





### AirLINE and AirLINE Quick – electrical/ pneumatic Automation System

- Fully compatible with PHOENIX INLINE System
- Combination of Fieldbus, pilot valves and I/O modules
- Higher flexibility in the control cabinet with AirLINE Quick
- Compact design
- High flow rate value

Product variants described in the data sheet may differ from the product presentation and description.

#### Can be combined with

- |   |   |
|---|---|
|   | <b>Type 2000</b> ▶<br>Pneumatically operated 2/2 way angle seat valve CLASSIC                                   |
|  | <b>Type MKRS</b> ▶<br>Redundancy valve block for safety related shut-off function                               |
|  | <b>Type 0498</b> ▶<br>Double pilot controlled check valve for realising 5/3 way function with all ports blocked |
|  | <b>Type 8614</b> ▶<br>Pneumatic control cabinet solutions for hygienic process environments                     |

#### Type description

The AirLINE System integrates high performance solenoid pilot valves, remote electronic I/O and fieldbus communication into a process actuation and control system that is both compact and extremely flexible. Its modular design allows fully customized, pre-mounted and tested solutions to exactly meet all application needs including the integration of a local Mini PLC. Due to the full electronic and mechanical integration, the valve block can be added without the need of any tools or wiring.

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## 1. General technical data

Solenoid valves	Type 0460, Type 6524, Type 6525
<b>Product properties</b>	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 7.
Width/station	11 mm
Electrical modules	PHOENIX INLINE
Fieldbus Type	PROFIBUS DP, INTERBUS, DeviceNet, CANopen, Ethernet, others on request
Max. number of modules	Depending on application
Max. number of valves	64 (by use of Type 0460 and Type 6524: 2 × 3/2 way-valve: 32)
Module Types	2x and 8x <sup>1)</sup>
Circuit function	C (3/2 way) D (3/2 way) H (5/2 way) H (5/2 way) impulse L (5/3 way) in middle position all ports locked N (5/3 way) in middle position all ports exhausted Detailed information can be found in chapter "3. Circuit functions" on page 6.
<b>Performance data</b>	
Flow ( $Q_{Nn}$ value air)	300 l/min <sup>1)</sup>
Pressure range	Vac. up to 10 bar
<b>Electrical data</b>	
Operating voltage	24 V DC
Nominal power per valve	1 W (0,5 W Nominal power acc. to 120 ms)
Rated current per valve	43 mA (28 mA Hold current after 120 ms) 41 mA (by use of Type 0460)
Residual ripple (at DC)	1 Vss
Voltage tolerance	+20%/- 15 % (by use of Type 0460: ± 10 %)
<b>Approvals and certificates</b>	
Degree of protection	IP20, IP65 in closed field housing
Approvals	On request
<b>Environment and installation</b>	
Storage temperature	-20...+60 °C
Ambient temperature	0...+55 °C (by use of Type 0460: 0...+50 °C)

1.) Integrated check valve and P-Shut off valve are optional)

## 2. Product versions

### 2.1. Solenoid valves Type 6524 and Type 6525



- The solenoid valves of **Type 6524** ▶ (single and double valve) and **Type 6525** ▶ (single valve) consist of a pilot flipper solenoid valve of Type 6144 and a pneumatic seat valve. The operating principle allows switching of high pressures with low power consumption and short switching times. The solenoid valves are equipped with a manual override as standard.
- For detailed information regarding ordering information see [“5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 9.](#)

