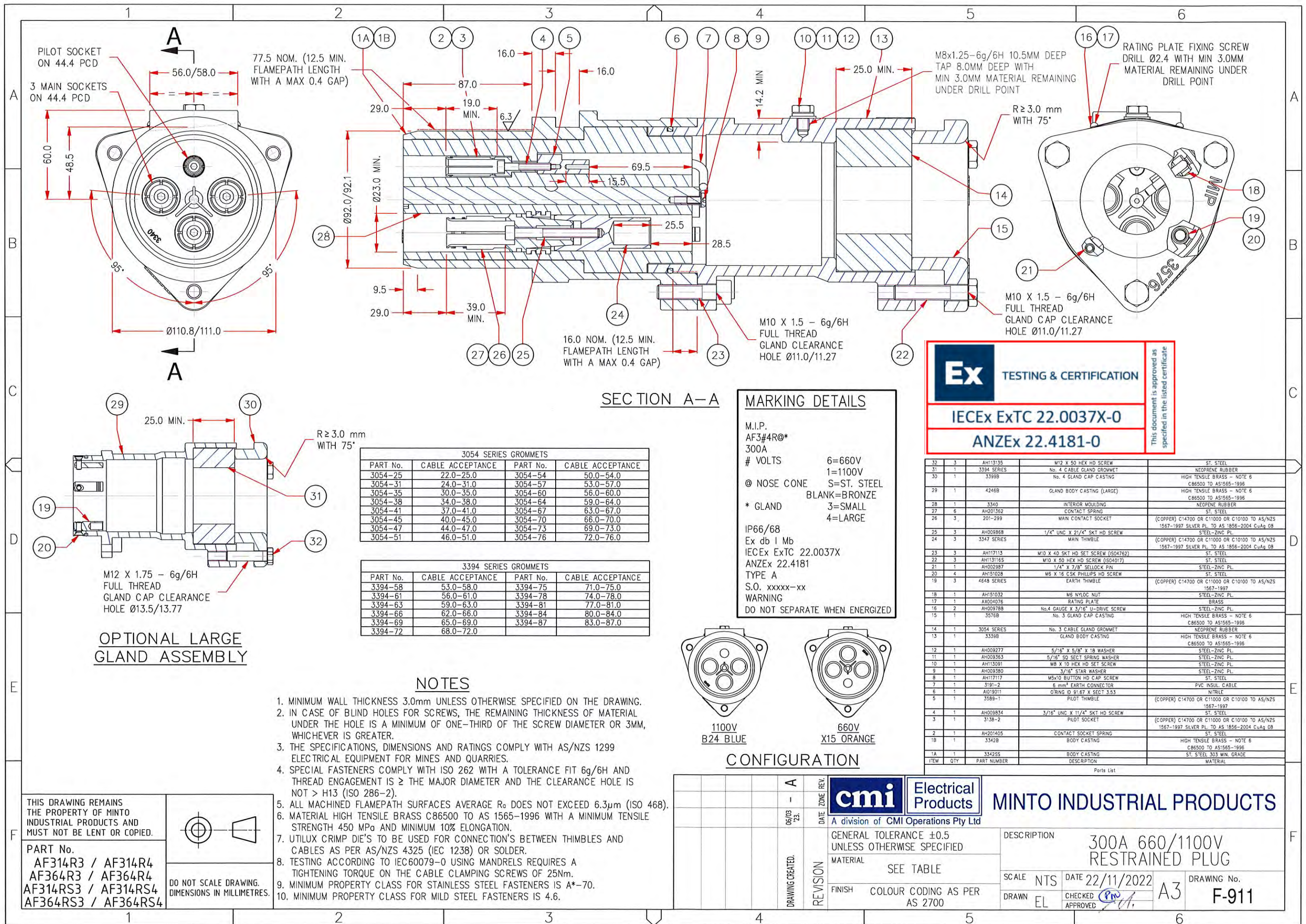
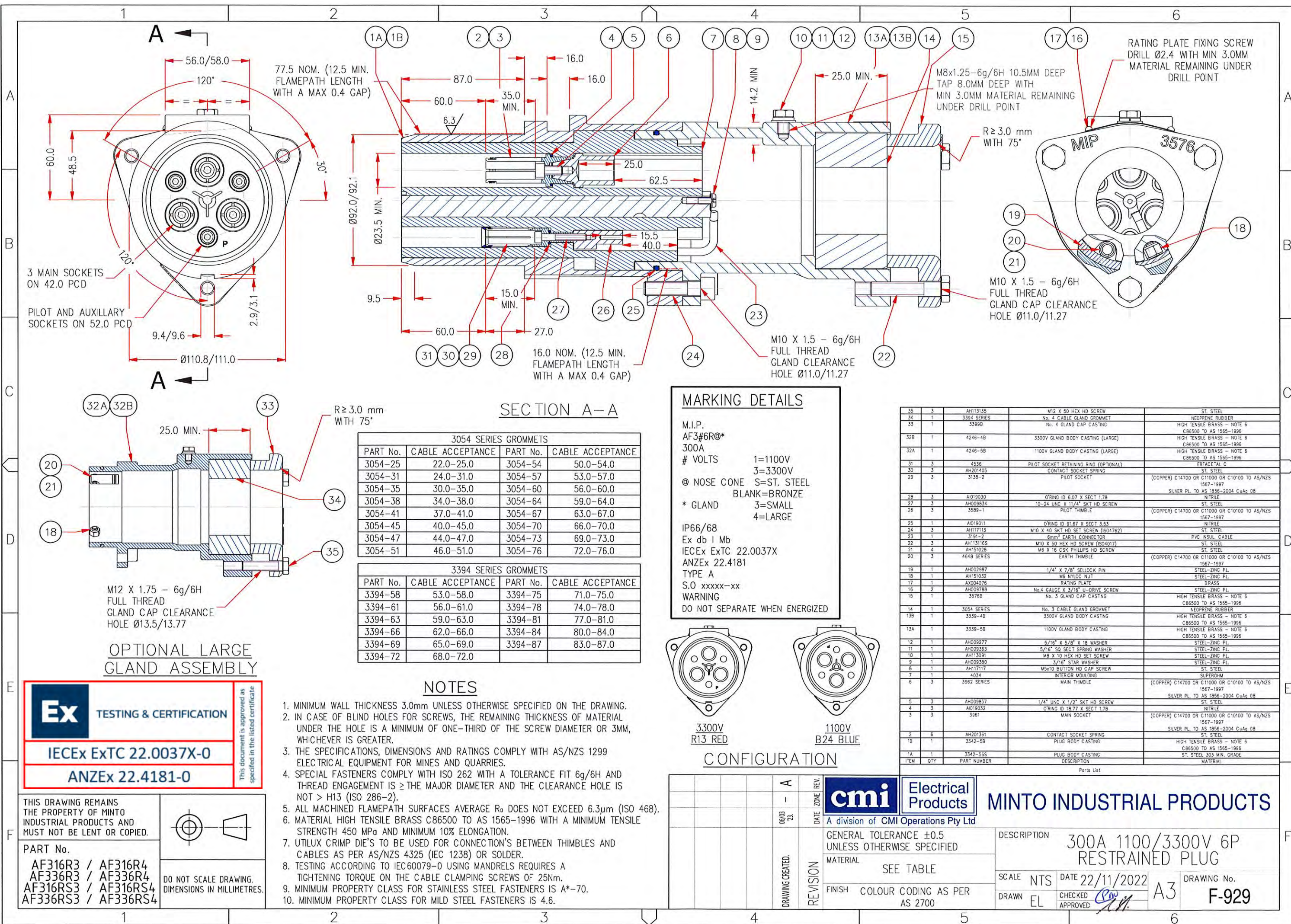
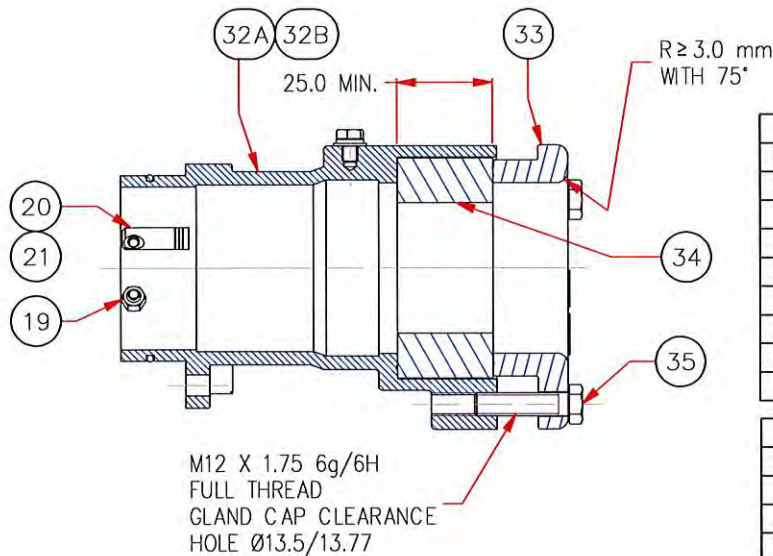
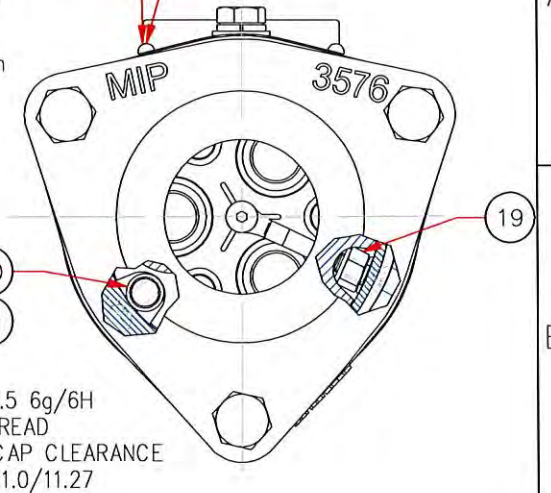
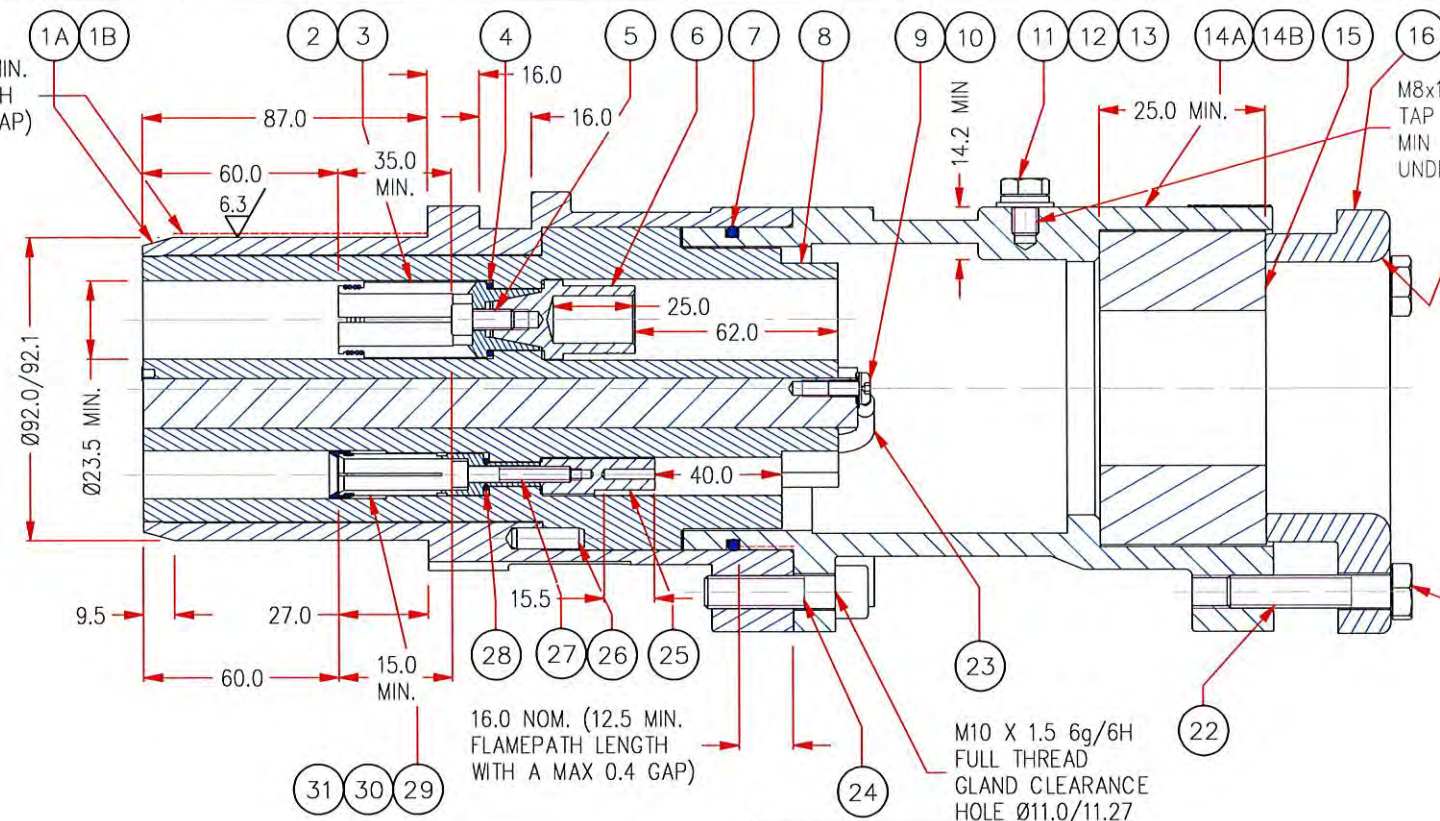
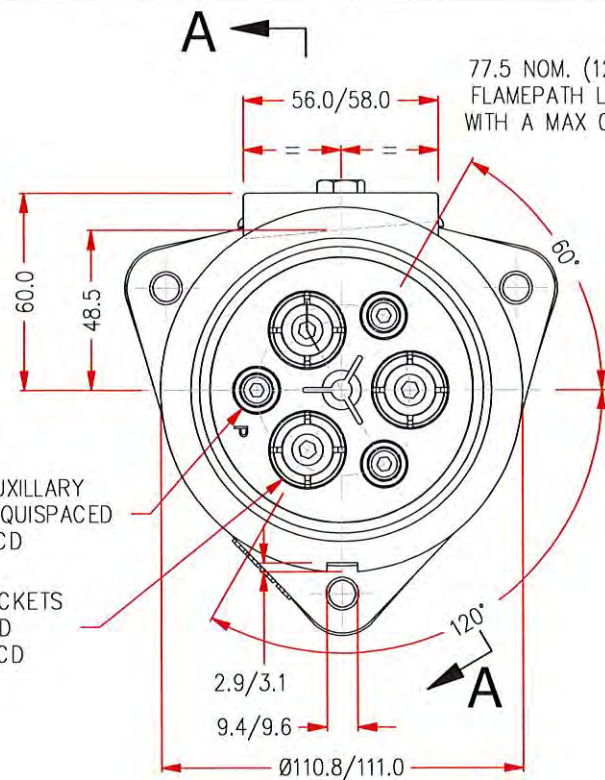








