

Specifications (English units)

2/2 VALVES, NORMALLY CLOSED, with NBR Disc										
Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor		Operating Pressure Differential (psi)		Max. Fluid and Ambient Temp. °F	Brass Body		Stainless Steel Body	
				Air-Inert Gas			Catalog Number	Const. Ref.	Catalog Number	Const. Ref.
				Min.	Max.					
1/4	1/16	.08		0	150	140	WBIS8262A320	1	WBIS8262A386	1A
3/8	5/16	1.5		10	150	140	WBIS8223A323	2	-	-
1/2	3/8	3.2		25	150	140	WBIS8223A303	3	WBIS8223A310	3
3/2 VALVES										
Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor		Operating Pressure Differential (psi)		Max. Fluid and Ambient Temp. °F	Brass Body		Stainless Steel Body	
				Air-Inert Gas			Catalog Number	Const. Ref.	Catalog Number	Const. Ref.
				Pressure to Cylinder	Cylinder to Exhaust					
UNIVERSAL OPERATION (Pressure at any port) with NBR Disc										
1/4	1/16	.08	.08	0	150	140	WBIS8314A300	4	WBIS8314A301	4A
NORMALLY CLOSED (Closed when de-energized)										
1/4	5/16	1.5	1.5	ⓐ	150	140	WBIS8316A301 ⓐ	5	WBIS8316A381V ⓐ	8
3/8	5/16	1.8	1.8	ⓐ	150	140	WBIS8316A302 ⓐ	5	WBIS8316A382V ⓐ	8
3/8	5/8	4	4	ⓐ	150	140	WBIS8316A303 ⓐ	6	-	-
1/2	5/8	4	4	ⓐ	150	140	WBIS8316A304 ⓐ	6	WBIS8316A384V ⓐ	9
3/4	11/16	5.5	5.5	10	150	140	WBIS8316A374 ⓐ	7	-	-
1	1	13	13	10	150	140	WBIS8316A334 ⓐ	7A	-	-
UNIVERSAL OPERATION (Normally Closed or Normally Open) "Quick Exhaust" with CR Diaphragm and NBR Disc										
1/4	ⓑ	.08	.73	5	150	140	WBIS8317A307 ⓑ	10	WBIS8317A308 ⓑ	11
4/2 VALVES, with NBR Disc and Seal										
1/4	1/16	.08	.08	10	150	140	WBIS8345A301 ⓑⓓ	12	WBIS8345A381 ⓑⓓ	12
4/2 VALVES, Brass Body with NBR Disc							Single Solenoid	Const. Ref.	Dual Solenoid	Const. Ref.
1/4	1/4	.80	1	10	150	140	WBIS8344A370 ⓑⓓ	13	WBIS8344A344 ⓑ	16
3/8	3/8	1.4	2.2	10	150	140	WBIS8344A372 ⓑⓓ	14	WBIS8344A380 ⓑ	17
1/2	3/8	1.4	2.2	10	150	140	WBIS8344A374 ⓑⓓ	14	WBIS8344A382 ⓑ	17
3/4	3/4	5.2	5.6	10	150	140	WBIS8344A376 ⓑⓓ	15	WBIS8344A354 ⓑ	18
1	3/4	5.2	5.6	10	150	140	WBIS8344A378 ⓑⓓ	15	WBIS8344A356 ⓑ	18
ⓐ There are two exhaust flows in the exhaust mode (pilot and main). The pilot exhaust must be connected to the main exhaust when the air or inert gas can not be exhausted to the atmosphere. ⓑ For "Quick Exhaust" valves, pressure port is 1/16", exhaust port is 1/4". ⓓ IMPORTANT: 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.						ⓔ Diaphragm and main disc FKM only (pilot is low-temperature NBR). ⓕ Zero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. See chart on page 146 for auxiliary pressure vs. mainline pressure. Minimum 15 psi Operating Pressure Differential when selection gasket is in the internal position.				

SPECIAL SERVICE PILOT

Specifications (English units)

Body Material	Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	Single Solenoid					Dual Solenoid				
				Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.
				Air-Inert Gas					Air-Inert Gas				
				Min.	Max.	Min.	Max.						
3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals													
Aluminum 3/2	1/4	1/4	.86	30	150	140	WBIS8551A305	19	30	150	140	WBIS8551A306	19
Aluminum 5/2							WBIS8551A317	20				WBIS8551A318	20
Aluminum 5/3 Center Closed							-	-				WBIS8551A367	20
Aluminum 5/3 Center Open							-	-				WBIS8551A368	20
Brass 3/2							WBIS8551A307	19				WBIS8551A308	19
Brass 5/2							WBIS8551A319	20				WBIS8551A320	20
316L Stainless Steel 3/2							WBIS8551A313 ②	19				WBIS8551A314 ②	19
316L Stainless Steel 5/2							WBIS8551A321 ②	20				WBIS8551A322 ②	20
Aluminum 3/2	1/2	1/2	3.7	30	150	140	WBIS8553A305	19	30	150	140	WBIS8553A306	19
Aluminum 5/2							WBIS8553A317	20				WBIS8553A318	20
316L Stainless Steel 3/2							WBIS8553A313 ②	19				WBIS8553A314 ②	19
316L Stainless Steel 5/2							WBIS8553A321 ②	20				WBIS8553A322 ②	20

Body Material	Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	Single Solenoid					Dual Solenoid				
				Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.
				Air-Inert Gas					Air-Inert Gas				
				Min.	Max.	Min.	Max.						
3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals, NAMUR Mount													
Aluminum 3/2, 5/2	1/4	1/4	.86	30	150	140	WBIS8551A301 ①	21	30	150	140	WBIS8551A302 ①	21
Aluminum 5/3 Center Closed							-	-				WBIS8551A365	22
Aluminum 5/3 Center Open							-	-				WBIS8551A366	22
Brass 3/2, 5/2							WBIS8551A303 ①	21				WBIS8551A304 ①	21
316L Stainless Steel 3/2, 5/2	1/2	1/2	3.7	30	150	140	WBIS8551A309 ②	22	30	150	140	WBIS8551A310 ②	22
Aluminum 3/2, 5/2							WBIS8553A301	22				WBIS8553A302	22
316L Stainless Steel 3/2, 5/2							WBIS8553A309 ②	22				WBIS8553A310 ②	22

① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Can be used for *dry* natural gas service.

