Non-Metallic Systems Xtraflex XF Type C90



| Technical Characteristics | | | | | | |
|------------------------------------|---|-----------------------|---------------------------------|---------------|-----------------------------|--|
| Conforms to | Low voltage | Low voltage directive | | | | |
| | | | | | | |
| | | | | | | |
| Approvals and Standards | (€ | | | | | |
| Degree of mechanical protection | High Impact | Resistance | | | | |
| Degree of protection | IP65 - As sta | andard | | | | |
| | | | | | | |
| UV protection | High | | | | | |
| Fitting Characteristics | 90° Elbow - Fixed external male thread Black (BL) Only | | | | | |
| Application | | | ed entries or ki METRIC Thre | | locknut to secure | |
| Normal operating temperature range | Application | Min Temp | Max Temp | | | |
| | Static | - 5°C | +60°C | | | |
| | Dynamic | - 5°C | +60 °C | | | |
| For use with - Conduit Series | Standard we | ight Xtraflex | Type XF | | | |
| Fire performance (Fittings ONLY) | Test | Standard | Perfo | rmance Rating | | |
| | ISC | 4589-2 | | 24% | | |
| | BS EN | 60695-2-11 | | 850°C | Self Extinguishing | |
| | Į | JL94 | | V2 | Low Smoke & Halogen Free | |
| Testing data | Click or See | page <u>3</u> | | | | |
| Type of material | Polyamide (N | Nylon) 66 - E | Body | | | |
| Image | | emic/ | | | | |

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

Technical Support e-mail: cmg.conduitsystems@abb.com - www.adaptaflex.co.uk

Non-Metallic Systems

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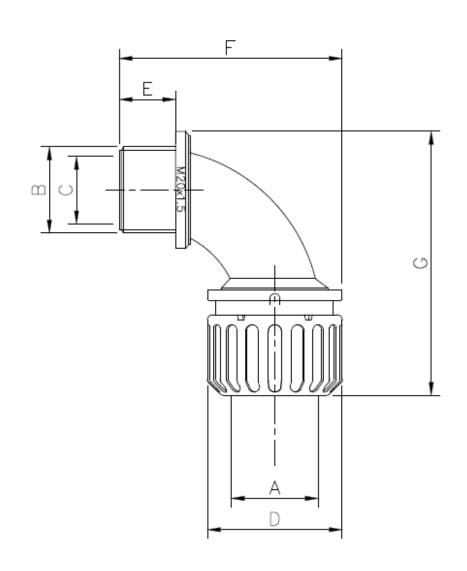


Dimensional & Thread Data

| | | | Nominal Dimensions (mm) | | | | |
|---|-------------------------|-------------|-------------------------|------|------|------|-------|
| Part No Black Body Metric Threads | Nominal Conduit A | Thread B | С | D | E | F | G |
| XF16/M16/C90/BL | 16 | M16x1.5 | 10.0 | 27.0 | 10.5 | 48.0 | 50.0 |
| XF20/M20/C90/BL | 16 | M20x1.5 | 14.0 | 33.0 | 13.5 | 56.0 | 49.5 |
| XF25/M25/C90/BL | 21 | M25x1.5 | 19.0 | 43.0 | 17.0 | 71.5 | 74.5 |
| XF32/M32/C90/BL | 21 | M32x1.5 | 26.0 | 47.0 | 18.5 | 82.0 | 90.5 |
| XF40/M40/C90/BL | 28 | M40x1.5 | 34.0 | 59.0 | 16.0 | 93.0 | 100.5 |

| 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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Thermal Properties

| Test Type | Methods / Standards | Requirements | Value |
|------------------------|---------------------|------------------------------|---------------|
| Dynamic Applications | | 5000 Operations at MBR 2hrs | -5°C to +60°C |
| Static Short Term Temp | | Temporary Use (3000hrs) | -5°C to +60°C |
| Static Long Term Temp | | Permanent Use (30,000) Hours | -5°C to +60°C |
| | | | |

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 | ISO 4589-2 | | 24.1 | % |
| | | | | |

Chemical Resistance Chart

| | Astm No.1 | Diesel oil | Methyl Bromide | Sulphur Dioxide (Gas) |
|----------------------|----------------------|-------------------------------|------------------------|-----------------------|
| | Astm No.2 | Diethylamine | MEK | Sulphuric Acid (10%) |
| Key: | Astm No.3 | Ethanol | Nitric Acid (10%) | Sulphuric Acid (70%) |
| | Acetic Acid (10%) | Ether | Nitric Acid (70%) | Toluene |
| Suitable : | Acetone | Ethylamine | Oxalic Acid | Transformer Oil |
| | Aluminium Chloride | Ethylene Glycol | Ozone (Gas) | 1,1,1-Trichloroethane |
| Limited Suitability: | Aniline | Ethyl Ethanoate | Paraffin oil | Trichloroethylene |
| | Benzaldehyde | Freon 32 | Petrol | Turpentine |
| Unsuitable : | Benzene | Hydrochloric Acid (10%) | Phenol | Vegetable Oil |
| | Carbon tetrachloride | Hydrochloric Acid (36%) | Sea Water | Vinyl Acetate |
| Not Tested : | 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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