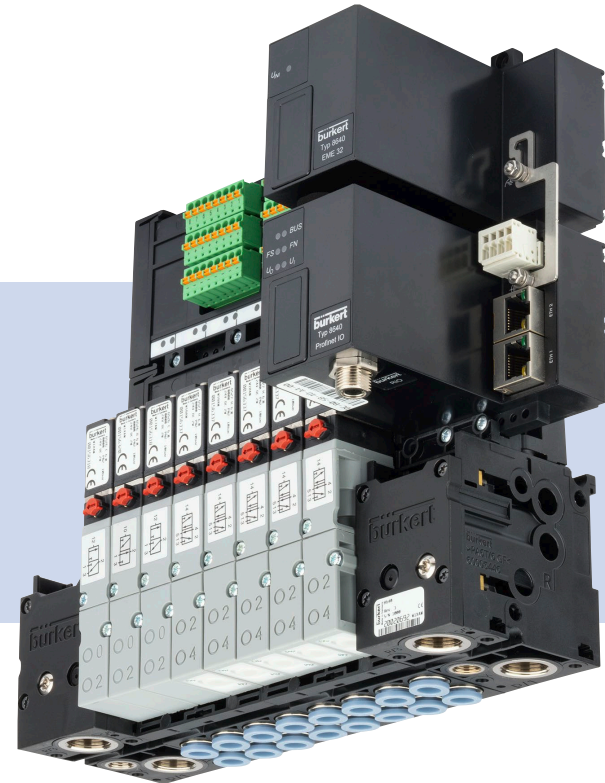


# Type 8640 AirLINE



## Quickstart

English    Deutsch    Français

We reserve the right to make technical changes without notice.  
Technische Änderungen vorbehalten.  
Sous réserve de modifications techniques.

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Operating Instructions 2206/12\_EUml\_00804431 / Original DE

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## 1 QUICKSTART

Quickstart contains a short summary of the most important information and instructions for using the device. The detailed description can be found in the operating instructions for Type 8640.

Keep the Quickstart in an easily accessible location for every user. The Quickstart must be available to each new owner of the device.

### Important safety information!

- ▶ Carefully read these instructions.
- ▶ Above all, observe the safety instructions, intended use and operating conditions.
- ▶ Persons who work on the device must read and understand these instructions.



Operating instructions and data sheets for Bürkert products can be found on the Internet at:  
[country.burkert.com](http://country.burkert.com)

## 1.1 Definition of terms

Term	in these instructions, refers to
Device, valve island	Valve island Type 8640
Actuator	Pneumatic consumer controlled by the valve island
Plant	Machine with pneumatic consumers actuated by the valve island

## 1.2 Symbols used



### DANGER!

**Warns of an immediate danger.**

- ▶ Failure to observe these instructions will result in death or serious injuries.



### WARNING!

**Warns of a potentially hazardous situation.**

- ▶ Failure to observe these instructions may result in serious injuries or death.



### CAUTION!

**Warns of a potential danger.**

- ▶ Failure to observe these instructions may result in moderate or minor injuries.

### NOTE!

**Warns of damage.**



Important tips and recommendations.



Refers to information in these operating instructions or in other documentation.

- ▶ Designates instructions to avoid danger.
- Highlights a work step which you must carry out.

## 2 INTENDED USE

The valve island Type 8640 has been designed to control pneumatic consumers in automation systems. The valve island must only be used for controlling suitable pneumatic consumers.

- ▶ Use the device only as intended. Non-intended use of the device may be dangerous to people, nearby equipment and the environment.
- ▶ In explosion hazardous areas, only use devices that are approved for these areas. These devices are identified by additional approval data on the type label. When used in explosion hazardous areas, always observe the specifications on the type label and the “Additional information for use in the Ex area” included in the scope of delivery.
- ▶ Device must not be used outdoors unprotected.
- ▶ When using the device, observe the authorised data, operating and deployment conditions specified in the contract documents and in the operating instructions. These are described in Chapter [“Technical data”](#).
- ▶ Use the device only in conjunction with third-party devices and components recommended or approved by Bürkert.
- ▶ Correct transport, storage and installation as well as careful use and maintenance are essential for safe and faultless operation.
- ▶ Use the device only when it is in perfect condition.

## 3 BASIC SAFETY INSTRUCTIONS

These safety instructions do not take account of any

- contingencies or events which may occur during installation, operation and maintenance of the devices;
- local safety regulations that are within the operator's scope of responsibility, including those relating to the installation personnel.



**Risk of injury from high pressure, escaping medium and uncontrolled movement of the actuators.**

- ▶ Secure the actuators against shifting before working on the device or plant.
- ▶ Switch off the pressure before working on the device or system. Vent or empty the lines.

**Risk of injury from electric shock.**

- ▶ Switch off the power supply before working on the device or system. Secure it against reactivation.
- ▶ Observe any applicable accident prevention and safety regulations for electrical devices.

**Risk of burns/fire due to hot device surface if device operated continuously.**

- ▶ Keep the device away from highly flammable substances and media and do not touch with bare hands.

**Risk of injury due to improper installation and maintenance.**

- ▶ Only allow trained technicians to perform installation and maintenance work.
- ▶ Perform installation and maintenance work using suitable tools only.

**Risk of injury due to unintentional activation of the device and system and uncontrolled restart.**

- ▶ Secure the device and system against unintentional activation.
- ▶ Ensure that the system only starts up in a controlled manner.

**Risk of injury due to allergic reaction to lubricants.**

- ▶ Avoid skin contact with lubricants.
- ▶ Wear protective gloves.

