

DA867P-UEM

2-WAY DIRECT ACTING WATER REGULATING VALVE

SELECTION CRITERIA PAGE 1 OF 3 Marine water use Union end connections Direct acting 0 2-way configuration Actuation by pressure 0 3/8" thru 1-1/2" sizes • Open on pressure increase Optional use of ammonia Optional open on pressure decrease 225 PSI proof pressure 150 PSI water pressure rating **C**ONSTRUCTION DETAILS Monel internals Bronze body Buna-N diaphragms & seals CONTROL SETTING ADJUSTING SCREW 3/16" F-F WRENCH FLATS ON 3/8" & 5/16" ON 1/2" THRU 1-1/2" 1/4" ON 3/8" 11/32" ON 1/2" THRU 1-1/2" E <≕⊰ FLOW D B REFRIGERANT CONNECTION 36" LONG CAPILLARY TUBE WITH 1/4" SAE FLARE NUT CONNECTION 臣 OPTIONAL REFRIGERANT PRESSURE CONNECTION 1/4" SAE FLARE FITTING IMM

Reference Metrex drawing DA867P-UEM

VALVE SIZING CHART_

	PIPE		DIMENSIONS			TYPE I		TYPE II		MIL-F-1183	
	SIZE		Α	В	С	D	E	D	E	D	E
DA867P-37-UEM	3/8"	2.3	4-1/2"	2-5/32"	3-7/32"	0.505"	3/8"	0.630"	1/2"	.675"	.313"
DA867P-50-UEM	1/2"	3	5"	2-5/8"	3-21/32"	0.630"	1/2"	0.880"	5/8"	.840"	.375"
DA867P-75-UEM	3/4"	5	5-9/16"	2-3/4"	3-13/16"	0.880"	3/4"	1.130"	7/8"	1.050"	.406"
DA867P-100-UEM	1"	7	6-63/64"	3-21/32"	6-3/16"	1.130"	29/32"	1.380"	29/32"	1.315"	.438"
DA867P-125-UEM	1-1/4"	13	7-13/32"	3-13/16"	6-5/16"	N/A	N/A	N/A	N/A	1.660"	.500"
DA867P-150-UEM	1-1/2"	14	8-9/32"	3-13/16"	6-5/16"	N/A	N/A	1.630"	1/2"	1.900"	.625"

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PAGE 2 OF 3

ORDERING INFORMATION

 Use the valve sizing chart on the preceding page tables and charts below to determine the complete part number.



BELLOWS OPTIONS ____

 The optional ammonia actuator is designated by an "A" after the P.

Example: DA867PA-50-UEM.

The optional reverse acting configuration (closes on a pressure increase) is designated by an "R" after the P.

Example: DA867PR-125-UEM.

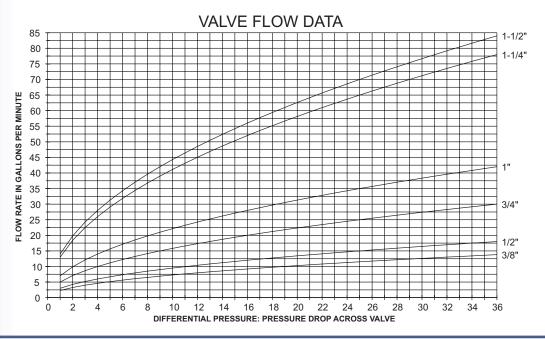
The optional 1/4" male SAE flare fitting for refrigerant pressure connection is designated by an "F" after the P. The 1/4" SAE flare fitting replaces the 36" long capillary tube with 1/4" SAE flare nut connection.

Example: DA867PE-37-UEM.

PRESSURE RANGE ADJUSTMENT

 The refrigerant pressure range at which the valve begins to open can be adjusted. A 40 PSI increase of pressure is required to open the valve fully. See table 1.

TABLE I								
VALVE ASSY. NUMBER	CRACK POINT ADJ. RANGE	PRESS. RISE FOR FULL OPEN						
DA867P-37-UEM	50-190 PSI	40 PSI						
DA867P-50-UEM	60-225 PSI	40 PSI						
DA867P-75-UEM	60-225 PSI	40 PSI						
DA867P-100-UEM	50-210 PSI	40 PSI						
DA867P-125-UEM	50-210 PSI	40 PSI						
DA867P-150-UEM	50-210 PSI	40 PSI						



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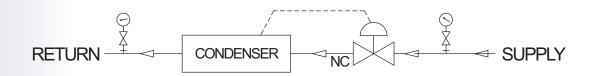
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2-WAY HEAD PRESSURE REGULATOR TYPICAL APPLICATION _____

PAGE 3 OF 3

 Typically used to modulate the cooling water through a condenser in response to a pressure signal from the condenser. Refrigerant head pressure is maintained over a wide range of operating conditions for a maximum system operating efficiency.



INSTALLATION INSTRUCTIONS

- 1) Valves can be mounted in any position without affecting performance. However, for ease of adjustment consider the accessibility of the adjusting screw.
- 2) Connect the incoming water line to the valve inlet. Direction of water flow (see drawing) is indicated by the arrow cast on the side of the valve body.
- 3) Connect capillary tube (1/4" flare nut) to refrigerant head pressure connection on condenser.

GENERAL DESCRIPTION _____

The DA series valves are direct acting, modulating water regulating valves utilizing a diaphragm construction to give a smooth, well balanced action. The pressure-balanced design and low frictional co-efficient of the diaphragm assure fast response to changes in refrigerant pressure and protection against both gradual and sudden water pressure changes. All sliding parts and adjustment springs are isolated from the water flow by the leak proof diaphragms.

Adjustment_____

 All valves in 3/8" through 1-1/2" sizes are multi-range valves applicable to both R-12 and R-22 service (see Table I). The refrigerant pressure at which the valve begins to open can be adjusted from (see Table I). A 40 PSI increase of pressure (depending on range option) is required to open the valve fully.

To adjust condensing head pressure, use wrench and turn adjusting screw on top of the spring housing. Turn to the right (counter clockwise) to raise the opening point and the left (clockwise) to lower.

MANUAL OVERRIDE

 All valves may be manually flushed by inserting a screwdriver in openings at opposite sides of the spring housing and lifting the lower spring plate to open the valve. The valve adjustment is not affected by manual flushing.



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