Non-Metallic Systems

Hi-Spec PB Type A

Technical Characteristics

Conforms to	BSI Kitemark KM-35161 Low voltage directive
Approvals and Standards	
Degree of mechanical protection	High Tensile Strength
Degree of protection	IP66 - As standard IP67 - As standard
UV protection	Very High
Fitting Characteristics	Straight fitting - Fixed external male thread
Application	For insertion into threaded entries or knockouts using a locknut to secure

Normal operating temperature range

Application	Min Temp	Max Temp
Static	**- 60°C**	**+260°C**
Dynamic	**- 45°C**	**+250 °C**

For use with - Conduit Series	Hi-Spec braided - PKTC, PKSS, PRTC & PRSS
Fire performance	For fire performance information, please refer to relevant conduit data sheet as highlighted above.
Testing data	Click or See page 3
Type of material	Nickel Plated Brass body & back nut

Image

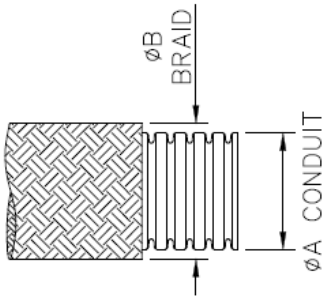
Cable Management Products Ltd.
CMG House - Station Road - Coleshill - B46 1HT - United Kingdom
Tel: +44(0)1675 468 222 - Fax: +44(0)1675 464 930
Technical Support e-mail: cmg.conduitsystems@tnb.com - www.adaptaflex.com

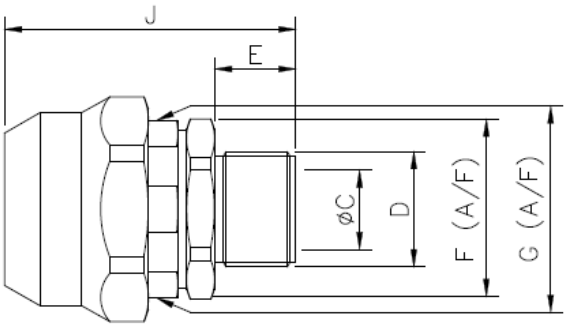
Non-Metallic Systems

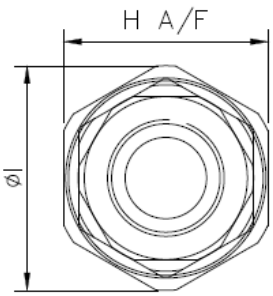
Hi-Spec PB Type A

Dimensional & Thread Data

Part No Metric Threads	To Suit Conduit øA	Braid øB	Thread D	Nominal Dimensions (mm)							Weight (kg)
				Bore øC	E	F	G	H	I	J	
PBF13/M16/A	13.0	14.1	M16x1.5	12.0	12.0	22.0	24.0	28.0	30.5	43.0	0.083
PBF16/M16/A	15.8	17.2	M16x1.5	12.0	12.0	24.0	25.4	30.0	33.0	46.0	0.098
PBF21/M20/A	21.2	23.6	M20x1.5	16.0	14.0	28.0	30.0	35.0	39.0	50.0	0.126
PBC28/M25/A	28.5	30.0	M25x1.5	19.0	15.0	38.0	38.0	45.0	49.0	55.0	0.224
PBC34/M32/A	34.5	36.0	M32x1.5	26.5	18.0	42.0	45.0	50.0	55.0	62.0	0.292
PBC42/M40/A	42.4	45.5	M40x1.5	35.0	15.0	54.0	57.0	75.0	77.0	80.0	0.602







Metric	Standard thread conforming to EN60423 & BS3643		
Thread Size	Ext Thread Outside Diameter	Int Thread Inside Diameter	Pitch
M12	12mm	10.9mm	1.5mm
M16	16mm	14.4mm	1.5mm
M20	20mm	18.4mm	1.5mm
M25	25mm	23.4mm	1.5mm
M32	32mm	30.4mm	1.5mm
M40	40mm	38.4mm	1.5mm
M50	50mm	48.4mm	1.5mm
M63	63mm	61.4mm	1.5mm

NOTE: Dimensions are nominal

Cable Management Products Ltd.
CMG House - Station Road - Coleshill - B46 1HT - United Kingdom
Tel: +44(0)1675 468 222 - Fax: +44(0)1675 464 930
Technical Support e-mail: cmg.conduitsystems@tnb.com - www.adaptaflex.com

Non-Metallic Systems

Hi-Spec PB Type A

BS EN 61386 Classification

	Fitting	Compression	Impact	Min temp	Max temp	bending	electrical	IP solids	IP water	Corrosion	Tensile	Non-flame Propogating	Suspended load
	PB	N/A	4	5	6	N/A	1	6	7	0	3	1	0

Mechanical Properties

Test Type	Methods / Standards	Requirements	Value
Tensile Strength	IEC61386-1	2 mins at Specified Value (*PKSS Conduit*)	Class 3
Tensile Strength		Ultimate Pullout (*PKSS Conduit*)	850N
Impact Strength @ -45°C	IEC61386-1	No visible damage	Class 4
Impact Strength @ -5°C	IEC61386-1	No visible damage	Class 5
Impact Strength @ 23°C	IEC61386-1	No visible damage	Class 5

Tensile Tests to IEC 61386 gives the minimum classification value only. Actual values will depend on the type and size of the fittings used and will always be greater than the minimum – Impact strength is the minimum classification value at the minimum temperature – actual values will depend on size and temperature. Specific values available on request.

Thermal Properties

Test Type	Methods / Standards	Requirements	Value
Dynamic Applications	IEC 61386-23	5000 Operations at MBR 2hrs	-45°C to +260°C
Static Short Term Temp		Temporary Use (3000hrs)	-60°C to +260°C
Static Long Term Temp		Permanent Use (30,000) Hours	-45°C to +260°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.

Cable Management Products Ltd.
CMG House - Station Road - Coleshill - B46 1HT - United Kingdom
Tel: +44(0)1675 468 222 - Fax: +44(0)1675 464 930
Technical Support e-mail: cmg.conduitsystems@tnb.com - www.adaptaflex.com