

## APPLICATIONS

- Torque measurement on machines,
- Servo control or torque limitation industrial process,
- Torque wrench calibrator,
- Torque measurement in laboratories



## DESCRIPTIONS

Universal non-rotating torque meters combining accuracy and sturdiness.

- Easy to install, compact design
- Protection class: IP65
- Material stainless steel (61000), nickel-plated steel (6105)
- Cable length: 3m

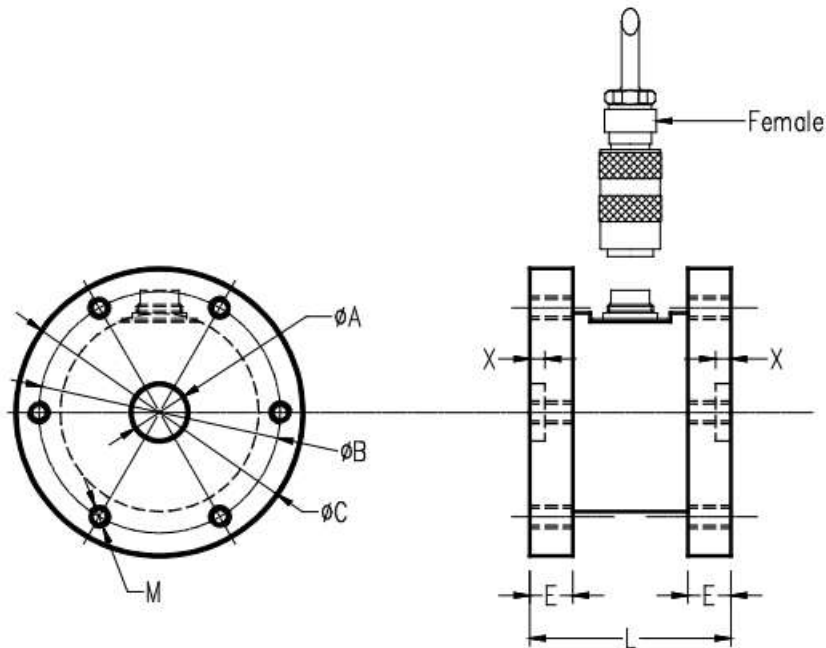
**TECHNICAL FEATURES**

Capacities 61000-6105: 300 – 500 – 1000 – 2000 – 5000 – 10 000 N m

	<b>0.25 %</b>	
<b>Combined error (non-linearity + hysteresis)</b>	<± 0.25	% F.S.
<b>Repeatability error</b>	<± 0.1	% F.S.
<b>Creep error over 30 min.</b>	<± 0.1	% F.S.
<b>Zero shift after loading</b>	<± 0.025	% F.S.
<b>Reference temperature</b>	23	°C
<b>Compensated temperature range</b>	-10...+45	°C
<b>Service temperature range</b>	-25...+70	°C
<b>Storage temperature range</b>	-50...+85	°C
<b>Temperature coefficient of the sensitivity</b>	<0.05	% F.S./10°C
<b>Temperature coefficient of zero signal</b>	<0.035	% F.S./10°C
<b>Zero balance</b>	± 0.02	mV/V
<b>Nominal sensitivity</b>	1.5	mV/V
<b>Sensitivity tolerance</b>	<± 0.3	%
<b>Input resistance</b>	350 ±2	ohm(s)
<b>Output resistance</b>	350 ±2	ohm(s)
<b>Insulation resistance (50 V)</b>	>5000	Mohm(s)
<b>Reference excitation voltage</b>	10	VDC
<b>Permissible nominal range of excitation voltage</b>	3...12	VDC
<b>Safe load limit</b>	130	% F.S.
<b>Breaking load</b>	>300	% F.S.
<b>Permissible dynamic loading</b>	50	% F.S.

\* F.S.: Full Scale

STANDARD DIMENSIONS



ORDER CODE

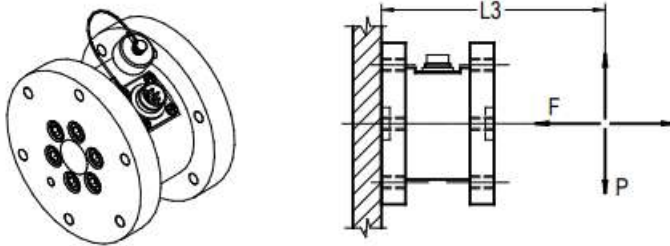
Ref. Item*	Capacities	ØA	ØB	ØC	E	L	M	X	F max (kN)	L3xP max (N x m)	Torsional stiffness (kN·m/rad)	Weight (kg)
610x-A	300 - 500 N·m	20 H7	84	99	15	70	M8 (6x60°)	10	7 - 12	80 - 170	170 - 215	2.2
610x-B	1 - 2 - 5 kN·m	20 H7	127	149	18	100	M12 (8x45°)	15	18 - 35 - 55	330 - 700 - 1300	220 - 600 - 1300	7.5
610x-C	10 kN·m	20 H7	150	179	25	120	M16 (8x45°)	15	84	2000	3400	12.8

\*x=Material: 6100 - stainless steel; 6105 - nickel-plated steel

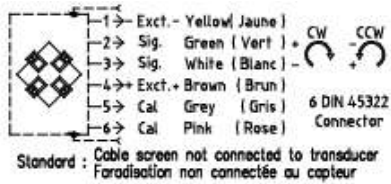
Dimensions in mm

OTHERS

- Others



- Wiring



- Load direction



*SPHEREL Systems reserves the right to make any kind of design or functional modification at any moment without prior notice.*