

3110-3115

HEAVY COMPRESSION LOAD CELLS

High capacity compression load cells.

- Material : Nickel plated steel (3115) or stainless steel (3110)
- Protection IP 65
- A whole range of mounting accessories is proposed
- Available options (non exhaustive list):
 - o High service temperature (180 °C)
 - o ATEX Ex ia IIC T6 to T4 certified (hazardous area)
 - o Redundant dual Wheatstone bridge
 - o Amplified output signal (0..10 V, 4..20 mA)
 - o Digital output signal (RS-232C, RS-485, USB, ...)
- Also available as standard reference load cells following ISO 376 (EN10002/3) (Class "0.5" and "00") (see specific data sheet)



Model 3115S - 5MN - V

The SENSY's load cells 3110-3115 are perfectly designed to the following applications :

- Industrial force measurement
- Structure weighing
- Industrial process control (ISO 9000...)
- Calibration of testing machines

CAPACITIES :

3110 - 3115 : 30 - 50 - (75) -100 - (150) - 200 - 300 - 500 kN
(0.75) - 1 - 2 - 3 - 5 - 7.5 - 10 - 15 - 20 - 30 MN



3115S + SUP + PAD + H

TECHNICAL DATA					
Accuracy class		0.25	0.1	0.05	0.03
			1000 d	2000 d	3000 d
Linearity error	% F.S.	< ± 0.25	< ± 0.1	< ± 0.05	< ± 0.025
Hysteresis error	% F.S.	< ± 0.25	< ± 0.1	< ± 0.05	< ± 0.025
Non - repeatability	% F.S.	< ± 0.1	< ± 0.03	< ± 0.02	< ± 0.015
Creep error over 30 min.	% F.S.	< ± 0.1	< ± 0.06	< ± 0.04	< ± 0.025
Zero shift after loading	% F.S.	< ± 0.025	< ± 0.015	< ± 0.01	< ± 0.0075
Reference temperature	°C	23	23	23	23
Nominal temperature range	°C	- 10...+45	- 10...+45	- 10...+45	- 10...+45
Service temperature range	°C	-30...+70	-30...+70	-30...+70	-30...+70
Storage temperature range	°C	-50...+85	-50...+85	-50...+85	-50...+85
Temperature coefficient of the sensitivity	%/10°C	< ± 0.05	< ± 0.05	< ± 0.035	< ± 0.015
Temperature coefficient of zero signal	% F.S./10°C	< ± 0.035	< ± 0.035	< ± 0.03	< ± 0.023
Nominal sensitivity	mV/V			1,5	
Zero balance	mV/V	± 0.02	± 0.02	± 0.02	± 0.02
Sensitivity tolerance (g=9,8107 m/s ²)	%	< ± 0.3	< ± 0.3	< ± 0.3	< ± 0.1
Input / Output resistance ≤ 50 kN	Ohm	351 ± 2	351 ± 2	351 ± 2	351 ± 2
Input / Output resistance > 50 kN	Ohm	702 ± 2	702 ± 2	702 ± 2	702 ± 2
Insulation resistance (50V)	MOhm	> 5000	> 5000	> 5000	> 5000
Nominal excitation voltage	V	5 to 10	5 to 10	5 to 10	5 to 10
Nominal range of the excitation voltage	V	2...15	2...15	2...15	2...15
Safe load limit	% F.S.	150	150	150	150
Breaking load	% F.S.	300	> 300	> 300	> 300
Static lateral force limit	% F.S.			15	
Permissible dynamic loading	% F.S.	50	50	50	50

