



Connect and Protect

TransTechnical Solutions

Technical Data Sheet

Non-Metallic Systems

Type A - Straight Connector Fixed External Male Thread

Technical Characteristics

Conforms to	BSI Kitemark KM-35161 Low voltage directive Lloyd's Register of Shipping (Type Approval) NFF 16-10/12 I4, F2 UL1969 Recognition (Metric and NPT Threads - Indoor dry locations only)
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Approvals and Standards



Degree of mechanical protection	High Impact Resistance
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Degree of protection	IP66 - As standard IP67 - When fitted with ALS Seal IP68 - When fitted with ALS Seal (1.1 Bar 35 mins) IP69K - When fitted with ALS Seal
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ALS Seal



UV protection	Very High
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Fitting Characteristics	 Straight fitting - Fixed external male thread Black (BL) or Grey (GR) [On Request]
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Application	For insertion into threaded entries or knockouts using a locknut to secure (Locknuts Supplied with METRIC Threads Only)
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Normal operating temperature range	Application	Min Temp	Max Temp
	Static	- 50°C	+120°C
	Dynamic	- 45°C	+120°C

For use with - Conduit Series	Light, Standard and Heavyweight variants of type PA, PI, CP, PADL & PF
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Fire performance	Test Standard	Performance Rating	
	BS EN 61386-1 & 23	Approved	
	NFF16-101	I4 F2	
	ISO 4589-2	24%	
	BS EN 60695-2-11	850°C	
	UL94	V2	

*Self Extinguish-
ing Low smoke &
Halogen Free*

Testing data	See page 6 & 7
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Type of material	Polyamide (Nylon) 66 - Body
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Image





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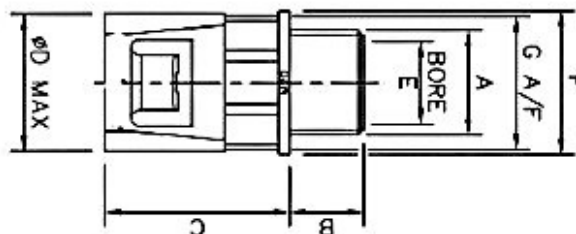
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Type A - Straight Connector Fixed External Male Thread

Dimensional & Thread Data - M Thread

Part No Black Body Metric Threads	Part No Grey Body (On Request) Metric Threads	Thread A	Nominal Dimensions (mm)						Weight in grams (Each)
			B	C	D	E	F	G	
TAL10/M12/A/BL	TAL10/M12/A/GR	M12x1.5	10	25	16	7.5	15	13	3
TAL13/M16/A/BL	TAL13/M16/A/GR	M16x1.5	12	33	21	12	19	17	5
TAL13/M20/A/BL	TAL13/M20/A/GR	M20x1.5	12	33	24	12	24	20	6
TAL16/M16/A/BL	TAL16/M16/A/GR	M16x1.5	12	33	24	15	23	20	7
TAL16/M20/A/BL	TAL16/M20/A/GR	M20x1.5	12	34	26	15	23	22	7
TAL21/M20/A/BL	TAL21/M20/A/GR	M20x1.5	14	35	29	15	27	25	9
TAL21/M25/A/BL	TAL21/M25/A/GR	M25x1.5	11	36	29	18	32	25	10
TAL25/M25/A/BL	TAL25/M25/A/GR	M25x1.5	16	36	33	20	31	29	12
TAL28/M25/A/BL	TAL28/M25/A/GR	M25x1.5	16	37	37	20	36	32	14
TAL28/M32/A/BL	TAL28/M32/A/GR	M32x1.5	12	37	37	22	38	33	17
TAL34/M32/A/BL	TAL34/M32/A/GR	M32x1.5	16	38	43	27	42	39	20
TAL34/M40/A/BL	TAL34/M40/A/GR	M40x1.5	12	38	43	30	45	39	23
TAL42/M40/A/BL	TAL42/M40/A/GR	M40x1.5	16	48	54	31	53	50	45
TAL42/M50/A/BL	TAL42/M50/A/GR	M40x1.5	12	48	54	38	67	50	57
TAL54/M50/A/BL	TAL54/M50/A/GR	M50x1.5	16	53	67	40	67	63	71
TAL54/M63/A/BL	TAL54/M63/A/GR	M63x1.5	16	53	67	50	70	63	75

Metric	Standard thread conforming		
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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Unit F11, Roete 24, 50 Herman Street, Meadowdale, Germiston, South Africa



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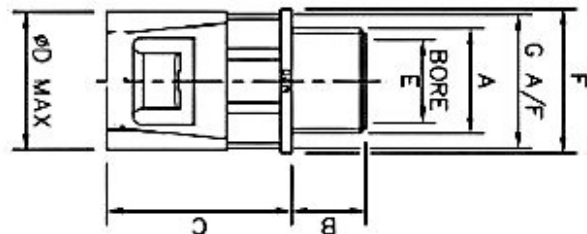
Type A - Straight Connector Fixed External Male Thread

Dimensional & Thread Data - PG Thread (On Request)

