

Features

- Increase in DC pressure ratings to AC levels on all products (up to a 500% improvement)
- Lower power operation
- Voltage ranging
- Built-in surge suppression
- Elimination of AC hum
- Increase in AC and DC operating temperatures
- Low solenoid temperature rise
- Longer coil life due to lower operating temperatures and electrical surge suppression
- Solenoid approvals to UL, CSA, and CE directives
- Available with Class I, Division 2 coils (EE prefix)

Nominal Ambient Temp. Ranges

-13°F to 140°F (-25°C to 60°C)

How to order

Find the valve that you are looking for in the provided specifications tables.

The tables contain the following information designed to help you in making your selection:

Pipe Size (in)	Orifice Dia. (in)	Cv Flow	Operating Pressure Differential (psi)				Max Fluid Temp. °F	Brass ①	Const. Ref.	Agency		Stainless Steel	Const. Ref.	Agency		Wattage AC/DC	Approx. Shipping Weight (lbs.)
			Max. AC/DC			UL				UL							
			Min.	Air-Inert Gas	Water						Light Oil @ 300 SSU						
1/2	5/8	4	0	150	150	-	180	8210P094	4	○	-	-	-	-	2	3.2	

① When ordering a valve product, specify the ASCO base catalog number (Ex. **8210P094**). This number will always be 8 digits long.

Choose one of the three operating voltage ranges (100-240V/50-60Hz/DC, 24-99V/50-60Hz/DC or 12-24/DC) and add it to the base catalog number (Ex. 8210P094 **24-99V/50-60Hz/DC**).

If you want to enhance the product with one or more of the options allowed in the Optional Features Chart for that catalog number, please add the appropriate prefix or suffix (as shown):

Pipe Size (in)	Orifice Dia. (in)	Solenoid Options ②	Base Catalog Number		Resilient Materials ③								Other ③		Standard Rebuild Kit ④	
		Class I, Division 2 Coil	Brass	Stainless Steel	NBR	FKM	EPDM	CR	Oxygen Service	PTFE	Urethane	Vacuum	Manual Operator	Mounting Bracket	Brass AC/DC	Stainless Steel AC/DC
1/2	5/8	EE	8210P094	-	●	V	E	J	N	-	-	VH	MO	MB	322670	-

② Optional Class I, Division 2 solenoid (Ex. **EE8210P094** 24-99V/50-60Hz/DC)

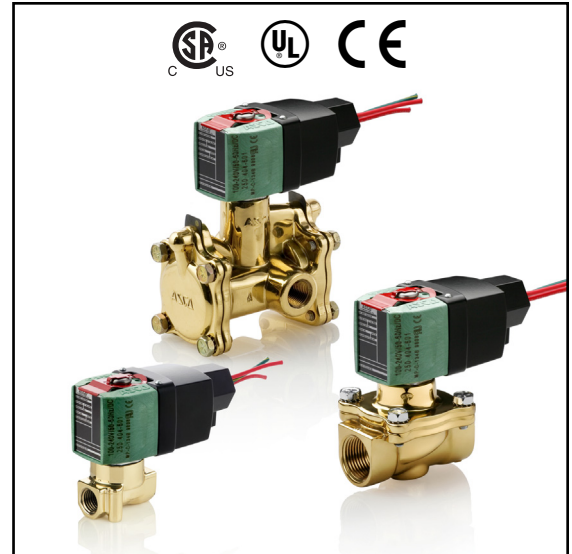
③ If an FKM elastomer and manual operator are required, add VMO to the back of the base catalog number. (Ex. 8210P094**VMO** 24-99V/50-60Hz/DC)

④ When ordering a rebuild kit for a valve, supply the rebuild kit number as shown in the table. (Ex. 322670) When ordering a rebuild kit for a valve with a suffix, add the suffix to the appropriate standard rebuild kit. (Ex. The rebuild kit for the above valve with FKM is 322670-V)

All constructions are available with prefix EE for Class I, Division 2 requirements.

When ordering a replacement coil, select from the following:

Voltage Range	Valve Prefix	Replacement Coil Part Number
100-240V/50-60Hz/DC	-	250404-601-*
24-99V/50-60Hz/DC	-	250404-602-*
12-24/DC	-	250404-603-*
100-240V/50-60Hz/DC	EE	250504-601-*
24-99V/50-60Hz/DC	EE	250504-602-*
12-24/DC	EE	250504-603-*



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Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X.

