

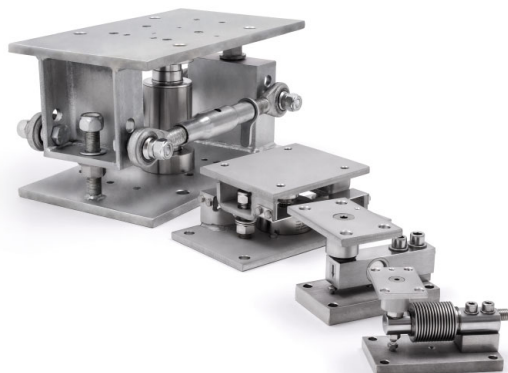
PRODUCTS CATALOG



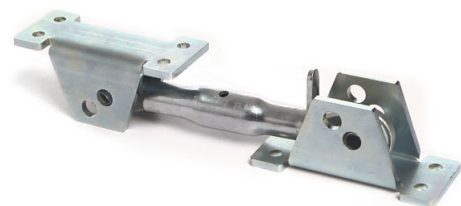
A1 LOAD CELLS



A2 MOUNTING KITS



A3 COMPLEMENTARY ACCESSORIES



LOAD CELLS

LAUMAS offers a wide range of load cells of the most common types in the main industrial sectors providing for each of them the quality, availability and assistance.

MOUNTING KITS

For all load cells, LAUMAS is able to provide suitable mounting kits, with the aim of obtaining the correct application of the cell and maximum reliability and accuracy, and compatibly with the mechanical, electrical and pneumatic connections present on the weighing structure.

CERTIFICATIONS



European Conformity Mark (CE)



UKCA CERTIFICATION (UK Conformity Assessed) for the United Kingdom



EAC CERTIFICATION



OIML APPROVAL



EU TYPE EXAMINATION CERTIFICATE FOR UK Non-Automatic Weighing Instruments (NAWI)



3-A SANITARY STANDARDS



NTEP CERTIFICATION



ATEX CERTIFICATION



IECEx CERTIFICATION



EAC Ex CERTIFICATION



FM HazLoc (Hazardous Locations) CERTIFICATION



PAC CERTIFICATION (Pattern Approval Certificate)



CPA CERTIFICATION (Chinese Pattern Approval)



EN1090






DECLARATION OF CONFORMITY IP69K MARKING PROTECTION RATING

Testing, Calibration, Quality Control

Calibration service through our **accredited laboratory (LAT)** for the calibration of load cells and load cells + weight indicator.

Issue of the relative certificates for force values between 2 and 100 kN (according to UNI EN ISO 376 and ASTM E 74 standards) or the linearity and repeatability test for force values between 0.5 and 5000 kN (compression) and between 0.5 and 600 kN (traction).

		PAGE
A1	LOAD CELLS	
A1.1	SINGLE-POINT	4
A1.2	BENDING BEAM	35
A1.3	SHEAR BEAM	49
A1.4	DOUBLE SHEAR BEAM	63
A1.5	COMPRESSION-LOW PROFILE	71
A1.6	COLUMN	89
A1.7	COMPRESSION / TENSION	100
A1.8	TENSION (COMPRESSION)	108
A1.9	TENSION	118
A1.10	DIGITAL LOAD CELLS	124
A1.11	SPECIAL LOAD CELLS	132
A2	MOUNTING KITS	
A2.1	for SINGLE-POINT load cells	142
A2.2	for BENDING BEAM load cells	146
A2.3	for SHEAR BEAM load cells	166
A2.4	for DOUBLE SHEAR BEAM / COLUMN load cells	182
A2.5	for COMPRESSION-LOW PROFILE load cells	187
A3	COMPLEMENTARY ACCESSORIES	207

	CAPACITY	PLATFORM	PAGE
A1.1	SINGLE-POINT		
	AF 5, 15, 50 kg	150x150 mm	6
	AS 0.25, 0.5, 1 kg	200x200 mm	8
	ALL 3, 5, 10, 15, 20, 30, 50 kg	250x350 mm	10
	PRC 6, 15, 30, 50 kg	350 x 350 mm	12
	AU 3, 6, 15 kg 30, 50 kg	250 x 400 mm 400 x 600 mm	14
	AZL 10, 15, 20, 30, 50, 100 kg	400 x 400 mm	16
	AZLI 10, 20, 50 kg	400 x 400 mm	18
	100, 200, 300, 500 kg	800 x 800 mm	
	AZS 10, 30, 50, 100, 200 kg	400 x 400 mm	21
	PTC 30, 50, 75, 100, 150 kg	400 x 400 mm	23
	AM 60, 100, 150, 200, 300 kg	400 x 400 mm	25
	APL 50, 100, 150, 200, 300, 500 kg	600 x 600 mm	27
	PEC 75, 150, 300, 500 kg	600 x 600 mm	29
	AR 500, 1000 kg	800 x 800 mm	31
	ATL 1000, 2000 kg	1200 x 1200 mm	33



Manufactured according to OIML R60 standards

Capacity from 5 kg to 50 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.05\%$
- IP65 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	5	150 x 150	0.13
	15	150 x 150	0.13
	50	150 x 150	0.13

CERTIFICATIONS



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEX (zone 0-1-2-20-21-22)

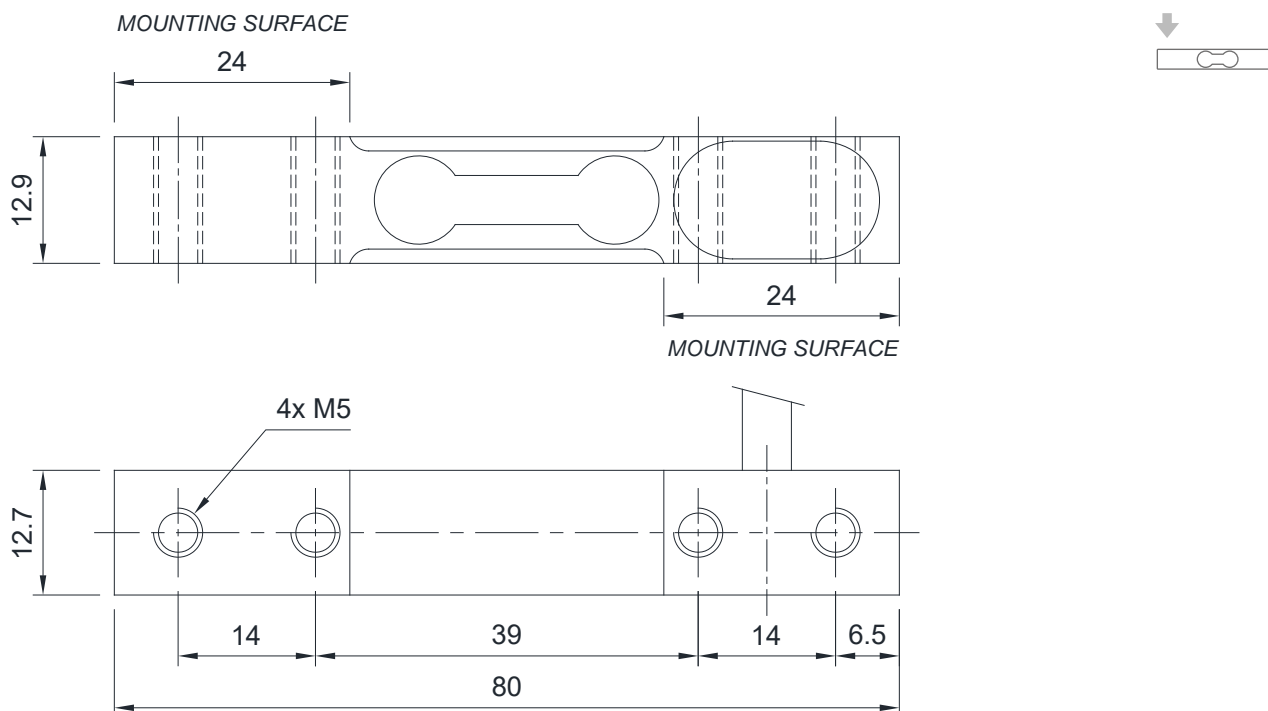


Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

AF

SINGLE-POINT LOAD CELL for platforms 150x150 mm

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M5	
Screw class	6.8	8.8
Tightening torque	4.5 Nm	6 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	5 - 15 - 50 kg		
Combined error	$\leq \pm 0.05\%$		
Protection rating	IP65		
Rated output	3 mV/V $\pm 10\%$	Input resistance	410 $\Omega \pm 40$
Temperature effect on zero	0.005% $^{\circ}\text{C}$	Output resistance	350 $\Omega \pm 5$
Temperature effect on span	0.005% $^{\circ}\text{C}$	Zero balance	$\pm 2\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	>2000 M Ω
Operating temperature range	-20 $^{\circ}\text{C}$ / +60 $^{\circ}\text{C}$	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.05%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	10 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

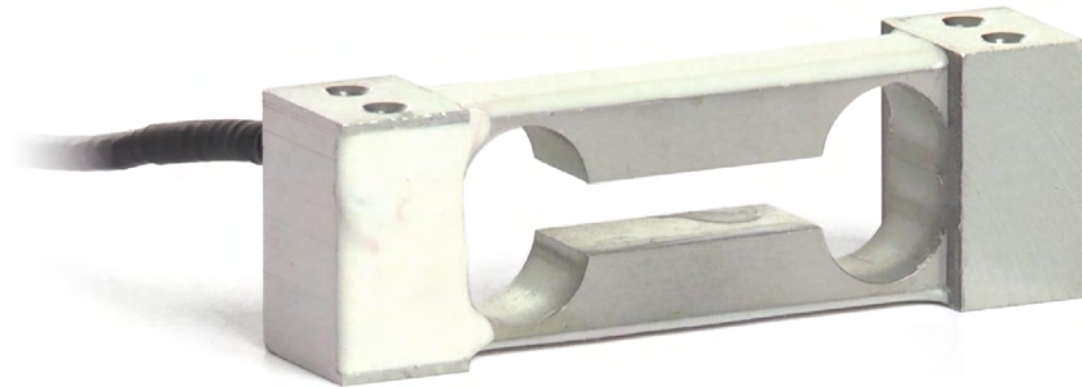
Cable length	3 m
Cable diameter	4 mm
Cores	4 x 0.20 mm ²





Manufactured according to OIML R60 standards

Capacity from 0.25 kg to 1 kg



- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.03\%$
- IP65 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	0.25	200 x 200	0.1
	0.5	200 x 200	0.1
	1	200 x 200	0.1

CERTIFICATIONS



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

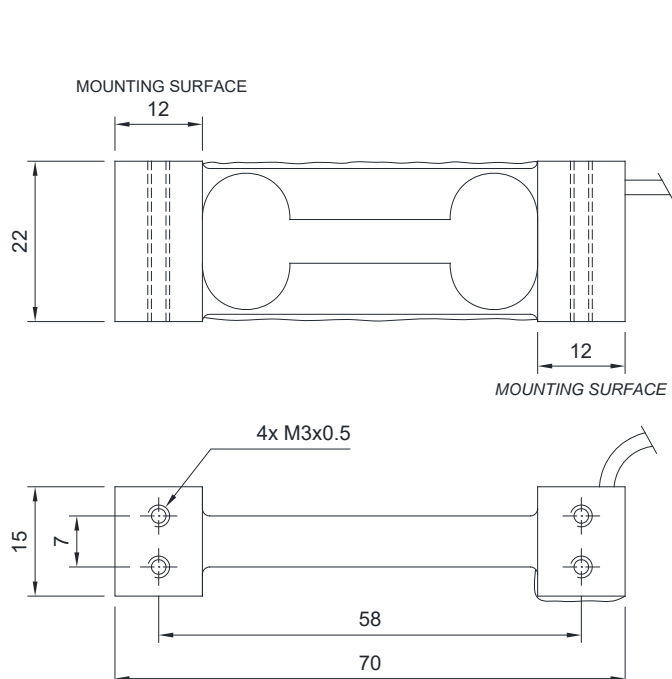


IECEX (zone 0-1-2-20-21-22)



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M3	
Screw class	6.8	8.8
Tightening torque	1 Nm	1.3 Nm

TECHNICAL FEATURES

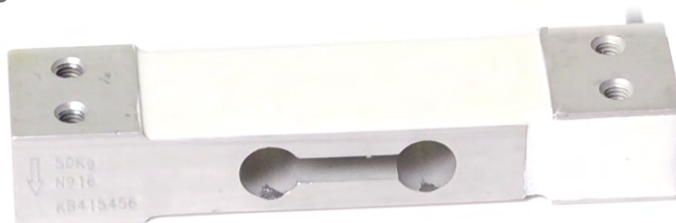
Material	Aluminum alloy		
Nominal load (E max)	0.25 - 0.50 - 1.00 kg		
Combined error	$\leq \pm 0.03\%$		
Protection rating	IP65		
Rated output	1 mV/V $\pm 15\%$	Input resistance	410 $\Omega \pm 10$
Temperature effect on zero	0.0025% $^{\circ}\text{C}$	Output resistance	350 $\Omega \pm 3$
Temperature effect on span	0.0025% $^{\circ}\text{C}$	Zero balance	$\pm 2\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	>2000 M Ω
Operating temperature range	-20 $^{\circ}\text{C}$ / +60 $^{\circ}\text{C}$	Safe overload (% of full scale)	200%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	400%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	2.5 mm
Cores	4 x 0.20 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.

**Capacity from 3 kg to 50 kg**

- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4; 0.014% C5)
- IP65 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS					PLATFORM (mm)	NET WEIGHT (kg)
		C3	C4	C5				
3		•	•	•	•	•	250 x 350	0.2
5		•	•	•	•	•	250 x 350	0.2
10		•	•	•	•	•	250 x 350	0.2
15		•	•	•	•	•	250 x 350	0.2
20		•	•	•	•	•	250 x 350	0.2
30		•	•	•	•	•	250 x 350	0.2
50		•	•	•	•	•	250 x 350	0.2

ON REQUEST

CERTIFICATIONS

OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



OIML R60 C4/C5



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres



NTEP - Complies with United States regulations for legal for trade use

COMPLEMENTARY ACCESSORIES

DESCRIPTION



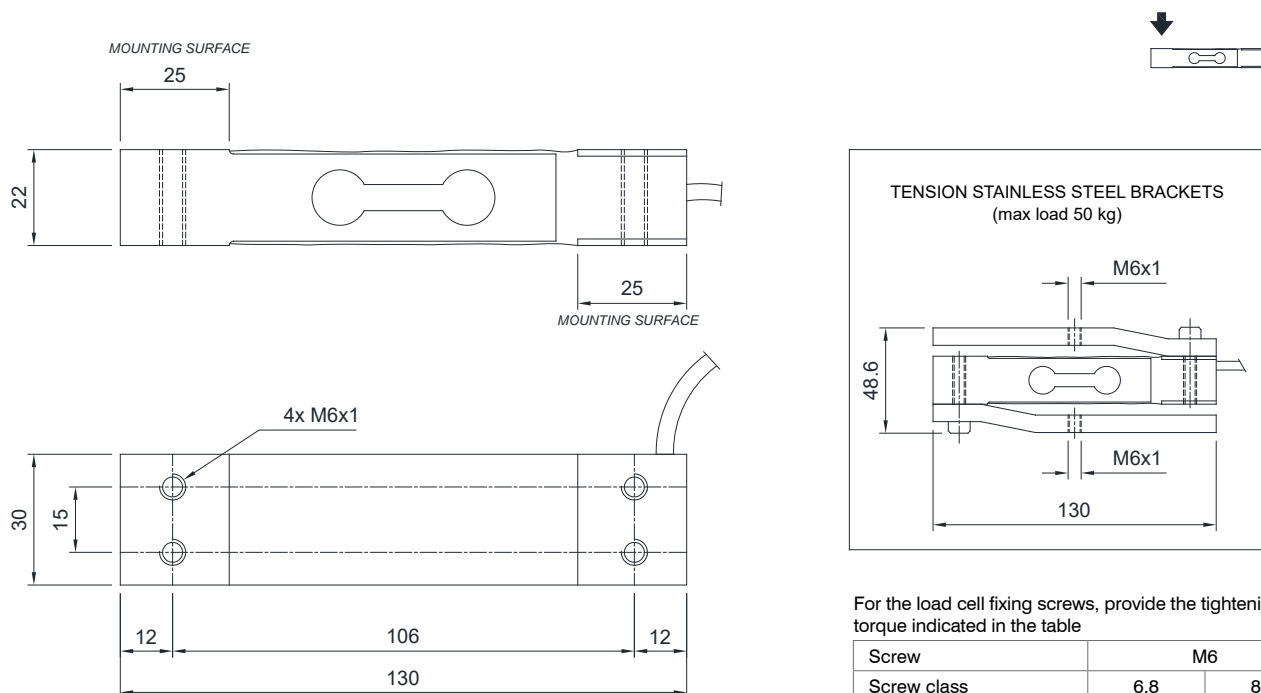
Pair of stainless steel tension brackets.
Maximum static load: 50 kg.

STAFFEALL

ALL

SINGLE-POINT LOAD CELL for platforms 250x350 mm

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

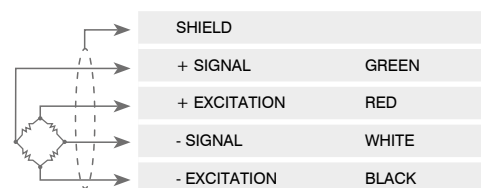
Screw	M6	
	Screw class	6.8
Tightening torque	7.5 Nm	10 Nm

TECHNICAL FEATURES

Material	Aluminum alloy		
	OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	3 - 5 - 10 - 15 - 20 - 30 - 50 kg		
Minimum verification interval (V min)	E max / 10000	E max / 15000	E max / 20000
Combined error	≤ ±0.02%	≤ ±0.017%	≤ ±0.014%
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	409 Ω ±6
Temperature effect on zero	0.0017% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0014% °C	Zero balance	≤ ±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.015%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	3.8 mm
Cores	4 x 0.20 mm ²





Manufactured according to OIML R60 standards

Capacity from 6 kg to 50 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	6	350 x 350	0.4
	15	350 x 350	0.4
	30	350 x 350	0.4
	50	350 x 350	0.4

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

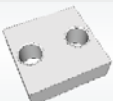
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

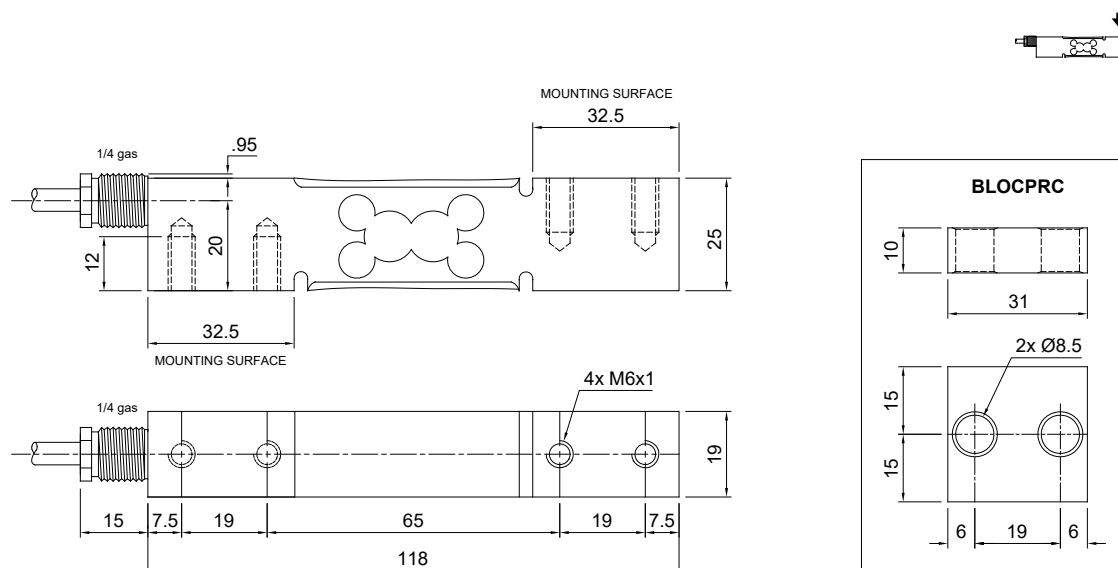
IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPRC

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

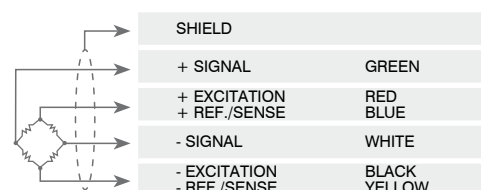
Screw	M6	
Screw class	6.8	8.8
Tightening torque	7.5 Nm	10 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	6 - 15 - 30 - 50 kg		
Combined error	$\leq \pm 0.02\%$		
Protection rating	IP67		
Rated output	2 mV/V $\pm 10\%$	Input resistance	380 $\Omega \pm 10$
Temperature effect on zero	0.002% $^{\circ}\text{C}$	Output resistance	350 $\Omega \pm 5$
Temperature effect on span	0.002% $^{\circ}\text{C}$	Zero balance	$\pm 1\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-20 $^{\circ}\text{C}$ / +60 $^{\circ}\text{C}$	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	5 mm
Cores	6 x 0.20 mm ²





Manufactured according to OIML R60 standards

Capacity from 3 kg to 50 kg



- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$
- IP65 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	3	250 x 400	0.5
	6	250 x 400	0.5
	15	250 x 400	0.5
	30	400 x 600	0.5
	50	400 x 600	0.5

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

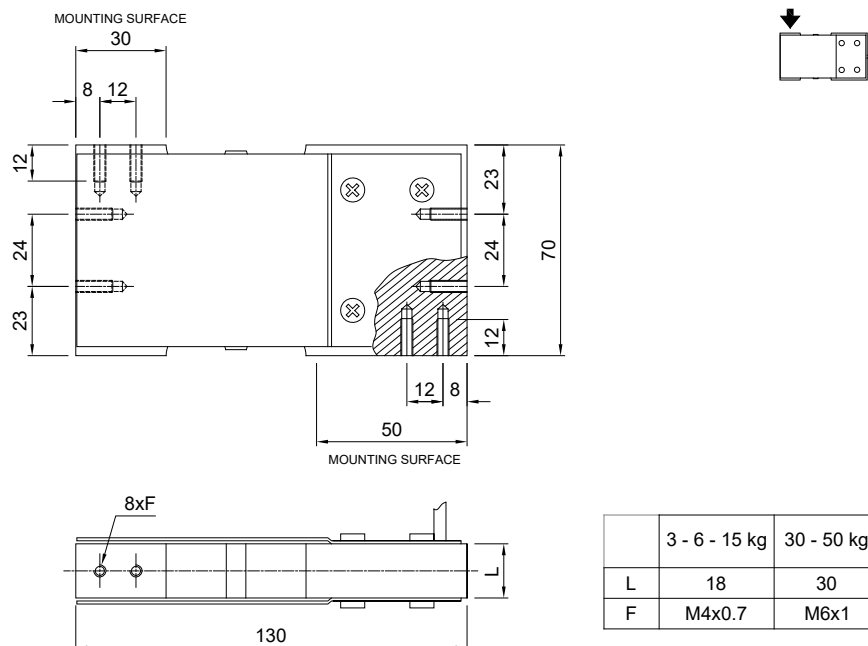
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M4		M6	
	Screw class	6.8	8.8	6.8
Tightening torque	2.2 Nm	3 Nm	7.5 Nm	10 Nm

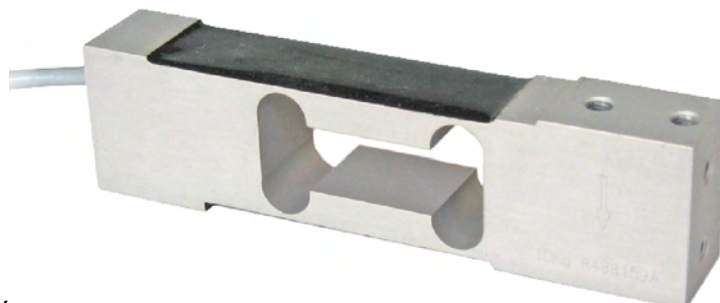
TECHNICAL FEATURES

Material	Aluminum alloy		
Nominal load (E max)	3 - 6 - 15 - 30 - 50 kg		
Combined error	≤ ±0.02%		
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	410 Ω ±10
Temperature effect on zero	0.0025% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0025% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>2000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	120%
Creep at nominal load in 30 minutes	0.025%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.5 mm

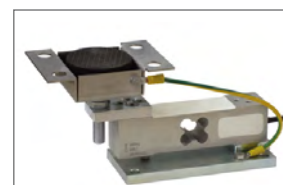
ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	4 mm
Cores	4 x 0.20 mm ²



**Capacity from 10 kg to 100 kg**

- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP65 PROTECTION RATING

MOUNTING KIT**T8AZL**

Can be used for systems with at least 3 supports

CAPACITY	kg	ACCURACY CLASS				PLATFORM (mm)	NET WEIGHT (kg)
		C3	C4				
10		•	–	•	•	400 x 400	0.4
15		•	•	•	•	400 x 400	0.4
20		•	•	•	•	400 x 400	0.4
30		•	•	•	•	400 x 400	0.4
50		•	•	•	•	400 x 400	0.4
100		•	–	•	•	400 x 400	0.4

ON REQUEST

CERTIFICATIONS

OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



OIML R60 C4



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

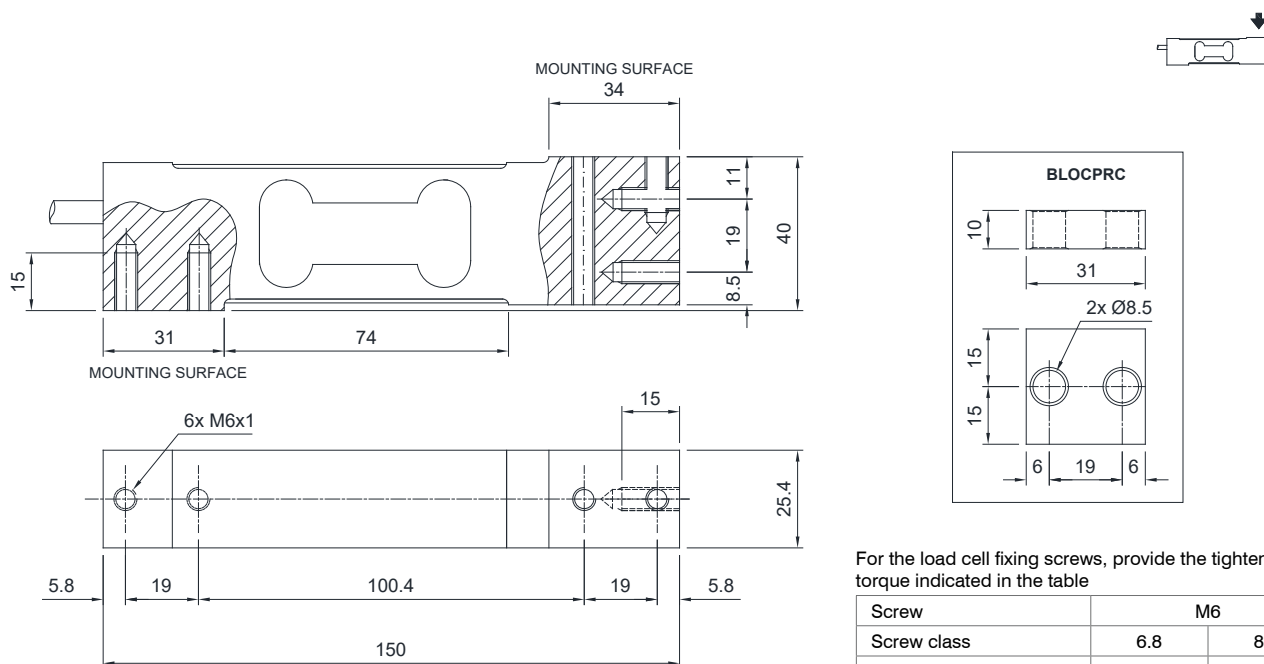


NTEP - Complies with United States regulations for legal for trade use

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPRC

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

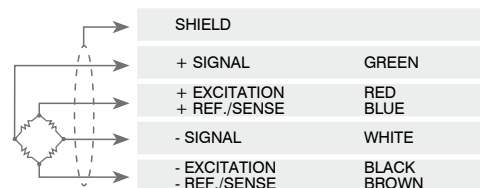
Screw	M6	
Screw class	6.8	8.8
Tightening torque	7.5 Nm	10 Nm

TECHNICAL FEATURES

Material	Aluminum alloy	
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	10 - 15 - 20 - 30 - 50 - 100 kg	15 - 20 - 30 - 50 kg
Minimum verification interval (V min)	E max / 12000	E max / 15000
Combined error	≤ ±0.02%	≤ ±0.017%
Protection rating	IP65	
Rated output	2 mV/V ± 10%	Input resistance 409 Ω ± 6
Temperature effect on zero	0.0017% °C	Output resistance 350 Ω ± 3
Temperature effect on span	0.0014% °C	Zero balance ≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance ≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale) 150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale) 300%
Max supply voltage without damage	18 V	Deflection at nominal load 0.5 mm

ELECTRICAL CONNECTIONS

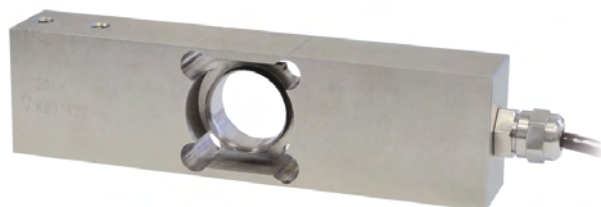
Cable length	6 m
Cable diameter	5 mm
Cores	6 x 0.20 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 10 kg to 50 kg

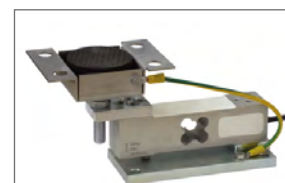


Capacity from 100 kg to 500 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP68 PROTECTION RATING

MOUNTING KIT



T8AZL capacity 50 kg

Can be used for systems with at least 3 supports

CAPACITY	kg	ACCURACY CLASS				PLATFORM (mm)	NET WEIGHT (kg)
		C3	C4				
10		•	•	–	•	400 x 400	0.9
20		•	•	•	•	400 x 400	0.9
50		•	•	•	•	400 x 400	1
100		•	–	•	•	800 x 800	2.7
200		•	–	•	•	800 x 800	2.7
300		•	–	•	•	800 x 800	2.8
500		•	–	•	•	800 x 800	2.8

ON REQUEST

CERTIFICATIONS

OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



IP69K

Declaration of conformity + IP69K marking protection rating

Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm)
Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)

Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



OIML R60 C4



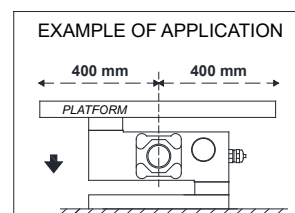
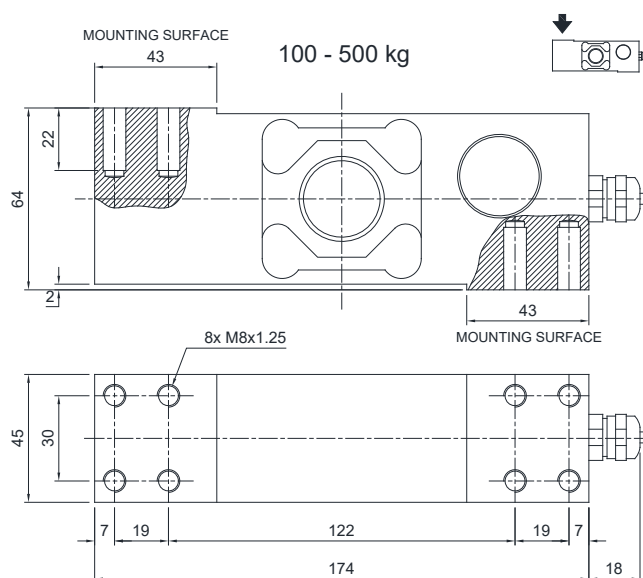
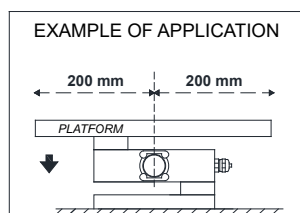
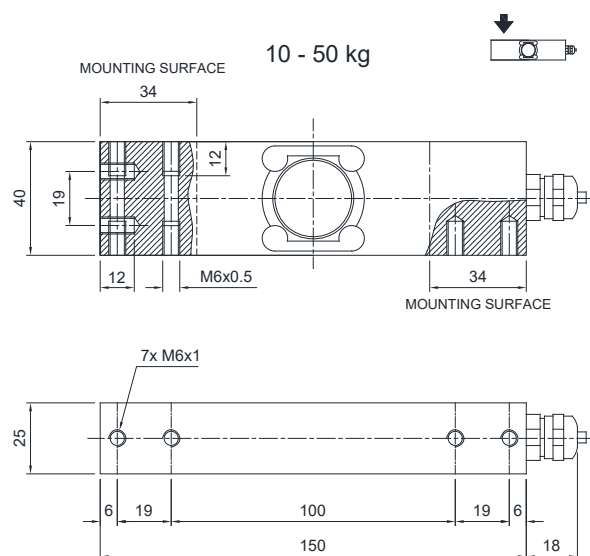
Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres



FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres



NTEP - Complies with United States regulations for legal for trade use

DIMENSIONS (mm)

For the load cell fixing screws, provide the tightening torque indicated in the table

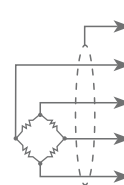
Screw	M6		M8	
	6.8	8.8	6.8	8.8
Tightening torque	7.5 Nm	10 Nm	19 Nm	25 Nm

TECHNICAL FEATURES

Material	17-4 PH Stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		C4 • 4000
Nominal load (E max)	10 - 20 - 50 - 100 - 200 - 300 - 500 kg		10 - 20 - 50 kg
Minimum verification interval (V min)	E max / 10000		E max / 40000
Combined error	≤ ±0.02%		≤ ±0.017%
Protection rating	IP68		
Rated output	2 mV/V ± 10%	Input resistance	350 Ω ± 3.5
Temperature effect on zero	0.0017% °C	Output resistance	350 Ω ± 3.5
Temperature effect on span	0.0014% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

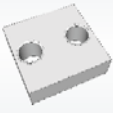

Cable length	3 m
Cable diameter	5 mm
Cores	4/6 x 0.20 mm ²



SHIELD	
+ SIGNAL	GREEN
+ EXCITATION	RED
+ REF./SENSE	BLUE
- SIGNAL	WHITE
- EXCITATION	BLACK
- REF./SENSE	YELLOW

■ where provided

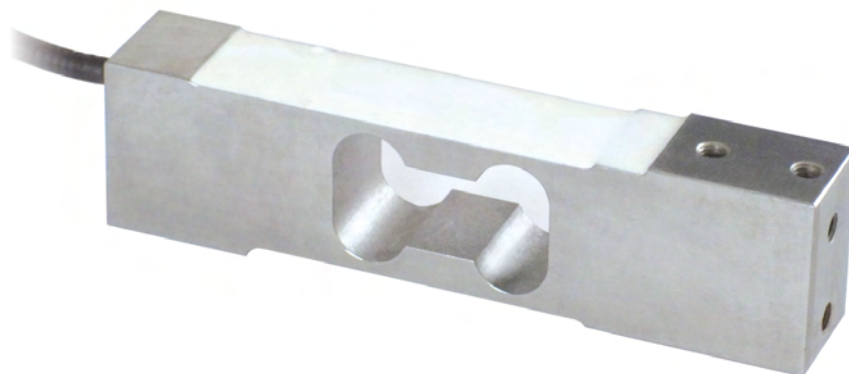
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block for capacities up to 50 kg.	BLOCPRC
	Stainless steel drawn block for capacities from 100 to 500 kg.	BLOCAPL

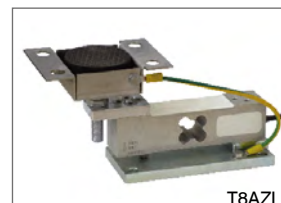


Manufactured according to OIML R60 standards

Capacity from 10 kg to 200 kg



MOUNTING KIT



T8AZL

Can be used for systems with at least 3 supports

- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.03\%$
- IP67 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	10	400 x 400	1
	30	400 x 400	1
	50	400 x 400	1
	100	400 x 400	1
	200	400 x 400	1

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

⚡ ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

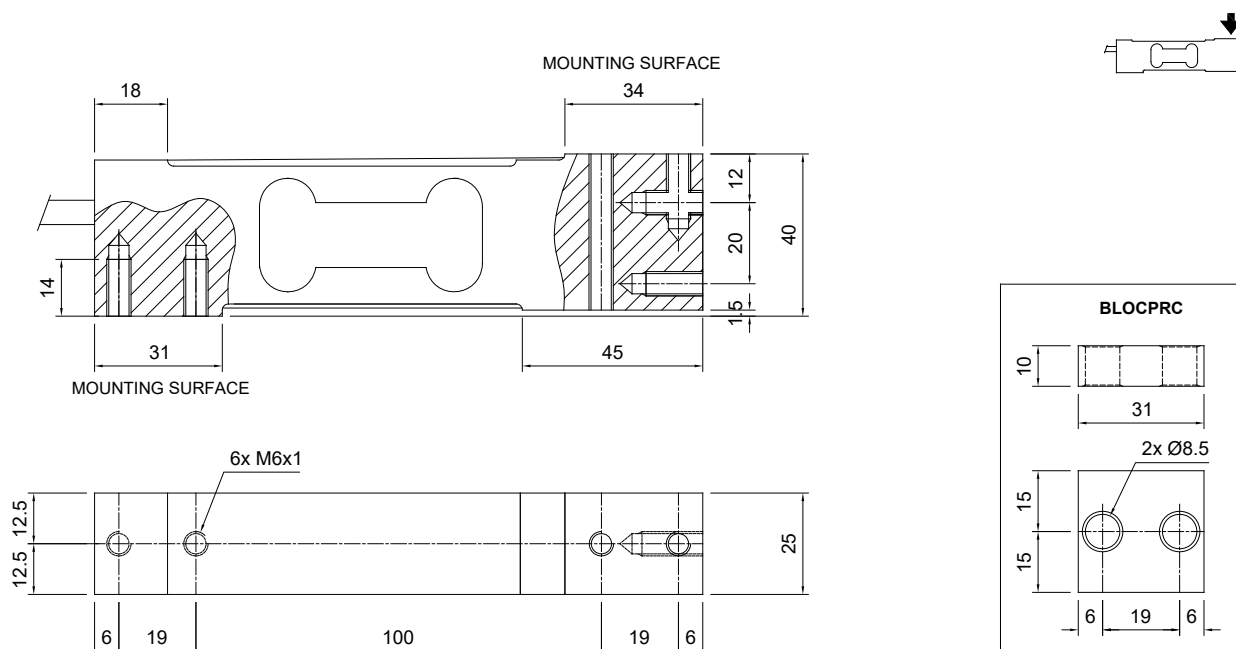
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPRC

AZS

SINGLE-POINT LOAD CELL for platforms 400x400 mm

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

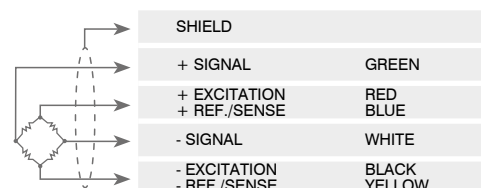
Screw	M6	
Screw class	6.8	8.8
Tightening torque	7.5 Nm	10 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	10 - 30 - 50 - 100 - 200 kg		
Combined error	≤ ±0.03%		
Protection rating	IP67		
Rated output	2 mV/V ±10%	Input resistance	385 Ω ±30
Temperature effect on zero	0.0025% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0025% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>2000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

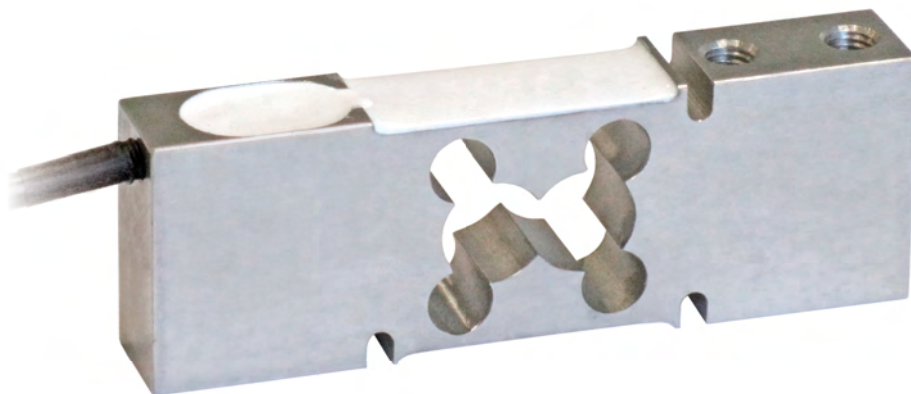
Cable length	6 m
Cable diameter	5 mm
Cores	6 x 0.20 mm ²





Manufactured according to OIML R60 standards

Capacity from 30 kg to 150 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	30	400 x 400	0.75
	50	400 x 400	0.75
	75	400 x 400	0.75
	100	400 x 400	0.75
	150	400 x 400	0.75

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UKCA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UKCA**)

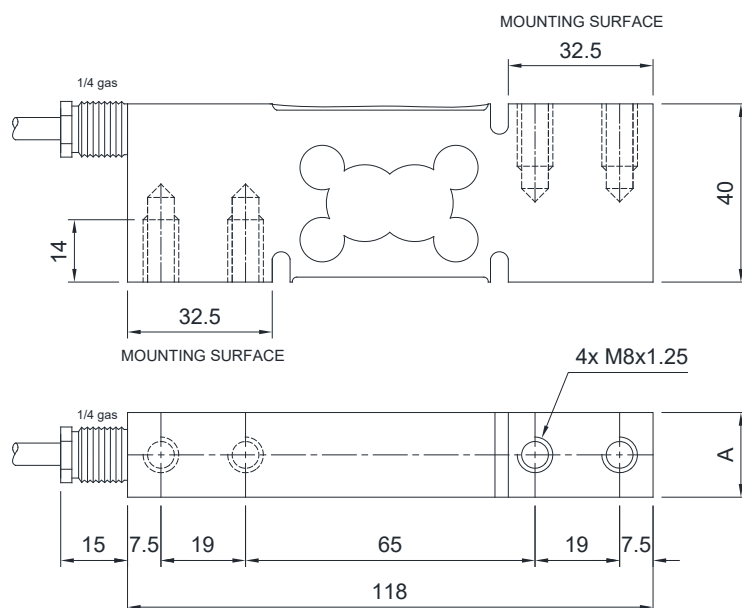
IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

PTC

SINGLE-POINT LOAD CELL for platforms 400x400 mm

DIMENSIONS (mm)



kg	30=100	150
A	19	25

For the load cell fixing screws, provide the tightening torque indicated in the table

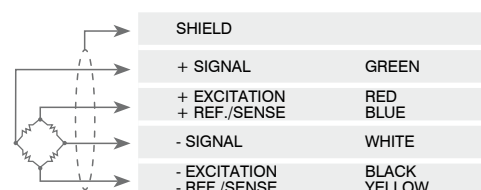
Screw	M8	
Screw class	6.8	8.8
Tightening torque	19 Nm	25 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	30 - 50 - 75 - 100 - 150 kg		
Combined error	≤ ±0.02%		
Protection rating	IP67		
Rated output	2 mV/V ±10%	Input resistance	385 Ω ±30
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.002% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	4 mm
Cores	6 x 0.20 mm ²

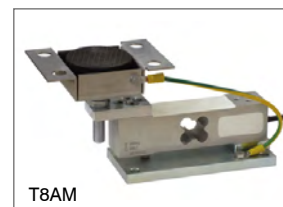




Capacity from 60 kg to 300 kg



MOUNTING KIT



T8AM

Can be used for systems with at least 3 supports

- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4; 0.014% C5)
- IP65 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS					PLATFORM (mm)	NET WEIGHT (kg)
		C3	C4	C5				
60		•	•	–	•	•	400 x 400	0.6
100		•	•	–	•	•	400 x 400	0.6
150		•	•	–	•	•	400 x 400	0.6
200		•	•	–	•	•	400 x 400	0.6
300		•	•	•	•	•	400 x 400	0.6

ON REQUEST

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- OIML R60 C4/C5
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- NTEP - Complies with United States regulations for legal for trade use

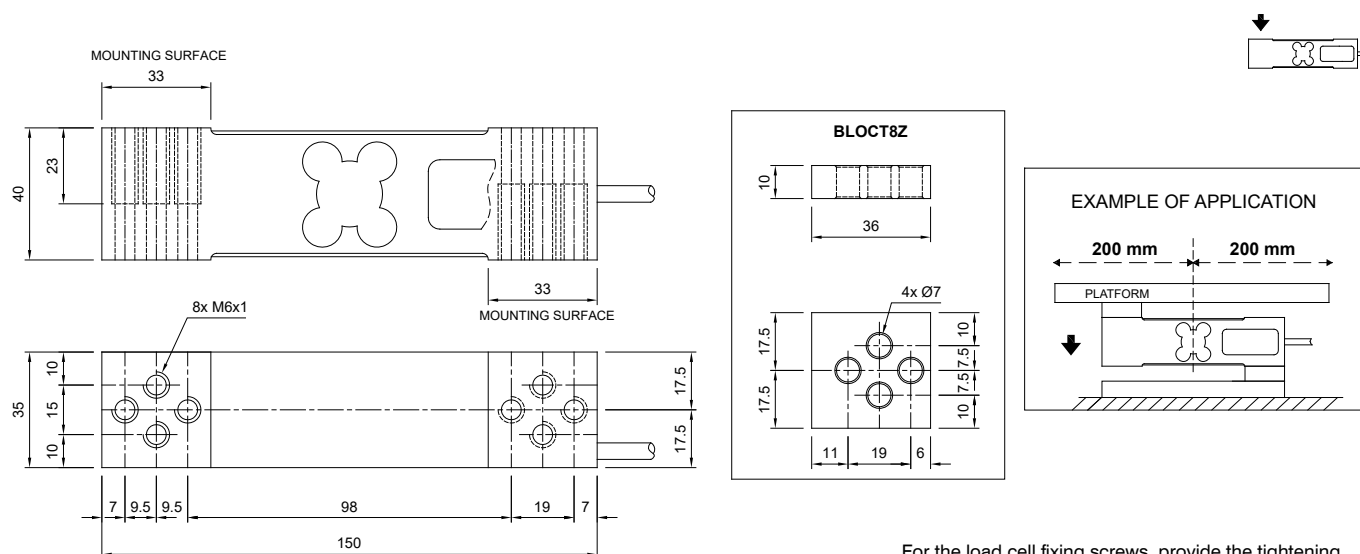
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel and rubber waterproof kit.	IP68AM
	Galvanized steel drawn block.	BLOCT8Z

AM

SINGLE-POINT LOAD CELL for platforms 400x400 mm

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

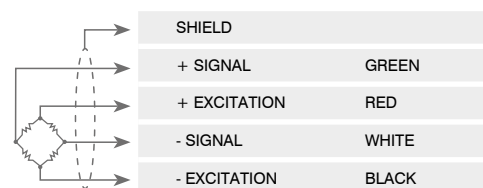
Screw	M6	
	Screw class	6.8
Tightening torque	7.5 Nm	10 Nm

TECHNICAL FEATURES

Material	Aluminum alloy		
	OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	60 - 100 - 150 - 200 - 300 kg		300 kg
Minimum verification interval (V min)	E max / 10000	E max / 15000	E max / 20000
Combined error	≤ ±0.02%	≤ ±0.017%	≤ ±0.014%
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	406 Ω ±6
Temperature effect on zero	0.003% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.002% °C	Zero balance	≤ ±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.025%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

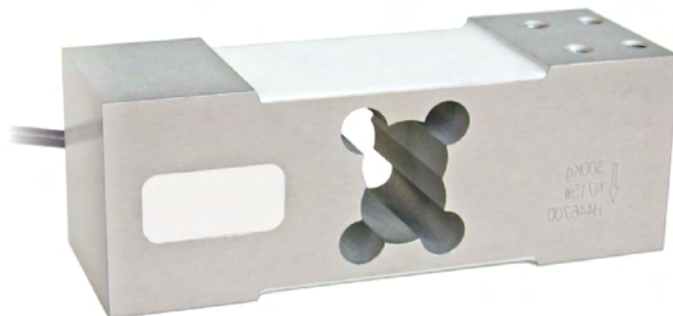
Cable length	3 m
Cable diameter	5 mm
Cores	4 x 0.20 mm ²





Capacity from 50 kg to 500 kg

- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP65 PROTECTION RATING



CAPACITY	kg	ACCURACY CLASS			PLATFORM (mm)	NET WEIGHT (kg)
		C3	C4			
50		•	–	•	600 x 600	1.7
100		•	–	•	600 x 600	1.7
150		•	•	•	600 x 600	1.7
200		•	•	•	600 x 600	1.7
300		•	•	•	600 x 600	1.7
500		•	•	•	600 x 600	1.7

ON REQUEST

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



OIML R60 C4



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

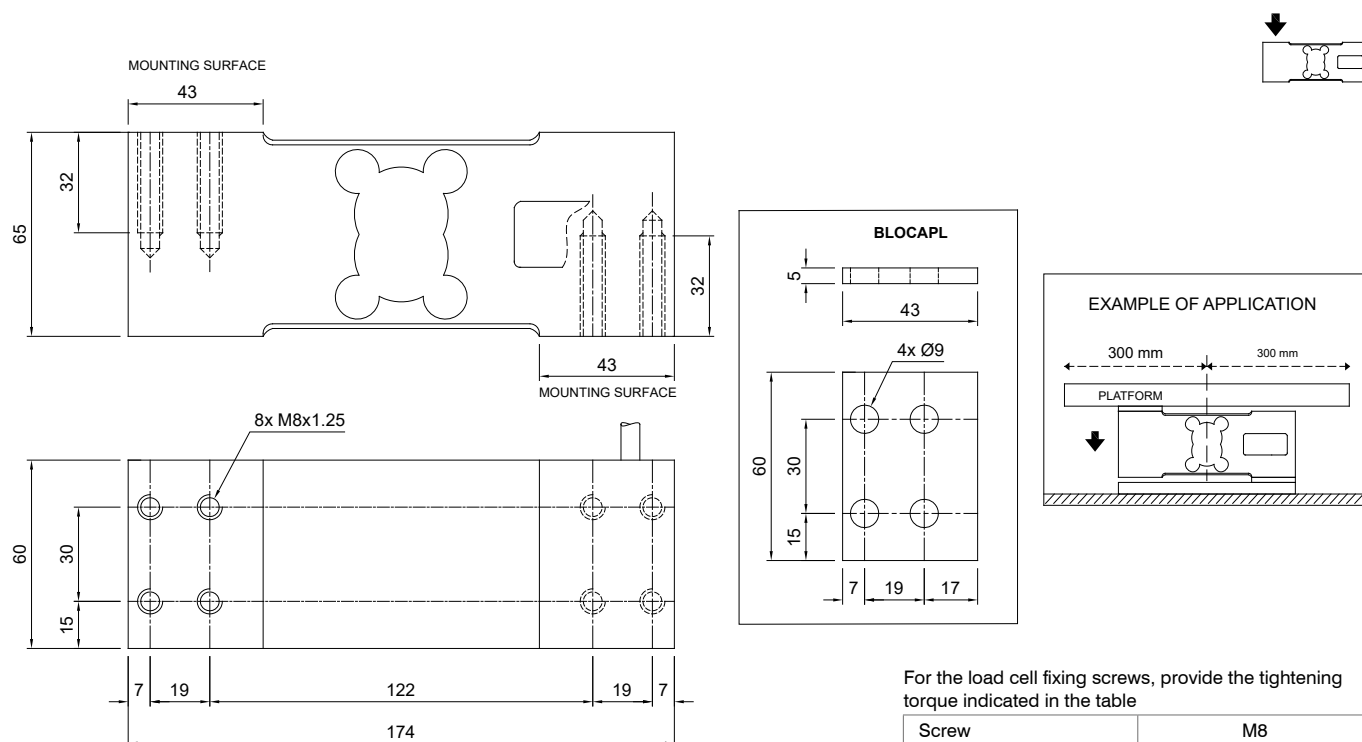
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel and rubber waterproof kit (Ø 107x245 mm cable gland included)	IP68APL
	Stainless steel drawn block.	BLOCAPL

APL

SINGLE-POINT LOAD CELL for platforms 600x600 mm

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

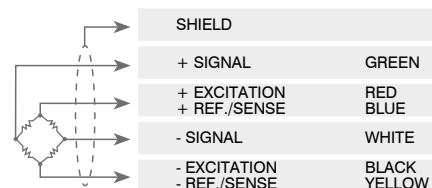
Screw	M8	
Screw class	6.8	8.8
Tightening torque	19 Nm	25 Nm

TECHNICAL FEATURES

Material	Aluminum alloy		
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	
Nominal load (E max)	50 - 100 - 150 - 200 - 300 - 500 kg	150 - 200 - 300 - 500 kg	
Minimum verification interval (V min)	E max / 12000	E max / 15000	
Combined error	≤ ±0.02%	≤ ±0.017%	
Protection rating	IP65		
Rated output	2 mV/V ± 10%	Input resistance	409 Ω ± 6
Temperature effect on zero	0.0017% °C	Output resistance	350 Ω ± 3
Temperature effect on span	0.0014% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.015%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	6 mm
Cores	6 x 0.20 mm ²

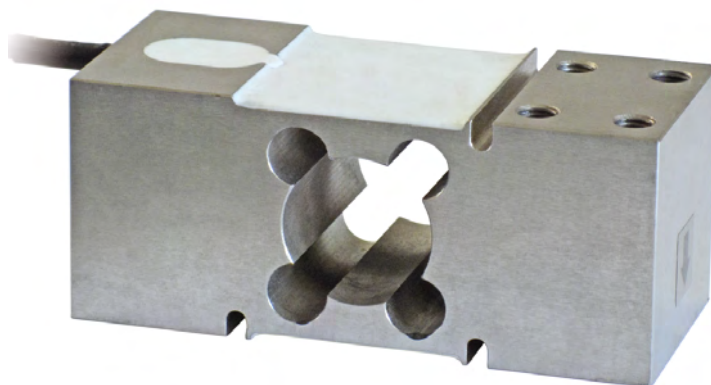


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 75 kg to 500 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	75	600 x 600	1.8
	150	600 x 600	1.8
	300	600 x 600	2
	500	600 x 600	2

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

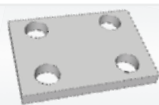
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE** - **UK CA**)

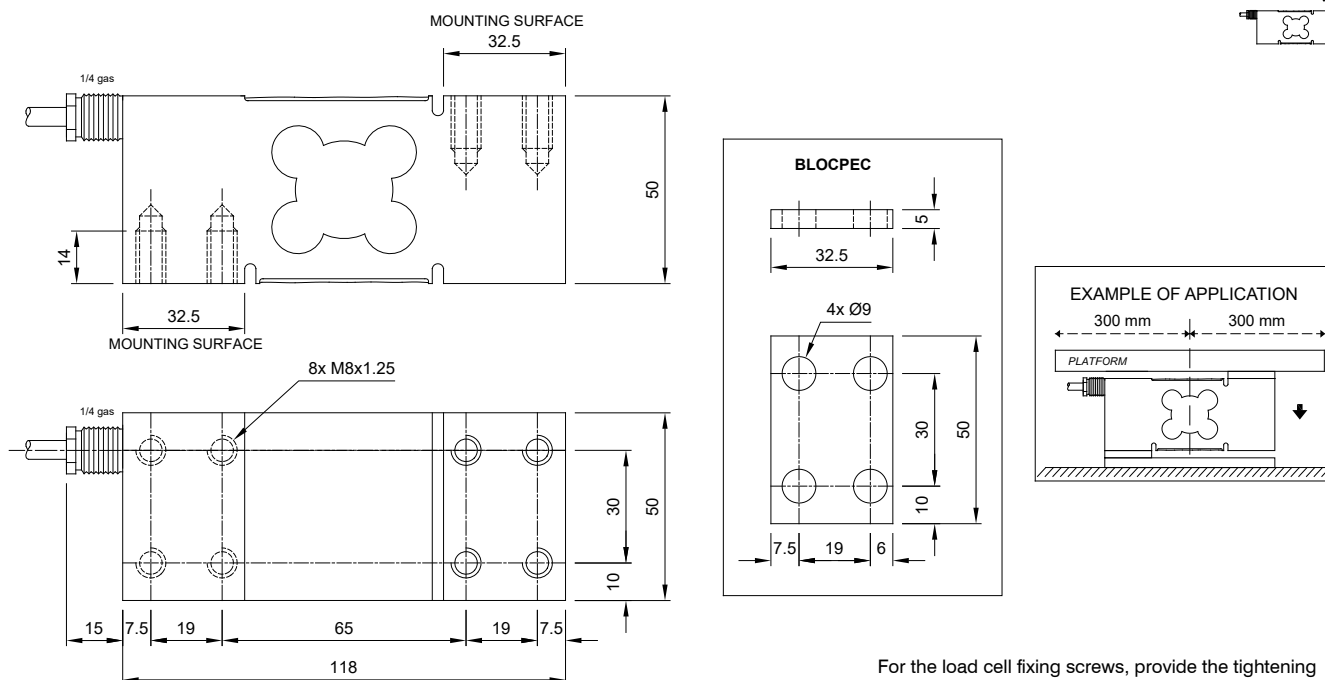
IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPEC

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

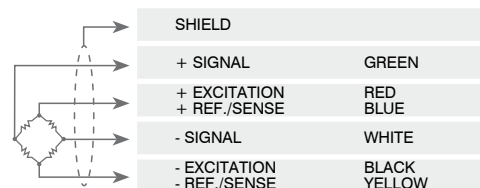
Screw	M8	
	Screw class	6.8
Tightening torque	19 Nm	25 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	75 - 150 - 300 - 500 kg		
Combined error	≤ ±0.02%		
Protection rating	IP67		
Rated output	2 mV/V ±10%	Input resistance	385 Ω ±30
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.002% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	5 mm
Cores	6 x 0.20 mm ²

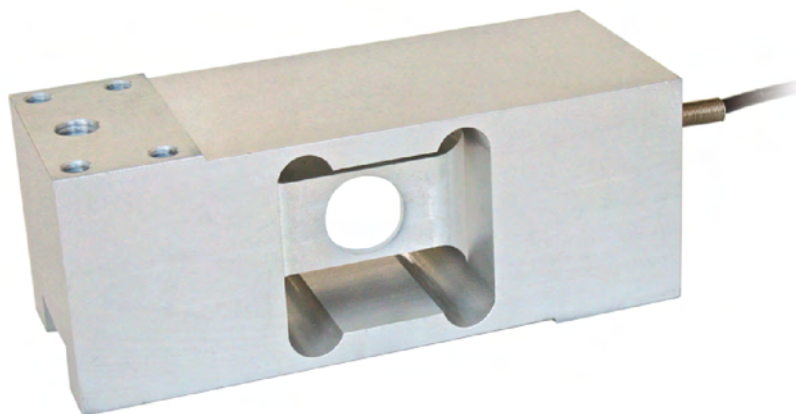


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 500 kg to 1000 kg



- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.05\%$
- IP65 PROTECTION RATING

CAPACITY	kg	PLATFORM (mm)	NET WEIGHT (kg)
	500	800 x 800	2.2
	1000	800 x 800	2.3

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

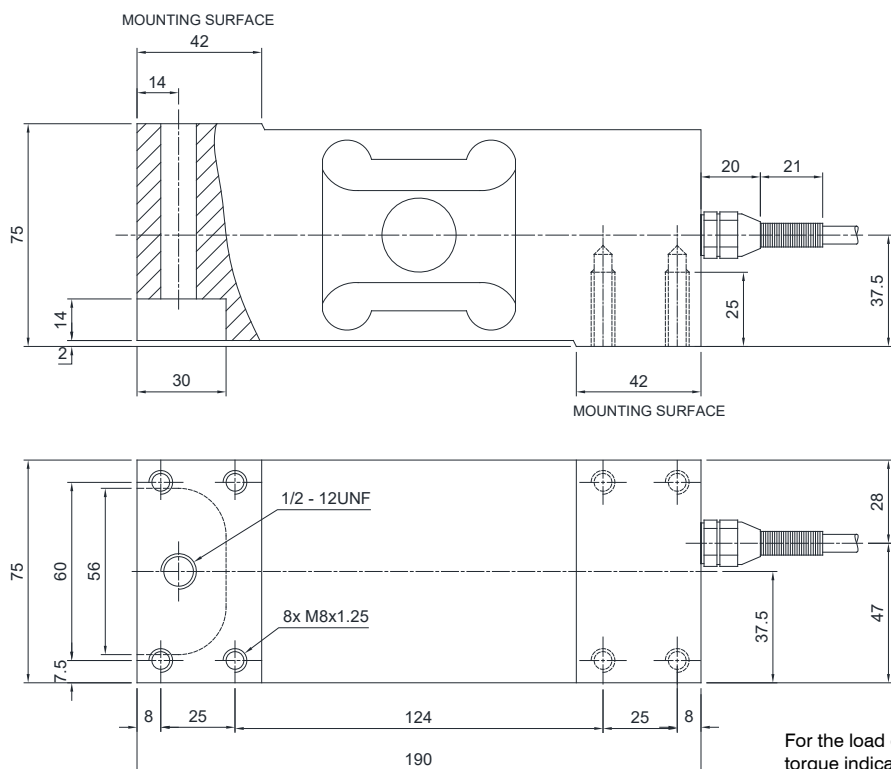
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

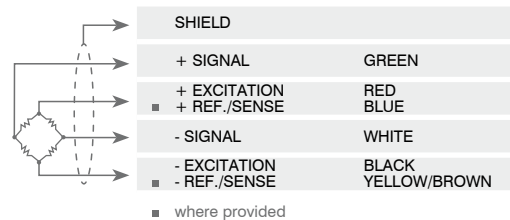
Screw	M8	
	Screw class	6.8
Tightening torque	19 Nm	25 Nm

TECHNICAL FEATURES

Material	Aluminum alloy		
Nominal load (E max)	500 - 1000 kg		
Combined error	≤ ±0.05%		
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	410 Ω ±10
Temperature effect on zero	0.0025% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0025% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>2000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	120%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.5 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	5 mm
Cores	4/6 x 0.20 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.







