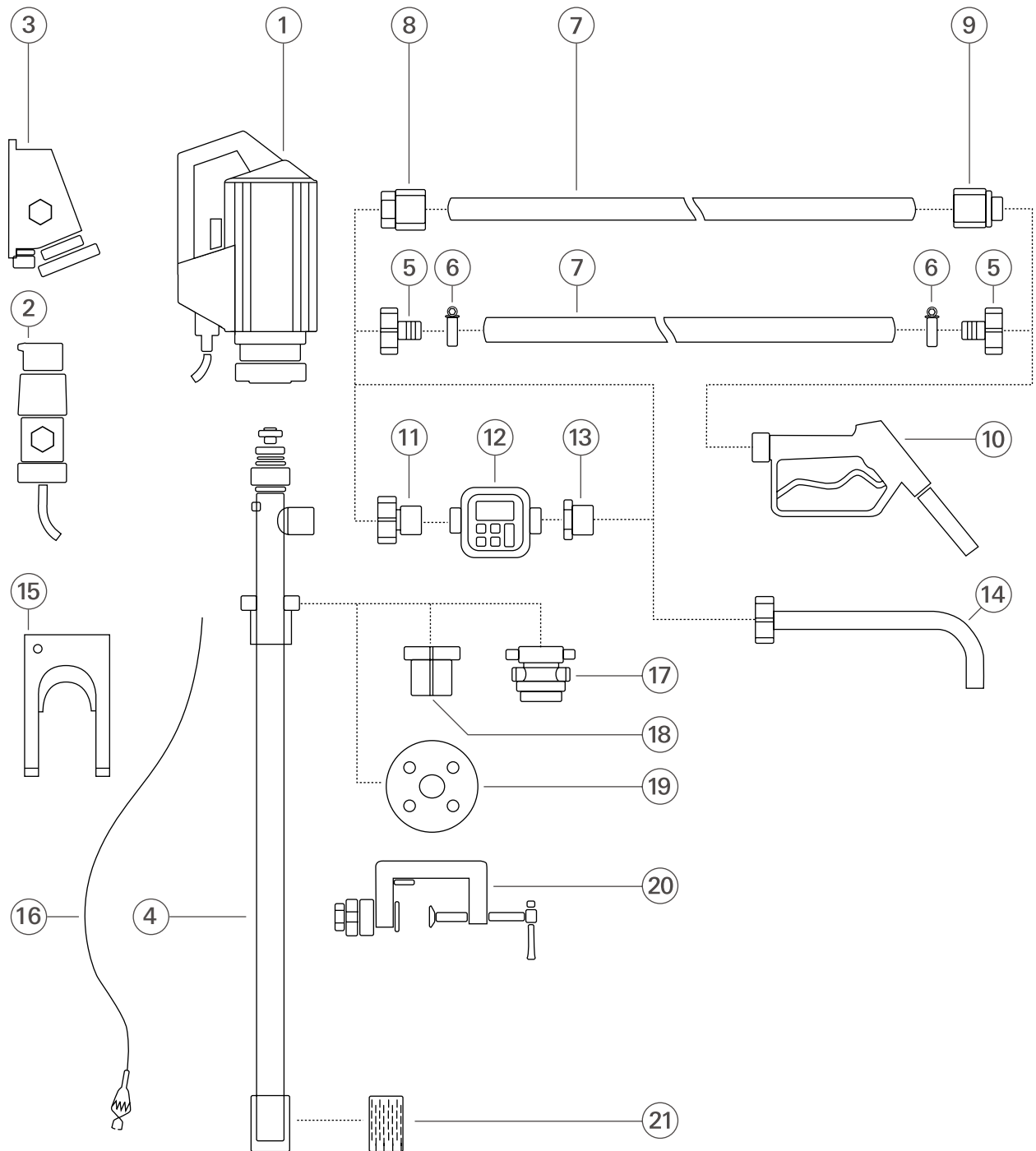


# Accessories



- 1 Drive motor
- 2 Explosion-proof plug
- 3 Explosion-proof socket
- 4 Pump tube
- 5 Hose connector
- 6 Hose clamps
- 7 Hose

