

Restoring force

For each mm of movement that the top of the load cell shifts from the vertical axis, a horizontal restoring force is generated of:
 max. capacity ≤ 10t : 0,65 %
 max. capacity ≥ 20t : 1,55 %
 of the vertical load on the load cell

Load cell housing

Full stainless steel housing, membrane and measuring element hermetically sealed, welded, filled with inert gas.
 Material-No.1.4301 (DIN 17440), equivalent to 304 S11/S15 (B.S.)

Ingress Protection

IP 68, IEC529 (equivalent to NEMA 6). The load cell can be submerged in water to a depth of 1.5m for 10,000 hours, IP69k

Cable

Robust, flexible, screened
 Sheath: TPE Thermopl. Elastomere, grey (for PR 6201/..E: blue)
 Diameter: 5mm, wires 4 x 0,35mm²
 Length: 5m (500kg - 10t), 12m (20t - 50t)

Bending radius

Fixed installation: ≥ 50mm
 Flexible installation: ≥ 150mm

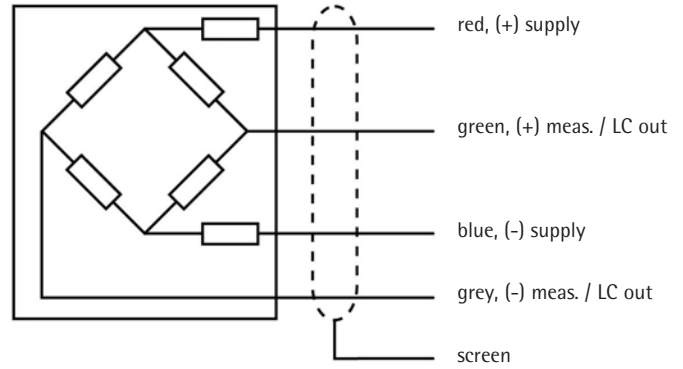
Certificate of conformity

Valid for: PR 6201/..E
 Feature:
 II 1 G EEx ia IIC T6, II 1D IP65 T 85°C
 Registration number:
 PTB 02 ATEX 2059, TÜV 03 ATEX 2301X

Technical Data		LA	L	D1	C3	
Accuracy class		0.25	0.25	0.04	0.015	% E _{max}
Minimum dead load	lowest limit of specified measuring range	E _{min} 0	0	0	0	% E _{max}
Maximum capacity	highest limit of specified measuring range	E _{max} s. table	s. table	s. table	s. table	
Minimum LC verification	minimum load cell verification interval, v _{min} = E _{max} /Y interval for E _{max} = 1,000kg for E _{max} = 500kg	Y Y Y		5,000 4,000 2,000	14,000	
Rated output	relative output at nominal load for E _{max} = 50t	C _n 16mA C _n 16mA	1 2	1 2	1 2	mV/V mV/V
Tolerance on rated output	permissible deviation from rated output	d _c < 1.0	< 1.0	< 0.25	< 0.07	% C _n
Zero output signal	load cell output signal under unloaded condition	S _{min} 4mA	< 2.0	< 1.0	< 1.0	% C _n
Repeatability error	max. change in load cell output for repeated loading	ε _R < 0.02	< 0.02	< 0.01	< 0.005	% C _n
Creep, during 30 min.	max. change in load cell output under nominal load	d _{cr} < 0.05	< 0.05	< 0.03	< 0.015	% C _n
Non-linearity	max. deviation from best straight line through zero	d _{lin} < 0.25	< 0.25	< 0.03	< 0.01	% C _n
Hysteresis	max. difference in load cell output between loading and unloading	d _{hy} < 0.25	< 0.25	< 0.04	< 0.015	% C _n
Temperature effect on S _{min}	max. change of S _{min} /10K over B _T referred to C _n	TK _{Smin} < 0.15	< 0.15	< 0.028	< 0.01	% C _n /10K
Temperature effect on C	max. change of C /10K over B _T referred to C _n	TK _c < 0.1	< 0.1	< 0.03	< 0.01	% C _n /10K
Input impedance	between supply terminals	R _{LC} -	650 + 50	650 ± 6	650 ± 6	Ω
Output impedance	between measuring terminals	R _O -	610 ± 3	610 ± 1	610 ±	Ω
Insulation impedance	between measuring circuit and housing at 100V _{DC}	R _{IS} -	> 5,000	> 5,000	> 5,000	MΩ
Insulation voltage	between circuit and housing, PR 6201/..E only	-	500	500	500	V
Recommended supply voltage	to hold the specified performance	B _u 20... 28	4... 24	4... 24	4... 24	V
Max. supply voltage	permissible for continuous operation without damage	U _{max} 28	32	32	32	V
Nominal ambient temp. range	to hold the specified performance	B _T -10... +55	-10... +55	-10... +55	-10... +55	° C
Usable ambient temp. range	permissible for continuous operation without damage	B _{Tu} -30... +55	-40... +95	-40... +95	-40... +95	° C
Storage temperature range	transportation and storage	B _{Tl} -40... +70	-40... +95	-40... +95	-40... +95	° C
Permissible eccentricity	permissible displacement from nominal load line	S _{ex} 10	10	10	10	mm
Vibration resistance	resistance against oscillation (IEC 68-2-6 Fc)	-	20g, 100h, 10... 150Hz	20g, 100h, 10... 150Hz	20g, 100h, 10... 150Hz	20g, 100h, 10... 150Hz
Air pressure effect	influence of ambient air pressure on S _{min} up to 2t 3t to 10t from 20t	PK _{Smin} 250 320 420	250 320 420	250 320 420	250 320 420	g/kPa g/kPa g/kPa
Nominal deflection	max. elastic deformation under nominal load up to 30t 50t	S _{nom} < 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.8	< 0.5 < 0.8	mm mm

