

Non-Metallic Systems

Type PPA

Technical Characteristics

Conforms to Low voltage directive

Approvals and Standards



Degree of mechanical protection High Impact Resistance

Degree of protection IP66 - As standard

UV protection Medium

Fitting Characteristics



Straight fitting - Fixed external male thread
Black (BL) Only

Application

For insertion into threaded entries or knockouts using a locknut to secure
(Locknuts Supplied with METRIC Threads Only)

Normal operating temperature range

Application	Min Temp	Max Temp
Static	- 20°C	+90°C
Dynamic	- 5°C	+105 °C

For use with - Conduit Series

Medium weight polypropylene [PP](#)

Fire performance

Test Standard

Performance Rating

Not Rated

Not Rated

Testing data

Click or See pages [3](#) & [4](#)

Type of material

Polypropylene

Image



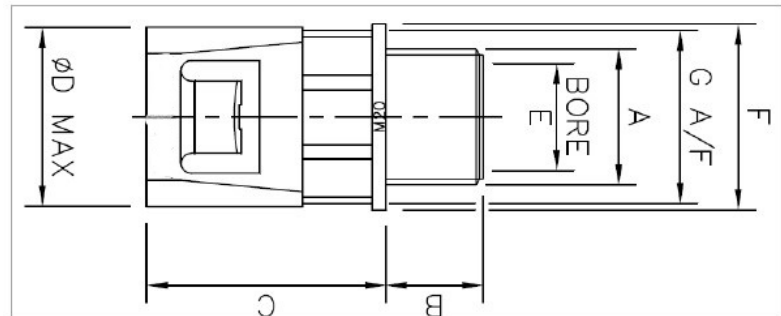
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Dimensional & Thread Data

Part No Black Body Metric Threads	Thread A	Nominal Dimensions (mm)						Weight in grams (Each)
		B	C	D	E	F	G	
TAL13/M16/PPA/BL	M16x1.5	11.5	33.0	21.3	11.6	19.0	17.0	5
TAL16/M16/PPA/BL	M16x1.5	11.5	33.0	23.7	11.6	23.7	19.8	6
TAL21/M20/PPA/BL	M20x1.5	14.0	34.7	28.9	14.8	26.7	25.0	9
TAL28/M25/PPA/BL	M25x1.5	16.2	36.8	36.8	20.0	35.5	32.3	14
TAL34/M32/PPA/BL	M32x1.5	16.0	37.8	43.2	26.5	41.5	38.9	20

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

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BS EN 61386 Classification

	Fitting	Compression	Impact	Min temp	Max temp	bending	electrical	IP solids	IP water	Corrosion	Tensile	Non-flame Propagating	Suspended load
	TAL	N/A	4	2	4	N/A	0	6	6	0	1	1	0

Mechanical Properties

Test Type	Methods / Standards	Requirements	Value
Tensile Strength	IEC61386-1	2 mins at Specified Value (<i>PPFMS21 Conduit</i>)	Class 1
Tensile Strength		Ultimate Pullout (<i>PPFMS21 Conduit</i>)	200N
Impact Strength @ -5°C	IEC61386-1	No visible damage	Class 2
Impact Strength @ 23°C	IEC61386-1	No visible damage	Class 4

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	-5°C to +105°C
Static Short Term Temp		Temporary Use (3000hrs)	-20°C to +105°C
Static Long Term Temp		Permanent Use (30,000) Hours	-20°C to +90°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 TTS 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.