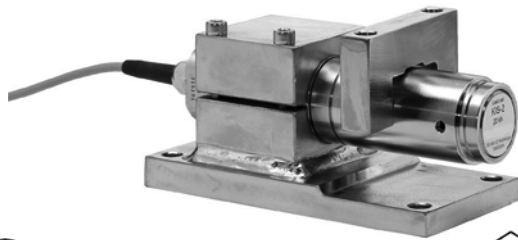


## Weigh Module



### FEATURES

- Capacity range: 0.5, 2, 5, 10, 20, 30, and 50kN (112, 450, 1.12K, 2.25K, 4.5K, 6.75K, and 11.2Klb)
- Simple installation
- Moveable load point
- Withstands very high lateral forces
- Extremely accurate and rugged
- ATEX/FM/CSA certified for hazardous locations

### DESCRIPTION

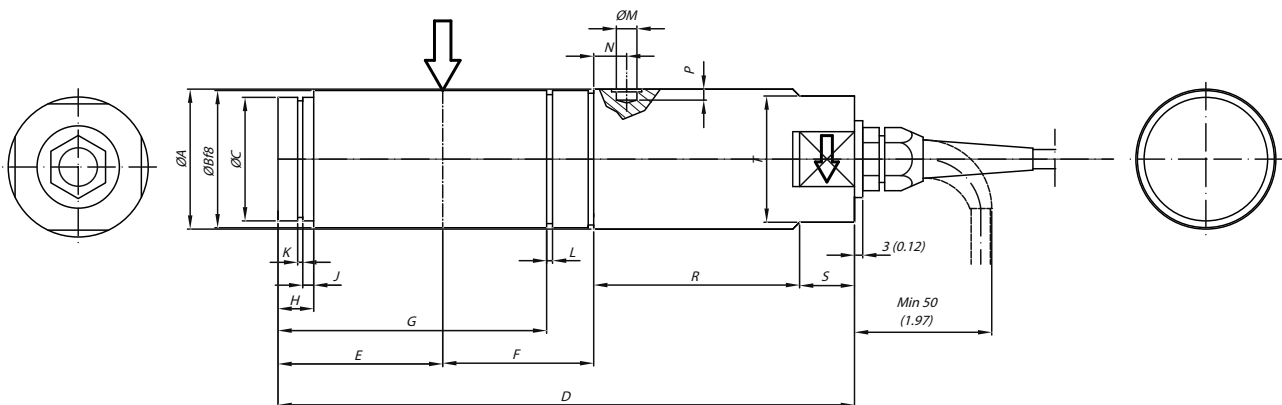
The KIS-2 load cells have several features that clearly distinguish them from other load cells. They are easy to install and extremely accurate, even when subjected to dynamic process forces and severe

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

### APPLICATIONS

- Batch/blend/mix systems
- Reactor vessels
- Quality-critical process weighing
- Precision force measurement
- Conveyor belts

