

PRODUCT CATALOG



A1 LOAD CELLS



A2 MOUNTING KIT



A3 COMPLEMENTARY ACCESSORIES



Load cells and mounting kits

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.

Load cells

Single point, shear beam, double shear, bending, tension, compression, low profile, pin, anchor, wire rope measuring, pre-amplified, column, foot brake, for weighing bridge, digital, load limiters.

Mounting kits for load cells

For all load cells, LAUMAS is able to provide suitable weigh modules, 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



OIML R60 - International Organization of Legal Metrology



ATEX/IECEx - 2014/34/EU Directive - for use in potentially explosive atmosphere



NTEP - compliant to the metrological standards of United States and Canada



EAC - Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)



IP69K - watertight protection against dust and water



Calibration report (ACCREDIA LAT traceability)

Production of load cells on CUSTOMER'S REQUEST

LAUMAS designs and manufactures "CUSTOM" load cells to offer the best solutions to customer needs.

Customizations are designed to solve specific problems or meet particular needs of applications in special conditions.

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

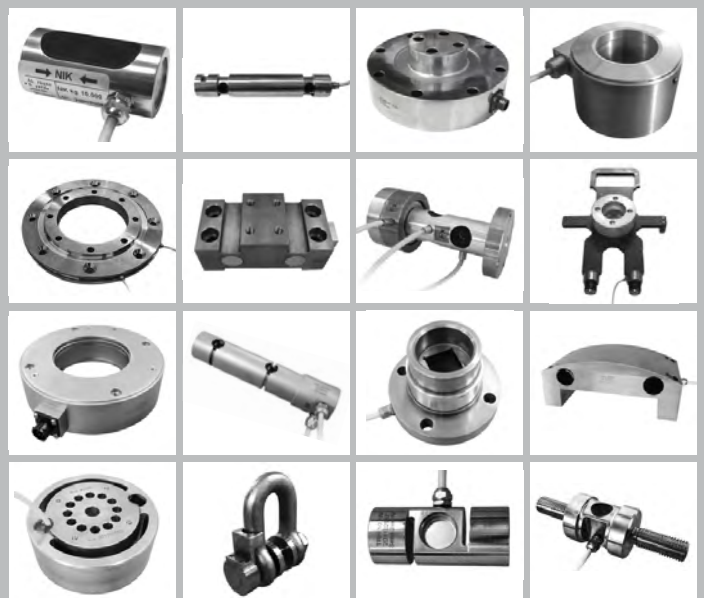


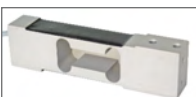
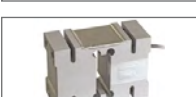
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A1 - LOAD CELLS

PRODUCT CATALOGUE

		CAPACITY kg	PLATFORM mm	PAGE
	A1.1	SINGLE POINT		
	AF	5, 15, 50	150 x 150	5
	AS	0.25, 0.5, 1	200 x 200	7
	ALL	3, 5, 6, 10, 15, 20, 30, 50	250 x 350	9
	PRC	6, 15, 30, 50	350 x 350	11
	AU	3, 6, 15 30, 50	250 x 400 400 x 600	13
	AZL	10, 15, 20, 30, 50, 100	400 x 400	15
	AZLI	10, 20, 50	400 x 400	17
		100, 200, 300, 500	800 x 800	
	AZS	10, 30, 50, 100, 200	400 x 400	19
	PTC	30, 50, 75, 100, 150	400 x 400	21
	AM	60, 100, 150, 200, 300	400 x 400	23
	APL	50, 100, 150, 200, 300, 500	600 x 600	25
	PEC	75, 150, 300, 500	600 x 600	27
	AR	500, 1000	800 x 800	29
	ATL	1000, 2000	1200 x 1200	31

AF

SINGLE-POINT LOAD CELL for platforms 150x150 mm



Manufactured according to OIML R60 standards



Capacity from 5 kg to 50 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.05\%$
- PROTECTION CLASS IP65

CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
5		•	•	150 x 150	0.13	AF5
15		•	•	150 x 150	0.13	AF15
50		•	•	150 x 150	0.13	AF50


ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

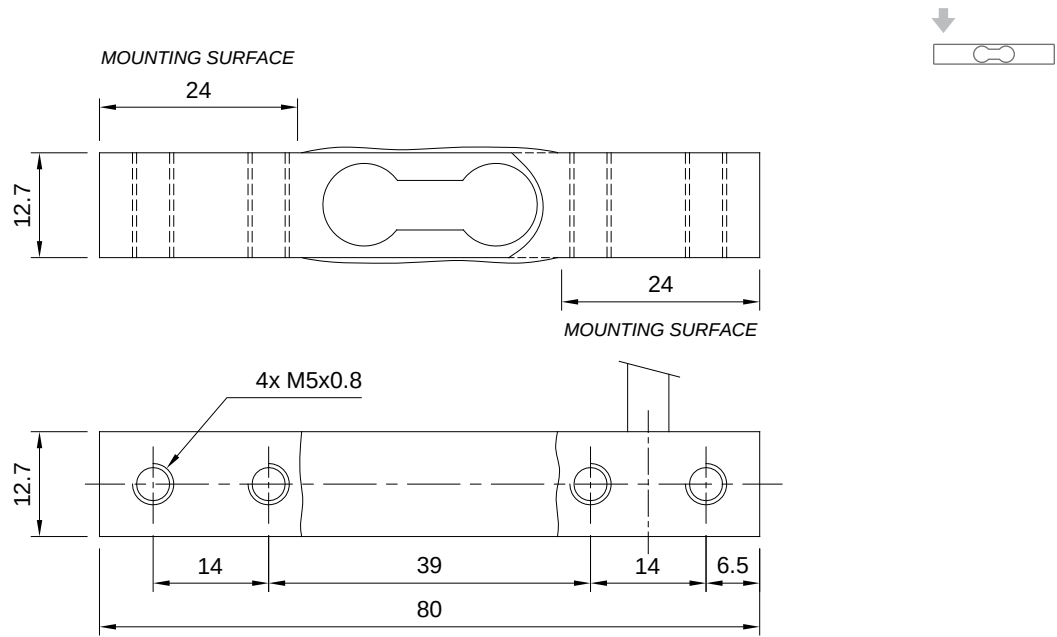
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

AF

SINGLE-POINT LOAD CELL for platforms 150x150 mm



DIMENSIONS (mm)

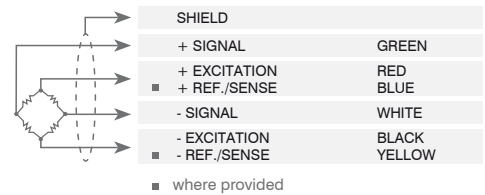


TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	5 - 15 - 50 kg		
Combined error	$\leq \pm 0.05\%$		
Protection class	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	0-4%
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	4/6 x 0.20 mm ²



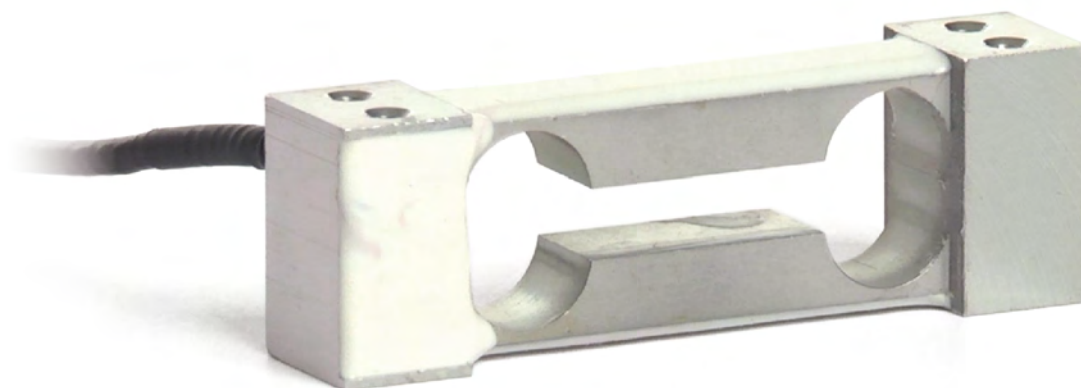
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Manufactured according to OIML R60 standards



Capacity from 0.25 kg to 1 kg



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

CAPACITY	kg	 		PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
0.25		•	•	200 x 200	0.1	AS025
0.5		•	•	200 x 200	0.1	AS05
1		•	•	200 x 200	0.1	AS1

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST



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



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



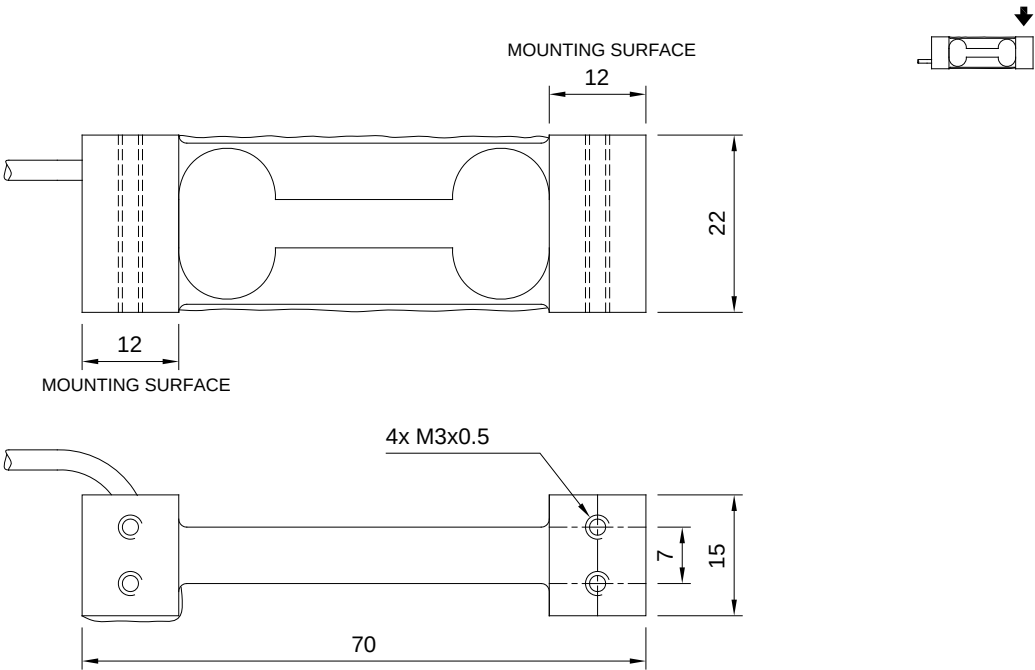
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

AS

SINGLE-POINT LOAD CELL for platforms 200x200 mm



DIMENSIONS (mm)

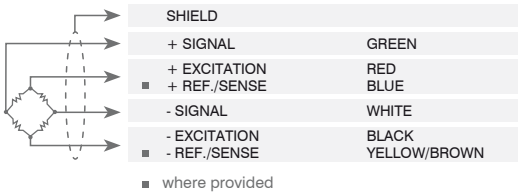


TECHNICAL FEATURES

Material	Alloy aluminum		
Nominal load (E max)	0.25 - 0.50 - 1.00 kg		
Combined error	$\leq \pm 0.03\%$		
Protection class	IP65		
Rated output	1 - 2 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)	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	2.5 mm
Cores	4/6 x 0.20 mm ²



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ALL

SINGLE-POINT LOAD CELL for platforms 250x350 mm



Capacity from 3 kg to 50 kg



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

CAPACITY	kg	ACCURACY CLASS			OIML	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
3	3	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL3
5	5	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL5
6	6	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL6
10	10	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL10
15	15	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL15
20	20	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL20
30	30	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL30
50	50	C3	C4	C5	•	•	•	•	250 x 350	0.2	ALL50

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
OIML	OIML R60 C4/C5
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

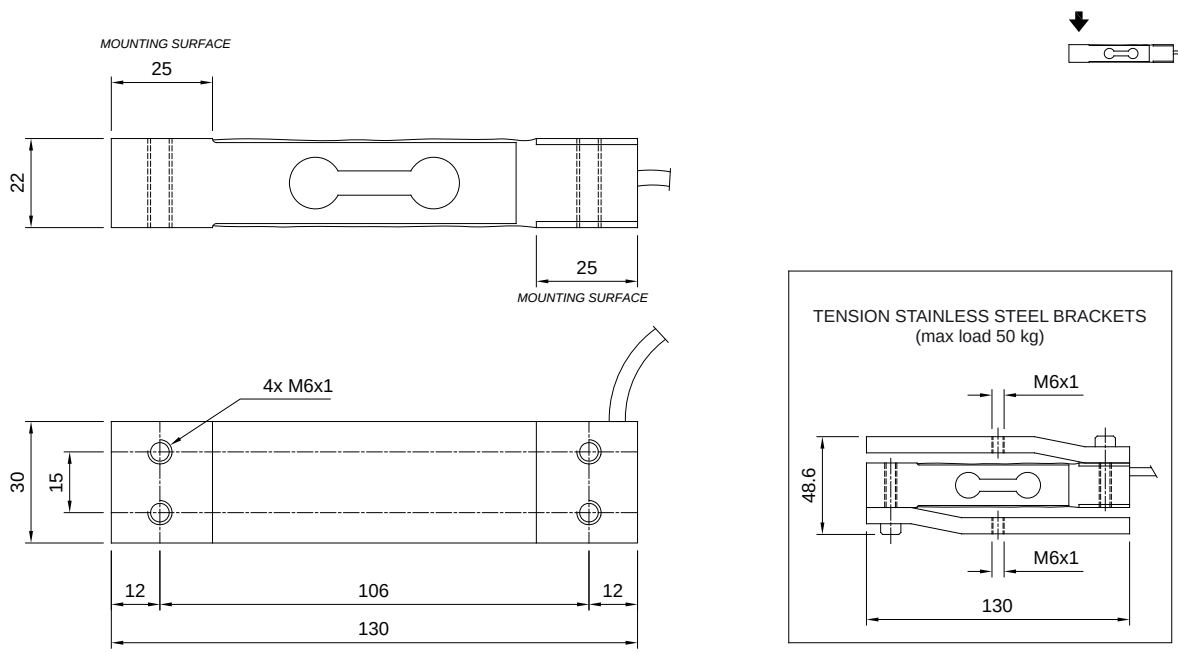
DESCRIPTION	CODE
 Pair of stainless steel tension brackets. Maximum static load: 50 kg	STAFFEALL

ALL

SINGLE-POINT LOAD CELL for platforms 250x350 mm



DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Alloy aluminum		
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	C5 • 5000
Nominal load (E max)	3 - 5 - 6 - 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 class	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 lenght	3 m
Cable diameter	3.8 mm
Cores	4 x 0.20 mm²



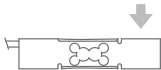
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PRC

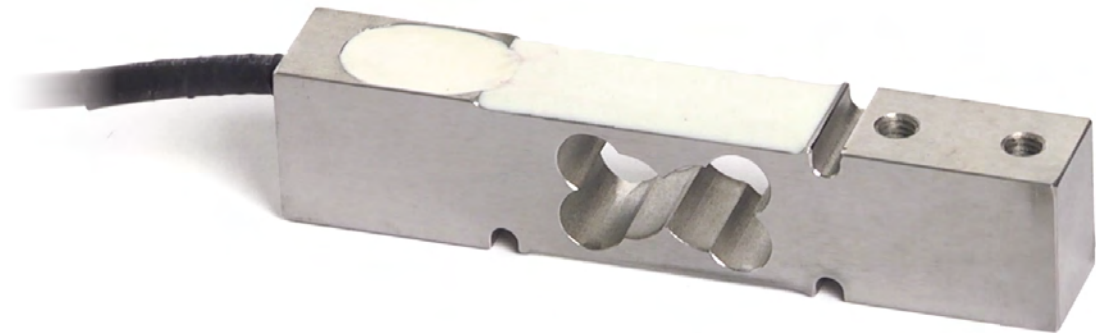
SINGLE-POINT LOAD CELL for platforms 350x350 mm



Manufactured according to OIML R60 standards



Capacity from 6 kg to 50 kg



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

CAPACITY	kg	  	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
6		• •	350 x 350	0.4	PRC6
15		• •	350 x 350	0.4	PRC15
30		• •	350 x 350	0.4	PRC30
50		• •	350 x 350	0.4	PRC50

 ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES



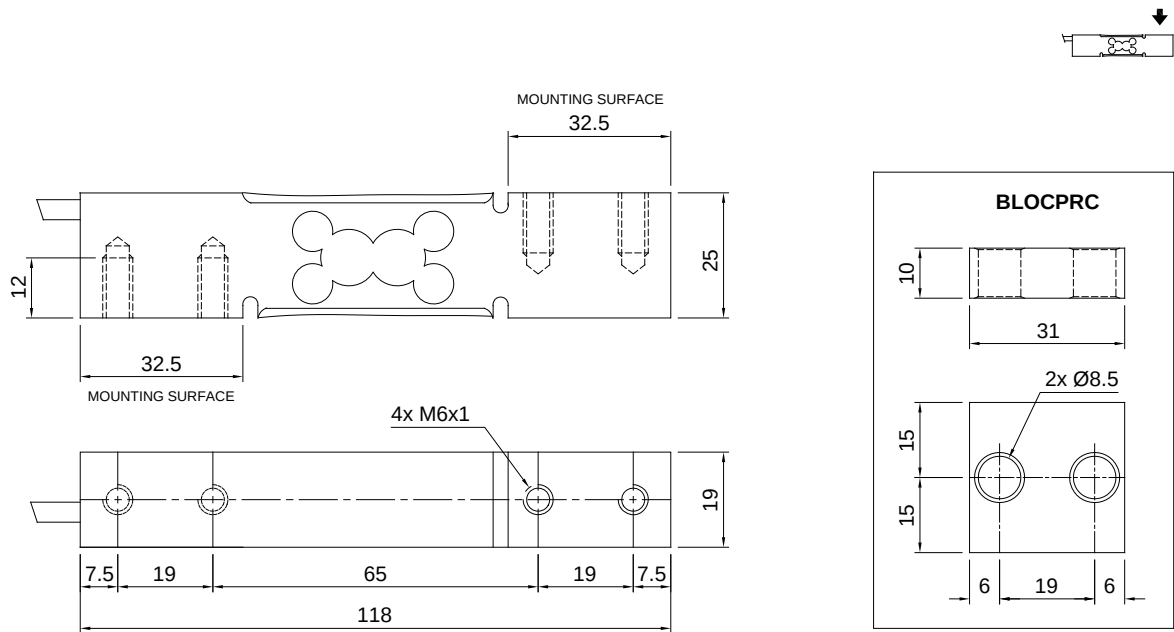
DESCRIPTION	CODE
Stainless steel drawn block.	BLOCPRC

PRC

SINGLE-POINT LOAD CELL for platforms 350x350 mm



DIMENSIONS (mm)

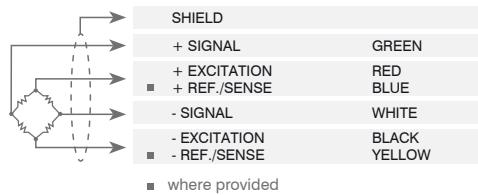


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	6 - 15 - 30 - 50 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	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	4/6 x 0.20 mm ²

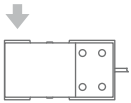


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 3 kg to 50 kg



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

CAPACITY	kg	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
3		•	•	•	250 x 400	0.5	AU3
6		•	•	•	250 x 400	0.5	AU6
15		•	•	•	250 x 400	0.5	AU15
30		•	•	•	400 x 600	0.5	AU30
50		•	•	•	400 x 600	0.5	AU50

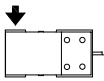
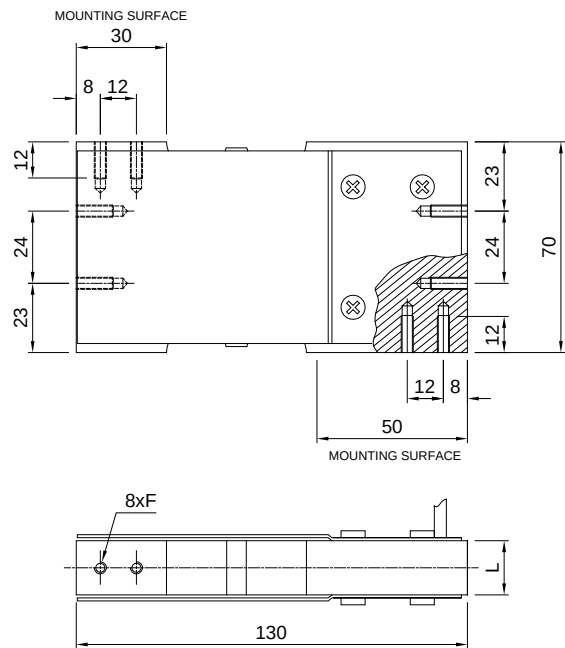
ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



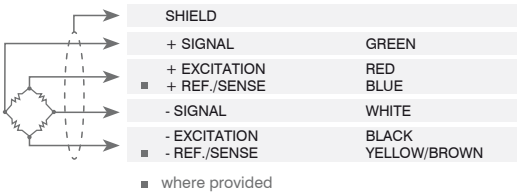
	3 - 6 - 15 kg	30 - 50 kg
L	18	30
F	M4x0.7	M6x1

TECHNICAL FEATURES

Material	Alloy aluminum		
Nominal load (E max)	3 - 6 - 15 - 30 - 50 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	IP65		
Rated output	2 mV/V $\pm 10\%$	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)	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 lenght	3 m
Cable diameter	4 mm
Cores	4/6 x 0.20 mm ²



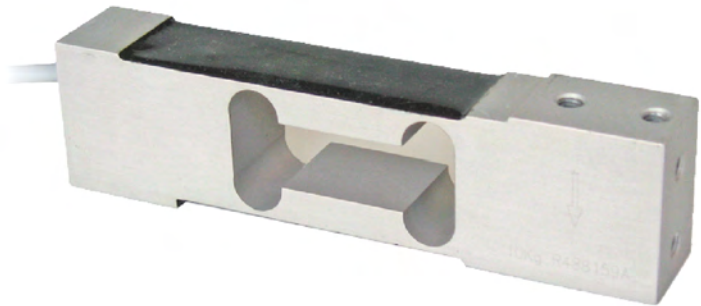
The Company reserves the right to make changes to the technical data, drawings and images without notice.

AZL

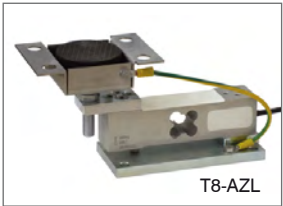
SINGLE-POINT LOAD CELL for platforms 400x400 mm



Capacity from 10 kg to 100 kg



MOUNTING KITS



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

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
10		C3	—	•	•	•	400 x 400	0.4	AZL10
15		C3	C4	•	•	•	400 x 400	0.4	AZL15
20		C3	C4	•	•	•	400 x 400	0.4	AZL20
30		C3	C4	•	•	•	400 x 400	0.4	AZL30
50		C3	C4	•	•	•	400 x 400	0.4	AZL50
100		C3	—	•	•	•	400 x 400	0.4	AZL100

ON REQUEST

CERTIFICATIONS

OIML R60 C3

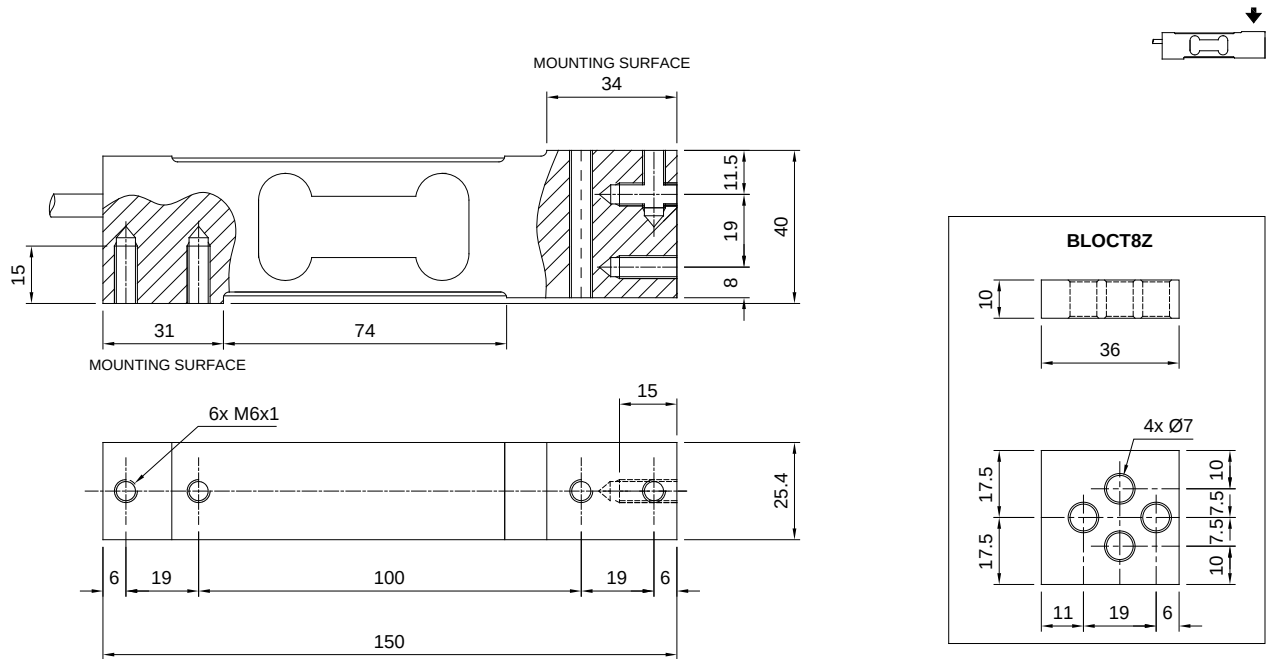
CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
OIML	OIML R60 C4 (see capacities table)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Galvanized steel drawn block.	BLOCT8Z

DIMENSIONS (mm)

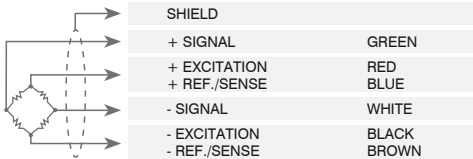


TECHNICAL FEATURES

Material		Alloy aluminum	
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 / 20000
Combined error		≤ ±0.02%	≤ ±0.017%
Protection class		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 lenght	6 m
Cable diameter	5 mm
Cores	6 x 0.20 mm²



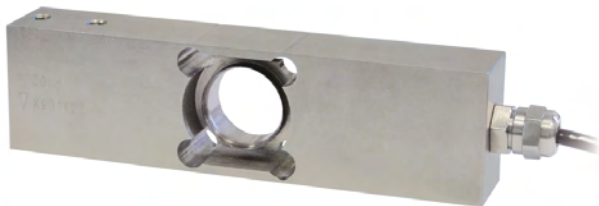
The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 10 kg to 50 kg

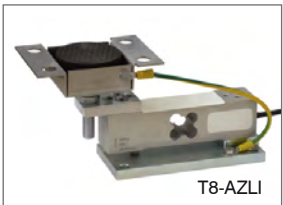


Capacity from 100 kg to 500 kg



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

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS		OIML	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
10		C3	C4					400 x 400	0.9	AZLI10
20		C3	C4					400 x 400	0.9	AZLI20
50		C3	C4					400 x 400	1	AZLI50
100		C3	—					800 x 800	2.7	AZLI100
200		C3	—					800 x 800	2.7	AZLI200
300		C3	—					800 x 800	2.8	AZLI300
500		C3	—					800 x 800	2.8	AZLI500

ON REQUEST

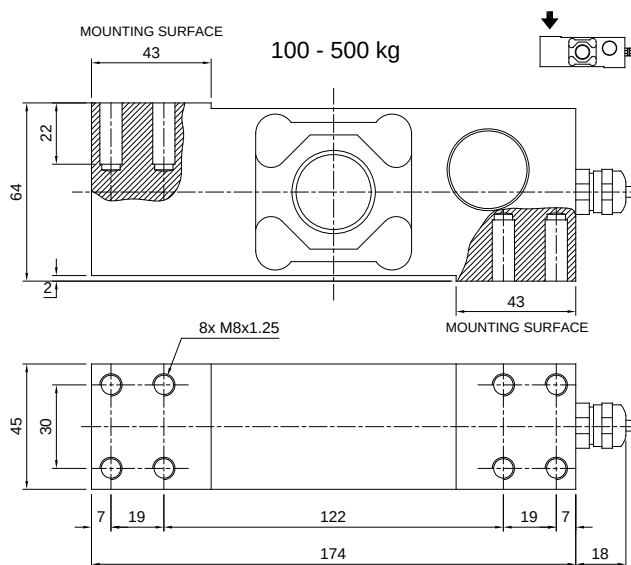
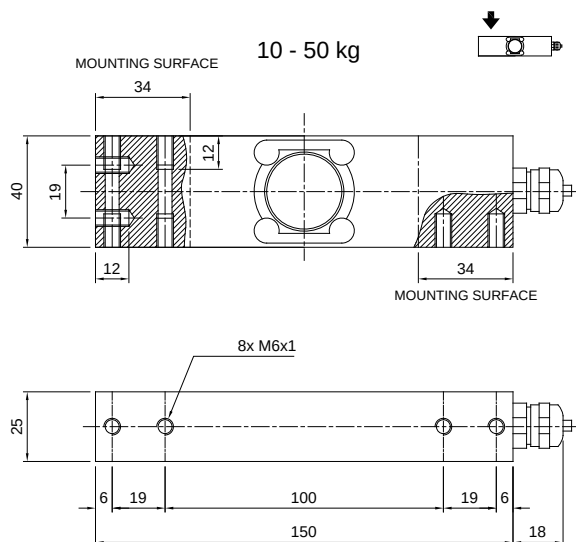
CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

	Declaration of conformity + IP69K marking protection rating Water protection when cleaning high pressure / steam jet (Test: pressurized hot water is sprayed from a distance of 150 mm). Water pressure 100 bar; temperature 80 ° C; test duration 250 seconds (Reference standard DIN 40050-9).
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	OIML R60 C4 (see capacities table)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

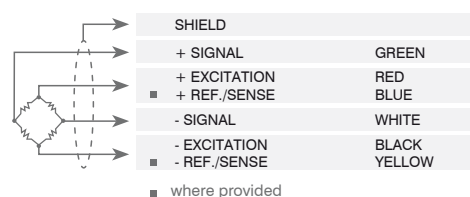


TECHNICAL FEATURES

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 class		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 lenght	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.

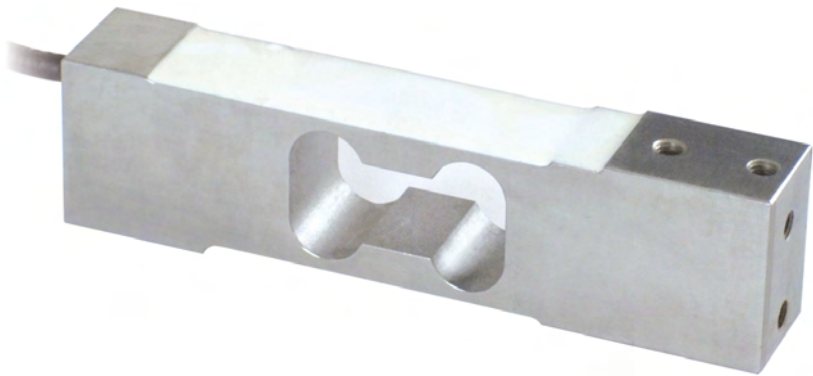
AZS

SINGLE-POINT LOAD CELL for platforms 400x400 mm

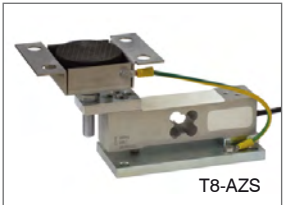


Manufactured according to OIML R60 standards

Capacity from 10 kg to 200 kg



MOUNTING KITS



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

CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
10		•	•	400 x 400	1	AZS10
30		•	•	400 x 400	1	AZS30
50		•	•	400 x 400	1	AZS50
100		•	•	400 x 400	1	AZS100
200		•	•	400 x 400	1	AZS200

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

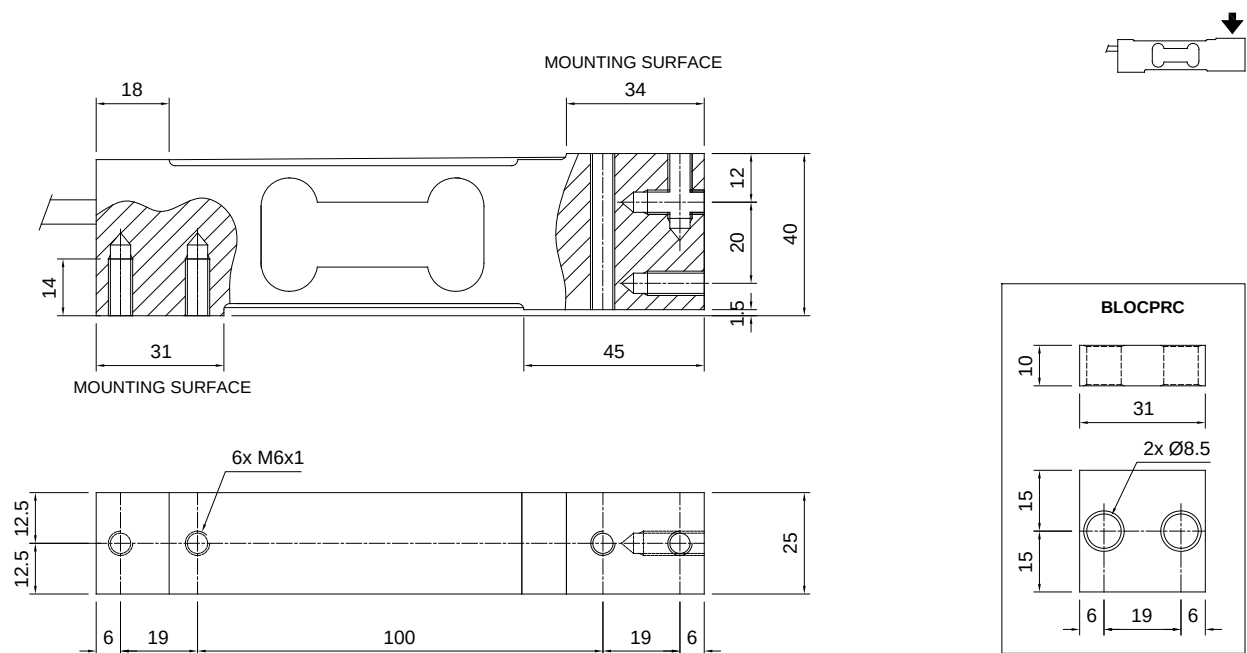
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES



DESCRIPTION	CODE
Stainless steel drawn block.	BLOCPRC

DIMENSIONS (mm)

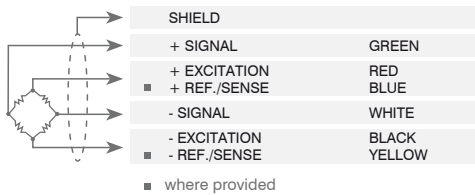


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	10 - 30 - 50 - 100 - 200 kg		
Combined error	≤ ±0.03%		
Protection class	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 lenght	6 m
Cable diameter	5 mm
Cores	4/6 x 0.20 mm²



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

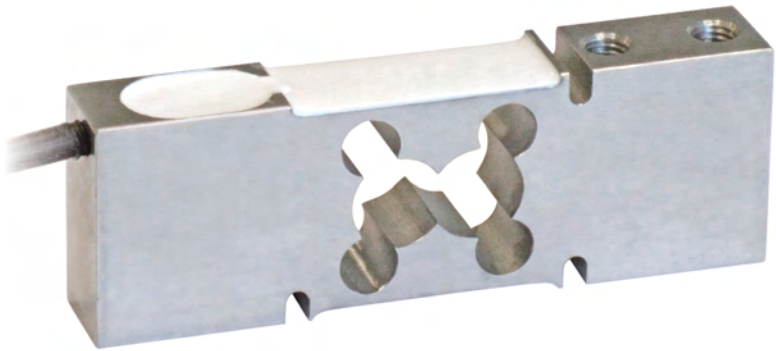
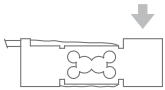
PTC

SINGLE-POINT LOAD CELL for platforms 400x400 mm



Manufactured according to OIML R60 standards

Capacity from 30 kg to 150 kg



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

CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
30		•	•	400 x 400	0.75	PTC30
50		•	•	400 x 400	0.75	PTC50
75		•	•	400 x 400	0.75	PTC75
100		•	•	400 x 400	0.75	PTC100
150		•	•	400 x 400	0.75	PTC150

 
ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

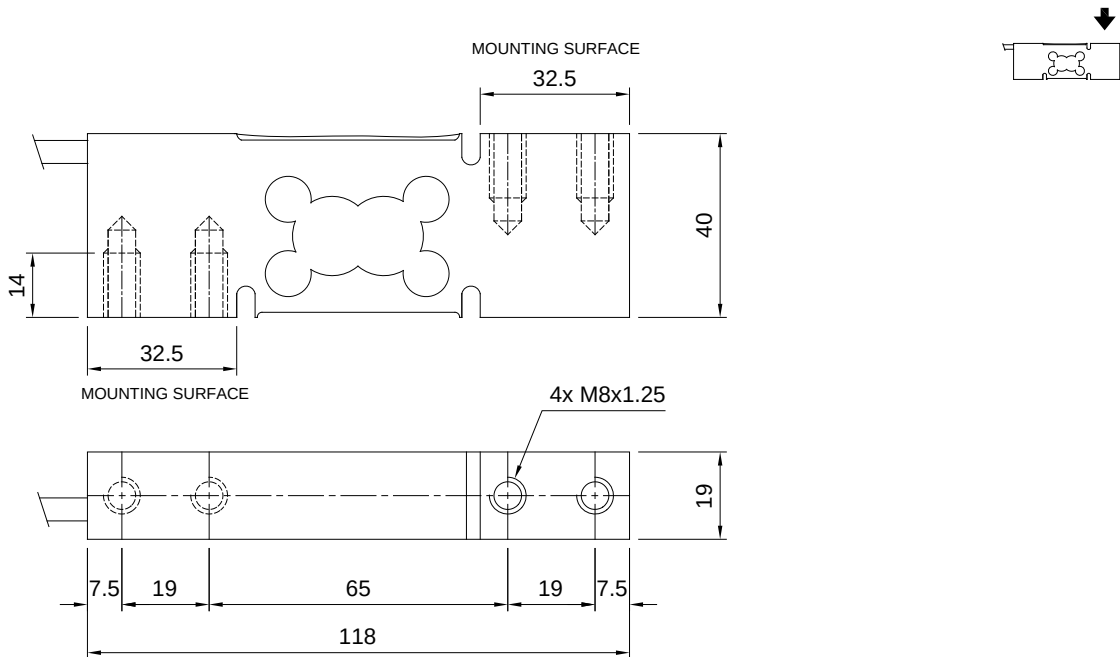
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

PTC

SINGLE-POINT LOAD CELL for platforms 400x400 mm



DIMENSIONS (mm)

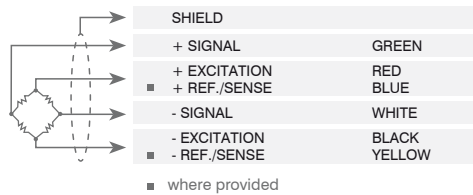


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	30 - 50 - 75 - 100 - 150 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	IP67		
Rated output	2 mV/V $\pm 10\%$	Input resistance	385 $\Omega \pm 30$
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	4 mm
Cores	4/6 x 0.20 mm ²



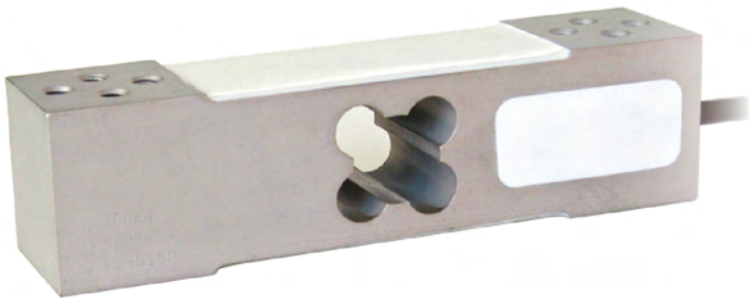
The Company reserves the right to make changes to the technical data, drawings and images without notice.

AM

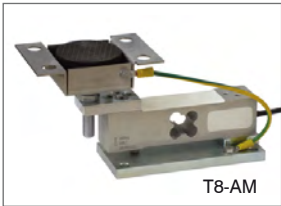
SINGLE-POINT LOAD CELL for platforms 400x400 mm



Capacity from 60 kg to 300 kg



MOUNTING KITS



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

CAPACITY	kg	ACCURACY CLASS			ON REQUEST			PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
		OIML	IECEx	Ex	EAC					
60		C3	C4	C5	•	•		400 x 400	0.6	AM60
100		C3	C4	C5	•	•		400 x 400	0.6	AM100
150		C3	C4	C5	•	•		400 x 400	0.6	AM150
200		C3	C4	C5	•	•		400 x 400	0.6	AM200
300		C3	C4	C5	•	•		400 x 400	0.6	AM300

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
OIML	OIML R60 C4/C5
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES



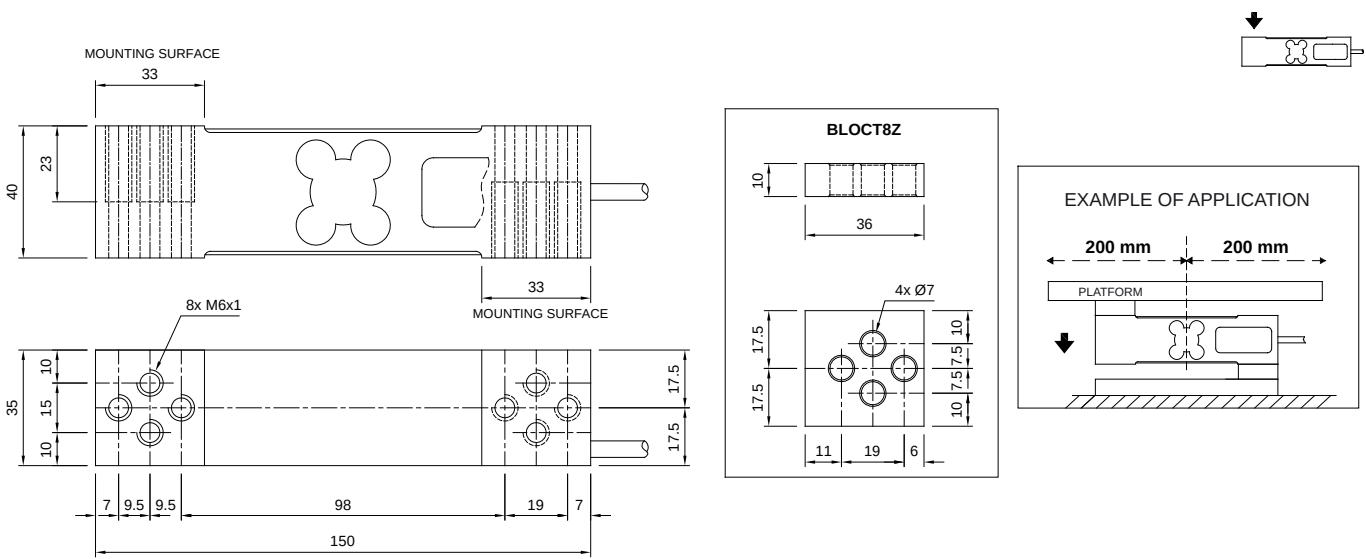
DESCRIPTION	CODE
Stainless steel and rubber waterproof kit.	IP68-AM
Galvanized steel drawn block.	BLOCT8Z

AM

SINGLE-POINT LOAD CELL for platforms 400x400 mm



DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Alloy aluminum		
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	C5 • 5000
Nominal load (E max)	60 - 100 - 150 - 200 - 300 kg		
Minimum verification interval (V min)	E max / 10000	E max / 15000	E max / 20000
Combined error	≤ ±0.02%	≤ ±0.017%	≤ ±0.0140%
Protection class	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



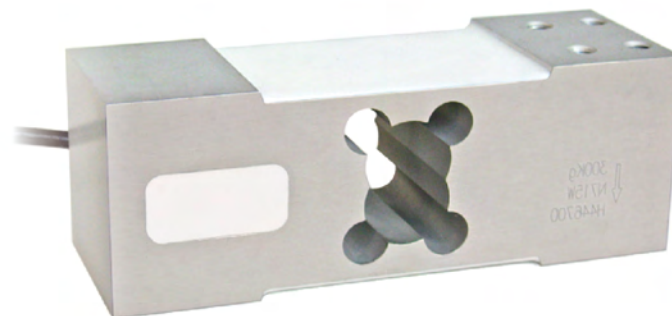
The Company reserves the right to make changes to the technical data, drawings and images without notice.

