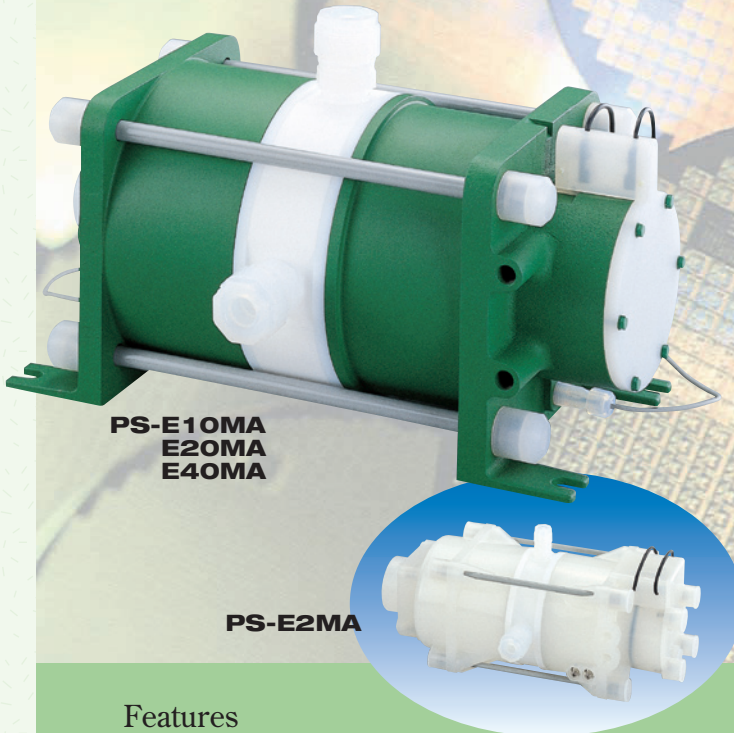


# SPELA 300 PILLAR BELLOWS PUMP PS-E SERIES

## PTFE Bellows Pump with No pulsation. More Compact.



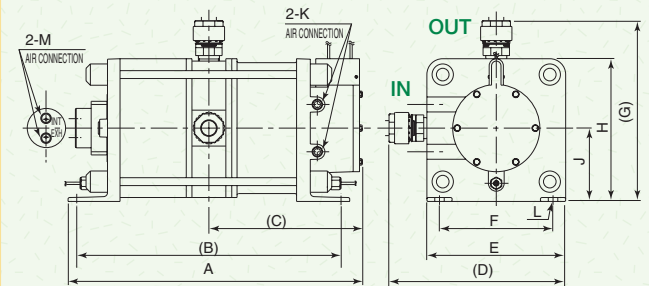
**PS-E10MA  
E20MA  
E40MA**

**PS-E2MA**

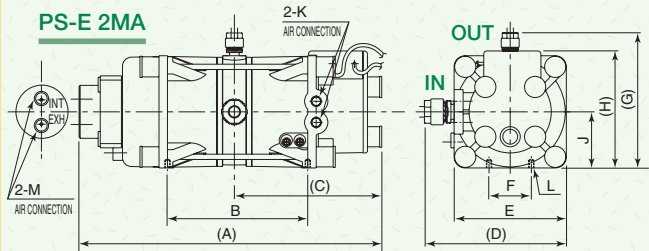
### Features

- 1 Minimized pulsation pressure.  
Average pulsation pressure rate is within  $\pm 12.5\%$
- 2 As compact as our current model, PE series pump.
- 3 VA design makes cost reduction possible.

**PS-E 10MA, PS-E 20MA, PS-E 40MA**



**PS-E 2MA**



DIMENSIONS (mm)

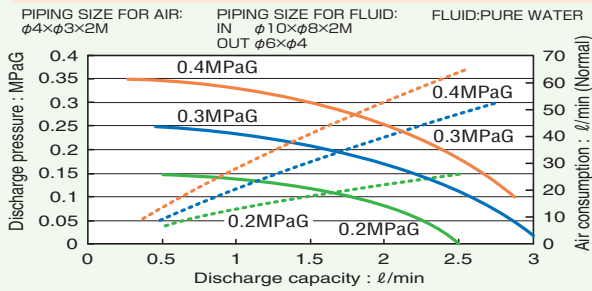
	A	B	C	D		E	F	G		H	J	K	L	M
				SUPER 300 FITTING	SUPER FITTING			SUPER 300 FITTING	SUPER FITTING					
PS-E 2MA	286	132	140	136	136	106	40	128	129	111	53	Rc1/8"	4-M5 7	Rc1/4"
PE-E 10MA	330	285	163	188	191	138	112	183	184	154	74	Rc1/4"	4-φ10	Rc1/4"
PE-E 20MA	373	335	194	226	229	176	144	231	234	181	93	Rc1/4"	4-φ12	Rc1/4"
PE-E 40MA	449	395	245	272	274	210	172	277	279	215	110	Rc3/8"	4-φ14	Rc1/4"

