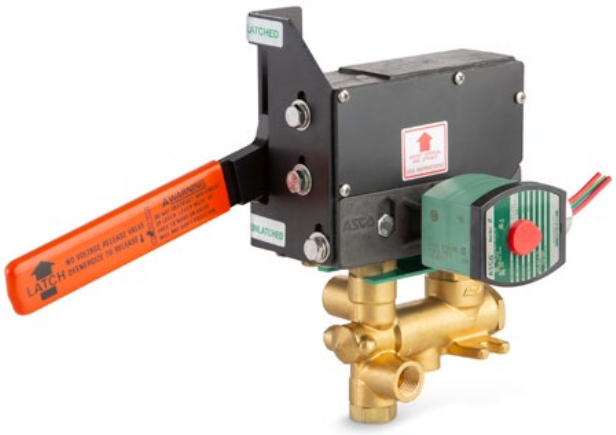
ASCO™ Manual Reset Valves

Brass or Stainless Steel Bodies • 1/4" to 1" NPT • Universal Operation • Manual Reset

3/2, 4/2 Series 8037/8308/8310 8047/8408/8410

Features

- High flow/high-pressure bodies with manual reset to prevent inadvertent valve start-up
- Once tripped, can only be manually reset
- Electrically Tripped (trips when energized), No Voltage Release (trips when de-energized), or Free Handle constructions
- Available for Latched Open or Latched Closed operation
- Ideal for controlling critical processes
- Some constructions can control aggressive fluids, including steam
- Intrinsically Safe constructions are available



Construction

Valve Parts in Contact with Fluids		
Body	Brass	Stainless Steel
Stem	303 Stainless Steel	
Springs	302 Stainless Steel	
Pilot Seat Cartridge	CA (when listed)	
Disc, Diaphragm, Seat	NBR, PA, PTFE, or Stainless Steel, as listed	

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part Number	
	DC Watts	AC				
		Watts	VA Holding	VA Inrush	AC	DC
F	30.8	20.1	45	140	272610	501695
H	30.8	20.1	45	140	272810	440162

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz. 6, 12, 24, 120, 240 volts DC. Must be specified when ordering. Other voltages are available when required.
Notes: 125 and 250 volts DC are battery voltages applied in power plants. Special valves are available to pilot control valves in power plants.
Consult your local ASCO sales office for a listing.

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X.
Optional: Explosion proof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9. To order, add prefix "EF" to catalog number.

Nominal Ambient Temp Ranges	
General Purpose	
AC	Class F: -20F to 125F (-29C to 52C)
	Class H: -20F to 140F (-29C to 60C)
DC	Class F: -20F to 104F (-29C to 40C)
	Class H: -20F to 140F (-29C to 60C)
Explosion Proof (EF)	
AC/DC	Class F: -20F to 104F (-29C to 40C)
	Class H: -20F to 140F (-29C to 60C)

Approvals

UL & CSA solenoid approval only for explosion proof options ("EF" prefix)

Operation Alternatives

Electrically Tripped – Valves move to latched position when the solenoid is de-energized, trips when they receive a continuous or momentary (at least 0.3 seconds) electrical signal. When tripped, they can be manually cycled open/closed, but must be reset when the solenoid has once again been de-energized.

No Voltage Release – Valves move to latched position when the solenoid is energized, trips when de-energized. When tripped, they can be manually cycled open/closed, but must be reset when the solenoid has once again been energized.

Free Handle – Valves move to latched position when the solenoid is energized, trips when de-energized. They cannot be manally cycled open/closed when de-energized. They can be manually cycled open/closed or reset only when energized.

Specifications (English units)

Pipe Size (in)	Orifice Size (in)	Cv Flow Factor	Operating Pressure Differential (psi)			Max. Fluid Temp. °F		No Voltage Release	Electrically Tripped	Const. Ref.	Flow Diagram	Watt Rating/ Class of Coil Insulation	
			Min.	Max. AC	Max.DC	AC	DC	Catalog Number	Catalog Number			AC	DC
3/2 UNIVERSAL OPERATION (Except as Noted ①), Brass Body with NBR Disc/Diaphragm (CA Pilot Cartridge) for Air-Inert Gas and Water. This group of valves meets shock and vibration ISA S71.03C2.													
1/4	11/64	0.38	0	125	125	180	180	8308G040	8310G040	1	B	20.1/F	30.8/F
3/8	5/8	3	10	250	250	180	180	8308G041①②	8310G041①②	2	C	20.1/F	30.8/F
1/2	5/8	4	10	250	250	180	180	8308G042①②	8310G042①②	2	C	20.1/F	30.8/F
3/4	11/16	5.5	10	250	250	180	180	8308G043①②	8310G043①②	3	C	20.1/F	30.8/F
1	1	13	10	125	125	180	180	8308G050①②	8310G050①②	5	C	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with Stainless Steel Seats and Discs for Air-Inert Gas, Water and Light Oil													
1/4	1/4	0.45	0	125	125	200	200	8308G044	8310G044	4	A	20.1/F	30.8/F
3/8	1/4	0.45	0	125	125	200	200	8308G045	8310G045	4	A	20.1/F	30.8/F
1/2	5/16	0.75	0	125	125	200	200	8308G046	8310G046	4	A	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with NBR Seats and PA Discs for Air-Inert Gas, Water and Light Oil													
1/4	1/4	0.39	0	125	125	180	180	8308G044R	8310G044R	4	A	20.1/F	30.8/F
3/8	1/4	0.39	0	125	125	180	180	8308G045R	8310G045R	4	A	20.1/F	30.8/F
1/2	5/16	0.53	0	125	125	180	180	8308G046R	8310G046R	4	A	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with FKM Discs for Air-Inert Gas and Water													
1/4	1/8	0.21	0	125	125	180	180	8308G011	8310G011	1	B	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with Stainless Steel Seats and Discs for Corrosive Service													
1/2	5/16	0.75	0	125	125	200	200	8308G047	8310G047	4	A	20.1/F	30.8/F
Free Handle Construction													
3/2 UNIVERSAL OPERATION, Brass Body with NBR Discs for Air-Inert Gas and Water													
1/4	11/64	0.38	0	125	125	180	180	8037G014		6	D	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with PTFE Seats and FKM Discs for Air-Inert Gas, Water and Light Oil													
1/4	3/16	0.70	0	125	125	160	160	8037G008①		7	E	20.1/F	30.8/F
3/8	3/16	0.70	0	125	125	160	160	8037G010①		7	E	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with FKM Discs for Air-Inert Gas and Water													
1/4	1/8	0.21	0	125	125	180	180	8037G012		6	D	20.1/F	30.8/F
4/2 BRASS BODY with PTFE + FKM Seats and Discs for Air and Inert Gas													
1/4	3/16	0.70	0	250	250	160	160	8408G006	8410G006	8	-	20.1/F	30.8/F
3/8	3/16	0.70	0	250	250	160	160	8408G007	8410G007	8	-	20.1/F	30.8/F
4/2 BRASS BODY with NBR Seats and Discs (CA Pilot Cartridge) for Air, Inert Gas, Water, and Light Oil. This group of valves meets shock and vibration ISA S71.03C2.													
1/2	3/8	2.2	10	250	250	200	200	8408G008③	8410G008③	9	-	20.1/F	30.8/F
3/4	3/4	5.6	10	250	250	200	200	8408G009③	8410G009③	10	-	20.1/F	30.8/F
1	3/4	5.6	10	250	250	200	200	8408G010③	8410G010③	10	-	20.1/F	30.8/F

