

2-Way Hot Water and Steam

Direct Acting & Pilot Operated
Valves 1/4" - 1 1/2" NPT



General Description

2-Way Hot Water and Steam valves are specifically designed to withstand harsh application conditions. Many designs include integral stainless steel main and pilot orifices.

Installation

Valves should be mounted vertical and upright.

Applications

- Industrial laundry machines
- Industrial dish washing machines
- Institutional cooking and food warming equipment
- Steam tables, steam cookers/kettles
- Sterilizers
- Dry cleaning equipment and steam irons
- Hospital equipment
- Steam presses
- Steam baths
- Autoclaves



Technical Specifications

Standard Materials of Construction	Please refer to page D33
Compatible Fluids	Ideal for the control of hot water and steam in a variety of applications.
Standard Voltages	AC – 24/60 120/60–110/50 240/60–220/50 DC – 12, 24 & 120 For other voltages – consult factory
Coil Classification	Class F Standard Class H Standard for media temperatures over 297°F ¹
Agency Approvals	Standard valves with NEMA 4X or explosion psolenoid enclosures are UL Listed and CSA Certified. For additional details, consult factory.
Maximum Ambient Temperature	150°F

1. Magnalatch coils are not available on steam valves.

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

2-Way Hot Water and Steam - Normally Closed - Brass

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
AC TECHNICAL SPECIFICATIONS											
1/4	13/64	0.76	0	100	-	10	210	EPDM	7121KBN2SE00	7	D21
1/4	13/64	0.76	0	-	40	10	285	EPDM	7121KBN2SES0	7	D21
1/4	7/16	2.00	3	150	-	10	210	EPDM	7321KBN2RE00	7	D22
1/4	7/16	2.00	3	-	45	10	293	EPDM	7321KBN2RES0	7	D22
3/8	7/16	2.50	3	150	-	10	210	EPDM	7321KBN3SE00	7	D22
3/8	5/8	3.00	0	150	50	11	300	EPDM	06FS3C2340ACF	4	D10
3/8	5/8	3.00	5	150	-	10	210	EPDM	73218BN3TE00	7	D20
3/8	5/8	3.00	0	100	-	10	210	EPDM	72218BN3TE00	7	D14
3/8	19/32	4.40	0	150	-	10	210	EPDM	7221GBN3VE00	7	D23
3/8	5/8	3.00	3	-	125	10	353	PTFE	73218BN3TTS0*	7	D20
3/8	1/2	3.00	1	-	125	11	353	PTFE	06FS5C2432ACH*	4	D9
3/8	1/2	3.00	1	-	80	11	320	PTFE	06FS5C2432ACF	4	D9
3/8	5/8	3.00	0	-	50	10	297	EPDM	72218BN3TES0	7	D14
3/8	5/8	3.00	5	-	50	10	297	EPDM	73218BN3TES0	7	D20
3/8	1/2	3.00	1	-	50	11	300	EPDM	06FS5C2332ACF	4	D9
3/8	19/32	4.40	0	-	45	10	293	EPDM	7221GBN3VES0	7	D23
1/2	7/16	3.00	3	150	-	10	210	EPDM	7321KBN4SE00	7	D22
1/2	5/8	4.00	5	150	-	10	210	EPDM	73218BN4UE00	7	D20
1/2	5/8	4.00	0	100	-	10	210	EPDM	72218BN4UE00	7	D14
1/2	19/32	4.40	0	150	-	10	210	EPDM	7221GBN4VE00	7	D23
1/2	5/8	4.00	0	150	50	11	300	EPDM	08FS3C2340ACF	4	D10
1/2	1/2	3.60	1	-	125	11	353	PTFE	08FS5C2432ACH*	4	D9
1/2	1/2	3.60	1	-	80	11	320	PTFE	08FS5C2432ACF	4	D9
1/2	1/2	3.60	1	-	50	11	300	EPDM	08FS5C2332ACF	4	D9
1/2	7/16	3.00	3	-	45	10	293	EPDM	7321KBN4SES0	7	D22
1/2	5/8	4.00	3	-	125	10	353	PTFE	73218BN4UTS0*	7	D20
1/2	5/8	4.00	0	-	50	10	297	EPDM	72218BN4UES0	7	D14
1/2	5/8	4.00	5	-	50	10	297	EPDM	73218BN4UES0	7	D20
1/2	19/32	4.40	0	-	45	10	293	EPDM	7221GBN4VES0	7	D23

* High pressure steam valves require Class 'H' coils only from referenced coil chart.

** Models xxS5xx have an integral stainless steel main orifice seat.

Models 72218xxx & 7221Gxxx are direct lift and will open at zero pressure differential but not at full flow.

*** Valves with EPDM (Ethylene Propylene) elastomers are limited to pressure range shown (45 or 50 psi) AND temperature rating shown (293-300° F). Do not use on higher pressure steam with pressure reducing valve; this may result in superheated steam.

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

2-Way Hot Water and Steam - Normally Closed - Brass (Continued)

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
AC TECHNICAL SPECIFICATIONS											
3/4	3/4	5.00	5	150	-	10	210	EPDM	73218BN5VE00	7	D20
3/4	3/4	5.00	0	100	-	10	210	EPDM	72218BN5VE00	7	D14
3/4	19/32	5.50	0	150	-	10	210	EPDM	7221GBN51E00	7	D23
3/4	3/4	5.00	0	150	50	11	300	EPDM	12FS3C2348ACF	4	D11
3/4	5/8	4.50	3	-	125	10	353	PTFE	73218BN5VTS0*	7	D20
3/4	3/4	5.00	0	-	50	10	297	EPDM	72218BN5VES0	7	D14
3/4	3/4	5.00	5	-	50	10	297	EPDM	73218BN5VES0	7	D20
3/4	19/32	5.50	0	-	45	10	293	EPDM	7221GBN51ES0	7	D23
3/4	3/4	7.40	1	-	125	11	353	PTFE	12FS5C2448ACH*	4	D25
3/4	3/4	7.40	1	-	80	11	320	PTFE	12FS5C2448ACF	4	D25
3/4	3/4	7.40	1	-	50	11	300	EPDM	12FS5C2348ACF	4	D25
1	19/32	5.50	0	150	-	10	210	EPDM	7221GBN61E00	7	D23
1	1 1/16	13.50	5	125	-	10	210	EPDM	73218BN64E00	7	D16
1	1	11.70	0	150	-	10	210	EPDM	7221GBN64E00	7	D23
1	1	12.20	1	150	50	11	300	EPDM	16FS5C2364ACF	4	D12
1	19/32	5.50	0	-	45	10	293	EPDM	7221GBN61ES0	7	D23
1	1	11.70	0	-	45	10	293	EPDM	7221GBN64ES0	7	D23
1	1	12.20	1	-	125	11	353	PTFE	16FS5C2464ACH*	4	D12
1	1	12.20	1	-	80	11	320	PTFE	16FS5C2464ACF	4	D12
1	1 1/16	13.50	5	-	125	10	353	PTFE	73218BN64TS0*	7	D17
1	1 1/16	13.50	5	-	50	10	297	EPDM	73218BN64ES0	7	D16
1 1/4	1 1/8	15.00	5	125	-	10	210	EPDM	73218BN75E00	7	D16
1 1/4	1 1/8	15.00	5	150	50	6	300	EPDM	20FS4C2372AAF	1	D13
1 1/4	1 1/8	15.00	5	-	50	10	297	EPDM	73218BN75ES0	7	D16
1 1/4	1 1/8	16.00	5	-	125	10	353	PTFE	73218BN75TS0*	7	D17
1 1/2	1 1/4	22.50	5	125	-	10	210	EPDM	73218BN87E00	7	D19
1 1/2	1 1/2	22.50	5	150	50	6	300	EPDM	24FS4C2380AAF	1	D13
1 1/2	1 1/4	22.50	5	-	50	10	297	EPDM	73218BN87ES0	7	D19
1 1/2	1 1/4	22.50	5	-	125	10	353	PTFE	73218BN87TS0*	7	D19

* High pressure steam valves require Class 'H' coils only from referenced coil chart.

