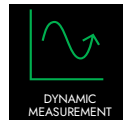


COMPACT RING LOAD CELL



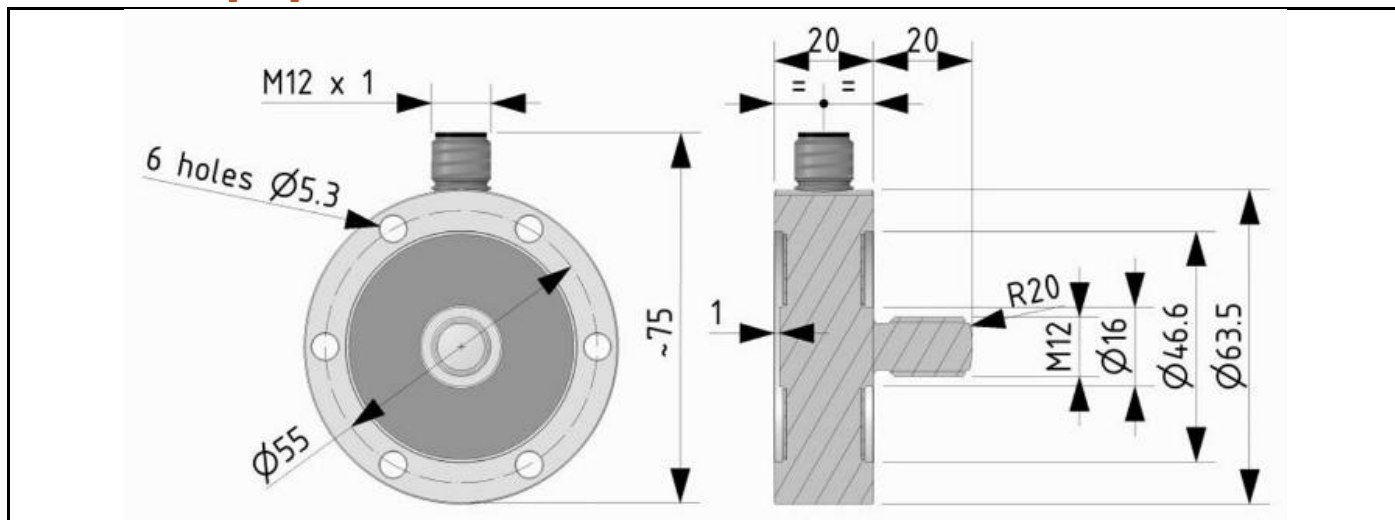
NOMINAL LOAD (FS)

N	kg (optional)	Net weight (kg)	Combined error	ISO 17025	High Temperature -40...250°C	Rated Output (mV/V)
1 000	100	0.28	$\leq \pm 0.07\%$	(optional)	(optional)	2 $\pm$ 0.1%
2 500	250	0.28	$\leq \pm 0.07\%$	(optional)	(optional)	2 $\pm$ 0.1%
5 000	500	0.28	$\leq \pm 0.07\%$	(optional)	(optional)	2 $\pm$ 0.1%
10 000	1 000	0.28	$\leq \pm 0.07\%$	(optional)	(optional)	2 $\pm$ 0.1%



TECHNICAL DATA

DIMENSIONS [mm]



PRECISION

Rated Output (C_n)	2 mV/V $\pm 0.1\%$ at FS
Zero Balance	$\leq \pm 1\%$ FS
Combined error	$\leq \pm 0.07\%$ FS
Non-linearity	$\leq \pm 0.05\%$ FS
Hysteresis	$\leq \pm 0.05\%$ FS
Repeatability	$\leq \pm 0.01\%$ FS
Creep	$\leq \pm 0.1\%$ FS (at 30 min FS)
Temperature coefficient of zero	$\pm 0.028\%$ FS/ $^{\circ}\text{C}$
Temperature coefficient of sensitivity	$\pm 0.024\%$ FS/ $^{\circ}\text{C}$
Compensated temperature range	-10...+60 $^{\circ}\text{C}$
Operating temperature range	-20...+70 $^{\circ}\text{C}$
Reference Temperature	23 $^{\circ}\text{C}$

MECHANICAL PROPERTIES

Material	17-4 PH 1.4542
Deflection at FN	~ 0.06 mm

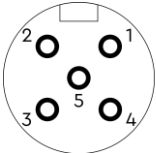
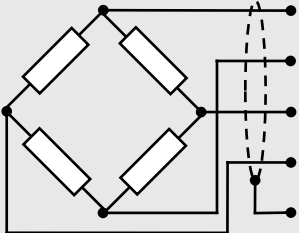
MECHANICAL LIMITS

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	70 %FS	For cyclic or oscillating loads, the amplitude should not exceed this load to prevent fatigue failure.

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	800 $\pm 20\ \Omega$
Output resistance	705 $\pm 10\ \Omega$
Insulation resistance	$\geq 5\ 000\ \text{M}\Omega$ at 100 V
Recommended excitation voltage	≤ 18 V

ELECTRICAL CONNECTION

Connector M12 Male 5 PIN	 View: Plug Side
	

+ EXCITATION	PIN 1
- EXCITATION	PIN 3
+ SIGNAL	PIN 2
- SIGNAL	PIN 4
SHIELD	PIN 5



COMPLIANCE AND CERTIFICATION

Protection Rating	IP67 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

ACCESSORIES

AM12H0511A141-010		
- M12 Pre-Molded Cable 5 Pins - A Code - Male-Straight Female-Straight - Cable Assembly		L=1;3;5;20 m
AM12F0511A141-010		
- M12 Pre-Molded Cable 5 Pins - A Code - Female-Straight Free end - Cable Assembly		L=1;3;5;20 m
AM12F0511A142-010		
- M12 Pre-Molded Cable 5 Pins - A Code - Female-90° Free end - Cable Assembly		L=1;3;5;20 m
MOUNTING PLATE		
- For compression - Stainless Steel - Center hole: M12 - Thickness: 20mm		
SWIVEL HEADS M12		
- For tension - Stainless Steel - Center distance when assembled: 127 mm		

