



Which **emec** Solenoid Metering Pump should I use?

For continuous chemical feed and 4800:1 turndown, refer to **emec PRISMA** Stepper Motor dosing pumps



Only 5 Simple questions to select the most suitable pump for your application

1. **Flow?** What flow rate do you require the pump to dose at?
2. **Pressure?** What is the maximum pressure you will dose into?
3. **Inputs?** Is it necessary to control the pump externally via a pulsing contact or a 4-20mA signal?
4. **Chemical?** Are all the liquid end materials of the pump compatible with your chemical?
5. **Temperature?** What temperature are you going to dose into?



EMEC VCO



EMEC KPLUS

Note: All Foot Mount pumps can be ordered with wall mount brackets to suit.

Flow & Pressure

All EMEC pumps are rated at a maximum flow rate at a maximum pressure (based on water at ambient temperature). For example, a KPLUS 10 05 pump's maximum rating is 5l/hr @ 10 bar injection pressure. Hence, you will achieve a higher flow rate if injecting into a lower pressure. It is always better to select a pump that will achieve the desired dose rate at less than its maximum rating. The instruction manuals for each pump are at www.cwc.com.au and include Flow rate vs Pressure curves.

Inputs

All pumps have internal timers which regulate the speed, or frequency at which the pump's solenoid strokes. The speed is adjusted or programmed on the pump to achieve a constant dose rate. However, if variable dose rate is required, for example, to dose proportional to water make-up, or to dose proportional to pH or ORP levels in the water, then external input capability is necessary. External inputs can either be in the form of a contact closure (such as from a controller or water flow meter) or a 4-20mA current. If external control is required, or even internal control with extreme turndown facility, it is necessary to select a pump with external control capability.

EMEC model to select based on input required:

Interface	Input	Wall Mount		Foot Mount	
		Non-oxidising	Hypo Dosing	Non-oxidising	Hypo Dosing
Analogue	Pulse or 4-20mA	N/A	N/A	EMEC KPLUS	EMEC KAPLUS
Digital	Pulse or 4-20mA	EMEC VMF	EMEC VAMF	EMEC KMF	EMEC KAMF

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Chemical

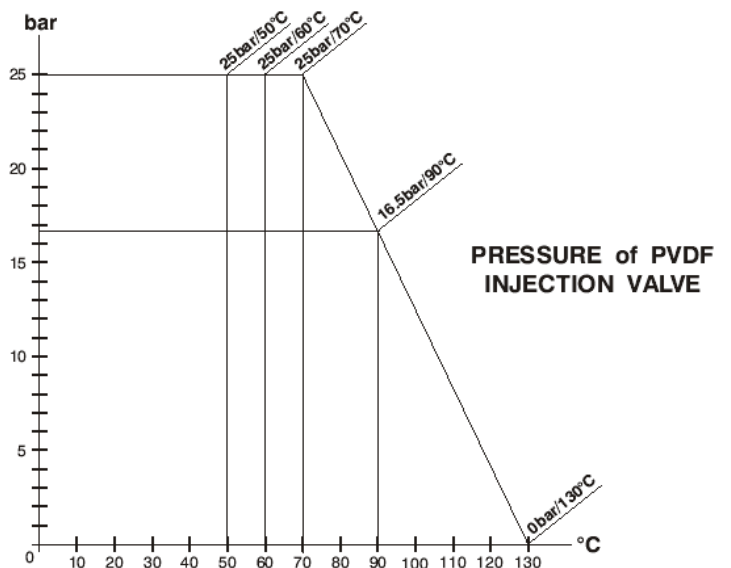
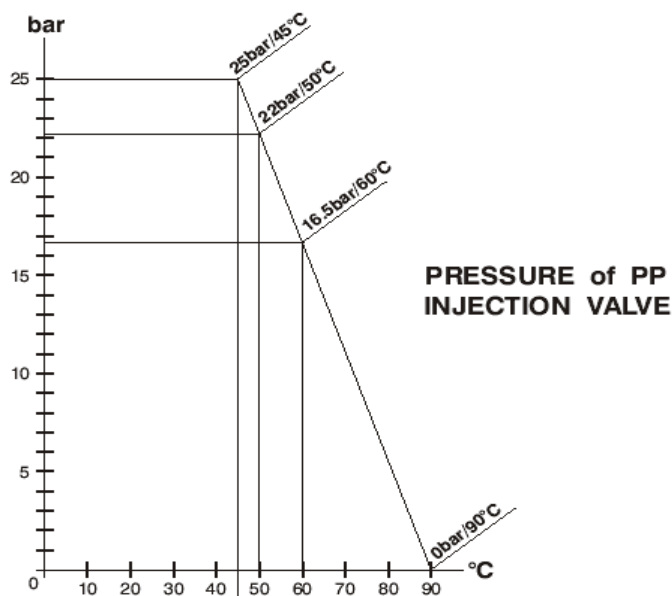
Head:	PP, PVDF or PMMA (Acrylic)
Diaphragm:	PTFE (Teflon)
Suction Tube:	PVC
Discharge Tube:	PE (Polyethelene), PVDF or PTFE
Valve bodies:	PP or PVDF
Injection valve spring:	Hastelloy C276
Balls:	Ceramic or SS
Seals (O-rings):	FPM (Viton) or EPDM

Important Notes:

1. Request EPDM (Dutral) Seals (O-rings) if dosing Caustic (also for boiler dosing applications).
 2. Request FPM (Viton) Seals (O-rings) if dosing Acid
 3. Request PVDF heads & tubing for dosing Sulphuric Acid (if greater than 98.5%)
 4. Always check chemical compatibility charts (downloadable at www.cwc.com.au)
- Part numbers of pumps with EPDM seals have "EP" on the end of the code
 - EP Pumps have white nuts for easy identification

Temperature

- EMEC pumps' flow & pressure ratings are based on water at ambient temperature
- Maximum pressure ratings reduce at higher temperatures. Refer to the graph below of pressure vs temperature of standard PP and PVDF injection valves supplied with all pumps.
- If dosing into temperature > 90°C (or high pressure/temperature application) always request PVDF injection valves (refer to graph below)



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