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INSTALLATION INSTRUCTIONS CMP CABLE GLAND

CMP TYPE TMC2X CABLE GLAND / GLAND FOR CONTINUOUSLY WELDED METAL CLAD (TYPE) ARMORED & JACKETED CABLES IN ORDINARY

INCORPORATING EU DECLARATION OF

TECHNICAL DATA

CABLE GLAND TYPE : TMC2X
INGRESS PROTECTION : IP66, NEMA 4X
PROCESS CONTROL SYSTEM : BS EN ISO 9001
: ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No : SIR4 09ATEX1165X
ATEX CERTIFICATION CODE : II 2G 1D, Ex d IIC, Ex e IIC Gb, Ex ta IIIC Da
IECEX CERTIFICATION No : IECEX SIR.09.0069X
IECEX CERTIFICATION CODE : Ex d IIC Gb / Ex e IIC Gb, Ex ta IIIC Da
c-CSA-us CERTIFICATION No : 2194053
c-CSA-us CERTIFICATION CODE : Class I Div 1 and 2 Groups A, B, C and D; Class II, Div 1 and 2, Groups E, F and G; Class III, Div 1 and 2; Enclosure Type 4X
: Ex d IIC; Ex e II: Class I, Zone 1, AEx d IIC; AEx e II; AEx ta IIC

INSTALLATION INSTRUCTIONS

Installation should only be performed by a competent person using the correct tools. Read all instructions before beginning installation.

INSTALLATION GUIDANCE NOTES

- In accordance with NEC requirements, glands with NPT and Metric entry threads are suitable for both Divisions and Zones.
- In accordance with CEC requirements, glands with NPT threads are suitable for both Divisions and Zones. Glands with Metric threads are only suitable for Zones unless fitted with an approved Metric to NPT thread conversion adaptor.
- For IEC and/or ATEX installations:
 - All tapes/shields/foils must be removed and any twisted pairs/triples unwound to form individual conductors.
 - Drain Wires: Pass sleeving/heat shrink tube over the drain, making sure it is positioned within the resin Tube/Resin Dam area. If required, shrink the tube by applying heat, then treat the drain wire as a conductor.
- For NEC Class 1 Div 1 and Zone 1 see article 501.15 of the NEC.

SPECIAL CONDITIONS FOR SAFE USE

- The glands shall only be fitted to enclosures where temperatures, at the point of mounting, is below 85°C.
- The cable shall be effectively clamped as close as possible to the gland.
- When used for Ex e or Ex ta applications, the user shall provide a suitable interface seal between the gland and associated enclosure to maintain the level of ingress protection of the enclosure they are fitted to.
- The TMC2X cable glands comprise of a flameproof labyrinth joint having length and gap dimensions which are other than those specified in IEC 60079-1 and are not intended to be repaired.

