



Modular valve island for pneumatics

- Compact design
- Modular configuration
- Higher flexibility in control cabinet due to AirLINE Quick
- Simple exchange of valves
(with option "P-shut-off" – also possible during operation)

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

Can be combined with

	Type 6524 3/2-way or 2 x 3/2-way solenoid valve for pneumatic applications
	Type 6525 5/2-way solenoid valve for pneumatic applications
	Type 8614 Pneumatic control cabinet solutions for hygienic process environments
	Type 0498 Double pilot controlled check valve for realising 5/3-way function with all ports blocked
	Type 2000 Pneumatically operated 2/2-way angle seat valve CLASSIC

Type description

The Type 8640 valve unit system is designed to solve diverse and complex control problems due to its systematic modular construction and combination of pneumatic and electrical interfaces. By putting together a row of pneumatic modules with different numbers of valves, 2 to 24 valve functionalities may be realized on one valve unit. Electrical connectivity is achieved by either fieldbus interfaces, common connection (parallel connection technique) or multipin interfaces. The valves allow different applications to be covered. Bodies and connection modules are made of high-quality plastic (polyamide) and are easy to assemble by means of the built-in snap connectors.

Table of contents

1. General technical data	4
1.1. General data	4
1.2. Solenoid valves Type 6524 and Type 6525	6
1.3. Solenoid valves Type 0460.....	7
1.4. Solenoid valves Type 6526 and Type 6527.....	8
1.5. Solenoid valve Type 5470	9
1.6. AirLINE Quick.....	10
2. Product variants	11
2.1. Notes on compatibility and revision levels.....	11
2.2. Distinguishing features	11
Valve island	11
Module.....	12
Valves.....	12
3. Circuit functions	13
3.1. Standard functions.....	13
3.2. SIA variant	13
4. Approvals and conformities	14
4.1. General notes	14
4.2. Conformity	14
4.3. Standards.....	14
4.4. Explosion protection.....	14
4.5. North America (USA/Canada).....	14
5. Materials	14
5.1. Bürkert resistApp.....	14
6. Dimensions	15
6.1. Pneumatics 11 mm width per station	15
6.2. Pneumatics 16 mm width per station.....	16
7. Product connections	17
7.1. Collective connection modules and multipole modules	17
7.2. Fieldbus modules.....	17
8. Product design and assembly	18
8.1. Product assembly	18
Electronics.....	18
Pneumatics 11 mm width per station	19
Pneumatics 16 mm width per station.....	20
AirLINE Quick adapter.....	21
Type 8640 programme.....	22

9. Ordering information

22

9.1.	Bürkert eShop	22
9.2.	Bürkert product filter	22
9.3.	Ordering chart replacement valves	23
	Solenoid valves Type 6524 and Type 6525	23
	Solenoid valves Type 0460	24
	Solenoid valves Type 6526 and Type 6527	25
	Solenoid valves Type 5470	26
9.4.	Ordering chart accessories	27
	Cover plate	27
	Blind plates AirLINE Quick	27
	Bus Y-piece	27
	RIO cable for bus extension	27
9.5.	Ordering chart spare parts	28
	Spare parts SVVI for Type 8640, REV1, REV2 – Pneumatics 11 mm width per station	28
	Spare parts SVVI for Type 8640, REV1, REV2 – Pneumatics 16 mm width per station	29
	Spare parts SVVI for Type 8640, REV3 – Pneumatics 11 mm width per station	30
	Spare parts SVVI for Type 8640, REV3 – Pneumatics 16 mm width per station	32

1. General technical data

1.1. General data

Note:

Further information can be found in chapter:

- Type 6524, 6525 “[1.2. Solenoid valves Type 6524 and Type 6525](#) on page 6
- Type 0460 “[1.3. Solenoid valves Type 0460](#)” on page 7
- Type 6526, 6527 “[1.4. Solenoid valves Type 6526 and Type 6527](#)” on page 8
- Type 5470 “[1.5. Solenoid valve Type 5470](#)” on page 9

Product properties	Type 0460, Type 6524, Type 6525	Type 6526, Type 6527	Type 5470
Dimensions	Further information can be found in chapter “ 6. Dimensions ” on page 15.		
Material			
Body	PA (polyamide), aluminium (Type 0460)	PA (polyamide), aluminium	PA (polyamide)
Seal	FKM, NBR and PUR	NBR	NBR
Maximum installation width of a valve island	Further information can be found in chapter “ 6. Dimensions ” on page 15.		
Width per station	11 mm	16.5 mm	19 mm
Manual override	Standard	Standard	Standard
Number of valve slots	24 Max. 12 for impulse and double valves (only for multipol plug and fieldbus connection)	Max. 24	Max. 24
Maximum number of valve functions	Max. 48 (only for individual wiring and multiple connection) Max. 24 (only for multipol plug and fieldbus connection)	Max. 24	Max. 24
Switching function/Circuit function ¹⁾	Further information can be found in chapter “ 3. Circuit functions ” on page 13.		
Pneumatic intermediate supply	Possible via centre feed plate on a valve slot	Only possible with individual wiring	Only possible with individual wiring
Performance data			
Pressure data	Overpressure to atmospheric pressure	Overpressure to atmospheric pressure	Overpressure to atmospheric pressure
Pressure range	Vac....10 bar	Vac....10 bar	Vac. 2...10 bar
External supply air (auxiliary pilot air)	> 2.5 bar (Type 0460: not possible)	> 2 bar	Not possible
Flow rate Q _{Nn} value air	200...300 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure	700 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure	300 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure
Flow rate Q _{Nn} value air with integrated P shut-off	Flow reduced by approx. 20 %	N/A	N/A
Nominal operating mode	Continuous operation (100 % duty cycle)	Continuous operation (100 % duty cycle)	Continuous operation (100 % duty cycle)
Switching time	Measured according to ISO 12238	Measured according to ISO 12238	Measured according to ISO 12238

Electrical data					
Operating voltage	24 V DC	24 V DC	24 V DC		
Voltage tolerance	± 10 %	± 10 %	± 10 %		
Residual ripple (at DC)	1 Vss	1 Vss	1 Vss		
Nominal power of each valve	For single valves: 0.8 W For impulse and double valves: 2x 0.8 W with power reduction	2 W, 1 W	1 W, 2 W, 3 W		
Nominal current of each valve	See total current	See total current	See total current		
Digital input	Max. 32	Max. 32	Max. 32		
Protection class	III according to VDE 0580	III according to VDE 0580	III according to VDE 0580		
Total current		Depending on the electrical connection technology			
With common collective connection	Max. 3 A (total current of the individual valves)				
With multipole connection	Max. 3 A (total current of the individual valves) + max. 3 A (digital inputs)				
With fieldbus connection	$I_{\text{TOTAL}} = I_{\text{BASE}} + (n \times I_{\text{VALVE}}) + (m \times I_{\text{digital input}})$ n=quantity of valves, m=quantity of digital inputs, I_{VALVE} = rated current of each valve $I_{\text{digital input}}$ = rated current of each digital inputs, $m \times I_{\text{digital input}}$ =max. 650 mA $I_{\text{BASE}}=200$ mA specific base current PROFIBUS DP				
Medium data					
Operating medium	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)		
Compressed air quality	ISO 8573 - 1: 2010, Class 7.4.4	ISO 8573 - 1: 2010, Class 7.4.4	ISO 8573 - 1: 2010, Class 7.4.4		
Approvals and conformities					
Degree of protection	IP20 IP65 in closed control cabinets	IP20 IP65 in closed control cabinets	IP20 IP65 in closed control cabinets		
Explosion protection	Further information can be found in chapter " 4.4. Explosion protection on page 14				
North America (USA/Canada)	Further information can be found in chapter " 4.5. North America (USA/Canada) " on page 14				
Product connections					
Working port	D 6, D 1/4	D 8	D 6, SL 6/4, G 1/8		
Air supply connection 1 (P), 3 (R), 5 (S)	G 1/4, D 3/8	G 3/8	G 1/4, G 1/8, NPT 1/4, D 10, D 8		
Communication module	ME01	ME01	ME01		
Communication interface	Collective connection (parallel connections) / Multipole (D-Sub, 25-pin) / PROFIBUS DP / PROFINET IO / EtherNet/IP / Modbus TCP	Collective connection (parallel connections) / Multipole (D-Sub, 25-pin) / PROFIBUS DP / PROFINET IO / EtherNet/IP / Modbus TCP	Collective connection (parallel connections) / Multipole (D-Sub, 25-pin) / PROFIBUS DP / PROFINET IO / EtherNet/IP / Modbus TCP		
Environment and installation					
Installation position	As required, preferably with actuator upright	As required, preferably with actuator upright	As required, preferably with actuator upright		
Storage temperature	- 20 °C...+ 60 °C	- 20 °C...+ 60 °C	- 20 °C...+ 60 °C		
Ambient temperature	0 °C...+ 55 °C (when using Type 0460: 0 °C...+ 50 °C)	0 °C...+ 55 °C (when using Type 0461: 0 °C...+ 50 °C)	10 °C...+ 55 °C		

1.) The maximum flow rate depends on the valve function.

