

# **JTS** MV HEAT-SHRINKABLE JOINTS CATALOGUE 2021







# COMPANY PRESENTATION

# NEXANS ITALY - OFFIDA

# INTRODUCTION

The origins of the Nexans Offida began with a company called ITALCO founded in 1969. Three entrepreneurs from Milan set up the company in order to manufacture high quality metal-connectors for the Italian energy networks. The company's focus soon shifted towards the design and manufacturing of accessories for cable installers.

In 1990 the company was bought by the Alcatel group which for the first time delivered the global marketplace onto ITALCO's doorstep In 2000, Alcatel decided to separate its "cable" activities within the group on a global scale and as a result of this move Nexans was created.

Nexans, from the Latin word "nexus" (link), active in the energy cable production, soon decided to create a highly specialized group of companies known as the Power Cable Accessories Business Unit (PCABU) in order to focus efforts on the sales and development of MV cable and cable accessories.

With expertise in various technologies Nexans manufactures a wide variety of cable Accessories like cold shrink (Nexans Power Accessories France), heat shrink (Nexans Italia, Offida), slip on, screened connectors and bushings (Nexans Network Solutions, Euromold in Belgium), as well as ferrules and lugs with shear bolt technology (Nexans Power Accessories Germany, GPH in Hof).

With a long experience in the production of accessories for electrical cables, Nexans has the competence to work with customers on a global scale and create personalized solutions that are specifically adapted to our clients requirements and environment.





# PRODUCTION

The production unit of Nexans Italia in Offida has been certified according to ISO 9001, ISO 14001 as well as ISO/TS 22163 - IRIS (International Railway Industry Standard), ISO 45001 and ISO 37001.

In order to guarantee the highest level of quality to our end customers, the Offida plant is specialized in the production of all the core-components of its products such as: heat-shrink tubes, mastics and resins for electrical applications.









### **R&D AND LABORATORY**

**Heatshrink tubes** Heatshrink technology dates back to 1960s. In Nexans, thanks to R&D activity, HS technology has been improved and tailored according to the market needs. Today we produce a complete range of tubes to cover Low and Medium voltage applications till 52kV in our Extruders/ Expanders lines with diameters starting from 20mm till 300mm and up to 4 different layers.

**Mastics** for electrical use: the complete range of our mastics have been developed and are manufactured totally in company, they are produced by means of a 630 liter mixer in a dedicated part of the plant.

**Resins** for electrical use, casting and insulating, have been designed by Nexans Italy for more than 35 years.

Our group of engineers and technicians use the most advanced tools and equipment to create, verify and test all our products among the different laboratories and material research centers of the Nexans group.

Offida has extensive know how in the field of heat shrink materials as well as mastics.

We are well equipped to perform physical and chemical analysis of insulating, anti-tracking, and stress control materials, both for tubing and mastics. We supply training and failure analysis for all our customers. In the electrical laboratory we can perform type test and routine test (PD measurement at hot and ambient temperature, heating cycles in air and water, humidity and salt fog). 17JTS1 W (CS) - 24JTS1 W (CS)

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMOURED SINGLE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 24 kV

#### **APPLICATION**

17-24JTS1 W heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

17-24JTS is the NEW high performance, compact and easy to install joint. A single body with all the electrical functions integrated!

The Nexans "TRIPLE GT125" is an integrated stress control field, insulating and conductive tube, which can withstand high voltage applications up to 24kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is ensured by a tinned copper stocking with constant force roll springs in case of copper wire/tape screen (CS type) or with a standard tinned copper tape plus an earthing ferrule in case of only copper wire screen (W type).

The outer sheath is restored with heavy wall adhesive lined tubing. MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
12/17,5	17JTS1.95W-(CS)	25÷95	600	12-24	20-38
12/17,5	17JTS1.240W-(CS)	70÷240	600	16-32	24-44
12/17,5	17JTS1.300W-(CS)	95÷300	600 (750 CS)	18-34	26-48
12/17,5	17JTS1.400W-(CS)	185÷400	750 (1000 CS)	22-38	30-52
24	24JTS1.95W-(CS)	25÷95	600	18-28	24-40
24	24JTS1.240W-(CS)	70÷240	600	20-36	26-46
24	24JTS1.300W-(CS)	95÷300	600 (750 CS)	22-38	28-52
24	24JTS1.400W-(CS)	185÷400	750 (1000 CS)	24-40	32-54

- 17JTS type tested with BIL at 95 kV, PD at 2Uo (≤ 10 pC) - 24JTS type tested with BIL at 150 kV, PD at 2Uo (≤ 10 pC)



For cables with additional vapor screen please contact our sales office.



