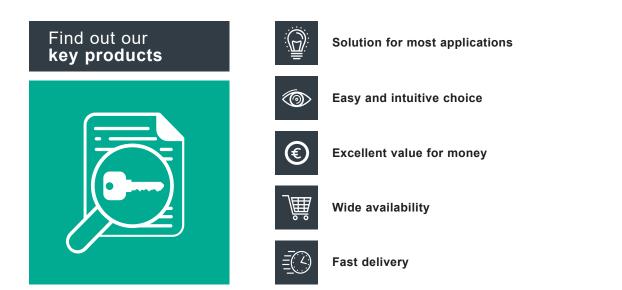
STAINLESS STEEL air operated valves Series AX1







ALMOTION B.V. Nijverheidsweg 14 | 6662 NG Elst (Gld) | The Netherlands t +31(0)85 0491 777 e info@almotion.nl www.almotion.nl | www.lineairegeleiding.nl | www.lineairegeleidingshop.nl | www.linearmotion.nl 5.115.1

Stainless Steel air operated valves series AX1



from page 5.116.10

Main features and certifications

Series of stainless steel spool valves, with in-line connections. Available in size 1/4", air operated, with functions 3/2 pilot/spring normally closed, 3/2 pilot/spring normally open, 3/2 pilot/pilot, 5/2 pilot/spring, 5/2 pilot/pilot and pilot/pilot differential, 5/3 open centres, closed centres and pressurized centres. Supplied as standard with HNBR seals for low temperature (down to -25°), in compliance to Reach and RoHS directives, SIL certified, and conforming to 2014/34/EU ATEX Directive, in classification Ex h.







REACH

Series AX1 1/4" 3/2 Pilot/Spring

| | Series of stainless steel spool valves, with in-line connections, size 1/4" air operated, in function 3/2 pilot/spring normally closed and 3/2 pilot/spring normally open. Conforming to 2014/34/UE ATEX Directive in classification: II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | $ \begin{array}{c} 12 \\ 12 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$ |
|--|---|--|
|--|---|--|

| Series AX1 1/4" 3/2 Pilot/Pilot | | from page 5.116.20 |
|---------------------------------|---|--------------------|
| | Series of stainless steel spool valves, with in-line connections, size 1/4" air operated, in function 3/2 pilot/pilot. Conforming to 2014/34/UE ATEX Directive in classification: II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | |

| Series AX1 1/4" 5/2 Pilot/Spring | | from page 5.116.40 |
|----------------------------------|---|--|
| | Series of stainless steel spool valves, with in-line connections, size 1/4" air operated, in function 5/2 pilot/spring. Conforming to 2014/34/UE ATEX Directive in classification: II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | $\sum_{j=1}^{14} \left[\sum_{j=1}^{4} \prod_{j=1}^{2} \bigcup_{j=1}^{4} \bigcup_{j=1}^{2} \bigcup_{j=1}^{4} $ |

| Series AX1 1/4" 5/2 Pilot/Pilot | | from page 5.116.50 |
|--|--|--|
| a the test test test test test test test | Series of stainless steel spool valves, with in-line connections, size 1/4" air operated, in function 5/2 pilot/pilot and 5/2 pilot/pilot differential. Conforming to 2014/34/UE ATEX Directive in classification: II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | $\frac{14}{2} \underbrace{1}_{513} $ |

| Series AX1 1/4" 5/3 | | from page 5.116.70 |
|--|--|--------------------|
| Annual Control of the second s | Series of stainless steel spool valves, with in-line connections, size 1/4" air operated, in function 5/3 closed centres, 5/3 open centres and 5/3 pressurized centres. Conforming to 2014/34/UE ATEX Directive in classification: II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | |

Stainless Steel air operated valves series AX1



| Options | | | |
|-----------------------------|----------------|------------|--------|
| Description | | Symbol | Suffix |
| FKM seals | -10°C ÷ +150°C | Å ☆ | V |
| Special versions on request | | | /S |

The options, when this is possible, can be combined with each other. For standard options matching see the table below. For code key see from page 5.115.4