Solenoid valve Type	6524 / 6525	6524
Circuit function	3/2 and 5/2 way valve	2 x 3/2 way valve
<b>Product properties</b>		
<b>Material</b>		
Body	PA (Polyamide)	
Seal	FPM, NBR and PUR	
Width per station	11 mm	
Manual override	Standard	
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø ¼"	
<b>Performance data</b>		
Pressure data	Overpressure to atmospheric pressure	
Flow rate (Q <sub>Nn</sub> value air)	See <a href="#">“5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 9</a> , measured at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference.	
Duty cycle	Continuous operation (100 % ED)	
Switching time	Measured according to ISO 12238	
<b>Electrical data</b>		
Electrical connection at the valve	Rectangular plug 2 pin grid spacing 5.08 mm Cable with leads <sup>1.)</sup>	Rectangular plug 3 pin grid spacing 2.54 mm Cable with leads <sup>1.)</sup>
Nominal power	0.8 W	2 x 0.8 W
<b>Process/Port connection &amp; communication</b>		
Service port 2 (A), 4 (B)	Plug-in coupling Ø 6 mm, plug-in coupling Ø ¼"	
Supply port connection 1 (P), 3 (R), 5 (S)	G ¼	
<b>Environment and installation</b>		
Installation	As required, preferably with actuator upright	
Mounting condition	With 2 screws M2 x 20	

1.) Versions with safety-related shutdown. The switching contact must be located in the same control cabinet as the valve block. The line length must be limited to a maximum of 2 m.

## 2.2. Solenoid valve Type 0460

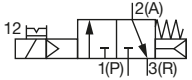
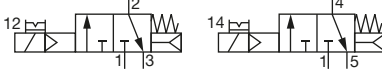
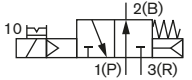
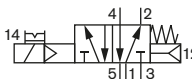
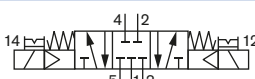

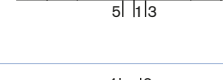


The solenoid valve, **Type 0460** ▶, consists of a pneumatic valve body fitted with a double coil solenoid valve. The principle allows switching of high pressures together with low power consumption and fast response times. All valves are equipped with manual override as a standard.

See [“5.4. Ordering chart replacement valves Type 0460” on page 10.](#)

<b>Solenoid valve Type</b>	<b>0460</b>
<b>Circuit function</b>	<b>5/2 way and 5/3 way Impulse valve</b>
<b>Product properties</b>	
<b>Materials</b>	
Body	Aluminium
Seal	NBR
Width per station	11 mm
Manual override	Standard
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø ¼
<b>Performance data</b>	
Pressure data	Overpressure to atmospheric pressure
Flow rate (Q <sub>Nn</sub> value air)	See <a href="#">“5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 9</a> , measured at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference.
Switching time	Measured according to ISO 12238
<b>Electrical data</b>	
Electrical connection at the valve	Rectangular plug 3 pin grid spacing 2,54 mm
<b>Process/Port connection &amp; communication</b>	
Service port 2 (A), 4 (B)	Plug-in coupling Ø 6 mm, plug-in coupling Ø ¼"
Supply port connection 1 (P), 3 (R), 5 (S)	G ¼
<b>Environment and installation</b>	
Installation	As required, preferably with actuator upright
Mounting condition	With 2 screws M1,7 x 23

### 3. Circuit functions

Circuit Function	Description
	<b>Type: C, solenoid valve</b> 3/2 way Servo-controlled, with manual mode Normally closed
	<b>Type: C, solenoid valve</b> 2 x 3/2 way Servo-controlled, with manual mode Normally closed
	<b>Type: D, solenoid valve</b> 3/2 way Servo-controlled, with manual mode Normally open
	<b>Type: H, solenoid valve</b> 5/2 way Servo-controlled, pilot air and manual mode Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.
	<b>Type: L, solenoid valve</b> 5/3 way With manual mode In middle position all ports locked Normally closed
	<b>Type: N, solenoid valve</b> 5/3 way With manual mode In middle position ports 2 and 4 exhausted There is always one of the two outlet ports (2) or (4) pressurized when coil is activated.
	<b>Type: Z, solenoid valve</b> 5/2 way Impulse version with 2 coils and manual mode Normally open Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.