APL

SINGLE-POINT LOAD CELL for platforms 600x600 mm



Capacity from 50 kg to 500 kg



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

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
50		C3	—	•	•	•	600 x 600	1.7	APL50
100		C3	—	•	•	•	600 x 600	1.7	APL100
150		C3	C4	•	•	•	600 x 600	1.7	APL150
200		C3	C4	•	•	•	600 x 600	1.7	APL200
300		C3	C4	•	•	•	600 x 600	1.7	APL300
500		C3	C4	•	•	•	600 x 600	1.7	APL500

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

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

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

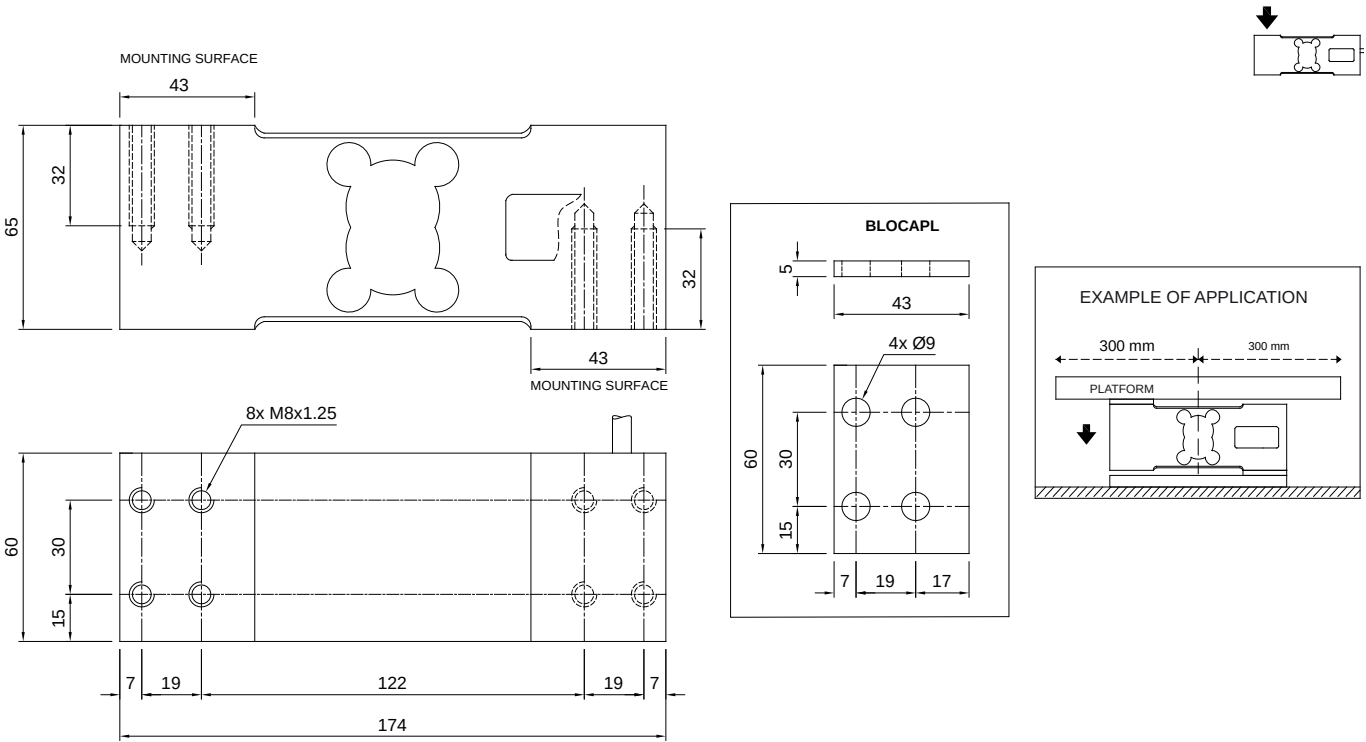
OIML R60 C4 (see capacities table)

Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
Stainless steel and rubber waterproof kit.	IP68-APL
Stainless steel drawn block.	BLOCAPL

DIMENSIONS (mm)

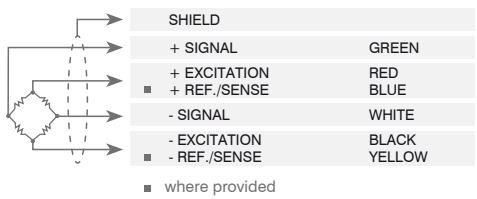


TECHNICAL FEATURES

Material		Alloy aluminum	
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 class		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 lenght	3 m
Cable diameter	6 mm
Cores	4/6 x 0.20 mm²



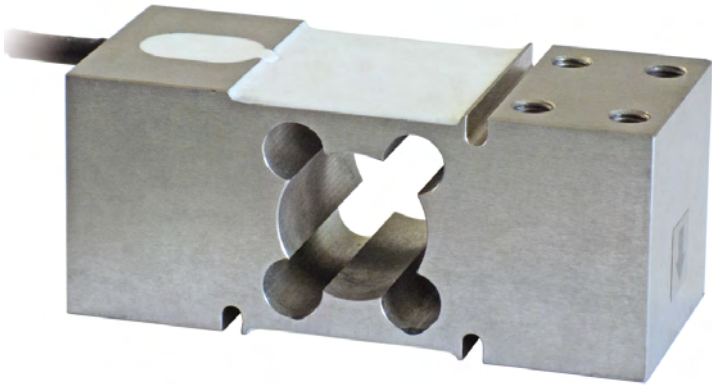
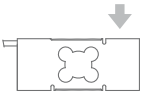
PEC

SINGLE-POINT LOAD CELL for platforms 600x600 mm



Manufactured according to OIML R60 standards

Capacity from 75 kg to 500 kg



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

CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
75		•	•	600 x 600	1.8	PEC75
150		•	•	600 x 600	1.8	PEC150
300		•	•	600 x 600	2	PEC300
500		•	•	600 x 600	2	PEC500

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

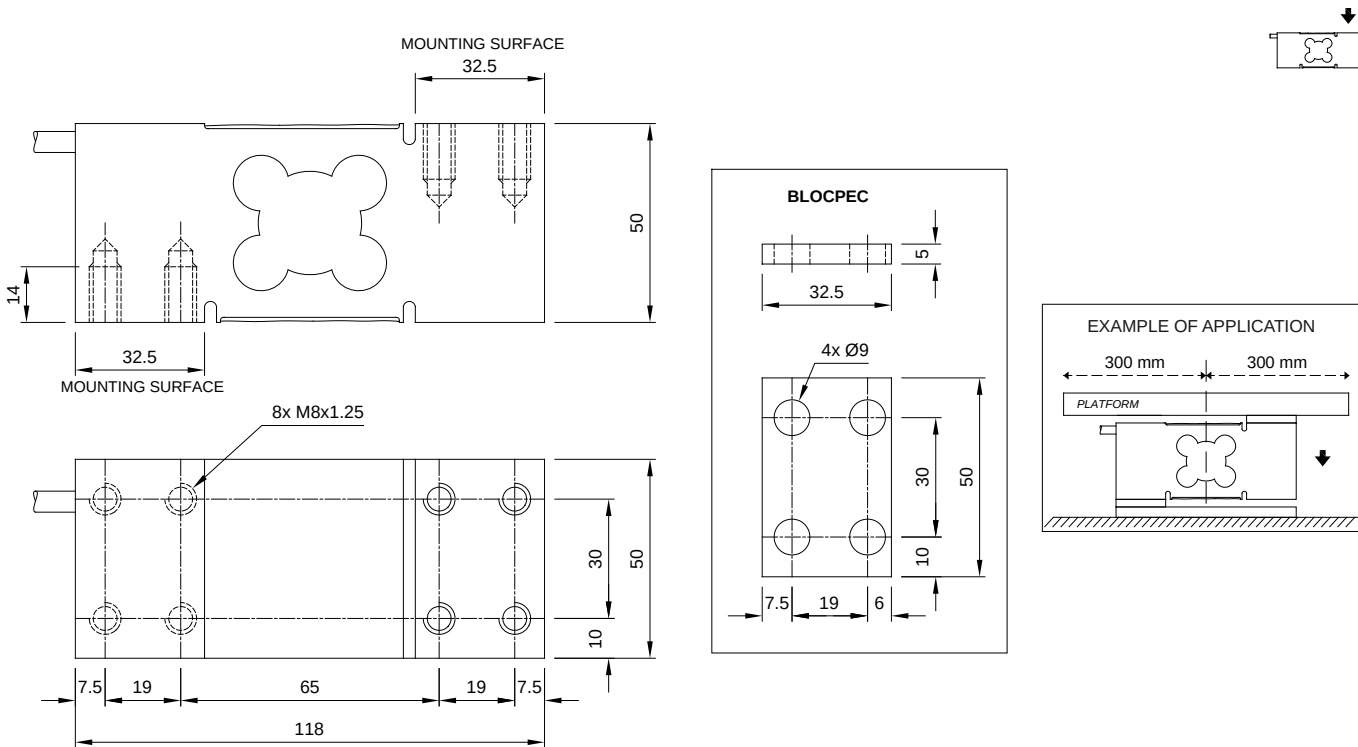
COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPEC

PEC

SINGLE-POINT LOAD CELL for platforms 600x600 mm

DIMENSIONS (mm)

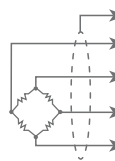


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	75 - 150 - 300 - 500 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	IP67		
Rated output	2 mV/V $\pm 10\%$	Input resistance	385 $\Omega \pm 30$
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	4/6 x 0.20 mm ²



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

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

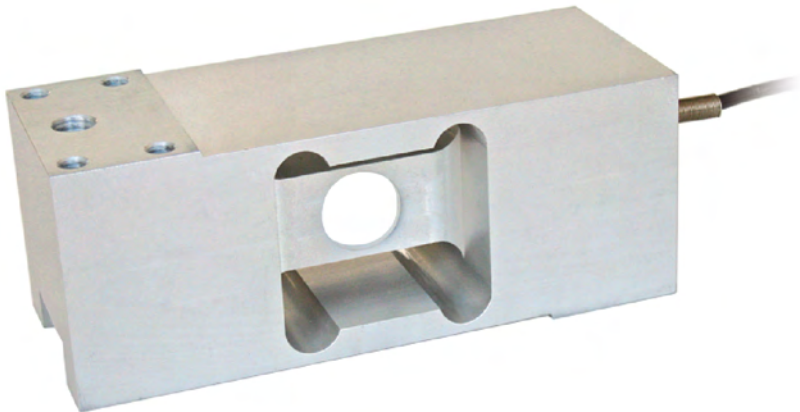
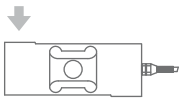
AR

SINGLE-POINT LOAD CELL for platforms 800x800 mm



Manufactured according to OIML R60 standards

Capacity from 500 kg to 1000 kg



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

CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
500		•	•	800 x 800	2.2	AR500
1000		•	•	800 x 800	2.3	AR1000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

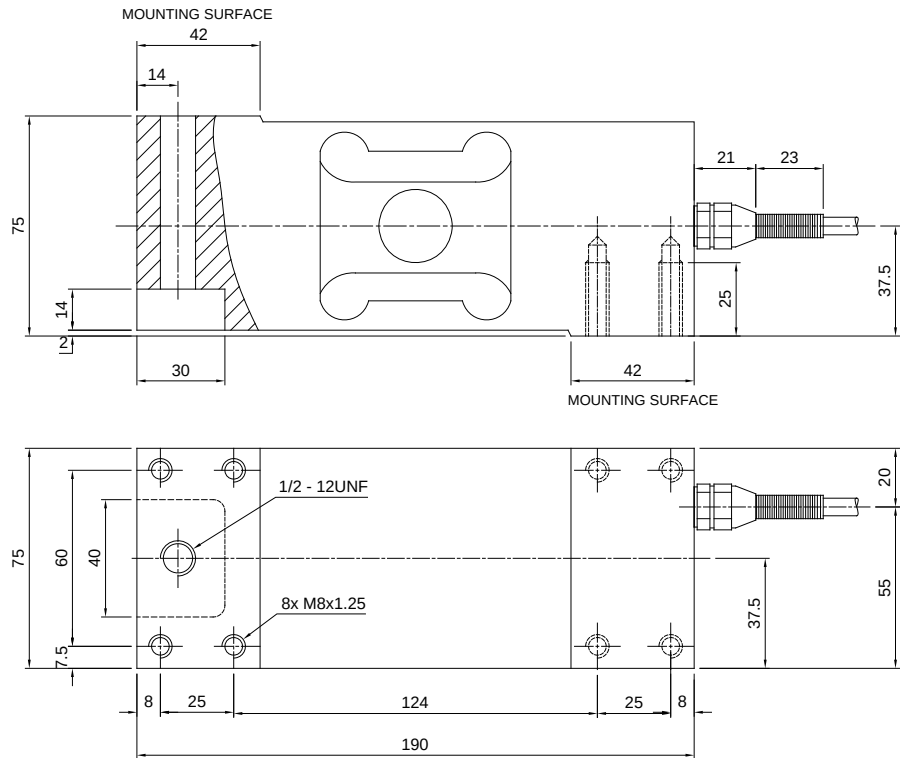
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	ATEX II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

AR

SINGLE-POINT LOAD CELL for platforms 800x800 mm



DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Alloy aluminum		
Nominal load (E max)	500 - 1000 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	IP65		
Rated output	2 mV/V $\pm 10\%$	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)	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



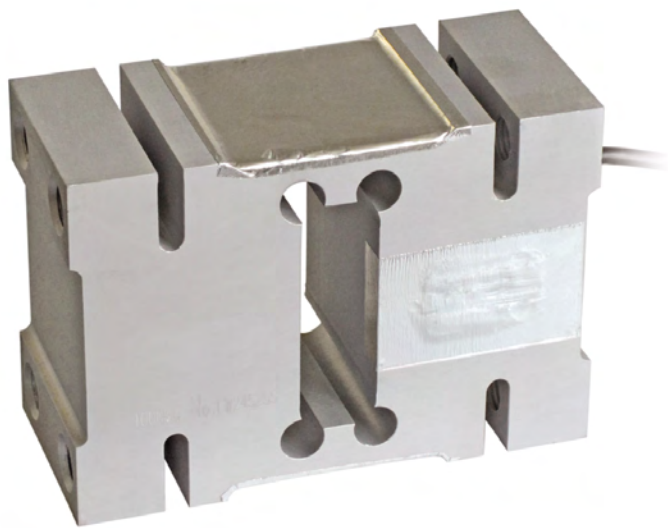
The Company reserves the right to make changes to the technical data, drawings and images without notice.

ATL

SINGLE-POINT LOAD CELL for platforms 1200x1200 mm



Capacity from 1000 kg to 2000 kg



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

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
1000		C3		•	•		1200 x 1200	3.8	ATL1000
2000		C3		•	•		1200 x 1200	3.8	ATL2000

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

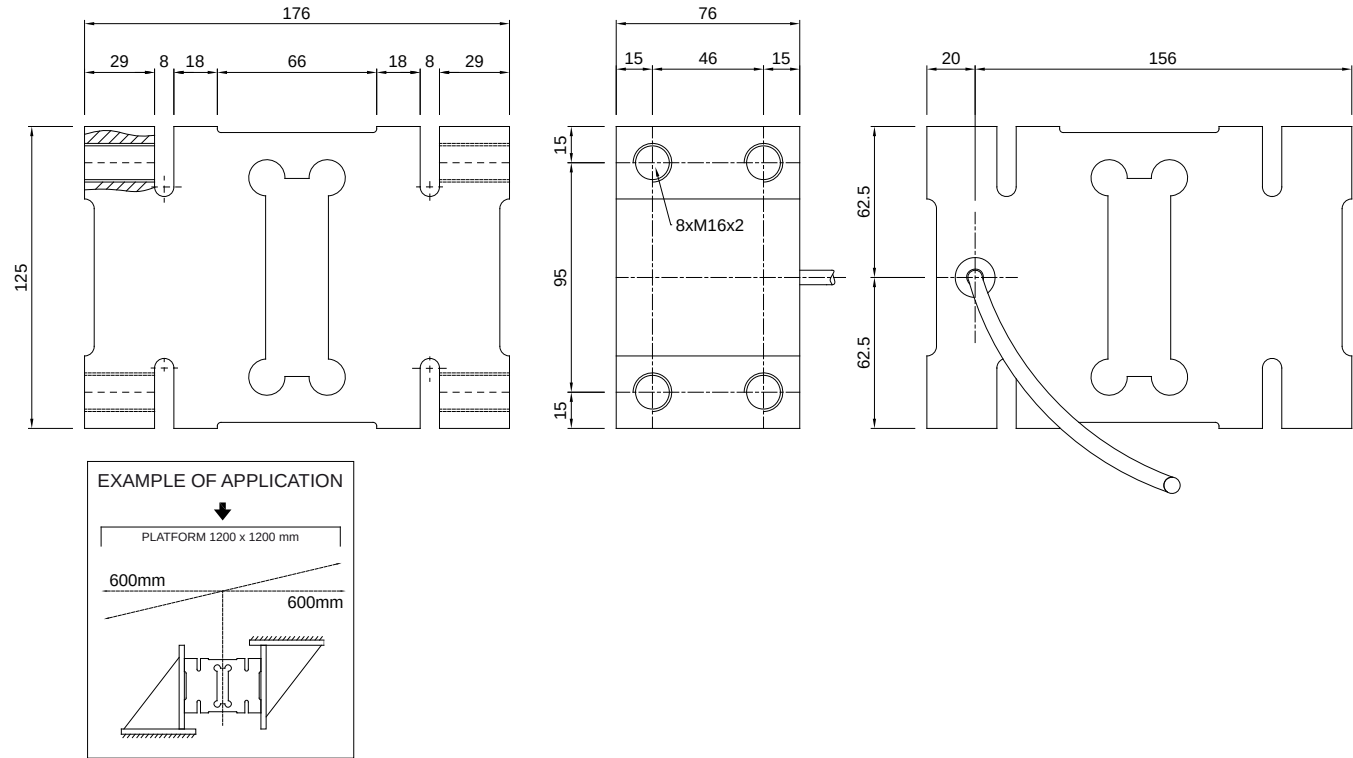
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

ATL

SINGLE-POINT LOAD CELL for platforms 1200x1200 mm



DIMENSIONS (mm)

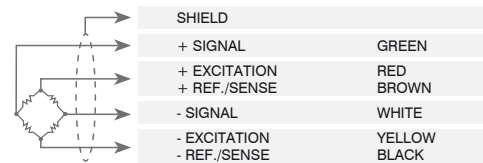


TECHNICAL FEATURES

Material	Alloy aluminum		
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 class	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

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



	CAPACITY kg	PAGE
A1.2	BENDING BEAM	
	FCK 5, 10	35
	FCOL 20, 50, 100, 200, 350, 500	37
	FCAX* 30, 50, 75, 150, 300, 500	39
	FCAL 50, 75, 150, 300	41
	FTP* 75, 150, 300	43
	FTK* 75, 150, 300	45

*) SHEAR / BENDING BEAM load cells

Notes section with horizontal lines for writing.

FCK

BENDING BEAM LOAD CELLS

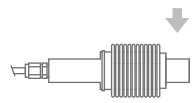


Manufactured according to OIML R60 standards

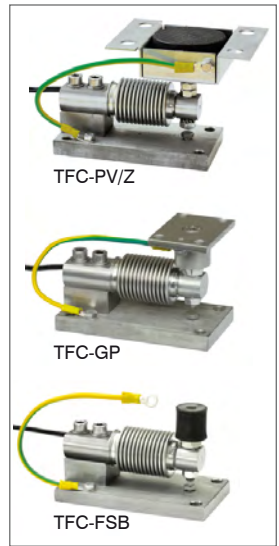
Capacity from 5 kg to 10 kg



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



MOUNTING KITS



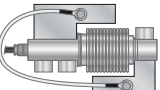
CAPACITY	kg	 	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
5		•	•	0.4	FCK5
10		•	•	0.4	FCK10
ON REQUEST					

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

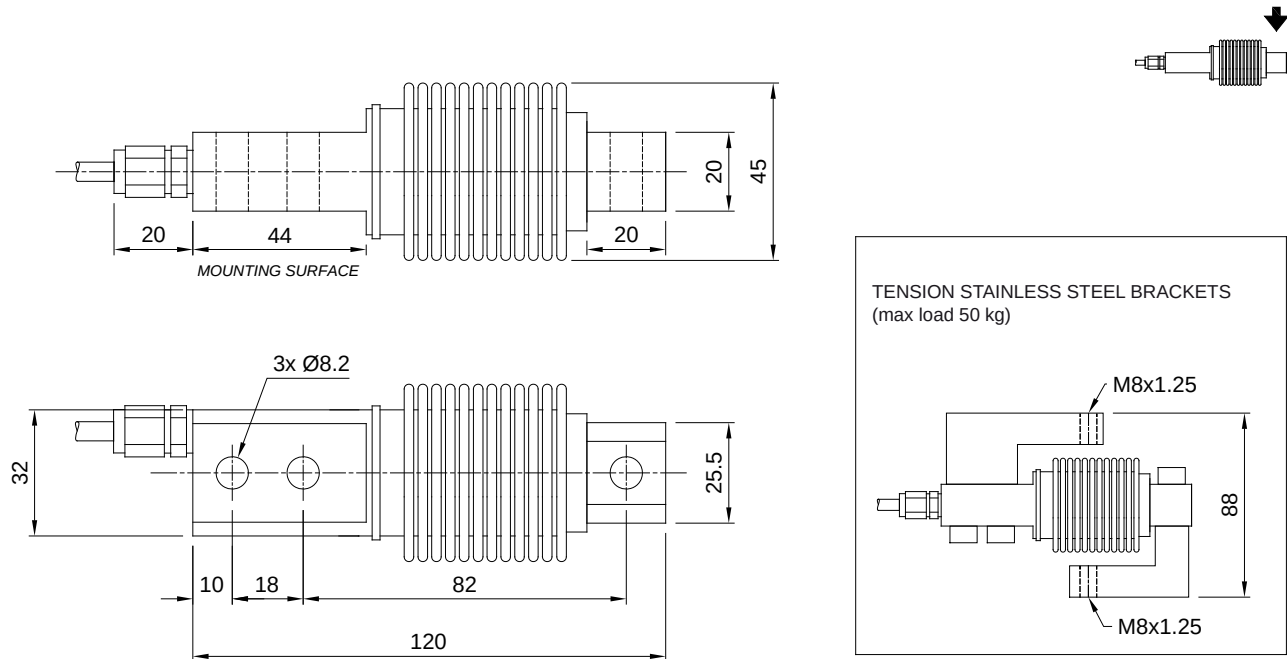
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEX II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

Rev. 00 del 12/03/2015

DIMENSIONS (mm)

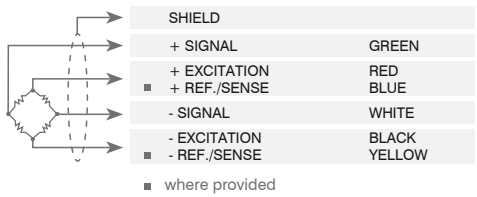


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	5 - 10 kg		
Combined error	≤ ±0.02%		
Protection class	IP68		
Rated output	2 mV/V ±1%	Input resistance	400 Ω ±20
Temperature effect on zero	0.002% °C	Output resistance	352 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	-30 °C / +65 °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	4/6 x 0.22 mm²



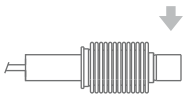
The Company reserves the right to make changes to the technical data, drawings and images without notice.

FCOL

BENDING BEAM LOAD CELLS

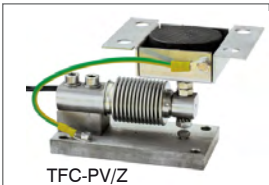


Capacity from 20 kg to 500 kg



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

MOUNTING KITS



TFC-PV/Z



TFC-FSB



TFC-GP

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NTEP	NET WEIGHT OF LOAD CELL (kg)	CODE
20		C3 C4	•	•	—			0.4	FCOL20
50		C3 C4	•	•	•			0.4	FCOL50
100		C3 C4	•	•	•			0.4	FCOL100
200		C3 C4	•	•	•			0.4	FCOL200
350		C3 C4	•	•	•			0.4	FCOL350
500		C3 C4	•	•	•			0.4	FCOL500

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

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

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

OIML R60 C4

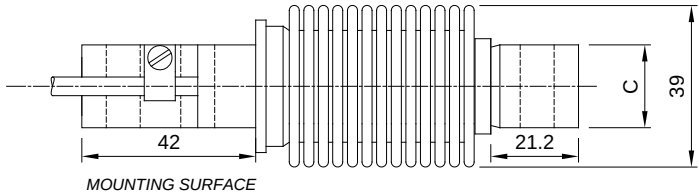
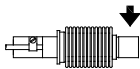
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

NTEP - compliant to the metrological standards of United States and Canada (capacity from 50 to 500 kg)

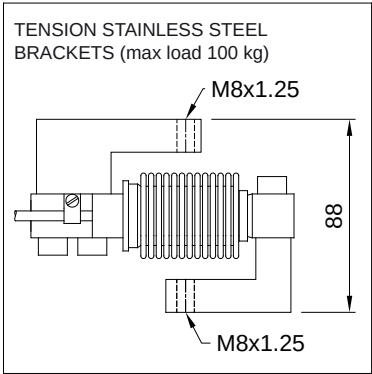
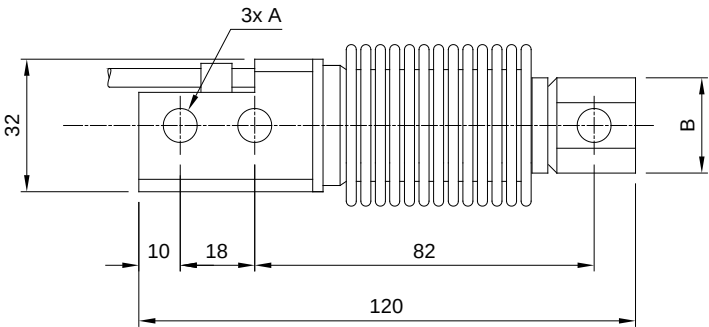
COMPLEMENTARY ACCESSORIES

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

DIMENSIONS (mm)



	A	B	C
20-200kg	Ø8.2	23	20
350-500kg	Ø10.3	24	19



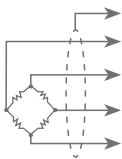
TECHNICAL FEATURES

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 class			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	4/6 x 0.22 mm²



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

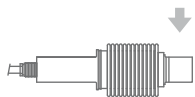
The Company reserves the right to make changes to the technical data, drawings and images without notice.

FCAX

BENDING BEAM AND SHEAR LOAD CELLS



Manufactured according to OIML R60 standards



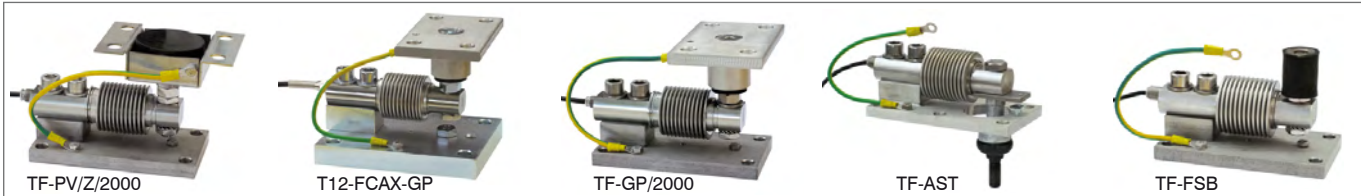
BENDING BEAM: capacity from 30 kg to 500 kg

SHEAR BEAM: capacity from 750 kg to 1500 kg

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



MOUNTING KITS



CAPACITY	kg	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
30		•	•	•	0.6	FCAX30
50		•	•	•	0.6	FCAX50
75		•	•	•	0.6	FCAX75
150		•	•	•	0.6	FCAX150
300		•	•	•	0.7	FCAX300
500		•	•	•	0.7	FCAX500
750		•	•	•	0.7	FCAX750
1000		•	•	•	0.7	FCAX1000
1500		•	•	•	0.7	FCAX1500

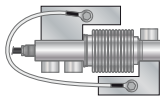
ON REQUEST

CERTIFICATIONS

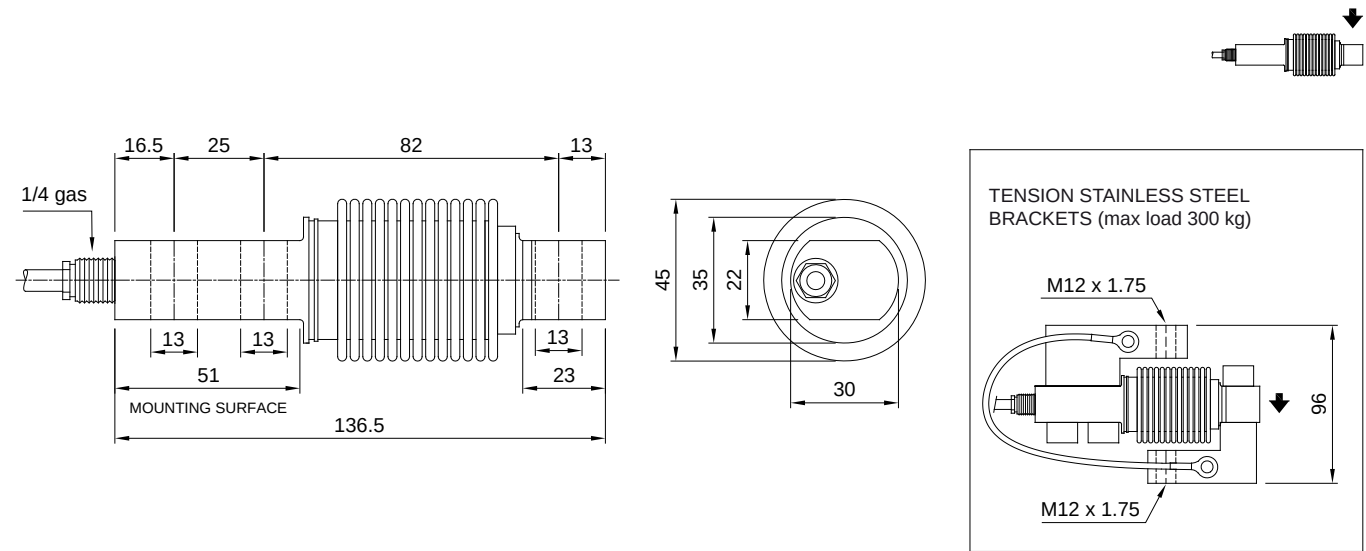
CERTIFICATIONS ON REQUEST

ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx II 1GD (zone 0-1-2-20-21-22)
EAC Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

DIMENSIONS (mm)



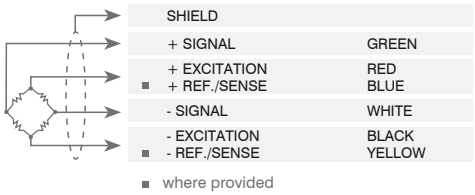
TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	30 - 50 - 75 - 150 - 300 - 500 - 750 - 1000 - 1500 kg		
Combined error	$\leq \pm 0.02\%$		
Protection class	IP68		
Rated output	2 mV/V $\pm 0.4\%$	Input resistance	350 $\Omega \pm 5$ *
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 $^{\circ}\text{C}$ / +50 $^{\circ}\text{C}$	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	0.4 mm

* Input resistance for 30, 50, 75, 150, 300 kg capacities: 400 $\Omega \pm 20$

ELECTRICAL CONNECTIONS

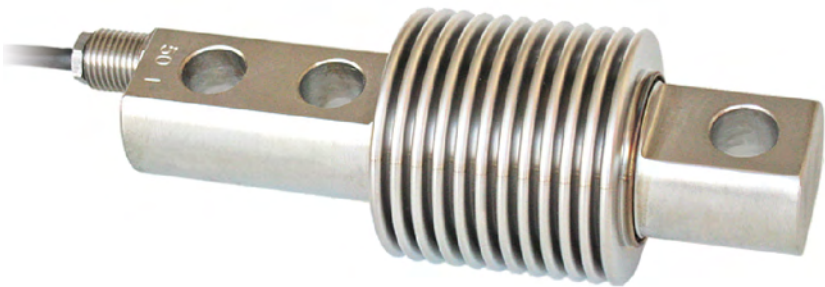
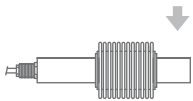
Cable length	5 m
Cable diameter	5 mm
Cores	4/6 x 0.22 mm ²



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

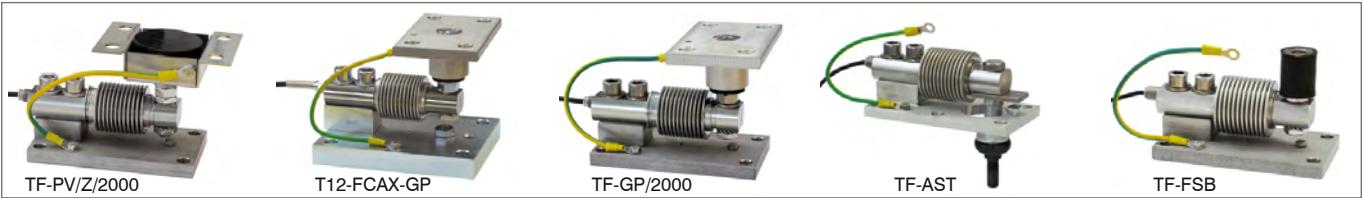


Capacity from 50 kg to 300 kg



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

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
50	50	C3	•	•	•	•	0.5	FCAL50
75	75	C3	•	•	•	•	0.5	FCAL75
150	150	C3	•	•	•	•	0.5	FCAL150
300	300	C3	•	•	•	•	0.5	FCAL300

ON REQUEST

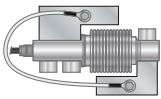
CERTIFICATIONS

OIML R60 C3

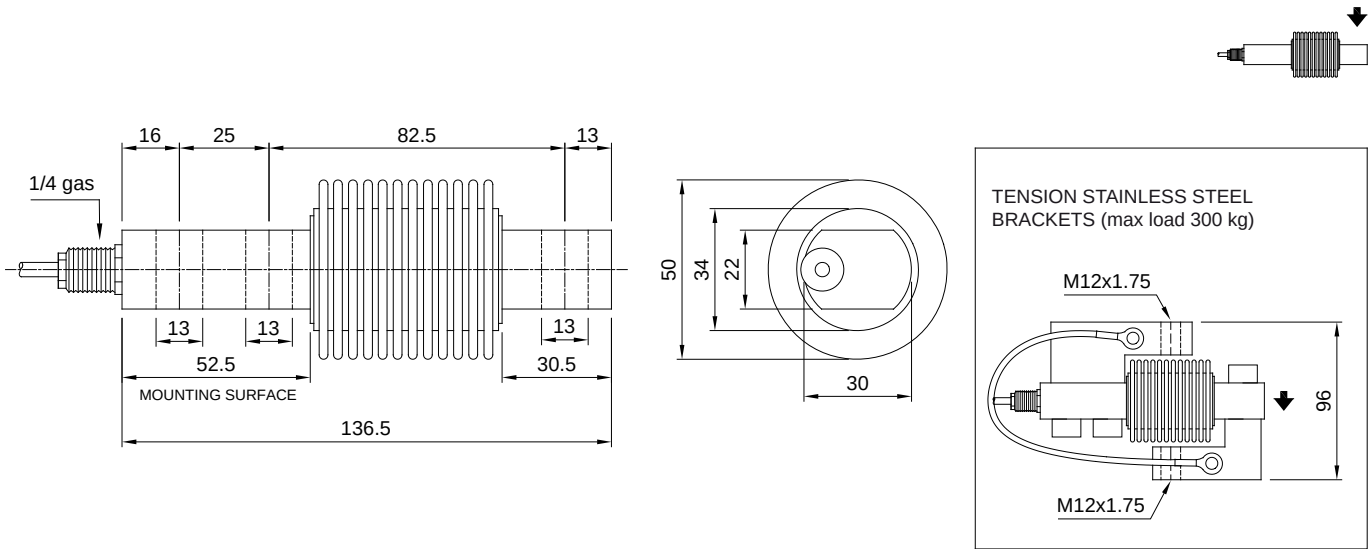
CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

DIMENSIONS (mm)



TECHNICAL FEATURES

Material	17-4 PH 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 class	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)	200%
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

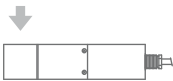
Cable lenght	3 m
Cable diameter	4 mm
Cores	4 x 0.22 mm ²



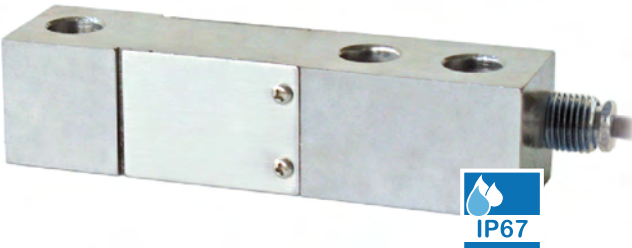
The Company reserves the right to make changes to the technical data, drawings and images without notice.

FTP

SHEAR BEAM AND BENDING LOAD CELLS



BENDING BEAM: capacity from 75 kg to 300 kg

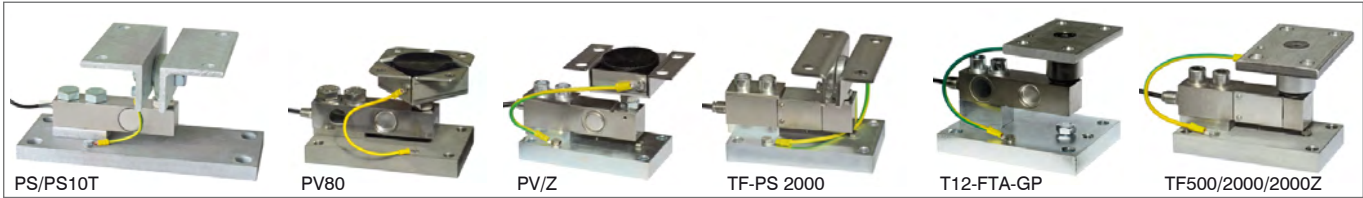


SHEAR BEAM: capacity from 500 kg to 10000 kg



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

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
75		C3					0.9	FTP75
150		C3					0.9	FTP150
300		C3					0.9	FTP300
500		C3					0.9	FTP500
750		C3					0.9	FTP750
1000		C3					0.9	FTP1000
1200		C3					0.9	FTP1200
1500		C3					0.9	FTP1500
2000		C3					0.9	FTP2000
3000		—					1.6	FTP3000
5000		—					1.6	FTP5000
10000		—					3.8	FTP10000

ON REQUEST

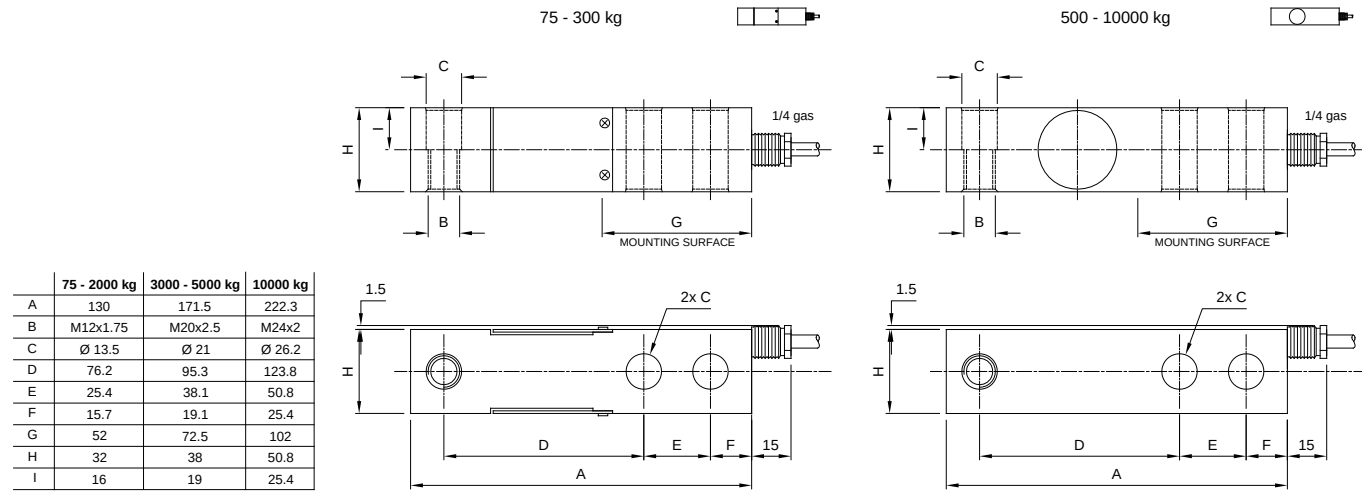
CERTIFICATIONS

OIML R60 C3 (see capacities table)

CERTIFICATIONS ON REQUEST

ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx II 1GD (zone 0-1-2-20-21-22)
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

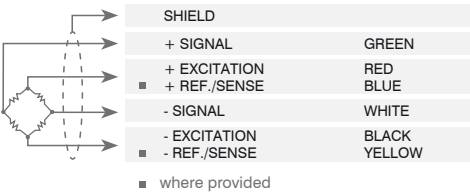


TECHNICAL FEATURES

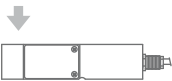
Material		AISI 420 stainless steel	
OIML R60 Accuracy class • Verification intervals		C3 • 3000	-
Nominal load (E max)		75 -150 -300- 500 - 750 kg 1000 - 1200 - 1500 - 2000 kg	3000 - 5000 - 10000 kg
Minimum verification interval (V min)		E max / 15000	-
Combined error		≤ ±0.02%	
Protection class		IP67 (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 lenght	5 m (75 - 5000 kg) 10 m (10000 kg)
Cable diameter	5 mm
Cores	4/6 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

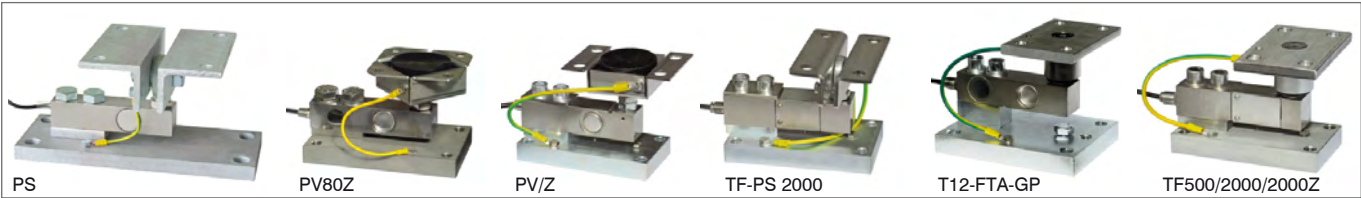


SHEAR BEAM: capacity from 500 kg to 5000 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- PROTECTION CLASS IP67, IP68

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS				EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
75		—		•	•		1	FTK75
150		—		•	•		1	FTK150
300		—		•	•		1	FTK300
500		—		•	•		1	FTK500
1000		C3		•	•		1.1	FTK1000
2000		C3		•	•		1.1	FTK2000
3000		C3		•	•		1.1	FTK3000
5000		C3		•	•		1.1	FTK5000

ON REQUEST

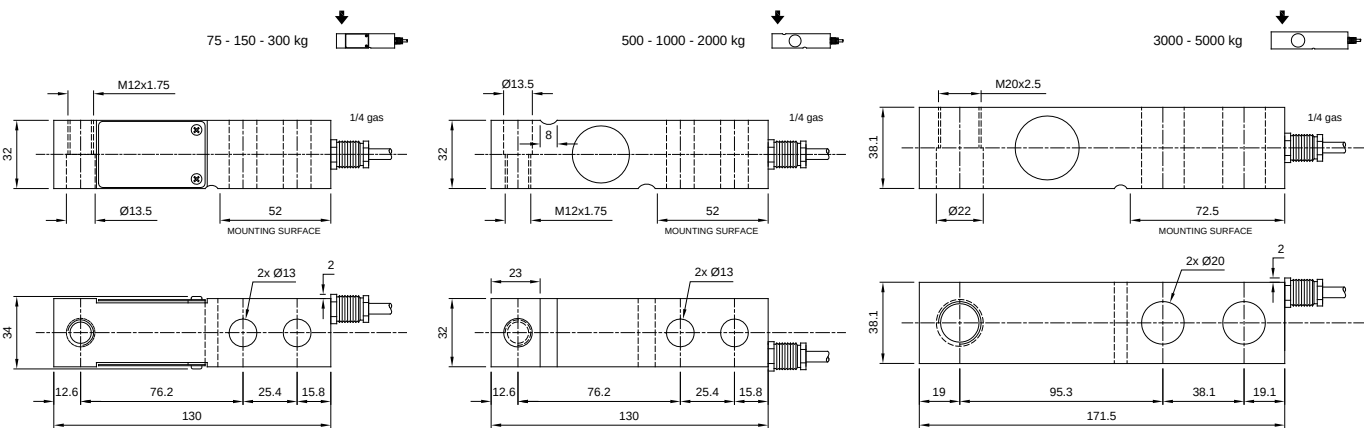
CERTIFICATIONS

OIML R60 C3 (see capacities table)

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

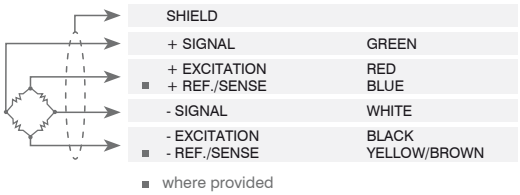


TECHNICAL FEATURES

Material		Special 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 class		IP67, IP68	
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	4/6 x 0.24 mm²



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

A1 - LOAD CELLS

PRODUCT CATALOGUE

	CAPACITY kg	PAGE
A1.3	SHEAR BEAM	
	FTL 300, 500, 1000, 2000	49
	FTK* 500, 1000, 2000, 3000, 5000	45
	FT-P 500, 1000, 2000	51
	FTKL 500, 1000, 1500, 2000, 3000, 5000	53
	FTZ 500, 1000, 2000, 5000	55
	FTZA 500, 1000, 2000, 5000, 7500, 10000	57
	FCAX* 750, 1000, 1500	39
	FTP* 500, 750, 1000, 1200, 1500, 2000, 3000, 5000, 10000	43
	FTH 5000, 10000	59

*) *SHEAR / BENDING BEAM load cells*

Notes section with horizontal lines for writing.



Capacity from 300 kg to 2000 kg



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

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
300		C3		•	•		0.9	FTL300
500		C3		•	•		0.9	FTL500
1000		C3		•	•		0.9	FTL1000
2000		C3		•	•		0.9	FTL2000

ON REQUEST

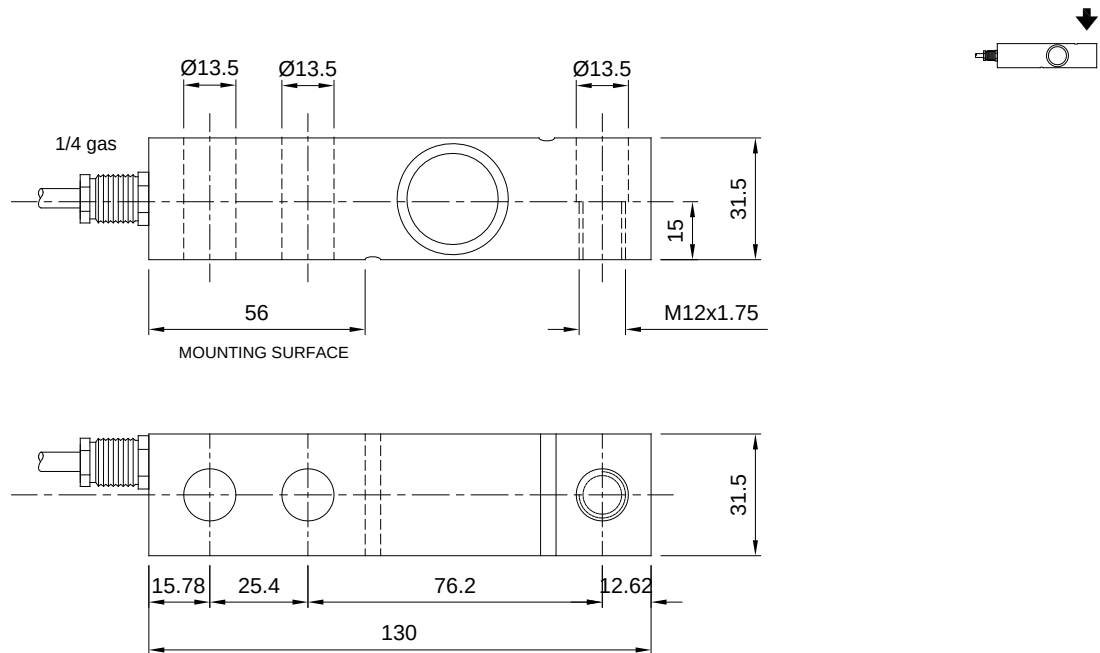
CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx II 1GD (zone 0-1-2-20-21-22)
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



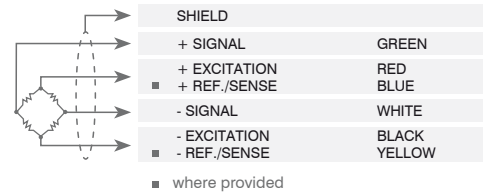
TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	300 - 500 - 1000 - 2000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.02%		
Protection class	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 / +70 °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

* Calibrated current output

ELECTRICAL CONNECTIONS

Cable length	5.8 m
Cable diameter	6 mm
Cores	4/6 x 0.22 mm²



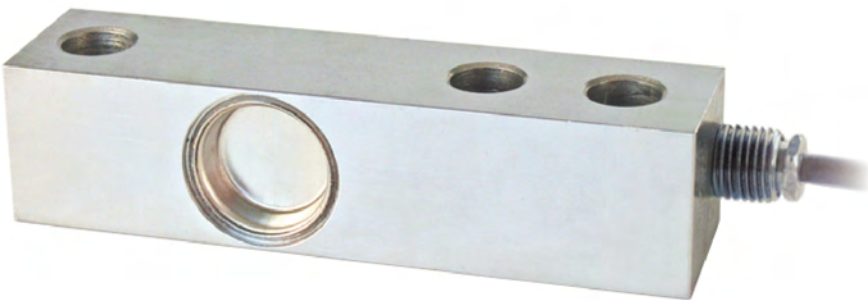
The Company reserves the right to make changes to the technical data, drawings and images without notice.

