

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

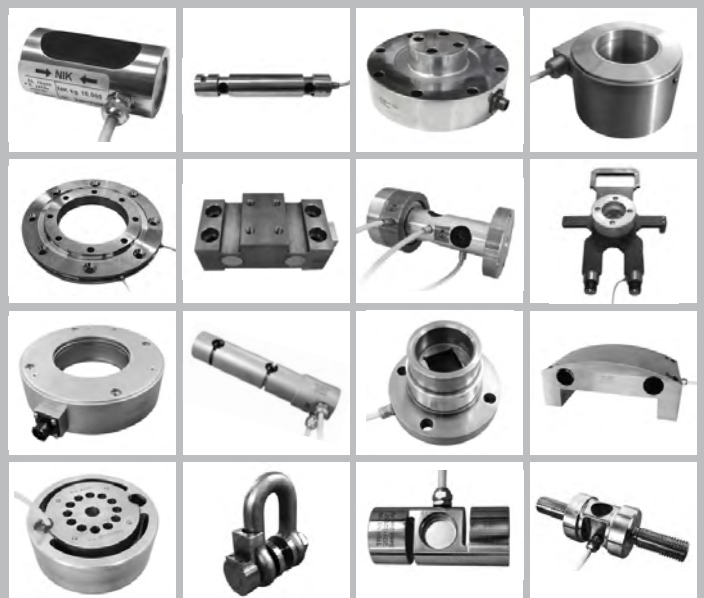


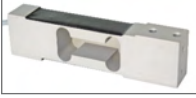
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A1 - LOAD CELLS

PRODUCT CATALOGUE

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

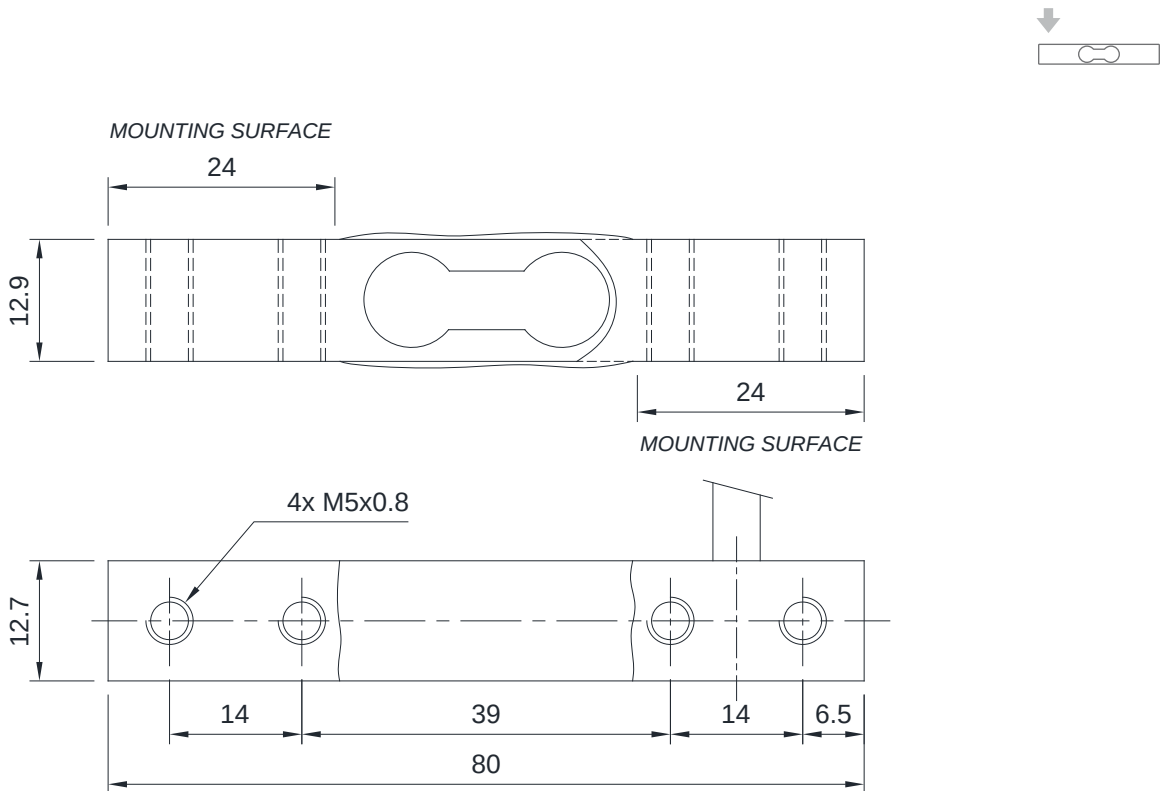
ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)

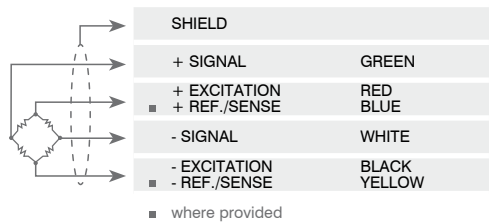


TECHNICAL FEATURES

Material	Special steel		
Nominal load (E max)	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

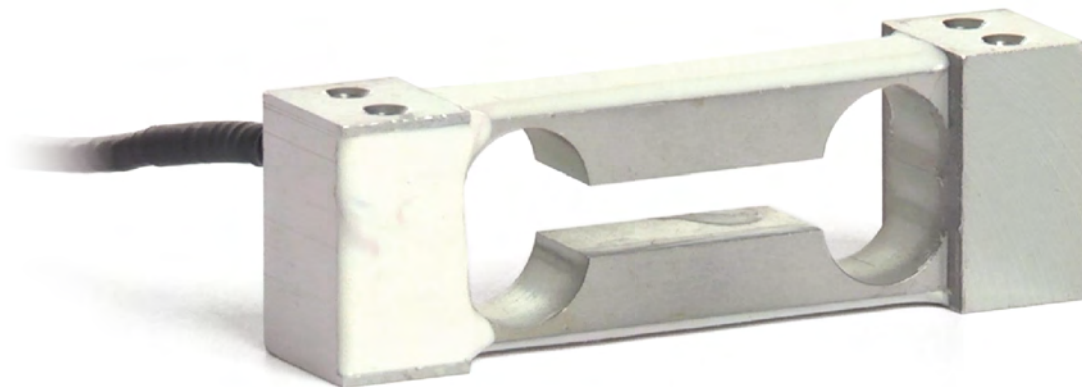


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 0.25 kg to 1 kg



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

CAPACITY	kg			EAC	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

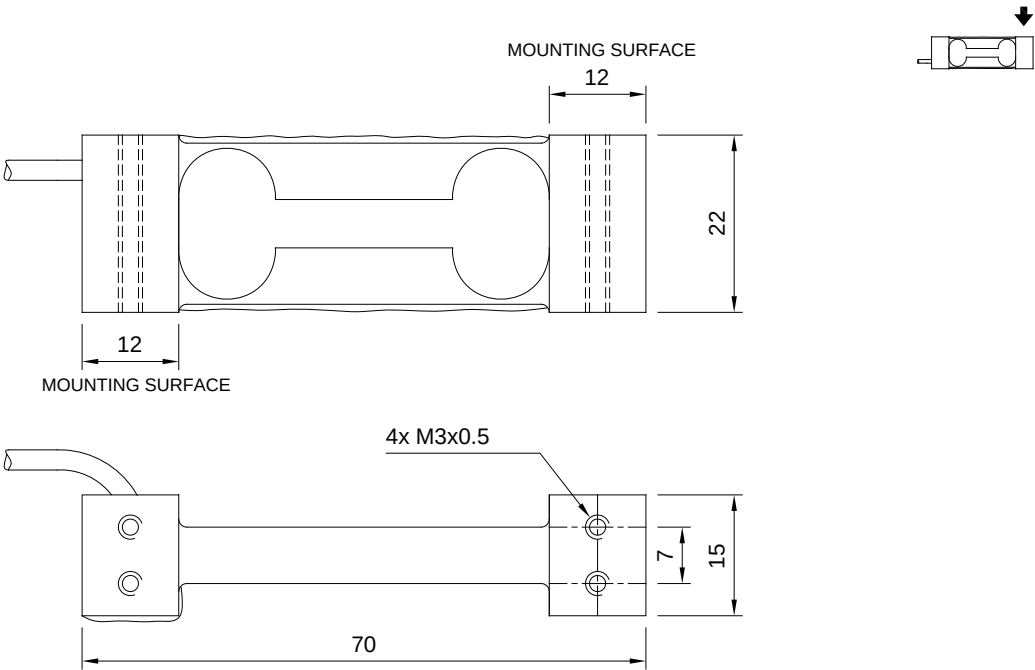
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

AS

SINGLE-POINT LOAD CELL for platforms 200x200 mm



DIMENSIONS (mm)

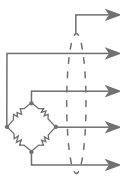


TECHNICAL FEATURES

Material	Aluminum alloy		
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



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

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ALL

SINGLE-POINT LOAD CELL for platforms 250x350 mm



Capacity from 3 kg to 50 kg



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

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

ON REQUEST

CERTIFICATIONS

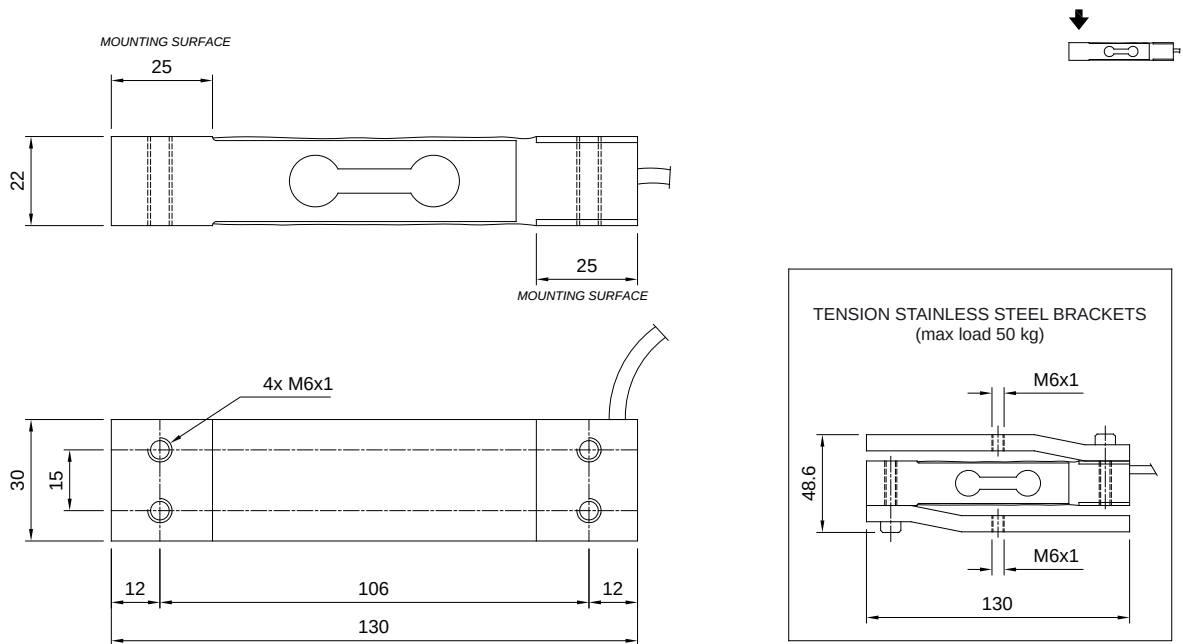
	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	OIML R60 C4/C5
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Aluminum alloy		
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000	C5 • 5000
Nominal load (E max)	3 - 5 - 10 - 15 - 20 - 30 - 50 kg		
Minimum verification interval (V min)	E max / 10000	E max / 15000	E max / 20000
Combined error	≤ ±0.02%	≤ ±0.017%	≤ ±0.014%
Protection 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 mm ²

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 6 kg to 50 kg



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

CAPACITY	kg	IECEx	Ex	EAC	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)

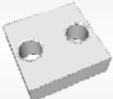


IECEx (zone 0-1-2-20-21-22)



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

COMPLEMENTARY ACCESSORIES

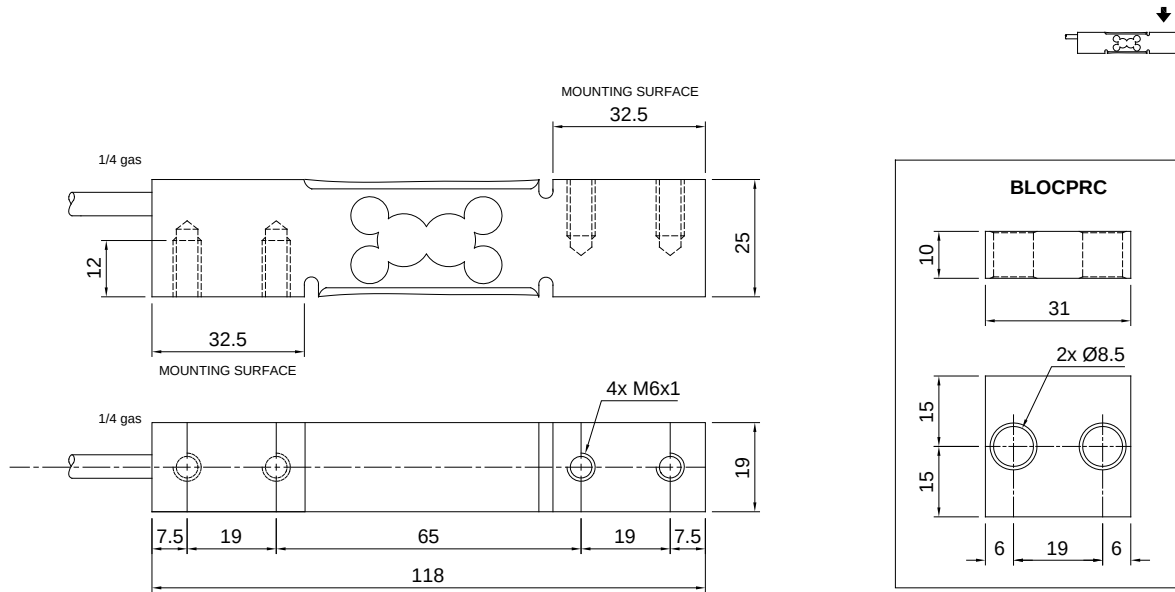
	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPRC

PRC

SINGLE-POINT LOAD CELL for platforms 350x350 mm



DIMENSIONS (mm)

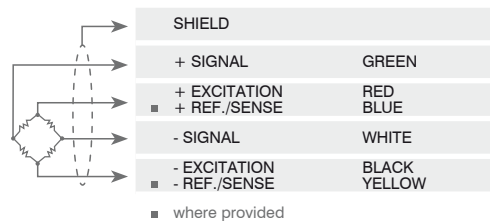


TECHNICAL FEATURES

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

ELECTRICAL CONNECTIONS

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





Manufactured according to OIML R60 standards

Capacity from 3 kg to 50 kg



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

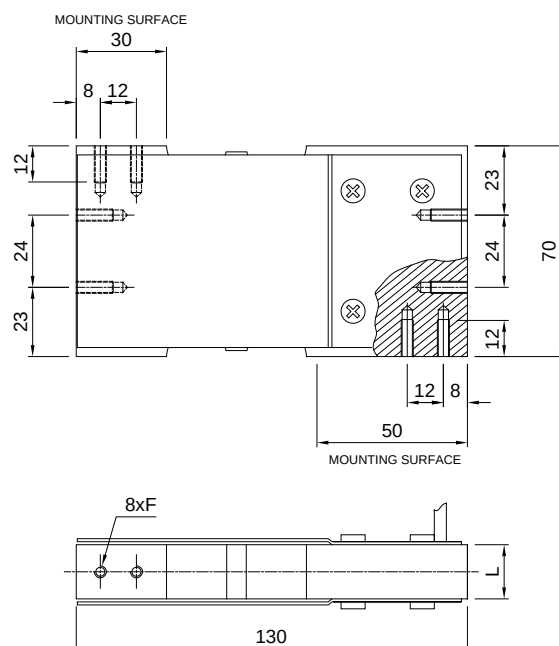
CAPACITY	kg	 	EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
3		•	•	250 x 400	0.5	AU3
6		•	•	250 x 400	0.5	AU6
15		•	•	250 x 400	0.5	AU15
30		•	•	400 x 600	0.5	AU30
50		•	•	400 x 600	0.5	AU50
ON REQUEST						

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)



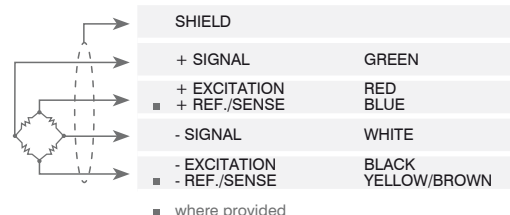
	3 - 6 - 15 kg	30 - 50 kg
L	18	30
F	M4x0.7	M6x1

TECHNICAL FEATURES

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

ELECTRICAL CONNECTIONS

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



AZL

SINGLE-POINT LOAD CELL for platforms 400x400 mm



Capacity from 10 kg to 100 kg



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

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

ON REQUEST

CERTIFICATIONS

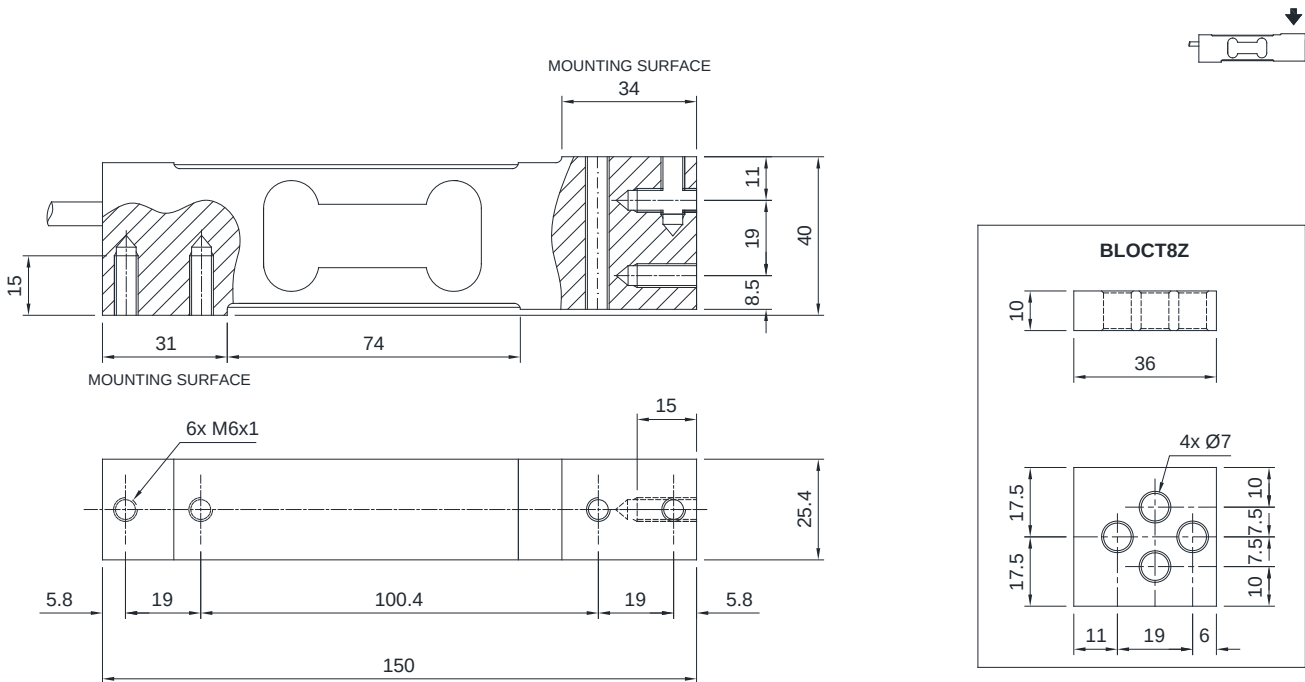
OIML	OIML R60 C3
CERTIFICATIONS ON REQUEST	
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (zone 0-1-2-20-21-22)
OIML	OIML R60 C4
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Galvanized steel drawn block.	BLOCT8Z

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



TECHNICAL FEATURES

Material		Aluminum alloy	
OIML R60 Accuracy class • Verification intervals		C3 • 3000	C4 • 4000
Nominal load (E max)		10 - 15 - 20 - 30 - 50 - 100 kg	15 - 20 - 30 - 50 kg
Minimum verification interval (V min)		E max / 12000	E max / 15000
Combined error		≤ ±0.02%	≤ ±0.017%
Protection 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 mm ²

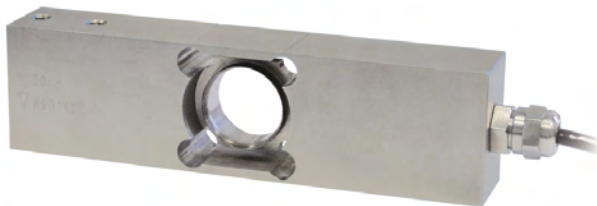
SHIELD	
+ SIGNAL	GREEN
+ EXCITATION + REF./SENSE	RED BLUE
- SIGNAL	WHITE
- EXCITATION - REF./SENSE	BLACK BROWN



Capacity from 10 kg to 50 kg

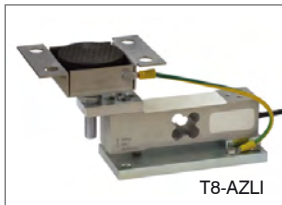


Capacity from 100 kg to 500 kg



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

MOUNTING KITS



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

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

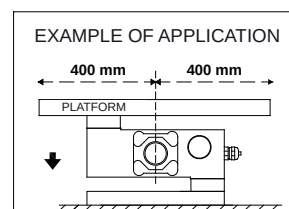
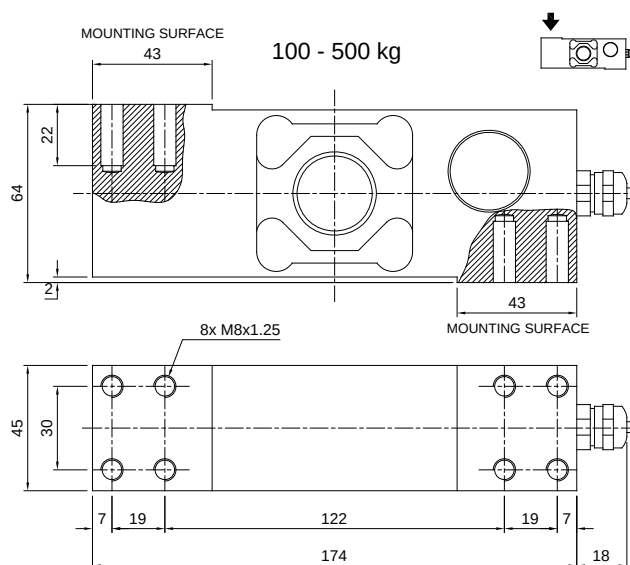
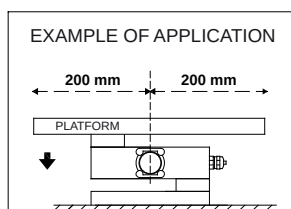
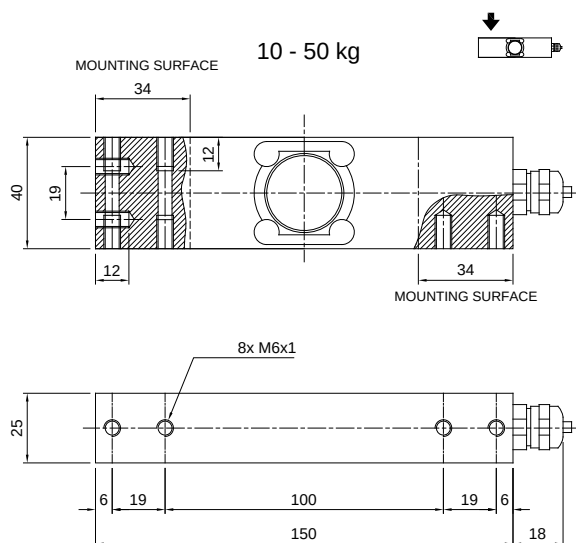


OIML R60 C4



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

DIMENSIONS (mm)



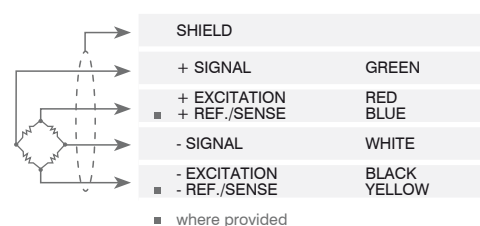
TECHNICAL FEATURES

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 mm²



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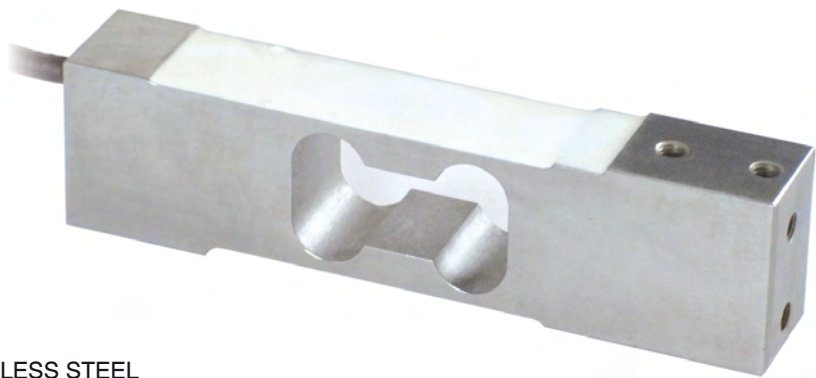
AZS

SINGLE-POINT LOAD CELL for platforms 400x400 mm

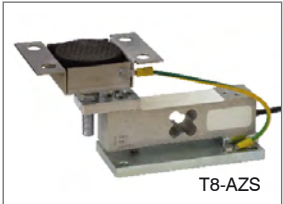


Manufactured according to OIML R60 standards

Capacity from 10 kg to 200 kg



MOUNTING KITS



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

CAPACITY	kg	IECEx	Ex	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

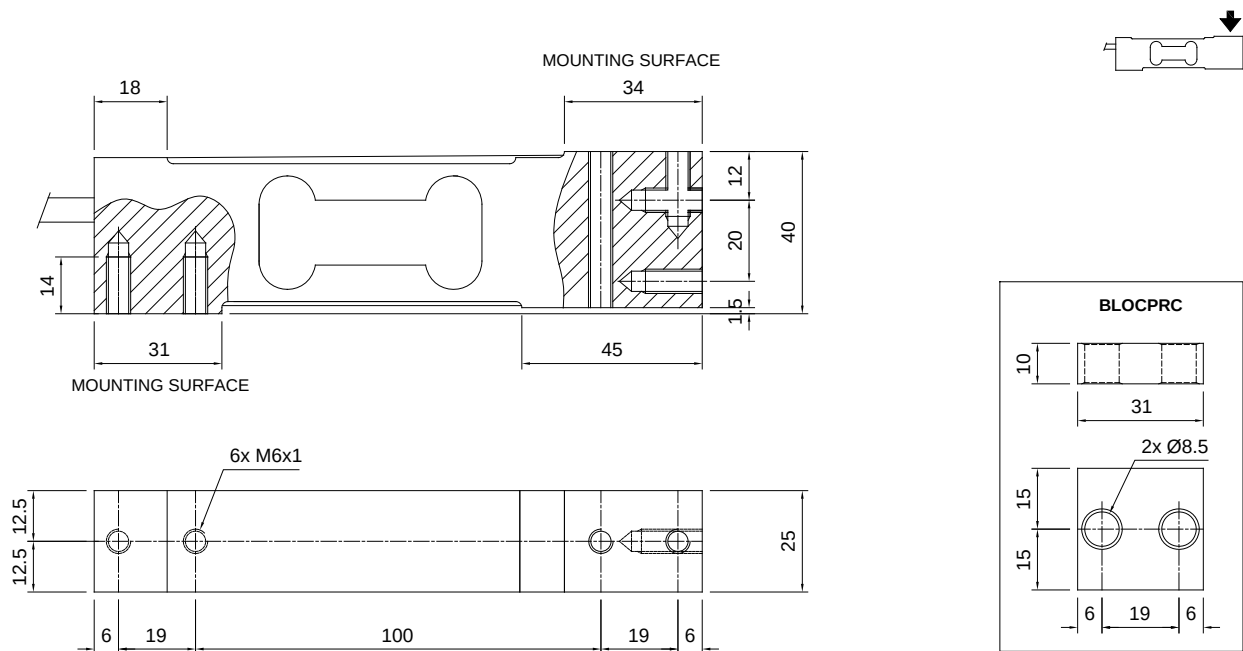
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel drawn block.	BLOCPRC

Rev. 00 del 12/03/2015

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

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

■ where provided

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

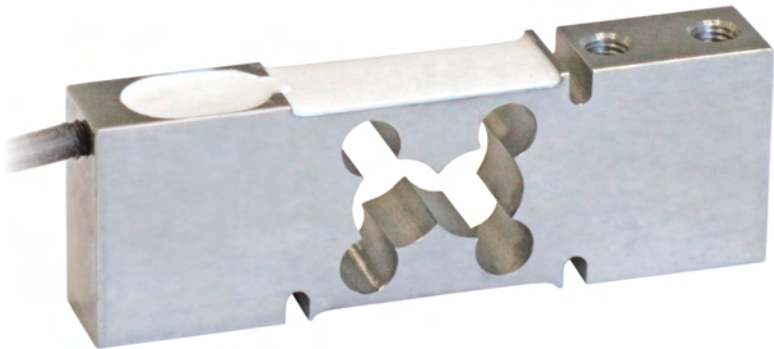
PTC

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

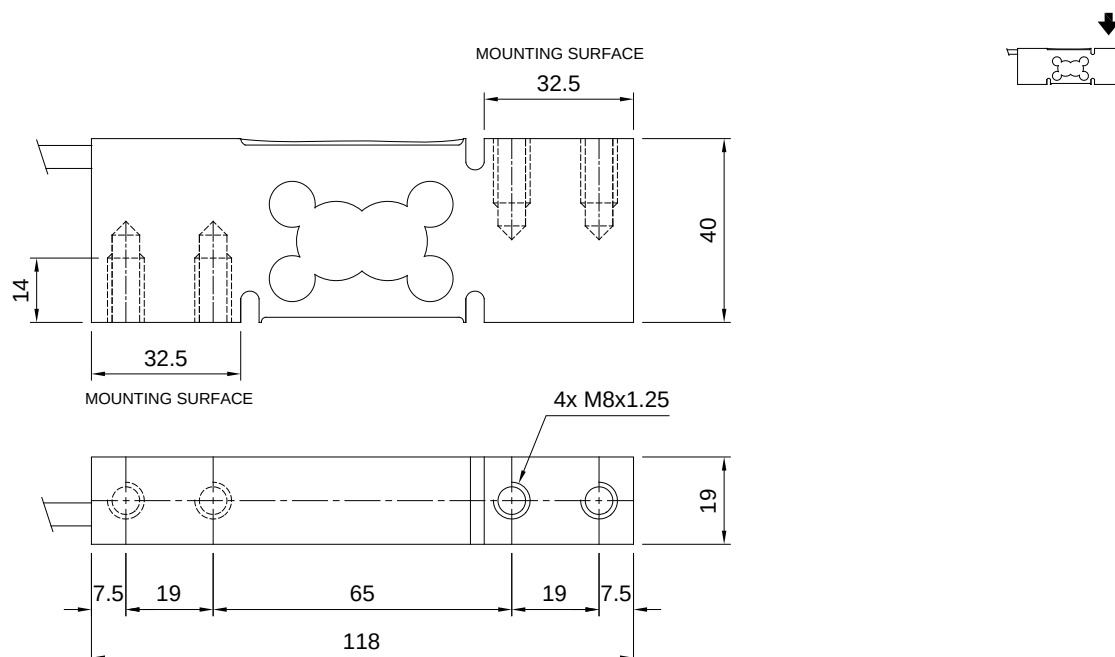
ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)

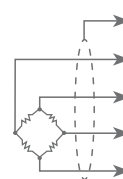


TECHNICAL FEATURES

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

ELECTRICAL CONNECTIONS

Cable lenght	3 m
Cable diameter	4 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



T8-AM

- ## CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

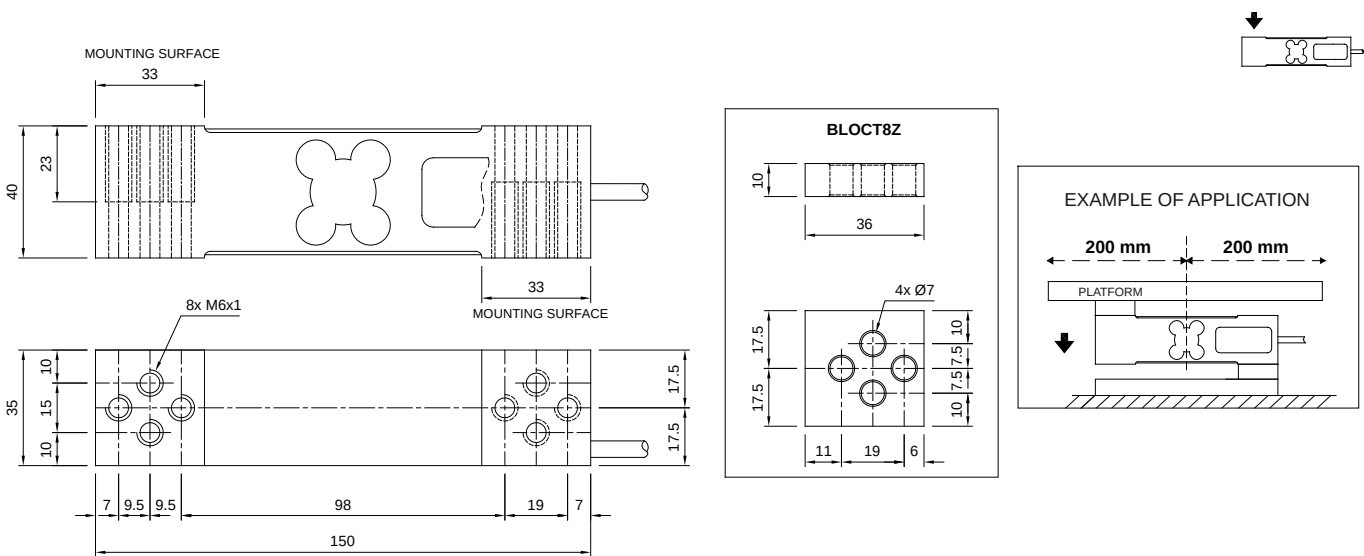
www.laumas.com

AM

SINGLE-POINT LOAD CELL for platforms 400x400 mm



DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Aluminum alloy		
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%	≤ ±0.014%
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 lenght	3 m		SHIELD	
Cable diameter	5 mm		+ SIGNAL	GREEN
Cores	4 x 0.20 mm²		+ EXCITATION	RED
			- SIGNAL	WHITE
			- EXCITATION	BLACK

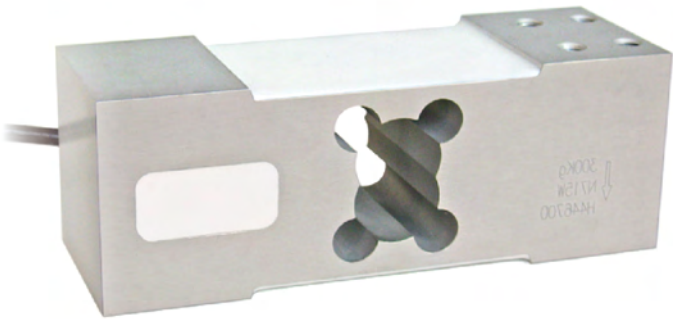
The Company reserves the right to make changes to the technical data, drawings and images without notice.

APL

SINGLE-POINT LOAD CELL for platforms 600x600 mm



Capacity from 50 kg to 500 kg



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

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

ON REQUEST

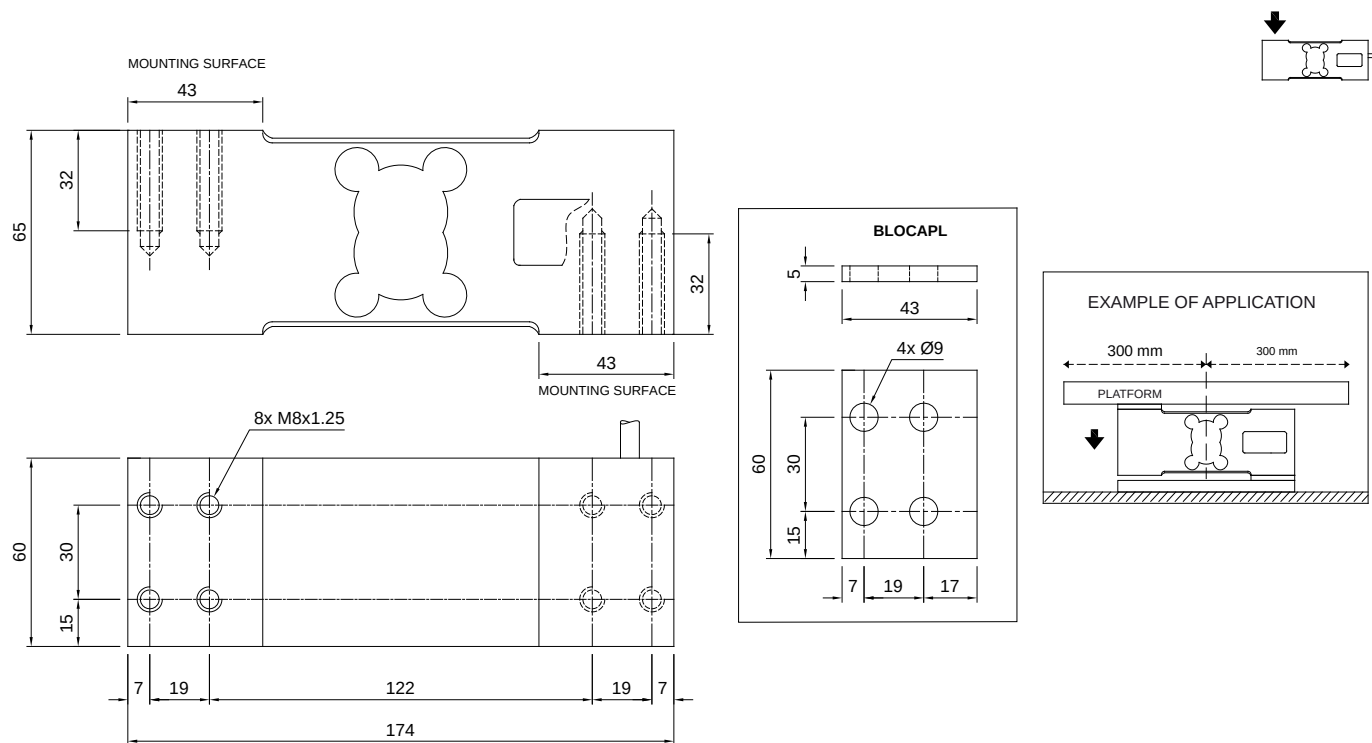
CERTIFICATIONS

OIML	OIML R60 C3
CERTIFICATIONS ON REQUEST	
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (zone 0-1-2-20-21-22)
OIML	OIML R60 C4
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Stainless steel and rubber waterproof kit.	IP68APLPRE
	Stainless steel drawn block.	BLOCAPL

DIMENSIONS (mm)

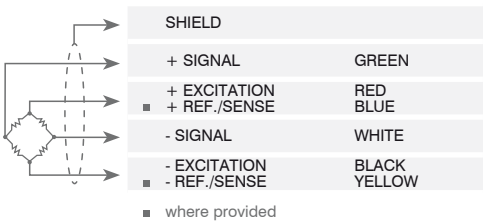


TECHNICAL FEATURES

Material		Aluminum alloy	
OIML R60 Accuracy class • Verification intervals		C3 • 3000	C4 • 4000
Nominal load (E max)		50 - 100 - 150 - 200 - 300 - 500 kg	150 - 200 - 300 - 500 kg
Minimum verification interval (V min)		E max / 12000	E max / 15000
Combined error		≤ ±0.02%	≤ ±0.017%
Protection 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

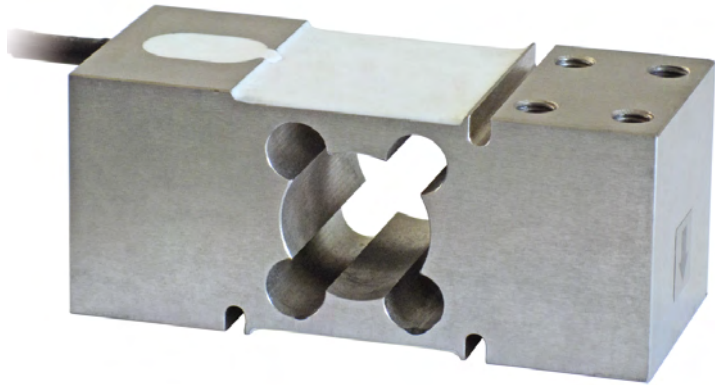


The Company reserves the right to make changes to the technical data, drawings and images without notice.



Manufactured according to OIML R60 standards

Capacity from 75 kg to 500 kg



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

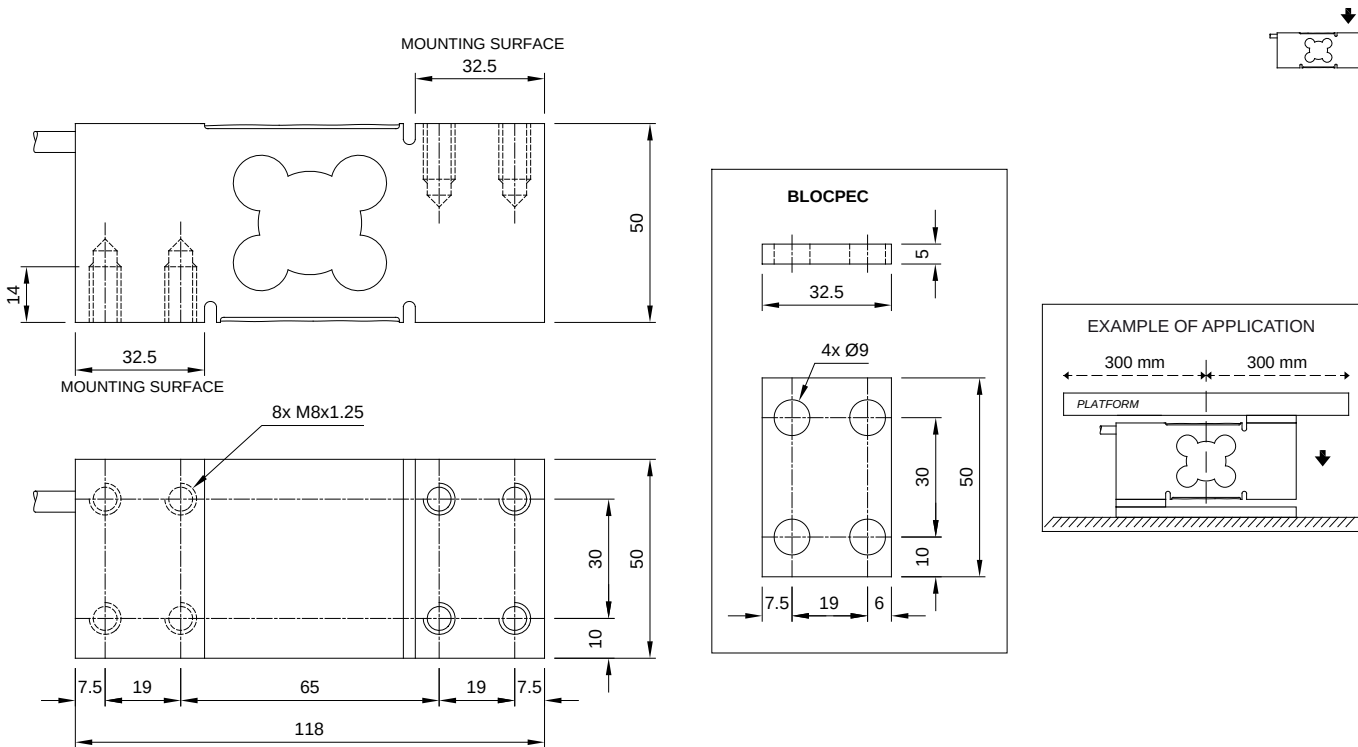
CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)

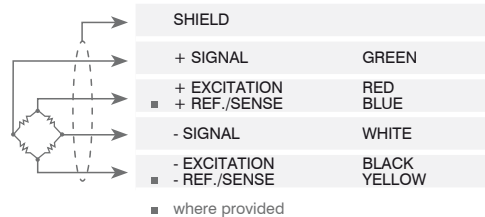


TECHNICAL FEATURES

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 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.