Specifications (Metric units)

2/2 VALVES, NORMALLY CLOSED, with NBR Disc										
Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)		Operating Pressure Differential (bar)		Max. Fluid and Ambient Temp. °C	Brass Body		Stainless Steel Body	
				Air-Inert Gas			Catalog Number	Const. Ref.	Catalog Number	Const. Ref.
				Min.	Max.					
1/4	1	.07		0	10.3	60	WBIS8262A320	1	WBIS8262A386	1A
3/8	8	1.29		0.7	10.3	60	WBIS8223A323	2	-	-
1/2	10	2.74		1.7	10.3	60	WBIS8223A303	3	WBIS8223A310	3
3/2 VALVES										
Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)		Operating Pressure Differential (bar)		Max. Fluid and Ambient Temp. °C	Brass Body		Stainless Steel Body	
				Air-Inert Gas			Catalog Number	Const. Ref.	Catalog Number	Const. Ref.
				Pressure to Cylinder	Cylinder to Exhaust					
UNIVERSAL OPERATION (Pressure at any port) with NBR Disc										
1/4	2	.07	.07	0	10.3	60	WBIS8314A300	4	WBIS8314A301	4A
NORMALLY CLOSED (Closed when de-energized)										
1/4	8	1.29	1.29	Ⓣ	10.3	60	WBIS8316A301 Ⓣ	5	WBIS8316A381V Ⓣ	8
3/8	8	1.37	1.37	Ⓣ	10.3	60	WBIS8316A302 Ⓣ	5	WBIS8316A382V Ⓣ	8
3/8	16	3.43	3.43	Ⓣ	10.3	60	WBIS8316A303 Ⓣ	6	-	-
1/2	16	3.43	3.43	Ⓣ	10.3	60	WBIS8316A304 Ⓣ	6	WBIS8316A384V Ⓣ	9
3/4	17	4.71	4.71	0.7	10.3	60	WBIS8316A374 Ⓣ	7	-	-
1	25	11.14	11.14	0.7	10.3	60	WBIS8316A334 Ⓣ	7A	-	-
UNIVERSAL OPERATION (Normally Closed or Normally Open) "Quick Exhaust" with CR Diaphragm and NBR Disc										
1/4	Ⓣ	.07	.63	0.3	10.3	60	WBIS8317A307 Ⓣ	10	WBIS8317A308 Ⓣ	11
4/2 VALVES, with NBR Disc and Seal										
1/4	2	.07	.07	0.7	10.3	60	WBIS8345A301 ⓉⓉ	12	WBIS8345A381 ⓉⓉ	12
4/2 VALVES, Brass Body with NBR Disc										
1/4	6	.69	.86	0.7	10.3	60	WBIS8344A370 ⓉⓉ	13	WBIS8344A344 Ⓣ	16
3/8	10	1.20	1.89	0.7	10.3	60	WBIS8344A372 ⓉⓉ	14	WBIS8344A380 Ⓣ	17
1/2	10	1.20	1.89	0.7	10.3	60	WBIS8344A374 ⓉⓉ	14	WBIS8344A382 Ⓣ	17
3/4	19	4.46	4.80	0.7	10.3	60	WBIS8344A376 ⓉⓉ	15	WBIS8344A354 Ⓣ	18
1	19	4.46	4.80	0.7	10.3	60	WBIS8344A378 ⓉⓉ	15	WBIS8344A356 Ⓣ	18
Ⓣ There are two exhaust flows in the exhaust mode (pilot and main). The pilot exhaust must be connected to the main exhaust when the air or inert gas can not be exhausted to the atmosphere. Ⓣ For "Quick Exhaust" valves, pressure port is 1/16", exhaust port is 1/4". Ⓣ IMPORTANT: 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.						Ⓣ Diaphragm and main disc FKM only (pilot is low-temperature NBR). Ⓣ Zero minimum when valve selection gasket is in external position and proper auxiliary air pressure is applied. See chart on page 146 for auxiliary pressure vs. mainline pressure. Minimum 1 bar Operating Pressure Differential when selection gasket is in the internal position.				

SPECIAL SERVICE PILOT

Specifications (Metric units)

Body Material	Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor	Single Solenoid					Dual Solenoid				
				Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number	Const. Ref.	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number	Const. Ref.
				Air-Inert Gas					Air-Inert Gas				
				Min.	Max.	Min.	Max.						
3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals													
Aluminum 3/2	1/4	6	.7	2	10	60	WBIS8551A305	19	2	10	60	WBIS8551A306	19
Aluminum 5/2							WBIS8551A317	20				WBIS8551A318	20
Aluminum 5/3 Center Closed							-	-				WBIS8551A367	20
Aluminum 5/3 Center Open							-	-				WBIS8551A368	20
Brass 3/2							WBIS8551A307	19				WBIS8551A308	19
Brass 5/2							WBIS8551A319	20				WBIS8551A320	20
316L Stainless Steel 3/2							WBIS8551A313 ②	19				WBIS8551A314 ②	19
316L Stainless Steel 5/2							WBIS8551A321 ②	20				WBIS8551A322 ②	20
Aluminum 3/2	1/2	13	3.7	2	10	60	WBIS8553A305	19	2	10	60	WBIS8553A306	19
Aluminum 5/2							WBIS8553A317	20				WBIS8553A318	20
316L Stainless Steel 3/2							WBIS8553A313 ②	19				WBIS8553A314 ②	19
316L Stainless Steel 5/2							WBIS8553A321 ②	20				WBIS8553A322 ②	20