CS type is suitable both cables with copper wire / copper tape screen. W type is supplied with standard metallic tape design and earth ferrule for copper wire screen cable.



For other cable types please contact our sales office.



Please contact our sales office when inquiring joints for same type cables with different cross sections



Various earth connection design solutions exist for armoring. For exact details contact our details conta sales office.



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IEC 60502-4

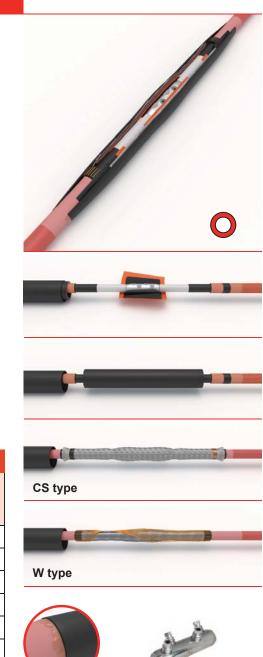
Design accommodates

various connector/ ferrule types.

**Specifications and Standards** CENELEC HD 629.1 S2



Various earth for connection kits are available for screen connection. For exact details contact our sales office.



# 36JTS1 W (CS) - 42JTS1 W (CS)

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMOURED SINGLE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 42 kV

#### **APPLICATION**

**36-42JTS1 W** heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**36-42JTS** is the **NEW** high performance, compact and easy to install joint. Double bodies with all the electrical functions integrated!

The Nexans **36-42JTS** is an integrated coextruded "stress control field + insulating" nested in a coextruded "insulating + conductive" tube, which can withstand high voltage applications up to 42kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is ensured by a tinned copper stocking with constant force roll springs in case of copper/wire tape screen **(CS type)** or with a standard tinned copper tape plus an earthing ferrule in case of only copper wire screen **(W type)**.

The outer sheath is restored with heavy wall adhesive lined tubing. MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
36	36JTS1.95W-(CS)	25÷95	600 (750 CS)	18-32	32-48
36	36JTS1.240W-(CS)	70÷240	750 (900 CS)	24-38	34-54
36	36JTS1.300W-(CS)	95÷300	750 (900 CS)	26-40	34-58
36	36JTS1.400W-(CS)	185÷400	750 (1000 CS)	28-44	38-62
42	42JTS1.95W-(CS)	25÷95	600 (750 CS)	20-34	34-50
42	42JTS1.240W-(CS)	70÷240	750 (900 CS)	26-42	38-54
42	42JTS1.300W-(CS)	95÷300	750 (900 CS)	28-46	40-60
42	42JTS1.400W-(CS)	185÷400	750 (1000 CS)	32-48	42-64

- 36JTS type tested with BIL at 200 kV



For cables with additional vapor screen please contact our sales office.



CS type is suitable W both cables with wit copper wire / me copper tape and screen. for



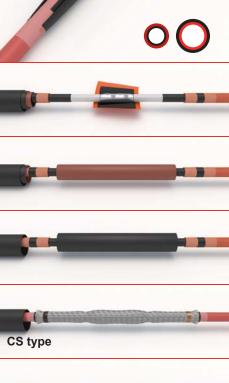
W type is supplied with standard metallic tape design and earth ferrule for copper wire screen cable.



Please contact our sales office when inquiring joints for same type cables with different cross sections.



Various earth connection design solutions exist for armoring. For exact details contact our sales office.







Specifications and Standards CENELEC HD 629.1 S3 IEC 60502-4

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Design accommodates

various connector/ ferrule types.



Various earth for connection kits are available for screen connection. For exact details contact our sales office.



# 17JTS1 WSK2.0 (MC) - 24JTS1 WSK2.0 (MC)

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMORED SINGLE CORE POLYMERIC CABLES WITH AI TAPE SCREEN (AHXAMK-WP) Up to Umax 24 kV

#### **APPLICATION**

**17-24JTS1 WSK2.0** heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with Al tape screen, to accommodate either crimped or mechanical connectors (MC).

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**17-24JTS** is the **NEW** high performance, compact and easy to install joint. A single body with all the electrical functions integrated!

