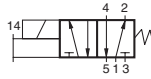
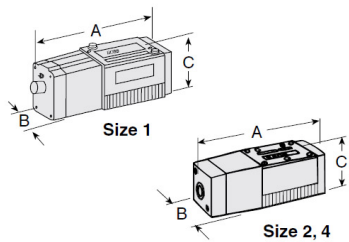


# Spool & Sleeve Valves for ANSI Sub-Bases Series W70

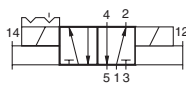
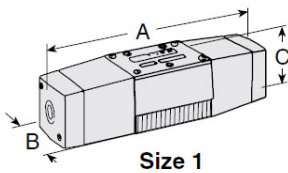
## 5/2 Valves – Single Direct Solenoid, Spring Return



ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7016A2331	0.9	177	50	58	1.6
2.5	G 3/8 - G 1/2	W7016A3331	2.2	209	66	66	1.5
4	G 3/8 - G 3/4	W7016A4331	3.7	254	88	70	1.9

\*Sub-base not included.

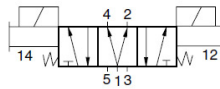
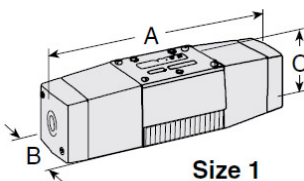
## 5/2 Valves – Double Pressure Controlled, Detented



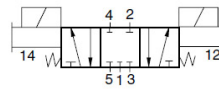
ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7016A2332	0.9	226	50	58	2.0
2.5	G 3/8 - G 1/2	W7016A3332	2.2	273	66	66	2.3
4	G 3/8 - G 3/4	W7016A4332	3.7	335	88	70	2.6

\*Sub-base not included.

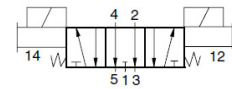
## 5/3 Valves – Double Direct Solenoid



Power Center



Closed Center



Open Center

ANSI Size	Range of Port Sizes	Valve Model Number*			Average $k_v$	Dimensions mm			Weight kg
		Power Center	Closed Center	Open Center		A	B	C	
1	G 1/8 - G 3/8	W7017B2905	W7017B2331	W7017B2332	0.9	226	50	58	2.0
2.5	G 3/8 - G 1/2	—	W7017A3331	W7017A3332	2.2	273	66	66	2.3
4	G 1/2 - G 3/4	—	W7017B4331	W7017A4332	3.7	335	88	70	2.6

\*Sub-base not included.

**STANDARD SPECIFICATIONS** (for valves on this page):

**Solenoids:** AC power; DC for size 1 models only.

**Power Consumption:** Models G 1/4 - G 3/8: 140 VA inrush; 30 VA holding on 50 or 60 Hz; 20 W nominal on DC. All other models: 380 VA inrush; 58 VA holding on 50 or 60 Hz.

**Indicator Light:** Available

**Ambient Temperature:** 4°C to 50°C.

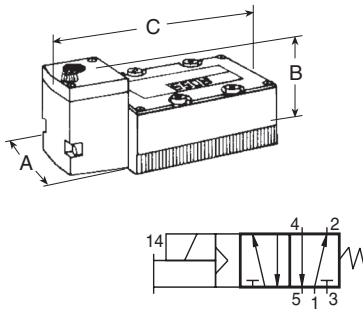
**Media Temperature:** 4°C to 80°C.

**Flow Media:** Filtered air; 5 micron recommended.

**Inlet Pressure:** Vacuum to 10 bar.

# Spool & Sleeve Valves for ANSI Sub-Bases Series W70

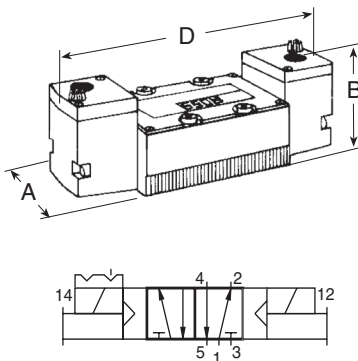
## 5/2 Valves – Single Solenoid Pilot Controlled, Spring Return



ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7076A2331	0.9	163	50	59	1.4
2.5	G 3/8 - G 1/2	W7076A3331	2.2	185	66	91	1.4
4	G 3/8 - G 3/4	W7076A4331	3.7	212	88	101	2.4
10	G 3/4 - G 1-1/4	W7076A6331	8.7	249	99	101	3.3
20	G 1-1/4 - G 1-1/2	W7076A8331	19	381	142	104	6.5

\*Sub-base not included.