**General hazardous situations.**

To prevent injuries, observe the following:

- ▶ Do not feed any aggressive or combustible media into the media connections of the device.
- ▶ Do not subject the housing to mechanical load (e.g. by placing objects on it or standing on it).
- ▶ Note that pipes and valves must not be released in pressurised devices.
- ▶ Always switch off the power before working on the device.
- ▶ Make the pressure supply as large as possible to avoid pressure drops during switching.
- ▶ The device cannot be activated unintentionally.
- ▶ Installation and maintenance tasks may only be performed by authorised technicians with the appropriate tools.

- ▶ Only restart the process in a controlled manner following disruptions.  
Observe sequence!
  1. Apply electrical supply.
  2. Charge the device with medium.
- ▶ Operate the device only when it is in perfect condition and in accordance with the operating instructions.
- ▶ Observe the general rules of technology.

**NOTE!**

**Avoid pressure drops!**

To avoid a pressure drop, make the pressure supply of the device as large as possible.

**Electrostatically sensitive components and assemblies.**

The device contains electronic components that are sensitive to the effects of electrostatic discharge (ESD). Components that come into contact with electrostatically charged persons or objects are at risk. In the worst case scenario, these components will be destroyed immediately or fail after start-up.

- ▶ Meet the requirements specified by EN 61340-5-1 to minimise or avoid the possibility of damage caused by a sudden electrostatic discharge.
- ▶ Do not touch electronic components when the supply voltage is connected.

## 4 INFORMATION ON COMPATIBILITY AND REVISION STATUS

### 4.1 Overview of revision levels

Valve island width per valve 11 mm		
REV.1	REV.2	REV.3
Electronic modules REV.1	Electronic modules REV.2	
Pneumatic base modules REV.1		Pneumatic base modules REV.2
Connection modules REV.1		Connection modules REV.2
Solenoid valve Types 6524 and 6525 REV.1 <ul style="list-style-type: none"> <li>• 1 flange pattern for double valves Type 6524 2x3/2-way</li> <li>• 1 flange pattern for single valves Type 6524 3/2-way Type 6525 5/2-way</li> </ul>		Solenoid valve Types 6524 and 6525 REV.2 <ul style="list-style-type: none"> <li>• 1 flange pattern for double valves and single valves Type 6524 2x3/2-way Type 6524 3/2-way Type 6525 5/2-way</li> </ul>
Solenoid valve type 0460 1 flange pattern for pulse valves and bistable valves Type 0460 5/2-way Type 0460 5/3-way		
AirLINE Quick REV.1		AirLINE Quick REV.2

Valve island width per valve 16 mm		
REV.1	REV.2	REV.3
Electronic modules REV.1	Electronic modules REV.2	
Pneumatic base modules REV.1		Pneumatic base modules REV.2
Connection modules REV.1		Connection modules REV.2
Solenoid valve Types 6526, 6527 and 0461 <ul style="list-style-type: none"><li>1 flange pattern for single valves<ul style="list-style-type: none"><li>Type 6526 3/2-way</li><li>Type 6527 5/2-way</li></ul></li><li>1 flange pattern for pulse valves and bistable valves<ul style="list-style-type: none"><li>Type 0461 5/2-way</li><li>Type 0461 5/3-way</li></ul></li></ul>		
AirLINE Quick REV.1		AirLINE Quick REV.2

## 4.2 Notes on valve islands Revision 2 (REV.2)

The electronic modules have been revised in terms of hardware and firmware. The revised version REV.2 is largely compatible with the previous version. Differences to be taken into account for the user relate to the EthernetIP and ModbusTCP Ethernet variants. The details are described in the operating instructions.



The operating instructions can be found on the Internet at:

[country.burkert.com](http://country.burkert.com) → 8640 🔍

## 4.3 Notes on valve islands Revision 3 (REV.3)

The single valves of Types 6524 and 6525, the pneumatic base modules and connection modules as well as the control cabinet base adaptation AirLINE Quick have been revised due to various optimisations. Compatibilities must therefore be taken into account in the following cases:

- Valve replacement (see operating instructions for details)
- Extension, repair or conversion of valve blocks (see operating instructions for details)

Revision 3 (REV.3) only affects pneumatic components of valve island 8640. Not affected by the revision:

Electrical data, configuration and external dimensions

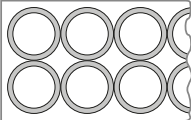
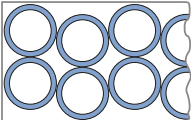


## 4.4 Distinguishing features between valve islands REV.1, REV.2 and REV.3

### Colour of release rings (push-in connectors)

REV.1	REV.2	REV.3
black		blue

### Channel arrangement of the working connections

REV.1	REV.2	REV.3
 parallel		 undulating

### Note on the type label of the valve island

REV.1	REV.2	REV.3
without note "REV."	with note "REV.2"	with note "REV.3"

## 5 GENERAL INFORMATION

### 5.1 Contact addresses

#### Germany Bürkert Fluid Control Systems

Sales Center  
 Christian-Bürkert-Str. 13-17  
 D-74653 Ingelfingen, Germany  
 Tel. + 49 (0) 7940 – 10 91 111  
 Fax + 49 (0) 7940 – 10 91 448  
 E-mail: [info@burkert.com](mailto:info@burkert.com)

#### International

The contact addresses can be found on the back pages of the printed Quickstart.

They are also available online at: [country.burkert.com](http://country.burkert.com)

### 5.2 Warranty

A precondition for the warranty is that the device is used as intended in consideration of the specified operating conditions.

### 5.3 Information on the Internet

Operating instructions and data sheets for Type 8640 can be found on the Internet at:

[country.burkert.com](http://country.burkert.com) → 8640 🔍

## 6 TECHNICAL DATA

### 6.1 Conformity

The device conforms to the EC directives as per the EC Declaration of Conformity (if applicable).

### 6.2 Standards

The applied standards, which are used to demonstrate conformity with the directives, are listed in the EU type examination certificate and/or the EU Declaration of Conformity (if applicable).