FT-P

SHEAR BEAM LOAD CELLS



Capacity from 500 kg to 2000 kg



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



MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
500		C3				• •	0.9	FT-P500
1000		C3				• •	0.9	FT-P1000
2000		C3				• •	0.9	FT-P2000

ON REQUEST

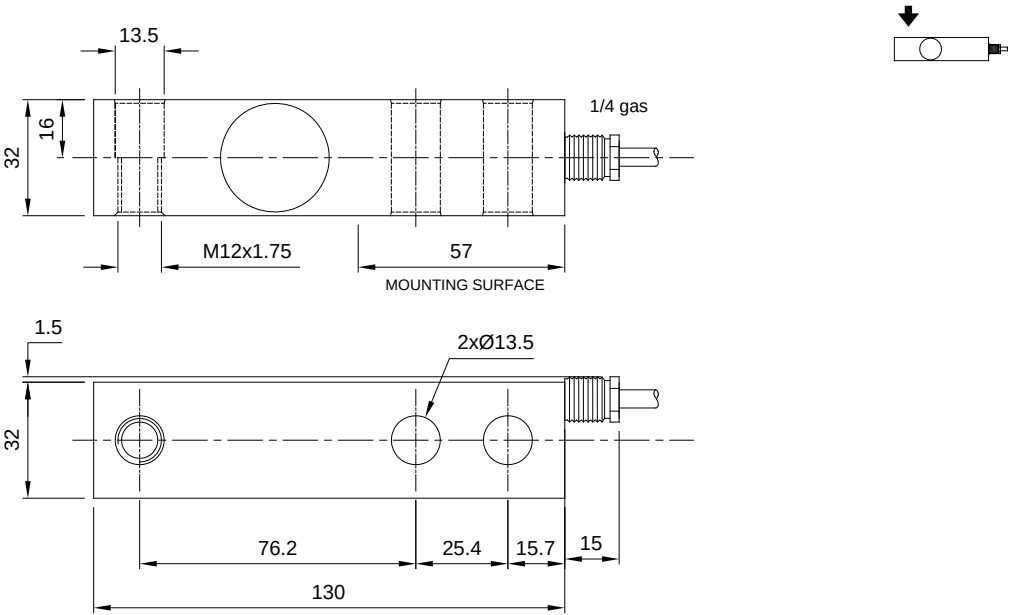
CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

	Declaration of conformity + IP69K marking protection rating Water protection when cleaning high pressure / steam jet (Test: pressurized hot water is sprayed from a distance of 150 mm). Water pressure 100 bar; temperature 80 ° C; test duration 250 seconds (Reference standard DIN 40050-9).
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

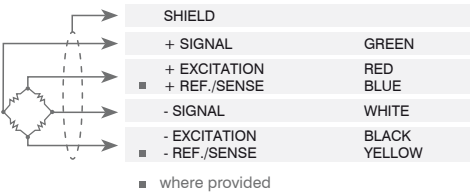


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	500 - 1000 - 2000 kg		
Minimum verification interval (V min)	E max / 15000		
Combined error	≤ ±0.02%		
Protection class	IP68		
Rated output	2.0 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	0.0012% °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	0.016%	Ultimate overload (% of full scale)	200%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

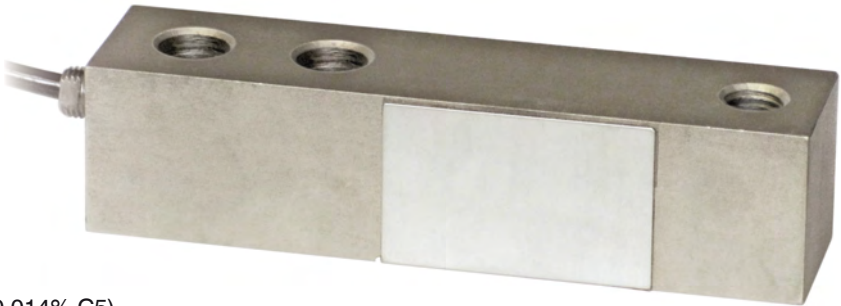
Cable length	5 m
Cable diameter	5 mm
Cores	4/6 x 0.25 mm²



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



Capacity from 500 kg to 5000 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4; 0.014% C5)
- PROTECTION CLASS IP67

MOUNTING KITS



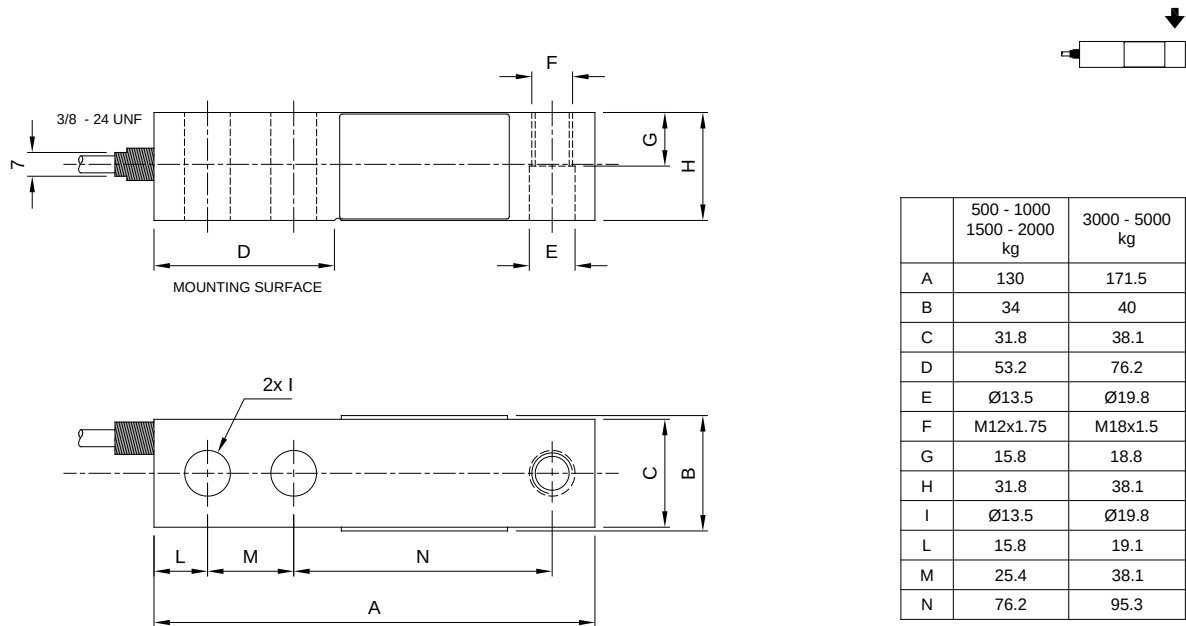
CAPACITY	kg	ACCURACY CLASS					EAC		NET WEIGHT OF LOAD CELL (kg)	CODE
		C3	C4	C5						
500		•	•	•	•	•	•		0.8	FTKL500
1000		•	•	•	•	•	•		0.8	FTKL1000
1500		•	•	•	•	•	•		0.9	FTKL1500
2000		•	•	•	•	•	•		0.9	FTKL2000
3000		•	•	•	•	•	•		1.7	FTKL3000
5000		•	•	•	•	•	•		1.7	FTKL5000

ON REQUEST

CERTIFICATIONS

	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	OIML R60 C4/C5
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)
	NTEP - compliant to the metrological standards of United States and Canada (capacity from 50 to 500 kg)

DIMENSIONS (mm)

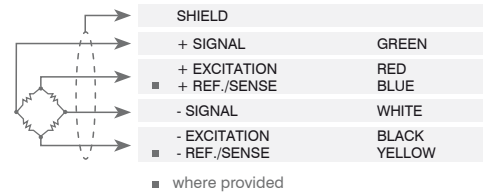


TECHNICAL FEATURES

Material		AISI 420 stainless 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 class		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 lenght	4 m (500 - 2000 kg) 6 m (3000 - 5000 kg)
Cable diameter	5 mm
Cores	4/6 x 0.20 mm²



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

FTZ

SHEAR BEAM LOAD CELLS



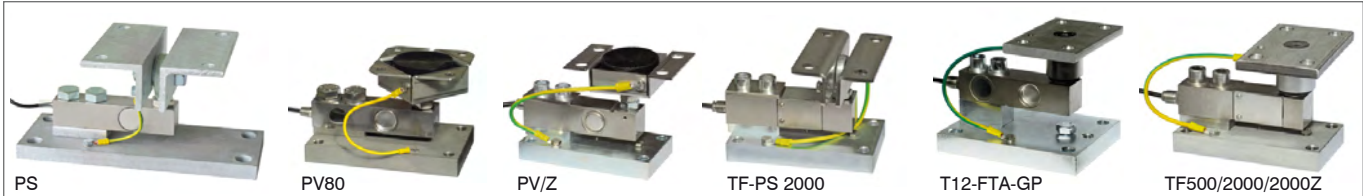
Capacity from 500 kg to 5000 kg



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



MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
500		C3					0.9	FTZ500
1000		C3					0.9	FTZ1000
2000		C3					0.9	FTZ2000
5000		C3					1.5	FTZ5000

ON REQUEST

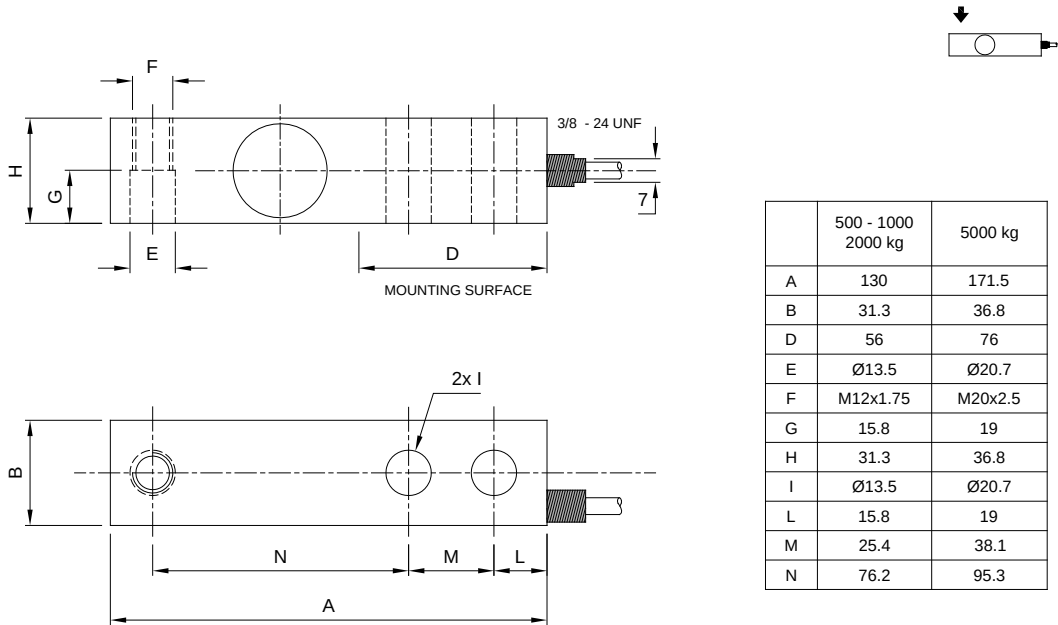
CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx II 1GD (zone 0-1-2-20-21-22)
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



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 class	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 lenght	5 m
Cable diameter	5 mm
Cores	4 x 0.20 mm²



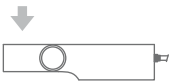
The Company reserves the right to make changes to the technical data, drawings and images without notice.

FTZA

SHEAR BEAM LOAD CELLS



Capacity from 500 kg to 10000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.0200\%$ (0.0170% C4)
- PROTECTION CLASS IP68

CAPACITY	kg	ACCURACY CLASS				EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
		C3	C4					
500		—	•	•	•		2.1	FTZA500
1000		—	•	•	•		2.1	FTZA1000
2000		—	•	•	•		2.1	FTZA2000
5000		•	—	•	•		4.2	FTZA5000
7500		•	—	•	•		4.2	FTZA7500
10000		•	—	•	•		4.2	FTZA10000

ON REQUEST

CERTIFICATIONS



OIML R60 C3 / C4

CERTIFICATIONS ON REQUEST



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

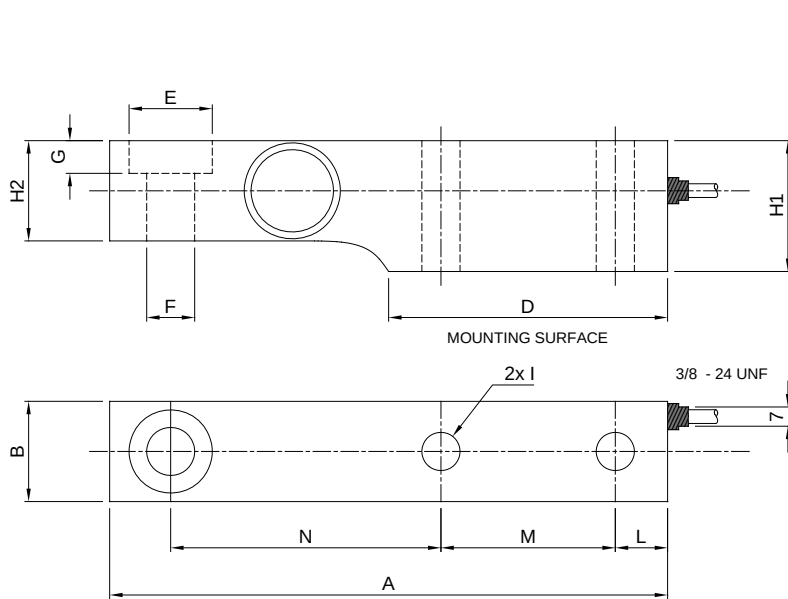


IECEx II 1GD (zone 0-1-2-20-21-22)



Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



	500 kg 1000 kg 2000 kg	5000 kg 7500 kg	1000 kg
A	203.2	234.95	234.95
B	36.48	47.36	55
D	101.6	111	111
E	Ø30.3	Ø41.4	Ø41.4
F	Ø17.48	Ø25.5	Ø25.5
G	11.9	15.75	15.75
H1	47.63	69.85	69.85
H2	36.5	47.64	58.6
I	Ø13.9	Ø22.23	Ø25
L	19.05	20.62	20.62
M	63.5	66.7	66.7
N	98.43	123.8	123.8

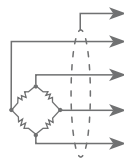
TECHNICAL FEATURES

Material	17-4 PH stainless steel	
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	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 class	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 lenght	5 m (500 - 7500 kg) 10 m (10000 kg)
Cable diameter	5 mm
Cores	4 x 0.20 mm²

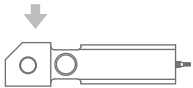


SHIELD	
+ SIGNAL	GREEN
+ EXCITATION	RED
- SIGNAL	WHITE
- EXCITATION	BLACK

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 $\leq \pm 0.1\%$
- PROTECTION CLASS IP68

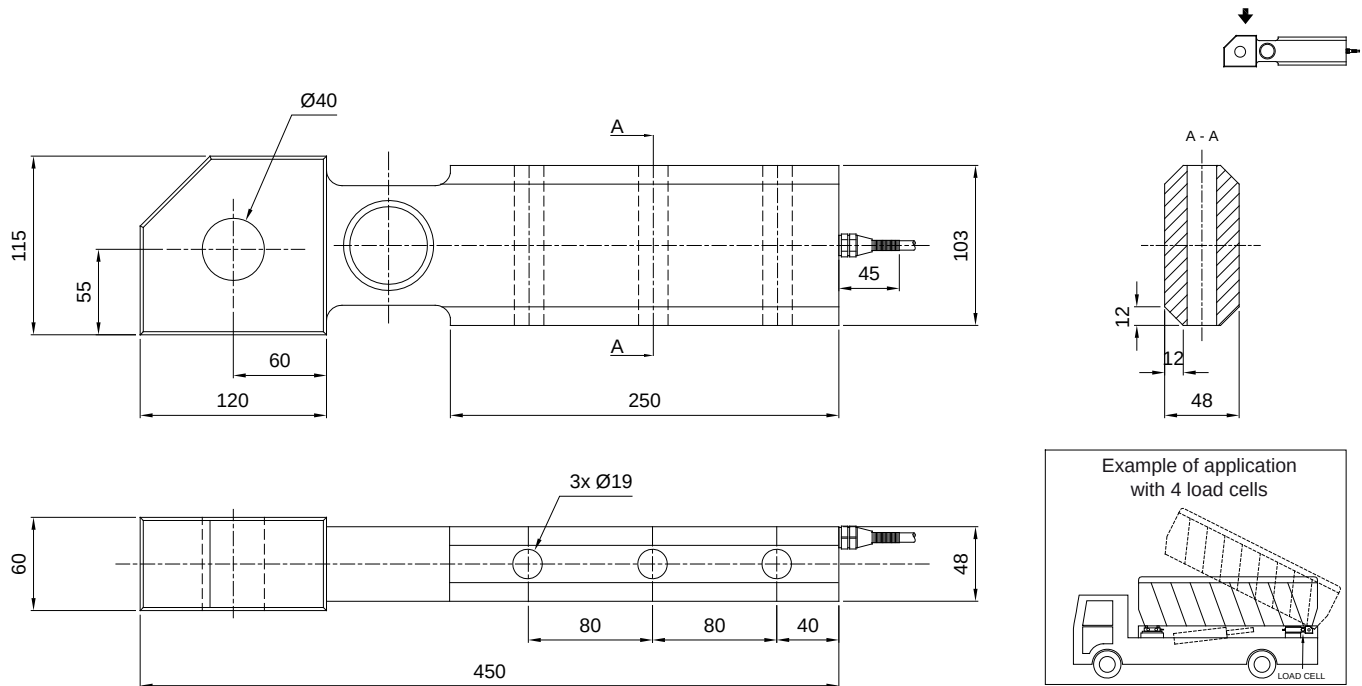
CAPACITY	kg	 	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
5000		•	•	15.5	FTH5000
10000		•	•	16.2	FTH10000
ON REQUEST					

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

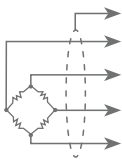


TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	5000 - 10000 kg		
Combined error	$\leq \pm 0.1\%$		
Protection class	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	4/6 x 0.24 mm ²



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

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



	CAPACITY kg	PAGE
A1.4	DOUBLE SHEAR BEAM	
DTL	2500	63

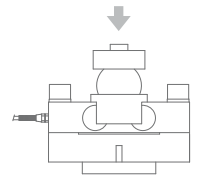
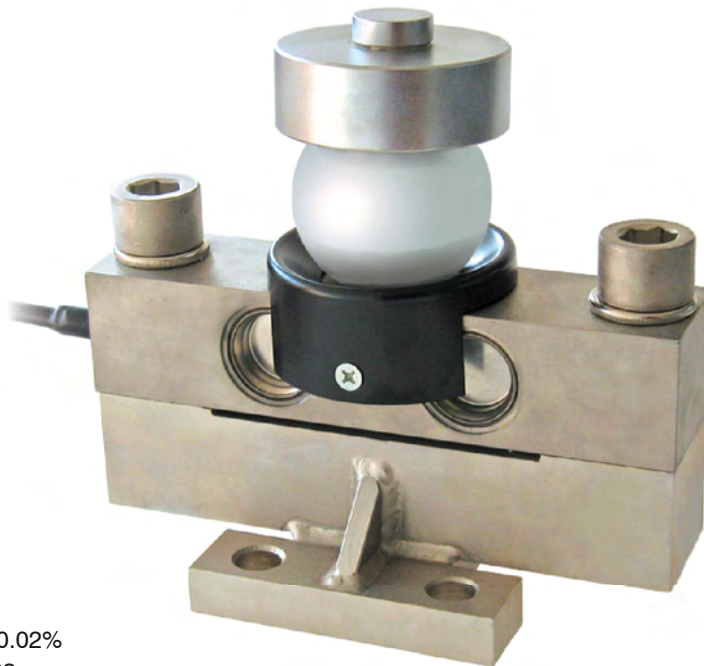
Notes section with horizontal lines for writing.

DTL

DOUBLE SHEAR BEAM LOAD CELLS

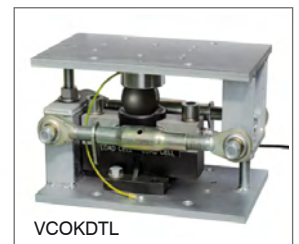


Capacity 25000 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- PROTECTION CLASS IP68

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
25000		C3					16	DTL25000
ON REQUEST								

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

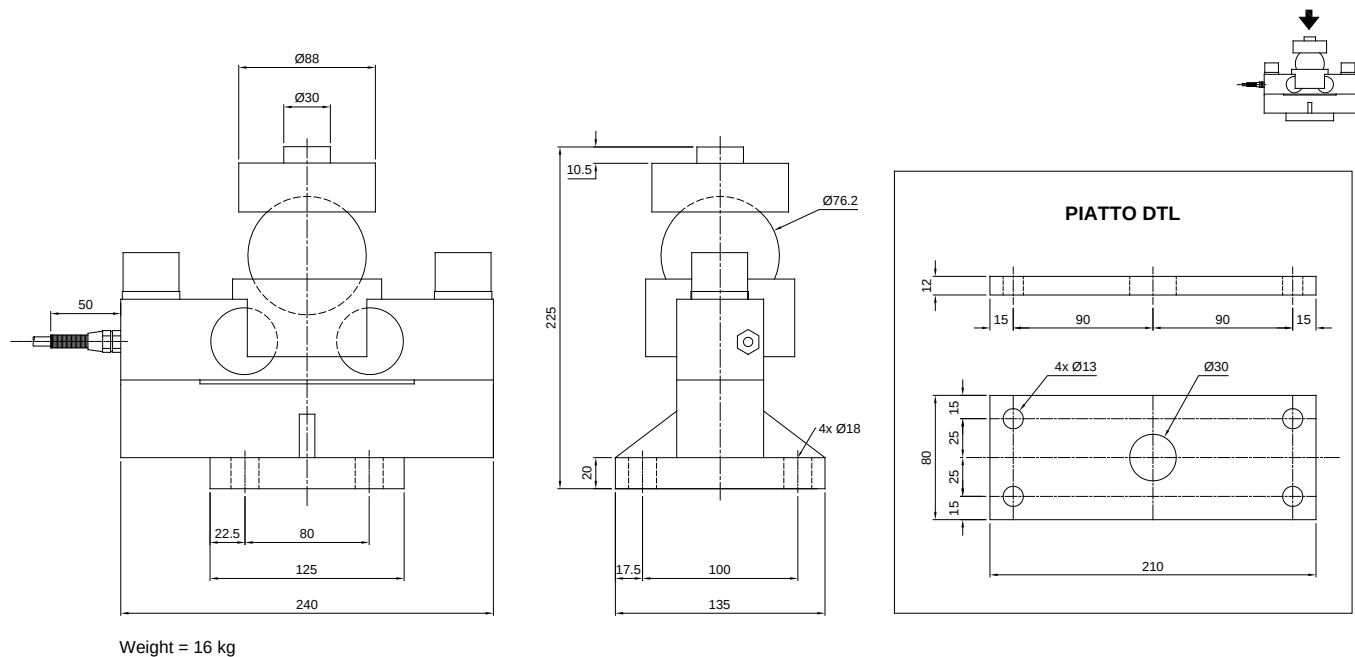
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
Galvanized steel plate.	PIATTODTL



DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Special 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	±0.002%		
Protection class	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 lenght	12 m
Cable diameter	6 mm
Cores	4 x 0.22 mm²



DTL

DOUBLE SHEAR BEAM LOAD CELLS

APPLICATION

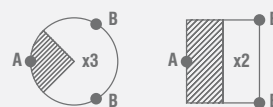
■ LEVEL MEASUREMENTS

"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.

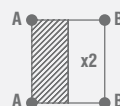
3 SUPPORTS STRUCTURES

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

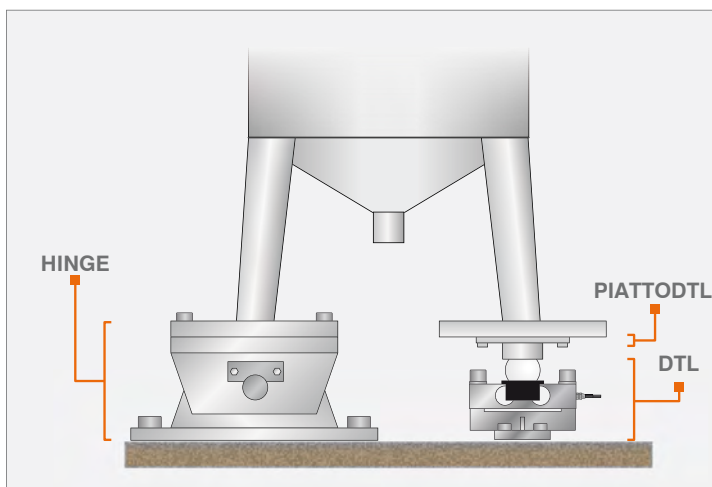
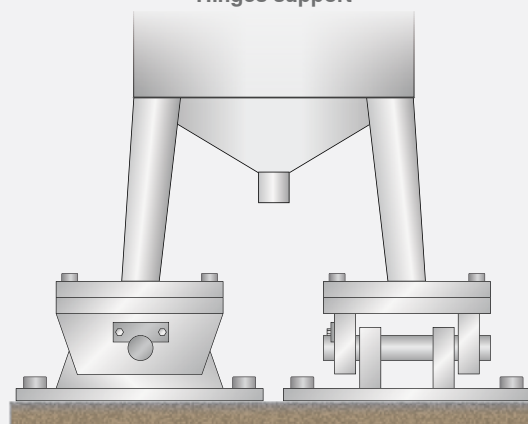


4 SUPPORTS STRUCTURES

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



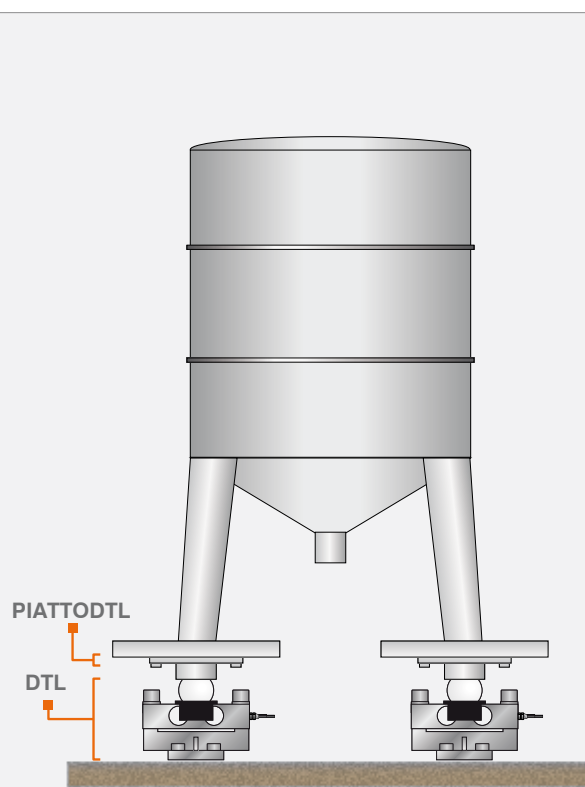
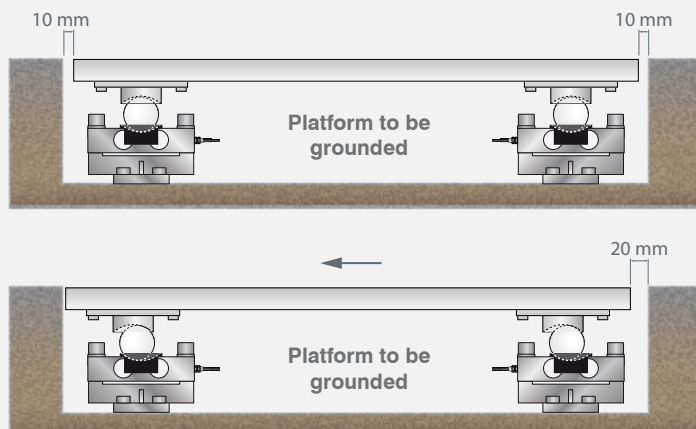
Hinges support



■ 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.

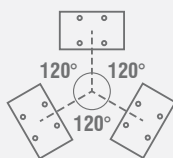
PIATTODTL is designed for facilitate the load cell installation and removal; it will be enough to lift 1 mm the structure. The different bending radius between the ball and the bases which contain it, makes that any side shifts lead to an increase of the structure.



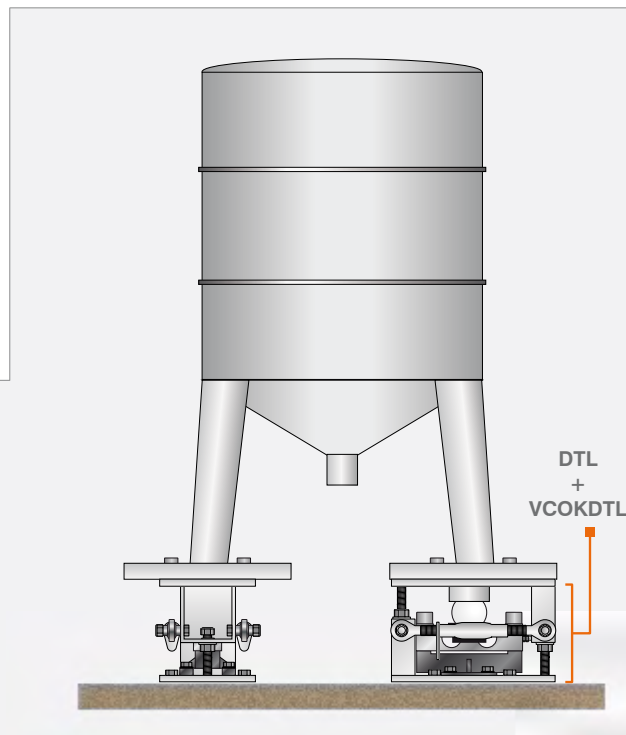
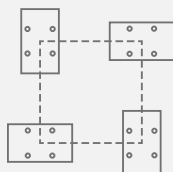
■ **WEIGHING STRUCTURES SUBJECT TO KNOCKS OR WIND EFFECT**

The VCOKDTL accessory 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



A1 - LOAD CELLS

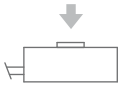
PRODUCT CATALOGUE

	CAPACITY kg	PAGE
A1.5	COMPRESSION-LOW PROFILE	
	CK 200, 500, 1000, 2500	69
	CLS 1000, 2000, 5000	71
	CBL 250, 500, 1000, 2500, 5000, 7500, 10000, 12500, 15000, 30000, 50000, 100000	73
	CBX 15000, 30000, 50000	77
	CBLS 200000, 300000, 500000, 750000	81

Notes section with horizontal lines for writing.



Manufactured according to OIML R60 standards



Capacity from 200 kg to 2500 kg



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

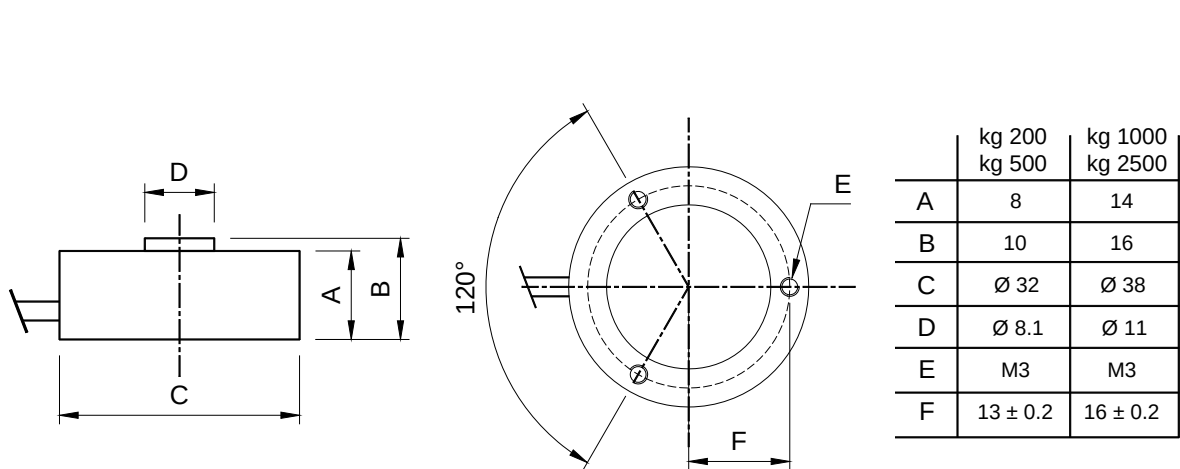
CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
200		•	•	•	0,11	CK200
500		•	•	•	0,08	CK500
1000		•	•	•	0,17	CK1000
2500		•	•	•	0,17	CK2500
		 ON REQUEST				

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)

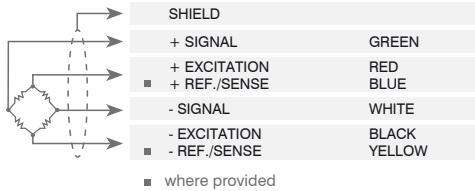


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	200 - 500 - 1000 - 2500 kg		
Combined error	≤ ±0.5%		
Protection class	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	4/6 x 0.25 mm ²



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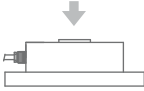
CLS

COMPRESSION LOAD CELLS - LOW PROFILE



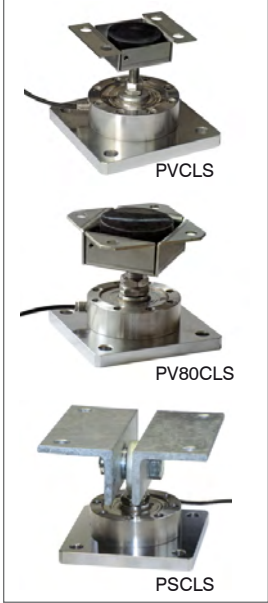
Manufactured according to OIML R60 standards

Capacity from 1000 kg to 5000 kg



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

MOUNTING KITS



CAPACITY	kg	 		NET WEIGHT OF LOAD CELL (kg)	CODE
1000		•	•	4.1	CLS1000
2000		•	•	4.1	CLS2000
5000		•	•	4.1	CLS5000

ON REQUEST

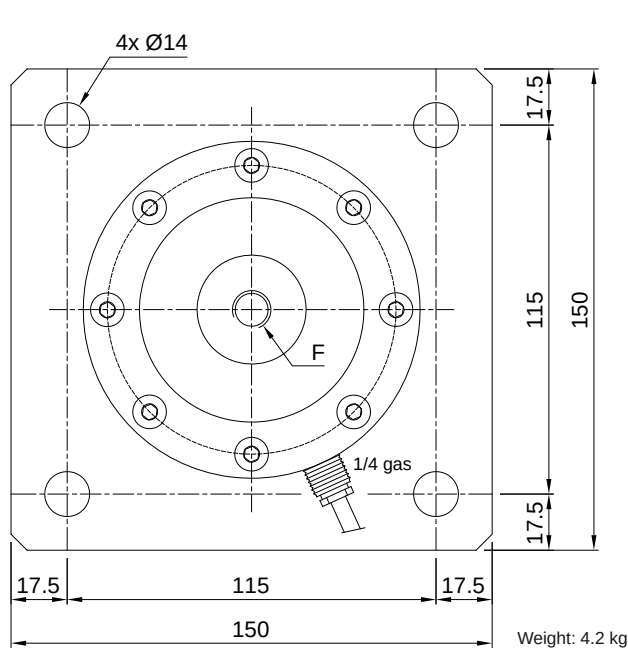
CERTIFICATIONS

CERTIFICATIONS ON REQUEST

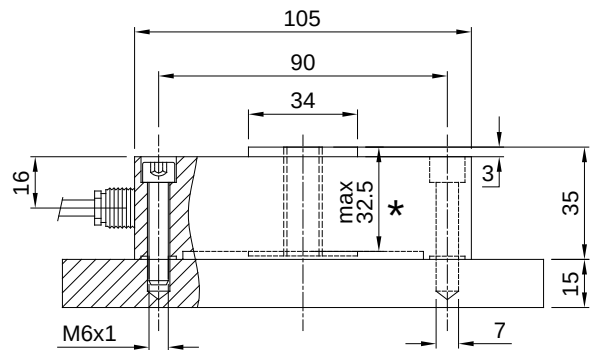
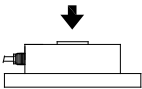
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



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



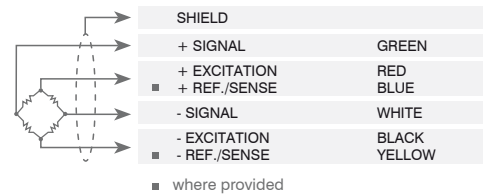
★ WARNING! Max dimension to insert the bolt to allow the cell to perform properly

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	1000 - 2000 - 5000		
Combined error	≤ ±0.03%		
Protection class	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

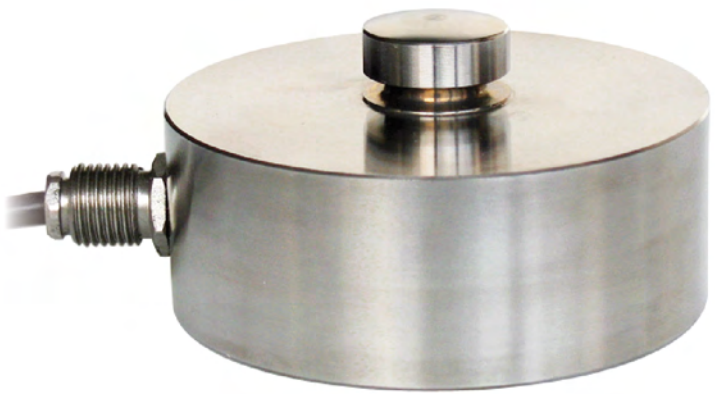
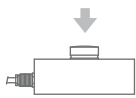
Cable lenght	5 m
Cable diameter	6 mm
Cores	4/6 x 0.25 mm ²



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Capacity from 250 kg to 100000 kg



MOUNTING KITS



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

CAPACITY	kg	ACCURACY CLASS					EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
250		—	—		•	•		1.1	CBL250
500		—	—		•	•		1.1	CBL500
1000		—	—		•	•		1.1	CBL1000
2500		C2	C3		•	•		1.1	CBL2500
5000		C2	C3		•	•		1.1	CBL5000
7500		C2	C3		•	•		1.1	CBL7500
10000		C2	C3		•	•		1.1	CBL10000
12500		—	C3 *		•	•		1.6	CBL12500
15000		—	—		•	•		2.1	CBL15000
30000		—	—		•	•		3.8	CBL30000
50000		—	—		•	•		8.6	CBL50000
100000		—	—		•	•		9.1	CBL100000

ON REQUEST

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

Rev. 00 del 12/03/2015

CERTIFICATIONS

 OIML R60 C2 / C3 (see capacities table)

CERTIFICATIONS ON REQUEST

	Declaration of conformity + IP69K marking protection rating Water protection when cleaning high pressure / steam jet (Test: pressurized hot water is sprayed from a distance of 150 mm). Water pressure 100 bar; temperature 80 °C; test duration 250 seconds (Reference standard DIN 40050-9).
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	OIML R60 C3 (see capacities table)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

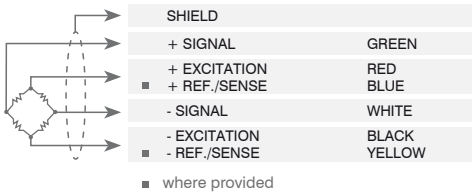
TECHNICAL FEATURES

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	
Combined error	≤ ±0.03%	≤ ±0.03%	≤ ±0.02%
Protection class	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%
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 after 4 hours	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 lenght	▲ 5 m (250-10000 kg) 10 m (12500-100000 kg)
Cable diameter	5 mm
Cores	4/6 x 0.25 mm ²

▲ On request: 10 m long cable version



OPTIONS ON REQUEST**DESCRIPTION**

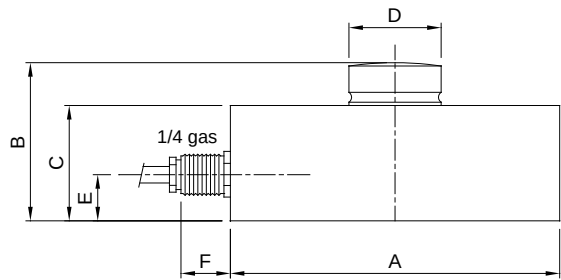
10 m long cable version

AISI 420 stainless steel load cell version (not OIML approved)

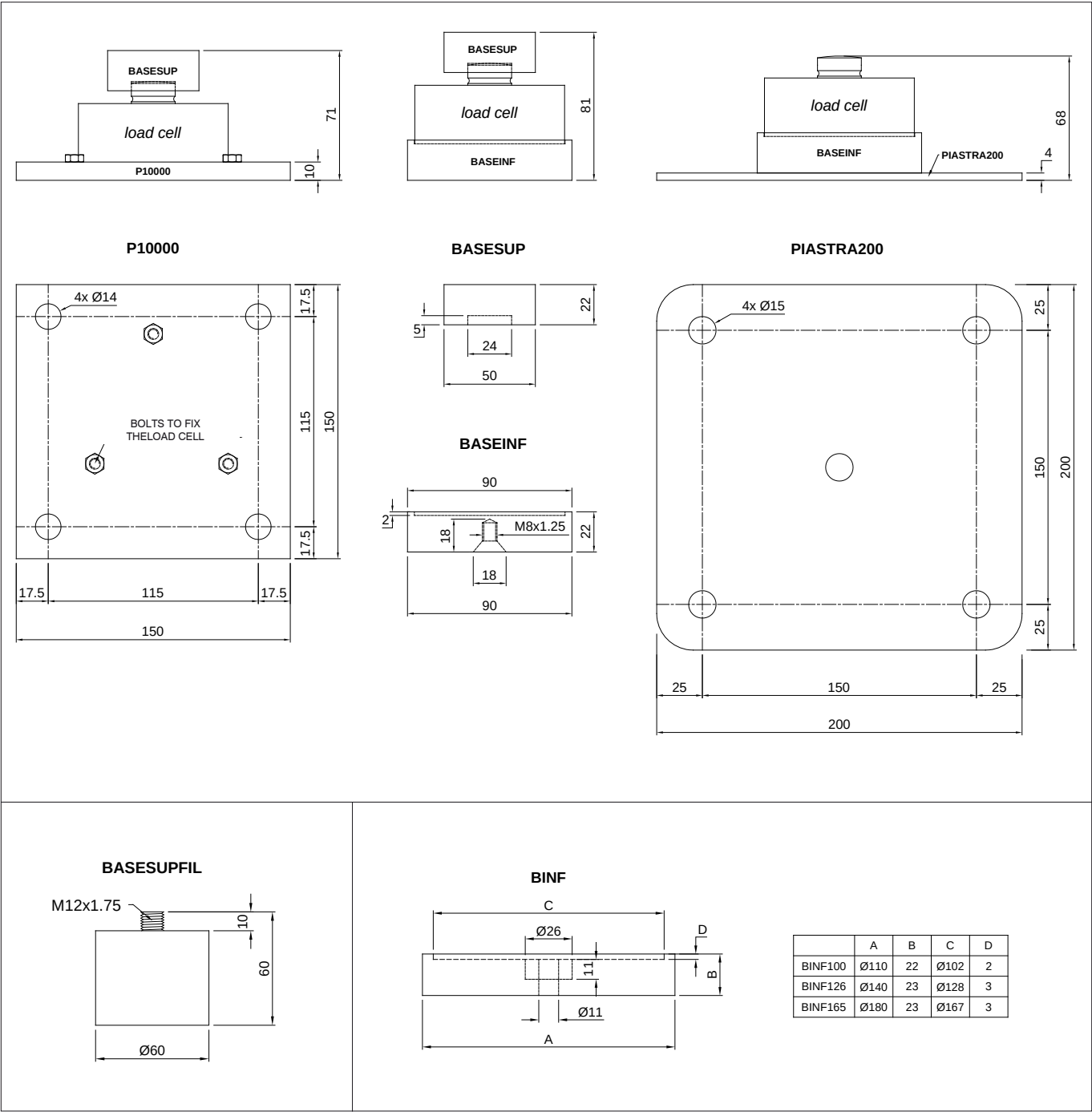
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems**COMPLEMENTARY ACCESSORIES**

	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: from 250 to 15000 kg.	BASESUP P10000
	Turned upper and lower bases in AISI 304 stainless steel. Load cell capacity: from 250 to 15000 kg.	BASESUP BASEINF
	Lower plate and turned lower base in AISI 304 stainless steel. Load cell capacity: from 250 to 15000 kg.	BASEINF PIASTRA200

DIMENSIONS (mm)



kg	250	1500	30000	50000
	12500	15000	30000	100000
A	Ø82	Ø100	Ø126	Ø165
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



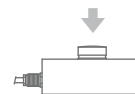
Rev. 00 del 12/03/2015

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 15000 kg to 50000 kg

**MOUNTING KITS**

V10000 - V10275



V15000 - V30000 - V100000

- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.03\%$
- PROTECTION CLASS IP68

CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
15000		•	•		1.4	CBX15000
30000		•	•		2.2	CBX30000
50000		•	•		3.8	CBX50000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

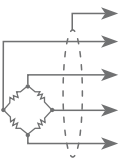
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	15000 - 30000 - 50000 kg		
Combined error	≤ ±0.035%		
Protection class	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	0.003% °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 lenght	10 m
Cable diameter	5 mm
Cores	4/6 x 0.25 mm²

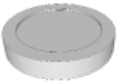


SHIELD	
+ SIGNAL	GREEN
+ EXCITATION	RED
+ REF./SENSE	BLUE
- SIGNAL	WHITE
- EXCITATION	BLACK
- REF./SENSE	YELLOW
■ where provided	

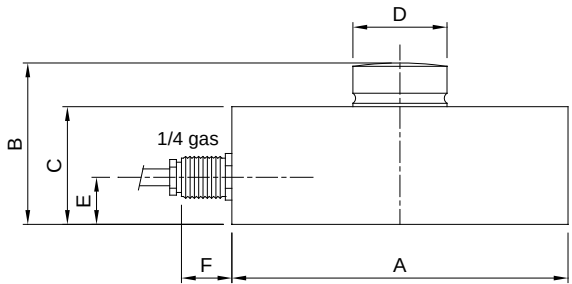
OPTIONS ON REQUEST**DESCRIPTION**

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

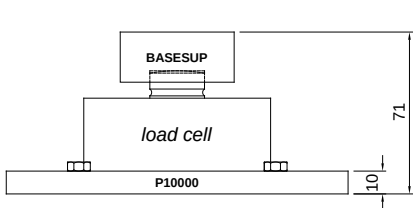
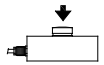
COMPLEMENTARY ACCESSORIES

	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	BINF100 BINF126
	Lower plate and turned upper base in AISI 304 stainless steel. Load cell capacity: 15000 kg.	BASESUP P10000
	Turned upper and lower bases in AISI 304 stainless steel. Load cell capacity: 15000 kg.	BASESUP BASEINF
	Lower plate and turned lower base in AISI 304 stainless steel. Load cell capacity: 15000 kg.	BASEINF PIASTRA200
	AISI 304 stainless steel adapter for mounting kits: - V15000 Ø110x6 mm - V30000 Ø126x9 mm - V100000 Ø165x29 mm	ADAT100CBX15T ADAT126CBX30T ADAT165CBX50T

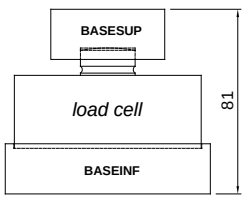
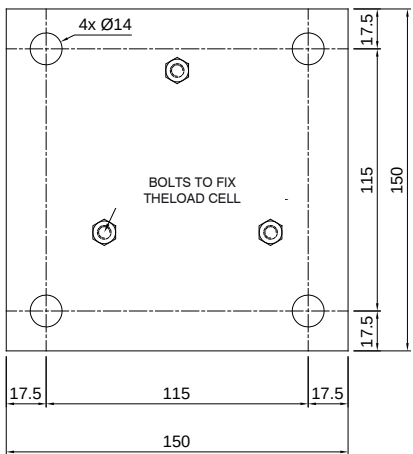
DIMENSIONS (mm)



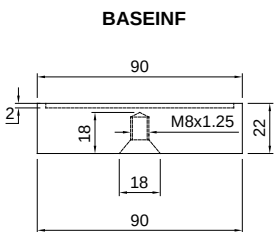
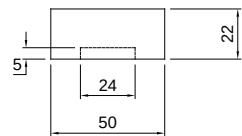
kg	15000	30000	50000
A	Ø82	Ø100	Ø126
B	44	48	54
C	32	35	40
D	Ø22	Ø28	Ø35
E	14	14	14
F	15	15	15



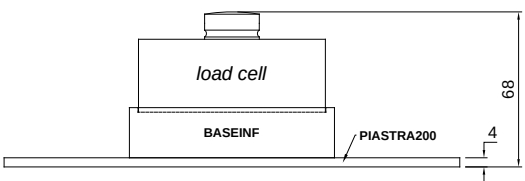
P10000



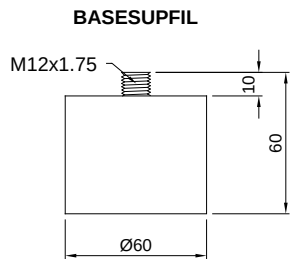
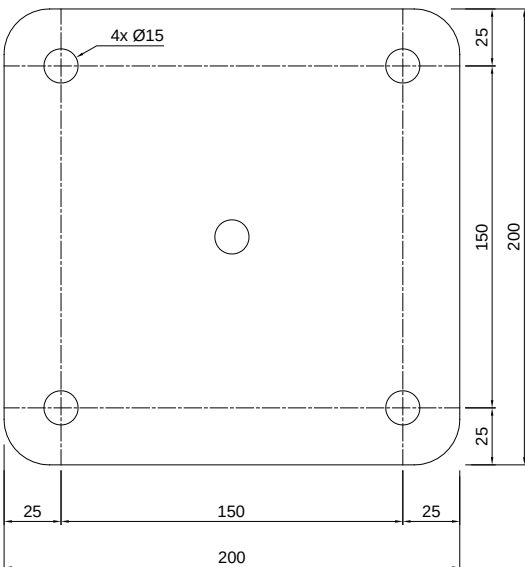
BASESUP



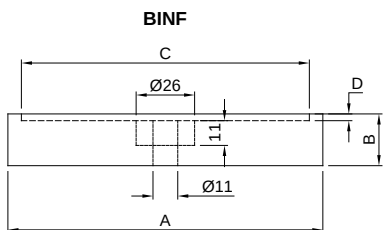
BASEINF



PIASTRA200



BASESUPFIL



BINF

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

CBLS

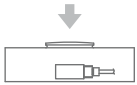
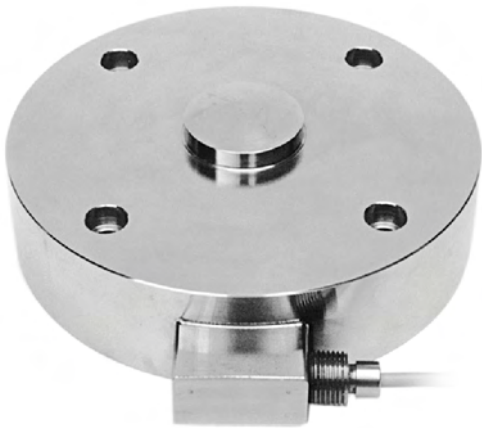
COMPRESSION LOAD CELLS - LOW PROFILE



Manufactured according to OIML R60 standards

Capacity from 200000 kg to 750000 kg

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



CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
200000		•	•	•	20	CBLS200000
300000		•	•	•	42	CBLS300000
500000		•	•	•	60	CBLS500000
750000		•	•	•	60	CBLS750000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

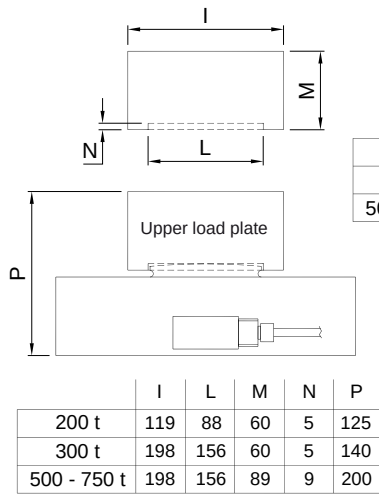
DESCRIPTION

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

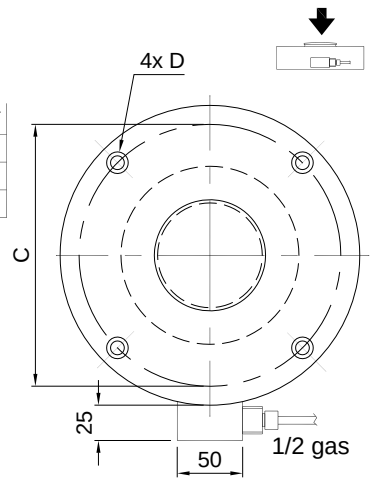
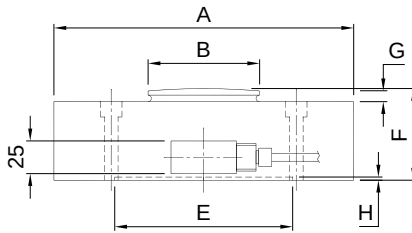
COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Upper plate. Dimensions: Ø119 mm; h=60 mm Ø198 mm; h=60 mm Ø198 mm; h=89 mm	 Maximum static load: 200000 kg 300000 kg 500000 - 750000 kg BOTTONE200 BOTTONE BOTTONE750

DIMENSIONS (mm)



	A	B	C	D	E	F	G	H	weight
200 t	229	87	200	10.5	136	70	10	2	20 kg
300 t	299	155	260	12.5	230	85	12	2	42 kg
500 - 750 t	299	155	260	12.5	230	120	14	2	60 kg

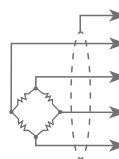


TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	200000 - 300000 - 500000 - 750000 kg		
Combined error	≤ ±0.10%		
Protection class	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	-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	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

Cable lenght	10 m
Cable diameter	5 mm
Cores	4/6 x 0.14 mm²



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

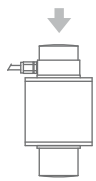
The Company reserves the right to make changes to the technical data, drawings and images without notice.

	CAPACITY kg	PAGE
A1.6	COLUMN	
	COK 15000, 25000, 50000	85
	CO 25000	87
	COL 30000, 60000	89
	COLD 30000	91

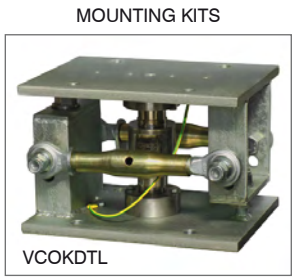
Notes section with horizontal lines for writing.



Capacity from 15000 kg to 50000 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- PROTECTION CLASS IP68



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
15000		C3					3.3	COK15000
25000		C3					3.5	COK25000
50000		C3					3.7	COK50000
25000	ANTI RAT CABLE	C3					4	COK25000AR

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

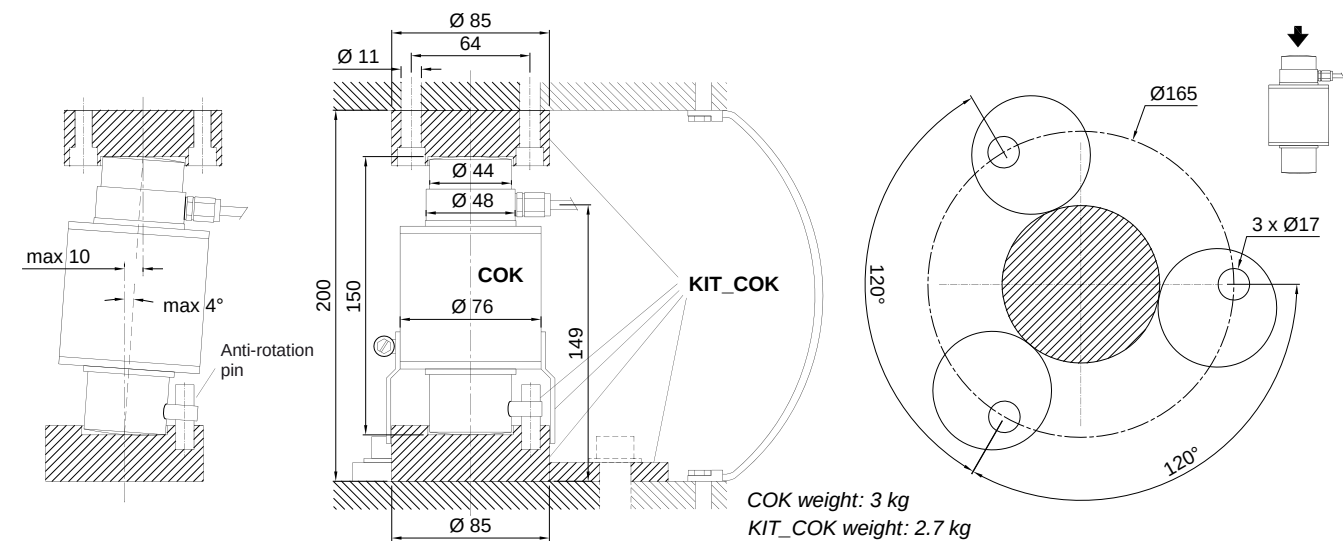
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Special steel mounting kit composed by protective rubber seal, 2 bases (upper and lower) and 3 self-centring cylindrical plates.	KIT_COK

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DIMENSIONS (mm)

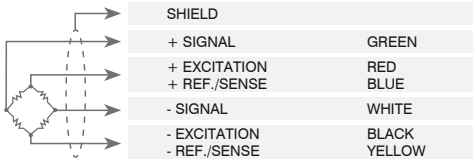


TECHNICAL FEATURES

Material	Alloy aluminum		
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 class	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

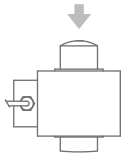
Cable length	20 m
Cable diameter	6 mm
Cores	6 x 0.22 mm²



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



Capacity 25000 kg



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

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
25000		C4					2.4	CO25000
ON REQUEST								

CERTIFICATIONS

OIML R60 C4

CERTIFICATIONS ON REQUEST

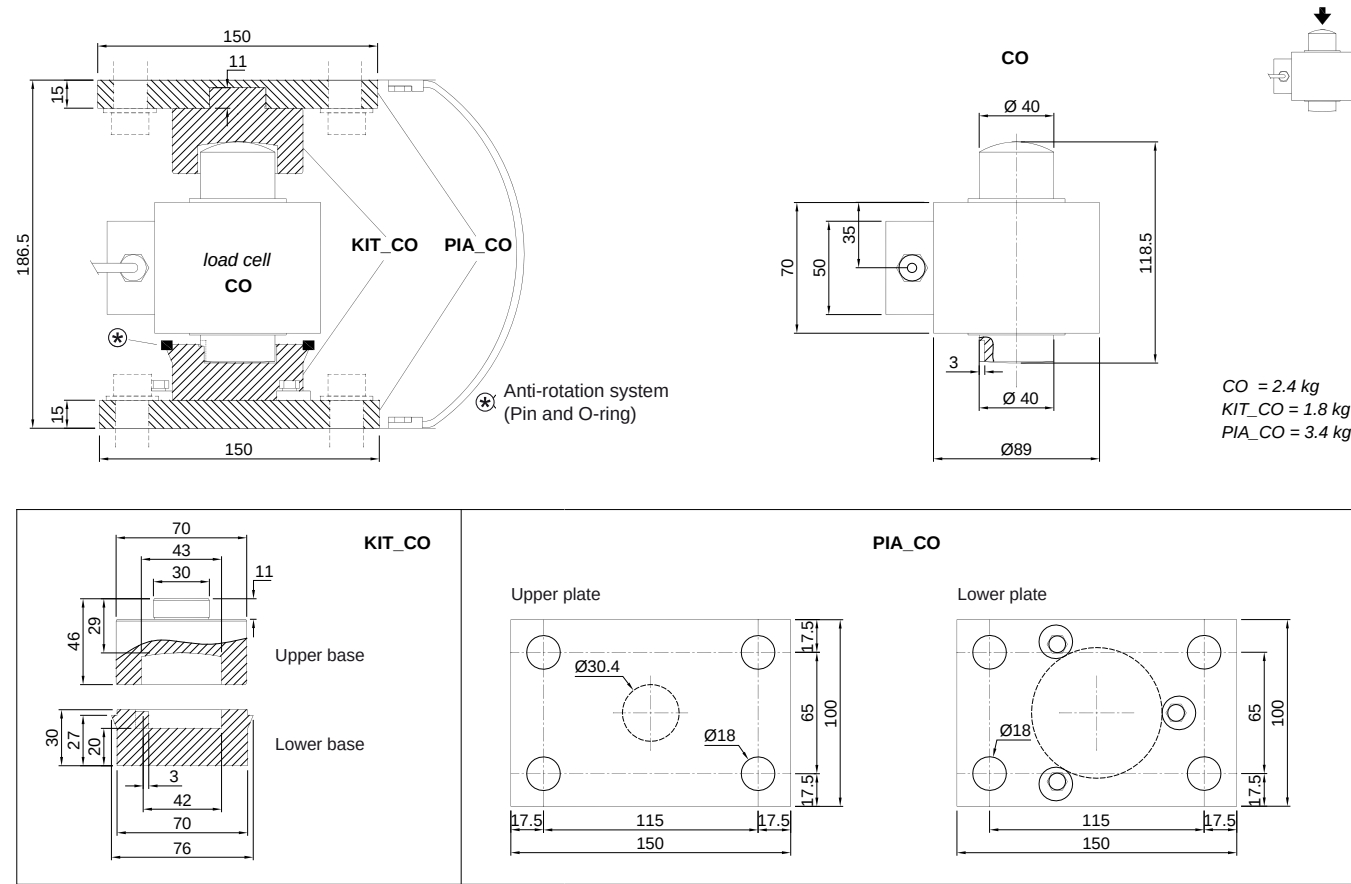
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES



DESCRIPTION	CODE
Kit composed by 2 stainless steel bases.	KIT_CO
Kit composed by 2 special steel plates (upper and lower) for KIT_CO bases.	PIA_CO

DIMENSIONS (mm)

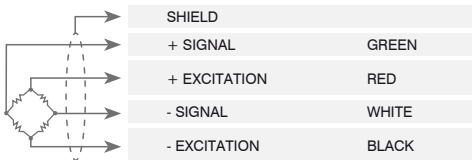


TECHNICAL FEATURES

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 class	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

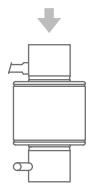
Cable lenght	15 m
Cable diameter	5 mm
Cores	4 x 0.24 mm²



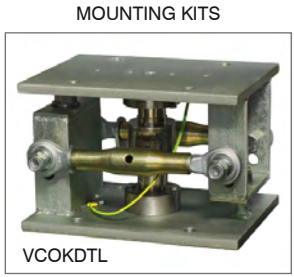
The Company reserves the right to make changes to the technical data, drawings and images without notice.



Capacity from 30000 kg to 60000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR ≤ ±0.013%
- PROTECTION CLASS IP68



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
30000		C4		•	•		2.5	COL30000
60000		C4		•	•		3.5	COL60000

ON REQUEST

CERTIFICATIONS

OIML R60 C4

CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

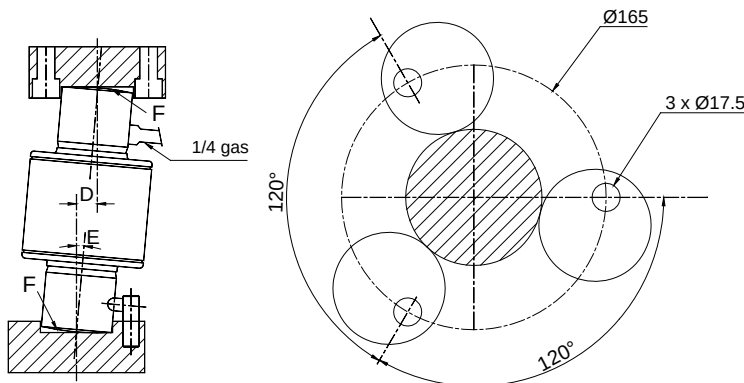
COMPLEMENTARY ACCESSORIES



DESCRIPTION	CODE
AISI 420 hardened steel mounting kit composed by rubber sheath, 2 bases (upper and lower) and 3 self-centring cylindrical plates.	KIT_COL

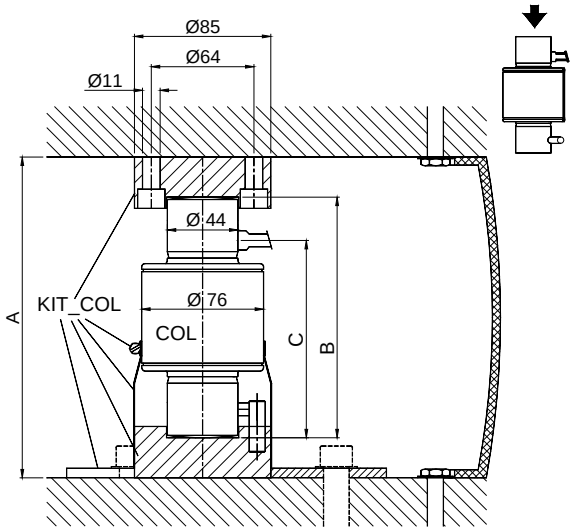
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DIMENSIONS (mm)



	A	B	C	D max.	E (max. angle)	F (curvature radius)	weight
COL 30000	200	150	123	13	5°	160°	2.3 kg
COL 60000	260	210	153	11	3°	220°	3.7 kg

KIT_COL weight = 3 kg



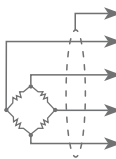
TECHNICAL FEATURES

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	≤ ±0.013%		
Protection class	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 lenght	20 m
Cable diameter	6 mm
Cores	6 x 0.22 mm ²



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

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

COLD

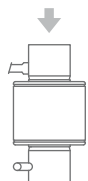
COLUMN LOAD CELLS - RS485 OUTPUT



Capacity 30000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.013\%$
- PROTECTION CLASS IP68
- RS485 OUTPUT



CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
30000		C4					3.5	COLD30000

ON REQUEST

CERTIFICATIONS

OIML R60 C4

CERTIFICATIONS ON REQUEST

Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 AISI 420 hardened steel mounting kit composed by rubber sheath, 2 bases (upper and lower) and 3 self-centring cylindrical plates.	KIT_COL

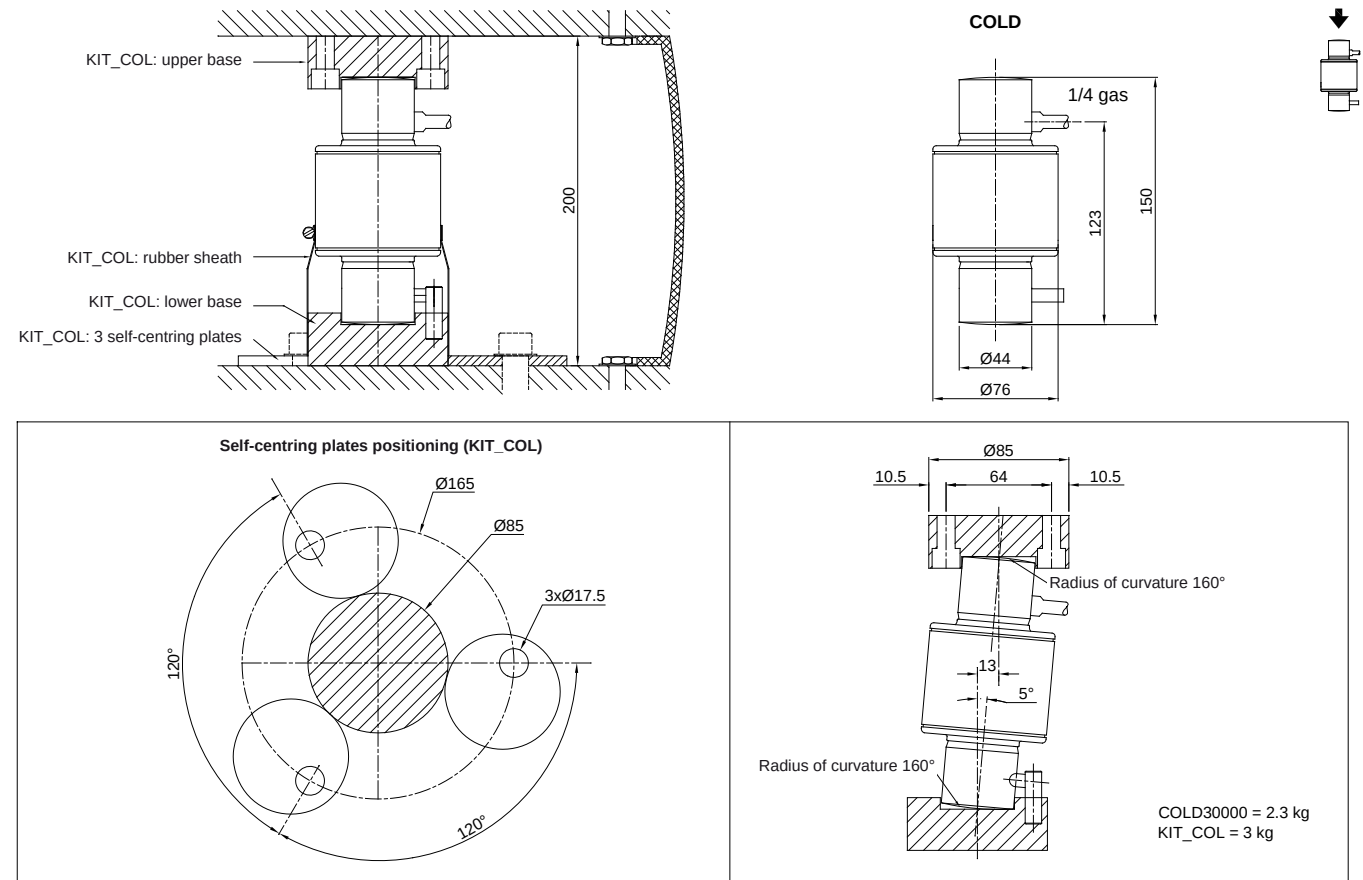
Rev. 00 del 12/03/2015

COLD

COLUMN LOAD CELLS - RS485 OUTPUT



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 / 12000		
Combined error	≤ ±0.013%		
Protection class	IP68		
Rated output (counts)	2000000±0.05%	Creep at nominal load in 30 minutes	0.012%
Power supply	8-15 VDC	Zero balance (% on rated output)	±0.1%
Supply current	60 mA (max)	Safe overload (% of full scale)	120%
Temperature effect on zero	0.002% °C	Ultimate overload (% of full scale)	150%
Temperature effect on span	0.0012% °C	Deflection at nominal load	0.6 - 1 mm
Compensated temperature range	-10 °C / +40 °C	RS485 serial interface	Full duplex
Operating temperature range	-30 °C / +70 °C	Maximum transmission cable length	1200 m

ELECTRICAL CONNECTIONS

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

VDC EXCITATION	RED
GND	BLACK
TX +	YELLOW
TX -	WHITE
RX +	GREEN
RX -	BLUE

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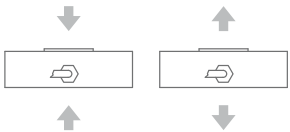
	CAPACITY kg	PAGE
A1.7	COMPRESSION / TENSION	
CL	500, 1000, 2000, 5000, 10000, 20000, 30000, 60000, 100000, 150000, 200000	95
CLK	2000, 5000, 10000, 20000	97

Notes section with horizontal lines for writing.



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 CLASS: IP68 (500 - 60000 kg), IP67 (100000 - 200000 kg)

CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
500		•	•	•	1.2	CL500
1000		•	•	•	1.2	CL1000
2000		•	•	•	1.2	CL2000
5000		•	•	•	1.7	CL5000
10000		•	•	•	1.8	CL10000
20000		•	•	•	-	CL20000
30000		•	•	•	5.3	CL30000
60000		•	•	•	5.4	CL60000
100000		•	•	•	12	CL100000
150000		•	•	•	-	CL150000
200000		•	•	•	-	CL200000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

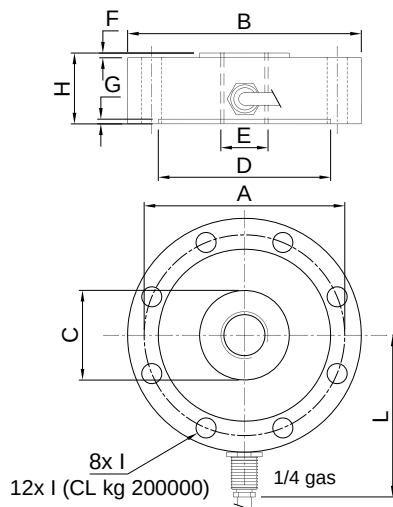
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

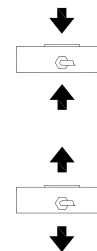
DESCRIPTION

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 94	Ø 140	Ø 170
D	Ø 72	Ø 78	Ø 113	Ø 129	Ø 176	Ø 210
E	M20 x1.5	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	8.5	8.5	16.5	25.5	25.5	25.5
L	68.5	73.5	101	128.5	143.5	168.5
Weight	1.1	1.4	5	11	16	26

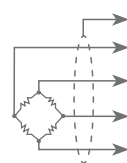


TECHNICAL FEATURES

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 class	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	-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	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable length	5 m
Cable diameter	5 mm
Cores	4/6 x 0.14 mm²



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

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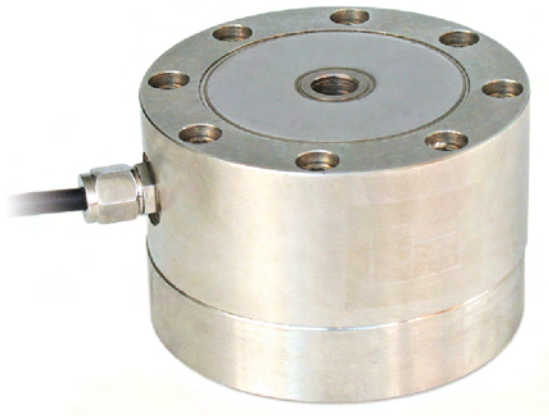
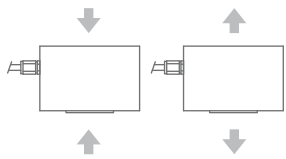
CLK

COMPRESSION / TENSION LOAD CELLS



Manufactured according to OIML R60 standards

Capacity from 2000 kg to 20000 kg



- SPECIAL STEEL
- BIDIRECTIONAL TENSION AND COMPRESSION
- COMBINED ERROR $\leq \pm 0.05\%$ (0,1% capacities 10000 kg and 20000 kg)
- PROTECTION CLASS IP67

CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
2000		•	•	•	4.2	CLK2000
5000		•	•	•	5.8	CLK5000
10000		•	•	•	10.5	CLK10000
20000		•	•	•	11	CLK20000

 ON REQUEST

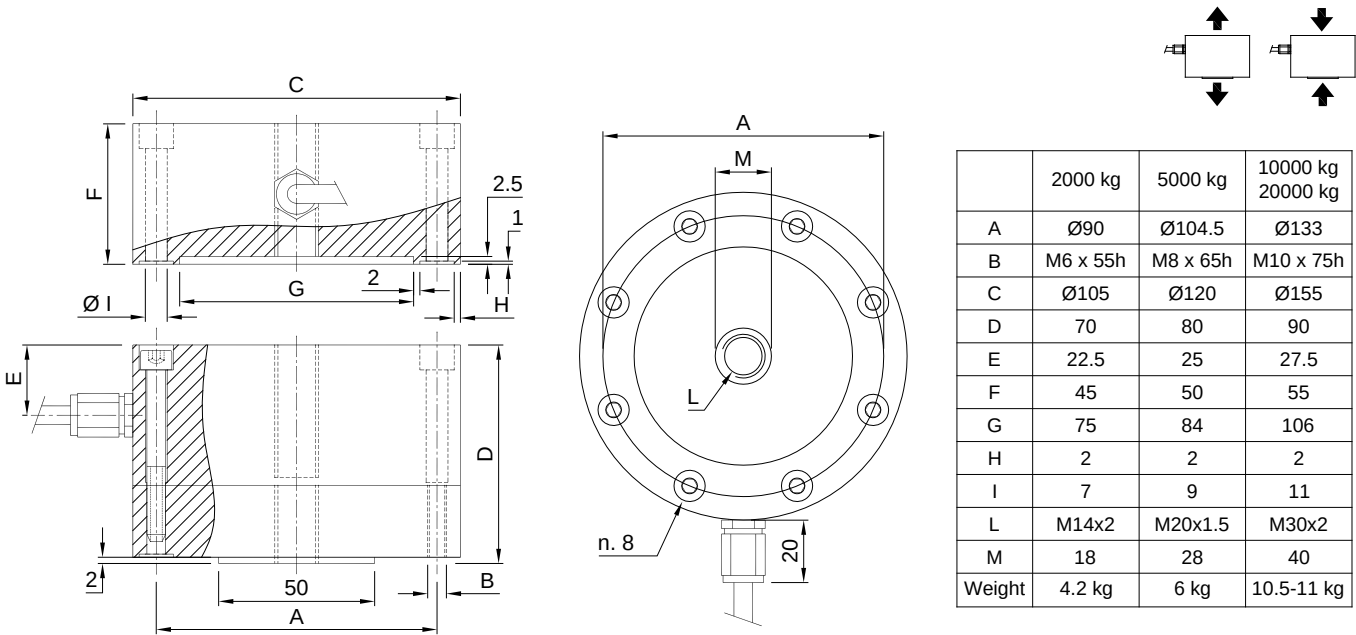
CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

Rev. 00 del 12/03/2015

DIMENSIONS (mm)

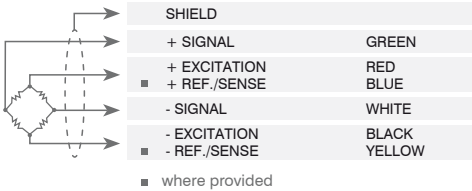


TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	2000 - 5000 kg		10000 - 20000 kg
Combined error	≤ ±0.05%		≤ ±0.1%
Protection class	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 lenght	12 m
Cable diameter	6 mm
Cores	4/6 x 0.24 mm²



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

A1 - LOAD CELLS

PRODUCT CATALOGUE

	CAPACITY kg	PAGE
A1.8	TENSION (COMPRESSION)	
	SA 15, 30, 60	101
	SL 25, 100, 200, 300, 500, 1000, 2500	103
	CTOL 50, 100, 200, 300 500, 1000, 2500, 5000	105
		
	CTL 100, 200, 300, 500, 1000, 2500, 5000, 7500, 10000, 12500	107

Notes section with horizontal lines for writing.

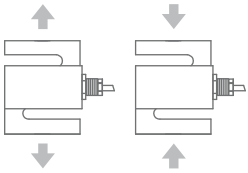
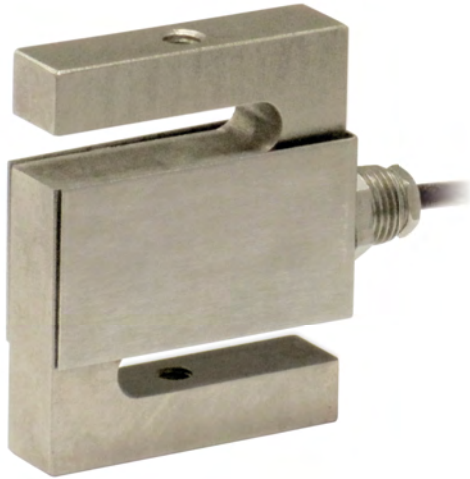
Rev. 00 del 12/03/2015

SA

TENSION (COMPRESSION) LOAD CELLS



Capacity from 15 kg to 60 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- PROTECTION CLASS IP65

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
15		C3					0.28	SA15
30		C3					0.28	SA30
60		C3					0.28	SA60

ON REQUEST

CERTIFICATIONS

OIML R60 C3

CERTIFICATIONS ON REQUEST

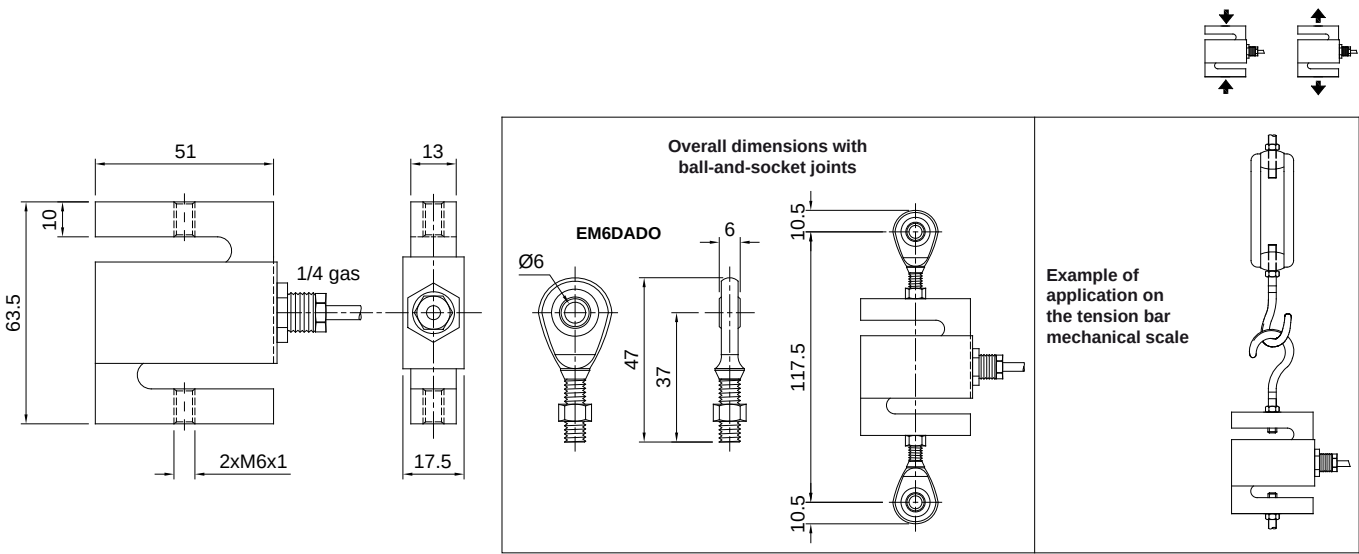
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Special steel ball-and-socket joint with nut Dimensions: Load cell capacity: M6x1 15 - 30 - 60 kg	EM6DADO

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



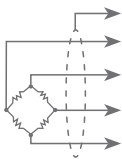
TECHNICAL FEATURES

Material	Special steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	15 - 30 - 60		
Minimum verification interval (V min)	E max / 8000		
Combined error	≤ ±0.02%		
Protection class	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	4/6 x 0.24 mm²



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

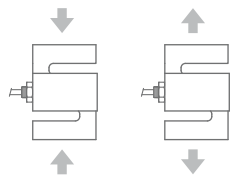
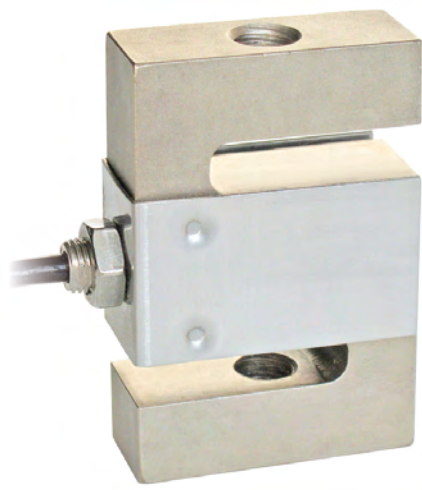
The Company reserves the right to make changes to the technical data, drawings and images without notice.

SL

TENSION (COMPRESSION) LOAD CELLS



Capacity from 25 kg to 2500 kg



- SPECIAL STEEL
- COMBINED ERROR $\leq \pm 0.02\%$ (0.017% C4)
- PROTECTION CLASS IP67

CAPACITY	kg	ACCURACY CLASS		OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
25		—	—					0.4	SL25
100		C3	C4					0.6	SL100
200		C3	C4					0.6	SL200
300		C3	C4					0.6	SL300
500		C3	C4					0.7	SL500
1000		C3	C4					0.9	SL1000
2500		C3	C4					1.6	SL2500

ON REQUEST

CERTIFICATIONS

OIML R60 C3 (see capacities table)

CERTIFICATIONS ON REQUEST

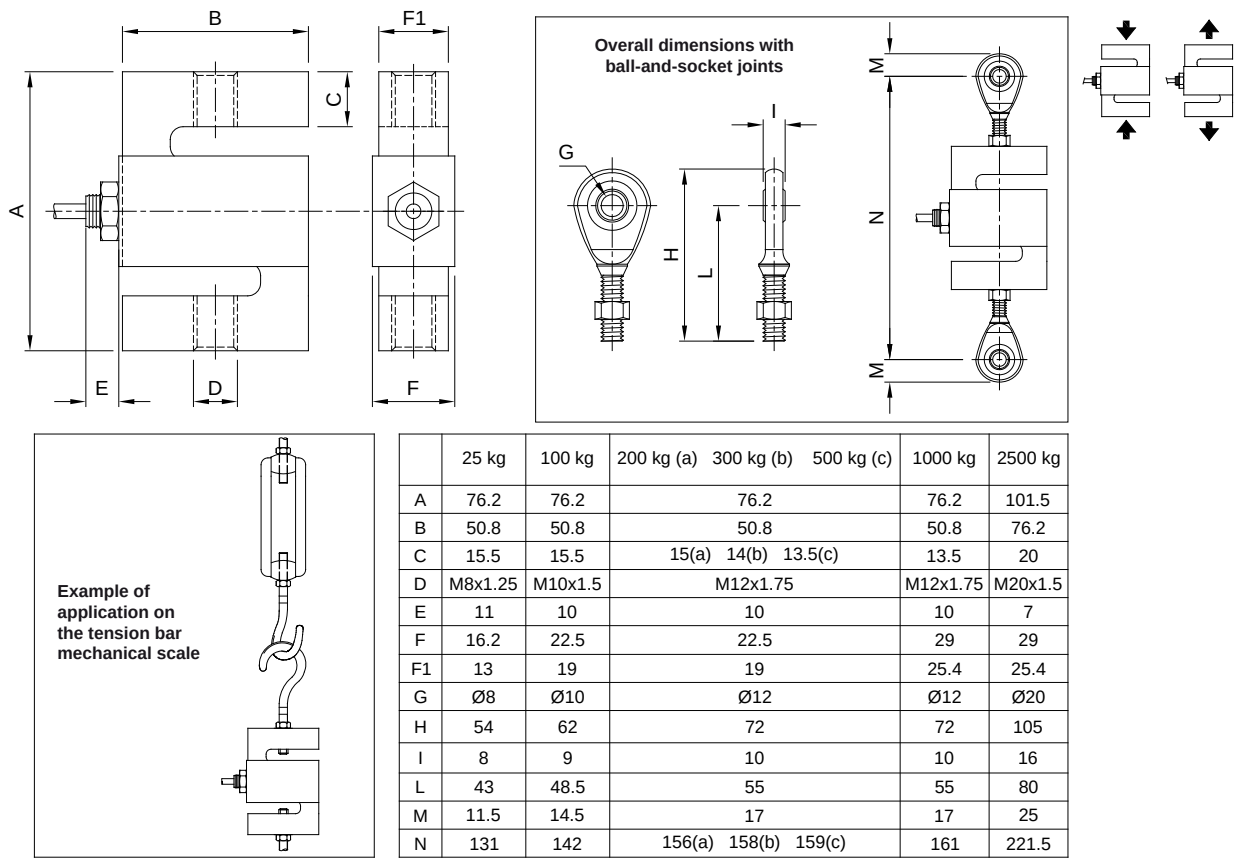
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	OIML R60 C4 (see capacities table)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Special steel ball-and-socket joint with nut Dimensions: Load cell capacity:	
M8x1.25 25 kg	EM8DADO
M10x1.5 100 kg	EM10DADO
M12x1.75 200-1000 kg	EM12DADO
M20x1.5 2500 kg	EM20DADO

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Special 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 class	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 after 4 hours	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 lenght	5 m (25 - 300 kg) 10 m (500 - 2500 kg)
Cable diameter	5 mm
Cores	4 x 0.24 mm²

SHIELD	
+ SIGNAL	GREEN
+ EXCITATION	RED
- SIGNAL	WHITE
- EXCITATION	BLACK

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

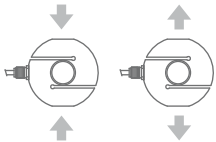
CTOL

TENSION (COMPRESSION) LOAD CELLS

LAUMAS[®]
ELETTRONICA



Manufactured according to OIML R60 standards



Capacity from 50 kg to 300 kg



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

Capacity from 500 kg to 5000 kg



CAPACITY	kg	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
50		•	•	•	0.7	CTOL50
100		•	•	•	0.7	CTOL100
200		•	•	•	0.7	CTOL200
300		•	•	•	0.7	CTOL300
500		•	•	•	0.7	CTOL500
1000		•	•	•	1.4	CTOL1000
2500		•	•	•	1.4	CTOL2500
5000		•	•	•	2.7	CTOL5000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

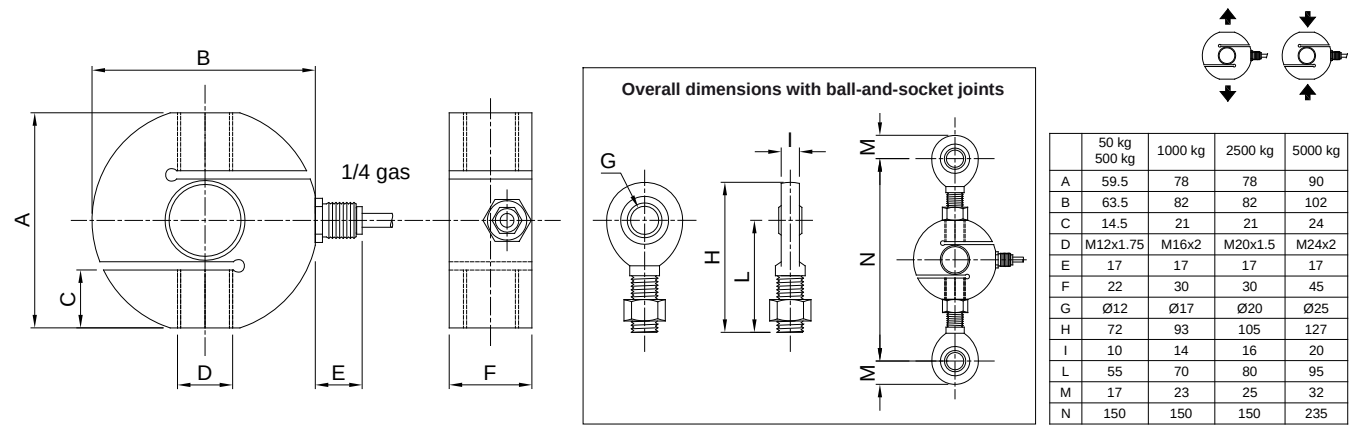
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
Special steel ball-and-socket joint with nut	
Dimensions:	Load cell capacity:
M12x1.75	50-500 kg
M16x2	1000 kg
M20x1.5	2500 kg
M24x2	5000 kg



DIMENSIONS (mm)

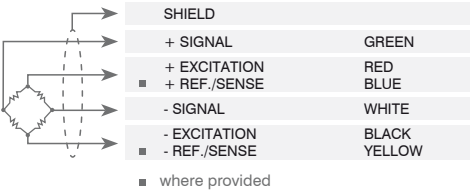


TECHNICAL FEATURES

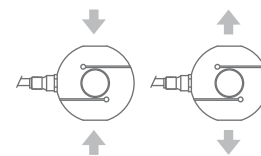
Material	AISI 420 stainless steel		
Nominal load (E max)	50 - 100 - 200 - 300 - 500 - 1000 - 2500 - 5000 kg		
Combined error	≤ ±0.03%		
Protection class	IP67		
Rated output	2 mV/V ±0.4%	Input resistance	385 Ω ±30
Temperature effect on zero	0.0025% °C	Output resistance	350 Ω ±10
Temperature effect on 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

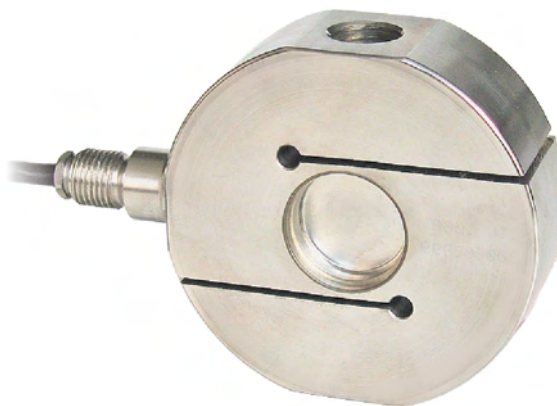
Cable length	10 m
Cable diameter	5 mm
Cores	4/6 x 0.20 mm ²



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



Capacity from 100 kg to 12500 kg



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

CAPACITY	kg	ACCURACY CLASS	OIML	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
100		—		•	•		0.7	CTL100
200		—		•	•		0.7	CTL200
300		—		•	•		0.7	CTL300
500		C3		•	•		1.4	CTL500
1000		C3		•	•		1.4	CTL1000
2500		C3		•	•		1.4	CTL2500
5000		C3		•	•		2.6	CTL5000
7500		C3		•	•		2.7	CTL7500
10000		C3		•	•		3.7	CTL10000
12500		C3		•	•		4.8	CTL12500

ON REQUEST

CERTIFICATIONS

OIML R60 C3 (see capacities table)

CERTIFICATIONS ON REQUEST

	Declaration of conformity + IP69K marking protection rating Water protection when cleaning high pressure / steam jet (Test: pressurized hot water is sprayed from a distance of 150 mm). Water pressure 100 bar; temperature 80 ° C; test duration 250 seconds (Reference standard DIN 40050-9).
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

DESCRIPTION

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

COMPLEMENTARY ACCESSORIES

DESCRIPTION	CODE
 Special steel ball-and-socket joint with nut Dimensions: Load cell capacity:	
M12x1.75 100-300 kg	EM12DADO
M16x2 500-1000 kg	EM16DADO
M20x1.5 2500 kg	EM20DADO
M24x2 5000-7500 kg	EM25DADO
M30x2 10000 kg	EM30DADO
M36x3 12500 kg	EM35DADO

DIMENSIONS (mm)

Overall dimensions with ball-and-socket joints

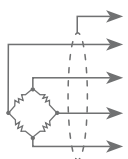
	100 kg 200 kg 300 kg	500 kg 1000 kg	2500 kg	5000 kg 7500 kg	10000 kg	12500 kg
A	59.5	78	78	90	103	120
B	63.5	82	82	102	114	129
C	14.5	21	21	24	30.5	37
D	M12x1.75	M16x2	M20x1.5	M24x2	M30x2	M36x3
E	29	29	29	29	29	29
F	22	30	30	45	50	55
G	Ø12	Ø17	Ø20	Ø25	Ø30	Ø35
H	72	93	105	127	146.5	181
I	10	14	16	20	22	25
L	55	70	80	95	110	140
M	17	23	25	32	36.5	41
N	150	185	200	235	260	324

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 class	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%
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	15 V	Deflection at nominal load 0.3 mm

ELECTRICAL CONNECTIONS

Cable lenght	10 m
Cable diameter	5 mm
Cores	4/6 x 0.25 mm²

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

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



	CAPACITY kg	PAGE
A1.9	TENSION	
TAL	5000, 10000, 20000	111
TBT	30000, 40000, 50000, 60000, 100000, 250000	113

Notes section with horizontal lines for writing.



