

Thermo Scientific Manostat Compulab® 3

Dispenser,
Transfer,
Dilutes



Manostat® Pumps & Dispensers

Microprocessor Controlled Dispenser / Dilutor / Pump

Standard Fluid Transfer:

- One bench top programmable controller capable of running up to four individual RD1 or RD2 pumps synchronized and independently. (Mix-or-match)
- Flow rate of RD-1 pump is .4-3450 ml/min. The RD-2 pumps .5-5000 ml/min.
- Easy connection of control and pump drives with supplied 3 1/2 ft RJ-12 (phone) cord. Maximum connection length of 15 ft.
- Up to 30 user programs can be stored in memory.
- Accuracy and Repeatability +/- 1%.
- 1 to 999 cycles or continuous operation in dispense and dilute modes.
- Manual or automatic timed delay cycling.

- Interval delay time ranges from as low as 0.1 seconds to 2.780 hours programmed in 0.1 second increments.
- User-friendly, menu-driven keypad with 80 character, backlit, alphanumeric, liquid-crystal display (2 x 40).
- Twenty-key keypad facilitates direct data entry. Keypad provides tactile feedback.
- No calibration necessary when changing volume with the same size tubing.
- Both pump models are dual voltage 115/230 VAC (switchable) and meet UL 508, IEC 1010, cUL and CE regulations. The controller power is supplied by the pump drives.
- Speed Control Feedback maintains accurate flow rate. 1/10 HP motor provides controlled responsive dispensing.
- Direct input of volumes, flow rates, and speed. Ranges determined by tubing size.
- Pump speed and dispense volume can be changed "on-the-fly" while pump is running.
- Direct connection and control from a PC-compatible DB9 serial port.
- The pump drives have an illuminated On/Off switch and seven-segment LED to indicate the pump address.
- RD1 and RD2 drives come complete with chemically resistant pump head (molded of glass filled Noryl®). The RD1 pump head has three stainless steel rollers. The RD2 pump head has three Delrin rollers.
- Operating temperature 0°C to 40°C.
- IP rating: 22



Flow Rates in mL / min							
	Tubing	Size 13	Size 14	Size 16	Size 25	Size 17	Size 18
RD2 Pump 72-666-100	ml/min	.5-50	3-300	12-1200	26-2600	42-4200	50-5000
RD1 Pump 72-777-100	ml/min	.4-40	2-200	7.5-750	17-1700	26.5-2650	34.5-3450

Dispensing Volumes mL / Cycle							
	Tubing	Size 13	Size 14	Size 16	Size 25	Size 17	Size 18
RD2 Pump 72-666-100	minimum ml/cycle	3	15	55	120	200	250
RD1 Pump 72-777-100	minimum ml/cycle	2	10	40	85	135	175

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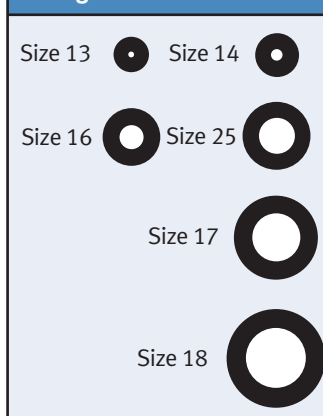
Tubing Specifications

