

Overview



Milltronics WD600 is a light- to-medium-duty slider bed belt scale used for process and load-out control in manufacturing, including the food, pharmaceutical and tobacco industries.

Benefits

- Simple installation
- Long weigh span for more retention time on load cells

Application

WD600 works with an existing flat belt conveyor and the selected Siemens integrator. As material is moving along the conveyor belt and travels over the belt scale, it exerts a force proportional to the material load through the suspended weighbridge to the load cells.

WD600 reacts only to the vertical component of the applied force. The resulting movement in each load cell is sensed by its strain gauges. When the strain gauges are excited by voltage from the electronic integrator, they produce an electrical signal proportional to weight, which is then applied to the integrator.

The vertical movement of the load cells is limited by the positive overload stop incorporated into the design of the load cell mount.

Technical specifications

Milltronics WD600	
Accuracy¹⁾	± 0.5 ... 1 % totalization over 25 ... 100 % operating range, application dependent
Repeatability	± 0.1 %
Belt width	12, 18, 24, 30, 36, 42, 48 inch (300, 450, 600, 750, 900, 1 000, 1 200 mm)
Belt speed	2.0 m/s (400 fpm) maximum ²⁾
Capacity	Up to 100 t/h
Conveyor incline	<ul style="list-style-type: none"> • ± 20° from horizontal, fixed incline • Up to ± 30° with reduced accuracy³⁾
Conveyor idler/slider profile	• Horizontal
Loading	<ul style="list-style-type: none"> • Minimum 1.0 kg/m (0.6 lb/ft) • Maximum 76 kg/m (51 lb/ft)
Load cell	
Construction	17-4 PH (1.4568) stainless steel or nickel plated alloy steel
Degree of protection	<ul style="list-style-type: none"> • Stainless steel: IP68 • Nickel plated alloy steel: IP66
Cable length	3 m (10 ft)
Excitation	10 V DC nominal, 15 V DC maximum
Output	2 mV/V
Non-linearity	0.02 % of rated output
Non-repeatability	0.01 % of rated output
Capacity	Stainless steel range: 6, 12, 30 kg Nickel-plated range: 10, 15, 20, 30, 50 kg
Overload	150 % of rated capacity
Temperature	<ul style="list-style-type: none"> • -40 ... +65 °C (-40 ... +150 °F) operating range • -10 ... +40 °C (15 ... 105 °F) compensated
Scale construction	<ul style="list-style-type: none"> • Stainless steel construction, bead blast finish (1 ... 6 µm, 40 ... 240 µin) • Acetal sliders
Hazardous locations	Consult the factory
Approvals	CE, meets FDA/USDA requirements for food processing, RCM, GOST-R

¹⁾ Accuracy subject to: On factory approved installations the belt scale system's totalized weight will be within the specified accuracy when compared to a known weighed material test sample. The test rate must be within the specified range of the design capacity and held constant for the duration of the test. The minimum material test sample must be equivalent to a sample obtained at the test flow rate for three revolutions of the belt or at least ten minutes running time, whichever is greater.

²⁾ Contact Siemens application engineering (factorysupport.smpi@siemens.com) for consideration of higher belt speeds.

³⁾ Review by Siemens application engineer required.

Belt Scales

Milltronics belt scales

Milltronics WD600

Selection and ordering data

Milltronics WD600

A low- to medium- capacity scale for light to medium belt loading. 304 stainless steel construction with Delrin sliders. Load cells are available in nickel plated, or stainless steel. Two calibration weights are required and are ordered as separate line item. Refer to Calibration weights.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Belt width

12 inch (300 mm)
18 inch (450 mm)
24 inch (600 mm)
30 inch (750 mm)
36 inch (900 mm)
42 inch (1 000 mm)
48 inch (1 200 mm)

Load cell capacity

Nickel plated

10 kg (22 lb)
15 kg (33.1 lb)
20 kg (44 lb)
30 kg (66.2 lb)
50 kg (110 lb)

Stainless steel

6 kg (13.2 lb)
12 kg (26.4 lb)
30 kg (66.2 lb)

Article No.