Manufactured according to OIML R60 standards

Capacity from 5000 kg to 20000 kg

- 17-4 PH STAINLESS STEEL
- HOLES FOR STANDARD SHACKLES
- COMBINED ERROR ≤ ±0.03%
- PROTECTION CLASS IP68



CAPACITY	kg	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
5000		•	•		4.5	TAL5000
10000		•	•		4.6	TAL10000
20000		•	•		6.6	TAL20000
		ON REQUEST				

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

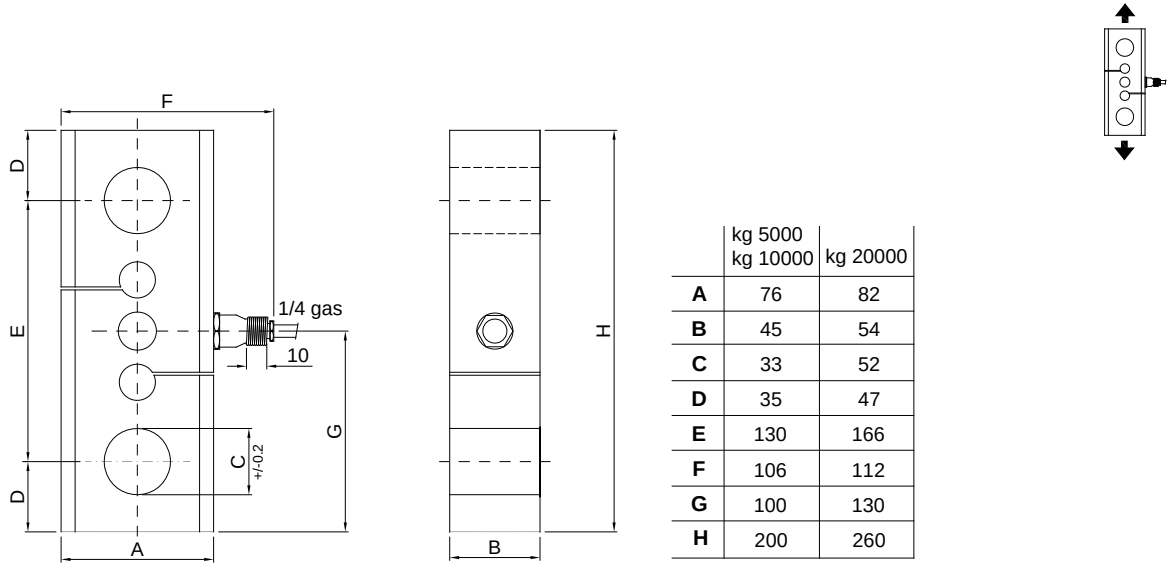
✓	Calibration report (ACCREDIA LAT traceability)
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

DESCRIPTION

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

DIMENSIONS (mm)

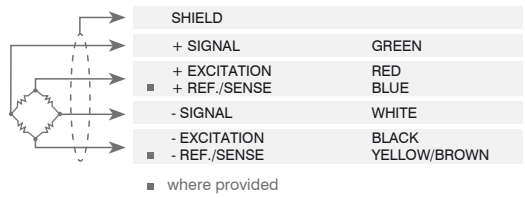


TECHNICAL FEATURES

Material	17-4PH stainless steel		
Nominal load (E max)	5000 - 10000 - 20000 kg		
Combined error	≤ ±0.03%		
Protection class	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	-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	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable lenght	10 m
Cable diameter	5 mm
Cores	4/6 x 0.25 mm²

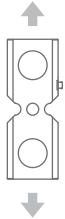




Manufactured according to OIML R60 standards

Capacity from 30000 kg to 250000 kg

- 17-4 PH STAINLESS STEEL
- HOLES FOR STANDARD SHACKLES
- COMBINED ERROR ≤ ±0.08%
- PROTECTION CLASS IP68



CAPACITY	kg	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
30000		•	•		-	TBT30
40000		•	•		-	TBT40
50000		•	•		-	TBT50
60000		•	•		-	TBT60
100000		•	•		-	TBT100
250000		•	•		-	TBT250
ON REQUEST						

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

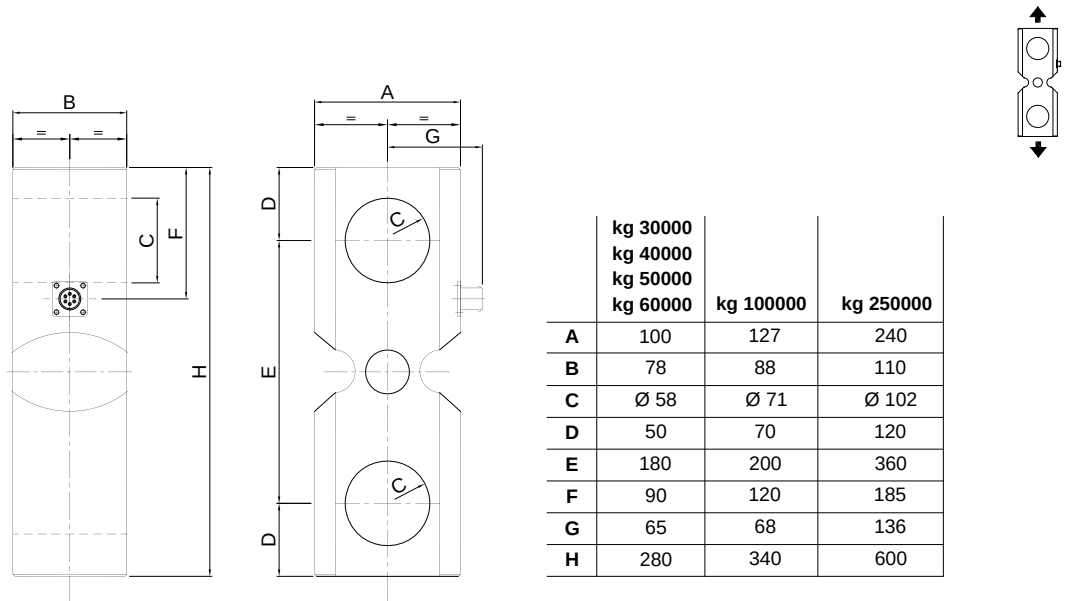
✓	Calibration report (ACCREDIA SIT traceability)
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

DESCRIPTION

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

DIMENSIONS (mm)



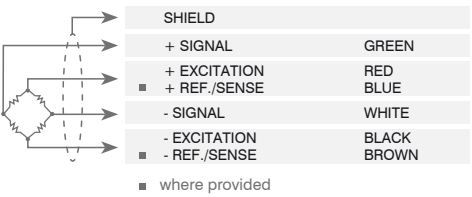
TECHNICAL FEATURES

Material	17-4PH stainless steel		
Nominal load (E max)	30000 - 40000 - 50000 - 60000 - 100000 - 250000 kg		
Combined error	≤ ±0.08%		
Protection class	IP68		

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	-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	0.03%	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	4/6 x 0.14 mm²



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	CAPACITY kg	PAGE
A1.10	SPECIAL LOAD CELLS	
A1.10.1	pin	
 LAU	5000, 10000, 20000	117
A1.10.2	FOR FOOT BRAKE	
 LPED	100	119
A1.10.3	ANCHOR	
 CA	30000, 50000, 75000, 100000, 125000, 150000, 180000, 250000	121

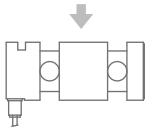
	CAPACITY kg	ROPE Ø MM	PAGE
A1.10.4	WIRE ROPE MEASURING		
 FUN	2000 4000 10000 20000 40000	6-14 10-18 16-26 24-36 24-36	123

Notes section with horizontal lines for writing.

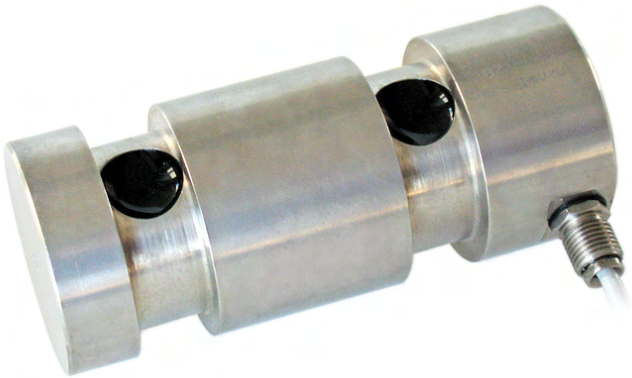


Manufactured according to OIML R60 standards

Capacity from 5000 kg to 20000 kg



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



CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
5000		•	•	•	2.9	LAU5000
10000		•	•	•	3.2	LAU10000
20000		•	•	•	3.4	LAU20000

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

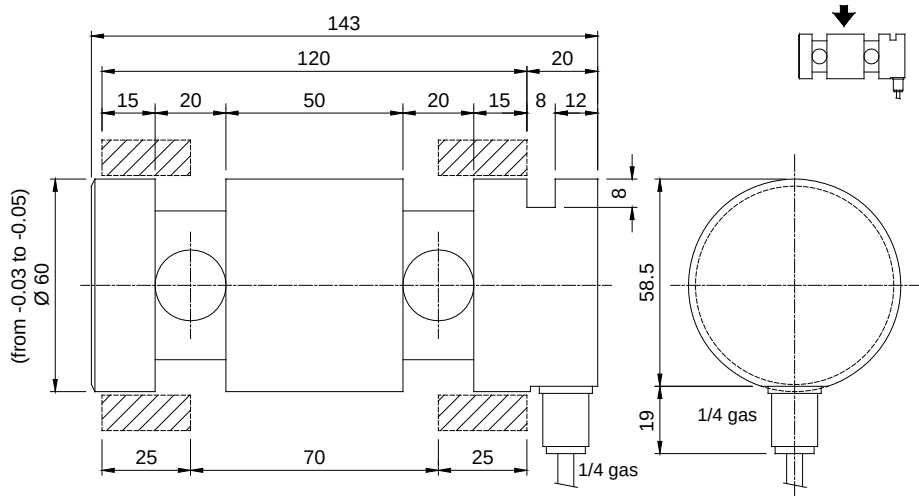
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

DESCRIPTION

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

DIMENSIONS (mm)

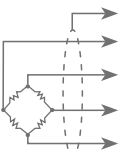


TECHNICAL FEATURES

Material	17-4PH stainless steel		
Nominal load (E max)	5000 - 10000 - 20000 kg		
Combined error	$\leq \pm 0.1\%$		
Protection class	IP67		
Rated output	1 mV/V $\pm 0.1\%$	Input resistance	350 $\Omega \pm 20$
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	$\pm 1\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +50 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-20 $^{\circ}\text{C}$ / +70 $^{\circ}\text{C}$	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	4/6 x 0.14 mm ²



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

■ where provided

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LPED

COMPRESSION LOAD CELL FOR FOOT BRAKE



Manufactured according to OIML R60 standards

Capacity 100 kg



- ALUMINUM
- COMBINED ERROR $\leq \pm 0.08\%$
- PROTECTION CLASS IP65

CAPACITY	kg	  	NET WEIGHT OF LOAD CELL (kg)	CODE
	100		-	LPED100

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEX II 1GD (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

DESCRIPTION

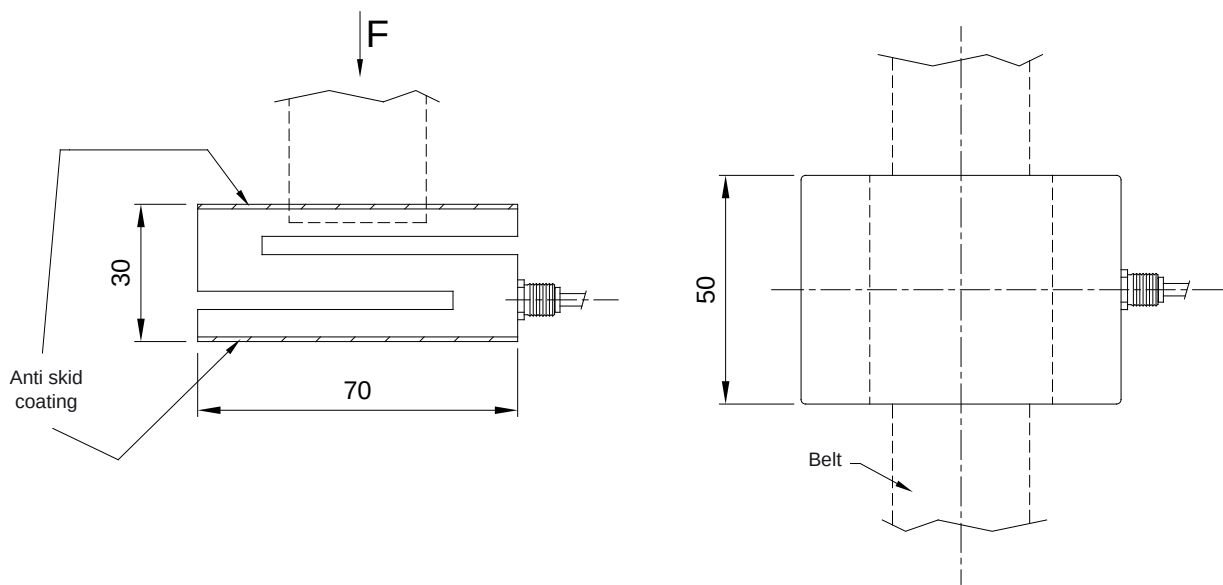
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems
--

LPED

COMPRESSION LOAD CELL FOR FOOT BRAKE



DIMENSIONS (mm)

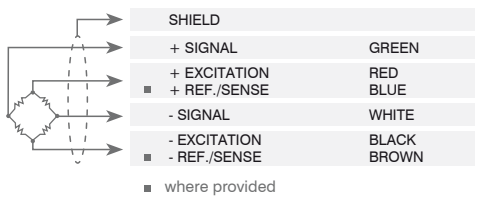


TECHNICAL FEATURES

Material	Aluminum		
Nominal load (E max)	100 kg		
Combined error	$\leq \pm 0.08\%$		
Protection class	IP65		
Rated output	1 mV/V $\pm 0.2\%$	Input resistance	350 $\Omega \pm 50$
Temperature effect on zero	0.005% $^{\circ}\text{C}$	Output resistance	350 $\Omega \pm 5$
Temperature effect on span	0.003% $^{\circ}\text{C}$	Zero balance	$\pm 1\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +50 $^{\circ}\text{C}$	Insulation resistance	>5000 M Ω
Operating temperature range	-20 $^{\circ}\text{C}$ / +70 $^{\circ}\text{C}$	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	4/6 x 0.25 mm ²



Rev. 00 del 12/03/2015

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Manufactured according to OIML R60 standards

Capacity from 30000 kg to 250000 kg

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



CAPACITY	kg	IECEx	Ex	EAC	INTERNAL DIAMETER	EXTERNAL DIAMETER	NET WEIGHT OF LOAD CELL (kg)	CODE
30000		•	•		50 mm	163 mm	-	CA50/30T
50000		•	•		50 mm	163 mm	-	CA50/50T
75000		•	•		50 mm	163 mm	-	CA50/75T
50000		•	•		75 mm	163 mm	-	CA75/50T
75000		•	•		75 mm	163 mm	-	CA75/75T
75000		•	•		120 mm	229 mm	-	CA120/75T
100000		•	•		120 mm	229 mm	-	CA120/100T
125000		•	•		120 mm	229 mm	-	CA120/125T
125000		•	•		165 mm	275 mm	-	CA165/125T
150000		•	•		165 mm	275 mm	-	CA165/150T
180000		•	•		165 mm	275 mm	-	CA165/180T
180000		•	•		225 mm	320 mm	-	CA225/180T
250000		•	•		225 mm	320 mm	-	CA225/250T

ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

✓	Calibration report (ACCREDIA LAT traceability)
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx Ex	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

OPTIONS ON REQUEST

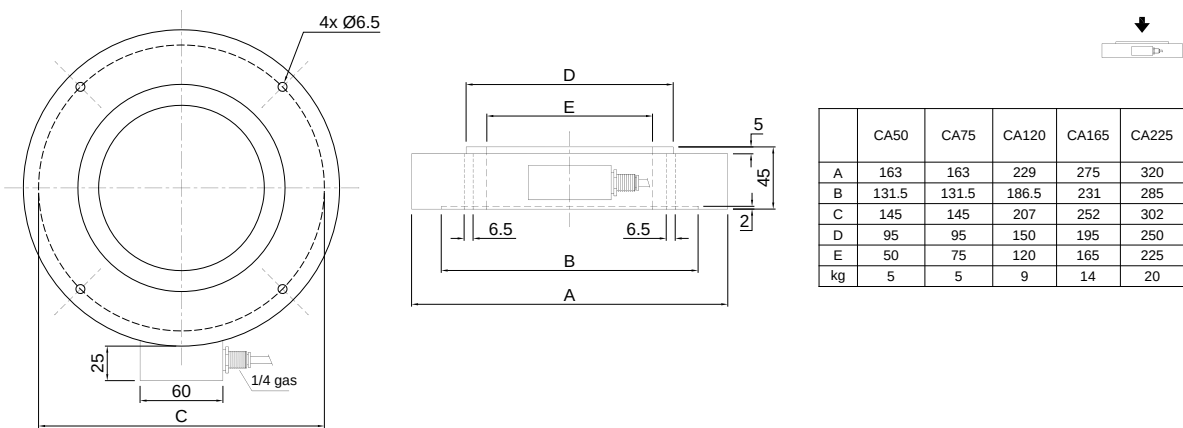
DESCRIPTION

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

COMPLEMENTARY ACCESSORIES

DESCRIPTION				CODE
	Galvanized steel plates for load distribution.			
		Dimensions:	for load cell:	
	Upper plate	Ø98x25 mm	CA50/ ...	PIAS50CASUP
	Lower plate	Ø170x25 mm		PIAS50CAINF
	Upper plate	Ø98x27.5 mm	CA75/ ...	PIAS75CASUP
	Lower plate	Ø170x25 mm		PIAS75CAINF
	Upper plate	Ø150x27.5 mm	CA120/ ...	PIAS120CASUP
	Lower plate	Ø240x30 mm		PIAS120CAINF
	Upper plate	Ø199x30 mm	CA165/ ...	PIAS165CASUP
	Lower plate	Ø290x30 mm		PIAS165CAINF
	Upper plate	Ø250x30 mm	CA225/ ...	PIAS225CASUP
	Lower plate	Ø330x35 mm		PIAS225CAINF

TECHNICAL FEATURES - DIMENSIONS

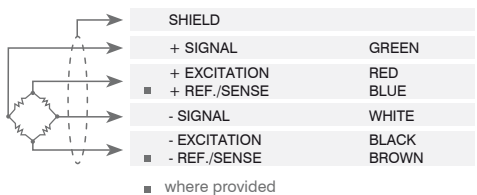


TECHNICAL FEATURES - DIMENSIONS

Material	17-4 PH stainless steel		
Nominal load (E max)	30000 - 50000 - 75000 - 100000 - 125000 - 150000 - 180000 - 250000 kg		
Combined error	≤ ±0.1%		
Protection class	IP68		
Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±5
Temperature effect on zero	0.005% °C	Output resistance	700 Ω ±20
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	0.03%	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	4/6 x 0.14 mm²



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 2000 kg to 40000 kg

- SPECIAL STEEL
- SWITCHING ACCURACY $\pm 2\%$ ON FULL SCALE
- PROTECTION CLASS IP67
- SUITABLE AS LOAD LIMITER FOR LIFTING EQUIPMENT
- RAPID MOUNTING (also on extant lifting systems)



WIRE ROPE TENSION	kg			EAC	WIRE ROPE DIAMETER	NET WEIGHT OF LOAD CELL (kg)	CODE
up to:	2000	•	•	•	Ø 6 - 14 mm	2.4	FUN6141T1T
up to:	4000	•	•	•	Ø 10 - 18 mm	2.4	FUN10182T1T
up to:	10000	•	•	•	Ø 16 - 26 mm	2.4	FUN16265T2T
up to:	20000	•	•	•	Ø 24 - 36 mm	7.5	FUN243610T3T
up to:	40000	•	•	•	Ø 24 - 36 mm	7.8	FUN243620T5T

ON REQUEST

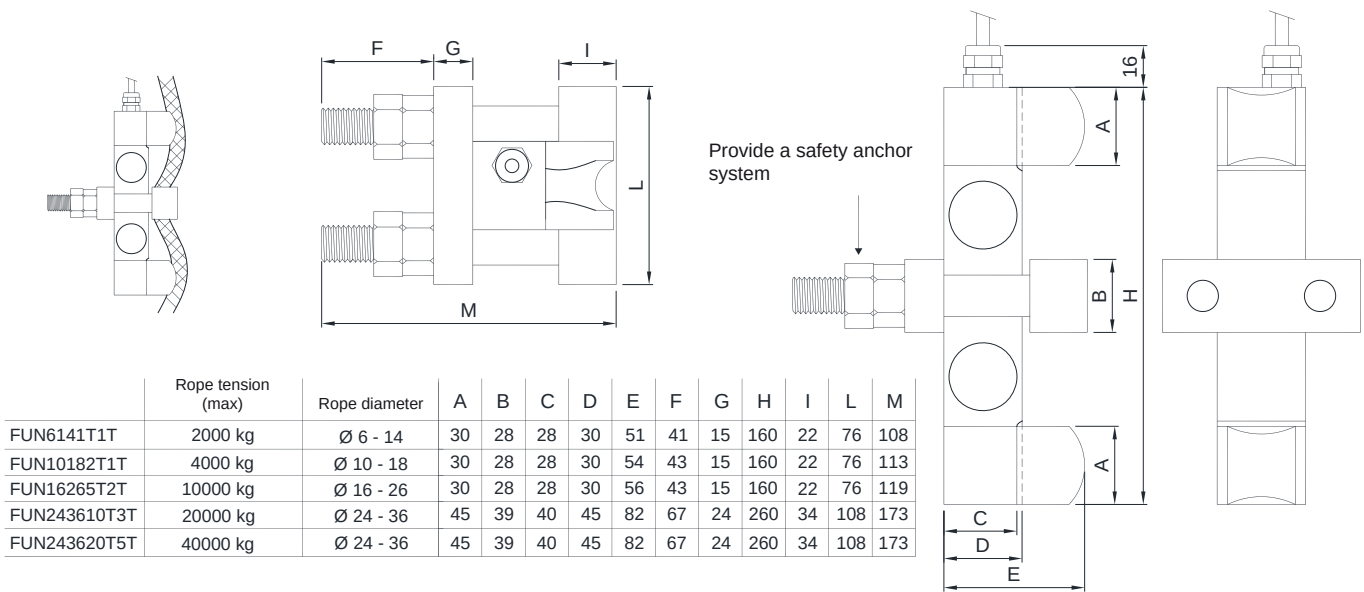
On request: customized load cells according to the relation between tension and rope diameter.

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	ATEX II 1GD (zone 0-1-2-20-21-22)
 	IECEx II 1GD (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



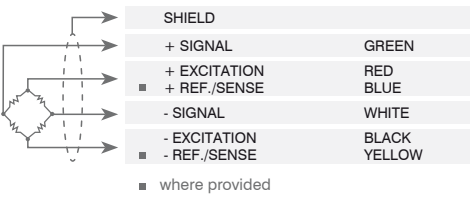
TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	2000 - 4000 - 10000 - 20000 - 40000 kg		
Combined error	±2%		
Protection class	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 lenght	6 m
Cable diameter	5 mm
Cores	4/6 x 0.14 mm²



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



	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.1	for SINGLE POINT load cells		
T8	$10 \leq x \leq 300 \text{ kg}$	AZL, AZLI, AZS, AM	127

Notes section with horizontal lines for writing.

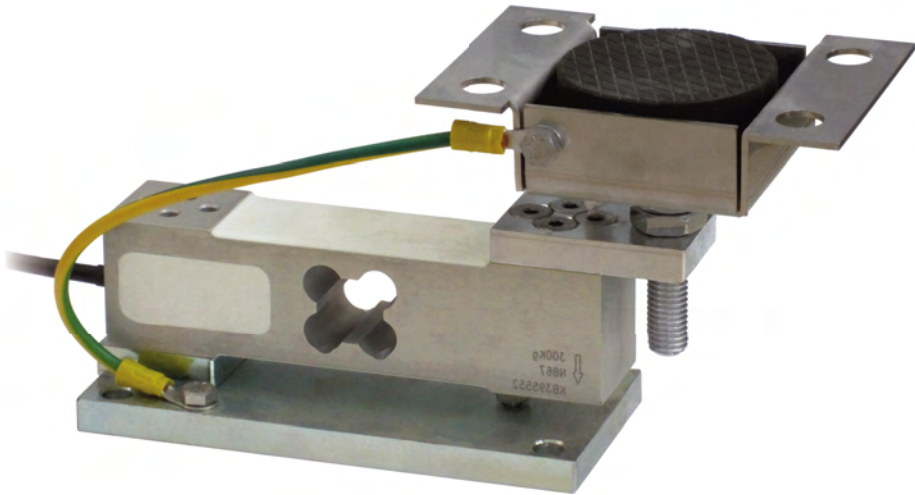
Rev. 00 del 12/03/2015

T8

MOUNTING KIT for SINGLE POINT load cells

Series load cells: AZLI - AZL - AZS - AM

Application range from 10 to 300 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
50	AZLI	1.7	T8AZLI
200	AZL	1.7	T8AZL
200	AZS	1.7	T8AZS
300	AM	1.7	T8AM

Load cell not included

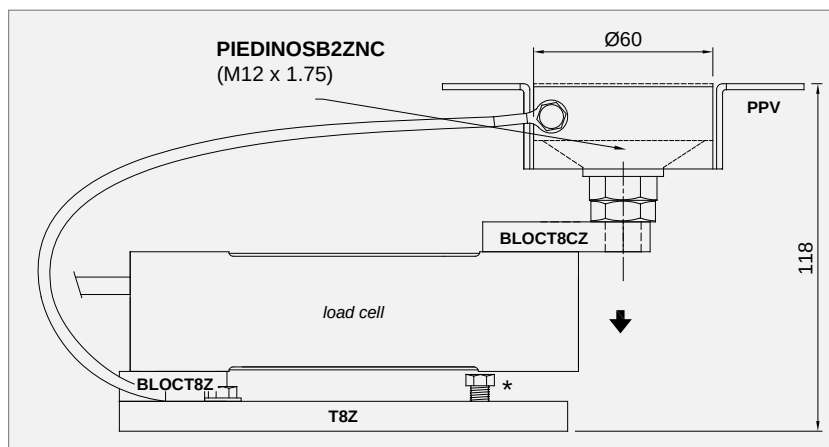
DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by nickel-plated self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

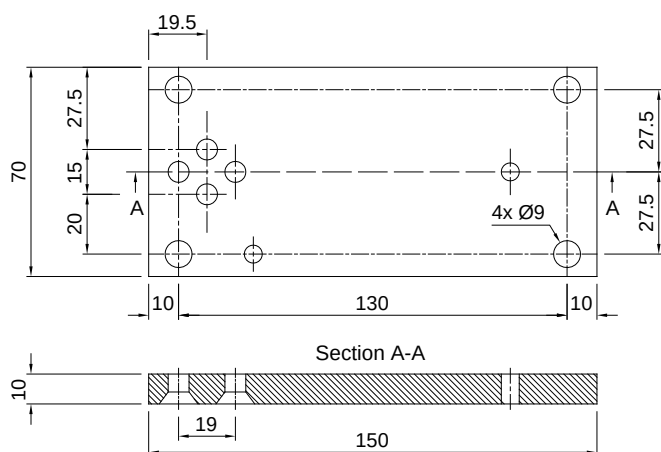
Rev. 00 del 12/03/2015

DIMENSIONS AND TECHNICAL SPECIFICATIONS

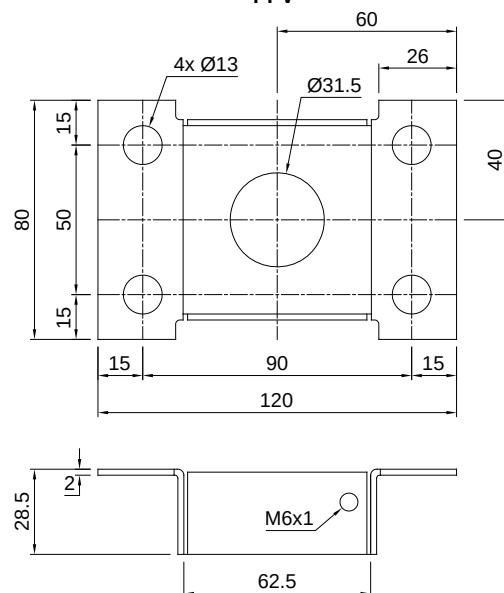
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you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



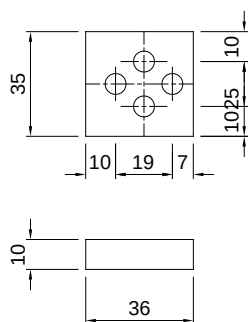
T8Z



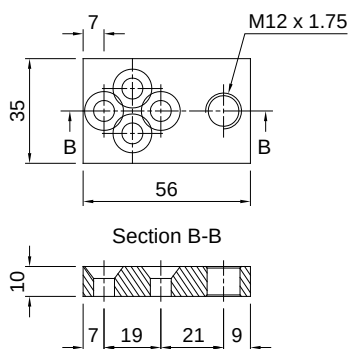
PPV



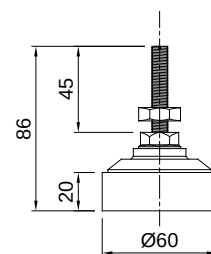
BLOCT8Z



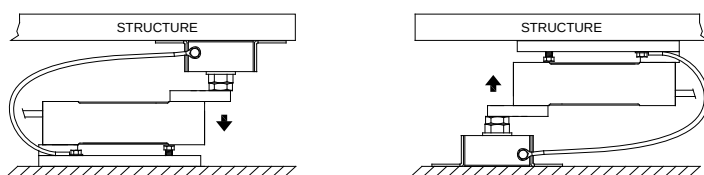
BLOCT8CZ



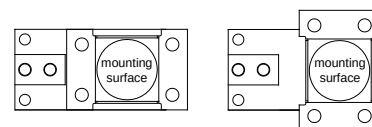
PIEDINOSB2ZNC
M12 x 1.75 mm



MOUNTING AND PLACING STRUCTURE



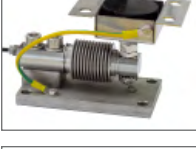
POSSIBLE PPV UPPER PLATE POSITIONS



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

A2 - MOUNTING KIT

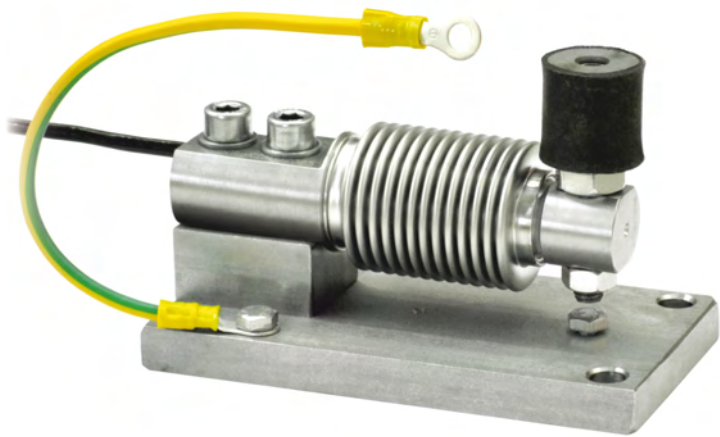
PRODUCT CATALOGUE

	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.2	for BENDING BEAM load cells		
	TFC-FSB $5 \leq x \leq 200 \text{ kg}$	FCK, FCOL	131
	TFC-PV TFC-PV10 $5 \leq x \leq 500 \text{ kg}$	FCK, FCOL	133
	TFC-GP $5 \leq x \leq 500 \text{ kg}$	FCK, FCOL	135
	TF-FSB $30 \leq x \leq 500 \text{ kg}$	FCAL, FCAX	137
	TF-AST $30 \leq x \leq 500 \text{ kg}$	FCAL, FCAX	139
	TF-PV/Z TF-PV2000 $30 \leq x \leq 500 \text{ kg}$ $30 \leq x \leq 1000 \text{ kg}$	FCAL, FCAX	141
	TF-GP TF-GP2000 $30 \leq x \leq 500 \text{ kg}$ $30 \leq x \leq 1500 \text{ kg}$	FCAL, FCAX	143
	T12-GP $30 \leq x \leq 1500 \text{ kg}$ $30 \leq x \leq 2000 \text{ kg}$	FCAL, FCAX FTL, FTK, FTKL, FTP, FT-P, FTZ	145

Notes section with horizontal lines for writing.

Series load cells: FCK - FCOL

Application range from 5 to 200 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
200	FCK - FCOL	1.2	TFCFSB

Load cell not included.

DESCRIPTION

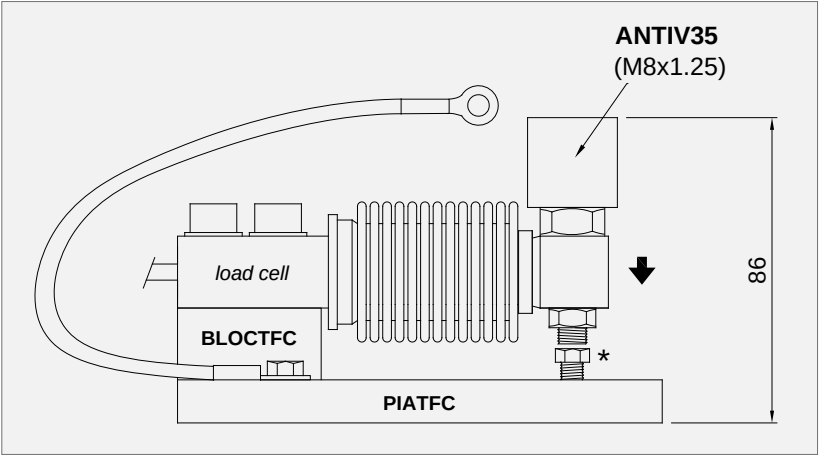
- Compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

TFC-FSB

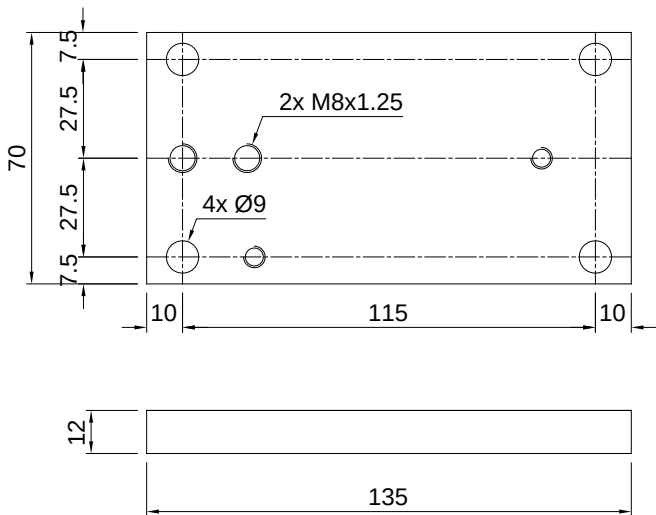
MOUNTING KIT for BENDING BEAM load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

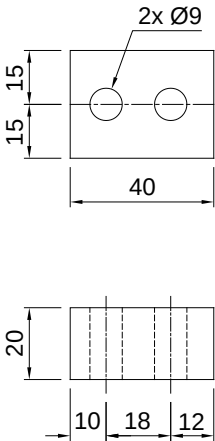
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed to insert a shim before fixing the bolts otherwise adjust the height.



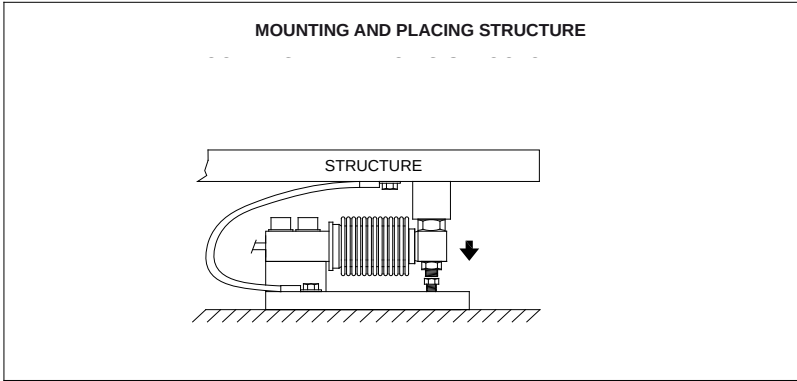
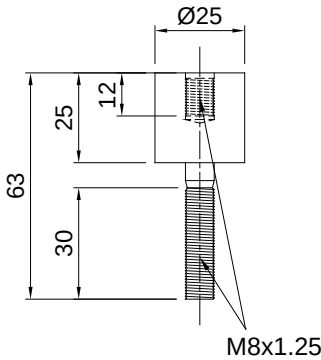
PIATFC



BLOCTFC



ANTIV35



MOUNTING AND PLACING STRUCTURE

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

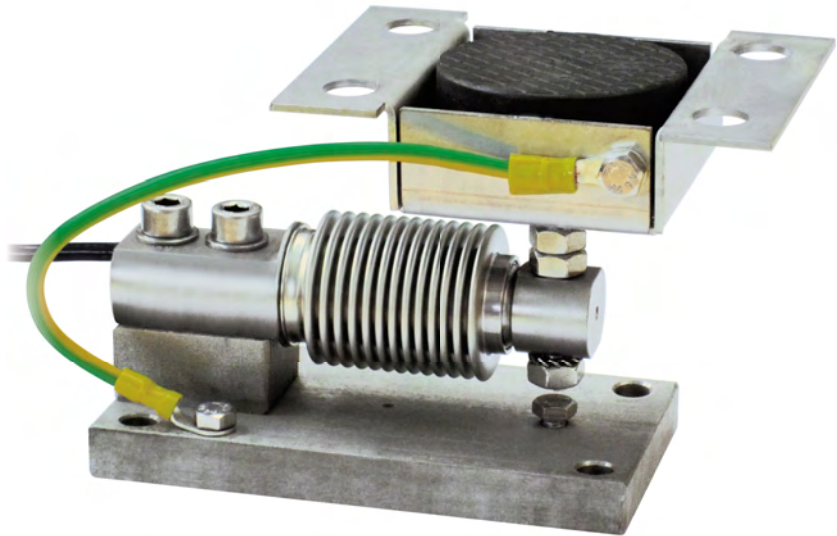
TFC-PV

MOUNTING KIT for BENDING BEAM load cells



Series load cells: FCK - FCOL

Application range from 5 to 500 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
500	FCK - FCOL	1.7	TFCPV
500	FCOL	1.7	TFCPV10

Load cell not included.

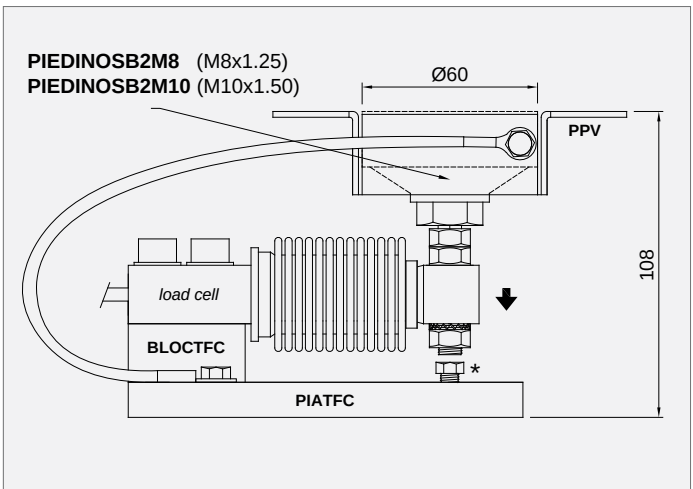
DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

Rev. 00 del 12/03/2015

DIMENSIONS AND TECHNICAL SPECIFICATIONS

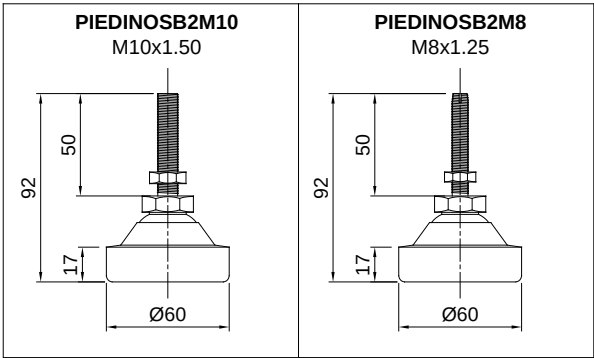
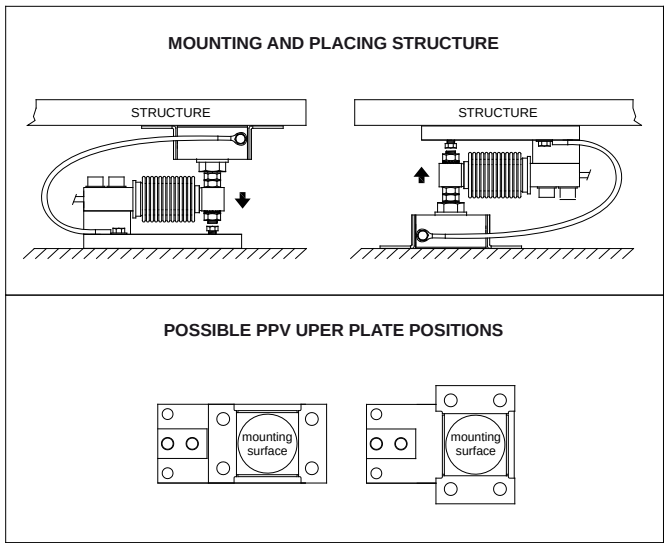
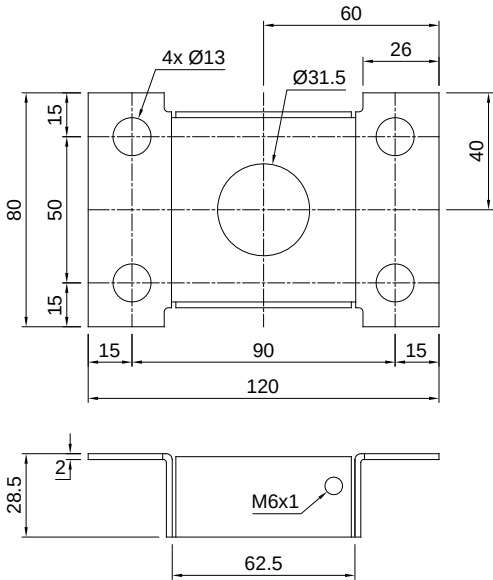
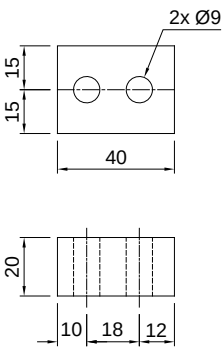
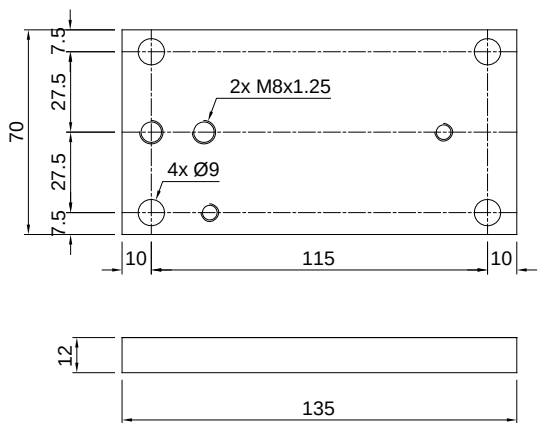
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



PIATFC

BLOCTFC

PPV

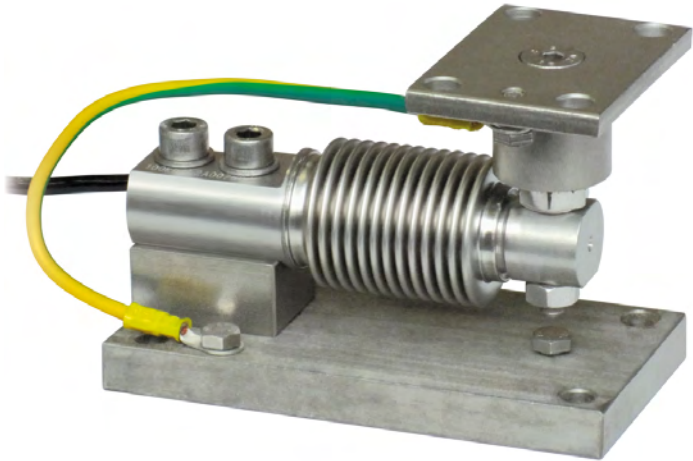


TFC-GP

MOUNTING KIT for BENDING BEAM load cells

Series load cells: FCK - FCOL

Application range from 5 to 500 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
500	FCK - FCOL	1.3	TFCGP

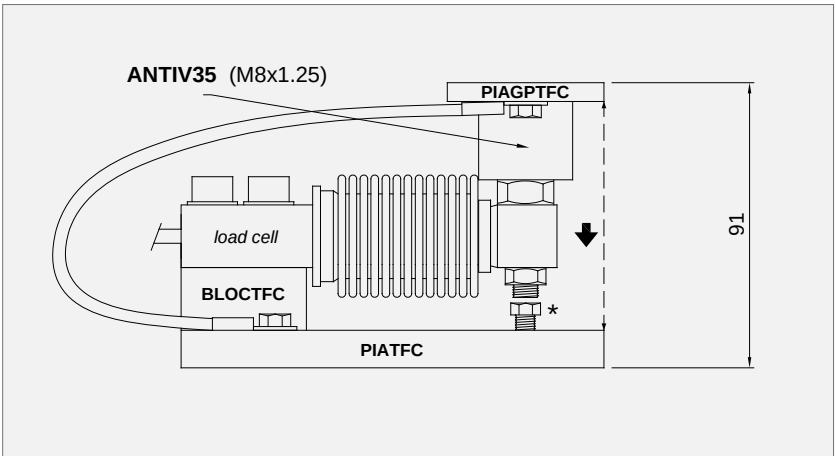
Load cell not included.

