

---

 TECHNICAL DATA SHEET

# PMA Automation - BSH - Tube clamp

## One-piece

### PMA


**Applications:**

- In automation applications for guiding or fixing PMA conduits

**Features & Benefits:**

- Single-piece, robust construction
- Easy installation
- To be used in combination with standard halfshells BGN
- Space saving design allows optimum installation in automation applications
- Reduces mechanical stress on the cable harness extending the lifespan of the application
- Increased freedom of movement for cable looms with individual combination of functional inserts:
  - swivel base DKLK
  - ball joint half-shells BSSK
  - ball joint sleeve BTK
  - ball joint termination BKE
  - half-shells BGS for BKS cable star

**Materials:**

- High-grade, specially formulated polyamide 6

**Compatible with:**

- PMAFLEX Pro Conduits
- PMAFLEX Multilayer Conduits
- PMAFLEX Conduits

**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:**

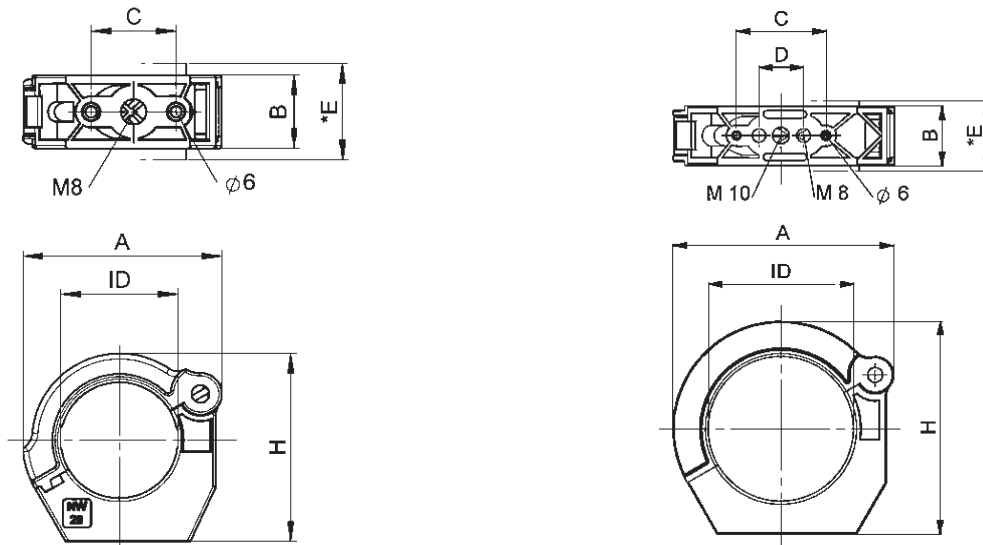
- Free from halogens and cadmium
- RoHS and REACH compliant

**Product selection:**

Part no.	Fits to half-shells		Conduit size	Dimensions in mm (nom.)							Weight	Packing unit
	strain relief	slide		ID	A	B	C	D	*E	H		
black	strain relief	slide	NW	ID	A	B	C	D	*E	H	kg/100 pcs	pcs/PU
BSH-R23	BGN-S23T		23	34.9	63.3	26.0	30.0	-	34.0	60.5	3.6	30
BSH-R23.	BGN-S23G		23	34.9	63.3	26.0	30.0	-	34.0	60.5	3.6	30
BSH-R29	BGN-S29T		29	41.3	70.3	26.0	30.0	-	34.0	67	4.0	30
BSH-R29.	BGN-S29G	BGN-R29	29	41.3	70.3	26.0	30.0	-	34.0	67	4.0	30
BSH-R36	BGN-S36T		36	49.1	81.6	26.0	30.0	-	36.0	77.5	5.5	20
BSH-R36.	BGN-S36G	BGN-R36	36	49.1	81.6	26.0	30.0	-	36.0	77.5	5.5	20
BSH-R48	BGN-S48T		48	61.0	95.8	26.0	30.0	-	34.0	91	8.0	20
BSH-R48.	BGN-S48G	BGN-R48	48	61.0	95.8	26.0	30.0	-	34.0	91	8.0	20
BSH-R56	BGN-S56G	BGN-R56	56	75.5	112.6	30.0	60.0	30.0	38.0	109.8	11.5	20
BSH-R70	BGN-R70G	BGN-R70	70	96.5	148	39.5	60.0	30.0	45.0	142.5	24.0	20

