

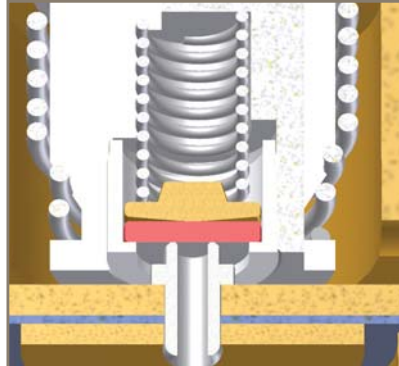


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Sporlan V-Series Ruby Seat Solenoid Valves

RACE Catalogue 30-10-8 UK, July 2010



ENGINEERING YOUR SUCCESS.

V-Series Ruby Seat Solenoid Valves

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Supersedes Bulletin 30-10-8, September 2008.

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FOR USE ON REFRIGERATION and/or AIR CONDITIONING SYSTEMS ONLY

V-Series Ruby Seat Solenoid Valves

GENERAL INFORMATION

INTRODUCTION

V-Series is a new range of solenoid valves for the liquid line, suction line and hot gas service for refrigeration and AC applications.

We choose the best, innovative materials for our valves and we assure a perfect control of the manufacturing process with 100% testing in order

to offer the best quality product for our customers.

V-series are compatible with all CFC, HCFC and HFC refrigerants and blends and most refrigeration oils in the limit of MRP of 35 bar.

RUBY SEAT TECHNOLOGY - INNOVATION

The benefit of the innovation in V series refrigeration solenoid valve design is the use of ruby and stainless steel in the valve seat.

Ruby is an industrial stone of unique physicochemical properties. It is extremely hard (just less than diamond) and inert to acids and other aggressive components that can be present within the refrigeration system.

It features perfect mechanical, corrosion, wear and extreme temperature resistance.

The use of the innovating seat technology: hard material (steel) on even harder (ruby), helps to significantly increase the seat tightness, cycle-life and reliability of Sporlan V-series solenoid valves.

COMPLIANCE TO EUROPEAN REGULATIONS AND STANDARDS

V-series solenoid valves are fully compliant to European regulation including: European Directives 97/23/CE (PED), 2006/95/CE (Low Voltage), RoHS.

The declarations of conformity are available from your Sporlan distributor.

VALVE NOMENCLATURE AND IDENTIFICATION

The nomenclature of V series solenoid valves has been created to allow an easy identification of any valves by the port size and fitting size and type.

All parts have to be ordered separately as they are delivered in individual boxes:

- Body (table page 4)
- Coil (table page 5)
- DIN connector and mounting brackets (table page 5)

The O-ring (5), the coil nut (2) and its O-ring (3) are delivered with the valve body. (see schematics on page 9)

Examples

Example 1

V	23	S	M	22
V Series	Port size in 1/32 of an inch	Solder ODF (F – Flare SAE)	Metric Connections	Connection size in mm

Example 2

V	8	F	3
V Series	Port size in 1/32 of an inch	F – Flare SAE (Solder ODF)	Connection size in 1/8 of an inch

V-Series Ruby Seat Solenoid Valves

TECHNICAL INFORMATION

VALVES

SPECIFICATIONS

V series solenoid valves are of normally closed construction. The Maximum Rated Pressure=35bar

Application temperature range for refrigerant: -40°C to +105°C for ambient temperature of max +50°C.

DIRECT ACTING – INCHES

Valve Type	Connections SAE or ODF	Port Size Ø	Flow Coefficient Kv	Minimum Pressure Differential	Maximum Pressure Differential M.O.P.D.		Coil Type	
	Inches	[mm]	[m ³ /h]	[bar]	C.A. (~) [bar]	C.C. (=) [bar]	C.A.	C.C.
V3F2	1/4" SAE	2.5	0.185	0	30	21	RT14-YB14	CD21
V4F2	1/4" SAE	3	0.270	0	30	21	RT14-YB14	CD21
V4F3	3/8" SAE	3	0.270	0	30	21	RT14-YB14	CD21
V3S2	1/4" ODF	2.5	0.185	0	30	21	RT14-YB14	CD21
V4S2	1/4" ODF	3	0.27	0	30	21	RT14-YB14	CD21
V4S3	9/8" ODF	3	0.27	0	30	21	RT14-YB14	CD21

DIRECT ACTING – MM

Valve Type	Connections SAE or ODF	Port Size Ø	Flow Coefficient Kv	Minimum Pressure Differential	Maximum Pressure Differential M.O.P.D.		Coil Type	
	[mm]	[mm]	[m ³ /h]	[bar]	C.A. (~) [bar]	C.C. (=) [bar]	C.A.	C.C.
V3SM6	6 ODF	2.5	0.185	0	30	21	RT14-YB14	CD21
V4SM6	6 ODF	3	0.270	0	30	21	RT14-YB14	CD21

PILOT OPERATED – INCHES

Valve Type	Connections SAE or ODF	Port Size Ø	Flow Coefficient Kv	Minimum Pressure Differential	Maximum Pressure Differential M.O.P.D.		Coil Type	
	Inches	[mm]	[m ³ /h]	[bar]	C.A. (~) [bar]	C.C. (=) [bar]	C.A.	C.C.
V8F3	3/8" SAE	6.5	0.800	0.1	30	21	RT14-YB14	CD21
V10F3	3/8" SAE	8	1.4	0.1	30	21	RT14-YB14	CD21
V13F4	1/2" SAE	10	1.88	0.1	30	21	RT14-YB14	CD21
V19F5	5/8" SAE	15	3.3	0.1	30	10	RT14-YB14	CD21
V8S3	3/8" ODF	6.5	0.800	0.1	30	21	RT14-YB14	CD21
V10S3	3/8" ODF	8	1.4	0.1	30	21	RT14-YB14	CD21
V13S4	1/2" ODF	10	1.88	0.1	30	21	RT14-YB14	CD21
V19S5	5/8" ODF	15	3.3	0.1	30	10	RT14-YB14	CD21
V23S6	3/4" ODF	18	3.85	0.1	30	10	RT14-YB14	CD21
V23S7	7/8" ODF	18	4.32	0.1	30	10	RT14-YB14	CD21
V23S9	1-1/8" ODF	18	4.32	0.1	30	10	RT14-YB14	CD21

PILOT OPERATED – MM

Valve Type	Connections SAE or ODF	Port Size Ø	Flow Coefficient Kv	Minimum Pressure Differential	Maximum Pressure Differential M.O.P.D.		Coil Type	
	[mm]	[mm]	[m ³ /h]	[bar]	C.A. (~) [bar]	C.C. (=) [bar]	C.A.	C.C.
V8SM10	10 ODF	6.5	0.800	0.1	30	21	RT14-YB14	CD21
V8SM12	12 ODF	6.5	0.800	0.1	30	21	RT14-YB14	CD21
V10SM10	10 ODF	8	1.4	0.1	30	21	RT14-YB14	CD21
V13SM12	12 ODF	10	1.88	0.1	30	21	RT14-YB14	CD21
V19SM16	16 ODF	15	3.3	0.1	30	10	RT14-YB14	CD21
V23SM18	18 ODF	18	3.85	0.1	30	10	RT14-YB14	CD21
V23SM22	22 ODF	18	4.32	0.1	30	10	RT14-YB14	CD21
V23SM28	28 ODF	18	4.32	0.1	30	10	RT14-YB14	CD21

The MOPD values are given for AC 50Hz. They have to be reduced by 20% if 60Hz AC current is used.