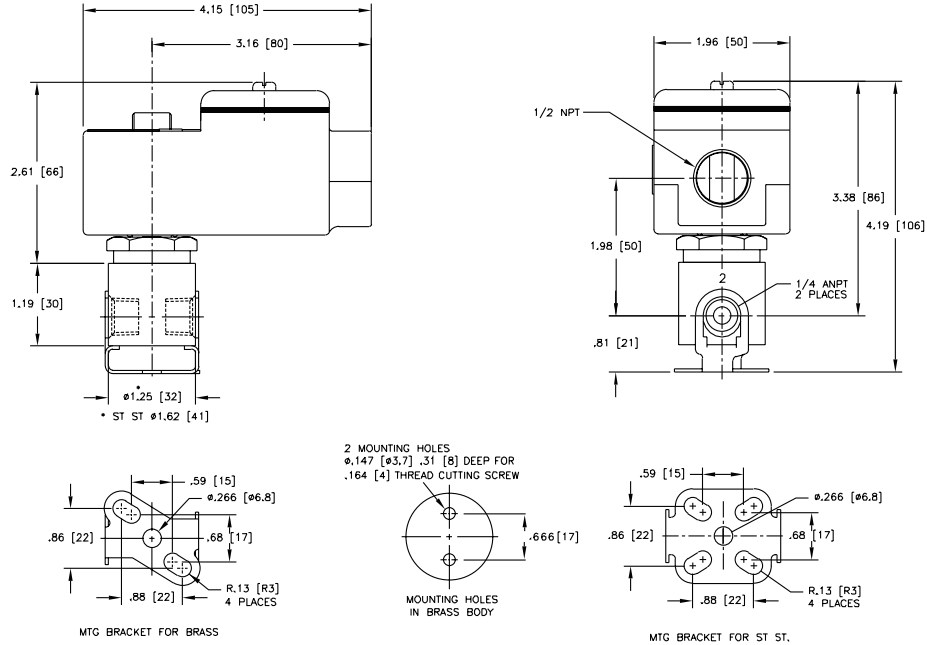
Body Material	Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor	Single Solenoid					Dual Solenoid				
				Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number	Const. Ref.	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number	Const. Ref.
				Air-Inert Gas					Air-Inert Gas				
				Min.	Max.	Min.	Max.						
3/2, 5/2, 5/3 VALVES, with NBR and PUR Seals, NAMUR Mount													
Aluminum 3/2, 5/2	1/4	6	.7	2	10	60	WBIS8551A301 ①	21	2	10	60	WBIS8551A302 ①	21
Aluminum 5/3 Center Closed							-	-				WBIS8551A365	22
Aluminum 5/3 Center Open							-	-				WBIS8551A366	22
Brass 3/2, 5/2							WBIS8551A303 ①	21				WBIS8551A304 ①	21
316L Stainless Steel 3/2, 5/2							WBIS8551A309 ②	22				WBIS8551A310 ②	22
Aluminum 3/2, 5/2	1/2	13	3.7	2	10	60	WBIS8553A301	22	2	10	60	WBIS8553A302	22
316L Stainless Steel 3/2, 5/2							WBIS8553A309 ②	22				WBIS8553A310 ②	22

① 1/8" NPT exhaust for 1/4" aluminum and brass. ② Can be used for *dry* natural gas service.

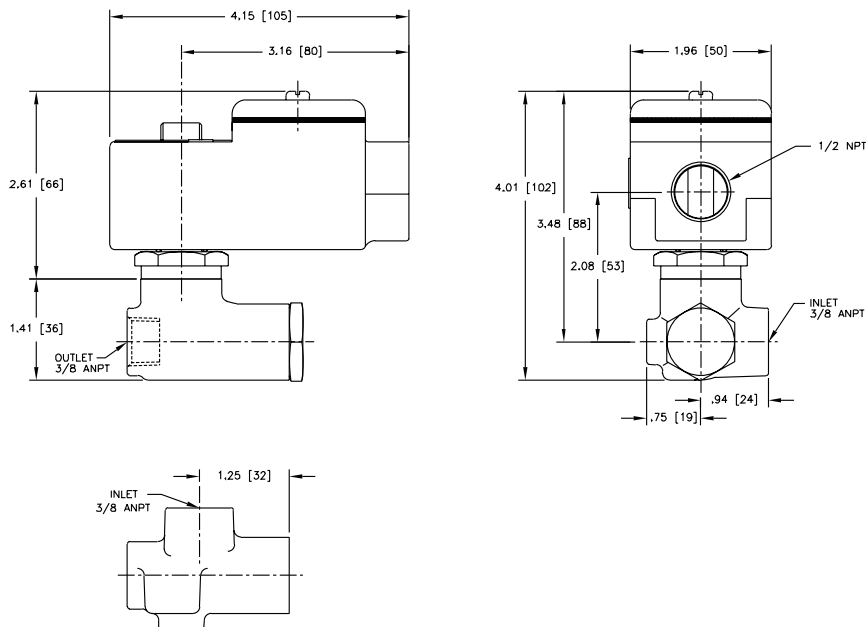
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 1, 1A

