

# ASCO™ Series 158 & 214/215 Double Safety Shutoff Valves Combination

2-Way Normally Closed | NPT (3/4" to 3")

**Series  
158 & 214(200)/215**

## Features

- Solenoid and motorized valve combination provides the most economical double safety shutoff valve burner solution for slow opening and High Fire/Low Fire applications
- Hardware kit enhances easy installation of solenoid & motorized valve on burner gas train
- Low pressure drop and high flow capacity, ideal in low gas supply pressure applications/locations

Please reference New Generation 214, 215, 158, or 159 catalog pages for additional features.

## Fluid

Fuel Gas

## Adapter & Connecting Hardware Kits (Optional)

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

## Installation

ASCO New Generation 214 & 215 valves can both be configured with flange mounting options (See dedicated catalog pages), the flanges allow easy assembly to ASCO 158 Valve Series using the **Connecting Hardware Kit**. ASCO New Generation 214 & 215 valves are always supplied with internal threads. If necessary Inlet **NPT Threaded End-Connector Kit** can be added for easier installation and maintenance.

(1) Inlet NPT Threaded End-Connectors to be mounted on solenoid valve's inlet flange.

(2) Outlet NPT Threaded End-Connectors to be mounted on 158 valve's outlet flange.

(3) Connection interface for mounting together ASCO series new generation 214 & 215 with ASCO series 158.

(4) Only when indicated "Class A" on the valve series label.



## Approvals

### Series 214 New Generation

- UL listed to standard 429 "Electrically Operated Valves" Guide YIOZ/ YIOZ2, File MP618 Safety Shutoff Valves.
- FM Approved to Class 7400 "liquid and gas safety shutoff valves."
- CSA Certified Shutoff C/I to Automatic Gas Valves standard ANSI Z21.21 / CSA 6.5 Classes 3371-03 (CAN), 3371-83 (US) File 112872

### Series 215 New Generation

- UL listed to standard 429 "Electrically Operated Valves" Guide YIOZ/ YIOZ2, File MP618 Safety Shutoff Valves.
- FM Approved to Class 7400 "liquid and gas safety shutoff valves."
- CSA Certified Shutoff C/I to Automatic Gas Valves standard ANSI Z21.21 / CSA 6.5 Classes 3371-03 (CAN), 3371-83 (US) File 112872

### 158 valve with 159 motorized actuator

- UL listed to standard 429 "Electrically Operated Valves", Guide YIOZ, File MP932 Safety Shutoff Valves.
- FM Approved to Class 7400 "liquid and gas safety shutoff valves."
- CSA Certified C/I to Automatic Gas Valves standard ANSI Z21.21 / CSA 6.5 Classes 3371-03 (CAN), 3371-83 (US) File 113070.
- 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 <sup>(4)</sup>

# ASCO™ Series 158 & 214/215 Double Safety Shutoff Valves Combination

2-Way Normally Closed | NPT (3/4" to 3")

**Series  
158 & 214(200)/215**

## New Generation 214 w/ 158/159 (Standard Trim) 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) <sup>(5)</sup>	Gas Capacity BTU/Hr <sup>(5)</sup>	Heat Output Capacity kW <sup>(5)</sup>	Maximum Operating Pressure Differential psi (mbar)
New Generation 214 (On/Off)	158 & 159 MID-SIZE BODY (On/Off with STANDARD Trim with or without overtravel)	3/4" (20)	9.4 (8.1)	484 (14)	484,000	142	5 (345)
		1" (25)	17.2 (14.8)	914 (26)	914,000	268	5 (345)
		1 1/4" (32)	26.9 (23.2)	1452 (41)	1,452,000	426	5 (345)
		1 1/2" (40)	30 (25.9)	1614 (46)	1,614,000	473	5 (345)
		1 1/4" (32) High Flow	29.2 (25.2)	1560 (44)	1,560,000	457	5 (345)
		1 1/2" (40) High Flow	35.7 (30.8)	1936 (55)	1,936,000	567	5 (345)
		2" (50)	43.8 (37.8)	2366 (67)	2,366,000	693	5 (345)
	158 & 159 BIG-SIZE BODY (On/Off with STANDARD Trim with or without overtravel)	2" (50) High Flow	59 (50.9)	3173 (90)	3,173,000	930	5 (345)
		2 1/2" (65)	79.9 (68.9)	4303 (122)	4,303,000	1,261	5 (345)
		3" (80)	85.2 (73.4)	4572 (130)	4,572,000	1,340	5 (345)

