

3100P

SELF RESTORING ROCKER PIN (HEAVY COMPRESSION LOAD CELL)

- Canister, high capacity load cell (from 3 to 300 tons)
- Totally made of stainless steel
- Protection IP 67
- Pendular technology (Self restoring pendle function)
- Optimized for parallel connection
- A whole range of mounting accessories is proposed
- Available in IP 68 version
- Available in EEx ia IIC T4 / T6 certified version for use in hazardous area
- Execution in high temperature version available
- Available in C1,5 (3000 d) OIML / R 60



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

AVAILABLE CAPACITIES :

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

TECHNICAL DATA

| Accuracy class | | 0.25 | 0.1 1000 d | C 1 1000 d OIML | 0.03 3000 d |
|--|-------------|-------------|---------------|--------------------|----------------|
| Linearity error | % F.S. | < ± 0.25 | < ± 0.1 | < ± 0.03 | < ± 0.025 |
| Hysteresis error | % F.S. | < ± 0.25 | < ± 0.1 | < ± 0.03 | < ± 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 | < ± 0.02 | < ± 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 | 1,5 | 1,5 | 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 | Ohm | 702 ± 20 | 351 ± 2 | 351 ± 2 | 700 ± 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

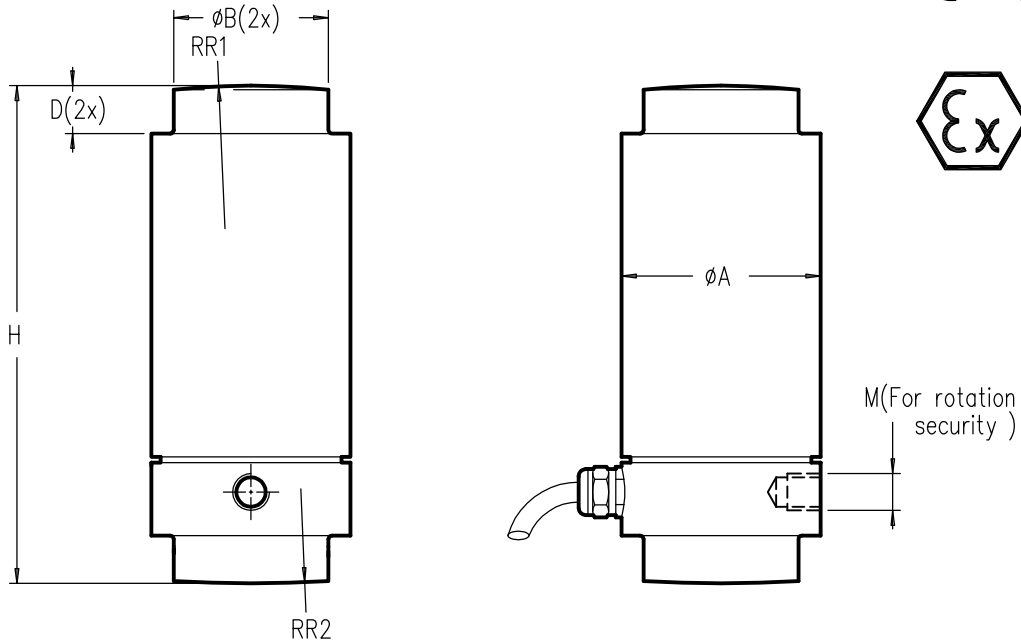
stainless steel



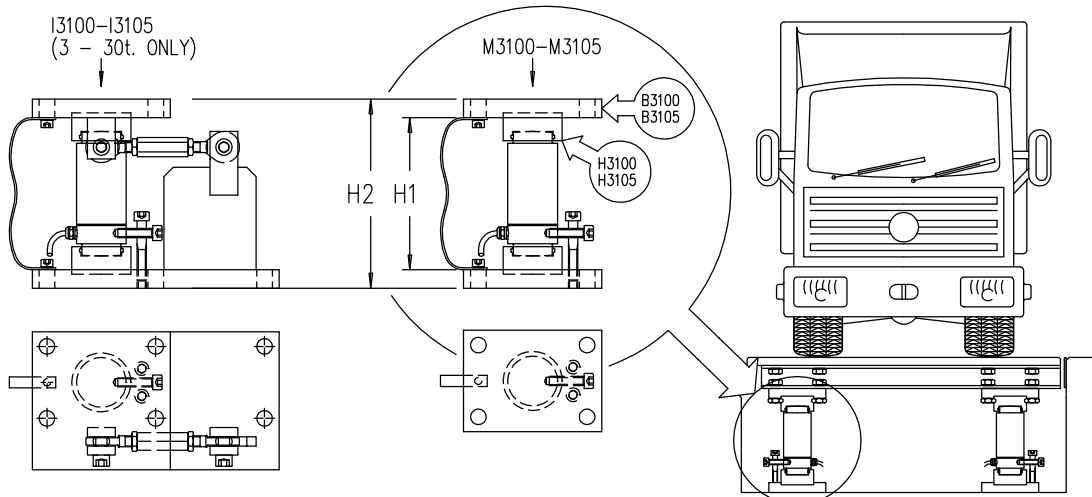
COMPRESSION

Range 3 – 300t IP 67 (IP 68)

Cable length : 12 m



| CAPACITIES | øA | øB ⁰ _{-0.1} | D | H | M | RR1 | RR2 | H1 | H2 | Max.deflexion (mm) | Weight (kg) | R Input(ohms) |
|------------|-----|---------------------------------|----|-----|-----|-----|-----|-----|-----|--------------------|-------------|---------------|
| 3 – 20 t | 54 | 42 | 13 | 135 | M10 | 200 | 250 | 165 | 205 | 0.03–0.1 | 2.2 kg | ±350 |
| 30 t | | | | | | | | | | | | ±700 |
| 50 – 100t | ±89 | 64 | 30 | 190 | M12 | 300 | 300 | 234 | 294 | 0.26–0.34 | 5 kg | ±700 |
| 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 | |



Rev. 19/04/2001A

ACCESSORIES

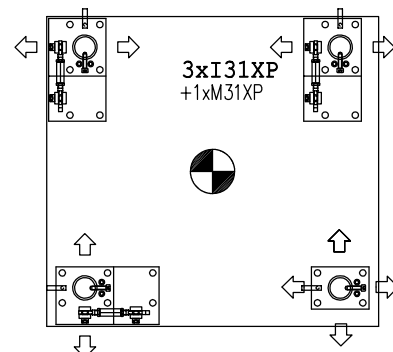
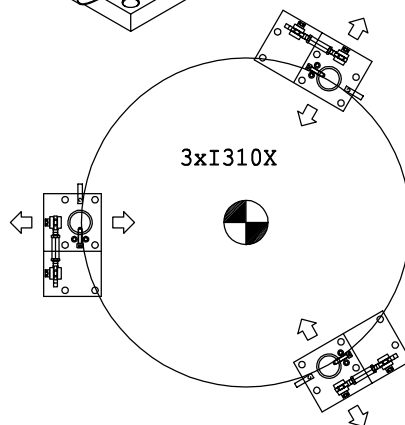
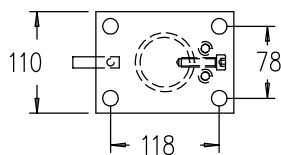
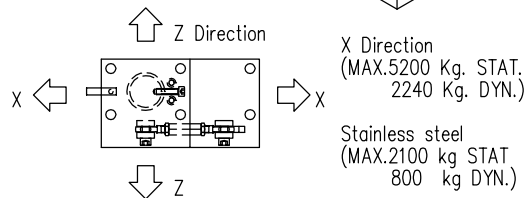
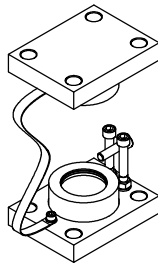
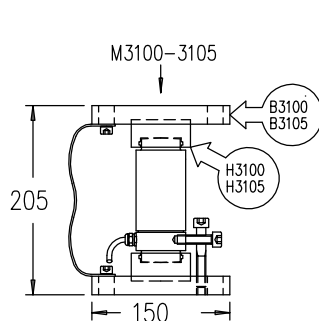
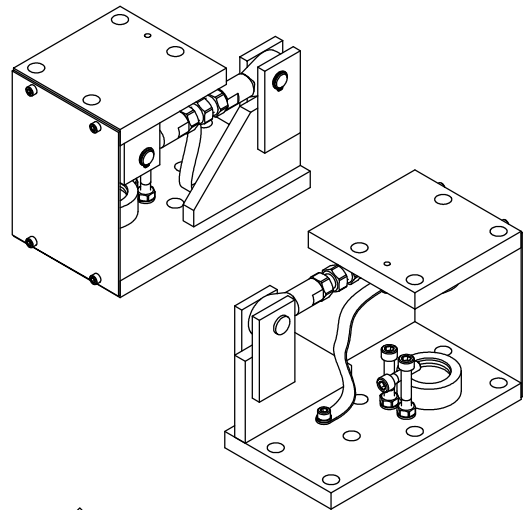
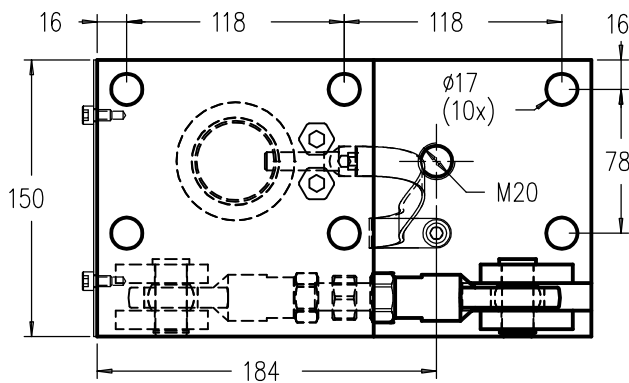
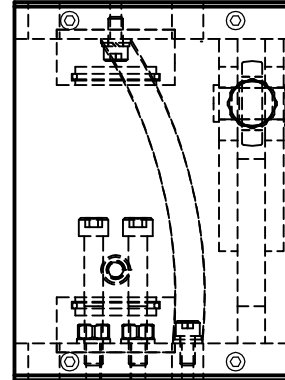
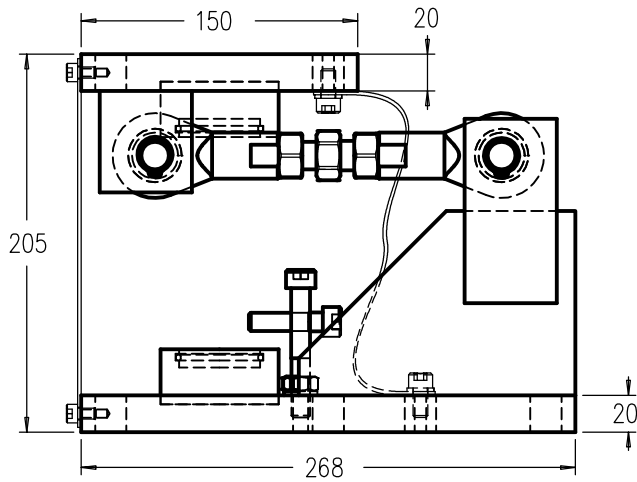
model I3100 stainless steel*