DESCRIPTION

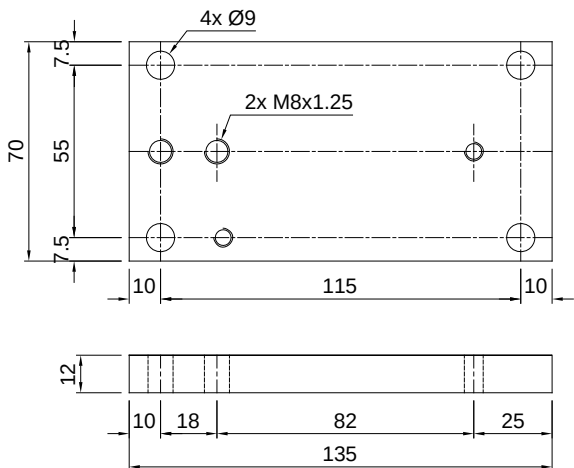
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

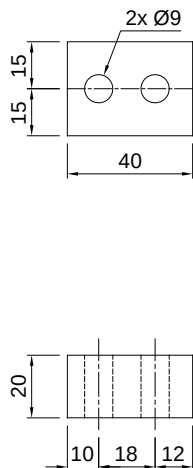
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



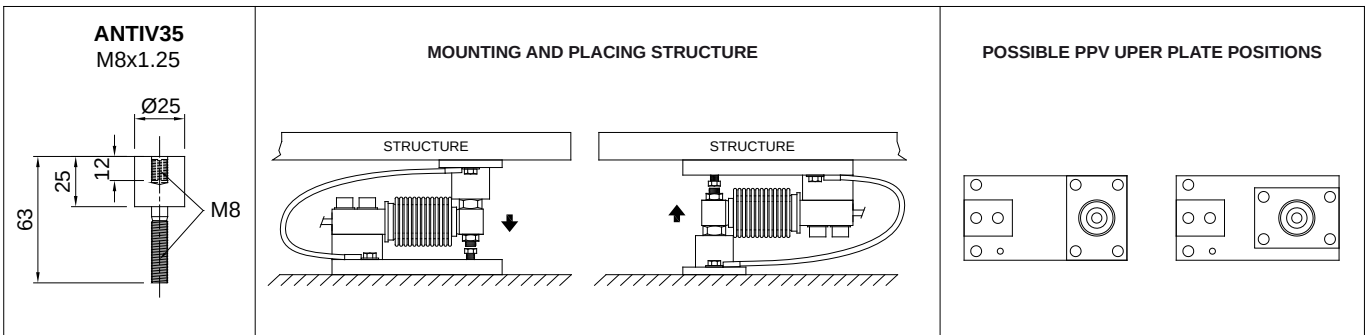
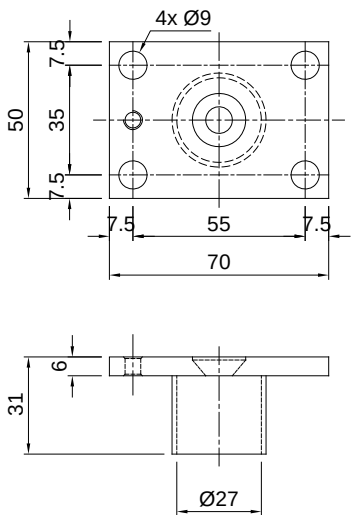
PIATFC



BLOCTFC

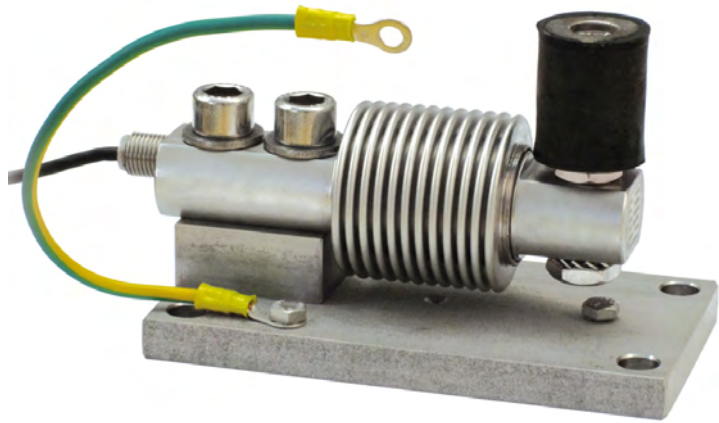


PIAGPTFC



Series load cells: FCAL - FCAX

Application range from 30 to 500 kg



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

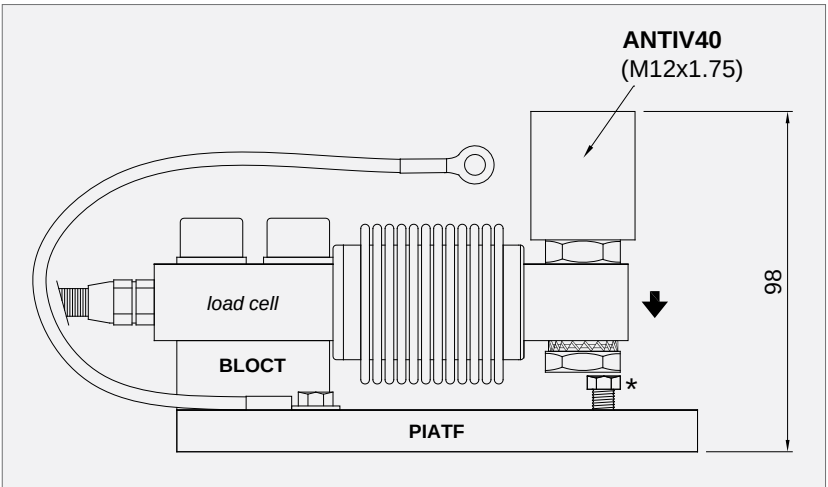
Load cell not included.

DESCRIPTION

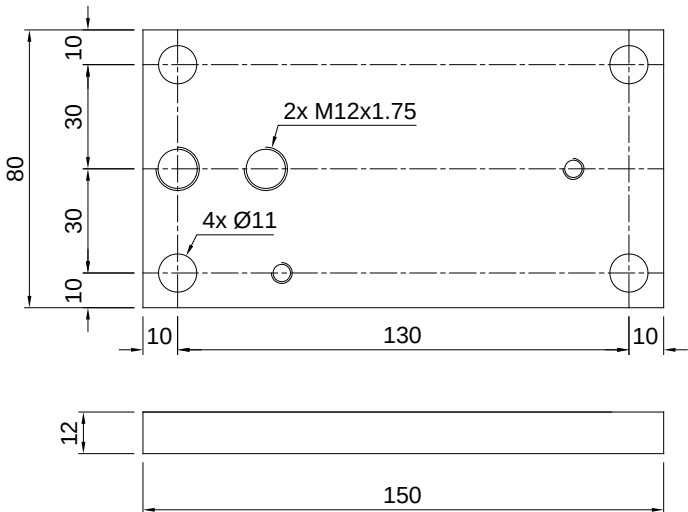
- Compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

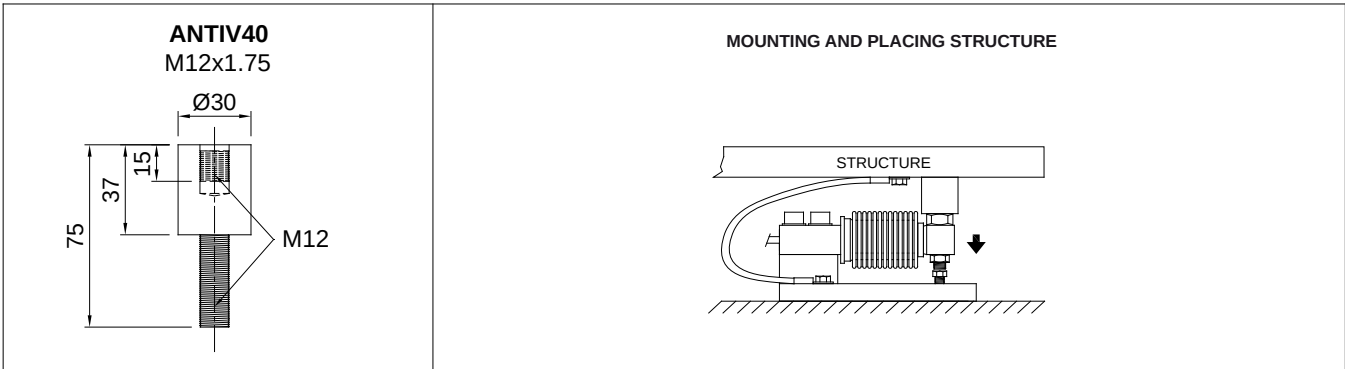
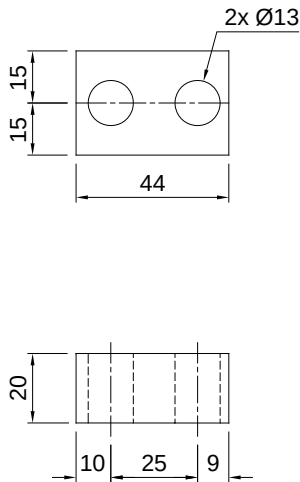
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed to insert a shim before fixing the bolts otherwise adjust the height.



PIATF



BLOCT



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Series load cells: FCAL - FCAX

Application range from 30 to 500 kg



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

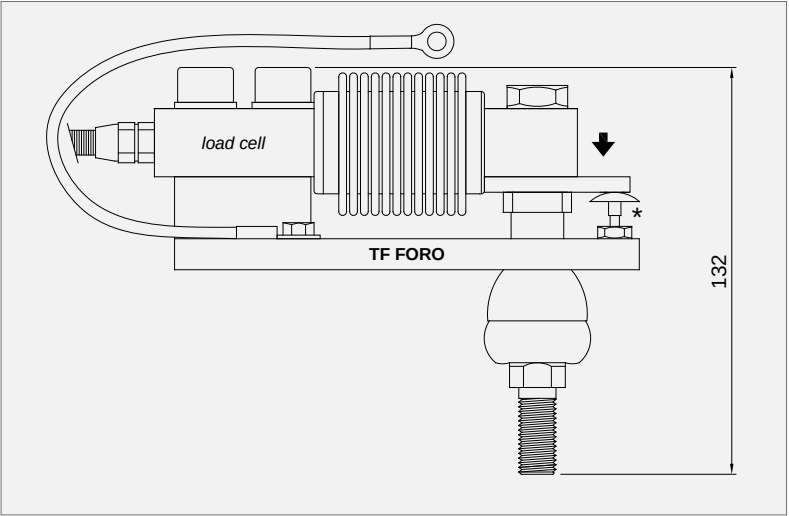
Load cell not included.

DESCRIPTION

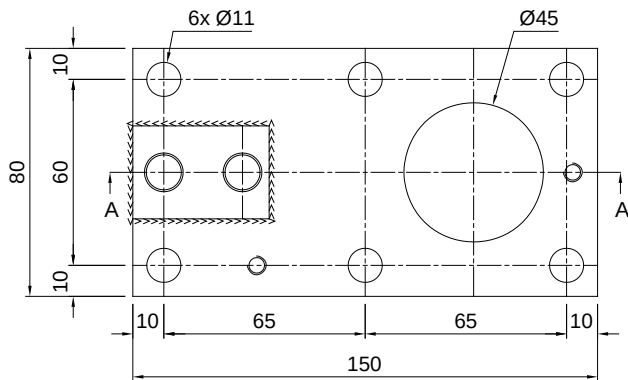
- Aluminum alloy tension ball joint.
- AISI 304 stainless steel lower plate.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

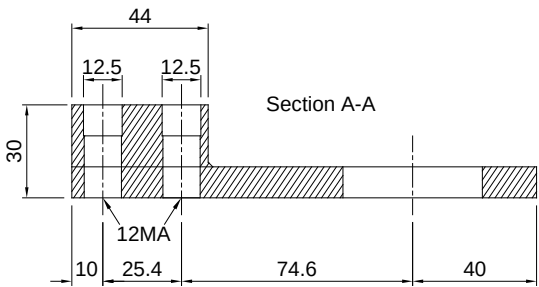
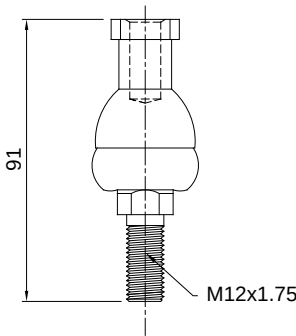
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.



TF FORO



Tension ball joint

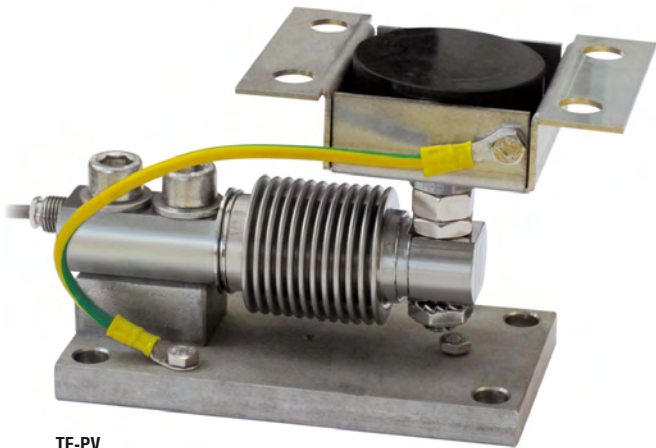


TF-PV

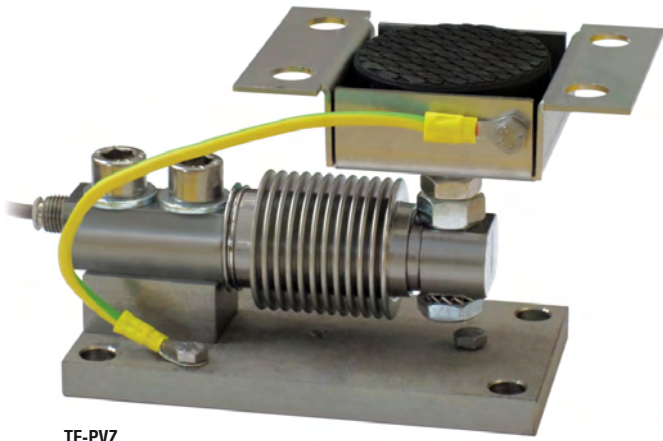
MOUNTING KIT for BENDING BEAM load cells

Series load cells: FCAL - FCAX

Application range from 30 to 1000 kg



TF-PV
TF-PV2000



TF-PVZ

MAX STATIC LOAD	kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
500		FCAL - FCAX	2	TFPV
500		FCAL - FCAX	2	TFPVZ
1000		FCAL - FCAX	2	TFPV2000

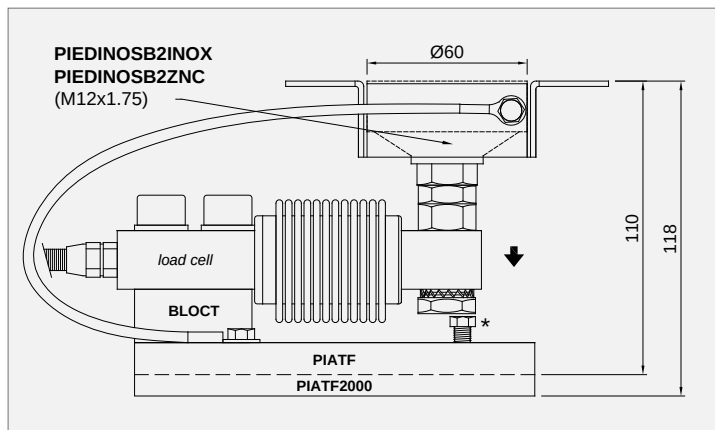
Load cell not included.

DESCRIPTION

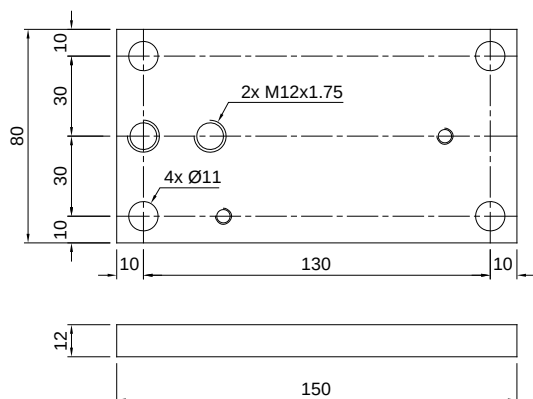
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by in (TFPV, TFPV2000) AISI 304 stainless steel or (TFPVZ) galvanized steel self-centring joint foot.
- Misalignment compensation of the support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

DIMENSIONS AND TECHNICAL SPECIFICATIONS

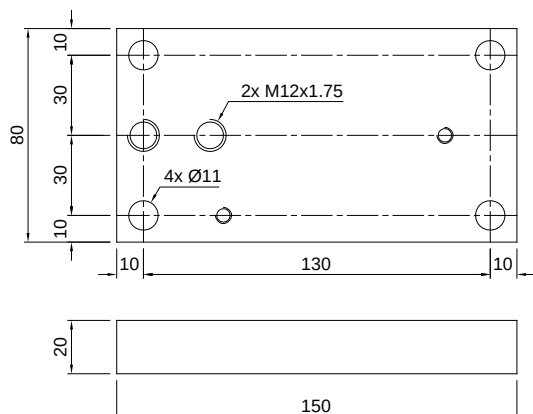
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



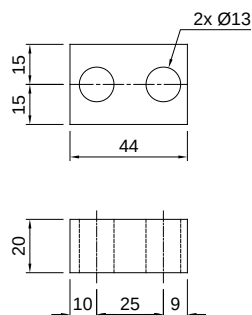
PIATF



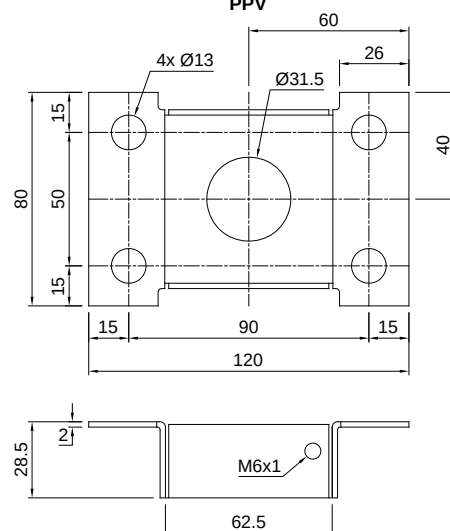
PIATF2000



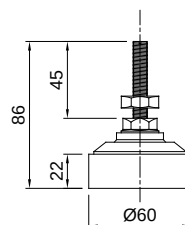
BLOCT



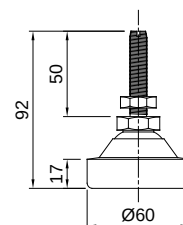
PPV



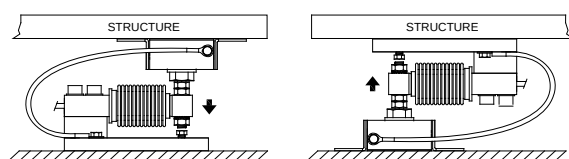
PIEDINOSB2ZNC
M12x1.75



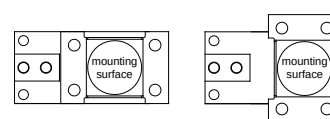
PIEDINOSB2INOX
M12x1.75



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPPER PLATE POSITIONS



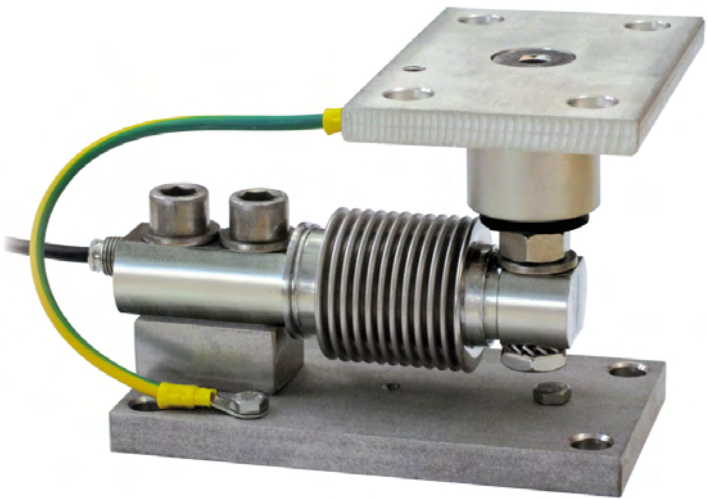
TF-GP

MOUNTING KIT for BENDING BEAM load cells



Series load cells: FCAL - FCAX

Application range from 30 to 1500 kg



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

Load cell not included.

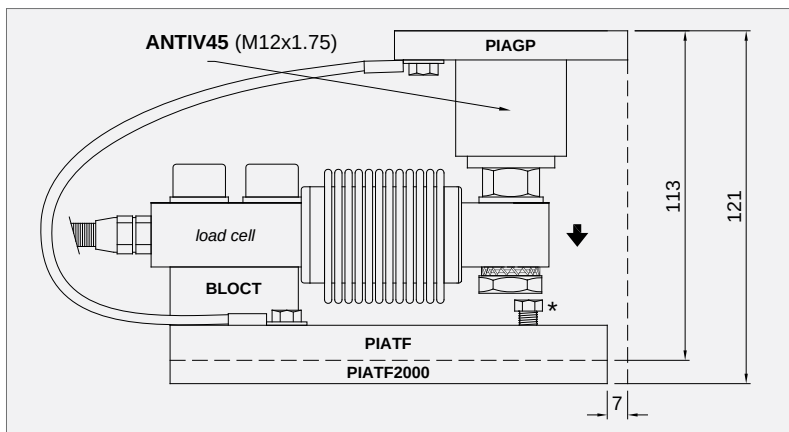
DESCRIPTION

- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

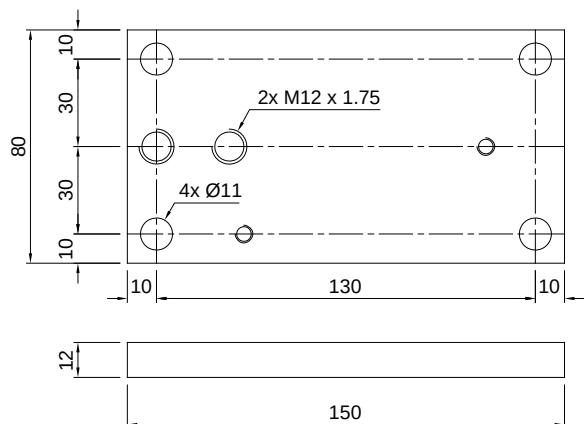
Rev. 00 del 12/03/2015

DIMENSIONS AND TECHNICAL SPECIFICATIONS

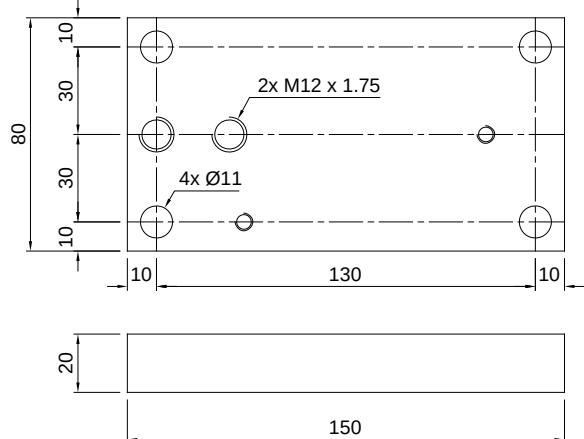
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



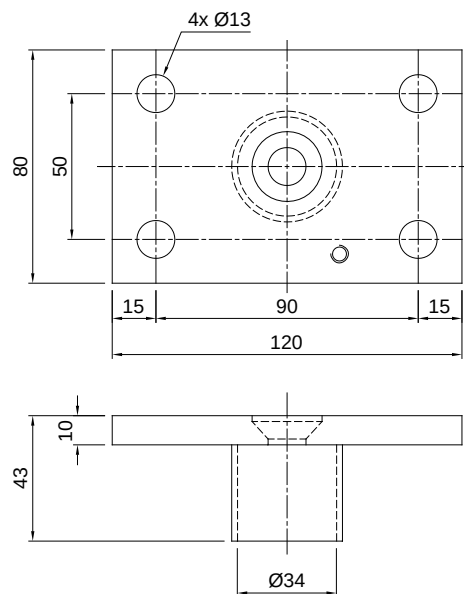
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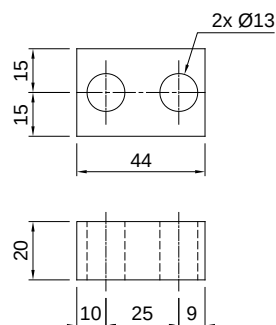
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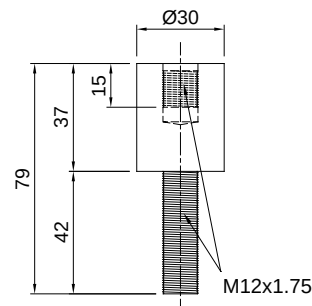
PIAGP



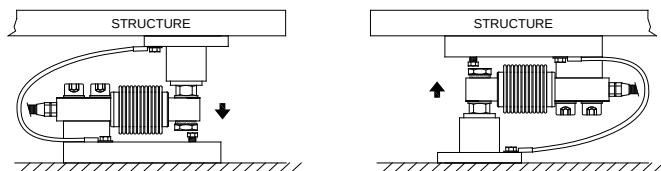
BLOCT



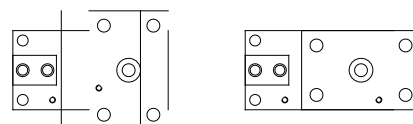
ANTIV45



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPPER PLATE POSITIONS



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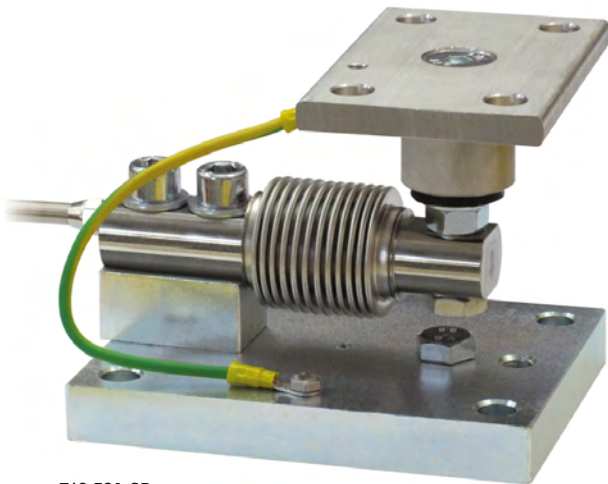
T12-GP

MOUNTING KIT for BENDING BEAM load cells

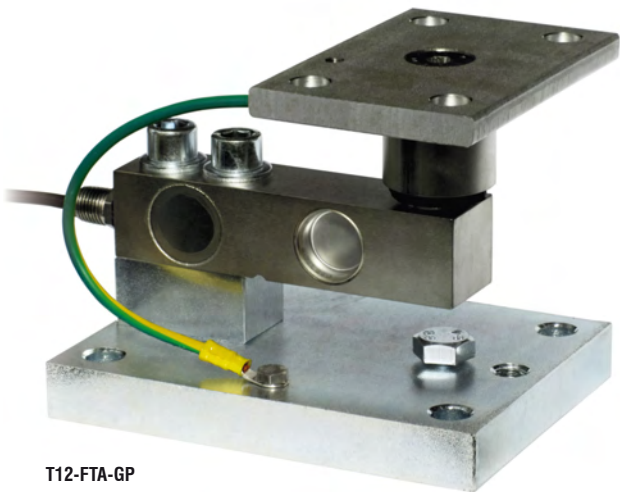


Series load cells: FCAL - FCAX - FTL - FTK - FTKL - FTP - FT-P - FTZ

Application range from 30 to 2000 kg



T12-FCA-GP



T12-FTA-GP

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

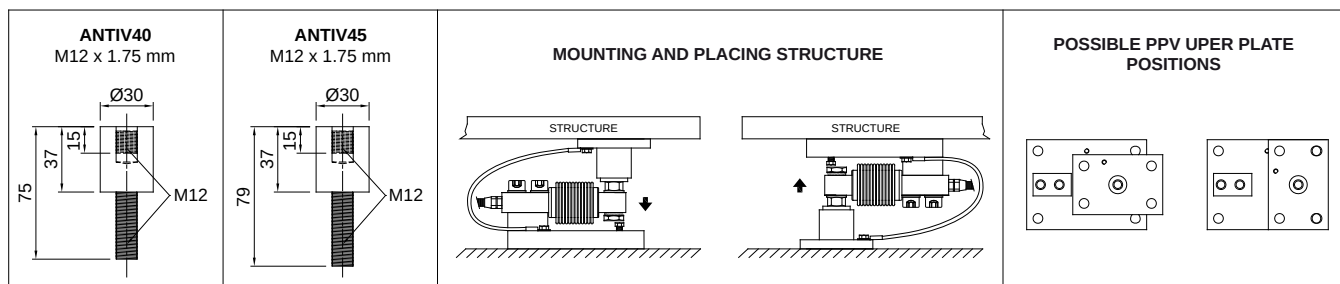
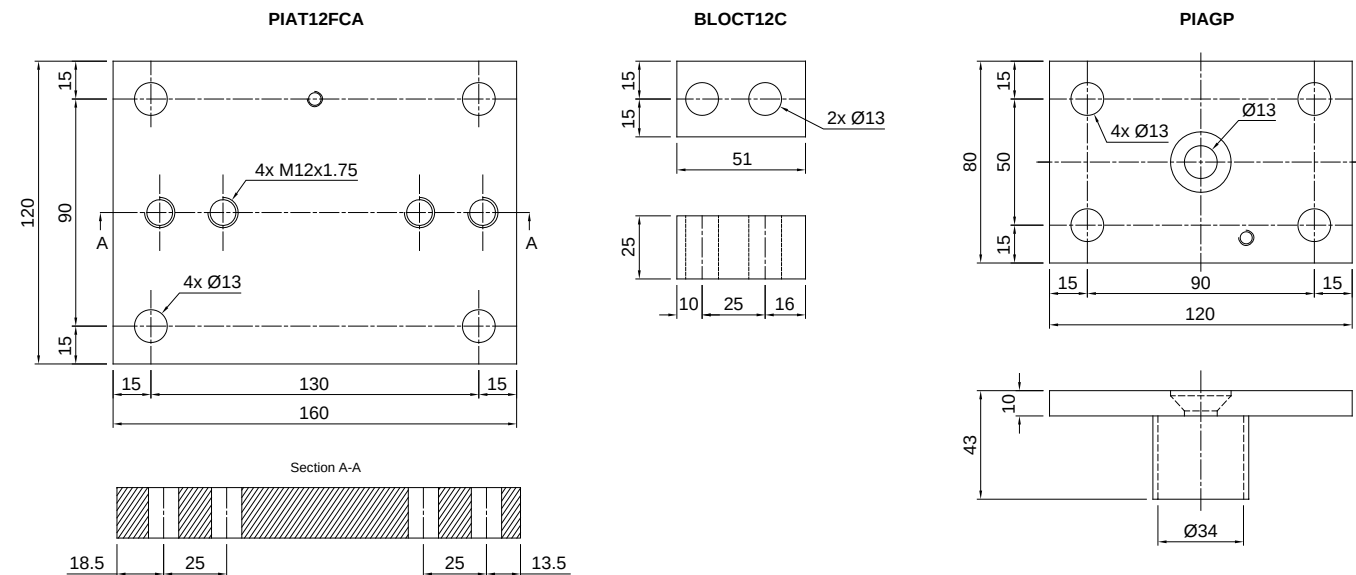
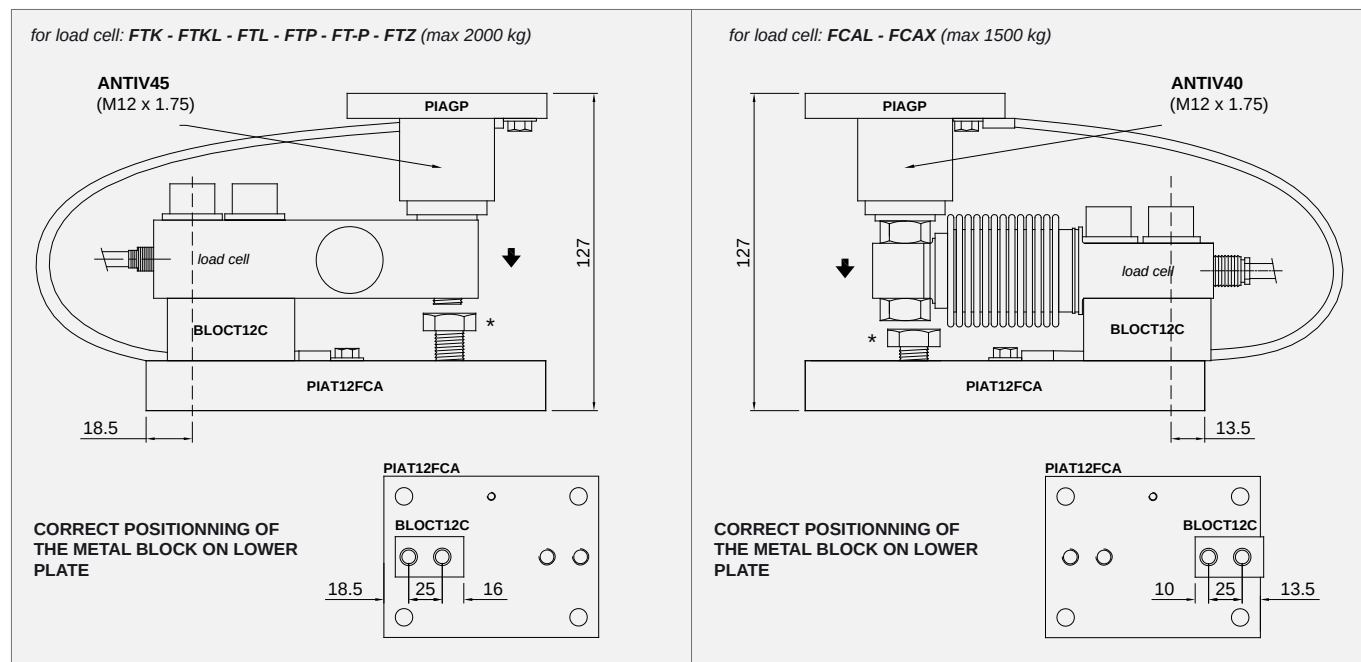
Load cell not included.

DESCRIPTION

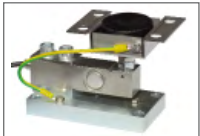
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in galvanized steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

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 lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed to insert a shim before fixing the bolts.



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	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.3	for SHEAR BEAM load cells		
	TF500 TF2000/Z $75 \leq x \leq 500 \text{ kg}$ $75 \leq x \leq 2000 \text{ kg}$	FTL, FTK, FTKL, FTP, FT-P, FTZ	149
	PV/Z $75 \leq x \leq 2000 \text{ kg}$	FTL, FTK, FTKL, FTP, FT-P, FTZ	151
	TF-PS 2000 $75 \leq x \leq 2000 \text{ kg}$	FTL, FTK, FTKL, FTP, FT-P, FTZ	153
	PV80/Z $3000 \leq x \leq 5000 \text{ kg}$	FTK, FTP, FTZ	155
	PS PS10T $3000 \leq x \leq 5000 \text{ kg}$ $3000 \leq x \leq 10000 \text{ kg}$	FTK, FTP, FTZ	157

Notes section with horizontal lines for writing.

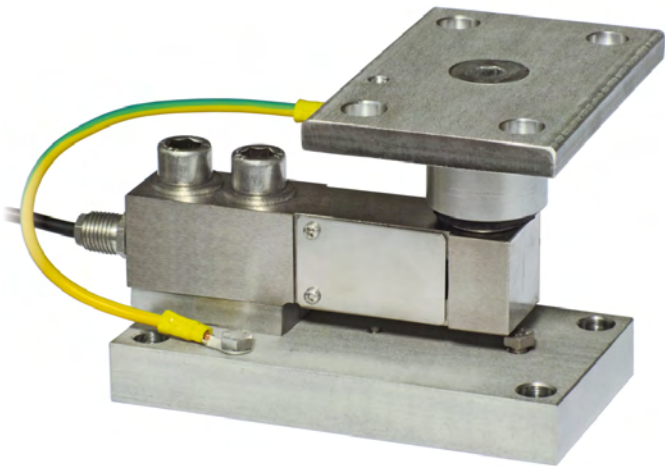
Rev. 00 del 12/03/2015

TF 500/2000

MOUNTING KIT for SHEAR BEAM load cells

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

Application range from 75 to 2000 kg



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

Load cell not included.

DESCRIPTION

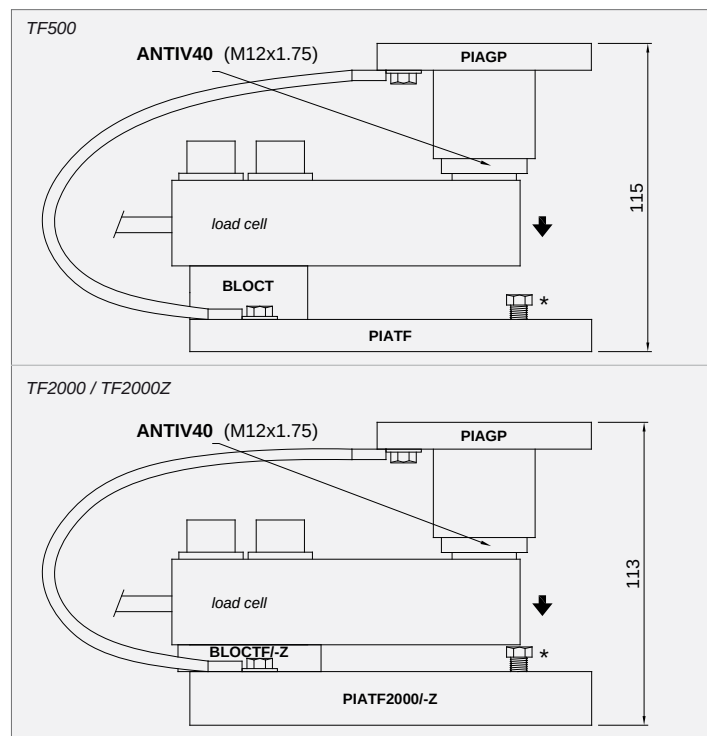
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel (TF500, TF2000) or in galvanized steel (TF2000Z).
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

TF 500/2000

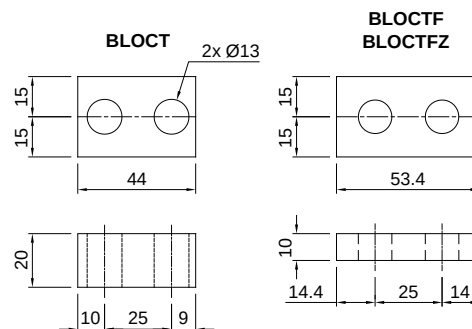
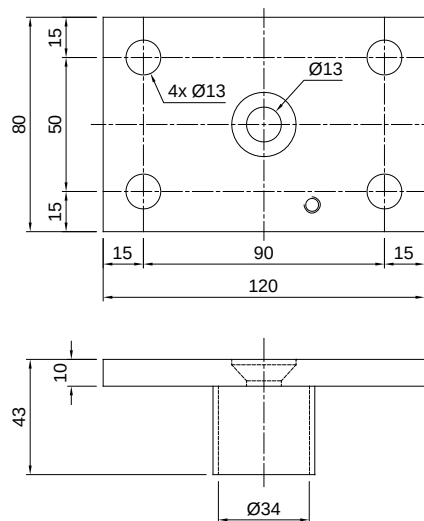
MOUNTING KIT for SHEAR BEAM load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

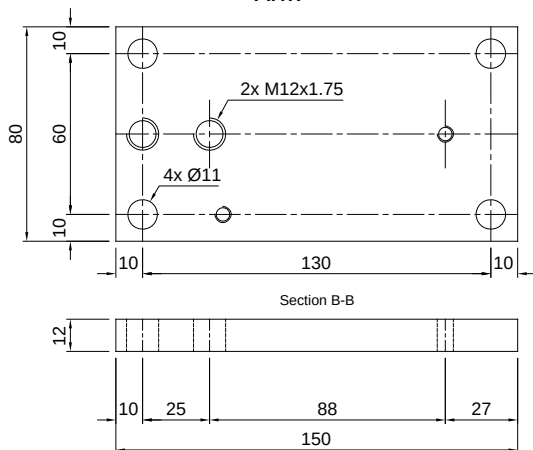
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



PIAGP

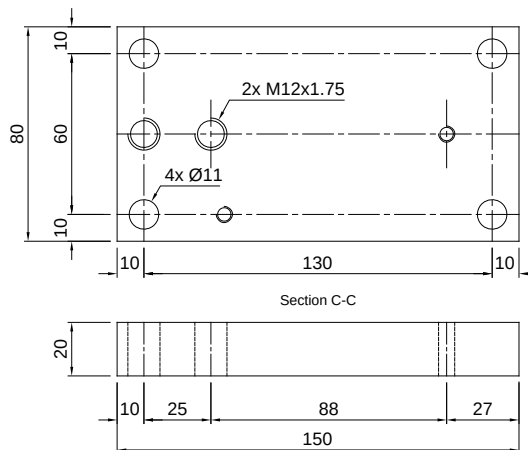


PIATF

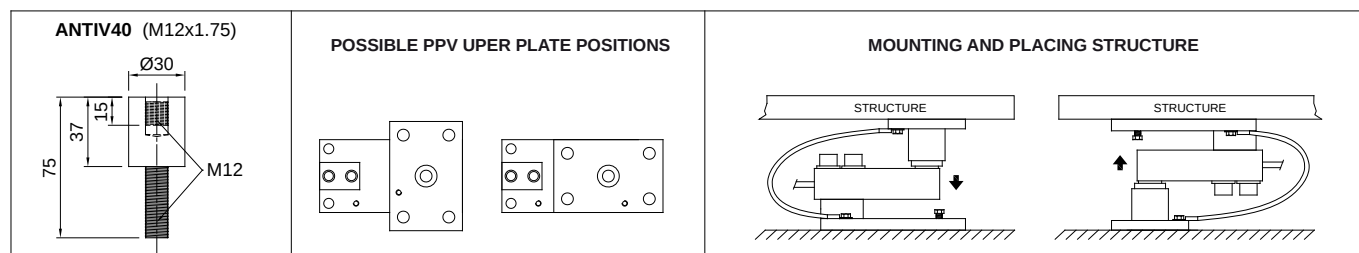


Section B-B

PIATF2000 PIATF2000Z



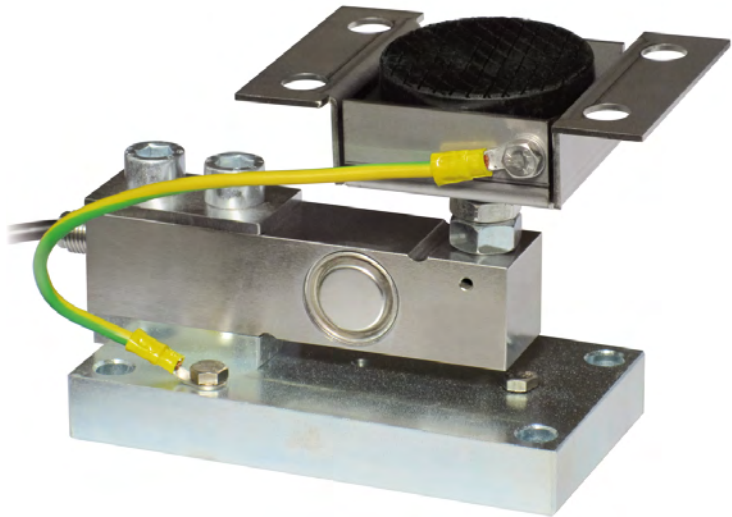
Section C-C



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

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

Application range from 75 to 2000 kg



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

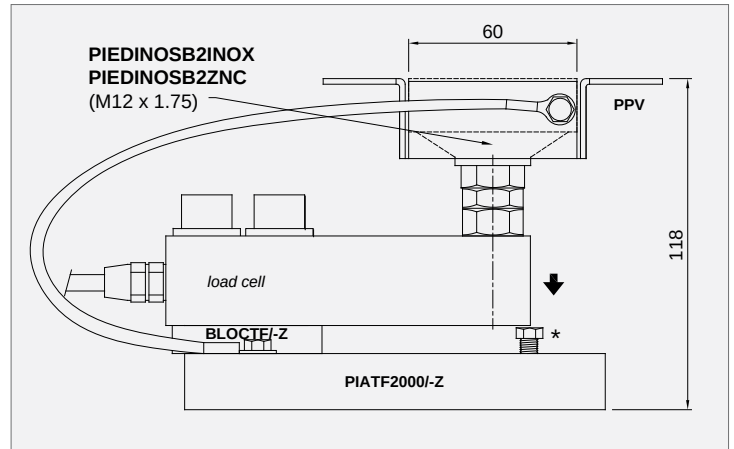
Load cell not included.