** Models xxS5xx have an integral stainless steel main orifice seat.

Models 72218xxx & 7221Gxxx are direct lift and will open at zero pressure differential but not at full flow.

*** Valves with EPDM (Ethylene Propylene) elastomers are limited to pressure range shown (45 or 50 psi) **AND** temperature rating shown (293-300° F). Do not use on higher pressure steam with pressure reducing valve; this may result in superheated steam.

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

2-Way Hot Water and Steam - Normally Closed - Brass (Continued)

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
DC TECHNICAL SPECIFICATIONS											
1/4	13/64	0.76	0	40	-	10	210	EPDM	7121KBN2SE00	7	D21
1/4	13/64	0.76	0	100	-	22	210	EPDM	7121KBN2SE00	8	D21
1/4	7/16	2.00	3	150	-	22	210	EPDM	7321KBN2RE00	8	D22
1/4	7/16	2.00	3	60	-	10	210	EPDM	7321KBN2RE00	7	D22
1/4	13/64	0.76	0	-	40	22	285	EPDM	7121KBN2SES0	8	D21
1/4	7/16	2.00	3	-	45	22	293	EPDM	7321KBN2RES0	8	D22
3/8	7/16	2.50	3	150	-	22	210	EPDM	7321KBN3SE00	8	D22
3/8	7/16	2.50	3	60	-	10	210	EPDM	7321KBN3SE00	7	D22
3/8	5/8	3.00	0	40	-	22	210	EPDM	72218BN3TE00	8	D14
3/8	5/8	3.00	0	100	-	11.5	150	EPDM	06F22C2340A3F	6	D10
3/8	5/8	3.00	5	150	-	10	210	EPDM	73218BN3TE00	7	D20
3/8	5/8	3.00	5	40	-	11.5	150	EPDM	06F23C2340A3F	6	D10
3/8	19/32	4.40	0	100	-	22	210	EPDM	7221GBN3VE00	8	D23
3/8	19/32	4.40	0	-	45	22	293	EPDM	7221GBN3VES0	8	D23
1/2	7/16	3.00	3	150	-	22	210	EPDM	7321KBN4SE00	8	D22
1/2	7/16	3.00	3	60	-	10	210	EPDM	7321KBN4SE00	7	D22
1/2	5/8	4.00	5	150	-	10	210	EPDM	73218BN4UE00	7	D20
1/2	5/8	4.00	0	100	-	11.5	150	EPDM	08F22C2340A3F	6	D10
1/2	5/8	4.00	5	40	-	11.5	150	EPDM	08F23C2340A3F	6	D10
1/2	5/8	4.00	0	40	-	22	210	EPDM	72218BN4UE00	8	D14
1/2	19/32	4.40	0	100	-	22	210	EPDM	7221GBN4VE00	8	D23
1/2	7/16	3.00	3	-	45	22	293	EPDM	7321KBN4SES0	8	D22
1/2	19/32	4.40	0	-	45	22	293	EPDM	7221GBN4VES0	8	D23
3/4	3/4	5.00	5	150	-	10	210	EPDM	73218BN5VE00	7	D20
3/4	3/4	5.00	0	100	-	11.5	150	EPDM	12F22C2348A3F	6	D11
3/4	3/4	5.00	5	40	-	11.5	150	EPDM	12F23C2348A3F	6	D11
3/4	3/4	5.00	0	40	-	22	210	EPDM	72218BN5VE00	8	D14
3/4	19/32	5.50	0	100	-	22	210	EPDM	7221GBN51E00	8	D23
3/4	19/32	5.50	0	-	45	22	293	EPDM	7221GBN51ES0	8	D23

* High pressure steam valves require Class 'H' coils only from referenced coil chart.

** Models xxS5xx have an integral stainless steel main orifice seat.

Models 72218xxx & 7221Gxxx are direct lift and will open at zero pressure differential but not at full flow.

*** Valves with EPDM (Ethylene Propylene) elastomers are limited to pressure range shown (45 or 50 psi) **AND** temperature rating shown (293-300° F). Do not use on higher pressure steam with pressure reducing valve; this may result in superheated steam.

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

2-Way Hot Water and Steam - Normally Closed - Brass (Continued)

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
DC TECHNICAL SPECIFICATIONS											
1	19/32	5.50	0	100	-	22	210	EPDM	7221GBN61E00	8	D23
1	1	11.70	0	100	-	22	210	EPDM	7221GBN64E00	8	D23
1	1 1/16	13.50	5	125	-	10	210	EPDM	73218BN64E00	7	D16
1	19/32	5.50	0	-	45	22	293	EPDM	7221GBN61ES0	8	D23
1	1	11.70	0	-	45	22	293	EPDM	7221GBN64ES0	8	D23
1 1/4	1 1/8	15.00	5	125	-	10	210	EPDM	73218BN75E00	7	D16
1 1/2	1 1/4	22.50	5	125	-	10	210	EPDM	73218BN87E00	7	D19

2-Way Hot Water and Steam - Normally Closed - Stainless Steel

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
AC TECHNICAL SPECIFICATIONS											
1/4	5/32	0.52	0	-	110	11	344	PTFE	04FS0C3410ACH*	4	D24
3/8	5/8	3.00	0	100	-	10	210	EPDM	72218RN3TE00	7	D14
1/2	5/8	4.00	0	100	-	10	210	EPDM	72218RN4UE00	7	D14
1/2	5/8	4.00	0	-	50	10	297	EPDM	72218RN4UES0	7	D14
3/4	3/4	5.00	0	100	-	10	210	EPDM	72218RN5VE00	7	D14
3/4	3/4	5.00	0	-	50	10	297	EPDM	72218RN5VES0	7	D14
DC TECHNICAL SPECIFICATIONS											
3/8	5/8	3.00	0	40	-	22	210	EPDM	72218RN3TE00	8	D14
1/2	5/8	4.00	0	40	-	22	210	EPDM	72218RN4UE00	8	D14
3/4	3/4	5.00	0	40	-	22	210	EPDM	72218RN5VE00	8	D14

* High pressure steam valves require Class 'H' coils only from referenced coil chart.

** Models xxS5xx have an integral stainless steel main orifice seat.

Models 72218xxx & 7221Gxxx are direct lift and will open at zero pressure differential but not at full flow.

*** Valves with EPDM (Ethylene Propylene) elastomers are limited to pressure range shown (45 or 50 psi) **AND** temperature rating shown (293-300° F). Do not use on higher pressure steam with pressure reducing valve; this may result in superheated steam.

