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)
- UN Regulation No. 118

Weathering resistance:
- Very good UV resistance and weathering characteristics

Colour:
- Black

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

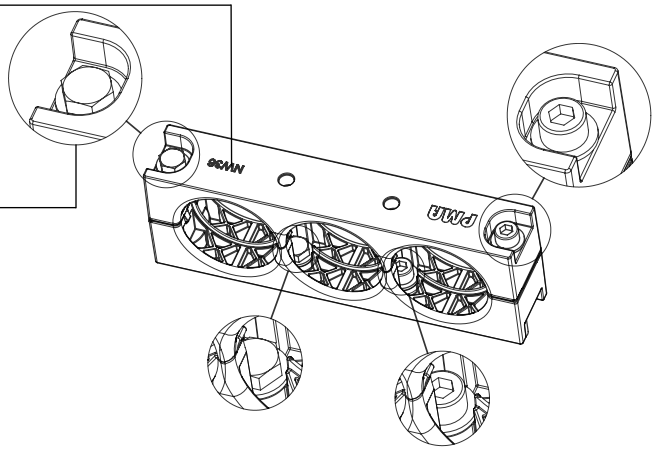
Environmental properties:
- Free from halogens and cadmium
- RoHS and REACH compliant

BGPM - system support

Benefits and key features

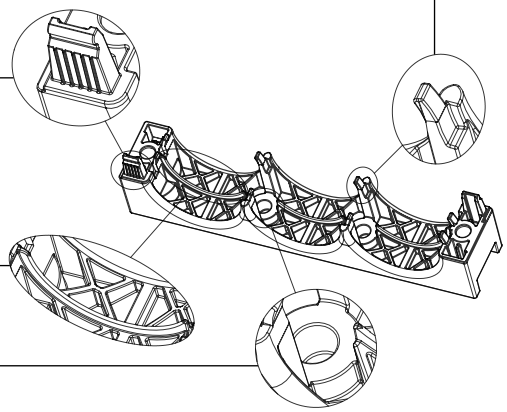
Size marking: Conduit size (NW) marking shows compatibility

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

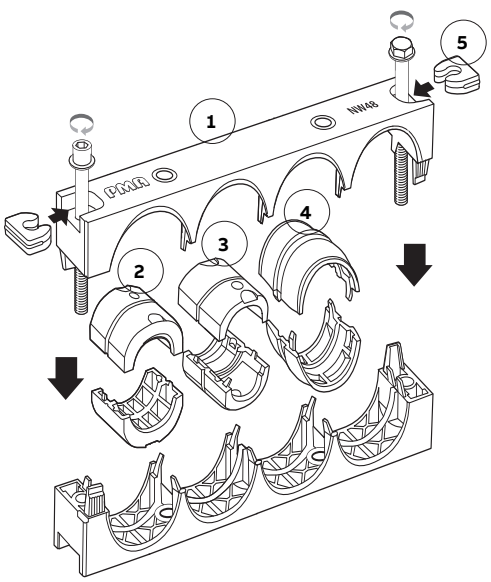
1: System support, BGPM: provides axial strain relief for conduits but allowing rotation so that torsion does not transfer to the conduit

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

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

4: Movable insert, BGPMB: allows 360° movement and helps to avoid torsion of corrugated conduits in dynamic applications

