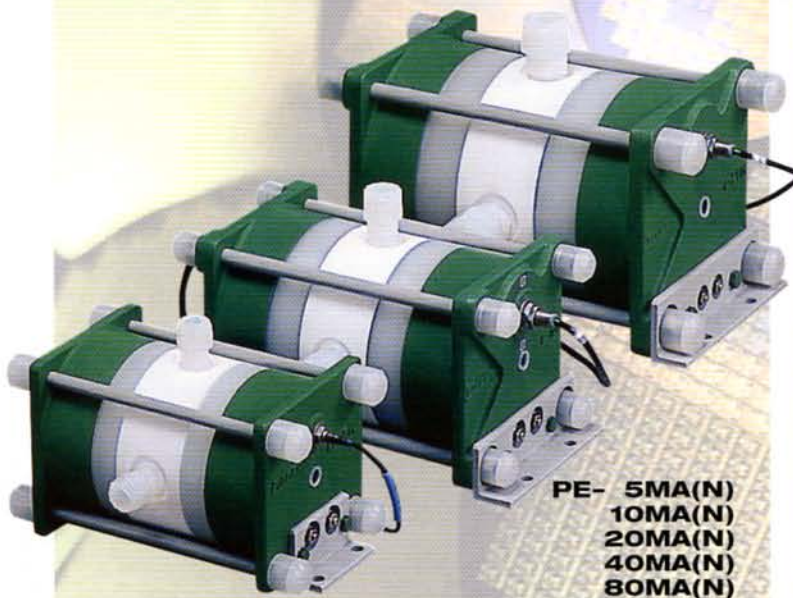


# SPELA PILLAR BELLOWS PUMP PE SERIES

## Highly reliable bellows pumps with extended durability.

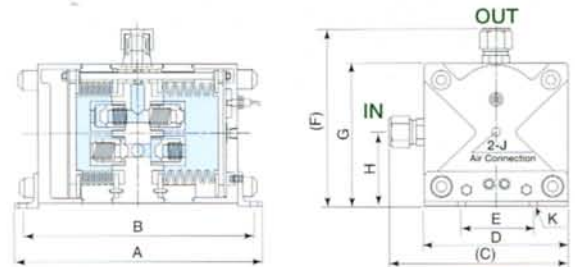


**PE- 5MA(N)  
10MA(N)  
20MA(N)  
40MA(N)  
80MA(N)**

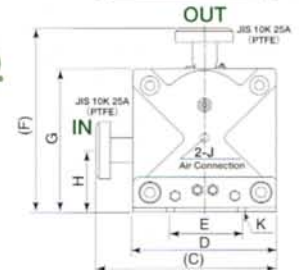
### Features

- 1 Proprietary PTFE bellows provides excellent durability.
- 2 Integrated, in-house production from raw materials to finished products assures quality and reliability.
- 3 Pillar's integrated manufacturing and design lower Total Cost of Ownership.

PE-5MA(N), PE-10MA(N), PE-20MA(N), PE-40MA(N)



PE-60MA(N)



DIMENSIONS (mm)

	A	B	(C)		D	E	(F)		G	H	J	K
			SUPER FITTING	SUPER 300 FITTING			SUPER FITTING	SUPER 300 FITTING				
PE- 5MA(N)	236	218	158	156	122	50	162	160	126	65	Rc1/4" (NPT1/4")	4-φ9
PE-10MA(N)	284	266	181	180	142	65	186	185	147	76		
PE-20MA(N)	324	304	234	231	184	80	237	234	187	95	Rc3/8" (NPT3/8")	4-φ11
PE-40MA(N)	404	376	304	302	245	120	309	307	249.5	112		4-φ13
PE-60MA(N)	538	478	342		277	130	359		286.5	129	Rc1/2" (NPT1/2")	

