

Load Measuring Pin K-1661 with Rated Force from 20 ... 400 kN



Data sheet



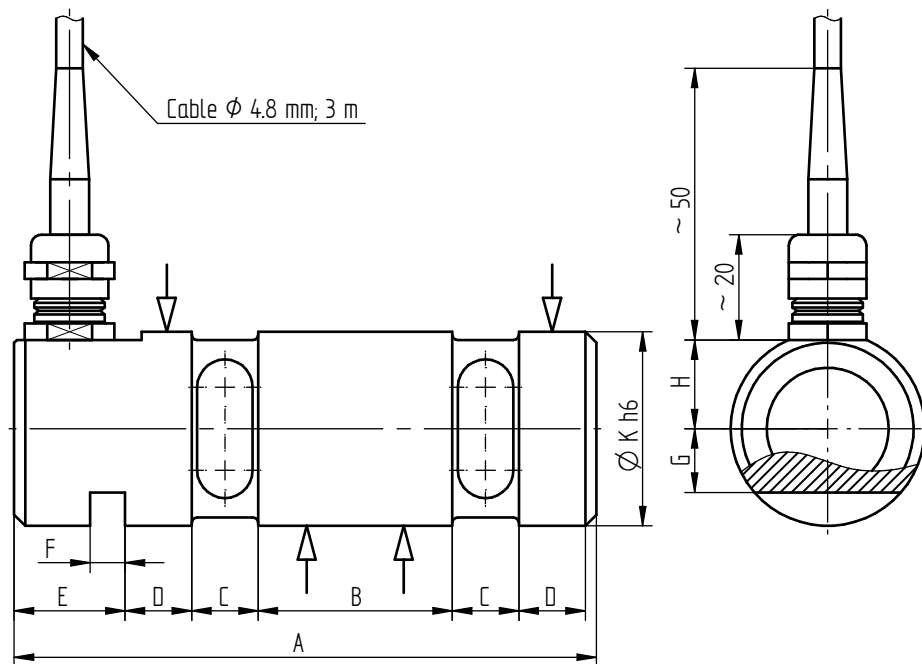
Performance Features

- Load measuring pin for load measurement
- TEDS (Transducer Electronic Data Sheet) Standard IEEE 1451.4 (optional)
- Simple handling and assembly
- Reliable and durable
- Long-term stability
- Level of protection IP67
- Special versions on request

Application

- Equipment engineering
- Conveyor belts
- Measuring and control devices
- Cranes and lifting devices
- Lifting and transport equipment
- Special mechanical engineering

Dimensions in mm



Article-No.	Rated Force [kN]	Dimensions [mm]									Weight [kg]
		A	B	C	D	E	F	G	H	ØK	
100504	20	105	35	12	12	20	6.3	11.5	16	35	0.9
100505	50										
100506	100	152	48	18	18	30	10.5	20	22.5	50	2.1
100507	200	190	65	25	20	32	10.5	22.5	30	65	5.1
100508	400	256	89	28	35	36	12.5	28	25	85	10.6

Connection Assignment

Electrical connection

Excitation (-)	Green	●
Excitation (+)	Brown	●
Signal (+)	Yellow	●
Signal (-)	White	○
Control signal or TEDS (option)	Gray	●
Shielding	Shield	⊕

Technical Data acc. to VDI/VDE/DKD 2638

Load Measuring Pin K-1661

Rated force F_{nom}	kN	20	50	100	200	400
Accuracy class	% F _{nom}	1				
Rel. repeatability error in unchanged mounting position b_{rg}	% F _{nom}	0.2				
Relative creep	% F _{nom} /30 min	<±0.1				
Rated characteristic value C_{nom}	mV/V	1.00 ±1 %				
Input/output resistance R_e/R_a	Ω	350				
Insulation resistance R_{is}	Ω	>2*10 ⁹				
Rated range of excitation voltage B_{U, nom}	V	2 ... 12				
Electrical connection		Cable, PVC, 3 m with free strands				
Reference temperature T_{ref}	°C	23				
Rated temperature range B_{T, nom}	°C	-10 ... 70				
Operating temperature range B_{T, G}	°C	-30 ... 80				
Storage temperature range B_{T, S}	°C	-50 ... 95				
Temperature effect on zero signal TK₀	% F _{nom} /10 K	±0.2				
Temperature effect on characteristic value TK_C	% F _{nom} /10 K	±0.2				
Maximum operating force F_G	% F _{nom}	130				
Force limit F_L	% F _{nom}	150				
Breaking force F_B	% F _{nom}	>300				
Permissible oscillation stress F_{rb}	% F _{nom}	70				
Rated displacement S_{nom}	mm	<0.15				
Material		Stainless steel				
Level of protection		IP67				

Options

Article-No.	Description	
100218	Control signal	100 % F _{nom}
100739	Control signal	80 % M _{nom}
106154	Control signal	50 % M _{nom}
113134	TEDS-standard IEEE 1451.4	
42828	Extended temperature range	-30 °C ... 100 °C
42829	Extended temperature range	-30 °C ... 120 °C
42830	Extended temperature range	-40 °C ... 150 °C
103954	Calibration in kg or t	
107592	6-wire connection	

Calibrations

Article-No.	Description	
400628	Linearity diagram in accordance to factory standard	25 % steps
400170	Linearity diagram in accordance to factory standard	10 % steps
400960	Proprietary calibration acc. to DIN EN ISO 376 and DAkKS-DKD-R 3-3	3 steps
400652	Proprietary calibration acc. to DIN EN ISO 376 and DAkKS-DKD-R 3-3	5 steps
400640	Proprietary calibration acc. to DIN EN ISO 376 and DAkKS-DKD-R 3-3	8 steps
	DAkKS-Calibration/Standard on request	

Accessories

Cable and input connector

Article-No.	Description
10323	Cable connector KS6 (6-pin series 581) incl. sensor mounting
10320	Cable connector KSSH15 (15-pin) incl. sensor mounting
43418	Input connector ZA9612FS (ALMEMO) incl. sensor mounting and connector calibration
49205	Input connector ZKD712FS (ALMEMO 202) incl. sensor mounting and connector calibration

Amplifiers

Examples of suitable amplifiers for the load measuring pin K-1661:

LCV	GM 78	GM 40	GM 80	SI
				

Further suitable amplifiers you can find on our homepage under www.lorenz-messtechnik.de