



- 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 mm<sup>2</sup> (1 x 0.80 mm) or stranded plain copper cross-section 0.88 mm<sup>2</sup> (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  
industryprojects.business@lynxéo  
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	0.5 mm <sup>2</sup>
Number of pairs	12
Number of triples	-
Conductor diameter	0.8 mm
Diameter over insulation	1.6 mm
Diameter over inner sheath	20.9 mm
Diameter over armour	21.9 mm
Minimum outer diameter	23.8 mm
Maximum outer diameter	26.2 mm
Approximate weight	840 kg/km

### Electrical characteristics

Operating voltage	250 V
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### 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  
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