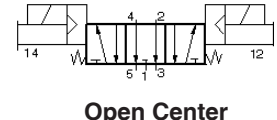
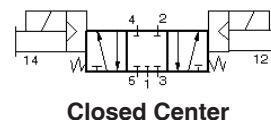
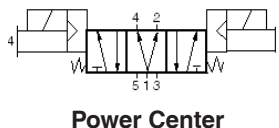
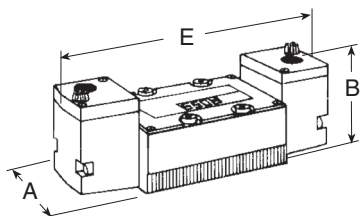
## 5/2 Valves – Double Solenoid Pilot Controlled, Detented



ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7076A2332	0.9	194	50	59	1.8
2.5	G 3/8 - G 1/2	W7076A3332	2.2	224	66	91	1.8
4	G 3/8 - G 3/4	W7076A4332	3.7	249	88	101	2.9
10	G 3/4 - G 1-1/4	W7076A6332	8.7	286	99	101	4.1
20	G 1-1/4 - G 1-1/2	W7076A8332	19	417	142	104	6.8

\*Sub-base not included.

## 5/3 Valves – Double Solenoid Pilot Controlled



ANSI Size	Range of Port Sizes	Valve Model Number*			Average $k_v$	Dimensions mm			Weight kg
		Power Center	Closed Center	Open Center		A	B	C	
1	G 1/4 - G 3/8	W7077B2906	W7077B2331	W7077B2332	0.9	194	50	59	1.8
2.5	G 3/8 - G 1/2	W7077B3904	W7077A3331	W7077A3332	2.2	224	67	91	1.8
4	G 3/8 - G 3/4	W7077B4939	W7077B4331	W7077A4332	3.7	249	88	101	2.9
10	G 3/4 - G 1-1/4	W7077B6920	W7077A6331	W7077A6332	8.7	307	99	101	3.8
20	G 1-1/4 - G 1-1/2	W7077B8901	W7077A8331	W7077A8332	19	417	142	104	6.9

\*Sub-base not included.

**STANDARD SPECIFICATIONS** (for valves on this page):

**Solenoid:** AC or DC power.

**Power Consumption:**

Size 1 models: 10 VA inrush; 9 VA holding on 50 or 60 Hz; 5 watts on DC.

All other sizes: 87 VA inrush; 30 VA holding on 50 or 60 Hz; 14 watts on DC.

**Indicator Light:** Size 4, 10 & 20 models only.

**Ambient Temperature:** 4°C to 50°C.

**Media Temperature:** 4°C to 80°C.

**Flow Media:** Filtered air; 5 micron recommended.

**Inlet Pressure:** Vacuum to 10 bar.

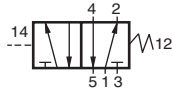
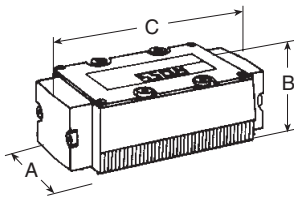
**Pilot Pressure:**

Size 1 & 20 models: At least 2 bar.

Size 2.5, 4 & 10 models: At least 1 bar.