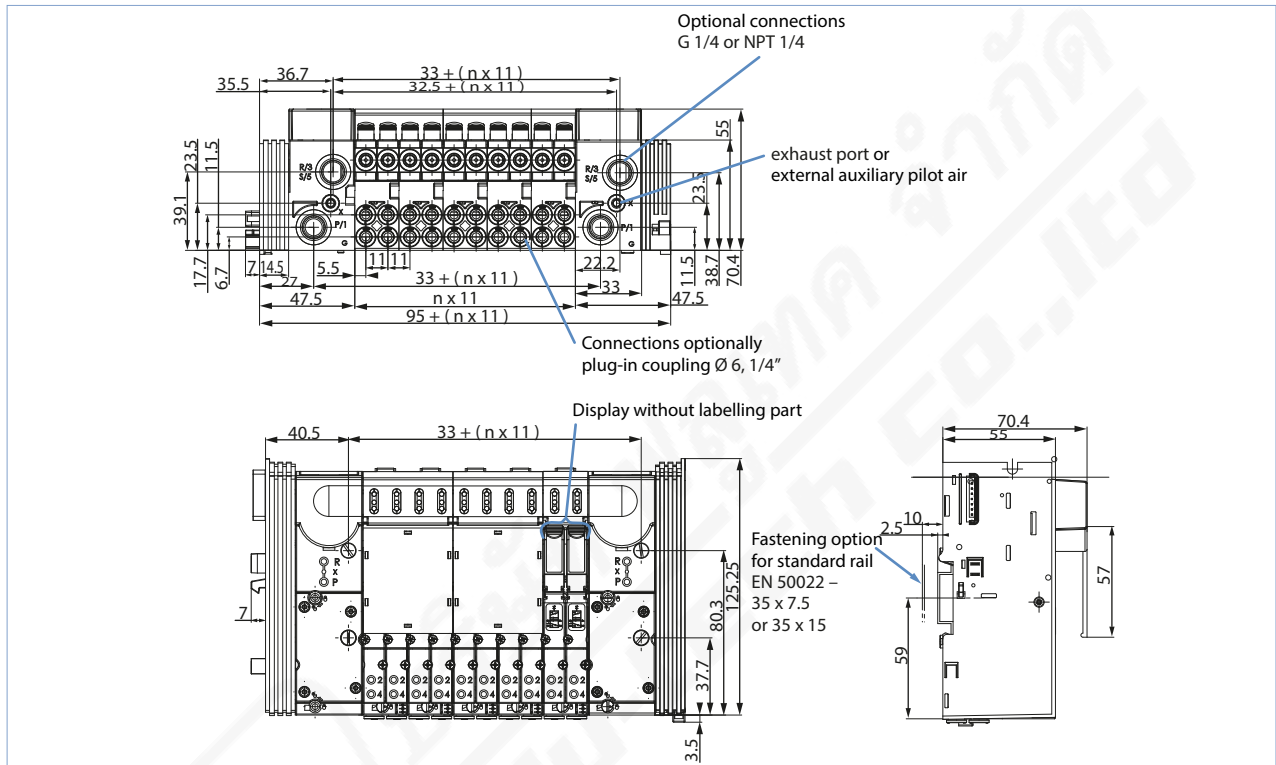
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## 4. Dimensions

