

TECHNICAL DATA SHEET

# PMA Trust™ - BGPM - System Support for conduits and cables



The most compact and lightest design of its kind on the market, saving space and weight in your application



### Applications:

- In rail vehicle construction and other applications where fixation of parallel running conduits and cables is required

### Features & Benefits:

- Design:
  - a) Light weight
  - b) Quick installation, possible with one hand
  - c) Compact design
  - d) Conduit rotation possible preventing torsion
  - e) Axial fixation of conduit and/or cables
- Pre-assembly possible:
  - a) For the bottom half of the support
  - b) Conduit retained in one half of the support by clips
- Multi-purpose usage:
  - a) Support for conduits
  - b) Reducers for conduits of smaller size
- User-friendly installation:
  - a) Clearance holes for M6 threaded screws for fixation
  - b) Use of Allen-screws and hexagonal-head-screws possible
  - c) Support clips assist quick installation
- High impact resistance

### Materials:

- High-grade, specially formulated polyamide 6

### Compatible with:

- PMAFLEX Pro Conduits
- PMAFLEX Multilayer Conduits
- PMAFLEX Conduits
- PMA Smart Line Conduits
- BGPMR Reducers (datasheet no. 40055)
- BGPMK Cable clamping adapters (datasheet no. 40056)

### 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

BGPM - system support

## Benefits and key features

**Size marking:** Conduit size (NW) marking shows compatibility

**Complete range is designed for use with M6 fixation screws:**

an industry standard allowing installation with the same tool regardless of the size of the conduit holder.

Compatible with Allen- and hexagonal-head-screws

Fixation torque for lateral screws: 4Nm

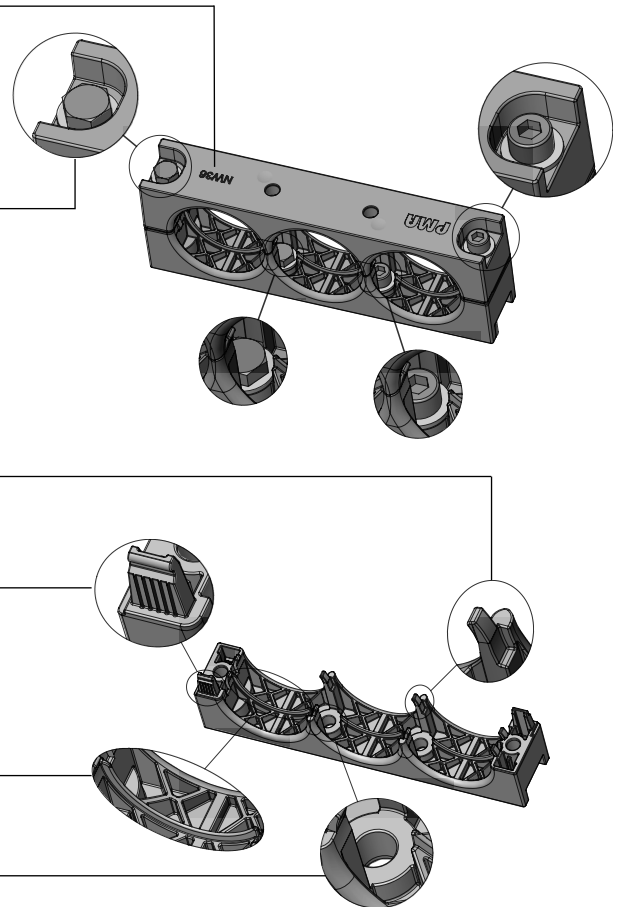
**Asymmetrical clips:** asymmetrical conduit retention arms hold the conduit in one half of the support until the second half is attached

**Asymmetrical snap-fit:** asymmetrical positioning posts hold the two halves of the support together before the M6 screws are installed

**Ribs:** provide strain relief for the conduit

**Holes for pre-attachment:** allow the bottom half of the support to be fixed to a plate or chassis

For mounting on C-rails: Fixation torque for pre-attachment to be < 2Nm



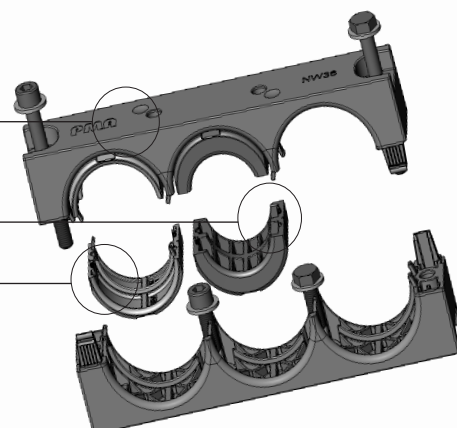
PMA Tust™ - Modular support system

## Composition of the system

**System support, BGPM:** provides axial strain relief for conduits but allowing rotation so that torsion does not transfer to the conduit

