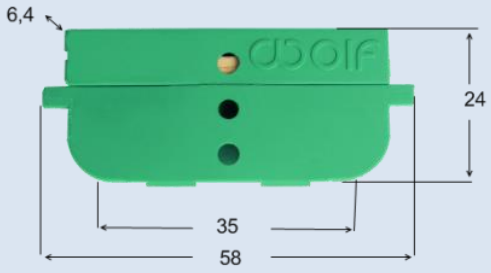
WS-G
Water detector

For the detection of penetration by water and chemical mixtures in connecting sleeves in FTTH networks

Monitoring option:
Dark Fibre Test (inactive)
Active Fibre Test



For glueing into splice cassettes

General

Water detectors are used to detect leaks. They serve to prevent transmission breakdown in telecommunication facilities, seepage from service or waste water in the earth or ground water pollution due to leakage of chemical substances.

If a leak occurs, the water detectors cause measurable attenuation changes as a result of manufacturer-dependent macrobending loss in the fibre.

Various types of water detectors are available, in accordance with market needs
→ See Table WO44 part 0: Water detector delivery programme.

Note: For the qualification of unnamed cable/fibre manufacturers, pleae contact our Fibre Optics CT GmbH testing lab, Tel. +49 (0) 711 87 08 572, E-Mail: service@fibreopticsct.de

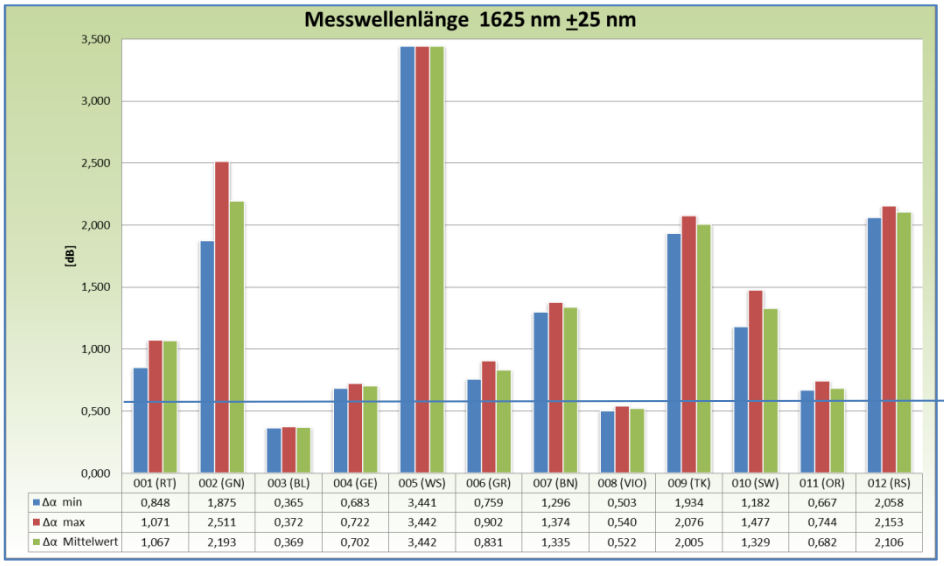
Benefits of water detectors

1. Reliable detection of leakage by means of the intermediately spliced fibre ring
2. Economical monitoring method
3. Can be simply and quickly retrofitted at any point
4. Pinpointing of leakage points over distances of more than 80 km, for short or long leak intervals
5. No interruption of operation: in operation the water detector fulfils the requirements of standards DIN EN 60793-2-50 and IEC 86A/1343/CD:2010
6. No activation for a relative humidity under 70%
7. Prevents fibre breakage. Savings on costs due to repairs and network breakdown.
8. Depending on the type of monitoring system, star or ring-shaped monitoring of an optical fibre route can be carried out from a central installation by means of optical switches.

Art. No. 44.2 WS-G for glueing into standard splice cassettes or E&MMS splice module

Fibre-optic water detector 4.2 WS-G, suitable for optical fibres ITU-T G.652.C/D

Cable manufacturer X

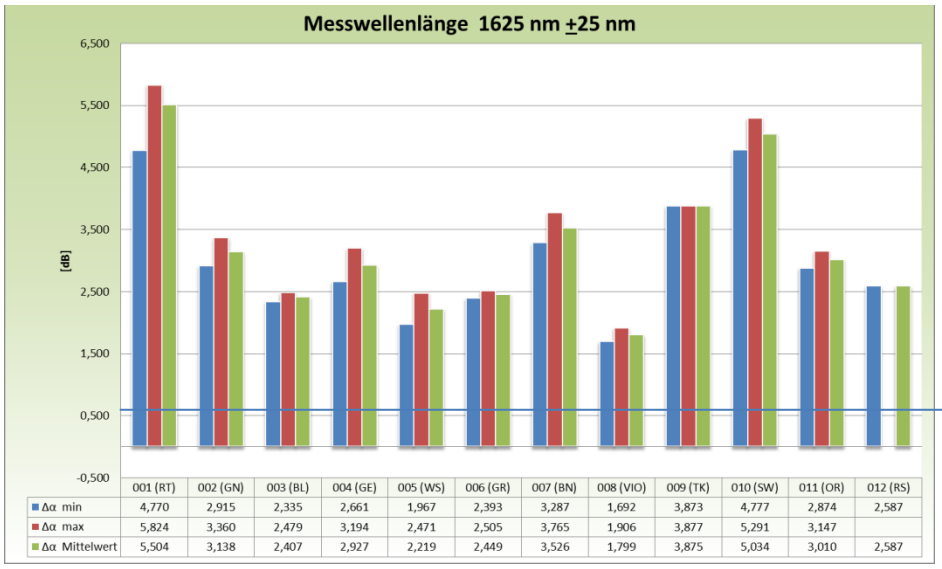


	001 (RT)	002 (GN)	003 (BL)	004 (GE)	005 (WS)	006 (GR)	007 (BN)	008 (VIO)	009 (TK)	010 (SW)	011 (OR)	012 (RS)
Δα min	0,848	1,875	0,365	0,683	3,441	0,759	1,296	0,503	1,934	1,182	0,667	2,058
Δα max	1,071	2,511	0,372	0,722	3,442	0,902	1,374	0,540	2,076	1,477	0,744	2,153
Δα Mittelwert	1,067	2,193	0,369	0,702	3,442	0,831	1,335	0,522	2,005	1,329	0,682	2,106

German Telekom
TS specified value
≥ 0.6 dB ≤ 1.1 dB

Result: The 44.2 WS-G water detector detected water entry unambiguously via the “red” fibre 001 (RT)

Cable manufacturer X



	001 (RT)	002 (GN)	003 (BL)	004 (GE)	005 (WS)	006 (GR)	007 (BN)	008 (VIO)	009 (TK)	010 (SW)	011 (OR)	012 (RS)
Δα min	4,770	2,915	2,335	2,661	1,967	2,393	3,287	1,692	3,873	4,777	2,874	2,587
Δα max	5,824	3,360	2,479	3,194	2,471	2,505	3,765	1,906	3,877	5,291	3,147	
Δα Mittelwert	5,504	3,138	2,407	2,927	2,219	2,449	3,526	1,799	3,875	5,034	3,010	2,587

German Telekom
TS specified value
≥ 0.6 dB ≤ 1.1 dB

Result: Water entry at all ITU-T G.652.D fibres is reliably detectable with the 44.2 WS-G water detector, independently of colour

Manufacturer **Your local partner**

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