V-Series Ruby Seat Solenoid Valves

COILS

SPECIFICATIONS

We offer three different types of coils for our valves. The preferred coil should be selected depending on the application and based on the required: current, Voltage and IP rating. If the coil with specifications different from those in the table is required, please contact your Sporlan distributor.

All the coils are manufactured with class H copper wire, molded in thermoplastic (polyester) with 30% glass fiber.

COIL RATINGS

Item	Type	Voltage-Cycles	Power	Electrical connections
AC Coils				
304987	RT14	230V CA 50/60 Hz	14W	* Connector DIN PG9 and PG11
304985	RT14	115V CA 50/60 Hz	14W	* Connector DIN PG9 and PG11
304983	RT14	24V CA 50/60 Hz	14W	* Connector DIN PG9 and PG11
304505	YB14	230V CA 50/60 Hz	14W	Flying Leads
304433	YB14	115V CA 50/60 Hz	14W	Flying Leads
304431	YB14	24V CA 50/60 Hz	14W	Flying Leads
DC Coils				
304584	CD21	12V CC	21W	* Connector DIN PG9 and PG11
304586	CD21	12V CC	21W	* Connector DIN PG9 and PG11
DIN Connectors				
6000000R	PG9	DIN Connectors for coils RT14 and CD21		
6000020R	PG11	DIN Connectors for coils RT14 and CD21		

* To be ordered as separate item

CONNECTORS

SPECIFICATIONS

Connector DIN 43650	
Nominal Voltage 250 -/ 300V=	250 -/ 300V=
Max Switch Rating 16 A	16 A
Contact Resistance ≤ 4 m Ohm	≤ 4 m Ohm
Contact Width (Max) 1,5 mm ²	1,5 mm ²
Protection Class IP65 - DIN 40050	IP65 - DIN 40050
Insulation Class Gruppo C - VDE 0110	Groupe C - VDE 0110
Gasket Material NBR (-40°C + 90°C)	NBR (-40°C + 90°C)
Cable Diameter 6 ÷ 8, 8 ÷ 10	6 ÷ 8, 8 ÷ 10
Gland Nut PG 9 and PG 11	PG 9 and PG 11

CONSTRUCTION MATERIAL DETAILS

Valve Type	Type of Operation	Body	Seat Type	
			Main Port	Pilot Port
V3 & V4	Direct Acting	Forged Brass	Ruby on the Stainless Steel	—
V8, V10, V13, V19, V23	Pilot Operated	Forged Brass	Diaphragm PTFE on brass	Ruby on Stainless Steel

V-Series Ruby Seat Solenoid Valves

CAPACITY TABLES - LIQUID LINE AND DISCHARGE LINE

Type	K [l/min]	Kv [m ³ /h]	Cv [GPM] (USA)	Refrig.	Liquid Line [kW]				Discharge Line [m ³ /h]						
					Δp [bar]				Δp [bar]						
					0,10	0,15	0,20	0,30	0,30	0,50	1,00	2,00	3,00	4,00	5,00
V3	3.20	0.19	0.22	R-134a	2.20	2.80	3.10	3.90	0.80	1.00	1.46	1.73	1.96	—	—
				R-22	2.90	3.80	4.20	5.00	0.58	0.72	1.05	1.32	1.55	1.85	2.15
				R-404A	2.04	2.44	2.95	3.67	0.48	0.59	0.87	1.07	1.27	1.48	1.68
				R-407C	2.93	3.84	4.24	5.05	0.59	0.73	1.06	1.33	1.57	1.87	2.17
V4	4.50	0.27	0.31	R-134a	3.50	4.20	4.90	5.90	1.00	1.46	1.90	2.80	3.60	—	—
				R-22	4.40	5.40	6.20	7.60	0.95	1.20	1.70	2.40	2.70	3.00	3.10
				R-404A	3.06	3.77	4.38	5.40	0.61	0.71	1.02	1.42	1.73	1.94	2.14
				R-407C	4.44	5.45	6.26	7.68	0.96	1.21	1.72	2.42	2.73	3.03	3.13
V8	13.30	0.80	0.93	R-134a	14.00	14.10	17.70	23.40	4.58	5.20	6.40	9.58	9.70	—	—
				R-22	15.00	15.50	19.60	25.80	4.82	6.10	8.27	11.40	11.80	15.70	19.60
				R-404A	10.20	10.60	13.30	17.90	3.86	4.87	6.76	9.40	9.79	12.90	16.30
				R-407C	15.15	15.66	19.80	26.06	4.87	6.16	8.35	11.51	11.92	15.86	19.80
V10	23.30	1.40	1.62	R-134a	19.00	24.60	30.40	35.70	5.70	7.30	10.01	13.00	14.00	—	—
				R-22	22.10	29.60	36.50	43.90	4.10	5.20	7.30	9.60	10.50	11.30	12.50
				R-404A	15.90	21.40	26.70	31.60	2.44	3.16	4.48	6.32	7.65	8.55	9.38
				R-407C	22.32	29.90	36.87	44.34	4.14	5.25	7.37	9.70	10.61	11.41	12.63
V13	31.30	1.88	2.18	R-134a	24.20	29.70	34.50	38.60	7.80	9.40	13.70	20.30	26.20	—	—
				R-22	31.10	38.30	44.20	49.40	5.06	6.80	9.80	14.30	19.00	21.70	25.20
				R-404A	21.80	26.70	30.90	34.50	4.79	5.61	8.05	11.70	14.70	17.50	20.20
				R-407C	31.41	38.68	44.64	49.89	5.66	6.87	9.90	14.44	19.19	21.92	25.45
V19	55.00	3.30	3.83	R-134a	41.00	54.80	66.70	80.60	11.80	15.00	21.10	27.90	30.40	—	—
				R-404A	35.20	47.40	58.60	70.50	5.10	6.32	8.97	13.10	15.10	17.20	19.80
				R-407C	49.79	66.36	81.10	97.16	8.89	10.91	15.86	21.31	24.04	27.57	28.68
V23S6 V23SM18	64.20	3.85	4.47	R-134a	43.90	56.40	68.20	82.20	12.20	15.70	21.90	29.20	32.10	—	—
				R-22	51.70	68.30	82.80	99.00	9.30	11.20	16.20	21.80	24.00	28.20	29.20
				R-404A	36.50	48.55	60.10	72.30	5.30	8.83	9.38	13.40	16.80	17.60	20.90
				R-407C	52.22	68.98	83.63	99.99	9.39	11.31	16.36	22.02	24.24	28.48	29.49
V23S7 V23S9 V23SM22 V23SM28	72.00	4.32	5.01	R-134a	44.80	59.90	72.90	88.00	13.00	16.30	23.10	30.60	33.20	—	—
				R-22	53.80	71.70	87.60	105.00	9.60	11.80	17.20	23.40	26.00	29.80	31.00
				R-404A	38.50	51.80	64.00	76.90	5.61	6.93	9.79	14.30	17.30	18.90	21.80
				R-407C	54.34	72.42	88.48	106.05	9.70	11.92	17.37	23.63	26.62	30.10	31.31

For valves with larger capacity, please refer to Sporlan Bulletin 30-10EN or 301EN.

