

3100P

PENDULAR COMPRESSION LOAD CELL

Compression load cell.

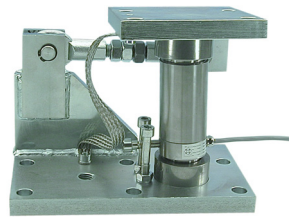
- Canister, high capacity load cell (up to 500 tons)
- Totally made of stainless steel
- Protection IP 67
- Pendular technology - Self restoring
- Available in C1,5 (1'500 d) OIML / R 60
- Matched impedance and sensitivity (for parallel connection)
- A whole range of mounting accessories is proposed
- Available options (non exhaustive list):
 - o ATEX Ex ia IIC T6 to T4 certified (hazardous area)
 - o High service temperature (180 °C)
 - o Protection IP68 (welded)



Model 3100P - 10 t

The SENSY's load cell 3100P is perfectly designed to the following application :

- Weighbridges
- Silos, tanks or hoppers weighing
- High capacity reactors
- Train scales etc...



3100P + I3100P

CAPACITIES :

3100P : (3) - 5 - (7.5) - 10 - (15) - 20 - 30 - 50 - (75) - 100 - (150) - 200 - 300 - 500 t

TECHNICAL DATA					
Accuracy class		0.25	0.1 1000 d	C 1.5 1500 d OIML	0.03 3000 d
Linearity error	% F.S.	< ± 0.25	< ± 0.1	< ± 0.025	< ± 0.025
Hysteresis error	% F.S.	< ± 0.25	< ± 0.1	< ± 0.025	< ± 0.025
Non - repeatability	% F.S.	< ± 0.1	< ± 0.03	< ± 0.015	< ± 0.015
Creep error over 30 min.	% F.S.	< ± 0.1	< ± 0.06	< ± 0.035	< ± 0.025
Zero shift after loading	% F.S.	< ± 0.025	< ± 0.015	< ± 0.0075	< ± 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	< ± 0.017	< ± 0.015
Temperature coefficient of zero signal	%F.S./10°C	< ± 0.035	< ± 0.035	< ± 0.025	< ± 0.023
Nominal sensitivity	mV/V	1,5	1,5	1,5...3	1,5
Zero balance	mV/V	± 0.02	± 0.02	± 0.02	± 0.02
Sensitivity tolerance (g=9,8107 m/s²)	%	< ± 0.3	< ± 0.3	< ± 0.1	< ± 0.1
Input / Output resistance ≤ 20t	Ohm	351 ± 2	351 ± 2	351 ± 2	351 ± 2
Input / Output resistance > 20t	Ohm	702 ± 2	702 ± 2	702 ± 2	702 ± 2
Insulation resistance (50V)	MOhm	> 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	15	15	15
Permissible dynamic loading	% F.S.	50	50	50	50

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

LOAD CELLS

model 3100P

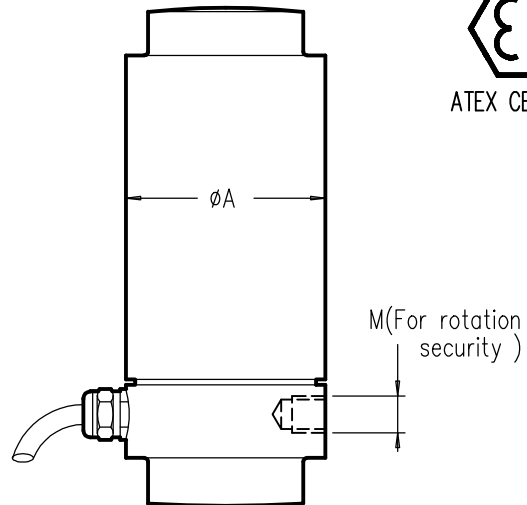
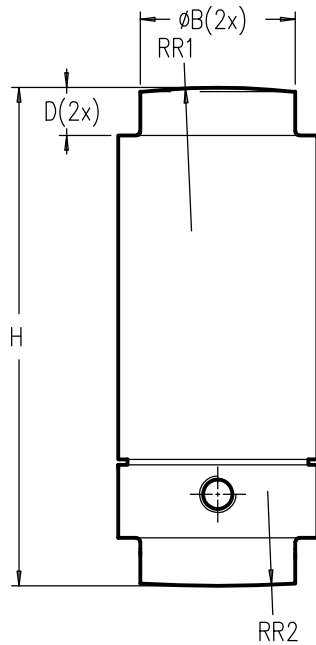
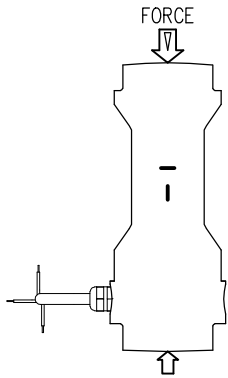
stainless steel