Capacity from 1000 kg to 2000 kg



- ALUMINUM ALLOY
- COMBINED ERROR $\leq \pm 0.02\%$
- IP65 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS C3		PLATFORM (mm)	NET WEIGHT (kg)
	1000	•	•	1200 x 1200	3.8
	2000	•	•	1200 x 1200	3.8

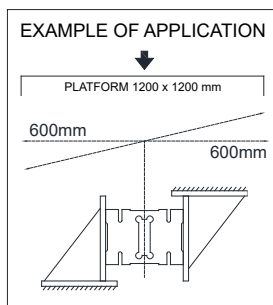
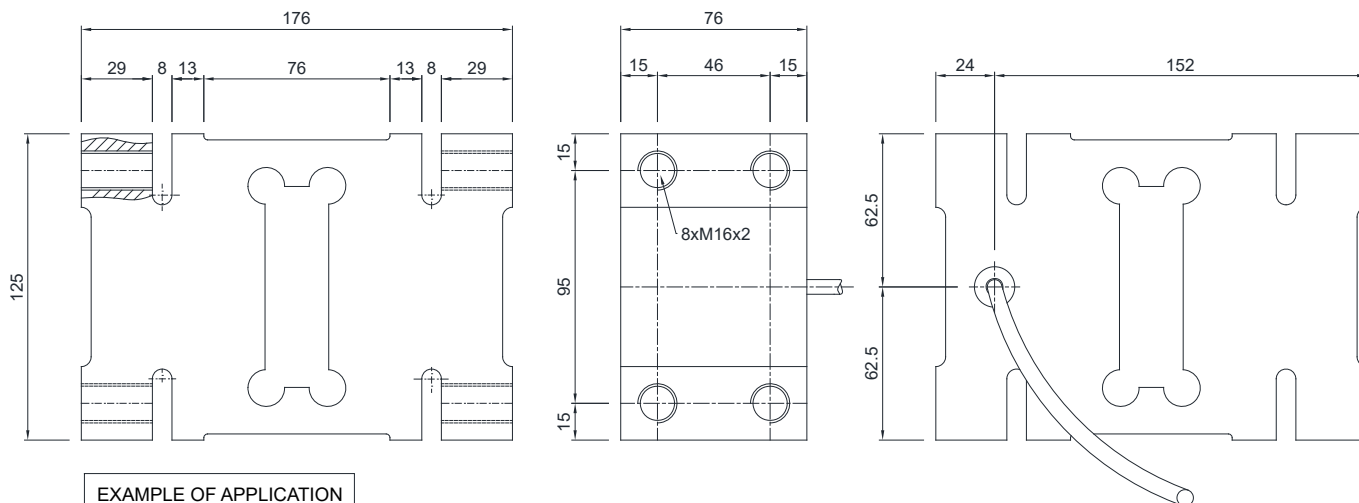
CERTIFICATIONS

-  OIML R60 C3
-  Complies with the Eurasian Customs Union standards
-  Equivalent of the CE marking for the United Kingdom
-  Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

-  Linearity test
-  ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
-  IECEx (zone 0-1-2-20-21-22)
-  Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M16	
	Screw class	6.8
Tightening torque	165 Nm	215 Nm

TECHNICAL FEATURES







Material	Aluminum alloy		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	1000 - 2000 kg		
Minimum verification interval (V min)	E max / 7000		
Combined error	≤ ±0.02%		
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	406 Ω ±6
Temperature effect on zero	0.0017% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0014% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.8 mm

ELECTRICAL CONNECTIONS

Length	3 m
Wire diameter	6 mm
Wire cross-section	6 x 0.20 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.

	CAPACITY	PAGE
A1.2 BENDING BEAM		
	FCK 5, 10 kg	37
	FCOL 20, 50, 100, 200, 350, 500 kg	39
	FCAX* 30, 50, 75, 150, 300, 500 kg	41
	FCAL 50, 75, 150, 300 kg	43
	FTP* 75, 150, 300 kg	45
	FTK* 75, 150, 300 kg	47

*) SHEAR / BENDING BEAM load cells



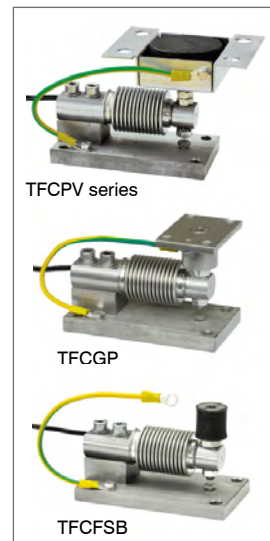
Manufactured according to OIML R60 standards

Capacity from 5 kg to 10 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	NET WEIGHT (kg)
	5	0.4
	10	0.4

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

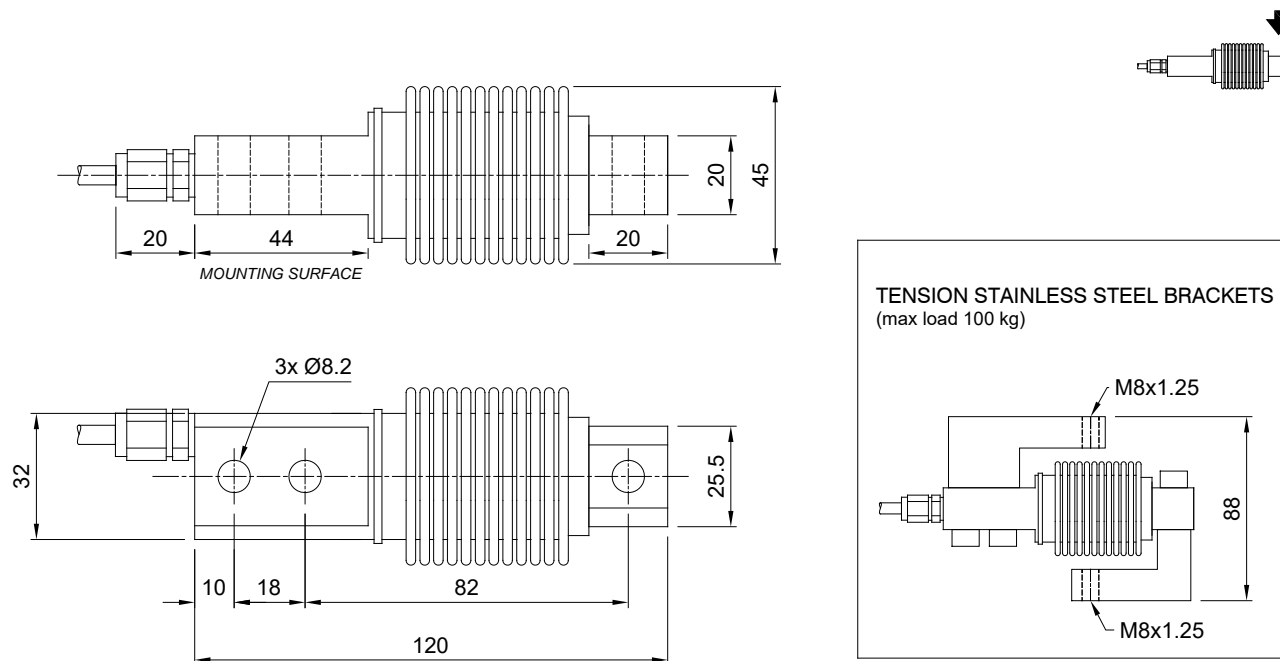
IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Pair of tension stainless steel brackets. Maximum static load: 100 kg	STAFFEFC

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

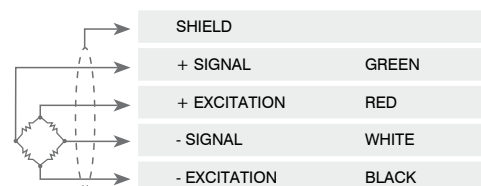
Screw	M8	
	6.8	8.8
Tightening torque	19 Nm	25 Nm

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	5 - 10 kg		
Combined error	$\leq \pm 0.02\%$		
Protection rating	IP68		
Rated output	2 mV/V $\pm 1\%$	Input resistance	400 $\Omega \pm 20$
Temperature effect on zero	0.002% $^{\circ}\text{C}$	Output resistance	352 $\Omega \pm 3$
Temperature effect on span	0.002% $^{\circ}\text{C}$	Zero balance	$\pm 2\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-30 $^{\circ}\text{C}$ / +65 $^{\circ}\text{C}$	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	4 mm
Cores	4 x 0.22 mm ²



FCOL

BENDING BEAM LOAD CELLS

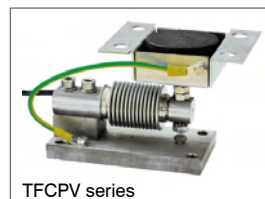
LAUMAS®


Capacity from 20 kg to 500 kg

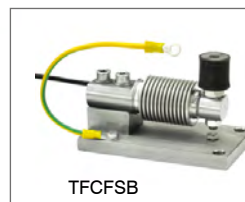


- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP68 PROTECTION RATING

MOUNTING KITS



TFCPV series



TFCFSB



TFCGP

CAPACITY	kg	ACCURACY CLASS				NET WEIGHT (kg)
		C3	C4			
20		•	•	—	•	0.4
50		•	•	•	•	0.4
100		•	•	•	•	0.4
200		•	•	•	•	0.4
350		•	•	•	•	0.4
500		•	•	•	•	0.4

ON REQUEST

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

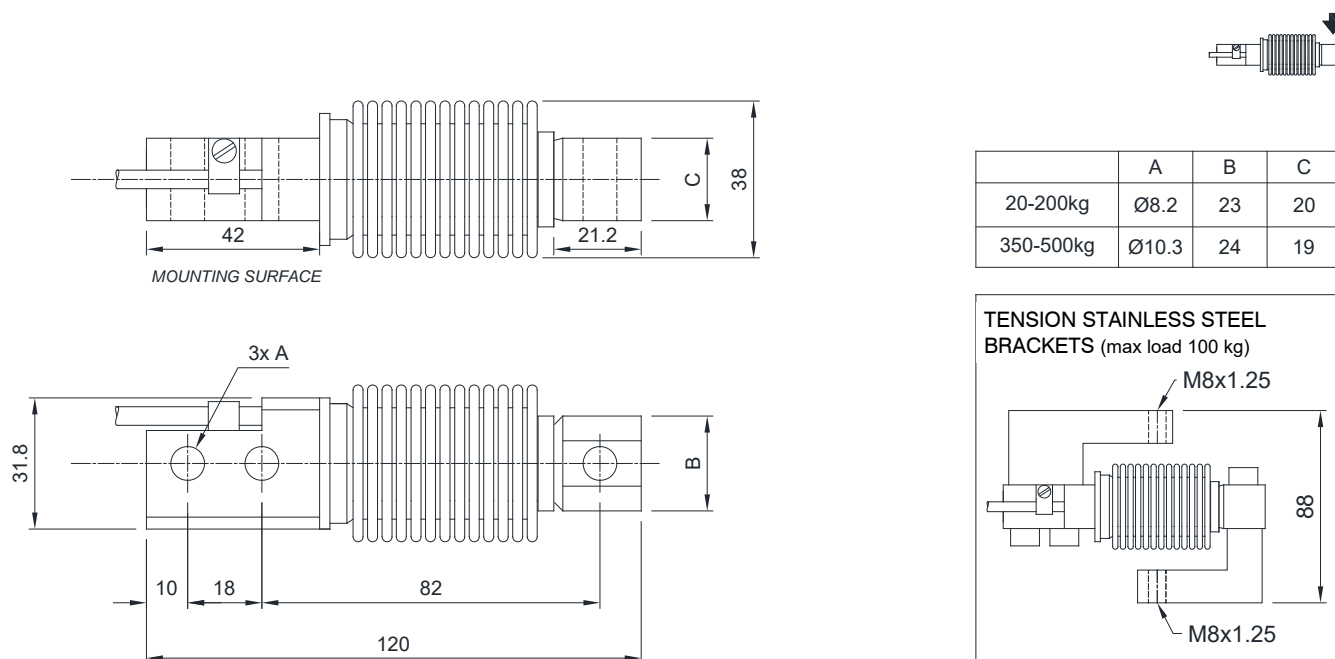
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (-
- IECEx (zone 0-1-2-20-21-22)
- OIML R60 C4
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres
- NTEP - Complies with United States regulations for legal for trade use

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Pair of tension stainless steel brackets. Maximum static load: 100 kg	STAFFEFC

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M8		M10	
	6.8	8.8	6.8	8.8
Tightening torque	19 Nm	25 Nm	37 Nm	50 Nm

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	
Nominal load (E max)	20 - 50 - 100 - 200 - 350 - 500 kg		
Minimum verification interval (V min)	E max / 10000	E max / 15000	
Combined error	≤ ±0.02%	≤ ±0.017%	
Protection rating	IP68		
Rated output	2 mV/V ± 1% *	Input resistance	460 Ω ± 50
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ± 3.5
Temperature effect on span	0.0014% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm

* Calibrated current output

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	5 mm
Cores	4 x 0.22 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

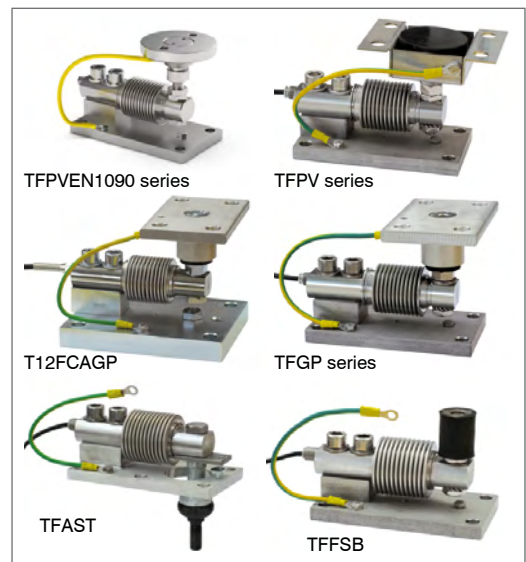
BENDING BEAM: capacity from 30 kg to 500 kg

SHEAR BEAM: capacity from 750 kg to 1500 kg

- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING



MOUNTING KITS



CAPACITY	kg	NET WEIGHT (kg)
	30	0.6
	50	0.6
	75	0.6
	150	0.6
	300	0.7
	500	0.7
	750	0.7
	1000	0.7
	1500	0.7

CERTIFICATIONS



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

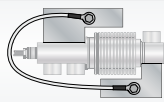


IECEX (zone 0-1-2-20-21-22)

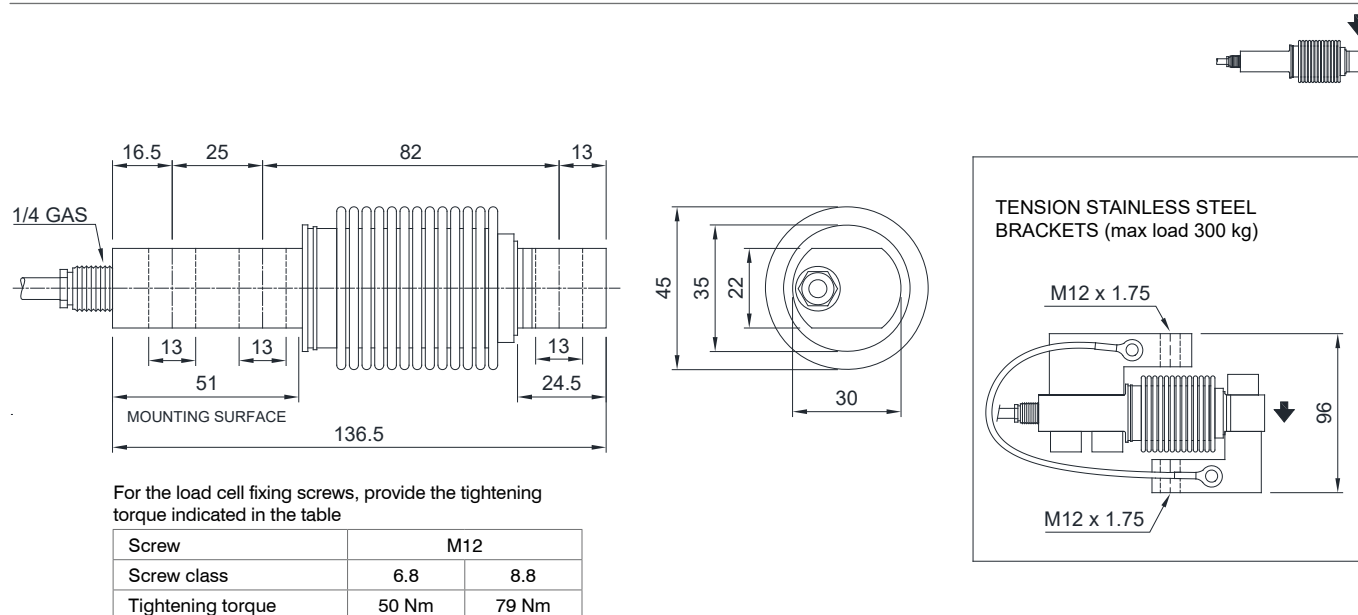


Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Pair of tension stainless steel brackets. Maximum static load: 300 kg	STAFFEFCA

DIMENSIONS (mm)

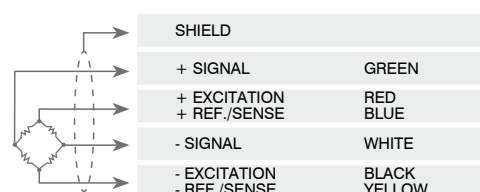


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	30 - 50 - 75 - 150 - 300 - 500 - 750 - 1000 - 1500 kg		
Combined error	≤ ±0.02%		
Protection rating	IP68		
Rated output	2 mV/V ±0.4%	Input resistance	385 Ω ±5
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.002% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +50 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

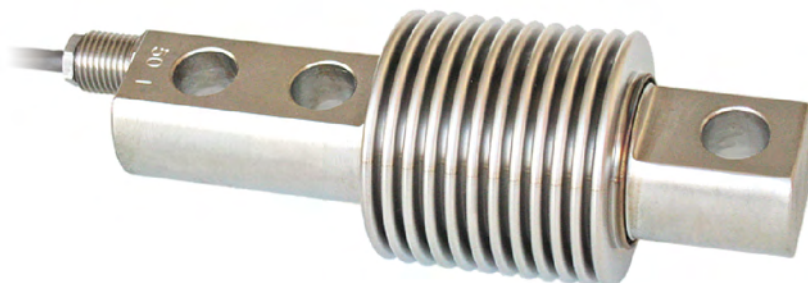
Cable length	5 m
Cable diameter	5 mm
Cores	6 x 0.22 mm ²



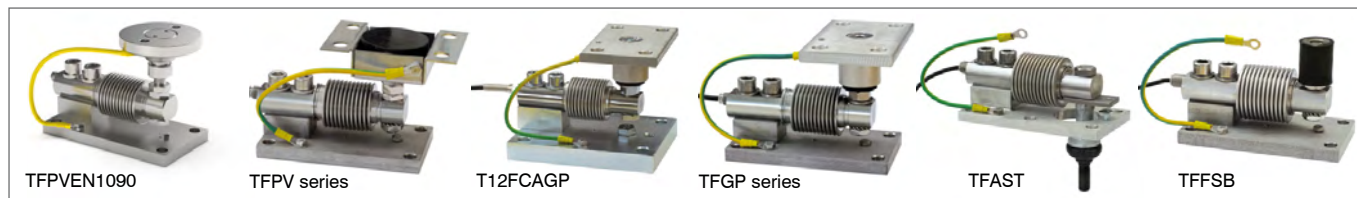


Capacity from 50 kg to 300 kg

- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.017\%$
- IP68 PROTECTION RATING



MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
50		•	•	0.5
75		•	•	0.5
150		•	•	0.5
300		•	•	0.5

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

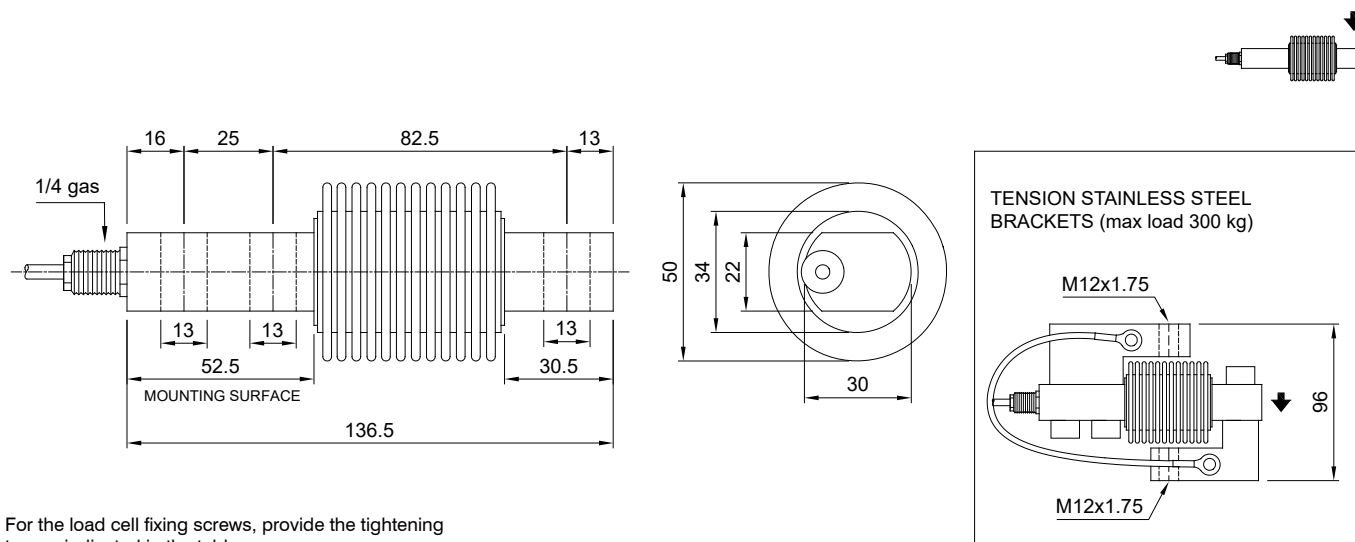
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Pair of tension stainless steel brackets. Maximum static load: 300 kg	STAFFEFCA

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

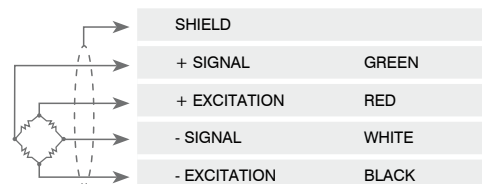
Screw	M12	
Screw class	6.8	8.8
Tightening torque	50 Nm	79 Nm

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	50 - 75 - 150 - 300 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.017%		
Protection rating	IP68		
Rated output	2.0 mV/V ±0.1%	Input resistance	400 Ω ±20
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.0012% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +50 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.016%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	4 mm
Cores	4 x 0.22 mm ²





BENDING BEAM: capacity from 75 kg to 300 kg



IP67

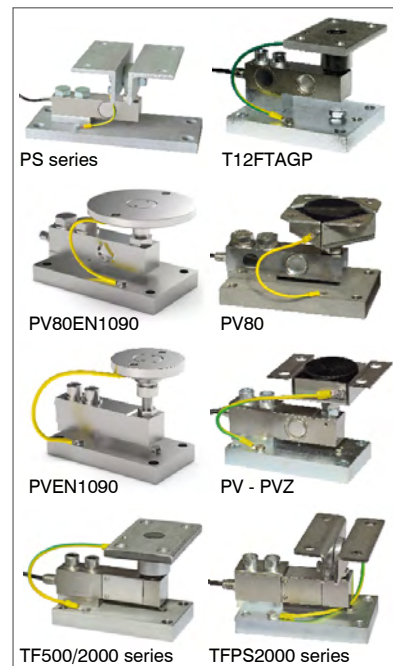
SHEAR BEAM: capacity from 500 kg to 10000 kg



IP68
IP69K

- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 - IP68 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
75	75	•	•	0.9
150	150	•	•	0.9
300	300	•	•	0.9
500	500	•	•	0.9
750	750	•	•	0.9
1000	1000	•	•	0.9
1500	1500	•	•	0.9
2000	2000	•	•	0.9
3000	3000	–	–	1.6
5000	5000	–	–	1.6
10000	10000	–	–	3.8

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

Declaration of conformity + IP69K marking protection rating
 Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm)
 Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)

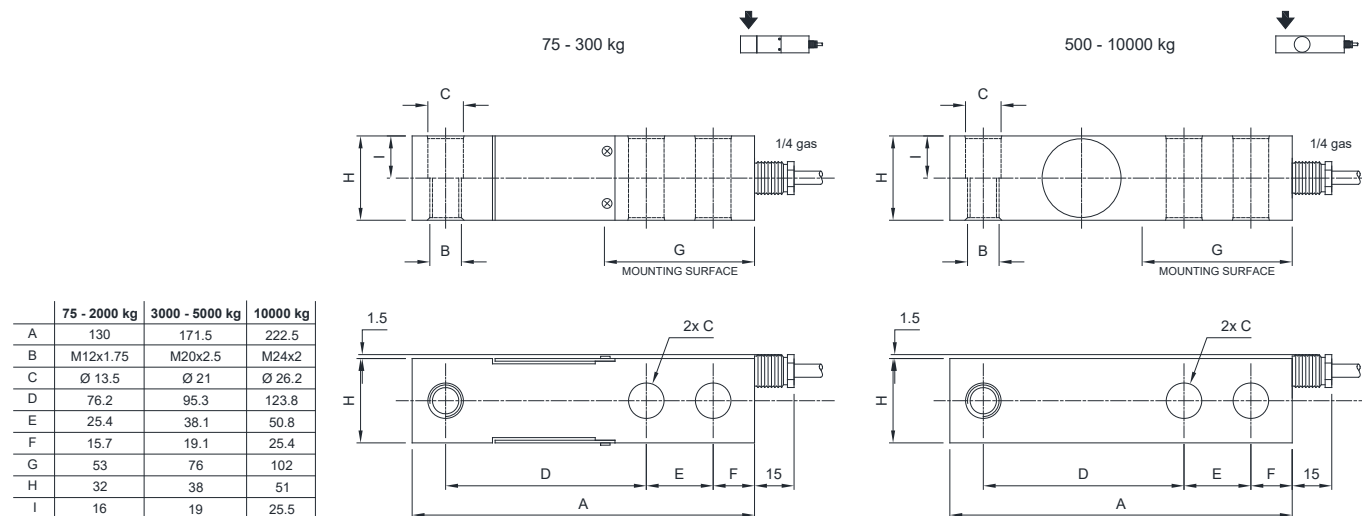
Linearity test

ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

IECEx (zone 0-1-2-20-21-22)

Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

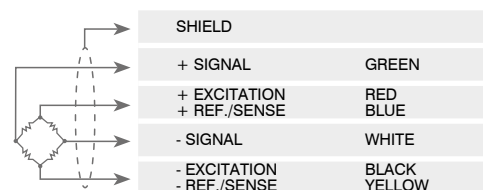
Screw	M12		M20		M24	
	6.8	8.8	6.8	8.8	6.8	8.8
Tightening torque	50 Nm	79 Nm	290 Nm	400 Nm	500 Nm	690 Nm

TECHNICAL FEATURES

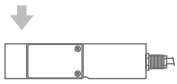
Material	AISI 420 stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		-
Nominal load (E max)	75 - 150 - 300 - 500 kg 1000 - 1500 - 2000 kg	3000 - 5000 - 10000 kg	
Minimum verification interval (V min)	E max / 15000		-
Combined error	≤ ±0.02%		
Protection rating	IP67 (75 - 300 kg), IP68 (500 - 10000 kg)		
Input resistance	385 Ω ± 10		400 Ω ± 15
Output resistance	350 Ω ± 3		350 Ω ± 5
Rated output	2 mV/V ± 0.1%	Max supply voltage without damage	15 V
Temperature effect on zero	0.002% °C	Zero balance	±2%
Temperature effect on span	0.0012% °C	Insulation resistance	≥ 5000 MΩ
Compensated temperature range	-10 °C / +40 °C	Safe overload (% of full scale)	150%
Operating temperature range	-20 °C / +70 °C	Ultimate overload (% of full scale)	200%
Creep at nominal load in 30 minutes	0.03%	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	5 m (75-5000 kg); 10 m (10000 kg)
Cable diameter	5 mm
Cores	6 x 0.25 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



BENDING BEAM: capacity from 75 kg to 300 kg



IP67

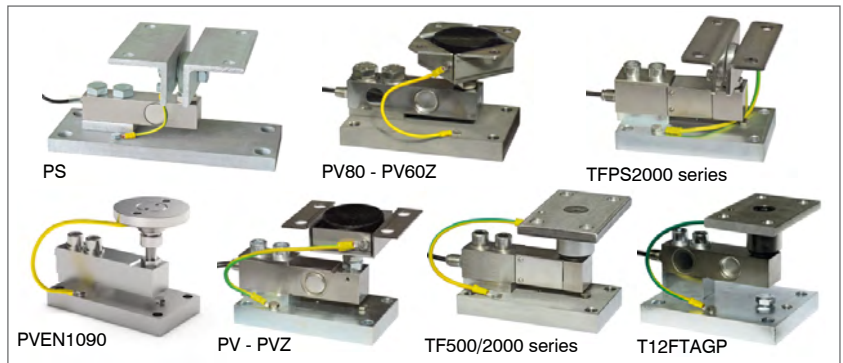


SHEAR BEAM: capacity from 500 kg to 5000 kg



IP68

MOUNTING KITS



- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 - IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
75		–	–	1
150		–	–	1
300		–	–	1
500		–	–	1
1000		•	•	1.1
2000		•	•	1.1
3000		•	•	1.1
5000		•	•	1.1

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UKCA)

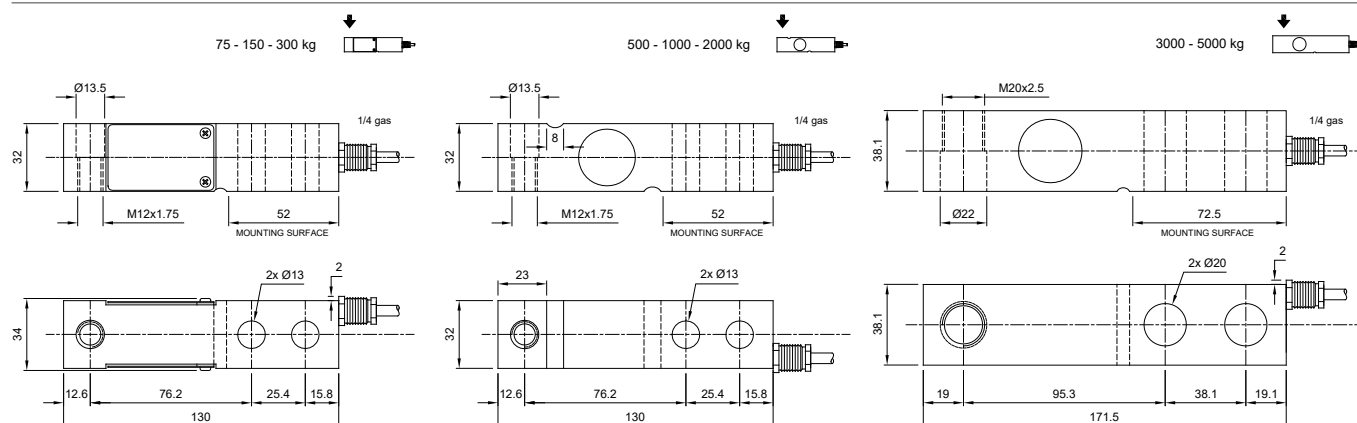


IECEx (zone 0-1-2-20-21-22)



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

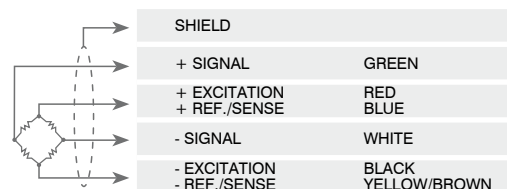
Screw	M12		M20	
	6.8	8.8	6.8	8.8
Tightening torque	50 Nm	79 Nm	290 Nm	400 Nm

TECHNICAL FEATURES

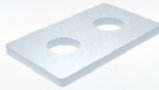
Material	AISI 4340 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	-	C3 • 3000	
Nominal load (E max)	75 -150 - 300 - 500 kg	1000 - 2000 - 3000 - 5000 kg	
Minimum verification interval (V min)	-	E max / 12000	
Combined error	≤ ±0.02%		
Protection rating	IP67 (75 - 300 kg), IP68 (500 - 5000 kg)		
Rated output	2 mV/V ±0.1%	Input resistance	400 Ω ±10
Temperature effect on zero	0.002% °C	Output resistance	352 Ω ±2
Temperature effect on span	0.0012% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	250%
Max supply voltage without damage	15 V	Deflection at nominal load	0.6 mm

ELECTRICAL CONNECTIONS

Cable length	6 m
Cable diameter	5 mm
Cores	6 x 0.24 mm ²



COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 <p>Special steel block for capacities up to 2000 kg.</p>	PIASTRINO

The Company reserves the right to make changes to the technical data, drawings and images without notice.

	CAPACITY	PAGE
A1.3	SHEAR BEAM	
	FTK* 500, 1000, 2000, 3000, 5000 kg	47
	FT-P 500, 1000, 2000 kg	51
	FTKL 500, 1000, 1500, 2000, 3000, 5000 kg	53
	FTZ 500, 1000, 2000, 5000 kg	55
	FTZA 500, 1000, 2000, 5000, 7500, 10000 kg	57
	FCAX* 750, 1000, 1500 kg	41
	FTP* 500, 750, 1000, 1200, 1500, 2000, 3000, 5000, 10000 kg	45
	FTH 5000, 10000 kg	59
	FTPDOP 1000, 6000 kg	61

*) SHEAR / BENDING BEAM load cells

FT-P

SHEAR BEAM LOAD CELLS

LAUMAS®


Capacity from 300 kg to 2000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
	300	•	•	0.8
	500	•	•	0.9
	1000	•	•	0.9
	2000	•	•	0.9

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Declaration of conformity + IP69K marking protection rating
Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm)
Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



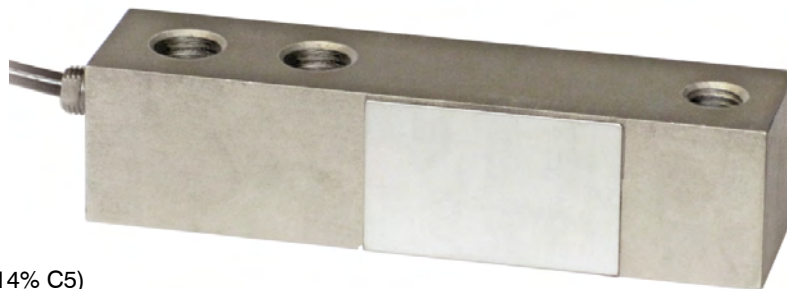
IECEx (zone 0-1-2-20-21-22)



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

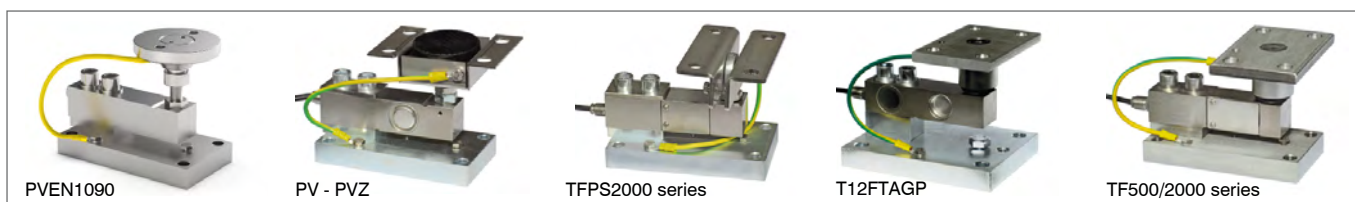


Capacity from 500 kg to 5000 kg



- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4; 0.014% C5)
- IP67 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS					NET WEIGHT (kg)
		C3	C4	C5			
500		•	•	•	•	•	0.8
1000		•	•	•	•	•	0.8
1500		•	•	•	•	•	0.9
2000		•	•	•	•	•	0.9
3000		•	•	•	•	•	1.7
5000		•	•	•	•	•	1.7

ON REQUEST


CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

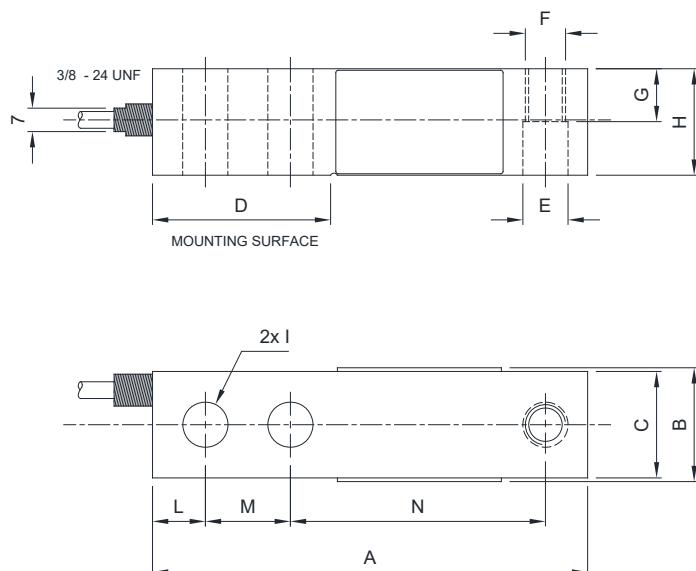
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- OIML R60 C4/C5
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres
- NTEP - Complies with United States regulations for legal for trade use

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 <p>Special steel block for capacities up to 2000 kg.</p>	PIASTRINO

DIMENSIONS (mm)



	500 kg	1000 - 1500 2000 kg	3000 - 5000 kg
A	130	130	171.5
B	-	32.8	39.1
C	31.8	31.8	38.1
D	53.2	53.2	76.2
E	Ø13.5	Ø13.5	Ø19.8
F	M12x1.75	M12x1.75	M18x1.5
G	16	16	19.3
H	31.8	31.8	38.1
I	Ø13.5	Ø13.5	Ø19.8
L	15.8	15.8	19.1
M	25.4	25.4	38.1
N	76.2	76.2	95.3

For the load cell fixing screws, provide the tightening torque indicated in the table

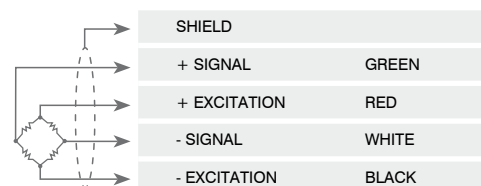
Screw	M12		M18	
Screw class	6.8	8.8	6.8	8.8
Tightening torque	50 Nm	79 Nm	205 Nm	280 Nm

TECHNICAL FEATURES

Material	AISI 4340 nickel plated steel			
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	C5 • 5000	
Nominal load (E max)	500 - 1000 - 1500 kg 2000 - 3000 - 5000 kg		500 - 1000 kg 1500 - 2000 kg	3000 - 5000 kg
Minimum verification interval (V min)	E max / 10000	E max / 15000	E max / 20000	E max / 18000
Combined error	≤ ±0.02%	≤ ±0.017%	≤ ±0.014%	
Protection rating	IP67			
Rated output	3 mV/V ±0.1%	Input resistance	350 Ω ±3.5	
Temperature effect on zero	0.0018% °C	Output resistance	350 Ω ±3.5	
Temperature effect on span	0.0014% °C	Zero balance	≤ ±1%	
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ	
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%	
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%	
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm	

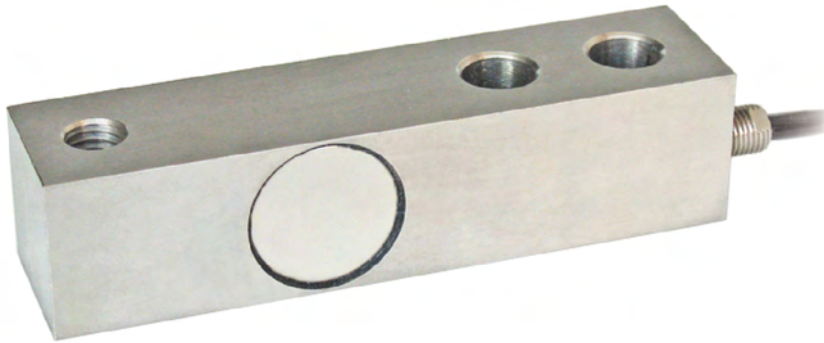
ELECTRICAL CONNECTIONS

Cable length	4 m (500-2000 kg); 6 m (3000-5000 kg)
Cable diameter	5 mm
Cores	4 x 0.22 mm ²



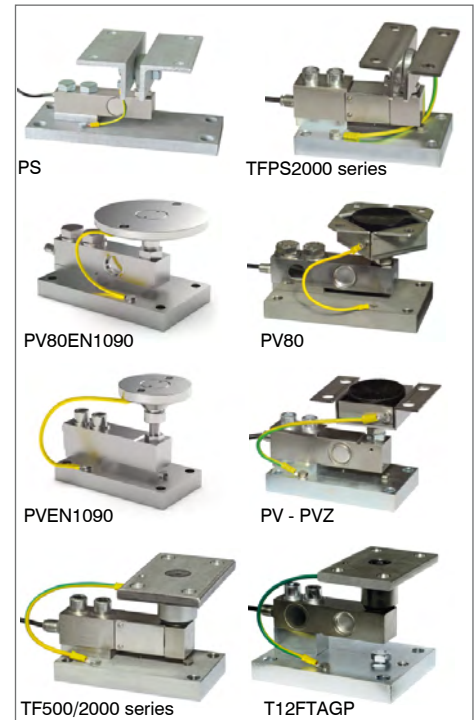


Capacity from 500 kg to 5000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP67 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
	500	•	•	0.9
	1000	•	•	0.9
	2000	•	•	0.9
	5000	•	•	1.5

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEX (zone 0-1-2-20-21-22)

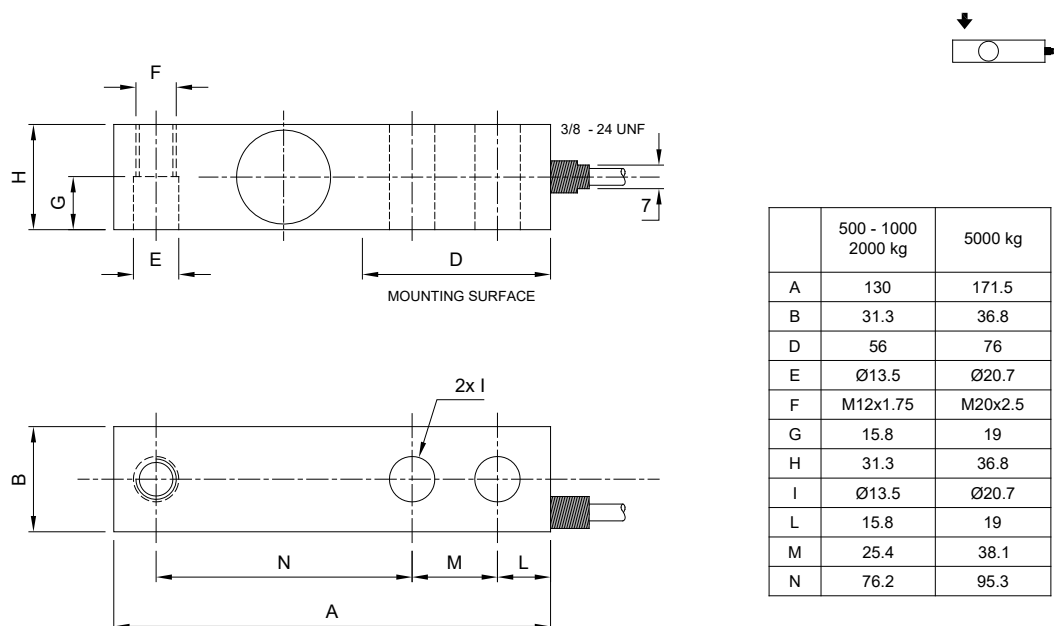


Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres



FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



For the load cell fixing screws, provide the tightening torque indicated in the table

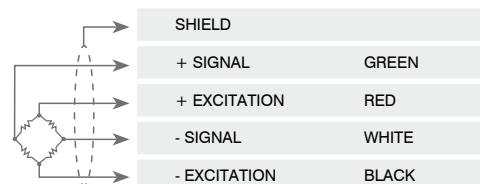
Screw	M12		M20	
	6.8	8.8	6.8	8.8
Tightening torque	50 Nm	79 Nm	290 Nm	400 Nm

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	500 - 1000 - 2000 kg	5000 kg	
Minimum verification interval (V min)	E max / 7500	E max / 9000	
Combined error	≤ ±0.02%		
Protection rating	IP67		
Rated output	3 mV/V ±0.27%	Input resistance	350 Ω ±3.5
Temperature effect on zero	0.0018% °C	Output resistance	350 Ω ±3.5
Temperature effect on span	0.0014% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-35°C / +65°C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	6 m
Cable diameter	5 mm
Cores	4 x 0.20 mm ²





Capacity from 500 kg to 10000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS			NET WEIGHT (kg)
		C3	C4		
500		•	•	•	2.1
1000		•	•	•	2.1
2000		•	•	•	2.1
5000		•	–	•	4.2
7500		•	–	•	4.2
10000		•	–	•	4.2

ON REQUEST

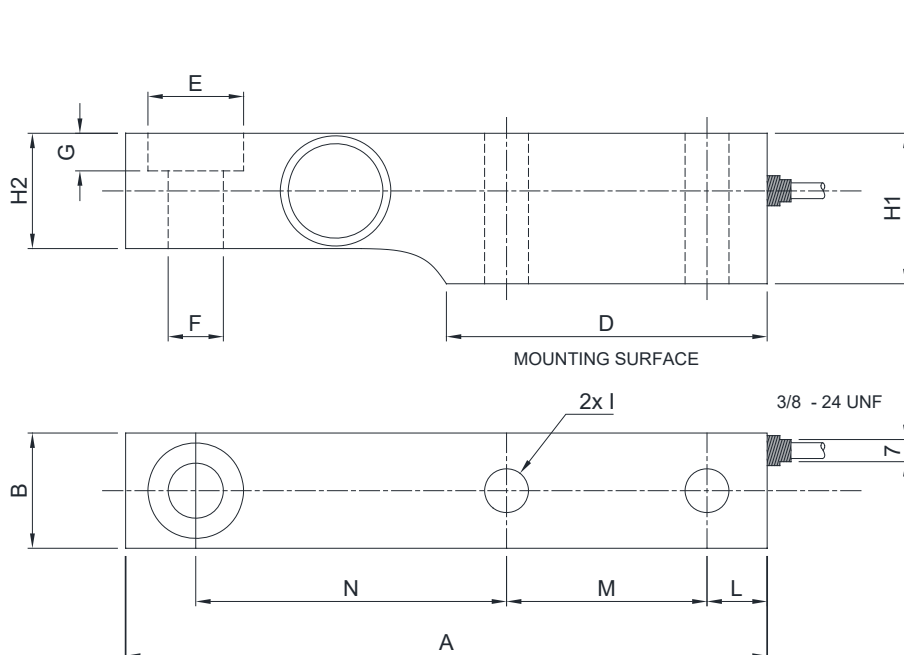
CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- OIML R60 C4
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



	500 kg 1000 kg 2000 kg	5000 kg 7500 kg	10000 kg
A	203.2	235	235
B	36.48	47.5	55
D	101.6	111.2	111.2
E	Ø30.3	Ø41.3	Ø41.3
F	Ø17.5	Ø25.5	Ø25.5
G	11.9	15.75	15.75
H1	47.63	69.9	69.9
H2	36.5	47.6	58.6
I	Ø14	Ø22	Ø25
L	19.05	20.6	20.6
M	63.5	66.7	66.7
N	98.45	123.8	123.8

For the load cell fixing screws, provide the tightening torque indicated in the table

Screw	M12		M20		M24	
	6.8	8.8	6.8	8.8	6.8	8.8
Tightening torque	50 Nm	795 Nm	290 Nm	400 Nm	500 Nm	690 Nm

TECHNICAL FEATURES

Material	17-4 PH stainless steel	
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	500 - 1000 - 2000 5000 - 7500 - 10000 kg	500 - 1000 - 2000 kg
Minimum verification interval (V min)	E max / 10000	E max / 15000
Combined error	≤ ±0.02%	≤ ±0.017%
Protection rating	IP68	

Rated output	2 mV/V ± 0.2% *	Input resistance	350 Ω ± 3.5
Temperature effect on zero	0.0018% °C	Output resistance	350 Ω ± 3.5
Temperature effect on span	0.0014% °C	Zero balance	< ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm

* Calibrated current output

ELECTRICAL CONNECTIONS

Cable length	5 m (500-7500 kg); 10 m (10000 kg)
Cable diameter	5 mm
Cores	4 x 0.20 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 5000 kg to 10000 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.1\%$
- IP68 PROTECTION RATING

CAPACITY	kg	NET WEIGHT (kg)
	5000	15.5
	10000	16.2

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

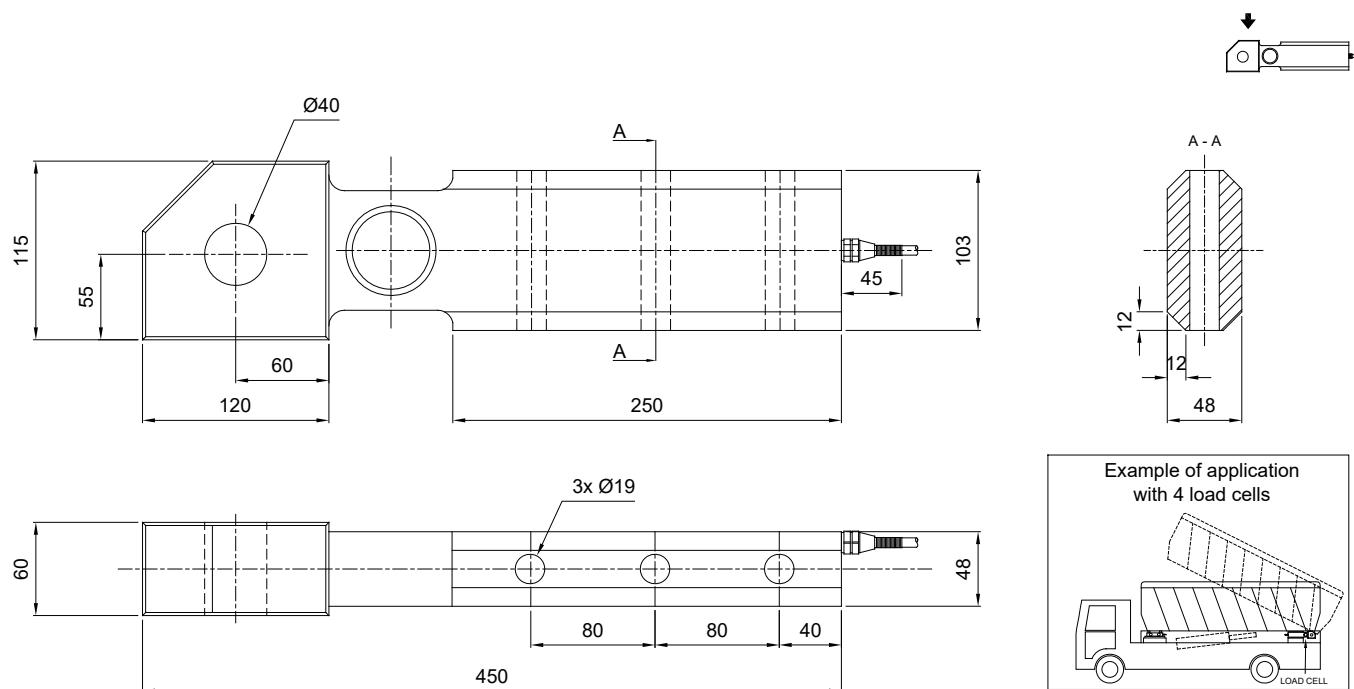
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)

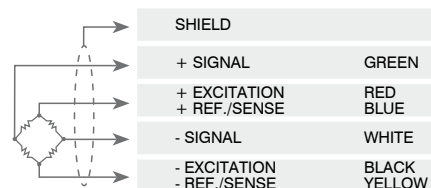


TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	5000 - 10000 kg		
Combined error	$\leq \pm 0.1\%$		
Protection rating	IP68		
Rated output	1 mV/V $\pm 0.5\%$	Input resistance	400 $\Omega \pm 20$
Temperature effect on zero	0.005% $^{\circ}\text{C}$	Output resistance	352 $\Omega \pm 3$
Temperature effect on span	0.005% $^{\circ}\text{C}$	Zero balance	$\pm 2\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-30 $^{\circ}\text{C}$ / +70 $^{\circ}\text{C}$	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.1%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

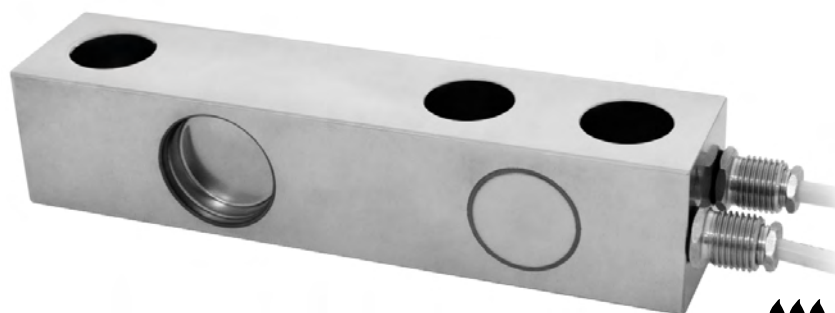
ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	6 mm
Cores	6 x 0.24 mm ²



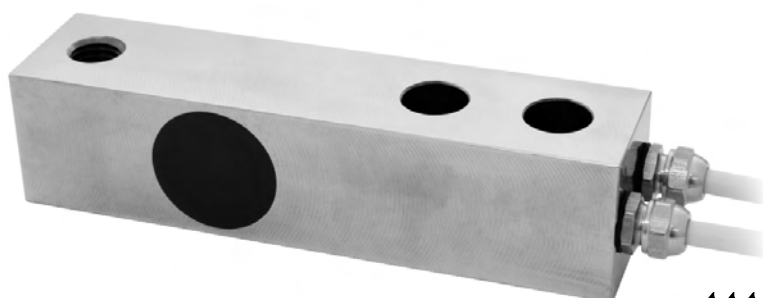


capacity 6000 kg




IP68

capacity 1000 kg




IP67

- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.03\%$
- IP67 - IP68 PROTECTION RATING
- TWO OUTPUT CABLES FOR DUAL SAFETY SYSTEMS

CAPACITY	kg	NET WEIGHT (kg)
	1000	0.93
	6000	1.54

CERTIFICATIONS

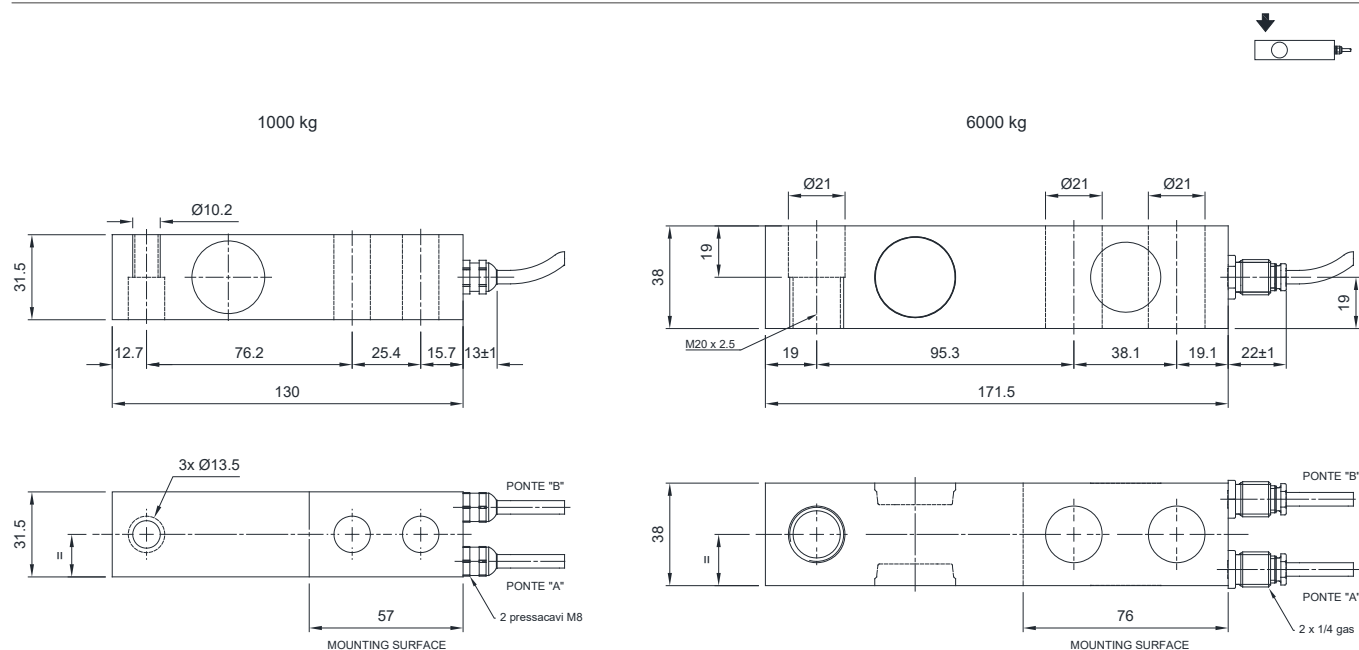
EAC Complies with the Eurasian Customs Union standards

UKCA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

Linearity test

DIMENSIONS (mm)

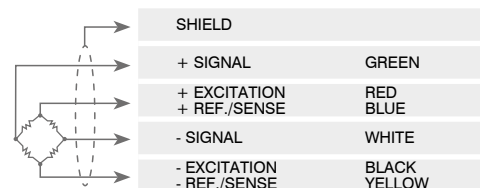


TECHNICAL FEATURES


Material	17-4 PH stainless steel		
Nominal load (E max)	1000 - 6000 kg		
Combined error	≤ ±0.03%		
Protection rating	IP67 (1000 kg) - IP68 (6000 kg)		
Rated output	2 mV/V ±0.1%	Input resistance	370 Ω ±10
Temperature effect on zero	0.005% °C	Output resistance	355 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.25 mm

ELECTRICAL CONNECTIONS

Cable length	5 m+5 m (1000 kg); 10 m+10 m (6000 kg)
Cable diameter	5 mm
Cores	6 x 0.25 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.

