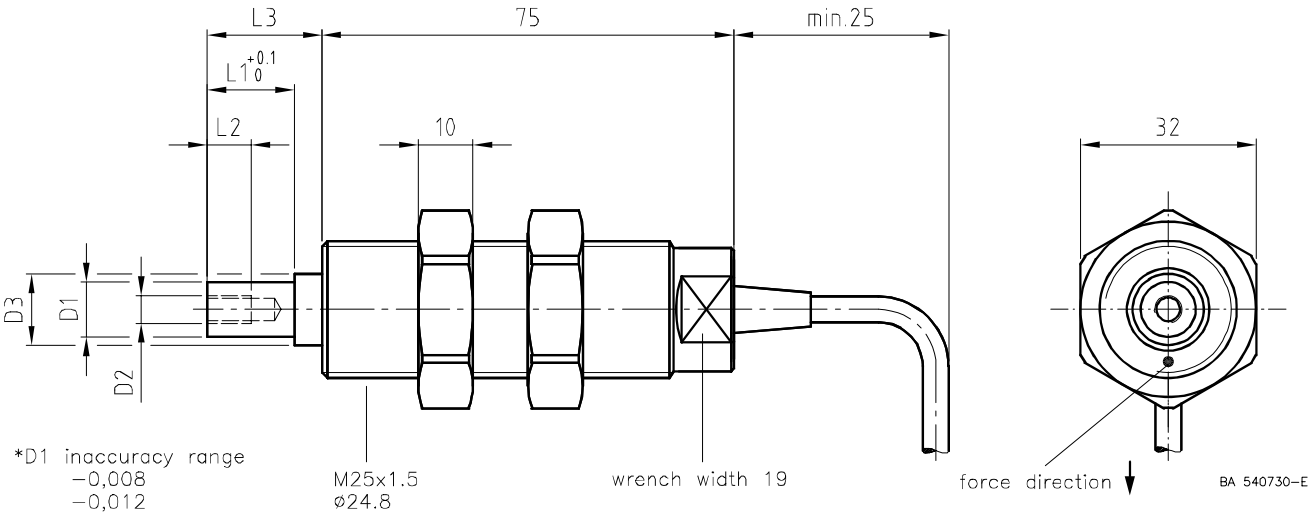
Tension Sensor RFS® 150



Nominal force [N]						Bearing journal ø [mm]		
1-2	5	10	20	30	40	5	8	10
50	60	100	200	300	400		8	10
500	600	1000						10

Bearing journal ø [mm]	Dimensions [mm]				
D1	L1	D2	L2	D3	L3
5	9,9	M3	6	7	12,9
8	11,9	M4	6	10	15,9
10	15,9	M5	8	13	20,9

Order code

RFS® 150 / 0200 / 10 / 3 / O

Sensor type

Nominal force [N]

Bearing journal ø [mm]

Cable length [m]
Standard: **3**
Option: required length

Connection type
Standard: open ends **O**
Option: connector **S**

The listed dimensions are corresponding to the product standard.

> Do you require customized variants of dimensions, adapters for bearing journal or guide pulleys ?

> We would be pleased to forward a special quotation !

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Technical Data - Tension Sensor RFS® 150

Type of sensor		RFS® 150
Rated measuring ranges available (F_N)	N	0 - 1 to 0 - 1000
Rated output	mV/V	1,5
Rated output tolerance	%	< ±0,2
Accuracy class		0,5
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	°C	+5 to +50, Option: -10 to +70
Operational temperature range		
- sensor	°C	-10 to +70
- connection cable	°C	-30 to +80
Storage temperature range	°C	-30 to +70
Reference temperature	°C	+23
Temperature influence per 10 °C		
- on the zero point	% F_N	< ±0,1
- on the calibration	% F_N	< ±0,15
Creep after 30 minutes	% F_N	< ±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	400 to 800, depending on nominal force
Ultimate side load	% F_N	200
Typ. deflection at nominal force	mm	0,07 ± 20%
Typ. resonant frequency of the measuring cell	kHz	1 to 3, depending on nominal force
Weight	g	approx. 400
Connection cable		robust, flexible, shielded 4 x 0,14mm², cable ∅ 4,5mm, 3m long, open ends with splices, sheath special PVC
Sensor covering and nuts		stainless steel
System of protection		IP 50

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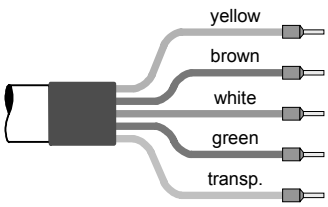
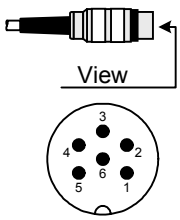
[1] radial incoming force without additional bending or tilting moment

Connections

Standard: connection type „O“	Option: connection type „S“
	

Standard: connection type „O“	
+U_{Br}	Excitation
-U_{Br}	
+U_{Sig}	Output
-U_{Sig}	
Shield *(not connected to housing)*	

Option: connection type „S“	
1 +U_{Br}	Excitation
2 -U_{Br}	
3 Shield *(not connected to housing)*	
4 +U_{Sig}	Output
5 -U_{Sig}	
6 Reserved	

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Technical execution subject to change without prior notice.