





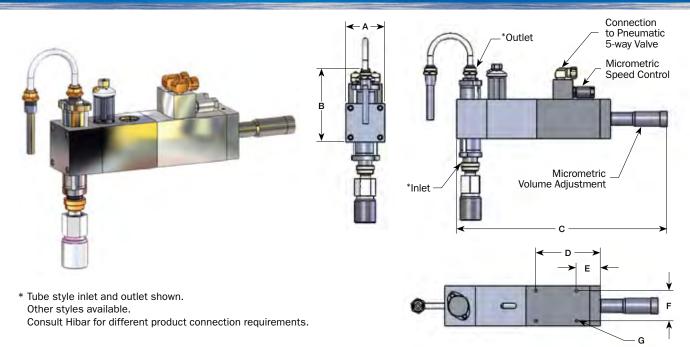
The **HIBAR B SERIES CHECK VALVE** style Dispensing Pumps have proven reliability having serviced the cosmetic, food, pharmaceutical and technical industries for over 30 years. These pumps are ideally suited for low to medium viscosity applications (<2000 cps) that require dispensing of .020 ml to 20 ml per shot.

B SERIES PRECISION CHECK VALVE DISPENSING PUMPS FEATURES

- Pneumatic Piston Pump provides extremely high dispensing accuracies, typically ±1/2% or better.
 (Some models are capable of dispensing quantities as small as 1 µl with excellent accuracy).
- Precise dispense volume adjustment and speed control via the built-in micrometers and precision needle valves.
- Integrated check valves handle fluids with viscosities up to 20,000 cps. containing no solids.
- Easy to disassemble, clean and maintain.
- Modular design makes it easy to integrate with automated filling equipment.

- 316L Stainless Steel construction standard.
- A number of different pump construction materials are available to insure product compatibility.
- Robust design provides reliable and extended life. A service life of 20 million cycles without maintenance for some applications is not unusual. Pumps have provided continuous service for over 25 years with only routine maintenance required.
- Wide range of fill nozzles and accessories are available to suit specific applications.
- Servo motor driven models are also available.
 Consult Hibar for details.

PRECISION CV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



Model	Plun Diam	_	Stroke	Maximum Dispensing Volume	Cycle Speed										
	inch	mm	inch (mm)	(cc)	(cpm)	scfm (I/min)	A	В	С	D	Е	F	G	lbs (kg)	
1BC-1S	0.079	(2.0)		0.020					7.77						
1BC-2S	1/8	(3.2)	1/4 (6.4)	0.050		0.22 (6.2) ^B			(198)						
1BC-3S	3/16	(4.8)		0.110											
1BC-3M	3/16	(4.8)		0.230	0-300 ^A		1.68	3.45	8.01	2.52	0.89	1.25	8-32	5.0	
1BC-4M	1/4	(6.4)		0.400			(43)	(88)	(203)	(64)	(23)	(32)		(2.3)	
1BC-5M	5/16	(7.9)	1/2 (12.7)	0.620		0.44 (12.5) ^B									
1BC-7M	7/16	(11.1)		1.220											
1BC-10M	5/8	(15.9)		2.510											
2BC-8R	1/2	(12.7)		3.220											
2BC-10R	5/8	(15.9)		5.030											
2BC-12	3/4	(19.1)	1 (25.4)	7.240	0-150 ^A	0.83 (23.5) ^B	1.94	3.71	10.53	3.2	1.2	1.5	8-32	7.9	
2BC-14	7/8	(22.2)	1 (20.4)	9.850	0 100	0.00 (20.0)	(49)	(94)	(267)	(81)	(30)	(38)		(3.6)	
2BC-17	1-1/16	(27.0)		14.520											
2BC-20	1-1/4	(31.8)		20.110											

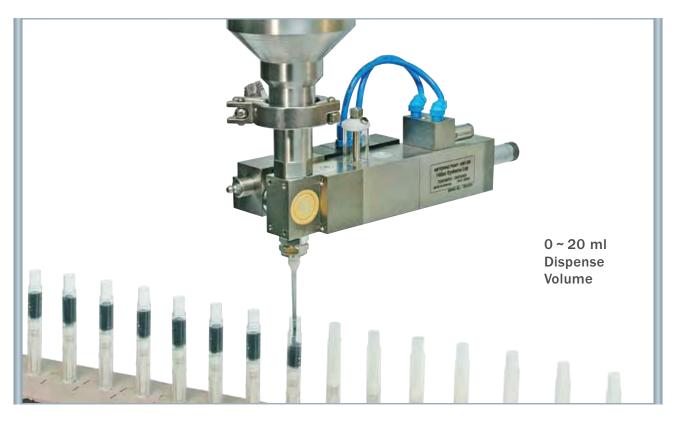
^A Maximum cycle rate is application dependant ^B Calculated at full stroke at 100cpm, 75 PSI (5 Bar)

APPLICA'	IIUNS					
General		Cosmetics		Food		Pharmaceutical
AcidsAlkalinesReagents	Glues / AdhesivesBattery ElectrolyteLighter Fluids	PerfumeCreamsLotions	MouthwashNail LacquerMoisturizer	KetchupVinegarHoney	CreamJellySauces	MedicineCulture MediaBiologicals
InksPaints	Oils Solvents	ShampoosOils	Skin CleanserMake-up Remover	ButterCoffee	JuicesPuddings	AntibioticsCough Syrup





