

Sealing system



Sealing element



Sealing tape

Test facility and instruments



Temperature cycling

Acc. to DIN EN 60794-1-2 / Method F1,
Chamber IEC 60068-2-14, Sect. 2 Test Nb
Equipment WT 450/70, climate chamber
Software SIMPATI 4.02

Tightness control system

Equipment meM-ADDA
Software NextView 4

DPLH 315/2



Optical measuring technology

Equipment Agilent E6000C Mini OTDR
Module: E6012 A (1550 nm / 1625 nm)

Hewlett Packard E4310A
Lab OTDR
Module: E4319A (1310 nm / 1550 nm)

Evaluation software

Agilent E6091A OTDR Toolkit II



Specimens during temperature cycling -20°C to +30°C

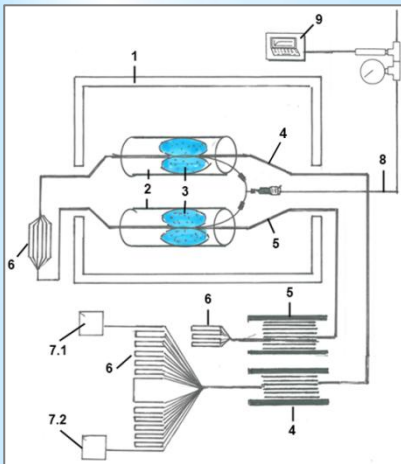
Climate chamber IEC 60068-2-14 Sect. 2 Test Nb

Specimen No: 178A /2011

A-DQ (ZN) 2Y 6x4 E9/ 125
Sealing element ADE/V L 100-x

178i /2011
I-D (ZN) H 2x12 E9/ 125
Sealing element ADE/V L 100-x

Test setup Test specification FO17_02 PG4 Test No. 1346 V1



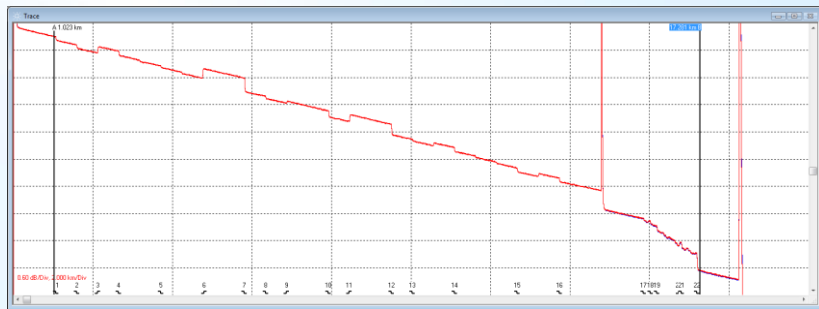
- 1 Climate chamber IEC 60068-2-14 Sect. 2, Test Nb
- 2 Cable protection tube 110 x 2.8 mm
- 3 Sealing element ADE/V L 100-x width 135 mm
- 4 Indoor cable I-D(ZN)H 2 x 12 E9/125
- 5 Outdoor cable A-DQ (ZN) 2Y 6 x 4 E9/125
- 6 All optical fibres fusion-spliced in series
- 7 Lab OTDR
(7.1) measuring ranges 1550 nm and (7.2) 1625 nm
- 8 Connecting cable ADE /V L 100-x for monitoring pressure
- 9 Measuring PC

Test results

Attenuation change in 1550 nm und 1625 nm range along the cable route consisting of cable types A-DQ(ZN)2Y 6x4 E9/125 and I-D(ZN)H 2x12 E9/125

Measuring wavelength 1550 nm
(Measuring direction B-A)

Attenuation change
-0.002 dB



Measuring wavelength 1625 nm
(Measuring direction A-B)

Attenuation change
-0.025 dB

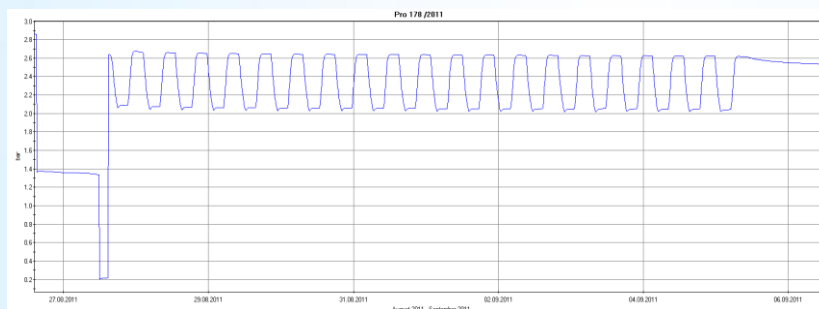


Test result:
The test was passed successfully;
attenuation change
< 0.05 dB

Tightness of the sealing elements connected in series during temperature cycling -20°C to +30°C (20 cycles)

Test result:

The test was passed successfully.
Tightness of the sealing elements
≤ 0.15 bar



FO 7 Part 50

Test Report No.: PB 178/2011

Attenuation change in indoor and outdoor
single-mode optical fibre cables due to lateral pressure,
with temperature cycling at -20°C +30°C

Product:

- Reusable sealing cushion with valve,
Type UA GE /V (valve) / ADE /V (valve) L 50 to 150
- Optical fibre buried or duct cable and
- Optical fibre indoor single-mode

Area of application:

For sealing cable ducts and service entries in buildings against
gas diffusion and temporarily accumulating water seepage

Client:

Wolf Kabeltechnik GmbH, Zazenhäuser Str. 52, 70437 Stuttgart, Germany

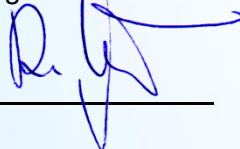
Test specifications:

- Based on DIN EN 60794-3:2002 and 60794-3-10:2002
Sect. 9.4 Property change "Lateral pressure"
- Based on Deutsche Telekom T-Com TS 0307/96 Abs. 4-6
Technical Specification "Sealing element for occupied cable ducts"
- Based on DIN 18195-1, 18195-5 and
18195-6: August 2000 "Waterproofing of buildings"
- Fibre Optics CT GmbH FO 17_02 PG 4 Test No. 1316

Stuttgart, 05.10.2011

Fibre Optics CT GmbH
Zazenhäuser Str. 52
70437 Stuttgart
Germany

Project planning:
Managing director



Mechanical and dynamic
measuring technology:



Random inspection of testing and measuring processes
carried out by TÜV SÜD Industrie Service GmbH on

09.11.2011

