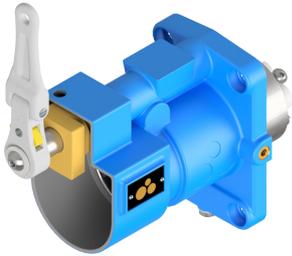


Jack In Style

Socket Type to Suit mm² Cable Tails with **Crimp Style Contact Set**

(mm ²)	Jack In Stock No.	Quick Release Stock No.	Ratchet Release Stock No.	Tamper Proof Stock No.
4	RS3692	RS3692QR	RS3692RR	RS3692TP
6	RS3693	RS3693QR	RS3693RR	RS3693TP
10	RS3694	RS3694QR	RS3694RR	RS3694TP
16	RS3695	RS3695QR	RS3695RR	RS3695TP
25	RS3696	RS3696QR	RS3696RR	RS3696TP
35	RS3697	RS3697QR	RS3697RR	RS3697TP
50	RS3698	RS3698QR	RS3698RR	RS3698TP
70	RS3699	RS3699QR	RS3699RR	RS3699TP
95	RS3700	RS3700QR	RS3700RR	RS3700TP

*For Grub Contact style refer to page 3



Ratchet Release Style



Quick Release Style

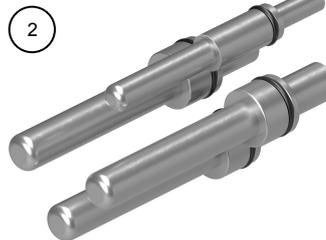
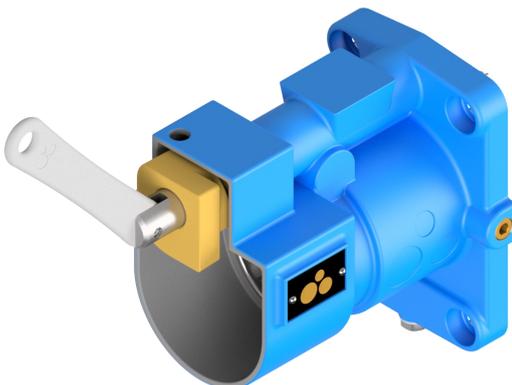
Part Breakdown For Customized Cables; One Of Each Type Required

① 1100V 250A Socket Body

Jack In Style:
Stock No. RS1359

Quick Release Style
Stock No: RS1359QR

Ratchet Release Style
Stock No. RS1359RR



②

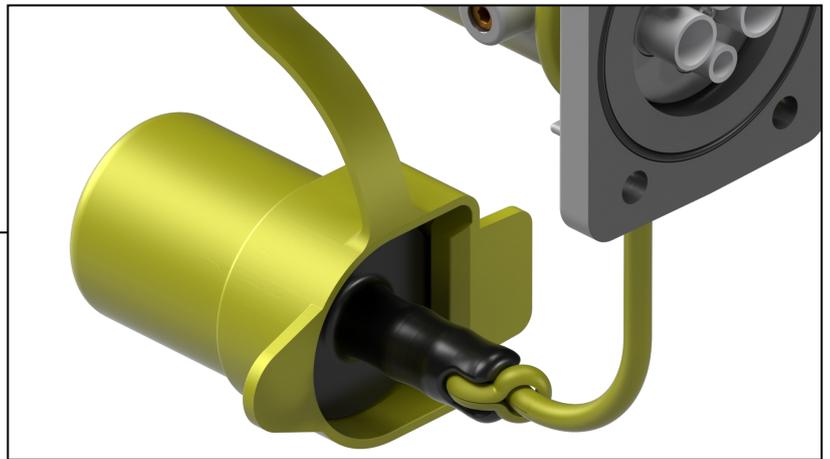
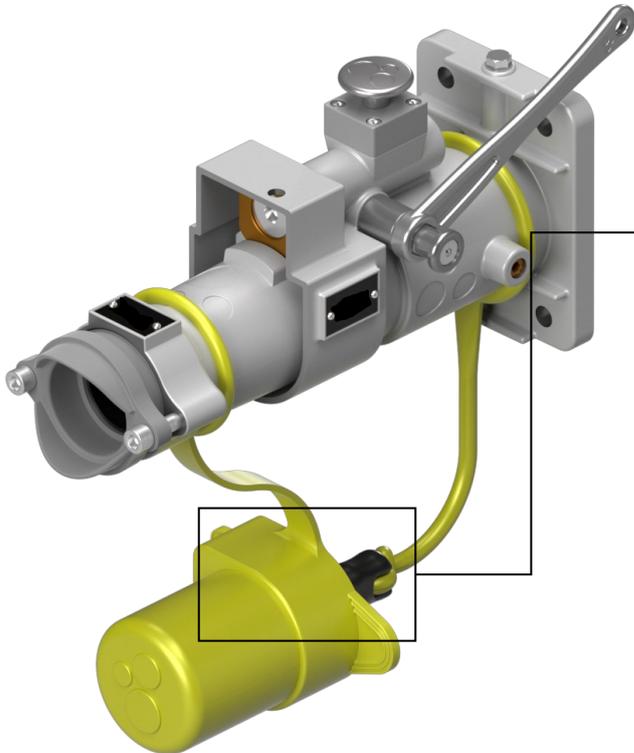
③ Socket Cage
Stock No: RS1270



