bürkert
FLUID CONTROL SYSTEMS

Mass flow controller (MFC) / Mass flow meter (MFM) for gases

- Nominal flow ranges from 20 l/min up to 2500 l/min
- High measuring accuracy and repeatability with very fast response times
- Long-term stability of the flow calibration
- Simpler device exchange due to configuration memory
- Optional: ATEX II Cat. 3G/D or USP Class VI, FDA, EC 1935 conformity

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with

Type 6013 ▸
Plunger valve 2/2-way direct-acting

Type 6027 ▸
Direct-acting 2/2-way plunger valve

Type 0330 ▸
Direct-acting 2/2 or 3/2-way pivoted armature valve

Type 0290 ▸
Servo-assisted 2/2-way diaphragm valve

Type ME43 ▸
Fieldbus gateway

Type ME63 ▸
Industrial Ethernet gateway, IP65/ IP67/ IP69k

Type description

The mass flow controller (MFC) / mass flow meter (MFM) Type 8746 for gases is suitable for a wide range of applications, e.g. metal and glass manufacturing or processing, fermentation processes, test benches or filling systems and packaging machines. Type 8746 is available in two variants: A variant with several analogue or digital (communication) interfaces and a variant with a pure CANopen-based interface. The latter is suitable for integration in existing CANopen networks or - in combination with a Bürkert fieldbus gateway - for integration in all common industry standards for Industrial Ethernet or fieldbus. This variant is tailor-made for applications with many control loops. Up to 32 MFCs / MFMs can be connected to one fieldbus gateway. The gateway transmits the internal CANopen-based communication to Industrial Ethernet and fieldbus standards. The mass flow controller / mass flow meter can always be switched between büS and CANopen communication. Type 8746 can be configured as an MFM or an MFC according to demand. Optionally, up to four calibration curves can be stored in the device. The thermal inline sensor is located directly in the main flow and achieves fast response times and a high level of measuring accuracy with long-term s table calibration. As the actuator, a Bürkert direct-acting, electromagnetic proportional valve or motor valve guarantees high response sensitivity. The integrated PI controller ensures excellent control characteristics of the MFC. Type 8746 is characterised by low pressure drop, even at high flow rates, and is especially designed for use in harsh environments thanks to its high IP protection class and explosion protection.

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Visit product website ▸

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1. General technical data

1.1. General

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 7.
Materials	
Seal	FKM or EPDM (depending on gas)[1.)]
Housing	Aluminium die casting (coated)
Body	Stainless steel or aluminium
Configuration memory	Further information can be found in chapter "9.2. Configuration management for easy device replacement" on page 33.
Electrical data	
Operating voltage	24 V DC
Electrical connection	M12 plug, 5 pin For analogue and PROFIBUS-DP version additionally: M12 socket, 5 pin
Residual ripple	±2 %
Voltage tolerance	±10 %
Medium data	
Operating medium	Neutral, non-contaminated gases, others on request
Calibration medium	Operating gas or air with correction function
Medium temperature	-10°C[2.)]…+70 °C (-10°C[2.)]…+60 °C with oxygen)
Process/Port connection & communication	
Analogue interfaces	4…20 mA, 0…20 mA, 0…10 V or 0…5 V Input impedance: >20 kΩ (voltage) o.R. <300 Ω (current) Maximum current: 10 mA (voltage output), Maximum load: 600 Ω (current output)
Digital communication interfaces	büS (CAN-based bus)/CANopen, PROFIBUS-DP
Port connection	G or NPT ¼", ⅜", ½", ¾", 1", flange
Environment and installation	
Installation position	Horizontal or vertical
Ambient temperature	-10 °C…+50°C (higher temperatures on request)
Accessories	
Software-Tool	Bürkert Communicator Further information can be found in chapter "9.1. Bürkert Communicator Software" on page 32.

1.) When using the motor valve additionally:
- Type 3280 DN 4: valve seat seal from PEEK
- Type 3285: valve seat seal from Al_2O_3

2.) When using the electromotive proportional valve, the minimum medium temperature is 0 °C.

1.2. Version with electromagnetic proportional valve

Type 8746 can be configured as MFC or MFM as required. The MFC version uses direct-acting proportional valves of the 287x series. These electromagnetic proportional valves are normally closed and stand for highest measuring accuracy and repeatability with response times of a few hundred milliseconds.

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 7.
Total weight	Approx. 1.8 kg (Aluminium, 16 W valve) Approx. 3.1 kg (Stainless steel, 16 W valve)
LED display	RGB LED according to NAMUR NE107
Control valve (proportional valve)	**Normally closed**
Nominal valve sizes	0.8…12 mm
K_{VS} value range	0.02…2.5 m^3/h

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Performance data	
Nominal flow range (Q_{Nom})	20…1500 l_N/min (N_2) MFM up to 2500 l_N/min (N_2)
Max. operating pressure (Overpressure to atmospheric pressure)	10 bar (for MFCs, the maximum pressure depends on the media and the valve orifice) Optional up to 25 bar for MFM
Measuring accuracy	±1.5 % o.R ±0.3 % F.S. (under calibration conditions)
Measuring span	1:50
Repeatability	±0.1 % F.S.
Settling time (MFC) / response time (MFM)[1.]	<500 ms
Electrical data	
Power consumption[2.]	Max. 2 W (as MFM) Max. 10.5…29.5 W (as MFC, depending on the proportional valve type)
Approvals and certificates	
Protection class	IP65

1.) Times given do not contain further times needed for communication with connected devices.

2.) Data refers to the typical power consumption (at +23 °C ambient temperature, nominal flow rate and 30 min control mode). The specifications according to UL 61010-1 can differ (see **operating instructions Type 8746** ▶).

1.3. Version with electromotive proportional valve

Type 8746 with electromotive proportional valve is especially suitable for applications with high inlet pressures up to 22 bar or high flow rates (with low pressure loss). Thanks to their very low holding capacity, these valves can drastically reduce the less energy consumption of a system. When de-energized, the motor valves remain in position. The maximum duty cycle of the motor depends on the ambient temperature. The duty cycle is not the duty cycle of the appliance but the duty cycle of the motor. This is only switched on when the valve is to move. The duty cycle of the motor increases drastically due to frequent changes in the setpoint value. More detailed information about the derating curve can be found in the chapter **"6.3. Derating diagram" on page 30**.

Product properties	
Dimensions	Further information can be found in chapter **"4. Dimensions" on page 7**.
Total weight	Approx. 1.67 kg (Aluminium, Standard, valve Type 3280) Approx. 2.94 kg (Stainless steel, standard, valve Type 3280)
LED display[1.]	On MFM: RGB-LED according to NAMUR NE107 On valve: RGB-LED to indicate valve opening
Control valve (proportional valve)	**Normally closed**
Nominal valve sizes	2…20 mm
K_{VS} value	0.5…7.8 m^3/h
Performance data	
Nominal flow range (Q_{Nom})	20…2500 l_N/min (N_2)
Max. operating pressure (Overpressure to atmospheric pressure)	22 bar (for MFCs, the maximum operating pressure depends on the nominal valve size)
Measuring accuracy	±2 % o.R. ±0.5 % F.S. (under calibration conditions)
Measuring span	1:50
Repeatability	±0.5 % F.S.
Settling (MFC)/response (MFM) time[2.]	<5 s
Electrical data	
Power consumption	Max. 2 W (as MFM) Max. 10.5 W (as MFC)[3.]
Approvals and certificates	
Degree of protection	IP54 (with valve Type 3280) or IP50 (with valve Type 3285)

1.) Detailed description of the LED colours: see **operating instructions Type 8746** ▶.

2.) Times given do not contain further times needed for communication with connected devices.

3.) Data during the movement of the engine valve. The holding power of the valve is <1 W.

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2. Approvals and conformities

2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available versions can be supplied with the below mentioned approvals or conformities.

2.2. Conformity

In accordance with the Declaration of conformity, the product is compliant with the EU Directives.

2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

2.4. Explosion protection

Approval	Description
	Optional: Explosion protection **ATEX:** II 3G Ex ec IIC T4 Gc X II 3D Ex tc IIIC T135°C Dc X

2.5. North America (USA/Canada)

Approval	Description
	Optional: UL Listed for the USA and Canada The products are UL Listed for the USA and Canada according to: • UL 61010-1 (ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE – Part 1: General Requirements) • CAN/CSA-C22.2 No. 61010-1

2.6. Foods and beverages/Hygiene

Conformity	Description
FDA	**FDA – Code of Federal Regulations (valid for variable code PL03)** All wetted materials are compliant with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA) according to the manufacturer‘s declaration.
USP	**United States Pharmacopeial Convention (USP) (valid for variable code PL04)** All wetted materials are biocompatible according to the manufacturer‘s declaration.
	EC Regulation 1935/2004 of the European Parliament and of the Council (valid for variable code PL01) All wetted materials are compliant with EC Regulation 1935/2004/EC according to the manufacturer‘s declaration.

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3. Materials

3.1. Bürkert resistApp

Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

Start Chemical Resistance Check

4. Dimensions

4.1. Thread depths of basic blocks

MFC/MFM with small nominal flow rates

Note:
For the basic blocks 00 or A1, the following table applies in each case.

A	Thread depth [mm]
G ¼	12
NPT ¼	11
G ⅜	12
NPT ⅜	11
G ½	15
NPT ½	14
G ¾	16
NPT ¾	15

MFC/MFM with large and very large nominal flow rates
Note:
For the basic blocks A2 or A3, the following table applies in each case.

A	Thread depth
G ½	15
NPT ½	14
G ¾	16
NPT ¾	15
G 1	18
NPT 1	16.8

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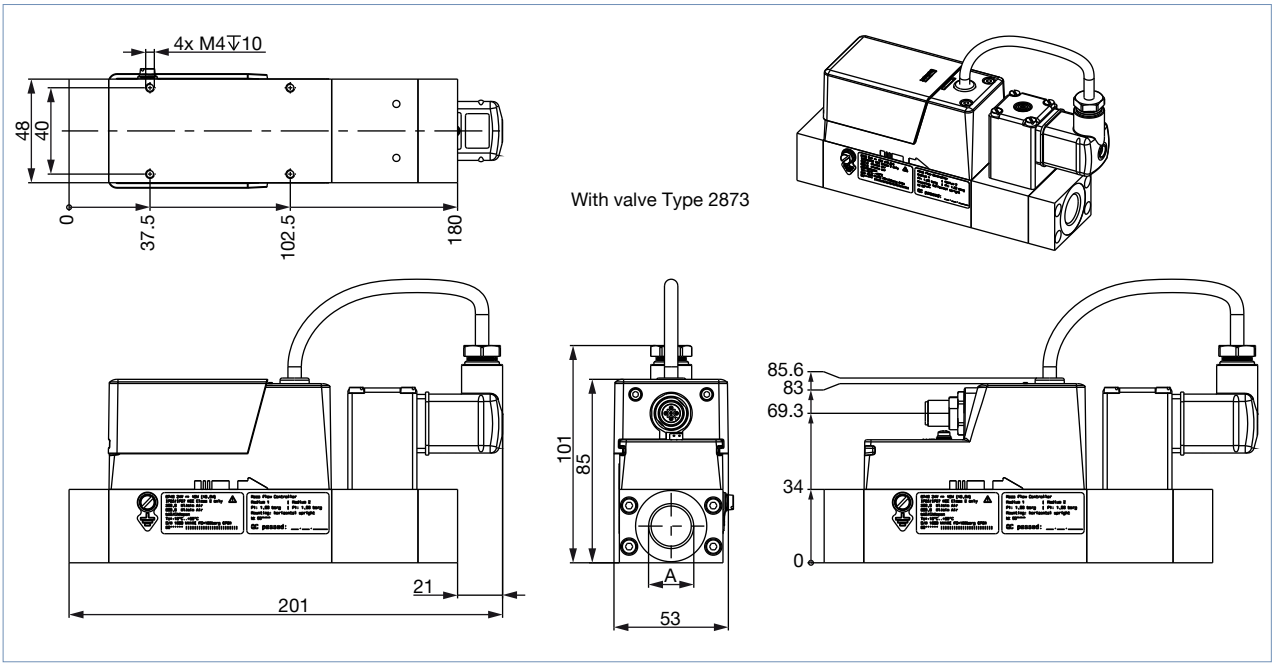
4.2. Version with electromagnetic proportional valve and büS/CANopen interface

MFC with valve Type 2873

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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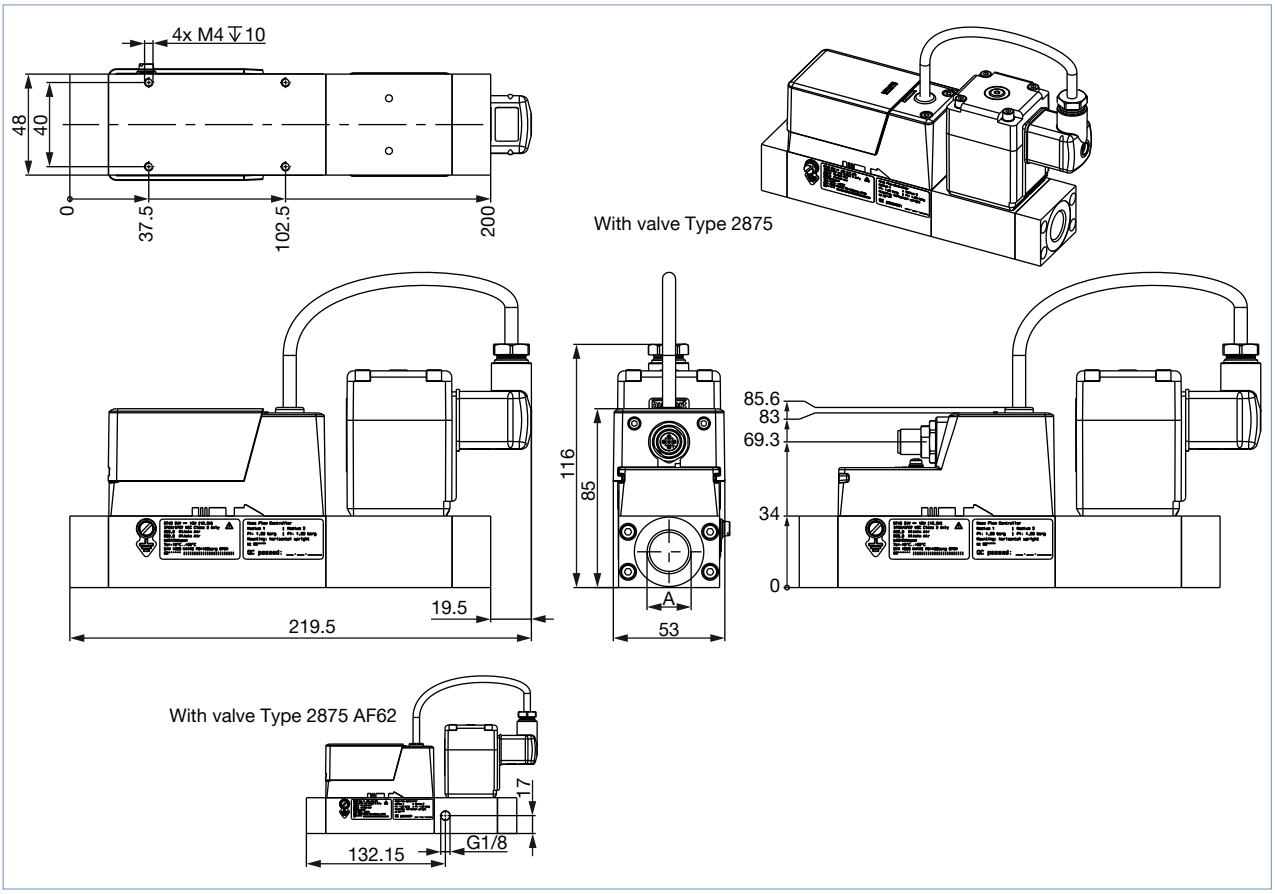
MFC with valve Type 2875

