






AirLINE and AirLINE Quick – electrical/pneumatic Automation System

- Fully compatible with Rockwell Point I/O 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

	Type 2000 ▶ Pneumatically operated 2/2 way angle seat valve CLASSIC
	Type MKRS ▶ Redundancy valve block for safety related shut-off function
	Type 0498 ▶ Double pilot controlled check valve for realising 5/3 way function with all ports blocked
	Type 8614 ▶ 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.

8644 Rockwell: available until September 2023

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1. General technical data

Solenoid valves	Type 0460, Type 6524, Type 6525
Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 7.
Width/station	11 mm
Electrical modules	Rockwell Point I/O
Fieldbus Type	DeviceNet, EtherNet/IP, PROFIBUS DP, ControlNet
Max. number of modules	Depending on application
Max. number of valves	64 (by use of Type 0460: 32)
Module Types	4x ^{1.)}
Circuit function ^{2.)}	C (3/2 way) D (3/2 way) H (5/2 way) Z (5/2 way) impulse L (5/3 way) in middle position all ports locked N (5/3 way) in middle position all ports exhausted
Performance data	
Pressure range	Vac. up to 10 bar
Flow (Q _{Nn} value air)	310 l/min ^{3.)}
Electrical data	
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 0461: ± 10 %)
Approvals and Certificates	
Degree of protection	IP20, IP65 in closed field housing
Approval	ATEX, Zone 2 (BVS 20 ATEX E 031 U) IECEX, Zone 2 (IECEX BVS 20.0024 U)
Environment and installation	
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.) Detailed information can be found in chapter "3. Circuit functions" on page 6.

3.) Maximum flow rate depending on valve function.

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 10.](#)

Solenoid valve Type	6524 / 6525	6524
Circuit function	3/2 and 5/2 way valve	2 × 3/2 way valve
Product properties		
Materials		
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"	
Performance data		
Pressure data	Overpressure to atmospheric pressure	
Flow rate (Q _{Nn} value air)	See “5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 10 , 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	
Electrical data		
Electrical connection at the valve	Rectangular plug 2 pin grid spacing 5.08 mm Cable with leads ^{1.)}	Rectangular plug 3 pin grid spacing 2.54 mm Cable with leads ^{1.)}
Nominal power	0.8 W	2 × 0.8 W
Process/Port connection & communication		
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	
Environment and installation		
Installation	As required, preferably with actuator upright	
Mounting condition	With 2 screws M2 × 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 11.](#)

Solenoid valve Type	0460
Circuit function	5/2 way and 5/3 way Impulse valve
Product properties	
Materials	
Body	Aluminium
Seal	NBR
Width per station	11 mm
Manual override	Standard
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø ¼
Performance data	
Pressure data	Overpressure to atmospheric pressure
Flow rate (Q _{Nn} value air)	See “5.3. Ordering chart replacement valves Type 6524 and Type 6525” on page 10 , measured at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference.
Switching time	Measured according to ISO 12238
Electrical data	
Electrical connection at the valve	Rectangular plug 3 pin grid spacing 2,54 mm
Process/Port connection & communication	
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
Environment and installation	
Installation	As required, preferably with actuator upright
Mounting condition	With 2 screws M1,7 x 23

