

# Herion Pilot Operated Solenoid Valve

with Soft seal spool, 3/2

Noise reduction through integrated pilot valve silencer

High flow performance

Simplified soft seal system, incorporating HERION's unique T-seal

Low maintenance and easy to service

Manual override standard on most models

Quick change of solenoids

Compact construction

Many configurations - air return, spring return or double solenoids



## Technical data:

### Port Sizes

1/4", 3/8" and 1/2" NPT

### Fluid

Filtered air, lubricated or non-lubricated

### Fluid Temperature

15° to 105° F

### Ambient Temperature

15° to 140° F

### Materials

Housing: Clear anodized aluminum

Seals: BUNA-N

### Options

Manifold mounting

External pilot adapter

Hazardous duty ("explosion-proof") solenoids with UL, CSA, CENELEC and other international listings

"G" thread ports available (ISO 228/1)

Polyurethane seals

Different pilot valve / solenoid operators available for low power, intrinsically safe, etc.

Variety of manual overrides: detent, non-detent, brass push button

## Hazardous duty applications

Solenoid	Power consumption			Remarks	NEMA classification
	DC	AC			
3720	1.4W	-	-	1/2" NPT 18" leads	4 X 7.9
3722	5 W	-	-		
3723	-	6 VA	6 VA		
3726	13 W	-	-		
3727	-	15 VA	15 VA		

These solenoids comply with insulation class H, and are for use in Class 1, Division 1,2 Groups A, B, C, D; Class 2, Division 1, 2 Groups E, F, G hazardous locations as defined in the National Electric Code.

Note: Valve numbers need to be modified to apply low watt solenoid; they cannot be applied to a standard part number.

Description	Port size (NPT)	Nom. size (mm)	Cv factor	Operating pressure (PSI)	Dim dwg	Spare parts kit	Order no.	
							Valve	Solenoid
3 way (3/2) solenoid air return Normally closed	1/4"	6	1.4	25-150 25-120	22	8110816	8020770	.0247
	3/8"	10	2.6	30-150 30-120	22	8110817	8020870	.0247
				30-150 30-120	22	8110817	8020870X01	.0240/.0241
3 way (3/2) solenoid air return Normally open	1/4"	6	1.4	25-150 25-120	22	8110816	8022770	.0247
	3/8"	10	2.6	30-150 30-120	22	8110817	8022870	.0247
				30-150 30-120	22	8110817	8022870X01	.0240/.0241
3 way 3/2 Double solenoid impulse	1/4"	6	1.4	25-150 25-120	24	8110818	8021770	.0247
	3/8"	10	2.6	30-150 30-120	24	8110818	8021775	.0240/.0241
				30-150 30-120	24	8110819	8021870X01	.0240/.0241
3 way (3/2) solenoid-spring return Normally closed	1/4"	6	1.4	50-150 50-120	23	8110829	8110006	.0247
	3/8"	10	2.6	50-150 50-120	23	8110828	8110007	.0247
				50-150 50-120	24	8110828	8110007X3	.0240/.0241
3 way (3/2) solenoid-spring return Normally open	1/4"	6	1.4	50-150 50-120	24	8110829	8110006X32	.0240/.0241
	3/8"	10	2.6	50-150 50-120	24	8110828	8110007X01	.0247
				50-150 50-120	24	8110828	8110007X32	.0240/.0241
3 way (3/2) solenoid-spring return Normally open	1/2"	12	3.5	50-150 50-120	24	8110828	8110008X01	.0247
				50-150 50-120	24	18110828	8110008X32	.0240/.0241

## Solenoids

Solenoid	Power consumption			Remarks	NEMA classification
	DC	Inrush	AC Holding		
0247	7 W	18 VA	10 VA	with DIN Connector	4
0240	3 W	-	-		
0241	-	10 VA	5 VA		
0263	1.6 W	-	-		

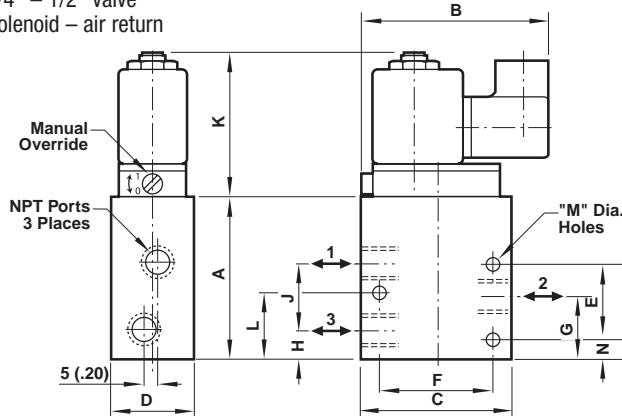
## Connector options

Solenoid Series	Standard cable clamp	Optional connector part numbers			
		Lighted - Cable clamp			
02XX	0570275	0661374	0570818	0570816	0570817

# Herion Pilot Operated Solenoid Valve

with Soft seal spool, 3/2

Fig. 22  
1/4" – 1/2" valve  
Solenoid – air return



Normally closed valve shown for normally open valve ports 1 and 3 are reversed

Fig. 23  
1/4" – 1/2" valve  
Solenoid – spring return

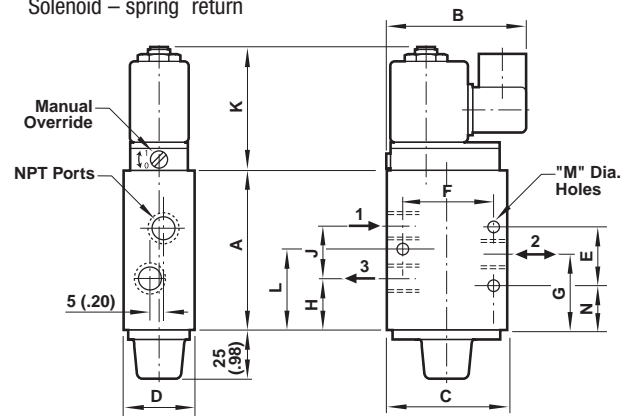


Figure	Valve size	A	B	C	D	E	F	G	H	J	K	L	M	N
22	1/4"	59 (2.32)	66 (2.70)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	23 (.91)	11 (.43)	24 (.94)	61 (2.40)	24.5 (.96)	5.5 (.22)	7.5 (.30)
22	3/8"-1/2"	87 (3.43)	73 (2.87)	65 (2.56)	35 (1.38)	--	46 (1.81)	50 (1.97)	29 (1.14)	33 (1.30)	61 (2.40)	77.5 (3.05)	7 (.28)	31.5 (1.24)
23	1/4"	74 (2.91)	66 (2.70)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	37 (1.46)	25 (.98)	24 (.94)	61 (2.40)	38.5 (1.52)	5.5 (.22)	21.5 (.85)
23	3/8"-1/2"	83 (3.27)	73 (2.87)	65 (2.56)	35 (1.38)	--	46 (1.81)	44 (1.73)	25 (.98)	33 (1.30)	61 (2.40)	73.5 (2.89)	7 (.28)	27.5 (1.08)
24	1/4"	74 (2.91)	66 (2.70)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	37 (1.46)	25 (.98)	24 (.94)	61 (2.40)	38.5 (1.52)	5.5 (.22)	21.5 (.85)
24	3/8"-1/2"	83 (3.27)	73 (2.87)	65 (2.56)	35 (1.38)	--	46 (1.81)	44 (1.73)	25 (.98)	33 (1.30)	61 (2.40)	73.5 (2.89)	7 (.28)	27.5 (1.08)

Dimensions in mm (inches)

## External pilot adapter

Part number: 8110138

For all 1/4" to 1/2" soft seal valves

One kit required for each solenoid on a valve.

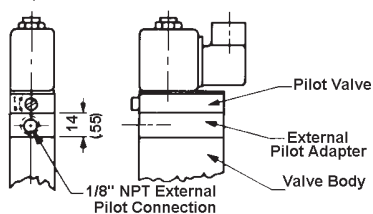
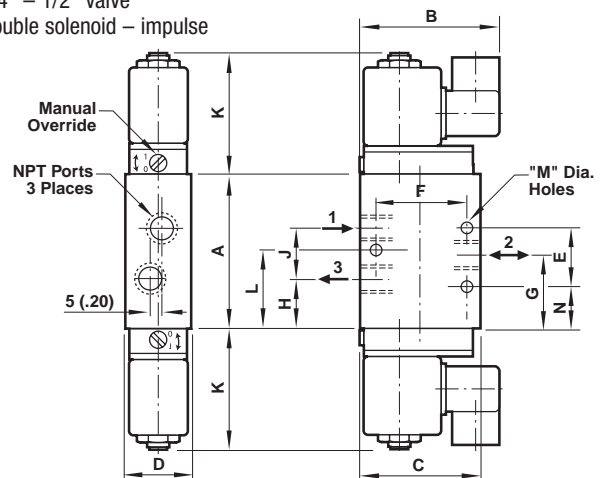


Fig. 24  
1/4" – 1/2" valve  
Double solenoid – impulse



# Herion Air Operated Valve

with Soft seal spool, 3/2

**Simplified soft seal system, incorporating HERION's unique T-Seal**

**Low maintenance and easy to service**

**Compact construction**

**Many configurations - air return, spring return or double air operated**

**Universal flow**



## Technical data

### Port Sizes

1/4", 3/8", and 1/2" NPT

### Fluid

Filtered air, lubricated or non-lubricated

### Fluid Temperature

15° to 105° F

### Ambient Temperature

15° to 140° F

### Materials

Housing: Clear anodized aluminum

Seals: BUNA-N

### Options

Manifold mounting

"G" thread ports available (ISO 228/2)

Polyurethane seals

NOTE: Pilot pressure must be equal to or greater than system pressure. Do not restrict exhaust port no. 3 on these valves.

