

5000M

DYNAMOMETRIC SHACKLE

Load measuring shackle designed to measure a tension force.

Model 5000M



Features

- CE certified for hoisting applications
- Sturdy design
- Load-pin : stainless steel
- Protection IP 65 (... IP68 : see options)
- Easy to install
- Complete range of "CE" certified electronics and load limiters
- 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 amplified output (V or mA) and digital output signal (RS-232C, RS-485, USB)
 - o protection IP68 or special for marine environment

Applications

The SENSY's load cell 5000M is perfectly designed to the following applications :

- SL - HOIST : Hoisting devices and crane's security in combination with a load limitation electronics
- SL - FORCE : Industrial weighing
- SL - FORCE : Force measuring test bench

Capacities

- from 1 to 400t (dimensions : see next page)
- from 500t to 1500t (dimensions on request)

Specifications	SL - FORCE	SL - HOIST	
Repeatability error	< ± 0.25	< ± 0.25	% F.S.
Creep error over 30 min.	< ± 0.3	< ± 0.3	% F.S.
Zero shift after loading	< ± 0.5	< ± 0.5	% F.S.
Reference temperature	23	23	C
Nominal temperature range	-10...+45	-10...+45	C
Service temperature range	-30...+70	-30...+70	C
Storage temperature range	-50...+85	-50...+85	C
Temperature coefficient of the sensitivity	< ± 0.2	< ± 0.2	% F.S./10 C
Temperature coefficient of zero signal	< ± 0.2	< ± 0.2	% F.S./10 C
Zero balance	± 0.02	± 0.02	mV/V
Input resistance	352 ± 2	352 ± 2	Ohm
Output resistance	352 ± 2	352 ± 2	Ohm
Insulation resistance (50V)	> 5000	> 5000	Megaohm
Reference excitation voltage	10	10	VDC
Nominal range of excitation voltage	3..12	3..12	VDC
Nominal sensitivity	1.5	1	mV/V
Safe load limit	150	200	% F.S.
Breaking load	> 300	> 500	% F.S.
Static lateral force limit	100	150	% F.S.
Permissible dynamic loading	50	75	% F.S.

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

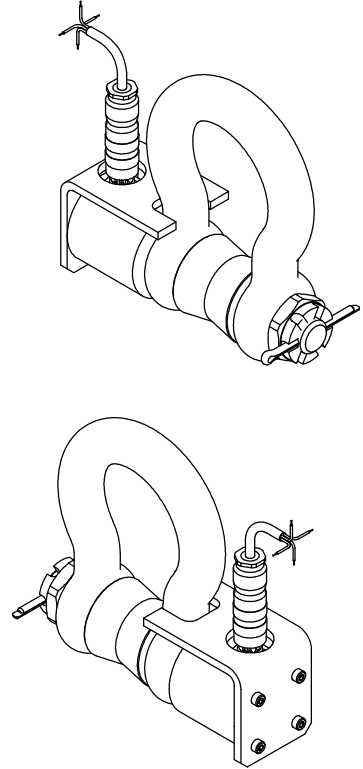
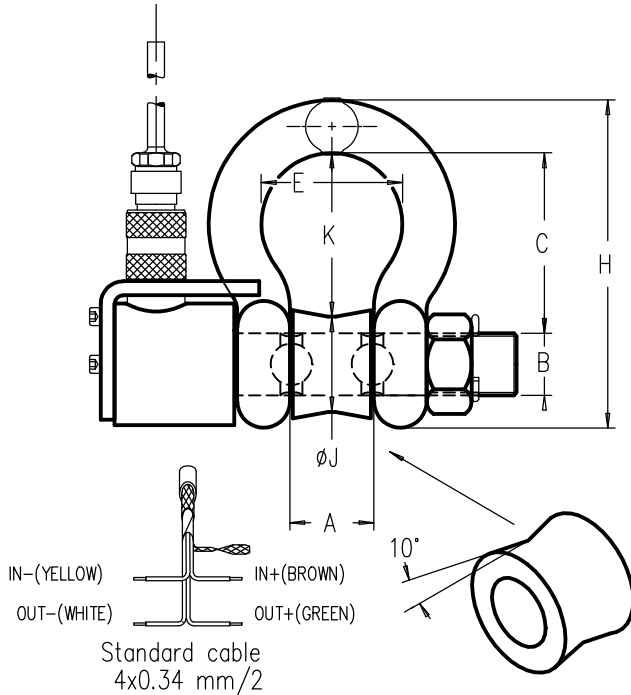
LOAD MEASURING SHACKLES

model 5000M

AXLE IN STAINLESS STEEL

Range 1 – 400t ±1mV/V IP65

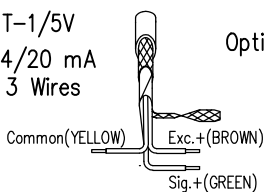
Cable length : 6 m



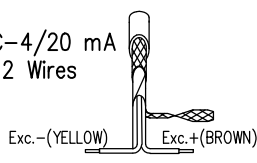
CAPACITIES												TOLERANCES ±		Total Weight(kg)
SIZE	HOISTING	FORCE	A	B	C	D	E	F	H	ØJ	K	C & K	A	
3/4"	1 – 1.5t.	2 – 4t.	31	22	75	19	51	46	126	34	65	6.5	1.6	3
7/8"	2.5t.	6t.	36	25	84	22	58	53	148	35.5	79			3.5
1"	4 t.	8 t.	43	28	95	25	68	60.5	167	37	90			4
1 1/8"	5 t.	9 t.	46	32	108	28	74	68.5	190	40	104			5
1 3/8"	6.3 t.	11 t.	57	38	133	35	92	85	233	50	127			8.5
1 1/2"	8 t.	12 t.	60	42	146	38	99	92	254	54	140		12	
1 3/4"	12 t.	16 t.	73	50	178	45	127	106	313	65	171		19	
2"	20 t.	32 t.	83	57	197	50	138	122	348	72	189		28	
2 1/2"	30 t.	40 t.	105	70	264	65	180	145	453	90	250		52	
3"	45 t.	70 t.	127	80	330	75	190	165	546	105	319		96	
3 3/4"	75 t.	87 t.	147	95	400	95	238	203	647	117	389	150		
4"	80 t.	115 t.	140	108	368	104	254	229	653	130	357	207		
4 7/8"	115 t.	200 t.	200	140	540	130	305	308	921	165	527	/	/	340
5 5/16"	150 t.	300 t.	200	150	600	140	305	335	1018	180	585	/	/	350
6 1/2"	200 t.	400 t.	225	175	650	170	325	387	1137	200	630	/	/	585

Other capacities : On request

Option: T-1/5V
or J-4/20 mA
3 Wires



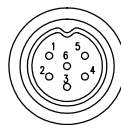
Option C-4/20 mA
2 Wires



FEMALE-MALE CONNECTOR DIN 45322

CONTACT N°

- 1 Excitation - Yellow
- 2 Output + Green
- 3 Output - White
- 4 Excitation + Brown
- 5 Sense - Grey
- 6 Sense + Pink



Standard cable

Cable screen connected to transducer for option t,C,J

Cable screen not connected to transducer
Option f : Cable screen connected to transducer
(6 wires cable in option)