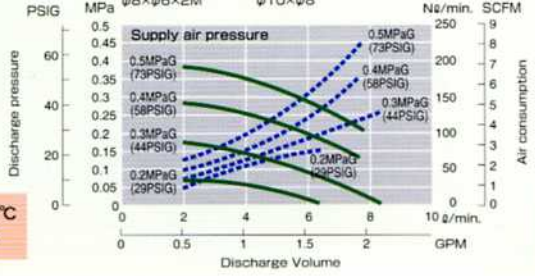
Type	PE-5MA(N)	PE-10MA(N)	PE-20MA(N)	PE-40MA(N)	PE-80MA(N)						
Pump connections INCH	IN φ10 / OUT φ10 (IN φ3/8" / OUT φ3/8")	IN φ12 / OUT φ12 (IN φ1/2" / OUT φ1/2")	IN φ19 / OUT φ19 (IN φ3/4" / OUT φ3/4")	IN φ25 / OUT φ25 (IN φ1" / OUT φ1")	JIS 10K 25A FLANGE <sup>※4</sup> OUT JIS 10K 25A FLANGE						
Pump connectors <sup>※1</sup>	SUPER 300 TYPE FITTING or SUPER TYPE FITTING										
Max discharge capacity ℓ/min. (GPM) <sup>※2</sup>	8 (2.1)	16 (4.2)	32 (8.4)	60 (15.8)	82 (22)						
Operating temp. °C (°F)	10~40 (50~104)	41~100 (105~212)	10~40 (50~104)	41~100 (105~212)	10~40 (50~104)	41~60 (105~140)	61~80 (141~176)				
Supply air pressure MPa (PSIG)	0.2~0.5 (29~73)	0.2~0.4 (29~58)	0.2~0.5 (29~73)	0.2~0.4 (29~58)	0.2~0.5 (29~73)	0.2~0.4 (29~58)	0.2~0.3 (29~44)				
Max discharge pressure MPa (PSIG)	0.45 (65)	0.35 (51)	0.45 (65)	0.35 (51)	0.45 (65)	0.35 (51)	0.45 (65)	0.35 (51)	0.25 (36)		
Allowable differential pressure of bellows MPa (PSIG) <sup>※3</sup>	0.4 (58)	0.3 (44)	0.4 (58)	0.3 (44)	0.4 (58)	0.3 (44)	0.4 (58)	0.3 (44)	0.25 (36)	0.2 (29)	
Discharge volume per stroke ℓ/stroke (IN <sup>3</sup> )	0.09 (5.5)		0.21 (13)		0.41 (25)		0.85 (52)		1.69 (103)		
Air consumption ℓ/min. [Normal] (SCFM)	25~225 (0.9~8.0)		30~340 (1.1~12.0)		30~450 (1.1~15.8)		50~630 (1.8~22.0)		100~650 (3.5~22.8)		
Temperature in atmosphere °C (°F)	10~50 (50~122)										
Air source connection (INCH)	2-Rc 1/4" (2-NPT 1/4")		2-Rc 3/8" (2-NPT 3/8")		2-Rc 1/2" (2-NPT 1/2")						
Effective cross-section area of solenoid valve	27 or larger		27 or larger		27 or larger		57 or larger		57 or larger		
Weight kg (lb)	4.4 (9.7)		6.7 (14.8)		13.2 (29.1)		26.3 (58.0)		42.5 (93.7)		
Pump size mm	236L × 122W × 126H		284L × 142W × 147H		324L × 184W × 187H		404L × 254W × 249.5H		538L × 277W × 286.5H		

<sup>※1</sup> Specify type of end connection when ordering. <sup>※2</sup> This data is based on test with D.I. water (20°C)  
<sup>※3</sup> Allowable differential pressure of bellows = Differential between discharge and supply air pressure. <sup>※4</sup> Super 300 type Pillar Fitting is also available.