① When ordering, specify suffix "F" for Normally Closed construction or Suffix "G" for Normally Open construction.
② Supplied with CA pilot cartridge.
③ A Minimum Operating Pressure DIfferential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

Specifications (Metric units)

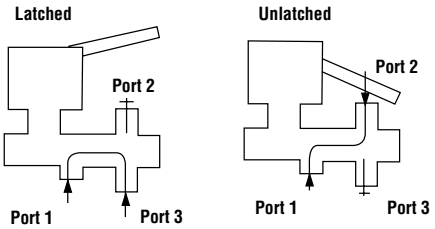
Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (m^3/h)	Operating Pressure Differential (bar)			Max. Fluid Temp. °C		No Voltage Release	Electrically Tripped	Const. Ref.	Flow Diagram	Watt Rating/ Class of Coil Insulation	
			Min.	Max. AC	Max.DC	AC	DC	Catalog Number	Catalog Number			AC	DC
3/2 UNIVERSAL OPERATION (Except as Noted ①), Brass Body with NBR Disc/Diaphragm (CA Pilot Cartridge) for Air-Inert Gas and Water. This group of valves meets shock and vibration ISA S71.03C2.													
1/4	4	0.33	0.0	9	9	82	82	8308G040	8310G040	1	B	20.1/F	30.8/F
3/8	16	2.57	0.7	17	17	82	82	8308G041①②	8310G041①②	2	C	20.1/F	30.8/F
1/2	16	3.43	0.7	17	17	82	82	8308G042①②	8310G042①②	2	C	20.1/F	30.8/F
3/4	17	4.71	0.7	17	17	82	82	8308G043①②	8310G043①②	3	C	20.1/F	30.8/F
1	25	11.14	0.7	9	9	82	82	8308G050①②	8310G050①②	5	C	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with Stainless Steel Seats and Discs for Air-Inert Gas, Water and Light Oil													
1/4	6	0.39	0	9	9	93	93	8308G044	8310G044	4	A	20.1/F	30.8/F
3/8	6	0.39	0	9	9	93	93	8308G045	8310G045	4	A	20.1/F	30.8/F
1/2	8	0.64	0	9	9	93	93	8308G046	8310G046	4	A	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with NBR Seats and PA Discs for Air-Inert Gas, Water and Light Oil													
1/4	6	0.33	0	9	9	82	82	8308G044R	8310G044R	4	A	20.1/F	30.8/F
3/8	6	0.33	0	9	9	82	82	8308G045R	8310G045R	4	A	20.1/F	30.8/F
1/2	8	0.45	0	9	9	82	82	8308G046R	8310G046R	4	A	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with FKM Discs for Air-Inert Gas and Water													
1/4	8	0.18	0	9	9	82	82	8308G011	8310G011	1	B	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with Stainless Steel Seats and Discs for Corrosive Service													
1/2	8	0.64	0	9	9	93	93	8308G047	8310G047	4	A	20.1/F	30.8/F
Free Handle Construction													
3/2 UNIVERSAL OPERATION, Brass Body with NBR Discs for Air-Inert Gas and Water													
1/4	4	0.33	0	9	9	82	82	8037G014		6	D	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Brass Body with PTFE Seats and FKM Discs for Air-Inert Gas, Water and Light Oil													
1/4	5	0.60	0	9	9	71	71	8037G008①		7	E	20.1/F	30.8/F
3/8	5	0.60	0	9	9	71	71	8037G010①		7	E	20.1/F	30.8/F
3/2 UNIVERSAL OPERATION, Stainless Steel Body with FKM Discs for Air-Inert Gas and Water													
1/4	3	0.18	0	9	9	82	82	8037G012		6	D	20.1/F	30.8/F
4/2 BRASS BODY with PTFE + FKM Seats and Discs for Air and Inert Gas													
1/4	5	0.60	0	17	17	71	71	8408G006	8410G006	8	-	20.1/F	30.8/F
3/8	5	0.60	0	17	17	71	71	8408G007	8410G007	8	-	20.1/F	30.8/F
4/2 BRASS BODY with NBR Seats and Discs (CA Pilot Cartridge) for Air, Inert Gas, Water, and Light Oil. This group of valves meets shock and vibration ISA S71.03C2.													
1/2	10	1.89	0.7	17	17	93	93	8408G008③	8410G008③	9	-	20.1/F	30.8/F
3/4	19	4.80	0.7	17	17	93	93	8408G009③	8410G009③	10	-	20.1/F	30.8/F
1	19	4.80	0.7	17	17	93	93	8408G010③	8410G010③	10	-	20.1/F	30.8/F

① When ordering, specify suffix "F" for Normally Closed construction or Suffix "G" for Normally Open construction.
② Supplied with CA pilot cartridge.
③ A Minimum Operating Pressure DIfferential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

