

PILLAR

PILAFLON[®] FOR SEMICONDUCTOR & FPD INDUSTRY



Fitting



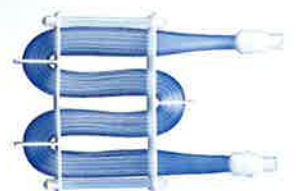
Pump



Valve



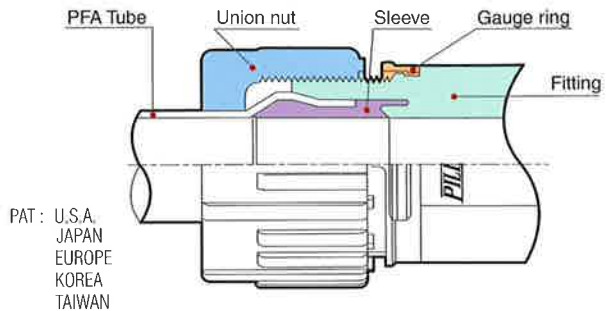
Tube



Heat Exchanger

Tube Piping Series

Super 300 Type Pillar Fitting®



PAT : U.S.A.
JAPAN
EUROPE
KOREA
TAIWAN

Minimum Micro bubble, Low pressure reduction, small liquid spot.
The unique "gauge ring" gives an audible "click" that you can feel as you tighten the nut.

Type	Max Operating Pressure (MPaG)	Operating Temperature (°C)	Tube Size : mm (Inch)
Super 300 Type	0.7 <1>	0 ~ 200	3 ~ 25 (1/8" ~ 1")

<1>At 60°C. The pressure varies with operating temperature.

Super 300 Type Pillar Fitting® Large size

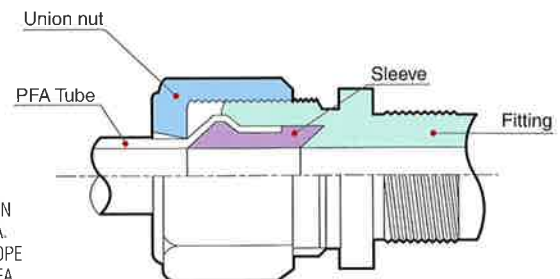
1 1/4", 1 1/2"

Type	Max Operating Pressure (MPaG)	Operating Temperature (°C)	Tube Size : mm (Inch)
Super 300 Type	0.7 <1>	0 ~ 200	1 1/4", 1 1/2"

<1>At 60°C. The pressure varies with operating temperature.



Super Type Pillar Fitting®



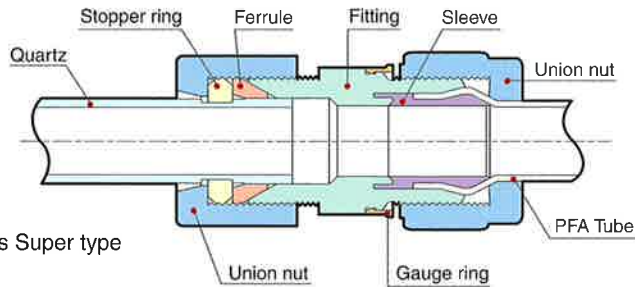
PAT : JAPAN
U.S.A.
EUROPE
KOREA

Type	Max Operating Pressure (MPaG)	Operating Temperature (°C)	Tube Size : mm (Inch)
Super Type	0.7 <1>	0 ~ 200	3 ~ 25 (1/8" ~ 1")

<1>At 60°C. The pressure varies with operating temperature.

Quartz Type Pillar Fitting®

- Joint PFA tubing to quartz piping.

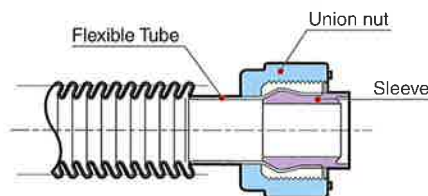


- Fitting side connection is Super type or Super 300 type.



