CONSTRUCTION

Conductor	Stranded annealed plain copper as per Class 2 of IEC 60228.
Insulation	Mica impregnated glass tape + Cross-linked polyethylene (XLPE) to EN 50290-2-29.
Color Code	Single pair: Black & White. Single triad: Black, White & Red
Pair/Triad Construction	Two/Three insulated conductors are uniformly twisted to form a pair/triad with 10-14 twists per meter.
Cabling	Required numbers of pairs/triads are assembled with non-hygroscopic fillers if necessary and the assembly is wrapped with a polyester binder tape.
Collective Screen	Aluminum backed Mylar tape (25µm) is applied with an overlap of 25% with the metallic side down in contact with a stranded annealed tinned copper drain wire of 0.5mm^2 (7x0.3mm) run longitudinally over the binder tape.
Inner Sheath	Low Smoke Zero Halogen thermoplastic to EN 50290-2-27 in Black color.
Armor	A single layer of galvanized steel wire armor to EN 10257-1 is applied over the inner sheath.
Outer Sheath	Low Smoke Zero Halogen thermoplastic to EN 50290-2-27. The color of the sheath shall be as per dimension sheet.
Printing on the sheath	INSTRUMENTATION CABLE CU/MICA/XLPE/LSZH/GSWA/LSZH SHIELDED NO OF PAIRS/TRIADS X 2/3 X … MM2 500V MESC YEAR BS EN 50288-7 IEC 60331 IEC 60332-3 CAT A LENGTH METER MARKING

Technical Data:

Operating Temperature	-15°C to 90°C
Voltage Rating	500 Volts
Conductor Resistance	≤ 12.34 (1.5mm^2) & 7.56 (2.5mm^2) Ω/km at 20°C
Mutual Capacitance (at 1kHz)	≤ 120nF/km
Capacitance Unbalance (at 1kHz)	≤ 500pF/500m (Not applicable for single pair/triad)
L/R Ratio	≤ 40 (1.5mm^2) & 60 (2.5mm^2) µH/Ω
Insulation Resistance Constant	≥ 1000MΩ-km at 20°C (500 V_{DC} for 1 minute)
Dielectric Strength Test (core to core & core to screen)	2000 V_{AC} or 3000 V_{DC} for 1 minute

Supplied by Digital Stout Innovation & Trading FZC

Flame Behavior Characteristics:

Flame Retardant (Outer Sheath)	IEC 60332-3 CAT A
Fire Resistance	IEC 60331-21
Halogen Acid Gas (Outer Sheath)	MAX. 0.5 % (IEC 60754-1)
Limiting Oxygen Index (Outer Sheath)	≥ 30% (ASTM D2863)
Min. Bending Radius	12 x Cable Overall Diameter

DIMENSIONAL DATA

PO ITEM NO.	MESC CODE	OUTER SHEATH COLOR	PAIR/TRIAD/QUAD	SIZE (mm^2)	STRAND x DIA. (n x mm)	INSULATION THICKNESS (mm)	INNER SHEATH THICKNESS (mm)	DIA. OVER INNER SHEATH (mm)	ARMOR WIRE DIA. (mm)	DIA. OVER ARMOR (mm)	OUTER SHEATH THICKNESS (mm)		APPROX. OVERALL DIA. (mm)	APPROX. CABLE WEIGHT (kg/km)
											Nom.	Min.		
31	021G-01P00150-W0BK8-L5	Black	1P	1.5	7x0.53	0.44	0.9	9.2	0.9	11.0	1.3	0.84	13.2	312
32	021G-01P00150-W0BL8-L5	Blue	1P	1.5	7x0.53	0.44	0.9	9.2	0.9	11.0	1.3	0.84	13.2	312
33	021G-01T00150-W0BK8-L5	Black	1T	1.5	7x0.53	0.44	0.9	9.6	0.9	11.4	1.4	0.92	13.8	348
34	021G-01T00150-W0BL8-L5	Blue	1T	1.5	7x0.53	0.44	0.9	9.6	0.9	11.4	1.4	0.92	13.8	348
35	021G-01P00250-W0BK8-L5	Black	1P	2.5	7x0.67	0.53	0.9	10.1	0.9	11.9	1.4	0.92	14.3	360

Note: The tolerance on the cable overall diameter shall be ± 2.5mm up to 30mm & ± 3.0mm above 30mm.

Supplied by Digital Stout Innovation & Trading FZC