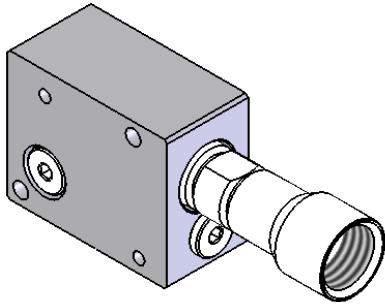
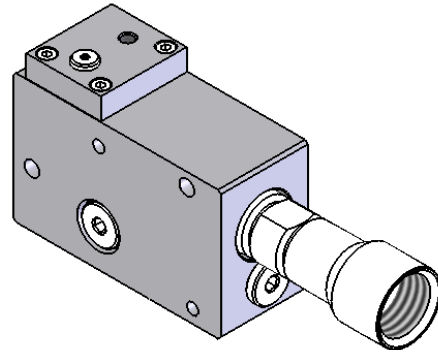


# J PUMPS

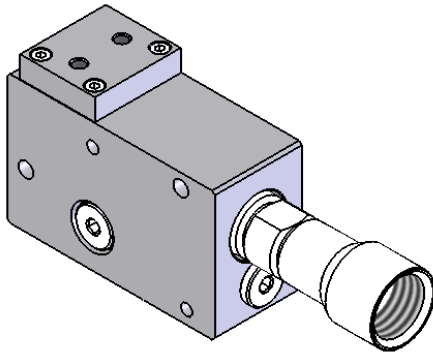
## SECTION 13



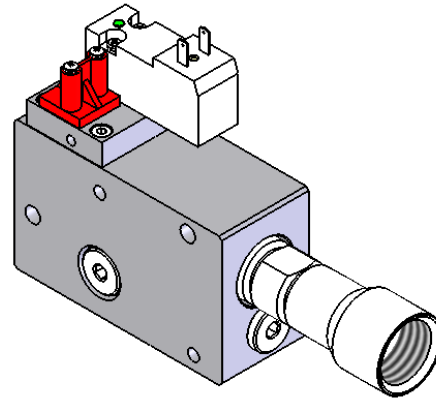
**BASIC**



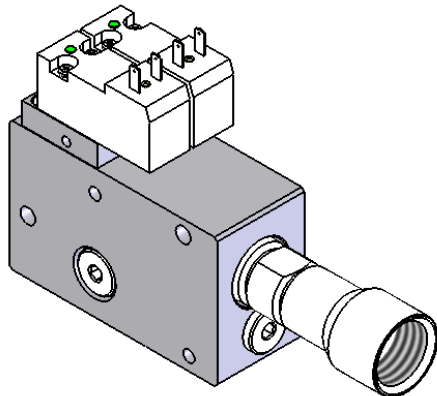
**PS**



**PSB**



**S24D / S110A**

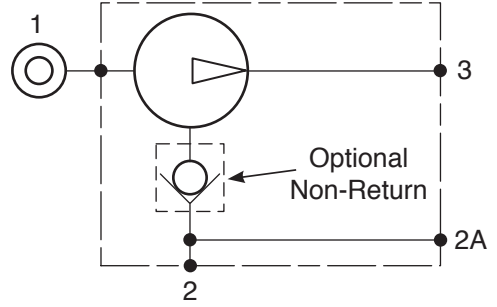


**SB24D / SB110A**

Basic Pumps	13:3 - 13:4
PS: Air Pilot Controlled Air Supply	13:5 - 13:6
PSB: Air Pilot Controlled Air Supply & Blow-Off	13:7 - 13:8
S24D / S110A: Solenoid Controlled Air Supply	13:9 - 13:10
SB24D / S110A: Solenoid Controlled Air Supply & Blow-Off	13:11 - 13:12
Options	13:13
Accessories	13:13
Performance	13:14

# J SERIES PUMPS

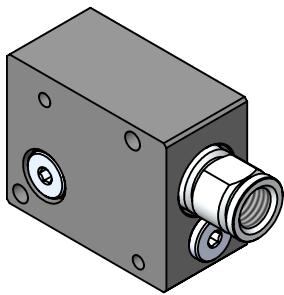
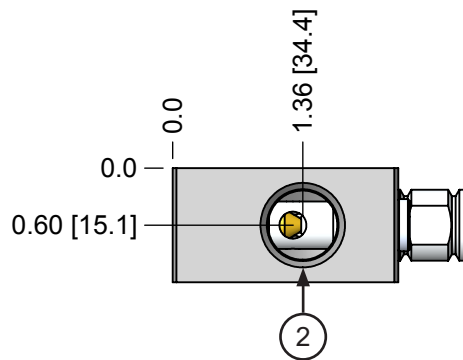
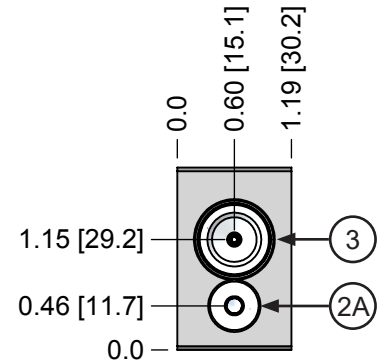
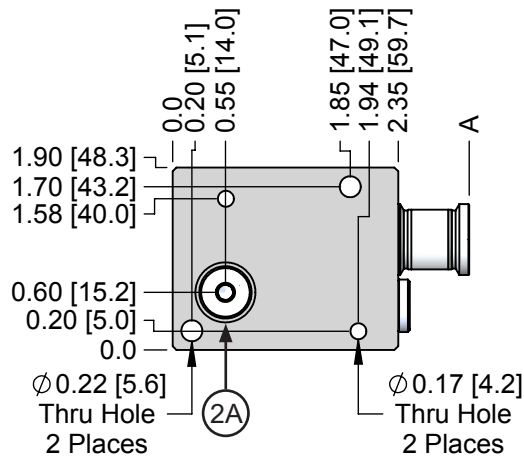
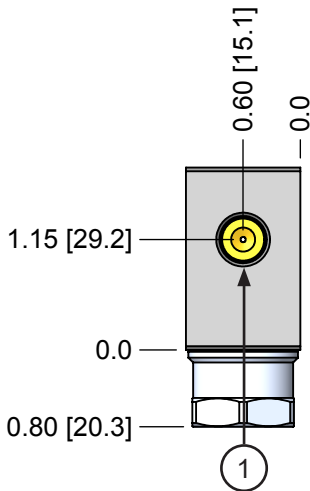
Basic J-series pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. Vacuum on/off control is accomplished via external control valves in the pump air supply. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level.



VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
J 12	H		
12 = 1.2 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
15 = 1.5 mm	G = G Threads	NR = Yes	ST = STA14M

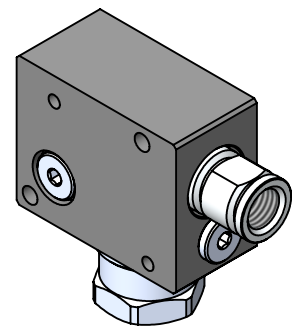
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/4 NPSF	G 1/4 NPSF

VENTURI DIAMETER	A in [mm]
12	3.09 [78.5]
15	3.49 [88.7]



Weight: 0.47 lbs [213.0 g]

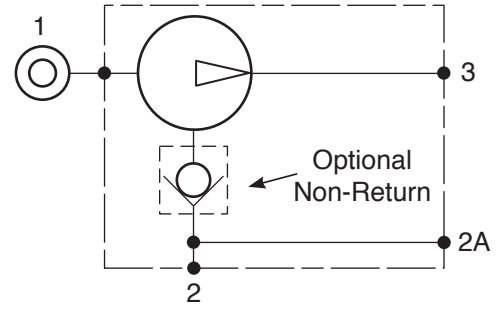
Non-Return Valve Option



Weight: 0.52 lbs [236.0 g]

