

DataGuard® (SWA)

430 Series Multi-Pair 22awg (RS) TIA-485

Control Cables 600V



Application

A range of 22awg low capacitance cables with a high level of screening. Provides interference free, high speed data transmission suitable for a range of RS485 applications including automation systems such as Modbus, BACnet MS/TP, HART and CanOpen systems. These low capacitance cables have enhanced noise protection providing the highest performance under harsh environments and utilise DataGuard® armouring and FireFighter® Low Smoke Zero Halogen performance materials.

Cable Design

Conductor	Stranded tinned copper wire (22awg)
Insulation	Polyethylene (PE)
No. of Pairs	1, 1.5, 2, 3 or 4 - see colour chart on page 2
Overall Shield	Overall Aluminium/polyester tape
Drain Wire	Stranded tinned copper wire
Overall Braid Shield	Tinned copper wire braid, 65% coverage
Inner Jacket	LSZH FireFighter®
Armour	DataGuard® Steel Wire Armour (DSWA)
Outer Jacket	LSZH FireFighter®, Black

Characteristics

- Indoor/Outdoor applications
- Mechanical protection
- Rodent Protection
- Direct Burial
- UV-Resistant
- 600 V rated
- Temperature Range : -20°C up to +90°C

Fire Behaviour

- Flame Retardant acc. to IEC 60332-1
- Halogen Free acc. to IEC 60754
- Smoke Emission acc. to IEC 61034



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Specification

Part Number	Formation No. of Pairs	Nom. Shield DC Resistance Ω/km	Inner Jacket Ø mm ± 10 %	Outer Jacket Ø mm ± 10 %	Weight kg/km
144301P2254-01	1 x 2 x 22 awg	9,5	7,0	11,9	355
144301.5P2254-01 *	1 x 2 x 22 awg + 1 x 22 awg	9,2	7,25	12,7	368
144302P2254-01	2 x 2 x 22 awg	4,6	9,0	13,5	398
144303P2254-01	3 x 2 x 22 awg	4,6	10,0	14,6	416
144304P2254-01	4 x 2 x 22 awg	3,6	11,30	16,0	433

*All conductors are under the braid shield, pair is under the aluminium/polyester tape

Electrical Characteristics

Nom. Capacitance (cond./cond.) pF/m	Nom. Capacitance (cond./cond./scrn) pF/m	Nom. Conductor DC Resistance Ω/km	Nom. Velocity of Propogtion %	Nom. Impedance Ω
36,1	65,6	48,2	78	120

Colour Code Chart

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

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