

TECHNICAL DATA SHEET

PMAFIX IP68 - BVNR-REM - Fitting

Straight, metric size, connection to solid metal tube

PMA



IP68, polyamide fitting for connection to solid metal tube



Applications:

- In railway vehicle construction and other applications where metric metal tubes are to be connected with the flexible PMA conduits

Features & Benefits:

- Very high impact resistance
- Quick connection of solid metal tubes with flexible PMA conduits
- Vibration-proof connection to PMA conduits
- Available with or without jubilee clip
- Easy installation
- High conduit pull-out strength
- Very good chemical properties
- Fits both conduit profiles - fine (T) and coarse (G)

Ingress protection:

- On conduit side:
IP66, IP68 & IP69 (EN/IEC 60529)
IP69, 100 bar with Water impact protection (WPS-ring)

- On tube side:
IP68 with sealant (please see assembly instructions)

Materials:

- High-grade, specially formulated polyamide 6

Compatible with:

- PMAFLEX Pro Conduits
- PMAFLEX Multilayer Conduits
- PMAFLEX Conduits
- PMA Smart Line Conduits

Conforms to:

- EN 45545-2 HL3 (R22 & R23)
- NFPA 130
- UL 94 (V0)

Weathering resistance:

- Very good UV resistance and weathering characteristics

Colour:

- Black

Chemical properties:

- Please refer to www.pma.ch
(Technical Information / Chemical Resistance)

Environmental properties:

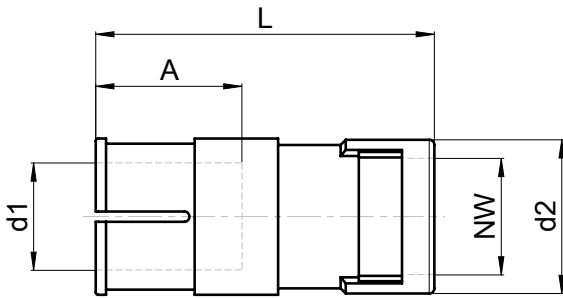
- Free from halogens and cadmium
- RoHS and REACH compliant

Product selection:

| Part no. | | Metal tube | Conduit size | Dimensions in mm (nom.) | | | | Weight | Packing unit |
|----------------------------|-------------------------|------------|--------------|-------------------------|------|------|------|------------|--------------|
| black without jubilee clip | black with jubilee clip | metric | NW | L | d1 | d2 | A | kg/100 pcs | pcs/PU |
| BVNR-REM162 | BVNR-REM162-24 | M16 | 12 | 54.0 | 16.0 | 23.5 | 26.0 | 1.2 / 3.1 | 50 |
| BVNR-REM187 | BVNR-REM187-28 | M18 | 17 | 65.0 | 18.5 | 30.0 | 26.5 | 2.2 / 4.0 | 50 |
| BVNR-REM207 | BVNR-REM207-28 | M20 | 17 | 65.0 | 20.0 | 30.0 | 28.0 | 2.1 / 3.9 | 50 |
| BVNR-REM253 | BVNR-REM253-32 | M25 | 23 | 71.0 | 26.0 | 37.0 | 30.0 | 2.5 / 4.9 | 30 |
| BVNR-REM329 | BVNR-REM329-44 | M32 | 29 | 71.0 | 32.0 | 44.0 | 30.5 | 3.4 / 6.5 | 20 |
| BVNR-REM406 | BVNR-REM406-50 | M40 | 36 | 90.0 | 40.0 | 53.5 | 36.0 | 5.3 / 8.8 | 20 |
| BVNR-REM508 | BVNR-REM508-65 | M50 | 48 | 90.0 | 50.0 | 66.0 | 35.5 | 7.9 / 12.0 | 10 |

replace „B“ by „S“ to order in grey colour.

Our customer services dept. or local distribution partner will be pleased to help you concerning product availability and lead time.



| Mechanical Properties: | Value: | Test parameters: | Test method: |
|-------------------------------|-----------------------------------|-------------------------|---------------------------------|
| Tensile modulus | 1'200 ... 3'700 N/mm ² | | ISO 527 |
| Tensile strength | 45 ... 65 N/mm ² | | ISO 527 |
| Notched bar impact test | 4 ... 20 kJ/m ² | | ISO 180/1C |
| Vibration and shock standard | | Cat. 2 | IEC 61373, IEC 60068-2-27 / -64 |

| Thermal properties: | Value: | Test parameters: | Test method: |
|------------------------------------|-------------------|-------------------------|---------------------|
| Continuous application temperature | - 50 ... + 105 °C | | PMA DO 9.21-4510 |
| Upper application temperature | + 120°C | (20'000 h) | PMA DO 9.21-4360 |
| Short-term | + 160 °C | (168 h) | PMA DO 9.21-4360 |

| Fire safety properties: | Value: | Test parameters: | Test method: |
|--------------------------------|---------------------------|-------------------------|---------------------------------------|
| Fire performance | non flame-propagating | | IEC EN 61386-1 |
| Flame class | V0 | | UL 94 |
| Fire hazard level | HL3 | | EN 45545-2 (R22) |
| Oxygen index | > 32 % | | EN ISO 4589-2 |
| Smoke density | < 150 Ds max. | | EN ISO 5659-2 (25 kW/m ²) |
| Toxicity | < 0.75 CIT _{NLP} | | NF X 70-100-1/-2: (600°C) |
| Fire hazard level | HL3 | | EN 45545-2 (R23) |
| Oxygen index | > 32 % | | EN ISO 4589-2 |
| Smoke density | < 300 Ds max. | | EN ISO 5659-2 (25 kW/m ²) |
| Toxicity | < 1.5 CIT _{NLP} | | NF X 70-100-1/-2: (600°C) |
| Fire performance NFPA 130: | | | NFPA 130 |
| - Flammability | compliant | | ASTM E 162 |
| - Smoke density | compliant | | ASTM E 662 |
| Heat and visible smoke | 26.00 MJ/kg | | ASTM E 1354 |
| Smoke emission toxicity | compliant | | Bombardier SMP 800-C |
| Smoke emission toxicity | compliant | | Boeing BSS 7241 |

Content of delivery:

- Fitting with or without jubilee clip
- Looking clip (OVN2),
- Conduit gasket (NVN3)

Assembly instructions:

- Sealing paste, sealing band, glue etc. should be used at the junction to the metal tubing if increased sealing is required

Please consider the appropriate assembly instructions on www.pma.ch

ABB Switzerland Ltd,
PMA Cable Protection
Aathalstrasse 90
8610 Uster, Switzerland
Phone: +41 58 585 00 11
pma-info@ch.abb.com
www.pma.ch

Let's write the future.
Together. **abb.com**

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Installation Products Inc. does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Inc. Copyright© 2019 ABB Installation Products Inc. All rights reserved