Definitions acc. to VDI / VDE 2637

Data for LA version are typical values. The technical data given here serve only as a product description and must not be interpreted as guaranteed characteristics in the legal sense.

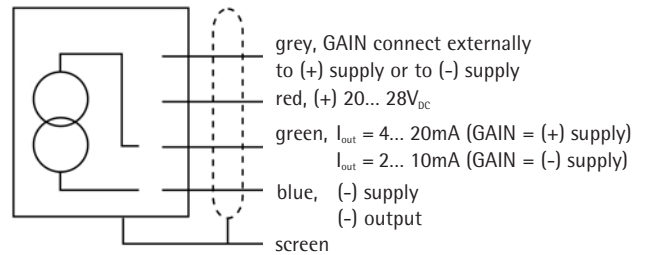


Dimensions in mm

PR 6201/52.../23	a = 24	R = 15	B = 150
PR 6201/33.../14	a = 34	R = 15	B = 150
PR 6201/24.../54	a = 56	R = 35	B = 220

Connection diagrams

PR 6201/ ...LA



Order information

Type	Rated Capacity E_{max}	Version	Max. usable load (in % of E_{max})	Destructive load (in % of E_{max})	Packing	Weight gross/net
PR6201/52	500kg	LA/L/D1/D1E	200 (LA:120)	> 500	240 x 240 x 155mm	2.8kg/1.9kg
PR6201/13	1t	LA/L/D1/D1E	200 (LA:120)	> 500	240 x 240 x 155mm	2.8kg/1.9kg
PR6201/23	2t	LA/L/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	2.8kg/1.9kg
PR6201/33	3t	LA/L/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	2.9kg/2.0kg
PR6201/53	5t	LA/L/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	2.9kg/2.0kg
PR6201/14	10t	LA/L/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	3.4kg/2.5kg
PR6201/24	20t	LA/L/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	5.1kg/4.2kg
PR6201/34	30t	LA/D1/C3/D1E/C3E	200 (LA:120)	> 500	240 x 240 x 155mm	5.5kg/4.6kg
PR6201/54	50t	LA/L/D1/C3/D1E/C3E	150 (LA:120)	> 300	240 x 240 x 155mm	5.1kg/4.2kg

For professional applications further options and a high number of additional mounting kits are available:

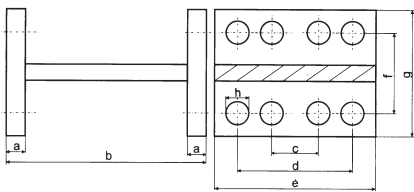
Table PR 6001

Type	Description		Weight net	tare	Order number
PR6001/00N	Universal vessel support	500kg... 10t	10.1kg	10.4kg	9405 360 01001
PR6001/00S	Universal vessel support, stainless steel	500kg... 10t	10.9kg	11.2kg	9405 360 01002
PR6001/01N	Universal vessel support	20t... 50t	10.1kg	10.4kg	9405 360 01011
PR6001/01S	Universal vessel support, stainless steel	20t... 50t	10.9kg	11.2kg	9405 360 01012
PR6001/10N	25kN MaxiFLEXLOCK	500kg... 10t	15.9kg	16.5kg	9405 360 01101
PR6001/10S	25kN MaxiFLEXLOCK, stainless steel	500kg... 10t	16.7kg	17.3kg	9405 360 01102
PR6001/11N	25kN MaxiFLEXLOCK	20t... 50t	15.9kg	16.5kg	9405 360 01111
PR6001/11S	25kN MaxiFLEXLOCK, stainless steel	20t... 50t	16.7kg	17.3kg	9405 360 01112
PR6001/20N	50kN MaxiFLEXLOCK	500kg... 10t	25.0kg	25.6kg	9405 360 01201
PR6001/20S	50kN MaxiFLEXLOCK, stainless steel	500kg... 10t	25.8kg	26.4kg	9405 360 01202
PR6001/21N	50kN MaxiFLEXLOCK	20t ... 50t	25.0kg	25.6kg	9405 360 01211
PR6001/21S	50kN MaxiFLEXLOCK, stainless steel	20t... 50t	25.8kg	26.4kg	9405 360 01212
PR6001/30N	200kN MaxiFLEXLOCK	500kg... 10t	138kg	143kg	9405 360 01301
PR6001/31N	200kN MaxiFLEXLOCK	20t... 50t	138kg	143kg	9405 360 01311

