

Belt Weighing

Belt scales

Milltronics WD600

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 ²⁾
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 Strain gauge protection: silicon (nickel plated version only)
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 ... +149 °F) operating range • -10 ... +40 °C (14 ... 104 °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, 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 (http://www.automation.siemens.com/aspa_app) for consideration of higher values.

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

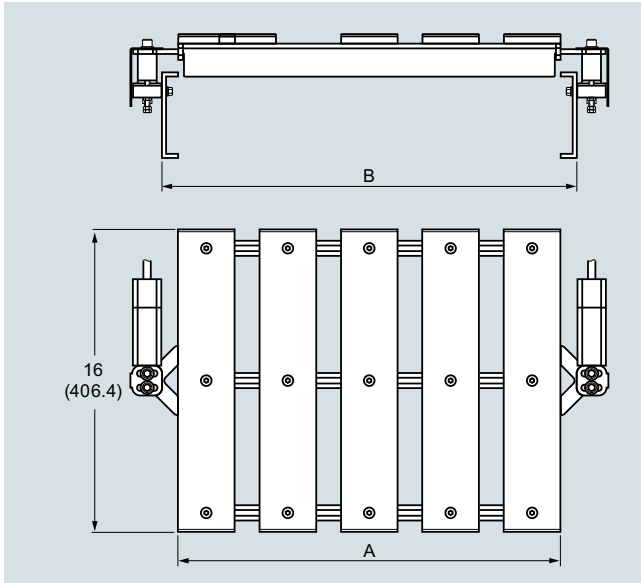
Selection and ordering data	Article No.	Article No.
Milltronics WD600 Belt scale: accuracy is $\pm 0.5 \dots 1$ % totalization over 25 ... 100 % operating range with capacity up to 100 t/h (110 STPH). Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	7MH7185- A 0	Spare parts Load cells <u>Stainless steel</u> 6 kg (13.2 lb) 12 kg (26.4 lb) 30 kg (66.2 lb) <u>Nickel plated</u> 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
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)	1 2 3 4 5 6 7	7MH7725-1EG 7MH7725-1EH 7MH7725-1EJ 7MH7725-1EK 7MH7725-1EL 7MH7725-1EM 7MH7725-1EN 7MH7725-1EP 7MH7723-1KF 7MH7723-1KE 7MH7723-1KG 7MH7723-1NF
Load cell capacity <u>Nickel plated</u> 10 kg (22 lb) 15 kg (33.1 lb) 20 kg (44 lb) 30 kg (66.2 lb) 50 kg (110 lb) <u>Stainless steel</u> 6 kg (13.2 lb) 12 kg (26.4 lb) 30 kg (66.2 lb)	D E F G L H J K	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.
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	Order Code Y15 Y31 C11	
Operating instructions All literature is available to download for free, in a range of languages, at http://www.siemens.com/weighing/documentation		

Belt Weighing

Belt scales

Milltronics WD600

Dimensional drawings

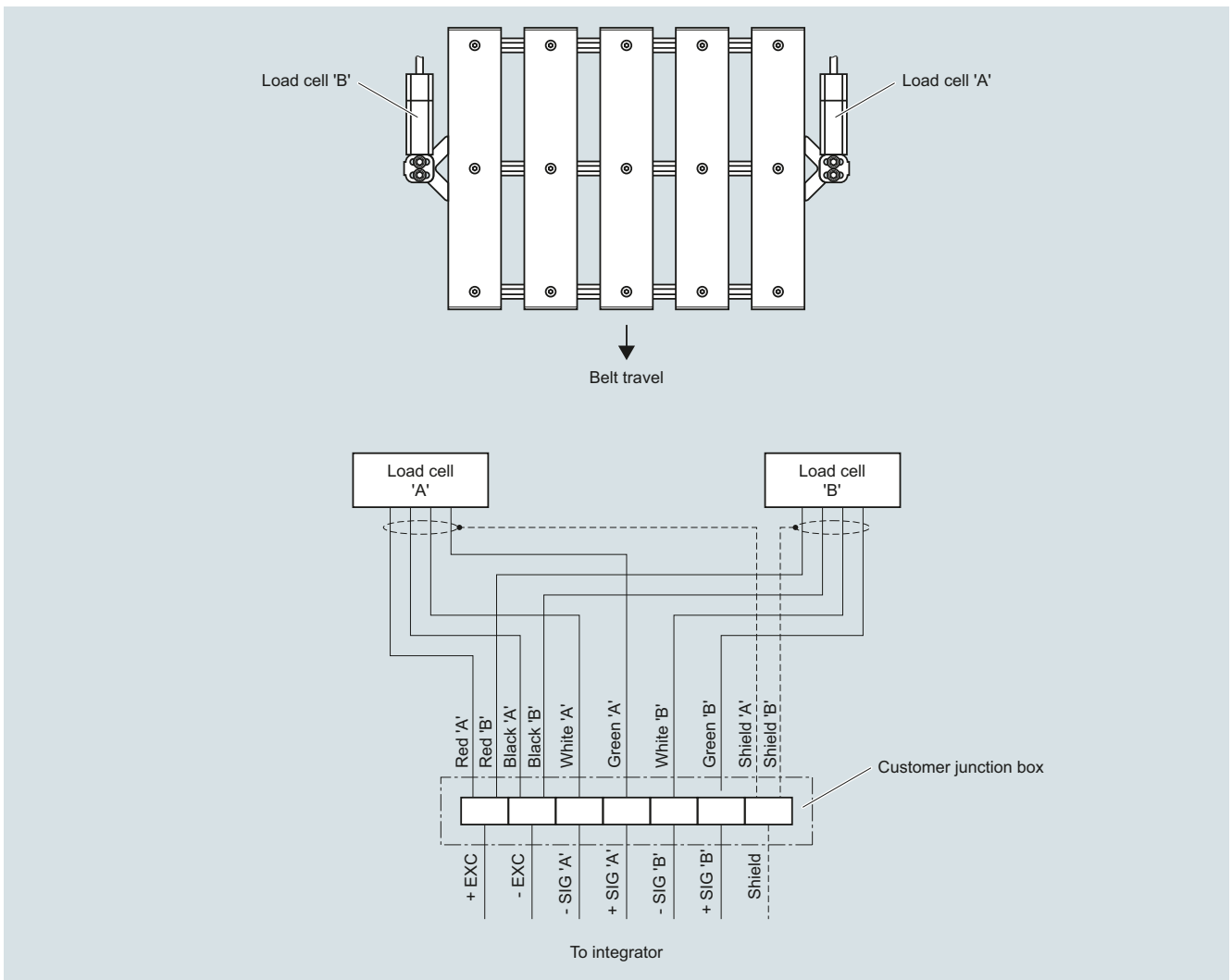


Belt width	A	B (min.)	B (max.)
12 (300)	14.25 (362)	15 (381)	16.5 (419)
18 (450)	20.25 (514)	21 (533)	22.5 (572)
24 (600)	26.25 (667)	27 (686)	28.5 (724)
30 (750)	32.25 (819)	33 (838)	34.5 (876)
36 (900)	38.25 (972)	39 (991)	40.5 (1 029)
42 (1 000)	44.25 (1 124)	45 (1 143)	46.5 (1 181)
48 (1 200)	50.25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

WD600, dimensions in inch (mm)

4

Circuit diagrams



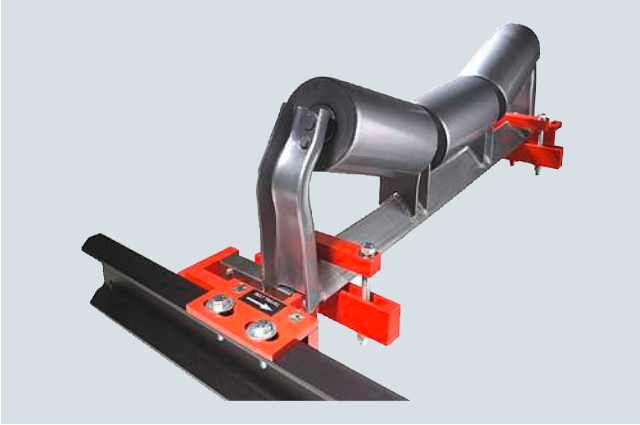
WD600 connections

Belt Weighing

Belt scales

Milltronics MCS

Overview



Milltronics MCS is a compact, rugged, modular, heavy-duty belt scale for use in mobile crushers and aggregate screening plants.

Idler not included with belt scale.

Application

Milltronics MCS provides continuous, in-line weighing at minimal cost. The stainless steel load cells ensure long-term, consistent, reliable measurement. The modular construction and easy assembly of the MCS ensures quick delivery to meet even the tightest of schedules.

