# Double Safety Shutoff Valves Combination 2-Way Normally Closed | NPT (3/4" to 3") & ISO (20mm to 80mm) Connections

Features

- Solenoid and motorized valve combination provides the most economical double safety shutoff valve burner solution for slow opening and high flow applications
- Hardware kit enhances easy installation of solenoid & motorized valve on burner gas train
- Low pressure drop and extremely high flow capacity, ideal in low gas supply pressure applications/locations *Please reference 8214(200), 158, or 159 catalog pages for additional features.*

#### Fluid

Fuel Gas

### Adapter & Connecting Hardware Kits (Optional)

Pipe size in (mm)	in NPT Threaded NPT Threaded End-Connector Kit Kit		Inlet (Note 1) & Outlet (Note 2) NPT Threaded End-Connector Kit	
3/4" (20)	296657-001	560399-003	560412-007	
1" (25)	296657-002	560399-001	560412-001	553748-001
1 1/4" (32)	296657-003	560399-004	560412-008	553748-001
1 1/2" (40)	296657-004	560399-002	560412-002	
1 1/4" (32) High Flow	296657-005	560399-004	560412-009	
1 1/2" (40) High Flow	296657-006	560399-002	560412-010	553748-002
2" (50)	296657-007	560399-005	560412-003	
2" (50) High Flow	296657-008	560399-006	560412-004	
2 1/2" (65)	296657-009	560399-007	560412-005	553748-003
3" (80)	296657-010	560399-008	560412-006	

Note 1: Inlet NPT Threaded End-Connectors to be mounted on solenoid valve's inlet flange. Note 2: Outlet NPT Threaded End-Connectors to be mounted on 158 valve's outlet flange. Note 3: Connection interface for mounting together ASCO series 214 with ASCO series 158.



# Approvals

#### 8214(200) valve

- UL listed to standard 429 "Electrically Operated Valves" Guide YIOZ, File MP618 Safety Shutoff Valves.
- FM Approved to Class 7400 "liquid and gas safety shutoff valves."

#### 158 valve with 159 actuator

- UL listed to standard 429 "Electrically Operated Valves", Guide YIOZ, File MP932 Safety Shutoff Valves.
- CSA Certified to Automatic Gas Shutoff Valves standard C22.2 No.139 requirements.
- FM Approved to Class 7400 "liquid and gas safety shutoff valves".
- Complies with RoHS directives.
- Automatic shut-off valves for gas burners and gas appliances as per EN 161 Class A, Group 2, for gas families 1, 2 and 3 (*Note 4*).

Note 4: Only when indicated "Class A" on the valve series label.



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### **Content for Hardware Kits and Adapters**

Part Name	Inlet (Note 1) NPT Threaded End- Connector Kit	Outlet (Note 2) NPT Threaded End- Connector Kit	Inlet (Note 1) & Outlet (Note 2) NPT Threaded End-Connector Kit				O-Ring Kit		
Catalog Item	296657	560399	560412	553748-001	553748-002	553748-003	562031-001	562031-002	562031-003
Connecting Plate	-	-	-	1	1	1	-	-	-
Cover Plate	-	-	-	-	1	-	-	-	-
O-Ring	1	1	2	2	3	2	12	15	12
Flat Washer	-	-	4	4	4	8	-	-	-
Hex Head Bolt	-	-	4	4	4	4	-	-	-
Split Lock Washer	-	-	4	-	-	-	-	-	-
Serrated Screws	-	4	4	4	4	-	-	-	-
Mach Socket Head Screws	-	-	-	-	-	4	-	-	-
I&M	1	1	1	1	1	1	1	1	1
Inlet Adapter	1	-	1	-	-	-	-	-	-
Outlet Adapter	-	1	1	-	-	-	-	-	-
Nut	-	-	4	-	-	-	-	-	-

Note 1: Inlet NPT Threaded End-Connectors to be mounted on solenoid valve's inlet flange. Note 2: Outlet NPT Threaded End-Connectors to be mounted on 158 valve's outlet flange.

Note 3: Connection interface for mounting together ASCO series 214 with ASCO series 158.

# Specifications English units (Metric units)

Double Valves Configuration		Pipe Size in (mm)	Flow factor CV (Kv = m <sup>3</sup> /h)	Flow Capacity Ft <sup>3</sup> /Hr (m <sup>3</sup> /h) (Note 4)	Gas Capacity BTU/Hr (Note 4)	Heat Output Capacity kW (Note 4)	Maximum Operating Pressure Differential psi (mbar)	Const. Ref
		3/4" (20)	9.0 (7.8)	484 (14)	484,000	142	5 (345)	1
		1" (25)	15.9 (13.7)	861 (24)	861,000	252	5 (345)	1
	158 & 159 MID-SIZE BODY (On/Off with <b>LINEAR</b> Trim with or without overtravel)	1 1/4" (32)	24.7 (21.3)	1,345 (38)	1,345,000	394	5 (345)	1
		1 1/2" (40)	28.8 (24.8)	1,560 (44)	1,560,000	457	5 (345)	1
8214 (200)		1 1/4" (32) High Flow	26.4 (22.8)	1,398 (40)	1,398,000	410	5 (345)	2
(On/Off)		1 1/2" (40) High Flow	33.7 (29.0)	1,829 (52)	1,829,000	536	5 (345)	2
		2" (50)	41.3 (35.6)	2,205 (62)	2,205,000	646	5 (345)	2
	158 & 159 BIG-SIZE BODY (On/Off with <b>LINEAR</b> Trim with or without overtravel)	2" (50) High Flow	58.2 (50.2)	3,119 (88)	3,119,000	914	5 (345)	3
		2 1/2" (65)	77.6 (66.9)	4,195 (119)	4,195,000	1,229	5 (345)	3
		3" (80)	83.6 (72.0)	4,518 (128)	4,572,000	1,340	5 (345)	3

