General information

Installation and maintenance: For European member countries of GENELEC shall standard EN 60079-14 and EN 60079-17 be considered. For countries members of IECEx shall standard IEC 60079-14 and IEC 60079-17 be considered. For other countries shall applicable national regulations be considered.

The products fulfill the following standards:
EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009
IEC 60079-0:2011, EN 60079-7:2006, IEC 60079-31:2008

))) Roxtec

Installation instructions
Cable Transit Device
R Ex and RO Ex type

Aperture dimensions
Sleeve for welding

Sleeve size	Recommended aperture dimensions	
	Ø (mm)	Ø (in)
70	85	3.346
75	91	3.583
100	116	4.567
125	142	5.591
127	142	5.591
150	166	6.535
200	216	8.504

Aperture dimensions
Sleeve for bolting

Sleeve size	Recommended aperture dimensions	
	Ø (mm)	Ø (in)
70	87	3.425
75	93	3.661
100	118	4.646
125	144	5.669
127	144	5.669
150	168	6.614
200	218	8.583

Installation

1

R...W Ex Sleeve
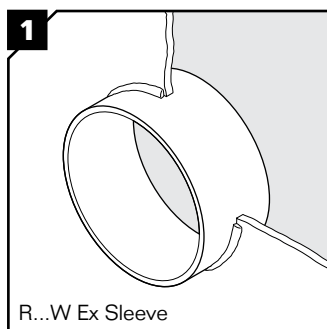
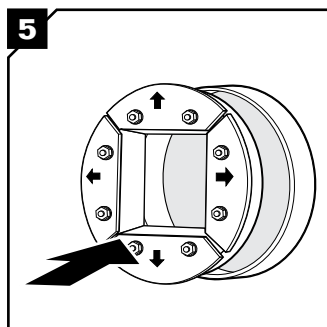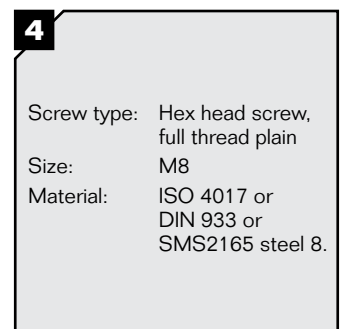Sleeve for welding. Weld the sleeve to the cabinet/wall. Welding instructions available on www.roxtec.com


2

R...B Ex Sleeve
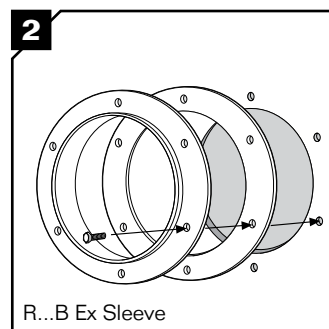
Sleeve for bolting. Use the sleeve as template for the drilling of the screw holes. Drill Ø = 8.5 mm.

3

R...B Ex Sleeve
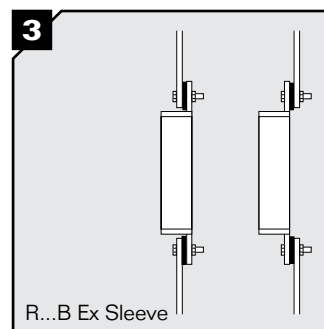
Attach the frame to the cabinet/wall using bolts and nuts. The rubber gasket shall be placed between frame and cabinet/wall.

4

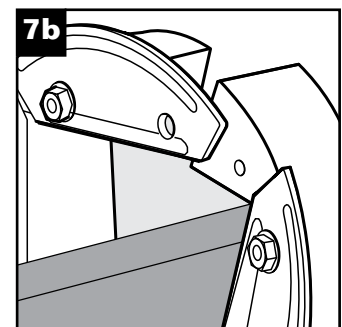|	
Screw type:	Hex head screw, full thread plain
Size:	M8
Material:	ISO 4017 or DIN 933 or SMS2165 steel 8.

Minimum quality.

5

Lubricate the outside of the R frame sparsely. Insert the frame into the hole. Push the front fittings of the frame to the sides.