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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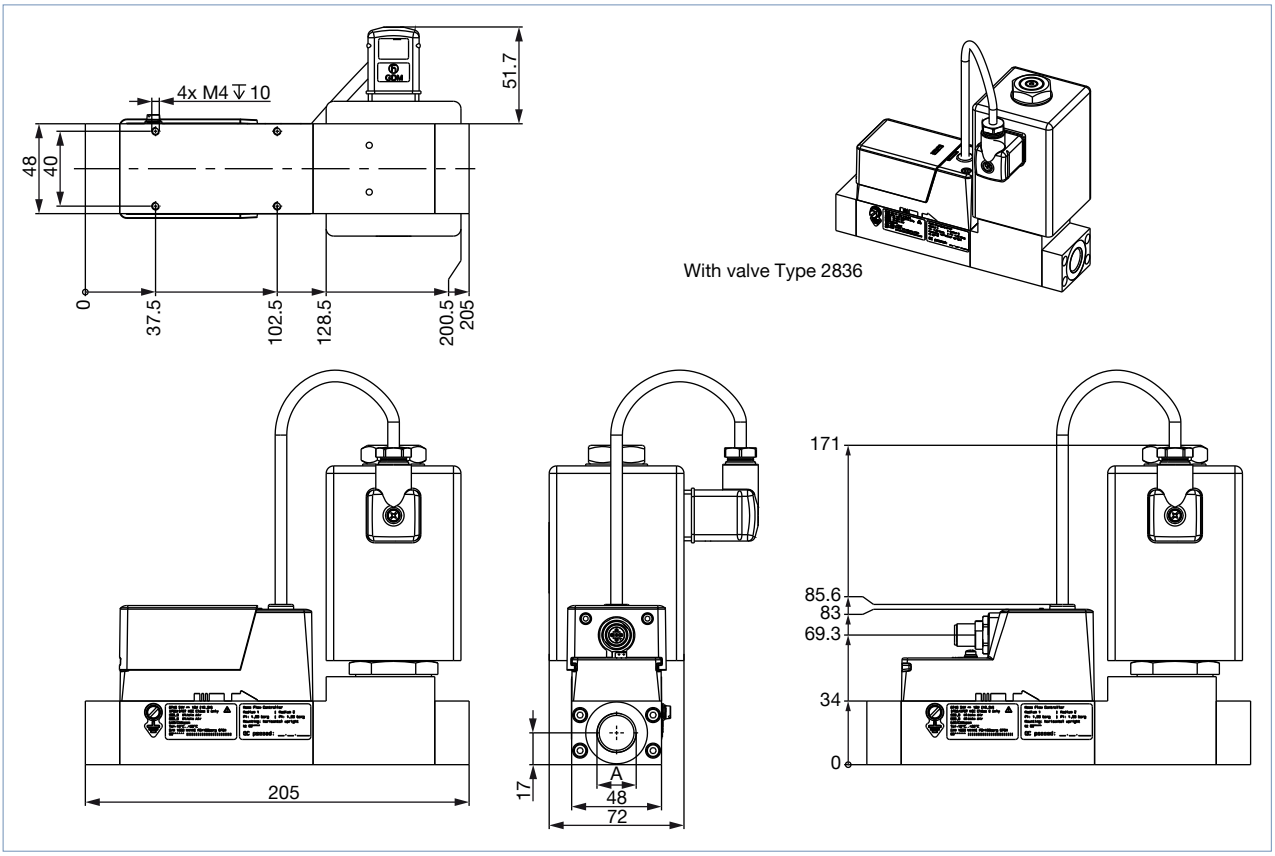
MFC with valve Type 2836

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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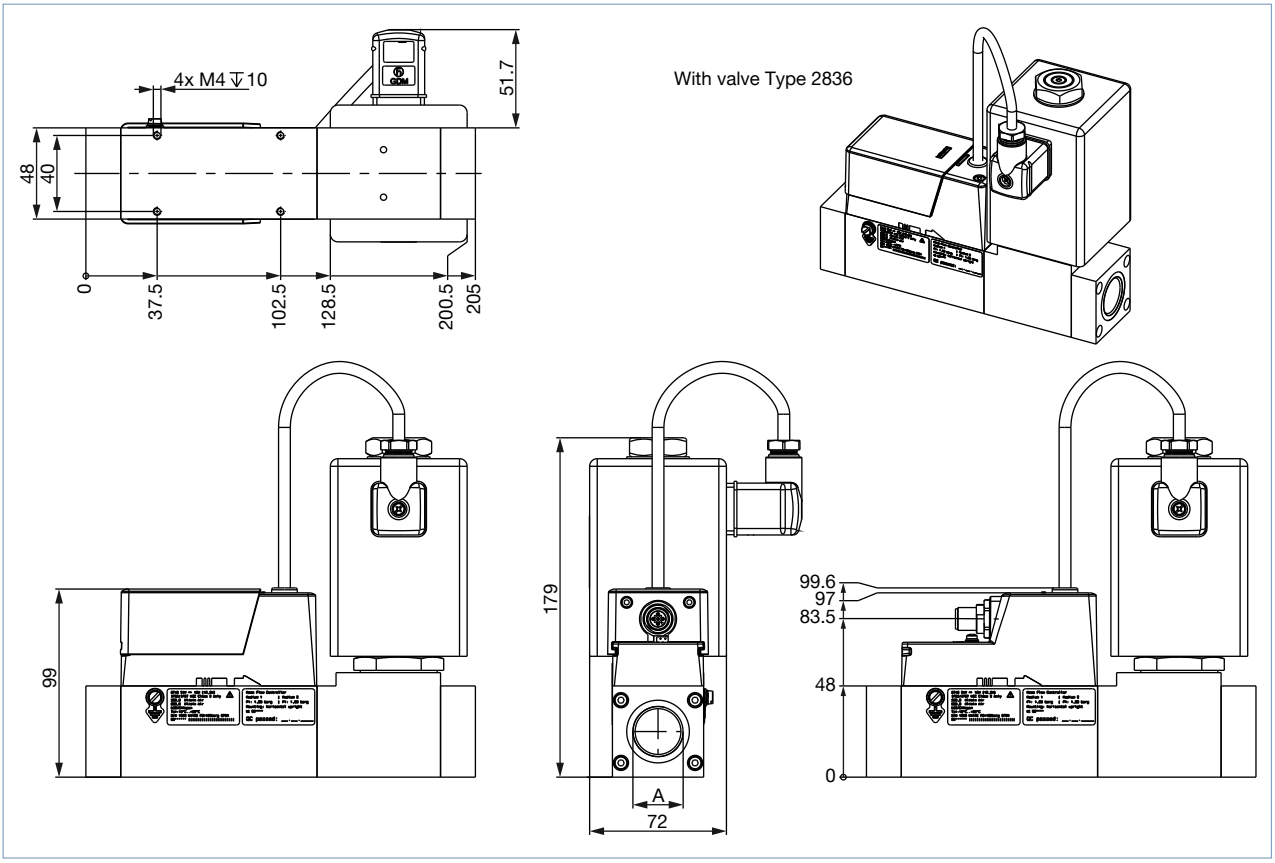
Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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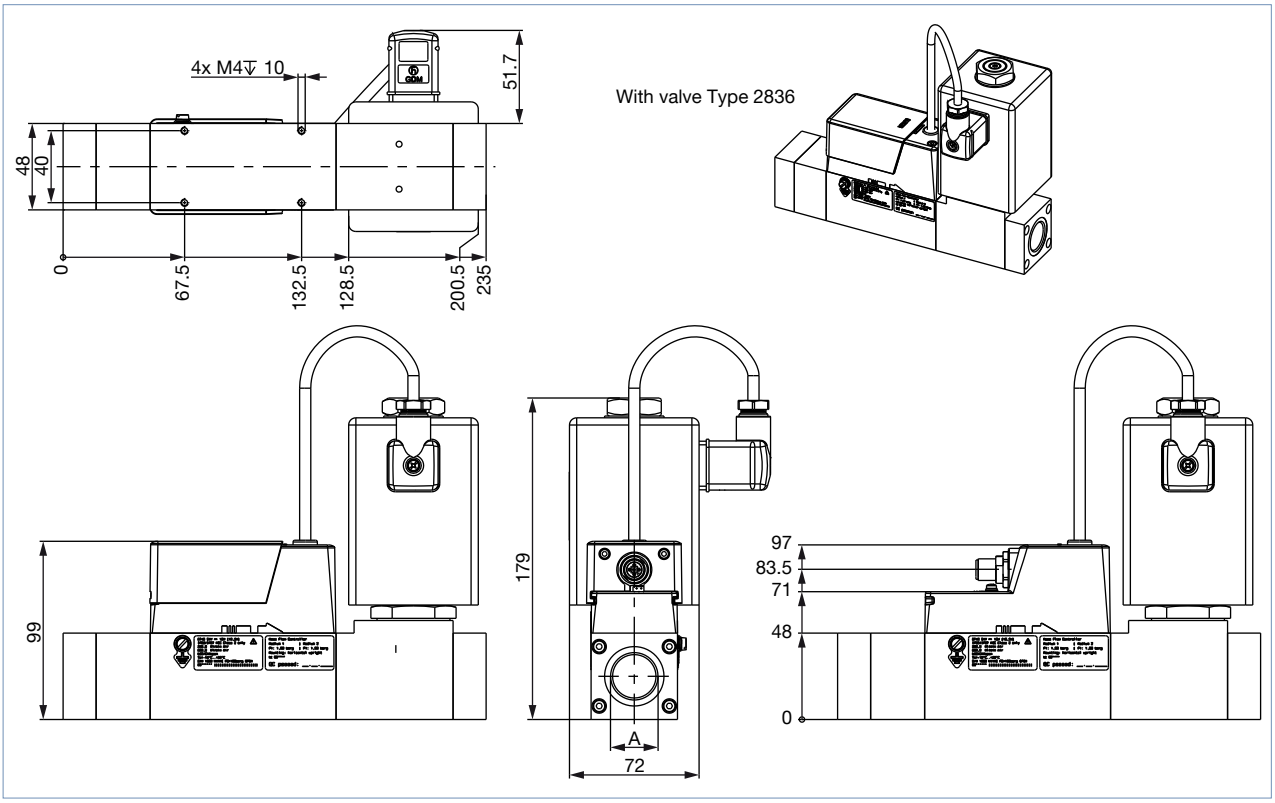
Version with base block A3 for very large nominal flow rates

Note:

- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



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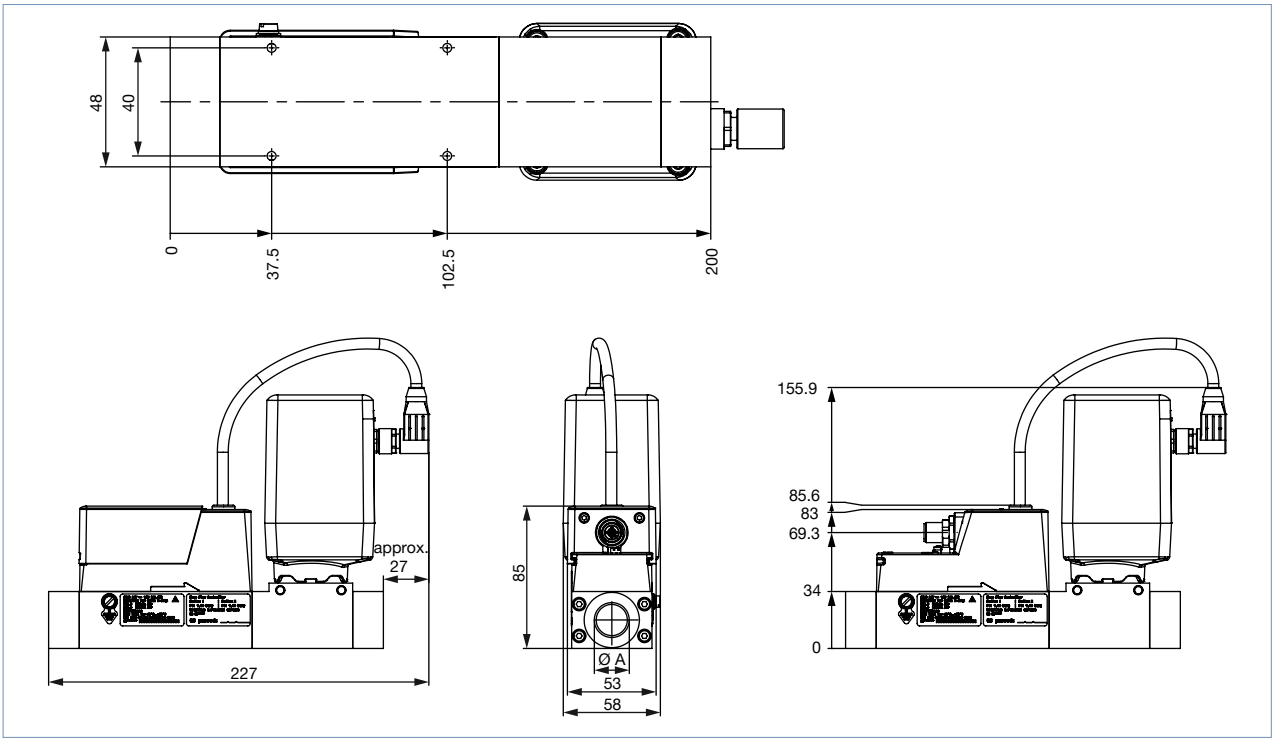
4.3. Version with electromotive proportional valve and büS/CANopen interface

