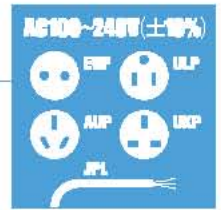


PZ

Manual Setting

Wide Voltage Range Power Supply

There is no need to worry about site power supply voltage or voltage fluctuations since it can be used with AC100 to 240 V ($\pm 10\%$) power supplies. You can also keep it in stock safely since it can be used for a variety of sites and applications.



Adjusting Dial for Easy Operation

Manual adjustment from 15 to 300 pulses per minute



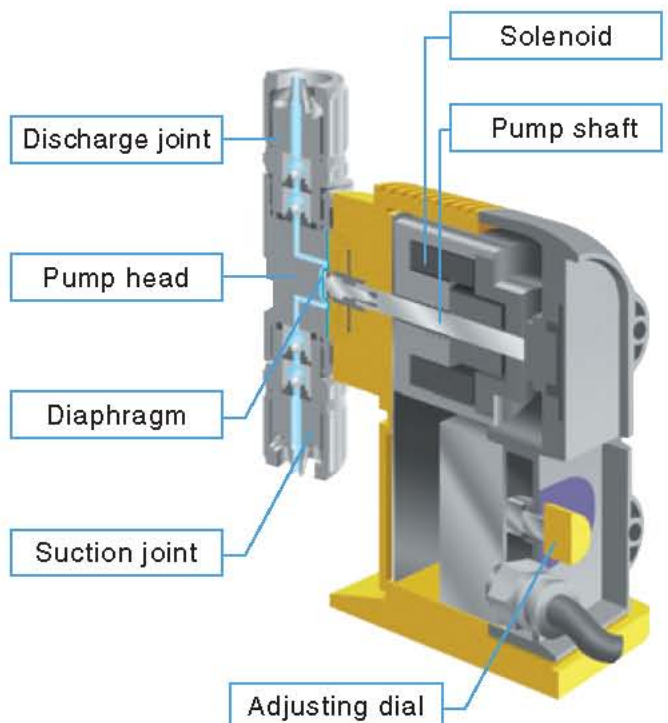
Water- & Dust-proof Specifications

IEC standard: IP65 or equivalent
* Avoid condensation and immersion in water.



Simple Structure

Minimum number of parts allows easy maintenance.



No-Input



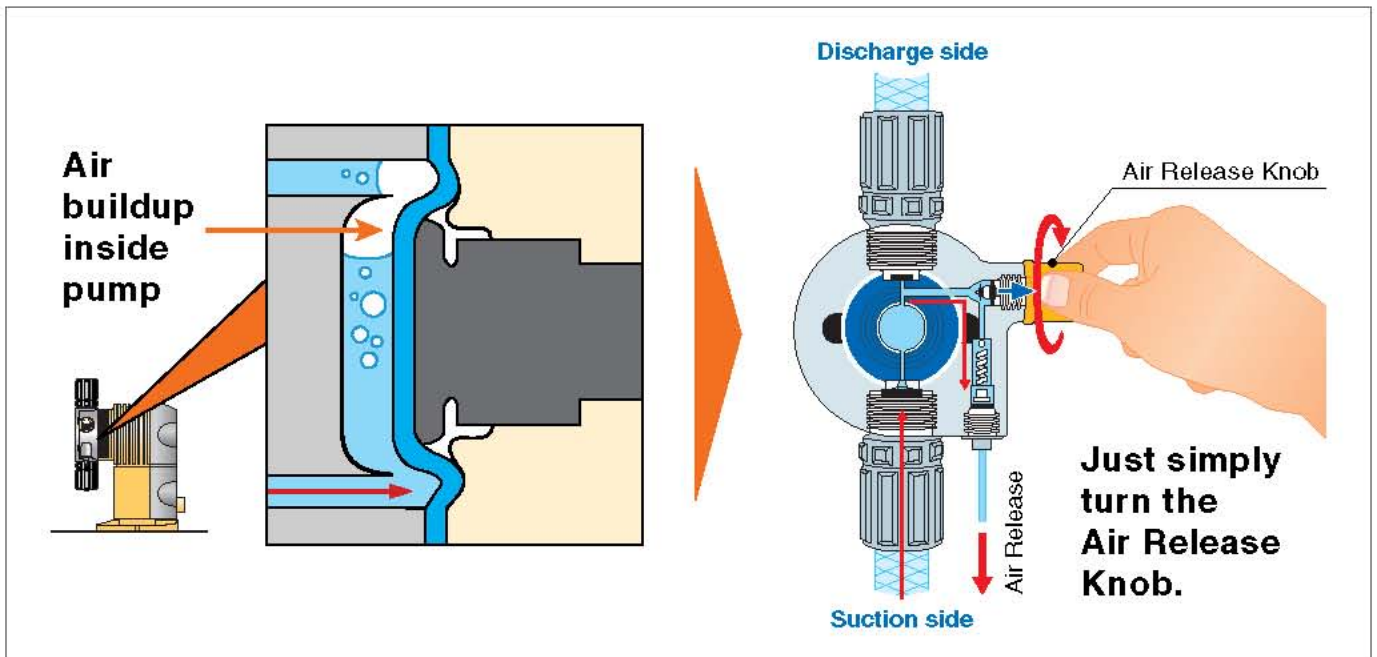
S-size only
(30R/60R/100R)