6
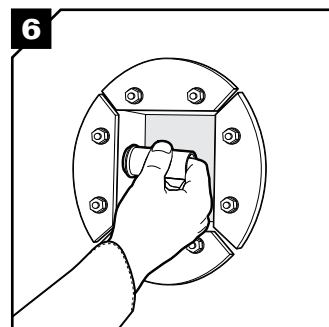
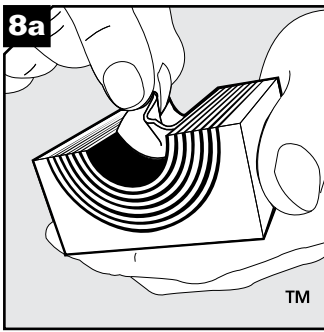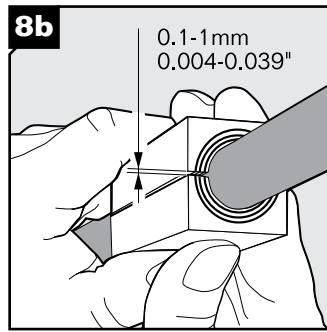Lubricate the inside of the R frame. Make sure to lubricate into the corners.

**7a**
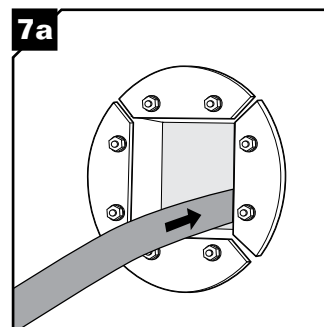
Pull the cables through.

7b

For pre-routed cables, use the RO (openable) frame. Disassemble and open the RO frame and wrap it around the cables.

8a

Adapt the modules which are to hold cables or pipes by peeling off layers. The halves may not differ by more than one layer.
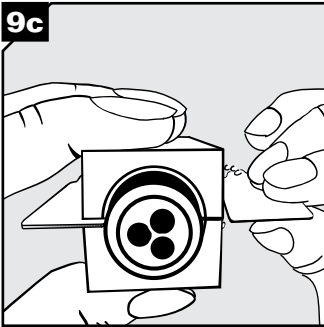
8b

0.1-1mm
0.004-0.039"

Try to achieve a 0.1–1.0 mm gap between the two halves when held against the cable/pipe.
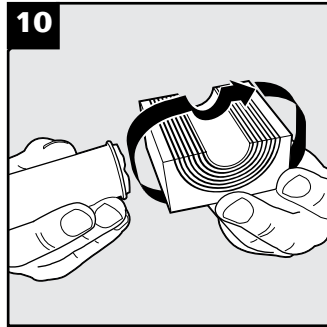
9a
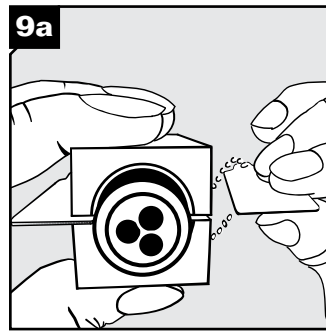
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.
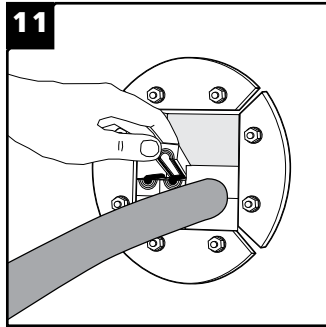
9b
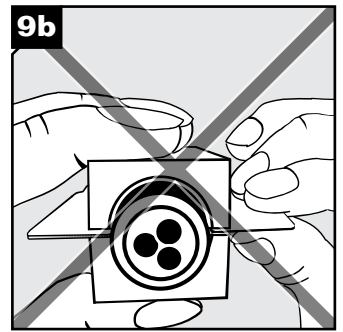
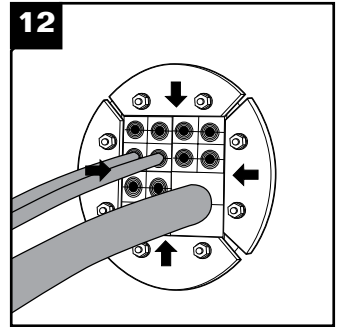If the gap is too big, the gauge will slip in easily.

