

KAF-U Force Transducer

Applications

- High accuracy material testing
- Classification option according to ISO 376
- Transfer standard

Features

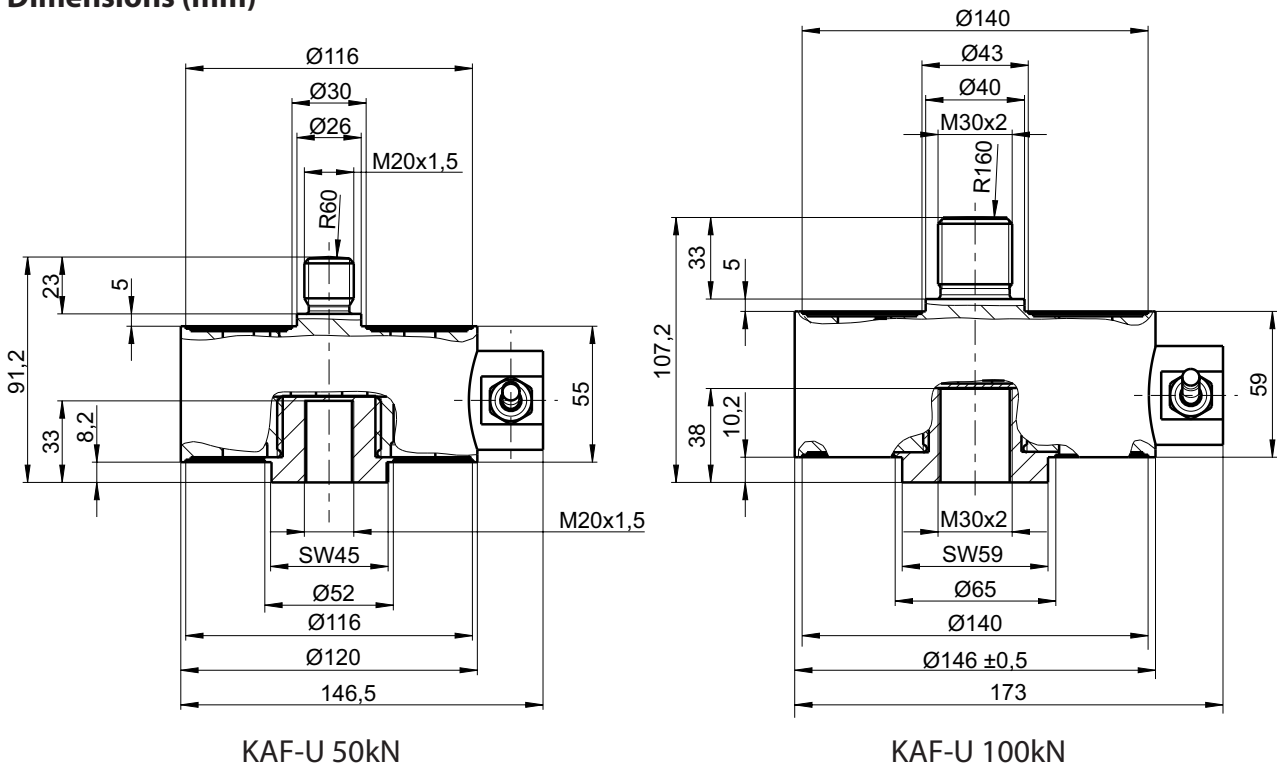
- 50 kN, 100kN
- With integrated force introduction element
- High accuracy 0,03 or 0,05
- For tensile and compressive forces
- Made of stainless steel
- Environmental protection IP 67

Options

- CANopen interface
- Accuracy class 00 und 05
 (according to ISO 376)

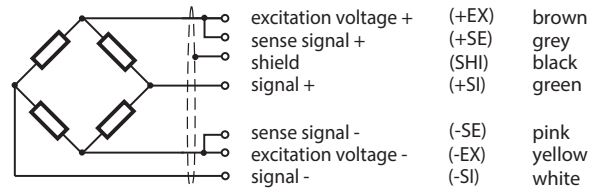


Dimensions (mm)



Wiring Code

Cable length 6m



Compressive load is positive change of signal.

Specifications

Accuracy Class	% F _{nom}	0.03	0.05
Rated force (F _{nom})	kN	50/ 100	
Maximum operating force (F _G)	% F _{nom}	150	
Breaking force (F _B)	% F _{nom}	>300	
Lateral force limit(F _Q)	% F _{nom}	10	
Rated characteristic value C _{nom})	mV/V	2.000 ± 0.005	
Relative deviation of zero signal	%	≤ 3	
Relative tension-compression characteristic difference	%	0,2	
Reference excitation voltage (U _{ref})	VDC	5	
Operating range of excitation voltage (B _{U,G})	VDC	5 ... 12	
Input resistance (R _e)	Ω	440 ± 15	
Output resistance (R _a)	Ω	335 ± 2	
Insulation resistance (R _{is})	Ω	> 5 x 10 ⁹	
Relative linearity error (d _{lin})	%	0.03	0.05
Relative reversibility error (v)	%	0.03	0.05
Temperature effect on zero signal (TK ₀)	%/10K	0.03	0.05
Temp. effect on characteristic value (TK _C)	%/10K	0.03	0.05
Relative creep over 30 minutes (d _{cr, F+E})	%	0.03	0.05
Dead load output return	%	0.03	0.05
Reference temperature (T _{ref})	°C	+23	
Rated temperature range (B _{T,nom})	°C	+10 ... +40	
Operating temperature range (B _{T,G})	°C	-30 ... +70	
Storage temperature range (B _{T,S})	°C	-30 ... +70	
Environmental protection (EN 60529)		IP 67	
Torque limit (M _G)	Nm	200 (50kN)/ 600 (100kN)	
Rated displacement (s _{nom})	mm	0.2 (50kN)/ 0.3 (100kN)	
Weight	kg	4.2 (50kN)/ 6.3 (100kN)	

All data according to VDI/VDE/DKD 2638

Order Examplel

Type code	Description
KAF-U/100kN/0.03	Force transducer 100kN with 0,03 accuracy
	Accuracy class
	Rated load
	Model

Accessoires/ Options

	Type code	Description
CANopen interface	KAF-U-DI	For 50kN to 100kN Please note data sheet „Force Transducer with CANopen Interface“