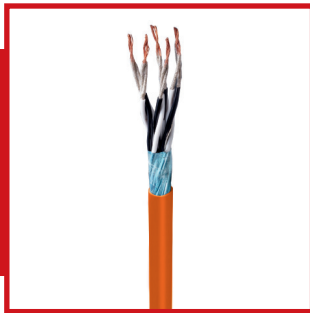


# Fire Resistant Instrumentation Cables

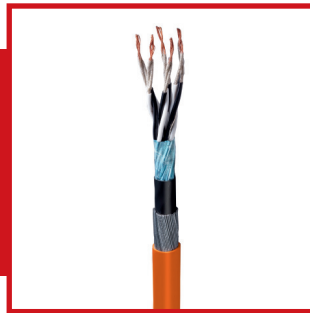
single & multi-pair,  
multi-core

# FR-XOL, FR-XOSL (ARMOURED)

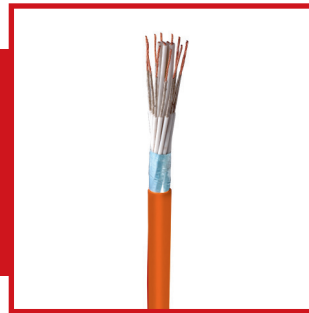
**FR-XOL  
single &  
multi-pair**



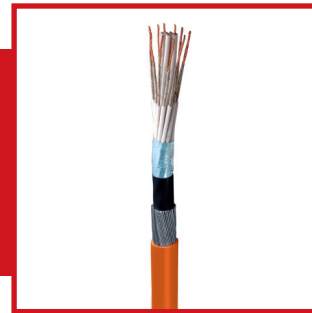
**FR-XOSL  
(ARMOURED)  
single &  
multi-pair**



**FR-XOL  
multi-core**



**FR-XOSL  
(ARMOURED)  
multi-core**



**FR-XOL  
single & multi-pair**

**FR-XOSL  
(ARMOURED)  
single & multi-pair**

**FR-XOL  
multi-core**

**FR-XOSL  
(ARMOURED)  
multi-core**

<p>Conductor : Fire Barrier : Insulation :</p> <p>Overall Screen :</p> <p>Bedding : Armouring : Sheath : Colour :</p> <p>Reference Standard : Test Standard :</p> <p>Voltage Uo/U : Conductor Stranding : Operating Temperature :</p> <p>Minimum Bending Radius :</p>	<p>Plain Annealed Copper Mica Tape (a) XLPE Compound or (b) XLEVA Compound Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire N.A. N.A. LSZH Compound Insulation: White and Black with numberings Sheath - Orange BS EN 50288-7* IEC 60331 BS 6387 (C, W, Z), SS 299 (C, W, Z) IEC 60332-3, BS 4066-3, BS EN 50266-2-2 IEC 60754-1, BS 6425-1, BS EN 50267-1 IEC 60754-2, BS 6425-2, BS EN 50267-2 IEC 61034-2, BS 7622-2, BS EN 61034-2 300 / 500V Class 2 (a) Max 90°C for XLPE (b) Max 110°C for XLEVA 8D for unarmoured cable</p>	<p>Plain Annealed Copper Mica Tape (a) XLPE Compound or (b) XLEVA Compound Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire LSZH Compound Galvanized Steel Wire LSZH Compound Insulation: White and Black with numberings Sheath - Orange BS EN 50288-7* IEC 60331 BS 6387 (C, W, Z), SS 299 (C, W, Z) IEC 60332-3, BS 4066-3, BS EN 50266-2-2 IEC 60754-1, BS 6425-1, BS EN 50267-1 IEC 60754-2, BS 6425-2, BS EN 50267-2 IEC 61034-2, BS 7622-2, BS EN 61034-2 300 / 500V Class 2 (a) Max 90°C for XLPE (b) Max 110°C for XLEVA 10D for armoured cable</p>	<p>Plain Annealed Copper Mica Tape (a) XLPE Compound or (b) XLEVA Compound Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire N.A. N.A. LSZH Compound Insulation: White with Black numberings Sheath - Orange BS EN 50288-7* IEC 60331 BS 6387 (C, W, Z), SS 299 (C, W, Z) IEC 60332-3, BS 4066-3, BS EN 50266-2-2 IEC 60754-1, BS 6425-1, BS EN 50267-1 IEC 60754-2, BS 6425-2, BS EN 50267-2 IEC 61034-2, BS 7622-2, BS EN 61034-2 300 / 500V Class 2 (a) Max 90°C for XLPE (b) Max 110°C for XLEVA 8D for unarmoured cable</p>	<p>Plain Annealed Copper Mica Tape (a) XLPE Compound or (b) XLEVA Compound Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire LSZH Compound Galvanized Steel Wire LSZH Compound Insulation: White with Black numberings Sheath - Orange BS EN 50288-7* IEC 60331 BS 6387 (C, W, Z), SS 299 (C, W, Z) IEC 60332-3, BS 4066-3, BS EN 50266-2-2 IEC 60754-1, BS 6425-1, BS EN 50267-1 IEC 60754-2, BS 6425-2, BS EN 50267-2 IEC 61034-2, BS 7622-2, BS EN 61034-2 300 / 500V Class 2 (a) Max 90°C for XLPE (b) Max 110°C for XLEVA 10D for armoured cable</p>
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Note \* : Previously known as BS 5308.

