

SHEAR-WEB LOAD CELL MEG50



- For general purpose
- Strain gauge measuring system
- Compression
- Made of high-grade stainless steel or aluminium (0.1 – 0.5 kN)
- Low profile
- Application:
 - Industry
 - Testing machines
 - Laboratory

Specifications

Rated capacity (F_n)	0.1, 0.2, 0.5	1, 2, 5	10, 20, 50	100, 200, 500	kN	
Overload						
- Safe					130	% F_n
- Ultimate					150	% F_n
- Permanent static load ¹					75	% F_n
- Dynamic load ¹					50	% F_n
Nominal sensitivity (C_n)	1.0 ± 2 %	1.5 ± 2 %			mV/V	
Zero balance	2				% F_n	
Non-linearity	0.25		0.5	1.0	% F_n	
Hysteresis	0.25		0.5	1.0	% F_n	
Creep (30 min)	0.1				% F_n	
Temperature effect						
- On zero					0.1	% F_n / 10 °C
- On output					0.1	% F_n / 10 °C
Bridge resistance						
- Input					380 ± 10 %	Ω
- Output					350 ± 5 %	Ω
Insulation Impedance	> 5000				MΩ	
Excitation ²						
- Recommended	5 ... 10		5 ... 10		V	
- Maximal	12		15		V	
Temperature range						
- Compensated	0 ... + 50				°C	
- Operating	- 10 ... + 70				°C	
Protection	IP54					
Cable						
- Type	LiYDY 4 x 0.05			LiYCY 4 x 0.14		
- Length	2			2	m	

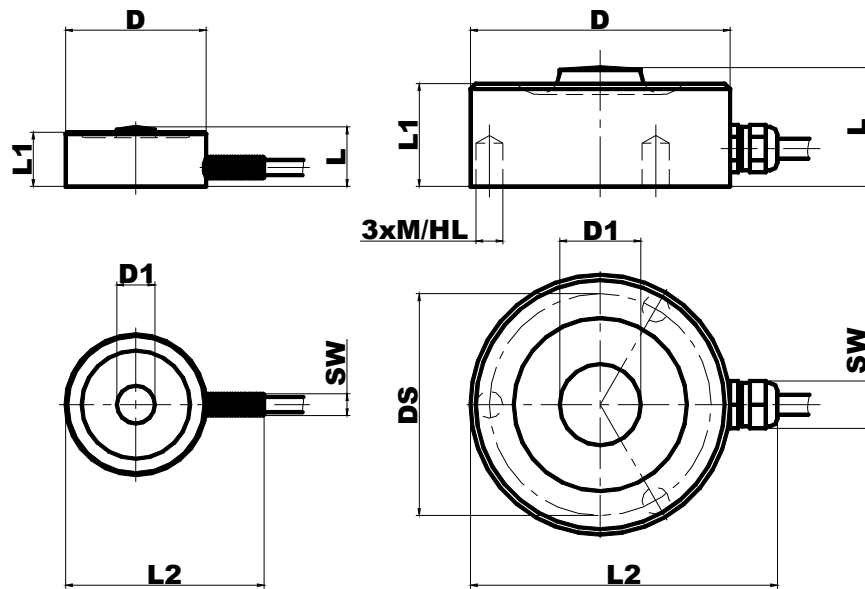
Notes:

