

# *Complete Range of Movement Solutions*



A complete range of Movement Solutions are available

- *ISO & VDMA Pneumatic Cylinders*
- *Compact Cylinders*
- *Guided Cylinders*
- *Non-Standard Cylinders*
- *Rotary Cylinders*
- *Grippers*
- *Rodless Cylinders*
- *Stainless Steel Cylinders*
- *Proximity Switches*
- *Additional Accessories*

### PRODUCT INDEX

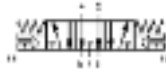
	Series	Page
Electropneumatically Operated Valves	3	496
Electropneumatically Operated Valves	3 and 4	499
Electropneumatically Operated Valves	4	500
Pneumatically Operated Valves	3 and 4	501
Electropneumatically and Pneumatically Operated Valves	9	502
U70, G70, A80, G80, H80 Solenoid Coils		504
Directly Operated Solenoid Valves	A	505



## SOLENOID AND PNEUMATIC VALVES

Series 3 Electropneumatically Operated Valves - continued

5/3 - way double solenoid valve - 1/8 -  
centres closed, centres open and pressure centres



Part Number

**368-011-02-\***

Part Number

**378-011-02-\***

Part Number

**388-011-02-\***



Part Number

**368-E11-02-\***

Part Number

**378-E11-02-\***

Part Number

**388-E11-02-\***

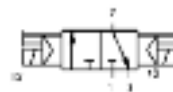
\*Coil sold separately, page 504

\*Coil sold separately, page 504

\*Coil sold separately, page 504

3/2 - way single solenoid valve - 1/4 - N.C. and N.O.

3/2 - way double solenoid valve - 1/4

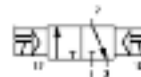
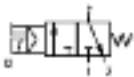


Part Number

**334-015-02-\***

Part Number

**334-011-02-\***



Part Number

**334-E15-02-\***

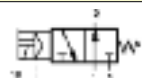
Part Number

**334-E11-02-\***

Part Number

**344-015-02-\***

\*Coil sold separately, page 504



Part Number

**344-E15-02-\***

\*Coil sold separately, page 504



4.  
5

Series 3 Electropneumatically Operated Valves - continued

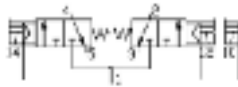
2 x 3/2 - way double solenoid valve - 1/4" - N.C. and N.O.

4.  
5



Part Number

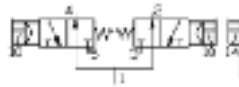
**334D-015-02-\***



Part Number

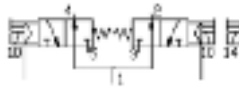
**334D-E15-02-\***

\*Coil sold separately, page 504



Part Number

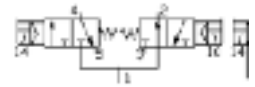
**344D-015-02-\***



Part Number

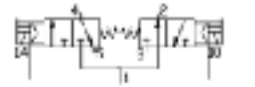
**344D-E15-02-\***

\*Coil sold separately, page 504



Part Number

**394D-015-02-\***



Part Number

**394D-E15-02-\***

\*Coil sold separately, page 504

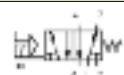
5/2 - way single solenoid valve - 1/4"

5/2 - way double solenoid valve - 1/4"



Part Number

**354-015-02-\***



Part Number

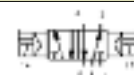
**354-E15-02-\***

\*Coil sold separately, page 504



Part Number

**354-011-02-\***



Part Number

**354-E11-02-\***

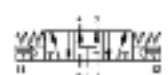
\*Coil sold separately, page 504



## SOLENOID AND PNEUMATIC VALVES

### Series 3 Electropneumatically Operated Valves continued

5/3 - way double solenoid valve - 1/4 -  
centres closed, centres open and pressure centres



Part Number

**364-011-02-\***



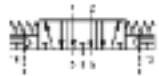
Part Number

**364-E11-02-\***

\*Coil sold separately, page 504

Part Number

**374-011-02-\***



Part Number

**374-E11-02-\***

\*Coil sold separately, page 504

Part Number

**384-011-02-\***



Part Number

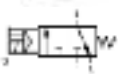
**384-E11-02-\***

\*Coil sold separately, page 504

4.  
5

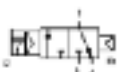
### Series 4 Electropneumatically Operated Valves

3/2 - way single  
solenoid valve - 1/8 - N.C.



Part Number

**438-015-22-\***



Part Number

**438-016-22-\***

\*Coil sold separately, page 504

3/2 - way double  
solenoid valve - 1/8 - N.C.