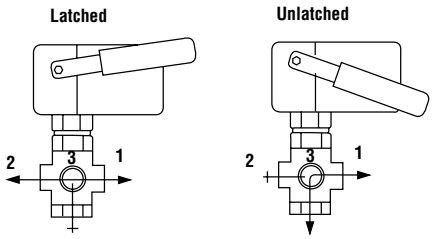
Flow Diagrams

Electrically Tripped and No Voltage Release Constructions

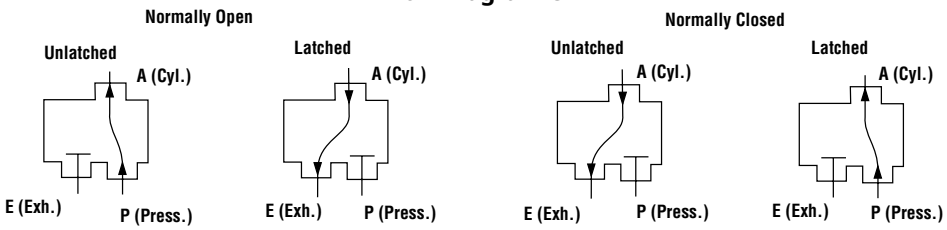
Flow Diagram A



Flow Diagram B

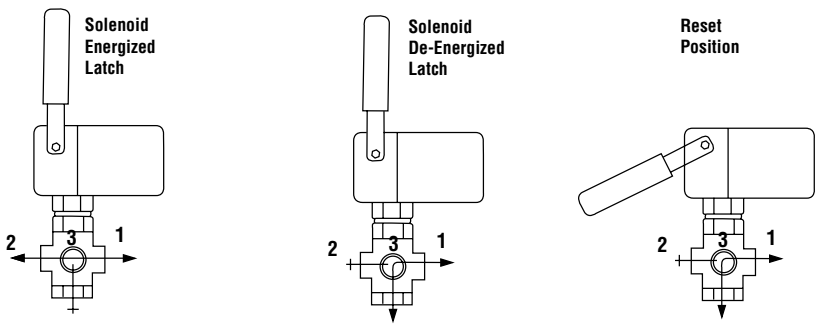


Flow Diagram C

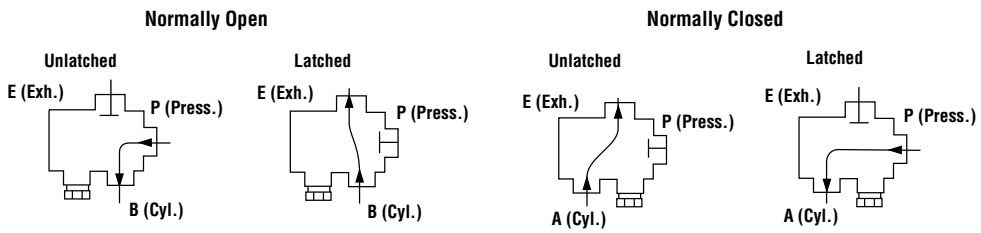


Free Handle Construction

Flow Diagram D

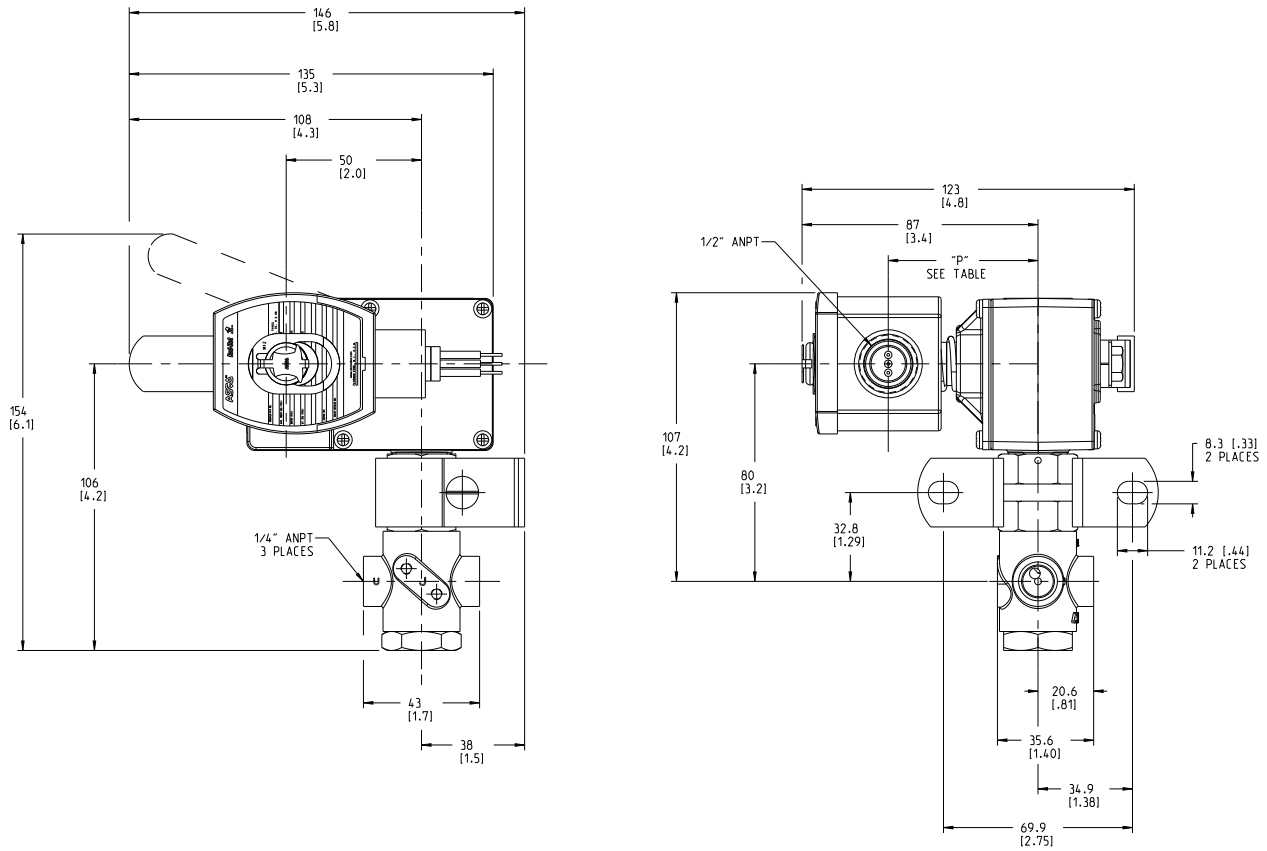


Flow Diagram E



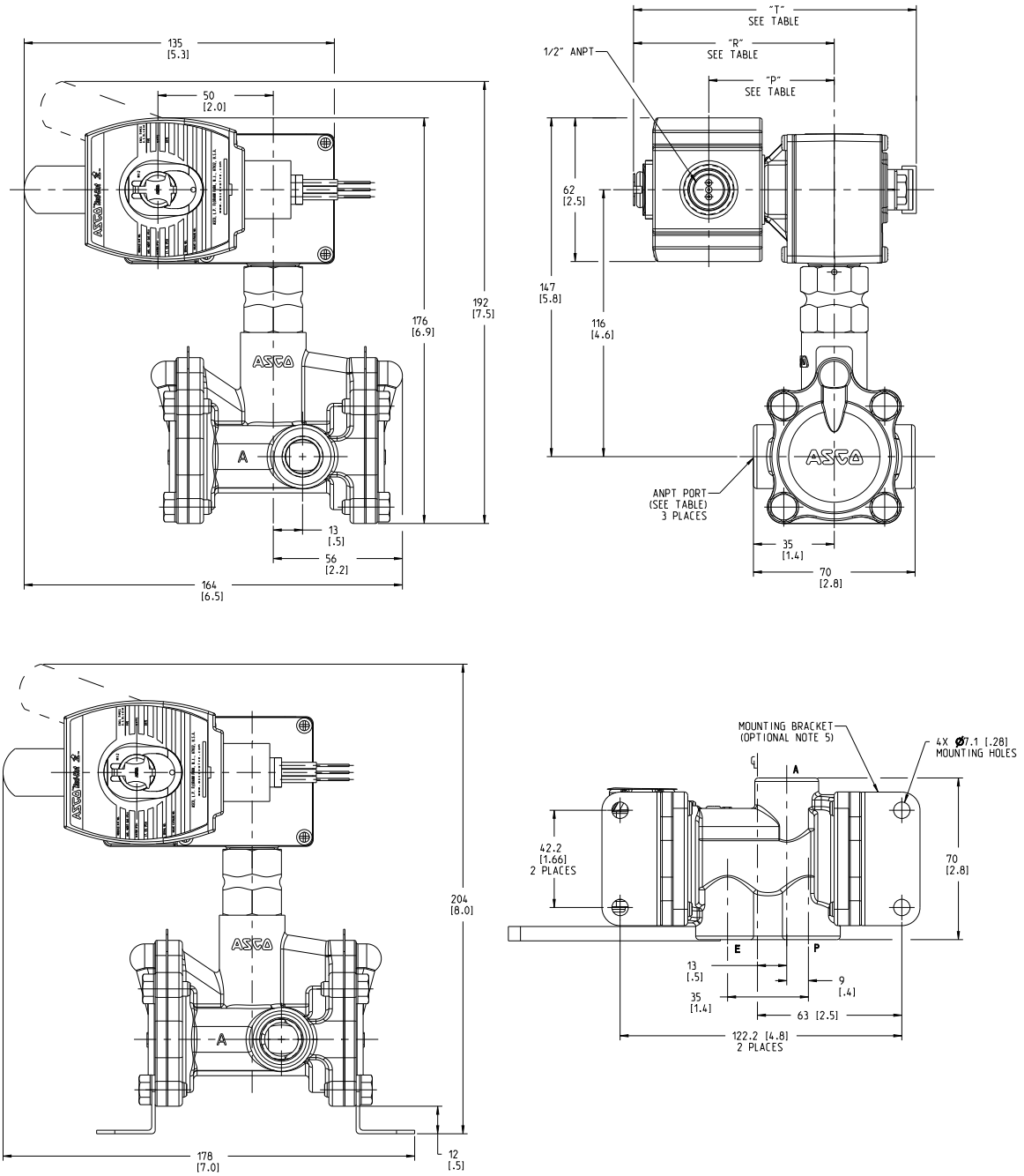
Dimensions: mm (inches)