# J SERIES PUMPS

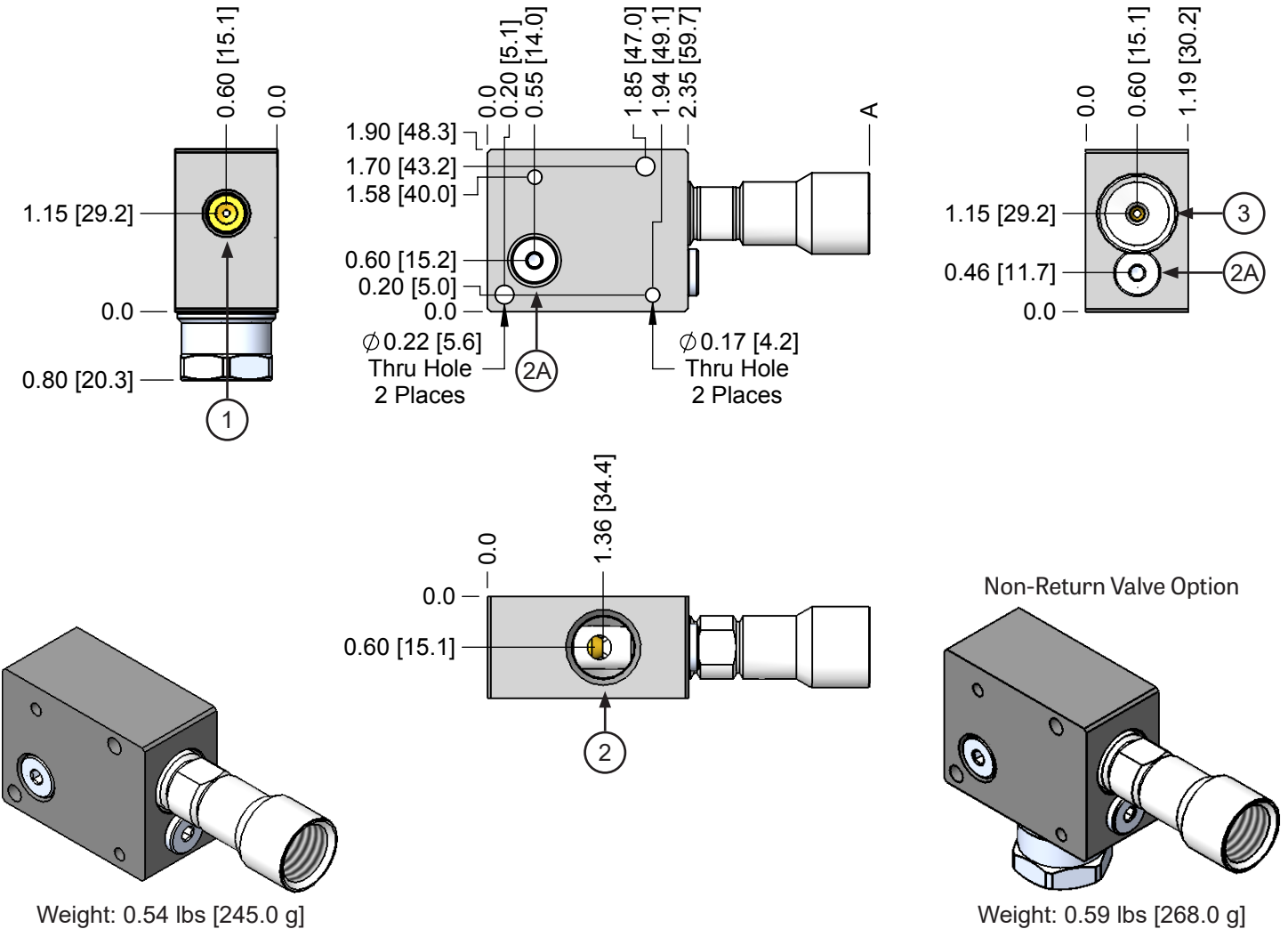
Basic J-series pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. Vacuum on/off control is accomplished via external control valves in the pump air supply. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level.



VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
<b>J 20</b>	<b>H</b>		
20 = 2.0 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
25 = 2.5 mm	G = G Threads	NR = Yes	ST = STC12M
30 = 3.0 mm			

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/2 NPSF	G 1/2 NPSF

VENTURI DIAMETER	A in (mm)
20	4.47 (113.5)
25	4.87 (123.6)
30	5.71 (144.9)

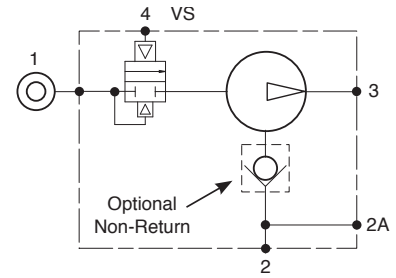


# J SERIES PUMPS

## PS : AIR PILOT CONTROLLED VACUUM SUPPLY

UPDATED 02/27/20

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral pilot-operated valve provides on/off vacuum control. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

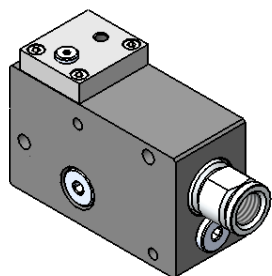
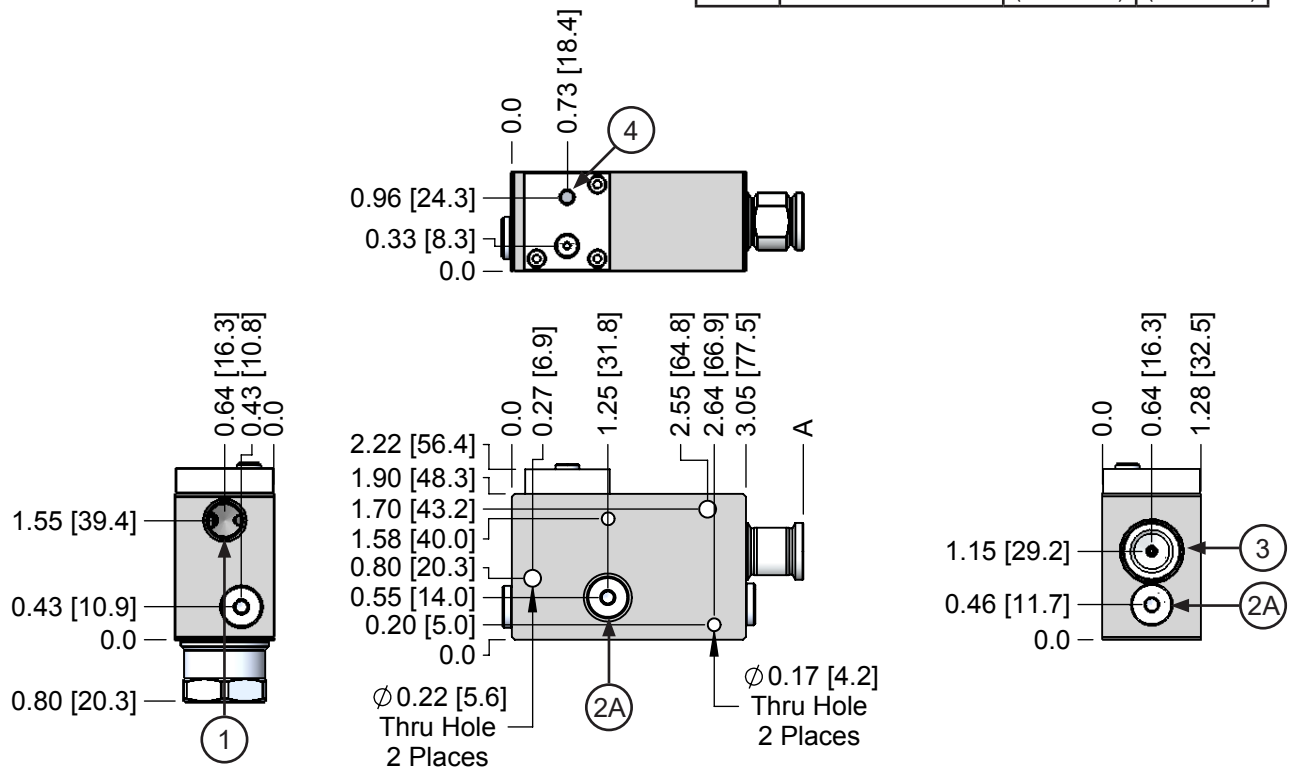


Air-pilot operation simplifies integration into field-bus systems by shifting electrical control to a bank of pneumatic 3-way solenoid valves. Flexing control wires in an automation system are replaced with small diameter air tubing for greater reliability.

