

KAZ Force Transducer

Applications

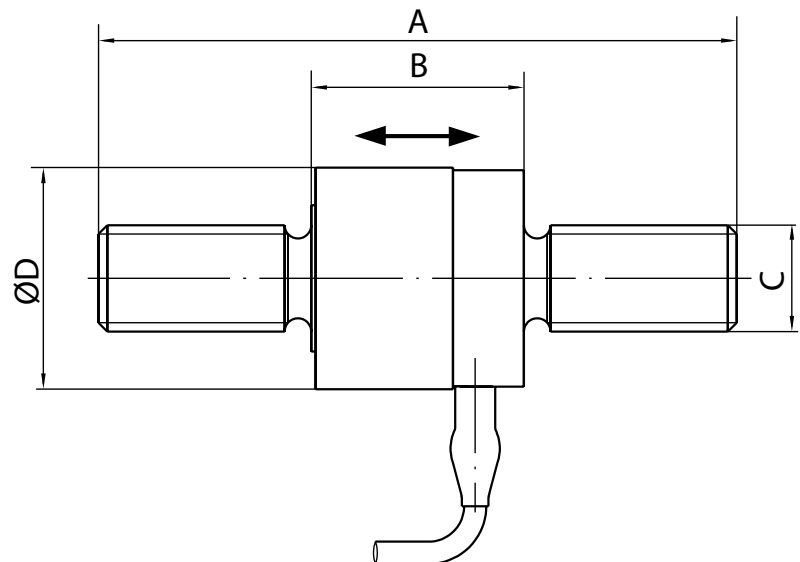
- Only with rod ends
- Torque bracket
- Mechanical engineering

Features

- 5 kN bis 400 kN tensile force
- Accuracy Class: 0.5 % (5-60kN)
- Accuracy Class: 0.2 % (100-400kN)
- Made of stainless steel
- Environmental protection IP65
- Breaking force >300%



Dimensions (mm)

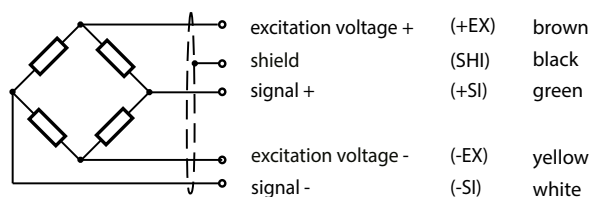


Rated Load	A	B	C	D	Weight
5kN	72	24	M10	25	90g
10kN	72	24	M12	25	100g
30kN	100	30	M20 x 1,5	32	350g
60kN	110	30	M24 x 2	32	470g
100kN	176	88	M45 x 1,5	71	3.6kg
150kN	176	88	M45 x 1,5	71	3.6kg
250kN	224	108	M58 x 1,5	90	5.5kg
400kN	262	138	M80 x 2	105	9.5kg

Wiring Code

Cable length 3m

Tensile load is positive change of signal.