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

LOAD CELLS

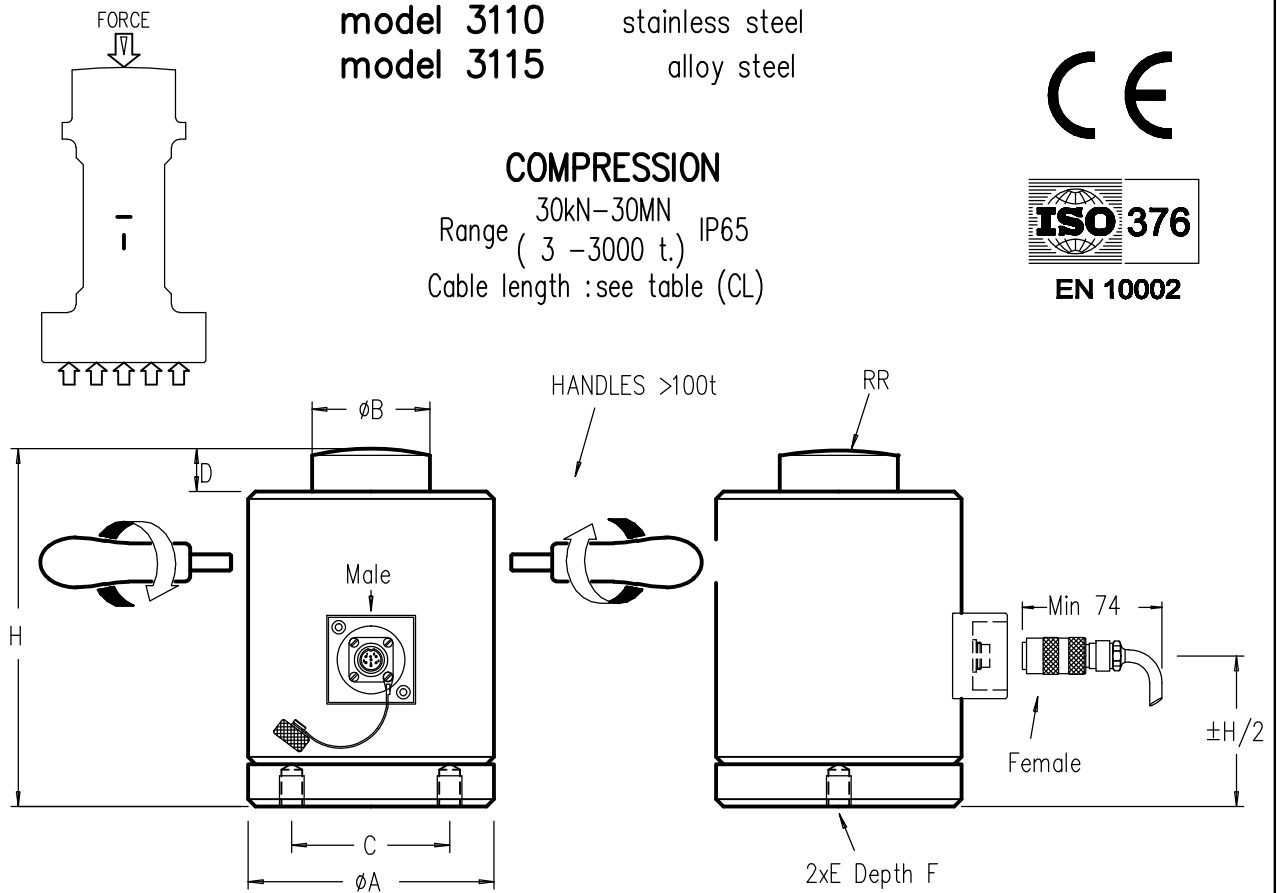
model 3110 stainless steel
 model 3115 alloy steel

COMPRESSION

Range 30kN-30MN IP65
 (3 - 3000 t.)
 Cable length : see table (CL)

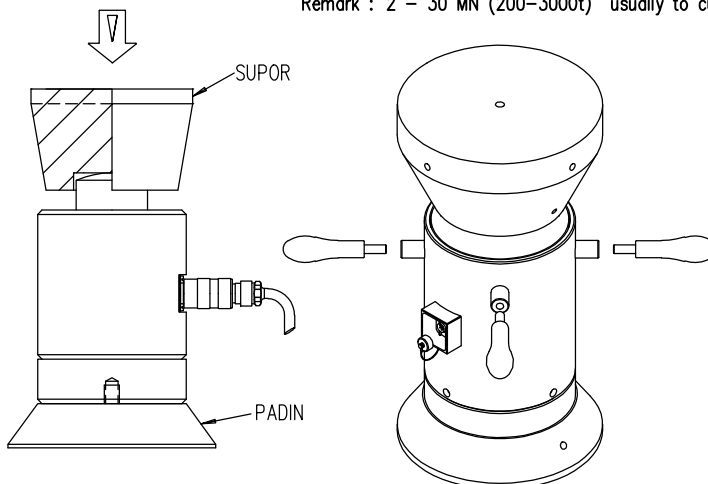


EN 10002

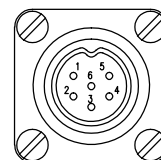


CAPACITIES	φA	φB ^{-0.05/-0.15}	C	D	E	F	H	RR	CL	Max.Deflexion	R Input(ohms)	Weight
30 - 50 kN	64	36	45	20	M10	12	135	250	6 m	0.12 mm	±350 Ω (0.25,0.1%) ±700 Ω (0.05%,0.03% or cl 1,cl 0.5,cl 00 to ISO 376)	2kg
75 - 200 kN					M12	15	160	300		0.16-0.18 mm		2.2kg
300-500 kN	89	56	60	30	M16	16	190	400		0.18-0.20 mm		4.5kg
0.75 - 1 MN	99	64	65							0.33-0.34 mm		6 kg
1.5 - 2 MN	119	90	90	40	M20	20	270	450		0.29-0.35 mm		20kg
3 MN	159	125	100							±0.4 mm		42kg
5 MN	205	160	125	50	M30	35	350	500	±0.5 mm	90kg		
7.5-10 MN	294	200	200	60					40	460	600	±0.7 mm
15 - 20 MN	364	250	270	75	M36	50	550	800	12 m	±0.8 mm	446kg	
30 MN	445	300	300							50	600	1000

Remark : 2 - 30 MN (200-3000t) usually to customer design specification



FEMALE-MALE CONNECTOR DIN 45322



- CONTACT N°
- 1 Excitation - Yellow
 - 2 Signal + Green
 - 3 Signal - White
 - 4 Excitation + Brown
 - 5 Sense - Grey
 - 6 Sense + Pink

Cable screen not connected to transducer