

MAKE EVERY DROP COUNT INTELLIGENT METERING PUMP





COMPLETE PROCESS CONTROL.

CONVEYING CAPACITY 0.02-180 GPH (4-945 l/h)

PRESSURE **UP TO 350** PSI (UP TO 24 BAR)

Complete process control starts with the pump. The unique design of a progressive cavity pump offers several advantages compared to traditional chemical metering pumps due to its precise, consistent, repeatable dosing with low shear, minimal pulsation and no vapor lock. Slip is minimized even when fluid temperature, viscosity or discharge pressure fluctuates.

Intelligent Metering Pumps (IMP) can be used in virtually all industries for metering and dosing precise quantities. They are particularly good for minimal pulsation conveyance of thin to high viscosity media, as well as abrasive media containing solids.

They are used for applications in agriculture; automotive assembly; bakeries; building products; ceramics; chemical and biochemical processing; coating kitchens, stock preparation and deinking in paper mills; confectioneries; dairies; distilleries; dye and ink plants; fruit and vegetable processing; pharmaceuticals, cosmetics and personal care products; poultry, meat and fish processing; oil, gas and petrochemicals; ship building; sewage sludge dewatering; wastewater treatment; water purification; wineries and wood treatment and fabrication.

COUPLING ROD

BENEFITS

- · High metering accuracy, decreasing chemical use
- Minimal pulsation, no pulsation dampers required
- Constant flow, independent of pressure
- Low shear characteristics
- NSF/ANSI 61 certified pumps
- Simple interchangeability due to modular construction
- · No check valves, no gas locking or blocking by solids
- Simple and predictive maintenance
- Less slip
- Infinite turn down
- Valveless flow control
- Vertical and horizontal mounting options

The IMP design incorporates an Electronic Programming Module (EPM) memory chip on which parameters can be pre-configured. This makes replacement of a drive simple, quick and accurate. Simply insert the EPM chip from a previous drive into the new one for no downtime between stop and startups.

Each unit is 115 volt single phase and has a keypad on the controller lid equipped with operator elements for manual speed control, display of pump speed / RPM or flow / fault indication and the ability to change factory settings. Various accessories can easily be connected to the drive via the control terminals on the terminal strip inside the controller. IMPs are optionally available with a cost-effective solution for dry running protection. The device senses the presence / absence of fluid within the pipe, stops the pump and alerts the operator.

ROTOR Wear and corrosior resistant materials.

STATOR ADAPTER

In stainless steel, enabling interchangeability of all sizes of rotor / stator with only one housing and drive unit.

PRESSURE BRANCH

Available in stainless steel or plastic, ½" connections to DIN EN ISO 228-1 or NPT.

TIE RODS AND SCREW CONNECTIONS

In stainless steel.

STATOR

The sealing gasket on both ends is molded as an integral part of the elastomeric stator; corrosion of the stator tube is prevented as the pumped media does not come in contact with the metal tube or the bonding adhesive.

EXTERNAL MECHANICAL SEAL (GAE)

Two hardened and wear resistant pin joints, easily

elastomer sleeves and two holding bands.

assembled, grease lubricated and positively sealed with

Single acting mechanical seal. Optional: double acting mechanical seal, gland packing or lip seal.

LANTERN

For connecting the pump and drive.

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SUCTION CASING

Available in stainless steel or plastic, 1" connection to DIN EN ISO 228-1 or NPT, can be rotated in 90° increments, with drain plug / gauge connections.

DRIVE

Geared motors, variable speed drives or hydraulic motors of all major manufacturers can be directly flanged to the pump without additional couplings or guards. Smart programmable vector drives are available. Program parameters are factory loaded onto a memory chip, which makes duplication fast and easy. A 4-20 mA process signal can be connected via a terminal strip inside the control box.

PLUG-IN SHAFT CONNECTION

Enables easy dismantling of the pump and drive for quick replacement of the rotating parts and shaft seal. The plugin shaft pin secures the shaft connection to the drive and the splash ring protects the bearing from contamination / gland leakage.

PLUG-IN SHAFT

Connects the drive shaft to the universal joint.

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SELECTING THE RIGHT PUMP FOR YOUR APPLICATION.

SEEPEX IMPs are customizable to achieve the best performance for your application. The below and adjacent charts are guidelines to help you select the most appropriate options for your pump.

- **1.** Using the below chart, find the flow range and pressure for your application.
- 2. Check the pressure/fluid abrasiveness chart on the adjacent page to determine if you need to account for de-rating the pressure due to the abrasiveness of your media.
- **3.** Find your media's category on the adjacent page's general compatibility chart to determine the appropriate materials of construction for the various pump components.
- **4.** Select the drive/VFD of your choosing.