# Spool & Sleeve Valves for ANSI Sub-Bases Series W70

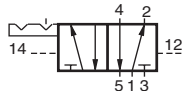
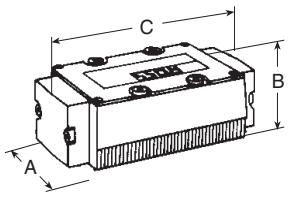
## 5/2 Valves – Single Pressure Controlled, Spring Return



ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7056A2331	0.9	128	50	58	1.1
2.5	G 3/8 - G 1/2	W7056A3331	2.2	145	66	66	0.9
4	G 3/8 - G 3/4	W7056A4331	3.7	174	88	70	1.9
10	G 3/4 - G 1-1/4	W7056A6331	8.7	211	99	68	2.8
20	G 1-1/4 - G 1-1/2	W7056A8331	19	342	142	76	5.9

\*Sub-base not included. See pages 28-30 for sub-bases, manifolds and accessories.

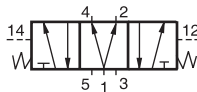
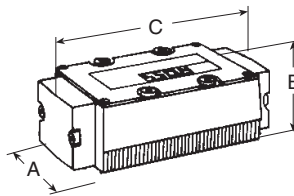
## 5/2 Valves – Double Pressure Controlled, Detented



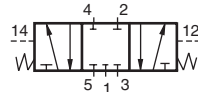
ANSI Size	Range of Port Sizes	Valve Model Number*	Avg. $k_v$	Dimensions mm			Weight kg
				A	B	C	
1	G 1/4 - G 3/8	W7056A2332	0.9	128	50	58	1.1
2.5	G 3/8 - G 1/2	W7056A3332	2.2	145	66	66	0.9
4	G 3/8 - G 3/4	W7056A4332	3.7	174	88	70	1.9
10	G 3/4 - G 1-1/4	W7056A6332	8.7	211	99	68	2.8
20	G 1-1/4 - G 1-1/2	W7056A8332	19	342	142	76	6.2

\*Sub-base not included.

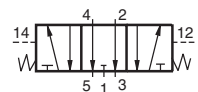
## 5/3 Valves – Double Pressure Controlled



Power Center



Closed Center



Open Center

ANSI Size	Range of Port Sizes	Power Center	Valve Model Number*		Average $k_v$	Dimensions mm			Weight kg
			Closed Center	Open Center		A	B	C	
1	G 1/8 - G 3/8	–	W7057B2331	W7057B2332	0.9	128	50	58	1.1
2.5	G 3/8 - G 1/2	–	W7057A3331	W7057A3332	2.2	145	66	66	0.9
4	G 1/2 - G 3/4	–	W7057B4331	W7057A4332	3.7	174	88	70	2.0
10	G 3/4 - G 1-1/4	W7057A6902	W7057A6331	W7057A6332	8.7	211	99	68	2.8
20	G 1-1/4 - G 1-1/2	–	W7057A8331	W7057A8332	19	342	142	76	6.2

\*Sub-base not included.

### STANDARD SPECIFICATIONS (for valves on this page):

**Ambient Temperature:** 4°C to 80°C.

**Flow Media:** Filtered air; 5 micron recommended.

**Inlet Pressure:** Vacuum to 10 bar.

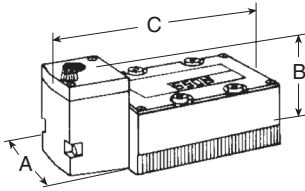
### Pilot Pressure:

*Size 1 & 20 models:* At least 2 bar.

*Size 2.5, 4 & 10:* At least 1 bar.

# Poppet Valves for ANSI Sub-Bases Series W74

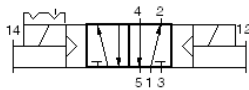
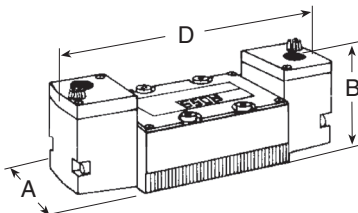
## 5/2 Valves – Single Solenoid Pilot Controlled, Air Return



Size	Range of Port Sizes	Avg. $k_v$	Valve Model Numbers*		Weight kg
			Std. Temp.	High Temp.	
1.0	G 1/4 – G 3/8	0.8	W7476A2331	W7476A2336	1.4
2.5	G 3/8 – G 1/2	1.7	W7476A3331	W7476A3336	1.4
4	G 3/8 – G 3/4	3.7	W7476B4331	W7476B4336	2.3
10	G 3/4 – G 1-1/4	9.6	W7476A6331	W7476A6336	2.8
20	G 1-1/4 – G 1-1/2	19	W7476A8331	W7476A8336	8.3

\*Base not included.