S-size only
(30/60/100)

Simple, Safe, Air Release

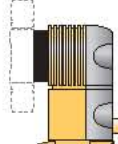
"Gas-lock" is the phenomenon that air enters the pump head and prevents chemicals from being discharged. The PZ Series is equipped with Air Release Valve as standard. Even if air gets into the pump head, you can simply and safely release the air just by lightly turning the Air Release Knob.



* Illustration shows the model with Relief Valve.

Extensive Range of Liquid-end Materials

* For details, refer to the 'Liquid-end Material' table on the following page.

Pump Head	Pump Body	Anti-siphonal Check Valve	Foot Valve
<p>VTCE/TCF Material: PVC Application example: Transfer/injection of general chemicals</p> <p><i>w/ Relief Valve*</i></p>	 <p>S-size only (30R/60R/100R/30/60/100)</p>	<p>VTCE/VTCF</p>	<p>VTCE/VTCF</p>
<p>FTCE/FTCF/FTCT Material: PVDF Application example: Transfer/injection of special chemicals (e.g. strong and mixed acids)</p> <p><i>w/ Relief Valve*</i></p>		<p>FTCE/FTCF/FTCT</p>	<p>FTCE/FTCF/FTCT</p>
<p>VTCE (for injection of boiler chemicals) Material: PVC Application example: Transfer/injection of boiler chemicals</p> <p><i>w/ Relief Valve*</i></p>		<p>VTCE (for injection of boiler chemicals)</p>	<p>VTCE (for injection of boiler chemicals)</p>
<p>6TCT Material: Stainless steel (SUS316) Application example: Transfer/injection of solutions/special chemicals</p>		<p>6TCT</p>	<p>6TCT</p>

* For a detailed explanation of the Relief Valve, see 'Relief Valve Function' on page 25.

