

Weight indicator Midrics® 1 Ex

Reliable transmission of weight values for hazardous areas



! Benefits

- Precise measuring results in a second
- Designed to fulfil worldwide Ex approvals
- Cost effective weighing solution
- Extremely durable, robust and easy to clean



The weight indicator Midrics® 1 Ex is especially designed to be used for weighing processes in hazardous areas and meets all international requirements. Extremely robust and easy to clean.

No compromises when it comes to hazardous areas

- ① The weight indicator is a **reliable solution for various Ex applications**. Resolutions of up to 30.000 d ensure precise measuring results.
- ① **Worldwide approvals** such as ATEX Zone 1/21; IECEx Zone 1/21; FM/CSA Class I, II, III Div. 1 (USA/Canada).
- ① Ease of use. **Operating elements are reduced to the necessary.**
- ① Midrics® 1 Ex is extremely durable, robust and easy to clean design ensures a high investment safety.

Technical specifications

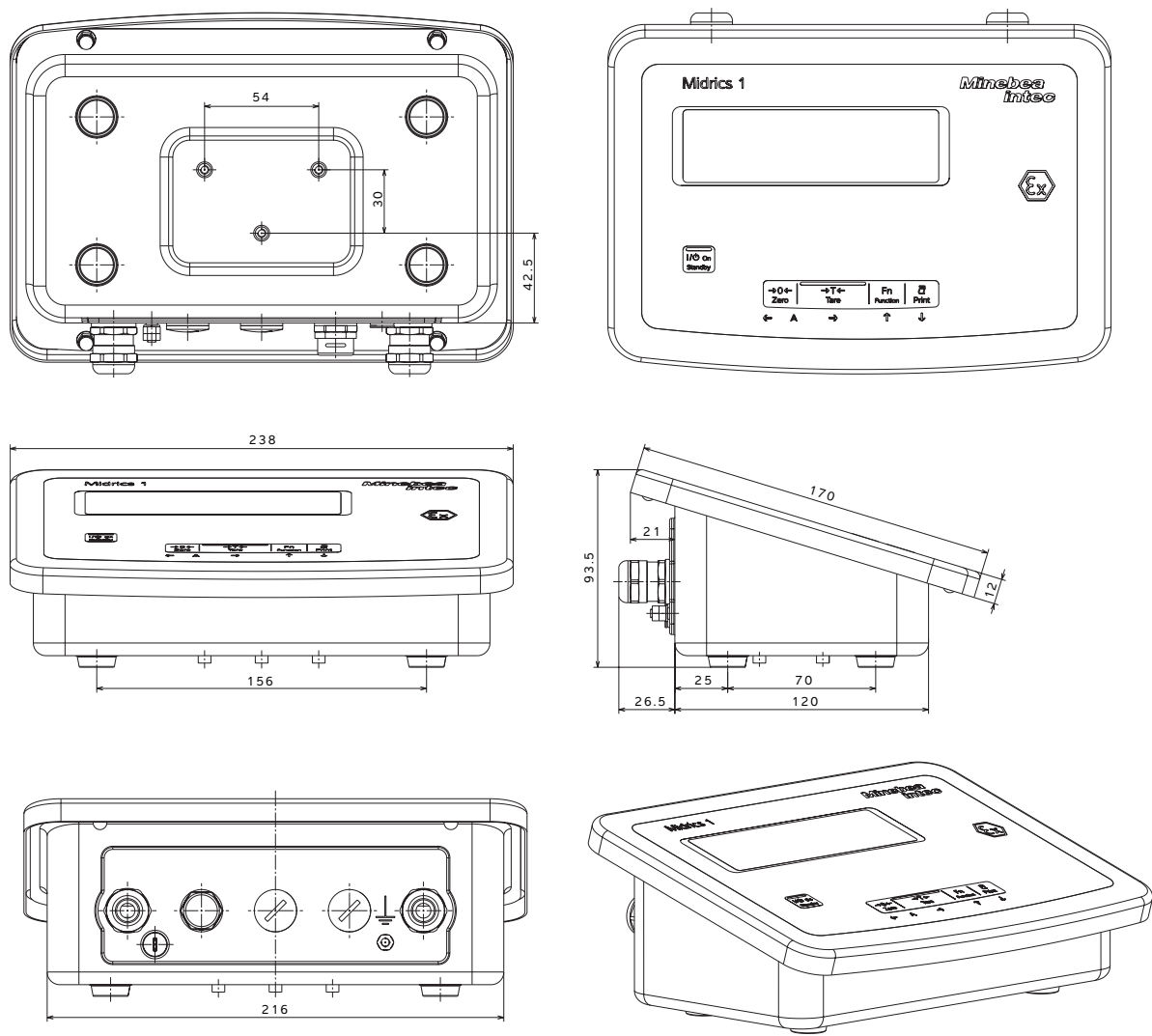
Weight indicator Midrics® 1 Ex	
Parameter	Description
Material	Stainless steel 1.4301/AISI 304
Data interfaces	RS232 Switchable to RS422
Scale connection	A/D converter
Resolution (not calibrated)	30,000 d Smallest usable signal: 0.2 µV/d
Preload	Up to 100% of the weighing range
Load cell electrical supply	3.9 V
Load impedance	83 ohm up to 2,000 ohm
Measuring signal	0 mV to 7.5 mV
Measurement signal for dead load	0 mV to 2.5 mV
Humidity	85% relative (non-condensing) to 31°C; 50% relative to 40°C
Use at altitudes above sea level	Up to 2,000 m; in interior spaces
IP protection rating	IP66
Ambient temperature	-10°C to +40°C
Ex-approvals	ATEX: II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T80°C Db IECEx: Ex ib IIC T4 Gb Ex ib IIIC T80°C Db USA: IS CL I, II, III, DIV 1, GP A, B, C, D, E, F, G T4 CL I, Zone 1, AEx ib IIC T4 Zone 21, AEx ib IIIC T80°C Canada: Zone 1, Ex ib IIC T4 Gb Zone 21, Ex ib IIIC T80°C Db
Emissions	In accordance with EN61326-1:2013 (IEC61326-1-2012: Class B)
Electrical safety	In accordance with EN 61010-1 (IEC 61010-1)
Immunity to interference	In accordance with EN61326-1:2013 (IEC61326-1-2012: Controlled Electromagnetic Environments)
Power supply	Via external power supply unit Connection via cable gland Inside the area with potentially explosive atmosphere: ATEX zone 1/21: YPSC01-X FM (US) DIV 1: YPS02-XUR ATEX/IECEx/CSA zone 2/22 and FM (US) DIV 2: YPS08-Y Outside the area with potentially explosive atmosphere: ATEX/IECEx/FM: YPS08-Z

