

TECHNICAL DATA SHEET

# PMA OXC - JXPCSF - Over-extruded Conduit

Highly flexible, heavy-duty

**PMA**



Over-extruded conduit for rail applications designed specifically to prevent the accumulation of ice under extreme climate conditions.



### Applications:

Static and dynamic external applications on railway vehicles.

- On the roof   
PA12 outer layer has excellent UV resistance characteristics
- On inter-carriage connections   
Excellent resistance to fatigue when exposed to continuous bending
- On bogies and undercarriage   
Excellent resistance to impact at low temperatures

### Features & Benefits:

- Excellent flexibility
- Self-extinguishing
- Smooth outer layer prevents accumulation of ice
- Easy cleaning
- High resistance to chemicals and cleaning agents

### Materials:

- Multi layer conduit: specially formulated polyamide 12
- Overextrusion: specially formulated polyamide 12

### Compatible with:

- PMAFIX Pro fittings and accessories

### Temperature range:

- -50°C ... +95°C continuous, +150°C short-term

### Conforms to:

- EN 45545-2 HL3 (R22 & R23)

### Weathering resistance:

- Excellent UV resistance and weathering characteristics

### Colour:

- Conduit outer layer: black
- Inner layer: orange
- Overextrusion: black

### 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

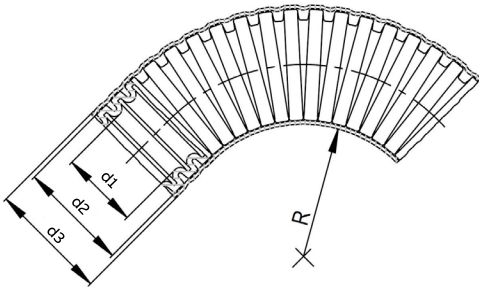
### JXPCSF-Index

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

**Product selection:**

Part no.	Profile	Conduit size		Dimensions in mm (nom.)					Weight kg/100 m	Packing unit metre
		NW	metric	d1*	d2*	d3*	stat. R	dyn. R.		
JXPCSFT-10BO	T	10	12	9.6	12.8	13.2	35	80	3.6	100
JXPCSFT-12BO	T	12	16	11.8	15.6	16.0	40	100	4.9	50
JXPCSFG-17BO	G	17	20	15.5	21.1	21.6	55	125	8.6	50
JXPCSFG-23BO	G	23	25	21.5	28.4	28.8	75	170	13.5	50
JXPCSFG-29BO	G	29	32	27.4	34.5	34.8	90	210	16.7	50
JXPCSFG-36BO	G	36	40	36.0	42.4	42.8	110	260	21.6	30
JXPCSFG-48BO	G	48	50	47.1	54.5	54.8	140	330	29.4	30

Our customer service dept. or local distribution partner will be pleased to help you concerning product availability and lead time  
 \*Tolerance acc. to ISO 20457 (TG8)



stat. R. = min. bending radius for static (fixed) installation

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

Mechanical Properties:	Value:	Test parameters:	Test method:
Impact strength	Class 3, >2J	(-45°C)	IEC EN 61386
	Class 4, > 6J	(-15°C)	IEC EN 61386
	Class 5, > 20 J	(+23°C)	IEC EN 61386
	> 12.2 J	(-18°C)	CSA C22.2 Nr. 227.3 / UL 1696
	> 7.5 J	(+23°C)	PMA DO 9.21-4330
Compression strength	Class 2		IEC EN 61386
	> 250 N	(50 x 50 mm)	PMA DO 9.21-4320
	> 500 N	(100 x 100 mm)	PMA DO 9.21-4320
Resistance to fatigue	> 5'000 cycles	(-45°C)	IEC EN 61386-23
	> 1'200'000 cycles		PMA DO 9.21-4420
	> 5'000'000 cycles		PMA DO 9.21-4425
Pull-out resistance conduit - fitting series			
PMAFIX Pro	Class 2		IEC EN 61386
	> 460 N		PMA DO 9.21-4610

Note: Testing at 23°C, 50% r.h., conduit nominal width 17, unless otherwise stated

Thermal properties:	Value:	Test parameters:	Test method:
Application temperature range	-45 ... +105°C		IEC EN 61386
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

Fire safety properties:	Value:	Test parameters:	Test method:
Fire performance	non flame-propagating		IEC EN 61386
Fire hazard level	HL3		EN 45545-2 (R22)
Oxygen index	> 32 %		EN ISO 4589-2
Smoke density	< 190 Ds max.		EN ISO 5659-2 (25 kW/m2)
Toxicity	< 0.75 CIT <sub>NLP</sub>		NF X 70-100-1/-2: (600°C)
Fire hazard level	HL3		EN 45545-2 (R23)
Oxygen index	> 32 %		EN ISO 4589-2
Smoke density	< 300 Ds max.		EN ISO 5659-2 (25 kW/m2)
Toxicity	< 1.5 CIT <sub>NLP</sub>		NF X 70-100-1/-2: (600°C)

Note: Requirement sets (R22 & R23) apply for conduit sizes up to and including NW48

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