Optional: Class I, Division 2 for Hazardous Locations and Watertight, Types 3, 3S, 4, 4X. (To order, add prefix "EE" to catalog number.)

Note

See Engineering Section for valve parts in contact with fluids and additional information.

4-Way Features

- Four-way, four port (4/2) and five port (5/2) Next Generation solenoid valves have one pressure port, 2 cylinder ports, and either 1 or 2 exhaust ports
- Control of air, water, light oil, and non-corrosive media
- Single solenoid operation (pressure and exhaust ports and cylinder ports alternate connection based on solenoid operation)
- Pipe sizes – 1/4 to 1 inch

4-Way Specifications (English units)

Pipe Size (in)	Orifice Dia. (in)	Cv Flow		Operating Pressure Differential (psi)				Max. Fluid Temp. °F	Brass	Const. Ref.	Agency UL	Stainless Steel	Const. Ref.	Agency UL	Wattage AC/DC	Approx. Shipping Weight (lbs.)
		Pressure	Exhaust	Min.	Max. AC/DC											
					Air-Inert Gas	Water ⑤	Light Oil @ 300 SSU									
General Service - Single Solenoid																
1/4	1/16 ②	0.09	0.09	10	150	150	150 ③	180	8345P001	2	●	-	-	-	2	4.8
1/4	1/4	0.8	1.0	10 ①	250	250	250	180	8344P070	1	●	-	-	-	2	5.2
3/8	3/8	1.4	2.2	10 ①	250	250	250	180	8344P072	3	●	-	-	-	2	9.6
1/2	3/8	1.4	2.2	10 ①	250	250	250	180	8344P074	3	●	-	-	-	2	9.6
3/4	3/4	5.2	5.6	10 ①	250	250	250	180	8344P076	4	●	-	-	-	2	18.6
1	3/4	5.2	5.6	10 ①	250	250	250	180	8344P078	4	●	-	-	-	2	18.6
General Service - 4/2 Dual Solenoid																
3/8	3/8	1.4	2.2	①	300	300	200	180	8344P080	5	●	-	-	-	2	10.8
NAMUR Mount - 3/2, 5/2 Single Solenoid																
1/4	1/4	0.86	0.86	30	150	-	-	180	EE8551P401④	6	●	EE8551P409	6	●	2	4

● = General Purpose Valve. ① 25 psi minimum for light oils. ② 3/32" exhaust orifice. ③ Viscosity 50 SSU max. ④ Aluminum body. ⑤ Water rating, CSA certified up to 232 psi.

4-Way Specifications (Metric units)

Pipe Size (in)	Orifice Dia. (mm)	Kv Flow Factor (m³/h)		Operating Pressure Differential (bar)				Max. Fluid Temp. °C	Brass	Const. Ref.	Agency UL	Stainless Steel	Const. Ref.	Agency UL	Wattage AC/DC	Approx. Shipping Weight (kgs.)
		Pressure	Exhaust	Min.	Max. AC/DC											
					Air-Inert Gas	Water ⑤	Light Oil @ 300 SSU									
General Service - Single Solenoid																
1/4	1.5 ②	0.07	0.07	0.7	10	10	10 ③	82	8345P001	2	●	-	-	-	2	2.2
1/4	6.3	0.7	0.86	0.7 ①	17	17	17	82	8344P070	1	●	-	-	-	2	2.4
3/8	9.5	1.2	2	0.7 ①	17	17	17	82	8344P072	3	●	-	-	-	2	4.4
1/2	9.5	1.2	2	0.7 ①	17	17	17	82	8344P074	3	●	-	-	-	2	4.4
3/4	19	4.5	4.8	0.7 ①	17	17	17	82	8344P076	4	●	-	-	-	2	8.5
1	19	4.5	4.8	0.7 ①	17	17	17	82	8344P078	4	●	-	-	-	2	8.5
General Service - 4/2 Dual Solenoid																
3/8	9.5	1.2	1.9	①	21	21	14	82	8344P080	5	●	-	-	-	2	4.9
NAMUR Mount - 3/2, 5/2 Single Solenoid																
1/4	6.3	0.74	0.74	2.1	10.3	-	-	82	EE8551P401④	6	●	EE8551P409	6	●	2	1.8

● = General Purpose Valve. ① 1.7 bar minimum for light oils; ② 2.4 mm exhaust orifice. ③ Viscosity 50 SSU max. ④ Aluminum body. ⑤ Water rating, CSA certified up to 16 bar.