# FR-XOL, FR-XOSL (ARMOURED)

## Fire Resistant Instrumentation Cables SINGLE & MULTI-PAIR

**Fire Resistant Instrumentation Cables FR-XOL, FR-XOSL (ARMOURED)**

Table 5

SIZE		Radial Thickness of Insulation (mm)	FR-XOL		FR-XOSL			
Nominal Conductor Area (mm <sup>2</sup> )	No. & Diameter of Wires (no./mm)		Unarmoured		Armoured			
			Cable Overall Diameter (mm)	Approx. Weight (kg/km)	Diameter Under Armour (mm)	Armour Wire Diameter (mm)	Cable Overall Diameter (mm)	Approx. Weight (kg/km)
1P x 1.0	7 / 0.43	0.6	9.9	95	10.0	0.9	14.6	364
2P x 1.0	7 / 0.43	0.6	15.9	178	15.8	1.25	21.5	717
5P x 1.0	7 / 0.43	0.6	20.7	340	20.4	1.25	26.1	1022
10P x 1.0	7 / 0.43	0.6	29.6	632	28.9	1.25	35.0	1587
15P x 1.0	7 / 0.43	0.6	34.3	891	33.4	1.6	40.4	2224
20P x 1.0	7 / 0.43	0.6	38.7	1151	37.6	1.6	44.6	2624
30P x 1.0	7 / 0.43	0.6	45.9	1648	45.0	2.0	53.2	3839
50P x 1.0	7 / 0.43	0.6	59.2	2681	57.7	2.5	67.3	6028
1P x 1.5	7 / 0.53	0.6	10.5	110	10.6	0.9	15.4	408
2P x 1.5	7 / 0.53	0.6	16.9	218	16.8	1.25	22.5	784
5P x 1.5	7 / 0.53	0.6	22.3	442	21.8	1.25	27.7	1146
10P x 1.5	7 / 0.53	0.6	31.9	786	31.0	1.25	37.1	1789
15P x 1.5	7 / 0.53	0.6	37.0	1112	35.9	1.6	42.9	2525
20P x 1.5	7 / 0.53	0.6	41.7	1440	40.4	1.6	47.6	3031
30P x 1.5	7 / 0.53	0.6	49.7	2095	48.4	2.0	56.8	4442
50P x 1.5	7 / 0.53	0.6	64.1	3402	62.6	2.5	72.6	7097
1P x 2.5	7 / 0.67	0.7	11.9	147	11.8	0.9	16.6	468
2P x 2.5	7 / 0.67	0.7	19.3	279	19.0	1.25	24.0	912
5P x 2.5	7 / 0.67	0.7	25.5	576	24.8	1.25	30.9	1403
10P x 2.5	7 / 0.67	0.7	36.5	1081	35.4	1.6	42.6	2496
15P x 2.5	7 / 0.67	0.7	42.6	1561	41.5	1.6	48.9	3239
20P x 2.5	7 / 0.67	0.7	48.0	2023	46.7	2	55.1	4283
30P x 2.5	7 / 0.67	0.7	57.2	2947	55.9	2.5	65.7	6265
50P x 2.5	7 / 0.67	0.7	73.9	4824	72.2	3.15	84.1	10129

Note : Other conductor class, core, triad and quad configurations are available upon request.  
: Braided Screen and / or armoured cables are available upon request.

Fire Resistant Instrumentation Cables FR-XOL, FR-XOSL (ARMOURED)