Const. Ref. 1



Dimensions: mm (inches)

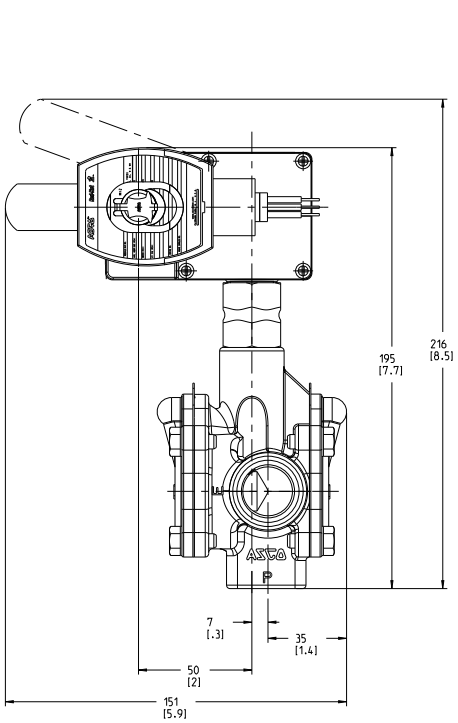
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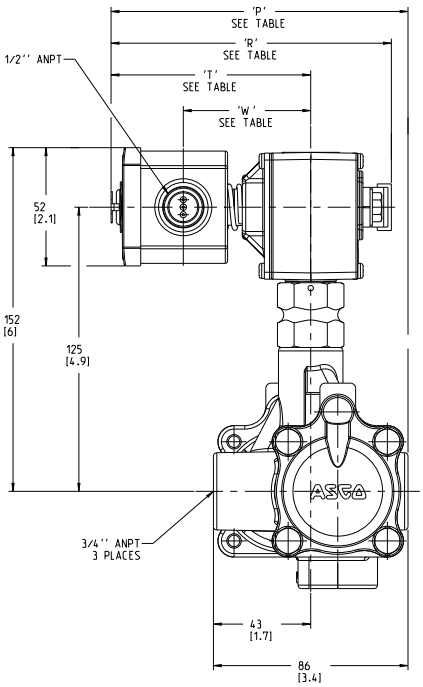


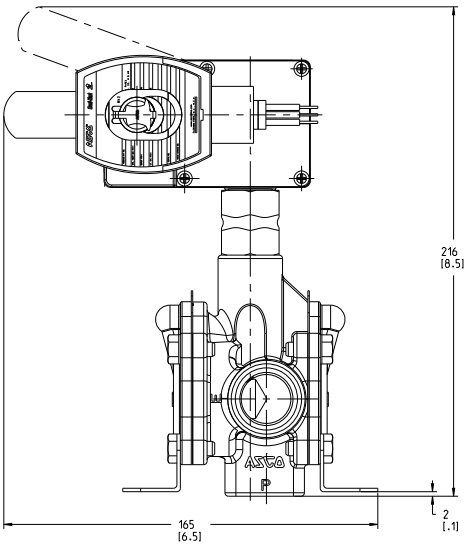
ANPT	Valve Operation	Movement Construction	P	R	T	Catalog Number
1/2"	Normally Open	Electrically Tripped (TSO)	58 [2.2]	87 [3.4]	123 [4.8]	8310G042G
3/8"						8310G041G
1/2"	Normally Closed					8310G042F
3/8"						8310G041F
1/2"	Normally Open	No Voltage Released (NVR)	54 [2.1]	87 [3.4]	123 [4.8]	8308G042G
3/8"						8308G041G
1/2"	Normally Closed					8308G042F
3/8"						8308G041F

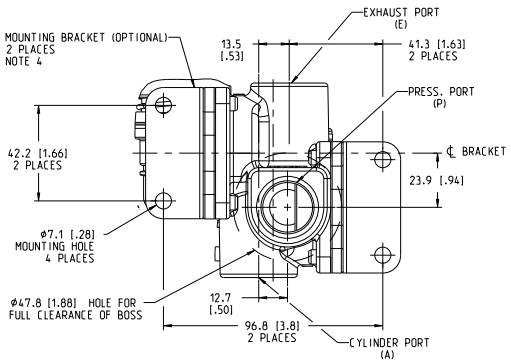
Dimensions: mm (inches)