1.2. Solenoid valves Type 6524 and Type 6525



- The pilot valves **Type 6524** ▶ (single and double valve) and **Type 6525** ▶ (single valve) consist of a pilot flipper solenoid valve Type 6144 and a pneumatic seat valve.
- The circuit function allows switching of high pressures with low power consumption and short switching times.
- The pilot valves are equipped with a manual override as standard.
- The pneumatic flange pattern of the pilot valves Type 6524 and 6525 (single valves) for Type 8640 REV3 has been standardised. There is a difference to the flange pattern of the pilot valves for Type 8640 REV2. It is therefore imperative to take into account the different article numbers of the pilot valves as described in chapter "[9.3. Ordering chart replacement valves](#)" on page 23.
- Further information about ordering information can be found in chapter "[9.3. Ordering chart replacement valves](#)" on page 23.
- Further information about further valve options can be found in chapter "[9.4. Ordering chart accessories](#)" on page 27.

Pilot valve Type	Type 6524, Type 6525	Type 6524
Circuit function	3/2 and 5/2-way valve	2 × 3/2-way valve
Product properties		
Material		
Body	PA (polyamide)	
Seal	FKM, NBR and PUR	
Width per station	11 mm	
Manual override	Standard	
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø 1/4"	
Performance data		
Pressure data	Overpressure to atmospheric pressure	
Flow rate Q_{Nn} value air	300 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure, see " 9.3. Ordering chart replacement valves " on page 23.	
Duty cycle	Continuous operation (100 % duty cycle)	
Switching time	Measured according to ISO 12238	
Electrical data		
Operating voltage	24 V DC (10 % residual ripple permissible)	
Nominal power of each valve	0.8 W	2 × 0.8 W with reduction of power
Medium data		
Operating medium	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)	
Product connections		
Service port 2 (A), 4 (B)	Plug-in coupling Ø 6 mm, Ø 1/4"	
Air supply connection 1 (P), 3 (R), 5 (S)	G 1/4	
Electrical connection on valve	Rectangular plug, 2-pin, grid 5.08 mm Cable with strands ¹⁾	Rectangular plug, 3-pin, grid 2.54 mm Cable with strands ¹⁾
Environment and installation		
Installation position	As required, preferably with actuator upright	
Mounting condition	With 2 screws M2 × 20	With 2 screws M2 × 28

1.) Variants with safety-related shutdown.

1.3. Solenoid valves Type 0460



- The solenoid valve **Type 0460** consists of a pneumatic valve body fitted with a double coil pilot valve.
- The principle allows switching of high pressures together with low power consumption and fast switching times.
- All valves are equipped with manual override as a standard.
- Further information about ordering information can be found in chapter "[Solenoid valves Type 0460" on page 24](#).
- Further information about further valve options can be found in chapter "[9.4. Ordering chart accessories" on page 27](#).

Pilot valve Type	Type 0460
Circuit function	5/2-way and 5/3-way bistable
Product properties	
Material	
Body	Aluminium
Seal	NBR
Width per station	11 mm
Manual override	Standard
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø 1/4"
Performance data	
Pressure data	Overpressure to atmospheric pressure
Flow rate Q_{Nn} value air	200 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure, see " 9.3. Ordering chart replacement valves" on page 23 .
Switching time	Measured according to ISO 12238
Electrical data	
Operating voltage	24 V DC ± 10 %
Medium data	
Operating medium	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)
Product connections	
Service port 2 (A), 4 (B)	Plug-in coupling Ø 6 mm, Ø 1/4"
Air supply connection 1 (P), 3 (R), 5 (S)	G 1/4
Electrical connection on valve	Rectangular plug, 3-pin, grid 2.54 mm
Environment and installation	
Installation position	As required, preferably with actuator upright
Mounting condition	With 2 screws M1.7 × 23

1.4. Solenoid valves Type 6526 and Type 6527



- The solenoid valve **Type 6526** ▶ and **Type 6527** ▶ consist of a pneumatic valve body fitted with a **Type 6106** ▶ rocker solenoid valve.
- The circuit function allows high pressures to be switched with low power consumption and short switching times.
- The solenoid valves are equipped with manual override as a standard.
- Further information about ordering information can be found in chapter "[Solenoid valves Type 6526 and Type 6527" on page 25](#).
- Further information about further valve options can be found in chapter "[9.4. Ordering chart accessories" on page 27](#).

Pilot valve Type	Type 6526	Type 6527
Circuit function	3/2-way valve	5/2-way valve
Product properties		
Material		
Body	PA (polyamide)	
Seal	NBR	
Width per station	16.5 mm	
Manual override	Standard	
Pneumatic module	With plug-in coupling, Ø 8 mm	
Performance data		
Pressure data	Overpressure to atmospheric pressure	
Flow rate Q_{Nn} value air	700 l/min measured at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure, see " 9.3. Ordering chart replacement valves" on page 23 .	
Nominal operating mode	Continuous operation (100 % duty cycle)	
Switching time	Measured according to ISO 12238	
Electrical data		
Operating voltage	24 V DC ± 10 %	
Electrical connection on valve	Tag connector according to DIN EN 175301 - 803 (previously DIN 43650) form C	
Nominal power of each valve	2 W, 1 W	
Medium data		
Medium	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)	
Product connections		
Service port 2 (A), 4 (B)	Plug-in coupling, Ø 8 mm	
Air supply connection 1 (P), 3 (R), 5 (S)	G $\frac{3}{8}$	
Environment and installation		
Installation position	As required, preferably with solenoid valve upright	
Mounting condition	With 2 screws M3 × 30	

1.5. Solenoid valve Type 5470



- The solenoid valve **Type 5470** consist of a pneumatic valve body fitted with **Type 6106** rocker pilot valve. An armature with a tilting bearing, similar or a rocker, tilts within the body of the pilot valve, and switches the valve. The minimal tilting movement of the rocker is non-wearing, and basic lubrication is unnecessary.
- Type 5470 R is available as a 3/2 and 4/2-way valve.
- The valves can be mounted together individually using the module flange. In various applications, they can be used advantageously as valve blocks. Different variants are available for service ports 2 and 4.
- Further information about ordering information can be found in chapter "**Solenoid valves Type 5470**" on page 26.
- Further information about further valve options can be found in chapter "**9.4. Ordering chart accessories**" on page 27.

Pilot valve Type	Type 5470
Circuit function	3/2-way and 4/2-way valve
Product properties	
Material	
Body	PA (Polyamide)
Seal	NBR
Width per station	18 mm
Nominal diameter	DN 4.0 mm
Performance data	
Nominal operating mode	Continuous operation (100 % duty cycle)
Electrical data	
Operating voltage	24 V DC, 110...120 V DC, 220...240 V DC (for alternating current, use valves with UC coil)
Electrical connection on valve	Tag connector according to DIN 43 650 form C, for cable plug Type 2516
Voltage tolerance	± 10 %
Medium data	
Medium	Oil-free or lubricated compressed dry air, neutral gases (5 µm filter recommended)
Medium temperature	-10...+ 50 °C
Product connections	
Service port connections 2 and 4 (variants)	Threaded port G 1/8, threaded port NPT 1/8, tube connection SL 6/4 mm, plug-in coupling Ø 6 mm
Air supply connection 1 (P), 3 (R), 5 (S)	Module flange
Approvals and conformities	
Degree of protection	IP65 (with cable plug)
Further information can be found in chapter " 4. Approvals and conformities " on page 14.	
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	-10 °C...+ 55 °C

1.6. AirLINE Quick

Note:

The valves of Type 0460 valves cannot be installed with AirLINE Quick due to their size.

AirLINE Quick considerably reduces the use of components in the control cabinet. With the AirLINE Quick Adapter, the valve terminal is adapted directly to the control cabinet floor or control cabinet wall.