Table 6

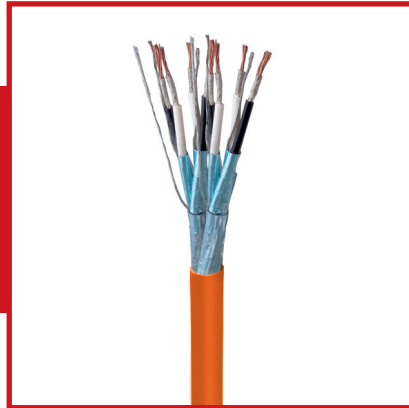
SIZE		Radial Thickness of Insulation (mm)	FR-XOL		FR-XOSL			
Nominal Conductor Area (mm <sup>2</sup> )	No. & Diameter of Wires (no./mm)		Unarmoured		Armoured			
			Cable Overall Diameter (mm)	Approx. Weight (kg/km)	Diameter Under Armour (mm)	Armour Wire Diameter (mm)	Cable Overall Diameter (mm)	Approx. Weight (kg/km)
2C x 1.0	7 / 0.43	0.6	9.9	101	10.0	0.9	14.6	368
3C x 1.0	7 / 0.43	0.6	10.4	127	10.5	0.9	15.1	407
4C x 1.0	7 / 0.43	0.6	11.4	155	11.5	0.9	16.1	463
7C x 1.0	7 / 0.43	0.6	13.7	243	13.6	0.9	18.2	594
12C x 1.0	7 / 0.43	0.6	18.1	392	17.8	1.25	23.3	971
19C x 1.0	7 / 0.43	0.6	21.3	583	20.8	1.25	26.3	1250
24C x 1.0	7 / 0.43	0.6	25.0	724	24.5	1.25	30.2	1517
37C x 1.0	7 / 0.43	0.6	28.8	1062	28.1	1.25	33.8	1954
2C x 1.5	7 / 0.53	0.6	10.5	117	10.6	0.9	15.2	403
3C x 1.5	7 / 0.53	0.6	11.1	150	11.2	0.9	15.8	450
4C x 1.5	7 / 0.53	0.6	12.3	191	12.2	0.9	16.8	508
7C x 1.5	7 / 0.53	0.6	14.6	293	14.5	1.25	19.8	769
12C x 1.5	7 / 0.53	0.6	19.3	477	19.0	1.25	24.5	1093
19C x 1.5	7 / 0.53	0.6	22.8	716	22.3	1.25	28.0	1445
24C x 1.5	7 / 0.53	0.6	27.0	904	26.3	1.25	32.0	1745
37C x 1.5	7 / 0.53	0.6	31.1	1331	30.2	1.25	36.1	2288
2C x 2.5	7 / 0.67	0.7	11.9	155	11.8	0.9	16.4	464
3C x 2.5	7 / 0.67	0.7	12.6	201	12.5	0.9	17.1	524
4C x 2.5	7 / 0.67	0.7	13.8	250	13.7	0.9	18.3	602
7C x 2.5	7 / 0.67	0.7	16.6	399	16.3	1.25	21.8	929
12C x 2.5	7 / 0.67	0.7	22.1	654	21.6	1.25	27.3	1359
19C x 2.5	7 / 0.67	0.7	26.1	986	25.4	1.25	31.1	1792
24C x 2.5	7 / 0.67	0.7	31.1	1261	30.0	1.25	35.9	2200
37C x 2.5	7 / 0.67	0.7	35.8	1860	34.5	1.6	41.3	3174

Note : Other conductor class, core, triad and quad configurations are available upon request.  
: Braided Screen and / or armoured cables are available upon request.

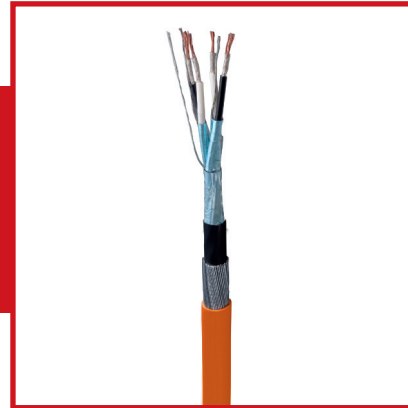
# FR-XIOL, FR-XIOSL (ARMOURED)

