

Metallic Systems - Stainless Steel

KSU - Uncovered Conduit



Technical Characteristics

Conforms to BSI Kitemark KM-90009
Low voltage directive

Approvals and Standards  

Degree of mechanical protection Very high flexibility & fatigue life

Degree of protection IP40 - As standard with GFMS fittings

UV protection Very High

Finish Self Coloured

Application Indoors - light industrial, buildings marine, corrosive environments

Normal operating temperature range	Application	Min Temp	Max Temp
	Static	- 65°C	+350°C
	Dynamic	- 45°C	+250 °C

For use with - Fitting range KF-E - [GFMS](#)

Fire performance	Test Standard	Performance Rating	
	Not Rated	Not Rated	Inherent Low Fire Hazard Resistance to Flame Propagation

Testing data [Click or See page 3](#)

Type of material Stainless Steel AISI 316L



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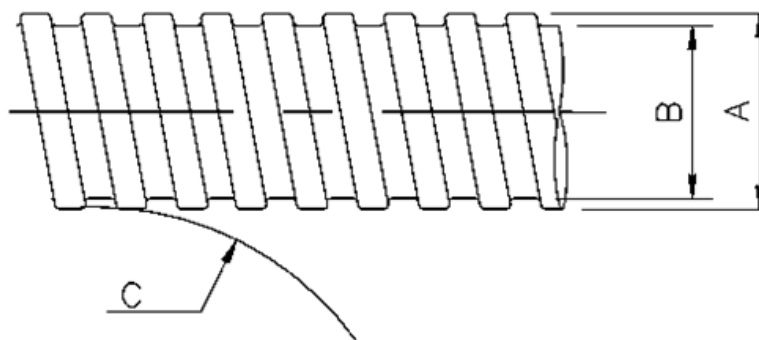
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Technical & Dimensional Data

Conduit size metric (mm)	10	12	16	20	25	32	40	-
Conduit size US trade (inches)	1/4"	5/16"	3/8"	1/2"	3/4"	1"	1 1/4"	-
Part code	KSU01*	KSU02*	KSU03*	KSU04*	KSU05*	KSU06*	KSU07*	-
Coil length (m)	10/30	10/30	10/30	10/30	10/30	10/20	10/20	-
A - Outside diameter (mm)	9.6	12.8	16.1	20.2	24.7	32.0	40.0	-
B - Inside diameter (mm)	7.0	10.0	12.9	17.0	21.1	28.4	36.4	-
C - Static bend radius (mm)	20.0	20.0	24.0	32.0	45.0	55.0	65.0	-
Average weight (KG/100m)	9.5	12.9	15.6	21.7	27.0	36.0	45.5	-

**For ordering code add coil length to part code - e.g KSU0410*



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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 Propogating	Suspended load
KSU04	GFMS	4	4	5	6	4	0	4	0	4	4	1	5

Mechanical Properties

Test Type	Methods / Standards	Requirements	Value
Crush Strength @ 23°C	IEC61386-1	<25% crush >90% recovery	>1250N
Impact Strength @ 23 °C	IEC61386-1	No Cracks <20% deformation	>20J
Impact Strength @-45 °C	IEC61386-1	No Cracks. <20% deformation	>20J
Tensile Strength	IEC61386-1	With GFMS Type Fitting	>1000N
Tensile Strength		Ultimate pull-out of GFMS Fitting	1450N
Dynamic Bend radius @ -45 °C	IEC61386-23	5000 cycles minimum	4xOD

Thermal Properties

Test Type	Methods / Standards	Requirements	Value
Minimum Temperature	IEC61386-23	Dynamic 5000 cycles	-45°C
Maximum Temperature	IEC61386-23	Dynamic 5000 cycles	250°C
Minimum Static		Permanent Use	-65°C
Maximum Static		Permanent Use	350°C

Chemical Resistance Chart

Key:	Green	Yellow	Red	Black
Suitable :	● Astm No.1	● Diesel oil	● Methyl Bromide	● Sulphur Dioxide (Gas)
Limited Suitability :	● Astm No.2	● Diethylamine	● MEK	● Sulphuric Acid (10%)
Unsuitable :	● Astm No.3	● Ethanol	● Nitric Acid (10%)	● Sulphuric Acid (70%)
Not Tested :	● 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.

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