OPTIONAL LARGE
GLAND ASSEMBLY

SECTION A-A

MARKING DETAILS

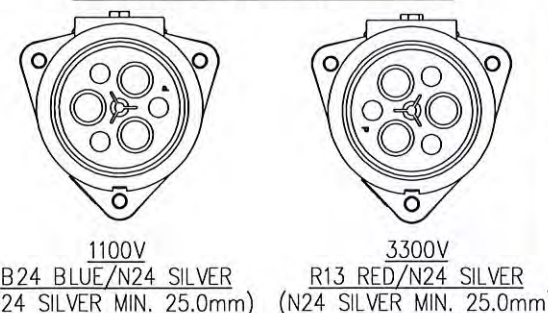
M.I.P.
AF4#6R@*
425A
VOLTS 1=1100V
3=3300V
@ NOSE CONE S=ST. STEEL
BLANK=BRONZE
* GLAND 3=SMALL
4=LARGE
IP66/68
Ex db I Mb
IECEx ExtC 22.0037X
ANZEx 22.4181
TYPE A
S.O xxxxx-xx
WARNING
DO NOT SEPARATE WHEN ENERGIZED

3054 SERIES GROMMETS			
PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3054-25	22.0-25.0	3054-54	50.0-54.0
3054-31	24.0-31.0	3054-57	53.0-57.0
3054-35	30.0-35.0	3054-60	56.0-60.0
3054-38	34.0-38.0	3054-64	59.0-64.0
3054-41	37.0-41.0	3054-67	63.0-67.0
3054-45	40.0-45.0	3054-70	66.0-70.0
3054-47	44.0-47.0	3054-73	69.0-73.0
3054-51	46.0-51.0	3054-76	72.0-76.0

3394 SERIES GROMMETS			
PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3394-58	53.0-58.0	3394-75	71.0-75.0
3394-61	56.0-61.0	3394-78	74.0-78.0
3394-63	59.0-63.0	3394-81	77.0-81.0
3394-66	62.0-66.0	3394-84	80.0-84.0
3394-69	65.0-69.0	3394-87	83.0-87.0
3394-72	68.0-72.0		

NOTES

- MINIMUM WALL THICKNESS 3.0mm UNLESS OTHERWISE SPECIFIED ON THE DRAWING.
- IN CASE OF BLIND HOLES FOR SCREWS, THE REMAINING THICKNESS OF MATERIAL UNDER THE HOLE IS A MINIMUM OF ONE-THIRD OF THE SCREW DIAMETER OR 3MM, WHICHEVER IS GREATER.
- THE SPECIFICATIONS, DIMENSIONS AND RATINGS COMPLY WITH AS/NZS 1299 ELECTRICAL EQUIPMENT FOR MINES AND QUARRIES.
- SPECIAL FASTENERS COMPLY WITH ISO 262 WITH A TOLERANCE FIT 6g/6H AND THREAD ENGAGEMENT IS ≥ THE MAJOR DIAMETER AND THE CLEARANCE HOLE IS NOT > H13 (ISO 286-2).
- ALL MACHINED FLAMEPATH SURFACES AVERAGE R_a DOES NOT EXCEED 6.3μm (ISO 468).
- MATERIAL HIGH TENSILE BRASS C86500 TO AS 1565-1996 WITH A MINIMUM TENSILE STRENGTH 450 MPa AND MINIMUM 10% ELONGATION.
- UTILUX CRIMP DIE'S TO BE USED FOR CONNECTION'S BETWEEN THIMBLES AND CABLES AS PER AS/NZS 4325 (IEC 1238) OR SOLDER.
- TESTING ACCORDING TO IEC60079-0 USING MANDRELS REQUIRES A TIGHTENING TORQUE ON THE CABLE CLAMPING SCREWS OF 25Nm.
- MINIMUM PROPERTY CLASS FOR STAINLESS STEEL FASTENERS IS A*-70.
- MINIMUM PROPERTY CLASS FOR MILD STEEL FASTENERS IS 4.6.



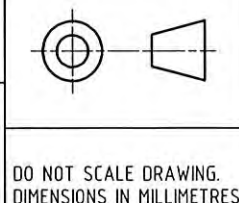
CONFIGURATION

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
35	1	AH113135	M12 X 50 HEX HD SCREW	ST. STEEL
34	1	3394 SERIES	No. 4 CABLE GLAND GROMMET	NEOPRENE RUBBER
33	1	3398	No. 4 GLAND CAP CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
32B	1	4246-7B	1100V GLAND BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
32A	1	4246-6B	3300V GLAND BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
31	3	4538	PILOT SOCKET RETAINING RING (OPTIONAL)	ST. STEEL
30	3	AH207405	CONTACT SOCKET SPRING	ERFACETAL C
29	3	3138-2	PILOT SOCKET	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
28	3	A1019030	O'RING ID 6.07 X SECT 1.78	NITRILE
27	3	AH009854	10-24 UNC X 1 1/4" SKT HD SCREW	ST. STEEL
26	1	AH002987	1/4" X 7/8" SELOCK PIN	STEEL-ZINC PL.
25	3	3589-1	PILOT THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997
24	3	AH117113	M10 X 40 SKT HD SET SCREW (ISO4762)	ST. STEEL
23	1	3191-2	6mm EARTH CONNECTOR	PVC INSUL. CABLE
22	3	AH113116S	M10 X 50 HEX HD SCREW (ISO4017)	ST. STEEL
21	4	AH151028	M6 X 16 CSK PHILLIPS HD SCREW	ST. STEEL
20	3	4648 SERIES	EARTH THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997
19	1	AH151032	M6 NYLOC NUT	STEEL-ZINC PL.
18	1	AX004076	RATING PLATE	BRASS
17	2	AH009768	No. 4 GAUGE X 3/16" U-DRIVE SCREW	STEEL-ZINC PL.
16	1	3576B	No. 3 GLAND CAP CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
15	1	3054 SERIES	No. 3 CABLE GLAND GROMMET	NEOPRENE RUBBER
14B	1	3339-7B	1100V GLAND BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
14A	1	3339-6B	3300V GLAND BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
13	1	AH009277	5/16" X 5/8" X 18 WASHER	STEEL-ZINC PL.
12	1	AH009363	5/16" SQ SECT SPRING WASHER	STEEL-ZINC PL.
11	1	AH113091	M8 X 10 HEX HD SET SCREW	STEEL-ZINC PL.
10	1	AH009380	3/16" STAR WASHER	STEEL-ZINC PL.
9	1	AH117117	M5X10 BUTTON HD CAP SCREW	ST. STEEL
8	1	4034	INTERIOR MOLDING	SUPERDYM
7	1	A1019011	O'RING ID 91.67 X SECT 3.53	NITRILE
6	3	3962 SERIES	MAIN THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
5	3	AH009857	1/4" UNC X 1 1/2" SKT HD SCREW	ST. STEEL
4	3	A1019032	O'RING ID 18.77 X SECT 1.78	NITRILE
3	3	4245	MAIN SOCKET	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
2	6	AH201432	CONTACT SOCKET SPRING	ST. STEEL
1B	1	3342-55S	PLUG BODY CASTING	ST. STEEL 303 MIN. GRADE
1A	1	3342-5B	PLUG BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996