Description	Port size (NPT)	Nom. size (mm)	Cv factor	Operating pressure (psi)	Pilot pressure (psi)	Dim dwg	Spare parts kit	Valve order number
3 way (3/2)	1/4"	6	1.4	25-230	25-230	40	8110816	4021370
Air operated	3/8"	10	2.6	30-230	30-230	40	8110817	4022070
air return	1/2"	12	3.5	30-230	30-230	40	8110817	4022071
3 way (3/2)	1/4"	6	1.4	VAC-230	30-230	41	8110818	4021470
Double air	3/8"	10	2.6	VAC-230	30-230	41	8110819	4022170
impulse	1/2"	12	3.5	VAC-230	30-230	41	8110819	4022171
3 way (3/2)	1/4"	6	1.4	VAC-230	50-230	42	8110829	4021371
Air operated	3/8"	10	2.6	VAC-230	50-230	42	8110828	4022072
spring return	1/2"	12	3.5	VAC-230	50-230	42	8110828	4022073

# Herion Air Operated Valve

with Soft seal spool, 3/2

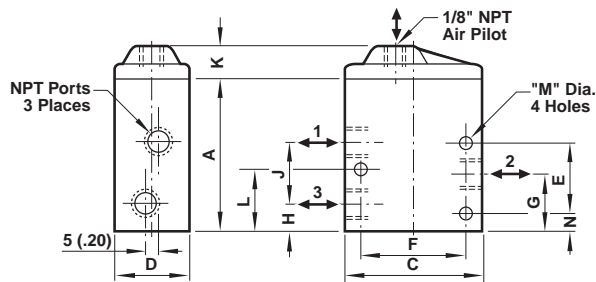


Fig. 40 Single air pilot

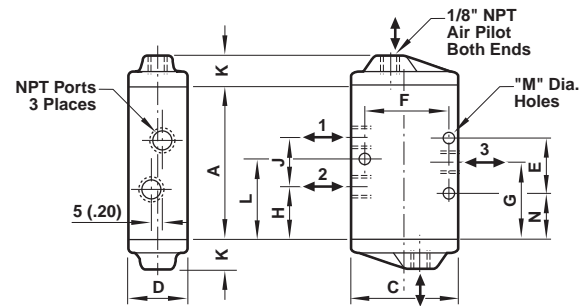


Fig. 41 Double air pilot

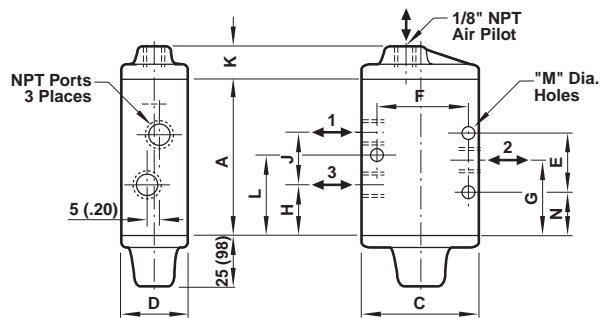


Fig. 42 Single air pilot - spring return

Figure Number	Valve Size	Dimensions											
		A	C	D	E	F	G	H	J	K	L	M	N
40	1/4"	59 (2.32)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	23 (.91)	11 (.43)	24 (.94)	16 (.63)	24.5 (.96)	5.5 (.22)	7.5 (.30)
	3/8"	87	65	35	--	46	50	29	33	16	77.5	7	31.5
	1/2"	(3.43)	(2.56)	(1.38)	--	(1.81)	(1.97)	(1.14)	(1.30)	(.63)	(3.05)	(.28)	(1.24)
41	1/4"	74 (2.91)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	37 (1.46)	25 (.98)	24 (.94)	16 (.63)	38.5 (1.52)	5.5 (.22)	21.5 (.85)
	3/8"	83	65	35	--	46	44	25	33	16	73.5	7	27.5
	1/2"	(3.27)	(2.56)	(1.38)	--	(1.81)	(1.73)	(.98)	(1.30)	(.63)	(2.89)	(.28)	(1.08)
42	1/4"	74 (2.91)	55 (2.17)	30 (1.18)	27 (1.06)	41 (1.61)	37 (1.46)	25 (.98)	24 (.94)	16 (.63)	38.5 (1.52)	5.5 (.22)	21.5 (0.85)
	3/8"	83	65	35	--	46	44	25	33	16	73.5	7	27.5
	1/2"	(3.27)	(2.56)	(1.38)	--	(1.81)	(1.73)	(.98)	(1.30)	(.63)	(2.89)	(.28)	(1.08)

Dimensions in mm (inches)

# Herion Solenoid operated valve

## 4 Way (4/2, 5/2, 5/3) with soft seal

Noise reduction through integrated pilot valve silencer

High flow performance

Simplified soft seal system, incorporating HERION's unique T-Seal

Low maintenance and easy to service

Manual override standard on most models

Quick change of solenoids

Compact construction

Many configurations - air return, spring return or double solenoids



### Technical data

#### Port Sizes

1/8", 1/4", 3/8" and 1/2" NPT

#### Fluid

Filtered air, lubricated or non-lubricated

#### Fluid Temperature

15° to 105°F

#### Ambient Temperature

15° to 140°F

#### Materials

##### Housing

Clear anodized aluminum

Seals: BUNA N

#### Options

Manifold mounting

External pilot adapter

Hazardous duty ("explosion-proof") solenoids with UL, CSA, CENELEC and other international listings

"G" Thread ports available (ISO 228/1)

Polyurethane seals

Different pilot valve / solenoid operators available for low power, intrinsically safe, etc.

Variety of manual overrides: detent, non-detent, brass push button

Description	Port size	Nom. size (NPT)	Cv factor (mm)	Operating pressure	Dim. dwg. (psi)	Spare parts	Order No. Valve kit	Order No. Solenoid
4 Way (4/2) solenoid – air return	1/8"	4	0.5	25-150	2	8110767	2630670E	.0162
				25-150	2	8110767	2630670X6	.0163
4 Way (5/2) solenoid – air return	1/4"	6	1.4	25-150	5	8110831	2636070	.0247
				30-150	5	8110833	2637070	.0247
				30-150	5	8110833	2637071	.0247
4 Way (5/2) solenoid – spring return	1/8"	4	0.5	50-150	3	8110769	8110134E	.0162
				50-120	3	8110769	8110134X6	.0163
				50-150	6	8110832	8110132	.0247
				50-150	6	8110825	8110443	.0247
4 Way (5/2) Double solenoid impulse	1/8"	4	0.5	25-150	4	8110768	2630770E	.0162
				25-120	4	8110768	2630770X6	.0163
				25-150	8	8110827	2636270	.0247
				30-150	7	8110826	2637270	.0247
4 Way (5/3) Double solenoid COE	1/2"	12	3.5	30-150	7A	8110826	2637271	.0247
				50-150	8A	557586X2	2637370	.0247
				50-150	7A	8110756X1	2636370	.0247
4 Way (5/3) Double solenoid COP	1/4"	6	1.1	50-150	8A	0557586X2	2636570	.0247
				50-150	7A	8110756X1	2637570	.0247
4 Way (5/3) Double solenoid APB	1/4"	6	1.1	50-150	8A	0557586X2	2636470	.0247
				50-150	7A	8110756X1	2637470	.0247

# Herion Solenoid operated valve

4 Way (4/2, 5/2, 5/3) with soft seal

## Hazardous duty applications

Solenoid	Power consumption			Remarks	NEMA classification
	DC	Inrush	AC Holding		
3720	1.4W	-	-	1/2" NPT 18" leads	4 X 7.9
3722	5 W	-	-		
3723	-	6 VA	6 VA		
3726	13 W	-	-		
3727	-	15 VA	15 VA		

These solenoid comply with insulation class H, and are for use in Class 1, Division 1,2 Groups A, B, C, D; Class 2, Division 1, 2 Groups E, F, G hazardous locations as defined in the National Electric Code.

NOTE: Solenoid valve part numbers change for low watt coil.

## Solenoids

Solenoid	Power consumption			Remarks	NEMA classification
	DC	Inrush	AC Holding		
0162	-	6 VA	6VA	with DIN Connector	4
0163	3 W	-	-		
0247	-	18 VA	10 VA		
0240	1.6 W	-	-		
0241	-	10 VA	5VA		
0241	-	10 VA	5VA		
0263	1.6W	-	-		

## Connector options

Solenoid Series	Standard cable clamp	Optional connector part numbers			
		1/2" NPT	Lighted - Cable clamp		
			24 VAC, DC	120 VAC	220 VAC
02XX	0570275	0661374	0570818	0570816	0570817
016X	0661464	8110519	0664811	8110548	8110549



Fig. 2 – 1/8" valve solenoid-air return

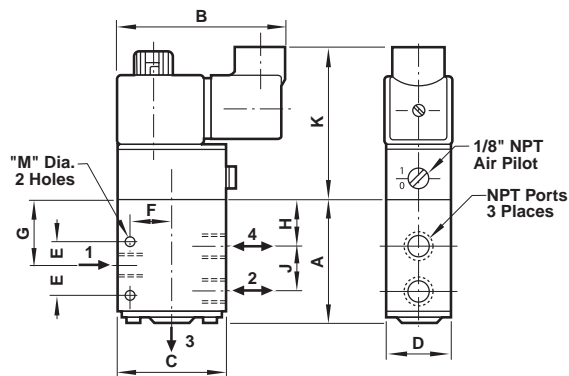
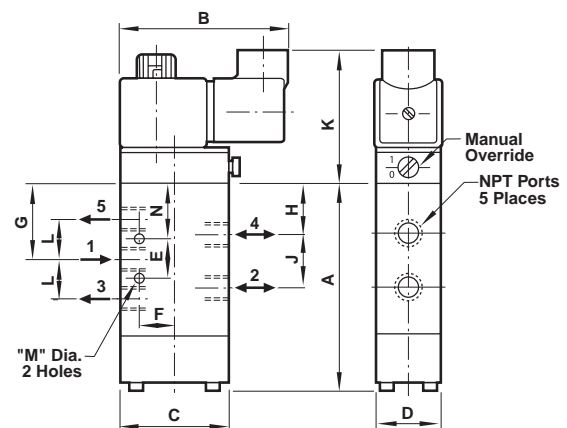


