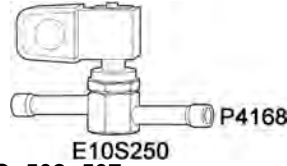


SPORLAN - SOLENOID VALVES



REFRIGERANTS 22, 134a, 402A, 404A, 407C, 502, 507

SPECIFICATIONS

6 Proven Benefits of Sporlan Solenoid Valves:

- Molded coil for most sizes.
- Class "F" temperature rating – Coil types MKC-1, OMKC-1, MKC-2, and OMKC-2.
- Extremely rugged, simple design – few parts.
- "E" Series may be brazed without disassembly.
- Tight closing through use of synthetic seating material.
- Can be used on Refrigerants 22, 134a, 401A, 402A, 404A, 407C, 502 & 507 because of high MOPD ratings.

Sporlan Solenoid Valves are made in two general types, normally closed and normally open. The normally closed types may be further sub-divided into direct acting and pilot operated types.

The Sporlan "E" series solenoid valves feature extended solder type connections as standard. One important benefit to the user is that all valves in the "E" series can be installed without disassembly using either low or no silver content brazing alloy. The "E" series is interchangeable with the "B" series; solder type valves, providing the overall length can be accommodated.

All valves in the "E" series have the same capacities as the "B" series with the exception of the E42. Its capacity is approximately 15% greater than the MA42.

All Sporlan solenoid valves are designed for liquid, suction and discharge gas applications.

Most Sporlan Solenoid Valves are listed by Underwriters' Laboratories, Inc. –Guide No. Y10Z – File No.MH4576 and Canadian Standards Association –Guide 440-A-O, Class 3221, File 19953 and CE provisions of the LVD 73/23/EEC.

LIQUID CAPACITY SELECTION TABLE

PART NO	TONS OF REFRIGERATION**																			
	R-22					R-134a					R-401A					R-402A				
	PRESSURE DROP – psi*																			
"E" SERIES VALVE	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
E3	0.9	1.3	1.6	1.9	2.1	0.8	1.2	1.5	1.8	2.0	0.9	1.3	1.6	1.9	2.1	0.6	0.9	1.1	1.2	1.4
E5	1.6	2.3	2.8	3.3	3.6	1.5	2.1	2.6	3.0	3.4	1.6	2.3	2.8	3.3	3.7	1.1	1.5	1.9	2.1	2.4
E6	2.9	4.0	4.9	5.7	6.4	2.7	3.8	4.6	5.3	5.9	2.9	4.1	4.9	5.7	6.4	1.9	2.7	3.3	3.8	4.2
E9	4.7	6.6	8.1	9.3	10.4	4.4	6.2	7.5	8.7	9.7	4.7	6.6	8.1	9.3	10.4	3.1	4.4	5.3	6.2	6.9
E10	6.4	9.1	11.1	12.8	14.3	6.0	8.5	10.4	12.0	13.4	6.4	9.1	11.1	12.8	14.4	4.2	6.0	7.3	8.5	9.4
E14	9.1	12.9	15.8	18.2	20.3	8.5	12.0	14.7	17.0	18.9	9.1	12.9	15.8	18.2	20.4	6.0	8.5	10.4	12.0	13.4
E19	13.9	19.8	24.2	28.0	31.4	13.0	18.4	22.6	26.1	29.2	14.0	19.8	24.3	28.1	31.4	9.2	13.0	16.0	18.5	20.7
E25	23.8	33.8	41.4	47.8	53.5	22.2	31.5	38.6	44.6	49.9	23.9	33.8	41.4	47.9	53.6	15.7	22.2	27.3	31.5	35.3
E34	33.2	47.0	57.6	66.5	74.4	31.0	43.8	53.7	62.0	69.4	33.3	47.1	57.7	66.6	74.5	21.9	31.0	38.0	43.9	49.0
—	60.9	82.3	98.2	111	123	56.7	76.7	91.5	104	114	61.0	82.5	98.0	112	123	40.4	54.6	65.1	73.8	81.4
E42	73.5	104	127	147	164	68.6	96.9	119	137	153	73.6	104	127	147	165	48.5	68.5	83.9	96.9	108
—	109	147	175	199	219	101	137	163	185	204	109	147	176	199	220	72.1	97.5	116	132	145