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

2-Way Hot Water and Steam - Normally Open - Brass

Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal***	Pressure Vessel Number**	Reference	
			Min.	Hot Water	Steam					Coil	Valve
AC TECHNICAL SPECIFICATIONS											
3/8	5/8	3.0	0	125	-	22	210	EPDM	72228BN3TE00	8	D18
3/8	5/8	3.0	5	-	125	10	353	PTFE	73228BN3TTS0	7	D15
3/8	5/8	3.0	0	-	50	10	297	EPDM	72228BN3TES0	7	D18
1/2	5/8	4.0	0	125	-	22	210	EPDM	72228BN4UE00	8	D18
1/2	1/2	3.6	1	-	125	11	353	PTFE	08FS5O2432ACH*	4	D9
1/2	5/8	4.0	5	-	125	10	353	PTFE	73228BN4UTS0*	7	D15
1/2	5/8	4.0	0	-	50	10	297	EPDM	72228BN4UES0	7	D18
3/4	3/4	5.0	0	125	-	22	210	EPDM	72228BN5VE00	8	D18
3/4	3/4	5.0	0	-	50	10	297	EPDM	72228BN5VES0	7	D18
3/4	3/4	7.5	5	-	125	10	353	PTFE	73228BN52TS0*	7	D15
3/4	3/4	7.4	1	-	125	11	353	PTFE	12FS5O2448ACH*	4	D25
1	1 1/16	13.5	5	-	125	10	353	PTFE	73228BN64TS0*	7	D17
1 1/4	1 1/8	16.0	5	-	125	10	353	PTFE	73228BN75TS0*	7	D17
1 1/2	1 1/4	22.5	5	-	125	10	353	PTFE	73228BN87TS0*	7	D19
DC TECHNICAL SPECIFICATIONS											
3/8	5/8	3.0	0	125	-	22	210	EPDM	72228BN3TE00	8	D18
1/2	5/8	4.0	0	125	-	22	210	EPDM	72228BN4UE00	8	D18
3/4	3/4	5.0	0	125	-	22	210	EPDM	72228BN5VE00	8	D18

* High pressure steam valves require Class 'H' coils only from referenced coil chart.

** Models xxS5xx have an integral stainless steel main orifice seat.

Models 72218xxx & 7221Gxxx are direct lift and will open at zero pressure differential but not at full flow.

*** Valves with EPDM (Ethylene Propylene) elastomers are limited to pressure range shown (45 or 50 psi) **AND** temperature rating shown (293-300° F). Do not use on higher pressure steam with pressure reducing valve; this may result in superheated steam.

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT 2-Way Hot Water and Steam
2-Way Hot Water and Steam - Normally Open - Stainless Steel

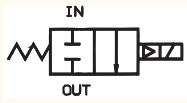
Port Size NPT	Orifice Size in.	Flow Factor Cv	Operating Pressure Differential (MOPD) PSI			Watt	Max. Media Temp. °F	Seal	Pressure Vessel Number*	Reference	
			Min.	Hot Water	Steam					Coil	Valve
AC TECHNICAL SPECIFICATIONS											
3/8	5/8	3.0	0	125	-	22	210	EPDM	72228RN3TE00	8	D18
1/2	5/8	4.0	0	125	-	22	210	EPDM	72228RN4UE00	8	D18
3/4	3/4	5.0	0	125	-	22	210	EPDM	72228RN5VE00	8	D18
DC TECHNICAL SPECIFICATIONS											
3/8	5/8	3.0	0	125	-	22	210	EPDM	72228RN3TE00	8	D18
1/2	5/8	4.0	0	125	-	22	210	EPDM	72228RN4UE00	8	D18
3/4	3/4	5.0	0	125	-	22	210	EPDM	72228RN5VE00	8	D18

*Models 72228xxx is a direct lift and will open at zero pressure differential but not at full flow.

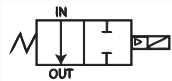
Specialty

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

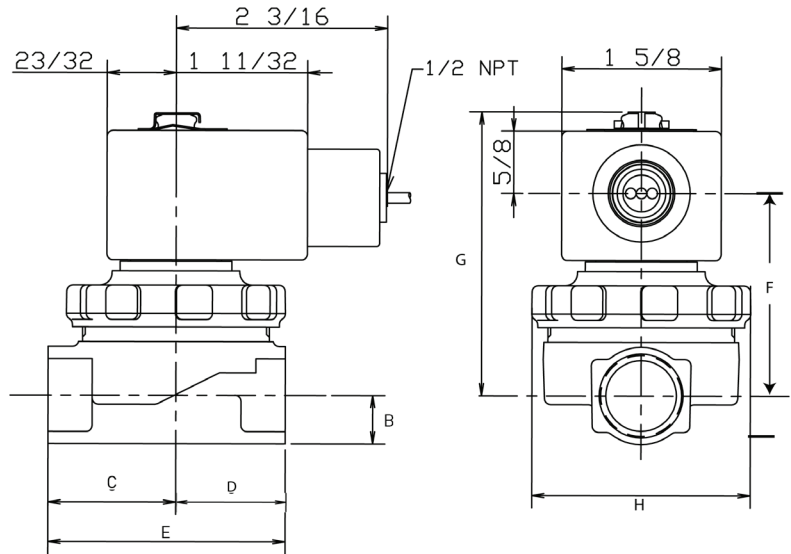
Valve Reference D9



2-Way Normally Closed
06FS5Cxx, 08FS5Cxx

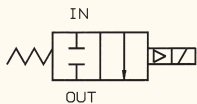


2-Way Normally Open
08FS50xx
Port Identification:
In-In/Out-Out

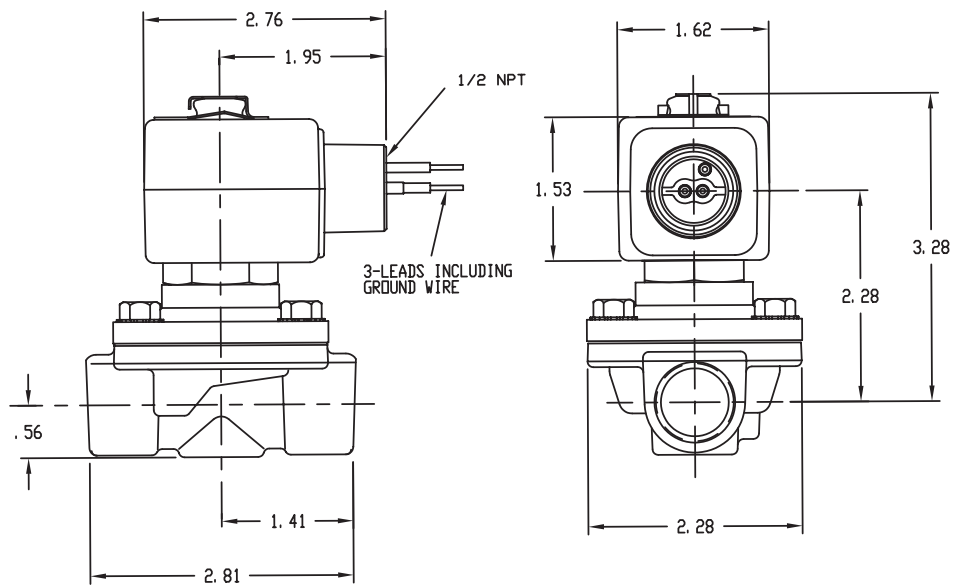


Valve	Dimensions						
	B	C	D	E	F	G	H
06FS5C2xxx 08FS5C2xxx	1/2	1 5/16	1 1/8	2 7/16	2 5/16	2 29/32	2 1/4
08FS502xxx	1/2	1 5/16	1 1/8	2 7/16	2 7/32	2 29/32	2 1/4