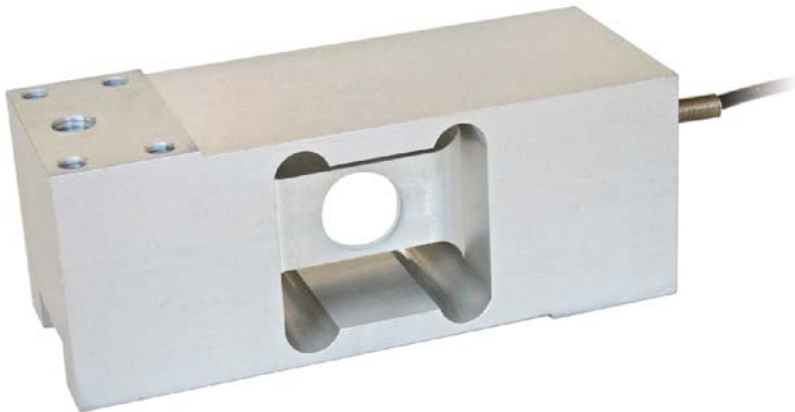
AR

SINGLE-POINT LOAD CELL for platforms 800x800 mm



Manufactured according to OIML R60 standards

Capacity from 500 kg to 1000 kg



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

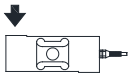
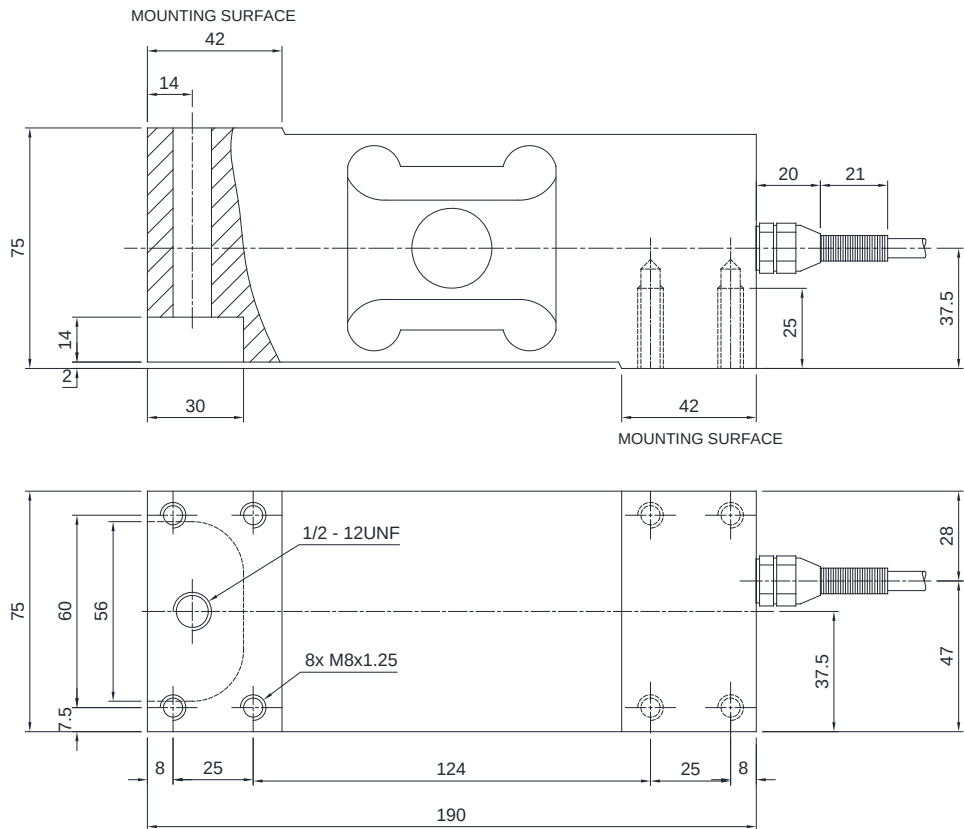
CAPACITY	kg				PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
500		•	•	•	800 x 800	2.2	AR500
1000		•	•	•	800 x 800	2.3	AR1000
ON REQUEST							

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)

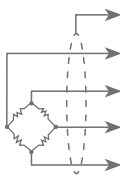


TECHNICAL FEATURES

Material	Aluminum alloy		
Nominal load (E max)	500 - 1000 kg		
Combined error	$\leq \pm 0.05\%$		
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 lenght	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/BROWN
■ where provided	

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



Capacity from 1000 kg to 2000 kg



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

CAPACITY	kg			EAC	PLATFORM DIMENSION (mm)	NET WEIGHT OF LOAD CELL (kg)	CODE
1000		•	•	•	1200 x 1200	3.8	ATL1000
2000		•	•	•	1200 x 1200	3.8	ATL2000
ON REQUEST							

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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

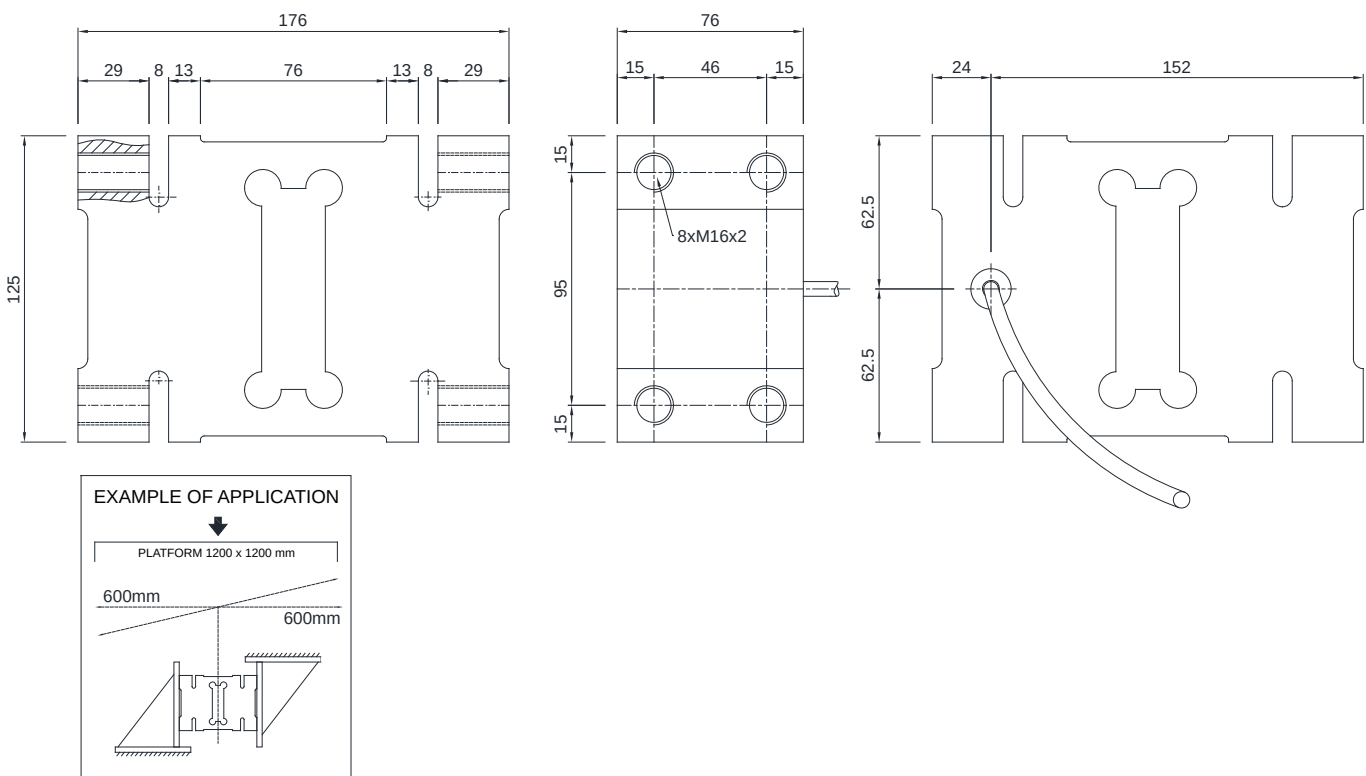


IECEx (zone 0-1-2-20-21-22)



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

DIMENSIONS (mm)



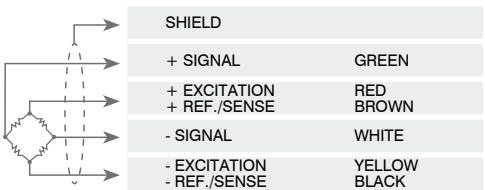
TECHNICAL FEATURES

Material	Aluminum alloy		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	1000 - 2000 kg		
Minimum verification interval (V min)	E max / 7000		
Combined error	≤ ±0.02%		
Protection 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



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

*) SHEAR / BENDING BEAM load cells

Notes section with horizontal lines for writing.



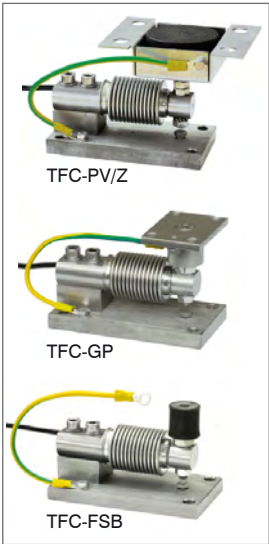
Manufactured according to OIML R60 standards

Capacity from 5 kg to 10 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR ≤ ±0.02%
- PROTECTION CLASS IP68

MOUNTING KITS



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

ON REQUEST

CERTIFICATIONS

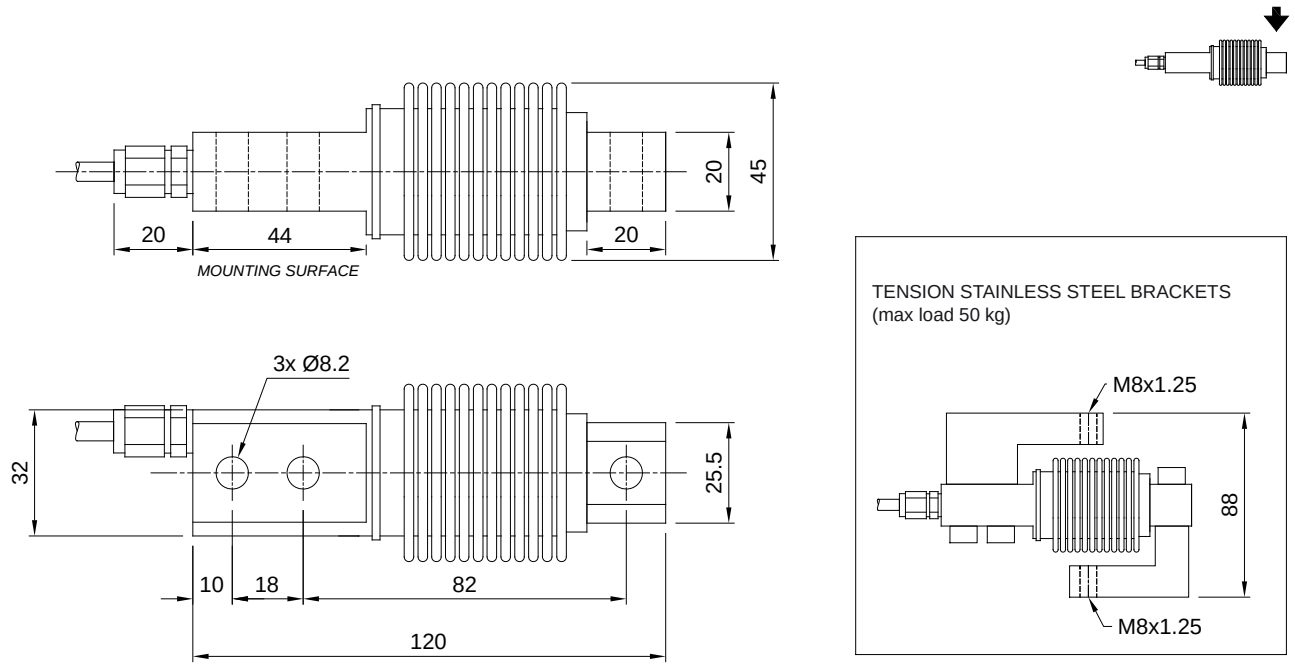
CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)

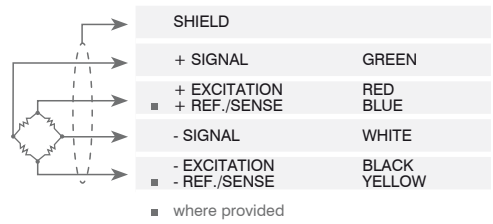


TECHNICAL FEATURES

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 lenght	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

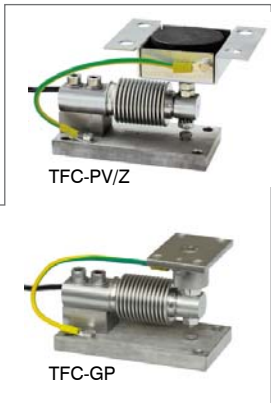


Capacity from 20 kg to 500 kg



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

MOUNTING KITS



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

ON REQUEST

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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



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



OIML R60 C4

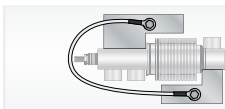


Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)



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

COMPLEMENTARY ACCESSORIES



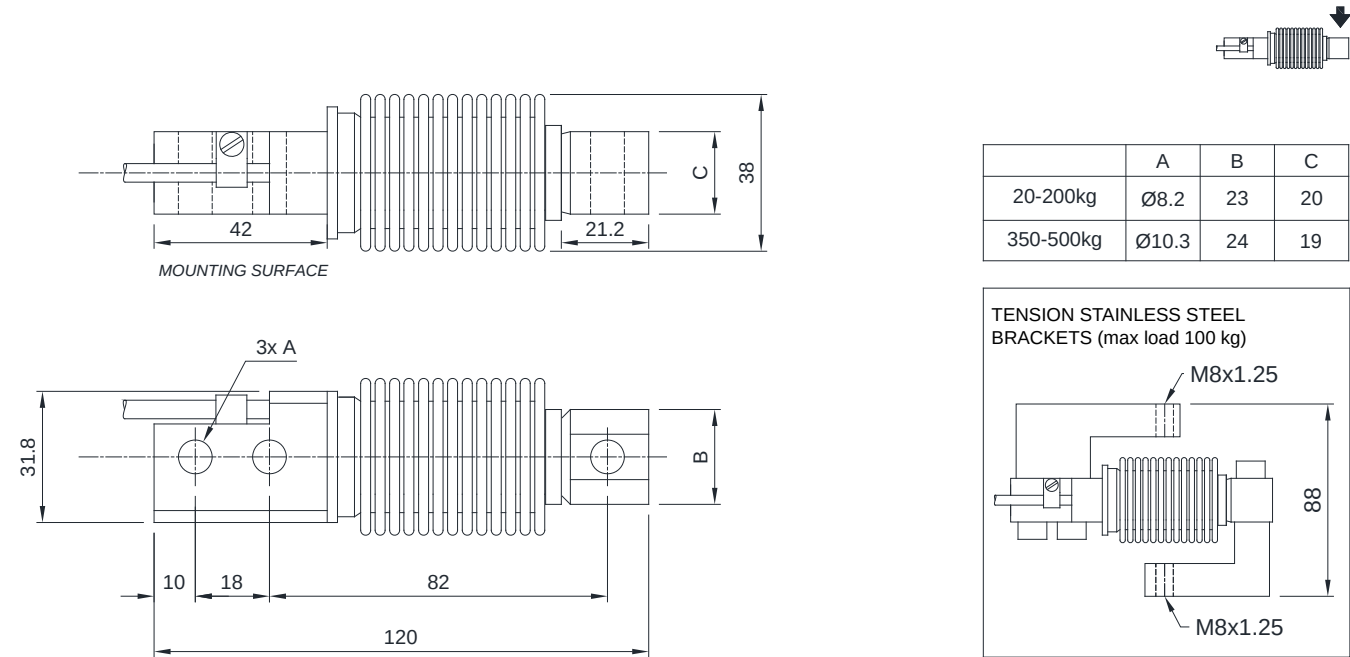
DESCRIPTION

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

CODE

STAFFEFC

DIMENSIONS (mm)



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 lenght	3 m		SHIELD
Cable diameter	5 mm		+ SIGNAL BIANCO
Cores	4/6 x 0.22 mm ²		+ 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

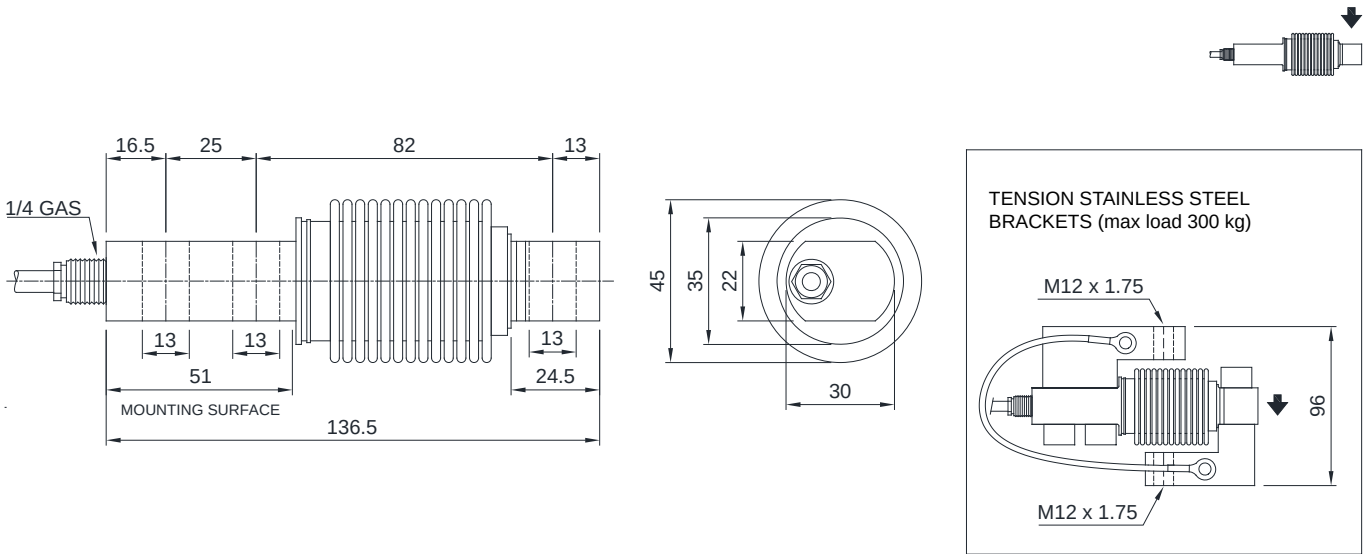
CERTIFICATIONS

CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	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)



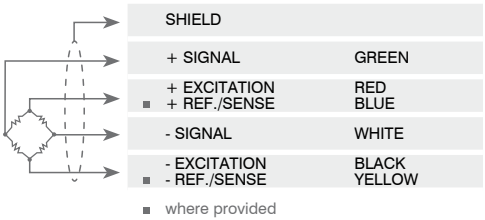
TECHNICAL FEATURES

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

* Input resistance for 30, 50, 75, 150, 300 kg capacities: 400 Ω ±20

ELECTRICAL CONNECTIONS

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

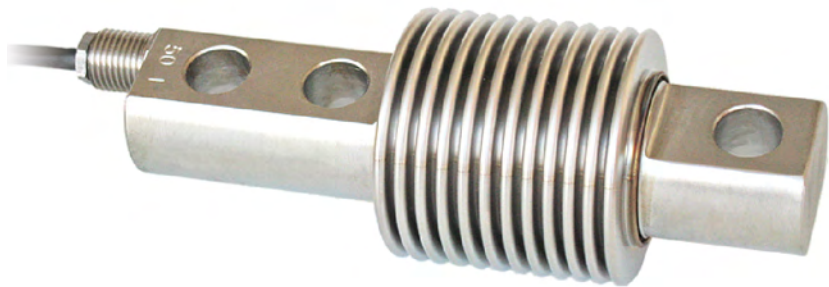


The Company reserves the right to make changes to the technical data, drawings and images without notice.

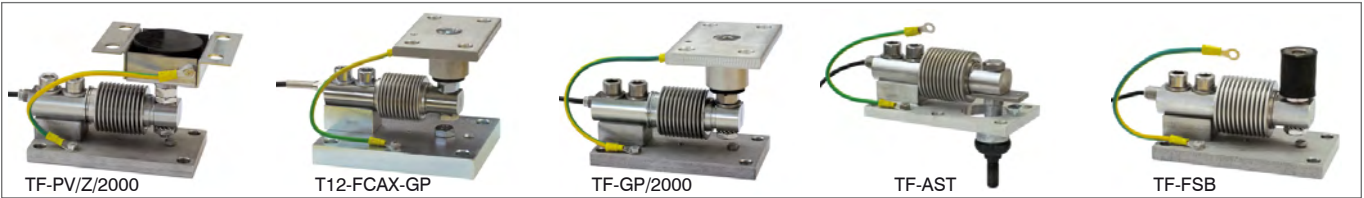


Capacity from 50 kg to 300 kg

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



MOUNTING KITS

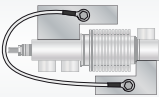


CAPACITY	kg	ACCURACY CLASS C3	 		NET WEIGHT OF LOAD CELL (kg)	CODE
	50	•	•	•	0.5	FCAL50
	75	•	•	•	0.5	FCAL75
	150	•	•	•	0.5	FCAL150
	300	•	•	•	0.5	FCAL300
ON REQUEST						

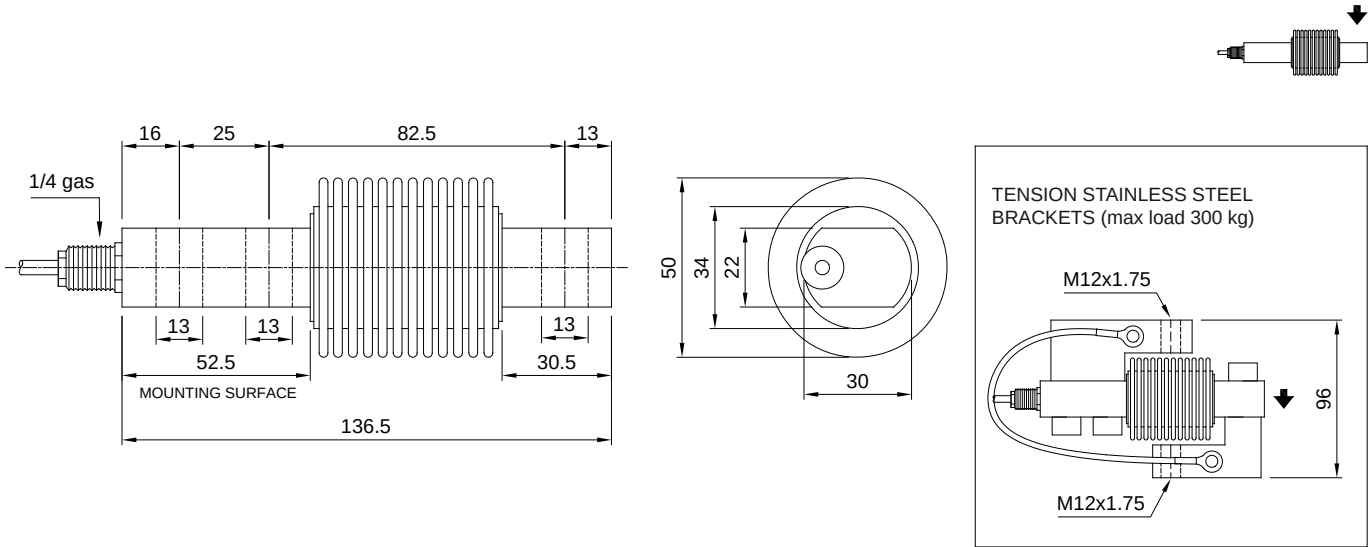
CERTIFICATIONS

	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	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)



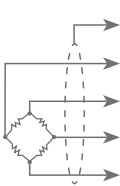
TECHNICAL FEATURES

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



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.



SHEAR BEAM: capacity from 500 kg to 10000 kg

BENDING BEAM: capacity from 75 kg to 300 kg



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

MOUNTING KITS



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

ON REQUEST

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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

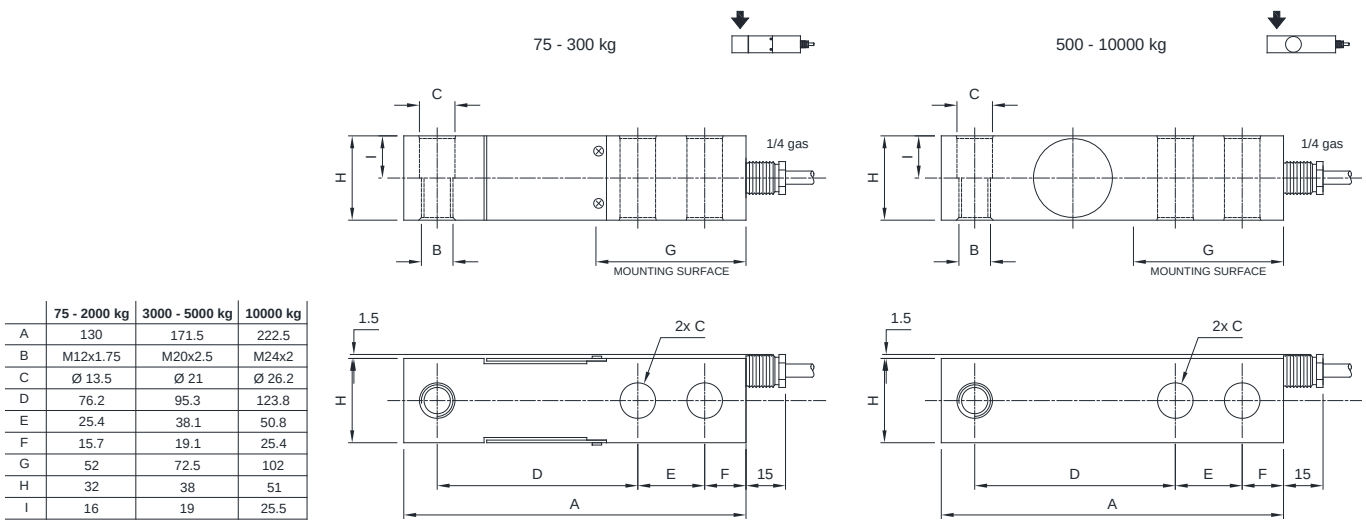


IECEx (zone 0-1-2-20-21-22)



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

DIMENSIONS (mm)



TECHNICAL FEATURES

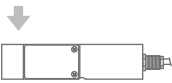
Material	AISI 420 stainless steel	
OIML R60 Accuracy class • Verification intervals	C3 • 3000	-
Nominal load (E max)	75 -150 - 300 - 500 kg 1000 -1200 - 1500 - 2000 kg	3000 - 5000 - 10000 kg
Minimum verification interval (V min)	E max / 12000	-
Combined error	≤ ±0.02%	
Protection class	IP67 (75 - 300 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



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 ≤ ±0.02%
- PROTECTION CLASS IP67, IP68

MOUNTING KITS



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

ON REQUEST

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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

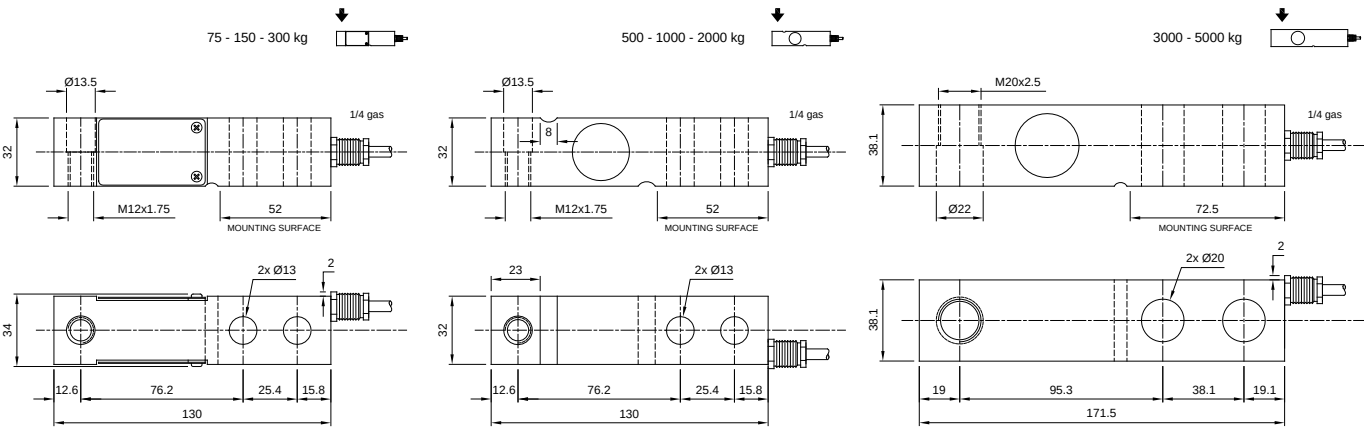


IECEx (zone 0-1-2-20-21-22)



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

DIMENSIONS (mm)



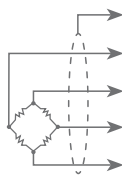
TECHNICAL FEATURES

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	$\leq \pm 0.02\%$	
Protection class	IP67 (75 - 300 kg), IP68 (500 - 5000 kg)	

Rated output	2 mV/V $\pm 0.1\%$	Input resistance	400 $\Omega \pm 10$
Temperature effect on zero	0.002% $^{\circ}\text{C}$	Output resistance	352 $\Omega \pm 2$
Temperature effect on span	0.0012% $^{\circ}\text{C}$	Zero balance	$\pm 2\%$
Compensated temperature range	-10 $^{\circ}\text{C}$ / +40 $^{\circ}\text{C}$	Insulation resistance	$\geq 5000 \text{ M}\Omega$
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)	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 mm ²



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

■ where provided

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

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

*) *SHEAR / BENDING BEAM load cells*

Notes section with horizontal lines for writing.

Rev. 00 del 12/03/2015



Capacity from 300 kg to 2000 kg



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

MOUNTING KITS



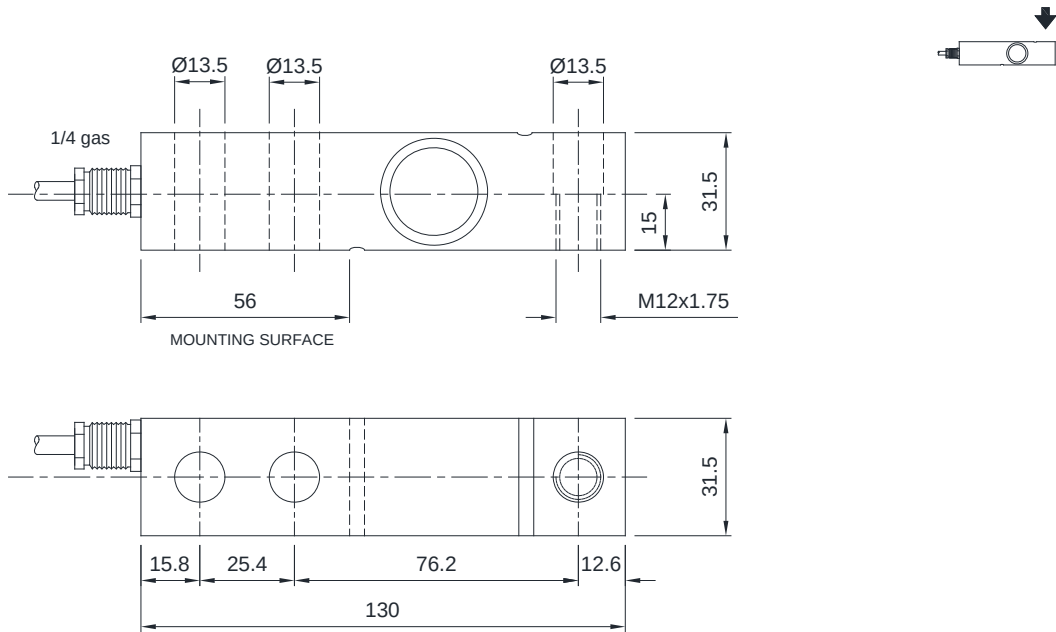
CAPACITY	kg	ACCURACY CLASS C3	 		NET WEIGHT OF LOAD CELL (kg)	CODE
300		•	•	•	0.9	FTL300
500		•	•	•	0.9	FTL500
1000		•	•	•	0.9	FTL1000
2000		•	•	•	0.9	FTL2000

ON REQUEST

CERTIFICATIONS

	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



TECHNICAL FEATURES

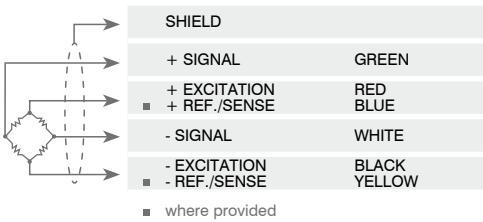
Material	17-4 PH stainless steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	300 - 500 - 1000 - 2000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.02%		
Protection class	IP68		

Rated output	2 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 lenght	5.8 m
Cable diameter	6 mm
Cores	4/6 x 0.22 mm ²



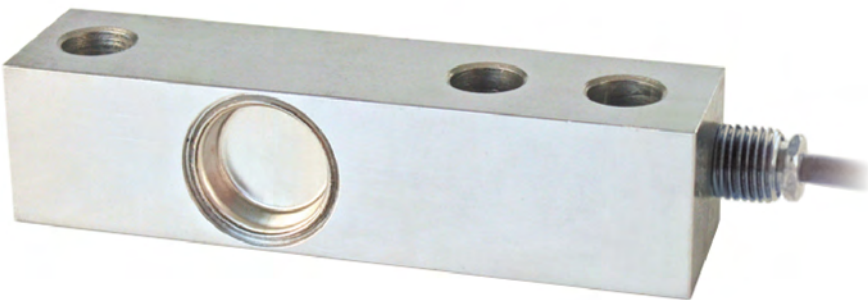
The Company reserves the right to make changes to the technical data, drawings and images without notice.

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

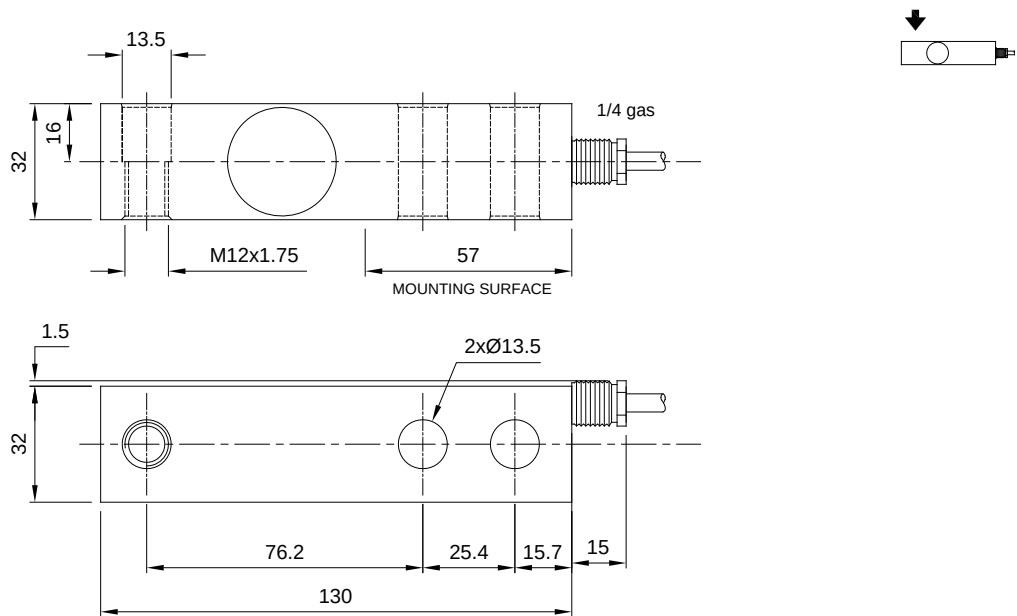


IECEx (zone 0-1-2-20-21-22)



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

DIMENSIONS (mm)



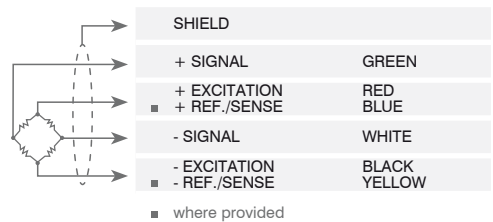
TECHNICAL FEATURES

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 / 10000		
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.

FTKL

SHEAR BEAM LOAD CELLS



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

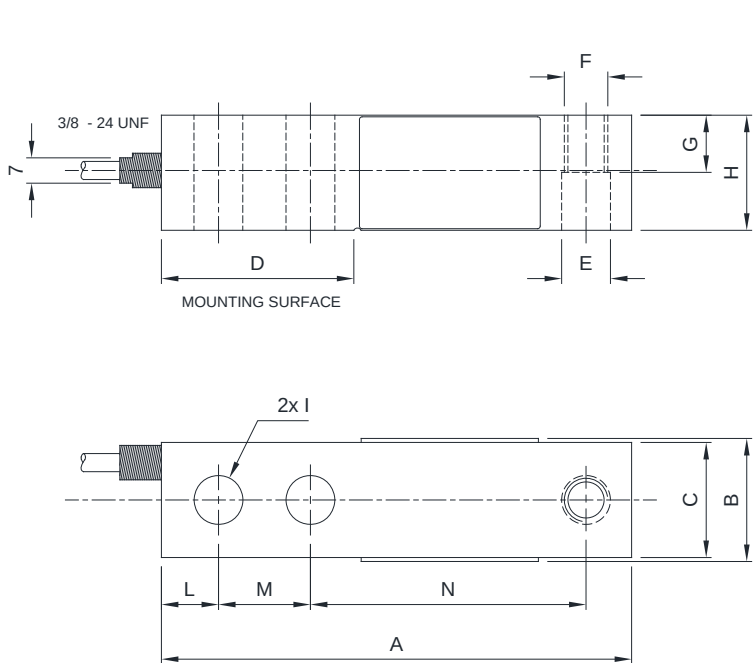


CAPACITY	kg	ACCURACY CLASS					EAC		NET WEIGHT OF LOAD CELL (kg)	CODE
		C3	C4	C5						
500		•	•	•	•	•	•	•	0.8	FTKL500
1000		•	•	•	•	•	•	•	0.8	FTKL1000
1500		•	•	•	•	•	•	•	0.9	FTKL1500
2000		•	•	•	•	•	•	•	0.9	FTKL2000
3000		•	•	•	•	•	•	•	1.7	FTKL3000
5000		•	•	•	•	•	•	•	1.7	FTKL5000
ON REQUEST										

CERTIFICATIONS

	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	OIML R60 C4/C5
EAC	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)



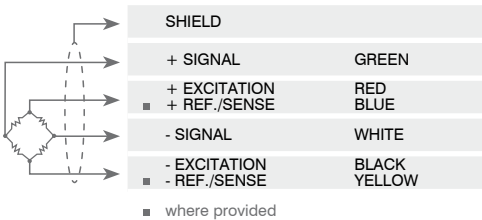
	500 kg	1000 - 1500 2000 kg	3000 - 5000 kg
A	130	130	171.5
B	-	32.8	39.1
C	31.8	31.8	38.1
D	53.2	53.2	76.2
E	Ø13.5	Ø13.5	Ø19.8
F	M12x1.75	M12x1.75	M18x1.5
G	16	16	19.3
H	31.8	31.8	38.1
I	Ø13.5	Ø13.5	Ø19.8
L	15.8	15.8	19.1
M	25.4	25.4	38.1
N	76.2	76.2	95.3

TECHNICAL FEATURES

Material		Special 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.

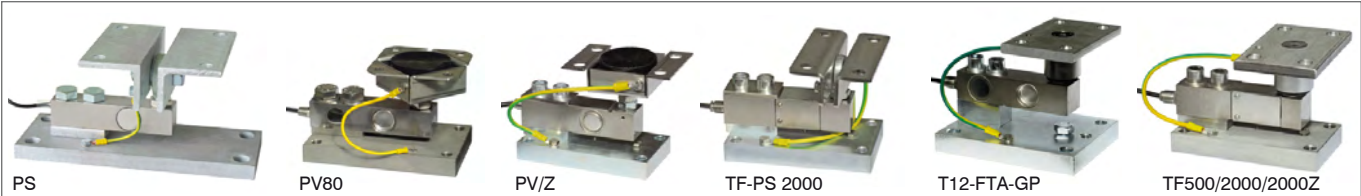


Capacity from 500 kg to 5000 kg

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



MOUNTING KITS



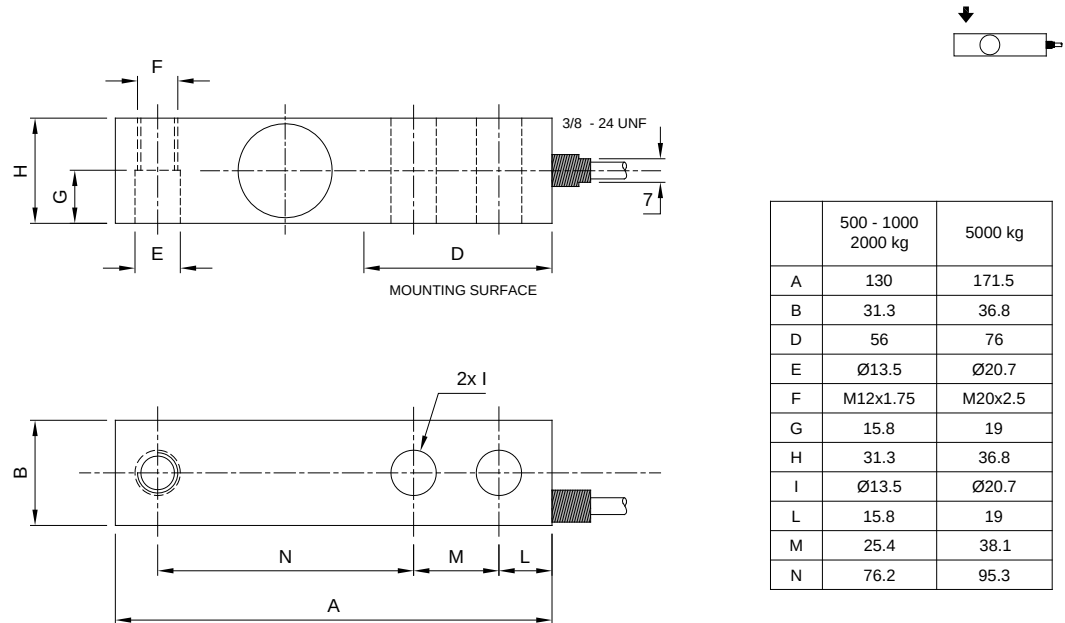
CAPACITY	kg	ACCURACY CLASS C3				NET WEIGHT OF LOAD CELL (kg)	CODE
500		•	•	•	•	0.9	FTZ500
1000		•	•	•	•	0.9	FTZ1000
2000		•	•	•	•	0.9	FTZ2000
5000		•	•	•	•	1.5	FTZ5000

ON REQUEST

CERTIFICATIONS

	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (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

	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.



