



Conduit Systems - Polypropylene

DSPP - Deep Section - Medium Weight



Technical Characteristics

Conforms to	CE mark to the Low voltage directive RoHS Compliant End of Life Vehicle Directive (ELV) EU 2000/53/EC		
Approvals and Standards	 		
Degree of mechanical protection	Very High flexibility and acid resistance. High fatigue life, impact and shock resistance		
Degree of protection	IP40 - Hinged fittings		
UV protection	Very High		
Finish	Black (BL) only		
Application	DSPP has a deep section to maintain the conduit shape during bending. Deep Section conduits are supplied in slit form to facilitate rapid cable installation and are designed for connection to all Harnessflex hinged fittings.		
Normal operating temperature range	Application	Min Temp	Max Temp
	Static	- 20°C	+90°C
	Dynamic	- 5°C	+105 °C
For use with - Fitting range	For use with all hinged fittings in the Harnessflex range		
Fire performance	Test Standard	Performance Rating	
	IEC 61386	Yes	
	ISO 4589	26 %	Halogen Free
	UL94	V2	Not self extinguishing
	IEC 60695	850°C	
Testing data	Click or See pages 3 & 4		
Type of material	Modified Polypropylene		

Image



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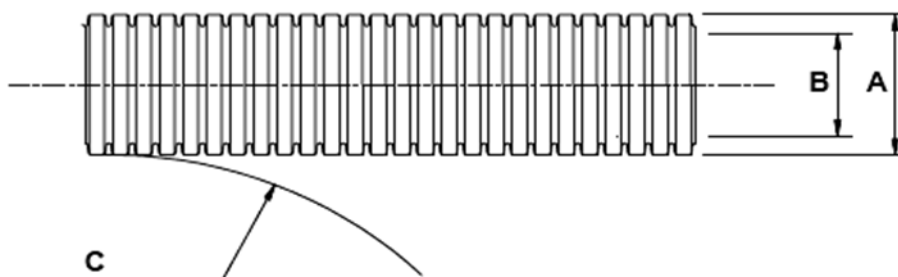
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Technical & Dimensional Data

Part No.	Conduit Size		Dimensions				Average Weight (KG/100m)
	(NC)	(NW)	(A) Outside Diameter	(B) Inside Diameter	(C) Min. Bend Radius	Reel Length (m)	
DSPP08	08	7.5	10.0mm	6.4mm	15mm	100	1.4
DSPP12	12	10	13.0mm	9.6mm	25mm	100	2.2
DSPP16	16	12	16.2mm	11.2mm	35mm	100	3.1
DSPP20	20	17	21.2mm	16.9mm	35mm	100	4.6
DSPP28	28	23	28.5mm	23.2mm	45mm	100	6.5
DSPP32	32	29	34.5mm	29.1mm	55mm	50	8.5
DSPP40	40	36	42.5mm	34.6mm	80mm	25	12.0
DSPP50	50	48	54.1mm	46.5mm	90mm	25	33.0

To order quote part number, colour & reel length, e.g DSPP25/25m



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Mechanical Properties

Test Type	Methods / Standards	Requirements	Value
Crush Strength	IEC61386-1	<25% crush >90% recovery	>125N
Tensile Strength	IEC61386-1	Fitting Pull off (Hinged Fitting)	>100N
Impact Strength @-25°C	IEC61386-1	No Cracks <20% deformation min value	>6J
Impact Strength @ 23°C	IEC61386-23	No Cracks <20% deformation min value	>20J
Dynamic Bend radius @-45 °C	IEC61386-23	5000 cycles minimum	6xOD

Thermal Properties

Test Type	Methods / Standards	Requirements	Value
Minimum Temperature	IEC61386-23	Static Permanent Use	-20°C
Minimum Temperature		Dynamic Use (5000 cycles)	-5°C
Maximum Temperature		Permanent Use (30,000) Hours	90°C
Short Term Temperature		Temporary Use (3,000) Hours	105°C

Chemical Resistance Chart

Key:

Suitable :



Limited Suitability :



Unsuitable :



Not Tested :



Astm No.1	Diesel oil	Methyl Bromide	Sulphur Dioxide (Gas)
Astm No.2	Diethylamine	MEK	Sulphuric Acid (10%)
Astm No.3	Ethanol	Nitric Acid (10%)	Sulphuric Acid (70%)
Acetic Acid (10%)	Ether	Nitric Acid (70%)	Toluene
Acetone	Ethylamine	Oxalic Acid	Transformer Oil
Aluminium Chloride	Ethylene Glycol	Ozone (Gas)	1,1,1-Trichloroethane
Aniline	Ethyl Ethanoate	Paraffin oil	Trichloroethylene
Benzaldehyde	Freon 32	Petrol	Turpentine
Benzene	Hydrochloric Acid (10%)	Phenol	Vegetable Oil
Carbon tetrachloride	Hydrochloric Acid (36%)	Sea Water	Vinyl Acetate
Chlorine water	Hydrogen Peroxide (35%)	Silver Nitrate	Water
Chloroform	Hydrogen Peroxide (87%)	Skydrol	White Spirit
Citric Acid	Lactic Acid	Sodium Chloride	Zinc Chloride
Copper Sulphate	Lubricating oil	Sodium Hydroxide (10%)	
Cresol	Methanol	Sodium Hydroxide (60%)	

The information above is given as a guide only and is based on published technical data and experience. The chemical resistance of the above products is dependant on factors such as chemical exposure, concentration of the chemical and temperature. The above chemicals are valid for a temperature of 23°C. Use of the above table is at the users own discretion and risk. Those using it must satisfy themselves that their application presents no health and safety risks. The end user should assess compatibility with their application and contact Thomas & Betts for further information.

ADHERENCE TO THE CURRENT WIRING REGULATIONS BS7671 OR NEC WIRING REGULATIONS (FOR USA) IS STRONGLY ADVISED.

MINIMUM BEND RADIUS FOR FLEXING IS DEPENDANT UPON MINIMUM TEMPERATURE, BENDING FREQUENCY AND CHEMICAL ENVIRONMENT.

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Flammability

Test Type	Method / Standard	Requirement	Result	Unit
Oxygen Index	ISO 4589-2	% Oxygen to support combustion >34%	26.0	%
Glow Wire Rating	IEC 60695	No Ignition to Extinguish with 30s	850	°C
Flammability	UL94	Vertical (V0) or Horizontal (HB)	V2	HB/V0
Flammability	IEC 61386	Vertical Burn	Pass	Pass/Fail

Smoke

Test Type	Method / Standard	Requirement	Result	Unit

Toxicity

Test Type	Method / Standard	Requirement	Result	Unit
Halogen Free		≤0.5%	Pass	Pass/Fail
Sulphur Free		≤0.5%	Pass	Pass/Fail
Phosphorous Free		≤0.5%	Pass	Pass/Fail

Pre Test Conditions

Duration	Standard	Temperature	Relative Humidity
168 (Hours)	BS EN IEC61386	23 (°C)	50 (%)