Redla

General Service Solenoid Valves

Brass or Stainless Steel Bodies 3/8" to 2 1/2" NPT

Features

- Wide range of pressure ratings, sizes, and resilient materials provide long service life and low internal leakage
- High flow valves for liquid, corrosive, and air/inert gas service
- Industrial applications include:
 - Car wash - Laundry equipment
 - Industrial water control - Air compressors
 - Pumps

Construction

Val	Valve Parts in Contact with Fluids										
Body	Brass	304 Stainless Steel*									
Seals and Discs	NBR or PTFE										
Disc-Holder	PA										
Core Tube	305 Stainless Steel										
Core and Plugnut	430F Stainless Steel										
Springs	302 Stainless Steel										
Shading Coil	Copper	Silver									

^{*}Catalog Numbers 8210G127, 8210G129, 8210G132, 8210G133 have 316L Stainless Steel bodies.

Electrical

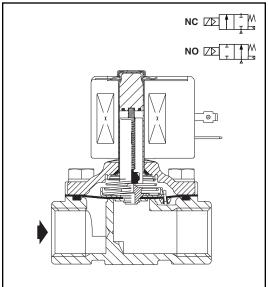
0111	Wa		g and Pou	wer	Spare Coil Part Number						
Standard Coil and			AC		General	Purpose	Explosionproof				
Class of Insulation	DC Watts	Watts	VA Holding	VA Inrush	AC	DC	AC	DC			
F	-	6.1	16	40	238210	-	238214	-			
F	11.6	10.1	25	70	238610	238710	238614	238714			
F	16.8	16.1	35	180	272610	97617	272614	97617			
F	-	17.1	40	93	238610	-	238614	-			
F	-	20	43	240	99257	-	99257	-			
F	-	20.1	48	240	272610	-	272614	-			
F	30.8	-	-	-	-	501695	-	501696			
Н	40.6	-	-	-	-	238910	-	238914			

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz). 6, 12, 24, 120, 240 volts DC. Must be specified when ordering. Other voltages available when required.

Solenoid Enclosures

Standard: RedHat II - Watertight, Types 1, 2, 3, 3S, 4, and 4X; RedHat - Type I. Optional: RedHat II - Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9; Red-Hat - Explosionproof and Watertight, Types 3, 4, 4X, 7, and 9. (To order, add prefix "EF" to catalog number, except Catalog Numbers 8210B057, 8210B058, and 8210B059, which are not available with Explosionproof enclosures.) See Optional Features Section for other available options.





Nominal Ambient Temp. Ranges

RedHat II/RedHat AC: 32°F to 125°F (0°C to 52°C)

RedHat II DC: 32°F to 104°F (0°C to 40°C) RedHat DC: 32°F to 77°F (0°C to 25°C)

(104°F/40°C occasionally)

8210G227 AC: 32°F to 130°F (0°C to 54°C) DC: 32°F to 90°F (0°C to 32°C)

Refer to Engineering Section for details.

Approvals

UL listed as indicated. CSA certified. RedHat II meets applicable CE directives. Refer to Engineering Section for details.



Specifications (English units)