B SERIES PRECISION ROTARY VALVE DISPENSING PUMPS



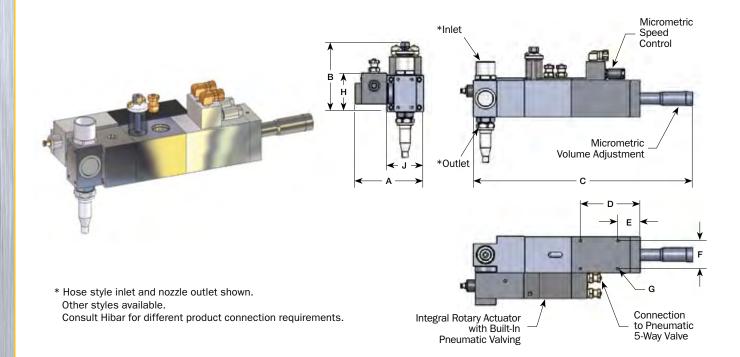
The **HIBAR B SERIES ROTARY VALVE** style Precision Dispensing Pumps have been servicing the cosmetic, food, pharmaceutical and technical industries for over 30 years. These pumps are ideally suited for medium to high viscosity applications (>5000 cps) that require dispensing of .050 to 20 ml per shot.

B SERIES PRECISION ROTARY VALVE DISPENSING PUMPS FEATURES

- A number of different pump construction materials are available to insure product compatability.
- Pneumatic Piston Pump provides extremely high dispensing accuracies, typically ±1/2% or better.
- Precise dispense volume and speed control via adjustment of the built-in micrometers and precision needle valves.
- Wear resistant ceramic rotary valve handles high viscosity fluids with particulates up to 100,000 cps.

- Higher viscosities achievable with pressurized infeed. Consult Hibar for details.
- Flexible design that can adapt to changing dispensing needs for new applications.
- Easy to disassemble, clean and maintain.
- Wide range of fill nozzles and accessories are available to suit specific applications.
- Servo motor driven models are also available. Consult Hibar for details.

PRECISION RV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



Model	Plun Diam		Stroke	Maximum Dispensing Volume	Cycle Speed	Air Consumption			Exter		imens ch (mi					Weight lbs
	inch	mm	inch (mm)	(cc)	(cpm)	scfm (I/min)	A	В	C	D	Ε	F	G	Н	J	(kg)
1BR-3M	3/16	(4.8)		0.230												
1BR-4M	1/4	(6.4)		0.400	0-150 A	0.5 (14.1) ^B	3.39	3.45	8.9	2.52	0.89	1.25	8-32	1.93	1.70	7.0
1BR-5M	5/16	(7.9)	1/2 (12.7)	0.630			(86)	(88)	(226)	(64)	(23)	(32)		(49)	(43)	(3.2)
1BR-7M	7/16	(11.1)		1.230												
1BR-10M	5/8	(15.9)		2.510												
2BR-8R	1/2	(12.7)		3.22												
2BR-10R	5/8	(15.9)		5.03												
2BR-12	3/4	(19.1)	1 (25.4)	7.24	0-120 ^A	1.3 (36.8) ^B	3.66	3.71	11.78	3.2	1.2	1.5	8-32	2.06	1.96	9.0
2BR-14	7/8	(22.2)	1 (20.4)	9.85	0 120	1.0 (00.0)	(93)	(94)	(299)	(81)	(30)	(38)		(52)	(50)	(4.1)
2BR-17	1-1/6	(27.0)		14.52												
2BR-20	1-1/4	(31.8)		20.11												

^A Maximum cycle rate is application dependant ^B Calculated at full stroke at 100 cpm, 75 PSI (5Bar)

APPLICATIONS									
General	Cosmetics	Food	Pharmaceutical						
 Toothpaste Caulking Glues/Adhesives Grease/Oils Zinc Gel Abrasive Kitcher Bathroom Clean Paints/Inks Tooth Whitener Fluxes 	·	 Salad Dressing Popcorn Oil Ketchup/Mustard Butter Marmalade Margarine Sauces Relish 	 Medicine Cough Syrup Antibiotic Blood Serum Biological						





4H SERIES PRECISION CHECK VALVE DISPENSING PUMPS



The **NEW HIBAR 4H SERIES CHECK VALVE STYLE DISPENSING PUMPS** are ideally suited for low to medium viscosity applications in food, cosmetic, technical and pharmaceutical industries. Dispensing accuracies of $\pm 1/2\%$ or better can be easily maintained without readjustment or recalibration.

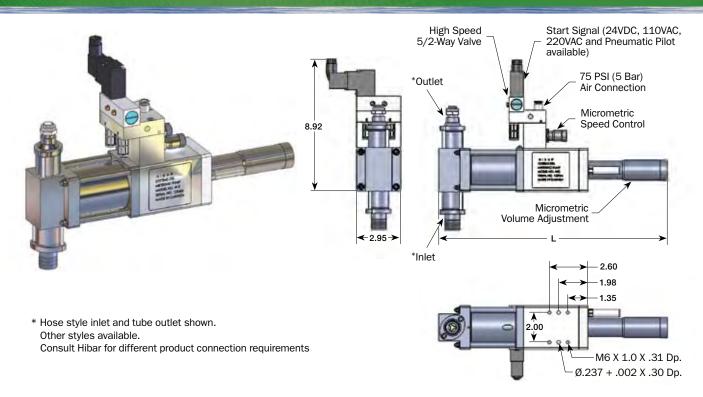
4H SERIES PRECISION CHECK VALVE PUMP FEATURES

- High quality Stainless Steel construction.
- Integrated check valves handle fluids with viscosities up to 20,000 cps. and containing no solids.
- Easy to disassemble, clean and maintain.
- ▶ Dispensing accuracies of up to $\pm 1/2\%$ or better.
- Precise dispense volume and speed control via adjustment of the built-in micrometers.
- Modular design makes it easy to integrate with automated filling equipment.

