

Instrumentation Cable Individually & Overall Screened

RALOS INST to AS/NZS 3808

High temperature PVC V90HT overall and individually screened

Application:

RALOS cables are mainly used in data processing and process control; they can also be used for general transmission of electrical signals in any systems of remote control, indication, telemetering, monitoring and analysis where it needs to be protected from interference to the transmission signal by other electrical circuits.

Reference Standard: BS EN 50288-7; AS/NZS3808

Conductor:

Stranded plain annealed copper wire Class 2 acc to AS/NZS 1125

0.5mm² (7/0.3mm);
1.0mm² (7/0.45mm)
1.5mm² (7/0.5mm)

Insulation and sheath material:

High grade Extruded Polyvinyl Chloride PVC 90°C (V-90HT)

Core colour:

Pair element: Black and white and all cores numbered.

Triad element: Black, white, red and all cores numbered.

Sheath colour:

Black sheath- standard type also available in an intrinsically blue sheath upon request.

Overall screen

A stranded tinned annealed copper drain wire(16/0.2mm) is helically applied between the lapping polyester tape and the aluminium foil (100% coverage) for extra protection against noise and interference.

Individually screen

A stranded tinned annealed copper drain wire(16/0.2mm) is helically applied between the lapping polyester tape and the aluminium foil (100% coverage) for protection against static noise, common mode noise and crosstalk between each pair.

Technical Data

- Rated voltage: 500 V AC
- Test voltage: 2.0 KV AC
- Max. conductor resistance: DC @20°C, acc to AS/NZS 1125
- Insulation Resistance: > 10M ohm/km @ 20°C

- Min. Bending Radius: 6 x cable diameter
- ROHS compliant: Yes
- EC low Voltage directive: Yes

Operating temperature:

Minimum conductor continuous operating temperature: -25°C.

Maximum conductor operating temperature: 90°C

Permanent continuous conductor operating temperature: 75°C

Short circuit temperature for 5 sec: 160°C

The maximum conductor temperature specified is based on the properties of insulation material but in practice may need to be derated to take account of joints and terminations and environmental conditions.

The cables should not be flexed when either the ambient or cable temperature is below 0°C



RALOS INST

Part No.	Nominal conductor area mm ² and number of cores	Approx. overall Ø mm	Approx. weight kg/km
INS2P0.5ESCSBK	0.5mm ² 2 pair	11.4	105
INS4P0.5ESCSBK	0.5mm ² 4 pair	13.4	190
INS6P0.5ESCSBK	0.5mm ² 6 pair	15.6	250
INS8P0.5ESCSBK	0.5mm ² 8 pair	17.0	316
INS12P0.5ESCSBK	0.5mm ² 12 pair	20.2	477
INS20P0.5ESCSBK	0.5mm ² 20 pair	26.0	771
INS24P0.5ESCSBK	0.5mm ² 24 pair	29.0	879
INS36P0.5ESCSBK	0.5mm ² 36 pair	34.6	1350

Part No.	Nominal conductor area mm ² and number of cores	Approx. overall Ø mm	Approx. weight kg/km
INS2P1.5ESCSBK	1.5mm ² 2 pair	14.8	195
INS4P1.5ESCSBK	1.5mm ² 4 pair	17.0	338
INS6P1.5ESCSBK	1.5mm ² 6 pair	19.4	446
INS8P1.5ESCSBK	1.5mm ² 8 pair	22.5	608
INS12P1.5ESCSBK	1.5mm ² 12 pair	27.1	860
INS20P1.5ESCSBK	1.5mm ² 20 pair	32.5	1345
INS24P1.5ESCSBK	1.5mm ² 24 pair	37.2	1676
INS36P1.5ESCSBK	1.5mm ² 36 pair	44.9	2350