Capacity from 500 kg to 10000 kg



- 17-4 PH STAINLESS STEEL
- COMBINED ERROR ≤ ±0.0200% (0.0170% C4)
- PROTECTION CLASS IP68

CAPACITY	kg	ACCURACY CLASS					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

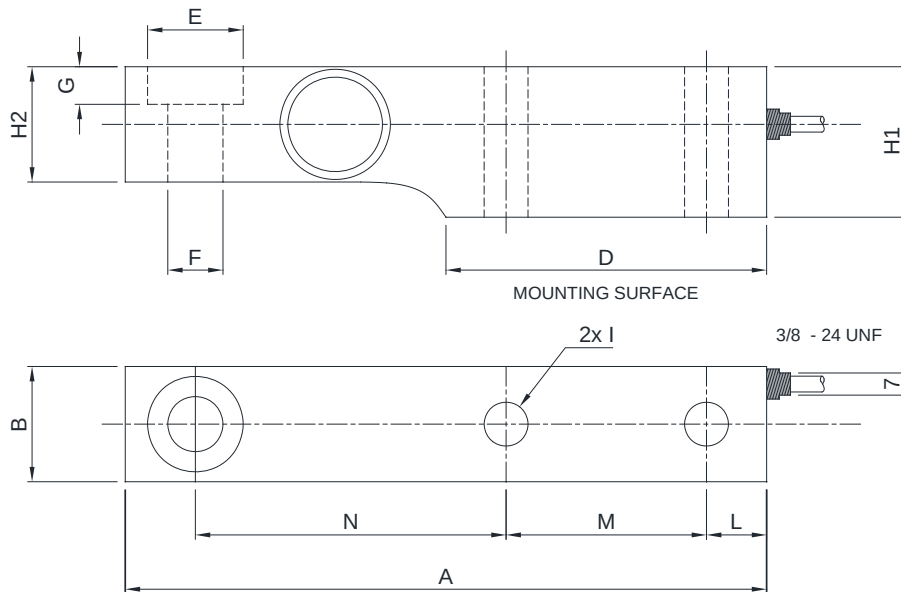
CERTIFICATIONS ON REQUEST

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

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

TECHNICAL FEATURES

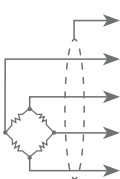
Material	17-4 PH stainless steel	
OIML R60 Accuracy class • Verification intervals	C3 • 3000	C4 • 4000
Nominal load (E max)	500 - 750 - 10000 kg	500 - 1000 - 2000 kg
Minimum verification interval (V min)	E max / 10000	E max / 15000
Combined error	≤ ±0.02%	≤ ±0.017%
Protection class	IP68	

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

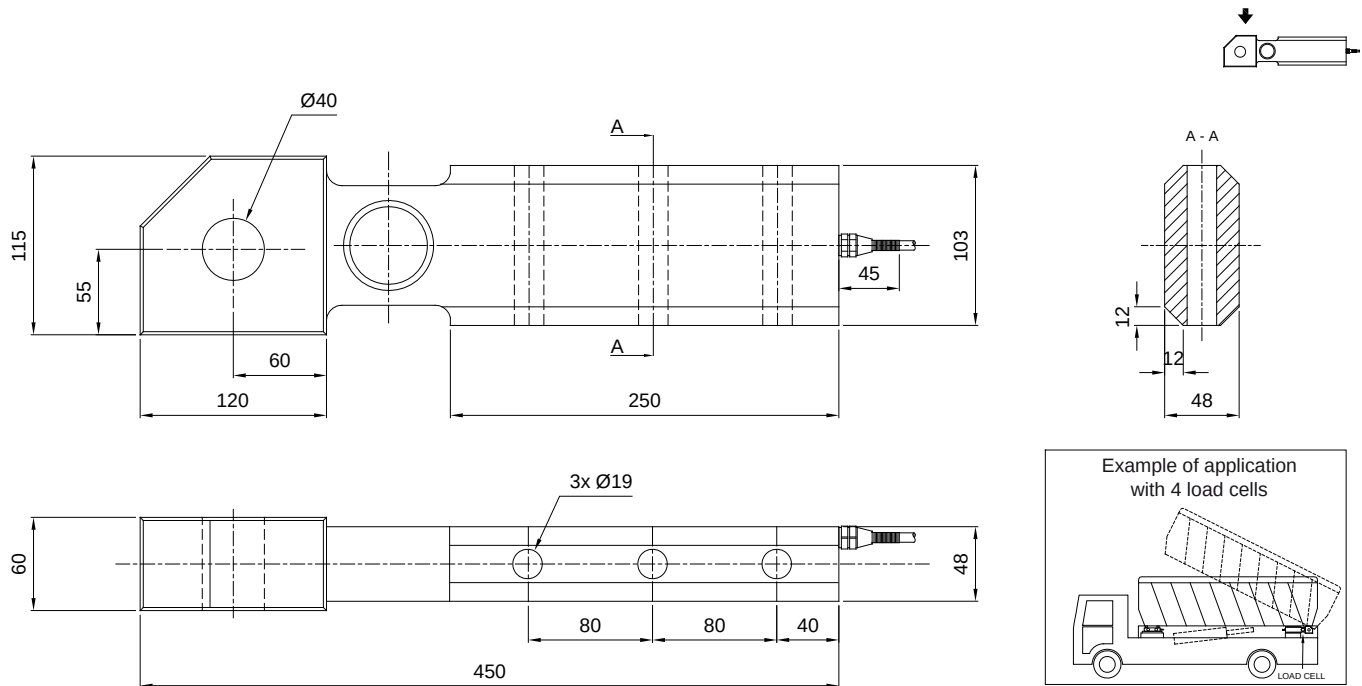
CAPACITY	kg			EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
5000		•	•	•	15.5	FTH5000
10000		•	•	•	16.2	FTH10000
		ON REQUEST				

CERTIFICATIONS

CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (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)	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 lenght	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	PAGE
A1.4	DOUBLE SHEAR BEAM	
DTL	2500 kg	63
DTX	20 klb ÷ 60 klb 9 ton ÷ 27 ton	67

Notes section with horizontal lines for writing.

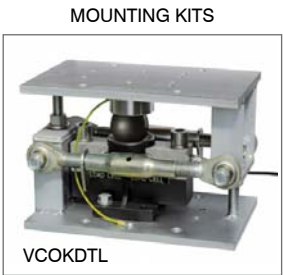
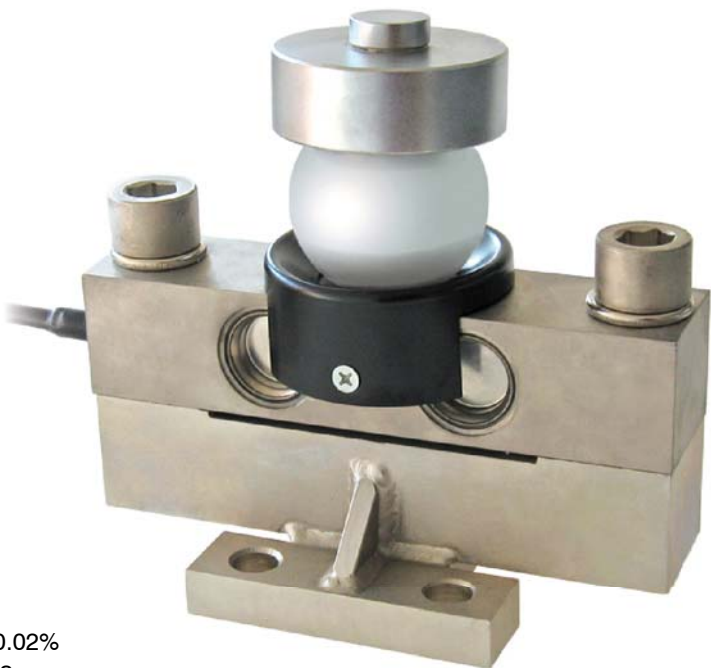
Rev. 00 del 12/03/2015

DTL

DOUBLE SHEAR BEAM LOAD CELLS



Capacity 25000 kg



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

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

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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



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



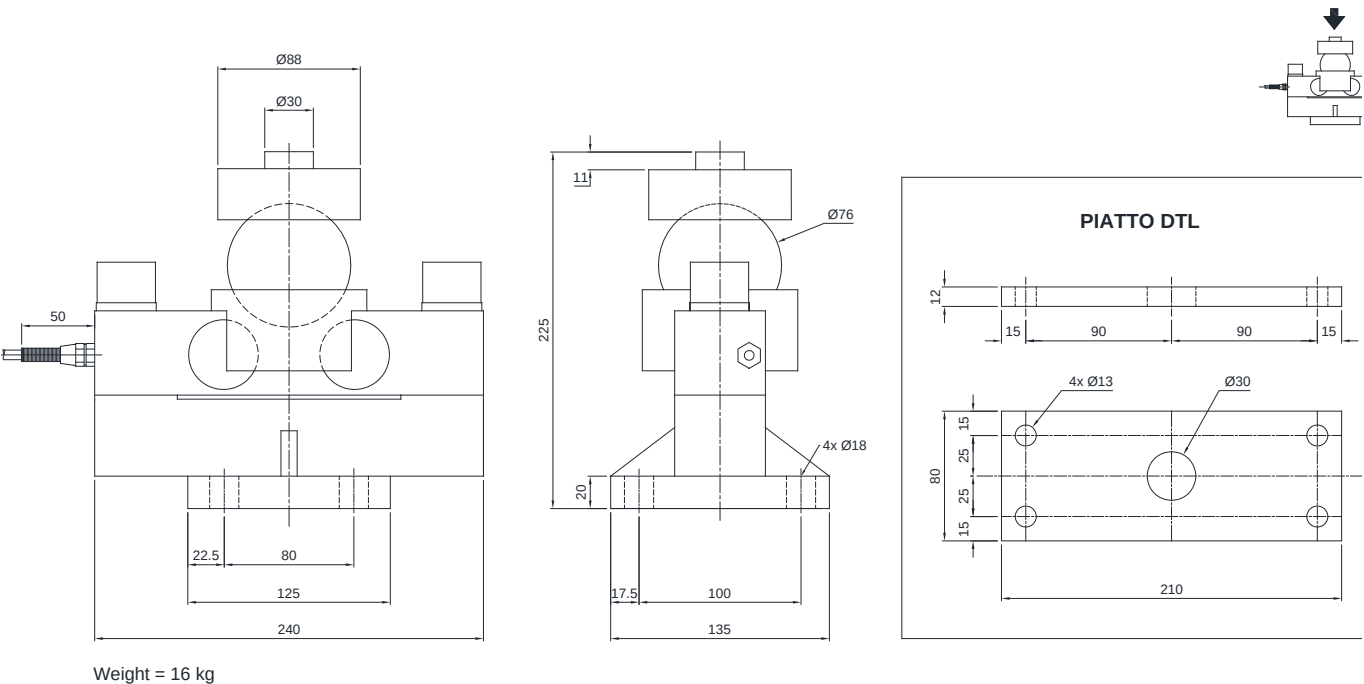
Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Galvanized steel plate.	PIATTODTL

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



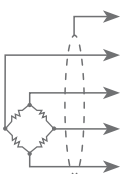
TECHNICAL FEATURES

Material	Special steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	25000 kg		
Minimum verification interval (V min)	E max / 15000		
Combined error	≤ ±0.02%		
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 mm ²



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

APPLICATION

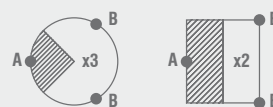
■ LEVEL MEASUREMENTS

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

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

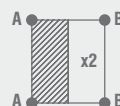
3 SUPPORTS STRUCTURES

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

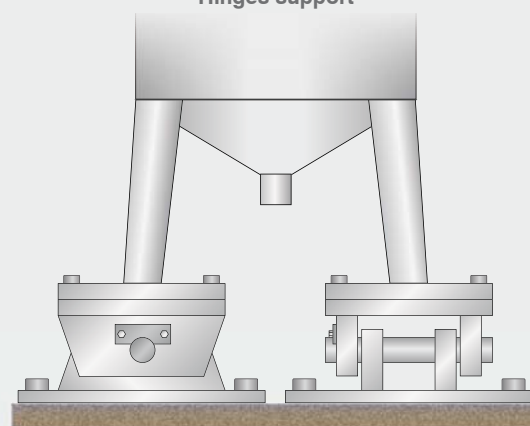
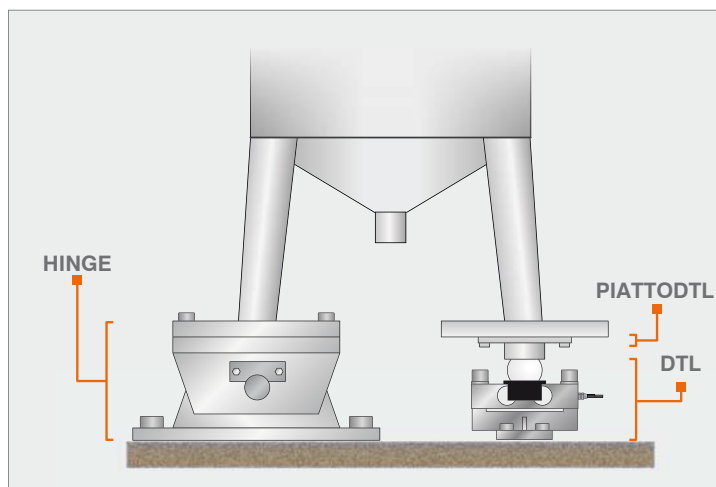


4 SUPPORTS STRUCTURES

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

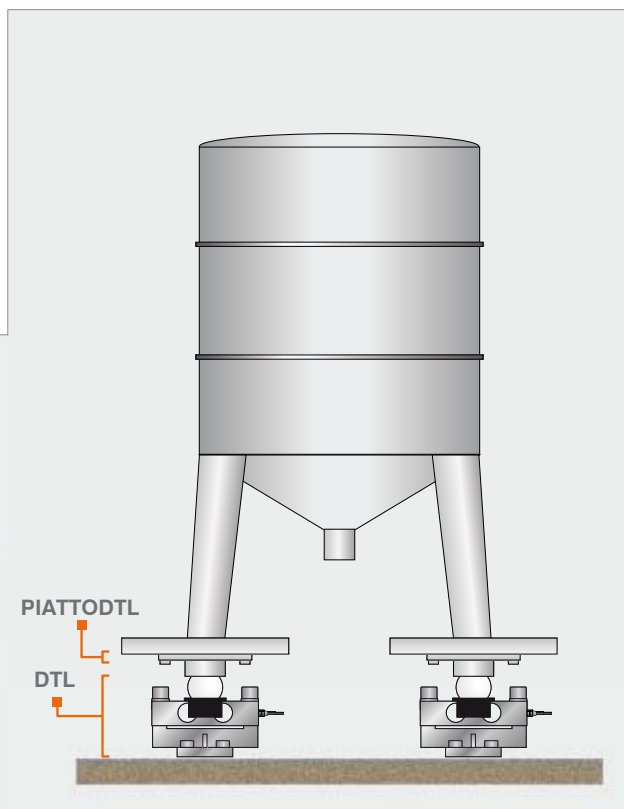
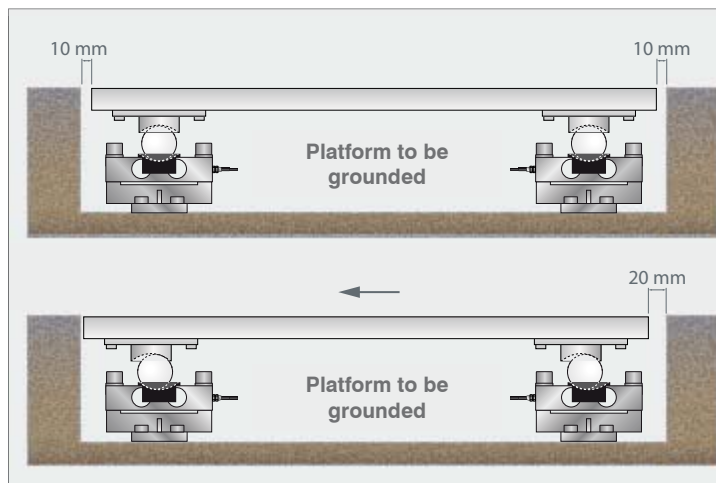


Hinges support

■ WEIGHING STRUCTURES NOT SUBJECT TO KNOCKS OR WIND EFFECT

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

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



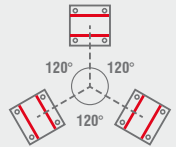
DTL

DOUBLE SHEAR BEAM LOAD CELLS

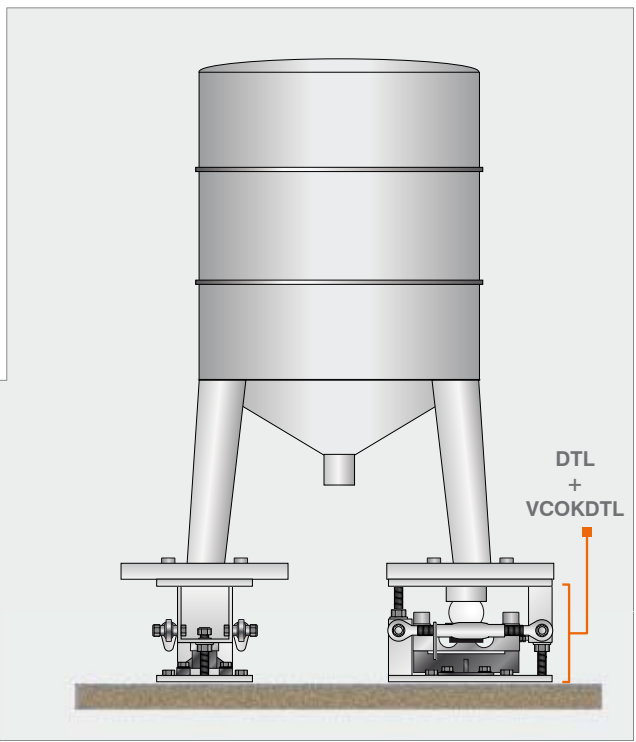
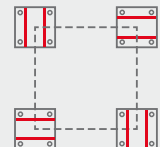
■ WEIGHING STRUCTURES SUBJECT TO KNOCKS OR WIND EFFECT

The VCOKDTL 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



DTX

DOUBLE SHEAR BEAM LOAD CELLS



Capacity from 20klb to 60klb



- NICKEL PLATED ALLOY STEEL
- COMBINED ERROR $\leq \pm 0.02\%$
- PROTECTION CLASS IP68

MOUNTING KITS



CAPACITY	kg	ACCURACY CLASS C3	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
20klb / 9 ton		•	•	•		2.7	DTX20KLB
30klb / 13.6 ton		•	•	•		7.75	DTX30KLB
40klb / 18 ton		•	•	•		7.78	DTX40KLB
50klb / 23 ton		•	•	•		8.3	DTX50KLB
60klb / 27 ton		•	•	•		8.5	DTX60KLB

ON REQUEST

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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

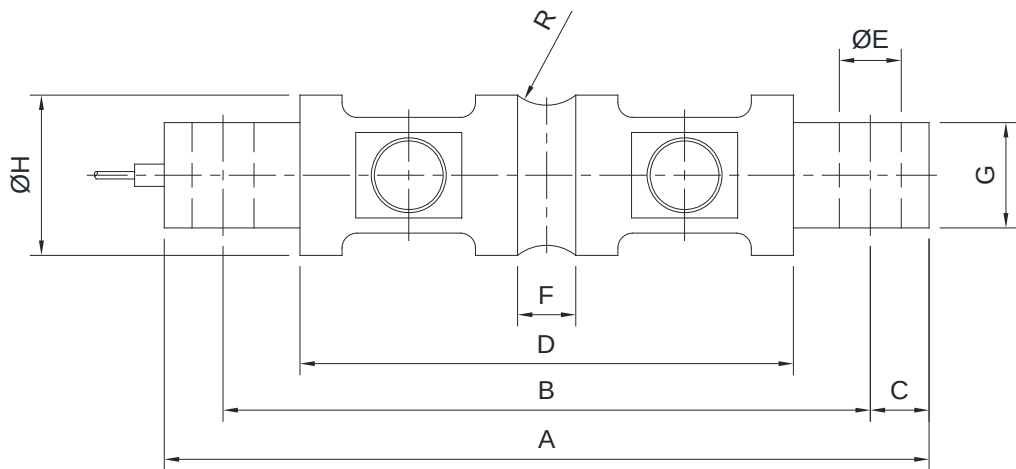


IECEx (zone 0-1-2-20-21-22)



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

DIMENSIONS (mm)



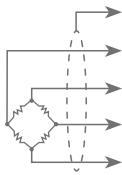
	A	B	C	D	ØE	F	G	ØH	R
20 klb	206	174.6	15.7	133	16.7	21.6	28.4	49.5	12.7
30-60 klb	260	215	22.4	165	27	25.7	60.2	76.2	25.4

TECHNICAL FEATURES

Material	Nickel plated alloy steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	20, 30, 40, 50, 60 klb		
Minimum verification interval (V min)	E max / 10000 - E max / 15000		
Combined error	≤ ±0.023%		
Protection class	IP68		
Rated output	3.0 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)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.6 mm

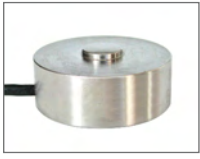
ELECTRICAL CONNECTIONS

Cable lenght	9 m
Cable diameter	5 mm (20klb) / 8 mm (30klb-60klb)
Cores	4/6 x 0.22 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	PAGE
A1.5	COMPRESSION-LOW PROFILE	
CK	200, 500, 1000, 2500 kg	71
CLS	1000, 2000, 5000 kg	73
CBL	250, 500, 1000, 2500, 5000, 7500, 10000, 12500, 15000, 30000, 50000, 100000 kg	75
CBX	15000, 30000, 50000 kg	79
CBLS	200000, 300000, 500000, 750000 kg	82

Notes section with horizontal lines for writing.

CK

COMPRESSION LOAD CELLS - LOW PROFILE



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	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
200		•	•	•	0.11	CK200
500		•	•	•	0.08	CK500
1000		•	•	•	0.17	CK1000
2500		•	•	•	0.17	CK2500



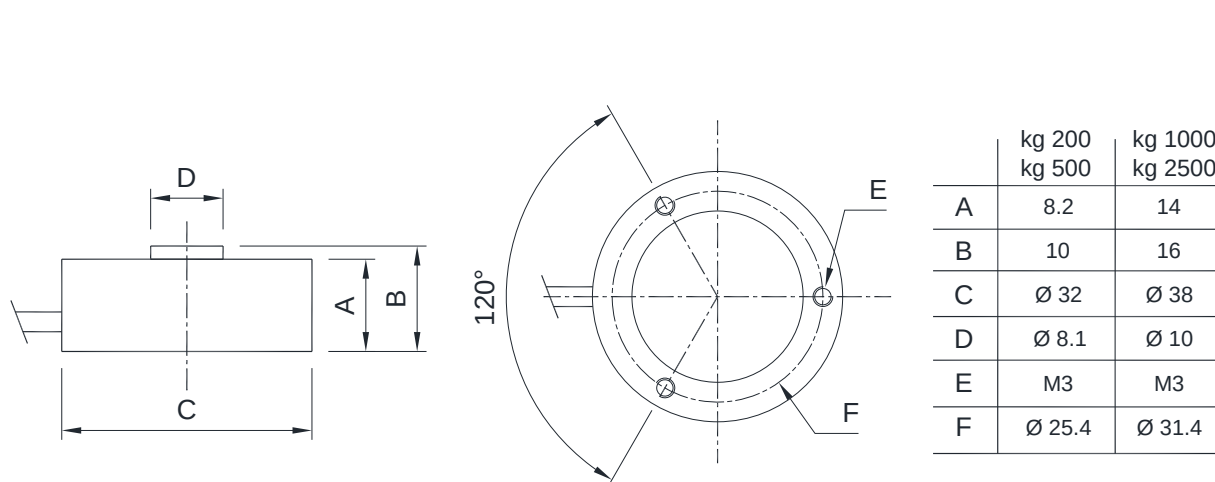
CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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



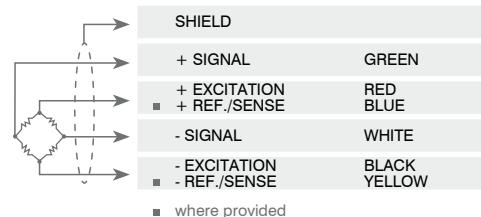
TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	200 - 500 - 1000 - 2500 kg		
Combined error	$\leq \pm 0.5\%$		
Protection class	IP67		

Rated output	1 mV/V $\pm 15\%$	Input resistance	400 $\Omega \pm 100$
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)	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





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



PVCLS



PV80CLS



PSCLS

CAPACITY	kg			EAC	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)

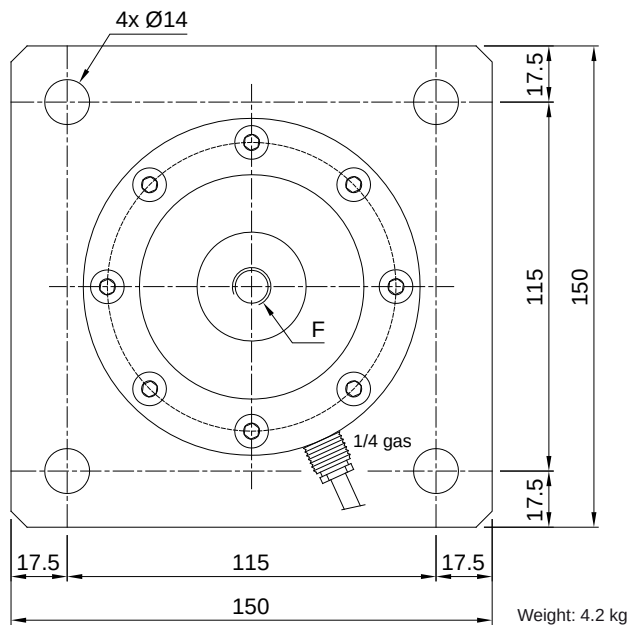


IECEx (zone 0-1-2-20-21-22)

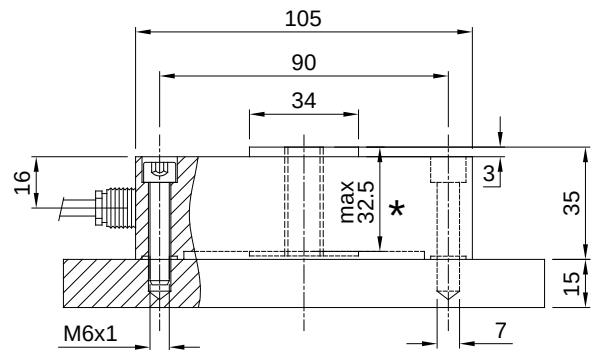
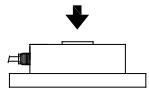


Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

DIMENSIONS (mm)



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



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

TECHNICAL FEATURES

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

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

■ where provided

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

CBL

COMPRESSION LOAD CELLS - LOW PROFILE



Capacity from 250 kg to 100000 kg



MOUNTING KITS



V10000 - V10275



V15000 - V30000 - V100000

- 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					NET WEIGHT OF LOAD CELL (kg)	CODE
		C2	C3					
250		–	–	•	•	•	1.1	CBL250
500		–	–	•	•	•	1.1	CBL500
1000		–	–	•	•	•	1.1	CBL1000
2500		•	•	•	•	•	1.1	CBL2500
5000		•	•	•	•	•	1.1	CBL5000
7500		•	•	•	•	•	1.1	CBL7500
10000		•	•	•	•	•	1.1	CBL10000
12500*		–	•	•	•	•	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

CERTIFICATIONS



OIML R60 C2

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



OIML R60 C3



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	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 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* (250-10000 kg); 10 m (12500-100000 kg)
Cable diameter	5 mm
Cores	4 x 0.25 mm ² /6 x 0.14 mm ²

*) On request: 10 m long cable version

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

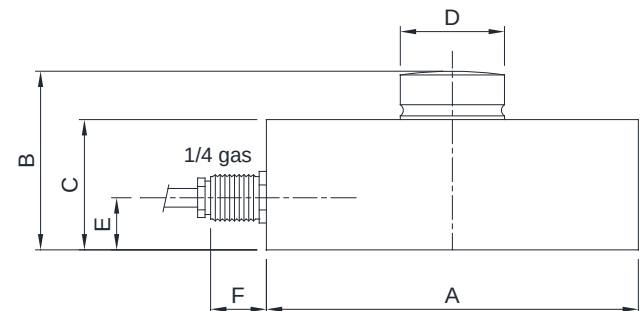
OPTIONS ON REQUEST

	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

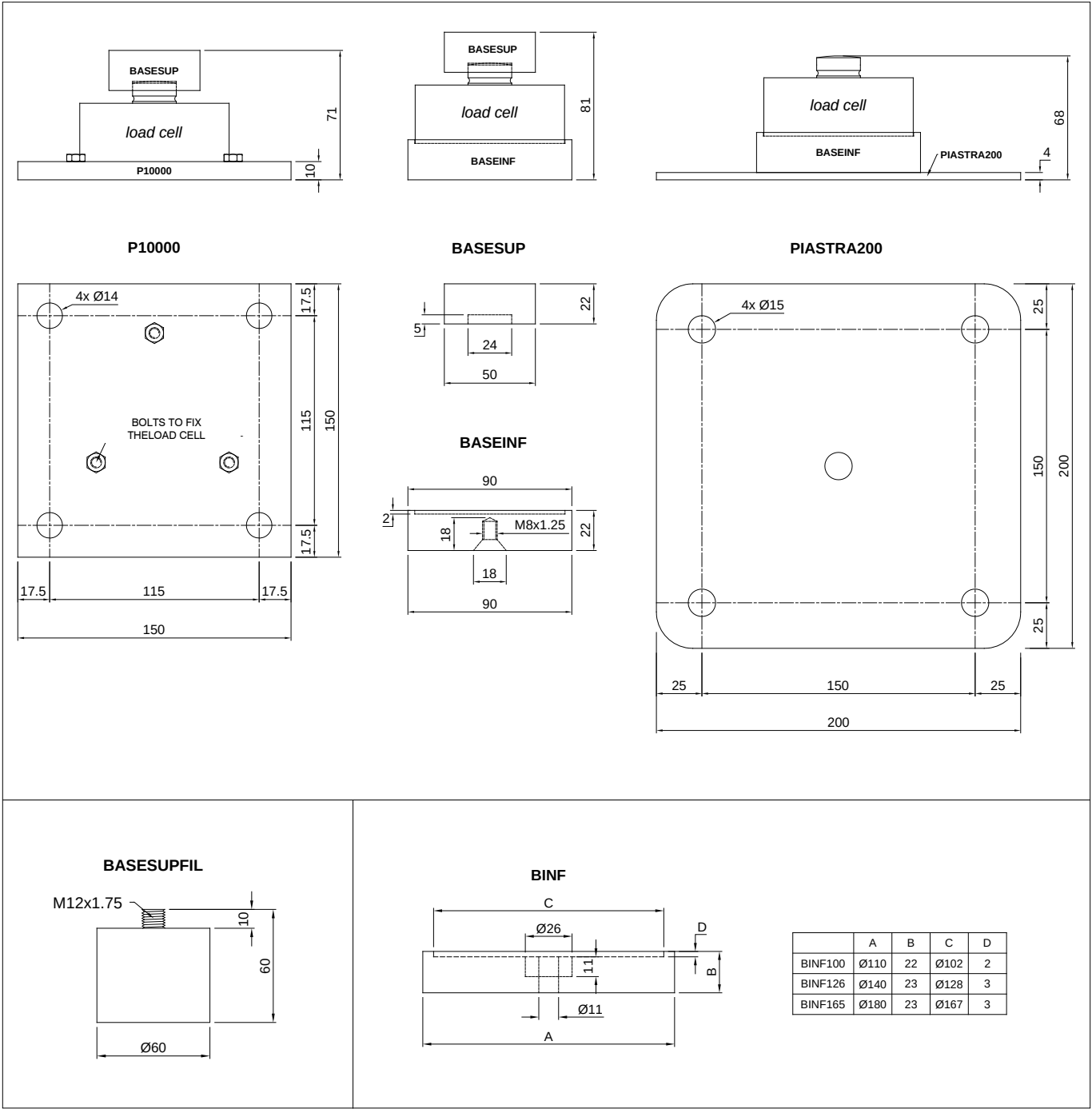
COMPLEMENTARY ACCESSORIES

	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)



	250			50000
kg	12500	15000	30000	100000
A	Ø82	Ø100	Ø126	Ø164
B	44	48	54	80
C	32	35	40	60
D	Ø22	Ø28	Ø35	Ø60
E	14	14	14	26
F	15	15	15	15



Rev. 00 del 12/03/2015

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CBX

COMPRESSION LOAD CELLS - LOW PROFILE



Manufactured according to OIML R60 standards

Capacity from 15000 kg to 50000 kg



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

MOUNTING KITS



V10000 - V10275



V15000 - V30000 - V100000

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

OPTIONS ON REQUEST

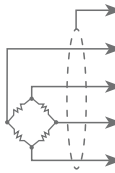
DESCRIPTION
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	15000 - 30000 - 50000 kg		
Combined error	$\leq \pm 0.035\%$		
Protection class	IP68		
Rated output	2 mV/V $\pm 0.1\%$	Input resistance	700 $\Omega \pm 5$
Temperature effect on zero	0.005% $^{\circ}\text{C}$	Output resistance	700 $\Omega \pm 5$
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	> 10000 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	0.4 mm

ELECTRICAL CONNECTIONS

Cable length	10 m
Cable diameter	5 mm
Cores	4 x 0.25 mm ² /6 x 0.14 mm ²

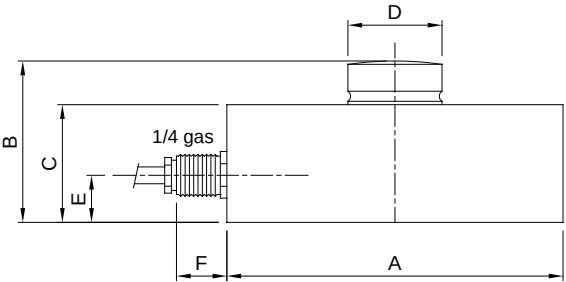


SHIELD	
+ SIGNAL	GREEN
+ EXCITATION + REF./SENSE	RED BLUE
- SIGNAL	WHITE
- EXCITATION - REF./SENSE	BLACK YELLOW
■ where provided	

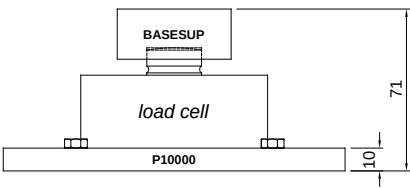
COMPLEMENTARY ACCESSORIES

	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	ADAT100CBX15T
	- V30000	Ø126x9 mm	ADAT126CBX30T
	- V100000	Ø165x29 mm	ADAT165CBX50T

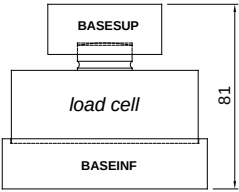
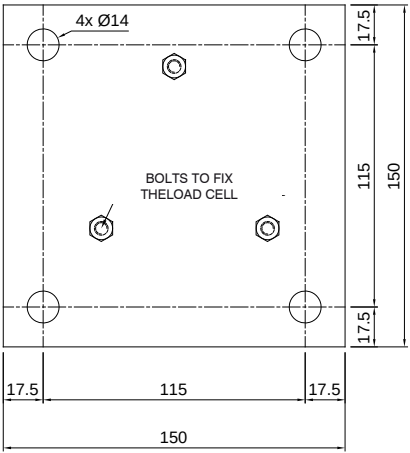
DIMENSIONS (mm)



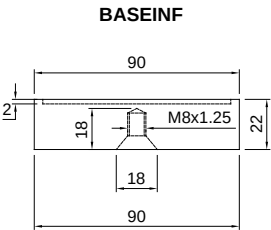
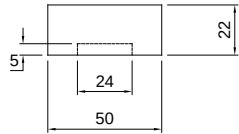
kg	15000	30000	50000
A	Ø82	Ø100	Ø126
B	44	48	54
C	32	35	40
D	Ø22	Ø28	Ø35
E	14	14	14
F	15	15	15



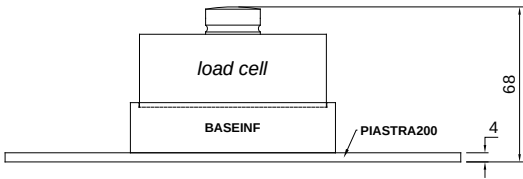
P10000



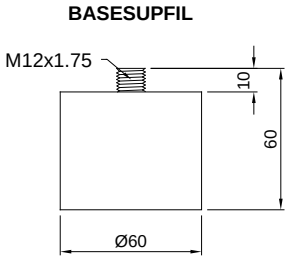
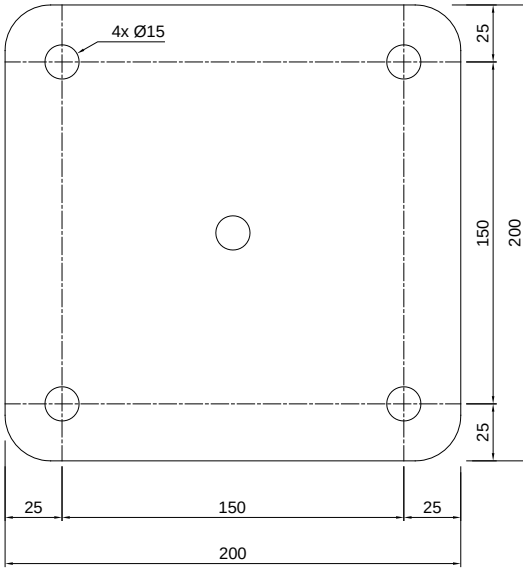
BASESUP



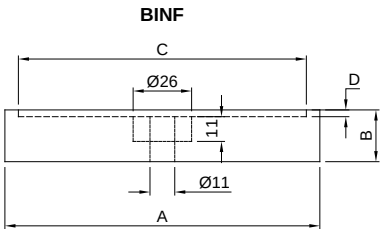
BASEINF



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 (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

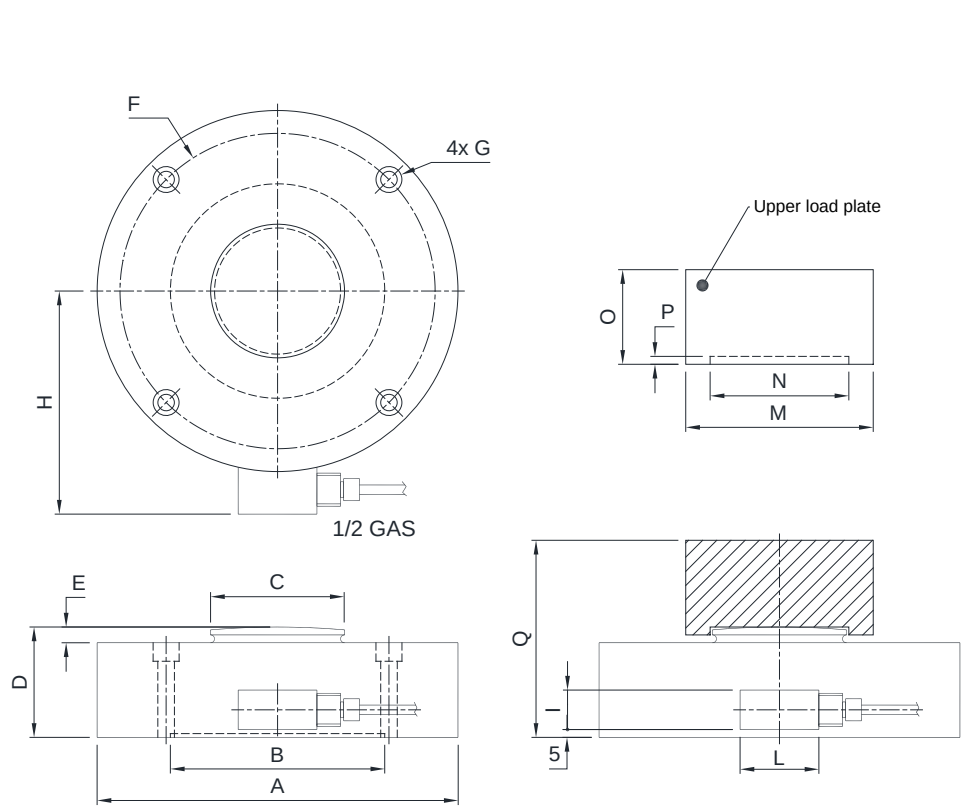
DESCRIPTION	CODE
Upper plate.	
Dimensions:	Maximum static load:
Ø119 mm; h=60 mm	200000 kg
Ø198 mm; h=60 mm	300000 kg
Ø198 mm; h=89 mm	500000 - 750000 kg
	BOTTONE200
	BOTTONE
	BOTTONE750

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CBL5

COMPRESSION LOAD CELLS - LOW PROFILE

DIMENSIONS (mm)



↓

	200 t	300 t	500-750 t
A	Ø 229	Ø 299	Ø 299
B	Ø 136.5	Ø 228	Ø 230
C	Ø 87	Ø 155	Ø 155
D	70	85	120
E	10	12	14
F	Ø 200	Ø 260	Ø 260
G	Ø 10.5	Ø 12.5	Ø 12.5
H	142 ±1	180 ±2	180 ±2
I	30	25	25
L	60	50	50
weight	20 kg	42 kg	60 kg

	200 t	300 t	500-750 t
M	Ø 119	Ø 198	Ø 198
N	Ø 88	Ø 156	Ø 158
O	60	60	89
P	5	5	9
Q	125	140	200

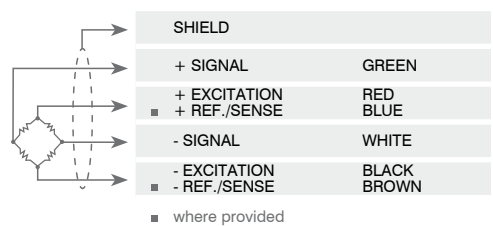
TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	200000 - 300000 - 500000 - 750000 kg		
Combined error	≤ ±0.10%		
Protection 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 x 0.25 mm²/6 x 0.14 mm²