Important

A Minimum Operating Pressure Differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

Refer to Engineering Section for details.

4-Way Optional Features Chart

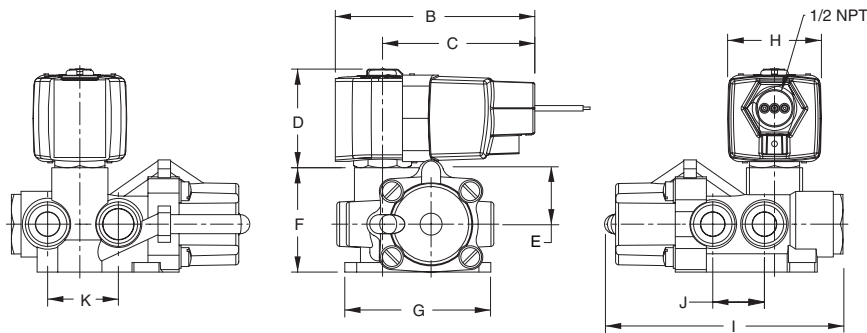
Pipe Size (in)	Orifice Dia. (in)	Base Catalog Number		Resilient Materials and Suffix Options								Other		Standard Rebuild Kit	
		Brass	Stainless Steel	NBR	FKM	EPDM	CR	Oxygen Service	PTFE	Urethane	Vacuum	Manual Operator	Mounting Bracket	Brass AC/DC	
1/4	1/16	8345P001	-	●	V	-	-	-	-	-	-	-	MO	-	322925
1/4	1/4	EE8551P401*	EE8551P409	●	-	-	-	-	-	-	-	-	MH/MS	-	-
1/4	1/4	8344P070	-	●	V	-	-	-	-	-	-	-	MO	-	322696
3/4	3/4	8344P080	-	●	V	-	-	-	-	-	-	-	MO	-	322700
3/8	3/8	8344P072	-	●	V	-	-	-	-	-	-	-	MO	-	322697
1/2	3/8	8344P074	-	●	V	-	-	-	-	-	-	-	MO	-	322697
3/4	3/4	8344P076	-	●	V	-	-	-	-	-	-	-	MO	-	322698
1	3/4	8344P078	-	●	V	-	-	-	-	-	-	-	MO	-	322698

● = Standard. * Aluminum body.

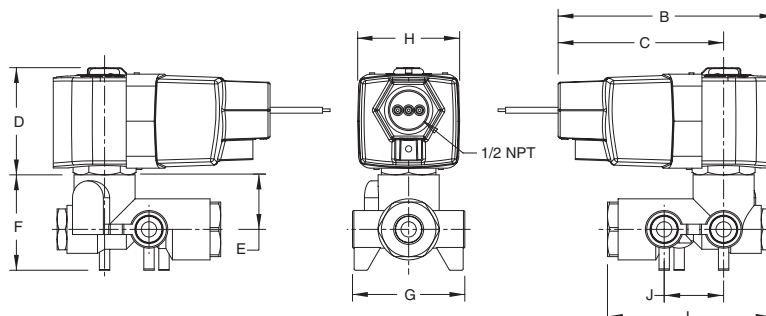
Dimensions: inches (mm)

Const. Ref.		B	C	D	E	F	G	H	I	J	K	Exhaust Pipe Size
1	in	3.98	3.04	2.0	1.12	2.08	2.94	1.87	4.82	1.03	1.41	3/8
	mm	101	77	51	28	53	75	48	122	26	112	
2	in	3.98	3.04	2.09	1.00	1.75	2.06	1.87	3.00	1.09	-	1/4
	mm	101	77	53	25	44	52	35	76	28	-	
3	in	3.98	3.04	2.0	0.94	2.06	3.18	1.87	6.05	1.50	1.86	1/2
	mm	101	77	51	24	52	81	48	154	38	47	
4	in	3.98	3.04	2.0	1.31	2.86	4.12	1.87	8.25	2.10	2.12	1
	mm	101	77	51	33	73	105	48	210	53	54	