Fig. 3 – 1/8" valve solenoid-spring return



# Herion Solenoid operated valve

4 Way (4/2, 5/2, 5/3)

Fig. 4 – 1/8" valve double solenoid

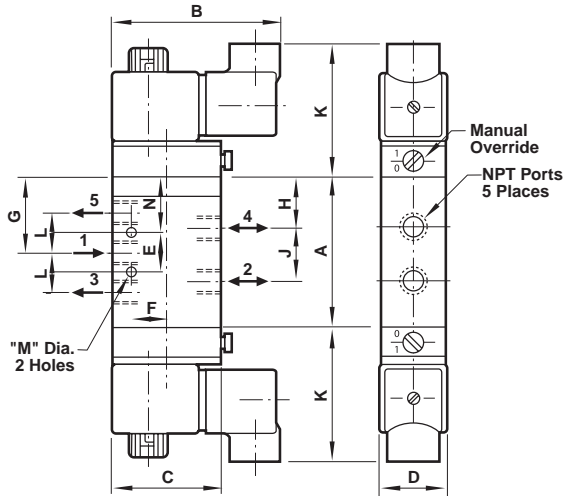


Fig. 5 – 1/2" valve solenoid-air return

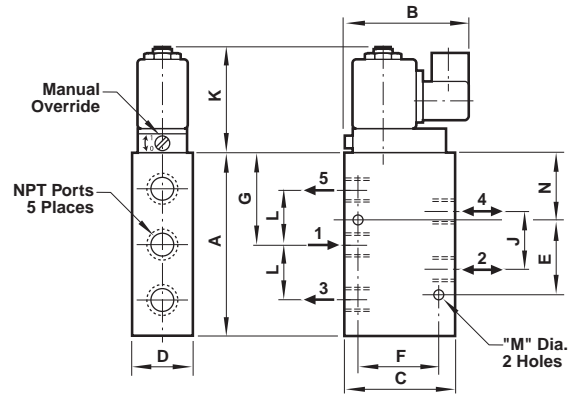
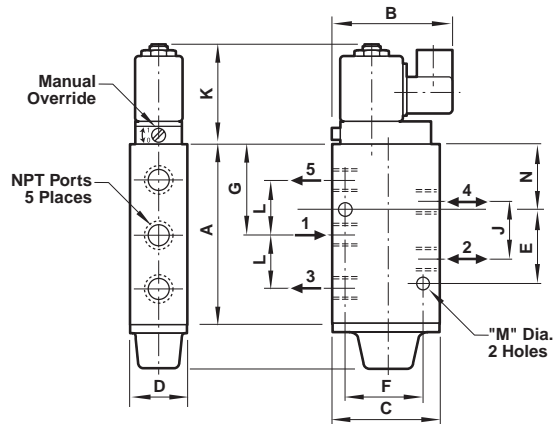


Fig. 6 – 1/4" - 1/2" valve solenoid spring return



## External pilot adapter

Kit part number	Used for
8110796	1/8" soft seal valves
8110138	1/4" to 1/2" soft seal valves except 5/3 position valves
8110138X01	1/2" 5/3 position valves only
8110138X02	1/4" 5/3 position valves only

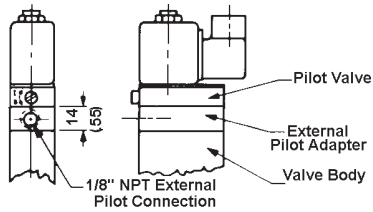


Fig. 7 – 3/8" - 1/2" valve 2 position double solenoid  
 Fig. 7A – 1/2" valve 3 position double solenoid

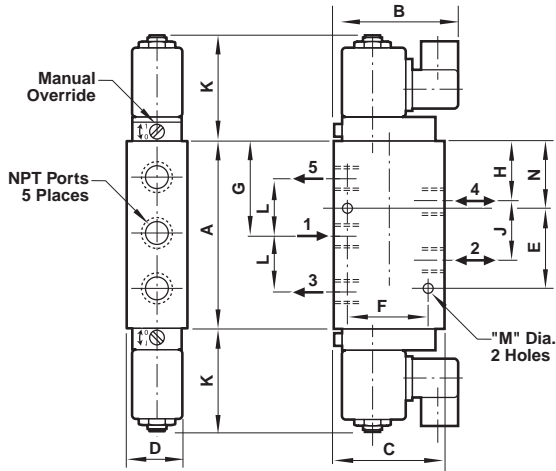
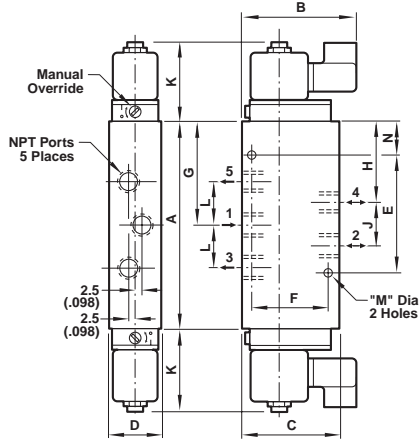


Fig. 8 – 1/4" valve 2 position double solenoid  
 Fig. 8A – 1/4" valve 3 position double solenoid



Drawing	Valve size	Dimensions												
		A	B	C	D	E	F	G	H	J	K	L	M	N
2	1/8"	47 (1.85)	80 (3.15)	40 (1.57)	25 (.98)	11 (.43)	14 (.55)	24 (.95)	15 (.59)	18 (.71)	67 (2.64)	-	5.5 (.22)	-
3	1/8"	84 (3.31)	80 (3.15)	40 (1.57)	25 (.98)	15.8 (.62)	14 (.55)	30.3 (1.20)	21.3 (.84)	18 (.71)	67 (2.64)	16 (.63)	5.2 (.20)	22.4 (.88)
4	1/8"	60.5 (2.38)	80 (3.15)	40 (1.57)	25 (.98)	15.8 (.62)	14 (.5)	30.3 (1.20)	21.3 (.84)	18 (.71)	67 (2.64)	16 (.63)	5.2 (.20)	22.4 (.88)
5	1/4"	84 (3.31)	66 (2.60)	55 (2.17)	30 (2.18)	67 (2.64)	40 (1.57)	37 (1.46)	-	24 (.94)	61 (2.40)	24 (.94)	7 (.28)	12 (.47)
5	3/8"	115 (4.53)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	-	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	39 (1.54)
5	1/2"	115 (4.53)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	-	33 (1.30)	61 (2.10)	33 (1.30)	7 (.28)	39 (1.54)
6	1/4"	102 (4.02)	66 (2.60)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	51 (2.01)	-	24 (.94)	61 (2.40)	24 (.94)	7 (.28)	14 (.55)
6	3/8"	111 (4.37)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	-	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	39 (1.54)
6	1/2"	111 (4.37)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	-	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	39 (1.54)
7	3/8"	111 (4.37)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	46 (1.81)	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	39 (1.54)
7	1/2"	111 (4.37)	73 (2.87)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	46 (1.81)	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	39 (1.54)
8	1/4"	102 (4.02)	66 (2.60)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	51 (2.01)	-	24 (.94)	61 (2.40)	24 (.94)	7 (.28)	14 (.55)
7A	1/2"	174 (6.85)	74 (2.91)	70 (2.76)	40 (1.57)	50 (1.97)	50 (1.97)	87 (3.43)	71 (2.80)	33 (1.30)	61 (2.40)	33 (1.30)	7 (.28)	71 (2.80)
8A	1/4"	122 (4.80)	66 (2.60)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	61 (2.41)	49 (1.93)	24 (.94)	61 (2.40)	24 (.94)	7 (.28)	25 (.98)

Dimensions in mm (inches)



# Herion Air operated valve

4 Way (4/2, 5/2, 5/3)

**Simplified soft seal system, incorporating HERION's unique T-seal**

**Low maintenance and easy to service**

**Compact construction**

**Many configurations - air return, spring return or double air operated**



## Technical data

**Port Sizes**

1/8", 1/4", 3/8", and 1/2" NPT

**Fluid**

Filtered air, lubricated or non-lubricated

**Fluid Temperature**

15° to 105°

**Ambient Temperature**

15° to 140°F

**Materials**

**Housing**

Clear anodized aluminum

**Seals**

BUNA-N

**Options**

Manifold mounting

"G" thread ports available (ISO 228/1)

Polyurethane seals

**NOTE:** Pilot pressure must be equal to or greater than operating pressure

Description	Port size (NPT)	Nom. size (mm)	Cv factor	Operating pressure (psi)	Pilot pressure (psi)	wgt. (lb)	Dim dwg.	Spare parts kit	valve order no.
Way (4/2) air-operated air return	1/8	4	0.5	25-230	25-230	0.4	25	8110820	4030670
4 way (5/2) air-operated air return	1/4	6	1.4	25-230	25-230	0.8	27	8110831	4031370
	3/8	10	2.6	30-230	30-230	1.4	27	8110833	4032070
4 way (5/2) double air impulse	1/2	12	3.5	30-230	30-230	1.4	27	8110833	4032071
	1/8	4	0.5	VAC-230	30-230	.6	26	8110830	4030770
4 way (5/2) air-operated spring return	1/4	6	1.4	VAC-230	30-230	1.1	29	8110827	4031470
	3/8	10	2.6	VAC-230	30-230	1.7	29	8110826	4032170
4 way (5/2) air-operated APB	1/2	12	3.5	VAC-230	30-230	1.7	29	8110826	4032171
	1/4	6	1.4	VAC-230	50-230	1.2	28	8110832	4031371
4 way (5/2) air-operated COP	3/8	10	2.6	VAC-230	50-230	1.8	28	8110825	4032072
	1/2	12	3.5	VAC-230	50-230	1.8	28	8110825	4032073
4 way (5/3) air-operated COE	1/4	6	1.1	VAC-230	50-230		29A	0557586	8110009
	1/2	12	2.7	VAC-230	50-230		29A	8110756	8110114
4 way (5/3) air-operated COP	1/4	6	1.1	VAC-230	50-230		29A	0557586	8110012
	1/2	12	2.7	VAC-230	50-230		29A	8110756	8110116
4 way (5/3) air-operated COE	1/4	6	1.1	VAC-230	50-230		29A	0557586	8110011
	1/2	12	2.7	VAC-230	50-230		29A	8110756	8110115