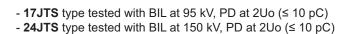
The Nexans "TRIPLE GT125" is an integrated stress control field, insulating and conductive tube, which can withstand high voltage applications up to 24kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is ensured by a tinned copper stocking with roll constant force springs.

The outer sheath is restored with heavy wall adhesive lined tubing. Wrap around sleeve, with Al foil, available upon request **(WSK3.0)**. Kit with cheese grader instead of constant force roll springs available **(WSK FC)**. **MC types** are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
12/17,5	3x17JTS1.95WSK 2.0	25÷95	600	12-24	20-38
12/17,5	3x17JTS1.240WSK 2.0	70÷240	600	16-32	24-44
12/17,5	3x17JTS1.300WSK 2.0	95÷300	750	18-34	26-48
12/17,5	3x17JTS1.400WSK 2.0	185÷400	750	22-38	30-52
24	3x24JTS1.95WSK 2.0	25÷95	600	18-28	24-40
24	3x24JTS1.240WSK 2.0	70÷240	600	20-36	26-46
24	3x24JTS1.300WSK 2.0	95÷300	750	22-38	28-52
24	3x24JTS1.400WSK 2.0	185÷400	750	24-40	32-54





For other cable types please contact our sales office.



Please contact our Va sales office when coinquiring joints for so same type cables ar with different cross de sections. sa



Various earth connection design accommodates solutions exist for armoring. For exact details contact our sales office.



Various earth for connection kits are available for screen connection. For exact details contact our sales office.





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Specifications and Standards CENELEC HD 629.1 S2 IEC 60502-4

# 36JTS1 WSK2.0 (MC) - 42JTS1 WSK2.0 (MC)

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMOURED SINGLE CORE POLYMERIC CABLES WITH AI TAPE SCREEN (AHXAMK-WP) Up to Umax 42 kV

#### **APPLICATION**

**36-42JTS1 WSK2.0** heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with AI tape screen, to accommodate either crimped or mechanical connectors (MC).

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**36-42JTS** is the **NEW** high performance, compact and easy to install joint. Double bodies with all the electrical functions integrated!

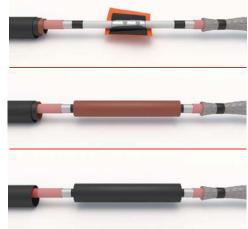
The Nexans **36-42JTS** is an integrated coextruded "stress control field + insulating" nested in a coextruded "insulating + conductive" tube, which can withstand high voltage applications up to 42kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is ensured by a tinned copper stocking with roll constant force springs.

The outer sheath is restored with heavy wall adhesive lined tubing. Wrap around sleeve, with Al foil, available upon request **(WSK3.0)**. Kit with cheese grader instead of constant force roll springs available **(WSK FC)**. **MC types** are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
36	3x36JTS1.95WSK2.0	25÷95	750	18-32	32-48
36	3x36JTS1.240WSK2.0	70÷240	1000	24-38	34-54
36	3x36JTS1.300WSK2.0	95÷300	1000	26-40	34-58
36	3x36JTS1.400WSK2.0	185÷400	1000	28-44	38-62
42	3x42JTS1.95WSK2.0	25÷95	1000	20-34	34-50
42	3x42JTS1.240WSK2.0	70÷240	1000	26-42	38-54
42	3x42JTS1.300WSK2.0	95÷300	1000	28-46	40-60
42	3x42JTS1.400WSK2.0	185÷400	1000	32-48	42-64







Specifications and Standards CENELEC HD 629.1 S3 IEC 60502-4

- 36JTS type tested with BIL at 200 kV



For other cable types please contact our sales office.



Please contact our Va sales office when co inquiring joints for so same type cables arr with different cross de coetione



Various earth connection design solutions exist for armoring. For exact details contact our sales office.



Various earth for connection kits are available for screen connection. For exact details contact our sales office.



### 17JTS3 CW - 24JTS3 CW

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMOURED THREE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 24 kV

#### **APPLICATION**

17-24JTS3 CW heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

17-24JTS is the NEW high performance, compact and easy to install joint. A single body with all the electrical functions integrated!

The Nexans "TRIPLE GT125" is an integrated stress control field, insulating and conductive tube, which can withstand high voltage applications up to 24kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is ensured with a standard metallic tape plus earthing ferrules (CW type) while for tape screen an additional earthing braid is provided (AW type).