## 5/2 Valves – Double Solenoid Pilot Controlled, Detented



Size	Range of Port Sizes	Avg. $k_v$	Valve Model Numbers*		Weight kg
			Std. Temp.	High Temp.	
1.0	G 1/4 – G 3/8	0.8	W7476A2332	W7476A2337	1.6
2.5	G 3/8 – G 1/2	1.7	W7476A3332	W7476A3337	1.8
4	G 3/8 – G 3/4	3.7	W7476B4332	W7476B4337	2.5
10	G 3/4 – G 1-1/4	9.6	W7476A6332	W7476A6337	4.9
20	G 1-1/4 – G 1-1/2	19	W7476A8332	W7476A8337	8.9

\*Base not included.

### DIMENSIONS mm

Avg. $C_v$	A	B	C	D
0.9	50	59	164	194
2.0	67	91	185	224
4.2	88	101	212	249
11	99	101	249	286
22	142	104	381	417

**STANDARD SPECIFICATIONS:** (for valves on this page):

**Solenoids:** AC or DC power.

**Power Consumption:** Each solenoid.  $C_v = 0.9$  models: 10 VA inrush, 9 VA holding on 50 or 60 Hz; 5 watts on DC.

*All other sizes:* 87 VA inrush, 30 VA holding on 50 or 60 Hz; 14 watts on DC.

**Indicator Light:**  $C_v = 4.2, 11, 22$  models only.

**Ambient Temperature:** 4° to 50°C; extended to 80°C for High Temperature models.

**Media Temperature:** 4° to 80°C; extended to 105°C for High Temperature models.

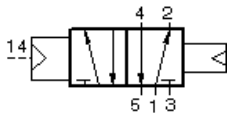
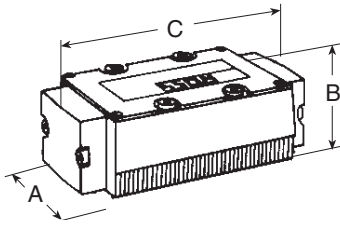
**Flow Media:** Filtered air. 5 micron recommended.

**Inlet Pressure:** 2 to 10 bar.

**Pilot Pressure:** Must be equal to or greater than inlet pressure.

# Poppet Valves for ANSI Sub-Bases Series W74

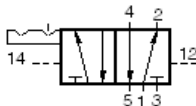
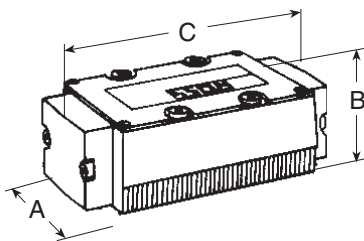
## 5/2 Valves – Single Pressure Controlled, Air Return



Size	Range of Port Sizes	Avg. $k_v$	Valve Model Numbers*		Weight kg
			Std. Temp.	High Temp.	
1.0	G 1/4 – G 3/8	0.8	W7456A2331	W7456A2336	1.1
2.5	G 3/8 – G 1/2	1.9	W7456A3331	W7456A3336	0.9
4	G 3/8 – G 3/4	3.7	W7456B4331	W7456B4336	1.5
10	G 3/4 – G 1-1/4	9.6	W7456A6331	W7456A6336	3.3
20	G 1-1/4 – G 1-1/2	19	W7456A8331	W7456A8336	7.9

\*Base not included.