Advantages:

- Reduced space requirement in the control cabinet
- This makes it possible to use more compact control cabinets
- Reduced installation effort due to hose connections directly at the bottom of the control cabinet

Product properties

Material

AirLINE Quick Adapter Plate	Stainless steel 1.4301 Anodised aluminium
Pneumatic feed/venting	Stainless steel 1.4301 Nickel-plated brass
Pneumatic working ports	Stainless steel 1.4401 Nickel-plated brass
Valve slots	4, 8, 12, 16, 24

Valve functions	Up to 48
-----------------	----------

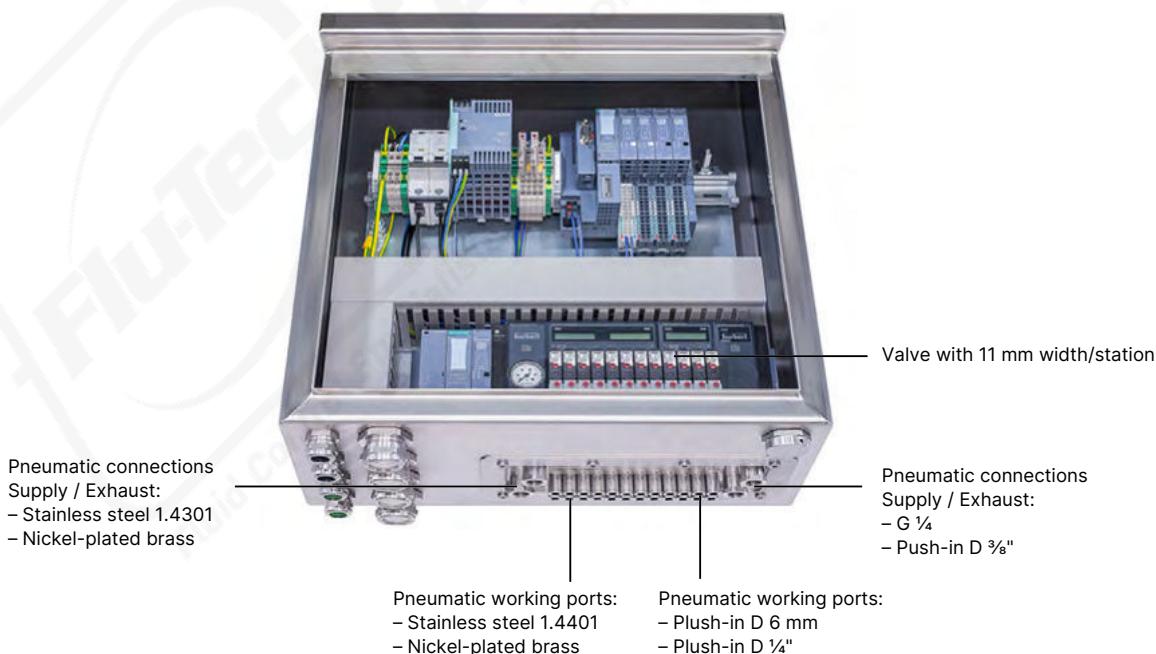
Product connections

Pneumatic Supply / Exhaust	G 1/4", Push-in D 3/8"
Pneumatic working ports	Push-in D 6 mm, 1/4"

Environment and installation

Installation position	Control cabinet wall Control cabinet floor
-----------------------	---

AirLINE Quick Adapter in stainless steel 1.4301 or anodised aluminium



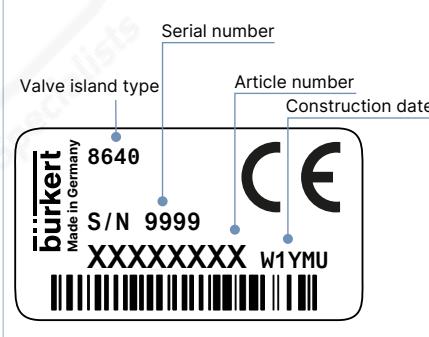
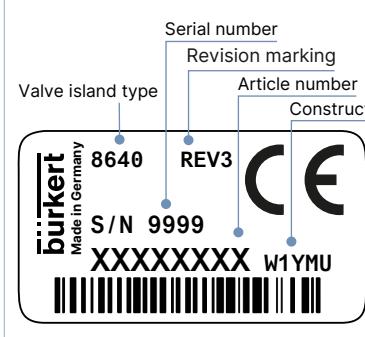
2. Product variants

2.1. Notes on compatibility and revision levels

The single valves Type 6524 and Type 6525, the pneumatic basic and connection modules and as well as the control cabinet base adaptation AirLINE Quick have been optimised.

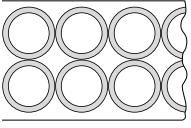
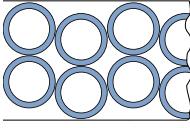
2.2. Distinguishing features

Valve island

Revision island	Type 8640 REV1 / REV2 ¹⁾	Type 8640 REV3 ¹⁾
Visual distinction 11 mm		
Visual distinction 16 mm		
Marking on type label	<p>Serial number</p> <p>Valve island type Article number Construction date</p>  <p>burkert Made in Germany 8640 S/N 9999 XXXXXX W1YMU</p> <p>CE</p>	<p>Serial number</p> <p>Valve island type Revision marking Article number Construction date</p>  <p>burkert Made in Germany 8640 REV3 S/N 9999 XXXXXX W1YMU</p> <p>CE</p>

1.) If you have any questions regarding the differences in revisions, please contact your Burkert sales department.

Module

Revision island	Type 8640 REV1 / REV2 ¹⁾	Type 8640 REV3 ¹⁾
Channel arrangement of the working connections	Parallel 	Wavy 
Colour of the release rings (hose connector)	Black	Blue
Flow reduction with integrated P shut-off	Up to 50 %	Up to 20 %

1.) If you have any questions regarding the differences in revisions, please contact your Burkert sales department.

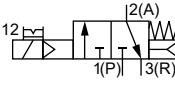
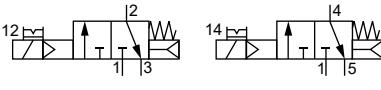
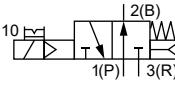
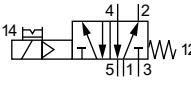
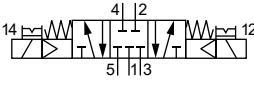
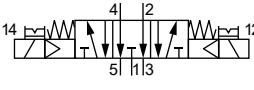
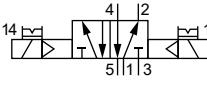
Valves

Valves Type 6524, Type 6525	Valve REV1	Valve REV2
Visual distinction	 REV1 Single valves Type 6524 and Type 6525 with flange interface FM14	 REV2 Single valves Type 6524 and Type 6525 with flange interface FM20
Article no.	Distinction by Article no., see " 9.3. Ordering chart replacement valves " on page 23	
Information label		There is a information label on the valve which indicates that the valve has been overhauled. This information label must be removed before assembly.

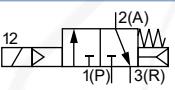
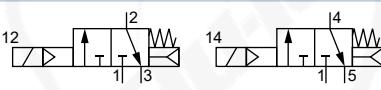
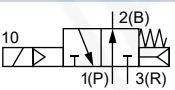
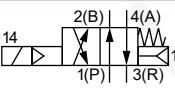
Further information can be found in the **operating instructions Type 8640** ►

3. Circuit functions

3.1. Standard functions

Symbol	Description
	Circuit function C (CF C) 3/2-way solenoid valve Servo-controlled, with manual override Normally closed
	Circuit function C (CF C) 2 x 3/2-way solenoid valve Servo-controlled, with manual override Normally closed
	Circuit function D (CF D) 3/2-way solenoid valve Servo-controlled, with manual override Normally open
	Circuit function H (CF H) 5/2-way solenoid valve Servo-controlled, with manual override Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.
	Circuit function L (CF L) 5/3-way solenoid valve With manual override In middle position all ports locked
	Circuit function N (CF N) 5/3-way solenoid valve With manual override In middle position ports 2 and 4 exhausted
	Circuit function Z (CF Z) 5/2-way solenoid valve Impulse variant with 2 coils and manual override Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.

3.2. SIA variant

Symbol	Description
	Circuit function C (CF C) 3/2-way solenoid valve Servo-controlled Normally closed
	Circuit function C (CF C) 2 x 3/2-way solenoid valve Servo-controlled Normally closed
	Circuit function D (CF D) 3/2-way solenoid valve Servo-controlled Normally open
	Circuit function G (CF G) 4/2-way solenoid valve Servo-controlled

4. Approvals and conformities

4.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

4.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

4.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

4.4. Explosion protection

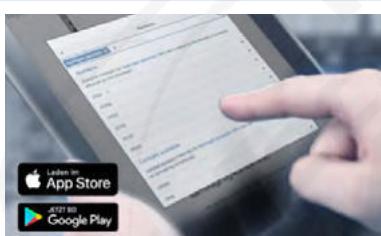
The explosion protection approvals for the individual valves can be found in the corresponding data sheets.

4.5. North America (USA/Canada)

The North American approvals of the individual valves can be found in the corresponding data sheets.

