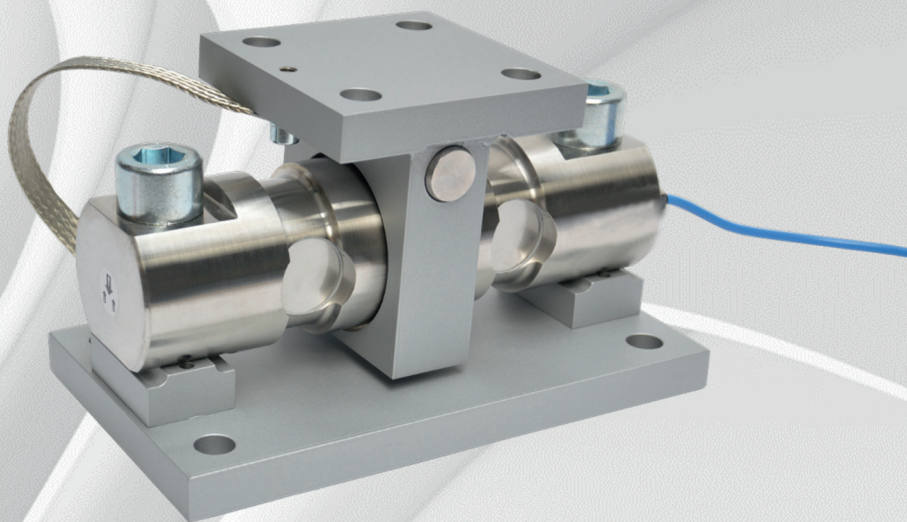


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ABB MEASUREMENT & ANALYTICS | DATA SHEET

9QGPS2600

Double shear beam load cell



Measurement made easy

Load cell for silo weighing combining a sturdy design with an easy installation.

Material

- Stainless steel (model 9QGPS2600)
- Nickel plated steel (model 9QGPS2605)

IP rating IP 67

Mounting kits available with following properties

- Stabilization without tension rods
- Compensation of thermal dilatations
- Compensation of defective alignment

Available options (non exhaustive list)

- ATEX intrinsic safety
- High service temperature -50 to 180 °C (-58 to 356 °F)
- Cable output by a connector
- Dual Wheatstone bridge
- IP rating IP 68
- Amplified output (V or mA) and digital output signal (RS-232C, RS-485)

Applications

The load cell 9QGPS2600 is perfectly designed to the following applications:

- High capacity silos, tanks or hoppers weighing (indoor and outdoor)
- Reactors weighing
- Mixers weighing (vibrating)

Capacities

10 - (15) - 20 - 30 - 50 - 75 t

Explosion protection (Option)

ATEX intrinsic safety

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

Specification

	0.25 %	0.1 %
Accuracy class	0.25 % F.S.	0.1 % F.S.
Combined error (nonlinearity and hysteresis)	< ± 0.25 % F.S.	< ± 0.1 % F.S.
Repeatability error	< ± 0.1 % F.S.	< ± 0.03 % F.S.
Creep error over 30 min.	< ± 0.1 % F.S.	< ± 0.06 % F.S.
Zero shift after loading	< ± 0.025 % F.S.	< ± 0.015 % F.S.
Sensitivity tolerance	< ± 0.3 % F.S.	< ± 0.3 % F.S.
Temperature coefficient of the sensitivity	< ± 0.05 % F.S./10 °C	< ± 0.05 % F.S./10 °C
Temperature coefficient of zero signal	< ± 0.035 % F.S./10 °C	< ± 0.035 % F.S./10 °C
Reference temperature	23 °C (73.4 °F)	23 °C (73.4 °F)
Temperature data		
Nominal 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		
Input resistance	352 Ω ± 2 Ω	352 Ω ± 2 Ω
Output resistance	352 Ω ± 2 Ω	352 Ω ± 2 Ω
Insulation resistance (50V)	> 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	2 mV/V	2 mV/V
Load limits		
Safe load limit	150 % F.S.	150 % F.S.
Breaking load	> 300 % F.S.	> 300 % F.S.
Static lateral force limit	100 % F.S.	100 % F.S.
Permissible dynamic loading	50 % F.S.	50 % F.S.