Valve Reference D10

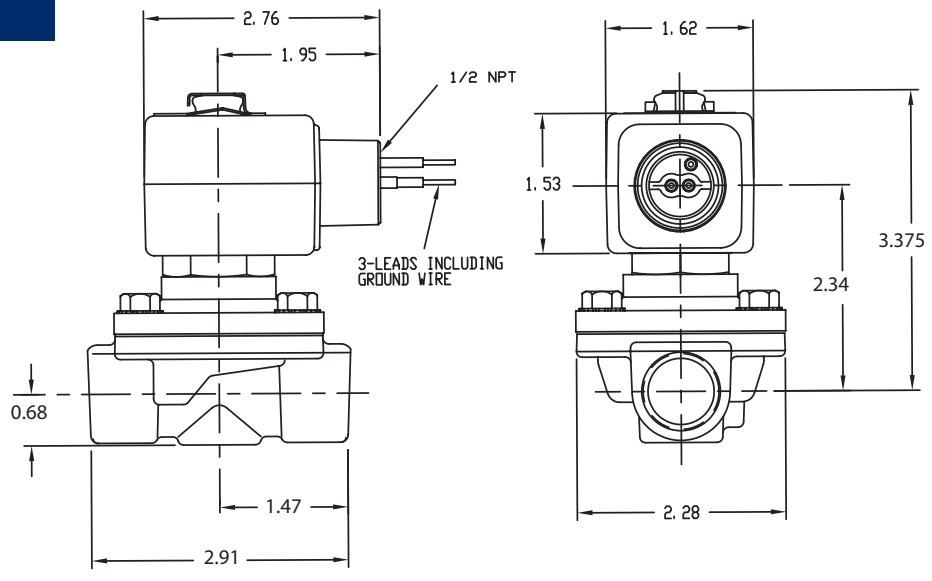
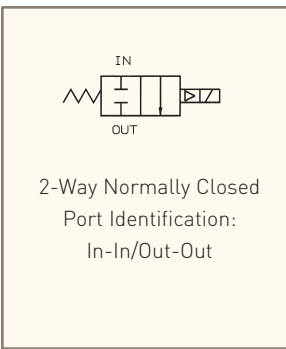


2-Way Normally Closed
Port Identification:
In-In/Out-Out

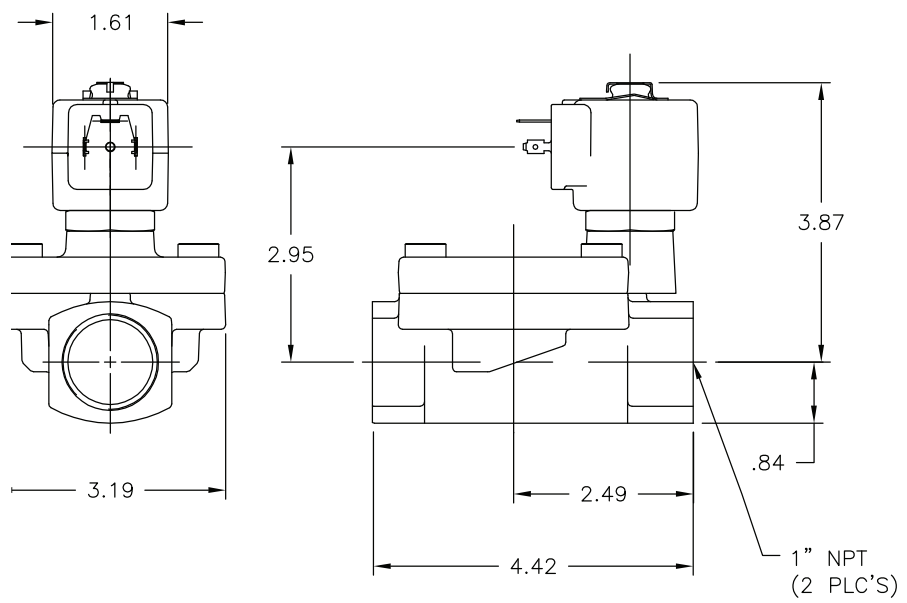
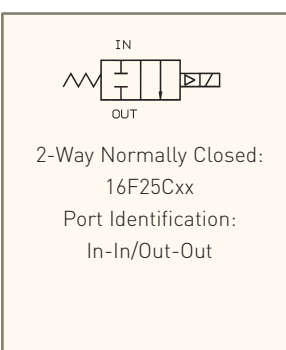


Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

Valve Reference D11



Valve Reference D12

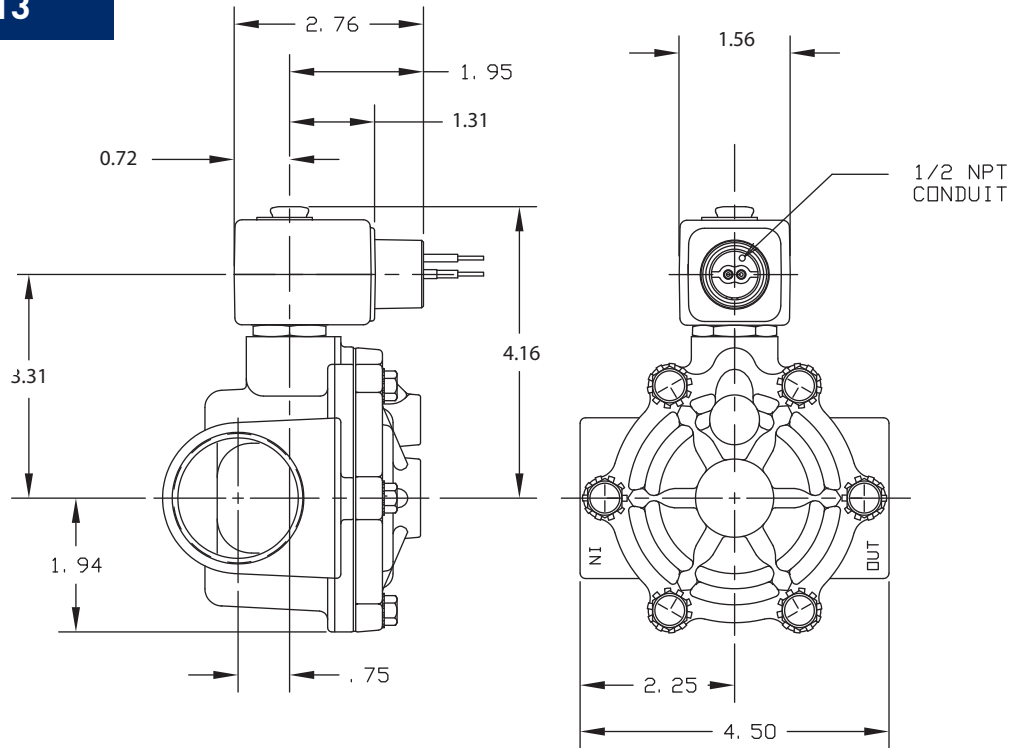
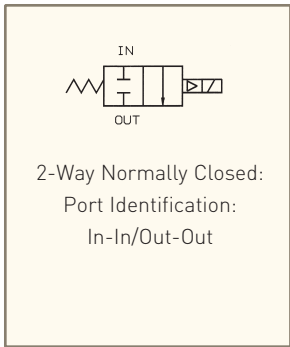


