FORCE TRANSDUCER

TENSION & COMPRESSION



- STAINLESS STEEL
- COMBINED ERROR ≤ ±0.07 %
- IP67 PROTECTION RATING

IP67 | Stainless Steel | Dynamic Measurement | Fully Laser Welded | ISO 376 REFERENCE STANDARD | ISO 17025 ACCREDITED LABORATORY | mV/V

NOMINAL LOAD (FS)

kg	kN	NET WEIGHT (kg)	COMBINED ERROR	ACCURACY CLASS AC 1	AC 0.5	RoHS	ISO 376	Rated Output (mV/V)
100	1	0.28	≤±0.07 %	•	•	•	•	2.0 ±0.1%
250	2.5	0.28	≤±0.07 %	•	•	•	•	2.0 ±0.1%
500	5	0.28	≤±0.07 %	•	•	•	•	2.0 ±0.1%
1 000	10	0.28	≤±0.07 %	•	•	•	•	2.0 ±0.1%

TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V[1] ±0.1 % at FS
Zero Balance	< ±1.0 %
Combined error	≤±0.07 %
Non-linearity	≤ ±0.05 %FS
Hysteresis	≤ ±0.05 %FS
Creep	≤ ±0.10 %FS
Temperature coefficient on zero	≤ ±0.028 %FS per 10 °C
Temperature coefficient on span	≤ ±0.024 %F.S. per 10 °C
Compensated temperature range	-10...+40 °C
Operating temperature range	-20...+70 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

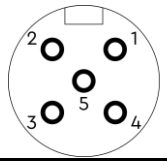
Material	STAINLESS STEEL
Deflection at FN	~ 0.6 mm

ELECTRICAL PROPERTIES

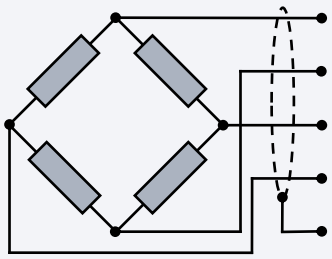
Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	800 ± 20 Ω
Output resistance	705 ± 2Ω
Insulation resistance	≥ 5 GΩ
Recommended excitation voltage	max. 18 V
Cable diameter	/
Cable length	/