	CAPACITY	PAGE
A1.4	DOUBLE SHEAR BEAM	
	DTL 25000 kg	65
	DTX 20 klb ÷ 60 klb 9 ton ÷ 27 ton	69

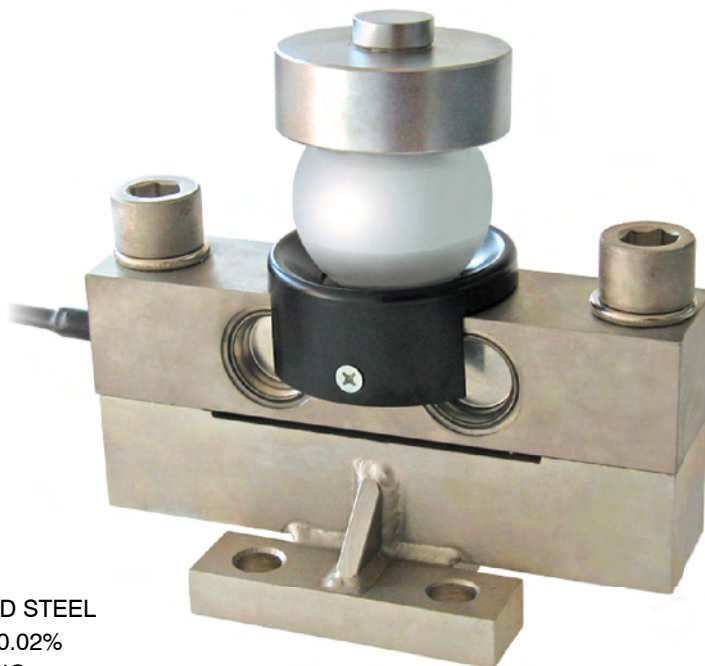
DTL

DOUBLE SHEAR BEAM LOAD CELLS

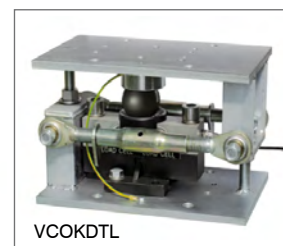
LAUMAS®



Capacity 25000 kg



MOUNTING KIT



- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS		NET WEIGHT (kg)
25000		C3		16

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

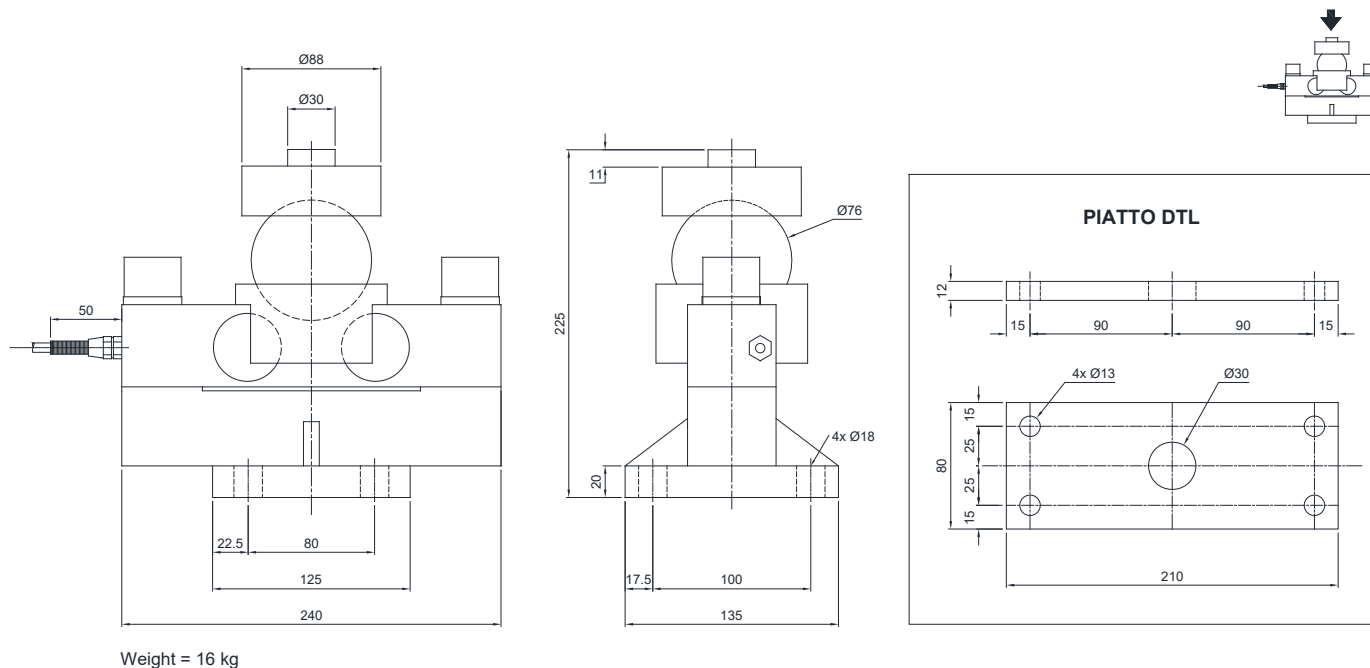


FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Galvanized steel plate.	PIATTODTL

DIMENSIONS (mm)

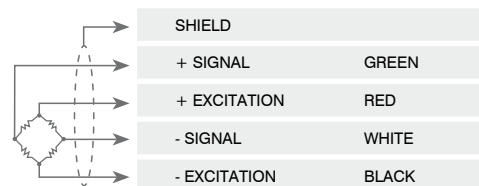


TECHNICAL FEATURES

Material	AISI 4340 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	25000 kg		
Minimum verification interval (V min)	E max / 15000		
Combined error	≤ ±0.02%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±7
Temperature effect on zero	0.002% °C	Output resistance	700 Ω ±7
Temperature effect on span	0.002% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.016%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	18 V	Deflection at nominal load	0.6 mm

ELECTRICAL CONNECTIONS

Cable length	20 m
Cable diameter	6 mm
Cores	4 x 0.22 mm ²



APPLICATION

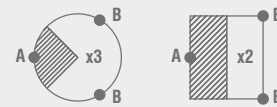
■ LEVEL MEASUREMENTS

"Point support hinge" can be used in combination with the load cells for measuring the level of liquid or weighing powder products that do not require a high degree of precision. It is absolutely necessary that the structure to weight has a uniform shape and is geometrically divisible.

It must be perfectly level and the type of product to be weighed must enable horizontal positioning, as if it were a liquid (otherwise it loading systems which distribute the product/load uniformly are required). The electronic weight display will show the effective weight multiplying the signal by two or three, depending on the application.

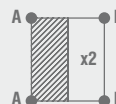
3 SUPPORTS STRUCTURES

1 load cell (A) + 2 hinges (B)

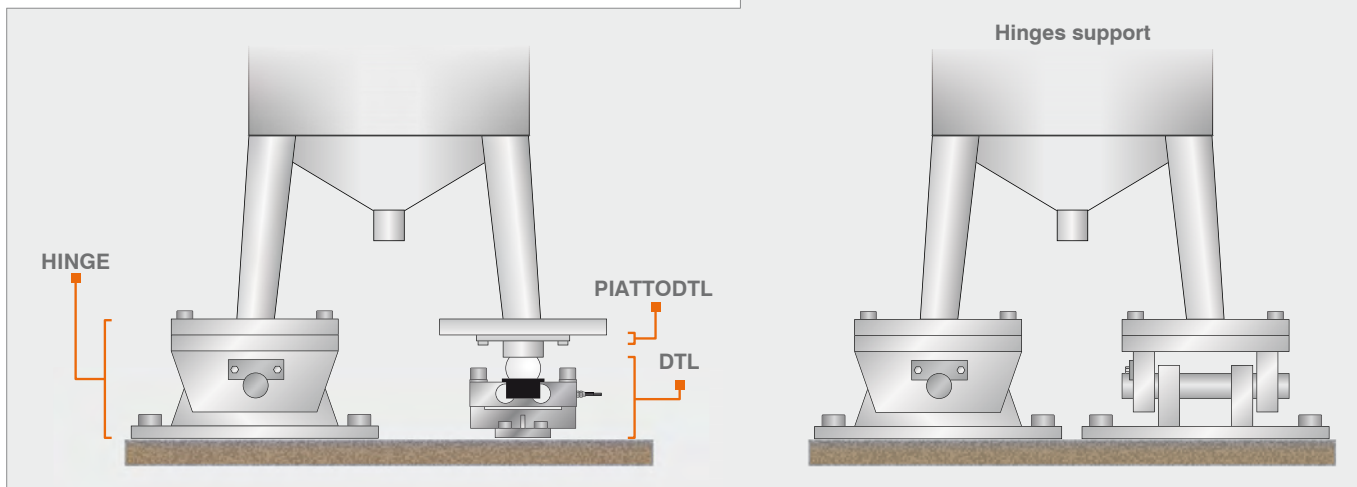


4 SUPPORTS STRUCTURES

2 load cells (A) + 2 hinges (B)



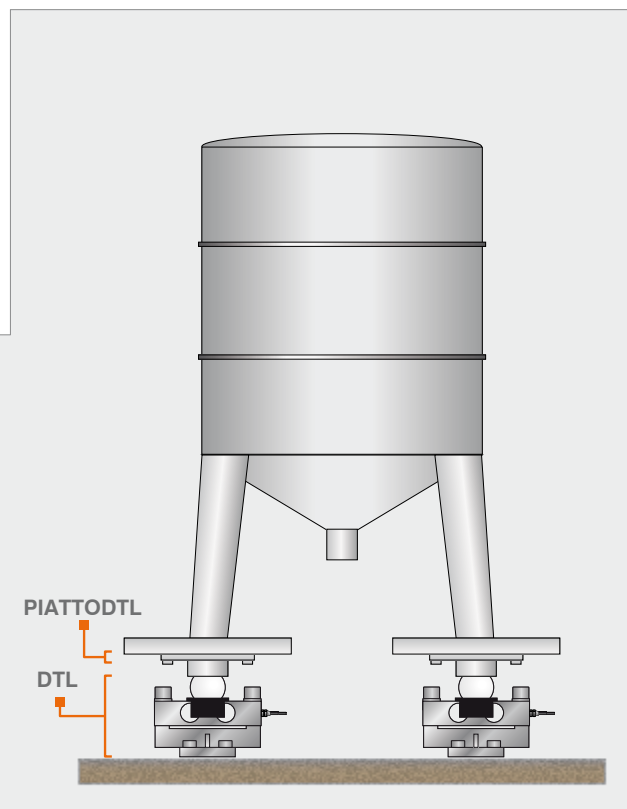
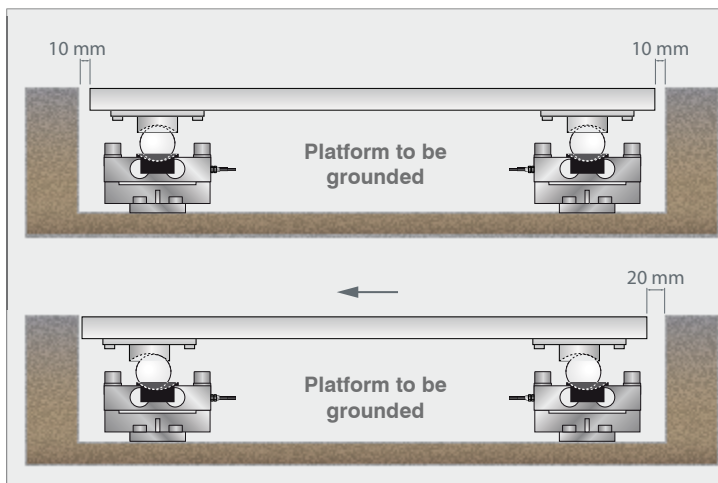
Hinges support



■ WEIGHING STRUCTURES NOT SUBJECT TO KNOCKS OR WIND EFFECT

The load cell, equipped with bases plus ball, is designed for weighing structures not subject to knocks or wind effect.

PIATTODTL is designed for facilitate the load cell installation and removal; it will be enough to lift 1 mm the structure. The different bending radius between the ball and the bases which contain it, makes that any side shifts lead to an increase of the structure.



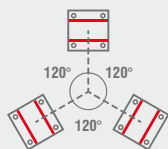
DTL

DOUBLE SHEAR BEAM LOAD CELLS

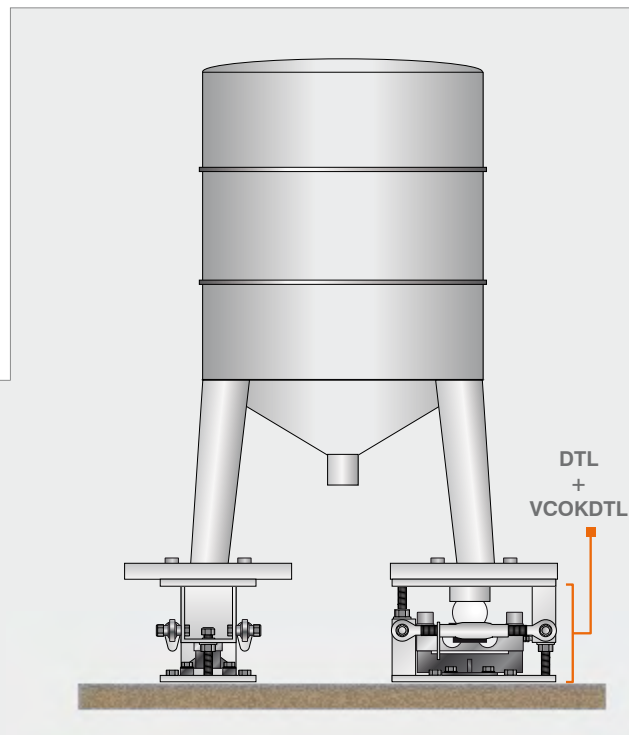
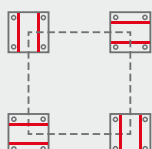
WEIGHING STRUCTURES SUBJECT TO KNOCKS OR WIND EFFECT

The VCOKDTL mounting kit is equipped with two stay rods against lateral forces with an ultimate tensile strength of 10000 kg each, and two threaded rods (22 mm diameter) with nuts to use as a jack for the insertion and extraction of the cells and with two self-locking nuts for anti-tilt function. To ensure the stability of the structure, the designer must consider further contrivances according to the following conditions: knocks and vibrations; wind effect; seismic conditions; hardness of support structure.

3 SUPPORTS STRUCTURES



4 SUPPORTS STRUCTURES



DTX

DOUBLE SHEAR BEAM LOAD CELLS

LAUMAS®



Capacity from 20 klb to 60 klb







MOUNTING KIT



- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
20klb / 9 ton		•	•	2.7
30klb / 13.6 ton		•	•	7.75
40klb / 18 ton		•	•	7.78
50klb / 23 ton		•	•	8.3
60klb / 27 ton		•	•	8.5

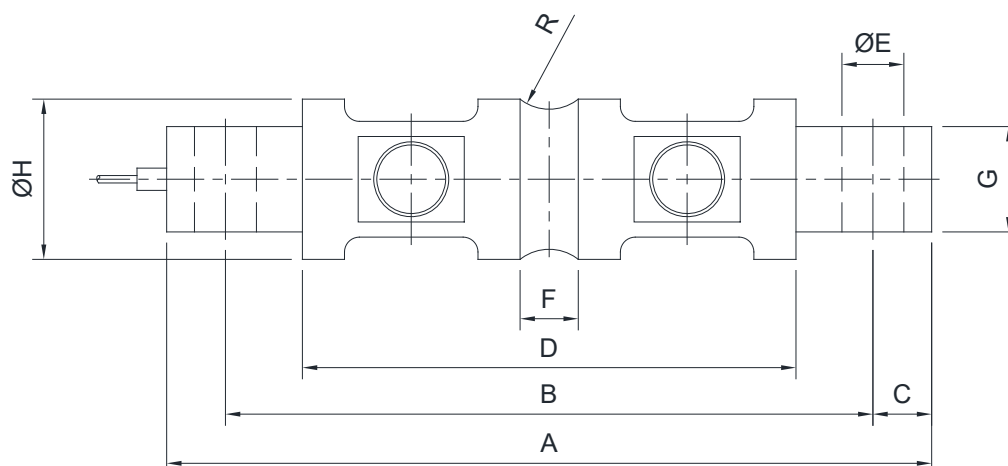
CERTIFICATIONS

-  OIML R60 C3
-  Complies with the Eurasian Customs Union standards
-  Equivalent of the CE marking for the United Kingdom
-  Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

-  Linearity test
-  ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
-  IECEx (zone 0-1-2-20-21-22)
-  Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
-  FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



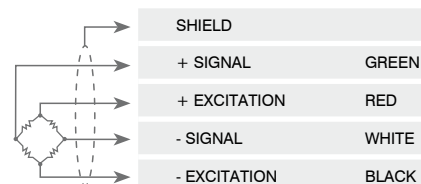
	A	B	C	D	ØE	F	G	ØH	R
20 klb	206	174.6	15.7	133	16.7	21.6	28.4	49.5	12.7
30-60 klb	260	215	22.4	165	27	25.7	60.2	76.2	25.4



TECHNICAL FEATURES

Material	AISI 4340 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	20, 30, 40, 50, 60 klb		
Minimum verification interval (V min)	E max / 10000 - E max / 15000		
Combined error	≤ ±0.023%		
Protection rating	IP68		
Rated output	3.0 mV/V ± 0.267%	Input resistance	700 Ω ± 7
Temperature effect on zero	0.002% °C	Output resistance	700 Ω ± 7
Temperature effect on span	0.002% °C	Zero balance	≤ ±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.016%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.6 mm

ELECTRICAL CONNECTIONS

Cable length	9 m
Cable diameter	5 mm (20klb) / 8 mm (30klb-60klb)
Cores	4 x 0.22 mm ²



	CAPACITY	PAGE
	A1.5	COMPRESSION-LOW PROFILE
	FLC 3A 1000, 2000, 5000, 10000, 20000 kg	73
	CK 200, 500, 1000, 2500 kg	76
	CLS 1000, 2000, 5000 kg	78
	CBL 250, 500, 1000, 2500, 5000, 7500, 10000, 12500, 15000, 30000, 50000, 100000 kg	80
	CBX 15000, 30000, 50000 kg	84
	CBLS 200000, 300000, 500000, 750000 kg	87

FLC 3A

HYGIENIC COMPRESSION LOAD CELL

LAUMAS®

Capacity from 1000 kg to 20000 kg



EXAMPLE OF INSTALLATION ON HYGIENIC FOOT



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.1\%$
- IP69K PROTECTION RATING
- CABLE SUITABLE FOR CONTACT WITH FOOD
- ADJUSTABLE HEIGHT
- HYGIENIC DEVICE RPSCQC AUTHORIZED BY 3-A SSI.

CAPACITY	kg	THREAD	NET WEIGHT (kg)
1000		M12	1.6
2000		M12	1.52
5000		M16	1.7
5000		M20	1.7
10000		M24	1.7
10000		M30	2.21
20000		M36	2.5

Foot not included.

CERTIFICATIONS



Equivalent of the CE marking for the United Kingdom



American standard that regulates the design, production and use of hygienic equipment

CERTIFICATIONS ON REQUEST

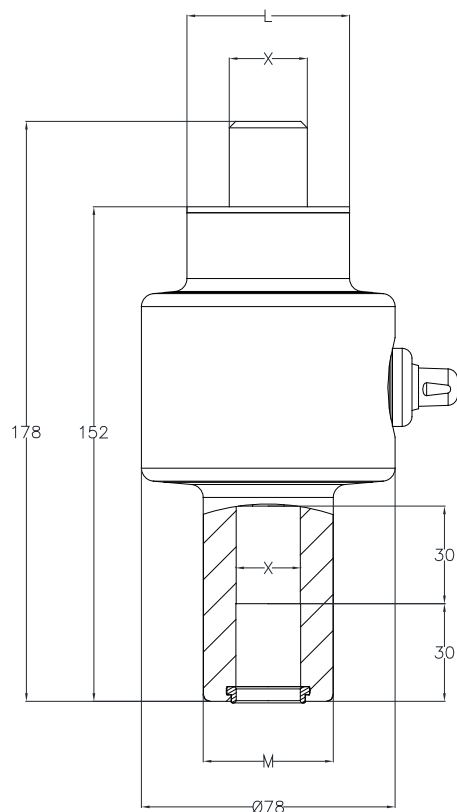


Linearity test

FLC 3A

HYGIENIC COMPRESSION LOAD CELL

DIMENSIONS (mm)



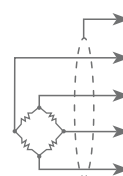
CAPACITY	X	L	M
1000 kg	M12x1.75	24	40
2000 kg	M12x1.75	24	40
5000 kg	M16x2	30	40
5000 kg	M20x2.5	35	40
10000 kg	M24x3	50	40
10000 kg	M30x3.5	50	50
20000 kg	M36x4	50	50

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load	1000 - 2000 - 5000 - 10000 - 20000 kg		
Combined error	≤ ±0.1%		
Protection rating	IP69K		
Rated output	2.0 mV/V ±0.1%	Input resistance	350 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.05%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	5 ÷ 15 VDC	Deflection at nominal load	-

ELECTRICAL CONNECTIONS

Cable length	5 m: 1000 kg, 2000 kg, 5000 kg, 10000 kg (M24) 10 m: 10000 kg (M30), 20000 kg
Cable diameter	5 mm
Cores	6 x 0.20 mm ²



SHIELD	
+ SIGNAL	GREEN
+ EXCITATION	RED
+ REF./SENSE	BLUE
- SIGNAL	WHITE
- EXCITATION	BLACK
- REF./SENSE	BROWN

FLC 3A

HYGIENIC COMPRESSION LOAD CELL

COMPLEMENTARY ACCESSORIES

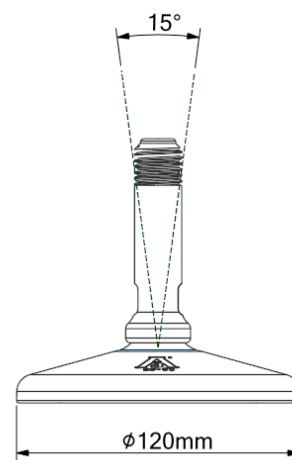
HYGIENIC FOOT

thread	load cell capacity
M12	1000 kg - 2000 kg
M16	5000 kg
M20	5000 kg
M24	10000 kg
M30	10000 kg
M36	20000 kg

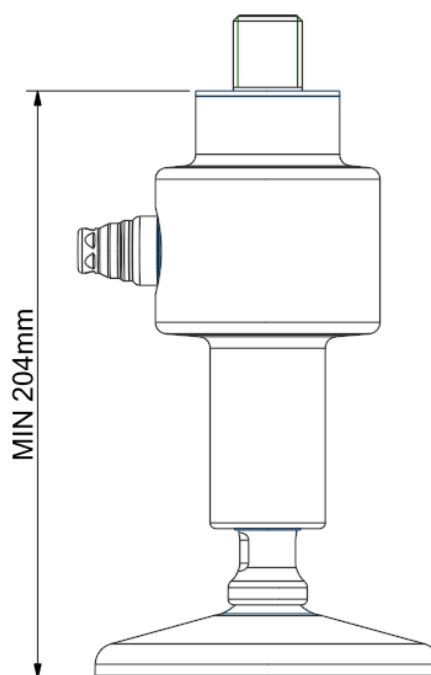
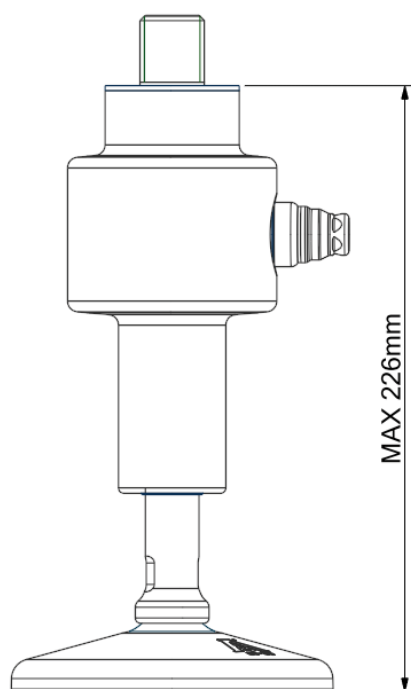
For further information see the HD data sheets

On request: hygienic foot with dowel fastening

For other types of hygienic, non-hygienic feet or customizations contact <https://martinlevelling.it>



ANGULAR ADJUSTMENT





Manufactured according to OIML R60 standards

Capacity from 200 kg to 2500 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.5\%$
- IP67 PROTECTION RATING

CAPACITY	kg	NET WEIGHT (kg)
	200	0.11
	500	0.08
	1000	0.17
	2500	0.17

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

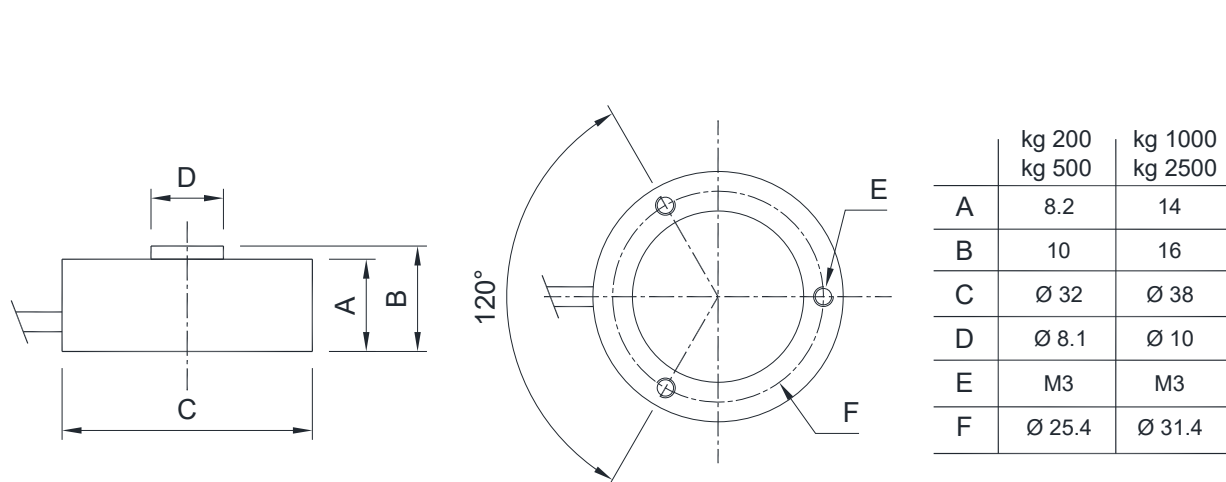
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	200 - 500 - 1000 - 2500 kg		
Combined error	≤ ±0.5%		
Protection rating	IP67		
Rated output	1 mV/V ±15%	Input resistance	400 Ω ±100
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	120%
Creep at nominal load in 30 minutes	0.3%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	5 m
Cable diameter	3 mm
Cores	4 x 0.25 mm ²





Manufactured according to OIML R60 standards

Capacity from 1000 kg to 5000 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.03\%$
- IP68 PROTECTION RATING
- INTEGRATED STAINLESS STEEL LOWER PLATE

MOUNTING KITS



CAPACITY	kg	NET WEIGHT (kg)
	1000	4.1
	2000	4.1
	5000	4.1

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

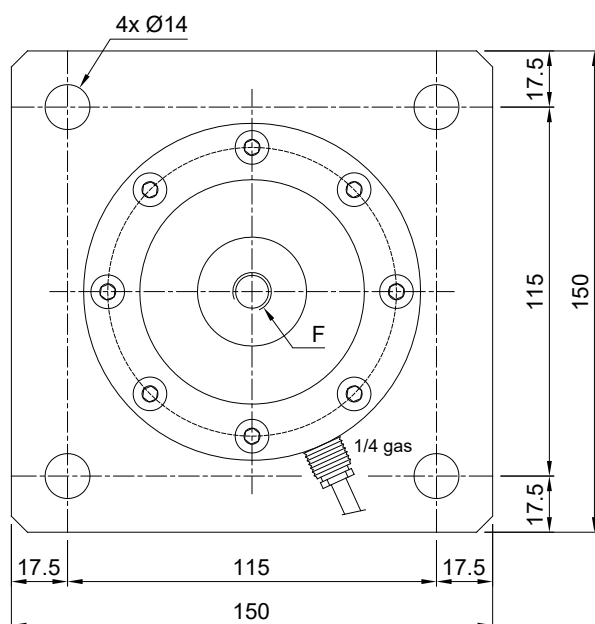
✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

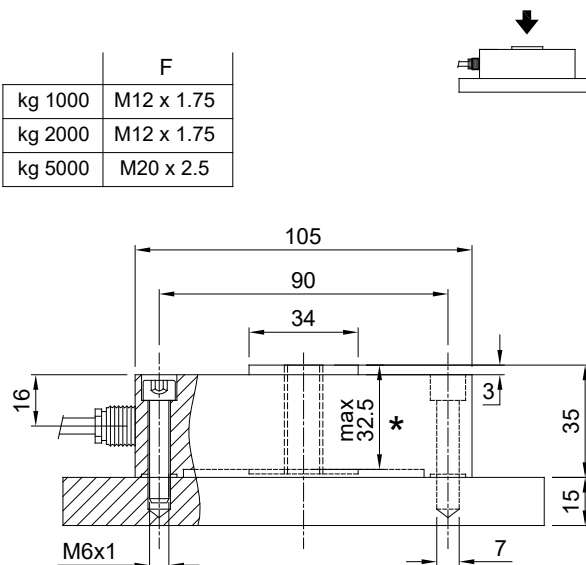
IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



	F
kg 1000	M12 x 1.75
kg 2000	M12 x 1.75
kg 5000	M20 x 2.5



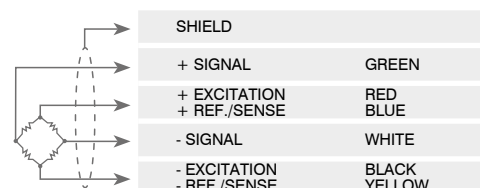
* WARNING! Max dimension to insert the bolt to allow the cell to perform properly

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	1000 - 2000 - 5000 kg		
Combined error	≤ ±0.03%		
Protection rating	IP68		
Rated output	2 mV/V ±0.4%	Input resistance	385 Ω ±10
Temperature effect on zero	0.002% °C	Output resistance	350 Ω ±3
Temperature effect on span	0.012% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	250%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	6 mm
Cores	6 x 0.25 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 250 kg to 100000 kg



- 17-4 PH STAINLESS STEEL (on request AISI 420 stainless steel version; not OIML approved)
- COMBINED ERROR $\leq \pm 0.03\%$ (0.02% C3)
- IP68 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS				NET WEIGHT (kg)
		C2	C3			
250		-	-	-	-	1.1
500		-	-	-	-	1.1
1000		-	-	-	-	1.1
2500		•	•	•	•	1.1
5000		•	•	•	•	1.1
7500		•	•	•	•	1.1
10000		•	•	•	•	1.1
12500*		-	•	•	•	1.6
15000		-	-	-	-	2.1
30000		-	-	-	-	3.8
50000		-	-	-	-	8.6
100000		-	-	-	-	9.1

ON REQUEST

(*) Except for the capacity of 12500kg, which is already OIML R60 C3 approved

CERTIFICATIONS

- OIML R60 C2
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

IP69K	Declaration of conformity + IP69K marking protection rating <i>Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm) Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)</i>
	Linearity test
	ATEX II 1GD (zone 0-1-2-20-21-22) (-)
	IECEx (zone 0-1-2-20-21-22)
	OIML R60 C3
	Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
	Complies with the regulations of the Russian Federation for legal for trade use

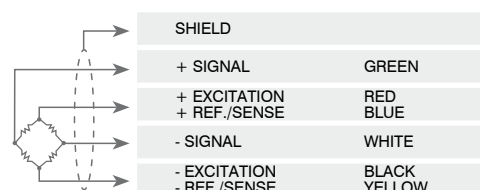
TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	-	C2 • 2000	C3 • 3000
Nominal load (E max)	250 - 500 - 1000 - 15000 kg 30000 - 50000 - 100000 kg	2500 - 5000 kg 7500 - 10000 kg	2500 - 5000 - 7500 kg 10000 - 12500 kg
Minimum verification interval (V min)	-	E max / 15000	E max / 15000
Combined error	≤ ±0.03%	≤ ±0.03%	≤ ±0.02%
Protection rating	IP68		
Rated output	2 mV/V ± 0.1%	Input resistance	700 Ω ± 10
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ± 10
Temperature effect on span	0.003% °C	Zero balance	± 1%
Temperature range OIML R60	-10 °C / +40 °C	Insulation resistance	> 10000 MΩ
Compensated temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Operating temperature range	-30 °C / +90 °C	Ultimate overload (% of full scale)	300%
Creep at nominal load in 30 minutes	0.03%	Deflection at nominal load	0.4 mm
Max supply voltage without damage	15 V		




ELECTRICAL CONNECTIONS

Cable length	5 m*(250-10000 kg); 10 m (12500-100000 kg)
Cable diameter	5 mm
Cores	6 x 0.14 mm ²






*) On request: 10 m long cable version



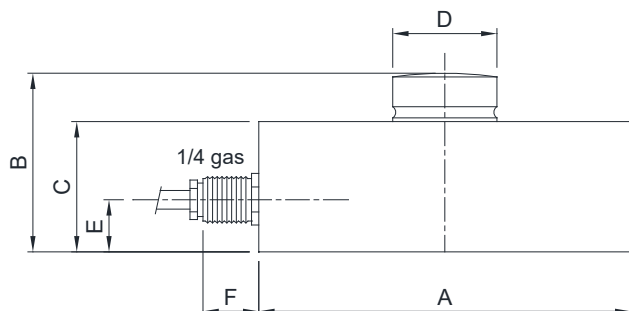
OPTIONS ON REQUEST

	DESCRIPTION
	10 m long cable version for 250-10000 kg capacities
 AISI 420	AISI 420 stainless steel load cell version (not OIML approved)
	Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

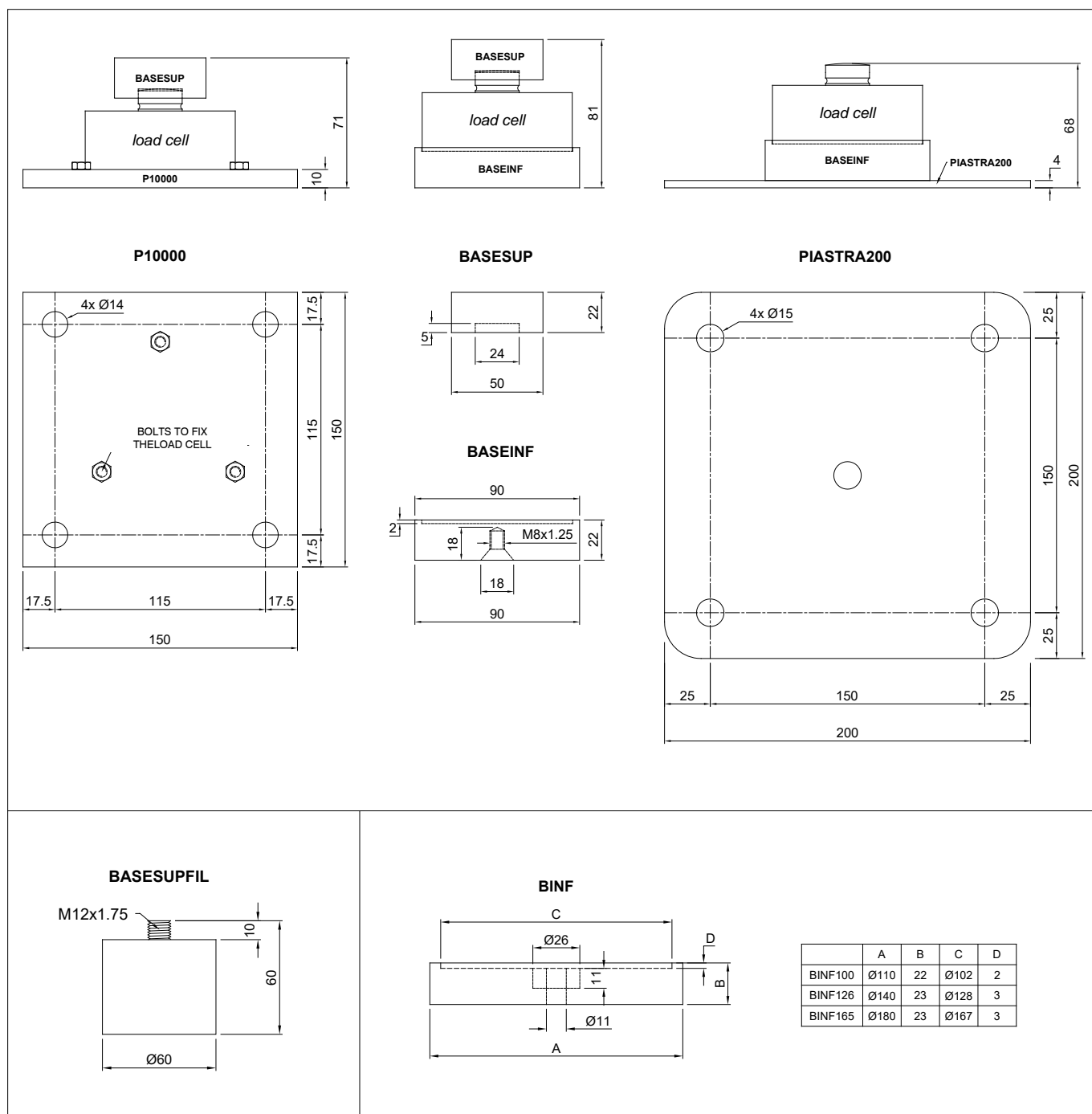
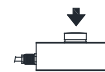
COMPLEMENTARY ACCESSORIES

	DESCRIPTION		CODE
	AISI 304 stainless steel threaded upper base for compression load cells.	M12x1.75 mm	BASESUPFIL
	AISI 304 stainless steel turned lower base for compression load cells.	Ø110x22 mm Ø140x23 mm Ø180x23 mm	BINF100 BINF126 BINF165
	Lower plate and turned upper base in AISI 304 stainless steel. Load cell capacity: up to 12500 kg.		BASESUP P10000
	Turned upper and lower bases in AISI 304 stainless steel. Load cell capacity: up to 12500 kg.		BASESUP BASEINF
	Lower plate and turned lower base in AISI 304 stainless steel. Load cell capacity: up to 12500 kg.		BASEINF PIASTRA200

DIMENSIONS (mm)



kg	250	15000	30000	50000
A	Ø82	Ø100	Ø126	Ø164
B	44	48	54	80
C	32	35	40	60
D	Ø22	Ø28	Ø35	Ø60
E	14	14	14	26
F	15	15	15	15



CBX

COMPRESSION LOAD CELLS - LOW PROFILE

LAUMAS®


Manufactured according to OIML R60 standards

Capacity from 15000 kg to 50000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.035\%$
- IP68 PROTECTION RATING

MOUNTING KITS



CAPACITY	kg	NET WEIGHT (kg)
	15000	1.4
	30000	2.2
	50000	3.8

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

OPTIONS ON REQUEST

DESCRIPTION



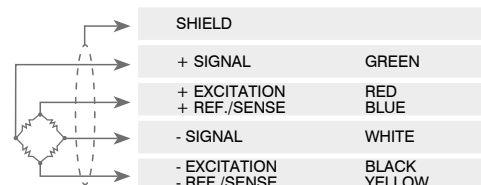
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	15000 - 30000 - 50000 kg		
Combined error	≤ ±0.035%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±5
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>10000 MΩ
Operating temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

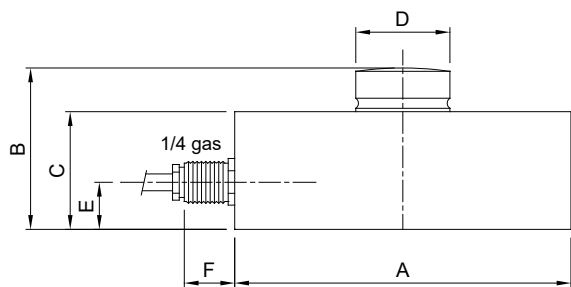
Cable length	10 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²



COMPLEMENTARY ACCESSORIES

	DESCRIPTION		CODE
	AISI 304 stainless steel threaded upper base for compression load cells.	M12x1.75 mm	BASESUPFIL
	AISI 304 stainless steel turned lower base for compression load cells.	Ø110x22 mm Ø140x23 mm	BINF100 BINF126
	Lower plate and turned upper base in AISI 304 stainless steel. Load cell capacity: up to 15000 kg.		BASESUP P10000
	Turned upper and lower bases in AISI 304 stainless steel. Load cell capacity: up to 15000 kg.		BASESUP BASEINF
	Lower plate and turned lower base in AISI 304 stainless steel. Load cell capacity: up to 15000 kg.		BASEINF PIASTRA200
	AISI 304 stainless steel adapter for mounting kit: - V15000 for Ø82 mm load cells - V30000 for Ø100 mm load cells - V100000 for Ø126 mm load cells		ADAT100 ADAT126 ADAT165

DIMENSIONS (mm)



kg	15000	30000	50000
A	Ø82	Ø100	Ø126
B	44	48	54
C	32	35	40
D	Ø22	Ø28	Ø35
E	14	14	14
F	15	15	15



P10000

BASESUP

PIASTRA200

BASESUPFIL

BINF

	A	B	C	D
BINF100	Ø110	22	Ø102	2
BINF126	Ø140	23	Ø128	3

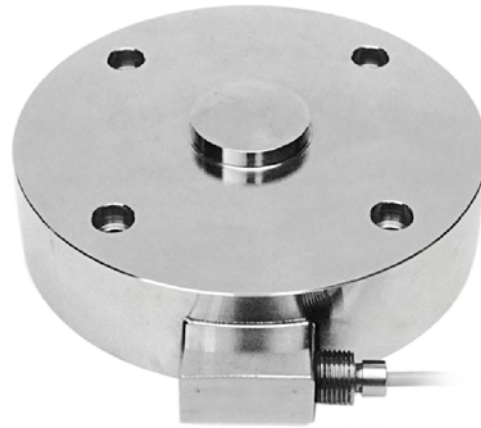
CBLS

COMPRESSION LOAD CELLS - LOW PROFILE

LAUMAS®


Manufactured according to OIML R60 standards

Capacity from 200000 kg to 750000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.10\%$
- IP68 PROTECTION RATING

CAPACITY	kg	NET WEIGHT (kg)
200000		20
300000		42
500000		60
750000		60

CERTIFICATIONS

- EAC** Complies with the Eurasian Customs Union standards
- UK CA** Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

- ✓ Linearity test
- Ex** ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx** IECEx (zone 0-1-2-20-21-22)
- EAC Ex** Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

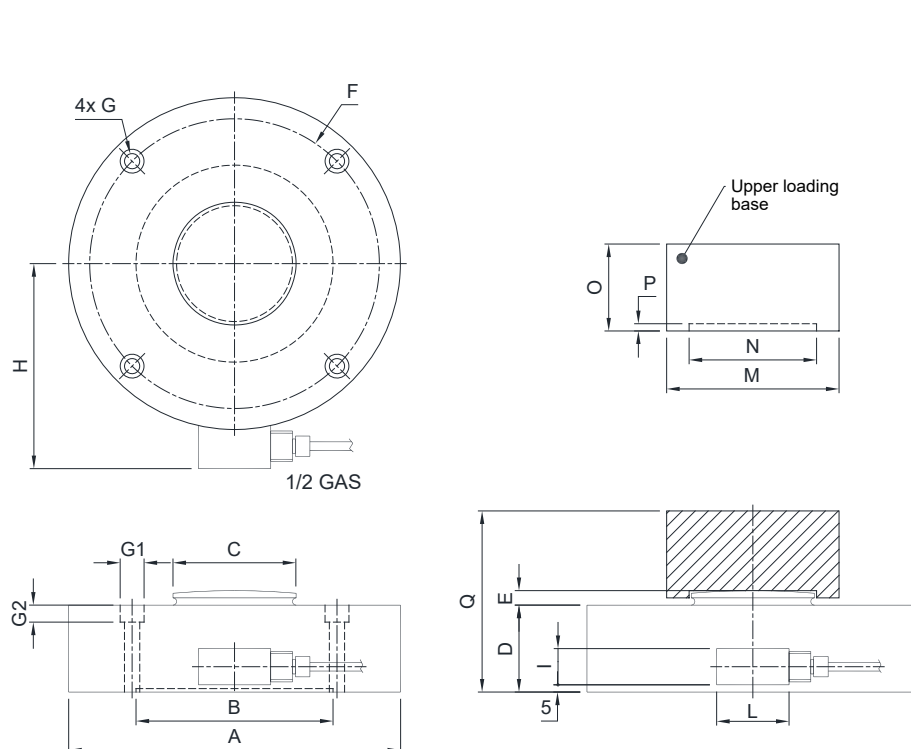
COMPLEMENTARY ACCESSORIES

DESCRIPTION	DESCRIPTION	CODE		
	Dimensions:	Maximum static load:		
	Upper loading base.	$\varnothing 119$ mm; h=60 mm	200000 kg	BOTTONE200
		$\varnothing 198$ mm; h=60 mm	300000 kg	BOTTONE
		$\varnothing 198$ mm; h=89 mm	500000 - 750000 kg	BOTTONE750

CBLS

COMPRESSION LOAD CELLS - LOW PROFILE

DIMENSIONS (mm)



	200t	300t	500-750t
A	Ø229	Ø299	Ø299
B	Ø136.5	Ø228	Ø230
C	Ø87	Ø155	Ø155
D	60	73	106
E	10	12	14
F	Ø200	Ø260	Ø260
G	Ø10.5	Ø12.5	Ø12.5
G1	Ø16.5	Ø18.5	Ø18.5
G2	10.5	12.5	12.5
H	142±1	180±2	180±2
I	30	25	25
L	60	50	50
weight	20kg	42kg	60kg

	200t	300t	500-750t
M	Ø119	Ø198	Ø198
N	Ø88	Ø156	Ø158
O	60	60	89
P	5	5	9
Q	125	140	200

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	200000 - 300000 - 500000 - 750000 kg		
Combined error	≤ ±0.10%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²

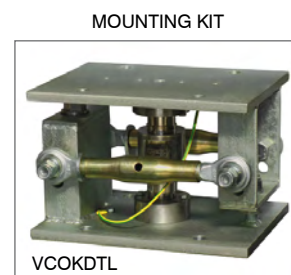
	SHIELD	
	+ SIGNAL	GREEN
	+ EXCITATION + REF./SENSE	RED BLUE
	- SIGNAL	WHITE
	- EXCITATION - REF./SENSE	BLACK BROWN



	CAPACITY	PAGE
A1.6	COLUMN	
COK	15000, 25000, 50000 kg	91
COD	25000, 50000 kg	93
CO	25000 kg	96
COL	30000 kg	98



Capacity from 15000 kg to 50000 kg



- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS C3			NET WEIGHT (kg)
15000		•	•	•	3.3
25000		•	•	•	3.5
50000		•	•	•	3.7
25000	Anti-rat Cable	•	•	•	4

ON REQUEST

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

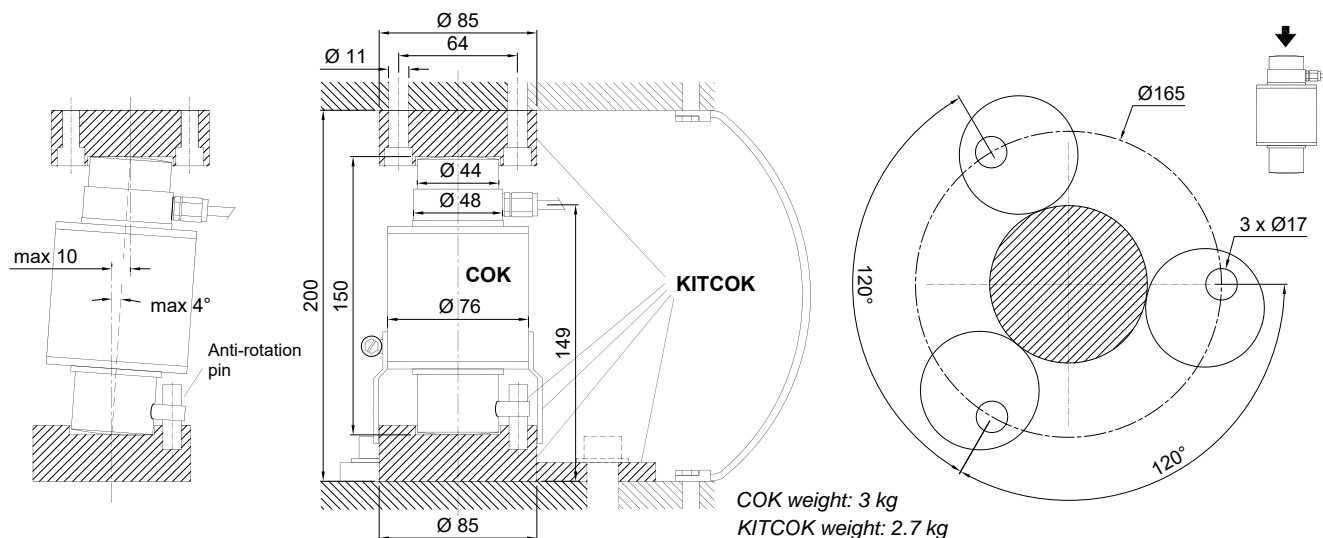
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- Complies with the regulations of the Russian Federation for legal for trade use

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	AISI 5140 nickel plated steel accessory composed by anti-rotation system, protective rubber seal, 2 bases (upper and lower) and 3 self-centering cylindrical plates.	KITCOK

DIMENSIONS (mm)

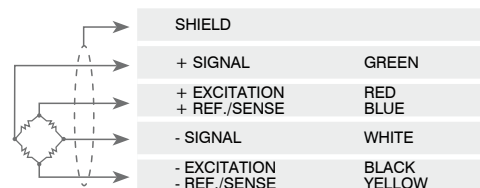


TECHNICAL FEATURES

Material	AISI 4340 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	15000 - 25000 - 50000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.02%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	780 Ω ±20
Temperature effect on zero	0.002% °C	Output resistance	700 Ω ±10
Temperature effect on span	0.002% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-30 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	250%
Max supply voltage without damage	15 V	Deflection at nominal load	0.6 - 1 mm

ELECTRICAL CONNECTIONS

Cable length	20 m
Cable diameter	6 mm
Cores	6 x 0.22 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



DESCRIPTION

- AISI 4340 nickel-plated steel body and AISI 304 stainless steel shell
- Combined error $\leq \pm 0.014\%$
- IP69K protection rating
- Two-connector digital output
- Compatible with WINOX BGE and WTAB BGE
- Load cell bases with anti-rotation mechanism
- Earthing cable
- Pipe clamps
- Lightning and electrical shock protection

CAPACITY	kg	ACCURACY CLASS C5	NET WEIGHT (kg)	CONNECTION CABLE
25000		•	3.5	-
50000		•	3.7	-
25000		•	3.5	5 metres
50000		•	3.7	5 metres
25000		•	3.5	10 metres
50000		•	3.7	10 metres

CERTIFICATIONS



OIML R60 C5



Equivalent of the CE marking for the United Kingdom



IP69K

Declaration of conformity + IP69K marking protection rating

Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm)

Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)

CERTIFICATIONS ON REQUEST

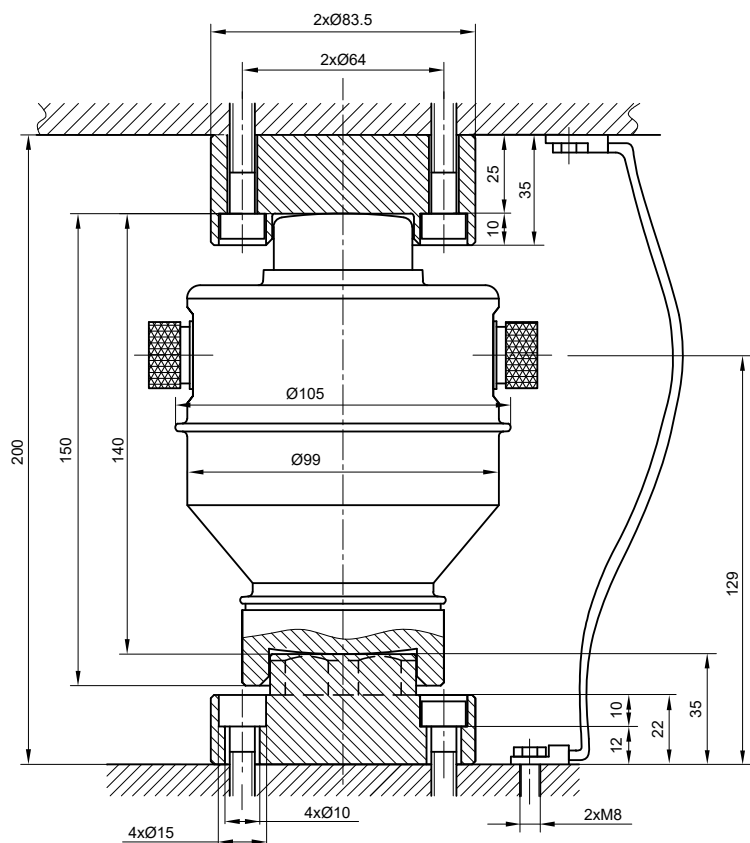


Linearity test

OPTIONS ON REQUEST

	DESCRIPTION
	Anti-rat cable for connecting to indicator, length: 20 m, equipped with connector on one end only.
	Anti-rat cable, length: 10 m, equipped with connector on both ends.
	Anti-rat cable, length: 5 m, equipped with connector on both ends.

DIMENSIONS (mm)

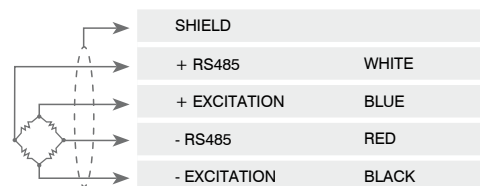


TECHNICAL FEATURES

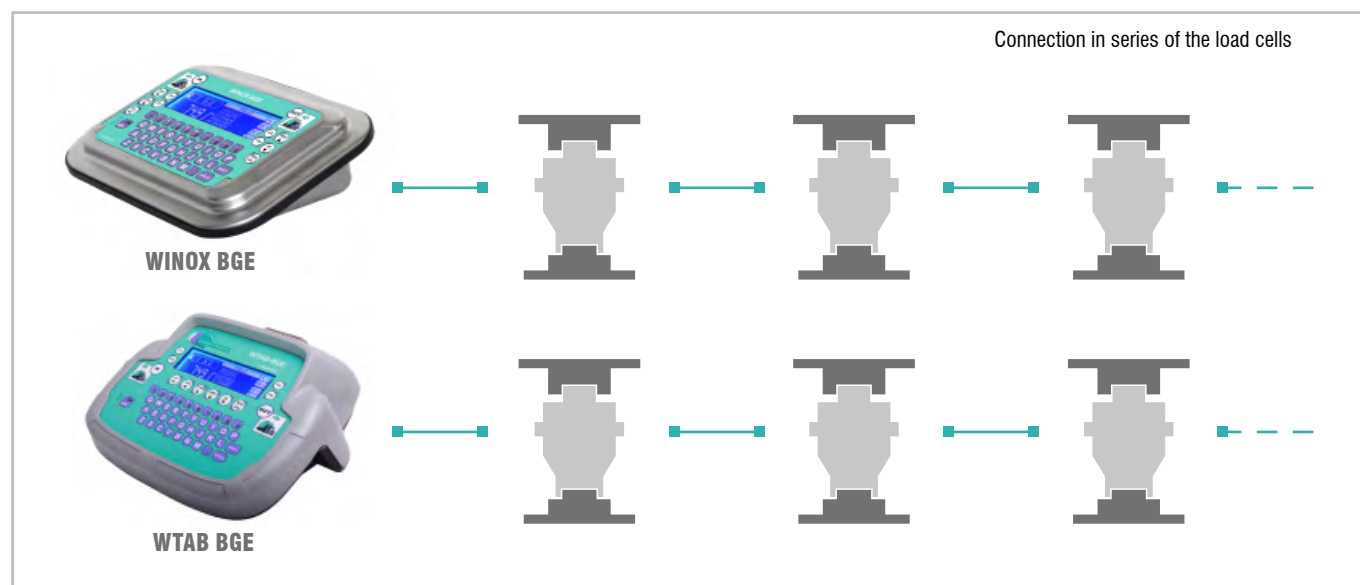
Material	AISI 4340 nickel-plated steel body and AISI 304 stainless steel shell		
OIML R60 Accuracy class • Verification intervals	C5 • 5000		
Nominal load (E max)	25000 - 50000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.014%		
Protection rating	IP69K		
Temperature effect on zero	0.0015% °C	Recommended power supply voltage	9 ÷ 12 VDC
Temperature effect on span	0.0015% °C	Safe overload (% of full scale)	150%
Compensated temperature range	-10 °C / +40 °C	Ultimate overload (% of full scale)	300%
Operating temperature range	-30 °C / +70 °C	RS485 serial interface	Halfduplex
Creep at nominal load in 30 minutes	0.02%	Maximum transmission distance	1200 m
Max supply voltage without damage	20 VDC		

ELECTRICAL CONNECTIONS

Cable length	5 m/10 m
Cable diameter	8.8 mm
Cores	4 x 0.2 mm ²



EXAMPLE OF APPLICATION





Capacity 25000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.017\%$
- IP68 PROTECTION RATING
- LIGHTNING PROTECTION

CAPACITY	kg	ACCURACY CLASS			NET WEIGHT (kg)
25000		C4			2.4
<input type="checkbox"/> ON REQUEST					

CERTIFICATIONS

- OIML R60 C4
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

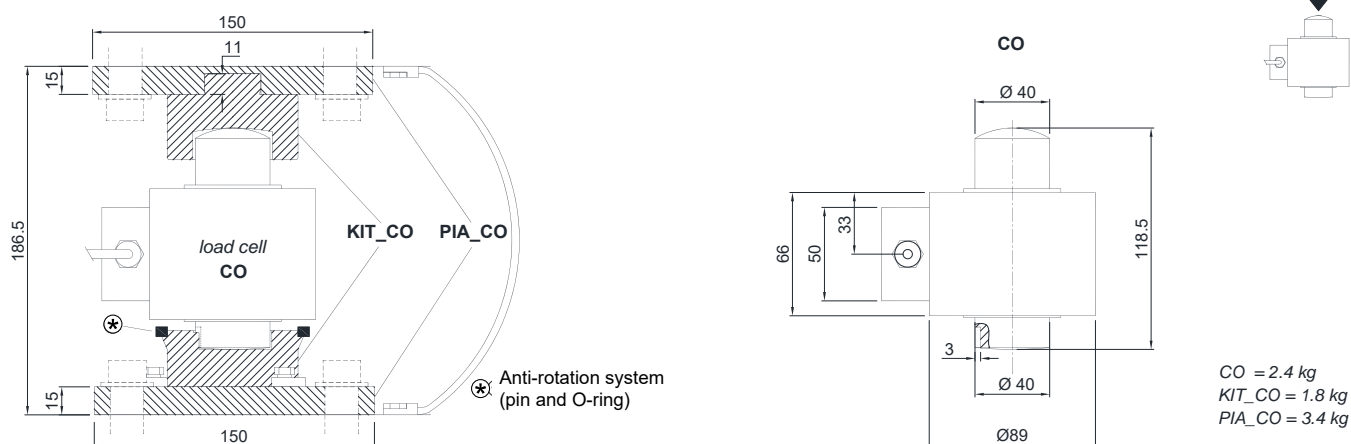
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres
- Complies with the regulations of the Russian Federation for legal for trade use

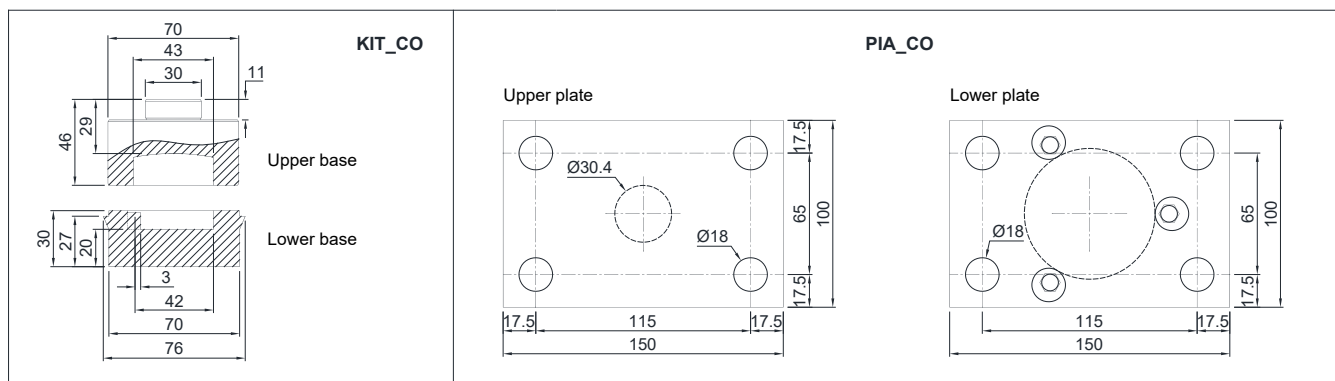
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel accessory composed by anti-rotation system with O-ring and 2 bases (upper and lower).	KITCO
	Kit composed by 2 AISI 5140 nickel plated steel plates (upper and lower) for KIT_CO bases.	PIACO

DIMENSIONS (mm)



CO = 2.4 kg
KIT_CO = 1.8 kg
PIA_CO = 3.4 kg

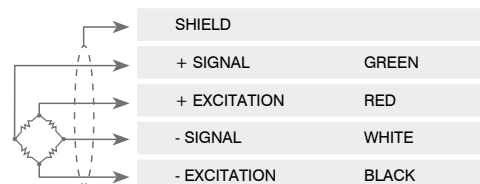


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C4 • 4000		
Nominal load (E max)	25000 kg		
Minimum verification interval (V min)	E max / 15000		
Combined error	≤ ±0.017%		
Protection rating	IP68		
Rated output	2 mV/V ± 1%	Input resistance	700 Ω ± 7
Temperature effect on zero	0.002% °C	Output resistance	700 Ω ± 7
Temperature effect on span	0.002% °C	Zero balance	± 1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥ 5000 MΩ
Operating temperature range	-30 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.02%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.6 - 1 mm

ELECTRICAL CONNECTIONS

Cable length	15 m
Cable diameter	5 mm
Cores	4 x 0.24 mm ²





Capacity 30000 kg



MOUNTING KIT



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.017\%$
- IP68 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS			NET WEIGHT (kg)
30000		C4			2.4
 ON REQUEST					