Order Reference (NPT)			Entry Thread		Minimum Thread Length	Cable Armour Diameter				Cable Jacket Diameter		Max Over Conductors	Across Flats	Across Corners	Nominal Assembly Length	RapidEx Pack Suffix	Separate RapidEx Order Ref	Shroud	Approx Weight Aluminium (Ozs)
Aluminium	Nickel Plated Brass	Stainless Steel	NPT	NPT Option		Armour Stop In		Armour Stop Out		Min	Max								
						Min	Max	Min	Max										
TMC2X-050A075	TMC2X-050NB075	TMC2X-050SS075	1/2"	-	0.78	0.42	0.55	0.55	0.63	0.50	0.750	0.51	1.200	1.320	2.440	TEX	RAPIDEX30	PVC06	2.290
TMC2X-075A075	TMC2X-075NB075	TMC2X-075SS075	-	3/4"	0.80	0.42	0.55	0.55	0.63	0.51	0.71	0.71	1.480	1.628	2.957	TEX	RAPIDEX30	PVC09	3.000
TMC2X-075A099	TMC2X-075NB099	TMC2X-075SS099	3/4"	-	0.80	0.60	0.65	0.65	0.89	0.690	0.990	0.51	1.480	1.628	2.957	TEX	RAPIDEX30	PVC09	3.000
TMC2X-050A099	TMC2X-050NB099	TMC2X-050SS099	-	1/2"	0.78	0.60	0.78	0.78	0.89	0.690	0.990	0.51	1.480	1.628	2.957	TEX	RAPIDEX30	PVC09	3.000
TMC2X-100A118	TMC2X-100NB118	TMC2X-100SS118	1"	-	0.98	0.79	0.86	0.86	1.10	0.870	1.180	0.94	1.810	1.991	3.154	TEX	RAPIDEX30	PVC11	5.110
TMC2X-075A118	TMC2X-075NB118	TMC2X-075SS118	-	3/4"	0.80	0.79	0.98	0.98	1.10	0.870	1.180	0.71	1.810	1.991	3.154	TEX	RAPIDEX30	PVC11	5.110
TMC2X-125A137	TMC2X-125NB137	TMC2X-125SS137	1-1/4"	-	1.00	0.94	1.08	1.08	1.28	1.020	1.370	1.20	2.050	2.255	3.547	TEX	RAPIDEX30	PVC15	6.700
TMC2X-100A137	TMC2X-100NB137	TMC2X-100SS137	-	1"	0.98	0.94	1.18	1.18	1.28	1.020	1.370	0.94	2.050	2.255	3.547	TEX	RAPIDEX30	PVC15	6.700
TMC2X-150A162	TMC2X-150NB162	TMC2X-150SS162	1-1/2"	-	1.03	1.22	1.35	1.35	1.50	1.300	1.620	1.46	2.360	2.596	3.591	TEX	RAPIDEX80	PVC18	8.820
TMC2X-125A162	TMC2X-125NB162	TMC2X-125SS162	-	1-1/4"	1.00	1.22	1.42	1.42	1.50	1.300	1.620	1.20	2.360	2.596	3.591	TEX	RAPIDEX80	PVC18	8.820
TMC2X-150A190	TMC2X-150NB190	TMC2X-150SS190	1-1/2"	-	1.03	-	-	1.51	1.72	1.570	1.900	1.46	2.560	2.816	3.587	TEX	RAPIDEX80	PVC37	9.450
TMC2X-125A190	TMC2X-125NB190	TMC2X-125SS190	-	1-1/4"	1.00	-	-	1.51	1.72	1.570	1.900	1.20	2.560	2.816	3.587	TEX	RAPIDEX80	PVC37	9.450
TMC2X-200A200	TMC2X-200NB200	TMC2X-200SS200	2"	-	1.53	1.57	1.70	1.70	1.88	1.650	2.000	1.63	2.750	3.025	3.756	TEX	2RAPIDEX80	PVC21	11.060
TMC2X-150A200	TMC2X-150NB200	TMC2X-150SS200	-	1-1/2"	1.03	1.57	1.70	1.70	1.88	1.650	2.000	1.46	2.750	3.025	3.756	TEX	RAPIDEX80	PVC21	11.060
TMC2X-250A233	TMC2X-250NB233	TMC2X-250SS233	2-1/2"	-	1.63	-	-	1.81	2.21	1.910	2.330	2.13	3.400	3.894	4.998	TEX	3RAPIDEX80	PVC28	12.770
TMC2X-200A233	TMC2X-200NB233	TMC2X-200SS233	-	2"	1.53	-	-	1.81	2.21	1.910	2.330	1.90	2.950	3.245	3.972	TEX	2RAPIDEX80	PVC23	12.770
TMC2X-150A233	TMC2X-150NB233	TMC2X-150SS233	-	1-1/2"	1.03	-	-	1.81	2.21	1.910	2.330	1.46	2.950	3.245	3.972	TEX	RAPIDEX80	PVC23	12.770
TMC2X-300A272	TMC2X-300NB272	TMC2X-300SS272	3"	-	1.63	2.14	2.46	2.46	2.61	2.270	2.720	2.55	3.540	3.894	4.098	TEX	3RAPIDEX80	PVC31	24.690
TMC2X-200A272	TMC2X-200NB272	TMC2X-200SS272	-	2-1/2"	1.63	2.14	2.46	2.46	2.61	2.270	2.720	2.13	3.540	3.894	4.098	TEX	2RAPIDEX80	PVC28	24.690
TMC2X-350A325	TMC2X-350NB325	TMC2X-350SS325	3-1/2"	-	1.68	2.49	2.78	2.78	2.97	2.620	3.250	2.98	4.330	4.763	4.665	TEX	3RAPIDEX80	PVC32	42.680
TMC2X-300A325	TMC2X-300NB325	TMC2X-300SS325	-	3"	1.63	2.49	2.78	2.78	2.97	2.620	3.250	2.98	4.330	4.763	4.665	TEX	3RAPIDEX80	PVC32	42.680
TMC2X-400A376	TMC2X-400NB376	TMC2X-400SS376	4"	-	1.73	2.95	3.45	3.45	3.54	3.160	3.760	3.38	4.840	5.324	4.953	TEX	4RAPIDEX80	LSF33	53.440
TMC2X-350A376	TMC2X-350NB376	TMC2X-350SS376	-	3-1/2"	1.68	2.95	3.45	3.45	3.54	3.160	3.760	3.38	4.840	5.324	4.953	TEX	3RAPIDEX80	LSF33	53.440
TMC2X-400A425	TMC2X-400NB425	TMC2X-400SS425	4"	-	1.73	-	-	3.56	3.94	3.700	4.250	3.38	5.230	5.753	5.161	TEX	4RAPIDEX80	LSF34	59.190

