KAF-S-E
Force Transducer

Application

- Measuring of tension and compression forces in machines and systems
- Material testing machines, testing stands
- Hydraulic cylinder

Special Features

- 100N up to 10kN
- Small mounting dimension
- Made from stainless steel or aluminium (<500N)
- Environmental protection IP 42

Options

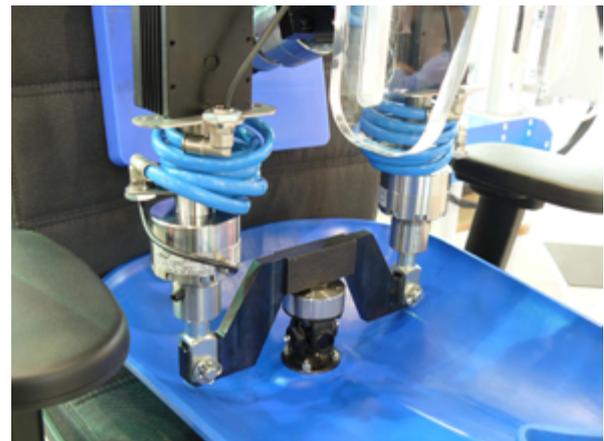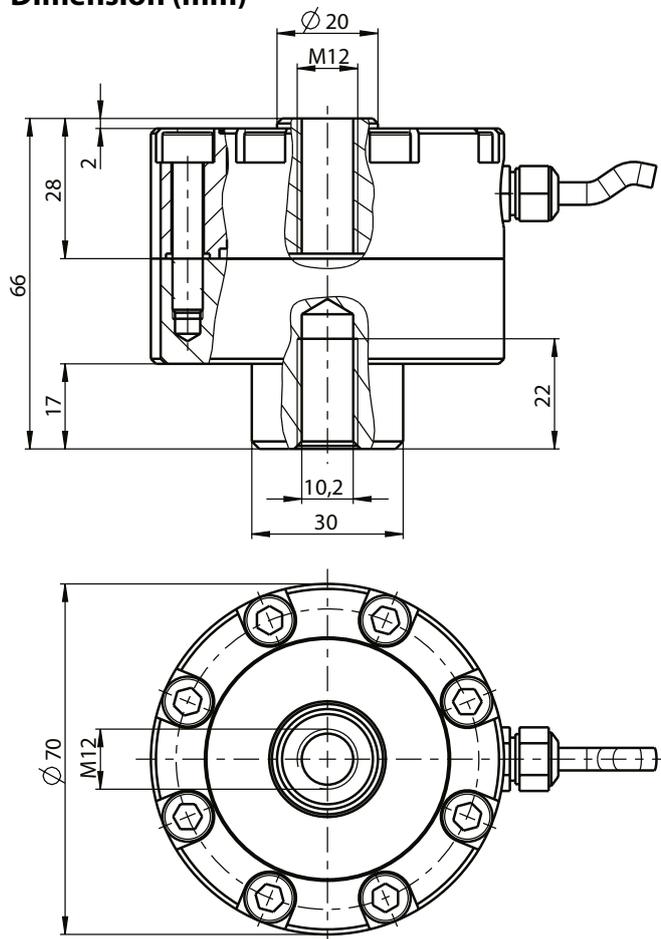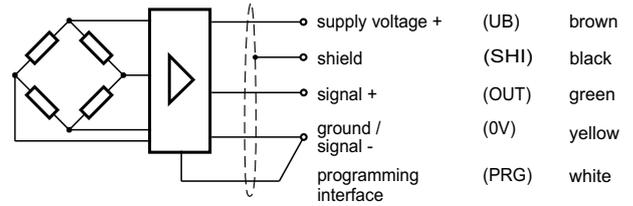- CANopen interface
- redundantes System

Dimension (mm)

Foto: Furniture test

Rated Force	Weight
KAF-S 100N / 200N	0.6 kg
KAF-S 500N - 10kN	1.2 kg

Wiring Code
Cable length 5.0m

supply voltage +	(UB)	brown
shield	(SHI)	black
signal +	(OUT)	green
ground / signal -	(0V)	yellow
programming interface	(PRG)	white

(0V and PRG to be connected by the customer.)

Specifications

Accuracy Class	% F_{nom}	0.2 with Integrated Amplifier
Rated force (F_{nom})	kN	0.1/ 0.2/ 0.5/ 1/ 2/ 5/ 10
Maximum operating force (F_G)	% F_{nom}	150
Breaking force (F_B)	% F_{nom}	>500
Lateral force limit (F_Q)	% F_{nom}	10
Relative linearity error (d_{lin})	%	0.1
Temperature effect on zero signal (TK_0)	%/10K	0.2
TK of output signal under load	%/10K	0.1
Relative creep over 30 minutes ($d_{cr, F+E}$)	%	0.2
Tolerance of output signal	%	0.1
Tolerance of zero signal	%	≤ 3
Reference temperature (T_{ref})	°C	+23
Rated temperature range ($B_{T, nom}$)	°C	-20 ... +50
Operating temperature range ($B_{T, G}$)	°C	-20 ... +50
Storage temperature range ($B_{T, S}$)	°C	-30 ... +70
Environmental protection (EN 60529)		IP 42
Excitation voltage	VDC	20 ... **24** ... 30
Power consumption	mA	< 30
Output signal (compression force positiv)	VDC	-10 ... +10

All data according to VDI/VDE/DKD 2638

Order Example

Type Code	Description
KAF-S-E/10kN/0.2/24V/-10...+10V	Force transducer 10kN with 0.2% accuracy class

— Output signal
— Supply voltage
— Accuracy class
— Rated force
— E = Integrated amplifier
— Model

Accessoires / Options

	Type Code	Description
Load button	XKM 019	K12-50 for KAF-S 100N up to 10kN
Rod end bearings	GKA 12	male thread with jam nut for 100N up to 10kN
CANopen interface	KAF-S-DI	for 10N ... 10kN Please note data sheet „Force Transducer with CANopen Interface"!