

5180-5182

## COMPRESSION WASHER LOAD CELL

Compression washer annular load cell specially designed for force measurement on bolts.

Model 5180



### Features

- Very low profile for high capacity load cell
- Material :
  - o body stainless steel; housing aluminium (5180)
  - o aluminium (5182)
- Protection IP 65
- Available in "custom-made" design
- Very competitive prices
- Cable length: See drawing's table (CL)

### Applications

The load cell 5180-5182 is perfectly designed to the following applications :

- Bolts tightening measurement and monitoring
- Industrial force applications where space is limited

### Capacities

5182 : 20 - 30 kN

5180 : 50 - (75) - 150 - 200 - 300 - 500 - 750 kN

Specifications	SL	
Reference temperature	23	C
Nominal temperature range	-10...+45	C
Service temperature range	-30...+70	C
Storage temperature range	-50...+85	C
Temperature coefficient of the sensitivity	< ± 0.2	% F.S./10 C
Temperature coefficient of zero signal	< ± 0.2	% F.S./10 C
Zero balance	± 0.02	mV/V
Insulation resistance (50V)	> 5000	Megaohm
Safe load limit	150	% F.S.
Breaking load	> 300	% F.S.
Static lateral force limit	25	% F.S.
Permissible dynamic loading	50	% F.S.
Input resistance	702 ± 2	Ohm
Output resistance	702 ± 2	Ohm
Nominal range of excitation voltage	3..10	VDC
Reference excitation voltage	5	VDC

F.S.: full scale - Specifications subject to change without notice

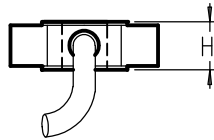
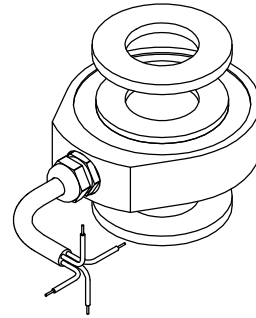
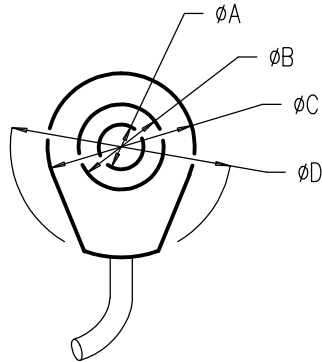
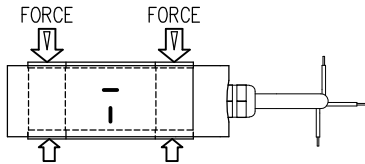
## LOAD CELLS

**model 5180** Body in stainless steel & housing aluminium  
**model 5182** Body & housing in aluminium

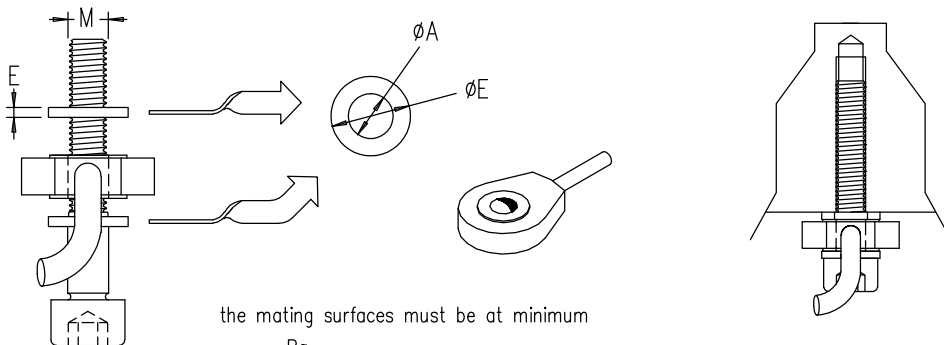
### COMPRESSION WASHER

Range 20-750 kN (2-75 t.) IP65

Cable length : See table (CL)



MODEL	CAPACITIES	M	$\phi A_{+0.1}^{+0}$	$\phi B$	$\phi C$	$\phi D$	$\phi E$	H	E	CL	Weight
5182	20 kN	6	6.1	17	34	40	12.7	11	3	2m	0.1 kg
	30 kN	8	8.1				19				
	50 kN	10	10.1	22							
	75 kN	12	12.1	24			38				
5180	150 kN	16	16.1	29	45	55	32	15	5	3m	0.12 kg
	200 kN	20	20.1	36	53	62	38	17			0.15 kg
	300 kN	24	24.1	44.9	63	70	48	19			0.25 kg
	500 kN	30	30.25	53	70	79	54	26	6		0.5 kg
	750 kN	36	36.5	76	99	99	74	35	6		1.3 kg



the mating surfaces must be at minimum

Ra 0.8  $\sqrt{\square 0.02 \quad // 0.05}$