

**Product Catalogue** 

Flexible conduit systems & accessories for critical power & data cable protection





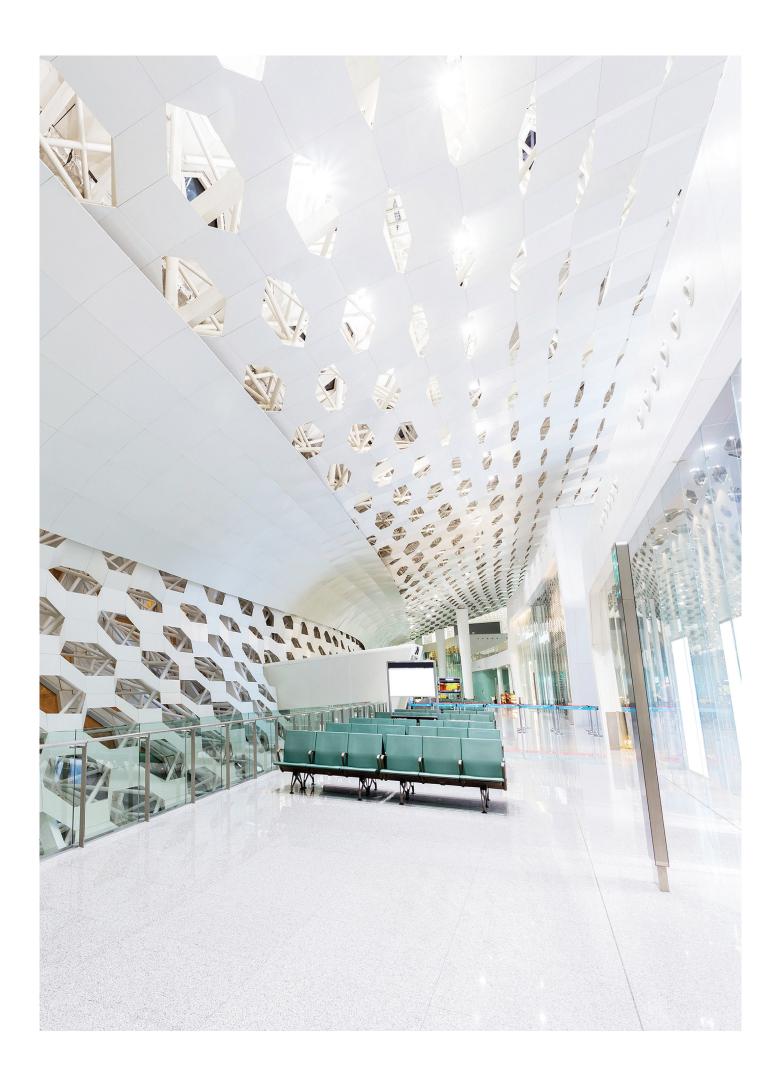
Imagine the expertise it takes to protect critical power and data systems for the engineering feat that is the world's tallest building.



Kopex has over 65 years of experience and expertise, and is why we were chosen to provide critical protection for key power, data and infrasturcture systems for the **Burj Khalifa**, **Dubai** 

# Flexible conduit systems & accessories for critical power & data cable protection

Introduction
Conduit selection guide
Liquid tight flexible metallic conduit system
KE Ultra flexible metallic conduit system
Stainless steel metallic conduit system
Accessories



#### Introduction

At ABB, our focus is on improving your business performance by providing practical, reliable electrical products & services. To connect & protect for life. To solve everyday problems in the area of wire & cable management, cable protection, power connection & control and safety.

Since 2012 Kopex has been part of ABB. ABB is a leader in power and automation technologies. The company enables utility, industry, transport and infrastructure customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 140,000 people around the world.

Our extensive engineering, supply chain management and technical sales support teams are committed to understanding everything that impacts your ability to accomplish your business objectives by reducing your total cost of ownership.

Whether you are designing, installing, operating, maintaining or owning an office building, off-shore platform, hospital, or a high speed train, power generating plant, machine equipment or a manufacturing facility, ABB engineered products fit and function in your application while providing superior performance, sustainability, and value throughout the project life cycle.

All our brands are built upon four product & service solution platforms. Platforms that address you or your customers' critical electrical & lighting needs covering the protection of data, energy, processes, assets and personal safety. Beyond hi-performance application characteristics, ABB products, information and services facilitate and speed up your time critical assembly, installation or maintenance process.

With a dedicated team, we can support you with a full set of services and flagship product brands.



## Introduction Company overview



Kopex flexible conduit systems are used to protect critical power and data cabling. Founded in 1947 in Slough, UK, Kopex has been at the leading edge of electrical and data conduit systems for over 65 years.

Kopex offers an outstanding range of metallic conduits, fittings and other accessories. In this way, Kopex provides a one-stop-shop for all your electrical conduit needs whatever your business.

The Kopex name stands for quality and reliability. Quality assurance in manufacture is backed up by accreditations from major organisations worldwide.