Part Number

**438-011-22-\***

\*Coil sold separately, page 504

5/2 - way single  
solenoid valve - 1/8



Part Number

**458-015-22-\***

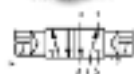


Part Number

**458-016-22-\***

\*Coil sold separately, page 504

5/2 - way double  
solenoid valve - 1/8



Part Number

**458-011-22-\***

\*Coil sold separately, page 504

Series 4 Electropneumatically Operated Valves - continued

4.  
5

5/3 - way double solenoid valve  
- 1/8 - centres closed

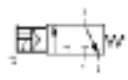


Part Number  
**468-011-22-\***

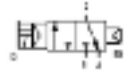


Part Number  
**478-011-22-\***  
\*Coil sold separately, page 504

3/2 - way single solenoid valve - 1/4 - N.C.



Part Number  
**434-015-22-\***



Part Number  
**434-016-22-\***  
\*Coil sold separately, page 504

3/2 - way double solenoid valve - 1/4 - N.C.



Part Number  
**434-011-22-\***  
\*Coil sold separately, see page 504

5/2 - way single solenoid valve - 1/4



Part Number  
**454-015-22-\***



Part Number  
**454-016-22-\***  
\*Coil sold separately, page 504

5/2 - way double solenoid valve - 1/4



Part Number  
**454-011-22-\***  
\*Coil sold separately, page 504

5/2 - way single vertical solenoid valve - 1/4



Part Number  
**454-V15-22-\***



Part Number  
**454-V16-22-\***  
\*Coil sold separately, page 504

5/2 - way double vertical solenoid valve - 1/4



Part Number  
**454-V11-22-\***  
\*Coil sold separately, page 504

5/3 - way double solenoid valve - 1/4 - centres closed and centre open



Part Number  
**464-011-22-\***



Part Number  
**474-011-22-\***  
\*Coil sold separately, page 504

## SOLENOID AND PNEUMATIC VALVES

Series 3 and 4 Pneumatically Operated Valves

Series 3: 1/8, 3/2-way and 5/2-way  
 Series 4: 1/8, 1/4 and 1/2  
 3/2, 5/2 and 5/3-way



Part Number	Part Number	Part Number
<b>338-035</b>	<b>338-033</b>	<b>358-035</b>
<b>338L-035</b> (For use with CNVL bases)	<b>338L-033</b> (For use with CNVL bases)	<b>354-035</b>
<b>334-035</b>	<b>334-033</b>	



Part Number	Part Number	Part Number
<b>358-033</b>	<b>368-033</b>	<b>338D-035</b>
<b>354-033</b>	<b>364-033</b>	<b>334D-035</b>



Part Number	Part Number
<b>378-033</b>	<b>348D-035</b>
<b>374-033</b>	<b>344D-035</b>



Part Number	Part Number
<b>388-033</b>	<b>398D-035</b>
<b>384-033</b>	<b>394D-035</b>

### Technical Data

#### Type of Construction

With spool

#### Media

Filtered air, without lubrication.

If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted.

#### Operating Temperature

0°C to +80°C.

(with dry air -20°C to +60°C)

#### Materials

Body: Aluminium

Spool: Stainless steel

Seals: NBR

#### Threaded Connections

1/8, 1/4, 1/2

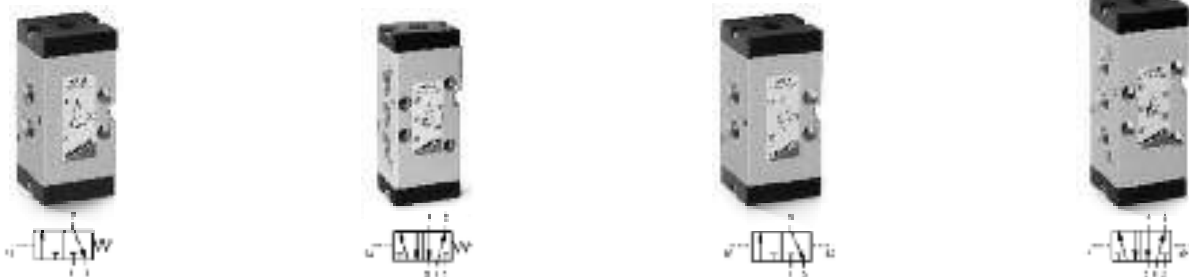
#### Mountings

Through holes in valve body

#### Additional Options

Seal Kits available on request

4.  
5



Part Number	Part Number	Part Number	Part Number
<b>438-35</b>	<b>458-35</b>	<b>438-33</b>	<b>458-33</b>