Liquid temperature = +25°C

Evaporating temperature = -10°C

Condensing temperature = +30°C

V-Series Ruby Seat Solenoid Valves

CAPACITY TABLES - SUCTION LINE

Type	K [l/min]	Kv [m ³ /h]	Cv [GPM] (USA)	Refrig.	Δp [bar]	Suction Line [kW]												
						Evaporation Temperature [°C]												
						+10	+5	0	-5	-10	-15	-20	-30	-40				
V10	23.30	1.40	1.62	R-134a	0.10	3.32	2.92	2.60	2.30	2.14	1.91	1.76	1.31	0.91				
					0.15	4.32	3.83	3.52	3.22	2.84	2.60	2.30	1.83	1.53				
				R-22	0.10	3.54	3.19	2.90	2.61	2.38	2.15	1.92	1.57	1.28				
					0.15	4.71	4.24	3.89	3.37	3.14	2.85	2.50	2.03	1.45				
				R-404A	0.10	3.35	2.91	2.52	2.27	2.03	1.89	1.65	1.26	0.95				
					0.15	4.24	3.92	3.42	3.16	2.79	2.52	2.14	1.76	1.45				
				R-407C	0.10	3.58	3.22	2.93	2.64	2.40	2.17	1.94	1.59	1.29				
					0.15	4.76	4.28	3.93	3.40	3.17	2.88	2.53	2.05	1.46				
				V13	31.30	1.88	2.18	R-134a	0.10	4.64	4.29	3.76	3.45	3.06	2.84	2.46	1.83	1.37
									0.15	5.64	5.21	4.61	4.56	3.68	3.30	2.92	2.22	1.53
								R-22	0.10	5.17	4.59	4.30	3.89	3.49	3.08	2.79	2.21	1.68
									0.15	6.28	5.75	5.23	4.71	4.30	3.78	3.43	2.67	2.03
R-404A	0.10	4.75	4.30					3.92	3.60	3.16	2.84	2.53	1.96	1.51				
	0.15	4.76	5.14					4.75	4.30	3.85	3.42	3.11	2.41	1.76				
R-407C	0.10	5.22	4.64					4.34	3.93	3.52	3.11	2.82	2.23	1.70				
	0.15	6.34	5.81					5.28	4.76	4.34	3.82	3.46	2.70	2.05				
V19	55.00	3.30	3.83					R-134a	0.10	7.12	6.44	5.90	5.37	4.83	4.37	3.76	2.84	1.91
									0.15	9.66	8.59	7.75	7.06	6.36	5.76	5.06	3.76	2.38
								R-22	0.10	7.79	7.09	6.45	5.87	5.35	4.82	4.36	3.43	2.44
									0.15	10.35	9.36	8.54	7.79	7.03	6.39	5.75	4.59	3.31
				R-404A	0.10	7.54	6.65	5.83	5.31	4.75	4.30	3.74	3.04	2.21				
					0.15	10.01	9.89	7.79	7.09	6.39	5.83	5.00	4.05	2.97				
				R-407C	0.10	7.87	7.16	6.51	5.93	5.40	4.87	4.40	3.46	2.46				
					0.15	10.45	9.45	8.63	7.87	7.10	6.45	5.81	4.64	3.34				
				V23S6 V23SM18	64.20	3.85	4.47	R-134a	0.10	7.42	6.75	6.22	5.68	5.13	4.67	3.99	3.06	2.07
									0.15	9.97	8.90	8.05	7.37	6.60	5.98	5.29	3.91	2.53
								R-22	0.10	8.14	7.38	6.62	6.10	5.58	4.94	4.47	3.54	2.56
									0.15	10.69	9.59	8.78	8.02	7.26	6.62	5.99	4.76	3.43
R-404A	0.10	7.79	6.89					6.01	5.45	4.87	4.43	3.85	3.16	2.27				
	0.15	10.26	8.99					7.97	7.28	6.52	6.08	5.18	4.17	3.10				
R-407C	0.10	8.22	7.45					6.69	6.16	5.64	4.99	4.51	3.58	2.59				
	0.15	10.80	9.69					8.87	8.10	7.33	6.69	6.05	4.81	3.46				
V23S7 V23S9 V23SM22 V23SM28	72.00	4.32	5.01					R-134a	0.10	7.73	7.06	6.60	5.83	5.21	4.75	4.14	3.14	2.07
									0.15	10.50	9.36	8.53	7.67	6.90	6.28	5.52	4.14	2.60
								R-22	0.10	8.49	7.73	7.03	6.39	5.87	5.29	4.76	3.78	2.67
									0.15	11.28	10.23	9.30	8.49	7.67	6.97	6.28	5.00	3.60
				R-404A	0.10	8.24	7.21	6.33	5.83	5.18	4.68	4.05	3.29	2.40				
					0.15	10.90	9.62	8.49	7.72	6.96	6.33	5.45	4.43	3.29				
				R-407C	0.10	8.57	7.81	7.10	6.45	5.93	5.34	4.81	3.82	2.70				
					0.15	11.39	10.33	9.39	8.55	7.75	7.04	6.34	5.05	3.64				

For valves with larger capacity, please refer to Sporlan Bulletin 30-10EN or 301EN.

Liquid temperature = +25°C

Evaporating temperature = -10°C

Condensing temperature = +30°C

V-Series Ruby Seat Solenoid Valves

INSTALLATION AND SERVICE

INSTALLATION INSTRUCTIONS

To ensure the peak performance, solenoid valves must be selected and applied correctly, however, proper installation procedures are equally important. The following are essential points for correct installation:

- The valves can be mounted in any position, except with the coil pointing downwards.
- The flow direction is indicated by an arrow on the valve body.
- The V-series valves with ODF solder connections can be installed on the system without disassembling thanks to extended ends copper tube. Nevertheless all necessary precautions, like use of a wet cloth and a solder with low melting point, should be taken to avoid excessive overheating. The flame should always be directed away from the valve body to prevent any damage to the diaphragm and O-ring gasket.
- Parker recommends that the valves should be protected by filters mounted upstream of the valve.
- To allow coil removal, 60 mm clearance is necessary.
- Mounting brackets are available on demand.

