

# 5100L-5105L

# TENSION LOAD CELLS

Robust and easy to install tension load cells.



Model : 5100L-50 t



### Features

- o Wide range of capacities: 2 t up to 100 t
- o Compact design
- o Protection class: IP66
- o Material: stainless steel (5100L), nickel-plated steel (5105L)
- o Cable length: see drawing table - CL (other lengths available on request)

### Most popular options



Ex i



IP68

### Application(s)

SENSY's load cells 5100L-5105L are perfectly designed for the following applications:

- Towing force measurement (marine),
- Force measurement on rigging,
- Hanging load weighing,
- Tensile test benches.

### Capacities

5100L - 5105L: 1 - 2 - 3 - 5 - 7.5 - 10 - 15 - 20 - 30 - 50 - 75 - 100 t

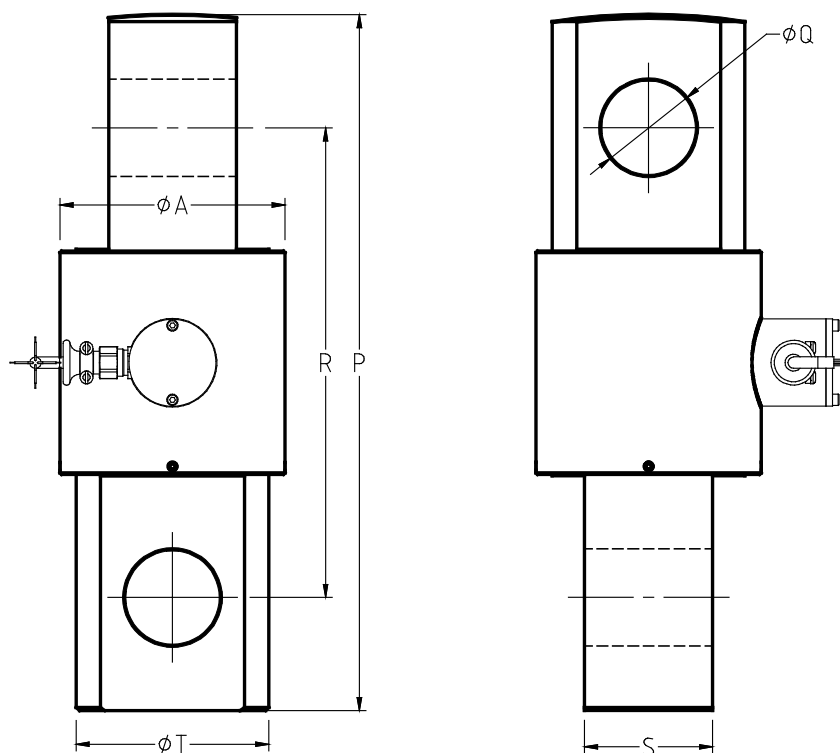
Specifications	SL - HOIST	0.25 %	
Combined error (non-linearity + hysteresis)	0.5 - 2**	<± 0.25	% F.S.*
Repeatability error	<± 0.25	<± 0.1	% F.S.*
Creep error over 30 min.	<± 0.3	<± 0.1	% F.S.*
Zero shift after loading	<± 0.5	<± 0.025	% F.S.*
Reference temperature	23	23	°C
Compensated temperature range	-10...+45	-10...+45	°C
Service temperature range	-25...+70	-25...+70	°C
Storage temperature range	-50...+85	-50...+85	°C
Temperature coefficient of the sensitivity	<± 0.2	<± 0.05	% F.S./10°C
Temperature coefficient of zero signal	<± 0.2	<± 0.035	% F.S./10°C
Zero balance	± 0.02	± 0.02	mVV
Nominal sensitivity	± 1	1.5	mVV
Sensitivity tolerance	< ± 0.5	<± 0.3	%
Input resistance	350 ± 2	350 ± 2	ohm(s)
Output resistance	350 ± 2	350 ± 2	ohm(s)
Insulation resistance (50 V)	> 5000	> 5000	Mohm(s)
Reference excitation voltage	10	10	VDC
Permissible nominal range of excitation voltage	3...12	3...12	VDC
Safe load limit	200	150	% F.S.*
Breaking load	> 500	> 300	% F.S.*
Permissible dynamic loading	75	40	% F.S.*
Static lateral force limit	10	10	% F.S.*

\* F.S. : Full Scale.

\*\* Typical range of accuracy, depending on design and dimensions.

Specifications subject to change without notice.

5100L-5105L > STANDARD DIMENSIONS



Ref. Item*	Capacities		$\phi A$	P	$\phi Q$	R	S	$\phi T$	CL (m)	Weight (kg)
	Hoist > 500 %**	Force > 300 %**								
510xL-A	1 - 2 t	2 - 3 t	50	144	18	108	20	35	3	$\pm 1.5$
510xL-B	3 t	5 t	60	160	24	112	30	45	3	$\pm 2$
510xL-C	4 - 7.5 t	7.5 - 10 t	80	240	35	170	44	64	3	$\pm 5.5$
510xL-D	10 - 15 t	15 - 20 t	100	310	42	226	52	86	6	$\pm 12.8$
510xL-E	20 - 30 t	30 - 50 t	139	430	58	290	78	109	6	$\pm 25$
510xL-F	40 - 75 t	75 - 100 t	180	520	80	348	100	149	12	$\pm 65$

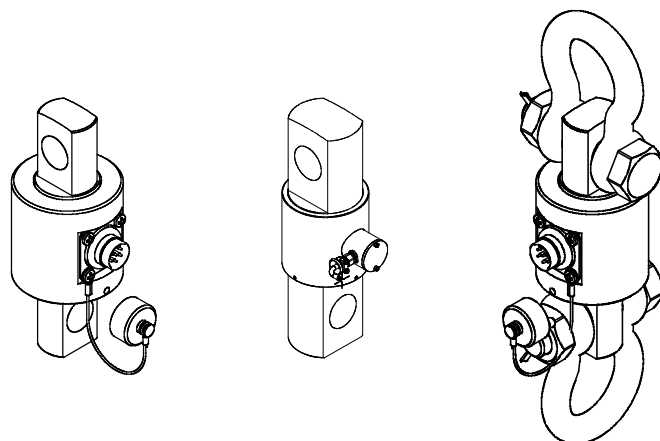
\*x=Material: 5100L - stainless steel; 5105L - nickel-plated steel

\*\* Breaking load (% full scale)

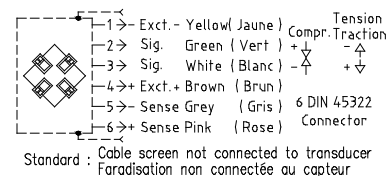
→ Other capacities and dimensions available on request

Dimensions in mm

Other views



Wiring



Load direction

