

# Automation systems for the hygienic process environment

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bürkert

Automation systems for the hygienic process environment

**bürkert**  
FLUID CONTROL SYSTEMS

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# Bürkert at a glance



**36**

**countries** worldwide  
**Headquarters** in Ingelfingen

**2,800+**

**employees**  
(of which roughly 1,600 are in Germany)



**7 %**  
**R&D quota**

**5**

**Systemhaus facilities**  
3 in Germany  
1 in the USA (Charlotte, NC)  
1 in China (Suzhou)

**5**

**production locations**  
in Germany and France



**70 %**  
share of sales outside  
Germany

**532.4**

**million euros**  
**in product sales**

**1946**

founded by  
Christian Bürkert

**100 %**

**family-owned**  
**company**

# Bürkert Systemhaus facilities

As an experienced and trustworthy system developer, we are happy to assist you. With our highly qualified, motivated engineers and our outstanding production facilities, we can supply systems that are tailored to meet your needs.

## Systemhaus Dortmund

Our control cabinets are designed, manufactured and tested at our Systemhaus facility in Dortmund.

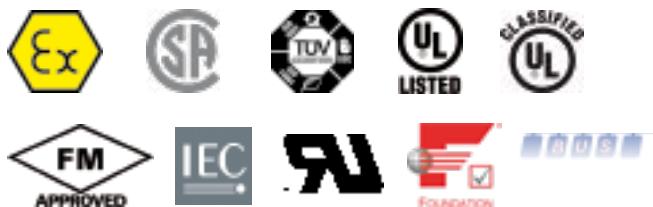
### Core expertise at Systemhaus Dortmund

- Control cabinets for pneumatic applications
- Control cabinets for fluidic applications
- ATEX control cabinets
- Customised systems
- Valves with pipe connections
- UL panel shop
- Standard-compliant control cabinet construction according to EN 61439
- Circuit diagram design using EPLAN P8



Systemhaus Dortmund | Germany

### International approvals for products and systems:



## Our other Bürkert Systemhaus facilities



Systemhaus Ingelfingen | Germany



Systemhaus Dresden | Germany



Systemhaus Suzhou | China



Systemhaus Charlotte | USA

# Intelligent concepts for tailored solutions

Automation in the food and beverage industry is always highly customised. There is no one best solution because very different priorities emerge depending on the plant configuration on the ground. Burkert takes three different approaches to automation:



## Centralised automation

The proven combination of control cabinets, valve islands, communication modules and valves ensure maximum operational safety and process repeatability. Perfectly compatible components make start-up and handling easier.



## Process-oriented automation

Flexible hygienic-design control cabinets in three sizes are ideal when it comes to housing the technology safely and in a process-oriented manner. Thanks to the stainless steel adapter plate, AirLINE valve islands can be mounted directly on the bottom of the control cabinet floor or on the control cabinet wall.



## Decentralised automation

Universal control heads enable direct integration of automation in the field. Diaphragm and process valve systems of the ELEMENT series are exceptionally easy to clean thanks to their entirely stainless-steel design.

# Central and process-oriented automation solutions

## Standardised solutions with uniform interfaces

Many applications in the food and beverage industry frequently require the same components and functions. For these cases, Burkert has developed standardised, hygienic automation solutions with uniform adaptation interfaces.



## Housing the technology safely in hygienic environments

Thanks to the use of suitable materials that can withstand the harsh conditions and meet the strict standards that apply in hygienic environments, these systems can be installed in the immediate vicinity of the actuator and sensor systems.



## Your benefits

Profit from completely pneumatic control cabinets made from a standardised construction set.

- Systems designed, implemented and tested by the Burkert Systemhaus in Dortmund
- Delivered with accompanying documentation, certificates and approvals
- Installation, start-up and service
- High degree of integration of valve islands in Siemens process automation systems
- Quick and clear plain-text and icon-based diagnostics and feedback directly on the device and in the central controller
- Feedback from the field is displayed and processed directly on the associated device.

This also applies in the event of a manual override.

On the following pages, you will find standardised system solutions with combinations of Burkert valve islands, installed in the hygienic-design control cabinet housing.

## Options

You also have the possibility to integrate options. You can find these starting on page 100.

# Cabinet system Type 8614

## **Stainless-steel system body featuring hygienic design**

- Height dimensions: rear 549 mm, front 430 mm
- Depth dimensions: 210 mm
- Width dimensions: 390, 510 or 810 mm
- Additional control cabinet sizes on request

## **Components in contact with the environment made of stainless steel**

- Cable glands and breather drains
- Pneumatic supply connections for the filter regulator option
- AirLINE Quick bottom adaptation including pneumatic connections

## **Electrical and pneumatic system components**

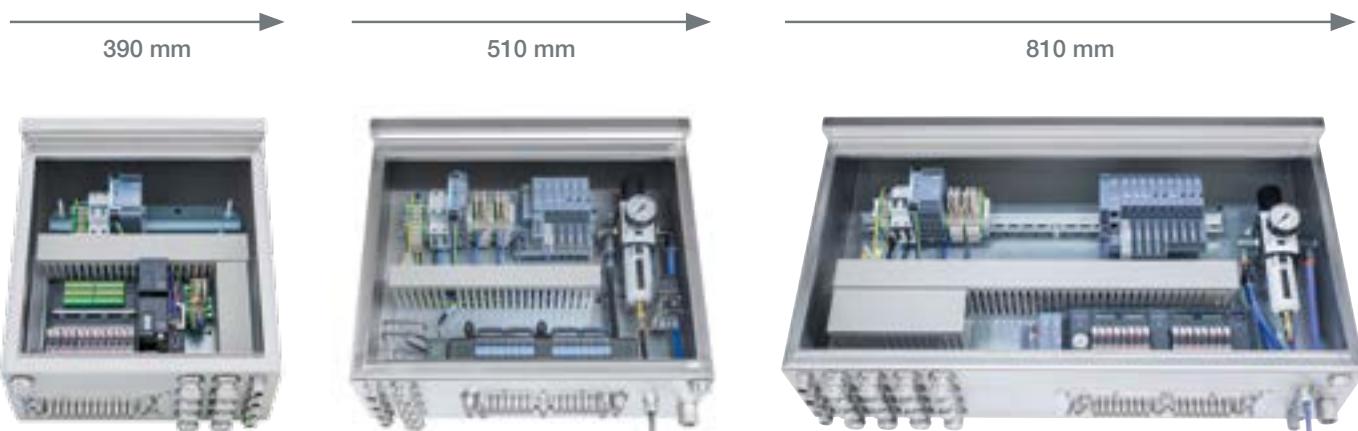
- Burkert valve island AirLINE Quick Type 8652, 8640, 8647 or 8644
- Mounting rail for additional electronic components
- Option: Mounted filter regulator with automatic drain
- Option: Pressure monitoring
- Option: Mounted power supply/power supply unit including fuse elements

## **Pneumatic process reliability features**

- Hot-swap function (P shutoff)
- Check valves in exhaust air ducts R and S

## **Electrical connection:**

- Fieldbus control unit Type 8652: Choice of Profibus DP, Industrial Ethernet (PROFINET I/O, EtherNet/IP, Modbus TCP, EtherCAT), büS/CANopen (for networking with Burkert devices)
- Fieldbus control unit Type 8640: Choice of Profibus DP, PROFINET I/O, EtherNet/IP, Multipole
- Fieldbus control unit Type 8647: Electr. modules Siemens ET 200SP, fieldbus type PROFIBUS DP, PROFINET I/O
- Fieldbus control unit Type 8644: Choice of I/O systems Siemens ET 200S, Wago 750, Rockwell Point (on request)
- Power supply: 24 V DC, optional 230 V AC via power supply option



# BürkertPlus

Excellent and comprehensive service for your plant

In addition to engineering expertise, Bürkert provides a comprehensive service offering that extends for the entire product life cycle – the BürkertPlus all-round service.

## Our services covering all aspects of control cabinet conversion

### Services areas

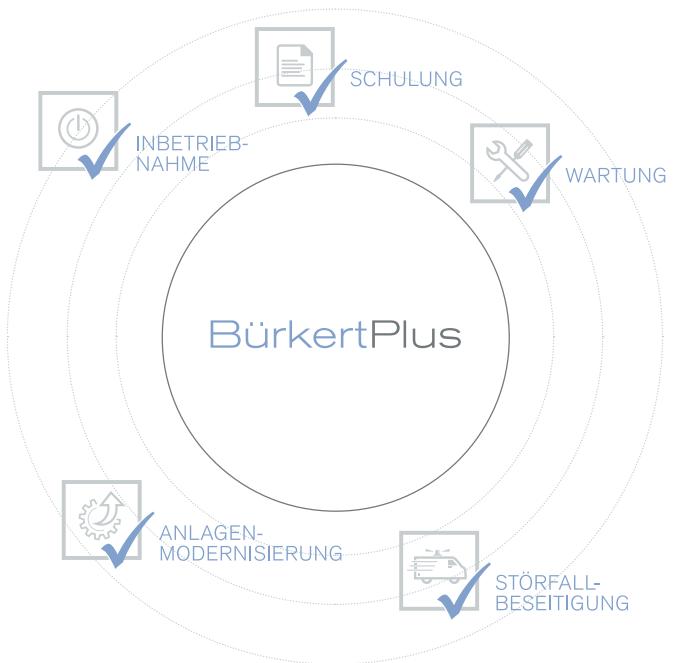
- New installations
- Control cabinet conversions
- Valve island conversions
- Conversion of solenoid valves to valve island

### Everything from a single source

- Installation control cabinet/valve island
- Wiring/cable laying
- Piping
- Installation of basket trays

### Customer benefits of BürkertPlus

- Expertise for all fluid system solutions
- Development and service partner for system solutions
- Individual, tailored service packages (fixed-price offers)



### Customer benefits

- Straightforward processing (planning, delivery, installation, start-up)
- Optimum, individually configured service
- Reduced downtimes
- Cost transparency, planning security, resource transparency



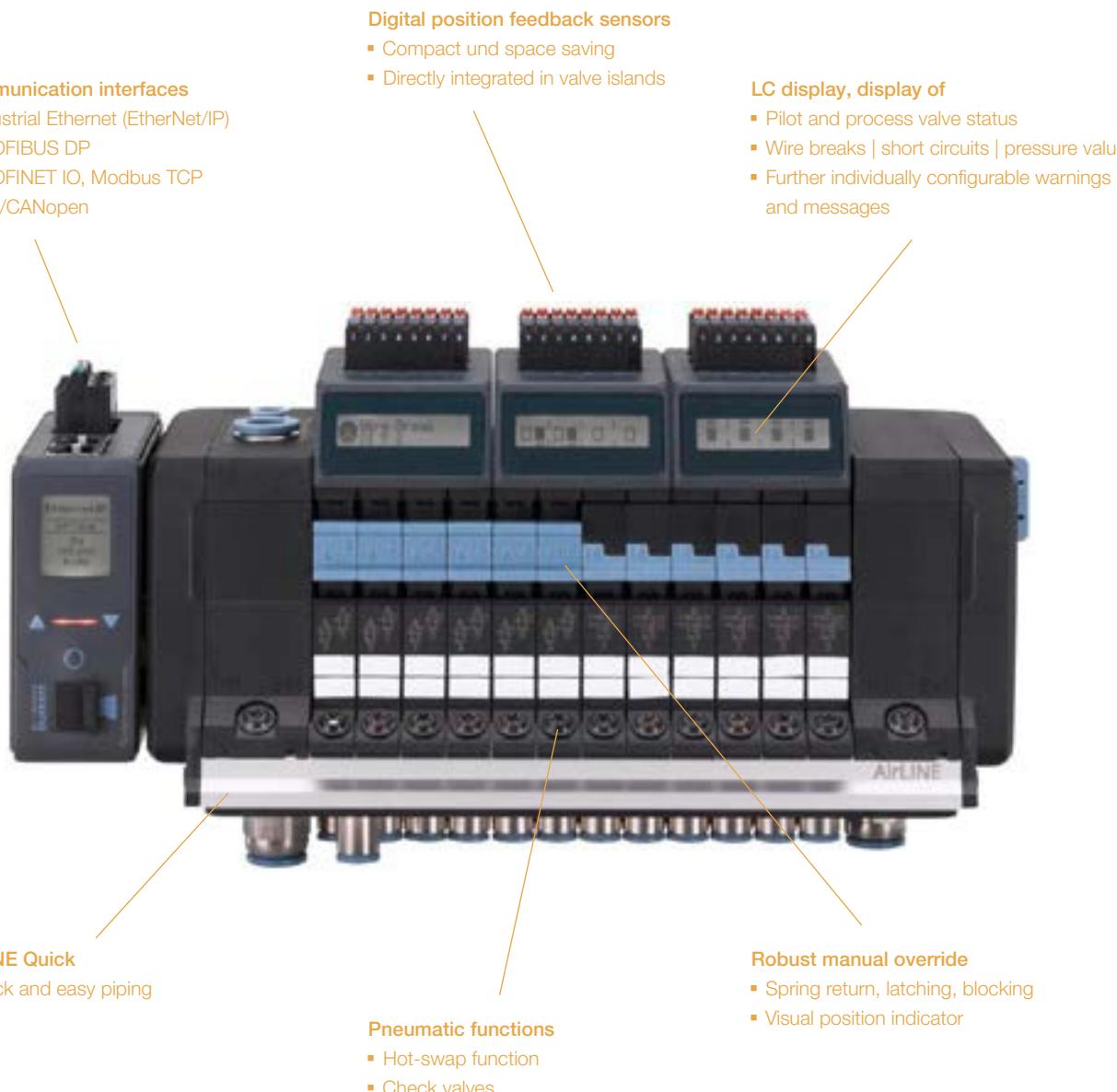
Before: Plastic cabinet with obsolete valve technology, porous hoses and plastic cable ducts



After: Stainless steel cabinet featuring hygienic design incorporating the latest valve technology, new piping and stainless steel mesh cable trays with cover

# Valve island AirLINE Type 8652

The latest electropneumatic Bürkert valve islands  
for your automation concept



# Valve island AirLINE Type 8652

The latest electropneumatic Burkert valve islands for your automation concept

**The valve island Type 8652 AirLINE was designed for applications in the pharmaceutical, cosmetics, food and beverage industries as well as for water treatment.**

## Advantages

- Adjustable monitoring and diagnostic functions
- Integrated displays show detailed information for each valve, such as the current switching statuses of pilot valve and process valve. They also issue a message if preset pressure limits are exceeded, or display errors such as cable breaks in plain text.
- Improved plant availability and process reliability
- Possibility of preventive maintenance
- Compact design: The valve island Type 8652 is substantially smaller than its predecessor and can be placed close to the process valves in compact control cabinets
- AirLINE Quick adapter

## High plant availability thanks to network redundancy

The valve island communicates using standard industrial Ethernet protocols or PROFIBUS DP. In closed ring topologies and PROFINET-IO communication, the Media Redundancy Protocol (MRP) guarantees a highly available network that can even compensate for the failure of a switch or a line. This improves system availability and makes the process safer.

## Process reliability through pneumatic functions

- All valves are individually hot-swappable, which means they can be replaced during operation without the need to shut down the plant.
- Check valves in the vent duct are an additional safety function. These prevent undesired reactions in the plant.

## Industry 4.0 powered by EDIP

The Burkert device platform EDIP (Efficient Device Integration Platform) encompasses a wide range of functions and coordinated HMI devices in order to facilitate the system integration of new devices. The free Burkert software (the Burkert Communicator) enables numerous diagnostic functions: Monitoring of operating data and alarm messages as well as customer-specific parameters.

## Valve island AirLINE Quick 8652

### Order table for valve islands (basic configuration)

**Variant: 2x3/2-way valve island variant for use with filter regulator in the system (internal compressed air feed)**

Valve island variant	Number of Valve functions	Digital Inputs	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	16	0	320784	320785
8x2x3/2	16	16	320789	320790
12x2x3/2	24	0	320917	320918
12x2x3/2	24	24	320920	320921
16x2x3/2	32	0	332313	332315
16x2x3/2	32	32	332314	332316
20x2x3/2	40	0	338222	338225
20x2x3/2	40	40	338356	338357
24x2x3/2	48	0	332326	332328
24x2x3/2	48	48	332327	332329

**Variant: 5/2-way valve island variant for use with filter regulator in the system (internal compressed air feed)**

Valve island variant	Number of Valve functions	Digital Inputs	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	8	0	320794	320795
8x5/2	8	16	320842	320843
12x5/2	12	0	320923	320924
12x5/2	12	24	320929	320931
16x5/2	16	0	332319	332321
16x5/2	16	32	332320	332322
20x5/2	20	0	338237	338238
20x5/2	20	40	338359	338360
24x5/2	24	0	332332	332334
24x5/2	24	48	332333	332335

**Variant: 2x3/2-way valve island variant for use without filter regulator in the system (external compressed air feed)**

Valve island variant	Number of Valve functions	Digital Inputs	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	16	0	320979	322753
8x2x3/2	16	16	320980	322757
12x2x3/2	24	0	323042	323081
12x2x3/2	24	24	320888	320891
16x2x3/2	32	0	336297	338637
16x2x3/2	32	32	336401	341001
20x2x3/2	40	0	336390	358061
20x2x3/2	40	40	336400	358062
24x2x3/2	48	0	336395	347972
24x2x3/2	48	48	335841	335843

**Variant: 5/2-way valve island variant for use without filter regulator in the system (external compressed air feed)**

Valve island variant	Number of Valve functions	Digital Inputs	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	8	0	322930	322947
8x5/2	8	16	322932	322951
12x5/2	12	0	323145	323192
12x5/2	12	24	323147	323194
16x5/2	16	0	328938	358060
16x5/2	16	32	341005	340999
20x5/2	20	0	328939	358064
20x5/2	20	40	358066	358067
24x5/2	24	0	346959	358074
24x5/2	24	48	341006	341000



## Automation system Type 8614 with valve island Type 8652

**Installation width 390 mm**

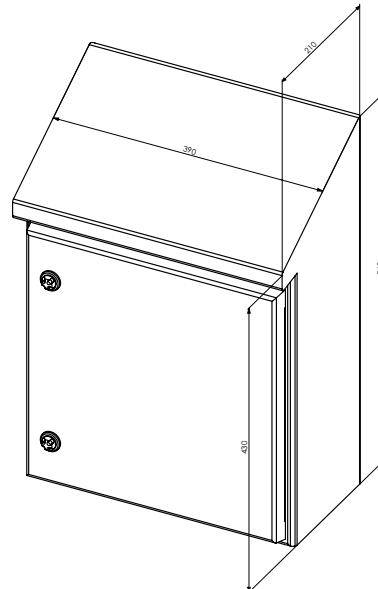
Max. expansion variant:

- One valve island
- 12x2x3/2-way function  
24 digital position feedback inputs
- 16x2x3/2- or 5/2-way function  
no digital position feedback inputs\*



### Technical data

<b>Housing dimensions W x H x D</b>	390 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +55°C
<b>Pressure range with/without filter regulator</b>	3 to 16 bar/3 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	270 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	Ø 10/8 mm push-in
Working ports valve	Ø 6/4 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10 %
<b>Performance (without I/O system)</b>	50 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6 x 6.5 mm (8 x 5.5 mm)* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.0 mm <sup>2</sup> (with ferrule)
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 25 kg



\* see order table

Automation system Type 8614 with valve island Type 8652, installation width 390 mm

## Order table

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 17	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1001	16	0	no	*	0	0	321355	321356
8x2x3/2	1002	16	0	no	*	24	32	321359	321360
8x2x3/2	1002	16	16	no	*	24	32	321363	321364
8x2x3/2	1003	16	0	no	*	48	64	321367	321368
8x2x3/2	1003	16	16	no	*	48	64	321371	321372
12x2x3/2	1011	24	0	no	*	0	0	321387	321388
12x2x3/2	1012	24	0	no	*	24	32	321391	321392
12x2x3/2	1012	24	24	no	*	24	32	321395	321396
12x2x3/2	1013**	24	0	no	*	48	64	321399	321400
12x2x3/2	1013**	24	24	no	*	48	64	321403	321404
16x2x3/2	1031	32	0	yes	*	0	0	321411	321412

\* Note the specifications of the I/O system manufacturer

\*\* Please contact us

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 17	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1001	8	0	no	*	0	0	321357	321358
8x5/2	1002	8	0	no	*	24	32	321361	321362
8x5/2	1002	8	16	no	*	24	32	321365	321366
8x5/2	1003	8	0	no	*	48	64	321369	321370
8x5/2	1003	8	16	no	*	48	64	321373	321374
12x5/2	1011	12	0	no	*	0	0	321389	321390
12x5/2	1012	12	0	no	*	24	32	321393	321394
12x5/2	1012	12	24	no	*	24	32	321397	321398
12x5/2	1013**	12	0	no	*	48	64	321401	321402
12x5/2	1013**	12	24	no	*	48	64	321405	321406
16x5/2	1031	16	0	yes	*	0	0	321413	321414

\* Note the specifications of the I/O system manufacturer

\*\* Please contact us

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 390 mm

## Order table

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 17	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1004	16	0	no	*	0	0	321375	321376
8x2x3/2	1005	16	0	no	*	24	32	321379	321380
8x2x3/2	1005	16	16	no	*	24	32	321383	321384
12x2x3/2	1014	24	0	no	*	0	0	321407	321408

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 17	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1004	8	0	no	*	0	0	321377	321378
8x5/2	1005	8	0	no	*	24	32	321381	321382
8x5/2	1005	8	16	no	*	24	32	321385	321386
12x5/2	1014	12	0	no	*	0	0	321409	321410

\* Note the specifications of the I/O system manufacturer

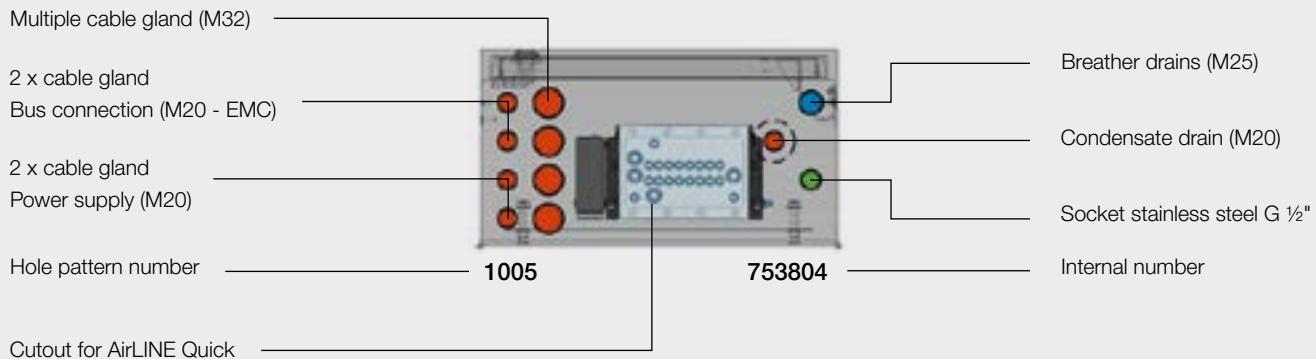
### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 390 mm

## Description of hole pattern



## Hole patterns

8-fold valve island  
Type 8652  
Installation width 390



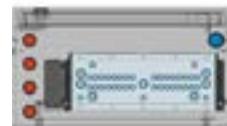
1001 753800

12-fold valve island  
Type 8652  
Installation width 390



1011 753805

16-fold valve island (w. IF)  
Type 8652  
Installation width 390



1031 753809



1002 753801



1012 753806



1003 753802



\*1013 753807



1004 753803



1014 753808



1005 753804

\*Hole pattern 1013: Please contact us  
w. IF = with intermediate feed

## Automation system Type 8614 with valve island Type 8652

### Installation width 510 mm

Max. expansion variant:

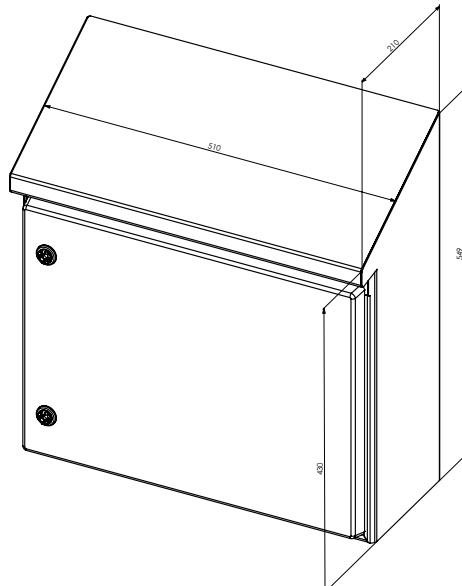
- Two valve islands
- 24x2x3/2-way function  
48 digital position feedback inputs
- 24x5/2-way function  
48 digital position feedback inputs



### Technical data

<b>Housing dimensions W x H x D</b>	510 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +55°C
<b>Pressure range with/without filter regulator</b>	3 to 16 bar/3 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	270 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	Ø 10/8 mm push-in
Working ports valve	Ø 6/4 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10%
<b>Performance (without I/O system)</b>	75 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6 x 6.5 mm (8 x 5.5 mm)* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.0 mm <sup>2</sup> (with ferrule)
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 30 kg

\* see order table



Automation system Type 8614 with valve island Type 8652, installation width 510 mm

## Order table

**Variant: 2x3/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 22-23	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter regulator	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1101	1	0	16	0	no	*	0	0	0	321415	321416
8x2x3/2	1102	1	0	16	0	no	*	24	32	0	321419	321420
8x2x3/2	1102	1	0	16	16	no	*	24	32	0	321423	321424
8x2x3/2	1103	1	0	16	0	no	*	48	64	0	321427	321428
8x2x3/2	1103	1	0	16	16	no	*	48	64	0	321431	321432
8x2x3/2	1104	1	0	16	0	no	*	72	96	0	321435	321436
8x2x3/2	1104	1	0	16	16	no	*	72	96	0	321439	321440
8x2x3/2	1105	1	0	16	0	no	*	96	128	0	321443	321444
8x2x3/2	1105	1	0	16	16	no	*	96	128	0	321447	321448
8x2x3/2	1110	2	0	32	0	no	*	0	0	0	321479	321480
8x2x3/2	1110	1	1	16	0	no	*	0	0	0	321483	321484
12x2x3/2	1111	1	0	24	0	no	*	0	0	0	321487	321488
12x2x3/2	1112	1	0	24	0	no	*	24	32	0	321491	321492
12x2x3/2	1112	1	0	24	24	no	*	24	32	0	321495	321496
12x2x3/2	1113	1	0	24	0	no	*	48	64	0	321499	321500
12x2x3/2	1113	1	0	24	24	no	*	48	64	0	321503	321504
12x2x3/2	1114	1	0	24	0	no	*	72	96	0	321507	321508
12x2x3/2	1114	1	0	24	24	no	*	72	96	0	321511	321512
12x2x3/2	1115	1	0	24	0	no	*	96	128	0	321515	321516
12x2x3/2	1115	1	0	24	24	no	*	96	128	0	321519	321520
16x2x3/2	1131	1	0	32	0	yes	*	0	0	0	321543	321544
16x2x3/2	1132	1	0	32	0	yes	*	24	32	0	321547	321548
16x2x3/2	1132	1	0	32	32	yes	*	24	32	0	321551	321552
16x2x3/2	1133	1	0	32	0	yes	*	48	64	0	321555	321556
16x2x3/2	1133	1	0	32	32	yes	*	48	64	0	321559	321560
20x2x3/2	1141	1	0	40	0	yes	*	0	0	0	321575	321576
20x2x3/2	1142	1	0	40	0	yes	*	24	32	0	321579	321580
20x2x3/2	1142	1	0	40	40	yes	*	24	32	0	321583	321584
20x2x3/2	1143**	1	0	40	0	yes	*	48	64	0	321587	321588
20x2x3/2	1143**	1	0	40	40	yes	*	48	64	0	321591	321592
24x2x3/2	1151	1	0	48	0	yes	*	0	0	0	321599	321600
24x2x3/2	1152	1	0	48	0	yes	*	24	32	0	321603	321604
24x2x3/2	1152	1	0	48	48	yes	*	24	32	0	321607	321608

\* Note the specifications of the I/O system manufacturer

\*\* Please contact us

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 510 mm

## Order table

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 22-23	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter regulator	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1101	1	0	8	0	no	*	0	0	0	321417	321418
8x5/2	1102	1	0	8	0	no	*	24	32	0	321421	321422
8x5/2	1102	1	0	8	16	no	*	24	32	0	321425	321426
8x5/2	1103	1	0	8	0	no	*	48	64	0	321429	321430
8x5/2	1103	1	0	8	16	no	*	48	64	0	321433	321434
8x5/2	1104	1	0	8	0	no	*	72	96	0	321437	321438
8x5/2	1104	1	0	8	16	no	*	72	96	0	321441	321442
8x5/2	1105	1	0	8	0	no	*	96	128	0	321445	321446
8x5/2	1105	1	0	8	16	no	*	96	128	0	321449	321450
8x5/2	1110	2	0	16	0	no	*	0	0	0	321481	321482
8x5/2	1110	1	1	8	0	no	*	0	0	0	321485	321486
12x5/2	1111	1	0	12	0	no	*	0	0	0	321489	321490
12x5/2	1112	1	0	12	0	no	*	24	32	0	321493	321494
12x5/2	1112	1	0	12	24	no	*	24	32	0	321497	321498
12x5/2	1113	1	0	12	0	no	*	48	64	0	321501	321502
12x5/2	1113	1	0	12	24	no	*	48	64	0	321505	321506
12x5/2	1114	1	0	12	0	no	*	72	96	0	321509	321510
12x5/2	1114	1	0	12	24	no	*	72	96	0	321513	321514
12x5/2	1115	1	0	12	0	no	*	96	128	0	321517	321518
12x5/2	1115	1	0	12	24	no	*	96	128	0	321521	321522
16x5/2	1131	1	0	16	0	yes	*	0	0	0	321545	321546
16x5/2	1132	1	0	16	0	yes	*	24	32	0	321549	321550
16x5/2	1132	1	0	16	32	yes	*	24	32	0	321553	321554
16x5/2	1133	1	0	16	0	yes	*	48	64	0	321557	321558
16x5/2	1133	1	0	16	32	yes	*	48	64	0	321561	321562
20x5/2	1141	1	0	20	0	yes	*	0	0	0	321577	321578
20x5/2	1142	1	0	20	0	yes	*	24	32	0	321581	321582
20x5/2	1142	1	0	20	40	yes	*	24	32	0	321585	321586
20x5/2	1143**	1	0	20	0	yes	*	48	64	0	321589	321590
20x5/2	1143**	1	0	20	40	yes	*	48	64	0	321593	321594
24x5/2	1151	1	0	24	0	yes	*	0	0	0	321601	321602
24x5/2	1152	1	0	24	0	yes	*	24	32	0	321605	321606
24x5/2	1152	1	0	24	48	yes	*	24	32	0	321609	321610

\* Note the specifications of the I/O system manufacturer

\*\* Please contact us

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 510 mm

## Order table

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 22-23	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter regulator	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1106	1	0	16	0	no	*	0	0	1	321451	321452
8x2x3/2	1107	1	0	16	0	no	*	24	32	1	321455	321456
8x2x3/2	1107	1	0	16	16	no	*	24	32	1	321459	321460
8x2x3/2	1108	1	0	16	0	no	*	48	64	1	321463	321464
8x2x3/2	1108	1	0	16	16	no	*	48	64	1	321467	321468
8x2x3/2	1109	1	0	16	0	no	*	72	96	1	321471	321472
8x2x3/2	1109	1	0	16	16	no	*	72	96	1	321475	321476
12x2x3/2	1116	1	0	24	0	no	*	0	0	1	321523	321524
12x2x3/2	1117	1	0	24	0	no	*	24	32	1	321527	321528
12x2x3/2	1117	1	0	24	24	no	*	24	32	1	321531	321532
12x2x3/2	1118	1	0	24	0	no	*	48	64	1	321535	321536
12x2x3/2	1118	1	0	24	24	no	*	48	64	1	321539	321540
16x2x3/2	1136	1	0	32	0	yes	*	0	0	1	321563	321564
16x2x3/2	1137	1	0	32	0	yes	*	0	0	1	321567	321568
16x2x3/2	1137	1	0	32	32	yes	*	0	0	1	321571	321572
20x2x3/2	1146	1	0	40	0	yes	*	0	0	1	321595	321596

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 22-23	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter regulator	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1106	1	0	8	0	no	*	0	0	1	321453	321454
8x5/2	1107	1	0	8	0	no	*	24	32	1	321457	321458
8x5/2	1107	1	0	8	16	no	*	24	32	1	321461	321462
8x5/2	1108	1	0	8	0	no	*	48	64	1	321465	321466
8x5/2	1108	1	0	8	16	no	*	48	64	1	321469	321470
8x5/2	1109	1	0	8	0	no	*	72	96	1	321473	321474
8x5/2	1109	1	0	8	16	no	*	72	96	1	321477	321478
12x5/2	1116	1	0	12	0	no	*	0	0	1	321525	321526
12x5/2	1117	1	0	12	0	no	*	24	32	1	321529	321530
12x5/2	1117	1	0	12	24	no	*	24	32	1	321533	321534
12x5/2	1118	1	0	12	0	no	*	48	64	1	321537	321538
12x5/2	1118	1	0	12	24	no	*	48	64	1	321541	321542
16x5/2	1136	1	0	16	0	yes	*	0	0	1	321565	321566
16x5/2	1137	1	0	16	0	yes	*	0	0	1	321569	321570
16x5/2	1137	1	0	16	32	yes	*	0	0	1	321573	321574
20x5/2	1146	1	0	20	0	yes	*	0	0	1	321597	321598