Options matching

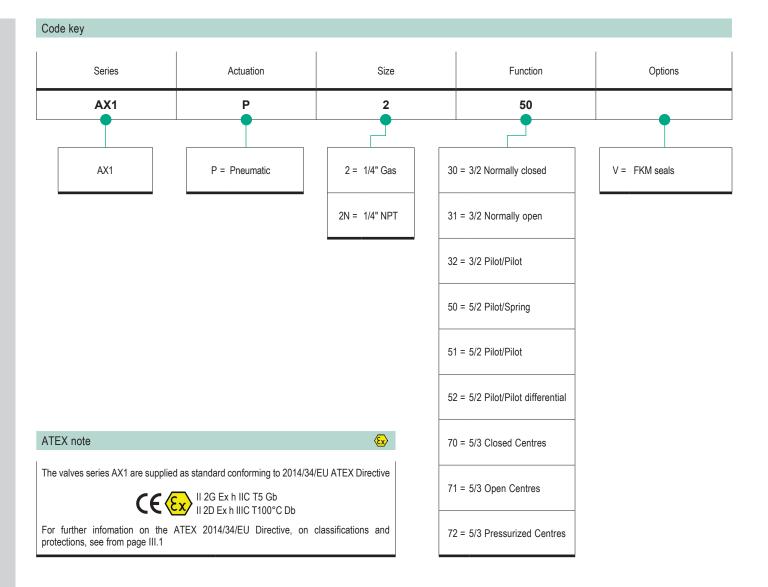
| Series | Size | Function | ATEX | Standard options matching |
|--------|------|-----------------|----------|---------------------------|
| | | | | V |
| AX1 | 1/4" | 3/2 - 5/2 - 5/3 | Standard | • |

Key

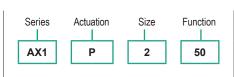
• allowed matching; - not allowed matching.

Stainless Steel air operated valves series AX1





How to order



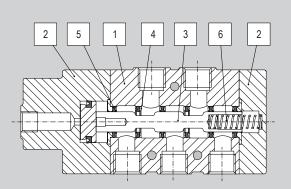
Notes

For standard materials, see page 5.115.5.

Stainless Steel air operated valves series AX1



Standard materials

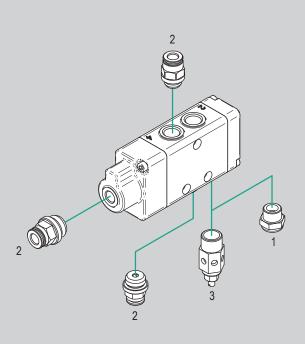


| Position | Description | Material |
|----------|-------------|---------------------------|
| | | 1/4" |
| | | AX1P |
| 1 | Body | Stainless Steel AISI 316L |
| 2 | Covers | Stainless Steel AISI 316L |
| 3 | Spool | Hard anodized aluminium |
| 4 | Distancers | Technopolymer |
| 5 | Seals | HNBR |
| 6 | Spring | Stainless Steel |

Stainless Steel air operated valves series AX1



Accessories



| N. | ltem | Description | Compliance | Matching 1/4" AX1P | Code key page | Data sheet page |
|----|-----------------------------|-------------------------------------|--|--------------------------|------------------|--------------------|
| 1 | AFEX AEX AEPX AERX | Stainless Steel silencers | - | • | 5.390.1 | |
| 2 | RX | Stainless Steel push-in fittings | UNI ISO 228/1 UNI ISO7/1 ISO R/232 | • | 5.302.1 | |
| 3 | AVRX | Stainless Steel silenced regulators | - | • | 5.375.1 | |

Key

• matching accessory; - not matching accessory

Stainless Steel air operated valves series AX1 1/4", 3/2 pilot/spring



| Main features | | | | | |
|---------------------|---------|---------|---|--|--|
| Version | Code | Item | Symbol | | |
| 3/2 Normally closed | 037002X | AX1P230 | $\begin{bmatrix} 12 & 2\\ T & 7 \\ 3 & 1 \end{bmatrix}$ W | | |
| 3/2 Normally open | 037022X | AX1P231 | $\begin{bmatrix} 23 \\ T \\ T \\ T \end{bmatrix} = \begin{bmatrix} 2 \\ T \\ T \\ T \\ T \end{bmatrix} W$ | | |



Technical data

| Version | 3/2 Normally closed | 3/2 Normally open | |
|-------------------------------------|---|-------------------|--|
| Code | 037002X | 037022X | |
| Item | AX1P230 | AX1P231 | |
| Size | 1/4" | | |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. | | |
| Pressure range | 1,5 ÷ 12 bar | | |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C | (V) | |
| Orifice Ø | 8 mm | | |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. | | |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | | |
| Mounting | In every position | | |

