



Features:

- Design Pressure (DP) / Maximum abnormal pressure (MAP): Up to 775 psig, 53 bar
- Power Supply: 24 VAC
- Actuator Ambient Temperature: -25°F to 130°F, -32°C to 54°C
- Contact factory or visit website for compatibility with CFC, HCFC, HFC and HFO refrigerants and oils
- Valve Refrigerant Temperature: -40°F to 300°F, -40°C to 149°C
- Full shutoff capability
- Gradual open/close stops line hammer
- Remote operating capability
- Removable actuator for quick change replacement
- Manual override and valve positioning
- Electronic overload protection
- UL/cUL Listed, Conforms to Pressure Equipment Directive 2014/68/EU

Actuated Standard

Part Number	Size		Cv	Kv	A		B		C Min		D		MAP		Wt		Motor	Hub Kit	Actuator Kit***	Heater
	in	mm			in	mm	in	mm	in	mm	in	mm	psig	bar	lb	kg				
AW17861	1/2	13	6.20	5	4.00	102	2.36	60	3.70	94	2.76	70	775	53	2.21	1.00	1	A 18389	A 18390	
AW17862	5/8	17	12.10	10	4.00	102	2.36	60	3.70	94	2.76	70	775	53	2.38	1.08	1	A 18389	A 18390	
AW17863	3/4	19	19.00	16	4.21	107	2.36	60	3.70	94	2.76	70	775	53	2.40	1.09	1	A 18391	A 18392	
AW17864	7/8	22	27.50	24	4.21	107	2.36	60	3.70	94	2.76	70	775	53	2.42	1.10	1	A 18391	A 18392	
AW17865	1 1/8	29	54.00	47	4.58	116	2.36	60	3.70	94	2.76	70	775	53	3.10	1.41	1	A 18391	A 18392	
AW17866	1 3/8	35	89.10	77	5.05	128	2.36	60	5.91	150	3.19	81	775	53	5.53	2.51	2	A 18393	A 18394	A 18366
AW17867	1 5/8	41	114.00	99	5.34	136	2.36	60	5.91	150	3.19	81	775	53	6.94	3.15	2	A 18393	A 18394	A 18366
AW17868	2 1/8	54	244.00	211	6.42	163	2.66	68	8.94	227	3.94	100	700	48	13.14	5.96	3	A 18368	A 18395	A 18367
AW17869	** 2 5/8	67	401.00	347	9.45	240	5.30	135	8.94	227	3.94	100	700	48	23.40	10.61	4	A 18764	A 18765	A 18367 (2)
AW17870	** 3 1/8	79	553.00	478	9.99	254	5.30	135	8.94	227	3.94	100	700	48	31.40	14.24	4	A 18400	A 18401	A 18367 (2)
AW17871	* 2 5/8	67	230.00	199	6.42	163	2.66	68	8.94	227	3.94	100	700	48	13.56	6.15	3	A 18368	A 18395	A 18367
AW17872	* 3 1/8	79	143.00	124	6.42	163	2.66	68	8.94	227	3.94	100	700	48	14.24	6.46	3	A 18368	A 18395	A 18367

