

CV Series Cylinder Vaporizer

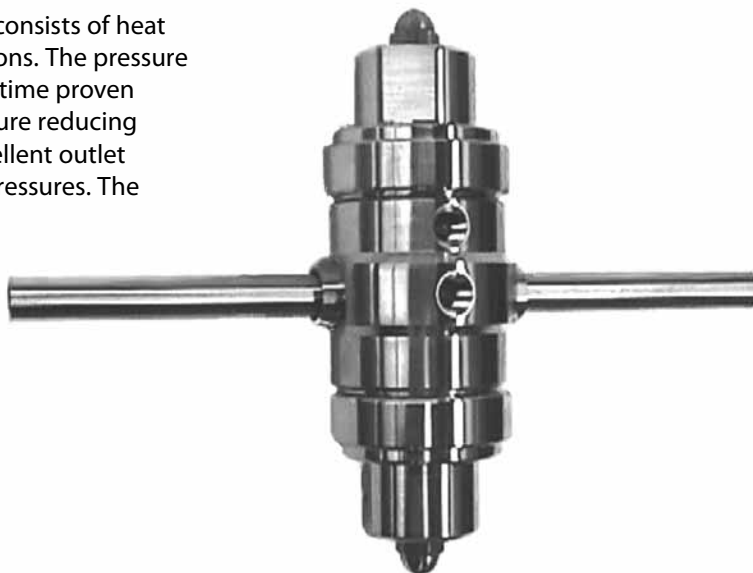
Steam Heated Two-stage Pressure Regulators



Introduction

The Cylinder Vaporizer Series Heated Pressure Regulator is designed to supply heat to samples entering instrumentation systems. It can be used to preheat liquids, to prevent condensation of gases or to vaporize liquids prior to gas analysis.

The design of the Cylinder Vaporizer consists of heat exchanger and pressure control sections. The pressure control section is patterned after the time proven design of the CYL-20 two-stage pressure reducing regulator and provides the same excellent outlet pressure stability with varying inlet pressures. The heat exchange element uses GO Regulator's unique spiral wrapped screen as the heat exchange surface. This screen has up to 100 square inches of heat transfer area and precise design forces all sample flow to pass through the element.



Typical Applications

Analytical process sample conditioning systems:

- Petrochemical refineries
- Chemical production facilities
- Pilot plants (chemical & petrochemical)
- LNG loading and off-loading points
- Natural gas pipeline sampling

Features & Benefits

- Optional Hastelloy® C-276 and Monel®
- Electropolished body with better than 25 Ra finish in diaphragm cavity for an optimal sealing surface
- Bubble-tight shutoff
- Unique spiral wrapped heat exchange element provides up to 100 square inches of heat transfer area.

Technical Data

CONSTRUCTION	316L stainless steel
OUTLET PRESSURES	0-10, 0-25, 0-50, 0-100, 0-250, and 0-500 psig
OPERATING TEMPERATURE	up to 550° F (285° C)
C _v COEFFICIENTS	0.06, 0.025, 0.2

GO Regulator

405 Centura Court • PO Box 4866 (29305) • Spartanburg, SC 29303
Phone (864) 574-7966 Fax (864) 574-5608
www.goreg.com • sales@goreg.com

pressure regulators

CV Series Cylinder Vaporizer

How to Order

Standard items in bold

CV

-

1

A

Q

3

1

Q

3

G

1

5

5

5

5

5

1st Stage

2nd Stage

BODY MATERIAL

1 316L stainless steel

4 Monel®

PORT CONFIGURATION

A Standard

SEAT MATERIAL (1ST STAGE)

A Tefzel®

B CF PTFE

C Polyimide

H PCTFE (formerly Kel-F® 81)

Q PEEK™

FLOW COEFFICIENT (1ST STAGE)

3 0.06

CAP ASSEMBLY (1ST STAGE)

1 Tamper-proof, stainless steel

4 Tamper-proof, panel mount, stainless steel

SEAT MATERIAL (2ND STAGE)

A Tefzel®

B CF PTFE

C Polyimide

H PCTFE (formerly Kel-F® 81)

