

Force Transducer SKL-40-40-1.60

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serial-no: key 44U



description

The load pin works according to the principle of the clipping strength measuring crossways to the longitudinal axis.

The SKL-40 was developed especially for the application in hydraulic cylinders by work platforms, cranes and in the conveyor technology.

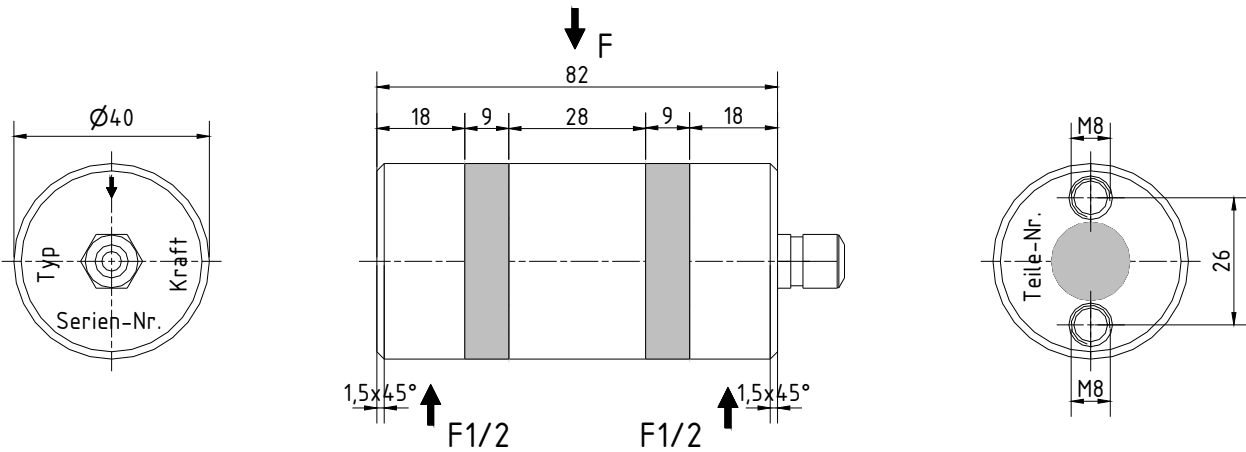
The application room for the strain gauge (dms) is spilled with a very elastic mass and therefore protected from mechanical and chemical damages.

The DMS-full bridge distributed this one on the measuring chambers measures the deformation which is caused by clipping strengths on the load pin. An integrated amplifier delivers the measuring signal of 4 - 20 mA.

In the unloaded state can by add-ons of the calibrating checking signal (software calibration) range of measuring signal of 4 mA be produced. A check of the load pin with the amplifier and the following measuring facilities is possible with that.

The SKL-40 is provided for the direct connection to an automatic control or a controller switch.

specification



mechanical execution

diameter, force transmission and mounting see assembly drawing

weight	approx. 1,0 kg
material	stainless steel
degree of protection	IP 67
SKL	40-40
nominal force / nominal load	40 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. 45 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	$\leq 0,04$ % of final value / K
of the sensitivity	$\leq 0,04$ % of set point / K
insulation resistance	> 5.000 M Ω
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	1,5 m Unitronic FD-CP 4 x 0,14 mm ²
amplifier - cable end	4,0 m Unitronic FD-CP 4 x 0,14 mm ²
cable end	wire-end-sleeve
wiring connections	
	brown operating voltage U _B
	green ground / earth GND
	yellow measuring signal output I _m
	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

*** This cable should be connected at the operating voltage unless the calibration signal is used. (only applicable to executions with amplifier)