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

Dimensions

Load cell model 9QGPS2600

All specified dimensions are in mm (in)

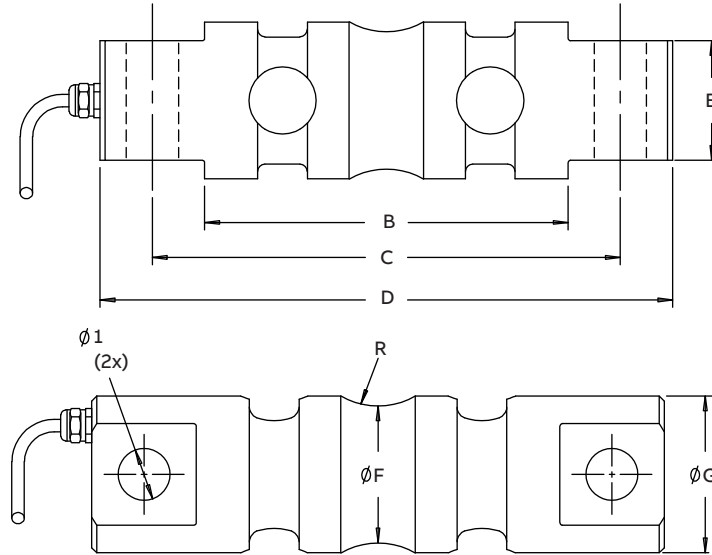


Figure 1: Dimensions

Ref. Item	Capacities t	B	C	D	E	ØF	ØG	R	Ø1	CL m (ft)	Weight kg (lb)
260x-A	10 to 20	118 (4.70)	188 (7.40)	230 (9.06)	51 (2.01)	55 (2.17)	63 (2.48)	30 (1.18)	21 (0.83)	10 (33)	4.3 (9.50)
260x-B	30	130 (5.12)	220 (8.66)	270 (10.63)	55 (2.17)	57 (2.24)	74 (2.95)	50 (1.97)	24.5 (0.96)	12 (39)	7 (15.43)
260x-C	50	134 (5.28)	240 (9.45)	290 (11.42)	70 (2.75)	80 (3.15)	89 (3.50)	40 (1.57)	31 (1.22)	12 (39)	11 (24.30)
260x-D	75	222 (8.74)	300 (11.81)	360 (14.17)	88 (3.46)	103 (4.06)	109 (4.29)	45 (1.77)	34 (1.34)	20 (66)	24.6 (54.23)

