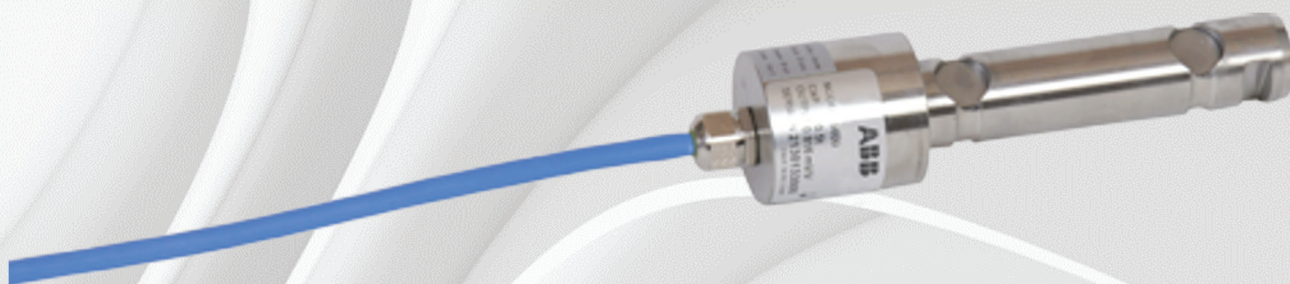


ABB MEASUREMENT & ANALYTICS | DATA SHEET

9QGPS5600

Economical custom-made load pins



Measurement made easy

Custom-made load pins designed to be installed at the same place of a common axle without big change of the existing mechanical environment.

CE certified for hoisting applications

Useful diameter smaller than or equal to 39 mm (1.5 in.)

With axial cable gland

Easy to install

Sturdy design

Material: stainless steel

IP rating IP65

Available options (non exhaustive list)

- ATEX intrinsic safety
- High service temperature 150 °C (302 °F)
- IP rating IP 67(M)
- Amplified output (V or mA)
- Dual Wheatstone bridge
- SIL / PL ready

Applications

The economical custom-made load pins 9QGPS5600 are perfectly designed to the following applications:

- **SL-FORCE**
Force measurement on cylinders / industrial weighing.
- **SL-HOIST**
Hoisting devices and crane's security in combination with load limitation electronics.

Capacities

0.5 to 6.3 t

Explosion protection (Option)

ATEX intrinsic safety:

- Ex II 1GD Ex ia IIC T6 or T4 Ga Ex ia IIIC T80°C Da

Specification

	SL-FORCE	SL-HOIST
Combined error (nonlinearity and hysteresis)	0.25 to 1 % F.S.	0.5 to 2 % F.S.
Repeatability error	< ± 0.25 % F.S.	< ± 0.25 % F.S.
Creep error over 30 min.	< ± 0.3 % F.S.	< ± 0.3 % F.S.
Sensitivity tolerance	–	< ± 0.5 %
Temperature coefficient of the sensitivity	< ± 0.2 % F.S./10 °C	< ± 0.2 % F.S./10 °C
Temperature coefficient of zero signal	< ± 0.2 % F.S./10 °C	< ± 0.2 % F.S./10 °C
Reference temperature	23 °C (73.4 °F)	23 °C (73.4 °F)
Temperature data		
Compensated temperature range	–10 to 45 °C (14 to 113 °F)	–10 to 45 °C (14 to 113 °F)
Service temperature range	–25 to 70 °C (–13 to 158 °F)	–25 to 70 °C (–13 to 158 °F)
Storage temperature range	–50 to 85 °C (–58 to 185 °F)	–50 to 85 °C (–58 to 185 °F)
Electrical data		
Zero balance	± 0.02 mV/V	± 0.02 mV/V
Input resistance	352 Ω ± 2 Ω	352 Ω ± 2 Ω
Output resistance	352 Ω ± 2 Ω	352 Ω ± 2 Ω
Insulation resistance (50 V)	> 5000 MΩ	> 5000 MΩ
Reference excitation voltage	10 V	10 V
Nominal range of excitation voltage	3 to 12 V	3 to 12 V
Nominal sensitivity	1.5 mV/V	1 mV/V
Load limits		
Safe load limit	150 % F.S.	200 % F.S.
Breaking load	> 300 % F.S.	> 500 % F.S.
Static lateral force limit	100 % F.S.	150 % F.S.
Permissible dynamic loading	50 % F.S.	75 % F.S.

Table 1: (F.S.: full scale)

Dimensions

Standard

Economical custom-made load pins 9QGPS5600

All specified dimensions are in mm (in.)