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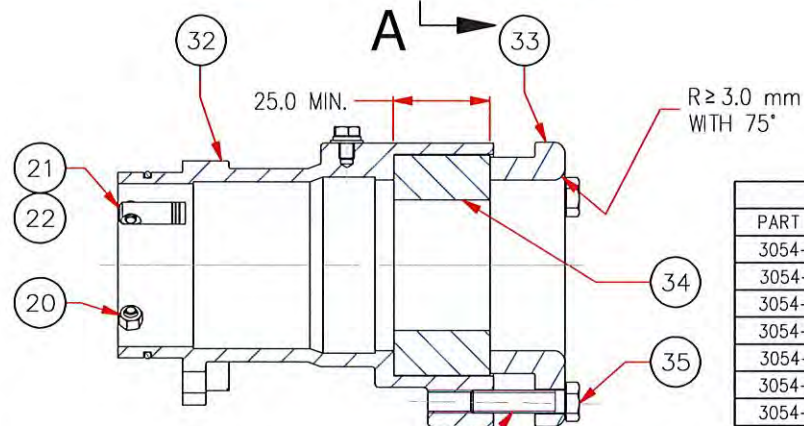
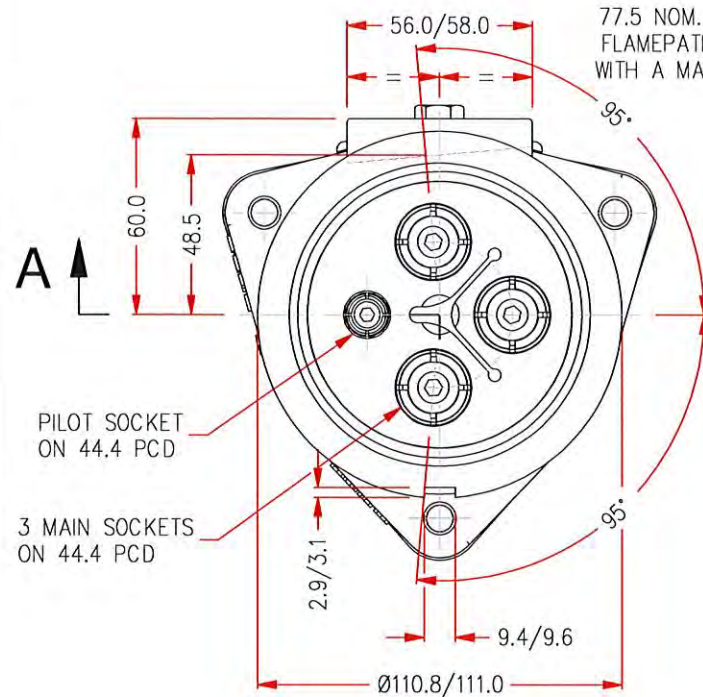
PART No.
AF416R3 / AF416R4
AF436R3 / AF436R4
AF416RS3 / AF416RS4
AF436RS3 / AF436RS4



MINTO INDUSTRIAL PRODUCTS

GENERAL TOLERANCE ±0.5
UNLESS OTHERWISE SPECIFIED
MATERIAL SEE TABLE
FINISH COLOUR CODED AS PER
AS 2700

DESCRIPTION
425A 1100/3300V 6P
RESTRAINED PLUG
SCALE NTS
DATE 22/11/2022
DRAWN AB
CHECKED
APPROVED
A3
DRAWING No.
F-941



OPTIONAL LARGE GLAND ASSEMBLY

3054 SERIES GROMMETS			
PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3054-25	22.0-25.0	3054-54	50.0-54.0
3054-31	24.0-31.0	3054-57	53.0-57.0
3054-35	30.0-35.0	3054-60	56.0-60.0
3054-38	34.0-38.0	3054-64	59.0-64.0
3054-41	37.0-41.0	3054-67	63.0-67.0
3054-45	40.0-45.0	3054-70	66.0-70.0
3054-47	44.0-47.0	3054-73	69.0-73.0
3054-51	46.0-51.0	3054-76	72.0-76.0

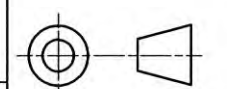
3394 SERIES GROMMETS			
PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3394-58	53.0-58.0	3394-75	71.0-75.0
3394-61	56.0-61.0	3394-78	74.0-78.0
3394-63	59.0-63.0	3394-81	77.0-81.0
3394-66	62.0-66.0	3394-84	80.0-84.0
3394-69	65.0-69.0	3394-87	83.0-87.0
3394-72	68.0-72.0		

NOTES

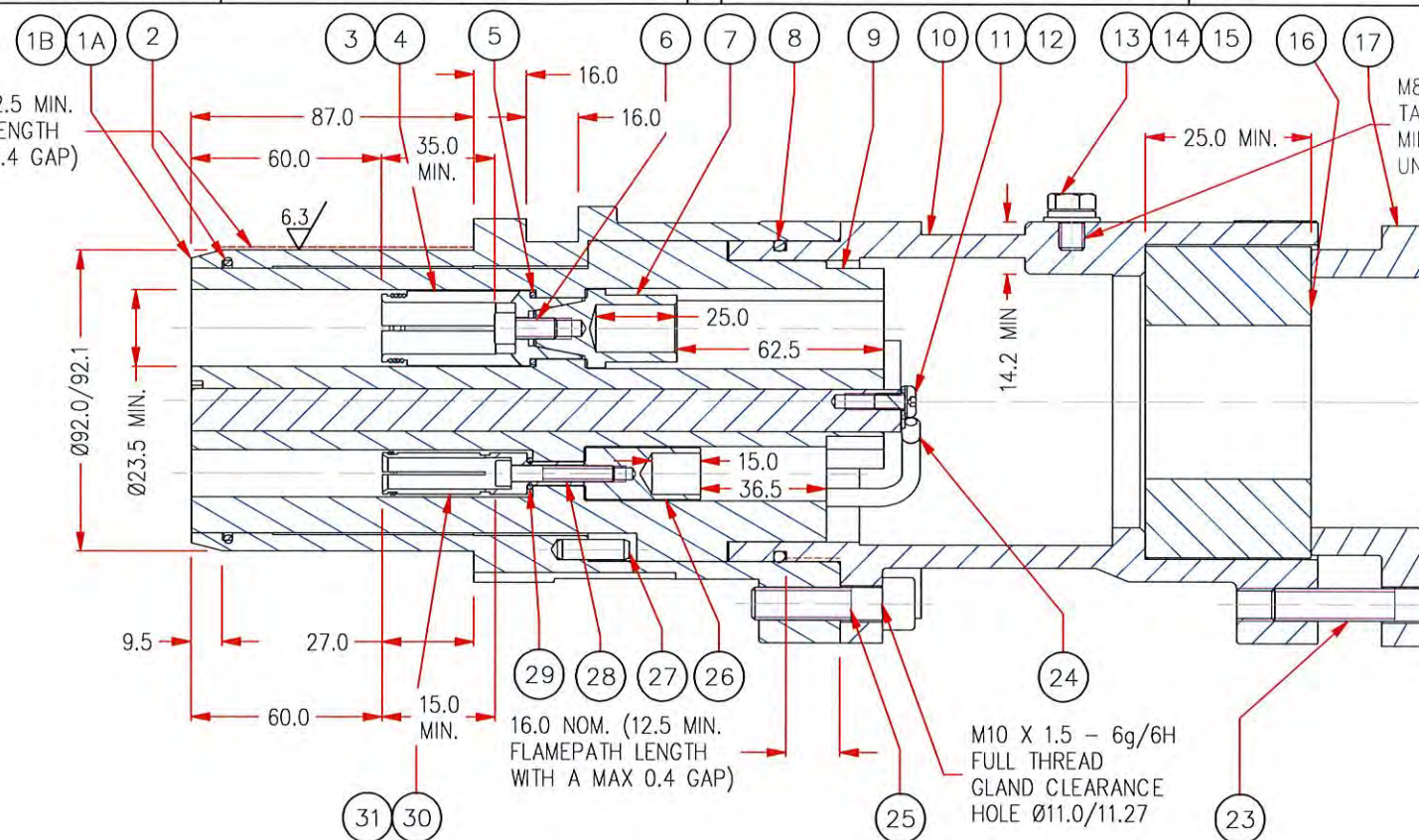
- MINIMUM WALL THICKNESS 3.0mm UNLESS OTHERWISE SPECIFIED ON THE DRAWING.
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- ALL MACHINED FLAMEPATH SURFACES AVERAGE R_a DOES NOT EXCEED 6.3µm (ISO 468).
- MATERIAL HIGH TENSILE BRASS C86500 TO AS 1565-1996 WITH A MINIMUM TENSILE STRENGTH 450 MPa AND MINIMUM 10% ELONGATION.
- UTILUX CRIMP DIE'S TO BE USED FOR CONNECTION'S BETWEEN THIMBLES AND CABLES AS PER AS/NZS 4325 (IEC 1238) OR SOLDER.
- TESTING ACCORDING TO IEC60079-0 USING MANDRELS REQUIRES A TIGHTENING TORQUE ON THE CABLE CLAMPING SCREWS OF 25Nm.
- MINIMUM PROPERTY CLASS FOR STAINLESS STEEL FASTENERS IS A*-70.
- MINIMUM PROPERTY CLASS FOR MILD STEEL FASTENERS IS 4.6.

THIS DRAWING REMAINS THE PROPERTY OF MINTO INDUSTRIAL PRODUCTS AND MUST NOT BE LENT OR COPIED.