### 6.3 Operating conditions

Ambient temperature	0... +50 °C (for Types 0460/0461 only +5... +50 °C)
Storage temperature	-20... +60 °C
Nominal operating mode	Continuous operation (100 % duty cycle)
Operating voltage	24 V DC ± 10%, residual ripple with fieldbus interface 1 Vss
Protection class	3 according to VDE 0580
Current consumption	The current consumption depends on the type of electrical connection technology.

1. For the common connection (parallel connection technology) and multipole interface, the current consumption depends on the type of valve used, but is limited to a total current of max. 3 A.  
In the case of multipoles in conjunction with feedback devices, a further total current is added, which must also not exceed 3 A.

2. The total current for the fieldbus interface is calculated according to the formula:

$$I_{\text{total}} = I_{\text{basic}} + (n \times I_{\text{valve}}) + (m \times I_{\text{position feedback sensor}})$$

$I_{\text{basic}}$	Basic current depending on the fieldbus system PROFIBUS DP/V1: 200 mA CANopen: 200 mA
$n$	Number of valves
$m$	Number of position feedback sensors
$I_{\text{valve}}$	Rated current of valve type
$I_{\text{position feedback sensor}}$	Position feedback sensor current consumption ( $m \times I_{\text{position feedback sensor}}$ ) = max. 650 mA

### NOTE!

Always use safety extra-low voltage according to protection class 3 VDE 0580!

## 6.4 General technical data

### 6.4.1 Width per valve 11 mm

Valve circuit function	C/D (3/2-way) Type 6524	2xC (2x3/2-way) Type 6524	L/N (5/3-way) Type 0460
Valve circuit function	H (5/2 way) Type 6525		Z (5/2 pulse) Type 0460
Flow rate [l/min]	300	300	200
Pressure range [bar]	2.5 ... 7 2.5... 10	2.5 ... 7 2.5... 10	2.5 ... 7
Power [W]	1	2 x 0.25	2 x 0.9
Current before/after power reduction [mA]	43/28	2 x 43/18	2 x 41/-
Valve slots	max. 24	max. 12	max. 12
Position feedback sensors	max. 32	max. 32	max. 32
Electrical modules	6-valve <sup>1)</sup> , 8-valve, 12-valve	6-valve <sup>1)</sup> , 8-valve, 12-valve	6-valve <sup>1)</sup> , 8-valve, 12-valve
Pneumatic modules REV.1	2-valve, 8-valve	2-valve, 8-valve	2-valve
Pneumatic modules REV.2	4-valve	4-valve	4-valve
Degree of protection in terminal version	IP40 IP20	IP40 IP20	IP40 IP20

1) 6-valve only for REV.1 and REV.2

### 6.4.2 Width per valve 16.5 mm

Width per valve	16.5 mm	
Valve circuit function	C/D (3/2-way) Type 6526	
Valve circuit function	H (5/2-way) Type 6527	
Flow rate [l/min]	700	
Pressure range [bar]	2... 10	
Power [W]	1	2
Current before/after power reduction [mA]	42/33	85/52
Valve slots	max. 24	
Position feedback sensors	max. 32	
Electrical modules	4-valve, 6-valve <sup>2)</sup> , 8-valve	
Pneumatic modules REV.1	2-valve, 4-valve	
Pneumatic modules REV.2	4-valve	
Degree of protection in terminal version	IP54 IP20	

2) 6-valve only for REV.1 and REV.2

### 6.4.3 Valve island type label

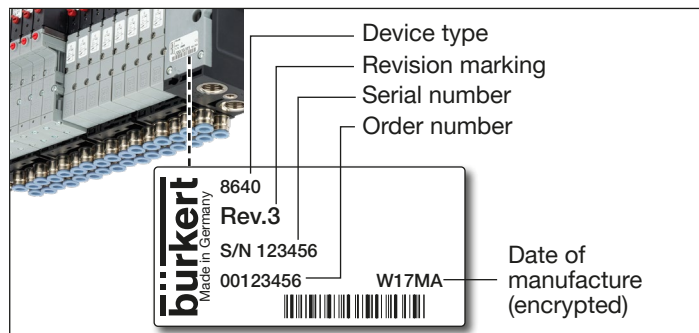


Figure 1: Location and description of the type label (example)

### 6.4.4 Valve type label

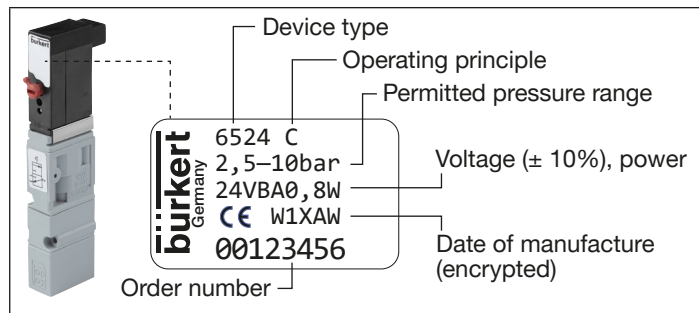


Figure 2: Location and description of the type label (example Type 6524)

## 7 VALVES TYPE 6524 AND TYPE 6525

### 7.1 Distinguishing features between individual valves REV.1 and REV.2

#### Single valves REV.1:

The single valves of Type 6524 3/2-way and Type 6525 5/2-way have the same flange pattern as the pneumatic base module. This single valve flange pattern differs from that of the double valve Type 6524 2x3/2-way.

#### Single valves REV.2:

Compared to the REV.1, the flange patterns of the valves have been standardised with regard to the pneumatic base modules. The single valves 3/2-way and 5/2-way as well as the double valves 2x3/2-way now have the same/standardised pneumatic flange pattern.

