

General Description

The HOV1(B) is a push-type, self-contained, fuel oil valve with a single, quick-opening, stem-guided seat. This 2-way normally closed, bronze safety shutoff valve features a spring-loaded stem which, upon power interruption, drives the PTFE seat firmly closed within one second.

The electrohydraulic actuator can be purchased separately, and consists of a pump applying pressure to a piston pushing the valve stem. Its power unit is immersed in oil and sealed. The HOV1(B) assembly, which consists of an actuator and the valve body mounted together by users, requires no adjustment or service. Stroke is controlled by a travel limit switch and electromagnetic relief valve. The unit rotates 360° for ease of installation. Two-wire connection via 1/2 inch threaded conduit terminal box is standard.

The HOV1(B) comes standard with valve seal overtravel and electrical interlock proof of closure switch. An optional auxiliary switch is also available.

Fluid

No. 2 Fuel Oil at 60 SSU No. 5 Fuel Oil at 5000 SSU
No. 4 Fuel Oil at 300 SSU No. 6 Fuel Oil at 5000 SSU (Heated)

Specifications

Opening Time: 9 seconds max.

Closing Time: 1 second max.

Note: Opening time is double between -30°F and -40°F ambient.
Opening time increased 20% when operating at 50Hz.

Ambient Temperature: -40°F to 150°F (-40°C to 66°C)

Fluid Temperature: 267°F max. (131°C)

Body/Trim: Bronze, 300# screw

Seal Material: PTFE

Port Size: 9/16"

Enclosure

Standard: General Purpose Type 1

Optional: Watertight Type 4
(Also meets General Purpose Type 1 and Raintight Type 3)

Electrical

Standard voltages: 120V/60Hz (or 110V/50Hz)

Non-standard voltages: 24V/60Hz; 240V/60Hz (or 220V/50Hz)

Proof of Closure Switch: (standard)

A factory set, non-field adjustable SPDT switch. 1800VA max. connected load (e.g. one 15A max. load @ 24V or 120V; one 7.5A max. load at 240V).

Auxiliary Switch: (optional)

One integral SPDT switch; field adjustable to actuate at any position of stroke. 1800 VA max. connected load
(e.g. one 15A max. load @ 24V or 120V; one 7.5A max. load at 240V).

To order, change last digit of part number from "0" to "1".
(e.g. assembly, HOV1B302T171; e.g. actuator, HO1B252A171)



Electrical Characteristics

Voltage/Hz*	Amperes		
	Inrush	Opening	Holding
24V/60	28	8.2	0.49
120V/60, 110/50	5.6	2.1	0.09
240V/60, 220/50	2.8	1.1	0.04

*Current increases by 20% for 50 Hz operation.

Installation

HO(B) actuator mounts in any position directly to a V2 valve body with 3 set screws.

Approvals

UL listed to standard 429 "Electrically Operated Valves", Guide Y10Z, File MP932

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves"

CSA Certified to "Electrically Operated Valves", CSA Std C22.2 No. 139, File 109157

Ordering Information

Important: HOV1(B) can be purchased as an assembly, which includes the actuator & valve packaged in one box, or separately as HO(B) actuator & V2 valve body.
(e.g. assembly, HOV1B302T170)
(e.g. actuator, HO1B252A170)
(e.g. valve body, V2JS2DT166)

Specifications (English units)