Const. Ref. 1

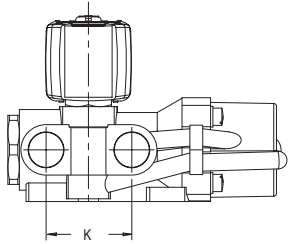


Const. Ref. 2

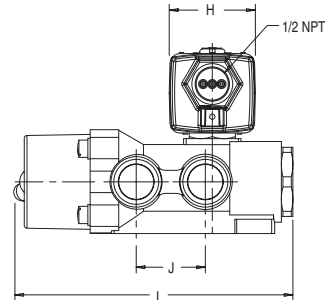
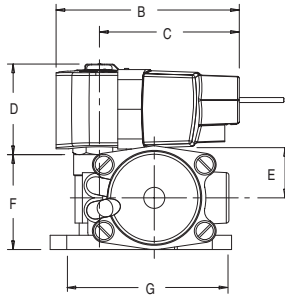


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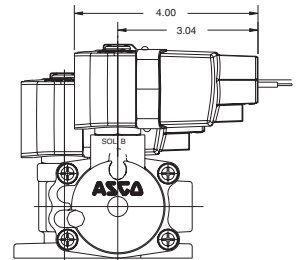
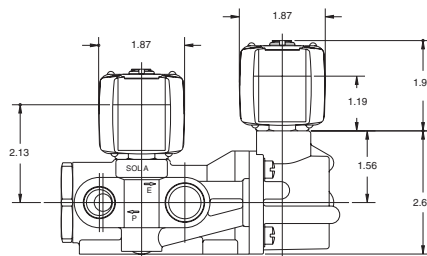
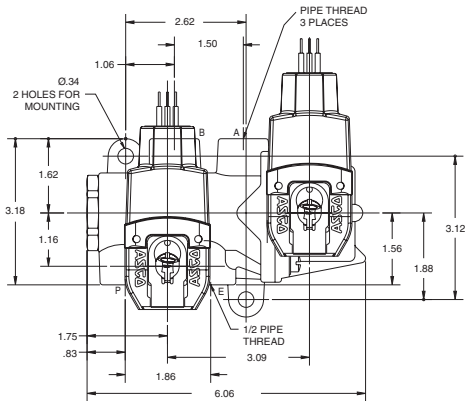
Dimensions: inches (mm)



Const. Ref. 3, 4

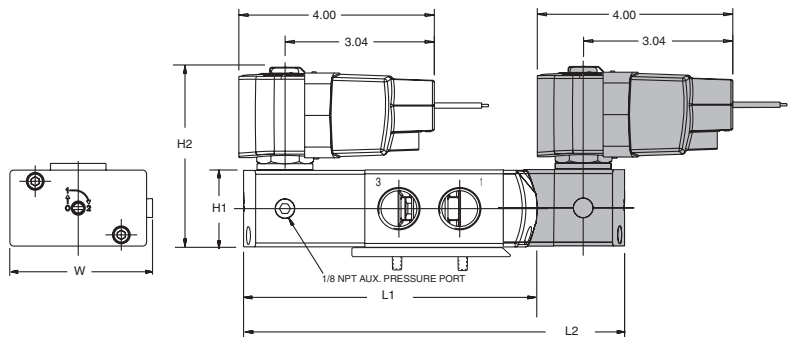


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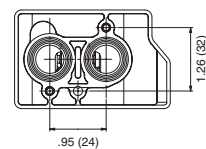


Series	8551
NPT	1/4
L1	4.96 (126)
L2	6.50 (165)
H2	3.97 (101)
H1	1.57 (40)
W	1.77 (45)

Const. Ref. 6



8551 NAMUR FOOTPRINT



Optional Manual Operators		
Add Suffix		Description
MO		Push and turn to lock with flat head screwdriver slot
MI		Momentary push in with flat head screwdriver slot
MH		Momentary push in by hand
MS		Push and turn to lock by hand

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