TempGuard - Co-Polyester

HTC Medium Weight - High Temperature

Harnessflex
SPECIALIST CONDUIT SYSTEMS

Technical Characteristics

Conforms to	CE Mark to the low voltage directive RoHS Compliant to 2011/65/EU Conforms with end of life vehicle directive (ELV) EU200/53/EC
Approvals and Standards	CE RoHS
Degree of mechanical protection	Very High flexibility & fatigue life. High elevated temperature, abrasion, impact and shock resistance.
Degree of protection	IP40 - TempGuard & Standard Hinged fittings IP67 - Sealed fittings
UV protection	Very High
Finish	Black (BL) only
Application	HTC conduit is suited to static and dynamic applications where elevated temperatures are present. HTC is resistant to all under bonnet greases, fuels and oils.

Normal operating temperature range

Application	Minimum Temperature	Permanent Maximum Temperature	Long Term Maximum Temperature (30,000 Hrs)	Short Term Maximum Temperature (3000 Hrs)
Static	**-50°C**	**+150°C**	**+175°C**	**+190°C**
Dynamic	**-45°C**	**+150°C**	**+175°C**	**+190°C**

For use with - Fitting range	For use with TempGuard high temperature fittings in the Harnessflex range. Also compatible with all standard Harnessflex hinged and sealed fittings.

Fire performance

Test Standard	**Performance Rating**
Not Rated	Not Rated
	Self Extinguishing & Halogen Free

Testing data	Click or See page 3
Type of material	Modified Co-Polyester
Image	

TempGuard - Co-Polyester

HTC Medium Weight - High Temperature

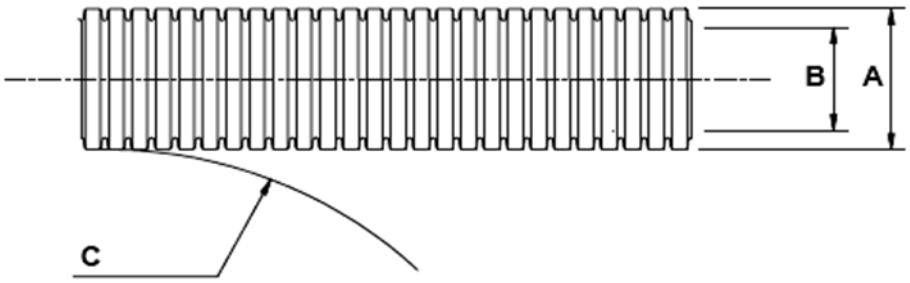
Harnessflex SPECIALIST CONDUIT SYSTEMS

Technical & Dimensional Data

Part No.	Conduit Size		Dimensions				Average Weight
* Stocked Items	(NC)	(NW)	(A) Outside Diameter (Mid Size)	(B) Inside Diameter	(C) Minimum Static Bend Radius	Reel Length (m)	(Kg/100m)
HTC08	08	7.5	9.8mm	6.2mm	20mm	50	2.6
HTC10	10	8.5	11.5mm	8.7mm	15mm	50	3.1
HTC12	12	10	13.0mm	9.4mm	25mm	50	3.9
HTC16	16	13	16.0mm	11.0mm	30mm	50	5.3
HTC20	20	17	21.2mm	16.1mm	40mm	50	8.4
To order quote part number & reel length, e.g HTC20/25M							

Part No.	Conduit Size		Dimensions				Average Weight
** Made to Order	(NC)	(NW)	(A) Outside Diameter (Mid Size)	(B) Inside Diameter	(C) Minimum Static Bend Radius	Reel Length (m)	(Kg/100m)
HTC06	06	4.5	7.1mm	4.5mm	5mm	50	1.8
HTC25	25	22	25.3mm	21.0mm	45mm	50	13.5
HTC28	28	23	28.5mm	22.5mm	45mm	50	14.0
HTC32	32	29	34.5mm	27.2mm	55mm	50	17.3
HTC40	40	36	42.5mm	34.2mm	60mm	25	20.6
HTC50	50	48	54.1mm	46.0mm	70mm	25	33.0
To order quote part number & reel length, e.g HTC25/25M							

* Part numbers listed are stocked items available for immediate order
** Parts numbers listed are available to order but not stocked items, and would therefore be subject to manufacturing leadtime.



TempGuard - Co-Polyester

HTC Medium Weight - High Temperature

Harnessflex
SPECIALIST CONDUIT SYSTEMS

Mechanical Properties

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

Thermal Properties

Test Type	Methods / Standards	Requirements	Value
Minimum Temperature		Static Permanent Use	-50°C
Minimum Temperature	IEC61386-23	Dynamic Use (5000 cycles)	-45°C
Maximum Temperature		Permanent Use Hours	150°C
Long Term maximum temperature		Temporary Use (30,000) Hours	175°C
Short Term maximum temperature		Temporary Use (3,000) Hours	190°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.