

Instrumentation cable BS EN 50288-7

XLPE/OSCR/PVC/SWA/PVC-FR





Application

Generally used within industrial process manufacturing plants for communication, data and voice transmission signals, typically in petroleum industry. The electrostatic screen protects screen pairs against outer electrostatic interference. Low level of line attenuations and low mutual capacitance allow longer transmission fast pulse acceleration. Steel wire armouredare suitable for fixed installations in open spaces, damp areas and underground laying. Also available in Blue outer sheath for use in Intrinsically safe system, hazardous environment.

Cable Structure & Features

Conductor	Plain annealed stranded copper conductor Class 2 to BS 6360 and IEC 60228
Insulation	XLPE (Cross-linked Polyethylene)
Overall Screen	Aluminum/ polyester collective screened with tinned copper drain wire
Bedding	Flame Retardant PVC -Black
Armouring	Galvanized Steel Wire (EN10257-1)
Outer Sheath	Flame Retardant PVC –Black (Optional: Blue colourfor Intrinsically Safe)
Core Identification	1 pair in Black & White 2 pair & above -each pair in Black & White core with numbering. 1 triad in Black, White & Red 2 triad & above -each triad in Black, White & Red printed with numbering.
Optional	Anti-termite, Anti-rodent and Ultra-Violet (UV) stabiliser additives are available upon request. Special core and sheath colour are also available upon request.

Technical Data

Reference Standard	BS EN 50288-7
Rated Voltage	500V
Max Operating Temperature	+90°C
Flame Retardant	IEC 60332-3-22
Max. Conductor Resistance	≤12.1Ω/km at 20°C(1.5mm²) ≤18.4Ω/km at 20°C(1.0mm²) ≤26.5Ω/km at 20°C(0.75mm²)
Max. Mutual Capacitance (at 1 KHz)	≤ 85pF/min (1.5-2.5mm²) ≤ 75pF/min (0.5-1.0mm²)
Max. L/R Ratio	≤40 μ H/ Ω (1.5-2.5mm ²) ≤25 μ H/ Ω (0.75-1.0mm ²)
Test Voltage	2000Vac for 1 minute
Bending Radius	10 x overall diameter

Item No.	Dim. nx2xmm²	Outer Ø mm	Copper weight	Weight kg/km
8411204140103	4x2x1.0	15.2	86	267
8411206140103	6x2x1.0	18.5	126	375
8411208140103	8x2x1.0	20.6	167	476
8411210140103	10x2x1.0	23.5	208	598
8411212140103	12x2x1.0	24.5	248	664
8411216140103	16x2x1.0	27.2	330	837
8411220140103	20x2x1.0	30.5	411	1470
8411224140103	24x2x1.0	34	493	1256
8411201160103	1x2x1.5	8.5	34	101
8411202160103	2x2x1.5	14	60	223
8411204160103	4x2x1.5	16.6	114	332
8411206160103	6x2x1.5	20	173	472



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Item No.	Dim. nx2xmm²	Outer Ø mm	Copper weight	Weight kg/km
8411208160103	8x2x1.5	26	218	1339
8411210160103	10x2x1.5	28.8	288	1572
8411212160103	12x2x1.5	29.5	322	1696
8411216160103	16x2x1.5	32.8	426	2064
8411220160103	20x2x1.5	36	576	2417
8411240160103	24x2x1.5	40.4	684	3081
8411301140103	1x3x1.0	12.3	44	294
8411301160203	1x3x1.5	13	95.9	328



Instrumentation cable BS EN 50288-7

XLPE/ISOS/PVC/SWA/PVC-FR

XLPE/ISOS/PVC/SWA/PVC-FR





Application

Generally used within industrial process manufacturing plants for communication, data and voice transmission signals, typically in petroleum industry. The individual screening of pairs guarantee low cross-talk attenuation. The electrostatic screen protects the screened pairs against outer electrostatic interference field. Low level of line attenuations and low mutual capacitance enable long transmission distance fast pulse acceleration. Steel wire armoured are suitable for fixed installations in open spaces, damp areas and underground laying. Also available in Blue outer sheath for use in Intrinsically safe system, hazardous environment.

Cable Structure & Features

	Conductor	Plain annealed stranded copper conductor Class 2 to BS 6360 and IEC 60228
	Insulation	XLPE (Cross-linked Polyethylene)
	Overall Screen	Aluminum / polyester collective screened with tinned copper drain wire
	Individual screen	Aluminium / Polyester tape, metallic side down ir contact with tinned copper drain wire 0.5mm²
	Bedding	Flame Retardant PVC –Black
	Armouring	Galvanized Steel Wire Armour(EN10257-1)
	Outer Sheath	Flame Retardant PVC –Black (Optional: Blue colourfor Intrinsically Safe)
	Core Identification	1 pair in Black & White 2 pair & above -each pair in Black & White core printed with numbering. 1 triad in Black, White & Red 2 triad & above -each triad in Black, White & Red core printed with numbering.
I	Optional	Anti-termite, Anti-rodent and Ultra-Violet (UV)

available upon request.

stabiliser additives are available upon request. Special core and sheath colour are also

Technical Data

Reference Standard	BS EN 50288-7
Rated Voltage	500V
Max Operating Temperature	+90°C
Flame Retardant	IEC 60332-3-22
Max. Conductor Resistance	≤12.1Ω/km at 20°C(1.5mm²) ≤18.4Ω/km at 20°C(1.0mm²) ≤26.5Ω/km at 20°C(0.75mm²)
Max. Mutual Capacitance (at 1 KHz)	≤ 85pF/min (1.5-2.5mm²) ≤ 75pF/min (0.5-1.0mm²)
Max. L/R Ratio	≤40µH/ Ω (1.5-2.5mm²) ≤25µH/ Ω (0.75-1.0mm²)
Test Voltage	2000Vac for 1 minute
Bending Radius	10 x overall diameter

