

TECHNICAL DATA SHEET

# PMAGRIP - BGO - Flange

## 90° elbow, IP65

**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
- Selectable flange seal included
- Very good chemical properties
- Fits both conduit profiles - fine (T) and coarse (G)

**Ingress protection:**

- On conduit side:  
IP65 with conduit sealing ring SGO3 (EN/IEC 60529)  
IP50 without conduit sealing ring (EN/IEC 60529)

**Materials:**

- 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)
- UL 1696 (UL file E80294)

**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

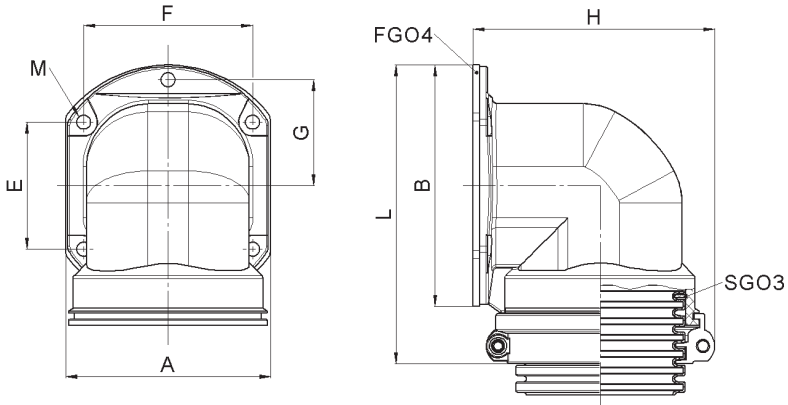
**Product selection:**

Part no.		Conduit size NW	Dimensions in mm (nom.)								Weight	Packing unit
black	grey		A	B	H	E	F	G	L	M	kg/100 pcs	pcs/PU
BGO-56	SGO-56	56	82.0	97.0	101.0	60.0	66.0	-	122.0	4 x M6	14.5	10
BGO-70	SGO-70	70	97.0	114.0	115.0	60.0	80.0	50.0	142.0	6 x M6	21.5	10
BGO-95	SGO-95	95	126.0	146.0	149.0	74.0	108.0	65.5	175.0	6 x M6	30.4	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: BGG-70 (with FGO4) standard for indoor and outdoor applications  
 BGG-70/01 (with FGO4/01) optional for indoor applications with special chemical requirements  
 For increased ingress protection up to IP68, please refer flange type BGOV



<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:

- PMAGRIP flange
- Flange sealing (FGO4 or FGO4/01)
- Conduit sealing (SGO3)

#### Assembly instructions:

- The enclosed Conduit sealing ring should be placed into the first corrugation of the conduit allowing a max. IP rating of up to IP65. Without the Conduit sealing ring an IP50 rating will be achieved on the conduit side

Threaded bore holes for mounting screws should be sealed separately during mounting (commercial sealing solvents)

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

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