## New Generation 214 w/ 158/159 (Linear Trim) 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) <sup>(5)</sup>	Gas Capacity BTU/Hr <sup>(5)</sup>	Heat Output Capacity kW <sup>(5)</sup>	Maximum Operating Pressure Differential psi (mbar)
New Generation 214 On/Off	158 & 159 MID-SIZE BODY (High/Low/Off with LINEAR Trim with or without overtravel)	3/4" (20)	9.0 (7.8)	484 (14)	484,000	142	5 (345)
		1" (25)	15.9 (13.7)	861 (24)	861,000	252	5 (345)
		1 1/4" (32)	24.7 (21.3)	1,345 (38)	1,345,000	394	5 (345)
		1 1/2" (40)	28.8 (24.8)	1,560 (44)	1,560,000	457	5 (345)
		1 1/4" (32) High Flow	26.4 (22.8)	1,398 (40)	1,398,000	410	5 (345)
		1 1/2" (40) High Flow	33.7 (29.0)	1,829 (52)	1,829,000	536	5 (345)
		2" (50)	41.3 (35.6)	2,205 (62)	2,205,000	646	5 (345)
	158 & 159 BIG-SIZE BODY (High/Low/Off with LINEAR Trim with or without overtravel)	2" (50) High Flow	58.2 (50.2)	3,119 (88)	3,119,000	914	5 (345)
		2 1/2" (65)	77.6 (66.9)	4,195 (119)	4,195,000	1,229	5 (345)
		3" (80)	83.6 (72.0)	4,518 (128)	4,572,000	1,340	5 (345)

(5) 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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2-Way Normally Closed | NPT (3/4" to 3")

**Series**  
**158 & 214(200)/215**

## New Generation 215 w/ 158/159 (StandardTrim) 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) <sup>(5)</sup>	Gas Capacity BTU/Hr <sup>(5)</sup>	Heat Output Capacity kW <sup>(5)</sup>	Maximum Operating Pressure Differential psi (mbar)
New Generation 215 (On/Off)	158 & 159 MID-SIZE BODY (On/Off with STANDARD Trim with or without overtravel)	3/4" (20)	12.0 (10.4)	645 (18)	645,000	189	25 (1724)
		1" (25)	18.8 (16.2)	1022 (29)	1,022,000	300	25 (1724)
		1 1/4" (32)	28.1 (24.2)	1506 (43)	1,506,000	441	25 (1724)
		1 1/2" (40)	33.0 (28.5)	1775 (50)	1,775,000	520	25 (1724)
		1 1/4" (32) High Flow	30.7 (26.5)	1506 (43)	1,506,000	441	25 (1724)
		1 1/2" (40) High Flow	38.0 (32.8)	1829 (52)	1,829,000	536	25 (1724)
		2" (50)	47.9 (41.3)	2582 (73)	2,582,000	757	25 (1724)
	158 & 159 BIG-SIZE BODY (On/Off with STANDARD Trim with or without overtravel)	2" (50) High Flow	64.3 (55.4)	3442 (98)	3,442,000	1,009	5 (345)
		2 1/2" (65)	82.5 (71.1)	4410 (125)	4,410,000	1,292	5 (345)
		3" (80)	97.4 (84.0)	5217 (148)	4,572,000	1,340	5 (345)

## New Generation 215 w/ 158/159 (LinearTrim) 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) <sup>(5)</sup>	Gas Capacity BTU/Hr <sup>(5)</sup>	Heat Output Capacity kW <sup>(5)</sup>	Maximum Operating Pressure Differential psi (mbar)
New Generation 215 On/Off	158 & 159 MID-SIZE BODY (High/Low/Off with LINEAR Trim with or without overtravel)	3/4" (20)	11.2 (9.7)	592 (17)	592,000	173	25 (1724)
		1" (25)	17.1 (14.8)	914 (26)	914,000	268	25 (1724)
		1 1/4" (32)	25.6 (22.1)	1398 (40)	1,398,000	410	25 (1724)
		1 1/2" (40)	31.4 (27.2)	1667 (47)	1,667,000	489	25 (1724)
		1 1/4" (32) High Flow	27.5 (23.8)	1506 (43)	1,506,000	441	25 (1724)
		1 1/2" (40) High Flow	35.6 (30.8)	1836 (52)	1,936,000	567	25 (1724)
		2" (50)	44.7 (38.7)	2420 (69)	2,420,000	709	25 (1724)
	158 & 159 BIG-SIZE BODY (High/Low/Off with LINEAR Trim with or without overtravel)	2" (50) High Flow	63.4 (54.8)	3388 (96)	3,388,000	993	5 (345)
		2 1/2" (65)	80.0 (69.2)	4303 (122)	4,303,000	1,261	5 (345)
		3" (80)	95.0 (82.2)	5109 (145)	5,109,000	1,497	5 (345)