				Operating Pressure Differential (psi)						Max	Fluid								Rating/ of Coil
Pipe	Orifice	Cv			Max. A	AC .		Max. D	C		p. °F	Bras	s Body		Stainles	s Steel Bo	dy		tion ⑦
Size	Size	Flow		Air-Inert		Light Oil @	Air-Inert		Light Oil @			Catalog	Const.	UL ®	Catalog	Const.	UL ®		
(in)	(in)	Factor	Min.	Gas	Water	300 SSU	Gas	Water	300 SSU	AC	DC	Number	Ref. 4	Listing	Number	Ref. 4	Listing	AC	DC
						NBR or PTFE				400	450	00100070	4.0			10	_	0.4/5	44.0/5
3/8	3/8	1.5	1	150	125	-	40	40	-	180	150	8210G073 ③	1P	•	8210G036 ③	1P -	-	6.1/F	11.6/F
3/8	5/8 5/8	3	5	150 200	150 150	135	40 125	40 100	100	180 180	150 150	8210G093 8210G001 ▼	5D 6D	0	-	-	-	10.1/F 6.1/F	11.6/F
3/8	5/8	3	5	300	300	300	125	-	-	175	-	8210G001 ▼ 8210G006 ✓	5D	0	-	-	-	17.1/F	11.0/F
1/2	7/16	2.2	1	150	125	-	40	40		180	150	8210G005 3	2P		8210G037 ③	2P	•	6.1/F	11.6/F
1/2	5/8	4	0	150	150	-	40	40		180	150	8210G094 🗸	5D	0	02100037 3	-	-	10.1/F	11.6/F
1/2	5/8	4	0	150	150	125	40	40	-	175	150	02100034 \$	-	-	8210G087 ✓	7D	•	17.1/F	11.6/F
1/2	5/8	4	5	200	150	135	125	100	100	180	150	8210G002 ▼	6D	0	02100007 v	-	-	6.1/F	11.6/F
1/2	5/8	4	5	300	300	300	-	-	-	175	-	8210G007	5D			-	-	17.1/F	-
1/2	3/4	4	5	-	300	-	-	300	-	130	90	8210G227	5D		-	-	-	17.1/F	40.6/H
3/4	5/8	4.5	0	150	150	125	40	40	_	175	150	-	-	-	8210G088 ✓	7D	•	17.1/F	11.6/F
3/4	3/4	5	5	125	125	125	100	90	75	180	150	8210G009 ▼	9D	0	-	-	-	6.1/F	11.6/F
3/4	3/4	5	0	150	150	-	40	40	-	180	150	8210G095 ✓	8D	<u> </u>	-	-	-	10.1/F	11.6/F
3/4	3/4	6.5	5	250	150	100	125	125	125	180	150	8210G003 ▼	11D	0	-	-	-	6.1/F	11.6/F
3/4	3/4	6	0	350	300	200	200	200	200	200	180	8210G026 ② ‡ ◆		•	-	-	-	16.1F	30.8/F
1	1	13	0	150	125	125	135	120	120	180	180	8210G054 ‡ ◆	41D/31D	•	8210G089 ‡ ◆	45D/15D	•	16.1/F	30.8/F
1	1	13	5	150	150	100	125	125	125	180	150	8210G004 ▼	12D	0	-	-	-	6.1/F	11.6/F
1	1	13.5	0	300	225	115	-	-	-	200	-	8210G027 ‡	42P	•	-	-	-	20.1/F	-
1	1	13.5	10	300	300	300	-	-	-	175	-	8210G078 ②	13P	-	-	-	-	17.1/F	-
1 1/4	1 1/8	15	0	150	125	125	135	120	120	180	180	8210G055 ‡ ◆	43D/32D	•	-	-	-	16.1/F	30.8/F
1 1/4	1 1/8	15	5	150	150	100	125	125	125	180	150	8210G008 ▼	16D	0	-	-	-	6.1/F	11.6/F