MFC with valve Type 3280

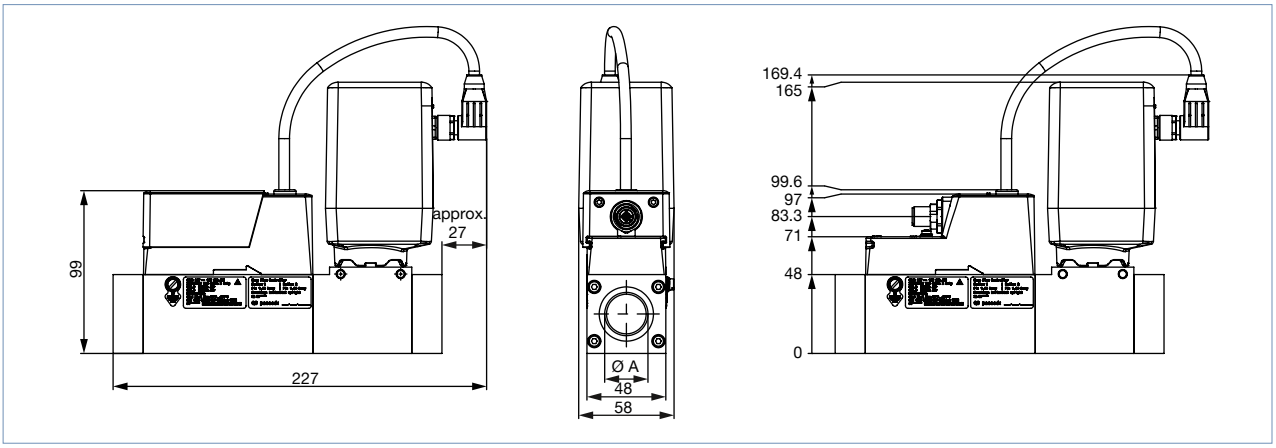
Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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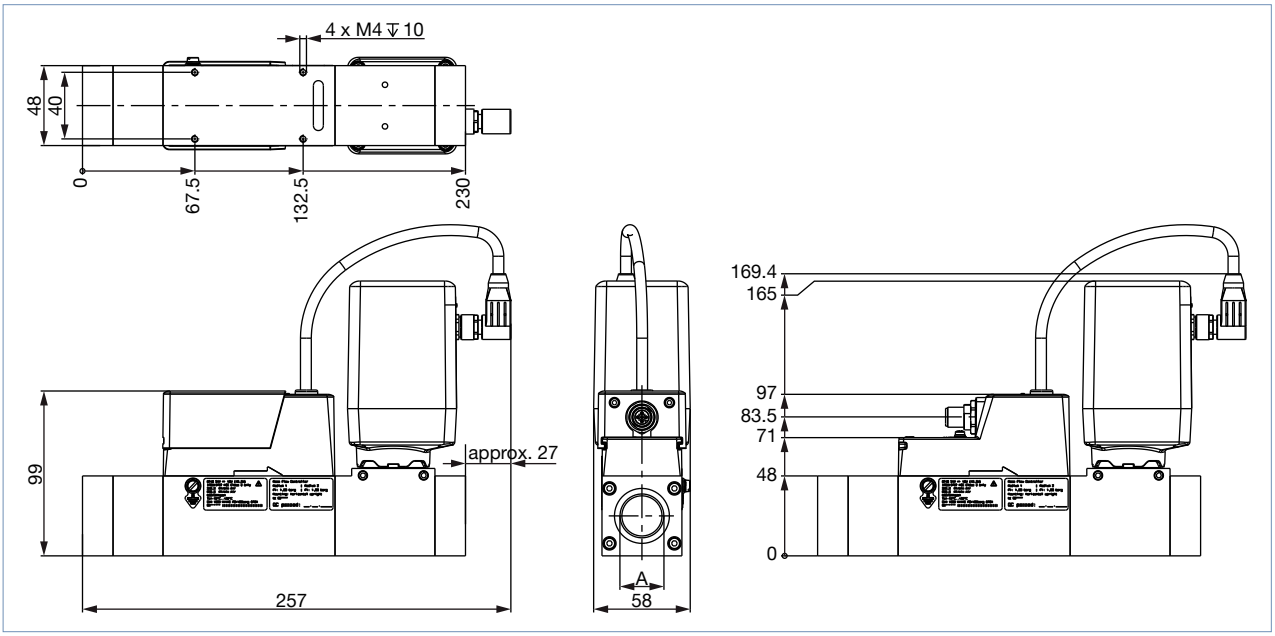
Version with base block A3 for very large nominal flow rates

Note:

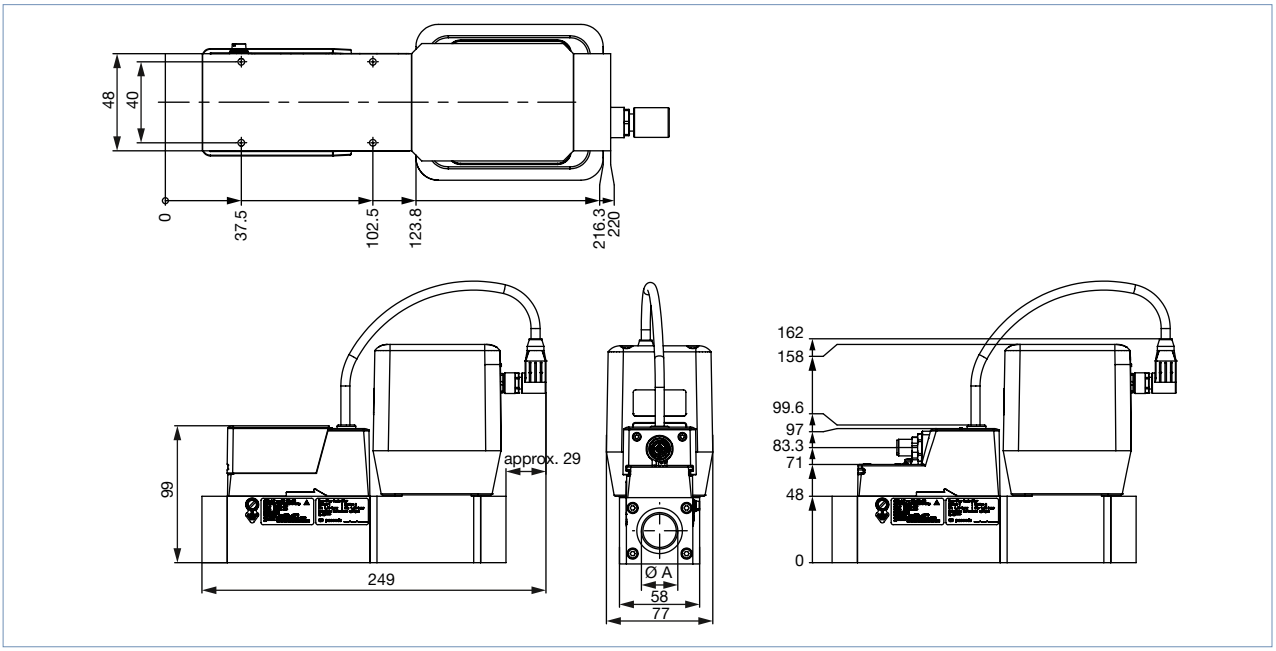
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



MFC with valve Type 3285 (DN 12 and DN 15)

Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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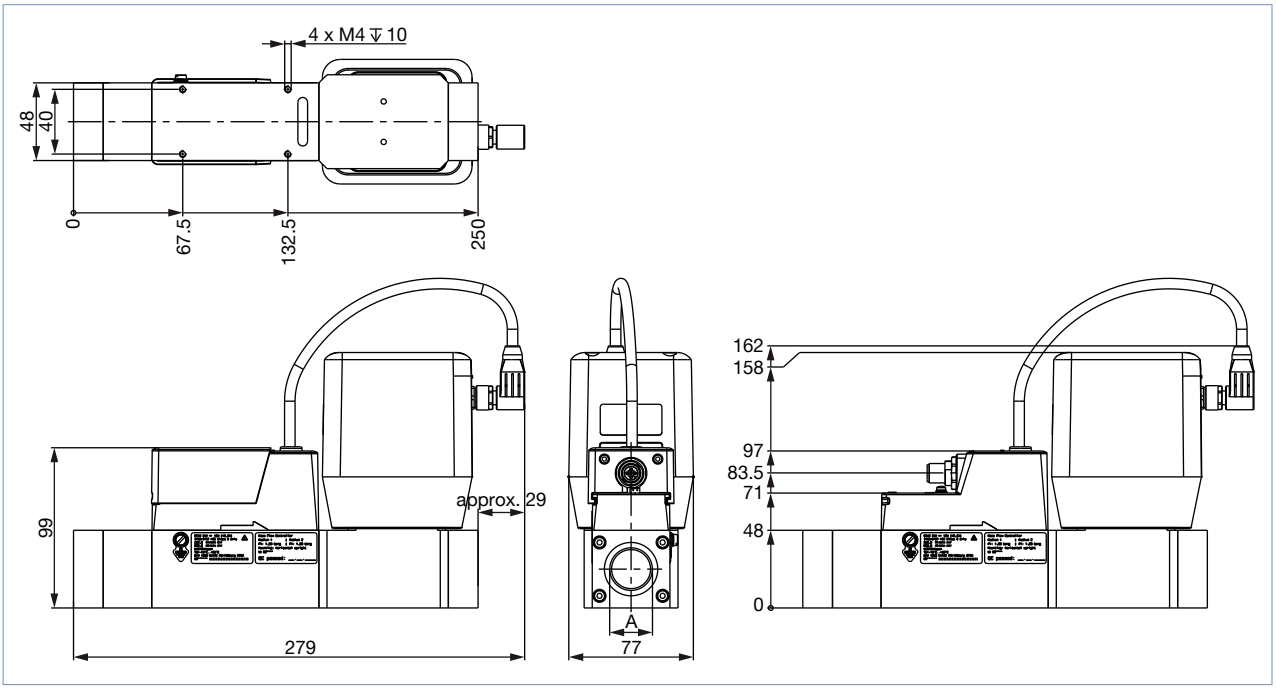
Version with base block A3 for very large nominal flow rates

Note:

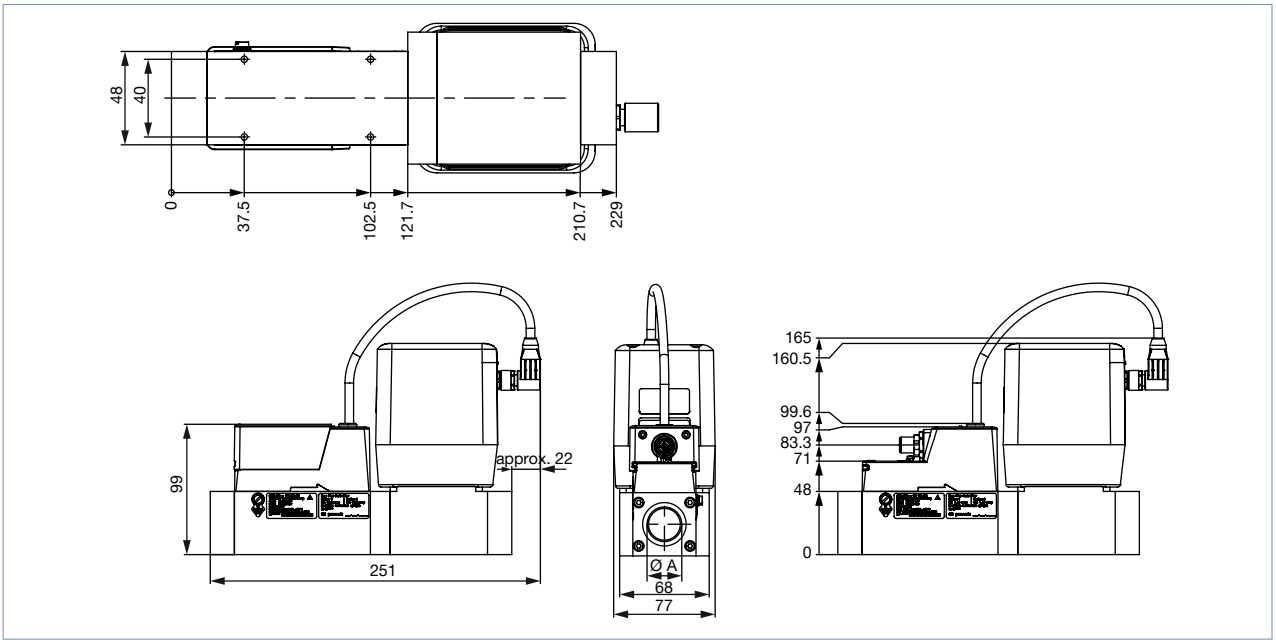
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



MFC with valve Type 3285 (DN 20 and DN 25)

Version with base block A2 for large nominal flow rates

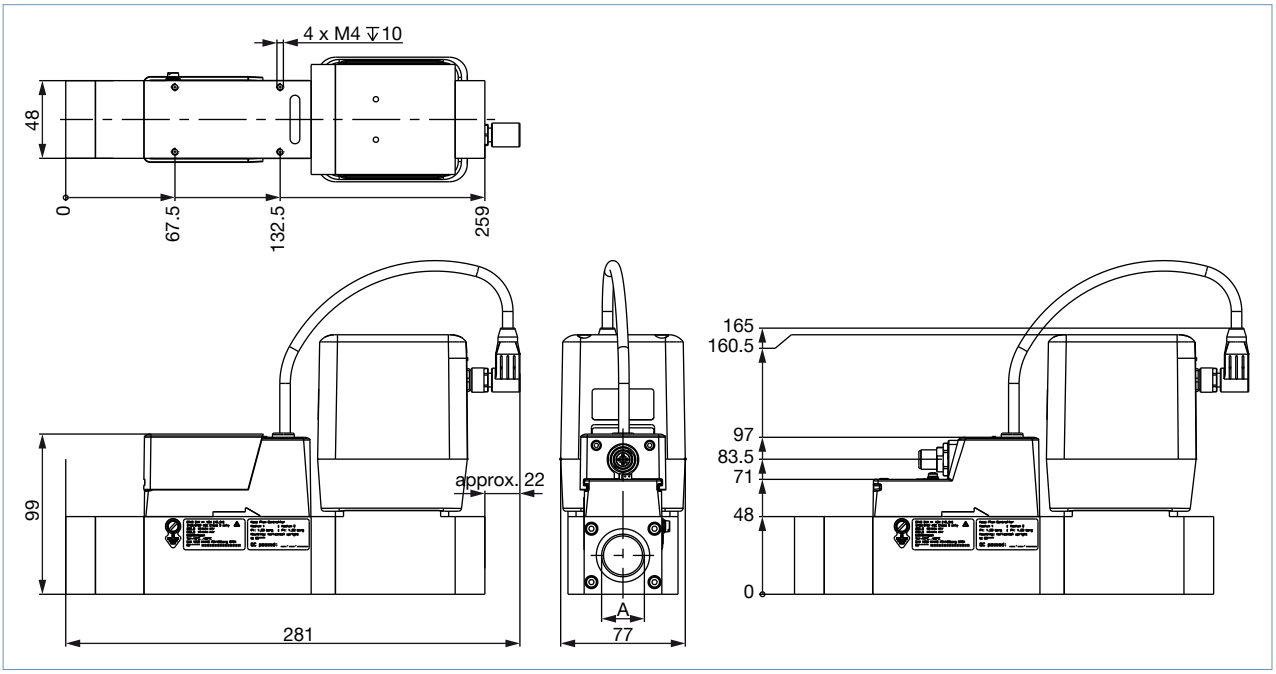
Note:
Dimensions in mm



Version with base block A3 for very large nominal flow rates

Note:

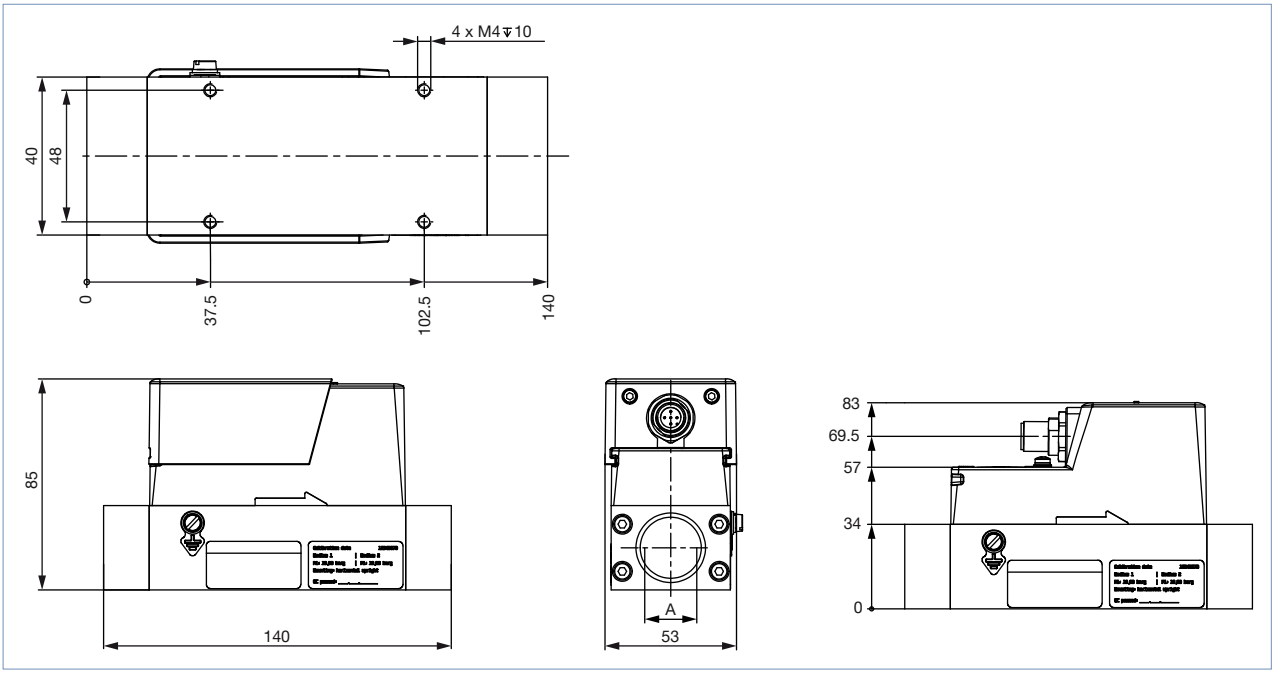
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



4.4. MFM version with büS/CANopen interface

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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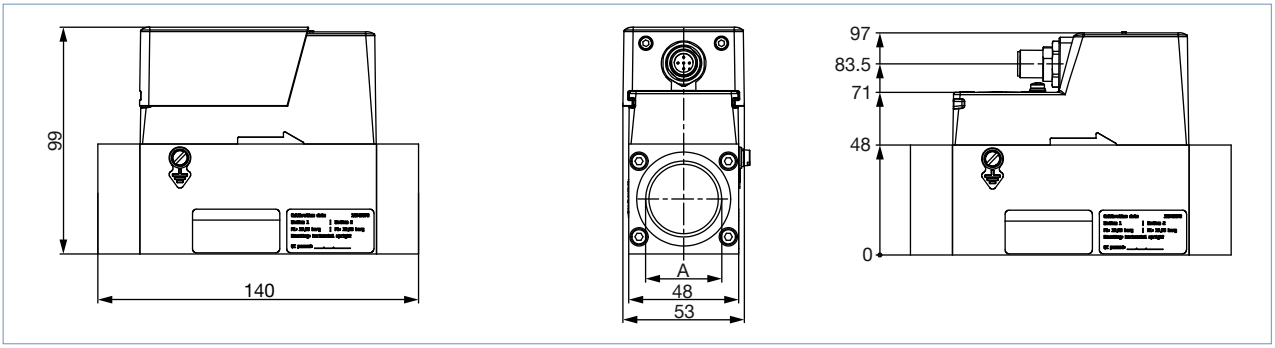
Version with base block A2 for large nominal flow rates

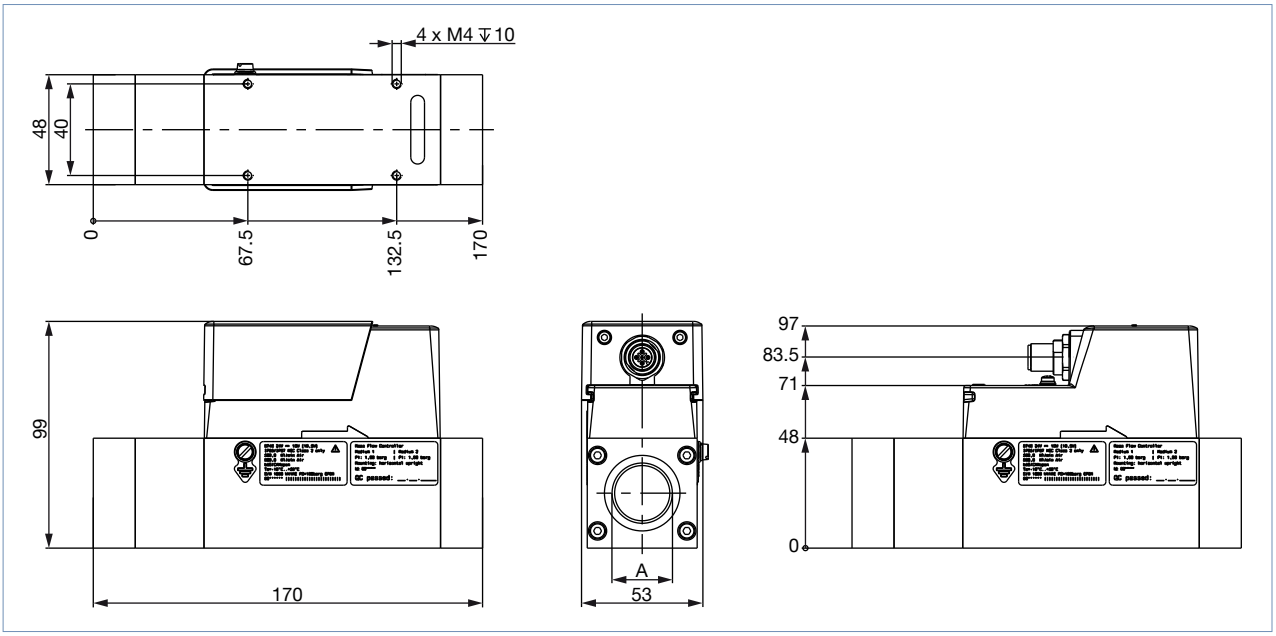
Note:
Dimensions in mm



Version with base block A3 for very large nominal flow rates

Note:

- From a nominal flow rate Q_{Nom} > 1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



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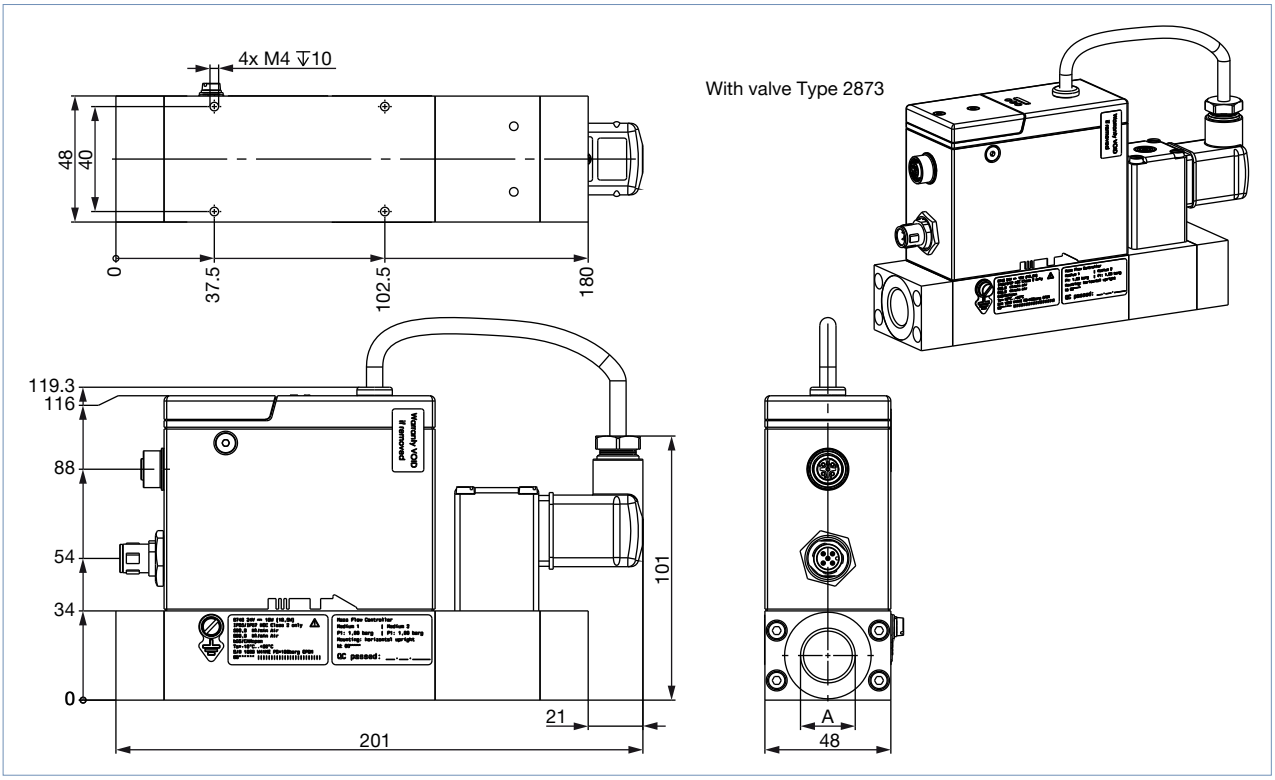
4.5. Version with electromagnetic proportional valve and analogue or PROFIBUS-DP interface

MFC with valve Type 2873

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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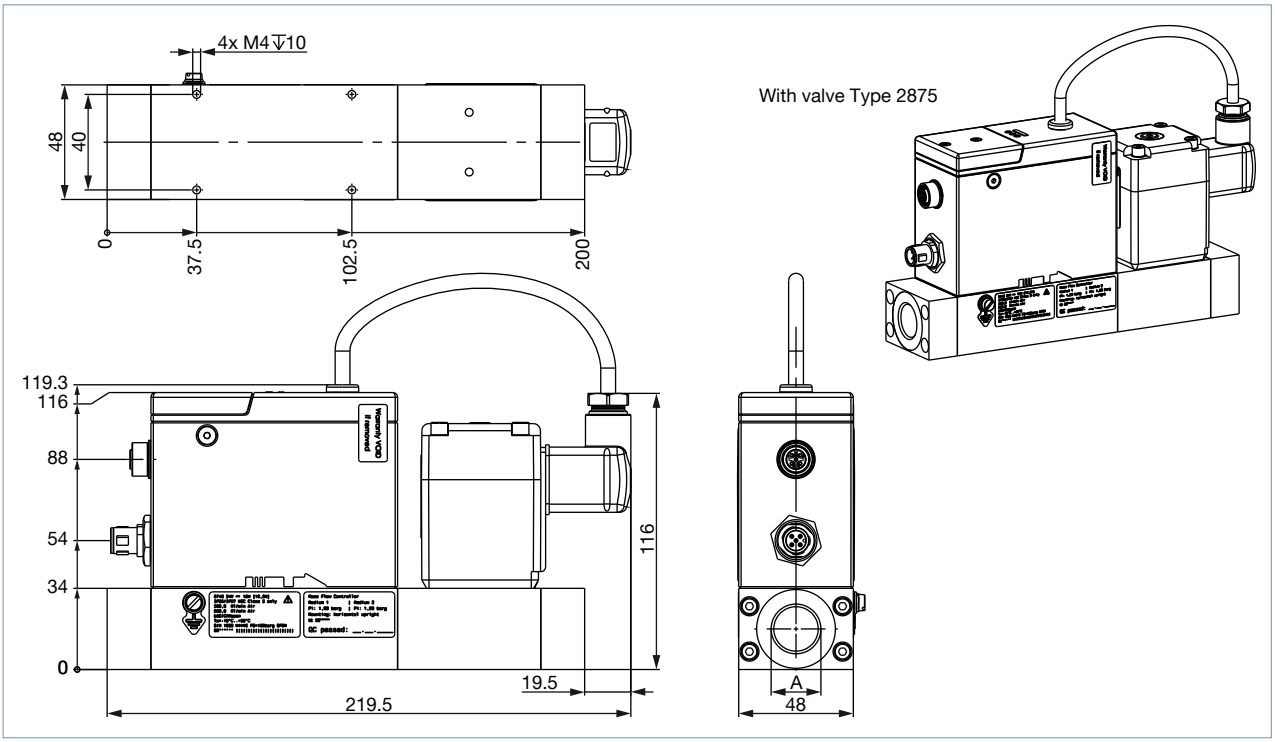
MFC with valve Type 2875