Q PEEK™

FLOW COEFFICIENT (2ND STAGE)

3 0.06

VOLTAGE

5 Steam

THERMISTOR TYPE

5 Steam

CONTROLLER TYPE

5 Steam

HEATER WATTAGE

5 Steam

TEMPERATURE RANGE

5 Steam

CAP ASSEMBLY (2ND STAGE)

1 Tamper-proof, stainless steel

4 Tamper-proof, panel mount, stainless steel

OUTPUT RANGE (2ND STAGE)

C 0–10 psig

D 0–25 psig

E 0–50 psig

G 0–100 psig

I 0–250 psig

J 0–500 psig

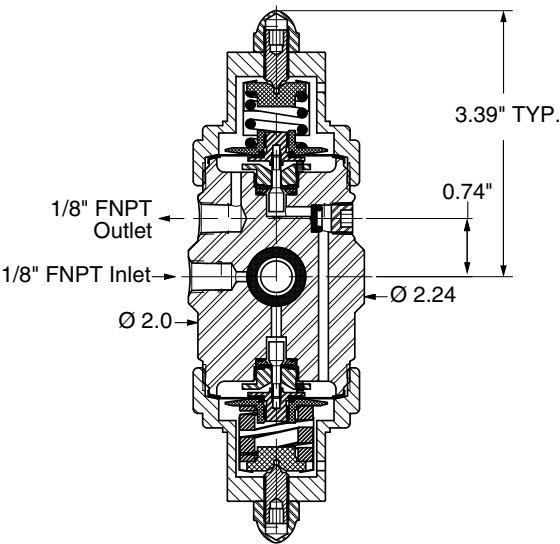
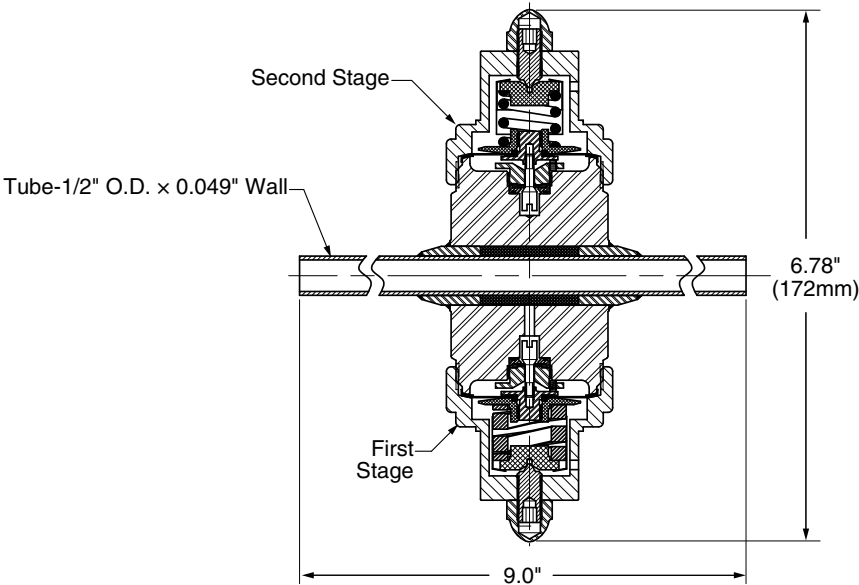
NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.goreg.com or contact the factory.