1 1/2	1 1/4	22.5	0	150	125	125	135	120	120	180	180	8210G056 ‡ ◆	44D/33D	•	-	-	-	16.1/F	30.8/F
1 1/2	1 1/4	22.5	5	150	150	100	125	125	125	180	150	8210G022 ▼	18D	•	8210G127	-	-	6.1/F	11.6/F
2	1 3/4	43	5	150	125	90	50	50	50	180	150	8210G100	20P	•	8210G129	-	-	6.1/F	11.6/F
2 1/2	1 3/4	45	5	150	125	90	50	50	50	180	150	8210G101	21P	•	-	-	-	6.1/F	11.6/F
NORMA	ALLY OPE	N (Open	when o	le-energiz	ed), NBI	R Seating (PA	Disc-Hold	er, exce	pt as noted)										
3/8	5/8	3	0	150	150	125	125	125	80	180	150	8210G033	23D	•	-	-		10.1/F	11.6/F
3/8	5/8	3	5	250	200	200	250	200	200	180	180	8210G011 ® 9	39D	•	-	-	-	10.1/F	11.6/F
1/2	5/8	4	0	150	150	125	125	125	80	180	150	8210G034 🗸	23D	•	-	-	-	10.1/F	11.6/F
1/2	5/8	3	0	150	150	100	125	125	80	180	150	-	-	-	8210G030 🗸	37D	•	10.1/F	11.6/F
1/2	5/8	4	5	250	200	200	250	200	200	180	180	8210G012 ® 9	39D	•	-	-	-	10.1/F	11.6/F
3/4	3/4	5.5	0	150	150	125	125	125	80	180	150	8210G035 ✓	25D	•	-	-	-	10.1/F	11.6/F
3/4	5/8	3	0	150	150	100	125	125	80	180	150	-	-	-	8210G038 ✓	38D	•	10.1/F	11.6/F
3/4	3/4	6.5	5	-	-	-	250	200	200	-	180	8210C013	24D	•	-	-	-	-	16.8/F
3/4	3/4	6.5	5	250	200	200	-	-	-	180	-	8210G013	46D	•	-	-	-	16.1/F	-
1	1	13	0	125	125	125	-	-	-	180	-	8210B057 ® ®	34D	•	-	-	-	20/F	-
1	1	13	5	-	-	-	125	125	125	-	180	8210D014	26D	•	-	-	-	-	16.8/F
1	1	13	5	150	150	125	-	-	-	180	-	8210G014	47D	•	-	-	-	16.1/F	-
1 1/4	1 1/8	15	0	125	125	125	- 105	- 105	-	180	-	8210B058 @ @	35D	•	-	-	-	20/F	- 10.0/5
1 1/4	1 1/8	15	5	- 150	- 150	- 105	125	125	125	- 100	180	8210D018	28D	•	-	-	-	- 101/E	16.8/F
1 1/4	1 1/8	15 22.5	5	150	150	125	-	-	-	180	-	8210G018	48D	•	-	-	-	16.1/F	-
1 1/2	1 1/4	22.5	5	125	125	125	125	125	125	180	180	8210B059 ® ® 8210D032	36D 29D	÷	-	-	-	20/F	- 16.8/F
1 1/2	1 1/4	22.5	5	150	150	125	125	125	125	180	-	8210D032 8210G032	49D	÷	8210G132	-	-	- 16.1/F	10.0/F
2	1 3/4	43	5	150	150	125	125	125	125	-	150	8210G032 8210 103	30P	÷	02100132	-	-	-	16.8/F
2	1 3/4	43	5	125	125	125	125	125	-	180	100	8210 103 8210G103	50P	÷	8210G133	-	-	- 16.1/F	10.8/F
2 1/2	1 3/4	45	5	-	-	-	125	125	125	-	150	8210 104	27P	•	- 02100133	-	-	-	16.8/F
L 1/L	1 3/4	45	5	125	125	125	123	120	-	180	-	8210G104	51P	÷				16.1/F	10.0/1