3. Circuit functions

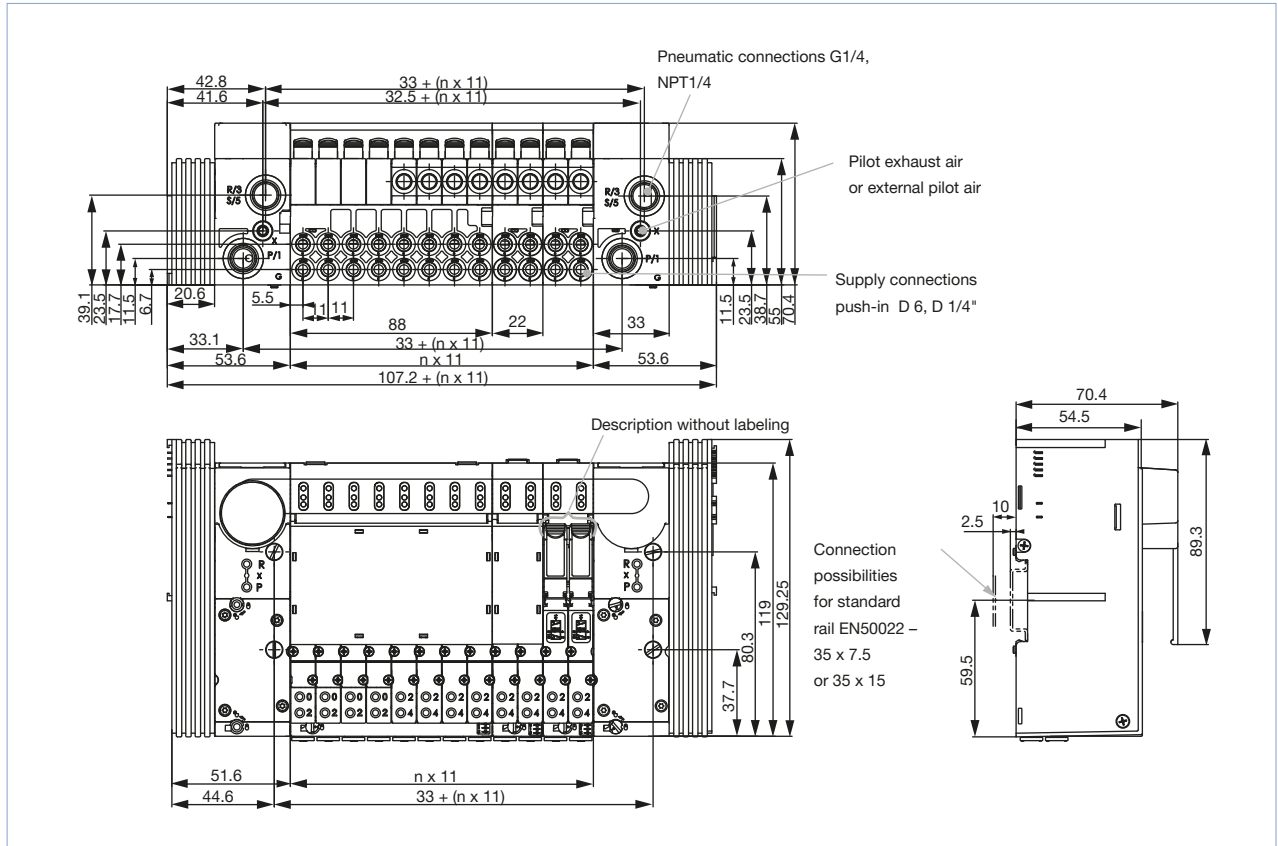
Circuit Function	Description
	<p>Type: C, solenoid valve 3/2 way Servo-controlled, with manual mode Normally closed</p>
	<p>Type: C, solenoid valve 2 x 3/2 way Servo-controlled, with manual mode Normally closed</p>
	<p>Type: D, solenoid valve 3/2 way Servo-controlled, with manual mode Normally open</p>
	<p>Type: H, solenoid valve 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.</p>
	<p>Type: L, solenoid valve 5/3 way With manual mode In middle position all ports locked Normally closed</p>
	<p>Type: N, solenoid valve 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.</p>
	<p>Type: Z, solenoid valve 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.</p>

4. Dimensions

4.1. Solenoid valve Type 6524 and Type 6525

Note:

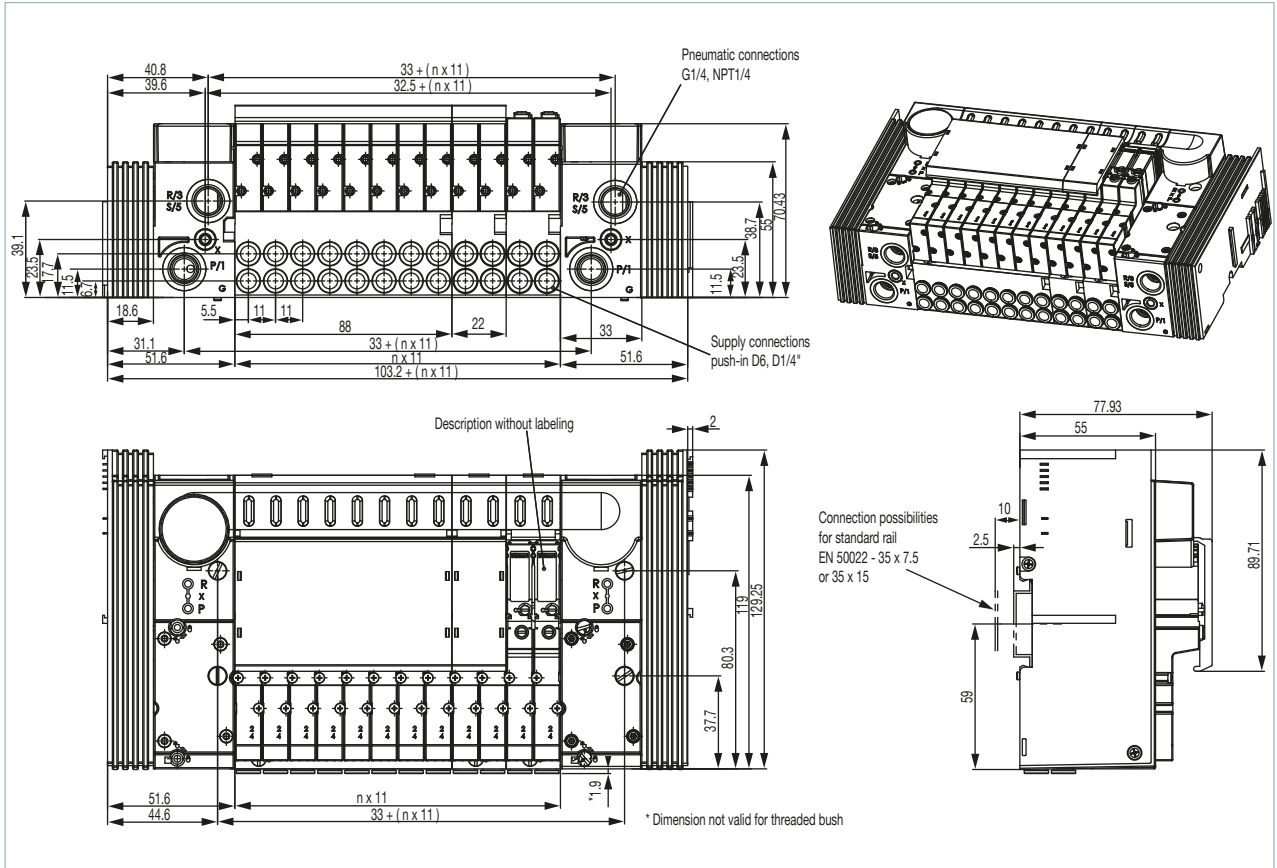
- 11 mm width per station
- Dimensions in mm
- n = number of valves



