bagger-nielsen
we combine product, technique & knowhow

TECHNICAL DATA SHEET

PMAFLEX - R90 - Corrugated Conduit

Very flexible, medium-grade

PMA

For robotic applications with multi-axial movements

CE

Applications:
- For dynamically moving conduit systems in robotics and the automation industry

Features & Benefits:
- High resistance to dynamic loads
- Excellent flexibility in combination with Very Good mechanical properties
- Omproved chafing resistance
- High torsion and elongation stiffness
- Long service life

Materials:
- Specially modified polyamide 12

Compatible with:
- PMA Automation Products
- PMAGRIP flange
- PMA accessories

Temperature range:
- –40°C ... +95°C continuous, +150°C short-term

Weathering resistance:
- Excellent UV resistance and weathering characteristics

Colour:
- Black

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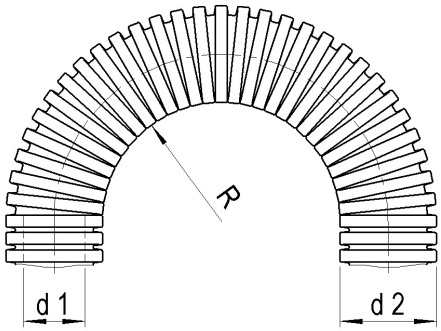
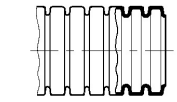
min.				max.
Ductility				
Fatigue reversed bending				
Compression resistance				
Low temperature performance				
Weathering resistance				

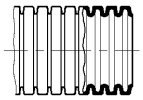
Product selection:

Part no.	Profile	Conduit size	Dimensions in mm (nom.)				Weight	Packing unit
black	T/G	NW	d1	d2	stat. R	dyn. R.	kg/100 m	metre
R90G-56B	G	56	56.3	67.5	110	270	33.0	30
R90G-70B	G	70	67.4	79.6	150	350	46.0	30





Coarse profile **G**



Fine profile **T**

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	> 3 J		PMA DO 9.21-4330
Compression strength	> 130 N	(50 x 50 mm)	PMA DO 9.21-4320
	> 260 N	(100 x 100 mm)	PMA DO 9.21-4320
Resistance to fatigue	> 4‘000‘000 cycles		PMA DO 9.21-4420
	> 10‘000‘000 cycles		PMA DO 9.21-4425

Thermal properties:	Value:	Test parameters:	Test method:
Continuous application temperature	–40 ... +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:
Free from halogen and cadmium	yes		DIN 53474