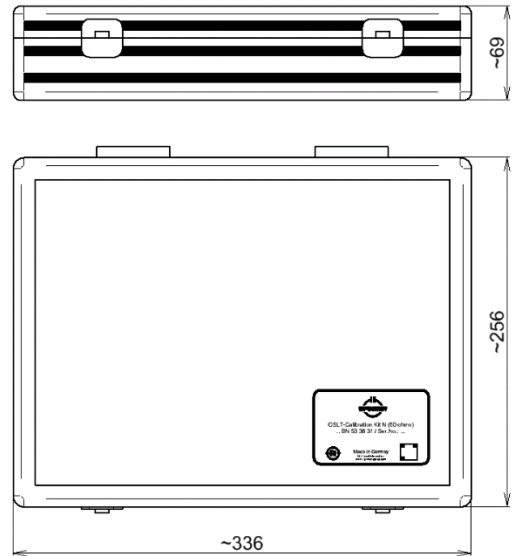


OSL Calibration Kit || BN 533831



all dimensions in millimeter

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Radio frequency characteristics

Interface type		N plug and socket per IEC 61169-16
Frequency range		DC to 18 GHz
OPEN ¹⁾	Phase deviation, max.	1 deg. @ DC to 4 GHz 1.25 deg. @ 4 to 8 GHz 1.5 deg. @ 8 to 12 GHz 2 deg. @ 12 to 18 GHz
	Offset	see calibration data
SHORT ¹⁾	Phase deviation, max.	1 deg. @ DC to 4 GHz 1.25 deg. @ 4 to 8 GHz 1.5 deg. @ 8 to 12 GHz 2 deg. @ 12 to 18 GHz
	Offset	see calibration data
LOAD	DC-resistance	50 Ω ± 0.5 Ω
	Return loss, min.	42 dB @ DC to 6 GHz
		38 dB @ 6 to 8 GHz
		35 dB @ 8 to 12 GHz
33 dB @ 12 to 18 GHz		
Power rating, max.	0.5 W	

¹⁾ The specifications for the opens and shorts are given as allowed deviation from the nominal model as defined in the calibration data.

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Mechanical characteristics

Center conductor material / surface finish	CuBe age hardened / gold-plated
Outer conductor material / surface finish	copper alloy / gold-plated
Insulation	PMP
Other metallic parts / surface finish	copper alloy / nickel-plated
Weight, approx.	1.8 kg
Marking	laser engraving

The environmental protection use period of 50 years is valid, if the product is used as intended.

Environmental conditions

Operation	
Ambient temperature range	+18 to +28°C ²⁾
Storage	
Ambient temperature range	-40 to +70°C (in line with EN 60068-2-1 and EN 60068-2-2)

²⁾ Temperature range within all components maintain conformance to their specification.

Scope of delivery

Description	Qty per kit	Part No	Calibration Option
N Open circuit plug	1	BN 533914R000	Factory calibration
N Open circuit socket	1	BN 533915R000	Factory calibration
N Short circuit plug	1	BN 533912R000	Factory calibration
N Short circuit socket	1	BN 533913R000	Factory calibration
N Load plug	1	BN 533910R000	Factory calibration
N Load socket	1	BN 533911R000	Factory calibration
Torque Wrench 19 mm / 90 N·cm	1	BN 537091R000	Factory calibration
Certificate of calibration incl. calibration data			
USB flash drive including certificate of calibration incl. calibration data data sheet			
Product manual calibration kit		M36080	
Handling instruction torque wrench		M31071	
Aluminium storage case			

Accessories

N Through plug / plug	BN 533916R000
N Through socket / socket	BN 533917R000
N Through plug / socket	BN 533918R000
N Gauge male conductor	BN 537011
N Gauge female conductor	BN 537013

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Calibration data

Calibration data in formats for the common VNAs are included in the kit. It includes individual calibration coefficients for every kit to achieve the best possible performance.

Re-Calibration

The suggested initial interval for recalibration is 12 months or 500 mating's, whichever comes first. The actual need for recalibration depends on the use and the maintenance of the kit. The recalibration interval should begin with the day of initial use after recalibration.

Pin depth limits

Pin depth is the distance between outer conductor mating plane and inner conductor mating plane. Positive values stand for protrusion of the inner conductor, negative values for recession.

Connector Type N	Typical Pin Depth	Measurement Uncertainty	Ranges of measurement ³⁾
male	-5.28 to -5.36 mm	0.005 mm	-5.275 to -5.365 mm
female	+5.18 to +5.26 mm	0.005 mm	+5.175 to +5.265 mm

³⁾ Ranges of measurement is the limit that could be measured with a suitable gauge due to the measurement uncertainty. These values could still be within the specification. The measurement uncertainty is based on the measurement with SPINNER gauges and the specified operating temperature. Deviation from these conditions may cause higher measurement uncertainty.