Const. Ref. 3





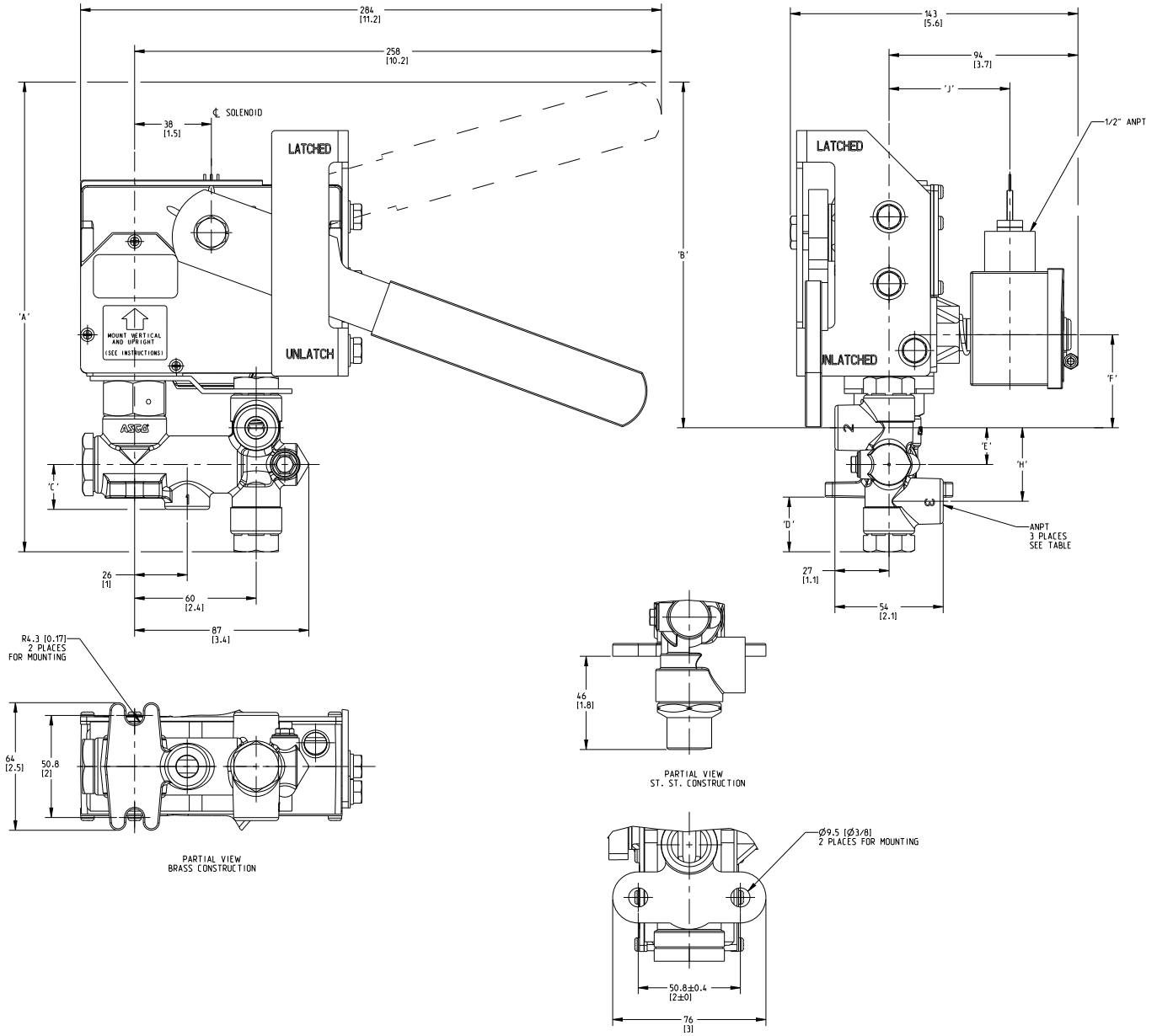




Valve Operation	Movement Construction	P	R	T	W	Catalog Number
Normally Open	Electrically Tripped (TSO)	130 [5.1]	123 [4.8]	87 [3.4]	56 [2.2]	8310G43G
Normally Closed						8310G43F
Normally Open	No Voltage Released (NVR)	131 [5.2]	124 [4.9]	88 [3.5]	56 [2.2]	8308G43G
Normally Closed						8308G43F

Dimensions: mm (inches)

