

# 5900

## TROUGH HOLE (ANNULAR) LOAD CELL

Annular force transducer specially designed for application requiring a centred hole.

Model 5900 - 30 kN



### Features

- Sturdy design
- Material: Stainless steel
- Protection: IP 67
- Easy to install
- CE certified for hoisting applications
- Complete range of "CE" certified electronics, load limiters
- Cable length: 6m
- Available options (non exhaustive list):
  - o ATEX intrinsic safety Ex II 1GD Ex ia IIC T6 or T4 Ga Ex ia IIIC T80 C Da
  - o protection IP68
  - o high service temperature (up to 180 °C)
  - o amplified output (V or mA)

### Applications

The SENSY's load cell 5900 is perfectly designed to the following applications :

- Industrial applications where space is limited
- Weighing on cranes
- Measurement of Force and stress

### Capacities

5900 : 3 - 5 - (7.5) - 10 - (15) - 20 - 30 - 50 - 75 - 100 - 150 - (200) kN

Specifications	SL - HOIST	0.5	0.25	
Combined error	< ± 0.5	< ± 0.5	< ± 0.25	% F.S.
Linearity error	< ± 1	< ± 0.5	< ± 0.25	% F.S.
Repeatability error	< ± 0.25	< ± 0.25	< ± 0.1	% F.S.
Creep error over 30 min.	< ± 0.3	< ± 0.2	< ± 0.1	% F.S.
Zero shift after loading	< ± 0.5	< ± 0.1	< ± 0.025	% F.S.
Reference temperature	23	23	23	°C
Nominal temperature range	-10...+45	-10...+45	-10...+45	°C
Service temperature range	-30...+70	-30...+70	-30...+70	°C
Storage temperature range	-50...+85	-50...+85	-50...+85	°C
Temperature coefficient of the sensitivity	< ± 0.2	< ± 0.1	< ± 0.05	% F.S./10 °C
Temperature coefficient of zero signal	< ± 0.2	< ± 0.1	< ± 0.035	% F.S./10 °C
Zero balance	± 0.02	± 0.02	± 0.02	mV/V
Sensitivity tolerance	< ± 0.5	< ± 0.5	< ± 0.3	%
Insulation resistance (50V)	> 5000	> 5000	> 5000	Megaohm
Reference excitation voltage	10	10	10	VDC
Nominal range of excitation voltage	3..12	3..12	3..12	VDC
Nominal sensitivity	1	1.5	1.5	mV/V
Safe load limit	200	150	150	% F.S.
Breaking load	> 500	> 300	> 300	% F.S.
Static lateral force limit	150	10	10	% F.S.
Permissible dynamic loading	75	40	40	% F.S.
Input resistance	702 ± 2	702 ± 2	702 ± 2	Ohm
Output resistance	702 ± 2	702 ± 2	702 ± 2	Ohm

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

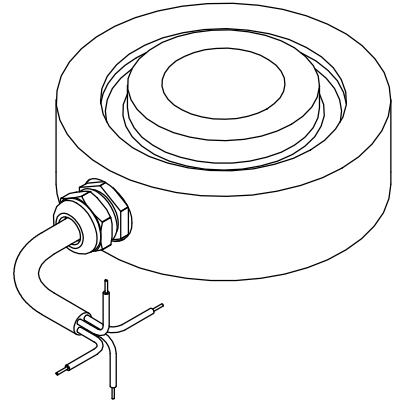
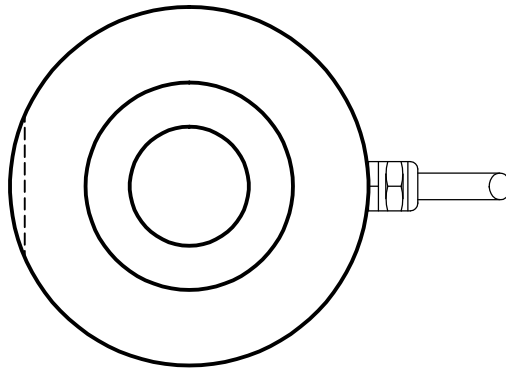
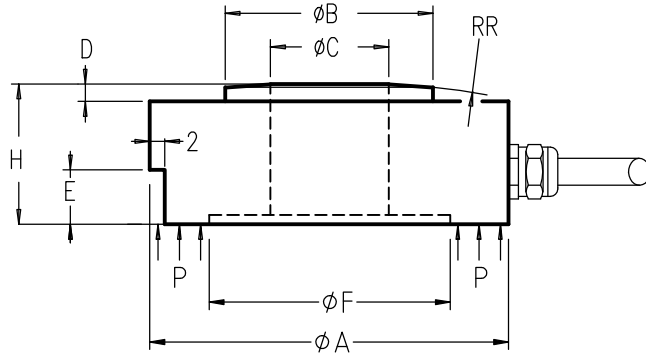
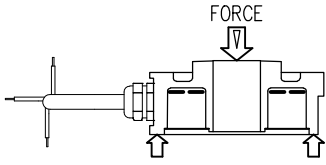
# LOAD CELLS