(5) 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

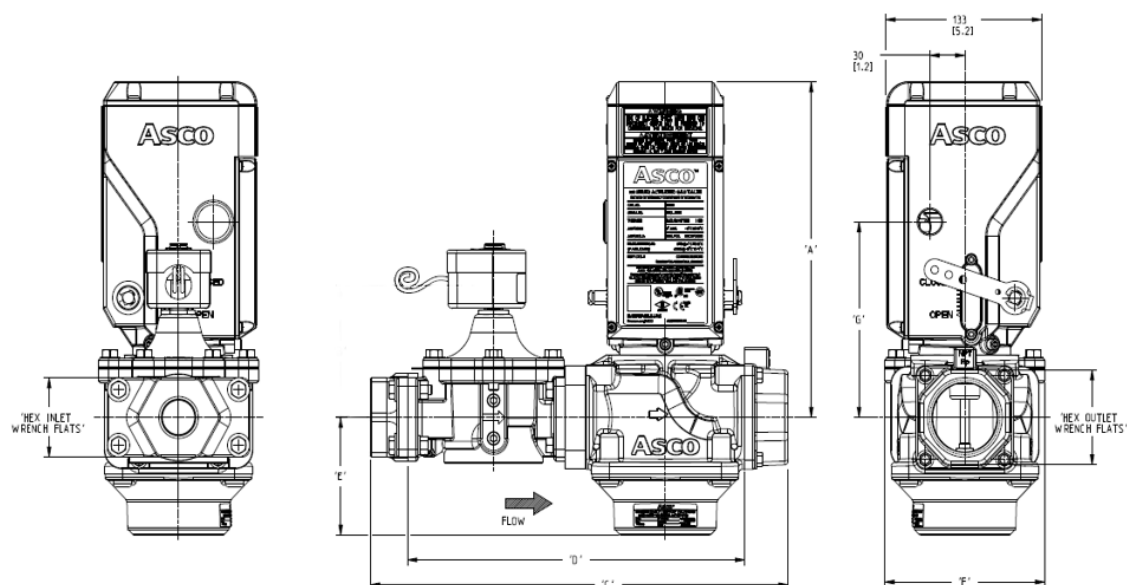
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**Series**  
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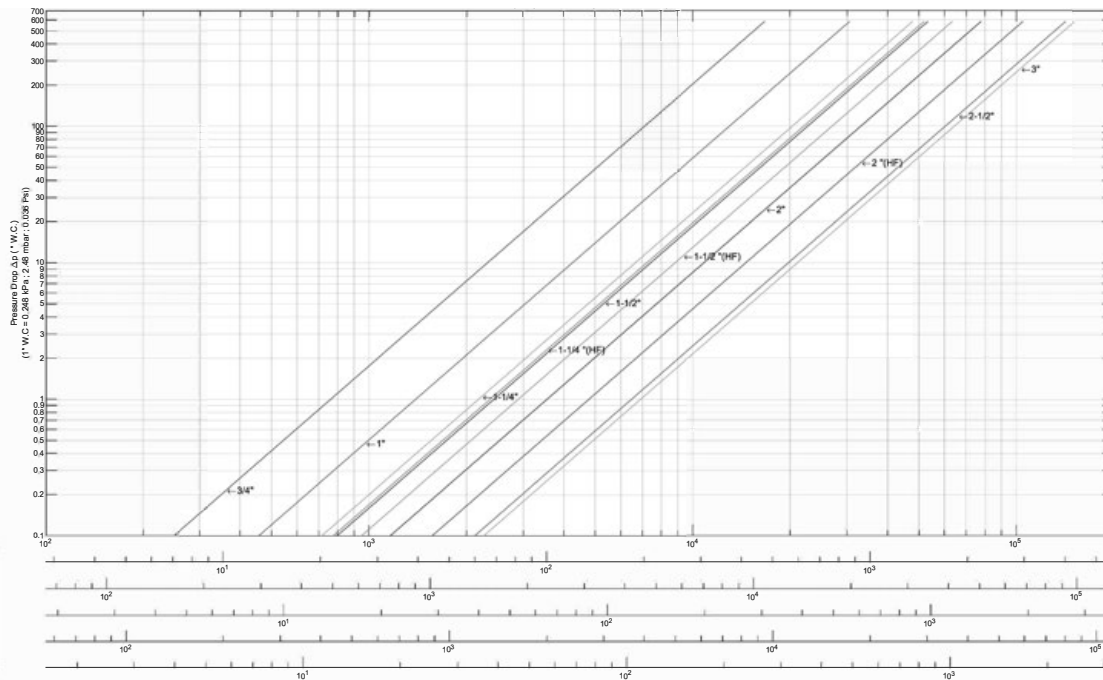
## Dimensions: mm (inches)