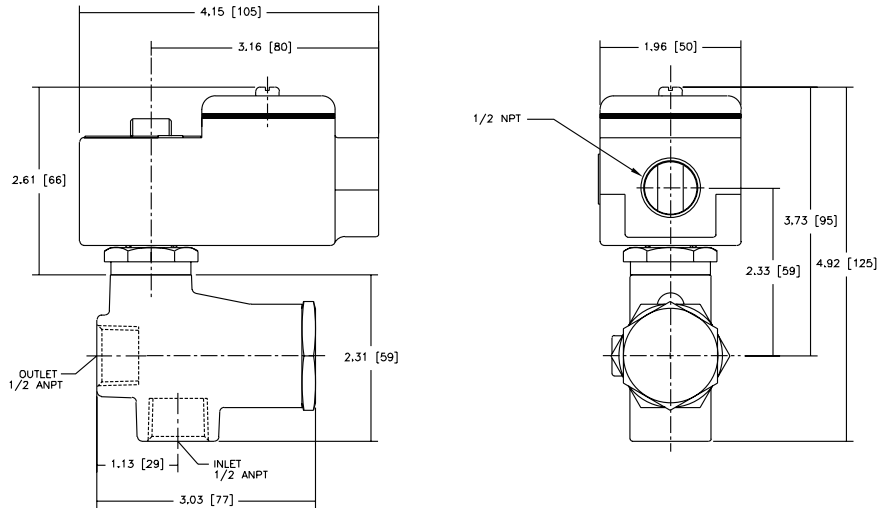


Const. Ref. 2

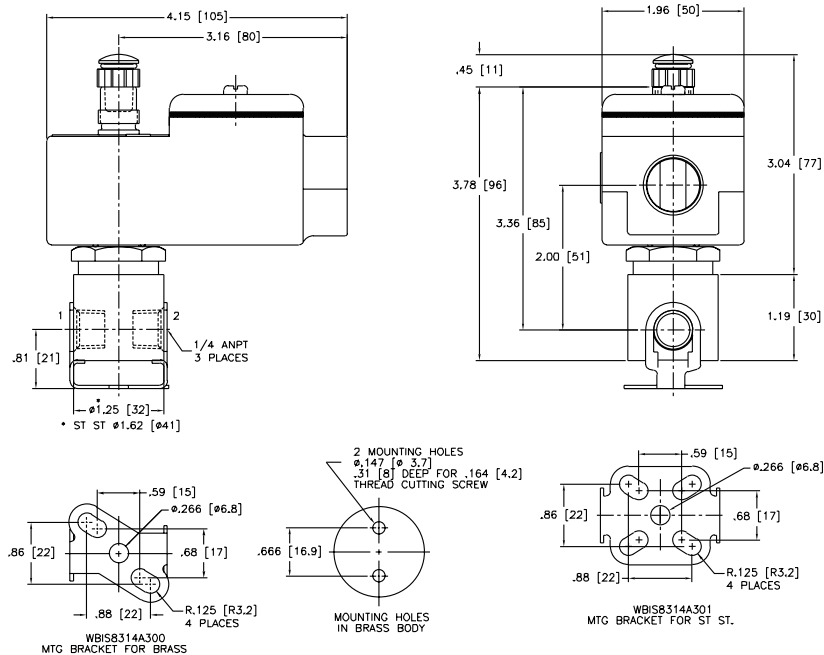


Dimensions: inches (mm)

Const. Ref. 3



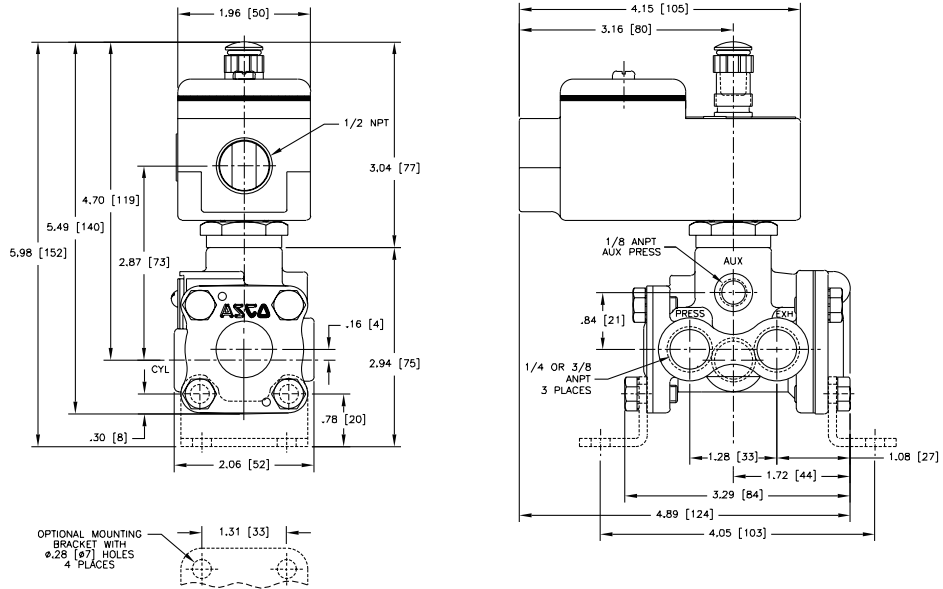
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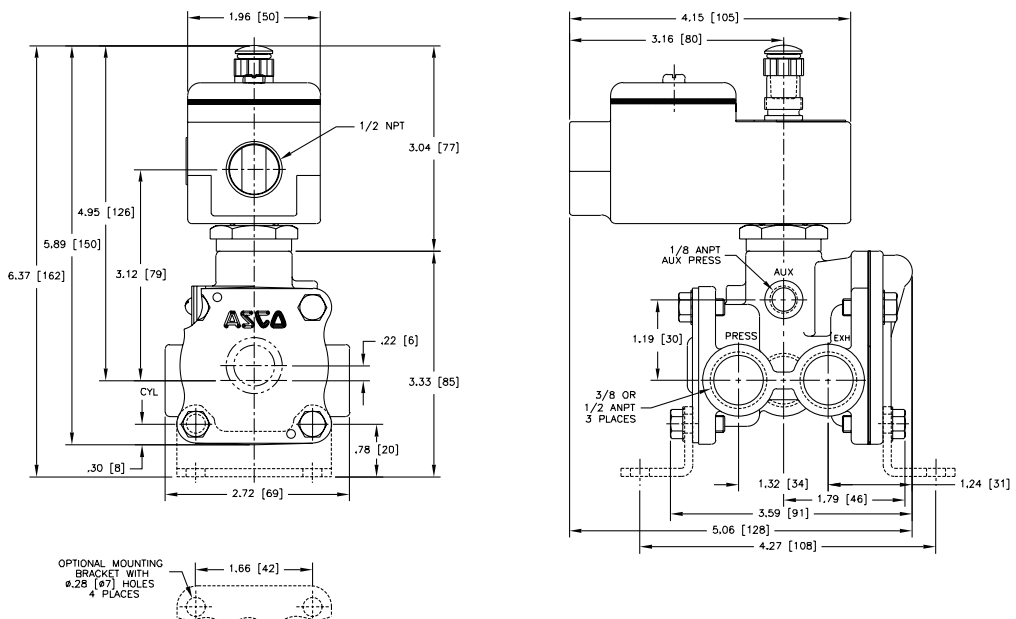
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 5