- Completely self-contained pneumatics provide easy integration with virtually any automated filling equipment.
- Compact footprint for easy mounting.
- Long service life lasting for millions of cycles.
- Wide range of fill nozzles & accessories are available to suit specific applications.
- Servo motor driven models are also available. Consult Hibar for details.



PRECISION CV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



Model		nger neter	Str	oke	Maximum Dispensing	Cycle	Air	L	Weight
	inch	(mm)	inch	(mm)	Volume (cc)	Speed (cpm)	Consumption scfm (I/min)	inch (mm)	lbs (kg)
4H1-C-10	7/8	(22.23)			9.9			12.47 (317.0)	
4H1-C-30	1-5/8	(41.28)	1.00	(25.4)	34.0	0-180 ^A	1.82 (51.5) ^B	11.47 (91.0)	13.75 (6.2)
4H1-C-60	2-1/8	(53.98)			58.0			11.47 (31.0)	
4H2-C-20	7/8	(22.23)			20.0			17.44 (443.0)	
4H2-C-65	1-5/8	(41.28)	2.00	(50.8)	68.0	0-150 ^A	3.02 (85.5) ^B	15.44 (392.0)	15.25 (6.9)
4H2-C-110	2-1/8	(53.98)			116.0			10.44 (002.0)	
4H3-C-30	7/8	(22.23)			30.0			22.44 (570.0)	
4H3-C-100	1-5/8	(41.28)	3.00	(76.2)	102.0	0-120 ^A	3.63 (102.8) ^B	19.44 (494.0)	16.75 (7.6)
4H3-C-170	2-1/8	(53.98)			174.0			13.44 (434.0)	
4H4.5-C-150	1-5/8	(41.28)	4.50	(114.3)	153.0	0-90 ^A	4.08 (115.5) ^B	01.04 (500.5)	10.0 (0.6)
4H4.5-C-260	2-1/8	(53.98)	1.00	()	261.0	0-90	4.06 (115.5)	21.24 (539.5)	19.0 (8.6)

^A Maximum cycle rate is application dependant ^B Calculated at full stroke at 100cpm, 75 PSI (5 Bar)

APPLICATIONS						
Pharmaceutical	Cosmetics		Food		General	
 Medicine 	• Perfume	Mouthwash	 Ketchup 	· Cream	- Acids	- Glues/Adhesives
 Culture Media 	- Creams	 Nail Lacquer 	 Vinegar 	Jelly	 Alkalines 	 Battery Electrolyte
 Biologicals 	- Lotions	 Moisturizer 	 Honey 	 Sauces 	 Reagents 	 Lighter Fluids
 Antibiotics 	 Shampoos 	 Skin Cleanser 	Butter	Juices	• Inks	• Oils
 Cough Syrup 	• Oils	 Make-up Remover 	- Coffee	 Puddings 	Paints	Solvents





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4H SERIES PRECISION ROTARY VALVE DISPENSING PUMPS



The **NEW HIBAR 4H SERIES ROTARY VALVE STYLE DISPENSING PUMPS** are ideally suited for higher viscosity applications in food, cosmetic, technical and pharmaceutical industries. Liquids with up to 100,000 cps viscosities and including particulates are easily handled with our durable ceramic rotary valve design. Dispensing accuracies of $\pm 1/2\%$ or better with positive cut-off and no drip can be easily maintained without readjustment or recalibration.

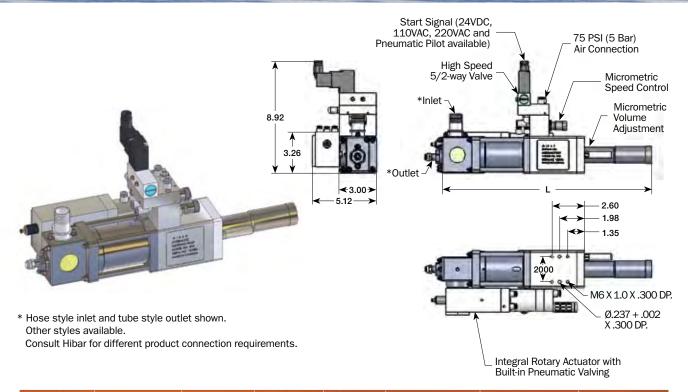
4H SERIES PRECISION ROTARY VALVE PUMP FEATURES

- High quality Stainless Steel construction.
- Wear resistant ceramic rotary valve handles high viscosity fluids with particulates up to 100,000 cps. Higher viscosities achievable with pressurized infeed.
- Easy to disassemble, clean and maintain.
- Compact footprint for easy mounting.
- Long service life for millions of cycles.
- Dispensing accuracies of up to ± 1/2% or better.

- Completely self-contained pneumatics provide easy integration with virtually any automated filling equipment.
- Precise dispense volume and speed control via adjustment of the built-in micrometers.
- Wide range of fill nozzles and accessories are available to suit specific applications.
- Servo motor driven models are also available.
 Consult Hibar for details.



