
ABB MEASUREMENT & ANALYTICS | DATA SHEET

9QGPS2625

On board weighing load cells



Measurement made easy

Load cells specially designed for on board weighing on trucks, trailer cars and moving machines

—
Very sturdy design

—
High resistance against shocks

—
IP rating IP 67

—
Material: Alloy steel

—
Easy to install (no stabilization system needed)

—
Screws and blocks to be welded available

—
Available options (non exhaustive list)

- ATEX intrinsic safety

Applications

The load cells 9QGPS2625-9QGPS2645 are perfectly designed to the following applications:

- ‘On board’ weighing system on trucks, lorries or agrarian trailer
- ‘On board’ overload preventing system
- Force measurement where the load has to be held with stiffness (example: weighing of railways)

Capacities

Model 9QGPS2625	Model 9QGPS2645
10 t	10 to 50 t

Explosion protection (option)

ATEX intrinsic safety:

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

Specification

0.5	
Measuring accuracy	
Repeatability error	< ±0.25 % F.S.
Creep error over 30 min.	< ±0.2 % F.S.
Temperature coefficient of the sensitivity	< ±0.1 % F.S./10 °C
Temperature coefficient of zero signal	< ±0.1 % F.S./10 °C
Reference temperature	23 °C (73.4 °F)
Temperature data	
Nominal temperature range	-10 to 45 °C (14 to 113 °F)
Service temperature range	-25 to 70 °C (-13 to 158 °F)
Storage temperature range	-50 to 85 °C (-58 to 185 °F)
Electrical Data	
Input resistance	352 Ω ±2 Ω
Output resistance	352 Ω ±2 Ω
Insulation resistance (50 V)	> 5000 MΩ
Reference excitation voltage	10 V DC
Nominal range of excitation voltage	3 to 12 V DC
Zero balance	±0.02 mV/V
Nominal sensitivity	1 mV/V
Load limits	
Safe load limit	120 % F.S.
Breaking load	> 250 % F.S.
Static lateral force limit	100 % F.S.
Permissible dynamic loading	50 % F.S.

F.S.: Full scale

Dimensions

Load cells model 9QGPS2625, model 9QGPS2645 nickelized steel body

Range 10 to 50 t (100 to 500 kN), Cable length: 6 m (19.69 ft)

All dimensions in mm (in)

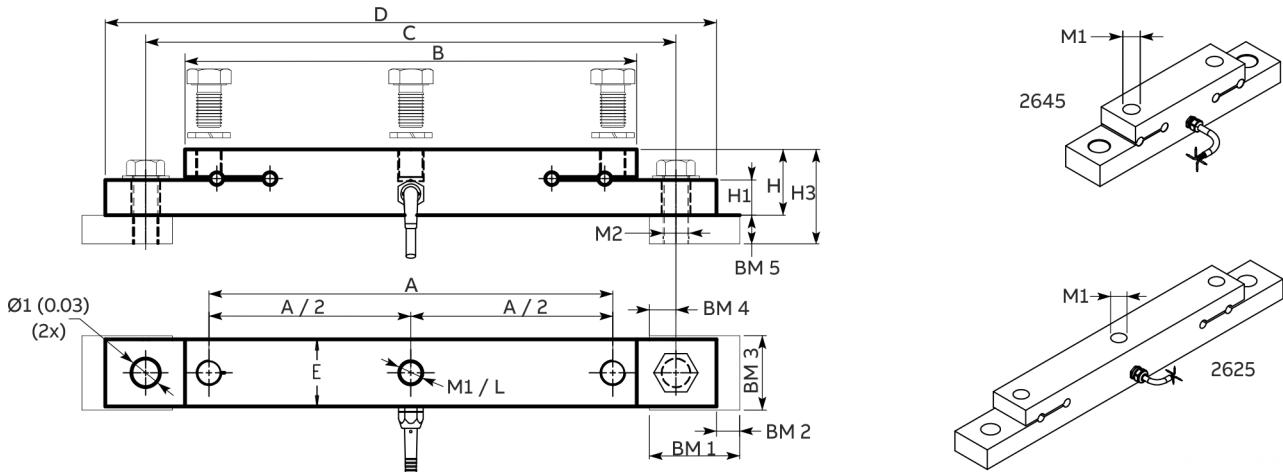
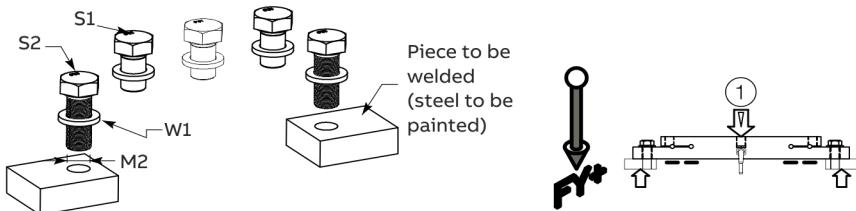


Figure 1: Standard dimensions

Capacities t														
Model	Static	Dynamic	A	B	C	D	E	H	H1	H3	Ø 1	M1/L	CL m (ft)	Weight Kg (lb)
2625-A	10	5	380 (14.96)	425 (16.73)	499 (819.65)	575 (22.64)	63 (2.48)	62 (2.44)	33 (1.30)	90 (3.54)	27 (1.06)	3 x M24 x 1.5/26	10 (32.8)	14.8 (32.63)
2645-A	10	5	152 (5.98)	200 (7.87)	270 (10.63)	390 (15.35)	63 (2.48)	62 (2.44)	33 (1.30)	90 (3.54)	27 (1.06)	2 x M24 x 1.5/26	10 (32.8)	7.5 (16.53)
2645-B	50	30	150 (5.91)	250 (9.84)	510 (20.08)	600 (23.62)	97 (3.82)	97 (3.82)	53 (2.09)	90 (3.54)	38.5 (1.52)	2 x M36 x 3/42	10 (32.8)	31.2 (68.78)

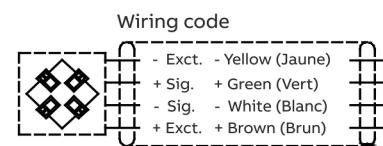
Model	BM1	BM2	BM3	BM4	BM5	S1 (DIN 961)	S2 (DIN 961)	W1 (DIN127)	M2	Weight Kg (lb)
K-BM2625-A	85 (3.35)	22 (0.87)	70 (2.76)	25 (0.98)	28 (1.10)	3 x M24 x 1.5 L40 10.9	2 x M24 x 1.5 L60 10.9	5 x A24 M24 x 1.5	4 (8.82)	
K-BM2645-A	85 (3.35)	22 (0.87)	70 (2.76)	25 (0.98)	28 (1.10)	2 x M24 x 1.5 L40 10.9	2 x M24 x 1.5 L60 10.9	4 x A24 M24 x 1.5	3.75 (8.27)	
K-BM2645-B	145 (5.71)	50 (1.97)	97 (3.82)	50 (1.97)	50 (1.97)	2 x M36 x 3 L70 10.9	2 x M36 x 3 L100 10.9	4 x A36 M36 x 3	15.3 (33.73)	

Accessories



① Force direction

Figure 2: Accessories kit mounting blocks



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

Notes

Notes

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