Maximum Temperature & Operating Inlet Pressures

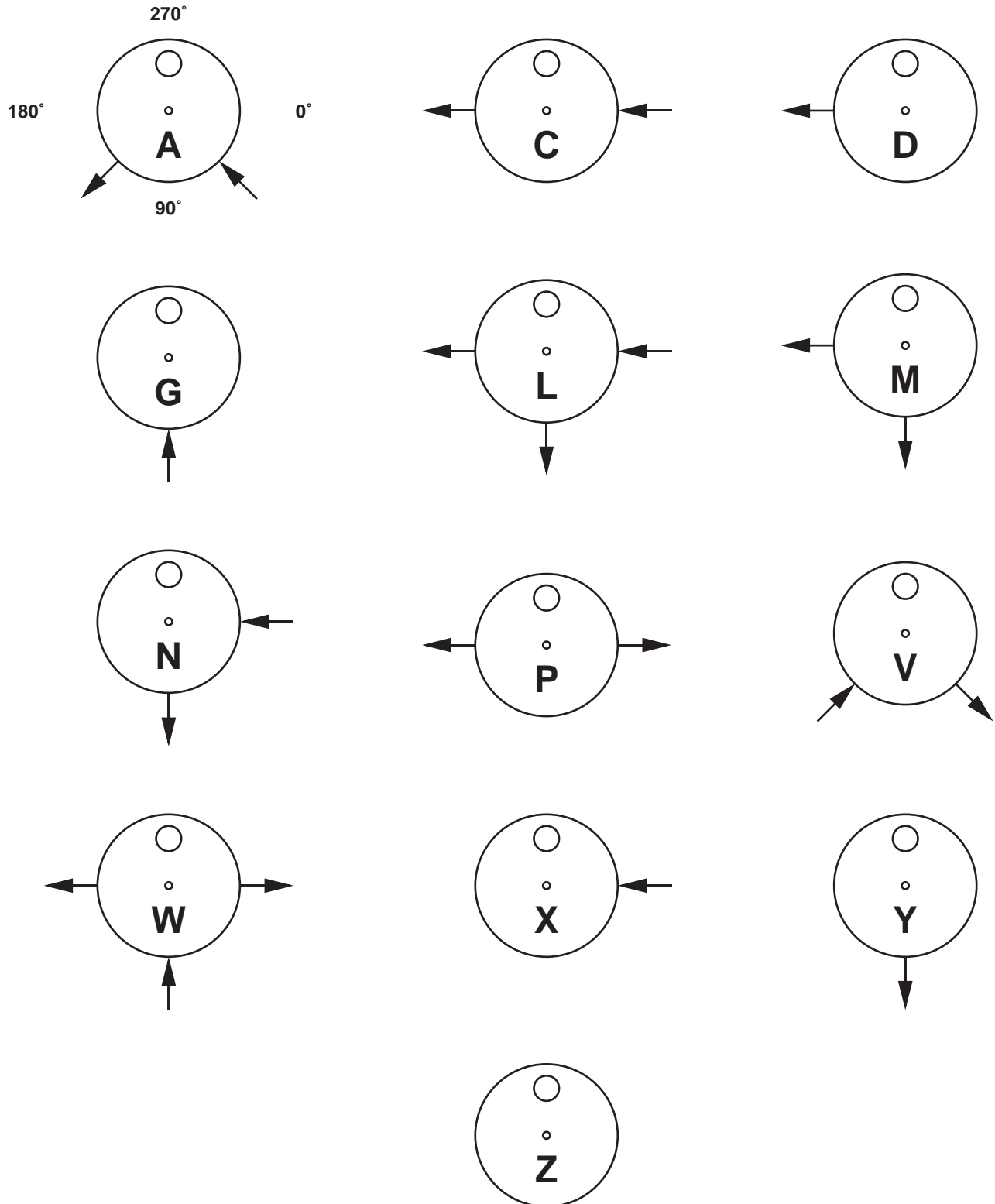
SEAT MATERIAL	MAXIMUM PRESSURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	Up to 175° F (80° C)	@	3600 psig (24.82 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
High density PTFE	Up to 175° F (80° C)	@	3600 psig (24.82 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
PCTFE (formerly Kel-F®)	Up to 380° F (193° C)	@	3600 psig (24.82 MPa)
Polyimide	Up to 380° F (193° C)	@	6000 psig (41.37 MPa)
PEEK™	Up to 380° F (193° C)	@	6000 psig (41.37 MPa)

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Outline and Mounting Dimensions

