



- Instrumentation cables 250 V
- Individual & Overall Screen (IOS)
- **Hydrocarbons resistant**

STANDARDS

Test IEC 60332-3-22 Cat.A

APPLICATIONS

These instrumentation and communication cables are used to **transmit analogue or digital signals in measurement and process control**. They are well adapted to **underground use in industrial applications where hydrocarbons may be present and mechanical protections are needed (refinery areas, chemical plant...)**. The individual screening of each pair limits the consequence of crosstalk.

Nexans code

- 1st serie = number of pairs, triples or quads: 01 to 27
- 2nd serie = pair (IP), triple (IT), quad (IQ)
- 3rd serie = conductor 05 (1 x 0.8 mm), 09 (7 x 0.4 mm) or 15 (7 x 0.52 mm)
- 4th serie = collective screen (EG), individual screen + collective screen (EI)
- 5th serie = mechanical protection: without metal tape (SF), with steel tape (FA), with lead and steel tape (PF)

Design

Conductor:

- Solid plain copper 0.50 mm² (1 x 0.80 mm) or stranded plain copper cross-section 0.88 mm² (7 x 0.40 mm)

Insulation:

- Polyvinyl chloride (PVC)

Individual screen:

- Polyester tape
- Tinned copper drain wire
- Aluminium/polyester tape

Individual sheath:

- Polyvinyl chloride (PVC)

Collective screen:

- Polyester tape
- Tinned copper drain wire
- Aluminium/polyester tape

Inner sheath:

- Polyvinyl chloride (PVC)

Armour:

- Double steel tape

Outer sheath:

- Polyvinyl chloride (PVC)
- Colour: light-blue or grey

Core identification

Pair: natural - red
Triple: natural - red - blue
Blue individual sheath printed with pair/triple number



Fire retardant
EN IEC 60332-3-22 (cat A)



Chemical resistance
Hydrocarbons resistant



Magnetic interference resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor temp. in service
70 °C

Marking

NEXANS 279 - Number of pair/triple IP/IT 05/09 EI FA IEC 60332-3-22(A) + metric marking

CONTACT

Market information
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ogroup.com

CHARACTERISTICS

Construction characteristics

| | |
|--------------------|---|
| Conductor material | Plain copper |
| Insulation | PVC |
| Individual screen | Tinned copper drain wire + aluminium/polyester tape |
| Individual sheath | PVC |
| Overall screen | Tinned copper drain wire + aluminium/polyester tape |
| Inner sheath | PVC |
| Armour type | Steel tapes |
| Outer sheath | PVC |

Dimensional characteristics

| | |
|----------------------------|----------------------|
| Conductor cross-section | 0.88 mm ² |
| Number of pairs | - |
| Number of triples | 7 |
| Conductor diameter | 1.2 mm |
| Diameter over insulation | 2.2 mm |
| Diameter over inner sheath | 19.9 mm |
| Diameter over armour | 21.0 mm |
| Minimum outer diameter | 22.9 mm |
| Maximum outer diameter | 25.3 mm |
| Approximate weight | 792 kg/km |

Electrical characteristics

| | |
|-------------------|-------|
| Operating voltage | 250 V |
|-------------------|-------|

Usage characteristics

| | |
|--|---------------------------|
| Fire retardant | EN IEC 60332-3-22 (cat A) |
| Chemical resistance | Hydrocarbons resistant |
| Electro magnetic interference resistance | Yes |
| Operating temperature, range | -20 ... 60 °C |
| Max. conductor temperature in service | 70 °C |
| Standard | NFM |



Fire retardant
EN IEC 60332-3-22 (cat A)



Chemical resistance
Hydrocarbons resistant



Electro magnetic interference resistance
Yes



Operating temp.
-20 ... 60 °C



Max. conductor temp. in service
70 °C

ELECTRICAL DATA NF M 87202

Electrical data

| Section | Maximum Voltage (V) | Voltage Test (V) | DC Lineic resistance at 20°C (Ω/km) | Self Inductance mH/km | | Capacitance between cond. (nF/km) |
|---------|---------------------|------------------|-------------------------------------|-----------------------|----------|-----------------------------------|
| | | | | Non Armoured | Armoured | |
| 05 | 250 | 2 000 | 37.5 | 0.33 | 0.38 | ≤145 |
| 09 | 250 | 2 000 | 21.4 | 0.31 | 0.36 | ≤160 |
| 15 | 250 | 2 000 | 12.1 | 0.31 | 0.36 | ≤180 |

SELLING AND DELIVERY INFORMATION

Minimum bending radius:

- 10 x outer diameter
- To be doubled during laying operations



Fire retardant
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Electro magnetic interference resistance
Yes



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-20 ... 60 °C



Max. conductor temp.in service
70 °C