PART No.
AF434S3 / AF434S4
AF434SS3 / AF434SS4



DO NOT SCALE DRAWING. DIMENSIONS IN MILLIMETRES



SECTION A-A

MARKING DETAILS

M.I.P.
AF434S@*
425A
3300V
@ NOSE CONE S=ST. STEEL
BLANK=BRONZE
* GLAND
3=SMALL
4=LARGE
IP66/68
Ex db I Mb
IECEx ExTC 22.0037X
ANZEx 22.4181
TYPE A
S.O xxxxx-xx
WARNING
DO NOT SEPARATE WHEN ENERGIZED



ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
35	3	AH113135	M12 X 40 HEX HD SCREW	ST. STEEL
34	1	3394 SERIES	No. 4 CABLE GLAND GROMMET	NEOPRENE RUBBER
33	1	3399B	No. 4 GLAND CAP CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
32	1	4246-BB	GLAND BODY CASTING (LARGE)	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
31	1	AH201405	CONTACT SOCKET SPRING	ST. STEEL
30	1	3138-2	PILOT SOCKET	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
29	1	A1019030	O-RING ID 6.07 X SECT 1.78	NITRILE
28	1	AH008834	10-24 UNC X 1/4" SKT HD SCREW	ST. STEEL
27	1	AH002987	1/4" X 7/8" SELLOCK PIN	STEEL-ZINC PL.
26	1	3984	PILOT THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 CuAg 08
25	3	AH117113	M10 X 40 SKT HD SET SCREW (ISO4762)	ST. STEEL
24	1	3191-2	6.0mm ² EARTH CONNECTOR	PVC INSUL. CABLE
23	3	AH113165	M10 X 50 HEX HD SCREW (ISO4017)	ST. STEEL
22	4	AH151028	M6 X 16 CSK PHILLIPS HD SCREW	ST. STEEL
21	3	4648 SERIES	EARTH THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 CuAg 08
20	1	AH151032	M6 NYLOC NUT	STEEL-ZINC PL.
19	1	AX004076	RATING PLATE	BRASS
18	2	AH009788	No.4 GAUGE X 3/16" U-DRIVE SCREW	STEEL-ZINC PL.
17	1	3576B	No. 3 GLAND CAP CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
16	1	3054 SERIES	No. 3 CABLE GLAND GROMMET	NEOPRENE RUBBER
15	1	AH009277	5/16" X 5/8" X 18 WASHER	STEEL-ZINC PL.
14	1	AH009363	5/16" SQ. SKT SPRING WASHER	STEEL-ZINC PL.
13	1	AH113091	M8 X 10 HEX HD SET SCREW	STEEL-ZINC PL.
12	1	AH009380	3/16" STAR WASHER	STEEL-ZINC PL.
11	1	AH117117	M5X10 BUTTON HD CAP SCREW	ST. STEEL
10	1	3339-BB	GLAND BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996
9	1	3980	INTERIOR MOLDING	DMC 6804 G78
8	1	A1019011	O-RING ID 91.47 X SECT 3.53	NITRILE
7	3	3962 SERIES	MAIN THIMBLE	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
6	3	AH009857	1/4" UNC X 1/2" SKT HD SCREW	ST. STEEL
5	3	A1019032	O-RING ID 18.77 X SECT 1.78	NITRILE
4	3	4245	MAIN SOCKET	(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997 SILVER PL. TO AS 1856-2004 CuAg 08
3	6	AH201432	CONTACT SOCKET SPRING	ST. STEEL
2	1	A1019023	O-RING ID 82.22 X SECT 2.62	NITRILE
1B	1	3342-1SS	PLUG BODY CASTING	ST. STEEL 303 MIN. GRADE
1A	1	3342-1B	PLUG BODY CASTING	HIGH TENSILE BRASS - NOTE 6 C86500 TO AS 1565-1996

cmi Electrical Products A division of CMI Operations Pty Ltd		MINTO INDUSTRIAL PRODUCTS	
DATE 06/03/23 ZONE 723 REV. A	DESCRIPTION 425A 3300V RESTRAINED PLUG	SCALE NTS DATE 22/11/2022	DRAWING No. F-945
GENERAL TOLERANCE ±0.5 UNLESS OTHERWISE SPECIFIED MATERIAL SEE TABLE FINISH R13 RED/N24 SILVER (N24 SILVER MIN. 25.0mm) AS PER AS 2700	DRAWN AB CHECKED APPROVED	A3	

300/425A PLUGS

F-3962 RANGE - MAIN PHASE THIMBLE 300/425A 4 PIN 3300V SOLID INTERIOR PRODUCTS 300/425A 6 PIN 1100/3300V RUBBER INTERIOR PRODUCTS			
PART No.	I.D.	UTILUX DIE No.	INSERTION DEPTH
F-3962-1	10.0	38-115 Cu	25 MIN
F-3962-2	11.0	38-115 Cu	25 MIN
F-3962-3	13.5	38-142 Cu	25 MIN
F-3962-4	14.5	38-165 Cu	25 MIN
F-3962-5	16.6	38-165 Cu	25 MIN
F-3962-6	18.0	38-183 Cu	25 MIN
F-3962-7	20.7	SOLDER ONLY	25 MIN

F-3838 RANGE - MAIN PHASE THIMBLE 300A 4 PIN 660/1100V SOLID INTERIOR PRODUCTS			
PART No.	I.D.	CRIMP DIE No.	INSERTION DEPTH
F-3838-1	5.5	38-57 Cu	25 MIN
F-3838-2	6.2	38-74 Cu	25 MIN
F-3838-3	8.0	38-92 Cu	25 MIN
F-3838-4	10.0	38-115 Cu	25 MIN
F-3838-5	11.0	38-115 Cu	25 MIN
F-3838-6	13.5	38-142 Cu	25 MIN
F-3838-7	14.5	38-165 Cu	25 MIN
F-3838-8	16.6	38-165 Cu	25 MIN
F-3838-9	18.0	38-183 Cu	25 MIN
F-3838-10	20.7	SOLDER ONLY	25 MIN

F-3347 RANGE - MAIN PHASE THIMBLE 300/425A 4 PIN 660/1100V RUBBER INTERIOR PRODUCTS			
PART No.	I.D.	CRIMP DIE No.	INSERTION DEPTH
F-3347-000	6.2	38-74 Cu	25 MIN
F-3347-00	8.0	38-92 Cu	25 MIN
F-3347-0	10.0	38-115 Cu	25 MIN
F-3347-1	11.0	38-115 Cu	25 MIN
F-3347-2	13.5	38-142 Cu	25 MIN
F-3347-3	14.5	38-165 Cu	25 MIN
F-3347-4	16.6	38-165 Cu	25 MIN
F-3347-5	18.0	38-183 Cu	25 MIN
F-3347-6	20.7	SOLDER ONLY	25 MIN

F-4789 RANGE - MAIN PHASE THIMBLE 300/425A 4 & 6 PIN 660/1100/3300V SS INTERIOR			
PART No.	I.D.	UTILUX DIE No.	INSERTION DEPTH
F-4789-25	8.0	38-92 Cu	25 MIN
F-4789-35	10.0	38-115 Cu	25 MIN
F-4789-50	11.0	38-115 Cu	25 MIN
F-4789-70	13.5	38-142Cu	25 MIN
F-4789-95	14.5	38-165 Cu	25 MIN
F-4789-120	16.6	38-165 Cu	25 MIN
F-4789-150	18.5	38-200 Cu	25 MIN
F-4789-185	20.5	38-200Cu	25 MIN

PLUG DRAWING REFERENCE		
DWG	MAIN	PILOT
F-911	F-3347	F-3589-1
F-914	F-3962	F-3984
F-916	F-3838	F-3984
F-920	F-3347	F-3589-1
F-929	F-3962	F-3589-1
F-941	F-3962	F-3589-1
F-945	F-3962	F-3984
F-951	F-4789	F-4791
F-952	F-4789	F-4791
F-953	F-4789	F-4791
F-954	F-4789	F-4791
F-955	F-4789	F-4791
F-956	F-4789	F-4791

PILOT THIMBLE			
PART No.	ID	CRIMP DIE No.	INSERTION DEPTH
F-3589-1	3	SOLDER	10 MIN
F-3589-1W	3	SOLDER	10 MIN
F-3984	12.7	SOLDER	10 MIN

F-4791 RANGE - PILOT SOCKET/THIMBLE 300/425A 4 & 6 PIN 660/1100/3300V SS INTERIOR			
PART No.	ID	CRIMP DIE No.	INSERTION DEPTH
F-4791	3.0	38-44 CU	15

300/425A RECEPTACLES

F-4606 RANGE - MAIN PHASE THIMBLE 300/425A 4/6 PIN 660/1100/3300V PRODUCTS			
PART No.	I.D.	UTILUX DIE No.	INSERTION DEPTH
F-4606-1	8.4	38-92 Cu	25 MIN
F-4606-2	9.5	38-104 Cu	25 MIN
F-4606-3	11.2	38-115 Cu	25 MIN
F-4606-4	13.4	38-142 Cu	25 MIN
F-4606-5	15.5	38-165 Cu	25 MIN
F-4606-6	16.3	38-183 Cu	25 MIN
F-4606-7	18.4	38-200 Cu	25 MIN
F-4606-8	21.0	SOLDER ONLY	25 MIN

F-853 RANGE - PILOT THIMBLE 300/425A 4/6 PIN 660/1100/3300V PRODUCTS			
PART No.	ID	UTILUX CRIMP DIE	INSERTION DEPTH
F-853-1	3.0	38-44 CU	15 MIN
F-853-2	3.0	38-44 CU	15 MIN
F-853-3	3.0	38-44 CU	15 MIN



RECEPTACLE DRAWING REFERENCE		
DWG	MAIN	PILOT
F-915	F-4606	F-853-3
F-921	F-4606	F-853-2
F-926	F-4606	F-853-1
F-927	F-4606	F-853-3
F-932	F-4606	F-853-1
F-933	F-4606	F-853-3
F-934	F-4606	F-853-3
F-935	F-4606	F-853-2
F-940	F-4606	F-853-3
F-944	F-4606	F-853-3

NOTE:
1. MATERIAL:
(COPPER) C14700 OR C11000 OR C10100 TO AS/NZS 1567-1997
SILVER PLATED TO AS 1856-2004 CuAg 08 (IF APPLICABLE)