Specialty

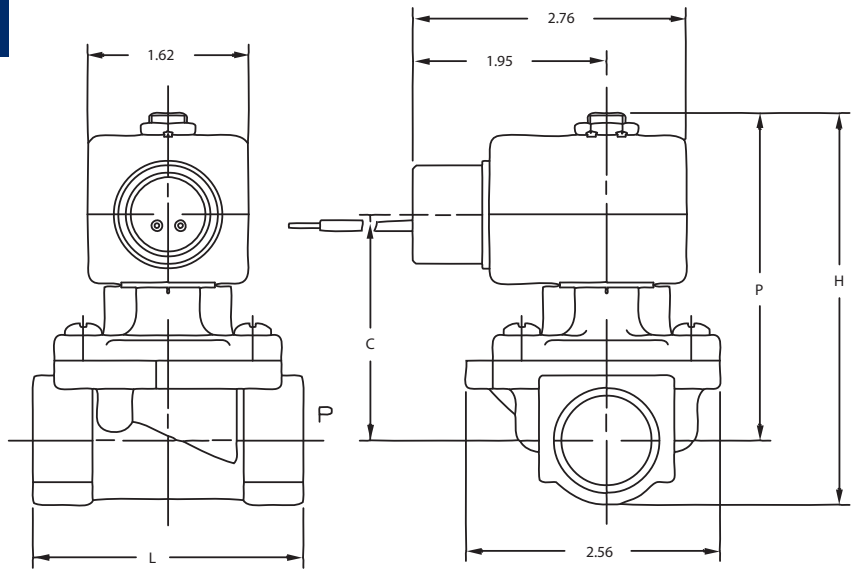
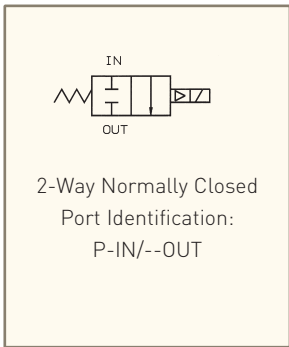


2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

Valve Reference D13



Valve Reference D14

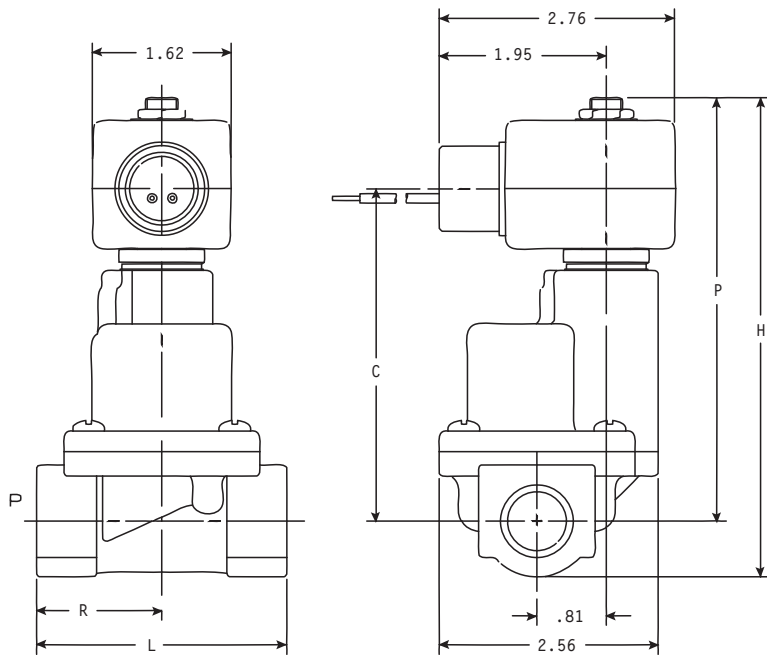


Valve	Dimensions			
	H	P	C	L
72218BN3TXXX 72218BN4UXXX	3.78	3.23	2.21	2.64
72218BN5VXXX 72218RN3TXXX 72218RN4UXXX 72218RN5VXXX	3.99	3.33	2.31	2.72

Valve Reference D15



2-Way Normally Open:
Port Identification:
P-IN/--OUT



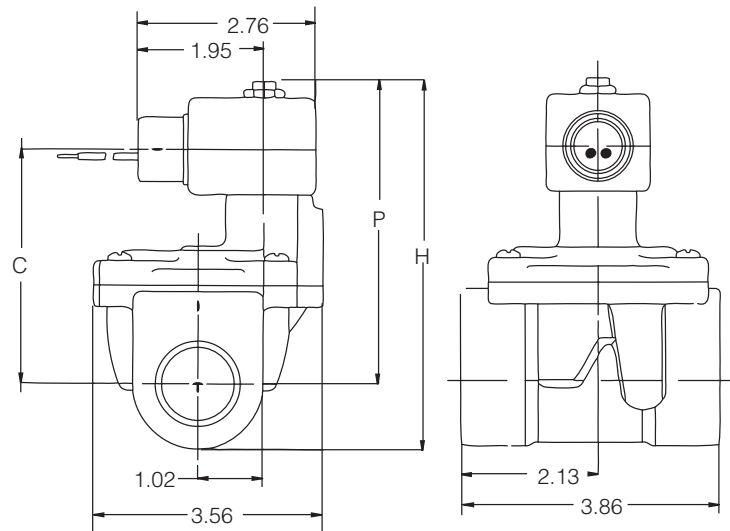
Valve	Dimensions				
	H	P	C	L	R
73228BN3TTS0	5.36	4.81	3.75	2.65	1.39
73228BN4UTS0	5.57	4.91	3.85	2.73	1.43
73228BN52TS0					

Specialty

Valve Reference D16



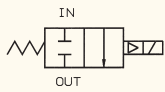
2-Way Normally Closed
Port Identification:
P-IN/--OUT



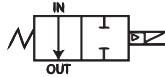
Valve	Dimensions					
	H	P	C	B	D	G
73218BN64Exx	4.56	3.70	2.38	5.58	3.96	2.94
73218BN75Exx	4.85	3.85	2.52	5.58	3.96	2.94

