

## Weigh Module



### FEATURES

- Capacity range: 50, 100, 200, 300, and 500kN (11.2K, 22.4K, 44.9K, 67.5K, and 112.4Klb)
- Simple installation
- Moveable load point
- Withstands very high lateral forces
- Extremely accurate and rugged
- ATEX/FM/CSA certified for hazardous locations

### DESCRIPTION

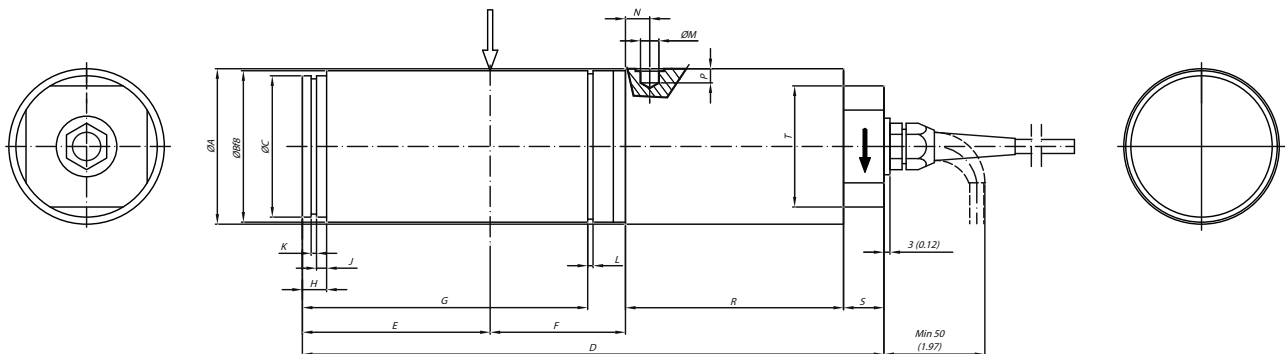
The KIS-1 load cell has several features that clearly distinguish it from other load cells. It is easy to install and extremely accurate, even when subjected to dynamic process forces and severe environmental

conditions. All KIS load cells can be ATEX/FM/CSA certified for use in explosive atmospheres.

### APPLICATIONS

- Large silo and storage bins
- Reactor and mixing vessels
- Conveyor belts
- High-capacity force measurement systems