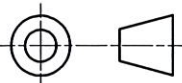
A	DRAWING CREATED.	07/02/2023	APPROVED
REV	ZONE	DESCRIPTION	DATE

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Electrical Products

A division of CMI Operations Pty Ltd



DO NOT SCALE DRAWING
DIMENSIONS IN MILLIMETRES

GENERAL TOLERANCE ± 0.25
ANGULAR TOLERANCE $\pm 0.5^\circ$
MATERIAL

FINISH

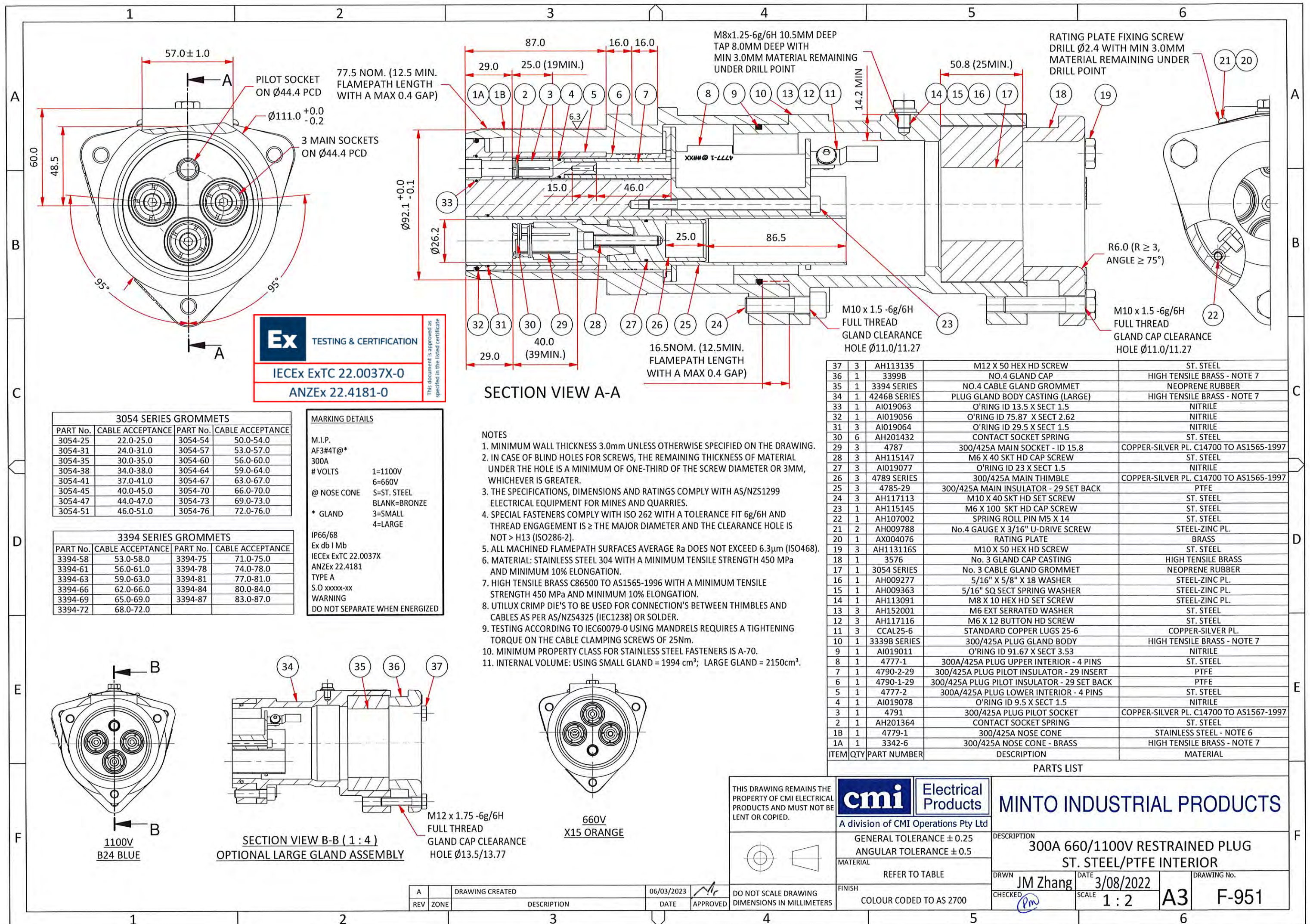
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MAIN PHASE/PILOT THIMBLES
RESTRAINED PRODUCT RANGE

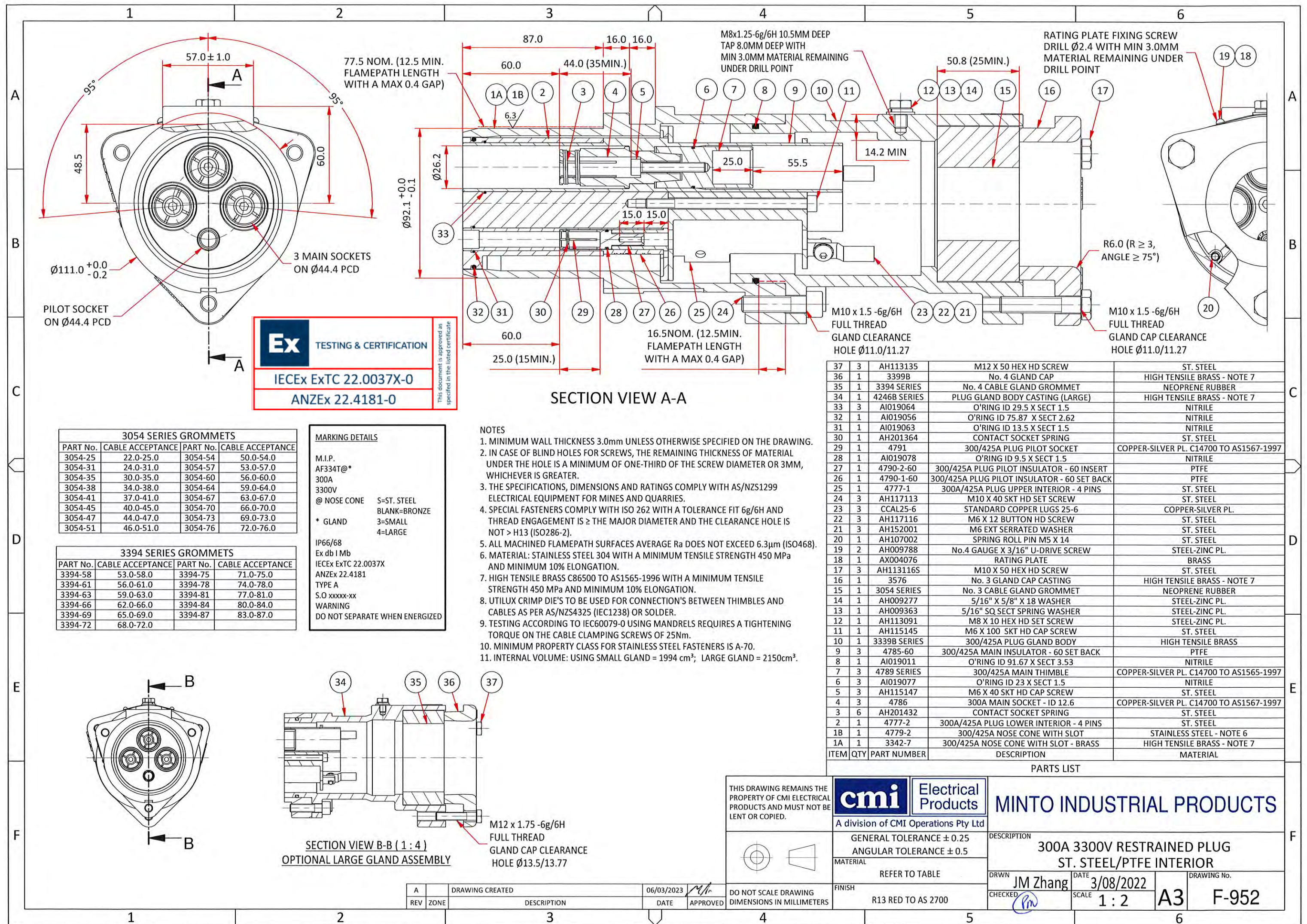
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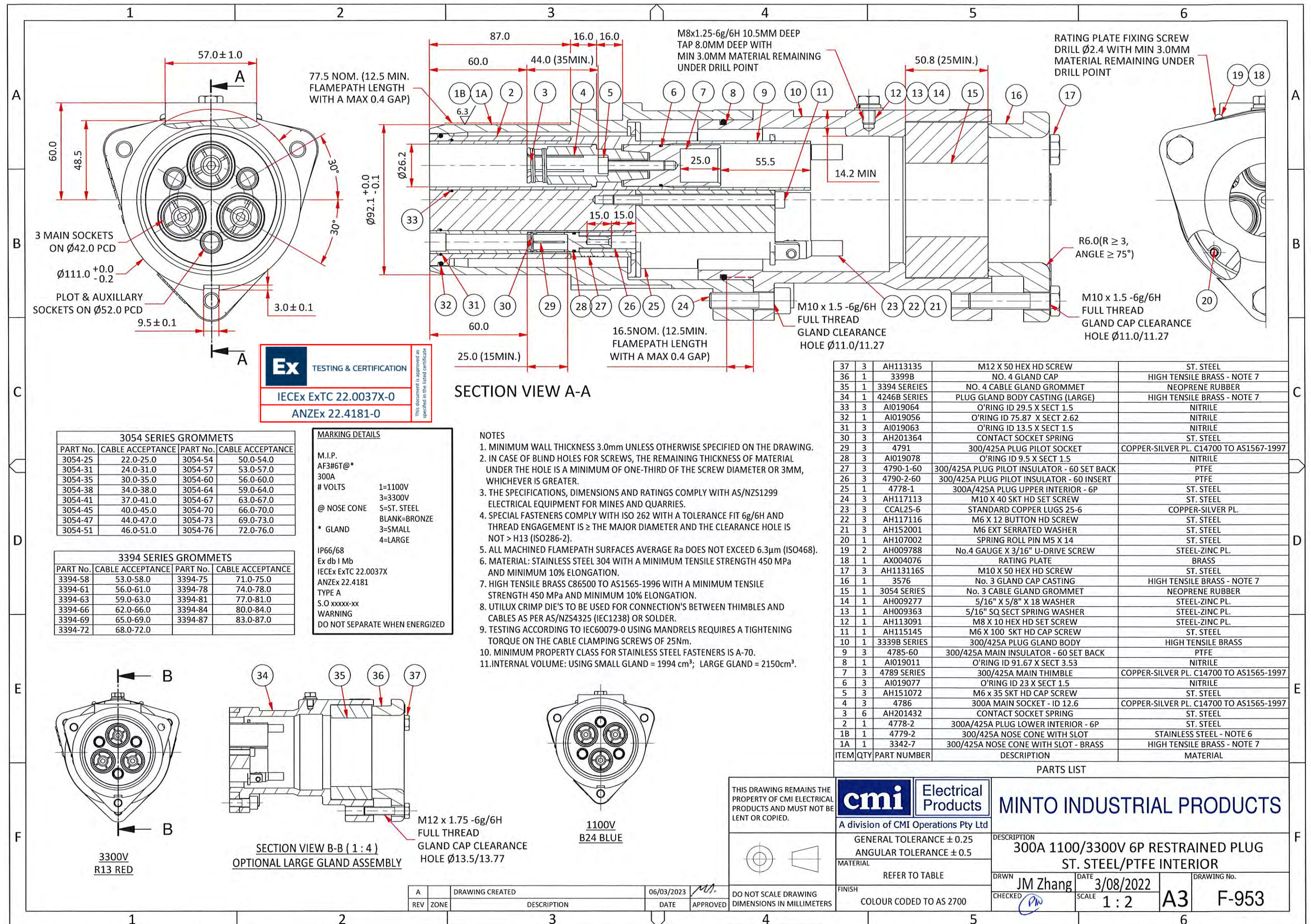
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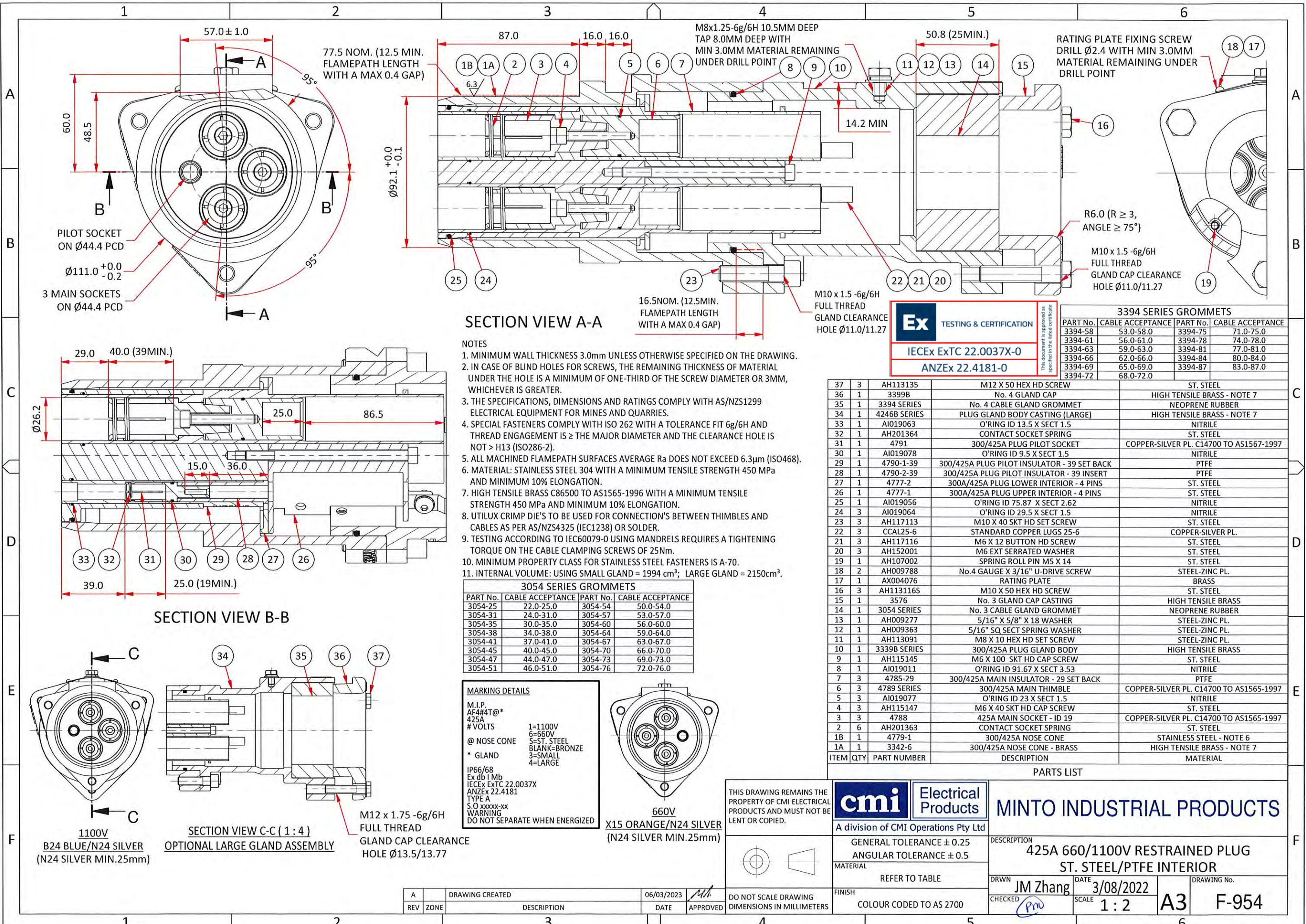
CHECKED