PART NO	TONS OF REFRIGERATION**																			
	404A					407C					502					507				
	PRESSURE DROP – psi*																			
"E" SERIES VALVES	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
E3	0.6	0.9	1.1	1.2	1.4	0.8	1.2	1.5	1.7	1.9	0.6	0.8	1.0	1.2	1.4	0.6	0.8	1.0	1.2	1.4
E5	1.1	1.5	1.9	2.1	2.4	1.5	2.1	2.6	3.0	3.4	1.0	1.5	1.8	2.1	2.4	1.0	1.5	1.8	2.1	2.4
E6	1.9	2.7	3.3	3.8	4.2	2.6	3.7	4.5	5.2	5.8	1.9	2.6	3.2	3.7	4.1	1.9	2.6	3.2	3.7	4.1
E9	3.1	4.4	5.4	6.2	6.9	4.3	6.1	7.4	8.6	9.6	3.0	4.3	5.2	6.0	6.8	3.0	4.3	5.2	6.0	6.7
E10	4.2	6.0	7.3	8.5	9.5	5.9	8.3	10.2	11.8	13.2	4.2	5.9	7.2	8.3	9.3	4.2	5.9	7.2	8.3	9.3
E14	6.0	8.5	10.4	12.0	13.4	8.4	11.8	14.5	16.7	18.7	5.9	8.4	10.2	11.8	13.2	5.9	8.3	10.2	11.8	13.2
E19	9.2	13.1	16.0	18.5	20.7	12.8	18.2	22.3	25.8	28.8	9.0	12.8	15.7	18.2	20.3	9.0	12.8	15.7	18.1	20.3
E25	15.7	22.3	27.4	31.6	35.4	21.9	31.0	38.0	44.0	49.2	15.5	21.9	26.8	31.0	34.7	15.4	21.8	26.8	30.9	34.6
E34	22.0	31.1	38.1	44.0	49.2	30.5	43.2	53.0	61.2	68.4	21.5	30.5	37.4	43.2	48.3	21.5	30.4	37.3	43.1	48.2
—	40.8	55.2	65.8	74.6	82.2	56.4	76.3	91.1	103	114	39.5	53.4	63.7	72.2	79.5	39.8	53.8	64.2	72.8	80.2
E42	48.6	68.8	84.2	97.2	109	67.6	95.6	117	135	151	47.7	67.4	82.5	95.3	107	47.6	67.3	82.4	95.1	106
—	72.8	98.5	118	133	147	101	136	163	184	203	70.4	95.3	114	129	142	71.0	96.1	115	130	143

*Do not use below 1 psi pressure drop, except Types E3 and A3 valves.

**Capacities are based on 40° F evaporator and 100° F liquid. Valve types whether Normally Closed or Normally Open have the same capacities, i.e., B10 or OB10, E10 or OE10.

Solenoid valves for brine applications – consult Sporlan Valve Company, Washington, MO.

SPORLAN - SOLENOID VALVES SPECIFICATIONS

REFRIGERANTS 22, 134a, 402A, 404A, 407C, 502, 507

PART NOE Series Extended Connections					
Without Manual Lift Stem	With Manual Lift Stem Normally Closed	CONNECTIONS (in)	PORT SIZE (in)	MOPD psi AC	WATTS
E3S120	—	—	.101	300	10
E3S130	—	3/8 ODF Solder	.101	300	10
E5S120	—	1/4 ODF Solder	.150	300	10
E5S130	—	3/8 ODF Solder	.150	300	10
E6S130	ME6S130	3/8 ODF Solder	3/16	300	10
E6S140	ME6S140	1/2 ODF Solder	3/16	300	10
E9S240	ME9S240	1/2 ODF Solder	9/32	300	15
E10S240	ME10S240	1/2 ODF Solder	5/16	300	15
E10S250	ME10S250	5/8 ODF Solder	5/16	300	15
E14S250	ME14S250	5/8 ODF Solder	7/16	300	15
E19S250	ME19S250	5/8 ODF Solder	19/32	300	15
E19S270	ME19S270	7/8 ODF Solder	19/32	300	15
E25S270	ME25S270	7/8 ODF Solder	25/32	300	15
E25S290	ME25S290	1-1/8 ODF Solder	25/32	300	15
E34S290	ME34S290	1-1/8 ODF Solder	1	300	15
E34S2110	ME34S2110	1-3/8 ODF Solder	1	300	15
E42S2130	ME42S2130	1-5/8 ODF Solder	1-5/16	300	15
E42S2170	ME42S2170	2-1/8 ODF Solder	1-5/16	300	15

SOLENOID PARTS KITS Part No.

KS-B6/E6	KS-B19/E19
KS-B9/E9	KS-B25/E25
KS-B10/E10	KS-B34/E34
KS-B14/E14	KS-B42/E42

SOLENOID COILS Coil Type and Voltage

MKC-1 and MKC-2 – 24 JAQ and CAQ
MKC-1 and MKC-2 – 120 JAM and CAM
MKC-1 and MKC-2 – 208-240 JAN and CAN
MKC-1 and MKC-2 – Dual JAU and CAU

SOLENOID VALVES R410A



R-410A Valves with 4 different port sizes and ODF solder Connections are available from Sporlan. The smallest port Valve uses a MKC-1 coil while the rest use MKC-2 coil. Sporlan solenoid valves are available in many different Voltage and cycle ratings. Standard coils are listed In the specification table below.

SPECIFICATIONS

VALVE SERIES	CONNECTIONS Inches	PORT SIZE Inches	KIT	VOLTS/CYCLES	WATTS
ME6S130-HP	3/8 ODF	3/16	MKC-1	24/50-60	10
ME9S240-HP	1/2 ODF	9/32	MKC-2	120/50-60	15
ME14S250-HP	5/8 ODF	7/16		208-240/50-60	
ME19S270-HP	7/8 ODF	19/32		220-240/50	
ME25S290-HP	1-1/8 ODF	25/32		120-208-240/50/60	
ME35S190-HP	1-1/8 ODF	1			
ME35S1110-HP	1-3/8 ODF	1			