Actuated 3-Way

Part Number	Size		Cv	Kv	A		B		C Min		D		MAP		Wt		Motor	Hub Kit	Actuator Kit***	Heater
	in	mm			in	mm	in	mm	in	mm	in	mm	psig	bar	lb	kg				
AY17861	1/2	13	3.90	3	4.18	106	2.36	60	3.70	94	2.76	70	700	48	2.28	1.03	1	A 18389	A 18390	
AY17862	5/8	17	4.60	4	4.18	106	2.36	60	3.70	94	2.76	70	700	48	2.39	1.08	1	A 18389	A 18390	
AY17863	3/4	19	11.90	10	4.50	114	2.36	60	3.70	94	2.76	70	700	48	3.50	1.59	1	A 18391	A 18392	
AY17864	7/8	22	10.90	9	4.50	114	2.36	60	3.70	94	2.76	70	700	48	3.25	1.47	1	A 18391	A 18392	
AY17865	1 1/8	29	19.30	17	5.02	128	2.36	60	5.91	150	3.19	81	700	48	5.73	2.60	2	A 18393	A 18394	A 18366
A 17810	1 3/8	35	31.10	27	5.44	138	2.36	60	5.91	150	3.19	81	700	48	8.13	3.69	2	A 18368	A 18396	A 18366
A 17811	1 5/8	41	44.70	39	6.22	158	2.66	68	8.94	227	3.94	100	700	48	12.00	5.44	3	A 18368	A 18395	A 18367
AY17868	2 1/8	54	76.30	66	6.54	166	2.66	68	8.94	227	3.94	100	700	48	13.23	6.00	3	A 18368	A 18395	A 18367
AY17871	* 2 5/8	67	69.90	60	6.54	166	2.66	68	8.94	227	3.94	100	700	48	14.09	6.39	3	A 18368	A 18395	A 18367
AY17872	* 3 1/8	79	58.20	50	6.54	166	2.66	68	8.94	227	3.94	100	700	48	14.64	6.64	3	A 18368	A 18395	A 18367

* Reduced Port

** Consists of two stacked motors operating in tandem

*** Actuator Kit includes Motor and Hub

Prefix AWS Actuator includes auxillary switch

Prefix AYS Actuator includes auxillary switch

Suffix -KIT Weatherproof Enclosure Kit includes ball valve, actuator and hub kit with enclosure

Warning Heater assembly required for low temperature applications

Warning Motors not for use in wet or applications where moisture will condense on motor

CYCLEMASTER® Ball Valves

Actuated

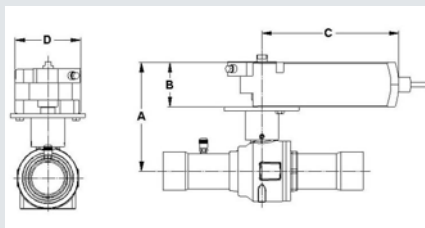


Tonnage calculations are based on the following conditions:
 Evaporator temperature: 40°
 Vapor temperature exiting evaporator: 10°F superheated
 Liquid temperature entering evaporator: 100°F
 Hot gas temperature: 140°F
 Pressure drop across valve: 1 psig

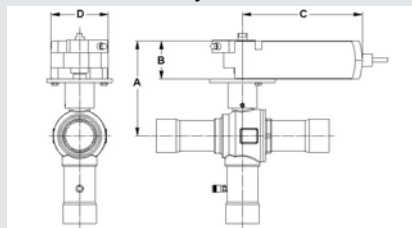
Motor Specifications

Motor Series	Torque (in-lb)	Power Consumption (VA)	Running Time (seconds)
1	44	2.5	90
2	132	3.0	125
3	310	7	125
4 **	620	12	125