Operating with Milltronics BW500, SIWAREX WT241, WP241, or FTC microprocessor-based integrators, the MCS provides indication of flow rate, total weight, belt load, and belt speed of bulk solids materials on a belt conveyor.

To complete the weighing system, include a speed sensor to monitor conveyor belt speed for input to the integrator. On mobile crushing equipment, the TASS speed sensor is a compact, rugged speed sensor designed for use with the MCS.

Benefits

- Rugged design
- Low profile
- Easy retrofit
- Low cost
- Stainless steel load cells

Technical specifications

Milltronics MCS	
Mode of operation	
Measuring principle	Strain gauge load cells measuring load on belt conveyor idlers
Typical application	Mobile crusher systems
Measurement accuracy	
Accuracy ¹⁾	<ul style="list-style-type: none"> ± 0.5 ... 1 % of totalization over 25 ... 100 % operating range, application dependent ± 2 % of totalization over 25 ... 100 % operating range on mobile crusher applications
Repeatability	± 0.1 %
Belt design	
Belt width	<ul style="list-style-type: none"> Up to 1 600 mm (60 inch CEMA) width Refer to the outline dimension section
Belt speed	Up to 4 m/s (800 fpm) ²⁾
Capacity	
	Up to 2 400 t/h (2 640 STPH) at maximum belt speed ²⁾
Conveyor incline	
	<ul style="list-style-type: none"> ± 20° from horizontal, fixed incline Up to ± 30° with reduced accuracy³⁾
Idlers	
Idler profile	<ul style="list-style-type: none"> Flat to 35° To 45° with reduced accuracy³⁾
Idler diameter	100 ... 150 mm (4 ... 6 inch)
Idler spacing	0.6 ... 1.2 m (2.0 ... 4.0 ft)
Load cell	
Construction	17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover Strain gauge protection: polybutadiene
Degree of protection	IP67, IP65 on hazardous approved models
Cable length	3 m (10 ft)
Excitation	10 V DC nominal, 15 V maximum
Output	2 mV/V excitation at rated load cell capacity
Non-linearity and hysteresis	0.02 % of rated output
Non-repeatability	0.01 % of rated output
Capacity	25, 50, 100, 250, 500 lb stainless steel
Overload	150 % of rated capacity, ultimate 300 % of rated capacity
Temperature	<ul style="list-style-type: none"> -50 ... +75 °C (-58 ... +167 °F) operating range -40 ... +65 °C (-40 ... +150 °F) compensated

Milltronics MCS	
Weight	
	Up to 20 kg (44 lb), 10 kg (22 lb) per side
Interconnection wiring (to integrator)	
	<ul style="list-style-type: none"> < 150 m (500 ft) 18 AWG (0.75 mm²) 6 conductor shielded cable > 150 m (500 ft) to 300 m (1 000 ft) 18 ... 22 AWG (0.75 ... 0.34 mm²), 8 conductor shielded cable
Approvals	
	CSA/FM Class II, Div. 1, Groups E, F, G, Class III; ATEX II 2D Ex tb IIIC T90°C Db, Tamb = -40°C to +75°C; UKEX II 2D Ex tb IIIC T90°C Db, Tamb = -40°C to +75°C; IECEX Ex tb IIIC T90°C Db, Tamb = -40°C to +75°C; EAC Ex Ex tD A21 IP65 T90°C X; CE, UKCA, RCM, EAC, RTN
Metrological approvals	PAC Russia

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

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

PAC Russia specification data

Accuracy limits (%)

Highest linear density (kg/m)

Lowest linear density (kg/m)

Belt Weighing

Belt scales

Milltronics MCS

Selection and ordering data

Milltronics MCS Belt scale

Accuracy is $\pm 0.5 \dots 1$ % of totalization over 25 ... 100 % operating range with capacity up to 2 400 t/h (2 640 STPH).

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

Scale construction

Ordinary Locations/General Purpose (Non-Ex), CE, UKCA, RCM, EAC, KC

CSA/FM Class II, Div. 1, Groups E, F, G, Class III;
ATEX II 2D Ex tb IIIC T90°C Db,
Tamb = -40°C to +75°C;
UKEX II 2D Ex tb IIIC T90°C Db,
Tamb = -40°C to +75°C;
IECEX Ex tb IIIC T90°C Db,
Tamb = -40°C to +75°C;
EAC Ex Ex tD A21 IP65 T90°C X;
CE, UKCA, RCM, EAC, KC

Load cell capacity

50 lb (22.7 kg) (use not recommended for mobile crushers)

100 lb (45.5 kg) (use not recommended for mobile crushers)

250 lb (113.6 kg)

500 lb (226.8 kg)

25 lb (11.3 kg) (use not recommended for mobile crushers)

Not specified¹⁾

Fabrication

C5-M rated polyester painted mild steel

C5-M rated polyester painted mild steel, for use with flat bar or MWL calibration

System specification

Standard

PAC Russia

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

PAC Russia approval additional nameplate (submit application data with order)²⁾

Operating instructions

All literature is available to download for free, in a range of languages, at:

<http://www.siemens.com/weighing/documentation>

Article No.

7MH7125-

1	2	A A	A B	A C	A D	A E	B B	1	2	0	1	Order Code	Y15	Y31	C11	Y79
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Article No.

Spare parts

Stainless steel load cell

[17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover]

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

Stainless steel load cell, mounting hardware included

[17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover]

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

25 lb (11.3 kg), CSA/FM/ATEX/IECEX

50 lb (22.7 kg), CSA/FM/ATEX/IECEX

100 lb (45.4 kg), CSA/FM/ATEX/IECEX

250 lb (113.4 kg), CSA/FM/ATEX/IECEX

500 lb (226.8 kg), CSA/FM/ATEX/IECEX

Conduit replacement kit

Calibration weights

Flat bar/MWL retrofit kit

Calibration test arm assembly, c/w one 8.2 kg (18 lb) calibration weight

Calibration test arm assembly, c/w two 8.2 kg (18 lb) calibration weights

MCS calibration arm c/w idler clip

[holds up to two 8.2 kg (18 lb) weights]

Calibration weight, 18 lb (8.2 kg)

Calibration weight, 6 lb (2.7 kg)

Milltronics flat bar calibration weights, see page 4/53.

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

¹⁾ Only for quotation purposes, not a valid ordering option.

²⁾ Complete specification data sheet and submit with order "legal for trade" version (see Application Questionnaire at <https://assets.new.siemens.com/siemens/assets/api/uuid:35272d97-6289-4291-ac8a-03398eb9315c/questionnaire-beltscale-en.pdf>)