DESCRIPTION

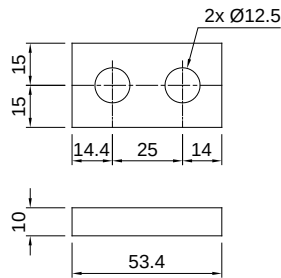
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by in (TF-PV, TF-PV-2000) AISI 304 stainless steel or (TF-PVZ) galvanized steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

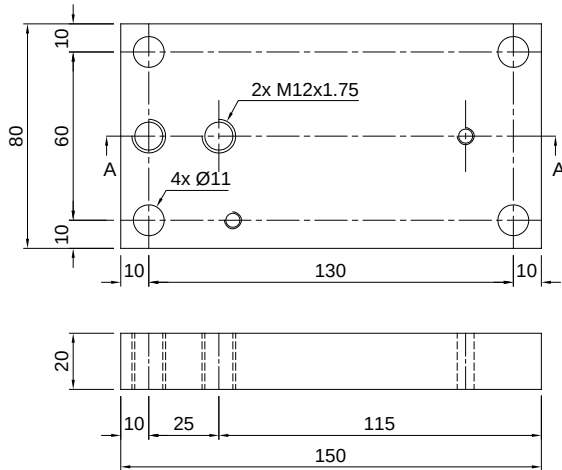
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



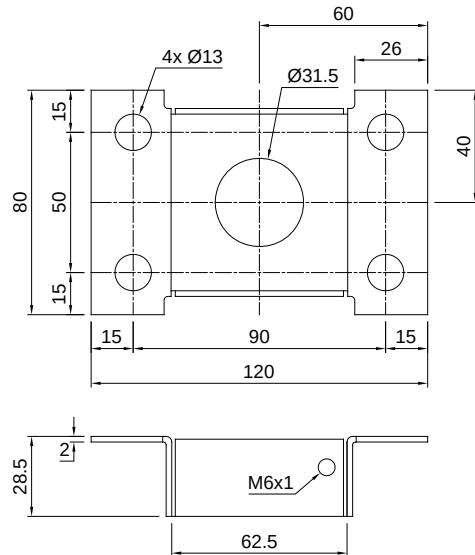
**BLOCTF
BLOCTFZ**



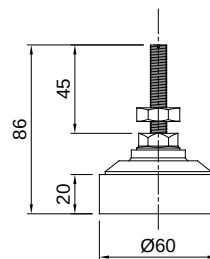
**PIATF2000
PIATF2000Z**



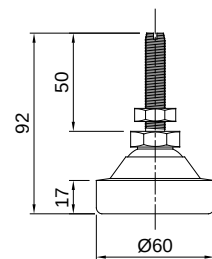
PPV



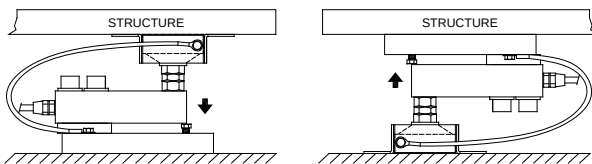
**PIEDINOSB2ZNC
M12x1.75**



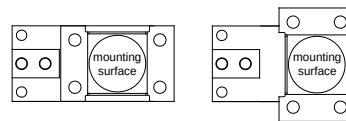
**PIEDINOSB2INOX
M12x1.75**



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPER PLATE POSITIONS

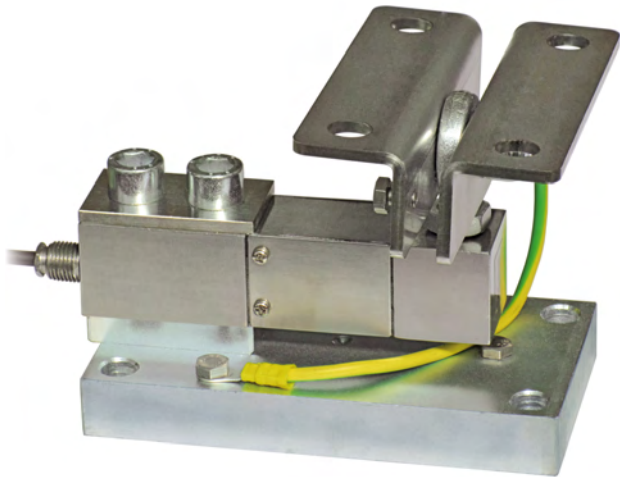


TFPS2000

MOUNTING KIT for SHEAR BEAM load cells

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

Application range from 75 to 2000 kg



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

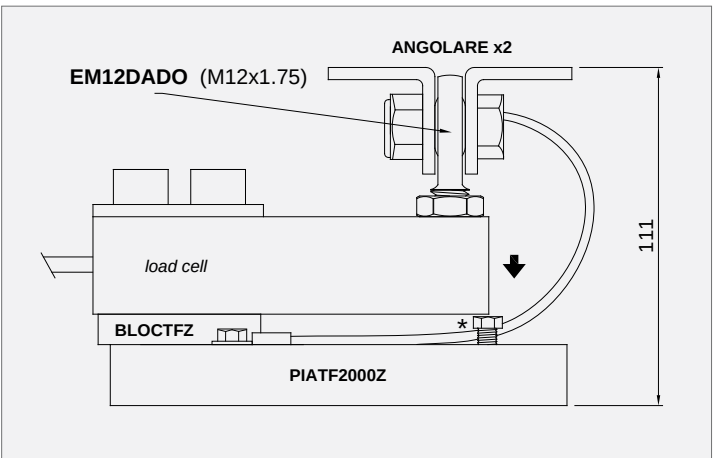
Load cell not included.

DESCRIPTION

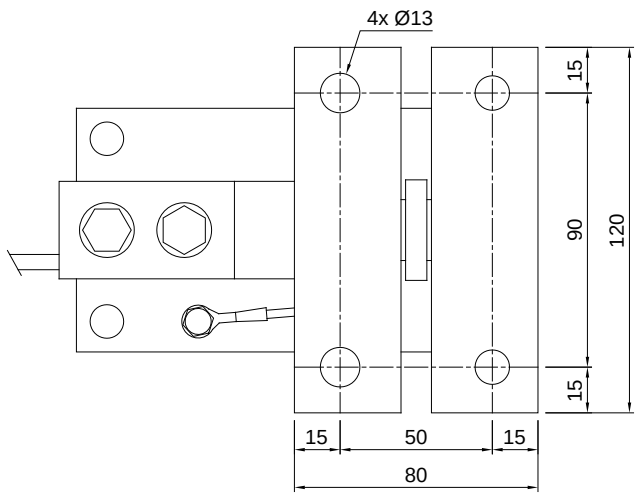
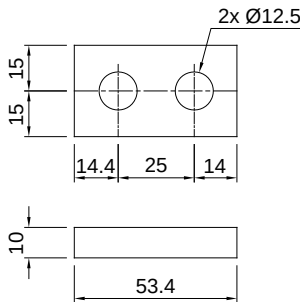
- AISI 304 stainless steel upper plate.
- Lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

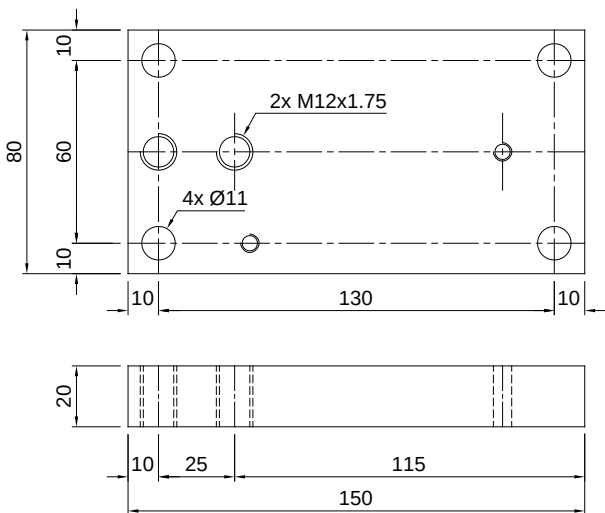
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



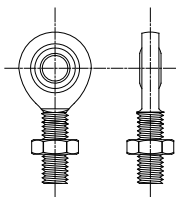
BLOCTFZ



PIATF2000Z



EM12DADO
(M12 x 1.75)



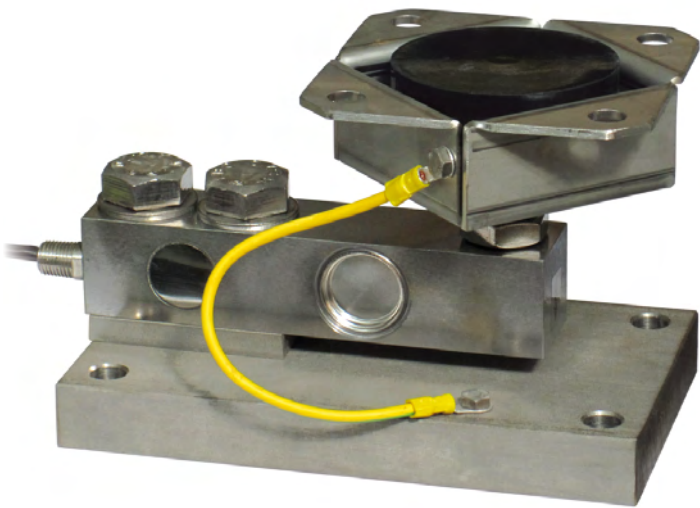
PV80 / PV80Z

MOUNTING KIT for SHEAR BEAM load cells



Series load cells: FTP - FTZ - FTK

Application range from 3000 to 5000 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
5000	FTP - FTZ	6.9	PV80
5000	FTK	6.7	PV80Z

Load cell not included.

DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in (PV80) AISI 304 stainless steel or (PV80Z) galvanized steel.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

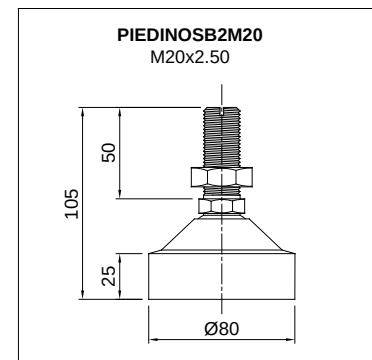
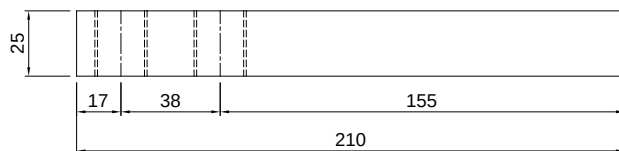
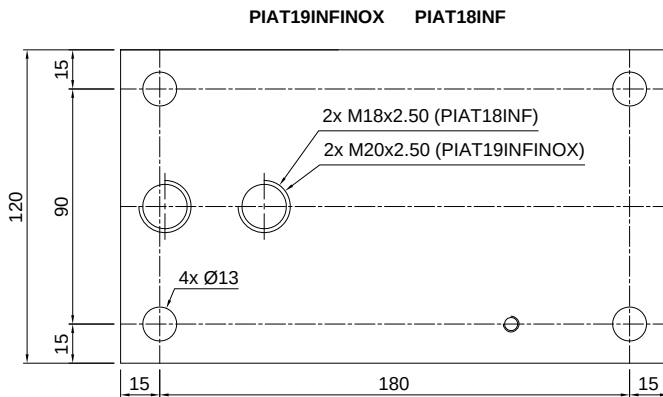
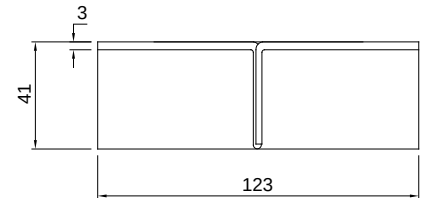
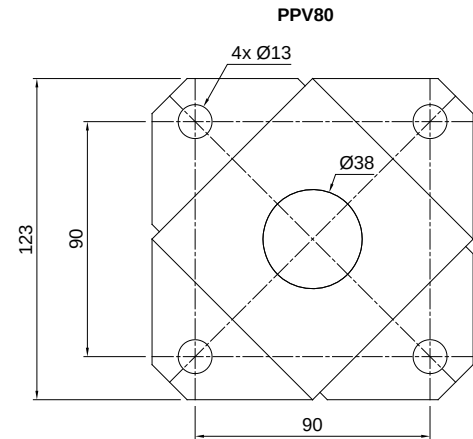
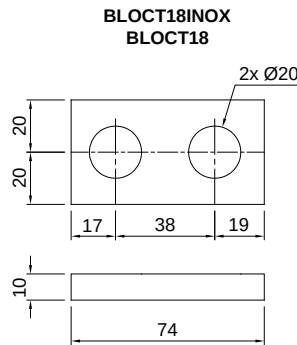
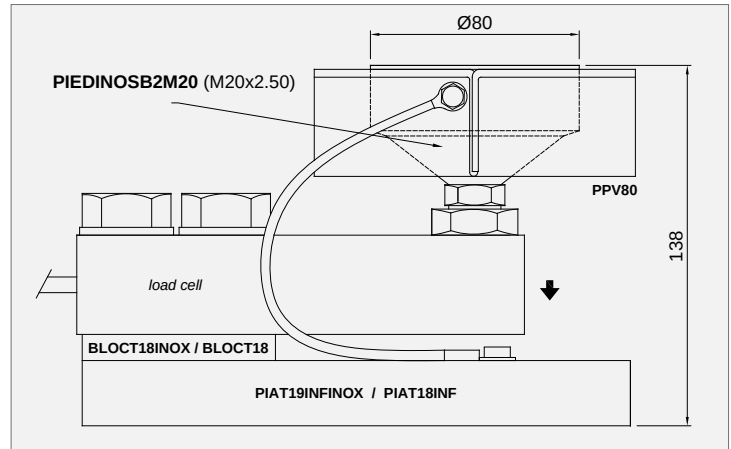
PV80 / PV80Z

MOUNTING KIT for SHEAR BEAM load cells

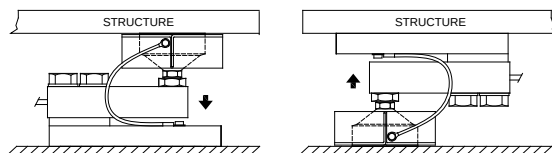
LAUMAS®
ELETTRONICA

DIMENSIONS AND TECHNICAL SPECIFICATIONS

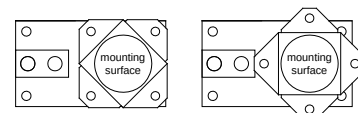
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPER PLATE POSITIONS



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

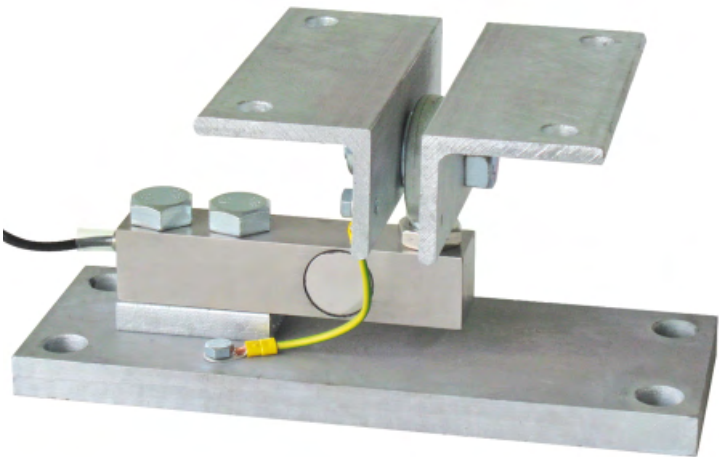
PS-PS10T

MOUNTING KIT for SHEAR BEAM load cells



Series load cells: FTP - FTZ - FTK

Application range from 3000 to 10000 kg



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

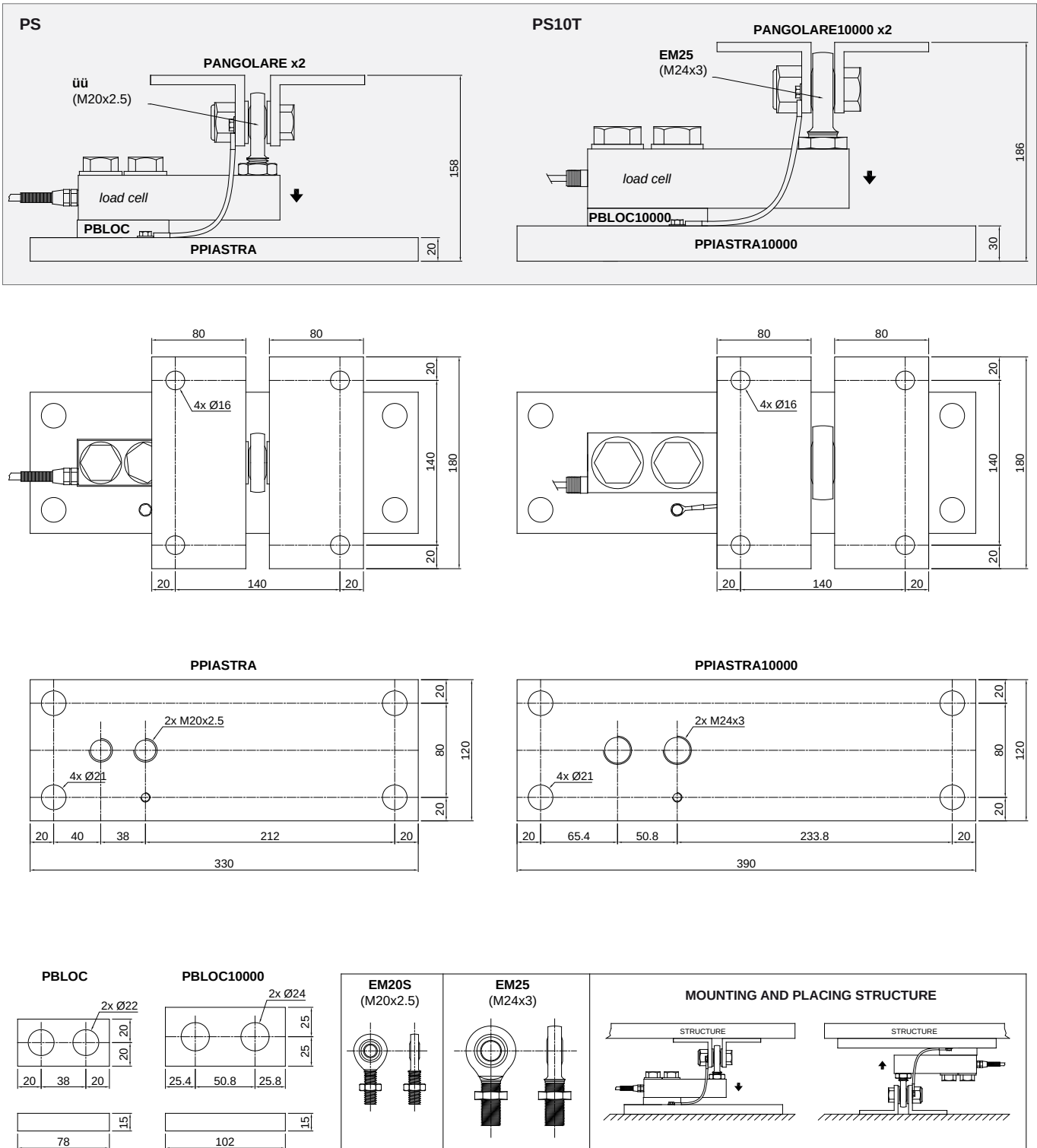
Load cell not included.

DESCRIPTION

- Hot worked galvanized (PS) or AISI 304 stainless steel (PS10T) upper plate.
- Lower plate and block in hot worked galvanized.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint.
- Misalignment compensation of the support plates 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 in contact with the upper part of the mounting kit.





	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.4	for DOUBLE SHEAR BEAM / COLUMN load cells		
VCOKDTL	$15000 \leq x \leq 50000 \text{ kg}$	DTL, COL, COLD, COK	161

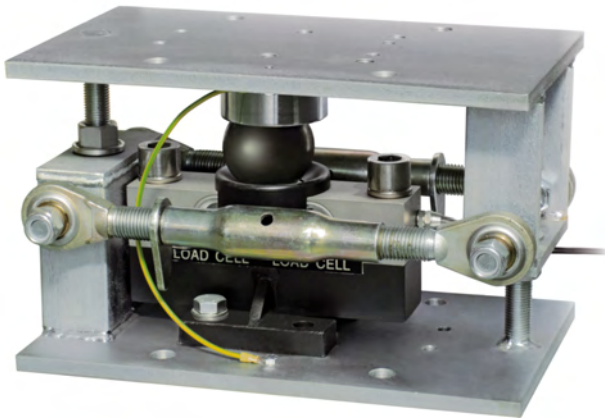
Notes section with horizontal lines for writing.

VCOKDTL

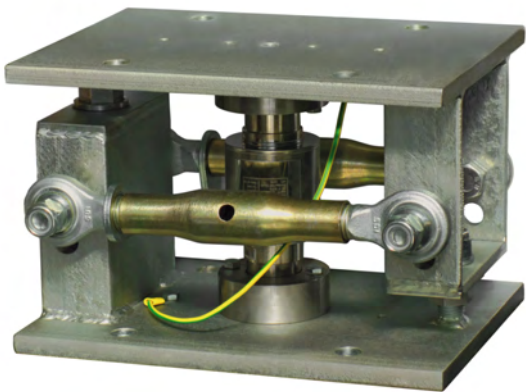
MOUNTING KIT for DOUBLE SHEAR BEAM / COLUMN load cells

Series load cells: DTL - COL - COLD - COK

Application range from 15000 to 50000 kg



DOUBLE SHEAR BEAM load cells



COLUMN load cells

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

Load cell not included.

DESCRIPTION

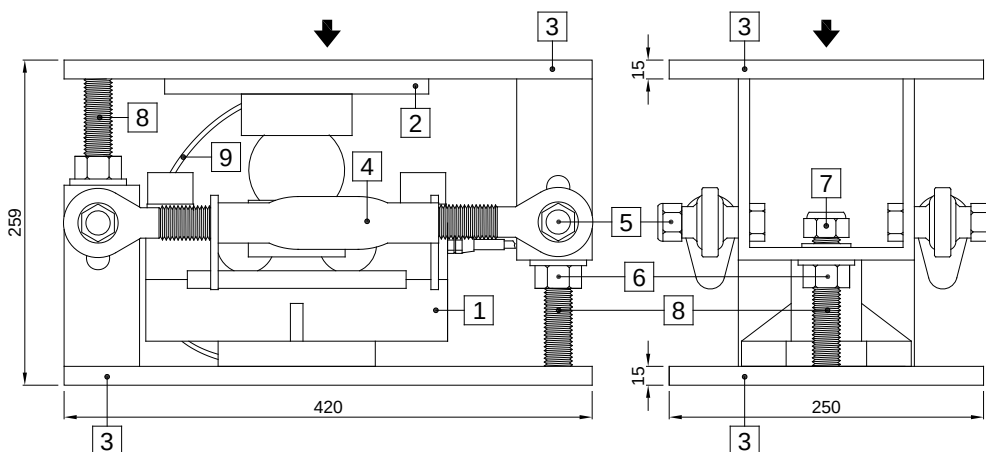
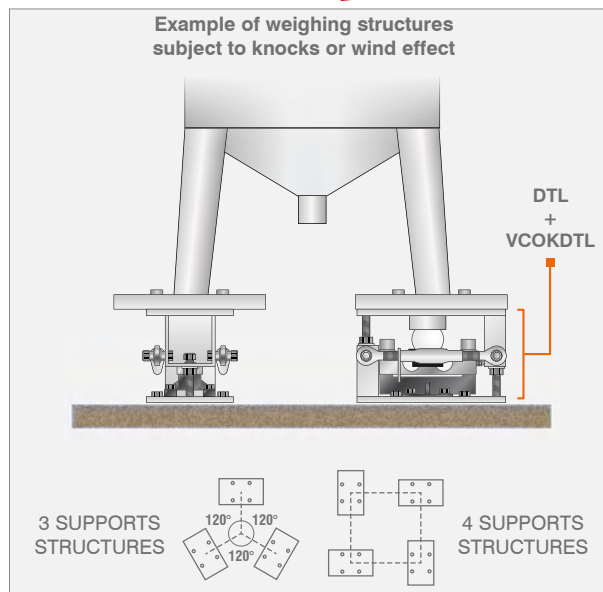
- Galvanized steel upper and lower plate.
- Galvanized steel plate (for DOUBLE SHEAR BEAM load cell)
- Upper and lower bases (for COLUMN load cell)
- Two integrated galvanized steel stay rods with dual ball-and-socket joints suitable to counter the lateral force.
- Anti-tilt system consists of two threaded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

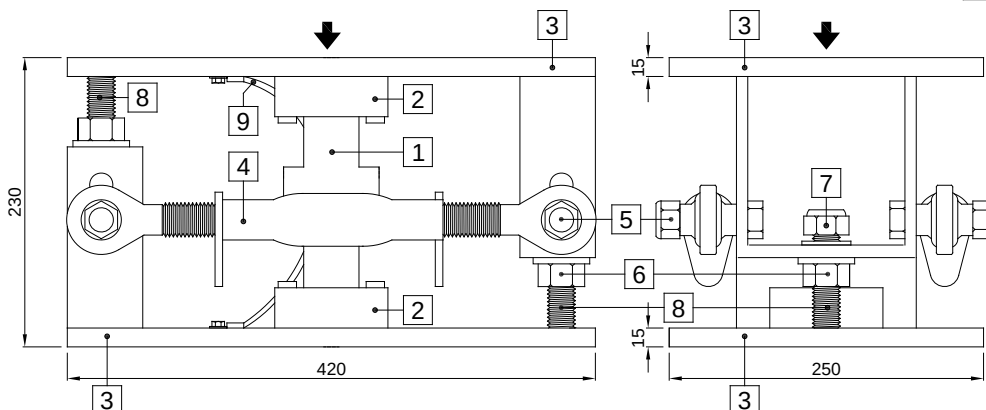
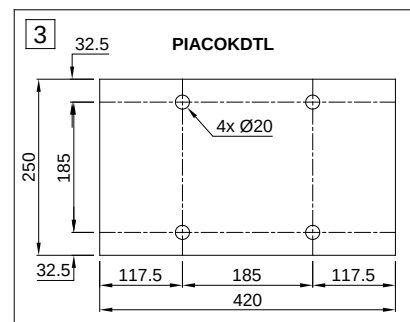
- Install the weighed system using only the mounting kit without the load cell [1] and inserting in its place a piece of pipe (Ø40x220 mm): unscrewing the nuts [5] and take off one of the two stay rods [4] and the plate [2].
- To finish the installation (weldings, etc.), take off the piece of pipe and 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 bar [8] slides into the hole; turn anti-tilt nuts [7] to a distance of 1 mm from plate.



- [1] Load cell.
- [2] Galvanized steel plate (PIATTODTL).
- [3] Galvanized steel upper and lower plates (PIACOKDTL).
- [4] Galvanized steel stay rod with horizontal constrainer function (TENDITORE300).
- [5] Self-locking nut Ø18.
- [6] Nut Ø22 to be used as jack.
- [7] Anti-tilt self-locking nut Ø22.
- [8] Threaded bar Ø22.
- [9] Copper wire for earthing connection.

for COLUMN load cells (COL - COLD - COK):

- Install the weighed system using only the mounting kit without the load cell [1] and inserting in its place a piece of pipe (Ø44x152 mm): unscrewing the nuts [5], take off one of the two stay 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 bar [8] slides into the hole; turn anti-tilt nuts [7] to a distance of 1 mm from plate.



- [1] Load cell.
- [2] Upper and lower bases.
- [3] Galvanized steel upper and lower plates (PIACOKDTL).
- [4] Galvanized steel stay rod with horizontal constrainer function (TENDITORE300).
- [5] Self-locking nut Ø18.
- [6] Nut Ø22 to be used as jack.
- [7] Anti-tilt self-locking nut Ø22.
- [8] Threaded bar Ø22.
- [9] Copper wire for earthing connection.

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	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.5	for COMPRESSION-LOW PROFILE load cells		
	PVCLS $1000 \leq x \leq 2000$ kg	CLS	165
	PV80CLS $x \leq 5000$ kg	CLS 5000 kg	167
	PSCLS $x \leq 5000$ kg	CLS 5000 kg	169
	V10000 V10275 $250 \leq x \leq 15000$ kg	CBL, CBX	171
	V15000 V30000 V100000 $15000 \leq x \leq 30000$ kg $30000 \leq x \leq 50000$ kg $50000 \leq x \leq 100000$ kg	CBL, CBX	173

Notes section with horizontal lines for writing.

Series load cells: CLS

Application range from 1000 to 2000 kg



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

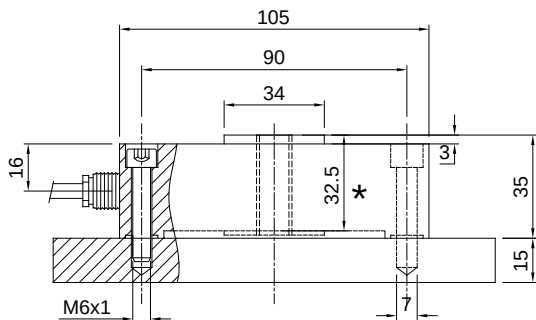
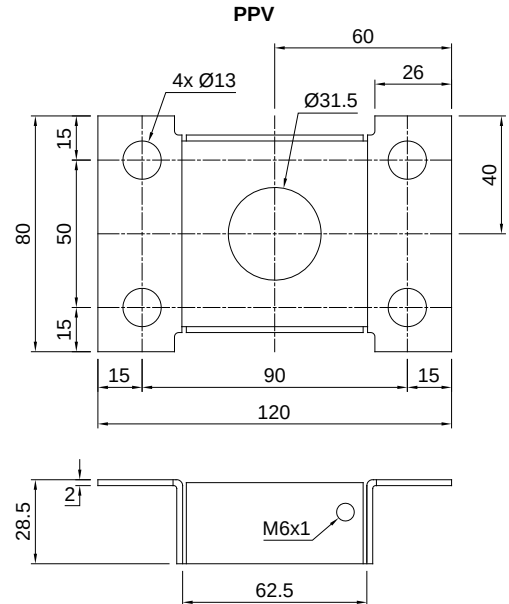
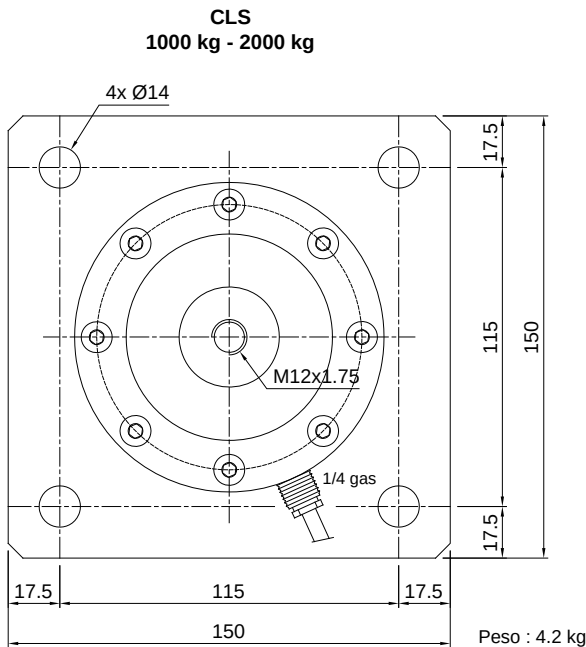
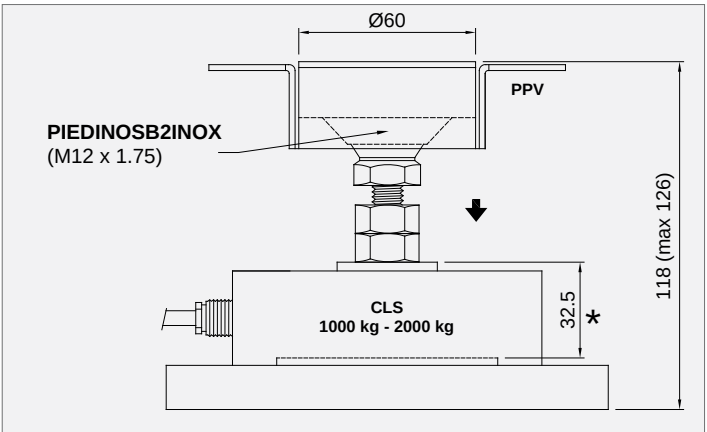
Load cell not included.

DESCRIPTION

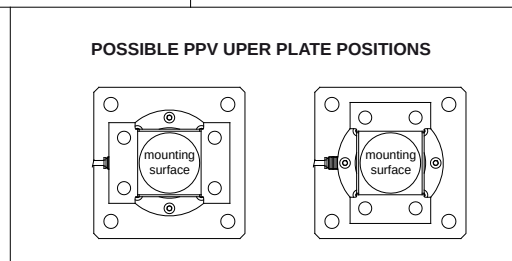
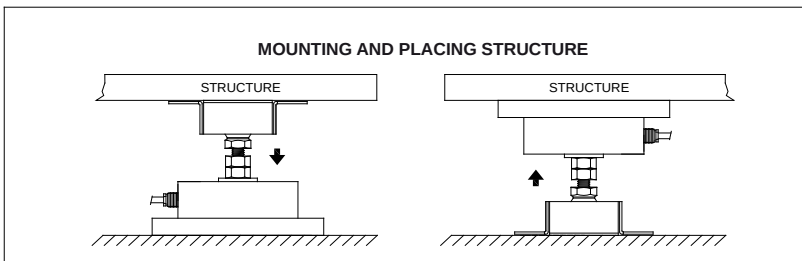
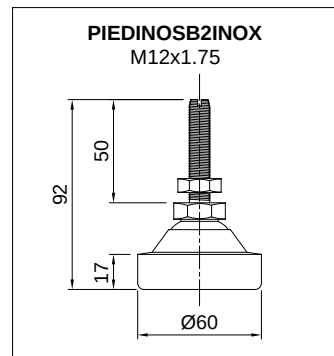
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- AISI 304 stainless steel lower plate.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.

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.

PV80CLS

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells



Series load cells: CLS

Application range 5000 kg



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

Load cell not included.

DESCRIPTION

- Adjustable upper plate in AISI 304 stainless steel (PPV80).
- AISI 304 stainless steel lower plate.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.

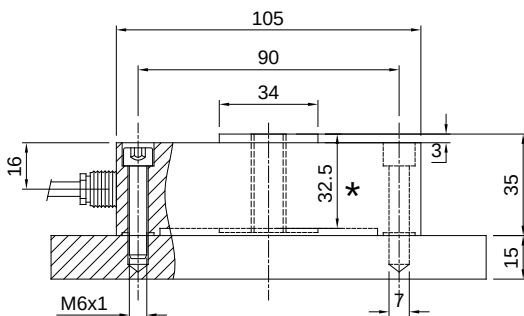
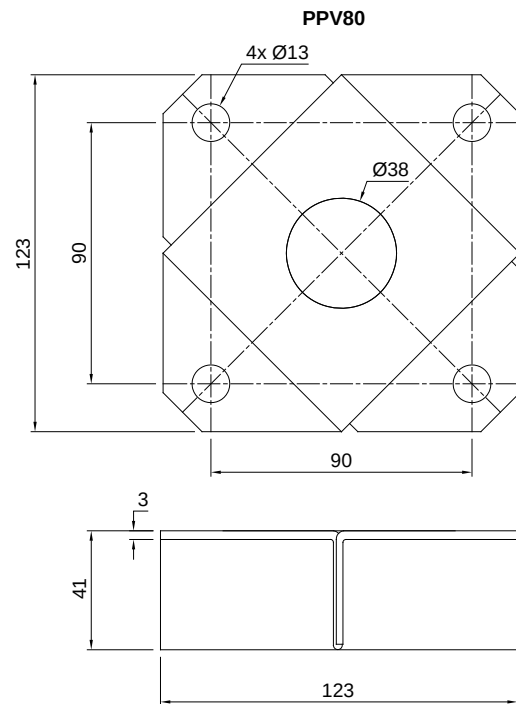
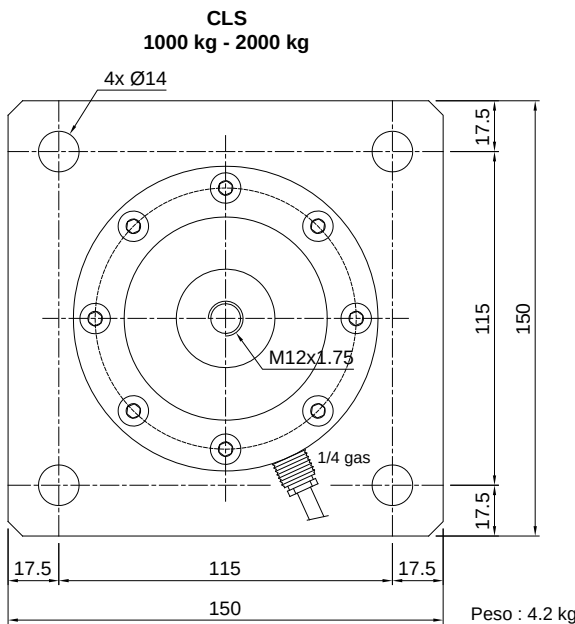
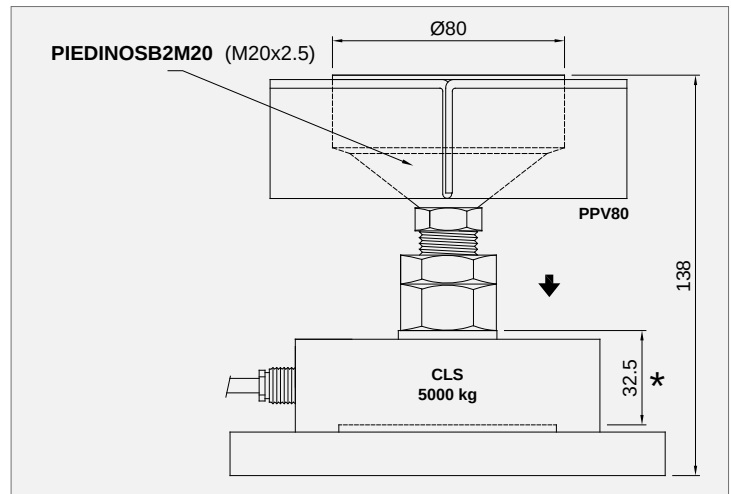
PV80CLS

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

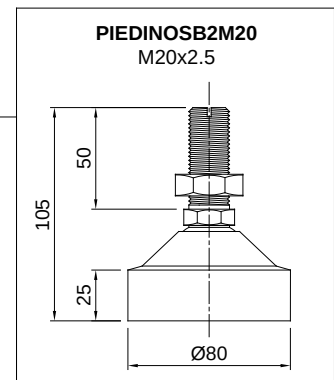
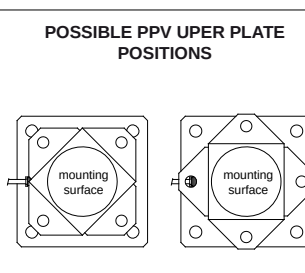
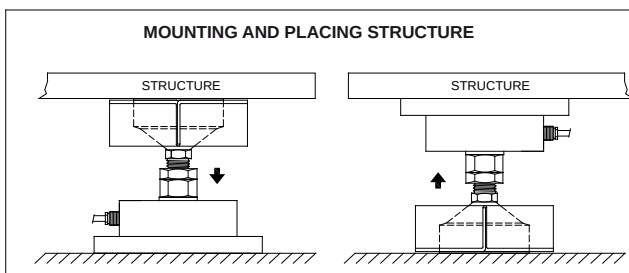
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ELETTRONICA

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.

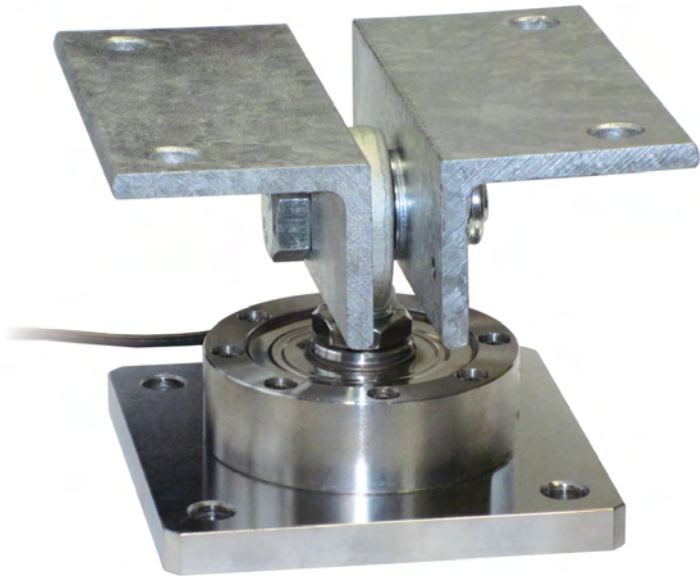
PSCLS

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells



Series load cells: CLS

Application range 5000 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
5000	CLS (5000 kg)	3.6	PSCLS

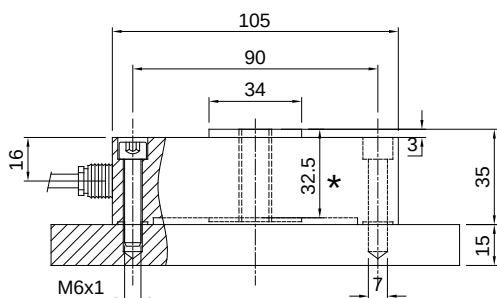
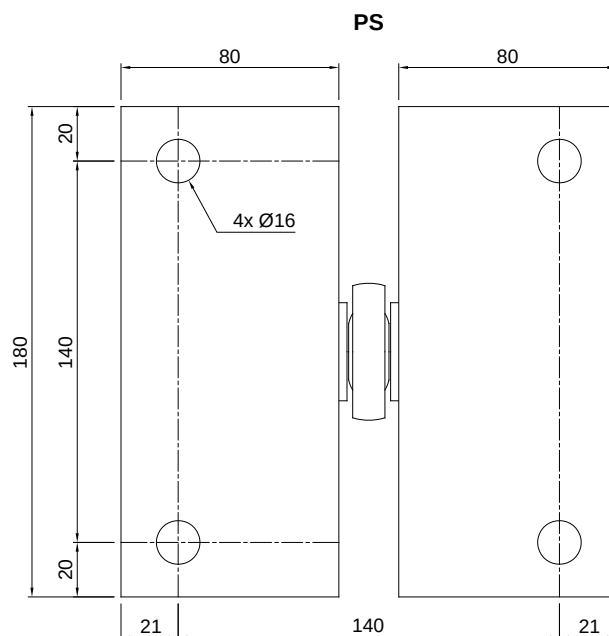
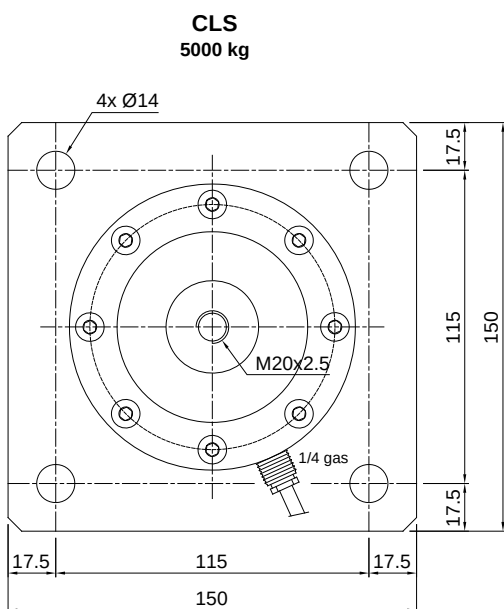
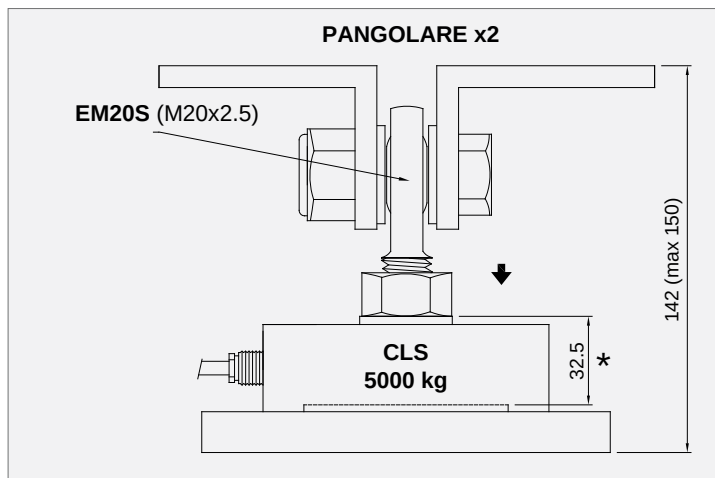
Load cell not included.

