

## TECHNICAL DATA SHEET

# PMA Smart Line - ALWD-P - Fitting

## 90°elbow, one-piece, IP66, PG thread

**PMA**



One-piece, IP66 polyamide fitting for flexible non-metallic conduit



### Applications:

- In machine building, installation and construction industries

### Features & Benefits:

- Economical
- Easy „push-in“ installation
- Re-opening with screwdriver (for security reasons hand opening not possible)
- Space saving due to compact design
- Fits both conduit profiles - fine (T) and coarse (G)

### Ingress protection:

- IP66 (EN/IEC 60529)

### Materials:

- High-grade, specially formulated polyamide 6

### Compatible with:

- PMAFLEX Pro Conduits
- PMAFLEX Multilayer Conduits
- PMAFLEX Conduits
- PMA Smart Line Conduits

### Weathering resistance:

- Very good UV resistance and weathering characteristics, particularly in black

### Colour:

- Black

### Chemical properties:

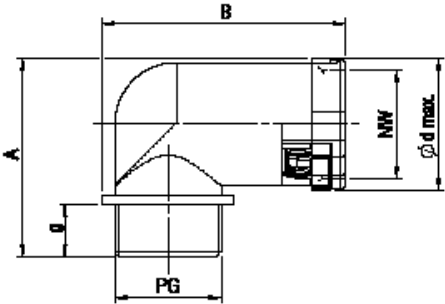
- Please refer to [www.pma.ch](http://www.pma.ch) (Technical Information / Chemical Resistance)

### Environmental properties:

- Free from halogens and cadmium
- RoHS and REACH compliant

| Product selection: |             |              |                         |      |      |      |            |              |
|--------------------|-------------|--------------|-------------------------|------|------|------|------------|--------------|
| Part no.           | Thread size | Conduit size | Dimensions in mm (nom.) |      |      |      | Weight     | Packing unit |
| black              | PG          | NW           | g                       | d2   | A    | B    | kg/100 pcs | pcs/PU       |
| ALWD-P070*         | 7           | 10           | 7.0                     | 21.5 | 42.0 | 37.5 | 1.3        | 100          |
| ALWD-P090          | 9           | 10           | 11.0                    | 21.5 | 32.5 | 37.5 | 0.6        | 100          |
| ALWD-P092*         | 9           | 12           | 8.0                     | 25.0 | 48.0 | 43.5 | 1.8        | 100          |
| ALWD-P110*         | 11          | 10           | 8.0                     | 25.0 | 44.0 | 40.0 | 1.0        | 100          |
| ALWD-P112          | 11          | 12           | 11.0                    | 31.0 | 36.5 | 43.5 | 0.9        | 100          |
| ALWD-P130*         | 13.5        | 10           | 9.0                     | 31.0 | 37.5 | 40.0 | 1.0        | 100          |
| ALWD-P132          | 13.5        | 12           | 11.0                    | 39.0 | 36.5 | 45.0 | 1.0        | 100          |
| ALWD-P137          | 13.5        | 17           | 11.0                    | 39.0 | 41.0 | 50.5 | 1.4        | 100          |
| ALWD-P167          | 16          | 17           | 11.0                    | 46.0 | 41.0 | 51.5 | 1.4        | 100          |
| ALWD-P213          | 21          | 23           | 12.0                    | 46.0 | 52.0 | 61.0 | 2.2        | 50           |
| ALWD-P299          | 29          | 29           | 12.0                    | 56.0 | 58.5 | 70.5 | 3.1        | 30           |
| ALWD-P366          | 36          | 36           | 13.0                    | 56.0 | 70.0 | 85.0 | 5.8        | 20           |
| ALWD-P488          | 48          | 48           | 13.0                    | 68.0 | 83.0 | 97.5 | 8.8        | 10           |

These products will be delivered with a thread adapter.  
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                    | V2                    |                         | UL 94               |

#### Content of delivery:

- Fitting

#### Assembly instructions:

- When mounting, push-in conduit completely and then pull back slightly to ensure the locking mechanism is fully engaged
- To Disassembly: reopen with screwdriver and tiwst for easy release
- Please consider the appropriate assembly instructions on [www.pma.ch](http://www.pma.ch)

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