

## Assembly Numbers

### Series 8000 Air Actuated Valves for liquid service

#### To determine the configured item number:

Select one choice from each of the following five categories

Configured Item Number				
Valve size	Flow capacity	Pressure rating	Normal position	Area classification

#### Valve size

038 - 0.375" (DN 10)  
050 - 0.5" (DN 15)  
075 - 0.75" (DN 20)  
100 - 1" (DN 25)  
125 - 1.25" (DN 32)  
150 - 1.5" (DN 40)  
200 - 2" (DN 50)

#### Flow capacity

H - High  
S - Standard

#### Pressure rating

80 - Pneumatic standard pressure  
81 - Pneumatic high pressure

#### Normal position

3 - Normally-closed liquid shut-off valve

#### Area classification

1 - General purpose  
2 - Non-incendive Class I, II and III Division 2  
3 - Intrinsically safe, Class I, II and III Division 1 (and ATEX Zone 2/22 when ordered with the ATEX IS solenoid) (see note 1)  
4 - Valve body only

**Note 1:** 122°F maximum ambient temperature limit

#### **Example:**

To order a 1" body, high pressure rating, normally closed shut-off valve for general purpose use, make the following selections:

Valve size .....100  
Flow capacity.....S  
Pressure rating .....81  
Normal position .....3  
Area classification .....1

**The configured item number for this valve is: 100 S 8131**

Segment choices for Series 8000 Air Actuated Valves for liquid service are shown on the following pages.

## Segment choice detail

NOTE: Some choices may not be available with all sizes and types of valves.

Segment name	Segment description	Segment choices (DEFAULT is shaded)	Segment choice description
MODEL NUMBER 1	Determined by configured item number selection (see page 10-30.4-AP-1)	Calculated	---
MODEL NUMBER 2		Calculated	---
SIZE		Calculated	---
FLOW CAPACITY		Calculated	---
PRESSURE RATING		Calculated	---
NORMAL POSITION		Calculated	---
AREA CLASSIFICATION		Calculated	---
BODY CONNECTION		Type of body connection	*
	A		(A) ANSI (NPT) threaded
	B		(B) ANSI flanged
	C		(C) ISO 7/1 threaded
	E		(E) Socket welded nipples
	F		(F) Socket welded nipples w/150# flange (PN20)
	G		(G) Socket welded nipples w/300# flange (PN50)
	H		(H) EN1092-1 PN10/PN16 flange
	I		(I) Socket welded nipples w/600# flange (PN110)
	J		(J) Butt weld nipples
BODY SEALS & STEM PACKING	Material specification for valve body seals and stem packing	*	(*) Actuator only
		A	(A) Buna-N w/Teflon
		B	(B) Viton w/Teflon
		C	(C) Ethylene-Propylene w/Teflon
		D	(D) Kalrez w/Grafoil
BODY MATERIAL	Type of valve body material	*	(*) Actuator only
		1	(1) Cast iron
		2	(2) Carbon steel
INTERNAL TRIM	Materials used for valve body internal components	*	(*) Actuator only
		B	(B) Ductile
		D	(D) Stellite
		P	(P) PEEK