- 5 psi on Air; 1 psi on Water.
- Valve provided with PTFE main disc.
 Valve includes Ultem (G.E. trademark) piston.
- $\ensuremath{\mathfrak{A}}$ Letter "D" denotes diaphragm construction; "P" denotes piston construction.
- Safety Shutoff Valve; General Purpose Valve.
 Refer to Engineering Section (Approvals) for details.
- ® Valves not available with Explosionproof enclosures.
- $\ensuremath{\mathfrak{D}}$ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts.
- ® AC construction also has PA seating.
- No disc-holder.
- Stainless steel disc-holder.
 UL listed for fire protection systems per UL429A 120/60, 110/50 24VDC, no prefix and voltage options offered.
- ‡ DC constructions must have solenoid mounted vertical and upright.

 ✓ ATEX/IECEx certified with prefix "EV".

 ▼ ATEX/IECEx certified for DC only with prefix "EV".

- ◆ Not available in 6 Volt DC. EF and HB prefix only.



Specifications (Metric units)

				0		g Pressure Di	fferential	` ′		Ma Flu	ıid			Listing Number Ref. ■ 8210G036 ③ 1F			Class	Rating/ of Coil	
Pipe	Orifice	Kv Flow			Max. A			Max. D	r e	Tem	p. °C	Bras	s Body				ř –	Insula	tion ⑦
Size (in)	Size (mm)	Factor (m³/hr)	Min.	Air-Inert Gas	Water	Light Oil @ 300 SSU	Air-Inert Gas	Water	Light Oil @ 300 SSU	AC	DC	Catalog Number	Const. Ref. ④			Const. Ref. 4	UL ⑤ Listing	AC	DC
						BR or PTFE @	Seating												
3/8	10	1.3	1	10	9	-	3	3	-	82	65	8210G073 ③	1P	•	8210G036 ③	1P	•	6.1/F	11.6/F
3/8	16	2.6	0	10	10	-	3	3	-	82	65	8210G093	5D			-	-	10.1/F	11.6/F
3/8	16	2.6	0.3	14	10	9	9	7	7	82	65	8210G001 ▼	6D	_			-	6.1/F	11.6/F
3/8	16	2.6	0.3	21	21	21	-	-	-	79	-	8210G006 🗸	5D				-	17.1/F	-
1/2	11	1.9	1	10	9	-	3	3	-	82	65	8210G015 ③	2P		8210G037 ③		•	6.1/F	11.6/F
1/2	16	3.4	0	10	10	-	3	3	-	82	65	8210G094 🗸	5D		-		-	10.1/F	11.6/F
1/2	16	3.4	0	10	10	9	3	3	-	79	65	-	-		8210G087 🗸		•	17.1/F	11.6/F
1/2	16	3.4	0.3	14	10	9	9	7	7	82	65	8210G002 ▼	6D	0	-	-	-	6.1/F	11.6/F
1/2	16	3.4	0.3	21	21	21	-	-	-	79	-	8210G007	5D	0	-	-	-	17.1/F	-
1/2	19	3.4	0.3	-	21	-	-	21	-	54	32	8210G227	5D	O †	-	-	-	17.1/F	40.6H
3/4	16	3.9	0	10	10	9	3	3	-	79	65	-	-	-	8210G088 🗸	7D	•	17.1/F	11.6/F
3/4	19	4.3	0.3	9	9	9	7	6	5	82	65	8210G009 ▼	9D	0	-	-	-	6.1/F	11.6/F
3/4	19	4.3	0	10	10	- 7	3	3	-	82	65	8210G095 ✓	8D	0	-	-	-	10.1/F	11.6/F
3/4	19	5.6	0.3	17	10	7	9	9	9	82	65	8210G003 ▼	11D	0	-	-	-	6.1/F	11.6/F
3/4	19	5.1	0	24	21	14	14	14	14	93	82	8210G026 ② ‡ ◆	40P/10D	•	-	450/450	-	16.1F	30.8/F
