

## Load Cell

### FEATURES

- Suitable for force measurement applications
- Easy installation
- The cylindrical shape makes it easy to replace an axis
- Resistant against harsh environment
- Could be adapted for other dimensions and capacities
- ATEX and IECEx approved for hazardous area upon request
- Functional Safety TÜV certification



### APPLICATIONS

- Offshore
- Cranes
- Tension measurement
- Level monitoring



SIL/PL  
Capability

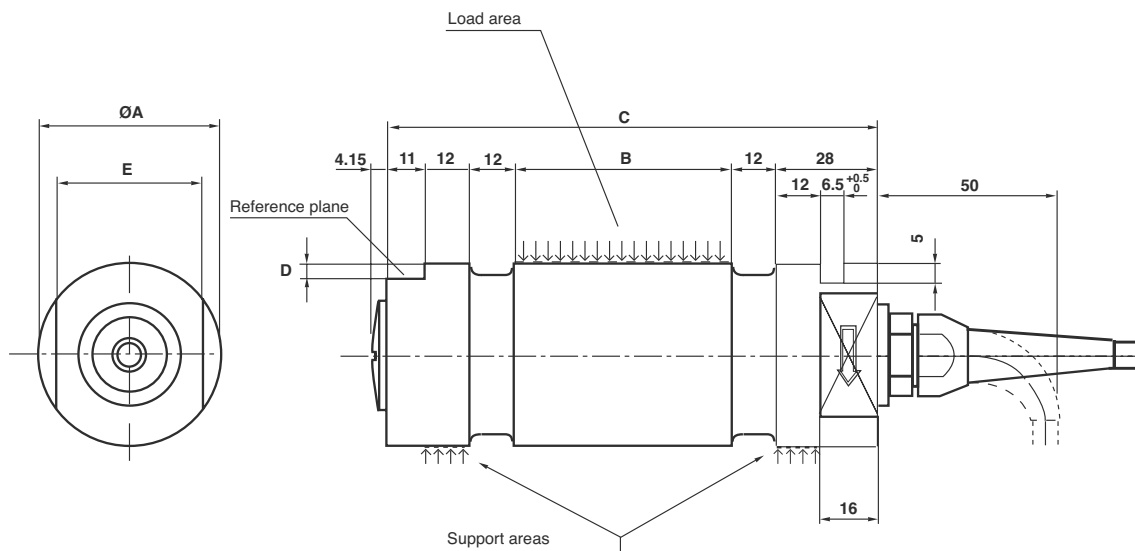
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### DESCRIPTION

The KOSD-40 load cell has a rugged design for harsh environment and is suitable for force measurement and overload protection. The sensing element consists of three sections, the two outer sections constitute supports and the middle section is the load sensing part.

The KOSD-40 can be delivered in a module for load and level monitoring in storage tanks, then called KOM-1.

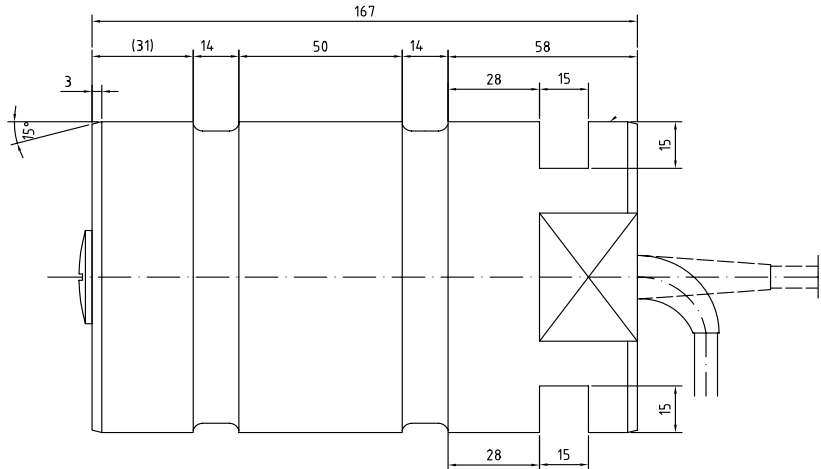
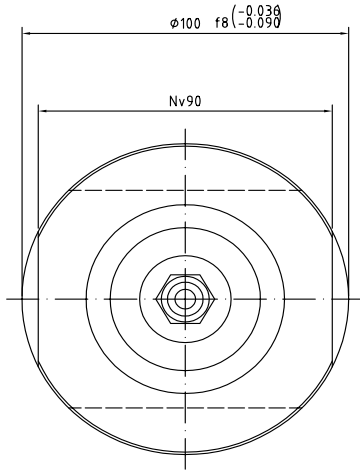
### OUTLINE DIMENSIONS – 10, 20, 50, 100, 200, 500 kN Capacities