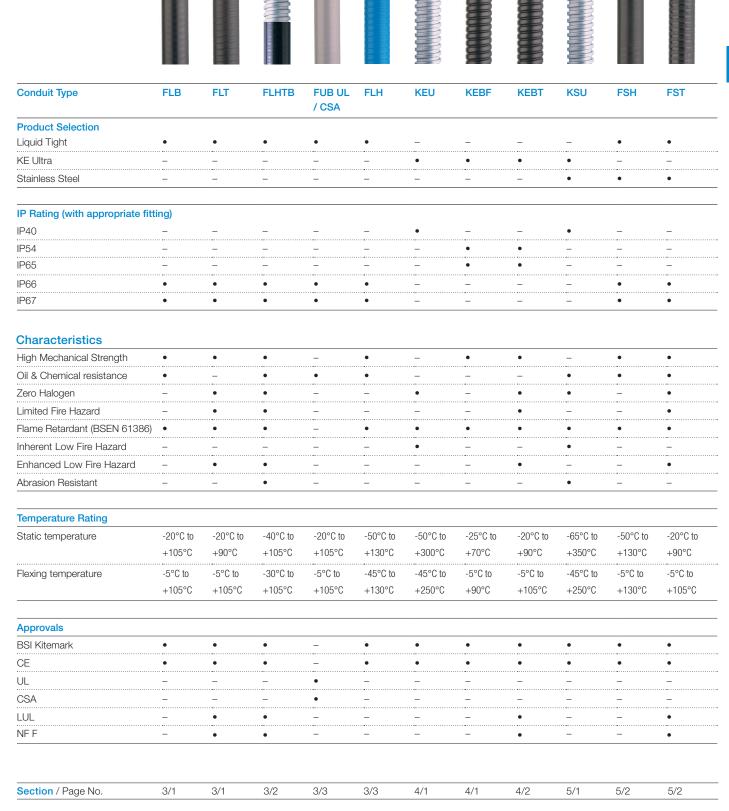
#### Markets and industries

Kopex flexible conduit systems are used to protect criticalpower and data cabling are available throughout a wide range of markets including:

- Commercial contracting
- OEM Machinery / Automation
- Mechanical
- Security / CCTV
- Critical power & data cabling
- Commercial buildings
- Institutional buildings
- Industrial OEM

Wherever you need mechanical and electrical protection for your cables you can be confident in specifying Kopex products.

# Conduit systems Quick selection guide



# Flexible metallic conduit systems Type FLB & FLT - Liquid tight conduit



Type FLB Liquid Tight, PVC Covered Conduit

Type FLB

Liquid Tight, PVC Covered Conduit

Materials: Galvanised Steel Core - String Packing with PVC Covering / Colour: Black, Grey

Black Part No.	Grey Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
FLB02*	-	12mm	5/16"	14.2mm	10.0mm	10/30m
FLB03*	FLG03*	16mm	3/8"	17.8mm	12.5mm	10/30m
FLB04*	FLG04*	20mm	1/2"	21.1mm	15.9mm	10/30m
FLB05*	FLG05*	25mm	3/4"	26.4mm	21.0mm	10/30m
FLB06*	FLG06*	32mm	1"	33.1mm	26.7mm	10/20m
FLB07*	FLG07*	40mm	1 1/4"	41.8mm	35.4mm	10/20m
FLB08*	FLG08*	50mm	1 1/2"	47.5mm	40.4mm	10/20m
FLB09*	FLG09*	63mm	2"	59.7mm	51.6mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FLB 12mm in black is FLB0210

#### **Approvals**





# Approvals BSI Kitemark KM-90009 / CE Mark to the Low Voltage Directive Temperature Range Static Temp: -20°C to +105°C Flexing Temp: -5°C to +105°C Flexibility & Fatigue Life Medium Flexibility - Medium Fatigue Life Characteristics

#### Fire Performance

Flame Retardant (BS EN 61386)

#### IP Rating (with appropriate fitting)

IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM

#### **UV** Resistance

Very High (Black)

High (Grey)



Type FLT Low Fire Hazard - Liquid Tight Conduit

#### Type FLT

Oil & Chemical Resistance

Low Fire Hazard - Liquid Tight Conduit

Materials: Galvanised Steel Core - String Packing with Low Fire Hazard Covering / Colour: Black

Black Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
FLT02*	12mm	5/16"	14.2mm	10.0mm	10/30m
FLT03*	16mm	3/8"	17.8mm	12.5mm	10/30m
FLT04*	20mm	1/2"	21.1mm	15.9mm	10/30m
FLT05*	25mm	3/4"	26.4mm	21.0mm	10/30m
FLT06*	32mm	1"	33.1mm	26.4mm	10/20m
FLT07*	40mm	1 1/4"	41.8mm	35.4mm	10/20m
FLT08*	50mm	1 1/2"	47.5mm	40.4mm	10/20m
FLT09*	63mm	2"	59.7mm	51.6mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FLT 16mm in black is FLT0310

#### **Approvals**













Approva	ıls
BSI Kiten	nark KM-90009 / CE Mark to the Low Voltage Directive
EN4554	5-2 HL3 / NFF16-101   I1 F1 / LUL 1-085
BS6853	Class 1A
Tempera	ture Range
Static Te	mp: -20°C to +90°C
Flexing T	emp: -5°C to +105°C
Flexibili	ty & Fatigue Life
Medium	Flexibility - Medium Fatigue Life

#### **Fire Performance**

Limited Fire Hazard, Flame Retardant (BS EN 61386)

Low Smoke, Zero Halogen NF F16-101 I1 F1

#### IP Rating (with appropriate fitting)

IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM

#### **UV** Resistance

High

### Flexible metallic conduit systems Type FLHTB - Liquid tight conduit



#### The NEW FLHTB conduit systems are Enhanced Fire Performance rated, highly flexible, liquid tight with a wide temperature operating range.