1	25	11	0	10	9	9	9	8	8	82	82	8210G054 ‡ ◆	41D/31D	•	8210G089 ‡ ◆	45D/15D	•	16.1/F	30.8/F
1	25	11	0.3	10	10	7	9	9	9	82	65	8210G004 ▼	12D	0	-	-	-	6.1/F	11.6/F
1	25	11.5	0	21 21	16	8 21	-	-	-	93	-	8210G027 ‡	42P 13P	•	-	-	-	20.1/F	-
1	25	11.5	0.7		21		-	-	-	79	-	8210G078 ②		-	-	-	-	17.1/F	-
1 1/4	29 29	13 13	0.3	10	9	9 7	9	8	8	82	82	8210G055 ‡ ◆	43D/32D	•	-	-	-	16.1/F	30.8/F
1 1/4	32	19.5	0.3	10	10	9	9	9	8	82 82	65 82	8210G008 ▼	16D 44D/33D	0	-	-		6.1/F 16.1/F	11.6/F 30.8/F
												8210G056 ‡ ◆ 8210G022 ▼		•			-		
1 1/2	32 44	19.5 37	0.3	10	10	7	9	9	9	82 82	65 65	8210G122 ▼	18D 20P	•	8210G127 8210G129	-	-	6.1/F 6.1/F	11.6/F
2 1/2	44	37	0.3	10	9	6	3	3	3	82	65	8210G100 8210G101	20P 21P	•	82106129	-	-		11.6/F
						eating (PA Di				82	00	82106101	ZIP	_	-			6.1/F	11.6/F
3/8	16	2.6	0.0	10	10	9	9	9	6	82	65	8210G033	23D	•		l -	l -	10.1/F	11.6/F
3/8	16	2.6	0.0	17	14	14	17	14	14	82	82	8210G011 ® ®	39D	•	-	-	-	10.1/F	11.6/F
1/2	16	3.4	0.3	10	10	9	9	9	6	82	65	8210G034 ✓	23D	•	-	-	-	10.1/F	11.6/F
1/2	16	2.6	0	10	10	7	9	9	6	82	65	02100034 2	- 230	-	8210G030 ✓	37D	•	10.1/F	11.6/F
1/2	16	3.4	0.3	17	14	14	17	14	14	82	82	8210G012 ® 9	39D	•	- 021000000	-	-	10.1/F	11.6/F
3/4	19	4.7	0.5	10	10	9	9	9	6	82	65	8210G035 🗸	25D	•		-	-	10.1/F	11.6/F
3/4	16	2.6	0	10	10	7	9	9	6	82	65	-	- 230	-	8210G038 ✓	38D	•	10.1/F	11.6/F
3/4	19	5.6	0.3	-	-	-	17	14	14	-	82	8210C013	24D	•	-	- 300	-	-	16.8/F
3/4	19	5.6	0.3	17	14	14	- 17	- 14	-	82	- 02	8210G013	46D		-	-	-	16.1/F	-
1	25	11	0.5	9	9	9	-	-	-	82	-	8210B057 ® ®	34D	•	-	-	-	20/F	-
1	25	11	0.3	-	-	-	9	9	9	-	82	8210D014	26D	•	-	-	-	-	16.8/F
1	25	11	0.3	10	10	9	-	-	-	82	-	8210G014 8210G014	47D	•	-	-	-	16.1/F	-
1 1/4	29	13	0.5	9	9	9	-	-	-	82	-	8210B058 © ®	35D	•	-	-	-	20/F	-
1 1/4	29	13	0.3	-	-	-	9	9	9	-	82	8210D018	28D	•	-	-	-	-	16.8/F
1 1/4	29	13	0.3	10	10	9	-	-	-	82	-	8210G018	48D			-	-	16.1/F	-
1 1/4	32	19.5	0.5	9	9	9	-	-	-	82	-	8210B059 ® ®	36D	•	-	-	-	20/F	-
1 1/2	32	19.5	0.3	-	-	-	9	9	9	-	82	8210D032	29D	•	-	-	-	-	16.8/F
1 1/2	32	19.5	0.3	10	10	9	-	-	-	82	-	8210G032	49D	•	8210G132	-	-	16.1/F	-
2	44	37	0.3	-	-	-	9	9	9	-	65	8210 103	30P	•	-	-	-	-	16.8/F
2	44	37	0.3	9	9	9	-	-	-	82	-	8210G103	50P	•	8210G133	-	-	16.1/F	-
2 1/2	44	39	0.3	-	-	-	9	9	9	-	65	8210 104	27P	•	-	-	-	-	16.8/F
2 1/2	44	39	0.3	9	9	9	-	-	-	82	-	8210G104	51P	•	-		-	16.1/F	-
- 1/-	_ ~	""	J 0.0					1		5		02100104	l ""			1	1	1 10.1/1	1

