

3110 - 3115

HIGH CAPACITY COMPRESSION STANDARD REFERENCE FORCE TRANSDUCER

- Standard reference force transducer specially designed according to the norm ISO 376⁽¹⁾ (Class "1", "05" and "00")
- Broad range of capacities (up to 30 MN)
- Compact design
- Complete range of load accessories
- Protection: IP65
- Stainless steel (3110) or nickel plated alloy steel (3115)
- Also available with RS-232C or RS-485 output (option)



Model 3115S – 5MN – V

STANDARD AVAILABLE CAPACITIES

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

	Class	1	05	00
Hysteresis		$\leq \pm 0.30$	$\leq \pm 0.15$	$\leq \pm 0.07$
Repeatability with rotation (reproducibility)		$\leq \pm 0.20$	$\leq \pm 0.10$	$\leq \pm 0.05$
Repeatability without rotation (repeatability)	% RO ⁽²⁾	$\leq \pm 0.10$	$\leq \pm 0.05$	$\leq \pm 0.025$
Creep (over 30 minutes)		$\leq \pm 0.10$	$\leq \pm 0.05$	$\leq \pm 0.025$
Return to zero		$\leq \pm 0.05$	$\leq \pm 0.025$	$\leq \pm 0.012$
Reference temperature		+20		
Compensated temperature range	°C	-10 .. +45		
Service temperature range		-30 .. +70		
Storage temperature range		-50 .. +85		
Temperature coefficient on sensitivity	% RO / °C	$\leq \pm 0.035$	$\leq \pm 0.035$	$\leq \pm 0.015$
Temperature coefficient on zero	% FS ⁽³⁾ / °C	$\leq \pm 0.03$	$\leq \pm 0.03$	$\leq \pm 0.023$
Sensitivity	mV/V	1.5...2		
Time of stabilization after power excitation supply	s	200...600		
Input resistance	Ω	350 \pm 3 or 700 \pm 5		
Output resistance	Ω	350 \pm 2 or 700 \pm 4		
Insulation resistance	M Ω	> 5000		
Nominal excitation voltage	V	10		
Maximum excitation voltage	V	15		
Service load		100		
Limit load	% FS	110		
Breaking load		> 300		

⁽¹⁾ The class G0,5 of the norm DIN 51301 (D), the class 0 of the norm NFA 03-510 (F), the class 0 of the norm NBN X07-001 (B) and the class 0,5 of the norm EN 10002-3 are equivalent with the class 05 of the norm ISO376.

⁽²⁾ RO is the rated output (i.e.: measured value). The mentioned values are only valid if RO \geq 20% of full scale).

⁽³⁾ FS is the full scale of the force transducer.

LOAD CELLS

model 3110 stainless steel
 model 3115 alloy steel

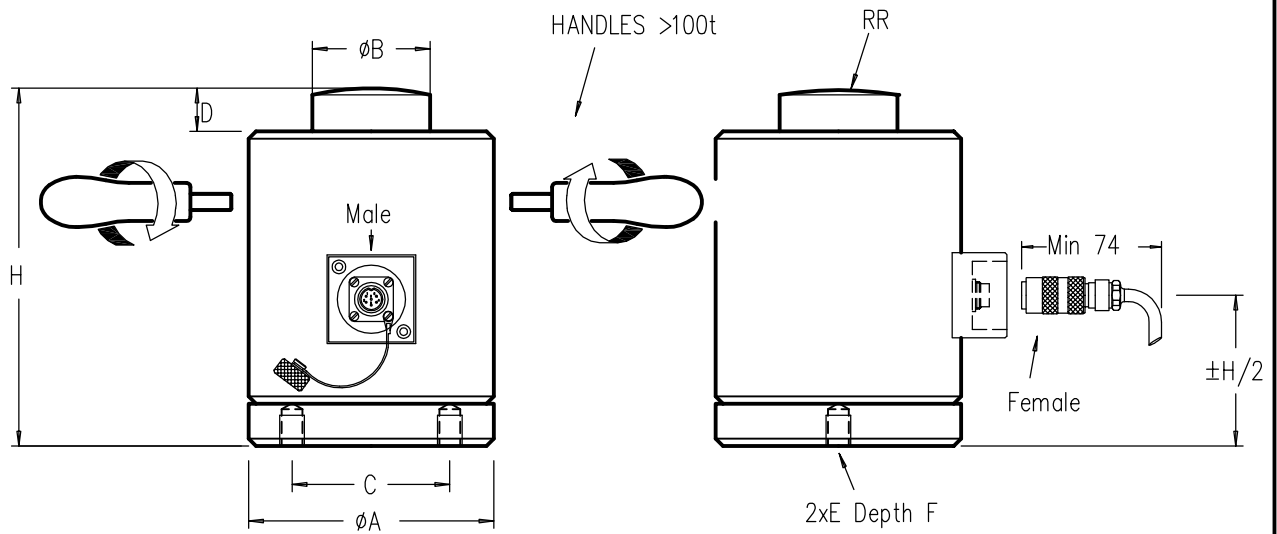


COMPRESSION

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

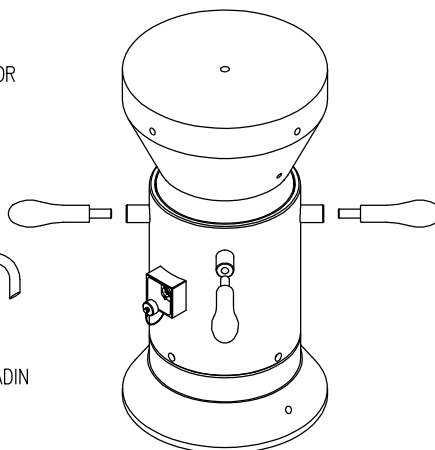
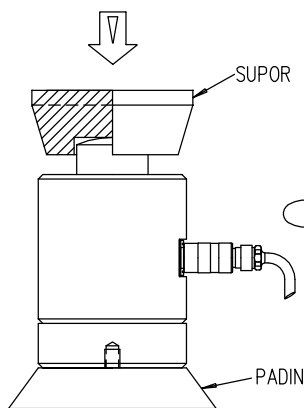


EN 10002

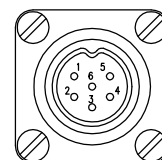


CAPACITIES	ØA	ØB $\begin{smallmatrix} -0.05 \\ 0.15 \end{smallmatrix}$	C	D	E	F	H	RR	CL	Max.Deflexion	Weight	R Input(ohms)
30 - 50 kN	64	36	45	20	M10	12	135	250	6 m	0.12 mm	2kg	±350 Ω (0.25,0.1%) ±700 Ω (0.05%,0.03% or cl 1,cl 0.5,cl 00 to ISO 376
75 -200 kN										0.16-0.18 mm	2.2kg	
300-500 kN	89	56	60	30	M12	15	160	300		0.18-0.20 mm	4.5kg	
0.75 -1 MN	99	64	65		M16	16	190	400		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							35	350	
5 MN	205	160	125	50	12 m	40	460	600	±0.5 mm	90kg		
7.5-10 MN	294	200	200	60		M30	40	460	600	±0.7 mm	243kg	
15 - 20 MN	364	250	270	75		M36	50	550	800	±0.8 mm	446kg	
30 MN	445	300	300							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

Rev.5/4/2003