

# ► Ring-torsion load cell V51S



- Material: Alloy steel
- Capacity: 1.000 - 4.700 kg
- Protection class: IP 66
- Construction: The measuring element is laser-welded
- Load Introduction: Spherical load application button / Edition with threaded holes
- Robust design for heavy-duty use in industrial applications

## *Scope of application:*

- Coil scales
- Coil scales
- Silo scales
- Heavy load scales
- Special scales
- Machine scales
- Cargobalances
- Force measurements in testing machines and process industry

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## Tension and compression force sensors for industrial applications

The V51S central-loading compression load cells are used to measure compression forces in a wide range of industrial applications. The load cells have a symmetrical design and are characterised by their very compact and flat construction. The forces are always introduced centrally into the load cell, making it largely insensitive to eccentric loads.

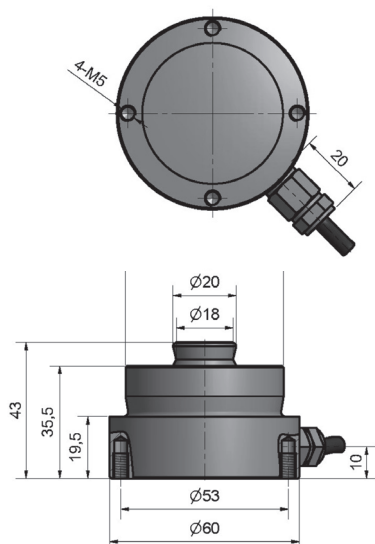
The load cell delivers extremely precise and reproducible

measurement results even in long-term use in harsh industrial environments. The high-load load cell is made of high-quality, nickel-plated tool steel, laser-welded and meets the requirements of protection class IP66.

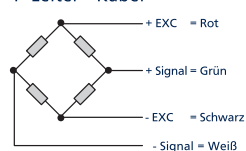
## TECHNICAL DETAILS

Accuracy class according to OIML R 60		0,03
Nominal load ( $E_{max}$ )	t	1,2,2,3,3,4,7
Number of division values ( $n_{LC}$ )		3000
Nominal value ( $C_n$ ) / Characteristic tolerance	mV/V	$2,85 \pm 0,01$
Characteristic value of the relative minimum division value d. WZ ( $Y = E_{max} / v_{min}$ )	% from $E_{max}$	10 000
Minimum preload ( $E_{min}$ )		0
Limit load ( $E_L$ )		150
Breaking load ( $E_d$ )	% from $E_{max}$	200
Recommended supply voltage ( $U_{ref}$ )	V	5 - 12
Maximum permissible supply voltage ( $B_U$ )		15
Zero adjustment	% v. $C_n$	$\leq 1 \%$
Input resistance ( $R_{LC}$ ) at reference temperature	$\Omega$	$1450 \pm 10$
Output resistance ( $R_o$ ) at reference temperature		$1402 \pm 5$
Insulation resistance	M $\Omega$	$> 5\,000$
Nominal temperature range ( $B_T$ )	$^{\circ}\text{C}$	- 10 ... + 40
Protection class according to (DIN 40.050 / EN 60529)		IP66
Cable length		8 m
Material		Alloy steel

## TECHNICAL DRAWINGS



### Elektrischer Anschluss 4-Leiter - Kabel



### Einbaubeispiel