5. Materials

5.1. Bürkert resistApp



Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

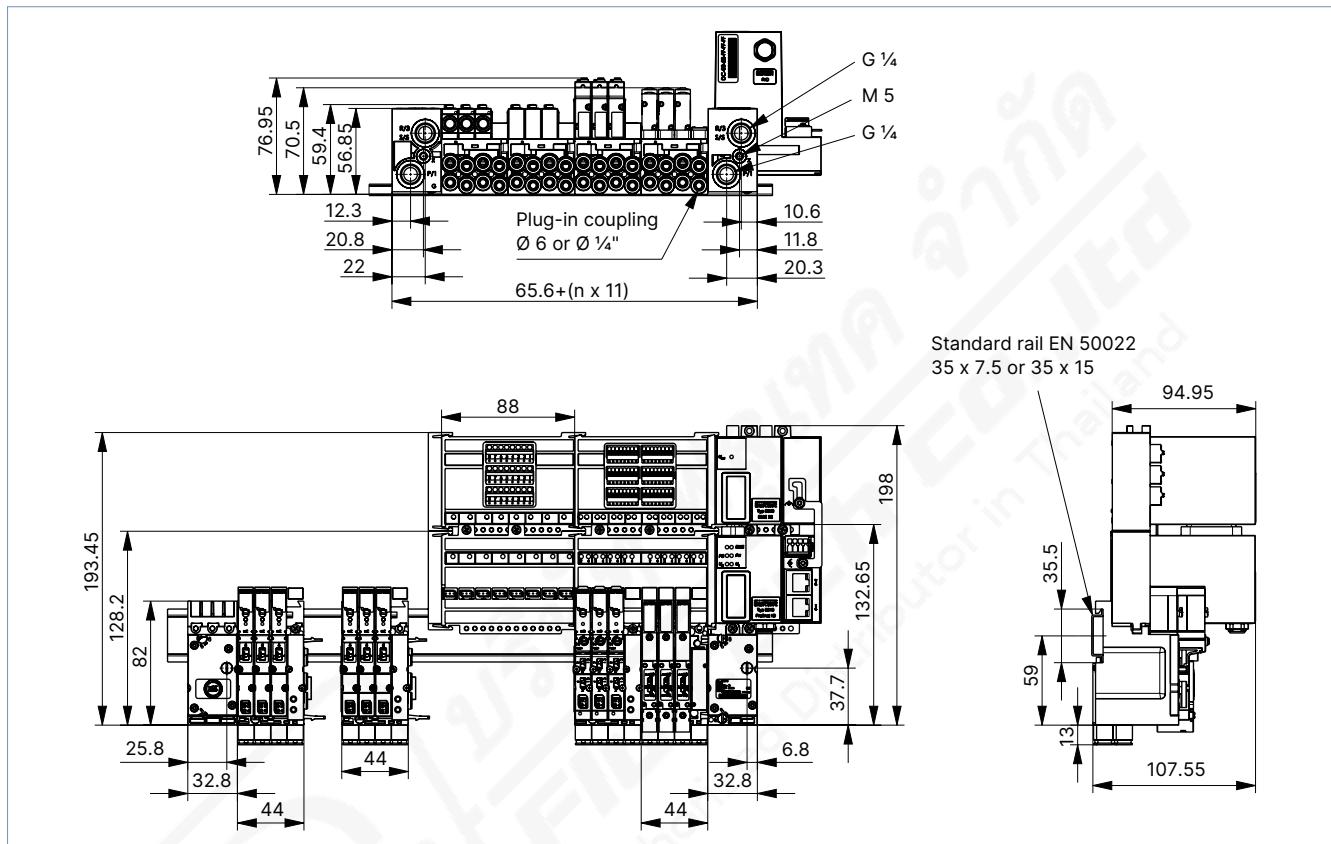
[Start Chemical Resistance Check](#)

6. Dimensions

6.1. Pneumatics 11 mm width per station

Note:

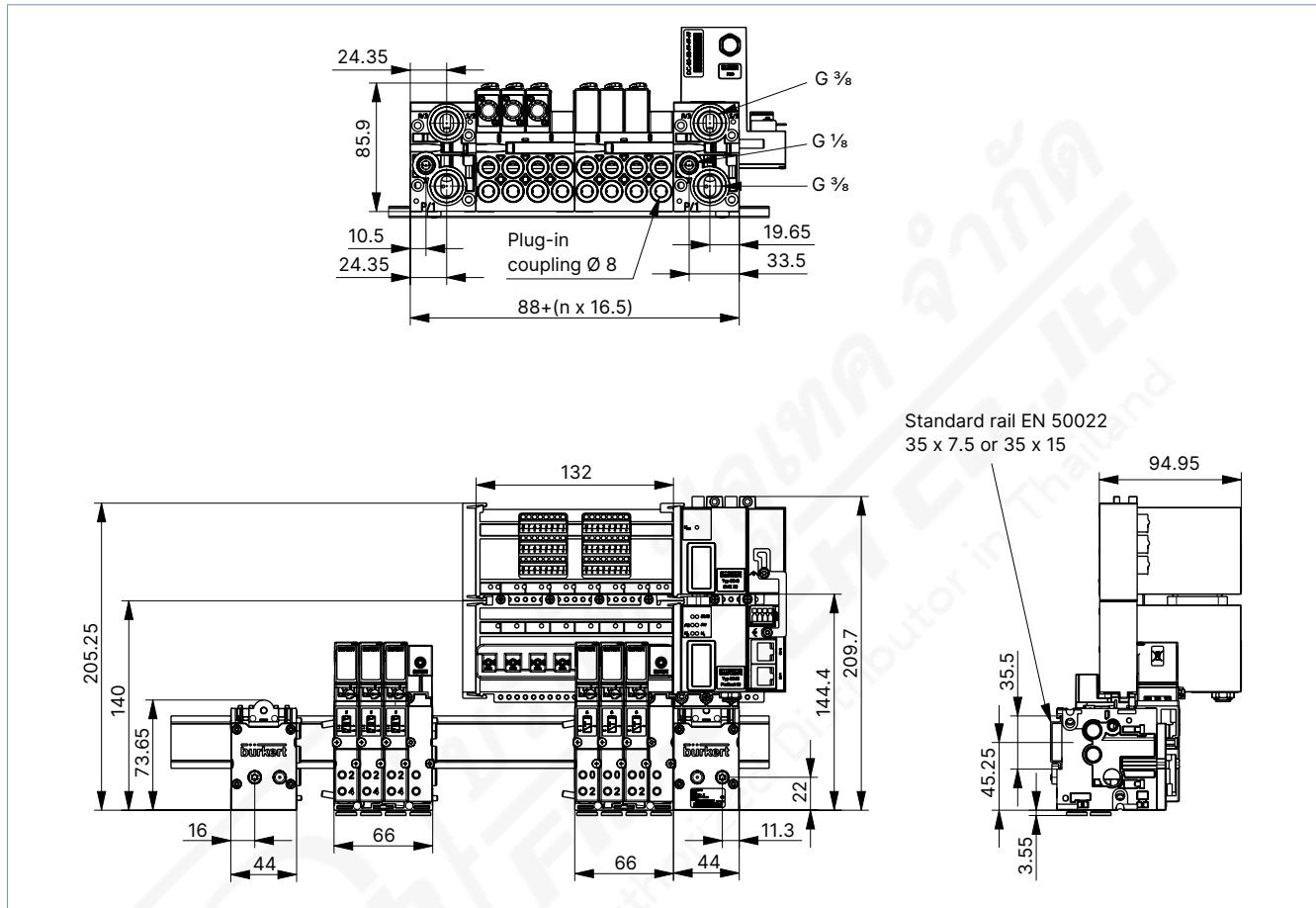
Dimensions in mm, unless otherwise stated



6.2. Pneumatics 16 mm width per station

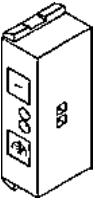
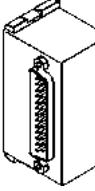
Note:

Dimensions in mm, unless otherwise stated

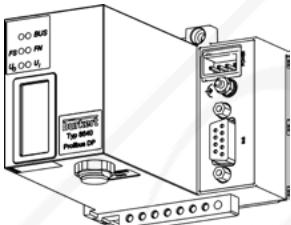


7. Product connections

7.1. Collective connection modules and multipole modules

Module	Description
Collective connection module 	<ul style="list-style-type: none"> Connection via individual stranded wires Looped-through ground potential Max. 24 valves Degree of protection IP20 Screw-type terminals
Multi-pin module Valve outputs 	<ul style="list-style-type: none"> Max. 24 valves Degree of protection IP20 Electrical connection plug D-Sub (2-pin)

7.2. Fieldbus modules

Module	Description
PROFIBUS DP 	<ul style="list-style-type: none"> Max. 24 valves Degree of protection IP20 Max. 32 digital inputs (in connection with EME module) Transmission rates 9.6 / 19.2 / 93.75 / 187.5 / 500 kBaud, 1.5 / 3 / 6 / 12 MBaud Power supply with rectangular plug (4-pin) Bus connection D-Sub (9-pin) RIO connection M8 (4-pin)
PROFINET IO, EtherNet/IP, Modbus TCP 	<ul style="list-style-type: none"> Degree of protection IP20 Max. 24 valves Max. 32 digital inputs (in connection with EME module) Transmission rates 10/100 MBit/s with Auto Crossover Power supply with rectangular plug (4-pin) Bus connection RJ45 (2x) RIO connection M8 (4-pin)