CERTIFICATIONS

- OIML R60 C4
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

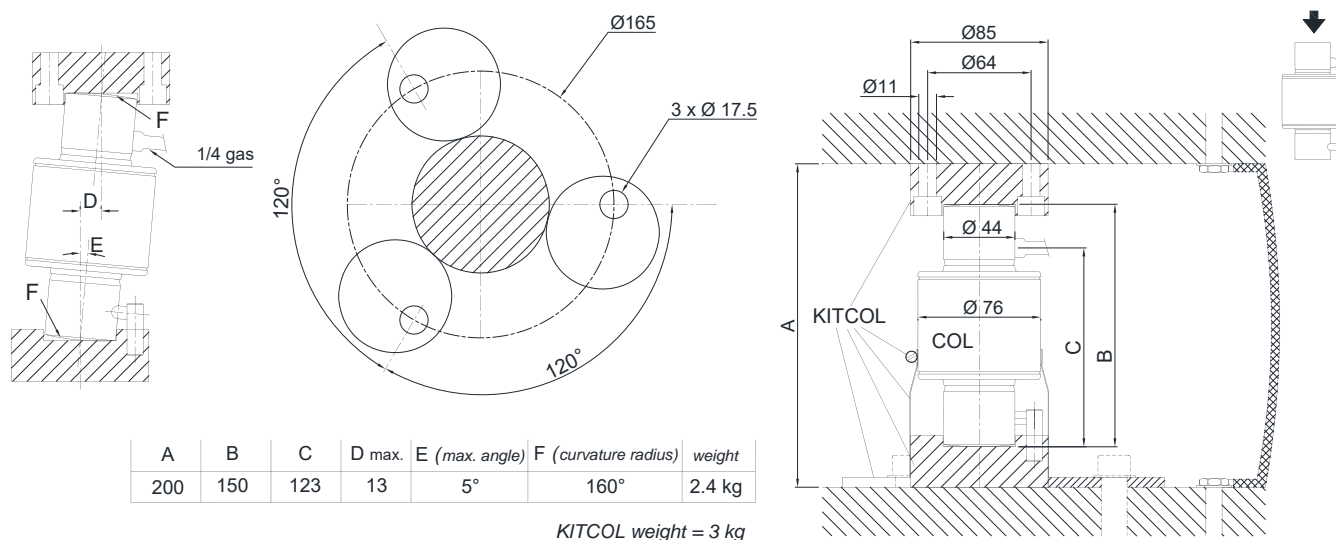
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)
- IECEx (zone 0-1-2-20-21-22)
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres
- Complies with the regulations of the Russian Federation for legal for trade use

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Hardened AISI 420 stainless steel accessory composed by anti-rotation system, protective rubber seal, 2 bases (upper and lower) and 3 self-centering cylindrical plates.	KITCOL

DIMENSIONS (mm)



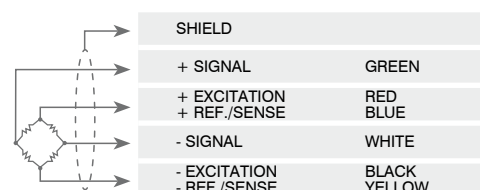
TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C4 • 4000		
Nominal load (E max)	30000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.017%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1% *	Input resistance	800 Ω ±30
Temperature effect on zero	0.002% °C	Output resistance	700 Ω ±10
Temperature effect on span	0.0012% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Operating temperature range	-30 °C / +70°C	Safe overload (% of full scale)	120%
Creep at nominal load in 30 minutes	0.016%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.6 - 1 mm

* Calibrated current output

ELECTRICAL CONNECTIONS

Cable length	20 m
Cable diameter	6 mm
Cores	6 x 0.22 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



	CAPACITY	PAGE
A1.7	COMPRESSION / TENSION	
CLBT	50, 100, 500 kg	102
CL	500, 1000, 2000, 5000, 10000, 20000, 30000, 60000, 100000, 150000, 200000 kg	104
CLK	10000, 20000 kg	106

CLBT

COMPRESSION / TENSION LOAD CELLS

LAUMAS®


Manufactured according to OIML R60 standards

Capacity from 50 kg to 500 kg

- 50-100 kg: ALUMINUM ALLOY (AVIONAL)
- 500 kg: 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.05\%$
- IP65 PROTECTION RATING



CAPACITY	kg	NET WEIGHT (kg)
	50	0,15
	100	0,15
	500	0,25

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Lower base	BINFCLBT

CERTIFICATIONS

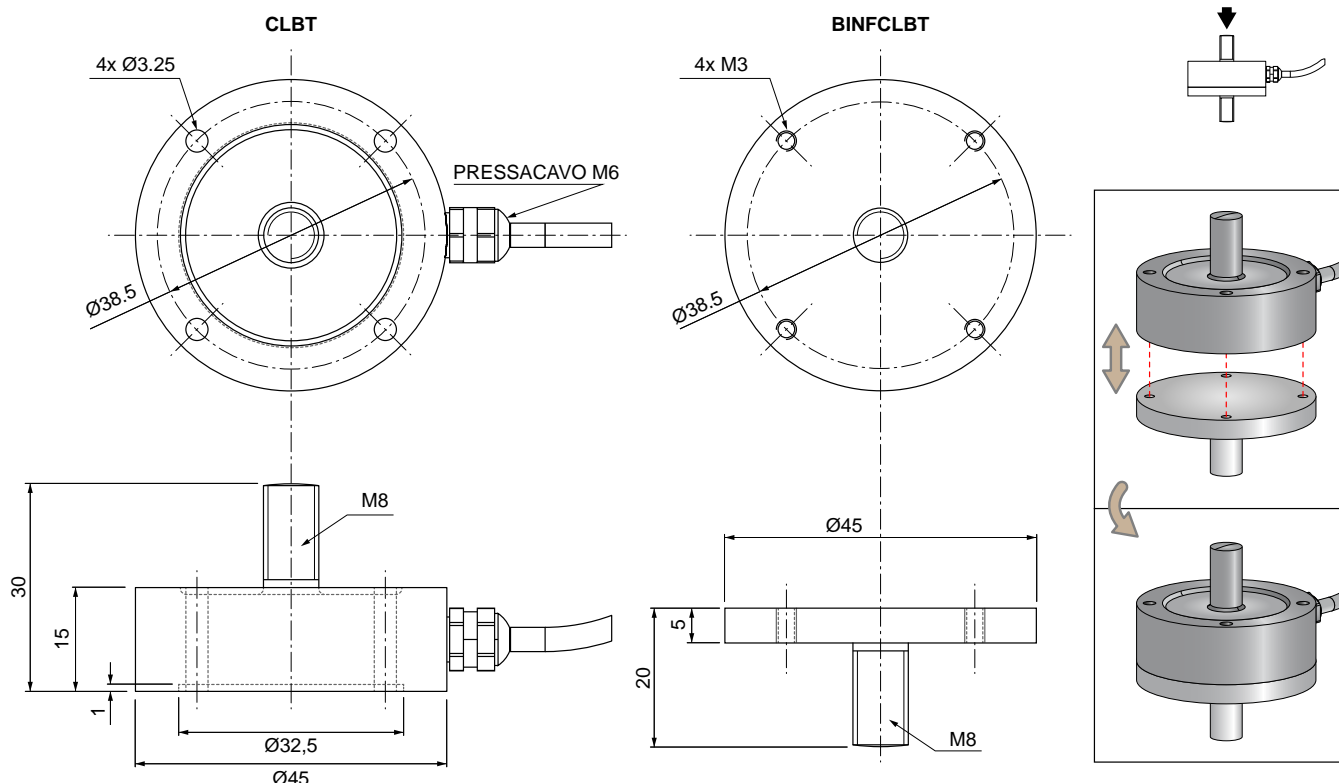
EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

DIMENSIONS (mm)

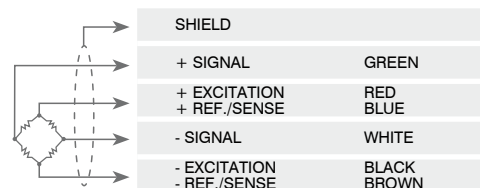


TECHNICAL FEATURES

Material	Aluminum alloy (Avional)	17-4 PH stainless steel	
Nominal load (E max)	50 - 100 kg	500 kg	
Combined error	≤ ±0.05%		
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	700 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 20 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	5 ÷ 15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	5 m
Cable diameter	5 mm
Cores	6 x 0.088 mm ²





Manufactured according to OIML R60 standards

Capacity from 500 kg to 200000 kg



- 17-4 PH STAINLESS STEEL
- BIDIRECTIONAL TENSION AND COMPRESSION
- COMBINED ERROR $\leq \pm 0.05\%$
- PROTECTION RATING: IP68 (500 - 60000 kg) - IP67 (100000 - 200000 kg)

CAPACITY	kg	NET WEIGHT (kg)
500		1.2
1000		1.2
2000		1.2
5000		1.7
10000		1.8
20000		4.8
30000		5.3
60000		5.4
100000		12
150000		15
200000		25

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

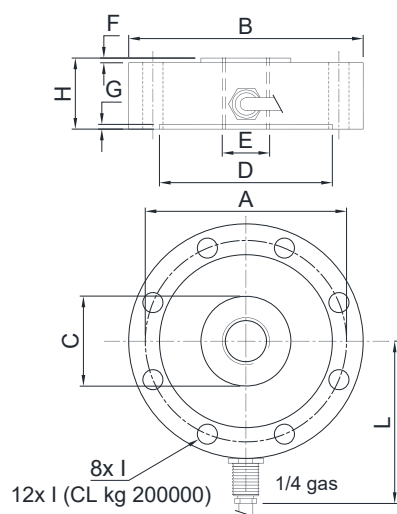
OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems.

DIMENSIONS (mm)



	kg 500 kg 1000 kg 2000	kg 5000 kg 10000	kg 20000 kg 30000 kg 60000	kg 100000	kg 150000	kg 200000
A	Ø 85	Ø 94	Ø 136	Ø 175	Ø 213	Ø 254
B	Ø 99	Ø 109	Ø 164	Ø 219	Ø 249	Ø 299
C	Ø 31	Ø 38	Ø 70	Ø 88	Ø 140	Ø 170
D	Ø 72	Ø 78	Ø 113	Ø 135	Ø 176	Ø 210
E	M20 x 1.5	M24 x 2	M48 x 3	M64 x 4	M72 x 4	M90 x 6
F	2	2	5	5	5	5
G	1.5	1.5	2	3	3	3
H	30	35	50	70	70	80
I	Ø 8.5	Ø 8.5	Ø 16.5	Ø 26	Ø 26	Ø 26
L	68.5	73.5	101	128.5	143.5	168.5
Weight	1.1	1.4	5	11	16	26

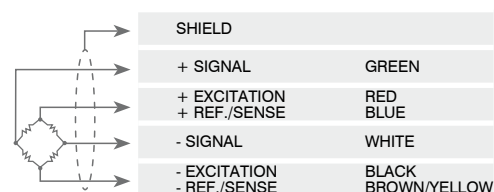


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	500 - 1000 - 2000 - 5000 - 10000 - 20000 - 30000 - 60000 - 100000 - 150000 - 200000 kg		
Combined error	≤ ±0.05%		
Protection rating	IP68 (500 - 60000 kg), IP67 (100000 - 200000 kg)		
Rated output	2 mV/V ±0.3%	Input resistance	700 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.3%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

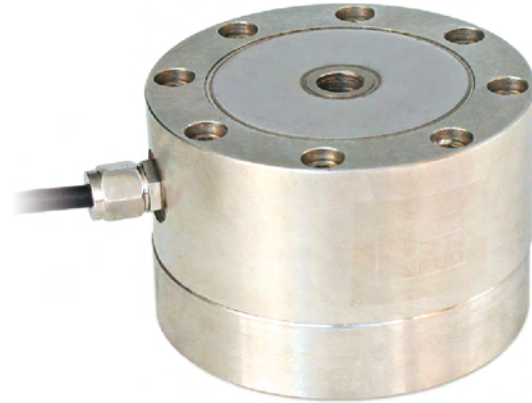
Cable length	5 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²





Manufactured according to OIML R60 standards

Capacity from 10000 kg to 20000 kg



- SPECIAL STEEL
- BIDIRECTIONAL TENSION AND COMPRESSION
- COMBINED ERROR $\leq \pm 0.1\%$
- IP67 PROTECTION RATING

CAPACITY	kg	NET WEIGHT (kg)
	10000	10.5
	20000	11

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

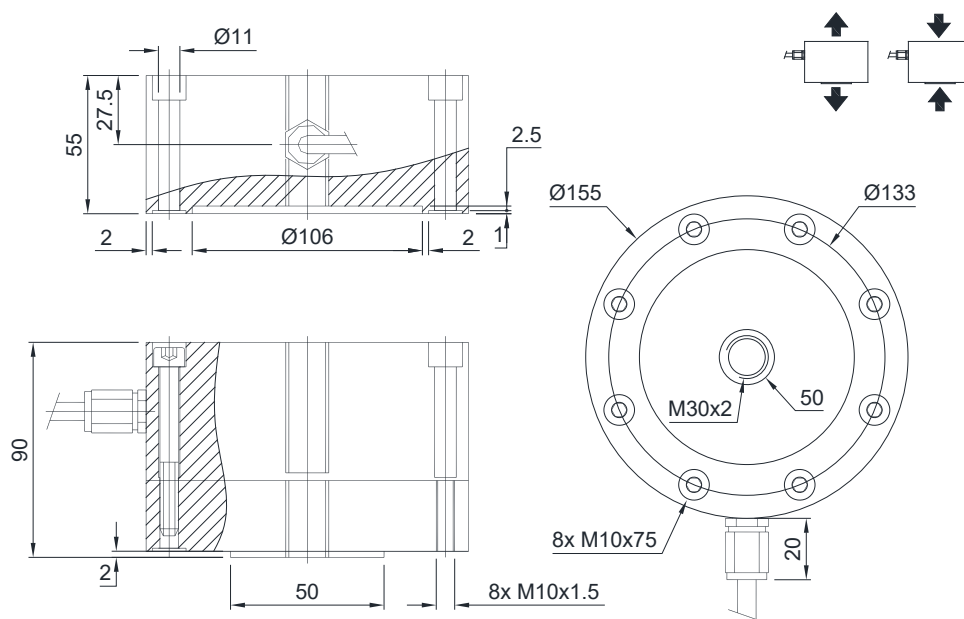
✓ Linearity test

⚡ ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)

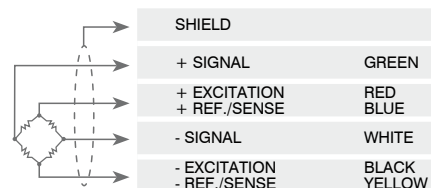


TECHNICAL FEATURES


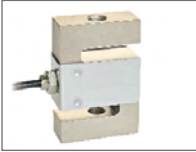



Material	Special steel		
Nominal load (E max)	10000 - 20000 kg		
Combined error	≤ ±0.1%		
Protection rating	IP67		
Rated output	2 mV/V ±0.3%	Input resistance	352 Ω ±3
Temperature effect on zero	0.002% °C	Output resistance	400 Ω ±20
Temperature effect on span	0.002% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	12 m
Cable diameter	6 mm
Cores	6 x 0.24 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.

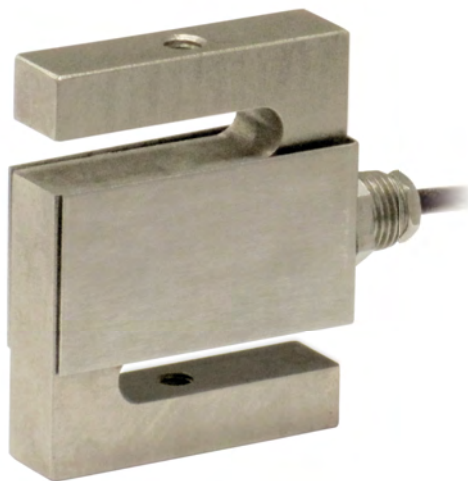
	CAPACITY	PAGE
A1.8		
TENSION (COMPRESSION)		
	SA 15, 30, 60 kg	110
	SL 25, 100, 200, 300, 500, 1000, 2500 kg	112
	CTOL 50, 100, 200, 300 kg 500, 1000, 2500, 5000 kg	114
		
	CTL 100, 200, 300, 500, 1000, 2500, 5000, 7500, 10000, 12500 kg	116

SA

TENSION (COMPRESSION) LOAD CELLS

LAUMAS®


Capacity from 15 kg to 60 kg



- AISI 4140 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP65 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS C3		NET WEIGHT (kg)
	15	•	•	0.28
	30	•	•	0.28
	60	•	•	0.28

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

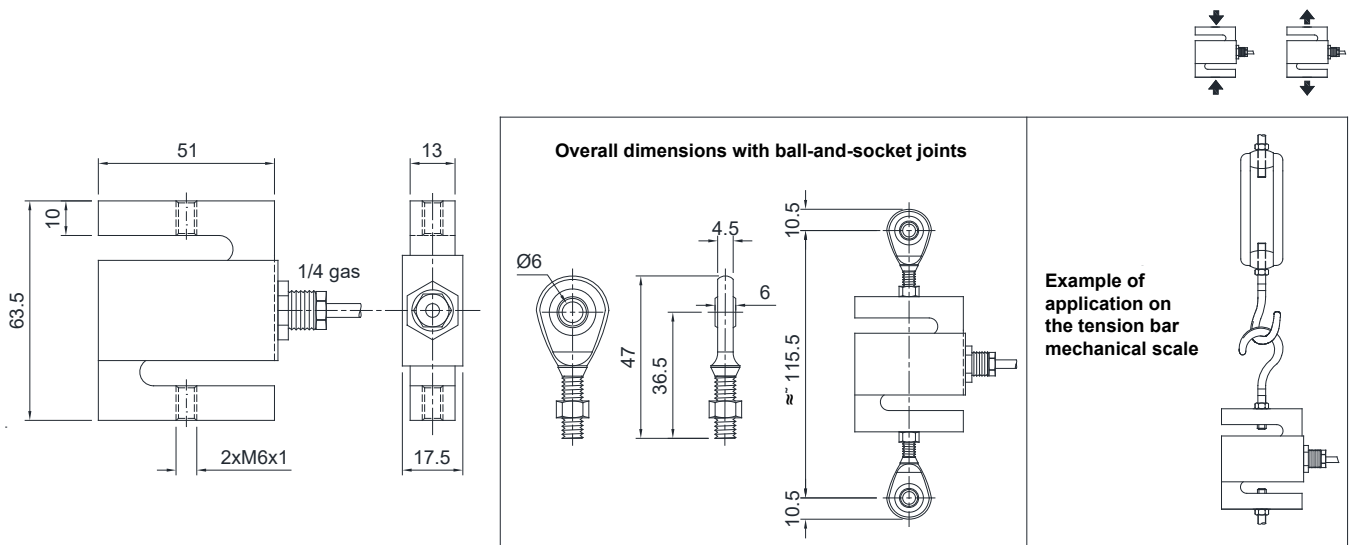
CERTIFICATIONS ON REQUEST

- Linearity test
- ATEX II 1GD (zone 0-1-2-20-21-22) (-)
- IECEx (zone 0-1-2-20-21-22)
- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Dimensions: Load cell capacity: galvanized C45 steel ball-and- socket joint with nut M6x1 15 ÷ 60 kg	EM

DIMENSIONS (mm)

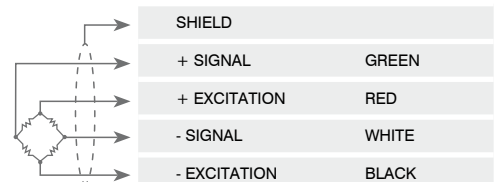


TECHNICAL FEATURES

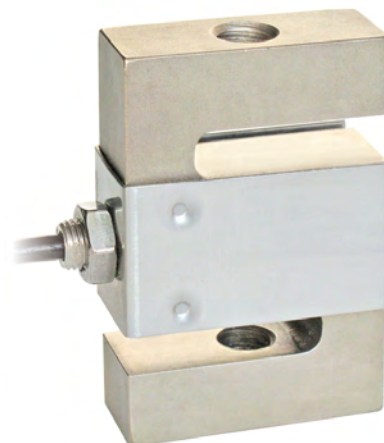
Material	AISI 4140 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	15 - 30 - 60 kg		
Minimum verification interval (V min)	E max / 8000		
Combined error	≤ ±0.02%		
Protection rating	IP65		
Rated output	2 mV/V ±10%	Input resistance	381 Ω ±10
Temperature effect on zero	0.0017% °C	Output resistance	350 Ω ±10
Temperature effect on span	0.0013% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	120%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.2 mm

ELECTRICAL CONNECTIONS

Cable length	3 m
Cable diameter	4 mm
Cores	4 x 0.24 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 25 kg to 2500 kg

- AISI 4340 NICKEL PLATED STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- IP67 PROTECTION RATING

CAPACITY	kg	ACCURACY CLASS				NET WEIGHT (kg)
		C3	C4			
25		–	–	–	–	0.4
100		•	•	•	•	0.6
200		•	•	–	•	0.6
300		•	•	–	•	0.6
500		•	•	•	•	0.7
1000		•	•	•	•	0.9
2500		•	•	•	•	1.6

ON REQUEST

CERTIFICATIONS



OIML R60 C3



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom



Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



OIML R60 C4



Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres



FM HazLoc - Complies with the United States and Canada standards for use in potentially explosive atmospheres



NTEP - Complies with United States regulations for legal for trade use

COMPLEMENTARY ACCESSORIES



DESCRIPTION

Ball-and-socket joint with nut:

stainless steel

DIMENSIONS

M12x1.75

M20x1.5

LOAD CELL CAPACITY

200-1000 kg

2500 kg

CODE

EM-INOX

galvanized C45 steel

M8x1.25

M10x1.5

M12x1.75

M20x1.5

25 kg

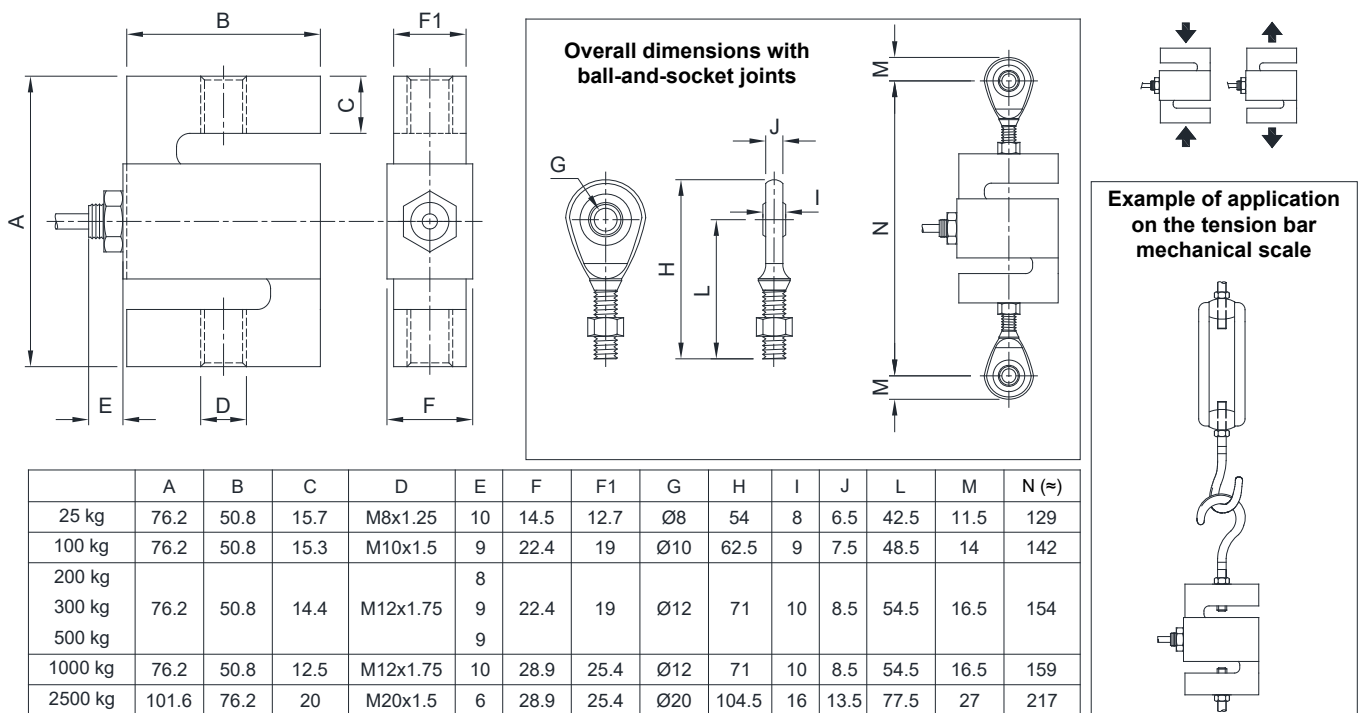
100 kg

200-1000 kg

2500 kg

EM

DIMENSIONS (mm)

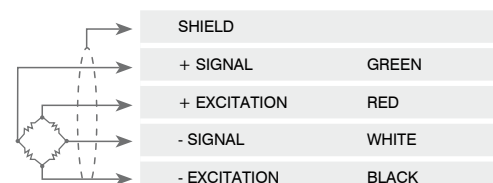


TECHNICAL FEATURES

Material	AISI 4340 nickel plated steel		
OIML R60 Accuracy class • Verification intervals	-	C3 • 3000	C4 • 4000
Nominal load (E max)	25 kg	100 - 200 - 300 kg 500 - 1000 - 2500 kg	100 - 200 - 300 kg 500 - 1000 - 2500 kg
Minimum verification interval (V min)	-	E max / 10000 E max / 15000	E max / 20000
Combined error	≤ ±0.02%	≤ ±0.02%	≤ ±0.017%
Protection rating	IP67		
Rated output	2 mV/V ±0.2%	Input resistance	350 Ω ±3.5
Temperature effect on zero	0.0015% °C	Output resistance	350 Ω ±3.5
Temperature effect on span	0.0017% °C	Zero balance	±1%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-35 °C / +65 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	5 m (25 - 300 kg); 10 m (500 - 2500 kg)
Cable diameter	5 mm
Cores	4 x 0.24 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 50 kg to 300 kg

Capacity from 500 kg to 5000 kg



- AISI 420 STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.03\%$
- IP67 PROTECTION RATING



CAPACITY	kg	NET WEIGHT (kg)
50		0.7
100		0.7
200		0.7
300		0.7
500		0.7
1000		1.4
2500		1.4
5000		2.7

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UKCA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UKCA)

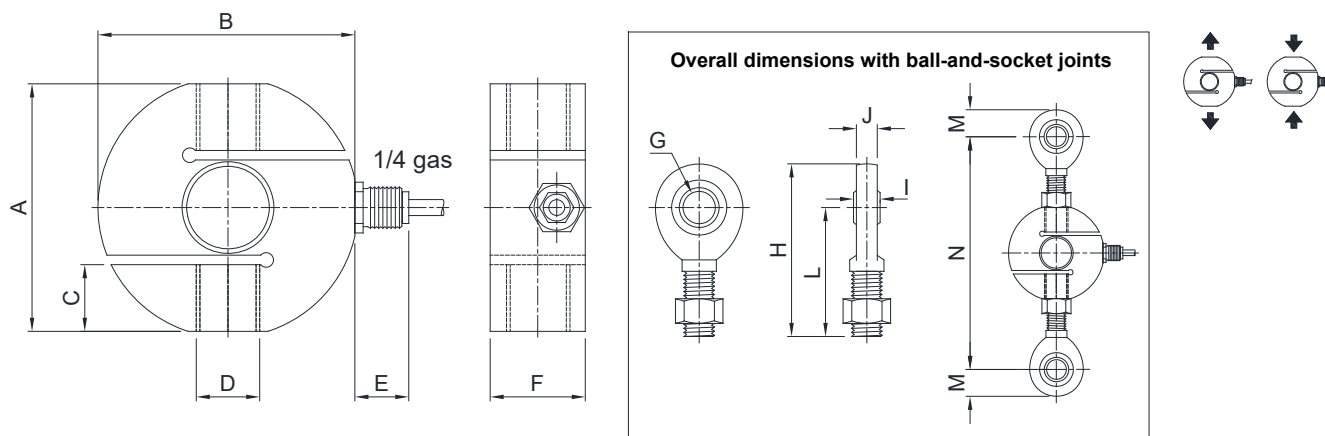
IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	DIMENSIONS	LOAD CELL CAPACITY	CODE
	Ball-and-socket joint with nut:			
	stainless steel	M12x1.75	50-500 kg	EM-INOX
		M16x2	1000 kg	
		M20x1.5	2500 kg	
		M24x2	5000 kg	
	galvanized C45 steel	M12x1.75	50-500 kg	EM
M16x2		1000 kg		
M20x1.5		2500 kg		
M24x2		5000 kg		

DIMENSIONS (mm)



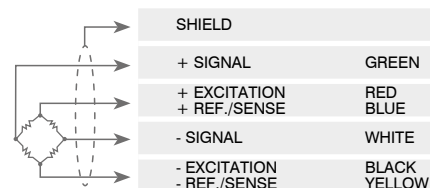
	A	B	C	D	E	F	G	H	I	J	L	M	N (≈)
50 kg 500 kg	59.5	63.5	14.5	M12x1.75	17	22	Ø12	71	10	8.5	54.5	16.5	140
1000 kg	78	82	21	M16x2	17	30	Ø17	92	14	11.5	69.5	22.5	176
2500 kg	78	82	21	M20x1.5	17	30	Ø20	104.5	16	13.5	77.5	27	191
5000 kg	90	102	24	M24x2	17	45	Ø25	126	20	17.5	94.5	31.5	230

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	50 - 100 - 200 - 300 - 500 - 1000 - 2500 - 5000 kg		
Combined error	≤ ±0.03%		
Protection rating	IP67		
Rated output	2 mV/V ±0.4%	Input resistance	385 Ω ±30
Temperature effect on zero	0.0025% °C	Output resistance	350 Ω ±10
Temperature effect on span	0.0025% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +40 °C	Insulation resistance	>2000 MΩ
Operating temperature range	-20 °C / +60 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	250%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	6 mm
Cores	6 x 0.20 mm ²

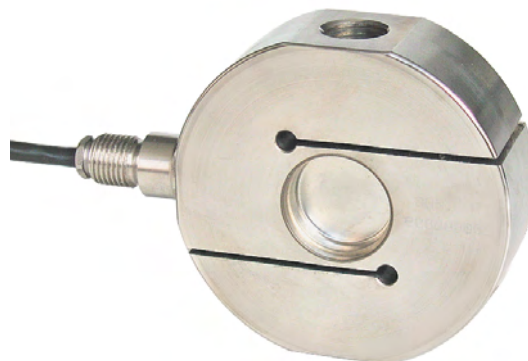


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 100 kg to 12500 kg

- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- IP68 PROTECTION RATING



CAPACITY	kg	ACCURACY CLASS C3			NET WEIGHT (kg)
100		–	–	–	0.7
200		–	–	–	0.7
300		–	–	–	0.7
500		•	•	•	1.4
1000		•	•	•	1.4
2500		•	•	•	1.4
5000		•	•	•	2.6
7500		•	•	•	2.7
10000		•	•	•	3.7
12500		•	•	•	4.8

ON REQUEST

CERTIFICATIONS

- OIML R60 C3
- Complies with the Eurasian Customs Union standards
- Equivalent of the CE marking for the United Kingdom
- Complies with United Kingdom regulations for legal for trade use

CERTIFICATIONS ON REQUEST

- Declaration of conformity + IP69K marking protection rating
Water protection in case of high-pressure or steam jet cleaning (test: pressurized water is sprayed from a distance of max 150 mm)
Water pressure: 100 bar; temperature: 80 °C; test duration: 250 seconds (reference standard: DIN 40050-9)

- Linearity test

- ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

- IECEx (zone 0-1-2-20-21-22)

- Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

- Complies with the regulations of the Russian Federation for legal for trade use


OPTIONS ON REQUEST

DESCRIPTION

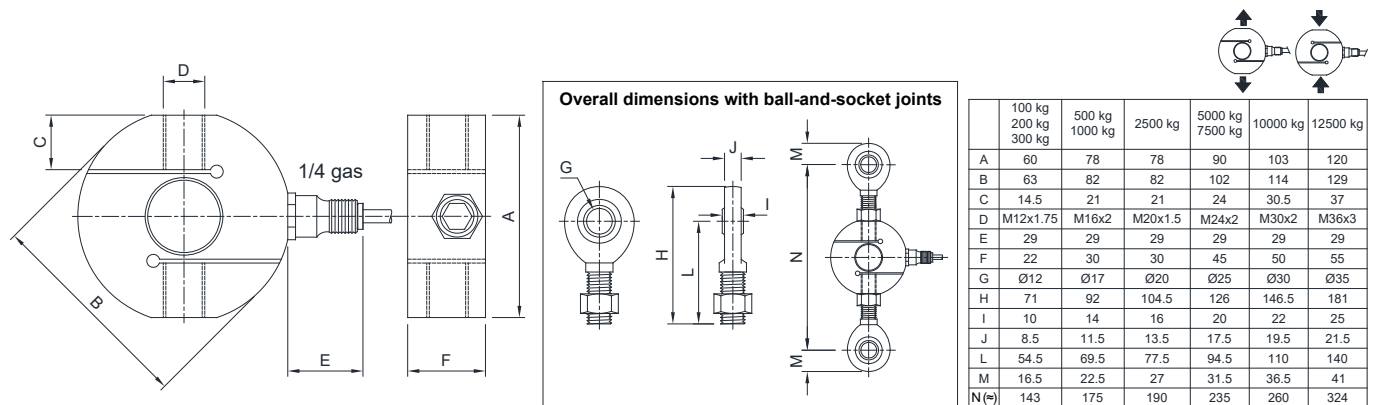


Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems.

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	DIMENSIONS	LOAD CELL CAPACITY	CODE
	Ball-and-socket joint with nut:			
	stainless steel	M12x1.75	100-300 kg	EM-INOX
		M16x2	500-1000 kg	
		M20x1.5	2500 kg	
		M24x2	5000-7500 kg	
	galvanized C45 steel	M12x1.75	100-300 kg	EM
		M16x2	500-1000 kg	
		M20x1.5	2500 kg	
		M24x2	5000-7500 kg	
		M30x2	10000 kg	
M36x3		12500 kg		

DIMENSIONS (mm)

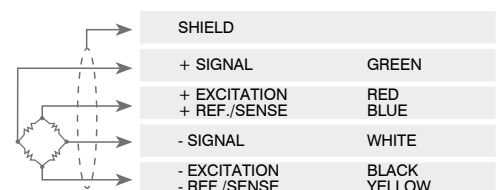


TECHNICAL FEATURES



Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	-		C3 • 3000
Nominal load (E max)	100 - 200 - 300 kg	500 - 1000 - 2500 - 5000 kg 7500 - 10000 - 12500 kg	
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.02%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	350 Ω ±5
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±2
Temperature effect on span	0.003% °C	Zero balance	±1%
Temperature range OIML R60	-10 °C / +40 °C	Insulation resistance	≥5000 MΩ
Compensated temperature range	-20 °C / +70 °C	Safe overload (% of full scale)	150%
Operating temperature range	-30 °C / +90 °C	Ultimate overload (% of full scale)	300%
Creep at nominal load in 30 minutes	0.05%	Deflection at nominal load	0.3 mm
Max supply voltage without damage	15 V		

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.

	CAPACITY	PAGE
A1.9	TENSION	
	TAL 5000, 10000, 20000 kg	120
	TBT 30000, 40000, 50000, 60000, 100000, 250000 kg	122



Manufactured according to OIML R60 standards

Capacity from 5000 kg to 20000 kg



- 17-4 PH STAINLESS STEEL
- HOLES FOR STANDARD SHACKLES
- COMBINED ERROR $\leq \pm 0.03\%$
- IP68 PROTECTION RATING

CAPACITY	kg	NET WEIGHT (kg)
5000		4.5
10000		4.6
20000		6.6

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

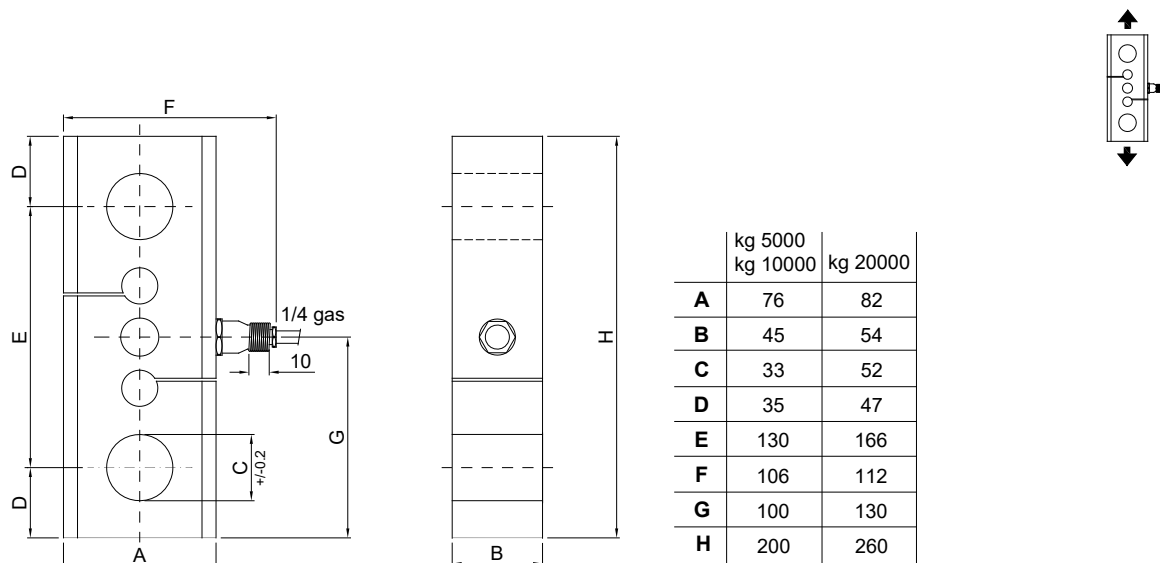
OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems.

DIMENSIONS (mm)

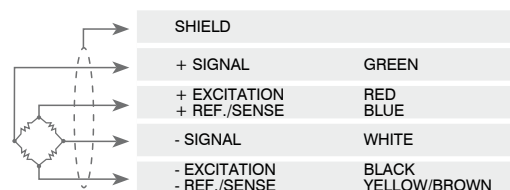


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	5000 - 10000 - 20000 kg		
Combined error	≤ ±0.03%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	350 Ω ±5
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.003% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards



Capacity 250000 kg



IP67

- 17-4 PH STAINLESS STEEL
- HOLES FOR STANDARD SHACKLES
- COMBINED ERROR $\leq \pm 0.08\%$
- IP67 - IP68 PROTECTION RATING



Capacity from 30000 kg to 100000 kg



IP68

CAPACITY	kg	NET WEIGHT (kg)
30000		11
40000		11
50000		11
60000		11
100000		-
250000		64

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE** - **UK CA**)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

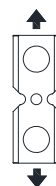
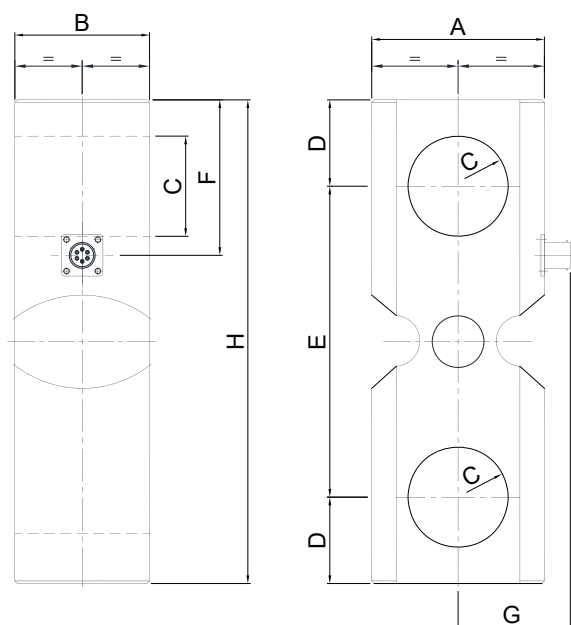
OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems.

DIMENSIONS (mm)



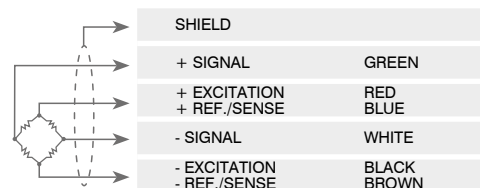
	kg 30000 kg 40000 kg 50000 kg 60000	kg 100000	kg 250000
A	100	127	240
B	78	88	110
C	Ø 58	Ø 71	Ø 102
D	50	70	120
E	180	200	360
F	90	120	185
G	65	68	136
H	280	340	600



TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	30000 - 40000 - 50000 - 60000 - 100000 - 250000 kg		
Combined error	≤ ±0.08%		
Protection rating	IP68 (30000 - 100000 kg), IP67 (250000 kg)		
Rated output	1.0 mV/V ±0.1%	Input resistance	350 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	6 mm
Cores	6 x 0.14 mm ²



		PAGE
	A1.10	DIGITAL LOAD CELLS
	LCB	126
	LCB 3A	129

LCB

UNIVERSAL LOAD CELLS DIGITIZER

LAUMAS®



COMING SOON



DESCRIPTION

- LCB transforms an analog load cell (mV/V output) into a digital one; it can also be used on existing load cells to digitize the weighing system.
- Conceived for IoT applications (Internet of Things).
- PC configuration software via micro USB port.
- Status LED of the communication interface.
- Mounting: wired or integral to the load cell body via standard ¼ GAS fitting (specific adapters for different threads are supplied on request).
- IP67 box in AISI 304 stainless steel or PA66 nylon reinforced with glass fiber (dimensions: 90x40x107 mm including flying connectors).
- Suitable for wall mounting (supports included: 2 fixing holes Ø 6 mm; centre distance: 68 mm).
- 3x IP67 M12 flying connectors included in the supply.
- The instrument can be configured and managed using the free "Instrument Manager" PC software, which you can download from www.laumas.com.

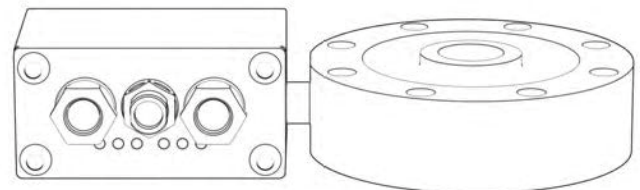
INPUTS/OUTPUTS AND COMMUNICATION

- 1 micro USB port.
- 3 relay outputs controlled by the setpoint values or via protocols.
- 2 digital inputs: status reading via serial communication protocols.
- 1 load cell input.

SUPPORTS FOR WALL MOUNTING



MICRO USB FOR PC CONFIGURATION



EXAMPLE OF APPLICATION WITH LOAD CELL

CERTIFICATIONS

- EAC** Complies with the Eurasian Customs Union standards
- UK CA** Equivalent of the CE marking for the United Kingdom

FIELD BUSES

MODBUS RTU

MODBUS/TCP

ETHERNET TCP/IP

ETHERNET POWERLINK

EtherCAT

EtherNet/IP

PROFINET

PROFINET

CC-Link

CC-Link IE Field Basic

IO-Link

CANopen

SERCOS interface

INTERFACES AND FIELDBUSES

stainless steel

plastic

RS485.

Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.
 Baud rate: 2400, 4800, 9600, 19200, 38400, 115200 (bit/s).

coming soon

RS485 + analog output.

Current: 0÷20 mA; 4÷20 mA (up to 400 Ω).
 Voltage: 0÷10 V; 0÷5 V (min 2 kΩ).
 Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.

IO-Link.

2x male M12 circular connector, A-coded, 4-pin.
 The instrument works as *device* in a IO-Link network.

CANopen.

Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.
 The instrument works as *slave* in a CANopen synchronous network.

CC-Link IE Field Basic.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a CC-Link IE Field Basic network.

CC-Link.

Male M12 circular connector, A-coded, 4-pin.
 Female M12 circular connector, A-coded, 5-pin.
 The instrument works as *Remote Device Station* in a CC-Link network and occupies 3 stations.

coming soon

Profibus DP.

Male M12 circular connector, B-coded, 5-pin.
 Female M12 circular connector, B-coded, 5-pin.
 The instrument works as *slave* in a Profibus DP network.

coming soon

Modbus/TCP.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Modbus/TCP network.

Ethernet TCP/IP.

Female M12 circular connector, D-coded, 4-pin.
 The instrument works in an Ethernet TCP/IP network and it is accessible via web browser.

coming soon

Ethernet/IP.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *adapter* in an Ethernet/IP network.

Profinet IO.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *device* in a Profinet IO network.

EtherCAT.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in an EtherCAT network.

POWERLINK.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Powerlink network.

SERCOS III.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Sercos III network.

MAIN FUNCTIONS

- Connections to:
 - PLC via analog output or fieldbuses;
 - PC/PLC via RS485 (up to 99 instruments with line repeaters, up to 32 without line repeaters);
 - up to 4 load cells in parallel by junction box.
- TCP/IP WEB APP: integrated software in combination with the Ethernet TCP/IP version for remote supervision, management and control of the instrument.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via PC software) and real calibration (with sample weights and the possibility of weight linearization up to 8 points).
- Calibration via characterization values of the load cell.
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.
- Semi-automatic tare (net/gross weight) and preset tare.
- Semi-automatic zero.
- Direct connection between RS485 and RS232 without converter.
- Configuration backup and restore via PC software.

BASE PROGRAM

- Hysteresis and setpoint value setting.

SINGLE PRODUCT LOADING PROGRAM

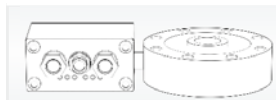
- 99 settable formulas.
- Automatic fall calculation.
- Tolerance error control.
- Precision batching through slow function.
- Precision batching through tapping function.
- Consumption storage.
- Batching start via external contact or fieldbus.

TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 5 W
Number of load cells • Load cells supply	up to 4 (350 Ω) - 4/6 wires • 3.3 VDC/40 mA
Linearity • Analog output linearity	<0.01% full scale • <0.01% full scale
Thermal drift • Analog output thermal drift	<0.0005% full scale/°C • <0.003% full scale/°C
A/D Converter	24 bit (16000000 points) - 4.8 kHz
Divisions (with measurement range ±10 mV and sensitivity 2 mV/V)	±999999 • 6.6 nV/d
Measurement range	±26 mV
Usable load cells sensitivity	±7 mV/V
Conversions per second	500/s
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	3 filter types • 5÷500 Hz
Relay outputs	3 - max 115 VAC/150 mA - 24 VDC/200 mA
Digital inputs	2 - 5÷24 VDC
Micro USB port	B type - USB 2.0 (full-speed)
Humidity (condensate free)	85%
Storage temperature	-30 °C +80 °C
Working temperature	-20 °C +50 °C

OPTIONS ON REQUEST

DESCRIPTION

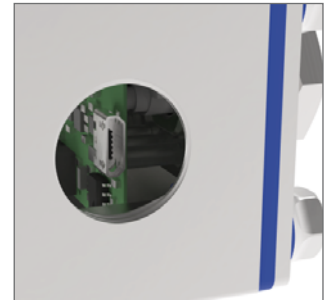


Load cell + instrument wiring.

The Company reserves the right to make changes to the technical data, drawings and images without notice.



COMING SOON

MICRO USB FOR
PC CONFIGURATION

DESCRIPTION

- LCB3A transforms an analog load cell (mV/V output) into a digital one; it can also be used on existing load cells to digitize the weighing system.
- Hygienic device RPSCQC authorized by 3-A SSI.
- Conceived for IoT applications (Internet of Things).
- PC configuration software via micro USB port.
- Status LED of the communication interface.
- Mounting: wired or integral to the load cell body via standard 1/4 GAS fitting (specific adapters for different threads are supplied on request).
- IP67 AISI 304 stainless steel box (dimensions: 90x40x107 mm including flying connectors).
- 3 M12 hygienic connectors with solder terminals included in the supply.
- The instrument can be configured and managed using the free "Instrument Manager" PC software, which you can download from www.laumas.com.

INPUTS/OUTPUTS AND COMMUNICATION

- 1 micro USB port.
- 3 relay outputs controlled by the setpoint values or via protocols.
- 2 digital inputs: status reading via serial communication protocols.
- 1 load cell input.



CERTIFICATIONS



Complies with the Eurasian Custom Union standards



Equivalent of the CE marking for the United Kingdom



American standard that regulates the design, production and use of hygienic equipment

FIELDBUSES

MODBUS RTU**MODBUS/TCP****ETHERNET
TCP/IP****ETHERNET
POWERLINK****EtherCAT****EtherNet/IP****PROFI
BUS****PROFI
NET****CC-Link****CC-Link IE
Field
Basic****IO-Link****CANopen****SERCOS
interface**

INTERFACES AND FIELDBUSES

RS485.

Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.
 Baud rate: 2400, 4800, 9600, 19200, 38400, 115200 (bit/s).

coming soon

RS485 + analog output.

Current: 0÷20 mA; 4÷20 mA (up to 400 Ω).
 Voltage: 0÷10 V; 0÷5 V (min 2 kΩ).
 Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.

IO-Link.

2x male M12 circular connector, A-coded, 4-pin.
 The instrument works as *device* in a IO-Link network.

CANopen.

Male M12 circular connector, A-coded, 5-pin.
 Female M12 circular connector, A-coded, 5-pin.
 The instrument works as *slave* in a CANopen synchronous network.

CC-Link IE Field Basic.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a CC-Link IE Field Basic network.

CC-Link.

Male M12 circular connector, A-coded, 4-pin.
 Female M12 circular connector, A-coded, 5-pin.
 The instrument works as *Remote Device Station* in a CC-Link network and occupies 3 stations.

coming soon

Profibus DP.

Male M12 circular connector, B-coded, 5-pin.
 Female M12 circular connector, B-coded, 5-pin.
 The instrument works as *slave* in a Profibus DP network.

coming soon

Modbus/TCP.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Modbus/TCP network.

Ethernet TCP/IP.

Female M12 circular connector, D-coded, 4-pin.
 The instrument works in an Ethernet TCP/IP network and it is accessible via web browser.

coming soon

Ethernet/IP.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *adapter* in an Ethernet/IP network.

Profinet IO.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *device* in a Profinet IO network.

EtherCAT.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in an EtherCAT network.

POWERLINK.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Powerlink network.

SERCOS III.

2x female M12 circular connectors, D-coded, 4-pin.
 The instrument works as *slave* in a Sercos III network.

MAIN FUNCTIONS

- Connections to:
 - PLC via analog output or fieldbuses;
 - PC/PLC via RS485 (up to 99 instruments with line repeaters, up to 32 without line repeaters);
 - up to 4 load cells in parallel by junction box.
- TCP/IP WEB APP: integrated software in combination with the Ethernet TCP/IP version for remote supervision, management and control of the instrument.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via PC software) and real calibration (with sample weights and the possibility of weight linearization up to 8 points).
- Calibration via characterization values of the load cell.
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.
- Semi-automatic tare (net/gross weight) and preset tare.
- Semi-automatic zero.
- Direct connection between RS485 and RS232 without converter.
- Configuration backup and restore via PC software.

BASE PROGRAM





- Hysteresis and setpoint value setting.

SINGLE PRODUCT LOADING PROGRAM

- 99 settable formulas.
- Automatic fall calculation.
- Tolerance error control.
- Precision batching through slow function.
- Precision batching through tapping function.
- Consumption storage.
- Batching start via external contact or fieldbus.

TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 5 W
Number of load cells • Load cells supply	up to 4 (350 Ω) - 4/6 wires • 3.3 VDC/40 mA
Linearity • Analog output linearity	<0.01% full scale • <0.01% full scale
Thermal drift • Analog output thermal drift	<0.0005% full scale/°C • <0.003% full scale/°C
A/D Converter	24 bit (16000000 points) - 4.8 kHz
Divisions (with measurement range ±10 mV and sensitivity 2 mV/V)	±999999 • 6.6 nV/d
Measurement range	±26 mV
Usable load cells sensitivity	±7 mV/V
Conversions per second	500/s
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Readings per second	3 filter types • 5÷500 Hz
Relay outputs	3 - max 115 VAC/150 mA - 24 VDC/200 mA
Digital inputs	2 - 5÷24 VDC
Micro USB port	B type - USB 2.0 (full-speed)
Humidity (condensate free)	85%
Storage temperature	-30 °C +80 °C
Working temperature	-20 °C +50 °C

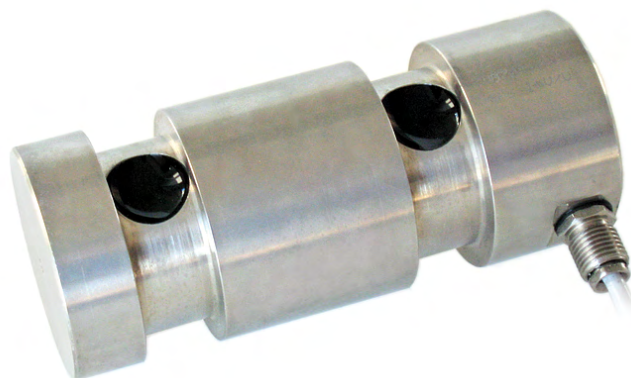
	CAPACITY		PAGE
A1.11	SPECIAL LOAD CELLS		
A1.11.1	pin		
 LAU	5000, 10000, 20000 kg		134
A1.11.2	for foot brake		
 LPED	100 kg		136
A1.11.3	anchor		
 CA	30000, 50000, 75000, 100000, 125000, 150000, 180000, 250000 kg		138
	CAPACITY	ROPE Ø MM	PAGE
A1.11.4	for wire rope measuring		
 FUN	2000 kg 4000 kg 10000 kg 20000 kg 40000 kg	6÷14 mm 10÷18 mm 16÷26 mm 24÷36 mm 24÷36 mm	140



Manufactured according to OIML R60 standards

Capacity from 5000 kg to 20000 kg

- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.1\%$
- IP67 PROTECTION RATING



CAPACITY	kg	NET WEIGHT (kg)
5000		2.9
10000		3.2
20000		3.4

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

⚠ ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

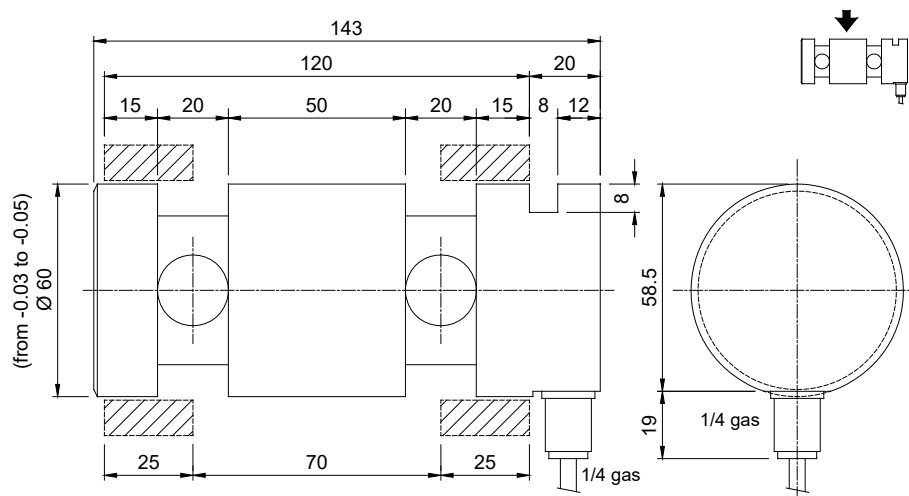
OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

DIMENSIONS (mm)

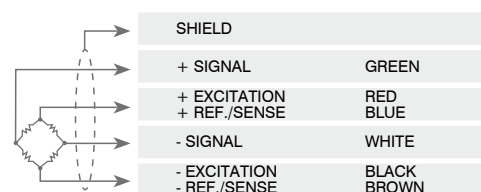


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	5000 - 10000 - 20000 kg		
Combined error	≤ ±0.1%		
Protection rating	IP67		
Rated output	1 mV/V ±0.1%	Input resistance	350 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	350 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	400%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²





Manufactured according to OIML R60 standards

Capacity 100 kg



- ALUMINUM
- COMBINED ERROR $\leq \pm 0.08\%$
- IP65 PROTECTION RATING
- FLEXIBLE CABLE

CAPACITY	kg	NET WEIGHT (kg)
	100	0.4

CERTIFICATIONS



Complies with the Eurasian Customs Union standards



Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST



Linearity test



ATEX II 1GD (zone 0-1-2-20-21-22) (CE - UK CA)



IECEx (zone 0-1-2-20-21-22)



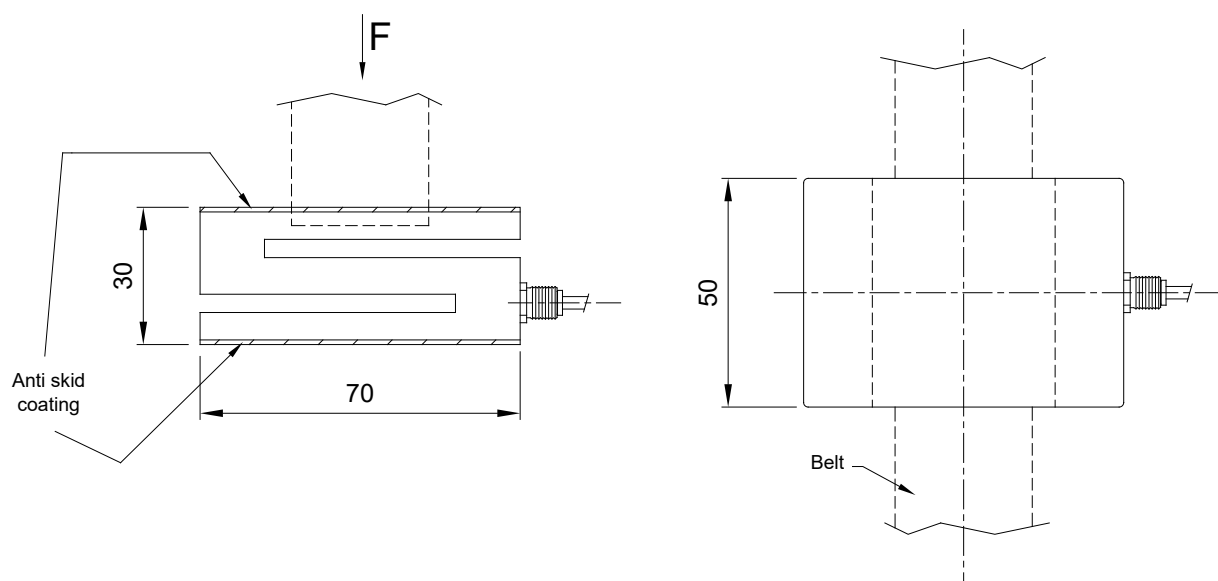
Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

OPTIONS ON REQUEST

DESCRIPTION



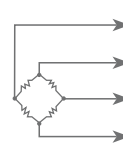
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

DIMENSIONS (mm)**TECHNICAL FEATURES**

Material	Aluminum		
Nominal load (E max)	100 kg		
Combined error	$\leq \pm 0.08\%$		
Protection rating	IP65		
Rated output	1 mV/V $\pm 0.2\%$	Input resistance	350 Ω ± 50
Temperature effect on zero	0.005% $^{\circ}\text{C}$	Output resistance	350 Ω ± 5
Temperature effect on span	0.003% $^{\circ}\text{C}$	Zero balance	$\pm 1\%$
Compensated temperature range	-20 $^{\circ}\text{C}$ / +70 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-30 $^{\circ}\text{C}$ / +90 $^{\circ}\text{C}$	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.25 mm

ELECTRICAL CONNECTIONS

Cable length	2 m
Cable diameter	5 mm
Cores	4 x 0.25 mm ²



+ SIGNAL	BROWN
+ EXCITATION	BLUE
- SIGNAL	WHITE
- EXCITATION	BLACK



Manufactured according to OIML R60 standards

Capacity from 30000 kg to 250000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.1\%$
- IP68 PROTECTION RATING

CAPACITY	kg	Ø INTERNAL	Ø EXTERNAL	NET WEIGHT (kg)
30000		50 mm	163 mm	5
50000		50 mm	163 mm	5
75000		50 mm	163 mm	5
50000		75 mm	163 mm	5
75000		75 mm	163 mm	5
75000		120 mm	229 mm	9
100000		120 mm	229 mm	9
125000		120 mm	229 mm	9
125000		165 mm	275 mm	14
150000		165 mm	275 mm	14
180000		165 mm	275 mm	14
180000		225 mm	320 mm	20
250000		225 mm	320 mm	20

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

CERTIFICATIONS ON REQUEST

✓ Linearity test

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

OPTIONS ON REQUEST

DESCRIPTION



Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems.

COMPLEMENTARY ACCESSORIES



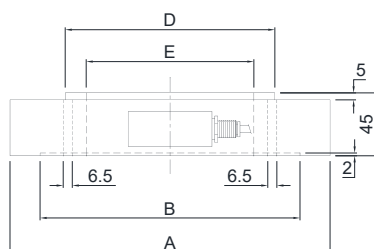
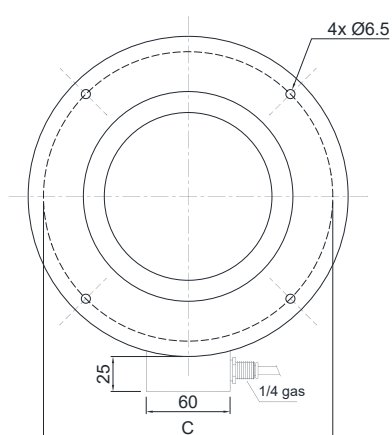
DESCRIPTION

Galvanized steel plates for load distribution.