## 5/2 Valves – Double Pressure Controlled, Detented



Size	Range of Port Sizes	Avg. $k_v$	Valve Model Numbers*		Weight kg
			Std. Temp.	High Temp.	
1.0	G 1/4 – G 3/8	0.8	W7456A2332	W7456A2337	1.1
2.5	G 3/8 – G 1/2	1.9	W7456A3332	W7456A3337	0.9
4	G 3/8 – G 3/4	3.7	W7456B4332	W7456B4337	1.5
10	G 3/4 – G 1-1/4	9.6	W7456A6332	W7456A6337	3.3
20	G 1-1/4 – G 1-1/2	19	W7456A8332	W7456A8337	7.9

\*Base not included.

### DIMENSIONS mm

Avg. $C_v$	A	B	C
0.9	50	58	128
2.0	66	66	145
4.2	88	70	174
11	99	68	211
22	142	76	342

### STANDARD SPECIFICATIONS: (for valves on this page):

**Ambient/Media Temperature:** 4° to 80°C;  
media temperature extended to 105°C for High Temperature models.

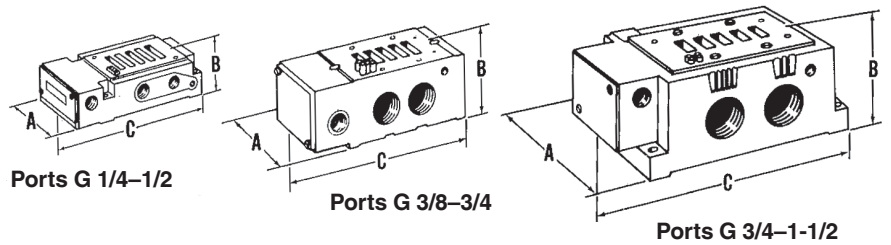
**Flow Media:** Filtered air. 5 micron recommended.

**Inlet Pressure:** 2 to 10 bar.

**Pilot Pressure:** Must be equal to or greater than inlet pressure.

# ANSI-type Sub-Bases

The sub-base numbers shown in the chart below specify pressure ports with threads, conforming to ISO 228/1. Electrical openings have G 1/2 threads. For other types, consult ROSS.



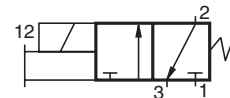
ANSI-Type SUB-BASES

Type	Pipe Size	Average $k_v$	Indicator Lights			Dimensions mm		
			None	One	Two	A	B	C
Side-Ported	G 1/4	0.8–0.9	W500B91	W525K91	W526K91	72	37	157
	G 3/8		W501B91	W527K91	W528K91			
	G 3/8	1.7–2.2	W474K91	W482K91	W484K91	91	41	180
	G 1/2		W475K91	W483K91	W485K91			
	G 3/8		W361B91	–	–			
	G 1/2	3.7	W362B91	–	–	86	67	183
	G 3/4		W363B91	–	–			
	G 3/4		W364B91	–	–			
	G 1	8.7–9.6	W365B91	–	–	130	96	266
	G 1-1/4		W366B91	–	–			
G 1-1/4	W367B91		–	–				
Side-and-Bottom-Ported	G 1-1/2	19	W368B91	–	–	169	94	314
	G 1/4	0.8–0.9	W499B91	W529K91	W530K91	72	37	157
	G 3/8		W476K91	W477K91	W486K91			
	G 3/8	3.7	W369B91	–	–	86	67	183
	G 1/2		W370B91	–	–			
G 3/4	W371B91		–	–				
Bottom-Ported	G 3/4	8.7–9.6	W372B91	–	–	130	96	266
	G 1		W373B91	–	–			
	G 1-1/4		W374B91	–	–			
	G 1-1/4	19	W375B91	–	–	169	94	314
	G 1-1/2		W376B91	–	–			

## 3/2 Miniature Valves for Base Mounting

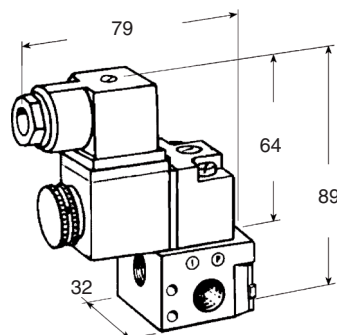
### VALVE MODEL NUMBERS

With locking manual override..... W1413A1408  
 With non-locking manual override ..... W1413A1409