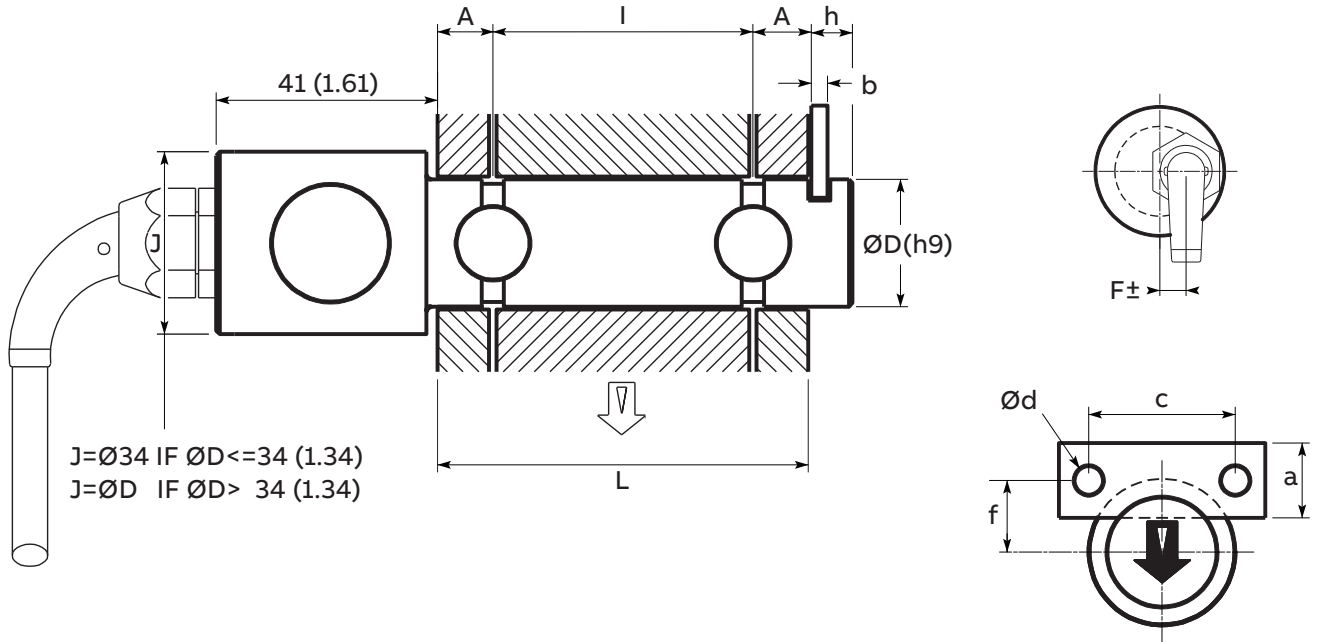


Figure 1: Dimensions

Reference dimensions										Standard dimensions			
Ref. Item	Capacities (t)	A (min)	I (min-max)	b	h	Ø D (h9)	F	f	a	c	Ø d	Ø D Range	a,b,c,Ød,f,h
5600-A	0.5	7 to 10* (0.28 to 0.39)	20 to 100 (0.79 to 3.9)	6 (0.24)	12 (0.47)	20 (0.79)	6 (0.24)	18 (0.71)	25 (0.98)	50 (2)	10 (0.39)	18 to 25 (0.71 to 0.98)	Depending directly on the diameter
5600-B	1.5	12 (0.47)	25 to 160 (0.98 to 6.3)	6 (0.24)	12 (0.47)	30 (1.2)	6 (0.24)	22 (0.87)	25 (0.98)	50 (2)	10 (0.39)	20 to 35 (0.79 to 1.4)	according to DIN 15058
5600-C	2	12 (0.47)	40 to 160 (1.6 to 6.3)	6 (0.24)	12 (0.47)	32 (1.3)	8 (0.31)	23 (0.91)	25 (0.98)	50 (2)	10 (0.39)	24 to 39 (0.94 to 1.5)	Complete list with the different parameters available on request
5600-D	3	12 (0.47)	40 to 160 (1.6 to 6.3)	6 (0.24)	12 (0.47)	36 (1.4)	8 (0.31)	24 (0.94)	25 (0.98)	50 (2)	10 (0.38)	28 to 39 (1.1 to 1.5)	
5600-E	4	12 (0.47)	40 to 160 (1.6 to 6.3)	6 (0.24)	12 (0.47)	39 (1.5)	8 (0.31)	25.5 (1)	25 (0.98)	50 (2)	10 (0.38)	32 to 39 (1.3 to 1.5)	
5600-F	6.3	12 (0.47)	40 to 160 (1.6 to 6.3)	6 (0.24)	12 (0.47)	39 (1.5)	8 (0.31)	25.5 (1)	25 (0.98)	50 (2)	10 (0.39)	36 to 39 (1.4 to 1.5)	

* Depend on capacity

Table 2: Other capacities and dimensions available on request

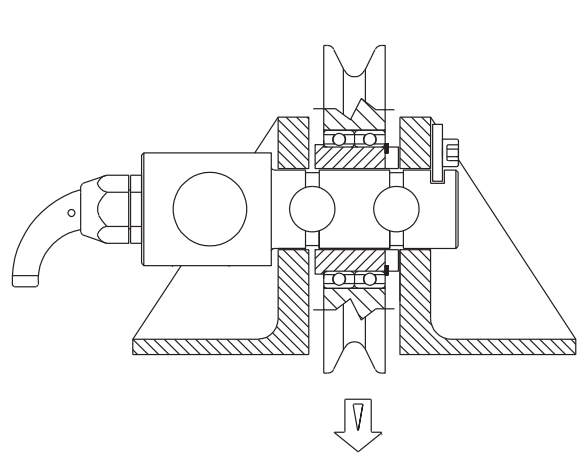


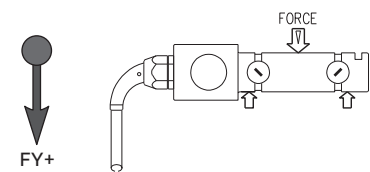
Figure 2: Other view

Wiring code

	- Exct.	- Yellow (Jaune)	-
	+ Sig.	+ Green (Vert)	+
	- Sig.	- White (Blanc)	-
	+ Exct.	+ Brown (Brun)	+

Standard: Cable screen not connected to transducer
Faradisation non connectée au capteur

Load direction



R00092



Notes

ABB Automation GmbH
Measurement & Analytics

Force Measurement
Oberhausener Str. 33
40472 Ratingen
Germany
Tel: +49 2102 12-2520
Fax: +49 2102 12-1414
Mail: ForceMeasurement@de.abb.com

abb.com/measurement

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