

## Concentric Core Loose Tube 12-144 Fibers – TOL 401 2012

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### Duct Cable GRHLDV Dielectric



#### Features

- Easy to strip and identify fibers
- Concentric core design
- Dielectric
- ITU-T-G652.D fibers

#### Application

GRHLDV is a loose tube cable using concentric core design, enabling a cost effective solution. GRHLDV is designed for installation in ducts.

The cable is completely dielectric making it suitable for installation in environments where there is electrical interference.

Each tube contains up to 12 fibers, and the cable up to 12 tubes.



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### Typical Data

#### Temperature range

Operation ..... -30 to +70°C  
 Storage ..... -40 to +70°C  
 Installation ..... -15 to +60°C

#### Bending radius

During installation .....  $\geq 10 \times$  cable diameter  
 During operation .....  $\geq 15 \times$  cable diameter

#### Tensile force

During installation .....  $\leq 2.7$  kN  
 During operation .....  $\leq 1.5$  kN

#### Crush resistance

Loose tube 2.4 mm .....  $\leq 1.5$  kN/100 mm  
 Loose tube 3.0 mm .....  $\leq 2.0$  kN/100 mm

#### Water penetration

Complies with ..... IEC 60794-1-2-F5

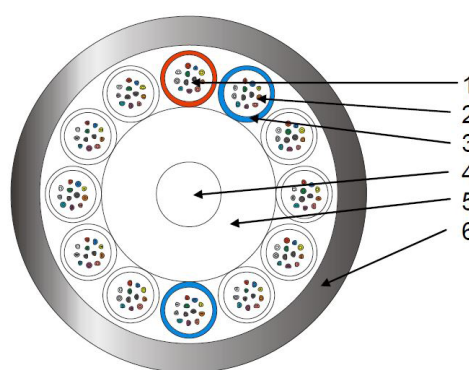
### Delivery Information

Supplied lengths ..... 2-12 km

Mechanical and environmental test in accordance with IEC 60794-1  
 Fiber parameters and tests according to the IEC series 60793-2 and 60793-1  
 Loose tube 2.4 mm for  $\leq 48$  fibers  
 Loose tube 3.0 mm for  $> 48$  fibers

### Design

1. Primary coated fiber ..... Silica, acrylate
2. Filling compound ..... Thixotropic gel
3. Loose tube ..... PBT
4. Central strength member ..... Glass fiber reinforced plastic
5. Water blocking ..... Polybutene based gel
6. Sheath ..... Polyethylene (HDPE) (black)



### Ordering Information

Product Number	Number of Fibers	Tubes/Fibers	Tube Diameter (mm)	Cable Diameter (mm)	Weight (kg/km)
TOL 401 2012/12A	12	3x4	2.4	11	100
TOL 401 2012/24A	24	6x4	2.4	11	100
TOL 401 2012/48A	48	6x8	2.4	11	100
TOL 401 2012/72A	72	6x12	3.0	13	140
TOL 401 2012/96A	96	8x12	3.0	15	180
TOL 401 2012/144A	144	12x12	3.0	19	280

This ordering information covers standard types of the GRHLDV cable.

The order number corresponds to a cable with standard single-mode fibers colored according to standard Hexatronic color code (see product information “Standard Hexatronic fiber color code”).

Other combinations such as:

- fiber types
- fiber colors
- total number of fibers
- number of fibers in each tube

and specific technical information is available on request.