- 8 Hose fittings
- 9 Hose fittings
- 10 Nozzle
- 11 Flow meter connection
- 12 Flow meter
- 13 Reducing piece
- 14 Discharge spout

- 15 Wall bracket
- 16 Equipotential bonding cable
- 17 Emission proof drum adapter
- 18 Drum adapter
- 19 Installation flange
- 20 Clamping device
- 21 Foot strainer

description ▼

data ▼

order-no. ▼

**Hose connector  
with wing nut**

for connecting the hoses  
to the drum pump

material	size	order-no.
PP	ND 19	825-0005
	ND 25	825-0006
	ND 32	825-0007
PVDF	ND 19	825-0008
	ND 25	825-0009
	ND 32	825-0010
stainless steel	ND 19	825-0011
	ND 25	825-0012
	ND 32	825-0013
HC	ND 19	on demand
	ND 25	825-0015
	ND 32	on demand



**Hose fittings**

for linking electrically conductive  
hoses to ensure elimination of  
electrostatic charges.

For mineral oil hose, solvent hose,  
chemical hose and chemical hose  
high-resistant.

material	size	order-no.
stainless steel 1.4571 for hose ND 25	IT G 11/4	825-0001
	AT G 1	825-0020
	IT G 1	825-0021
brass for hose ND 25	IT G 11/4	825-0002
	AT G 1	825-0022
	IT G 1	825-0023

IT = inner thread  
OT = outer thread



**Hose clamps**

to fix hoses at the hose connector

material	size	order-no.
stainless steel	ND 19-25	825-0003
	ND 25-32	825-0004



**Hoses**

**PVC – reinforced**

for aggressive, non-inflammable  
liquids like acids and caustics

operating pressure	size	order-no.
max. 10 bar	ND 19	820-0001
	ND 25	820-0002
	ND 32	820-0003

**PVC – clear, oil resistant**

for mineral oils

operating pressure	size	order-no.
max. 3 bar	ND 19	820-0028
	ND 25	820-0027
	ND 32	820-0029

**Mineral oil hose**

NBR liner, electrically conductive,  
for petrol, diesel oil, fuel oil and petroleum

operating pressure	size	order-no.
max. 10 bar	ND 19	820-0010
	ND 25	820-0011
	ND 32	820-0012

**Solvent hose**

EPDM liner, electrically conductive,  
for alcohols, benzene, toluene,  
acetone, glycols, softener oils, acids, caustics etc.

operating pressure	size	order-no.
max. 16 bar	ND 19	820-0004
	ND 25	820-0005
	ND 32	820-0006

**Chemical hose**

PE-X liner, electrically conductive,  
for approx. 95% of all industrial chemicals

operating pressure	size	order-no.
max. 16 bar	ND 19	820-0007
	ND 25	820-0008
	ND 32	820-0009

**Chemical hose high resistant**

FEP-liner, electrically conductive, for high-  
aggressive acids and caustics and nearly all liquids

operating pressure	size	order-no.
max. 16 bar	ND 19	820-0015
	ND 25	820-0016
	ND 32	820-0017

**D**

Accessories



description ▼ data ▼ order-no. ▼

**Equipotential bonding cable**

for electrically conductive connection between pump and drum or container, prevent electrostatic charges