COMPRESSION

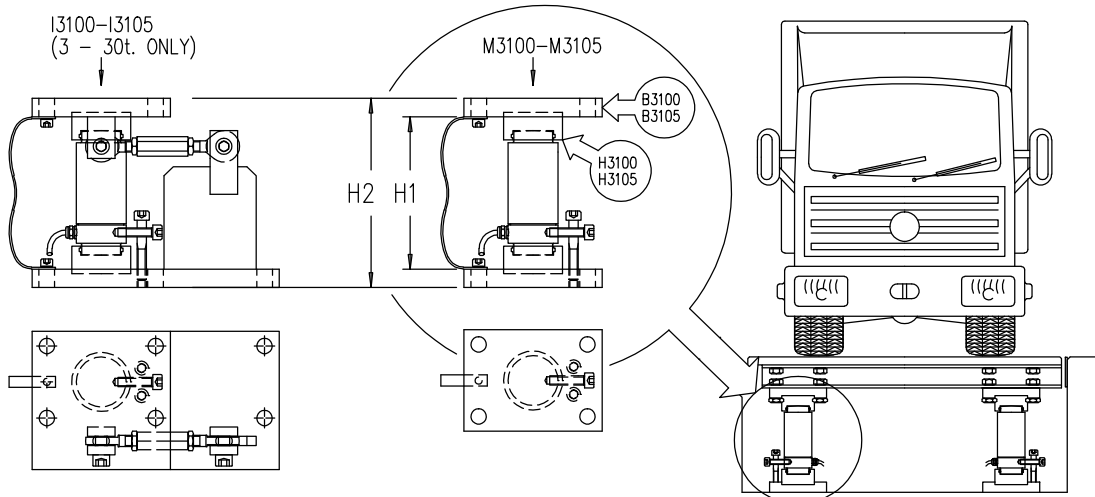
Range 3 – 500t IP 67 (IP 68)
Cable length : 12 m (500t: 20m)



ATEX CERTIFIED



CAPACITIES	ϕA	$\phi B \begin{smallmatrix} 0 \\ -0.1 \end{smallmatrix}$	D	H	M	RR1	RR2	H1	H2	Max.deflexion (mm)	R Input(ohms)	Weight (kg)
3 – 20 t	54	42	13	135	M10	200	250	165	205	0.03–0.1	±350	2.2 kg
30 t												
50 – 100t	±89	64	30	190	M12	300	300	234	294	0.26–0.34	±700	5 kg
150 – 200t	115	90	20	210	M16	400	400	290	370	0.33		15 kg
300t	121	110	20	240	M16	400	400	338	418	0.4		18 kg
500t (2mV/V)	180	130	25	350	M12	600	600	610	/	0.57		46 kg