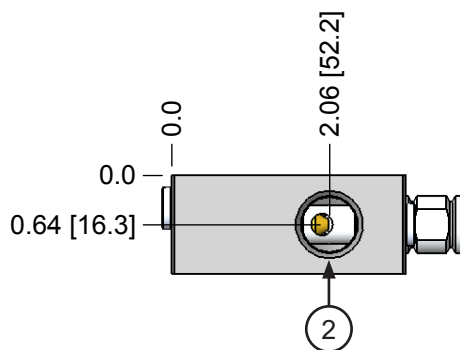
VENTURI DIAMETER	A in (mm)
12	3.09 (78.5)
15	3.49 (88.7)

VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
<b>12</b>			
12 = 1.2 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
15 = 1.5 mm	G = G Threads	NR = Yes	ST = STA14M

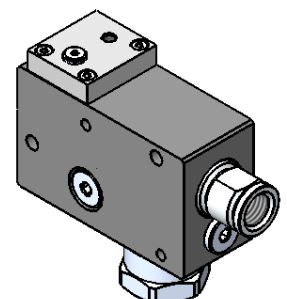
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/4 NPSF	G 1/4 NPSF
4	Pilot Signal - Vacuum	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)



Weight: 0.69 lbs [313.0 g]



Non-Return Valve Option



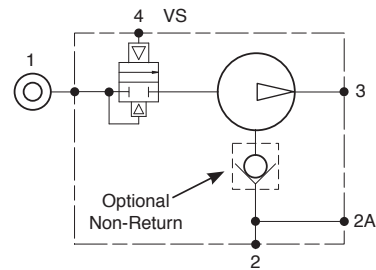
Weight: 0.74 lbs [336.0 g]

# J SERIES PUMPS

## PS : AIR PILOT CONTROLLED VACUUM SUPPLY

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral pilot-operated valve provides on/off vacuum control. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

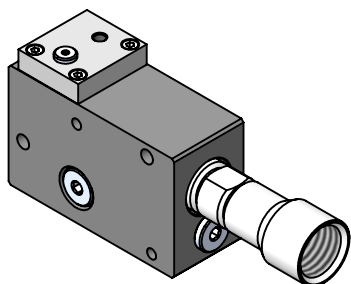
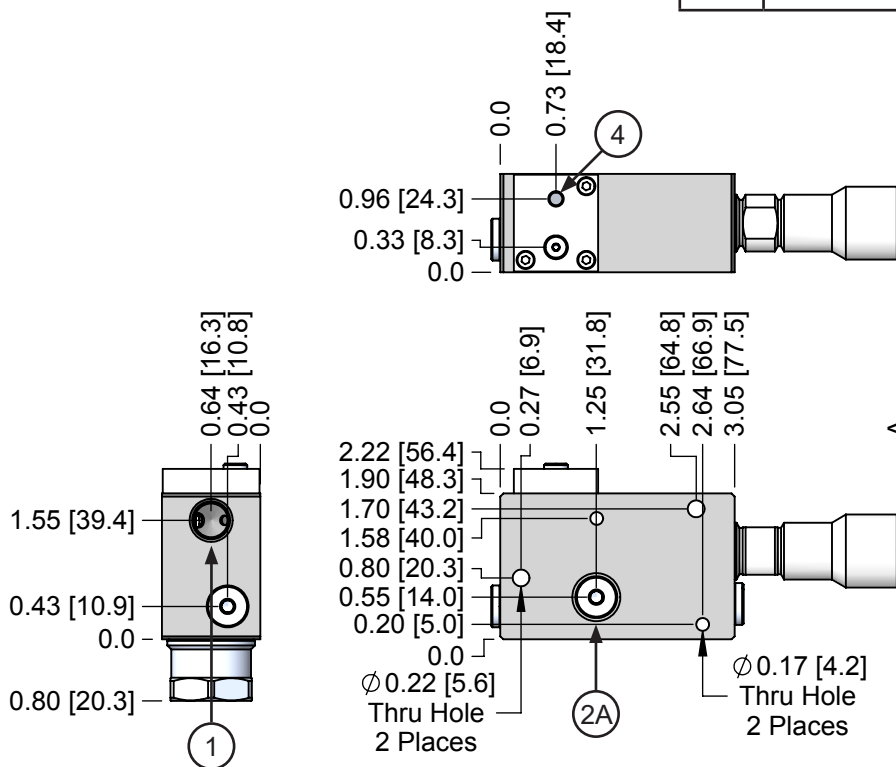
Air-pilot operation simplifies integration into field-bus systems by shifting electrical control to a bank of pneumatic 3-way solenoid valves. Flexing control wires in an automation system are replaced with small diameter air tubing for greater reliability.



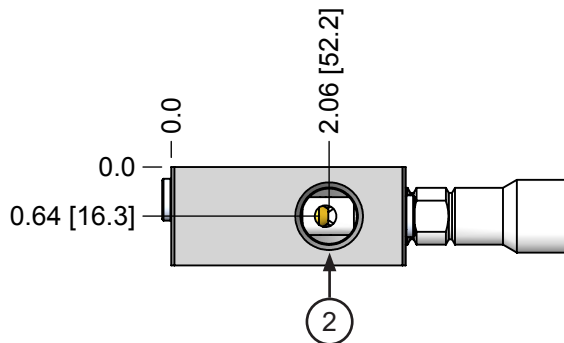
VENTURI DIAMETER	A in (mm)
20	4.47 (113.5)
25	4.87 (123.6)
30	5.71 (144.9)

VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
<b>J 20</b>	<b>H</b>	<b>-PS-</b>	
20 = 2.0 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
25 = 2.5 mm	<b>G</b> = G Threads	<b>NR</b> = Yes	<b>ST</b> = STC12M
30 = 3.0 mm			

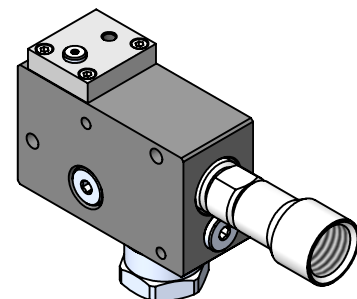
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/2 NPSF	G 1/2 NPSF
4	Pilot Signal - Vacuum	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)



Weight: 0.76 lbs [345.0 g]



Non-Return Valve Option

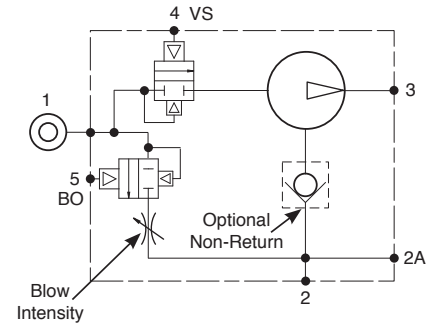


Weight: 0.81 lbs [367.0 g]

# J SERIES PUMPS

## PSB : AIR PILOT CONTROLLED VACUUM SUPPLY & BLOW-OFF

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral pilot-operated valve provides on/off vacuum control. A second integral pilot-operated valve provides quick-release air control, while an integral flow control valve that fine-tunes the blow intensity to suit the application. An optional non-return valve is available for use in sealed non-porous systems. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