CODE

PIAS

TECHNICAL FEATURES - DIMENSIONS

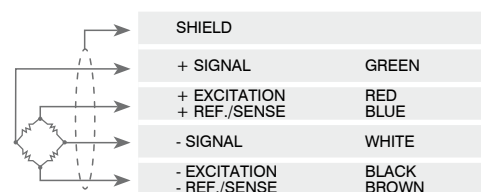


	30000 - 75000 kg	50000 - 75000 kg	75000 - 125000 kg	125000 - 180000 kg	180000 - 250000 kg
A	163	163	229	275	320
B	131.5	131.5	186.5	231	285
C	145	145	207	252	302
D	95	95	150	195	250
E	50	75	120	165	225
kg	5	5	9	14	20

Material	17-4 PH stainless steel		
Nominal load (E max)	30000 - 50000 - 75000 - 100000 - 125000 - 150000 - 180000 - 250000 kg		
Combined error	≤ ±0.1%		
Protection rating	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±20
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±5
Temperature effect on span	0.005% °C	Zero balance	±1%
Compensated temperature range	-20 °C / +70 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +90 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	5 m
Cable diameter	5 mm
Cores	6 x 0.14 mm ²

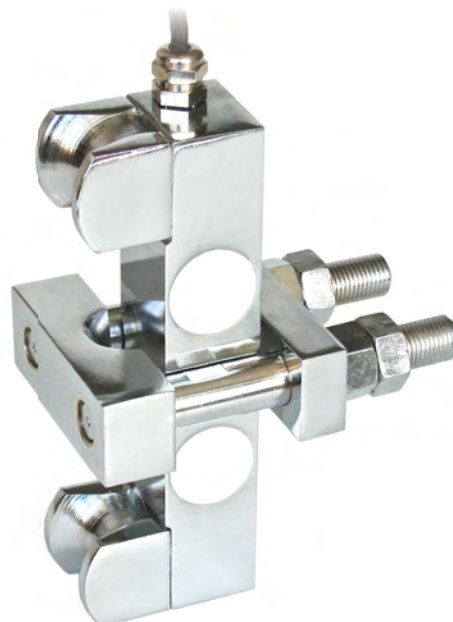




Manufactured according to OIML R60 standards

Capacity from 2000 kg to 40000 kg

- AISI 4140 NICKEL PLATED STEEL
- LOAD LIMITING ACCURACY $\pm 2\%$ ON FULL SCALE
- IP67 PROTECTION RATING
- SUITABLE AS LOAD LIMITER FOR LIFTING EQUIPMENT
- RAPID MOUNTING (also on pre-existing lifting systems)



WIRE ROPE TENSION	kg	DIAMETER ROPE (mm)	NET WEIGHT (kg)
up to	2000	Ø 6 ÷ Ø 14	2.4
up to	4000	Ø 10 ÷ Ø 18	2.4
up to	10000	Ø 16 ÷ Ø 26	2.4
up to	20000	Ø 24 ÷ Ø 36	7.5
up to	40000	Ø 24 ÷ Ø 36	7.5

CERTIFICATIONS

EAC Complies with the Eurasian Customs Union standards

UK CA Equivalent of the CE marking for the United Kingdom

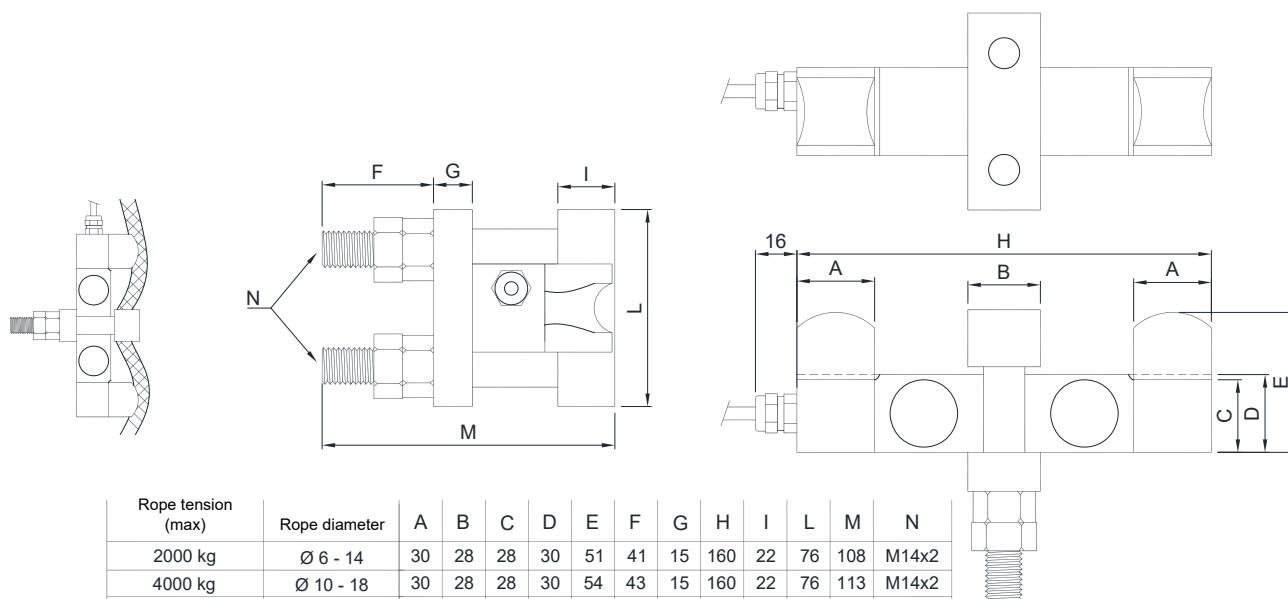
CERTIFICATIONS ON REQUEST

Ex ATEX II 1GD (zone 0-1-2-20-21-22) (**CE - UK CA**)

IECEx (zone 0-1-2-20-21-22)

EAC Ex Complies with the Eurasian Customs Union standards for use in potentially explosive atmospheres

DIMENSIONS (mm)



Rope tension (max)	Rope diameter	A	B	C	D	E	F	G	H	I	L	M	N
2000 kg	Ø 6 - 14	30	28	28	30	51	41	15	160	22	76	108	M14x2
4000 kg	Ø 10 - 18	30	28	28	30	54	43	15	160	22	76	113	M14x2
10000 kg	Ø 16 - 26	30	28	28	30	56	43	15	160	22	76	119	M14x2
20000 kg	Ø 24 - 36	45	39	40	45	82	67	24	260	34	108	173	M18x2,5
40000 kg	Ø 24 - 36	45	39	40	45	82	67	24	260	34	108	173	M18x2,5

SCREW TIGHTENING TORQUES

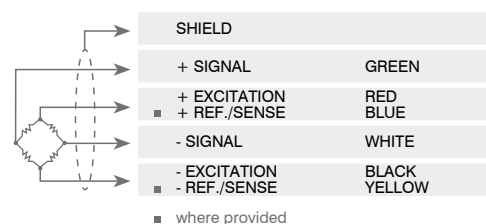
Diameter of the steel cable (mm)	5	6 - 6.5	7 - 8	9 - 10	11 - 13	14	15 - 16	17 - 19	20 - 22	23 - 26	28 - 30	32 - 34	36 - 40
Tightening torque (Nm)	2.0	5.2	6.0	9.0	20	25	30	42	51	67	75	88	106

TECHNICAL FEATURES

Material	AISI 4140 nickel plated steel		
Nominal load (E max)	2000 - 4000 - 10000 - 20000 - 40000 kg		
Load limiting accuracy on full scale	±2%		
Protection rating	IP67		
Rated output	3 mV/V ±0.1%	Input resistance	450/750/1050 Ω ±50
Temperature effect on zero	0.005% °C	Output resistance	350/700/1000 Ω ±20
Temperature effect on span	0.005% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +70 °C	Safe overload (% of full scale)	150%
Creep at nominal load in 30 minutes	0.03%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.5 mm

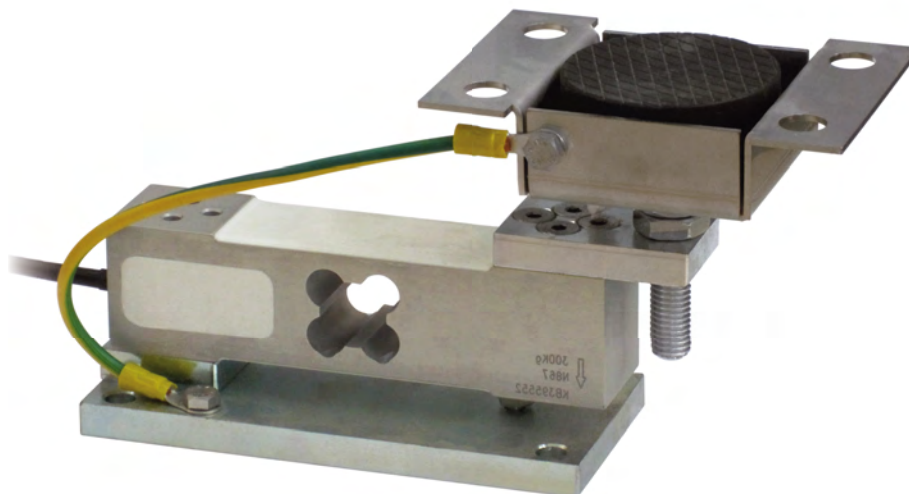
ELECTRICAL CONNECTIONS

Cable length	6 m
Cable diameter	5 mm
Cores	4/6 x 0.14 mm ²





	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.1	for SINGLE-POINT load cells		
T8	up to 300 kg	AZL, AZLI, AZS, AM	144

Series load cells: AZLI - AZL - AZS - AM**Up to 300 kg application range**

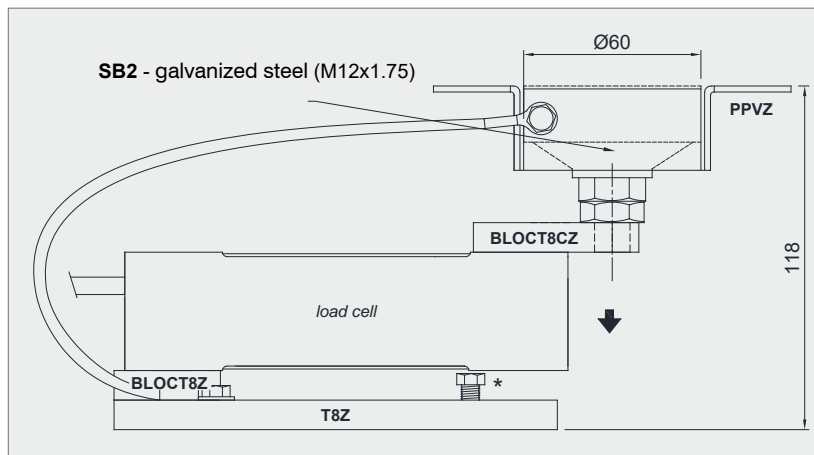
MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	200	AZLI (max 50 kg) - AZL - AZS	1.7	T8AZL
	300	AM	1.7	T8AM

*Load cell not included***DESCRIPTION**

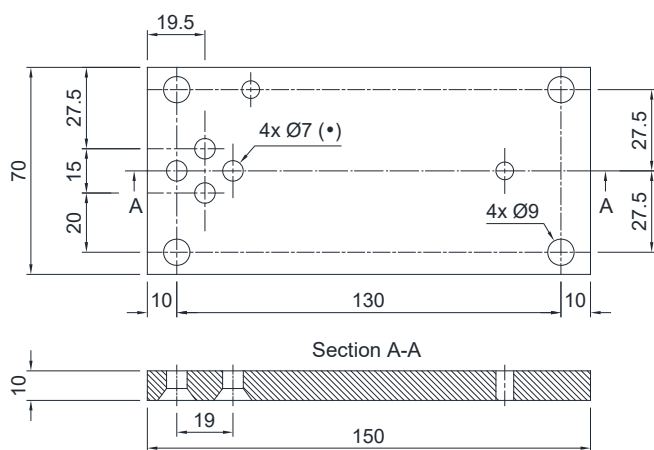
- Adjustable upper plate in galvanized steel (PPVZ).
- Lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by galvanized steel self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

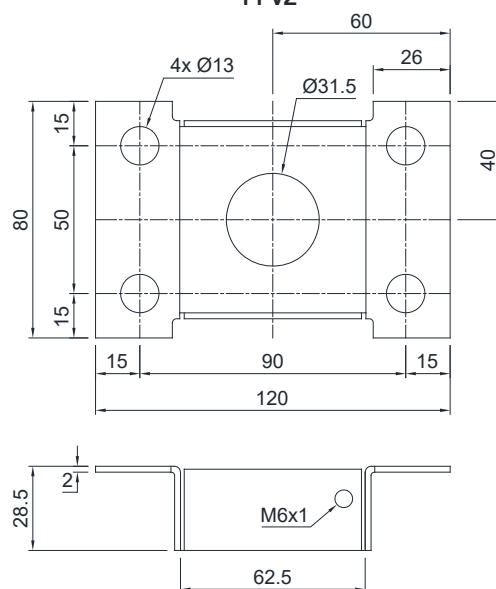
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you must proceed to adjust foot height.
- For the load cell fixing screws (*), provide a tightening torque of 7.5 Nm.



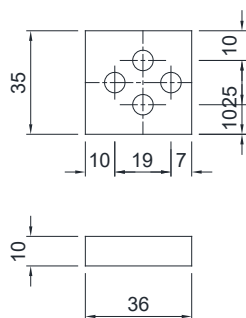
T8Z



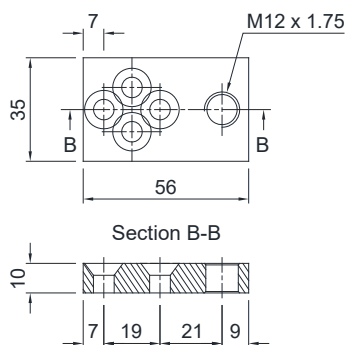
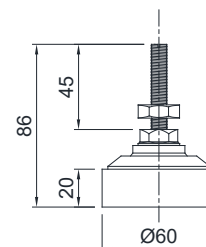
PPVZ



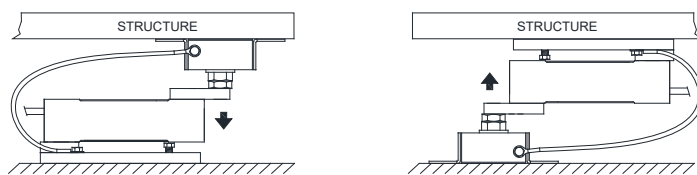
BLOCT8Z



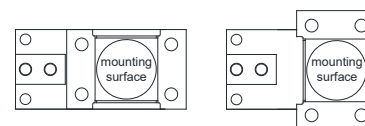
BLOCT8CZ

SB2 - galvanized steel
(M12x1.75 mm)

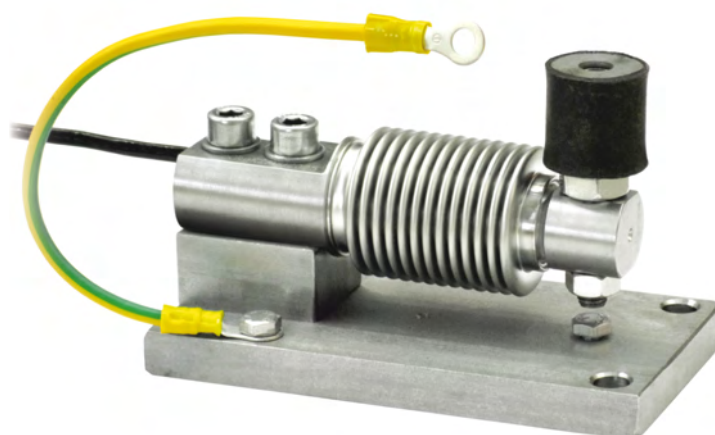
FIXING TO THE WEIGHED STRUCTURE



POSSIBLE UPPER PLATE POSITIONS



	APPLICATION RANGE	FOR LOAD CELLS	PAGE	
A2.2	for BENDING BEAM load cells			
	TFCFSB	up to 300 kg	FCK, FCOL	148
	TFCPV	up to 300 kg	FCK, FCOL	150
	TFCGP	up to 300 kg	FCK, FCOL	152
	TFFSB	up to 500 kg	FCAL, FCAX	154
	TFAST	up to 500 kg	FCAL, FCAX	156
	TFPVEN1090	up to 1500 kg	FCAL, FCAX	158
	TFPV	up to 1500 kg	FCAL, FCAX	160
	TFGP	up to 1500 kg	FCAL, FCAX	162
	T12	up to 2000 kg	FCAL, FCAX FTK, FTKL, FTP, FT-P, FTZ	164

Series load cells: FCK - FCOL**Up to 300 kg application range**

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
300	FCK - FCOL	1.2	TFCFSB

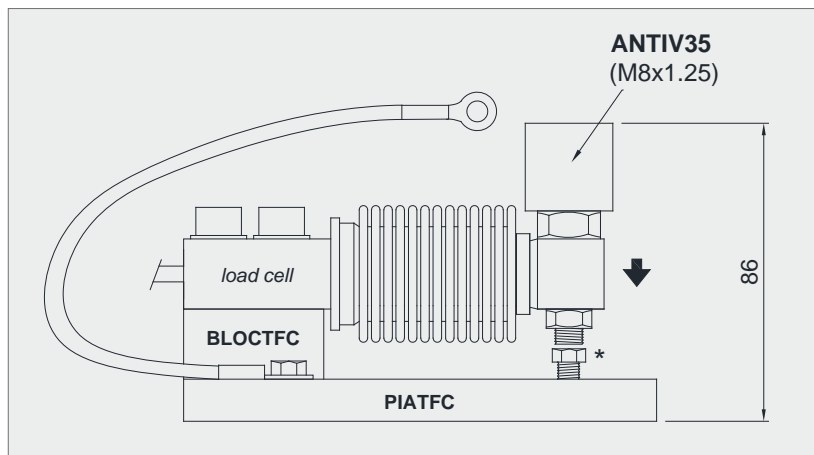
Load cell not included.

DESCRIPTION

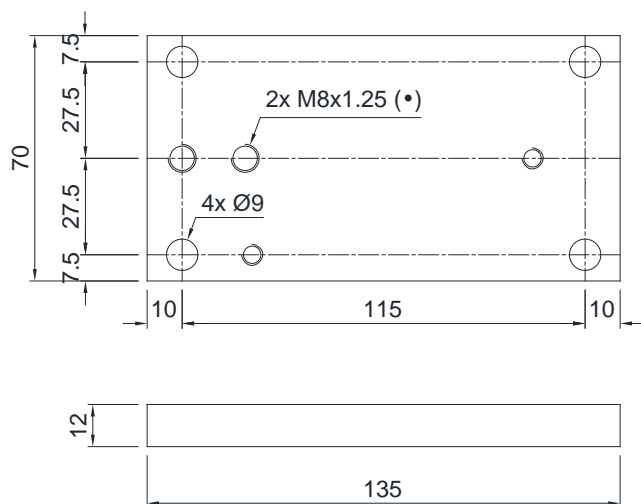
- Compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

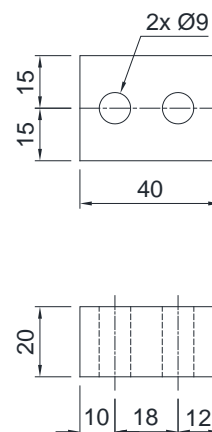
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 19 Nm.



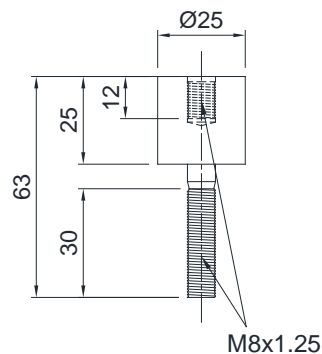
PIATFC



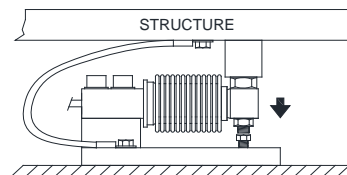
BLOCTFC

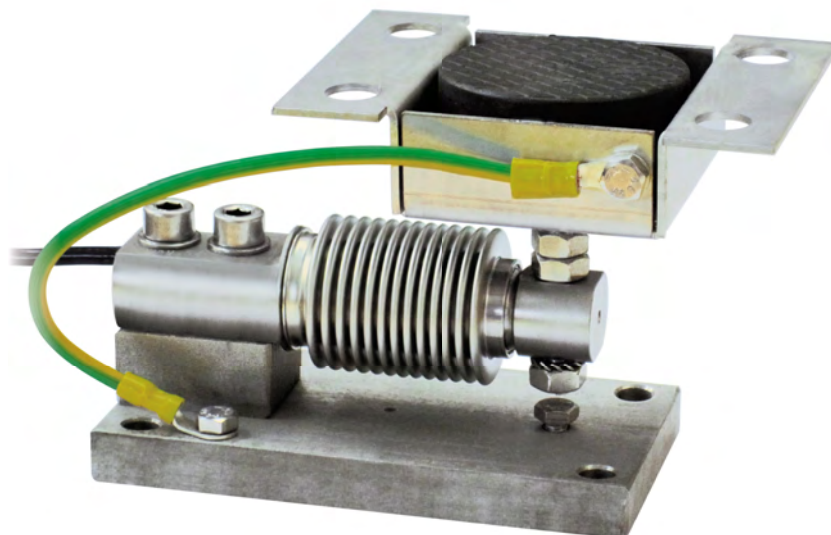


ANTIV35



FIXING TO THE WEIGHED STRUCTURE



Series load cells: FCK - FCOL**Up to 300 kg application range**

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
200	FCK - FCOL	1.7	TFCPV
200	FCK - FCOL	1.7	TFCPVZ
300	FCOL (350 - 500 kg)	1.7	TFCPV10
300	FCOL (350 - 500 kg)	1.7	TFCPVZ10

Load cell not included

DESCRIPTION

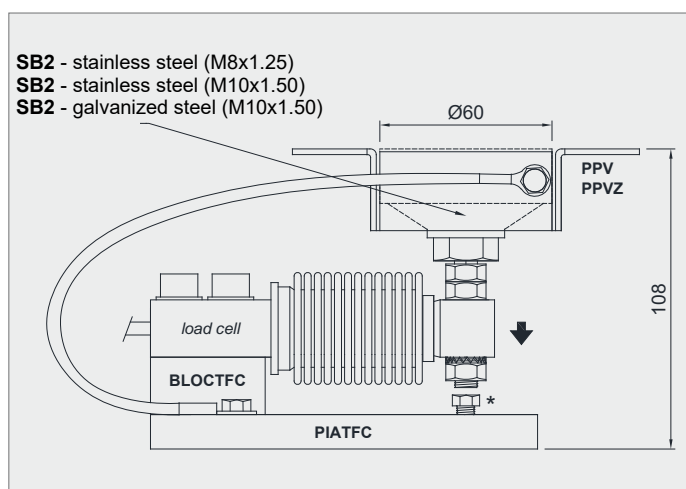
- Adjustable upper plate in AISI 304 stainless steel (PPV) or galvanized steel (PPVZ).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel (TFCPV, TFCPVZ, TFCPV10) or galvanized steel (TFCPVZ10) self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Partial height adjustment.
- Locking screw to avoid damage during transport and installation.

TFCPV

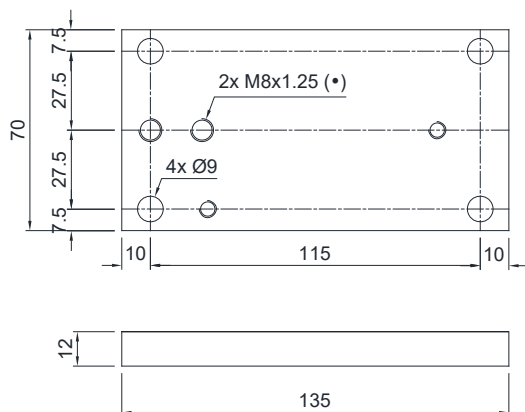
MOUNTING KIT for BENDING BEAM load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

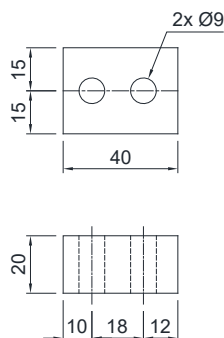
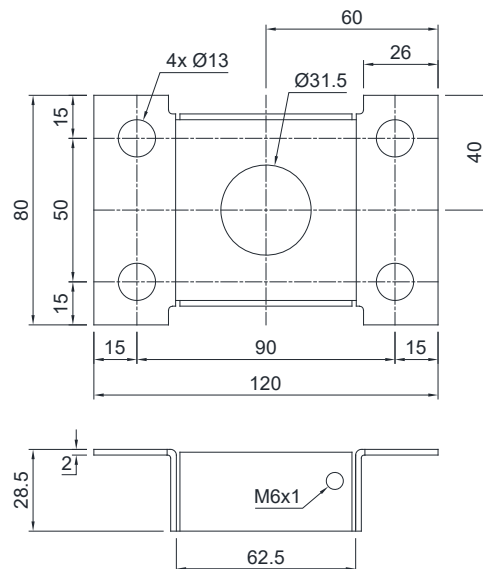
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 19 Nm.



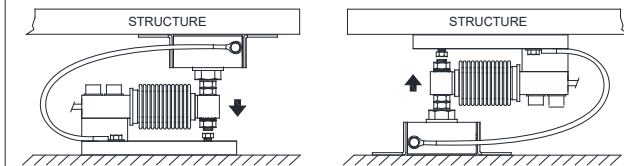
PIATFC



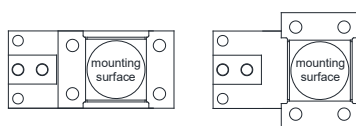
BLOCTFC

PPV
PPVZ

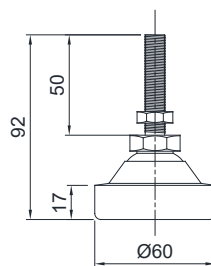
FIXING TO THE WEIGHED STRUCTURE



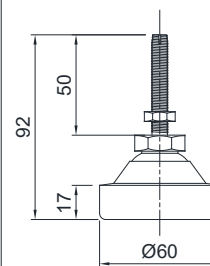
POSSIBLE UPPER PLATE POSITIONS



SB2 - stainless steel
SB2 - galvanized steel
(M10x1.50)

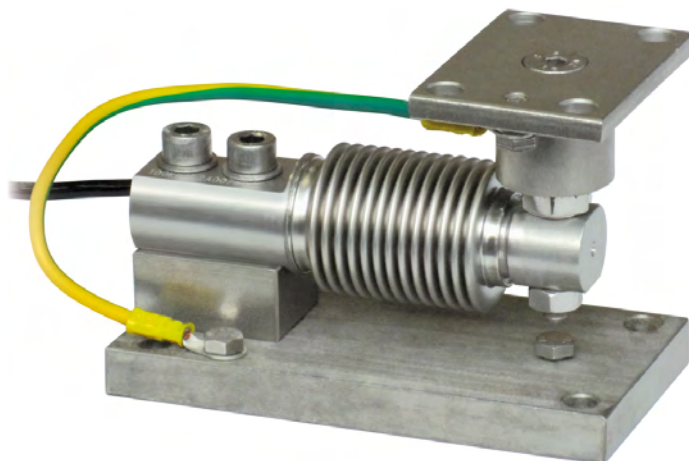


SB2 - stainless steel
(M8x1.25)



Series load cells: **FCK - FCOL**

Up to 300 kg application range



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
300	FCK - FCOL	1.3	TFCGP

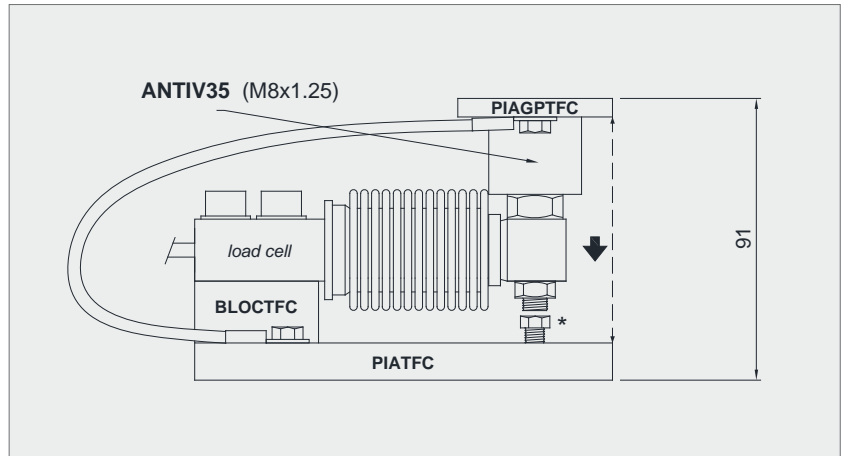
Load cell not included.

DESCRIPTION

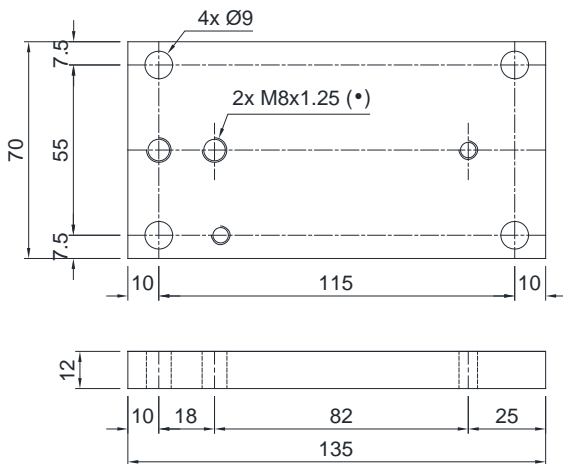
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

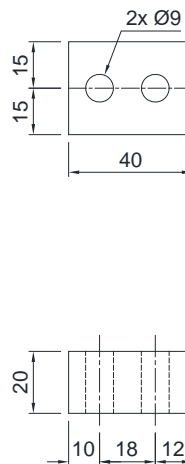
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 19 Nm.



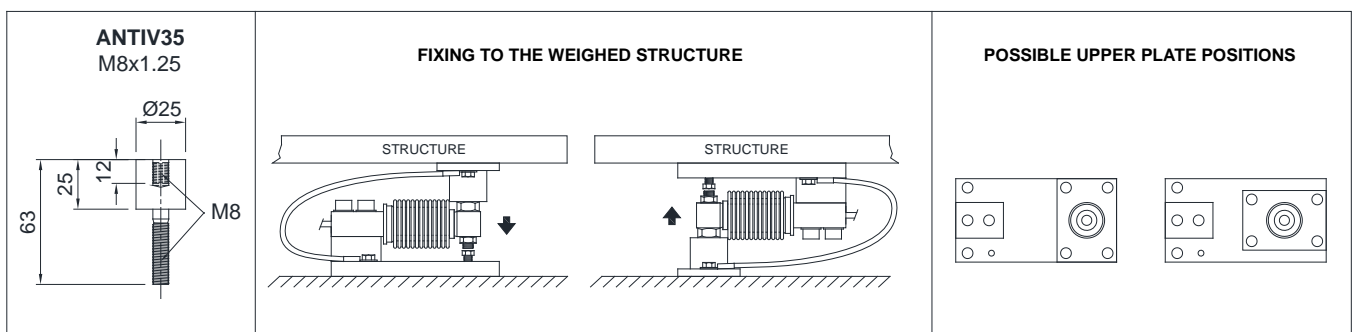
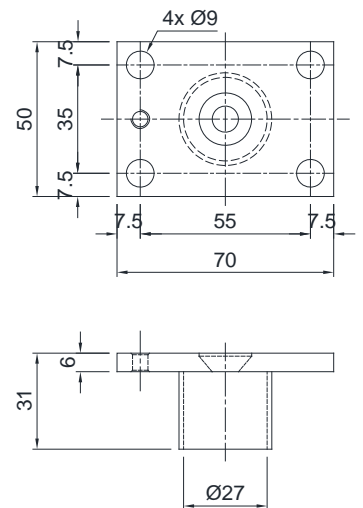
PIATFC

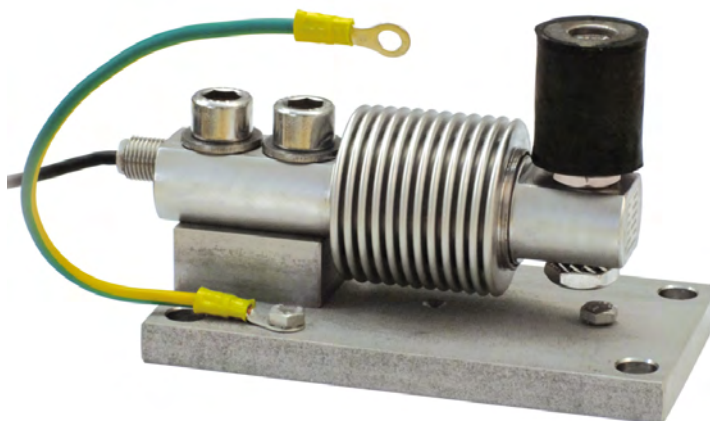


BLOCTFC



PIAGPTFC



Series load cells: FCAL - FCAX**Up to 500 kg application range**

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500	FCAL - FCAX	1.5	TFFSB

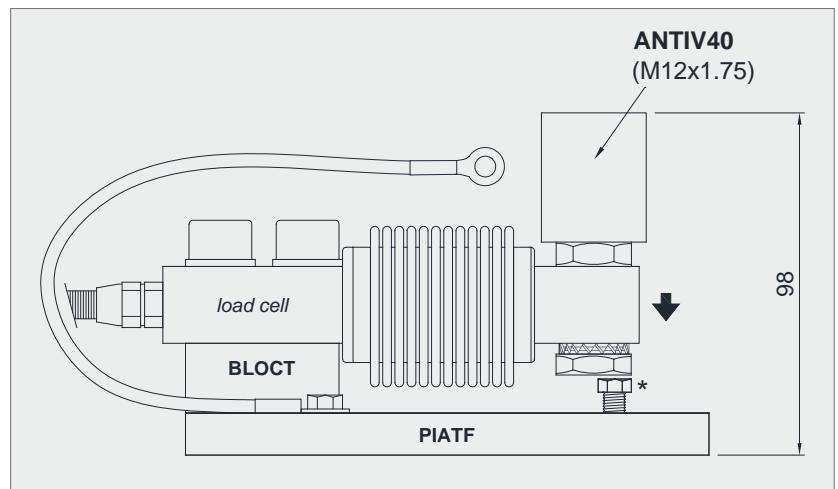
Load cell not included.

DESCRIPTION

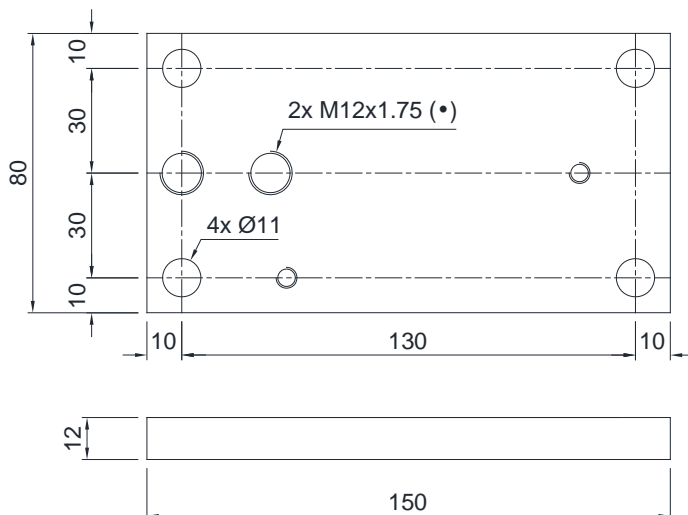
- Compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

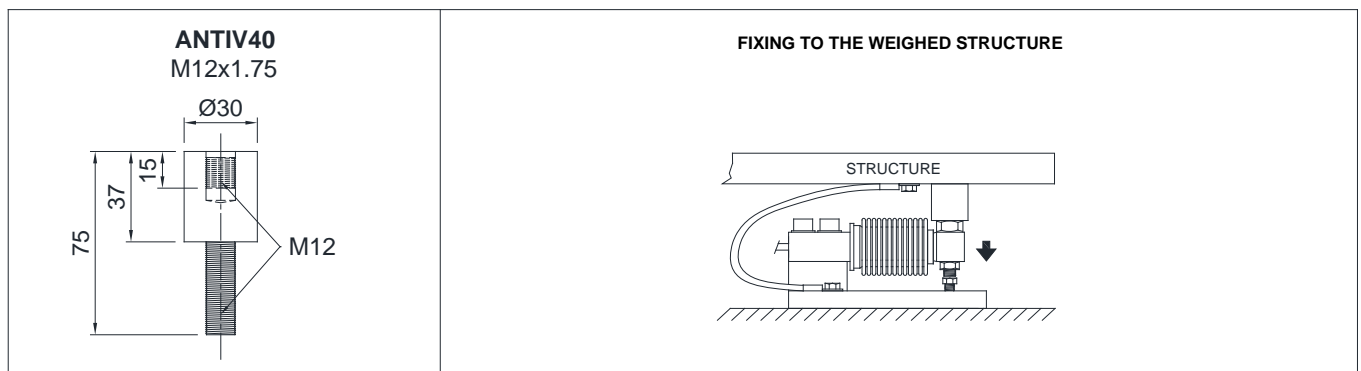
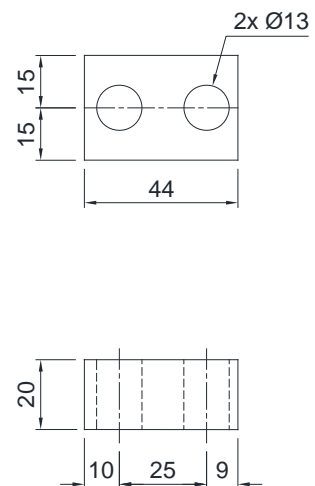
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 50 Nm.



PIATF



BLOCT



Series load cells: FCAL - FCAX**Up to 500 kg application range**

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500	FCAL - FCAX	1.5	TFAST

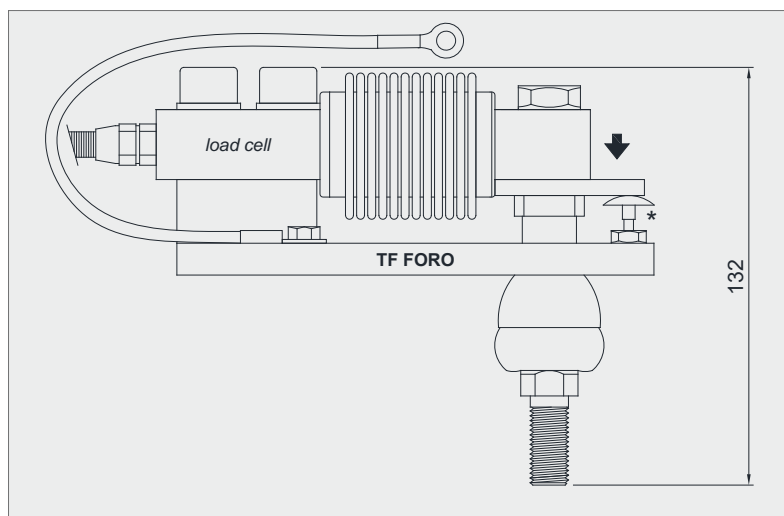
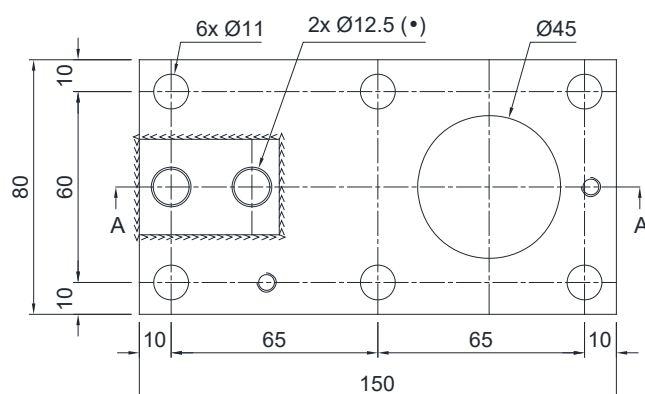
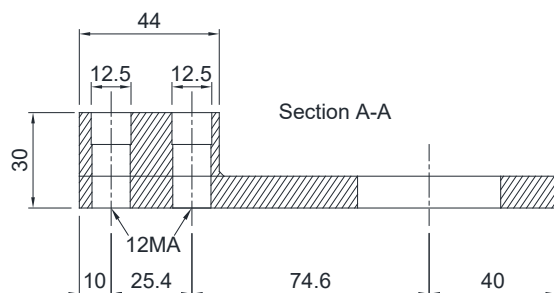
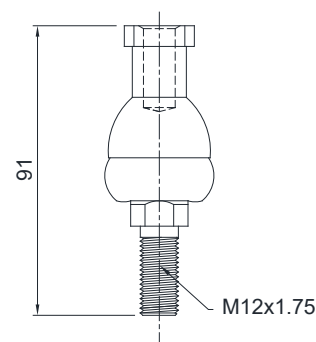
Load cell not included.

DESCRIPTION

- Aluminum alloy tension ball joint.
- AISI 304 stainless steel lower plate.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- For the load cell fixing screws (*), provide a tightening torque of 79 Nm.

**TF FORO****Tension ball joint**

TFPVEN1090

MOUNTING KIT for BENDING BEAM load cells

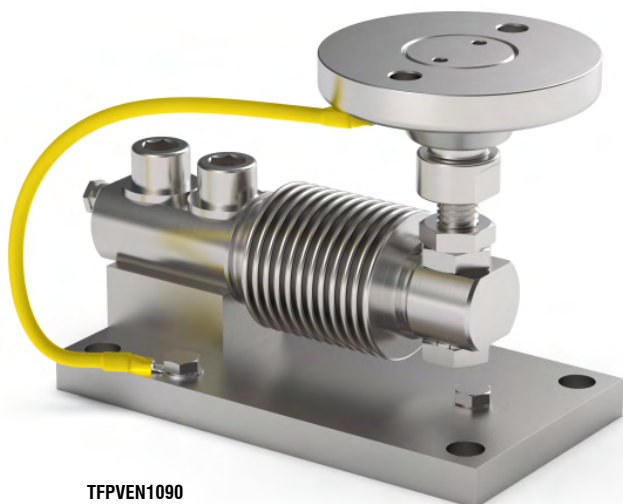
LAUMAS®

Series load cells: FCAL - FCAX

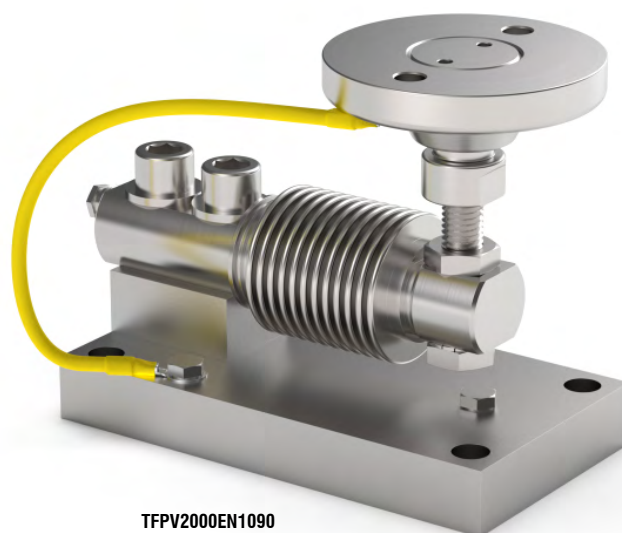


Up to 1500 kg application range

Certification EN1090



TFPVEN1090



TFPV2000EN1090

MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500		FCAL - FCAX	2	TFPVEN1090
1500		FCAX	2	TFPV2000EN1090

Load cell not included.

DESCRIPTION

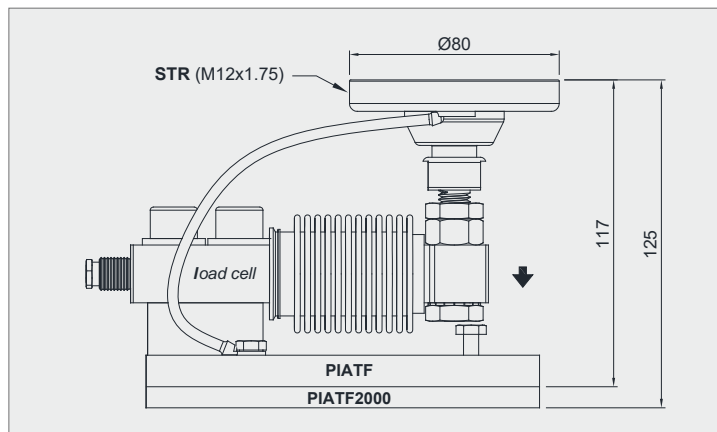
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel self-centering joint foot.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Partial height adjustment.
- Locking screw to avoid damage during transport and installation.

TFPVEN1090

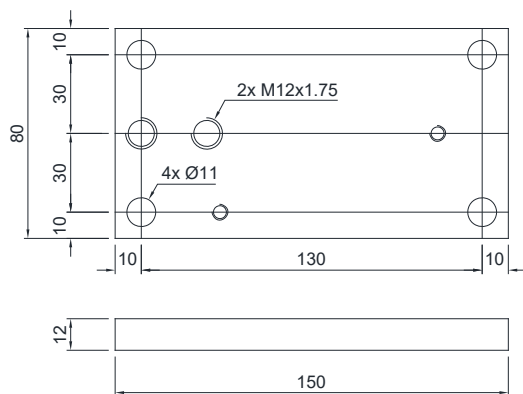
MOUNTING KIT for BENDING BEAM load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

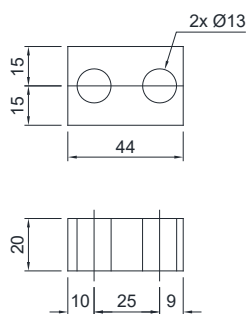
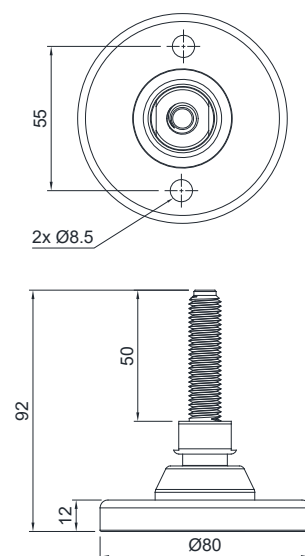
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.



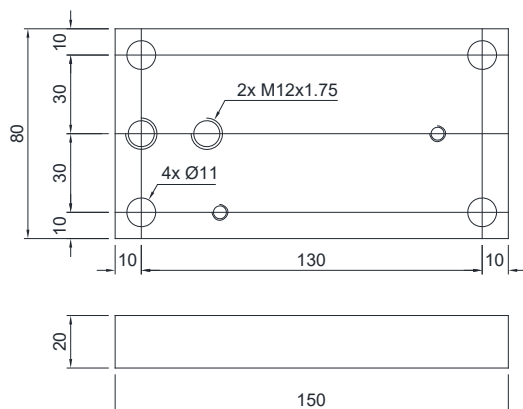
PIATF



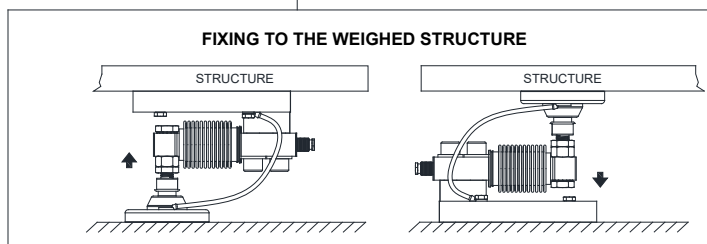
BLOCT

STR
(M12x1.75)

PIATF2000

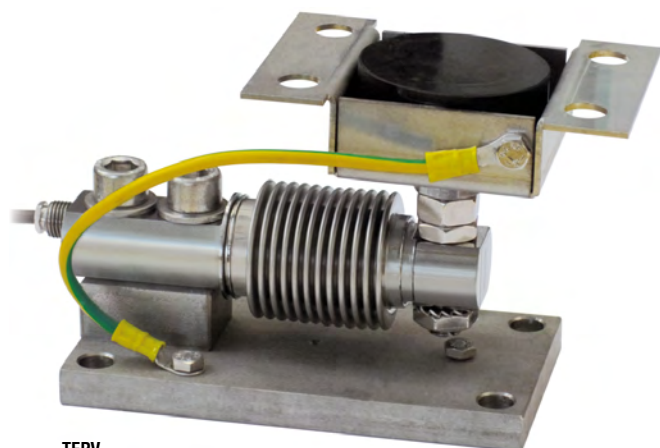


FIXING TO THE WEIGHED STRUCTURE

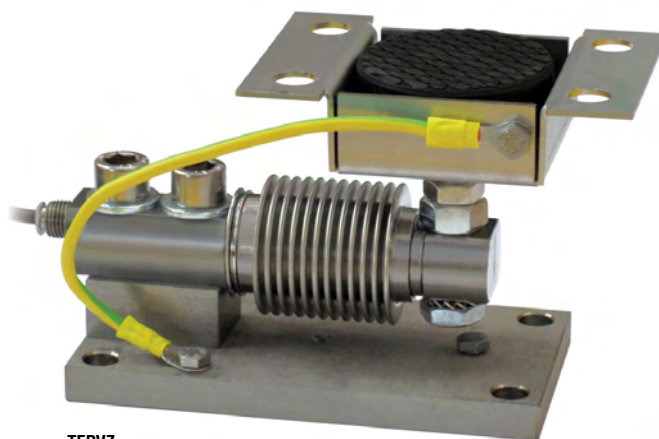


Series load cells: FCAL - FCAX

Up to 1500 kg application range



TFPV
TFPV2000



TFPVZ

MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500		FCAL - FCAX	2	TFPV
500		FCAL - FCAX	2	TFPVZ
1500		FCAX	2	TFPV2000

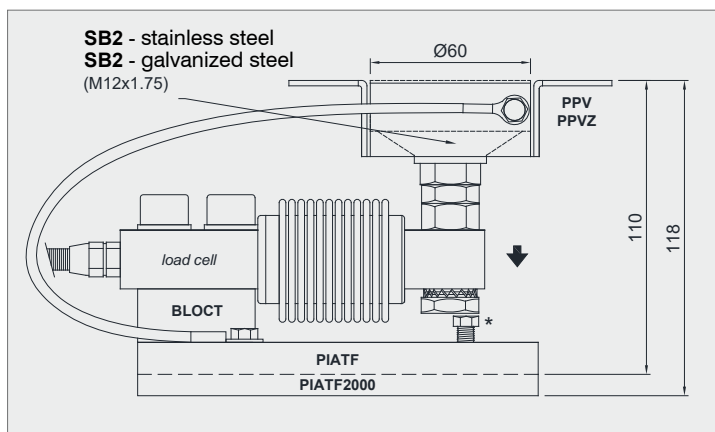
Load cell not included

DESCRIPTION

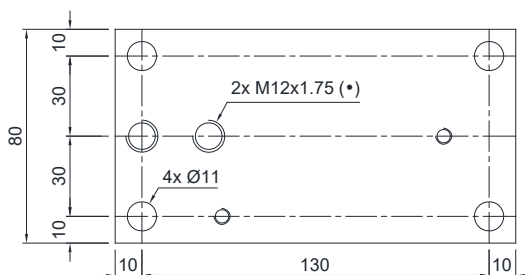
- Adjustable upper plate in AISI 304 stainless steel (PPV) or galvanized steel (PPVZ).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel (TFPV, TFPV2000) or galvanized steel (TFPVZ) self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Partial height adjustment.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

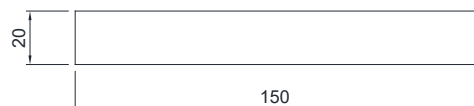
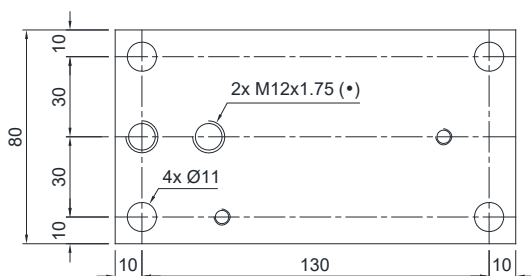
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 50 Nm.



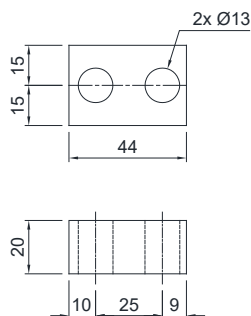
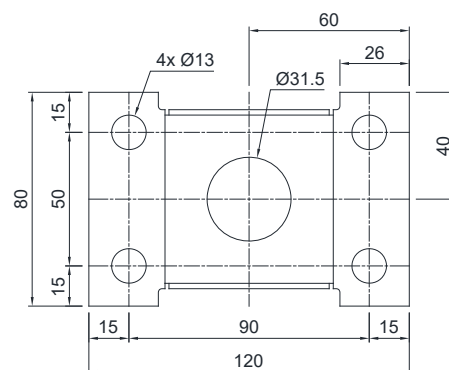
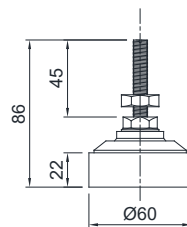
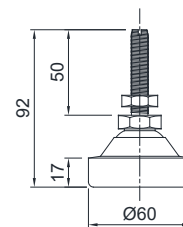
PIATF



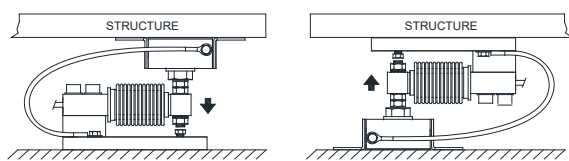
PIATF2000



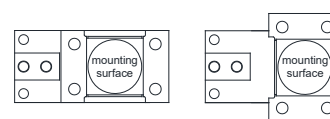
BLOCT

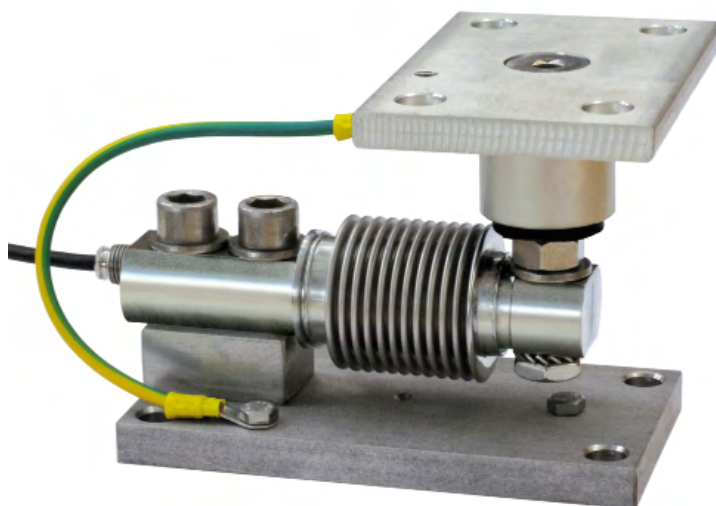
PPV
PPVZSB2 - galvanized steel
(M12x1.75)SB2 - stainless steel
(M12x1.75)

FIXING TO THE WEIGHED STRUCTURE



POSSIBLE UPPER PLATE POSITIONS



Series load cells: FCAL - FCAX**Up to 1500 kg application range**

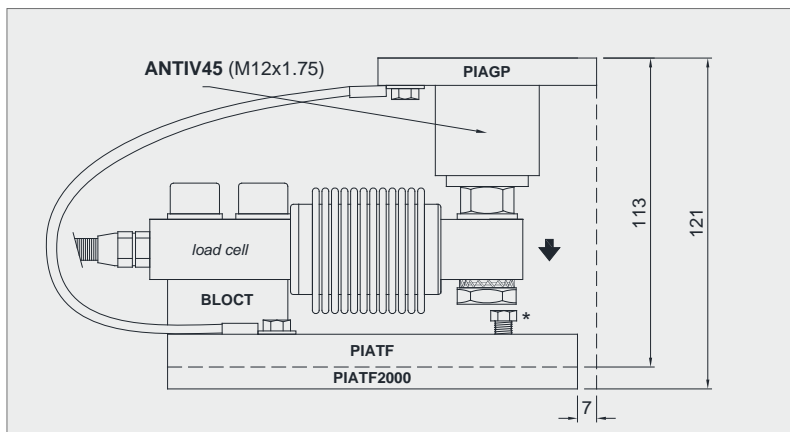
MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500	FCAL - FCAX	2.3	TFGP
1500	FCAL - FCAX	2.3	TFGP2000

*Load cell not included***DESCRIPTION**

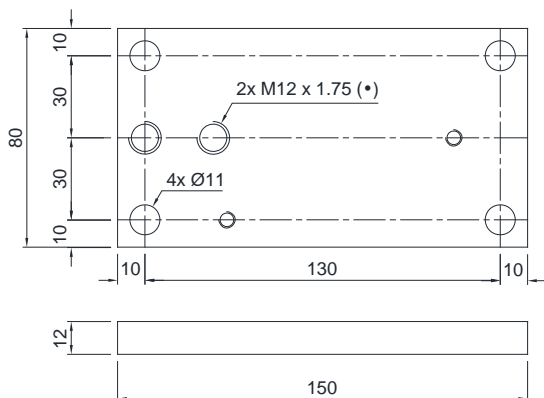
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

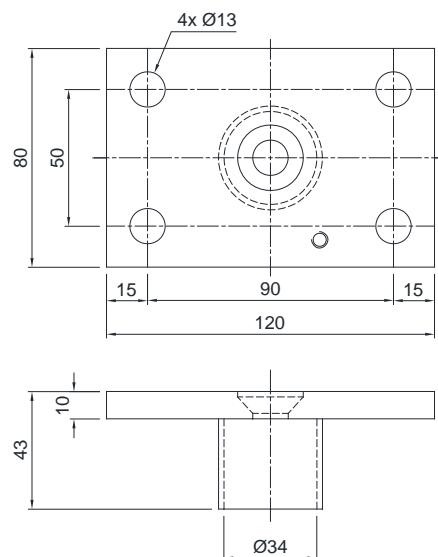
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 50 Nm.