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 510 mm  
**Hole patterns**

8-fold valve island  
Type 8652  
Installation width 510



1101 753810



1102 753811



1103 753812



1104 753813



1105 753814



1106 753815



1107 753816



1108 753817



1109 753818



1110 753819

12-fold valve island  
Type 8652  
Installation width 510



1111 753820



1112 753821



1113 753822



1114 753823



1115 753824



1116 753825



1117 753826



1118 753827

16-fold valve island (w. IF)  
Type 8652  
Installation width 510



1131 753828



1132 753829



1133 753830



1136 753831



1137 753832



Automation system Type 8614 with valve island Type 8652, installation width 510 mm

## Hole patterns

20-fold valve island (w. IF)

Type 8652

Installation width 510

24-fold valve island (w. IF)

Type 8652

Installation width 510



1141

753833



1151

753837



1142

753834



1152

753838



1143

753835

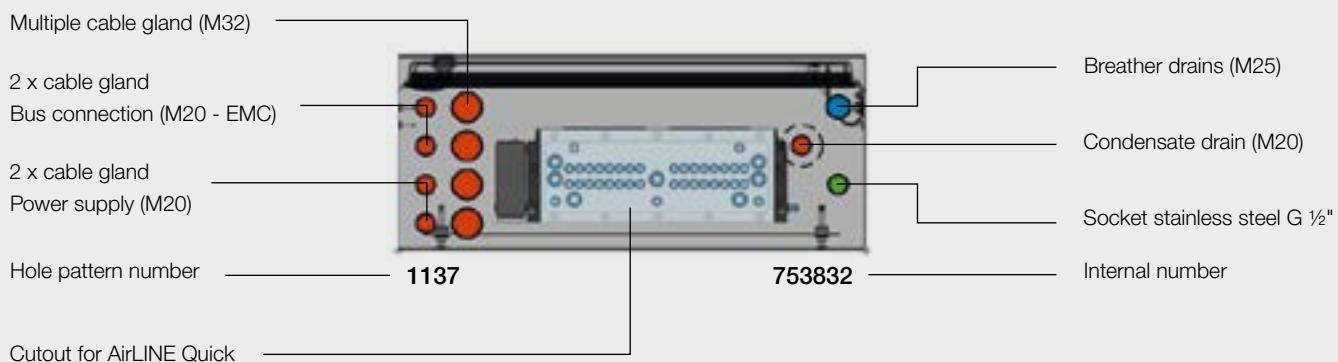


1146

753836

\*Hole pattern 1143: Please contact us  
w. IF = with intermediate feed

## Description of hole pattern

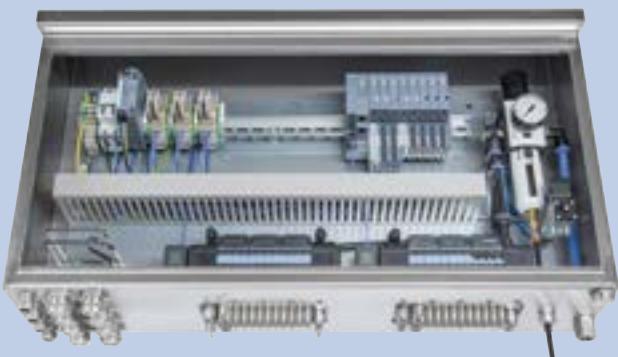


## Automation system Type 8614 with valve island Type 8652

### Installation width 810 mm

Max. expansion variant:

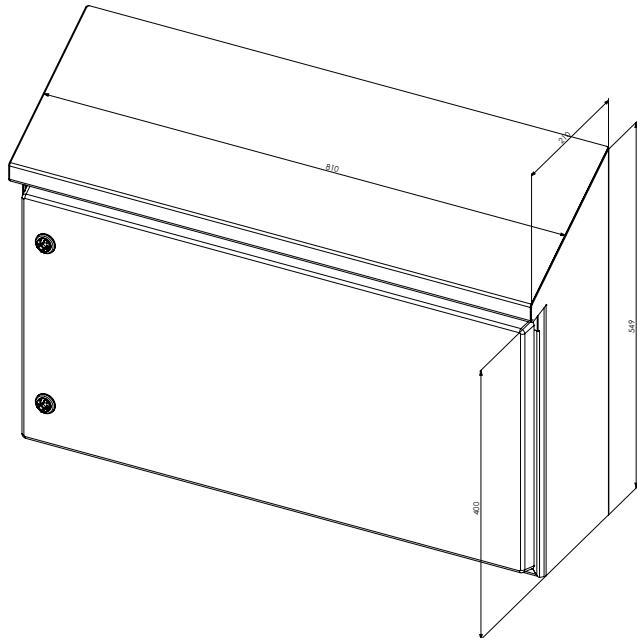
- Two valve islands
- 32 x 2x3/2-way function  
64 digital position feedback inputs
- 32 x 5/2-way function  
64 digital position feedback inputs



### Technical data

<b>Housing dimensions W x H x D</b>	810 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +55°C
<b>Pressure range with/without filter regulator</b>	3 to 16 bar/3 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	270 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	Ø 10/8 mm push-in
Working ports valve	Ø 6/4 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 V AC
Valve island	24 V DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	120 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O system	6 x 6.5 mm (8 x 5.5 mm)* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.0 mm <sup>2</sup> (with ferrule)
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 40 kg

\* see order table



Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 2x3/2-way valve island variant without filter regulator, without position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1201	2	0	32	no	*	0	0	321611	321612
8x2x3/2	1201	1	1	16	no	*	0	0	321615	321616
8x2x3/2	1202	2	0	32	no	*	24	32	321619	321620
8x2x3/2	1202	1	1	16	no	*	24	32	321623	321624
8x2x3/2	1203	2	0	32	no	*	48	64	321635	321636
8x2x3/2	1203	1	1	16	no	*	48	64	321639	321640
8x2x3/2	1204	2	0	32	no	*	72	96	321651	321652
8x2x3/2	1204	1	1	16	no	*	72	96	321655	321656
8x2x3/2	1205	2	0	32	no	*	96	128	321667	321668
8x2x3/2	1205	1	1	16	no	*	96	128	321671	321672
8x2x3/2	1206	2	0	32	no	*	120	160	321683	321684
8x2x3/2	1206	1	1	16	no	*	120	160	321687	321688
12x2x3/2	1221	2	0	48	no	*	0	0	343311	343312
12x2x3/2	1221	1	1	24	no	*	0	0	343315	343316
12x2x3/2	1222	2	0	48	no	*	24	32	343319	343320
12x2x3/2	1222	1	1	24	no	*	24	32	343323	343324
12x2x3/2	1223	2	0	48	no	*	48	64	343335	343336
12x2x3/2	1223	1	1	24	no	*	48	64	343339	343340
12x2x3/2	1224	2	0	48	no	*	72	96	343351	343352
12x2x3/2	1224	1	1	24	no	*	72	96	343355	343356
12x2x3/2	1225	2	0	48	no	*	96	128	343367	343368
12x2x3/2	1225	1	1	24	no	*	96	128	343371	343372
16x2x3/2	1241	2	0	64	yes	*	0	0	343439	343440
16x2x3/2	1241	1	1	32	yes	*	0	0	343443	343444
16x2x3/2	1242	2	0	64	yes	*	24	32	343447	343448
16x2x3/2	1242	1	1	32	yes	*	24	32	343451	343452
16x2x3/2	1243	2	0	64	yes	*	48	64	343463	343464
16x2x3/2	1243	1	1	32	yes	*	48	64	343467	343468
16x2x3/2	1244	1	0	32	yes	*	0	0	343487	343488
16x2x3/2	1245	1	0	32	yes	*	24	32	343491	343492
16x2x3/2	1246	1	0	32	yes	*	48	64	343499	343500
16x2x3/2	1247	1	0	32	yes	*	72	96	343507	343508
16x2x3/2	1248	1	0	32	yes	*	96	128	343515	343516
16x2x3/2	1249	1	0	32	yes	*	120	160	343523	343524
20x2x3/2	1261	2	0	80	yes	*	0	0	343575	343576
20x2x3/2	1261	1	1	40	yes	*	0	0	343579	343580
20x2x3/2	1264	1	0	40	yes	*	0	0	343583	343584
20x2x3/2	1265	1	0	40	yes	*	24	32	343587	343588
20x2x3/2	1266	1	0	40	yes	*	48	64	343595	343596
20x2x3/2	1267	1	0	40	yes	*	72	96	343603	343604
20x2x3/2	1268	1	0	40	yes	*	96	128	343611	343612
20x2x3/2	1269	1	0	40	yes	*	120	160	343619	343620
24x2x3/2	1284	1	0	48	yes	*	0	0	343671	343672
24x2x3/2	1285	1	0	48	yes	*	24	32	343675	343676
24x2x3/2	1286	1	0	48	yes	*	48	64	343683	343684
24x2x3/2	1287	1	0	48	yes	*	72	96	343691	343692
24x2x3/2	1288	1	0	48	yes	*	96	128	343699	343700
24x2x3/2	1289	1	0	48	yes	*	120	160	343707	343708

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 2x3/2-way valve island variant without filter regulator, with position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1202	2	0	32	32	no	*	24	32	321627	321628
8x2x3/2	1202	1	1	16	16	no	*	24	32	321631	321632
8x2x3/2	1203	2	0	32	32	no	*	48	64	321643	321644
8x2x3/2	1203	1	1	16	16	no	*	48	64	321647	321648
8x2x3/2	1204	2	0	32	32	no	*	72	96	321659	321660
8x2x3/2	1204	1	1	16	16	no	*	72	96	321663	321664
8x2x3/2	1205	2	0	32	32	no	*	96	128	321675	321676
8x2x3/2	1205	1	1	16	16	no	*	96	128	321679	321680
8x2x3/2	1206	2	0	32	32	no	*	120	160	343215	343216
8x2x3/2	1206	1	1	16	16	no	*	120	160	343219	343220
12x2x3/2	1222	2	0	48	48	no	*	24	32	343327	343328
12x2x3/2	1222	1	1	24	24	no	*	24	32	343331	343332
12x2x3/2	1223	2	0	48	48	no	*	48	64	343343	343344
12x2x3/2	1223	1	1	24	24	no	*	48	64	343347	343348
12x2x3/2	1224	2	0	48	48	no	*	72	96	343359	343360
12x2x3/2	1224	1	1	24	24	no	*	72	96	343363	343364
12x2x3/2	1225	2	0	48	48	no	*	96	128	343375	343376
12x2x3/2	1225	1	1	24	24	no	*	96	128	343379	343380
16x2x3/2	1242	2	0	64	64	yes	*	24	32	343455	343456
16x2x3/2	1242	1	1	32	32	yes	*	24	32	343459	343460
16x2x3/2	1243	2	0	64	64	yes	*	48	64	343471	343472
16x2x3/2	1243	1	1	32	32	yes	*	48	64	343475	343476
16x2x3/2	1245	1	0	32	32	yes	*	24	32	343495	343496
16x2x3/2	1246	1	0	32	32	yes	*	48	64	343503	343504
16x2x3/2	1247	1	0	32	32	yes	*	72	96	343511	343512
16x2x3/2	1248	1	0	32	32	yes	*	96	128	343519	343520
16x2x3/2	1249	1	0	32	32	yes	*	120	160	343527	343528
20x2x3/2	1265	1	0	40	40	yes	*	24	32	343591	343592
20x2x3/2	1266	1	0	40	40	yes	*	48	64	343599	343600
20x2x3/2	1267	1	0	40	40	yes	*	72	96	343607	343608
20x2x3/2	1268	1	0	40	40	yes	*	96	128	343615	343616
20x2x3/2	1269	1	0	40	40	yes	*	120	160	343623	343624
24x2x3/2	1285	1	0	48	48	yes	*	24	32	343679	343680
24x2x3/2	1286	1	0	48	48	yes	*	48	64	343687	343688
24x2x3/2	1287	1	0	48	48	yes	*	72	96	343695	343696
24x2x3/2	1288	1	0	48	48	yes	*	96	128	343703	343704
24x2x3/2	1289	1	0	48	48	yes	*	120	160	343711	343712

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant without filter regulator, without position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Middle feed valve island	Max. Cross-section field I/O (mm²)	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1201	2	0	16	no	*	0	0	321613	321614
8x5/2	1201	1	1	8	no	*	0	0	321617	321618
8x5/2	1202	2	0	16	no	*	24	32	321621	321622
8x5/2	1202	1	1	8	no	*	24	32	321625	321626
8x5/2	1203	2	0	16	no	*	48	64	321637	321638
8x5/2	1203	1	1	8	no	*	48	64	321641	321642
8x5/2	1204	2	0	16	no	*	72	96	321653	321654
8x5/2	1204	1	1	8	no	*	72	96	321657	321658
8x5/2	1205	2	0	16	no	*	96	128	321669	321670
8x5/2	1205	1	1	8	no	*	96	128	321673	321674
8x5/2	1206	2	0	16	no	*	120	160	321685	321686
8x5/2	1206	1	1	8	no	*	120	160	343213	343214
12x5/2	1221	2	0	24	no	*	0	0	343313	343314
12x5/2	1221	1	1	12	no	*	0	0	343317	343318
12x5/2	1222	2	0	24	no	*	24	32	343321	343322
12x5/2	1222	1	1	12	no	*	24	32	343325	343326
12x5/2	1223	2	0	24	no	*	48	64	343337	343338
12x5/2	1223	1	1	12	no	*	48	64	343341	343342
12x5/2	1224	2	0	24	no	*	72	96	343353	343354
12x5/2	1224	1	1	12	no	*	72	96	343357	343358
12x5/2	1225	2	0	24	no	*	96	128	343369	343370
12x5/2	1225	1	1	12	no	*	96	128	343373	343374
16x5/2	1241	2	0	32	yes	*	0	0	343441	343442
16x5/2	1241	1	1	16	yes	*	0	0	343445	343446
16x5/2	1242	2	0	32	yes	*	24	32	343449	343450
16x5/2	1242	1	1	16	yes	*	24	32	343453	343454
16x5/2	1243	2	0	32	yes	*	48	64	343465	343466
16x5/2	1243	1	1	16	yes	*	48	64	343469	343470
16x5/2	1244	1	0	16	yes	*	0	0	343489	343490
16x5/2	1245	1	0	16	yes	*	24	32	343493	343494
16x5/2	1246	1	0	16	yes	*	48	64	343501	343502
16x5/2	1247	1	0	16	yes	*	72	96	343509	343510
16x5/2	1248	1	0	16	yes	*	96	128	343517	343518
16x5/2	1249	1	0	16	yes	*	120	160	343525	343526
20x5/2	1261	2	0	40	yes	*	0	0	343577	343578
20x5/2	1261	1	1	20	yes	*	0	0	343581	343582
20x5/2	1264	1	0	20	yes	*	0	0	343585	343586
20x5/2	1265	1	0	20	yes	*	24	32	343589	343590
20x5/2	1266	1	0	20	yes	*	48	64	343597	343598
20x5/2	1267	1	0	20	yes	*	72	96	343605	343606
20x5/2	1268	1	0	20	yes	*	96	128	343613	343614
20x5/2	1269	1	0	20	yes	*	120	160	343621	343622
24x5/2	1284	1	0	24	yes	*	0	0	343673	343674
24x5/2	1285	1	0	24	yes	*	24	32	343677	343678
24x5/2	1286	1	0	24	yes	*	48	64	343685	343686
24x5/2	1287	1	0	24	yes	*	72	96	343693	343694
24x5/2	1288	1	0	24	yes	*	96	128	343701	343702
24x5/2	1289	1	0	24	yes	*	120	160	343709	343710

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant without filter regulator, with position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1202	2	0	16	32	no	*	24	32	321629	321630
8x5/2	1202	1	1	8	16	no	*	24	32	321633	321634
8x5/2	1203	2	0	16	32	no	*	48	64	321645	321646
8x5/2	1203	1	1	8	16	no	*	48	64	321649	321650
8x5/2	1204	2	0	16	32	no	*	72	96	321661	321662
8x5/2	1204	1	1	8	16	no	*	72	96	321665	321666
8x5/2	1205	2	0	16	32	no	*	96	128	321677	321678
8x5/2	1205	1	1	8	16	no	*	96	128	321681	321682
8x5/2	1206	2	0	16	32	no	*	120	160	343217	343218
8x5/2	1206	1	1	8	16	no	*	120	160	343221	343222
12x5/2	1222	2	0	24	48	no	*	24	32	343329	343330
12x5/2	1222	1	1	12	24	no	*	24	32	343333	343334
12x5/2	1223	2	0	24	48	no	*	48	64	343345	343346
12x5/2	1223	1	1	12	24	no	*	48	64	343349	343350
12x5/2	1224	2	0	24	48	no	*	72	96	343361	343362
12x5/2	1224	1	1	12	24	no	*	72	96	343365	343366
12x5/2	1225	2	0	24	48	no	*	96	128	343377	343378
12x5/2	1225	1	1	12	24	no	*	96	128	343381	343382
16x5/2	1242	2	0	32	64	yes	*	24	32	343457	343458
16x5/2	1242	1	1	16	32	yes	*	24	32	343461	343462
16x5/2	1243	2	0	32	64	yes	*	48	64	343473	343474
16x5/2	1243	1	1	16	32	yes	*	48	64	343477	343478
16x5/2	1245	1	0	16	32	yes	*	24	32	343497	343498
16x5/2	1246	1	0	16	32	yes	*	48	64	343505	343506
16x5/2	1247	1	0	16	32	yes	*	72	96	343513	343514
16x5/2	1248	1	0	16	32	yes	*	96	128	343521	343522
16x5/2	1249	1	0	16	32	yes	*	120	160	343529	343530
20x5/2	1265	1	0	20	40	yes	*	24	32	343593	343594
20x5/2	1266	1	0	20	40	yes	*	48	64	343601	343602
20x5/2	1267	1	0	20	40	yes	*	72	96	343609	343610
20x5/2	1268	1	0	20	40	yes	*	96	128	343617	343618
20x5/2	1269	1	0	20	40	yes	*	120	160	343625	343626
24x5/2	1285	1	0	24	48	yes	*	24	32	343681	343682
24x5/2	1286	1	0	24	48	yes	*	48	64	343689	343690
24x5/2	1287	1	0	24	48	yes	*	72	96	343697	343698
24x5/2	1288	1	0	24	48	yes	*	96	128	343705	343706
24x5/2	1289	1	0	24	48	yes	*	120	160	343713	343714

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 2x3/2-way-valve island variant with filter regulator, without position feedback inputs on valve island**

Valve is-land variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1208	2	0	32	no	*	0	0	343223	343224
8x2x3/2	1208	1	1	16	no	*	0	0	343227	343228
8x2x3/2	1209	2	0	32	no	*	24	32	343231	343232
8x2x3/2	1209	1	1	16	no	*	24	32	343235	343236
8x2x3/2	1210	2	0	32	no	*	48	64	343247	343248
8x2x3/2	1210	1	1	16	no	*	48	64	343251	343252
8x2x3/2	1211	2	0	32	no	*	72	96	343263	343264
8x2x3/2	1211	1	1	16	no	*	72	96	343267	343268
8x2x3/2	1212	2	0	32	no	*	96	128	343279	343280
8x2x3/2	1212	1	1	16	no	*	96	128	343283	343284
8x2x3/2	1213	2	0	32	no	*	120	160	343295	343296
8x2x3/2	1213	1	1	16	no	*	120	160	343299	343300
12x2x3/2	1228	2	0	48	no	*	0	0	343383	343384
12x2x3/2	1228	1	1	24	no	*	0	0	343387	343388
12x2x3/2	1229	2	0	48	no	*	24	32	343391	343392
12x2x3/2	1229	1	1	24	no	*	24	32	343395	343396
12x2x3/2	1230	2	0	48	no	*	48	64	343407	343408
12x2x3/2	1230	1	1	24	no	*	48	64	343411	343412
12x2x3/2	1231	2	0	48	no	*	72	96	343423	343424
12x2x3/2	1231	1	1	24	no	*	72	96	343427	343428
16x2x3/2	1258	2	0	64	yes	*	0	0	343479	343480
16x2x3/2	1258	1	1	32	yes	*	0	0	343483	343484
16x2x3/2	1250	1	0	32	yes	*	0	0	343531	343532
16x2x3/2	1251	1	0	32	yes	*	24	32	343535	343536
16x2x3/2	1252	1	0	32	yes	*	48	64	343543	343544
16x2x3/2	1253	1	0	32	yes	*	72	96	343551	343552
16x2x3/2	1254	1	0	32	yes	*	96	128	343559	343560
16x2x3/2	1255	1	0	32	yes	*	120	160	343567	343568
20x2x3/2	1270	1	0	40	yes	*	0	0	343627	343628
20x2x3/2	1271	1	0	40	yes	*	24	32	343631	343632
20x2x3/2	1272	1	0	40	yes	*	48	64	343639	343640
20x2x3/2	1273	1	0	40	yes	*	72	96	343647	343648
20x2x3/2	1274	1	0	40	yes	*	96	128	343655	343656
20x2x3/2	1275	1	0	40	yes	*	120	160	343663	343664
24x2x3/2	1290	1	0	48	yes	*	0	0	343715	343716
24x2x3/2	1291	1	0	48	yes	*	24	32	343719	343720
24x2x3/2	1292	1	0	48	yes	*	48	64	343727	343728
24x2x3/2	1293	1	0	48	yes	*	72	96	343735	343736
24x2x3/2	1294	1	0	48	yes	*	96	128	343743	343744
24x2x3/2	1295	1	0	48	yes	*	120	160	343751	343752

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 2x3/2-way valve island variant with filter regulator, with position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x2x3/2	1209	2	0	32	32	no	*	24	32	343239	343240
8x2x3/2	1209	1	1	16	16	no	*	24	32	343243	343244
8x2x3/2	1210	2	0	32	32	no	*	48	64	343255	343256
8x2x3/2	1210	1	1	16	16	no	*	48	64	343259	343260
8x2x3/2	1211	2	0	32	32	no	*	72	96	343271	343272
8x2x3/2	1211	1	1	16	16	no	*	72	96	343275	343276
8x2x3/2	1212	2	0	32	32	no	*	96	128	343287	343288
8x2x3/2	1212	1	1	16	16	no	*	96	128	343291	343292
8x2x3/2	1213	2	0	32	32	no	*	120	160	343303	343304
8x2x3/2	1213	1	1	16	16	no	*	120	160	343307	343308
12x2x3/2	1229	2	0	48	48	no	*	24	32	343399	343400
12x2x3/2	1229	1	1	24	24	no	*	24	32	343403	343404
12x2x3/2	1230	2	0	48	48	no	*	48	64	343415	343416
12x2x3/2	1230	1	1	24	24	no	*	48	64	343419	343420
12x2x3/2	1231	2	0	48	48	no	*	72	96	343431	343432
12x2x3/2	1231	1	1	24	24	no	*	72	96	343435	343436
16x2x3/2	1251	1	0	32	32	yes	*	24	32	343539	343540
16x2x3/2	1252	1	0	32	32	yes	*	48	64	343547	343548
16x2x3/2	1253	1	0	32	32	yes	*	72	96	343555	343556
16x2x3/2	1254	1	0	32	32	yes	*	96	128	343563	343564
16x2x3/2	1255	1	0	32	32	yes	*	120	160	343571	343572
20x2x3/2	1271	1	0	40	40	yes	*	24	32	343635	343636
20x2x3/2	1272	1	0	40	40	yes	*	48	64	343643	343644
20x2x3/2	1273	1	0	40	40	yes	*	72	96	343651	343652
20x2x3/2	1274	1	0	40	40	yes	*	96	128	343659	343660
20x2x3/2	1275	1	0	40	40	yes	*	120	160	343667	343668
24x2x3/2	1291	1	0	48	48	yes	*	24	32	343723	343724
24x2x3/2	1292	1	0	48	48	yes	*	48	64	343731	343732
24x2x3/2	1293	1	0	48	48	yes	*	72	96	343739	343740
24x2x3/2	1294	1	0	48	48	yes	*	96	128	343747	343748
24x2x3/2	1295	1	0	48	48	yes	*	120	160	343755	343756

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant with filter regulator, without position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1208	2	0	16	no	*	0	0	343225	343226
8x5/2	1208	1	1	8	no	*	0	0	343229	343230
8x5/2	1209	2	0	16	no	*	24	32	343233	343234
8x5/2	1209	1	1	8	no	*	24	32	343237	343238
8x5/2	1210	2	0	16	no	*	48	64	343249	343250
8x5/2	1210	1	1	8	no	*	48	64	343253	343254
8x5/2	1211	2	0	16	no	*	72	96	343265	343266
8x5/2	1211	1	1	8	no	*	72	96	343269	343270
8x5/2	1212	2	0	16	no	*	96	128	343281	343282
8x5/2	1212	1	1	8	no	*	96	128	343285	343286
8x5/2	1213	2	0	16	no	*	120	160	343297	343298
8x5/2	1213	1	1	8	no	*	120	160	343301	343302
12x5/2	1228	2	0	24	no	*	0	0	343385	343386
12x5/2	1228	1	1	12	no	*	0	0	343389	343390
12x5/2	1229	2	0	24	no	*	24	32	343393	343394
12x5/2	1229	1	1	12	no	*	24	32	343397	343398
12x5/2	1230	2	0	24	no	*	48	64	343409	343410
12x5/2	1230	1	1	12	no	*	48	64	343413	343414
12x5/2	1231	2	0	24	no	*	72	96	343425	343426
12x5/2	1231	1	1	12	no	*	72	96	343429	343430
16x5/2	1258	2	0	32	yes	*	0	0	343481	343482
16x5/2	1258	1	1	16	yes	*	0	0	343485	343486
16x5/2	1250	1	0	16	yes	*	0	0	343533	343534
16x5/2	1251	1	0	16	yes	*	24	32	343537	343538
16x5/2	1252	1	0	16	yes	*	48	64	343545	343546
16x5/2	1253	1	0	16	yes	*	72	96	343553	343554
16x5/2	1254	1	0	16	yes	*	96	128	343561	343562
16x5/2	1255	1	0	16	yes	*	120	160	343569	343570
20x5/2	1270	1	0	20	yes	*	0	0	343629	343630
20x5/2	1271	1	0	20	yes	*	24	32	343633	343634
20x5/2	1272	1	0	20	yes	*	48	64	343641	343642
20x5/2	1273	1	0	20	yes	*	72	96	343649	343650
20x5/2	1274	1	0	20	yes	*	96	128	343657	343658
20x5/2	1275	1	0	20	yes	*	120	160	343665	343666
24x5/2	1290	1	0	24	yes	*	0	0	343717	343718
24x5/2	1291	1	0	24	yes	*	24	32	343721	343722
24x5/2	1292	1	0	24	yes	*	48	64	343729	343730
24x5/2	1293	1	0	24	yes	*	72	96	343737	343738
24x5/2	1294	1	0	24	yes	*	96	128	343745	343746
24x5/2	1295	1	0	24	yes	*	120	160	343753	343754

\* Note the specifications of the I/O system manufacturer

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant with filter regulator, with position feedback inputs on valve island**

Valve island variant	Hole pattern see P. 34-35	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Middle feed valve island	Max. Cross-section field I/O (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Ident. number Industrial Ethernet	Ident. number Profibus DP
8x5/2	1209	2	0	16	32	no	*	24	32	343241	343242
8x5/2	1209	1	1	8	16	no	*	24	32	343245	343246
8x5/2	1210	2	0	16	32	no	*	48	64	343257	343258
8x5/2	1210	1	1	8	16	no	*	48	64	343261	343262
8x5/2	1211	2	0	16	32	no	*	72	96	343273	343274
8x5/2	1211	1	1	8	16	no	*	72	96	343277	343278
8x5/2	1212	2	0	16	32	no	*	96	128	343289	343290
8x5/2	1212	1	1	8	16	no	*	96	128	343293	343294
8x5/2	1213	2	0	16	32	no	*	120	160	343305	343306
8x5/2	1213	1	1	8	16	no	*	120	160	343309	343310
12x5/2	1229	2	0	24	48	no	*	24	32	343401	343402
12x5/2	1229	1	1	12	24	no	*	24	32	343405	343406
12x5/2	1230	2	0	24	48	no	*	48	64	343417	343418
12x5/2	1230	1	1	12	24	no	*	48	64	343421	343422
12x5/2	1231	2	0	24	48	no	*	72	96	343433	343434
12x5/2	1231	1	1	12	24	no	*	72	96	343437	343438
16x5/2	1251	1	0	16	32	yes	*	24	32	343541	343542
16x5/2	1252	1	0	16	32	yes	*	48	64	343549	343550
16x5/2	1253	1	0	16	32	yes	*	72	96	343557	343558
16x5/2	1254	1	0	16	32	yes	*	96	128	343565	343566
16x5/2	1255	1	0	16	32	yes	*	120	160	343573	343574
20x5/2	1271	1	0	20	40	yes	*	24	32	343637	343638
20x5/2	1272	1	0	20	40	yes	*	48	64	343645	343646
20x5/2	1273	1	0	20	40	yes	*	72	96	343653	343654
20x5/2	1274	1	0	20	40	yes	*	96	128	343661	343662
20x5/2	1275	1	0	20	40	yes	*	120	160	343669	343670
24x5/2	1291	1	0	24	48	yes	*	24	32	343725	343726
24x5/2	1292	1	0	24	48	yes	*	48	64	343733	343734
24x5/2	1293	1	0	24	48	yes	*	72	96	343741	343742
24x5/2	1294	1	0	24	48	yes	*	96	128	343749	343750
24x5/2	1295	1	0	24	48	yes	*	120	160	343757	343758

\* Note the specifications of the I/O system manufacturer

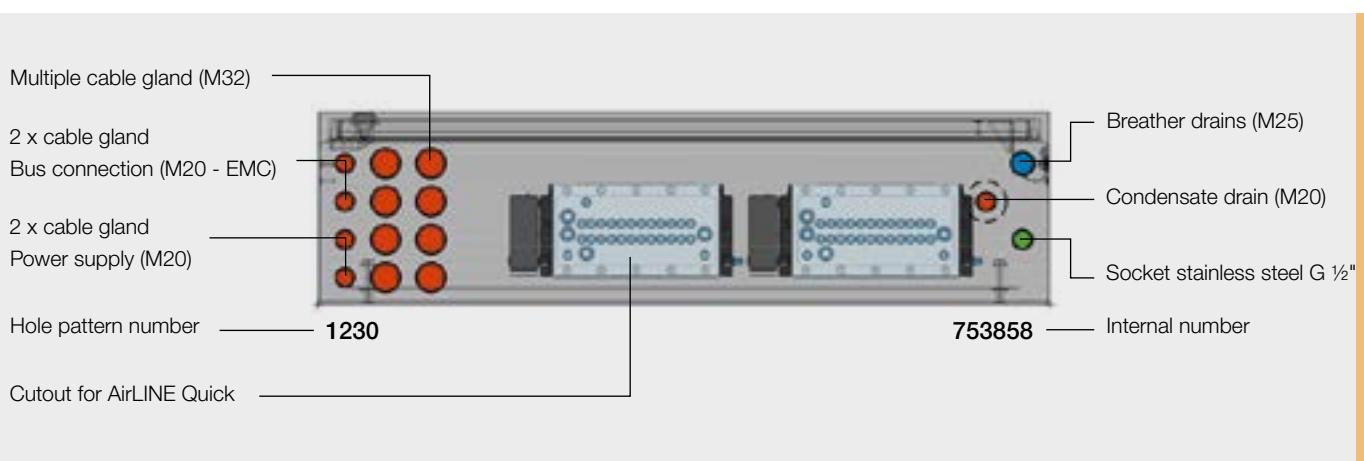
### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Description of hole pattern



Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Hole patterns

8-fold valve island  
Type 8652  
Installation width 810



1201 753839



1202 753840



1203 753841



1204 753842



1205 753843



1206 753844



1208 753845



1209 753846



1210 753847



1211 753848



1212 753849



1213 753850

12-fold valve island  
Type 8652  
Installation width 810



1221 753851



1222 753852



1223 753853



1224 753854



1225 753855



1226 753844



1228 753856



1229 753857



1230 753858



1231 753859

16-fold valve island (w. IF)  
Type 8652  
Installation width 810



1241 753860



1242 753861



1243 753862



1258 753900

w. IF = with intermediate feed

Automation system Type 8614 with valve island Type 8652, installation width 810 mm

## Hole patterns

16-fold valve island (w. IF)

Type 8652

Installation width 810

20-fold valve island (w. IF)

