Weighbeam DWB 11.5 ... 25t

- **Simple and economical installation through direct screwing onto the connecting structure**
- **Transmission of high interferential forces and moments at minimal impact on measurement value**
- **Extremely low headroom**
- **Designed for rugged environment**
- **Suitable for construction of service free scales**
- **Option: HT-type for service temperature up to 120°C**

Application

- Silo and hopper scales
- Crane scales
- Rail weighbridges
- Scrap bucket, roller train, and tundish scales
- Platform scales

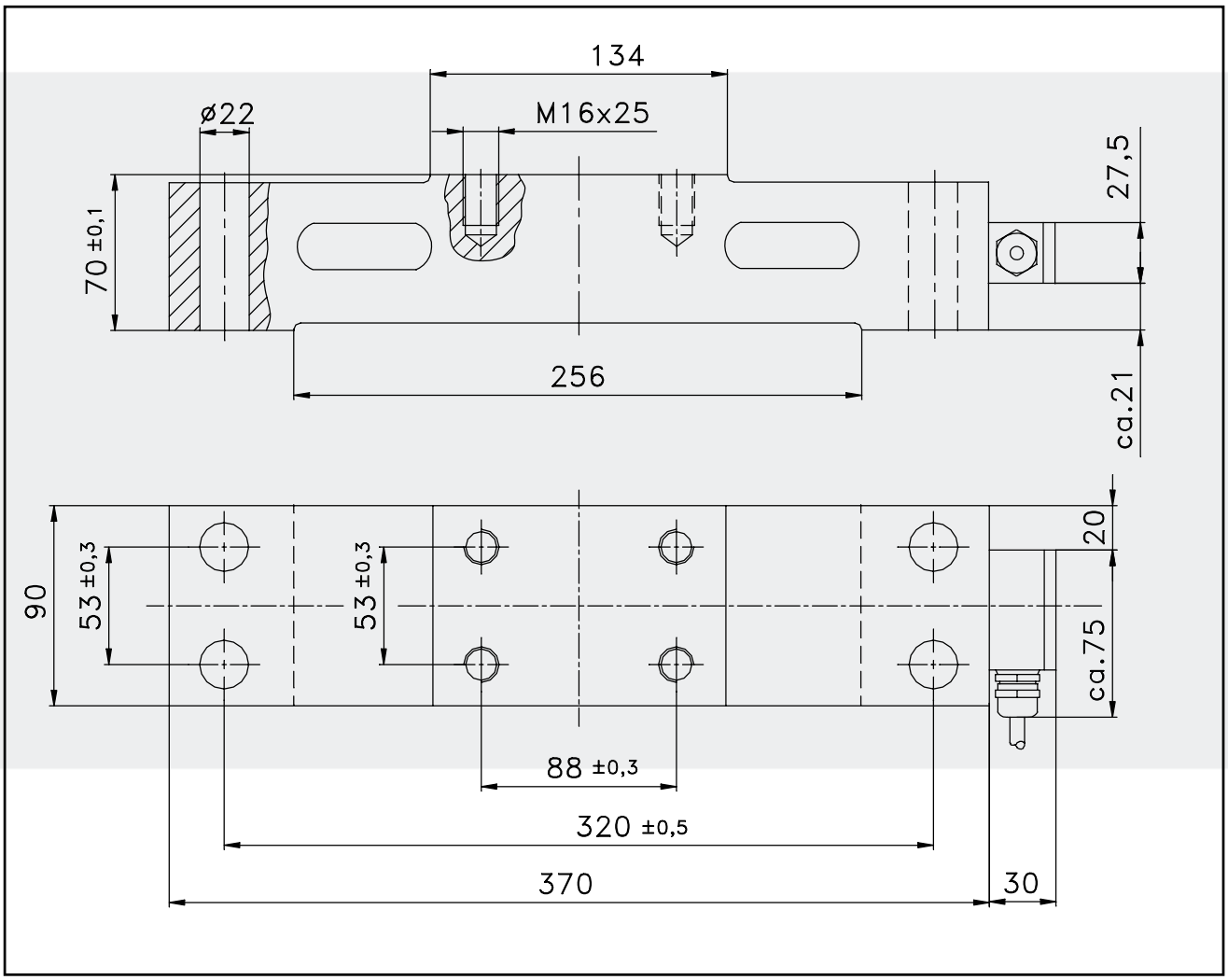
Construction

- Low and compact design
- Galvanized surface
- Protected to IP 67

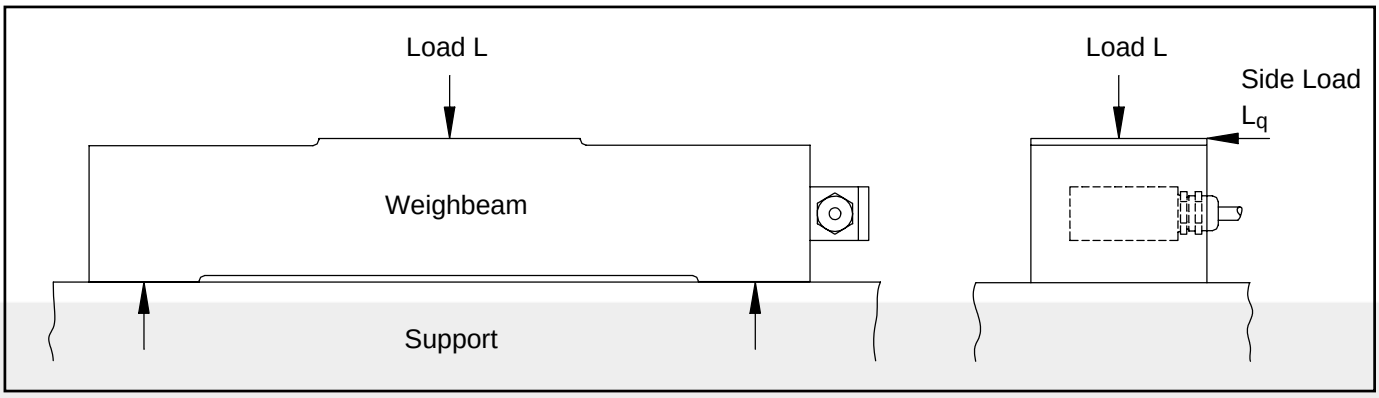
Function

- High degree of reliability and availability
- Virtually impervious to shock loads and unavoidable side forces
- No need for additional tie-rods and hold-downs

