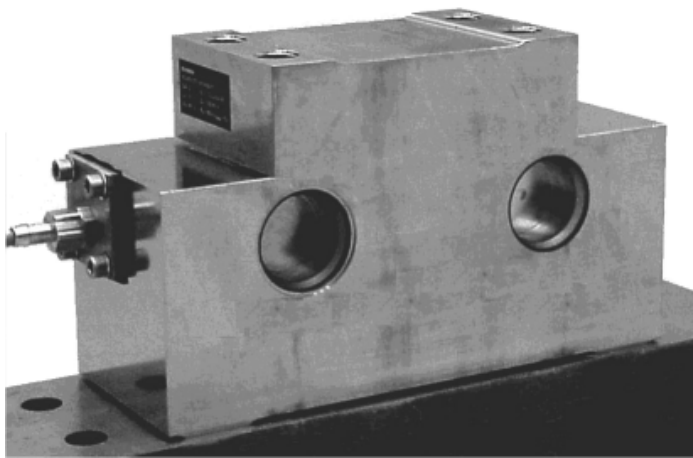


## Weighbeam DMR 15t



- High accuracy
- Hermetically sealed, protected to IP67 by laser welding
- Easy and economical installation through direct screwing to the connecting structure
- Transmission of high interferential forces and moments at minimal influence on measurement value
- For high temperatures and rugged operation
- For the design of maintenance-free scales

