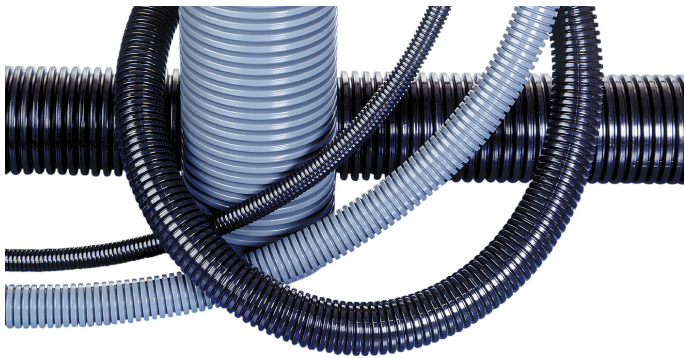


TECHNICAL DATA SHEET

# 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](http://www.pma.ch) (Technical Information / Chemical Resistance)

**Environmental properties:**

- Free from halogens and cadmium
- RoHS and REACH compliant

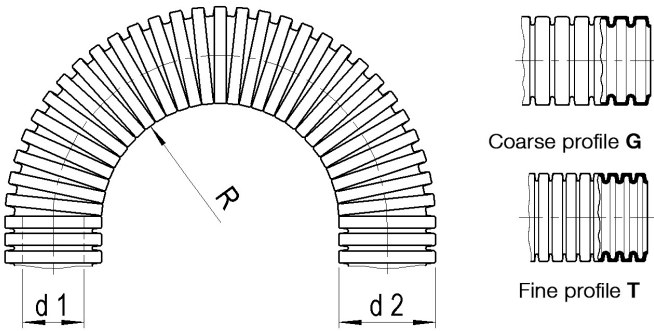
**PUS-Index**

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

**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

<b>Mechanical Properties:</b>	<b>Value:</b>	<b>Test parameters:</b>	<b>Test method:</b>
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, > 2J	(-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
<b>Pull-out resistance conduit - fitting series:</b>			
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

<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 ... +105°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
Oxygen index	> 29 %		EN ISO 4589-2
Fire performance	V2		UL 94
Fire performance	compliant		UL 224

ABB Switzerland Ltd,  
PMA Cable Protection  
Aathalstrasse 90  
8610 Uster, Switzerland  
Phone: +41 58 585 00 11  
pma-info@ch.abb.com  
www.pma.ch

Let's write the future.  
Together. **abb.com**

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Installation Products Inc. does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Inc. Copyright© 2019 ABB Installation Products Inc. All rights reserved