### 4.1. Solenoid valve Type 6524 and Type 6525

**Note:**

- 11 mm width per station
- Dimensions in mm
- n = number of valves

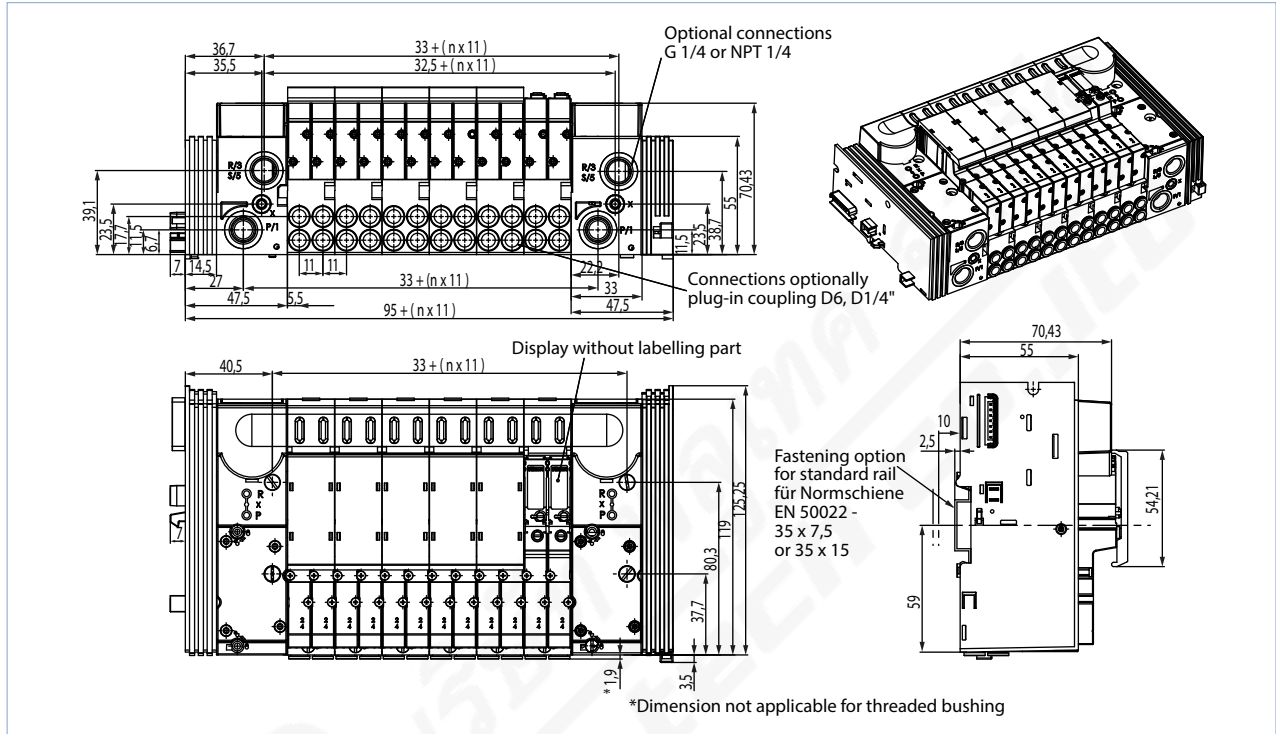


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## 4.2. Solenoid valve with Type 6524 2 x 3/2 way valve

**Note:**

- 11 mm width per station
- Dimensions in mm
- n = number of valves



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## 5. Ordering information

### 5.1. Bürkert eShop – Easy ordering and quick delivery



#### Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

### 5.2. Bürkert product filter



#### Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

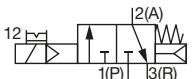
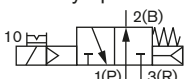
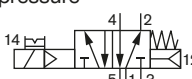
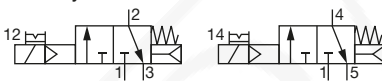
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### 5.3. Ordering chart replacement valves Type 6524 and Type 6525

**Note:**

For detailed information on the corresponding product version, see “2.1. Solenoid valves Type 6524 and Type 6525” on page 4.

Circuit function	Orifice	Q <sub>Nn</sub> -value <sup>1.)</sup> air	Pressure range	Switching times		Voltage/ Frequency <sup>3.)</sup>	Article no.
	[mm]			[l/min]	Opening [ms]		
<b>C, solenoid valve</b> 3/2 way Servo-controlled, with manual mode Normally closed 	4	300	Vac. 7	15	20	24 V DC	20029915 ☒ (186258) <sup>4.)</sup>
			1...10 <sup>2.)</sup>	15	20	24 V DC	20029913 ☒ (186257) <sup>4.)</sup>
			2.5...10	15	28	24 V DC	20029910 ☒ (184043) <sup>4.)</sup>
<b>D, solenoid valve</b> 3/2 way Servo-controlled, with manual mode Normally open 	–	–	2.5...10	15	28	24 V DC	20029911 ☒ (184400) <sup>4.)</sup>
<b>H, solenoid valve</b> 5/2 way Servo-controlled, pilot air and manual mode Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure 	4	300	1...10 <sup>2.)</sup>	15	20	24 V DC	20029914 ☒ (186271) <sup>4.)</sup>
			2.5...10	20	28	24 V DC	20029912 ☒ (179938) <sup>4.)</sup>
<b>C, solenoid valve</b> 2 x 3/2 way Servo-controlled, with manual mode Normally closed 	4	300	1...10 <sup>2.)</sup>	12	20	24 V DC	186259 ☒
			2.5...10	12	20	24 V DC	186260 ☒

