

Ritmo[®] 030



The robustness and intelligence of metering with extremely wide setting range, intelligent pressure sensors and versatile, application-specific material selection

Metering pumps – exactly matching your needs

Ritmo[®] - 030 metering pumps are specialized, high-precision metering pumps for laboratory and process optimization, for drinking and waste water treatment and for all possible tasks of industrial applications.

They are characterized by their versatile application-specific material equipment up to a full version of PTFE with **highest chemical resistance**, **product purity** and **FDA-/BGVO-Konformität**.

Available in **9 sizes** of 40 µl/min to 500 ml/min, back pressures to 16 bar and an extremely broad set of 1:1000

With the versatility of a variable, **application-specific selection of materials** with PP, PVC, PVDF, PTFE and stainless steel pump heads.

In the full-PTFE construction for nearly all **aggressive fluids**, acids, alkalis and solvents, for high-purity processes and metal-free applications and for dispensing in the pharmaceutical, food and beverage industry.

With nonpositive diaphragm actuator, full suction stroke and delayed discharge action for constant, **low-pulsation metering**.

With **simple operation** by pressing a click wheel and well laid out menu navigation with direct indication of the metering rate in µl/min or ml/min and the pressure (when using a pressure sensor).

With **versatile functions** available for continuous dosing, batch dosing, pulse dosing and with timer functions, quick air vent and pressure sensors.).

Pump head with built-in pressure sensor (R033 version) for maximum **process reliability** by disconnection of the metering process at over pressure (eg blockade of dosing pipe) or undercut a minimum pressure (eg, defect in the suction line).

Intelligence through integrated **flow measurement** using pressure sensors and indicator diagram. Pump-internal control of actual metering flow according to changed processing parameters (pressure) or error effects (air bubbles).

Versatile, process and **automation-capable interface configurations** for automated processes (analog interface 4-20 mA, analog output, impulse control, level control, Profibus-connection)

- Metering pumps in full-PTFE-design
- Metering pumps in PP, PVDF, PVC, stainless steel
- Metering pumps with pressure monitoring
- Metering pumps with dosing errors compensation
- Metering pumps with heated and cooled pump head
- Batch- and filling pumps
- Process diaphragm pumps up to 940 l/h
- Piston diaphragm pumps up to 200 bar
- Double-piston diaphragm pump with 2 pump heads
- Motor pumps in Ex-Design
- pH-controlled pumps
- wide range of accessories

Ritmo[®] 030

Metering pumps
from 40 µl/min to 500 ml/min



Hofstraße 9 · 78073 Bad Dürkheim · Germany
Tel. +49 (0) 77 26 - 92 96 55 · Fax: +49 (0) 77 26 - 92 96 56
www.finkct.de · info@finkct.de

Specifications

pump type	R 031/...		R032/...			R033/...			
	6-10	15-4	6-10	9-7	15-4	7-16	12-10	17-7	30-4
max. metering capacity (l/h)	6,0	15,0	6,0	9,0	15	7,5	12,0	17,0	30,0
max. metering capacity (l/h) *			3,0	4,5	7,5	3,75	6,0	8,5	15,0
min. metering capacity (ml/h)	6,0	15,0	6,0	9,0	15,0	2,5	12,0	17,0	30,0
max. pressure outlet (bar)	10,0	4,0	10,0	7,0	4,0	16,0 **	10,0	7,0	4,0
max. pressure inlet (bar)	2	2	2	2	2	2	2	2	2
min. pressure difference (bar)	1	1	1	1	1	1	1	1	1
max. stroke freq. (stroke/min)	140	180	140	200	180	190	155	205	180
stroke volumen (ml)	0,81	1,58	0,81	0,84	1,58	0,74	1,45	1,55	3,10
min. stroke duration (sec.)	0,428	0,333	0,428	0,300	0,333	0,316	0,400	0,293	0,333
max. stroke duration (sec.)	486,03	379,19	486,03	336,13	379,19	1065,72	434,99	328,23	372,02
max. suction lift, filled (m)	6	6	6	6	6	6	6	6	6
max. viscosity (mPas) *	50	50	50	50	50	50	300	300	150
max. viscosity (mPas) **	600	500	600	500	500	600	500	500	200
min. inner- Ø pipe (mm) ***	4	6	4	6	6	4	6	6	9
max. fluid temperature	80°C (176°F)								
heating pump head	100°C (212°F)								
ambient temperature	45°C (113°F)								
material pump head	PP, PVC, PVDF, PTFE, VA 1.4401								
material diaphragm	PTFE								
material valves	ceramics, VA 1.4401, PTFE								
input voltage	100-240 V								
power consumption	12 W	12 W	14 W	14 W	14 W	18 W	18 W	18 W	18 W
enclosure class	IP 65								
max. dimensions (LxBxH)	280 x 120 x 196 mm								

The above rated values have been carefully determined with reference fluid. If other fluids are metered, the above values may differ minimal.

* Max. metering capacity * = with Antikavitationsmodus 50%
(Suction lift based on measurements made with water)

** Max. operating pressure - in PTFE design max. 10 bar

• Max. viscosity * with reduced max. metering capacity (approx. 30%),
(without a spring-loaded valves in suction 1m)

** Max. viscosity ** with reduced max. metering capacity (approx. 30%),
(with spring-loaded valves in suction 1m)

*** Min. inside diameter hose / tube, based on water
(Length suction hose 1.5 m, length discharge hose 10 m)



① stainless steel pump head



② PTFE pump head with pressure sensor

Fluid connecting options:

- ① Inside thread for 1/4" G or 1/4" NPT
- ② RGLK-PTFE-connection with PTFE-sealing ring and cone
- ③ Swagelok-/Gyrolok-stainless steel screwing
- ④ tapered hose connection with screw cap (not shown)
- ⑤ coupling body with adaptation for pressure relief valve
- ⑥ pressure retention valve in Full-PTFE design
- ⑦ valve body, consisting of block valve and pressure relief valve