Further options

Type	Description		Dimensions	Order number
PR6130/08	Plastic cable junction box	for all industrial applications, max. 8 load cells	250 x 180 x 90mm	9405 361 30081
PR6130/04	Cable junction box	Aluminium, grey varnished, IP 68, for all industrial applications, max. 4 load cells	175 x 80 x 57mm	9405 361 30041
PR6130/64S	Stainless steel cable junction box	material stainless steel 1.4301, IP 68, IP 69K, for all industrial, intrinsically safe and W&M applications, max. 4 load cells	195 x 114 x 59mm	9405 361 30642
PR6130/68S	Stainless steel cable junction box	material stainless steel 1.4404, IP 68, IP 69K, for all industrial, intrinsically safe and W&M applications, max. 8 load cells	200 x 160 x 60mm	9405 361 21682
PR6135	Extension cable	for all applications, grey	D = 9 mm	9405 361 35. . 2
PR6135/...A	Extension cable, armoured	for all applications, grey	D = 13 mm	9405 361 35. . 9
PR6136	Extension cable	for intrinsically safe applications, blue	D = 11 mm	9405 361 36. . 2
PR6136/...A	Extension cable, armoured	for intrinsically safe applications, blue	D = 13 mm	9405 361 36. . 9
PR6143/50N	Loaddisk	normal version for 0.5t up to 50t		9405 361 43501
PR6143/50S	Stainless steel loaddisk	material 1.4542 (DIN 17440) for 0.5t up to 50t		9405 361 43502
PR6143/24S	Stainless steel bottomdisk	material 1.4542 (DIN 17440) for PR 6201 up to 10t nominal load		9405 361 43242
PR6143/54S	Stainless steel bottomdisk	material 1.4542 (DIN 17440) for PR 6201 20t, 30t or 50t nominal load		9405 361 43542
PR6145/00N	Mounting kit	steel plates to mount all PR 6201 up to 50t nominal load		9405 361 45001
PR6145/00S	Stainless steel Mounting kit	material 1.4301, for 20 t up to 50 t nominal load order PR 6143/54S separately		9405 361 45002
PR6143/00N	Mini Flexlock	mounting plate kit with built in constrainer up to 25kN horizontal forces		9405 361 43001
PR6143/00S	Stainless steel Mini Flexlock	material 1.4301, up to 25kN horizontal forces		9405 361 43002
PR6143/10N	Mini Flexlock	stronger version with built in constrainer up to 50kN horizontal forces		9405 361 43101
PR6143/10S	Stainless steel Flexlock	material 1.4301, up to 50t nominal load and up to 50kN horizontal forces		9405 361 43102
PR6152/02	Horizontal constrainer	withstands horizontal forces up to 200kN		9405 361 52021

PR 6101/... Pivot



Type	Dimensions in mm							
	a	b	c	d	e	f	g	h
PR6101/53	15	190.5	-	115	150	65	100	14 (4x)
PR6101/24	15	190.5	-	115	150	65	100	14 (4x)
PR6101/54	15	190.5	115	195	250	65	100	14 (8x)

Table for the possible pivots to use together with PR 6201 load cell

Type	Description	Order number
PR6101/53N	normal steel up to 5t Rated capacity	9405 561 01531
PR6101/53S	stainless steel	9405 561 01532
PR6101/24N	normal steel up to 20t Rated capacity	9405 561 01241
PR6101/24S	stainless steel	9405 561 01242
PR6101/54N	normal steel up to 50t Rated capacity	9405 561 01541
PR6101/54S	stainless steel	9405 561 01542

Please feel free to contact one of our sales consultants for further information

Kontrols & Industrial Weighing
Unit 6A, 11 Bryants Rd
Dandenong, 3175 VIC
AUSTRALIA

Tel. +61 3 9791 5569
Fax. +61 3 9791 5589
e-mail: sales@kiw.com.au
www.kiw.com.au