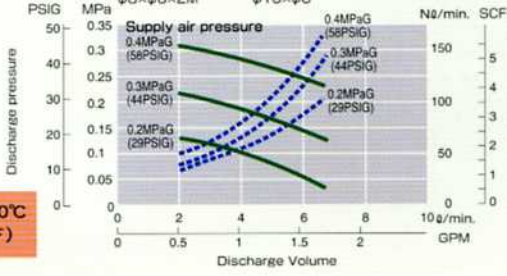
## Curves for PE-5MA(N)

HQ PERFORMANCE  
AIR CONSUMPTION

Temp:20°C  
(68°F)



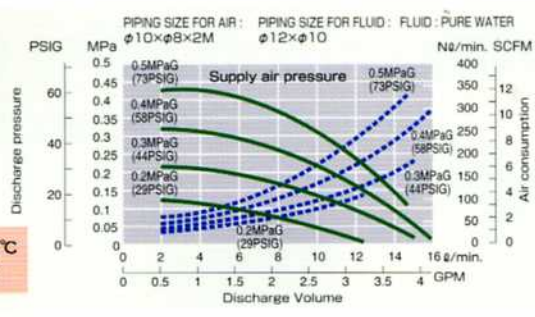
Temp:80°C  
(176°F)



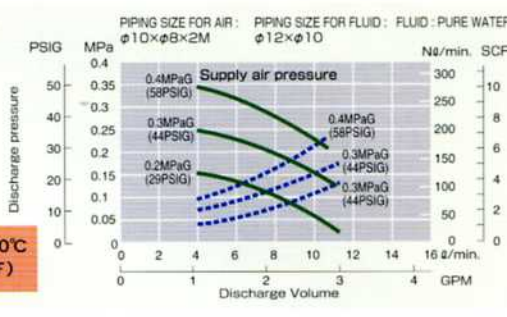
## Performance Curves for PE-10MA(N)

HQ PERFORMANCE  
AIR CONSUMPTION

Temp:20°C  
(68°F)



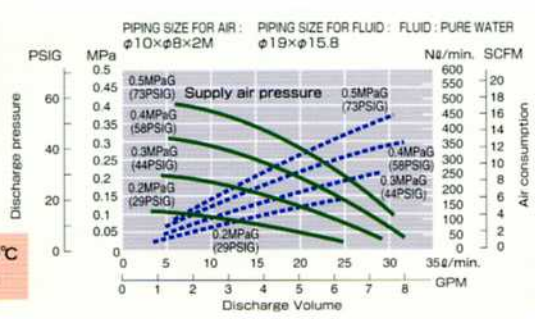
Temp:80°C  
(176°F)



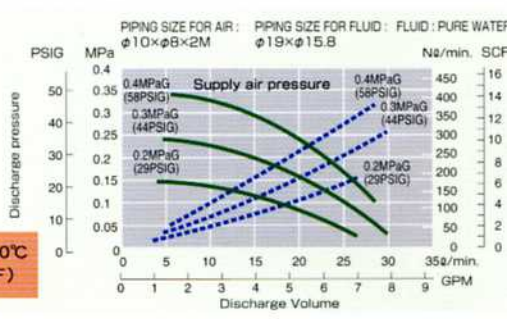
## Performance Curves for PE-20MA(N)

HQ PERFORMANCE  
AIR CONSUMPTION

Temp:20°C  
(68°F)



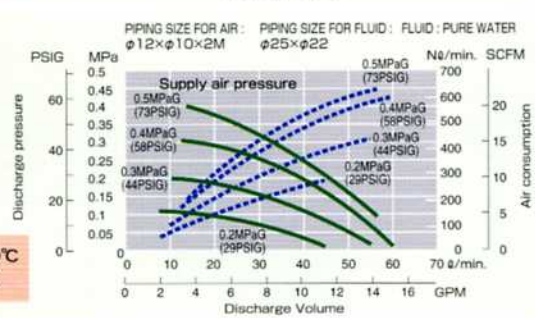
Temp:80°C  
(176°F)