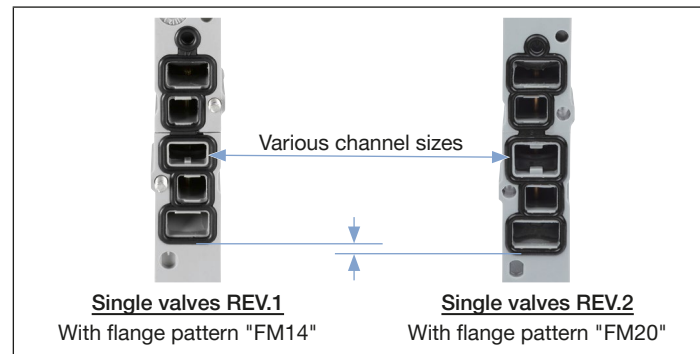


Figure 3: Differences between flange patterns of REV.1 and REV.2 for single valves Type 6524 and Type 6525

## Type 8640

Valves Type 6526 and Type 6527

### 7.2 Connection of single valves

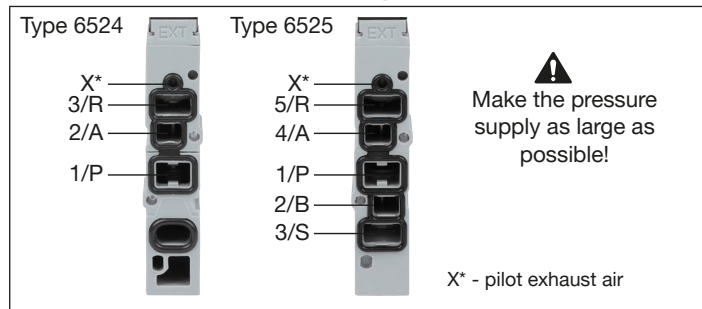


Figure 4: Fluid connection single valves Type 6524 and Type 6525

### 7.3 Connection of double valves

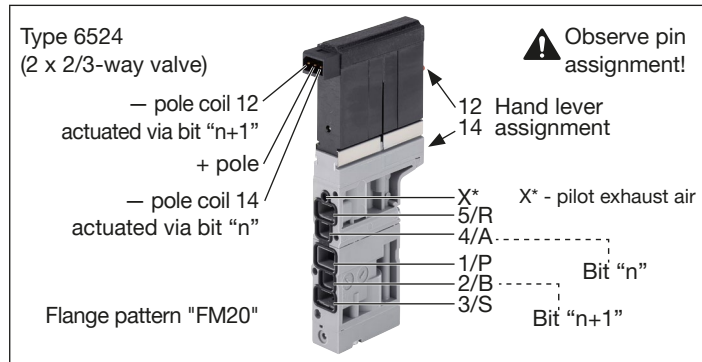


Figure 5: Fluid and electrical connection double valves Type 6524

## 8 VALVES TYPE 6526 AND TYPE 6527

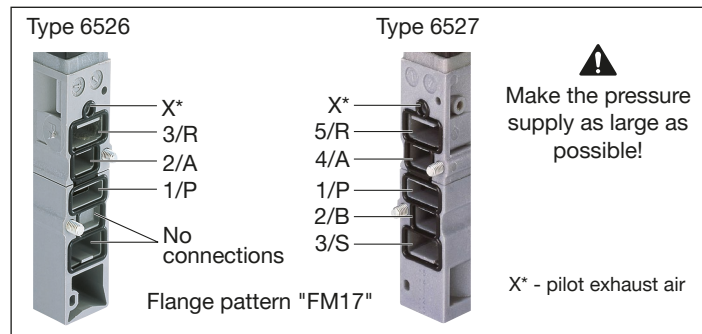


Figure 6: Fluid connection valves Type 6526 and Type 6527

## 9 REMOVING THE VALVE BLOCK FROM THE STANDARD RAIL

The valve block is mounted on a standard rail for transport safety. It must be removed from the standard rail for installation in the control cabinet.

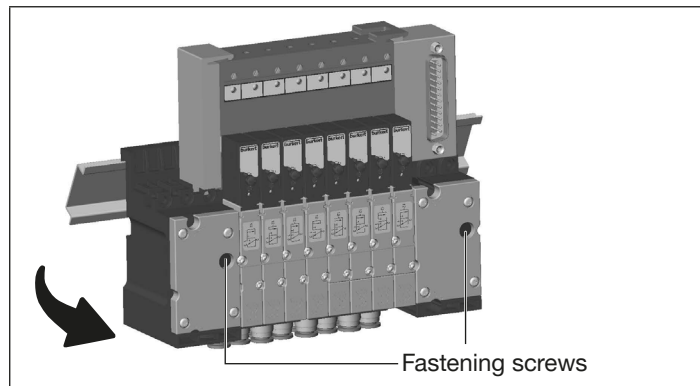


Figure 7: Removing the valve block from the standard rail

- Carefully turn the fastening screws anticlockwise until they stop.
- Tilt the valve block slightly upwards and lift it off the standard rail.

## 10 INSTALLATION OF THE VALVE ISLAND IN THE CONTROL CABINET

### 10.1 Safety instructions



#### **DANGER!**

##### **Risk of explosion.**

For devices in the explosion hazardous area, which are installed in a control cabinet, ensure the following:

- ▶ The control cabinet must be approved for use in explosion-proof areas.
- ▶ The control cabinet must be dimensioned in such a way that the resulting heat loss can be discharged to the outside using suitable means.
- ▶ The internal temperature of the control cabinet must not exceed the maximum permitted ambient temperature for the device.

##### **Risk of injury from electric shock.**

- ▶ Switch off the power supply before working on the device or system. Secure it against reactivation.



#### **WARNING!**

##### **Risk of injury due to improper installation.**

- ▶ Only trained specialist personnel may carry out assembly and disassembly work.
- ▶ Only carry out assembly work using suitable tools.

