

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.

Selection and ordering data

Milltronics WD600		Article No.			
Belt scale: accuracy is $\pm 0.5 \dots 1 \%$ totalization over 25 ... 100 % operating range with capacity up to 100 t/h (110 STPH).		7MH7185-	●	●	A 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.					
Belt width					
12 inch (300 mm)			1		
18 inch (450 mm)			2		
24 inch (600 mm)			3		
30 inch (750 mm)			4		
36 inch (900 mm)			5		
42 inch (1 000 mm)			6		
48 inch (1 200 mm)			7		
Load cell capacity					
<u>Nickel plated</u>					
10 kg (22 lb)				D	
15 kg (33.1 lb)				E	
20 kg (44 lb)				F	
30 kg (66.2 lb)				G	
50 kg (110 lb)				L	
<u>Stainless steel</u>					
6 kg (13.2 lb)				H	
12 kg (26.4 lb)				J	
30 kg (66.2 lb)				K	

Belt Weighing

Belt scales

Milltronics WD600

Selection and ordering data (Continued)

Selection and ordering data	Order Code
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.	Y15
Application Eng. reference number (max. 15 characters), specify in plain text.	Y31
Manufacturer's test certificate: According to EN 10204-2.2	C11
Operating instructions	
All literature is available to download for free, in a range of languages, at http://www.siemens.com/weighing/documentation	
Spare parts	Article No.
Load cells	
<u>Stainless steel</u>	
6 kg (13.2 lb)	7MH7725-1EG
12 kg (26.4 lb)	7MH7725-1EH
30 kg (66.2 lb)	7MH7725-1EJ
<u>Nickel plated</u>	
10 kg (22 lb)	7MH7725-1EK
15 kg (33.1 lb)	7MH7725-1EL
20 kg (44 lb)	7MH7725-1EM
30 kg (66.2 lb)	7MH7725-1EN
50 kg (110 lb)	7MH7725-1EP
Slider bar UHMW PE	7MH7723-1KF
Test chain 1.62 lb/ft (2.41 kg/m), 60 inch	7MH7723-1NF
Calibration Hanger Weights	
200 g (0.4 lb)	7MH7724-1AF
500 g (1.1 lb)	7MH7724-1AG
1 000 g (2.2 lb)	7MH7724-1AH
2 000 g (4.4 lb)	7MH7724-1AJ
3 500 g (7.7 lb)	7MH7724-1BQ
5 000 g (11 lb)	7MH7724-1AK
7 500 g (16.5 lb)	7MH7724-1BR
8 500 g (18.7 lb)	7MH7724-1BS
10 000 g (22 lb)	7MH7724-1BT
12 000 g (26.5 lb)	7MH7724-1BU
15 000 g (33.1 lb)	7MH7724-1BV
Note: calibration accessories should be ordered as a separate item on the order.	

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 ²⁾
Conveyor incline	• ± 20° from horizontal, fixed incline • Up to ± 30° with reduced accuracy³⁾
Conveyor idler/slider profile	Horizontal
Loading	• 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 Strain gauge protection: silicon (nickel plated version only)
Degree of protection	• 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	• -40 ... +65 °C (-40 ... +149 °F) operating range • -10 ... +40 °C (14 ... 104 °F) compensated
Scale construction	• Stainless steel construction, bead blast finish (1 ... 6 µm, 40 ... 240 µin) • UHMW PE sliders
Hazardous locations	Consult the factory
Approvals	CE, UKCA, meets FDA/USDA requirements for food processing, RCM, EAC, KC

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 () for consideration of higher values.http://www.automation.siemens.com/aspa_app

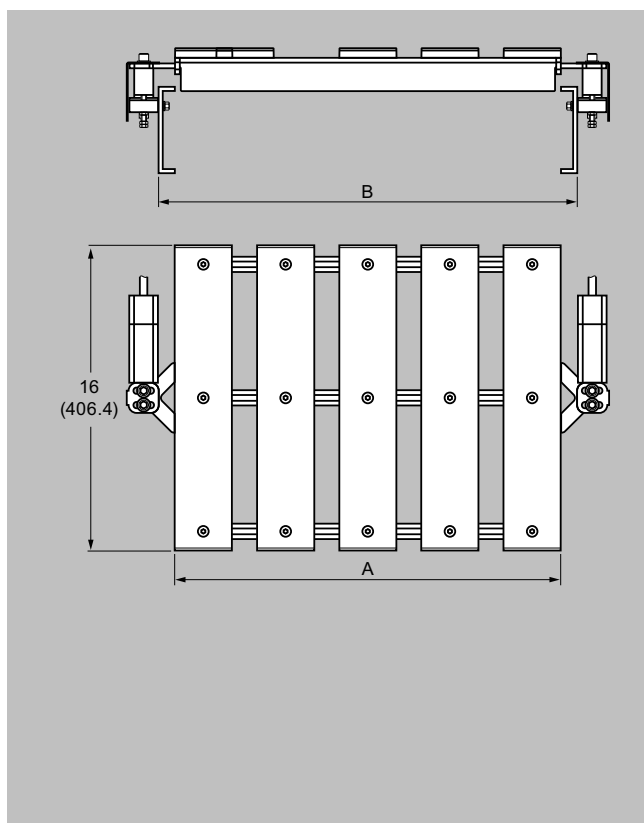
³⁾ Review by Siemens required ().http://www.automation.siemens.com/aspa_app