Pipe Size (in)	Cv Flow Factor	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number 120V/60Hz (or 110V/50Hz)			Const. Ref.	Agency			Max. Opening Time (Sec.)
		Min.	Max.		HO(B) Actuator ①	V2 Valve Body	HOV1(B) Assembly ②		UL	FM	CSA	
COMBUSTION (Fuel Oil) - General Purpose												
With Proof of Closure Switch												
1/2	4.5	0	300	267	HO1B252A170	V2JS2DT166	HOV1B302T170	1	○	○	○	9
3/4	5.5	0	300	267		V2JS2E03T166	HOV1B307T170		○	○	○	9
1	6	0	300	267		V2JS2F04T166	HOV1B312T170	2	○	○	○	9
With Proof of Closure & Auxiliary Switch												
1/2	4.5	0	300	267	HO1B252A171	V2JS2DT166	HOV1B302T171	1	○	○	○	9
3/4	5.5	0	300	267		V2JS2E03T166	HOV1B307T171		○	○	○	9
1	6	0	300	267		V2JS2F04T166	HOV1B312T171	2	○	○	○	9
COMBUSTION (Fuel Oil) - Watertight												
With Proof of Closure Switch												
1/2	4.5	0	300	267	HO2B252A170	V2JS2DT166	HOV2B302T170	1	○	○	○	9
3/4	5.5	0	300	267		V2JS2E03T166	HOV2B307T170		○	○	○	9
1	6	0	300	267		V2JS2F04T166	HOV2B312T170	2	○	○	○	9
With Proof of Closure & Auxiliary Switch												
1/2	4.5	0	300	267	HO2B252A171	V2JS2DT166	HOV2B302T171	1	○	○	○	9
3/4	5.5	0	300	267		V2JS2E03T166	HOV2B307T171		○	○	○	9
1	6	0	300	267		V2JS2F04T166	HOV2B312T171	2	○	○	○	9

① For 24V/60Hz, change 7th digit to "1" (EX: HO1B251A170); For 240V/60Hz (or 220V/50Hz), change 7th digit to "4" (EX: HO1B254A170)
 ② For 24V/60Hz, change 8th digit, for 1/2" to "1", for 3/4" to "6", for 1" to "1" (EX: HOV1B301T170, HOV1B306T170, HOV1B311T170)
 For 240V/60Hz (or 220V/50Hz), change 8th digit, for 1/2" to "3", for 3/4" to "8", for 1" to "3" (EX: HOV1B303T170, HOV1B308T170, HOV1B313T170)

Specifications (Metric units)

Pipe Size (in)	Kv Flow (m³/hr)	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number 120V/60Hz (or 110V/50Hz)			Const. Ref.	Agency			Max. Opening Time (Sec.)
		Min.	Max.		HO(B) Actuator ①	V2 Valve Body	HOV(B) Assembly ②		UL	FM	CSA	
COMBUSTION (Fuel Oil) - General Purpose												
With Proof of Closure Switch												
1/2	3.9	0	20.7	131	HO1B252A170	V2JS2DT166	HOV1B302T170	1	○	○	○	9
3/4	4.8	0	20.7	131		V2JS2E03T166	HOV1B307T170		○	○	○	9
1	5.1	0	20.7	131		V2JS2F04T166	HOV1B312T170	2	○	○	○	9
With Proof of Closure & Auxiliary Switch												
1/2	3.9	0	20.7	131	HO1B252A171	V2JS2DT166	HOV1B302T171	1	○	○	○	9
3/4	4.8	0	20.7	131		V2JS2E03T166	HOV1B307T171		○	○	○	9
1	5.1	0	20.7	131		V2JS2F04T166	HOV1B312T171	2	○	○	○	9
COMBUSTION (Fuel Oil) - Watertight												
With Proof of Closure Switch												
1/2	3.9	0	20.7	131	HO2B252A170	V2JS2DT166	HOV2B302T170	1	○	○	○	9
3/4	4.8	0	20.7	131		V2JS2E03T166	HOV2B307T170		○	○	○	9
1	5.1	0	20.7	131		V2JS2F04T166	HOV2B312T170	2	○	○	○	9
With Proof of Closure & Auxiliary Switch												
1/2	3.9	0	20.7	131	HO2B252A171	V2JS2DT166	HOV2B302T171	1	○	○	○	9
3/4	4.8	0	20.7	131		V2JS2E03T166	HOV2B307T171		○	○	○	9
1	5.1	0	20.7	131		V2JS2F04T166	HOV2B312T171	2	○	○	○	9