model I3105 coated steel

* ROD ENDS IN STAINLESS STEEL

EASY MOUNT FOR MODELS 3100P-3105P

Range 3 - 30 t

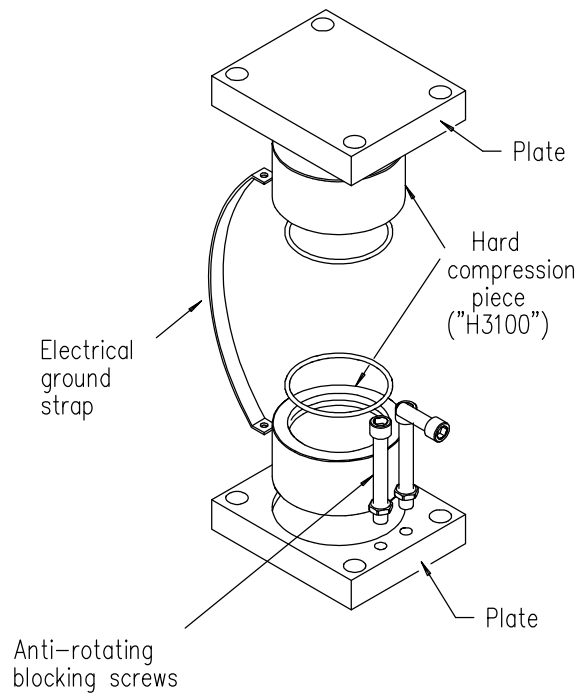
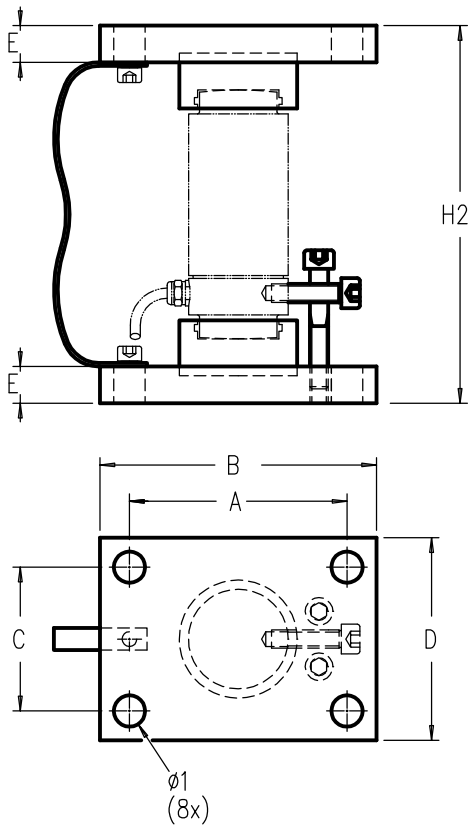