Notes

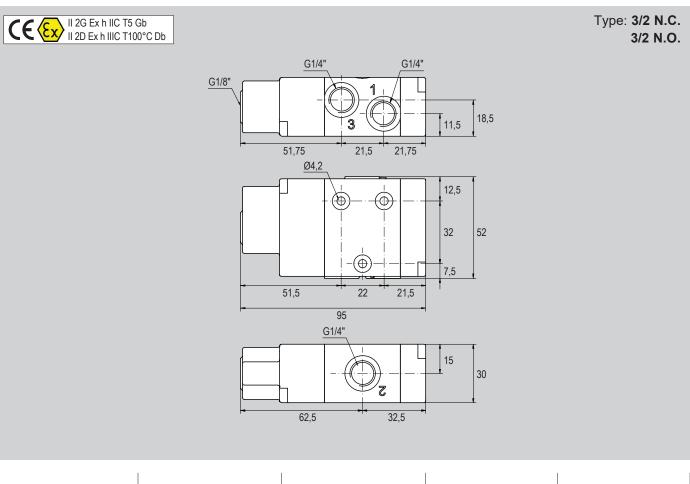
For code and availability of NPT threads, please contact the sales department

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Stainless Steel air operated valves series AX1 1/4", 3/2 pilot/spring

Standard dimensions



| Version | Actuation | Symbol | Code | ltem |
|--------------------------|-----------|--|---------|---------|
| 1/4" 3/2 Normally closed | Pneumatic | $\sum_{T=1}^{12} \frac{1}{3} \frac{1}{1} W$ | 037002X | AX1P230 |
| 1/4" 3/2 Normally open | Pneumatic | $\sum_{T=1}^{23} \frac{1}{T} \sum_{T=1}^{2} W$ | 037022X | AX1P231 |





| Code | 037023X |
|-------------------------------------|---|
| Item | AX1P232 |
| Size | 1/4" |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. |
| Pressure range | 1 ÷ 12 bar |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C (V) |
| Orifice Ø | 8 mm |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db |
| Mounting | In every position (vertical not reccomended when in presence of vibrations) |

Notes

For code and availability of NPT threads, please contact the sales department

Stainless Steel air operated valves series AX1 1/4", 3/2 pilot/pilot

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5 - STAINLESS STEEL COMPONENTS





ALMOTION

Technical data

| Version | 3/2 pilot/pilot | | |
|-------------------------------------|---|--|--|
| Code | 037023X | | |
| Item | AX1P232 | | |
| Size | 1/4" | | |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. | | |
| Pressure range | 1 ÷ 12 bar | | |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C (V) | | |
| Orifice Ø | 8 mm | | |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. | | |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | | |
| Mounting | In every position (vertical not reccomended when in presence of vibrations) | | |

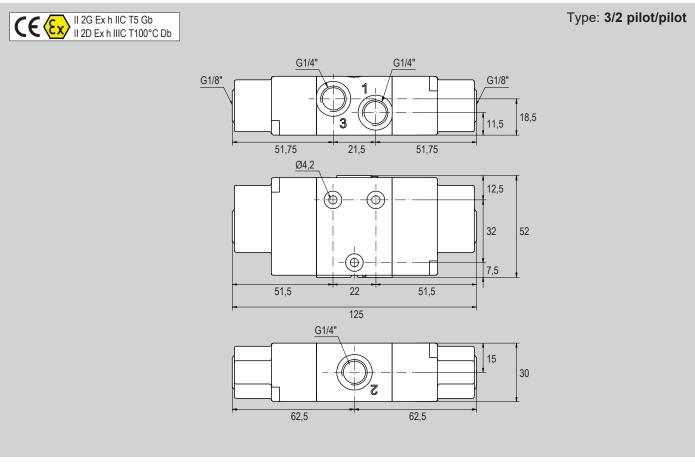
Main features

| Version | Code | ltem | Symbol |
|-----------------|---------|---------|--------|
| 3/2 pilot/pilot | 037023X | AX1P232 | |



Stainless Steel air operated valves series AX1 1/4", 3/2 pilot/pilot

Standard dimensions



| Version | Actuation | Symbol | Code | ltem |
|----------------------|-----------|--|---------|---------|
| 1/4" 3/2 pilot/pilot | Pneumatic | $\begin{bmatrix} 12 & & 2 \\ T & & & T \\ \hline T & & & T \\ 3 & 1 \end{bmatrix}$ | 037023X | AX1P232 |



ries AX1

| Stainless Steel | air operated val | ves ser |
|------------------------|------------------|---------|
| 1/4", 5/2 pilot/spring | | |