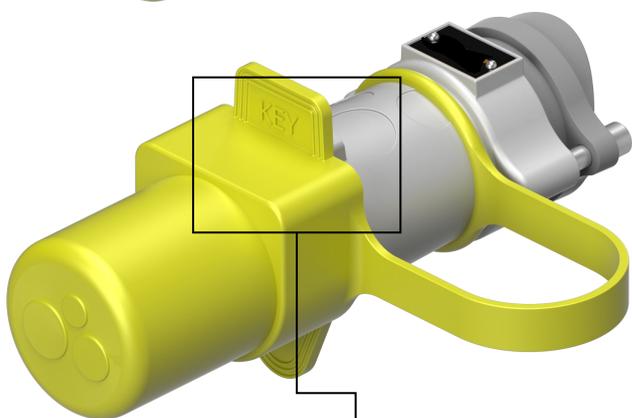
12 / 68 Style Contact Sets			
(mm ²)	ID (mm)	Stock No Crimp.	Stock No Grub.
10	4.7	RS3704	RS3544
16	6.5	RS3640	RS3545
25	7.7	RS3641	RS3546
35	9.0	RS3642	RS3547
50	10.5	RS3643	RS3548
70	12.5	RS3549	N/A
95	14.0	RS3550	N/A

PSZA Range Product Handling

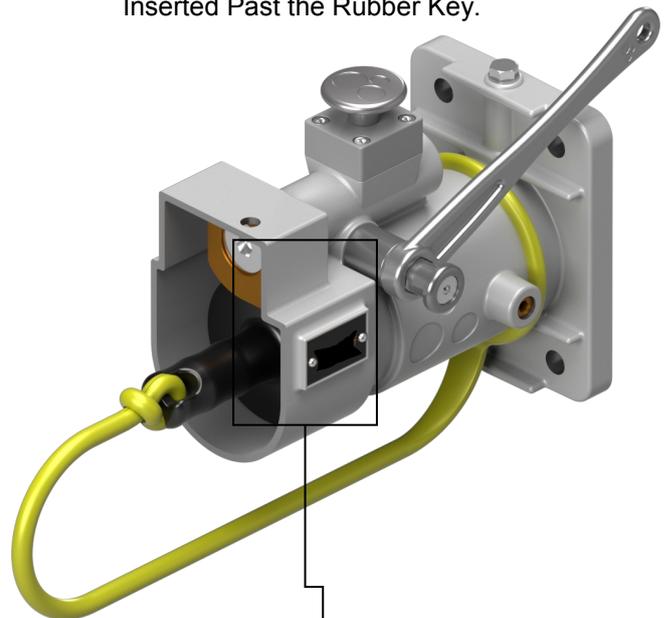
1100V 250A Plug And Socket



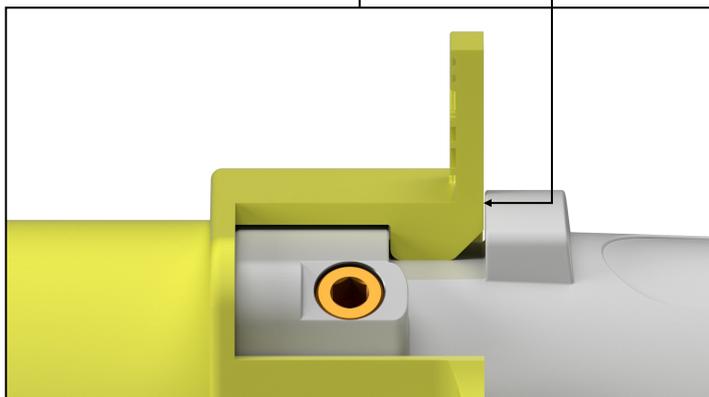
When Not In Use, Insert Socket Bung Into Silicone Plug Cover. Ensure Cap is Inserted Past the Rubber Key.