Table 2: Other capacities and dimensions on request

Accessories

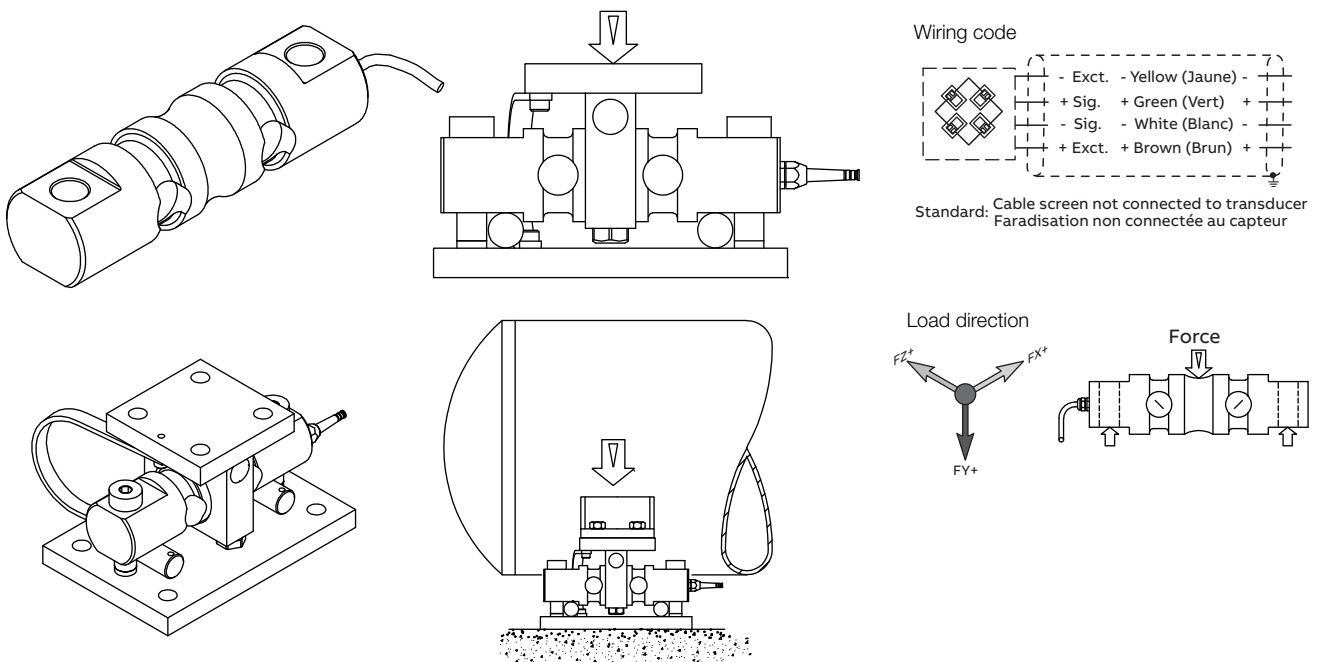


Figure 2: Accessories

Dummy model D2605 mounted with I2600

For load cells 9QGPS2600

All specified dimensions are in mm (in)