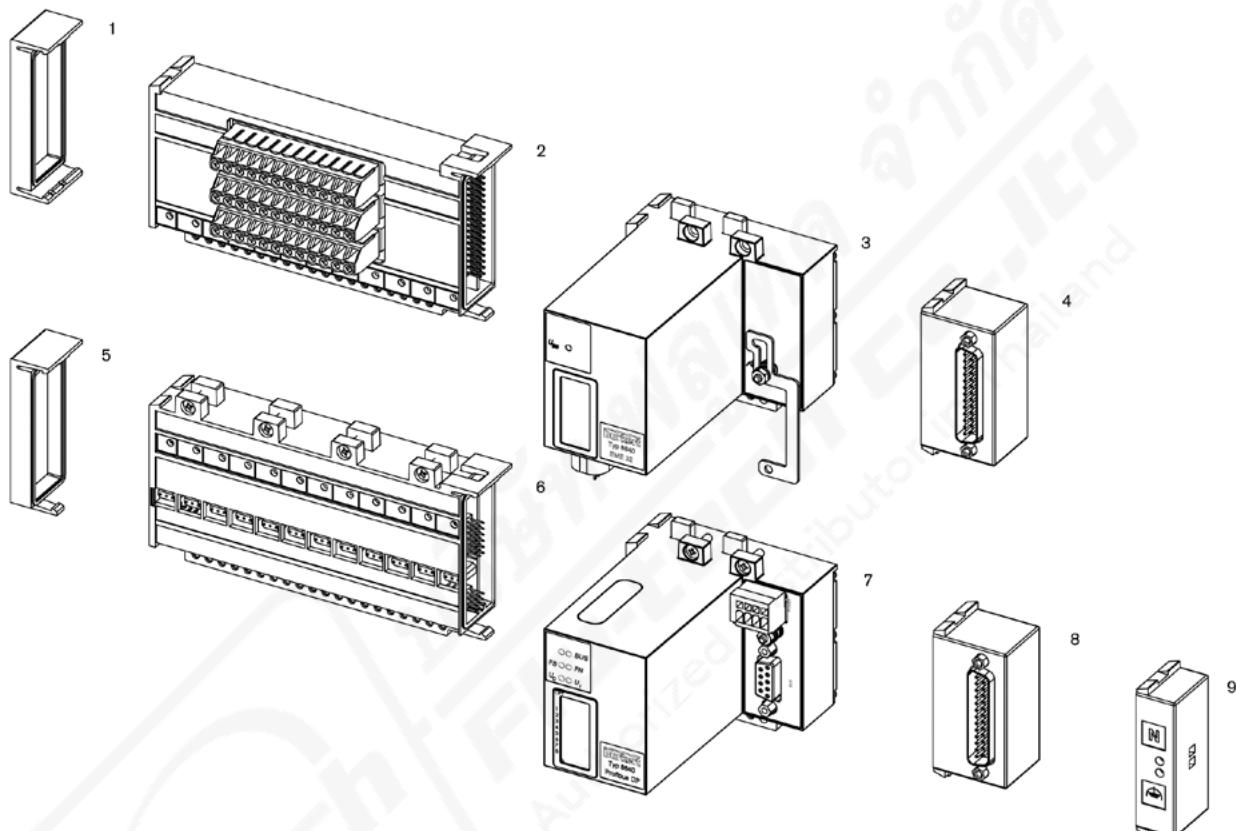
8. Product design and assembly

8.1. Product assembly

Electronics

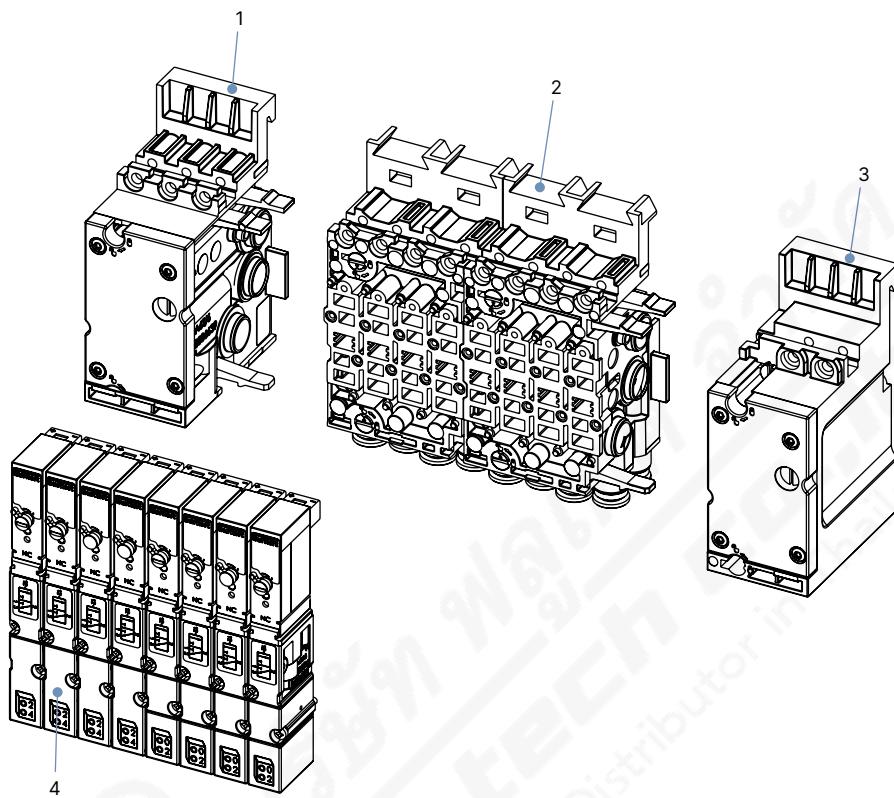
Note:

For a selection of basic electrical modules and other modules, see "7.1. Collective connection modules and multipole modules" on page 17 and "7.2. Fieldbus modules" on page 17.



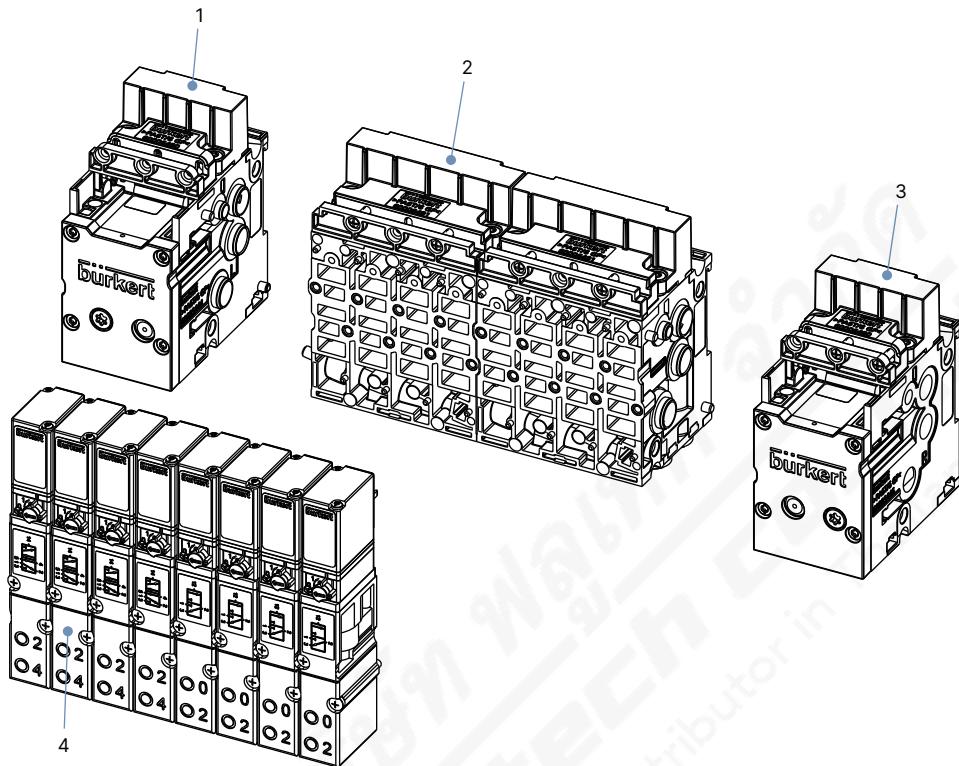
No.	Element
1	Electrical end module, left
2	Terminal module for feedback
3	Extension module for electrical inputs
4	Multi-pin digital inputs (initiators)
5	Electrical end module, left
6	Basic electrical module standard
7	Fieldbus module
8	Multipin valve outputs
9	Common connection module

Pneumatics 11 mm width per station



No.	Element
1	Pneumatic connection module, left
2	Basic pneumatic modules
3	Pneumatic connection module, right
4	Valves (for example 5/2-way)