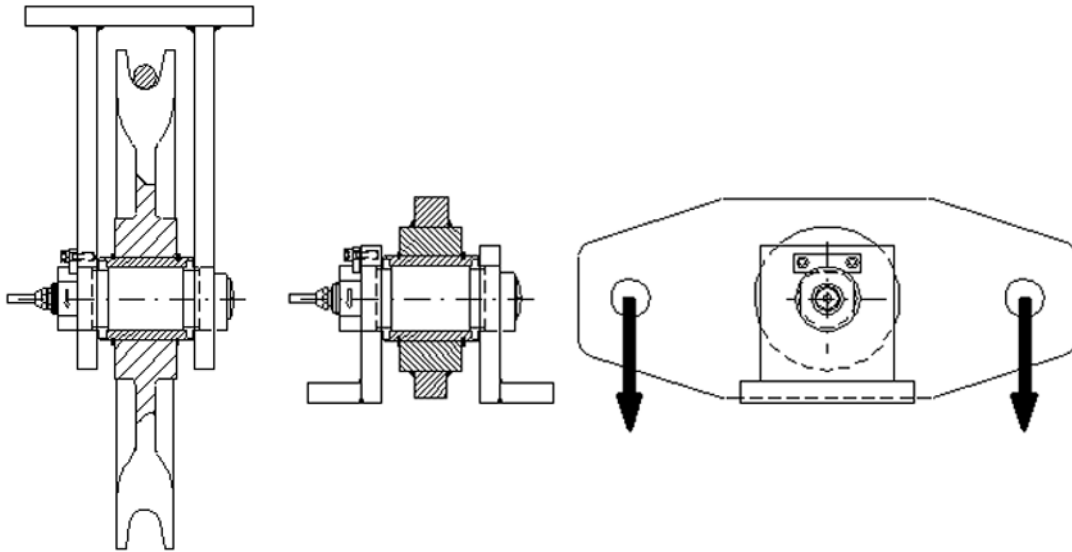
RANGE kN	ØA	B	C	D	E
10, 20, 50	40 f8 (-0.025) (-0.064)	35	110	4	32
100	50 f8 (-0.025) (-0.064)	60	135	5	40
200	70 f8 (-0.030) (-0.076)	60	135	5	60

Load Cell

**OUTLINE DIMENSIONS—500 kN Capacity**



**INSTALLATION EXAMPLE**



Load Cell

<b>SPECIFICATIONS</b>	
<b>PARAMETER</b>	<b>VALUE</b>
Rated load (RL)	10, 20, 50, 100, 200, 500 kN
Combined error	±0.5% RO (±1% RO 500 kN)
Repeatability	0.25% RO
Safe load*	200% RL
Ultimate load*	300% RL
Safe sideload*	100% RL
Ultimate sideload*	200% RL
Input voltage, recommended	10 VDC or VAC
Input voltage, maximum	18 VDC or VAC
Input resistance	350 Ω ±5 Ω
Output resistance	350 Ω ±5 Ω
Rated output (RO)	≈1 mV/V
Zero balance	±5% RO
Tolerance of shunt calibration values	±1% of value (actual output listed on unit calibration sheet)
Temperature range	-40 to +80°C, -40 to +100°C upon request
Temperature effect on output	+0.04% of output/°C
Temperature effect on zero balance	±0.04% of RO/°C
Insulation resistance at 200 VDC	>4 GΩ
Material	Stainless steel
Electrical connection	5 m shielded four conductor cable 10, 20, 50 kN 10 m shielded four conductor cable 100, 200, 500 kN
Degree of protection	IP67
<b>APPROVALS</b>	
Certified for Functional Safety applications according to EN ISO 13849 (up to PLd) and EN 61508 (up to SIL2). ATEX, IECEx certified versions are available upon request. For details contact <a href="mailto:blhnobel@vpgsensors.com">blhnobel@vpgsensors.com</a> .	

\* Referring to recommended loading point

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.



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