2m with clips

815-0005



**Foot strainer**

to protect drum pump for coarse impurities

PP, ø 40 mm  
stainless steel, ø 40 mm

840-0002  
840-0003



**Wall bracket**

for safe keeping of drum pumps

steel varnished

840-0004



**Barrel adapter**

for fixing a drum pump in the barrel opening

PP, ø 40 mm, outer thread G 2  
SS, ø 40 mm, outer thread G 2

840-0006  
840-0005



**Clamping device**

to fix a drum pump in an opentopped barrel or container

stainless steel,  
for pump tube ø 40 mm

840-0008

**Discharge spout**

with wing nut  
connection thread G 1 1/4

PP  
PVDF  
stainless steel

840-0021  
840-0023  
840-0022



**Installation flange**

for fixing drum pumps  
ND 50, NP 6

PP  
PVDF  
stainless steel  
HC

840-0009  
840-0011  
840-0013  
840-0015



**Connecting flange**

for flanging on to piping  
ND 32, NP 6

PP  
PVDF  
stainless steel

840-0010  
840-0012  
840-0014

**Maintenance unit**

for compressed air motors  
to clean and oil the supply air

operation pressure max. 10 bar

850-0001

**Compressed air connector**

outer thread G 3/8, hose liner ND 9

850-0002



**Compressed air hose**

PVC-reinforced, ND 9

850-0003

**Connection cable**

as replacement or extension cable

for motors p310, p400 2-core  
for motors ex300 3-core  
for motors pd500 4-core

810-0001  
810-0002  
810-0003

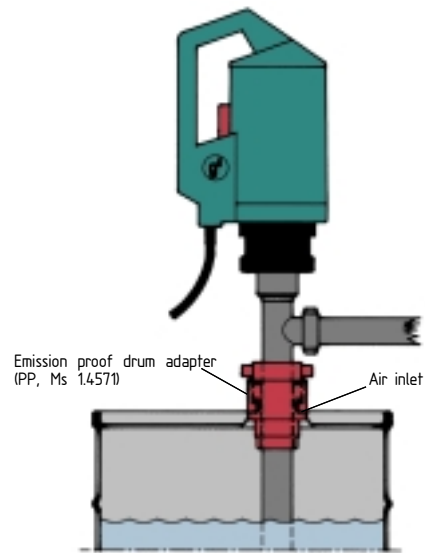


**D**

Accessories

## Emission proof drum adapter ESA

The emission proof drum adapter ESA, locks the pump tube in the drum opening and seals the opening around the tube. ESA prevents gas from leaking out of the drum opening into the environment. To avoid a vacuum, generated when pumping the liquid out of the drum, ESA has a valve, which allows air outside to enter the drum when a low pressure is created. If no liquid is pumped from the drum, then the valve remains closed and keep the gas inside the drum. ESA is available in different materials for all pump tubes with tube diameter 40 mm.



### Emission proof drum adapter

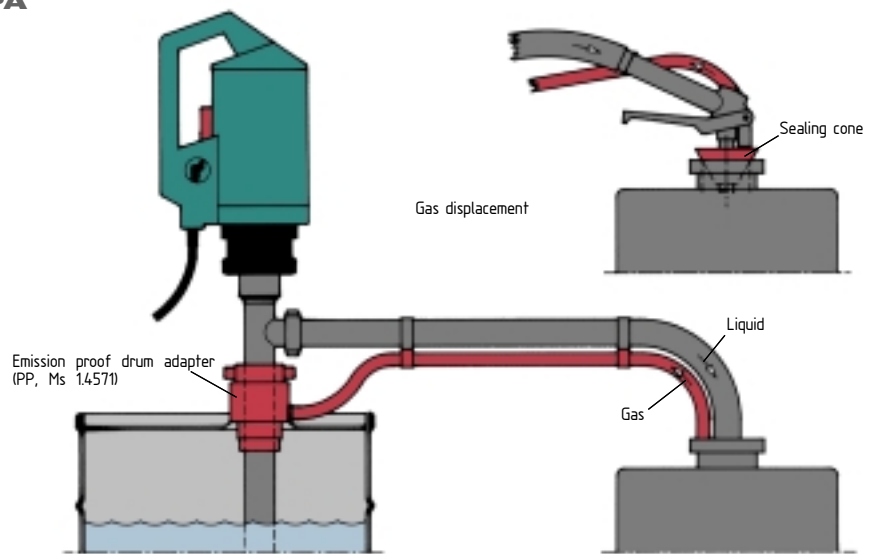
for drum opening G 2 and  
pump tube  $\varnothing$  40 mm

PP  
brass  
stainless steel

840-0095  
840-0096  
840-0097

## Gas displacement system GPA

The drum adapter with gas displacement system GPA secures the pump tube in the drum opening and also seals the opening around the pump tube. The GPA allows the exchange of gas via a small hose between the container to be emptied and the container to be filled. The gas volume displaced by filling the container may flow back into the container where the liquid is pumped out. With the GPA it is possible to create a closed circulation system which prevents any flammable gas from escaping into the environment. GPA is available in different materials for all pump tubes with 40 mm tube diameter.