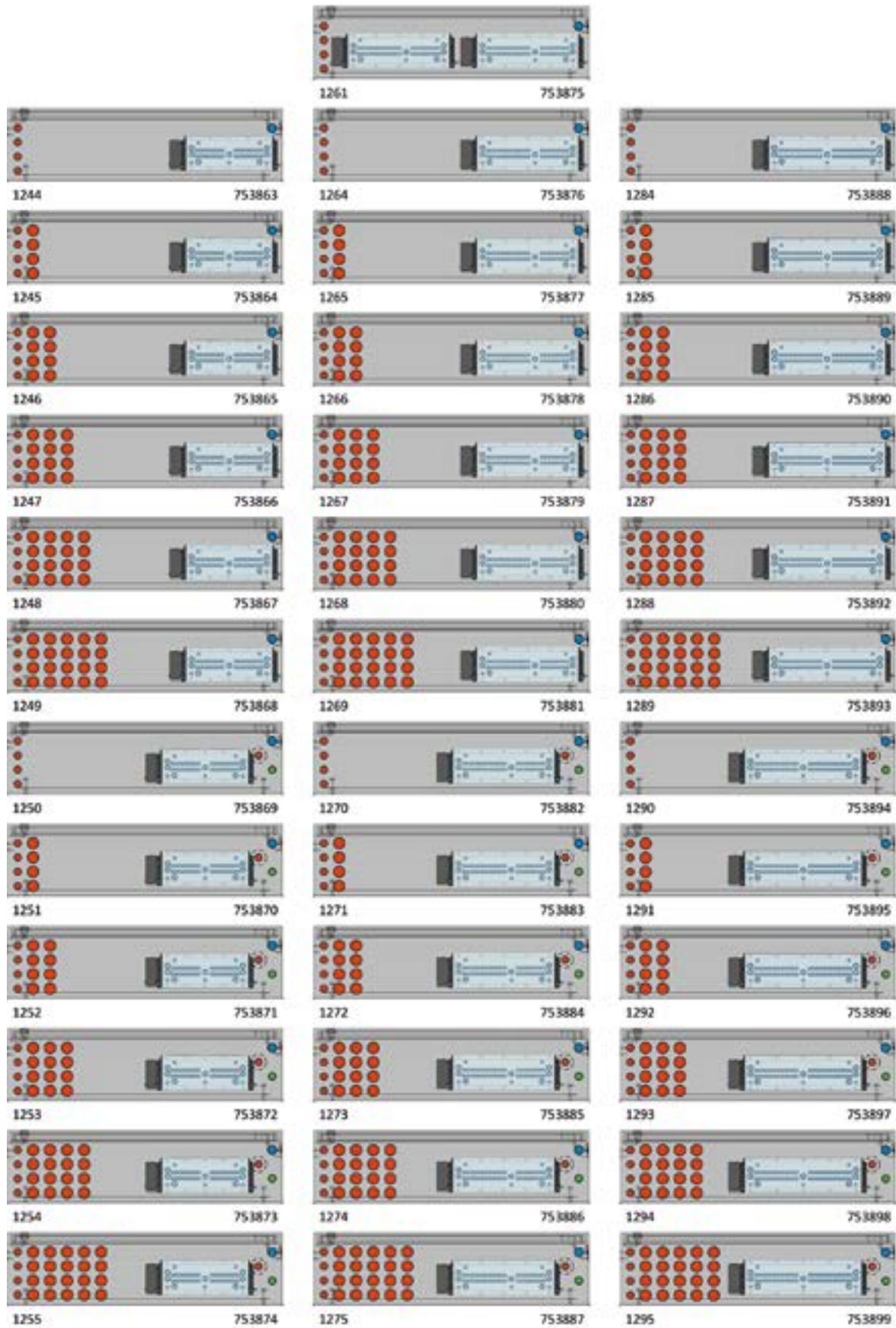
Type 8652

Installation width 810

24-fold valve island (w. IF)

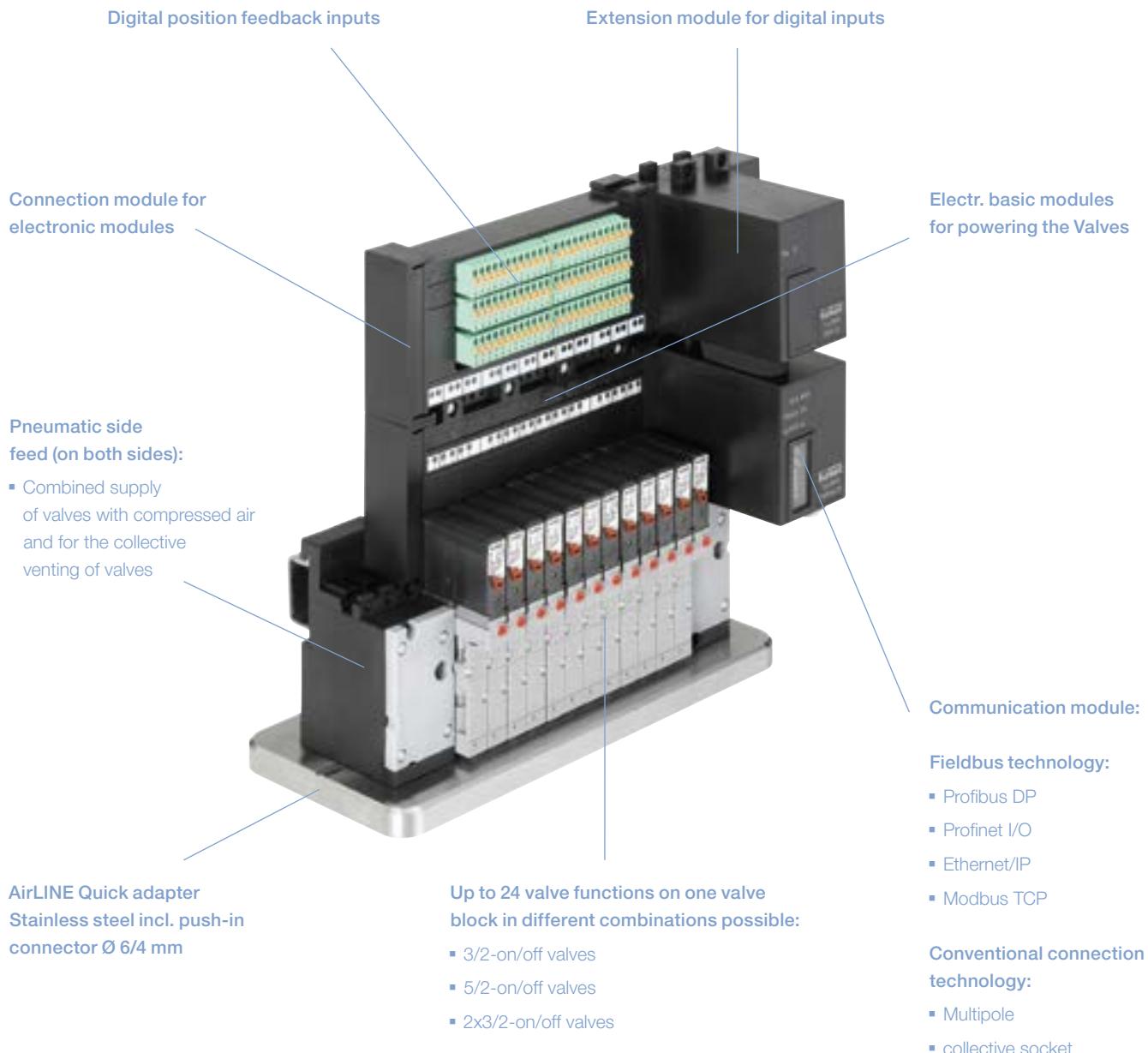
Type 8652

Installation width 810



# The valve island Type 8640 AirLINE Quick

Automation for high process reliability and system availability



# The valve island Type 8640 AirLINE Quick

Automation for high process reliability and system availability

The valve island system Type 8640 is suitable for solving varied and complex control tasks thanks to its consistent modular structure with regard to pneumatic and electrical interfaces. The arrangement of pneumatic modules with varying numbers of valves alongside one other makes it possible to realise 2 to 24 valve functions on a valve island. The electrical connection technology can be implemented either using fieldbus interfaces, collective connections (parallel connection technology) or multipole interfaces. The valves allow different application possibilities. Housing and connection modules are manufactured from high-quality plastic (polyamide) and are easy to connect and release thanks to the built-in interlocking technology.

## Features

- High plant availability thanks to integrated hot-swap function (P shutoff)
- High process reliability through integrated check valves in the R and S channel
- Option digital inputs for position feedback sensors, assigned to the pneumatic valves
- Stainless steel AirLINE Quick adapter
- Standardised, modular structure using 8-fold design with 8, 16 or 24 valve functions
- Short delivery times for a defined standard range (in some cases from stock)



Type 8640 8x6524 Profibus

AirLINE Quick adapter



# AirLINE Quick Type 8640 with 3/2- and 5/2-way function



including process safety functions, pneumatic hot swap  
and check valves

AirLINE Quick serves as the bridge between centralised and decentralised automation concepts. Fitted with a stainless-steel flange plate, the AirLINE Quick can be mounted on the bottom of a housing. In this case, the installation is in the immediate vicinity of the process or the machine surroundings. This reduces the distance to the actuator in the field.

## AirLINE Quick offers:

- Reduction of the distance to valves directly in the cleaning environment
- Cost savings due to fewer cables and pneumatic hoses in the valve body
- Time savings due to quicker installation in the valve body
- Space savings due to smaller valve body

### Application areas

For hygienic applications using AirLINE Quick in stainless steel

### Functions

With pneumatic hot-swap function

With check valves in the R and S channel

Flow rate of the valves (QNn-value) 150 l/min

Pressure range 2.5–10 bar

Pneumatic feed G 1/4"

Pneumatic working ports 6 mm push-in

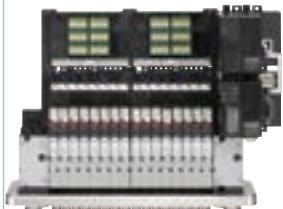
## Order table for valve islands

Figures showing the possible electrical connection technology						
Valve functions	Digital Inputs	Profinet I/O	Ethernet/IP	Profibus DP	Collective connection	Multipole
4x2x3/2		*	*	*	247991	248000
8x2x3/2		253444	262477	230709	231113	230859
8x2x3/2	16	253538	262473	230714	**	230870
12x2x3/2		253543	262485	230808	230845	230840
12x2x3/2	24	253555	262515	230154	**	230842
16x3/2		298054	298059	287231	298061	298063
16x3/2	32	290053	298039	220607	**	298040
16x5/2		253559	262525	247617	247626	247894
16x5/2	32	253563	262533	247620	**	247900

\* on request

\*\* Technically not possible

### Examples

			
Type 8640 AirLINE Quick with 4x2x3/2 on/off valves with multipole	Type 8640 AirLINE Quick with 8x2x3/2 on/off valves with Profibus DP and 16 digital Position feedback inputs	Type 8640 AirLINE Quick with 12x2x3/2 on/off valves with Profibus DP and 24 digital Position feedback inputs	Type 8640 AirLINE Quick with 16x5/2 on/off valves with Profibus DP and 32 digital Position feedback inputs

## Automation system Type 8614 with valve island Type 8640

### Installation width 390 mm

Max. expansion variant:

- One valve island
- 12x2x3/2-way function  
24 digital position feedback inputs
- 16x3/2- or 5/2-way function  
32 digital position feedback inputs\*

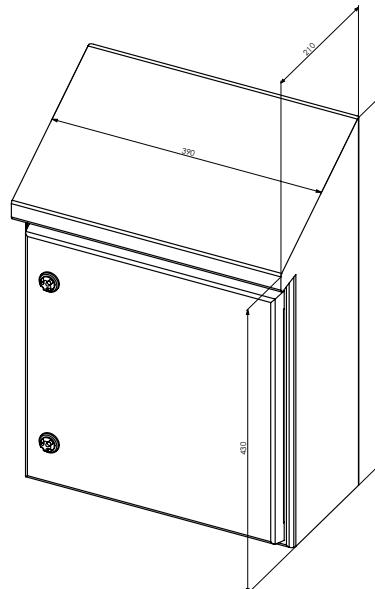


### Technical data

<b>Housing dimensions W x H x D</b>	390 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	60 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.5 mm <sup>2</sup> /0.5 mm <sup>2</sup> **
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 25 kg

\* see order table

\*\* see order table



Automation system Type 8614 with valve island Type 8640, installation width 390 mm

## Order table

**Variant: 2x3/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 43	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
8x2x3/2	102	16	16	0.14...0.5	24	-	-	-	275662	275663
8x2x3/2	104	16	-	-	-	-	+	+	275670	275671
8x2x3/2	102	16	-	-	24	-	+	-	275672	275673
8x2x3/2	103	16	-	-	48	-	+	-	275674	275675
12x2x3/2	111	24	24	0.14...0.5	24	-	-	-	275660	275661
12x2x3/2	110	24	-	-	-	-	+	-	275664	275665
12x2x3/2	111	24	-	-	24	-	+	-	275666	275667
12x2x3/2	112	24	-	-	48	-	+	-	275668	275669
12x2x3/2	112	24	-	-	48	-	+	-	275668	275669

**Variant: 5/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 43	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
16x5/2	121	16	32	0.14...0.5	-	32	-	-	275678	275679

- Ethernet/IP and multipole variants on request

### Note:

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8640, installation width 390 mm

## Order table

**Variant: 2x3/2-way with filter regulator**

Valve island variant	Hole pattern see P. 43	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
8x2x3/2	105	16	-	-	-	-	+	+	-	275522	275523

- Ethernet/IP and multipole variants on request

**Note:**

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

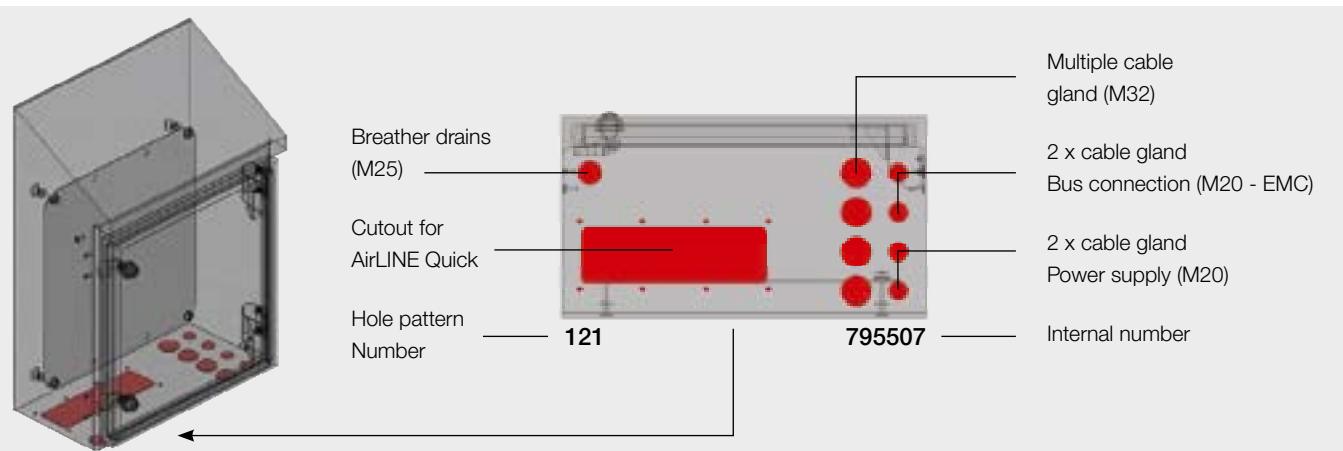
**Options/assemblies:**

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8640, installation width 390 mm

## Description of hole pattern



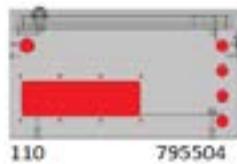
## Hole patterns

8-fold valve island  
Type 8640  
Installation width 390



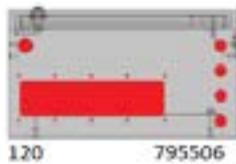
101 79555

12-fold valve island  
Type 8640  
Installation width 390

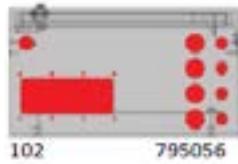


110 795504

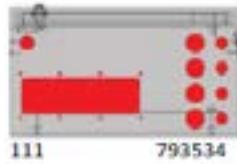
16-fold valve island (w/o IF)  
Type 8640  
Installation width 390



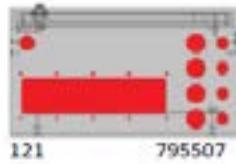
120 795506



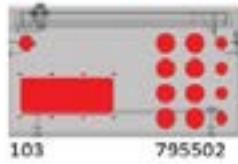
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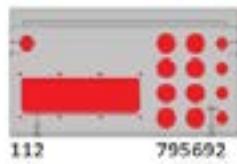
111 795534



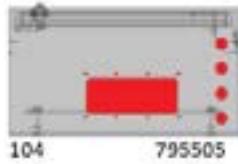
121 795507



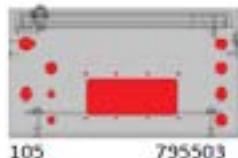
103 795502



112 7955692



104 795505



105 795503

w/o IF = without intermediate feed

## Automation system Type 8614 with valve island Type 8640

### Installation width 510 mm

Max. expansion variant:

- One valve island
- 12x2x3/2-way function  
24 digital position feedback inputs
- 16x3/2- or 5/2-way function  
32 digital position feedback inputs\*

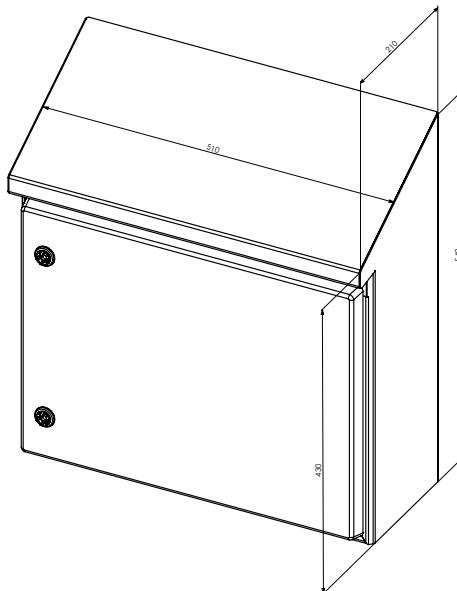


### Technical data

<b>Housing dimensions W x H x D</b>	510 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	60 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.5 mm <sup>2</sup> /0.5 mm <sup>2</sup> **
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 30 kg

\* see order table

\*\* see order table



Automation system Type 8614 with valve island Type 8640, installation width 510 mm

## Order table

### Variant: 3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
16x3/2	221	16	32	0.14...0.5	–	32	–	–	–	275680	275681

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
8x2x3/2	241	16	16	0.14...0.5	24	–	–	–	+	275638	275639
8x2x3/2	240	16	–	–	–	–	–	+	+	275650	275651
8x2x3/2	241	16	–	–	24	–	–	+	+	275652	275653
8x2x3/2	242	16	–	–	48	–	–	+	+	275654	275655
8x2x3/2	204	16	–	–	72	–	–	+	–	275656	275657
8x2x3/2	205	16	–	–	96	–	–	+	–	275658	275659
12x2x3/2	244	24	24	0.14...1.5	24	–	–	–	+	275636	275637
12x2x3/2	243	24	–	–	–	–	–	+	+	275640	275641
12x2x3/2	244	24	–	–	24	–	–	+	+	275642	275643
12x2x3/2	245	24	–	–	48	–	–	+	+	275644	275645
12x2x3/2	213	24	–	–	72	–	–	+	–	275646	275647
12x2x3/2	214	24	–	–	96	–	–	+	–	275648	275649

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
16x5/2	221	16	32	0.14...0.5	–	32	–	–	–	275682	275683

- Ethernet/IP and multipole variants on request

#### Note:

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8640, installation width 510 mm

## Order table

### Variant: 3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
16x3/2	226	16	32	0.14...0.5	–	32	+	–	–	275524	275525

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on Valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
8x2x3/2	207	16	16	0.14...0.5	24	–	+	–	–	275508	275509
8x2x3/2	206	16	–	–	–	–	+	+	–	275516	275517
8x2x3/2	207	16	–	–	24	–	+	+	–	275518	275519
8x2x3/2	208	16	–	–	48	–	+	+	–	275520	275521
12x2x3/2	216	24	24	0.14...1.5	24	–	+	–	–	275506	275507
12x2x3/2	215	24	–	–	–	–	+	+	–	275510	275511
12x2x3/2	216	24	–	–	24	–	+	+	–	275512	275513
12x2x3/2	217	24	–	–	48	–	+	+	–	275514	275515

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 49	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Inlets field I/O Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit, special	Order no. Profibus DP	Order no. Profinet I/O
16x5/2	226	16	32	0.14...0.5	–	32	+	–	–	275526	275527

#### ■ Ethernet/IP and multipole variants on request

#### Note:

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

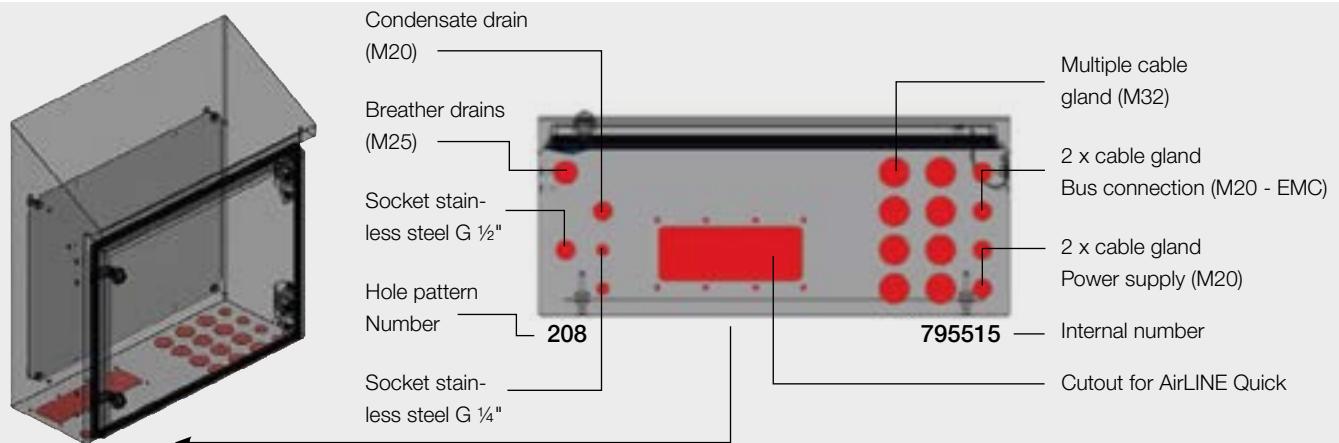
You can find options/assemblies and accessories on pages 100 - 105



Automation system Type 8614 with valve island Type 8640, installation width 510 mm

## Description of hole pattern

8614/8640



Automation system Type 8614 with valve island Type 8640, installation width 510 mm

## Hole patterns

8-fold valve island

Type 8640

Installation width 510

12-fold valve island

Type 8640

Installation width 510

16-fold valve island (w/o IF)

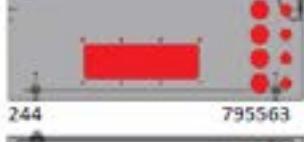
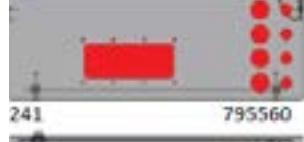
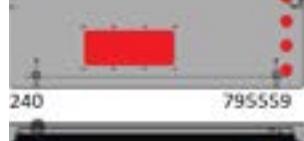
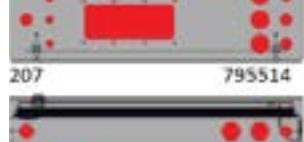
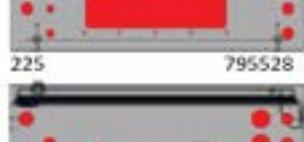
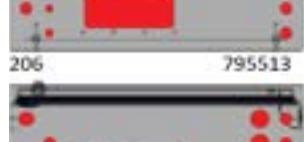
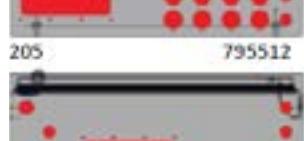
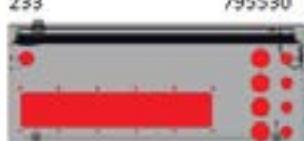
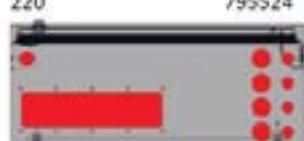
Type 8640

Installation width 510

24-fold valve island (w/o IF)

Type 8640

Installation width 510



w/o IF = without intermediate feed



## Automation system Type 8614 with valve island Type 8640

### Installation width 810 mm

Max. expansion variant:

- Two valve islands
- 12x2x3/2-way function  
24 digital position feedback inputs
- 16x3/2- or 5/2-way function  
32 digital position feedback inputs\*

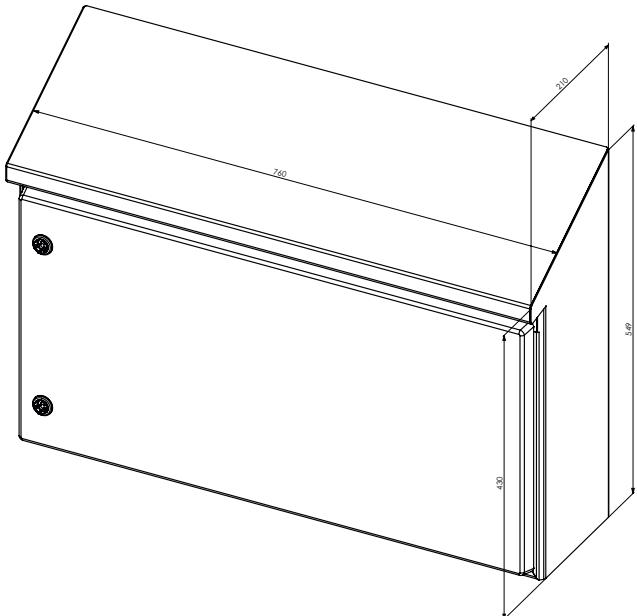


### Technical data

<b>Housing dimensions W x H x D</b>	810 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10 %
<b>Total output</b>	120 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	1.5 mm <sup>2</sup> /0.5 mm <sup>2</sup> **
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 40 kg

\* see order table

\*\* see order table



Automation system Type 8614 with valve island Type 8640, installation width 810 mm

## Order table

### Variant: 3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 53-54	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Max. cross section of position feedback sensors ( $\text{mm}^2$ )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit	Order no.	Order no.
												Profibus DP	Profinet I/O
16x3/2	322	2	–	32	64	0.14...0.5	–	64	–	–	–	275743	275744
16x3/2	322	1	1	16	32	0.14...0.5	–	64	–	–	–	275686	275687

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 53-54	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Max. cross section of position feedback sensors ( $\text{mm}^2$ )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit	Order no.	Order no.
												Profibus DP	Profinet I/O
8x2x3/2	342	2	–	32	32	0.14...0.5	48	–	–	–	+	275727	275728
8x2x3/2	342	1	1	16	16	0.14...0.5	48	–	–	–	+	275606	275607
8x2x3/2	340	2	–	32	–	–	–	–	–	+	+	275735	275736
8x2x3/2	342	2	–	32	–	–	48	–	–	+	+	275737	275738
8x2x3/2	304	2	–	32	–	–	72	–	–	+	–	275739	275740
8x2x3/2	305	2	–	32	–	–	96	–	–	+	–	275741	275742
8x2x3/2	340	1	1	16	–	–	–	–	–	+	+	275628	275629
8x2x3/2	342	1	1	16	–	–	48	–	–	+	+	275630	275631
8x2x3/2	304	1	1	16	–	–	72	–	–	+	–	275632	275633
8x2x3/2	305	1	1	16	–	–	96	–	–	+	–	275634	275635
12x2x3/2	345	2	–	48	48	0.14...1.5	48	–	–	–	+	275694	275695
12x2x3/2	345	1	1	24	24	0.14...1.5	48	–	–	–	+	275602	275603
12x2x3/2	343	2	–	48	–	–	–	–	–	+	+	275729	275730
12x2x3/2	345	2	–	48	–	–	48	–	–	+	+	275731	275732
12x2x3/2	314	2	–	48	–	–	96	–	–	+	–	275733	275734
12x2x3/2	343	1	1	24	–	–	–	–	–	+	+	275614	275615
12x2x3/2	345	1	1	24	–	–	48	–	–	+	+	275616	275617
12x2x3/2	314	1	1	24	–	–	96	–	–	+	–	275618	275619

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 53-54	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Max. cross section of position feedback sensors ( $\text{mm}^2$ )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit	Order no.	Order no.
												Profibus DP	Profinet I/O
16x5/2	322	2	–	32	64	0.14...0.5	–	64	–	–	–	275745	275746
16x5/2	322	1	1	16	32	0.14...0.5	–	64	–	–	–	275690	275691

#### ■ Ethernet/IP and multipole variants on request

#### Note:

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8640, installation width 810 mm

## Order table

Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 53-54	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors ( $\text{mm}^2$ )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit	Order no.	Order no.
												Profibus DP	Profinet I/O
8x2x3/2	308	2	–	32	32	0.14...0.5	48	–	+	–	–	275713	275714
8x2x3/2	308	1	1	16	16	0.14...0.5	48	–	+	–	–	275488	275489
8x2x3/2	306	2	–	32	–	–	–	–	+	+	–	275719	275720
8x2x3/2	308	2	–	32	–	–	48	–	+	+	–	275721	275722
8x2x3/2	306	1	1	16	–	–	–	–	+	+	–	275502	275503
8x2x3/2	308	1	1	16	–	–	48	–	+	+	–	275504	275505
12x2x3/2	317	2	–	48	48	0.14...1.5	48	–	+	–	–	275692	275693
12x2x3/2	317	1	1	24	24	0.14...1.5	48	–	+	–	–	275484	275485
12x2x3/2	315	2	–	48	–	–	–	–	+	+	–	275715	275716
12x2x3/2	317	2	–	48	–	–	48	–	+	+	–	275717	275718
12x2x3/2	315	1	1	24	–	–	–	–	+	+	–	275494	275495
12x2x3/2	317	1	1	24	–	–	48	–	+	+	–	275496	275497

Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 53-54	Number of islands	Vacant position	Number of valve functions	Position feedback inputs on valve island	Max. cross-section of position feedback sensors ( $\text{mm}^2$ )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Filter controller	Vacant position I/O System	Standard rail for power supply unit	Order no.	Order no.
												Profibus DP	Profinet I/O
16x5/2	325	2	–	32	–	–	–	–	+	+	–	275723	275724
16x5/2	325	1	1	16	–	–	–	–	+	+	–	275530	275531

■ Ethernet/IP and multipole variants on request

### Note:

If no position feedback sensors are installed, an installation space of 180 mm is available for an I/O system (see Type 8644).