The outer sheath is restored with heavy/medium wall adhesive lined tubing. Vapor barrier protection available upon request (VS).

MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
12/17,5	17JTS3.95CW	25÷95	1200	12-24	38-66
12/17,5	17JTS3.240CW	70÷240	1200	16-32	46-80
12/17,5	17JTS3.300CW	95÷300	1400	18-34	52-86
12/17,5	17JTS3.400CW	185÷400	1400	22-38	62-94
24	24JTS3.95CW	25÷95	1200	18-28	46-72
24	24JTS3.240CW	70÷240	1400	20-36	48-88
24	24JTS3.300CW	95÷300	1400	22-38	54-92
24	24JTS3.400CW	185÷400	1600	24-40	68-96

- **17JTS** type tested with BIL at 95 kV, PD at 2Uo (≤ 10 pC) - 24JTS type tested with BIL at 150 kV, PD at 2Uo (≤ 10 pC)



For other cable types please contact our sales office.



Please contact our sales office when inquiring joints for same type cables with different cross sections



Design accommodates connection design solutions exist for armoring. For exact details contact our sales office. various connector/ ferrule types.



Various earth for connection kits are available for screen connection. For exact details contact our sales office





**Specifications and Standards** CENELEC HD 629.1 S2 IEC 60502-4

### 36JTS3 CW - 42JTS3 CW

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR UNARMOURED THREE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 42 kV

#### **APPLICATION**

**36-42JTS3 CW** heat-shrinkable straight joints are designed for unarmoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**36-42JTS** is the **NEW** high performance, compact and easy to install joint. Double bodies with all the electrical functions integrated!

The Nexans **36-42JTS** is an integrated coextruded "stress control field + insulating" nested in a coextruded "insulating + conductive" tube, which can withstand high voltage applications up to 42kV

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

The electrical continuity of the screen is achieved with a standard metallic tape plus earthing ferrules (**CW type**) while for tape screen an additional earthing braid is provided (**AW type**).

The outer sheath is restored with heavy/medium wall adhesive lined tubing. Vapor barrier protection available upon request (VS). MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
36	36JTS3.95CW	25÷95	1400	18-32	64-92
36	36JTS3.240CW	70÷420	1600	24-38	66-112
36	36JTS3.300CW	95÷300	1600	26-40	70-118
36	36JTS3.400CW	185÷400	1800	28-44	80-132
42	42JTS3.95CW	25÷95	1400	20-34	64-94
42	42JTS3.240CW	70÷420	1600	26-42	66-114
42	42JTS3.300CW	95÷300	1600	28-46	70-122
42	42JTS3.400CW	185÷400	1800	32-48	80-136

- 36JTS type tested with BIL at 200 kV



For other cable types please contact our sales office.



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Please contact our



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Various earth Design connection design solutions exist for armoring. For exact details contact our sales office.



Various earth for connection kits are available for screen connection. For exact details contact our sales office.







Specifications and Standards CENELEC HD 629.1 S3 IEC 60502-4



# 17JTS3 K - 24JTS3 K

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR ARMOURED THREE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 24 kV

#### **APPLICATION**

**17-24JTS3 K** heat-shrinkable straight joints are designed for armoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**17-24JTS3 K** is the **NEW** high performance, compact and easy to install joint. A single body with all the electrical functions integrated!

The Nexans **"TRIPLE GT125"** is an integrated stress control field, insulating and conductive tube, which can withstand high voltage applications up to 24kV.

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

Screen connection and armour continuity material whether SWA, STA, DSTA are included in the kit.

The outer sheath is restored with heavy/medium wall adhesive lined tubing. MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
12/17,5	17JTS3.95K	25÷95	1200	12-24	40-74
12/17,5	17JTS3.240K	70÷240	1400	16-32	48-92
12/17,5	17JTS3.300K	95÷300	1400	18-34	56-98
12/17,5	17JTS3.400K	185÷400	1600	22-38	64-102
24	24JTS3.95K	25÷95	1200	18-28	48-82
24	24JTS3.240K	70÷240	1400	20-36	54-98
24	24JTS3.300K	95÷300	1600	22-38	58-98
24	24JTS3.400K	185÷400	1800	24-40	66-106

- 17JTS type tested with BIL at 95 kV, PD at 2Uo (≤ 10 pC)
 - 24JTS type tested with BIL at 150 kV, PD at 2Uo (≤ 10 pC)



For other cable types please contact our sales office.