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

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



Capacity from 15000 kg to 50000 kg



- SPECIAL STEEL
- COMBINED ERROR ≤ ±0.02%
- PROTECTION CLASS IP68



CAPACITY	kg	ACCURACY CLASS C3	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
15000		•	•	•		3.3	COK15000
25000		•	•	•		3.5	COK25000
50000		•	•	•		3.7	COK50000
25000	Anti-rat Cable	•	•	•		4	COK25000AR

ON REQUEST

CERTIFICATIONS

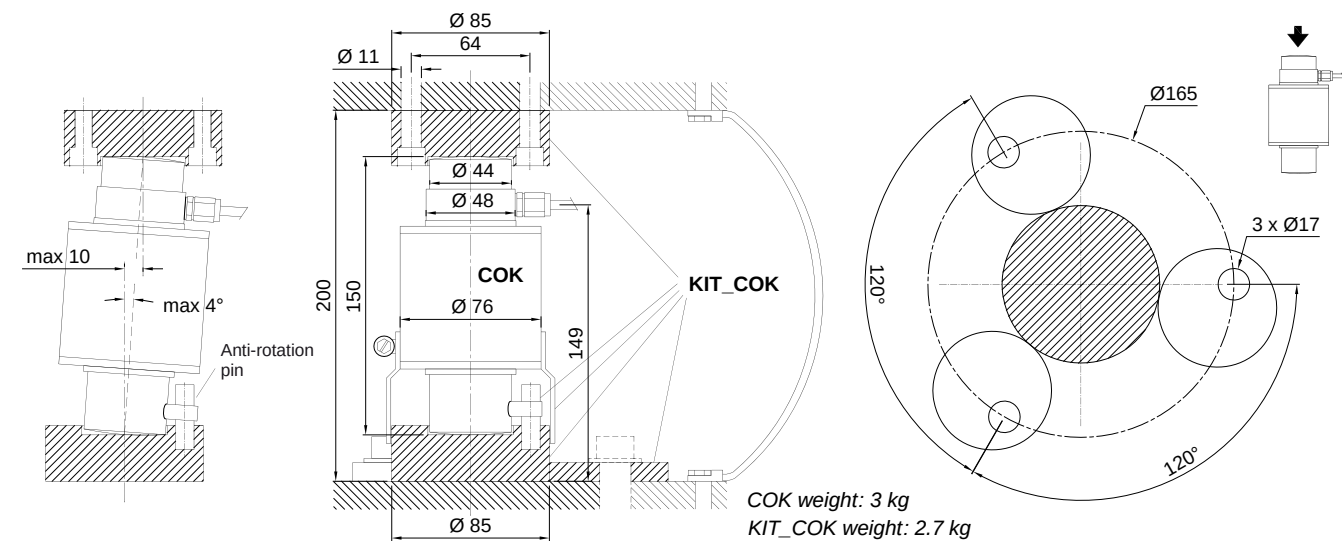
OIML	OIML R60 C3
CERTIFICATIONS ON REQUEST	
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

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DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Special steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	15000 - 25000 - 50000 kg		
Minimum verification interval (V min)	E max / 10000		
Combined error	≤ ±0.02%		
Protection 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 lenght	20 m
Cable diameter	6 mm
Cores	6 x 0.22 mm ²



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Capacity 25000 kg

- 17-4 PH STAINLESS STEEL
- COMBINED ERROR ≤ ±0.017%
- PROTECTION CLASS IP68
- LIGHTNING PROTECTION



CAPACITY	kg	ACCURACY CLASS			NET WEIGHT	
		C4			OF LOAD CELL (kg)	CODE
25000		•	•	•	2.4	CO25
				ON REQUEST		

CERTIFICATIONS

 OIML R60 C4

CERTIFICATIONS ON REQUEST

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

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

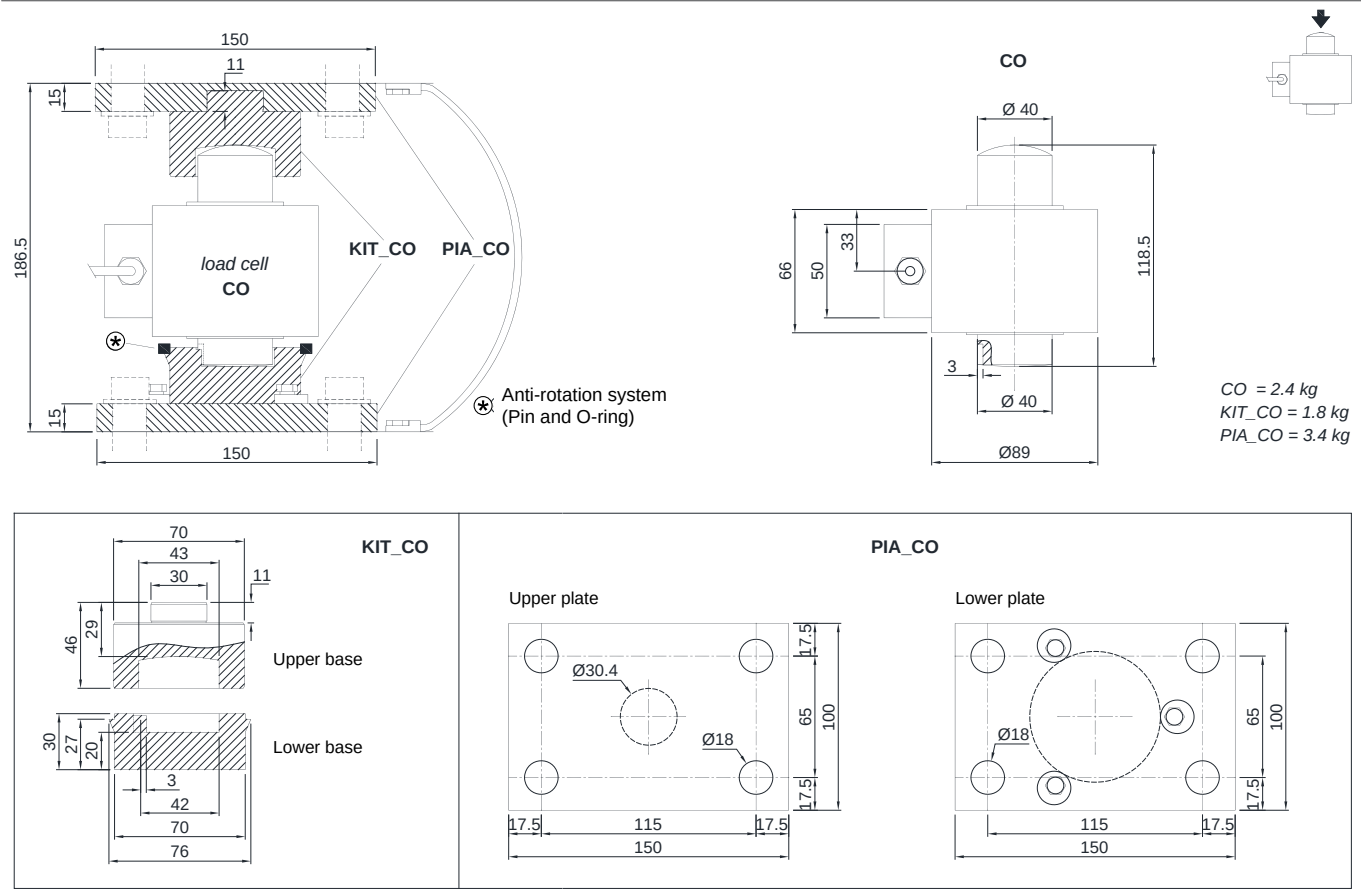
 Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

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

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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 length	15 m		SHIELD
Cable diameter	5 mm		+ SIGNAL GREEN
Cores	4 x 0.24 mm²		+ EXCITATION RED
			- SIGNAL WHITE
			- EXCITATION BLACK

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 $\leq \pm 0.013\%$
- PROTECTION CLASS IP68



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

ON REQUEST

CERTIFICATIONS

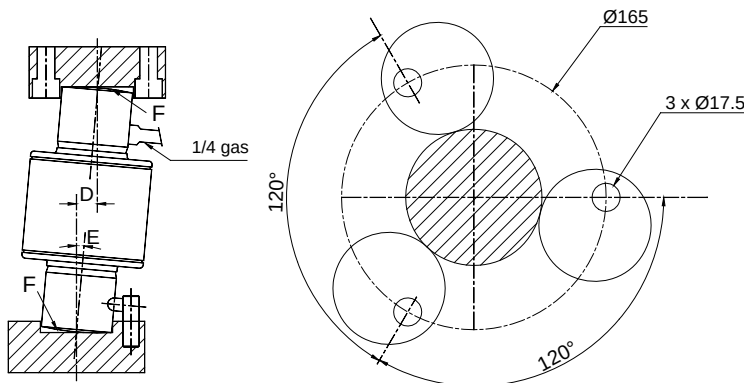
OIML	OIML R60 C4
CERTIFICATIONS ON REQUEST	
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (zone 0-1-2-20-21-22)
EAC	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

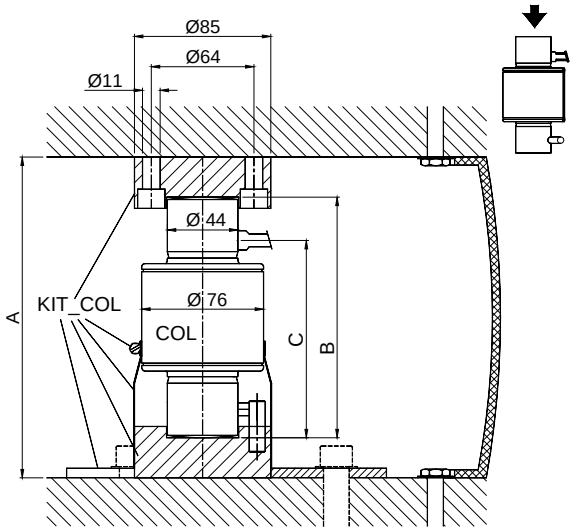
Rev. 00 del 12/03/2015

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 - 60000 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			NET WEIGHT OF LOAD CELL (kg)	CODE
30000		C4			3.5	COLD30000
			ON REQUEST			

CERTIFICATIONS

OIML R60 C4

CERTIFICATIONS ON REQUEST

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

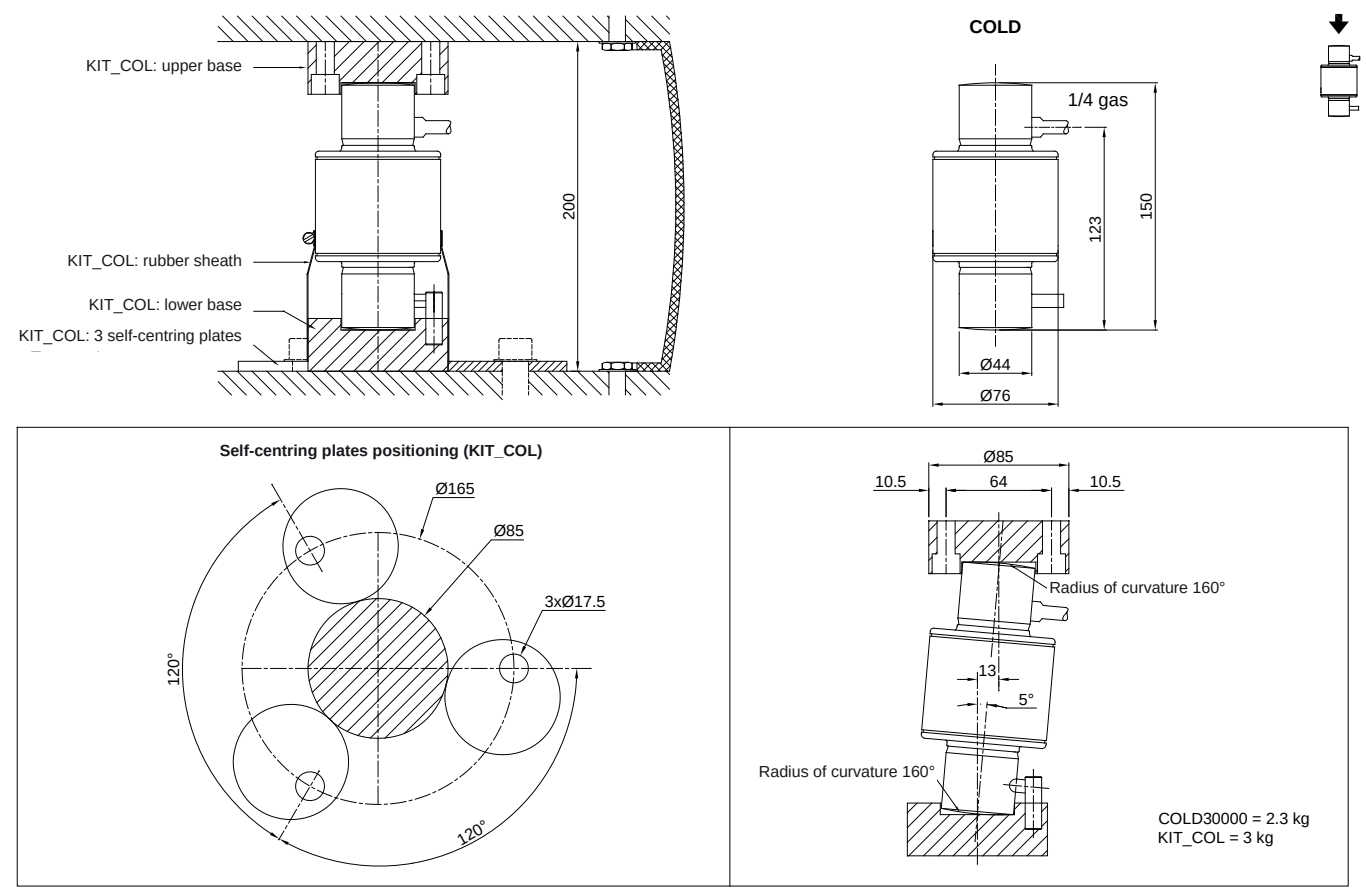
IECEx (zone 0-1-2-20-21-22)

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

COMPLEMENTARY ACCESSORIES

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

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 lenght	20 m		VDC EXCITATION	RED
Cable diameter	6 mm		GND	BLACK
Cores	6 x 0.22 mm²		TX+	YELLOW
			TX-	WHITE
			RX+	GREEN
			RX-	BLUE

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



	CAPACITY	PAGE
A1.7	COMPRESSION / TENSION	
CLBT	50, 100, 500 kg	95
CL	500, 1000, 2000, 5000, 10000, 20000, 30000, 60000, 100000, 150000, 200000 kg	97
CLK	2000, 5000, 10000, 20000 kg	99

Notes section with horizontal lines for writing.

CLBT

COMPRESSION / TENSION LOAD CELLS



Manufactured according to OIML R60 standards

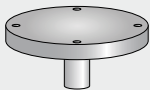
Capacity from 50 kg to 500 kg

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



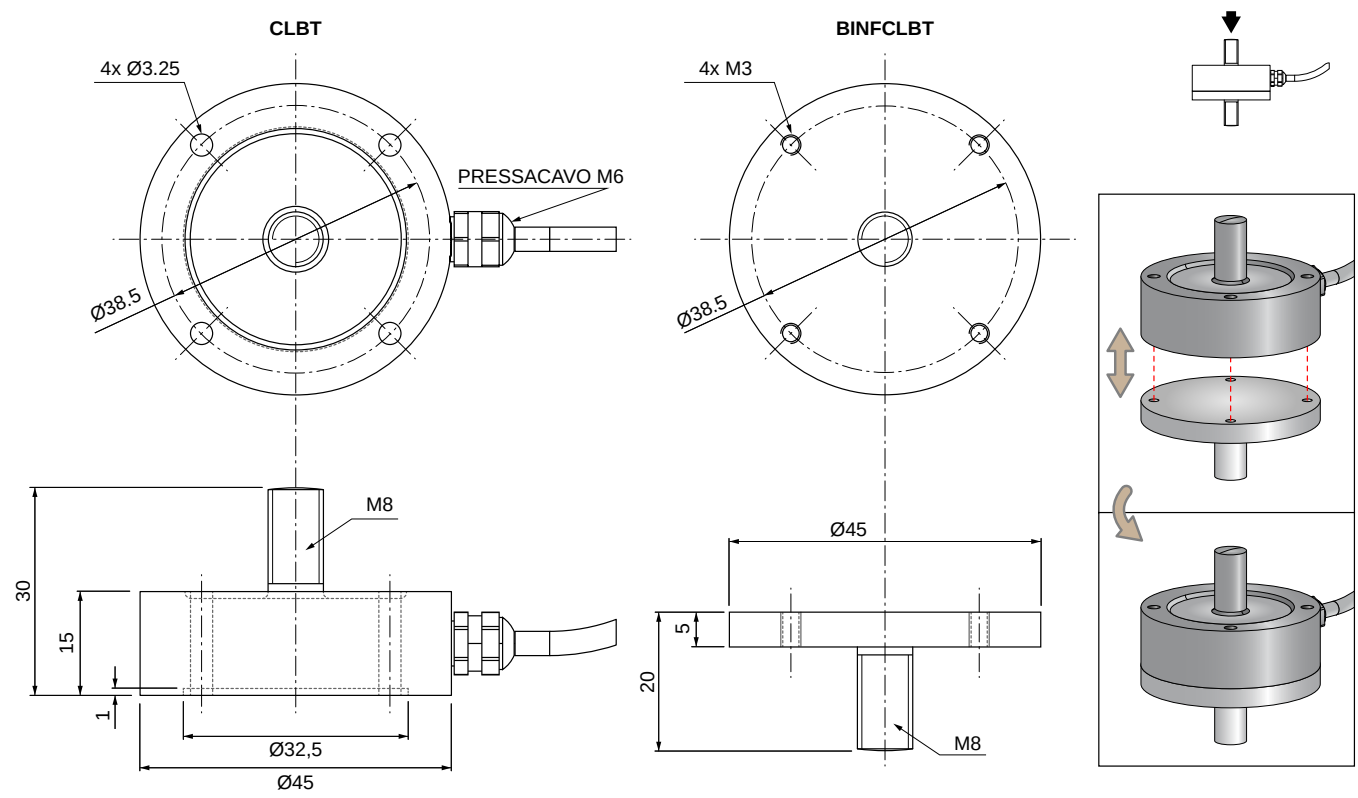
CAPACITY	kg	NET WEIGHT OF LOAD CELL (kg)	CODE
50		0,15	CLBT50
100		0,15	CLBT100
500		0,25	CLBT500

COMPLEMENTARY ACCESSORIES

	DESCRIPTION	CODE
	Lower base	BINFCLBT

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DIMENSIONS (mm)



TECHNICAL FEATURES

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

ELECTRICAL CONNECTIONS

Cable lenght	5 m
Cable diameter	5 mm
Cores	6 x 0.088 mm²

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

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



Manufactured according to OIML R60 standards

Capacity from 500 kg to 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

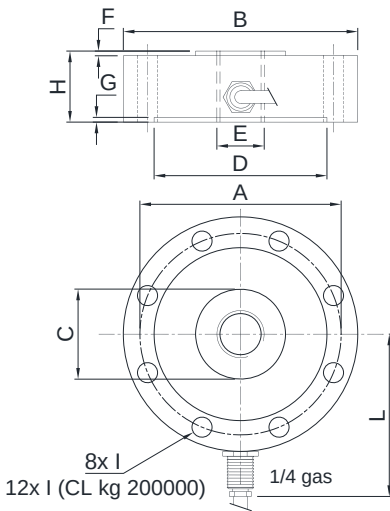
CERTIFICATIONS ON REQUEST

	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (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 88	Ø 140	Ø 170
D	Ø 72	Ø 78	Ø 113	Ø 135	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	Ø 8.5	Ø 8.5	Ø 16.5	Ø 26	Ø 26	Ø 26
L	68.5	73.5	101	128.5	143.5	168.5
Weight	1.1	1.4	5	11	16	26

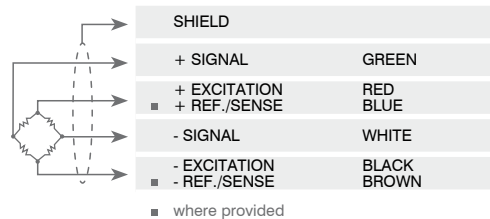


TECHNICAL FEATURES

Material	17-4 PH stainless steel		
Nominal load (E max)	500 - 1000 - 2000 - 5000 - 10000 - 20000 - 30000 - 60000 - 100000 - 150000 - 200000 kg		
Combined error	≤ ±0.05%		
Protection 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	0.3%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	15 V	Deflection at nominal load	0.3 mm

ELECTRICAL CONNECTIONS

Cable lenght	5 m
Cable diameter	5 mm
Cores	4 x 0.25 mm²/6 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 20000 kg



- SPECIAL STEEL
- BIDIRECTIONAL TENSION AND COMPRESSION
- COMBINED ERROR ≤ ±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

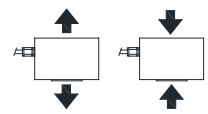
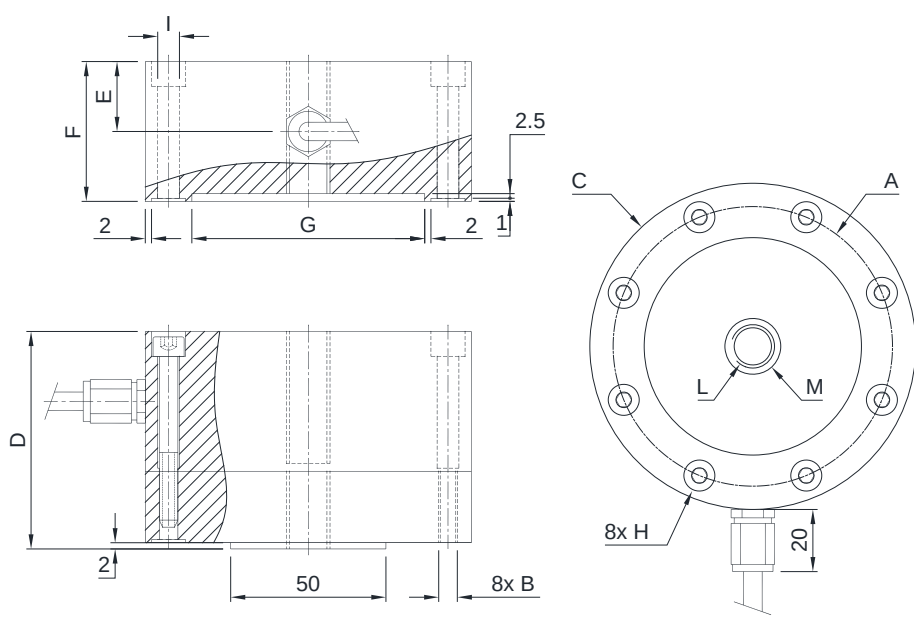
ON REQUEST

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)



	2000 kg	5000 kg	10000 kg 20000 kg
A	Ø90	Ø104.5	Ø133
B	M6x1	M8x1.25	M10x1.5
C	Ø105	Ø120	Ø155
D	70	80	90
E	22.5	25	27.5
F	45	50	55
G	Ø75	Ø84	Ø106
H	M6 x 55	M8 x 65	M10 x 75
I	Ø7	Ø9	Ø11
L	M14x2	M20x1.5	M30x2
M	18	28	50
Weight	4.2 kg	6 kg	10.5-11 kg

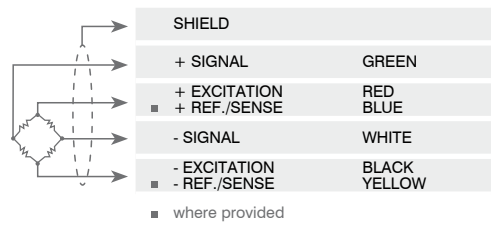
TECHNICAL FEATURES

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 mm ²



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	CAPACITY	PAGE
A1.8	TENSION (COMPRESSION)	
	SA 15, 30, 60 kg	103
	SL 25, 100, 200, 300, 500, 1000, 2500 kg	105
	CTOL 50, 100, 200, 300 kg 500, 1000, 2500, 5000 kg	107
		
	CTL 100, 200, 300, 500, 1000, 2500, 5000, 7500, 10000, 12500 kg	109

Notes section with horizontal lines for writing.



Capacity from 15 kg to 60 kg



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

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

ON REQUEST

CERTIFICATIONS



OIML R60 C3

CERTIFICATIONS ON REQUEST



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



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

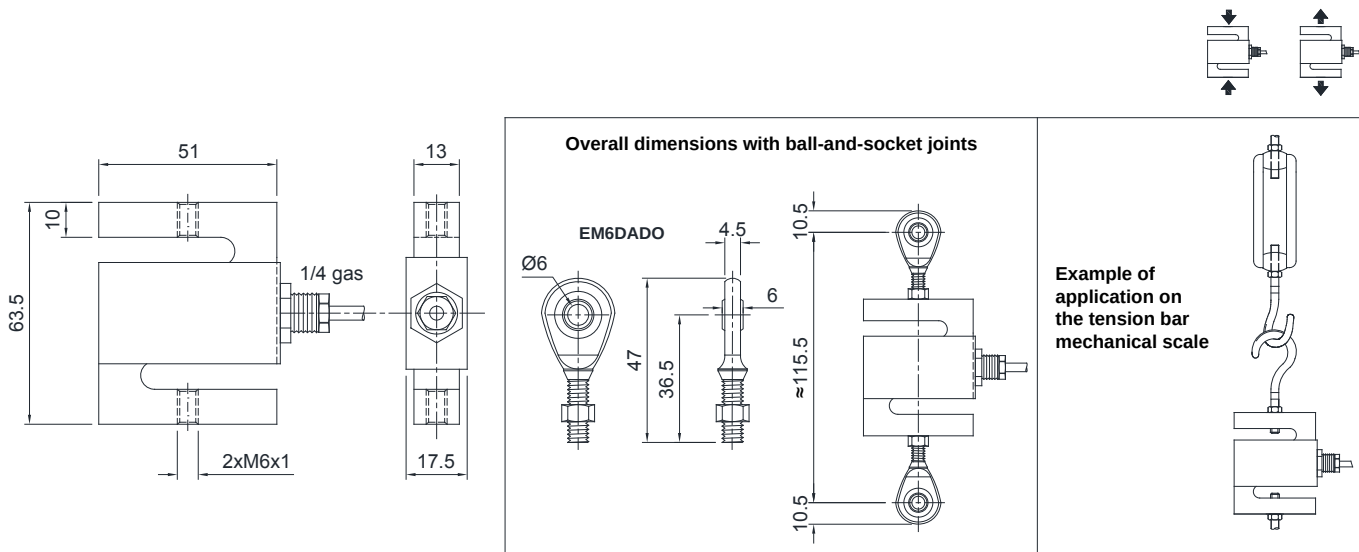


Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

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

DIMENSIONS (mm)



TECHNICAL FEATURES

Material	Special steel		
OIML R60 Accuracy class • Verification intervals	C3 • 3000		
Nominal load (E max)	15 - 30 - 60 kg		
Minimum verification interval (V min)	E max / 8000		
Combined error	≤ ±0.02%		
Protection 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 lenght	3 m
Cable diameter	4 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

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

ON REQUEST

CERTIFICATIONS

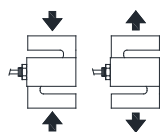
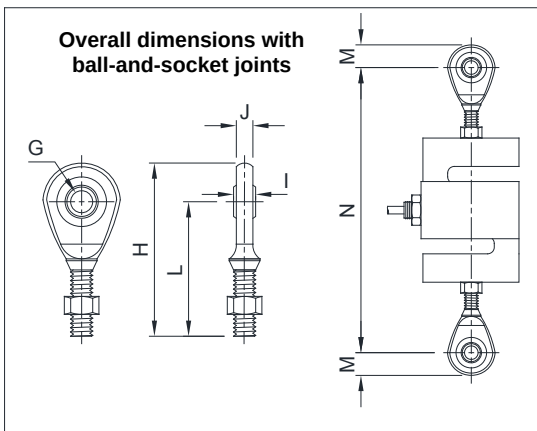
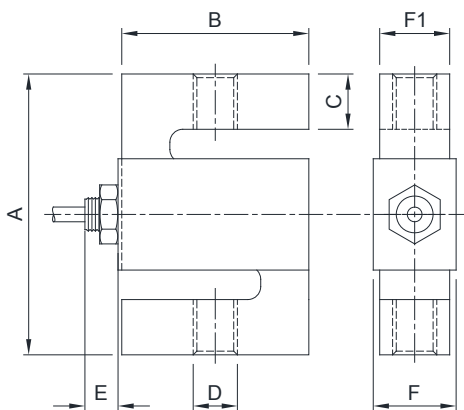
	OIML R60 C3
CERTIFICATIONS ON REQUEST	
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (zone 0-1-2-20-21-22)
	OIML R60 C4
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

COMPLEMENTARY ACCESSORIES

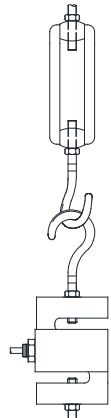
	DESCRIPTION		CODE	
	Special steel ball-and-socket joint with nut.			
	Dimensions:	Load cell capacity:		
	M8x1.25	25 kg	EM8DADO	
	M10x1.5	100 kg	EM10DADO	
	M12x1.75	200-1000 kg	EM12DADO	
	M20x1.5	2500 kg	EM20DADO	

Rev. 00 del 12/03/2015

DIMENSIONS (mm)



**Example of application
on the tension bar
mechanical scale**



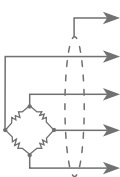
	A	B	C	D	E	F	F1	G	H	I	J	L	M	N (≈)
25 kg	76.2	50.8	15.7	M8x1.25	10	16.7	12.7	Ø8	54	8	6.5	42.5	11.5	129
100 kg	76.2	50.8	15.5	M10x1.5	9	22.5	19	Ø10	62.5	9	7.5	48.5	14	142
200 kg (a)			15 (a)		8									
300 kg (b)	76.2	50.8	14.5 (b)	M12x1.75	9	22.5	19	Ø12	71	10	8.5	54.5	16.5	154
500 kg (c)			13.5 (c)		9									
1000 kg	76.2	50.8	12.5	M12x1.75	10	29	25.4	Ø12	71	10	8.5	54.5	16.5	159
2500 kg	101.6	76.2	20	M20x1.5	6	29	25.4	Ø20	104.5	16	13.5	77.5	27	217

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 in 30 minutes	0.03%	Ultimate overload (% of full scale)	300%
Max supply voltage without damage	18 V	Deflection at nominal load	0.4 mm

ELECTRICAL CONNECTIONS

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



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

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CTOL

TENSION (COMPRESSION) LOAD CELLS



Manufactured according to OIML R60 standards

Capacity from 50 kg to 300 kg



Capacity from 500 kg to 5000 kg



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

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

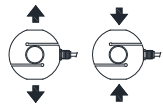
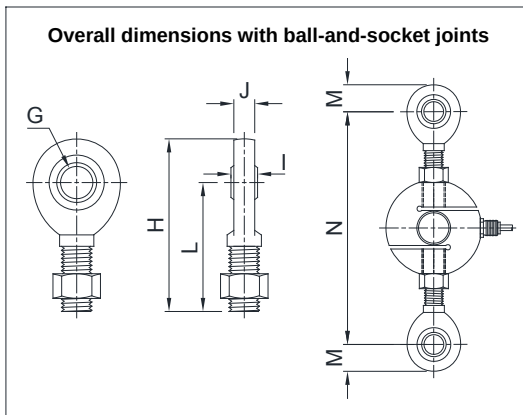
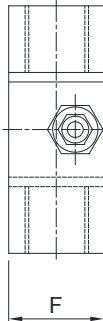
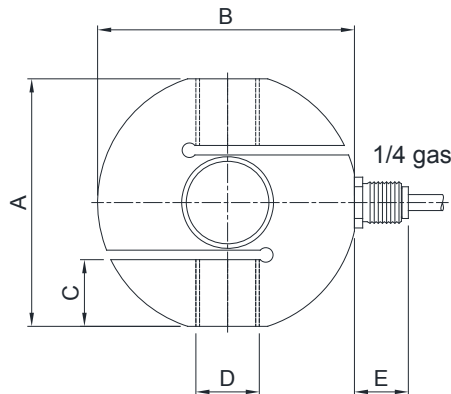
CERTIFICATIONS

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

COMPLEMENTARY ACCESSORIES

	DESCRIPTION		CODE	
		Dimensions:	Load cell capacity:	
	Special steel ball-and-socket joint with nut.	M12x1.75	50-500 kg	EM12DADO
		M16x2	1000 kg	EM16DADO
		M20x1.5	2500 kg	EM20DADO
		M24x2	5000 kg	EM25DADO

DIMENSIONS (mm)



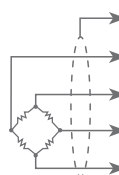
	A	B	C	D	E	F	G	H	I	J	L	M	N (≈)
50 kg 500 kg	59.5	63.5	14.5	M12x1.75	17	22	Ø12	71	10	8.5	54.5	16.5	140
1000 kg	78	82	21	M16x2	17	30	Ø17	92	14	11.5	69.5	22.5	176
2500 kg	78	82	21	M20x1.5	17	30	Ø20	104.5	16	13.5	77.5	27	191
5000 kg	90	102	24	M24x2	17	45	Ø25	126	20	17.5	94.5	31.5	230

TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	50 - 100 - 200 - 300 - 500 - 1000 - 2500 - 5000 kg		
Combined error	≤ ±0.03%		
Protection 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	6 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.



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

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).



Calibration report (ACCREDIA LAT traceability)



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



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



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

OPTIONS ON REQUEST

DESCRIPTION



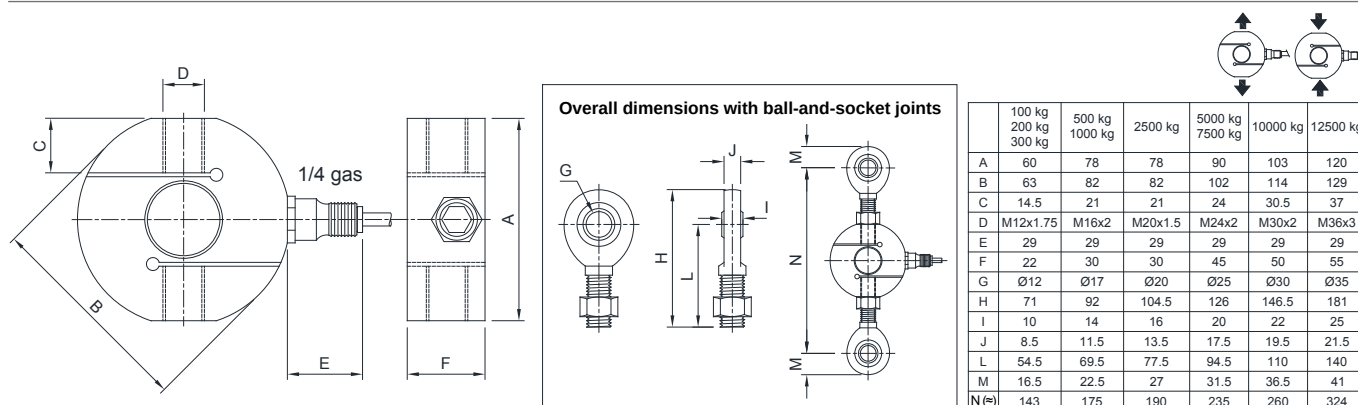
Two redundant strain gauges Wheatstone bridges (350 Ω) with two output cables; for dual safety systems

COMPLEMENTARY ACCESSORIES



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

DIMENSIONS (mm)



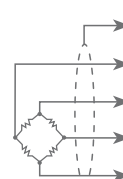
TECHNICAL FEATURES

Material	17-4 PH stainless steel	
OIML R60 Accuracy class • Verification intervals	-	C3 • 3000
Nominal load (E max)	100 - 200 - 300 kg	500 - 1000 - 2500 - 5000 kg 7500 - 10000 - 12500 kg
Minimum verification interval (V min)	E max / 10000	
Combined error	≤ ±0.02%	
Protection class	IP68	

Rated output	2 mV/V $\pm$ 0.1%	Input resistance	350 Ω $\pm$ 5
Temperature effect on zero	0.005% $^{\circ}$ C	Output resistance	350 Ω $\pm$ 2
Temperature effect on span	0.003% $^{\circ}$ C	Zero balance	$\pm$ 1%
Compensated temperature range	-10 $^{\circ}$ C / +50 $^{\circ}$ C	Insulation resistance	$\geq$ 5000 M Ω
Operating temperature range	-20 $^{\circ}$ C / +70 $^{\circ}$ 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 x 0.25 mm ² /6 x 0.14 mm ²



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



	CAPACITY	PAGE
A1.9	TENSION	
TAL	5000, 10000, 20000 kg	113
TBT	30000, 40000, 50000, 60000, 100000, 250000 kg	115

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				

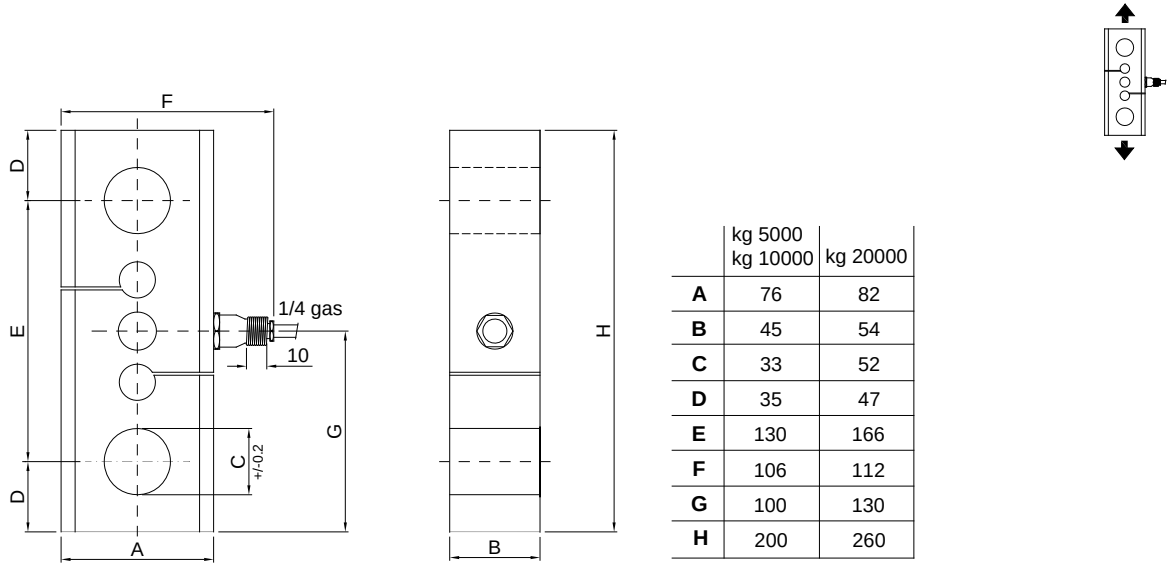
CERTIFICATIONS

CERTIFICATIONS ON REQUEST	
✓	Calibration report (ACCREDIA LAT traceability)
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (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)

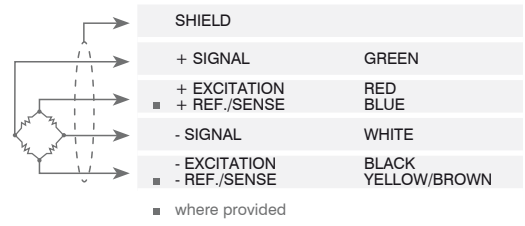


TECHNICAL FEATURES

Material	AISI 420 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 x 0.25 mm²/6 x 0.14 mm²



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
- HOLES FOR STANDARD SHACKLES
- COMBINED ERROR ≤ ±0.08%
- PROTECTION CLASS IP68

CAPACITY	kg	IECEx	Ex	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
30000		•	•	•	-	TBT30000
40000		•	•	•	-	TBT40000
50000		•	•	•	-	TBT50000
60000		•	•	•	-	TBT60000
100000		•	•	•	-	TBT100000
250000		•	•	•	-	TBT250000
		ON REQUEST				

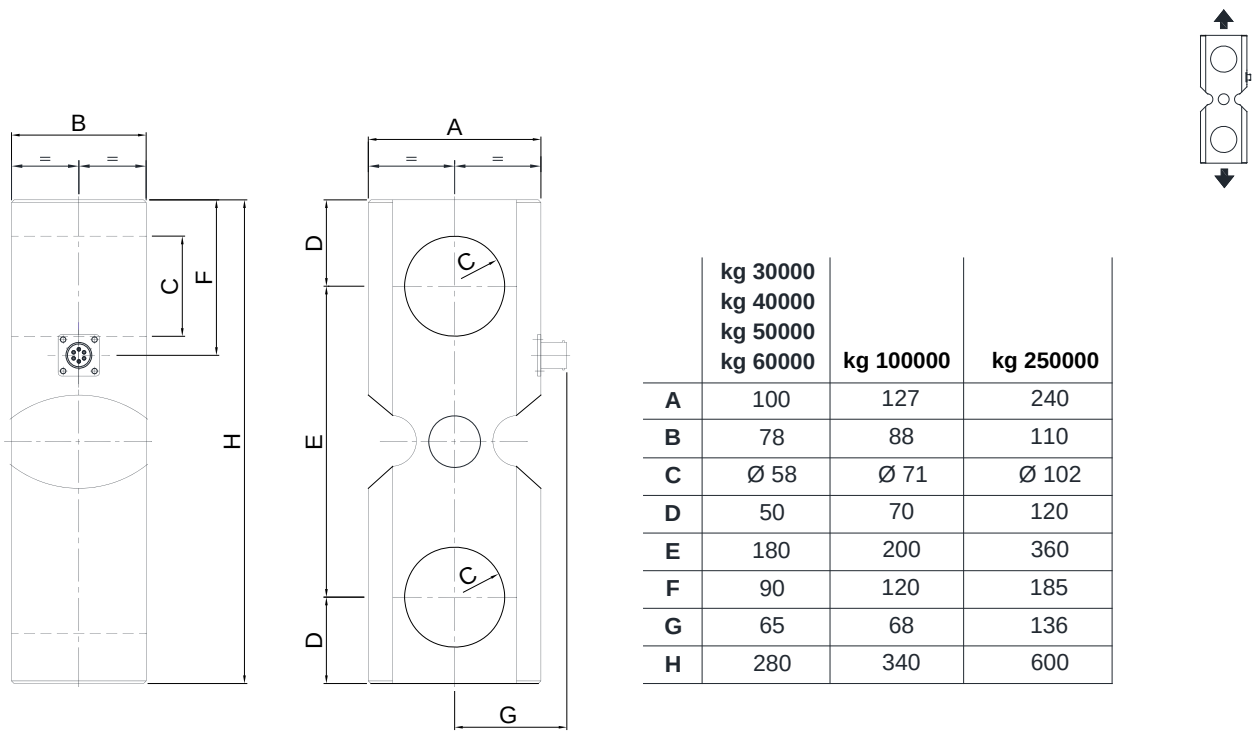
CERTIFICATIONS

CERTIFICATIONS ON REQUEST	
✓	Calibration report (ACCREDIA LAT traceability)
Ex	ATEX II 1GD (zone 0-1-2-20-21-22)
IECEx	IECEx (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	AISI 420 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 lenght	10 m
Cable diameter	6 mm
Cores	4 x 0.25 mm²/6 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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	CAPACITY	PAGE
A1.10	SPECIAL LOAD CELLS	
A1.10.1	pin	
 LAU	5000, 10000, 20000 kg	119
A1.10.2	FOR FOOT BRAKE	
 LPED	100 kg	121
A1.10.3	ANCHOR	
 CA	30000, 50000, 75000, 100000, 125000, 150000, 180000, 250000 kg	123

	CAPACITY	ROPE Ø MM	PAGE
A1.10.4	WIRE ROPE MEASURING		
 FUN	2000 kg 4000 kg 10000 kg 20000 kg 40000 kg	6 ÷ 14 mm 10 ÷ 18 mm 16 ÷ 26 mm 24 ÷ 36 mm 24 ÷ 36 mm	125

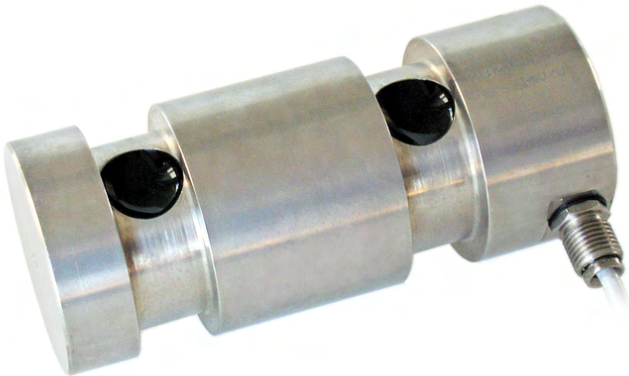
Notes section with horizontal lines for writing.