**Cable clamping adapter, BGPMK:** made of elastic material, can be used within both the support and the reducers

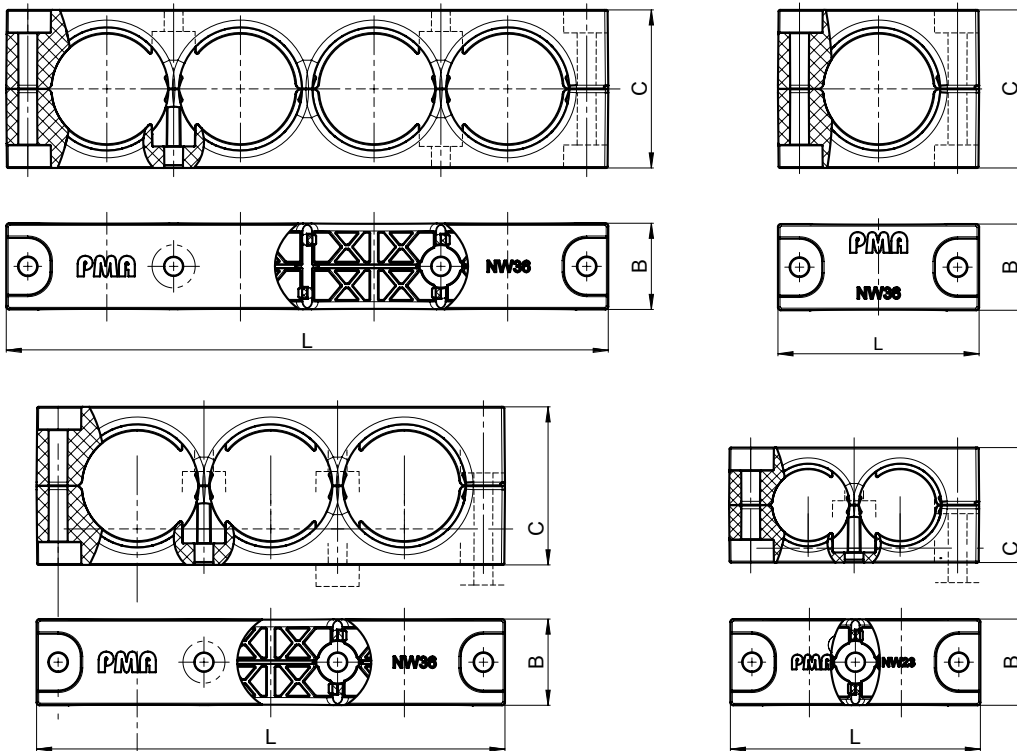
**Reducer, BGPMR:** allows to adapt the support holder to the next smaller conduit size and even further down



**Product selection:**

Part no.	Conduit Profile	Conduit size	Number of conduits	Dimensions in mm (nom.)			Weight	Packing unit
				L	B	C		
black	T/G	NW	No.	L	B	C	kg/100 pcs	pcs/PU
BGPM-1x10	T	10	1	39.5	30.0	24.5	1.7	10
BGPM-1x12	T	12	1	42.5	30.0	28.0	2.0	10
BGPM-2x12	T	12	2	61.0	30.0	28.0	2.7	10
BGPM-3x12	T	12	3	79.5	30.0	28.0	3.3	5
BGPM-4x12	T	12	4	98.0	30.0	28.0	4.0	5
BGPM-1x17	T/G	17	1	48.0	30.0	33.0	2.7	10
BGPM-2x17	T/G	17	2	72.5	30.0	33.0	3.6	10
BGPM-3x17	T/G	17	3	97.0	30.0	33.0	4.5	5
BGPM-4x17	T/G	17	4	121.5	30.0	33.0	5.7	5
BGPM-1x23	T/G	23	1	55.0	30.0	40.0	3.3	10
BGPM-2x23	T/G	23	2	87.0	30.0	40.0	4.6	10
BGPM-3x23	T/G	23	3	119.0	30.0	40.0	5.7	5
BGPM-4x23	T/G	23	4	151.0	30.0	40.0	7.2	5
BGPM-1x29	T/G	29	1	61.0	30.0	46.0	4.0	10
BGPM-2x29	T/G	29	2	99.5	30.0	46.0	5.5	10
BGPM-3x29	T/G	29	3	137.5	30.0	46.0	7.0	5
BGPM-4x29	T/G	29	4	176.0	30.0	46.0	9.0	5
BGPM-1x36	T/G	36	1	70.0	30.0	55.0	5.4	10
BGPM-2x36	T/G	36	2	116.5	30.0	55.0	7.6	10
BGPM-3x36	T/G	36	3	163.0	30.0	55.0	9.9	5
BGPM-4x36	T/G	36	4	209.5	30.0	55.0	12.4	5
BGPM-1x48	T/G	48	1	82.0	30.0	66.0	6.9	10
BGPM-2x48	T/G	48	2	141.0	30.0	66.0	10.5	10
BGPM-3x48	T/G	48	3	199.5	30.0	66.0	13.4	5
BGPM-4x48	T/G	48	4	258.5	30.0	66.0	17.1	5

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

<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:

- System support

#### Assembly instructions:

- For possible combinations, please see page 2

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