① For 24V/60Hz, change 7th digit to "1" (EX: HO1B251A170); For 240V/60Hz (or 220V/50Hz), change 7th digit to "4" (EX: HO1B254A170)
 ② For 24V/60Hz, change 8th digit, for 1/2" to "1", for 3/4" to "6", for 1" to "1" (EX: HOV1B301T170, HOV1B306T170, HOV1B311T170)
 For 240V/60Hz (or 220V/50Hz), change 8th digit, for 1/2" to "3", for 3/4" to "8", for 1" to "3" (EX: HOV1B303T170, HOV1B308T170, HOV1B313T170)

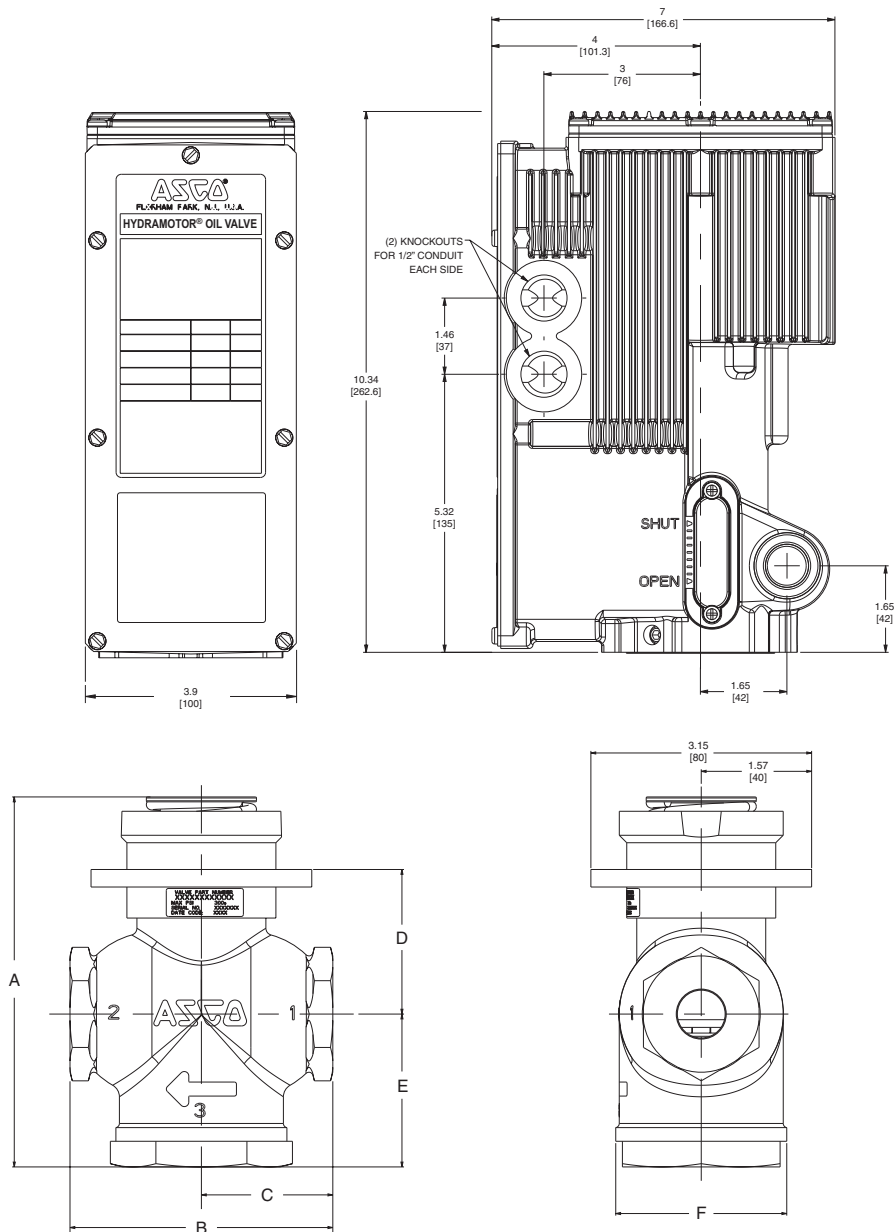
COMBUSTION

Dimensions inches (mm)

