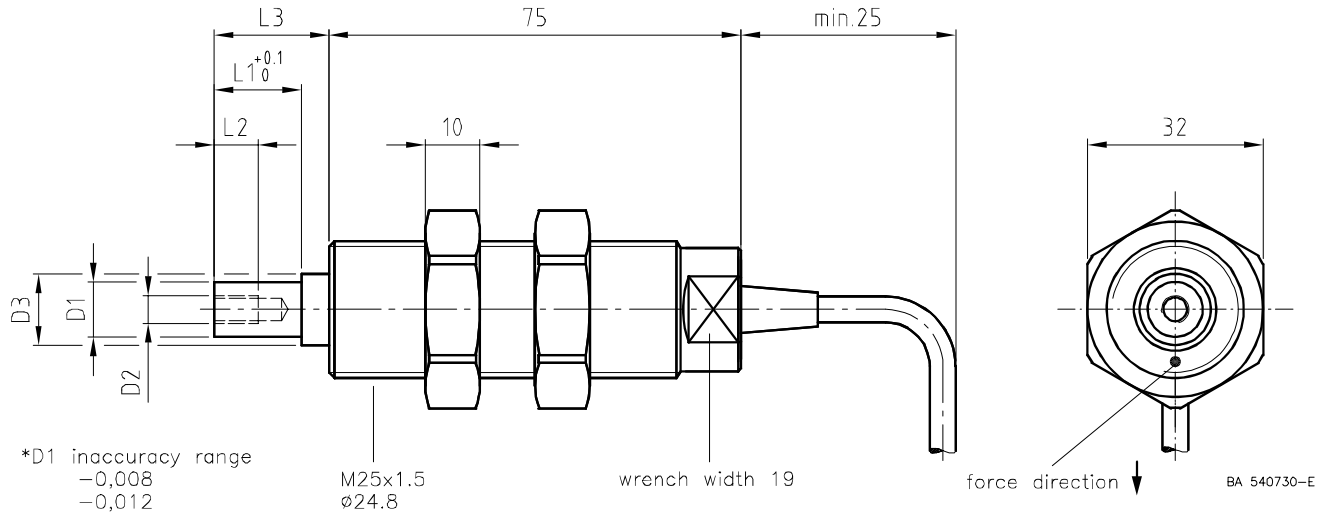


Tension Sensor RFS® 150



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 !

611785

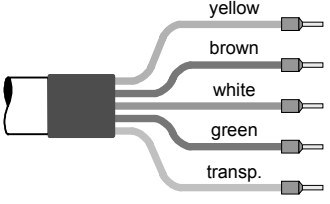
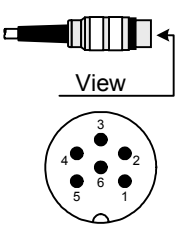
Technical Data - Tension Sensor RFS® 150

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	%	< $\pm 0,2$
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	G Ω	> 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 $^{\circ}\text{C}$		
- on the zero point	% F_N	< $\pm 0,1$
- on the calibration	% 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	400 to 800, depending on nominal force
Ultimate side load	% F_N	200
Typ. deflection at nominal force	mm	$0,07 \pm 20\%$
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 0,14mm ² , cable \varnothing 4,5mm, 3m long, open ends with splices, sheath special PVC	
Sensor covering and nuts	stainless steel	
System of protection	IP 50	

¹ radial incoming force without additional bending or tilting moment

611786

Connections

Standard: connection type „O“	Option: connection type „S“																													
 <table border="1" style="margin-left: 20px;"> <tr> <td>yellow</td> <td>$+U_{Br}$</td> <td rowspan="2">Excitation</td> </tr> <tr> <td>brown</td> <td>$-U_{Br}$</td> </tr> <tr> <td>white</td> <td>$+U_{Sig}$</td> <td rowspan="2">Output</td> </tr> <tr> <td>green</td> <td>$-U_{Sig}$</td> </tr> <tr> <td>transp.</td> <td>Shield</td> <td>(not connected to housing)</td> </tr> </table>	yellow	$+U_{Br}$	Excitation	brown	$-U_{Br}$	white	$+U_{Sig}$	Output	green	$-U_{Sig}$	transp.	Shield	(not connected to housing)	 <table border="1" style="margin-left: 20px;"> <tr> <td>1</td> <td>$+U_{Br}$</td> <td rowspan="2">Excitation</td> </tr> <tr> <td>2</td> <td>$-U_{Br}$</td> </tr> <tr> <td>3</td> <td>Shield</td> <td>(not connected to housing)</td> </tr> <tr> <td>4</td> <td>$+U_{Sig}$</td> <td rowspan="2">Output</td> </tr> <tr> <td>5</td> <td>$-U_{Sig}$</td> </tr> <tr> <td>6</td> <td>Reserved</td> <td></td> </tr> </table>	1	$+U_{Br}$	Excitation	2	$-U_{Br}$	3	Shield	(not connected to housing)	4	$+U_{Sig}$	Output	5	$-U_{Sig}$	6	Reserved	
yellow	$+U_{Br}$	Excitation																												
brown	$-U_{Br}$																													
white	$+U_{Sig}$	Output																												
green	$-U_{Sig}$																													
transp.	Shield	(not connected to housing)																												
1	$+U_{Br}$	Excitation																												
2	$-U_{Br}$																													
3	Shield	(not connected to housing)																												
4	$+U_{Sig}$	Output																												
5	$-U_{Sig}$																													
6	Reserved																													

611787

Technical execution subject to change without prior notice.
Reproduction - in whole, in part or in translation - is prohibited.