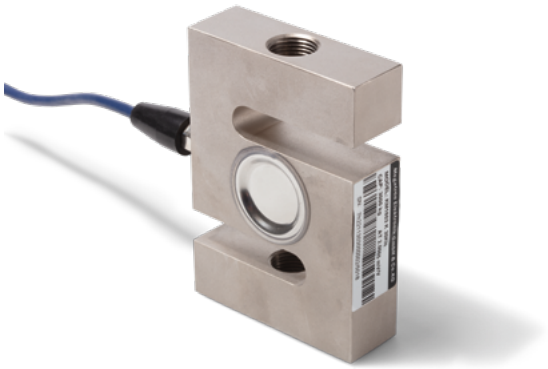
Data sheet for Load Cells

S-Beam Load Cells — Series KM1603



- Strain gauge principle
- Stainless steel
- Force transmission via M18-thread for 20kN..50kN
- Protection grade IP67
- Easy to install, stable and reliable
- Test protocol available

Series KM1603 force transducer is a all-purpose S-beam load cell.

Data Load Cell	
Rated force	20kN, 30kN, 50kN
Rated characteristic value	2,0 mV / V of rated output
Relative error of characteristic value	≤ 1 % of rated output
Relative repeatability error	≤ 0,03 % of rated output
Relative reversibility error	≤ 0,03 % of rated output
Relative linearity error	≤ 0,03 % of rated output
Relative deviation of zero signal	≤ 0,03 % of rated output
Input resistance	387 ±20 Ω
Output resistance	350 ±5 Ω
Insulation resistance	≥ 5 GΩ @ 50 VDC
Maximum operating force	≤ 150% of rated force
Rated range of excitation voltage	≤ 10 V DC/AC
Operating range of excitation voltage	≤ 15 V DC/AC
Rated temperature range	-10 °C..+70 °C
Operating temperature range	-10 °C..+40 °C
Protection	IP67
Temperature effect on characteristic value	≤ 0,02 % of rated output / 10 K
Temperature effect on zero signal	≤ 0,02 % of rated output / 10 K
Creep under load	≤ 0,03 % of rated output
Cable dimension	4xAWG24; jacket Ø4,8 mm; screened
Cable length from body	ca. 6 m
Body material / cable material	Stainless steel / PTFE
Mass	ca. 1.46 kg

Terms according to guideline VDI / VDE / DKD 2638

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Order code				
Description	Selection: **standard=black/bold**, possible *options=grey/italic*			
Series:	**KM1603**			
Connecting cable: **Cable length 6 m**		**K**		
Rated force: *Option 20 kN* **30 kN** **50 kN**			*20kN* **30kN** **50kN**	
Test protocol				**P**

Accessories	
Measuring amplifier	IMA2 DMS

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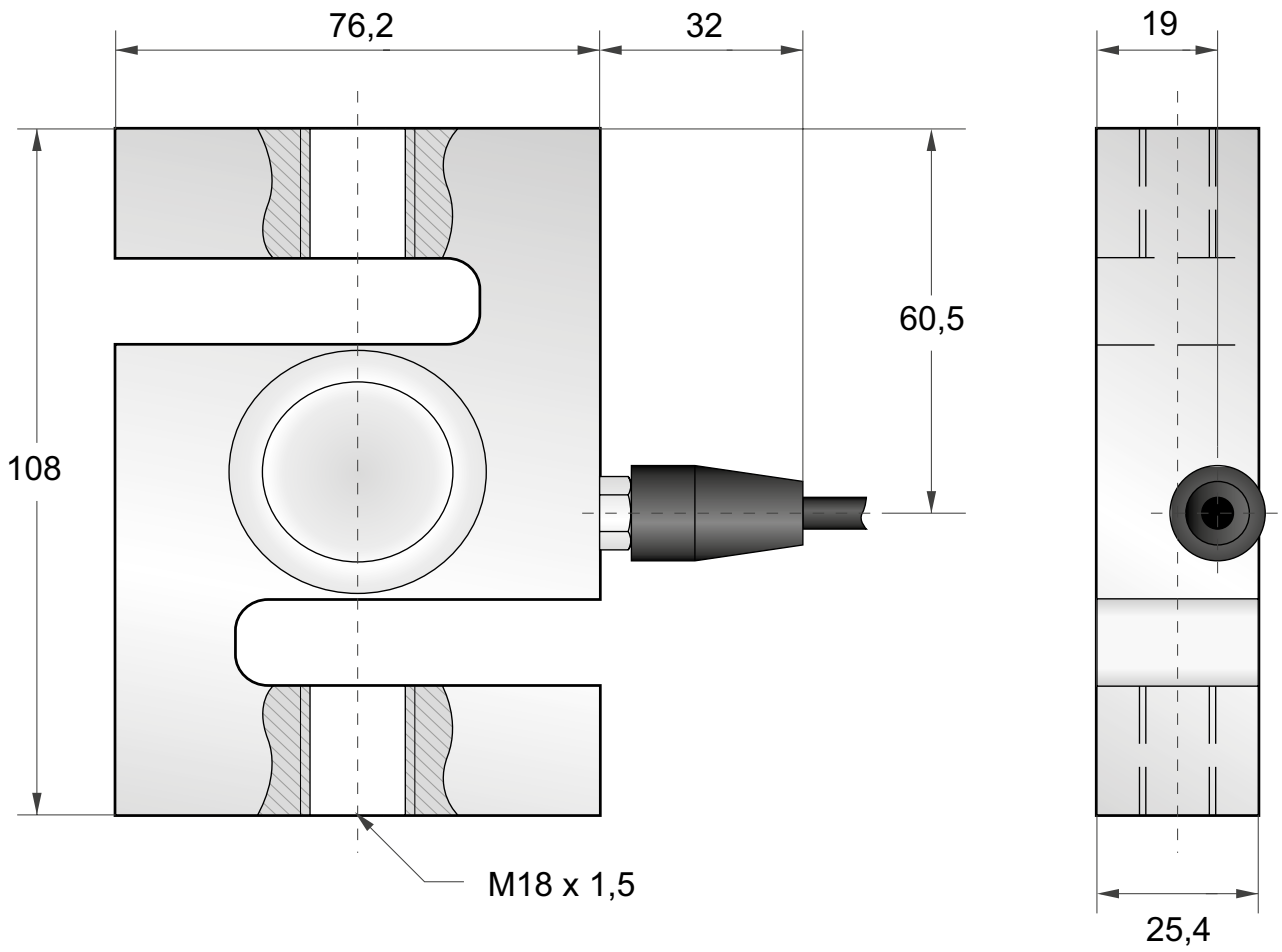
Drawing



Dimensions in mm

Cable assignment

For tension:

Red:	+input
Black:	-input
White:	-output
Green:	+output

For pressure:

Red:	+input
Black:	-input
White:	+output
Green:	-output

Connection diagram tension