Item No.	Dim. nx2xmm²	Outer Ø mm	Copper weight	Weight kg/km
8401204140103	4x2x1.0	15.2	86	267
8401206140103	6x2x1.0	18.5	126	375
8401208140103	8x2x1.0	20.6	167	476
8401210140103	10x2x1.0	23.5	208	598
8401212140103	12x2x1.0	24.5	248	664
8401216140103	16x2x1.0	27.2	330	837
8401220140103	20x2x1.0	30.5	411	1470
8410224140103	24x2x1.0	34	493	1256
8401202160103	2x2x1.5	14	60	223
8401204160103	4x2x1.5	16.6	114	332
8401206160103	6x2x1.5	20	173	472



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Item No.	Dim. nx2xmm²	Outer Ø mm	Copper weight	Weight kg/km
8401208160103	8x2x1.5	22.7	218	603
8401210160103	10x2x1.5	26	288	759
8401212160103	12x2x1.5	27	322	848
8401216160103	16x2x1.5	30	426	1075
8401220160103	20x2x1.5	33.8	576	1229
8401224160103	24x2x1.5	37.7	684	1620



Instrumentation cable BS EN 50288-7 XLPE/OSCR/LSHF/SWA/LSHF

XLPE/OSCR/LSHF/SWA/LSHF





Application

Generally used within industrial process manufacturing plants for communication, data and voice transmission signals, typically in petroleum industry. The electrostatic screen protect the screened pairs against outer electrostatic interference field. Low level of line attenuations and low mutual capacitance enable long transmission distance fast pulse acceleration. Steel wire armoured are suitable for fixed installations in open spaces, damp areas and underground laying.

Also available in Blue outer sheath for use in Intrinsically safe system, hazardous environment.

Cable Structure & Features

Conductor	Plain annealed stranded copper conductor Class 2 to BS 6360 and IEC 60228
Insulation	XLPE (Cross-linked Polyethylene)
Overall Screen	Aluminum/ polyester collective screened with tinned copper drain wire
Bedding	LSHF(Low Smoke Halogen Free) -Black
Armouring	Galvanized Steel Wire Armour(EN10257-1)
Outer Sheath	LSHF (Low Smoke Halogen Free) -Black (Optional: Blue colourfor Intrinsically Safe)
Insulation color	1 pair in Black & White 2 pair & above -each pair in Black & White core with numbering. 1 triad in Black, White & Red 2 triad & above —each triad in Black, White & Red printed with numbering.
Optional	Anti-termite, Anti-rodent and Ultra-Violet (UV) stabiliser additives are available upon request. Special core and sheath colour are also available upon request.

Technical Data

Reference Standard	BS EN 50288-7
Rated Voltage	500V M
Max Operating Temperature	+90°C
Halogen Free Low Smoke Emission Flame Retardant	IEC 60754 IEC 61034 IEC 60332-3-22
Max. Conductor Resistance	≤12.1 Ω /km at 20°C(1.5mm²) ≤18.4 Ω /km at 20°C(1.0mm²) ≤26.5 Ω /km at 20°C(0.75mm²)
Max. Mutual Capacitance (at 1 KHz)	≤ 85pF/min (1.5-2.5mm²) ≤ 75pF/min (0.5-1.0mm²)
Max. L/R Ratio	≤40μH/Ω(1.5-2.5mm²) ≤25μH/Ω(0.75-1.0mm²)
Test Voltage	2000Vacfor 1 minute
Bending Radius	10 x overall diameter

Item No.	Dim. nx2xmm²	Outer Ø mm	Weight kg/km
8431A201140103	1x2x1.0	11.7	291
8431A202140103	2x2x1.0	17	515
8431A203140103	3x2x1.0	17.8	570
8431A204140103	4x2x1.0	19.2	650
8431A205140103	5x2x1.0	21.5	887
8431A206140103	6x2x1.0	23	971
8431A208140103	8x2x1.0	25.4	1143
8431A210140103	10x2x1.0	28.5	1352
8431A212140103	12x2x1.0	29.5	1444
8431A215140103	15x2x1.0	32.7	1889
8431A216140103	16x2x1.0	32.7	1910
8431A220140103	20x2x1.0	36.5	2133



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Item No.	Dim. nx2xmm²	Outer Ø mm	Weight kg/km
8431A224140103	24x2x1.0	40	2637
8431A230140103	30x2x1.0	42.3	2933
8431A236140103	36x2x1.0	46.7	3719
8431A201160103	1x2x1.5	12.3	321
8431A202160103	2x2x1.5	18.2	582
8431A203160103	3x2x1.5	19.5	652
8431A204160103	4x2x1.5	21.5	880
8431A205160103	5x2x1.5	23	996
8431A206160103	6x2x1.5	24.9	1122
8431A208160103	8x2x1.5	27.5	1332
8431A210160103	10x2x1.5	30.9	1585
8431A212160103	12x2x1.5	32.5	1907
8431A216160103	16x2x1.5	36	2273
8431A220160103	20x2x1.5	40	2702
8431A224160103	24x2x1.5	44.5	3464
8431A236160103	36x2x1.5	51	4435
8431A301160103	1x3x1.5	13.1	349