# Fire Resistant Instrumentation Cables multi-pair

## FR-XIOL multi-pair



## FR-XIOSL [ARMOURED] multi-pair



### FR-XIOL multi-pair

### FR-XIOSL (ARMOURED) multi-pair

<p>Conductor :</p> <p>Fire Barrier :</p> <p>Insulation :</p> <p>Individual Screen:</p> <p>Overall Screen :</p> <p>Bedding :</p> <p>Armouring :</p> <p>Sheath :</p> <p>Colour :</p> <p>Reference Standard :</p> <p>Test Standard :</p> <p>Voltage U<sub>o</sub>/U :</p> <p>Conductor Stranding :</p> <p>Operating Temperature :</p> <p>Minimum Bending Radius :</p>	<p>Plain Annealed Copper</p> <p>Mica Tape</p> <p>(a) XLPE Compound or (b) XLEVA Compound</p> <p>Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire</p> <p>Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire</p> <p>N.A.</p> <p>N.A.</p> <p>LSZH Compound</p> <p>Insulation: White and Black with numberings</p> <p>Sheath - Orange</p> <p>BS EN 50288-7*</p> <p>IEC 60331</p> <p>BS 6387 (C, W, Z), SS 299 (C, W, Z)</p> <p>IEC 60332-3, BS 4066-3, BS EN 50266-2-2</p> <p>IEC 60754-1, BS 6425-1, BS EN 50267-2-1</p> <p>IEC 60754-2, BS 6425-2, BS EN 50267-2-2</p> <p>IEC 61034-2, BS 7622-2, BS EN 61034-2</p> <p>300 / 500V</p> <p>Class 2</p> <p>(a) Max 90°C for XLPE (b) Max 110°C for XLEVA</p> <p>8D for unarmoured cable</p>	<p>Plain Annealed Copper</p> <p>Mica Tape</p> <p>(a) XLPE Compound or (b) XLEVA Compound</p> <p>Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire</p> <p>Aluminium / Polyester Tape with 0.5mm<sup>2</sup> (7/0.3mm) Tinned Drain Wire</p> <p>LSZH Compound</p> <p>Galvanized Steel Wire</p> <p>LSZH Compound</p> <p>Insulation: White and Black with numberings</p> <p>Sheath - Orange</p> <p>BS EN 50288-7*</p> <p>IEC 60331</p> <p>BS 6387 (C, W, Z), SS 299 (C, W, Z)</p> <p>IEC 60332-3, BS 4066-3, BS EN 50266-2-2</p> <p>IEC 60754-1, BS 6425-1, BS EN 50267-2-1</p> <p>IEC 60754-2, BS 6425-2, BS EN 50267-2-2</p> <p>IEC 61034-2, BS 7622-2, BS EN 61034-2</p> <p>300 / 500V</p> <p>Class 2</p> <p>(a) Max 90°C for XLPE (b) Max 110°C for XLEVA</p> <p>10D for armoured cable</p>
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Note \* : Previously known as BS 5308.

Fire Resistant Instrumentation Cables FR-XIOL, FR-XIOSL (ARMOURED)

Table 7

SIZE		Radial Thickness of Insulation (mm)	FR-XIOL		FR-XIOSL			
Nominal Conductor Area (mm <sup>2</sup> )	No. & Diameter of Wires (no./mm)		Unarmoured		Armoured			
			Cable Overall Diameter (mm)	Approx. Weight (kg/km)	Diameter Under Armour (mm)	Armour Wire Diameter (mm)	Cable Overall Diameter (mm)	Approx. Weight (kg/km)
2P x 1.0	7 / 0.43	0.6	16.4	204	16.1	1.25	21.8	747
5P x 1.0	7 / 0.43	0.6	21.3	393	20.8	1.25	26.7	1095
10P x 1.0	7 / 0.43	0.6	30.5	731	29.6	1.25	35.7	1107
15P x 1.0	7 / 0.43	0.6	35.4	1033	34.3	1.6	41.3	2406
20P x 1.0	7 / 0.43	0.6	39.8	1335	38.5	1.6	45.7	2875
30P x 1.0	7 / 0.43	0.6	47.5	1941	46.2	2.0	54.4	4184
50P x 1.0	7 / 0.43	0.6	61.1	3148	59.6	2.5	69.4	6693
2P x 1.5	7 / 0.53	0.6	17.5	236	15.1	1.25	22.9	816
5P x 1.5	7 / 0.53	0.6	22.8	466	22.3	1.25	28.2	1218
10P x 1.5	7 / 0.53	0.6	32.8	889	31.7	1.25	38.0	1932
15P x 1.5	7 / 0.53	0.6	38.1	1260	36.8	1.6	44.0	2735
20P x 1.5	7 / 0.53	0.6	42.9	1632	41.8	2.0	50.0	3677
30P x 1.5	7 / 0.53	0.6	51.1	2375	49.6	2.0	58.0	4774
50P x 1.5	7 / 0.53	0.6	66.0	3889	64.1	2.5	74.1	7683
2P x 2.5	7 / 0.67	0.7	19.9	309	19.4	1.25	25.3	958
5P x 2.5	7 / 0.67	0.7	26.0	623	25.3	1.25	31.4	1470
10P x 2.5	7 / 0.67	0.7	37.4	1192	36.1	1.6	43.3	2625
15P x 2.5	7 / 0.67	0.7	43.7	1721	42.4	2	50.6	3769
20P x 2.5	7 / 0.67	0.7	49.1	2230	47.6	2	56.0	4529
30P x 2.5	7 / 0.67	0.7	58.8	3278	57.1	2.5	67.1	6670
50P x 2.5	7 / 0.67	0.7	75.8	5351	73.7	3.15	85.6	10724

Note : Other conductor class, core, triad and quad configurations are available upon request.  
: Braided Screen and / or armoured cables are available upon request.