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

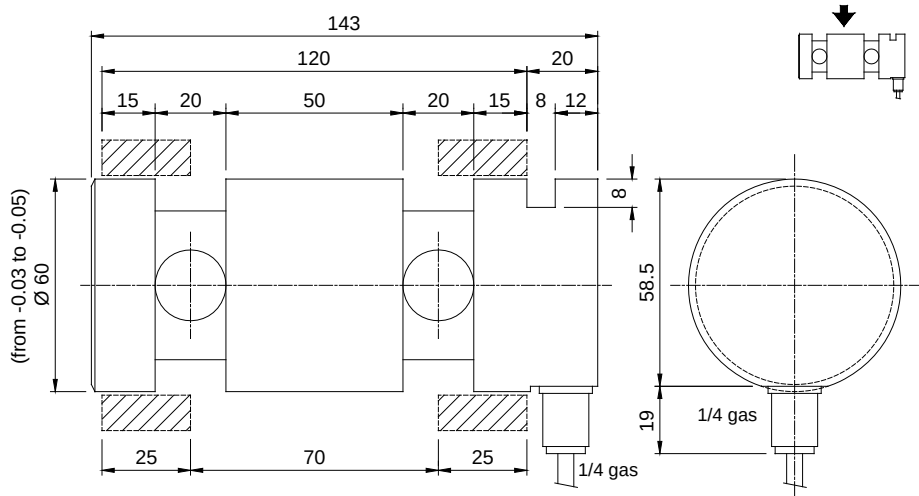
CERTIFICATIONS ON REQUEST

	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (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)



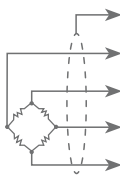
TECHNICAL FEATURES

Material	17-4 PH 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 x 0.25 mm ² /6 x 0.14 mm ²



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.

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	 	EAC	NET WEIGHT OF LOAD CELL (kg)	CODE
100		•	•	-	LPED100
ON REQUEST					

CERTIFICATIONS

CERTIFICATIONS ON REQUEST	
	Calibration report (ACCREDIA LAT traceability)
	ATEX II 1GD (zone 0-1-2-20-21-22)
	IECEx (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

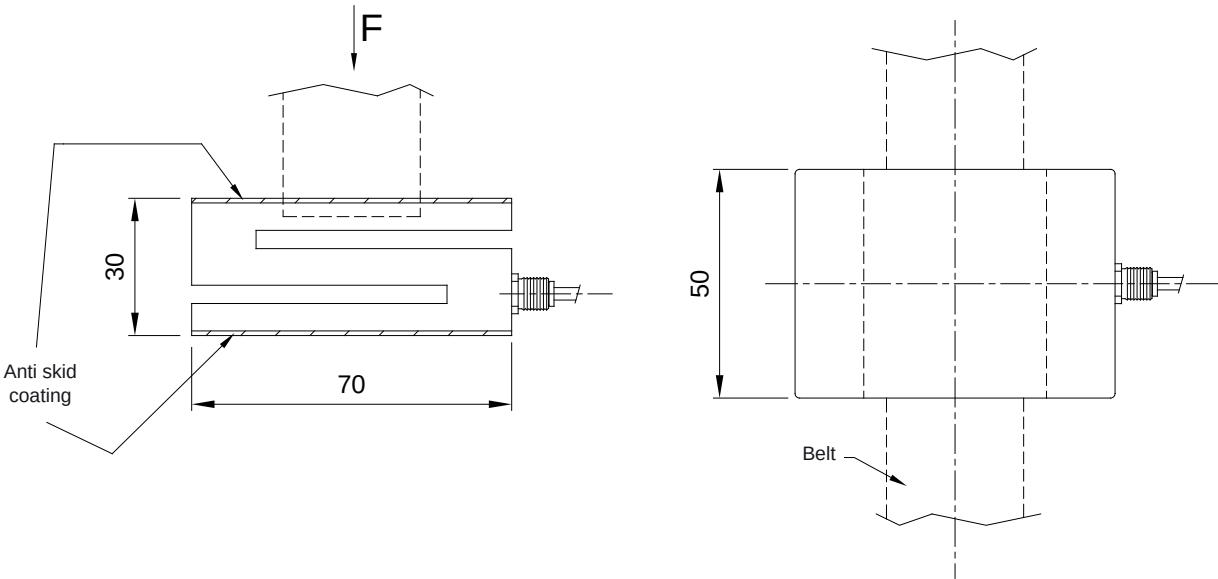
Rev. 00 del 12/03/2015

LPED

COMPRESSION LOAD CELL FOR FOOT BRAKE



DIMENSIONS (mm)

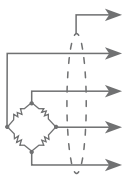


TECHNICAL FEATURES

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 lenght	2 m
Cable diameter	5 mm
Cores	4 x 0.25 mm ² /6 x 0.14 mm ²



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

■ where provided

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 30000 kg to 250000 kg

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



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

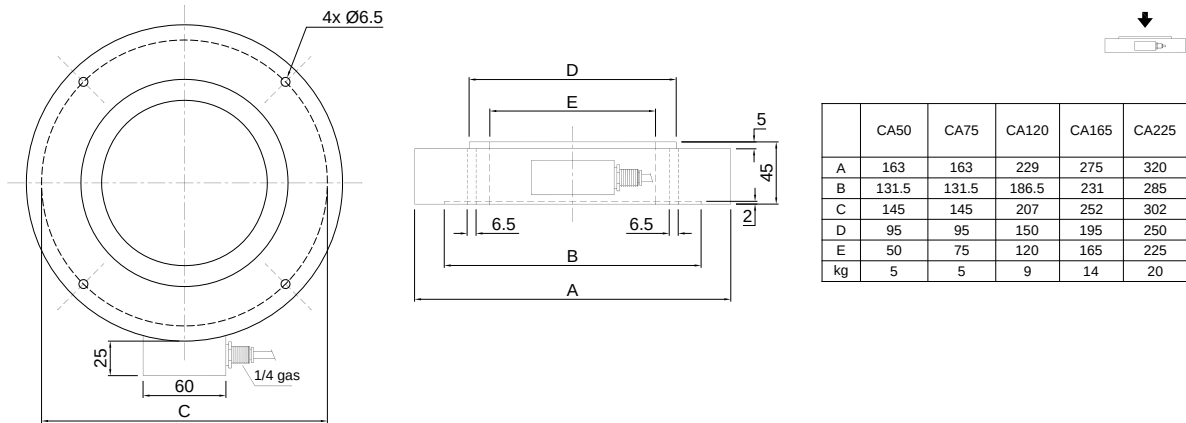
OPTIONS ON REQUEST

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

COMPLEMENTARY ACCESSORIES

DESCRIPTION			CODE
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

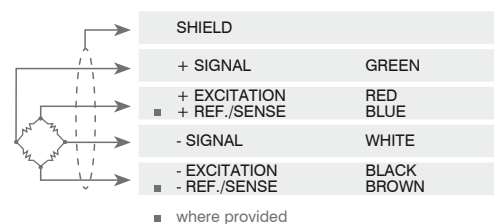


Material	17-4 PH stainless steel			
Nominal load (E max)	30000 - 50000 - 75000 - 100000 - 125000 - 150000 - 180000 - 250000 kg			
Combined error	≤ ±0.1%			
Protection class	IP68			

Rated output	2 mV/V ±0.1%	Input resistance	700 Ω ±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	5 m
Cable diameter	5 mm
Cores	4 x 0.25 mm ² /6 x 0.14 mm ²



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

ON REQUEST

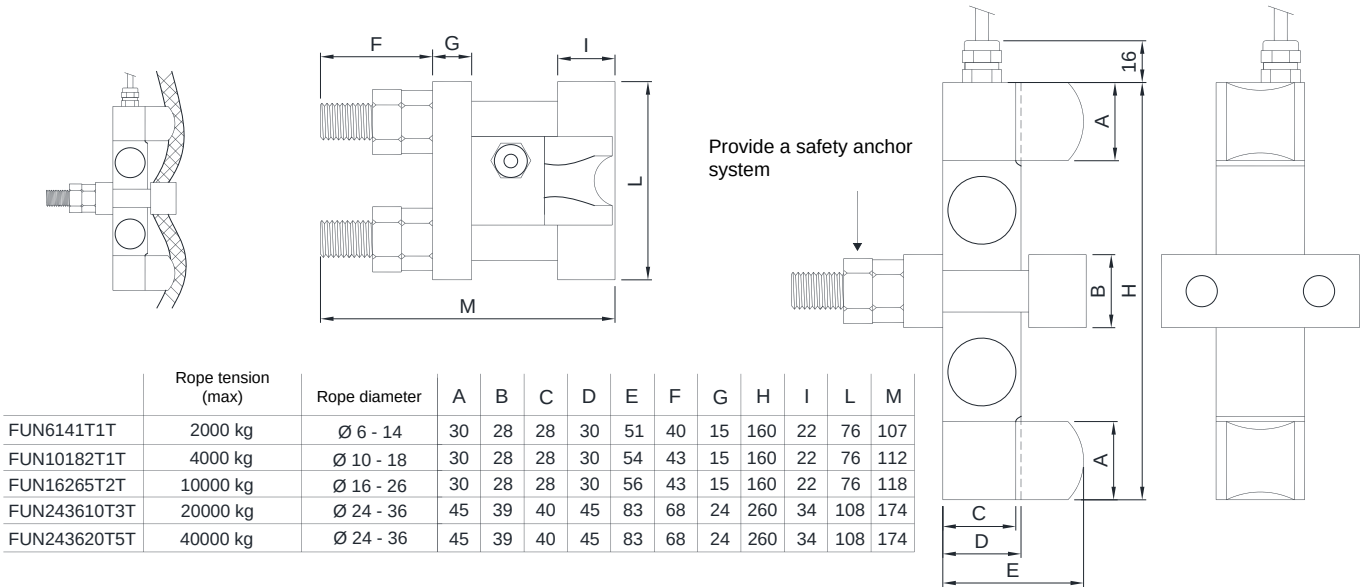
On request: customized load cells according to the relation between tension and rope diameter.

CERTIFICATIONS

CERTIFICATIONS ON REQUEST

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

DIMENSIONS (mm)



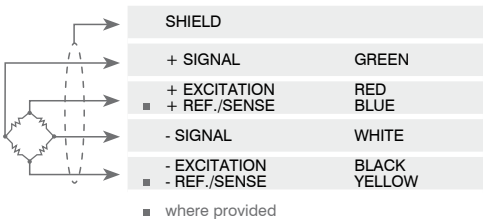
TECHNICAL FEATURES

Material	AISI 420 stainless steel		
Nominal load (E max)	2000 - 4000 - 10000 - 20000 - 40000 kg		
Switching accuracy on full scale	±2%		
Protection class	IP67		

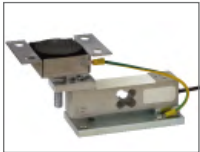
Rated output	3 mV/V ±0.1%	Input resistance	450/750/1050 Ω ±50
Temperature effect on zero	0.005% °C	Output resistance	350/700/1000 Ω ±20
Temperature effect on span	0.005% °C	Zero balance	±2%
Compensated temperature range	-10 °C / +50 °C	Insulation resistance	>5000 MΩ
Operating temperature range	-30 °C / +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 mm ²



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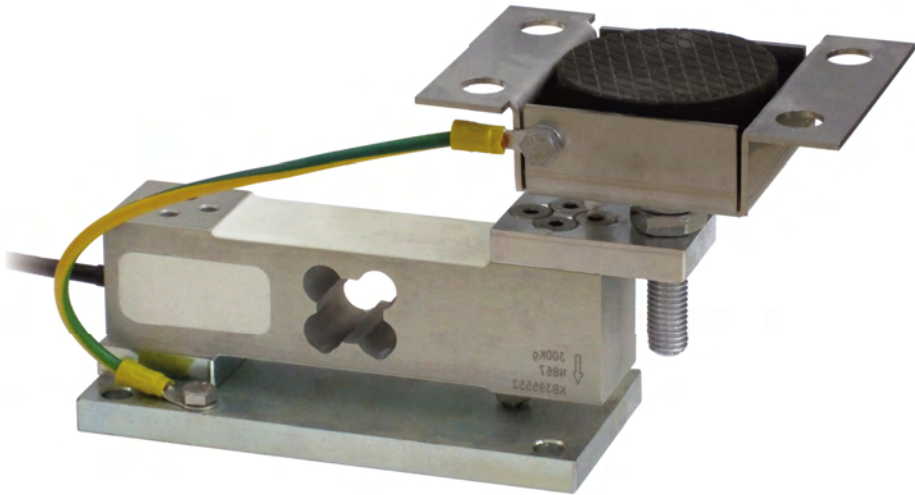
	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.1	for SINGLE POINT load cells		
T8	$10 \leq x \leq 300 \text{ kg}$	AZL, AZLI, AZS, AM	129

Notes section with horizontal lines for writing.

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 (max 50 kg)	1.7	T8AZLI
100	AZL (max 100 kg)	1.7	T8AZL
200	AZS	1.7	T8AZS
300	AM	1.7	T8AM

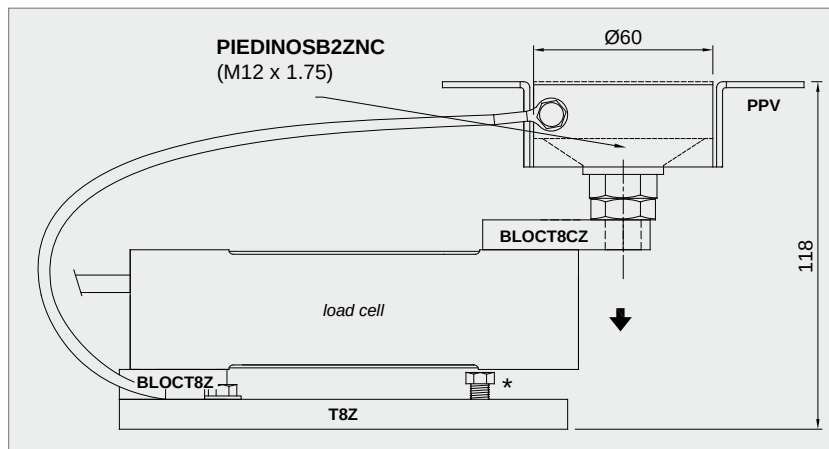
Load cell not included

DESCRIPTION

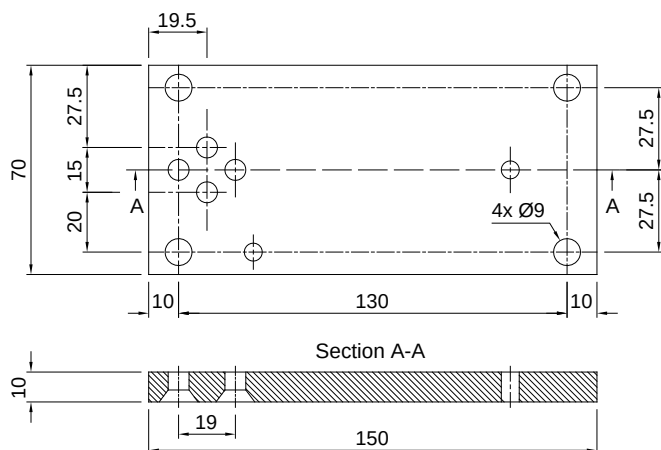
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by nickel-plated self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid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

DIMENSIONS AND TECHNICAL SPECIFICATIONS

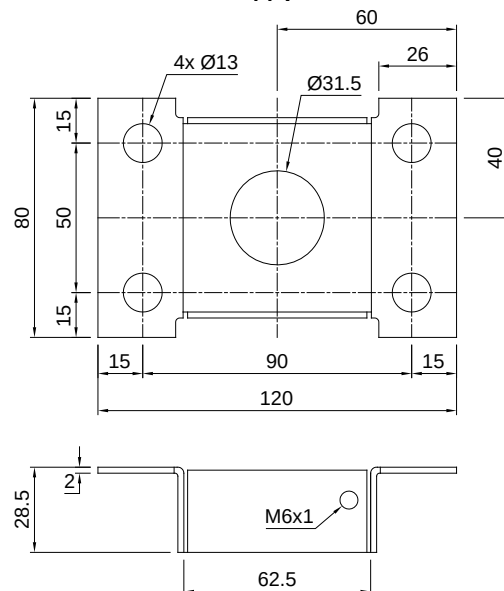
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the support base of the foot, you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



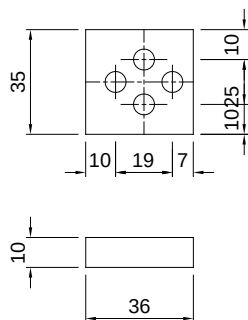
T8Z



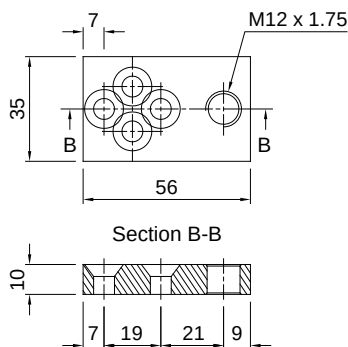
PPV



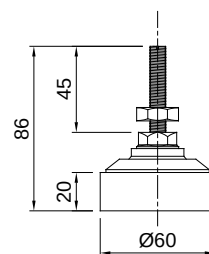
BLOCT8Z



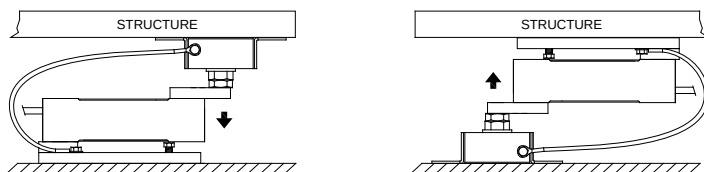
BLOCT8CZ



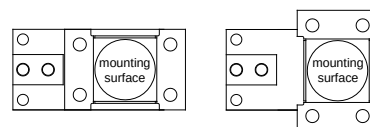
PIEDINOSB2ZNC
M12 x 1.75 mm



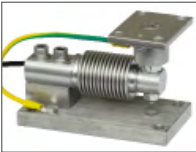
MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPPER PLATE POSITIONS



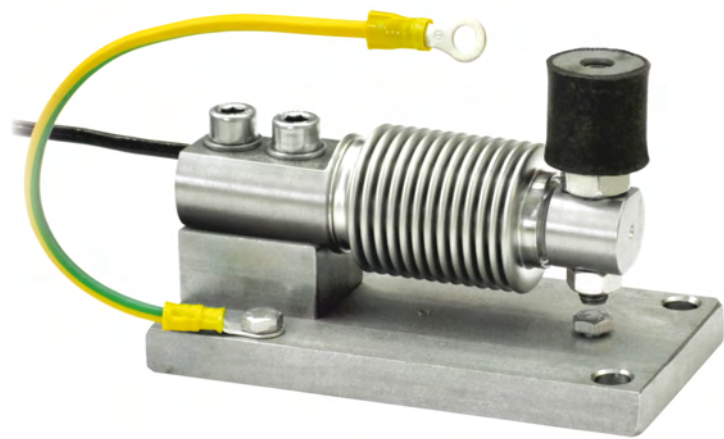
The Company reserves the right to make changes to the technical data, drawings and images without notice.

	APPLICATION RANGE	FOR LOAD CELLS	PAGE
A2.2	for BENDING BEAM load cells		
	TFC-FSB $5 \leq x \leq 200 \text{ kg}$	FCK, FCOL	133
	TFC-PV TFC-PV10 $5 \leq x \leq 500 \text{ kg}$	FCK, FCOL	135
	TFC-GP $5 \leq x \leq 500 \text{ kg}$	FCK, FCOL	137
	TF-FSB $30 \leq x \leq 500 \text{ kg}$	FCAL, FCAX	139
	TF-AST $30 \leq x \leq 500 \text{ kg}$	FCAL, FCAX	141
	TF-PV/Z TF-PV2000 $30 \leq x \leq 500 \text{ kg}$ $30 \leq x \leq 1000 \text{ kg}$	FCAL, FCAX	143
	TF-GP TF-GP2000 $30 \leq x \leq 500 \text{ kg}$ $30 \leq x \leq 1500 \text{ kg}$	FCAL, FCAX	145
	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	147

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

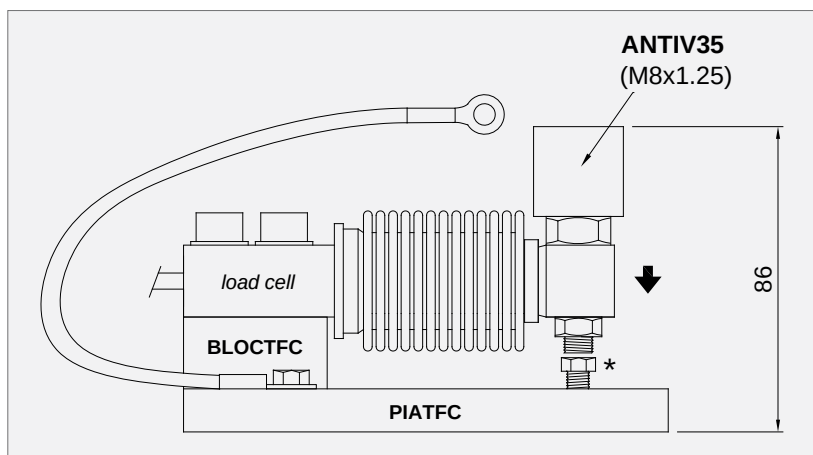
Load cell not included.

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.

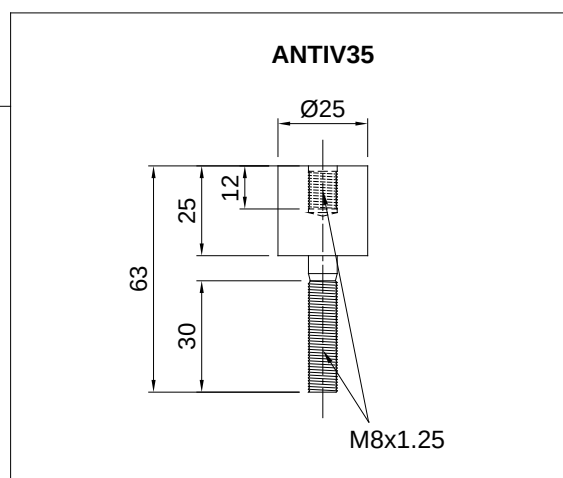
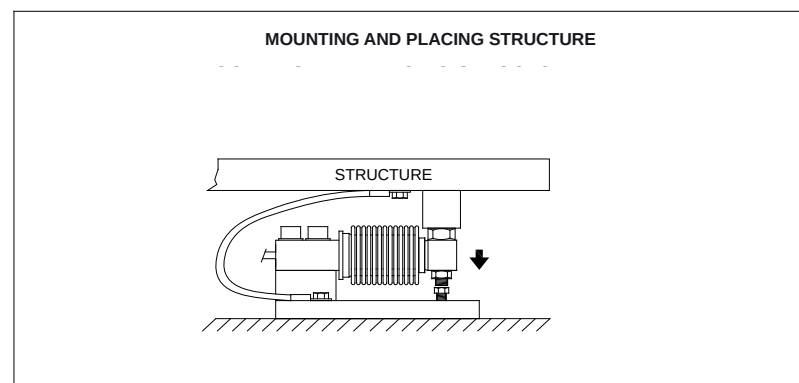
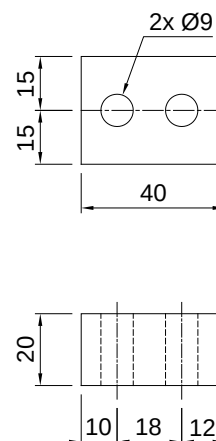
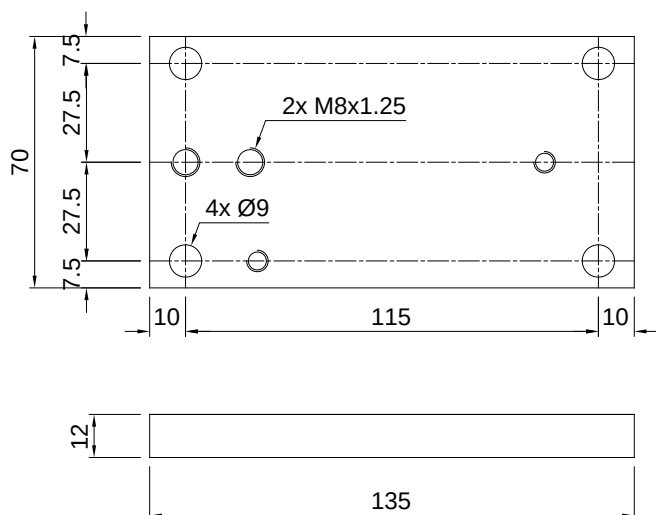
DIMENSIONS AND TECHNICAL SPECIFICATIONS

- 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

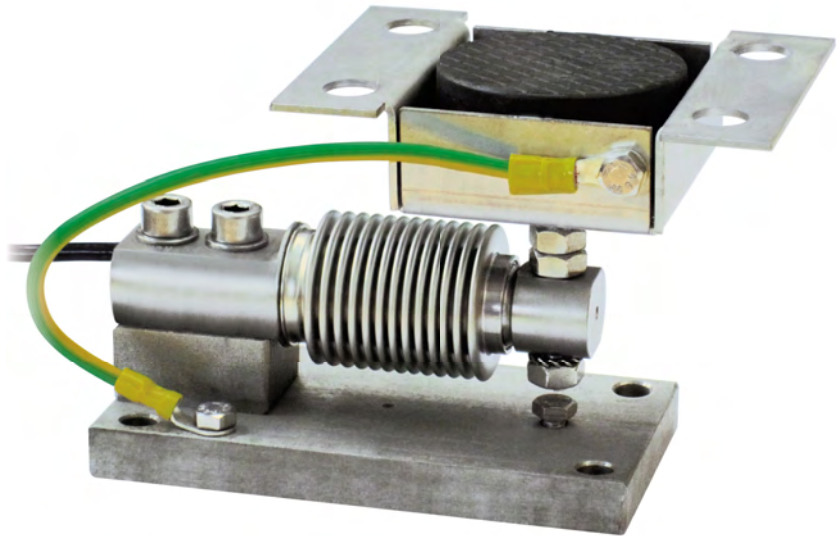
BLOCTFC



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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
	200	FCK - FCOL	1.7	TFCPV
	500	FCOL	1.7	TFCPV10

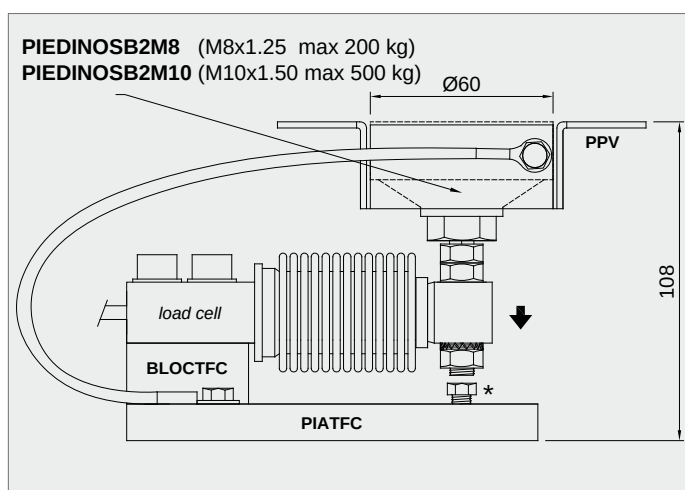
Load cell not included.

DESCRIPTION

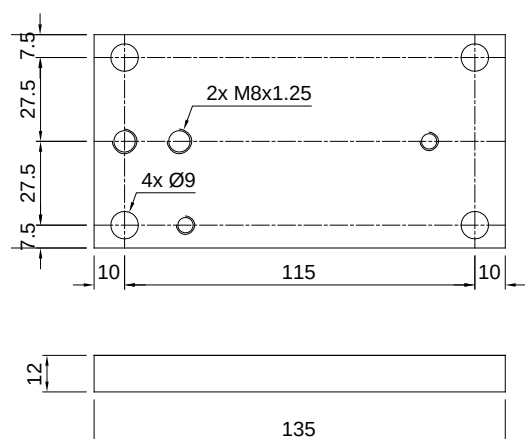
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking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

DIMENSIONS AND TECHNICAL SPECIFICATIONS

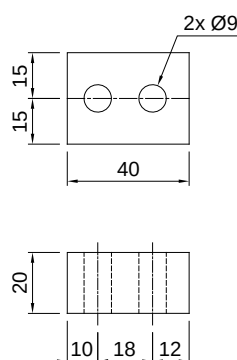
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



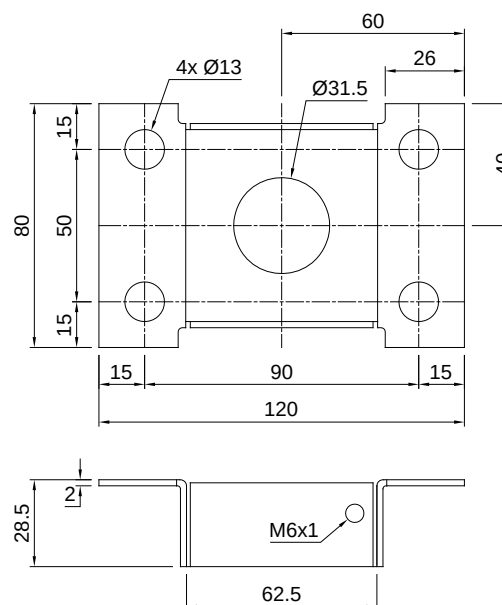
PIATFC



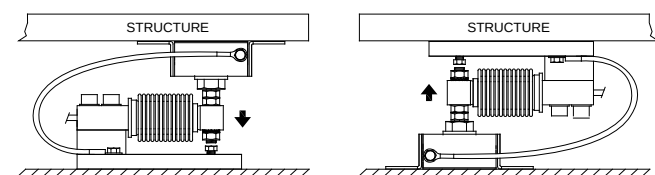
BLOCTFC



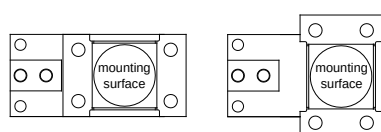
PPV



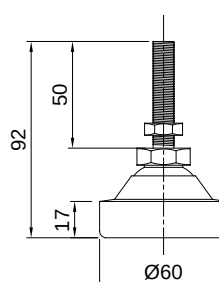
MOUNTING AND PLACING STRUCTURE



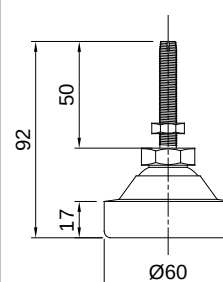
POSSIBLE PPV UPPER PLATE POSITIONS



PIEDINOSB2M10
M10x1.50
max 500 kg



PIEDINOSB2M8
M8x1.25
max 200 kg



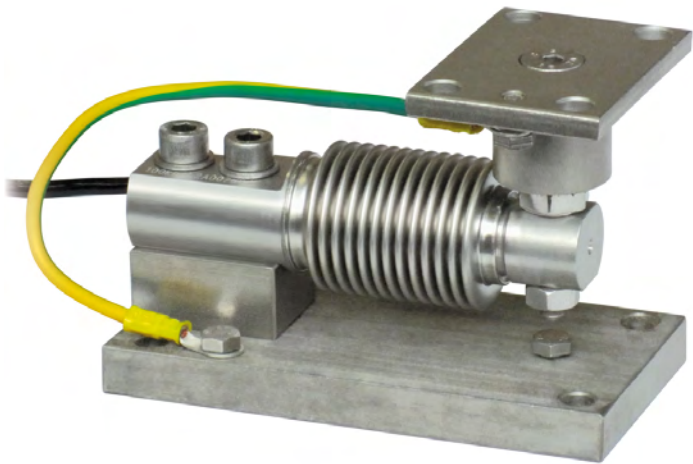
The Company reserves the right to make changes to the technical data, drawings and images without notice.

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

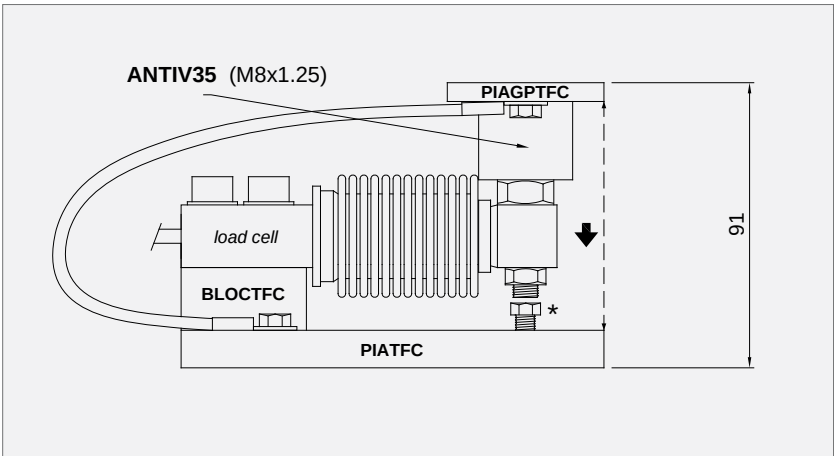
Load cell not included.

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

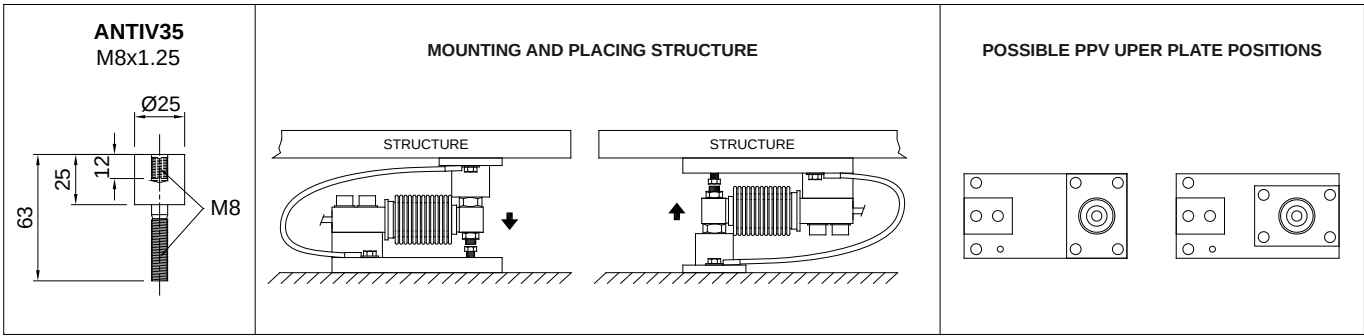
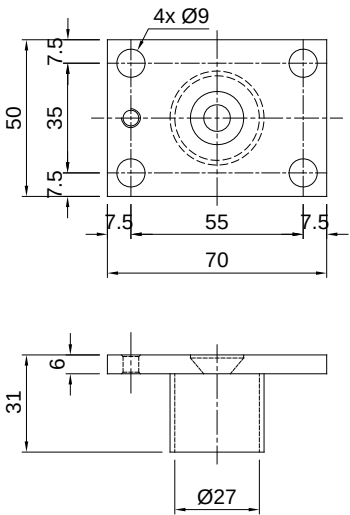
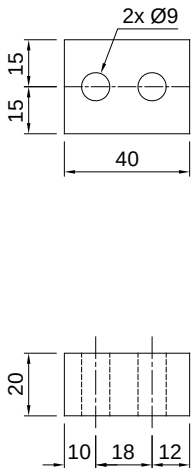
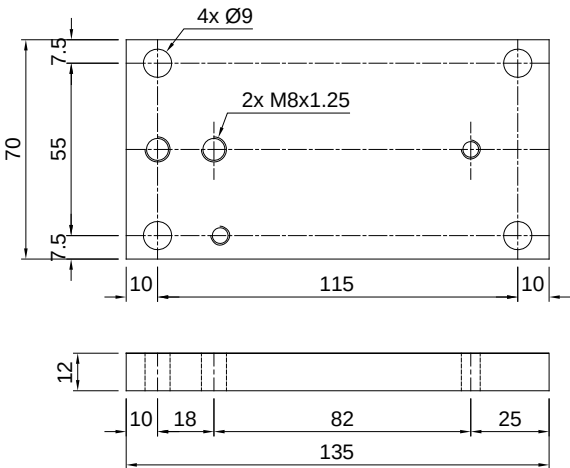
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



PIATFC

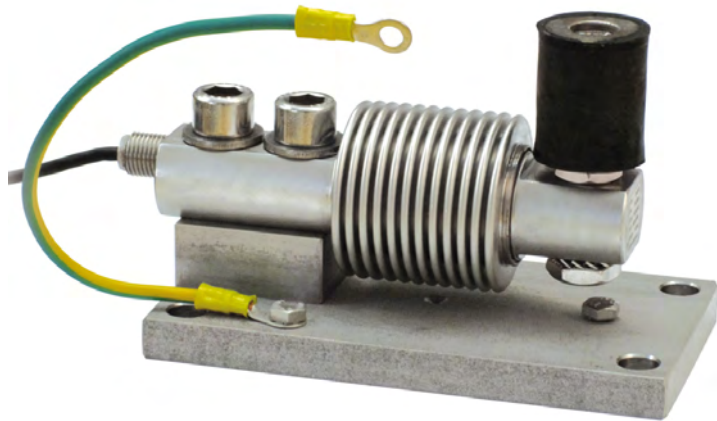
BLOCTFC

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

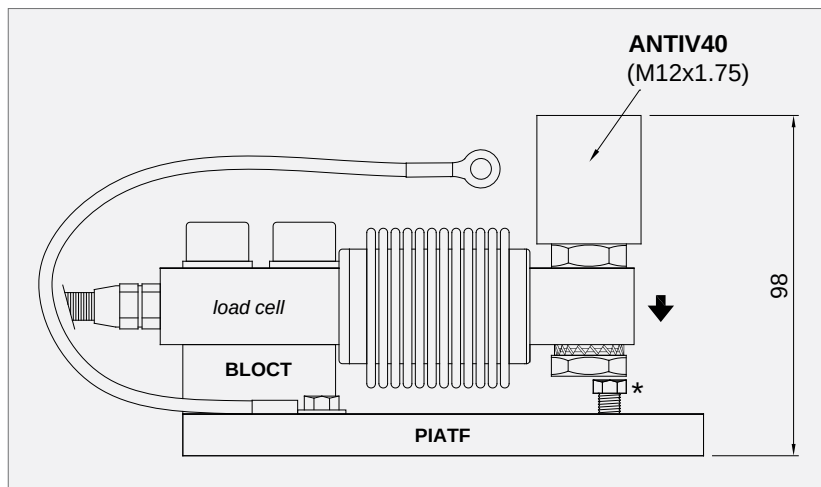
Load cell not included.

DESCRIPTION

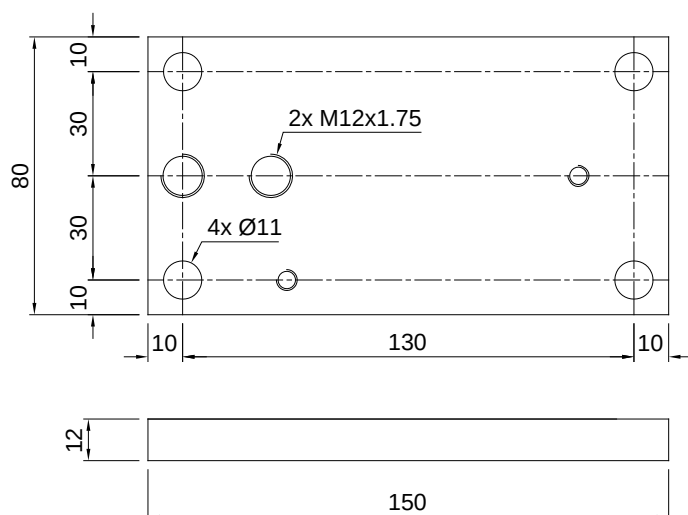
- Compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

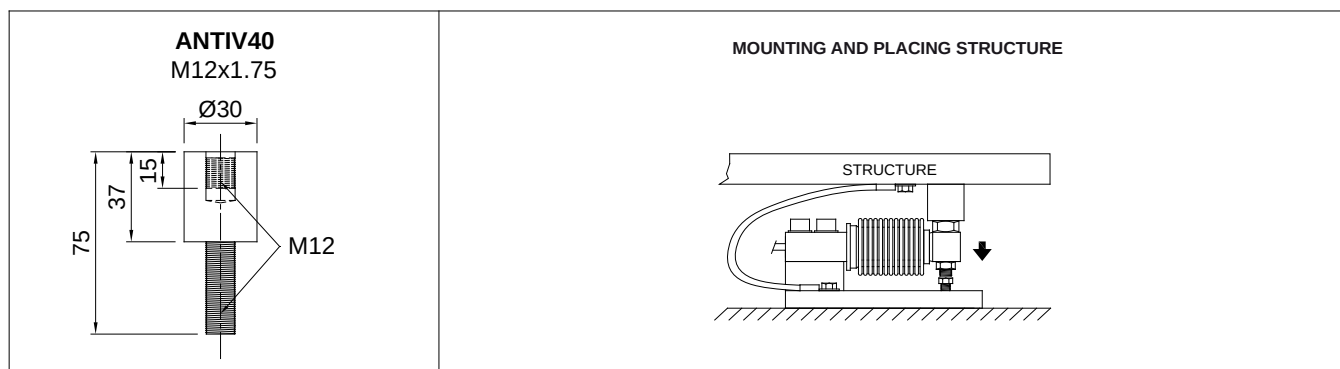
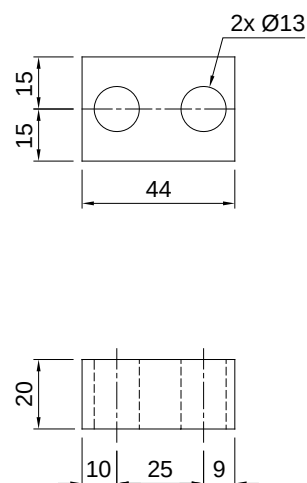
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.
- In case of structure with four-point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



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

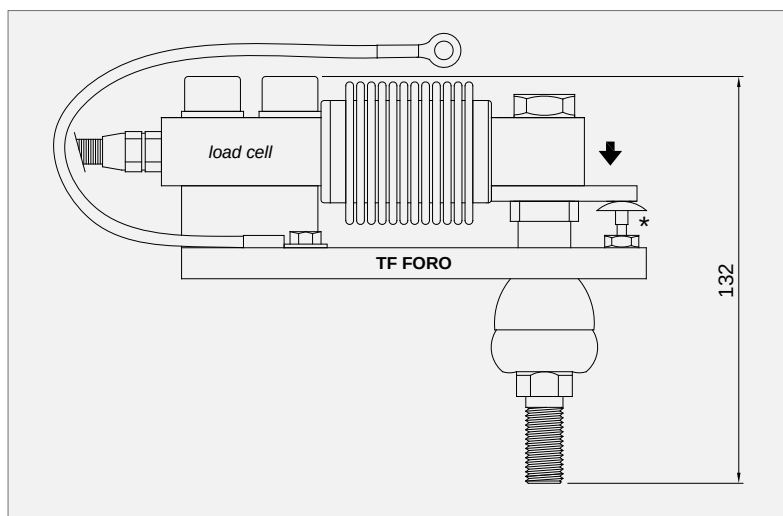
Load cell not included.