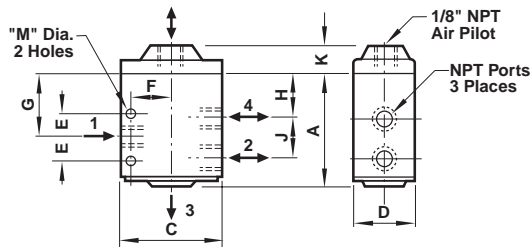


Fig 25. – 1/8" valve, single air pilot

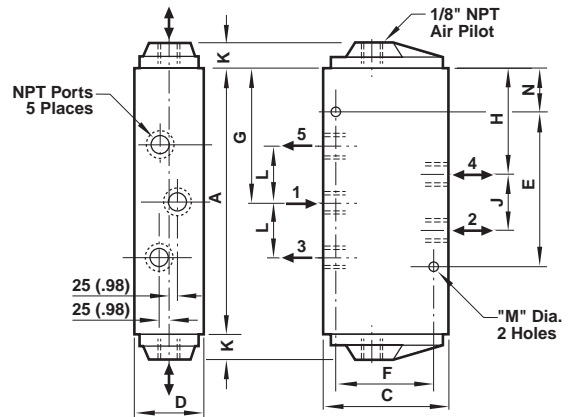


Fig 26. – 1/8" valve, double air pilot  
 Fig 29. – 1/4", 3/8", 1/2" double air pilot  
 Fig 29A. – 1/4", 1/2" 3 position double air pilot

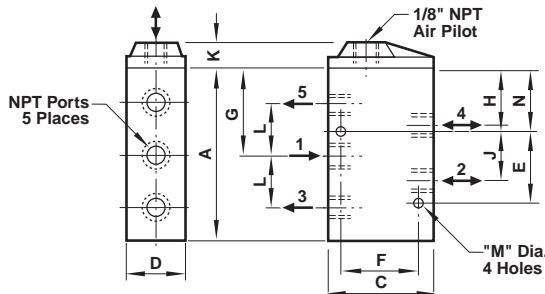


Fig 27. – 1/4", 3/8", 1/2" valve single air pilot

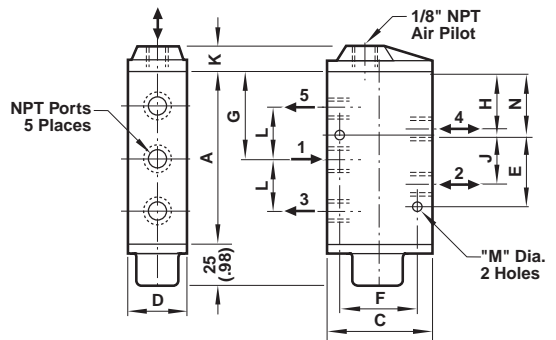


Fig 28. – 1/4", 3/8", 1/2" valve, single air pilot - spring return

Figure	Valve size	A	C	D	E	F	G	H	J	K	L	M	N
25	1/8"	47 (1.85)	40 (1.57)	25 (0.98)	11 (.43)	14 (.55)	24 (.95)	15 (.59)	18 (.71)	14 (.55)	-	5.5 (.22)	-
26	1/8"	60.5 (2.38)	40 (1.57)	25 (.98)	15.8 (.62)	14 (.55)	30.3 (1.20)	21.3 (.84)	18 (.71)	14 (.55)	16 (.63)	5.5 (.22)	22.4 (.88)
27	1/4"	84 (3.31)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	37 (1.46)	25 (.98)	24 (.94)	16 (.63)	24 (.94)	7 (.28)	12 (.47)
27	3/8"	115 (4.53)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.56)	33 (1.30)	16 (.63)	33 (1.30)	7 (.28)	39 (1.54)
27	1/2"	115 (4.53)	65 (2.56)	36 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.56)	33 (1.30)	16 (.63)	33 (1.30)	7 (.28)	39 (1.54)
28	1/4"	102 (4.02)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	51 (2.01)	39 (1.54)	24 (.94)	16 (.63)	24 (.94)	7 (.28)	14 (.55)
28	3/8"	111 (4.37)	65 (2.56)	35 (1.58)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.56)	33 (1.30)	16 (0.63)	33 (1.30)	7 (.28)	39 (1.54)
28	1/2"	111 (4.37)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.56)	33 (1.30)	16 (0.63)	33 (1.30)	7 (.28)	39 (1.54)
29	1/4"	102 (4.02)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	51 (2.01)	39 (1.54)	24 (.94)	16 (.63)	24 (.94)	7 (.28)	14 (.55)
29	3/8"	111 (4.37)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.81)	33 (1.30)	16 (0.63)	33 (1.30)	7 (.28)	39 (1.54)
29	1/2"	111 (4.37)	65 (2.56)	35 (1.38)	46 (1.81)	46 (1.81)	56 (2.20)	39.5 (1.81)	33 (1.30)	16 (0.63)	33 (1.30)	7 (.28)	39 (1.54)
29A	1/4"	122 (4.80)	55 (2.17)	30 (1.18)	67 (2.64)	40 (1.57)	61 (2.41)	49 (1.93)	24 (.94)	16 (.63)	24 (.94)	7 (.28)	25 (.98)
29A	1/2"	174 (6.85)	70 (2.76)	40 (1.57)	50 (1.97)	50 (1.97)	87 (3.43)	71 (2.80)	33 (1.30)	16 (0.63)	33 (1.30)	7 (.28)	71 (2.80)

Dimensions in mm (inches)

# Herion Manifold system

Suitable for use with all 1/4" through 1/2" valves and with the Hazardous Duty Solenoid (372X). Other valves can be used with this manifold .

**FEATURES**

**Manifold System**

Allows space saving manifolding for 2 to 16 valves

**Common Supply Line**

Standard manifold mounting with supply bar, which has 2 supply ports.

**Universal Mounting**

Manifold bar can be rotated within the mounting brackets in 90° increments.

**Service**

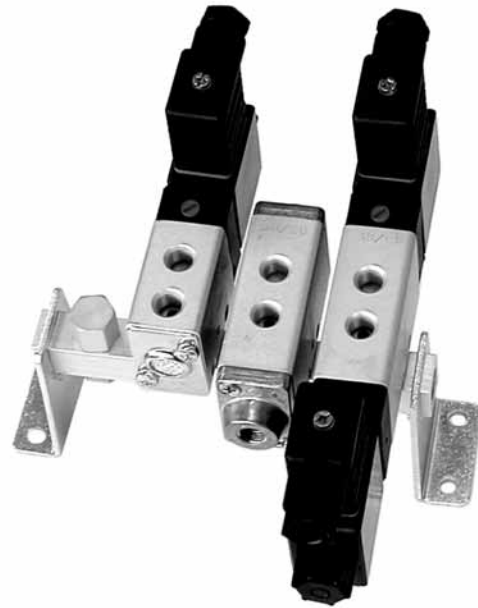
Each valve can be installed or removed easily.

**Simple Construction**

Allows room for installation of flow controls and exhaust silencers.

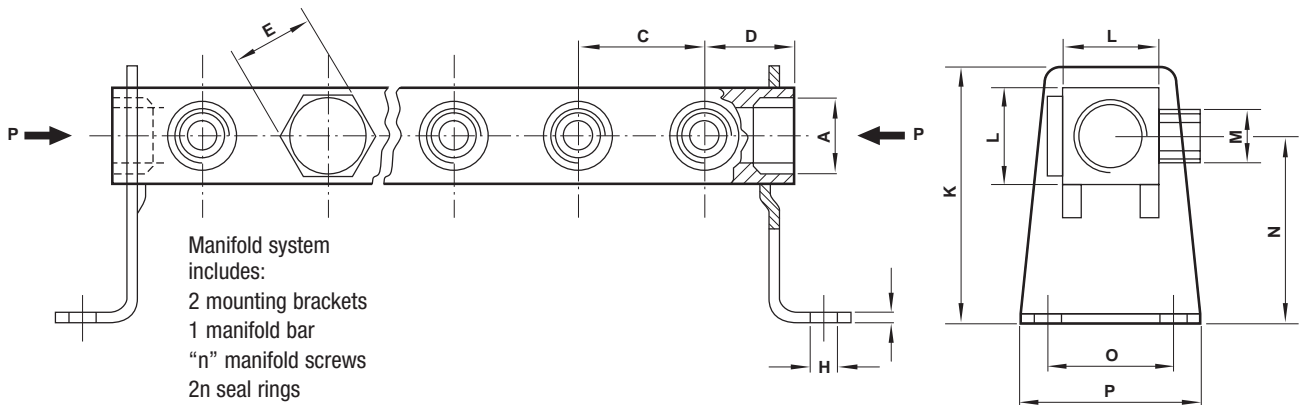
**Flexibility**

Additional unused stations can be blocked with blank station caps.



