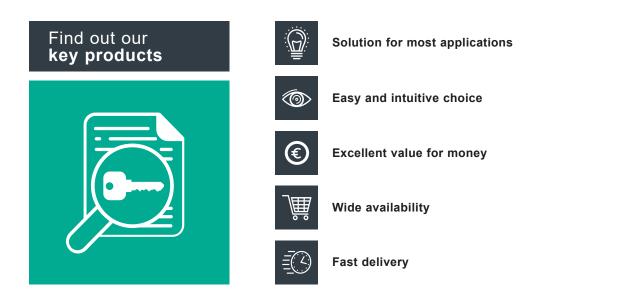
STAINLESS STEEL air operated valves Series AX1







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$
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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

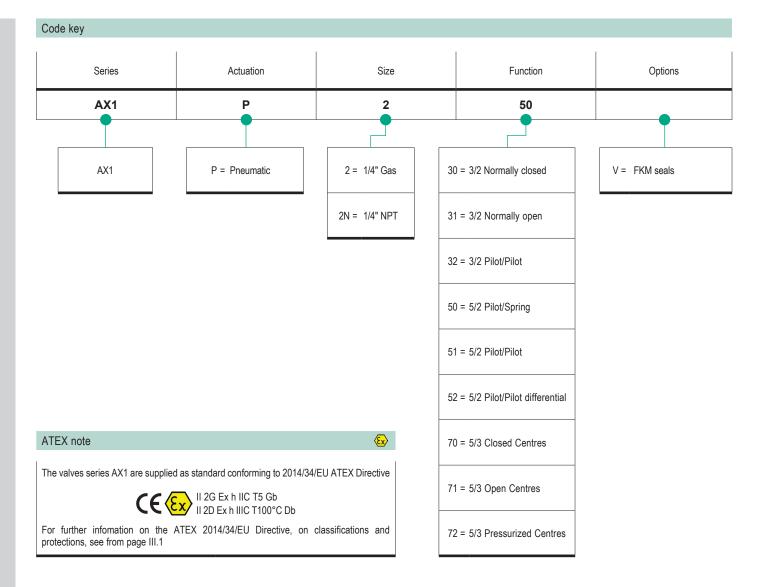
Series	Size	Function	ATEX	Standard options matching
				V
AX1	1/4"	3/2 - 5/2 - 5/3	Standard	•

Key

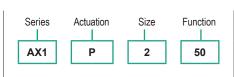
• allowed matching; - not allowed matching.

Stainless Steel air operated valves series AX1





How to order



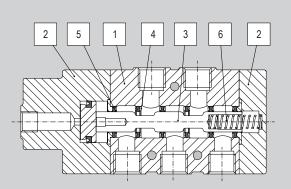
Notes

For standard materials, see page 5.115.5.

Stainless Steel air operated valves series AX1



Standard materials

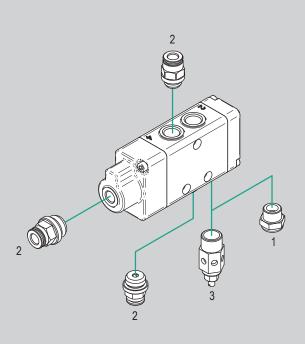


Position	Description	Material
		1/4"
		AX1P
1	Body	Stainless Steel AISI 316L
2	Covers	Stainless Steel AISI 316L
3	Spool	Hard anodized aluminium
4	Distancers	Technopolymer
5	Seals	HNBR
6	Spring	Stainless Steel

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

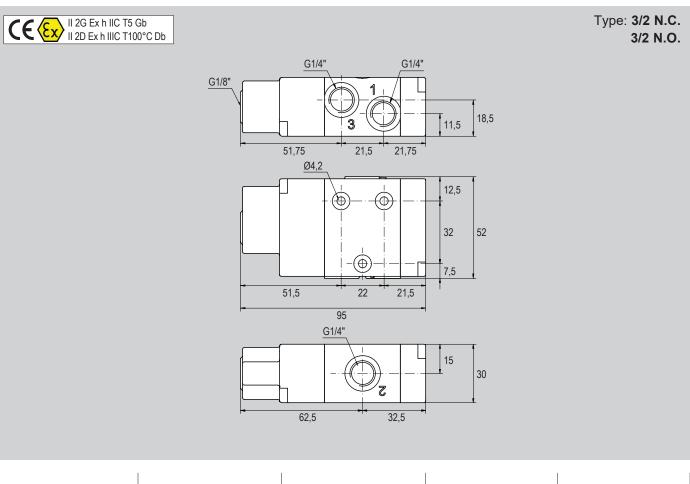
For code and availability of NPT threads, please contact the sales department

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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)		