DRAWING No.
A3
F-946









SECTION VIEW A-A

NOTES

1. MINIMUM WALL THICKNESS 3.0mm UNLESS OTHERWISE SPECIFIED ON THE DRAWING.
2. IN CASE OF BLIND HOLES FOR SCREWS, THE REMAINING THICKNESS OF MATERIAL UNDER THE HOLE IS A MINIMUM OF ONE-THIRD OF THE SCREW DIAMETER OR 3MM, WHICHEVER IS GREATER.
3. THE SPECIFICATIONS, DIMENSIONS AND RATINGS COMPLY WITH AS/NZS1299 ELECTRICAL EQUIPMENT FOR MINES AND QUARRIES.
4. SPECIAL FASTENERS COMPLY WITH ISO 262 WITH A TOLERANCE FIT 6g/6H AND THREAD ENGAGEMENT IS ≥ THE MAJOR DIAMETER AND THE CLEARANCE HOLE IS NOT > H13 (ISO286-2).
5. ALL MACHINED FLAMEPATH SURFACES AVERAGE Ra DOES NOT EXCEED 6.3µm (ISO468).
6. MATERIAL: STAINLESS STEEL 304 WITH A MINIMUM TENSILE STRENGTH 450 MPa AND MINIMUM 10% ELONGATION.
7. HIGH TENSILE BRASS C86500 TO AS1565-1996 WITH A MINIMUM TENSILE STRENGTH 450 MPa AND MINIMUM 10% ELONGATION.
8. UTILUX CRIMP DIE'S TO BE USED FOR CONNECTION'S BETWEEN THIMBLES AND CABLES AS PER AS/NZS4325 (IEC1238) OR SOLDER.
9. TESTING ACCORDING TO IEC60079-0 USING MANDRELS REQUIRES A TIGHTENING TORQUE ON THE CABLE CLAMPING SCREWS OF 25Nm.
10. MINIMUM PROPERTY CLASS FOR STAINLESS STEEL FASTENERS IS A-70.
11. INTERNAL VOLUME: USING SMALL GLAND = 1994 cm³; LARGE GLAND = 2150cm³.

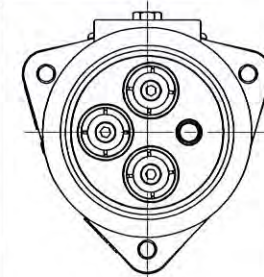
3054 SERIES GROMMETS

PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3054-25	22.0-25.0	3054-54	50.0-54.0
3054-31	24.0-31.0	3054-57	53.0-57.0
3054-35	30.0-35.0	3054-60	56.0-60.0
3054-38	34.0-38.0	3054-64	59.0-64.0
3054-41	37.0-41.0	3054-67	63.0-67.0
3054-45	40.0-45.0	3054-70	66.0-70.0
3054-47	44.0-47.0	3054-73	69.0-73.0
3054-51	46.0-51.0	3054-76	72.0-76.0

MARKING DETAILS

M.I.P.
AF4#4T@*
425A
VOLTS
@ NOSE CONE
* GLAND
IP66/68
Ex db I Mb
IECEx ExTC 22.0037X
ANZEx 22.4181
TYPE A
S.O xxxxx-xx
WARNING
DO NOT SEPARATE WHEN ENERGIZED

1=1100V
6=660V
S=ST. STEEL
BLANK=BRONZE
3=SMALL
4=LARGE



660V
X15 ORANGE/N24 SILVER
(N24 SILVER MIN.25mm)



3394 SERIES GROMMETS			
PART No.	CABLE ACCEPTANCE	PART No.	CABLE ACCEPTANCE
3394-58	53.0-58.0	3394-75	71.0-75.0
3394-61	56.0-61.0	3394-78	74.0-78.0
3394-63	59.0-63.0	3394-81	77.0-81.0
3394-66	62.0-66.0	3394-84	80.0-84.0
3394-69	65.0-69.0	3394-87	83.0-87.0
3394-72	68.0-72.0		

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
37	3	AH113135	M12 X 50 HEX HD SCREW	ST. STEEL
36	1	3399B	No. 4 GLAND CAP	HIGH TENSILE BRASS - NOTE 7
35	1	3394 SERIES	No. 4 CABLE GLAND GROMMET	NEOPRENE RUBBER
34	1	4246B SERIES	PLUG GLAND BODY CASTING (LARGE)	HIGH TENSILE BRASS - NOTE 7
33	1	AI019063	O'RING ID 13.5 X SECT 1.5	NITRILE
32	1	AH201364	CONTACT SOCKET SPRING	ST. STEEL
31	1	4791	300/425A PLUG PILOT SOCKET	COPPER-SILVER PL. C14700 TO AS1567-1997
30	1	AI019078	O'RING ID 9.5 X SECT 1.5	NITRILE
29	1	4790-1-39	300/425A PLUG PILOT INSULATOR - 39 SET BACK	PTFE
28	1	4790-2-39	300/425A PLUG PILOT INSULATOR - 39 INSERT	PTFE
27	1	4777-2	300A/425A PLUG LOWER INTERIOR - 4 PINS	ST. STEEL
26	1	4777-1	300A/425A PLUG UPPER INTERIOR - 4 PINS	ST. STEEL
25	1	AI019056	O'RING ID 75.87 X SECT 2.62	NITRILE
24	3	AI019064	O'RING ID 29.5 X SECT 1.5	NITRILE
23	3	AH117113	M10 X 40 SKT HD SET SCREW	ST. STEEL
22	3	CCAL25-6	STANDARD COPPER LUGS 25-6	COPPER-SILVER PL.
21	3	AH117116	M6 X 12 BUTTON HD SCREW	ST. STEEL
20	3	AH152001	M6 EXT SERRATED WASHER	ST. STEEL
19	1	AH107002	SPRING ROLL PIN M5 X 14	ST. STEEL
18	2	AH009788	No.4 GAUGE X 3/16" U-DRIVE SCREW	STEEL-ZINC PL.
17	1	AX004076	RATING PLATE	BRASS
16	3	AH113116S	M10 X 50 HEX HD SCREW	ST. STEEL
15	1	3576	No. 3 GLAND CAP CASTING	HIGH TENSILE BRASS
14	1	3054 SERIES	No. 3 CABLE GLAND GROMMET	NEOPRENE RUBBER
13	1	AH009277	5/16" X 5/8" X 18 WASHER	STEEL-ZINC PL.
12	1	AH009363	5/16" SQ SECT SPRING WASHER	STEEL-ZINC PL.
11	1	AH113091	M8 X 10 HEX HD SET SCREW	STEEL-ZINC PL.
10	1	3339B SERIES	300/425A PLUG GLAND BODY	HIGH TENSILE BRASS
9	1	AH115145	M6 X 100 SKT HD CAP SCREW	ST. STEEL
8	1	AI019011	O'RING ID 91.67 X SECT 3.53	NITRILE
7	3	4785-29	300/425A MAIN INSULATOR - 29 SET BACK	PTFE
6	3	4789 SERIES	300/425A MAIN THIMBLE	COPPER-SILVER PL. C14700 TO AS1565-1997
5	3	AI019077	O'RING ID 23 X SECT 1.5	NITRILE
4	3	AH115147	M6 X 40 SKT HD CAP SCREW	ST. STEEL
3	3	4788	425A MAIN SOCKET - ID 19	COPPER-SILVER PL. C14700 TO AS1565-1997
2	6	AH201363	CONTACT SOCKET SPRING	ST. STEEL
1B	1	4779-1	300/425A NOSE CONE	STAINLESS STEEL - NOTE 6
1A	1	3342-6	300/425A NOSE CONE - BRASS	HIGH TENSILE BRASS - NOTE 7