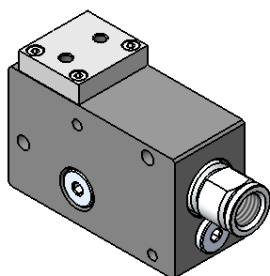
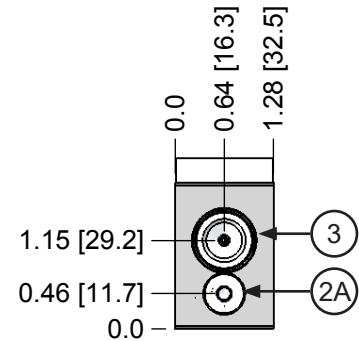
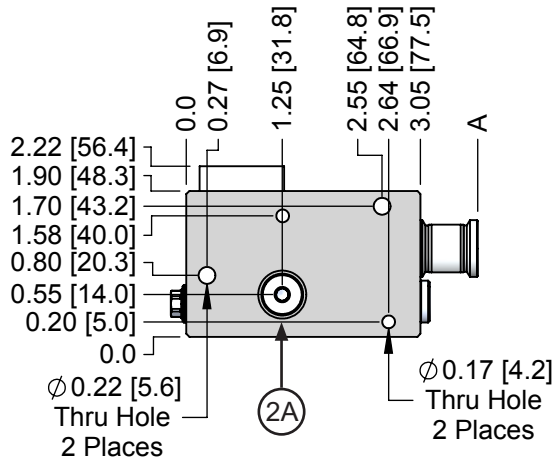
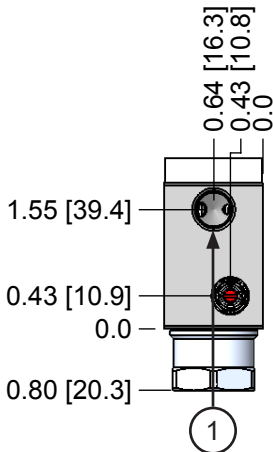
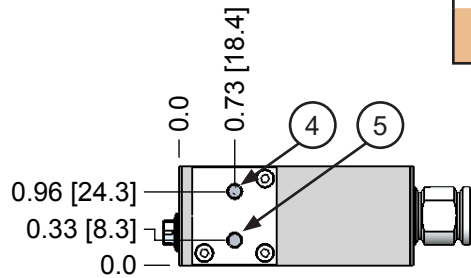


Air-pilot operation simplifies integration into field-bus systems by shifting electrical control to a bank of pneumatic 3-way solenoid valves. Flexing control wires in an automation system are replaced with small diameter air tubing for greater reliability.

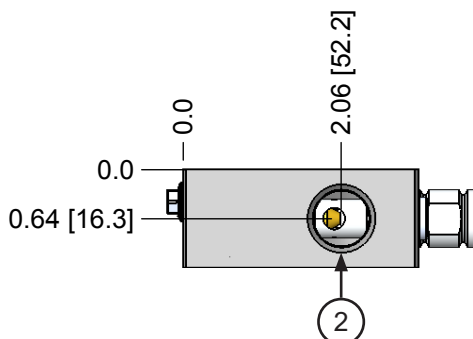
VENTURI DIAMETER	A in (mm)
12	3.09 [78.5]
15	3.49 [88.7]

VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
J 12	H	-PSB-	-
12 = 1.2 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
15 = 1.5 mm	G = G Threads	NR = Yes	ST = STA14M

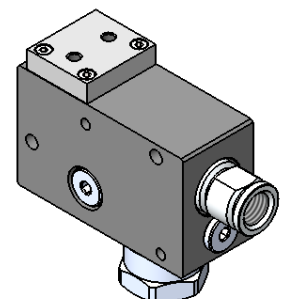
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/4 NPSF	G 1/4 NPSF
4	Pilot Signal - Vacuum	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)
5	Pilot Signal - Blow-Off	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)



Weight: 0.69 lbs [313.0 g]



Non-Return Valve Option



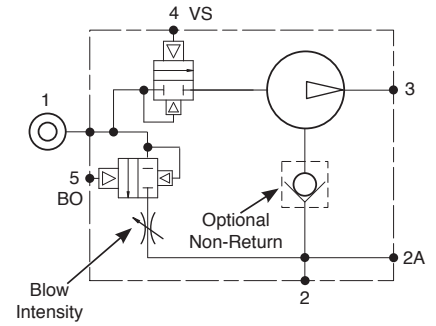
Weight: 0.74 lbs [336.0 g]

# J SERIES PUMPS

## PSB : AIR PILOT CONTROLLED VACUUM SUPPLY & BLOW-OFF

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral pilot-operated valve provides on/off vacuum control. A second integral pilot-operated valve provides quick-release air control, while an integral flow control valve that fine-tunes the blow intensity to suit the application. An optional non-return valve is available for use in sealed non-porous systems. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

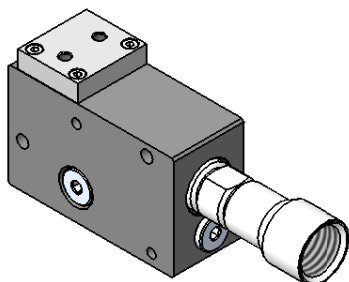
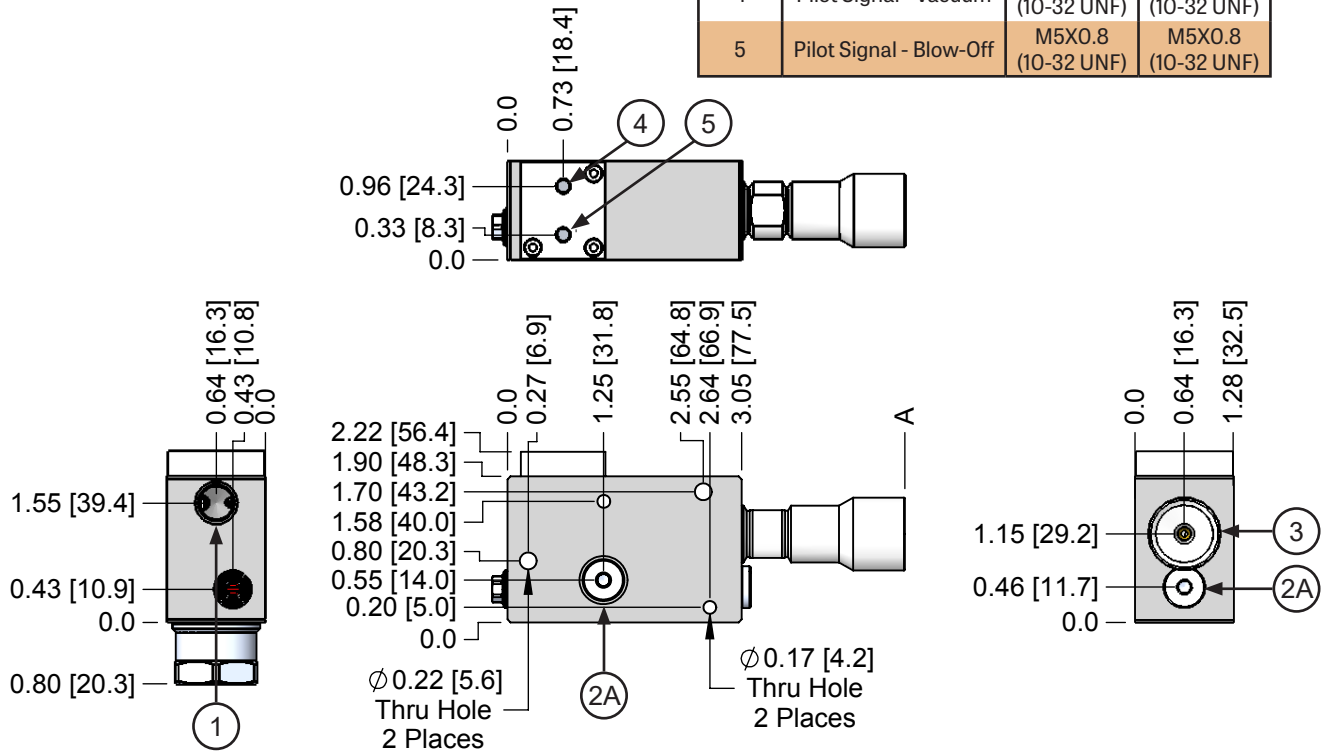
Air-pilot operation simplifies integration into field-bus systems by shifting electrical control to a bank of pneumatic 3-way solenoid valves. Flexing control wires in an automation system are replaced with small diameter air tubing for greater reliability.