DESCRIPTION

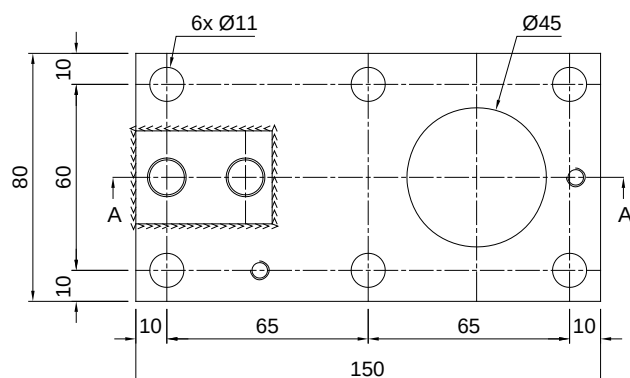
- Aluminum alloy tension ball joint.
- AISI 304 stainless steel lower plate.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

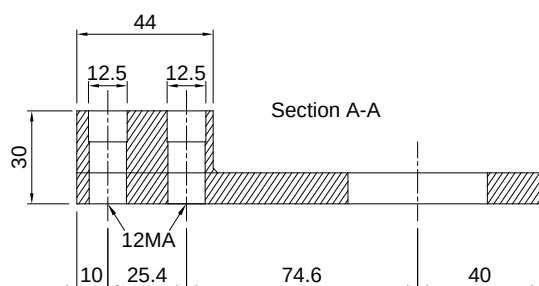
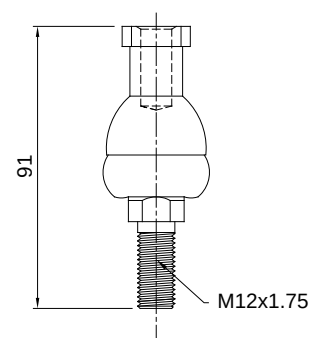
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Connect the structure to be weighed by means of copper wire, then connect all the lower plates to the earthing system.



TF FORO



Tension ball joint

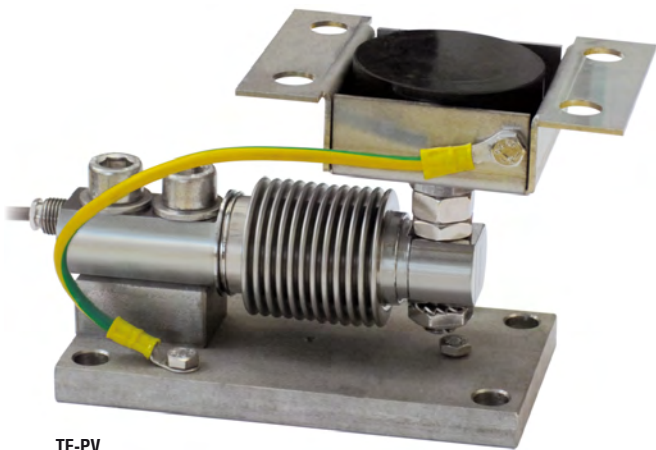


TF-PV

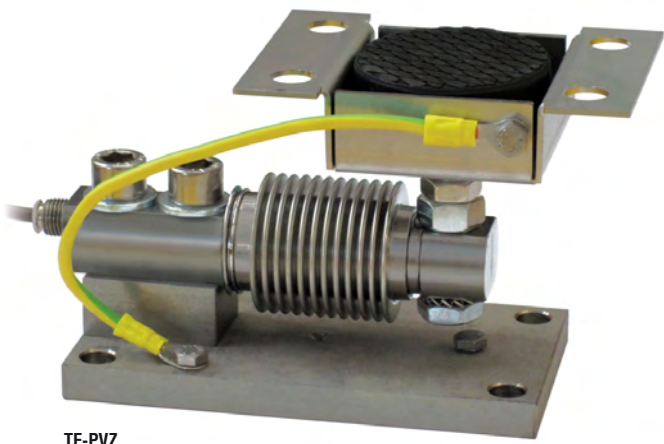
MOUNTING KIT for BENDING BEAM load cells

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

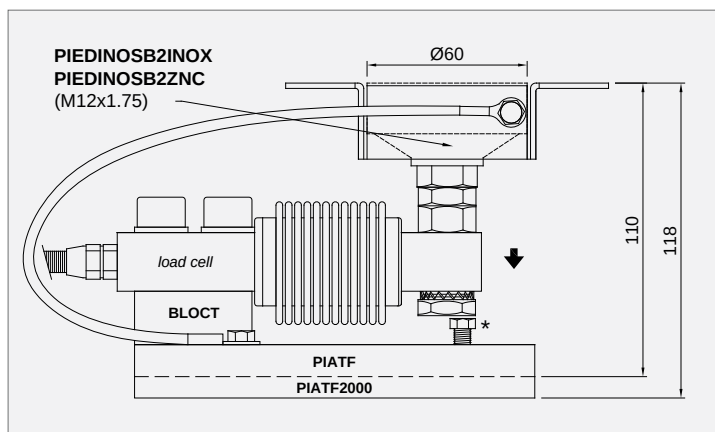
Load cell not included.

DESCRIPTION

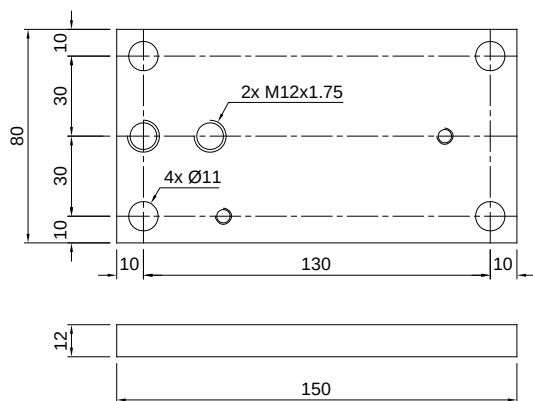
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel.
- Constraint against lateral forces and anti-tilt by in (TFPV, TFPV2000) AISI 304 stainless steel or (TFPVZ) galvanized steel self-centring joint foot.
- Misalignment compensation of the support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

DIMENSIONS AND TECHNICAL SPECIFICATIONS

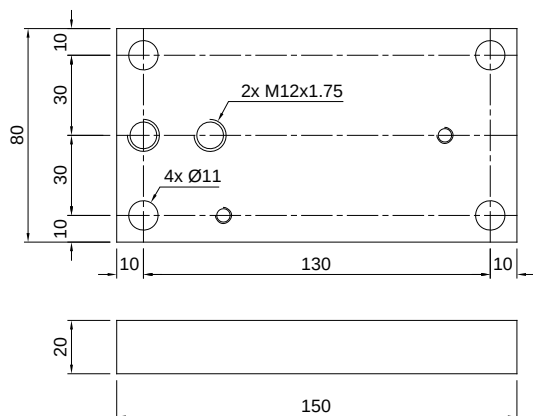
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



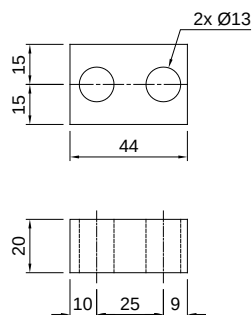
PIATF



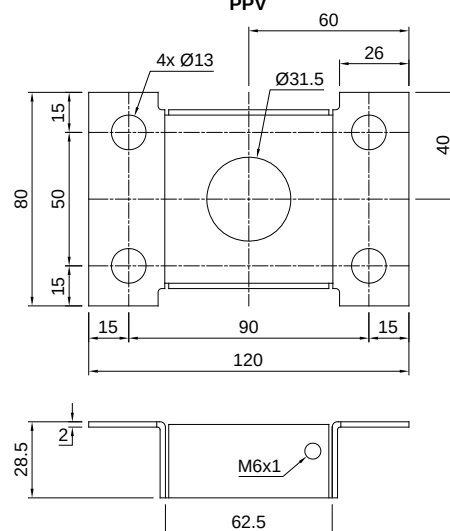
PIATF2000



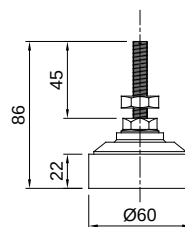
BLOCT



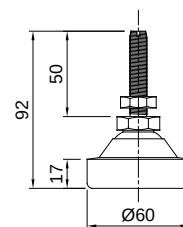
PPV



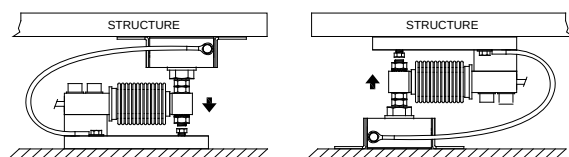
PIEDINOSB2ZNC
M12x1.75



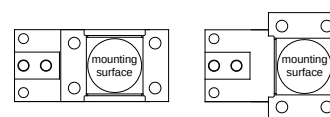
PIEDINOSB2INOX
M12x1.75



MOUNTING AND PLACING STRUCTURE

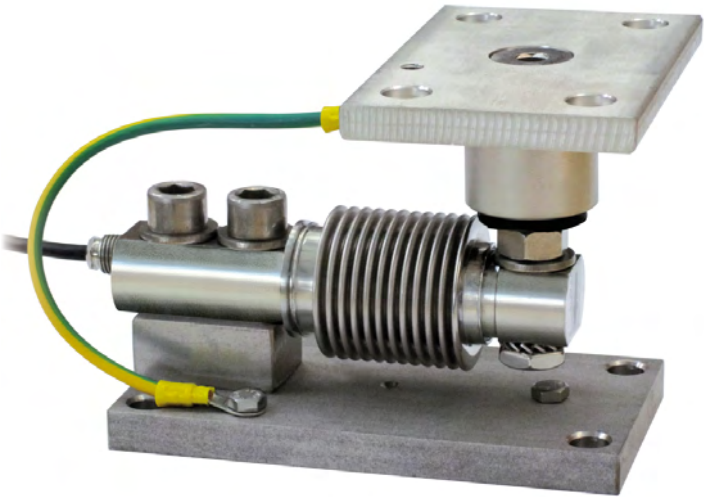


POSSIBLE PPV UPPER PLATE POSITIONS



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

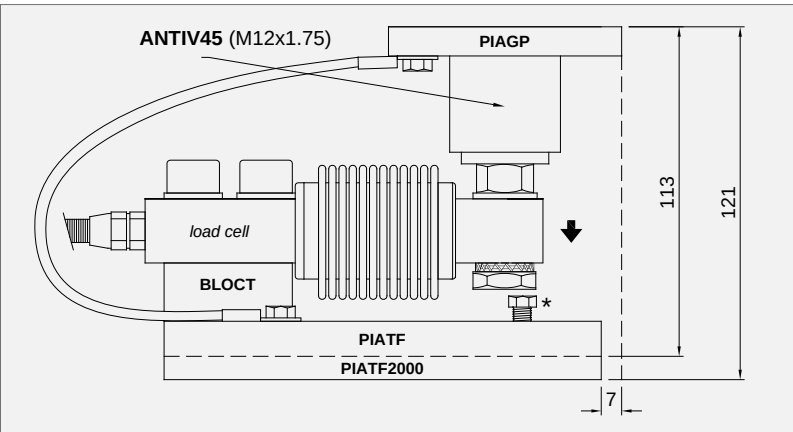
Load cell not included.

DESCRIPTION

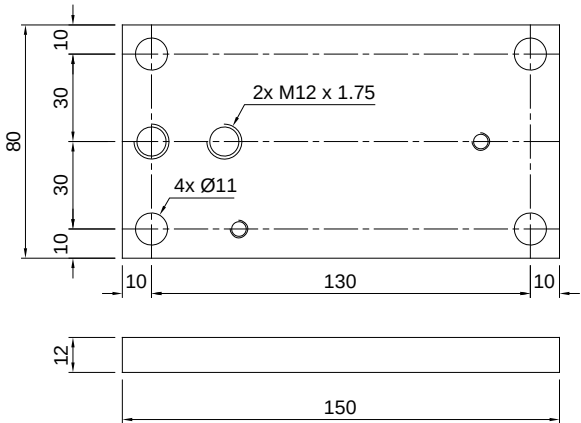
- Upper plate with a compression joint in AISI 304 stainless steel and rubber.
- Lower plate and block in AISI 304 stainless steel.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

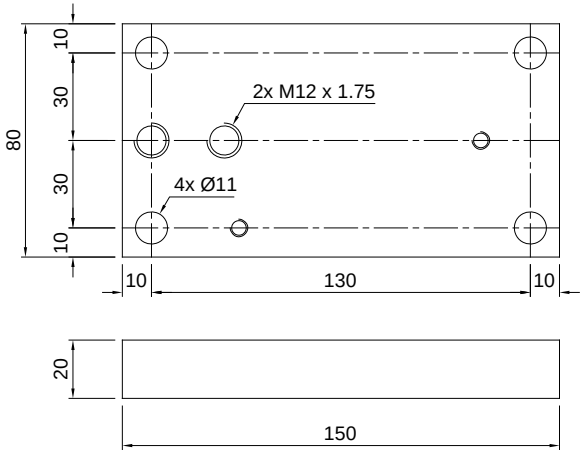
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the lower plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must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



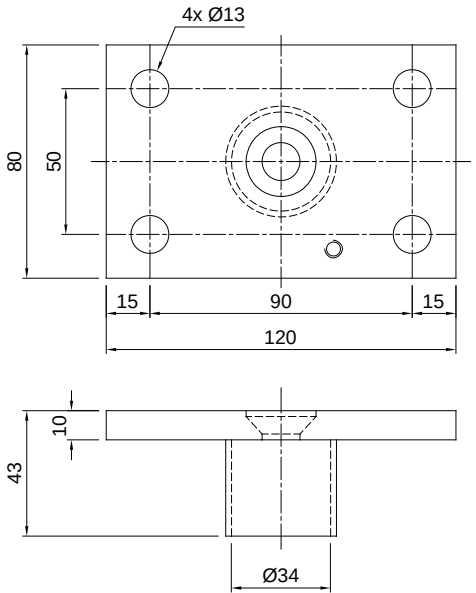
PIATF



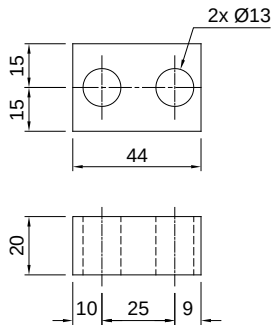
PIATF2000



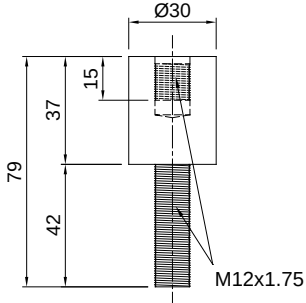
PIAGP



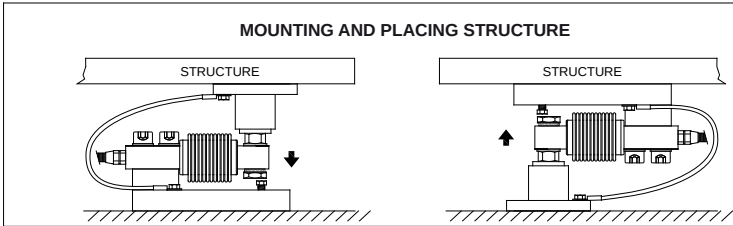
BLOCT



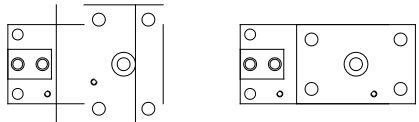
ANTIV45



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPPER PLATE POSITIONS



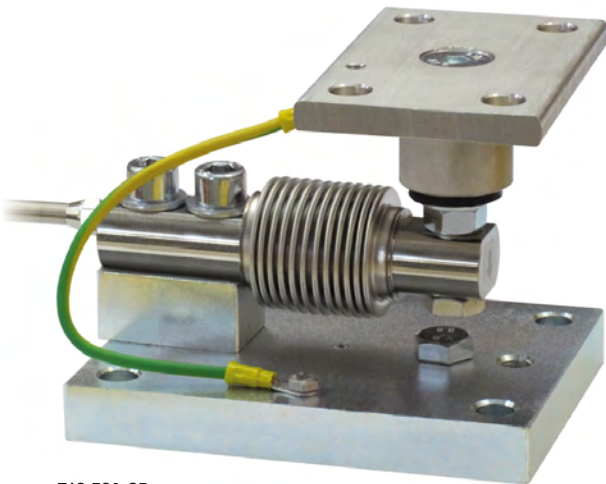
The Company reserves the right to make changes to the technical data, drawings and images without notice.

T12-GP

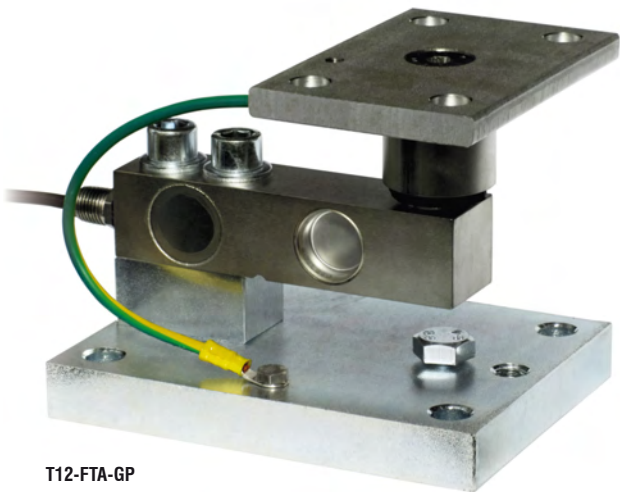
MOUNTING KIT for BENDING BEAM load cells

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

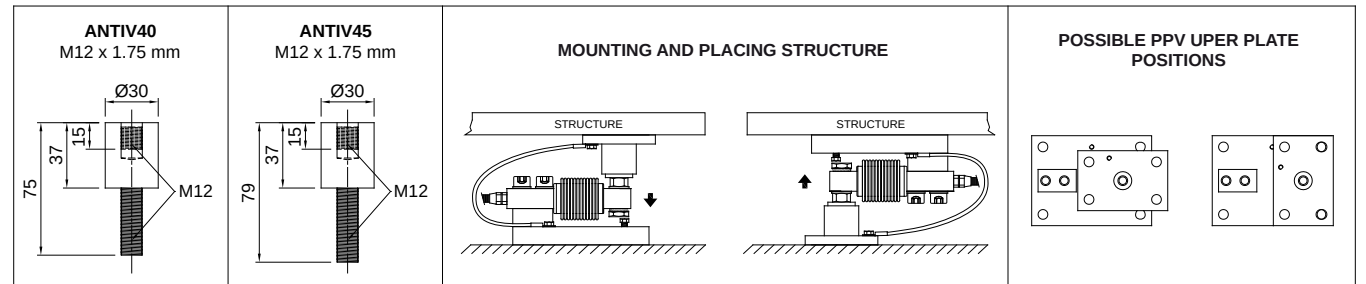
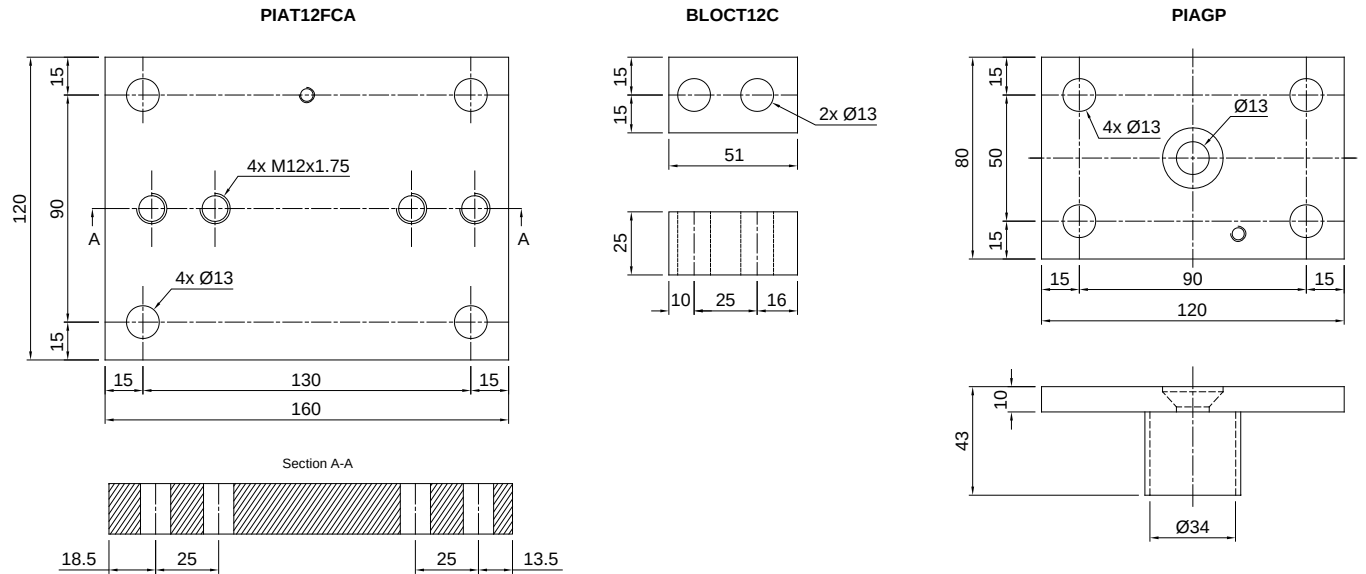
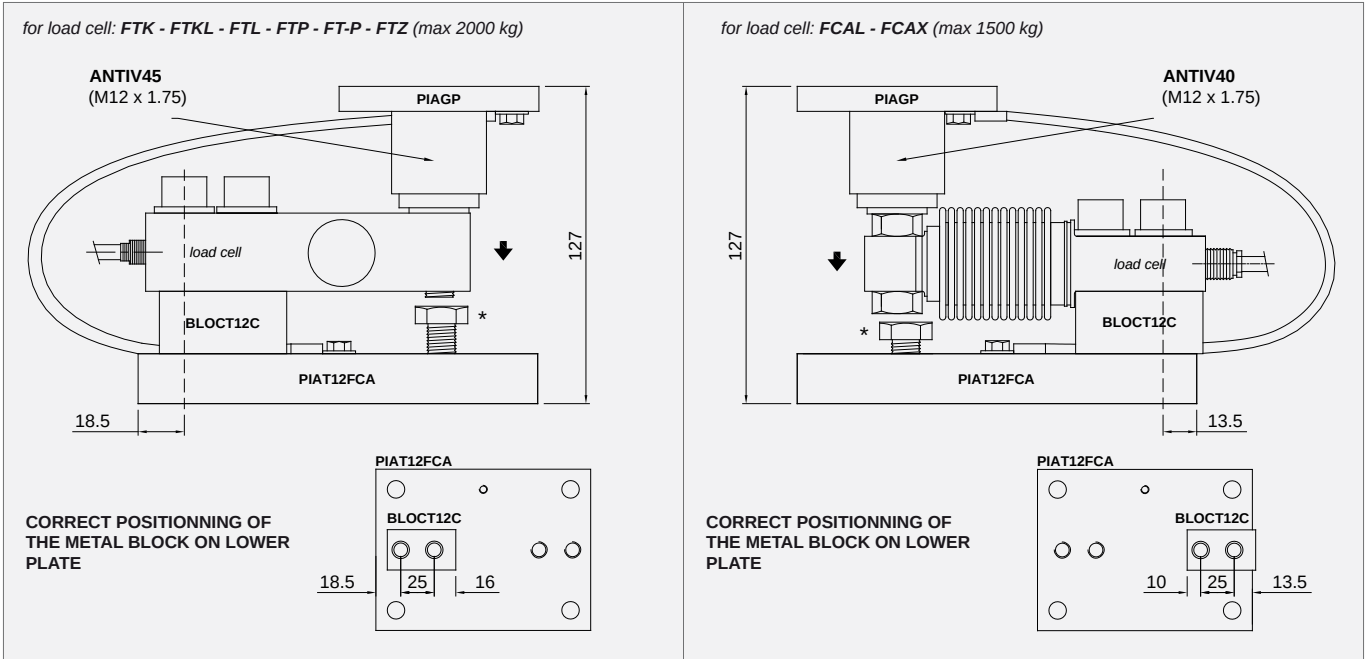
Load cell not included.

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	151
	PV/Z $75 \leq x \leq 2000 \text{ kg}$	FTL, FTK, FTKL, FTP, FT-P, FTZ	153
	TF-PS 2000 $75 \leq x \leq 2000 \text{ kg}$	FTL, FTK, FTKL, FTP, FT-P, FTZ	155
	PV80/Z $3000 \leq x \leq 5000 \text{ kg}$	FTK, FTP, FTZ	157
	PS PS10T $3000 \leq x \leq 5000 \text{ kg}$ $3000 \leq x \leq 10000 \text{ kg}$	FTK, FTP, FTZ	159

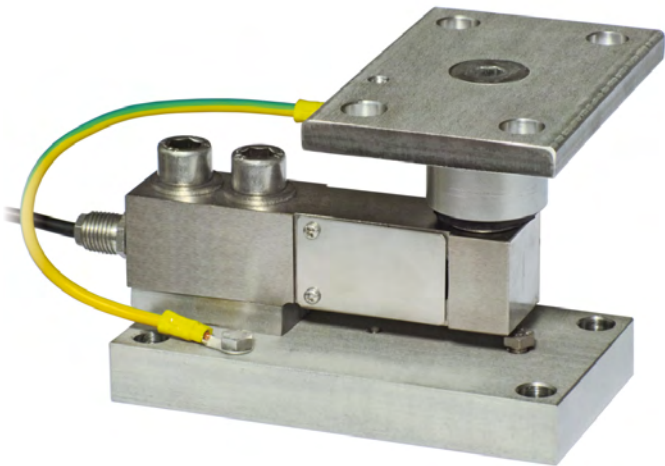
Notes section with horizontal lines for writing.

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.

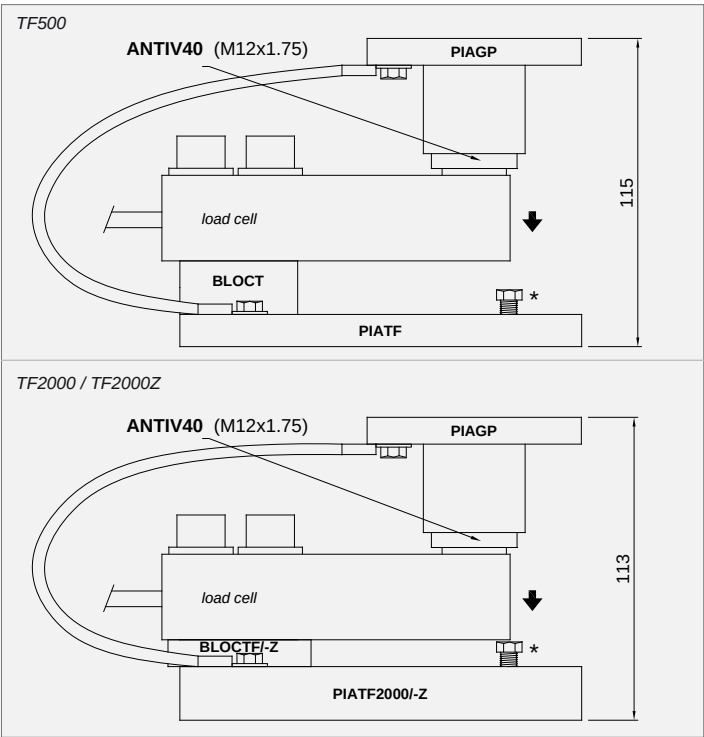
TF 500/2000

MOUNTING KIT for SHEAR BEAM load cells

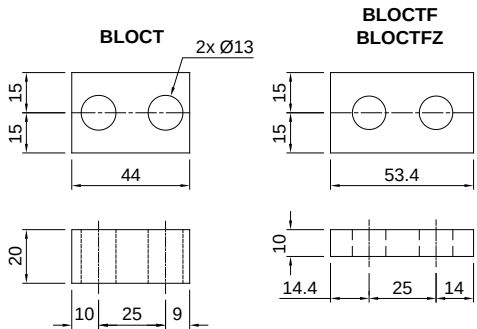
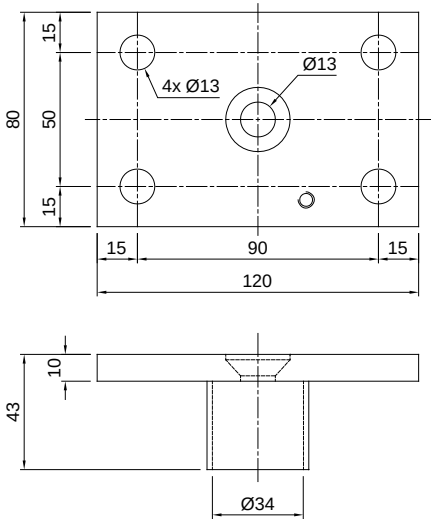


DIMENSIONS AND TECHNICAL SPECIFICATIONS

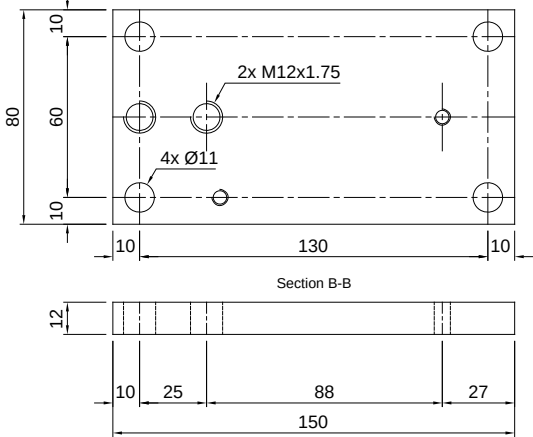
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



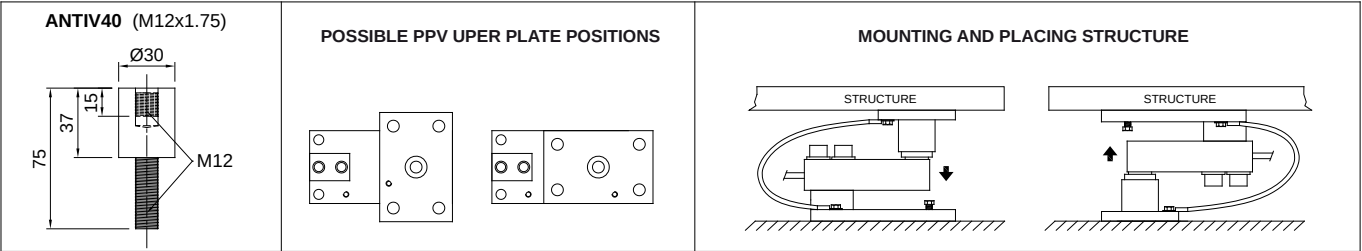
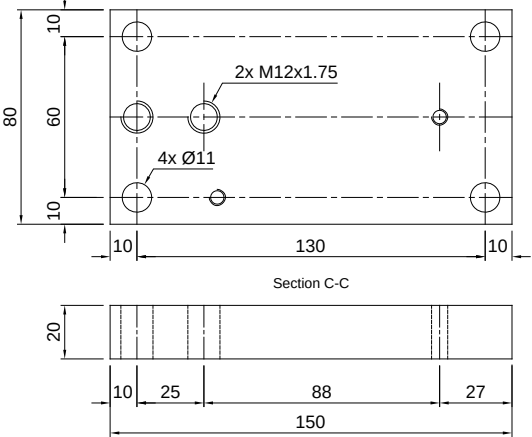
PIAGP



PIATF



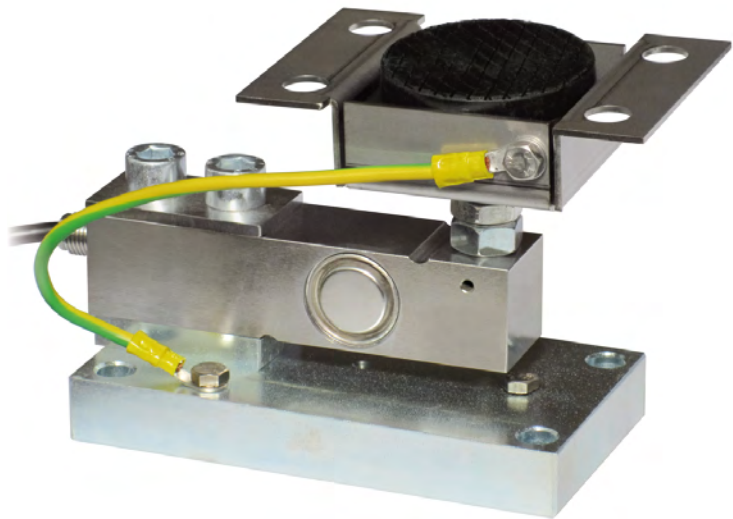
PIATF2000 PIATF2000Z



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

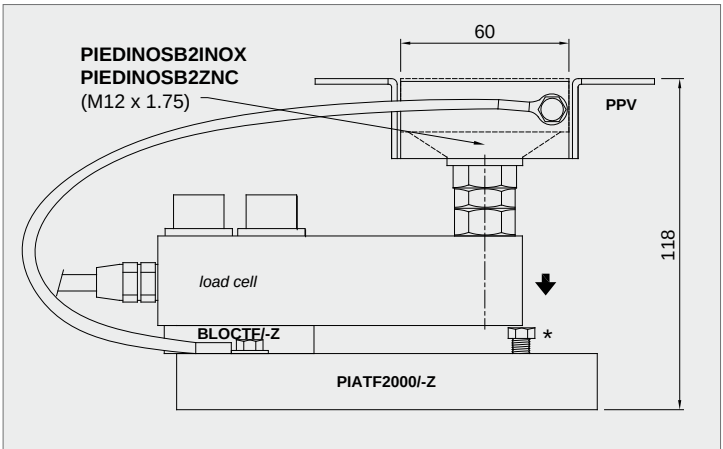
Load cell not included.

DESCRIPTION

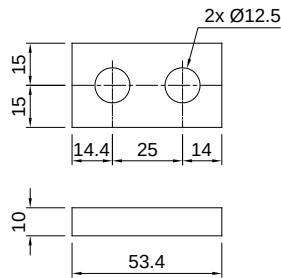
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in AISI 304 stainless steel (PV) or galvanized steel (PVZ)
- Constraint against lateral forces and anti-tilt by in (TF-PV, TF-PV-2000) AISI 304 stainless steel or (TF-PVZ) galvanized steel self-centring joint foot.
-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

DIMENSIONS AND TECHNICAL SPECIFICATIONS

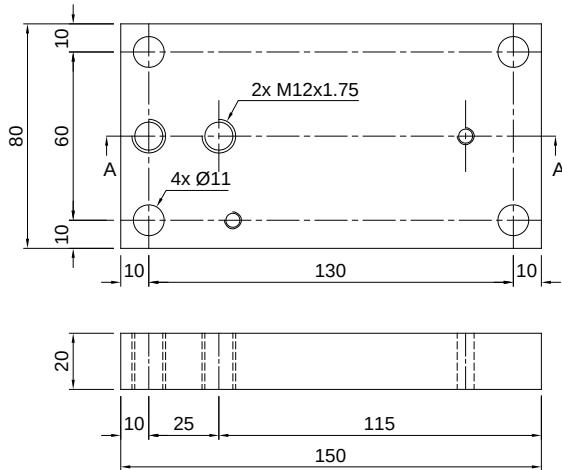
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



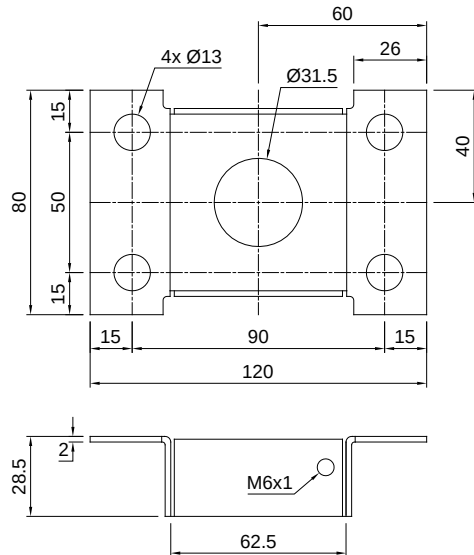
**BLOCTF
BLOCTFZ**



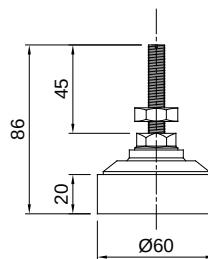
**PIATF2000
PIATF2000Z**



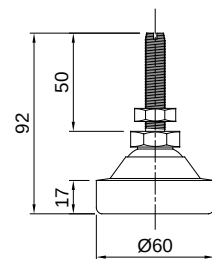
PPV



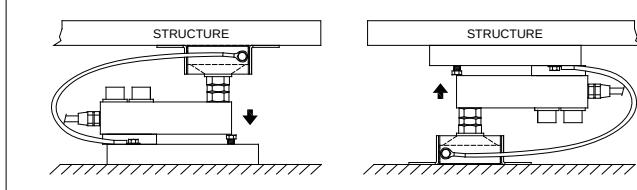
**PIEDINOSB2ZNC
M12x1.75**



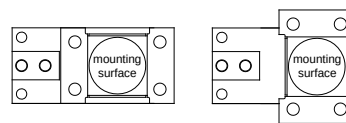
**PIEDINOSB2INOX
M12x1.75**



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPER PLATE POSITIONS

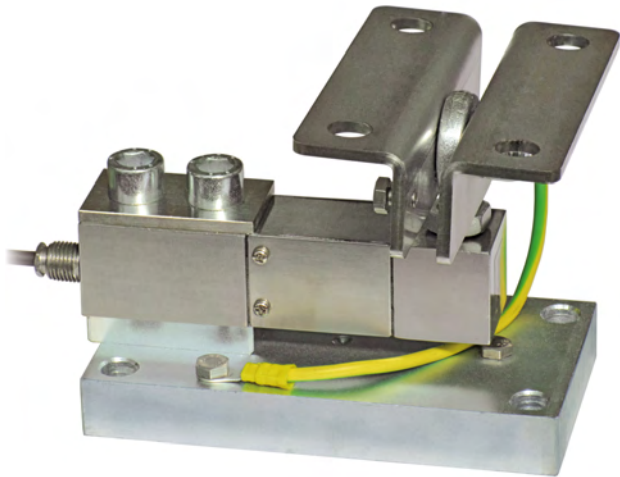


TFPS2000

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

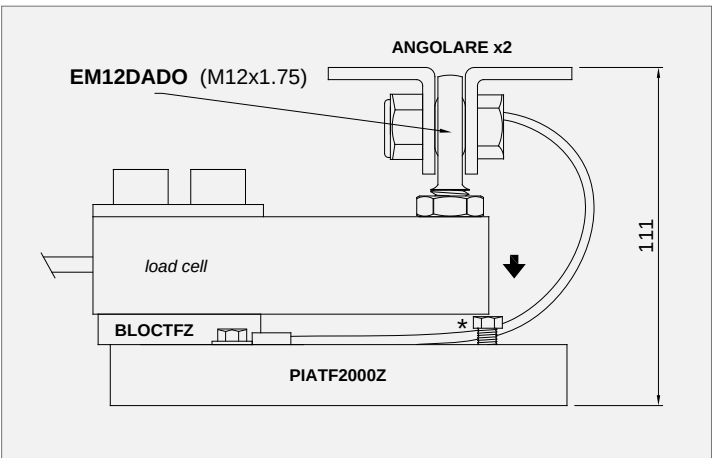
Load cell not included.