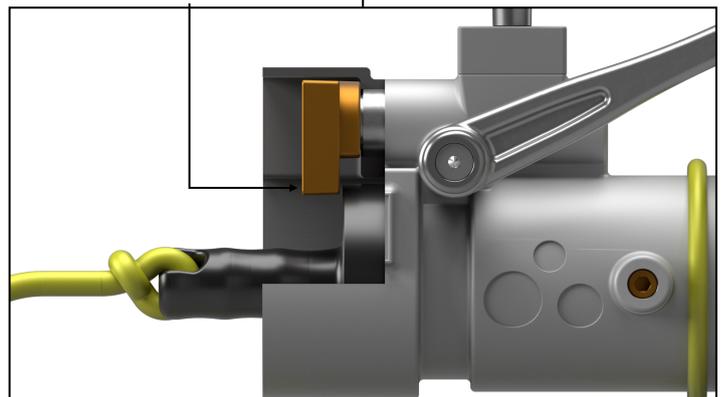
Ensure Key Is Engaged With Plug Body



Ensure Socket Bung Is Locked In Place With Pawl



Plug Key Engagement



Socket Key Engagement

Flamepath Detail

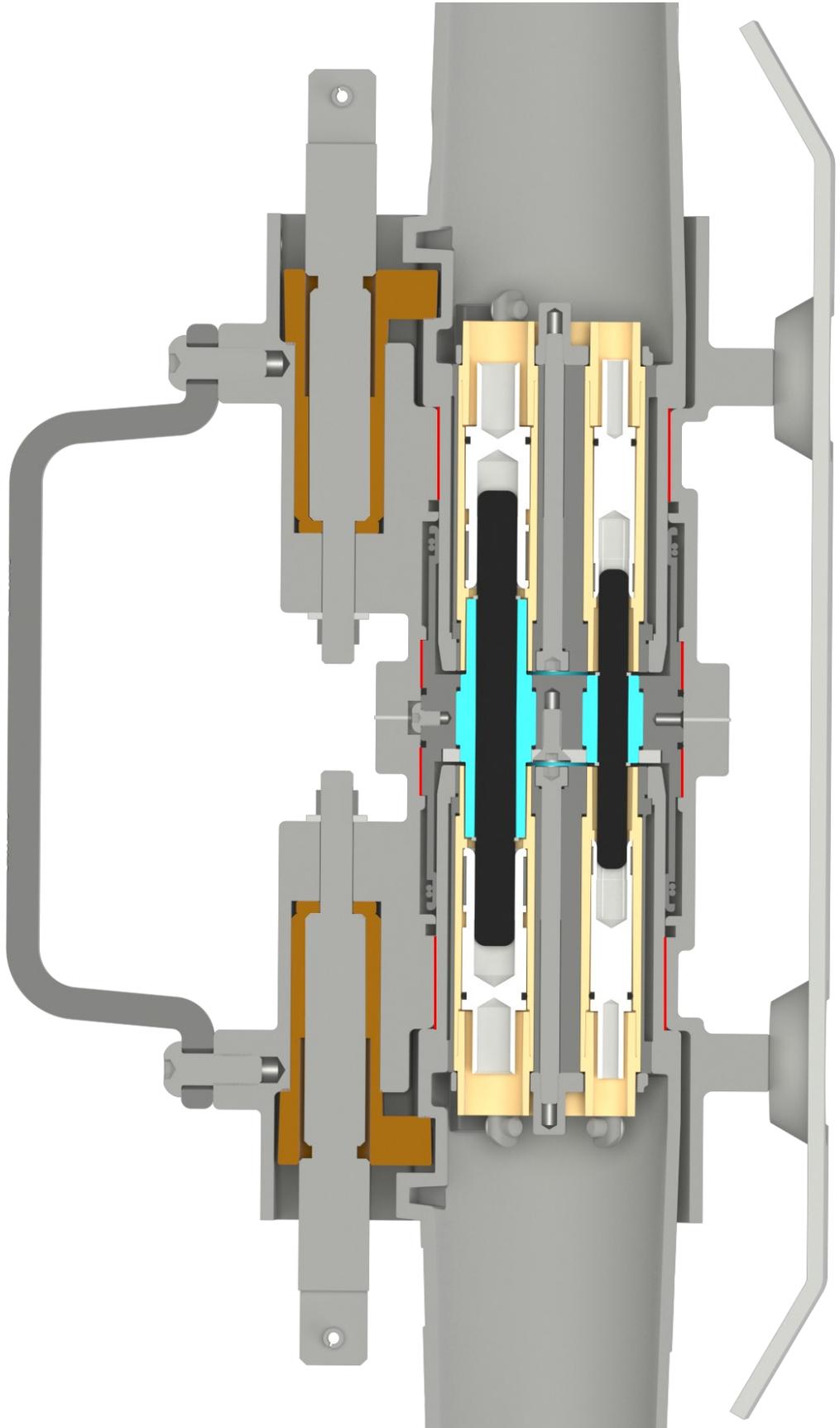
1100V 250A PSZA Back to Back

Legend	
	Flamepath
	Plug Insulators
	Sockets Insulators
	Plug Contacts
	Receptacle Contacts
	Plug and Socket Housing
	Plug and Socket Cage

Flamepaths are not intended to be repaired. For further specifications on Flamepath joints, contact manufacturer for dimensions and tolerances.

Plug and Socket Disengagement Order
Pilot/Auxiliary – Phase Contacts – Scraping Earth – Flameproof Path.

Pilot disengages first providing electrical isolation of phase during disconnection sequence.



