



Oil & Gas - Cable Solutions

Refineries & Petrochemical - Onshore

# Medium Voltage Cables

IEC 60502-2

**Cu/XLPE/LS/PVC or LSZH/AWA/PVC or LSZH (single core)  
Cu/XLPE/CWS or CTS/PVC or LSZH/LS/PVC or LSZH/SWA  
PVC or LSZH (multicore) 3,6/6 kV ... 18/30 kV**

Distribution cables from 3,6/6 up to 18/30 kV with Chemical Barrier. Flame retardant, low smoke and halogen free (only LSZH version). Design option with insect repellent/rodent protection; Arctic Grade design option; Fire Resistant version: all available on demand.

## APPLICATION

Medium Voltage cables used for underground power distribution applications in refineries, pipelines and other midstream and downstream facilities. Prysmian offers a wide range of MV cables with diverse design options depending on the reference standards and customer requirements.

## STANDARDS & APPROVALS

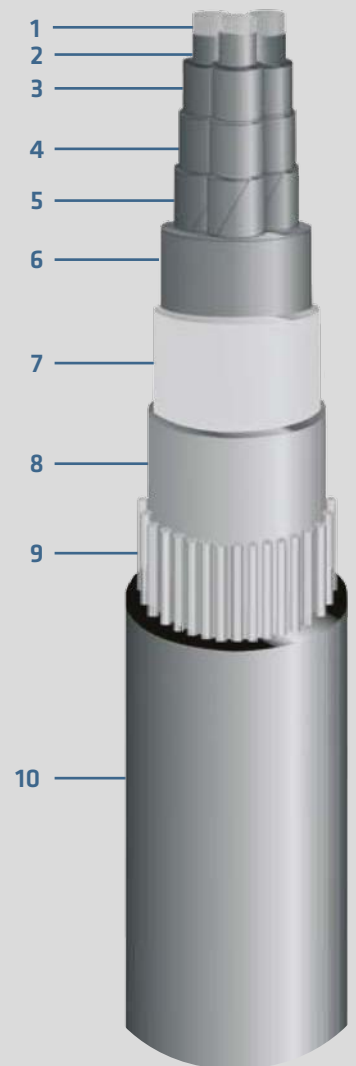
**IEC 60502-2** Design guidelines  
**IEC 60332-1-2** Flame retardance  
**IEC-60332-3-22 or 24** Fire retardance  
**IEC-60754-1 /...-2** Halogen free properties  
**IEC-61034-1 / 2** Smoke emission properties

on request

**CSA 22.2 n. 38/95 or IEC 60811**  
Cold bend/impact test at low temperature

## DESIGN & CONSTRUCTION

- 1 CONDUCTOR**  
**Cu**  
Annealed copper conductor according to IEC 60228 cl. 2 from 16 to 630 mm<sup>2</sup>, single core or three cores
- 2 CONDUCTOR SCREEN**  
Semiconducting layer
- 3 INSULATION**  
**XLPE**  
HEPR or EPR on demand
- 4 INSULATION SCREEN**  
Semiconducting layer
- 5 SCREEN**  
**CWS or CTS**  
Copper wires or copper tapes
- 6 BEDDING/INNER COVERING**  
**PVC or LSZH**
- 7 CHEMICAL BARRIER**  
**LS**  
Lead alloy E  
DRYLAM® (multilayer sheath) instead of Lead sheath available on demand
- 8 SEPARATION SHEATH**  
**PVC or LSZH**
- 9 ARMOURING**  
**SWA or AWA**  
Steel Wire Armour/Aluminium Wire  
Armour for single core (Double Steel Tape available on demand, aluminium for single core)
- 10 OUTER SHEATH**  
**PVC or LSZH**  
Hydrocarbon resistant option available on demand



R/P MV IEC Chem Barr - 09/2017

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**Prysmian**  
Group



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## PERFORMANCES/RATINGS

FIRE  
BEHAVIOUR



IEC 60332-1-2  
IEC 60332-3-22 or 24  
IEC 60331-21 (only FR version)

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

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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