

TECHNICAL DATA SHEET

PMA Smart Line - LLPF - Corrugated Conduit

Flexible, medium-grade

PMA



Flexible conduit ideal for machine building, installation and construction industries



Applications:

- In machine building and installation industries, vehicle construction

Features & Benefits:

- Very good insulating characteristics
- Good fire safety characteristics
- Self-extinguishing
- Very Good flexibility
- Good impact resistance
- Good resistance against strong acids

Materials:

- High-grade, specially formulated polyamide 6

Compatible with:

- PMAFIX, PMA Smart Line fittings
- PMA accessories

Temperature range:

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

Conforms to:

- UL 94 V0

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

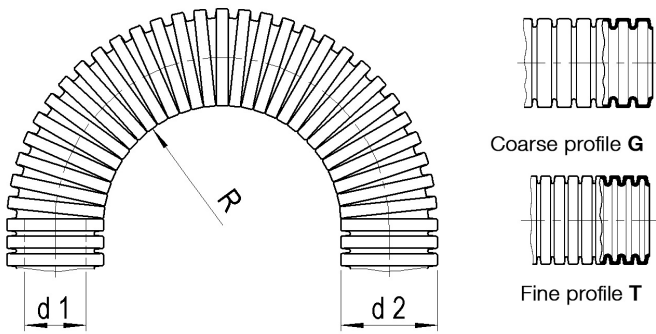
LLPF-Index

	min.												max.
Ductility	[Progressive bar from min to max]												
Fatigue reversed bending	[Progressive bar from min to max]												
Compression resistance	[Progressive bar from min to max]												
Low temperature performance	[Progressive bar from min to max]												
Weathering resistance	[Progressive bar 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
LLPF-07A	LLPF-07S	T	7	10	7	M12 x 1.5	6.8	10.0	15	2.0	50
LLPF-10A	LLPF-10S	T	10	12	9	M12 x 1.5	9.8	12.8	20	2.5	50
LLPF-12A	LLPF-12S	T	12	16	11	M16 x 1.5	12.2	15.6	25	3.2	50
LLPF-17A	LLPF-17S	T	17	20	16	M20 x 1.5	16.8	21.1	35	5.2	50
LLPF-23A	LLPF-23S	T	23	25	21	M25 x 1.5	23.4	28.4	45	8.9	50
LLPF-29A	LLPF-29S	T	29	32	29	M32 x 1.5	29.1	34.5	55	12.0	50
LLPFG-17A	LLPFG-17S	G	17	20	16	M20 x 1.5	15.8	21.1	40	5.7	50
LLPFG-23A	LLPFG-23S	G	23	25	21	M25 x 1.5	21.9	28.4	50	8.9	50
LLPFG-29A	LLPFG-29S	G	29	32	29	M32 x 1.5	27.8	34.5	60	12.0	50
LLPFG-36A	LLPFG-36S	G	36	40	36	M40 x 1.5	36.1	42.4	75	14.4	30
LLPFG-48A	LLPFG-48S	G	48	50	48	M50 x 1.5	46.9	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

Mechanical Properties:	Value:	Test parameters:	Test method:
Impact strength	> 6 J		PMA DO 9.21-4330
Compression strength	> 250 N	(50 mm)	PMA DO 9.21-4320
	> 500 N	(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 IP68	> 250 N		PMA DO 9.21-4610
PMAFIX IP66	> 220 N		PMA DO 9.21-4610
PMA Smart Line	> 175 N		PMA DO 9.21-4610
PMA Smart Line, PMAFIX IP66 & IP68	class 1		IEC EN 61386

Note: Testing at 23°C, 50% r.h., conduit nominal width 17 (profile G), 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

Fire safety properties:	Value:	Test parameters:	Test method:
Fire performance	non flame-propagating		IEC EN 61386
Fire performance	V0		UL 94
Fire performance	compliant		UL 224
Fire performance	BKZ 5.2		VKF

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