www.sensy.com

# 6200-6205 REACTION TORQUE METERS

**Universal non-rotating torque meters combining accuracy, sturdiness and easiness to install.**

Model 6200 - 500 Nm

## Features

- Easy to install, Compact design
- Protection IP: See drawing's table (IP)
- Materials :
  - o Stainless steel (6200)
  - o Nickel plated steel (6205)
- Cable length: 3m
- 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 high service temperature (up to 180 C)
  - o amplified (0..10 V, 4..20 mA) and digital output signal (RS-232C, RS-485, USB)
  - o double strain-gage bridge
- Also available as standard reference torque meters

## Applications

The SENSY's load cells 6200-6205 are perfectly designed to the following applications :

- Torque measurement on machines
- Servo control or torque limitation on industrial process
- Calibration of screw drivers
- Torque measurement in laboratories

## Capacities

6200 - 6205 : 10 - 20 - 50 - 100 - 200 - 500 - 1000 - 2000 Nm
Higher capacitie on request

| Specifications | 0.25 | |
|---|---|---|
| Linearity error | < ± 0.25 | % F.S. |
| Repeatability error | < ± 0.1 | % F.S. |
| Creep error over 30 min. | < ± 0.1 | % F.S. |
| Zero shift after loading | < ± 0.025 | % F.S. |
| Reference temperature | 23 | C |
| Nominal temperature range | -10...+45 | C |
| Service temperature range | -30...+70 | C |
| Storage temperature range | -50...+85 | C |
| Temperature coefficient of the sensitivity | < ± 0.05 | % F.S./10 C |
| Temperature coefficient of zero signal | < ± 0.035 | % F.S./10 C |
| Zero balance | ± 0.02 | mV/V |
| Sensitivity tolerance | < ± 0.3 | % |
| Input resistance | 352 ± 2 | Ohm |
| Output resistance | 352 ± 2 | Ohm |
| Insulation resistance (50V) | > 5000 | Megaohm |
| Reference excitation voltage | 10 | VDC |
| Nominal range of excitation voltage | 3..12 | VDC |
| Nominal sensitivity | 1.5 | mV/V |
| Safe load limit | 130 | % F.S. |
| Breaking load | >300 | % F.S. |
| Static lateral force limit | 50 | % F.S. |
| Permissible dynamic loading | 50 | % F.S. |

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

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# STATIC TORQUEMETER

## model 6200 stainless steel
## model 6205 alloy steel
## REACTION TORQUE TRANSDUCER

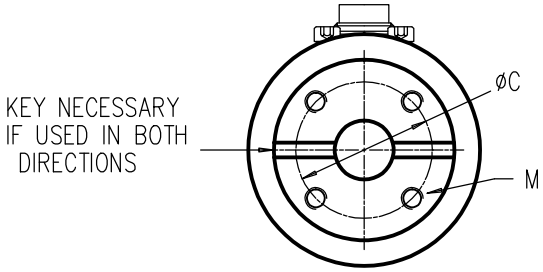
TEDS sensors
PLUG & PLAY
IEEE 1451.4 compliant

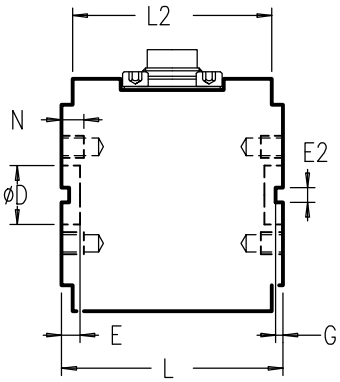
CE

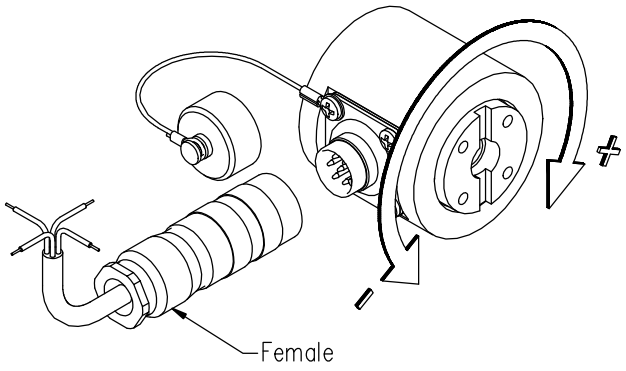
ATEX CERTIFIED

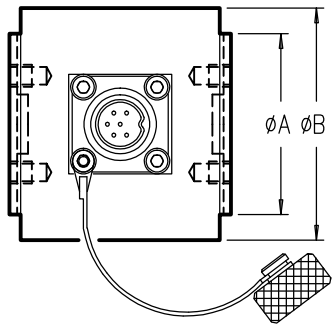
Range 10–2000 Nm – Protection see table IP

Cable length : 3 m Overload 150 %



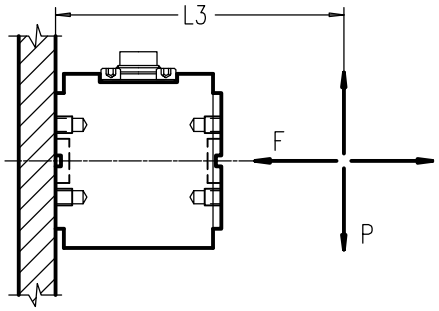



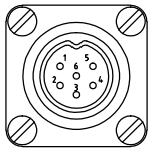




| CAPACITIES | øA | øB | øC | øD H7 | E | E2 | G | L | L2 | M | N | IP | F max (N) | L3xP max (N/m) | Torsional stiffness Nm/rad |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10–20 Nm | 30 | 45 | 22 | 10 | 5 | 4 | 2 | 45 | 40 | 4 x M 4 | 4 | IP 54 | 100–160 | 8 – 10 | 2300–3500 |
| 50–100 Nm | 49 | 63 | 37 | 16 | | 4 | 2 | 60 | 54 | 4 x M 6 | 6 | IP 67 | 2000–4000 | 16 – 32 | 4000–10200 |
| 200–500 Nm | 79 | 95 | 59 | 25 | | 5 | 2.5 | 80 | 73 | 4 x M 10 | 10 | | 6000–10000 | 64 –163 | 20200–70000 |
| 1000 Nm | 99 | 112 | 78 | 40 | | 6 | 3 | 125 | 115 | 4 x M 12 | 12 | | 18000 | 323 | 105000 |
| 2000 Nm | | | 69 | | | | | | | 4 x M 16 | 16 | | 30000 | 647 | 260000 |

PARASITIC FORCES ALLOWED




CONNECTOR -CONNECTEUR *DIN 45322*



| CONTACT N° | | | | |
|---|---|---|---|---|
| 1 | *Yellow* | *Jaune* | Excitation - | |
| 4 | *Brown* | *Brun* | Excitation + | |
| 2 | *Green* | *Vert* | :Signal+ | :Signal - |
| 3 | *White* | *Blanc* | :Signal- | :Signal + |
| 5 | *Grey* | *Gris* | Calibration | |
| 6 | *Pink* | *Rose* | Calibration | |

Standard : Cable screen not connected to transducer
Option f : Cable screen connected to transducer

Rev.9/10/2006