3-Way Features

- Three-way (3/2) Next Generation solenoid valves have three ports and two orifices. When one orifice is open, the other is closed
- Control of air, water, light oil, and other non-corrosive media
- Normally closed (pressure to cylinder port when energized) operation
- Normally open (cylinder port exhausts when energized) operation
- Universal operation (can function as normally open, normally closed, diverter of fluid flow, or selector of 2 fluid sources configurable by piping)
- Pipe sizes – 1/4 to 3/4 inch

3-Way Specifications (English units)

Pipe Size (in)	Orifice Dia. (in)	Cv Flow	Operating Pressure Differential (psi) Min.	Max. Air-Inert Gas	Max. Water	Max. Light Oil @ 300 SSU	Max. Fluid Temp. °F	Brass	Const. Ref.	Agency UL	Stainless Steel	Const. Ref.	Agency UL	Wattage DC	Wattage AC/DC	Approx. Shipping Weight (lbs.)
General Service - Normally Closed																
1/8	3/64	0.05 ③	0	300	300	300 ⑦	200 ⑥	8314R031	1	●	8314R037	1	●			1.7
1/8	3/32	0.15 ④	0	205	205	190 ⑦	200 ⑥	8314R032	1	●	8314R038	1	●			1.7
1/8	1/8	0.25 ④	0	145	145	100 ⑦	200 ⑥	8314R033	1	●	8314R039	1	●			1.7
1/4	3/64	0.05 ③	0	300	300	300 ⑦	200 ⑥	8314R034	2	●	8314R068	2	●			1.8
1/4	3/32	0.15 ④	0	205	205	190 ⑦	200 ⑥	8314R035	2	●	8314R121	2	●			1.8
1/4	1/8	0.25 ④	0	145	145	100 ⑦	200 ⑥	8314R036	2	●	8314R126	2	●			1.8
1/4	5/32	0.50 ④	0	75	75	75 ⑦	200 ⑥	8314R130	2	●	8314R230	2	●			1.8
1/4	7/32	0.70 ④	0	40	40	40 ⑦	200 ⑥	8314R131	2	●	8314R231	2	●			1.8
1/4	9/32	0.85 ④	0	25	25	25 ⑦	200 ⑥	8314R132	2	●	8314R232	2	●			1.8
1/4	1/32	0.05	0	750	750	750	194	8320R180	3	●	-	-	-	1.2 ⑧	1.5 ⑨	2.5
1/4	1/16	0.09	0	255	255	255	194	8320R182	3	●	-	-	-			2.5
1/4	7/64	0.23	0	190	190	190	194	8320R184	3	●	-	-	-			2.5
1/4	1/8	0.25	0	90	90	90	194	8320R186	3	●	-	-	-			2.5
1/4	11/64	0.35	0	55	55	55	194	8320R188	3	●	-	-	-			2.5
1/4	3/32 ①	0.2 ①	5 ⑤	150	150	100	180	8317P035	4	●	-	-	-			2.7
1/4	9/32 ②	0.8 ②	10	200	200	200	180	8321P001	5	●	-	-	-			3.8
3/8	9/32 ②	0.8 ②	10	200	200	200	180	8321P002	5	●	-	-	-			3.8
3/8	5/8	2.5	10	250	250	-	180	8316P054	6	●	-	-	-			4.9
1/2	5/8	3.2	10	250	250	-	180	8316P064	6	●	-	-	-			4.9
3/4	11/16	4.8	10	250	250	-	180	8316P074	7	●	-	-	-			5.1
NAMUR Mount - 3/2 Normally Closed																
1/4	3/32	0.12	-	150	-	-	194	8320R704	9	●	8320R714	9	●	1.2 ⑧	1.5 ⑨	3.2
General Service - Normally Open																