WIRING

Please check the electrical specifications of the coil to be sure they correspond to the available electrical service. Wiring and fusing must comply with the prevailing wiring codes and local legislation.

SPARE PARTS

The following spare part kits are available for V-series valves:

Spare Part Kit	Valve Type	Parts Included
430360	V8	Diaphragm Plunger Gasket (8)
430361	V10 & V13	Diaphragm Plunger Gasket (8)
430362	V19 & V23	Diaphragm Plunger Gasket (8)
430369	V3, V4, V8, V10, V13, V19 & V23	Coil nut Coil nut O-ring (3) Enclosing Tube Gasket (5)

We do not offer spare part kits for direct operated valves (V3 & V4)

PACKAGING INFORMATION

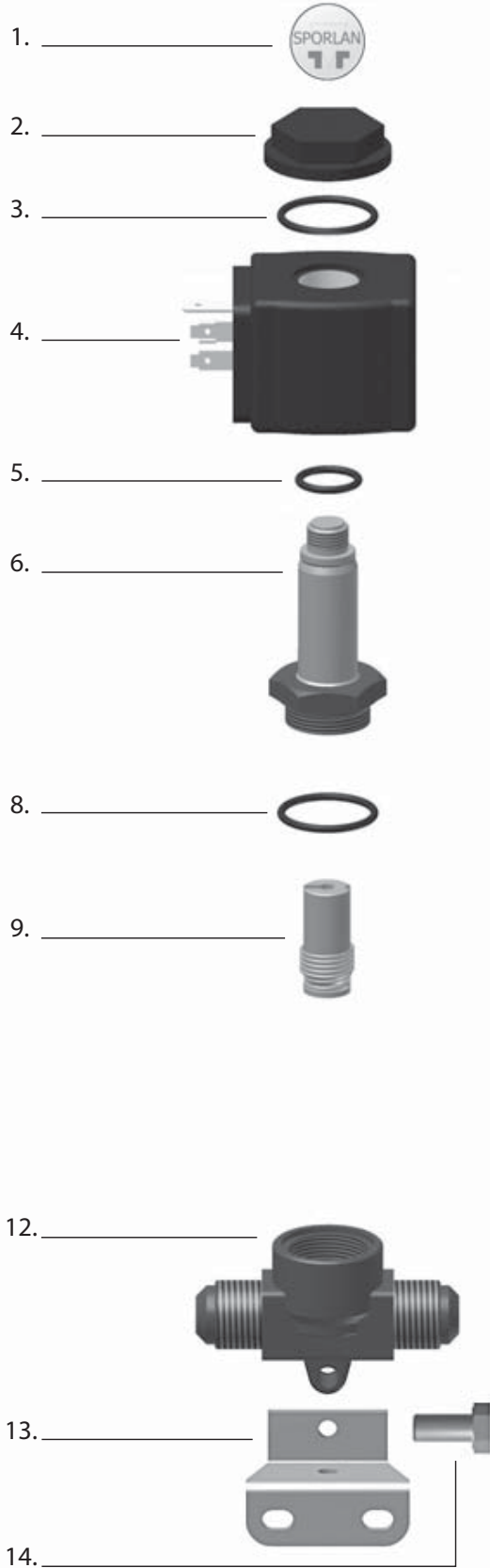
Valve bodies, coils and DIN connectors are delivered in individual boxes. The enclosing tube gasket (5), coil nut (2) and coil nut gasket (3) are delivered with valve bodies.

Valve Type	Std. Master Carton Qty.	Shipping Weight (kg)	
		Individual Box	Master Carton
V3	20	0.25	5.00
V4	20	0.25	5.00
V8	10	0.30	3.00
V10	10	0.38	3.90
V13	10	0.41	4.30
V19	5	0.60	3.50
V23	5	0.75	3.90
RT-14*	10	0.16	1.68
YB-14	5	0.17	0.82
CD-21*	10	0.26	2.66

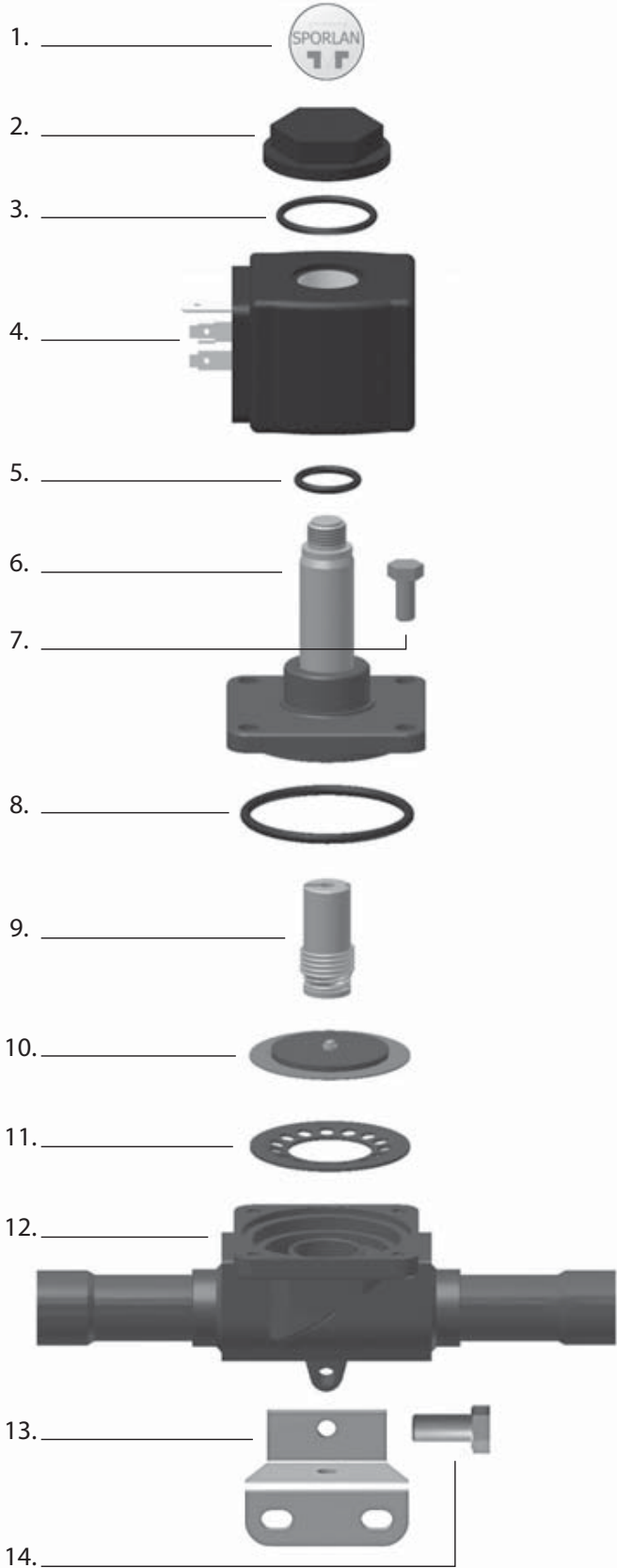
* Coil only without PG DIN connector.