#### **CAUTION!**

##### **Risk of injury due to falling heavy equipment.**

During transportation or installation work, heavy equipment may fall and cause injuries.

- ▶ Heavy equipment must only be transported, installed and removed with the help of a second person and using suitable aids.

The valve block is not firmly connected to the standard rail before tightening the fastening screws.

- ▶ Make sure that the valve block cannot fall during the entire installation.

##### **Risk of injury due to sharp edges.**

Sharp edges can cause cuts.

- ▶ Wear suitable protective gloves.

#### **NOTE!**

Valve island Type 8640 is supplied as a fully assembled device. Modifications are only permitted to be carried out by Bürkert.

The valves are excluded from this and may be exchanged by the user for valves of the same version.

## 10.2 Installation on standard rail

### **CAUTION**

- ▶ To ensure the best possible EMC protection, ground the standard rail with low impedance.
- ▶ Before mounting in the control cabinet, check whether the standard rail is firmly anchored in the control cabinet.



The valve block must be freely accessible from above. When installing the standard rail in the control cabinet, take into account that the valve block requires a **minimum distance of 3 cm from the upper edge of the control cabinet** ("Fig. 12").

The minimum distance is required for

- installation and removal of the device on the standard rail,
- avoiding heat build-up due to the waste heat from the device.

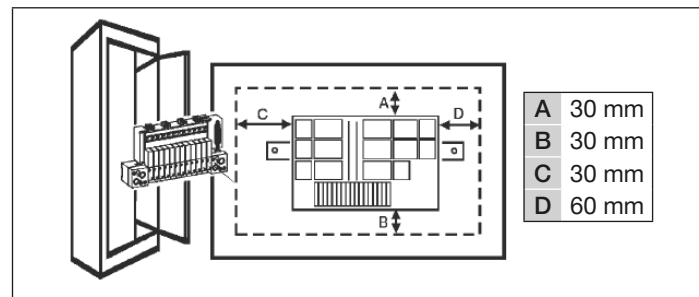


Figure 8: Recommended distance when installing in the control cabinet

- Install the standard rail firmly in the control cabinet.
- Establish a short, wide PE connection between the standard rail and the control cabinet.

**!** The valve island must be freely accessible from above. Ensure good heat dissipation.

### 10.2.1 Installation with AirLINE Quick (valve island width per valve 11 mm only)

For installation with AirLINE Quick, a cut-out must first be provided in the control cabinet base or wall. This can be done, for example, with a laser or punch.

For the dimensions of the corresponding flange pattern, see chapter [“10.2.2 Dimensions of the flange patterns for AirLINE Quick”](#).

The distances to the left, right, front and top depend on the selected valve island configuration.

**Recommended distance between the control cabinet and valve island:**

left	right	front	top
30 mm	60 mm	30 mm	50 mm

#### NOTE!

The cutout in the control cabinet must be burr-free so that the AirLINE Quick adapter seal is not damaged.

- Insert the AirLINE Quick adapter seal into the groove of the flange opening without damage

- Position the valve island on the cut-out made in the control cabinet.
- Install the stabilising plate from the outside to avoid warping and secure it with M5 x 10 screws from the supplied attachment set.