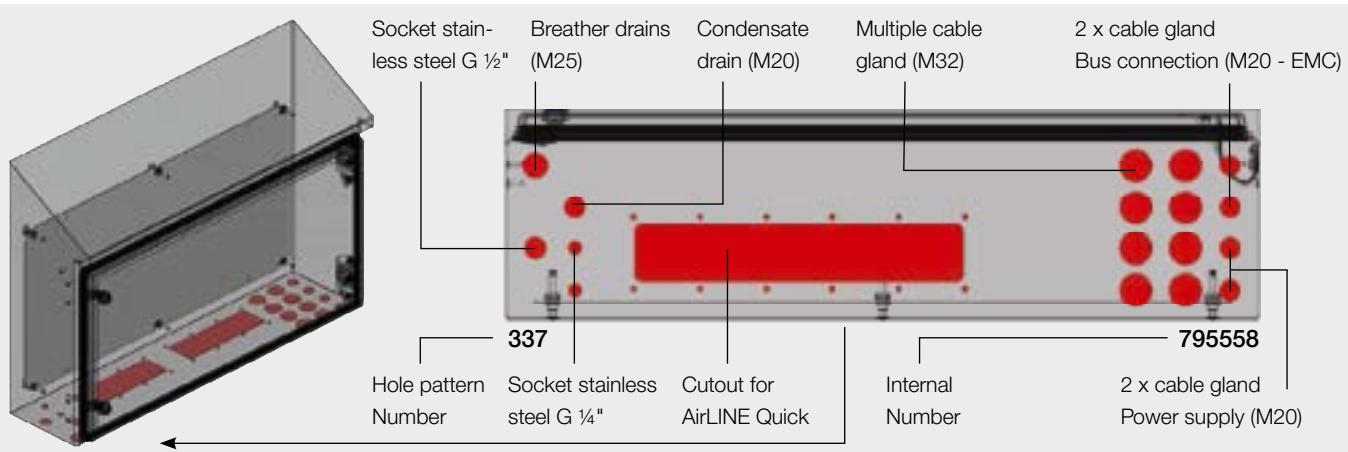
### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8640, installation width 810 mm

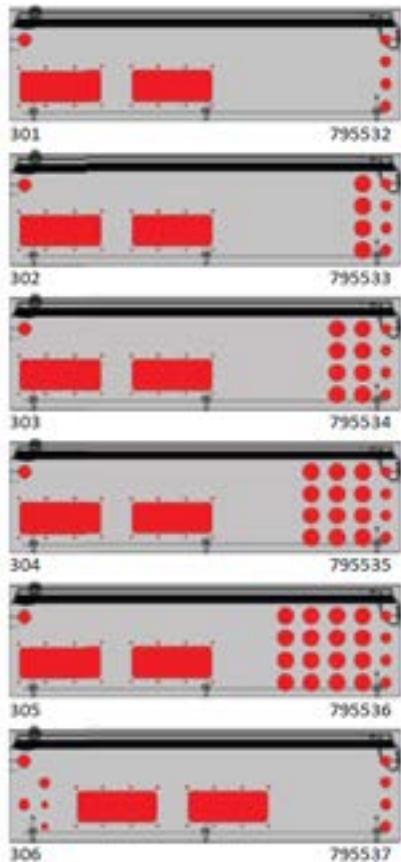
## Description of hole pattern



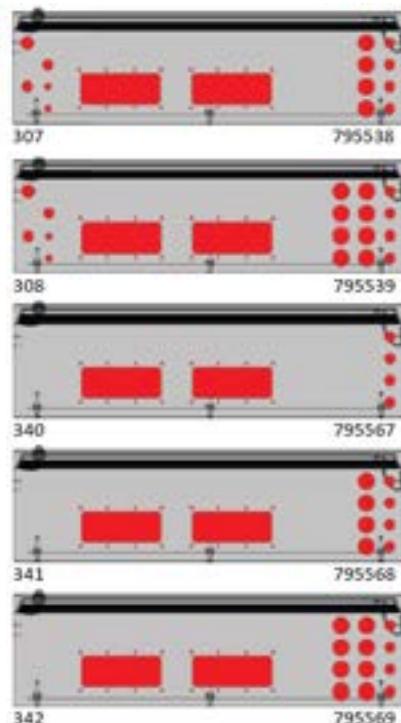
8614/8640

## Hole patterns

8-fold valve island  
Type 8640  
Installation width 810 mm



8-fold valve island  
Type 8640  
Installation width 810 mm



Automation system Type 8614 with valve island Type 8640, installation width 810 mm

## Hole patterns

12-fold valve island

Type 8640

Installation width 810 mm

16-fold valve island

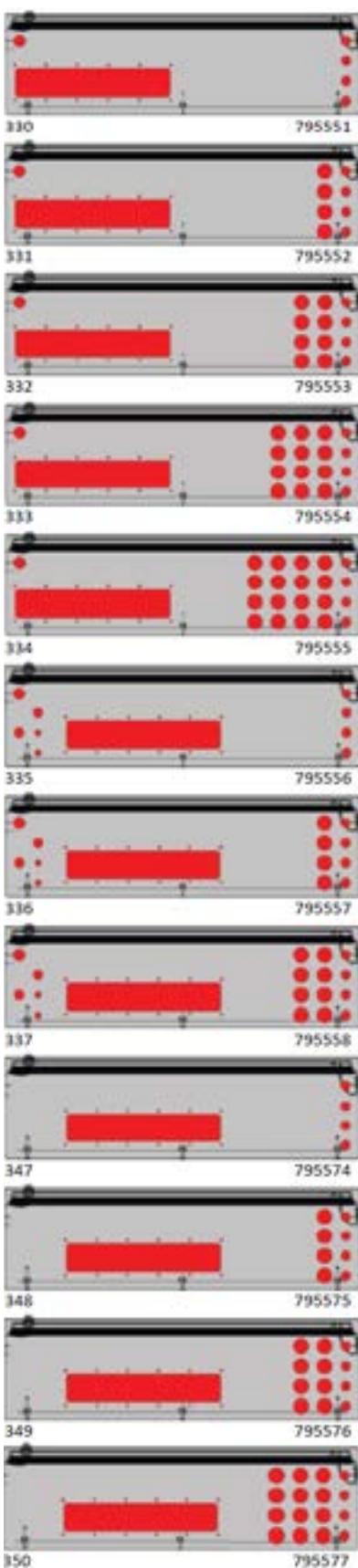
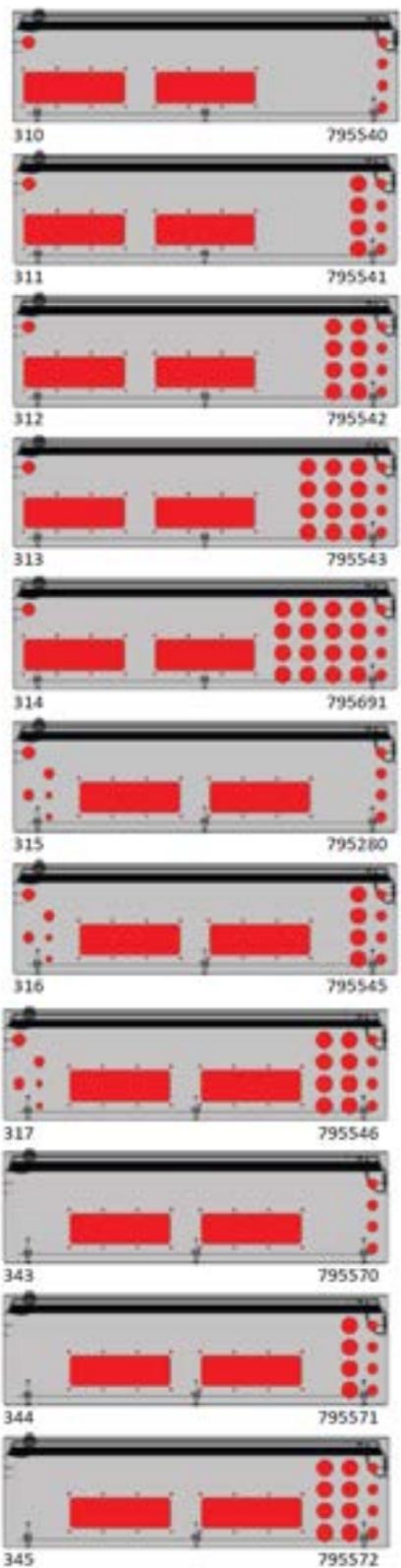
Type 8640

Installation width 810 mm

24-fold valve island

Type 8640

Installation width 810 mm





# Valve island AirLINE SP Type 8647

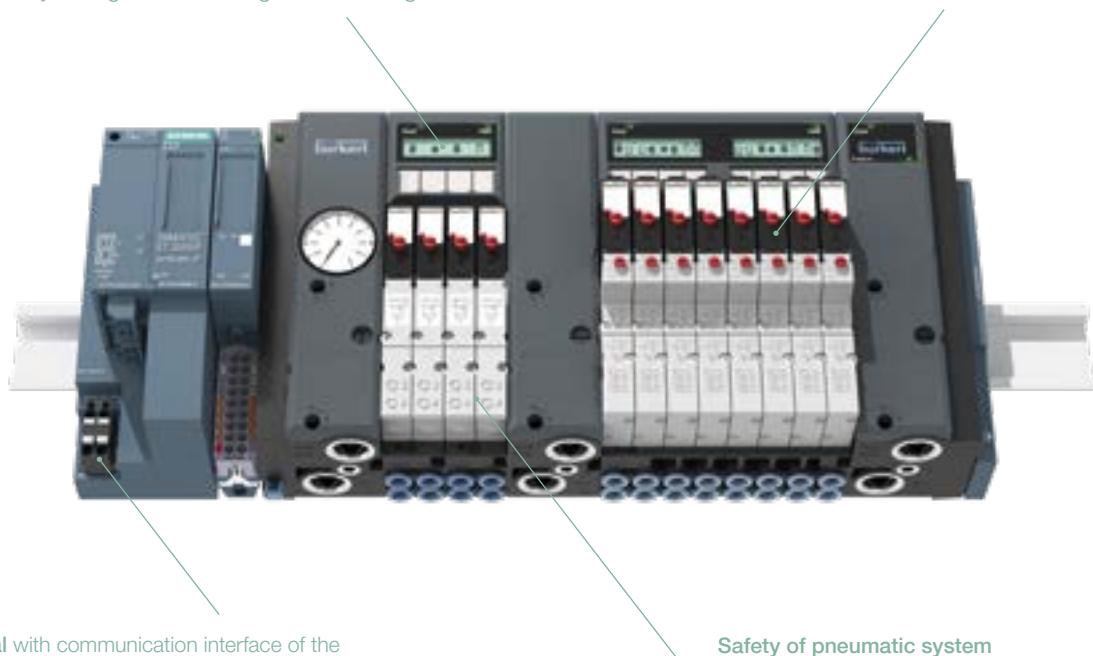
## Variants and options

### Displays for showing

- Pilot valve and process valve status
- Wire breaks, short circuits, pressure values
- Individually configurable warnings and messages

### Safe cutoff

- Shutdown of 4 or 8 valve slots (module-based)
- Shutdown of a pilot valve (channel-based)



Optional with communication interface of the complete SIMATIC ET 200SP module range

### Safety of pneumatic system

- Hot-swap function
- Check valves

# Valve island AirLINE SP Type 8647

Compatible with the Siemens I/O system SIMATIC ET 200SP

Siemens and Bürkert collaborated to develop the valve island AirLINE SP Type 8647, which is compatible with the Siemens I/O system SIMATIC ET 200SP HA. The valve island is therefore perfectly matched to the connection of the decentralised Siemens peripheral systems SIMATIC ET 200SP and SIMATIC ET 200SP HA. Whether conventional digital/analogue input modules or controlling actuators via digital/analogue output modules: Everything is combined in a compact, powerful automation system. The valves are connected directly to the Siemens I/O system. This enables quick and seamless integration during start-up and provides benefits later on during monitoring of the system in operation. The integrated display for each valve shows different types of information. These include, for example, the ability to display the number of switching cycles to facilitate preventive and wear-optimised plant maintenance, thereby minimising downtimes.

## Features:

- System tailored to Siemens SIMATIC ET 200SP or SIMATIC ET 200SP HA
- Integrated check valves: Prevent the occurrence of unwanted reactions in the plant, for example, due to uncontrolled pressure peaks
- Ring topology with MRP (Media Redundancy Protocol) is supported: Redundancy is used to avoid complete failure in case a single device/communication participant fails
- Integrated safety functionality: In combination with Siemens modules, the valve island can solve automation tasks in a fail-safe manner

## Time saving during start-up and maintenance

- Simple start-up thanks to fast project planning via Siemens TIA Portal
- Two-line, plain-text LC display: Information in real time, e.g., about the device status of pilot valve and process valve, about wire breaks, short circuits, pressure values and other information
- Hot-swap function: Valve can be changed during operation, no plant shutdown required

Valve island AirLINE SP Type 8647, compatible with the Siemens I/O system SIMATIC ET 200SP

## Order table for valve islands (basic configuration)

### Variant: 3/2-way

valve function	Pressure sensor	Order no.
8x3/2	no	333417
8x3/2	yes	334648
12x3/2	no	334653
12x3/2	yes	334655
16x3/2	no	334658
16x3/2	yes	334660
16x3/2*	no	330670
16x3/2*	yes	335246
24x3/2	no	333422
24x3/2	yes	334682
24x3/2*	no	335255
24x3/2*	yes	335256

\* with middle feed module

### Variant: 2x3/2-way

valve function	Pressure sensor	Order no.
8x2x3/2	no	310392
8x2x3/2	yes	324269
12x2x3/2	no	315920
12x2x3/2	yes	314095
16x2x3/2	no	327773
16x2x3/2	yes	334680
16x2x3/2*	no	315918
16x2x3/2*	yes	324389
24x2x3/2*	no	317369
24x2x3/2*	yes	334694

\* with middle feed module

### Variant: 5/2-way

valve function	Pressure sensor	Order no.
8x5/2	no	310407
8x5/2	yes	334649
12x5/2	no	317649
12x5/2	yes	316238
16x5/2	no	327780
16x5/2	yes	334679
16x5/2*	no	327782
16x5/2*	yes	316278
24x5/2	no	327792
24x5/2	yes	334689
24x5/2*	no	327795
24x5/2*	yes	316237

\* with middle feed module



## Automation system Type 8614 with valve island Type 8647

**Installation width 390 mm**

Max. expansion variant:

- One valve island
- 16x2x3/2- or 5/2-way function
- 48 bushings for electrical control lines



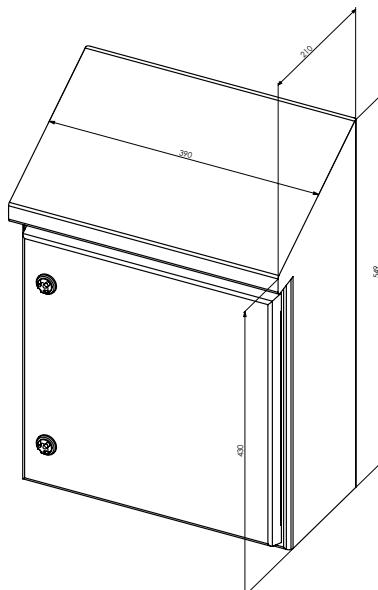
### Technical data

<b>Housing dimensions W x H x D</b>	390 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10 %
<b>Total output</b>	60 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	see SIEMENS ET200SP OPERATING INSTRUCTIONS
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 25 kg

\* see order table

### Options:

- Additional inputs on request



Automation system Type 8614 with valve island Type 8647, installation width 390 mm

## Order table

### Variant: 3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x3/2	701	8	*	0	yes	321698
8x3/2	702	8	*	24	yes	321704
8x3/2	703	8	*	48	yes	321710
12x3/2	711	12	*	0	yes	321722
12x3/2	712	12	*	24	yes	321728
16x3/2	721	16	*	0	yes	321734

\* Note the specifications of the I/O system manufacturer

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x2x3/2	701	16	*	0	yes	321702
8x2x3/2	702	16	*	24	yes	321708
8x2x3/2	703	16	*	48	yes	321714
12x2x3/2	711	24	*	0	yes	321726
12x2x3/2	712	24	*	24	yes	321732
16x2x3/2	721	32	*	0	yes	321738

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x5/2	701	8	*	0	yes	321700
8x5/2	702	8	*	24	yes	321706
8x5/2	703	8	*	48	yes	321712
12x5/2	711	12	*	0	yes	321724
12x5/2	712	12	*	24	yes	321730
16x5/2	721	16	*	0	yes	321736

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 390 mm

## Order table

### Variant: 3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x3/2	704	8	*	0	yes	321716

\* Note the specifications of the I/O system manufacturer

### Variant: 2x 3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x2x3/2	704	16	*	0	yes	321720

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 63	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x5/2	704	8	*	0	yes	321718

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

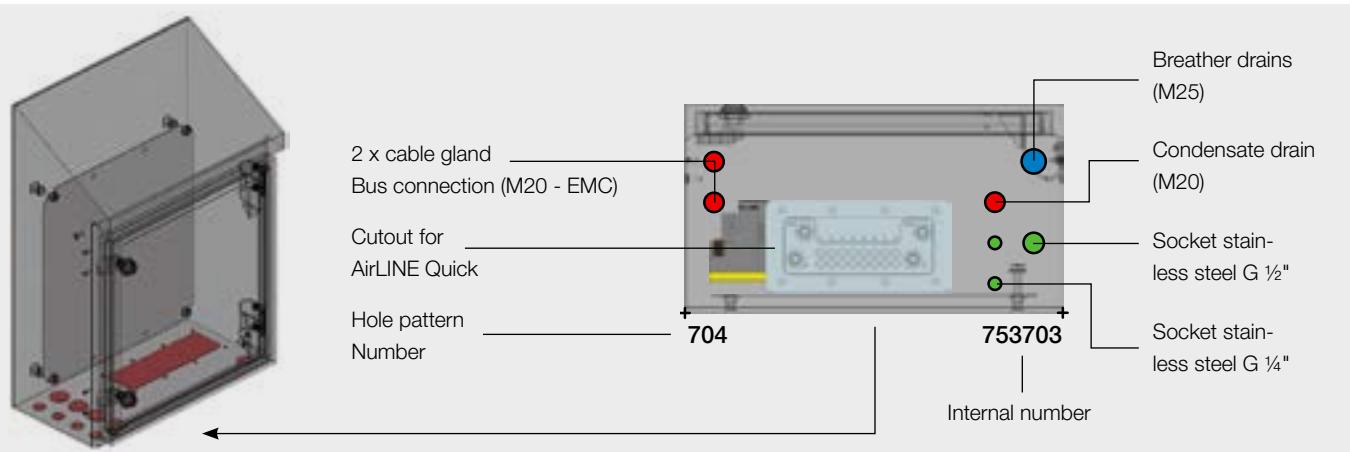
#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 390 mm

## Description of hole pattern



## Hole patterns

8-fold valve island  
Type 8647  
Installation width 390 mm



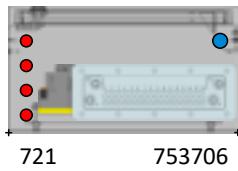
701 753700

12-fold valve island  
Type 8647  
Installation width 390 mm

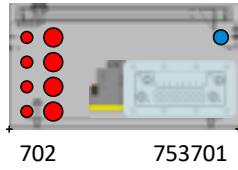


711 753704

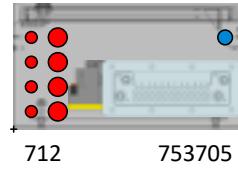
16-fold valve island  
Type 8647  
Installation width 390 mm



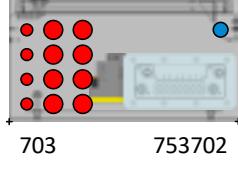
721 753706



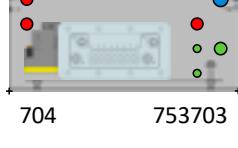
702 753701



712 753705



703 753702



704 753703

## Automation system Type 8614 with valve island Type 8647

### Installation width 510 mm

Max. expansion variant:

- One valve island
- 24x2x3/2- or 5/2-way function
- 96 bushings for electrical control lines



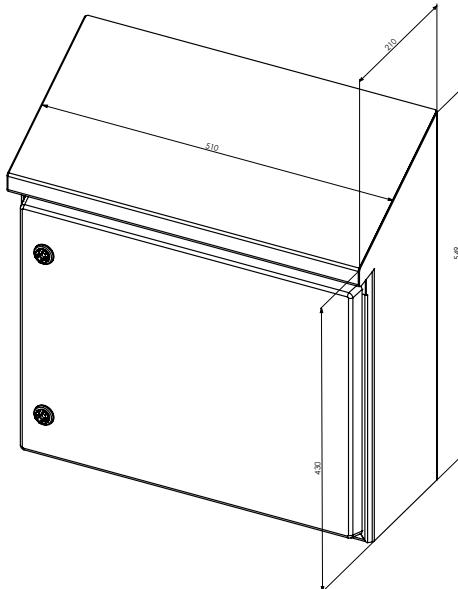
### Technical data

<b>Housing dimensions W x H x D</b>	510 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	75 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	see SIEMENS ET200SP OPERATING INSTRUCTIONS
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 30 kg

\* see order table

### Options:

- Inlets field I/O Ø 5.3 mm on request



Automation system Type 8614 with valve island Type 8647, installation width 510 mm

## Order table

### Variant: 3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x3/2	801	8	no	*	0	yes	321740
8x3/2	802	8	no	*	24	yes	321746
8x3/2	803	8	no	*	48	yes	321752
8x3/2	804	8	no	*	72	yes	321758
8x3/2	805	8	no	*	96	yes	321764
12x3/2	811	12	no	*	0	yes	321788
12x3/2	812	12	no	*	24	yes	321794
12x3/2	813	12	no	*	48	yes	321800
12x3/2	814	12	no	*	72	yes	321806
16x3/2	821	16	no	*	0	yes	321824
16x3/2	822	16	no	*	24	yes	321830
16x3/2	823	16	no	*	48	yes	321836
16x3/2	831	16	yes	*	0	yes	321848
16x3/2	832	16	yes	*	24	yes	321854
16x3/2	833	16	yes	*	48	yes	321860
24x3/2	841	24	no	*	0	yes	321866
24x3/2	842	24	no	*	24	yes	321870
24x3/2	851	24	yes	*	0	yes	321874

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Variant: 2x 3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x2x3/2	801	16	no	*	0	yes	321744
8x2x3/2	802	16	no	*	24	yes	321750
8x2x3/2	803	16	no	*	48	yes	321756
8x2x3/2	804	16	no	*	72	yes	321762
8x2x3/2	805	16	no	*	96	yes	321768
12x2x3/2	811	24	no	*	0	yes	321792
12x2x3/2	812	24	no	*	24	yes	321798
12x2x3/2	813	24	no	*	48	yes	321804
12x2x3/2	814	24	no	*	72	yes	321810
16x2x3/2	821	32	no	*	0	yes	321828
16x2x3/2	822	32	no	*	24	yes	321834
16x2x3/2	823	32	no	*	48	yes	321840
16x2x3/2	831	32	yes	*	0	yes	321852
16x2x3/2	832	32	yes	*	24	yes	321858
16x2x3/2	833	32	yes	*	48	yes	321864
24x2x3/2	851	48	yes	*	0	yes	321878

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 510 mm

## Order table

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x5/2	801	8	no	*	0	yes	321742
8x5/2	802	8	no	*	24	yes	321748
8x5/2	803	8	no	*	48	yes	321754
8x5/2	804	8	no	*	72	yes	321760
8x5/2	805	8	no	*	96	yes	321766
12x5/2	811	12	no	*	0	yes	321790
12x5/2	812	12	no	*	24	yes	321796
12x5/2	813	12	no	*	48	yes	321802
12x5/2	814	12	no	*	72	yes	321808
16x5/2	821	16	no	*	0	yes	321826
16x5/2	822	16	no	*	24	yes	321832
16x5/2	823	16	no	*	48	yes	321838
16x5/2	831	16	yes	*	0	yes	321850
16x5/2	832	16	yes	*	24	yes	321856
16x5/2	833	16	yes	*	48	yes	321862
24x5/2	841	24	no	*	0	yes	321868
24x5/2	842	24	no	*	24	yes	321872
24x5/2	851	24	yes	*	0	yes	321876

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 510 mm

## Order table

### Variant: 3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x3/2	806	8	no	*	0	yes	321770
8x3/2	807	8	no	*	24	yes	321776
8x3/2	808	8	no	*	48	yes	321782
12x3/2	816	12	no	*	0	yes	321812
12x3/2	817	12	no	*	24	yes	321818
16x3/2	826	16	no	*	0	yes	321842

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Variant: 2x 3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x2x3/2	806	16	no	*	0	yes	321774
8x2x3/2	807	16	no	*	24	yes	321780
8x2x3/2	808	16	no	*	48	yes	321786
12x2x3/2	816	24	no	*	0	yes	321816
12x2x3/2	817	24	no	*	24	yes	321822
16x2x3/2	826	32	no	*	0	yes	321846

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 68-69	Number of valve functions	IF**	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Order no.
8x5/2	806	8	no	*	0	yes	321772
8x5/2	807	8	no	*	24	yes	321778
8x5/2	808	8	no	*	48	yes	321784
12x5/2	816	12	no	*	0	yes	321814
12x5/2	817	12	no	*	24	yes	321820
16x5/2	826	16	no	*	0	yes	321844

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

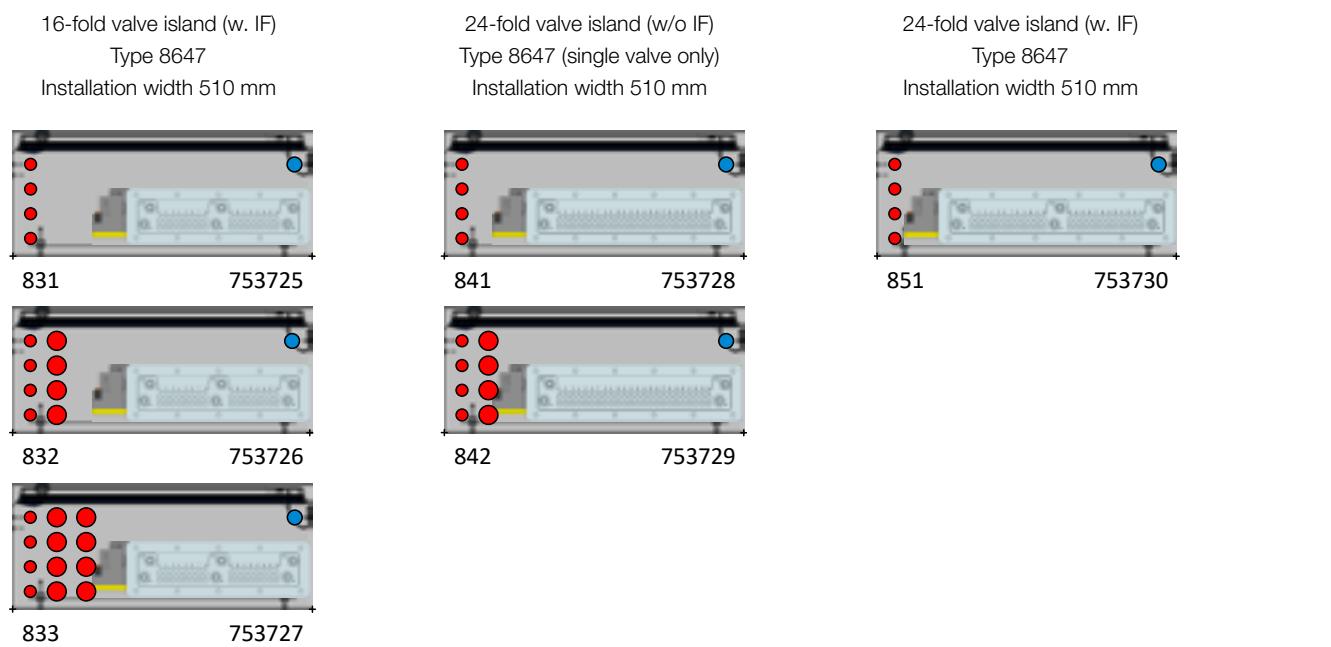
- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105



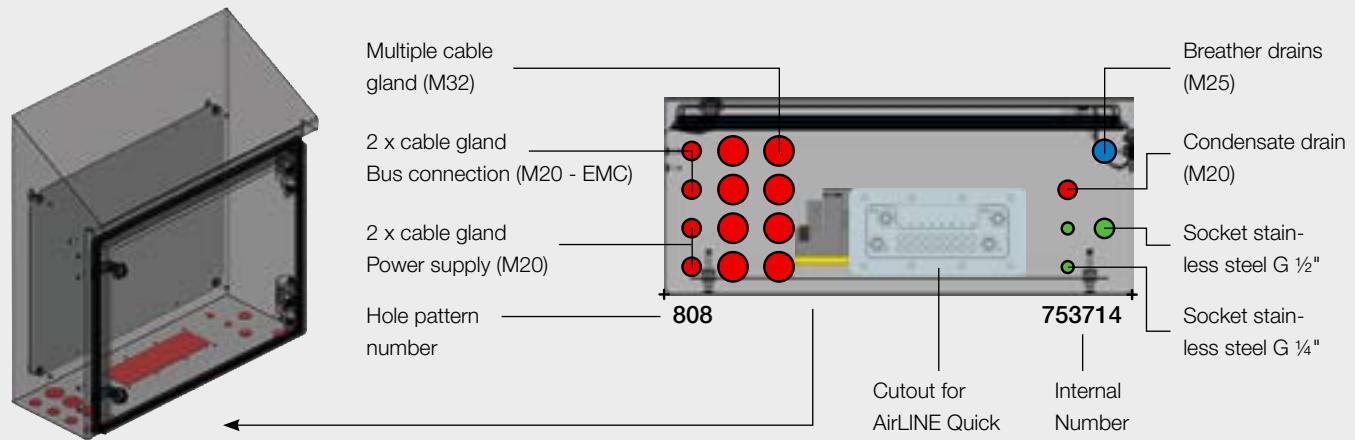
Automation system Type 8614 with valve island Type 8647, installation width 510 mm

## Hole patterns



w. IF = with intermediate feed  
w/o IF = without intermediate feed

## Description of hole pattern

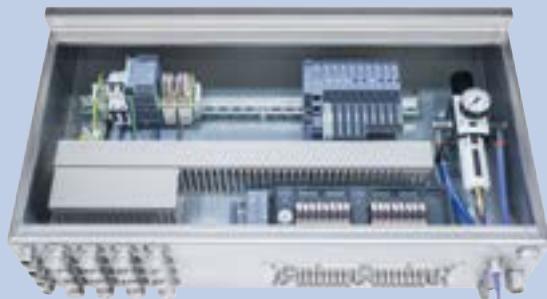


## Automation system Type 8614 with valve island Type 8647

**Installation width 810 mm**

Max. expansion variant:

- 2 valve islands
- 32 x 2x3/2- or 5/2-way function
- 96 bushings for electrical control lines



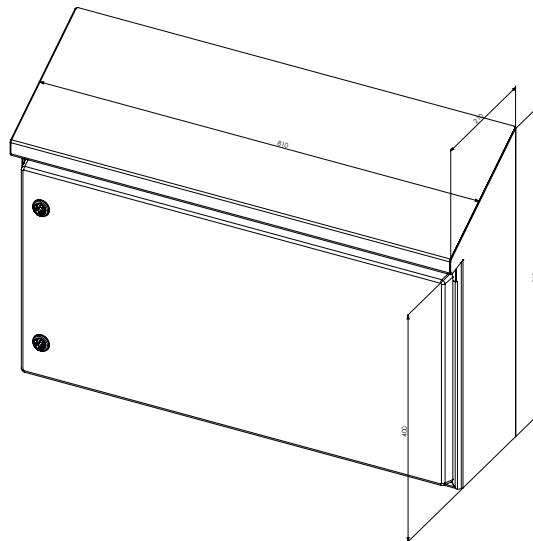
### Technical data

<b>Housing dimensions W x H x D</b>	810 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	G 1/4"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10 %
<b>Total output</b>	120 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O	6 x 6.5 mm* (8 x 5.5 mm*) VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	see SIEMENS ET200SP OPERATING INSTRUCTIONS
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 40 kg

\* see order table

### Options:

- Inlets field I/O Ø 5.3 mm on request



Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 3/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x3/2	901	2	0	16	no	*	0	yes	335282
8x3/2	901	1	1	8	no	*	0	yes	335288
8x3/2	902	2	0	16	no	*	24	yes	335294
8x3/2	902	1	1	8	no	*	24	yes	335300
8x3/2	903	2	0	16	no	*	48	yes	335306
8x3/2	903	1	1	8	no	*	48	yes	335312
8x3/2	904	2	0	16	no	*	72	yes	335318
8x3/2	904	1	1	8	no	*	72	yes	335324
8x3/2	905	2	0	16	no	*	96	yes	335330
8x3/2	905	1	1	8	no	*	96	yes	335336
8x3/2	906	2	0	16	no	*	120	yes	335342
8x3/2	906	1	1	8	no	*	120	yes	335348
12x3/2	911	2	0	24	no	*	0	yes	335390
12x3/2	911	1	1	12	no	*	0	yes	335396
12x3/2	912	2	0	24	no	*	24	yes	335402
12x3/2	912	1	1	12	no	*	24	yes	335408
12x3/2	913	2	0	24	no	*	48	yes	335414
12x3/2	913	1	1	12	no	*	48	yes	335420
12x3/2	914	2	0	24	no	*	72	yes	335426
12x3/2	914	1	1	12	no	*	72	yes	335432
16x3/2	921	2	0	32	no	*	0	yes	335462
16x3/2	921	1	1	16	no	*	0	yes	335468
16x3/2	922	2	0	32	no	*	24	yes	335474
16x3/2	922	1	1	16	no	*	24	yes	335480
16x3/2	931	2	0	32	yes	*	0	yes	335486
16x3/2	931	1	1	16	yes	*	0	yes	335492
16x3/2	923	1	0	16	no	*	0	yes	335598
16x3/2	924	1	0	16	no	*	24	yes	335604
16x3/2	925	1	0	16	no	*	48	yes	335610
16x3/2	926	1	0	16	no	*	72	yes	335616
16x3/2	927	1	0	16	no	*	96	yes	335622
16x3/2	928	1	0	16	no	*	120	yes	335628
16x3/2	933	1	0	16	yes	*	0	yes	335670
16x3/2	934	1	0	16	yes	*	24	yes	335676
16x3/2	935	1	0	16	yes	*	48	yes	321290
16x3/2	936	1	0	16	yes	*	72	yes	321296
16x3/2	937	1	0	16	yes	*	96	yes	321302
16x3/2	938	1	0	16	yes	*	120	yes	321308
24x3/2	941	1	0	24	no	*	0	yes	335498
24x3/2	942	1	0	24	no	*	24	yes	335502
24x3/2	943	1	0	24	no	*	48	yes	335506
24x3/2	944	1	0	24	no	*	72	yes	335510
24x3/2	945	1	0	24	no	*	96	yes	335514
24x3/2	946	1	0	24	no	*	120	yes	335518
24x3/2	951	1	0	24	yes	*	0	yes	335538
24x3/2	952	1	0	24	yes	*	24	yes	335544
24x3/2	953	1	0	24	yes	*	48	yes	335550
24x3/2	954	1	0	24	yes	*	72	yes	335556
24x3/2	955	1	0	24	yes	*	96	yes	335562
24x3/2	956	1	0	24	yes	*	120	yes	335568

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 2 x 3/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x2x3/2	901	2	0	32	no	*	0	yes	335286
8x2x3/2	901	1	1	16	no	*	0	yes	335292
8x2x3/2	902	2	0	32	no	*	24	yes	335298
8x2x3/2	902	1	1	16	no	*	24	yes	335304
8x2x3/2	903	2	0	32	no	*	48	yes	335310
8x2x3/2	903	1	1	16	no	*	48	yes	335316
8x2x3/2	904	2	0	32	no	*	72	yes	335322
8x2x3/2	904	1	1	16	no	*	72	yes	335328
8x2x3/2	905	2	0	32	no	*	96	yes	335334
8x2x3/2	905	1	1	16	no	*	96	yes	335340
8x2x3/2	906	2	0	32	no	*	120	yes	335346
8x2x3/2	906	1	1	16	no	*	120	yes	335352
12x2x3/2	911	2	0	48	no	*	0	yes	335394
12x2x3/2	911	1	1	24	no	*	0	yes	335400
12x2x3/2	912	2	0	48	no	*	24	yes	335406
12x2x3/2	912	1	1	24	no	*	24	yes	335412
12x2x3/2	913	2	0	48	no	*	48	yes	335418
12x2x3/2	913	1	1	24	no	*	48	yes	335424
12x2x3/2	914	2	0	48	no	*	72	yes	335430
12x2x3/2	914	1	1	24	no	*	72	yes	335436
16x2x3/2	921	2	0	64	no	*	0	yes	335466
16x2x3/2	921	1	1	32	no	*	0	yes	335472
16x2x3/2	922	2	0	64	no	*	24	yes	335478
16x2x3/2	922	1	1	32	no	*	24	yes	335484
16x2x3/2	931	2	0	64	yes	*	0	yes	335490
16x2x3/2	931	1	1	32	yes	*	0	yes	335496
16x2x3/2	923	1	0	32	no	*	0	yes	335602
16x2x3/2	924	1	0	32	no	*	24	yes	335608
16x2x3/2	925	1	0	32	no	*	48	yes	335614
16x2x3/2	926	1	0	32	no	*	72	yes	335620
16x2x3/2	927	1	0	32	no	*	96	yes	335626
16x2x3/2	928	1	0	32	no	*	120	yes	335632
16x2x3/2	933	1	0	32	yes	*	0	yes	335674
16x2x3/2	934	1	0	32	yes	*	24	yes	335680
16x2x3/2	935	1	0	32	yes	*	48	yes	321294
16x2x3/2	936	1	0	32	yes	*	72	yes	321300
16x2x3/2	937	1	0	32	yes	*	96	yes	321306
16x2x3/2	938	1	0	32	yes	*	120	yes	321312
24x2x3/2	951	1	0	48	yes	*	0	yes	335542
24x2x3/2	952	1	0	48	yes	*	24	yes	335548
24x2x3/2	953	1	0	48	yes	*	48	yes	335554
24x2x3/2	954	1	0	48	yes	*	72	yes	335560
24x2x3/2	955	1	0	48	yes	*	96	yes	335566
24x2x3/2	956	1	0	48	yes	*	120	yes	335572

