

MINING ► FLOW

MIDEX

DESCRIPTION



Robust and safe electromagnetic flow meter for general mining applications

Digital local display with status indicated for the potential-free optocoupler outputs

Highly accurate supply and return temperature measurement. The refrigeration/heating capacity can be determined by two optional quartz temperature sensors.

Totalizing counter: Medium throughput can be displayed like on a water meter and evaluated.

The potential-free optocoupler outputs (4 in the standard version, 8 in the extended version) can be assigned the following output functions:

- Frequency (5 to 15 Hz) for flow, temperature and cooling capacity
- Pulse
- Limit
- Flow direction
- Medium detection

Control input for turn down (weekend input)

Your benefits

- Quick and simple commissioning on-site operation
- Robust and proven technology in mining operation
- Wear-free and maintenance-free since there are no moving parts
- No fittings in the channel so no additional pressure loss
- Mounting position can be selected as required within the scope of the mounting instructions

- Measuring range:
 - Flow maximum 0 to 2000 m³/h or 0 to 1000 l/min
 - Refrigeration/heating capacity maximum 20000 kW
 - Temperature maximum -20 to +60 °C (freely programmable)
- Protection (according to EN 60529): IP65
- Power supply: 9.5 to 13.0 V DC
- Signal outputs: Optocoupler (5 to 15 Hz, pulse or limit)
- Electrical connection:
 - Cable gland
 - Connector (optional):
 - PROMOS BN 4160
 - Machaczek ME2A10
 - Hydrostar SKK24
- Process connection: Flange or high pressure coupling
- Nominal width: DN40 to DN300
- Nominal pressure: PN10 to PN500
- Material: Steel/stainless steel
- Weight: Depending on version (MIDEX-***F*100/40: 28 kg)
- Approval: ATEX

A complete description of all device features can be found in the corresponding operating manual ba023000en.

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ORDER CODE

10	Electrical connection
H	Hydrostar connector SKK24
K	Cable gland
M	Machaczek connector ME2A10
P1	1x PROMOS connector type BN 4160, not potential-separated
P2	2x PROMOS connector type BN 4160, potential-separated
Y	Special version, to be specified

20	Outputs
S	Standard, 4 potential-free outputs
E	Extended version, 8 potential-free outputs
T	With temperature sensors, 8 potential-free outputs
Y	Special version, to be specified

30	Totalizing counter
S	Without totalizing counter
T	With totalizing counter
Y	Special version, to be specified

40	Process connection
F	Flange
H	High pressure coupling
Y	Special version, to be specified

50	Lining
H	Vulcanite
M	For building material, suitable for scraper
P	Plastic
Y	Special version, to be specified

60	Nominal width
__	Nominal width in mm (see table)

70	Nominal pressure
__	Nominal pressure in bar (see table)

80	Special version
S	Special version, to be specified

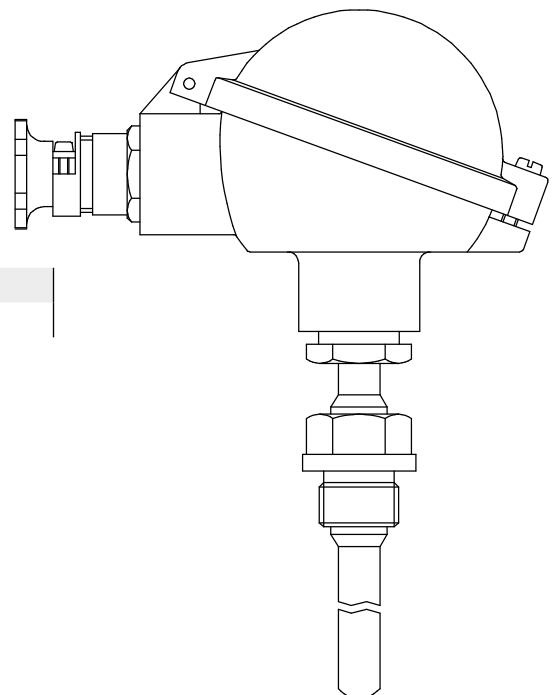
Complete order code	10	20	30	40	50	60	70	80
MIDEX								*1

*1 Only necessary with deviations from order code pos. 10 to 70!