### Application

- Railway scales
- Crane scales
- Coil scales

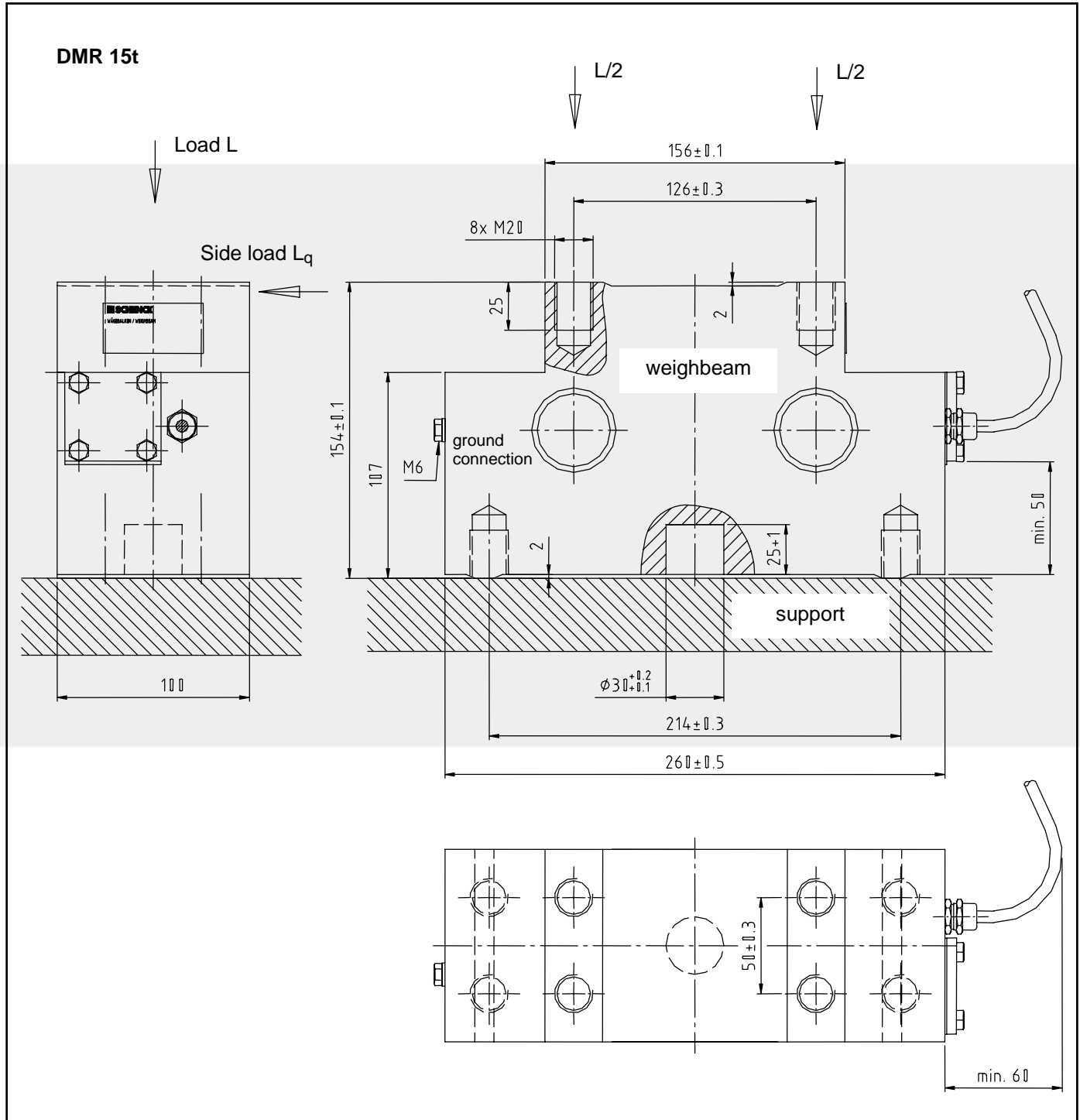
### Equipment

- Two-line load introduction and outlet
- Stainless steel
- Hermetically sealed

### Function

- High repeatability
- High long-term stability and consistently high accuracy
- No additional tie-rods or hold-downs
- Optional execution with two measuring circuits inside one sensor available