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

Note:

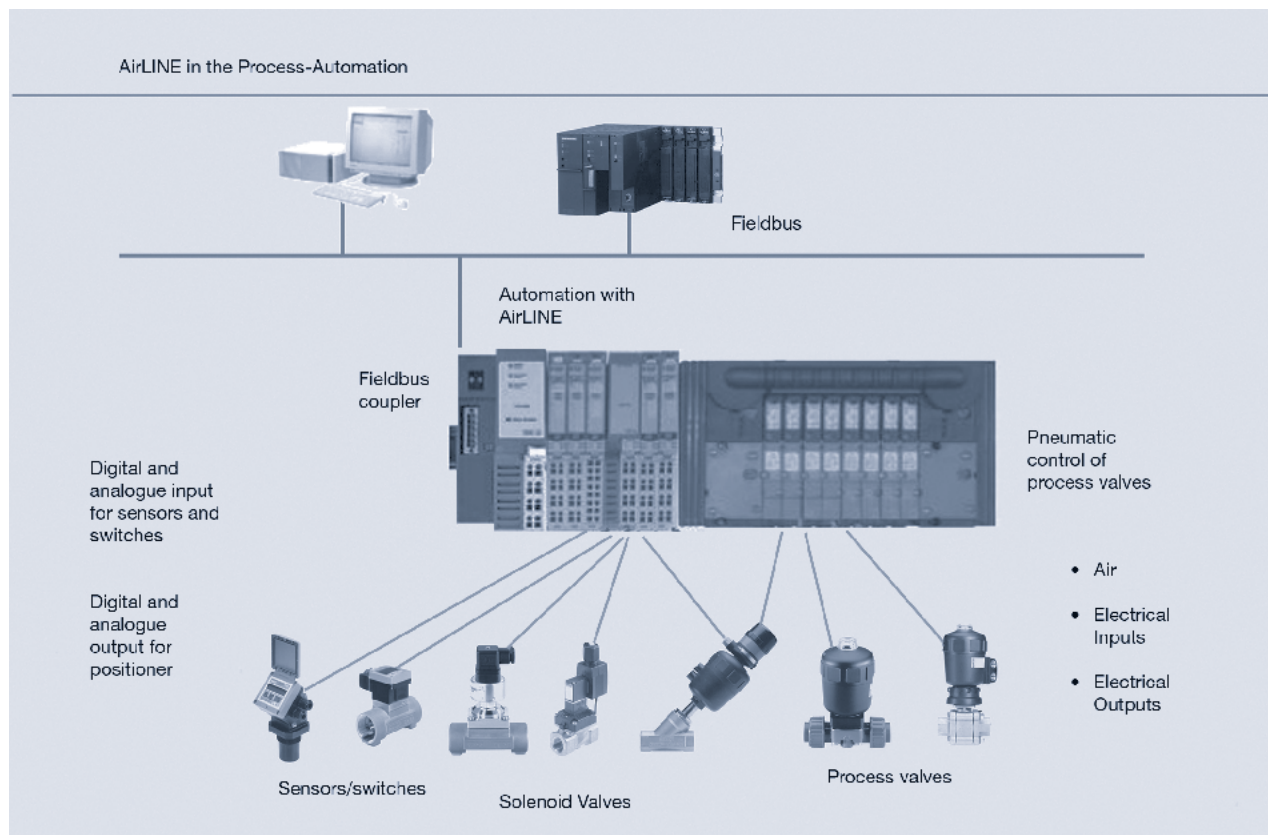
- 11 mm width per station
- Dimensions in mm
- n = number of valves