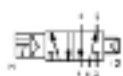


Part Number	Part Number
<b>438-34</b>	<b>458-34</b>



Series 9 Electropneumatically and Pneumatically Operated Valves

Assembly with sub-base (ISO 5599/1 Standards)  
Size 1, 2 and 3



Technical Data

**Type of Construction**

Spool-type (Servo controlled)

**Media**

Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted

**Operating Temperature**

0°C to +60°C. (with dry air -20°C to +60°C)

**Materials**

Body: Aluminium  
Spool: Stainless steel  
Seal: NBR

**Mountings**

Threaded holes in sub-base

**Additional Options**

Seal Kits available on request

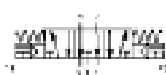
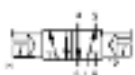
4.  
5

Part Number
<b>951-000-P15-23*</b>
<b>952-000-P15-23*</b>
<b>953-000-P15-23*</b>

\*Coil sold separately, page 504

Part Number
<b>951-000-P16-23*</b>
<b>952-000-P16-23*</b>
<b>953-000-P16-23*</b>

\*Coil sold separately, page 504



Part Number
<b>951-000-P11-23*</b>
<b>952-000-P11-23*</b>
<b>953-000-P11-23*</b>

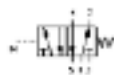
\*Coil sold separately, page 504

Part Number
<b>961-000-P11-23*</b>
<b>962-000-P11-23*</b>
<b>963-000-P11-23*</b>

\*Coil sold separately, page 504

Part Number
<b>971-000-P11-23*</b>
<b>972-000-P11-23*</b>
<b>973-000-P11-23*</b>

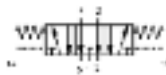
\*Coil sold separately, page 504



Part Number
<b>951-000-33</b>
<b>952-000-33</b>
<b>953-000-33</b>

Part Number
<b>951-000-34</b>
<b>952-000-34</b>
<b>953-000-34</b>

Part Number
<b>951-000-35</b>
<b>952-000-35</b>
<b>953-000-35</b>



Part Number
<b>961-000-33</b>
<b>962-000-33</b>
<b>963-000-33</b>

Part Number
<b>971-000-33</b>
<b>972-000-33</b>
<b>973-000-33</b>

## SOLENOID AND PNEUMATIC VALVES

### CODING EXAMPLE

<b>9</b>	<b>5</b>	<b>1</b>	<b>-</b>	<b>C</b>	<b>1</b>	<b>B</b>	<b>-</b>	<b>P16</b>	<b>-</b>	<b>23</b>	<b>-</b>	<b>U</b>	<b>7</b>	<b>7</b>	<b>-</b>	<b>S</b>
<b>9</b>	SERIES: 9				<b>1</b>	CONNECTIONS (OUTLETS): 1 = 1/4 2 = 3/8 3 = 1/2				<b>U</b>	SOLENOID MATERIAL: U = PPS G = Nylon					
<b>5</b>	NO OF WAYS/POSITIONS: 5 = 5/2 6 = 5/3 Closed centres 7 = 5/3 Open centres				<b>B</b>	N° OF SUB-BASE: A = 1                    *K = 9 *B = 2                   *L = 10 *C = 3                   *M = 11 *D = 4                   *N = 12 *E = 5                   *P = 13 *F = 6                   *R = 14 *G = 7                   *S = 15 *H = 8				<b>7</b>	SOLENOID DIMENSIONS: 7 = 22 x 22 8 = 30 x 30					
<b>1</b>	SIZE: 1 = Size 1 2 = Size 2 3 = Size 3				<b>P16</b>	ACTUATION: 33 = pneumatic, pneumatic return 34 = pneumatic, differential pneumatic return 35 = pneumatic, mechanical spring return P11 = double solenoid (horizontal solenoids) P15 = single solenoid, spring return (horizontal solenoids) P16 = solenoid, pneumatic spring return (horizontal solenoids)				<b>7</b>	SOLENOID VOLTAGE: See solenoids page 2.00/031					
<b>C</b>	SUB-BASE: C = ISO (manifold outlets) F = ISO (single sub-base, side connections) G = ISO (single sub-base, rear connections) N = ISO (front outlet interface) N1A = front outlet sub-base				<b>23</b>	SOLENOID INTERFACE: 23 = A531 - BC2				<b>S</b>	SPECIAL: S = Special to be specified					

\*Complete with two end-blocks Part Number **90\*-H\*\*** or **90\*-HN\***.

