Caledonian

PAS 5308 Instrumentation Cables

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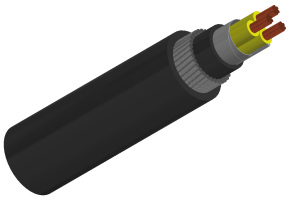
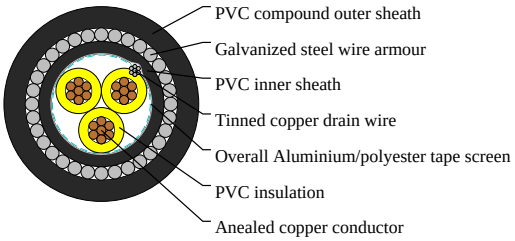
PAS 5308 Part 2 / Type 2 (Armoured Cables)

PVC-OS-SWA-PVC Stranded Conductor 3C2.5





APPLICATIONS

These cables are designed to connect electrical instrumentation and communication systems in and around process plants and similar applications. Generally used to transmit analogue or digital signals in measurement and process control where chemicals may be present. The armoured version are well adapted to underground use in industrial applications where chemical and mechanical protections are needed (refinery areas, chemical plant...).

CABLE CONSTRUCTION

Conductor:Annealed copper, mulitistranded(Class 2)to BS EN 60228
Insulation:PVC to BS EN 50290-2-21:2002,grade TI51
Binder tape:Non-hygroscopic binder tape of minimum thickness 0.023 mm
Collective screen:Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm²
Inner sheath:Extruded sheath of a PVC compound conforming to BS EN 50290-2-22:2002,grade TM51
Armour:Galvanized steel wire armour
Outer sheath:Extruded sheath of a PVC compound conforming to BS EN 50290-2-22:2002,grade TM51

COLOUR CODE

Insulation: up to 40 cores yellow with black numbers, 41 - 80 cores black with yellow numbers
Outer Sheath: Generally black

PHYSICAL AND THERMAL PROPERTIES

Temperature range:
above 0˚C(fixed installation)
-15˚C to +65˚C(during operation)

Electrical Properties

Conductor Area Size:2.5 mm²
Conductor Stranding(No.xmm):7x0.67
Conductor resistance(max):7.6 ohm/km
Insulation resistance(min):

Individual conductor:5 Gohm/km

Individual screen:1 Mohm/km

Max. L/R Ratio for adjacent cores(Inductance/Resistance):60 μH/ohm

Test voltage:2000 V

Rated voltage:300/500 V

DIMENSION AND PARAMETERS

No. of Cores	Nominal Cross-sectional Area	No. and Dia. of Wires	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Diameter Over Inner Sheath	Nominal Armour Wire Diameter	Nominal Outer Sheath Thickness	Nominal Diameter Over Armour	Nom. Overall Diameter
	mm²	no./mm	mm	mm	mm	mm	mm	mm	mm
3	2.5	7/0.67	0.6	0.9	8.8	0.9	1.4	10.6	13.4