7MH7185-

A0

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Further designs

Please add "-Z" to article no. and specify order code(s).

Stainless steel tag [69 x 38 mm (2.7 x 1.5 inch)], Measuring-point number / identification (max 27 characters), specify in plain text.

Application Eng. reference number (max. 15 characters), specify in plain text.

Manufacturer's test certificate: According to EN 10204-2.2

Operating instructions

- English
- German
- French
- Spanish

Belt Scale Application Guidelines

- English
- French
- German
- Spanish

Note: The operating instructions should be ordered as a separate line on the order.

This device is shipped with the Siemens Milltronics manual DVD containing the complete operating instructions library.

Spare parts

Load cells

Stainless steel

6 kg (13.2 lb)
12 kg (26.4 lb)
30 kg (66.2 lb)

Nickel plated

10 kg (22 lb)
15 kg (33.1 lb)
20 kg (44 lb)
30 kg (66.2 lb)
50 kg (110 lb)

Slider bar middle UHMW PE (for old style WD600)

Slider bar side UHMW PE (for old style WD600)

Slider bar acetal

Test chain 1.62 lb/ft (2.41 kg/m), 60 inch

Calibration Hanger Weights

200 g (0.4 lb)
500 g (1.1 lb)
1 000 g (2.2 lb)
2 000 g (4.4 lb)
3 500 g (7.7 lb)
5 000 g (11 lb)
7 500 g (16.5 lb)
8 500 g (18.7 lb)
10 000 g (22 lb)
12 000 g (26.5 lb)
15 000 g (33.1 lb)

Note: Calibration accessories should be ordered as a separate item on the order

Order Code

Y15

Y31

C11

Article No.