### Sub-base for Series 9

			
Single Sub-base with Side Outlets	Single Sub-base with Rear Outlets	Manifold sub-base with common exhausts and inlet with outlet connection on rear	End Block for manifold Sub-base
Size	Size	Size	Size
<b>901-F1A</b> 1	<b>901-G1A</b> 1	<b>901-C1A</b> 1	<b>901-H1*</b> 1
<b>902-F2A</b> 2	<b>902-G2A</b> 2	<b>902-C2A</b> 2	<b>902-H2*</b> 2
<b>903-F3A</b> 3	<b>903-G3A</b> 3	<b>903-C3A</b> 3	<b>903-H3*</b> 3
			*Pair
			
End Block with Front Outlet	Manifold Sub-base with common inlet and exhaust connection and with outlet connection on the front	End Block for manifold bases with front outlets	
Size	Size	Size	
<b>901-N1</b> 1	<b>901-N1A</b> 1	<b>901-HN1</b> 1	
<b>902-N2</b> 2			
<b>903-N3</b> 3			
			
Cover Plate for Unused Positions	Mounting	Separation Joint	Separation Joint
<b>901-TP</b>	<b>901-C1A-TP</b> <b>902-C2A-TP</b>	<b>901-N1A-T</b>	<b>901-N1A/TP</b>

4.  
5

**U70, G70, A80, G80, H80 Solenoid Coils**

Solenoids for electropneumatically operated valves Series A-3-4-9-NA



**Solenoid Voltages U7**

<b>U7H</b>	24V	50/60 Hz	3.5VA
	12V	DC	3.1W
<b>U7K</b>	110V	AC 50/60Hz	4.3VA
	125V	AC 50/60Hz	5.5VA
<b>U7J</b>	230V	50/60Hz	3.5VA
	240V	50/60Hz	4VA
<b>U79</b>	48V	DC	3.1W
<b>U710</b>	110V	DC	3.2W
<b>U77</b>	24V	DC	3.1W
	48V	50/60Hz	3.5VA
<b>U7F</b>	380V	50/60Hz	7VA
<b>U72</b>	12V	DC	5W
<b>U73</b>	24V	DC	5W
<b>U74</b>	48V	DC	5.3W
<b>U76</b>	110V	DC	4.2W

**Solenoid Voltages G70**

<b>G7H</b>	24V	50/60 Hz	3.5VA
	12V	DC	3.1W
<b>G7K</b>	110V	AC 50/60Hz	4.3VA
	125V	AC 50/60Hz	5.5VA
<b>G7J</b>	230V	50/60Hz	3.5VA
	240V	50/60Hz	4VA
<b>G79</b>	48V	DC	3.1W
<b>G710</b>	110V	DC	3.2W
<b>G77</b>	24V	DC	3.1W
	48V	50/60Hz	3.5VA
<b>G7F</b>	380V	50/60Hz	7VA
<b>G72</b>	12V	DC	5W
<b>G73</b>	24V	DC	5W
<b>G74</b>	48V	DC	5.3W
<b>G76</b>	110V	DC	4.2W

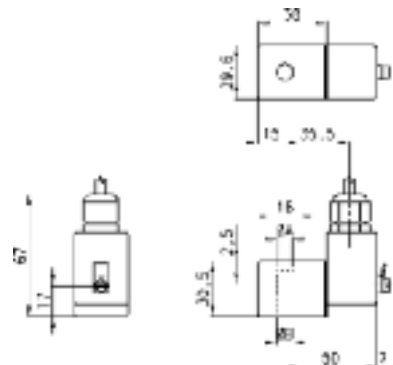
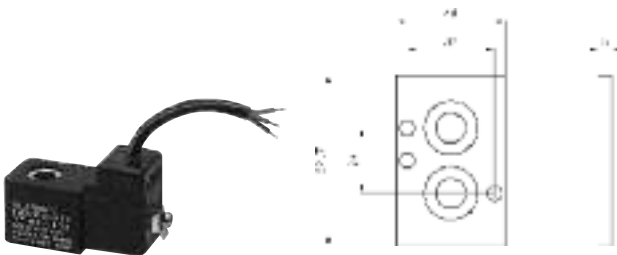


**Solenoid Voltages A80**

<b>A8B</b>	24V	50/60 Hz	5VA
<b>A8D</b>	110V	50/60 Hz	5VA
<b>A8E</b>	220V	50/60Hz	5VA
<b>A83</b>	24V	DC	4W
<b>A84</b>	48V	DC	4W
<b>A86</b>	110V	DC	4W