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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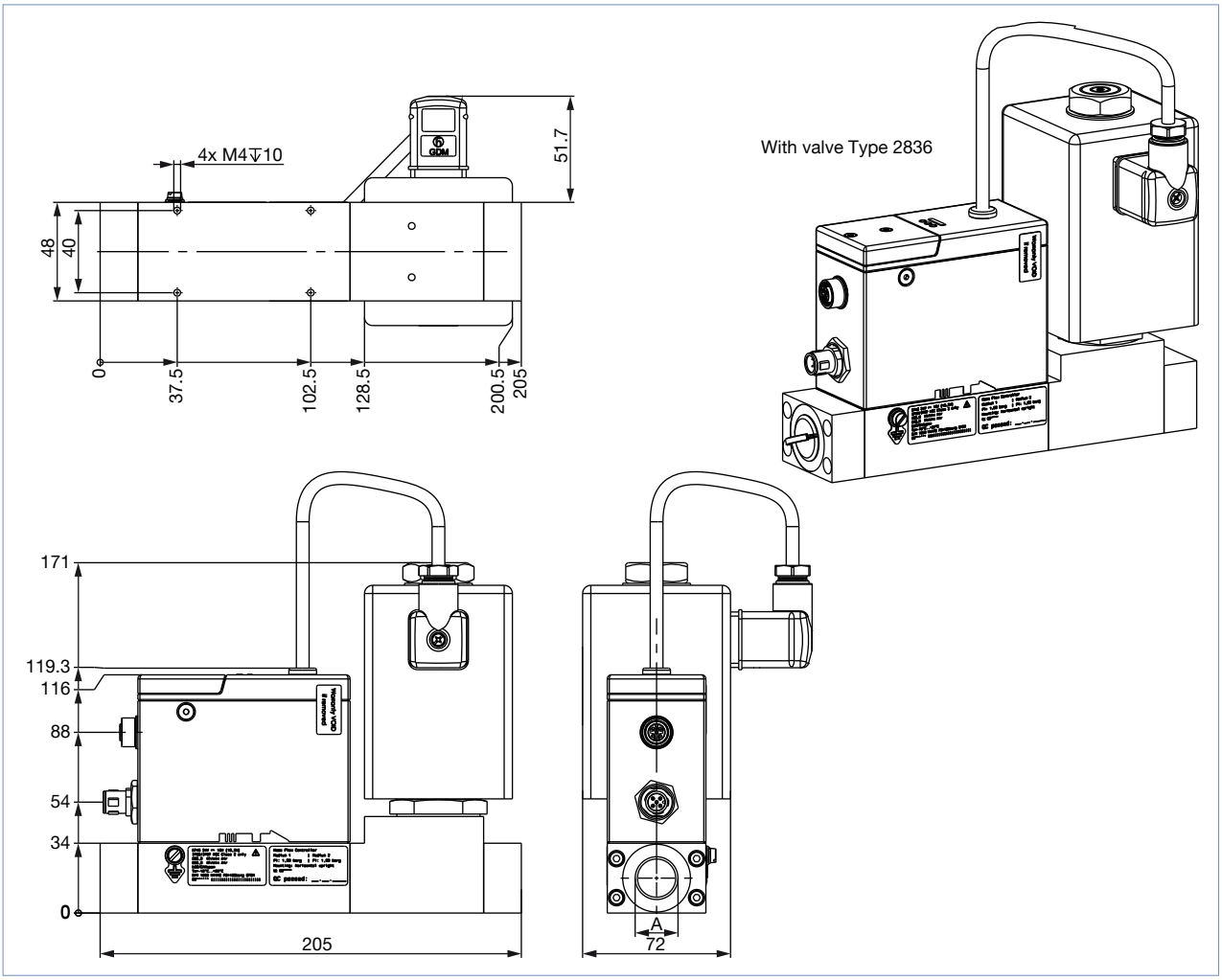
MFC with valve Type 2836

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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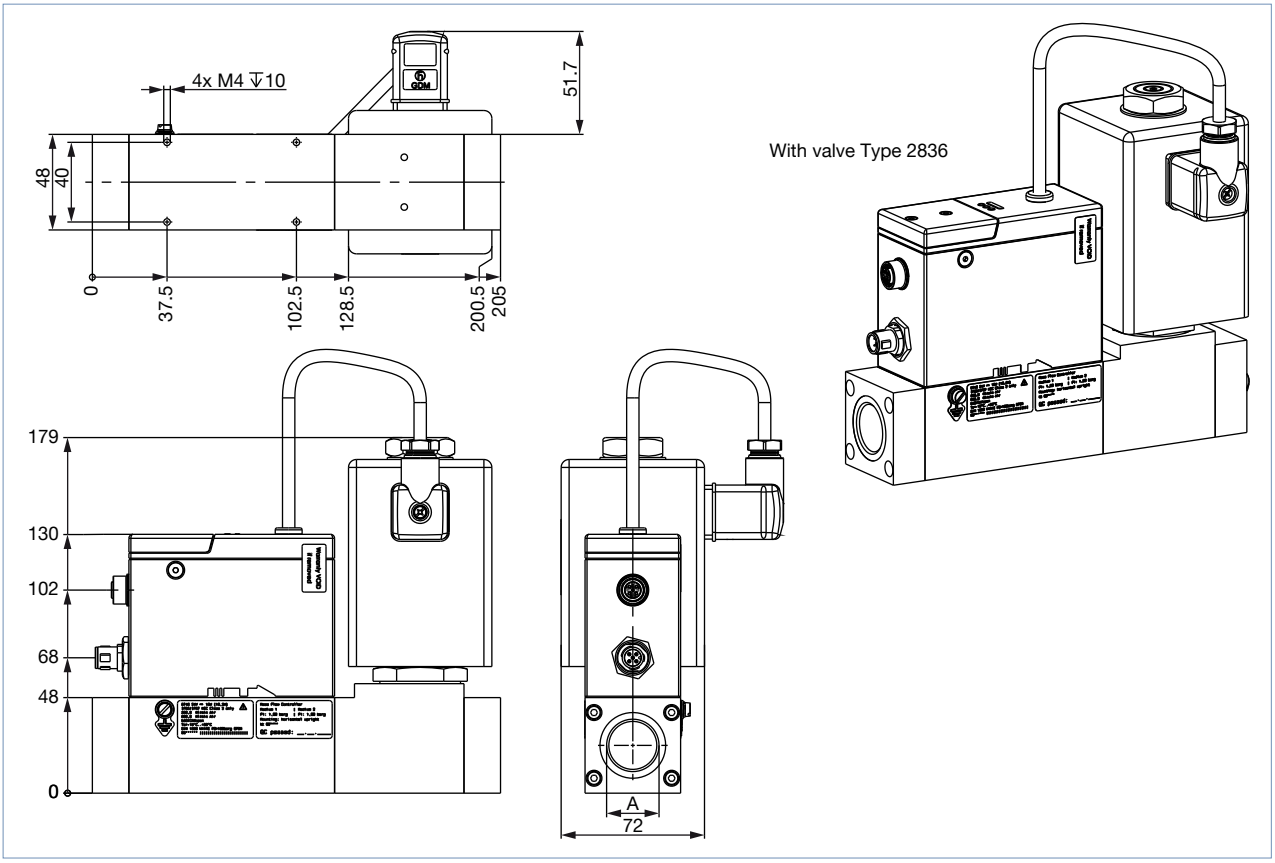
Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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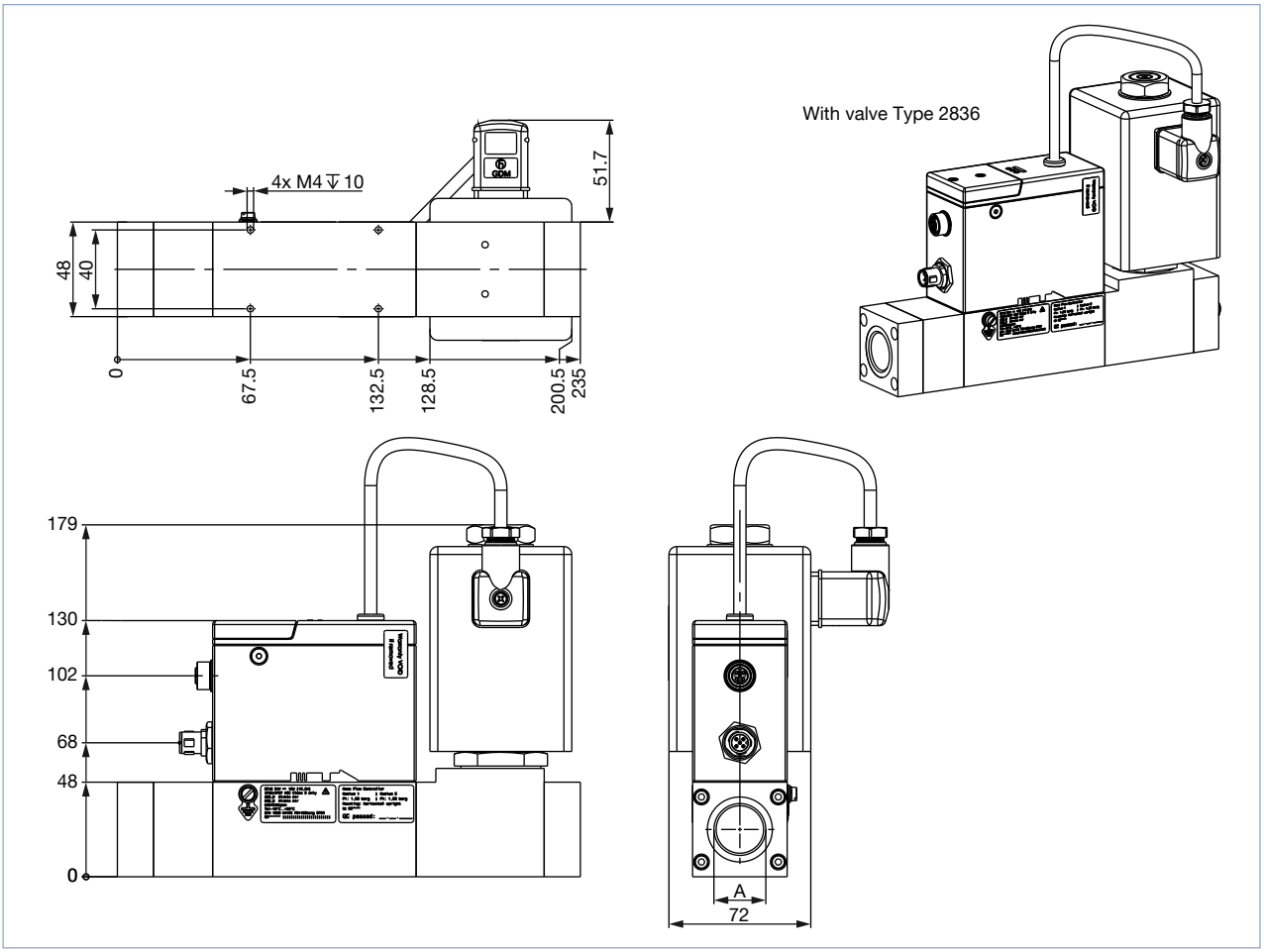
Version with base block A3 for very large nominal flow rates

Note:

- From a nominal flow rate Q_{Nom} >1500 l_N/min the overall length increases by 30 mm.
- Dimensions in mm



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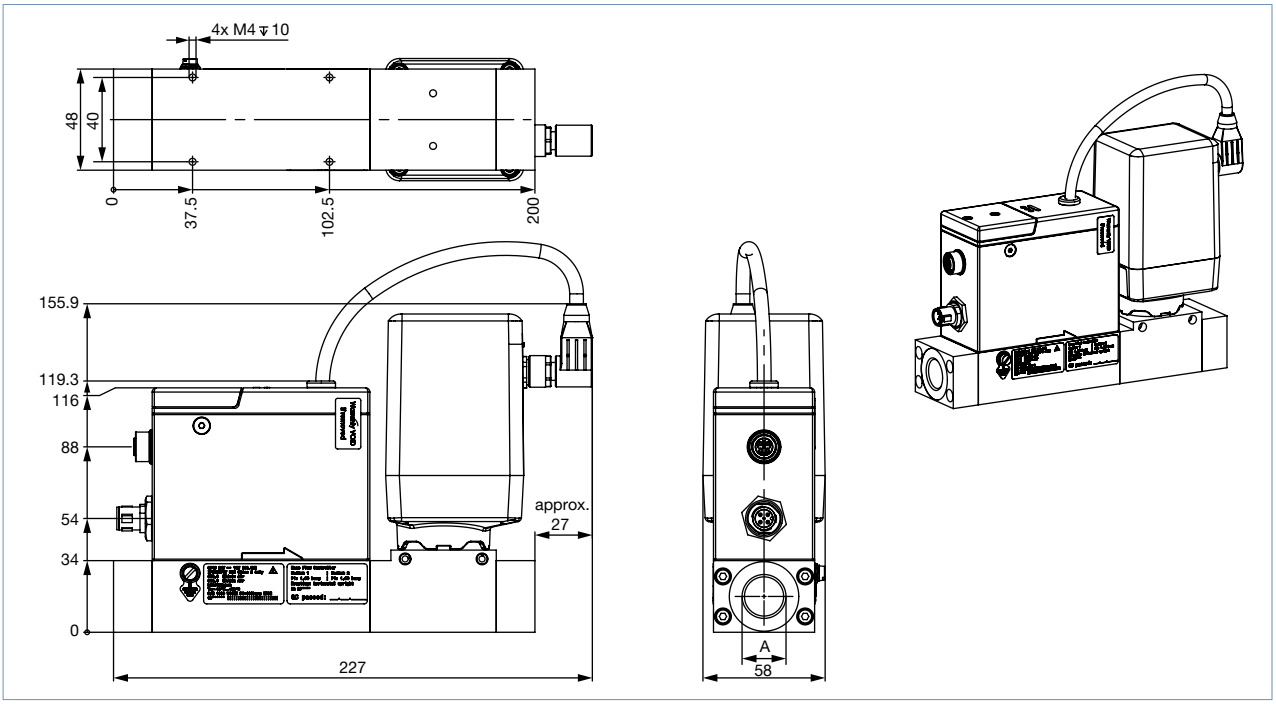
4.6. Version with electromotive proportional valve and analogue or PROFIBUS-DP interface

