

Thermo Scientific Manostat Spencer

Variable Flow Dispenser Pump



Ideal for a wide variety of life science and medical applications:

- Sample prep
- General dispensing
- Media dispensing (multiple samples)
- Dilution blanks (multiple samples)
- Dispensing diagnostics
- Reagents
- Biopharmaceuticals
- Agrochemicals
- Oil analysis
- Sampling, testing
- Filling
- Dispensing
- Sample prep (multiple samples)
- Media dispensing
- Dispense Volumes from 0.5 to 1700 ml/cycle.
- Dispense Time Control Knob lets you set dispense time from 0.2 to 20 seconds.
- Pause Time Control Knob lets you set delay interval from 1 to 10 seconds between dispensing cycles.
- Variable Flow from 2 ml/min to 5000 ml/min.
- Analog single-turn speed control.
- Lighted On/off switch. The On/off switch lets you maintain your flow rate setting when pump is turned on.
- Unit is reversible for purging of transfer lines.
- The 1/10 hp reversible motor has soft start and back EMF for 3% speed control.
- Stackable painted steel housing is IP22.
- Removable 6 ft. (1.8m) line cord -US standard plug on 115 VAC models, IEC 320/CEE 22 socket on 230 VAC models.
- All units are equipped with a Pump Status Jack that can be used to operate remote relays to start/stop other equipment being utilized with dispenser.
- All 115 VAC models meet UL508, IEC 1010 and cUL; 230 VAC models meet CE regulations for safety and noise immunity.
- All drives come complete with pump head, dispensing handle and tubing link.
- The chemically resistant pump head (molded of glass filled Noryl®) has three Delrin® rollers and a Plexiglas safety cover.



Specification & Ordering Information								
Model	Cat. No.	RPM	Speed	Motor	IP	Dims (cm)	Shpg.	Power
SPENCER	72-640-000	24-720	3%	1/10 HP	IP22	29 x 25.4 x 15.9	7.3 Kg	90-130 VAC
	72-640-230	24-720	3%	1/10 HP	IP22	29 x 25.4 x 15.9	7.3 Kg	190-260 VAC
Flow Rates in ml/min @ 24-720 rpm speed range								
Model	Tubing Sizes	13	14	16	25	17	18	
SPENCER	ml/min	2-40	11-295	45-1200	80-2500	170-4200	245-500	
	Tube I.D. Size (")	1/32	1/16	1/8	3/16	1/4	5/16	

Dispensing Volume ml/cycle @ 24-720 rpm speed range							
Model	Tubing Sizes	13	14	16	25	17	18
SPENCER	ml/cycle	0.5-25	1-95	2.5-320	9-800	13-1250	20-1700
	Tube I.D. Size (")	1/32	1/16	1/8	3/16	1/4	5/16

Tubing Specifications							
Formulation	Tubing Sizes	13	14	16	25	17	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	5/16
Pharmed® BPT	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
	Tubing 50 ft/pk	75-303-013	75-303-014	75-303-016	75-303-025	75-303-017	75-303-018
	Pumping Links	75-303-135	75-303-145	75-303-165	75-303-255	75-303-175	*
Norprene® Food	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
	Tubing 50 ft/pk	75-305-013	75-305-014	75-305-016	75-305-025	75-305-017	75-305-018
	Pumping Links	75-305-135	75-305-145	75-305-165	75-305-255	75-305-175	*
Silicone (Pt Cure)	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
	Tubing 25 ft/pk	75-300-013	75-300-014	75-300-016	75-300-025	75-300-017	75-300-018
	Silicon	75-300-135	75-300-145	75-300-165	75-300-255	75-300-175	*
Tygon®	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
	Tubing 25 ft/pk	75-310-013	75-310-014	75-310-016	75-310-025	75-310-017	75-310-018
	Pumping Links	75-310-135	75-310-145	75-310-165	75-310-255	75-310-175	*

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	
Size 13	Size 14
Size 16	Size 25
	Size 17
	Size 18