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

Valve Reference D17

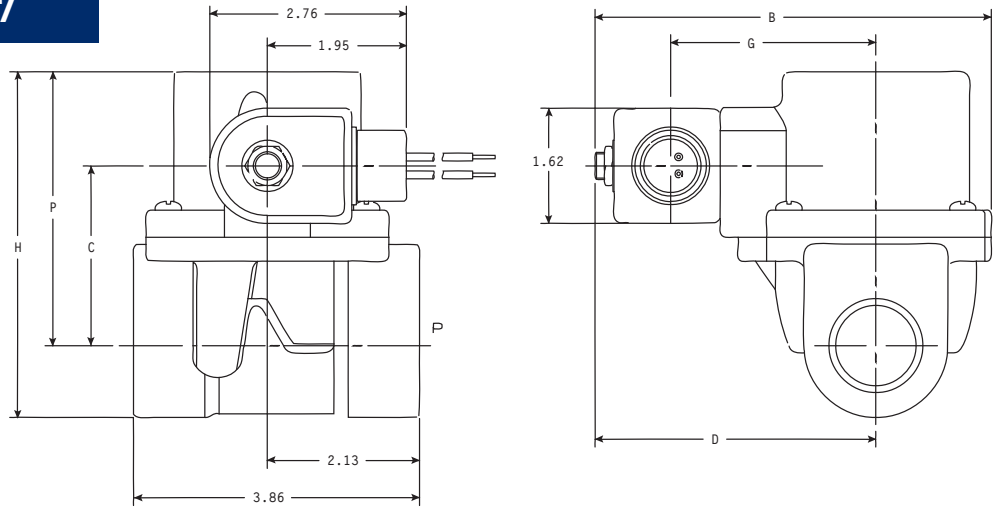


2-Way Normally Closed
73218



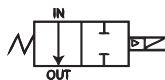
2-Way Normally Open:
73228

Port Identification:
P-IN/--OUT

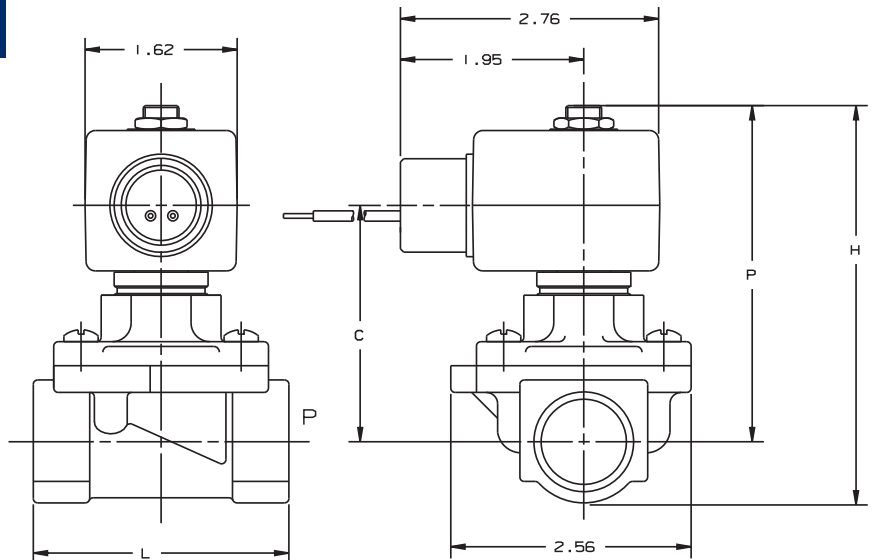


Valve	Dimensions					
	H	P	C	B	D	G
73228BN64TS0 73218BN64TS0	4.56	3.70	2.38	5.82	4.20	3.14
73228BN75TS0 73218BN75TS0	4.85	3.85	2.52	5.82	4.20	3.14

Valve Reference D18



2-Way Normally Open:
Port Identification:
P-IN/--OUT



Valve	Dimensions			
	H	P	C	L
72228BN3TXXX 72228BN4UXXX 72228RN3TXXX 72228RN4UXXX	4.04	3.49	2.43	2.64
72228BN5VXXX 72228RN5VXXX	4.24	3.58	2.52	2.72

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

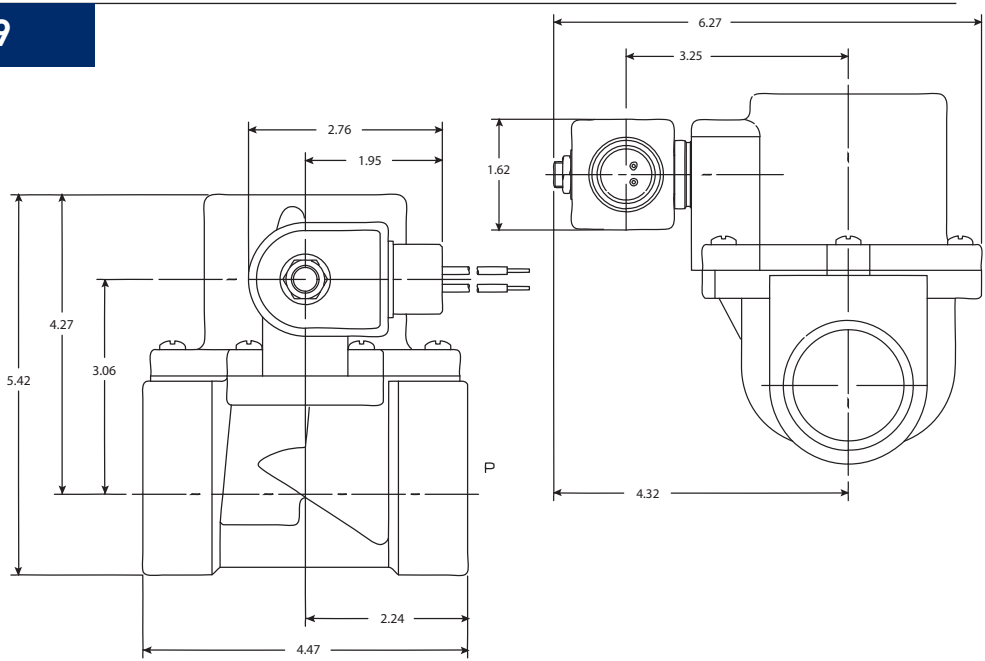
Valve Reference D19



2-Way Normally Closed
 73218BN87xx

2-Way Normally Open:
 73228BN87xx

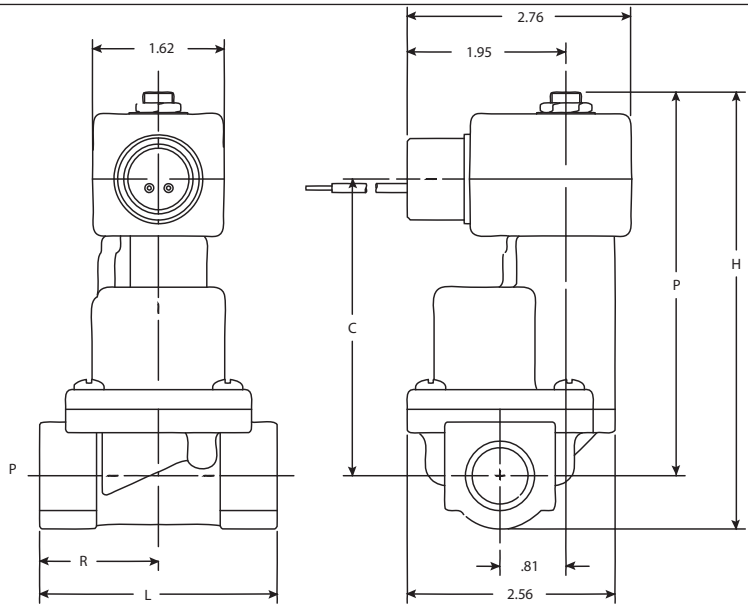
Port Identification:
 P-IN/--OUT



Valve Reference D20



2-Way Normally Closed
 Port Identification:
 P-IN/--OUT

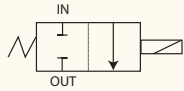


Valve	Dimensions				
	H	P	C	L	E
73218BN3TXXX 73218BN4UXXX	4.38	3.84	2.81	2.64	1.39
73218BN5VXXX	4.59	3.94	2.91	2.72	1.43

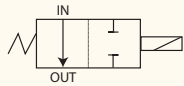
Specialty

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

Valve Reference D21

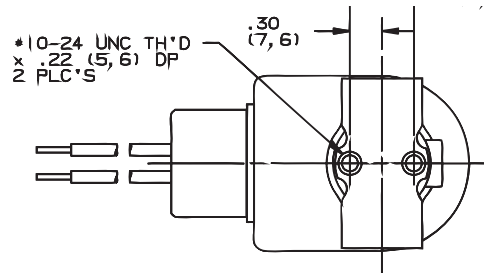
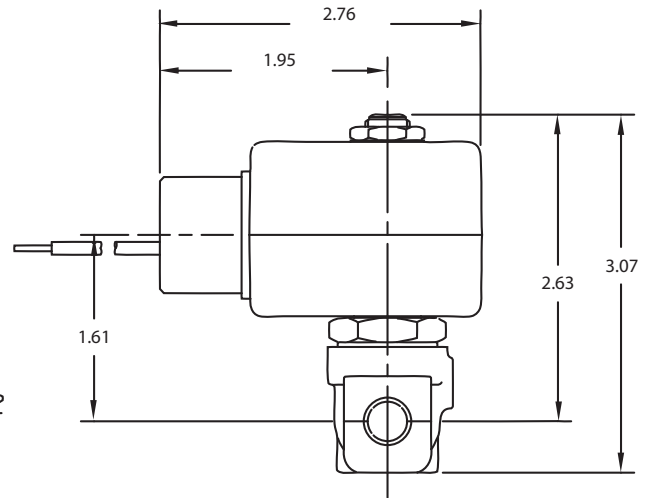
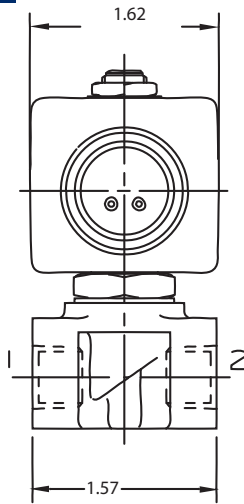