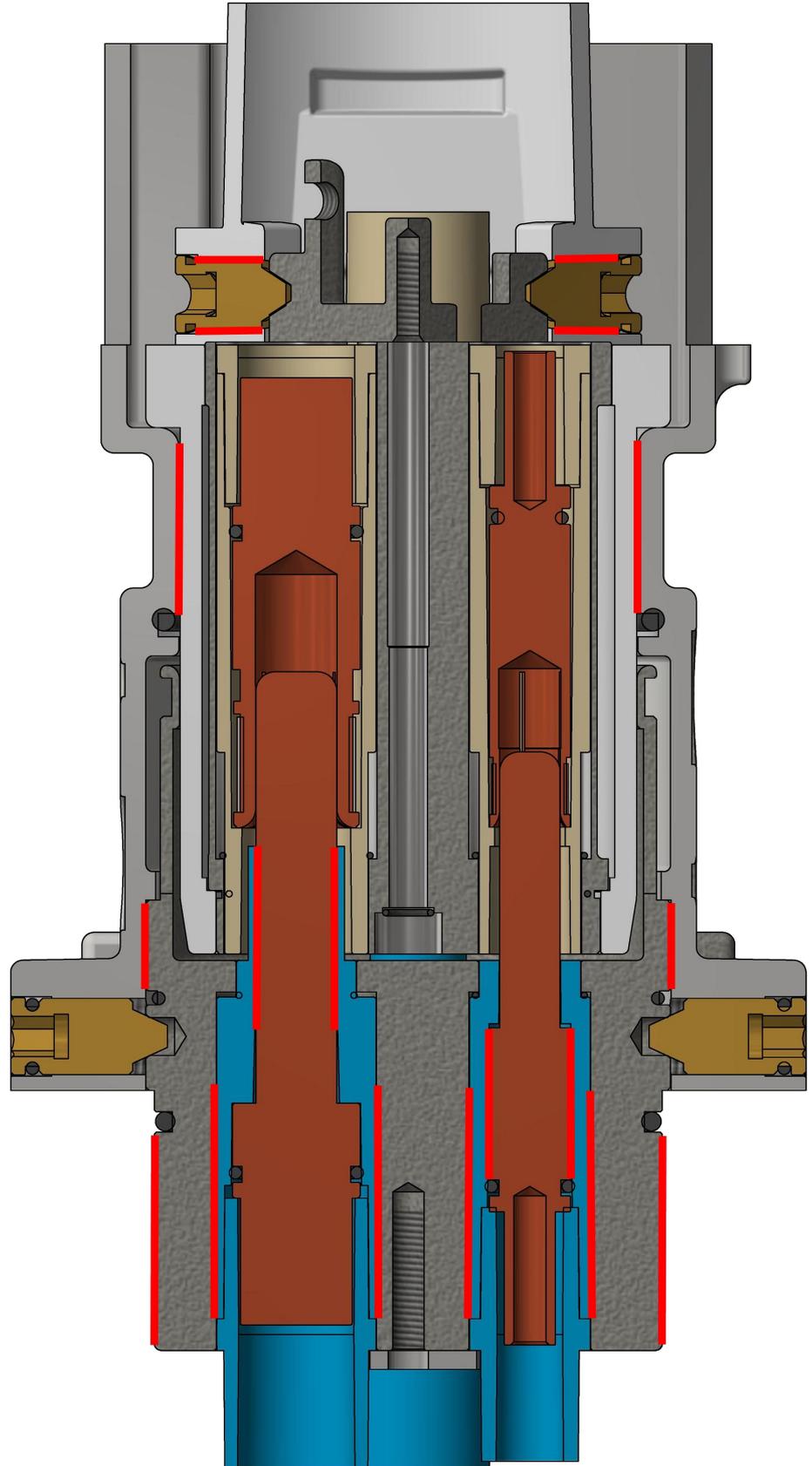
Flamepath Detail

1100V 250A PSZA Plug And Socket

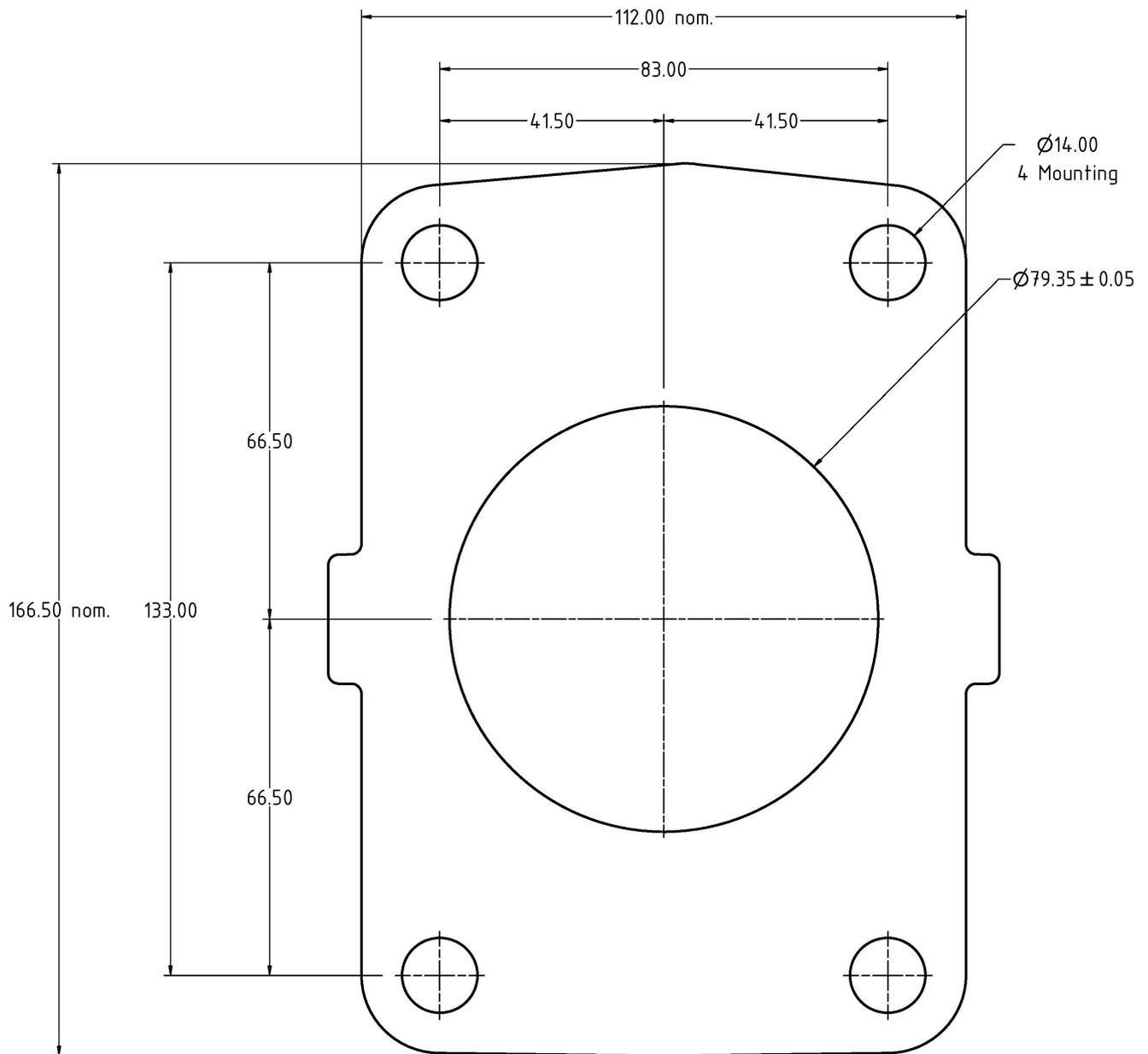
Legend	
	Flamepath
	Plug Insulators
	Socket Insulators
	Plug Contacts
	Socket Contact
	Cage/Barrel
	Cage Locking Screw

