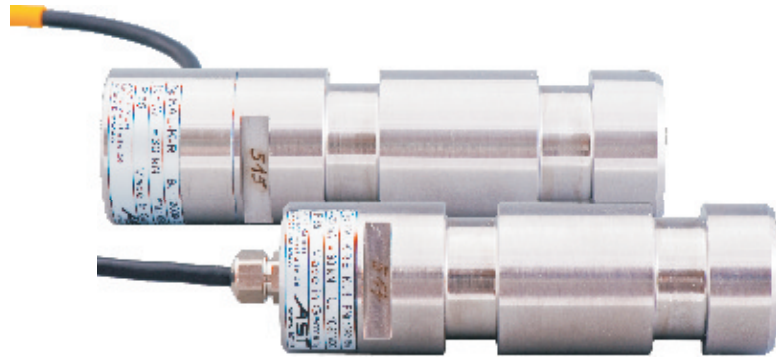


# Force Transducer KAL-K

## Special Features

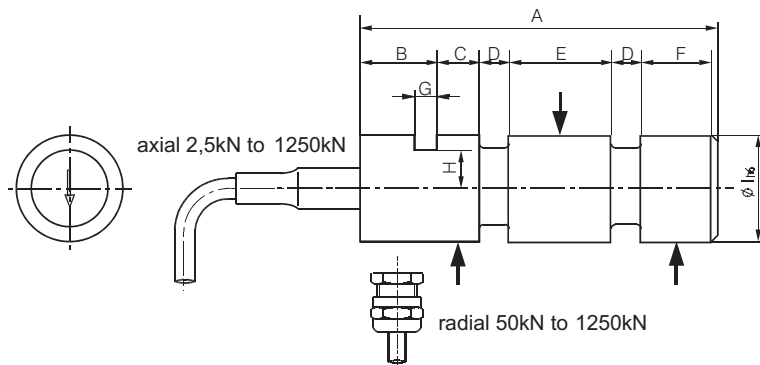
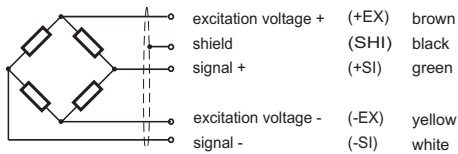
- 2,5kN to 1250kN
- Application as pin or axle
- Made of stainless steel
- Environmental protection IP65
- Option: redundant systems



## Dimensions

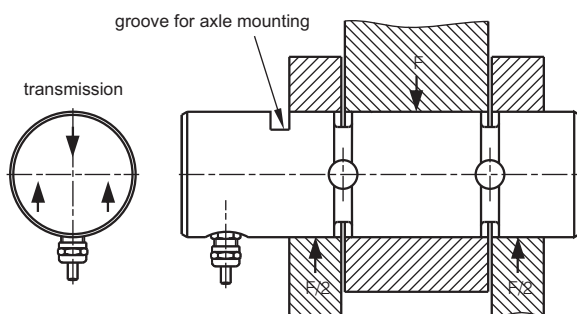
### Wiring code

Cable length 1,5 m (KAL-K/2,5kN ... 50kN)  
6,0 m (KAL-K/100kN ... 1250kN)



Rated load	cable output	Ø I h6	A	B	C	D	E	F	G	H	Weight
KAL-K 2,5kN ... 20kN	axial	25	84	18	10	7	24	16	5,2	9	0,2kg
KAL-K 50kN	radial or axial	35	112	25	12	12	35	14	6,3	11,5	0,7kg
KAL-K 100kN	radial or axial	50	161	32	18	18	48	24	10,5	20	2,0kg
KAL-K 200kN	radial or axial	65	196	32	20	25	65	26	10,5	22,5	4,5kg
KAL-K 500kN	radial or axial	85	258	34	35	28	89	39	10,5	28	10,5kg
KAL-K 1000kN	radial or axial	100	347	36	55	35	120	61	10,5	36	19,5kg
KAL-K 1250kN	radial or axial	120	347	36	55	35	120	61	12,5	40	28,5kg

## Example of installation



# Force Transducer KAL-K

## Specifications

Accuracy class	% S	1	2
Rated load (=F <sub>N</sub> )	kN	2,5 / 5 / 10 / 20 / 50 / 100 / 200 / 500	1000 / 1250
Safe overload	%F <sub>N</sub>	150	
Ultimate overload	%F <sub>N</sub>		>500 <sup>3)</sup> 350
Safe side load	%F <sub>N</sub>	10	
Reference temperature	°C	23	
Compensated temperature range	°C	-25 . . . . +80	
Storage temperature range	°C	-50 . . . . +80	
Environmental protection (DIN 40 0 50)		IP 65	
Sensitivity (=S)	mV/V	1,00±0,01	1,80±0,02
Zero balance	%S	≤3	
Max. excitation voltage	V	12	
Input resistance	Ω	380 ± 30	
Output resistance	Ω	352 ± 3	
Insulation resistance	Ω	>5 10 <sup>9</sup>	
Nonlinearity <sup>5)</sup>	%S	≤1	
Hysteresis <sup>5)</sup>	%S	≤1	
Temperature effect on zero/10K	%S	≤0,2	
Temperature effect on output/10K	%S	≤0,1	
Creep in 30 minutes	%S	≤1	

3) 500kN: 400%F<sub>N</sub>

5) according to VDI / VDE 2638

## Options

Type code	Description	Comments
	Redundant system	possibly changing dimensions
XKC 044	Flange plug M12x1, 5pin	
30000962	Cable with PUR insulation	Sea water resistant, oil resistant

## Recommended strain gauge measuring amplifiers

Typcode	Description	Housing	Environmental protection	Power supply	Output signal
BA 601.03	Strain gauge measuring amplifier	DIN-rail installation	IP 40	19... 28VDC	4...20mA
BS 805.11-230VAC	Switching amplifier	Al-die cast enclosure	IP 65	230VAC/50Hz	4...20mA, two switching points

## Type code / Order example

Type code	
KAL-K-A / 100kN / 1	(cable output axial)
KAL-K-R / 100kN / 1	(cable output radial)

Data sheet KAL-K • Subject to technical changes • 05/2010