PRECISION RV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS



Model		nger neter	Str	oke	Maximum Dispensing	Cycle	Air	L	Weight
	inch	(mm)	inch	(mm)	Volume (cc)	Speed (cpm)	Consumption scfm (I/min)	inch (mm)	lbs (kg)
4H1-R-10	7/8	(22.23)			9.9			13.76 (350)	
4H1-R-30	1-5/8	(41.28)	1.00	(25.4)	34	0-140 ^A	1.41 (39.9) ^B	12.76 (324)	17.5 (7.9)
4H1-R-60	2-1/8	(53.98)			58			12.70 (024)	
4H2-R-20	7/8	(22.23)			20			18.73 (476)	
4H2-R-65	1-5/8	(41.28)	2.00	(50.8)	68	0-110 ^A	2.22 (62.9) ^B	16.73 (425)	19.0 (8.6)
4H2-R-110	2-1/8	(53.98)			116			10.70 (420)	
4H3-R-30	7/8	(22.23)			30			23.73 (603)	
4H3-R-100	1-5/8	(41.28)	3.00	(76.2)	102	0-90 ^A	2.72 (77) ^B	20.73 (527)	20.5 (9.3)
4H3-R-170	2-1/8	(53.98)			174			20.10 (021)	
4H4.5-R-150	1-5/8	(41.28)	4.50	(114)	153	0-60 ^A	0.70 (77) ^B	0.4.52 (602)	22.75 (10.2)
4H4.5-R-260	2-1/8	(53.98)	1.00	(117)	261	0-00	2.72 (77) ^B	24.53 (623)	22.75 (10.3)

^A Maximum cycle rate is application dependant B Calculated at full stroke at 100cpm, 75 PSI (5 bar)

APPLICATIONS			
Cosmetics	Food	Pharmaceutical	General
 Mascara Exfoliant Lipstick Creams Lotions Shampoos Antiperspirant Lip Gloss Nail Lacquer Foundation 	 Salad Dressing Popcorn Oil Ketchup/Mustard Marmalade Sauces Juices Honey Butter Margarine Relish 	 Medicine Cough Syrup Antibiotic Blood Serum Biological	 Toothpaste Caulking Glues/Adhesives Grease/Oils Zinc Gel Abrasive Kitchen/ Bathroom Cleaner Paints/Inks Tooth Whitener Fluxes





5H SERIES PRECISION CHECK VALVE DISPENSING PUMPS



The **HIBAR 5H SERIES CHECK VALVE STYLE DISPENSING PUMPS** are ideally suited for low to medium viscosity applications in technical, food, cosmetic and pharmaceutical industries. Dispensing accuracies of $\pm 1/2\%$ or better can be easily maintained.

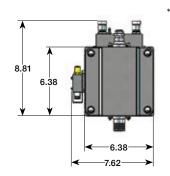
5H SERIES PRECISION CHECK VALVE DISPENSING PUMPS FEATURES

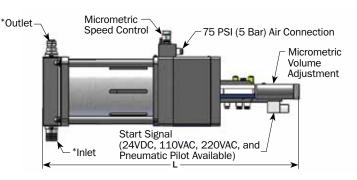
- High quality Stainless Steel construction.
- Integrated check valves handle fluids with viscosities up to 15,000 cps. and containing no solids.
- Easy to disassemble, clean and maintain.
- Compact footprint for easy mounting.
- Dispensing accuracies of up to $\pm 1/2\%$ or better.

- Precise dispense volume and speed control via adjustment of the built-in micrometers.
- Easy integration with virtually any automated filling equipment.
- Low maintenance and long service life.
- Wide range of fill nozzles and accessories are available to suit specific applications.

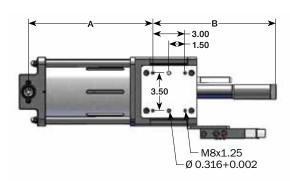


PRECISION CV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS









Hose style inlet and tube outlet shown.
 Other styles available.
 Consult Hibar for different product connection requirements.

Model	Plunger Diameter	Stroke	Maximum Dispensing Cycle Volume Speed C	Air Consumption	External Dimensions inch (mm)			Weight	
	inch (mm)	inch (mm)	(cc)	(cpm)	scfm (I/min)	A	В	L	lbs (kg)
5H3-C-100	1-5/8 (41.28)		102						
5H3-C-250	2-3/4 (69.85)	3.00 (76.2)	292	0-30 ^C	11.5 (325) ^A	11.54	11.42	23.77	60 (27.21)
5H3-C-500	3-3/4 (95.25)	3.00 (70.2)	543	0-30	11.5 (525)	(293.1)	(290.1)	(603.7)	00 (27.21)
5H3-C-1000	5-1/8 (130.18)		1014						
5H6-C-2000	5-1/8 (130.18)	6.00 (152.4)	2028	0-12 ^C	9.5 (269) ^B	13.04	12.95	26.79	64 (29.03)
3110 0 2000	3 1/0 (100.10)	0.00 (102.4)	2020	0 12	3.3 (203)	(331.2)	(328.9)	(680.4)	(, , , ,

^A Calculated at full stroke at 30 cpm, 75 psi

^C Maximum cycle rate is application dependant

APPLICATIONS			
Pharmaceutical	Cosmetics	Food	General
MedicineCulture MediaBiologicalsAntibioticsCough Syrup	 Perfume Creams Nail Lacquer Lotions Moisturizer Shampoos Skin Cleanser Oils Make-up Remover 	 Ketchup Vinegar Honey Butter Coffee Puddings 	 Acids Glues/Adhesives Alkalines Battery Electrolyte Reagents Lighter Fluids Oils Paints Solvents



 $^{^{\}rm B}$ Calculated at full stroke at 12 cpm, 75 psi



5H SERIES PRECISION ROTARY VALVE DISPENSING PUMPS



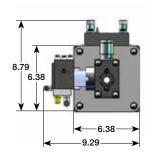
The **HIBAR 5H SERIES ROTARY VALVE STYLE DISPENSING PUMPS** are ideally suited for higher viscosity applications in technical, food, cosmetic and pharmaceutical industries. Liquids with viscosity up to 100,000 cps and including particulates are easily handled with our durable ceramic rotary valve design.