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4.3. Example configuration

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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.

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5.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

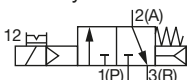



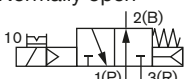

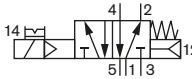


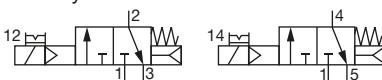


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5.3. Ordering chart replacement valves Type 6524 and Type 6525

Note:

Detailed information about product version see “2.1. Solenoid valves Type 6524 and Type 6525” on page 4.

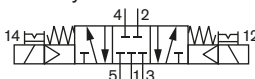
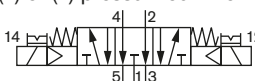
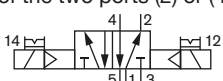
Circuit function	Nominal diameter	Q _{Nn} -value ^{1.)}	Pressure range	Switching times		Voltage/ Frequency ^{3.)}	Article no.
	[mm]	[l/min]		Opening	Closing		
Type: C, solenoid valve 3/2 way Servo-controlled, with manual mode Normally closed 	4	300	Vac. 7	15	20	24 V DC	20029915  (186258) ^{4.)}
			1...10 ^{2.)}	15	20	24 V DC	20029913  (186257) ^{4.)}
			2.5...10	15	28	24 V DC	20029910  (184043) ^{4.)}
Type: D, solenoid valve 3/2 way Servo-controlled, with manual mode Normally open 	–	–	2.5...10	15	28	24 V DC	20029911  (184400) ^{4.)}
Type: H, solenoid valve 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 ^{2.)}	15	20	24 V DC	20029914  (186271) ^{4.)}
			2.5...10	20	28		20029912  (179938) ^{4.)}
Type: C, solenoid valve 2 x 3/2 way Servo-controlled, with manual mode Normally closed 	4	300	1...10 ^{2.)}	12	20	24 V DC	186259 
			2.5...10				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.

5.4. Ordering chart replacement valves Type 0460

Note:

Detailed information about product version see “2.2. Solenoid valve Type 0460” on page 5.

Circuit function	Nominal diameter	Q _{Nn} -value ¹⁾	Pressure range	Switching times		Voltage/ Frequency ³⁾	Article no.
	[mm]	[l/min]		Opening [ms]	Closing [ms]		
Type: L, solenoid valve 5/3 way With manual mode In middle position all ports locked Normally closed 	2.5	200	2...7	1	15	20	154184 ☒
Type: N, solenoid valve 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	1	15	20	154185 ☒
Type: Z, solenoid valve 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	1	15	20	154183 ☒

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.

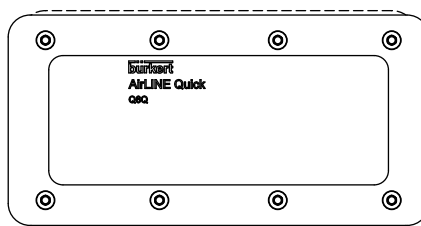
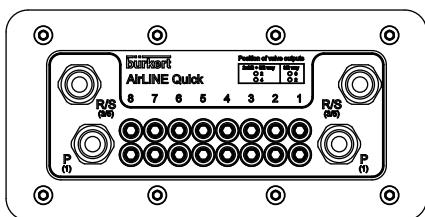
Covering plates	Article no.
Covering plate for solenoid valve Type 6524/6525	650373 ☒
Covering plate for solenoid valve Type 6524 2 × 3/2 way valve	661092 ☒
Covering plate for solenoid valve Type 0460	655069 ☒

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Blind plates

Note:

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



Material	Amount of valve slots	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 10
Cover plates	–	See “5.5. Ordering chart accessories” on page 11
Set of valve seals		
Profile seal set solenoid valve Type 6524, 2x 3/2 way	12 seals	20016305
Profile seal set solenoid valve Type 6525	12 seals	20024334
Profile seal set solenoid valve Type 6524, 3/2 way	12 seals	20024333
Profile seal set solenoid valve Type 0460	12 seals	20024330

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