Note: *Order Code Example: TMC2X-050A075 - "TMC2X" (Gland Type) - "050" (1/2" NPT Thread) - "A" (Material Aluminium) - "075" (Max Cable Diameter 0.75")

Dimensions are displayed in inches unless otherwise stated

CMP Products Limited on its sole responsibility declares that the equipment referred to herein conforms to the requirements of the ATEX Directive 2014/34/EU and the following standards:-

EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007, EN 60079-15:2010, EN 60079-31:2009, BS 6121:1989, EN 62444:2013

David Willcock

David Willcock - Certification Engineer (Authorised Person)
CMP Products Limited, Cramlington, NE23 1WH, UK
24th June 2015

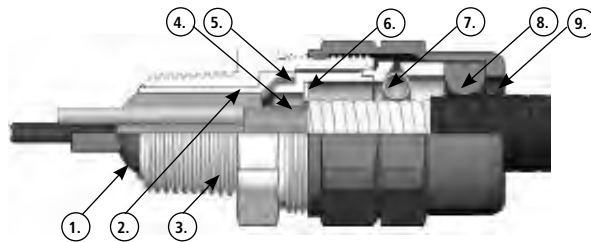


TMC2X - Corrugated & Interlocked Metal Clad Armor (MC) or TECK90, Continuously Welded Metal Clad Armor (MCHL), ACIC-HL, ACWU90-HL, RC90-HL, RA90-HL

INSTALLATION INSTRUCTIONS FOR CMP TMC2X

CABLE GLAND COMPONENTS - It is not necessary to dismantled the cable gland any further than illustrated below