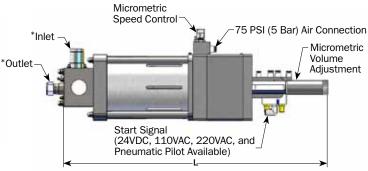
5H SERIES PRECISION ROTARY VALVE DISPENSING PUMPS FEATURES

- High quality Stainless Steel construction.
- Wear resistant ceramic rotary valve handles high viscosity fluids with particulates up to 100,000 cps. Higher viscosities achievable with pressurized infeed - Consult Hibar.
- Easy to disassemble, clean and maintain.
- Compact footprint for easy mounting.
- Dispensing accuracies of up to $\pm 1/2\%$ or better.

- Precise dispense volume and speed control via adjustment of the built-in micrometers.
- Easy integration with virtually any automated filling equipment.
- Low maintenance and long service life.
- Wide range of fill nozzles and accessories are available to suit specific applications.

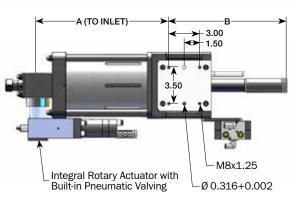
PRECISION RV DISPENSING PUMPS SPECIFICATIONS AND APPLICATIONS







Hose style inlet and tube outlet shown.
 Other styles available.
 Consult Hibar for different product connection requirements.



Model	Plunger Diameter	Stroke			Cycle Air Speed Consumption		nal Dime nch (mm		Weight
	inch (mm)	inch (mm)	(cc)	(cpm)	scfm (I/min)	A	В	L	lbs (kg)
5H3-R-100	1-5/8 (41.28)		102						
5H3-R-250	2-3/4 (69.85)	2.00 (76.0)	292	0-30 ^c	11.5 (325) ^A	12.85	11.42	25.55	70 (31.7)
5H3-R-500	3-3/4 (95.25)	3.00 (76.2)	543	0-30	11.5 (323)	(326.4) (290	(290.1)	(648.9)	70 (31.7)
5H3-R-1000	5-1/8 (130.18)		1014						
5H6-R-2000	5-1/8 (130.18)	6.00 (152.4)	2028	0-12 ^C	9.5 (269) ^B	14.35 (364.5)	12.95 (328.9)	28.57 (725.7)	73 (33.1)

^A Calculated at full stroke at 30 cpm, 75 psi

^C Maximum cycle rate is application dependant

APPLICATIONS	APPLICATIONS										
Cosmetics	Food	Pharmaceutical	General								
 Mascara Exfoliant Lipstick Creams Lotions Shampoos Antiperspirant Lip Gloss Nail Lacquer Foundation 	 Salad Dressing Popcorn Oil Ketchup/Mustard Marmalade Sauces Juices Honey Butter Margarine Relish 	 Medicine Cough Syrup Antibiotic Blood Serum Biological	 Toothpaste Caulking Glues/Adhesives Grease/Oils Zinc Gel Abrasive Kitchen/ Bathroom Cleaner Paints/Inks Tooth Whitener Fluxes 								



 $^{^{\}rm B}$ Calculated at full stroke at 12 cpm, 75 psi



P SERIES SEALLESS CERAMIC SERVO MOTOR CONTROLLED PRECISION METERING PUMPS



The **NEW HIBAR P SERIES SEALLESS PRECISION METERING PUMPS** are specifically designed to meet the demanding requirements of the Pharmaceutical Industry. The pumps feature close fitting sealless ceramic pistons and cylinders engineered for Pharmaceutical liquid dispensing applications.

Our unique rotary piston design with precision fit cylinder requires no dynamic seals, making the pump easy to clean and maintain. State-of-the-art servo motor drives provide full programmability of dispense volume, dispense speed profiles and automatic cleaning cycles.

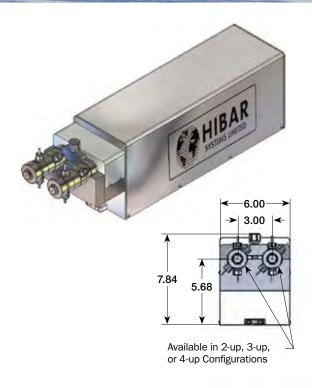
P SERIES PRECISION METERING PUMPS FEATURES

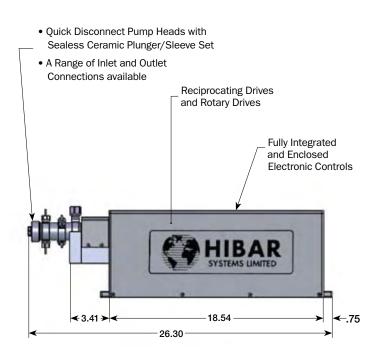
- Positive Displacement Piston Pump better than ±0.5% volumetric accuracy.
- No dynamic seals Low maintenance.
- Dispense volumes from 0 to 20 ml.
- Standard 316L Stainless Steel construction.
- Modular design makes it easy to integrate with automated filling equipment.
- Wear resistant ceramic rotary piston valve handles low and high viscosity fluids with up to 100,000 cps.
- No tools required for easy disassembly, cleaning and maintainance.

- Programmable clean-in-place cycle.
- 2 Axis servo motor drives with built-in motor motion controls.
- Built-in I/O ports for easy integration with existing automated filling systems.
- Simple operation via menu driven controls.
- Pneumatic models are also available. Consult Hibar for details.
- Models are also available in various multiple configurations and drive options.
 Consult Hibar for details.