MFC with valve Type 3280

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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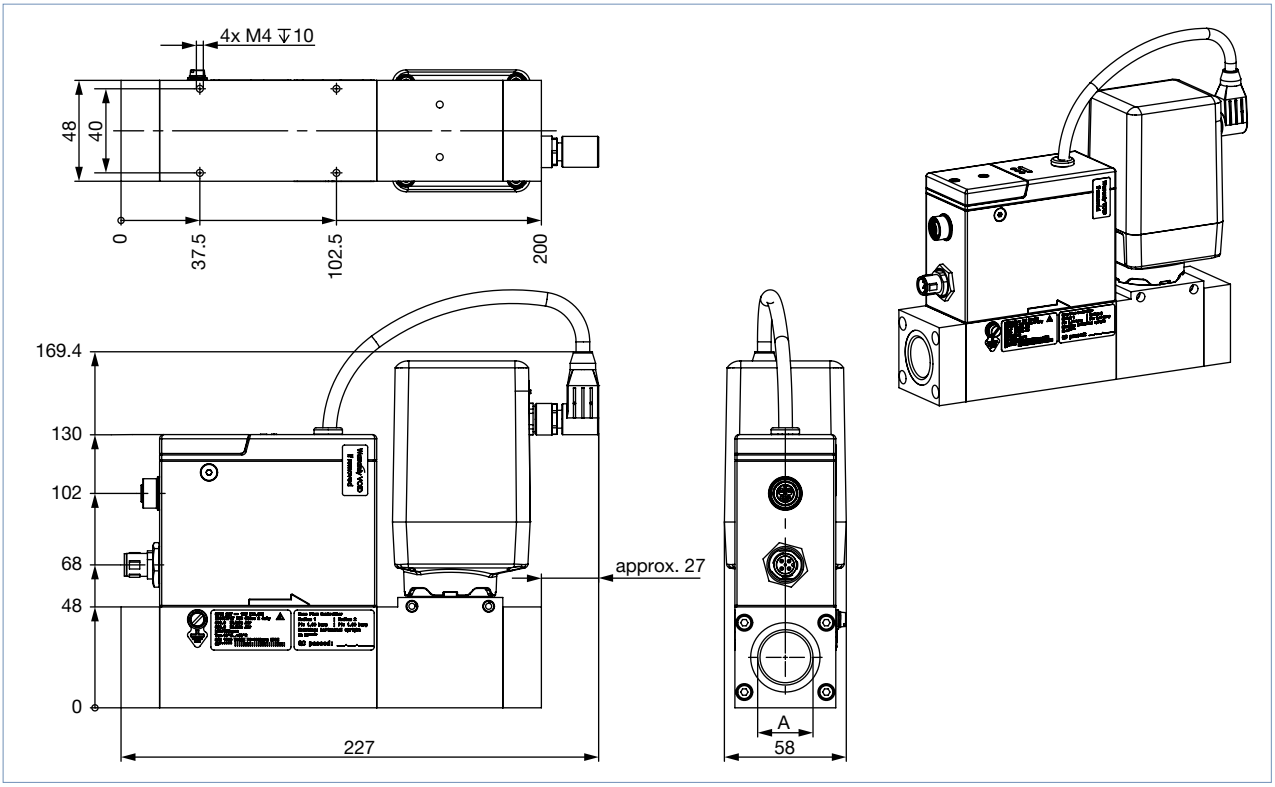
Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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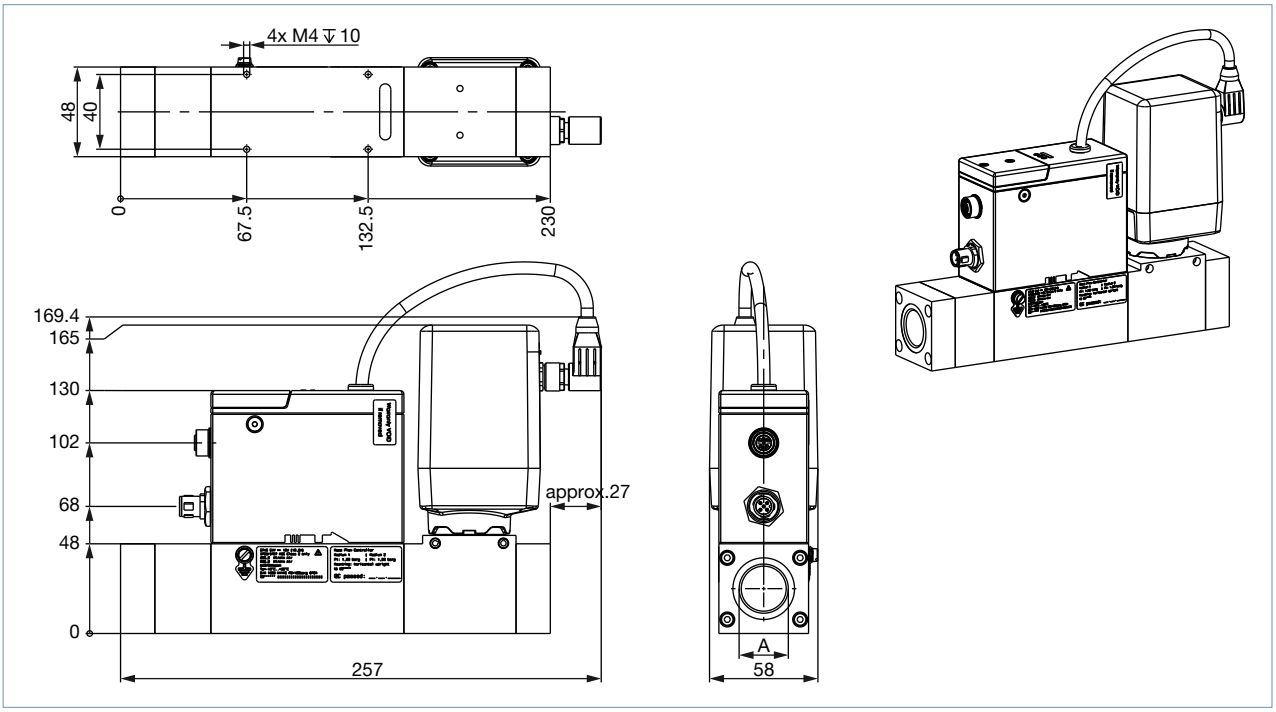
Version with base block A3 for very large nominal flow rates

Note:

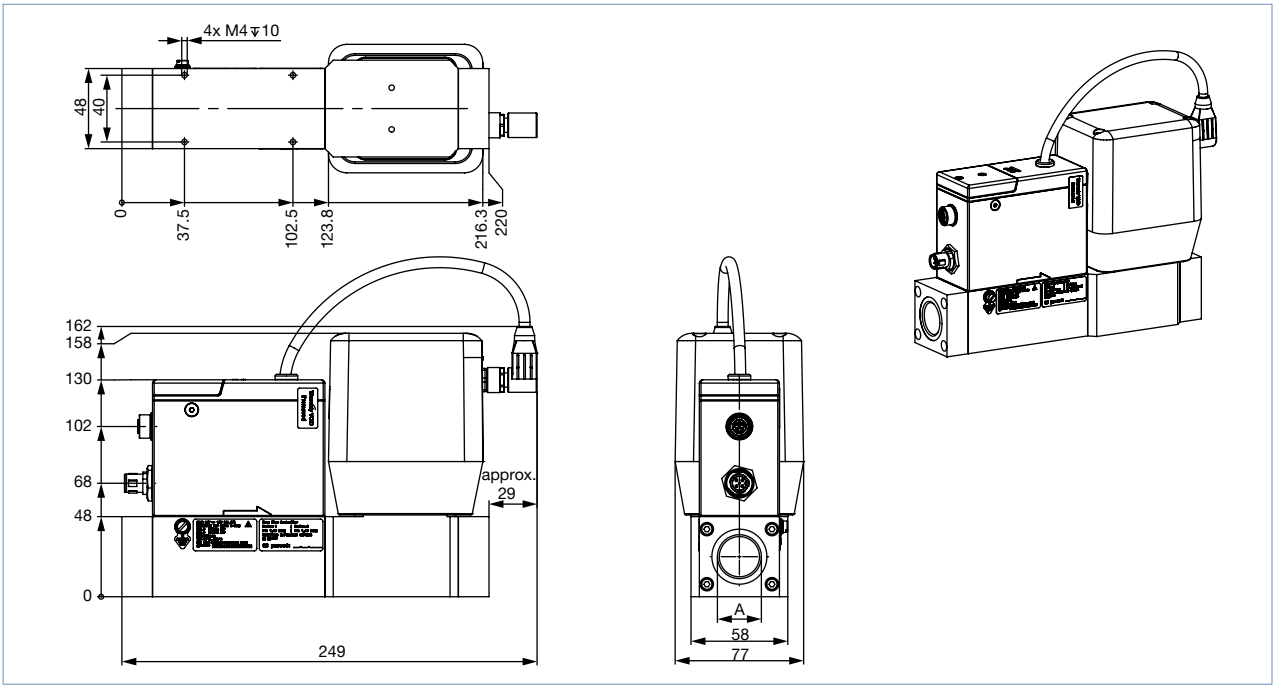
- From a nominal flow rate Q_{Nom} >1500 l_N/min the overall length increases by 30 mm.
- Dimensions in mm



MFC with valve Type 3285 (DN 12 and DN 15)

Version with base block A2 for large nominal flow rates

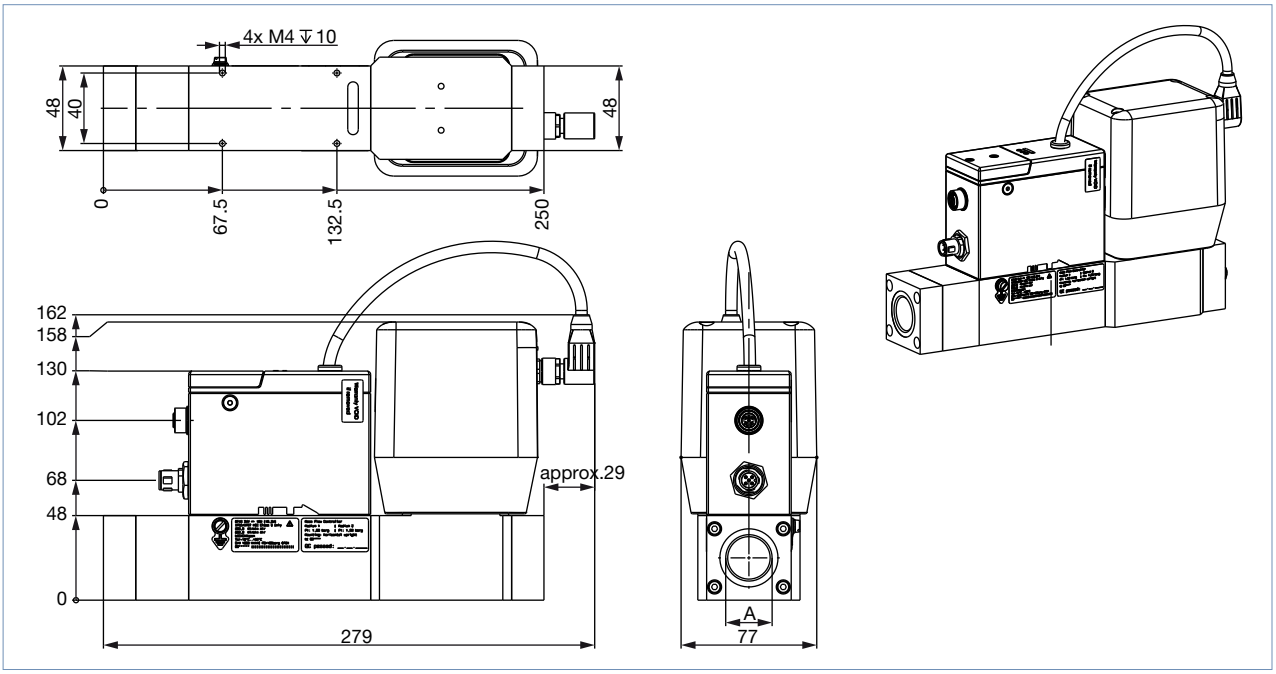
Note:
Dimensions in mm



Version with base block A3 for very large nominal flow rates

Note:

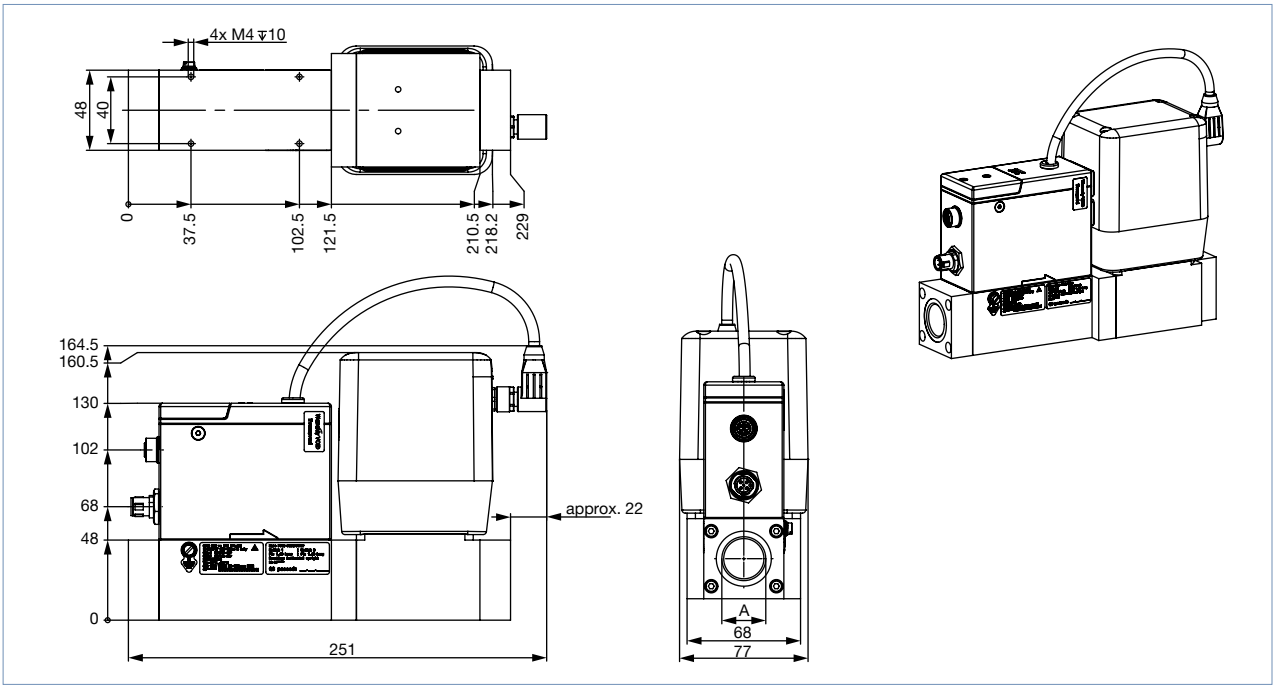
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



MFC with valve Type 3285 (DN 20 and DN 25)