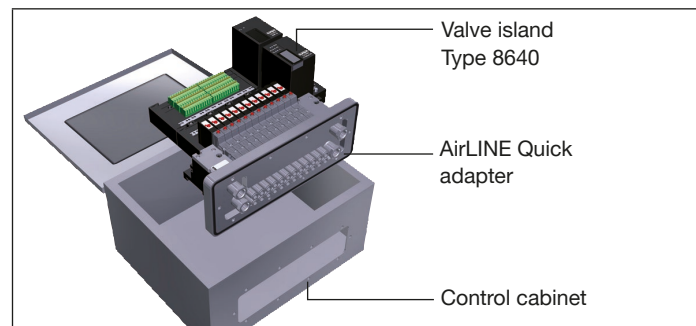


Figure 9: Positioning the valve island in the control cabinet

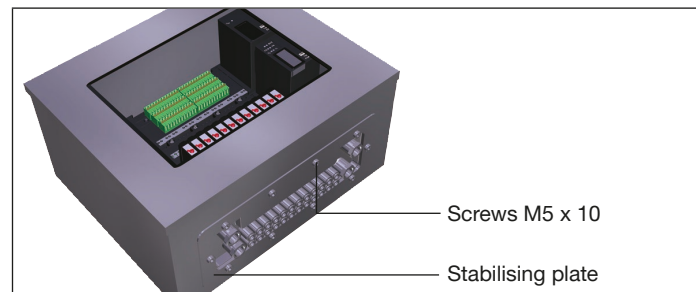


Figure 10: Fixing the stabilising plate



## 10.2.2 Dimensions of the flange patterns for AirLINE Quick

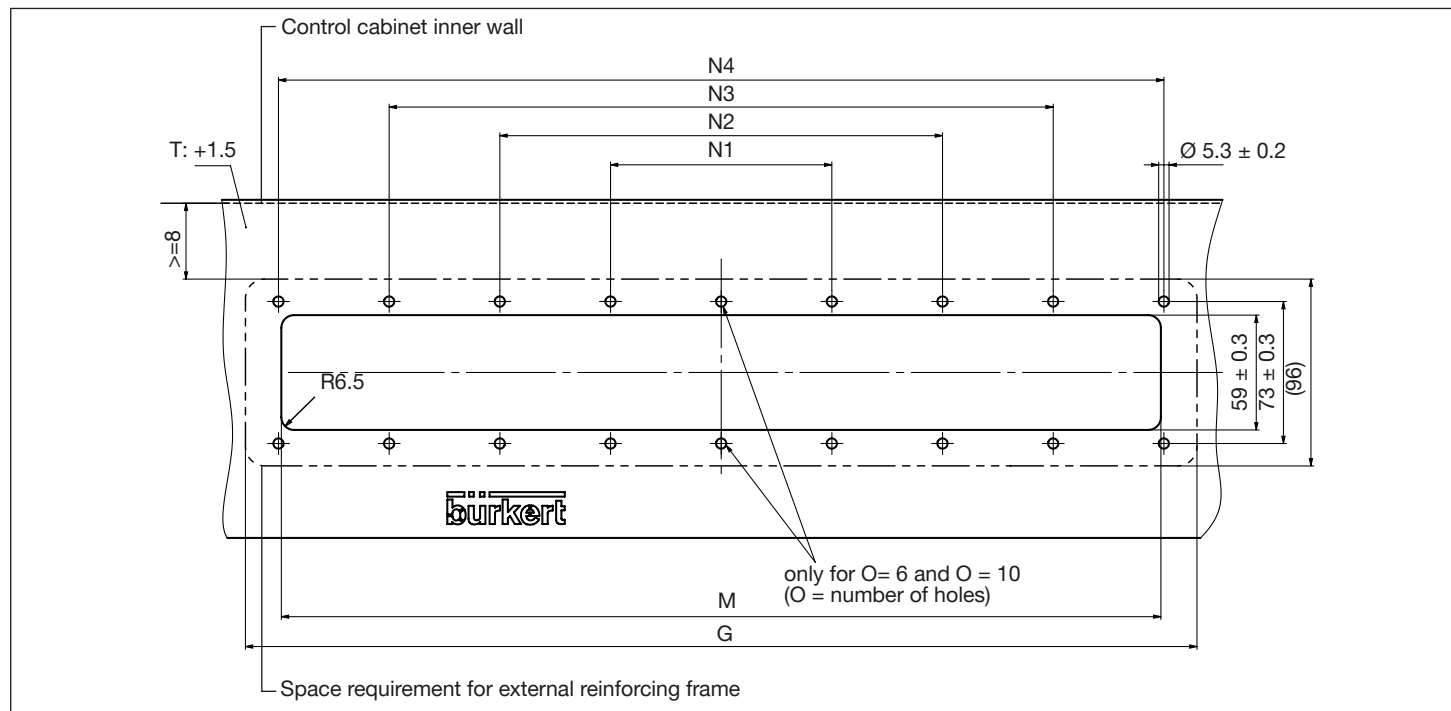


Figure 11: AirLINE Quick flange patterns — for dimensions see [Tab. 1 on page 18](#)

	Version				
	4-valve	8-valve	12-valve	16-valve	24-valve
Special feature	–	–	–	–	On request
M	111 ±0.4	155 ±0.4	199 ±0.4	243 ±0.4	331 ±0.4
N1	114 ±0.4	54 ±0.3	68 ±0.3	123 ±0.4	66 ±0.3
N2	–	158 ±0.4	202 ±0.4	246 ±0.4	200 ±0.4
N3	–	–	–	–	334 ±0.4
N4	–	–	–	–	–
O (number of holes)	6	8	8	10	12
G	148	192	236	280	368

Tab. 1: Dimensions of the AirLINE Quick flange patterns

## 11 INSTALLATION

### 11.1 Fluidic installation



#### **DANGER!**

**Risk of injury from high pressure in the system!**

- ▶ Switch off the pressure before working on the device or system. Vent or drain the lines.
- ▶ Make the pressure supply as large as possible.
- ▶ Close open connections that are not required with sealing plugs.
- ▶ The connections for the pilot exhaust air (x) must not be closed.
- ▶ Check that connections 1 and 3 or 5 are correctly assigned. These must not be interchanged under any circumstances.

#### **NOTE!**

The hose lines must meet the following requirements for the plug-in connections:

- Minimum hardness of 40 Shore D (according to DIN 53505 or ISO 868);
- Outer diameter according to DIN 73378 (max. permissible deviation ± 0.1 mm from nominal dimension).
- Burr-free, cut off at right angles and undamaged on the external diameter surface.
- ▶ Push the hose lines into the plug-in connections up to the stop.

### 11.1.1 Connecting the feed

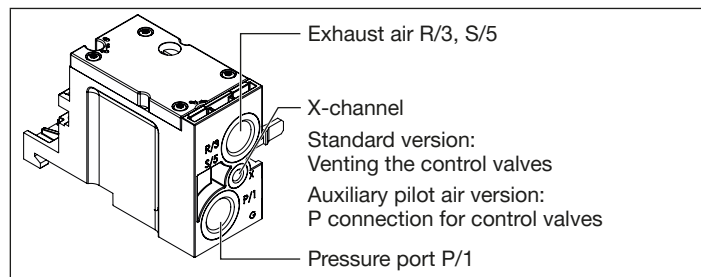


Figure 12: Pneumatic connections

- Screw the connection adapter G1/4 to connections P and R/S.
- Insert or screw the hose lines into the corresponding connections (depending on the version).

#### NOTE!

##### Risk of leakage if the screw connection is too strong!

- ▶ When installing the fluidic connection adapters on the P, R/S connections, observe the maximum torque of 12 Nm.

##### Irreversible damage to the seal in the thread of the screw connection!

- ▶ When screwing or loosening the connection adapters, prevent the corresponding supply connection or exhaust port from turning using a suitable tool.

### 11.1.2 Connecting the working connections

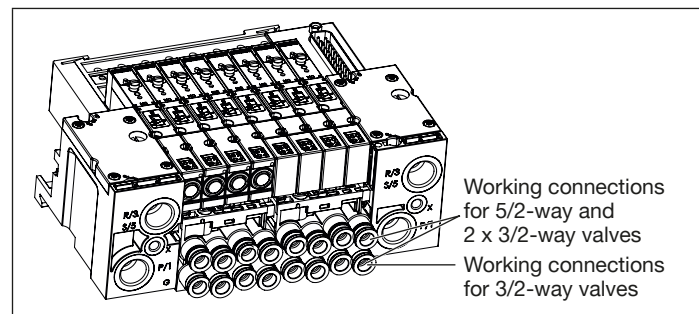


Figure 13: Pneumatic connections - working connections

- Insert or screw the hose lines into the corresponding work connections, depending on the version.
- Connection nipples can be used for threaded version.