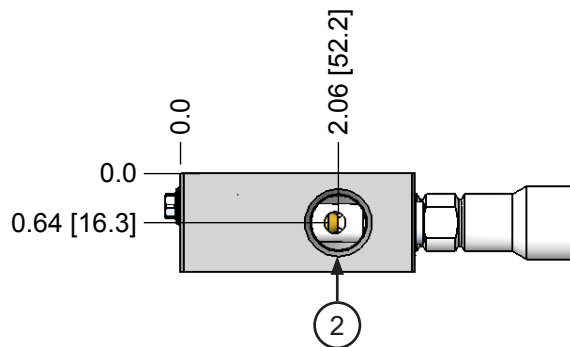
VENTURI DIAMETER	A in (mm)
20	4.47 (113.5)
25	4.87 (123.6)
30	5.71 (144.9)

VENTURI DIAMETER	PORTS	NON RETURN	SILENCER
<b>J 20</b>	<b>H</b>	<b>-PSB-</b>	
20 = 2.0 mm	(Blank) = NPTF	(Blank) = No	(Blank) = None
25 = 2.5 mm	<b>G</b> = G Threads	<b>NR</b> = Yes	<b>ST</b> = STC12M
30 = 3.0 mm			

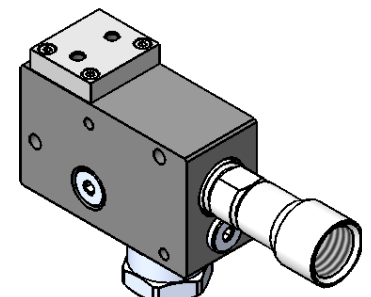
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/2 NPSF	G 1/2 NPSF
4	Pilot Signal - Vacuum	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)
5	Pilot Signal - Blow-Off	M5X0.8 (10-32 UNF)	M5X0.8 (10-32 UNF)



Weight: 0.76 lbs [345.0 g]



Non-Return Valve Option



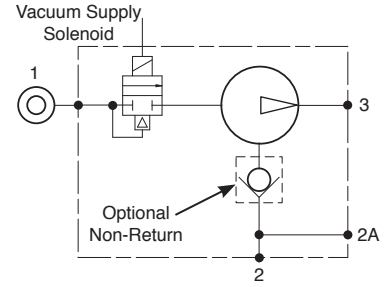
Weight: 0.81 lbs [367.0 g]



# J SERIES PUMPS

## S24D / S110A : SOLENOID CONTROLLED VACUUM SUPPLY

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral solenoid valve provides on/off vacuum control. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

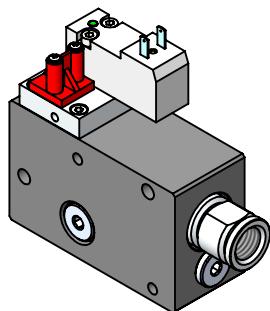
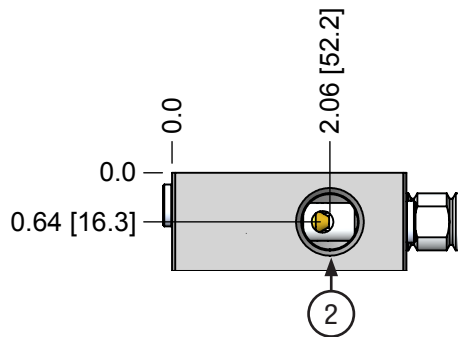
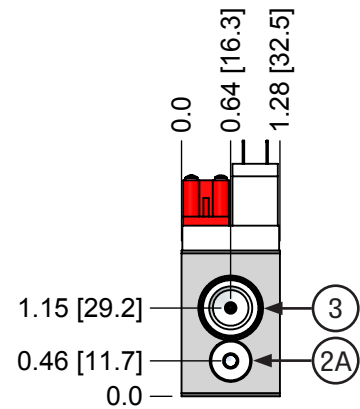
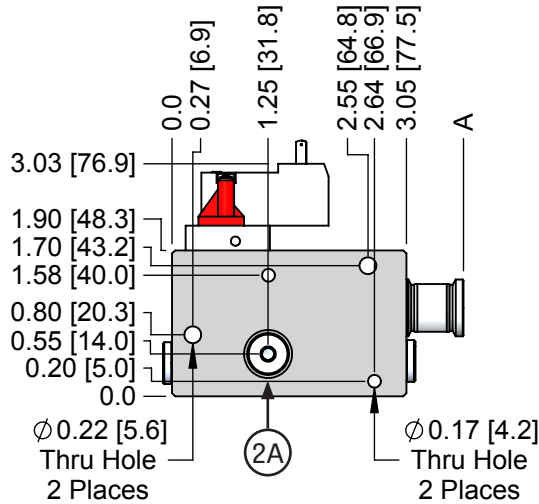
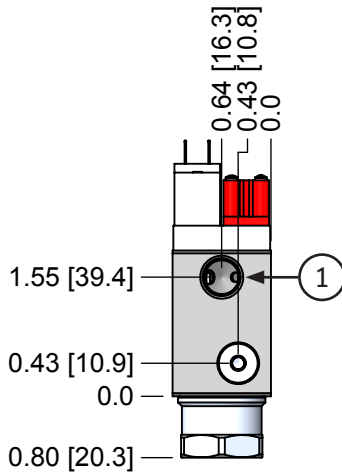
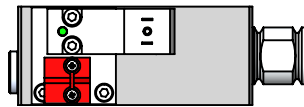


J	H	S		
<b>VENTURI DIAMETER</b>	<b>PORTS</b>	<b>SOLENOID VOLTAGE</b>	<b>NON RETURN</b>	<b>SILENCER</b>
<b>12</b>		<b>24D</b>		
12 = 1.2 mm	(Blank) = NPTF	24D = 24V DC	(Blank) = No	(Blank) = None
15 = 1.5 mm	G = G Threads	110A = 110V AC	NR = Yes	ST = STA14M

CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/4 NPSF	G 1/4 NPSF

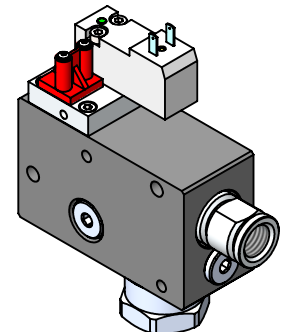
VENTURI DIAMETER	A in (mm)
12	3.09 [78.5]
15	3.49 [88.7]

Order DIN T-9 Molded Cords Separately:  
 923-2M01 = Std. 2M  
 923-2M31 = L.E.D. 0-50V, 2M  
 923-2M81 = L.E.D. 70-250V, 2M



Weight: 0.77 lbs [349.0 g]

Non-Return Valve Option

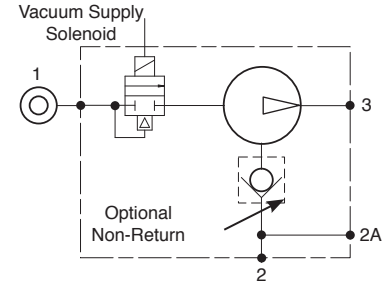


Weight: 0.82 lbs [372.0 g]

# J SERIES PUMPS

## S24D / S110A : SOLENOID CONTROLLED VACUUM SUPPLY

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral solenoid valve provides on/off vacuum control. An optional non-return vacuum check valve is available for use in sealed systems, but some method of releasing vacuum must be added to the system – see RC18 Release Check. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

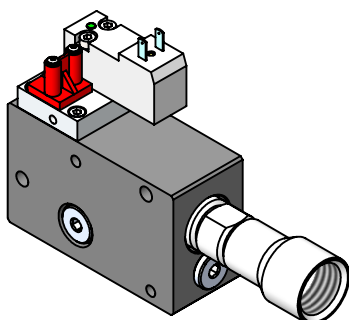
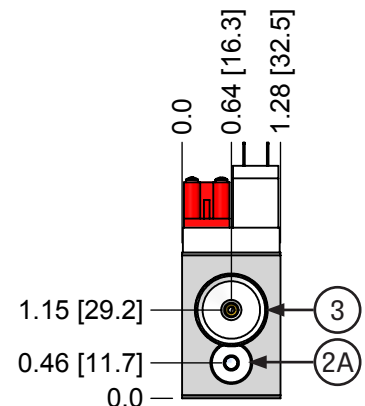
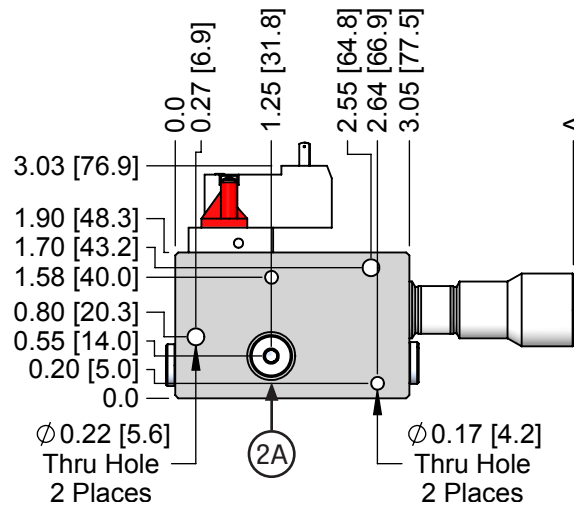
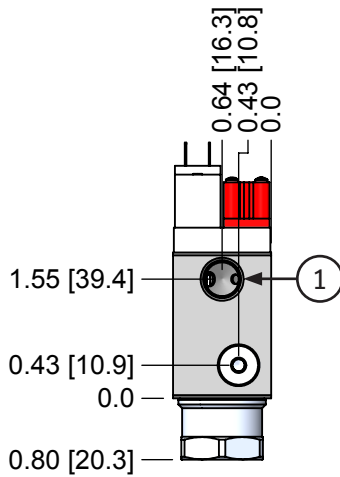
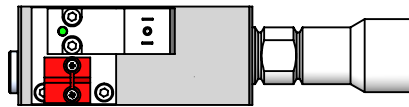