Code

037001X

ltem

AX1P250

| Technical data | |
|----------------|--|

Main features

5/2 pilot/spring

Version

| Version | 5/2 pilot/spring | | |
|-------------------------------------|---|--|--|
| Code | 037001X | | |
| Item | AX1P250 | | |
| Size | 1/4" | | |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. | | |
| Pressure range | 1,5 ÷ 12 bar | | |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C (V) | | |
| Orifice Ø | 8 mm | | |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. | | |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | | |
| Mounting | In every position | | |

Notes

For code and availability of NPT threads, please contact the sales department





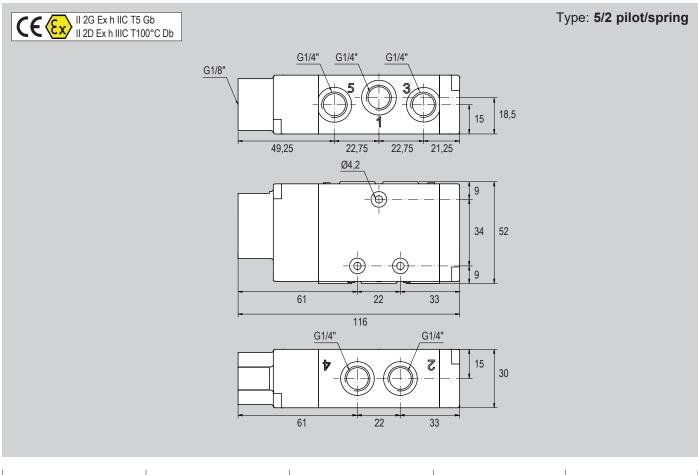


Symbol

5.116.40

Stainless Steel air operated valves series AX1 1/4", 5/2 pilot/spring

Standard dimensions



| Version | Actuation | Symbol | Code | ltem |
|-----------------------|-----------|---|---------|---------|
| 1/4" 5/2 pilot/spring | Pneumatic | $\begin{bmatrix} 14 \\ T \\ $ | 037001X | AX1P250 |





Stainless Steel air operated valves series AX1 1/4", 5/2 pilot/pilot



| Main features | | | |
|------------------------------|---------|---------|---|
| Version | Code | Item | Symbol |
| 5/2 pilot/pilot | 037024X | AX1P251 | $ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array}\\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\$ |
| 5/2 pilot/pilot differential | 037025X | AX1P252 | $\begin{bmatrix} 14\\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$ |



Technical data

| Version | 5/2 pilot/pilot | 5/2 pilot/pilot differential | |
|-------------------------------------|---|------------------------------|--|
| Code | 037024X | 037024X | |
| Item | AX1P251 | AX1P252 | |
| Size | 1/4" | | |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. | | |
| Pressure range | 1 ÷ 12 bar | | |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C (V) | | |
| Orifice Ø | 8 mm | | |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. | | |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | | |
| Mounting | In every position (vertical not reccomended when in presence of vibrations) | | |

Notes

For code and availability of NPT threads, please contact the sales department

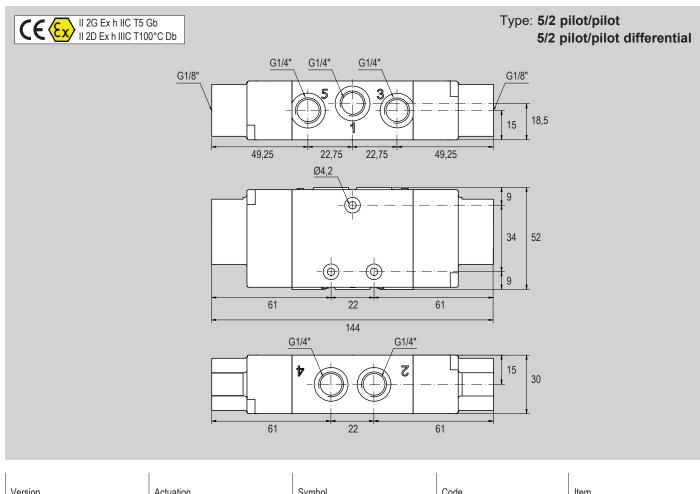
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Stainless Steel air operated valves series AX1 1/4", 5/2 pilot/pilot