Belt Weighing

Belt scales

Milltronics WD600

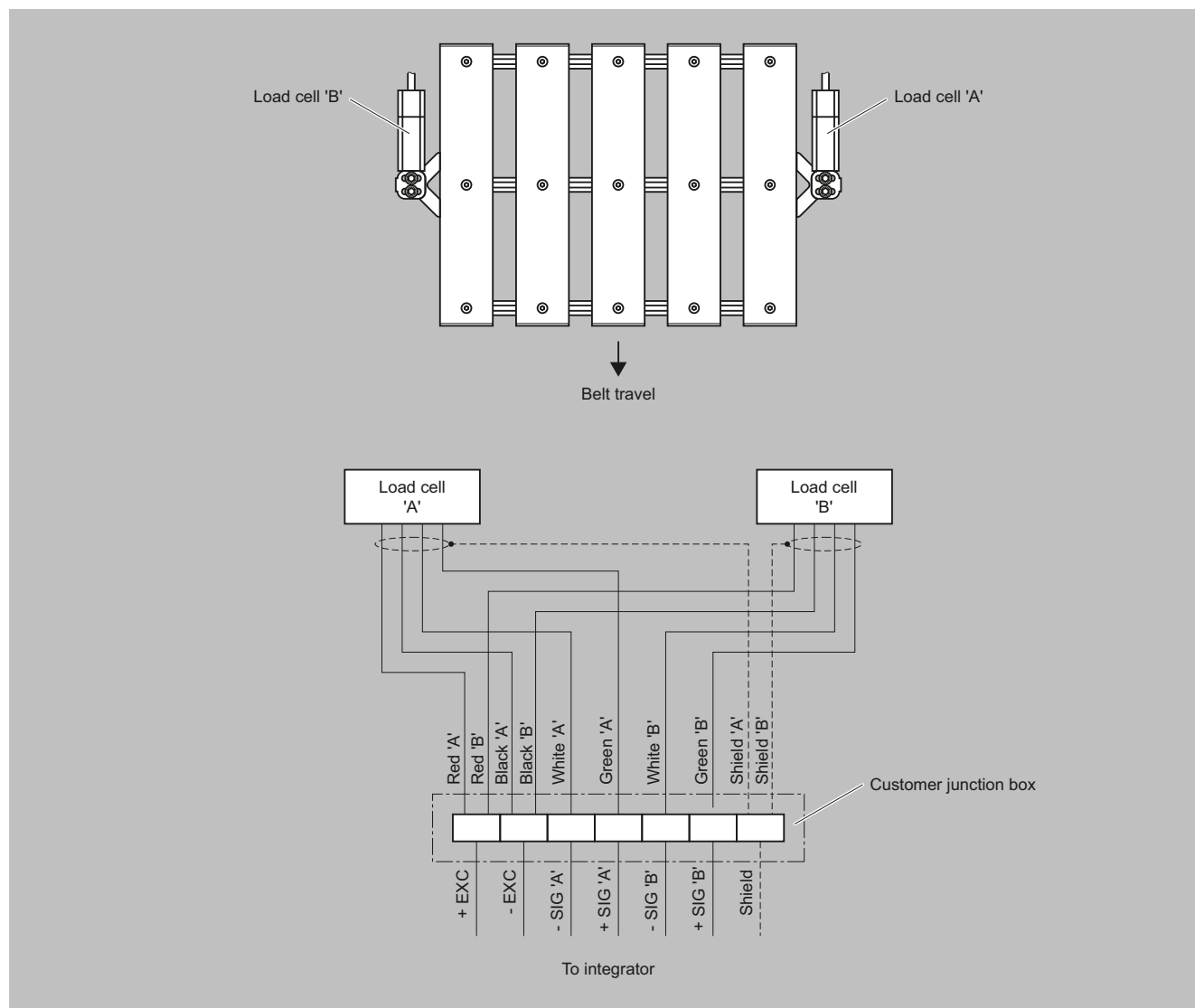
Dimensional drawings



Belt with	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)	20.25 (514)	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 in inch (mm)

Circuit diagrams



WD600 connections