Actuated Standard



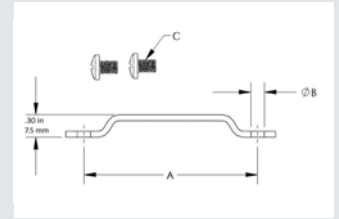
Actuated 3-Way



Part Number	Liquid Capacity (tons)					Suction Capacity (tons)					Hot Gas Capacity (tons)				
	R22	R134a	R404A/ R507	R407C	R410A	R22	R134a	R404A/ R507	R407C	R410A	R22	R134a	R404A/ R507	R407C	R410A
AW17861	19.0	17.7	12.2	18.13	17.8	2.7	2.1	2.2	2.52	3.1	3.9	3.2	3.2	4.05	4.5
AW17862	36.9	34.5	23.8	35.27	34.6	5.2	4.1	4.3	4.90	6.0	7.5	6.2	6.2	7.87	8.7
AW17863	58.0	54.1	37.4	55.40	54.4	8.1	6.4	6.8	7.69	9.5	11.8	9.7	9.7	12.37	13.7
AW17864	84.1	78.4	54.2	80.27	78.8	11.8	9.2	9.8	11.15	13.7	17.1	14.1	14.0	17.92	19.8
AW17865	165.3	154.3	106.5	157.86	154.9	23.2	18.1	19.4	21.92	27.0	33.7	27.7	27.6	35.24	38.9
AW17866	272.9	254.7	175.8	260.62	255.8	38.3	29.9	32.0	36.19	44.6	55.6	45.7	45.6	58.18	64.2
AW17867	348.7	325.3	224.6	332.95	326.8	49.0	38.2	40.8	46.23	57.0	71.1	58.4	58.3	74.33	82.1
AW17868	746.8	696.9	481.2	713.19	699.9	104.9	81.9	87.5	99.03	122.2	152.3	125.0	124.8	159.21	175.8
AW17869	1227.6	1145.5	791.0	1172.30	1150.5	172.4	134.6	143.8	162.78	200.8	250.3	205.5	205.2	261.71	289.0
AW17870	1693.7	1580.4	1091.3	1617.41	1587.4	237.9	185.8	198.4	224.58	277.0	345.3	283.5	283.1	361.08	398.7
AW17871	705.3	658.2	454.5	673.57	661.1	99.1	77.4	82.6	93.53	115.4	143.8	118.1	117.9	150.37	166.0
AW17872	439.3	409.9	283.0	419.50	411.7	61.7	48.2	51.5	58.25	71.9	89.6	73.5	73.4	93.65	103.4
AY17861	12.1	11.3	7.8	11.52	11.3	1.7	1.3	1.4	1.60	2.0	2.5	2.0	2.0	2.57	2.8
AY17862	14.2	13.2	9.1	13.54	13.3	2.0	1.6	1.7	1.88	2.3	2.9	2.4	2.4	3.02	3.3
AY17863	36.4	34.0	23.5	34.79	34.1	5.1	4.0	4.3	4.83	6.0	7.4	6.1	6.1	7.77	8.6
AY17864	33.3	31.1	21.5	31.84	31.2	4.7	3.7	3.9	4.42	5.5	6.8	5.6	5.6	7.11	7.8
AY17865	59.2	55.2	38.1	56.52	55.5	8.3	6.5	6.9	7.85	9.7	12.1	9.9	9.9	12.62	13.9
A 17810	95.1	88.7	61.3	90.81	89.1	13.4	10.4	11.1	12.61	15.6	19.4	15.9	15.9	20.27	22.4
A 17811	136.8	127.7	88.2	130.66	128.2	19.2	15.0	16.0	18.14	22.4	27.9	22.9	22.9	29.17	32.2
AY17868	233.7	218.0	150.6	223.14	219.0	32.8	25.6	27.4	30.98	38.2	47.6	39.1	39.1	49.81	55.0
AY17871	213.9	199.6	137.8	204.22	200.4	30.0	23.5	25.1	28.36	35.0	43.6	35.8	35.7	45.59	50.3
AY17872	178.2	166.2	114.8	170.13	167.0	25.0	19.5	20.9	23.62	29.1	36.3	29.8	29.8	37.98	41.9

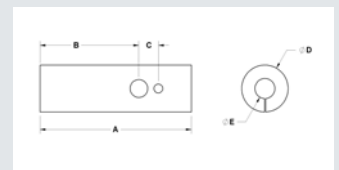
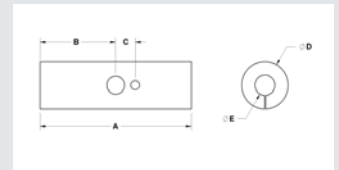
Bracket Kits

Part Number	Valve Size	A		B		Screw Thread Size (C)	Wt	
		(in)	(mm)	(in)	(mm)		(lb)	(kg)
B 35531	1/4 - 5/8	2.28	58	0.17	4.4	M4 X .07	0.03	0.02
B 35532	3/4 - 7/8	2.84	72	0.17	4.4	M4 X .07	0.03	0.02
B 35533	1 1/8	3.07	78	0.17	4.4	M4 X .07	0.04	0.02
B 35534	1 3/8	3.62	92	0.25	6.4	M6 X 1.0	0.05	0.02
B 35535	1 5/8	3.94	100	0.25	6.4	M6 X 1.0	0.05	0.02
B 35536	2 1/8	4.80	122	0.25	6.4	M6 X 1.0	0.06	0.02