Designed to meet the demand for 'interoperability' and compliance with stringent local and European fire safety requirements in the rail infrastructure market, the FLHTB system, is accredited with the EN45545-2 standard achieving the highest HL3 fire performance rating for both interior and exterior locations.

The system provides higher performance levels of flexibility, impact and abrasion resistance, combined with enhanced chemical resistances especially to oils and greases, with a much higher and lower temperature rating (-40°C to +105°C), than any other metallic conduit system with a EN45545-2 HL3 rating.

#### Advantages include:

- EN45545-2 and BS EN 61386-1 & 23 accreditation
- HL3 R22 & R23 rating
- Up to IP69 rating
- High flexibility
- Oil and hydrocarbons resistant
- Suitable for wide use underground and in any part of train vehicles and infrastructure



Type FLHTB **Enhanced Fire Performance** Covered Steel Flexible Conduit

#### Type FLHTB NEW

#### **Enhanced Fire Performance Covered Steel Flexible Conduit**

Materials: Thermoplastic Jacket Covered Galvanised Steel / Colour: Black

Black Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Static Bend Radius	Coil Lengths
FLHTB01*	10mm	1/4"	11.8mm	7.0mm	40mm	10/30m
FLHTB02*	12mm	5/16"	14.2mm	10.0mm	25mm	10/30m
FLHTB03*	16mm	3/8"	17.8mm	12.5mm	35mm	10/30m
FLHTB04*	20mm	1/2"	21.0mm	16.0mm	42mm	10/30m
FLHTB05*	25mm	3/4"	26.1mm	21.0mm	52mm	10/20m
FLHTB06*	32mm	1"	33.1mm	26.1mm	66mm	10/20m
FLHTB07*	40mm	1 1/4"	41.8mm	35.3mm	84mm	10/20m
FLHTB08*	50mm	1 1/2"	47.7mm	40.4mm	100mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FLHTB 10mm in black is FLHTB0110

#### **Approvals**









**Approvals** 



he Low Voltage Directive
01   I1 F1 / LUL 1-085

#### Fire Performance

Limited Fire Hazard, Flame Retardant (BS EN 61386-1 & 23) Low Smoke, Zero Halogen NF F16-101 I1 F1 / UL94 V0

#### IP Rating (with appropriate fitting)

IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM

#### **UV** Resistance

Very High

# Flexible metallic conduit systems Type FUB UL / CSA & FLH - Liquid tight conduit



Type FUB UL / CSA UL / CSA Listed - Liquid Tight

#### Type FUB UL / CSA

UL / CSA Listed - Liquid Tight Conduit

Materials: Heavy Galvanised Steel Core - Copper Packing with PVC Covering / Colour: Black, Grey

Black Part No.	Grey Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
FUB03*	FUG03*	16mm	3/8"	17.8mm	12.5mm	10/30m
FUB04*	FUG04*	20mm	1/2"	21.1mm	15.9mm	10/30m
FUB05*	FUG05*	25mm	3/4"	26.4mm	21.0mm	10/30m
FUB06*	FUG06*	32mm	1"	33.1mm	26.7mm	10/20m
FUB07*	FUG07*	40mm	1 1/4"	41.8mm	35.4mm	10/20m
FUB08*	FUG08*	50mm	1 1/2"	47.7mm	40.4mm	10/20m
FUB09*	FUG09*	63mm	2"	60.0mm	51.6mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FUB UL / CSA 16mm in black is FUB0310

#### **Approvals**





Approvals	Characteristics		
UL Listed - File No. E76358	Oil & Chemical Resistance		
CSA Approved - File No. 048689	IP Rating (with appropriate fitting)		
Temperature Range	IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & X		
Static Temp*: -20°C to +105°C	IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMN		
Flexing Temp*: -5°C to +105°C	UV Resistance		
Flexibility & Fatigue Life	Very High (Black)		
Medium Flexibility - Medium Fatigue Life	High (Grey)		
*A			

<sup>\*</sup>Application temperature limited by approval



High Temperature - Liquid Tight Conduit

#### Type FLH

**High Temperature - Liquid Tight Conduit** 

Materials: Galvanised Steel Core - String Packing with Thermoplastic Rubber Covering / Colour: Blue, Black

Black Part No.	Blue Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
FLH03*	FLLH03	16mm	3/8"	17.8mm	12.5mm	10/30m
FLH04*	FLLH04*	20mm	1/2"	21.1mm	15.9mm	10/30m
FLH05*	FLLH05*	25mm	3/4"	26.4mm	21.0mm	10/30m
FLH06*	FLLH06*	32mm	1"	33.1mm	26.7mm	10/30m
FLH07*	FLLH07*	40mm	1 1/4"	41.8mm	35.4mm	10/30m
FLH08*	_	50mm	1 1/2"	47.5mm	40.4mm	10/30m
FLH09*	_	63mm	2"	59.7mm	51.6mm	10/30m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FLH 16mm in black is FLH0310





Approvals	Fire Performance			
BSI Kitemark KM-90009	Flame dies in less than 30 seconds after ignition source is remove			
CE Mark to the Low Voltage Directive	Flame Retardant (BSEN 61386)			
Temperature Range	IP Rating (with appropriate fitting)			
Static Temp: -50°C to +130°C	IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XM			
Flexing Temp: -45°C to +130°C	IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM			
Flexibility & Fatigue Life	UV Resistance			
High Flexibility - High Fatigue Life	High (Blue)			
	Very High (Black)			

# Flexible metallic conduit systems Type XQM & XRM 45° - Liquid tight fittings



Type XQM Straight Male Fitting

#### Type XQM

Straight Male Fitting - Liquid Tight for Covered Conduit / Materials: Nickel plated brass Body, Back Nut & Insert.

