Non-Metallic Systems



- Type Y - Yellow Elastomer



Technical Characteristics

Conforms to BSI Kitemark KM-35161

CE Low voltage directive Lloyd's Register of Shipping (Type Approval)

NF 16-10/12 I4, F2 CEI 11170 LR3 / LR4

Approvals and Standards	♥ (€ 🖟	NE W	
Degree of mechanical protection	High Impact Resistance	APPROVED	
Degree of protection	IP66 - As standard IP67 - As standard IP68 - As Standard (4 b IP69k - As standard	ar 30 mins)	
UV protection	Very High		
Fitting Characteristics	3 Way Y piece with vari Swivel fittings three boo	ous size options - Integrated y mounting points	Seal System
Application	For connecting three fle	xible conduits	
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 Hea	avyweight variants of type P	A, PI, PR, PADL & PF
Fire performance	Test Standard	Performance Ratin	g
	BS EN 61386-1 & 2	3 Approved	
	NFF16-101	I4 F2	Self Extinguishing
	ISO 4589-2	24%	Low Smoke & Halogen Free
	BS EN 60695-2-11	850°C	1100
	UL94	НВ	
Testing data	Click or See pages 3 &	4	
Type of material	Polyamide (Nylon) 66 b	ody, TPE Seal.	
Image	A A		

The Company's policy is one of continuous improvement and reserves the right to change specifications at any time without prior notice.

Non-Metallic Systems

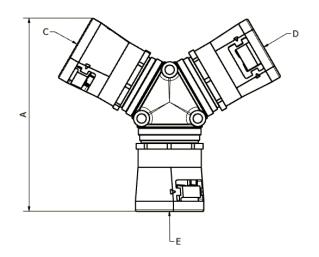


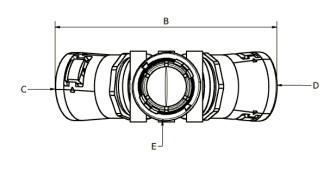
- Type Y - Yellow Elastomer



Dimensional Data

		Nominal Dimensions (mm)					
Part No Black Body 28Y	Part No Grey Body 28Y	A	В	С	D	E	
AT282113/Y/BLY	AT282113/Y/GRY	107.1	117.8	28	21	13	
AT282116/Y/BLY	AT282116/Y/GRY	110.6	117.8	28	21	16	
AT282121/Y/BLY	AT282121/Y/GRY	116.4	129.9	28	21	21	
AT282813/Y/BLY	AT282813/Y/GRY	108.7	124.6	28	28	13	
AT282816/Y/BLY	AT282816/Y/GRY	112.2	124.6	28	28	16	
AT282821/Y/BLY	AT282821/Y/GRY	116.6	124.6	28	28	21	
AT282828/Y/BLY	AT282828/Y/GRY	165.0	119.0	28	28	28	





The Company's policy is one of continuous improvement and reserves the right to change specifications at any time without prior notice.

201410 **Technical Data Sheet** Page 3

Non-Metallic Systems



- Type Y - Yellow Elastomer



BS EN 61386 Classification

Fitting	Compression	Impact	Min temp	Max temp	bending	electrical	IP solids	IP water	Corrosion	Tensile	Non-flame Propogating	Suspended load
ATS	N/A	4	2	4	N/A	0	6	7	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	IEC 61386-23	5000 Operations at MBR 2hrs	-45°C to +120°C
Static Short Term Temp		Temporary Use (3000hrs)	-50°C to +120°C
Static Long Term Temp		Permanent Use (30,000) Hours	-40°C to +105°C

The Company's policy is one of continuous improvement and reserves the right to change specifications at any time without prior notice.

201410 Page 4 **Technical Data Sheet**

Non-Metallic Systems



- Type Y - Yellow Elastomer



Flammability

Test Type	Method / Standard	Requirement	Result	Unit
Glow Wire	BS EN 60695-2-11	Extinguish within 30s	850°C	°C
Flammability	IEC 61386-1-12	1Kw Burner Flame to Self Extinguish	Pass	Pass/Fail
Oxygen Index - Nylon Body	ISO 4589-2		24.1	%
Ignition Rating - Nylon Body	NF F16-101	I Rating	14	-
Oxygen Index - Elastomer Seal	ISO 4589-2		20.2	%
Ignition Rating - Elastomer Seal	ISO 4589-2	I Rating	14	-

Smoke

Test Type	Method / Standard	Requirement	Result	Unit
Fume Rating - Nylon Body	NF F16-101	F Rating	F2	-
Fume Rating - Elastomer Seal	NF F16-101	F Rating	F2	-

Toxicity

Test Type	Method / Standard	Requirement	Result	Unit
Halogen Free	NFX 70-100	< 0.5%	Pass	Pass/Fail

Pre Test Conditions

Duration	Standard	Temperature	Relative Humidity
168 (Hours)	IEC61386	23 (⁰ C)	50 (%)

Chemical Resistance Chart

	Astm No.1	Diesel oil	Methyl Br	romide	Sulphur Dioxide (Gas)
	Astm No.2	Diethylamine	MEK		Sulphuric Acid (10%)
Key:	Astm No.3	Ethanol	Nitric Acid	d (10%)	Sulphuric Acid (70%)
	Acetic Acid (10%)	Ether	Nitric Acid	d (70%)	Toluene
Suitable :	Acetone	Ethylamine	Oxalic Ac	id	Transformer Oil
	Aluminium Chloride	Ethylene Glycol	Ozone (G	as)	1,1,1-Trichloroethane
Limited Suitability:	Aniline	Ethyl Ethanoate	Paraffin o	il (Trichloroethylene
_	Benzaldehyde	Freon 32	Petrol		Turpentine
Unsuitable :	Benzene	Hydrochloric Acid (10%)	Phenol		Vegetable Oil
	Carbon tetrachloride	Hydrochloric Acid (36%)	Sea Wate	er (Vinyl Acetate
Not Tested :	Chlorine water	Hydrogen Peroxide (35%)	Silver Nitr	rate	Water
	Chloroform	Hydrogen Peroxide (87%)	Skydrol		White Spirit
	Citric Acid	Lactic Acid	Sodium C	Chloride	Zinc Chloride
	Copper Sulphate	Lubricating oil	Sodium H	lydroxide (10%)	
	Cresol	Methanol	O Sodium H	lydroxide (60%)	

All Values Based on Size 21 Fittings and PAFS Conduit, For Other Sizes and Conduit Systems Please Consult

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.

The Company's policy is one of continuous improvement and reserves the right to change specifications at any time without prior notice.

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@abb.com - www.adaptaflex.co.uk