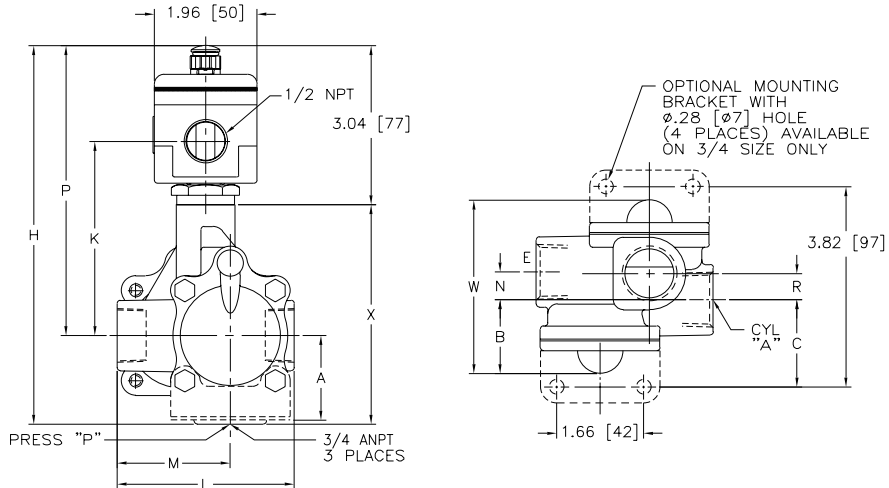
Const. Ref. 6



SPECIAL SERVICE
PILOT

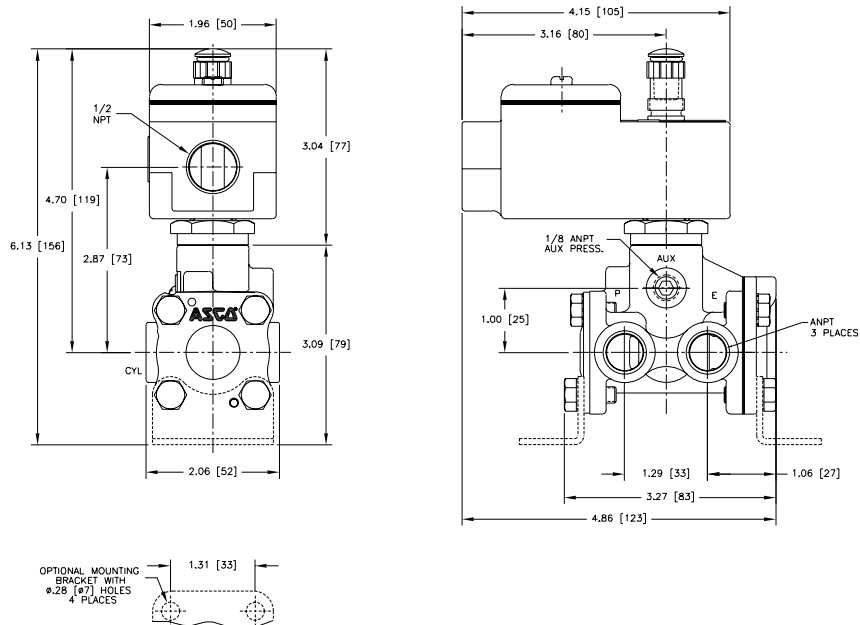
Dimensions: inches (mm)

Const. Ref. 7, 7A



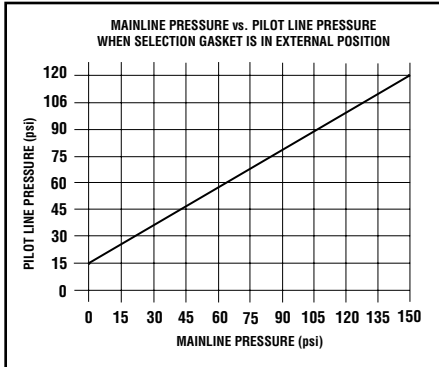
Catalog No.		A	B	C	H	K	L	M	N	P	R	W	X
WBIS8316A374	ins.	1.61	1.41	1.66	7.23	3.71	3.38	2.16	.53	5.54	.50	3.31	4.19
	mm	41	36	42	184	94	86	55	13	141	13	84	106
WBIS8316A334	ins.	-	1.78	-	7.85	3.96	4.44	2.81	.87	5.79	1.74	5.32	4.81
	mm	-	45	-	199	100	113	71	22	147	44	135	122