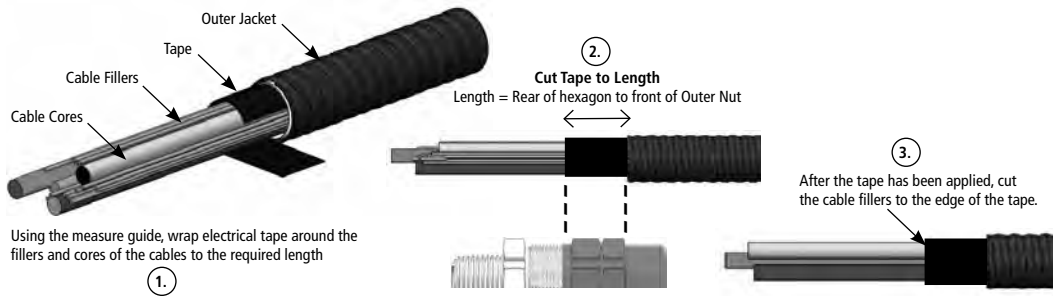
1. RapidEx Resin
2. Resin Tube
3. Entry Component
4. Sealant Tape or Inner Jacket
5. Resin Dam
6. End Stop
7. Grounding Spring
8. Jacket Seal
9. Outer Nut



PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

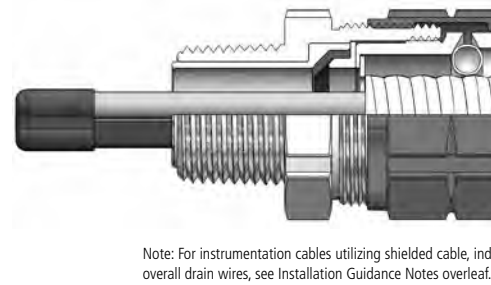
1. Cable preparation — Without Inner Jacket

Strip back the jacket armor to suit the equipment geometry.



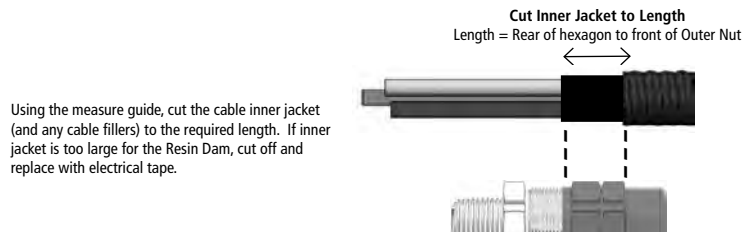
3. Electrical tape **MUST** be wrapped around the tips of the cable cores. This is to ensure the cable cores are together and also to cover any gaps that could potentially tear the Resin Dam during installation.

4. Pass the cable through the gland until the armor makes contact with the end stop. Then pass the conductors to pass through the end stop then it should be removed. Tighten the Outer Nut within the entry component. At this stage unscrew the Outer Nut. Retighten the Armor Spacer. If no access is gained repeat step 2 and trim the cable.

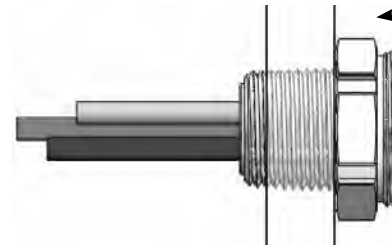


1. Cable preparation — With Inner Jacket

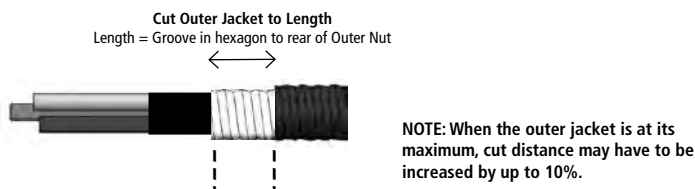
Strip back the jacket armor to suit the equipment geometry.



5. Once the resin has cured, loosen the Outer Nut to ensure the cable is centered in the gland. Loosen the Outer Nut back over the cable, enough to loosen the Armor Spacer enclosure. Retighten the Armor Spacer when the entry component is fully seated.



2. Using the armor measure guide, expose the armor further by stripping back the cable jacket



6. Finally, holding the cable central in the gland, tighten the Outer Nut and the seal to engage the cable jacket. Do not over tighten. Tighten the Outer Nut close face to face.

