## Control Cables

□ □ □ □ □ □ □ x □
1 2 3 4 5 6 7 8

**1. Basic type**
- N VDE standard
- (N) or X as per VDE

**2. Insulation material**
- Y Thermoplastic resins
- X Crosslinked thermoplastic resins
- G Elastomers
- HX Halogen-free materials

**3. Cable designation**
- A Cored cable
- D solid wire
- AF Fine wire cored cable
- F Socket core
- L Fluorescent tube cable
- LH Connecting cable light mechanical load
- MH Connecting cable medium mechanical load
- SH Connecting cable heavy mechanical load
- SSH Connecting cable special load
- SL Control cable/welding cable
- S Control cable
- LS Light control cable
- FL Flat cable
- Si Silicone cable
- Z Twin calbe
- GL Glass filament
- Li Stranded core to VDE 0812
- LiF Stranded core to VDE 0812, superfine wire

**4. Special features**
- T Support wire
- Ö Enhanced oil resistance
- U Flame-retardant
- w Heat resistant, weather resistant
- FE Insulation retained for a limited time
- C Screen braiding
- D Screening as envelope with copper wire
- S Steel wire braid as mechanical protection

**5. Sheaths**
as point 2. Insulating material
P/PUR polyurethane

**6. Protective conductor**
- -O without protective conductor
- -J with protective conductor

**7. Number of cores**
... No. of cores

**8. Conductor cross-section**
in mm²

Example: **NSHTÖU 24G 1.5**
ÖLFLEX® CRANE NSHTÖU – VDE approved, 24-core with protective conductor, cross-section 1.5mm²





## Harmonised Cables

□ □ □ □ □ - □ □ □ □
1 2 3 4 5 6 7 8 9

**1. Basic type**
- H harmonised type
- A national type

**2. Rated voltage**
- 01 100/100Volt
- 03 300/300Volt
- 05 300/500Volt
- 07 450/750Volt

**3. Insulation material**
- V PVC
- V2 PVC +90 °C
- V3 PVC cold-flexible
- B Ethylenpropylen rubber
- E PE Polyethylene
- X XPE, crosslinked PE
- R Rubber
- S Silicone rubber

**4. Outer/inner sheath material**
- V PVC
- V2 PVC +90 °C
- V3 PVC cold-flexible
- V5 PVC with enhanced oil resistance
- R Rubber
- N Chloroprene rubber
- Q Polyurethane
- J Glass fibre braid
- T Textile braid

**5. Special features**
- C4 Copper screen braiding
- H Flat cable, separable
- H2 Flat cable, not separable
- H6 Flat cable, not separable, for lifts
- H8 Helical/spiral cable

**6. Conductor type**
- U Single wire
- R Multi-wire
- K Fine wire (static)
- F Fine wire (flexible)
- H Superfine wire
- Y Tinsel wire
- D Fine wire core for welding cable
- E Superfine core for welding cable

**7. Number of cores**
... No. of cores

**8. Protective conductor**
- X without protective conductor
- G with protective conductor

**9. Conductor cross section**
in mm²

Example: **H05 VV-F 3G 1.5**
medium PVC sheathed cable 3-core with protective conductor, cross-section 1.5 mm²

## Telephone Cables and Leads

□ □ - □ □ □ □ x □ x □ □ □

1 2 3 4 5 6 7 8 9 10

**1. Basic type**
- A Outside cable
- G Mine cable
- J Installation cable
- Li Rubber sheathed cable
- S Jumper cable

**2. Additional information**
- B Lightning protection make-up
- J Induction protection
- E Electronics

**3. Insulation material**
- Y PVC
- 2Y Polyethylene
- O2Y Cellular-PE
- 5Y PTFE
- 6Y FEP
- 7Y ETFE
- P Paper

**4. Make-up features**
- F Petroleum jelly filling
- L Aluminium sheath
- LD Corrugated Al sheath
- (L) Aluminium strip
- (ST) Metal foil screen
- (K) Copper strip screen
- (C) Copper braid screen
- (Z) Steel wire braid
- W Corrugated steel sheath
- M Lead sheath
- Mz Special lead sheath
- b Armouring
- c Jute sheath + ground
- E Ground layer + strip

**5. Sheath material**
(see 3. insulation)

**6. Number of elements**
... number of stranding elements

**7. Stranding elements**
- 1 Single core
- 2 Pair

**8. Conductor diameter**
... in mm

**9. Stranding element**
- F star-quad (railway)
- St star-quad (phantom)
- StI star-quad (trunk cable)
- StIII star-quad (local cable)
- TF star-quad for TF
- S signal cable (railway)
- PiMF screened pair

**10. Type of stranding**
- Lg twisted in layers
- Bd twisted in bundles

Example: **A2Y(L)2Y 6 x 2 x 0.8 Bd**
Telephone cable for local network with
PE insulation and composite layer sheath





## Fibre optic cables complying with VDE 0888

□ □ - □ □ □ □ x □ x □ □ □ □

1 2 3 4 5 6 7 8 9 10 11

**1. Basic type**
- A Outdoor cable
- AT Outdoor cable, divisible
- I Indoor cable

**2. Fibres**
- D Bundled cores, filled
- V Full core
- H Loose tube, unfilled
- W Loose tube, filled
- B Bundled cores, unfilled

**3. Other structural elements**
- F Petroleum jelly filling
- Q Swelling tape
- S Metal element in cable core

**4. Sheath**
- 2Y PE sheath
- (L)2Y Layered sheath
- (D)2Y PE sheath with plastic barrier layer
- (ZN)2Y PE sheath with non-metallic strain relief elements
- (L)(ZN)2Y Layered sheath with non-metallic strain relief elements
- (D)(ZN)2Y PE sheath with plastic barrier layer and non-metallic strain relief elements
- B Armouring
- BY Armouring with PVC casing
- B2Y Armouring with PE casing

**5. Number of fibres**

**6. Fibre type**
- G Gradient fibre glass/glass
- E Monomode fibre glass/glass
- S Stepped fibre glass/glass
- K Stepped fibre glass/plastic

**7. Fibre core diameter**

**8. Fibre sheath diameter**

**9. Attenuation coefficient in dB/km**

**10. Optical window**
- A 650 nm
- B 850 nm
- F 1300 nm
- H 1550 nm

**11. Bandwidth in MHz and dispersion in ps/nm/km**