



# ESA Messtechnik GmbH

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## Force Transducer Type CL 17s

### FEATURES:



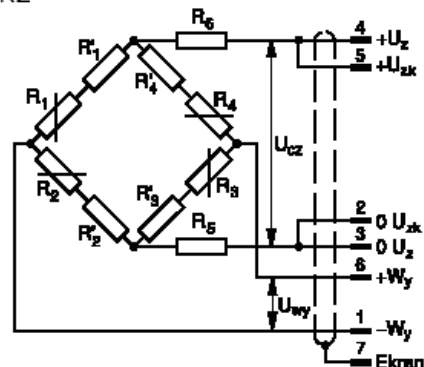
Mod. CL 17s Force Transducer operates with a bending/shear spring element. The spring element carries a balanced strain gauge full bridge which is temperature compensated for the temperature range specified below which provides for a very high zero stability. Mod. CL 17s sensitivity is either 1 mV/V or 2 mV/V.

### TECHNICAL SPECIFICATIONS:

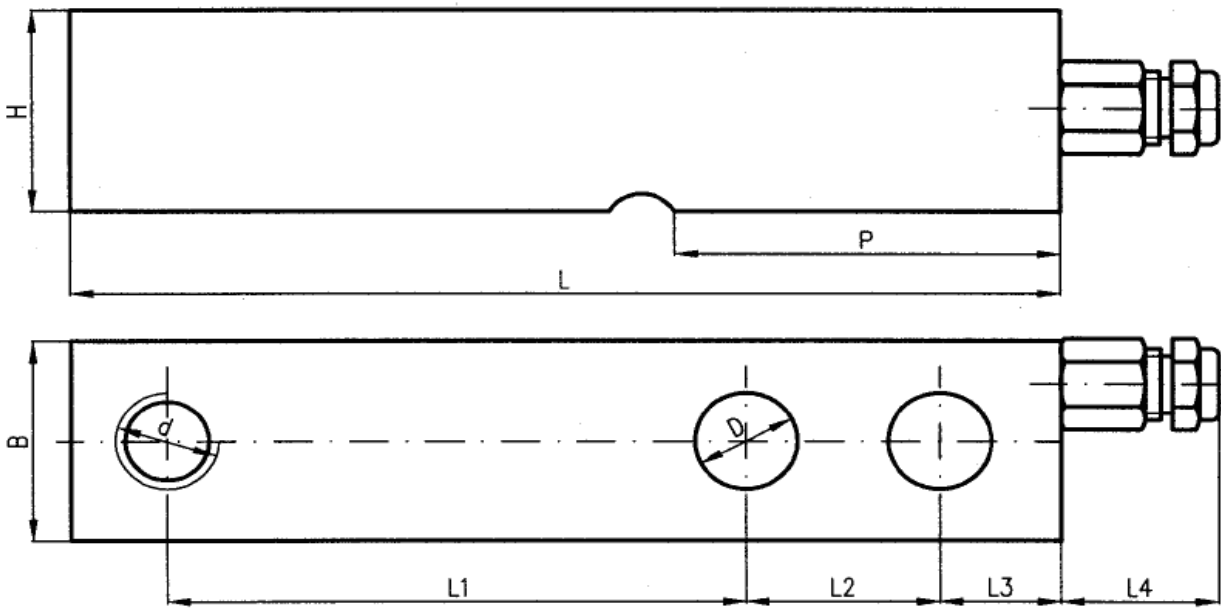
Range	[kN]	5; 10; 20; 50; 100
Accuracy	%	0,05 or 0,1 (referred to full scale)
Sensitivity	[mV/V]	1 - R1, 2 - R2
Nominal supply voltage	[VDC]	10
Input resistance	[Ω]	380 ±25
Output resistance	[Ω]	350 + 5
Operating temperature range	[°C]	-20 bis +100
Compensated temperature range	[°C]	+20 bis +90
Zero drift	[%/30 min]	≤ 0,03
Hysteresis after unloading from nominal load	[%]	≤ 0,03
Temperature effect on sensitivity	[%/10K]	≤ 0,02
Temperature effect on zero	[%/10K]	≤ 0,02
Maximum strain	[mm]	1
Overload	[%]	50
Isolation resistance	[GΩ]	≥ 40
Connectors		O-Ring gland (O1)
Protection system		IP67
Dimensions		See drawing and table below
Spring element material		Steel
Cable length		3 m (standard) or other optional

Circuit diagram for the Force Transducer CL 17s:

R1, R2



**DIMENSIONS:**



Range kN	B	H	L	L1	L2	L3	L4	P	D	d	Weight kg
	mm										
5	28	24	136	82,4	24,6	16,5	20	50	12,5	M12	0,55
10	28	24	136	82,4	24,6	16,5	20	60	12,5	M12	0,56
20	28	24	136	82,4	24,6	16,5	20	60	12,5	M12	0,57
50	38	38	171	95,3	38,1	19,0	20	60	18,5	18,5	1,54
100	48	48	171	95,3	38,1	19,0	20	70	20,5	20,5	2,50

**ORDER INFORMATION:**

**CL17s-10 kN-0,1-R2-10-O1-1**

Measuring Range \_\_\_\_\_

Accuracy Class \_\_\_\_\_

Configuration / Sensitivity (R1 or R2) \_\_\_\_\_

Excitation \_\_\_\_\_

Connectors (O1) \_\_\_\_\_

Wire Length in m \_\_\_\_\_