Pneumatics 16 mm width per station



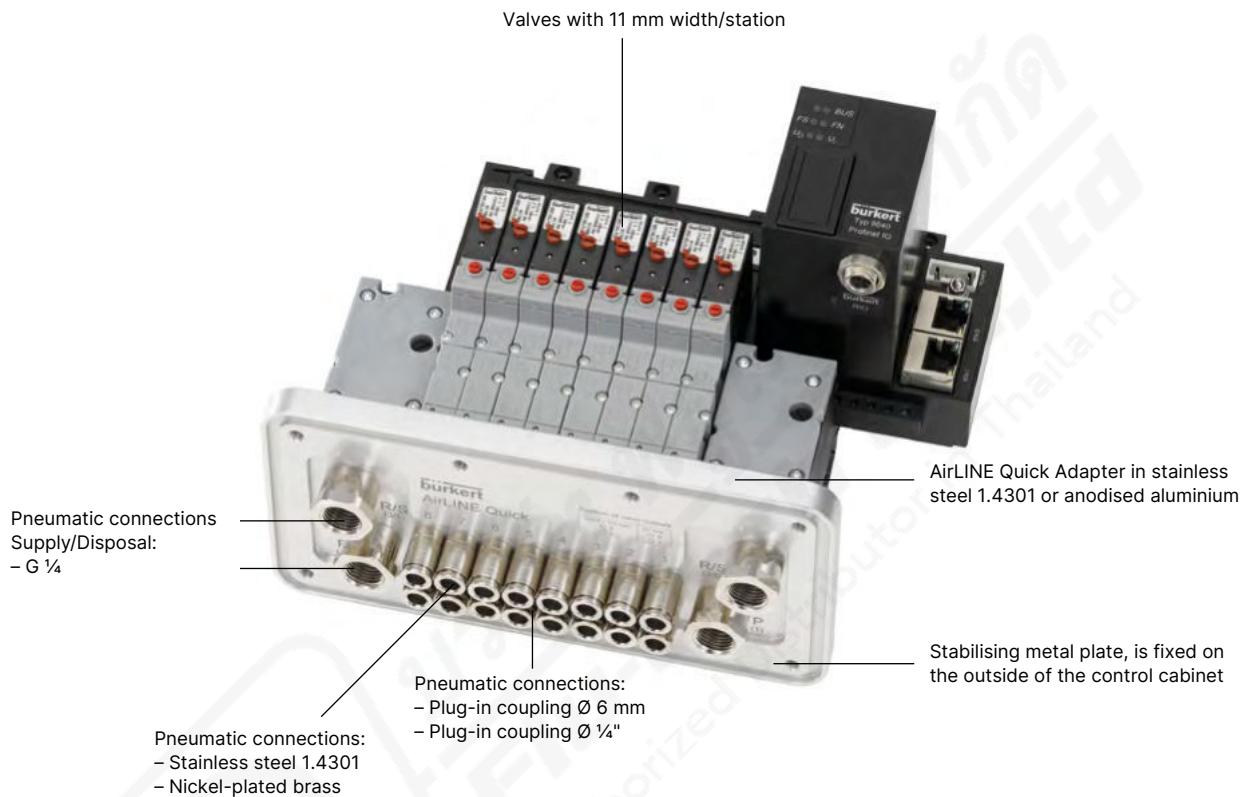
No.	Element
1	Pneumatic connection module, left
2	Basic pneumatic modules
3	Pneumatic connection module, right
4	Valves (for example 5/2-way)

AirLINE Quick adapter

AirLINE Quick considerably reduces the use of components in the control cabinet. With the AirLINE Quick Adapter, the valve island is directly adapted on the control cabinet floor or wall.

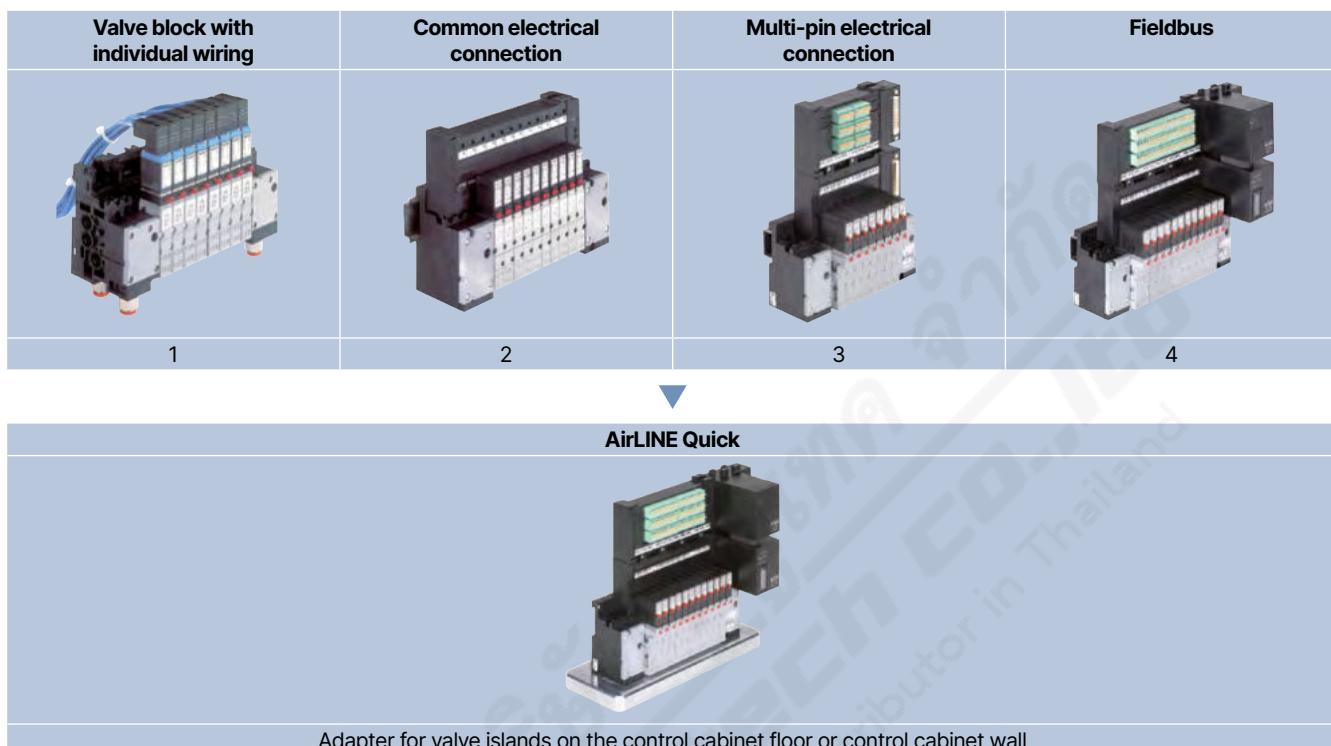
Note:

Type 0460 valves cannot be installed with AirLINE Quick because of their size.



Type 8640 programme

Example:



9. Ordering information

9.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick delivery

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

[Order online now](#)

9.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

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

[Try out our product filter](#)

9.3. Ordering chart replacement valves

Solenoid valves Type 6524 and Type 6525

Note:

Further information about this product variant can be found in chapter “[1.2. Solenoid valves Type 6524 and Type 6525](#) on page 6.

Circuit function	Nominal diameter	Q _{Nn} value air ^{1.)}	Pressure range	Switching times		Voltage/ Frequency	Article no.	
				Opening	Closing		Valves for 8640 REV1 / REV2 ^{3.)}	Valves for 8640 REV3 ^{3.)}
C (CF C) 3/2-way solenoid valve Servo-controlled, with manual override Normally closed	4.0	300	Vac....7	15	20	24 V DC	20029915	20029923
			1...10 ^{2.)}	15	20	24 V DC	20029913	20029921
			2.5...10	15	28	24 V DC	20029910	20029918
D (CF D) 3/2-way solenoid valve Servo-controlled, with manual override Normally open	4.0	300	2.5...10	15	28	24 V DC	20029911	20029919
H (CF H) 5/2-way solenoid valve Servo-controlled, with manual override Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.	4.0	300	1...10 ^{2.)}	15	20	24 V DC	20029914	20029922
			2.5...10	20	28	24 V DC	20029912	20029920
C (CF C) 2 x 3/2-way solenoid valve Servo-controlled, with manual override Normally closed	4.0	300	1...10 ^{2.)}	12	20	24 V DC	186259	
			2.5...10	12	20	24 V DC	186260	

1.) With integrated hot swap and/or non-return function, see chapter “[2.2. Distinguishing features](#) on page 11

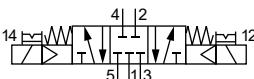
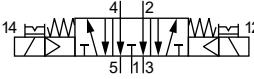
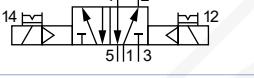
2.) Variant with auxiliary pilot air

3.) If you have any questions about the compatibility of the valve revision, please contact your Bürkert sales office.

