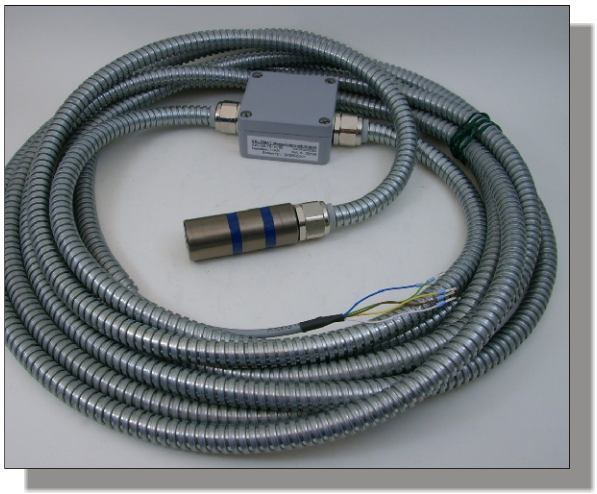
Force Transducer
SKL-25-10-19.60

VELOMAT
MESSELEKTRONIK GmbH

article-no: VX34021200
serial-no: key 45W



description

The load pin works according to the strength measuring principle on a transverse basis to the longitudinal axis.

The SKL-25 was developed especially for use at hydraulics cylinders by work platforms, cranes and conveyor technology.

It is designed as a round bolt with two measuring cells. A notch of 5 mm of breadth and 4 mm of depth serves for the fastening.

The application room for the strain gauge (dms) has been cast with a high-elastic compound and is thus protected against mechanical or chemical damages.

The strain gauge bridges measure the deformation caused by clipping strengths on the bolt in the measuring chamber. An external amplifier produce the measuring signal of 4 - 20 mA

In the unloaded state can by add-ons of the calibrating checking signal (software calibration) the nominal output current be produced. A check of the load pin with the amplifier and the following measuring facilities is possible with that.

The SKL-25 is planned for the direct connection with an automatic control or a controlling switch.

The shield of the cable connected with the surface of the force transducer.

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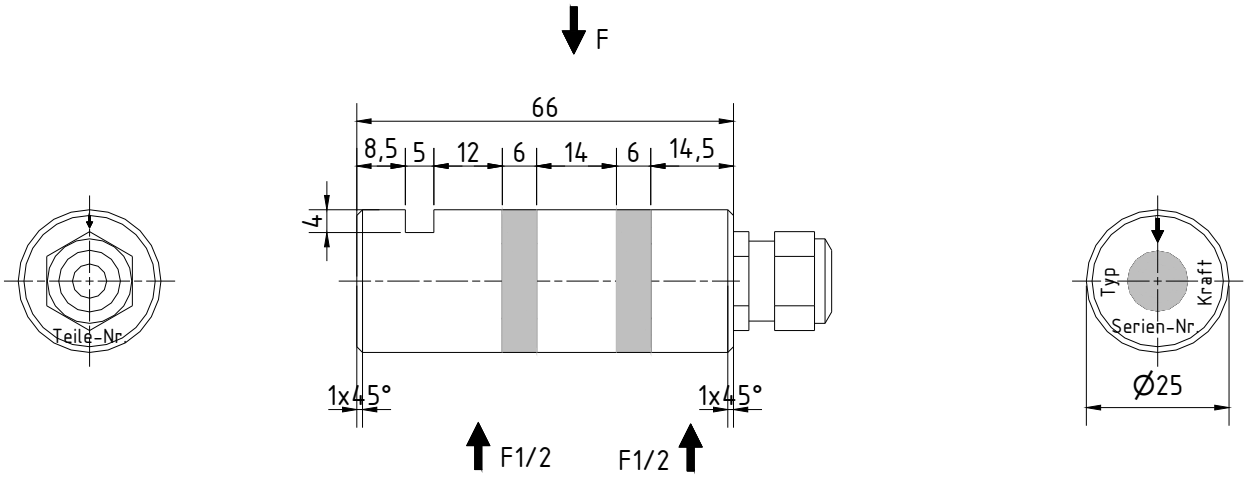
specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight	approx. 1,46 kg
material	stainless steel
degree of protection	IP 67
SKL	**25-10**
nominal force / nominal load	10 kN
max. overload range / force limit	150 % of nominal force
breaking force	400 % of nominal force

electrical execution

measuring signal (output)	4 - 20 mA
operating voltage	12 - 24 V DC ±20 %
current consumption	max. 50 mA
calibration tolerance	< 0,50 % of final value*
non-linearity	< 0,25 % of final value*
hysteresis	< 0,15 % of final value*
temperature coefficient:	
of zero signal	≤ 0,04 % of final value / K
of the sensitivity	≤ 0,04 % of set point / K
insulation resistance	> 5.000 MΩ
nominal temperature range	-15 °C to +70 °C
operating temperature range	-25 °C to +80 °C

cable and connection

cable length / cable type:		
sensor - amplifier	1 m UNITRONIC-FD 4 x 0,14 mm²	
amplifier - cable end	5 m UNITRONIC-FD 4 x 0,14 mm²	
cable end	wire-end-sleeve	
wiring connections	brown	operating voltage U_B
	green	ground / earth GND
	yellow	measuring signal output Im
	white	calibration signal (low activ) CC***
	blue	shielding (only in the case of a shielded cable)

* These details are depending on the fit, the resistance moment and the installation length. They are reached with favorable values.
** only for the case that the cable is laid with fastening (depending on cable type)
*** This cable should be connected at the operating voltage unless the calibration signal is used. (only applicable to executions with amplifier)