Standard dimensions



| Version | Actuation | Symbol | Code | ltem |
|-----------------------------------|-----------|--|---------|---------|
| 1/4" 5/2 pilot/pilot | Pneumatic | $\begin{bmatrix} 14 & 4 & 2 \\ 1 & 7 & 7 \\ \hline 1 & 7 & 7 \\ \hline 5 & 1 & 3 \end{bmatrix}$ | 037024X | AX1P251 |
| 1/4" 5/2 pilot/pilot differential | Pneumatic | $\begin{bmatrix} 14 & 4 & 2 \\ 14 & 7 & 7 \\ 14 & 7 & 7 \\ 14 & 7 & 7 \\ 14 & 5 & 1 & 3 \end{bmatrix}$ | 037025X | AX1P252 |



Stainless Steel air operated valves series AX1 $_{1/4^{\prime\prime},\;5/3}$



Main features

| Version | Code | ltem | Symbol |
|-------------------------|---------|---------|---|
| 5/3 Closed Centres | 037026X | AX1P270 | 14 <u>4</u> 2 12 14 <u>1</u> 1 <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u></u> |
| 5/3 Open Centres | 037027X | AX1P271 | |
| 5/3 Pressurized Centres | 037028X | AX1P272 | 14 4 2 12 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |



Technical data

| Version | 5/3 Closed Centres | 5/3 Open Centres | 5/3 Pressurized Centres | | |
|-------------------------------------|---|------------------|-------------------------|--|--|
| Code | 037026X | 037027X | 037028X | | |
| Item | AX1P270 | AX1P271 | AX1P272 | | |
| Size | 1/4" | | | | |
| Fluid | Compressed air with or without lubrication. Lubrication, if started, must be continued. | | | | |
| Pressure range | 2,5 ÷ 12 bar | | | | |
| Temperature range | -25°C ÷ +70°C (standard) -10°C ÷ +150°C (V) | | | | |
| Orifice Ø | 8 mm | | | | |
| Flow at 6 bar with ΔP 1 bar | 1.100 NI/min. | | | | |
| ATEX compliance | II 2G Ex h IIC T5 Gb II 2D Ex h IIIC T100°C Db | | | | |
| Mounting | In every position | | | | |

Notes

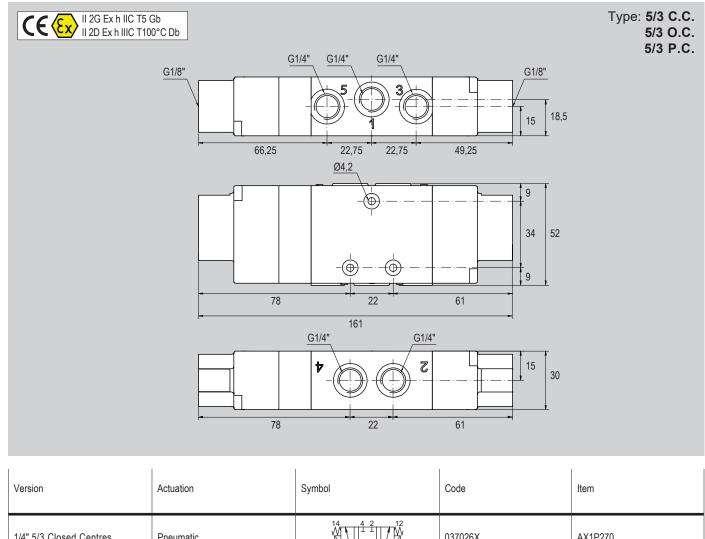
For code and availability of NPT threads, please contact the sales department



Stainless Steel air operated valves series AX1 $_{1/4^{\prime\prime},\;5/3}$



Standard dimensions



| 1/4" 5/3 Closed Centres | Pneumatic | 14 <u>4</u> <u>2</u> <u>12</u> <u>14</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> | 037026X | AX1P270 |
|------------------------------|-----------|---|---------|---------|
| 1/4" 5/3 Open Centres | Pneumatic | 14 4 2 12 V 1 1 1 1 1 1 1 5 1 3 | 037027X | AX1P271 |
| 1/4" 5/3 Pressurized Centres | Pneumatic | | 037028X | AX1P272 |