

TECHNICAL DATA SHEET

## PMAFIX IP68 - BVNR-RE - Fitting

Straight, PG/inch, 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
- Jubilee clip made of galvanised bright steel

### 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](http://www.pma.ch)  
(Technical Information / Chemical Resistance)

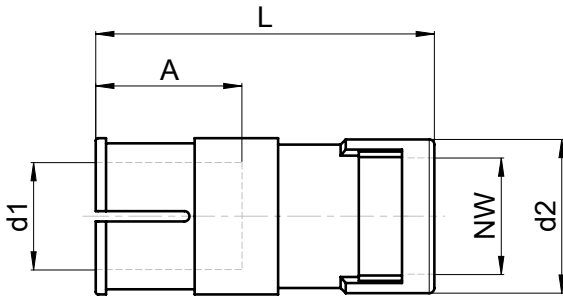
### Environmental properties:

- 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	PG/inch	NW	L	d1	d2	A	kg/100 pcs	pcs/PU
BVNR-RE12	BVNR-RE12-24	PG11	12	54.0	18.5	26.0	25.0	1.2 (3.1)	50
BVNR-RE1317	BVNR-RE1317-28	PG13	17	65.0	20.4	30.0	28.0	1.3 (3.9)	50
BVNR-RE17	BVNR-RE17-28	PG16	17	65.0	22.5	30.0	28.0	2.1 (3.9)	50
BVNR-RE23	BVNR-RE23-32	PG21	23	71.0	28.3	37.0	30.0	2.5 (4.9)	30
BVNR-RE29	BVNR-RE29-44	PG29	29	70.5	37.0	45.0	30.0	3.4 (6.5)	20
BVNR-RE36	BVNR-RE36-50	PG36	36	84.5	47.0	56.0	30.0	5.3 (8.8)	20
BVNR-RE48	BVNR-RE48-65	PG48	48	90.0	59.3	67.5	35.0	7.9 (12.0)	10
BVNR-RE1917	-	3/4"	17	65.0	19.0	29.5	28.0	1.8 (-)	50
BVNR-RE2523	-	1"	23	71.0	25.5	37.0	30.0	2.5 (-)	30
BVNR-RE3129	-	1 1/4"	29	71.0	32.0	44.0	30.0	3.4 (-)	10
BVNR-RE3836	-	1 1/2"	36	130.0	38.0	53.5	76.0	5.3 (-)	10

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



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

<b>Thermal properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
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

<b>Fire safety properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
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 <sup>2</sup> )
Toxicity	< 0.75 CIT <sub>NLP</sub>		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 <sup>2</sup> )
Toxicity	< 1.5 CIT <sub>NLP</sub>		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
- Locking 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](http://www.pma.ch)

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