

TECHNICAL DATA SHEET

PMAFLEX - R90 - Corrugated Conduit

Very flexible, medium-grade





For robotic applications with multi-axial movements

CE EN

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:

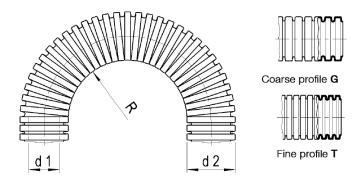
 Please refer to www.pma.ch (Technical Information / Chemical Resistance)

Environmental properties:

- Free from halogens and cadmium
- RoHS and REACH compliant

min.					
mın.					max.
Ductility					
Fatigue revers	ed bending	3			
Compression	resistance				
Low temperat	ure perforr	nance			
Weathering re	sistance				

roduct 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



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	on 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	

Value:	Test parameters:	Test method:
yes		DIN 53474