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant without filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x5/2	901	2	0	16	no	*	0	yes	335284
8x5/2	901	1	1	8	no	*	0	yes	335290
8x5/2	902	2	0	16	no	*	24	yes	335296
8x5/2	902	1	1	8	no	*	24	yes	335302
8x5/2	903	2	0	16	no	*	48	yes	335308
8x5/2	903	1	1	8	no	*	48	yes	335314
8x5/2	904	2	0	16	no	*	72	yes	335320
8x5/2	904	1	1	8	no	*	72	yes	335326
8x5/2	905	2	0	16	no	*	96	yes	335332
8x5/2	905	1	1	8	no	*	96	yes	335338
8x5/2	906	2	0	16	no	*	120	yes	335344
8x5/2	906	1	1	8	no	*	120	yes	335350
12x5/2	911	2	0	24	no	*	0	yes	335392
12x5/2	911	1	1	12	no	*	0	yes	335398
12x5/2	912	2	0	24	no	*	24	yes	335404
12x5/2	912	1	1	12	no	*	24	yes	335410
12x5/2	913	2	0	24	no	*	48	yes	335416
12x5/2	913	1	1	12	no	*	48	yes	335422
12x5/2	914	2	0	24	no	*	72	yes	335428
12x5/2	914	1	1	12	no	*	72	yes	335434
16x5/2	921	2	0	32	no	*	0	yes	335464
16x5/2	921	1	1	16	no	*	0	yes	335470
16x5/2	922	2	0	32	no	*	24	yes	335476
16x5/2	922	1	1	16	no	*	24	yes	335482
16x5/2	931	2	0	32	yes	*	0	yes	335488
16x5/2	931	1	1	16	yes	*	0	yes	335494
16x5/2	923	1	0	16	no	*	0	yes	335600
16x5/2	924	1	0	16	no	*	24	yes	335606
16x5/2	925	1	0	16	no	*	48	yes	335612
16x5/2	926	1	0	16	no	*	72	yes	335618
16x5/2	927	1	0	16	no	*	96	yes	335624
16x5/2	928	1	0	16	no	*	120	yes	335630
16x5/2	933	1	0	16	yes	*	0	yes	335672
16x5/2	934	1	0	16	yes	*	24	yes	335678
16x5/2	935	1	0	16	yes	*	48	yes	321292
16x5/2	936	1	0	16	yes	*	72	yes	321298
16x5/2	937	1	0	16	yes	*	96	yes	321304
16x5/2	938	1	0	16	yes	*	120	yes	321310
24x5/2	941	1	0	24	no	*	0	yes	335500
24x5/2	942	1	0	24	no	*	24	yes	335504
24x5/2	943	1	0	24	no	*	48	yes	335508
24x5/2	944	1	0	24	no	*	72	yes	335512
24x5/2	945	1	0	24	no	*	96	yes	335516
24x5/2	946	1	0	24	no	*	120	yes	335520
24x5/2	951	1	0	24	yes	*	0	yes	335540
24x5/2	952	1	0	24	yes	*	24	yes	335546
24x5/2	953	1	0	24	yes	*	48	yes	335552
24x5/2	954	1	0	24	yes	*	72	yes	335558
24x5/2	955	1	0	24	yes	*	96	yes	335564
24x5/2	956	1	0	24	yes	*	120	yes	335570

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 3/2-way valve island variant with filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x3/2	907	2	0	16	no	*	0	yes	335354
8x3/2	907	1	1	8	no	*	0	yes	335360
8x3/2	908	2	0	16	no	*	24	yes	335366
8x3/2	908	1	1	8	no	*	24	yes	335372
8x3/2	909	2	0	16	no	*	48	yes	335378
8x3/2	909	1	1	8	no	*	48	yes	335384
12x3/2	917	2	0	24	no	*	0	yes	335438
12x3/2	917	1	1	12	no	*	0	yes	335444
12x3/2	918	2	0	24	no	*	24	yes	335450
12x3/2	918	1	1	12	no	*	24	yes	335456
16x3/2	961	1	0	16	no	*	0	yes	335634
16x3/2	962	1	0	16	no	*	24	yes	335640
16x3/2	963	1	0	16	no	*	48	yes	335646
16x3/2	964	1	0	16	no	*	72	yes	335652
16x3/2	965	1	0	16	no	*	96	yes	335658
16x3/2	966	1	0	16	no	*	120	yes	335664
16x3/2	971	1	0	16	yes	*	0	yes	321314
16x3/2	972	1	0	16	yes	*	24	yes	321320
16x3/2	973	1	0	16	yes	*	48	yes	321326
16x3/2	974	1	0	16	yes	*	72	yes	321332
16x3/2	975	1	0	16	yes	*	96	yes	321338
16x3/2	976	1	0	16	yes	*	120	yes	321344
24x3/2	947	1	0	24	no	*	0	yes	335522
24x3/2	948	1	0	24	no	*	24	yes	335526
24x3/2	949	1	0	24	no	*	48	yes	335530
24x3/2	950	1	0	24	no	*	72	yes	335534
24x3/2	957	1	0	24	yes	*	0	yes	335574
24x3/2	958	1	0	24	yes	*	24	yes	335580
24x3/2	959	1	0	24	yes	*	48	yes	335586
24x3/2	960	1	0	24	yes	*	72	yes	335592

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 2 x 3/2-way valve island variant with filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x2x3/2	907	2	0	32	no	*	0	yes	335358
8x2x3/2	907	1	1	16	no	*	0	yes	335364
8x2x3/2	908	2	0	32	no	*	24	yes	335370
8x2x3/2	908	1	1	16	no	*	24	yes	335376
8x2x3/2	909	2	0	32	no	*	48	yes	335382
12x2x3/2	917	2	0	48	no	*	0	yes	335442
12x2x3/2	917	1	1	24	no	*	0	yes	335448
12x2x3/2	918	2	0	48	no	*	24	yes	335454
12x2x3/2	918	1	1	24	no	*	24	yes	335460
16x2x3/2	961	1	0	32	no	*	0	yes	335638
16x2x3/2	962	1	0	32	no	*	24	yes	335644
16x2x3/2	963	1	0	32	no	*	48	yes	335650
16x2x3/2	964	1	0	32	no	*	72	yes	335656
16x2x3/2	965	1	0	32	no	*	96	yes	335662
16x2x3/2	966	1	0	32	no	*	120	yes	335668
16x2x3/2	971	1	0	32	yes	*	0	yes	321318
16x2x3/2	972	1	0	32	yes	*	24	yes	321324
16x2x3/2	973	1	0	32	yes	*	48	yes	321330
16x2x3/2	974	1	0	32	yes	*	72	yes	321336
16x2x3/2	975	1	0	32	yes	*	96	yes	321342
16x2x3/2	976	1	0	32	yes	*	120	yes	321348
24x2x3/2	957	1	0	48	yes	*	0	yes	335578
24x2x3/2	958	1	0	48	yes	*	24	yes	335584
24x2x3/2	959	1	0	48	yes	*	48	yes	335590
24x2x3/2	960	1	0	48	yes	*	72	yes	335596

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Order table

**Variant: 5/2-way valve island variant with filter regulator**

Valve island variant	Hole pattern see P. 78-79	Number of islands	Number of vac.	Number of valve functions	IF**	Max. cross-section FBS (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number
8x5/2	907	2	0	16	no	*	0	yes	335356
8x5/2	907	1	1	8	no	*	0	yes	335362
8x5/2	908	2	0	16	no	*	24	yes	335368
8x5/2	908	1	1	8	no	*	24	yes	335374
8x5/2	909	2	0	16	no	*	48	yes	335380
8x5/2	909	1	1	8	no	*	48	yes	335386
12x5/2	917	2	0	24	no	*	0	yes	335440
12x5/2	917	1	1	12	no	*	0	yes	335446
12x5/2	918	2	0	24	no	*	24	yes	335452
12x5/2	918	1	1	12	no	*	24	yes	335458
16x5/2	961	1	0	16	no	*	0	yes	335636
16x5/2	962	1	0	16	no	*	24	yes	335642
16x5/2	963	1	0	16	no	*	48	yes	335648
16x5/2	964	1	0	16	no	*	72	yes	335654
16x5/2	965	1	0	16	no	*	96	yes	335660
16x5/2	966	1	0	16	no	*	120	yes	335666
16x5/2	971	1	0	16	yes	*	0	yes	321316
16x5/2	972	1	0	16	yes	*	24	yes	321322
16x5/2	973	1	0	16	yes	*	48	yes	321328
16x5/2	974	1	0	16	yes	*	72	yes	321334
16x5/2	975	1	0	16	yes	*	96	yes	321340
16x5/2	976	1	0	16	yes	*	120	yes	321346
24x5/2	947	1	0	24	no	*	0	yes	335524
24x5/2	948	1	0	24	no	*	24	yes	335528
24x5/2	949	1	0	24	no	*	48	yes	335532
24x5/2	950	1	0	24	no	*	72	yes	335536
24x5/2	957	1	0	24	yes	*	0	yes	335576
24x5/2	958	1	0	24	yes	*	24	yes	335582
24x5/2	959	1	0	24	yes	*	48	yes	335588
24x5/2	960	1	0	24	yes	*	72	yes	335594

\* Note the specifications of the I/O system manufacturer

\*\* Intermediate feed

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

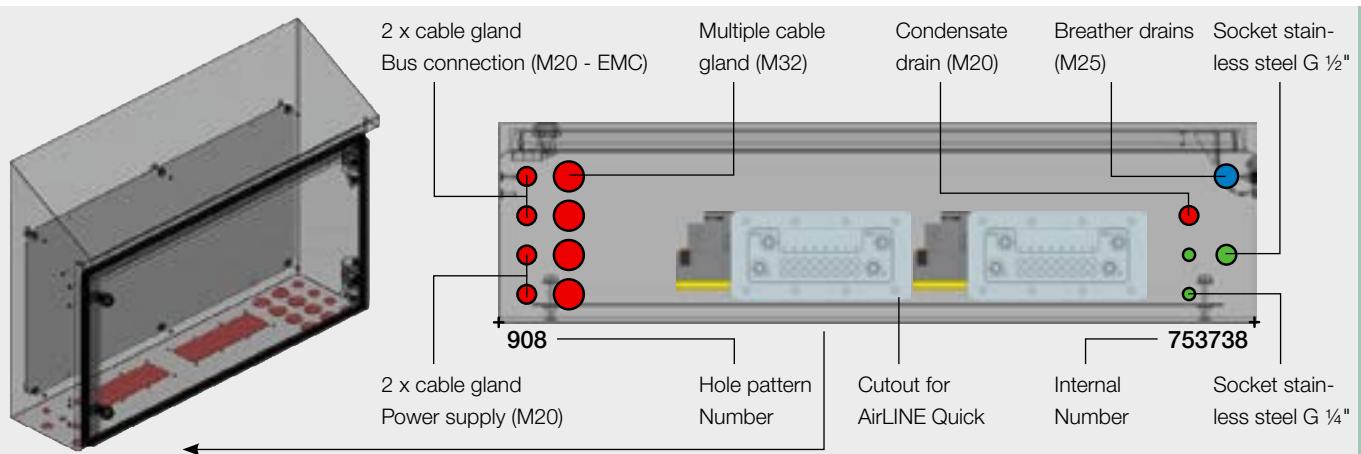
### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8647, installation width 810 mm

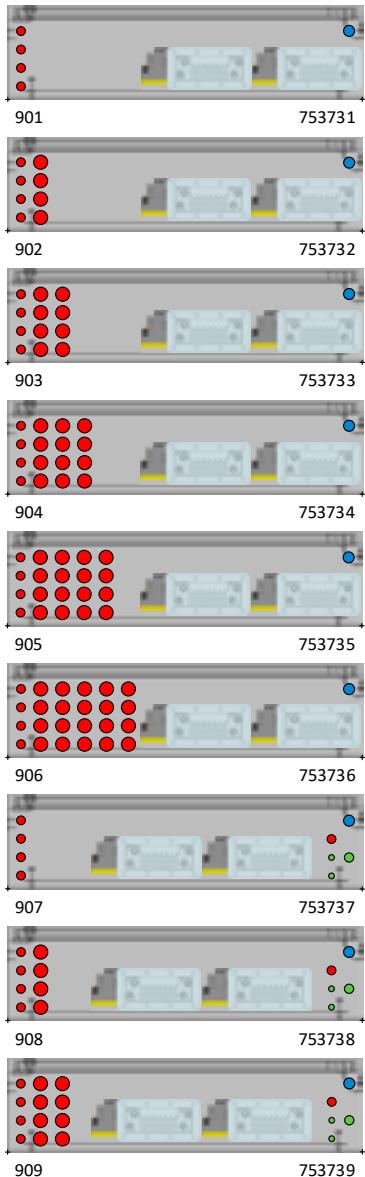
## Description of hole pattern



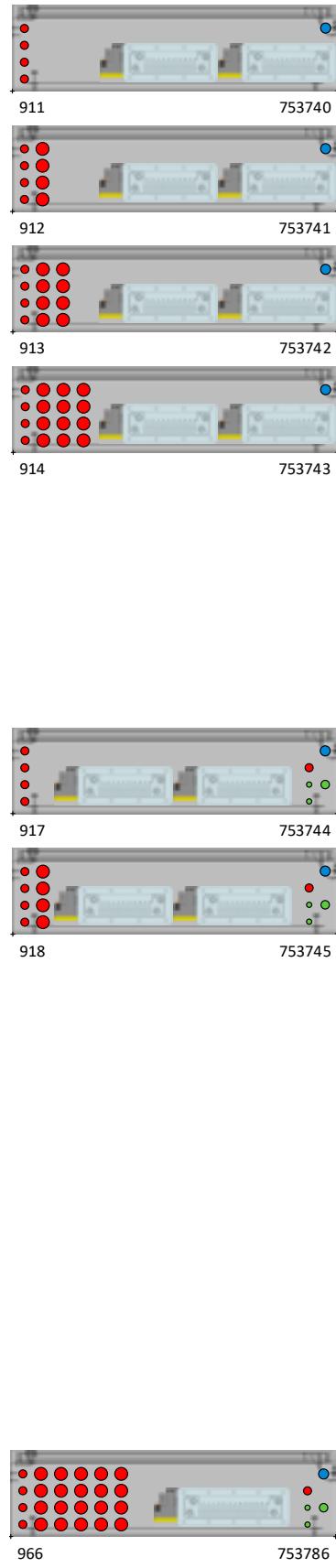
Automation system Type 8614 with valve island Type 8647, installation width 810 mm

## Hole patterns

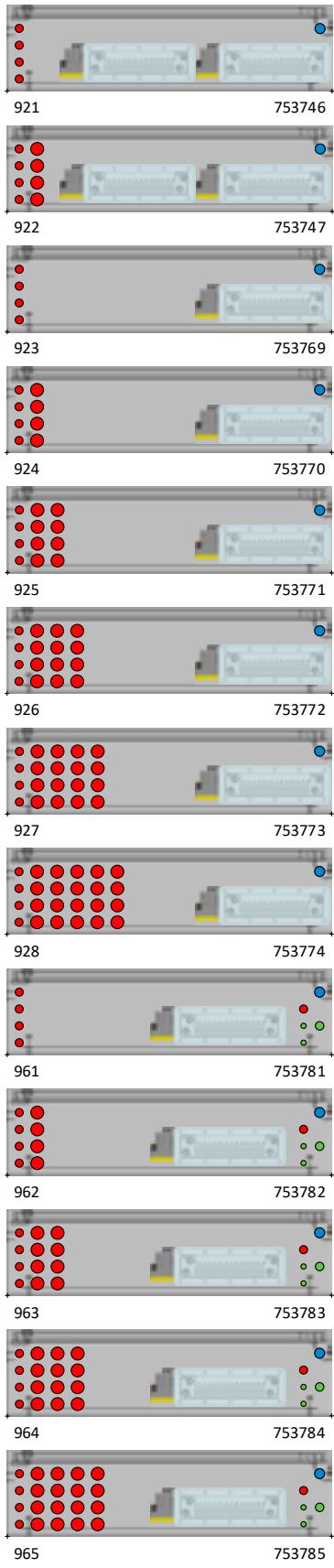
8-fold valve island  
Type 8647  
Installation width 810 mm



12-fold valve island  
Type 8647  
Installation width 810 mm



16-fold valve island  
Type 8647  
Installation width 810 mm





# Valve island AirLINE Quick Type 8644

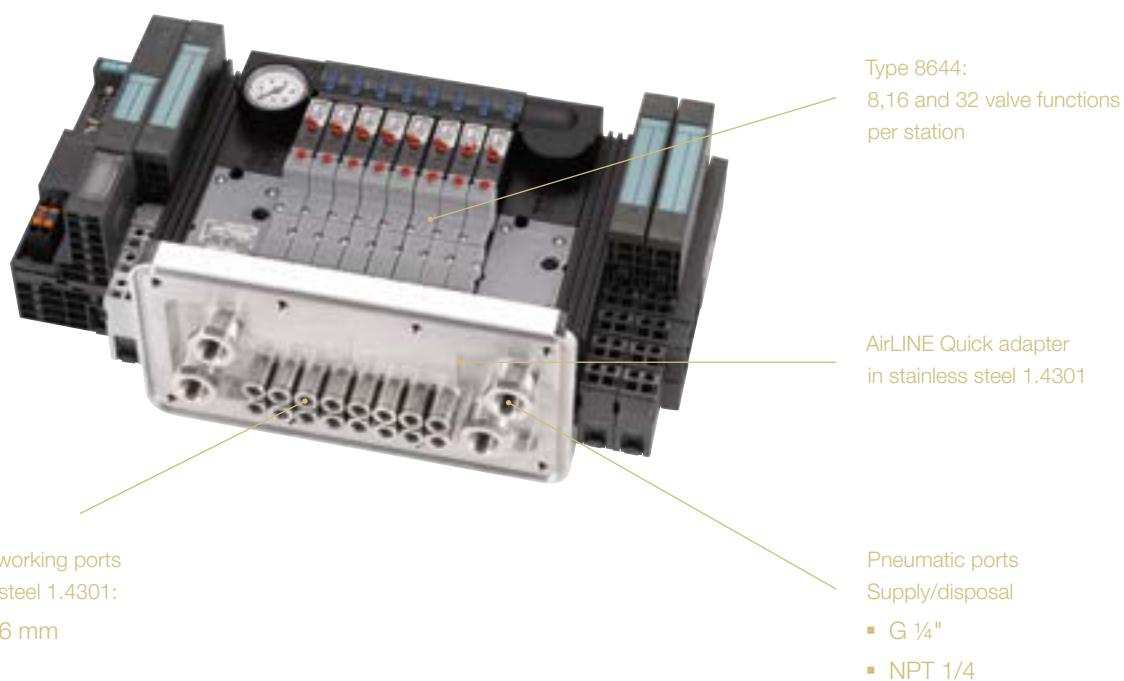
The solution for controlling complete process loops

In conjunction with the valve island AirLINE Quick Type 8644, you can monitor and control complete process loops including the flow rate, temperature and fill level.

On the modular valve island AirLINE Quick Type 8644, you can install pneumatic modules with different numbers of valves to realise 8 to 48 valve functions on a single valve island.

## Features:

- High plant availability thanks to integrated hot-swap function among other things
- High process reliability
- Fast and easy installation
- Optimum cleaning and hygiene
- Compatible with many I/O systems (Siemens ET200S, Wago 750, Rockwell Point on request)
- Innovative fieldbus interface
- High level of flexibility
- Standardised modular structure
- Short delivery times for a defined standard range of valve islands (in some cases from stock)



# Valve island AirLINE Quick Type 8644

Our cooperation partners



## AirLINE Quick Type 8644

**Siemens ET 200S I/O system**

Modular, pneumatic valve island with fieldbus and digital/analogue I/O modules. This automation system is suitable for all functions, including application in ATEX Zone 2 potentially explosive areas. Fieldbus interfaces: PROFIBUS DP, PROFINET



## AirLINE Quick Type 8644

**WAGO I/O system 750**

The automation system AirLINE Quick for process control is fully compatible with the WAGO I/O system 750 and integrates pneumatic valves, I/O for remote operation and fieldbus communication in a single compact and flexible assembly. Fieldbus interfaces: e.g. PROFIBUS DP, EtherNet/IP, PROFINET I/O



## AirLINE Type 8644

**Rockwell Point I/O system (on request)**

Fully compatible with Rockwell Point I/O system with degree of protection IP20. Fieldbus interfaces: e.g. ControlNet, DeviceNet, EtherNet/IP, PROFINET DP

The valve island is supplied as a valve block only without electrical components from partners Siemens, Wago and Rockwell (on request).

8644

# AirLINE Quick Type 8644 with 3/2- and 5/2-way function



including process safety function, pneumatic hot-swap function  
and check valves

In the tables below, you will find the standard order numbers for Type 8644 with the AirLINE Quick adapter plate in stainless steel 1.4301. This refers solely to the compatible pneumatic system for the respective cooperation partner in each case.

This purely pneumatic valve module by Burkert can easily be integrated directly in the I/O systems of Siemens ET 200S, Wago I/O system 750 and Rockwell Point I/O system (on request).

Application areas	
For hygienic applications using AirLINE Quick in stainless steel	
Functions	
With pneumatic hot-swap function	
With check valves in the R and S channel	
Flow rate of the valves (QNm-value)	150 l/min
Pressure range	2.5–10 bar
Pneumatic feed	G 1/4"
Pneumatic working ports	6 mm push-in

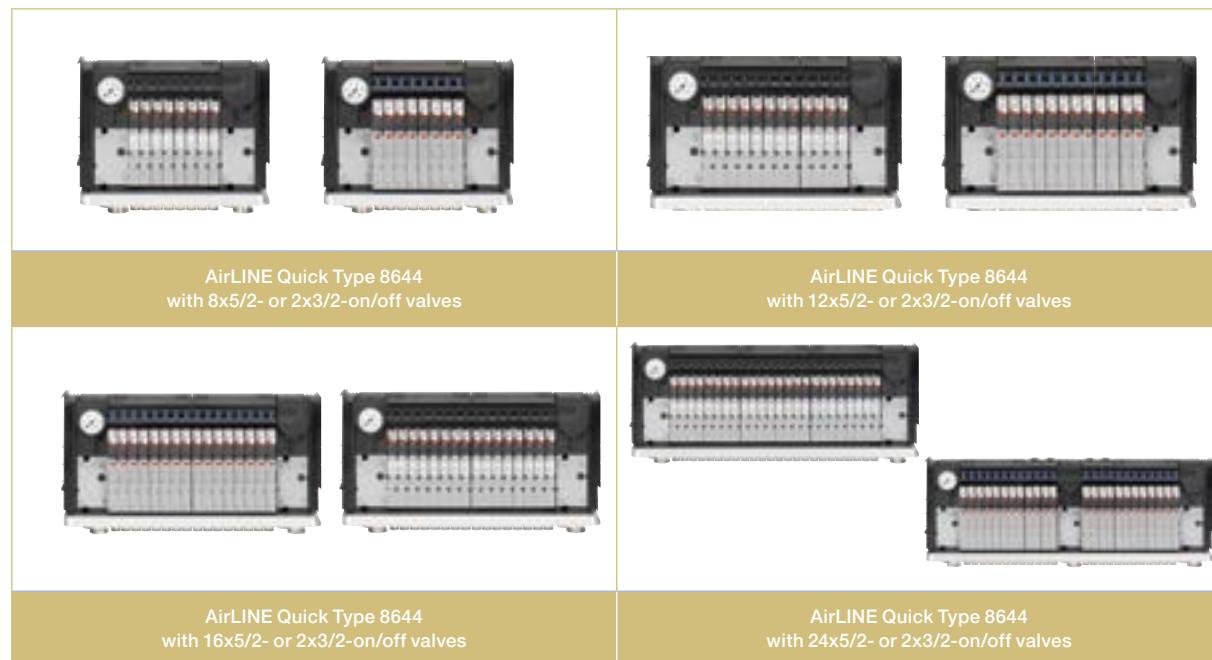
## Valve island AirLINE Quick Type 8644

### Order table

Valve functions	compatible with	
	Siemens ET 200S	Wago I/O system 750
8x3/2	239942	239971
8x5/2	239945	239974
8x2x3/2	239938	239968
12x5/2	253755	253760
12x2x3/2	244417	248123
16x5/2	239947	239977
16x2x3/2	239940	239969
16x2x3/2*	254943	254947
24x5/2	248093	248108
24x2x3/2*	248102	248098

\* with middle feed module

### Examples



## Automation system Type 8614/8644 with integrated AirLINE Quick valve islands

**Installation width 390 mm**

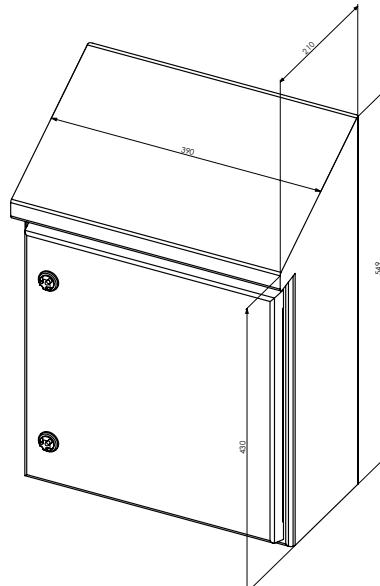
Max. expansion variant:

- One valve island
- 16x2x3/2-way function
- 48 bushings for electrical Control lines



### Technical data

<b>Housing dimensions W x H x D</b>	390 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G ½"
Valve island feed	G ¼"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 V AC
Valve island	24 V DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	60 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O system	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	Note the specifications of the I/O system manufacturer
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 25 kg



\* see order table

Automation system Type 8614 with valve island Type 8644, installation width 390 mm

## Order table

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 87	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O
8x2x3/2	401	16	*	-	+	279881	279882	on request
8x2x3/2	402	16	*	24	+	279885	279886	on request
8x2x3/2	403	16	*	48	+	279889	279890	on request
12x2x3/2	410	24	*	-	+	279897	279898	on request
12x2x3/2	411	24	*	24	+	279901	279902	on request
16x2x3/2	420	32	*	-	+	279905	279906	on request

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 87	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O
8x5/2	401	8	*	-	+	279909	279910	on request
8x5/2	402	8	*	24	+	279913	279914	on request
8x5/2	403	8	*	48	+	279917	279918	on request
12x5/2	410	12	*	-	+	279925	279926	on request
12x5/2	411	12	*	24	+	279873	279874	on request
16x5/2	420	16	*	-	+	279877	279878	on request

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8644, installation width 390 mm

## Order table

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 87	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x2x3/2	404	16	*	-	+	279893	279894	on request

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 87	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x5/2	404	8	*	-	+	279921	279922	on request

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

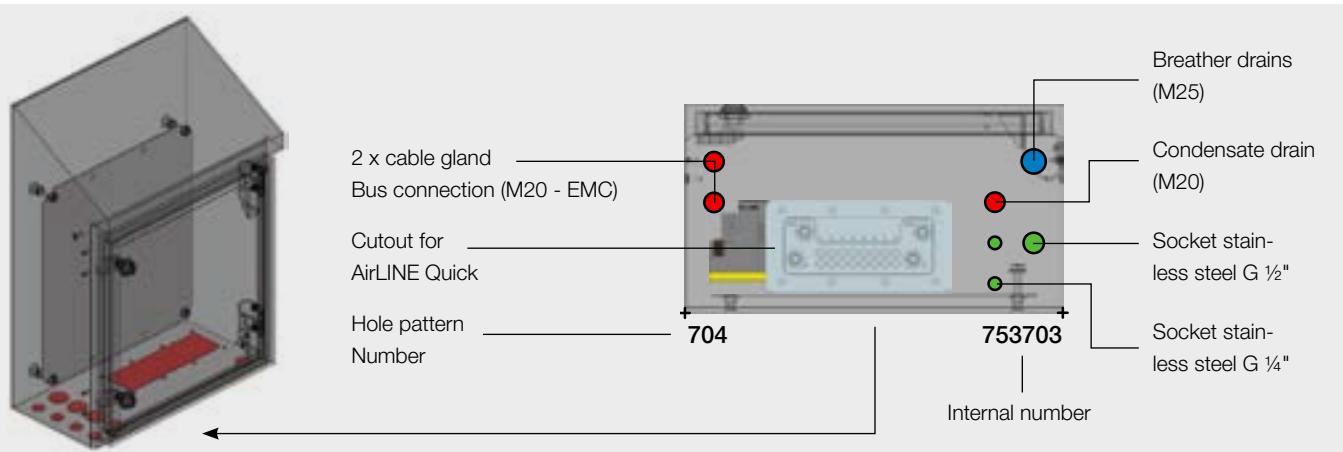
#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8644, installation width 390 mm

## Description of hole pattern

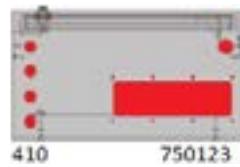


## Hole patterns

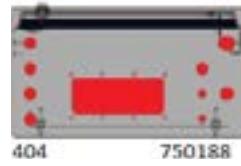
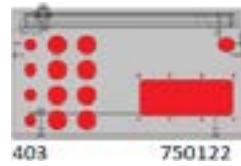
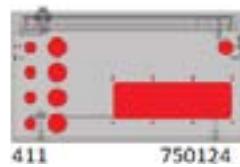
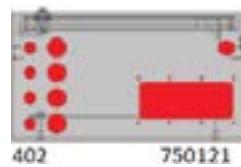
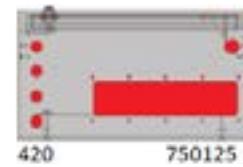
8-fold valve island  
Type 8644  
Installation width 390 mm



12-fold valve island  
Type 8644  
Installation width 390 mm



16-fold valve island (w/o IF)  
Type 8644  
Installation width 390 mm



w/o IF = without intermediate feed

## Automation system Type 8614 with valve island Type 8644

### Installation width 510 mm

Max. expansion variant:

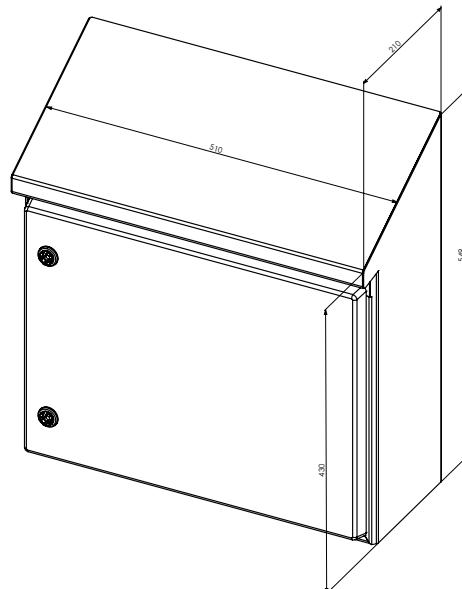
- One valve island
- 24x2x3/2-way function
- 96 bushings for electrical Control lines



### Technical data

<b>Housing dimensions W x H x D</b>	510 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	G 1/4"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 V AC
Valve island	24 V DC
<b>Voltage tolerance</b>	+/-10 %
<b>Total output</b>	60 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O system	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	Note the specifications of the I/O system manufacturer
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 30 kg

\*see order table



Automation system Type 8614 with valve island Type 8644, installation width 510 mm

## Order table

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 92-93	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x2x3/2	504	16	*	72	+	279781	279782	on request
8x2x3/2	505	16	*	96	+	279785	279786	on request
12x2x3/2	512	24	*	48	+	279801	279802	on request
12x2x3/2	513	24	*	72	+	279805	279806	on request
16x2x3/2	521	32	*	24	+	279817	279818	on request
16x2x3/2	522	32	*	48	+	279821	279822	on request
24x2x3/2 IF	535	48	*	-	+	279829	279830	on request

IF = with intermediate feed

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see P. 92-93	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x5/2	504	8	*	72	+	279833	279834	on request
8x5/2	505	8	*	96	+	279837	279838	on request
12x5/2	512	12	*	48	+	279845	279846	on request
12x5/2	513	12	*	72	+	279849	279850	on request
16x5/2	522	16	*	48	+	279857	279858	on request
24x5/2	534	24	*	24	+	279865	279866	on request

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8644, installation width 510 mm

## Order table

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 92-93	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x2x3/2	506	16	*	-	+	279789	279790	on request
8x2x3/2	507	16	*	24	+	279793	279794	on request
8x2x3/2	508	16	*	48	+	279797	279798	on request
12x2x3/2	515	24	*	-	+	279809	279810	on request
12x2x3/2	516	24	*	24	+	279813	279814	on request
16x2x3/2	525	32	*	-	+	279825	279826	on request

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see P. 92-93	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x5/2	508	8	*	48	+	279841	279842	on request
12x5/2	516	12	*	24	+	279853	279854	on request
16x5/2	525	16	*	-	+	279861	279862	on request

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105



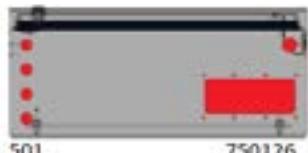
Automation system Type 8614 with valve island Type 8644, installation width 510 mm