High Temperature Co-polyester Seal, NBR Face Seal, Nylon Cable Protection Insert

Metric Part No.	Nominal Conuit Size	Metric Thread Size	NPT Part No.	NPT Thread Size	US Conduit Size
XQM0203	16mm	M16	_	_	5/16"
XQM0303	16mm	M16	_	_	3/8"
XQM0304	20mm	M20	XQA0304	1/2"	3/8"
XQM0404	20mm	M20	XQA0404	1/2"	1/2"
XQM0505	25mm	M25	XQA0505	3/4"	3/4"
XQM0606	32mm	M32	XQA0606	1"	1"
XQM0707	40mm	M40	XQA0707	1 1/4"	1 1/4"
XQM0808	50mm	M50	XQA0808	1 1/2"	1 1/2"
XQM0909	63mm	M63	XQA0909	2"	2"

#### **Approvals**







Approvals	For use with:
BSI Kitemark KM-90009	Covered Galvanised Steel - with FLB, FLT, FUB & FLH
CE Mark to the Low Voltage Directive	IP Rating
UL514B file number E60625	IP66 / IP67
Temperature Range	Degree of Mechanical Protection
Static Temp: -65°C to +150°C	Very High
Dynamic Temp: -45°C to +150°C	



Type XRM 45° 45° Elbow Fitting

#### Type XRM 45°

45° Elbow Fitting - External Male Thread / Materials: Nickel plated brass Body, Back Nut & Insert.

High Temperature Co-polyester Seal, NBR Face Seal, Nylon Cable Protection Insert

Part No.	Nominal Conuit Size	Metric Thread Size	US Conduit Size	
XRM0303	16mm	M16	3/8"	
XRM0304	20mm	M20	3/8"	
XRM0404	20mm	M20	1/2"	
XRM0505	25mm	M25	3/4"	
XRM0606	32mm	M32	1"	
XRM0707	40mm	M40	1 1/4"	
XRM0808	50mm	M50	1 1/2"	
XRM0909	63mm	M63	2"	







Approvals	For use with:
BSI Kitemark KM-90009	Covered Galvanised Steel - with FLB, FLT, FUB & FLH
CE Mark to the Low Voltage Directive	IP Rating
UL514B file number E60625	IP66 / IP67
Temperature Range	Degree of Mechanical Protection
Static Temp: -50°C to +150°C	Very High
Dynamic Temp: -50°C to +150°C	

# Flexible metallic conduit systems Type XSM 90° & XMM - Liquid tight fittings



#### Type XSM 90°

90° Male Elbow Fitting / Materials: Nickel plated brass Body, Back Nut & Insert.

High Temperature Co-polyester Seal, NBR Face Seal, Nylon Cable Protection Insert

NPT Part No.	NPT Thread Size	US Conduit Size
_	-	3/8"
XSA0304	1/2"	3/8"
XSA0404	1/2"	1/2"
XSA0505	3/4"	3/4"
XSA0606	1"	1"
XSA0707	1 1/4"	1 1/4"
XSA0808	1 1/2"	1 1/2"
XSA0909	2"	2"
	XSA0505 XSA0606 XSA0707 XSA0808	XSA0505 3/4" XSA0606 1" XSA0707 1 1 1/4" XSA0808 1 1/2"

#### **Approvals**







#### **Approvals**

BSI Kitemark KM-90009 / CE Mark to the Low Voltage Directive UL514B - File No. E60625

#### **Temperature Range**

Static Temp: -50°C to +150°C

Dynamic Temp: -50°C to +150°C

#### For use with:

Covered Galvanised Steel - with FLB, FLT, FUB & FLH

#### IP Rating

IP66 / IP67



#### Type XMM - Straight - Swivel Liquid Tight Straight Male Fitting

#### Type XMM - Straight - Swivel

Liquid Tight Straight Male Fitting / Materials: Nickel plated brass, PVC Sleeve - Nylon Inserts

Part No.	Nominal Conduit Size	Metric Thread Size	US Conduit Size	
XMM0303	16mm	M16	3/8"	
XMM0404	20mm	M20	1/2"	
XMM0505	25mm	M25	3/4"	
XMM0606	32mm	M32	1"	
XMM0707	40mm	M40	1 1/4"	
XMM0808	50mm	M50	1 1/2"	
XMM0909	63mm	M63	2"	

#### Approvals





Approvals	
BSI Kitemark KM-9	0009
CE Mark to the Lov	Voltage Directive
Temperature Ran	ge
Static Temp: -20°0	to +120°C
Dynamic Temp: -5	C to +120°C

#### For use with:

Covered Galvanised Steel - with FLB, FLT, FUB & FLH

#### IP Rating

IP66 / IP67

#### **Degree of Mechanical Protection**

Medium

# Flexible metallic conduit systems Type XEN - Conduit terminator



Type XEN **Conduit Terminator** 

Type XEN Conduit Terminator / Materials: Nickel plated brass

Part No.	Nominal Conduit Size	US Conduit Size	
XEN01	10mm	1/4"	
XEN02	12mm	5/16"	
XEN03	16mm	3/8"	
XEN04	20mm	1/2"	
XEN05	25mm	3/4"	
XEN06	32mm	1"	
XEN07	40mm	1 1/4"	
XEN08	50mm	1 1/2"	
XEN09	63mm	2"	





