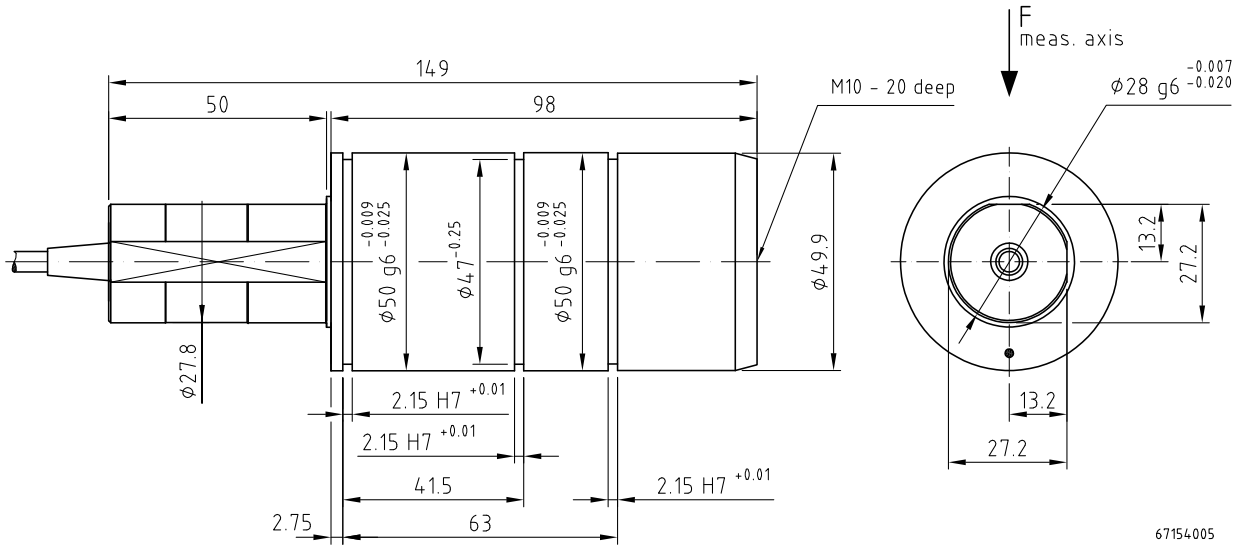


RFS[®] 200 S

Radial force measuring axle

Scale drawing



All dimensions in mm

Rated measuring ranges

Nominal force [kN]					Axle journal Ø [mm]	Bearing seating Ø [mm]
0,5	1	2	3	4	28	50
5	10					

The measuring range of the sensor begins at the force's zero point.
Nominal forces differing from the list are available.

Order code

		RFS 200 S	- 5	- 28	- 3	- O
Sensor type						
Nominal force [kN]						
Axle journal Ø [mm]						
Length of cable [m]	standard: 3					
	option: required length					
Connection	standard: O with open ends					
	option: S with male socket					

Scope of supply

- Sensor with connection cable

RFS[®] 200 S

Radial force measuring axle

Options / Special versions

- Connection cable with male plug
- Special connection cable, e.g. oil-resistant
- Special nominal force, differing from standard
- Extended rated temperature range -10 to 70°C
- Special dimensions differing from standard
- Type ES, for use as simple apparatus

Accessories

- Bracket assembly
- Guide rollers
- Rope pulleys

RFS[®] 200 S

Radial force measuring axle

Technical data

Rated measuring ranges (F_N)	kN	0 to 0,5...0 to 10
Rated output	mV/V	1,0
Rated output tolerance	%	< $\pm 0,2$
Accuracy class		0,3
Excitation voltage max.	V	12
Reference excitation voltage	V	10
Input resistance	Ω	350 ± 3
Output resistance	Ω	350 ± 1
Isolation resistance	GΩ	> 10
Rated temperature range	$^{\circ}\text{C}$	5 to 50, Option: -10 to 70
Operational temperature range		
- sensor	$^{\circ}\text{C}$	-10 to 70
- connection cable	$^{\circ}\text{C}$	-30 to 80
Storage temperature range	$^{\circ}\text{C}$	-30 to 70
Reference temperature	$^{\circ}\text{C}$	23
Temperature influence per 10 K		
- on the zero point (TK0)	% F_N	< $\pm 0,1$
- on the calibration (TKC)	% F_N	< $\pm 0,15$
Creep after 30 minutes	% F_N	< $\pm 0,05$
Linear output signal up to	% F_N	approx. 125
Mech. overload protection takes effect at	% F_N	approx. 140
Overload protected ¹	% F_N	200 to 400 (depending on nominal force)
Ultimate side load	% F_N	200
Deflection at nominal force	mm	0,07 to 0,25 (depending on nominal force)
Natural frequency of the sensor	kHz	> 0,25 (depending on nominal force)
Weight	kg	approx. 1,6
Connection cable		3 m long, flexible, shielded, 4 x 0,14 mm ² , total- \varnothing 4,5 mm
Sensor housing		high-tensile steel, black finishing
Protection class		IP 50

¹ radial incoming force without additional bending or tilting moment

Connections

Standard: Connection type „O“		Option: Connection type „S“			
<p>67164003</p>	+U_{Br} -U_{Br}	Excitation		+U_{Br} -U_{Br}	Excitation
	+U_{Sig} -U_{Sig}	Output		+U_{Sig} -U_{Sig}	Output
	Shield (not connected to housing)		1 +U _{Br} 2 -U _{Br} 3 Shield <i>(not connected to housing)</i> 4 +U _{Sig} 5 -U _{Sig} 6 Reserved		