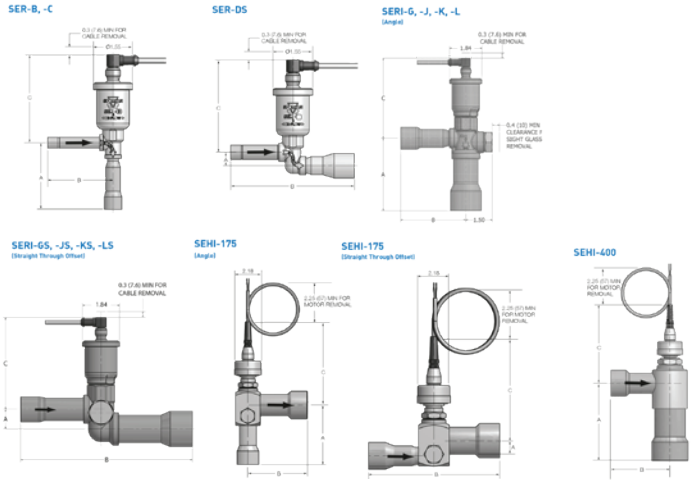
SER, SERI, SEHI *Series*

Specifications

Valve	SER-B,-C	SER-D	SERI-G, -J, -K, -L	SEHI-175	SEHI-400
Motor type	2 phase, bipolar wet motor				
Compatible refrigerant	All common HCFC and HFC refrigerants including R-410A and subcritical R-744				All common HCFC and HFC refrigerants
Compatible oils	All common Mineral, Polyolester and Alkybenzene oils				
Supply voltage (L/R)	12 volt DC, -5%, +10% measured at the valve leads				
Cable type	IP67 Removable Quad-Position		IP67 Removable Quad-Position	Hermetic	Hermetic
Phase resistance	100 ohms +- 10%		100 ohms +-10%	75 ohms +-10%	75 ohms +-10%
Chopping current*	Evaluate to avoid step loss or damage to the valve*				
Maximum power input (L/R)	2.8 watts		2.8 watts	3.8 watts	3.8 watts
Recommended step rate	200/second (L/R), up to 400/second (current limited)				
Number of steps	2500		2500	6386	6386
Resolution	.00009" (.0023 mm) / step		.00012" (.003 mm) / step	.00008" (.002 mm) / step	.00008" (.002 mm) / step
Stroke	0.23" (5.8 mm)		.297" (7.5 mm)	.500" (12.7mm)	.500" (12.7mm)
MOPD	580 psid (40 bar)		500 psid (34 bar)	500 psid (34 bar)	300 psid (21 bar)
MRP	1015 psig (70 bar)	700 psig (48 bar)	700 psig (48 bar)	620 psig (43 bar)	500 psig (34 bar)
Max. internal leakage	100 cc/min @ 100 psid (6.9 bar), dry air				
Max. external leakage	.10 oz./yr at 300 psig (2.8 gram/yr @ 20 bar)				
Operating temp range	-50°F to 155°F (-45°C to 68°C)				
Materials of construction	Brass, copper, synthetic seals, stainless steel				

Specifications

Valve	Configuration	A	B	C
SER-B	Angle	2.63 (66.8)	2.56 (65.0)	3.57 (90.7)
SER-C	Angle	2.63 (66.8)	2.56 (65.0)	3.57 (90.7)
SER-DS	Straight Through Offset	0.52 (13.2)	4.83 (122.7)	3.57 (90.7)
SERI-G	Angle	3.65 (92.7)	3.11 (79.0)	3.61 (91.7)
SERI-J	Angle	3.86 (98.0)	3.31 (84.1)	3.61 (91.7)
SERI-K	Angle	3.92 (99.6)	3.39 (86.1)	4.05 (102.9)
SERI-L	Angle	4.00 (101.6)	3.70 (94.0)	4.06 (103.1)
SERI-GS	Straight Through Offset	0.73 (18.5)	6.84 (173.7)	3.59 (91.2)
SERI-JS	Straight Through Offset	0.73 (18.5)	7.09 (180.1)	3.59 (91.2)
SERI-KS	Straight Through Offset	0.97 (24.6)	7.66 (194.6)	4.01 (101.9)
SERI-LS	Straight Through Offset	0.97 (24.6)	7.69 (195.3)	4.01 (101.9)
SEHI-175	Angle	4.98 (126.5)	4.82 (122.4)	6.85 (174.0)
	Straight Through Offset	0.98 (24.9)	8.50 (215.9)	6.85 (174.0)
SEHI-400	Angle	6.28 (159.5)	5.08 (129.0)	6.71 (170.4)



Available Connections

Valve Type	Inlet Inches (ODF)	Outlet Inches (ODF)	Configuration	Cable Length		Cable Ends
				Feet	Meters	
SER-B	1/4", 3/8"	3/8", 1/2", 5/8"	Angle	10 Less Cable	3 Less Cable	S- Stripped and Tinned (Custom Connections Available)
SER-C	1/4", 3/8"	3/8", 1/2", 5/8"	Angle			
SER-DS	3/8", 1/2", 5/8"	1/2", 5/8", 7/8", 1 1/8"	Straight Through Offset			
SERI-G	5/8", 7/8"	1/2", 5/8", 7/8", 1 1/8", 1 3/8"	Angle or Straight Through Offset	10 Less Cable	3 Less Cable	
SERI-J	7/8", 1 1/8"	7/8", 1 1/8", 1 3/8"	Angle or Straight Through Offset			
SERI-K	1 1/8"	7/8", 1 1/8", 1 3/8", 1 5/8"	Angle or Straight Through Offset			
SERI-L	1 1/8", 1-3/8"	1 1/8", 1 3/8", 1 5/8"	Angle or Straight Through Offset			
SEHI-175	1 1/8", 1 3/8", 1 5/8"	2 1/8"	Angle or Straight Through Offset	10, 20, 30, 40	3, 6, 9, 12	
SEHI-400	1 5/8", 2 1/8", 2 5/8"	1 5/8", 2 1/8", 2 5/8", 3 1/8" ODM	Angle			