\* Width dimension over half-shell

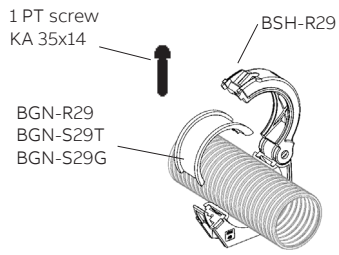
Our customer service dept. or local distribution partner will be pleased to help you concerning product availability and lead time



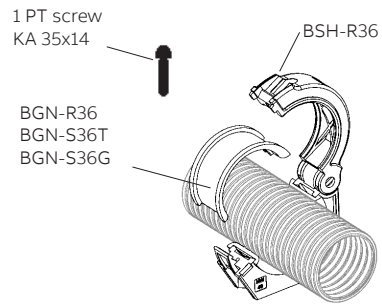
### Examples for combination possibilities:

The BSH tube clamp can be used to suit the application with different inserts.

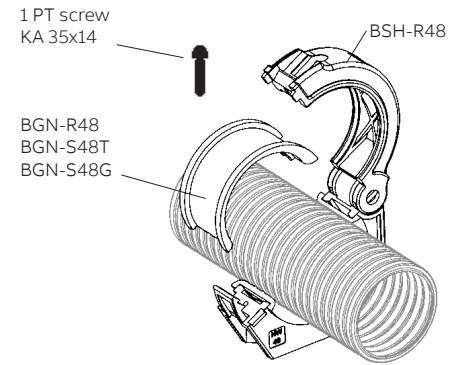
#### NW 29



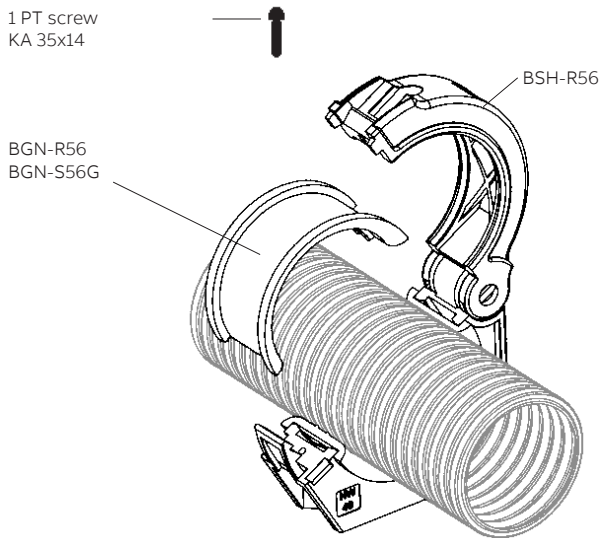
#### NW 36



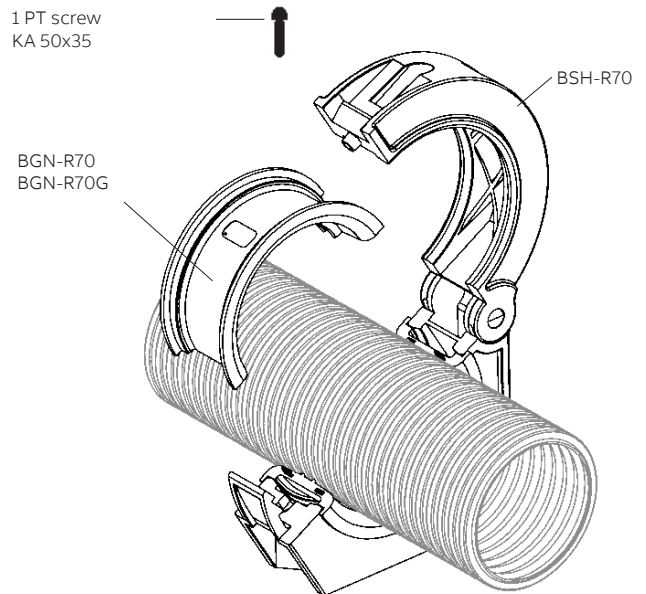
#### NW 48



#### NW 56



#### NW 70



<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
<hr/>			
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

#### Content of delivery:

- Tube clamp,
- PT-screw, stainless steel
- Straight pin

#### Assembly instructions:

- Possible combinations, please see on page 3

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