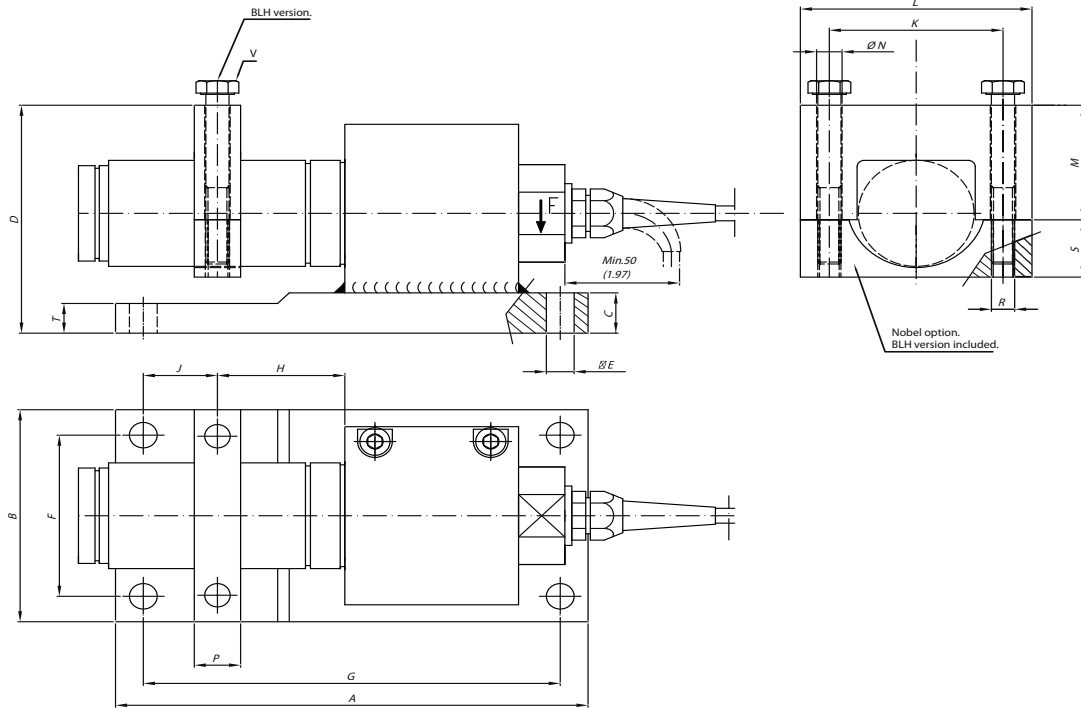
### OUTLINE DIMENSIONS



| RANGE<br>kN | ØA           | ØB           | ØC           | D              | E            | F            | G               | H           | J            | K             | L             | ØM           | N           | P            | R             | S           | T            |
|-------------|--------------|--------------|--------------|----------------|--------------|--------------|-----------------|-------------|--------------|---------------|---------------|--------------|-------------|--------------|---------------|-------------|--------------|
| 0.5-1-2-5   | 34<br>(1.34) | 33<br>(1.30) | 29<br>(1.14) | 169<br>(6.65)  | 46<br>(1.81) | 35<br>(1.38) | -               | 10<br>(.39) | 2.5<br>(.10) | 1.6<br>(.06)  | -             | 4.4<br>(.17) | 10<br>(.39) | 2.3<br>(.09) | 70<br>(2.75)  | 15<br>(.59) | 30<br>(1.18) |
| 10-20-30    | 51<br>(2.00) | 50<br>(1.97) | 45<br>(1.77) | 213<br>(8.38)  | 60<br>(2.36) | 55<br>(2.16) | 97.85<br>(3.85) | 13<br>(.51) | 4<br>(.16)   | 1.85<br>(.07) | 2.15<br>(.08) | 7.5<br>(.29) | 12<br>(.47) | 5<br>(.20)   | 75<br>(2.95)  | 20<br>(.79) | 46<br>(1.81) |
| 50          | 77<br>(3.03) | 75<br>(2.95) | 70<br>(2.76) | 288<br>(11.34) | 93<br>(3.66) | 65<br>(2.56) | 141.3<br>(5.56) | 12<br>(.47) | 5<br>(.20)   | 2.65<br>(.10) | 2.65<br>(.10) | 9.1<br>(.36) | 14<br>(.55) | 7<br>(.28)   | 110<br>(4.33) | 20<br>(.79) | 60<br>(2.36) |

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            |
|-----------|----------------|---------------|--------------|-----------------|-------------|---------------|---------------|--------------|----------------|---------------|---------------|--------------|--------------|--------------|--------------|-----|--------------|
| 0.5-1-2-5 | 175<br>(6.89)  | 75<br>(2.95)  | 14<br>(.55)  | 81<br>(3.19)    | 12<br>(.47) | 51<br>(2.01)  | 151<br>(5.94) | 35<br>(1.38) | 31<br>(1.22)   | 55<br>(2.17)  | 70<br>(2.76)  | 41<br>(1.61) | 8.5<br>(.33) | 20<br>(.88)  | 14<br>(.55)  | M8  | 19<br>(.75)  |
| 10-20-30  | 204<br>(8.03)  | 100<br>(3.93) | 19<br>(.75)  | 107.5<br>(4.23) | 12<br>(.47) | 76<br>(2.99)  | 180<br>(7.08) | 55<br>(2.16) | 32<br>(1.26)   | 75<br>(2.95)  | 100<br>(3.93) | 54<br>(2.12) | 11<br>(.43)  | 20<br>(.79)  | 14<br>(.55)  | M10 | 27<br>(1.06) |
| 50        | 280<br>(11.02) | 150<br>(5.90) | 30<br>(1.18) | 152<br>(5.98)   | 16<br>(.63) | 115<br>(4.53) | 245<br>(9.64) | 65<br>(2.56) | 45.5<br>(1.79) | 115<br>(4.53) | 150<br>(5.90) | 72<br>(2.83) | 18<br>(.71)  | 30<br>(1.18) | 30<br>(1.18) | M16 | 43<br>(1.69) |

| RANGE kN  | V                     |
|-----------|-----------------------|
| 0.5-1-2-5 | M8-1.25X70 (2.755) LG |
| 10-20-50  | M10-1.5X90 (3.543) LG |
| 50        | M16-2X120(4.724) LG   |

Dimension shown in MM (inch)

**KIS-2 TECHNICAL DATA**

|  |                 |   |                                  |
|--|-----------------|---|----------------------------------|
| Rated load (R.L.)  |                 | 0.5, 1, 2, 5, 10, 20, 30, 50                                  | kN                               |
| Combined error (terminal)  |                 | ± 0.05  | % of R.O.                        |
| Repeatability  |                 | 0.01  | % of R.O.                        |
| Overload (referred to recommended loading point)   | Safe            | 200, 150 for 30 kN and 50kN                                   | % of R.L.                        |
|  | Ultimate        | 300, 200 for 30 kN and 50kN                                   | % of R.L.                        |
| Uplift   | Safe            | 100   | % of R.L.                        |
|  | Ultimate        | 120   | % of R.L.                        |
| Side load (referred to recommended loading point)  | Safe            | 100, 50 for 30kN  | % of R.L.                        |
|  | Ultimate        | 200, 100 for 30 kN  | % 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 ±3  | Ohm                              |
| Rated output (R.O.)  |                 | 2.040   | mV/V                             |
| Tolerance of R.O.  |                 | ±0.25   | % of R.O.                        |
| Zero balance   |                 | ±5  | % of R.O.                        |
| Tolerance of shunt calibration values  |                 | ±0.25   | % of value                       |
| Creep at R.L. after 30 minutes   |                 | ±0.03   | % of R.L.                        |
| Temperature range  |                 | -40 to +100   | °C                               |
|  |                 | -40 to +212<br>Wider temperature range available upon request | °F                               |
| Temperature effect (-10°C to +50°C)  | On output       | ±0.0033<br>±0.00018   | % of output/°C<br>% of output/°F |
|  | On zero balance | ±0.0014<br>±0.0008  | % of R.O./°C<br>% of R.O./°F     |
| Insulation resistance at 200V DC   |                 | >4  | Gohm                             |
| Material: Load Cell  |                 | Stainless steel   |                                  |
| Material bracket, yoke and tilt guard  |                 | Yellow chromate steel<br>Stainless steel as an option         |                                  |
| Electrical connection  |                 | 10 m shielded four conductor cable                            | BLH version                      |
|  |                 | 5 m shielded four conductor cable                             | Nobel version                    |
| 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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