## Hole patterns

8-fold valve island

Type 8644

Installation width 510 mm



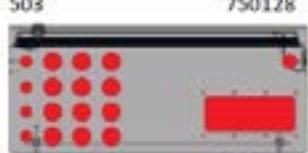
501 750126



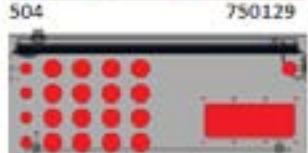
502 750127



503 750128



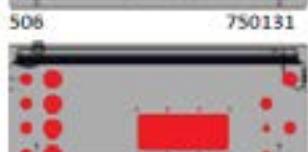
504 750129



505 750130



506 750131



507 750132



508 750133

12-fold valve island

Type 8644

Installation width 510 mm



510 750134



511 750135



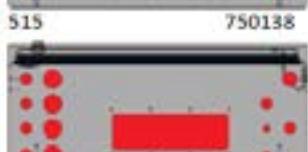
512 750136



513 750137



515 750138



516 750139

16-fold valve island (w/o IF)

Type 8644

Installation width 510 mm



520 750140



521 750141



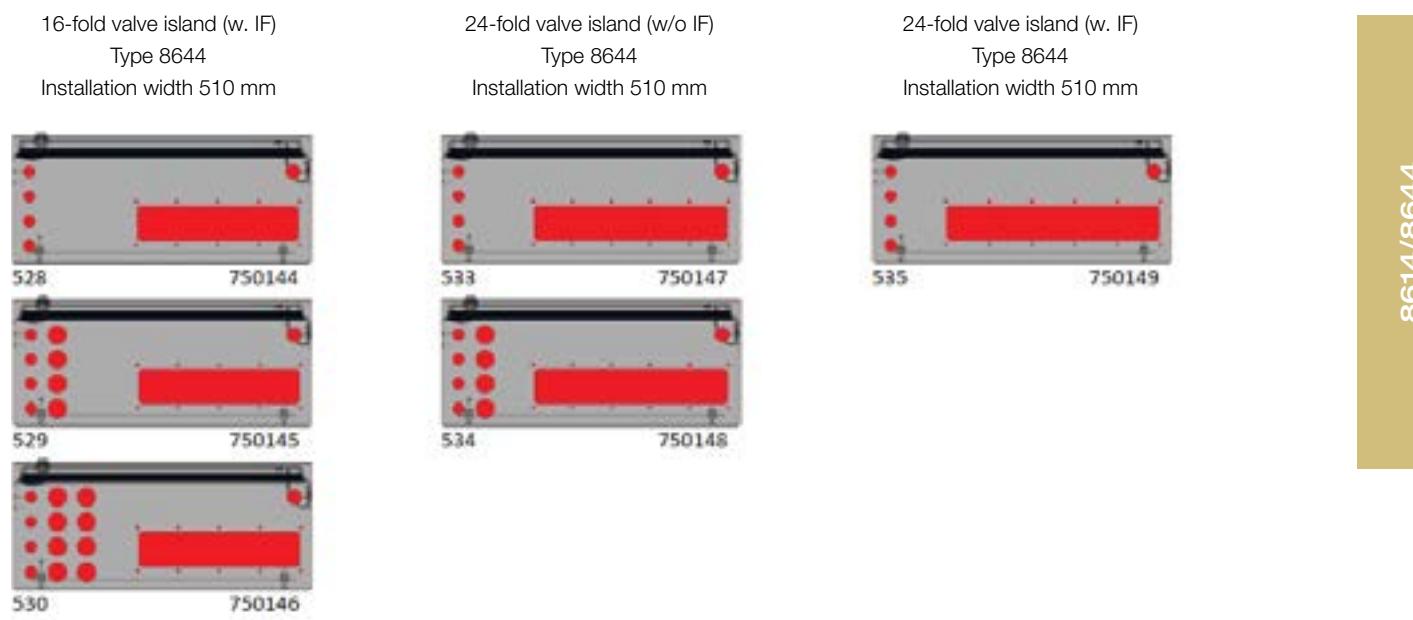
522 750142



525 750143

Automation system Type 8614 with valve island Type 8644, installation width 510 mm

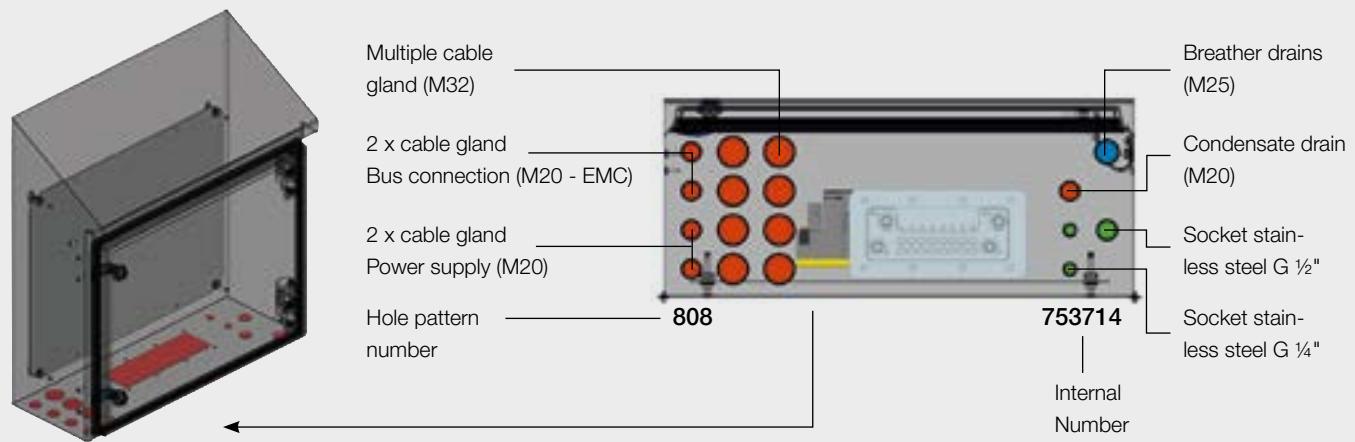
## Hole patterns



w. IF = with intermediate feed

w/o IF = without intermediate feed

## Description of hole pattern



## Automation system Type 8614 with valve island Type 8644

### Installation width 810 mm

Max. expansion variant:

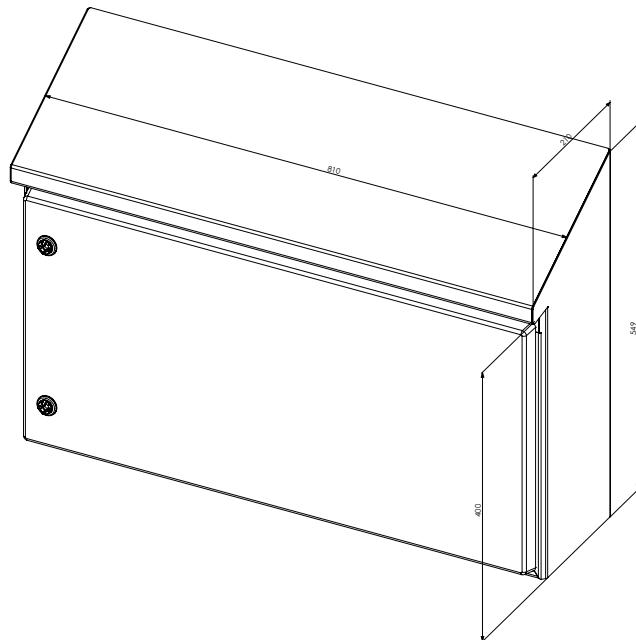
- Two valve islands
- 24x2x3/2-way function
- 96 bushings for electrical Control lines



### Technical data

<b>Housing dimensions W x H x D</b>	810 x 549 x 210 mm Front height 430 mm
<b>Housing material, adapter plate, cable glands</b>	Stainless steel (V2A)
<b>Sealing materials used</b>	FKM, TPE, silicone – conforming to FDA Regulation 21 CFR 177.2600
<b>Ambient temperature</b>	0 to +40°C
<b>Medium</b>	Compressed air, neutral gases
<b>Medium temperature</b>	-10°C to +50°C
<b>Pressure range with/without filter regulator</b>	2.5 to 16 bar/2.5 to 10 bar
<b>Flow rate for optional filter regulator</b>	5,200 l/min
<b>Flow rate of the valves</b>	150 l/min
<b>Pneumatic ports</b>	
Filter regulator (optional)	G 1/2"
Valve island feed	G 1/4"
Working ports valve	Ø 6 mm push-in
<b>Power supply</b>	
Power supply unit (optional)	100 to 230 Volt AC
Valve island	24 Volt DC
<b>Voltage tolerance</b>	+/-10%
<b>Total output</b>	120 VA
<b>Duty cycle</b>	100% duty cycle
<b>Cable diameter</b>	
Power supply	7.0 to 10.5 mm VA-M20
Communication	6.5 to 9.5 mm VA-M20-EMC
Field I/O system	6.5 mm/5.5 mm* VA-M32
Connection terminals power supp.	2.5 mm <sup>2</sup>
Connection terminals for position feedback sensors	Note the specifications of the I/O system manufacturer
<b>Degree of protection</b>	IP65
<b>Standards</b>	
Switching device combination	EN 61439
EMV	EN 61000
MSR-EMC	EN 61326
Documentation	EN 81346
RoHS	EN 50581
<b>Weight</b>	approx. 40 kg

\*see order table



Automation system Type 8614 with valve island Type 8644, installation width 810 mm

## Order table

### Variant: 2x3/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see Page 98-99	Number of islands	Vacant position	Number of valve functions	Max. cross-section of position feed-back sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
16x2x3/2	620	2	-	64	*	-	-	+	279681	279682	on request
16x2x3/2	620	1	1	32	*	-	-	+	279685	279686	on request
16x2x3/2	621	2	-	64	*	24	-	+	279689	279690	on request
16x2x3/2	621	1	1	32	*	24	-	+	279693	279694	on request
24x2x3/2 IF	638	1	-	48	*	-	-	+	279697	279698	on request
24x2x3/2 IF	639	1	-	48	*	24	-	+	279701	279702	on request
24x2x3/2 IF	640	1	-	48	*	48	-	+	279705	279706	on request
24x2x3/2 IF	641	1	-	48	*	72	-	+	279709	279710	on request
24x2x3/2 IF	642	1	-	48	*	96	-	+	279713	279714	on request

IF = with intermediate feed

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant without filter regulator

Valve island variant	Hole pattern see Page 98-99	Number of islands	Vacant position	Number of valve functions	Max. cross-section of position feed-back sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x5/2	603	2	-	16	*	48	-	+	279729	279730	on request
8x5/2	603	1	1	8	*	48	-	+	279733	279734	on request
12x5/2	613	2	-	24	*	72	-	+	279737	279738	on request
12x5/2	613	1	1	12	*	72	-	+	279741	279742	on request
16x5/2	621	2	-	32	*	-	32	+	279745	279746	on request
16x5/2	621	1	1	16	*	-	32	+	279749	279750	on request
24x5/2	632	1	-	24	*	48	-	+	279753	279754	on request
24x5/2	633	1	-	24	*	72	-	+	279757	279758	on request
24x5/2	634	1	-	24	*	96	-	+	279761	279762	on request

\* Note the specifications of the I/O system manufacturer

### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

You can find options/assemblies and accessories on pages 100 - 105

Automation system Type 8614 with valve island Type 8644, installation width 810 mm

## Order table

### Variant: 2x3/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see Page 98-99	Number of islands	Vacant position	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
24x2x3/2 IF	643	1	-	48	*	-	-	+	279717	279718	on request
24x2x3/2 IF	644	1	-	48	*	24	-	+	279721	279722	on request
24x2x3/2 IF	645	1	-	48	*	48	-	+	279725	279726	on request

IF = with intermediate feed

\* Note the specifications of the I/O system manufacturer

### Variant: 5/2-way valve island variant with filter regulator

Valve island variant	Hole pattern see Page 98-99	Number of islands	Vacant position	Number of valve functions	Max. cross-section of position feedback sensors (mm <sup>2</sup> )	Inlets field I/O system Ø 6.5 mm	Inlets field I/O system Ø 5.3 mm	Standard rail I/O system	Ident. number Siemens ET 200S	Ident. number Wago I/O system 750	Ident. number Rockwell Point I/O system
8x5/2	608	2	-	16	*	48	-	+	279765	279766	on request
12x5/2	616	2	-	24	*	24	-	+	279769	279770	on request
24x5/2	637	1	-	24	*	48	-	+	279773	279774	on request

\* Note the specifications of the I/O system manufacturer

#### Note:

The I/O system is not part of the identification number and must be ordered and configured separately.

#### Options/assemblies:

- Pressure switch mounted and cables/hoses fitted
- Power supply unit mounted and wired
- Wall spacer set mounted

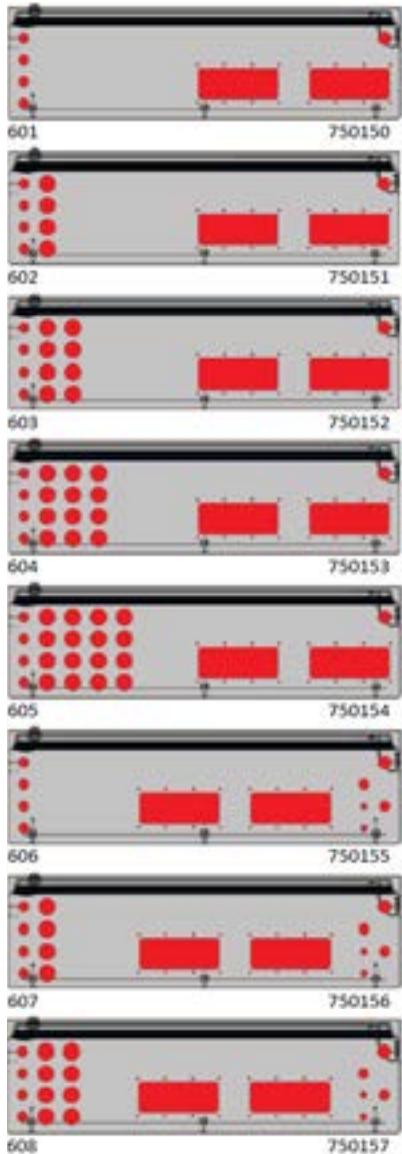
You can find options/assemblies and accessories on pages 100 - 105



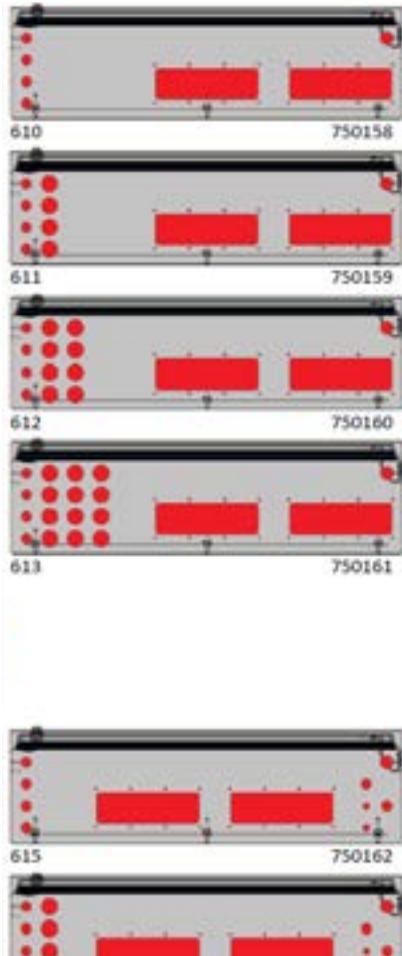
Automation system Type 8614 with valve island Type 8644, installation width 810 mm

## Hole patterns

8-fold valve island Type 8644  
Installation width 810 mm



12-fold valve island Type 8644  
Installation width 810 mm



16-fold valve island (w/o IF) Type 8644  
Installation width 810 mm



Automation system Type 8614 with valve island Type 8644, installation width 810 mm

## Hole patterns

16-fold valve island (w. IF)

Type 8644

Installation width 810 mm

24-fold valve island (w/o IF)

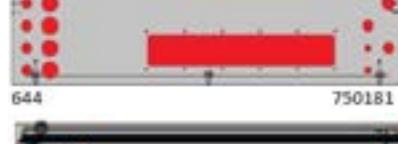
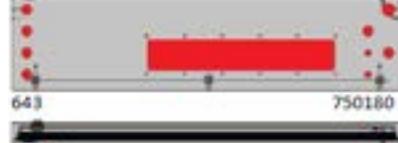
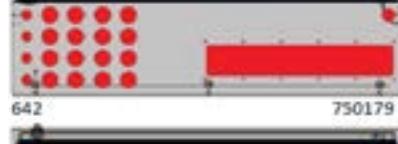
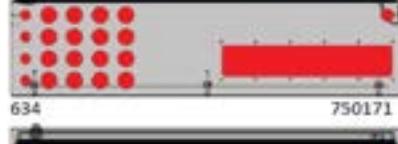
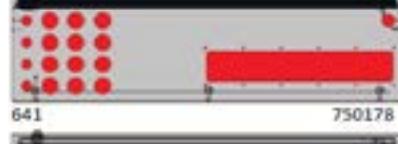
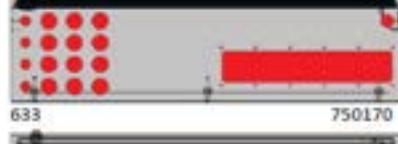
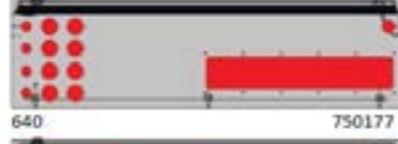
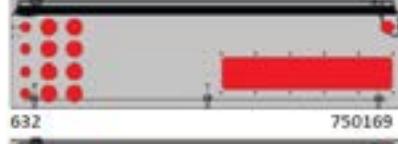
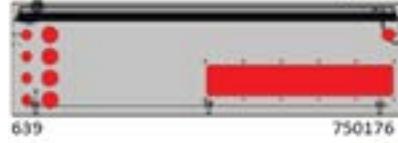
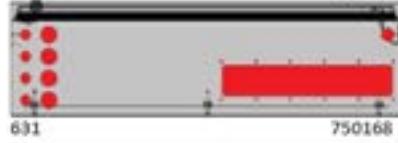
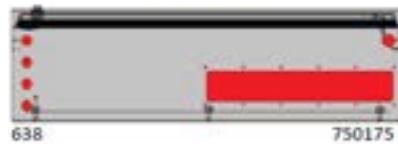
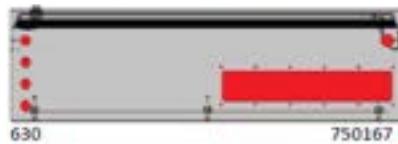
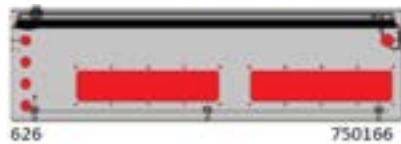
Type 8644

Installation width 810 mm

24-fold valve island (w. IF)

Type 8644

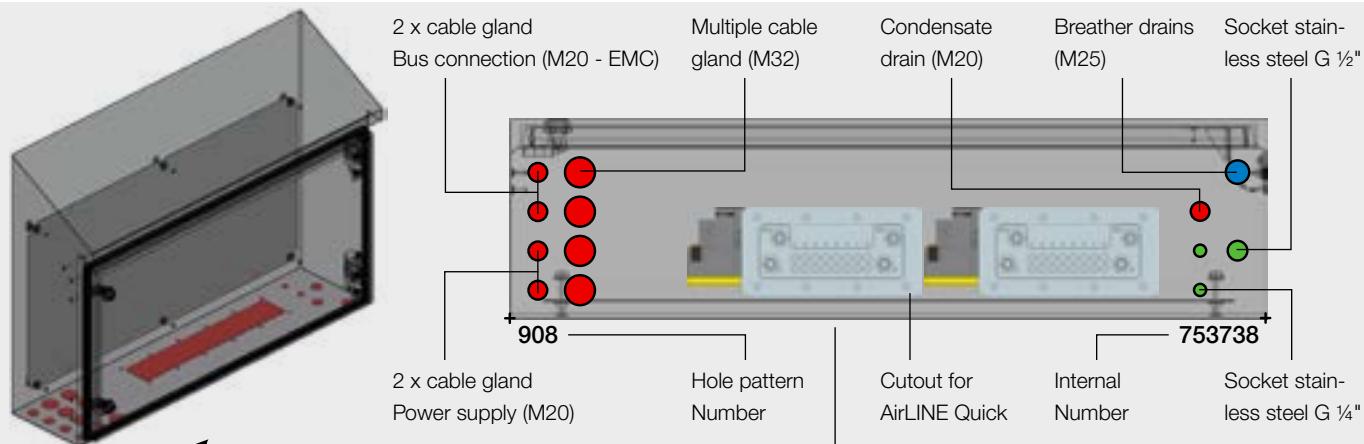
Installation width 810 mm



w. IF = with intermediate feed  
w/o IF = without intermediate feed

8614/8644

## Description of hole pattern



## Option/assembly

### Wall spacer hygienic design

- Creates space for cleaning even behind the housing
- Ensures greater hygiene safety by avoiding dead space between housing and wall that cannot be monitored
- Fully assembled



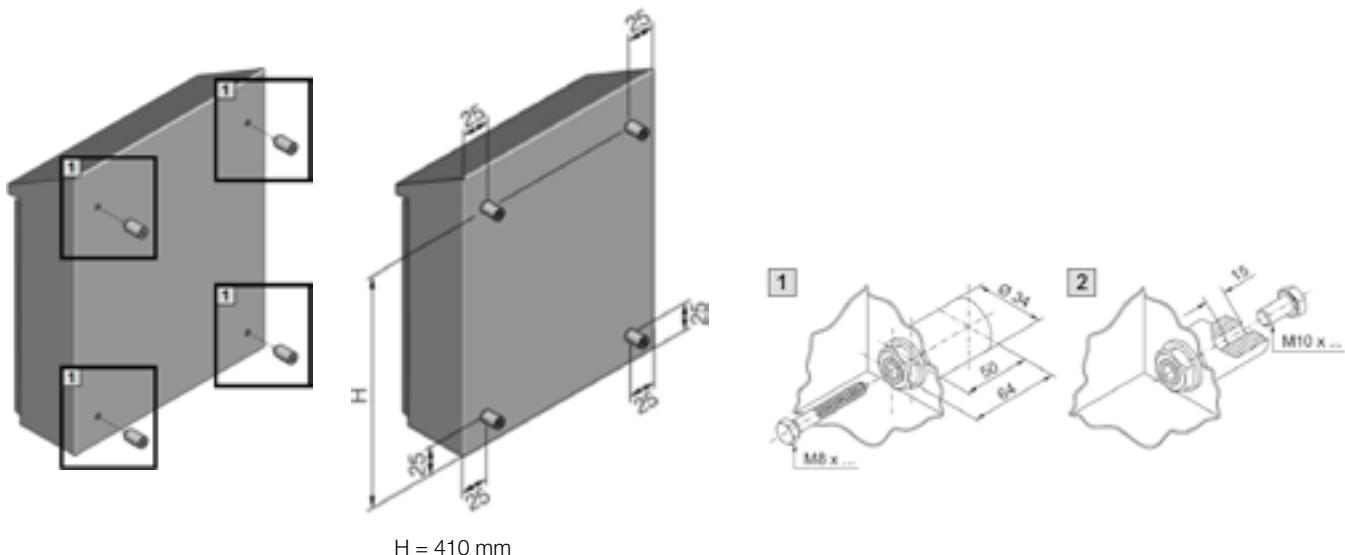
### Technical data

<b>Material</b>	Stainless steel 1.4301 (AISI 304)
<b>Surface</b>	Surface roughness height RA < 0.8 µm
<b>Wall spacing</b>	50 mm
<b>Diameter</b>	34 mm
<b>Conformity</b>	All seals conform to FDA Regulation 21 CFR 177.2600
<b>Weight</b>	1.6 kg/set (consisting of 4 wall spacers)



### Order table

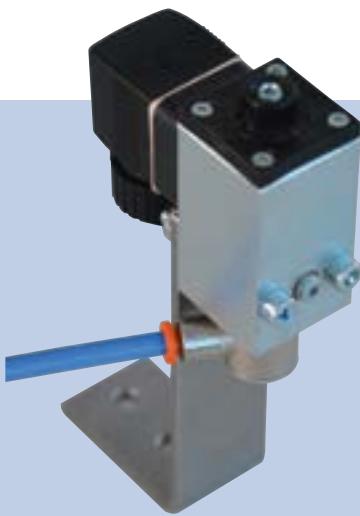
Wall spacer set consisting of 4 wall spacers, fully assembled	795481
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## Option/assembly

### Pressure switch, fully mounted and cables/hoses fitted

- Additional cable gland for direct connection via cable connector
- Pressure switch mounted on stainless steel bracket
- Front adjusting screw



#### Technical data (pressure switch)

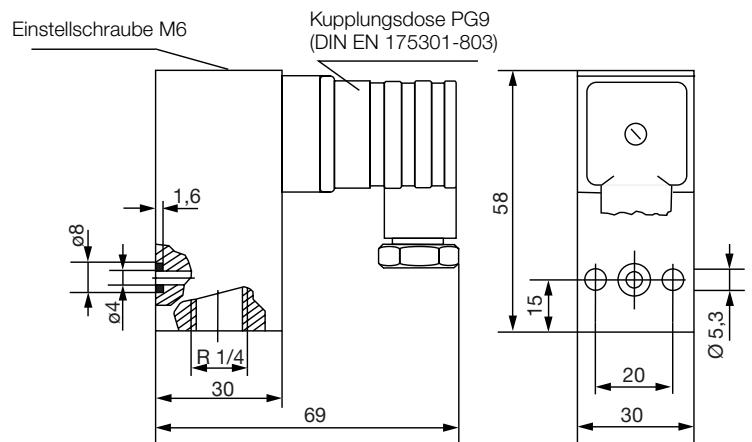
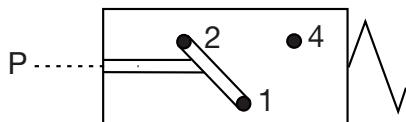
Material	steel galvanised
switching function	Changeover contact
Setting range	1 – 10 bar
Bursting pressure	20 bar
Design	Spring-loaded diaphragm
Diaphragm	NBR
Medium	Air, hydraulic oil, oil emulsion, water
Medium temperature	-25 to +85°C
Switch-back difference	15–25 %
Switching frequency	max. 200/min.
Mechanical service life	10 <sup>6</sup> switching cycles
switching voltage	max. 250 V/UC
Degree of protection	IP65 with device socket Type 2508



### Order table (only possible in conjunction with built-in filter regulator)

Pressure switch, fully mounted and cables/hoses fitted	795486
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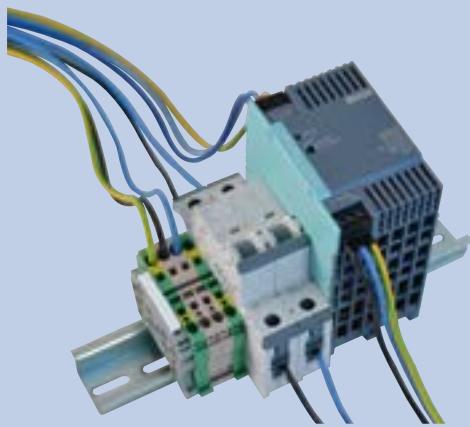
### Wechsler



## Option/assembly

### Power supply unit, fully mounted and wired

- Low energy consumption due to high efficiency
- Minimum energy losses at idle
- Small installation space required due to slender design



### Technical data

<b>Input voltage-nominal range</b>	AC 100–230 V
-operating range	AC 85–264 V/DC 110–300 V
<b>Mains buffering</b>	> 20 ms (at AC 120/230 V)
<b>Nominal frequency-nominal value</b>	50/60 Hz
<b>Input current-nominal value</b>	1.56–0.75 A
- recommended circuit breaker	Char. C: from 10 A, Char. B: from 16 A
<b>Output voltage-nominal value</b>	DC 24 V
- Tolerance	± 3 %
- Setting range	DC 22.2–26.4 V
<b>Output current-nominal value</b>	4 A
- Derating range	+50°C to 70°C
<b>Degree of efficiency at nominal values</b>	approx. 88 %
<b>No-load losses</b>	< 0.75 W
<b>Switchable in parallel</b>	yes
<b>Electronic short-circuit protection</b>	yes, restart
<b>Interference noise suppression (EN 55022)</b>	Class B
<b>Degree of protection (EN 60529)</b>	IP20
<b>Ambient temperature</b>	–20 to +70°C
<b>Ports</b>	Removable screw-type terminals
<b>Circuit breaker</b>	1/N C6A
<b>Connection terminals (max. 4 mm<sup>2</sup>) for input voltage</b>	85–264 VAC
<b>certifications</b>	CE, UL, CSA, ATEX
<b>Assembly dimensions (B x H x D)</b>	125 x 90 x 115 mm
<b>Siemens power supply unit</b>	PSU100C/4A*

\* other makes subject to consultation

### Order table

Power supply unit, fully mounted and wired	795497
--	--------

## Accessories

### Solenoid valve for pneumatic applications

- Type 6524 – 3/2-way and 2x3/2-way
- Type 6525 – 5/2-way
- Low power consumption
- Fast switching times
- Second port for separation from the bus signal
- Compact design



With shut-off function for safety-related  
Switching operations (see page 118)

#### Technical data

Nominal diameter	DN 4.0 mm
Body material	PPS, PA
Seal material	FKM
Media	Compressed air oiled, oil-free, dry; neutral gases (5µm filter recommended)
Medium temperature	–10 to +50°C
Ambient temperature	–10 to +50°C
Manual override	Standard
Port connection	Flange for MP11
Pneumatic modules	Type MP11 with M5, M7, plug-in coupling Ø 6 mm
Voltage tolerance	± 10 %
Switching times	approximately 1000 c.p.m.
Operating voltage	24 V DC*
Nominal power	0.8 W/2 x 0.8 W (2x3/2-way)
Nominal operating mode	Continuous operation (100% duty cycle)
Electr. connection on the valve	Rectangular connector with raster 5.08 mm, rectangular connector 2.42, 3-pin (2x3/2-way)
Degree of protection	IP40 with rectangular connector
Protection class	3 according to VDE 0580
Installation	with 2 screws M2 x 20/2 screws M2 x 28 (2x3/2-way)
Installation position	any, preferably actuator face up

\* 10 % residual ripple permissible

Switching times [ms]	Measurement acc. to ISO 12238
Opening	<10 ms
Closing	<10 ms

#### Order table (second connection with shut-off function, without manual override)

Type	Circuit function	Nominal diameter [mm]	QNn value Air <sup>1</sup> [l/min.]	Pressure range <sup>2</sup> [bar]	Voltage/Frequency [V/Hz]	Integrated power reduction	Ident. number
6524	C 3/2-on/off valve	4	300	2.5–10	24 V DC*	No	285545
6524	C 2x3/2-on/off valve	4	300	2.5–10	24 V DC*	Yes <sup>3</sup>	285547
6525	H 5/2-on/off valve	4	300	2.5–10	24 V DC*	No	285544

\* 10 % residual ripple permissible

<sup>1</sup> Measurement at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference

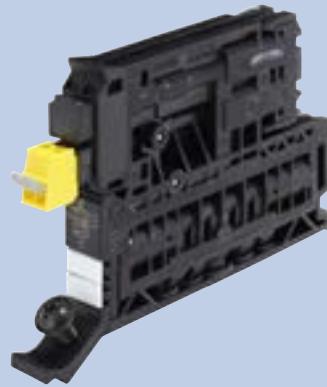
<sup>2</sup> Overpressure with respect to atmospheric pressure

<sup>3</sup> Can be used in valve island Type 8640, AirLINE Type 8644 or valve blocks

## Accessories

### Solenoid valve for pneumatic applications

- For valve island Type 8652
- With shut-off function for safety-related switching operations
- Second port for shutdown
- Maximum flexibility and reliability
- Switch high pressures with low power consumption
- Short switching times



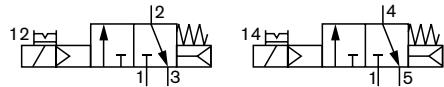
With shut-off function for safety-related switching operations

#### Technical data

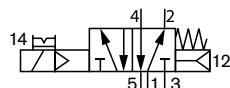
Nominal diameter	DN 4.0 mm
Body material	PA
Seal material	NBR and PUR
Media	Compressed air oiled, oil-free, dry; neutral gases (5 µm filter recommended)
Working ports	Flange for MP15
Air supply connection	Flange for MP15
Manual override available/lockable	Yes/yes
Installation position	any
Installation	1 screw M4 x 10
Flow: QNm value air [l/min]	Measurement at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference
Pressure data [bar]	Overpressure with respect to atmospheric pressure
Nominal operating mode	Continuous operation (100 % duty cycle)
Switching times [ms]	Measured according to ISO 12238

#### Circuit function

2x3/2-way solenoid valve servo-assisted,  
Normally closed



5/2-way solenoid valve servo-assisted



#### Order table (second port for shutdown)

Circuit function	Nominal diameter [mm]	QNm value Air <sup>1</sup> [l/min]	Pressure range <sup>2</sup> [bar]	Switching times		Voltage/Frequency [V/Hz]	Ident. number <sup>2</sup> incl. screw
				Opening [ms]	Closing [ms]		
C 2x3/2-on/off valve	4	270	Vac. 10 <sup>3</sup> 3 ... 10	15	15	24 V DC	338802
H 5/2-on/off valve	4	290	Vac. 10 <sup>3</sup> 3 ... 10	20	20	24 V DC	338805

1) For hot-swap function approx. 3 % flow reduction

2) The valves are components or spare parts of the valve island Type 8652. They can be used only on the valve island Type 8652.