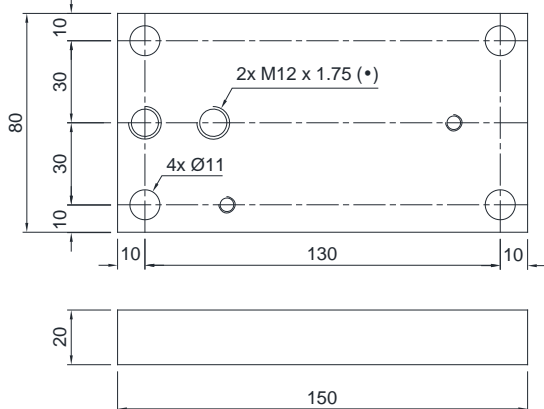
PIATF



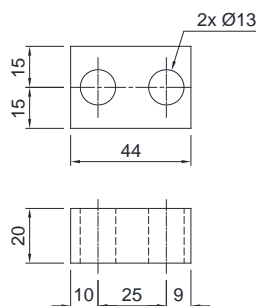
PIAGP



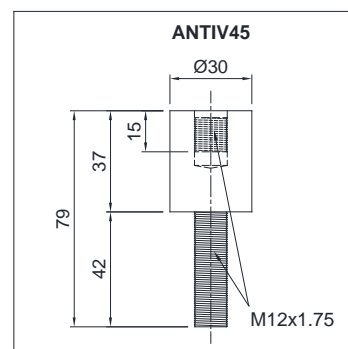
PIATF2000



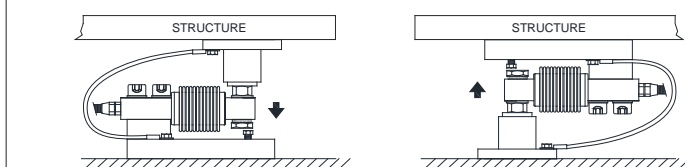
BLOCT



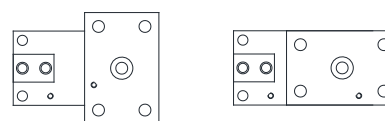
ANTIV45



FIXING TO THE WEIGHED STRUCTURE

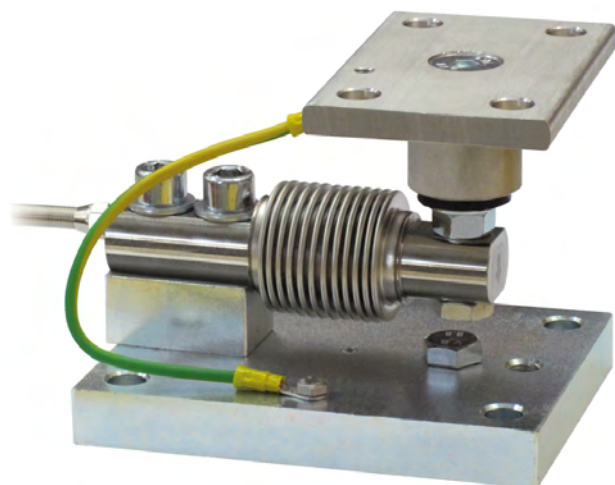


POSSIBLE UPPER PLATE POSITIONS

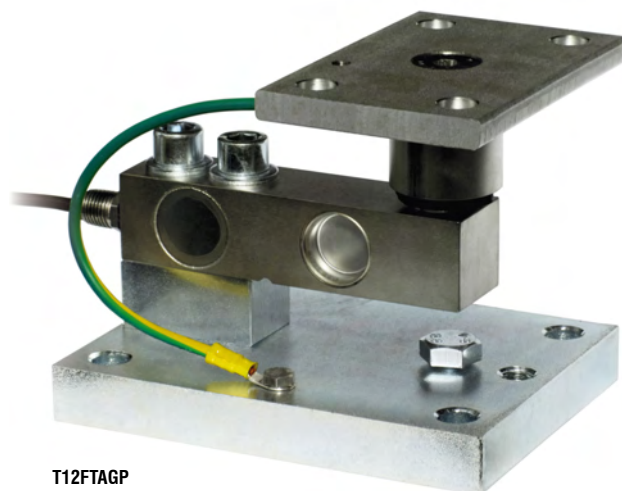


Series load cells: FCAL - FCAX - FTK - FTKL - FTP - FT-P - FTZ

Up to 2000 kg application range



T12FCAGP



T12FTAGP

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
1500	FCAL - FCAX	4	T12FCAGP
2000	FTK - FTKL - FTP - FT-P - FTZ	4	T12FTAGP

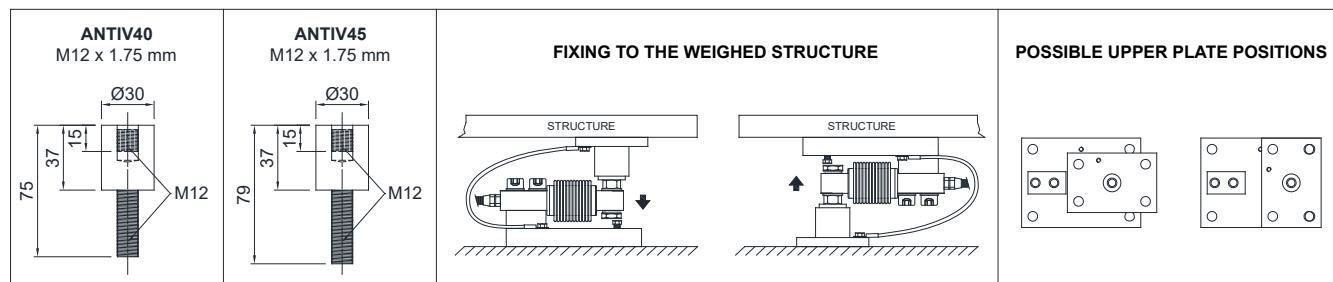
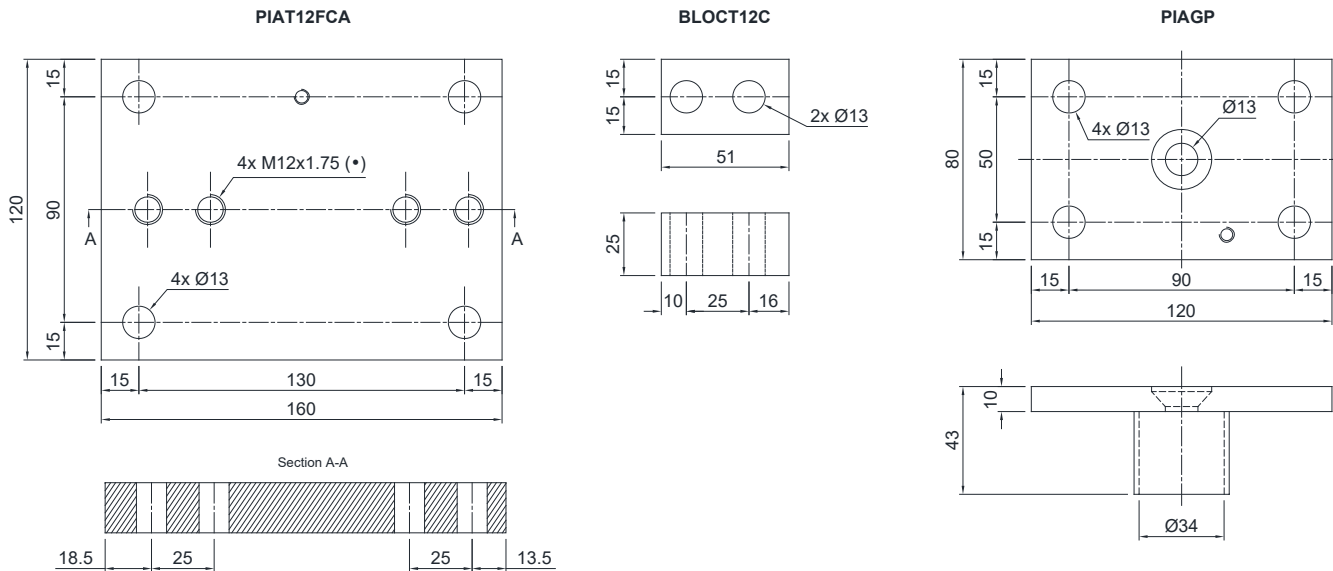
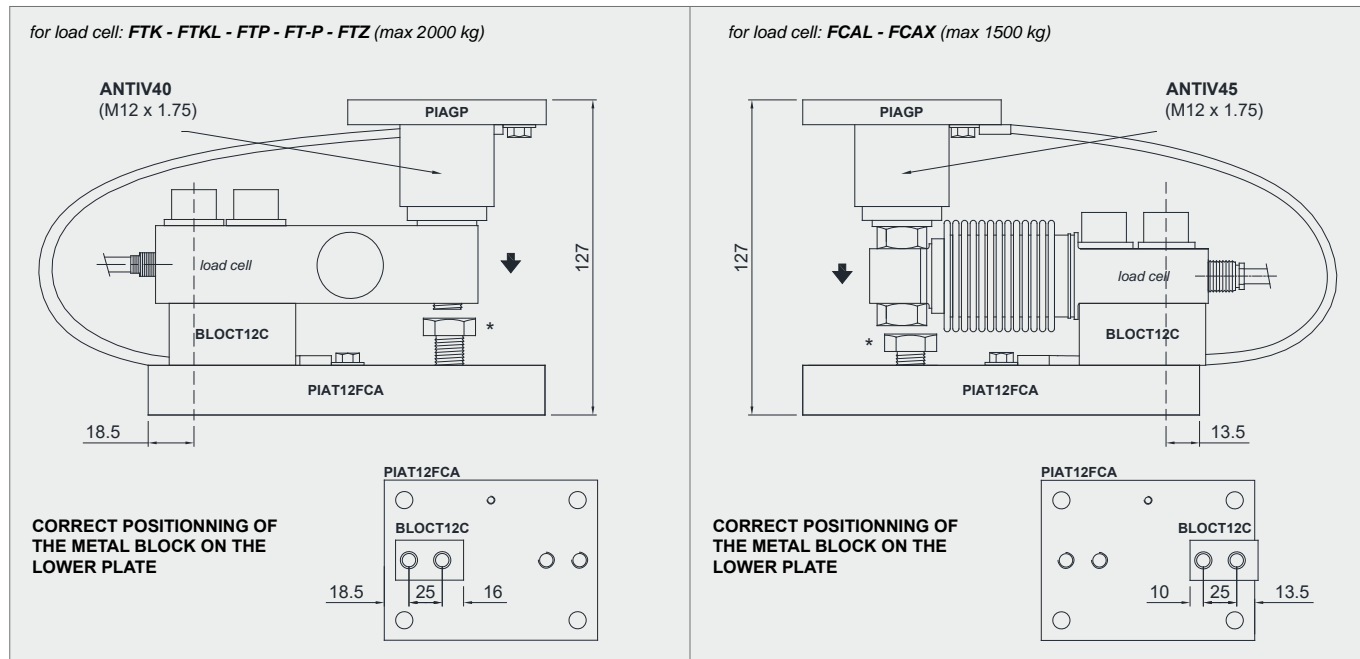
Load cell not included

DESCRIPTION

- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in galvanized steel.
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 79 Nm.



Rev. 0.0

The Company reserves the right to make changes to the technical data, drawings and images without notice.

	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.3	for SHEAR BEAM load cells		
	TF500/2000 up to 2000 kg	FTK, FTKL, FTP, FT-P, FTZ	168
	PVEN1090 up to 2000 kg	FTK, FTKL, FTP, FT-P, FTZ	170
	PV - PVZ up to 2000 kg	FTK, FTKL, FTP, FT-P, FTZ	172
	TFPS2000 up to 2000 kg	FTK, FTKL, FTP, FT-P, FTZ	174
	PV80EN1090 up to 5000 kg	FTK, FTP, FTZ	176
	PV80 PV60Z up to 5000 kg	FTK, FTP, FTZ	178
	PS up to 10000 kg	FTK, FTP, FTZ	180

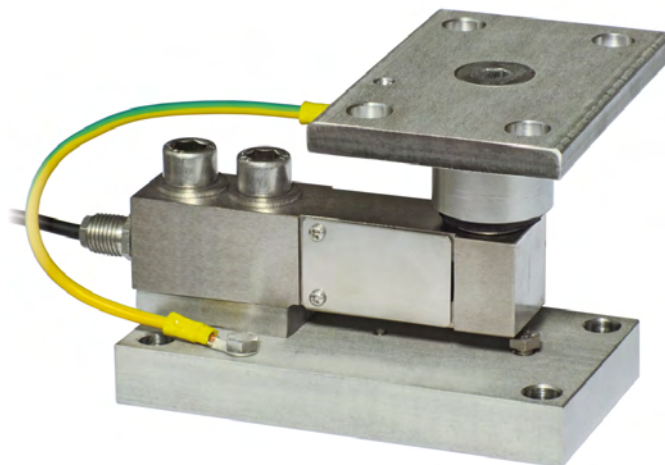
TF500/2000

MOUNTING KIT for SHEAR BEAM load cells

LAUMAS®

Series load cells: FTK - FTKL - FTP- FT-P - FTZ

Up to 2000 kg application range



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
500	FTK - FTKL - FTP - FT-P - FTZ	2.3	TF500
2000	FTK - FTKL - FTP - FT-P - FTZ	2.9	TF2000
2000	FTK - FTKL - FTP - FT-P - FTZ	2.9	TF2000Z

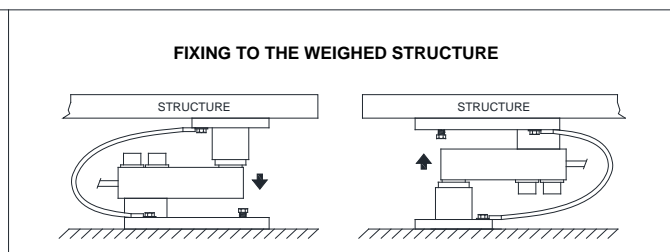
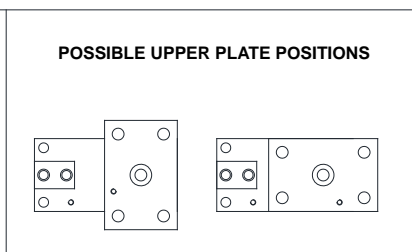
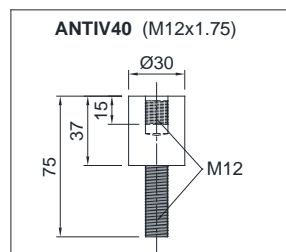
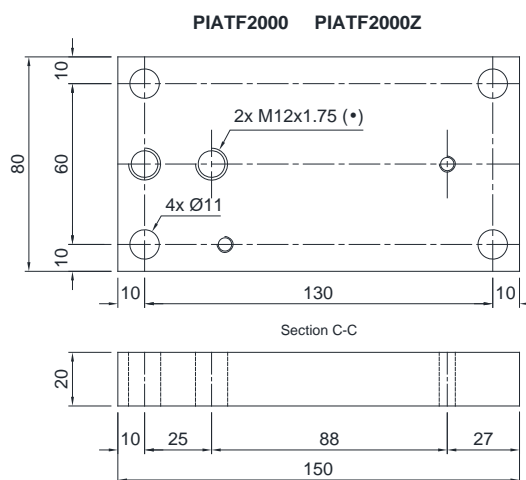
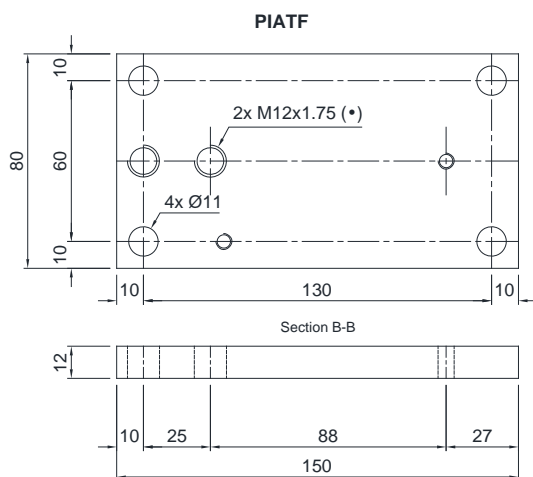
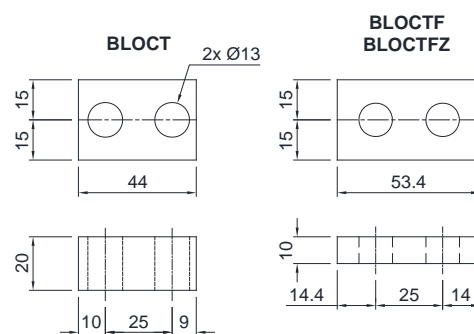
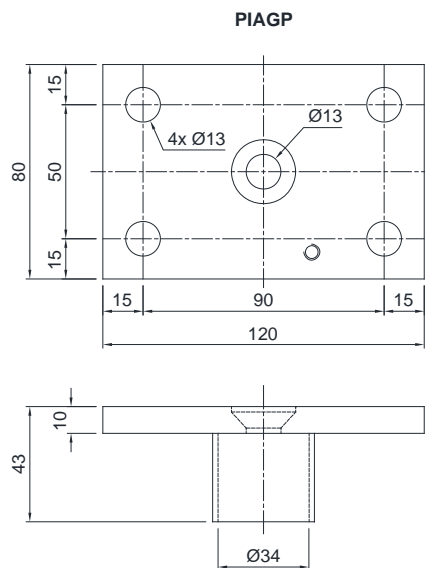
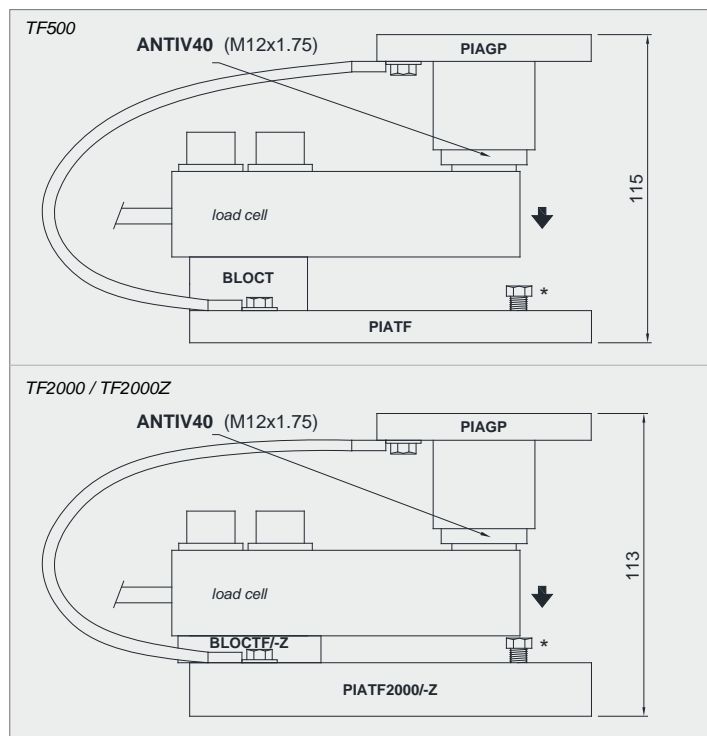
Load cell not included.

DESCRIPTION

- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel (TF500, TF2000) or in galvanized steel (TF2000Z).
- Compensation for any misalignments of the support plates of the structure.
- Locking screw to avoid damage during transport and installation.
- Can be used for systems with at least 3 supports.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 50 Nm for TF500/TF2000 and 79 Nm for TF2000Z.



PVEN1090

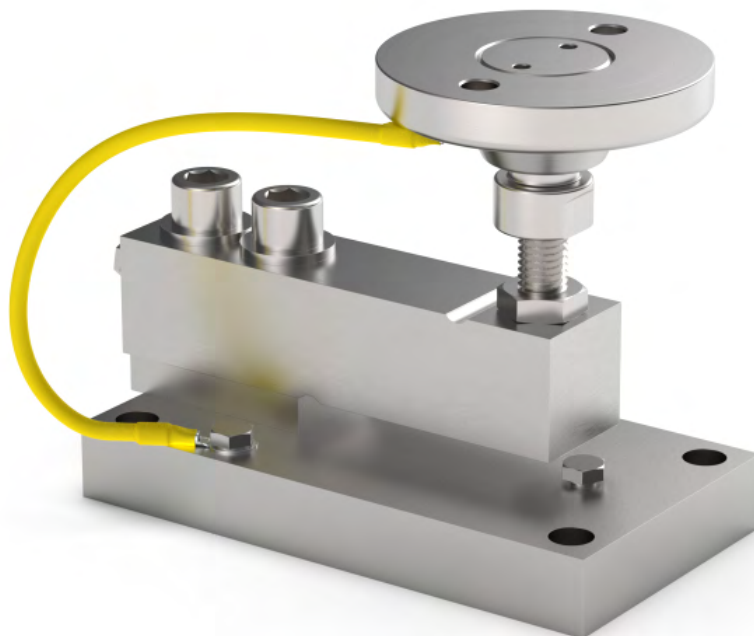
MOUNTING KIT for SHEAR BEAM load cells

LAUMAS®

Series load cells: FTK - FTKL - FTP - FT-P - FTZ



Up to 2000 kg application range
Certification EN1090



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	2000	FTK - FTKL - FTP - FT-P - FTZ	2.7	PVEN1090

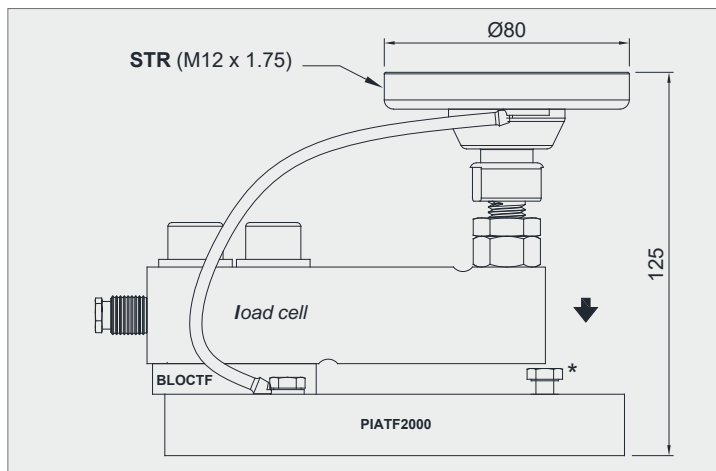
Load cell not included.

DESCRIPTION

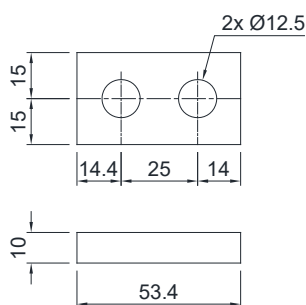
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel self-centering joint foot.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

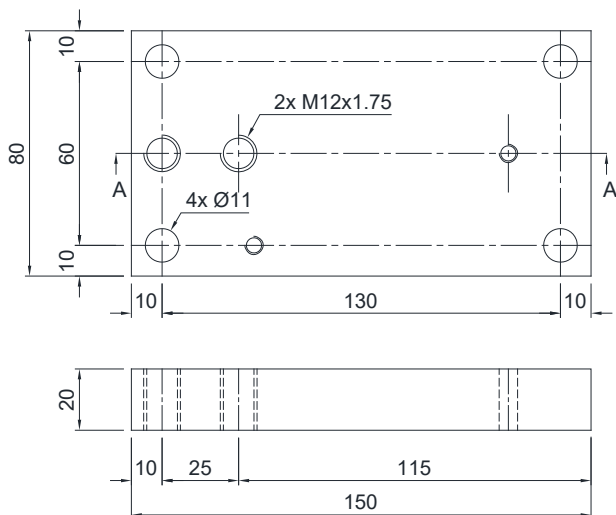
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.



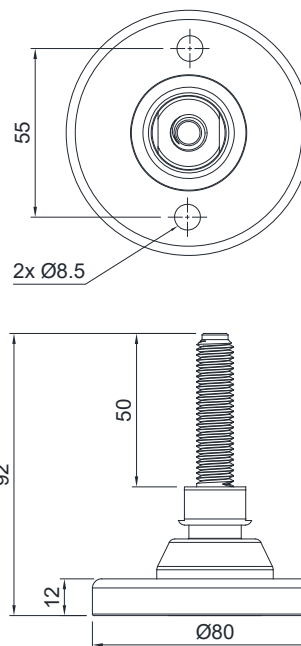
BLOCTF



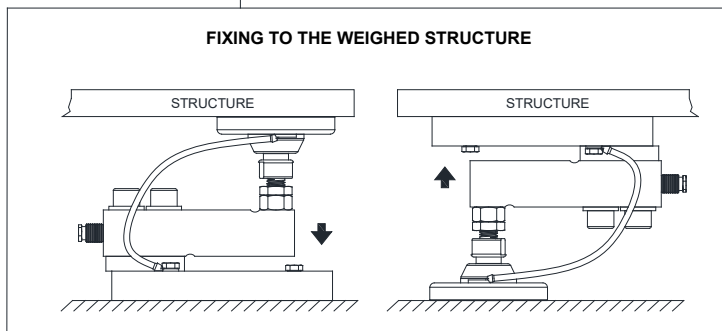
PIATF2000

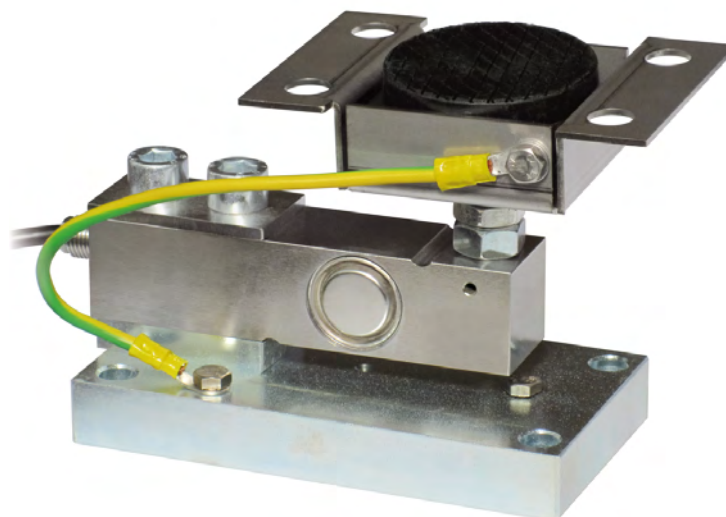


**STR
(M12x1.75)**



FIXING TO THE WEIGHED STRUCTURE



Series load cells: FTK - FTKL - FTP - FT-P - FTZ**Up to 2000 kg application range**

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
2000	FTK - FTKL - FTP - FT-P - FTZ	2.7	PV
2000	FTK - FTKL - FTP - FT-P - FTZ	2.7	PVZ

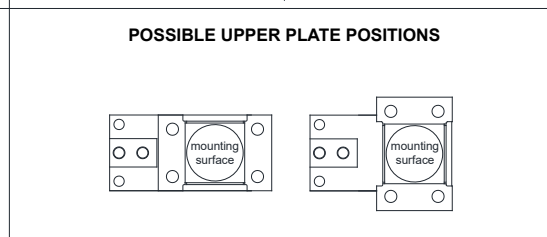
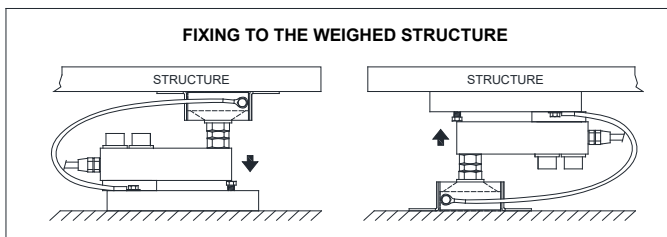
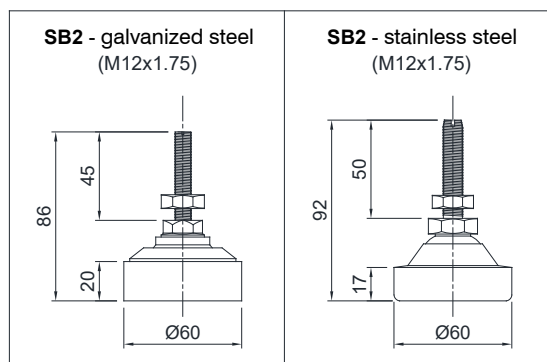
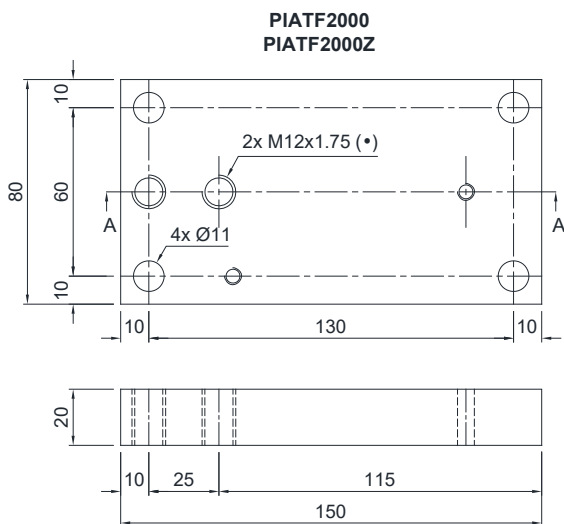
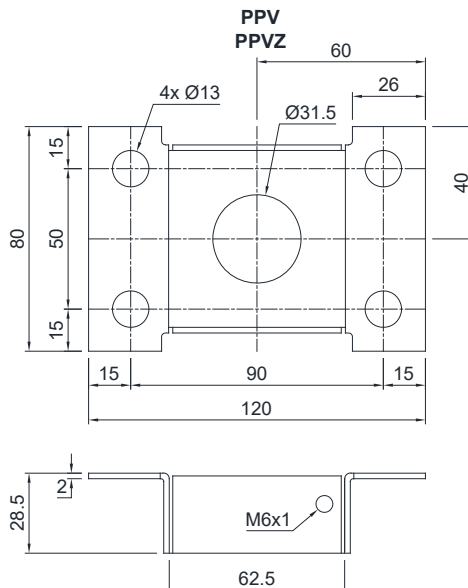
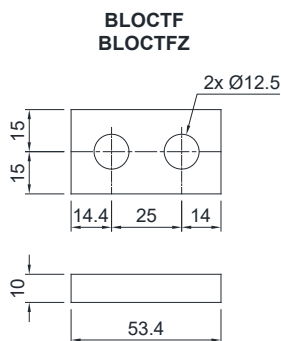
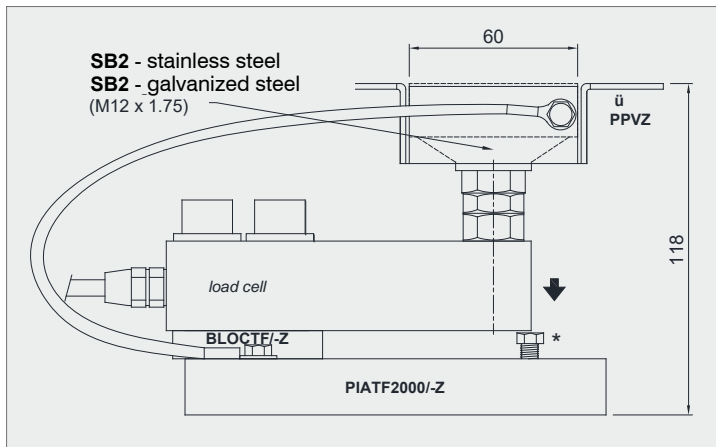
Load cell not included.

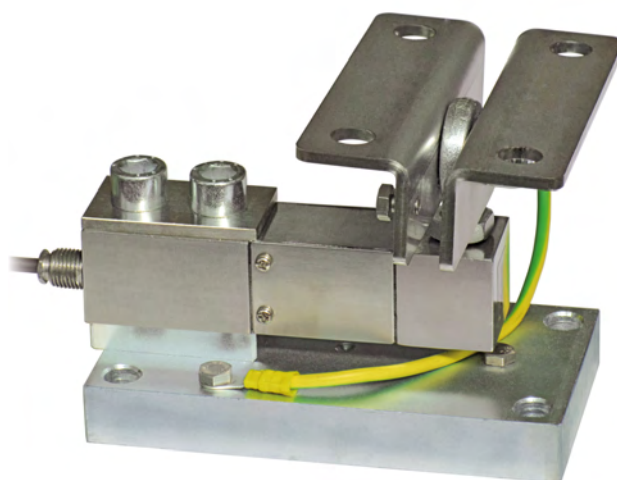
DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV) or galvanized steel (PPVZ).
- Lower plate and block in AISI 304 stainless steel (PV) or galvanized steel (PVZ).
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel (TFPV, TFPV2000) or galvanized steel (TFPVZ) self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 50 Nm for PV and 79 Nm for PVZ.



Series load cells: FTK - FTKL - FTP - FT-P - FTZ**Up to 2000 kg application range**

MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
2000		FTK - FTKL - FTP - FT-P - FTZ	2.7	TFPS2000
2000		FTK - FTKL - FTP - FT-P - FTZ	2.7	TFPS2000INOX

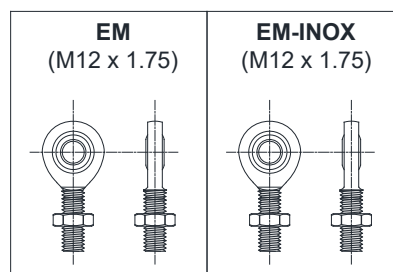
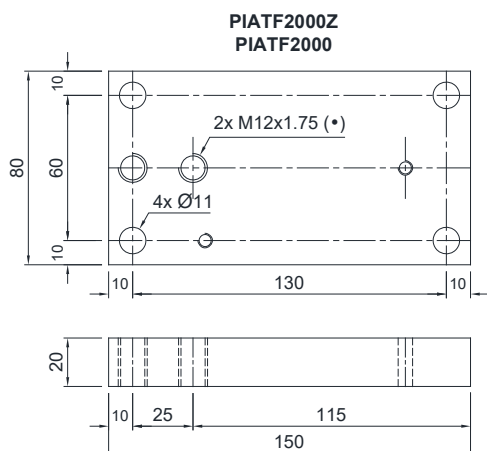
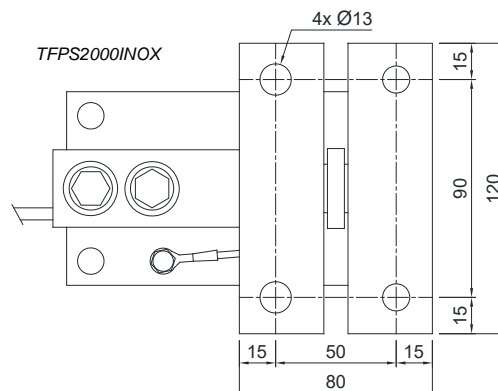
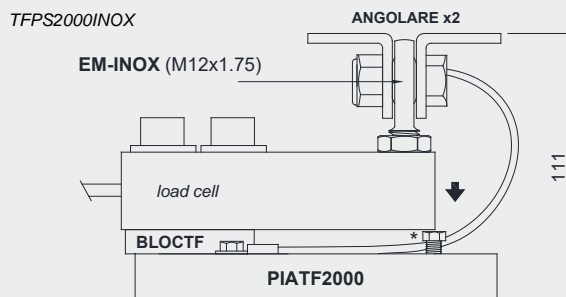
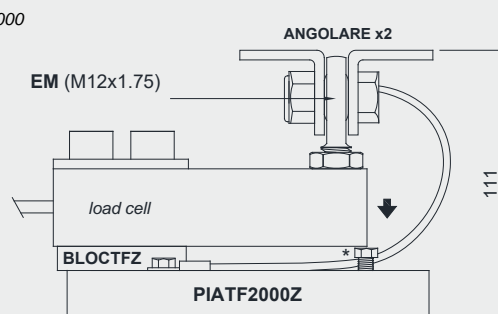
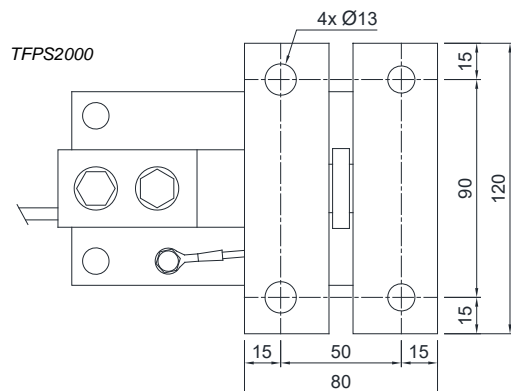
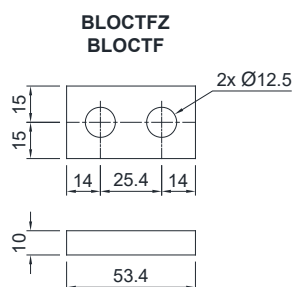
Load cell not included.

DESCRIPTION

- AISI 304 stainless steel upper plate.
- Lower plate and block in galvanized steel (TFPS2000) or in stainless steel (TFPS2000INOX).
- Constraint against lateral forces and anti-tilt by means of ball-and-socket joint with nut in galvanized C45 steel (TFPS2000) or in stainless steel (TFPS2000INOX).
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 79 Nm.



PV80EN1090

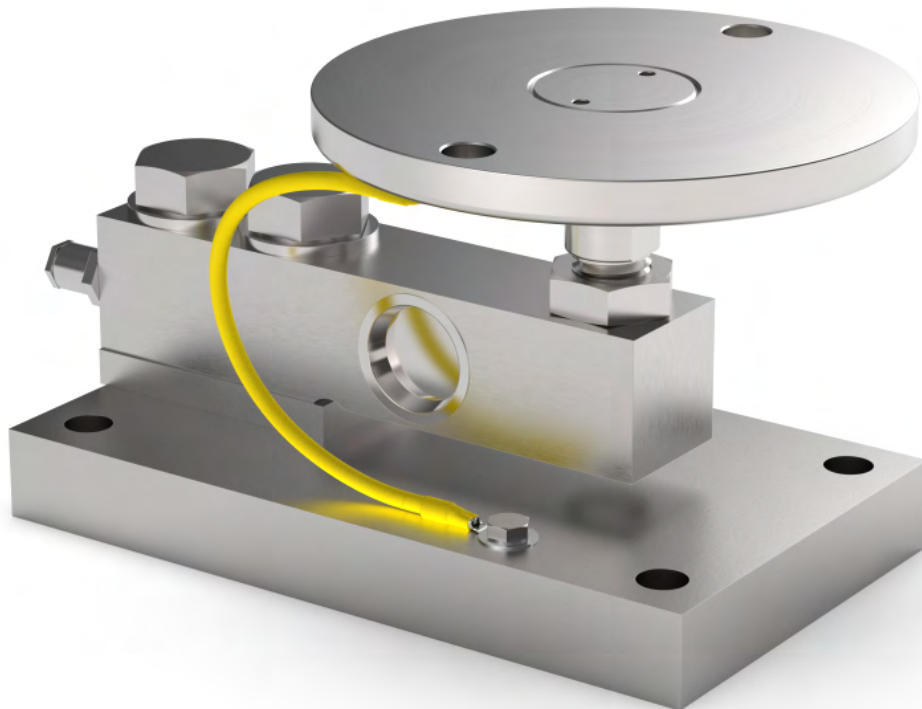
MOUNTING KIT for SHEAR BEAM load cells

LAUMAS®

Series load cells: FTP - FTZ



Up to 5000 kg application range
Certification EN1090



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	5000	FTP - FTZ	6.9	PV80EN1090

Load cell not included.

DESCRIPTION

- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel self-centering joint foot.
- Lower plate and block in AISI 304 stainless steel.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

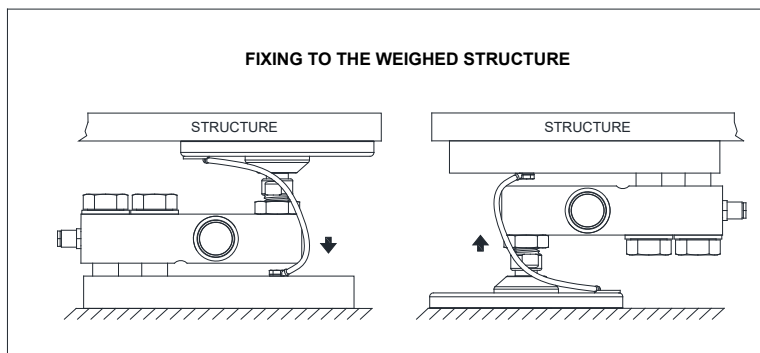
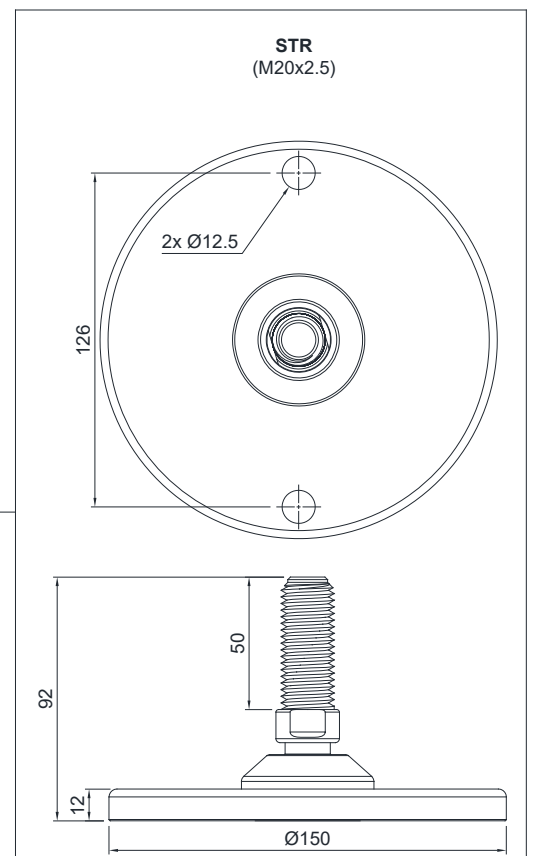
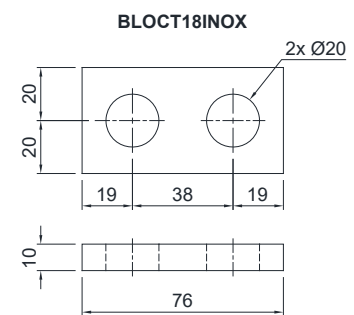
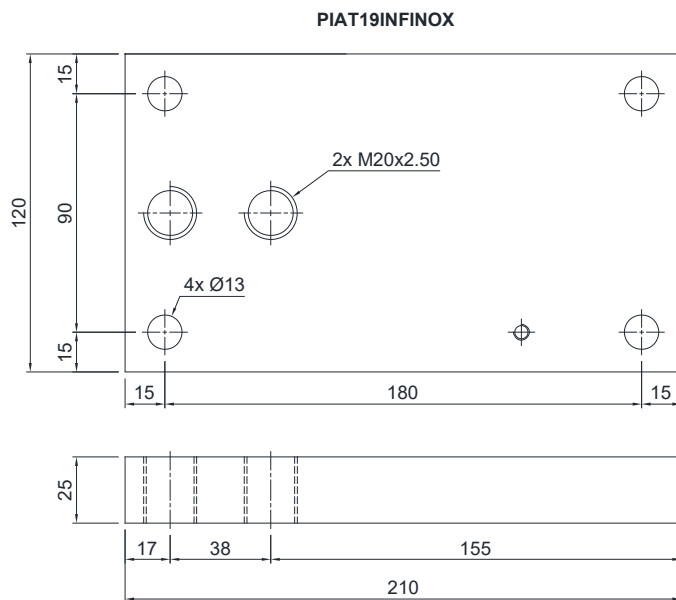
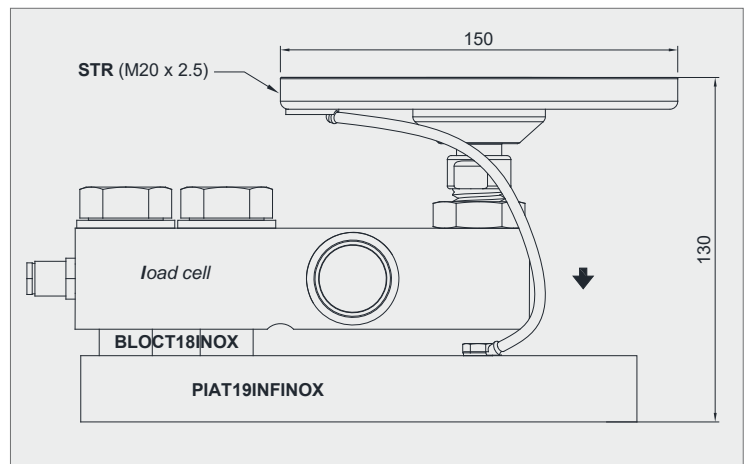
PV80EN1090

MOUNTING KIT for SHEAR BEAM load cells

LAUMAS®

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.



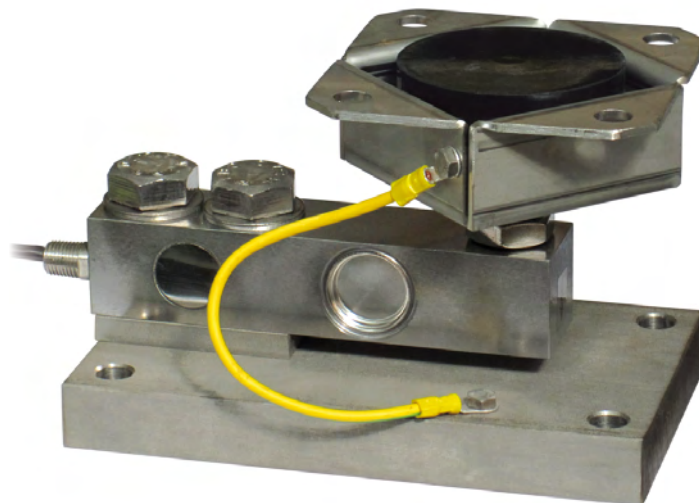
The Company reserves the right to make changes to the technical data, drawings and images without notice.

PV80 - PV60Z

MOUNTING KIT for SHEAR BEAM load cells

Series load cells: FTP - FTZ - FTK

Up to 5000 kg application range



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
5000		FTP - FTZ	6.9	PV80
5000		FTK	6.7	PV60Z

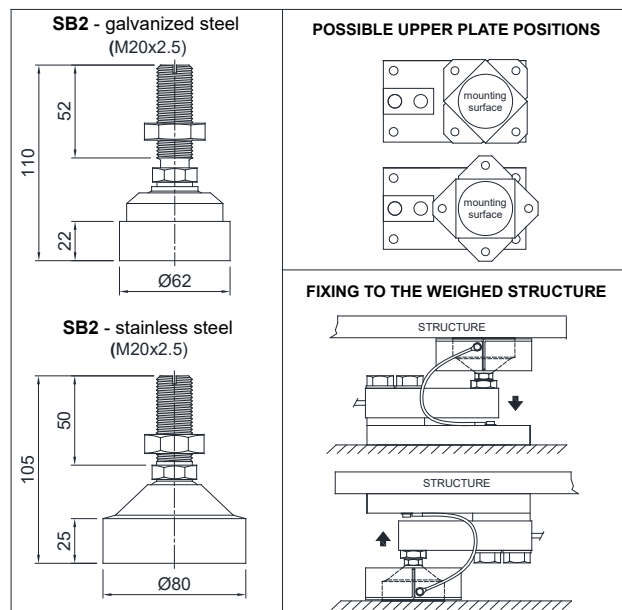
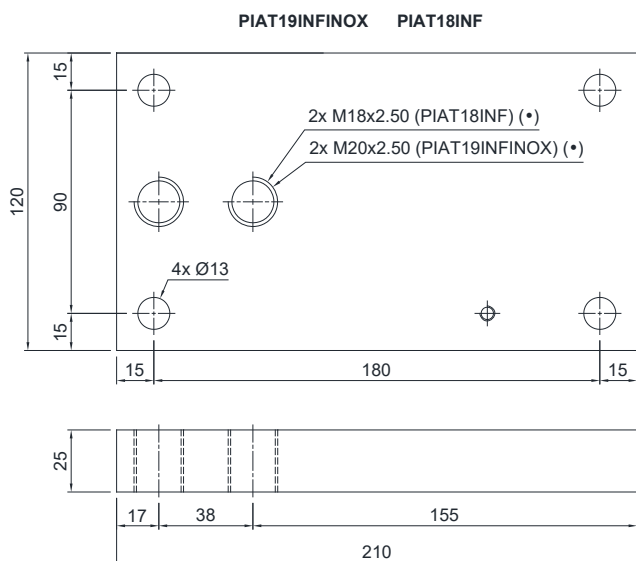
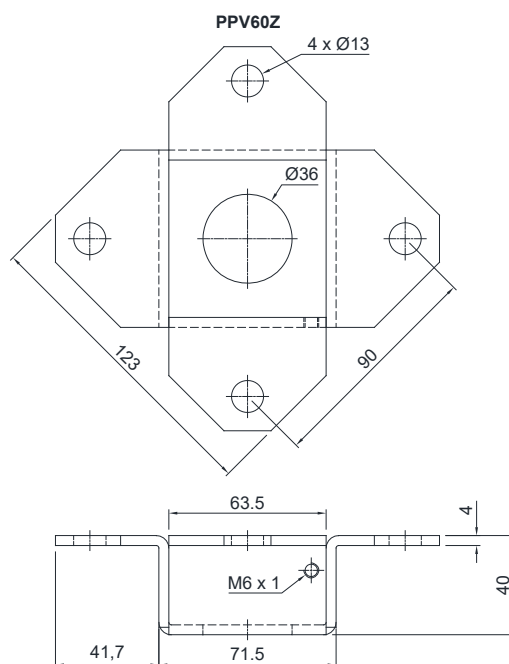
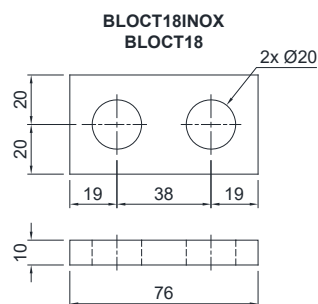
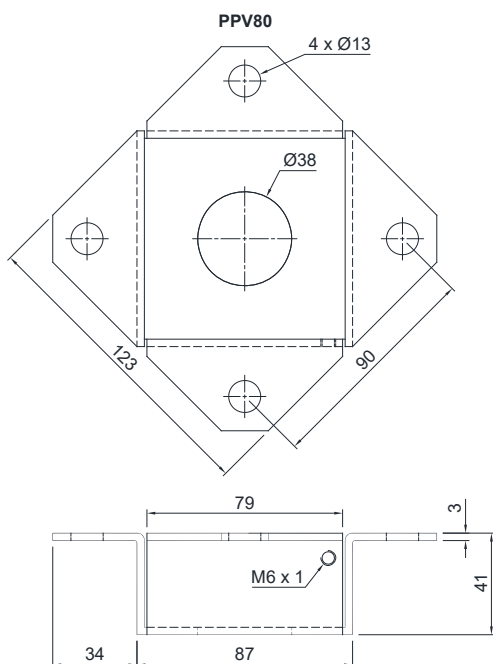
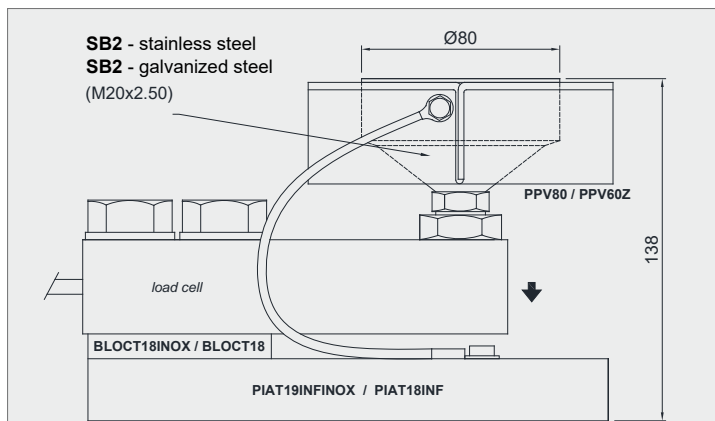
Load cell not included

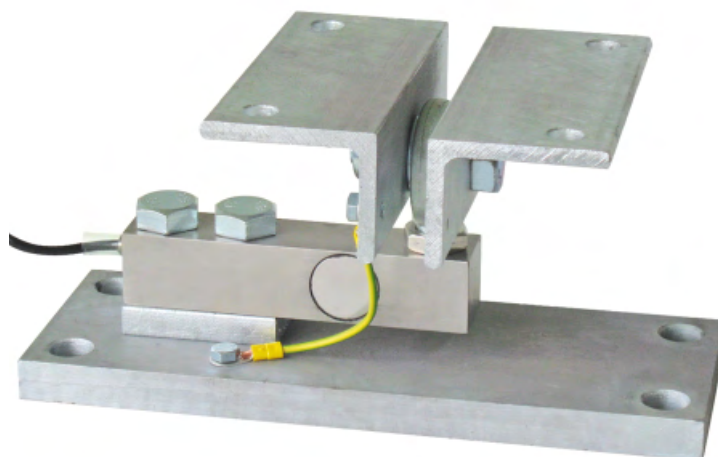
DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV80) or galvanized steel (PPV60Z)
- Lower plate and block in AISI 304 stainless steel (PV80) or galvanized steel (PV60Z).
- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel (PV80) or galvanized steel (PV60Z) self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the upper part of the mounting kit, you must proceed to insert a shim before fixing the bolts.
- For the load cell fixing screws (*), provide a tightening torque of 280 Nm.



Series load cells: FTP - FTZ - FTK**Up to 10000 kg application range**

MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
5000		FTK - FTP - FTZ (3000 - 5000 kg)	10.5	PS
10000		FTP	15.5	PS10T

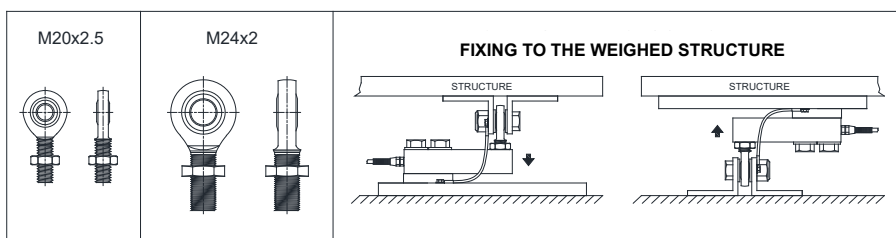
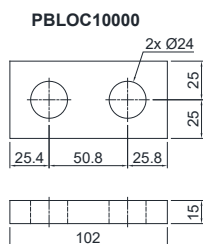
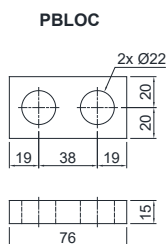
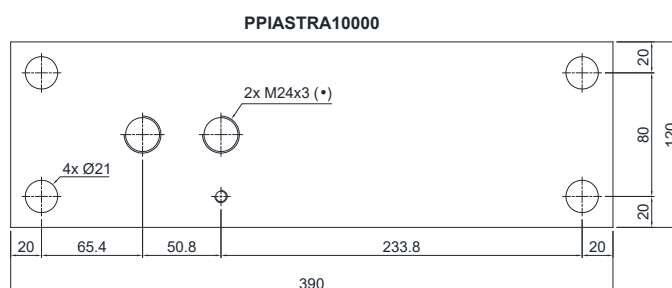
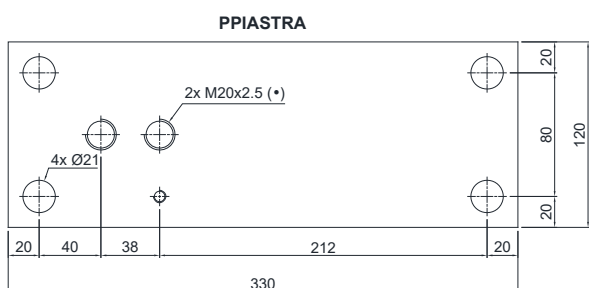
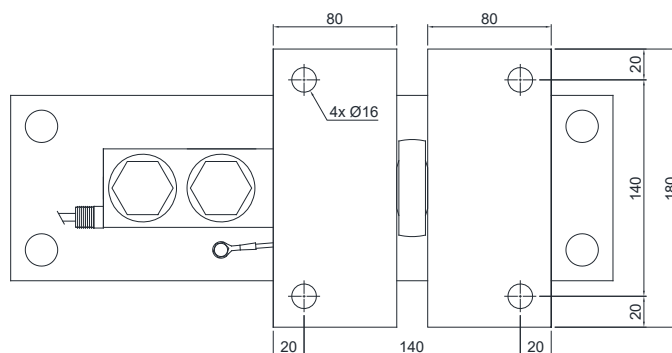
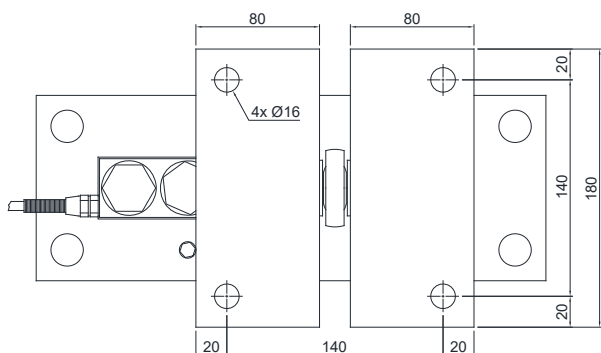
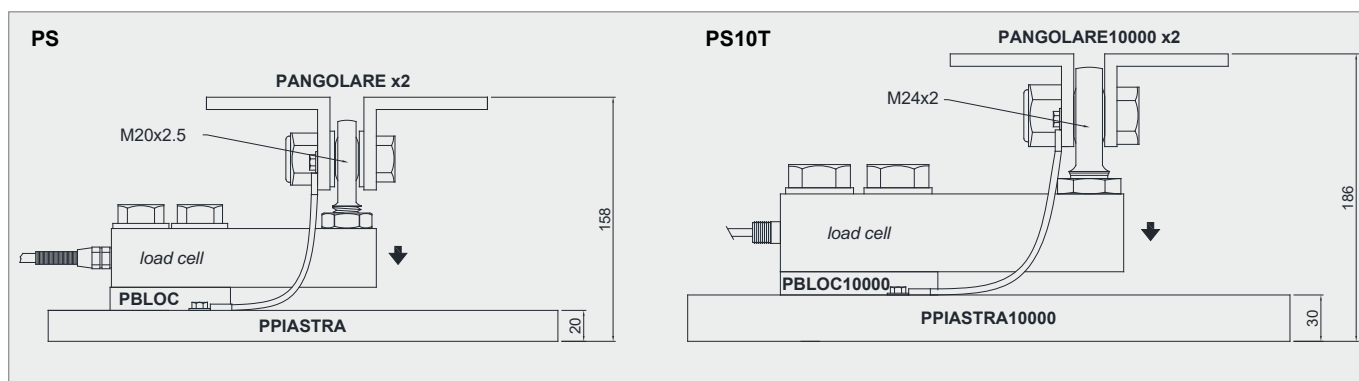
Load cell not included.

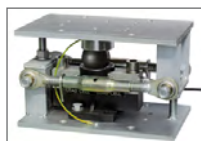
DESCRIPTION

- Upper plate, lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Interconnect the plates to the earthing.
- In case of structure with four-point support, proceed to the height adjustment, if one-point does not touch the upper part of the mounting kit.
- For the load cell fixing screws (*), provide a tightening torque of 290 Nm for PS and 690 Nm for PS10T.

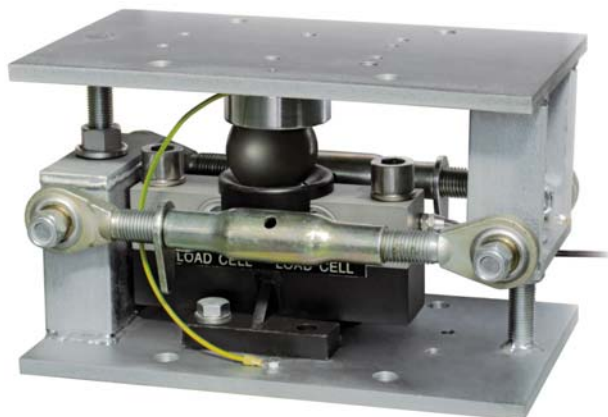




	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.4	for DOUBLE SHEAR BEAM / COLUMN load cells		
VCOKDTL	up to 50000 kg	DTL, COL, COK	184
VDTX	up to 60klb/27 ton	DTX	186

Series load cells: DTL - COL - COK

Up to 50000 kg application range



DOUBLE SHEAR BEAM load cells



COLUMN load cells

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
50000	DTL - COL - COK	39	VCOKDTL

Load cell not included.

DESCRIPTION

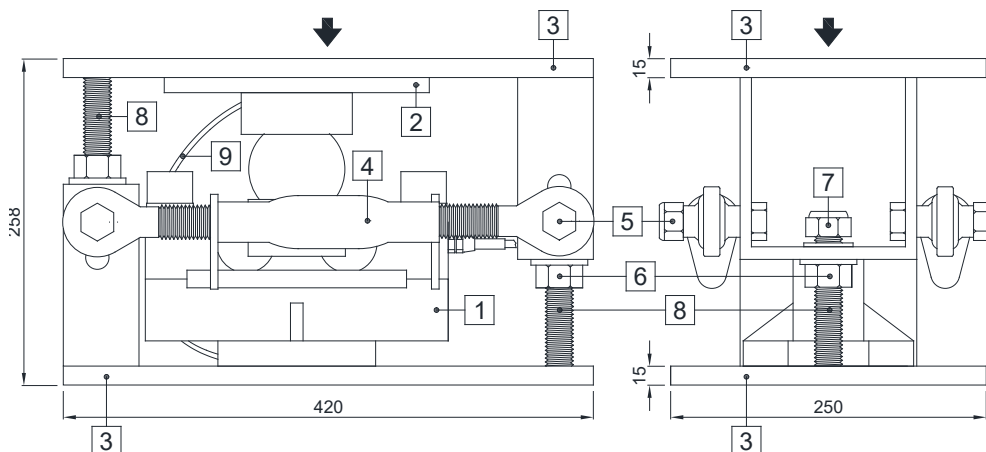
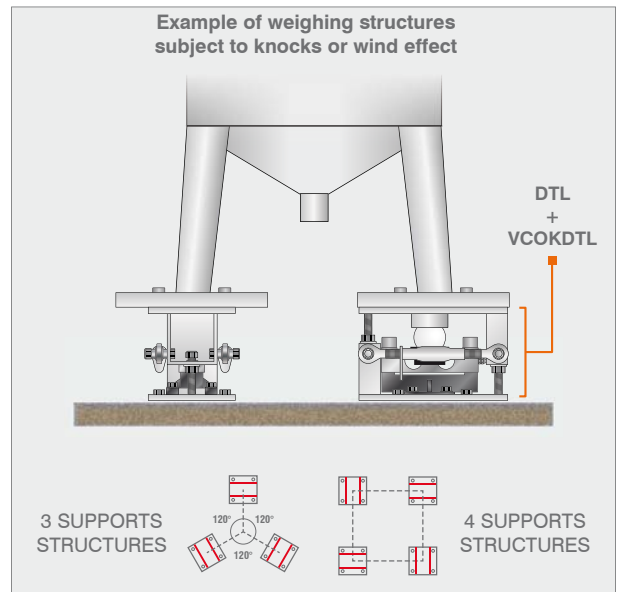
- Galvanized steel upper and lower plate.
- Galvanized steel plate (for DOUBLE SHEAR BEAM load cell).
- Upper and lower bases (for COLUMN load cell).
- Two integrated galvanized steel stay rods with dual ball-and-socket joints suitable to counter the lateral force.
- Anti-tilt constraint consisting of two threaded rods with self-locking nut.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

Upper and lower plates **3** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

for DOUBLE SHEAR BEAM load cells (DTL):

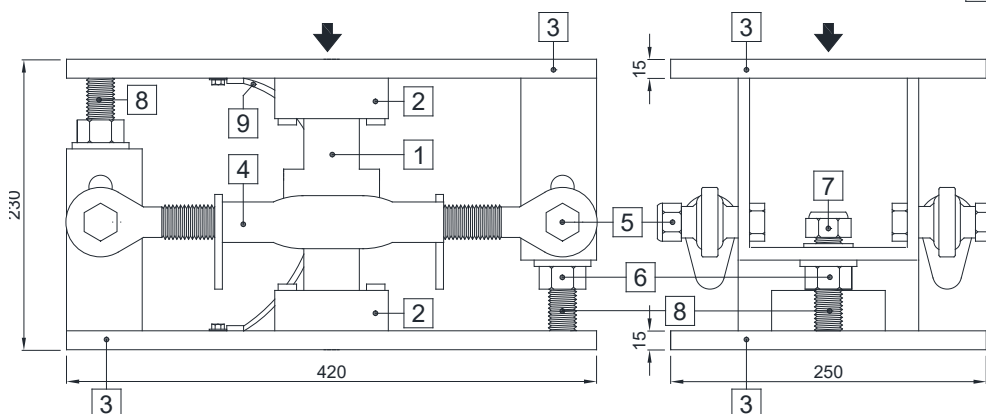
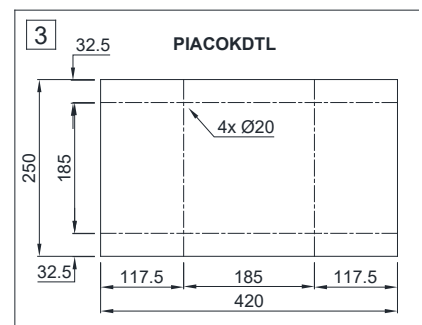
- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe ($\varnothing 40 \times 220$ mm): unscrewing the nuts **5** and take off one of the two threaded rods **4** and the plate **2**.
- To finish the installation (weldings, etc.), take off the piece of pipe and the plate **2**; to place the plate **2** on the load cell **1** and insert them in mounting kit.
- Fix the load cell and the plate by using the bolts provided.
- Connect lower and upper plates **3** to the earthing system **9** then loosen nuts **6**; verify that the threaded rod **8** slides into the hole; turn anti-tilt nuts **7** to a distance of 1 mm from plate.



