

TECHNICAL DATA SHEET

PMA FLEXPLus - PUS - Corrugated Conduit

Very flexible, heavy-duty

PMA



For long-term external applications with approval according to UL 1660 (UL Listing)



Applications:

- Long-term external applications, e.g. solar systems, signalling, CCTV
- Dynamic applications
- For use according to National Electric Code (NEC) NFPA 70, Article 356

Features & Benefits:

- Excellent flexibility
- Very good mechanical strength at low temperatures and dry conditions
- Self-extinguishing

Materials:

- High-grade, specially formulated polyamide 12

Compatible with:

- PMA FIXPLus fittings

Temperature range:

- -50°C ... +95°C continuous, +150°C short-term

Conforms to:

- UL Listed according to UL1660 (UL File E311441)
- For use according to National Electric Code (NEC) NFPA 70, Article 356

Weathering resistance:

- Excellent UV resistance and weathering characteristics, particularly in black

Colour:

- Black
- Grey

Chemical properties:

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

Environmental properties:

- Free from halogens and cadmium
- RoHS and REACH compliant

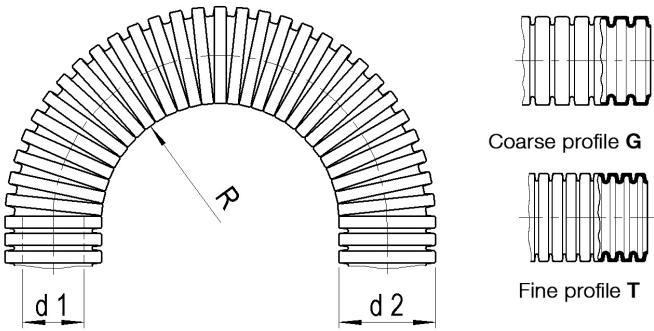
PUS-Index

| | min. | | | | | | | | | max. |
|-----------------------------|-------------------------|--|--|--|--|--|--|--|--|------|
| Ductility | [Progressive bar chart] | | | | | | | | | |
| Fatigue reversed bending | [Progressive bar chart] | | | | | | | | | |
| Compression resistance | [Progressive bar chart] | | | | | | | | | |
| Low temperature performance | [Progressive bar chart] | | | | | | | | | |
| Weathering resistance | [Progressive bar chart] | | | | | | | | | |

Product selection:

| Part no. | | Profile | Conduit size | | | rec. fitting thread size | | | Dimensions in mm (nom.) | | | | Weight | Packing unit |
|----------|----------|---------|--------------|--------|------|--------------------------|---------|------|-------------------------|------|---------|---------|-----------|--------------|
| black | grey | T/G | NW | metric | Inch | PG | metric | NPT | d1 | d2 | stat. R | dyn. R. | kg/100 ft | PU/ft |
| PUSG-17B | PUSG-17S | G | 17 | 20 | ½" | 16 | M20x1.5 | ½" | 15.5 | 21.1 | 35 | 85 | 2.3 | 100 |
| PUSG-23B | PUSG-23S | G | 23 | 25 | ¾" | 21 | M25x1.5 | ¾" | 21.6 | 28.4 | 45 | 110 | 3.7 | 100 |
| PUSG-29B | PUSG-29S | G | 29 | 32 | 1" | 29 | M32x1.5 | 1" | 27.5 | 34.5 | 55 | 135 | 4.6 | 100 |
| PUSG-36B | PUSG-36S | G | 36 | 40 | 1 ¼" | 36 | M40x1.5 | 1 ¼" | 35.9 | 42.4 | 65 | 170 | 5.8 | 100 |
| PUSG-48B | PUSG-48S | G | 48 | 50 | 1 ½" | 48 | M50x1.5 | 1 ½" | 47.0 | 54.5 | 85 | 220 | 7.6 | 100 |

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



stat. R. = min. bending radius for static (fixed) installation

dyn. R. = min. bending radius for dynamic (flexible) installation

| Mechanical Properties: | Value: | Test parameters: | Test method: |
|--|--------------------|-------------------------|-------------------------------|
| Impact strength | > 7.5 J | (+23°C) | PMA DO 9.21-4330 |
| | > 12.2 J | (-18°C) | CSA C22.2 Nr. 227.2 / UL 1660 |
| | class 3, > 2 J | (-45°C) | IEC EN 61386 |
| | class 4, > 6 J | (-15°C) | IEC EN 61386 |
| | class 5, > 20 J | (+23°C) | IEC EN 61386 |
| Compression strength | > 200 N | (50 x 50 mm) | PMA DO 9.21-4320 |
| | > 400 N | (100 x 100 mm) | PMA DO 9.21-4320 |
| | class 1 | | IEC EN 61386 |
| Resistance to fatigue | > 1'000'000 cycles | | PMA DO 9.21-4420 |
| | > 4'000'000 cycles | | PMA DO 9.21-4425 |
| | class 4, flexible | (-45°C) | IEC EN 61386 |
| Pull-out resistance conduit - fitting series: | | | |
| PMA FIXPLus | > 430 N | | PMA DO 9.21-4610 |
| | class 2 | | IEC EN 61386 |

Note: Testing at 23°C, 50% r.h., conduit nominal width 17, unless otherwise stated

| Thermal properties: | Value: | Test parameters: | Test method: |
|------------------------------------|----------------|-------------------------|---------------------------------|
| Continuous application temperature | -50 ... +95°C | | PMA DO 9.21-4510 |
| Upper application temperature | +110°C | (20'000 h) | PMA DO 9.21-4360 |
| Short-term | +150°C | (168 h) | PMA DO 9.21-4360 |
| Application temperature range | -18 ... +105°C | | UL 1660 / CSA C22.2 Nr. 227.2.1 |

| Fire safety properties: | Value: | Test parameters: | Test method: |
|--------------------------------|-----------------------|-------------------------|---------------------|
| Fire performance | non flame-propagating | | IEC EN 61386 |
| Oxygen index | > 29 % | | EN ISO 4589-2 |
| Fire performance | V2 | | UL 94 |
| Fire performance | compliant | | UL 224 |

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