ACCESSORIES

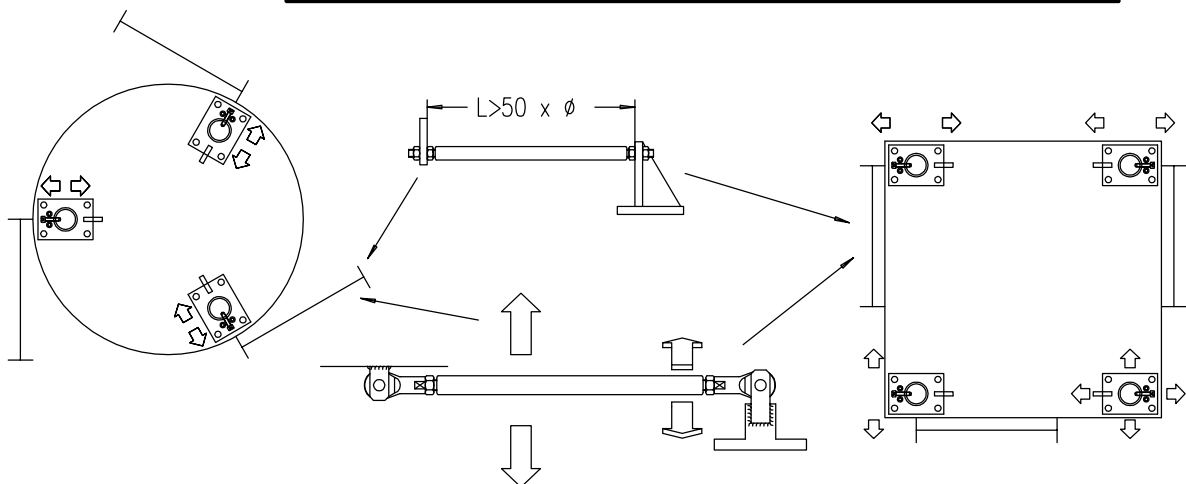
model M3100 stainless steel
 model M3105 coated steel

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 |



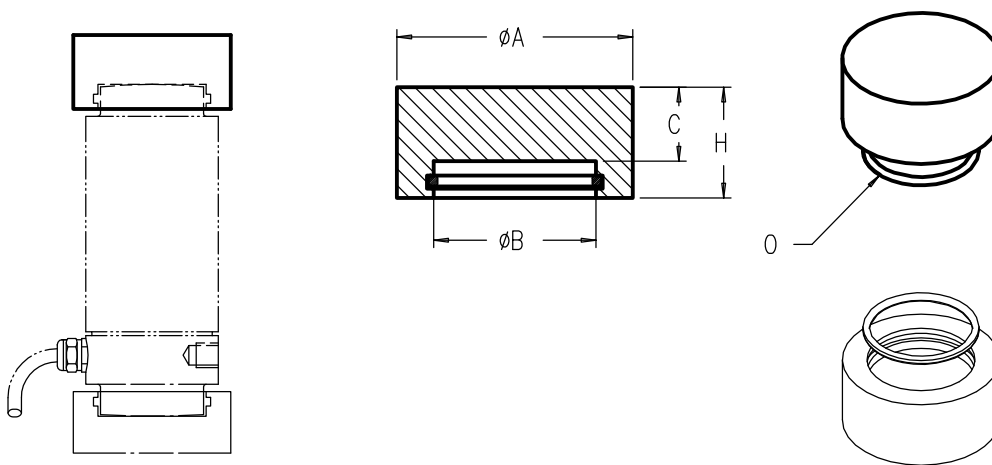
Rev.19/04/2001A

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 |