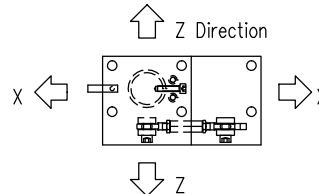
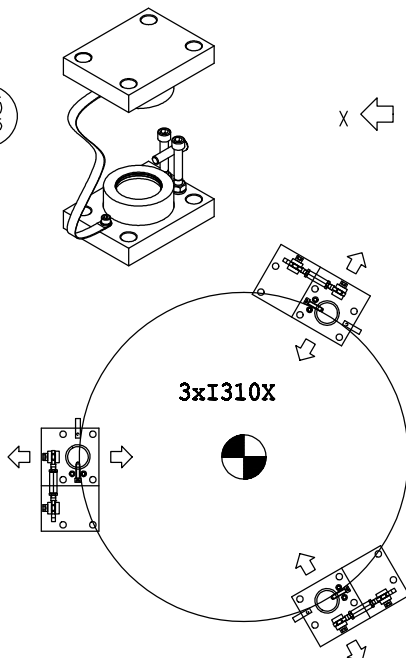
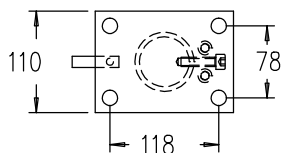
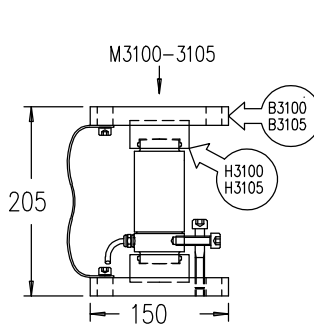
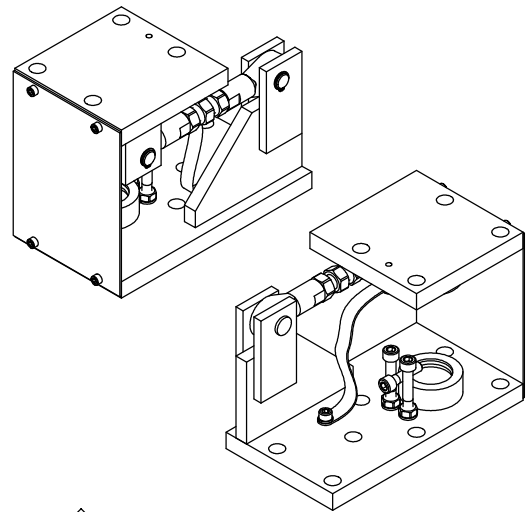
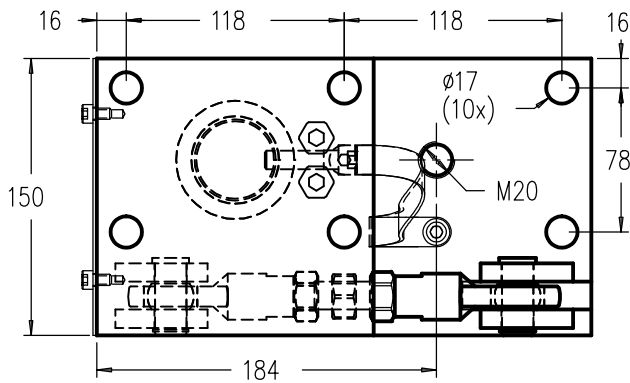
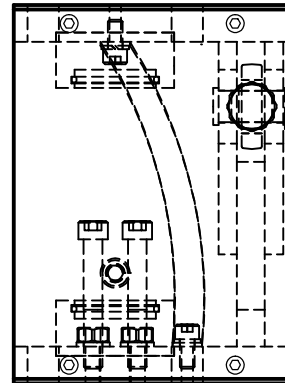
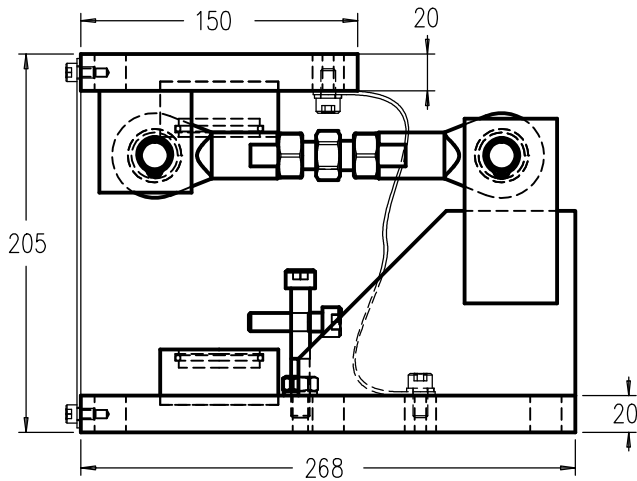
ACCESSORIES