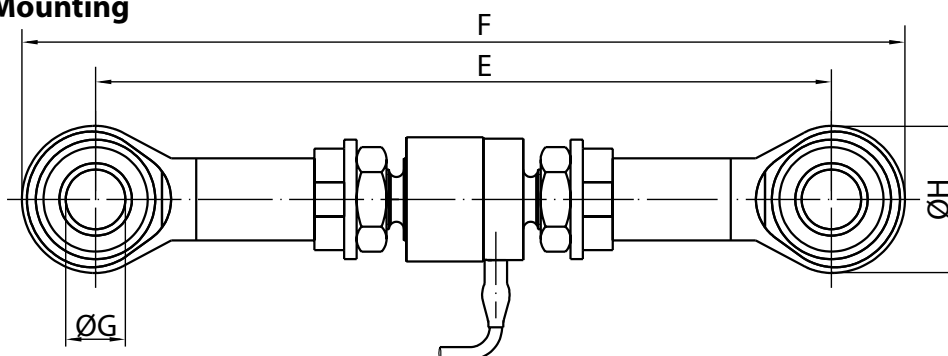


Specifications

Accuracy Class	% F_{nom}	0.5	0.2
Rated (nominal) force (F_{nom})	kN	5kN ... 60kN	100kN ... 400kN
Maximale Gebrauchskraft (F_G)	% F_{nom}		120
Bruchkraft (F_B)	% F_{nom}		>300
Grenzquerkraft (F_Q)	% F_{nom}		40
Rated characteristic value (C_{nom})	mV/V		1.000 ± 0.01
Zero signal tolerance	%		≤ 3
Reference excitation voltage (U_{ref})	VDC		10
Input resistance (R_e)	Ω		380 ± 30
Output resistance (R_a)	Ω		352 ± 3
Insulation resistance (R_{is})	Ω		$> 5 \times 10^9$
Relative linearity error (d_{lin})	%	0.5	0.2
Relative reversibility error (v)	%	0.2	0.1
Temperature effect on zero signal (TK_0)	%/10K	0.2	0.1
Temperature effect on charact. value (TK_C)	%/10K	0.2	0.1
Reference temperature (T_{ref})	$^{\circ}C$		+23
Rated temperature range ($B_{T,nom}$)	$^{\circ}C$		-20 ... +60
Operating temperature range ($B_{T,G}$)	$^{\circ}C$		-30 ... +70
Storage temperature range ($B_{T,s}$)	$^{\circ}C$		-40 ... +70
Environmental protection (EN 60529)			IP 65

All data according to VDI/VDE/DKD 2638

Appliances for Intallation and Mounting



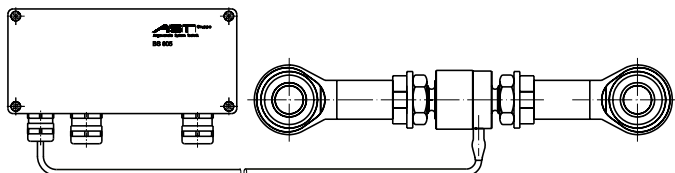
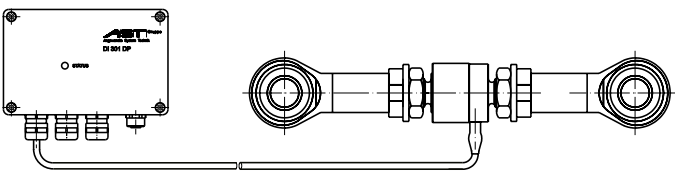
Rated load	E	F	G	H	Rod end bearing
5kN	approx. 131	approx. 159	10	28	GKI 10
10kN	approx. 148	approx. 180	12	32	GKI 12
30kN	approx. 214	approx. 264	20	50	GKI 20
60kN	approx. 350	approx. 410	25	60	GKI 25
100kN	approx. 310	approx. 426	50	116	GIHR-K 50 DO
150kN	approx. 310	approx. 426	50	116	GIHR-K 50 DO
250kN	approx. 394	approx. 534	60	130	GIHR-K 60 DO
400kN	approx. 502	approx. 692	80	176	GIHR-K 80 DO

Caution: Never apply any torque to the sensor. Torque will destroy the measuring system.

Accessoires/ Options

	Type Code	Description
Cable extension	XKC 042	Cable extension m
Connector male	XKC 044.01 XKC 046.03	Connector male M12x1, mounted to sensor body, 5 pin Connecting cable 5m
Rod end bearing	GKI respectively GIHR-K	see KAZ-variant

Recommended switching amplifiers / electronics

	Type Code	Notes	Description
Strain gauge switching amplifier	BS 805.01	Supply voltage 10 - 30VDC Analogue output 4 – 20mA 2 set points 230VAC/6A Environmental protection IP65	
Strain gauge Interface	DI 301DP.21	Supply voltage 10 – 30VDC Digital output PROFIBUS DP 2 set points 42V/0,1A Environmental protection IP65	

Order Example

Type Code	Description
KAZ / 10kN / 0,5	Force transducer 10kN with 0,5% accuracy
	Accuracy class
	Rated load
	Model