- ① 0.3 bar on Air; 0.0 bar on Water.
- Valve provided with PTFE main disc.
 Valve includes Ultem (G.E. trademark) piston.
- ④ Letter "D" denotes diaphragm construction; "P" denotes piston construction.
- ⑤ Safety Shutoff Valve; General Purpose Valve.
- Refer to Engineering Section (Approvals) for details.
- © Valves not available with Explosionproof enclosures.
- ① On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts.
- ® AC construction also has PA seating. 9 No disc-holder.
- @ Stainless steel disc-holder.
- † UL listed for fire protection systems per UL429A 120/60, 110/50 24VDC, no prefix and voltage options offered.
- ‡ DC constructions must have solenoid mounted vertical and upright.
- ✓ ATEX/IECEx certified with prefix "EV".
- ▼ ATEX/IECEx certified for DC only with prefix "EV".
- ◆ Not available in 6 Volt DC. EF and HB prefix only.



.59 [15]

BOTTOM VIEW SHOWING MOUNTING BRACKET HOLES (OPTIONAL)

.69 [18] .86 [22]

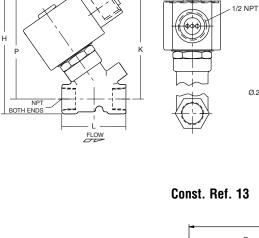
Dimensions: inches (mm)

Const.						
Ref.		Н	K	L	P	W
1*	in	3.85	3.00	1.91	3.41	1.69
	mm	98	76	49	87	43
2*	in	4.17	3.25	2.28	3.63	1.69
	mm	106	83	58	92	43
5	in	3.84	2.31	2.75	3.28	2.28
J	mm	98	59	70	83	58
6*	in	3.38	1.94	2.75	2.80	2.28
7	mm	86	49	70	71	58
7	in	4.19	2.50	2.81	3.47	2.39
•	mm	106	64	71	88	61
Ω	in	4.13	2.47	2.81	3.44	2.29
8	mm	105	63	71	87	58
9*	in	3.66	2.10	2.81	2.96	2.28
	mm	93	53	71	75	58
10*	in	5.20	3.40	2.80	4.50	2.50
10*	mm	131	86	71	114	62
11*	in	4.16	2.66	3.84	3.52	2.75
	mm	106	68	98	89	70
12	in	5.64	3.15	3.75	4.01	3.36
12	mm	143	80	95	102	85
13	in	4.44	3.22	3.75	4.19	5.81
	mm	113	82	95	106	147
15*	in	5.20	3.30	3.80	4.40	3.80
	mm	133	83	98	111	98
16	in	5.64	3.15	3.66	4.01	3.56
	mm	143	80	93	102	90
18*	in	6.11	3.30	4.38	4.16	3.92
	mm	155	84	111	106	100
	in	7.33	3.71	5.06	4.57	4.87
20*	mm	186	94	129	116	124
	in	7.33	3.71	5.50	4.57	4.87
21*	mm	186	94	140	116	124
	in	4.35	2.65	2.75	3.79	2.28
23	mm	110	67	70	96	58
	in	5.06	X	3.78	4.44	2.75
24	mm	129	X	96	113	70
	in	4.64	2.81	2.81	3.94	2.28
25	mm	118	71	71	100	58
	in	6.53	X	3.75	4.91	3.19
26	mm	166	X	95	125	81
	in	8.22	X	5.50	5.47	4.87
27	mm	209	X	140	139	124
	in	6.53	X	3.66	4.91	3.19
28	mm	166	X	93	125	81
	in	7.03	X	4.38	5.06	4.40
29	mm	179	X	111	129	112
	1 111111	1/9	_ ^	1111	129	112

* DC dimensions slightly larger. IMPORTANT: Valves may be mounted in any position, except as noted in specifications table.

1.656 [42] -

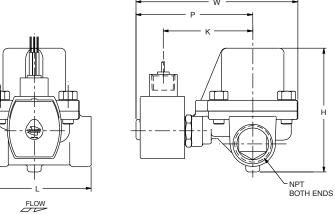
OPTIONAL MOUNTING BRACKET



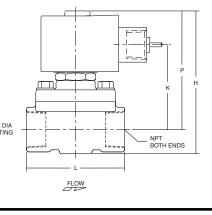
Const. Ref. 1, 2

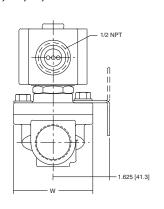
R .12 [3.2] 4 PLACES

Ø.266 [6.8]



Const. Ref. 5-9, 11, 23, 25, 37,38, 40-46







Dimensions: inches (mm)