model **I3100** stainless steel*
 model **I3105** coated steel

* ROD ENDS IN
 STAINLESS STEEL

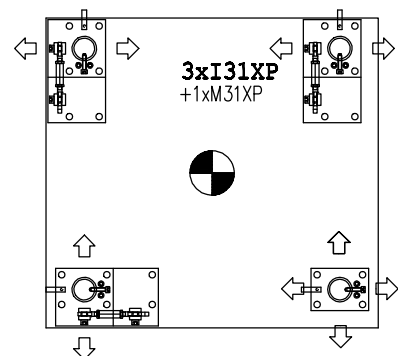
EASY MOUNT FOR MODELS 3100P-3105P

Range 3 - 30 t



X Direction
 (MAX.5200 Kg. STAT.
 2240 Kg. DYN.)

Stainless steel
 (MAX.2100 kg STAT
 800 kg DYN.)



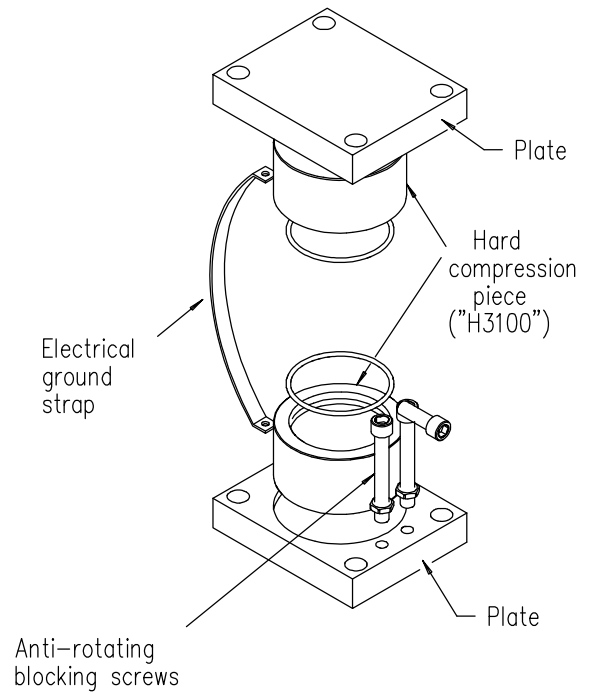
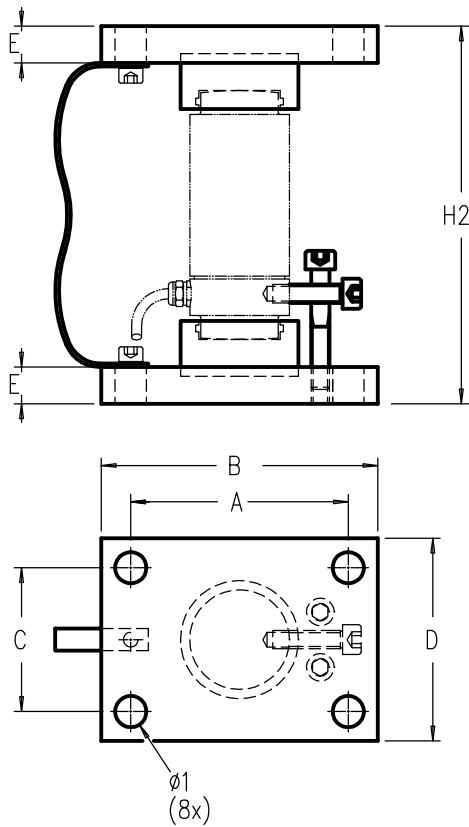