A5E01673047

A5E01135823

A5E01135824

A5E01135825

A5E01135826

7MH725-1DR

7MH725-1DH

7MH725-1DJ

7MH725-1DK

7MH725-1DS

7MH725-1DQ

7MH725-1DL

7MH725-1DM

7MH725-1DN

7MH725-1DP

7MH723-1NA

7MH723-1HA

7MH723-1FR

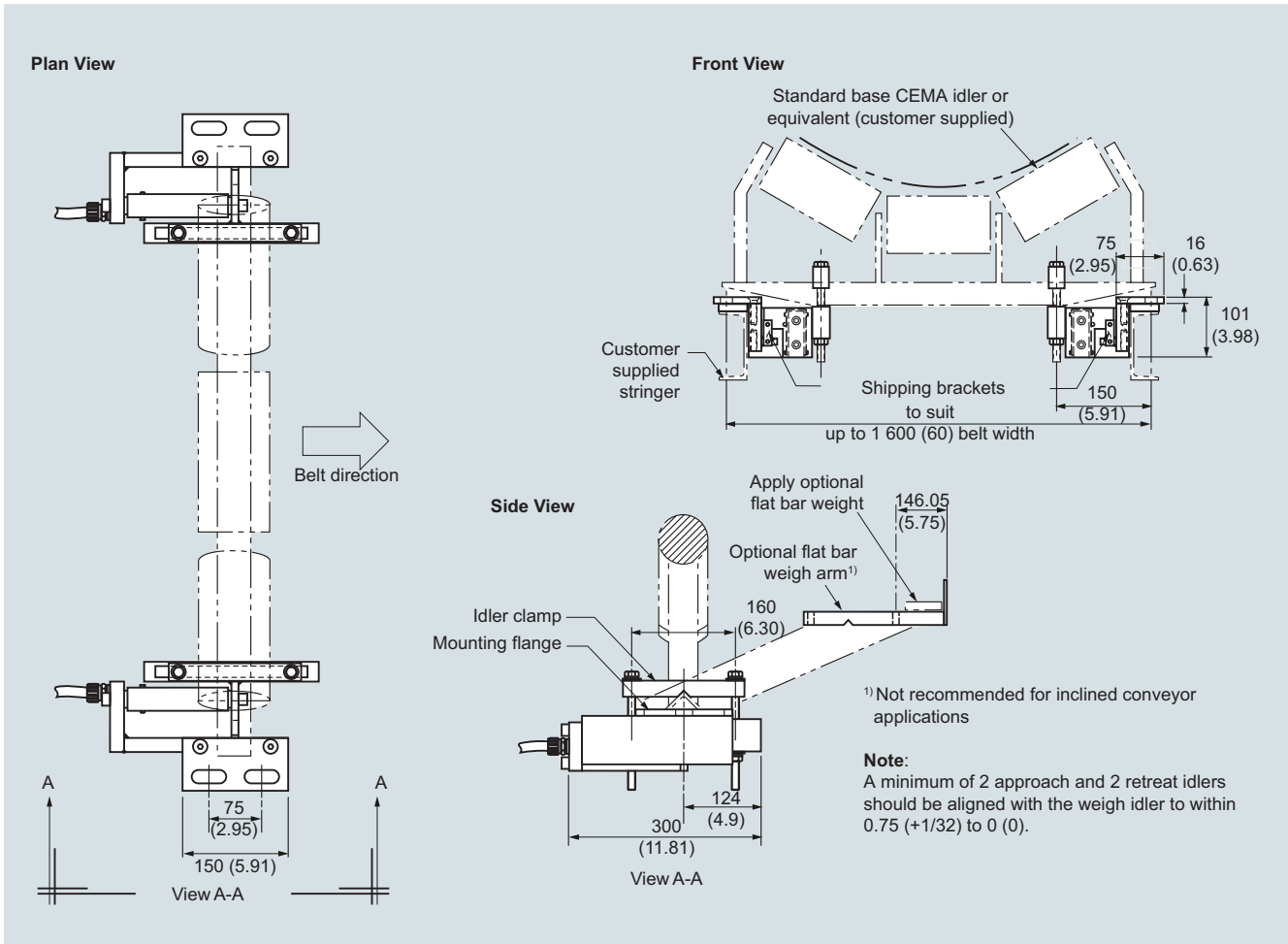
7MH723-1FS

7MH726-1AD

7MH724-1AA

7MH724-1AB

Dimensional drawings



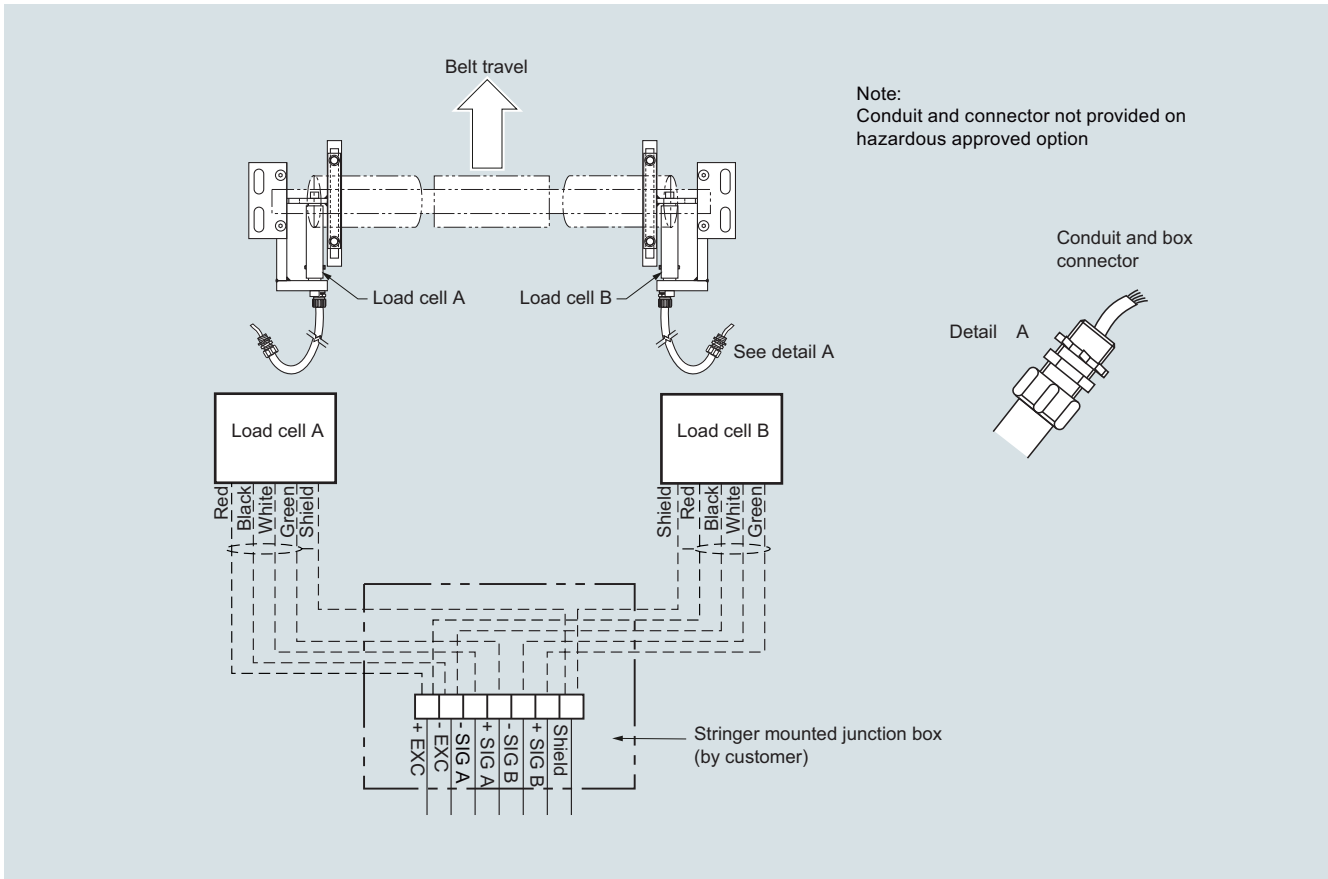
MCS, dimensions in mm (inch)

Belt Weighing

Belt scales

Milltronics MCS

Circuit diagrams



MCS connections

4

Belt Weighing

Belt scales

Milltronics MLC

Overview



Milltronics MLC is a low-capacity scale for light belt loading.

Application

The MLC is suitable for monitoring such products as fertilizer, tobacco, animal feed pellets, or sugar.

The MLC's proven use of parallelogram style load cells results in fast reaction to vertical forces, ensuring instant response to product loading. This enables it to provide outstanding accuracy and repeatability even with very light loading. The MLC may be easily installed in existing flat belt conveyors or belt feeders.

Operating with Milltronics BW500, SIWAREX WT241, WP241, or FTC microprocessor-based integrators, the MLC provides indication of flow rate, total weight, belt load and belt speed of bulk solids materials on a belt conveyor. A speed sensor monitors conveyor belt speed for input to the integrator. When used in conjunction with Milltronics BW500 integrator with PID controller, the MLC may also be used in the food industry as part of a pre-feed control system for extruders, cookers and de-hydrators.

Benefits

- Unique parallelogram style load cell design
- Designed for light product loading
- Compact and easy to install
- System includes weighing idler
- Stainless steel option
- Low cost of ownership

Technical specifications

Milltronics MLC	
Mode of operation	
Measuring principle	Strain gauge load cell measuring load on flat belt conveyor idler
Typical application	Monitor fertilizer, tobacco, animal feed pellets, sugar, cereal
Performance	
Accuracy ¹⁾	± 0.5 ... 1.0 % of totalization over 25 ... 100 % operating range
Repeatability	± 0.1 %
Medium conditions	
Max. material temperature	85 °C (185 °F)
Belt design	
Belt width	<ul style="list-style-type: none"> • 450 ... 1 200 mm • 18 ... 48 inch
Belt speed	2.0 m/s (400 fpm) maximum ²⁾
Capacity	Up to 50 t/h (55 STPH) ²⁾
Conveyor incline	<ul style="list-style-type: none"> • ± 20° from horizontal, fixed incline • Up to ± 30° with reduced accuracy
Idlers	
Conveyor idler	Horizontal
Idler diameter	50 or 60 mm (1.90 or 2.30 inch)
Idler spacing	0.5 ... 1.5 m (1.6 ... 5.0 ft)

Milltronics MLC	
Load cell	
Construction	17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover Strain gauge protection: polybutadiene
Degree of protection	IP67
Cable length	3 m (10 ft)
Excitation	10 V DC nominal, 15 V DC maximum
Output	2 mV/V excitation at rated load cell capacity
Non-linearity	0.03 % of rated output
Hysteresis	0.05 % of rated output
Non-repeatability	0.03 % of rated output
Capacity	10 or 20 lb
Overload	150 % of rated capacity, ultimate 300 % of rated capacity
Temperature	<ul style="list-style-type: none"> • -40 ... +85 °C (-40 ... +185 °F) operating range • -10 ... +60 °C (14 ... 140 °F) compensated
Mounting dimensions	Identical for all capacities
Hazardous locations	Consult the factory
Approvals	CE, UKCA, 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 (http://www.automation.siemens.com/aspa_apppe) for higher values.