**Solenoid Voltages G90**

<b>G93</b>	24V
------------	-----



**Solenoid Voltages H80**

<b>H8B</b>	24V	50/60 Hz	5.5VA
<b>H8C</b>	48V	50/60 Hz	5.5VA
<b>H8D</b>	110V	50/60Hz	5.5VA
<b>H8E</b>	220V	50/60Hz	5.5VA
<b>H83</b>	24V	DC	5.5W

## SOLENOID AND PNEUMATIC VALVES

### Series A Directly Operated Solenoid Valves

2/2 Way, 3/2 Way. Monostable, bistable (with magnetic memory)  
 Connection: M5, 1/8, ø4mm cartridge.

The Camozzi range of Series A Directly Operated Solenoid Valves can be used with dry or lubricated air.



Part Number	Thread	Function
<b>A321-0C2</b> -*	M5	2/2 N.C.
<b>A321-1C2</b> -*	1/8	2/2 N.C.
<b>A321-1D2</b> -*	1/8	2/2 N.C.
<b>A321-1E2</b> -*	1/8	2/2 N.C.
<b>A322-0C2</b> -*	M5	2/2 N.O.
<b>A322-1C2</b> -*	1/8	2/2 N.O.

Part Number	Thread	Function
<b>A331-0C2</b> -*	M5	3/2 N.C.
<b>A331-1C2</b> -*	1/8	3/2 N.C.
<b>A332-0C2</b> -*	M5	3/2 N.O.
<b>A332-1C2</b> -*	1/8	3/2 N.O.



Part Number	Thread	Function
<b>A431-0C2</b> -*	1/8 - M5	3/2 N.C.
<b>A431-1C2</b> -*	1/8 - ø4	3/2 N.C.



Part Number	Thread	Function
<b>A431-1C2</b> -*	1/8	3/2 N.C.



Part Number	Thread	Function
<b>A431-3C2</b> -*	M5 - 1/83/2	N.C.
<b>A431-4C2</b> -*	M5 - 1/83/2	N.C.

Part Number	Interface	Function
<b>A631-AC2</b> -*	OR	3/2 N.C.

Part Number	Interface	Function
<b>A531-BC2</b> -*	OR	3/2 N.C.

\*Coil sold separately, see page 504

#### Technical Data

##### Type of Construction

Poppet type

##### Media

Filtered air, without lubrication.  
 If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted.

##### Operating Pressure

See technical data page 2.00/002

##### Flow Rate

See technical data page 2.00/002

##### Operating Temperature

0°C to +60°C  
 (with dry air -20°C to +60°C)

##### Materials

Body: OT58 Brass nickel-plated (A531... nylon)  
 Seals: NBR Other Parts: Stainless Steel

##### Connections

M5, 1/8, ø4mm cartridge

##### Mountings

By means of M4 screws

##### Additional Options

Seal Kits available on request

##### Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

4.  
5

#### CODING EXAMPLE

**A** | **3** | **3** | **1** | **-** | **0** | **C** | **2** | **-** | **U** | **7** | **7**

#### A SERIES:

**3** BODY DESIGN:  
 1 = base (24 x 24 mm) interface rotatable through 360°  
 2 = base (24 x 24 mm) fixed interface  
 3 = threaded body  
 4 = rapid exhaust body  
 5 = base with ISO standard interface, fixed  
 6 = base (16 x 16 mm) interface rotatable through 360°  
 For other options please contact our sales office.

**0** CONNECTIONS:

	1	2	3
0	M5	M5	M5
1	1/8	1/8	M5
3	M5	1/8 male	M5
4	M5	1/8 male	M5
		(with manual override)	
A	rotatable O-ring interface		M5
B	fixed O-ring interface		M5

**U** ENCAPSULATING MATERIAL:  
 G = Nylon  
 U = PET (standard)  
 A8 = PPS  
 H8 = PA6VO

**3** N° OF CONNECTIONS:  
 2 = 2 way  
 3 = 3 way

**C** NOMINAL DIAMETER:  
 C = 1.5ø D = 2ø E = 2.5ø

**7** SOLENOID DIMENSIONS:  
 7 = 22 x 22 9 = 22 x 58  
 8 = 30 x 30

**1** FUNCTION:  
 1 = NC (normally closed)  
 2 = NO (normally open)

**2** BODY MATERIAL:  
 1 = Aluminium  
 2 = OT58 brass A531 - BC2: Nylon

**7** SOLENOID VOLTAGE:  
 See page 2.00/031