### Gas displacement barrel adapter

for drum opening G 2 and pump  
tube  $\varnothing$  40 mm, with hose liner ND 9  
for gas displacement hose

PP  
brass  
stainless steel

840-0098  
840-0099  
840-0100

### Emission proof sealing cone

for gas displacement nozzle,  
with hose liner ND 9 for gas  
displacement hose

PP  
PTFE

840-0101  
840-0102

### Gas displacement hose

ND 9

PVC-reinforced  
NBR liner, conductive

850-0003  
820-0014

### Gas displacement nozzle

outlet tube  $\varnothing$  20 mm

PP, with hose liner ND 25  
SS, with outer thread G 1

830-0031  
830-0032

# Flow meter

## Flow meter electronic FM

The flow meter type FM is used to measure the volume of thin, low viscosity liquids. It can be mounted onto a drum pump or integrated into the pipeline.

The measuring principle is based on a radial turbine impeller. Because of the very low pressure losses it can be used with a very low pre-pressure. The pressure created when emptying a container is sufficient.

The measured value is transmitted sealless and contactless through magnets, so that there is a leakage-free separation between the wet and the dry area.

The conversion of the measured value is done through an electronic part with a display on it. Power is provided by extra long life lithium-batteries (service life 5 years).

The display is clear and readable and has two lines. The first big line (12 mm figures,

6-digit) shows the topical datas in litre. The second smaller line (6 mm figures, 6-digit) shows the total volume or a user-orientated partial-sum.

The clear foil-keyboard is easy to handle.

The display housing can be rotated in 90° steps.

Easy calibration regarding to the liquid.

For processing of measured values the flow meter can be fitted with an impulse-adapter.

For different liquids there are different materials.



### POM

for diesel oil, fuel oil, anti-freeze and other neutral liquids

### PP

for acids and caustics

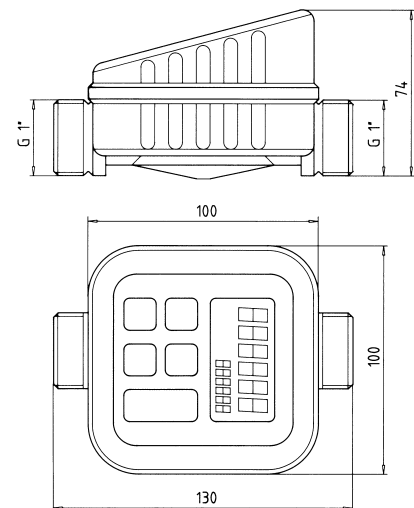
### PVDF

for highly aggressive acids, caustics and solvents

### OPERATING DATA FLOW METER

Typ		FM – POM	FM – PP	FM – PVDF
measuring principle		radial turbine impeller		
material:	housing	POM	PP	PVDF
	turbine	POM	PP	PVDF
	shaft	SS	HC	HC
	seal	NBR	FPM	FPM
flow range		20 – 125 l/min		
accuracy		±1 %		
operating pressure		max. 2 bar		
burst pressure		10 bar	4 bar	4 bar
temperature		-10 to +40 °C		
connection		outer thread G 1		
weight		0,3 kg		
order-no.		860-0007	860-0008	860-0009

POM = Polyoxymethylene      HC = Hastelloy C-4      SS = stainless steel 1.4571  
 PP = Polypropylene          NBR = Perbunan  
 PVDF = Polyvinylidene fluoride      FPM = fluorine rubber



D

Accessories/  
Flow meter

### OPERATING DATA CONNECTION PIECES FOR FLOW METER

description	flow meter	connecting thread	material	order-no.
<b>flow meter</b>	FM-POM		SS, NBR	825-0046
<b>connection</b> onto the drum pump (inlet)	FM-POM	inner thread	brass, NBR	825-0047
	FM-PP	G 1 1/4 – G 1	PP	825-0048
	FM-PVDF		PVDF,FPM	825-0066
<b>reducing piece</b> (outlet)	FM-POM		SS, NBR	825-0070
	FM-POM	inner thread G 1 -	brass, NBR	825-0067
	FM-PP	outer thread G 1 1/4	PP	825-0068
	FM-PVDF		PVDF,FPM	825-0069

# Flow meter

## Flow meter electronic EDM Explosion-proof EEx ia IIC T6

The flow meter type EDM is used to measure the volume of thin, low viscosity and also inflammable liquids. It is mainly designed to integrate into a pipeline or hoseline.