IP Rating
IP40
Degree of Mechanical Protection
High

# Flexible metallic conduit systems Type KEU & KEBF - KE Ultra Conduit



Type KEU Uncovered Galvanised Steel Conduit

#### Type KEU

Uncovered Galvanised Steel Conduit / Materials: Galvanised Steel

Part No.	Nominal Conduit Size	US Conduit Size	Inside Diameter	Outside Diameter	Coil Length
KEU01*	10mm	1/4"	6.8mm	9.0mm	10/30m
KEU02*	12mm	5/16"	10.3mm	13.0mm	10/30m
KEU03*	16mm	3/8"	13.0mm	16.0mm	10/30m
KEU04*	20mm	1/2"	16.9mm	20.5mm	10/30/50m
KEU05*	25mm	3/4"	21.4mm	25.0mm	10/30/50m
KEU06*	32mm	1"	28.1mm	32.0mm	10/20m
KEU07*	40mm	1 1/4"	37.7mm	42.5mm	10/20m
KEU08*	50mm	1 1/2"	48.4mm	53.0mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of KEU 10mm is KEU0110

#### **Approvals**







#### Approvals

BSI Kitemark KM-90009

CE Mark to the Low Voltage Directive

#### **Temperature Range**

Static Temp: -50°C to +300°C

Flexing Temp: -45°C to +250°C

Flexibility & Fatigue Life

Very High Flexibility - Very High Fatigue Life

#### IP Rating (with appropriate fitting)

IP40 - Standard with GFM & GGM Fittings

#### Characteristics

High Mechanical Strength

#### **Fire Performance**

Inherent Low Fire Hazard resistance to flame propagation



Type KEBF PVC Covered - Liquid Resistant Conduit

#### Type KEBF

PVC Covered - Liquid Resistant Conduit / Materials: Galvanised Steel Core with PVC Jacket / Colour: Black

Part No.	Nominal Conduit Size	US Conduit Size	Inside Diameter	Outside Diameter	Coil Length
KEBF01*	10mm	1/4"	7.0mm	10.3mm	10/30m
KEBF02*	12mm	5/16"	10.0mm	13.8mm	10/30m
KEBF03*	16mm	3/8"	12.9mm	17.1mm	10/30m
KEBF04*	20mm	1/2"	17.0mm	21.2mm	10/30/50m
KEBF05*	25mm	3/4"	21.1mm	25.7mm	10/30/50m
KEBF06*	32mm	1"	28.4mm	33.0mm	10/20m
KEBF07*	40mm	1 1/4"	36.4mm	41.1mm	10/20m
KEBF07*	40mm	1 1/2"	36.4mm	54.9mm	10/20m
KEB08*	50mm	2"	48.2mm	64.5mm	10/20m
KEBF09*	63mm	2"	57.5mm	64.5mm	10m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of KEBF 10mm is KEBF0110

#### **Approvals**





Approvals	
BSI Kitemark KM-90009	
CE Mark to the Low Voltage Directive	
Temperature Range	
Static Temp: -25°C to +70°C	
Flexing Temp: -5°C to +90°C	
Flexibility & Fatigue Life	
Very High Flexibility - High Fatique Life	

#### IP Rating (with appropriate fitting)

 $\ensuremath{\mathsf{IP65}}$  - Standard with GQM Fittings

IP54 - Standard with GAM, GBM & GUN Fittings

#### Characteristics

High Mechanical Strength

#### **Fire Performance**

Flame dies in less than 30 seconds after ignition source is removed

# Flexible metallic conduit systems Type KEBT - KE Ultra Conduit



Low Fire Hazard - Liquid Resistant Conduit

#### Type KEBT

Low Fire Hazard - Liquid Resistant Conduit / Colour: Black

Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Length
KEBT01*	10mm	1/4"	10.3mm	7.0mm	10/30m
KEBT02*	12mm	5/16"	13.8mm	10.0mm	10/30m
KEBT03*	16mm	3/8"	17.1mm	12.9mm	10/30m
KEBT04*	20mm	1/2"	21.2mm	17.0mm	10/20m
KEBT05*	25mm	3/4"	25.7mm	21.1mm	10/30m
KEBT06*	32mm	1"	33.0mm	28.4mm	10/30m
KEBT07*	40mm	1 1/4"	41.1mm	36.4mm	10/20m
KEBT09*	50mm	1 1/2"	54.9mm	48.2mm	10/30m
KEBT09*	63mm	2"	64.5mm	57.5mm	10/20m
KEBT10*	75mm	2 1/2"	79.0mm	70.0mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of KEBT 16mm is KEBT0310











Approvals	IP Rating (with appropriate fitting)	
BSI Kitemark KM-90009 / CE Mark to the Low Voltage Directive	IP65 - Standard with GQM Fittings	
EN45545-2 HL3 / NFF16-101   I1 F1 / LUL 1-085	IP54 - Standard with GAM, GBM & GUN Fittings	
BS6853 Class 1A	Characteristics	
Temperature Range	High Mechanical Strength	
Static Temp: -20°C to +90°C	Fire Performance	
Flexing Temp: -5°C to +105°C	Limited Fire Hazard, Flame Retardant (BSEN 61386)	
Flexibility & Fatigue Life	Low Smoke, Zero Halogen NF F16-101 I1 F1	
Medium Flexibility - Medium Fatigue Life	_	