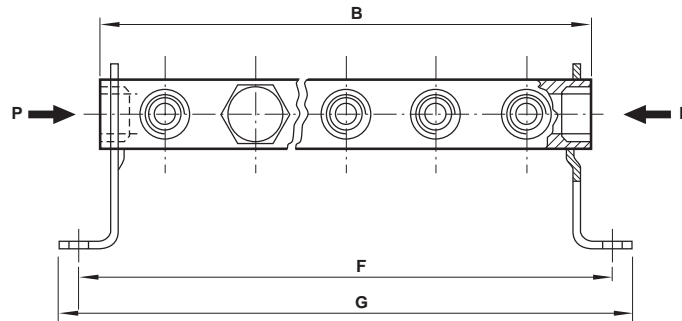
Valve Size	Order Number	Number of Stations (n)	Station related dimensions mm (inch)			
			B	F	G	
1/8	2639652	2	76 (2.99)	90 (3.54)	106 (4.17)	
	2639653	3	108 (4.25)	122 (4.80)	138 (5.43)	
	2639654	4	140 (5.51)	154 (6.06)	170 (6.69)	
	2639655	5	172 (6.77)	186 (7.32)	202 (7.95)	
	2639656	6	204 (8.03)	218 (8.58)	234 (9.21)	
	2639657	7	236 (9.29)	250 (9.84)	266 (10.47)	
	2639658	8	268 (10.55)	282 (11.10)	298 (11.73)	
	2639659	9	300 (11.81)	314 (12.36)	330 (12.99)	
	2639660	10	332 (13.07)	346 (13.62)	362 (14.25)	
	2639662	12	396 (15.59)	410 (16.14)	426 (16.77)	
	1/4	2639452	2	85 (3.35)	100 (3.94)	116 (4.57)
		2639453	3	120 (4.72)	135 (5.31)	151 (5.94)
2639454		4	155 (6.10)	170 (6.69)	186 (7.32)	
2639455		5	190 (7.48)	205 (8.07)	221 (8.70)	
2639456		6	225 (8.86)	240 (9.45)	256 (10.08)	
2639457		7	260 (10.24)	275 (10.83)	291 (11.46)	
2639458		8	295 (11.61)	310 (12.20)	326 (12.83)	
2639460		10	365 (14.37)	380 (14.96)	396 (15.59)	
2639462		12	435 (17.13)	450 (17.72)	466 (18.35)	
2639464		14	505 (19.88)	520 (20.47)	536 (21.10)	
2639466		16	575 (22.64)	590 (23.23)	606 (23.86)	
3/8		2639752	2	102 (4.02)	120 (4.72)	138 (5.43)
	2639753	3	144 (5.67)	162 (6.38)	180 (7.09)	
	2639754	4	186 (7.32)	204 (8.03)	222 (8.74)	
	2639755	5	228 (8.98)	246 (9.69)	264 (10.39)	
	2639756	6	270 (10.63)	286 (11.26)	306 (12.05)	
	2639757	7	312 (12.28)	330 (12.99)	348 (13.70)	
	2639758	8	354 (13.94)	372 (14.64)	390 (15.35)	
	1/2"	2639552	2	102 (4.02)	120 (4.72)	138 (5.43)
2639553		3	144 (5.67)	162 (6.38)	180 (7.09)	
2639554		4	186 (7.32)	204 (8.03)	222 (8.76)	
2639555		5	228 (8.98)	246 (9.69)	264 (10.39)	
2639556		6	270 (10.63)	286 (11.26)	306 (12.05)	
2639557		7	312 (12.28)	330 (12.99)	348 (13.70)	
2639558		8	354 (13.94)	372 (14.66)	390 (15.35)	

# Herion Manifold system



Manifold system includes:  
 2 mounting brackets  
 1 manifold bar  
 "n" manifold screws  
 2n seal rings

Valve Size	A	C	D	E	H	I	K	L	M	N	O	P
1/8	1/4 NPT	32 (1.26)	22 (0.87)	14 (0.55)	6.5 (0.26)	2.5 (0.10)	60 (2.36)	16 (0.63)	1/8 NPT	48 (1.89)	28 (1.10)	42 (1.65)
1/4	3/8 NPT	35 (1.38)	25 (0.98)	19 (0.75)	6.5 (0.26)	3 (0.12)	75 (2.95)	23 (0.90)	1/4 NPT	57 (2.24)	35 (1.38)	50 (1.97)
3/8	3/4 NPT	42 (1.65)	30 (1.18)	27 (1.06)	9 (0.35)	3 (0.12)	86 (3.39)	32 (1.26)	3/8 NPT	63 (2.48)	42 (1.65)	60 (2.36)
1/2	3/4 NPT	42 (1.65)	30 (1.18)	27 (1.06)	9 (0.35)	3 (0.12)	86 (3.39)	32 (1.26)	1/2 NPT	63 (2.48)	42 (1.65)	60 (2.36)



## Hazardous Duty Manifold System

### FEATURES

Suitable for use with all 1/4" through 1/2" valves, and with Hazardous Duty Solenoid (372X).

Additional spacing allows valves with Hazardous Duty coil to be manifold mounted. (Use "EX" suffix)

Dimensions for Hazardous duty applications manifold

Valve Size	A	C	D	E	H	I	K	L	M	N	O	P
1/4	3/8 NPT	45 (1.77)	25 (0.98)	19 (0.75)	6.5 (0.26)	3 (0.12)	75 (2.95)	23 (0.90)	1/4 NPT	57 (2.24)	35 (1.38)	50 (1.97)
3/8	3/4 NPT	45 (1.77)	30 (1.18)	27 (1.06)	9 (0.35)	3 (0.35)	86 (3.39)	32 (1.26)	3/8 NPT	63 (2.48)	42 (1.65)	60 (2.36)
1/2	3/4 NPT	45 (1.77)	30 (1.18)	27 (1.06)	9 (0.35)	3 (0.35)	86 (3.39)	32 (1.26)	1/2 NPT	63 (2.48)	42 (1.65)	60 (2.36)

Dimensions in mm (inches)

# Herion Double valve Series XSz with dynamic monitoring



Used to control air actuated systems which must always exhaust to a safe position.

Designed for self-checking in accordance with OSHA and ANSI

Patented cross flow pattern and air logic monitor design.

When used on spring loaded clutches and brakes for mechanical power presses, they function as 3/2 air valves, normally closed.

### Medium

Compressed air, filtered, lubricated or non-lubricated

Temperature Range  
15° to 140° F

Operating Pressure  
30 to 120 psig

Operating Frequency  
165 cpm (cycles per Minute)

### Material

Body: Aluminum

Piston Seals: Polyurethane

Size	Type/ model no.	NPT Port Sizes <sup>2</sup>			Weight lbs.	Flow (Cv)		Part no.			Valve with port 2 in back
		1 (P)	2 (A)	3 (R)		1 → 2	2 → 3	Valve/solenoid	Voltage <sup>1</sup>	AC/DC (Hz)	
1/4"	XSz-8	1/4"	1/4"	3/8"	2.6	2.3	2.5	2492807.3053	120	60 AC	
1/4"	XSz-8	1/4"	1/4"	3/8"	2.6	2.3	2.5	2492807.3053	024	DC	
1/2"	XSz-16	1/2"	1/2"	3/4"	6	2.8	5.8	2492920.0201	120	60 AC	2492920X02
1/2"	XSz-16	1/2"	1/2"	3/4"	6	2.8	5.8	2492921.0201	024	DC	---
3/4"	XSz-20	3/4"	3/4"	1"	10	8.0	13.2	2493045.0801	120	60 AC	2493045X02
3/4"	XSz-20	3/4"	3/4"	1"	10	8.0	13.2	2493045.0801	024	DC	2493045X02
1"	XSz-32	1"	1"	1-1/2"	17	12	23.3	2493120.0801	120	60 AC	2493120X02
1"	XSz-32	1"	1"	1-1/2"	17	12	23.3	2493120.0801	024	DC	2493120X02
1-1/2"	XSz-50	1-1/2"	2"	2"	34	20.4	62.4	2493220.0801	120	60 AC	---
1-1/2"	XSz-50	1-1/2"	2"	2"	34	20.4	62.4	2493220.0801	024	DC	---

1. Additional Voltages available upon request
2. 1 (P) = Pressure port, 2 (A) = Working port, 3 (R) Exhaust Port
3. CSA certification should be requested with the purchase order

Size	Type/ model	BSPP port			Flow (Cv)		Part number		
		1 (P)	2 (A)	3 (R)	1 → 2	2 → 3	Valve/solenoid	Voltage (1)	AC/DC (Hz)
1/4"	XSz-8	1/4"	1/4"	3/8"	2.3	2.5	2492808.3053	120	60 AC
1/4"	XSz-8	1/4"	1/4"	3/8"	2.3	2.5	2492808.3053	024	DC
1/2"	XSz-16	G 1/2"	G 1/2"	G 3/4"	2.8	5.8	2492900.0201	120	60 AC
1/2"	XSz-16	G 1/2"	G 1/2"	G 3/4"	2.8	5.8	2492901.0201	024	DC
3/4"	XSz-20	G 3/4"	G 3/4"	G 1"	8	13.2	2493040.0801	120	60 AC
3/4"	XSz-20	G 3/4"	G 3/4"	G 1"	8	13.2	2493040.0801	024	DC
1"	XSz-32	G 1"	G 1"	G 1-1/2"	12	23.3	2493130.0801	120	60 AC
1"	XSz-32	G 1"	G 1"	G 1-1/2"	12	23.3	2493130.0801	024	DC
1-1/2"	XSz-50	G 1-1/2"	G 2"	G 2"	20.4	62.4	2493230.0801	120	60 AC
1-1/2"	XSz-50	G 1-1/2"	G 2"	G 2"	20.4	62.4	2493230.0801	024	DC

1. Additional Voltages available upon request
2. 1(P) = Pressure port, 2(A) = Working port, 3 (R) = Exhaust Port
3. ISO 228/ 1 (BSPP Threads)

