

RPBS INSTALLATION INSTRUCTION

TC-182-IP Rev A, Oct 2017 www.commscope.com

Pressure Blocking System

Kit Contents

- Wraparound sleeve
- Flexible channel (2 pcs for sizes 70/50 and 100/70 + underclip)
- Inner liner
- Compound sheet
- Shield continuity wire
- Sealant strips
- Cleaning tissue
- Abrasive strip
- Aluminum foils
- Tie wraps
- PVC tape
- Adhesive pad (RPBS II only)
- Installation instruction

Not included in kit

- Easy wrap tape
- DR tape
- Filling compound

Recommended safety rules

- Check manhole for gas
- Use safety glasses and safety gloves when working.



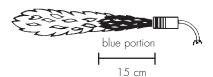
Kit RPBS



Adhesive pad - for RPBS II only

Flame description

flame length 25-30 cm



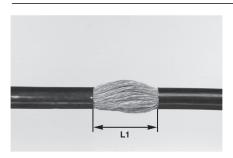
Use a torch FH-T001-0020 or equivalent.

RPBS I: Selection chart single jacketed cable (dimensions in mm)

RPBS-C-I	Minimum cable	Maximum cable	 Jacket	
	diameter	diameter	opening (L1)	
RPBS-C-I-25/15	15	25	100	
RPBS-C-I-50/25	25	50	150	
RPBS-C-I-70/50	50	70	200	
RPBS-C-I-100/70	70	100		
250				

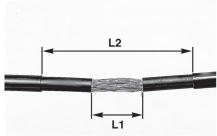
RPBS II: Selection chart double jacketed cable (dimensions in mm)

RPBS-C-II	Minimum cable diameter	Maximum cable diameter	Outer jacket and shield opening (L2)	Inner jacket opening (L1)
RPBS-C-II-25/15	15	25	400	100
RPBS-C-II-50/25	25	50	450	150
RPBS-C-II-70/50	50	70	500	200
RPBS-C-II-100/70	70	100	550	250



A For RPBS-C-I

Make an opening in the jacket and shield: length indicated in the selection chart. Remove the core wrap exposing the conductors. Remove all group binders.



B For RPBS-C-II

Make an outer and inner jacket and shield: length indicated in the selection chart. Remove the core wrap and group binders (see part B of the instruction).

A RPBS-C-I Single jacketed cable



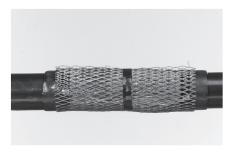
1 Make a window cut in the cable jacket: 15 mm wide and 25 mm deep for installing the shield continuity wire.



2 Install bonding hardware 90° from the top.



3 Wrap one layer of the sealant strip around the cable. The sealant strip should butt against the bonding hardware as shown.



4 Center and loosely wrap the inner liner around the jacket opening. Secure the liner with PVC tape in the middle. The liner should be placed on top of the sealant strips as shown.



5 Center and wrap the compound sheet around the inner liner, tracking the sheet onto the sealant strips. Fold in any excess sheet, leaving 15 mm of sealant exposed at each end



6 Tightly twist the side edges of the sheet several times together and press onto the sealant strip.



7 Secure the twisted sheet to the sealant strip with two tight wraps of PVC tape over half the width of the sealant strip.



8 Install a tie wrap tightly over the PVC tape at each end.



9 Fold the excess of tie wrap round itself and secure with a layer of PVC tape.
Note: Do not cut off the excess of the tie wrap.



10 Mix the compound according to manufacturers instructions. Fill the jacket opening to the top of the inner liner.

Note: check the expire date on compound before using.



11 Lightly massage the bundle to allow the compound to penetrate into the core. If necessary, pour more compound into the bundle to maintain the proper level.



12 Roll the sheet down onto the top of the inner liner and secure with PVC tape.



13 Using easy wrap or equivalent, wrap the entire compound sheet with 2 or 3 half lapped layers, applying minimal tension, then 2 or 3 layers tightly wrapped. Do not wrap outside the sealant.



14 Apply D.R. tape or equivalent under tension at the ends of the splice.



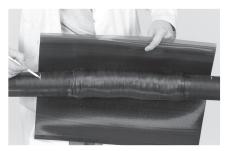
15 Apply a half-lapped layer of D.R. tape or equivalent under tight tension, beginning at the center and wrapping outwards 10 mm past the end of the sealant strips. Relax tension on the last wrap to prevent unraveling. Repeat for the other end.



16 Clean the cable jacket with the cleaning tissue over a distance of 150 mm.



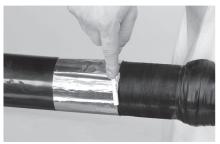
17 Abrade the cable jacket at each end of the sealant strip over the same distance. **Note:** for lead sheathed cable use local approved method to scuff.



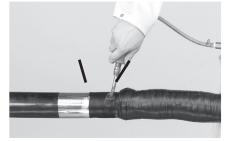
18 Center the wraparound sleeve over the bundle and mark the sleeve ends on the cable.



19 Add a second mark at 15 mm width nearer to the bundle.



20 Apply 1 layer of aluminium foil to the cable at each end, positioning it on the inner mark and leave the bondline free. Smooth the aluminium foil with a blunt tool.



21 Flame brush the cable areas between the indicated arrows for ca. 10 seconds. For lead cables, preheat up to 60°C (hot to the touch).



22 Center and wrap the sleeve around the bundle, pull both flexible channels over the sleeve rails.



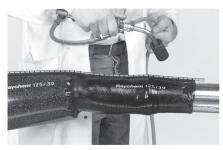
23 Press the underclip over the rails in the center, pull both flexible channels over the underclip.



24 Start heating in the center of the sleeve 180 degrees from the channel area, continuously heating circumferentially. When the paint has completely changed to black, progressively move towards one end.



25 Press the channel with a blunt tool to give the channel the shape of the splice.



26 Apply extra heat to the end of the sleeve around the cable for about 30 seconds.



27 Repeat steps 24, 25 and 26 from the middle towards the other end of the sleeve.

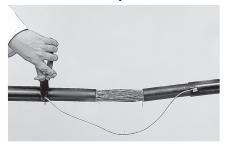


28 When all temperature indicating paint has changed, 2 white lines will be visible in the slots of the channel. If the white lines are not visible, apply more heat until they appear.

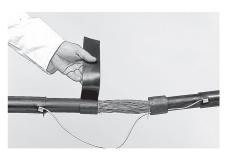


29 Allow the sleeve to cool down at ambient temperature before moving. Refer to blocking compound instructions before pressurizing cable.

B RPBS II: Double jacketed cable



1 Install bonding hardware 90° from the top.



2 Wrap one layer of the sealant strip around the inner jacket. Sealant should butt against the inner jacket opening. Press the bonding wire into the sealant.

3a Install the inner liner. Pour the compound and finish bundle as indicated in section A from step 4 through 15.

3b Prepare inner and outer cable sheath by cleaning, abrading and flame brushing as indicated in section A from step 16 through 21.



4 Position an adhesive pad on the inner jacket under the grounding wire. Secure with PVC tape. Protect the shield continuity clips with several wraps of PVC tape.



5 Install the wraparound sleeve and shrink as indicated from 22 through step 28.

6 Allow the sleeve to cool down at ambient temperature before moving. Refer to blocking compound instructions before pressurizing cable.

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