Please contact our sales office when inquiring joints for same type cables with different cross conting

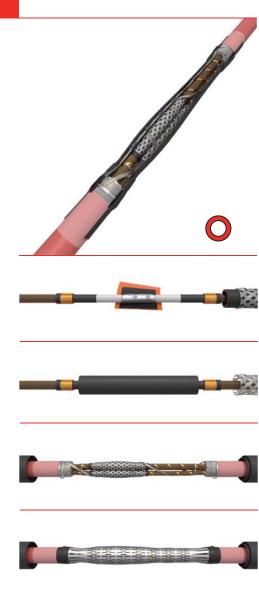


Various earth connection design solutions exist for armoring. For exact details contact our sales office.

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Various earth for connection kits are available for screen connection. For exact details contact our sales office.





Specifications and Standards CENELEC HD 629.1 S2 IEC 60502-4

### 36JTS3 K - 42JTS3 K

HEAT-SHRINKABLE MV STRAIGHT JOINTS FOR ARMOURED THREE CORE POLYMERIC CABLES WITH COPPER WIRE OR COPPER TAPE SCREEN Up to Umax 24 kV

#### **APPLICATION**

**36-42JTS3 K** heat-shrinkable straight joints are designed for armoured, plastic insulated cables with Cu wire or Cu tape screen, to accommodate either crimped or mechanical connectors.

#### **TECHNICAL CHARACTERISTICS AND DESIGN**

**36-42JTS** is the **NEW** high performance, compact and easy to install joint. Double bodies with all the electrical functions integrated!

The Nexans **36-42JTS** is an integrated coextruded "stress control field + insulating" nested in a coextruded "insulating + conductive" tube, which can withstand high voltage applications up to 42kV

A double layer pad with conductive rubber inside and HK orange mastic outside ensure a Faraday cage and smooth the effect of the electrical field and of the voltage gradient in the connector area.

Screen connection and armour continuity material whether SWA, STA, DSTA are included in the kit.

The outer sheath is restored with heavy/medium wall adhesive lined tubing. MC types are supplied with "Nexans GPH" mechanical connectors.

Um kV	Туре	Section range (mm²)	Length L (mm)	DOI Insulation (mm)	DOE Outer (mm)
36	36JTS3.95K	25÷95	1200	18-32	64-92
36	36JTS3.240K	70÷240	1400	24-38	66-112
36	36JTS3.300K	95÷300	1400	26-40	70-118
36	36JTS3.400K	185÷400	1600	28-44	80-132
42	42JTS3.95K	25÷95	1200	20-34	64-94
42	42JTS3.240K	70÷240	1400	26-42	66-114
42	42JTS3.300K	95÷300	1600	28-46	70-122
42	42JTS3.400K	185÷400	1800	32-48	80-136

- 36JTS type tested with BIL at 200 kV



For other cable types please contact our sales office.



Please contact our Va sales office when coinquiring joints for so same type cables ar with different cross de sections. sa



Various earth Design accommodates solutions exist for armoring. For exact details contact our sales office.

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Various earth for connection kits are available for screen connection. For exact details contact our sales office.







Specifications and Standards CENELEC HD 629.1 S3 IEC 60502-4



- QUICK AND EASY TO INSTALL, SHORT AND SLIM DESIGN
- EXCELLENT INSULATING PROPERTIES
- ADVANCED SCREEN CONNECTION
  AND ARMOUR CONTINUITY
- HEAVY WALL TUBING FOR HIGH
  MECHANICAL STRENGHT AND IMPACT
  RESISTANCE
- PROOF AGAINST WATER
  PENETRATION AND CHEMICALS
  AGGRESSION
- STABILIZED UV PROTECTION
- HALOGEN FREE MATERIAL CONTENT
- COMPLIANT TO REACH REGULATIONS
- PREMIUM TECHNICAL SUPPORT
- MADE IN EU



#### Nexans brings energy to life.

For many years we have been producing single, double and tripie layer heat-shrink tubing with excellent material and processing properties. This enables us to combine a comprehensive range of technically mature and high-quality power cable accessories in accordance with international industry standards and European norms.

Our products are competitive due to quality, performance and technical advance.

Please ask for straight joints, transition joints, terminations, tubes, end caps and mastics for single and threecore cables in low and medium voltage applications.



All Enquiries: tel: +44 (0)1744 762 929 email: sales@etechcomponents.com web: www.etechcomponents.com

