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# HRL Series Load cell

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## FEATURES

- Monitors anchor forces and other force measurements
- Range: 600 – 2,700 k-N
- Admissible overload: 120% of the nominal load
- maximum load: 300% of the nominal load
- Suitable for heavy-duty use on construction sites
- Special sizes available upon request
- Easy to assemble
- Stainless steel
- Option: Lightning and Surge Protection



## DESCRIPTION

HRL Series load cells consist of a high quality stainless steel. This compact load cell is designed specifically for heavy duty use on construction sites, with load cells that are available in the range of 600 to 2,700 k-N. Special designs are available upon request.

The attached shielded cable has a length of 15 m and includes a water-proof connector.

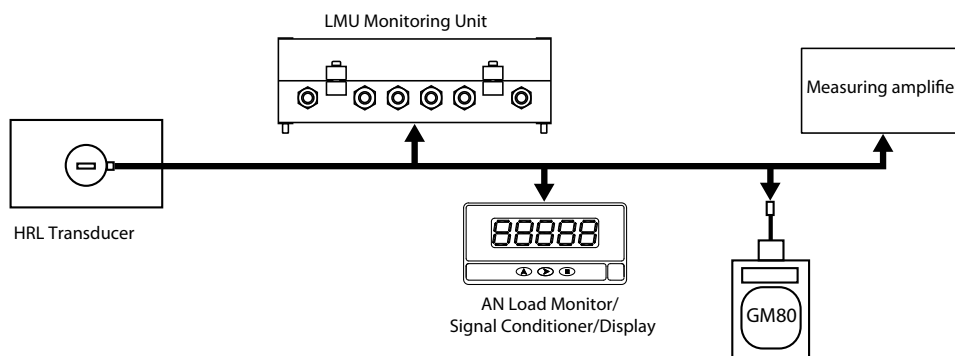
The data collected from the strain gauge is proportional to the applied force. The signal is transmitted to the monitoring unit for amplification.

## APPLICATION

The Magtrol HRL Series load cells can be used to monitor anchor forces in classical and prestressed structures on sites (civil engineering, tunnels...) as well as a range of other static or dynamic measurements.

## SYSTEM CONFIGURATION

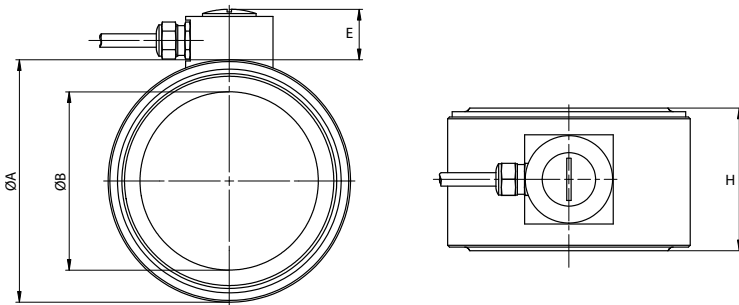
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## TECHNICAL RATINGS

Transducer Type	HRL 4	HRL 7	HRL 12	HRL 19
<b>MECHANICAL CHARACTERISTICS</b>				
Nominal Load	600 k-N	1,000 k-N	1,700 k-N	2,700 k-N
Admissible Overload	120%			
Overload at Rupture	> 300%			
Accuracy Class	1%			
Weight	4.5 kg	6.3 kg	9.5 kg	15 kg
<b>ELECTRICAL CHARACTERISTICS</b>				
Nominal Sensitivity	1.5 mV/V $\pm$ 1 %			
Input Resistance	700 -1,100 $\Omega$			
Output Resistance	700 $\Omega$			
Nominal Supply Voltage of Strain Bridge	5V to 10V			
Combined Error (Non-linearity + Hysteresis)	1%			
<b>ENVIRONMENTAL CHARACTERISTICS</b>				
Reference Temperature	+23°C			
Operating Temperature	-30°C to +70°C			
Storage Temperature	-40°C to +80°C			
Temperature Influence: On Zero	$\leq \pm 0.01$ %/K			
Temperature Influence: On Sensitivity	$\leq \pm 0.01$ %/K			
Protection Class	IP66			
Option: Lightning and Surge Protection	up to 20kA (8/20 $\mu$ s)			
<b>CONNECTION CABLE</b>				
Cable Length	15 m			

## DIMENSIONS



### ASSEMBLY EXAMPLE



TYPE/DIMENSIONS [mm]	ØA	ØB	E	H
HRL 4	136	100	28	80
HRL 7	164	125	29	100
HRL 12	206	160	29	128
HRL 19	242	190	29	130

Due to the continual development of our products, we reserve the right to modify specifications without forewarning.



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