ACCESSORIES

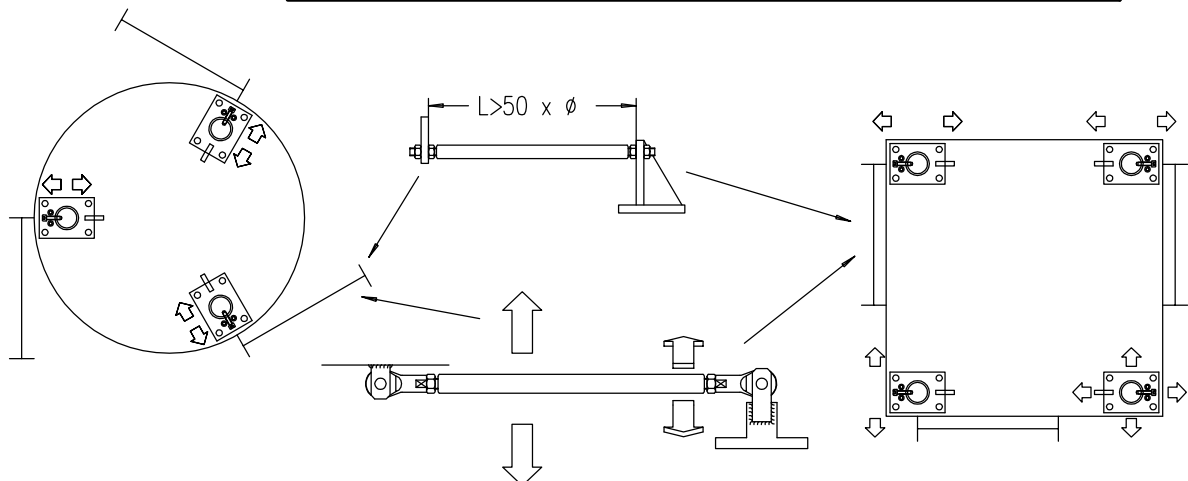
model M3100 stainless steel
 model M3105 coated steel

PENDULAR KIT UNIT FOR MODELS 3100P-3105P

Range 3 - 300 t



CAPACITIES	A	B	C	D	E	$\phi 1$	H2	Weight (kg)
3 - 30 t	118	150	78	110	20	17	205	± 5.7
50 - 100t	130	170	90	130	30	21	294	± 13
150 - 200t	185	235	135	185	40	25	370	± 35.5
300t							418	± 41

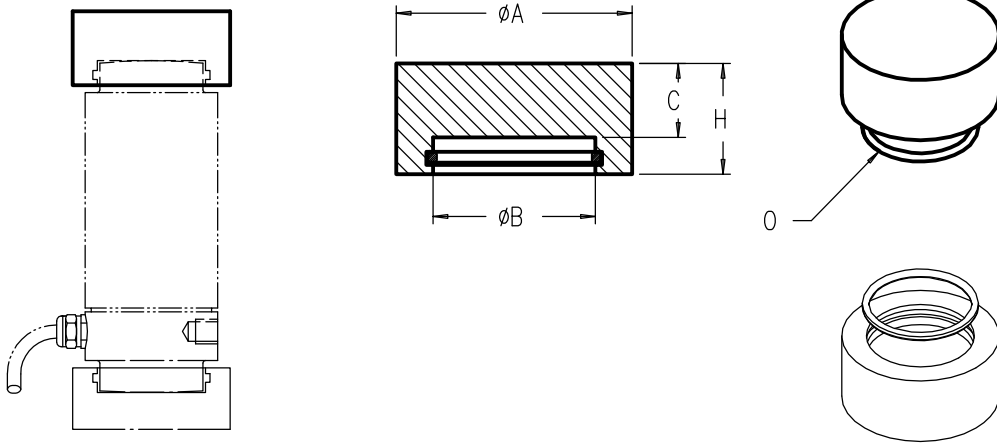


ACCESSORIES

model H3100 stainless steel
 model H3105 coated steel

HARD COMPRESSION PIECES FOR 3100P

Range 3 – 300 t



CAPACITIES	ϕA	ϕB	E	H	O (O-Ring)	Weight (kg)
3 – 30 t	64	44	20	30	42 x 3	± 0.65
50 – 100t	99	66	32	43	64 x 4	± 2.3
150 – 200t	128	92	50	65	90 x 5	± 6
300t	148	112	59	75	110 x 5	± 9

