

Industrial Ethernet Cat.6

For Petrol Forecourt Applications Black

Application

The Galvanised steel wire braid and overall polyurethane sheath make for a rugged cable with excellent resistance to oil and petrol. Tested to BS EN13617-1:2004. Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units Section 5.3.2.4 cables used in hazardous areas, independently tested by Sira. As directed by the IP/APEA Hazardous Area "Blue Book".



Cable Design

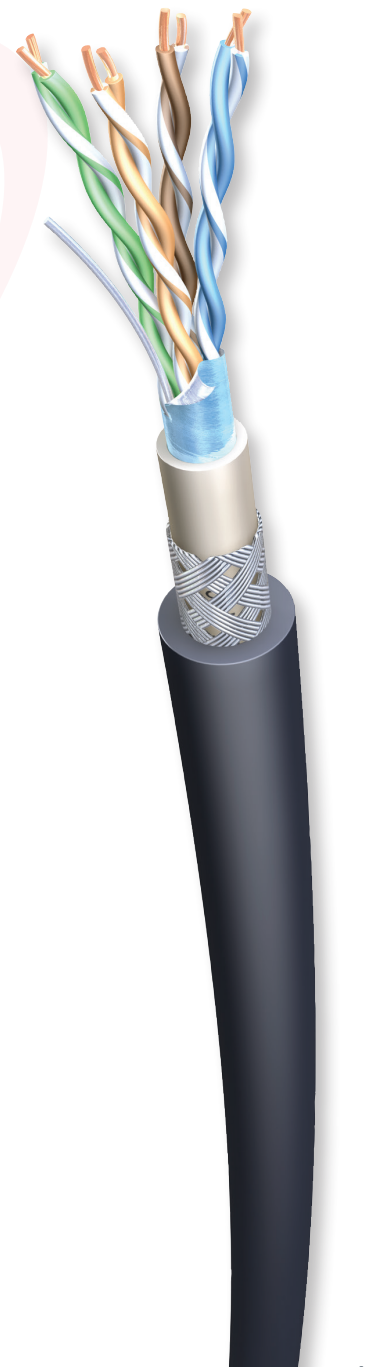
Conductor	Solid Bare Cu-wire AWG 23/1
Insulation	PE - Polyethylene
Pair	2 cores to the pair
Cable lay up	4 pairs cabled with cross separator (spline)
Screen	Plastic laminated Aluminium foil + TC drain wire
Inner Jacket	LSZH FireFighter® : Ø 7,00 ± 0,50 mm
Armour	DataGuard® Galvanised Steel Wire Braid (GSWB)
Sheath	Polyurethane (PUR) : Ø 10,90 mm ± 10%

Colour Code Chart

Pair	Colour
1	Blue + White/Blue
2	Orange + White/Orange
3	Green + White/Green
4	Brown + White/Brown

Standards

Applicable Standards	ISO/IEC 110801 2nd.ed., EN 50173-1, TIA/EIA 568-B.2, EN 50288-5-1, IEC 61156-5
Flamability Rating	IEC 60332-1, IEC 60754-2, EN 61034, IEC 61034



Industrial Ethernet Cat.6

For Petrol Forecourt Applications Black

Thermal Characteristics

Temperature range	during installation	-15 °C to +70 °C
	stationary	-40 °C to +70 °C

Electrical Data

Conductor Loop resistance	≤ 19 Ω/100m
Insulation Resistance	≥ 5 GΩ x km
Operating Capacitance (nom.)	50 nF/km
Capacitance unbalance (nom.)	≤ 150 pF/100m
Rel. Velocity of Propagation	76 %
Transfer Impedance at 10 MHz (nom.)	≤ 10 mΩ/m
Characteristic Impedance at 1-100 MHz	100 ± 15 Ω
Characteristic Impedance at 100-250 MHz	100 ± 22 Ω
Test Voltage	700 V - AC

Frequency (MHz)	Attenuation (dB/100m)		NEXT (dB)		ACR (dB/100m)	Return Loss (dB)	
	Nom.	Max. Cat 6	Nom.	Min. Cat 6	Nom.	Nom.	Min. Cat 6
1	1.8	[2.1]	95	66	93.2	24	[20.0]
4	3.4	3.8	90	65	86.6	27	23.1
10	5.4	6.0	85	60	79.6	30	25.0
16	6.9	7.6	78	56	71.1	30	25.0
20	7.8	8.5	75	55	67.2	30	25.0
31.25	9.8	10.8	72	52	62.2	30	23.6
62.5	13.8	15.5	68	47	54.2	30	21.5
100	17.5	19.9	64	44	46.5	28	20.1
155	21.8	25.3	60	41	38.2	26	18.8
200	24.9	29.2	57	40	32.1	25	18.0
250	27.5	33.0	55	38	27.5	24	17.3
300	29.5	-	53	-	23.5	23	-
350	33.0	-	50	-	22.0	22	-

The performance data given are typical measured values

Industrial Ethernet Cat.6

For Petrol Forecourt Applications Black

Test Voltage

Table 21 Test Voltage of Core

Type	Test Voltage
321, 331	7500V 5 mins
Additional Test	12000V 1 min

Tested to BS EN13617-1:2004. Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units section 5.3.2.4 cables used in hazardous areas, independently tested by Sira. As directed by the IP/APEA Hazardous Area "Blue Book".

Additional voltage test to BS6708 table 21, types 321 and 331

Specification

Part Number	Type
3014P23S601	Cat.6 F/UTP Industrial Ethernet Petrol Forecourt Cable, Black



CSA Group – Providing Sira Certification and CSA Approvals

Belcom Cables Ltd. ("Belcom") reserves the right to make changes to the product described in this specification without prior notice. Belcom does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.