



## Oil & Gas - Cable Solutions

## Pipelines & LNG - Onshore

# Instrumentation Cables

EN 50288-7 / IEC 60331

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

Instrumentation cables with Chemical Barrier. Multi-core (pairs, triads - twisted). Screened. Armoured. Flame retardant. Fire resistant. Design option with insect repellent/rodent protection; Arctic Grade design option: all available on demand.

#### 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

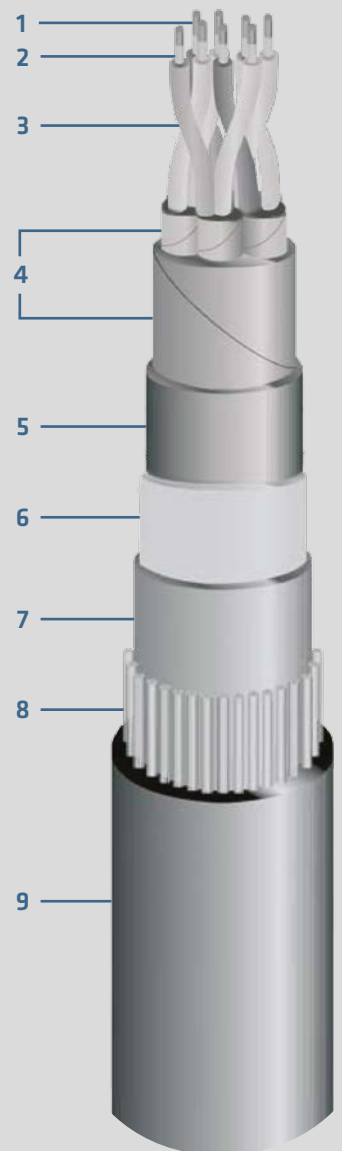
**EN 50288-7** Design guidelines  
**EN 50290-2** Insulation and sheathing materials  
**IEC 60332-1-2** Flame retardant  
**IEC 60332-3-24 or 22** Fire retardant  
**IEC 60331-21/60331 1/2 plus EN 50200 annex E/ BS 6387 CWZ** Fire Resistance  
**IEC-60754-1 / ...-2** Halogen free properties  
**IEC-61034-1 / 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
- 2 FIRE BARRIER**  
**MGT**  
 Mica/glass tape
- 3 INSULATION**  
**XLPE**  
 HFFR available on demand
- 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**  
**LSZH**
- 6 CHEMICAL BARRIER**  
**LS**  
 Lead alloy E  
 DRYLAM® (multilayer sheath) instead of Lead sheath available on demand
- 7 SEPARATION SHEATH**  
**LSZH**
- 8 ARMOURING**  
**SWA**  
 Galvanized steel wire (SWA)  
 Galvanized steel braid (GSWB) or double steel tape (DSTA) available on demand
- 9 OUTER SHEATH**  
**PVC or LSZH**  
 Hydrocarbon resistant option available on demand





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## 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



EXCELLENT

IMPACTS



GOOD

SMOKE DENSITY, CORROSIVITY AND TOXICITY



LOW EMISSION  
(only LSZH version)

MIN. INSTALLATION TEMPERATURE



-5 °C (PVC)  
-15 °C (LSZH)  
(-40°C for Arctic Grade)

MAX OPERATING TEMPERATURE



+90 °C (XLPE)  
+70 °C (HFFR)

SHORT CIRCUIT TEMPERATURE



+250 °C

LEAD



Lead Free  
(only Drylam™ option)

## 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.

This product information sheet is provided for reference only.

Please consult the factory or your representative to confirm all engineering information or refer to the related catalogues available in the local countries website.

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**Prysmian**  
Group