### Solenoids

Solenoid	Power Consumption		
	DC	AC	
0201	11 W	22 VA	15 VA
0801	16 W	50 VA	27 VA

### Connectors

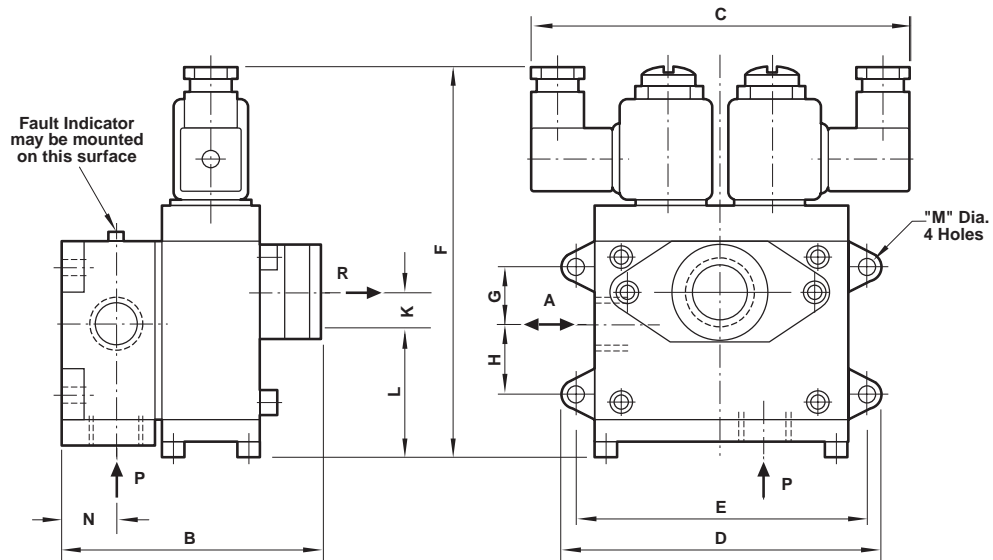
Connector Type	Standard	Part Number	
		Lighted 24 DC	Lighted 120 VAC
Cable Clamp	0570275	0570818	0570816
Conduit – 1/2"	0661374	8110111	8110113
Brad Harrison – 5 pin	8111900	--	--
Brad Harrison – 3 pin	8110100	--	--
Cable Clamp with Surge Suppressor	8111979	--	--



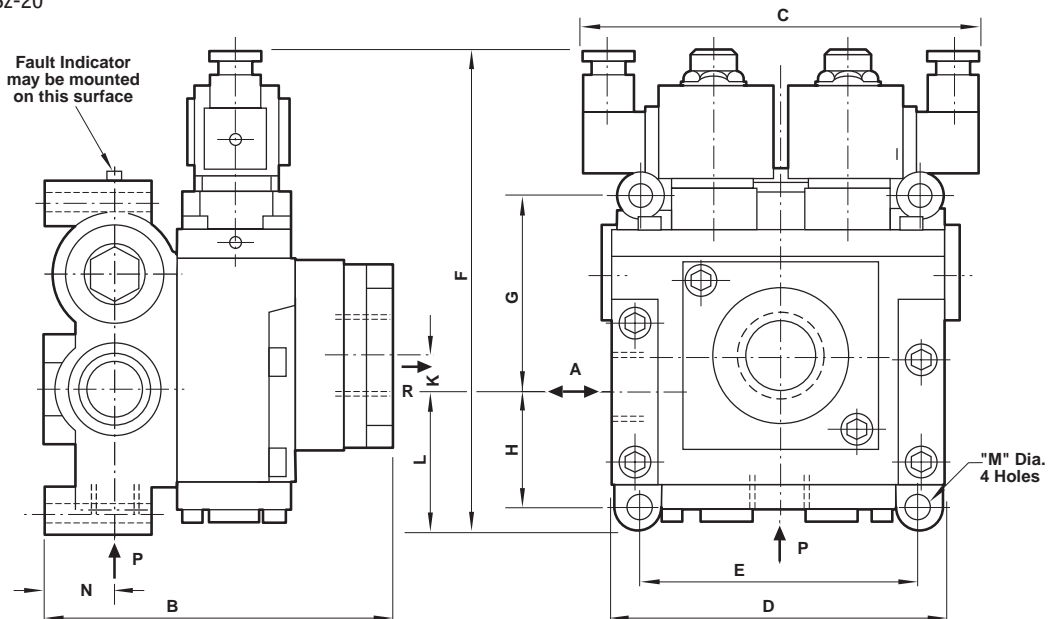
# Herion Double valve Series XSz

with dynamic monitoring

XSz-16



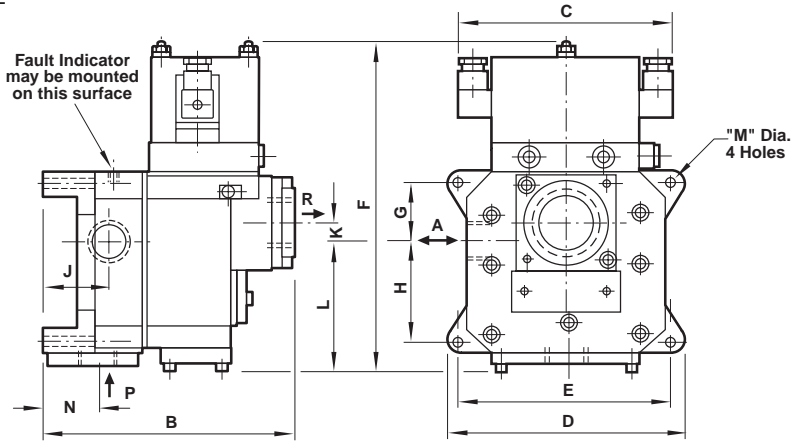
XSz-20



# Herion Double valve Series XSz

with dynamic monitoring

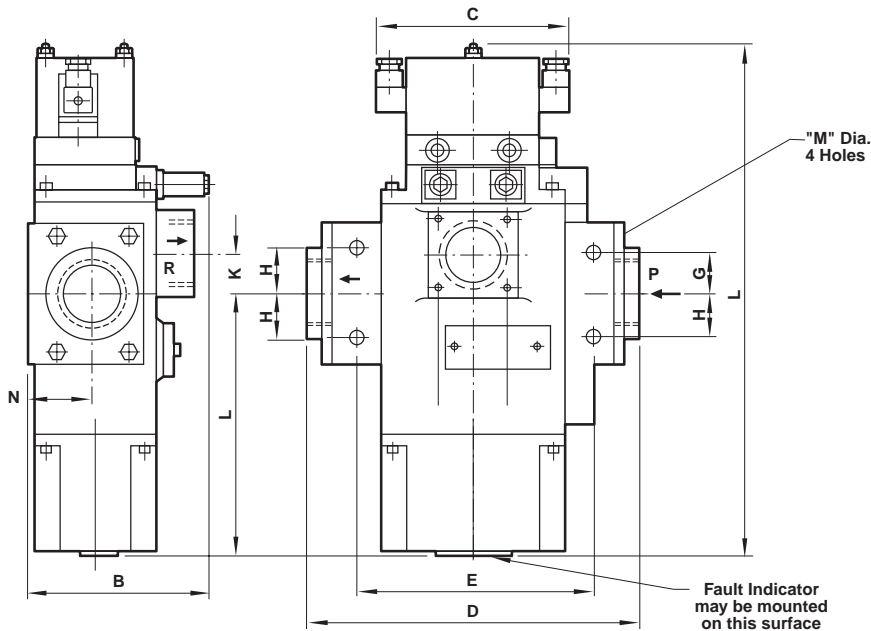
XSz-32



Valve (NPT)	Port Sizes Dimensions														
	P	A	R	B	C	D	E	F	G	H	J	K	L	M	N
XSz-16	1/2	1/2	3/4	106 (4.17)	154 (6.06)	128 (5.04)	116 (4.57)	163 (6.42)	24 (.94)	29 (1.14)	-	13 (.51)	55 (2.17)	6.5 (.26)	22.5 (.89)
XSz-20	3/4	3/4	1	154 (6.06)	165 (6.50)	135 (5.31)	115 (4.53)	209 (8.23)	80 (3.15)	55 (2.17)	-	11 (.43)	65 (2.56)	8.6 (.34)	39.5 (1.56)
XSz-32	1	1	1-1/2	201 (7.91)	165 (6.50)	194 (7.64)	174 (6.85)	282 (11.10)	47 (1.85)	84 (3.31)	50.5 (1.99)	14 (.55)	110.5 (4.35)	11 (.43)	42.5 (1.67)
XSz-50	1-1/2	2	2	166 (6.54)	195 (7.68)	330 (12.99)	217 (8.54)	475 (18.70)	37 (1.46)	41 (1.61)	-	41 (1.61)	238 (9.37)	13 (.51)	60 (2.36)

Dimensions in mm (in)