#### Labelling of connections:

- Label the label fields with the data of the valve connections.

### 11.1.3 AirLINE Quick fluidic connection

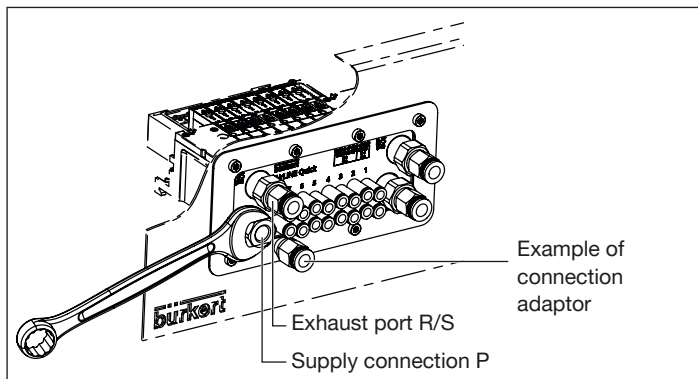


Figure 14: AirLINE Quick fluidic connection

- Screw the connection adapter G1/4" to connections P and R/S.
- Insert the hose lines into the corresponding connections.

#### NOTE!

##### **Risk of leakage if the screw connection is too strong!**

- ▶ When installing the fluidic connection adapters on the P, R/S connections, observe the maximum torque of 12 Nm.

##### **Irreversible damage to the seal in the thread of the screw connection!**

- ▶ When screwing or loosening the connection adapters, prevent the corresponding supply connection or exhaust port from turning using a suitable tool.

### 11.1.4 Pneumatic connections - AirLINE Quick

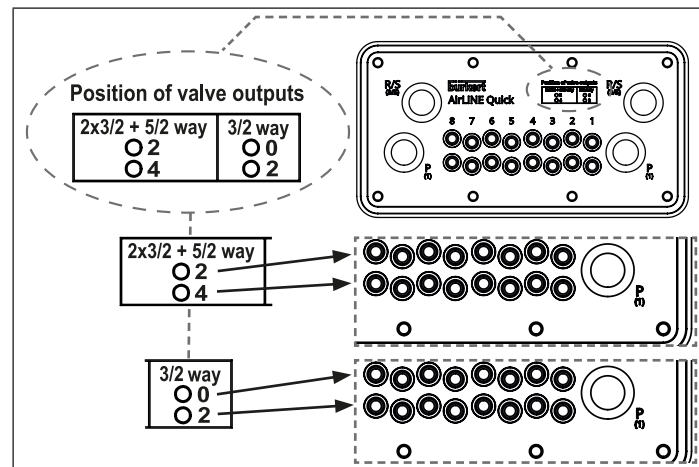


Figure 15: Pneumatic connections — AirLINE Quick

- Insert the hose lines into the appropriate working connections.

### 11.1.5 Loosen the hose lines

- To release the hose lines, press in the release ring on the working connection and pull out the hose line.

### 11.1.6 Electrical installation


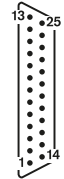
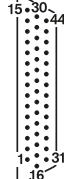


#### DANGER!

Risk of injury from electric shock.

- ▶ Switch off the power supply before working on the device or system. Secure it against reactivation.

### 11.1.7 Conventional connection technology (multipole and collective connection)

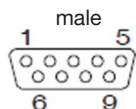
Module	Assignment	
Collective socket	—	Ground
		Functional earth
Multipole connection valve outlets		Pin 1      Valve 1
		⋮      ⋮
		Pin 24 <sup>3)</sup> Valve 24
		Pin 25      Ground
Multipole connection with position feedback sensor inputs		Pin 1      Input 1
		⋮      ⋮
		Pin 32      Input 32
		Pin 43      24 V
		Pin 44      Ground

<sup>3)</sup> In manual automatic mode, pin 24 is constantly assigned 24 V.

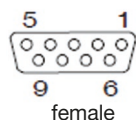
### 11.1.8 Fieldbus technology connections

Please note chapter “4 Information on compatibility and revision status” on page 7.

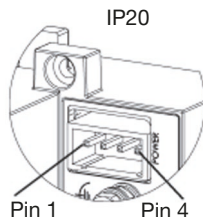
Pin	Profibus DP		CANopen		Profinet, Ethernet/IP, Modbus TCP
	IP20	IP54	IP20	IP54	
1	n.c.	+5 V	n.c.	Drain	TX+
2	n.c.	RxD/TxD-N/A-line	CAN LOW	n.c.	TX-
3	RxD/TXD-P/B line	DGND	GND	GND	RX+
4	CNTR-P (RTS)	RxD/TXD-P/B line	n.c.	CAN HIGH	n.c.
5	DGND	Shielding	n.c.	CAN LOW	n.c.
6	+5 V		n.c.		RX-
7	n.c.		CAN HIGH		n.c.
8	RxD/TxD-N/A-line		n.c.		n.c.
9	n.c.		n.c.		
	D-SUB 9	5-pin M12	D-SUB 9	5-pin	RJ45
	female	female (reverse key)	male	Micro 12	female



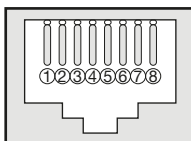
D-SUB 9



female



RJ45 socket



### 11.1.9 Power supply connections

Pin	All versions	
	IP20	IP54
1	GND outputs	24 V DC outputs
2	24 V DC outputs	24 V DC logic
3	GND logic	GND logic
4	24 V DC logic	GND outputs