Type	PS-E 2MA			PS-E 10MA			PS-E 20MA			PS-E 40MA					
Pump connections mm (inch)	IN φ10 / OUT φ6 (IN φ3/8" / OUT φ1/4")			IN φ19 / OUT φ12 (IN φ3/4" / OUT φ1/2")			IN φ19 / OUT φ19 (IN φ3/4" / OUT φ3/4")			IN φ25 / OUT φ25 (IN φ1" / OUT φ1")					
Pump connectors	SUPER 300 TYPE PILLARFITTING or SUPER TYPE PILLARFITTING														
Max discharge capacity ℓ/min (GPM)	3.0 (0.66)			10 (2.64)			20 (5.28)			40 (10.57)					
Pulsation pressure range	When the pump discharge pressure is over 0.1MPaG			Within $\pm 12.5\%$			Within $\pm 16\%$			Within $\pm 24\%$			Within $\pm 31\%$		
	When the pump discharge pressure is under 0.1MPaG			Within 0.03MPa			Within 0.03MPa			Within 0.035MPa			Within 0.045MPa		
At full-load operation [※]															
Operating temp. °C (°F)	10~40 (50~104) ; 41~70 (105~158) ; 71~100 (160~212)			10~40 (50~104) ; 41~70 (105~158) ; 71~100 (160~212)			10~40 (50~104) ; 41~70 (105~158) ; 71~100 (160~212)			10~40 (50~104) ; 41~70 (105~158) ; 71~100 (160~212)			10~40 (50~104) ; 41~70 (105~158) ; 71~100 (160~212)		
Supply air pressure MPaG (PSIG)	0.2~0.4 (29.0~58.0) ; 0.2~0.3 (29.0~43.5) ; 0.2~0.25 (29.0~36.3)			0.2~0.3 (29.0~43.5) ; 0.2~0.25 (29.0~36.3)			0.2~0.3 (29.0~43.5) ; 0.2~0.25 (29.0~36.3)			0.2~0.3 (29.0~43.5) ; 0.2~0.25 (29.0~36.3)			0.2~0.3 (29.0~43.5) ; 0.2~0.25 (29.0~36.3)		
Max discharge pressure MPaG (PSIG)	0.35 (50.8) ; 0.25 (36.2) ; 0.2 (29.0)			0.25 (36.2) ; 0.2 (29.0)			0.25 (36.2) ; 0.2 (29.0)			0.25 (36.2) ; 0.2 (29.0)			0.25 (36.2) ; 0.2 (29.0)		
Allowable differential Pressure of Bellows MPa (PSIG)	0.3 (43.5) ; 0.25 (36.2) ; 0.2 (29.0)			0.3 (43.5) ; 0.25 (36.2) ; 0.2 (29.0)			0.3 (43.5) ; 0.25 (36.2) ; 0.2 (29.0)			0.3 (43.5) ; 0.25 (36.2) ; 0.2 (29.0)			0.3 (43.5) ; 0.25 (36.2) ; 0.2 (29.0)		
Discharge capacity per stroke ℓ/stroke (IN <sup>3</sup> ) [※1]	0.03 (1.83)			0.10 (6.10)			0.20 (12.20)			0.40 (24.41)					
Air consumption ℓ/min (GPM) [Normal] (SCFM)	10~70 (0.4~2.5)			10~80 (0.4~2.8)			50~130 (1.8~4.6)			50~300 (1.8~10.6)					
Ambient temperature °C (°F)	10~50 (50~122)														
Air inlet ports (inch)	For pump operation			2-Rc 1/8" (2-NPT 1/8")			2-Rc 1/4" (2-NPT 1/4")			2-Rc 1/4" (2-NPT 1/4")			2-Rc 3/8" (2-NPT 3/8")		
	For master valve			2-Rc 1/4" (2-NPT 1/4")			2-Rc 1/4" (2-NPT 1/4")			2-Rc 1/4" (2-NPT 1/4")			2-Rc 1/4" (2-NPT 1/4")		
Weight kg (lb)	2.5 (5.5)			7 (15)			12 (26)			21 (46)					
Pump size mm (inch) [※2]	286L × 106W × 111H (11.3L × 4.2W × 4.4H)			330L × 138W × 154H (13.0L × 5.4W × 6.1H)			373L × 176W × 181H (14.7L × 6.9W × 7.1H)			449L × 210W × 215H (17.7L × 8.3W × 8.5H)					

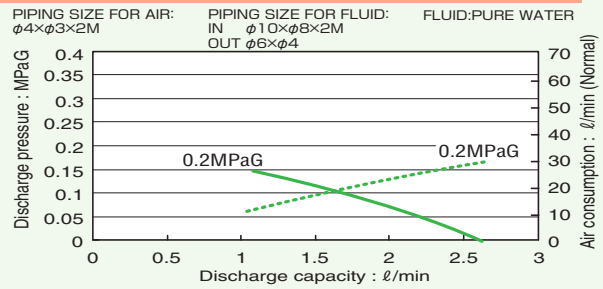
- Different size of pump connections may vary the above figure.
- Specify type of end connection when ordering.
- We have also explosionproof sensor type pumps that are suitable for pumping an explosive organic solution.
- The length of the suction pipe does not exceed 2m.
- We have also PC series pumps for CMP slurry, please contact us.
- [※1] Operation with an AIR chamber.
- [※2] The reference value of the pump size (cast metal size) is designed under the JIS standard tolerance.