DESCRIPTION

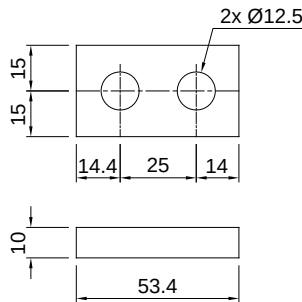
- AISI 304 stainless steel upper plate.
- Lower plate and block in galvanized steel.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint.
- Misalignment compensation of the support plates structure.
- Adjustable height.
- Locking screw to avoid damage during transport and installation.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

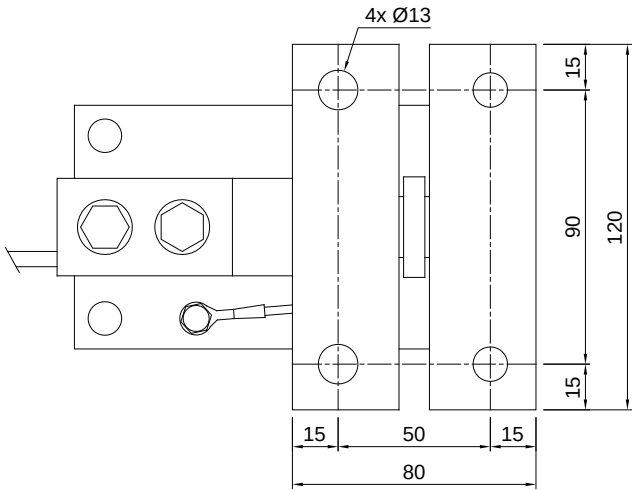
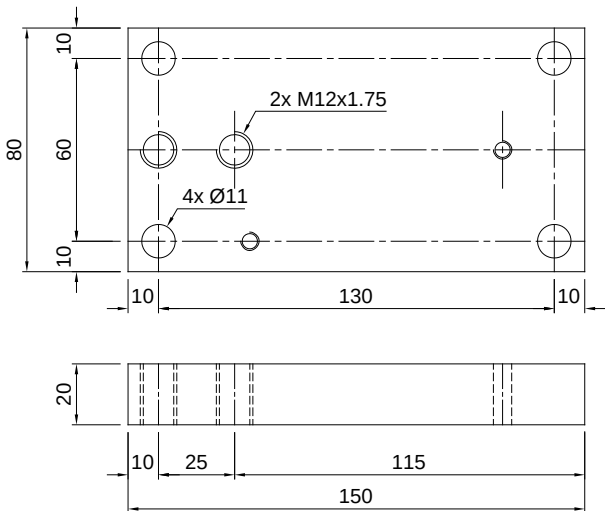
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



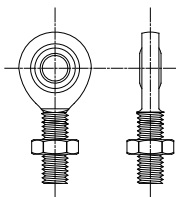
BLOCTFZ



PIATF2000Z



EM12DADO
(M12 x 1.75)

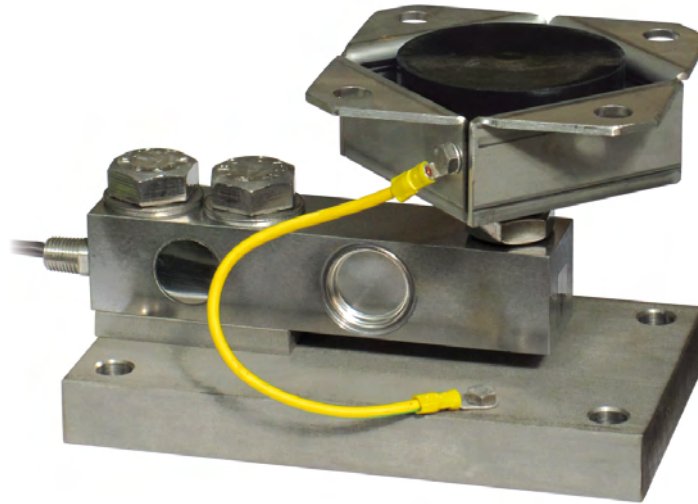


PV80 / PV80Z

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

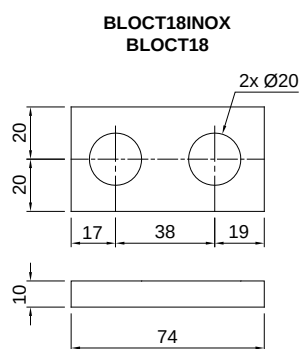
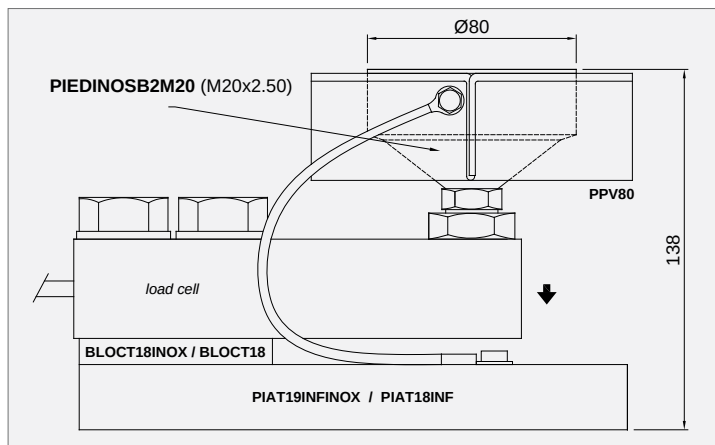
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- Lower plate and block in (PV80) AISI 304 stainless steel or (PV80Z) galvanized steel.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.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

PV80 / PV80Z

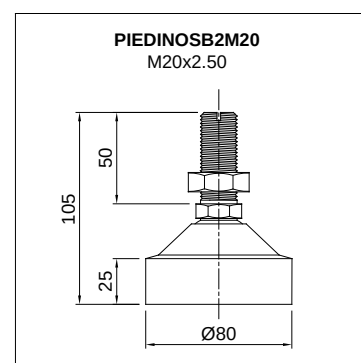
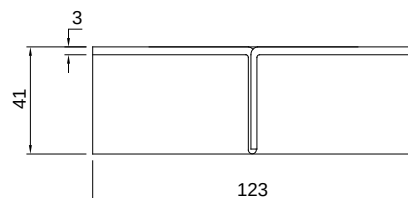
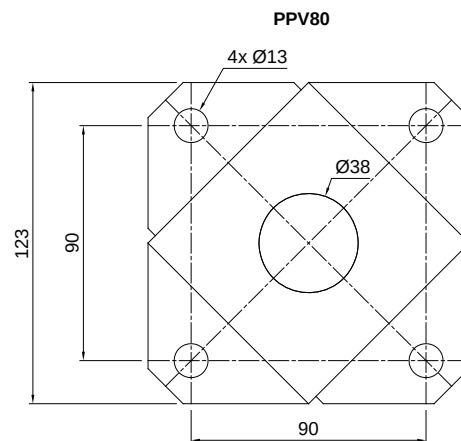
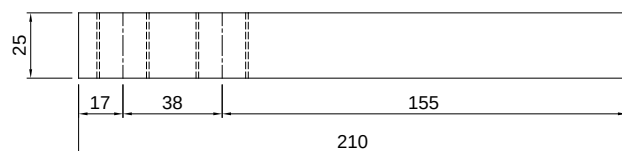
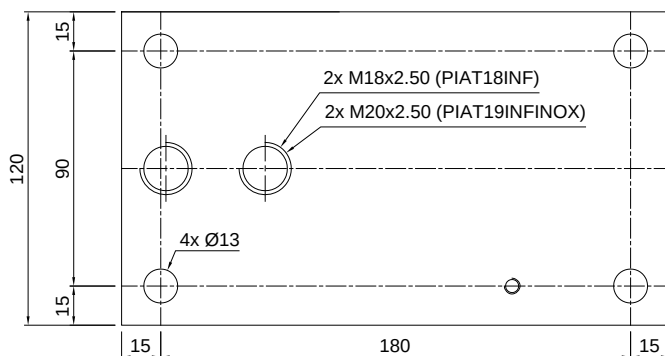
MOUNTING KIT for SHEAR BEAM load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

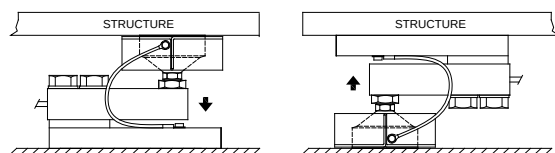
- During the transport and installation the lock (*) must touch under the load cell. After installation, move the lock away from the load cell.
- Interconnect the plates to the earthing.
- In case of structure with four-point support, if one-point does not touch the compression joint, you must proceed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



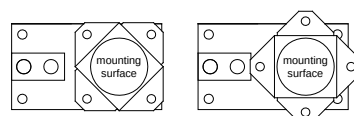
PIAT19INFINOX PIAT18INF



MOUNTING AND PLACING STRUCTURE



POSSIBLE PPV UPPER PLATE POSITIONS



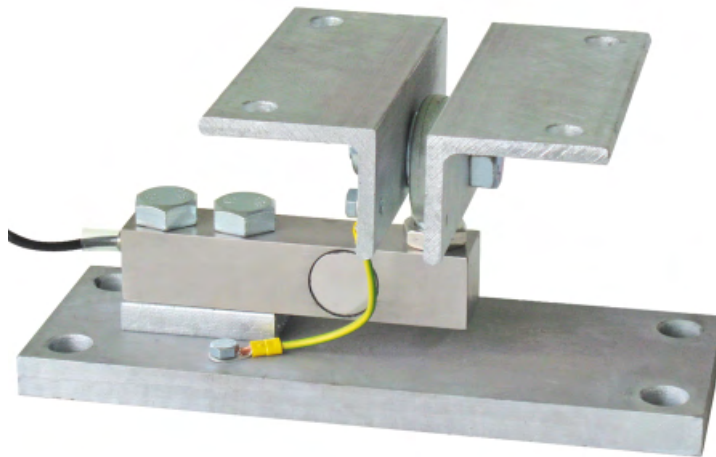
The Company reserves the right to make changes to the technical data, drawings and images without notice.

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

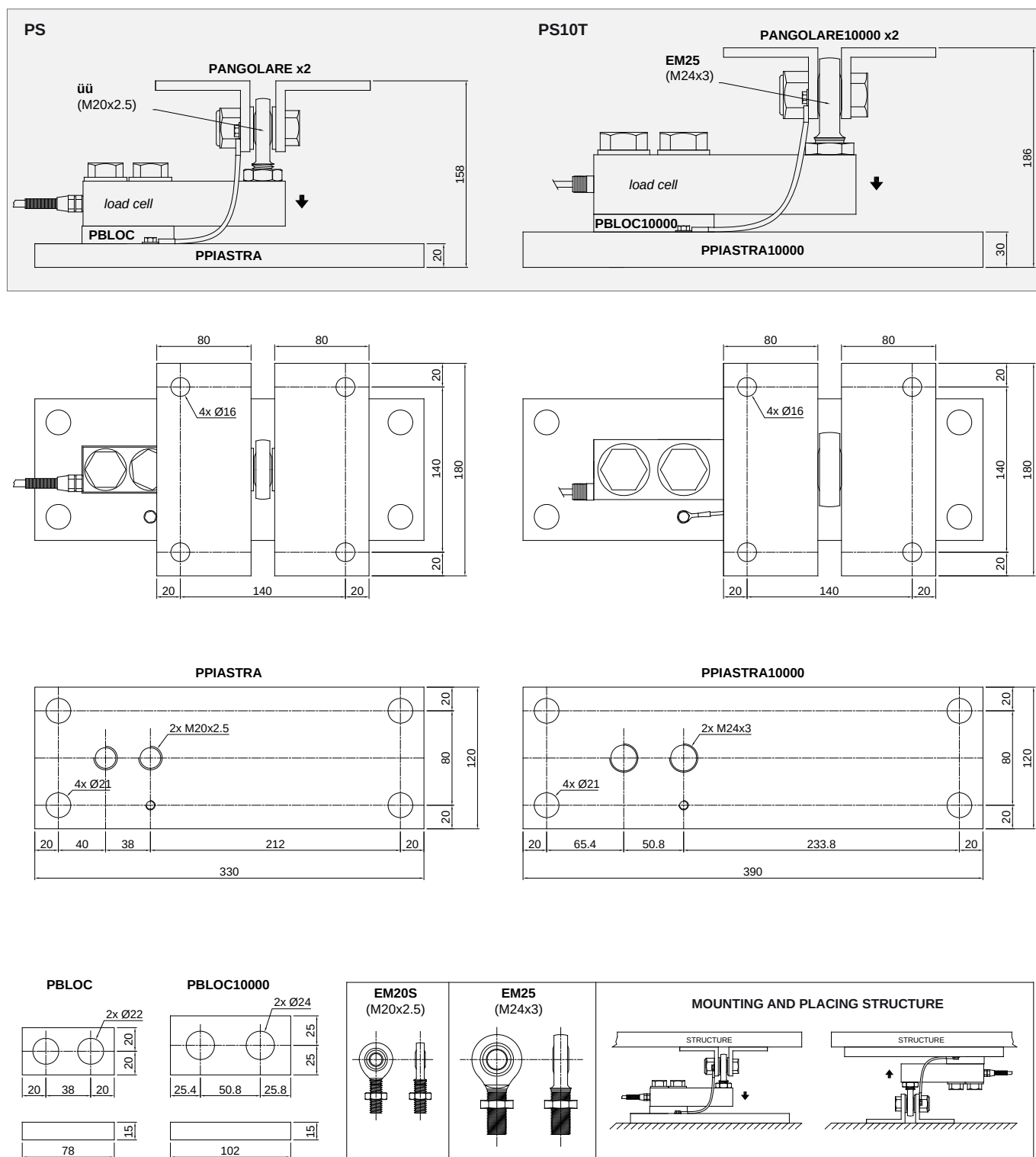
Load cell not included.

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	163
VDTX	$20\text{klb} \leq x \leq 60\text{klb}$	DTX	165

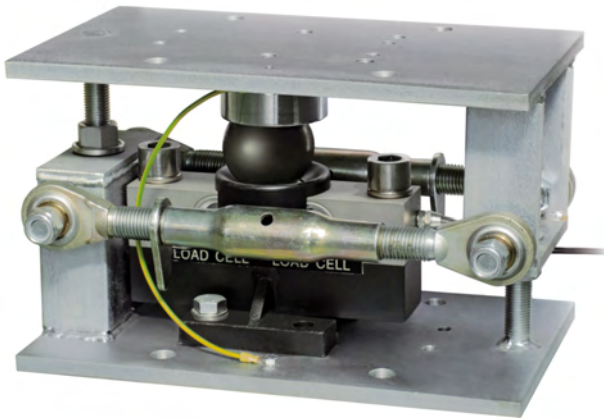
Notes section with horizontal lines for writing.

VCOKDTL

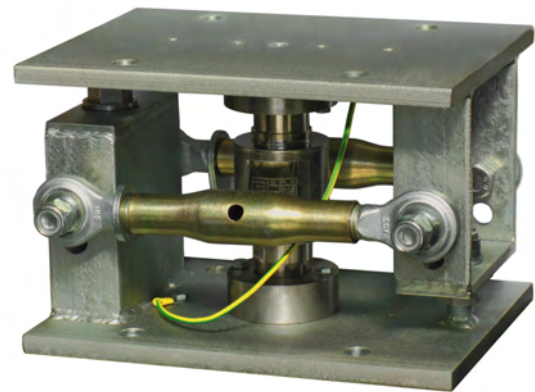
MOUNTING KIT for DOUBLE SHEAR BEAM / COLUMN load cells

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

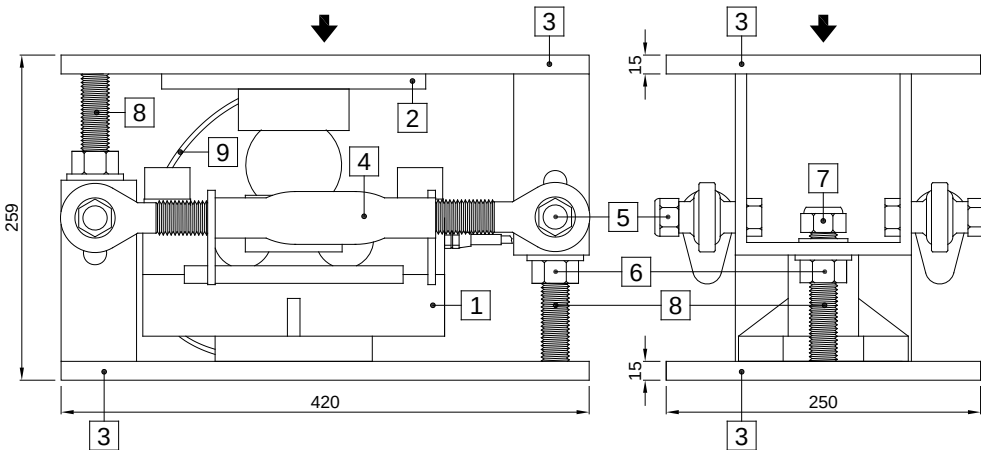
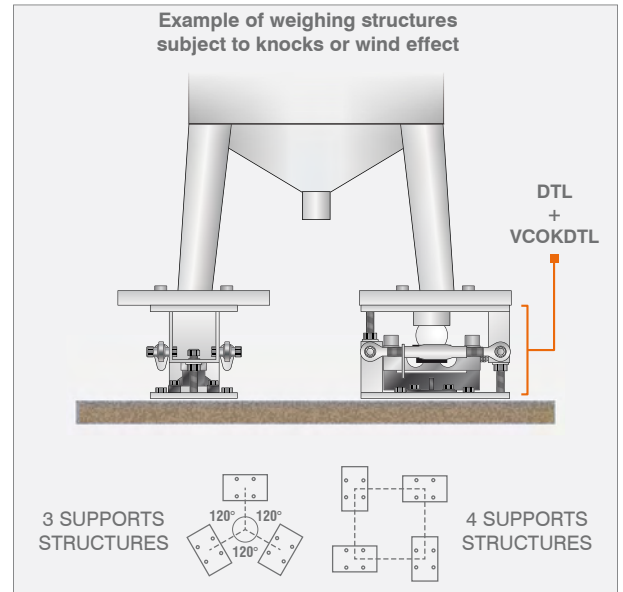
- Galvanized steel upper and lower plate.
- Galvanized steel plate (for DOUBLE SHEAR BEAM load cell)
- Upper and lower bases (for COLUMN load cell)
- Two integrated galvanized steel stay rods with dual ball-and-socket joints suitable to counter the lateral force.
- Anti-tilt system consists of two threaded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

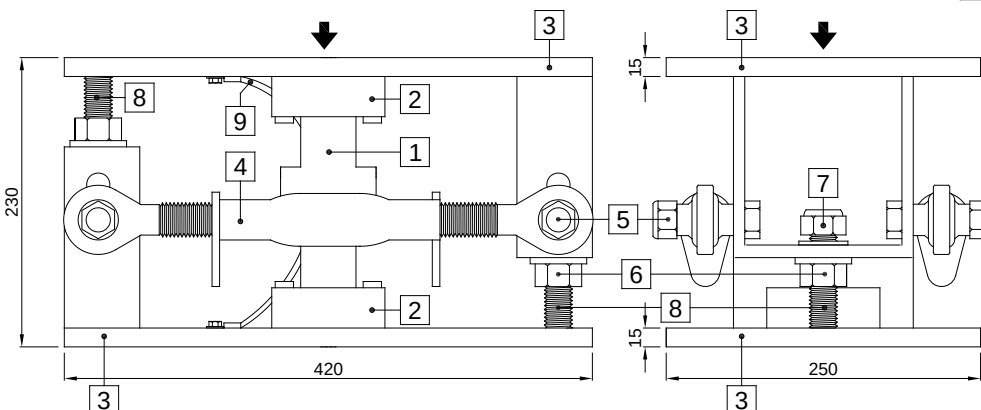
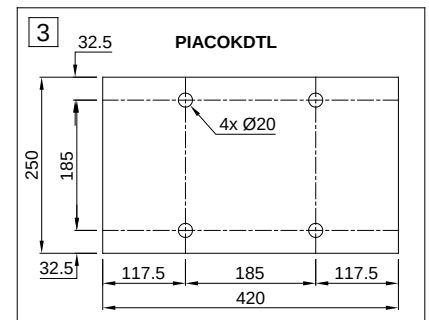
- Install the weighed system using only the mounting kit without the load cell [1] and inserting in its place a piece of pipe (Ø40x220 mm): unscrewing the nuts [5] and take off one of the two stay rods [4] and the plate [2].
- To finish the installation (weldings, etc.), take off the piece of pipe and 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.

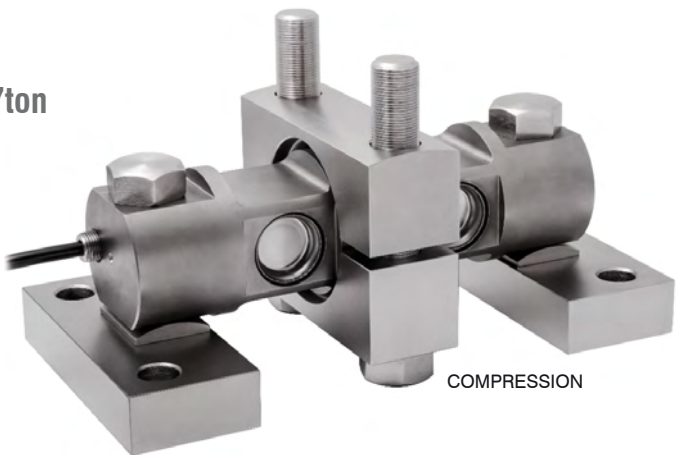
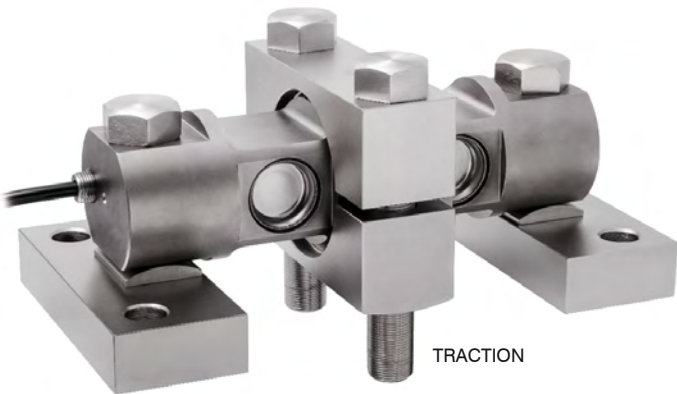


- [1] Load cell.
- [2] Upper and lower bases.
- [3] Galvanized steel upper and lower plates (PIACOKDTL).
- [4] Galvanized steel stay rod with horizontal constrainer function (TENDITORE300).
- [5] Self-locking nut Ø18.
- [6] Nut Ø22 to be used as jack.
- [7] Anti-tilt self-locking nut Ø22.
- [8] Threaded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

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

Series load cells: DTX

Application range from 30klb/13.6ton to 60klb8/27ton



DESCRIPTION

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

MAX STATIC LOAD klb / c.a. ton

FOR LOAD CELLS

NET WEIGHT OF
MOUNTING KIT (kg)

CODE

60klb / 27 ton

DTX 30klb÷60klb

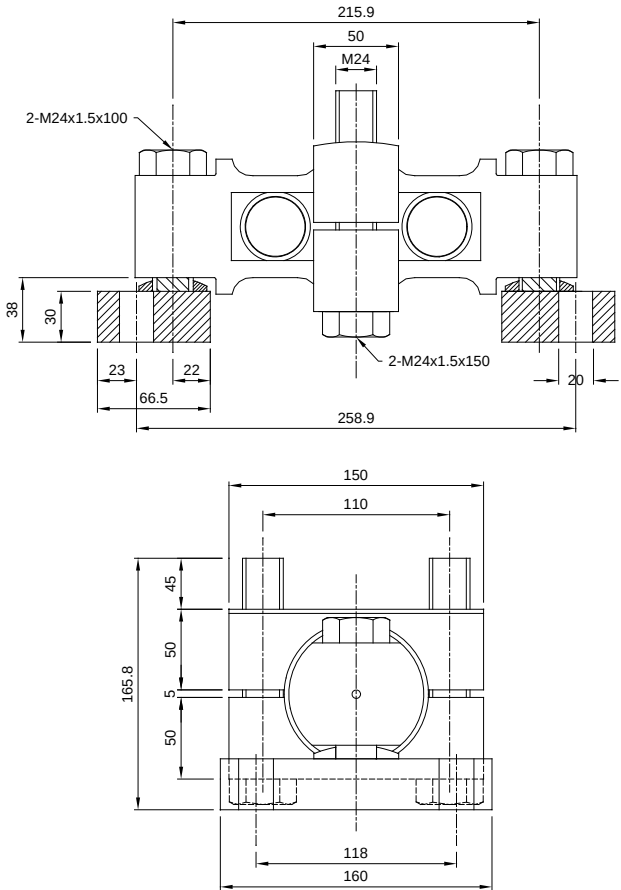
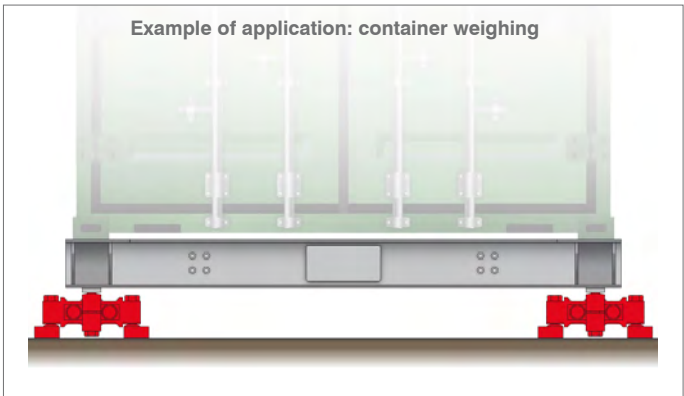
16.9

VDTX

Load cell not included.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

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



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		APPLICATION RANGE	FOR LOAD CELLS	PAGE
	A2.5	for COMPRESSION-LOW PROFILE load cells		
	PVCLS	$1000 \leq x \leq 2000 \text{ kg}$	CLS	167
	PV80CLS	$x \leq 5000 \text{ kg}$	CLS 5000 kg	169
	PSCLS2000 PSCLS	$x \leq 2000 \text{ kg}$ $x \leq 5000 \text{ kg}$	CLS 1000 - 2000 kg CLS 5000 kg	171
	V10000 V10275	$250 \leq x \leq 15000 \text{ kg}$	CBL, CBX	173
	V15000 V30000 V100000	$15000 \leq x \leq 30000 \text{ kg}$ $30000 \leq x \leq 50000 \text{ kg}$ $50000 \leq x \leq 100000 \text{ kg}$	CBL, CBX	175

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

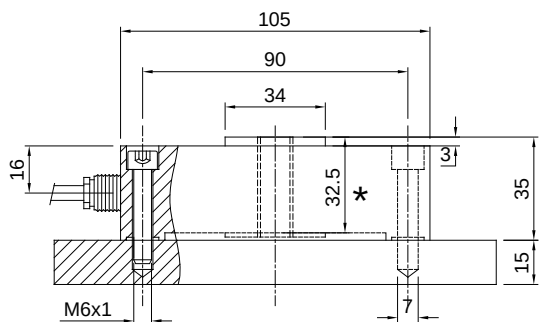
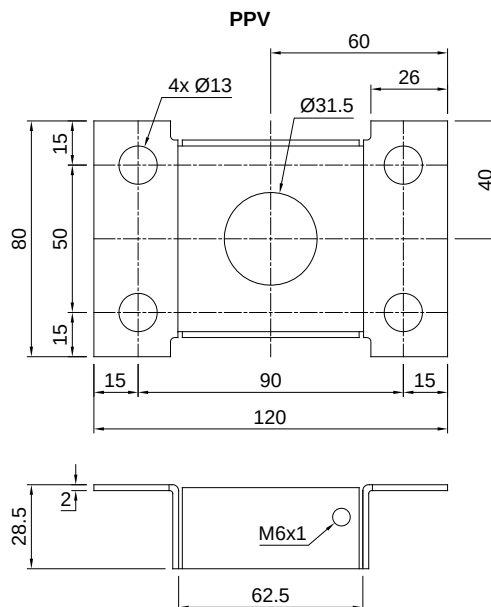
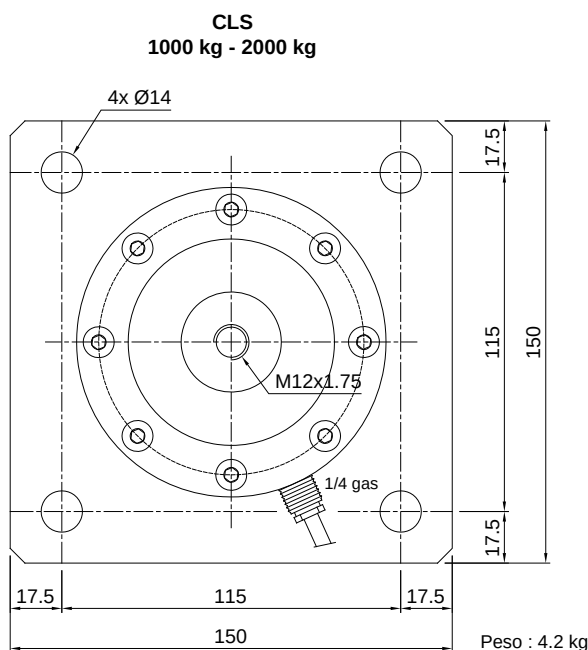
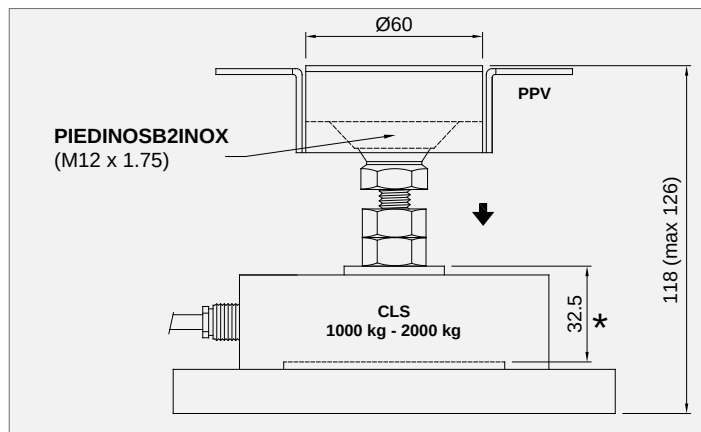
Load cell not included.

DESCRIPTION

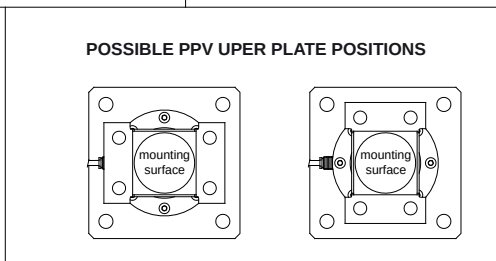
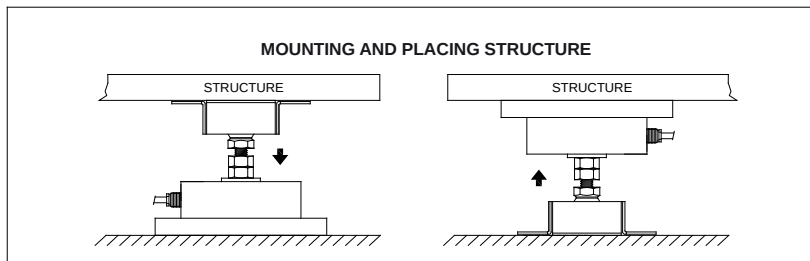
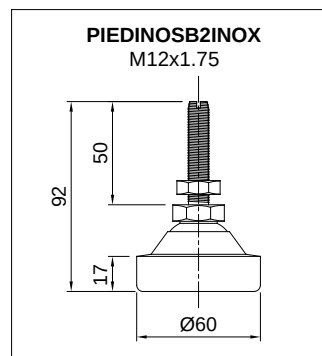
- Adjustable upper plate in AISI 304 stainless steel (PPV).
- AISI 304 stainless steel lower plate.
- Constraint against lateral forces and anti-tilt by in stainless steel self-centring joint foot.
- Misalignment compensation of the support plates structure.
- Adjustable height.

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.

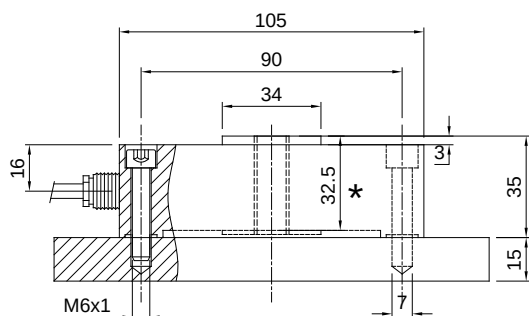
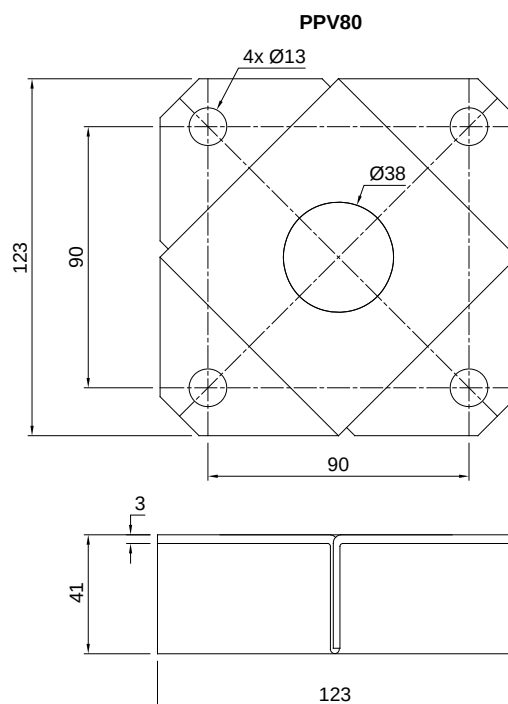
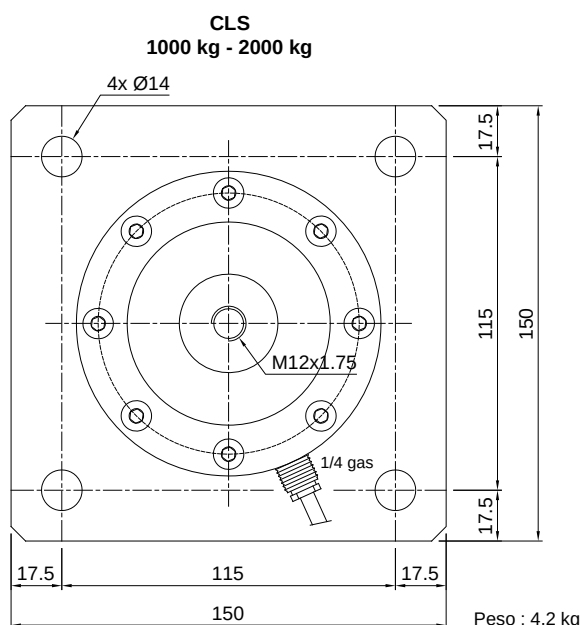
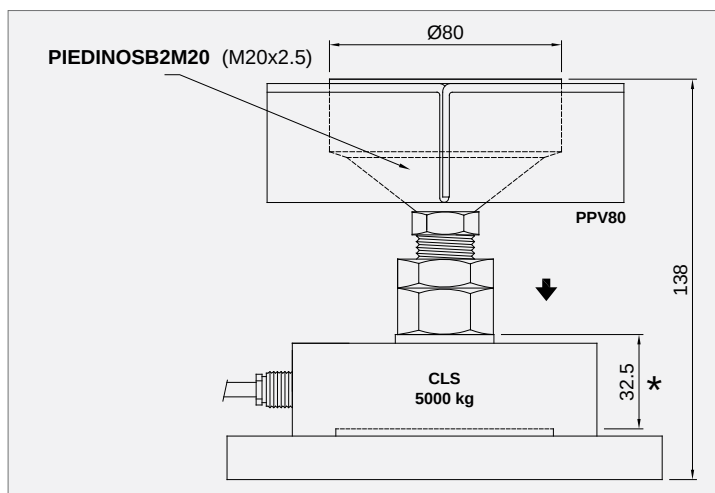
PV80CLS

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

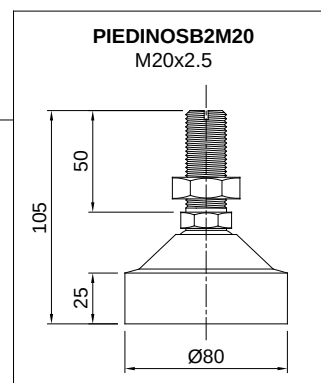
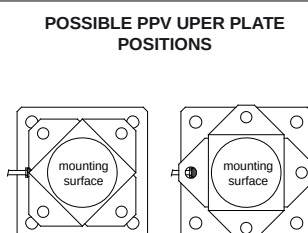
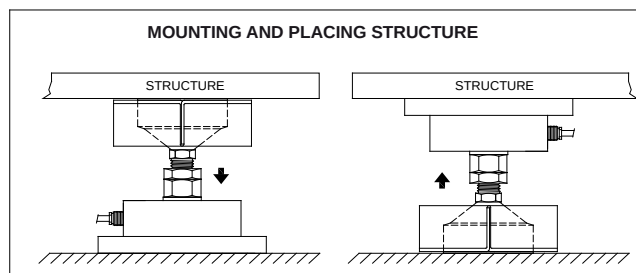
LAUMAS®
ELETTRONICA

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.

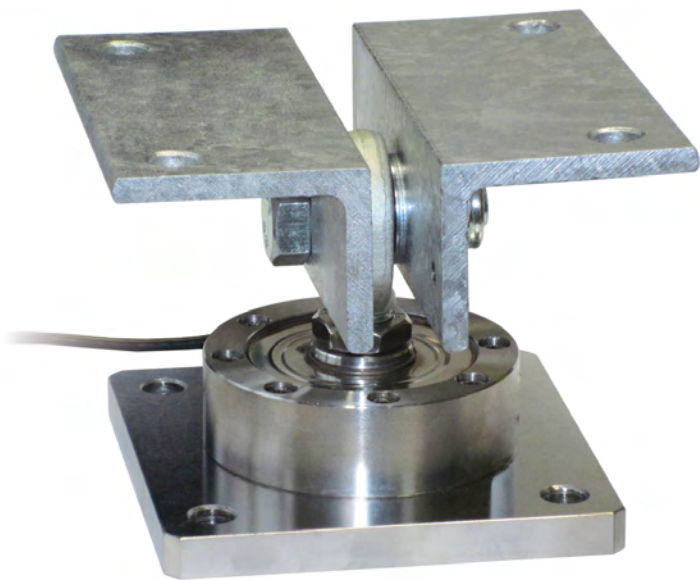
PSCLS/2000

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells



Series load cells: CLS

Application range from 1000 to 5000 kg



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

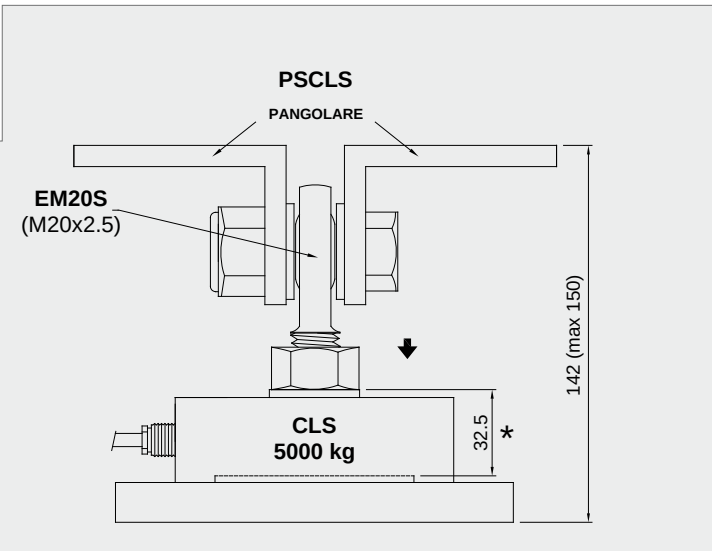
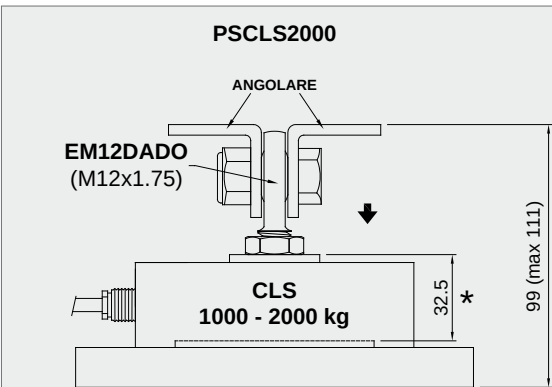
Load cell not included.

DESCRIPTION

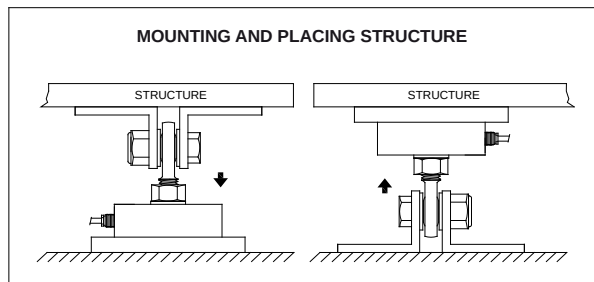
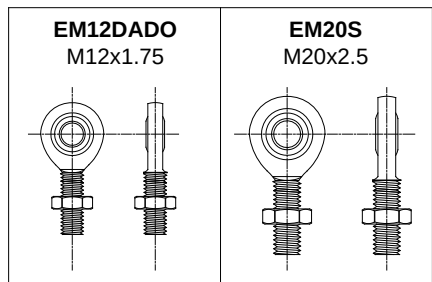
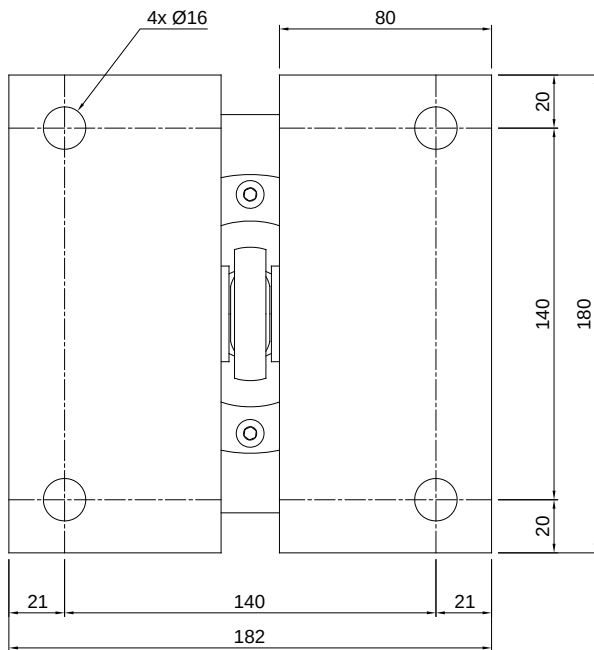
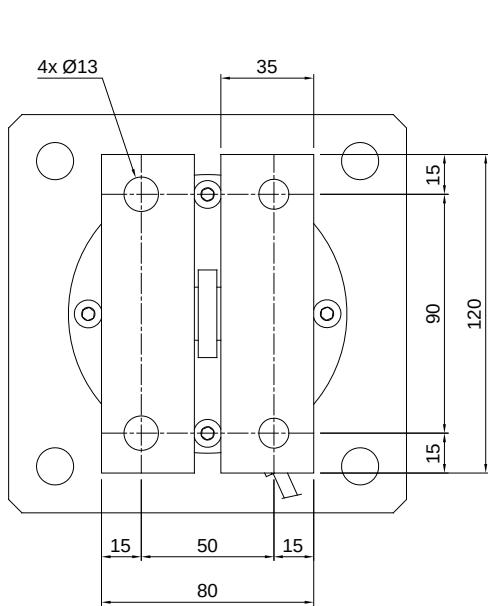
- AISI 304 stainless steel or hot worked galvanized upper plate.
- AISI 304 stainless steel lower plate.
- Constraint against lateral forces and anti-tilt by ball-and-socket joint
- Misalignment compensation of the support plates structure.
- Adjustable height.

DIMENSIONS AND TECHNICAL SPECIFICATIONS

- 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



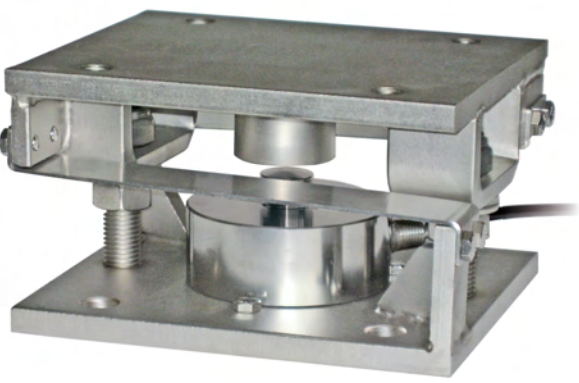
The Company reserves the right to make changes to the technical data, drawings and images without notice.

V10000-275

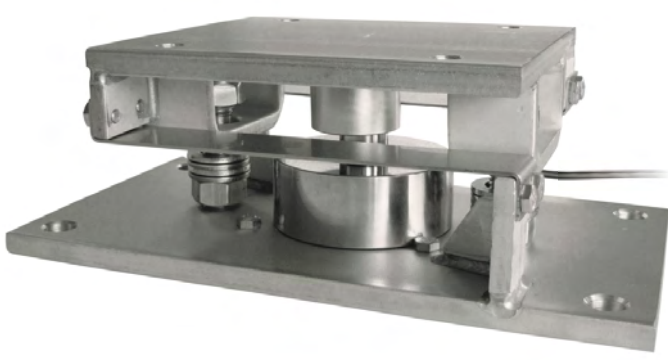
MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

Series load cells: CBL - CBX

Application range from 250 to 15000 kg



V10000



V10275

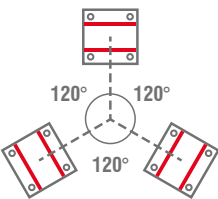
MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
15000	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	5.7	V10000
15000	CBL (250 ÷ 12500 kg) - CBX (15000 kg)	6.9	V10275

Load cell not included.