1/8	3/64	0.05 ③	0	300	300	300 ⑦	200 ⑥	8314R049	1	●	8314R055	1	●			1.7
1/8	3/32	0.15 ④	0	175	175	175 ⑦	200 ⑥	8314R050	1	●	8314R056	1	●			1.7
1/8	1/8	0.25 ④	0	160	160	160 ⑦	200 ⑥	8314R051	1	●	8314R057	1	●			1.7
1/4	3/64	0.05 ③	0	300	300	300 ⑦	200 ⑥	8314R052	2	●	8314R069	2	●			1.8
1/4	3/32	0.15 ④	0	175	175	175 ⑦	200 ⑥	8314R053	2	●	8314R122	2	●			1.8
1/4	1/8	0.25 ④	0	160	160	160 ⑦	200 ⑥	8314R054	2	●	8314R070	2	●			1.8
1/4	5/32	0.50 ④	0	150	150	150 ⑦	200 ⑥	8314R133	2	●	8314R233	2	●			1.8
1/4	7/32	0.70 ④	0	100	100	100 ⑦	200 ⑥	8314R134	2	●	8314R234	2	●	1.2 ⑧	1.5 ⑨	1.8
1/4	9/32	0.85 ④	0	65	65	65 ⑦	200 ⑥	8314R135	2	●	8314R235	2	●			1.8
1/8	3/64	0.06	0	350	350	350	194	8320R136	8	●	8320R146	8	●			2.5
1/4	1/32	0.05	0	790	825	825	194	8320R190	3	●	-	-	-			2.5
1/4	1/16	0.09	0	255	255	255	194	8320R192	3	●	-	-	-			2.5
1/4	3/32	0.12	0	200	200	200	194	8320R194	3	●	-	-	-			2.5
1/4	1/8	0.25	0	95	95	95	194	8320R196	3	●	-	-	-			2.5
1/4	11/64	0.35	0	60	60	60	194	8320R198	3	●	-	-	-			2.5
General Service - Universal Operation																
1/8	3/64	0.05 ③	0	200	200	200 ⑦	200 ⑥	8314R041	1	●	8314R042	1	●			1.7
1/8	3/32	0.15 ④	0	105	85	60 ⑦	200 ⑥	8314R043	1	●	8314R044	1	●			1.7
1/8	1/8	0.25 ④	0	70	70	40 ⑦	200 ⑥	8314R045	1	●	8314R040	1	●			1.7
1/4	3/64	0.05 ③	0	200	200	200 ⑦	200 ⑥	8314R006	2	●	8314R123	2	●			1.8
1/4	3/32	0.15 ④	0	105	85	60 ⑦	200 ⑥	8314R007	2	●	8314R120	2	●			1.8
1/4	1/8	0.25 ④	0	70	70	40 ⑦	200 ⑥	8314R008	2	●	8314R124	2	●			1.8
1/4	5/32	0.50 ④	0	35	35	35 ⑦	200 ⑥	8314R127	2	●	8314R227	2	●	1.2 ⑧	1.5 ⑨	1.8
1/4	7/32	0.70 ④	0	18	18	18 ⑦	200 ⑥	8314R128	2	●	8314R228	2	●			1.8
1/4	9/32	0.85 ④	0	10	10	10 ⑦	200 ⑥	8314R129	2	●	8314R229	2	●			1.8
1/4	1/32	0.05	0	395	395	395	194	8320R170	3	●	-	-	-			2.5
1/4	1/16	0.09	0	160	160	160	194	8320R172	3	●	-	-	-			2.5
1/4	3/32	0.12	0	100	100	100	194	8320R174	3	●	-	-	-			2.5
1/4	1/8	0.25	0	50	50	50	194	8320R176	3	●	-	-	-			2.5
1/4	11/64	0.35	0	30	30	30	194	8320R178	3	●	-	-	-			2.5

● = General Purpose Valve. ① 1/4" exhaust orifice with 0.73 Cv flow; ② 11/32" exhaust orifice with 1.20 Cv flow; ③ 3/64" exhaust orifice with 0.06 Cv flow. ④ 3/32" exhaust orifice with 0.20 Cv flow.
⑤ 10 psi minimum for light oils. ⑥ Max. fluid temp. 180°F for light oil @ 45 SSU. ⑦ Pressure rating for light oil @ 45 SSU. ⑧ 12-24V DC. ⑨ 24-120V AC/DC, 100-240V AC/DC.