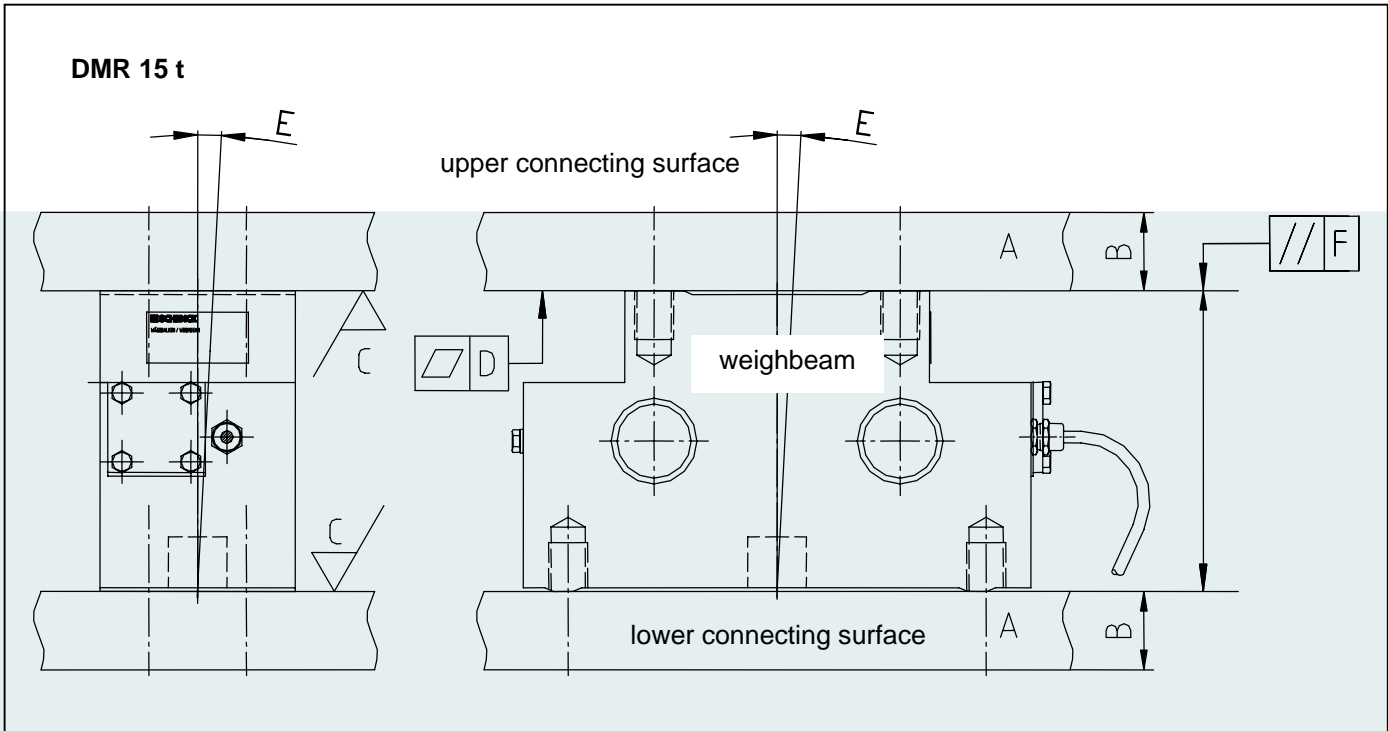
# Mounting Dimensions



## Technical Data

DMR 15 t				Ref.
Rated capacity	$E_{max}$	15 t		
Accuracy class		C1 (OIML R60) C2 upon request	0.1	
Number of increments	$n_{LC}$	1000		
Nominal measuring range	$B_{max}$	$B_{max} = E_{max}$		
Sensitivity	$C_n$	2.00 mV/V		
Combined error	$F_{comb}$	$\pm 0.06 \%$	$\pm 0.1 \%$	$C_n$
Return of minimum preload signal	$d_{DR}$	$\pm 0.033 \%$		$C_n$
Creep error (30 min)	$d_{cr}$	$\pm 0.049 \%$	$\pm 0.05 \%$	$C_n$
Zero signal temperature coefficient	$TK_{smin}$	$\pm 0.028 \%$ / 10K		$C_n$
Sensitivity temperature coefficient	$TK_c$	$\pm 0.023 \%$ / 10K		
Minimum increment value	$V_{min}$	$E_{max} / 5000$	---	
Minimum measuring range	$B_{min}$	33.3 %	---	
Limit load (with $L_Q = 0.15 \times E_{max}$ )	$L_L$	26 t		
Rupture load (with $L_Q = 0.15 \times E_{max}$ )	$L_B$	38 t		
Max. lateral load	$L_Q$	13 t		
Input resistance	$R_{LC}$	$378 \pm 3$ ohms		$t_{ref}$
Output resistance	$R_o$	$360 \pm 0.5$ ohms		$t_{ref}$
Zero signal	$S_o$	$\pm 1 \%$		$C_n$
Relative sensitivity deviation	$d_c$	$\pm 0.2 \%$		$C_n$
Supply voltage nominal range	$B_U$	5 V to 12 V		
Nominal temperature range	$B_T$	-10°C to +40°C		
Service temperature range	$B_{tu}$	-30°C to +120°C		
Reference temperature	$t_{ref}$	22°C		
Material		Stainless steel		
Protected to		IP 67 (laser welded)		
Corrosion protection		see resistance list DDP8 483		
Dead weight	$m_e$	25 kg		
Measuring cable		4 x 0.5 mm <sup>2</sup> screened in pairs and external screening outer diameter 6.5 mm, Length 8 m Silicone, -30°C to +150°C		
Colour code		Black:	Input +	
		Blue:	Input -	
		Red:	Output +	
		White:	Output -	
		Green-Yellow:	screen	

## Connecting surface quality requirements



- Material quality "A":  
Usually construction steel of a minimum quality S355 is used
- Plate thickness "B":  
Depends on stiffness of total construction. Plate thickness of connecting surface must be at least 40 mm
- Surface quality "C":  
Requisite mean roughness of the connecting surfaces is 6.3  $\mu\text{m}$
- Planeness "D":  
Maximum admissible plane-ness tolerance within every connecting surface is 0.05 mm
- Angular deviation error to vertical axis "E":  
Angle deviation of connecting surface to vertical axis in both planes of view must not exceed  $\pm 2^\circ$
- Plane parallelism "F":  
Upper and lower connecting surfaces have to be plane parallel to minimum 0.1 mm

Variant	Order No.
DMR 15 t 0.1	V 000 522 .B01
DMR 15 t C1	upon request
DMR 15 t C2	upon request
DMR 15 t 2 channels	upon request