Version with base block A2 for large nominal flow rates

Note:
Dimensions in mm



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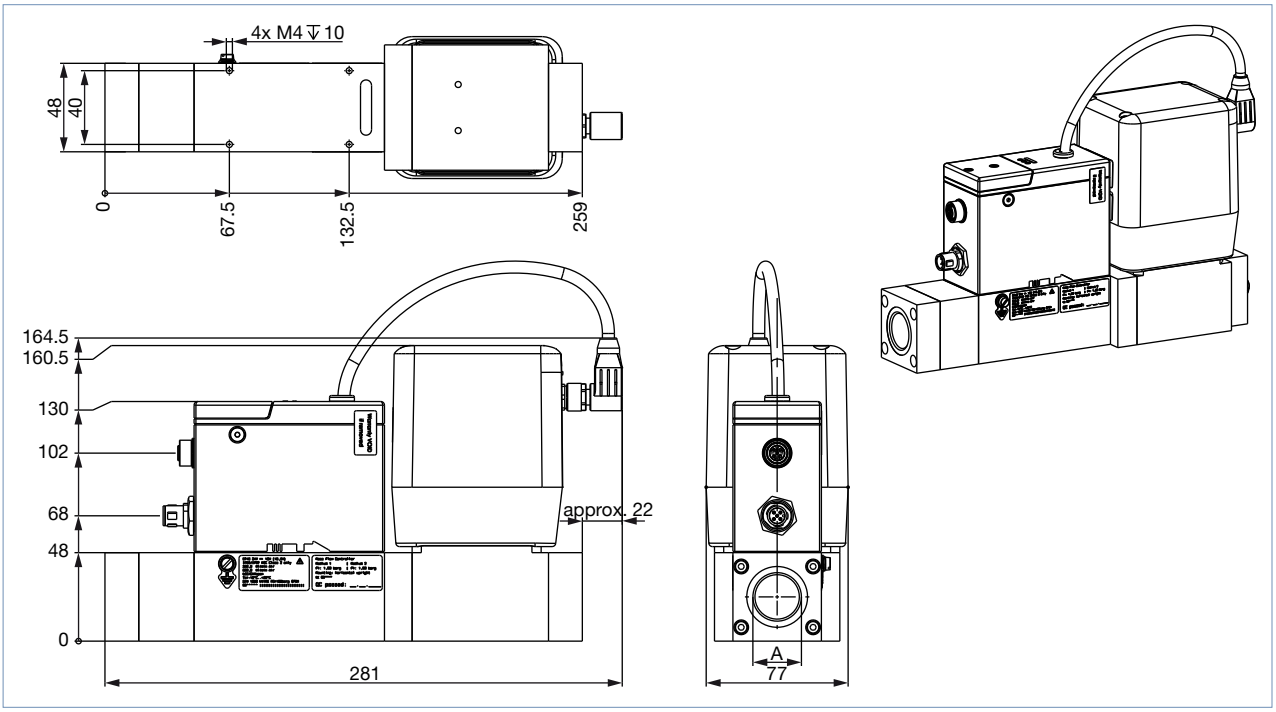
Version with base block A3 for very large nominal flow rates

Note:

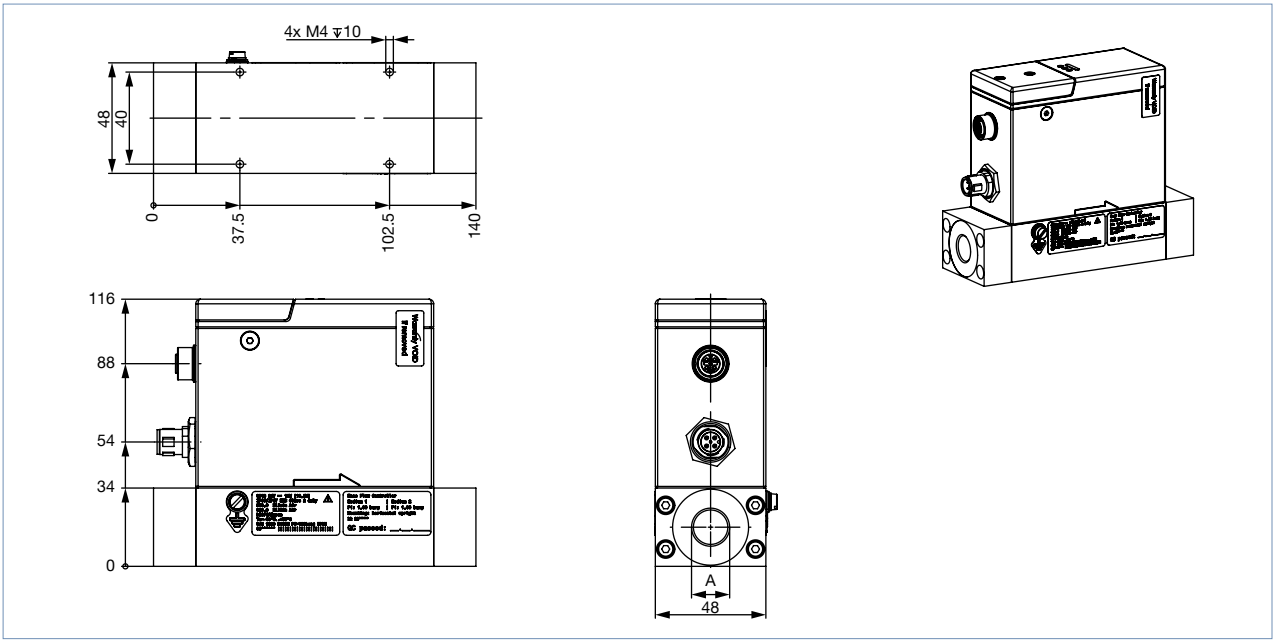
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



4.7. MFM version with analog or PROFIBUS-DP interface

Version with basic block 00 or A1 for small nominal flow rates

Note:
Dimensions in mm



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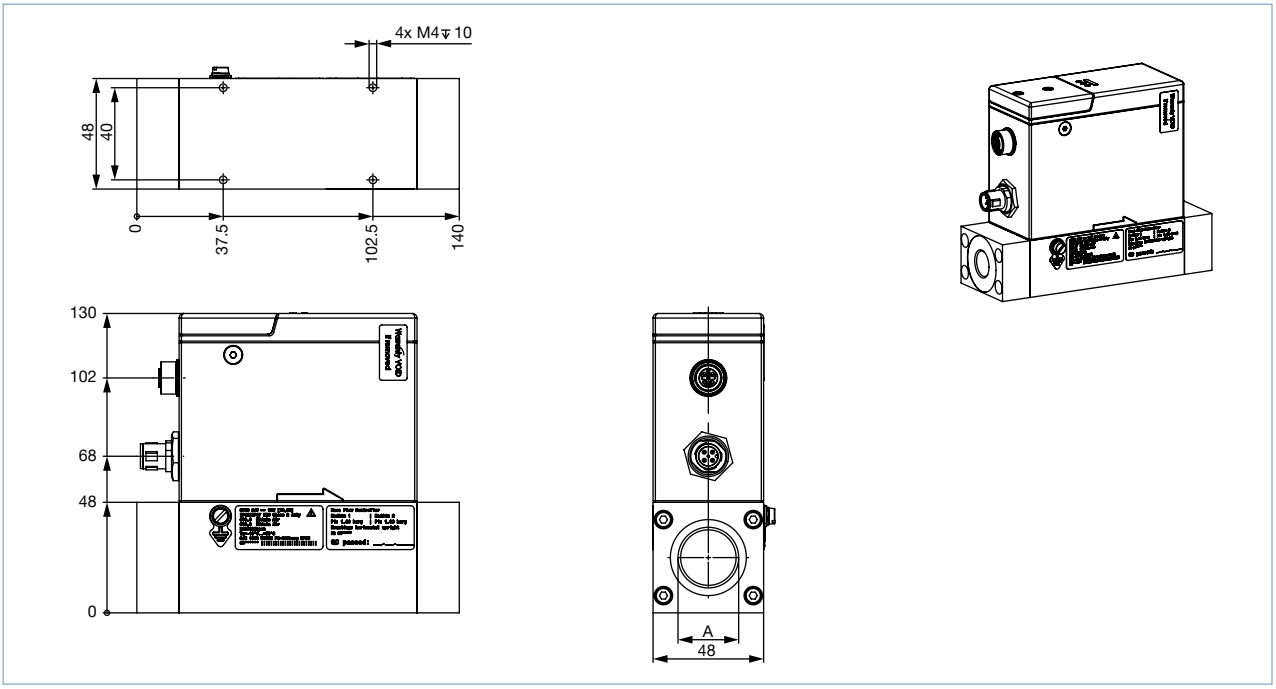
Version with base block A2 for large nominal flow rates

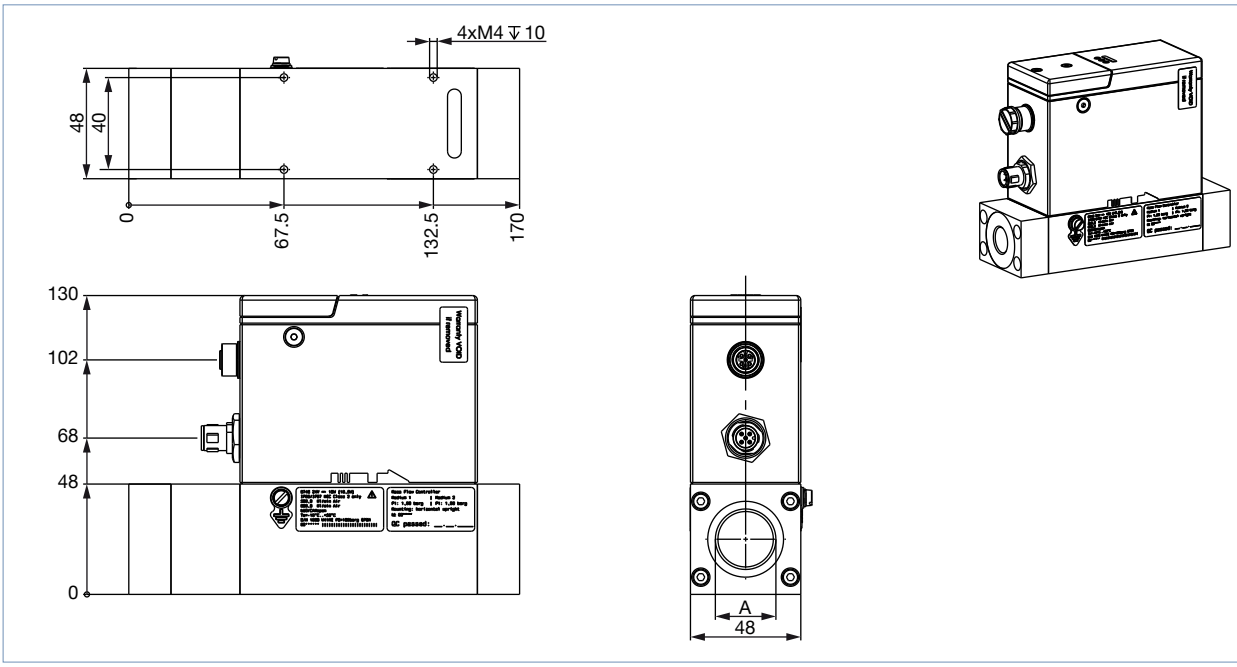
Note:
Dimensions in mm



Version with base block A3 for very large nominal flow rates

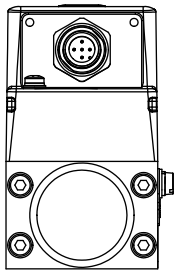
Note:

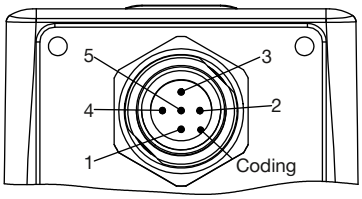
- From a nominal flow rate Q_{Nom} >1500 l_N/min onwards, the overall length increases by 30 mm.
- Dimensions in mm



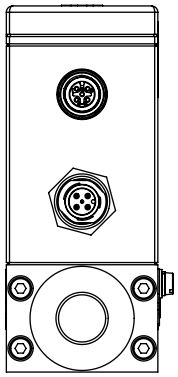
5. Device/Process connections

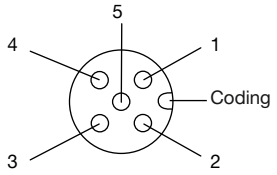
5.1. büS/CANopen

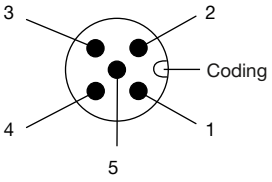


M12 plug, 5 pin (A-coded)	Pin	Configuration
	1	Shield
	2	24 V
	3	DGND
	4	CAN_H
	5	CAN_L

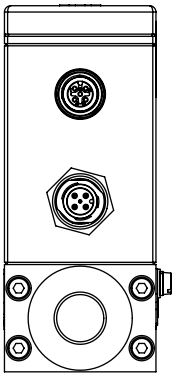
5.2. Analogue

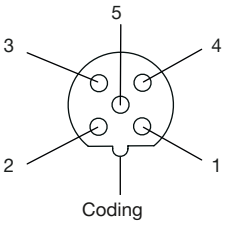


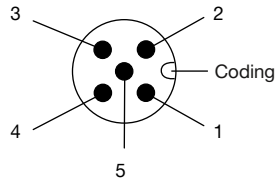
M12 socket, 5 pin (A-coded)	Pin	Configuration
	1	Digital input GND
	2	Digital input +
	3	Relay, Reference contact
	4	Relay, Opener (disconnect contact / normally closed (NC))
	5	Relay, Closer (make contact / normally open (NO))

M12 plug, 5 pin (A-coded)	Pin	Configuration
	1	GND for the analogue output (for MFM) or GND for the analogue output and the setpoint input (for MFC)
	2	24 V
	3	GND (for supply voltage)
	4	Setpoint input (not connected for MFM)
	5	Analogue output for the measured value

5.3. PROFIBUS-DP



M12 socket, 5 pin (B-coded)	Pin	Configuration
	1	5 V
	2	RxD / TxD (Line A)
	3	DGND
	4	RxD / TxD (Line B)
	5	Not connected

M12 plug, 5 pin (A-coded)	Pin	Configuration
	1	Shield
	2	24 V
	3	GND
	4	Not connected
	5	Not connected

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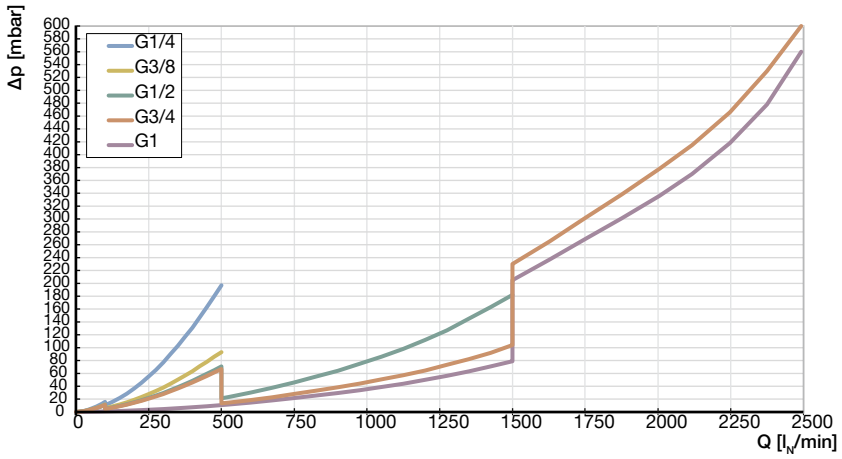
6. Performance specifications

6.1. Pressure Loss Diagram of the MFM

The diagram shows an example of the pressure loss characteristics when air flows through. To determine the pressure loss of another gas, the corresponding air equivalent must first be calculated and the basic fluidics used for the other gas taken into account.