J	VENTURI DIAMETER	H	PORTS	S	SOLENOID VOLTAGE	NON RETURN	SILENCER
	<b>25</b>		(Blank) = NPTF		<b>24D</b>	(Blank) = No	(Blank) = None
	20 = 2.0 mm		G = G Threads		24D = 24V DC	NR = Yes	ST = STC12M
	25 = 2.5 mm				110A = 110V AC		
	30 = 3.0 mm						

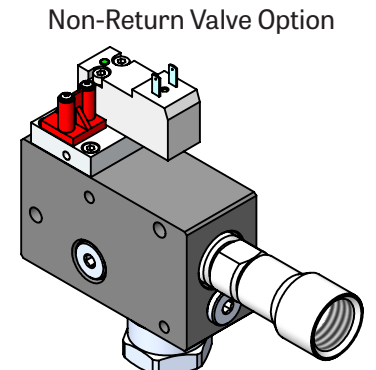
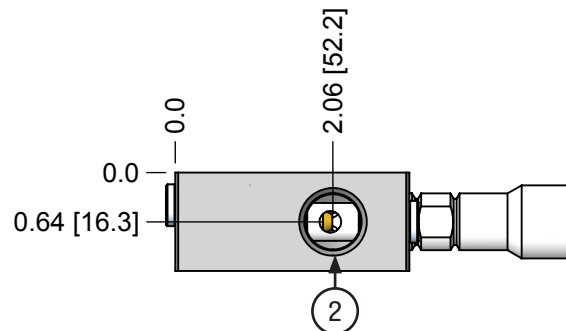
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/2 NPSF	G 1/2 NPSF

VENTURI DIAMETER	A in (mm)
20	4.47 (113.5)
25	4.87 (123.6)
30	5.71 (144.9)

Order DIN T-9 Molded Cords Separately:  
 923-2M01 = Std. 2M  
 923-2M31 = L.E.D. 0-50V, 2M  
 923-2M81 = L.E.D. 70-250V, 2M



Weight: 0.84 lbs [381.0 g]

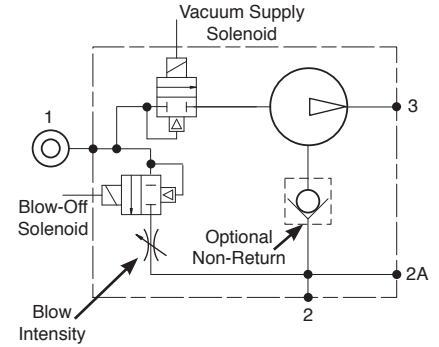


Weight: 0.89 lbs [404.0 g]

# J SERIES PUMPS

## SB24D / SB110A : SOLENOID CONTROLLED VACUUM SUPPLY & BLOW-OFF

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral solenoid valve provides on/off vacuum control. A second integral pilot-operated valve provides quick-release air control while an integral flow control valve that fine-tunes the blow intensity to suit the application. An optional non-return valve is available for use in sealed non-porous systems. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

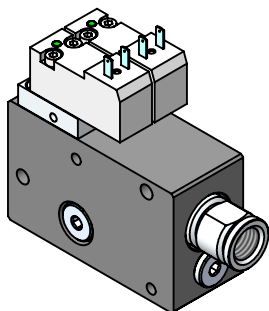
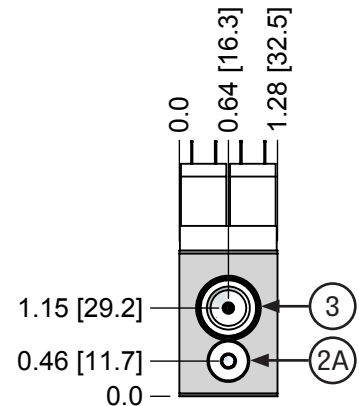
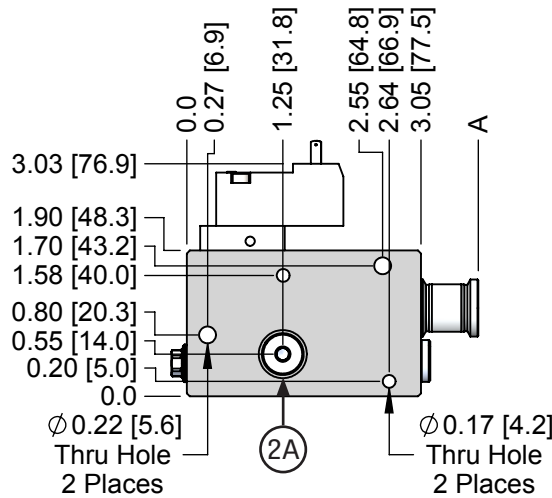
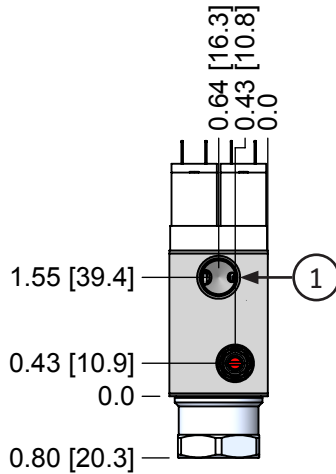
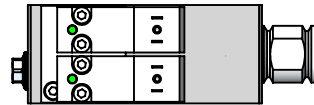


VENTURI DIAMETER		PORTS		SOLENOID VOLTAGE		NON RETURN		SILENCER	
J	12	H		-SB	24D				
	12 = 1.2 mm		(Blank) = NPTF		24D = 24V DC		(Blank) = No		(Blank) = None
	15 = 1.5 mm		G = G Threads		110A = 110V AC		NR = Yes		ST = STA14M

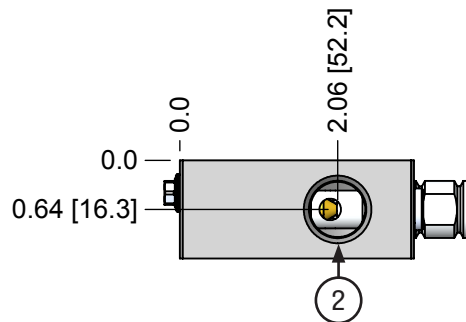
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/4 NPSF	G 1/4 NPSF

VENTURI DIAMETER	A in (mm)
12	3.09 (78.5)
15	3.49 (88.7)

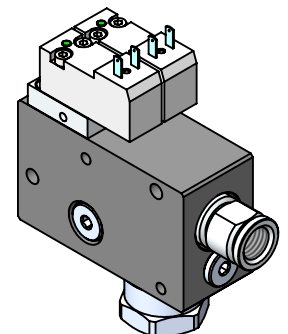
Order DIN T-9 Molded Cords Separately:  
 923-2M01 = Std. 2M  
 923-2M31 = L.E.D. 0-50V, 2M  
 923-2M81 = L.E.D. 70-250V, 2M



