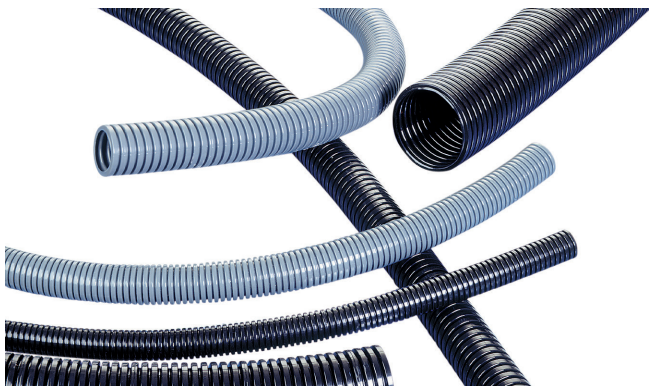


TECHNICAL DATA SHEET

PMAFLEX - PLR - Corrugated Conduit

Flexible, medium-grade

PMA



Conduit for fire safety sensitive applications in the passenger zone of light rail vehicles



Applications:

- In light rail rolling stock applications e.g. Tram, Metro, Monorail

Features & Benefits:

- High fire safety specification
- Good compression strength
- Good impact resistance
- Good flexibility
- Self-extinguishing

Materials:

- High-grade, specially formulated polyamide 6

Compatible with:

- PMAFIX Pro, PMAFIX fittings
- PMA accessories

Temperature range:

- -40°C ... +105°C continuous, +160°C short-term

Conforms to:

- EN 45545 HL2 (R22 & R23)

Weathering resistance:

- Good 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

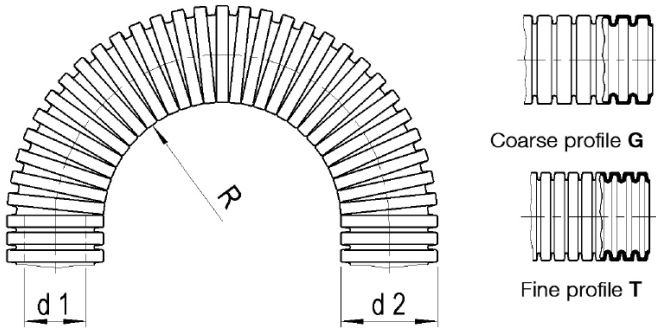
PLR-Index

	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	Packing unit
black	grey	T/G	NW	metric	PG	metric	d1	d2	stat. R	kg/100 m	metre
PLRT-07B	PLRT-07S	T	7	10	7	M12 x 1.5	6.8	10.0	15	2.0	50
PLRT-10B	PLRT-10S	T	10	12	9	M12 x 1.5	9.8	12.8	20	2.5	50
PLRT-12B	PLRT-12S	T	12	16	11	M16 x 1.5	12.2	15.6	25	3.2	50
PLRG-17B	PLRG-17S	G	17	20	16	M20 x 1.5	15.9	21.1	40	5.7	50
PLRG-23B	PLRG-23S	G	23	25	21	M25 x 1.5	22.0	28.4	50	8.9	50
PLRG-29B	PLRG-29S	G	29	32	29	M32 x 1.5	28.0	34.5	60	12.0	50
PLRG-36B	PLRG-36S	G	36	40	36	M40 x 1.5	36.3	42.4	75	14.4	30
PLRG-48B	PLRG-48S	G	48	50	48	M50 x 1.5	47.2	54.5	90	20.5	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

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

Mechanical Properties:	Value:	Test parameters:	Test method:
Impact strength	> 6 J	(+23°C)	PMA DO 9.21-4330
	class 3, > 2 J	(-45°C)	IEC EN 61386
	class 3, > 2 J	(-15°C)	IEC EN 61386
	class 4, > 6 J	(+23°C)	IEC EN 61386
Compression strength	> 175 N	(50 x 50 mm)	PMA DO 9.21-4320
	> 350 N	(100 x 100 mm)	PMA DO 9.21-4320
Reverse bending resistance	> 30'000 cycles		PMA DO 9.21-4420
	> 60'000 cycles		PMA DO 9.21-4425
	> 5'000 cycles	(-25°C)	IEC EN 61386-23
	pliable	(-45°C)	IEC EN 61386-22
Pull-out resistance conduit - fitting series			
PMAFIX Pro	> 300 N		PMA DO 9.21-4610
PMAFIX IP68	> 280 N		PMA DO 9.21-4610
PMAFIX IP66	> 250 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

Thermal properties:	Value:	Test parameters:	Test method:
Continuous application temperature	-40 ... +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	-25 ... +105°C		IEC EN 61386

Fire safety properties:	Value:	Test parameters:	Test method:
Fire performance	non flame-propagating		IEC EN 61386
Fire hazard level	HL2		EN 45545-2 (R22)
Oxygen index	> 28 %		EN ISO 4589-2
Smoke density	< 300 Ds max.		EN ISO 5659-2 (25 kW/m ²)
Toxicity	< 0.9 CIT _{NLP}		NF X 70-100-1/-2: (600°C)
Fire hazard level	HL2		EN 45545-2 (R23)
Oxygen index	> 28 %		EN ISO 4589-2
Smoke density	< 600 Ds max		EN ISO 5659-2 (25 kW/m ²)
Toxicity	< 1.8 CIT _{NLP}		NF X 70-100-1/-2: (600°C)

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

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