Segment name	Segment description	Segment choices (DEFAULT is shaded)	Segment choice description
PRIMARY VOLTAGE	Electrical voltage-actuator	A	(A) 120v 50hz
		B	(B) 120v 60hz
		D	(D) 240v 50hz
		E	(E) 240v 60hz
		G	(G) 24vDC
		H	(H) 24vDC - intrinsically safe
SWITCHES	Switch options desired, if any	0	(0) None
		1	(1) VOS1/VCS1 - GP switches
		2	(2) VOS2/VCS2 - GP switches
		3	(3) VOS1/VCS1 - IP67 switches
		4	(4) VOS2/VCS2 - IP67 switches
ENCLOSURE RATING	Rating of actuator enclosure	A	(A) NEMA 4, IP65
		B	(B) NEMA 4X, IP65
INSTRUCTION LANGUAGE	Language for valve instructions	0	(0) English
		1	(1) French
		3	(3) German
VISUAL INDICATION	Choice of color scheme for visual indicator	1	(1) Red closed / green open
		2	(2) Green closed / red open
		3	(3) Black closed / yellow open
FUEL	Type of fuel to be used	AMMA	Ammonia (anhydrous)
		BUTL	Butane (liquid)
		ETHL	Ethanol (ethyl alcohol)
		JP4	JP4
		KERO	Kerosene
		METHL	Methanol (methyl alcohol)
		NO1OIL	No. 1 fuel oil
		NO2OIL	No. 2 fuel oil
		NO4OIL	No. 4 fuel oil (125 ssu max)
		NO5OIL	No. 5 fuel oil (900 ssu max)
		NO6OIL	No. 6 fuel oil (2500 ssu max)
		NO6OILH	No. 6 fuel oil (7000 ssu max)
		PROPL	Propane (liquid)
		RESID	Residual oil (15000 ssu max)
STEAM	Steam		
TOP ASSEMBLY POSITION	Actuator position	AW	Away
		L	Left
		R	Right
		TO	Toward

Segment name	Segment description	Segment choices (DEFAULT is shaded)	Segment choice detail
TAGGING	Type of tagging	ALW	Aluminum (wire-on)
		NONE	No tagging
		SSP	Stainless steel (permanent)
		SSW	Stainless steel (wire-on)
MINIMUM FLUID TEMPERATURE (F)	No choices available	Calculated	---
MAXIMUM FLUID TEMPERATURE	Maximum fluid temperature capabilities	A	(A) 100F (38C)
		B	(B) 150F (66C)
		C	(C) 200F (93C)
		D	(D) 250F (121C)
		E	(E) 300F (148C)
		F	(F) 350F (177C)
		G	(G) 400F (204C)
		H	(H) 450F (232C)
		I	(I) 500F (260C)
		J	(J) 550F (288C)
MIN CYL INLET PRESS (PSIG)	No choices available	Calculated	---
MIN AMBIENT TEMPERATURE (F)	No choices available	Calculated	---
MAX AMBIENT TEMPERATURE (F)	No choices available	Calculated	---
MOPD (PSIG)	No choices available	Calculated	---
SOLENOID CURRENT/POWER RATING	No choices available	Calculated	---
AGENCY SANCTIONS	No choices available	Calculated	---

**Complete switch assembly w/terminal blocks and leads mounted**

Nominal valve size	Flow capacity	Ref. model number	Assembly numbers			
			General purpose & Class I, Div. 1		IP67 - Class I, Div. 2	
			VOS1/VCS1	VOS2/VCS2	VOS1/VCS1	VOS2/VCS2
3/8"	S	038 S 81_	1053981	1053982	1053983	1053985
1/2"	S	050 S 81_	1053981	1053982	1053983	1053985
3/4"	S	075 S 81_	1053981	1053982	1053983	1053985
1"	S	100 S 80_	1053986	1053987	1053988	1053989
1"	S	100 S 81_	1094374	1094375	1094377	1094378
1-1/4"	S	125 S 80_	1053986	1053987	1053988	1053989
1-1/4"	S	125 S 81_	1094374	1094375	1094377	1094378
1-1/4"	H	125 H 80_	1053986	1053987	1053988	1053989
1-1/4"	H	125 H 81_	1094374	1094375	1094377	1094378
1-1/2"	S	150 S 80_	1094374	1094375	1094377	1094378
1-1/2"	S	150 S 81_	1094374	1094375	1094377	1094378
2"	S	200 S 80_	1094374	1094375	1094377	1094378
2"	S	200 S 81_	1094374	1094375	1094377	1094378

