

# Ritmo 05

*Elegant and easy metering with positively controlled valves, variable pressure stroke and in all PTFE design for fluids and gases.*



**Metering pumps – exactly matching your needs**

- **Easy and simple operation with direct adjustment of the delivery rate in ml/h**  
(no complex computations from stroke volume and stroke frequency and no complex calibration tables)
- **Metering with consistent and constant stroke length**  
(for linear metering performance over the entire setting range and low dead volumes for minimum outgassing risk in the pump head))
- **Pump head, diaphragm and valves in all PTFE design version**  
(for universal use with ultimate chemicals resistance, also in heated design)
- **Displacement of the working diaphragm via linear action**  
(with rapid suction velocity (and anti-cavitation mode) and delayed output velocity (low pulsation, quasi-continuous metering))
- **Positively controlled, friction-locked and absolutely backlash-free driveover the entire metering process via recirculating ball screws**  
(with accurate and reproducible metering steps, long service life and maintenance free)
- **Positively controlled valves cycled via solenoids**  
(absolutely tight pump head between pressure and suction side, robust suction performance right into the vacuum range))
- **Volumetric metering for liquids, gases, liquid gases, fluids under prime pressure, solvent with high vapour pressure**  
(no additional external lock valves)
- **Sampling / discharge from vacuum, metering at high vacuum levels**  
(no additional external lock valves)
- **Easy calibration via fixed menu item**  
(differences quickly corrected in the display menu and providing ultimate metering accuracy under controlled consumption of chemicals)
- **Versatile and varied functions**  
(rapid venting (Max function), flushing steps (Clean function), changing the direction of delivery (Return function), process capability via analogue interface 4-20 mA and master-slave functions)
- Stepping motor controlled diaphragm metering unit
- Metering pumps in all PTFE design versions
- Diaphragm metering unit with positively controlled valve engineering
- Metering pumps with heated and cooled pump head
- Metering pumps for vacuum applications
- Sampling pumps with flushing function
- Gas metering pumps
- Gas mixing pumps
- Metering systems consisting of metering pump and Coriolis measurement technology
- Metering pump system in master-slave-configuration
- High pressure metering pumps
- Batch- and filling metering pumps
- Multi-channel distributor pumps
- Pneumatic metering pumps
- Ex-protected metering pumps
- Special customised solutions

## Ritmo 05

Metering pumps with capacities ranging from 0.5 ml/h to 15 l/h



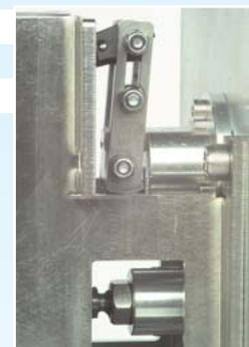
# Ritmo 05

## Specifications



Pump type	R 05/03	R 05/30	R 05/60	R 05/120	R 05/150	R 05/250
max. metering capacity ml/min	3	30	60	120	150	250
min. metering capacity µl/min	3	30	60	120	150	250
max. stroke frequency strokes/min	ca. 43	ca. 43	ca. 46	ca. 48	ca. 79	ca. 79
max. pressure inlet bar	4	4	3	2	3	2
max. pressure outlet bar	4	4	3	2	3	2
Stroke volume µl	70	700	1300	2500	1900	3400
min. stroke duration sec	1,4	1,4	1,3	1,2	0,8	0,8
max. stroke duration sec	1400	1400	1300	1500	800	800
Repeat accuracy %	< 1	< 1	< 1	< 1	< 1	< 1
Vacuum at inlet mbar	20	20	20	20	20	20
Vacuum at outlet mbar	0	0	0	0	0	0
Max. viscosity mPas	600	700	800	800	800	800
Max. medium temperature	120°C (248°F)					
Material, pump head	PTFE					
Material, diaphragm	PTFE					
Material, valves	PTFE					
Input voltage	100 – 240V, 25 W					
Safety class	IP 30					
Ambient temperature	50°C (122°F)					
max. dimensions LxBxT mm	270x130x205					

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



(above) Drive engineering  
(left) PTFE-pump-chamber with diaphragm



### Connecting options:

- ① RGL-PTFE unions with sealing ring and cone
- ② RGL-PTFE flexible unions with precision thread and silicone jacket for vacuum use and for temperature changes
- ③ Tube sleeve with PTFE-Adapter
- ④ Swagelok/Gyrolok stainless steel unions
- ⑤ Rapid action couplings
- ⑥ Heater hose adapter
- ⓧ Other customised connections- depending on apparatus