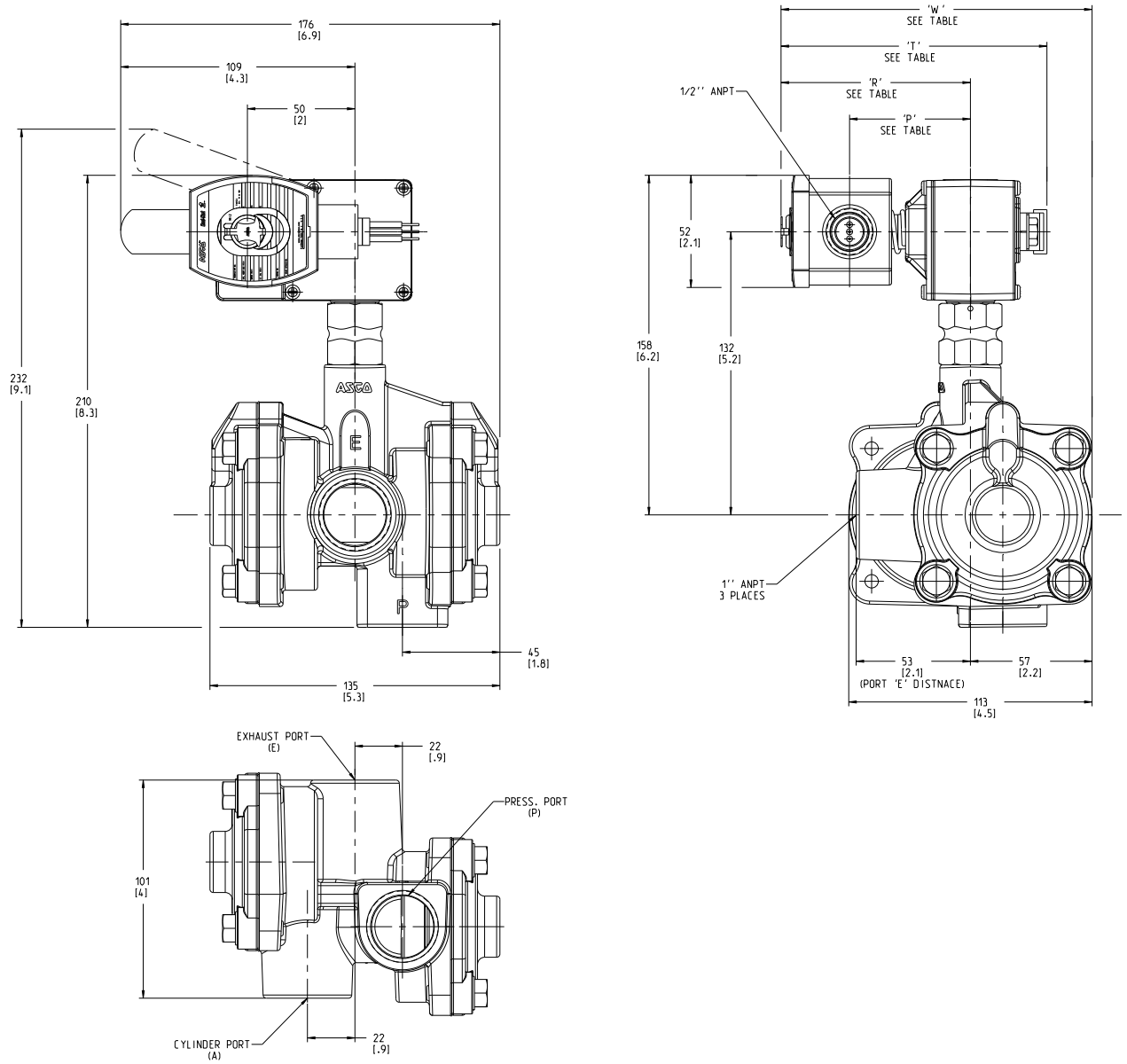
Const. Ref. 4



Movement Construction	Pipe Connection ANPT	ORF. DIA.	Body	Seating	A	B	C	D	E	F	H	J	Catalog Number
Electrically Tripped (TSO)	1/4"	6.3 [0.25]	BRASS	RESILENT	232 [9.13]	171 [6.73]	22 [0.88]	27 [1.06]	18 [0.72]	46 [1.82]	37 [1.44]	61 [2.40]	8310G044R
	3/8"												8310G045R
	1/2"	7.9 [0.31]			278 [10.94]	188 [7.4]	27 [1.06]	48 [1.89]	24 [0.94]	64 [2.51]	48 [1.89]		8310G046R
			ST. ST.	METAL									8310G047
			BRASS										8310G046
	3/8"	6.3 [0.25]			232 [9.13]	171 [6.73]	22 [0.88]	27 [1.06]	18 [0.72]	46 [1.82]	37 [1.44]		8310G045
	1/4"												8310G044
No Voltage Released (NVR)	3/8"			RESILENT	232 [9.13]	171 [6.73]	22 [0.88]	27 [1.06]	18 [0.72]	46 [1.82]	37 [1.44]	60 [2.36]	8308G044R
	1/4"												8308G045R
	1/2"	7.9 [0.31]			278 [10.94]	188 [7.4]	27 [1.06]	48 [1.89]	24 [0.94]	64 [2.51]	48 [1.89]		8308G046R
			ST. ST.	METAL									8308G047
			BRASS										8308G046
	3/8"	6.3 [0.25]			232 [9.13]	171 [6.73]	22 [0.88]	27 [1.06]	18 [0.72]	46 [1.82]	37 [1.44]		8308G045
	1/4"												8308G044

Dimensions: mm (inches)

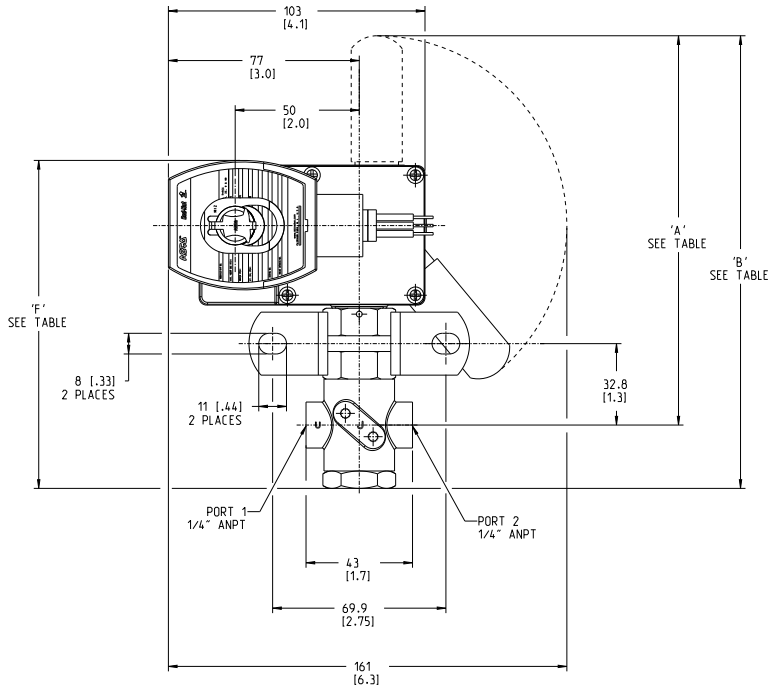
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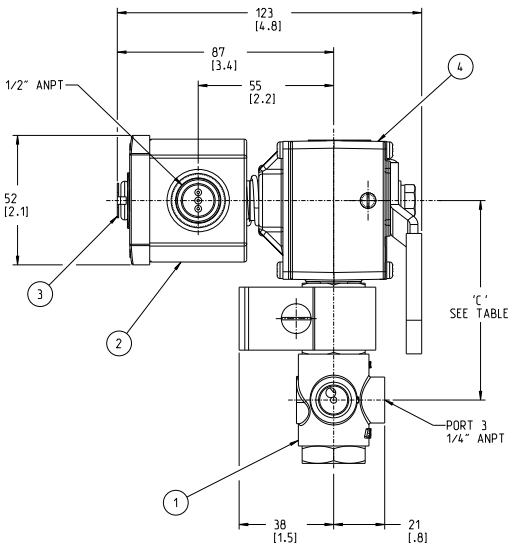


Movement Construction	Valve Operation	P	R	T	W	Catalog Number
Electrically Tripped (TSO)	Normally Open	56 [2.2]	87 [3.4]	123 [4.8]	144 [5.7]	8310G50G
	Normally Closed					8310G50F
No Voltage Released (NVR)	Normally Open	56 [2.2]	88 [3.5]	124 [4.9]	145 [5.7]	8308G50G
	Normally Closed					8308G50F

Dimensions: mm (inches)