Solenoid valves Type 0460

Note:

Further information about this product variant can be found in chapter "[1.3. Solenoid valves Type 0460](#)" on page 7.

Circuit function	Nominal diameter [mm]	Q _{Nr} value air ^{1.)} [l/min]	Pressure range ^{2.)} [bar]	Switching times		Nominal power [W]	Article no. Valve for 8640 REV1, 2, 3
				Opening [ms]	Closing [ms]		
L (CFL) 5/3-way solenoid valve With manual override In middle position all ports locked	2.5	200	2.0...7.0	15	20	1	154184 
							
N (CFN) 5/3-way solenoid valve With manual override In middle position ports 2 and 4 exhausted	2.5	200	2.0...7.0	15	20	1	154185 
							
Z (CFZ) 5/2-way solenoid valve Impulse variant with 2 coils and manual override Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.	2.5	200	2.0...7.0	15	15	0.5	154183 
							

1.) Measurement at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure

2.) Pressure information: overpressure to atmospheric pressure

Solenoid valves Type 6526 and Type 6527
Note:

 Further information about this product variant can be found in chapter "**1.4. Solenoid valves Type 6526 and Type 6527**" on page 8.

Circuit function	Nominal diameter [mm]	Q _{Nn} -value ^{1.)} air [l/min]	Pressure range ^{2.)} [bar]	Switching times		Nominal power [W]	Voltage/Frequency [V/Hz]	Article no. Valve for 8640 REV1, 2, 3
				Opening [ms]	Closing [ms]			
C (CF C) 3/2-way solenoid valve Servo-controlled, with manual override Normally closed	6	700	1.0...10 ^{1.)}	20	12	2	24 V DC	156842 22
			1.0...10 ^{1.)}	20	12	2	24 V DC	163028 22
			2.0...10	20	12	2	24 V DC	156318 22
			2.0...10	20	12	2	24 V DC	158944 22
			2.0...8.0	20	17	1	24 V DC	156840 22
			2.0...8.0	20	12	1	24 V DC	158947 22
D (CFD) 3/2-way solenoid valve Servo-controlled, with manual override Normally open	6	700	1.0...10 ^{1.)}	20	12	2	24 V DC	163029 22
			2.0...10	12	20	2	24 V DC	156320 22
			2.0...10	20	12	2	24 V DC	158946 22
			2.0...8.0	17	20	1	24 V DC	156841 22
H (CFH) 5/2-way solenoid valve Servo-controlled, with manual override Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.	6	700	1.0...10 ^{1.)}	20	12	2	24 V DC	156828 22
			1.0...10 ^{1.)}	20	12	2	24 V DC	163030 22
			2.0...10	20	12	2	24 V DC	156337 22
			2.0...10	20	12	2	24 V DC	158942 22
			2.0...8.0	20	17	1	24 V DC	156827 22
			2.0...8.0	20	12	1	24 V DC	158943 22

1.) Measurement at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure

2.) Pressure information: overpressure to atmospheric pressure

Solenoid valves Type 5470

Note:

Further information about this product variant can be found in chapter "[1.5. Solenoid valve Type 5470](#)" on page 9.

Circuit function	Nominal diameter [mm]	Q _{Nn} - value ¹⁾ air [l/min]	Service ports 4 and 2	Pressure range ²⁾ [bar]	Nominal power [W]	Voltage/ Frequency [V/Hz]	Article no. Valve islands	Article no. Valve blocks
C (CF C) 3/2-way solenoid valve Servo-controlled, with manual override Normally closed	4	300	Plug-in coupling Ø 6 mm, below	2...8	1	24 V DC	132479 ☰	135203 ☰
				2...10	2	24 V DC	133148 ☰	135204 ☰
				2...10	3	110...120 DC	–	132952 ☰
				2...10	3	220...240 DC	–	132953 ☰
D (CF D) 3/2-way solenoid valve Servo-controlled, with manual override Normally open	4	300	Plug-in coupling Ø 6 mm, below	2...8	1	24 V DC	132481 ☰	136742 ☰
				2...10	2	24 V DC	136741 ☰	136743 ☰
				2...10	3	110...120 DC	–	136744 ☰
				2...10	3	220...240 DC	–	136745 ☰
G (CF G) 4/2-way solenoid valve Servo-controlled	4	300	Plug-in coupling Ø 6 mm, front	2...8	1	24 V DC	132487 ☰	135205 ☰
				2...10	2	24 V DC	133149 ☰	135206 ☰
				2...10	3	110...120 DC	–	132954 ☰
				2...10	3	220...240 DC	–	132955 ☰
	4	300	Plug-in coupling Ø 6 mm, below	2...8	1	24 V DC	132489 ☰	135207 ☰
				2...10	2	24 V DC	133150 ☰	135208 ☰
				2...10	3	110...120 DC	–	132956 ☰
				2...10	3	220...240 DC	–	132957 ☰
	4	300	Plug-in coupling Ø 6 mm, front with throttle- check valve	2...8	1	24 V DC	132488 ☰	135209 ☰
				2...10	2	24 V DC	133151 ☰	135210 ☰
				2...10	3	110...120 DC	–	133152 ☰
				2...10	3	220...240 DC	–	133153 ☰
	4	300	Threaded port G 1/8, front	2...8	1	24 V DC	132483 ☰	135211 ☰
				2...10	2	24 V DC	133157 ☰	135212 ☰
				2...10	3	110...120 DC	–	132958 ☰
				2...10	3	220...240 DC	–	132959 ☰
	4	300	Threaded port G 1/8, front, with throttle- check valve	2...8	1	24 V DC	132484 ☰	135213 ☰
				2...10	2	24 V DC	133159 ☰	135214 ☰
				2...10	3	110...120 DC	–	133160 ☰
				2...10	3	220...240 DC	–	133161 ☰
	4	300	Tube connection SL6/4 mm, front	2...8	1	24 V DC	133162 ☰	135215 ☰
				2...10	2	24 V DC	133163 ☰	135216 ☰
				2...10	3	110...120 DC	–	133164 ☰
				2...10	3	220...240 DC	–	133166 ☰

1.) Measurement at + 20 °C, 6 bar pressure at valve inlet and 1 bar differential pressure

2.) Pressure information: overpressure to atmospheric pressure

9.4. Ordering chart accessories

Cover plate

Note:

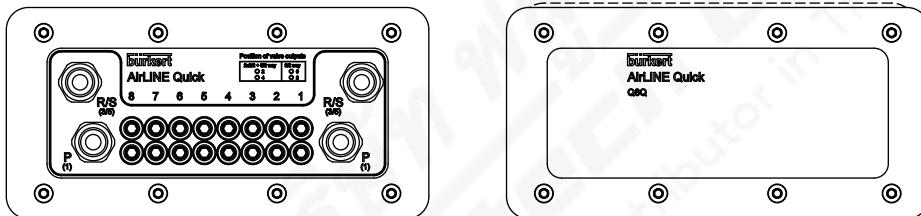
If not all the valve connections in a basic valve unit module are used, then these connections should be covered by the appropriate cover plate to ensure full efficiency.

Cover plate	Article no.
Cover plate for solenoid valves Type 6524/6525 (REV1)	650373 ₪
Cover plate for solenoid valves Type 6524/6525 (REV2)	661092 ₪
Cover plate for solenoid valves Type 6524 2x 3/2-way valve	661092 ₪
Cover plate for solenoid valves Type 0460	655069 ₪
Cover plate for solenoid valves Type 6526/6527	653765 ₪
Cover plate for solenoid valves Type 0461	657490 ₪

Blind plates AirLINE Quick

Note:

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

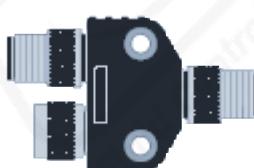


Description	Article no.
Blind plate AirLINE Quick, 4-fold	20057391 ₪
Blind plate AirLINE Quick, 8-fold	20057390 ₪
Blind plate AirLINE Quick, 12-fold	20057388 ₪
Blind plate AirLINE Quick, 16-fold	20057387 ₪
Blind plate AirLINE Quick (valve terminal with intermediate supply), 16-fold	20056955 ₪
Blind plate AirLINE Quick, 24-fold	20057392 ₪
Blind plate AirLINE Quick (valve terminal with intermediate supply), 24-fold	20057394 ₪

Bus Y-piece

Note:

For the bus Y-piece for PROFIBUS, a pre-assembled and a free-assembled connector must be used.