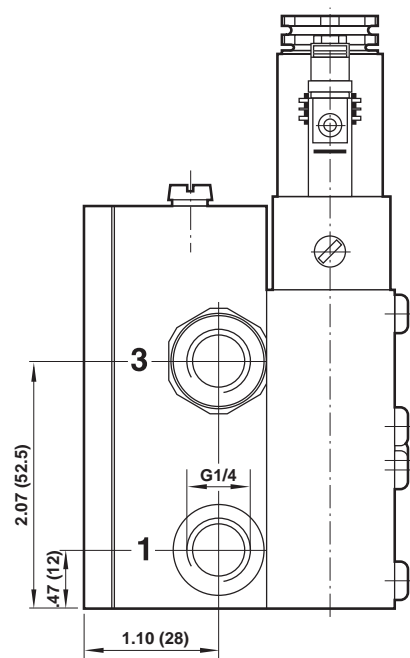
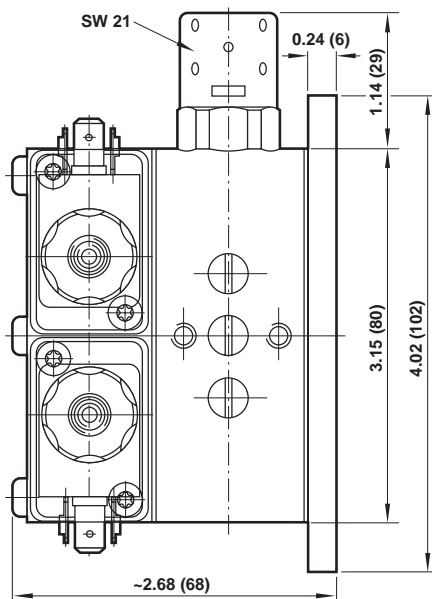
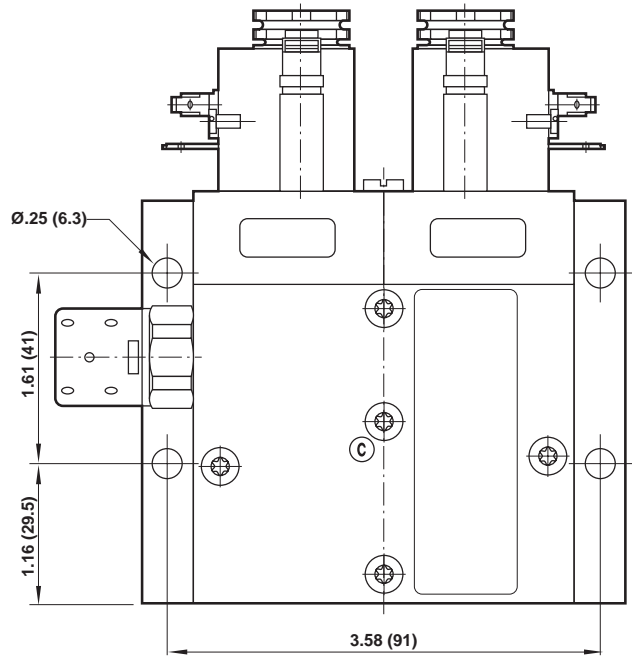
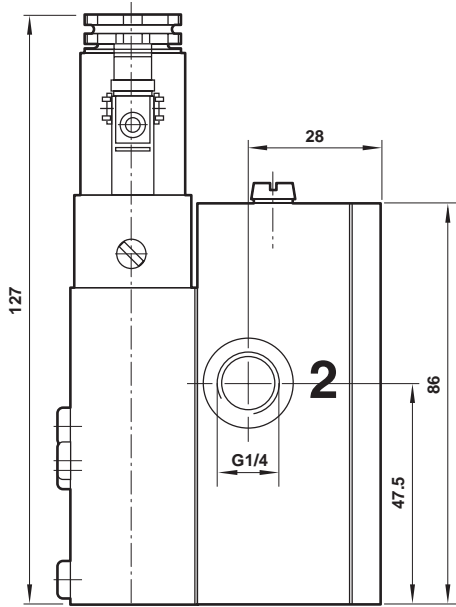
XSz-50



# Herion Double valve Series XSz

with dynamic monitoring

XSz-8



Dimensions in mm



# Herion 3 way (3/2) Poppet Valves

for air and vacuum service  
solenoid or air actuated

**Medium**

Compressed air, filtered, lubricated or non-lubricated

**Temperature Range**

15° to 140° F

**Operating Pressure**

30 to 120 psig

**Operating Frequency**

120 cpm (cycles per Minute)

**Material**

Body: Aluminum

Piston Seals: Polyurethane



Nom. Size (mm)	Function	NPT Ports		Operating Pressure (psi)		Flow (Cv) Ports		Response Time (ms)	Weight (lb.)	Spare Parts Kit	Order No. Valve Solenoid
		1, 2	3	min.	max.	1-2	2-3				
Solenoid actuated valves with internal pilot air supply											
15	NC	1/2	3/4	30	150	4.8	6.1	10	2.8	05-553-70	80-265-80.0801
20	NC	3/4	1	30	150	8.3	14.4	10	3.3	05-553-71	80-266-80.0801
25	NC	1	1	30	150	11.7	15.6	10	3.3	05-553-71	80-267-80.0801
30	NC	1-1/4	1-1/4	30	150	19.2	23.0	12	6.6	05-571-42	80-268-80.0801
40	NC	1-1/2	1-1/2	30	150	26.7	31.8	15	8.4	05-571-41	80-269-80.0801
50	NC	2	2	30	150	39.6	44.4	20	15.0	05-571-40	80-270-80.0801
15	NO	1/2	3/4	30	150	4.8	6.1	10	2.8	05-553-72	80-285-80.0801
20	NO	3/4	1	30	150	8.3	14.4	10	3.3	05-553-73	80-286-80.0801
25	NO	1	1	30	150	11.7	15.6	10	3.3	05-553-73	80-287-80.0801
30	NO	1-1/4	1-1/4	30	150	19.2	23.0	12	6.6	05-571-48	80-288-80.0801
40	NO	1-1/2	1-1/2	30	150	26.7	31.8	15	8.4	05-571-47	80-289-80.0801
50	NO	2	2	30	150	39.6	44.4	20	15.0	05-571-46	80-290-80.0801
Solenoid actuated with internal pilot air supply and manual override											
15	NC	1/2	3/4	30	150	4.8	6.1	10	2.8	05-563-05	80-265-85.0801
20	NC	3/4	1	30	150	8.3	14.4	10	3.3	05-563-06	80-266-94.0801
25	NC	1	1	30	150	11.7	15.6	10	3.3	05-563-06	80-267-94.0801
40	NC	1-1/2	1-1/2	30	150	26.7	31.8	15	8.4	05-565-27	80-269-85.0801
50	NC	2	2	30	150	39.6	44.4	20	15.0	05-571-40	80-270-85.0801
Solenoid actuated with external pilot air supply <sup>1</sup>											
15	NC	1/2	3/4	0	150	4.8	6.1	10	2.8	05-553-70	80-265-88.0801
20	NC	3/4	1	0	150	8.3	14.4	10	3.3	05-553-71	80-266-88.0801
25	NC	1	1	0	150	11.7	15.6	10	3.3	05-553-71	80-267-88.0801
30	NC	1-1/4	1-1/4	0	150	19.2	23.0	12	6.6	05-571-42	80-268-88.0801
40	NC	1-1/2	1-1/2	0	150	26.7	31.8	15	8.4	05-571-41	80-269-88.0801
50	NC	2	2	0	150	39.6	44.4	20	15.0	05-571-40	80-270-88.0801
15	NO	1/2	3/4	0	150	4.8	6.1	10	2.8	05-553-72	80-285-88.0801
20	NO	3/4	1	0	150	8.3	14.4	10	3.3	05-553-73	80-286-88.0801
25	NO	1	1	0	150	11.7	15.6	10	3.3	05-553-73	80-287-88.0801
30	NO	1-1/4	1-1/4	0	150	19.2	23.0	12	6.6	05-571-48	80-288-88.0801
40	NO	1-1/2	1-1/2	0	150	26.7	31.8	15	8.4	05-571-47	80-289-88.0801
50	NO	2	2	0	150	39.6	44.4	20	15.0	05-571-46	80-290-88.0801
Solenoid actuated with external pilot air supply for vacuum service <sup>2</sup>											
15	NC vac service	1/2	3/4	vac	90	4.8	6.1	10	2.8	05-564-76	80-265-87.0801
20	NC vac service	3/4	1	vac	90	8.3	14.4	10	3.3	05-564-77	80-266-87.0801
25	NC vac service	1	1	vac	90	11.7	15.6	10	3.3	05-564-77	80-267-87.0801
30	NC vac service	1-1/4	1-1/4	vac	90	19.2	23.0	12	6.6	05-574-71	80-268-87.0801
40	NC vac service	1-1/2	1-1/2	vac	90	26.7	31.8	15	8.4	05-574-74	80-269-87.0801
50	NC vac service	2	2	vac	90	39.6	44.4	20	15.0	05-574-77	80-270-87.0801
Air actuated <sup>3</sup>											
15	NC	1/2	3/4	0	240	4.8	6.1	–	1.8	05-555-71	80-365-20
20	NC	3/4	1	0	240	8.3	14.4	–	2.2	05-555-72	80-366-20
25	NC	1	1	0	240	11.7	15.6	–	2.2	05-555-72	80-367-20
30	NC	1-1/4	1-1/4	0	150	19.2	23.0	–	4.8	05-571-53	80-368-20
40	NC	1-1/2	1-1/2	0	150	26.7	31.8	–	6.4	05-571-54	80-369-20
50	NC	2	2	0	150	39.6	44.4	–	12.5	05-571-55	80-370-20

1. Pilot air pressure must be equal to or greater than system (working) pressure at port No. 1 and a minimum of 30 psig.

2. Pilot air pressure must be at least 60 psig and a minimum of 15 psig greater than pressure at port No. 1. For vacuum service, vacuum is applied at Port No. 1.

3. Actuating air pressure must be equal to or greater than system (working) pressure at port No. 1 and a minimum of 15 psig.

# Herion 3 way (3/2) Poppet Valves

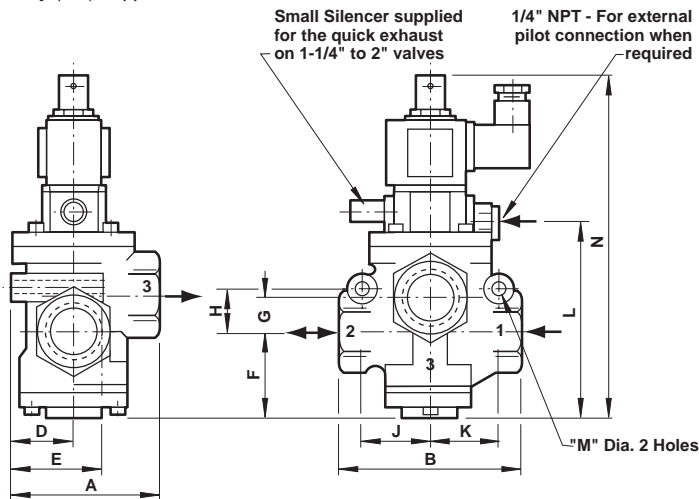
for air and vacuum service  
solenoid or air actuated

STANDARD SOLENOID NUMBER 0801

Specifications: The connector conforms to ISO 4400 and the combination solenoid / connector meets the classification NEMA 4. All HERION solenoids are rated for 100% duty cycle complying to insulation class 155°F (Class F).