Const. Ref.	Pipe Size	A	C	D	E	F	G	HEX Inlet	HEX Outlet
1	3/4", 1", 1-1/4", 1-1/2"	270 [10.6]	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]	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]	499 [19.6]	409 [16.1]	130 [5.1]	202 [7.9]	170 [6.7]	114 [4.5]	108 [4.3]

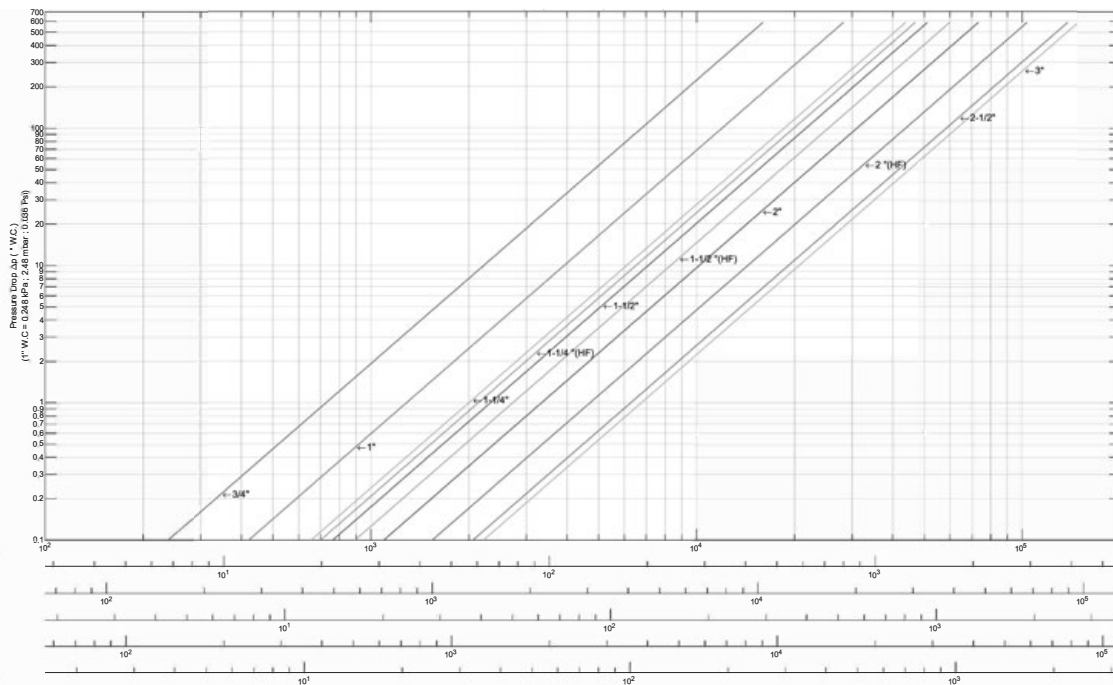