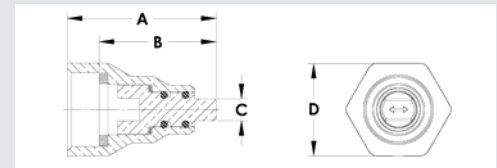
Insulation Cover

Insulation	Valve Size	A (in)	B (in)	C (in)	D (in)	E (in)	Thickness (in)	Wt(lb)
38RBVINS	3/8	5.50	3.00	0.63	2.50	1.19	0.50	0.10
12RBVINS	1/2	6.38	3.44	0.63	2.50	1.19	0.50	0.10
58RBVINS	5/8	6.38	3.44	0.63	2.50	1.38	0.50	0.10
34RBVINS	3/4	7.44	3.88	0.88	3.06	1.63	1.09	0.10
78RBVINS	7/8	7.44	3.88	0.88	3.06	1.63	1.09	0.10
118RBVINS	1 1/8	8.44	4.31	1.13	3.63	1.75	1.25	0.10
138RBVINS	1 3/8	10.00	5.00	1.25	3.94	2.06	1.35	0.10
158RBVINS	1 5/8	11.00	5.50	1.44	4.56	2.25	1.56	0.32
218RBVINS	2 1/8	12.00	6.06	1.88	5.38	2.44	1.75	0.10
258RBVINS	2 5/8	13.50	6.81	2.25	6.25	2.88	2.00	0.82
MSBVINS	Holes Offset	8.56	6.56	1.10	2.63	1.13	0.75	0.10
MSBVINSCEN	Holes Centered	8.56	4.28	1.10	2.63	1.13	0.75	0.02



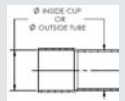
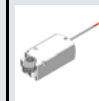
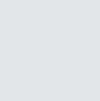
Retrofit Cap

- Designed to replace existing caps on installed valves for the full range of CYCLEMASTER Ball Valve sizes 1/4" to 3 1/8"
- Large nut secures cap assembly to valve neck allowing center post to easily turn for on/off operation and clear visual identification
- Uses dual o-ring stem seals and base seal to assure positive isolation

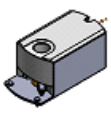
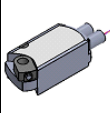
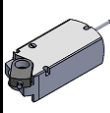
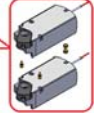


Part Number	Valve Configuration	Valve Size in	A		B		C		D		Recommended Sealing Torque		Wt	
			in	mm	in	mm	in	mm	in	mm	ft-lb	N-m	lb	kg
A 18351	Straight	1/4 - 5/8	1.33	34	1.04	26	0.16	4	0.81	21	3 - 4	4 - 5	0.08	0.04
	3-Way	1/4 - 5/8												
A 18352	** Straight	3/4 - 1 1/8	1.50	38	1.18	30	0.22	6	0.94	24	5 - 6	7 - 8	0.12	0.05
	3-Way	3/4 - 7/8												
A 18353	*** Straight	1 3/8 - 1 5/8	1.92	49	1.59	40	0.31	8	1.13	29	13 - 15	18 - 20	0.22	0.10
	3-Way	1 1/8												
A 18354	Straight	2 1/8, 2 5/8 & 3 1/8" Red Port	2.57	65	1.97	50	0.38	10	1.63	41	40 - 45	54 - 61	0.57	0.26
	3-Way	1 3/8 - 2 1/8, 2 5/8 & 3 1/8" Red Port												
A 18355	* Straight	2 5/8 & 3 1/8 Full Port	2.66	68	2.10	53	0.38	10	1.88	48	45 - 50	61 - 68	0.84	0.38
	3-Way													

Valve sizes listed are based on current standard product offering. Confirm part number requirement based on thread size.