Note 4: 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

## **Specifications English units (Metric units)**

Double	Valves Configuration	Pipe Size in (mm)	Flow factor CV (Kv = m <sup>3</sup> /h)	Flow Capacity Ft <sup>3</sup> /Hr (m <sup>3</sup> /h) (Note 4)	Gas Capacity BTU/Hr (Note 4)	Heat Output Capacity kW (Note 4)	Maximum Operating Pressure Differential psi (mbar)	Const. Ref
		3/4" (20)	9.4 (8.1)	484 (14)	484,000	142	5 (345)	1
		1" (25)	17.2 (14.8)	914 (26)	914,000	268	5 (345)	1
	158 & 159 MID-SIZE BODY (On/Off with <b>STANDARD</b> Trim with or without overtravel)	1 1/4" (32)	26.9 (23.2)	1,452 (41)	1,452,000	426	5 (345)	1
		1 1/2" (40)	30 (25.9)	1,614 (46)	1,614,000	473	5 (345)	1
8214 (200)		1 1/4" (32) High Flow	29.2 (25.1)	1,560 (44)	1,560,000	457	5 (345)	2
(On/Off)		1 1/2" (40) High Flow	35.7 (30.8)	1,936 (55)	1,936,000	567	5 (345)	2
		2" (50)	43.8 (37.8)	2,366 (67)	2,366,000	693	5 (345)	2
	158 & 159 BIG-SIZE BODY (On/Off with <b>STANDARD</b> Trim	2" (50) High Flow	59 (50.9)	3,173 (90)	3,173,000	930	5 (345)	3
		2 1/2" (65)	79.9 (68.9)	4,303 (122)	4,303,000	1,261	5 (345)	3
	with or without overtravel)	3" (80)	85.2 (73.4)	4,572 (130)	4,572,000	1,340	5 (345)	3

Note 4: 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

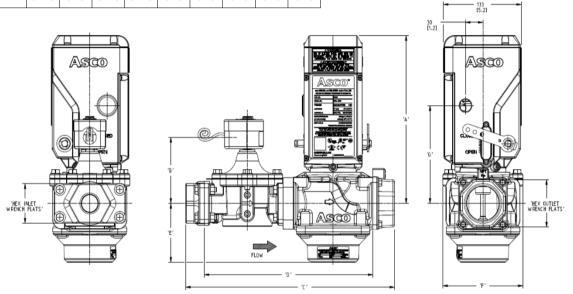


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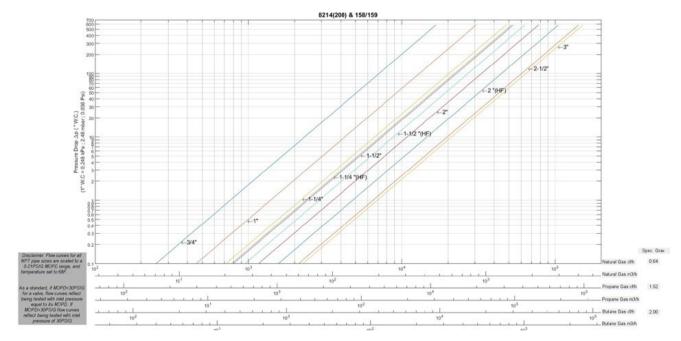
Series 158 & 214

# **Dimensions: mm (inches)**

Const. Ref.	Pipe Size	A	В	с	D	E	F	G	HEX Inlet	HEX Outlet
1	3/4", 1", 1-1/4", 1-1/2"	270 [10.6]	106 [4.2]	357 [14.1]	288 [11.3]	95 [3.7]	137 [5.4]	157 [6.2]	64 [2.5]	76 [3.0]
2	2", 1-1/4" (HF), 1-1/2" (HF) "	270 [10.6]	114 [4.5]	389 [15.3]	317 [12.5]	95 [3.7]	161 [6.3]	157 [6.2]	76 [3.0]	76 [3.0]
3	2" (HF), 2-1/2", 3"	283 [11.1]	149 [5.8]	499 [19.6]	409 [16.1]	130 [5.1]	202 [7.9]	170 [6.7]	114 [4.5]	108 [4.3]



#### **Gas Flow Charts**





# Adapter & Joining Hardware Kits (Optional)