Mounting Dimensions



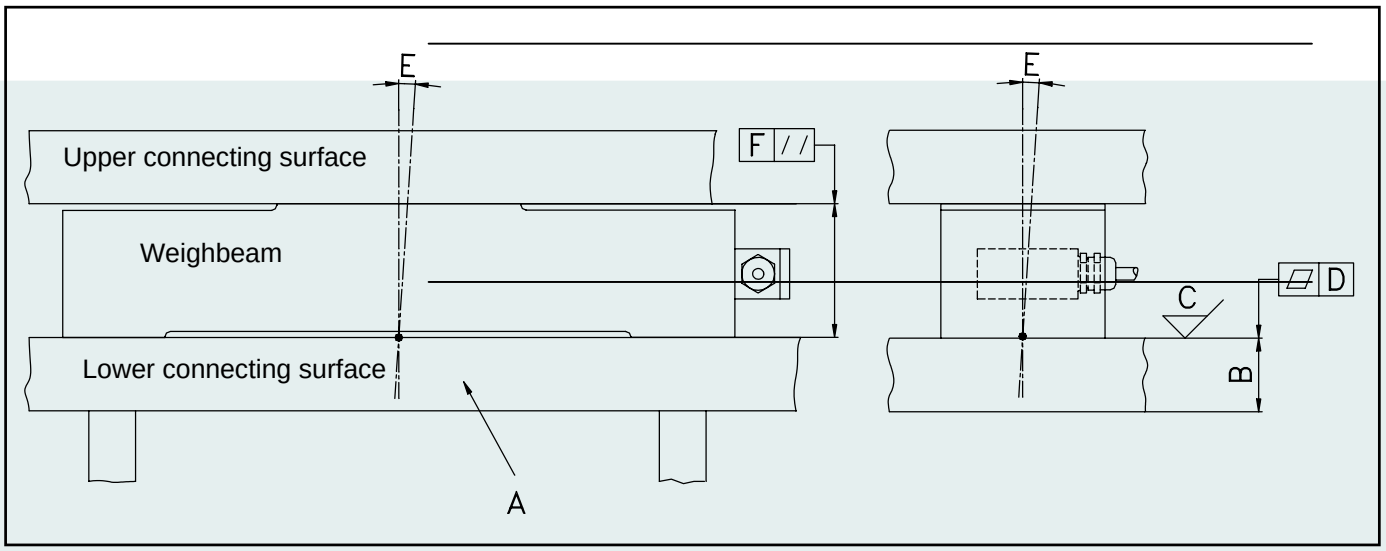
Operating Principle



Technical Data

		DWB 11.5 t	DWB 15 t	DWB 25 t	Reference
Rated capacity	L_n	11.5 t	15 t	25 t	
Limit load (with $L_q = 0.15xL_n$)	L_l	23 t	26 t	35 t	
Rupture load (with $L_q = 0.15xL_n$)	L_d	35 t	38 t	40 t	
Max. admissible side load	L_{qmax}	15 t	18 t	25 t	
Sensitivity	C_n	0.90 mV/V	1.16 mV/V	1.40 mV/V	L_n
Combined error	F_{comb}	± 0.15 %			C_n
Creep (30 m)	F_{cr}	± 0.05 %			C_n
Input resistance	R_e	378 Ω	378 Ω	756 Ω	T_r
Output resistance	R_a	350 Ω	350 Ω	700 Ω	T_r
Ref. supply voltage	U_{sref}	10V			
Max. supply voltage	U_{smax}	18V	18V	36V	
Nominal temperature range	B_{tn}	- 10°C to + 40°C			
Service temperature range	B_{tu}	- 15°C to + 80°C (HT quality + 120°C)			
Reference temperature	T_r	+ 22°C			
Storage temperature range	B_{ts}	- 30°C to + 85°C (HT quality + 120°C)			
Temperature effect on zero signal	TK_o	± 0.1% / 10K (HT quality: ± 0.05%)			C_n in B_{tu}
Temperature effect on sensitivity	TK_c	± 0.07% / 10K (HT quality: ± 0.05%)			
Dead weight	m_e	18kg	18kg	18kg	
Corrosion protection		hot dip galvanized			
Protection class		IP 67			
Cable specification		silicone RAL 7000 (grey) Ø 6.5mm x 15m – 30°C to + 150°C			
Colour code		black : input + (82) / blue : input - (81) red : output + (28) / white : output - (27) green-yellow : screening			

Contact surfaces quality requirements



- Material “A”:
  Usually, construction steel of a minimum quality S355 is used
- Plate thickness “B”:
  Plate thickness depends on total construction stiffness. Connecting surfaces plate thickness must be at least 40% of weighbeam height
- Surface quality “C”:
  The requisite mean rough value of connecting surfaces is around 6.3µm
- Planeness “D”:
  The maximum admissible tolerance of each contact surface is 0.05 mm
- Angular error to vertical axle “E”:
  The connecting surface angle may differ from the vertical. axle in both planes of view by max. ± 2°
- Plane parallelity “F”:
  The upper and lower connecting surfaces to the weighbeam must be plane parallel to minimum 0.1 mm

Variants	Order No.
DWB 11.5 t	D 703 100.01
DWB 15 t	D 703 100.02
DWB 25 t	D 704 280.03

Options:

HT quality for service temperature up to 120°C

Variants	Order No.
DWB 11.5 t HT	D 703 100.04
DWB 25 t HT	D 704 280.05

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