

TECHNICAL DATA SHEET

## PMAFIX IP68 - NVWV-M - Fitting

90° elbow, metric thread

**PMA**



IP68, metal thread fitting for flexible non-metallic conduit



**Applications:**

- For applications with high technical requirements

**Features & Benefits:**

- Very high impact resistance
- High thread and system connection strength
- Vibration-proof connection to PMA conduits
- Easy installation
- High conduit pull-out strength
- Very good chemical properties
- Fits both conduit profiles - fine (T) and coarse (G)

**Ingress protection:**

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

**Materials:**

- Fitting body: high-grade, specially formulated polyamide 6
- Thread: nickel-plated brass

**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)
- UL 1696 (UL file E80294)
- CSA C22.2 No. 227.3-05 (CSA file LL 88703)

**Weathering resistance:**

- Very good UV resistance and weathering characteristics, particularly in black

**Colour:**

- Black
- Grey

**Chemical properties:**

- Please refer to [www.pma.ch](http://www.pma.ch) (Technical Information / Chemical Resistance)

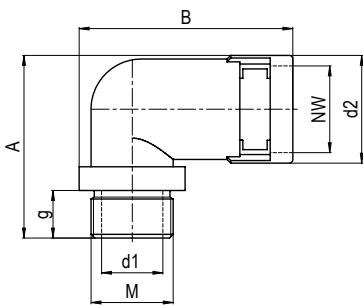
**Environmental properties:**

- Free from halogens and cadmium
- RoHS and REACH compliant

**Product selection:**

Part no.		Thread size	Conduit size	Dimensions in mm (nom.)					Weight	Packing unit
black	grey	metric	NW	g	d1	d2	A	B	kg/100 pcs	pcs/PU
NVWV-M120-10	MVWV-M120-10	M12x1.5	10	10.0	5.0	20.0	37.5	39.5	1.7	50
NVWV-M120-5	MVWV-M120-5	M12x1.5	10	5.0	5.0	20.0	32.5	39.5	1.5	50
NVWV-M160-10	MVWV-M160-10	M16x1.5	10	10.0	9.0	20.0	37.5	41.5	2.1	50
NVWV-M160-5	MVWV-M160-5	M16x1.5	10	5.0	9.0	20.0	32.5	41.5	1.8	50
NVWV-M162-10	MVWV-M162-10	M16x1.5	12	10.0	9.0	23.5	42.0	46.5	2.3	50
NVWV-M162-5	MVWV-M162-5	M16x1.5	12	5.0	9.0	23.5	37.0	46.5	2.0	50
NVWV-M202-10	MVWV-M202-10	M20x1.5	12	10.0	13.0	23.5	42.0	49.0	2.8	50
NVWV-M202-6	MVWV-M202-6	M20x1.5	12	6.0	13.0	23.5	38.0	49.0	2.5	50
NVWV-M207-10	MVWV-M207-10	M20x1.5	17	10.0	13.0	29.5	47.0	58.5	3.5	50
NVWV-M207-6	MVWV-M207-6	M20x1.5	17	6.0	13.0	29.5	43.0	58.5	3.3	50
NVWV-M253-11	MVWV-M253-11	M25x1.5	23	11.0	18.0	37.0	59.0	67.0	4.8	30
NVWV-M253-7	MVWV-M253-7	M25x1.5	23	7.0	18.0	37.0	55.0	67.0	4.4	30
NVWV-M329-13	MVWV-M329-13	M32x1.5	29	13.0	24.5	44.0	68.0	74.5	7.1	20
NVWV-M329-8	MVWV-M329-8	M32x1.5	29	8.0	24.5	44.0	63.0	74.5	6.6	20
NVWV-M406-13	MVWV-M406-13	M40x1.5	36	13.0	32.0	53.5	78.5	98.0	12.6	20
NVWV-M406-8	MVWV-M406-8	M40x1.5	36	8.0	30.0	53.5	75.5	98.0	11.5	20
NVWV-M508-14	MVWV-M508-14	M50x1.5	48	14.0	40.2	66.0	92.5	111.0	20.0	10
NVWV-M508-9	MVWV-M508-9	M50x1.5	48	9.0	39.5	66.0	90.5	111.0	18.6	10
NVWV-M638-14	MVWV-M638-14	M63x1.5	48	14.0	49.3	66.0	92.5	114.0	22.1	10
NVWV-M638-10	MVWV-M638-10	M63x1.5	48	10.0	50.0	66.0	90.5	114.0	20.6	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 7239

#### Content of delivery:

- Fitting with conduit locking clip (OVN2)
- Conduit gasket (NVN3)
- Thread gasket (SVN4)
- O-ring

#### Assembly instructions:

- Please consider the appropriate assembly instructions on [www.pma.ch](http://www.pma.ch)
- O-ring or thread gasket, select the best solution for your application

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