

TECHNICAL DATA SHEET

# PMAFLEX Multilayer - XVCS1H - Corrugated Conduit

## Flexible, Heavy-duty

**PMA**



Flexible conduit ideal for track side applications and other exterior static applications



**Applications:**

- Track side applications

**Features & Benefits:**

- Very long life time, >20 years
- Excellent low temperature performance
- Easy installation through flexibility
- Low friction inner layer facilitates cable insertion
- Very good mechanical strength combined with high flexibility
- Impermeable to water and steam
- Good resistance to rodents
- No prone to accumulation of fungus or mould

**Materials:**

- Outer layer: High-grade, specially formulated polyamide 6
- Inner layer: Specially modified polyolefin

**Compatible with:**

- PMAFIX Pro, PMAFIX, PMA Smart Line fittings
- PMA accessories

**Temperature range:**

- -50°C ... +90°C continuous, +120°C short-term

**Conforms to:**

- Deutsche Bahn Standard

**Weathering resistance:**

- Very good UV resistance and weathering characteristics

**Colour:**

- Outer layer: black
- 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

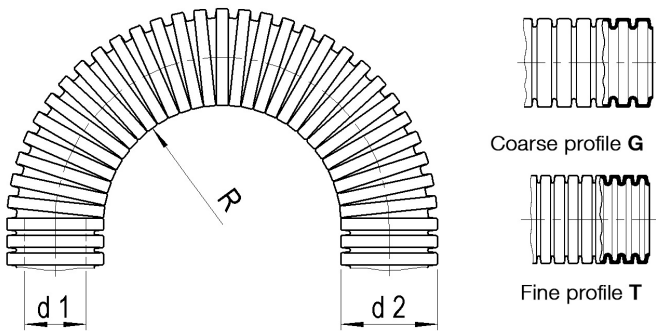
**XVCS1H-Index**

	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		
XVCS1H-10BG	T	10	12	9	M12x1.5	9.5	12.8	20	3.2	50
XVCS1H-12BG	T	12	16	11	M16x1.5	11.8	15.6	25	4.5	50
XVCS1H-17BG	G	17	20	16	M20x1.5	15.5	21.1	40	7.5	50
XVCS1H-23BG	G	23	25	21	M25x1.5	21.7	28.4	50	11.0	50
XVCS1H-29BG	G	29	32	29	M32x1.5	27.5	34.5	60	14.0	50
XVCS1H-36BG	G	36	40	36	M40x1.5	35.8	42.4	75	17.0	30
XVCS1H-48BG	G	48	50	48	M50x1.5	47.1	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. = min. bending radius for static (fixed) installation

<b>Mechanical Properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
Impact strength	> 13.5 J	(+23°C)	PMA DO 9.21-4330
	> 12.2 J	(-18°C)	CSA C22.2 Nr. 227.3 / UL 1696
	> 7.5 J	(-40°C)	PMA DO 9.21-4330
	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	> 300 N		PMA DO 9.21-4320
	> 600 N		PMA DO 9.21-4320
	class 2		IEC EN 61386
Resistance to fatigue	> 50'000 cycles		PMA DO 9.21-4425
	class 4, flexible	(-45°C)	IEC EN 61386
<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	> 270 N		PMA DO 9.21-4610
PMAFIX Pro, PMAFIX IP66 & IP68	class 1		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 ... +90°C		PMA DO 9.21-4510
Upper application temperature	+100°C	(20'000 h)	PMA DO 9.21-4360
Short-term	+120°C	(168 h)	PMA DO 9.21-4360
Application temperature range	-45 ... +90°C		IEC EN 61386

<b>Fire safety properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
Fire performance	flame-propagating level 2	(1kw burner test)	IEC EN 61386

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