Specification: PZ

Model		30						60						100								
		VTCE	VTCF	FTCE	FTCF	FTCT	6TCT	VTCE (for injection of boiler chemicals)	VTCE	VTCF	FTCE	FTCF	FTCT	6TCT	VTCE	VTCF	FTCE	FTCF	FTCT	6TCT		
Max. discharge volume*	mL/min	30			27			28			60			55			100			95		
	L/h	1.8			1.6			1.68			3.6			3.3			6.0			5.7		
Max. discharge pressure*	MPa	1.0			0.5			1.5			0.8			0.5			0.4					
Stroke speed	15 to 300 strokes/min (dial setting)																					
Stroke length	Fixed at 1.0 mm																					
Connection (hose/tube: ID x O.D.)	Discharge side	4 x 9 (PVC braided hose)	6 x 8 (PE)	6 x 8 (FEP)	6 x 8 (PTFE)	6 x 8	4 x 6 (nylon tube)	6 x 11 (PVC braided hose)	6 x 8 (PE)	6 x 8 (FEP)	6 x 8 (PTFE)	6 x 8	6 x 11 (PVC braided hose)	6 x 8 (PE)	6 x 8 (FEP)	6 x 8 (PTFE)	6 x 8	6 x 8 (PE)	6 x 8 (FEP)	6 x 8		
	Suction side	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (FEP)	1/4 x 3/8 (PTFE)	1/4 x 3/8 (PE)	4 x 9 (PVC braided hose)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (FEP)	1/4 x 3/8 (PTFE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)	1/4 x 3/8 (PE)		
	Air Release	4 x 6 (soft PVC hose)																				
Max. allowable viscosity	50 mPa·s																					
Allowable temperature	Ambient temperature: 0 to 40°C/Transferring liquid: 0 to 40°C (no freezing allowed)																					
Environmental protection	IEC standard: IP65 or equivalent (water- and dust-proof)																					
Operation mode	Manual	Setting stroke speed (15 to 300 strokes/min) w/ manual dial																				
Power supply	Rated voltage	AC 100 to 240 V (±10%)																				
	No. of phases/Frequency	1-phase/50 or 60 Hz																				
	Maximum current	2.2 A																				
	Power consumption	Max.: 220 VA/Ave.: 16 W																				
Weight	1.7 kg																					

* Conditions: Clean water, room temperature

Liquid-end Material

* Also refer to the "Corrosion-resistance Table" on page 26.

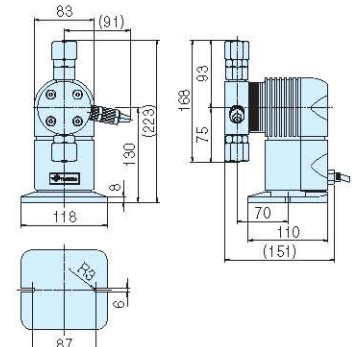
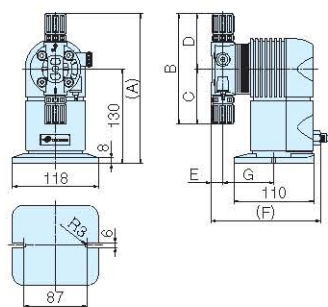
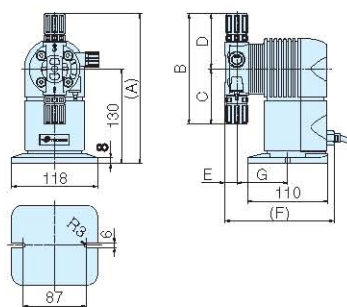
Part	Model	VTCE	VTCF	FTCE	FTCF	FTCT	VTCE (for injection of boiler chemicals)	6TCT	
Pump head		PVC			PVDF			PVC	SUS316
Diaphragm		PTFE							
Check ball		Ceramic							
O-ring		EPDM	Fluoro-rubber	EPDM	Fluoro-rubber	Special fluoro-rubber Pafulo®	EPDM	PTFE	
Valve seat		EPDM	Special fluoro-rubber	EPDM	Special fluoro-rubber	PTFE	EPDM	—	
Joint		PVC			PVDF			PVC	SUS316
Ball stopper		PVC			PVDF			PVC	PTFE (valve stopper)

External Dimension (mm)

w/ relief Valve
30R/60R/100R

30/60/100

30/60/100(6TCT)



Model	(A)	B	C	D	E	(F)	G
VTCE/VTCF	206	152	76	76	16.5	150.5	70
FTCE/FTCF/FTCT	227.5	195	97.5	97.5	17.5	142	69.5
VTCE (for injection of boiler chemicals)	193	139	76	63	16.5	150.5	70

Model	(A)	B	C	D	E	(F)	G
VTCE/VTCF	206	152	76	76	16.5	150.5	70
FTCE/FTCF/FTCT	227.5	195	97.5	97.5	17.5	142	69.5
VTCE (for injection of boiler chemicals)	193	139	76	63	16.5	150.5	70

* The shape and dimensions differ slightly depending on the liquid-end material and connection type.
* The mounting pitch allows mounting from 87 to 110 mm.