## Flexible metallic conduit systems Type GFM & GGM - KE Ultra fittings



Type GFM Straight Fitting

#### Type GFM - Fixed Body

Straight Fitting - Fixed External Male Thread for Uncovered Conduit / Materials: Zinc & Nickel plated brass

Part No.	Metric Thread Size	Ext. Thread Outside Diameter
GFM0303*	M16	16mm
GFM0304**	M20	20mm
GFM0404**	M20	20mm
GFM0505**	M25	25mm
GFM0606**	M32	32mm
GFM0707*	M40	40mm
GFM0808*	M50	50mm

\*Nickel Plated Brass Body & Ferule, \*\*Nickel Plated Cast Zinc Body with Nickel Plated Brass Ferule

#### Approvals





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +350°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP40 as standard with KEU & KSU	Very High



Type GGM Straight Fitting

#### Type GGM - Swivel External Thread

Straight Fitting - Swivel External Thread / Materials: Nickel plated brass

Part No.	Metric Thread Size	Nominal Conduit size
GGM0303	M16	16mm
GGM0404	M20	20mm
GGM0505	M25	25mm
GGM0606	M32	32mm
GGM0707	M40	40mm
GGM0808	M50	50mm





0009
Voltage Directive
SU
50

	Temperature Range
	Static Temp: -50°C to +300°C
	Dynamic Temp: -45°C to +250°C
	Degree of Mechanical Protection
,	Very High

# Flexible metallic conduit systems Type GYN & GAM - KE Ultra fittings



Smooth Entry Bush

#### Type GYN

Smooth Entry Bush for Uncovered Conduit / Materials: Nickel plated brass

Part No.	Nominal Conduit size	
GYN0101	10mm	
GYN0202	12mm	
GYN0303	16mm	
GYN0404	20mm	
GYN0505	25mm	
GYN0606	32mm	
GYN0707	40mm	
GYN0808	50mm	

**Approvals** 





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +300°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP40 with KEU & KSU	Very High



Type GAM Straight Fitting

#### Type GAM - Fixed Body

Straight Fitting - Fixed External Male Thread for Covered Conduit / Materials: Zinc & Nickel plated brass

Part No.	Metric Thread Size	Ext. Thread Outside Diameter
GAM0303*	M16	16mm
GAM0304**	M20	20mm
GAM0404**	M20	20mm
GAM0505**	M25	25mm
GAM0606**	M32	32mm
GAM0707*	M40	40mm
GAM0808*	M50	50mm
GAM0909*	M63	63mm
GAM1010*	M75	75mm

\*Nickel Plated Brass Body & Ferule, \*\*Nickel Plated Cast Zinc Body with Nickel Plated Brass Ferule





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +350°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP54 as standard with KEBF & KEBT	Very High

# Flexible metallic conduit systems Type GBM & GQM - KE Ultra fittings



Type GBM Straight Fitting

#### Type GBM - Swivel Body

Straight Fitting - Swivel External Male Thread for Covered Conduit / Materials: Nickel plated brass

Part No.	Metric Thread Size	Ext. Thread Outside Diameter
GBM0303	M16	16mm
GBM0404	M20	20mm
GBM0505	M25	25mm
GBM0606	M32	32mm
GBM0707	M40	40mm
GBM0808	M50	50mm

#### **Approvals**





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +350°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP54 as standard with KEBF & KEBT	Very High



Type GQM Straight Fitting

#### Type GQM - Liquid Resistant

Straight Fitting - External Male Thread for Covered Conduit

Materials: Nickel plated brass, Co-Polyester Seals - Nylon Insert

Part No.	Metric Thread Size	Ext. Thread Outside Diameter
GQM0303	M16	16mm
GQM0404	M20	20mm
GQM0505	M25	25mm
GQM0606	M32	32mm
GQM0707	M40	40mm





Approvals		
BSI Kitemark KM-900	09	
CE Mark to the Low \	oltage Directi	ve
IP Rating		
IP65 as standard wit	n KEBF & KEB	T

	Temperature Range
_	Static Temp: -50°C to +350°C
	Dynamic Temp: -45°C to +250°C
	Degree of Mechanical Protection
	Very High

# Flexible metallic conduit systems Type GEN & GUN - Conduit terminator & Space saver



Type GEN Conduit Terminator

#### Type GEN

Conduit Terminator for Covered Conduit / Materials: Nickel plated brass

Part No.	Nominal Conduit Size	
GEN01	10mm	
GEN02	12mm	
GEN03	16mm	
GEN04	20mm	
GEN05	25mm	
GEN06	32mm	
GEN07	40mm	
GEN08	50mm	

**Approvals** 





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +300°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP40 with KEBF & KEBT	High



Space Saver

#### Type GUN - Liquid Resistant

Space Saver for Covered Conduit / Materials: Nickel plated brass

Part No.	Nominal Conduit Size	
GUN0101	10mm	
GUN0202	12mm	
GUN0303	16mm	
GUN0404	20mm	
GUN0505	25mm	
GUN0606	32mm	
GUN0707	40mm	
GUN0808	50mm	