Weight: 0.85 lbs [386.0 g]



Non-Return Valve Option

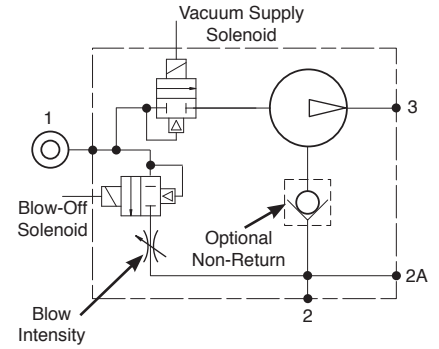


Weight: 0.90 lbs [408.0 g]

# J SERIES PUMPS

## SB24D / SB110A : SOLENOID CONTROLLED VACUUM SUPPLY & BLOW-OFF

Large capacity J-series coaxial pumps provide full control features in an integrated package. Pumps may be ordered with any of five different coaxial ejectors to match pump performance to system requirements. An integral solenoid valve provides on/off vacuum control. A second integral pilot-operated valve provides quick-release air control while an integral flow control valve that fine-tunes the blow intensity to suit the application. An optional non-return valve is available for use in sealed non-porous systems. Vacuum sensors may be installed in either of the two 1/8" auxiliary vacuum ports to monitor system vacuum level. Large 1/2" vacuum port readily handles the high vacuum flow produced by coaxial ejectors.

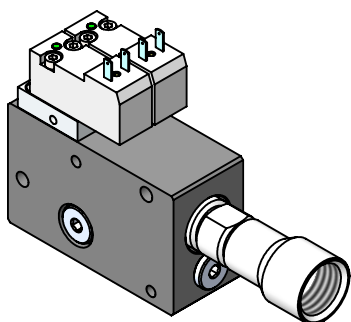
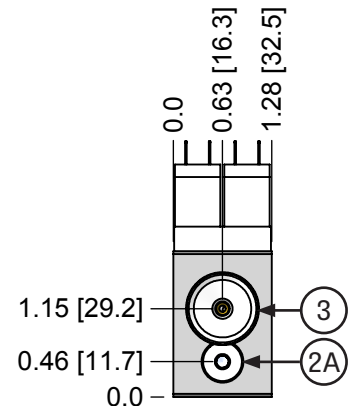
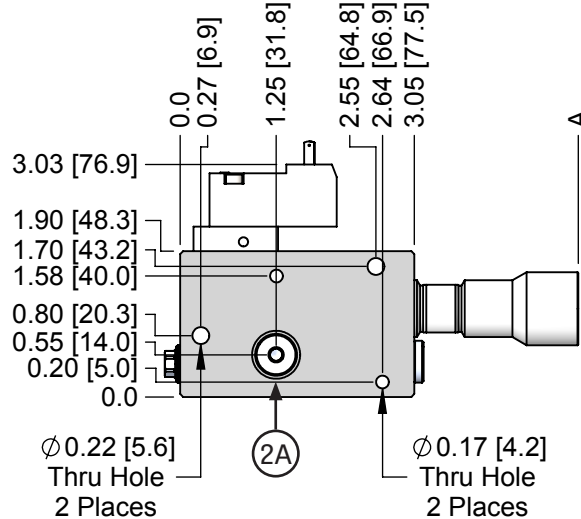
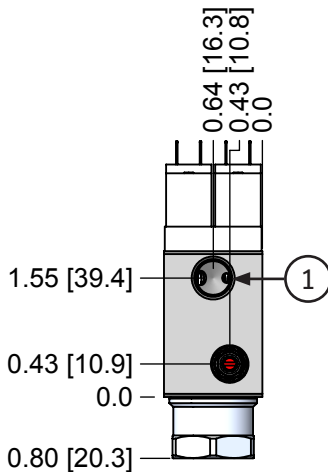
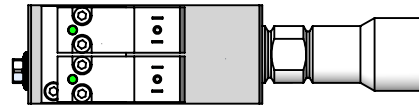


J	VENTURI DIAMETER	H	PORTS	-SB	SOLENOID VOLTAGE	-	NON RETURN	-	SILENCER
	<b>25</b>				<b>24D</b>				
	20 = 2.0 mm		(Blank) = NPTF		24D = 24 V DC		(Blank) = No		(Blank) = None
	25 = 2.5 mm		G = G Threads		110A = 110V AC		NR = Yes		ST = STC12M
	30 = 3.0 mm								

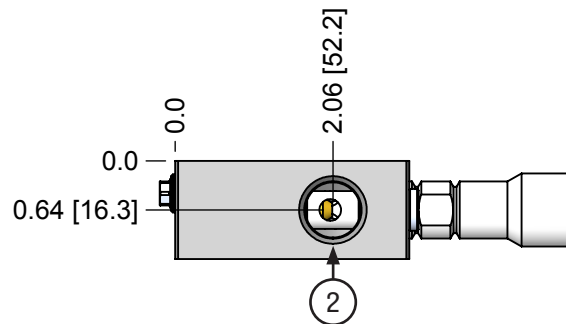
CODE	FUNCTION	NPT	G
1	Air Supply	1/4 NPTF	G 1/4
2	Vacuum - Main	G 1/2 NPSF	G 1/2 NPSF
2A	Vacuum - Alternate	G 1/8 NPSF	G 1/8 NPSF
3	Exhaust	G 1/2 NPSF	G 1/2 NPSF

VENTURI DIAMETER	A in (mm)
20	4.47 (113.5)
25	4.87 (123.6)
30	5.71 (144.9)

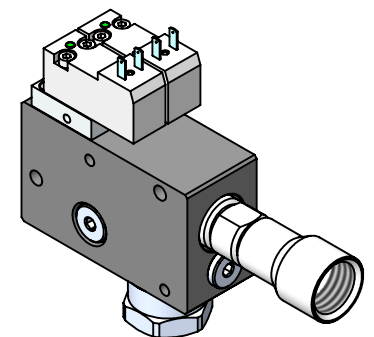
Order DIN T-9 Molded Cords Separately:  
 923-2M01 = Std. 2M  
 923-2M31 = L.E.D. 0-50V, 2M  
 923-2M81 = L.E.D. 70-250V, 2M



Weight: 0.92 lbs [417.0 g]



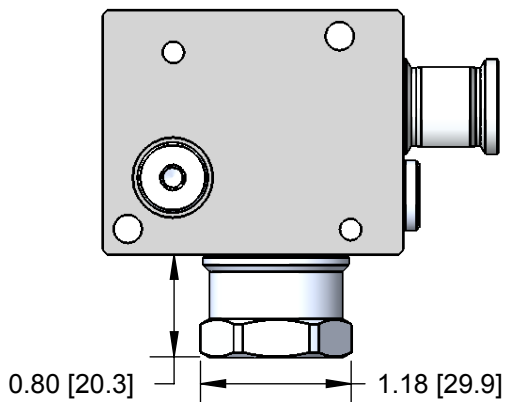
Non-Return Valve Option



Weight: 0.97 lbs [440.0 g]