Order code temperature sensor **MTF**

10	Sensor length
__	Length in mm (minimum 30 mm, standard 100 mm, other lengths on request)

Complete order code	10
MTF	



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FEATURES

■ Measuring ranges

Nominal width	Measuring range (flow) Q/(m ³ /h)		
	minimum	standard	maximum
DN50	0 to 10	0 to 30	0 to 50
DN65	0 to 10	0 to 30	0 to 80
DN80	0 to 20	0 to 50	0 to 100
DN100	0 to 50	0 to 100	0 to 200
DN125	0 to 60	0 to 150	0 to 300
DN150	0 to 70	0 to 200	0 to 500
DN200	0 to 150	0 to 400	0 to 1000
DN250	0 to 200	0 to 600	0 to 1500
DN300	0 to 300	0 to 800	0 to 2000

Nominal width	Measuring range (flow) Q/(l/min)		
	minimum	standard	maximum
DN40 / PN500	0 to 100	0 to 250	0 to 500
DN60 / PN500	0 to 200	0 to 500	0 to 1000

Nominal width	Measuring range (refrigeration/heating capacity) W/(kW)		
	minimum	standard	maximum
DN40	50	300	500
DN50	50	300	500
DN60	50	300	500
DN65	50	500	1000
DN80	100	800	1500
DN100	200	1000	2500
DN125	300	2000	3500
DN150	400	3000	5000
DN200	600	5000	10000
DN250	800	8000	15000
DN300	1000	10000	20000

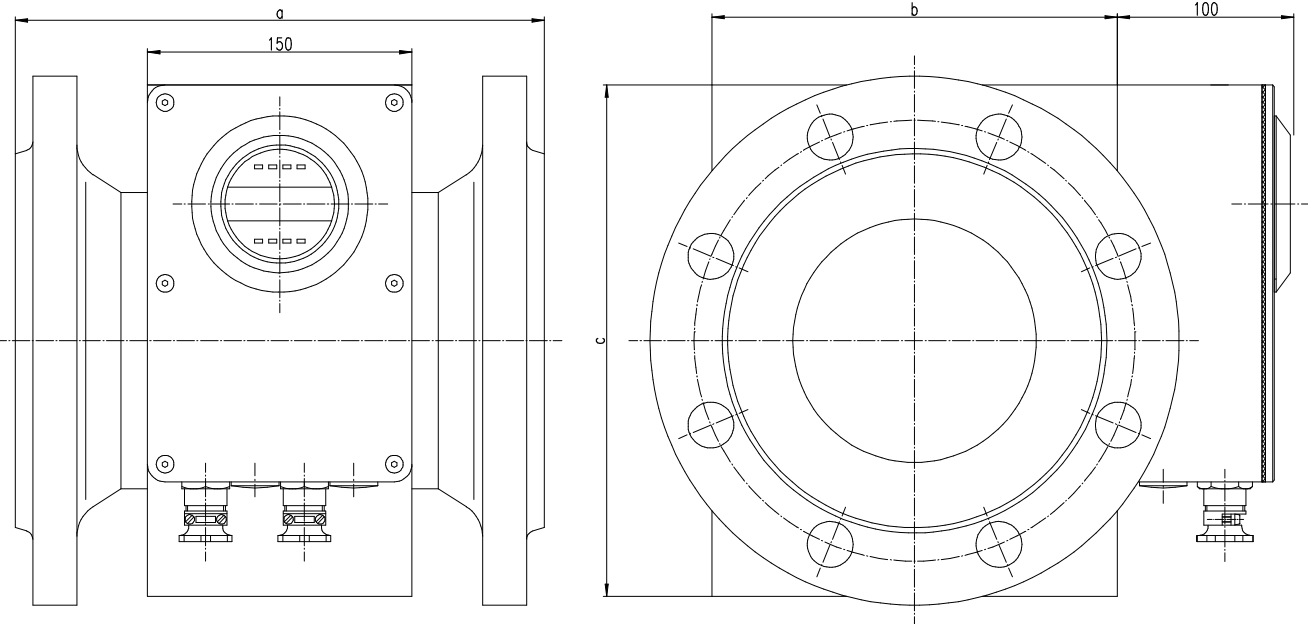
■ Extensive programmable functions to adapt the MIDEX to the measuring task, for example:

