



- Instrumentation cables 250 V
- Overall Screen (OS)
- **Hydrocarbons resistant and enhanced resistance to aromatics**

### 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, in moist areas, where chemical and mechanical protections are needed. The lead cover brings an enhanced resistance to aromatics hydrocarbons.**

### 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 = overall screen (EG), individual screen + overall 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)

#### Collective screen:

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

#### Inner sheath:

- Polyvinyl chloride (PVC)

#### Lead covering

#### Armour:

- Paraffin-waxed crepe paper
- Double steel tape

#### Outer sheath:

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

### Core identification

Pair: natural - red  
 Triple: natural - red - blue  
 Quad: natural - red - blue - yellow  
 Natural cores printed with pair/triple number



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



Chemical resistance  
Hydrocarbons resistant



### Marking

NEXANS 279 - Number of pair/triple/quad IP/IT/IQ-05/09 EG PF IEC 60332-3-22(A) +

metric marking  
Electromagnetic interference resistance  
Yes



Operating temp.  
-20 ... 60 °C



Max. conductor temp.in service  
70 °C

## CHARACTERISTICS

### Construction characteristics

Conductor material	Plain copper
Insulation	PVC
Overall screen	Tinned copper drain wire + aluminium/polyester tape
Inner sheath	PVC
Lead Sheath	Yes
Armour type	Steel tapes
Outer sheath	PVC

### Dimensional characteristics

Conductor cross-section	0.88 mm <sup>2</sup>
Number of pairs	12
Number of triples	-
Number of quads	-
Conductor diameter	1.2 mm
Diameter over insulation	2.2 mm
Minimum outer diameter	25.2 mm
Maximum outer diameter	27.8 mm
Approximate weight	1605 kg/km
Diameter over inner sheath	18.8 mm
Lead cover diameter	21.4 mm

### 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  
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