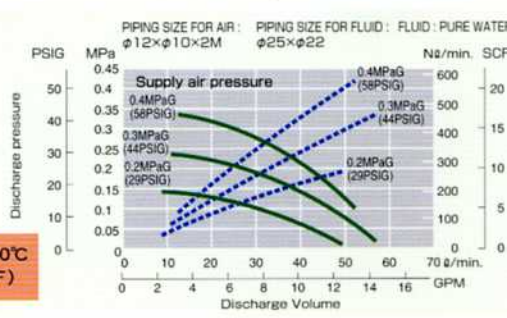
## Performance Curves for PE-40MA(N)

HQ PERFORMANCE  
AIR CONSUMPTION

Temp:20°C  
(68°F)



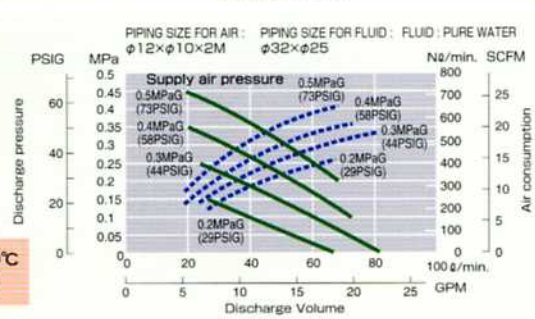
Temp:80°C  
(176°F)



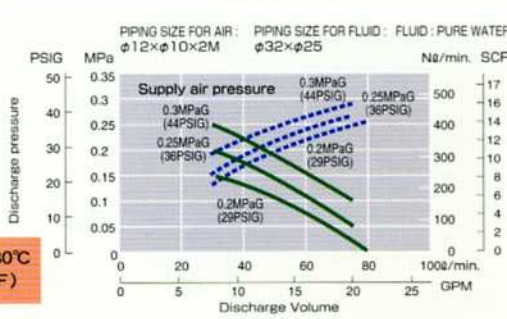
## Performance Curves for PE-80MA(N)

HQ PERFORMANCE  
AIR CONSUMPTION

Temp:20°C  
(68°F)



Temp:80°C  
(176°F)



# NIPPON PILLAR PACKING CO., LTD.

**Head Office :** 11-48, Nonakaminami 2 Chome, Yodogawa-ku, Osaka, 532-0022 Japan.  
Tel : 81-(0)6-6305-2821 Fax : 81-(0)6-6302-3300  
E-mail : info@pillar.co.jp

**Tokyo Office :** 2-2, Uchisaiwaicho 2 Chome, Chiyoda-ku, Tokyo, 100-0011 Japan.  
Tel : 81-(0)3-3508-1611 Fax : 81-(0)3-3508-1881

**Nippon Pillar Corporation of America :** 1562, Parkway Loop, Suite2C, Tustin, CA 92780, USA.  
Tel : 1-714-258-7741 Fax : 1-714-258-7760  
E-mail : sales@nipponpillar.com

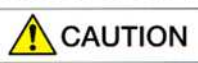
**Nippon Pillar Singapore Pte. Ltd. :** Blk 71 Ayer Rajah Crescent, #06-20/23 Ayer Rajah Industrial Estate Singapore 139951  
Tel : (65)6861-7138 Fax : (65)6862-9098  
E-mail : npillars@singnet.com.sg

**Pillar Taiwan Semiconductor Work Shop :** No.15 Lane 42, Ming-Yu 2 Street, Hsin-Chu, Taiwan, R.O.C.  
Tel : 886-3-5785715 Fax : 886-3-5785716  
E-mail : homwell@ms9.hinet

**Pillar Korea Semiconductor Work Shop :** 55-1, Changkoc-1R1, Paltan-Myun, Hwasung-Kun, Kyongki-Do, Korea.  
Tel : 031-353-1521 Fax : 031-353-1522  
E-mail : hanjongeng@hotmail.com

<http://www.pillar.co.jp/> e-mail : info@pillar.co.jp

\*Specifications and dimensions are subject to change without prior notice.  
\*The data on this catalogue are solely for your reference and are not construed as constituting a warranty.



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