## Performance Curves for PS-E 2MA

Performance Curves for PS-E 2MA (at 25°C)

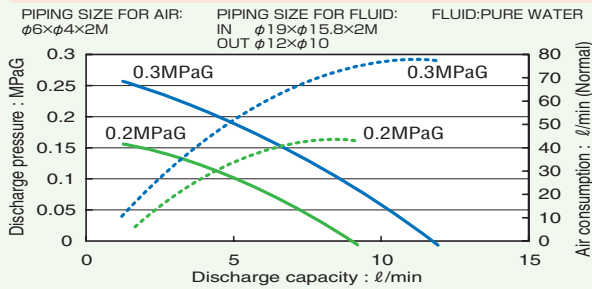


Performance Curves for PS-E 2MA (at 80°C)

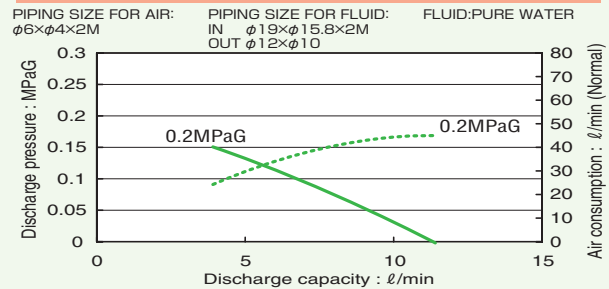


## Performance Curves for PS-E 10MA

Performance Curves for PS-E 10MA (at 20°C)

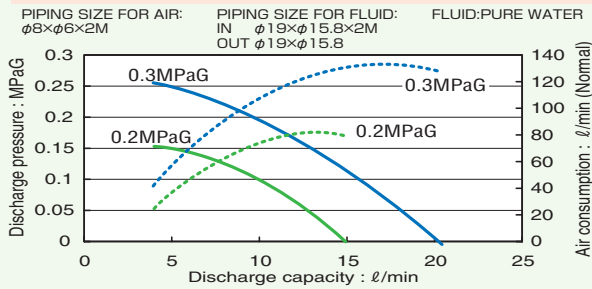


Performance Curves for PS-E 10MA (at 80°C)

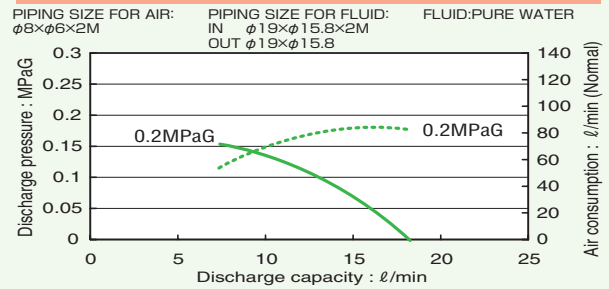


## Performance Curves for PS-E 20MA

Performance Curves for PS-E 20MA (at 20°C)

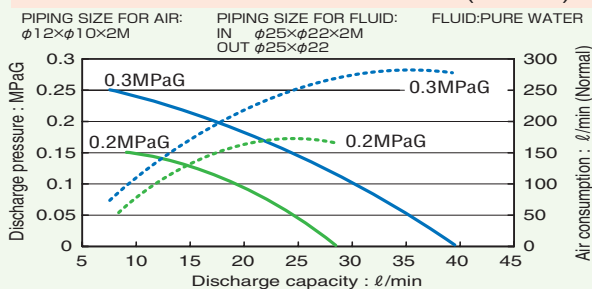


Performance Curves for PS-E 20MA (at 80°C)

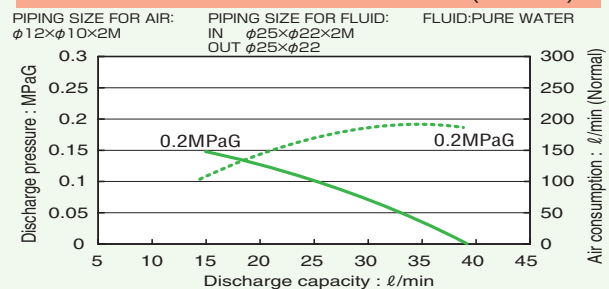


## Performance Curves for PS-E 40MA

Performance Curves for PS-E 40MA (at 20°C)



Performance Curves for PS-E 40MA (at 80°C)



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\*Specifications and dimensions are subject to change without prior notice.

\*The data on this catalogue are solely for your reference and are not to be construed as constituting a warranty.



**CAUTION**

• Follow the instructions, before installation and operation, for your safety.