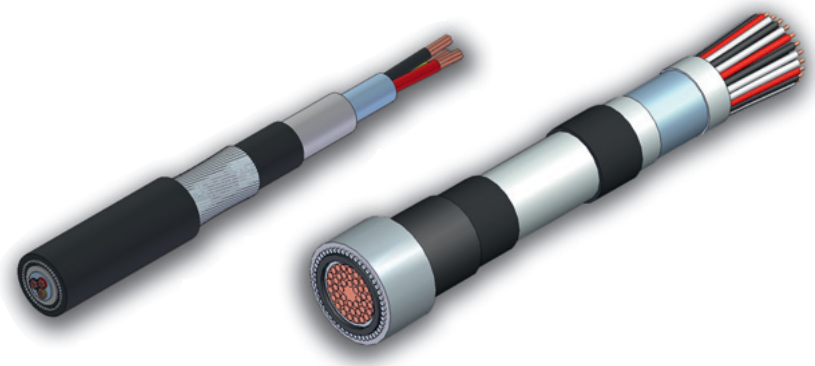
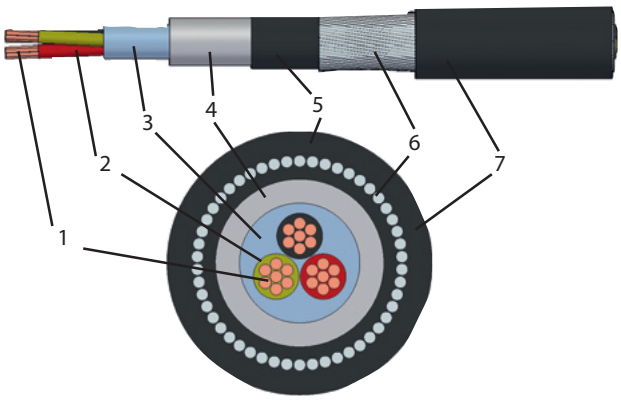
Innovation in the Oil, Gas and Petrochemical Industry.



CAMUNA CAVI

LAPP GROUP

Lead cables for refineries

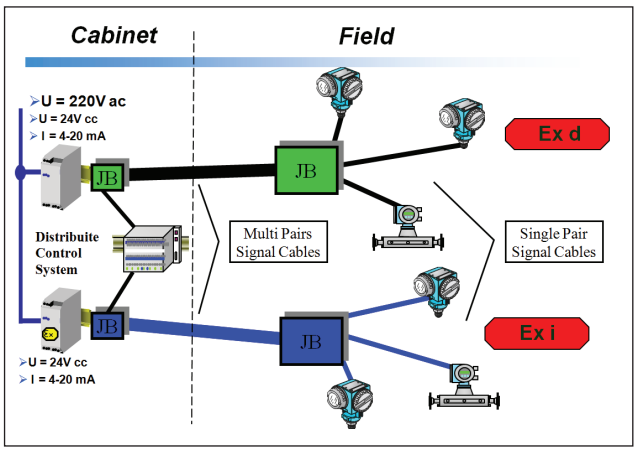


I. LEGEND
1. Conductor
2. Insulation
3. PVC
4. Lead Jacket Thickness 1 – 2 mm
5. PVC Inner sheath (Ref. Norm: EN 50288-7, BS 5308 Part 1 Type 3
6. Steel Wire Armor
7. Outer sheath

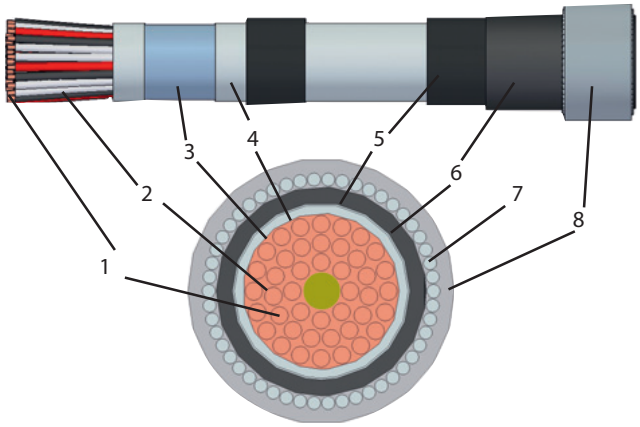
II. DISADVANTAGES OF LEAD VS AL/HDPE/PA
1. The weight of the cable is high.
2. The handling of the cable in installation is more difficult.
3. Bigger bending radius recommended:
   • With Lead Sheath, 15 time the O. D.
   • With AL-HDPE/Nylon, 10 time the O. D.
4. Higher cost for transportation.

III. APPLICATION

Process control cables application



AL/HDPE/PA Cables for refineries

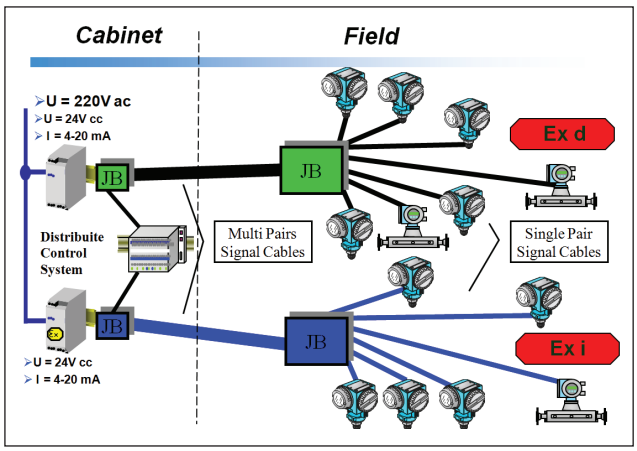


I. LEGEND
1. Conductor
2. Insulation
3. Aluminum-Pet Tape (if requested)
4. Aluminum Longitudinal (Thickness 0.15 mm)
5. HDPE-High Density Polyethylene Thickness 1-2 mm
6. PA – Polyamide (Nylon) Thickness 0.3-0.5 mm Ref. Norm EN 50288-7
7. Steel Wire Armor
8. Outer sheath

II. ADVANTAGES OF AL/HDPE/PA VS LEAD
1. For the same section we have more conductors and the possibility to connect more equipments.
2. The weight of the cable is strongly reduced.
3. The handling of the cable in installation is improved.
4. Reduced bending radius recommended:
   • With Lead Sheath, 15 time the O. D.
   • With AL-HDPE/Nylon, 10 time the O. D.
5. Lower cost for transportation.

III. APPLICATION

Process control cables application



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