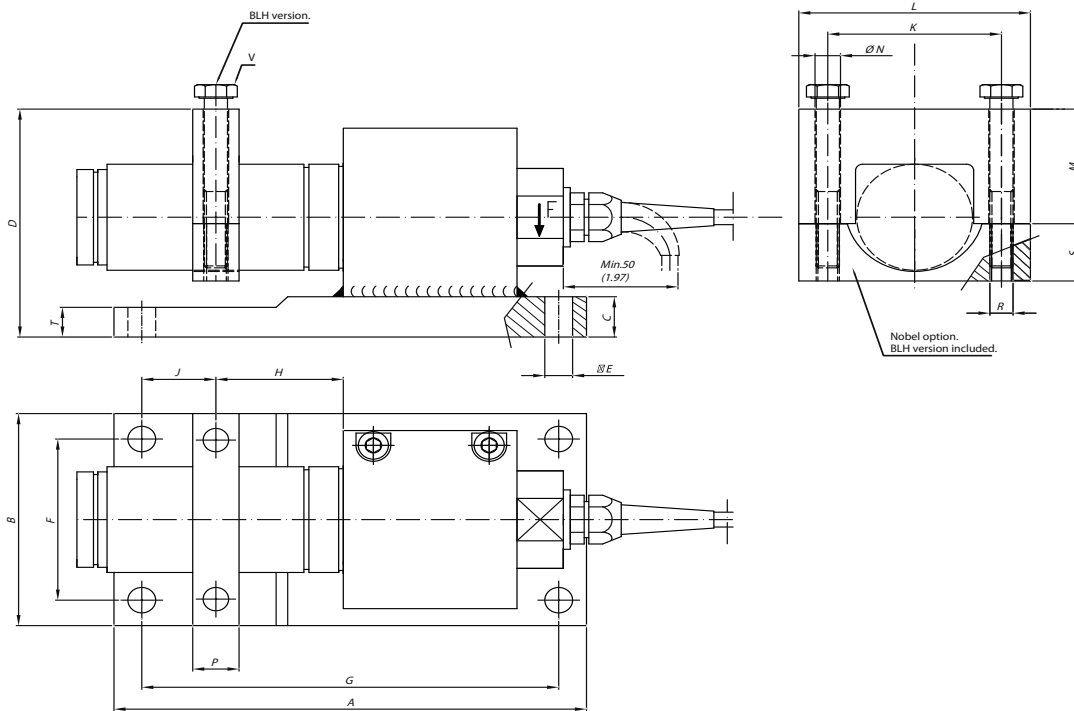
### OUTLINE DIMENSIONS



RANGE kN	ØA	ØB	ØC	D	E	F	G	H	J	K	L	ØM	N	P	R	S	T
50 (11.2k)	77 (3.03)	75 (2.95)	70 (2.76)	291 (11.46)	93 (3.66)	65 (2.56)	141.3 (5.56)	12 (.47)	5 (.20)	2.65 (.10)	2.65 (.10)	9.1 (.36)	14 (.55)	7 (.28)	110 (4.33)	20 (.79)	60 (2.36)
100 (22.4k)	92 (3.62)	90 (3.54)	82 (3.23)	315 (12.40)	107 (4.21)	65 (2.56)	155.4 (6.12)	15 (.59)	6 (.24)	2.65 (.10)	3.15 (.12)	12.6 (.50)	17 (.67)	8 (.31)	120 (4.72)	20 (.79)	70 (2.76)
200 (44.9k)	101 (3.98)	100 (3.94)	90 (3.54)	346 (13.62)	128 (5.04)	65 (2.56)	175.8 (6.92)	15 (.59)	6 (.24)	3.15 (.12)	3.15 (.12)	15.7 (.62)	19 (.75)	8.5 (.33)	130 (5.12)	20 (.79)	80 (3.15)
300 (67.5k)	101 (3.98)	100 (3.94)	90 (3.54)	346 (13.62)	128 (5.04)	65 (2.56)	175.8 (6.92)	15 (.59)	6 (.24)	3.15 (.12)	3.15 (.12)	15.7 (.62)	19 (.75)	8.5 (.33)	130 (5.12)	20 (.79)	80 (3.15)
500 (112.4k)	142 (5.59)	140 (5.51)	130 (5.12)	450 (17.72)	165 (6.50)	75 (2.95)	212.8 (8.38)	35 (1.38)	20 (.79)	4.15 (.16)	4.15 (.16)	15.7 (.62)	30 (1.18)	8.5 (.33)	180 (7.09)	27 (1.06)	80 (3.15)

Dimension shown in MM (inch)

### OUTLINE DIMENSIONS cont.



RANGE kN	A	B	C	D	ØE	F	G	H	J	K	L	M	ØN	P	T	R	S
50 (11.2k)	280 (11.02)	150 (5.91)	30 (1.18)	152 (5.98)	16 (.63)	115 (4.53)	245 (9.65)	65 (2.56)	45,5 (1.79)	115 (4.53)	150 (5.91)	72 (2.83)	18 (.71)	30 (1.18)	30 (1.18)	M16 M16	43 (1.69)
100 (22.4k)	310 (12.20)	170 (6.69)	40 (1.57)	173 (6.81)	22 (.87)	130 (5.12)	270 (10.63)	65 (2.56)	63 (2.48)	126 (4.96)	160 (6.30)	85 (3.35)	22 (.87)	40 (1.57)	26 (1.02)	M20 M20	50 (1.97)
200 (44.9k)	340 (13.39)	180 (7.09)	50 (1.97)	199 (7.83)	25 (.98)	140 (5.51)	300 (11.81)	65 (2.56)	71 (2.80)	146 (5.75)	190 (7.48)	95 (3.74)	25 (.98)	50 (1.97)	32 (1.26)	M24 M24	57 (2.24)
300* (67.5k)	340 (13.39)	180 (7.09)	50 (1.97)	199 (7.83)	25 (.98)	140 (5.51)	300 (11.81)	65 (2.56)	71 (2.80)	175 (6.89)	220 (9.02)	105 (4.13)	26 (1.02)	53 (2.09)	32 (1.26)	M24 M24	56 (2.20)
500* (112.4k)	480 (18.90)	280 (11.02)	60 (2.36)	315 (12.40)	33 (1.30)	220 (8.66)	420 (16.54)	75 (2.95)	108 (4.25)	240 (9.45)	300 (11.81)	150 (5.91)	26 (1.02)	70 (2.76)	60 (2.36)	M24 M24	91 (3.58)

\*is provided with loading ring

RANGE kN	V
50	M16-2X120 (4.724) LG
100	M20-2.5X140 (5.512) LG
200	M24-3X160 (6.299) LG
300	Not available
500	Not available

Dimension shown in MM (inch)

**KIS-1 TECHNICAL DATA**

Rated load (R.L.)		50, 100, 200, 300, 500	kN
Combined error (terminal)		±0.03	% of R.O.
Repeatability		0.01	% of R.O.
Overload (referring to recommended loading point)	Safe	200, 150 for 300kN and 500kN	% of R.L.
	Ultimate	300, 200 for 300 kN	% of R.L.
Uplift	Safe	70	% of R.L.
	Ultimate	85	% of R.L.
Side load (referred to recommended loading point)	Safe	100, 50 for 300kN and 500kN	% of R.L.
	Ultimate	200, 100 for 300kN and 500kN	% of R.L.
Input voltage	Recommended	10	V DC or AC
	Maximum	18	V DC or AC
Input resistance		350 ±3	Ohm
Output resistance		350 ±0.5	Ohm
Rated output (R.O.)		2.040	mV/V
Tolerance of R.O.		±0.1	% of R.O.
Zero balance		±1	% of R.O.
Tolerance of shunt calibration values		0.1	% of value Actual output defined on unit calibration sheet
Creep at R.L. after 30 minutes		±0.04	% of R.L.
Temperature range		-40 to +105 -40 to +220 Wider temperature range available upon request	°C °F
Temperature effect (-10°C to +50°C)	On output	±0.0015 ±0.0008	% of output/°C % of output/°F
	On zero balance	±0.003 ±0.0017	% of R.O./°C % of R.O./°F
Insulation resistance at 200V DC		>4	Gohm
Material: Load cell	50 kN	Stainless steel (Nobel version) Yellow chromate steel (BLH version)	
	100 - 500 kN	Yellow chromate steel Stainless steel as an option	
Material bracket, yoke and tilt guard		Yellow chromate steel Stainless steel as an option	
Electrical connection		10m shielded four conductor cable	
Degree of protection		IP 67	
ATEX/FM/CSA certified versions for use in explosive atmospheres are available upon request			
ATEX		II 1 GD	
FM		3611 (Class I, II, III; Div 1,2; Group A-G)	
CSA		C22.2 (Class I, II, III; Div 1,2; Group A-G)	

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