7ML1998-5KM03

A5E32015601

A5E32862113

A5E32862157

7ML1998-5GA01

7ML1998-5GA11

7ML1998-5GA31

7ML1998-5GA21

7MH7725-1EG

7MH7725-1EH

7MH7725-1EJ

7MH7725-1EK

7MH7725-1EL

7MH7725-1EM

7MH7725-1EN

7MH7725-1EP

7MH7723-1KF

7MH7723-1KE

7MH7723-1KG

7MH7723-1NF

7MH7724-1AF

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7MH7724-1AH

7MH7724-1AJ

7MH7724-1BQ

7MH7724-1AK

7MH7724-1BR

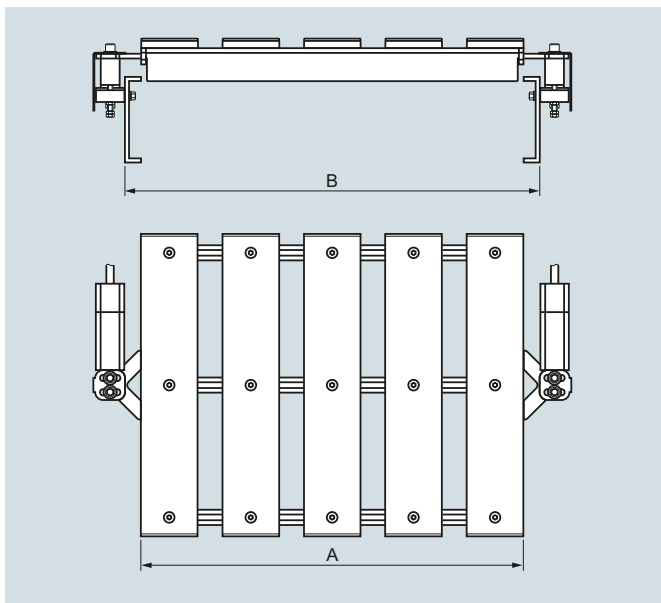
7MH7724-1BS

7MH7724-1BT

7MH7724-1BU

7MH7724-1BV

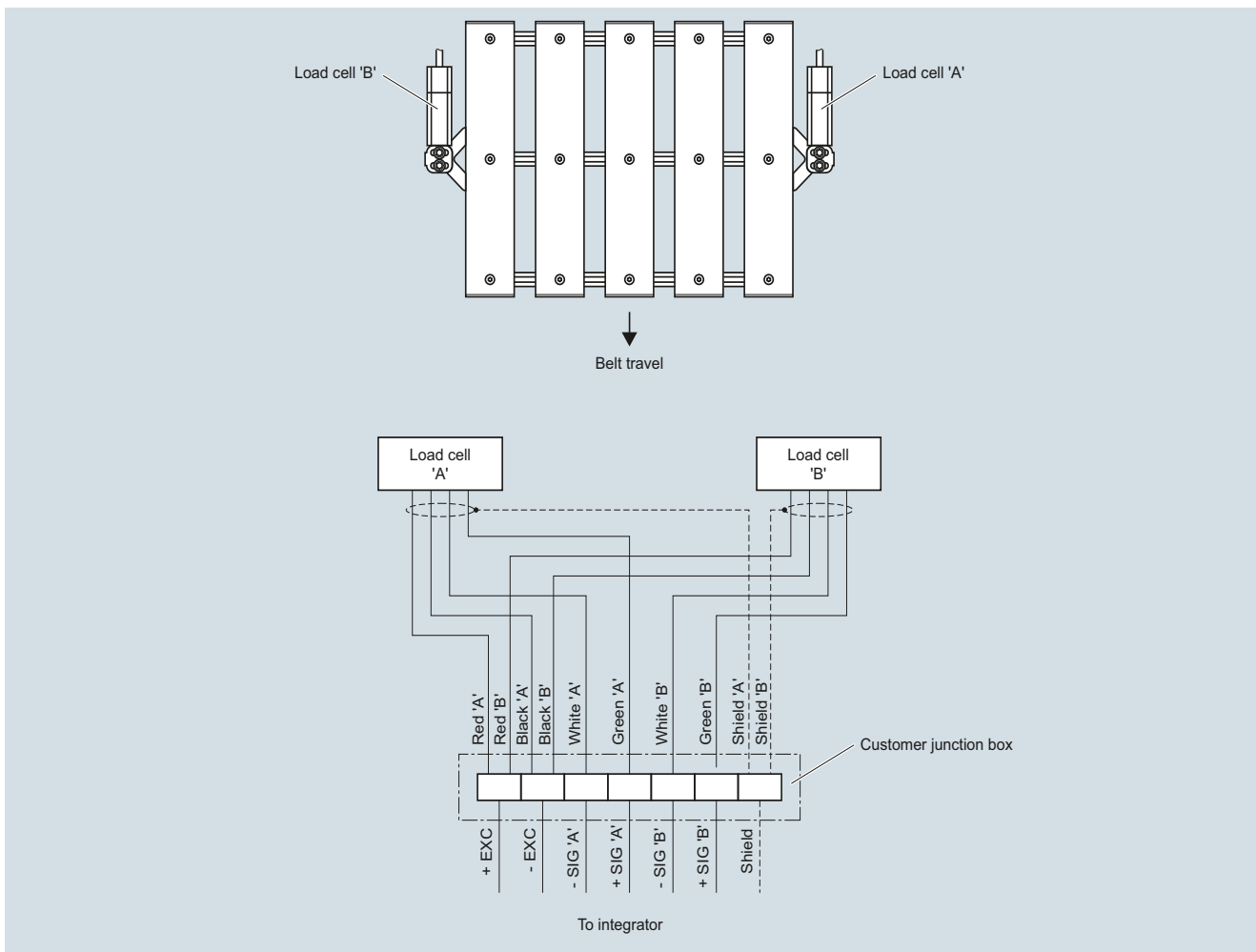
Dimensional drawings



Belt width	A	B (min.)	B (max.)
12 (300)	14.25 (362)	15 (381)	16.5 (419)
18 (450)	20.25 (514)	21 (533)	22.5 (572)
24 (600)	26.25 (667)	27 (686)	28.5 (724)
30 (750)	32.25 (819)	33 (838)	34.5 (876)
36 (900)	38.25 (972)	39 (991)	40.5 (1 029)
42 (1 000)	44.25 (1 124)	45 (1 143)	46.5 (1 181)
48 (1 200)	50.25 (1 276)	51 (1 295)	52.5 (1 334)

WD600, dimensions

Schematics



WD600 connections