Const. Ref. 6

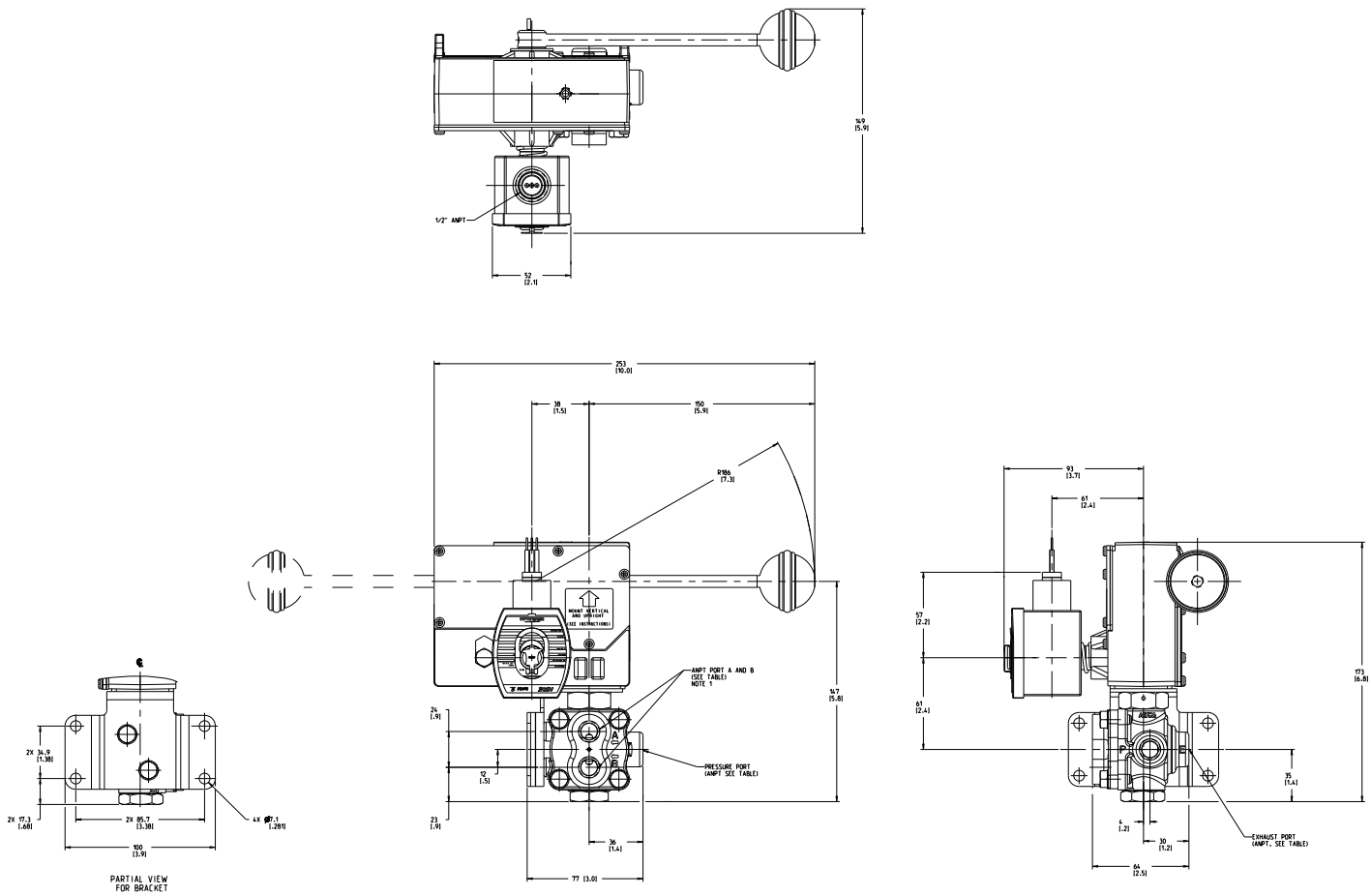




Orifice	Body Material	A	B	C	F	Catalog Number
11/64"	BRASS	157 [6.2]	182 [7.2]	80 [3.1]	132 [5.2]	8037G014
1/8"	ST. ST.	157 [6.2]	182 [7.2]	81 [3.2]	132 [5.2]	8037G012

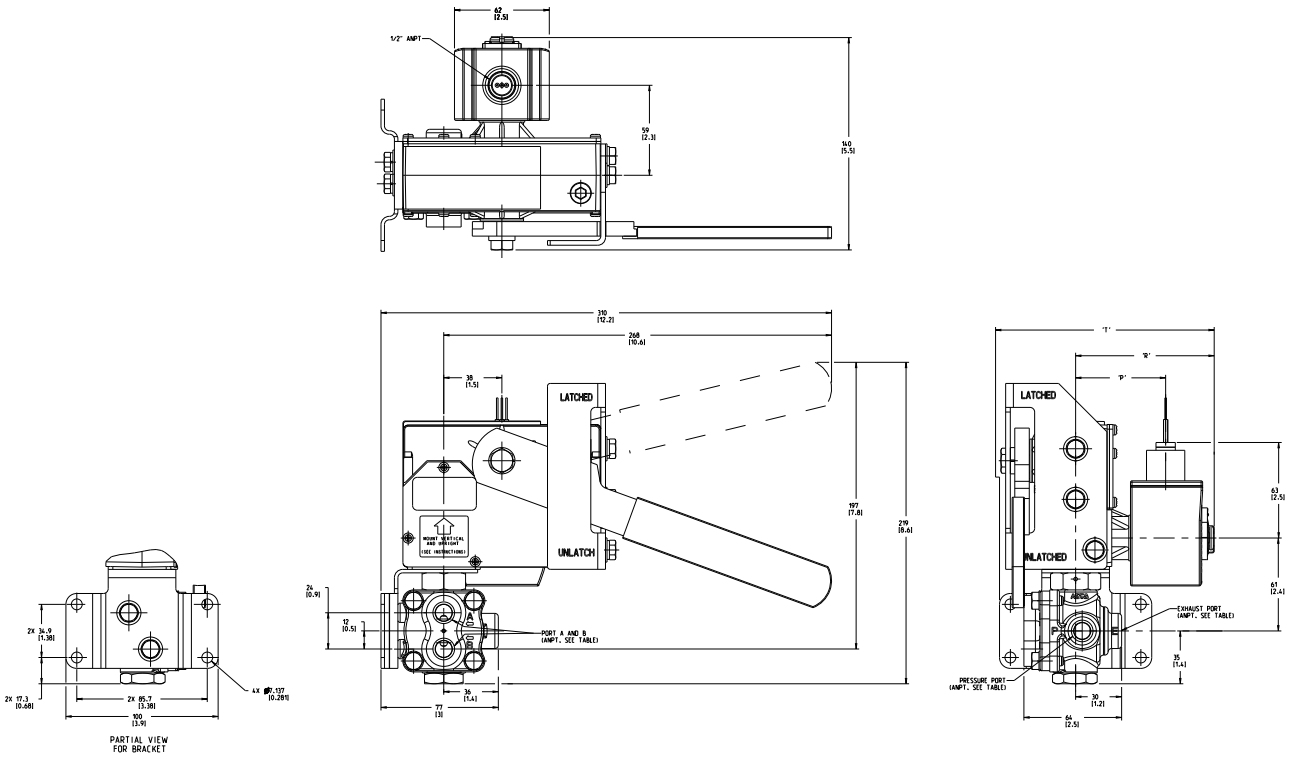
Dimensions: mm (inches)

Const. Ref. 7



Dimensions: mm (inches)