6.2. Flow characteristic

Nominal flow range of typical gases

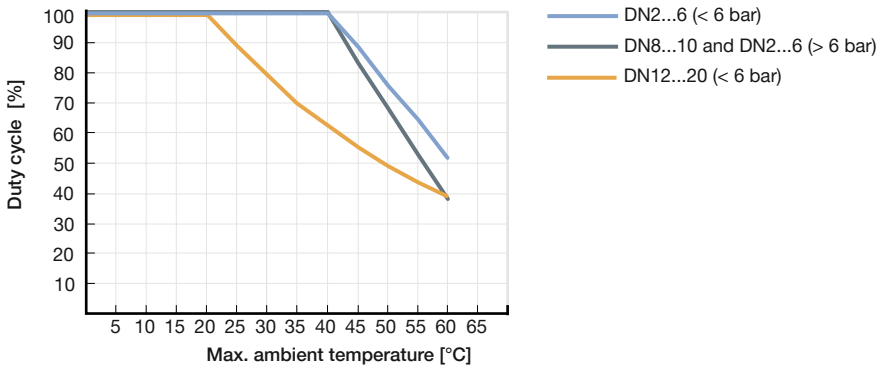
Note:

- All values refer to 1.013 bar abs and 0 °C (Index N)
- Other gases and gas mixtures on request

Gas	Min. Q_{Nom} [l_N/min]	Max. Q_{Nom} [l_N/min]
Acetylene	20	320 (from 65 l_N/min with air calibration)
Ammonia	8	1000
Argon	20	1600
Carbon dioxide	20	1000
Air, oxygen, nitrogen	20	2500
Methane	20	750
Propane	20	200

6.3. Derating diagram

Electromotive versions



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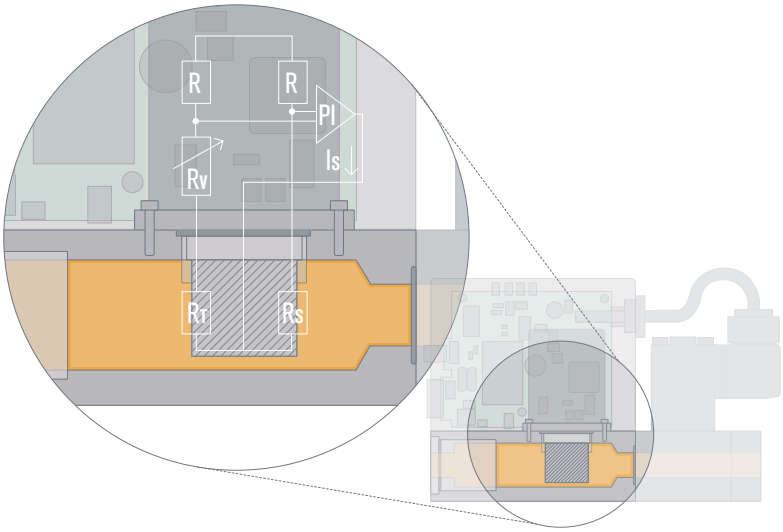
7. Product operation

7.1. Measuring principle

This sensor works as a hot-film anemometer in the so called CTA operational mode (Constant Temperature Anemometer). To do this, two resistors with precisely specified temperature coefficients located directly in the media flow and three resistors located outside the flow are connected together to form a bridge.

The first resistor in the gas flow (R_T) measures the fluid temperature, while the second, low value resistor (R_S) is heated so that it is maintained at a fixed, predefined overtemperature with respect to the fluid temperature. The heating current required to maintain this temperature is a measure of the heat being removed by the flowing gas, and represents the primary measurement.

An adequate flow conditioning within the MFC and the calibration with high quality flow standards ensure that the mass of gas flowing per time unit can be derived from the primary signal with high accuracy.

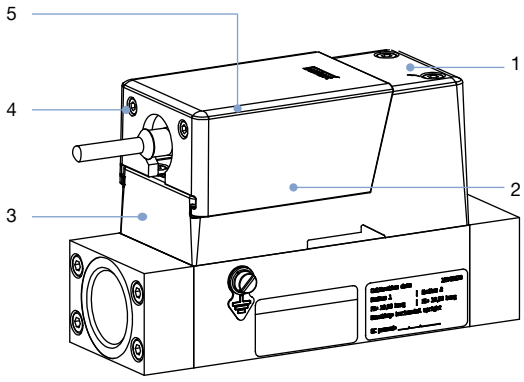


8. Product design and assembly

8.1. Product features

Measures to comply with ATEX requirements

Note:
Devices with ATEX conformity meet protection class IP65.



No.	Description
1	The standard requirements for cable glands are fulfilled for versions with external valve.
2	The M12 plug achieves protection class IP65 with and without mounted counterpart.
3	The die-cast housing receives IP protection under high mechanical stress.
4	The screws prevent uncoupling of the M12 connection under tension.
5	The impact protection cap prevents damage of the M12 plug and all connected elements if mechanical stress is applied. No particular ATEX sockets are required.

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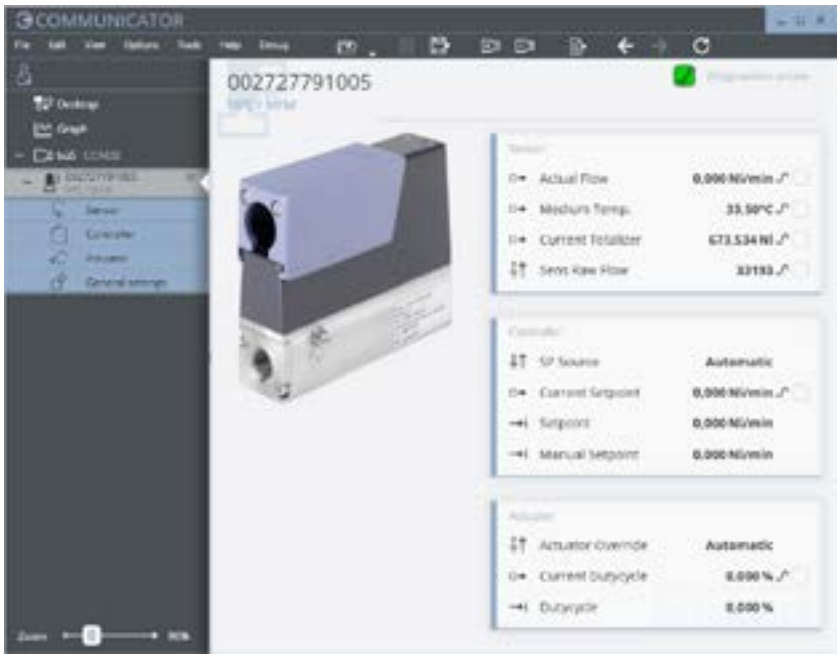
9. Product accessories

9.1. Bürkert Communicator Software

Note:
The corresponding communication software can be downloaded from the website **Type 8920** ▶.

Part of Bürkert's EDIP program (Efficient Device Integration Platform) is the Bürkert Communicator. This software can be run under MS-Windows and it is available on Bürkert's website for free. The Bürkert Communicator allows convenient system configuration and parametrisation of all connected field devices. An accessory part, the büS stick serves as the interface between computer and process instruments (see "10.5. Ordering chart accessories" on page 34). The Bürkert Communicator allows:

- Diagnostics
- Parametrisation
- Registration and storage of process data
- Graphic monitoring of process data
- Updating firmware of connected büS device stick
- Guided re-calibration routine
- Setting for a defined gas composition
- Zero point adjustment in case of changed ambient conditions



Type 8746 connection with Bürkert Communicator software

The interface to the "Bürkert Communicator" software tool is based on CANopen. The appropriate bus termination is mandatory. For Type 8746 with analogue or PROFIBUS interface, activate the termination resistor switch on the büS-stick. For Type 8746 büS/CAN-open, this termination resistor must not be activated, in case the device is already integrated in a properly terminated bus network

To connect the MFC / MFM with the "Bürkert Communicator" software tool, you need a büS stick. The büS stick sets contain the necessary accessories.

- For Type 8746 büS/CANopen, the connection is made directly via the 5 pin M12 plug (büS stick Set 1 contains the necessary accessories).
- For Type 8746, with analogue or PROFIBUS, the connection is made via the micro USB socket on the device (büS stick Set 2 contains the necessary accessories).

Please note: no external power supply must be connected to the micro USB socket. The power supply to the unit must be provided as described in chapter "5. Device/Process connections" on page 29.

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9.2. Configuration management for easy device replacement

Note:
Does not apply for CANopen.

Depending on the electrical connection of the MFC, the following options for device replacement are available to the user:

- Type 8746 büS: The device exchange is carried out via the configuration provider of the higher-level gateway control (ME43 or ME63). A micro SD card is required in the gateway for this. The micro SD card is available as an accessory and must be ordered separately.
- Type 8746 analogue or Profibus DP: The MFC is supplied with a micro-SIM card on which all relevant data are stored. If a device needs to be replaced, the micro-SIM card can be removed from the defective device and inserted into the new one. This transfers all data of the unit to be replaced to the new unit.

The prerequisite for a successful device replacement is that both the new device and the device to be replaced have the same device ID.

10. Ordering information

10.1. Bürkert eShop

Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

Order online now

10.2. Recommendation regarding product selection

Note:
Use the product enquiry form (see “10.4. Bürkert Product Enquiry Form” on page 34) for the device details and send it to us once completed.

For the proper choice of the actuator orifice within the MFC, not only the required maximum flow rate Q_{Nom}, but also the pressure values directly before and after the MFC (p_1, p_2) at this flow rate Q_{Nom} should be known. In general, these pressures are not the same as the overall inlet and outlet pressures of the whole plant, because usually there are additional flow resistors (tubing, additional shut-off valves, nozzles etc.) present both before and after the controller.

Please use the Product Enquiry Form to indicate the pressures directly before and after the MFC. If these are unknown or not accessible to a measurement, estimates are to be made by taking into account the approximate pressure drops over the flow resistors before and after the MFC, respectively, at a flow rate of Q_{Nom}. In addition, please quote the maximum inlet pressure $p_{1\,max}$ to be encountered. This data is needed to make sure the actuator is able to provide a close-tight function within all the specified modes of operation.

10.3. Bürkert product filter

Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

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10.4. Bürkert Product Enquiry Form

Bürkert Product Enquiry Form – Your enquiry quickly and compactly

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

Fill out the form now

10.5. Ordering chart accessories

Note:

- A büS stick is required to connect the MFC / MFM with the “Bürkert Communicator” software tool. It is connected via the micro USB socket on the device (büS stick set 2 contains the necessary accessories).
- Please note: The interface to our software tool “Bürkert Communicator” is based on CANopen. A corresponding bus termination is mandatory. Therefore, please activate the switchable terminating resistor on the büS stick.

Description	Article no.
General accessories	
Power supply Type 1573 for rail mounting, 100…240 V AC / 24 V DC, 1.25 A, NEC Class 2 (UL 1310)	772438
Power supply Type 1573 for rail mounting, 100…240 V AC / 24 V DC, 1 A, NEC Class 2 (UL 1310)	772361
Power supply Type 1573 for rail mounting, 100…240 V AC / 24 V DC, 2 A, NEC Class 2 (UL 1310)	772362
Power supply Type 1573 for rail mounting, 100…240 V AC / 24 V DC, 4 A	772363
büS stick Set 1 including cable (M12 and micro USB) Stick with integrated terminating resistor, power supply and software	772426
büS stick Set 2 including cable (M12 and micro USB) Stick with integrated terminating resistor	772551
Software Bürkert Communicator	Download from www.burkert.com
CANopen/büS	
büS cable extension M12, 0.1 m	772492
büS cable extension M12, 0.2 m	772402
büS cable extension M12, 0.5 m	772403
büS cable extension M12, 1 m	772404
büS cable extension M12, 3 m	772405
Connector M12, socket, straight[1,)]	772416
Connector M12, plug, straight[1,)]	772417
Connector M12, socket, angled[1,)]	772418
Connector M12, plug, angled[1,)]	772419
Y-junction	772420
Y-junction for connecting two separately powered segments of a büS network	772421
Termination resistor 120 Ω, M12 plug	772424
Termination resistor 120 Ω, M12 socket	772425
LabVIEW device driver	On request
Micro SD card for Fieldbus Gateway Type ME43 and Type ME63	774087
EDS-File (CANopen)	Download from www.burkert.com
Analogue	
Connection cable M12 plug (A-coded) on open leads, 5 m	566923
Connection cable M12 plug (A-coded) on open leads, 10 m	571393
Connection cable M12, socket (A-coded) on open leads, 5 m	560365
Connection cable M12, socket (A-coded) on open leads, 10 m	563108
PROFIBUS-DP	
Connection cable M12, socket (A-coded) on open leads, 5 m	560365
Connection cable M12, socket (A-coded) on open leads, 10 m	563108
Straight 5 pin M12 socket (A-coded)	772416

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Description	Article no.
Straight 5 pin M12 plug (B-coding)	918198
Straight 5 pin M12 socket (B-coding)	918447
Profibus Y-piece	902098
Profibus T-piece	918531
Profibus terminating resistor, plug (B-coding)	902553
Memory card	On request
GSD-File (PROFIBUS-DP)	Download from www.burkert.com

1.) It is possible that the M12 connectors cannot be used together on the same side of a Y-junction. If that is the case, please use a prefabricated cable which uses typically a thinner connector.

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For up-to-date addresses
please visit us at
www.burkert.com

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