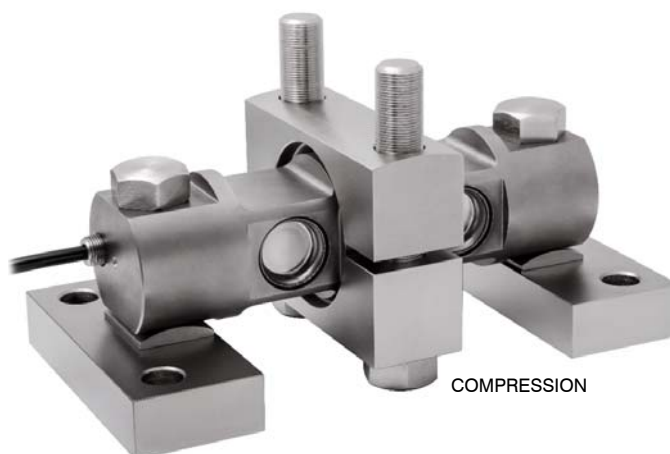
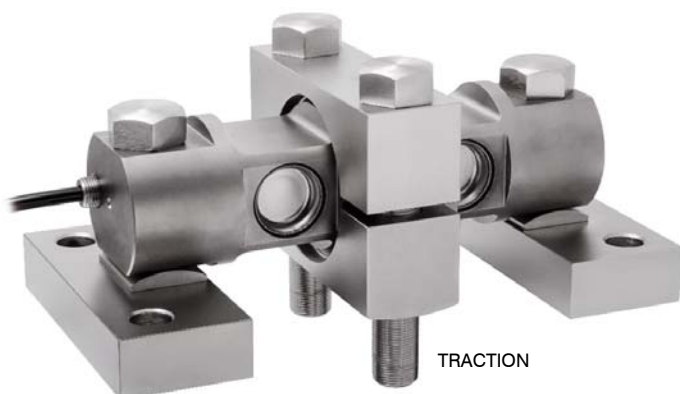
- Load cell.
- Galvanized steel plate (PIATTODTL).
- Galvanized steel upper and lower plates (PIACOKDTL).
- Galvanized steel turnbuckle with horizontal constrainer function (TENDITORE300).
- Self-locking nut $\varnothing 18$.
- Nut $\varnothing 22$ to be used as jack.
- Anti-tilt self-locking nut $\varnothing 22$.
- Threaded rod $\varnothing 22$.
- Copper wire for earthing connection.

for COLUMN load cells (COL - COK):

- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe ($\varnothing 44 \times 152$ mm): unscrewing the nuts **5**, take off one of the two threaded rods **4** and the lower base **2**.
- To finish the installation (weldings, etc.), take off the piece of pipe and the lower base **2**; replace the load cell **1** on the lower base **2** and insert them in mounting kit.
- Connect lower and upper plates **3** to the earthing system **9** then loosen nuts **6**; verify that the threaded rod **8** slides into the hole; turn anti-tilt nuts **7** to a distance of 1 mm from plate.



- Load cell.
- Upper and lower bases.
- Galvanized steel upper and lower plates (PIACOKDTL).
- Galvanized steel turnbuckle with horizontal constrainer function (TENDITORE300).
- Self-locking nut $\varnothing 18$.
- Nut $\varnothing 22$ to be used as jack.
- Anti-tilt self-locking nut $\varnothing 22$.
- Threaded rod $\varnothing 22$.
- Copper wire for earthing connection.

Series load cells: DTX**Up to 60 klb/27 ton application range****DESCRIPTION**

- Nickel-plated steel alloy mounting kit for rigid attachment of the load cell.
- It prevents horizontal movement.

MAX STATIC LOAD klb / c.a. ton**60 klb / 27 ton****FOR LOAD CELLS**

DTX 30 klb ÷ 60 klb

NET WEIGHT (kg)

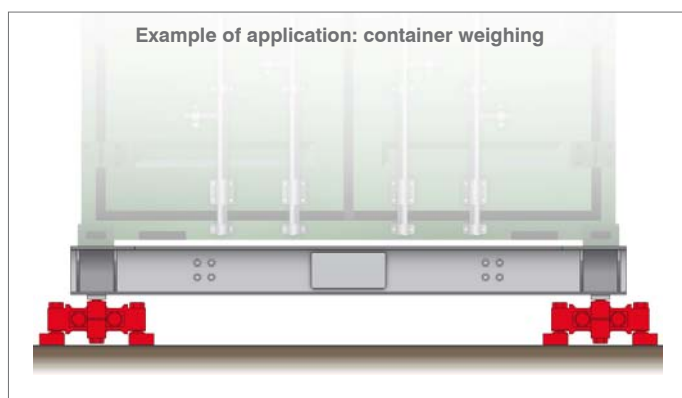
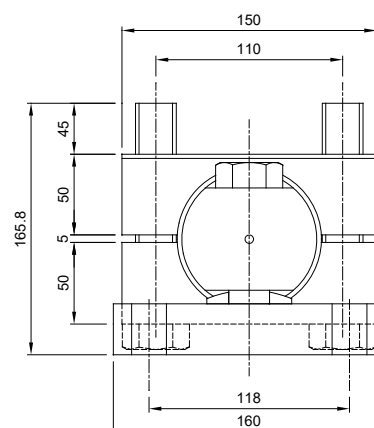
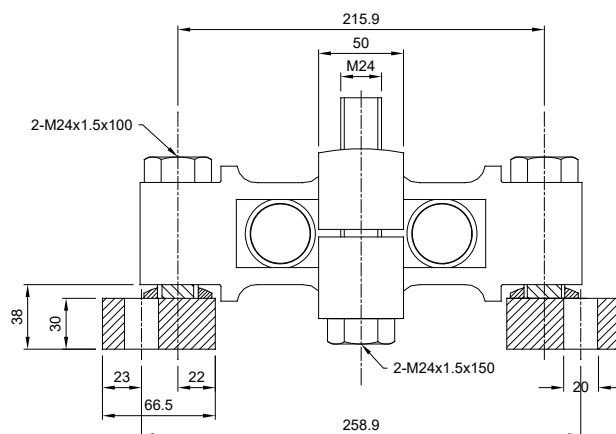
16.9

CODE

VDTX

*Load cell not included.***DIMENSIONS AND TECHNICAL SPECIFICATIONS**

The base plates must be placed on non-deformable surface. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

**Example of application: container weighing***The Company reserves the right to make changes to the technical data, drawings and images without notice.*

	APPLICATION RANGE	FOR LOAD CELLS	PAGE	
A2.5	for COMPRESSION-LOW PROFILE load cells			
	PVCLSEN1090	up to 2000 kg	CLS 1000 - 2000 kg	189
	PVCLS	up to 2000 kg	CLS 1000 - 2000 kg	191
	PV80CLSEN1090	up to 5000 kg	CLS 5000 kg	193
	PV80CLS	up to 5000 kg	CLS 5000 kg	195
	PSCLS	up to 5000 kg	CLS 1000 - 2000 kg CLS 5000 kg	197
	V10000/ V10275- EN1090	up to 15000 kg	CBL, CBX	199
	Z10000	up to 15000 kg	CBL, CBX	201
	V15000/ V100000- EN1090	up to 100000 kg	CBL, CBX	203
	Z15000/ 100000	up to 100000 kg	CBL, CBX	205

PVCLSEN1090

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

Series load cells: **CLS**



Up to 2000 kg application range
Certification EN1090



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	2000	CLS (1000 - 2000 kg)	0.6	PVCLSEN1090

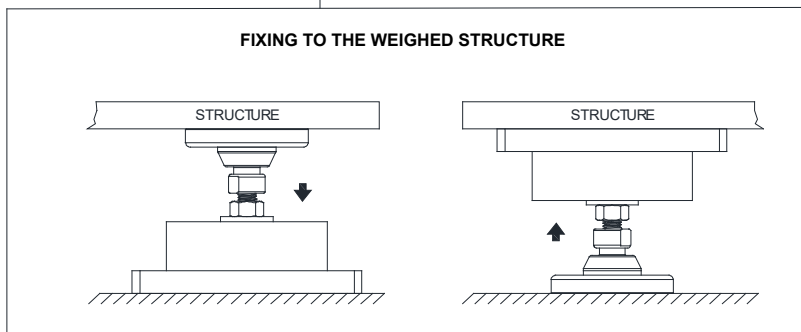
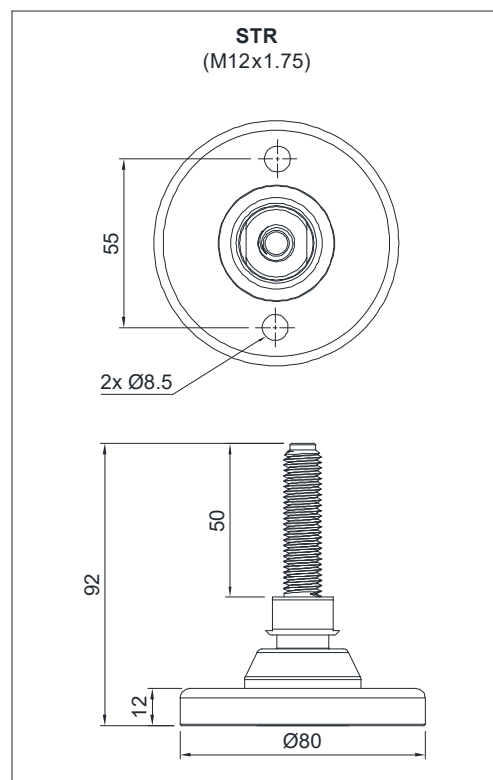
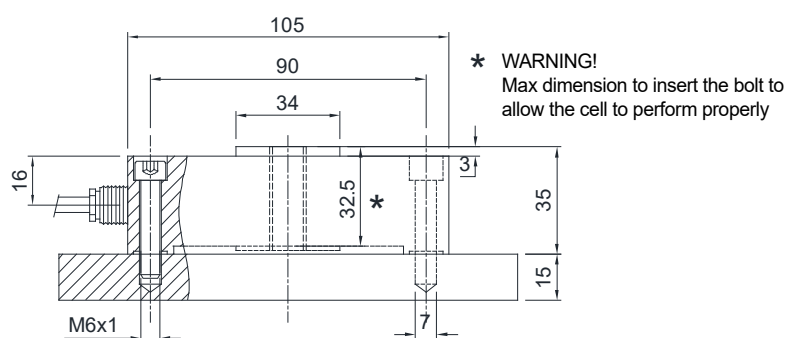
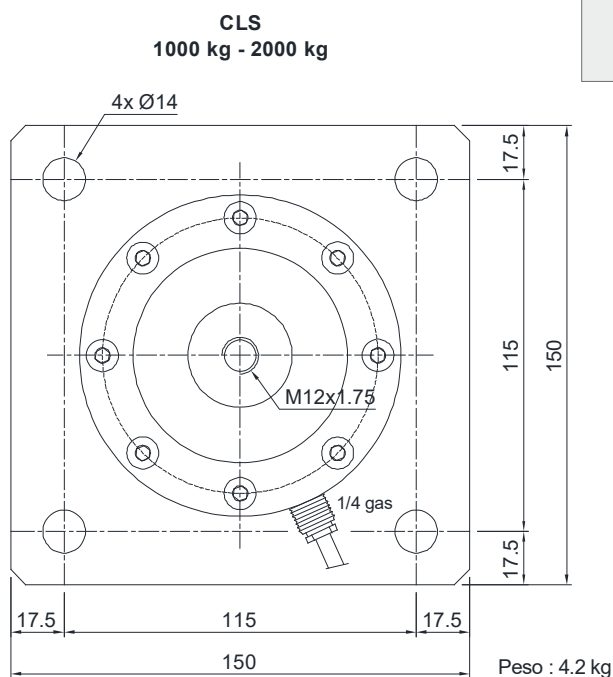
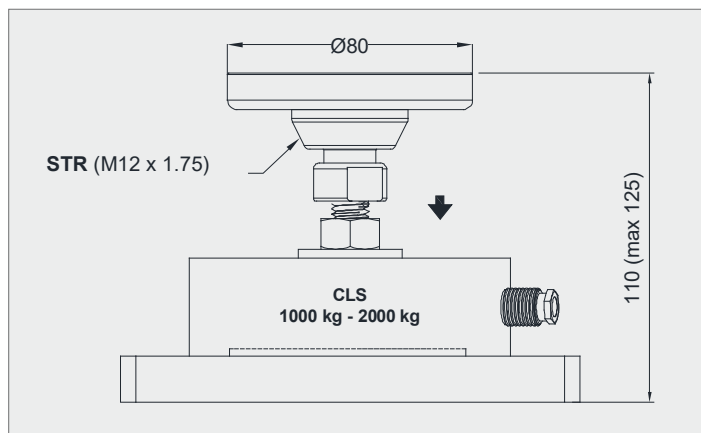
Load cell not included.

DESCRIPTION

- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Finished the installation by means of a copper wire, connect the upper supporting plate with the lower supporting plate, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you must proceed to adjust foot height.



Series load cells: CLS**Up to 2000 kg application range**

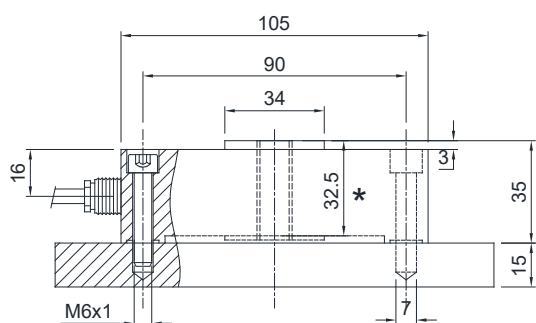
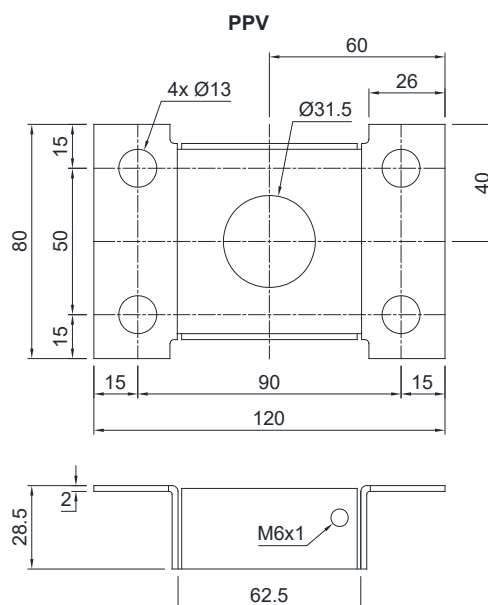
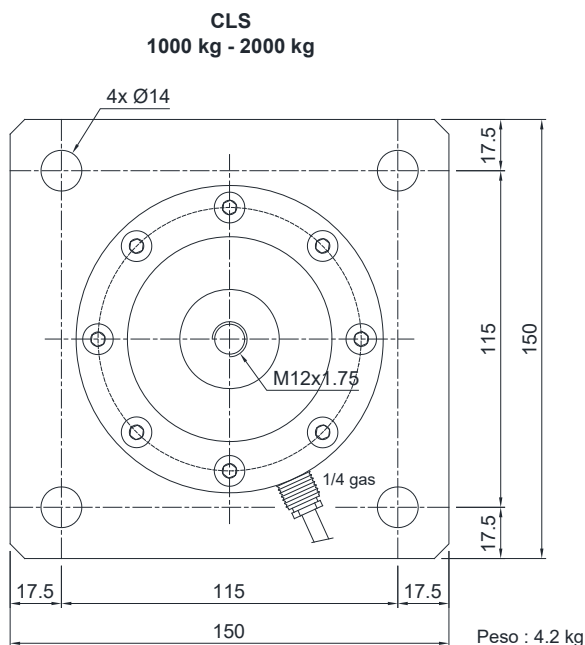
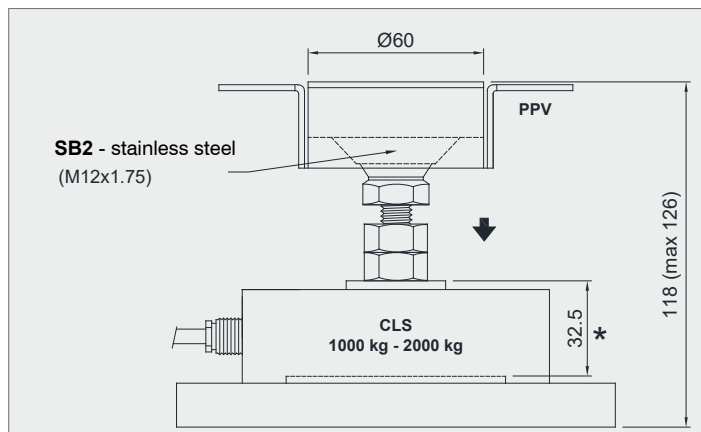
MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	2000	CLS (1000 - 2000 kg)	0.6	PVCLS

*Load cell not included***DESCRIPTION**

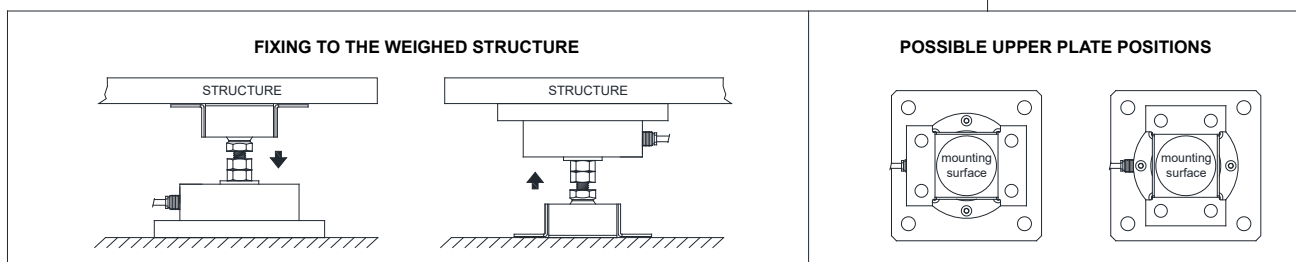
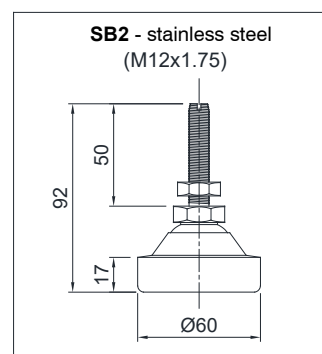
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Constraint against lateral forces and anti-tilt by stainless steel self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Finished the installation by means of a copper wire, connect the upper supporting plate with the lower supporting plate, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you must proceed to adjust foot height.



*** WARNING!**
Max dimension to insert the bolt to allow the cell to perform properly



The Company reserves the right to make changes to the technical data, drawings and images without notice.

PV80CLSEN1090

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®

Series load cells: **CLS**



Up to 5000 kg application range
Certification EN1090



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	5000	CLS (5000 kg)	1.5	PV80CLSEN1090

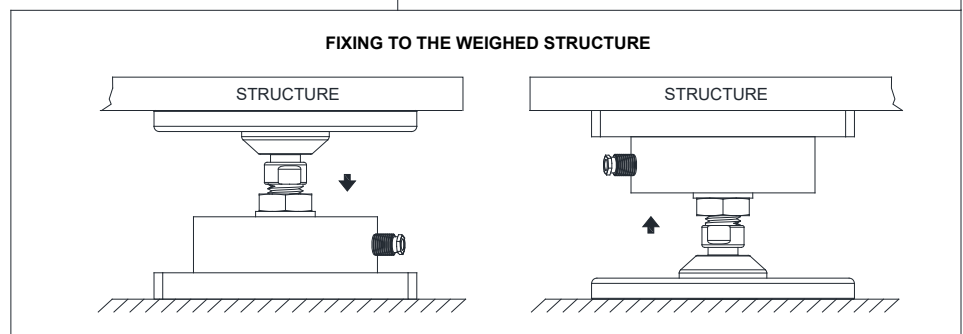
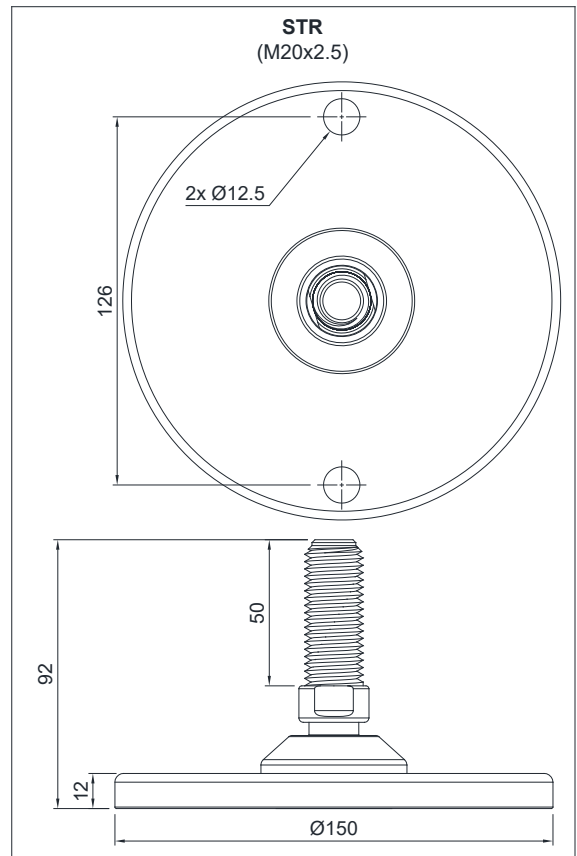
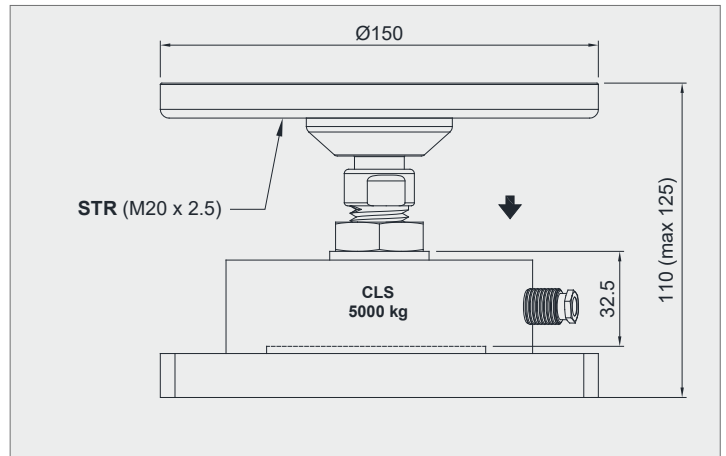
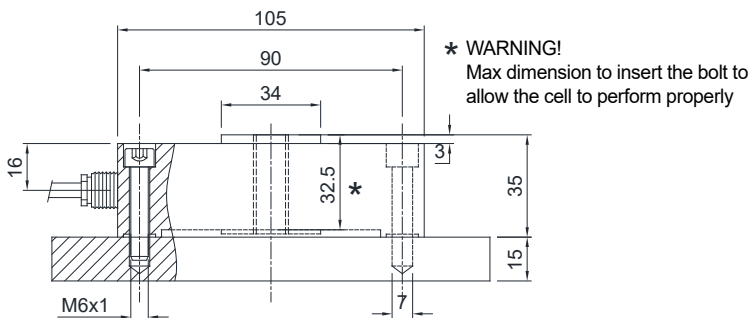
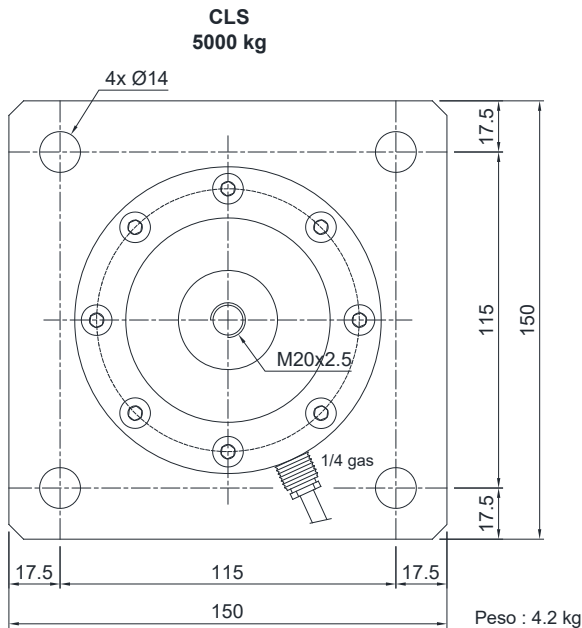
Load cell not included.

DESCRIPTION

- Constraint against lateral forces and anti-tilt by AISI 304 stainless steel self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Finished the installation by means of a copper wire, connect the upper supporting plate with the lower supporting plate, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you must proceed to adjust foot height.



PV80CLS

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®

Series load cells: **CLS**

Up to 5000 kg application range



MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
	5000	CLS (5000 kg)	1.5	PV80CLS

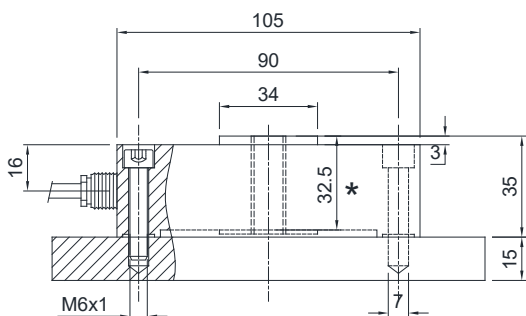
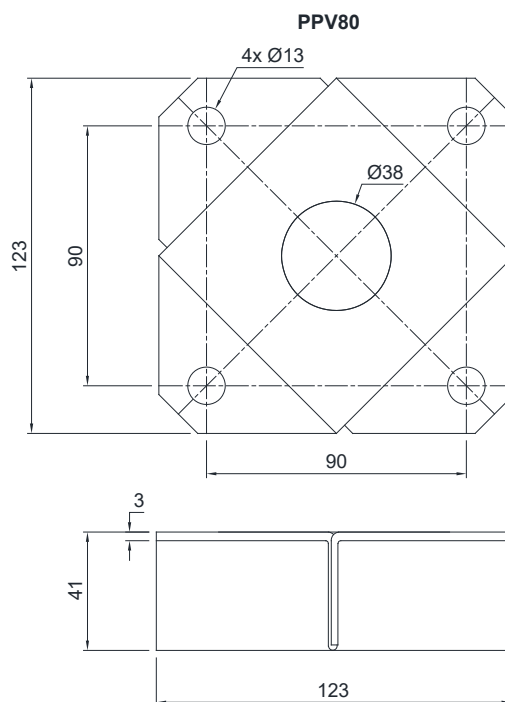
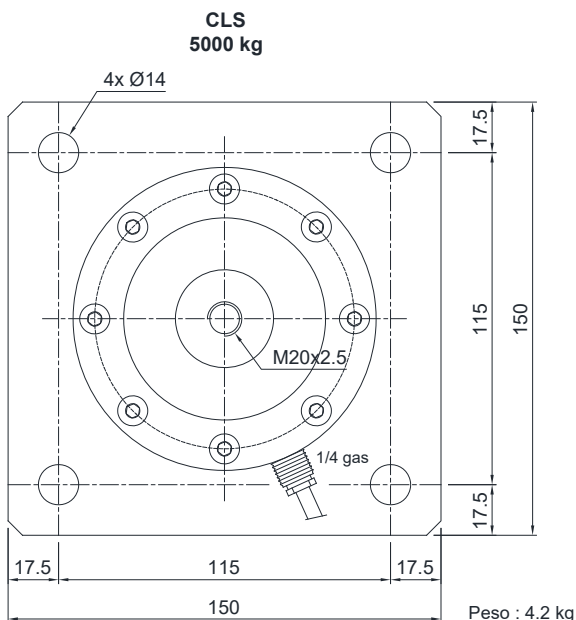
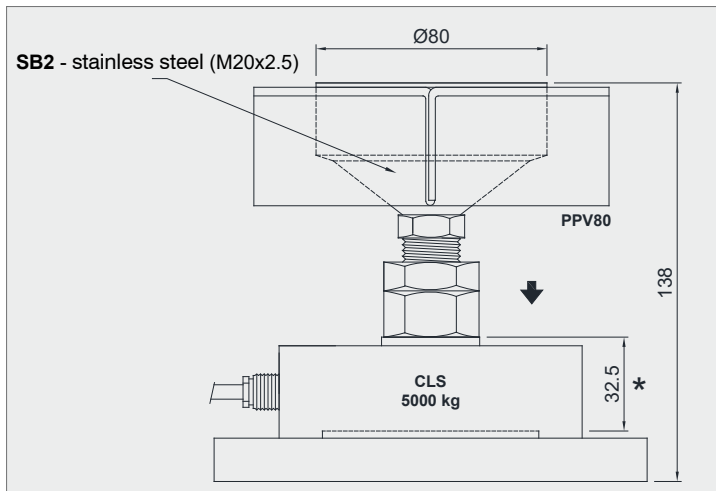
Load cell not included.

DESCRIPTION

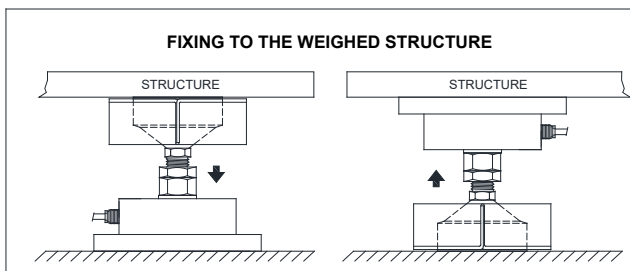
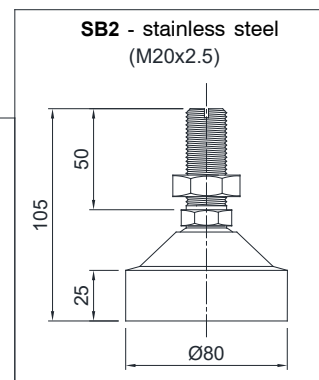
- Adjustable upper plate in AISI 304 stainless steel (PPV80).
- Constraint against lateral forces and anti-tilt by stainless steel self-centering joint foot.
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

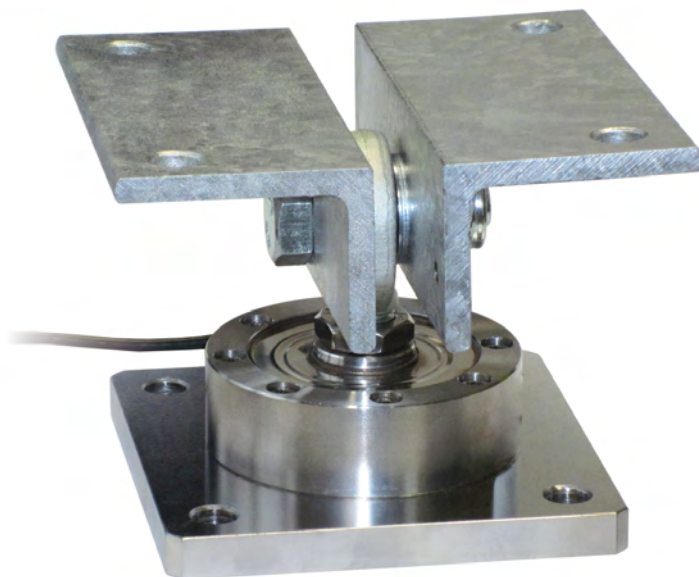
- Finished the installation by means of a copper wire, connect the upper supporting plate with the lower supporting plate, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you must proceed to adjust foot height.



*** WARNING!**
Max dimension to insert the bolt to allow the cell to perform properly



The Company reserves the right to make changes to the technical data, drawings and images without notice.

Series load cells: CLS**Up to 5000 kg application range**

kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
2000	CLS 1000-2000 kg	3.6	PSCLS2000
5000	CLS 5000 kg	3.6	PSCLS

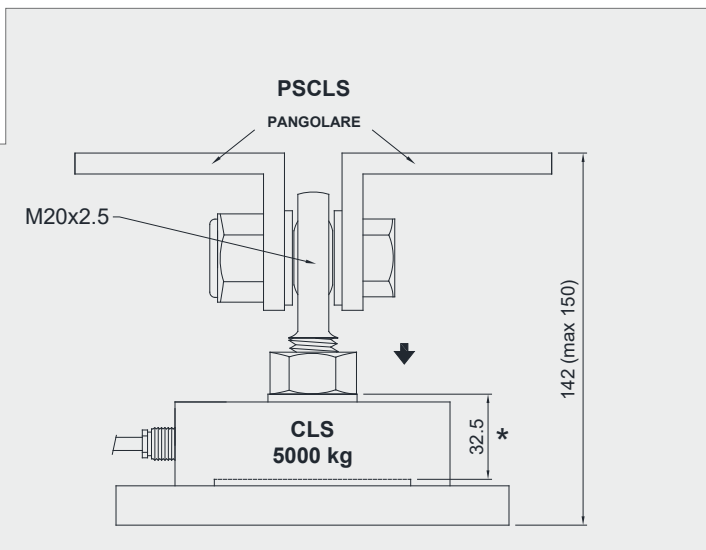
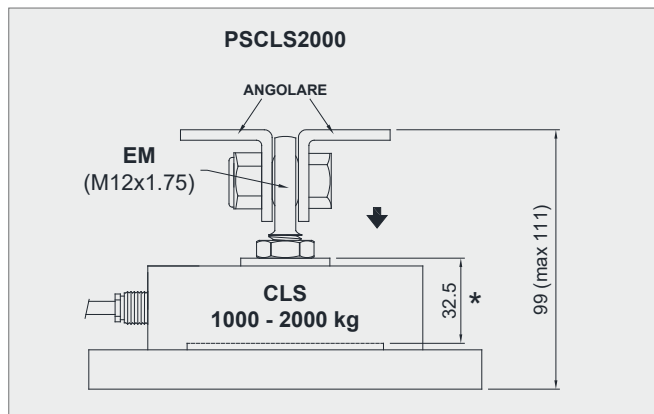
Load cell not included.

DESCRIPTION

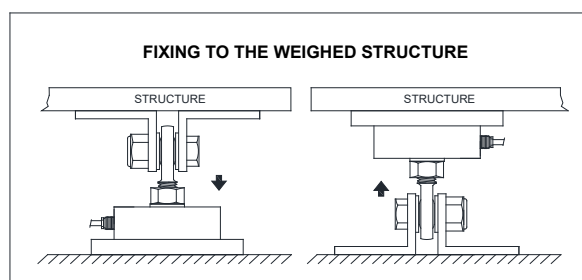
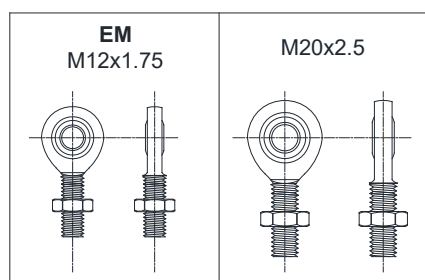
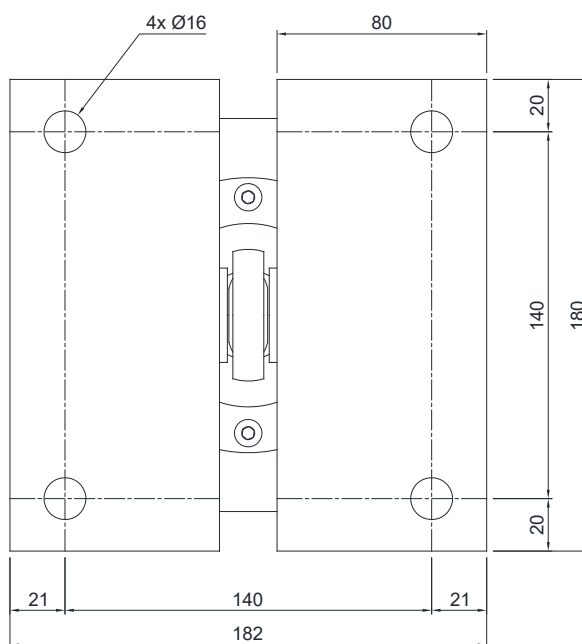
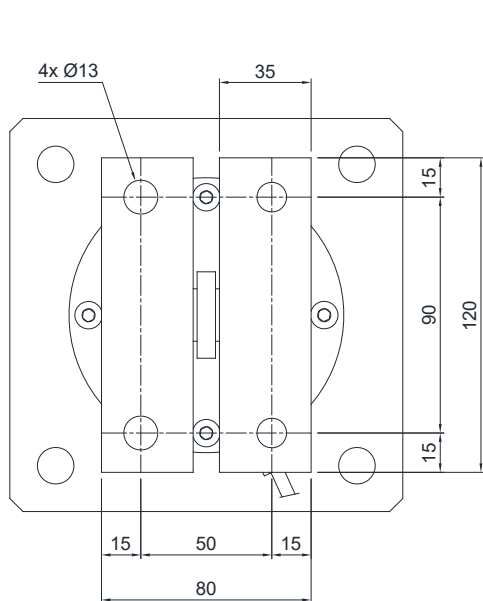
- Adjustable upper plate in hot galvanized steel.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint
- Compensation for any misalignments of the support plates of the structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- Finished the installation by means of a copper wire, connect the upper supporting plate with the lower supporting plate, then connect all the lower plates to the earthing system.



* WARNING! Max dimension to insert the bolt to allow the cell to perform properly



V10000/V10275-EN1090

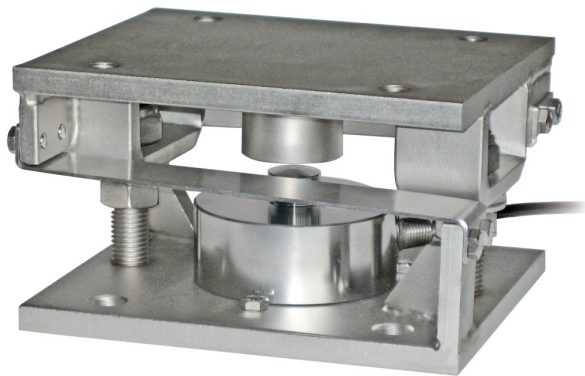
MOUNTING KIT for COMPRESSION-LOW PROFILE load cells



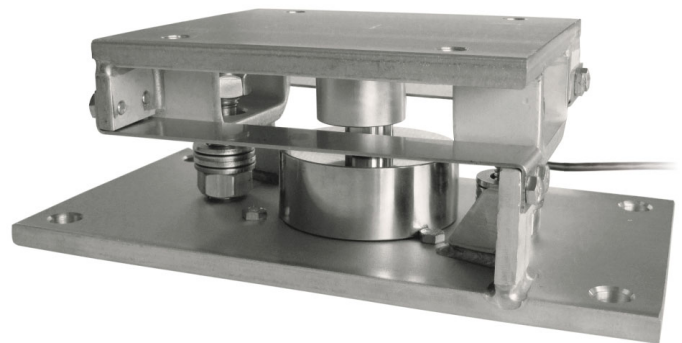
Series load cells: CBL - CBX



Up to 15000 kg application range



V10000/V10000EN1090



V10275/V10275EN1090

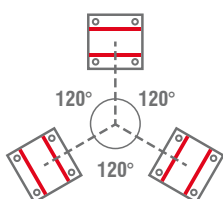
MAX STATIC LOAD kg	EN 1090	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
15000	–	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	5.7	V10000
15000	–	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	6.9	V10275
15000	•	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	5.7	V10000EN1090
15000	•	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	6.9	V10275EN1090

Load cell not included.

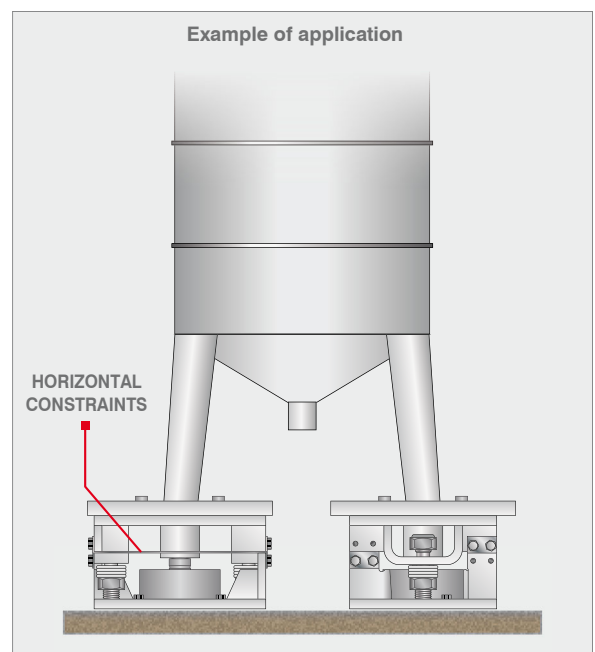
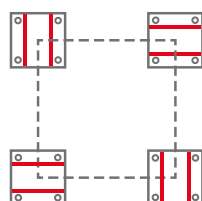
DESCRIPTION

- AISI 304 stainless steel upper and lower plates.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt constraint consisting of two threaded rods with self-locking nut.

HORIZONTAL CONSTRAINTS ORIENTATION IN STRUCTURES WITH 3-POINT SUPPORT



HORIZONTAL CONSTRAINTS ORIENTATION IN STRUCTURES WITH 4-POINT SUPPORT



Rev. 0.0

V10000/V10275-EN1090

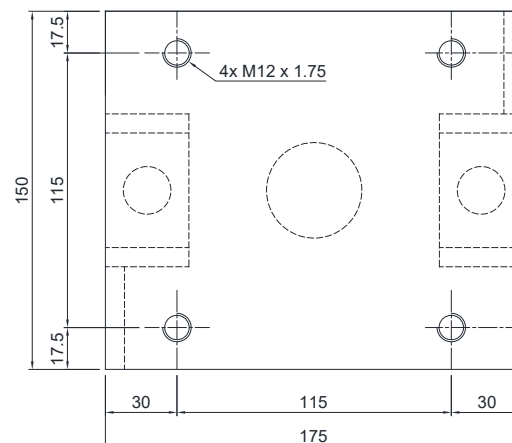
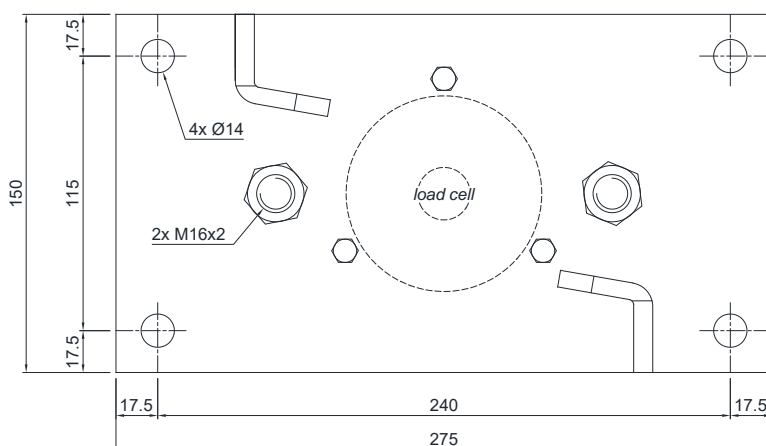
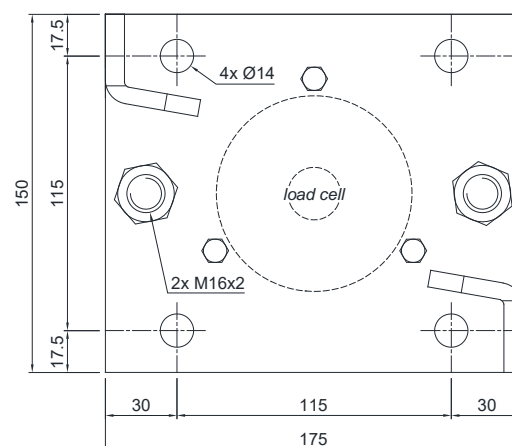
MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®

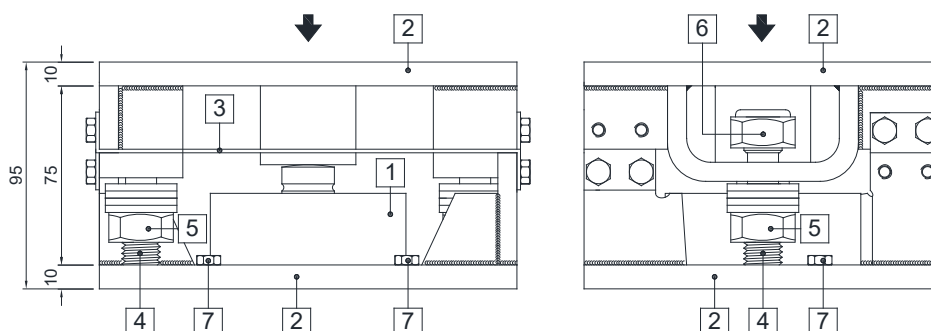
DIMENSIONS AND TECHNICAL SPECIFICATIONS

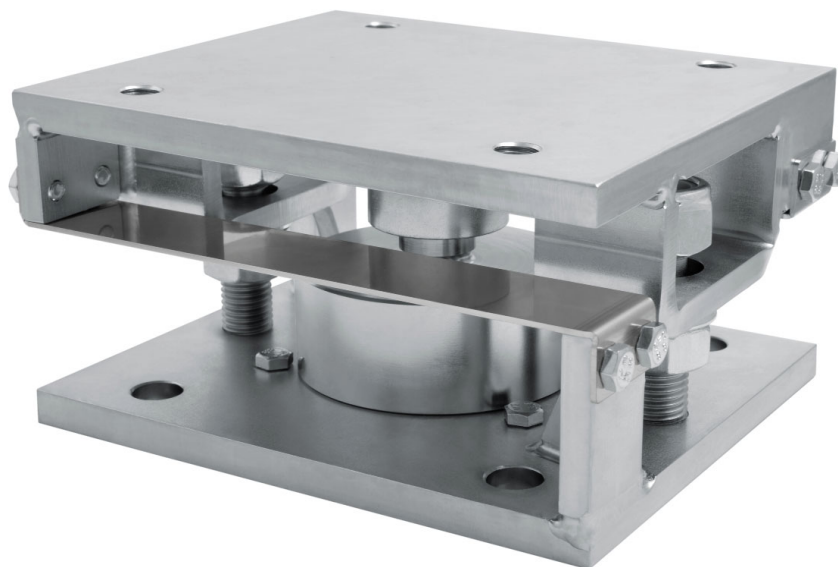
Upper and lower plates **2** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe (1-2 mm higher than the load cell).
- To finish the installation (weldings, etc.), remove the piece of pipe and then removing the bolts to fix the the load cell **7** insert the load cell **1** in mounting kit.
- Connect lower and upper plates **2** to the earthing system then loosen nuts **5**; verify that the threaded rod **4** slides into the hole; turn anti-tilt nuts **6** to a distance of 1 mm from plate.
- Tighten the three bolts to fix the load cell **7**.

Upper plate

V10275/V10275EN1090 - Lower plate

V10000/V10000EN1090 - Lower plate


- 1 Load cell.
- 2 AISI 304 stainless steel upper and lower plates.
- 3 AISI 304 stainless steel laminas with horizontal constraint function.
- 4 Threaded rod.
- 5 Nut to be used as jack.
- 6 Anti-tilt self-locking nut.
- 7 M6 bolts to fix the load cell.



Series load cells: CBL - CBX**Up to 15000 kg application range**

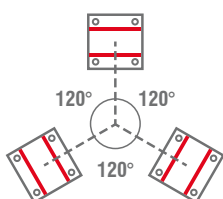
MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
15000		CBL (250 ÷ 12500 kg) - CBX (15000 kg)	5.7	Z10000

Load cell not included.

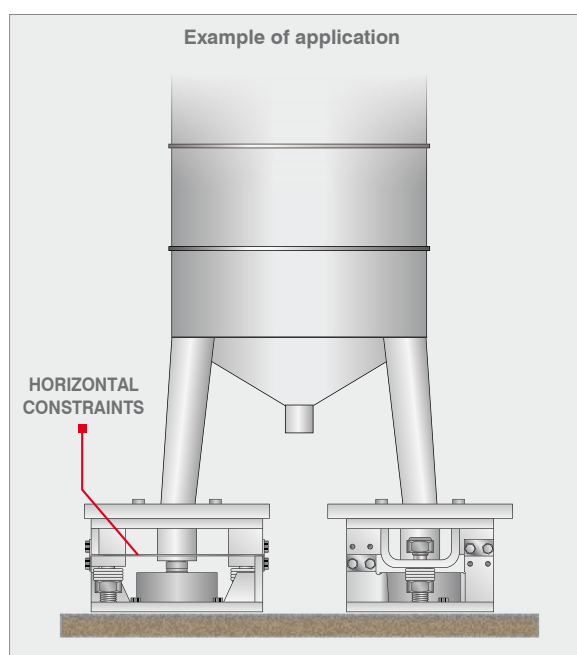
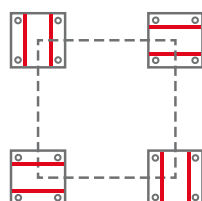
DESCRIPTION

- Upper and lower plates in galvanized S355JR construction steel.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt constraint consisting of two threaded rods with self-locking nut.

HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
3-POINT SUPPORT



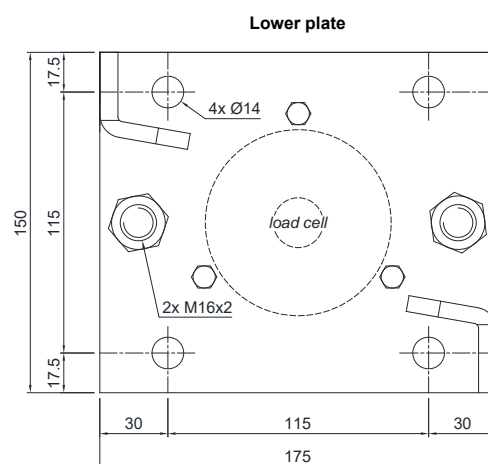
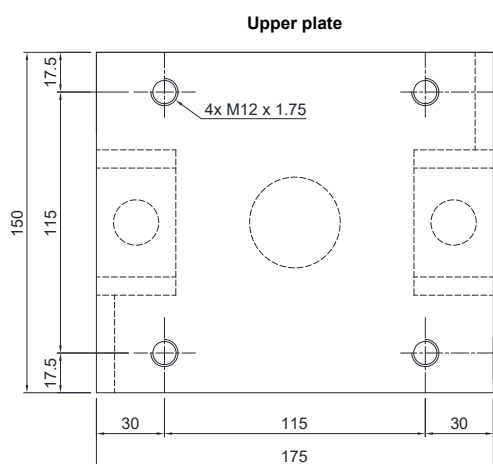
HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
4-POINT SUPPORT



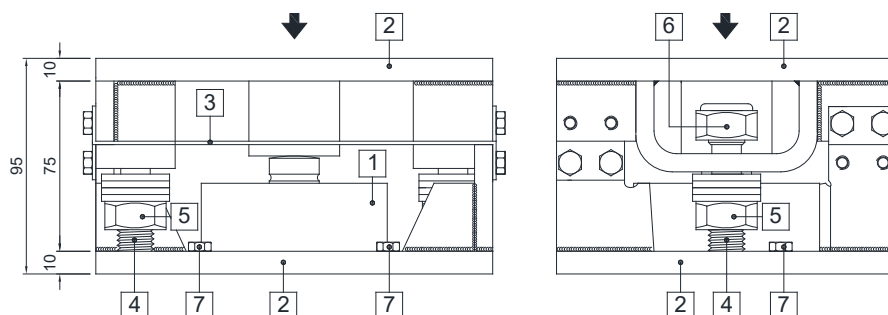
DIMENSIONS AND TECHNICAL SPECIFICATIONS

Upper and lower plates **2** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe (1-2 mm higher than the load cell).
- To finish the installation (weldings, etc.), remove the piece of pipe and then removing the bolts to fix the the load cell **7** insert the load cell **1** in mounting kit.
- Connect lower and upper plates **2** to the earthing system then loosen nuts **5**; verify that the threaded rod **4** slides into the hole; turn anti-tilt nuts **6** to a distance of 1 mm from plate.
- Tighten the three bolts to fix the load cell **7**.



- 1** Load cell.
- 2** Upper and lower plates in galvanized S355JR construction steel.
- 3** AISI 304 stainless steel laminas with horizontal constraint function.
- 4** Threaded rod.
- 5** Nut to be used as jack.
- 6** Anti-tilt self-locking nut.
- 7** M6 bolts to fix the load cell.



V15000/V100000-EN1090

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®

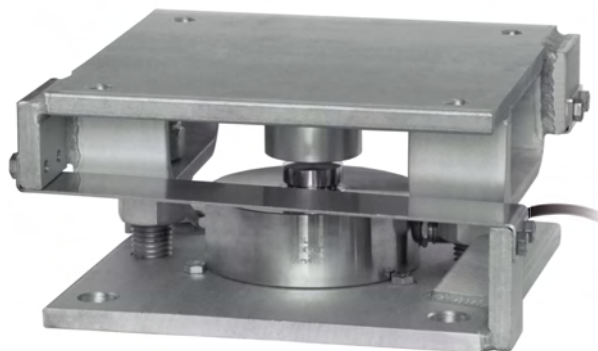
Series load cells: **CBL - CBX**

Up to 100000 kg application range



DESCRIPTION

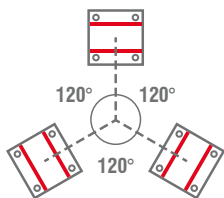
- AISI 304 stainless steel upper and lower plates.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt constraint consisting of two threaded rods with self-locking nut.



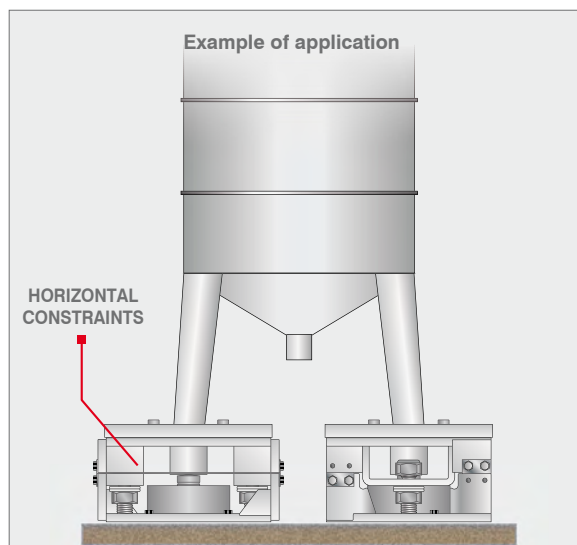
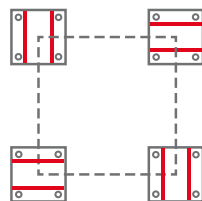
MAX STATIC LOAD	kg	EN 1090	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
30000	–	–	CBL (15000 kg) - CBX (30000 kg)	9	V15000
50000	–	–	CBL (30000 kg) - CBX (50000 kg)	17.5	V30000
100000	–	–	CBL (50000 kg) - CBL (100000 kg)	33.5	V100000
30000	•	•	CBL (15000 kg) - CBX (30000 kg)	9	V15000EN1090
50000	•	•	CBL (30000 kg) - CBX (50000 kg)	17.5	V30000EN1090
100000	•	•	CBL (50000 kg) - CBL (100000 kg)	33.5	V100000EN1090

Load cell not included.

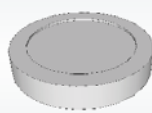


HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
3-POINT SUPPORT



HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
4-POINT SUPPORT



COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	AISI 304 stainless steel adapter: V15000/V15000EN1090 for load cells Ø82 mm V30000/V30000EN1090 for load cells Ø100 mm V100000/V100000EN1090 for load cells Ø126 mm	ADAT100 ADAT126 ADAT165
	Galvanized steel turnbuckle with dual ball-and-socket. Net weight: 2.10 kg Working load: 2500 kg Ultimate overload: 10000 kg	TENDITORE300
	Galvanized steel anchor plate for TENDITORE300 Net weight: 1.5 kg	PTEND

V15000/V100000-EN1090

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

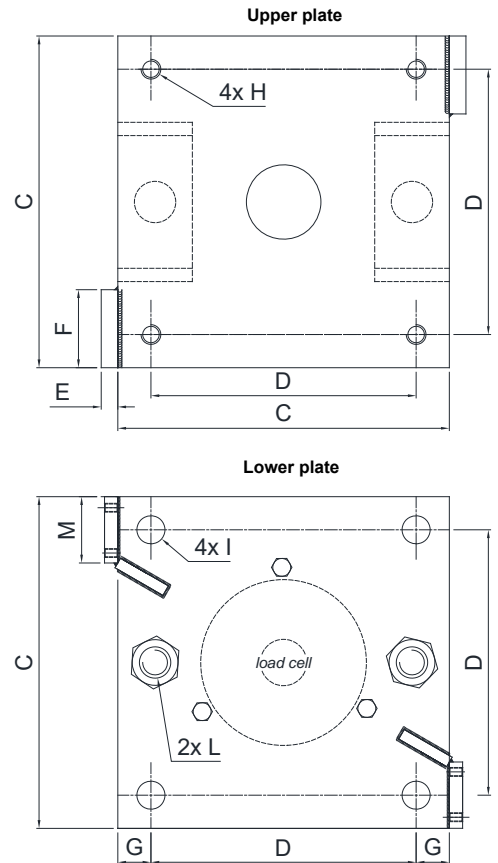
DIMENSIONS AND TECHNICAL SPECIFICATIONS

Upper and lower plates **2** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

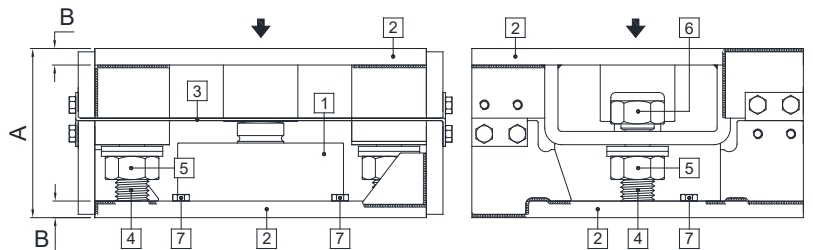
- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe (1-2 mm higher than the load cell).
- To finish the installation (weldings, etc..), remove the piece of pipe and then removing the bolts to fix the the load cell **7** insert the load cell **1** in mounting kit.
- Connect lower and upper plates **2** to the earthing system then loosen nuts **5** ; verify that the threaded rod **4** slides into the hole; turn anti-tilt nuts **6** to a distance of 1 mm from plate.
- Tighten the three bolts to fix the load cell **7**.

	A	B	C	D	E	F	G	H	I	L	M	Weight
V15000/V15000EN1090	102	10	200	160	10	47	20	M12x1.75	Ø17	M20x2.5	40	9 kg
V30000/V30000EN1090	132	12	250	185	12	70	32.5	M18x2.5	Ø20	M24x3	60	17 kg
V100000/V100000EN1090	155	15	320	250	15	95	35	M20x2.5	Ø23	M30x3.5	70	34 kg

Dimensions (mm)



- 1** Load cell.
- 2** AISI 304 stainless steel upper and lower plates.
- 3** AISI 304 stainless steel laminas with horizontal constraint function.
- 4** Threaded rod.
- 5** Nut to be used as jack.
- 6** Anti-tilt self-locking nut.
- 7** M6 bolts to fix the load cell.