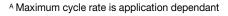


PRECISION METERING PUMPS SPECIFICATIONS AND APPLICATIONS





Model		nger neter	Str	oke	Maximum Dispensing Volume	Cycle Speed	Weight lbs
	inch	mm	inch	(mm)	(cc)	(cpm)	lbs (kg)
1SRP-3	3/16	(4.8)			0.339		
1SRP-7	7/16	(11.1)	3/4	(19.05)	1.847		
1SRP-10	5/8	(15.9)			3.770	0-120 ^A	50 (22.7)
1SRP-12	3/4	(19.1)	4	(OF 40)	7.240		
1SRP-20	1-1/4	(31.8)		(25.40)	20.110		





Custom Configured 40 Pump System

APPLICATIONS					
Pharmaceutical	Cosmetics	Food		General	
MedicineCulture MediaBiologicalsAntibioticsCough Syrup	 Perfume Creams Nail Lacq Lotions Moisturize Shampoos Skin Clea Make-up 	uer · Vinegar er · Honey nser · Butter	CreamJellySaucesJuicesPuddings	AcidsAlkalinesReagentsInksPaints	Glues / AdhesivesBattery ElectrolyteLighter FluidsOilsSolvents





RP SERIES SEALLESS CERAMIC PNEUMATIC PRECISION METERING PUMPS



The **NEW HIBAR 'RP' SERIES SEALLESS PRECISION METERING PUMPS** are specifically designed to meet the stringent requirements of the Pharmaceutical Industry. The pumps feature close fitting sealless ceramic pistons and cylinders engineered for Pharmaceutical liquid dispensing applications.

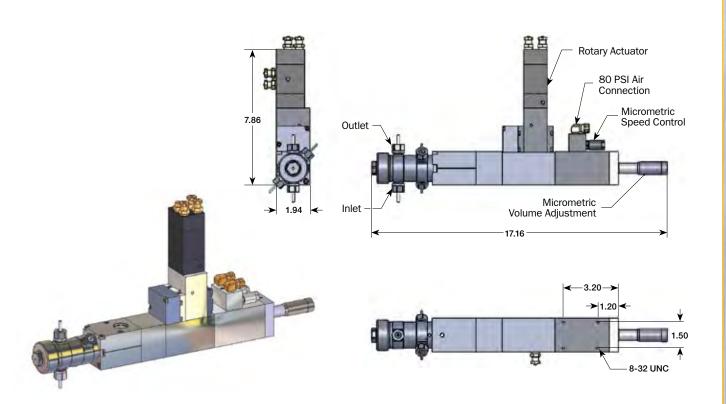
Our unique Rotary Piston design with precision fit cylinder requires no dynamic seals, making the pump easy to clean and maintain. The proven Pneumatic Drive provides modularity, flexibility at an affordable price.

RP SERIES PRECISION METERING PUMPS FEATURES

- Dispense volumes from 0 to 20 ml.
- No dynamic seals Low maintenance.
- Positive Displacement Piston Pump delivers better than ±0.5% volumetric accuracy.
- Standard 316L Stainless Steel construction.
- Modular design makes it easy to integrate with automated filling equipment.
- Wear resistant ceramic rotary piston valve handles low and high viscosity fluids with up to 100,000 cps.

- Compact footprint for easy mounting.
- No tools required for easy disassembly, cleaning and maintenance.
- Precise dispense volume and speed control via adjustment of the built-in micrometers and precision needle valves.
- Wide range of fill nozzles and accessories are available to suit specific applications.
- Servo motor driven models are also available.
 Consult Hibar for details.

PNEUMATIC PRECISION METERING PUMPS SPECIFICATIONS AND APPLICATIONS



Model	Plunger Diameter	Stroke	Maximum Dispensing Volume	Cycle Speed	Air Consumption	Weight Ibs
	inch mm	inch (mm)	(cc)	(cpm)	scfm (I/min)	lbs (kg)
1BRP-3	3/16 (4.8)		0.339			
1BRP-7	7/16 (11.1)	3/4 (19.05)	1.847	0-120 ^A	1.3 (36.8) ^B	12.3 (5.6)
1BRP-10	5/8 (15.9)		3.770			
1BRP-12	3/4 (19.1)	1 (25.4)	7.24	4 400	0.0 (70.0)	
1BRP-20	1-1/4 (31.8)	1 (25.4)	20.11	1-100	2.6 (73.6)	

^A Maximum cycle rate is application dependant ^B Calculated at full stroke at 100cpm, 80psi

APPLICATIONS			The second
Pharmaceutical	Cosmetics	Food	General
 Medicine Culture Media Biologicals Antibiotics Cough Syrup	Perfume Mouthwash Creams Nail Lacquer Lotions Moisturizer Shampoos Skin Cleanser Oils Make-up Remover	 Ketchup Vinegar Honey Butter Coffee Puddings 	 Acids Glues/Adhesives Alkalines Battery Electrolyte Reagents Lighter Fluids Inks Oils Paints Solvents





IN-LINE CONTINUOUS MOTION FILLING SYSTEMS

The Liquid Dispensing Specialists



HIBAR'S IN-LINE CONTINUOUS MOTION FILLING SYSTEMS are designed with performance and versatility in mind. The compact "Walking Beam" design, together with our innovative dual screw bottle feeding is capable of filling bottles at rates up to 300 bottles/min. With one simple adjustment, the integrated "Universal" dual screw system is able to handle a wide range of bottle sizes with no change parts required.