Stem Neck Thread Size	Connection Size (in)	Straight Body No.	3-Way Body No.	Motor Series	ABV Hub Kit	ABV Hub Kit w/ Enclosure	ABV Hub/ Motor Kit	Heater	Replacement Caps								
									1 Piece Plastic	1 Piece Brass	2 Piece Brass	Retrofit Brass					
																	
11/16"-16 UN	1/4	N 02351	----	I	A 18389	A 18389-KIT1	A 18390	---	P 36723	A 17965	A 17842	A 18351					
	3/8	F 35222	F 35222														
	1/2	F 36573															
	5/8	F 36700															
		F 36700A															
13/16"-16 UN	3/4	N 02352	F 35223	I	A 18391	A 18391-KIT1	A 18392	---	P 36762	A 17966	A 17843	A 18352					
	7/8	F 33957															
		F 35223															
		F 35427															
		F 35639															
		F 36701															
		F 36701A															
	1 1/8	F 36702A	---														
1"-16 UN	1 1/8	N 02353	F 35224	II	A 18393	A 18393-KIT2	A 18394	A 18366	P 36763	A 17967	A 17844	A 18353					
		F 33958															
		F 35224															
		F 35428															
		F 35640															
		F 36702															
	1 3/8	F 35949	---														
		F 36703															
		F 36703A															
	1 5/8	F 36704A	---														
1 1/2"-16 UN	1 3/8	N 02354	F 35162	II	A 18368	A 18368-KIT2	A 18396	A 18366	P 36764	A 17968	A 17845	A 18354					
	1 5/8	N 02355	---										F 35160				
		F 35430															
		F 35642															
		F 35950															
		F 36704															
	2 1/8			III	A 18368	A 18368-KIT3	A 18395	A 18367									
2 5/8 Red. Port	F 35951	F 36595															
3 1/8 Red. Port	F 36451																
	F 36705																
	F 36705A																
	2 5/8 Full Port	F 36706A	---	IV	A 18764	A 18764-KIT4	A 18765	A 18367 (2)									
3 1/8 Full Port	F 36322A	---															
3 5/8, 4 1/8	F 36707A																
1 3/4"-16 UN	2 1/8				III	A 18402	A 18402-KIT3	---	A 18367	P 36765	A 18399	A 17846	A 18355				
	2 5/8 Red. Port	N 02356	F 35161														
	3 1/8 Red. Port	F 35111															
	2 5/8 Full Port	F 35755	IV	A 18400	A 18400-KITIV	A 18401	A 18367 (2)										
	F 36452	---															
	F 36706																
	3 1/8 Full Port		F 35952	---													
	F 36322																
3 5/8, 4 1/8	F 36707																

Actuators

Motor Series	I		II		III		IV	
Standard Actuator	P 36408		P 36409		P 36410		P 36414 (2)	
Actuator with Auxillary Switch	P 36417		P 36418		P 36419		P 36714 p 36889	
Hub Seal Kits	A 18403 (1 Seal)		A 18404 (2 Seals)		A 18404 (2 Seals)		A 18404 (2 Seals)	

Views shown without Hub Kit Bracket Assembly. Hub Seal Kits include seals ONLY.

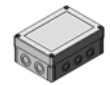
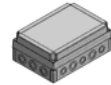
* Note: Series IV motor assemblies require additional mounting hardware to join tandem motors.

Actuator Shaft Adapter Kits

Motor Series	I		II		III		IV	
Shaft Adaptor Kit (1 per box)			P 37736		P 37735		P 37735	
Position Indicator (10 per bag)	P 37732		P 37731		P 37730		P 37730	
Shaft Adapter Clip (20 per bag)			P 37733		P 37734		P 37734	
Shaft Insert (10 per bag)	P 37729							

Shaft Adapter kit includes Shaft Adapter (1), Clip (1), Position Indicator Set (1) and Screws (2).

Enclosures

Motor Series	I	II	III	IV
Enclosure (L x W x H)	 7.1" x 5.1" x 3.0"	 10.0" x 7.1" x 4.0"	 14.2" x 10.0" x 6.0"	 14.2" x 10.0" x 6.0"

ABV Hub kit w/ Enclosure includes all the necessary accessories along with the hub kit to connect the enclosure to the hub.; Ambient Temperature (operation): -25°F to 125°F (-31°C to 51°C); Heater kit for lower temperature applications.

O Ring Kit for Actuator Hub Service

O-Ring Kits	Valve Size
A 18403	1/2 - 1 1/8
A 18404	1 3/8 - 3 1/8