### 11.1.10 DIP switch settings

Profibus DP

1	2	3	4	5	6	7	8
Address of Profibus DP - participant - 125							OFF

CANopen

1	2	3	4	5	6	7	8
Address of fieldbus module 0... 63						Baud rate	

Baud rate

DIP 7/8	DVN	COP
0	125 kB	20 kB
1	250 kB	125 kB
2	500 kB	250 kB
3	-	500 kB

## 11.1.11 RIO slave bus module

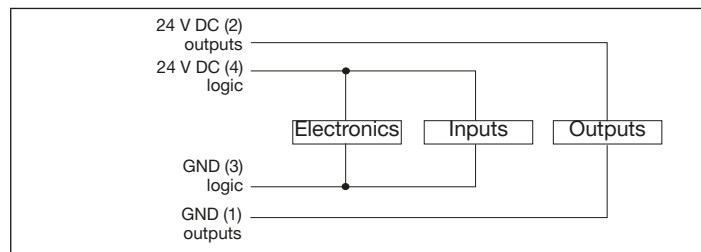
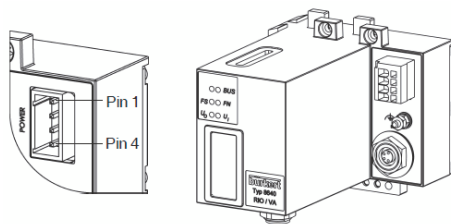


Figure 16: Power supply



Internal fieldbus: 4-pin socket M8



Fieldbus settings:

## DIP switch

1	2	3	4	5	6	7	8
Internal RIO bus address			Mode inputs		Reserve always OFF		Terminating resistors

11.1.12 Internal RIO bus address:  
DIP switches 1 to 3

Each extension island has a unique address. On the valve island, this address is set via DIP switches 1 to 3.

DIP 1	DIP 2	DIP 3	Address	Extension island
OFF	OFF	OFF	0	0
ON	OFF	OFF	1	1
OFF	ON	OFF	2	2
<b>ON</b>	<b>ON</b>	<b>OFF</b>	<b>3</b>	<b>3</b>
OFF	OFF	ON	4	4
ON	OFF	ON	5	5
OFF	ON	ON	6	6
ON	ON	ON	7	7

### 11.1.13 Mode inputs DIP switches 4 and 5

#### NOTE!

With the input modes, the entries (position feedback sensors) in the process image of the inputs (PAE) can be assigned differently.

	DIP 4	DIP 5
No entries available	OFF	OFF
Normal mode	ON	OFF
Mode: Staggered inputs	OFF	ON
Mode: Halved inputs	ON	ON



#### CAUTION!

If no inputs are available, both switches must be set to OFF.

## 12 START UP



#### WARNING!

##### Risk of injury due to improper operation!

Improper operation may result in injuries as well as damage to the device and the area around it.

- ▶ Before start-up, ensure that the operating personnel are aware of and have completely understood the contents of the operating instructions.
- ▶ The safety instructions and the intended use must be observed.
- ▶ Only adequately trained personnel may start up the system/ device.

#### NOTE!

- ▶ Switch on the supply pressure first.
- ▶ Only then switch on the voltage.

##### Measures before fluidic start-up:

- Check connections, voltage and operating pressure.
- Ensure that max. operating data is not exceeded.
- Check that connections 1 and 3 or 5 are correctly assigned. These must not be interchanged under any circumstances.
- For electrical operation, unlock the manual override.



## 13 MAINTENANCE

### NOTE!

#### Irreversible damage to the seal.

When loosening the connection adapters at the P and R/S connections, the seal in the thread of the screw connection can be damaged.

- Prevent twisting of the corresponding connection by holding it with a suitable tool.

## 14 SPARE PARTS



Spare parts for valve island Type 8640 REV.2 can be found in the data sheet at [country.burkert.com](https://country.burkert.com) → 8640 🔍



### Different flange patterns of the single valve Types 6524/6525 REV.1 and 6524/6525 REV.2!

The single valves (3/2-way valve Type 6524 and 5/2-way valve Type 6525) were optimised. The channel cross-sections and thus the flange pattern of these valves were revised, among other things. Valves REV.1 and valves REV.2 are therefore different.

When replacing single valves, observe the following:

- The different design of the mechanical interface eliminates the accidental installation of incompatible valves.
- It is **not** possible to exchange single valves between REV.1 and REV.2 (Type 6524/6525).
- **With regard to spare parts, it must be ensured that the matching version of the valve is used.**

This does not apply to the double valve (2x 3/2-way valve Type 6524).

## 15 TRANSPORT, STORAGE, PACKAGING



### WARNING

**Risk of injury due to improper behaviour during transport.**

- ▶ Only have transport carried out by trained specialists.

During transportation or installation work, heavy equipment may fall and cause injuries.

- ▶ Transport, install and remove a heavy device only with the aid of a second person and using suitable equipment.

### NOTE!

**Transport damage.**

Inadequately protected devices may be damaged during transport.

- ▶ Protect the device against moisture and dirt in shock-resistant packaging during transportation.
- ▶ Avoid exceeding or dropping below the permitted storage temperature.
- ▶ Protect the electrical interfaces and pneumatic connections from damage and dirt by fitting protective caps.

**Incorrect storage may damage the device.**

- ▶ Store the device in a dry and dust-free location.
- Storage temperature –20...+60 °C.

**Damage to the environment caused by device parts contaminated with media.**

- ▶ Dispose of the device and packaging in an environmentally-friendly manner.
- ▶ Observe applicable disposal and environmental regulations.
- ▶ Observe national waste disposal regulations.

## Type 8640

Transport, storage, packaging



[www.burkert.com](http://www.burkert.com)