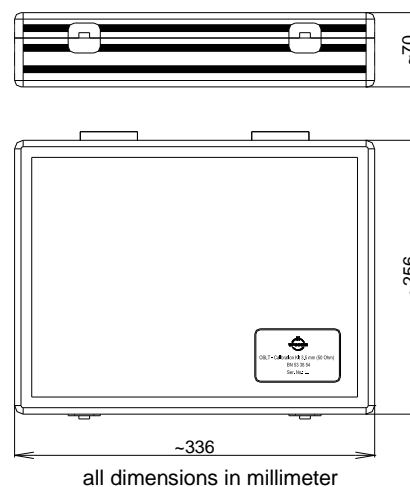


OSLT Calibration Kit || BN 533312



Radio frequency characteristics

Interface type		4.3-10 plug and socket per IEC 61169-54
Frequency range		DC to 12 GHz
THROUGH ²⁾	Return loss, min.	35 dB @ DC to 4 GHz 30 dB @ 4 to 6 GHz 25 dB @ 6 to 12 GHz
	Insertion loss, max.	$0.04 \text{ dB} \times \sqrt{f \text{ (GHz)}}$
OPEN ^{1) 2)}	Phase deviation, max.	1.5 deg. @ DC to 4 GHz 2.5 deg. @ 4 to 6 GHz 3 deg. @ 6 to 12 GHz
	Offset delay	see calibration data
SHORT ^{1) 2)}	Phase deviation, max.	1 deg. @ DC to 4 GHz 2 deg. @ 4 to 6 GHz 2.5 deg. @ 6 to 12 GHz
	Offset delay	see calibration data
LOAD ²⁾	DC-resistance	$50 \Omega \pm 0.5 \Omega$
	Return loss, min.	40 dB @ DC to 4 GHz 35 dB @ 4 to 6 GHz 30 dB @ 6 to 12 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.

²⁾ The specifications only apply to screw-type test ports, not push-pull or hand-screw ports.

OSLT Calibration Kit || BN 533312

Mechanical characteristics

Center conductor material / surface finish	CuBe age hardened; copper alloy / gold-plated
Outer conductor material / surface finish	copper alloy / gold-plated
Insulation	LCP, cross linked polystyrene
Other metallic parts / surface finish	copper alloy / nickel-plated stainless steel
Weight, approx.	1.1 kg
Marking	laser engraving

Environmental conditions

Operation	
Ambient temperature range	+18 to +28°C ³⁾
Storage	
Ambient temperature range	-40 to +70°C (in line with EN 60068-2-1 and EN 60068-2-2)

³⁾ Temperature range within all components maintain conformance to their specification.

Scope of delivery

Description	Qty per kit	Part No	Calibration option
4.3-10 Open circuit plug	1	BN 533303R000	Factory calibration
4.3-10 Open circuit socket	1	BN 533304R000	Factory calibration
4.3-10 Short circuit plug	1	BN 533305R000	Factory calibration
4.3-10 Short circuit socket	1	BN 533306R000	Factory calibration
4.3-10 Load plug	1	BN 533307R000	Factory calibration
4.3-10 Load socket	1	BN 533308R000	Factory calibration
4.3-10 Through plug / plug	1	BN 533309R000	Factory calibration
4.3-10 Through socket / socket	1	BN 533310R000	Factory calibration
Torque Wrench 22 mm / 2.5 N·m	1	BN 238740C0001	Factory calibration
Certificate of calibration incl. calibration data			
USB flash drive including certificate of calibration incl. calibration data data sheet			
Product manual calibration kit		M36281	
Handling instruction torque wrench		M31071	
Aluminium storage case			

Accessories

4.3-10 Through plug / socket	BN 533311R000
4.3-10 Gauge male inner conductor	BN 533315
4.3-10 Gauge female inner conductor	BN 533317
4.3-10 Gauge female outer conductor	BN 533318

OSLT Calibration Kit || BN 533312

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 4.3-10	Typical pin depth	Measurement uncertainty	Ranges of measurement ⁴⁾
male	+2.8 to +2.9 mm	0.005 mm	+2.795 to +2.905 mm
female	-3.1 to -3.2 mm	0.005 mm	-3.095 to -3.205 mm

- ⁴⁾ 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.