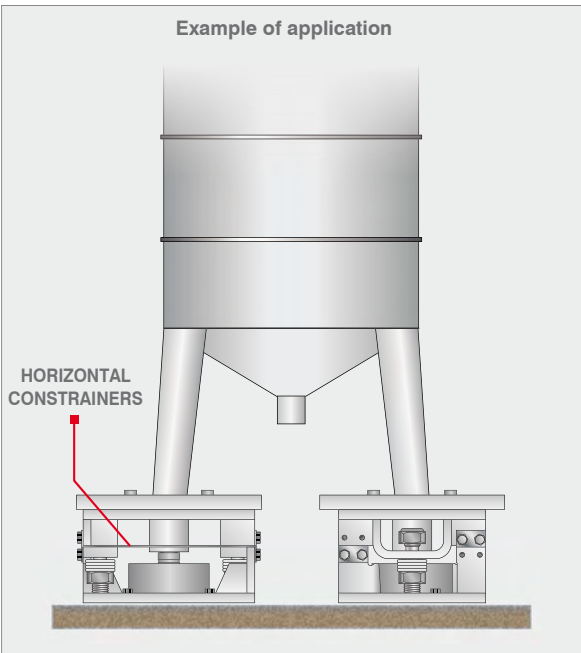
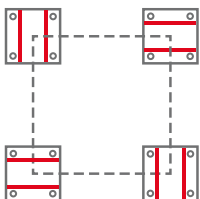
DESCRIPTION

- 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.

HORIZONTAL CONSTRAINERS
ORIENTATION
IN STRUCTURE WITH
3-POINTS SUPPORT



HORIZONTAL CONSTRAINERS
ORIENTATION
IN STRUCTURE WITH
4-POINTS SUPPORT



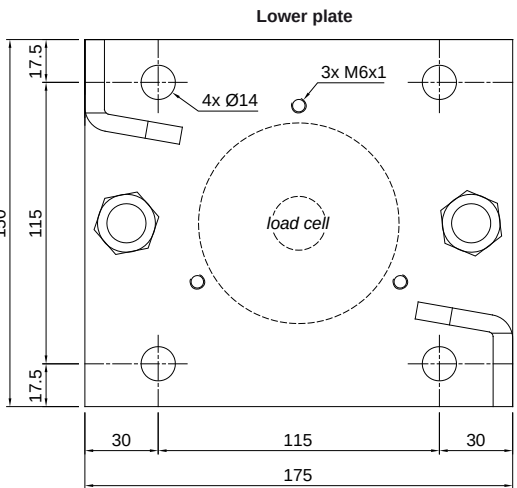
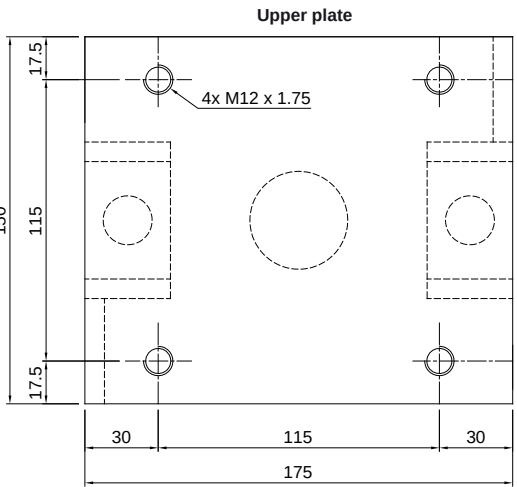
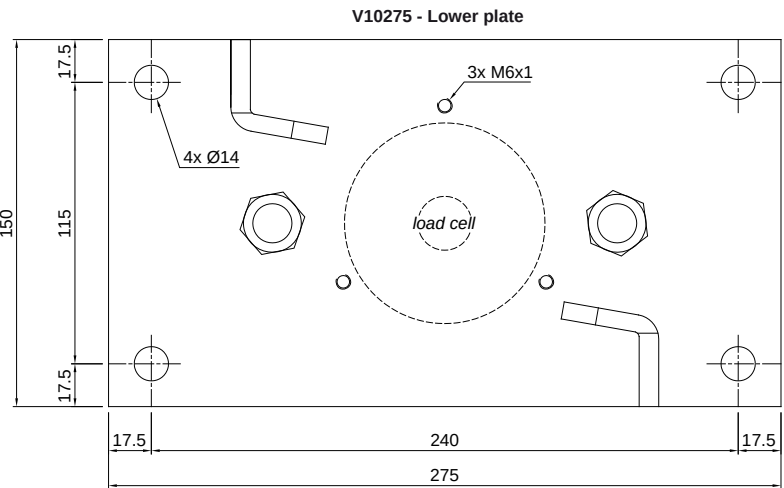
V10000-275

MOUNTING KIT for COMPRESSION-LOW PROFILE load cells

DIMENSIONS AND TECHNICAL SPECIFICATIONS

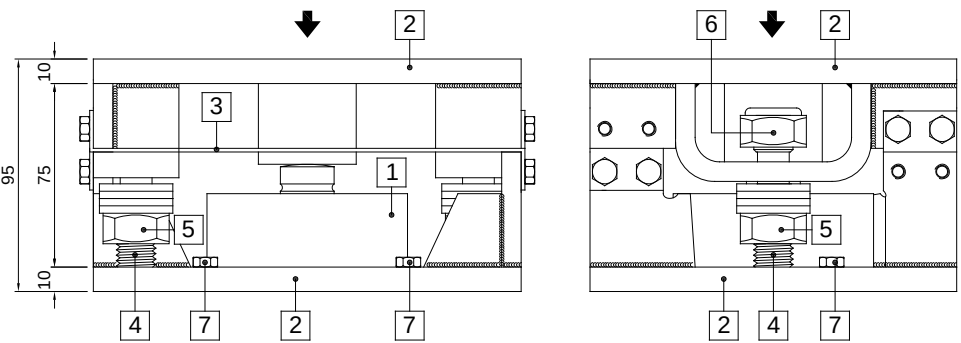
Upper and lower plates **2** must rest completely on not deformable surfaces. To ensure the stability of the structure, the system designer must predict any further precaution against side shifts and anti-tilt in function of: knocks and vibrations, wind effect, seismic conditions and hardness of support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



V10000: 6 kg
V10275: 7 kg

- 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.



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



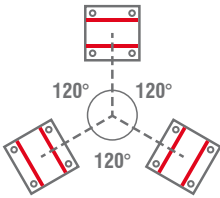
MAX STATIC LOAD kg	FOR LOAD CELLS	NET WEIGHT OF MOUNTING KIT (kg)	CODE
30000	CBL (15000 kg) - CBX (30000 kg)*	9	V15000
50000	CBL (30000 kg) - CBX (50000 kg)*	17.5	V30000
100000	CBL (50000 kg) - CBL (100000 kg)	33.5	V100000

Load cell not included.

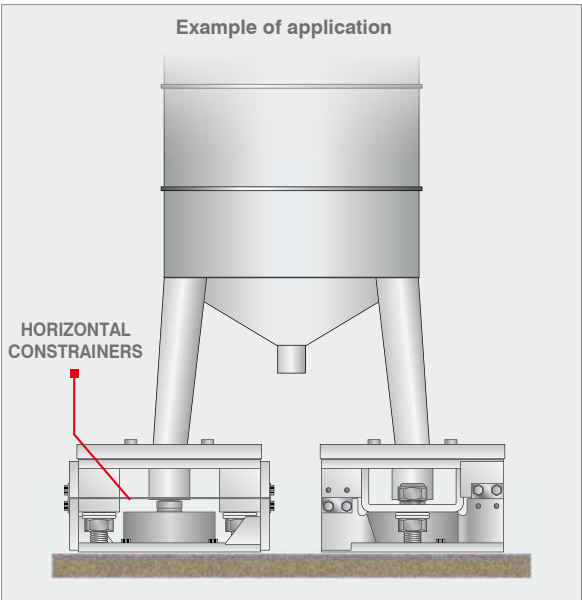
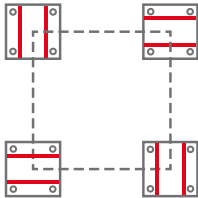
DESCRIPTION

- 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.

HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURE WITH
3-POINTS SUPPORT



HORIZONTAL CONSTRAINTS
ORIENTATION
IN STRUCTURE WITH
4-POINTS SUPPORT



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

LAUMAS®
ELETTRONICA

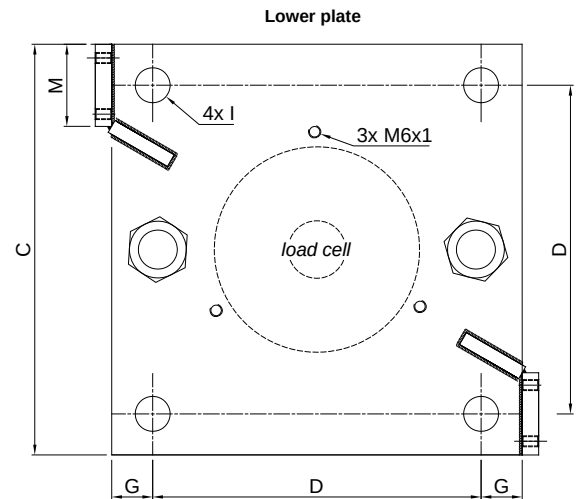
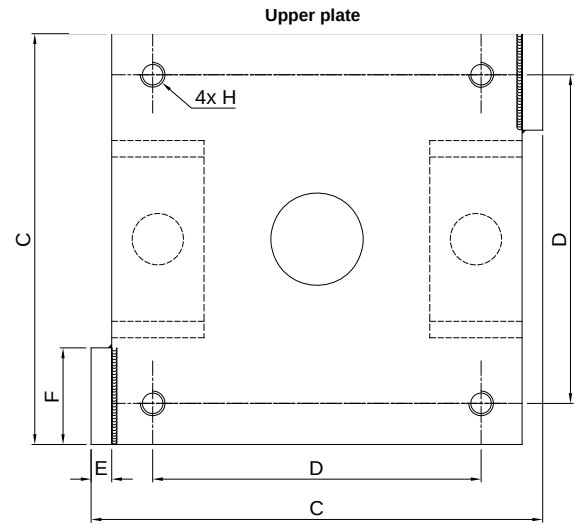
DIMENSIONS AND TECHNICAL SPECIFICATIONS

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.

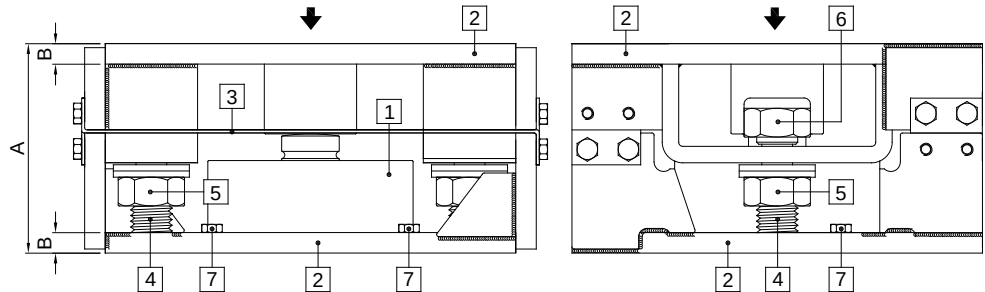
- Install the weighed system using only the mounting kit without the load cell [1] and inserting in its place a piece of pipe (1-2 mm higher than the load cell).
- To finish the installation (weldings, etc.), remove the piece of pipe and then removing the bolts to fix the the load cell [7] insert the 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].

	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)



- [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.



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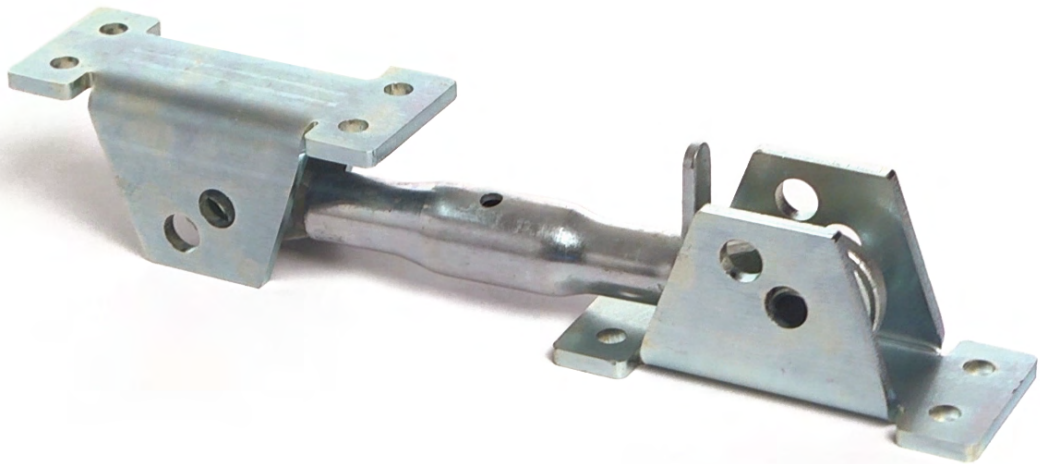
	APPLICATION RANGE	FOR LOAD CELLS	PAGE
	A3.1	Horizontal restraints for mounting kits	
	TENDITORE300 PTEND	15000 ≤ x ≤ 100000 kg	- 179
	A3.2	Self-centring joint feet	
	PIEDINOSB2	x ≤ 5000 kg	- 181
	A3.3	Adjustable upper plate for self-centring joint foot.	
	PPV PPV80	x ≤ 5000 kg	- 183
	A3.4	Accessory with ball to compensate for misalignment of the support plates	
	ACCSFER	300 ≤ x ≤ 5000 kg	FTL, FTK, FT-P, FTKL, FTZ, FTP, CLS 184
	A3.5	Compression joint	
	ANTIV	500 ≤ x ≤ 2000 kg	FCOL, FCK, FTKL, FTL, FCAL, FCAX, FTP, FT-P, FTK, FTZ, CLS 185
	A3.6	Spherical plain thrust bearings	
	SNODOGE	500 ≤ x ≤ 2000 kg	FTL, FTK, FT-P, FTKL, FTZ, FTP, CLS 186
	A3.7	Level measurements - false cells	
	ML	5 ≤ x ≤ 100000 kg	- 187

Notes section with horizontal lines for writing.

TENDITORE300 - PTEND

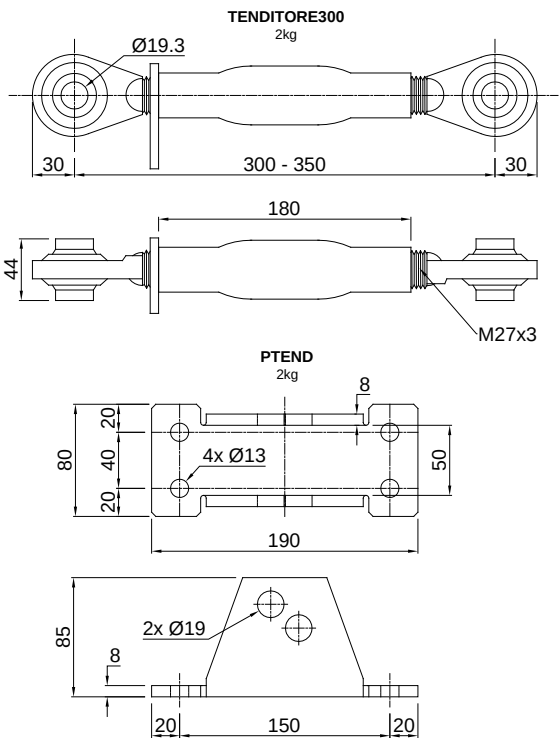
Horizontal restraints for mounting kits

Application range from 15000 to 100000 kg



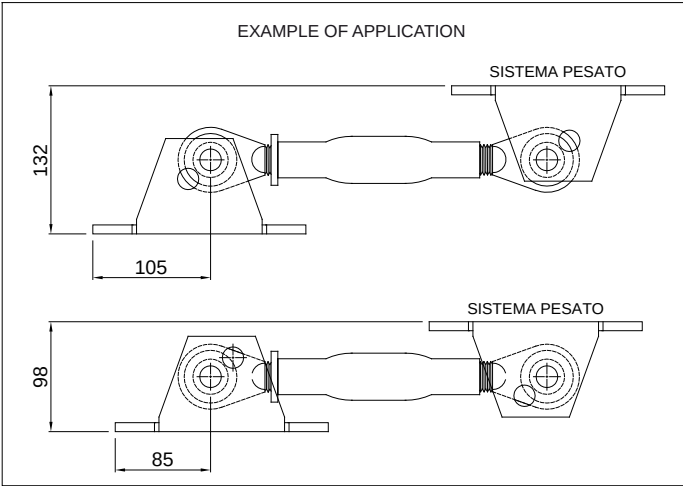
DESCRIPTION	CODE
Galvanized steel stay rod with dual ball-and-socket. Net weight: - kg Working load: 2500 kg Carico di rottura: 10000 kg	TENDITORE300
Galvanized steel anchor plate for TENDITORE300 Net weight: 1.5 kg	PTEND

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

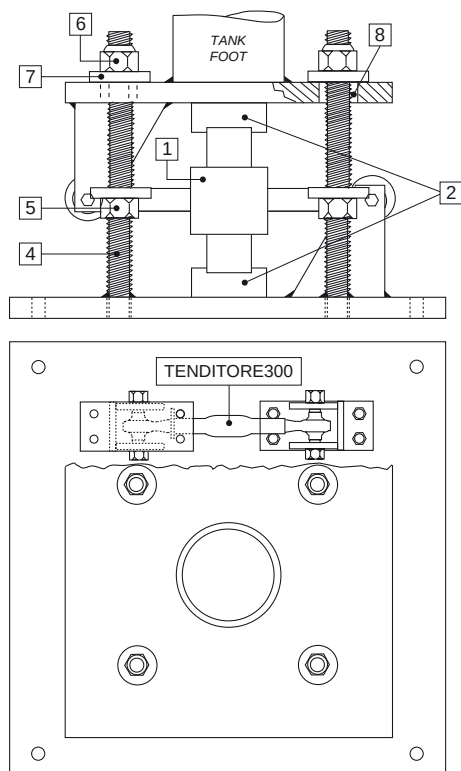
LAUMAS®
ELETTRONICA

APPLICATION EXAMPLE: HOW TO MAKE MOUNTING KITS WITH HORIZONTAL RESTRAINTS

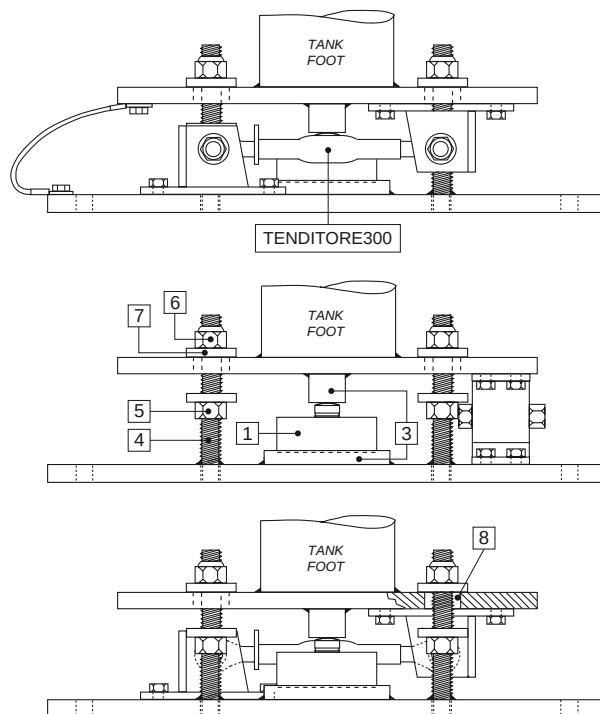
By a copper wire, connect the upper supporting plate with the lower supporting plate, then link together the lower plates to the earthing system.

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

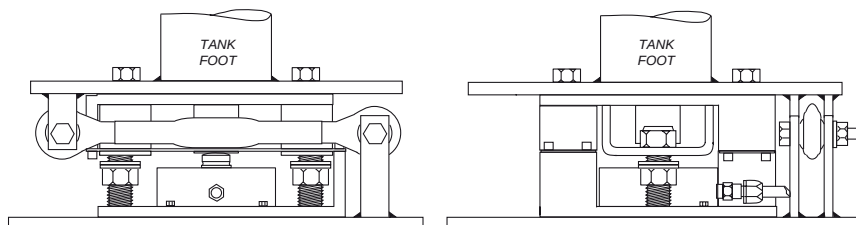


Application example with compression load cells

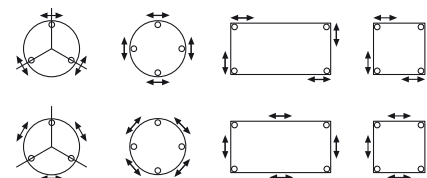


- 1 Load cell.
- 2 Mounting kit for column load cell.
- 3 AISI 304 stainless steel upper and lower bases.
- 4 Threaded bar.
- 5 Nut to be used as jack.
- 6 Anti-tilt self-locking nut.
- 7 Washer.
- 8 Hole diameter 20 mm larger than the bolt.

Application example with V15000 - V30000 - V100000 mounting kits

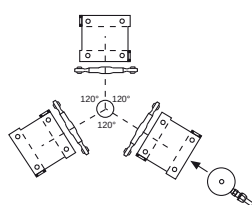


HORIZONTAL RESTRAINTS PLACEMENT ON 3/4 SUPPORTS: The restraining elements can be positioned both on supports and on the four sides, centrally between two supports.

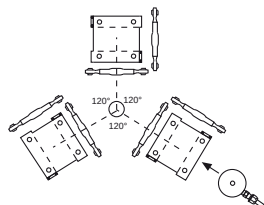


STRUCTURE WITH 3-POINTS SUPPORT

1 RESTRAINT FOR SUPPORT

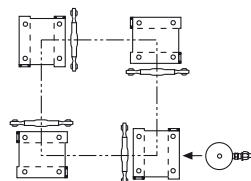


2 RESTRAINTS FOR SUPPORT

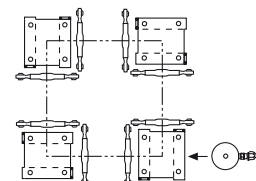


STRUCTURE WITH 4-POINTS SUPPORT

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

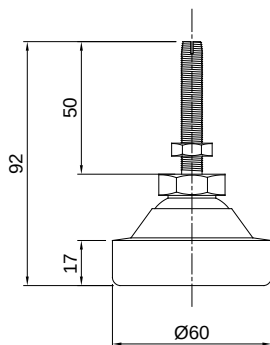


MAX STATIC LOAD	kg	DIMENSIONS	MATERIAL	NET WEIGHT JOINT FOOT (kg)	CODE
500		M8x1.25	stainless steel	0.3	PIEDINOSB2M8
500		M10x1.5		0.3	PIEDINOSB2M10
2000		M12x1.75		0.4	PIEDINOSB2INOX
5000		M20x2.5		0.9	PIEDINOSB2M20
2000		M12x1.75	galvanized steel	0.4	PIEDINOSB2ZNC
5000		M20x2.5		-	PIEDINOSB2ZNCM20

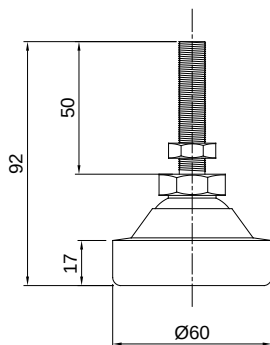
Nuts and washers included.

DIMENSIONS AND APPLICATION

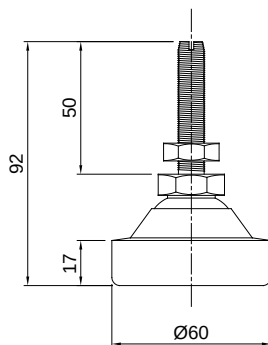
PIEDINOSB2M8
M8x1.25



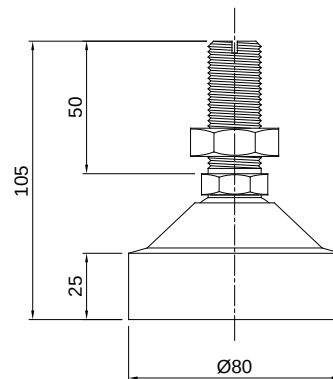
PIEDINOSB2M10
M10x1.5



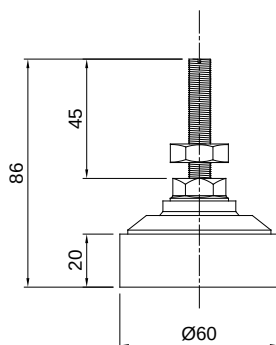
PIEDINOSB2INOX
M12x1.75



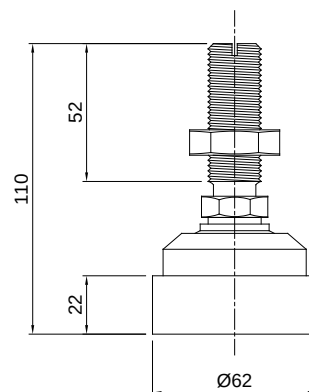
PIEDINOSB2M20
M20x2.5



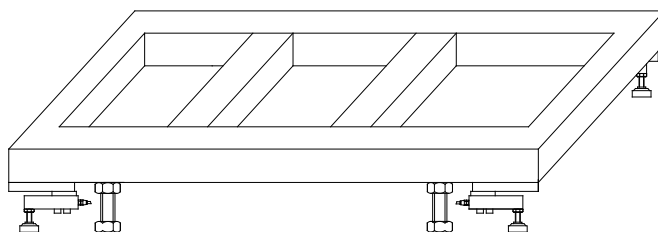
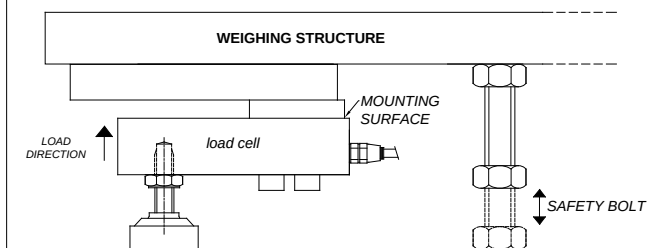
PIEDINOSB2ZNC
M12x1.75



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

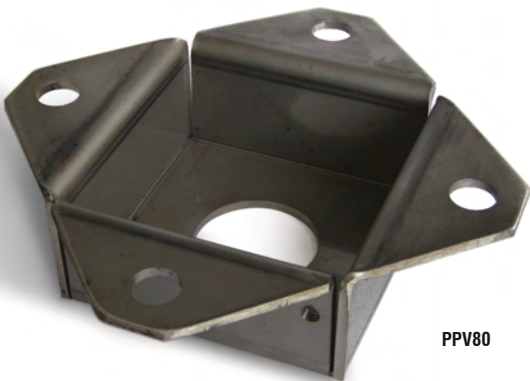
Adjustable upper plate

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

Application range from 10 to 5000 kg



PPV



PPV80

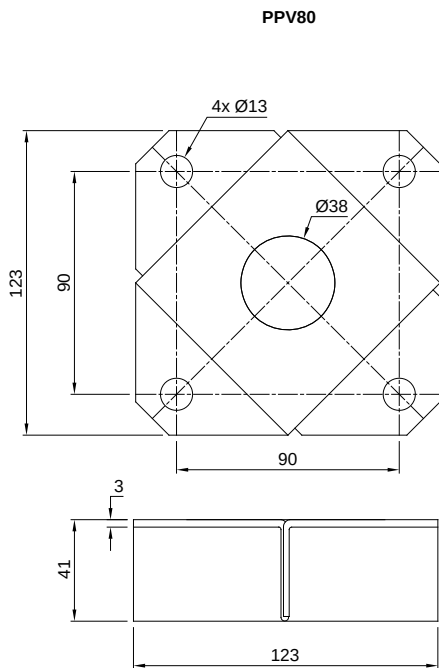
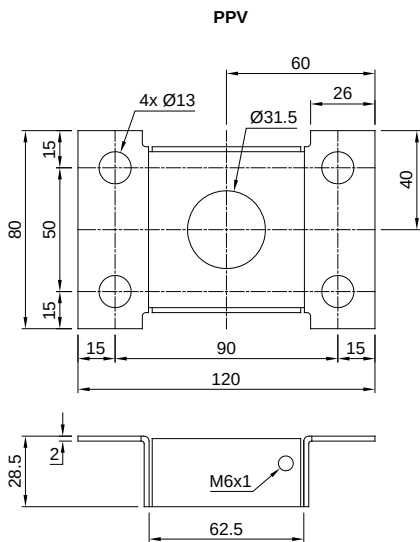


DESCRIPTION

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

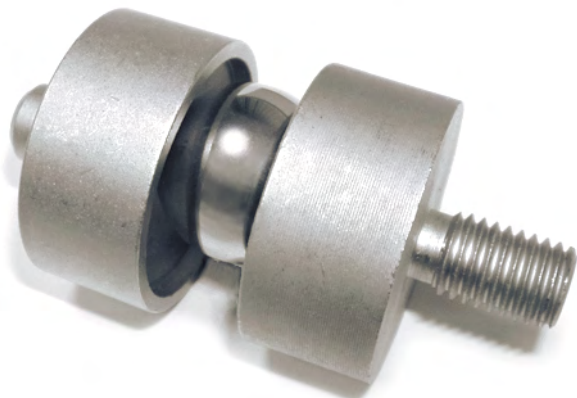
MAX STATIC LOAD	kg	NET WEIGHT OF PLATE (kg)	CODE
2000		0.2	PPV
5000		0.6	PPV80

DIMENSIONS (mm)



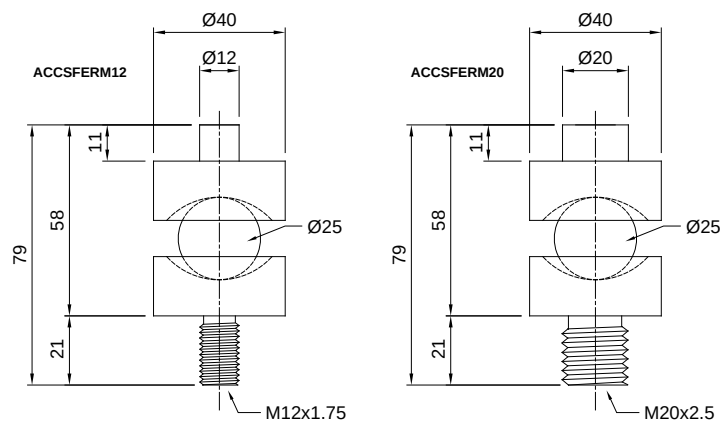
The Company reserves the right to make changes to the technical data, drawings and images without notice.

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

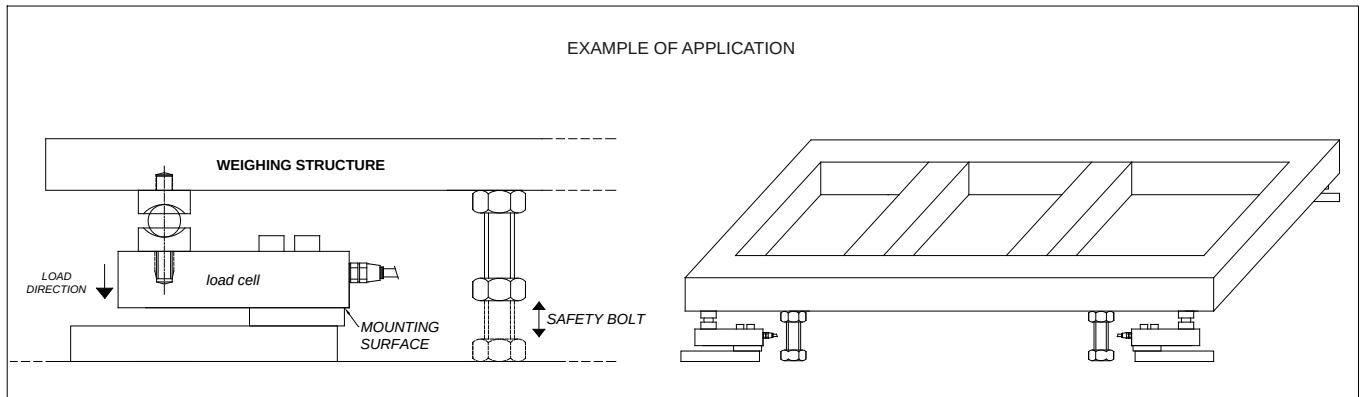


DESCRIPTION

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



EXAMPLE OF APPLICATION



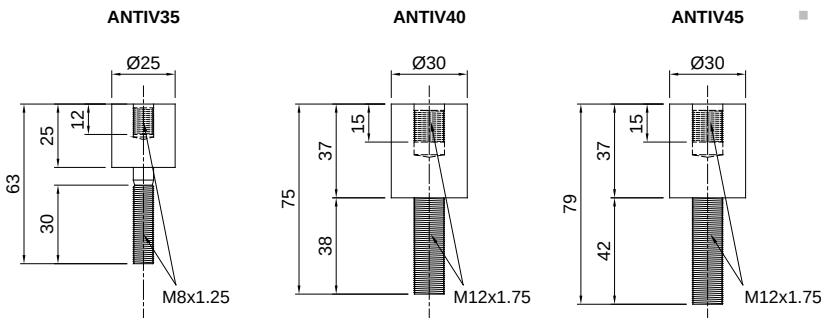
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Application range from 500 to 2000 kg



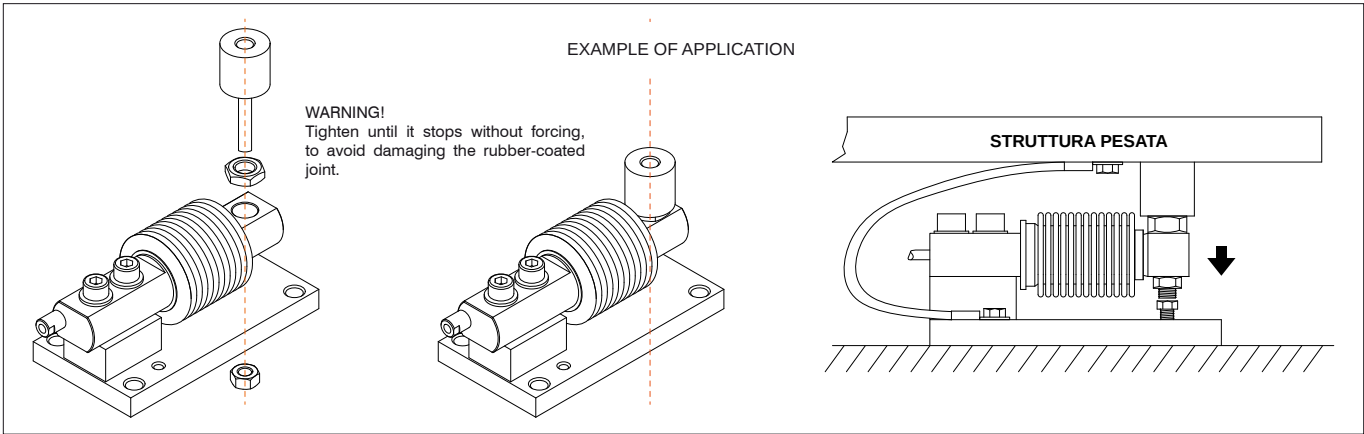
MAX STATIC LOAD kg	FOR LOAD CELLS	DIMENSIONS	NET WEIGHT OF ACCESSORY (kg)	CODE
500	FCOL - FCK	M8x1.25	-	ANTIV35
2000	FTKL - FTL - FCAL - FCAX - FTP FT-P - FTK- FTZ - CLS	M12x1.75	-	ANTIV40
2000	FCAL - FCAX	M12x1.75	-	ANTIV45

DIMENSIONS AND APPLICATION



DESCRIPTION

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



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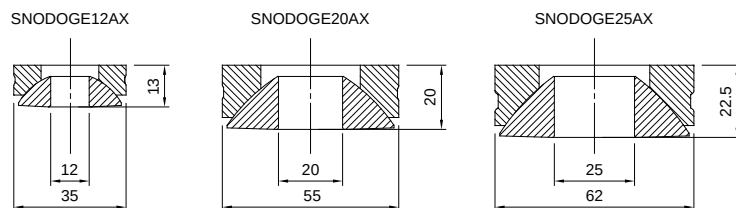
Series load cells: FTL - FTK - FT-P - FTKL - FTZ - FTP - CLS

Application range from 5000 to 10000 kg



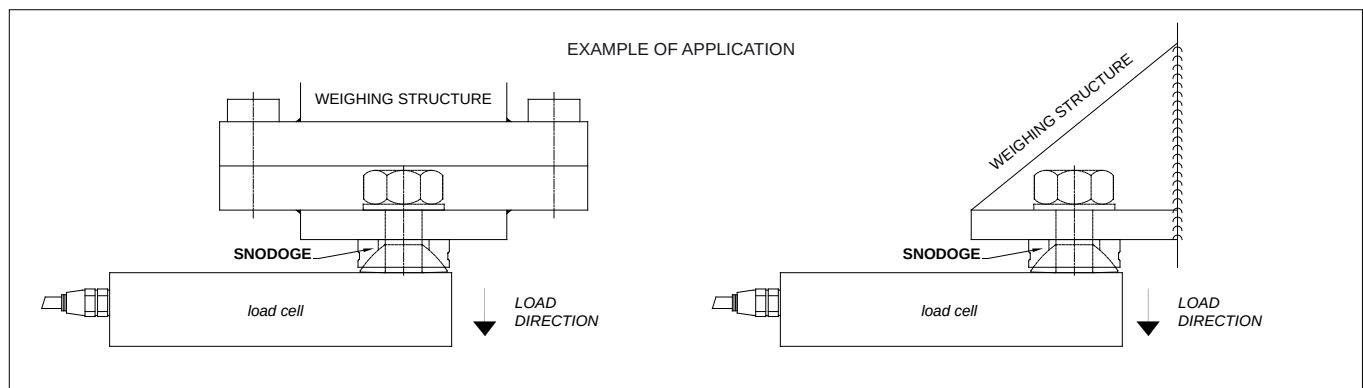
MAX STATIC LOAD kg	DESCRIPTION	NET WEIGHT (kg)	CODE
5000	Spherical plain bearings	0.07	SNODOGE12AX
5000	Kit composed by spherical bearing (cod.SNODOGE20AX), galvanized bolt (20x80 mm) and washer (22x60 mm).	0.3	SNODOGE20AXKIT
10000	Kit composed by spherical bearing (cod. SNODOGE25AX), galvanized bolt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

DIMENSIONS AND APPLICATION



DESCRIPTION

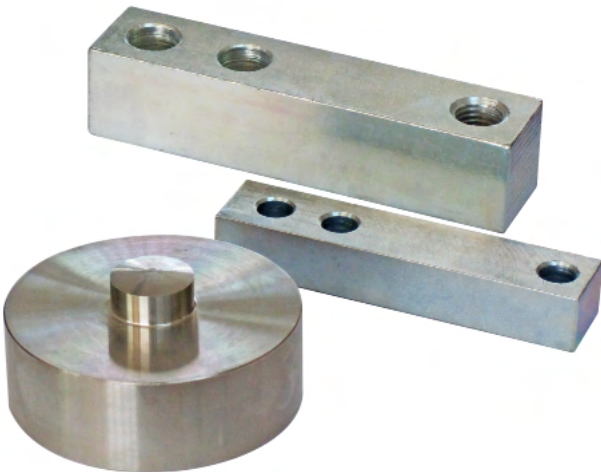
- Carbon steel spherical plain bearings to compensate for misalignment of the support plates.



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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

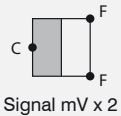
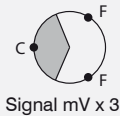
DESCRIPTION

- 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.

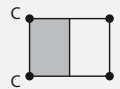
DIMENSIONS AND TECHNICAL SPECIFICATIONS

- 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

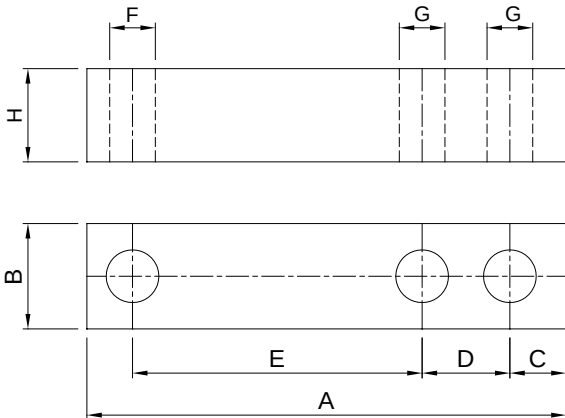


STRUCTURE WITH 4-POINTS SUPPORT
2 LOAD CELLS + 2 FALSE CELLS

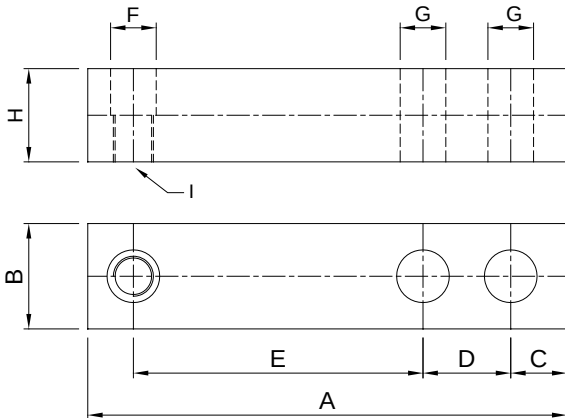


Signal mV x 2

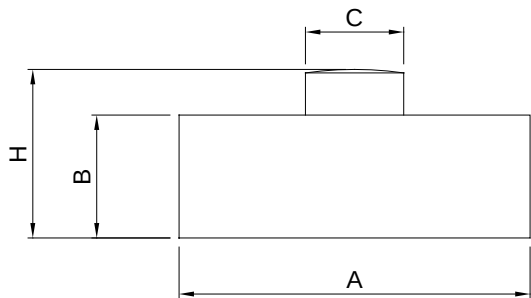
C = SUPPORT FOOT WITH LOAD CELL
F = SUPPORT FOOT WITH FALSE CELL



	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

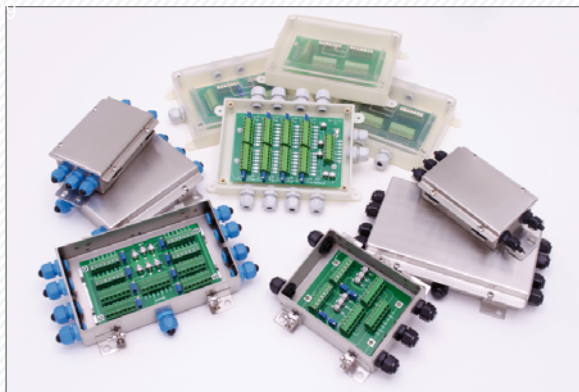


	FALSAFT	FALSAFTI5000
A	130	171.5
B	32	40
C	15	19
D	25.5	38
E	76	95
F	Ø14	Ø22
G	Ø14	Ø20
H	32	38
I	M12	M20



	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.

PRODUCT VIDEOS on www.laumas.com



Watch the presentation video of each product.



By scanning the QR code, you can access directly with your smartphone or tablet to our web site where consult the items on catalog and find the information; it's also possible discover the full range of Laumas products.



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