Formulation	Tubing Size	Size 13	Size 14	Size 16	Size 25	Size 17	Size 18
	Inside Dia	0.03	0.06	0.12	0.19	0.25	0.31
	Hose Barb	1/16	1/16	1/8	3/16	1/4	3/8
Pharmed® 25 ft/pkg	Part No.	75-301-013	75-301-014	75-301-016	75-301-025	75-301-017	75-301-018
	Max Pressure	15 PSI	25 PSI	25 PSI	25 PSI	15 PSI	10 PSI
	Max Vacuum	26" hg	26" hg	26" hg	26" hg	20" hg	20" hg.
Pharmed® Pumping Links	Compulab RD1	75-301-135	75-301-145	75-301-165	75-301-255	75-301-175	*
	Compulab RD2	72-301-135	72-301-145	72-301-165	72-301-255	72-301-175	*
Norprene® Food 50 ft/pkg	Part No.	75-305-013	75-305-014	75-305-016	75-305-025	75-305-017	75-305-018
	Max Pressure	15 PSI	25 PSI	25 PSI	25 PSI	15 PSI	10 PSI
	Max Vacuum	26" hg	26" hg	26" hg	26" hg	20" hg	20" hg
Norprene® Pumping Links	Compulab RD1	75-305-135	75-305-145	75-305-165	75-305-255	75-305-175	*
	Compulab RD2	72-305-135	72-305-145	72-305-165	72-305-255	72-305-175	*
Silicone Platinum Cured 25 ft/pkg	Part No.	75-300-013	75-300-014	75-300-016	75-300-025	75-300-017	75-300-018
	Max Pressure	10 PSI	10 PSI	10 PSI	10 PSI	10 PSI	10 PSI
	Max Vacuum	26" hg	26" hg	26" hg	26" hg	20" hg	20" hg
Silicone Pumping Links	Compulab RD1	75-300-135	75-300-145	75-300-165	75-300-255	75-300-175	*
	Compulab RD2	72-300-135	72-300-145	72-300-165	72-300-255	72-300-175	*
Tygon® 50 ft/pkg	Part No.	75-310-013	75-310-014	75-310-016	75-310-025	75-310-017	75-310-018
	Max Pressure	15 PSI	25 PSI	25 PSI	25 PSI	15 PSI	10 PSI
	Max Vacuum	26" hg	26" hg	26" hg	26" hg	20" hg	20" hg
Tygon® Pumping Links	Compulab RD1	75-310-135	75-310-145	75-310-165	75-310-255	75-310-175	*
	Compulab RD2	72-310-135	72-310-145	72-310-165	72-310-255	72-310-175	*

Tubing Formulation

	Physical Characteristics and Composition	Temperature Range	Meets Classifications
Pharmed® BPT	Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm (stiff) material. Opaque, beige.	-75 to 275°F (-59 to 135°C)	USP Class VI FDA21 CFR 177.2600
Norprene® Food	Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm (stiff) material. Opaque, beige.	-75 to 275°F (-59 to 135°C)	FDA21 CFR 177.2600 NSF Listed (Standard 51)
Silicone Platinum Cured	Thermal set rubber Siloxane polymers and amorphous silica. Excellent compression strength. Soft material Translucent, clear to light amber.	-60 to 460°F (-51 to 232°C)	USP Class VI FDA21 CFR 177.2600
Tygon® R-3603	Thermoplastic. PVC-based material with plasticizer. Firm (stiff) material. Transparent, clear.	-58 to 165°F (-50 to 74°C)	FDA21 CFR 175.300

Tubing Cross Sections



Specification & Ordering Information

Compulab® 3 Controller (includes software)

Cat. No.	Dims. L x W x H	Shipping Weight	Power
72-767-000	8 3/4 x 6 1/8 x 3 1/4 front to 7 3/4 back	5 Lbs 2.7 Kg	Powered by Pump Drive

Compulab® 3 Pump Drives (includes dispensing wand)

Cat. No.	Pump Drives	RPM	Speed Control	Motor Size	IP Rating	Dims LxWxH (Pump Drive)	Shipping Weight	Power 50/60 Hz
72-666-100	RD2 Pump	12-720	± 0.3	1/10 HP	IP 22	9 1/2 x 10 1/2 x 6	14 Lbs 6.4 Kg	115/230 VAC 2A
72-777-100	RD1 Pump	12-720	± 0.3	1/10 HP	IP 22	8 3/4 x 10 x 5	10 Lbs 4.5 Kg	115/230 VAC 2A

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