2-Way Normally Closed
7121KBNxx

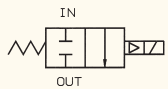


2-Way Normally Open:
7122KBNxx

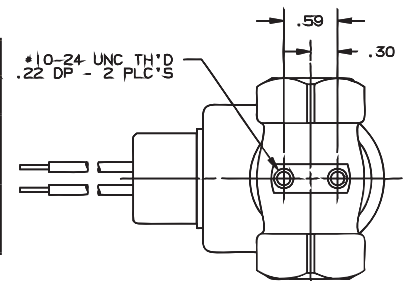
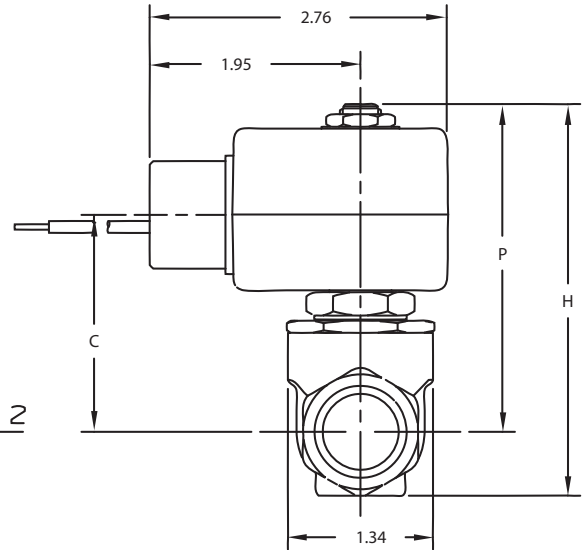
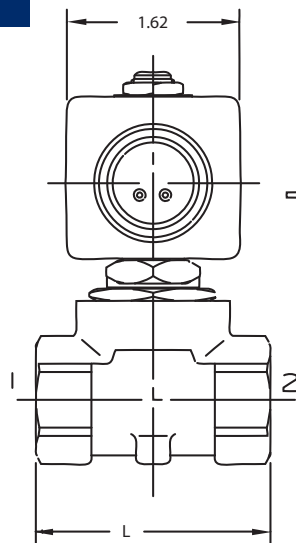
Port Identification:
1-IN/ 2-OUT



Valve Reference D22



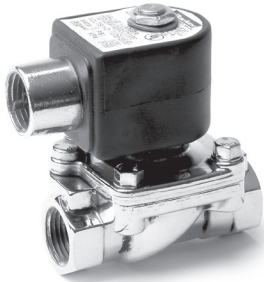
2-Way Normally Closed
Port Identification
Flow arrow on body
indicates flow direction-
ports are not marked.



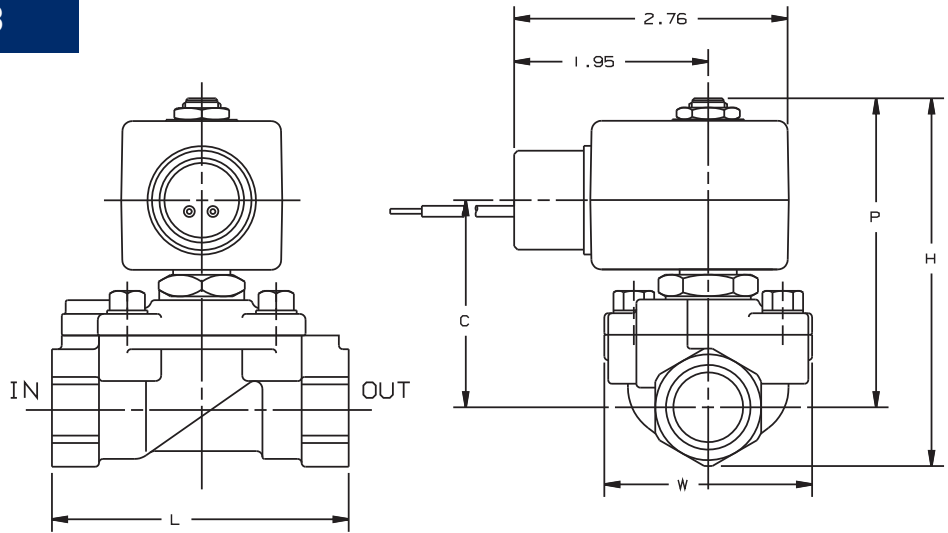
Valve	Dimensions			
	H	P	C	L
7121KBN44V00 7321KBN4SXXX	3.56	2.97	1.96	2.17
7321KBN2RXXX 7321KBN3SXXX	3.56	2.97	1.96	1.97

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

Valve Reference D23



2-Way Normally Closed
Port Identification
Flow arrow on body indicates flow direction.
Ports are not marked.



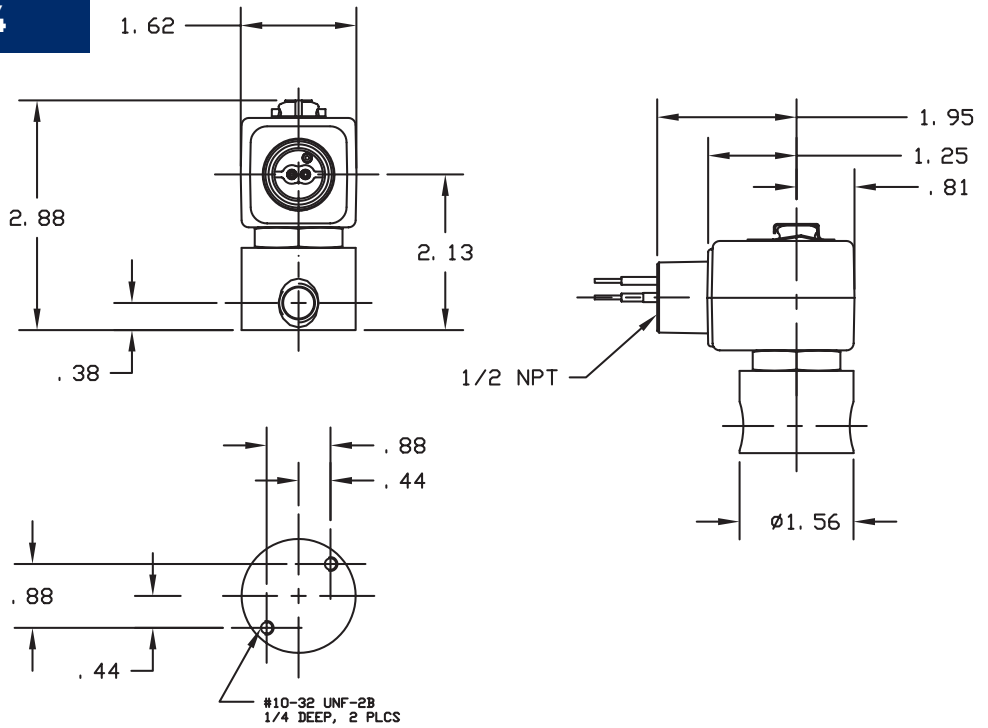
Valve	Dimensions				
	H	P	C	L	W
7221GBN3VXXX 7221GBN4VXXX	3.66	3.07	2.06	2.95	2.09
7221GBN51XXX	3.75	3.07	2.06	3.15	2.09
7221GBN61XXX	4.03	3.15	2.12	3.35	2.09
7221GBN64XXX	4.25	3.35	2.34	3.94	2.75

