Belt Scale

FEATURES

- Stable and precise single-idler belt scale for belt conveyors
- Load cell with transport and overload protection
- Feed rates from 2 to 1,000 t/h
- Belt widths from 500 up to 1,000 mm
- Completely hot dip galvanized, painted or stainless steel
- Easy installation
- Low installation height

DESCRIPTION

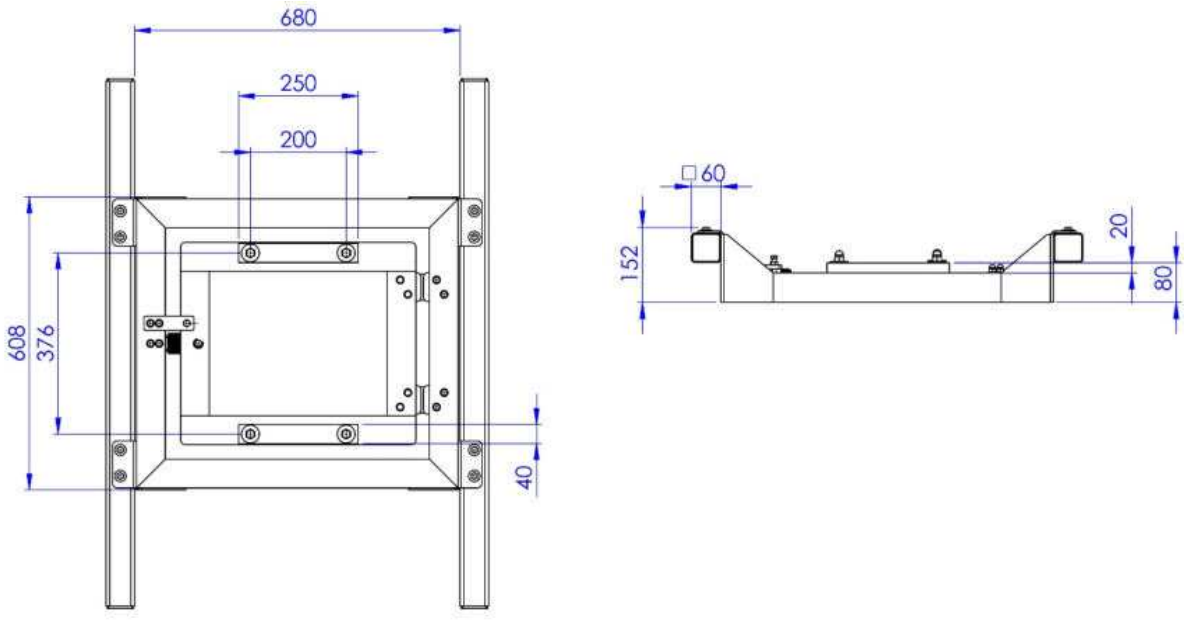
The EBW 10 is a single-idler belt scale and serves to continuously record the quantity of the bulk material during the transport on a belt conveyor. The scale can be used for universal application in almost every conveyor.

The belt scale EBW 10 has a simple mechanical construction. Part of the scale is an external frame mounted on two support bars. Within the frame, there is located the measuring rocker (weighing platform), which is elastically but torsionally rigidly mounted on spring steels and a load cell. The load cell has a transport and overload protection. The scale allows the installation in conveyors with a small interspace between upper and lower belt. The support bars of the scale are easily screwed upon the conveyor.

Belt scale frame, measuring rocker and support bars are made of galvanized angle steel profile, optionally painted or made of stainless steel. The measuring wheel is mounted upon the frame unit.

The bulk material generates a pressure load on the measuring idler station which is recorded by strain gauge load cell. At the same time, the measuring wheel running simultaneously on the lower belt and records the current belt speed. By the control unit, the signals of the load cells and the speed measurement are recorded, scaled and provided as a weight value in kg/h or t/h.

OUTLINE DIMENSIONS (MM)



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BLH NOBEL
A VPG Brand

Belt Scale

Built-in belt scale EBW 10
consisting of weighing platform with integrated strain gauge load cell with transport and overload protection

SPECIFICATIONS	
Feed rate	2 to 1,000 t/h
Belt width	500 to 1,000 mm
Combined measuring error of belt scale	± 1 % to max. 2 % in the range of 50 % and 100 % of the maximum feed rate and checked application in the temperature range from -10°C to +40°C
Material frame, support bars, weighing platform	completely hot dip galvanized, optionally painted or made of stainless steel; fittings made of stainless steel
Weight scale	approx. 25 kg (without support bars)
Loadcell - full bridge strain gauge bending beam load cell (1 pc.)	
Supply voltage	10 to 15 V DC – via control unit
Material	stainless steel, hermetically sealed
Electronic overload capacity	3 times nominal load, based on nominal feed rate
Electrical connection	6-wire cable
Working temperature range	-30°C to +70°C
Environmental protection	IP 69K
Measuring wheel MTS MR 10 - consisting of ball bearing mounted friction wheel with polyurethane running surface and inductive proximity switch	
Wheel diameter	200 mm, alternatively 160 mm
Wheel bar	stainless steel
Weight measuring wheel	approx. 5 kg
Proximity switch	
Supply voltage	10 to 36 V DC - via control unit
Outgoing signal	Voltage pulse, 22 per rotation
Switching function	PNP (NPN)
Electrical connection	M12-plug, 3-wire, cable length 5 m
Working temperature range	-25°C to +70°C
Environmental protection	IP 68

Alternatively, a rotary encoder can be used, which is mounted on the bend pulley.
Delivery includes: Weighing platform, support bars, measuring wheel or incremental encoder, junction box.
Idler stations can be delivered optionally.

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