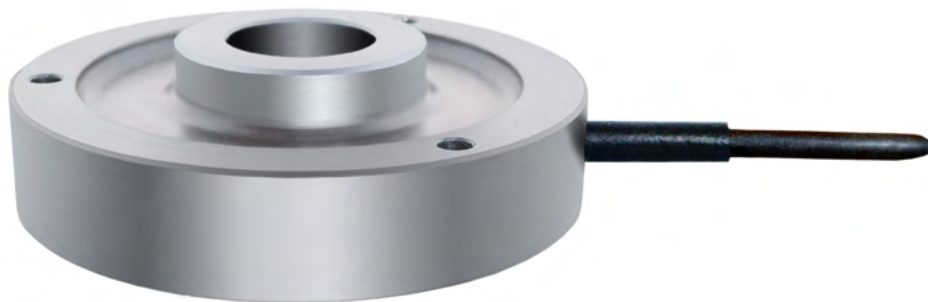


## Compression Force Sensor K-2528 with Nominal Force from 0.2 ... 10 kN



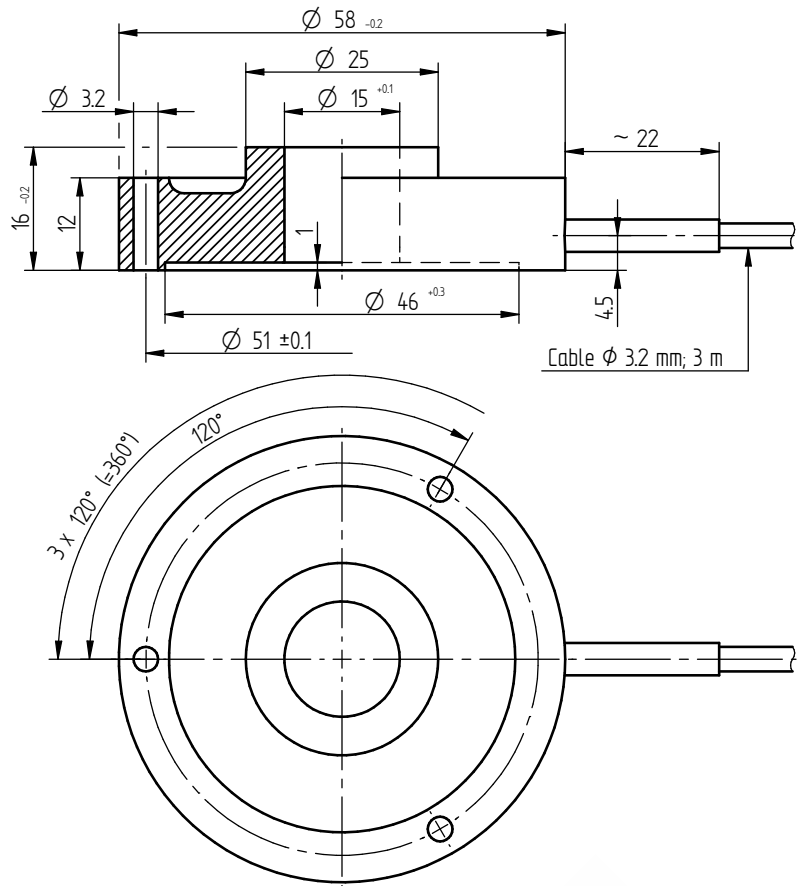
### Performance Features

- Compression force sensor for press-in force measuring
- Low cost sensor
- Aluminum
- Long-term stability
- Simple handling and assembly
- Special versions on request

### Application

- Equipment engineering
- Automotive industry
- Measuring and control devices
- Fully automated machining centres
- Tool engineering
- Special mechanical engineering

## Dimensions of K-2528 in mm



Article-No.	Nominal Force [kN]	Weight [kg]
109142	0.2	0.2
109143	0.5	
109144	1	
109145	2	
109146	5	
109147	10	

## Pin Connection

### Electrical connection

Excitation (-)	green	●
Excitation (+)	brown	●
Signal (+)	yellow	●
Signal (-)	white	○
Control signal (option)	grey	●
Shield	shield	⊕

## Technical Data acc. to VDI/VDE/DKD 2638

### Compression Force Sensor K-2528 with Through Hole

Nominal force $F_{nom}$	kN	0.2	0.5	1	2	5	10
Accuracy class	% $F_{nom}$	1					
Rel. repeatability error in unchanged mounting position $b_{rg}$	% $F_{nom}$	0.3					
Relative creep	% $F_{nom}/30 \text{ min}$	< $\pm 0.1$					
Rated characteristic value $C_{nom}$	mV/V	1.00 $\pm 20\%$					
Input/output resistance $R_e/R_a$	$\Omega$	350					
Insulation resistance $R_{is}$	$\Omega$	> $2 \cdot 10^9$					
Rated range of excitation voltage $B_{U, nom}$	V	2 ... 12					
Electrical connection		Cable, PURS, 3 m with free strands					
Reference temperature $T_{ref}$	$^{\circ}\text{C}$	23					
Rated temperature range $B_{T, nom}$	$^{\circ}\text{C}$	0 ... 60					
Operating temperature range $B_{T, G}$	$^{\circ}\text{C}$	-10 ... 70					
Storage temperature range $B_{T, S}$	$^{\circ}\text{C}$	-30 ... 95					
Temperature effect on zero signal $TK_0$	% $F_{nom}/10 \text{ K}$	$\pm 0.2$					
Temperature effect on characteristic value $TK_C$	% $F_{nom}/10 \text{ K}$	$\pm 0.2$					
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		Aluminum					
Level of protection		IP60					

### Options

Article-No.	Description	
100218	Control signal	100 % $F_{nom}$
100896	Nominal sensitivity adjustment	
42828	Extended temperature range	-30 $^{\circ}\text{C}$ ... 100 $^{\circ}\text{C}$
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 compression force sensor K-2528:

LCV	SI-USB	GM 40	GM 80	GM 80-PA
				