**BASES:** G 1/8 ports.

Sub-Base..... 516B91  
 Manifold..... 535K91



### STANDARD SPECIFICATIONS

**$k_v$  Rating:** 0.9  
**Solenoids:** AC or DC power.  
**Power Consumption:** 8 VA inrush, 6 VA holding on 50 or 60 Hz; 6 watts on DC.  
**Ambient Temperature:** -15° to 50°C.  
**Media Temperature:** -15° to 80°C.  
*For temperatures below 4°C air must be free of water vapor to prevent formation of ice.*  
**Flow Media:** Filtered air. 5 micron recommended.  
**Inlet Pressure:** Vacuum to 10 bar.

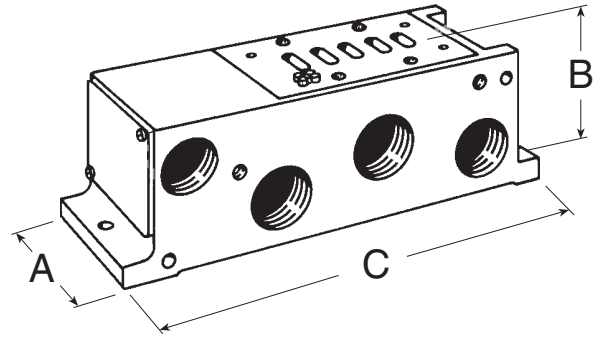
# ANSI-type MANIFOLDS

The numbers of the manifold stations shown in the chart below specify pressure ports with ISO 228/1 threads, and electrical openings with G 1-1/4 threads. For other thread types, consult ROSS.

All necessary hardware and seals for manifold assembly are included with each manifold station.

**Indicator Lights:** As shown in the chart below, the smaller sizes of manifolds are available with indicator lights. These lights are located in the end plate covering the electrical cavity.

**Manifold Note:** The port positions of the solenoid controlled and the pressure controlled manifolds are not the same. For this reason these stations cannot be mixed in the same installation. If both types of valves *must* be used in the same installation, *use only manifold stations for solenoid controlled valves.*



Typical Manifold Station

## ANSI-Type MANIFOLDS

Type	Port Size	Average $k_v$	Indicator Lights			Dimensions mm		
			None	One	Two	A	B	C
For solenoid controlled valves	G 1/4	0.8 - 0.9	W502B91	W531K91	W532K91	57.4	58	201
	G 3/8		W503B91	W533K91	W534K91			
	G 3/8	1.7 - 2.2	W472K91	W478K91	W480K91	71.1	68	216
	G 1/2		W473K91	W479K91	W481K91			
	G 3/8		W377B91	—	—			
	G 1/2	3.7	W378B91	—	—	90	94	240
	G 3/4		W379B91	—	—			
	G 3/4		W380B91	—	—			
	G 1	8.7 - 9.6	W381B91	—	—	108	103	339
G 1-1/4	W382B91		—	—				
For pressure controlled valves	G 1/4	0.8 - 0.9	W359B91	—	—	57.4	58	159
	G 3/8		W360B91	—	—			
	G 3/8	1.7 - 2.2	W468B91	—	—	71.1	68	178
	G 1/2		W469B91	—	—			
	G 3/8		W383B91	—	—			
	G 1/2	3.7	W384B91	—	—	90	94	240
	G 3/4		W385B91	—	—			
	G 3/4		W386B91	—	—			
	G 1	8.7 - 9.6	W387B91	—	—	108	103	339
G 1-1/4	W388B91		—	—				

## ASSEMBLED MANIFOLDS

Valves and manifold stations can be assembled by ROSS to your precise specifications. The assembly is then ready for integration into your system. For detailed information about such assemblies, consult ROSS or your ROSS Distributor.