The technical specifications listed above are for product description purposes only; they are not legally binding.

Use – weight indicator Midrics® 1 Ex	
Parameter	Description
Keyboard	5 keys
Display	20 mm weight readout (14 segments) plus application symbols
Weighing	•
Data transfer to printer/PC	•
Date/Time	•
Function trigger by external switch	•
Connection to second weight indicator display	•
Alibi Memory (optional)	•

Technical diagrams

Weight indicator Midrics® 1 Ex



All dimensions in mm

Options

Due to the many different options, the indicator can be adapted to the specific applications of the user. When the option code is submitted with the order, the indicator will be delivered with the requested characteristics. (Conversion is possible by ordering the corresponding accessories.)

COM1 for weight indicator Midrics® 1 Ex

Description	Order number as option	Order number as accessory
RS232	A21	-
RS422	A22	-

Separable analogue scale connection for weight indicator Midrics® 1 Ex

Description	Order number as option	Order number as accessory
Indicator WP1 and platform separable plug connection, socket on indicator (0.2 m) (connector for platform enclosed separately)	X2	YCC03-XR12F02

Separable power supply connection for weight indicator Midrics® 1 Ex

Description	Order number as option	Order number as accessory
Indicator to power supply separable plug connection, 8-pin male connector on indicator (0.2 m cable)	X5	YCC03-XR4M02

Cables for COM1 for weight indicator Midrics® 1 Ex

Description	Order number as option	Order number as accessory
Connection cable for YDI05-Z via RS232 – 14-pin round socket (0.2 m) (option A21) (YDI05-Z – option M52 please order separately)	M14	YCC02-XR14F02
Connection cable for YDI05-Z via RS422 – 14-pin round socket (0.2 m) (option A22) (YDI05-Z – option M54 please order separately)	M21	YCC04-XR14F02
Connection cable for 2nd weight indicator	N39	YCC03-XR14M6

Accessories

Zener barrier for weight indicator Midrics® 1 Ex

Description	Order number
Ex-interface converter, for installation in the safe area	YDI05-Z

Printers for installation in the safe area (connection via YDI05-Z) for weight indicator Midrics® 1 Ex

Description	Order number
Needle high-speed matrix printer	YDP21
Strip/label printer with thermal direct printing mechanism, 108 mm paper width	ZD420d
Strip/label printer with thermal transfer printing mechanism, 108 mm paper width	ZD420t

Power supply for weight indicator Midrics® 1 Ex

Description	Order number
Via external power supply unit, connection via 8-pin round connector (20 cm cable)	
Power supply units for installation in the potentially explosive atmosphere (100–240 V) FM (US) DIV 2	YPS08-Y
Power supply units for installation in the safe area (100–240 V) ATEX/IECEX/FM	YPS08-Z

Software for weight indicator Midrics® 1 Ex

Description	Order number
OPC UA communication via miOPC server software	

Mechanical accessories for weight indicator Midrics® 1 Ex

Description	Order number
Stainless steel wall bracket	YDH01CIS
Stainless steel wall bracket, tiltable	YDH02CIS

Other accessories for weight indicator Midrics® 1 Ex

Description	Order number
Unassembled cable, 5×0,5 mm ² LiYCY, sheath colour blue, for own cable assembly, 1 m = one piece	YCC232-X
Unassembled cable, 6×(2×0,14 mm ² C), sheath colour blue, for own cable assembly, 1 m = one piece	YCC422-X
14-pin round connector for own cable assembly, IP65	69Y03166

Ordering information

Weight indicator Combics Midrics® 1 Ex

Description	Order number
Weight indicator Midrics® 1 Ex	MIXS1

The products and solutions presented in this data sheet make major contributions in the following sectors:



Food and
beverages



Pharmaceutical



Chemical



Cosmetics



Building
materials



Recycling



Machinery
(OEM)

The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice.
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