Application example:
how to make further horizontal constraints with the TENDITORE300 accessory

STRUCTURE WITH 3-POINT SUPPORT

1 CONSTRAINT FOR SUPPORT

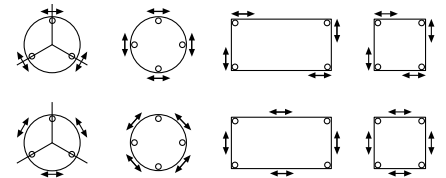
2 CONSTRAINTS FOR SUPPORT

STRUCTURE WITH 4-POINT SUPPORT

1 CONSTRAINT FOR SUPPORT

2 CONSTRAINTS FOR SUPPORT

CONSTRAINTS PLACEMENT ON 3/4 SUPPORTS:
the horizontal constraints can be positioned both on supports and on the four sides, centrally between two supports.



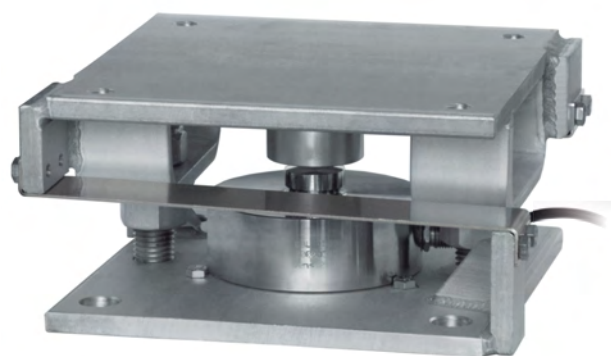
The Company reserves the right to make changes to the technical data, drawings and images without notice.

Z15000/100000

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®
Series load cells: CBL - CBX
Up to 100000 kg application range
DESCRIPTION

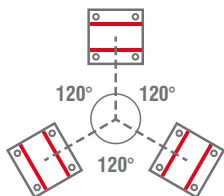
- Upper and lower plates in galvanized S355JR construction steel.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt constraint consisting of two threaded rods with self-locking nut.



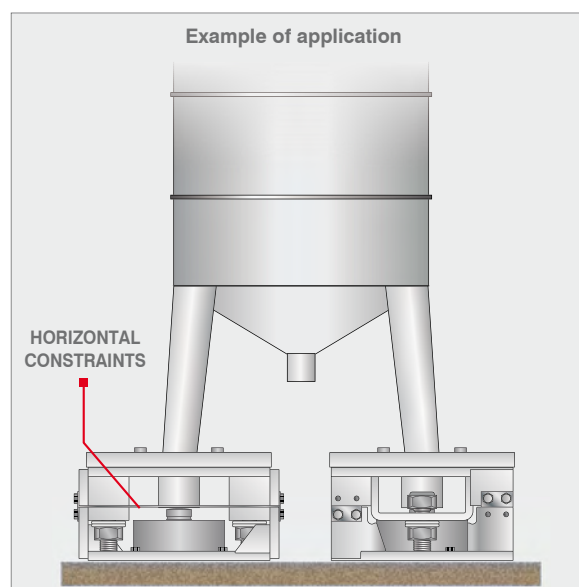
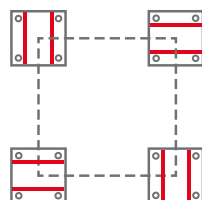
MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
30000		CBL (15000 kg) - CBX (30000 kg)	9	Z15000
50000		CBL (30000 kg) - CBX (50000 kg)	17.5	Z30000
100000		CBL (50000 kg) - CBL (100000 kg)	33.5	Z100000

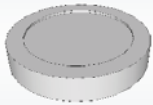


Load cell not included.

HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
3-POINT SUPPORT



HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURES WITH
4-POINT SUPPORT


COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	AISI 304 stainless steel adapter: Z15000 for load cells: Ø82 mm Z30000 for load cells: Ø100 mm Z100000 for load cells: Ø126 mm	ADAT100 ADAT126 ADAT165
	Galvanized steel turnbuckle with dual ball-and-socket. Net weight: 2.10 kg Working load: 2500 kg Ultimate overload: 10000 kg	TENDITORE300
	Galvanized steel anchor plate for TENDITORE300 Net weight: 1.5 kg	PTEND

Z15000/100000

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

LAUMAS®

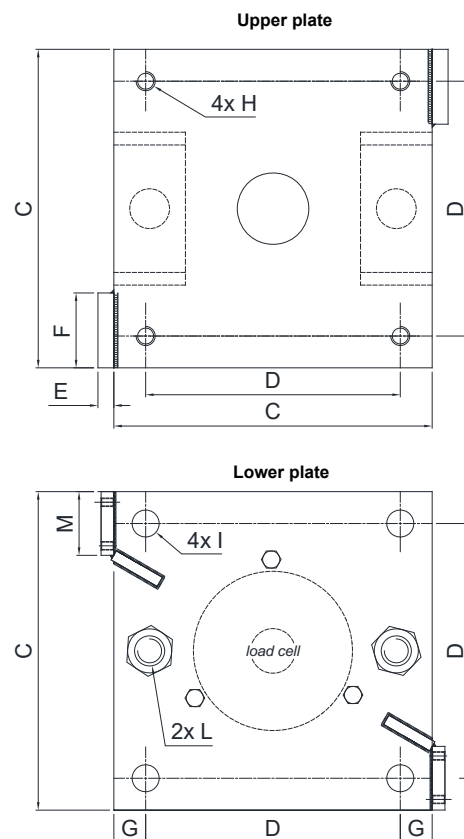
DIMENSIONS AND TECHNICAL SPECIFICATIONS

Upper and lower plates **2** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

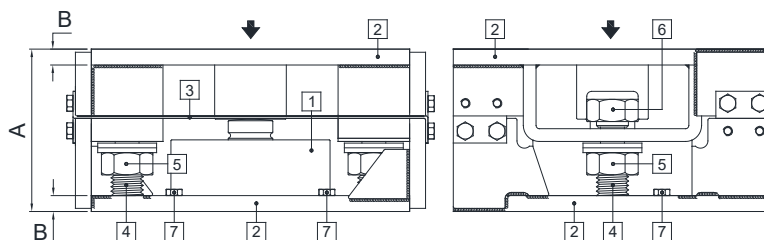
- Install the weighed system using only the mounting kit without the load cell **1** and inserting in its place a piece of pipe (1-2 mm higher than the load cell).
- To finish the installation (weldings, etc..), remove the piece of pipe and then removing the bolts to fix the the load cell **7** insert the load cell **1** in mounting kit.
- Connect lower and upper plates **2** to the earthing system then loosen nuts **5** ; verify that the threaded rod **4** slides into the hole; turn anti-tilt nuts **6** to a distance of 1 mm from plate.
- Tighten the three bolts to fix the load cell **7**.

	A	B	C	D	E	F	G	H	I	L	M	Weight
Z15000	102	10	200	160	10	47	20	M12x1.75	Ø17	M20x2.5	40	9 kg
Z30000	132	12	250	185	12	70	32.5	M18x2.5	Ø20	M24x3	60	17 kg
Z100000	155	15	320	250	15	95	35	M20x2.5	Ø23	M30x3.5	70	34 kg

Dimensions (mm)

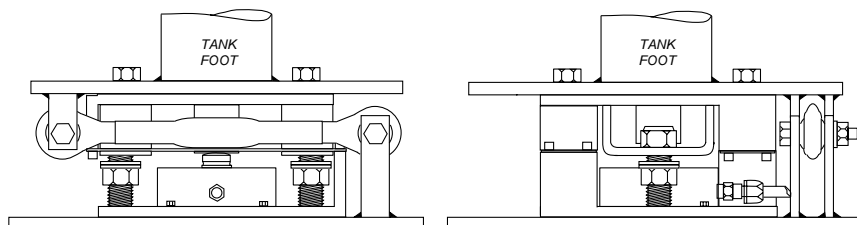


- Load cell.
- Upper and lower plates in galvanized S355JR construction steel.
- AISI 304 stainless steel laminas with horizontal constraint function.
- Threaded rod.
- Nut to be used as jack.
- Anti-tilt self-locking nut.
- M6 bolts to fix the load cell.

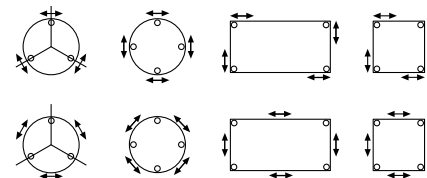


Application example:

how to make further horizontal constraints with the TENDITORE300 accessory

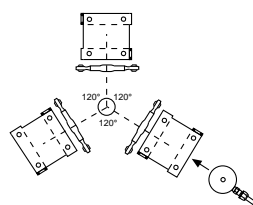


CONSTRAINTS PLACEMENT ON 3/4 SUPPORTS: the horizontal constraints can be positioned both on supports and on the four sides, centrally between two supports.

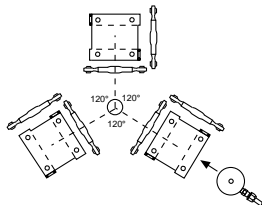


STRUCTURE WITH 3-POINT SUPPORT

1 CONSTRAINT FOR SUPPORT

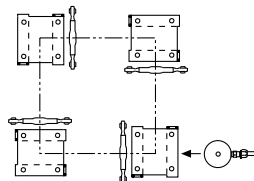


2 CONSTRAINTS FOR SUPPORT

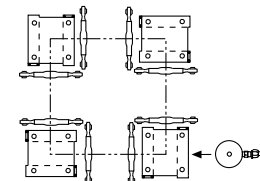







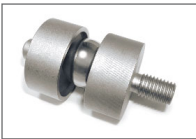

STRUCTURE WITH 4-POINT SUPPORT




1 CONSTRAINT FOR SUPPORT



2 CONSTRAINTS FOR SUPPORT



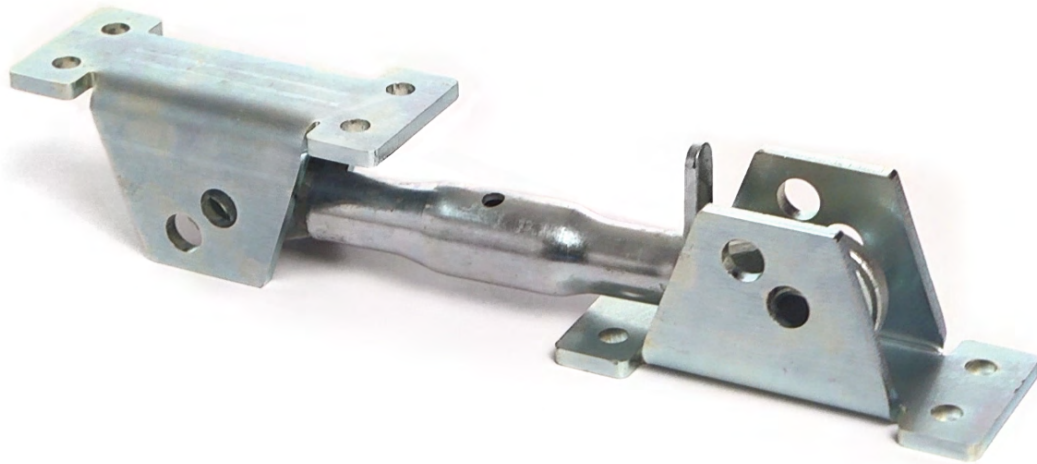
	APPLICATION RANGE	FOR LOAD CELLS	PAGE	
	A3.1	Horizontal constraints for mounting kits		
	TENDITORE300 PTEND	up to 100000 kg	-	210
	A3.2	Self-centering adjustable feet		
	SB2 - PXC	up to 5000 kg	FCAL, FCAX, FCOL, FTK, FTKL, FTP, FT-P, FTZ	212
	STR	up to 10000 kg	FCAL, FCAX, FCOL, FTK, FTKL, FTP, FT-P, FTZ, FLC	214
	HD	up to 20000 kg	FLC 3A	216
	A3.3	Adjustable upper plate		
	PPV PPVZ PPV80 PPV60Z	up to 5000 kg	-	218
	A3.4	Accessory with ball		
	ACCSFER	up to 5000 kg	FTK, FT-P, FTKL, FTZ, FTP, CLS	219
	A3.5	Compression joint		
	ANTIV	up to 2000 kg	FCOL, FCK, FTKL, FCAL, FCAX, FTP, FT-P, FTK, FTZ, CLS	220

	APPLICATION RANGE	FOR LOAD CELLS	PAGE
	A3.6	Ball-and-socket joint	
	EM-DADO	up to 112 kN (dynamic) up to 146 kN (static)	-
	A3.7	Axial spherical plain bearings	
	SNODOGE	up to 10000 kg	FTK, FT-P, FTKL, FTZ, FTP, CLS
	A3.8	Level measurements - false cells	
	ML	up to 100000 kg	-

TENDITORE300 - PTEND

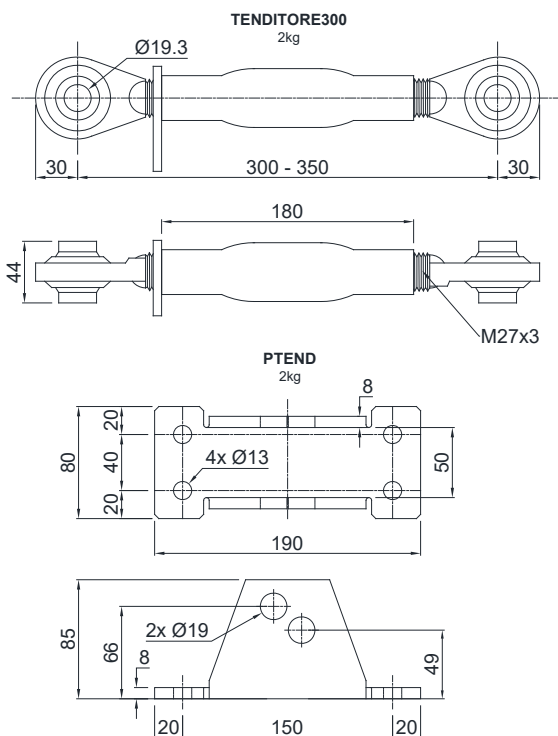
Horizontal constraints for mounting kits

Up to 100000 kg application range



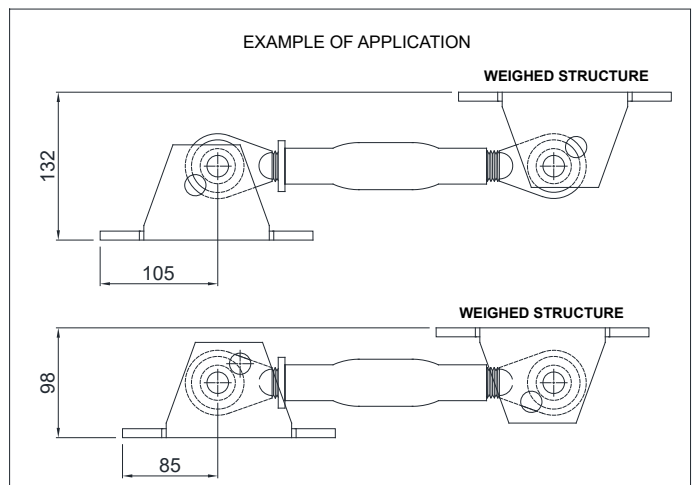
DESCRIPTION	CODE
Galvanized steel turnbuckle with dual ball-and-socket.	
Net weight: 2.10 kg	TENDITORE300
Working load: 2500 kg	
Ultimate overload: 10000 kg	
Galvanized steel anchor plate for TENDITORE300	
Net weight: 1.5 kg	PTEND

DIMENSIONS



DESCRIPTION

- Suitable for static applications; place the constraints in a horizontal position.
- Turnbuckle lock for constraint adjustment.



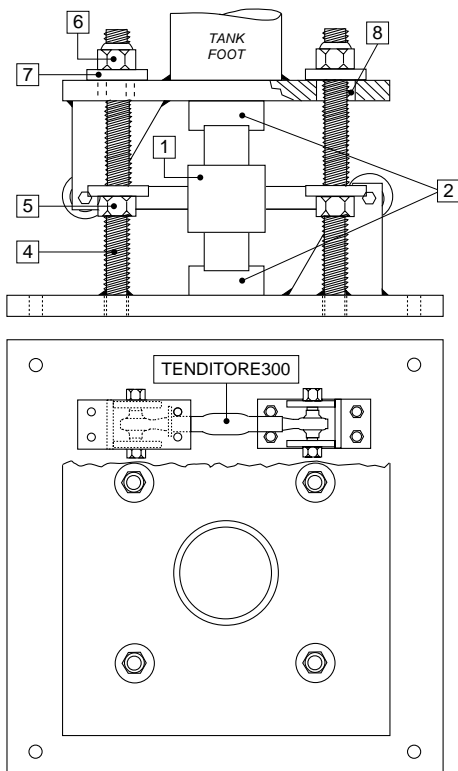
Horizontal constraints for mounting kits

APPLICATION EXAMPLE: HOW TO MAKE MOUNTING KITS WITH HORIZONTAL CONSTRAINTS

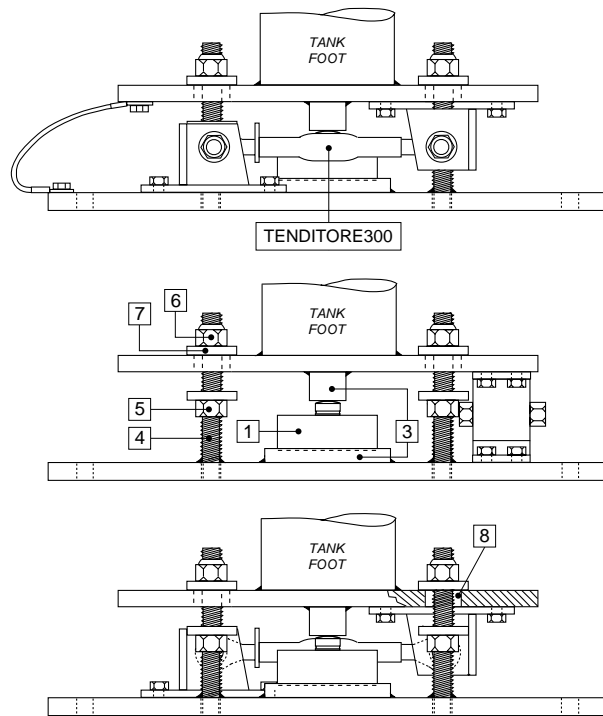
By a copper wire, connect the upper supporting plate with the lower supporting plate, then link together the lower plates to the earthing system.

To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support structure.

Application example with column load cells

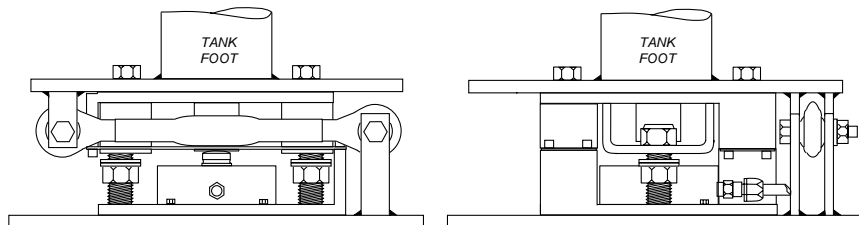


Application example with compression load cells

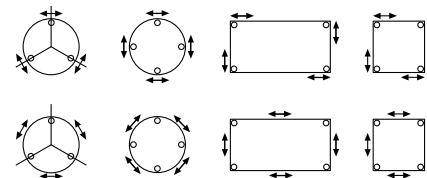


- 1 Load cell.
- 2 Mounting kit for column load cell.
- 3 AISI 304 stainless steel upper and lower bases.
- 4 Threaded rod.
- 5 Nut to be used as jack.
- 6 Anti-tilt self-locking nut.
- 7 Washer.
- 8 Hole diameter 20 mm larger than the bolt.

Application example with V15000 - V30000 - V100000 mounting kits

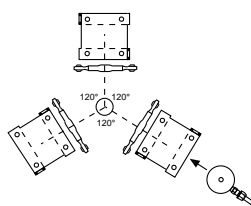


CONSTRAINTS PLACEMENT ON 3/4 SUPPORTS: the horizontal constraints can be positioned both on supports and on the four sides, centrally between two supports.

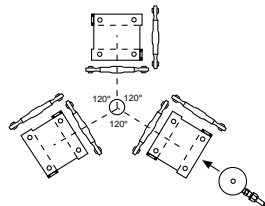


STRUCTURE WITH 3-POINT SUPPORT

1 CONSTRAINT FOR SUPPORT

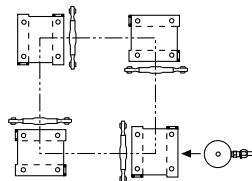


2 CONSTRAINTS FOR SUPPORT

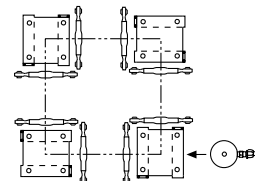


STRUCTURE WITH 4-POINT SUPPORT

1 CONSTRAINT FOR SUPPORT



2 CONSTRAINTS FOR SUPPORT



SB2 - PXC

Self-centering joint feet

For BENDING BEAM and SHEAR BEAM load cells

Up to 5000 kg application range

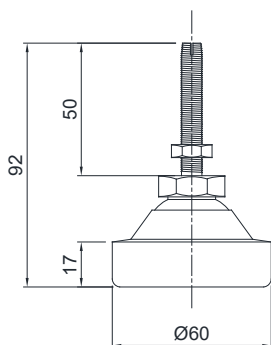


MAX STATIC LOAD	kg	THREAD	DIMENSIONS	MATERIAL	NET WEIGHT (kg)	SERIES
500		M8	Ø60 x H 92 mm	stainless steel	0.3	SB2
500		M10	Ø60 x H 92 mm		0.3	SB2
2000		M12	Ø60 x H 92 mm		0.4	SB2
5000		M20	Ø80 x H 105 mm		0.9	SB2
2000		M12	Ø60 x H 78 mm	stainless steel	0.4	PXC
2000		M12	Ø60 x H 86 mm	galvanized steel	0.4	SB2
5000		M20	Ø62 x H 110 mm		0.9	SB2
2000		M12	Ø60 x H 78 mm	galvanized steel	0.4	PXC

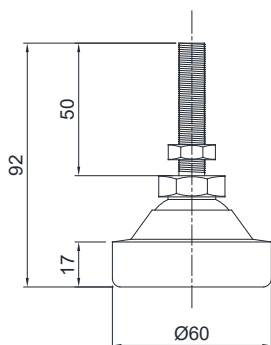
Nuts and washers included.

DIMENSIONS AND APPLICATION

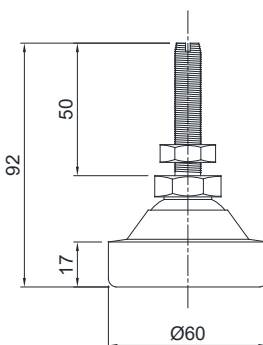
SB2 - stainless steel
M8x1.25



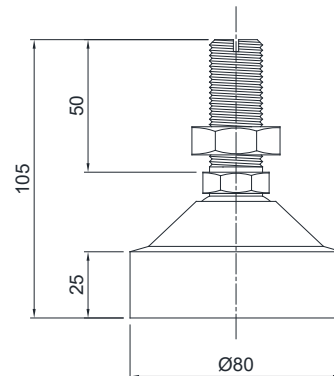
SB2 - stainless steel
M10x1.5



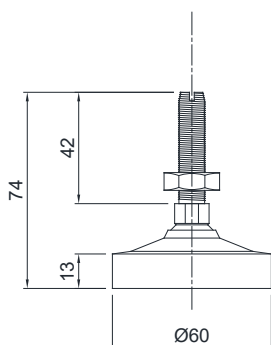
SB2 - stainless steel
M12x1.75



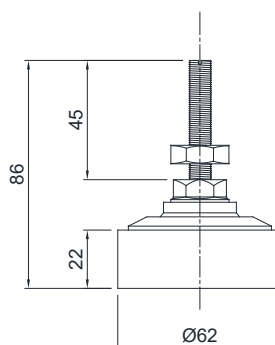
SB2 - stainless steel
M20x2.5



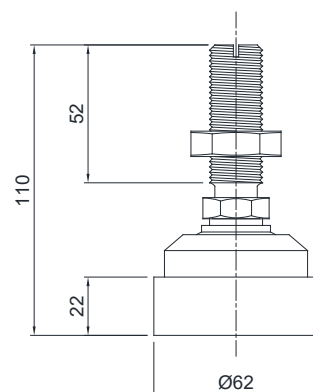
**PXC - stainless steel/
galvanized steel**
M12x1.75



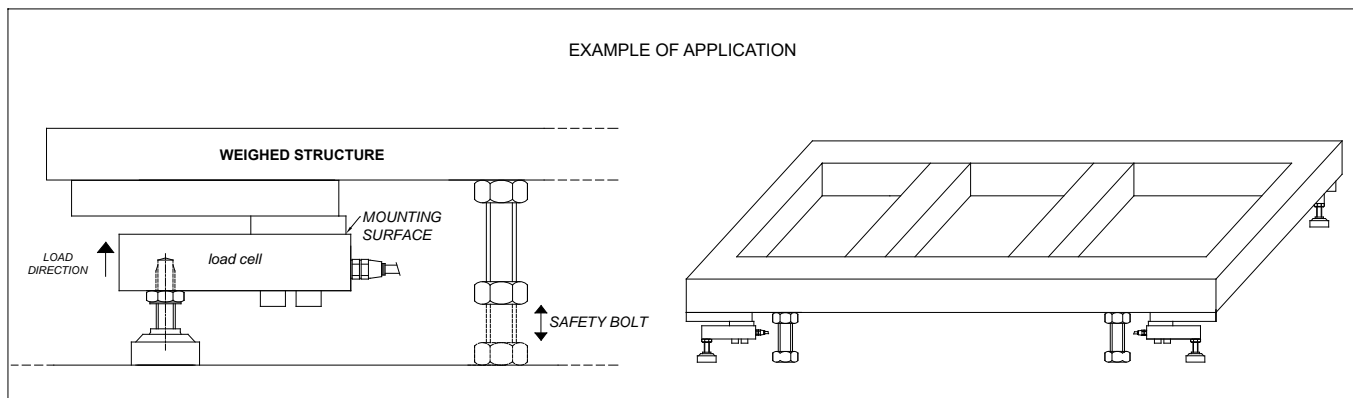
SB2 - galvanized steel
M12x1.75



SB2 - galvanized steel
M20x2.5

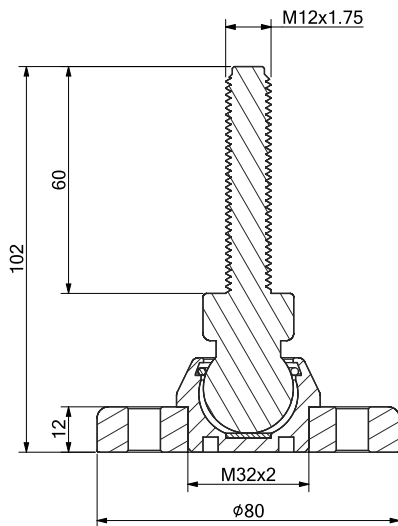
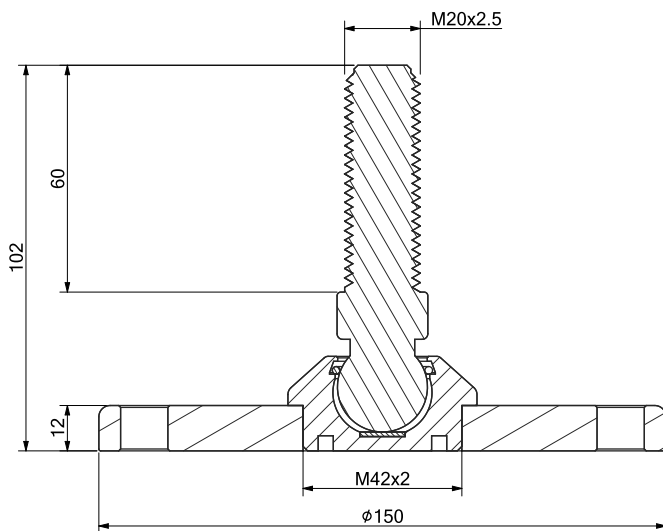
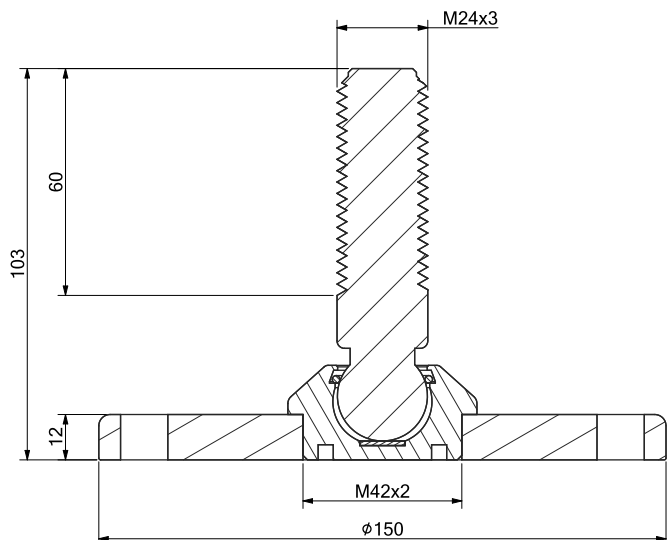


EXAMPLE OF APPLICATION



For BENDING BEAM and SHEAR BEAM load cells**Up to 10000 kg application range**

MAX STATIC LOAD	kg	THREAD	DIMENSIONS	MATERIAL	NET WEIGHT (kg)
2500		M12x1.75	Ø80 x H 102 mm		0.4
5000		M20x2.5	Ø150 x H 102 mm	stainless steel	0.9
10000		M24x3	Ø150 x H 103 mm		0.9

DIMENSIONS AND APPLICATION**2500 kg****5000 kg****10000 kg**



Up to 20000 kg application range



MAX STATIC LOAD	kg	THREAD	DIMENSIONS	MATERIAL	NET WEIGHT (kg)
2000		M12	Ø120 x H 101 mm	stainless steel	0.3
5000		M16	Ø120 x H 101 mm		0.3
5000		M20	Ø120 x H 101 mm		0.4
10000		M24	Ø120 x H 97 mm		0.4
10000		M30	Ø120 x H 97 mm		0.9
20000		M36	Ø120 x H 97 mm		0.4

On request: pluggable hygienic foot, with holes for fixing to the floor.

For other types of hygienic or customized feet, please contact <https://martinlevelling.it>

CERTIFICATIONS



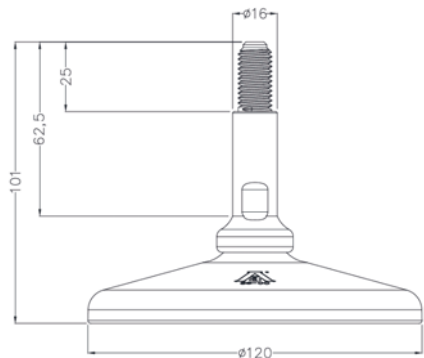
Equivalent of the CE marking for the United Kingdom



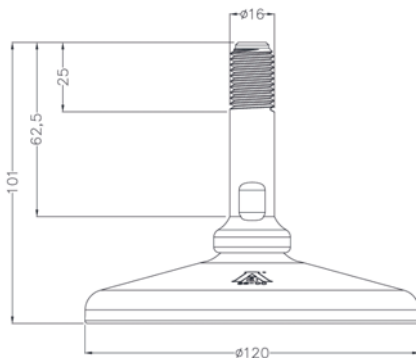
American standard that regulates the design, production and use of hygienic equipment

DIMENSIONS AND APPLICATION

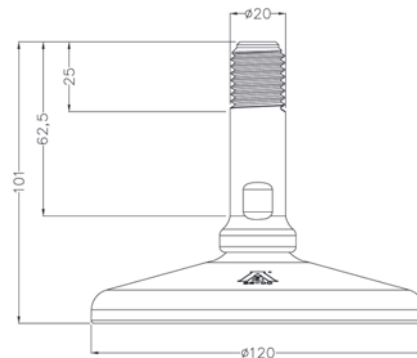
2000 kg
M12 x 1.75



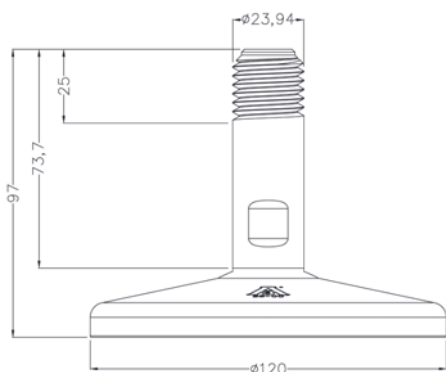
5000 kg
M16 x 2



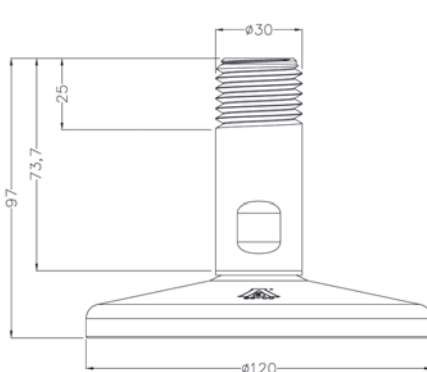
5000 kg
M20 x 2.5



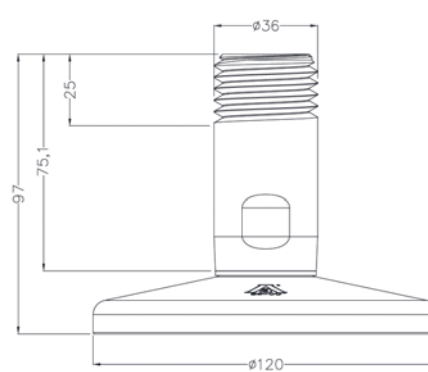
10000 kg
M24 x 3



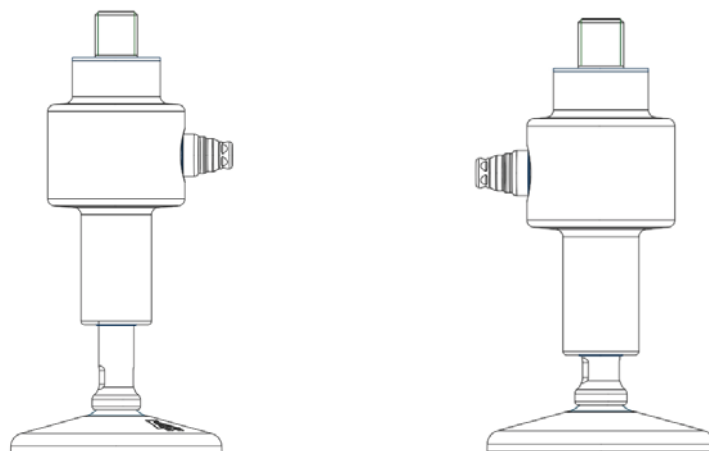
10000 kg
M30 x 3.5



20000 kg
M36 x 4



EXAMPLE OF APPLICATION



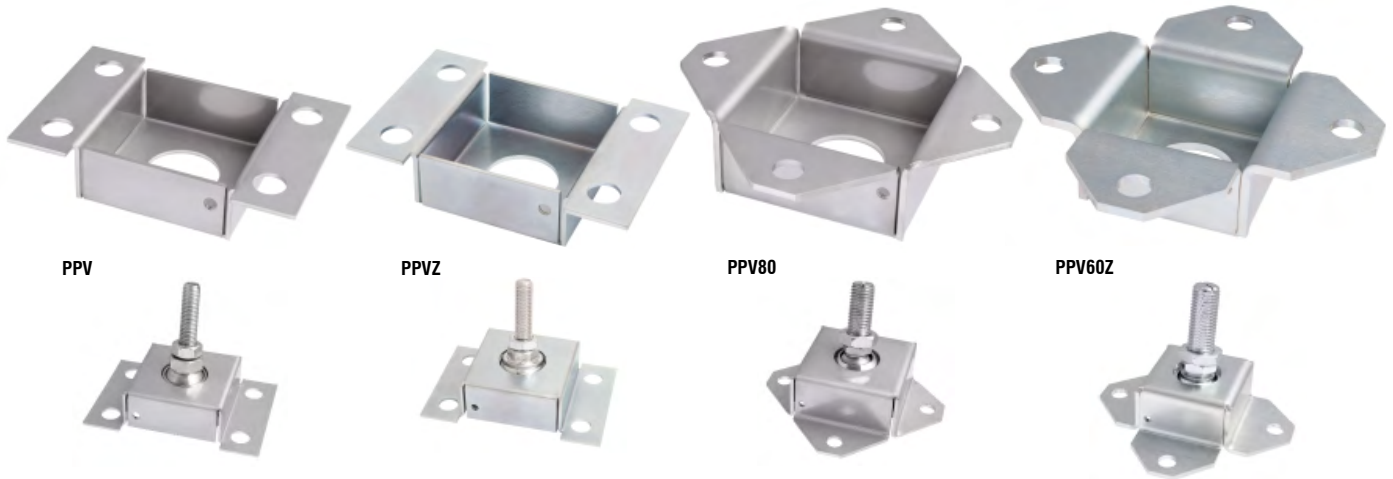
PPV - PPVZ - PPV80 - PPV60Z

Adjustable upper plate

For SINGLE POINT, BENDING BEAM, SHEAR BEAM and COMPRESSION load cells

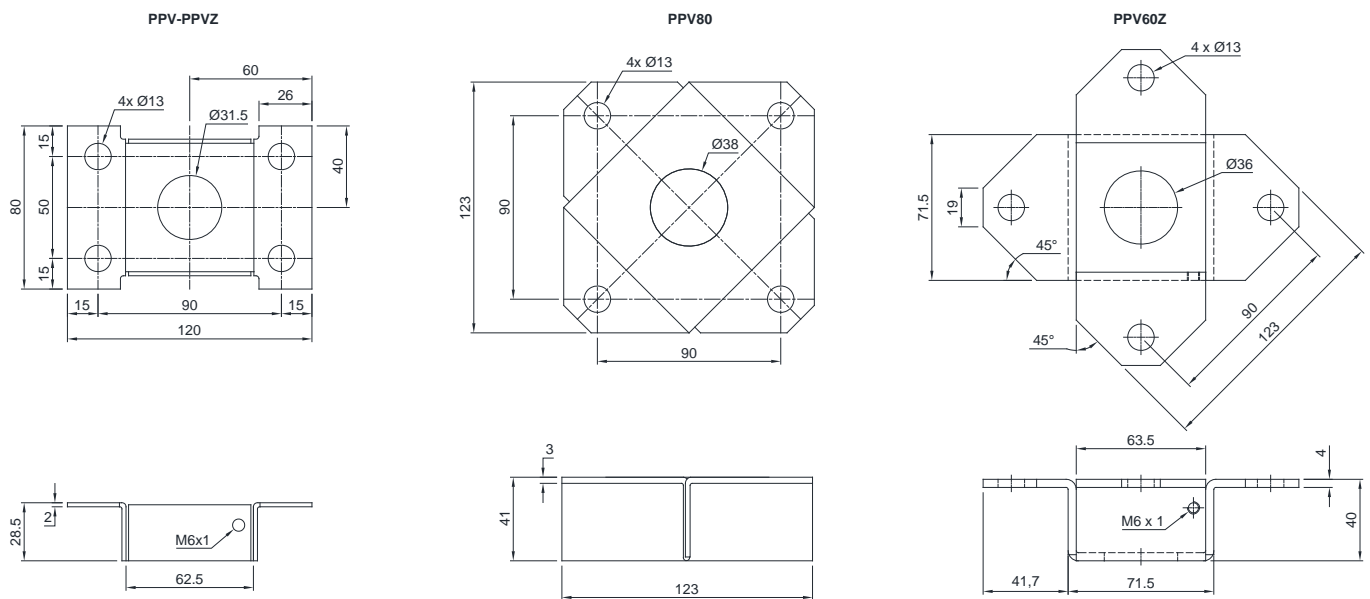
- Plates for constraint against lateral forces and anti-tilt.
- For self-centering joint foot.

Up to 5000 kg application range



MAX STATIC LOAD kg		NET WEIGHT (kg)	CODE
2000	AISI 304 stainless steel	200	PPV
2000	galvanized steel	200	PPVZ
5000	AISI 304 stainless steel	600	PPV80
5000	galvanized steel	641	PPV60Z

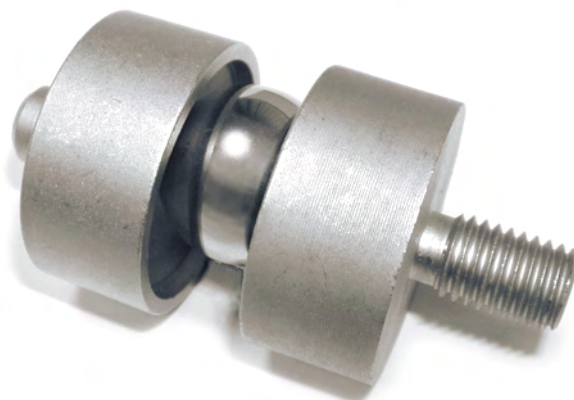
DIMENSIONS (mm)



Rev. 0.0

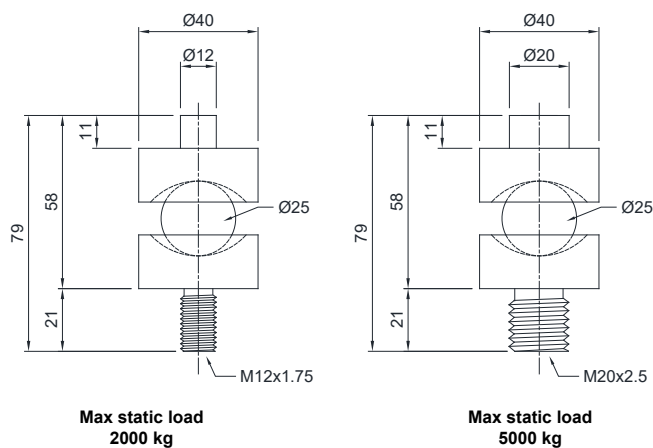
The Company reserves the right to make changes to the technical data, drawings and images without notice.

Up to 5000 kg application range



MAX STATIC LOAD	kg	FOR LOAD CELLS	DIMENSIONS	NET WEIGHT (kg)
2000		FTK - FT-P - FTKL FTZ - FTP - CLS	M12x1.75	0.3
5000		FTK - FTKL - FTZ (5000 kg) FTP (3000-5000 kg) - CLS (5000 kg)	M20x2.5	0.4

DIMENSIONS AND APPLICATION

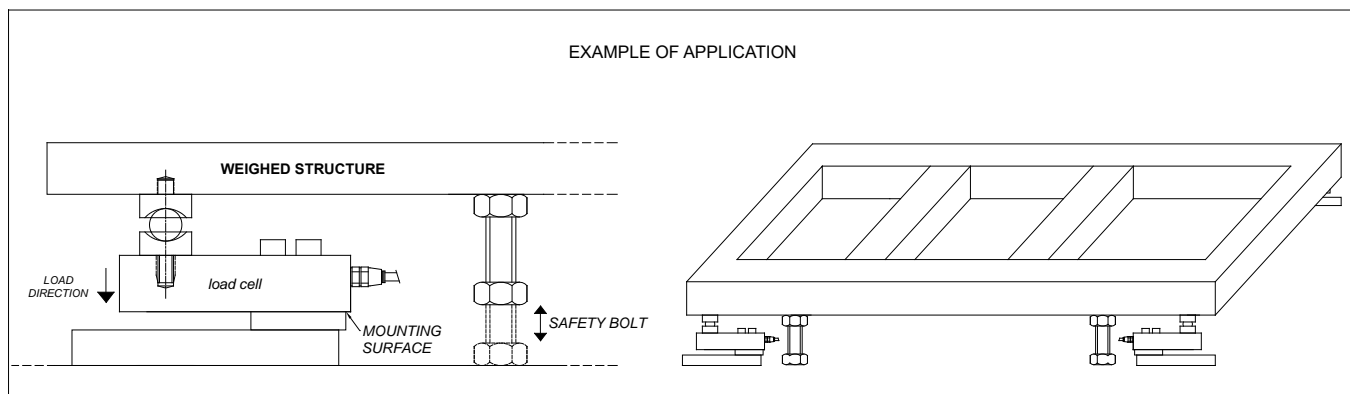


DESCRIPTION

- Stainless steel accessory with ball to compensate for misalignment of the support plates.



EXAMPLE OF APPLICATION



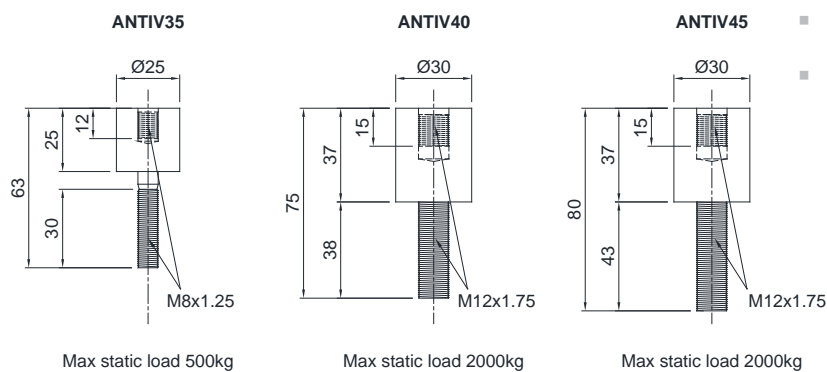
The Company reserves the right to make changes to the technical data, drawings and images without notice.

Up to 2000 kg application range



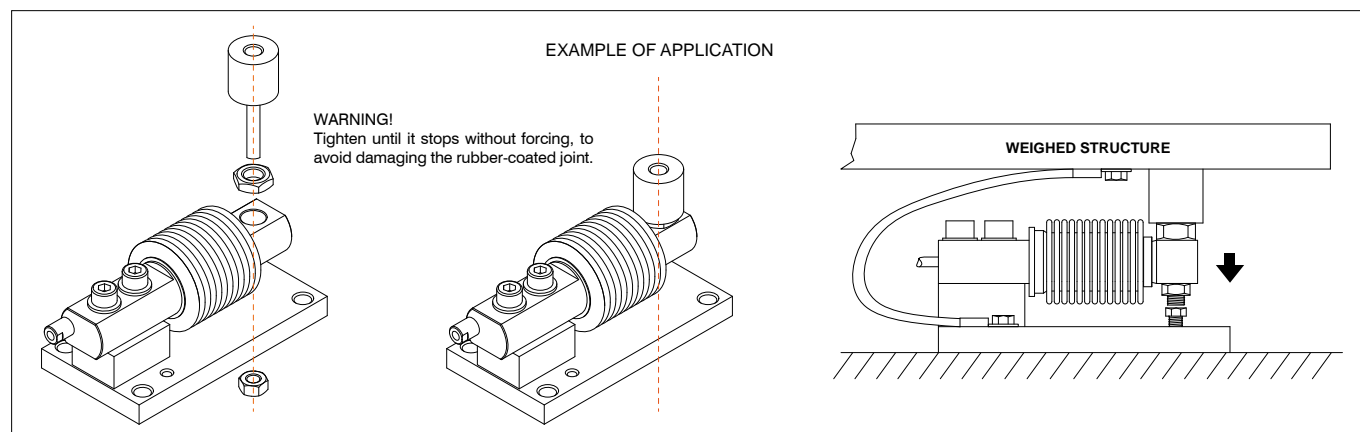
MAX STATIC LOAD	kg	FOR LOAD CELLS	DIMENSIONS	NET WEIGHT (kg)	CODE
500		FCOL - FCK	M8x1.25	0.04	ANTIV35
2000		FTKL - FCAL - FCAX - FTP FT-P - FTK - FTZ - CLS	M12x1.75	0.1	ANTIV40
2000		FCAL - FCAX	M12x1.75	0.1	ANTIV45

DIMENSIONS AND APPLICATION



DESCRIPTION

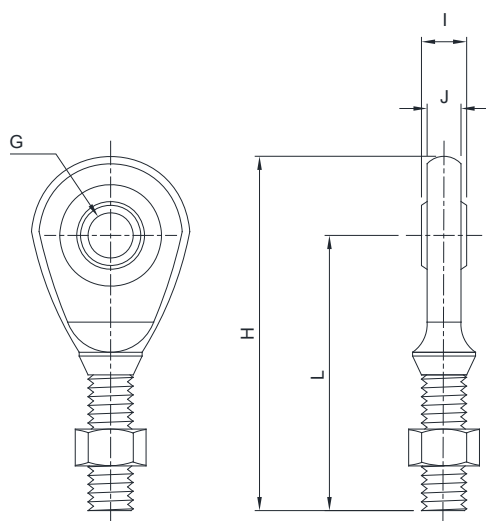
- Stainless steel and rubber compression joints to compensate for any misalignments of the support plates.
- Can be used for systems with at least 3 supports.



The Company reserves the right to make changes to the technical data, drawings and images without notice.

**For TENSION (COMPRESSION) load cells**

THREAD	MATERIAL	STATIC LOAD RATINGS kN	NET WEIGHT (kg)	CODE
M12	stainless steel	24.5	0.08	EM-INOX
M16		45	0.19	
M20		60	0.30	
M24		83	0.60	
M6	galvanized C45 steel	8.1	0.02	EM
M8		12.9	0.04	
M10		17.6	0.06	
M12		24.5	0.08	
M16		45	0.19	
M20		60	0.30	
M24		83	0.60	
M30		110	0.93	
M36	146	1.45		

DIMENSIONS

stainless steel

THREAD	G	H	I	J	L
M12x1.75	Ø12	72	10	8.5	55
M16x2	Ø17	88.5	14	11.5	65.5
M20x1.5	Ø20	104	16	13.5	77
M24x2	Ø25	124	20	18	92

galvanized C45 steel

M6x1	Ø6	47	6	4.5	36.5
M8x1.25	Ø8	54	8	6.5	42.5
M10x1.5	Ø10	62.5	9	7.5	48.5
M12x1.75	Ø12	71	10	8.5	54.5
M16x2	Ø17	92	14	11.5	69.5
M20x1.5	Ø20	104.5	16	13.5	77.5
M24x2	Ø25	126	20	17.5	94.5
M30x2	Ø30	146.5	22	19.5	110
M36x3	Ø35	181	25	21.5	140

The Company reserves the right to make changes to the technical data, drawings and images without notice.

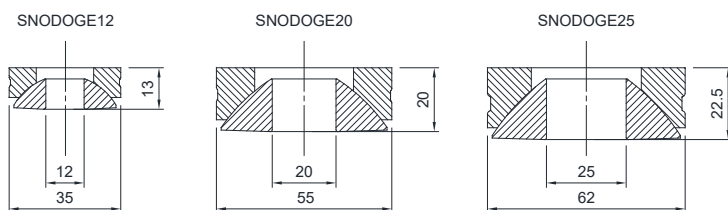
Series load cells: **FTK - FT-P - FTKL - FTZ - FTP - CLS**

Up to 10000 kg application range



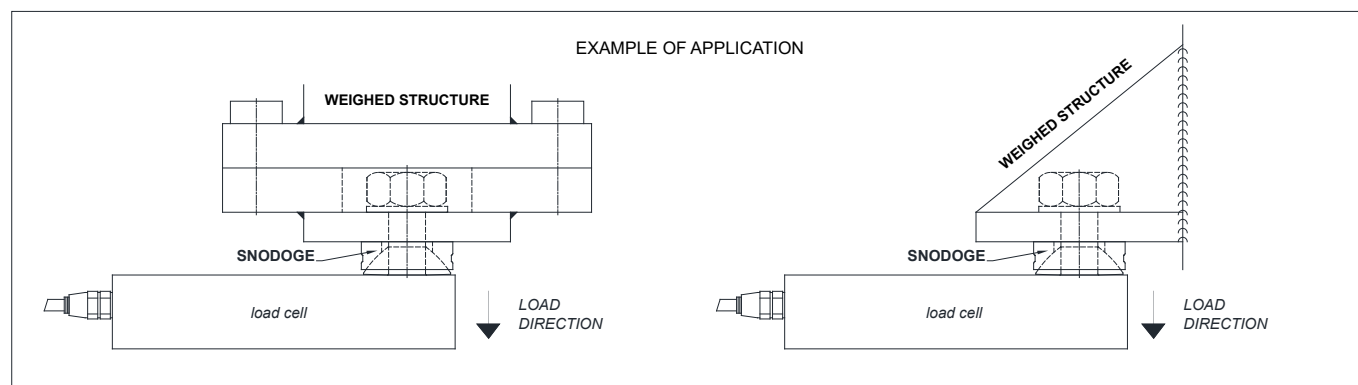
MAX STATIC LOAD kg	DESCRIPTION	FOR LOAD CELLS	NET WEIGHT (kg)	CODE
2000	Axial spherical plain bearing	CLS, FTK, FTKL, FTP, FT-P, FTZ	0.07	SNODOGE12
5000	Kit composed by bearing, galvanized bolt (20x80 mm) and washer (22x60 mm).	CLS (5000 kg), FTK (3000-5000 kg), FTKL, FTZ (5000 kg), FTP (3000-5000 kg)	0.3	SNODOGE20
10000	Kit composed by bearing, galvanized bolt (24x100 mm) and washer (26x72 mm).	FTP 10000 kg	0.9	SNODOGE25

DIMENSIONS AND APPLICATION



DESCRIPTION

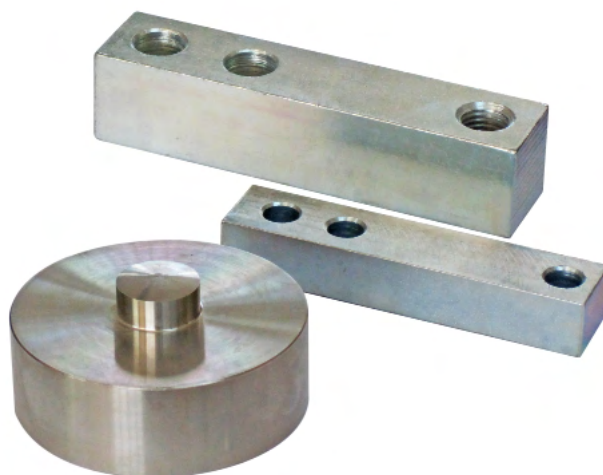
- Hardened 100Cr6 steel bearing to compensate for misalignment of the support plates.



The Company reserves the right to make changes to the technical data, drawings and images without notice.



Up to 100000 kg application range



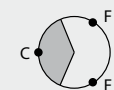
CAPACITY	kg	EQUIVALENT TO LOAD CELLS	MATERIAL	NET WEIGHT (kg)
BENDING BEAM				
	200	FCK (5-10 kg) - FCOL (20-200 kg)	Galvanized steel	0.5
	1500	FCAL (30-300 kg) - FCAX (30-1500 kg)	Galvanized steel	0.6
SHEAR BEAM				
	2000	FTP (75-2000 kg) - FTK (75-2000 kg) FTKL (500-2000 kg) - FTZ (500-2000 kg) FT-P (300-2000 kg)	Galvanized steel	0.9
	5000	FTP (3000-5000 kg) - FTK (3000-5000 kg) FTKL (3000-5000 kg) - FTZ (5000 kg)	Galvanized steel	1.6
COMPRESSION-LOW PROFILE				
	15000	CBL (250-12500 kg) - CBX (15000 kg)	Stainless steel	1.4
	30000	CBL (15000 kg) - CBX (30000 kg)	Stainless steel	2.2
	50000	CBL (30000 kg) - CBX (50000 kg)	Stainless steel	4
	100000	CBL (50000-100000 kg)	Stainless steel	10.5

DESCRIPTION

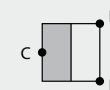
- Structural mechanical steel elements that can be used in combination with the load cells for measuring the level of liquid or weighing powder products that do not require a high degree of precision.
- They do not transmit any electrical signals.
- They can be mounted on the same mounting kits as the load cells.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

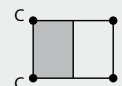
- To enable use of the false cells, it is absolutely necessary that the structure to weigh has a uniform shape and is geometrically divisible. It must be perfectly level and the type of product to be weighed must enable horizontal positioning, as if it were a liquid (otherwise, loading systems which distribute the product/load uniformly are required).
- Mounting kits should be used for all supports (also for those with false cells), because, apart from simplifying and optimising cell assembly, they enable future replacement of false cells with real versions, accuracy and the reliability of the weighing process needs to be improved.
- The weight indicator will show the effective weight multiplying the signal by two or three, depending on the application.

STRUCTURE WITH 3-POINT SUPPORT
 1 LOAD CELL + 2 FALSE CELLS


Signal mV x 3

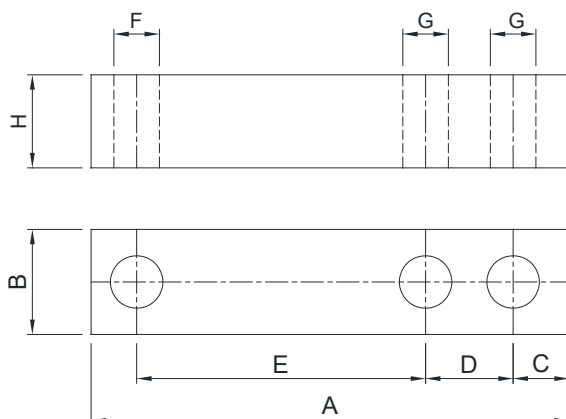


Signal mV x 2

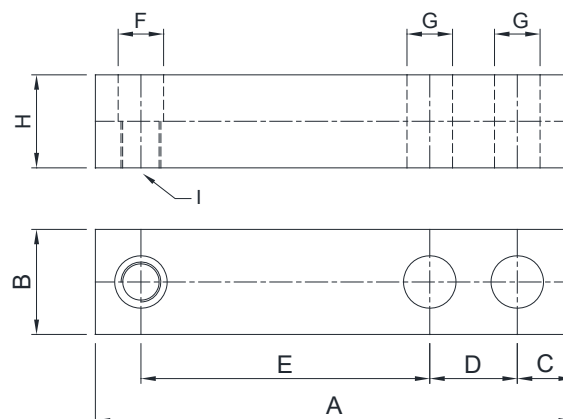
STRUCTURE WITH 4-POINT SUPPORT
 2 LOAD CELLS + 2 FALSE CELLS


Signal mV x 2

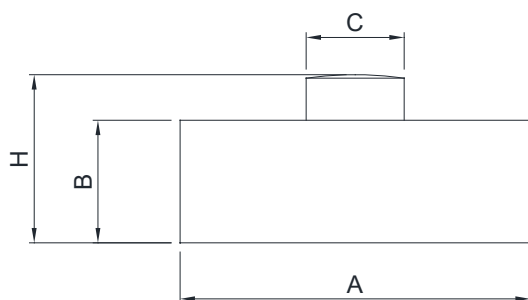
C = SUPPORT FOOT WITH LOAD CELL
 F = SUPPORT FOOT WITH FALSE CELL



	200 kg	1500 kg
A	120	137
B	30	30
C	10	17.5
D	18	24.5
E	82	81.5
F	Ø9.5	Ø13
G	Ø8.5	Ø13
H	20	22



	2000 kg	5000 kg
A	130	171.5
B	32	40
C	15	19
D	25.5	38
E	76	95
F	Ø14	Ø22
G	Ø14	Ø20
H	32	38
I	M12	M20



	15000 kg	30000 kg	50000 kg	100000 kg
A	Ø82	Ø100	Ø126	Ø165
B	32	35	40	60
C	Ø22	Ø28	Ø35	Ø60
H	44	48	54	80

CUSTOM LOAD CELLS

Production of load cells based on CUSTOMERS REQUESTS

LAUMAS designs and manufactures "CUSTOM" load cells to offer the best solutions to customer needs. Customizations are designed to solve specific customer problems and meet the needs of particular applications in special conditions, even for use in potentially explosive atmospheres (Atex-IECEx).

- Pre-amplified load cells
- Biaxial and triaxial
- Two strain gauges Wheatstone bridges
- Torque detection
- Special cables high / low temperature with non-standard thermal compensation

JUNCTION BOXES



AISI 304 stainless steel or ABS junction boxes, including equalization boards or parallel connection boards, to connect from 1 to 4 or from 5 to 8 load cells.

Lightning and electrical shock protection device.

ATEX certified versions:

II 1G Ex ia IIC T4 -20 °C ≤ Tamb +60 °C
II 1D Ex ta IIIC T85°C -20 °C ≤ Tamb +60 °C

Hygienic version: hygienic device RPSCQC authorized by 3-A SSI.



LAUMAS.COM



LAUMAS

LAUMAS ELETTRONICA SRL
VIA I MAGGIO N. 6
43022 MONTECHIARUGOLO (PR) - ITALY

PHONE (+39) 0521 683124
FAX (+39) 0521 681091

EXPORT SALES DEPARTMENT: sales@laumas.it