V-Series Ruby Seat Solenoid Valves

2-WAY N.C. DIRECT CONTROL



2-WAY N.C. PILOT CONTROL



- 1. Label
- 2. Coil Nut
- 3. O-Ring
- 4. Coil
- 5. O-Ring

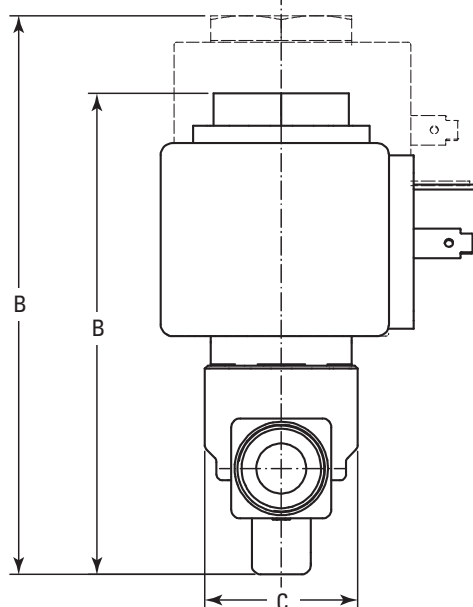
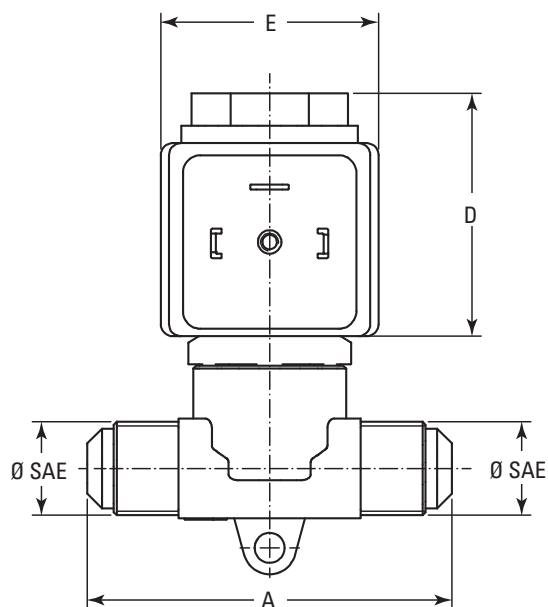
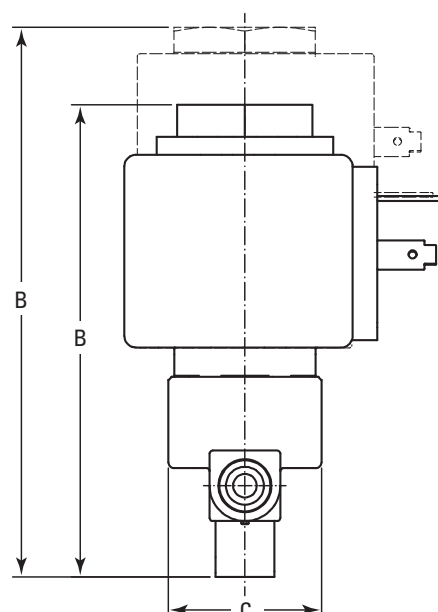
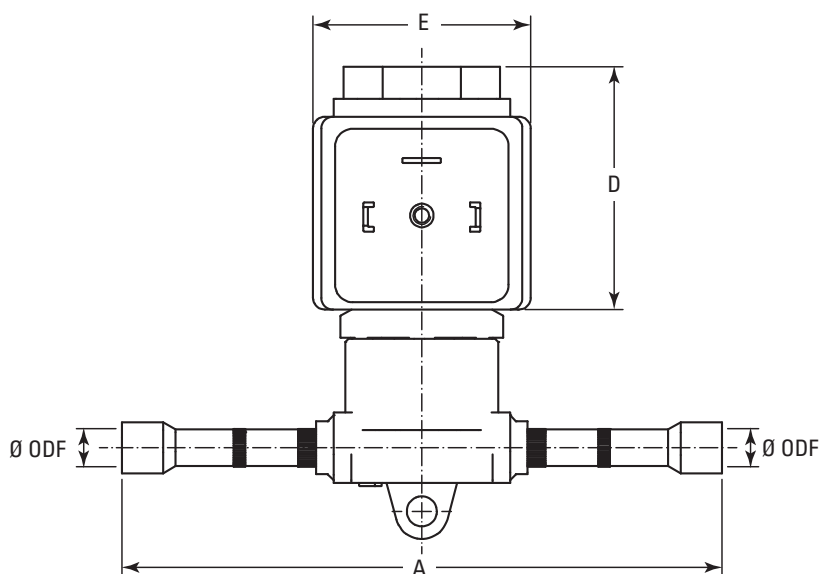
- 6. Enclosing Tube
- 7. Hexagon Top Screw
- 8. Gasket
- 9. Plunger
- 10. Diaphragm