Belt Weighing

Belt scales

Milltronics MLC

Selection and ordering data

Article No.

Order Code

Milltronics MLC Belt scale

Accuracy is $\pm 0.5 \dots 1.0$ % of totalization over 25 ... 100 % operating range with capacity up to 50 t/h (55 STPH).

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

Belt width/Scale construction

C5-M rated polyester painted mild steel

18 inch (457 mm)

1 A

24 inch (610 mm)

1 B

30 inch (762 mm)

1 C

36 inch (914 mm)

1 D

42 inch (1 067 mm)

1 E

48 inch (1 219 mm)

1 F

500 mm (20 inch)

1 G

650 mm (26 inch)

1 H

800 mm (32 inch)

1 J

1 000 mm (39 inch)

1 K

1 200 mm (47 inch)

1 L

450 mm (18 inch)

1 M

Stainless steel 304 (1.4301), bead blast finish (1 ... 6 μ m, 40 ... 240 μ m)

18 inch (457 mm)

2 A

24 inch (610 mm)

2 B

30 inch (762 mm)

2 C

36 inch (914 mm)

2 D

42 inch (1 067 mm)

2 E

48 inch (1 219 mm)

2 F

500 mm (20 inch)

2 G

650 mm (26 inch)

2 H

800 mm (32 inch)

2 J

1 000 mm (39 inch)

2 K

1 200 mm (47 inch)

2 L

450 mm (18 inch)

2 M

Load cell capacity

10 lb (4.55 kg)

A

20 lb (9.09 kg)

B

Not specified¹⁾

X

Weighing idler dimensions

50 mm (1.96 inch)²⁾

1

60 mm (2.40 inch)³⁾

2

1.90 inch (48.2 mm)⁴⁾

5

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

FDA compliant version. Conduit and fittings designed for food applications conforming to FDA/USDA standards

K01

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 cell, 10 lb (4.55 kg), 17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover

PBD-23900244

Load cell, 20 lb (9.09 kg), 17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover

PBD-23900245

Load cell, 10 lb (4.55 kg), 17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover, includes hardware

7MH7725-1AA

Load cell, 20 lb (9.09 kg), 17-4 PH (1.4568) stainless steel construction with 304 (1.4301) stainless steel cover, includes hardware

7MH7725-1AB

Conduit replacement kit

7MH7723-1NA

FDA conduit replacement kit

7MH7723-1QL

Milltronics MLC calibration weight [Stainless Steel 304 (1.4301)]

For scales with belt width of 18 inch or 500 mm or 450 mm

1.05 lb (0.47 kg)

7MH7724-1AL

1.63 lb (0.73 kg)

7MH7724-1AM

2.35 lb (1.06 kg)

7MH7724-1AN

3.21 lb (1.45 kg)

7MH7724-1AP

For scales with belt width of 24 inch or 650 mm

1.38 lb (0.62 kg)

7MH7724-1AQ

2.15 lb (0.97 kg)

7MH7724-1AR

3.11 lb (1.41 kg)

7MH7724-1AS

4.24 lb (1.91 kg)

7MH7724-1AT

For scales with belt width of 30 inch or 800 mm

1.72 lb (0.77 kg)

7MH7724-1AU

2.67 lb (1.21 kg)

7MH7724-1AV

3.85 lb (1.73 kg)

7MH7724-1AW

5.26 lb (2.37 kg)

7MH7724-1AX

For scales with belt width of 36 inch or 1 000 mm

2.05 lb (0.92 kg)

7MH7724-1AY

3.19 lb (1.44 kg)

7MH7724-1BA

4.56 lb (2.07 kg)

7MH7724-1BB

6.29 lb (2.83 kg)

7MH7724-1BC

For scales with belt width of 42 inch or 1 000 mm

2.38 lb (1.07 kg)

3.71 lb (1.67 kg)

5.35 lb (2.41 kg)

7.31 lb (3.29 kg)

7MH7724-1BD**7MH7724-1BE****7MH7724-1BF****7MH7724-1BG**
For scales with belt width of 48 inch or 1 200 mm

2.72 lb (1.22 kg)

4.23 lb (1.92 kg)

6.06 lb (2.75 kg)

8.34 lb (3.75 kg)

7MH7724-1BH**7MH7724-1BJ****7MH7724-1BK****7MH7724-1BL**

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

- 1) Only for quotation purposes, not a valid ordering option.
- 2) Available with Belt width/Scale construction options 1G ... 1M and 2G ... 2M only.
- 3) Available with Belt width/Scale construction options 1G ... 1M only.
- 4) Available with Belt width/Scale construction options 1A ... 1F and 2A ... 2F only.

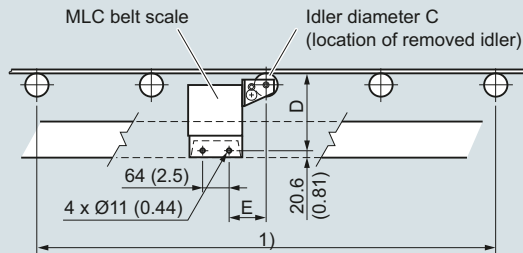
Belt Weighing

Belt scales

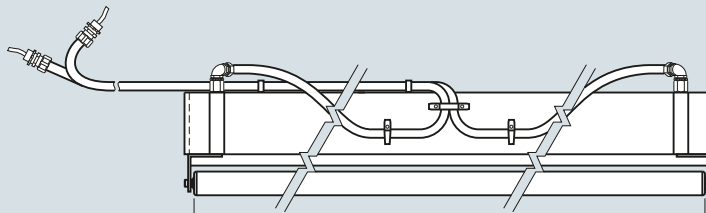
Milltronics MLC

Dimensional drawings

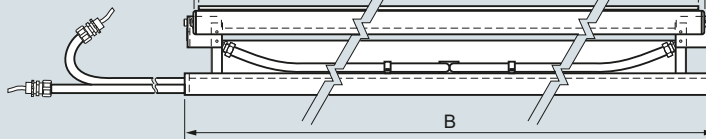
Installation



Plan View



Front View



1) For pan supported belts, the belt should be cut out to allow the MLC and at least two (preferably four) other idlers to be installed.

Imperial designs [dimensions in inch (mm)]

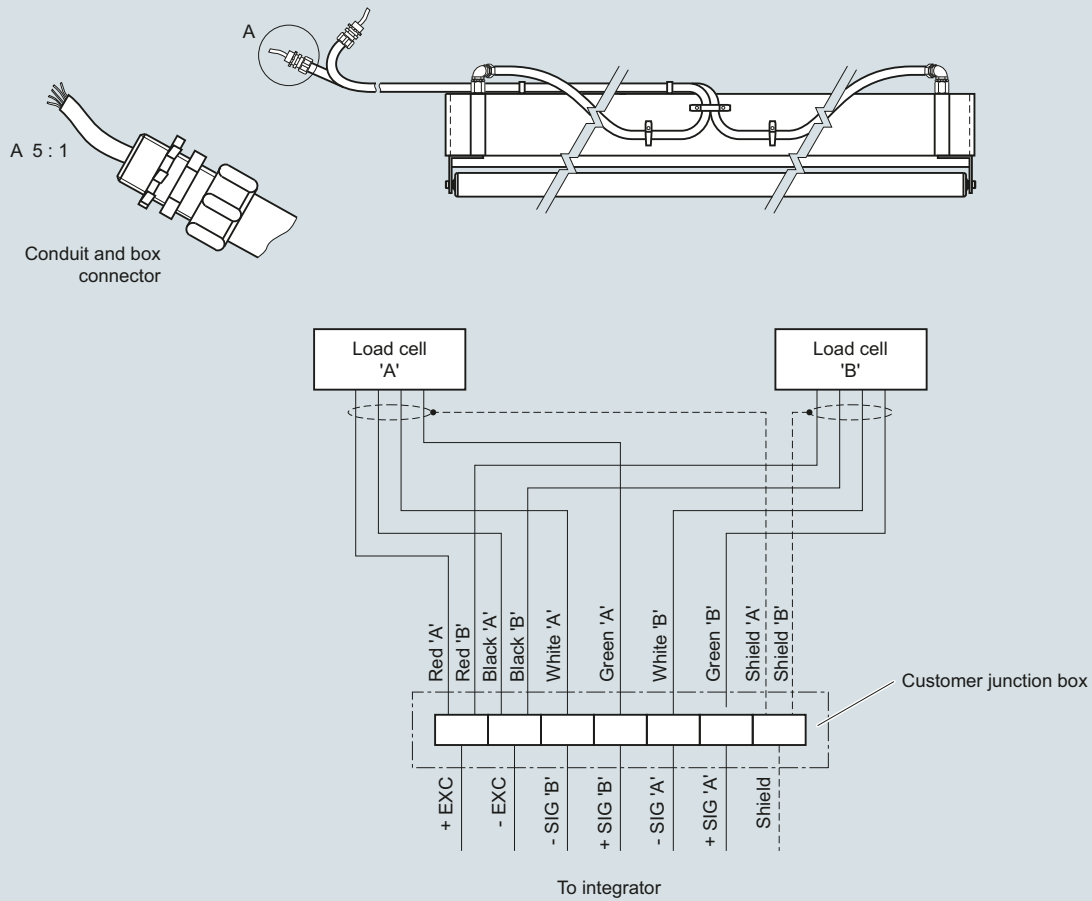
Scale size	'A' roller width	'B' dimension	'C' dimension	'D' dimension	'E' dimension
18 (457)	18 (457)	19 (483)	1.90 (48.3)	6.19 (157)	3.5 (89)
24 (610)	24 (610)	25 (635)	1.90 (48.3)	6.19 (157)	3.5 (89)
30 (762)	30 (762)	31 (787)	1.90 (48.3)	6.19 (157)	3.5 (89)
36 (914)	36 (914)	37 (940)	1.90 (48.3)	6.19 (157)	3.5 (89)
42 (1 067)	42 (1 067)	43 (1 092)	1.90 (48.3)	6.19 (157)	3.5 (89)
48 (1 219)	48 (1 219)	49 (1 245)	1.90 (48.3)	6.19 (157)	3.5 (89)