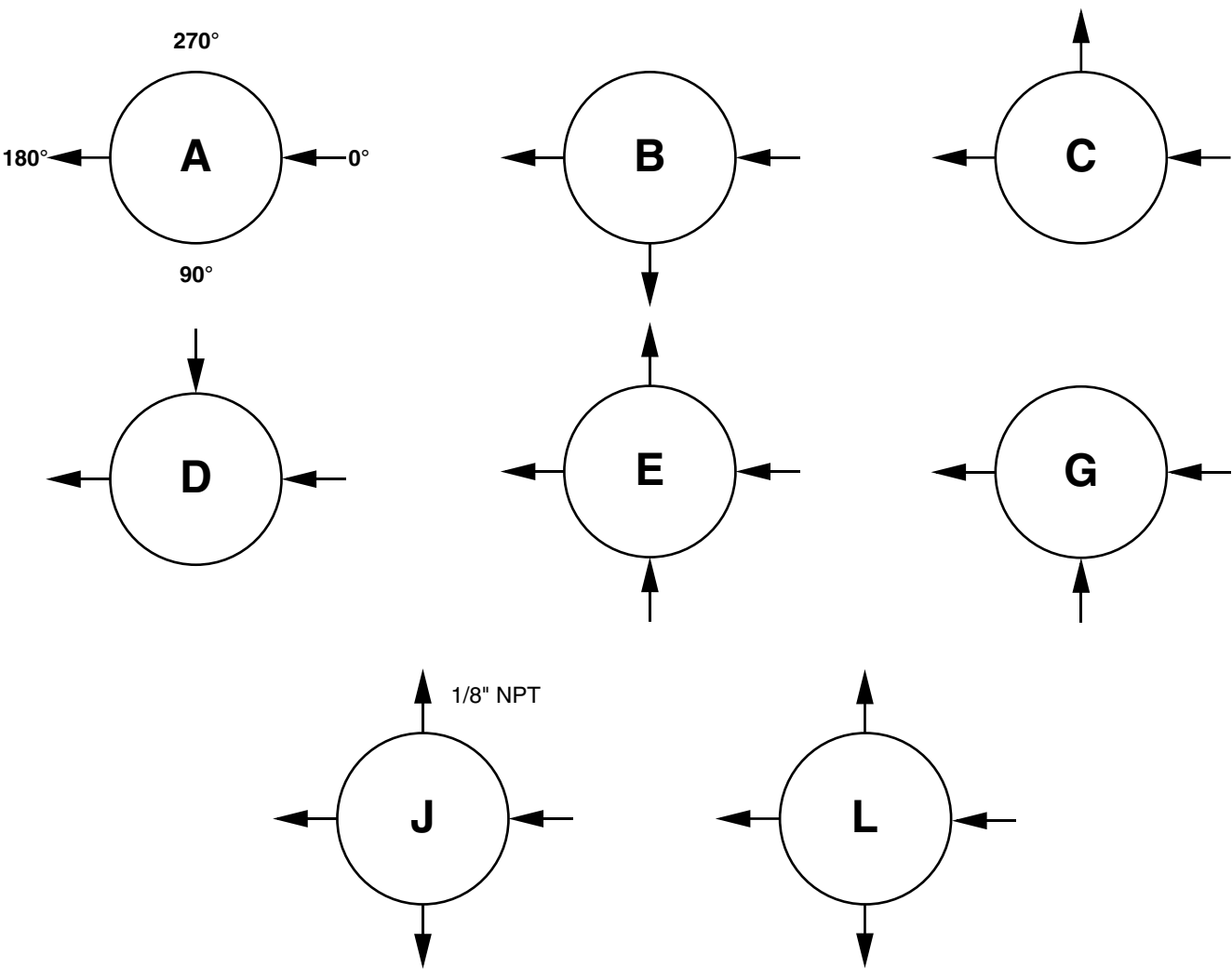


Porting Configurations (Pressure Regulator Body) for HPR-2 Steam & Electric and HPR-2XW Steam & Electric Series