Const. Ref. 8

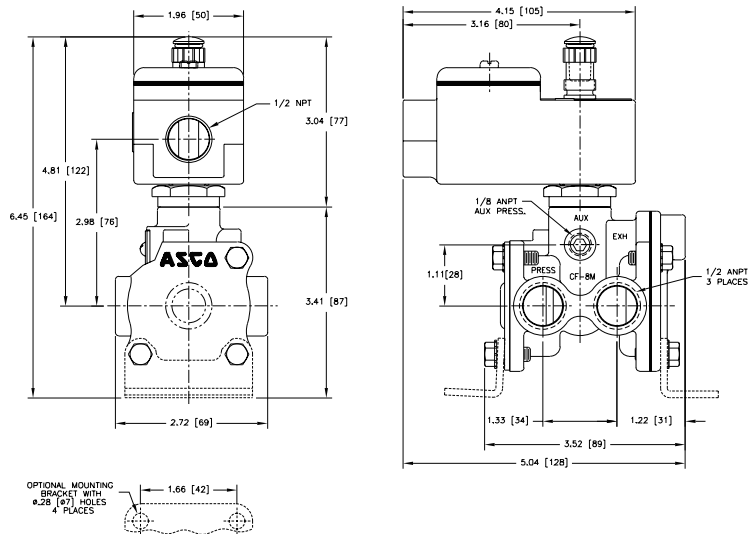


Dimensions: inches (mm)

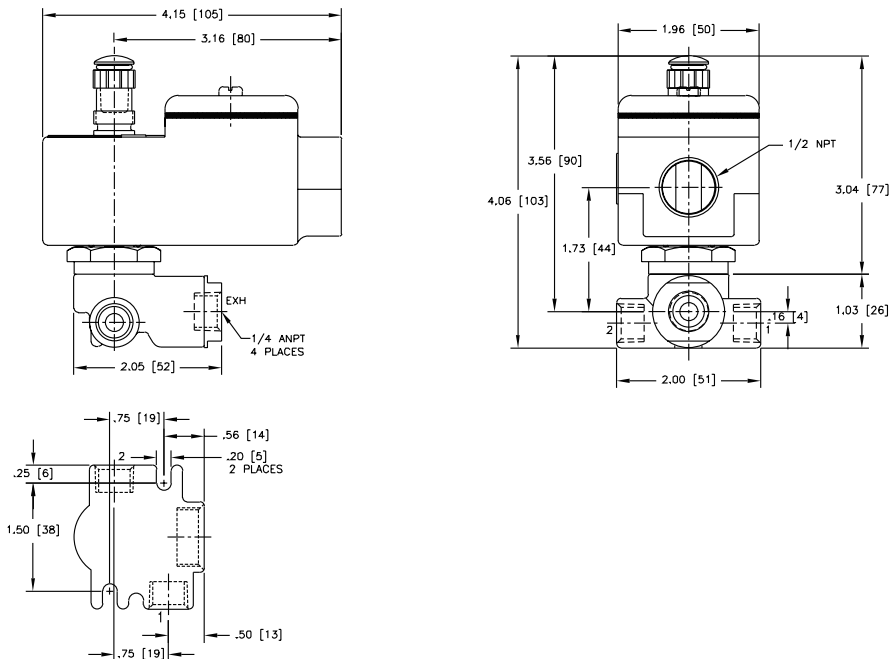
Refer to note ⑥.
For all 8316 "0" Minimum Series only.



Const. Ref. 9



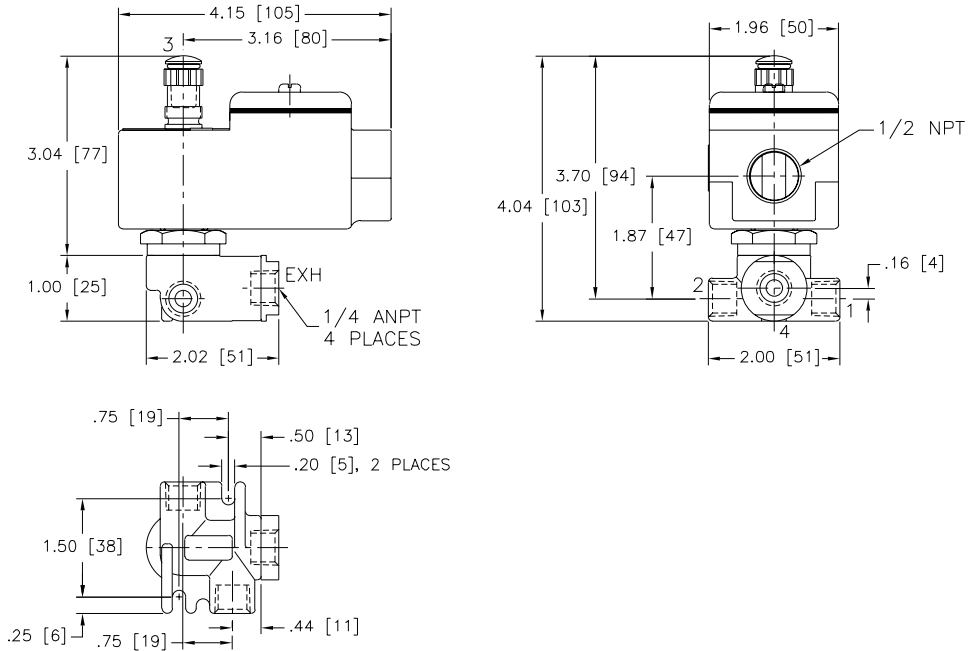
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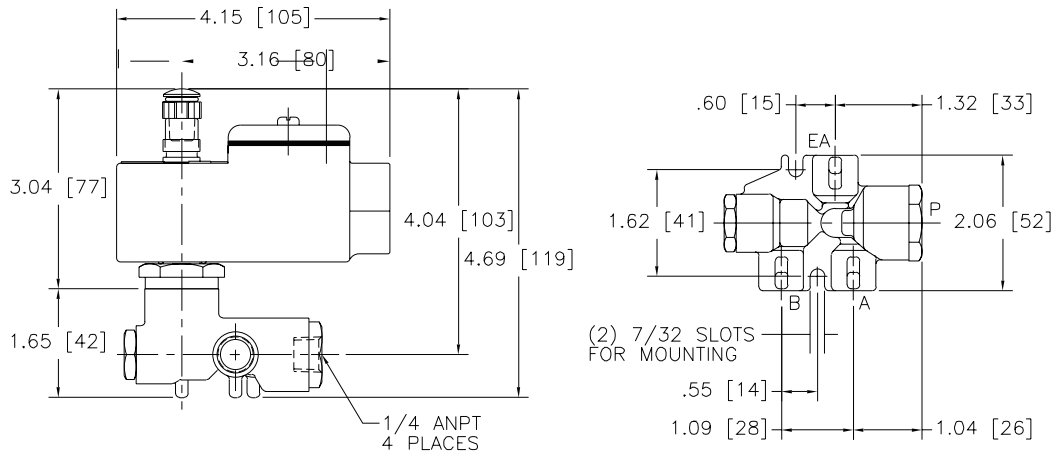
SPECIAL SERVICE
PILOT