PARTS LIST

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Electrical Products

A division of CMI Operations Pty Ltd

GENERAL TOLERANCE ± 0.25
ANGULAR TOLERANCE ± 0.5
MATERIAL REFER TO TABLE
FINISH COLOUR CODED TO AS 2700

DO NOT SCALE DRAWING
DIMENSIONS IN MILLIMETERS

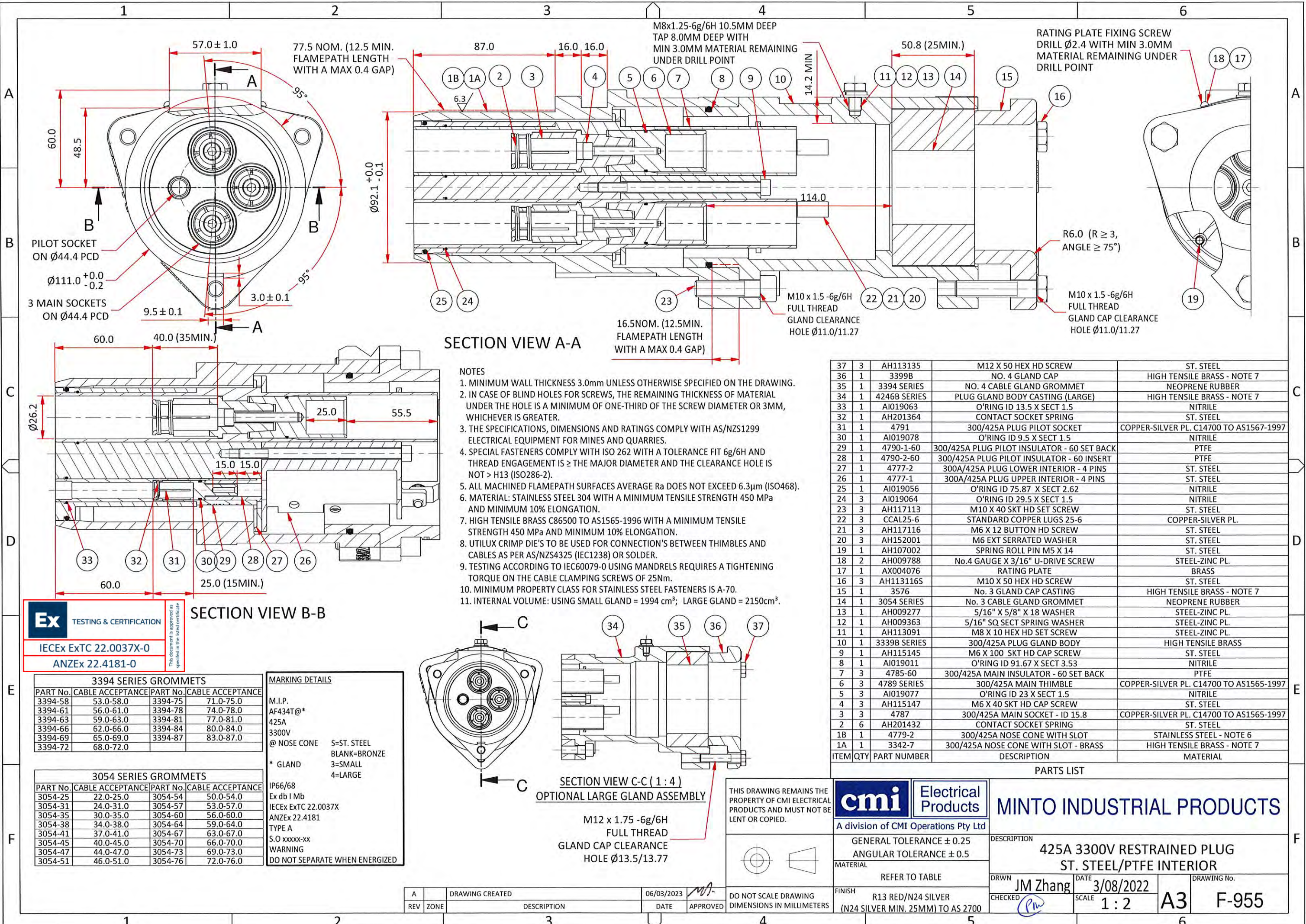
DESCRIPTION
425A 660/1100V RESTRAINED PLUG
ST. STEEL/PTFE INTERIOR

DRWN JM Zhang
CHECKED pm

DATE 3/08/2022
SCALE 1:2

DRAWING No.
A3 F-954

REV	ZONE	DESCRIPTION	DATE	APPROVED
A		DRAWING CREATED	06/03/2023	M.H.



Instructions for 300/425 AMP 660/1100/3300 VOLT Restrained Range **TRP2**

Catalogue Number	Description
AF3#4&@*	300A 660/1100V Restrained Plug
AF3#6&@*	300A 1100/3300V 6P Restrained Plug
AF334%@*	300A 3300V Restrained Plug
AF4#4&@*	425A 660/1100V Restrained Plug
AF4#6%@*	425A 1100/3300V 6P Restrained Plug
AF434%@*	425A 3300V Restrained Plug.
AG3#4B	300A 660/1100/3300V Restrained Receptacle
AG3#4BQR	300A 660/1100/3300V Q/R Restrained Receptacle
AG3#6B	300A 1100/3300V 6P Restrained Receptacle
AG3#6BQR	300A 1100/3300V Q/R 6P Restrained Receptacle
AG334B	300A 3300V Restrained Receptacle
AG334BQR	300A 3300V Q/R Restrained Receptacle
AG4#4B	425A 660/1100V Restrained Receptacle
AG4#4BQR	425A 660/1100V Q/R Restrained Receptacle
AG4#6BQR	425A 1100/3300V Q/R 6P Restrained Receptacle
AG434BQR	425A 3300V Q/R Restrained Receptacle
AH3#4B	300A 660/1100V Restrained Back to Back Receptacle
AH3#4BQR	300A 660/1100V Q/R Restrained Back to Back Receptacle
AH3#6B	300A 1100/3300V 6P Restrained Back to Back Receptacle
AH3#6BQR	300A 1100/3300V Q/R 6P Restrained Back to Back Receptacle
AH334B	300A 3300V Restrained Back to Back Receptacle
AH334BQR	300A 3300V Q/R Restrained Back to Back Receptacle
AH4#4B	425A 660/1100V Restrained Back to Back Receptacle
AH4#4BQR	425A 660/1100V Q/R Restrained Back to Back Receptacle
AH4#6BQR	425A 1100/3300V Q/R 6P Restrained Back to Back Receptacle
AH434BQR	425A 3300V Q/R Restrained Back to Back Receptacle
AR3#1R@	300A 660/1100V Restrained Dummy Plug
AR3#6R@	300A 1100V/3300 6P Restrained Dummy Plug
AR331S@	300A 3300V Restrained Dummy Plug
AR4#1R@	425A 660/1100V Restrained Dummy Plug
AR4#6R@	425A 1100V/3300 6P Restrained Dummy Plug
AR431S@	425A 3300V Restrained Dummy Plug

Note:

Marking:

1. # Volts: 6=660V, 1=1100V, 3=3300V
2. % Interior: S = Solid DMC, T = Teflon/Stainless
3. & Interior R = Rubber, T = Teflon/Stainless
4. @ Nose Cone: S=ST. Steel, Blank=Bronze.
5. * Gland: 3=Small, 4=large.

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TRP-2 300/425A Restrained Termination & Maintenance Instruction Page 1 of 4
Rev J 20230331



Installation

- Confirm components suitable for application e.g. thimbles and grommets suitable for the conductors and cable.
- Plug fitting cable preparation.
 1. Slide the gland cap, grommet and plug body along the cable.
 2. Prepare the cable to the dimensions given in the strip back table.
 3. Crimp or solder the thimbles to the phase, pilot and earth cores.
- **Plug fitting**
 4. Fit the conductors to the appropriate location securing in place with screw through socket where appropriate.
 5. Assemble the plug, ensuring the interior rotation conforms to AS/NZS1299.
 6. Then fit dust cap (F-264L). Care should be taken not to damage the earth sleeve flamepath.
 7. Slide the grommet into position and bolt the gland cap firmly to the body.
 8. Note: The certified drawings form a part of the user instructions. Refer to them for further details.
- **Receptacle fitting**
 9. For Receptacle mounting dimensions refer to AS/NZS1299. The flange flamepath used to assemble the receptacle and Exd enclosure with minimum width 12.5mm and maximum gap 0.4mm.
 10. Attach to enclosure via special fasteners.
 11. The special fasteners and/or nuts shall be minimum grade 4.6 (yield stress 240MPa) or for stainless steel minimum grade A*-70 (Yield stress 450MPa)
- **Connection of Protective Earthing Conductors**
 - This range of plugs and receptacles has facility for earthing conductors up to 95 mm²
 - It is the responsibility of the installer to determine and fit the correct sized earth conductors

Use

- Isolate power before connecting or disconnecting.

Assembly

- Ensure sockets are clean and serviceable.
- Correct pin alignment.
- Insert plug using receptacle operating mechanism.
- NB. For quick release mechanism, ensure the locking button is fully home.

Disassembly

- To remove plug from receptacle, utilise the operating mechanism.
- NB. For quick release, lift the locking button first.
- Fit dust cover to plug and receptacle.