- 11. Cap for Diaphragm
- 12. Body
- 13. Mounting Bracket
- 14. Screw

V3 & V4 Series Ruby Seat Solenoid Valves

DIMENSIONS

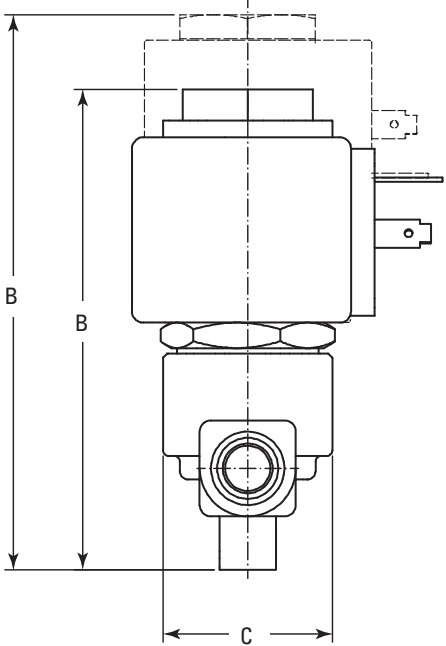
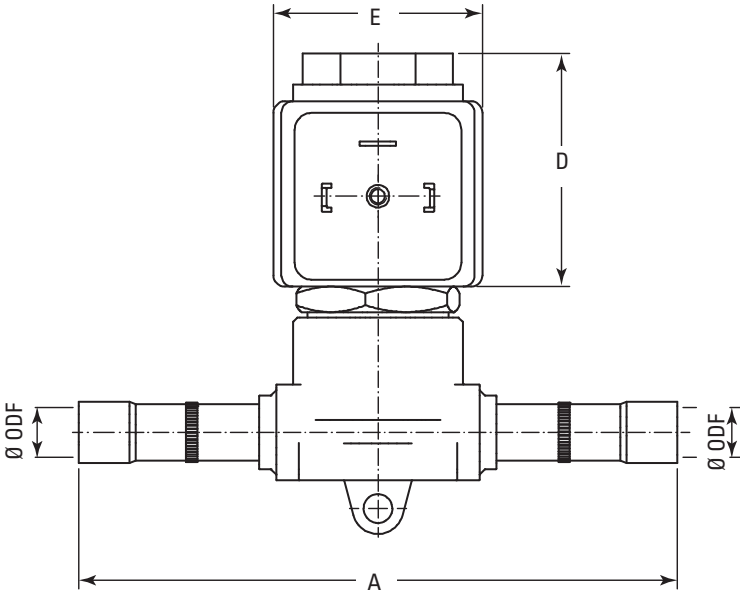
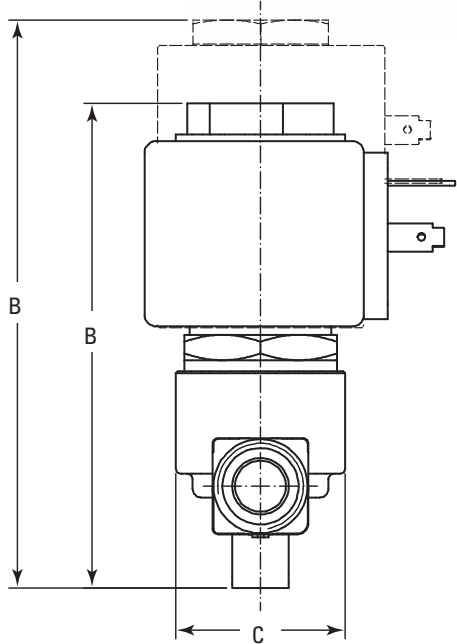
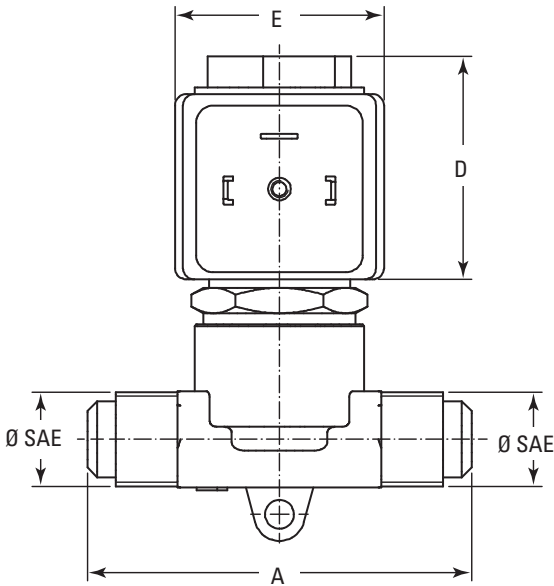
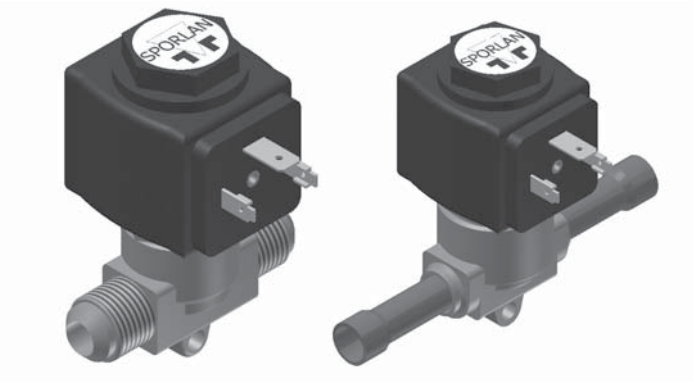
Connections [Inches or mm]	A [mm]	B [mm]		C [mm]	D [mm]		E [mm]
		AC Coil	DC Coil		AC Coil	DC Coil	
1/4" SAE	61	79.8	93.5	26	41.3	55	37
3/8" SAE	62	79.8	93.5	26	41.3	55	37
1/4" ODF	102	79.8	93.5	26	41.3	55	37
6 mm ODF	102	79.8	93.5	26	41.3	55	37
3/8" ODF	101	79.8	93.5	26	41.3	26	26



