

TECHNICAL DATA SHEET

# PMA FLEXPLus - VUS - Corrugated Conduit

Very flexible, heavy-duty

**PMA**



For static exterior installations with approval according to UL 1660 (UL Listing)



**Applications:**

- For high requirements in machine building and plant construction
- Where high compression resistance is required
- For external applications

**Features & Benefits:**

- Good flexibility
- High mechanical strength at low temperature and low humidity
- Self-extinguishing

**Materials:**

- High-grade, specially formulated polyamide 6

**Compatible with:**

- PMA FIXPLus fittings

**Temperature range:**

- -50°C ... +105°C continuous, +160°C short-term

**Conforms to:**

- UL Listed according to UL1660 (UL File E311441)

**Weathering resistance:**

- Excellent UV resistance and weathering characteristics, particularly in black

**Colour:**

- Black
- Grey

**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

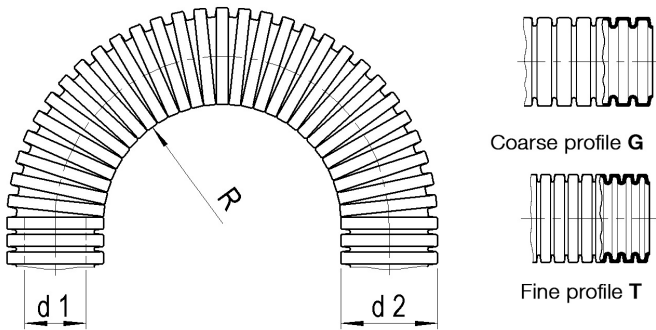
**VUS-Index**

min.					max.
Ductility					
Fatigue reversed bending					
Compression resistance					
Low temperature performance					
Weathering resistance					

**Product selection:**

Part no.		Profile	Conduit size			rec. fitting thread size			Dimensions in mm (nom.)			Weight kg/100 ft	Packing unit PU/ft
black	grey		NW	metric	Inch	PG	metric	NPT	d1	d2	stat. R		
VUSG-17B	VUSG-17S	G	17	20	½"	16	M20x1.5	½"	15.5	21.1	40	2.3	100
VUSG-23B	VUSG-23S	G	23	25	¾"	21	M25x1.5	¾"	21.4	28.4	50	3.7	100
VUSG-29B	VUSG-29S	G	29	32	1"	29	M32x1.5	1"	27.2	34.5	60	4.6	100
VUSG-36B	VUSG-36S	G	36	40	1 ¼"	36	M40x1.5	1 ¼"	35.4	42.4	75	5.8	100
VUSG-48B	VUSG-48S	G	48	50	1 ½"	48	M50x1.5	1 ½"	46.4	54.5	90	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

<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. 227.2 / 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	> 300 N		PMA DO 9.21-4320
	> 600 N		PMA DO 9.21-4320
	class 2		IEC EN 61386
Resistance to fatigue	> 40'000 cycles		PMA DO 9.21-4420
	> 4'000'000 cycles		PMA DO 9.21-4425
	class 4, flexible	(-45°C)	IEC EN 61386
<b>Pull-out resistance conduit - fitting series:</b>			
FLEXPLus IP68	> 500 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

<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
Application temperature range	-18 ... +60°C		UL 1660 / CSA C22.2 Nr. 227.2.1

<b>Fire safety properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
Fire performance	non flame-propagating		IEC EN 61386
Glowing wire flammability index	850°C		EN 60695-2-10
Oxygen index	> 25 %		EN ISO 4589-1

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