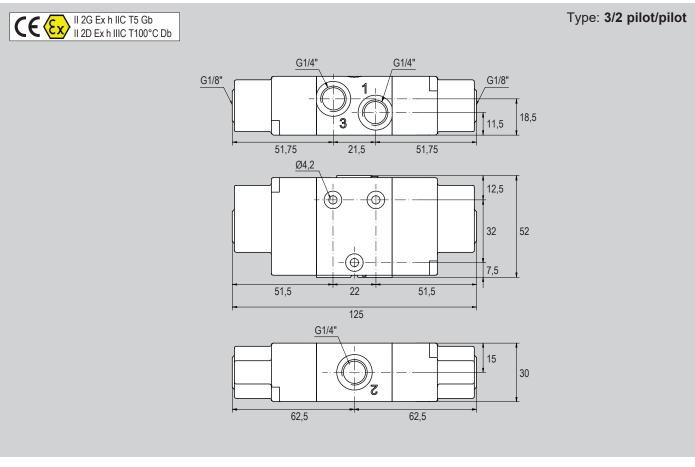
Main features

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





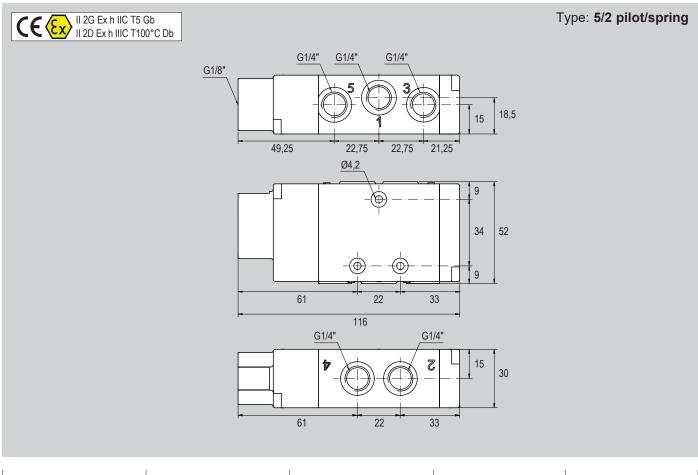


Symbol

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

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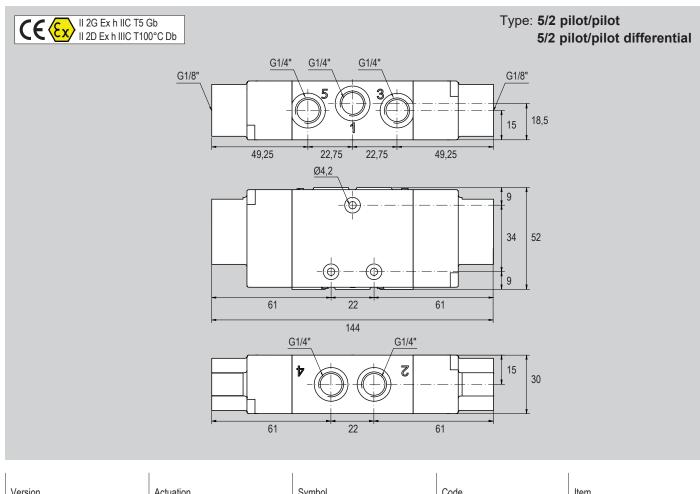
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Stainless Steel air operated valves series AX1 1/4", 5/2 pilot/pilot



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

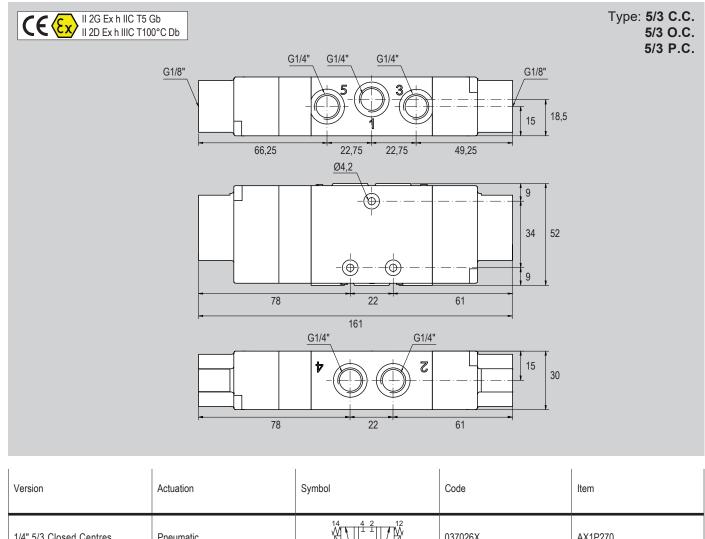
For code and availability of NPT threads, please contact the sales department



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