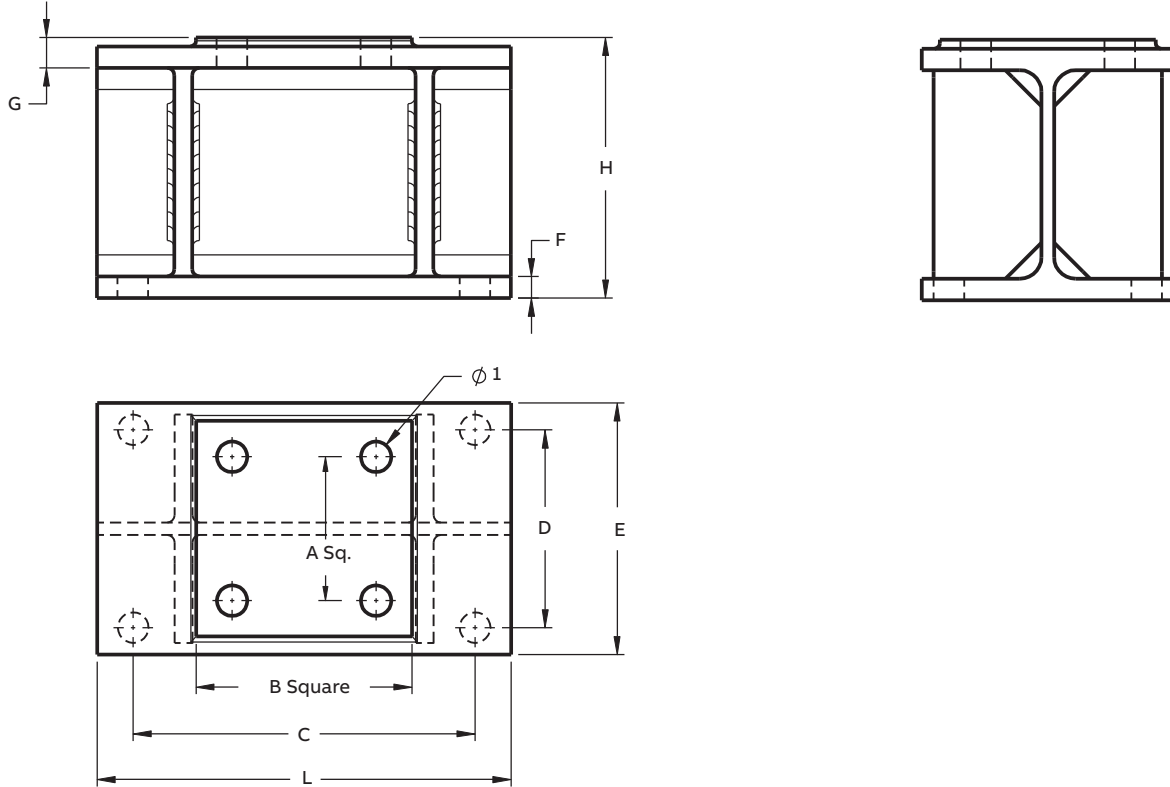


Figure 3: Dummy model D2605 mounted with I2600

Ref. Item	Capacities t	A	B	C	D	E	F	G	H	L	Ø1	Weight kg (lb)
D260x-A	10 to 20	80 (3.15)	120 (4.72)	190 (7.48)	110 (4.33)	140 (5.51)	12 (0.47)	17 (0.67)	145 (5.71)	230 (9.06)	17 (0.67)	10.2 (22.49)
D260x-B	30	110 (4.33)	150 (5.91)	240 (9.45)	110 (4.33)	180 (7.09)	14 (0.55)	184 (7.24)	184 (7.24)	280 (11.02)	18 (0.71)	18.4 (40.57)
D260x-C	50	136 (5.35)	180 (7.09)	256 (10.08)	136 (5.35)	220 (8.66)	16 (0.63)	224 (8.12)	224 (8.12)	300 (11.81)	20 (0.79)	26.23 (57.83)
D260x-D	75	To be defined										

Table 3: Other capacities and dimensions on request

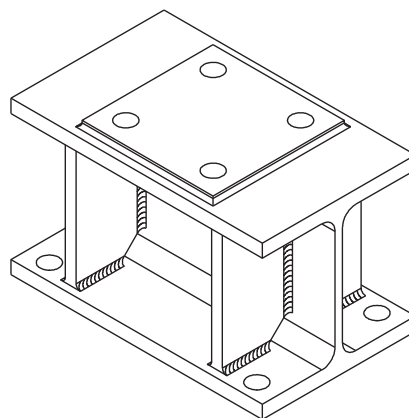


Figure 4: Other views

...Dimensions

Easy mount model I2600 (stainless steel) and I2605 (alloy steel)

For load cells 9QGPS2600

All specified dimensions are in mm (in)