9c

If the gap is correct, there will be no room for blade two.

10

Lubricate the modules thoroughly, on both inside and outside faces.

11

Insert the modules according to your packing plan.

12

Push the front fittings back towards the center.

13
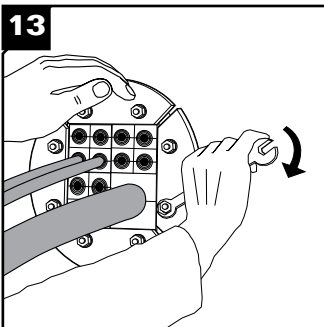
Tighten the nuts crosswise until the frame is sealed.

Torque settings

Nuts size	Rec torque (Nm)
M6	7
M8	10

Disassembly

Reverse order.

Note

- An incorrectly adapted module shall be replaced (layers shall not be reused).
- Temperature range -60 to +80 °C.
- Permitted Roxtec modules: RM Ex type.
- You find EC Type examination certificate on www.roxtec.com, or contact your local Roxtec supplier.

Standard adaptable modules Ex

Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
with core			
RM 15 Ex	1	0+3.0-11.0	0+ 0.118-0.433
RM 15w40 Ex	3	0+3.5-10.5	0+ 0.138-0.413
RM 20 Ex	1	0+4.0-14.5	0+ 0.157-0.571
RM 20w40 Ex	2	0+3.5-16.5	0+ 0.138-0.650
RM 30 Ex	1	0+10.0-25.0	0+ 0.394-0.984
RM 40 Ex	1	0+21.5-34.5	0+ 0.846-1.358
RM 40 10-32 Ex	1	0+9.5-32.5	0+ 0.374-1.280
RM 60 Ex	1	0+28.0-54.0	0+ 1.102-2.126
RM 60 24-54 Ex	1	0+24.0-54.0	0+ 0.945-2.126
RM 80 Ex	1	0+48.0-71.0	0+ 1.890-2.795
RM 90 Ex	1	0+48.0-71.0	0+ 1.890-2.795
RM 120 Ex	1	0+67.5-99.0	0+ 2.657-3.898
without core			
RM 60 Ex woc	1	28.0-54.0	1.102-2.216
RM 80 Ex woc	1	48.0-71.0	1.890-2.795
RM 90 Ex woc	1	48.0-71.0	1.890-2.795
RM 120 Ex woc	1	67.5-99.0	2.657-3.898

Solid compensation modules Ex

Module
RM 5/0x24 Ex
RM 10/0x12 Ex
RM 15/0 Ex
RM 20/0 Ex
RM 30/0 Ex
RM 40/0 Ex
RM 60/0 Ex

Single diameter modules Ex

Module
RM 20/14 Ex
RM 20/15 Ex
RM 20/16 Ex
RM 30/24 Ex
RM 30/26 Ex
RM 40/34 Ex
RM 40/36 Ex
RM 60/52 Ex
RM 60/54 Ex

Frame label:

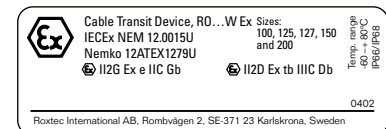Year of manufacture → XXXX

R...B Ex (Bolting)

Cable Transit Device, R...B
IECEx NEM 12.0014X
Nemko 12ATEX1278X
II2G Ex e IIC Gb   II2D Ex tb IIIC Db
Canada: Ex e IIC   USA: AEx e IIC Class I, Zone 1
Rating: 1, 2, 3, 3S, 3R, 4, 4X, 5, 12 and 13.
Sizes: 70, 75, 100, 125, 127, 150 and 200
Temp. range -60 - +80°C   IP66/IP68   0402
Roxtec International AB, Rombvägen 2, SE-371 23 Karlskrona, Sweden

