TECHNICAL DATA SHEET

PMAFLEX - VCS - Corrugated Conduit

Flexible, heavy-duty

Robust, heavy duty UL recognized conduit

Applications:
- Static installations in machine and ship building applications

Features & Benefits:
- Very good resistance to ultra violet rays and weathering
- Good flexibility
- High compression and impact strengths at low temperature and low humidity
- Self-extinguishing

Materials:
- High-grade, specially formulated polyamide 6

Compatible with:
- PMAFIX Pro, PMAFIX fittings
- PMAGRIP flange
- PMA accessories

Temperature range:
- –50°C ... +105°C continuous, +160°C short-term

Conforms to:
- UL 1696 (UL File E80294)
- CSA C22.2 No. 227.3-05 (CSA File LL 88703)

Weathering resistance:
- Very 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

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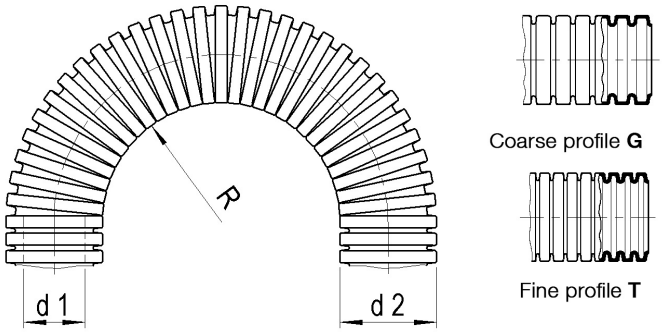
min.				max.
Ductility				
Fatigue reversed bending				
Compression resistance				
Low temperature performance				
Weathering resistance				

Product selection:

Part no.		Profile	Conduit size		rec. fitting thread size		Dimensions in mm (nom.)			Weight	Packing unit
black	grey	T/G	NW	metric	PG	metric	d1	d2	stat. R	kg/100 m	metre
VCST-07B	VCST-07S	T	7	10	7	M12x1.5	6.6	10.0	20	2.5	100
VCST-10B	VCST-10S	T	10	12	9	M12x1.5	9.6	12.8	25	3.1	50
VCST-12B	VCST-12S	T	12	16	11	M16x1.5	12.0	15.6	30	4.2	50
VCST-17B	VCST-17S	T	17	20	16	M20x1.5	16.5	21.1	40	7.0	50
VCSG-17B	VCSG-17S	G	17	20	16	M20x1.5	15.7	21.1	45	7.5	50
VCSG-23B	VCSG-23S	G	23	25	21	M25x1.5	21.8	28.4	60	12.0	50
VCSG-29B	VCSG-29S	G	29	32	29	M32x1.5	27.6	34.5	70	15.0	50
VCSG-36B	VCSG-36S	G	36	40	36	M40x1.5	35.7	42.4	85	19.0	30
VCSG-48B	VCSG-48S	G	48	50	48	M50x1.5	46.7	54.5	110	25.0	30
VCSG-56B	VCSG-56S	G	56	68	-	-	56.2	67.5	135	36.0	30
VCSG-70B	VCSG-70S	G	70	80	-	-	67.1	79.6	160	52.0	10
VCSG-95B	VCSG-95S	G	95	106	-	-	91.0	107.0	220	76.5	10

Our customer service dept. or local distribution partner will be pleased to help you concerning product availability and lead time
* Conduit size NW10 - NW95 UL recognized to UL 1696 (UL file E 80294) / CSA C22.2 No. 227.3-05 (CSA File LL 88703)



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

Mechanical Properties:	Value:	Test parameters:	Test method:
Impact strength	> 13.5 J	(+23°C)	PMA DO 9.21-4330
	> 12.2 J	(-18°C)	UL 1696 / CSA C22.2 Nr. 227.3
	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	(50 x 50 mm)	PMA DO 9.21-4320
	> 600 N	(100 x 100 mm)	PMA DO 9.21-4320
	class 2		IEC EN 61386
Resistance to fatigue	> 40‘000 cycles		PMA DO 9.21-4420
	> 100‘000 cycles		PMA DO 9.21-4425
	> 5‘000 cycles	(-45°C)	IEC EN 61386-23
Pull-out resistance conduit - fitting series			
PMAFIX Pro	> 400 N		PMA DO 9.21-4610
PMAFIX IP68	> 350 N		PMA DO 9.21-4610
PMAFIX IP66	> 300 N		PMA DO 9.21-4610
PMAFIX Pro, PMAFIX IP68	class 2		IEC EN 61386
PMAFIX IP66	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	–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 ... +105°C		UL 1696 / CSA C22.2 Nr. 227.3
Application temperature range	–45 ... +105°C		IEC EN 61386

Fire safety properties:	Value:	Test parameters:	Test method:
Fire performance		non flame-propagating	IEC EN 61386
Fire performance		V2	UL 94

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