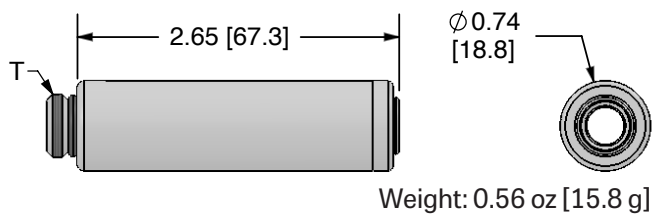
**J SERIES PUMPS  
OPTIONS**

**NON-RETURN VALVE**

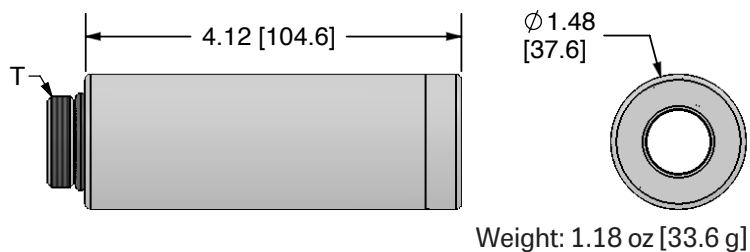


**SILENCERS**

**STA14M**

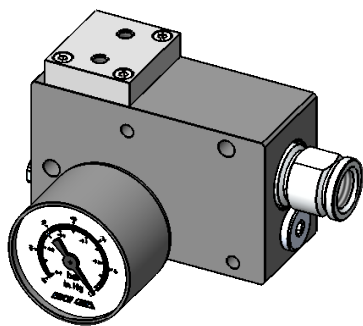


**STC12M**

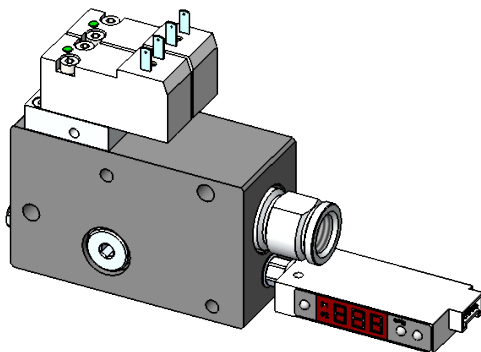


**ACCESSORIES**

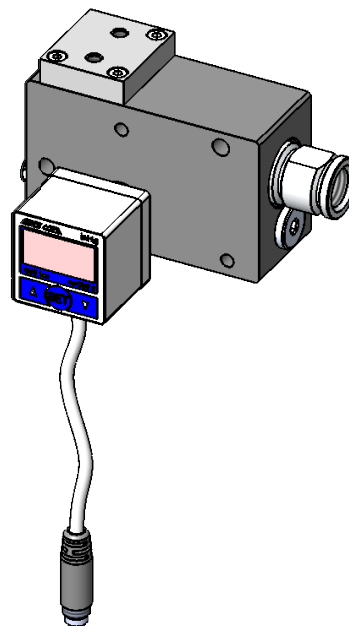
**VG15-18CB**



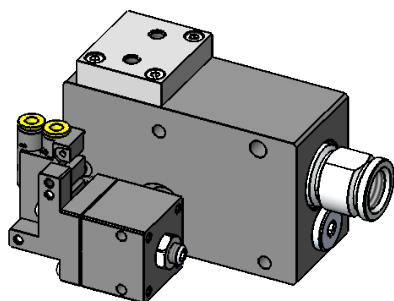
**DVN-61-18M**



**DVN-200**

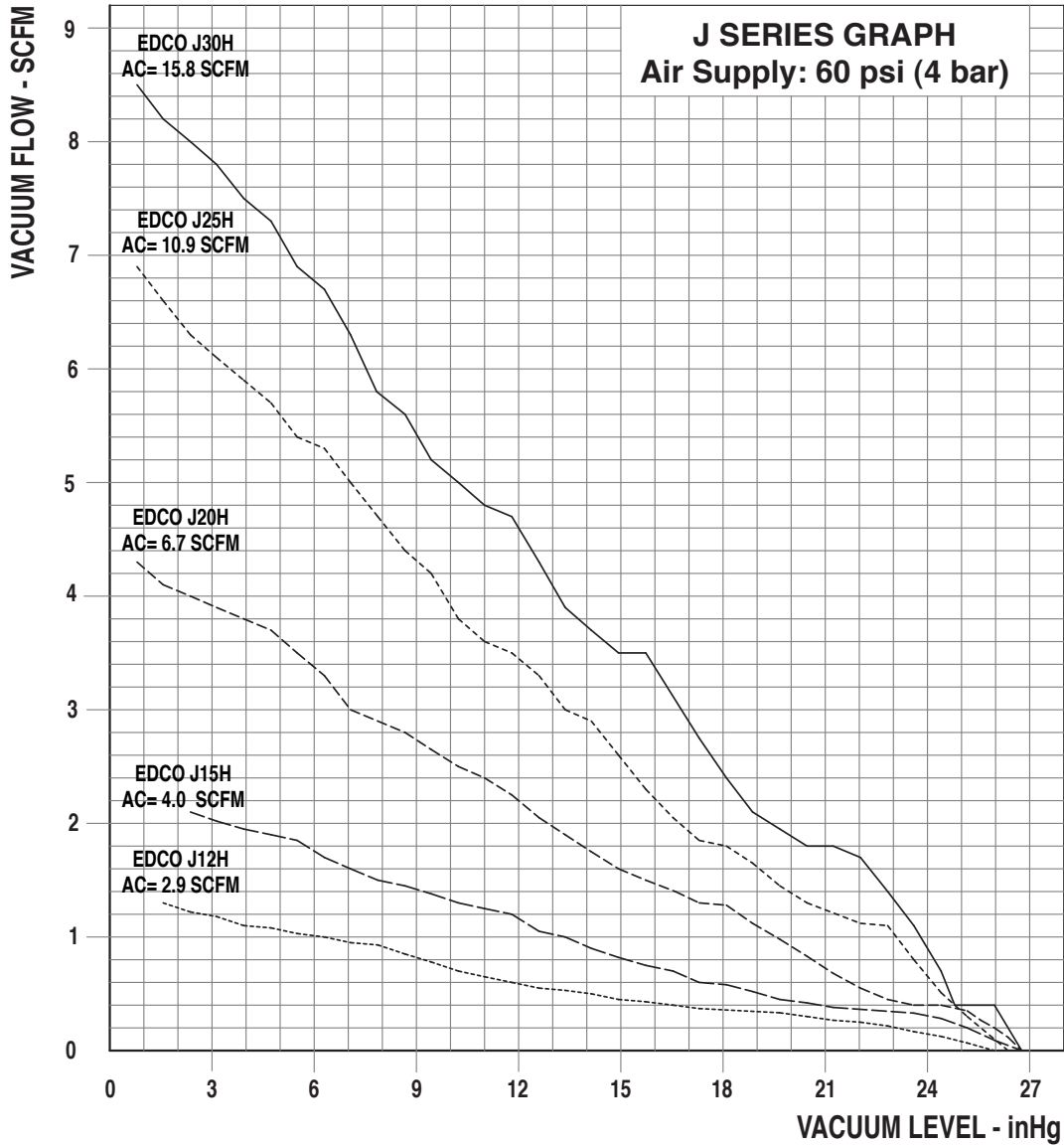


**VSA18-NCL**



All performance data presented is a representation of production pumps but is not a guarantee due to variations in local barometric pressure and of mass produced components.

**J SERIES PUMPS  
PERFORMANCE**



**VACUUM FLOW - SCFM**

MODEL	AIR SUPPLY PSI	AIR CONS SCFM	MAX VACUUM inHG	SCFM AT VACUUM LEVEL							
				3 inHG	6 inHG	9 inHG	12 inHG	15 inHG	18 inHG	21 inHG	24 inHG
J12H	60	2.9	26	1.2	1.0	0.8	0.6	0.5	0.4	0.3	0.1
J15H	60	4.0	26.7	2.0	1.8	1.4	1.2	0.8	0.6	0.4	0.3
J20H	60	6.7	26.7	3.9	3.4	2.7	2.2	1.6	1.3	0.7	0.4
J25H	60	10.9	26.3	6.1	5.3	4.3	3.5	2.6	1.8	1.2	0.7
J30H	60	15.8	26.7	7.8	6.8	5.4	4.6	3.5	2.4	1.8	0.9

SCFM X 28.32 = nl / m

**EVACUATION TIME - SEC / FT<sup>3</sup>**

MODEL	AIR SUPPLY PSI	AIR CONS SCFM	MAX VACUUM inHG	SECONDS TO VACUUM LEVEL							
				3 inHG	6 inHG	9 inHG	12 inHG	15 inHG	18 inHG	21 inHG	24 inHG
J12H	60	2.9	26	3.7	1.0	16.5	28.4	47.2	78.0	134.0	252.0
J15H	60	4.0	26.7	2.2	5.2	9.7	16.4	27.0	63.3	77.0	147.0
J20H	60	6.7	26.7	1.1	2.7	5.1	8.5	14.0	23.1	39.8	76.2
J25H	60	10.9	26.3	0.7	1.7	3.2	5.4	8.9	14.7	25.3	48.0
J30H	60	15.8	26.7	0.6	1.4	2.5	4.3	7.0	11.4	19.6	37.2

sec / ft<sup>3</sup> X 35.32 = sec / m<sup>3</sup>