

Specialty Convoluted Tubing



OVAL TUBING

OVAL TUBING is a convoluted tube extruded in an oval shape specially designed to protect and route electrical cables in vehicles.

The oval shape design keeps the wire bundle in a flat position, ideal for confined spaces.

OVAL TUBING can be made of two combined sections: flexible (convoluted) and straight (rigid).

This option makes OVAL TUBING a **customized product**: straight and flexible sections are combined depending on the routing needs.

The choice can also consider the local position of fasteners.

It can be delivered slit or non-slit to fit to specific applications.

Application



OVAL TUBING is well suited to underbody applications and door panel harnesses where cables need to be maintained flat in confined spaces.

Oval Tubing

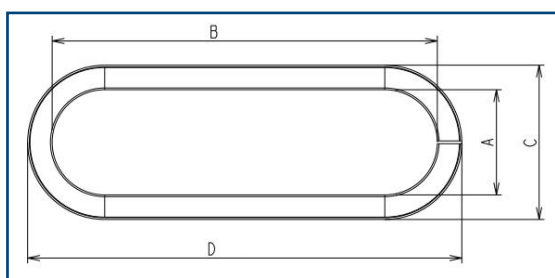


Characteristics

Colors: standard colors are black and orange, for high voltage cable identification.

Physical properties	Spec.	Unit	Polyethylene	Polypropylene grades	Heat stabilized polyamide grades	Heat stabilized flame retardant polyamide
Thermal properties						
Continuous temperature of use (3000h)	-	°C (°F)	-40/85 (-40/185)	-40/125 (-40/257)	-40/125 (-40/257)	-40/150 (-40/302)
Peak temperature	-	°C (°F)	168h at 115 (239)	240h at 150 (302)	168h at 150 (302)	240h at 175 (347)
Mechanical properties						
Tensile strength at yield	-	MPa	15 (ASTM D792)	23 (ASTM D638)	40-41 (ISO 527)	80 (ISO 527)
Tensile strength at break	ASTM D638	MPa	-	21	-	-
Elongation at yield	ASTM D638	%	-	9	-	-
Elongation at break	-	%	>450 (ASTM D638)	>600 (ASTM D638)	>150 (ISO 527)	>100 (ISO 527)
Other properties						
Density	ASTM D792	g/cm ³	0.94	0.95 - 1.03	1.06 - 1.08 (ISO 527)	1.14 (ISO 1183)
Flammability	FMVSS 302	mm/min	complies (UL 49)	complies (UL 49) < 75 (ISO 3795)	<100	<100
Chemical resistance	Resists the majority of chemicals and automotive fluids (oils, coolant, battery liquid, brake fluid, fuels, windshield washer...)					

Dimensions



The following sizes are standard diameters. Other dimensions can be proposed upon request. Note: some diameters may not be compatible with the requested material.

Designation	A Ø (mm)	B Ø (mm)	C Ø (mm)	D Ø (mm)
OVAL TUBING 06x21	6.5	21.5	9.6	24.6
OVAL TUBING 10x25	10	25	14.6	29.6
OVAL TUBING 12x35	12	35	18.3	41.3
OVAL TUBING 15x55	15	55	22	62

Approvals

Specific to applications.

Packaging

OVAL TUBING is delivered in cut lengths from 100 to 1,200 mm (other lengths upon request only).

Data and photos for information only. Delfingen makes no warranties as to the accuracy or completeness of this information. Delfingen reserves the right to make changes in materials or processing without notification.

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