Specialty Convoluted Tubing

TWINVOLT

TWINVOLT is a specific dual channel convoluted tube designed to protect **high power lines** in hybrid and electric vehicles.

The two separate compartments reduce abrasion and contact problems between cables and restrict their mutual heating, reinforcing therefore protection and safety.

Both tubes are linked every 300 mm. This design brings a high flexibility to the wire harness and allows to separate each tube at the extremities, for routing ease and continuous protection.

TWINVOLT can be proposed in various thermoplastic grades depending on the temperature requirements and can be delivered slit or non-slit.
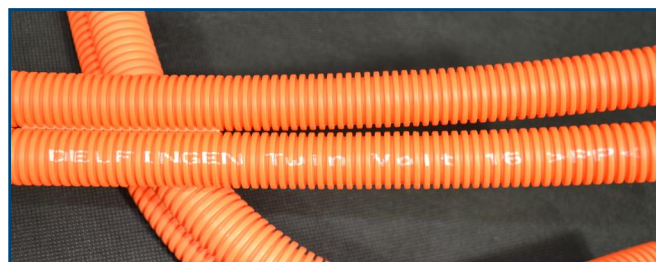
RoHS
COMPLIANT

DELFINGEN

Application & Material

TWINVOLT is particularly suited for underbody power cable routing and battery cables.
The two channels can also be used to route separately cables.

TWINVOLT is proposed in heat stabilized and flame retardant polypropylene, as standard material.
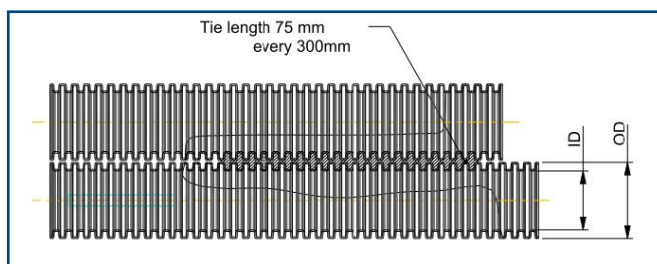A polypropylene material can also be proposed in a UL94 V-0 grade upon request, following validation steps.

Characteristics

Colors: standard color is orange with white marking.

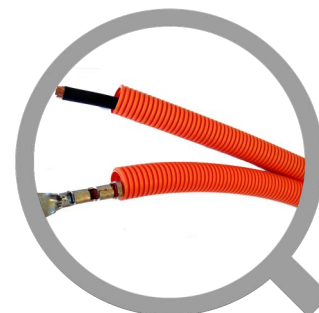| Physical properties	Specification	Unit	Value
Thermal properties			
Continuous temperature of use - min/max (3000h)	-	°C (°F)	-40/125 (-40/257)
Peak temperature (240h)	-	°C (°F)	150 (302)
Mechanical properties			
Tensile strength at break	ISO 527	MPa	>27.5
Elongation at break	ISO 527	%	>600
Other properties			
Density	ISO 1183	g/cm^3	0.92
Flammability	FMVSS 302	mm/min	self-extinguishing
Chemical resistance	Resists the majority of chemicals and automotive fluids (oils, coolant, battery liquid, brake fluid, fuels, windshield washer...)		

Dimensions

Tie length 75 mm every 300mm

ID
OD

Designation	ID	OD
TWINVOLT 16	16.3	21.3
TWINVOLT 19	19.6	25

Delfingen_TWINVOLT_v3.2

Approvals

Via Tier-1: Microcar.

Packaging

TWINVOLT is delivered in cut lengths or in bulks.