ASCO®

3-Way Specifications (Metric units)

Pipe Size (in)	Orifice Dia. (mm)	Kv Flow Factor (m^3/h)	Operating Pressure Differential (bar) Min.	Max. Air-Inert Gas	Max. Water	Max. Light Oil @ 300 SSU	Max. Fluid Temp.˚C	Brass	Const. Ref.	Agency UL	Stainless Steel	Const. Ref.	Agency UL	Wattage DC	Wattage AC/DC	Approx. Shipping Weight (kgs.)
General Service - Normally Closed																
1/8	1.2	0.04 ③	0	21	21	21 ⑦	93 ⑥	8314R031	1	●	8314R037	1	●			0.77
1/8	2.4	0.13 ④	0	14	14	13 ⑦	93 ⑥	8314R032	1	●	8314R038	1	●			0.77
1/8	3.2	0.22 ④	0	10	10	7 ⑦	93 ⑥	8314R033	1	●	8314R039	1	●			0.77
1/4	1.2	0.04 ③	0	21	21	21 ⑦	93 ⑥	8314R034	2	●	8314R068	2	●			0.81
1/4	2.4	0.13 ④	0	14	14	13 ⑦	93 ⑥	8314R035	2	●	8314R121	2	●			0.81
1/4	3.2	0.22 ④	0	10	10	7 ⑦	93 ⑥	8314R036	2	●	8314R126	2	●			0.81
1/4	4.0	0.43 ④	0	5.2	5.2	5.2 ⑦	93 ⑥	8314R130	2	●	8314R230	2	●			0.81
1/4	5.6	0.60 ④	0	3	3	3 ⑦	93 ⑥	8314R131	2	●	8314R231	2	●			0.81
1/4	7.1	0.73 ④	0	2	2	2 ⑦	93 ⑥	8314R132	2	●	8314R232	2	●			0.81
1/4	0.8	0.04	0	51	51	51	90	8320R180	3	●	-	-	-	1.2 ⑧	1.5 ⑨	
1/4	1.9	0.08	0	18	18	18	90	8320R182	3	●	-	-	-			1.1
1/4	2.7	0.10	0	13	13	13	90	8320R184	3	●	-	-	-			1.1
1/4	3.9	0.21	0	6	6	6	90	8320R186	3	●	-	-	-			1.1
1/4	4.4	0.30	0	4	4	4	90	8320R188	3	●	-	-	-			1.1
1/4	2.3 ①	0.17 ①	0.3 ④	10	10	7	82	8317P035	4	●	-	-	-			1.2
1/4	7.1 ②	0.7 ②	0.7	14	14	14	82	8321P001	5	●	-	-	-			1.7
3/8	7.1 ②	0.7 ②	0.7	14	14	14	82	8321P002	5	●	-	-	-			1.7
3/8	3.3	2.1	0.7	17	17	-	82	8316P054	6	●	-	-	-			2.2
1/2	3.3	2.7	0.7	17	17	-	82	8316P064	6	●	-	-	-			2.2
3/4	17	4.1	0.7	17	17	-	82	8316P074	7	●	-	-	-			2.3
NAMUR Mount - 3/2 Normally Closed																
1/4	2.4	0.1	-	10	-	-	90	8320R704	9	●	8320R714	9	●	1.2 ⑧	2	1.5
General Service - Normally Open																
1/8	1.2	0.04 ③	0	21	21	21 ⑦	93 ⑥	8314R049	1	●	8314R055	1	●			0.77
1/8	2.4	0.13 ④	0	12	12	12 ⑦	93 ⑥	8314R050	1	●	8314R056	1	●			0.77
1/8	3.2	0.22 ④	0	11	11	11 ⑦	93 ⑥	8314R051	1	●	8314R057	1	●			0.77
1/4	1.2	0.04 ③	0	21	21	21 ⑦	93 ⑥	8314R052	2	●	8314R069	2	●			0.81