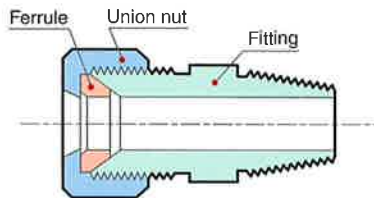
Flexible Tube Fitting

- Excellent flexibility, Absorb thermal expansion.
- Fitting side connection is Super type or Super 300 type.



Male Connector Through Pillar Fitting

- Through fitting for panel, equipment assembly.



Tube Type For Welding

- No bead, perfect flat surface.



Bend Tube Piping

- Bending by our own technology.



Pump Series

Pillar Spela® 300 Bellows Pump

PTFE Bellows Pump with No Pulsation

The bellows pump has realized the low pulsation only with its body. It is not necessary to arrange any accumulator separately.



PS-E2MA PS-E10MA
PS-E20MA PS-E40MA

PS-E series

For Medium Temperature

For single wafer cleaning system, circulation loop of cleaning system

- Minimized pulsation.
- As compact as PE series pump.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PS-E 2MA	3	10 ~ 100
PS-E10MA	10	
PS-E20MA	20	
PS-E40MA	40	



PS-E10H PS-E20H PS-E40H

PS-E series

For High Temperature

For circulation loop of high temperature cleaning system

- Minimized pulsation.
- As compact as PE series pump.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PS-E10H	10	10 ~ 180
PS-E20H	20	
PS-E40H	40	10 ~ 160



PS-EN20M

PS-EN series

For Medium Temperature

For circulation loop of cleaning system

- Plastic type pump with no pulsation.
- More compact than PS-E series pump.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PS-EN20M	20	10 ~ 100



PS-10MA PS-20MA PS-40MA

PS series

For Medium Temperature

For chemical supply system

- Minimized pulsation.
- Space saving design.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PS-10MA	12	10 ~ 100
PS-20MA	24	
PS-40MA	48	

Pillar Spela® Bellows Pump

PE series

For Medium Temperature

For chemical supply system, circulation loop of cleaning system

■ This data depends on larger solenoid valve and air source connection. (except PE-80MA)

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PE- 5MA	8	10 ~ 100
PE-10MA	16	
PE-20MA	32	
PE-40MA	60	10 ~ 80
PE-80MA	82	



PE-5MA PE-10MA PE-20MA
PE-40MA PE-80MA

PE series

For High Temperature

For circulation loop of high temperature cleaning system

■ This data depends on larger solenoid valve and air source connection.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PE-10HB	16	10 ~ 180
PE-20HB	32	
PE-40HBH	64	



PE-10HB PE-20HB
PE-40HBH

PE-E series

For Medium Temperature

For chemical supply system, circulation loop of cleaning system

■ More compact than PE series pump.

Type	Max Discharge Capacity (ℓ /min)	Operating Temperature (°C)
PE-E 2M	2.5	10 ~ 100
PE-E10M	10	
PE-E20M	20	
PE-E40M	40	



PE-E2M PE-E10M
PE-E20M PE-E40M

CONTROLLER



Type	Applicable Pump
PB-10	PS-E series, PS-EN series, PS series, PE series, PE-E series, PC series, PW series

ACCUMULATOR

■ Automatic pressure compensation.



Type	Applicable Pump
PA-10HB	PE-5MA, PE-10MA, PE-10HB
PA-20HB	PE-20MA, PE-20HB
PA-40HB	PE-40MA, PE-40HBH
PA-80MB	PE-80MA

Pump Series

Metering Pump



PW-5MA PW-10MA

PW series

For Medium Temperature

For feeding

■ ±1% accuracy without any back pressure device.

Type	Nominal Discharge Capacity (ml/st)	Discharge Repeatability (%)	Stroke Speed (spm)	Operating Temperature (°C)
PW- 5MA	5 <*1>	±1.0 <*2>	4 ~ 40	10 ~ 100
PW-10MA	10 <*1>			

<*1> Water, 25°C. <*2> When operating at one setup.