V8 Series Ruby Seat Solenoid Valves

DIMENSIONS

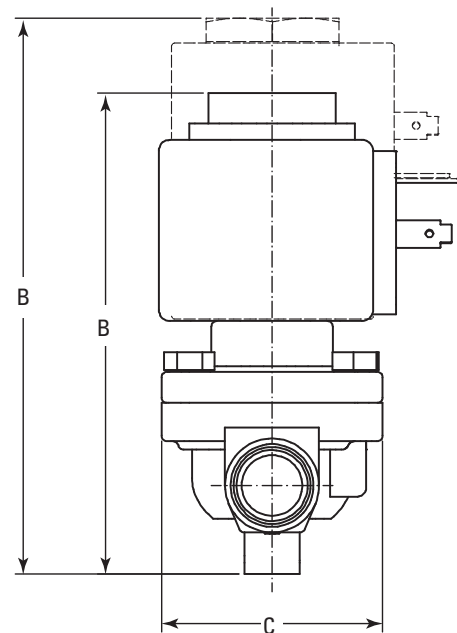
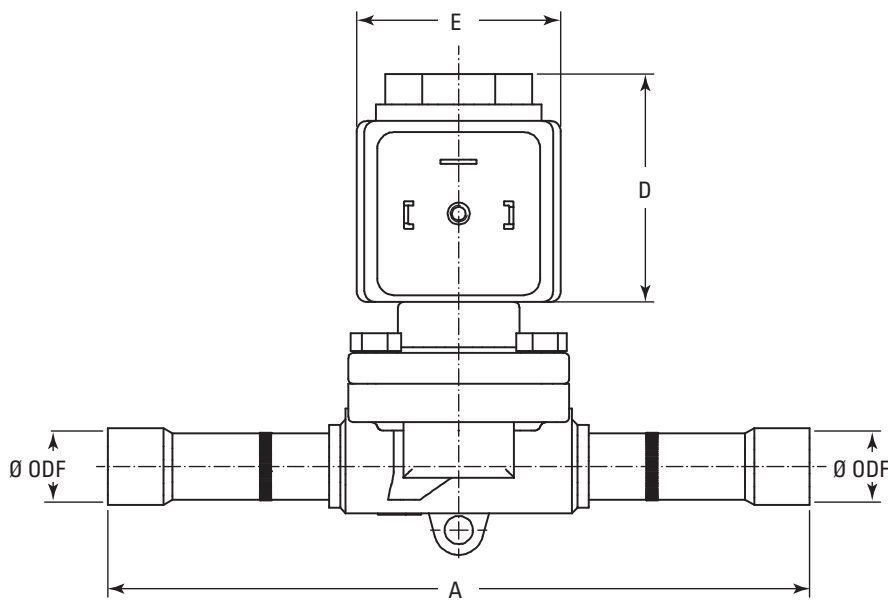
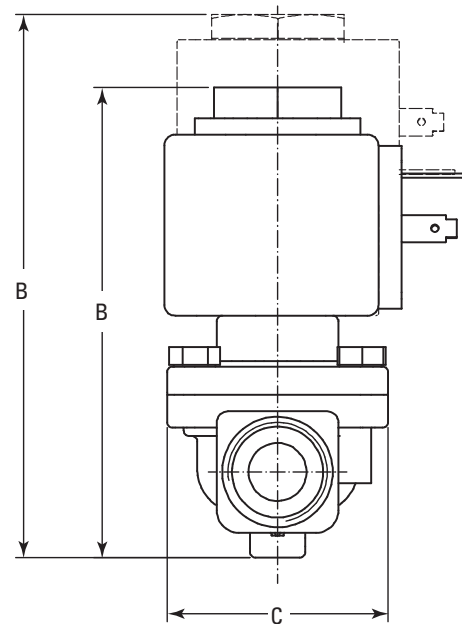
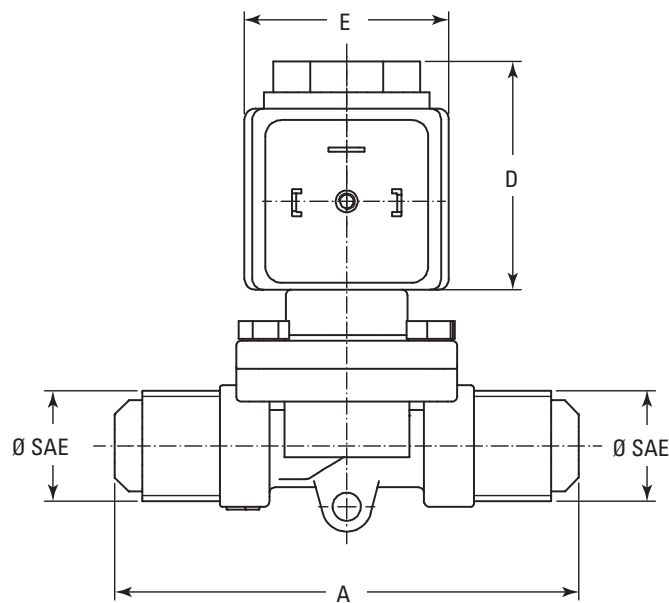
Connections [Inches or mm]	A [mm]	B		C [mm]	D		E [mm]
		[mm] AC Coil	[mm] DC Coil		[mm] AC Coil	[mm] DC Coil	
3/8" SAE	68	85.8	99.5	30	41.3	55	37
10 mm ODF	106	85.8	99.5	30	41.3	55	37
3/8" ODF	106	85.8	99.5	30	41.3	55	37
1/2" ODF	123	85.8	99.5	30	41.3	55	37
12 mm ODF	123	85.8	99.5	30	41.3	55	37



V10, V13, V19 & V23 Series Ruby Seat Solenoid Valves

DIMENSIONS

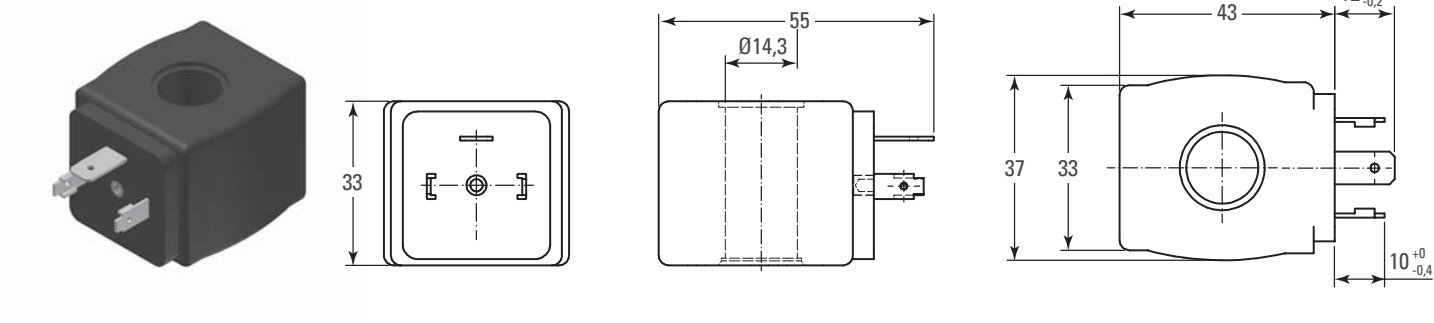
Connections [Inches or mm]	A [mm]	B		C [mm]	D		E [mm]
		[mm] AC Coil	[mm] DC Coil		[mm] AC Coil	[mm] DC Coil	
3/8" SAE	80	85.3	99	40	41.3	55	37
1/2" SAE	84	85.3	99	40	41.3	55	37
5/8" SAE	104	85.3	103.5	51	41.3	55	37
10mm - 3/8 ODF	111	79.3	193	40	41.3	55	37
12mm - 1/2 ODF	127	79.3	93	40	41.3	55	37
16mm - 5/8 ODF	153	93.3	107	51	41.3	55	37
18mm - 3/4 ODF	160	93.3	107	51	41.3	55	37
22mm - 7/8 ODF	170	93.3	107	51	41.3	55	37
28mm - 1-1/8 ODF	180	96.3	110	51	41.3	55	37