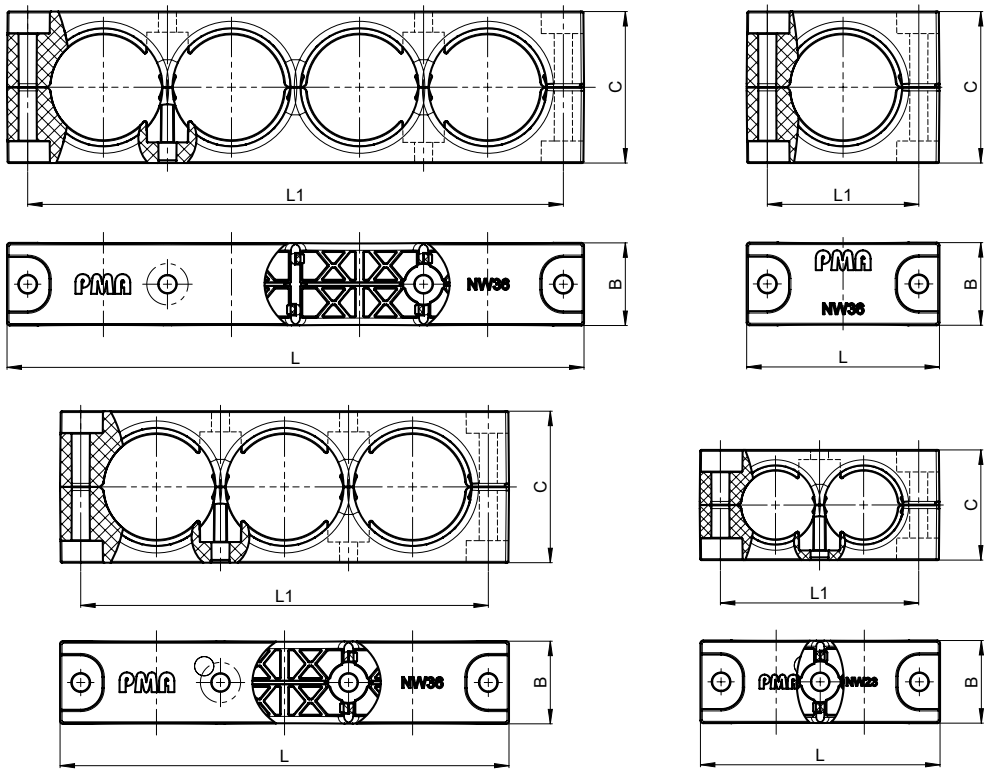
5: Filler cap, BGPMF: for mounting BGPM holders on thin sheet metal brackets, to allow even distribution of fixation forces



Product selection:

Part no.	Conduit Profile	Conduit size	Number of conduits	Dimensions in mm (nom.)				Weight	Packing unit
black	T/G	NW	No.	L	L1	B	C	kg/100 pcs	pcs/PU
BGPM-1x10	T	10	1	39.5	24.5	30.0	24.5	1.7	10
BGPM-1x12	T	12	1	42.5	27.5	30.0	28.0	2.0	10
BGPM-2x12	T	12	2	61.0	46.0	30.0	28.0	2.7	10
BGPM-3x12	T	12	3	79.5	64.5	30.0	28.0	3.3	5
BGPM-4x12	T	12	4	98.0	83.0	30.0	28.0	4.0	5
BGPM-1x17	T/G	17	1	48.0	33.0	30.0	33.0	2.7	10
BGPM-2x17	T/G	17	2	72.5	57.5	30.0	33.0	3.6	10
BGPM-3x17	T/G	17	3	97.0	82.0	30.0	33.0	4.5	5
BGPM-4x17	T/G	17	4	121.5	106.5	30.0	33.0	5.7	5
BGPM-1x23	T/G	23	1	55.0	40.0	30.0	40.0	3.3	10
BGPM-2x23	T/G	23	2	87.0	72.0	30.0	40.0	4.6	10
BGPM-3x23	T/G	23	3	119.0	104.0	30.0	40.0	5.7	5
BGPM-4x23	T/G	23	4	151.0	136.0	30.0	40.0	7.2	5
BGPM-1x29	T/G	29	1	61.0	46.0	30.0	46.0	4.0	10
BGPM-2x29	T/G	29	2	99.5	84.5	30.0	46.0	5.5	10
BGPM-3x29	T/G	29	3	137.5	122.5	30.0	46.0	7.0	5
BGPM-4x29	T/G	29	4	176.0	161.0	30.0	46.0.	9.0	5
BGPM-1x36	T/G	36	1	70.0	55.0	30.0	55.0	5.4	10
BGPM-2x36	T/G	36	2	116.5	101.5	30.0	55.0	7.6	10
BGPM-3x36	T/G	36	3	163.0	148.0	30.0	55.0	9.9	5
BGPM-4x36	T/G	36	4	209.5	194.5	30.0	55.0	12.4	5
BGPM-1x48	T/G	48	1	82.0	67.0	30.0	66.0	6.9	10
BGPM-2x48	T/G	48	2	141.0	126.0	30.0	66.0	10.5	10
BGPM-3x48	T/G	48	3	199.5	184.5	30.0	66.0	13.4	5
BGPM-4x48	T/G	48	4	258.5	243.5	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



Mechanical Properties:	Value:	Test parameters:	Test method:
Tensile modulus	1‘200 ... 3‘700 N/mm²		ISO 527
Tensile strength	45 ... 65 N/mm²		ISO 527
Notched bar impact test	4 ... 20 kJ/m²		ISO 180/1C

Thermal properties:	Value:	Test parameters:	Test method:
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

Fire safety properties:	Value:	Test parameters:	Test method:
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/m2)
Toxicity	< 0.75 CIT_{NLP}		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/m2)
Toxicity	< 1.5 CIT_{NLP}		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 on page 2
- Please consider the appropriate assembly instructions on www.pma.ch

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