Features: The solenoids are attached to the valve with a solenoid retaining nut. The coil of the solenoid is a pressure molded encapsulation. The electrical connection is made through three prongs (2 power, 1 ground) which attach to the mating connector with one screw. Solenoids are stocked for 24 VDC and 120 VAC 60 HZ.

3 way (3/2) Poppet valves with solenoid actuation



## Connector

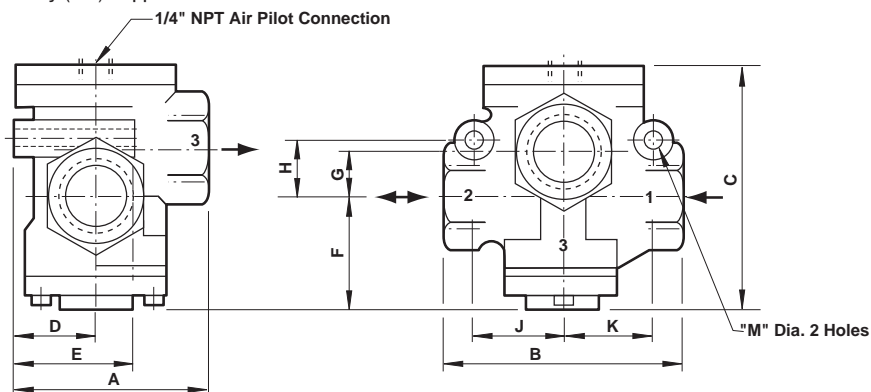
Solenoid Series	Standard Cable		Optional Connector Part Numbers		
	Clamp	1/2" NPT	Lighted - 24VAC DC	Cable Clamp 120 VAC	220 VAC
0801	0570275	0661374	0570818	0570816	0570817

Power consumption

DC - 16W

AC - 50 VA inrush, 27 VA holding

3 way (3/2) Poppet valve with air actuation



Port Size NPT			A	B	C	D	E	F	G	H	J	K	L	M	N
1, 2	3														
1/2	3/4		78 (3.07)	86 (3.39)	105.5 (4.15)	39 (1.54)	52 (2.05)	48 (1.89)	15 (.59)	17 (.67)	32 (1.26)	39 (1.54)	104 (4.09)	9 (.35)	20 (7.87)
3/4	1		92 (3.62)	112 (4.41)	115.5 (4.55)	40 (1.57)	54 (2.13)	53 (2.09)	21 (.83)	23 (.91)	39 (1.54)	44 (1.73)	116 (4.57)	9 (.35)	210 (8.27)
1	1		92 (3.62)	112 (4.41)	115.5 (4.55)	40 (1.57)	54 (2.13)	53 (2.09)	21 (.83)	23 (.91)	39 (1.54)	44 (1.73)	116 (4.57)	9 (.35)	210 (8.27)
1-1/4	1-1/4		108 (4.25)	142 (5.59)	150 (5.91)	42 (1.65)	64 (2.52)	70 (2.76)	28 (1.10)	38 (1.50)	48 (2.89)	56 (2.20)	148 (5.83)	11 (.43)	251 (9.88)
1-1/2	1-1/2		123 (4.84)	164 (6.46)	173 (6.81)	46 (1.81)	70 (2.76)	85 (3.35)	31 (1.22)	37 (1.46)	50 (1.97)	68 (2.68)	168 (6.61)	14 (.55)	277 (10.9)
2	2		153 (6.02)	200 (7.87)	209 (8.23)	56 (2.20)	85 (3.35)	98 (3.86)	39 (1.54)	46 (1.81)	66 (2.60)	82 (3.23)	204 (8.03)	18 (.71)	314 (12.4)

Dimensions in mm (inches)

# Herion 4 way (4/2) Poppet Valves

Solenoid or air actuated



Use for applications requiring high Cv, fast response times, large exhaust, and dirt tolerant.

Slip-on coil design accepts explosion proof solenoids.

### Medium

Compressed air, filtered, lubricated or non-lubricated

Temperature Range  
20° to 140° F

Flow direction  
Fixed

### Material

Body: Aluminum

Seats: Polyurethane

### 4 Way (4/2) Poppet valves Solenoid or air actuated

Nom. Size (mm)	NPT Ports			Operating Pressure (psi)		Flow (Cv) Ports		Response Time (ms)	Weight (lb.)	Spare Parts Kit	Order No. Valve Solenoid
	1	2, 4	3	min.	max.	1-2, 4	2,4-3				
Solenoid actuated valves with internal air supply											
15	1/2	1/2	1/2	30	150	4.8	6.1	10	4.2	8110782	2641250.0801
20	3/4	3/4	1	30	150	8.3	14.4	10	4.2	8110420	2641350.0801
25	1	1	1	30	150	11.7	15.6	10	4.2	8110420	2641450.0801
Solenoid actuated with external pilot air supply <sup>1</sup>											
15	1/2	1/2	1/2	0	150	4.8	6.1	10	4.2	8110782	2641270.0801
20	3/4	3/4	1	0	150	8.3	14.4	10	4.8	8110420	2641370.0801
25	1	1	1	0	150	11.7	15.6	10	4.8	8110420	2641470.0801
Air actuated valves <sup>2</sup>											
15	1/2	1/2	1/2	0	150	4.8	6.1	10	3.4	8110783	2641290
20	3/4	3/4	1	0	150	8.3	14.4	10	4.0	8110781	2641390
25	1	1	1	0	150	11.7	15.6	10	4.0	8110781	2641490

1. Pilot air pressure must be equal to or greater than system pressure at port no. 1, and a minimum of 15 psig.

2. Air actuation pressure must be equal to or greater than system pressure at port no. 1, and a minimum of 15 psig.

### Hazardous duty (3826, 3827) solenoids

Designed to be used with 1/2" NPT mating conduit, these solenoids meet NEMA 7 and NEMA 9 requirements, and are rated for a 100% duty cycle. They comply with insulation class H (180°C), and are for use in class 1, groups A, B, C, D; class II groups E, F, G, hazardous locations as defined in the National Electric Code. The solenoids are attached to the valve with a solenoid retaining nut. The electrical connection is made through three wire leads, (18" long).

### Connector

Standard cable clamp type connector is included with the 0801 solenoid. Optional connectors may be selected from the table below.

Standard Cable Clamp	1/2" NPT	Optional Connector Part Numbers Lighted - Cable Clamp		
		24VAC DC	120 VAC	220 VAC
0570275	0661374	0570818	0570816	0570817

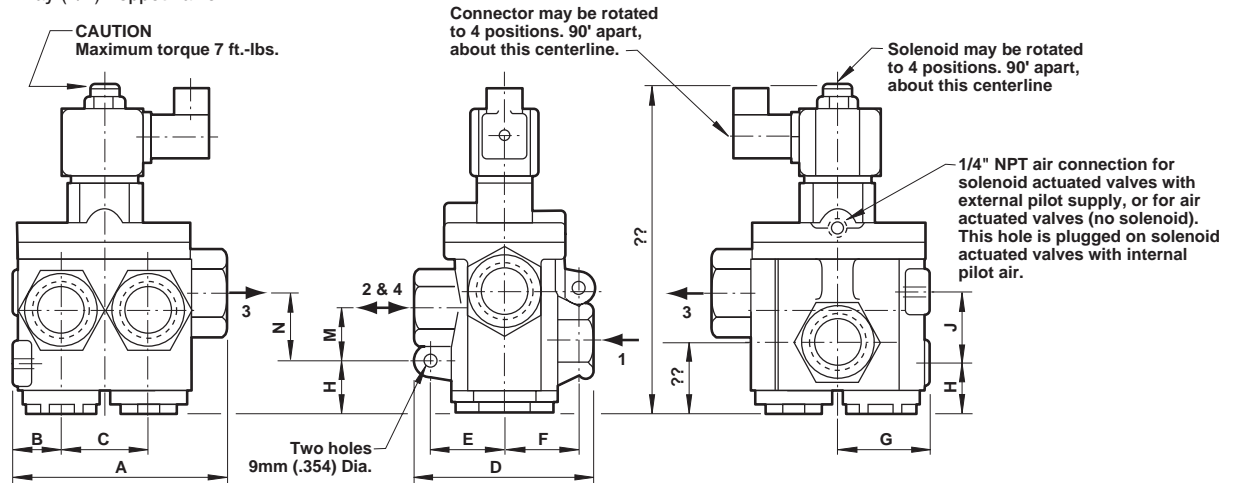
See website for additional options.

Solenoid Number	Power consumption	
	Inrush	Holding
0801 (AC)	50 VA	27 VA
0801 (AC)	16W	16W
3827 (AC)	15 VA	15 VA
3826 (DC)	13W	13W

# Herion 4 way (4/2) Poppet Valves

Solenoid or air actuated

4 way (4/2) Poppet valve



Size NPT	A	B	C	D	E	F	G	H	J	K	L (sol)	L (air)	M	N
1/2	121 (4.76)	27.5 (1.08)	51 (2.01)	96 (3.78)	38.5 (1.52)	38.5 (1.52)	53 (2.09)	35 (1.38)	30.7 (1.21)	40.5 (1.59)	188 (7.40)	115 (4.53)	25.1 (.9)	31.5 (1.24)
3/4, 1	132 (5.20)	29 (1.14)	54 (2.13)	108 (4.25)	45 (1.77)	45 (1.77)	56 (2.20)	31.5 (1.24)	43 (1.69)	43.5 (1.71)	198 (7.79)	125 (4.92)	32 (1.26)	42 (1.65)

Dimensions in mm (in)