Pump for CMP slurry



PC-10MB PC-20MB PC-40MB

PC series

For Medium Temperature

Pump for CMP slurry

■ No secondary cohesion or retention of slurry.

Type	Max Discharge Capacity (ℓ/min)	Operating Temperature (°C)
PC-10MB	12	10 ~ 100
PC-20MB	24	
PC-40MB	48	

Model Map

	Type	Operating Temperature (°C)		Max. Supply Air Pressure (MPaG)	Discharge Capacity (ℓ/min)										Application	Notes
					2	5	10	15	20	30	40	60	80			
Circulating Pump	PS-E series	Medium	10~100	0.4	○										Single water processing cleaner	
		Medium	10~100	0.3		○		○		○					Cleaning equipment	
		High	10~180	0.3			○		○		*	○			Cleaning equipment for high temp.	*PS-E40H: 10 ~ 160°C
Supply Pump	PS series	Medium	10~100	0.5			○		○		○			Chemical supply system		
Circulating, Supply Pump	PE series	Medium	10~100	0.5		○		○		○		○	*	Chemical supply system, cleaning equipment	*PE-80MA: 10 ~ 80°C	
		High	10~180	0.5			○		○		○			Cleaning equipment for high temp.		
	PE-E series	Medium	10~100	0.3 *	○		○		○		○			Chemical supply system, cleaning equipment	*PE-E2M: 0.4MPaG	
Metering Pump	PW series	Medium	10~100	0.25	5ml, 10ml / stroke										For feeding	
Pump for slurry	PC series	Medium	10~100	0.5			○		○		○			For slurry of CMP process		
Plastic Pump	PS-EN series	Medium	10~100	0.3					○					Cleaning equipment		
Accumulator	PA series	High	10~180	0.5		○	○		○		○		*	Automatic pressure compensation	*PA-80MB: 10 ~ 80°C	
	PA-C series	Medium	10~100	0.5			○		○		○			For PC series Pump only.		

Manual Valve, Tube, Heat Exchanger

Manual Valve

Stop Valve



Check Valve



Flow Control Valve Angle



Air Vent Valve



Type	Stop Valve	Check Valve	Flow Control Valve Angle	Air Vent Valve
Max Operating Pressure (MPaG)	0.7 ^{*1}	0.7 ^{*1}	0.7 ^{*1}	0.3 ^{*1}
Operating Temperature (°C)	0 ~ 100	0 ~ 150	0 ~ 100	0 ~ 80

^{*1} At 60°C. The pressure varies with operating temperature.

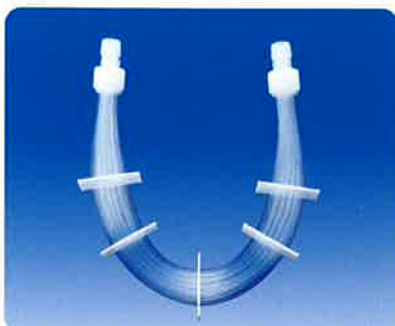
Tube

Materials	Tube Size O.D. :mm (O.D. Inch)
PFA	3 ~ 38.1 (1/8" ~ 1 1/2")

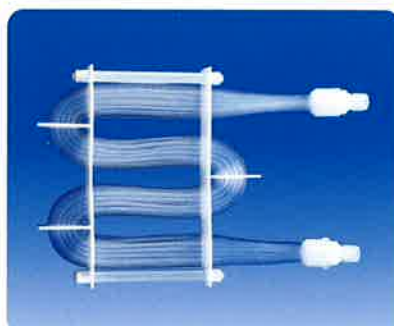


Heat Exchanger

MODULE type



W type



END Connector

close-up



Manufacturing in clean room

Integrated manufacturing from material to final products.
All the processes of molding, machining, assembling,
cleaning and inspection are performed at the clean room
in captive factory certified to ISO9001 and ISO14001.



Shipment



Clean
and
High quality

Assembly



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CAUTION

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

URL ▶ <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 to be construed as constituting a warranty.