Metric designs [dimensions in mm (inch)]

Scale size	'A' roller width	'B' dimension	'C' dimension	'D' dimension	'E' dimension
450 (17.72)	450 (17.72)	500 (19.69)	50 (1.97)	158 (6.22)	96 (3.78)
500 (19.69)	500 (19.69)	550 (21.65)	50 (1.97)	158 (6.22)	96 (3.78)
650 (25.59)	650 (25.59)	700 (27.56)	50 (1.97)	158 (6.22)	96 (3.78)
800 (31.50)	800 (31.50)	850 (33.46)	50 (1.97)	158 (6.22)	96 (3.78)
1 000 (39.37)	1 000 (39.37)	1 050 (41.34)	60 (2.36)	158 (6.22)	96 (3.78)
1 200 (47.24)	1 200 (47.24)	1 250 (49.21)	60 (2.36)	158 (6.22)	96 (3.78)

MLC, dimensions in mm (inch)

Circuit diagrams



Note:
Conduit and cable arrangement may differ from example shown.

MLC connections

Overview



Milltronics MSI is a heavy-duty, high accuracy full-frame single idler belt scale used for process and load-out control. Idler not included with belt scale.



Milltronics MMI is a heavy-duty, high accuracy multiple idler belt scale used for critical process and load-out control. Idler not included with belt scale.

Benefits

Milltronics MSI belt scale

- Outstanding accuracy and repeatability
- Unique parallelogram style load cell design
- Fast reaction to product loading; capable of monitoring fast moving belts
- Rugged construction
- SABS approval (South Africa), OIML, MID, and Measurement Canada

Milltronics MMI belt scale

- Exceptional accuracy and repeatability
- Unique parallelogram style load cell design
- Suitable for uneven or light product loading
- Capable of monitoring fast moving belts
- Low cost of ownership
- NTEP, OIML, MID, and Measurement Canada approved

Application

Milltronics MSI belt scale

Milltronics MSI belt scale provides continuous in-line weighing on a variety of products in primary and secondary industries. It is proven in a wide range of tough applications from extraction (in mines, quarries and pits), to power generation, iron and steel, food processing and chemicals. The MSI is suitable for monitoring such diverse products as sand, flour, coal, or sugar.

The MSI's proven use of parallelogram-style load cells results in fast reaction to vertical forces, ensuring instant response to product loading. This enables it to provide outstanding accuracy and repeatability even with uneven loading and fast belt speeds.

Operating with Milltronics BW500, SIWAREX WT241, WP241, or FTC microprocessor-based integrators, the MSI provides indication of flow rate, totalized weight, belt load, and belt speed of bulk solid materials. A speed sensor monitors conveyor belt speed for input to the integrator.

The MSI is installed in a simple drop-in operation and may be secured with just four bolts. An existing idler is then attached to the MSI dynamic beam. With no moving parts, maintenance is kept to a minimum, with just periodic calibration checks required.

Milltronics MMI belt scale

Milltronics MMI belt scale consists of two or more MSI single idler belt scales installed in series. It provides high accuracy continuous in-line weighing on a variety of products in primary and secondary industries. The MMI system is proven in a wide range of tough applications from extraction to power generation, iron and steel, food processing and chemicals. The MMI is suitable for monitoring such diverse products as fertilizer, sand, grain, flour, coal, or sugar.

The MMI's proven use of parallelogram-style load cells results in fast reaction to vertical forces, ensuring instant response to product loading. This enables it to provide outstanding accuracy and repeatability even with uneven or light loading, short idler spacing and fast belt speeds. Operating with Milltronics BW500 integrator (for custody transfer applications), the MMI provides indication of flow rate, total weight, belt load and belt speed of bulk solids materials on a belt conveyor. A speed sensor monitors conveyor belt speed for input to the integrator.

The MMI is installed in a simple drop-in operation and may be secured with just eight bolts and existing idler sets, secured to the dynamic beam. With no moving parts, maintenance is kept to a minimum, with just periodic calibration checks required.

Belt Weighing

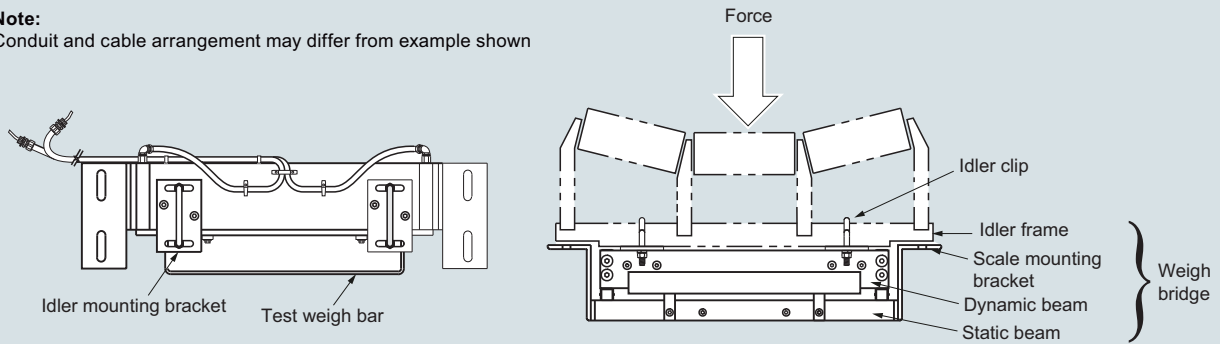
Belt scales

Milltronics MSI and MMI

Design

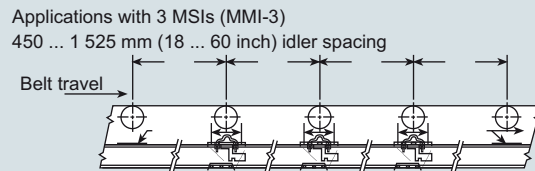
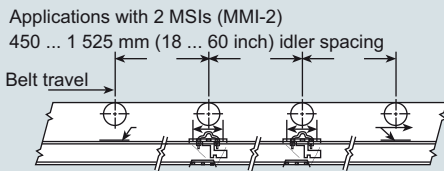
Mounting

Note:
Conduit and cable arrangement may differ from example shown



MSI/MMI mounting

4



Mounting (two or more MSI units)

Technical specifications

Milltronics MSI/MMI	
Mode of operation	
Measuring principle	Strain gauge load cells measuring load on belt conveyor idler(s)
Typical application	
• MSI	Control in fractionated stone blending tunnels
• MMI	Custody transfer
Measurement accuracy	
Accuracy ¹⁾	
• MSI	± 0.5 % or better of totalization over 20 ... 100 % operating range
• MMI-2 (2 idler)	± 0.25 % or better of totalization over 20 ... 100 % operating range
• MMI-3 (3 idler)	± 0.125 % or better of totalization over 25 ... 100 % operating range
Note: available with system specification option D only	
Repeatability	± 0.1 %
Medium conditions	
Material temperature	-50 ... +200 °C (-58 ... +392 °F)
Belt design	
Belt width	<ul style="list-style-type: none"> • 18 ... 96 inch in CEMA sizes • Equivalent to 500 ... 2 000 mm in metric size • Refer to dimensions section
Belt speed	Up to 5 m/s (1 000 fpm) ²⁾
Capacity	
	Up to 12 000 t/h (13 200 STPH) at maximum belt speed. Please contact a Siemens representative for higher rates. ²⁾
Conveyor incline	
	<ul style="list-style-type: none"> • ± 20° from horizontal, fixed incline • Up to ± 30° with reduced accuracy³⁾
Idlers	
Idler profile	<ul style="list-style-type: none"> • Flat to 35° • Up to 45° with reduced accuracy³⁾
Idler diameter	50 ... 180 mm (2 ... 7 inch)
Idler spacing	0.5 ... 1.5 m (1.5 ... 5.0 ft)

