

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)

Ex i

IP68

IP rating



-50°C...+180°C



Amplified output



Amplified output

### Applications

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

- Load limitation on EOT cranes
- Industrial weighing
- Force measurement

### Capacities

5900 : 0.3 - 0.5 - (0.75) - 1 - (1.5) - 2 - 3 - 5 - 7.5 - 10 - 15 - (20) t

Specifications	SL - HOIST	0.5 %	0.25 %	
Combined error ( Non linearity + hysteresis)	< ± 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	-25...+70	-25...+70	-25...+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	2	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

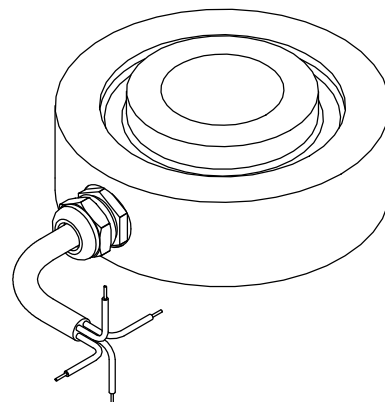
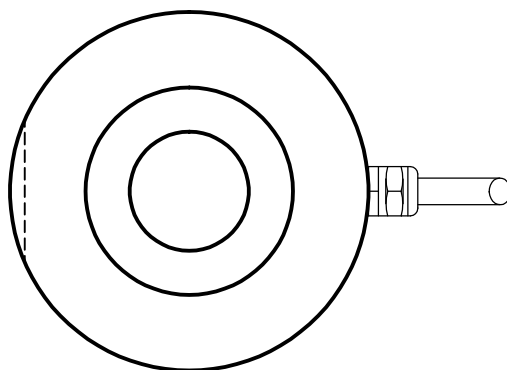
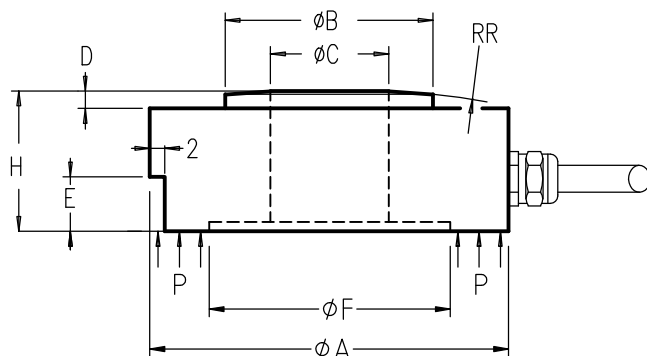
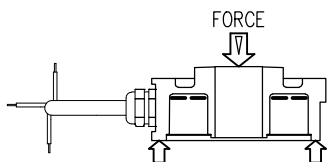
model 5900 stainless steel

### COMPRESSION ANNULAR (THRU HOLE)

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

Cable length : See table(CL)

CE  
(Hoisting \* )

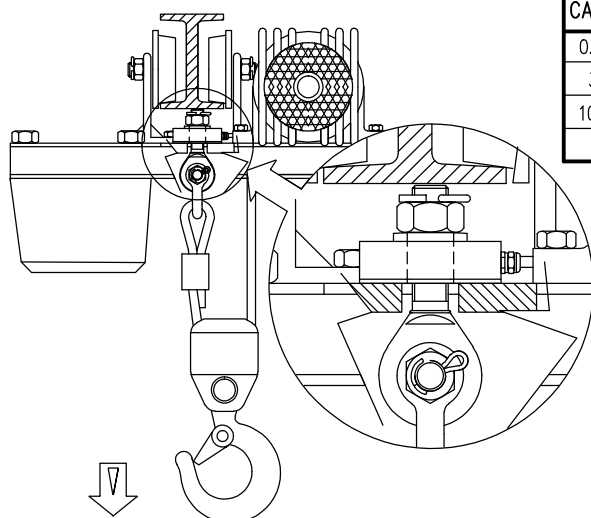


CAPACITIES	φA	φB	φC	D	E	φF	H	P (N/mm <sup>2</sup> )	RR	Max Deflexion	CL	Weight
3 – 20 kN	59	30	16	4	3	49	25	4 – 24.5	300	0.05–0.15 mm	6m	0.5 kg
30 – 75 kN	79	50	30	5	4	70	31	30 – 74	500	0.20–0.35 mm	6m	1 kg
100 –150(200)kN	119	80	50	6	4.5	105	40	42 – 83	750	0.30–0.40 mm	6m	3.2 kg

STANDARD

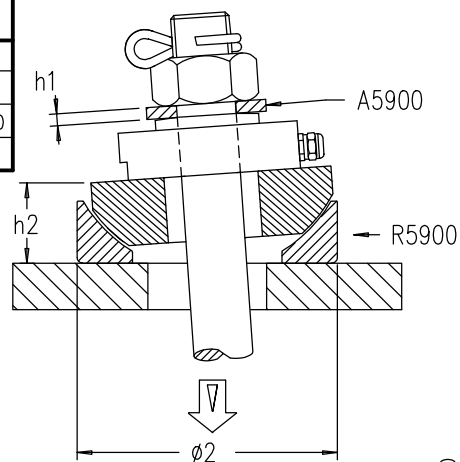
φC	φB	φA	H
↓ φX	φX+14 φX+20 φX+30	±φX+43 ±φX+49 ±φX+69	23...25 27...31 35...40

AVAILABLE



CAPACITIES	h1	h2	φ2
0.3 – 2 t	10	22.5	62
3 – 7.5t	15	28	90
10 –15(20)t	20	50	180

PROPOSED



\* Optional