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FUHIULEA


BASIC


PSB


S24D / S110A


PS


SB24D / SB110A

| Basic Pumps | $14: 3-14: 4$ |
| :--- | :---: |
| PS: Air Pilot Controlled Air Supply | $14: 5-14: 6$ |
| PSB: Air Pilot Controlled Air Supply \& Blow-Off | $14: 7-14: 8$ |
| S24D / S11OA: Solenoid Controlled Air Supply | $14: 9-14: 10$ |
| SB24D / S110A: Solenoid Controlled Air Supply \& Blow-Off | $14: 11-14: 12$ |
| Options | $14: 13$ |
| Accessories | $14: 13$ |
| Performance | $14: 14$ |

## JSERIES 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.


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


| VENTURI <br> DIAMETER | A <br> in [mm] |
| :---: | :---: |
| 12 | $3.09[78.5]$ |
| 15 | $3.49[88.7]$ |




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.


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


| VENTURI <br> DIAMETER | A <br> in (mm) |
| :---: | :---: |
| 20 | $4.47(113.5)$ |
| 25 | $4.87(123.6)$ |
| 30 | $5.71(144.9)$ |



Weight: $0.59 \mathrm{lbs}[268.0 \mathrm{~g}]$

## JSERIES 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 <br> DIAMETER | A <br> in (mm) |
| :---: | :---: |
| 12 | $3.09(78.5)$ |
| 15 | $3.49(88.7)$ |


| J | VENTURI DIAMETER | H | PORTS |
| :---: | :---: | :---: | :---: |
|  | 12 |  |  |
|  | $12=1.2 \mathrm{~mm}$ |  | (Blank) = NPTF |
|  | $15=1.5 \mathrm{~mm}$ |  | G = G Threads |


| NON <br> RETURN | SILENCER |
| :---: | :---: |
|  | - |
| (Blank) $=$ No <br> NR $=$ Yes |  |


| CODE | FUNCTION | NPT | G |
| :---: | :---: | :---: | :---: |
| 1 | Air Supply | $1 / 4$ NPTF | G 1/4 |
| 2 | Vacuum - Main | G 1/2 NPSF | G 1/2 NPSF |
| $2 A$ | 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 | M5X0.8 |
|  |  | (10-32 UNF) | (10-32 UNF) |




Non-Return Valve Option


Weight: $0.74 \mathrm{lbs}[336.0 \mathrm{~g}]$

## J SERIES PUMPS

PS: AIR PILOT CONTROLLED VACUUM SUPPIY
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 $1 / 2^{\prime \prime}$ 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 <br> DIAMETER | A <br> in (mm) |
| :---: | :---: |
| 20 | $4.47(113.5)$ |
| 25 | $4.87(123.6)$ |
| 30 | $5.71(144.9)$ |




Weight: $0.76 \mathrm{lbs}[345.0 \mathrm{~g}]$


Non-Return Valve Option


Weight: $0.81 \mathrm{lbs}[367.0 \mathrm{~g}]$

## J SERIES PUMPS <br> PSB: AIR PILOT CONTROLLED VACUUM SUPPIY \& 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 $1 / 2^{\prime \prime}$ 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 | H | PORTS | -PSB- | NON RETURN | SILENCER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | 12 |  |  |  |  |  |
|  | $12=1.2 \mathrm{~mm}$ |  | (Blank) = NPTF |  | (Blank) = No | (Blank) = None |
|  | $15=1.5 \mathrm{~mm}$ |  | 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 |
| $2 A$ | Vacuum - Alternate | $\mathrm{G} 1 / 8$ NPSF | $\mathrm{G} 1 / 8$ NPSF |
| 3 | Exhaust | $\mathrm{G} 1 / 4$ NPSF | $\mathrm{G} 1 / 4$ NPSF |
| 4 | Pilot Signal - Vacuum | M5X0.8 | M5X0.8 |
| (10-32 UNF) | $(10-32$ UNF) |  |  |
| 5 | Pilot Signal - Blow-Off | M5X0.8 <br> (10-32 UNF) | M5X0.8 <br> (10-32 UNF) |



Non-Return Valve Option


Weight: 0.74 lbs [ 336.0 g ]


## J SERIES PUMPS <br> PSB: AIR PILOT CONTROLLED VACUUM SUPPIY \& 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 $1 / 2^{\prime \prime}$ 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 <br> DIAMETER |  |
| :---: | :---: |
| $\mathbf{J I N}$ |  |
| $\mathbf{2 0}=2.0 \mathrm{~mm}$ |  |
| $\mathbf{2 5}=2.5 \mathrm{~mm}$ |  |
| $\mathbf{3 0}=3.0 \mathrm{~mm}$ |  |