Milltronics MSI/MMI	
Load cell	
Construction	Stainless steel construction with 304 (1.4301) stainless steel cover Strain gauge protection: polybutadiene
Degree of protection	IP67, IP65 on hazardous approved models
Cable length	3 m (10 ft) Note: to calculate installation cable length subtract 3 048 mm (120 inch) from the "A" dimension
Excitation	10 V DC nominal, 15 V DC maximum
Output	2 ± 0.002 mV/V excitation (nominal) at rated load cell capacity
Non-linearity and hysteresis	0.02 % of rated output
Non-repeatability	0.01 % of rated output
Capacity	
• Maximum ranges	25, 50, 100, 250, 500, 750, 1 000, 1 250, 1 500, 2 000 lb
Overload	150 % of rated capacity, ultimate 300 % of rated capacity
Temperature	<ul style="list-style-type: none"> • -50 ... +75 °C (-58 ... +167 °F) operating range, optional -50 ... +175 °C (-58 ... 347 °F) • -40 ... +65 °C (-40 ... +150 °F) compensated • -10 ... +40 °C (14 ... 104 °F) compensated on trade approved versions
Weight	
	See dimensions section
Interconnection wiring (to integrator, per MSI)	
	< 150 m (500 ft) 18 AWG (0.75 mm ²) 6 conductor shielded cable
	> 150 m ... 300 m (500 ft ... 1 000 ft) 18 ... 22 AWG (0.75 ... 0.34 mm ²), 8 conductor shielded cable
Approvals	
	<ul style="list-style-type: none"> • CSA/FM Class II, Div. 1, Groups A, B, C, D, Class II, Div. 1, Groups E, F, G, Class III; • ATEX I M1 Ex ia I Ma, ATEX II 1 GD Ex ia IIC T4 Ga, ATEX II 1 GD Ex ia IIIC T135°C Da, ATEX II 2 D Ex tb IIIC T90°C Db; ATEX II 2D Ex tD A21 IP65 T90 °C • UKEX I M1 Ex ia I Ma, UKEX II 1 GD Ex ia IIC T4 Ga, UKEX II 1 GD Ex ia IIIC T135°C Da, UKEX II 2 D Ex tb IIIC T90°C Db; • IECEx Ex ia I Ma, IECEx Ex ia IIC T4 Ga, IECEx Ex ia IIIC T135°C Da, IECEx Ex tb IIIC T90°C Db; • EAC Ex Ex tD A21 IP65 T90°C X; • KCs Ex tD A21 IP65 T90°C; • MSHA; • CE, UKCA, RCM, EAC, KC, CMC, RTN
Metrology approvals	
	Measurement Canada, MID, OIML, SABS ⁴⁾ , NTEP ⁵⁾ , STAMEQ, GOST

¹⁾ Accuracy subject to: on factory approved installations the belt scale system's totalized accuracy 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 (http://www.automation.siemens.com/aspa_app) for consideration of higher values.

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

⁴⁾ MSI only.

⁵⁾ MMI only.

Selection and ordering data	Article No.	Article No.
Milltronics MSI Belt scale Accuracy is ± 0.5 % or better of totalization over 20 ... 100 % operating range with capacity up to 12 000 t/h (13 200 STPH).	7MH7122-	7MH7122-
Load cell capacity Not specified ¹⁾ 25 lb (11.3 kg) 50 lb (22.7 kg) 100 lb (45.4 kg) 250 lb (113.4 kg) 500 lb (226.8 kg) 750 lb (340.2 kg) 1 000 lb (453.6 kg) 1 250 lb (567 kg) ²⁾ 1 500 lb (680.4 kg) ²⁾ 2 000 lb (907.2 kg)	0 9 L 1 A 1 2 3 4 5 6 7 8 9 L 1 B	4 2 4 3 4 4 4 5 4 6 4 7 4 8
Fabrication C5-M rated polyester painted mild steel <u>Electro-galvanized mild steel:</u> 18 ... 29 inch (457.2 ... 736.6 mm) 30 ... 41 inch (762 ... 1 041.4 mm) 42 ... 53 inch (1 066.8 ... 1 346.2 mm) 54 ... 65 inch (1 371.6 ... 1 651 mm) 66 ... 77 inch (1 676.4 ... 1 955.8 mm) 78 ... 89 inch (1 981.2 ... 2 260.6 mm) 90 ... 96 inch (2 286 ... 2 438.4 mm) <u>Stainless steel 304 (1.4301), bead blast finish (1 ... 6 µm, 40 ... 240 µin) for belt width scales:</u> 18 ... 29 inch (457.2 ... 736.6 mm) 30 ... 41 inch (762 ... 1 041.4 mm) 42 ... 53 inch (1 066.8 ... 1 346.2 mm) 54 ... 65 inch (1 371.6 ... 1 651 mm) 66 ... 77 inch (1 676.4 ... 1 955.8 mm) 78 ... 89 inch (1 981.2 ... 2 260.6 mm) 90 ... 96 inch (2 286 ... 2 438.4 mm) <u>Stainless steel 316 (1.4401), bead blast finish (1 ... 6 µm, 40 ... 240 µin) for belt width scales:</u> 18 ... 29 inch (457.2 ... 736.6 mm) 30 ... 41 inch (762 ... 1 041.4 mm) 42 ... 53 inch (1 066.8 ... 1 346.2 mm) 54 ... 65 inch (1 371.6 ... 1 651 mm) 66 ... 77 inch (1 676.4 ... 1 955.8 mm) 78 ... 89 inch (1 981.2 ... 2 260.6 mm) 90 ... 96 inch (2 286 ... 2 438.4 mm) C5-M rated polyester painted mild steel (compatible with MWL or flat bar weight calibration system)	1 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 2 1 2 2 2 3 2 4 2 5 2 6 2 7 3 1 3 2 3 3 3 4 3 5 3 6 3 7 4 1	System specification Standard MSI and MMI NTEP Certified MMI ⁽³⁾⁽⁴⁾⁽⁵⁾ OIML/MID Certified ⁽⁴⁾⁽⁵⁾ MSI for MMI-3 ± 0.125 % accuracy ⁽⁶⁾
		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 Factory test certificate OIML/MID approval additional nameplate (submit application data with order) ⁽⁵⁾ NTEP approval additional nameplate (submit application data with order) ⁽⁵⁾ Extended cable length (For spare part pricing and part number consult factory) Load cell with 15 m (49.2 ft) cable length [standard is 3 m (9.8 ft)] High temp load cell (For spare part pricing and part number consult factory) Load cell suitable for high temp up to 175 °C (347 °F) [standard is 75 °C (167 °F)] ⁽⁷⁾ Load cell with 316 (1.4401) cover (For spare part pricing and part number consult factory) Load cell cover is constructed from 316 (1.4401) -stainless steel [standard is 304 (1.4301)] FDA compliant version Conduit and fittings designed for food applications -conforming to FDA/USDA standards
		Order Code Y15 Y31 C11 Y33 Y77 Y78 A08 T50 H53 K01
		Article No.
		All literature is available to download for free, in a range of languages, at http://www.siemens.com/weighing/documentation

Belt Weighing

Belt scales

Milltronics MSI and MMI

Selection and ordering data

Spare parts

Flat bar/MWL retrofit kit

Conduit replacement kit

FDA conduit replacement kit

MWL calibration weight support brackets -galvanized

Ground cable

Stainless steel load cells

Standard load cell with 304 (1.4301) stainless steel cover

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

2 000 lb (907.2 kg)

100 lb (45.4 kg), NTEP, OIML/MID

250 lb (113.4 kg), NTEP, OIML/MID

500 lb (226.8 kg), NTEP, OIML/MID

750 lb (340.2 kg), NTEP, OIML/MID

1 000 lb (453.6 kg), NTEP, OIML/MID

Standard load cell with 304 (1.4301) stainless steel cover, includes mounting hardware

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

100 lb (45.4 kg), NTEP, OIML/MID

250 lb (113.4 kg), NTEP, OIML/MID

500 lb (226.8 kg), NTEP, OIML/MID

750 lb (340.2 kg), NTEP, OIML/MID

1 000 lb (453.6 kg), NTEP, OIML/MID

50 lb (22.7 kg), CSA/FM/ATEX/IECEX

100 lb (45.4 kg), CSA/FM/ATEX/IECEX

250 lb (113.4 kg), CSA/FM/ATEX/IECEX

500 lb (226.8 kg), CSA/FM/ATEX/IECEX

750 lb (340.2 kg), CSA/FM/ATEX/IECEX

1 000 lb (453.6 kg), CSA/FM/ATEX/IECEX

1 250 lb (567 kg), CSA/FM/ATEX/IECEX

1 500 lb (680.4 kg), CSA/FM/ATEX/IECEX

Article No.