Conditions of Use

- Some flameproof joints (flamepath) have dimensions that are different than the values given in table 1 of IEC60079.1. Refer to the manufacture's drawings for details.
- The special fasteners used to assemble the plug and gland shall be minimum grade 4.6 (yield stress 240MPa) or for stainless steel minimum grade A*-70 (Yield stress 450MPa).

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TRP-2 300/425A Restrained Termination & Maintenance Instruction Page 2 of 4
Rev J 20230331



minto industrial products



AfleX Cables



XLPE cables



HARTLAND CABLES



Global-Mark.com.au®

Maintenance

- Inspection shall include cleanliness and compliance with certification documentation.
- Check as per AS/NZS 2290.1

Overhaul and Repair

- To be carried out by suitable workshop.
- It is recommended that the equipment is overhauled at intervals that do not exceed the requirements of AS/NZS2290.1.

Certification Details:

Certified to: IEC 60079-0:2017; IEC 60079-1:2015;
AS/NZS 1299:2009 (incorporating amendment No.1)

Certificate of Conformity: IECEX ExTC 22.0037X and ANZEx 22.4181

Type of Protection: Ex db I Mb

Type: (AS/NZS 1299) Type A

Ingress Protection: IP66/68 (2 metres for 30 minutes) for Restrained Plug, Restrained Back to Back Receptacle, Restrained Receptacle, Gland Adapter.
IP66 only for Dummy Plug

Certification Nameplate Details:

TYPICAL 300/425A MOUNTING BRACKET RATING PLATE DETAILS	TYPICAL 300/425A RESTRAINED PLUG RATING PLATE DETAILS	TYPICAL 300/425A 6 PIN RESTRAINED PLUG RATING PLATE DETAILS
CMI AV3 300/425A Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A BATCH. xxxxx	M.I.P. AF%@* & AMPS 3 = 300A 4 = 425A # VOLTS 6 = 660V 1 = 1100V 3 = 3300V % INTERIOR R = RUBBER S = SOLID DMC T = TEFLON/STAINLESS @ NOSE CONE S = St, Steel BLANK = BRONZE * GLAND 3 = SMALL 4 = LARGE IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AF%@* & AMPS 3 = 300A 4 = 425A # VOLTS 1 = 1100V 3 = 3300V % INTERIOR R = RUBBER T = TEFLON/STAINLESS @ NOSE CONE S = St, Steel BLANK = BRONZE * GLAND 3 = SMALL 4 = LARGE IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED

TYPICAL 300/425A RESTRAINED PLUG (INT GLAND) RATING PLATE DETAILS	TYPICAL 300/425A RESTRAINED RECEPTACLE RATING PLATE DETAILS	TYPICAL 300/425A 6 PIN RESTRAINED RECEPTACLE RATING PLATE DETAILS
M.I.P. AFS & AMPS 3 = 300A 4 = 425A # VOLTS 6 = 660V 1 = 1100V IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AGB & AMPS 3 = 300A 4 = 425A # VOLTS 6 = 660V 1 = 1100V 3 = 3300V IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AGB & AMPS 3 = 300A 4 = 425A # VOLTS 1 = 1100V 3 = 3300V IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED
TYPICAL 300/425A RESTRAINED BACK TO BACK RECEPTACLE RATING PLATE DETAILS	TYPICAL 300/425A 6 PIN RESTRAINED BACK TO BACK RECEPTACLE RATING PLATE DETAILS	TYPICAL 300/425A RESTRAINED DUMMY PLUG RATING PLATE DETAILS
M.I.P. AHB & AMPS 3 = 300A 4 = 425A # VOLTS 6 = 660V 1 = 1100V 3 = 3300V IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AHB & AMPS 3 = 300A 4 = 425A # VOLTS 1 = 1100V 3 = 3300V IP66/68 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AR%@ & AMPS 3 = 300A 4 = 425A # VOLTS 6 = 660V 1 = 1100V 3 = 3300V % INTERIOR R = RUBBER S = SOLID DMC @ NOSE CONE S = St, Steel BLANK = BRONZE IP66 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED
TYPICAL 300/425A 6 PIN RESTRAINED DUMMY PLUG RATING PLATE DETAILS		
M.I.P. ARR@ & AMPS 3 = 300A 4 = 425A # VOLTS 1 = 1100V 3 = 3300V @ NOSE CONE S = St, Steel BLANK = BRONZE IP66 Ex db I Mb IECEX ExTC 22.0037X ANZEx 22.4181 TYPE A S.O. xxxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED		

Refer to Instruction TRP-2-2 for additional detailed instructions

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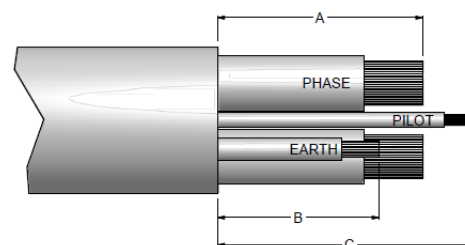
TRP-2 300/425A Restrained Termination & Maintenance Instruction Page 4 of 4
Rev J 20230331

Additional Instructions for 300/425 AMP 660/1100/3300 VOLT Restrained Range

TRP-2-2

Cable Strip Back Dimensions

Strip Back Dimensions (mm)			
	A (Phase)	B (Earth)	C (Pilot)
AF314R3 / AF364R3 / AF414R3 / AF464R3	110	155	155
AF314R4 / AF364R4 / AF414R4 / AF464R4	130	180	120
AF334S3 / AF434S3 / AF316R3 / AF336R3 AF416R3 / AF436R3	128	120	130
AF334S4 / AF434S4 / AF316R4 / AF336R4 AF416R4 / AF436R4	158	150	100
AF314S / AF364S	145	165	120



Note- Cables with semi conductive phase screening shall have the semi conductive screen removed back to the outer sheath.

Fitting of Cables

Note: The torque specified in the certification drawings is for the sealing test where the gland is tightened onto a steel mandrel.

- Cable fitting and testing shall be in compliance with AS/NZS 1747
- AS/NZS 1747:2022 sets out the method of cable installation and subsequent testing.
- Selection of thimbles
 - Thimbles shall be sized so that the internal diameter of the thimble is within 1mm of the stripped conductor diameter.
- Grommet sizing
 - Grommets shall be sized to the cable being used
 - The grommet shall preferably be a conformal fit that fits tightly onto the cable.
 - Grommets that fit loosely, will prevent the cable been effectively sealed in the gland.
- For guidance only, CMI recommend minimum torque settings for fitting cables to the range of 300/425A Restrained Plugs and Receptacle, Gland & Bracket
 - This recommended minimum torque for the gland bolt / screw is: 18NM

Note:

- A suitable calibrated Torque Wrench shall be used for this process
- Initial testing of cable installation to gland:
 - Undertake a "Twist Test" as outlined in AS/NZS 1747:2022.
 - Undertake other tests as outlined in AS/NZS 1747:2022.
- Testing of plug / cable complete.
- Undertake the required tests as outlined in AS/NZS 1747:2022.

Fitting of Sockets to Cable Thimbles

- The following maximum torques shall be applied when screwing the sockets to the cable thimbles
 - Main (Phase) Sockets
 - 6.5 ~ 8Nm torque
 - Pilot Socket
 - 2.5 ~ 3 Nm torque

Note:

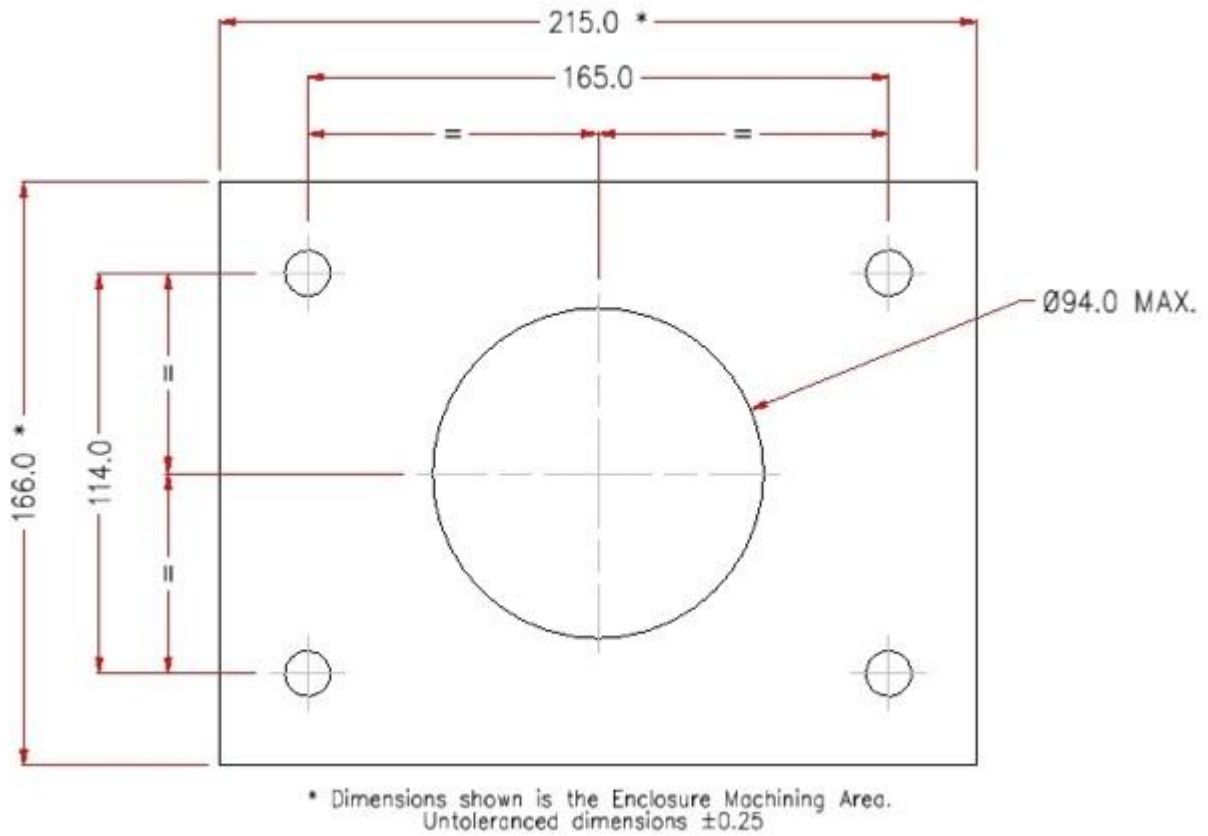
- A suitable calibrated Torque Wrench (recommended ¼ inch size) shall be used for this process

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TRP-2-2 300/425A Restrained Termination & Maintenance Instruction Additional Instructions Page 1 of 2

Rev B 20230331

300/425A Receptacle Mounting Details



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TRP-2-2 300/425A Restrained Termination & Maintenance Instruction Additional Instructions Page 2 of 2

Rev B 20230331