The measuring principle is based on an axial turbine impeller. Because of the very low pressure losses it can be used with a very low pre-pressure.

The measured value is transmitted sealless and contactless through magnets, so that there is a leakage-free separation between the wet and the dry area.

The conversion of the measured value is done through an electronic part with a display on it. Power is provided by extra long life lithium power cells (service life up to

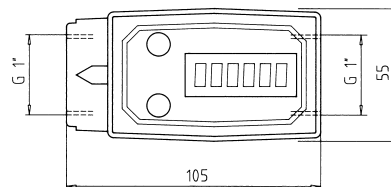
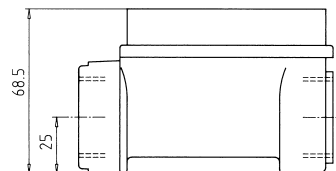
4.000 hours).

The display shows a resettable batch total and a non-resettable cumulative total.

Easy calibration regarding to the liquid.

For processing of measured values the flow meter can be fitted with an impulse-adapter.

For different liquids there are different materials.



### Nylon

for neutral liquids

### Stainless steel (SS)

for aggressive liquids

type ▶		EDM-Nylon	EDM-SS
measuring principle		axial turbine impeller	axial turbine impeller
material:	housing	Nylon	stainless steel
	turbine	Nylon	PVDF
	bearing	ceramic	ceramic
	shaft	tungsten carbide	tungsten carbide
	magnet	ferrit	PVDF covered
flow range		10 – 190 l/min	10 – 190 l/min
accuracy		±1 %	±1 %
operation pressure		10 bar	50 bar
temperature		-10 to +60 °C	-10 to +60 °C
connection		inner thread G 1	inner thread G 1
protection class		EEx ia IIC T6	EEx ia IIC T6
weight		0,3 kg	1,0 kg
order-no.		860-0003	860-0006

# Questionnaire for our offer

## 1. Medium

- 1.1 Type \_\_\_\_\_ chemical formula \_\_\_\_\_
- 1.2 Concentration \_\_\_\_\_ %
- 1.3 Density \_\_\_\_\_ g/cm<sup>3</sup>
- 1.4 Viscosity \_\_\_\_\_ mPas/cP at \_\_\_\_\_ °C
- 1.5 Operating temperature \_\_\_\_\_ °C
- 1.6 Suspended solids \_\_\_\_\_ g/l  hard  soft particle size \_\_\_\_\_ mm
- 1.7 Does the medium tend to crystalize?  yes  no at \_\_\_\_\_ °C
- 1.8 Which materials according to your experience are resistant against the medium (tubes, fittings)? \_\_\_\_\_

## 2. Operating conditions

- 2.1 Capacity flow \_\_\_\_\_ m<sup>3</sup>/h or l/min
- 2.2 Delivery head (including pipework resistance) \_\_\_\_\_ m wc
- 2.3 Operating conditions?  portable  permatent  vertical  horizontal
- 2.4 Immersion depth \_\_\_\_\_ mm flange  yes  no
- 2.5 Drum aperture diameter \_\_\_\_\_ mm
- 2.6 Strainer  yes  no
- 2.7 Operating hours per day \_\_\_\_\_ closing frequency \_\_\_\_\_

## 3. Motor

- 3.1  AC  DC  three phase current  compressed air
- 3.2.1 Voltage \_\_\_\_\_ Volt / Frequency \_\_\_\_\_ Hz
- 3.2.2 Pressure \_\_\_\_\_ bar
- 3.3 Flame proof required?  yes  no
- Class of hazard: \_\_\_\_\_ Protection: \_\_\_\_\_
- Special requirements: \_\_\_\_\_

## 4. Offer to

- Company: \_\_\_\_\_
- Address: \_\_\_\_\_
- Telephone: \_\_\_\_\_ Telefax: \_\_\_\_\_
- Date: \_\_\_\_\_ Signature: \_\_\_\_\_