2-Way Valve Body Dimensions Table							
Const. Ref.		A	B	C	D	E	F
1	in	5.28	3.75	1.87	2.06	2.18	2.44
	mm	134.1	95.3	47.6	52.4	55.4	62
2	in	5.46	4.25	2.12	2.50	2.32	2.87
	mm	138.8	103.7	51.7	61.0	59.0	72.9

Approx. Shipping Weight (lbs)		
Actuator	Valve Body	HOV1B Assembly
10.4	6.4	16.8

Const. Ref. 1, 2

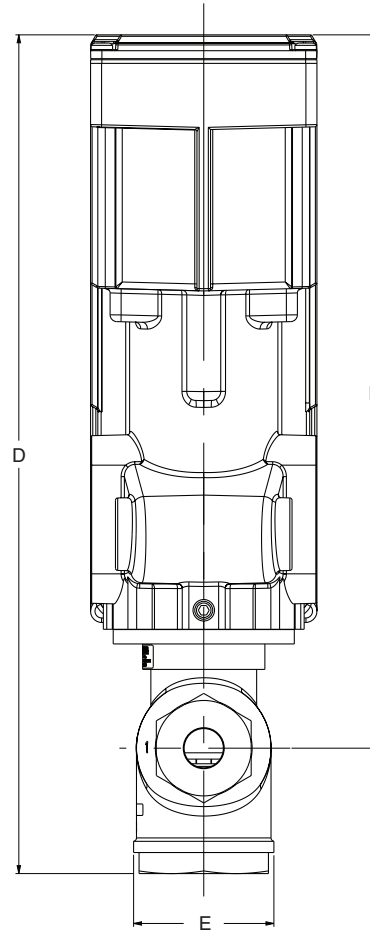
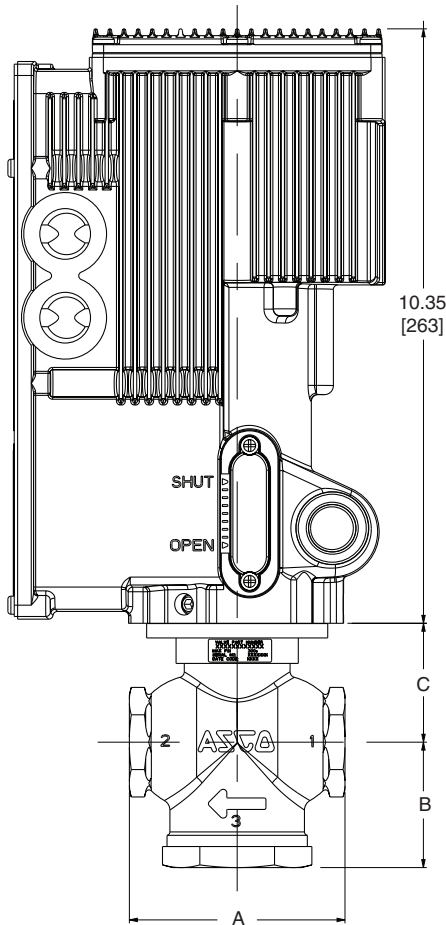
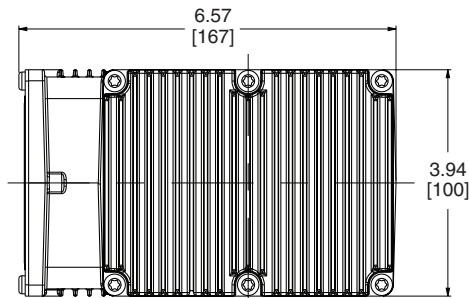


Dimensions inches (mm)

2-Way Assembly Dimensions Table							
Const. Ref.		A	B	C	D	E	F
1	in	3.75	2.18	2.06	14.61	2.44	12.40
	mm	95.3	55.4	52.4	371	62	315
2	in	4.25	2.32	2.50	14.80	2.87	12.76
	mm	103.7	59.0	61.0	375.9	72.9	324

Actuator Rebuild Kit	Part Number
Auxiliary Switch Kit	296804
Proof of Closure Switch Kit	296806
Limit Switch Kit	296807

Const. Ref. 1, 2



COMBUSTION