-PSB-

| NON <br> RETURN | SILENCER |
| :---: | :---: |
|  | - |
| (Blank) $=$ No <br> NR $=$ Yes |  |


|  | 4 | Pilot Signal - Vacuum | $\begin{gathered} \text { M5X0. } 8 \\ \text { (10-32 UNF) } \end{gathered}$ | $\begin{gathered} \text { M5X0. } 8 \\ \text { (10-32 UNF) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{+}{\infty}$ | 5 | Pilot Signal - Blow-Off | $\begin{gathered} \text { M5X0.8 } \\ \text { (10-32 UNF) } \end{gathered}$ | $\begin{gathered} \text { M5X0. } 8 \\ \text { (10-32 UNF) } \end{gathered}$ |



Weight: 0.76 lbs [345.0 g]



Weight: $0.81 \mathrm{lbs}[367.0 \mathrm{~g}]$

## JSERIES 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 $1 / 8^{\prime \prime}$ auxiliary vacuum ports to monitor system vacuum level. Large $1 / 2^{\prime \prime}$ vacuum port readily handles the high vacuum flow produced by coaxial ejectors.


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


| VENTURI <br> DIAMETER | A <br> 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



## J SERIES PUMPS <br> S24D / S110A: SOLENOID CONTROLLED VACUUM SUPPIY

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 $1 / 8^{\prime \prime}$ auxiliary vacuum ports to monitor system vacuum level. Large $1 / 2^{\prime \prime}$ vacuum port readily handles the high vacuum flow produced by coaxial ejectors.


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


| VENTURI <br> DIAMETER | A <br> 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, 2 M 923-2M81 = L.E.D.70-250V, 2M




Weight: 0.89 lbs [404.0 g]

## J SERIES PUMPS <br> 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 $1 / 2^{\prime \prime}$ vacuum port readily handles the high vacuum flow produced by coaxial ejectors.


| CODE | FUNCTION | NPT | G |
| :---: | :---: | :---: | :---: |
| 1 | Air Supply | $1 / 4$ NPTF | G $1 / 4$ |
| 2 | Vacuum- Main | G $1 / 2$ NPSF | G $1 / 2$ NPSF |
| $2 A$ | Vacuum - Alternate | G $1 / 8$ NPSF | G 18 NPFF |
| 3 | Exhaust | G $1 / 4$ NPSF | G $1 / 4$ NPSF |


| VENTURI <br> DIAMETER | A <br> 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 <br> 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 $1 / 2^{\prime \prime}$ vacuum port readily handles the high vacuum flow produced by coaxial ejectors.


|  |
| :---: | | VENTURI |
| :---: |
| DIAMETER |$|$| $\mathbf{2 5}$ |
| :---: |
| $\mathbf{2 0}=2.0 \mathrm{~mm}$ |
| $\mathbf{2 5}=2.5 \mathrm{~mm}$ |
| $\mathbf{3 0}=3.0 \mathrm{~mm}$ |



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


| VENTURI <br> DIAMETER | A <br> 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. 2 M
923-2M31 = L.E.D. 0-50V, 2M 923-2M81 = L.E.D.70-250V, 2M


Non-Return Valve Option


Weight: 0.97 lbs [440.0 g]

## NON-RETURN VALVE



SILENCERS
STA14M


STC12M

$\varnothing 1.48$
[37.6]


Weight: $1.18 \mathrm{oz}[33.6 \mathrm{~g}]$

## ACCESSORIES

## VG15-18CB



14

## VSA18-NCL



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


## VACUUM FLOW -SCFM

| MODEL | $\begin{gathered} \hline \text { AIR } \\ \text { SUPPLY } \end{gathered}$ | $\begin{gathered} \text { AIR } \\ \text { CONS } \end{gathered}$ | $\begin{gathered} \hline \text { MAX } \\ \text { VACUUM } \end{gathered}$ | SCFM AT VACUUM LEVEL |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PSI | SCFM | inHG | 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 $28.32=\mathrm{nl} / \mathrm{m}$

## EVACUATION TIME-SEC / 100 IN $^{3}$

| MODEL | $\begin{gathered} \text { AIR } \\ \text { SUPPLY } \end{gathered}$ | $\begin{gathered} \text { AIR } \\ \text { CONS } \end{gathered}$ | MAX VACUUM | SECONDS TO VACUUM LEVEL |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PSI | SCFM | inHG | 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 |

$\mathrm{sec} / 100 \mathrm{in}^{3} \times 0.61=\mathrm{sec} / \mathrm{I}$

