

TECHNICAL DATA SHEET

# PMAFLEX Multilayer - XSOL - Corrugated Conduit

Very flexible, medium-duty

**PMA**



Very flexible UL recognized conduit ideal for long-term external applications



**Applications:**

- All-purpose, especially for long-term external applications, e.g. energy technology, transportation

**Features & Benefits:**

- Very high flexibility
- Very good mechanical strength
- High impact resistance at low temperature and humidity
- Excellent fire safety characteristics
- Excellent chemical resistance
- NMPT-C

**Materials:**

- Outer layer: High-grade, specially formulated polyamide 12
- Intermediate layer: spec. bonding compound
- Inner layer: High-grade, specially formulated polyamide 6

**Compatible with:**

- PMAFIX Pro, PMAFIX fittings
- PMA accessories

**Temperature range:**

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

**Conforms to:**

- UL 1696 (UL File E80294)
- CSA C22.2 No. 227.3-05 (CSA File LL 88703)

**Weathering resistance:**

- Excellent UV resistance and weathering characteristics

**Colour:**

- Outer layer: black, other colours on request
- Inner layer: green

**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

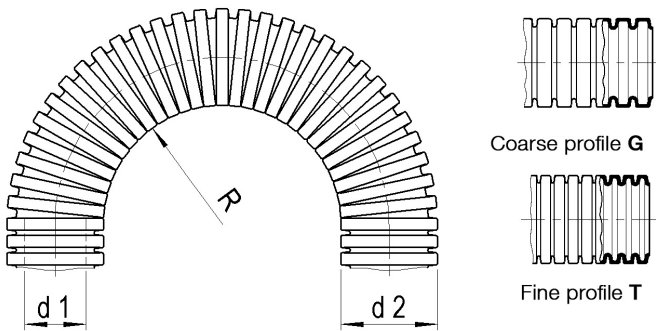
**XSOL-Index**

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

**Product selection:**

Part no.	Profile	Conduit size		rec. fitting thread size		Dimensions in mm (nom.)			Weight kg/100 m	Packing unit metre
		NW	metric	PG	metric	d1	d2	stat. R		
XSOLT-10BG	T	10	12	9	M12x1.5	9.5	12.8	20	3.0	50
XSOLT-12BG	T	12	16	11	M16x1.5	11.9	15.6	25	4.0	50
XSOLG-17BG	G	17	20	16	M20x1.5	15.6	21.1	40	6.5	50
XSOLG-23BG	G	23	25	21	M25x1.5	21.9	28.4	50	10.0	50
XSOLG-29BG	G	29	32	29	M32x1.5	27.7	34.5	60	13.5	50
XSOLG-36BG	G	36	40	36	M40x1.5	36.4	42.4	75	16.0	30
XSOLG-48BG	G	48	50	48	M50x1.5	47.2	54.5	90	23.0	30

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



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

<b>Mechanical Properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
Impact strength	> 9 J	(+23°C)	PMA DO 9.21-4330
	> 12.2 J	(-18°C)	CSA C22.2 Nr. 227.3 / UL 1696
	class 3, > 2 J	(-45°C)	IEC EN 61386
Compression strength	> 250 N	(50 x 50 mm)	PMA DO 9.21-4320
	> 500 N	(100 x 100 mm)	PMA DO 9.21-4320
Reverse bending resistance	> 400'000 cycles		PMA DO 9.21-4420
	> 1'000'000 cycles		PMA DO 9.21-4425
<b>Pull-out resistance conduit - fitting series</b>			
PMAFIX Pro	> 350 N		PMA DO 9.21-4610
PMAFIX IP68	> 300 N		PMA DO 9.21-4610
PMAFIX IP66	> 250 N		PMA DO 9.21-4610
PMAFIX Pro, PMAFIX IP66 & IP68	class 2		IEC EN 61386

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

<b>Thermal properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
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 ... +90°C		UL 1696/CSA 22.2 Nr. 227.3

<b>Fire safety properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
Fire performance	non flame-propagating		IEC EN 61386
Fire performance	V2		UL 94

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