DESCRIPTION

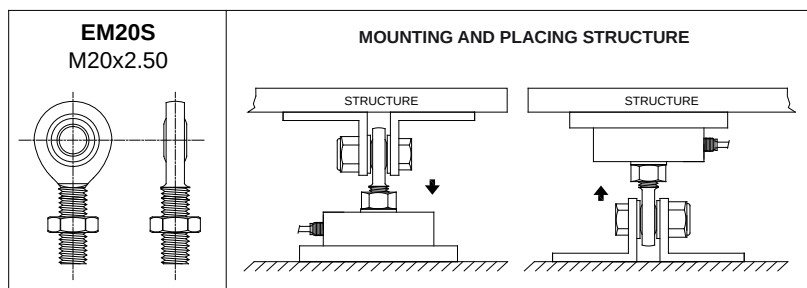
- Hot worked galvanized upper plate.
- AISI 304 stainless steel lower plate.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.

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



V10000-275

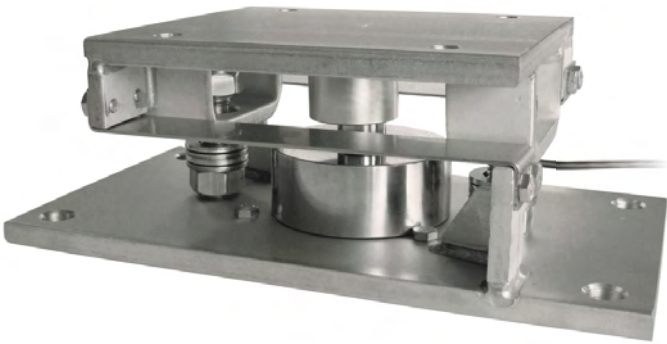
MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

Series load cells: CBL - CBX

Application range from 250 to 15000 kg



V10000



V10275

MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
15000	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	5.7	V10000
15000	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	6.9	V10275

Load cell not included.

DESCRIPTION

- AISI 304 stainless steel upper and lower plates.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt system consists of two threaded bars with self-locking nut.

V10000-275

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

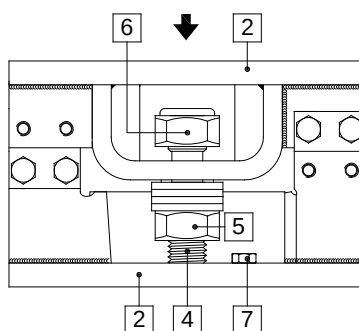
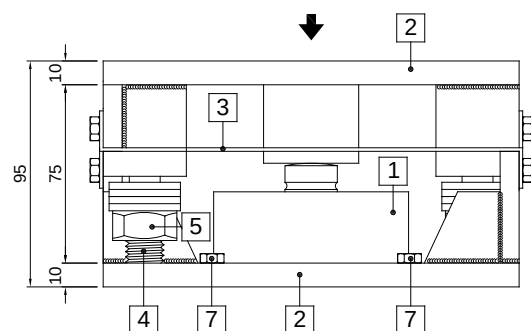
LAUMAS[®]
ELETTRONICA

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.

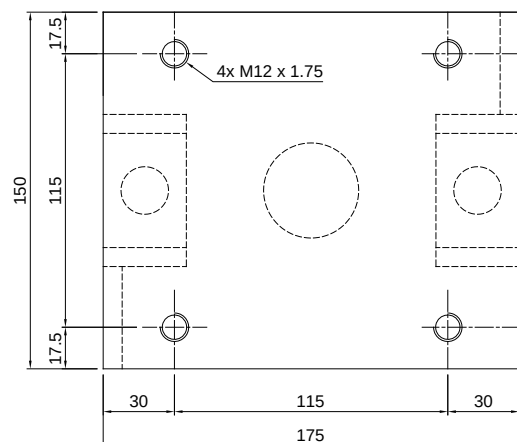
V10000: 6 kg
V10275: 7 kg

- 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]**; erify that the threaded bar **[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]**.

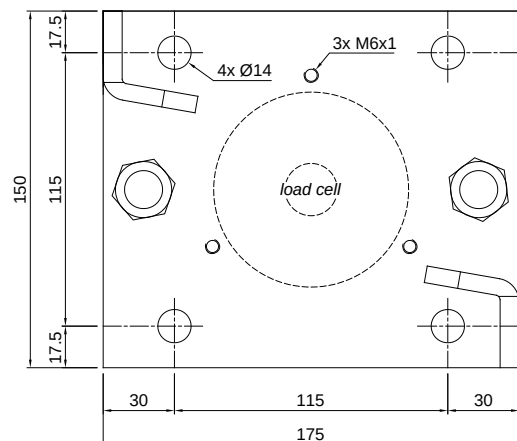


- [1]** Load cell.
- [2]** AISI 304 stainless steel upper and lower plates.
- [3]** AISI 304 stainless steel laminas with horizontal constrainer function.
- [4]** Threaded bar.
- [5]** Nut to be used as jack.
- [6]** Anti-tilt self-locking nut.
- [7]** M6 bolts to fix the load cell.

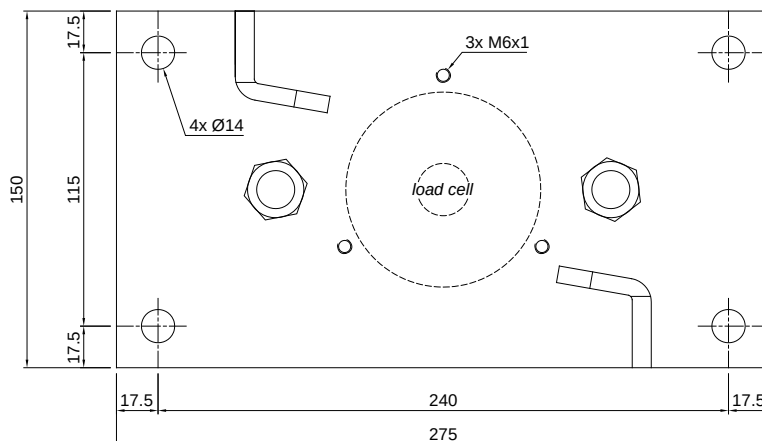
Upper plate



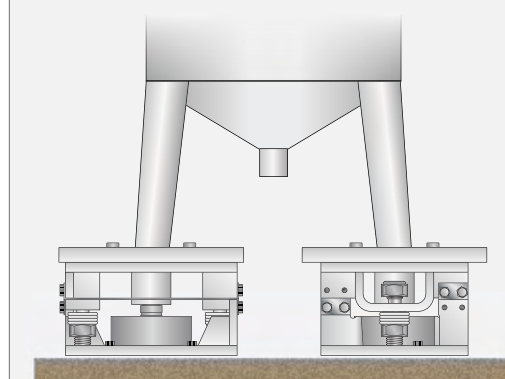
Lower plate



V10275 - Lower plate



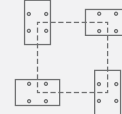
Example of weighing structures subject to knocks or wind effect



STRUCTURE WITH 3-POINTS SUPPORT



STRUCTURE WITH 4-POINTS SUPPORT



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

V15000-V30000-V100000

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

Series load cells: **CBL - CBX**

Application range from 15000 to 100000 kg



MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (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) - CBX (100000 kg)*	33.5	V100000

Load cell not included.

DESCRIPTION

- AISI 304 stainless steel upper and lower plates.
- AISI 304 stainless steel laminas against lateral forces.
- Anti-tilt system consists of two threaded bars with self-locking nut.

COMPLEMENTARY ACCESSORIES



DESCRIPTION	CODE
* AISI 304 stainless steel adapter for CBX load cells:	
- V15000 Ø110x6 mm	ADAT100CBX15T
- V30000 Ø126x9 mm	ADAT126CBX30T
- V100000 Ø165x29 mm	ADAT165CBX50T

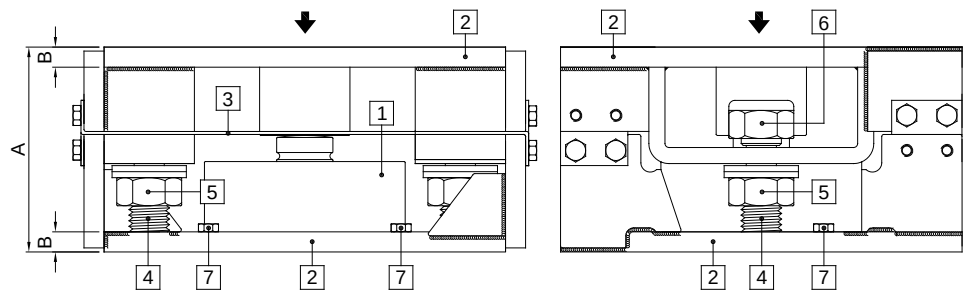
V15000-V30000-V100000

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

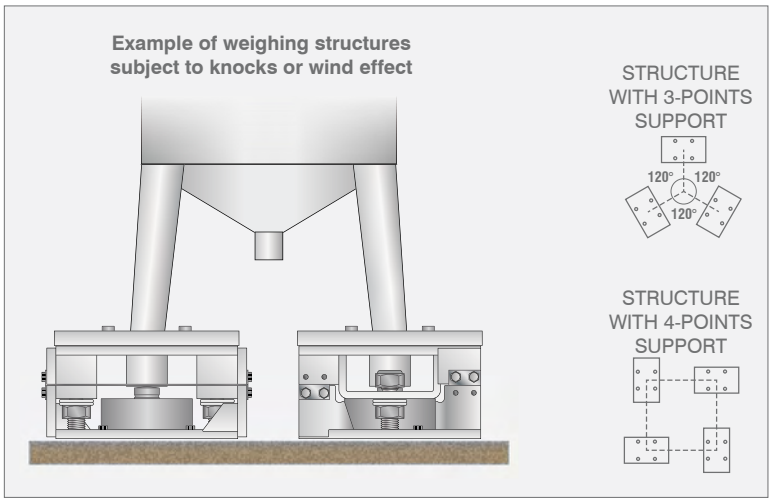
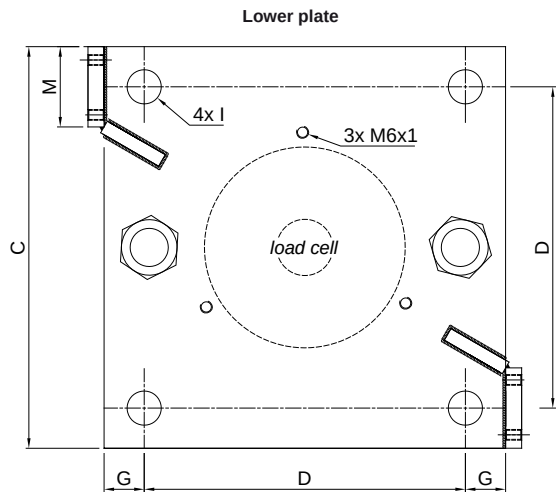
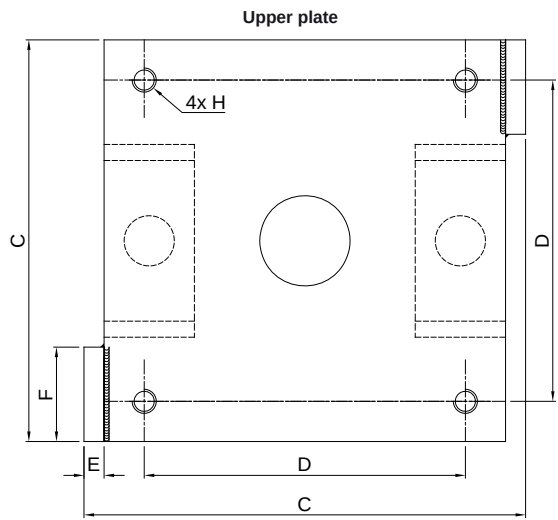
DIMENSIONS AND TECHNICAL SPECIFICATIONS

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**; erify that the threaded bar **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** AISI 304 stainless steel upper and lower plates.
- 3** AISI 304 stainless steel laminas with horizontal constraider function.
- 4** Threaded bar.
- 5** Nut to be used as jack.
- 6** Anti-tilt self-locking nut.
- 7** M6 bolts to fix the load cell.



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

Dimensions (mm)

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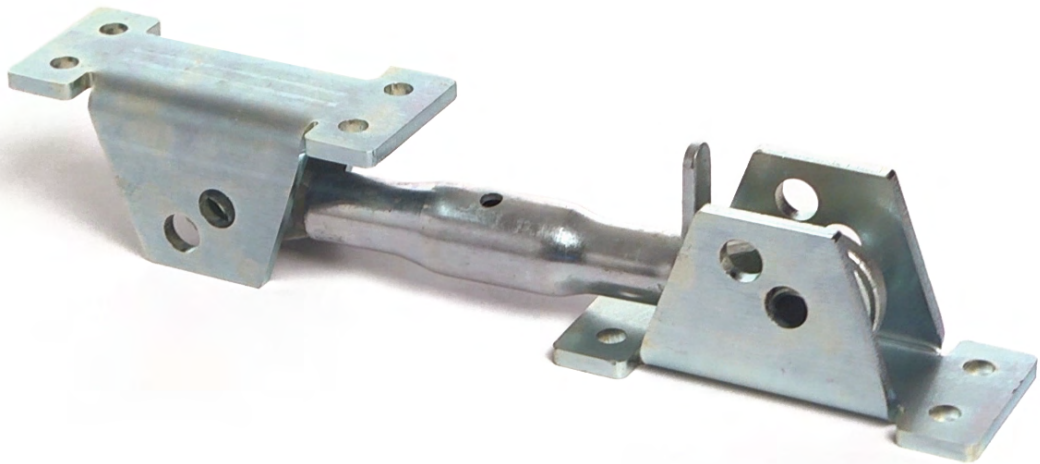
		APPLICATION RANGE	FOR LOAD CELLS	PAGE
	A3.1	Horizontal restraints for mounting kits		
	TENDITORE300 PTEND	$15000 \leq x \leq 100000$ kg	-	177
	A3.2	Self-centring joint feet		
	PIEDINOSB2	$x \leq 5000$ kg	-	179
	A3.3	Adjustable upper plate for self-centring joint foot.		
	PPV PPV80	$x \leq 5000$ kg	-	181
	A3.4	Accessory with ball to compensate for misalignment of the support plates		
	ACCSFER	$300 \leq x \leq 5000$ kg	FTL, FTK, FT-P, FTKL, FTZ, FTP, CLS	182
	A3.5	Compression joint		
	ANTIV	$500 \leq x \leq 2000$ kg	FCOL, FCK, FTKL, FTL, FCAL, FCAX, FTP, FT-P, FTK, FTZ, CLS	183
	A3.6	Spherical plain thrust bearings		
	SNODOGE	$500 \leq x \leq 2000$ kg	FTL, FTK, FT-P, FTKL, FTZ, FTP, CLS	184
	A3.7	Level measurements - false cells		
	ML	$5 \leq x \leq 100000$ kg	-	185

Notes section with horizontal lines for writing.

TENDITORE300 - PTEND

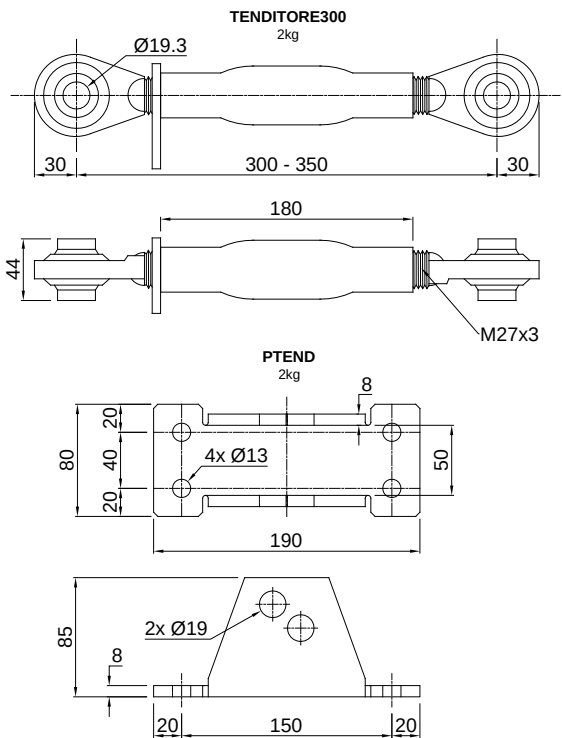
Horizontal restraints for mounting kits

Application range from 15000 to 100000 kg



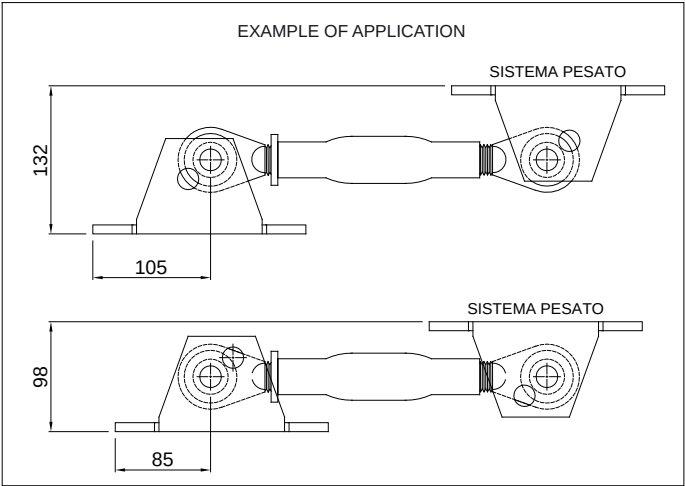
DESCRIPTION	CODE
Galvanized steel stay rod with dual ball-and-socket. Net weight: - kg Working load: 2500 kg Carico di rottura: 10000 kg	TENDITORE300
Galvanized steel anchor plate for TENDITORE300 Net weight: 1.5 kg	PTEND

DIMENSIONS



DESCRIPTION

- Suitable for static applications; place the constraints in a horizontal position.
- Stay rod lock for adjustment restraint.



TENDITORE300 - PTEND

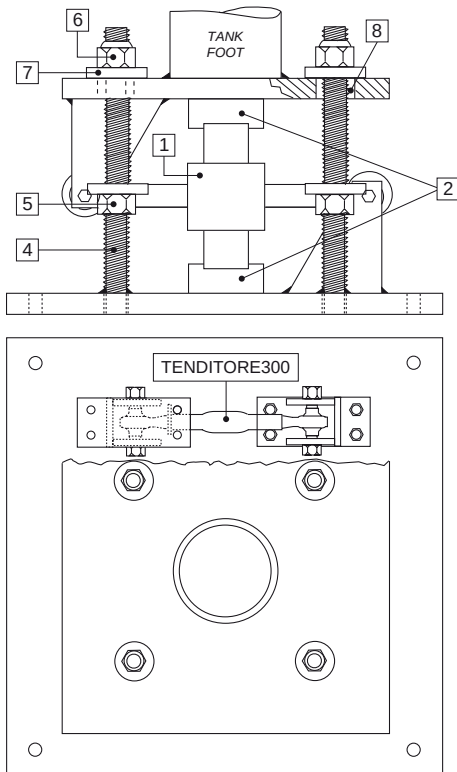
Horizontal restraints for mounting kits

APPLICATION EXAMPLE: HOW TO MAKE MOUNTING KITS WITH HORIZONTAL RESTRAINTS

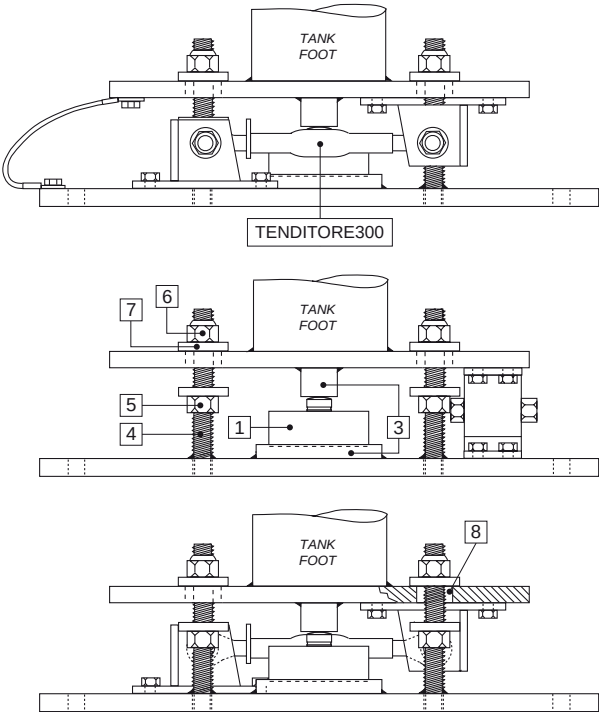
By a copper wire, connect the upper supporting plate with the lower supporting plate, then link together the lower plates to the earthing system.

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

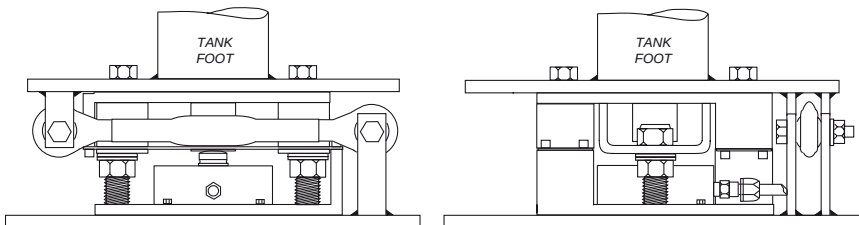


Application example with compression load cells

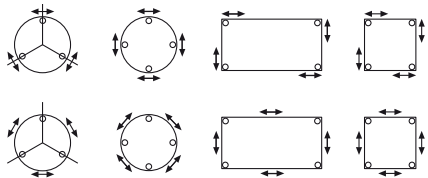


- 1 Load cell.
- 2 Mounting kit for column load cell.
- 3 AISI 304 stainless steel upper and lower bases.
- 4 Threaded bar.
- 5 Nut to be used as jack.
- 6 Anti-tilt self-locking nut.
- 7 Washer.
- 8 Hole diameter 20 mm larger than the bolt.

Application example with V15000 - V30000 - V100000 mounting kits

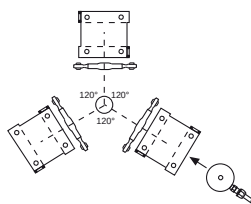


HORIZONTAL RESTRAINTS PLACEMENT ON 3/4 SUPPORTS: The restraining elements can be positioned both on supports and on the four sides, centrally between two supports.

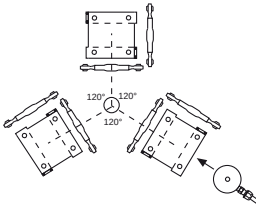


STRUCTURE WITH 3-POINTS SUPPORT

1 RESTRAINT FOR SUPPORT

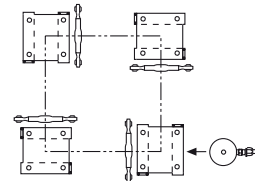


2 RESTRAINTS FOR SUPPORT

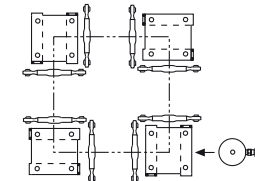


STRUCTURE WITH 4-POINTS SUPPORT

1 RESTRAINT FOR SUPPORT



2 RESTRAINTS FOR SUPPORT



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PIEDINOSB2

Self-centring joint feet

For BENDING BEAM and SHEAR BEAM load cells

Up to 5000 kg application range

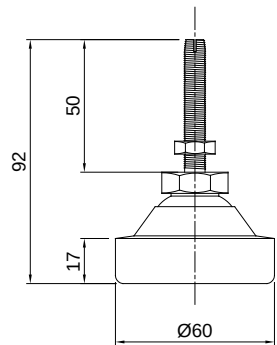


MAX STATIC LOAD	kg	DIMENSIONS	MATERIAL	NET WEIGHT JOINT FOOT (kg)	CODE
500		M8x1.25	stainless steel	0.3	PIEDINOSB2M8
500		M10x1.5		0.3	PIEDINOSB2M10
2000		M12x1.75		0.4	PIEDINOSB2INOX
5000		M20x2.5		0.9	PIEDINOSB2M20
2000		M12x1.75	galvanized steel	0.4	PIEDINOSB2ZNC
5000		M20x2.5		-	PIEDINOSB2ZNCM20

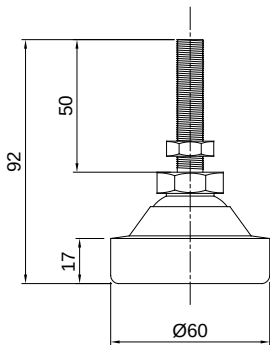
Nuts and washers included.

DIMENSIONS AND APPLICATION

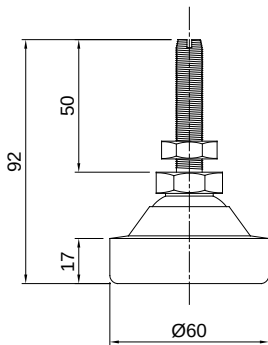
PIEDINOSB2M8
M8x1.25



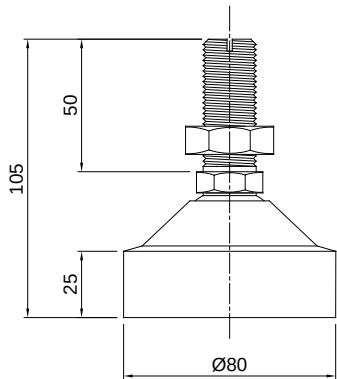
PIEDINOSB2M10
M10x1.5



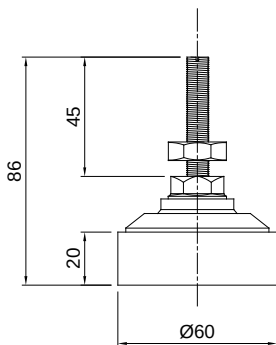
PIEDINOSB2INOX
M12x1.75



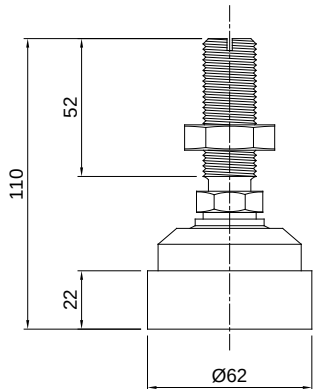
PIEDINOSB2M20
M20x2.5



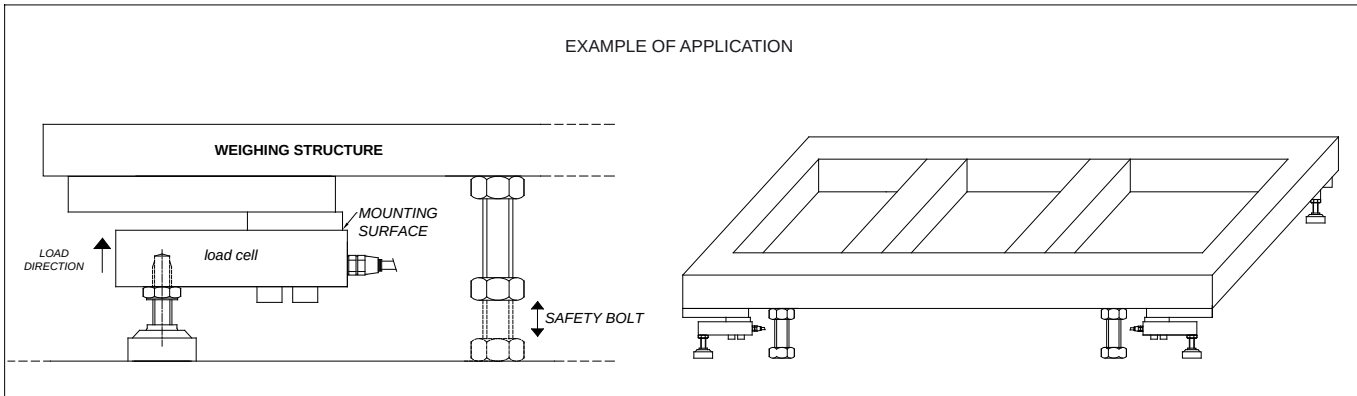
PIEDINOSB2ZNC
M12x1.75



PIEDINOSB2ZNCM20
M20x2.5



EXAMPLE OF APPLICATION



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

PPV - PPV80

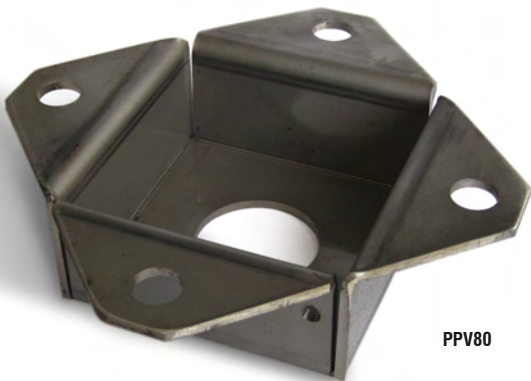
Adjustable upper plate

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

Application range from 10 to 5000 kg



PPV



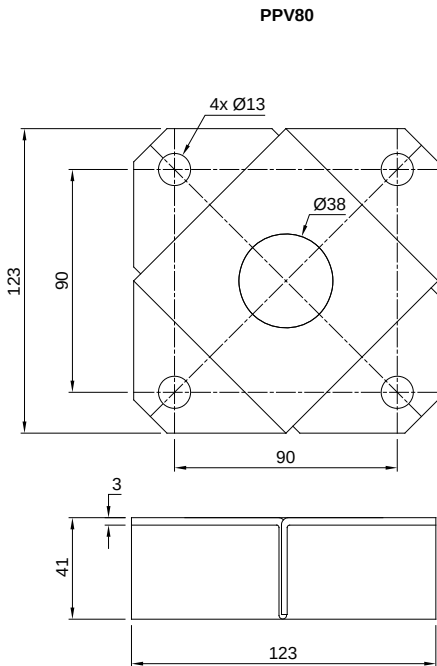
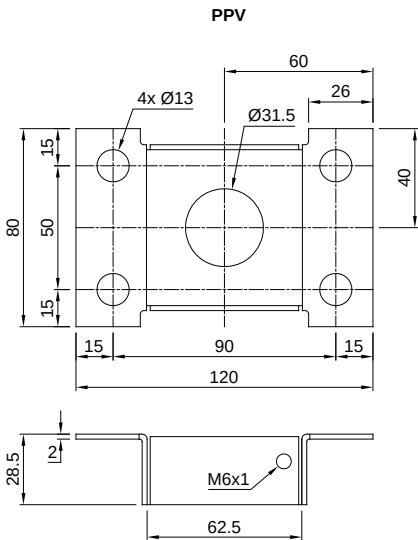
PPV80

DESCRIPTION

- AISI 304 stainless steel plates for constraint against lateral forces and anti-tilt.
- For self-centring joint foot.

MAX STATIC LOAD	kg	NET WEIGHT OF PLATE (kg)	CODE
5000		0.2	PPV
5000		0.6	PPV80

DIMENSIONS (mm)



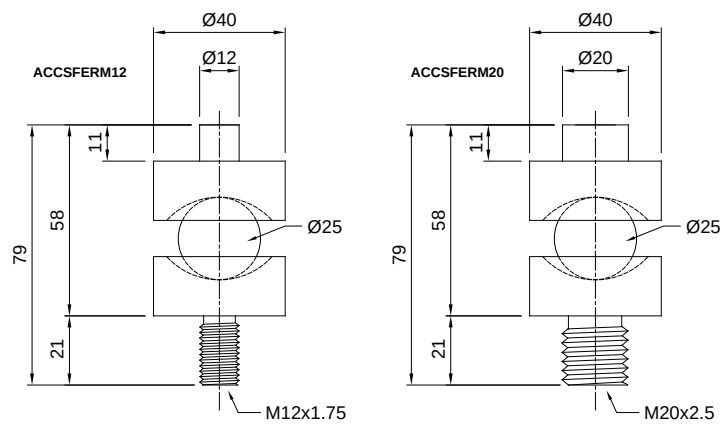
The Company reserves the right to make changes to the technical data, drawings and images without notice.

Application range from 300 to 5000 kg



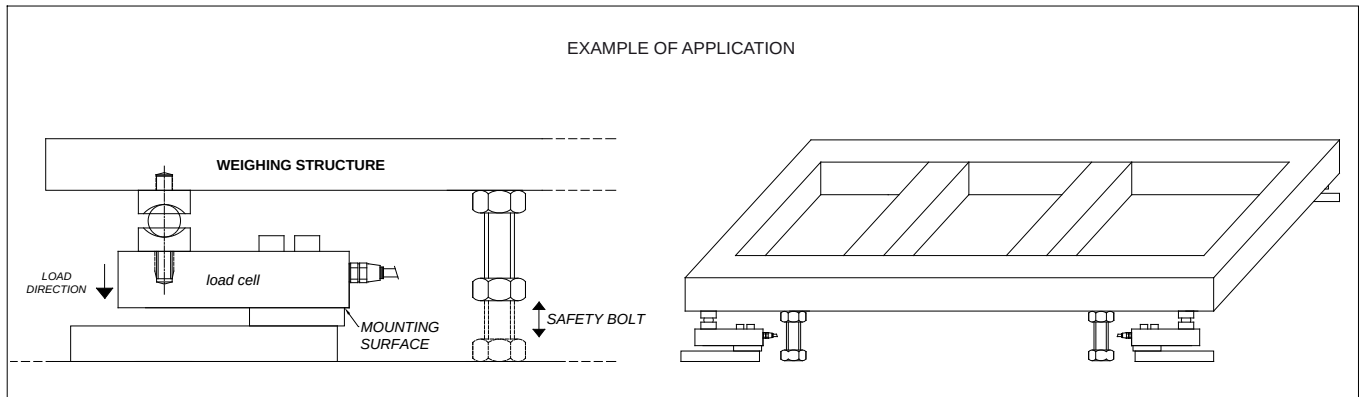
MAX STATIC LOAD kg	FOR LOAD CELLS	DIMENSIONS	NET WEIGHT OF ACCESSORY (kg)	CODE
2000	FTL - FTK - FT-P - FTKL FTZ - FTP - CLS	M12x1.75	0.3	ACCSFERM12
5000	FTK - FTKL - FTZ (5000 kg) FTP (3000-5000 kg) - CLS (5000 kg)	M20x2.5	0.4	ACCSFERM20

DIMENSIONS AND APPLICATION



DESCRIPTION

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



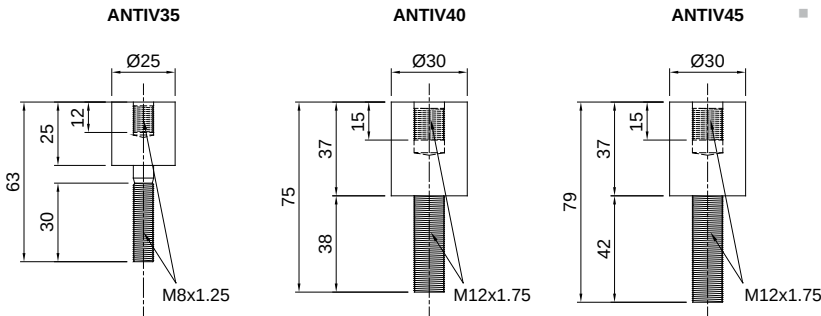
The Company reserves the right to make changes to the technical data, drawings and images without notice.

Application range from 500 to 2000 kg



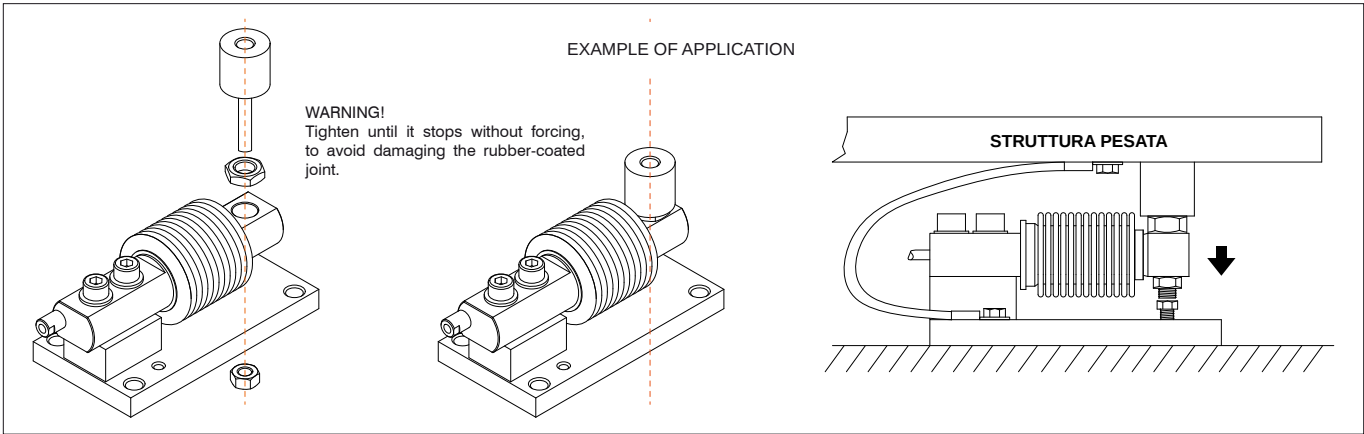
MAX STATIC LOAD kg	FOR LOAD CELLS	DIMENSIONS	NET WEIGHT OF ACCESSORY (kg)	CODE
500	FCOL - FCK	M8x1.25	-	ANTIV35
2000	FTKL - FTL - FCAL - FCAX - FTP FT-P - FTK- FTZ - CLS	M12x1.75	-	ANTIV40
2000	FCAL - FCAX	M12x1.75	-	ANTIV45

DIMENSIONS AND APPLICATION



DESCRIPTION

- Stainless steel and rubber compression joints to compensate for misalignment of the support plates.



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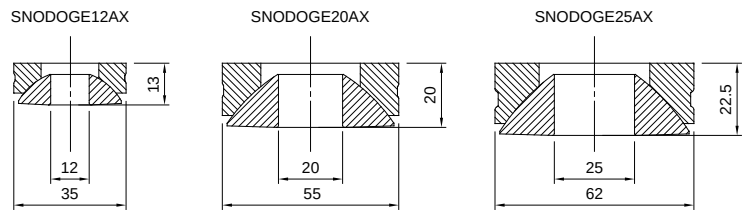
Series load cells: FTL - FTK - FT-P - FTKL - FTZ - FTP - CLS

Application range from 5000 to 10000 kg



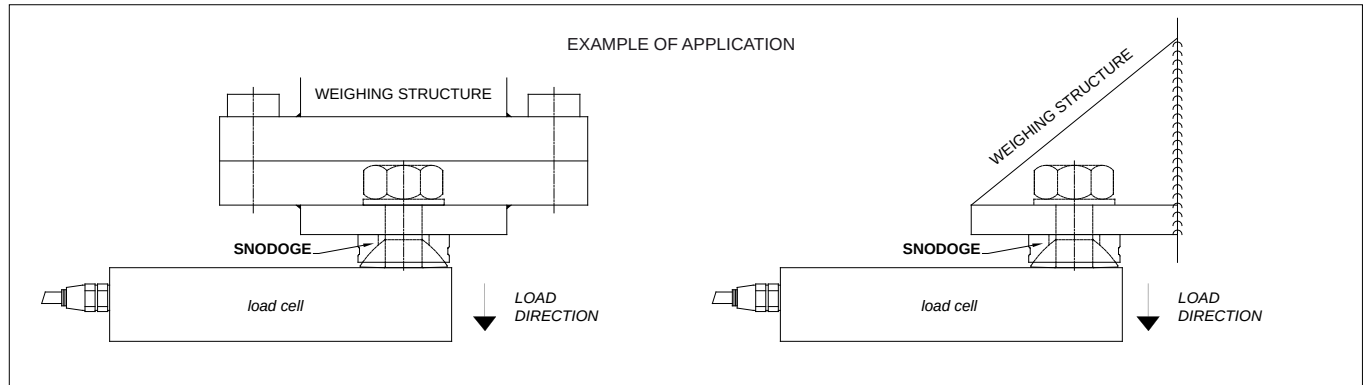
MAX STATIC LOAD kg	DESCRIPTION	NET WEIGHT (kg)	CODE
5000	Spherical plain bearings	0.07	SNODOGE12AX
5000	Kit composed by spherical bearing (cod.SNODOGE20AX), galvanized bolt (20x80 mm) and washer (22x60 mm).	0.3	SNODOGE20AXKIT
10000	Kit composed by spherical bearing (cod. SNODOGE25AX), galvanized bolt (24x100 mm) and washer (26x72 mm).	0.9	SNODOGE25AXKIT

DIMENSIONS AND APPLICATION



DESCRIPTION

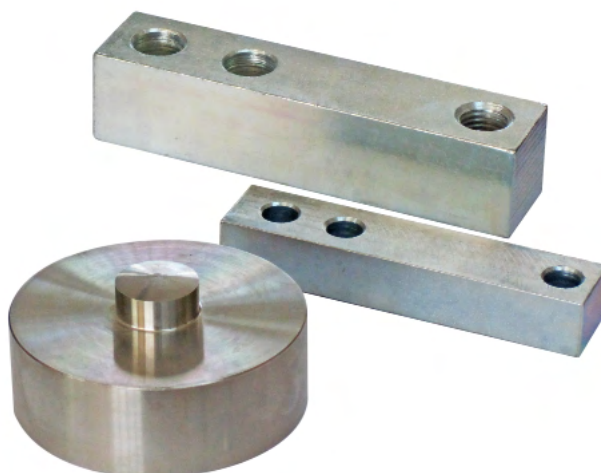
- Carbon steel spherical plain bearings to compensate for misalignment of the support plates.



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Application range from 5 to 100000 kg



CAPACITY	kg	EQUIVALENT TO LOAD CELLS	MATERIAL	NET WEIGHT OF FALSE CELL (kg)	CODE
BENDING BEAM					
200		FCK (5-10 kg) - FCOL (20-200 kg)	Galvanized steel	-	FALSAFC
1500		FCAL (30-300 kg) - FCAX (30-1500 kg)	Galvanized steel	-	FALSAFCA
SHEAR BEAM					
2000		FTP (75-2000 kg) - FTL (300-2000 kg) FTK (500-2000 kg) - FTKL (500-2000 kg) FTZ (500-2000 kg)	Galvanized steel	-	FALSAFT
5000		FTP (3000-5000 kg) - FTK (3000-5000 kg) FTKL (3000-5000 kg) - FTZ (5000 kg)	Galvanized steel	-	FALSAFTI5000
COMPRESSION-LOW PROFILE					
15000		CBL (250-10000 kg) - CBX (15000 kg)	Stainless steel	-	FALSA82
30000		CBL (15000 kg) - CBX (30000 kg)	Stainless steel	-	FALSA100
50000		CBL (30000 kg) - CBX (50000 kg)	Stainless steel	-	FALSA127
100000		CBL (50000-100000 kg)	Stainless steel	-	FALSA165

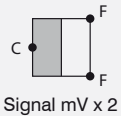
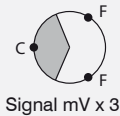
DESCRIPTION

- False cells are 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.
- Do not able to transmit any electrical signal.
- False cells can be mounted on the same mounting kits as the latter.

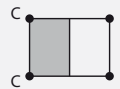
DIMENSIONS AND TECHNICAL SPECIFICATIONS

- 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).
- Assembly accessories 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-POINTS SUPPORT
1 LOAD CELL + 2 FALSE CELLS

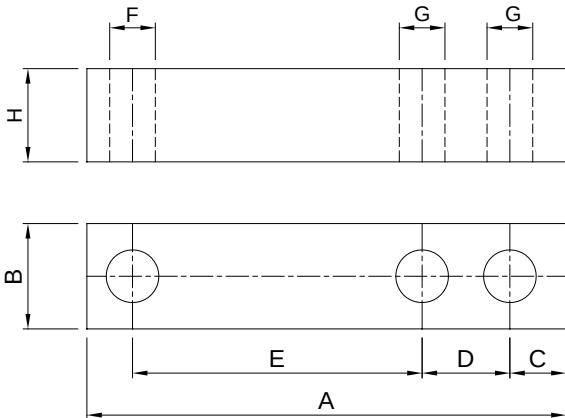


STRUCTURE WITH 4-POINTS SUPPORT
2 LOAD CELLS + 2 FALSE CELLS

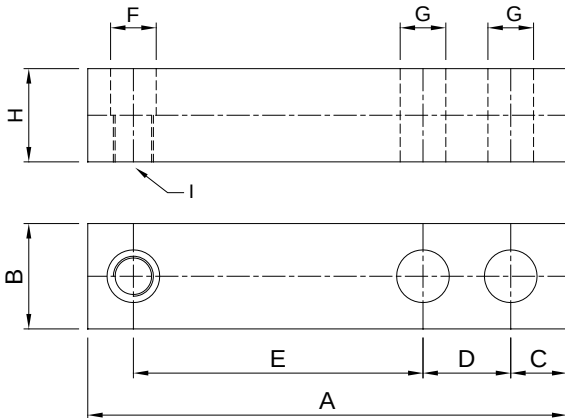


Signal mV x 2

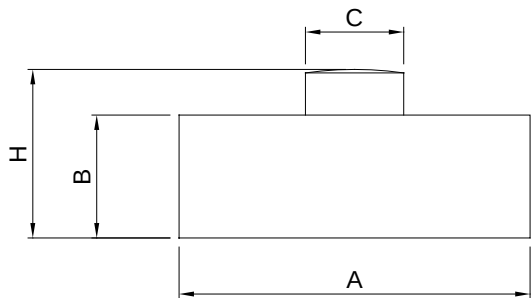
C = SUPPORT FOOT WITH LOAD CELL
F = SUPPORT FOOT WITH FALSE CELL



	FALSAFC	FALSAFCA
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

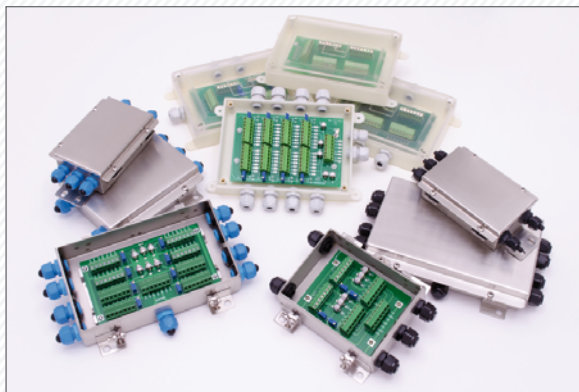


	FALSAFT	FALSAFTI5000
A	130	171.5
B	32	40
C	15	19
D	25.5	38
E	76	95
F	Ø14	Ø22
G	Ø14	Ø20
H	32	38
I	M12	M20



	FALSA82	FALSA100	FALSA127	FALSA165
A	Ø82	Ø100	Ø126	Ø165
B	32	35	40	60
C	Ø22	Ø28	Ø35	Ø60
H	44	48	54	80

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JUNCTION BOXES

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.
IP67 protection rating.
Lightning and electrical shock protection versions.
ATEX II 1GD certified versions.

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