1/4	2.4	0.13 ④	0	12	12	12 ⑦	93 ⑥	8314R053	2	●	8314R122	2	●			0.81
1/4	3.2	0.22 ④	0	11	11	11 ⑦	93 ⑥	8314R054	2	●	8314R070	2	●			0.81
1/4	4.0	0.43 ④	0	10	10	10 ⑦	93 ⑥	8314R133	2	●	8314R233	2	●			0.81
1/4	5.6	0.60 ④	0	6.8	6.8	6.8 ⑦	93 ⑥	8314R134	2	●	8314R234	2	●	1.2 ⑧	1.5 ⑨	0.81
1/4	7.1	0.73 ④	0	4.5	4.5	4.5 ⑦	93 ⑥	8314R135	2	●	8314R235	2	●			0.81
1/8	1.2	0.05	0	24	24	24	90	8320R136	8	●	8320R146	8	●			1.1
1/4	0.8	0.04	0	54	57	57	90	8320R190	3	●	-	-	-			1.1
1/4	1.6	0.08	0	18	18	18	90	8320R192	2	●	-	-	-			1.1
1/4	2.4	0.10	0	14	14	14	90	8320R194	2	●	-	-	-			1.1
1/4	3.2	0.21	0	6.5	6.5	6.5	90	8320R196	2	●	-	-	-			1.1
1/4	4.4	0.30	0	4	4	4	90	8320R198	2	●	-	-	-			1.1
General Service - Universal Operation																
1/8	1.2	0.04 ③	0	14	14	14 ⑦	93 ⑥	8314R041	1	●	8314R042	1	●			0.77
1/8	2.4	0.13 ④	0	7	6	4 ⑦	93 ⑥	8314R043	1	●	8314R044	1	●			0.77
1/8	3.2	0.22 ④	0	5	5	3 ⑦	93 ⑥	8314R045	1	●	8314R040	1	●			0.77
1/4	1.2	0.04 ③	0	14	14	14 ⑦	93 ⑥	8314R006	2	●	8314R123	2	●			0.81
1/4	2.4	0.13 ④	0	7	6	4 ⑦	93 ⑥	8314R007	2	●	8314R120	2	●			0.81
1/4	3.2	0.22 ④	0	5	5	3 ⑦	93 ⑥	8314R008	2	●	8314R124	2	●			0.81
1/4	4.0	0.43 ④	0	2.5	2.5	2.5 ⑦	93 ⑥	8314R127	2	●	8314R227	2	●	1.2 ⑧	1.5 ⑨	0.81
1/4	5.6	0.60 ④	0	1.5	1.5	1.5 ⑦	93 ⑥	8314R128	2	●	8314R228	2	●			0.81
1/4	7.1	0.73 ④	0	0.7	0.7	0.7 ⑦	93 ⑥	8314R129	2	●	8314R229	2	●			0.81
1/4	0.8	0.04	0	27	27	27	90	8320R170	3	●	-	-	-			1.1
1/4	1.6	0.08	0	11	11	11	90	8320R172	3	●	-	-	-			1.1
1/4	2.4	0.10	0	7	7	7	90	8320R174	3	●	-	-	-			1.1
1/4	3.2	0.21	0	3	3	3	90	8320R176	3	●	-	-	-			1.1
1/4	4.4	0.30	0	2	2	2	90	8320R178	3	●	-	-	-			1.1

● = General Purpose Valve. ① 6.3 mm exhaust orifice with 0.63 Kv flow; ② 8.7 mm exhaust orifice with 1.0 Kv flow; ③ 1.3 mm exhaust orifice with 0.05 Kv flow.
④ 2.5 mm exhaust orifice with 0.17 Kv flow. ⑤ 0.7 bar minimum for light oils. ⑥ Max. fluid temp. 82˚C for light oil @ 45 SSU. ⑦ Pressure rating for light oil @ 45 SSU.
⑧ 12-24V DC. ⑨ 24-120V AC/DC, 100-240V AC/DC.

ELECTRONICALLY ENHANCED