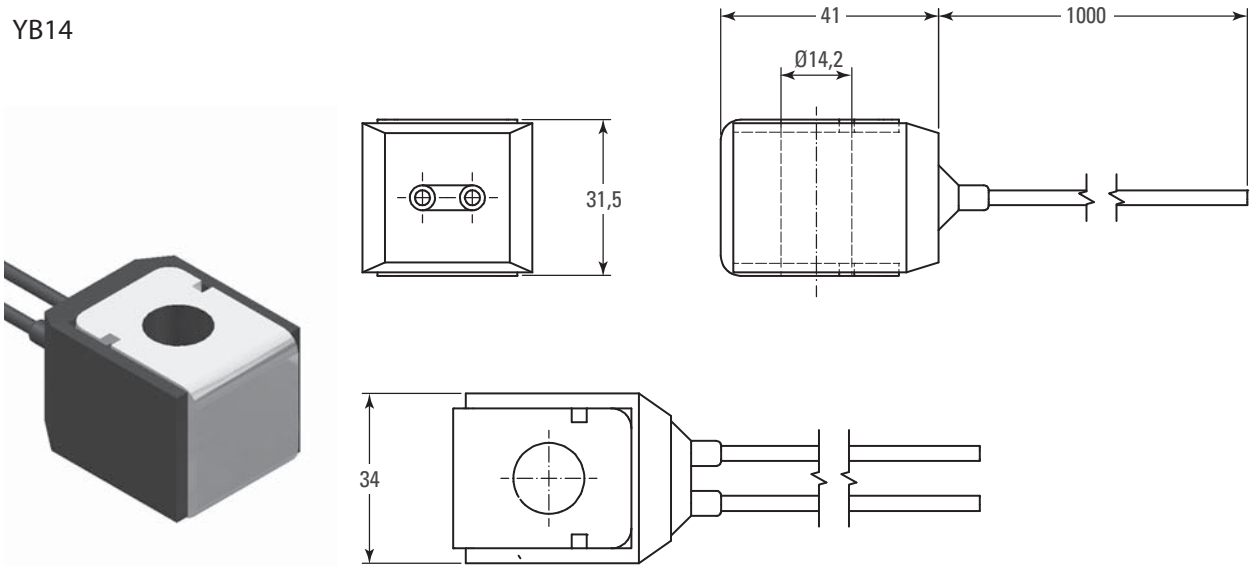
V-Series Ruby Seat Solenoid Valves

COIL TECHNICAL DRAWINGS

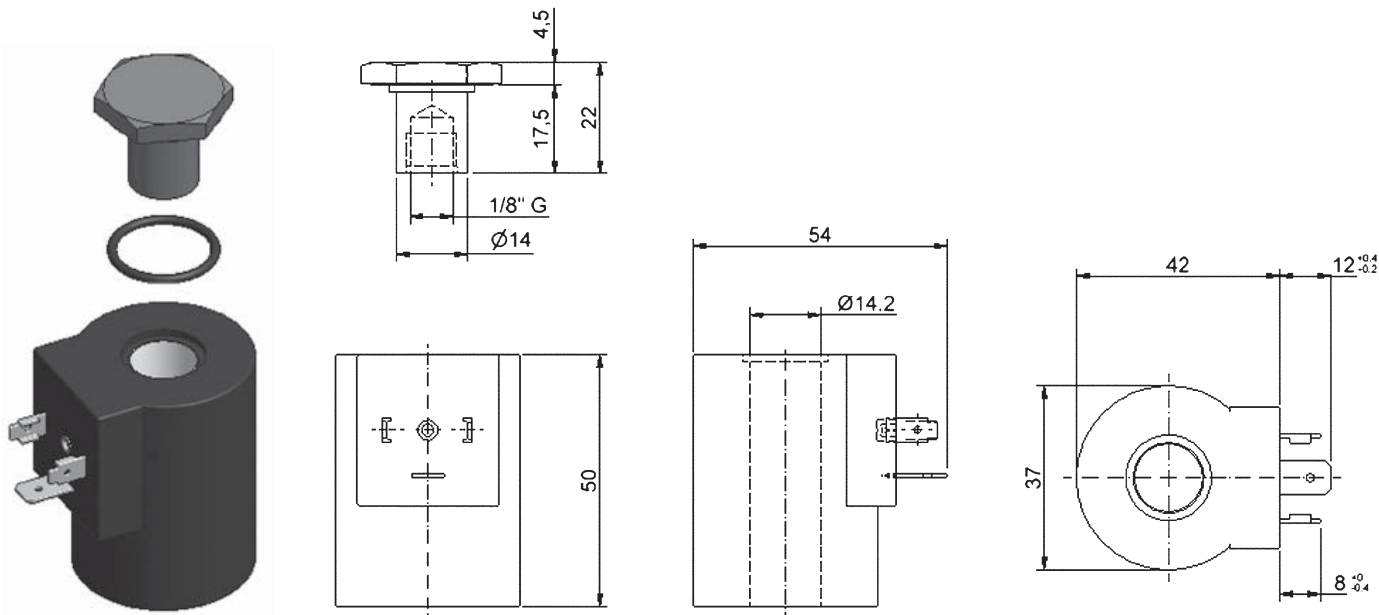
RT14



YB14



CD21



V-Series Ruby Seat Solenoid Valves

LIST OF AVAILABLE ITEMS

Reference Items	Description
V3F2	1/4" SAE - Vanne à action directe avec l'orifice de 2.5 mm
V4F2	1/4" SAE - Vanne à action directe avec l'orifice de 3.0 mm
V4F3	3/8" SAE - Vanne à action directe avec l'orifice de 3.0 mm
V3S2	1/4" ODF - Vanne à action directe avec l'orifice de 2.5 mm
V4S2	1/4" ODF - Vanne à action directe avec l'orifice de 3.0 mm
V4S3	3/8" ODF - Vanne à action directe avec l'orifice de 3.0 mm
V3SM6	6 mm ODF - Vanne à action directe avec l'orifice de 2.5 mm
V4SM6	6 mm ODF - Vanne à action directe avec l'orifice de 3.0 mm
V8F3	3/8" SAE - Vanne à action pilote avec l'orifice de 3.0 mm
V10F3	3/8" SAE - Vanne à action pilote avec l'orifice de 8.0 mm
V13F4	1/2" SAE - Vanne à action pilote avec l'orifice de 10.0 mm
V19F5	5/8" SAE - Vanne à action pilote avec l'orifice de 15.0 mm
V8S3	3/8" ODF - Vanne à action pilote avec l'orifice de 6.5 mm
V10S3	3/8" ODF - Vanne à action pilote avec l'orifice de 8.0 mm
V13S4	1/2" ODF - Vanne à action pilote avec l'orifice de 10.0 mm
V19S5	5/8" ODF - Vanne à action pilote avec l'orifice de 15.0 mm
V23S6	3/4" ODF - Vanne à action pilote avec l'orifice de 18.0 mm
V23S7	7/8" ODF - Vanne à action pilote avec l'orifice de 18.0 mm
V23S9	1-1/8" ODF - Vanne à action pilote avec l'orifice de 18.0 mm
V8SM10	10 mm ODF - Vanne à action pilote avec l'orifice de 6.5 mm
V10SM10	10 mm ODF - Vanne à action pilote avec l'orifice de 8.0 mm
V13SM12	12 mm ODF - Vanne à action pilote avec l'orifice de 10.0 mm
V19SM16	16 mm ODF - Vanne à action pilote avec l'orifice de 15.0 mm
V23SM18	18 mm ODF - Vanne à action pilote avec l'orifice de 18.0 mm
V23SM22	22 mm ODF - Vanne à action pilote avec l'orifice de 18.0 mm
V23SM28	28 mm ODF - Vanne à action pilote avec l'orifice de 18.0 mm
304987	Bobine RT14, 230v/50-60Hz
304985	Bobine RT14, 115v/50-60Hz
304983	Bobine RT14, 24v/50-60Hz
304505	Bobine YB14, 230v/50-60Hz
304433	Bobine YB14, 115v/50-60Hz
304431	Bobine YB14, 24v/50-60Hz
304584	Bobine CD21, 12v DC
304586	Bobine CD21, 24v DC
600000R	Connector DIN PG9
600020R	Connector DIN PG11
170511	Support de montage pour électrovannes
430360	Kit parties internes pour V8
430361	Kit parties internes pour V10&V13
430362	Kit parties internes pour V19&V23
430369	Kit de joints et écrou pour montage de bobine RT14

European Product
Information Centre
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