

## **U10M**

## Force Transducer

## Special features

- Precise and robust tensile/compressive force transducer for static and dynamic measurement tasks
- High lateral force and bending moment stability, the effect of the bending moment is electrically compensated
- For forces up to 2.5 MN
- The numerous possible configurations (TEDS, double bridge, various electrical connections, etc.), mean that it can be flexibly adapted to many measurement tasks
- Made of rust-resistant materials, degree of protection IP68 on request
- High fundamental frequency ideal for measuring fast processes

Nominal (rated) force:	F <sub>nom</sub>	kN	1.25	2.5	5	12.5	25	50	125	250	500	
		MN										1.25
Accuracy												
Accuracy class			0.02			0.03		0.04			0.05	
Relative repro- ducibility and re- peatability errors without rotation	b <sub>rg</sub>	%	0.02									
Hysteresis error at 0.4 F <sub>nom</sub> , rel. to the full scale value	v <sub>0.4</sub>	%	0.02		0.03		0.04			0.05		
Linearity deviation	d <sub>lin</sub>	%	0.02		0.025		0.035			0.05		
Rel. zero point re- turn	v <sub>w0</sub>	%	0.008									
Relative creep	d <sub>cr, F+E</sub>	%	0.02									
Effect of the bend- ing moment at 10% F <sub>nom</sub> * 10mm	d <sub>Mb</sub>	%	0.01									
Effect of lateral forces (lateral force = 10% of F <sub>nom</sub> )	dQ	%	0.01									
Temperature coeffi- cient of the rated output	TCS	% / 10 K	0.015									
Temperature coeffi- cient of zero signal	TC <sub>0</sub>	% / 10 K	0.015									