model 5900 stainless steel

## COMPRESSION ANNULAR (THRU HOLE)

Range 3 - (200) kN IP67  
(0.3-15 (20)t)

Cable length : See table(CL)

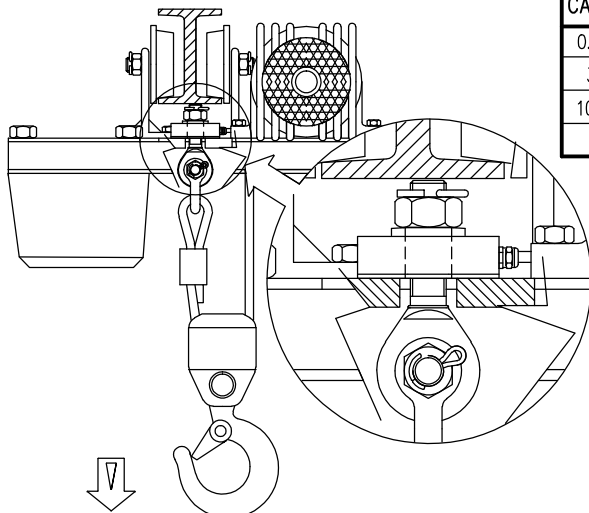


CAPACITIES	øA	øB	øC	D	E	øF	H	P (N/mm <sup>2</sup> )	RR	Max Deflexion	CL	Weight
3 - 20 kN	59	30	16	4	3	49	25	4 - 24.5	300	0.05-0.15 mm	6m	0.5 kg
30 - 75 kN	79	50	30	5	4	70	31	30 - 74	500	0.20-0.35 mm	6m	1 kg
100 -150(200)kN	119	80	50	6	4.5	105	40	42 - 83	750	0.30-0.40 mm	6m	3.2 kg

STANDARD

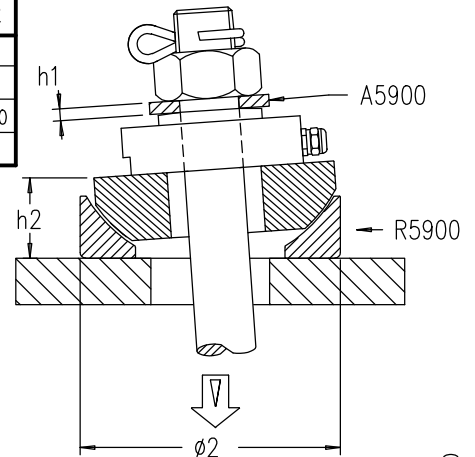
øC	øB	øA	H
øX-14	±øX+43		23...25
øX	±øX+49		27...31
øX+30	±øX+69		35...40

AVAILABLE



CAPACITIES	h1	h2	ø2
0.3 - 2 t	10	22.5	62
3 - 7.5t	15	28	90
10 -15(20)t	20	50	180

PROPOSED



\* Optional