Flamepaths are not intended to be repaired. For further specifications on Flamepath joints, contact manufacturer for dimensions and tolerances.

Plug and Socket
Disengagement Order
Pilot/Auxiliary – Phase
Contacts – Scraping Earth –
Flameproof Path.
Pilot disengages first providing electrical isolation of phase during disconnection sequence.



PSZA Socket Enclosure Profile For Mounting of 1100V 250A Socket



In Accordance with SANS 1489-2

Maintenance And Safety

Plug and Socket System

To ensure the safe operation of the plug and socket, personnel should be aware of minimal ongoing care and maintenance.

- When cables are not in use, ensure that protective covers have been fitted to provide adequate sealing against moisture and dust.
- The plugs and sockets should never be used as a towing or anchor point.
- Inspect plug and socket to ensure no parts are missing, if parts are missing it is deemed unsafe for use.
- Inspect insertion end of plug and entry of socket to ensure there is no damage, as damage could compromise the flame path protection.
- Before connection inspect sealing ring in socket to ensure they are located correctly into groove.
- Before connection of plug and socket ensure connecting pins are not bent from previous misuse or incorrect assembly.
- Ensure plug has been inserted fully into socket before energizing.
- If witness marks are used, make sure they are brightly painted on the sheath, located where the cable enters the gland. This needs to be routinely inspected to check if a gap appears between the end of the gland and the witness mark. A gap may indicate that the cable has been under tension and that the termination in the coupler may have moved.
- The maximum surface temperature the plug will achieve when operating at full rated current at an ambient of 40 Deg Celsius will not exceed 85 Deg Celsius, which is therefore suitable for safe use in underground mines as it is less than 150 Deg Celsius.





Identification Labels

For 250A Plug Product



RATING: (Volts) (Amps)

IA No:

CoC: IECEX

REF: ID (Model) - Ex db 1 Mb Type A

S/N:



**WARNING - DO NOT SEPARATE
WHEN ENERGIZED**

- Standards Applied: SANS 1489:2016, AS/NZS 1299:2099, AS/NZS 60079.0:2019, AS/NZS 60079.1:2015
- In accordance with clause 11.3 of AS/NZS 60079-1:2015, the following fastener property class shall apply;
 - ◆ Fixing Gland Bracket to Socket: Property Class \geq 4.6
 - ◆ Fixing Compression Clamp: Property Class \geq 12.9
 - ◆ Fixing Socket to Ex d Enclosure: Property Class \geq 4.6*

**Note: Specified Fastener Property Class to be \geq the Fastener Property Class specified for the Ex enclosure.*
- Flameproof Joints Are Not Intended to Be Repaired: For Further Specifications On Flamepath Joints Contact The Original Manufacturer For Information On The Dimensions Of The Flameproof Joints
- Ensure Socket is Earthed to Ensure Induced Voltages Are Not Developed
- Plug and Socket Are Not To Be Separated When Energised



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