

# HUBER+SUHNER® DATA SHEET RF ASSEMBLIES

## Test Lead: TL-P



Rev.: A

### Description

High flexible Test Lead for Passive Intermodulation (PIM) and Return Loss with armour cable and 1x 4.3-10 male straight (screw version) and 1x DIN 7/16 male straight connectors for frequency up to 4 GHz.

**ID (Material/Item No.)** **85029280**  
**Description (Product)** **TL-P-11431X-11716-03000-51**



### Product Configuration

Length of Assembly	3000 mm +/- 30 mm (118.1 +/- 1.18 in)
Connectors	4.3-10 (screw) straight male / DIN 7/16 straight male
	Coupling nuts: Steel / 431X: HEX.22 mm / DIN: Hex.32 mm
	Body: Brass / SUCOPLATE®,
	Center Contact: Cu-Be / Gold plated
Cable	Inner Conductor: Copper / Silver plated wire
	Dielectric: PTFE
	Outer Conductor: Braid / Tin plated
	Jacket Armour: TPU black / max. Ø 10.4 mm

### Technical Data

#### Mechanical Data

Connector Interface	IEC 61169-54 /4	Bending Radius:	min. 50 mm (1.97 in)
Mating cycle *)	> 2000	repeated (50x)	min. 80 mm (3.15 in)
Retention Force	< 200 N	dynamic	min. 110 mm (4.30 in)
Weight	0.590 kg (1.30 lb)		
Mating Torque (Recom.)	431X: 5 Nm / DIN: 20 Nm		
Crush Resistance	80 kN/m		

#### Environmental Data

Operating Temperature	- 15°C to + 65°C
Installation Temperature	- 10°C to + 55°C
Storage Temperature	- 40°C to + 85°C
RoHS, REACH	compliant
Water protection	IP 67, in mated condition

#### Electrical Data

Impedance	50 Ω +/-2 Ω			
Operating Frequency	up to 4 GHz			
Velocity of propagation	71 %			
Capacitance	92 pF / m			
Dielectric withstand voltage	5 kV rms			
Screening effectiveness	> 110 dB up to 4 GHz			
Passive Intermodulation **)	≥ -117 dBm (-160 dBc)			
Frequency	1.0 GHz	2.0 GHz	3.0 GHz	4.0 GHz
Return Loss	- 29 dB	- 26 dB	- 23 dB	- 20 dB
Attenuation (max. at 25°C)	1.45 dB	2.10 dB	2.60 dB	3.05 dB
Power handling (seal level at 40°C)	560 W	390 W	320 W	280 W

#### General Information

\*) Number of Mating With use of torque wrench at recommended value, clean interface after each 20 mating's. Mated with connectors according IEC or MIL standard.

\*\*) PIM Testing 100%, according IEC 62037-2

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

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**HUBER+SUHNER AG**  
**RF Technology**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

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