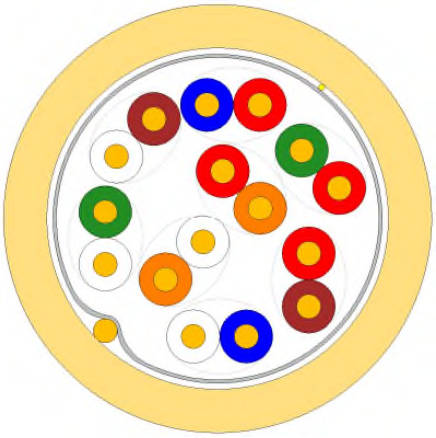
M@XDN® Comms Cable

Digital Multipair Balanced Screened Station Cable

Cable Design

ACMA - AS/CA S008



- Drawing not to scale -

- **Multi-pair construction**
- **Conductor:** Annealed solid copper wire 0.50mm diameter (24 AWG) in compliance with AS/NZS 1125
- **Insulation:** Foam skin NHFR/PE compound in compliance with AS 1049
- **Cabling element:** Twisted pair
- **Colour code:** See table 1
- **Stranding of pairs:**
  a) Concentric (up to 10 pairs)
  b) Bunched (8 pair units) or combination of **a** and **b**
- **Wrapping:** Polyethylene terephthalate tape
- **Screen:** Aluminium /Polyethylene terephthalate tape, aluminium tape in contact with
- **Drain wire:** Tinned annealed copper wire 0.5mm diameter
- **Wrapping:** Polyethylene terephthalate tape
- **Sheath:** Zero halogen flame retardant low smoke and fume thermoplastic in compliance with AS 1049. One ripcord is provided beneath the sheath for easy removal

Aluminium foil screened data-grade (up to 150 MHz) Station cable capable of supporting standard transmission bit rates of up to 155Mbps. The cable is suitable for applications in confined environments where low smoke generation, low toxicity and low acidic fumes under fire conditions are expected.

Technical data

Number of Pairs		8	10	20	32
Cable nominal diameter	mm	8.9	9.4	13.4	16.3
Cable nominal weight	kg/km	82	94	170	240
Max. installation tension	N	300	375	750	1200
Min. bending diameter	mm	135	140	200	245
Temperature range	ºC	Installation -0 -> +50		Operation -0 -> +55	

Identification

Sheath Colour:
The standard outer sheath colour is manilla (off-white).

Sheath Marking:
The outer sheath is marked in 1 metre intervals as follows:

```
PRYSMIAN DW M@XDN COMMS CABLE MM/YY XX/0.50 SCREENED STATION
J/N #### MADE IN AUSTRALIA *****M >> | << *****M
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Where:

MM/YY	= Month/Year of manufacture
XX	= Number of Pairs
####	= Job Numbers
*****M >> | << *****M	= Metre Marking with cut line

Attenuation and Far End Crosstalk (FEXT):		
Frequency [MHz]	Max. Attenuation [dB/100m]	Min. Pr-Pr FEXT [dB/250m]
1	2.1	-65
10	5.9	-45
20	8.2	-43
30	10.1	-40
40	11.7	-38
50	13.2	-36
60	15.5	-34
70	17	-32
80	18	-30
90	19.4	-28
100	20.9	-28
110	21.8	-28
120	22.8	-28
130	23.7	N/A
140	24.7	N/A
150	25.6	N/A

Electrical characteristics		
DC resistance (Max.)	Ω/100m	9.45
Characteristic impedance @ 1MHz	Ω	120±15
Capacitance unbalance (Max.) pair to ground @ 0.8 or 1.0kHz	pF/250m	500

Note: All electrical characteristics are given at 20ºC

Table 1. Colour code / Pair and unit identification

Pair number	Insulation colour		Pair number	Insulation colour		Unit (8 pairs)* Binding colour	
	Wire a	Wire b		Wire a	Wire b		
1	White	Blue	9	Black	Blue	Unit 1	Blue
2	White	Orange	10	Black	Orange	Unit 2	Blue
3	White	Green	11	Black	Green	Unit 3	Orange
4	White	Brown	12	Black	Brown	Unit 4	Orange
5	Red	Blue	13	Yellow	Blue		
6	Red	Orange	14	Yellow	Orange		
7	Red	Green	15	Yellow	Green		
8	Red	Brown	16	Yellow	Brown		

8 Pair cable – Pair 1 to 8
10 Pair cable – Pair 1 to 10
20 Pair cable – Centre: Pair 1 to 8 with Blue binder; 1st layer Pair 1 to 12
32 Pair cable* – Unit 1 (Pair 1 to 8) + Unit 2 (Pair 9 to 16) + Unit 3 (Pair 1 to 8) + Unit 4 (Pair 9 to 16)

Logistic

Packing:
Timber or plastic drums

Delivery Lengths:
Standard delivery length is 250 or 500 m with a tolerance of - 1% / + 3%