### Gas Flow Charts

#### New Generation 214 & 158-159 (Standard Trim)

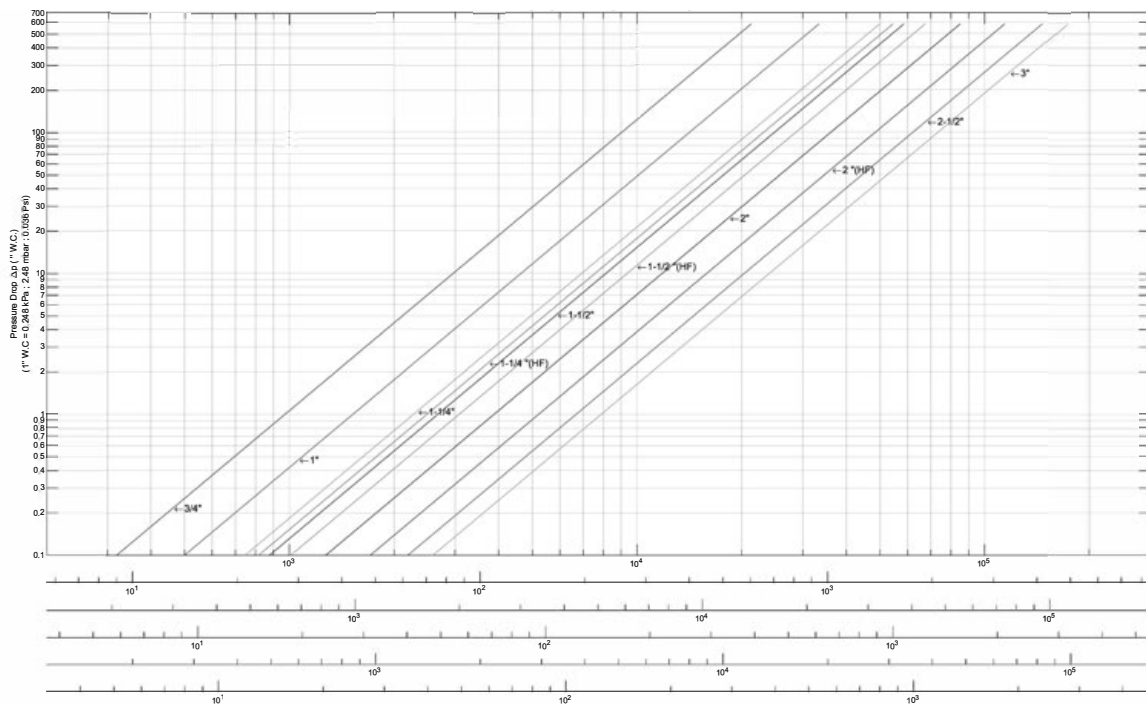


#### New Generation 214 & 158-159 (Linear Trim)

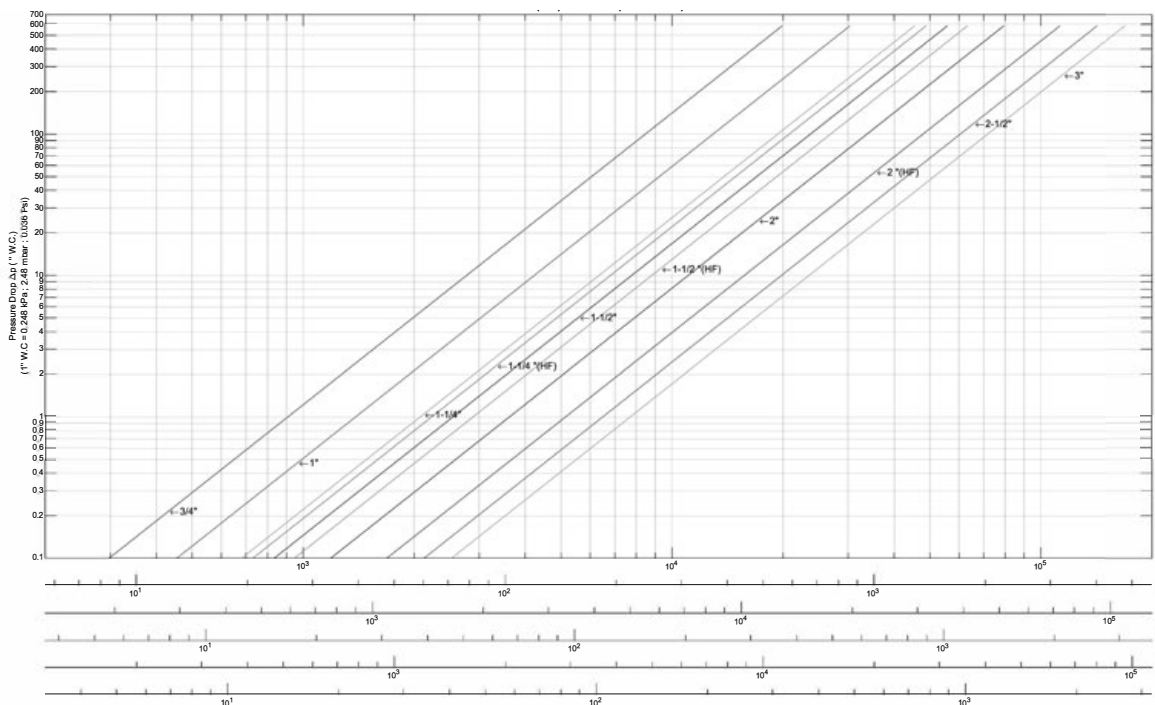


### Gas Flow Charts

New Generation 215 & 158-159 (Standard Trim)



New Generation 215 & 158-159 (Linear Trim)





## Adapter & Joining Hardware Kits (Optional)

