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 TECHNICAL DATA SHEET

# PMAFIX IP68 - BVOV - Flange

## PMA



90°, polyamide flange for flexible non-metallic conduit



### Applications:

- For cable protection systems in a wide range of applications

### Features & Benefits:

- Very high impact resistance
- Vibration-proof connection to PMAFLEX Conduits
- High conduit pull-out strength
- Can be easily re-opened with a screwdriver
- Selectable flange seal included
- Very good chemical properties
- Fits both conduit profiles - fine (T) and coarse (G)

### Ingress protection:

- On conduit side:  
IP66, IP68 & IP69 (EN/IEC 60529)

### Materials:

- Flange body: high-grade, specially formulated polyamide 6
- Flange seal: FGO4 made from EPDM
- Flange seal: FGO4/01 made from NBR

### 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, 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

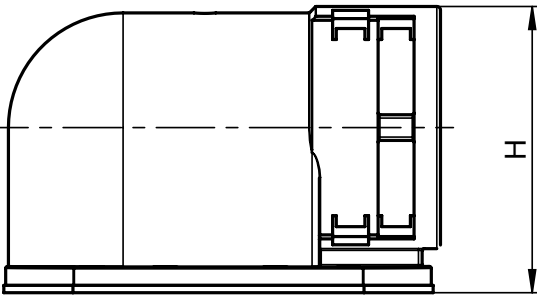
**Product selection:**

Part no.		Thread size	Conduit size	Dimensions in mm (nom.)				Weight	Packing unit
black	grey	PG	NW	L	H	d2	A	kg/100 pcs	pcs/PU
BVOV-P167	SVOV-P167	1	17	65.5	35.8	29.5	47.0	2.1	50
BVOV-P213	SVOV-P213	1	23	70.5	43.2	37.0	66.0	4.3	30
BVOV-P299	SVOV-P299	2	29	78.5	50.0	44.0	67.5	5.7	20
BVOV-P366	SVOV-P366	2	36	103.0	66.0	53.5	86.0	9.2	10
BVOV-P488	SVOV-P488	3	48	119.0	78.0	66.0	86.0	15.4	10

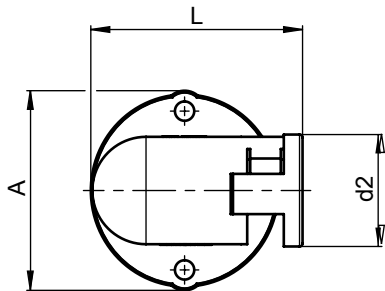
Our customer service dept. or local distribution partner will be pleased to help you concerning product availability and lead time

Can be used outdoors with flange seal FGO4 for standard applications where water proofness and weathering resistance are required. For indoor applications the flanges are available with a special flange seal FGO4/01 for contact with substances like fuels, mineral oils, emulsions etc. Please add „/01“ to the order number.

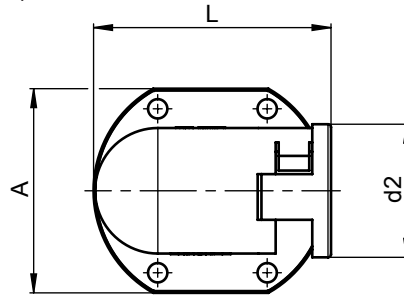
Example:  
 BVOV-P167 (with FGO4) standard for indoor and outdoor applications  
 BVOV-P167/01 (with FGO4/01) optional for indoor applications with special chemical requirements



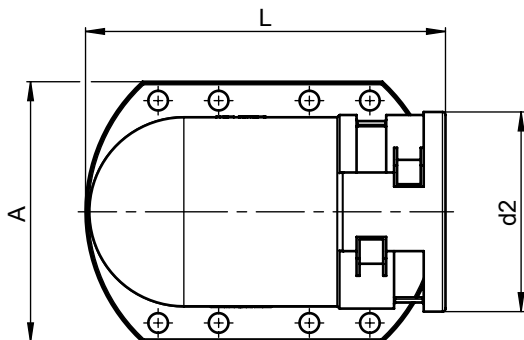
Design 1:  
NW17 / NW23



Design 2:  
NW29 / NW36



Design 3:  
NW48



Fixation with 4 screws sufficient

Recommendation:  
 When fixing to thin plates use outer holes.  
 Additional holes in flange and flange seal do not need to be sealed separately

<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 conduit locking clips (OVN2)
- Conduit gasket (NVN3)
- Flange seal (FGO4)

#### Assembly instructions:

- Threaded bore holes for mounting screws should be sealed separately during mounting (commercial sealing solvents). For information about the flange seal please see data sheet: No. 50020 for FGO4  
No. 50025 for FGO4/01

Please consider the appropriate assembly instructions on [www.pma.ch](http://www.pma.ch)

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