Specialty

Valve Reference D24

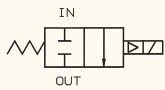
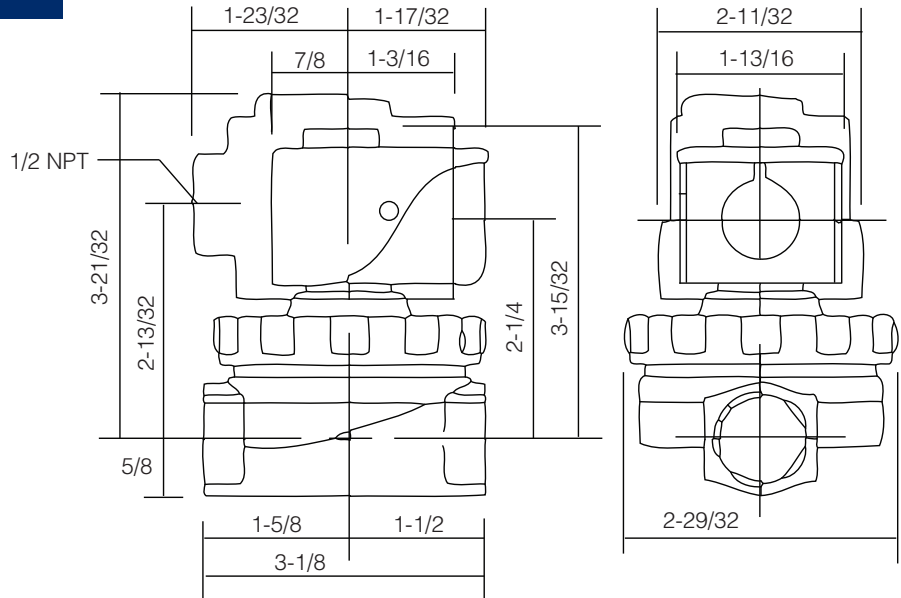


2-Way Normally Closed
Port Identification:
IN-IN/OUT-OUT

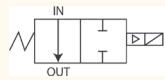


2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

Valve Reference D25



2-Way Normally Closed:
12FS25Cxx



2-Way Normally Open:
12FS250xx
Port Identification:
IN-IN/OUT-OUT

Valve	Dimensions							
	A	B	C	D	E	F	G	H
12FS5C2148ACF	3 5/8	1/2	1 5/16	1 1/8	2 7/16	2 5/16	3 5/16	2 1/4
12FS5O2148ACF	3 21/32	5/8	1 5/8	1 1/2	3 1/8	2 1/4	3 15/32	2 29/32

Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT **2-Way Hot Water and Steam**

Two-Way 210°F Hot Water with EPDM seals - Materials of Construction**

Product*	Watt	Type	Port Size	Body	Sleeve Tube	Sleeve Stop	Sleeve Flange	"Plunger Blank"	Plunger Spring	Shading Ring	Max. Ambient Temp.
06F22C2	11.5	2WNC	3/8	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
06F23C2	11.5	2WNC	3/8	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
08F22C2	11.5	2WNC	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
08F23C2	11.5	2WNC	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
12F22C2	11.5	2WNC	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
12F23C2	11.5	2WNC	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
7121KBN	10	2WNC	1/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
7121KBN	22	2WNC	1/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
72218BN	10	2WNC	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
72218BN	22	2WNC	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
72218RN	10	2WNC	3/8 - 3/4	316SS	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
72218RN	22	2WNC	3/8 - 3/4	316SS	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
7221GBN	10	2WNC	3/8 - 1	Brass	304SS	430FR	430F	430FR	301SS	Copper	150°F
7221GBN	22	2WNC	3/8 - 1	Brass	304SS	430FR	430F	430FR	301SS	Copper	77°F
72228BN	10	2WNO	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
72228BN	22	2WNO	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
73218BN	10	2WNC	3/8 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
73218BN	22	2WNC	3/8 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
7321KBN	10	2WNC	1/4 - 1/2	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
7321KBN	22	2WNC	1/4 - 1/2	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
73228BN	10	2WNO	1/2 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	150°F
73228BN	22	2WNO	1/2 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F

Two-Way High Pressure Steam with PTFE Seals - Materials of Construction**

Product*	Watt	Type	Port Size	Body	Sleeve Tube	Sleeve Stop	Sleeve Flange	"Plunger Blank"	Plunger Spring	Shading Ring	Max. Ambient Temp.
06FS5C2	11	2WNC	3/8	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
08FS5C2	11	2WNC	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
08FS5O2	11	2WNO	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
12FS5C2	11	2WNC	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
12FS5O2	11	2WNO	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
16FS5C2	11	2WNC	1	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
73218BN	10	2WNC	3/8 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
73228BN	10	2WNO	1/2 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F

* Shows first 7 digits of pressure vessel

**Maximum ambient temperature shown is the rating when valve is operating at the maximum fluid temperature as shown in the product sections for each of the valves in this catalog.

2-Way Hot Water and Steam Direct Acting & Pilot Operated Valves 1/4" - 1 1/2" NPT

Two-Way Low Pressure Steam with EPDM Seals - Materials of Construction**

Product*	Watt	Type	Port Size	Body	Sleeve Tube	Sleeve Stop	Sleeve Flange	"Plunger Blank"	Plunger Spring	Shading Ring	Max. Ambient Temp.
06FS3C2	11	2WNC	3/8	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
06FS5C2	11	2WNC	3/8	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
08FS3C2	11	2WNC	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
08FS5C2	11	2WNC	1/2	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
12FS3C2	11	2WNC	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
12FS5C2	11	2WNC	3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
16FS5C2	11	2WNC	1	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	131°F
20FS4C2	6	2WNC	1¼	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
24FS4C2	6	2WNC	1½	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
7121KBN	10	2WNC	1/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	122°F
7121KBN	22	2WNC	1/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
72218BN	10	2WNC	3/8 - 3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	122°F
72218BN	22	2WNC	3/8 - 3/4	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
72218RN	10	2WNC	3/8 - 3/4	316SS	305SS	430FR	12L14 Plated	430FR	302SS	Copper	122°F
72218RN	22	2WNC	3/8 - 3/4	316SS	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
7221GBN	10	2WNC	3/8 - 1	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	122°F
7221GBN	22	2WNC	3/8 - 1	Brass	305SS	430FR	12L14 Plated	430FR	302SS	Copper	77°F
72228BN	10	2WNO	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	122°F
72228BN	22	2WNO	3/8 - 3/4	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
73218BN	10	2WNC	3/8 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	122°F
73218BN	22	2WNC	3/8 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
7321KBN	10	2WNC	1/4 - 1/2	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	122°F
7321KBN	22	2WNC	1/4 - 1/2	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F
73228BN	10	2WNO	1/2 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	122°F
73228BN	22	2WNO	1/2 - 1½	Brass	304SS	430FR	430F	430FR	18-8SS	Copper	77°F

* Shows first 7 digits of pressure vessel

**Maximum ambient temperature shown is the rating when valve is operating at the maximum fluid temperature as shown in the product sections for each of the valves in this catalog.