- **Display functions** (like measuring value of flow, temperature, refrigeration/heating capacity and volume counter)
- **Parameter functions** (like user range of end value, temperature measuring range and low-pass filter)
- **In and output functions** (like definition and assignment of in and outputs, hysteresis and limit value)
- **Diagnosis functions** (like check of the different signal outputs and simulation of measured values)
- **Hardware functions** (like activation the medium detection and input of a creepage value)

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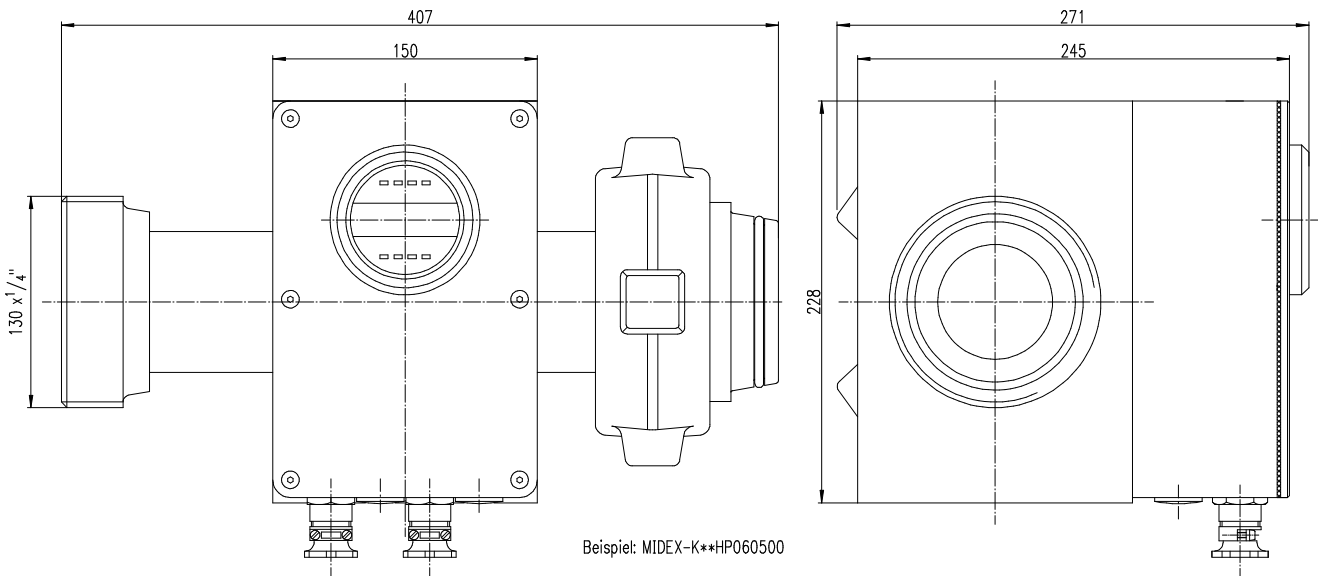
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DIMENSIONS



DN	PN	a							b	c
		10	16	25	40	64	100	160		
50		300	300	300	300	300	300	300	130	228
65		300	300	300	300	300	350	350	156	228
80		300	300	300	300	300	350	350	176	228
100		300	300	300	300	300	350	400	176	228
125		300	300	300	300	350	400	450	230	290
150		300	300	300	300	350	400	450	230	290
200		300	300	300	350	400	500	500	281	341
250		350	350	350	350	400	500	500	336	395
300		400	400	400	500	500	500	500	386	450

Beispiel: MIDEX-K**F*150040



Beispiel: MIDEX-K**HP060500