Dimensions: inches (mm)

Const. Ref. 11



Const. Ref. 12

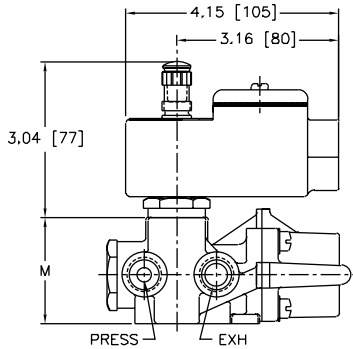


SPECIAL SERVICE
PILOT

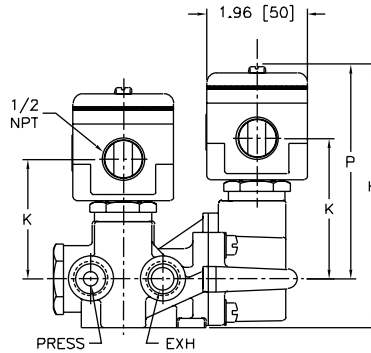
Dimensions: inches (mm)

Const. Ref. 13-18

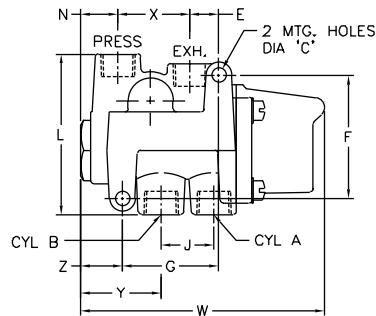
13-15



16-18



All



Catalog No.		ØC	E	F	G	H	J	K	L	M	N	P	W	X	Y	Z	Exhaust Pipe Size
WBIS8344A370	ins.	.28	.56	2.41	1.88	5.12	1.03	2.33	3.13	2.08	.72	4.16	4.75	1.41	1.56	.81	3/8"
	mm	7.1	14	61	48	130	26	59	80	53	18	106	121	36	40	21	
WBIS8344A380, 382	ins.	.34	.77	3.12	2.62	5.72	1.50	2.77	3.18	2.06	.83	4.60	6.06	1.86	1.90	.84	1/2"
	mm	8.6	20	79	67	145	38	70	81	52	21	117	154	47	48	21	
WBIS8344A372, 374	ins.	.34	.77	3.12	2.62	5.10	1.50	2.14	3.18	2.06	.83	3.98	6.06	1.86	1.90	.84	1/2"
	mm	8.6	20	79	67	120	38	54	81	52	21	101	154	47	48	21	
WBIS8344A344	ins.	.28	.56	2.41	1.88	5.12	1.03	2.74	3.13	2.08	.72	4.16	4.75	1.41	1.56	.81	3/8"
	mm	7.1	14	61	48	130	26	70	80	53	18	106	121	36	40	21	
WBIS8344A376, 378	ins.	.34	1.37	3.81	3.88	5.90	2.09	2.52	4.56	2.86	1.55	4.35	8.25	2.12	2.63	1.16	1"
	mm	8.6	35	97	99	150	53	64	116	73	39	110	210	54	67	30	
WBIS8344A354, 356	ins.	.34	1.37	3.81	3.88	6.54	2.09	3.21	4.56	2.81	1.55	4.35	8.25	2.12	2.63	1.16	1"
	mm	8.6	35	97	99	168	53	81	116	71	39	110	210	54	67	30	

IMPORTANT: Valves can be mounted in any position.

Dimensions: inches (mm)

Series	8551	8553
NPT	1/4	1/2
L1 ①	5.12 (132)	6.00 (153)
L2 ①	6.73 (171)	7.80 (198)
H2	4.38 (111)	4.77 (121)
H1	1.10 (28)	1.58 (40)
W	1.77 (45)	2.85 (72)

① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

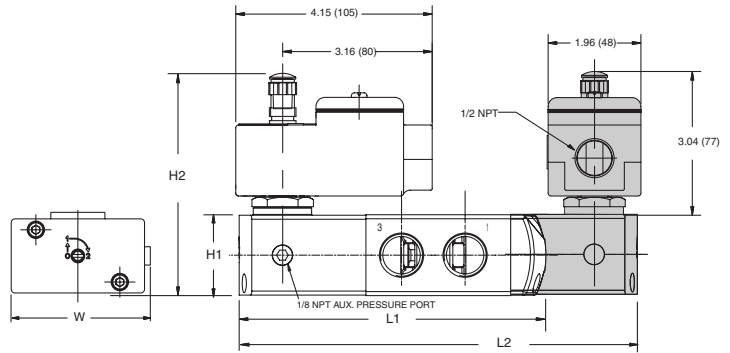
Optional Manual Operators		
Add Suffix		Description
MO		Push and turn to lock with flat head screwdriver slot
MI		Momentary push in with flat head screwdriver slot
MH		Momentary push in by hand
MS		Push and turn to lock by hand

