

SKINNER 7000

General Purpose Two-Way
Direct Acting Valves

IN THIS SECTION :
7121, 7122, 7123, 7129

SPECIFICATIONS

Mechanical Characteristics

Standard Materials of Construction

- Body—Brass or Stainless Steel (430F)
- Seals—NBR, FKM, PCTFE as listed
- Sleeve Tube—Stainless Steel (303 or 304)
- Plunger—Stainless Steel (430FR)
- Stop—Stainless Steel (430FR)
- Springs—Stainless Steel (18-8)
- Shading Rings—Copper
- Pilot Orifice—Stainless Steel (303)

Compatible Fluids

- Lubricated Air, Non-Lubricated Air, Inert Gases, Water, Hydraulic Fluids, Petroleum Products and additional fluids compatible with materials of construction. Use of non-lubricated gaseous media will substantially limit valve life.

Electrical Characteristics

Voltages

- DC—12, 24
- AC—24/60, 110/50-120/60, 220/50-240/60, (other AC/DC voltages available upon request)

Agency Approvals

- UL and CSA approvals are available on valves with applicable coil/enclosure combinations. For additional information see page 122.

Power Consumption

- 10, 22 watts
- Fluxtron Electronic Coils and Magnelatch (refer to page 123 for current draw charts)

Miscellaneous

Maximum Ambient Temperature

- 10 watt AC/DC—150°F
- 22 watt AC/DC—77°F
- Fluxtron/Magnelatch—122°F

7121 DIRECT ACTING BRASS VALVES—NORMALLY CLOSED, PCTFE OR FKM SEALS

Pipe Size NPT	Orifice Size (inch)	Cv Factor	Min.	Operating Pressure Differential (PSI)				MAX.* Fluid Temp. (F)	Pressure Vessel Number	UL/CSA** Approval	Const. Ref.
				Maximum							
				AC Ratings		DC Ratings					
10 watt	22 watt	10 watt	22 watt								
FLG [^]	1/16	0.11	0	1000		435		165	7121FBF4GF00	GP	1
	1/8	0.31	0	365		125		165	7121FBF4NF00	GP	1
1/8	1/16	0.11	0	1000		435	700	165	7121KBN1GF00	GP	2
	1/8	0.31	0	365		125	205	165	7121KBN1NF00	GP	2
1/4	1/16	0.11	0	1000		435	700	165	7121KBN2GF00	GP	2
	1/8	0.31	0	365		125	205	165	7121KBN2NF00	GP	2
	1/8	0.31	0	145		125	125	185	7121KBN2NV00	SS	2
	5/32	0.52	0	120		60	75	185	7121KBN2QV00	SS	2
	13/64	0.76	0	80		30	40	185	7121KBN2SV00	SS	2
3/8	1/4	0.83	0	55		20	20	185	7121KBN3UV00	SS	2
1/2	7/16	2.5	0	17.5	35	5	10	185	7121KBN44V00	SS	3

[^] 2, 3 and 5 station subbases with 1/4" BSP common inlet port and 1/8" BSP outlet port are available for use with D400 and D500 32mm DIN coils only. For details consult factory.

7121 DIRECT ACTING STAINLESS STEEL VALVES—NORMALLY CLOSED, PCTFE OR NBR SEALS

'5' Family valves listed below containing NBR seals are also available with FKM seals.

Pipe Size NPT	Orifice Size (inch)	Cv Factor	Operating Pressure Differential (PSI)				MAX.* Fluid Temp. (F)	Pressure Vessel Number	UL/CSA** Approval	Const. Ref.	
			Maximum								
			Min.	AC Ratings		DC Ratings					
10 watt	22 watt	10 watt		22 watt							
1/8	3/64	0.06	0	1000		520	1000	165	71215SN1EF00	GP	4
	3/64	0.06	0	450		450		185	71215SN1EN00	SS	4
	1/16	0.1	0	700		350	700	165	71215SN1GF00	GP	4
	1/16	0.1	0	350		350		185	71215SN1GN00	SS	4
	3/32	0.18	0	260	650	130	300	165	71215SN1KF00	GP	4
	3/32	0.18	0	275		275		185	71215SN1KN00	SS	4
	1/8	0.28	0	200	520	100	200	165	71215SN1MF00	GP	4
	1/8	0.28	0	200		150	200	185	71215SN1MN00	SS	4
	5/32	0.4	0	110	150	60	130	185	71215SN1QN00	SS	4
	3/16	0.5	0	80	90	25	70	185	71215SN1SN00	SS	4
	1/4	0.75	0	40	70	10	30	185	71215SN1VN00	SS	4
	1/4	3/64	0.06	0	1000		520	1000	165	71215SN2EF00	GP
3/64		0.06	0	450		450		185	71215SN2EN00	SS	4
1/16		0.1	0	700		350	700	165	71215SN2GF00	GP	4
1/16		0.1	0	350		350		185	71215SN2GN00	SS	4
3/32		0.18	0	260	650	130	300	165	71215SN2KF00	GP	4
3/32		0.18	0	275		275		185	71215SN2KN00	SS	4
1/8		0.28	0	200	520	100	200	165	71215SN2MF00	GP	4
1/8		0.28	0	200		150	200	185	71215SN2MN00	SS	4
5/32		0.4	0	110	150	60	130	185	71215SN2QN00	SS	4
3/16		0.5	0	80	90	25	70	185	71215SN2SN00	SS	4
1/4		0.75	0	40	70	10	30	185	71215SN2VN00	SS	4
5/16		1.1	0	20	55	3	10	185	71215SN21N00	SS	5
3/8	3/8	2	0	6	25		5	185	71215SN33N00	SS	6
	3/8	2	5	11				185	71215SN33NHP***	SS	6

* Maximum fluid temperatures are provided for Class F coils. Valves with FKM seals (letter "V" in 10th position of pressure vessel number) can be used at fluid temperatures up to 240°F on DC and 250°F on AC provided a Class H coil is used.

** UL/CSA Approval Information: SS=Safety Shutoff GP=General Purpose Blank=Not Approved

See page 122 for additional agency approval information.

5-11PSI is the operating pressure range for bubbletight sealing. Valves may leak if the pressure differential falls below 5 PSI. Fluxtron coils not suitable for use with these valves.

DRAWINGS

#4

Port Identification: 2-IN/ 1-OUT

#5

Port Identification: 2-IN/ 1-OUT

7000 Series General Purpose Two-Way Direct Acting Valves

#6

Port Identification: 2-IN/ 1-OUT

#1

Port Identification: 1-IN/ 2-OUT

Valve	Dimension			
	H	P	C	L
7121KBN1XXXX	2.63	3.07	1.61	1.57
7121KBN2XXXX	2.63	3.07	1.61	1.57
7121KBN3XXXX	2.57	3.08	1.55	1.97

*"X" denotes multiple digit combinations for brevity.

#2

Port Identification: 1-IN/ 2-OUT

#3

Port Identification: Flow arrow on body indicates flow direction-ports are not marked.