Part No Black Body PG Threads	Part No Grey Body PG Threads (On Request)	Thread A	Nominal Dimensions (mm)						Weight in grams (Each)
			B	C	D	E	F	G	
TAL10/PG7/A/BL	TAL10/PG7/A/GR	PG7	8	25.1	16.1	8	15.2	12.7	3
TAL10/PG9/A/BL	TAL10/PG9/A/GR	PG9	10.2	25.1	16.2	9.5	18.1	12.7	3
TAL13/PG9/A/BL	TAL13/PG9/A/GR	PG9	10	31.4	21.3	11.4	18.4	16.9	5
TAL13/PG11/A/BL	TAL13/PG11/A/GR	PG11	10	31.4	21.3	12.5	21.7	16.9	5
TAL13/PG13/A/BL	TAL13/PG13/A/GR	PG13.5	10.2	31.4	21.3	12.5	23.2	16.9	5
TAL16/PG9/A/BL	TAL16/PG9/A/GR	PG9	10	33	23.7	11.3	21.8	19.9	6
TAL16/PG11/A/BL	TAL16/PG11/A/GR	PG11	10	33	23.7	12.5	21.7	19.9	6
TAL16/PG13/A/BL	TAL16/PG13/A/GR	PG13.5	10	33	23.7	12.5	23.6	19.9	7
TAL16/PG16/A/BL	TAL16/PG16/A/GR	PG16	11.5	33	23.7	14.5	26.8	19.9	7
TAL21/PG16/A/BL	TAL21/PG16/A/GR	PG16	11.2	34.8	28.9	17.7	26.8	25.1	10
TAL28/PG21/A/BL	TAL28/PG21/A/GR	PG21	12.2	36.9	36.8	22.3	35.5	32.3	15
TAL34/PG29/A/BL	TAL34/PG29/A/GR	PG29	12.2	37.8	43	30.1	41.5	38.9	20
TAL54/PG36/A/BL	TAL54/PG36/A/GR	PG36	12.1	48	53.8	38	52.7	49.5	43
TAL54/PG48/A/BL	TAL54/PG48/A/GR	PG48	12.1	52.8	66.8	49.3	67.2	62.3	67

PG	German Standard Thread Conforming to DIN40430		
Thread Size	Ext Thread Outside Diameter	Int Thread Inside Diameter	Pitch
PG7	12.5mm	11.3mm	1.27mm
PG9	15.2mm	13.9mm	1.41mm
PG11	18.6mm	17.3mm	1.41mm
PG13.5	20.4mm	19.1mm	1.41mm
PG16	22.5mm	21.2mm	1.41mm
PG21	28.3mm	26.8mm	1.59mm
PG29	37mm	35.5mm	1.59mm
PG36	47mm	45.5mm	1.59mm
PG48	59.3mm	57.8mm	1.59mm

NOTE: Dimensions are nominal



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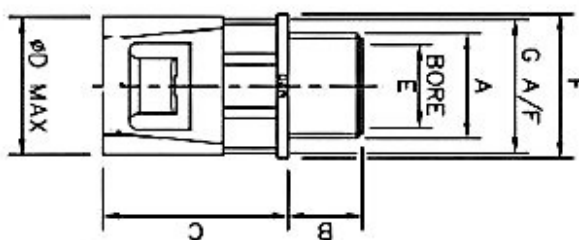
Non-Metallic Systems

Type A - Straight Connector Fixed External Male Thread

Dimensional & Thread Data - NPT Thread (On Request)

Part No Black Body NPT Threads	Part No Grey Body NPT Threads (On Request)	Thread A	Nominal Dimensions (mm)						Weight in grams (Each)
			B	C	D	E	F	G	
TAL13/038/A/BL	TAL13/038/A/GR	NPT $\frac{3}{8}$	11.5	31.4	21.3	11.6	18.8	17	5
TAL16/038/A/BL	TAL16/038/A/GR	NPT $\frac{3}{8}$	11.5	33	23.7	11.6	21.4	19.8	7
TAL16/050/A/BL	TAL16/050/A/GR	NPT $\frac{1}{2}$	11.5	33	23.7	15.3	26.6	19.8	7
TAL21/050/A/BL	TAL21/050/A/GR	NPT $\frac{1}{2}$	14	34.8	28.9	15.2	26.7	24.9	9
TAL28/075/A/BL	TAL28/075/A/GR	NPT $\frac{3}{4}$	16.2	37	36.8	20.1	34.3	32.4	15
TAL34/100/A/BL	TAL34/100/A/GR	NPT1	16	37.8	43.2	26.8	41.6	38.9	20
TAL42/125/A/BL	TAL42/125/A/GR	NPT1 $\frac{1}{4}$	16	47.8	53.8	30.8	52.7	49.5	46
TAL54/150/A/BL	TAL54/150/A/GR	NPT1 $\frac{1}{2}$	16	53	66.8	41	66.7	62.6	70

NPT	US taper seal pipe thread conforming to ANSI/ASME B1.20.1-1983	
Thread Size	Ext Thread Outside Diameter	Pitch
3/8"	16.7mm	1.14mm
1/2"	21.0mm	1.81mm
3/4"	26.4mm	1.81mm
1"	33.3mm	2.21mm
1 1/4"	41.9mm	2.21mm
1 1/2"	47.8mm	2.21mm
2"	59.6mm	2.21mm



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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 (PAFS21 Conduit)	Class 1
Tensile Strength		Ultimate Pullout (PAFS21 Conduit)	240N
Impact Strength @ -45°C	IEC61386-1	No visible damage	Class 1
Impact Strength @ -5°C	IEC61386-1	No visible damage	Class 3
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		5000 Operations at MBR 2hrs	-45°C to +120°C
Static Short Term Temp	IEC 61386-23	Temporary Use (3000hrs)	-50°C to +120°C
Static Long Term Temp		Permanent Use (30,000) Hours	-40°C to +105°C