**Individual mounted switch assembly w/leads mounted**

Nominal valve size	Flow capacity	Ref. model number	Assembly numbers	
			General purpose & Class I, Div. 1	IP67 - Class I, Div. 2
3/8"	S	038 S 81_	1063530	1063536
1/2"	S	050 S 81_	1063530	1063536
3/4"	S	075 S 81_	1063530	1063536
1"	S	100 S 80_	1063531	1063537
1"	S	100 S 81_	1094376	1094379
1-1/4"	S	125 S 80_	1063631	1063537
1-1/4"	S	125 S 81_	1094376	1094379
1-1/4"	H	125 H 80_	1063631	1063537
1-1/4"	H	125 H 81_	1094376	1094379
1-1/2"	S	150 S 80_	1094376	1094379
1-1/2"	S	150 S 81_	1094376	1094379
2"	S	200 S 80_	1094376	1094379
2"	S	200 S 81_	1094376	1094379

### Solenoid coil w/quick exhaust assembly

Description	Assembly number	Ref. number
General purpose and Class I, Div. 2, 120VAC 50/60 Hz	1056273	3000-196AA
General purpose and Class I, Div. 2, 240VAC 50/60 Hz	1056274	3000-196AB
General purpose and Class I, Div. 2, 24VDC	1056272	3000-196DB
General purpose and Class I, Div. 2, 120VAC 50/50 Hz and -58F min fluid temp	1124799	3000-196AA
General purpose and Class I, Div. 2, 240VAC 50/60 Hz and -58F min fluid temp	1124800	3000-196AB
General purpose and Class I, Div. 2, 24VDC and -58F min fluid temp	1124798	3000-196DB
General purpose and Class I, Div. 1, 24VDC ATEX certified and -58F min fluid temp	1124801	---
Intrinsically safe for Class I, Div. 1, 24VDC	1055029	---
Intrinsically safe for Class I, Div. 1, 24VDC ATEX certified	1073473	

### Accessories

Description	Assembly number
Carbon steel speed control set kit	1067124
Stainless steel speed control set kit	1067125
Solenoid barrier for intrinsically safe	1067656
Switch barrier for intrinsically safe	1067655
Solenoid isolator for intrinsically safe	1067660
Switch isolator for intrinsically safe	1067659

**Complete visual indication top assembly**

**To order, enter configured item number: REPL 8000 VI TOP**

NOTE: Some choices may not be available with all sizes and types of valves.

Segment Name	Segment Description	Segment Choices (DEFAULT is shaded)	Segment Choice Description
ORIGINAL MODEL NUMBER 1	Original valve designation	Calculated	---
SIZE	Original valve size	038	(038) .375" -- DN10
		050	(050) .5" -- DN15
		075	(075) .75" -- DN20
		100	(100) 1" -- DN25
		125	(125) 1.25" -- DN32
		150	(150) 1.5" -- DN40
		200	(200) 2" -- DN50
		250	(250) 2.5" -- DN65
		300	(300) 3" -- DN80
		400	(400) 4" -- DN100
		600	(600) 6" -- DN150
		800	(800) 8" -- DN200
FLOW CAPACITY	Original flow capacity	C	(C) CP flow
		H	(H) High flow
		S	(S) Std flow
PRESSURE RATING	Original pressure rating	80	(80) Pneumatic std pressure
		81	(81) Pneumatic high pressure
NORMAL POSITION	Original valve type	1	(1) Shut-off valve
		2	(2) Vent valve
		3	(3) Liquid shut-off valve
AREA CLASSIFICATION	Original hazardous location designation	1	(1) General purpose
		2	(2) Class 1, Div. II
		3	(3) Class 1, Div I
INSTRUCTION LANGUAGE	Original language for valve instructions	0	(0) English
		1	(1) French
		3	(3) German
		4	(4) Portuguese
		5	(5) Spanish
VISUAL INDICATION	Original choice of color scheme for visual indicator	1	(1) RED closed/GRN open
		2	(2) GRN closed/ RED open
		3	(3) BLK closed/YL open