Approvals	Temperature Range
BSI Kitemark KM-90009	Static Temp: -50°C to +350°C
CE Mark to the Low Voltage Directive	Dynamic Temp: -45°C to +250°C
IP Rating	Degree of Mechanical Protection
IP54 as standard with KEBF & KEBT	Very High

## Flexible metallic conduit systems Type KSU & KSU Small bore - Stainless steel conduit



**Uncovered Flexible Conduit** 

#### Type KSU

Uncovered Flexible Conduit / Materials: Stainless Steel AISI 316L

Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
KSU01*	10mm	1/4"	9.6mm	7.0mm	10/30m
KSU02*	12mm	5/16"	12.8mm	10.0mm	10/30m
KSU03*	16mm	3/8"	16.1mm	12.9mm	10/30m
KSU04*	20mm	1/2"	20.2mm	17.0mm	10/30m
KSU05*	25mm	3/4"	24.7mm	21.1mm	10/30m
KSU06*	32mm	1"	32.0mm	28.4mm	10/20m
KSU07*	40mm	1 1/4"	40.0mm	36.4mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of KSU 10mm is KSU0110

#### **Approvals**







Approvals	
BSI Kitemark KM-90009	
CE Mark to the Low Voltage Directive	
Temperature	
Static Temp: -65°C to +350°C	
Flexing Temp: -45°C to +250°C	
Fire Performance	
Inherent Low Fire Hazard	
Resistance to Flame Propagation	

Flexibili	ty & Fatigue Life
Very High	Flexibility - Very High Fatigue Life
IP Rating	g (with appropriate fitting)
IP40 - As	standard with GFMS Fittings
Characte	risitics
Oil & Che	mical Resistance
Abrasion	Resistant



Type KSU Small Bore Uncovered Flexible Conduit

#### Type KSU - Small Bore

Uncovered Flexible Conduit / Materials: Stainless Steel AISI 304

Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
KSU00320	10mm	1/4"	5.1mm	3.3mm	20m
KSU00520	12mm	5/16"	7.0mm	5.1mm	20m
KSU00810	16mm	3/8"	10.1mm	8.0mm	10m







Approvals	
BSI Kitemark KM-90009	
CE Mark to the Low Voltage Directive	
Temperature Temperature	
Static Temp: -65°C to +350°C	
Flexing Temp: -45°C to +250°C	
Fire Performance	
Inherent Low Fire Hazard	
Resistance to Flame Propagation	

F	lexibility & Fatigue Life
٧	ery High Flexibility - Very High Fatigue Life
II	P Rating (with appropriate fitting)
IF	240
C	haracterisitics
0	il & Chemical Resistance
Α	brasion Resistant

# Conduit systems

# Type FST & FSH - Stainless steel conduit system



Type FST Low Fire Hazard - Liquid Tight Conduit

#### Type FST

Low Fire Hazard - Liquid Tight Conduit

Materials: Stainless Steel AISI 316L Core - String Packing with Low Fire Hazard Covering / Colour: Black

Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
ST02*	12mm	5/16"	14.2mm	10.0mm	10/30m
FST03*	16mm	3/8"	14.2mm	12.5mm	10/30m
FST04*	20mm	1/2"	17.8mm	15.9mm	10/30m
FST05*	25mm	3/4"	21.1mm	21.0mm	10/30m
FST06*	32mm	1"	26.4mm	26.7mm	10/20m
FST07*	40mm	1 1/4"	33.1mm	35.4mm	10/20m
FST08*	50mm	1 1/2"	41.8mm	40.4mm	10/20m
FST09*	63mm	2"	47.5mm	51.6mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FST 16mm is FST0310

#### **Approvals**











#### **Approvals**

BSI Kitemark KM-90009 / CE Mark to the Low Voltage Directive EN45545-2 HL3 / NFF16-101 I1 F1 / LUL 1-085 BS6853 Class 1A Temperature Range Static Temp: -20°C to +90°C Flexing Temp: -5°C to +105°C

Flexibility & Fatigue Life

Medium Flexibility - Medium Fatigue Life

#### **Fire Performance**

Limited Fire Hazard, Flame Retardant (BSEN 61386) Low Smoke, Zero Halogen NF F16-101 I1 F1

#### IP Rating (with appropriate fitting)

IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM

High



Type FSH High Temperature - Liquid Tight Conduit

#### Type FSH

**High Temperature - Liquid Tight Conduit** 

Materials: Stainless Steel AISI 316L Core - String Packing with Thermoplastic Rubber Covering / Colour: Black

Part No.	Nominal Conduit Size	US Conduit Size	Outside Diameter	Inside Diameter	Coil Lengths
FSH03*	16mm	3/8"	17.8mm	12.5mm	10/30m
FSH04*	20mm	1/2"	21.1mm	15.9mm	10/30m
FSH05*	25mm	3/4"	26.4mm	21.0mm	10/30m
FSH06*	32mm	1"	33.1mm	26.7mm	10/20m
FSH07*	40mm	1 1/4"	41.8mm	35.4mm	10/20m
FSH08*	50mm	1 1/2"	47.9mm	40.4mm	10/20m
FSH09*	63mm	2"	59.7mm	51.6mm	10/20m

<sup>\*</sup>Add coil length to complete part number, e.g. 10 metres of FSH 16mm is FSH0310

#### **Approvals**





Approvals
BSI Kitemark KM-90009 / CE Mark to the Low Voltage Directive
Temperature Range
Static Temp: -20°C to +105°C
Flexing Temp: -5°C to +105°C
Flexibility & Fatigue Life
Medium Flexibility - Medium Fatigue Life
Characteristics
Oil & Chemical Resistance