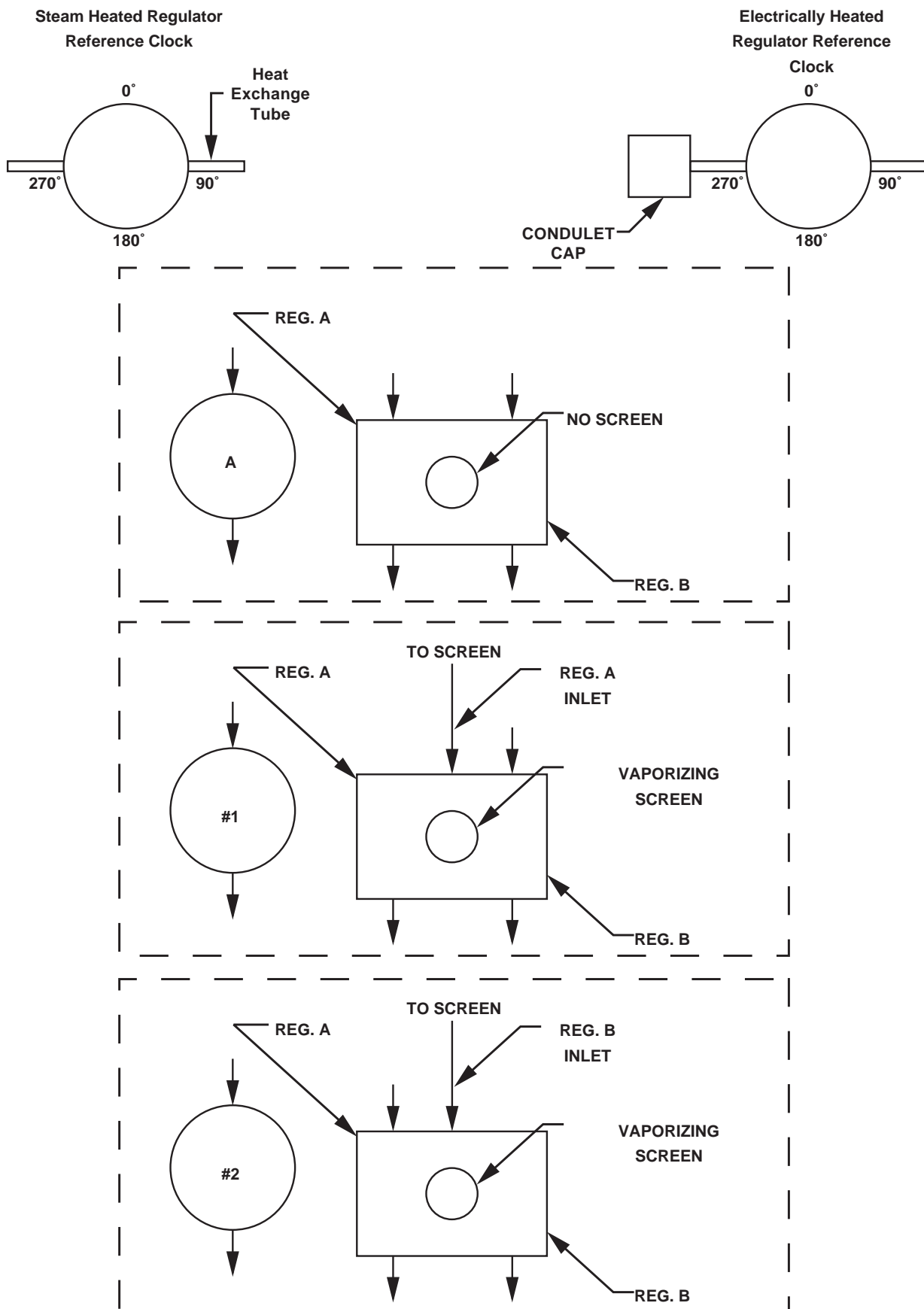
Location of ports from top view. Arrow pointing toward body is inlet. Arrow pointing away from body is outlet.

Porting Configurations for MV-1 Series



Location of ports from top view. Arrow pointing toward body is inlet. Arrow pointing away from body is outlet.

Porting Configurations for DHR Steam & Electric Series



Location of ports from to of regulator "A". Arrow pointing toward body is inlet. Arrow pointing away from body is outlet.

Heater Block Configurations

for HPR-2 Steam & Electric and HPR-2XW Steam & Electric Series

