

Hydraulic Diaphragm Metering Pump Evolution mikro

For the smallest quantities at the highest pressures



Capacity range 0.02 – 18.0 l/h, 400 – 16 bar

With a capacity range of 0.02 – 18 l/h at pressures of up to 400 bar, the hydraulic diaphragm metering pumps Evolution mikro EMFa and EMHa are extremely suitable for ultra-precise micro-metering in gas metering and filling processes of all kinds. They are also used for additive metering in oil, gas and chemical applications, etc.

Typical applications include the metering of additives in gas metering and filling processes.

The Evolution mikro is the first of its kind with an electronically regulated direct power end. It can be ideally adapted to the respective application, thanks to an adjustment range of 1:200 and the combination of individually independent metering profiles with 3-parameter control.

Your benefits

Maximum process reliability:

- Precise micro-metering at high pressures
- Hermetically sealed by PTFE multi-layer safety diaphragm or metal diaphragm
- Long service life thanks to its sturdy construction with low-wear, contact-less power end

- High positional accuracy guarantees reproducibility of better than $\pm 1\%$

Excellent flexibility:

- Seriously extended adjustment range of up to 1:200
- Universally controllable with electronically integrated overload protection

Field of application

- Additive metering in the chemical and petrochemical industry
- General filling processes in industry
- Metering of additives in the food industry
- Universal lab applications
- Gas metering applications

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Technical Data

Technical data for EMFa - Evo mikro with PTFE multi-layer safety diaphragm

Plunger Ø	Max. pressure	stroke rate	Feed rate at max. pressure	Theor. stroke volume	Suction lift	Connection, suction/ discharge side	Shipping weight
mm	bar	strokes/min	l/h	ml/stroke	m WC	Connector	kg
3	400	140	0.6	0.42	1	DN 3	25
3	320	200	1.5	0.42	1	DN 3	25
3	250	200	2.0	0.42	1	DN 3	25
3	160	200	2.8	0.42	1	DN 3	25
3	100	200	3.3	0.42	1	DN 3	25
3	64	200	3.7	0.42	1	DN 3	25
3	25	200	4.1	0.42	1	DN 3	25
6	100	140	10.2	1.69	1	DN 6	25
6	80	140	10.8	1.69	1	DN 6	25
6	64	200	16.7	1.69	1	DN 6	25
6	40	200	17.0	1.69	1	DN 6	25
6	25	200	18.0	1.69	1	DN 6	25

Technical data for EMHa - Evo mikro metal diaphragm

Plunger Ø	Max. pressure	stroke rate	Feed rate at max. pressure	Theor. stroke volume	Suction lift	Connection, suction/ discharge side	Shipping weight
mm	bar	strokes/min	l/h	ml/stroke	m WC	Connector	kg
3	400	140	1.5	0.42	1	DN 3	25
3	320	200	2.7	0.42	1	DN 3	25
3	250	200	3.2	0.42	1	DN 3	25
3	160	200	3.8	0.42	1	DN 3	25
3	100	200	4.0	0.42	1	DN 3	25
3	64	200	4.3	0.42	1	DN 3	25
3	25	200	4.5	0.42	1	DN 3	25
6	100	140	11.0	1.69	1	DN 6	25
6	80	140	11.5	1.69	1	DN 6	25
6	64	200	16.7	1.69	1	DN 6	25
6	40	200	17.0	1.69	1	DN 6	25
6	25	200	18.0	1.69	1	DN 6	25

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Materials in Contact With the Medium

Dosing head complete

Dosing head	Diaphragm retaining screw	Diaphragm
Stainless steel	Stainless steel 1.4462	PTFE multi-layer diaphragm

Ball valve DN 3 – DN 6

	Suction/ pressure connector	Valve/head seal	Valve ball	Valve seat	Valve housing	Clamp ring
DN 3 (double ball)	Stainless steel 1.4404	Stainless steel 1.4404	Al ₂ O ₃ ceramic	Stainless steel 1.4404	Stainless steel 1.4404	Hastelloy C4
DN 6 (double ball)	Stainless steel 1.4404	Stainless steel 1.4404	SIN ceramic	Stainless steel 1.4404	Stainless steel 1.4404	Hastelloy C4

Hastelloy C, PVDF and PTFE on request