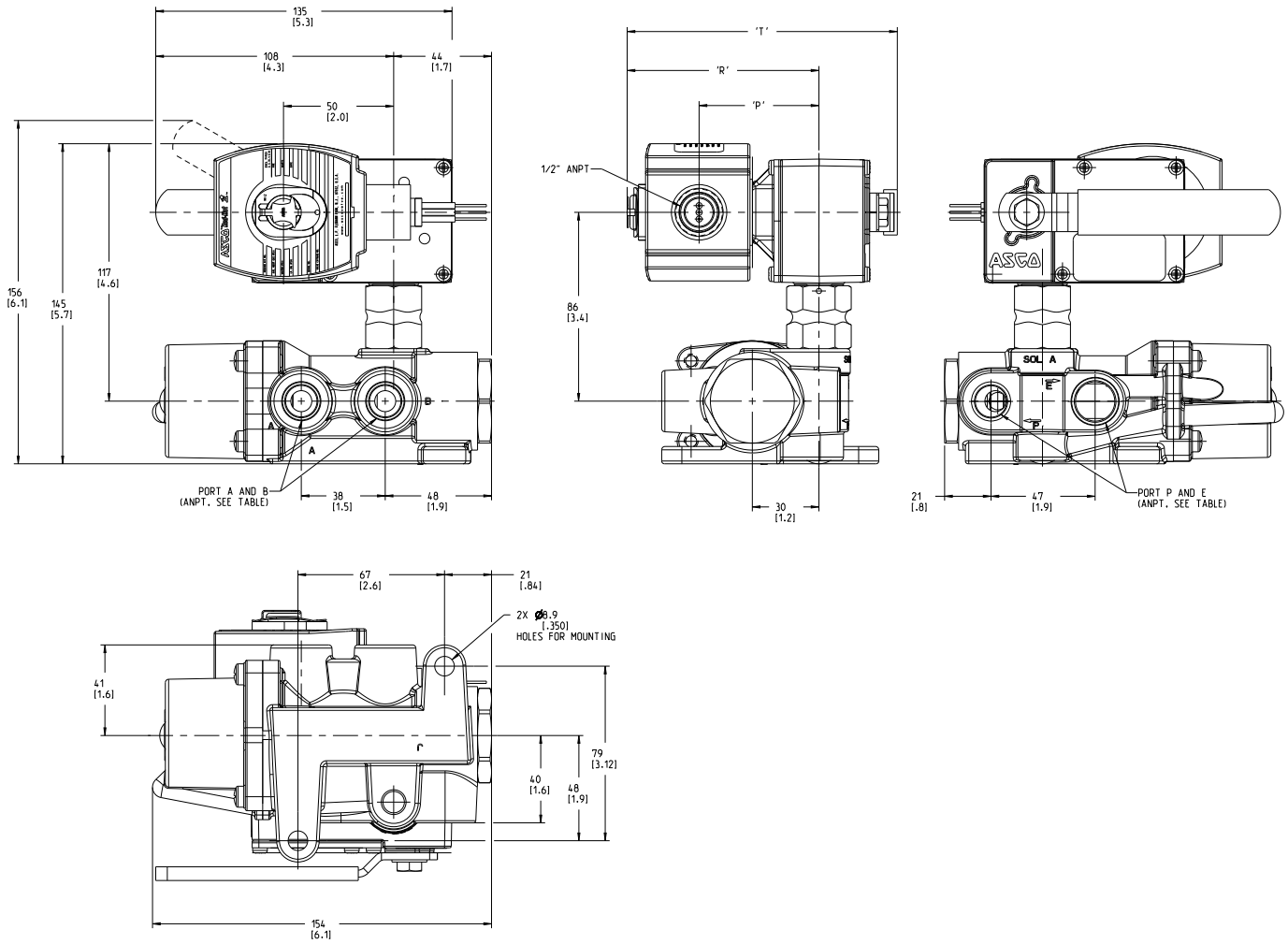
Const. Ref. 8



ANPT	Orifice Size	Construction	Movement Construction	P	R	T	Catalog Number
3/8"	3/16"	4 Way	Electrically Tripped (TSO)	62.9 [2.3]	91.4 [3.6]	141.4 [5.6]	8408G007
1/4"							8408G006
3/8"			No Voltage Released (NVR)	59.1 [2.3]	91 [3.6]	141 [5.5]	8410G007
1/4"							8410G006

Dimensions: mm (inches)

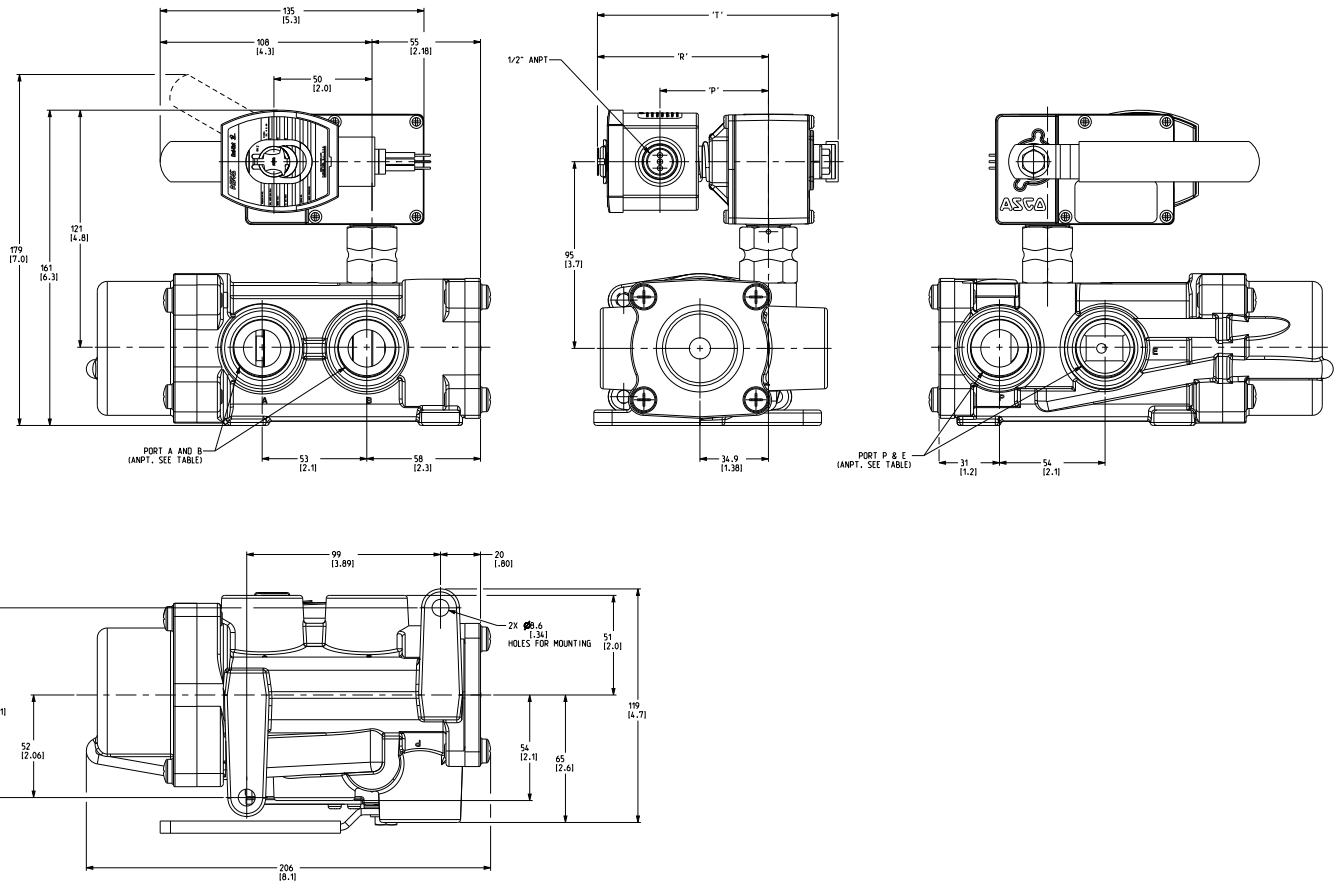
Const. Ref. 9



ANPT	Orifice Size	Construction	Movement Construction	P	R	T	Catalog Number
1/2"	⌀9.5 [3/8"]	4 Way	Electrically Tripped (TSO)	58 [2.3]	86 [3.39]	122 [4.79]	8410G008
			No Voltage Released (NVR)	54 [2.1]	87 [3.42]	123 [4.82]	8408G008

Dimensions: mm (inches)

Const. Ref. 10



ANPT	Orifice Size	Construction	Movement Construction	P	R	T	Catalog Number
1"	ø19 [3/4"]	4 Way	Electrically Tripped (TSO)	56 [2.20]	87 [3.43]	123 [4.83]	8410G010
3/4"							8410G009
1"			No Voltage Released (NVR)	55 [2.18]	87 [3.43]	123 [4.83]	8408G010
3/4"							8408G009

Availability, design and specifications are subject to change without notice.
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