IN-LINE CONTINUOUS MOTION FILLING SYSTEMS FEATURES

- Innovative design dual-feed screw handling system for a wide range of bottle/container shapes and sizes.
- High speed bottle filling speeds of up to 300 bottles/min within a compact envelope.
- Hibar mobile dispensing module for easy cleaning, service and product change over.
- Integral, syncronized, vertical nozzle movement for "bottom-up" filling of high-viscosity products.
- Provision for integration of Hibar positive shut-off fill tubes for drip-free filling of "stringy" liquids.

- Special system configurations are available to suit various environmental requirements; ie. explosionproof, hot fill, nitrogen blanket.
- Integrated operator touch-screen with colour graphics interface and state of the art PLC controls for easy system operation.
- Self contained, stand-alone design makes intergration with bottle feeding, capping and labeling systems simple. Contact Hibar for details.



IN-LINE CONTINUOUS MOTION FILLING SYSTEMS SPECIFICATIONS AND APPLICATIONS



Heated Filling Systems are available, utilizing sealed heated chambers or electronic cartridge heaters.



Mobile Dispensing Module for easy cleaning and product change over.

Provision for Servo Motor Controlled Bottom/Up Fill Motion for high viscosity products or foamy products.

> Filling in a Nitrogen Atmosphere with Integrated Capper

APPLICATIONS

Cosmetics

- Mascara
- Shampoos Exfoliant
- Lipstick
- Antiperspirant Lip Gloss
- Creams Nail Lacquer
- Lotions
- Foundation

Food

- Salad Dressing
- Popcorn Oil
- Ketchup/Mustard
 Butter
- Marmalade Sauces

Pharmaceutical

- Medicine
 - Cough Syrup
 - Antibiotic
 - Blood Serum Biological

General

- Toothpaste
- Caulking
- Glues/AdhesivesPaints/Inks
- Grease/Oils
- Zinc Gel
- Abrasive Kitchen/ Bathroom Cleaner
- Tooth Whitener
- Fluxes



Juices

Honey

Relish

Margarine



IN-LINE INTERMITTENT MOTION FILLING SYSTEMS

The Liquid Dispensing Specialists



HIBAR'S IN-LINE INTERMITTENT MOTION FILLING SYSTEMS are designed to provide both economy and flexibility for customers with a diverse product range. An indexing system is used to transport containers in groups through the fill area. Quick change parts are available to accommodate product change-overs in minutes.

IN-LINE INTERMITTENT MOTION FILLING SYSTEMS FEATURES

- Available with cross push, star wheel on pneumatic gating for indexing of containers.
- Modular Hibar Mobile Dispensing System for easy cleaning and service.
- Integral vertical nozzle movement for smooth bottomup filling when required.
- Integrated colour graphical touchscreen operator interface and state of the art PLC to controls provide intuitive, operator-friendly system control.
- Provision to integrate Hibar positive shut-off fill tubes for drip-free filling.
- Special system configurations are available to suit a range of filling environments including purge atmospheres, explosion proof constructions or heated filling requirements.
- Programmable servo motor driven models are also available. Consult Hibar for details.



IN-LINE INTERMITTENT MOTION FILLING SYSTEMS SPECIFICATIONS AND APPLICATIONS





High Viscosity Make-up Filler with Star Wheel Indexing System

Heated Filler with Cross Push Container Indexing System



Shampoo Filling with a Pneumatic Gate Indexing System

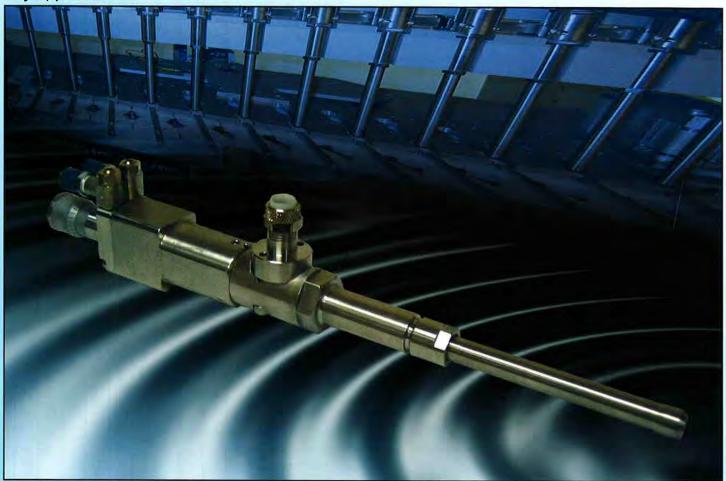


Pharmaceutical Filling System

APPLICATIONS Cosmetics Food **Pharmaceutical General** Mascara Shampoos Salad Dressing Juices Medicine Toothpaste Abrasive Kitchen/ Exfoliant Bathroom Cleaner Antiperspirant - Popcorn Oil Honey Cough Syrup Caulking Glues/AdhesivesPaints/Inks Lipstick · Lip Gloss Ketchup/Mustard Butter Antibiotic Tooth Whitener Blood Serum Creams Nail Lacquer Marmalade Margarine Grease Fluxes Lotions Foundation Sauces Relish Biological • Oils



The **NEW** Hibar FT-1 Series Positive Shut Off Fill Tubes are ideally suited for drip free dispensing of "stringy" products or slurries found in food, cosmetic and pharmaceutical industries. With a wide range of available styles and lengths, the FT-1 fill tube can be customized to suit virtually any application.