#### **Fire Performance**

Flame Retardant (BSEN 61386)

#### IP Rating (with appropriate fitting)

IP67 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM IP66 - Standard with XQM, XQMS, XQAS, XQA, XRM, XSM, XSA & XMM

#### **UV** Resistance

Very High (Black)

High (Grey)

# Flexible metallic conduit systems Type GFMS & XQMS - Stainless steel fittings



Type GFMS Fixed Body Fitting

#### Type GFMS

**Fixed Body Fitting for Uncovered Conduit** 

Materials: Stainless Steel AISI 316L

Metric Part No.	Metric Thread Size	Ext. Thread Outside Diameter
GFMS0303	M16	16mm
GFMS0404	M20	20mm
GFMS0505	M25	25mm
GFMS0606	M32	32mm
GFMS0707	M40	40mm

#### **Approvals**





Approvals	
BSI Kitemark KM-90009	
CE Mark to the Low Voltage Directive	
IP Rating	
IP40 as standard with KSU	

Temperature Range	
Static Temp: -50°C to +350°C	
Dynamic Temp: -45°C to +250°C	
Degree of Mechanical Protection	
Very High	



Type XQMS **Liquid Tight Fitting** 

#### Type XQMS

**Liquid Tight Fitting for Covered Conduit** 

Materials: Stainless Steel AISI 316L - Nylon Seals

Metric Part No.	Metric Thread Size	Ext. Thread Outside Diameter	NPT Part No.	NPT Thread Size	
XQMS0303	M16	16mm	_		
XQMS0304	M20	16mm	XQAS0304	1/2"	
XQMS0404	M20	20mm	XQAS0404	1/2"	
XQMS0505	M25	25mm	XQAS0505	3/4"	
XQMS0606	M32	32mm	XQAS0606	1"	
XQMS0707	M40	40mm	XQAS0707	1 1/4"	
XQMS0808	M50	50mm	XQAS0808	1 1/2"	
XQMS0909	M63	63mm	XQAS0909	2"	





Approvals
3SI Kitemark KM-90009
CE Mark to the Low Voltage Directive
P Rating
P66 as standard with FST & FSH
P67 as standard with FST & FSH

	Temperature Range
_	Static Temp: -50°C to +350°C
	Dynamic Temp: -45°C to +250°C
	Degree of Mechanical Protection
	Very High

## Flexible metallic conduit systems Accessories



Hex Locknut Accessories

#### **Hex Locknut**

For Securing Threaded Fittings into Knockouts and Fixing Holes

Materials: Stainless Steel, Nickel plated brass or Steel

Part No.	Metric Thread Size	Dimension Across Flats	Thickness
Stainless Steel	- Hex Locknut		
MXWH03	16mm	20mm	3.0mm
MXWH04	20mm	28mm	3.5mm
MXWH05	25mm	28mm	4.0mm
MXWH06	32mm	38mm	5.0mm
MXWH07	40mm	50mm	4.5mm
MXWH08	50mm	66mm	7.0mm
MXWH09	63mm	70mm	7.5mm
Nickel plated b	rass - Hex Locknut	-	·
WHMM03	M16	20mm	3.0mm
WHMM04	M20	24mm	3.0mm
WHMM05	M25	30mm	3.5mm
WHMM06	M32	38mm	5.0mm
WHMM07	M40	50mm	5.0mm
WHMM08	M50	60mm	7.0mm



# Female to Female Thread Coupler

#### Coupler

Female to Female Thread Coupler

Materials: Nickel plated brass

Part No.	Metric Thread	Int. Thread Inside Diameter
EXN/M16/C	M16	14.4mm
EXN/M20/C	M20	18.4mm
EXN/M25/C	M25	23.4mm
EXN/M32/C	M32	30.4mm
EXN/M40/C	M40	38.4mm
EXN/M50/C	M50	48.4mm
EXN/M63/C	M63	61.4mm

#### **Approvals**







Approvals	
Baseefa 08 ATEX 0003X	
Ex de IIC Gb	
Ex tb IIIC Db	

Temperature Range

Safe operating Temperature Range: -60°C to +200°C

#### Contact us

#### Kopex

Station Road Coleshill Birmingham B46 1HT United Kingdom T +44 (0) 1675 468 217 F +44 (0) 1675 468 280

www.kopex.co.uk

#### **ABB UK Sales**

ABB UK Sales Tel: +44 (0) 333 999 9900 ABB UK Sales Fax +44 (0) 333 999 9901

#### Thomas & Betts Ltd. Br. Middle East Sales Office

Office 724 6WA West Wing Dubai Airport Free Zone PO Box 54567 Dubai

Tel: +971 (0) 4 609 1635 Fax: +971 (0) 4 609 1636

United Arab Emirates

E-Mail: furseenquiryme@tnb.com

# Thomas & Betts Asia (Singapore) Pte Ltd South East Asia Office

2 Ayer Rajah Crescent Level 4 Singapore 139935

Tel: +65 6720 8828 Fax: +65 6720 8780

E-Mail: asia.inquiry@tnb.com

**Note:** We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders and/or contracts, the agreed particulars shall prevail. Adaptaflex does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilisation of its contents – in whole or in parts – is forbidden without prior written consent of Adaptaflex.

Copyright © 2016 Adaptaflex All rights reserved

