

5500-5505

WIRE ROPE LOAD CELLS

Low cost load cells specially designed to measure the tension force on hoisting ropes.



Model 5500 - 2 t + accessories



Features

- o CE certified for hoisting applications
- o Easy installation directly without dismantling on the hoisting rope
- o Wide range of measured loads on cable (from 0.25 up to 24 t) and suitable cables (available diameters: from 6 up to 46 mm)
- o Material:
 - 5500: stainless steel
 - 5505: nickel-plated steel
- o Protection class: IP65
- o Sturdy design
- o Reliable and economical solution
- o Complete range of "CE" certified electronics and load limiters available
- o Cable length: see drawing table - CL (other lengths available on request)

Most popular options



Ex i



Application(s)

SENSY's load cells 5500-5505 are perfectly designed for the following applications:

- Hoisting devices and crane security in combination with load limitation electronics (e.g.: BRIDGE-BOY, CRANE-BOY, ...),
- Cost-effective solution for safety improvement on existing cranes.

Capacities

5500-5505: 0.25 to 24 t on the wire rope

Specifications	2 - 5 %	
Reference temperature	23	°C
Compensated temperature range	-10...+45	°C
Service temperature range	-30...+70	°C
Storage temperature range	-50...+85	°C
Temperature coefficient of the sensitivity	<± 0.1	% F.S./10°C
Temperature coefficient of zero signal	<± 0.1	% F.S./10°C
Nominal sensitivity	± 1 **	mV/V
Input resistance	350 ± 2	ohm(s)
Output resistance	350 ± 2	ohm(s)
Insulation resistance (50 V)	> 5000	Mohm(s)
Reference excitation voltage	10	VDC
Permissible nominal range of excitation voltage	3...12	VDC
Safe load limit	200	% F.S.*
Breaking load	>300	% F.S.*
Permissible dynamic loading	70	% F.S.*

* F.S. : Full Scale.

** : can be different (according to the wire rope)

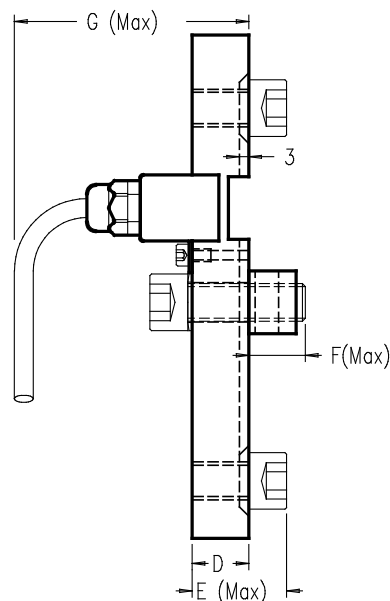
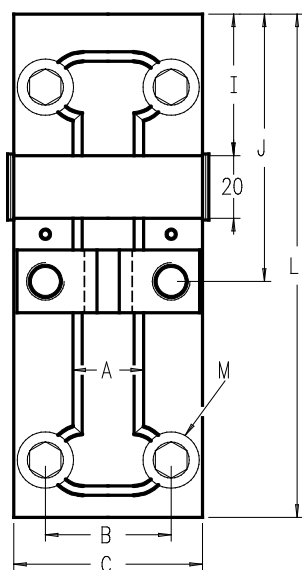
Combined error depends on rope material and on-site calibration

Specifications subject to change without notice



ISO 9001 certified

5500-5505 > STANDARD DIMENSIONS



Ref. Item*	Capacities	Load range (t) Min-Max	Cable Ø (mm)	±A	B	C	D	E	±F	G	I	J	L	M	Torque (Optimum) (N·m)	CL (m)	Weight (kg)
550x-A	0.25 t (1TTSA)**	-	6 - 12	20	40	60	18	30	31	100	45	85	160	M12	10	3	1.75
550x-B	1 t (1TSA)	0.4 - 1.5	6 - 15	20	40	60	18	30	31	100	45	85	160	M12	15	3	1.75
550x-C	2 t (1SA)	0.75 - 2.8	6 - 22	20	40	60	18	30	31	100	45	85	160	M12	15	3	1.8
550x-D	3.5 t (1A)	1.6 - 5	6 - 22	20	40	60	18	30	31	100	45	85	160	M12	15	3	1.8
550x-E	5 t (2A)	2 - 7	14 - 28	20	50	75	18	30	40	100	45	85	160	M12	20	3	2.1
550x-F	10 t (3A)	5.5 - 16	26 - 36	25	68	100	25	41	55	115	55	95	200	M16	25	6	4.3
550x-G	15 t (4A)	10 - 24	30 - 46	35	75	115	26	46	70	116	55	110	230	M20	50	6	5.7

* x=Material: 5500 - stainless steel; 5505: alloy steel

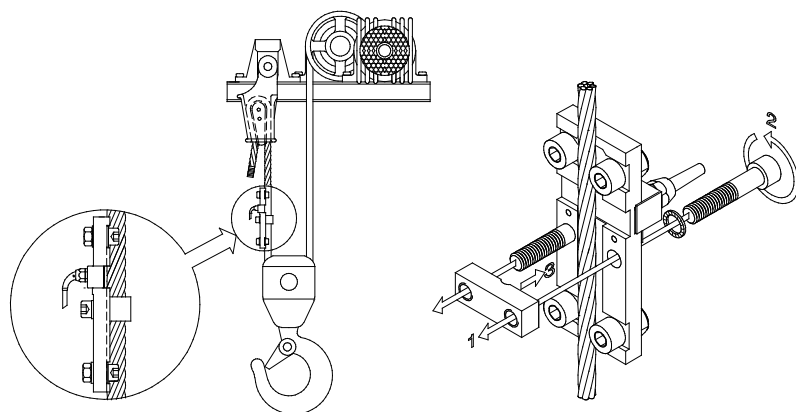
** Only for amplified version (4-20 mA 3 wires)

Table including sensitivity and SENSY electronics limits for each cable diameter, available upon request

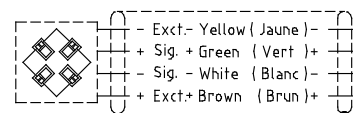
→ Other capacities and dimensions available on request

Dimensions in mm

Other views



Wiring



Standard : Cable screen not connected to transducer
Faradisatison non connectée au capteur

Load direction