7MH7723-1FW**7MH7723-1NA****7MH7723-1QL****7MH7723-1JT****7MH3701-1AA1****A5E35801457****PBD-23900246****PBD-23900247****PBD-23900248****PBD-23900249****PBD-23900250****PBD-23900251****A5E02235671****A5E02239623****A5E35801460****PBD-23900261****PBD-23900262****PBD-23900263****PBD-23900264****PBD-23900265****7MH7725-1AC****7MH7725-1AD****7MH7725-1AE****7MH7725-1AF****7MH7725-1AG****7MH7725-1AH****7MH7725-1EA****7MH7725-1EB****7MH7725-1DB****7MH7725-1DC****7MH7725-1DD****7MH7725-1DE****7MH7725-1DF****7MH7725-1DT****7MH7725-1DU****7MH7725-1DV****7MH7725-1DW****7MH7725-1DX****7MH7725-1DY****7MH7725-1EE****7MH7725-1EF**

Article No.

Load cell with 316 (1.4401) stainless steel cover

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

2 000 lb (907.2 kg)

100 lb (45.4 kg), NTEP, OIML/MID

250 lb (113.4 kg), NTEP, OIML/MID

500 lb (226.8 kg), NTEP, OIML/MID

750 lb (340.2 kg), NTEP, OIML/MID

1 000 lb (453.6 kg), NTEP, OIML/MID

Load cell, high temperature up to 175 °C (347 °F)

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

2 000 lb (907.2 kg)

Load cell, high temperature up to 175 °C (347 °F) with 316 (1.4401) stainless steel cover

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

2 000 lb (907.2 kg)

Load cell with 15 m (49.2 ft) cable length

25 lb (11.3 kg)

50 lb (22.7 kg)

100 lb (45.4 kg)

250 lb (113.4 kg)

500 lb (226.8 kg)

750 lb (340.2 kg)

1 000 lb (453.6 kg)

1 250 lb (567 kg)

1 500 lb (680.4 kg)

2 000 lb (907.2 kg)

PBD-25851-A8H53**PBD-25851-A0H53****PBD-25851-A1H53****PBD-25851-A2H53****PBD-25851-A3H53****PBD-25851-A4H53****PBD-25851-A5H53****PBD-25851-A6H53****PBD-25851-A7H53****PBD-25851-A9H53****PBD-25851-B1H53****PBD-25851-B2H53****PBD-25851-B3H53****PBD-25851-B4H53****PBD-25851-B5H53****PBD-25851-A8T50****PBD-25851-A0T50****PBD-25851-A1T50****PBD-25851-A2T50****PBD-25851-A3T50****PBD-25851-A4T50****PBD-25851-A5T50****PBD-25851-A6T50****PBD-25851-A7T50****PBD-25851-A9T50****PBD-25851-A8TH****PBD-25851-A0TH****PBD-25851-A1TH****PBD-25851-A2TH****PBD-25851-A3TH****PBD-25851-A4TH****PBD-25851-A5TH****PBD-25851-A6TH****PBD-25851-A7TH****PBH-25851-A9TH****PBD-25851-A8A08****PBD-25851-A0A08****PBD-25851-A1A08****PBD-25851-A2A08****PBD-25851-A3A08****PBD-25851-A4A08****PBD-25851-A5A08****PBD-25851-A6A08****PBD-25851-A7A08****PBD-25851-A9A08**

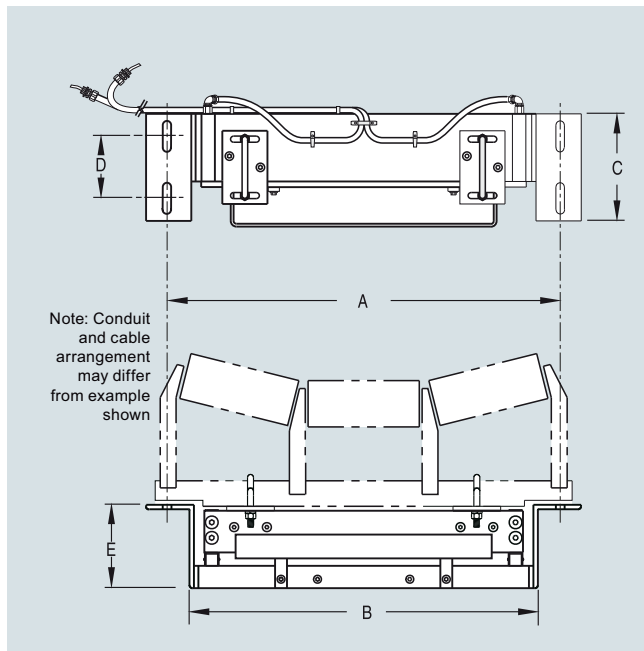
Selection and ordering data	Article No.		Article No.
100 lb (45.4 kg), NTEP, OIML/MID	PBD-25851-B1A08	<i>Idler clips</i>	
250 lb (113.4 kg), NTEP, OIML/MID	PBD-25851-B2A08	5 inch (127 mm) for 27 ... 62 inch (686 ... 1 575 mm) "A" dimensions	7MH7723-1BT
500 lb (226.8 kg), NTEP, OIML/MID	PBD-25851-B3A08		
750 lb (340.2 kg), NTEP, OIML/MID	PBD-25851-B4A08	7 inch (178 mm) for 63 ... 74 inch (1 600 ... 1 880 mm) "A" dimensions	7MH7723-1DF
1 000 lb (454 kg), NTEP, OIML/MID	PBD-25851-B5A08		
<u>Load cell with 15 m (49.2 ft) cable length and 316 (1.4401) stainless steel cover</u>		<i>Calibration weights</i>	
25 lb (11.3 kg)	PBD-25851-A8AH	6.0 lb/ 2.7 kg	7MH7724-1AB
50 lb (22.7 kg)	PBD-25851-A0AH	18 lb/ 8.2 kg	7MH7724-1AA
100 lb (45.4 kg)	PBD-25851-A1AH	Milltronics flat bar calibration weights, see page 4/53	
250 lb (113.4 kg)	PBD-25851-A2AH	Note: calibration accessories should be ordered as a separate line order	
500 lb (226.8 kg)	PBD-25851-A3AH		
750 lb (340.2 kg)	PBD-25851-A4AH	<i>Intrinsically safe barriers for use with IS mining approvals⁸⁾</i>	
1 000 lb (453.6 kg)	PBD-25851-A5AH	Mild steel enclosure 115 V AC P+F barrier	A5E39271483
1 250 lb (567 kg)	PBD-25851-A6AH	Mild steel enclosure 230 V AC P+F barrier	A5E39271487
1 500 lb (680.4 kg)	PBD-25851-A7AH	Stainless steel enclosure 115 V AC P+F barrier	A5E39271485
2 000 lb (907.2 kg)	PBD-25851-A9AH	Stainless steel enclosure 230 V AC P+F barrier	A5E39271489
100 lb (45.4 kg), NTEP, OIML/MID	PBD-25851-B1AH	1) Only for quotation purposes, not a valid ordering option.	
250 lb (113.4 kg), NTEP, OIML/MID	PBD-25851-B2AH	2) Available with Fabrication options 11 ... 18 and 41 ... 48 only, and with -System specification option A only.	
500 lb (226.8 kg), NTEP, OIML/MID	PBD-25851-B3AH	3) Two MSI are required to make the NTEP approved MMI.	
750 lb (340.2 kg), NTEP, OIML/MID	PBD-25851-B4AH	4) Approval available with load cell options 2 ... 6 only and applicable BW500.	
1 000 lb (453.6 kg), NTEP, OIML/MID	PBD-25851-B5AH	5) Complete specification data sheet and submit with order "legal for trade" version (see Application Questionnaire at http://www.siemens.com/weighing/application-questionnaires)	
<u>Load cell, high temperature up to 175 °C (347 °F) with 15 m (49.2 ft) cable length</u>		6) Includes metrological approved load cells.	
25 lb (11.3 kg)	PBD-25851-A8TA	7) Not available with construction option 2, or system specification options B, C, D.	
50 lb (22.7 kg)	PBD-25851-A0TA	8) Barrier contains connections for MMI-2 and speed sensor.	
100 lb (45.4 kg)	PBD-25851-A1TA		
250 lb (113.4 kg)	PBD-25851-A2TA		
500 lb (226.8 kg)	PBD-25851-A3TA		
750 lb (340.2 kg)	PBD-25851-A4TA		
1 000 lb (453.6 kg)	PBD-25851-A5TA		
1 250 lb (567 kg)	PBD-25851-A6TA		
1 500 lb (680.4 kg)	PBD-25851-A7TA		
2 000 lb (907.2 kg)	PBD-25851-A9TA		
<u>Load cell, high temperature up to 175 °C (347 °F) with 15 m (49.2 ft) cable length and 316 (1.4401) stainless steel cover</u>			
25 lb (11.3 kg)	PBD-25851-A8AHT		
50 lb (22.7 kg)	PBD-25851-A0AHT		
100 lb (45.4 kg)	PBD-25851-A1AHT		
250 lb (113.4 kg)	PBD-25851-A2AHT		
500 lb (226.8 kg)	PBD-25851-A3AHT		
750 lb (340.2 kg)	PBD-25851-A4AHT		
1 000 lb (453.6 kg)	PBD-25851-A5AHT		
1 250 lb (567 kg)	PBD-25851-A6AHT		
1 500 lb (680.4 kg)	PBD-25851-A7AHT		
2 000 lb (907.2 kg)	PBD-25851-A9AHT		