R...W Ex (Welding)

Cable Transit Device, R...W
IECEx NEM 12.0015U
Nemko 12ATEX1279U
II2G Ex e IIC Gb   II2D Ex tb IIIC Db
Canada: Ex e IIC   USA: AEx e IIC Class I, Zone 1
Rating: 1, 2, 3, 3S, 3R, 4, 4X, 5, 12 and 13.
Sizes: 70, 75, 100, 125, 127, 150 and 200
Temp. range -60 - +80°C   IP66/IP68   0402
Roxtec International AB, Rombvägen 2, SE-371 23 Karlskrona, Sweden

RO...B Ex (Bolting)

Cable Transit Device, RO...W Ex
IECEx NEM 12.0015U
Nemko 12ATEX1279U
II2G Ex e IIC Gb   II2D Ex tb IIIC Db
Sizes: 100, 125, 127, 150 and 200
Temp. range -60 - +80°C   IP66/IP68   0402
Roxtec International AB, Rombvägen 2, SE-371 23 Karlskrona, Sweden

RO...W Ex (Welding)

Cable Transit Device, RO...W Ex
IECEx NEM 12.0015U
Nemko 12ATEX1279U
II2G Ex e IIC Gb   II2D Ex tb IIIC Db
Sizes: 100, 125, 127, 150 and 200
Temp. range -60 - +80°C   IP66/IP68   0402
Roxtec International AB, Rombvägen 2, SE-371 23 Karlskrona, Sweden

UKCA conformity marking

Can only be applied together with the ATEX and IECEx main frame label.

Applicable with Nemko 12ATEX1278X

UK CA Ⓔx II 2 G D
0518 Ex eb IIC Gb; Ex tb IIIC Db
CSAE 23UKEX1066X

Applicable with Nemko 12ATEX1279U

Ⓔx II 2 G D
0518 Ex eb IIC Gb; Ex tb IIIC Db
CSAE 23UKEX1065U

The following conditions for safe use (apparatus certified glands) and schedule of limitations (U-marked component certified glands) shall be considered according to the ATEX EC Type examination certificates and the IECEx Certificates of Conformity:

1   For maintaining the explosion protection, the installation instructions that accompany the products shall be considered.
2   Only cable for fixed installation is permitted for the cable entry.
3   For optimum reliability, wait 24 hours or longer after installation before exposing the cables/pipes to strain or pressure.
4   For cable glands certified as Ex components and marked with the symbol U (cable gland of type R…W), compliance with
    applicable requirements not covered by the sub-clauses stated below shall be verified. This includes mechanical test (if applicable) and
    test of degree of protection IP, which shall be carried out on the frame of the cable entry (excluding modules and compression unit) after it has been
    mounted on the enclosure of the apparatus subject to test and certification.

IEC 60079-0:2011
1, 2, 3, 4.2, 4.3, 5.2 (with respect of temperature limits), 6.1, 6.2, 7.1.1, 7.1.2.3, 7.2.1, 7.2.2, 7.5, 8.1, 8.3, 8.4, 13.1, 13.2, 13.4, 13.5, 16.3, 24, 25, 26.1, 26.2 (with respect of internal ingress protection), 26.4.1.1, 26.4.1.2, 26.4.1.2.2, 26.4.2, 26.4.4, 26.4.5.1 (with respect of internal ingress protection), 26.4.5.2, 26.7.1, 26.7.2, 26.8, 26.9, 29.1, 29.2, 29.4, 29.5, 29.9, 30.1, A.1, A.2.1, A.2.3, A.2.4.1, A.2.5, A.2.6, A.2.7, A.3.1.1, A.3.1.4, A.3.1.5, A.3.2.2, A.3.3, A.3.4 (with respect of internal ingress protection), A.4.1, A.4.2 and B.1.

EN 60079-0:2012
ZA

IEC 60079-31:2008
1, 2, 3, 4, 4.1, 5.2.1, 6.1.1 (with respect of internal ingress protection) and 7.

EN 60079-31:2009
ZA

DISCLAIMER