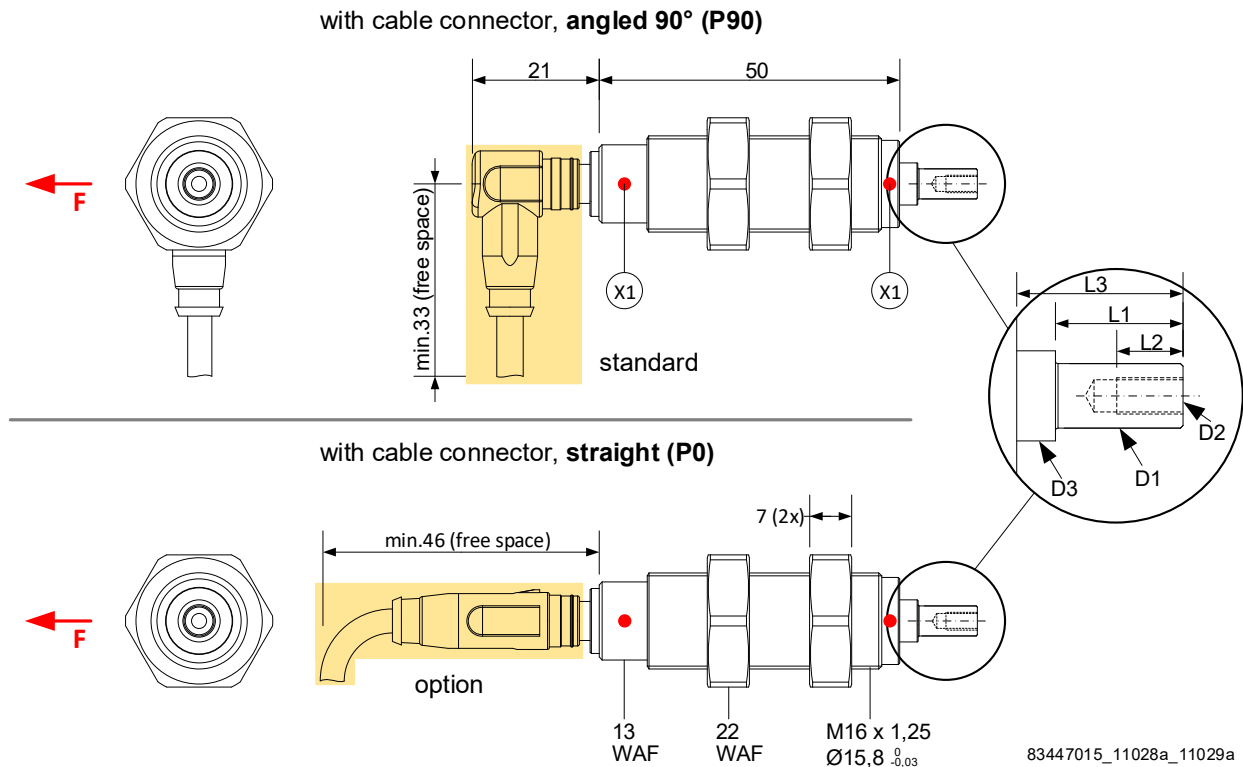


Scale drawing



All dimensions in mm

WAF: width across flats

X1: red mark indicates the position of the measuring axis, parallel to the spanner flats WAF13

Rated measuring ranges

Nominal force [N]							Axle journal Ø [mm]		
2*	3*	4*					5	8	10
5*	10	20	30	40			5	8	10
50	60	100**	200***					8	10

The measuring range of the sensor begins at force's zero point.

Nominal forces differing from the list are available.

SR (Standard Range)

* Special type LR (Low Range)

** Special type HR (High Range)

** Special type XR (eXtended Range)

Dimensions

Axle journal Ø						
D1	$\begin{smallmatrix} -0,006 \\ -0,01 \end{smallmatrix}$	L1	$\begin{smallmatrix} +0,02 \\ 0 \end{smallmatrix}$	D2	L2	L3
5		9,9		M3	6	12,9
8		11,9		M4	6	15,9
10		15,9		M5	8	20,9

All dimensions in mm

Non-standard dimensions and execution upon request

Technical Data

Rated measuring ranges (FN)	N	0 - 2 to 0 - 200
Rated output	mV/V	1,0
Rated output tolerance	%	$< \pm 0,2$
Accuracy class		0,1
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	°C	-10 to 70
Storage temperature range	°C	-30 to 70
Reference temperature	°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	400 to 800 (depending on nominal force)
Ultimate side load	% F_N	200
Deflection at nominal force	mm	$0,04 \pm 20\%$
Typ. natural frequency of the sensor	kHz	1 ... 3 (depending on nominal force)
Weight	g	approx. 70
Protection class		IP 50
Sensor housing and nuts		stainless steel
electrical connection sensor side		plug, snap-on type Ø 8mm, 4-pole, gold-plated contacts
Connection cable		3m long, flexible, shielded 4 x 0,14mm², total Ø 4,5 mm

(#1) radial incoming force without additional bending or tilting moment

Terminal assignment cable end

O: open ends (Standard)		S: cable plug instead of open ends (Option)	
	+ U_{Br}	Excitation	1 + U_{Br}
	- U_{Br}		2 - U_{Br}
	+ U_{Sig}	Output	3 Shield (not connected to housing)
	- U_{Sig}		4 + U_{Sig}
	Shield (not connected to housing)		5 - U_{Sig}
			6 Reserved

Order code

	RFS 100	- 50	- 10	- P90	- 3	- O
Sensor type						
Nominal force [N]						
Axle journal Ø D1 [mm]						
Cable connector	Standard: P90 (angled 90°) Option: P0 (straight 0°)					
Cable length [m]	Standard: 3m Option: 5m or 10m					
Cable end	Standard: O (open ends) Option: S (cable connector)					

Scope of supply

- sensor with connection cable
- protection cap

Accessories

The following accessories are available:

- axle journal adapter (custom-specific)
- winding protection
- clamping flange for flange mounting

Options / Special versions

- extended rated temperature range -10 to 70°C
- cylindrical sensor housing (without outside thread)
- custom-specific sensor housing
- vacuum design
- custom-specific axle journal
- special nominal force, differing from standard
- further enhanced natural frequency (HF)
increase in the already very high natural frequency for special high-speed applications