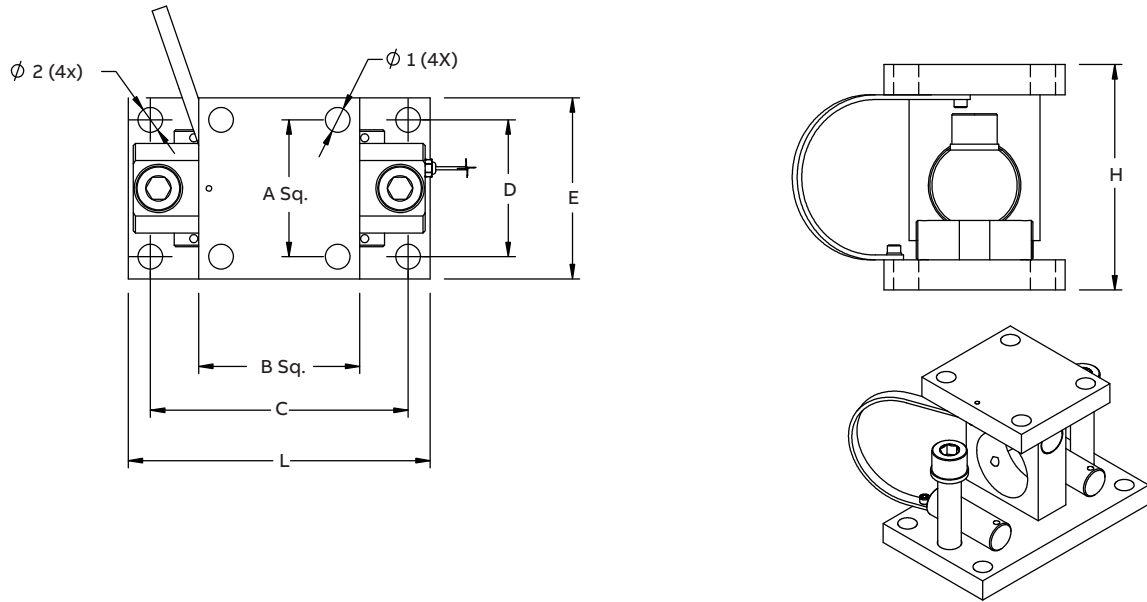


Figure 5: Easy mount

Ref. Item	Capacities t	A	B	C	D	E	F	G	H	L	Ø1	Ø2	Weight kg (lb)
I260x-A	10 to 20	80 (3.15)	120 (4.72)	190 (7.48)	110 (4.33)	150 (5.91)	20 (0.79)	20 (0.79)	145 (5.71)	230 (9.06)	17 (0.67)	17 (0.67)	10.5 (23.15)
I260X-B	30	110 (4.33)	150 (5.91)	240 (9.45)	110 (4.33)	150 (5.91)	25 (0.98)	25 (0.98)	184 (7.24)	280 (8.19)	21 (0.83)	21 (0.83)	16.5 (36.38)
I260x-C	50	136 (5.35)	180 (7.09)	256 (10.08)	136 (5.35)	180 (7.09)	30 (1.18)	30 (1.18)	224 (8.82)	300 (11.81)	25 (0.98)	25 (0.98)	25 (55.12)
I260x-D	75	180 (7.09)	250 (9.84)	440 (17.32)	160 (6.30)	250 (9.84)	40 (1.57)	30 (1.18)	327 (12.87)	520 (20.47)	23 (0.91)	34 (1.34)	86 (189.60)

Table 4: Other capacities and dimensions on request

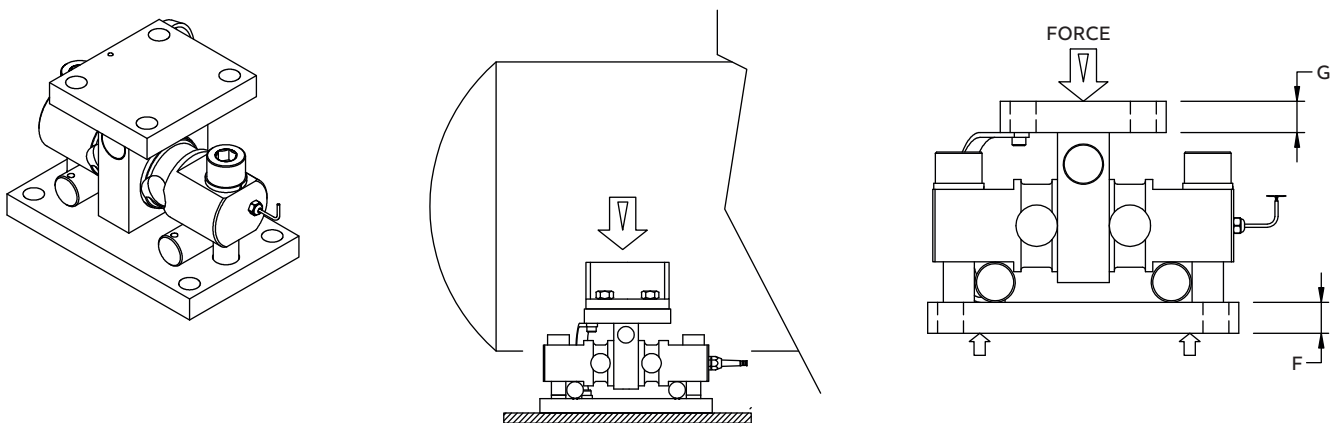


Figure 6: Other views

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