Series	8551	8553
NPT	1/4	1/2
L1 ①	5.63 (144)	7.06 (180)
L2 ①	7.20 (183)	8.86 (225)
H2	4.38 (111)	4.77 (121)
H1	1.10 (28)	1.58 (40)
W	1.77 (45)	2.85 (72)

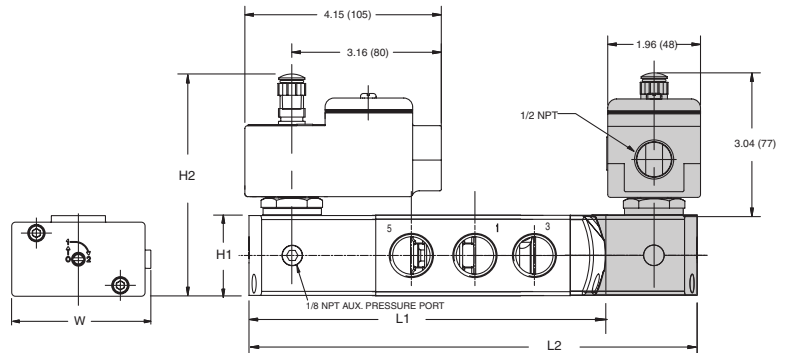
① Manual override option MH adds .250" (6.4),
MS option adds .468" (11.9) to each solenoid endcap.

Optional Manual Operators		
Add Suffix		Description
MO		Push and turn to lock with flat head screwdriver slot
MI		Momentary push in with flat head screwdriver slot
MH		Momentary push in by hand
MS		Push and turn to lock by hand

Const. Ref. 19







Const. Ref. 20



Dimensions: inches (mm)





Series	8551 (Aluminum, Brass)
NPT	1/4
L1 ①	4.96 (126)
L2 ①	6.49 (165)
H2	4.38 (111)
H1	1.57 (40)
W	1.77 (45)

① Manual override option MH adds .250" (6.4), MS option adds .468" (11.9) to each solenoid endcap.

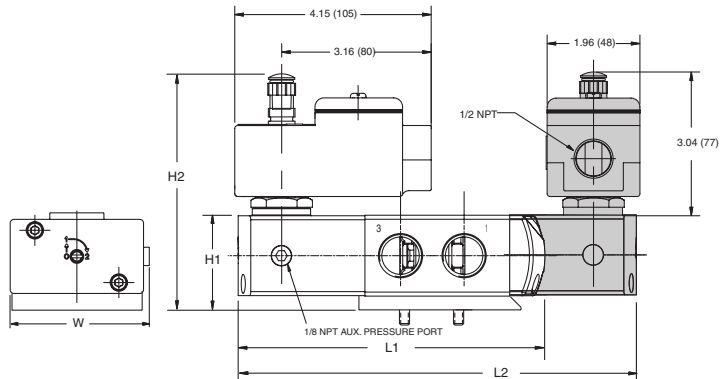
Optional Manual Operators		
Add Suffix		Description
MO		Push and turn to lock with flat head screwdriver slot
MI		Momentary push in with flat head screwdriver slot
MH		Momentary push in by hand
MS		Push and turn to lock by hand

Series	8551 (316L SS)	8551 (5/3)	8553
NPT	1/4	1/4	1/2
L1 ①	5.20 (132)	-	7.08 (180)
L2 ①	6.73 (171)	7.44 (189)	8.85 (225)
H2	4.38 (111)	4.38 (111)	4.77 (121)
H1	1.57 (40)	1.57 (40)	2.08 (53)
W	1.77 (45)	1.77 (45)	2.87 (73)

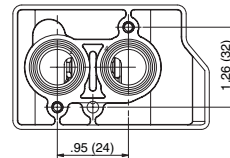
① Manual override option MH adds .250" (6.4), MS option adds .468" (11.9) to each solenoid endcap.

Optional Manual Operators		
Add Suffix		Description
MO		Push and turn to lock with flat head screwdriver slot
MI		Momentary push in with flat head screwdriver slot
MH		Momentary push in by hand
MS		Push and turn to lock by hand

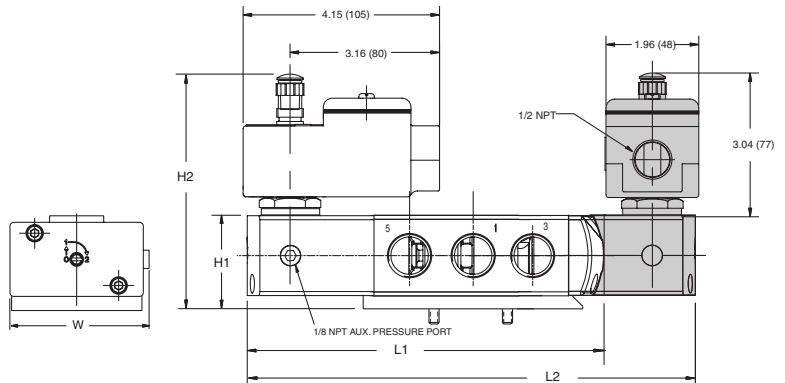
Const. Ref. 21



8551 NAMUR Footprint



Const. Ref. 22



8553 NAMUR Footprint

8551 NAMUR Footprint