- 1.) With integrated HotSwap and/or non-return function, the flow rate reduces
- 2.) Version with auxiliary control air
- 3.) 10 % residual ripple allowed
- 4.) The valve article number can no longer be ordered. Please order superior set.

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#### 5.4. Ordering chart replacement valves Type 0460

**Note:**

For detailed information on the corresponding product version, see “2.2. Solenoid valve Type 0460” on page 5.

Circuit function	Orifice	Q <sub>nn</sub> -value <sup>1)</sup> air	Pressure range	Switching times		Nominal power [W]	Article no.
	[mm]	[l/min]		Opening [ms]	Closing [ms]		
<b>L, solenoid valve</b> 5/3 way With manual mode In middle position all ports locked Normally closed 	2.5	200	2...7	15	20	1	154184 𠄎
<b>N, solenoid valve</b> 5/3 way With manual mode In middle position ports 2 and 4 exhausted There is always one of the two outlet ports (2) or (4) pressurized when coil is activated. 	2.5	200	2...7	15	20	1	154185 𠄎
<b>Z, solenoid valve</b> 5/2 way Impulse version with 2 coils and manual mode Normally open Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure. 	2.5	200	2...7	15	20	1	154183 𠄎

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### 5.5. Ordering chart accessories

#### Covering plates

**Note:**

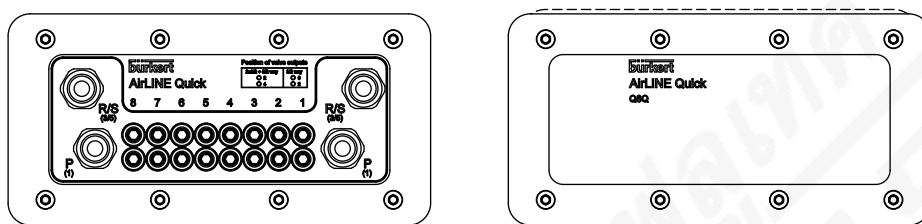
When all the valve connections in a basic valve unit module are not used, then these connections should be covered by the appropriate covering plate for full efficiency.

Covering plates	Article no.
Covering plate for solenoid valve Type 6524/6525	650373
Covering plate for solenoid valve Type 6524 2 x 3/2 way valve	661092
Covering plate for solenoid valve Type 0460	655069

#### Blind plates

**Note:**

A blind plate is used to cover an existing flange interface for AirLINE Quick on control cabinet wall or on the control cabinet floor.



Material	Number of valve positions	Article no.
Stainless steel 1.4301	8	366244
	12	366245
	16	366246
	16 with Intermediate supply	366247
	24	366248
	24 with Intermediate supply	366249

### 5.6. Ordering chart spare parts

#### 11 mm width per station

Description	Content	Article no.
Replacement valves	–	See “5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 9
Cover plates	–	See “5.5. Ordering chart accessories” on page 11
<b>Set of valve seals</b>		
Profile seal set solenoid valve Type 6524, 2x 3/2 way	12 seals	20016305
Profile seal set solenoid valve Type 6525, REV. 1	12 seals	20024334
Profile seal set solenoid valve Type 6524, 3/2 way, REV. 1	12 seals	20024333
Profile seal set solenoid valve Type 0460	12 seals	20024330

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