1 Recommended value

2 DC or AC Voltage

2019-04

Outline dimensions

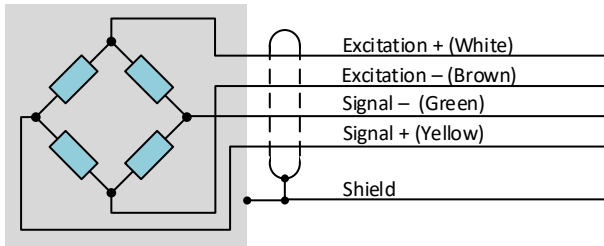


0.1 ... 50 kN

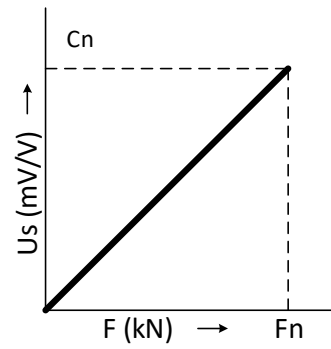
100 ... 500 kN

F _n ¹ (kN)	Dimensions in mm									
	D	DS	D1	L	L1	L2	SW	M / HL	Mass kg	Deflection @ F _n (μm)
0.1	32	28	7	11	10	40	Φ4	M3 / 5	0.04	30
0.2	32	28	7	11	10	40	Φ4	M3 / 5	0.04	30
0.5	32	28	7	11	10	40	Φ4	M3 / 5	0.04	30
1	32	28	7	11	10	40	Φ4	M3 / 5	0.07	30
2	32	28	7	11	10	40	Φ4	M3 / 5	0.07	30
5	32	28	7	11	10	40	Φ4	M3 / 5	0.07	30
10	36	32	8	16	15	44	8	M3 / 5	0.10	50
20	40	35	10	19	17	50	8	M4 / 6	0.14	50
50	48	41	15	22	19	58	8	M5 / 8	0.22	60
100	60	50	20	26	22	70	11	M6 / 10	0.43	100
200	74	61	28	31	26	84	11	M8 / 12	0.80	100
500	110	87	44	42	36	120	11	M10 / 16	2.50	150

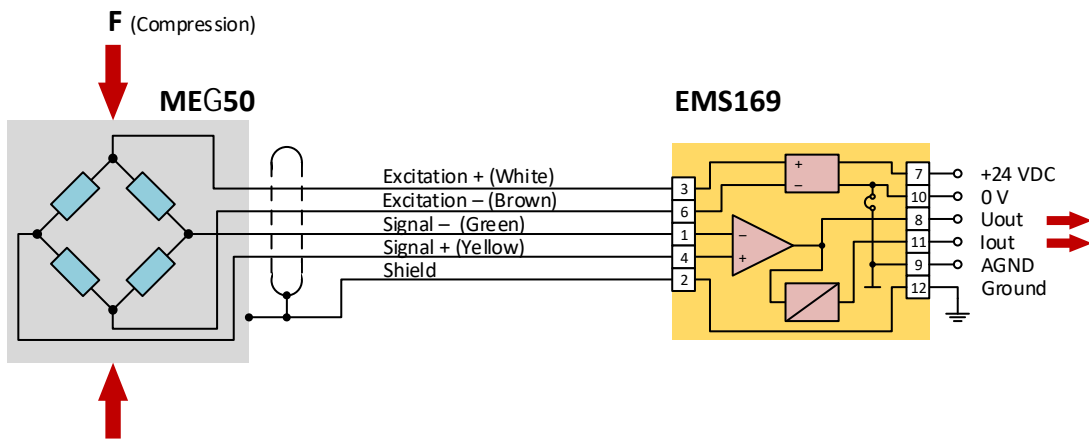
Wiring color code



Output characteristic

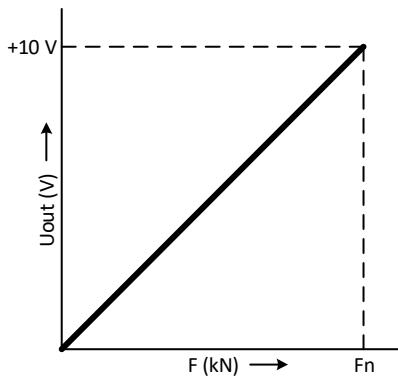


Wiring diagram, example with signal conditioner EMS169

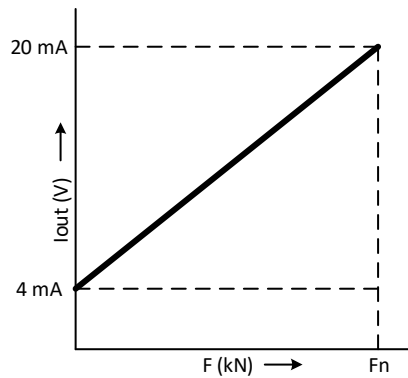


Output characteristic

U_{out} vs. F



I_{out} vs. F



Parallel wiring diagram