FT-1 Series Fill Tube Features:

- * Positive shut off, drip free dispensing.
- * 316L Stainless Steel construction.
- * Wide range of styles & lengths for virtually any application.
- * Easy to disassemble, clean and maintain.
- * Compact design for easy mounting (1" pitch).
- * Pneumatic drive with precise stroke adjustment and pneumatic flow control.
- * Various inlet fitting styles and sizes available.
- * Sanitary one-piece formed fill tube.
- * Metal to metal shut off.
- * Designed for long service life.

Hibar can help match a fill tube to your application

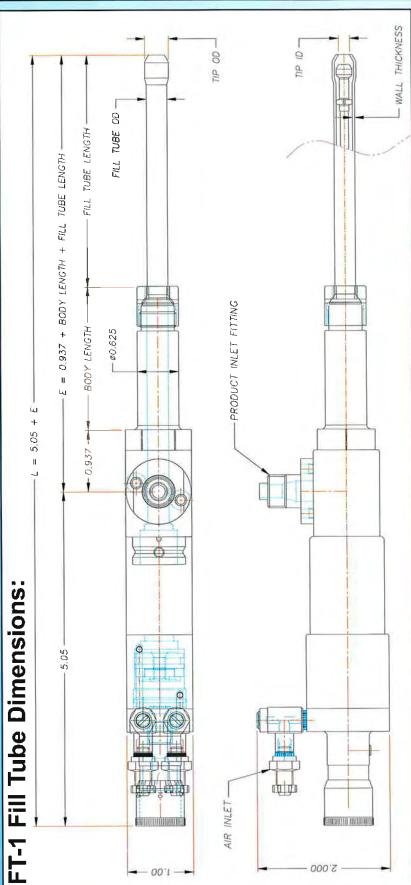
HEAD OFFICE: 35 POLLARD STREET RICHMOND HILL, ONTARIO CANADA L4B1A8

TEL: 905-731-2400 FAX: 905-731-6035 "The Liquid Dispensing Specialists"

WEB: www.hibar.com EMAIL: sales@hibar.com







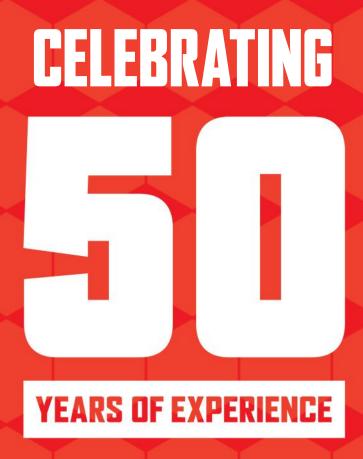
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FI-1 FIII Tube Specification	ecifica	TIOUS:								
FT-1 MODELS	FT-1-T3 FT-1	FT-1L-T3	FT-1-T4	L-T3 FT-1-T4 FT-1L-T4 FT-1-T5 FT-1L-T5 FT-1-T6 FT-1L-T6 FT-1L-T8 FT-1L-T8	FT-1-T5	FT-1L-T5	FT-1-T6	FT-1L-T6	FT-1-T8	FT-1L-T8
BODY LENGTH	2.165"	4.165"	2.165"	4.165"	2.165"	4.165"	2.165"	4.165"	2.165"	4.165"
FILL TUBE OD	3/7	3/16"	1/	1/4"	5/16"	6"	3/8	3"	1/	1/2"
WALL THICKNESS	0.0	0.020"	0.0	0.020"	0.035	35"	0.035"	35"	0.035"	35"
TIP OD	0.2	0.230"	0.2	0.280"	0.360"	30"	0.420"	20,,	0.550"	20
TIP ID	0.0	0.095"	0.1	0.125"	0.160"	30"	0.210"	10"	0.3	0.306"
FILL TUBE LENGTH		S	TANDARD	STANDARD & CUSTOM LENGTHS RANGING FROM 1.5" TO 42"	M LENGT	IS RANGI	NG FROM	1.5" TO 42	<u>.</u>	
PRODUCT INLET FITTING		/ARIOUS T	'UBE, SW	VARIOUS TUBE, SWAGELOK AND OTHER FITTINGS AVAILABLE UPON REQUEST	ND OTHEI	R FITTING	S AVAILAE	LE UPON	REQUES	
AIR INLET FITTING	QUICK C	ONNECT F	ITTING F	QUICK CONNECT FITTING FOR 3-4MM ID TUBING, OTHER FITTINGS AVAILABLE UPON REQUEST	ID TUBIN	з, отнек	FITTINGS	AVAILABL	E UPON F	EQUEST
AIR REQUIREMENTS			FILTER	FILTERED AND REGULATED AIR SUPPLY, 50 PSIG MIN	GULATE	AIR SUPF	۲۲, 50 Ps-	IG MIN.		
OPERATION			AIR OP	AIR OPERATED OPEN AND CLOSED, SPRING CLOSED	PEN AND	CLOSED,	SPRING C	COSED		
CONSTRUCTION	316 STAII	NLESS STI	EEL BOD	316 STAINLESS STEEL BODY, ORIFICE AND POPPET, 1-PIECE FORMED STAINLESS STEEL TUBE	AND POP	PET, 1-PIE	CE FORM	IED STAIN	LESS STE	EL TUBE
CYCLE RATE				UPT	O 200 CY	UP TO 200 CYCLES/MINUTE	쁘			

35 POLLARD STREET, RICHMOND HILL, ONTARIO, CANADA L4B 1A8

TEL: (905) 731-2400 FAX: (905) 731-6035 WEB: v hibar.com EMAIL: sales@hibar.com





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1300 255 786 | sales@allpumps.com.au