Belt Weighing

Belt scales

Milltronics MSI and MMI

Dimensional drawings



MSI dimensions

Conveyor belt width	Mounting scale width A	Minimum drop-in width B	C	D	E	Weight (approx.)
18 inch (457 mm)	27 inch (686 mm)	23.25 inch (591 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	82 lb (37 kg)
20 inch (508 mm)	29 inch (737 mm)	25.25 inch (641 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	85 lb (39 kg)
24 inch (610 mm)	33 inch (838 mm)	29.25 inch (743 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	90 lb (41 kg)
30 inch (762 mm)	39 inch (991 mm)	35.25 inch (895 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	99 lb (45 kg)
36 inch (914 mm)	45 inch (1 143 mm)	41.25 inch (1 048 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	107 lb (49 kg)
42 inch (1 067 mm)	51 inch (1 295 mm)	47.25 inch (1 200 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	116 lb (53 kg)
48 inch (1 219 mm)	57 inch (1 448 mm)	53.25 inch (1 353 mm)	9.5 inch (241 mm)	5.5 inch (140 mm)	7 inch (178 mm)	125 lb (57 kg)
54 inch (1 372 mm)	63 inch (1 600 mm)	59.25 inch (1 505 mm)	12 inch (305 mm)	8 inch (203 mm)	7 inch (178 mm)	175 lb (79 kg)
60 inch (1 524 mm)	69 inch (1 753 mm)	65.25 inch (1 657 mm)	12 inch (305 mm)	8 inch (203 mm)	7 inch (178 mm)	193 lb (88 kg)
66 inch (1 676 mm)	75 inch (1 905 mm)	71.25 inch (1 810 mm)	12 inch (305 mm)	8 inch (203 mm)	8 inch (203 mm)	229 lb (104 kg)
72 inch (1 829 mm)	81 inch (2 057 mm)	77.25 inch (1 962 mm)	12 inch (305 mm)	8 inch (203 mm)	8 inch (203 mm)	247 lb (112 kg)

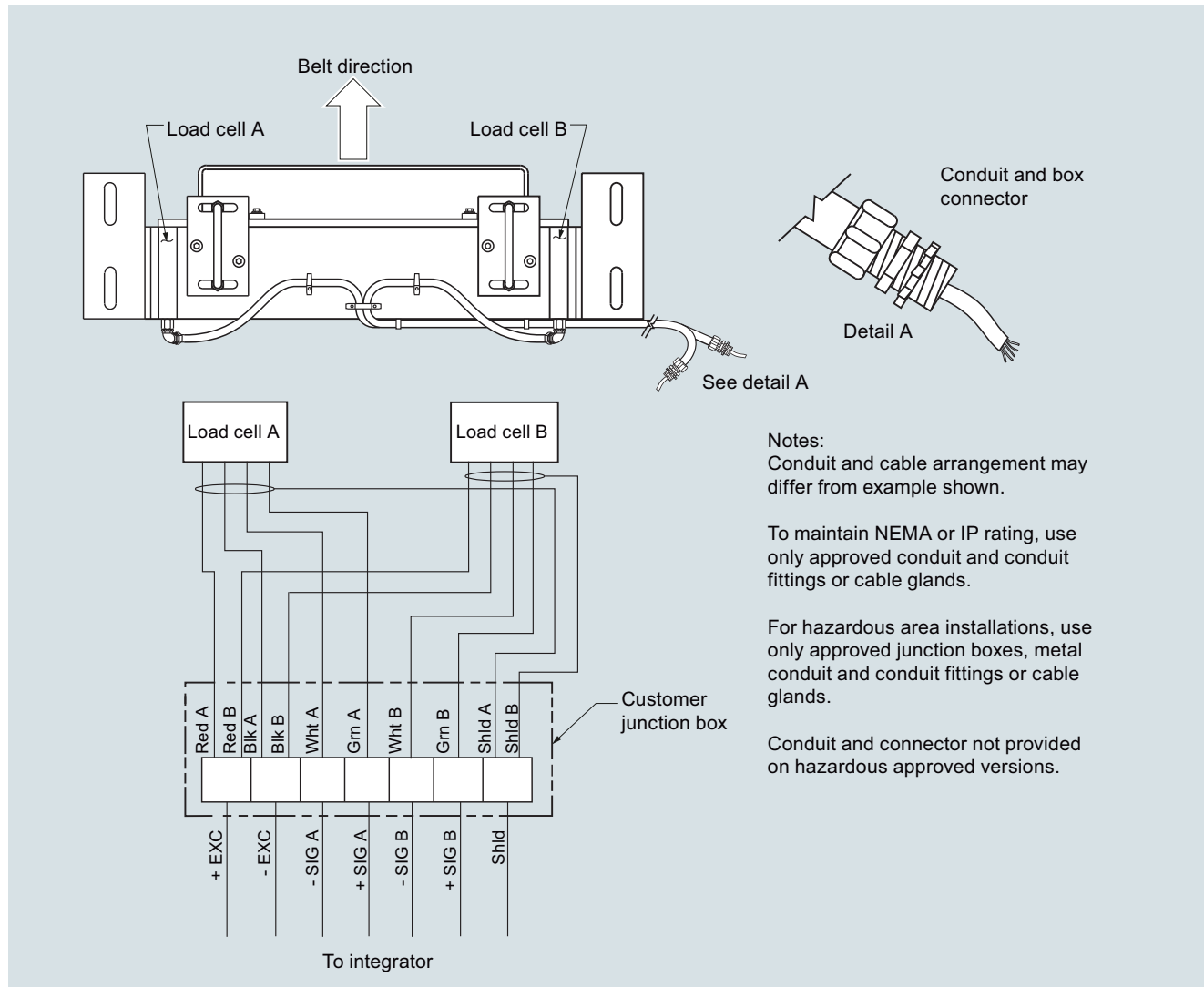
Other widths available - check configuration information.

Sizes are from 18 inch (457 mm) to 96 inch (2 438 mm) in 1 inch (25.4 mm) increments.

All sizes are nominal.

Note: dimension B must be approx. 3/8 inch or 10 mm less than Y dimension of the conveyor (see Application Questionnaire at <http://www.siemens.com/weighing/application-questionnaires>).

Circuit diagrams



MSI/MMI connections

More information

NTEP/Measurement Canada/OIML & MID Specification Data

Please complete and submit the relevant details listed below when ordering NTEP, Measurement Canada, or OIML & MID approval options	Value
NTEP	
Maximum rated capacity (TPH)	
Minimum rated capacity (TPH)	
Belt speed (FPM)	
Scale division (tons)	
Maximum loading (lb/ft)	
Measurement Canada	
Rate	
Speed (min/max m/s, FPM)	
Test load (kg/m, lb/ft)	

Please complete and submit the relevant details listed below when ordering NTEP, Measurement Canada, or OIML & MID approval options	Value
OIML & MID	
Totalization scale interval (tonnes)	
Belt speed max/min (m/s)	
Maximum flow rate (MTPH)	
Minimum flow rate (MTPH)	
Minimum totalized load (tonnes)	
Product to be weighed	
Maximum capacity (tonnes)	
Weigh length (m)	
Ratio between minimum net load and maximum capacity	
Zero testing should have a duration of at least (____) revolutions	