3) Separate auxiliary pilot air at least 3 bar, please observe the control pressure table in the operating instructions

## Accessories

### Plastic hose for pneumatic system

- PTFE for higher temperatures (-196°C to +250°C)
- Resistant to aggressive or corrosive media
- Food-resistant

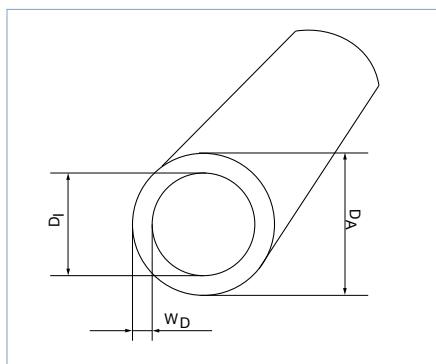


TVGO07

### Order table

Dimensions [mm] DA, DI, WD	Max. operating pressure at 20° C [bar]	Minimum bending radius Rmin [mm]	Weight [kg/m]	Roll length 50 m Colour natural ident. number
6/4/1	12	18	3.43	788880
10/8/1	6.5	50	6.16	788882
12/10/1	5.5	72	7.55	788883

Tolerances: WD ±0.2 mm



## Other housing sizes and options on request

### Sample dimensions:

Dimensions W x H x D: 810 x 1221 x 300 mm

Front height 1050 mm

or

810 x 1421 x 300 mm

Front height 1250 mm



# Sample configuration

Designation	Quantity	Ident. no.	List price
Automation system Type 8614/8640, installation width 510 mm, PROFIBUS	1	275512	€4,444.00 *
Wall spacer set, mounted	1	795481	€333.00 *
Pressure switch fully mounted and cables/hoses fitted (this affects ident. number 795486)	1	795486	€222.00 *
Power supply unit fully mounted and wired (this affects ident. number 795497)	1	795497	€111.00 *
<b>Total price</b>			<b>€5,110.00 *</b>

\* The prices listed above are notional prices. You will receive the actual list prices for your individual project from our employees in your quotation.

**In the event of order placement, a new identification number can be created on request that consists of the respective components. This simplifies order processing for you. The accessories will be supplied loose as a separate item.**

Please consider the notes. For example, the option "Pressure switch, fully mounted and cables/hoses fitted" is only possible in conjunction with a built-in filter regulator.

## Spare part

### Power supply unit

- Low energy consumption due to high efficiency across the entire load range
- Minimum energy losses at idle
- Connection via push-in terminals
- Small installation space required due to slender design



### Technical data

<b>Input voltage-nominal range</b>	AC 100–230 V
– operating range	AC 85–264 V/DC 110–300 V
<b>Mains buffering</b>	> 20 ms (at AC 120/230 V)
<b>Nominal frequency-nominal value</b>	50/60 Hz
<b>Input current-nominal value</b>	1.56–0.75 A
– recommended circuit breaker	Char. C: from 10 A, Char. B: from 16 A
<b>Output voltage-nominal value</b>	DC 24 V
– Tolerance	± 3 %
– Setting range	DC 22.2–26.4 V
<b>Output current-nominal value</b>	4 A
– Derating range	+50°C to 70°C
<b>Degree of efficiency at nominal values</b>	approx. 88 %
<b>No-load losses</b>	< 0.75 W
<b>Switchable in parallel</b>	yes
<b>Electronic short-circuit protection</b>	yes, restart
<b>Interference noise suppression (EN 55022)</b>	Class B
<b>Degree of protection (EN 60529)</b>	IP20
<b>Ambient temperature</b>	–20 to +70°C
<b>Ports</b>	Removable screw-type terminals
<b>Certifications</b>	CE, UL, CSA, ATEX
<b>Dimensions (W x H x D)</b>	52.5 x 80 x 100 mm
<b>Siemens power supply unit</b>	PSU100C/4A*
<b>Weight</b>	approx. 0.32 kg

\* other makes subject to consultation

### Order table

power supply unit	750884
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## Spare part

### Pressure switch

- For neutral gases and liquids
- Switching point adjustable using setscrew



TCDO01

### Order table (without cable plug)

Size	Variant	Setting range	Switching voltage	Material	Seal material	Port connection	Electrical connection	Ident. number
Flange installation	Changeover contact	1–10 bar	max. 250 V/UC	Steel galvanised	NBR	G 1/4" socket	Cable plug design A	780499

## Spare part

TAU001

### Pressure gauge

- For gases and non-crystallising liquids
- Rear connection



### Order table

Diameter	Port connection	Material	Installation position	Size	Pressure	Pressure	Ident. number
Ø 50 mm	G 1/4"	plastic	rear, centric	1.2	0–12 bar	0–160 psi	772138

## Spare part

### Filter regulator

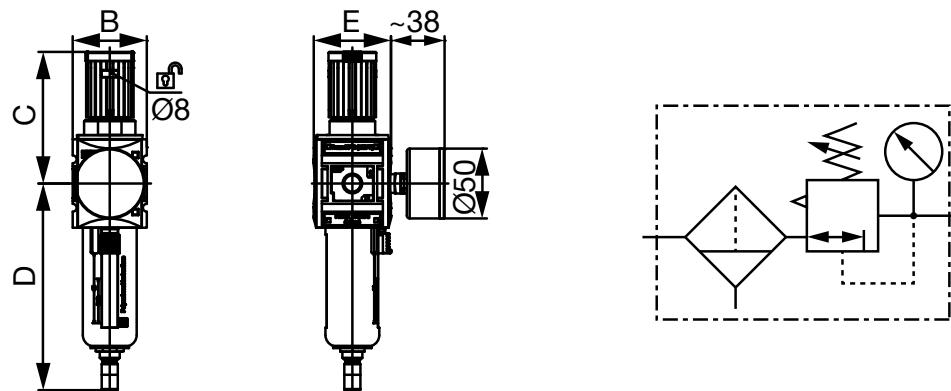
- Simple installation
- Compact design



TPM001

### Order table (without pressure gauge and mounting parts)

Size	Port size	B mm	C mm	D mm	E mm	Material	Q max. at P = 6.3 bar and $\Delta p = -1$ bar, l/min.	Max. Input pressure bar (g)	Control range (bar)	Connection G-thread with autom. condensate draining  Ident. number
2	1/2"	63	110	147	67	Griproxy GV-6H	5200	16	0.5–10	772110



## Spare part

### Solenoid valve for pneumatic applications

- Type 6524: 3/2-way and 2x3/2-way
- Type 6525: 5/2-way
- Low power consumption
- Fast switching times
- Compact design



Standard

#### Technical data

<b>Nominal diameter</b>	DN 4.0 mm
<b>Body material</b>	PPS, PA
<b>Seal material</b>	FKM
<b>Media</b>	Compressed air oiled, oil-free, dry; neutral gases (5 µm filter recommended)
<b>Medium temperature</b>	–10 to +50°C
<b>Ambient temperature</b>	–10 to +50°C
<b>Manual override</b>	Standard
<b>Port connection</b>	Flange for MP11
<b>Pneumatic modules</b>	Type MP11 with M5, M7, plug-in coupling Ø 6 mm
<b>Voltage tolerance</b>	± 10 %
<b>Switching times</b>	approximately 1000 c.p.m.
<b>Operating voltage</b>	24 V DC*
<b>Nominal power</b>	0.8 W/2 x 0.8 W (2x3/2-way)
<b>Nominal operating mode</b>	Continuous operation (100 % duty cycle)
<b>Electr. Connection on valve</b>	Rectangular connector with raster 5.08 mm, Rectangular connector 2,42, 3-pin (2x3/2-way)
<b>Degree of protection</b>	IP40 with rectangular connector
<b>Protection class</b>	3 according to VDE 0580
<b>Installation</b>	with 2 screws M2 x 20/2 screws M2 x 28 (2x3/2-way)
<b>Installation position</b>	any, preferably actuator face up

\* 10% residual ripple permissible

<b>Switching times [ms]</b>	Measurement acc. to ISO 12238
<b>Opening</b>	<10 ms
<b>Closing</b>	<10 ms

## Order table

Type	Circuit function	Nominal diameter [mm]	QNn value Air <sup>1</sup> [l/min.]	Pressure range <sup>2</sup> [bar]	Voltage/Frequency [V/Hz]	Integrated power reduction	Ident. number
6524	<b>C</b> 3/2-on/off valve	4	300	2.5–10	24 V DC*	Yes <sup>3</sup>	184043
6524	<b>C</b> 2x3/2-on/off valve	4	300	2.5–10	24 V DC*	Yes <sup>3</sup>	186260
6524	<b>C</b> 2x3/2-on/off valve	4	300	2.5–10	24 V DC*	No	204710
6525	<b>H</b> 5/2-on/off valve	4	300	2.5–10	24 V DC*	No	179938

\* 10% residual ripple permissible

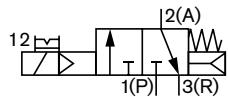
<sup>1</sup> Measurement at +20° C, 6 bar pressure at the valve inlet and 1 bar pressure difference

<sup>2</sup> Overpressure with respect to atmospheric pressure

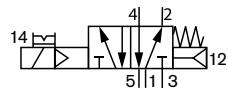
<sup>3</sup> Can be used in valve island Type 8640, AirLINE Type 8644 or valve blocks

### Circuit function

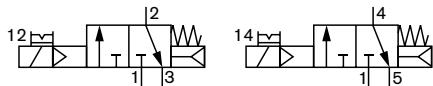
#### **C** 3/2-on/off valve



#### **H** 5/2-on/off valve



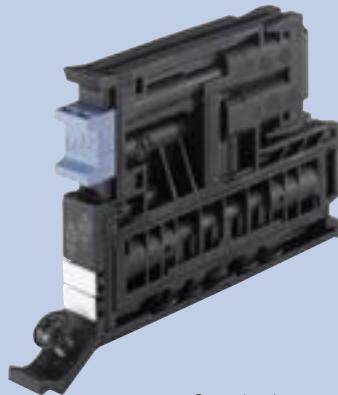
#### **C** 2x3/2-on/off valve



## Spare part

### Solenoid valve for pneumatic applications

- For valve island Type 8652
- Maximum flexibility and reliability
- Switch high pressures with low power consumption
- Short switching times



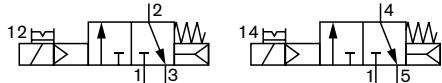
Standard

#### Technical data

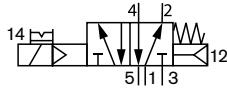
Nominal diameter	DN 4.0 mm
Body material	PA
Seal material	NBR and PUR
Media	Compressed air oiled, oil-free, dry; neutral gases (5 µm filter recommended)
Working ports	Flange for MP15
Air supply connection	Flange for MP15
Manual override available/lockable	Yes/yes
Installation position	any
Installation	1 screw M4 x 10
Flow: QNm value air [l/min]:	Measurement at +20 °C, 6 bar pressure at the valve inlet and 1 bar pressure difference
Pressure data [bar]:	Overpressure with respect to atmospheric pressure
Nominal operating mode	Continuous operation (100 % duty cycle)
Switching times [ms]	Measured according to ISO 12238

#### Circuit function

2x3/2-way solenoid valve servo-assisted, normally closed, with manual override



5/2-way solenoid valve, servo-assisted, with manual override



#### Order table (standard)

Circuit function	Nominal dia-meter [mm]	QNm value Air <sup>1</sup> [l/min]	Pressure range <sup>2</sup> [bar]	Switching times		Voltage/Frequency [V/Hz]	Ident. number <sup>2</sup> incl. screw
				Opening [ms]	Closing [ms]		
<b>C</b> 2x3/2-on/off valve	4	270	Vac. 10 <sup>3</sup> 3 ... 10	15	15	24 V DC	301374
<b>H</b> 5/2-on/off valve	4	290	Vac. 10 <sup>3</sup> 3 ... 10	20	25	24 V DC	301376

1) For hot-swap function approx. 3 % flow reduction

2) The valves are components or spare parts of the valve island Type 8652. They can be used only on the valve island Type 8652.

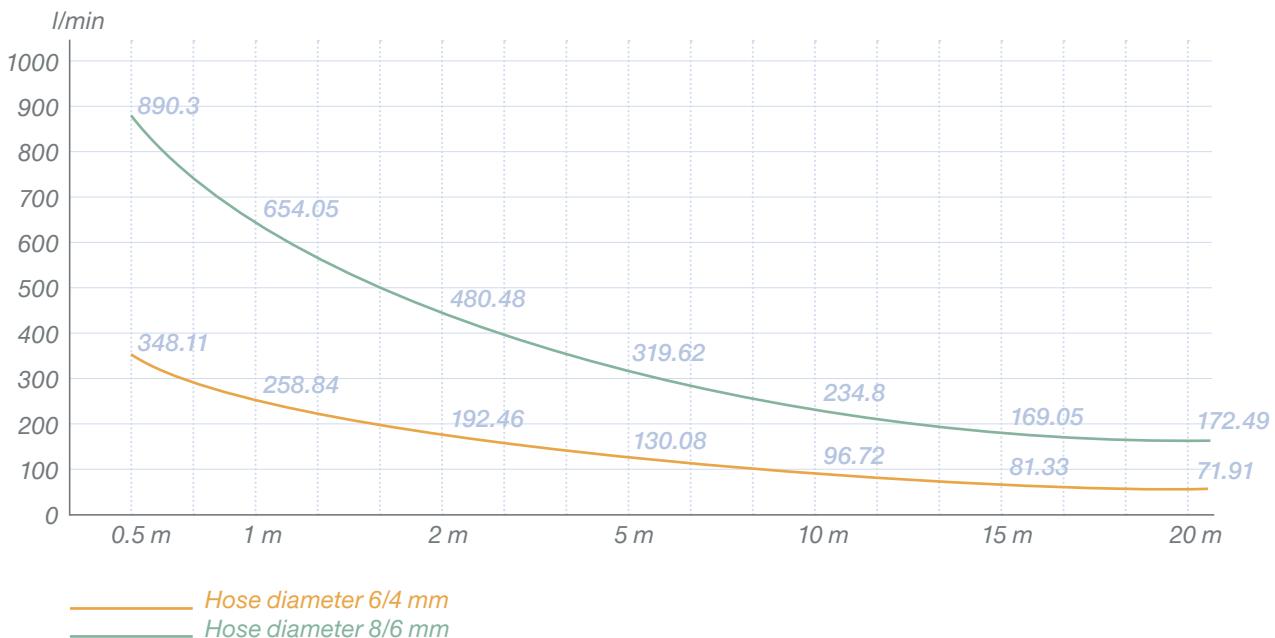
3) Separate auxiliary pilot air at least 3 bar, please observe the control pressure table in the operating instructions

# Flow optimisation with regard to hose length

## Reducing the hose length

A hose presents an additional flow resistance and a disadvantageous volume. Shortening the hose length therefore reduces the volume to be filled and permits the use of “smaller” pilot valves. Experience from real-world applications shows that the flow rate has fallen to 50% after a hose length of approximately 3 – 4 metres, and by an additional 20 – 30% after an additional length of approximately 10 metres. Therefore, the selection of valves and hose dimensions must take these losses into consideration.

$Q_{Nn}$  value (hose diameter 6/4 mm, 8/6 mm)



The diagram shows the influence of hose lengths (6/4; 8/6 mm) on the air flow. Quantitatively similar progressions are also achieved for the hose sizes 10/8 and 12/10 mm. The measurements were taken using multiway valves at + 20 °C and an input pressure of 6 bar. The valve-island configurators include a tool for calculating the flow rates.

## Linear routing of lines

It is also important to ensure that hoses are routed in straight lines wherever possible and kept free of kinks, crushing points and bends as these will impair the flow behaviour, i.e., by increasing flow rate losses in the hose. The diagram illustrates that an enlargement of the hose internal diameter from 6/4 mm to 8/6 mm achieves higher flow values.

# Enhanced process safety

## Pneumatic hot-swap function and check valves



For valve blocks, valve islands and automation systems, there are two specific process reliability features such as hot-swap functionality and check valves. These process reliability features are very important particularly in the hygienic environment.

### **Hot-swap function:**

The Burkert valve islands are designed to allow pilot valves to be replaced quickly and without interrupting system operation, i.e. while it is under pressure and electrically live! The integrated P channel shutoff closes the pressure channel automatically below the valve and opens it again as soon as the new valve is screwed on. You can remove the valve by loosening two fastening screws and simply pulling it away. The pneumatic hot-swap function is the first function of its kind to allow the other valves on a valve island to continue operating as normal with no need to shut down the plant component during the replacement. The result is significantly higher plant availability. The replacement of valves is supported by the ease of handling of the components.

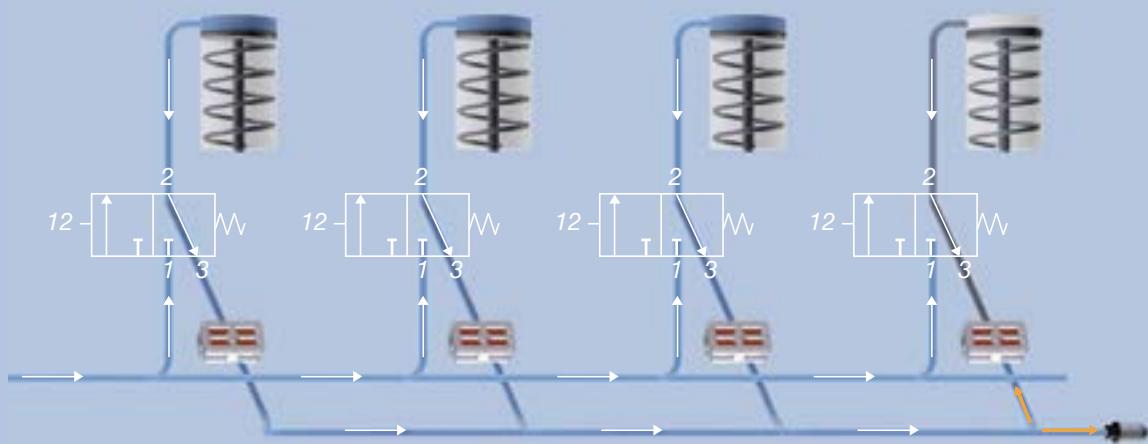
### **Check valves:**

Check valves in the Burkert valve islands enhance process reliability by preventing back pressure. When multiple valves are switched, their exhaust air must be vented via the collective return air duct in the valve island. This can lead to the formation of back pressure in the valve block if venting is not completed quickly enough. In the worst-case scenario, this back pressure can bring about undefined switching statuses. This can have serious consequences for the process, for example, cleaning fluid could enter the product without being immediately detected. The integration of check valves in the basic modules of the Burkert valve island excludes these types of errors from the outset.



Pneumatic hot-swap function  
(P shutoff)

Check valves in the  
exhaust air ducts

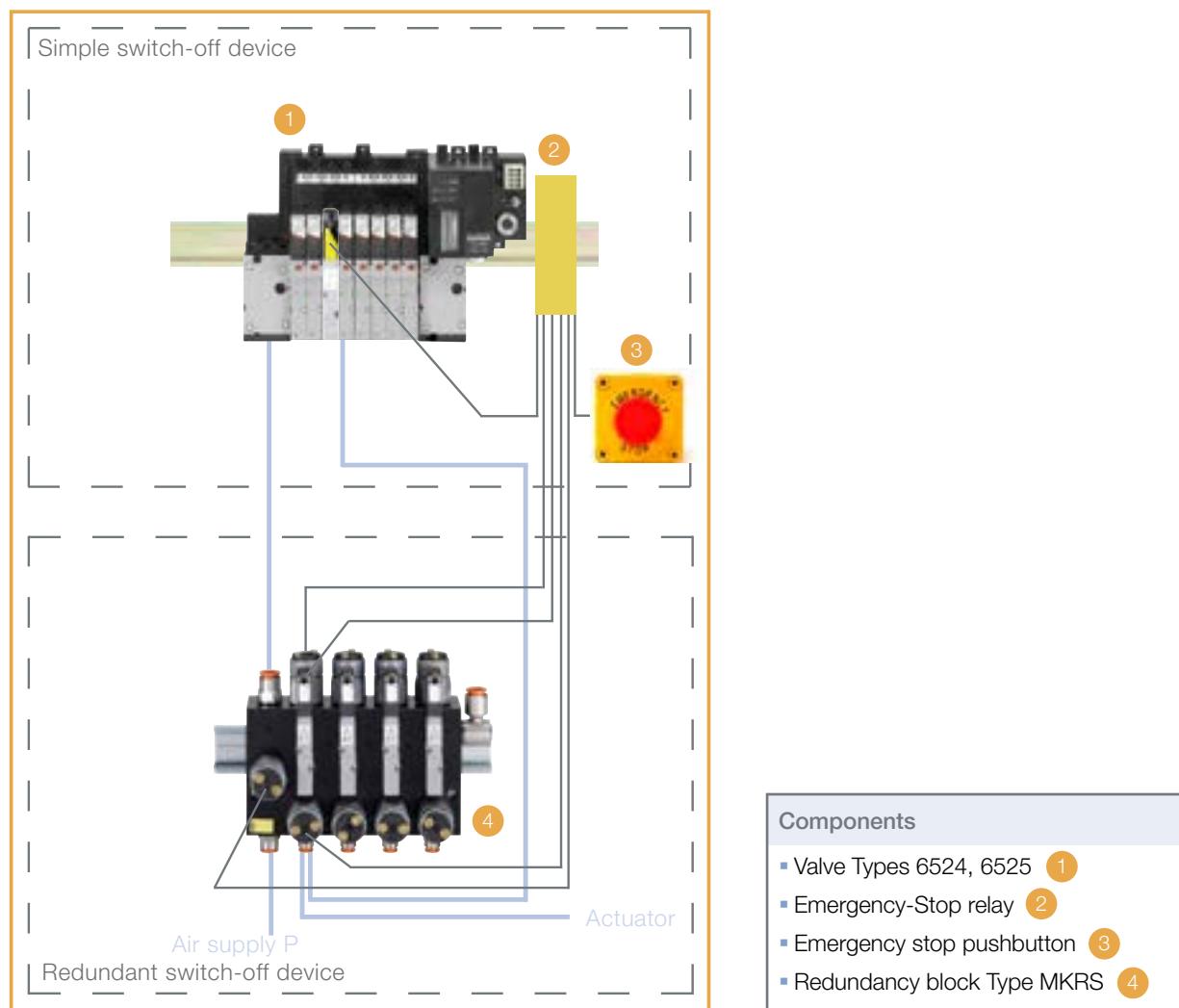


Greater process reliability thanks to check valves

# Safety-related shut-off of pneumatic valves

The versatile applications of valve islands Type 8640, 8644, 8647 and 8652 is extended by the pneumatic valve types 6524, 6525 and 6534 for safety-oriented shut-off.

According to the Machinery Directive EN ISO 13849, machines must be designed to function in such a way that does not cause damage to humans, the environment or to property assets. Safety is the top priority. For this reason, the versatile valve islands are also available with a patented safety-related shutdown (Type 6524, 6525 and 6534). Using these otherwise identical valves, processes can be safely shut down. With the help of a moulded cable or additional terminal, it is possible to switch off the affected valve electrically via a floating contact even though the valve it may still be actuated from the valve island. All other processes continue to operate without any time or product losses. With these valves, the processes can be safely shut down up to Performance Level C in accordance with the Machinery Directive EN ISO 13849. Performance Level D can be achieved by integrating the redundancy block (Type MKRS).





#### Reliable and safe to operate

The innovative valves can be switched off independently of the regular switch signal control of the valve island (multipole or fieldbus communication). The electrical shutdown of the pilot valve can be demonstrated based on the B10d values (B10d values are dimensions for the product lifetime).

#### Flexible retrofitting options

The valve for safe shutdown can be integrated at every valve slot on our valve islands, valves can be retrofitted to suit requirements. This allows the required performance level to be achieved retrospectively.

#### Simple and compact

This practical solution significantly reduces the use of pneumatic and electrical components in the control cabinet. As a result, control cabinets can generally be of much smaller dimensions than in the past.

Pneumatic valves Types 6524, 6525 and 6534 with a second port are available in the following variants  
(For technical data and order table, see P. 112-114):

- 3/2-way valve (only Type 6524, 6525)
- 5/2-way valve
- 2x 3/2-way valve

# In use with a leading manufacturer of dairy products

The installation of the Burkert valve island AirLINE Quick Type 8614 on a new dessert and yoghurt line at the dairy company's production plant in North Rhine-Westphalia qualifies as a reference project. The installation was conducted as a collaboration between the global manufacturer of milk and dairy products, a plant engineering company from southern Germany that specialises in food and the fluid control specialist Burkert Fluid Controls Systems. This particular production plant already processes 300,000 litres of fresh milk daily, from which dessert and yoghurt products are produced. Capacity has been significantly increased by the construction of a new hall and the opening of a flexible production line for pudding as well as yoghurt products, which has been fully networked since mid-2012 following the completion of no less than five parallel packaging lines. The dessert line was initiated as far back as autumn 2011 – where finished products are currently filled into beakers at one-second intervals on three packaging machines before being sealed and packaged into the correct bundles ready for shipment.

## **Control cabinets reliably control 2,000 pneumatic process actuators**

For the design and installation of the complex production line, the plant engineers from southern Germany decided to use the compact Burkert system Type 8614, the AirLINE Quick valve islands in the hygienic-design control cabinet. The plant consists of a computer-controlled loop with a convoluted network of stainless steel pipes, pumps, agitators, heaters and sterile tanks with a capacity of up to 12,000 litres. Almost 2,000 pneumatic process actuators are required to ensure precise delivery and circulation of a wide variety of media throughout the highly complex plant, which also includes an integrated automatic cleaning and disinfection system (CIP) for all pipelines and tanks.

## **A total of 42 hygienic-design control cabinets control all processes with millisecond precision**

The pneumatic drives weighing several kilogrammes – equipped with proximity switches for visual status queries – are installed in huge pneumatic clusters. These have been configured in exemplary fashion in the plant in North Rhine-Westphalia so that they can be accessed quickly and easily via metal gangways when service work is required. The process valve clusters, which precisely control to the nearest millisecond which medium in which quantity is dosed at any one time, are actuated from a total of 42 hygienic-design housings each fitted with two 24-fold AirLINE Quick valve islands including digital position feedback inputs.

## **5 metres instead of 50 metres from control cabinet to actuator**

The majority of pneumatic housings, which are equipped with a PROFIBUS DP for electric actuation in the configuration used by the global dairy company, are installed in the immediate vicinity of the valve clusters - and therefore in the midst of the highly sensitive hygienic process environment. "Where it used to take 20, 30 or 50 metres to reach from the control cabinet to the actuator or sensor, with this new optimised installation, sometimes just five metres will suffice," explains Seifer. Costs are further reduced because the entire plant structure is "more hygienic". This in turn reduces the cost of the cleaning process.

## **Easy cleaning using the pressure washer**

"Having the pneumatic cabinets so close to the process was something we had to get used to in the beginning – especially as we used to have to clean them very carefully in the past," says the company's dairy manager. As the deputy director of "preparation" at one of the four production plants in Germany, he along with his 35 employees is responsible not only for ensuring the correct ingredients and the right product mix, but also for maintaining the strict hygiene standards. "We always take great care whenever we have to treat the AirLINE Quick valve islands with hygienic-design housings with cleaning agents and pressure washers. However, we have long since realised that these essential cleaning procedures present no problems whatsoever!"



*"Where it used to take 20, 30 or 50 metres to reach from the control cabinet to the actuator or sensor, with this new optimised installation, sometimes all we need is just five metres."*

*Kai-Ulrich Seifer (Field Segment Manager .hygienic Food and Beverage, Bürkert Fluid Control Systems)*



# Decentralised automation solutions



Decentralised automation can have significant advantages regarding monitoring, flexibility and security, even with complex projects.

If local access to information and valves is required, decentralised automation offers many further benefits: The basis is formed by flexible process valve systems that make for lean automation processes and straightforward cabling and piping. This shortens planning phases and makes the system design more transparent, saving time and money in the installation phase and ensuring a fast start-up. Operation is efficient and economical thanks to the fact that switching intervals are short, with practically no delay times.

In addition, intelligent information exchange via direct messaging and status diagnostics, greater reliability thanks to a straightforward process monitoring architecture and easy troubleshooting all combined to create cogent arguments. LEDs ensure that switching statuses are clearly visible even from a distance. The components can also be cleaned easily and are suitable for thorough washdowns.

## Your benefits

- Reliable, clear process monitoring
- Hygienic design for optimal cleaning capacity
- Reduced energy costs
- Fast start-up
- Simple maintenance

# Control head Type 8681

**Universal control heads enable direct integration of automation in the field.**

The control head Type 8681 is optimised for decentralised automation of hygienic process valves.

- Universal adaptation: can be combined with all standard valves, ball valves, single and double seat valves
- Handles all pneumatic control, feedback and diagnostic functions all the way to bus communication
- Very easy to clean, proven IP protection and chemically-resistant materials for use in hygienic processing plants in the beverage, food and pharmaceutical industries
- Independent actuation: up to 3 pneumatic actuator chambers
- Separate setting of switching speeds for both movement directions
- Built-in check valve prevents switching errors in process valves due to back pressure
- Process valve switch positions are recorded by the inductive, analogue position sensor and fed back to the higher-level controller
- Teach-in function: Up to 3 switch points can be set at the push of a button or automatically determined by predefined autotune functions
- 4. The switch position can also be read in or confirmed by an external inductive proximity switch
- A coloured status LED indicates the respective switch position of the process valve or diagnostic functions such as maintenance required or error statuses
- Pilot valves are equipped with a mechanical manual override. If the device is closed, the patented magnetically encoded manual override allows the main actuator to be switched from outside.