GROUP	FLOW Range	Low (GPH)	High (GPH)	PRESSURE Range	Max (PSI)	CASING Parts	INTERNAL PARTS	ROTOR	STATOR	SEAL	DRIVE/VFD (1/60/115 VAC)
MD	05	2.268	181.44	6LT	87						ІМР
	025	1.116	89.28	12T	174						Standard
				6L	87						(Lenze i550
	012	0.54	43.2	24	354						4-20mA)
				12	174	A6	A7	A7	FO	GA	IMP
	006	0.288	23.04	24	354	BU	T4	T4	RO	GAE	MODBUS
				12	174		C4	C4	H5	GA-T4	TCP/IP)
	003	0.144	11 50	24	354						
			11.52	12	174						IMP
	0015	0.0648	5.184	24	354						(Lenze i550)
	0005	0.0216	1.728	24	354						

APPLICATION EXAMPLE:

- Conveyed Media: Soap
- Abrasiveness: None
- Flow Range: 0.54 43.2 GPH
- Max PSI: 174 PSI



GROUP	FLOW RANGE	PRESSURE RANGE	CASING Parts	INTERNAL PARTS	ROTOR	STATOR	SEAL	DRIVE/VFD
MD	012	12	A6	A7	A7	FO	GA	IMP Standard

REFERENCE CHARTS.

PRESSURE DE-RATE BASED ON MEDIA ABRASIVENESS

	PUMP PRESSURE RATING (MAX PSI)						
LEVEL OF ADRASIVENESS	87	174	354				
None	87	174	354				
Low	60	120	240				
Medium	40	80	160				
High	25	50	100				

GENERAL COMPATIBILITY GUIDE

Always check material compatibility with pumped media

* = Most economical offering, please select from these materials first if compatible with pumped media.

CONVEYED	CASINGS		INTERNALS / ROTOR			STATOR			SEAL		
MEDIA	*A6 Cast 316ss	BU CPVC	*A7 316ss	T4 Titanium	C4 Hastelloy	*FO Buna	*RO EPDM	H5 Viton	*GA	*GAE	GA-T4
Acids	-	•	-	-	•	-	-	-	-	•	-
Chlorides	X	•	X	•	-	•	•	•	X	•	•
Sulfates	•	•	•	•	•	•	•	•	•	•	•
Polymers	•	•	•	•	•	-	-	•	•	•	•
Solvents	•	X	•	•	•	X	X	-	X	•	X
Alcohols	•	-	•	•	•	-	•	-	•	•	•
Bleaches	-	•	-	-	•	-	-	•	-	•	-
Ammonia	•	•	•	•	•	-	•	-	•	•	•
Oils	•	•	•	•	•	•	X	•	•	•	•
Soaps	•	•	•	•	•	•	•	•	•	•	•

LEGEND:

- GOOD: Recommended
- GOOD WITH CERTAIN TYPES OR CONCENTRATION: Please verify material compatibility with your pumped media
- **x POOR:** Not Recommended

PUMP DIMENSIONS.

IMPs are compact pumps with big pumping power requiring only a small footprint. After you have identified your pump model from the charts on the previous page, use the below chart to obtain dimensional information. Please contact SEEPEX for exact drawings and specifications.

PUMP MODEL	A STAINLESS (A6)	A CPVC (BU)	B WIDTH	C HEIGHT	D Suction	E DISCHARGE
05-6LT	25 %6"	25 3⁄4"				
025-12T	25 % ₁₆ "	25 ¾"				
025-6L	25 %ıs"	25 ¾"				
012-24	30 ²¼₃₂"	30 %"				
012-12	25 ¾°"	25 ¾"				
006-24	29 ³⁄32"	29 ¾2"	5 ½"	12 11/32"	1" NPT	1∕2" npt
006-12	24 ¾"	24 15/16"				
003-24	26 15/32"	26 ²1⁄32"				
003-12	23 7/16"	24 11/16"				
0015-24	23 7/16"	24 11/16"				
0005-24	23 7/16"	24 11/16"				





IMPROVED PROCESS CONTROL. BRAVO CHEMICAL METERING SYSTEMS.

SIMPLEX

DUPLEX

TRIPLEX



BRAVO Chemical Metering Systems are an integrated, modular and scalable solutions used in a variety of industries for disinfection, pH control, flocculation, corrosion inhibitors, oxygen scavengers and contaminant elimination.

FEATURES

- Single source for pumps and controls
- Standardized modules for system expansion to meet future demands • Less chemical use

OPTIONS

- Wall or floor mounting
- Vertical (BRAVO V) or horizontal (BRAVO H) pump mounting
- Chemically resistant
- Drip tray
- Pressure gauge
- Calibration column



Experience whole process control, complete reliability and reduced chemical consumption with SEEPEX's BRAVO Chemical Metering Systems. These innovative, plug-and-play, pre-engineered chemical feed systems are the culmination of over three decades of SEEPEX's experience in optimizing progressive cavity pumps, systems and controls.

 Programmable, precise, low pulsation SEEPEX Intelligent Metering Pumps (IMP) • Simplified system design reduces initial and operating costs while increasing process dependability

• Pre-engineered simplex, duplex, and triplex pump configurations

- SEEPEX TOUCH: Advanced process controller



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