

# Ritmo 05 EH



*The process safety of an electrically heated melted metering with positively controlled valves, variable pressure stroke and external heating tubes.*

**Metering pumps – exactly matching your needs**

- **Easy and simple operation with direct adjustment of the delivery rate in ml/min**  
(no complex computations from stroke volume and stroke frequency and no external temperature regulation)
- **Closed heating system with power supply of the external heating tubes**  
(special connector on the metering pump, no additional mains plug, no additional heater control)
- **Clear process control**  
(indication temperature of the pump chamber and the external heating tubes on the display)
- **Extreme safety with over heating cutoff and electronically controlled deactivation of the safety relays**  
(compelled user quitting of error signalization)
- **Pump head, diaphragm and valves in all PTFE design version**  
(for universal use with ultimate chemicals and resistance temperature resistance to 140 °C · 284 °F)
- **Efficient thermal insulation between pump drive and external surroundings**  
(Polyamide thermal insulating plating towards pump casing, Armaflex Insulation hood up to 160 °C · 320 °F)
- **Tailored heating tubes in combination with the system configuration**  
(with Polyamide woven sheath and pump tailored cap nuts)
- **Sample extraction/delivery of melting from the vacuum or in high vacuums**
- **Special fluid connections with continuous PTFE tubing**  
(Only one sealing connection on pump head, no thermal bridges in the total melting system)
- **Return function**  
(residue drainage of the heated metering system, no crystallization danger at end of process)
- **Process and automatic control**  
(analogue interface 4 - 20mA, digital control RS 232, actual temperature read out)

- Metering pumps in all PTFE – version
- Stepping motor controlled diaphragm metering
- Diaphragm metering unit with positively controlled valve engineering
- Metering pumps with heated and cooled pump head
- Metering pumps for vacuum applications
- Gas metering pumps
- Gas mixing pumps
- Batch- and filling metering pumps
- Multi - channel distributor pumps
- Sampling pumps with flushing function
- Metering pump system in master - /slave - configuration
- Pneumatic metering pumps
- Ex-protected metering pumps
- High pressure metering pumps
- Metering systems consisting of metering pump and Coriolis measurement technology
- Special customized solutions



## Ritmo 05 EH

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



## Technical data

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 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 (251.6 °F)					
Material, pump head	PTFE					
Material, diaphragm	PTFE					
Material, valves	PTFE					
Input voltage	100 - 240V, 125-800W					
Safety class	IP 30					
Ambient temperature	50 °C (122 °F)					
Max. dimensions LxWxH mm	340x130x205					

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



PTFE pump chamber with diaphragm

### Connection variations:

- ① GL - PTFE - unions with sealing ring and cone
- ② Swagelok / Gyrolok stainless steel unions
- ③ Heater hose adapter
- ⊗ Other customized connections – depending on apparatus