ELECTRICAL CONNECTION

Connector
M12 Male
5 PIN



View:
Plug Side



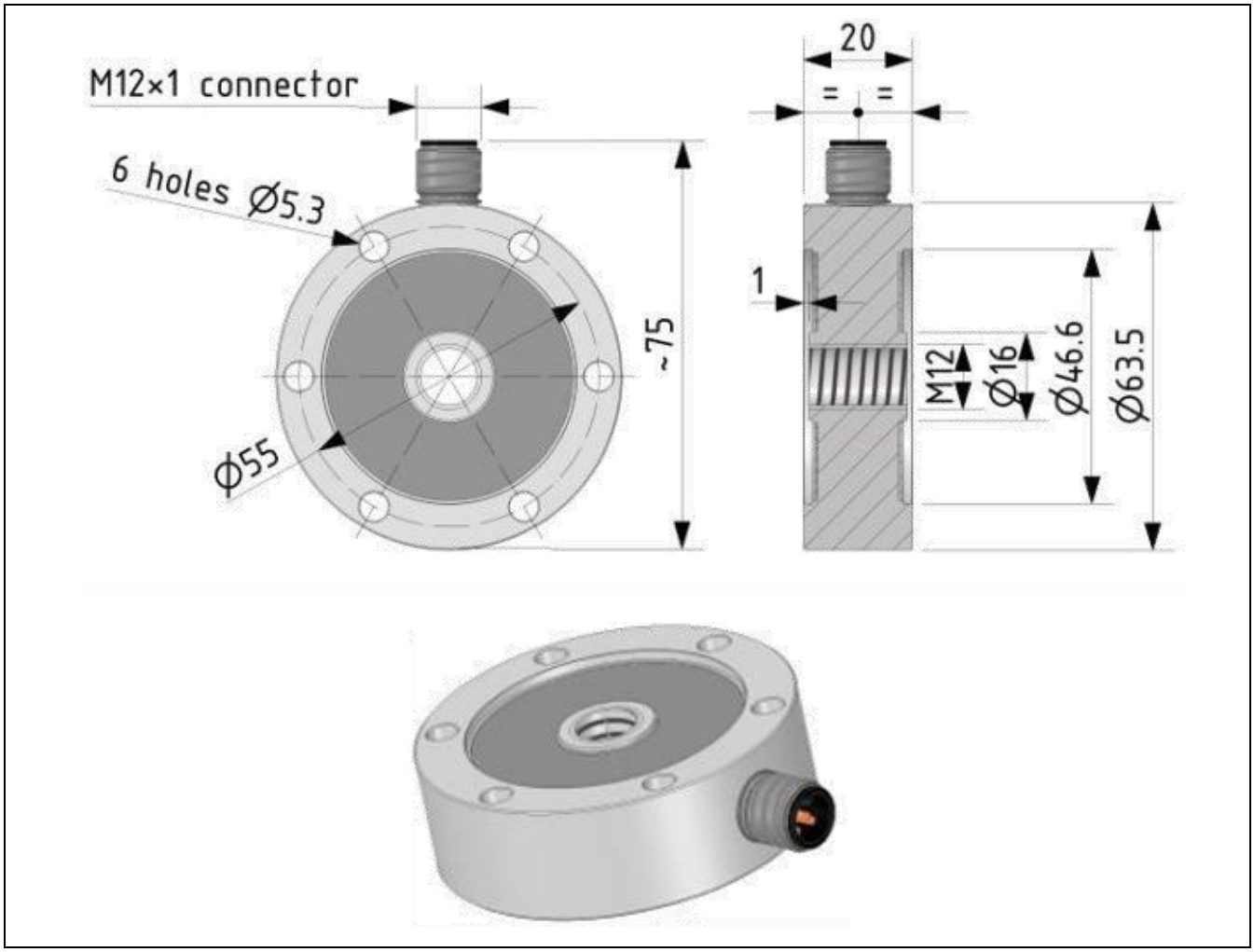
+ EXCITATION	RED
– EXCITATION	BLACK
+ SIGNAL	WHITE
– SIGNAL	YELLOW
SHIELD	

MECHANICAL LIMITS

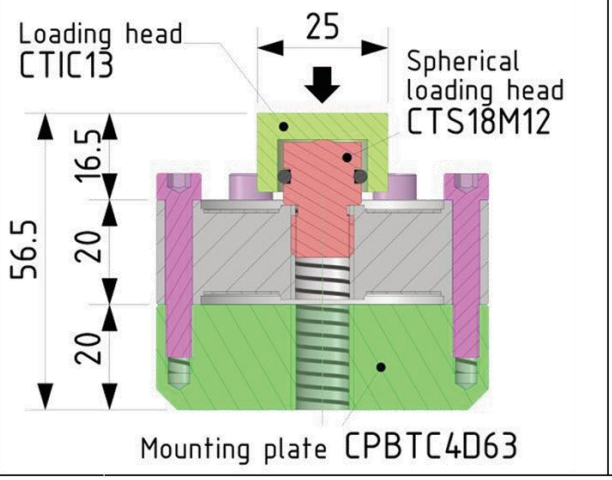
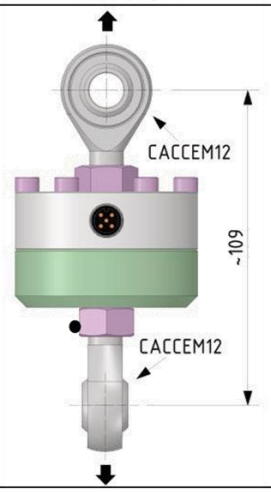
Service load	120 %FS	Load without any permanent deformation or change in calibration.
Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Breaking load	> 300 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.
Max. transverse load (side)	100 %FS	Maximum lateral or shear load that can be applied (e.g. due to misalignment or friction).
Max. permissible dynamic load	75 %FS[2]	For cyclic or oscillating loads, the amplitude should not exceed this load to prevent fatigue failure.

[1] Tests and calibrations performed in **COMPRESSION** with the transducer mounted on a bearing support with correctly tightened clamping screws.
[2] The dynamic load must be applied to the transducer central thread and not to the external fixing rim.

DIMENSIONS (mm)



APPLICATIONS (mm)

COMPRESSION	TENSION
	

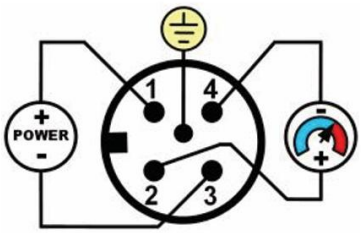
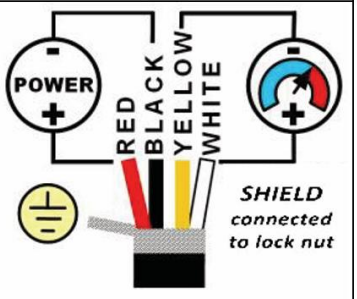
Warning

Check that the fixing screws and the accessories are correctly tightened.

Accessories material: Stainless Steel

Rm ≥ 90 kg/mm²

ELECTRICAL CONNECTIONS

	Connector M12X1	Cable
2 mV/V		

COMPLIANCE AND CERTIFICATION

Protection Rating	IP67
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated in COMPRESSION[1], ISO 17025 calibration available on request
HS-CODE	9031.80.80
Certifications	LAT Accredia calibration certificate ISO 376 or ASTM E74 for capacities from 1000 kg to 10000 kg

OPTIONS (to be purchased separately)

CONNM12FV5

- Female 5 poles straight **M12x1** CONNECTOR complete PVC molded **CABLE**, shielded, length 3 m