# Control head for hygienic process valves

8681

## Control head Type 8681

- Universal actuator adaptation to hygienic process valves
- Contactless position sensor with 3 switching points (teach-in function)
- Coloured status LED
- Manual override on the closed housing
- Communication interface, AS-Interface, DeviceNet (option)



### Technical data

Materials	
Body	PA, PPO, VA
Cover	PC
Seal	CR, EPDM
Control medium	
neutral gases, air DIN ISO 8573-1 (recommended filter 5 µm)	
Dust content	Class 7 (< 40 µm particle size)
Particle density	Class 7 (< 10 mg/m³)
Pressure dew point	Class 3 (<-20 °C)
Oil content	Class X (<25 mg/m³)
Supply pressure	2.5 ... 8 bar
Air flow rate solenoid valve <sup>1)</sup> (supply and exhaust air per solenoid valve adjustable)	110 l <sub>N</sub> /m in – for pressurisation and exhaust, lifting device 110 l <sub>N</sub> /m in – delivery condition 200 l <sub>N</sub> /m in – maximum typical flow rate
Pilot air ports	
Air inlet and exhaust air port	G 1/4
Working ports	G 1/8
position sensor	non-contact position sensor, 3 self-regulated switching points PNP (teach-in or autotune function) Normally open contact (normally open), PNP output short circuit proof, with self-clocking short circuit protection
Output current	max. 100 mA per feedback signal
Stroke range	0 to 80 mm
Resolution	≤ 0.1 mm
Total error	± 0.5 mm - if a target is used according to the dimensions drawing, material 1.4021 and a piston rod (Ø 22 mm, material 1.4301) (error refers to the repeatability of a taught position)
Ambient temperature	-10 to +55 °C +5 to +55 °C (ATEX II 3 G Ex nA IIC T 4 ; ATEX II 3 G Ex tD A 22 T 135 °C)
Installation position	any, preferably actuator face up
Degree of protection	IP 65/67 acc. to EN 60529
Protection class	3 (AS-Interface, 24 V DC, DeviceNet); 1 (120 V AC) acc. to DIN EN 61140
Bus actuation	AS-Interface, DeviceNet
EC conformity	EMC2004/108/EC; ATEX 94/9/EC
Ignition protection	ATEX II 3G Ex nA IIC T4 ATEX II 3G Ex tD A22 T135 °C

QNn value for a pressure drop from 7 to 6 bar absolute at 20°C

## Control head for hygienic process valves

### without bus actuation; 24 V DC

<b>Power supply</b>	12 to 28 V DC
<b>Residual ripple at DC</b>	max. 10 %
	< 5 W
<b>Power consumption</b>	(depending on variant and operating state, see operating instructions)
<b>Inputs for valve actuation (Y1 - Y3)</b>	
Signal level - active	U > 10 V, max. 24 V DC + 10 %
Signal level - inactive	U < 5 V
Impedance	U > 30 kOhm
<b>Outputs/binary feedback signals</b>	S1 out - S4 out
Design	Normally open contact (normally open), PNP output short circuit proof, with self-clocking short circuit protection
Switchable output current	max. 100 mA per feedback signal
Output voltage - active	≥ (operating voltage - 2 V)
Output voltage - inactive	max. 1 V in the unloaded state
<b>Input/proximity switch (external proximity switch: S4 in)</b>	
Operating voltage	Voltage present at control head - 10 %
Current carrying capacity, sensor power supply	max. 90 mA short-circuit protection
Design	DC 2- and 3-conductor, NO or NC (factory setting NO), PNP output
Input current 1 signal	$I_{\text{Sensor}} > 6.5 \text{ mA}$ , limited internally to 10 mA
Input voltage 1 signal	$U_{\text{Sensor}} > 10 \text{ V}$
Input current 0 signal	$I_{\text{Sensor}} < 4 \text{ mA}$
Input voltage 0 signal	$U_{\text{Sensor}} < 5 \text{ V}$
Electrical connection	
Multipole	M12 12-pin with cable 8 cm, 1 x M16 x 1.5 cable glands for external proximity switch (clamping range 3 ... 6 mm)
Cable gland	M16 x 1.5 (cable Ø 5 ... 10 mm, screw-type terminals 0.14 ... 1.5 mm <sup>2</sup> ), 1 x M16 x 1.5 cable gland for external proximity switch (clamping range 3 ... 6 mm)

### without bus actuation; 120 V AC

<b>Power supply</b>	110 to 130 V AC/50/60 Hz
<b>Current consumption (standby current)</b>	10 mA at 120 V AC
<b>Inputs for valve actuation (Y1 - Y3)</b>	
Signal level - active	U > 60 V AC
Signal level - inactive	U < 20 V AC
Impedance	> 40 kOhm
<b>Outputs/binary feedback signals</b>	S1 out - S3 out
Design	Normally open contact (normally open), L switching, short-circuit protection via automatically resetting fuse
Switchable output current	max. 50 mA per feedback signal
Output voltage - active	≥ (operating voltage - 2 V)
Output voltage - inactive	max. 1 V in the unloaded state
<b>Input/proximity switch (external proximity switch: S4 in)</b>	
Operating voltage	Voltage present at control head - $U_{\text{Nominal}} = 120 \text{ V AC}, 50/60 \text{ Hz}$
Current carrying capacity, sensor power supply	max. 0.7 A
Design	DC 2- and 3-conductor, NO contact, L switching
Input current 1 signal	$I_{\text{Sensor}} < 2 \text{ mA}$
Electrical connection	
Cable gland	M16 x 1.5 (cable Ø 5 ... 10 mm, screw-type terminals 0.14 ... 1.5 mm <sup>2</sup> ), 1 x M16 x 1.5 cable gland for external proximity switch (clamping range 3 ... 6 mm)

# Control head for hygienic process valves

## With bus actuation; AS-Interface

<b>Profile</b>	S-7.A.E (A/B slave max . 62 slaves/master) S-7.F.F (max . 31 slaves/master)
<b>Power supply</b>	
via bus line	as per specification
separate from bus signal	reversible (jumper)
<b>Current consumption of devices without external power supply</b>	
Max. Current consumption	240 mA (incl. external proximity switch with 90 mA)
Current consumption in normal operation (acc. to current reduction; valve +1 end position achieved)	≤ 150 mA 3 valves enabled, 1 position confirmed with LED display, no external proximity switch
<b>Current consumption of devices with external power supply</b>	
The power supply unit must include a secure disconnect in accordance with IEC 364-4-41. It must conform to the SELV standard. The ground potential may not have an earth connection.	19.2 V DC to 31.6 V DC ≤ 110 mA 24 V DC ≤ 150 mA type.
Output (from master perspective)/solenoid valves	
Max. switching capacity	0.9 W (per solenoid valve)
Typ. continuous output	0.6 W (per solenoid valve)
Watch-dog function	integrated
Inrush current	30 mA or 0.9 W/200 ms (at 30.5 AS-Interface voltage)
Hold current	20 mA or 0.6 W/200 ms (at 30.5 AS-Interface voltage)
Operating mode	Continuous operation (100 % operation)
Valve type	6524
<b>Input/proximity switch (external proximity switch: S4 in)</b>	
Operating voltage	AS-Interface voltage present at control head - 10 %
Current carrying capacity, sensor power supply	max. 30 mA short-circuit protection
Design	DC 2- and 3-conductor, NO or NC (factory setting NO), PNP output
Input current 1 signal	$I_{Sensor} > 6.5 \text{ mA}$ , limited internally to 10 mA
Input voltage 1 signal	$U_{Sensor} > 10 \text{ V}$
Input current 0 signal	$I_{Sensor} < 4 \text{ mA}$
Input voltage 0 signal	$U_{Sensor} < 5 \text{ V}$
Electrical connection (Standard: AS-Interface flat cable clip, 80 cm)	M12 4-pin at cable 8 cm (acc. 0.3 m cable length acc. to AS-Interface specification) 1 x M16 x 1.5 cable gland for external proximity switch (clamping range 3 ... 6 mm) M12 4-pin at cable 80 cm (acc. 1.0 m cable length acc. to AS-Interface specification) 1 x M16 x 1.5 cable gland for external proximity switch (clamping range 3 ... 6 mm)

# Control head for hygienic process valves

## With bus actuation: DeviceNet

<b>Power supply</b>	11 to 24 V DC (acc. to specification)
<b>Max. Current consumption</b>	200 mA at 24 V DC
<b>Input/proximity switch (external proximity switch: S4 in)</b>	
Operating voltage	via DeviceNet power supply - 10 %
Current carrying capacity, sensor power supply	max. 30 mA
Design	DC 2- and 3-conductor, NO contact, PNP output
Input current 1 signal	$I_{Sensor} > 6.5 \text{ mA}$ , limited internally to 10 mA
Input voltage 1 signal	$U_{Sensor} > 10 \text{ V}$
Input current 0 signal	$I_{Sensor} < 4 \text{ mA}$
Input voltage 0 signal	$U_{Sensor} < 5 \text{ V}$
<b>Output (from master perspective)/solenoid valves</b>	
Max. switching capacity	1.0 W
Typ. continuous output	0.6 W
Power reduction	via DeviceNet – electronically integrated
Inrush current	120 mA typ. at 24 V DC (3 valves)
Hold current	100 mA typ. at 24 V DC (3 valves)
Operating mode	Continuous operation (100% operation)
Valve type	6524
Electrical connection	
Multipole	M12, 5-pin on cable 80 cm, 1 x M16 x 1.5 cable gland for external proximity switch (clamping range 3 ... 6 mm.)

## Bit configuration table

Databit	D3	D2	D1	D0
Input	External proximity switch S4	Position 3	Position 2	Position 1
Output	not used	Solenoid valve 3	Solenoid valve 2	Solenoid valve 1
Parameter bit	D3	D2	D1	D0
Output	not used	not used	not used	not used

## Programming data table

Databit	Programming data with 62 slaves AS-Interface - device for A/B slave addressing (standard device)	Programming data with 31 slaves AS-Interface (optional)
I/O - configuration	7 hex (4 inputs/4 outputs)  see bit configuration table	7 hex (4 inputs/4 outputs)  see bit configuration table
ID-Code	A hex	F hex
Extended ID code 1	7 hex	(F hex)
Extended ID code 2	E hex	(F hex)
Profile	S-7.A.E	S-7.F.F

## Control head for hygienic process valves

### Order table

Communication	Power supply	Connection	ATEX Zone 2/22 cat. 3	Number of solenoid valves	Position feedback sensor	Order no.
none	12 ... 28 VDC	Cable gland	none	0	3 int. + 1 ext.	<b>196 410</b>
			none	1	3 int. + 1 ext.	<b>196 411</b>
			none	2	3 int. + 1 ext.	<b>196 412</b>
			none	3	3 int. + 1 ext.	<b>196 413</b>
			screw to	1	3 int. + 1 ext.	<b>196 415</b>
	12 ... 28 VDC	M12, 12-pin, cable 8 cm	none	0	3 int. + 1 ext.	<b>196 420</b>
			none	1	3 int. + 1 ext.	<b>196 421</b>
			none	2	3 int. + 1 ext.	<b>196 422</b>
			none	3	3 int. + 1 ext.	<b>196 423</b>
			screw to	1	3 int. + 1 ext.	<b>196 425</b>
	120 V AC	Cable gland	none	0	3 int. + 1 ext.	<b>196 470</b>
			none	1	3 int. + 1 ext.	<b>196 471</b>
			none	2	3 int. + 1 ext.	<b>196 472</b>
			none	3	3 int. + 1 ext.	<b>196 473</b>
			screw to	1	3 int. + 1 ext.	<b>196 475</b>
AS-Interface (62 slaves)	29.5 ... 31.6 V DC	Variant with ASI flat cable terminal and 80 cm cable	none	0	3 int. + 1 ext.	<b>196 430</b>
			none	1	3 int. + 1 ext.	<b>196 431</b>
			none	2	3 int. + 1 ext.	<b>196 432</b>
			none	3	3 int. + 1 ext.	<b>196 433</b>
			screw to	1	3 int. + 1 ext.	<b>196 435</b>
DeviceNet	via bus	M 12, 5-pin, cable 80 cm	none	0	3 int. + 1 ext.	<b>196 450</b>
			none	1	3 int. + 1 ext.	<b>196 451</b>
			none	2	3 int. + 1 ext.	<b>196 452</b>
			none	3	3 int. + 1 ext.	<b>196 453</b>
			screw to	1	3 int. + 1 ext.	<b>196 455</b>

### Order table accessories

Variant	Order no.
Silencer PE G 1/4 (spare part)	<b>780 780</b>
Dummy plug PP G 1/8 (spare part)	<b>770 901</b>
Rotary elbows male brass nickel-plated G 1/4 for Ø hose 8/6	<b>780 084</b>
Rotary elbows male brass nickel-plated G 1/8 for Ø hose 6/4	<b>780 082</b>
Universal adapter flange with O-ring	<b>196 495</b>
Target for position sensor, 1.4021	<b>196 494</b>
Magnetic hand tool actuation	<b>196 490</b>
Cable 8 cm with connector M12 12-pin for 24 V DC (spare part)	<b>217 574</b>
Cable 80 cm with connector M12 4-pin for ASi (spare part)	<b>217 572</b>
Cable 8 cm with connector M12 4-pin for ASi (spare part)	<b>217 573</b>
ASI flat cable terminal with M12 stainless steel bushing	<b>799 646</b>
Cable 80 cm with connector M12 5-pin for DeviceNet (spare part)	<b>218 187</b>
USB adapter set for PC communication	<b>227 093</b>
Set with 20 pcs. lead seals to prevent opening of the cover without tools (spare part)	<b>257 100</b>

# Adaptation for control head for hygienic process valves

## Order table adaptations

Bürkert adapter suitable for Alfa Laval valves	Alfa Laval Type Bürkert Type	LKLA Ø 87 mm for LKB	LKLA Ø 156 mm for LKB	Unique Mixproof	Unique SSV Ø 85 mm Ø 115 mm Ø 156 mm	SRC Ø 87 mm	Unique 7000
Order no.	Type 8681*	251 806	251 806	251 806	251 806	251 806	251 806

Bürkert adapter suitable for GEA Tuchenhagen valves	GEA Type** Bürkert Type	T-Smart 8000	T-Smart 7 T-Smart 9	EcoVent	Varivent AA - EH5	Varivent DF6 - SN6	Varivent ZZBB - ZEH
Order no.	Type 8681*	230 967	279 454	230 973	230 973	230 973	230 973

Bürkert adapter suitable for GEA Tuchenhagen valves	GEA Type** Bürkert Type	Varivent Z ZEK6Z - SN6Z	Varivent Mixproof	SCAMI
Order no.	Type 8681*	230 973	230 973	228 711

Bürkert adapter suitable for Definox valves	Definox Series Bürkert Type	DPAX	DCX3 DCX4
Order no.	Type 8681*	682 517	230 970

Bürkert adapter suitable for Aseptomag stroke actuators	Aseptomag Bürkert Type	PA Ø 80/100 mm	
Order no.	Type 8681*	230 985	

Bürkert adapter suitable for APV/SPX valves	APV SPX Type Bürkert Type	SV1/SV1F	SW4
Order no.	Type 8681*	230 992	230 966

Bürkert adapter suitable for Bardiani valves	Bardiani valves Bürkert Type	BBZPM Stainless steel	Mach 83/98 Stainless steel	ZAW Stainless steel	ZD90 Stainless steel
Order no.	Type 8681*	683 478	On request	On request	246 082

Bürkert adapter suitable for Tyco Hovap valves	Tyco Hovap Bürkert Type	BASICFLOW SERIES 9600-9630	VARIFLOW
Order no.	Type 8681*	230 982	230 983

Bürkert adapter suitable for Kieselmann valves	Kieselmann Bürkert Type	Pn. actuator PA Ø 160
Order no.	Type 8681*	245 852

\* For Type 8681 - pilot air duct: external piping

\*\* Can only be used in conjunction with GEA Tuchenhagen valves in CF A, CF B subject to prior testing or on request

# EDIP - The flexible solution for efficient processes

The digital revolution has brought about a high degree of process automation in production processes. Now Industry 4.0 is here with the second digitalization phase in which machines, sensors, actuators and people are networked with each other and can exchange information with each other. With EDIP – the Efficient Device Integration Platform – Bürkert opens up the world of intelligent networking for its products in this age of digitalization.

EDIP is the new device platform that unifies the operation, communication and interfaces of the process devices. The platform consists of the three components communication, software and hardware.

All future Bürkert field devices will be based on EDIP. The platform already offers numerous modules that simplify intelligent networking.



*Online Analysis System:  
Modular system with 7'' touch screen  
for monitoring all important potable  
water parameters at a glance.*



*FLOWave: Innovative flow  
meters without sensor ele-  
ments in the measuring tube  
for hygienic applications.*



*Mass flow controllers/  
meters for lean and  
precise gas control.*



*2-way motorised  
proportional valve.*



Electromotive process control valve for use in plants without compressed air.



Fieldbus gateway: A multi-protocol module for integrating Bürkert field devices in industrial communication standards.



AirLINE: Valve island for reliable control of process technology.



ELEMENT  
control heads  
and position  
controllers.

### Your benefits at a glance

- Standardised operating and display concept
- Simple and quick start-up
- Access to detailed device diagnosis via the digital interface
- If service is required, quick and simple parameter transfer by exchanging storage medium
- Add new measurement functions quickly and reliably
- Comprehensive options for connection to higher-level controllers
- Simple programming of new functions via graphical interface of the “Bürkert Communicator” software tool

## Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 390 mm

4 multiple cable glands



Valve island Type 8652 AirLINE Quick

Installation width 390 mm

4 multiple cable glands

Power supply unit



# Sample configuration

## Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 390 mm

4 multiple cable glands

Power supply unit

I/O system by Siemens



8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 390 mm

Filter regulator



## Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 390 mm

Power supply unit

Filter regulator



Valve island Type 8652 AirLINE Quick

Installation width 390 mm

Power supply unit

Filter regulator

Pressure switch



# Sample configuration

## Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

8 multiple cable glands



8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Power supply unit



## Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Power supply unit

I/O system by Siemens



Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Filter regulator



# Sample configuration

## Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator



Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens



## Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens

Pressure switch



Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Wago



# Sample configuration

## Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Wago

Pressure switch



# Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

Filter regulator



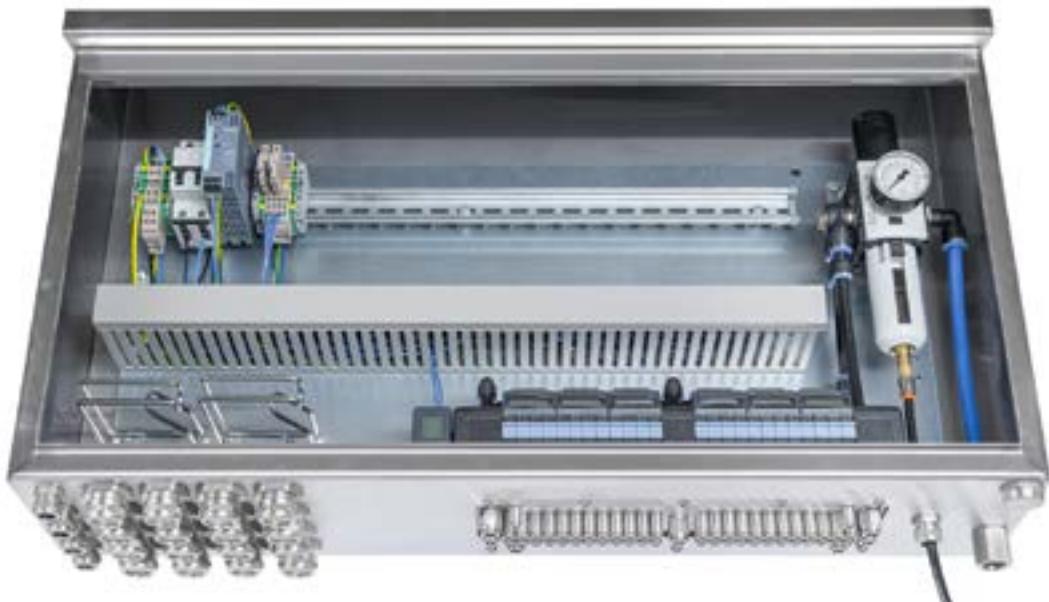
Valve island Type 8652 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

Power supply unit

Filter regulator



# Sample configuration

## Type 8614/8652

Valve island Type 8652 AirLINE Quick

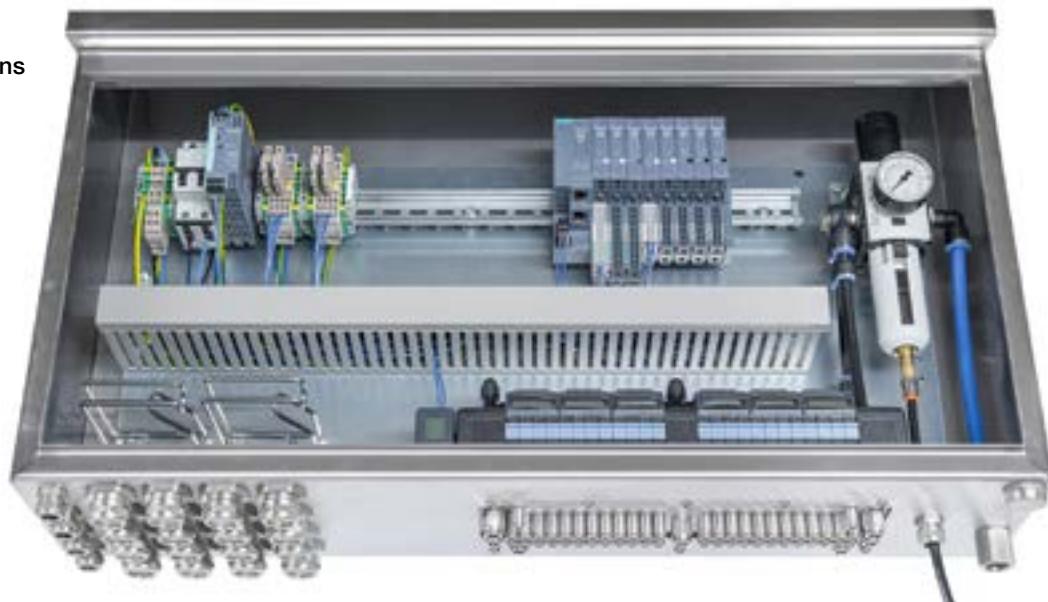
Installation width 810 mm

16 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens



Valve island Type 8652 AirLINE Quick

Installation width 810 mm

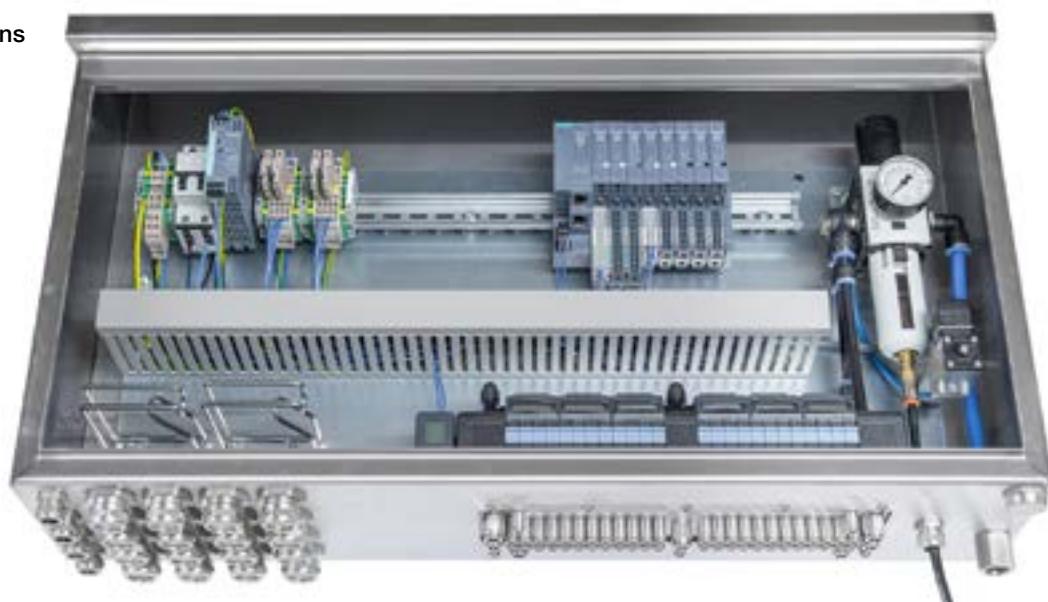
16 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens

Pressure switch



# Sample configuration Type 8614/8652

Valve island Type 8652 AirLINE Quick

Installation width 810 mm

8 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens

Pressure switch



Valve island Type 8652 AirLINE Quick

Installation width 810 mm

8 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens

Pressure switch





# Sample configuration Type 8614/8640

8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 390 mm



Valve island Type 8640 AirLINE Quick

Installation width 390 mm

8 multiple cable glands



# Sample configuration

## Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 390 mm

8 multiple cable glands

Direct digital inputs



8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 390 mm

8 multiple cable glands

Direct digital inputs

Power supply unit



## Sample configuration Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Direct digital inputs

Filter regulator



Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Direct digital inputs

Power supply unit

Filter regulator



# Sample configuration

## Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Direct digital inputs

Power supply unit

Filter regulator

Pressure switch



8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Direct digital inputs

Filter regulator

I/O system by Siemens



# Sample configuration Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens



Valve island Type 8640 AirLINE Quick

Installation width 510 mm

8 multiple cable glands

Power supply unit

Filter regulator

Pressure switch

I/O system by Siemens



# Sample configuration

## Type 8614/8640

Valve island AirLINE Quick Type 8640

Installation width 810 mm

8 multiple cable glands

Direct digital inputs

Filter regulator



8614/8640

Valve island Type 8640 AirLINE Quick

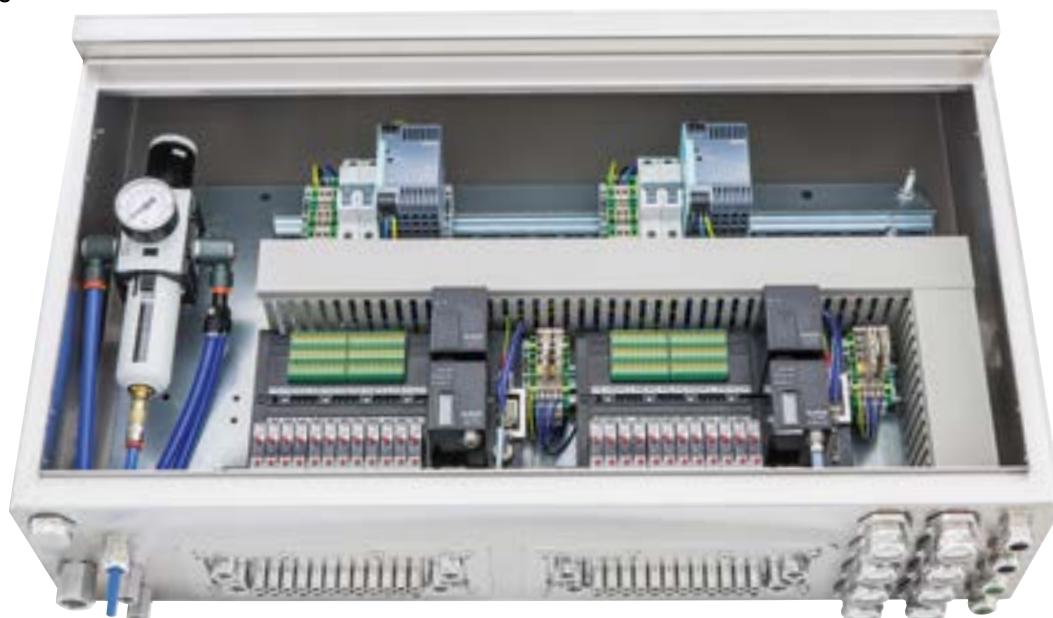
Installation width 810 mm

8 multiple cable glands

Direct digital inputs

Power supply units

Filter regulator



# Sample configuration Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 810 mm

8 multiple cable glands

Direct digital inputs

Power supply units

Filter regulator

Pressure switch



Valve island AirLINE Quick Type 8640

Installation width 810 mm

16 multiple cable glands



# Sample configuration

## Type 8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

I/O system by Siemens



8614/8640

Valve island Type 8640 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

Power supply units

I/O system by Siemens



## Sample configuration Type 8614/8647

Valve island AirLINE SP Type 8647

Installation width 390 mm

4 multiple cable glands



Valve island AirLINE SP Type 8647

Installation width 390 mm

4 multiple cable glands

Power supply unit



# Sample configuration

## Type 8614/8647

Valve island AirLINE SP Type 8647

Installation width 390 mm

4 multiple cable glands

Power supply unit

I/O system by Siemens



8614/8647

Valve island AirLINE SP Type 8647

Installation width 510 mm

4 multiple cable glands

Filter regulator



## Sample configuration Type 8614/8647

Valve island AirLINE SP Type 8647

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator



Valve island AirLINE SP Type 8647

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens



# Sample configuration

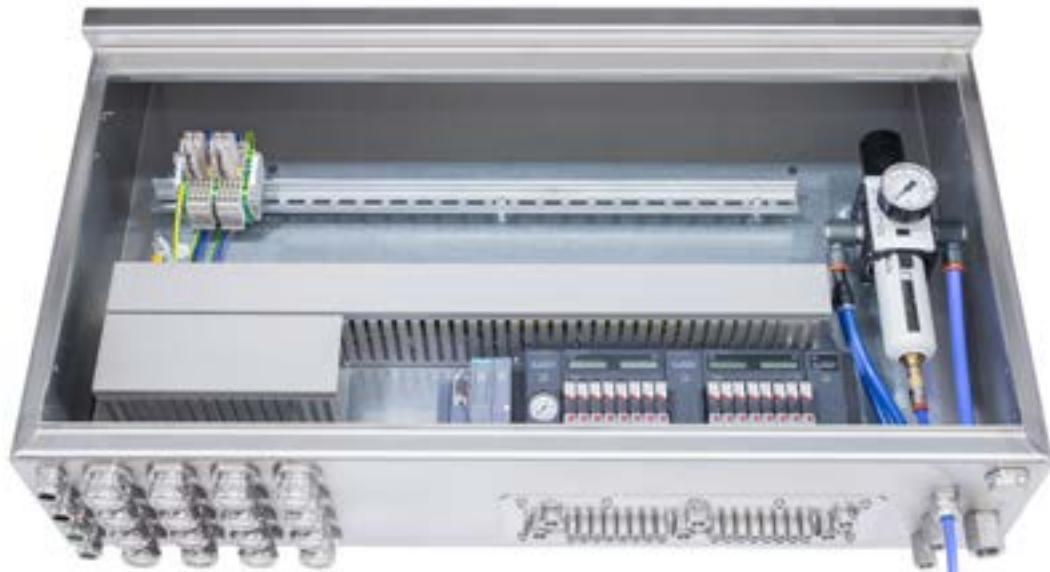
## Type 8614/8647

Valve island AirLINE SP Type 8647

Installation width 810 mm

16 multiple cable glands

Filter regulator



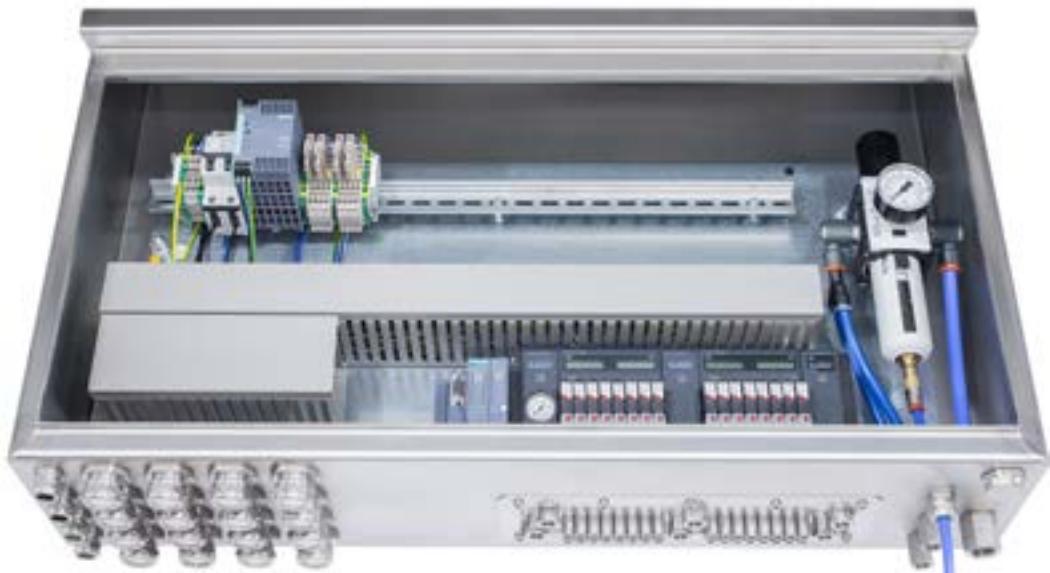
Valve island AirLINE SP Type 8647

Installation width 810 mm

16 multiple cable glands

Power supply unit

Filter regulator



## Sample configuration Type 8614/8647

Valve island AirLINE SP Type 8647

Installation width 810 mm

16 multiple cable glands

Power supply unit

Filter regulator

I/O system by Siemens





## Sample configuration Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 390 mm

4 multiple cable glands



Valve island Type 8644 AirLINE Quick

Installation width 390 mm

4 multiple cable glands

I/O system by Siemens



# Sample configuration

## Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 390 mm

4 multiple cable glands

Power supply unit

I/O system by Siemens



8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 390 mm

4 multiple cable glands

Power supply unit

I/O system by Siemens

Pressure switch (in the right-hand pressure gauge port)



## Sample configuration Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

12 multiple cable glands



Valve island Type 8644 AirLINE Quick

Installation width 510 mm

12 multiple cable glands

I/O system by Wago



# Sample configuration

## Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

12 multiple cable glands

Power supply unit

I/O system by Wago



8614/8644

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Installation width 510 mm

12 multiple cable glands

Power supply unit

I/O system by Wago

Pressure switch

(in the right-hand pressure gauge port)



## Sample configuration Type 8614/8644

Valve island Type 8644 AirLINE Quick

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I/O system by Rockwell (on request)



# Sample configuration

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8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Filter regulator



## Sample configuration Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Filter regulator

I/O system by Rockwell (on request)



Valve island Type 8644 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Rockwell (on request)



# Sample configuration

## Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Power supply unit

Filter regulator

I/O system by Rockwell (on request)

Pressure switch

(in the right-hand pressure gauge port)



8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 510 mm

4 multiple cable glands

Filter regulator

I/O system by Siemens



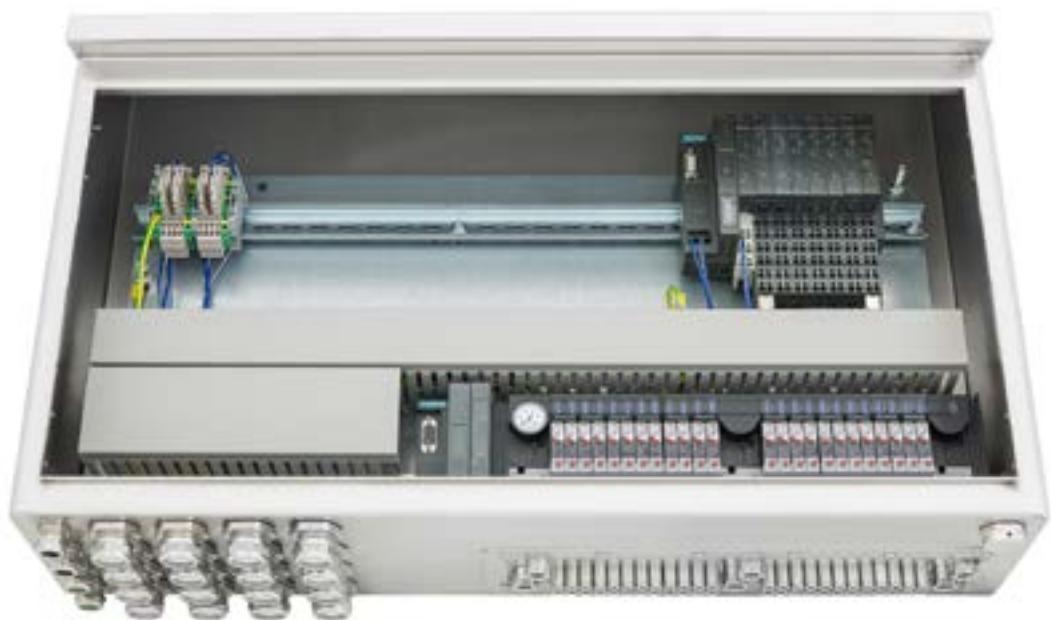
# Sample configuration Type 8614/8644

Valve island Type 8644 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

I/O system by Siemens



Valve island Type 8644 AirLINE Quick

Installation width 810 mm

16 multiple cable glands

Power supply units

I/O system by Siemens



# You can download all certificates free of charge from our website:

## Management certificates:

Certificates for the areas of quality, environmental as well as occupational health and safety management

<https://www.burkert.com/en/Service-Support/Company-certificates/Management-system-certificates>

## Factory certificates:

Certificates relating to topics such as the Pressure Equipment Directive, EC design inspection documents,

ATEX certificates and IECx certificates

<https://www.burkert.com/en/Service-Support/Company-certificates/Factory-Certificates>

The image displays several examples of certificates and documents from Burkert:

- ISO 9001:2015 Zertifikat:** A certificate issued by TÜV SÜD Management Service GmbH to Christian Burkert GmbH & Co. KG, dated 01.04.2019, valid until 22.11.2020. It covers sites in Ingelheim and Darmstadt.
- PTB Anlage zur Qualitätsicherung:** A document detailing quality management systems for various production processes at different locations.
- PTB Mitteilung:** A document detailing quality management systems for various production processes, including ATEX certification for site 01.
- UL Certificate of Compliance:** A certificate for Industrial Control Panels, UL62362-2-19, listing specific product numbers and their compliance with UL62362-2-19 requirements.