Oil & Gas - Cable Solutions

Refineries & Petrochemical - Onshore

Instrumentation Cables
EN 50288-7 / IEC 60331

Cu/MGT/XLPE/IS or OS or IS+OS/LSZH
Cu/MGT/XLPE/IS or OS or IS+OS/LSZH/SWA/LSZH
300 V and 500 V


APPLICATION

Instrumentation cables are used to transmit digital or analogue signals for measurement or process control applications in fixed installation on onshore platforms. Prysmian offers a wide range of Instrumentation cables with diverse design options depending on the reference standards and customer requirements. On demand Prysmian can offer also instrumentation thermocouples cables.

STANDARDS & APPROVALS

EN 50288-7 Design guidelines
EN 50290-2 Series Insulation and sheathing materials
IEC 60332-1-2 Flame retardant
IEC 60332-3-24 or 22 Fire retardant
IEC 60331-21/60331 1/2 plus EN 50200 annex E/BS 6387 CWZ Fire Resistance
IEC-60754-1 /...-2 Halogen free properties
IEC-61034-1 / 2 Smoke emission properties
on request
CSA 22.2 n. 38/95 or IEC 60811

DESIGN & CONSTRUCTION

1 CONDUCTOR
Cu
Annealed copper wires according to cl. 2
Solid cl. 1 conductors (U) or Flexible cl. 5 conductors (F) available on demand
Tinned copper conductors (available on demand) from 0.5 to 2.5 mm² up to 50 pairs, up to 24 triples

2 FIRE BARRIER
MGT
Mica/glass tape

3 INSULATION
XLPE
HFFR are also available

4 SCREEN
IS/OS/IS+OS
Individual (IS)/Overall (OS)/Individual+Overall (IS+OS)
Aluminium/polyester tape in electrical contact with tinned annealed drain wire

5 INNER COVERING
(on only armoured versions)
LSZH

6 ARMOURING
(on only armoured versions)
SWA
Galvanized steel wire (SWA)
Galvanized steel braid (GSWB) or double steel tape (DSTA) available on demand

7 OUTER SHEATH
LSZH
Hydrocarbon resistant option available on demand
PERFORMANCES/RATINGS

**FIRE BEHAVIOUR**
- IEC 60332-1-2
- IEC 60332-3-22 or IEC 60332-3-24
- IEC 60331-21/60331 1/2 plus EN 50200 annex E
- BS 6387 CWZ

**CHEMICAL RESISTANCE**
- GOOD

**IMPACTS**
- GOOD
- EXCELLENT (armoured only)

**SMOKE DENSITY, CORROSIVITY AND TOXICITY**
- LOW EMISSION

**MIN. INSTALLATION TEMPERATURE**
- -15 °C (LSZH)
- (-40°C for Arctic Grade)

**MAX OPERATING TEMPERATURE**
- +90 °C (XLPE)
- +70 °C (HFFR)

**SHORT CIRCUIT TEMPERATURE**
- +250 °C

QUALITY & TESTING

Prysmian has a built-in multi-step quality assurance program, covering the production process from cable design and raw material purchases to final inspection and testing documentation.

The ISO 9001 quality system of Prysmian Group (together with ISO 14001 and OHSAS 18001) has been assessed, approved and is currently audited by SGS.