Cover plates	Description	Article no.
	PROFIBUS Y-piece, M12, 5-pin, 21 mm	920625 ₪

RIO cable for bus extension

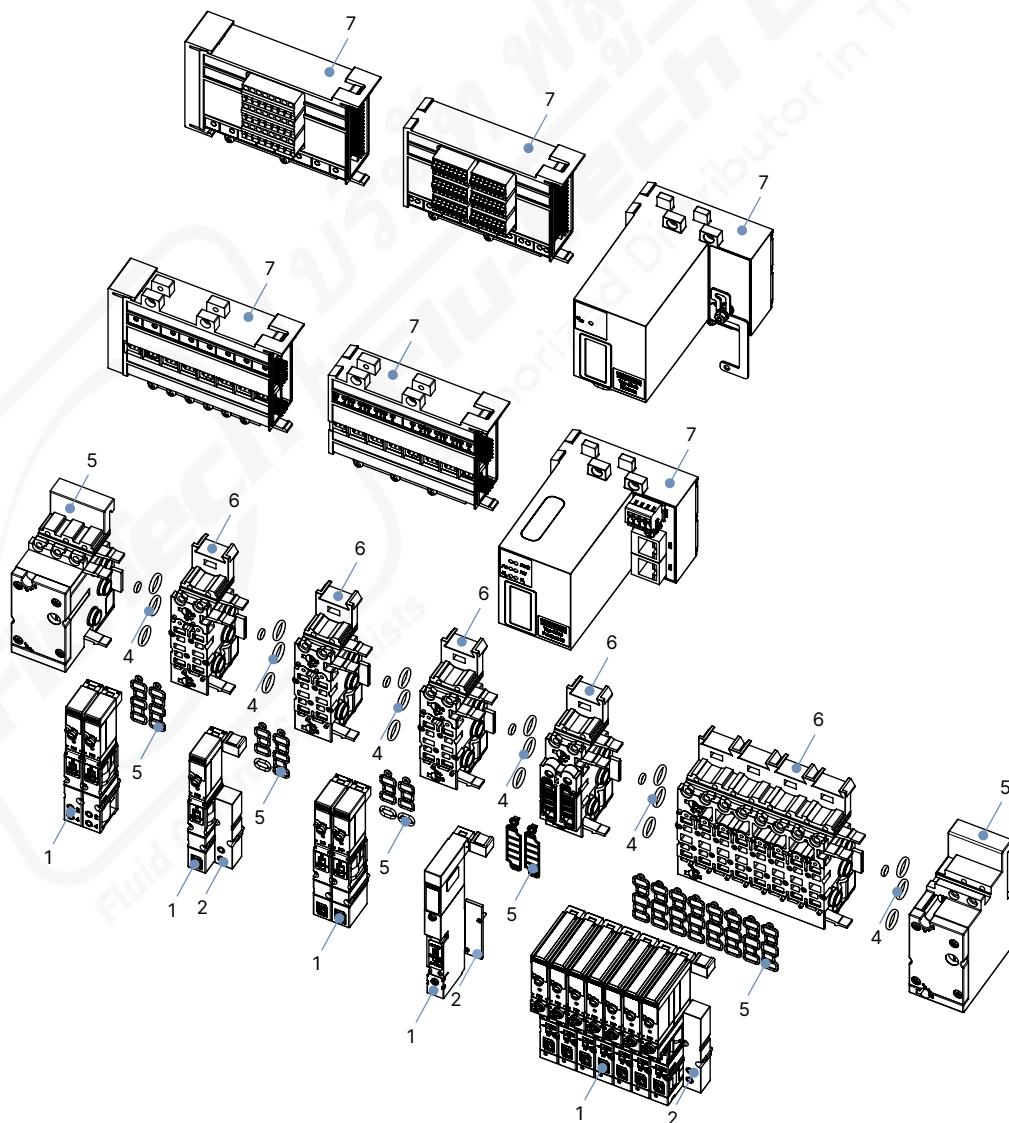
Cable	Article no.
1 m cable	917498 ₪

9.5. Ordering chart spare parts

Spare parts SVVI for Type 8640, REV1, REV2 – Pneumatics 11 mm width per station

Pos.	Description	Content	Article no.
1	Spare valves see “9.3. Ordering chart replacement valves” on page 23	–	–
2	Cover plate see “9.4. Ordering chart accessories” on page 27	–	–
3	Set of valve seals	–	–
	Spare valve seals FM20 for Type 6524, 2 × 3/2-way solenoid valve	12	20016305 
	Spare valve seals FM15 for Type 6524, 3/2-way solenoid valve	12	20024333 
	Spare valve seats FM14 for Type 6525, 5/2-way solenoid valve	12	20024334 
	Spare valve seals FM16 for Type 0460	12	20024330 
4	Sets of module seals	–	–
	Spare module seals for Type MP11	4	20040779 
5	Connection units	o. r.	o. r.
6	Base modules	o. r.	o. r.
7	Sets of electronic modules	o. r.	o. r.
8	AirLINE Quick spare parts see “9.4. Ordering chart accessories” on page 27	–	–

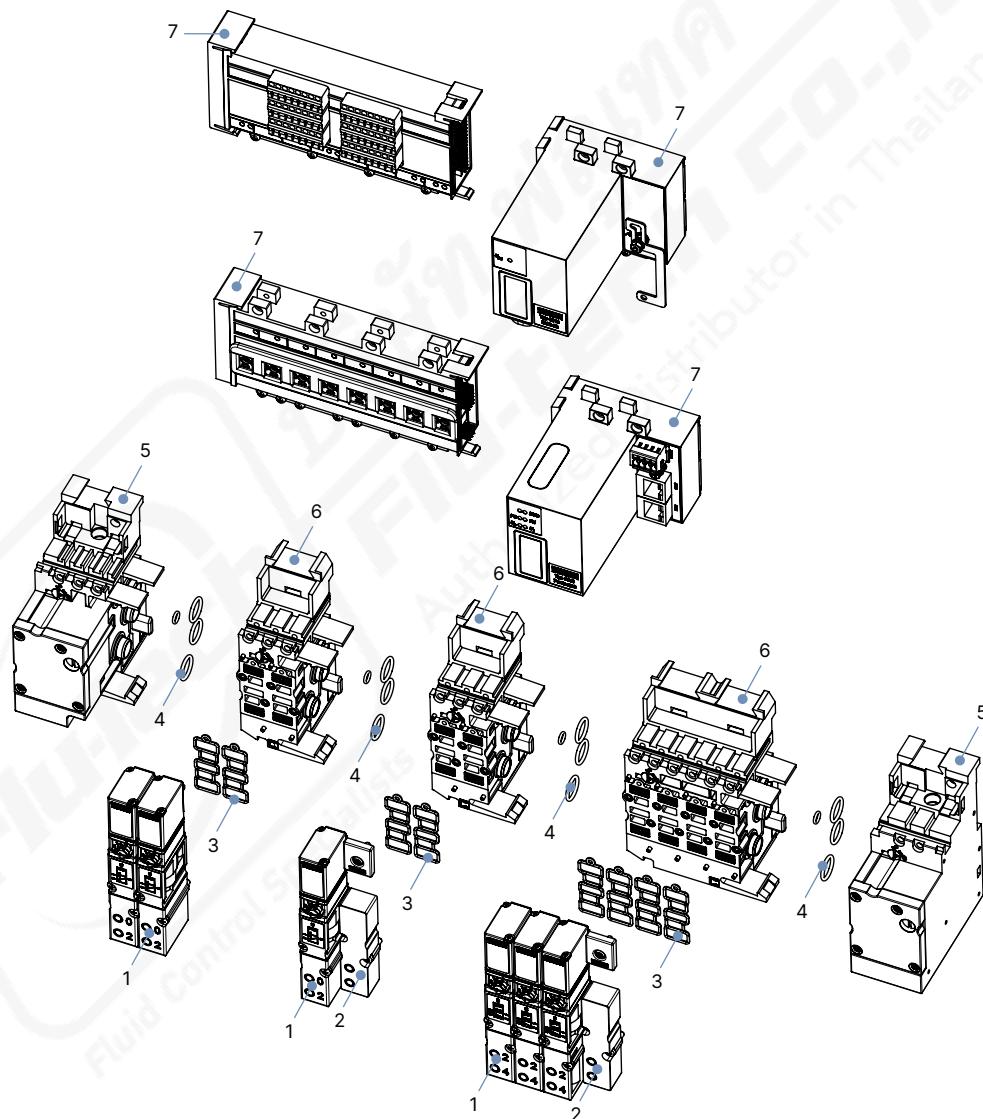
o. r. = on request



Spare parts SVVI for Type 8640, REV1, REV2 – Pneumatics 16 mm width per station

Pos.	Description	Content	Article no.
1	Spare valves see "9.3. Ordering chart replacement valves" on page 23	-	-
2	Cover plate see "9.4. Ordering chart accessories" on page 27	-	-
3	Set of valve seals	-	-
	Spare valve seals FM17 for Type 6526 and Type 6527	12	20016307 ☈
	Spare valve seals FM19 for Type 0461	12	20024337 ☈
4	Sets of module seals	-	-
	Spare module seals for Type MP12	4	20036699 ☈
5	Connection units	o. r.	o. r.
6	Base modules	o. r.	o. r.
7	Electronic modules	o. r.	o. r.

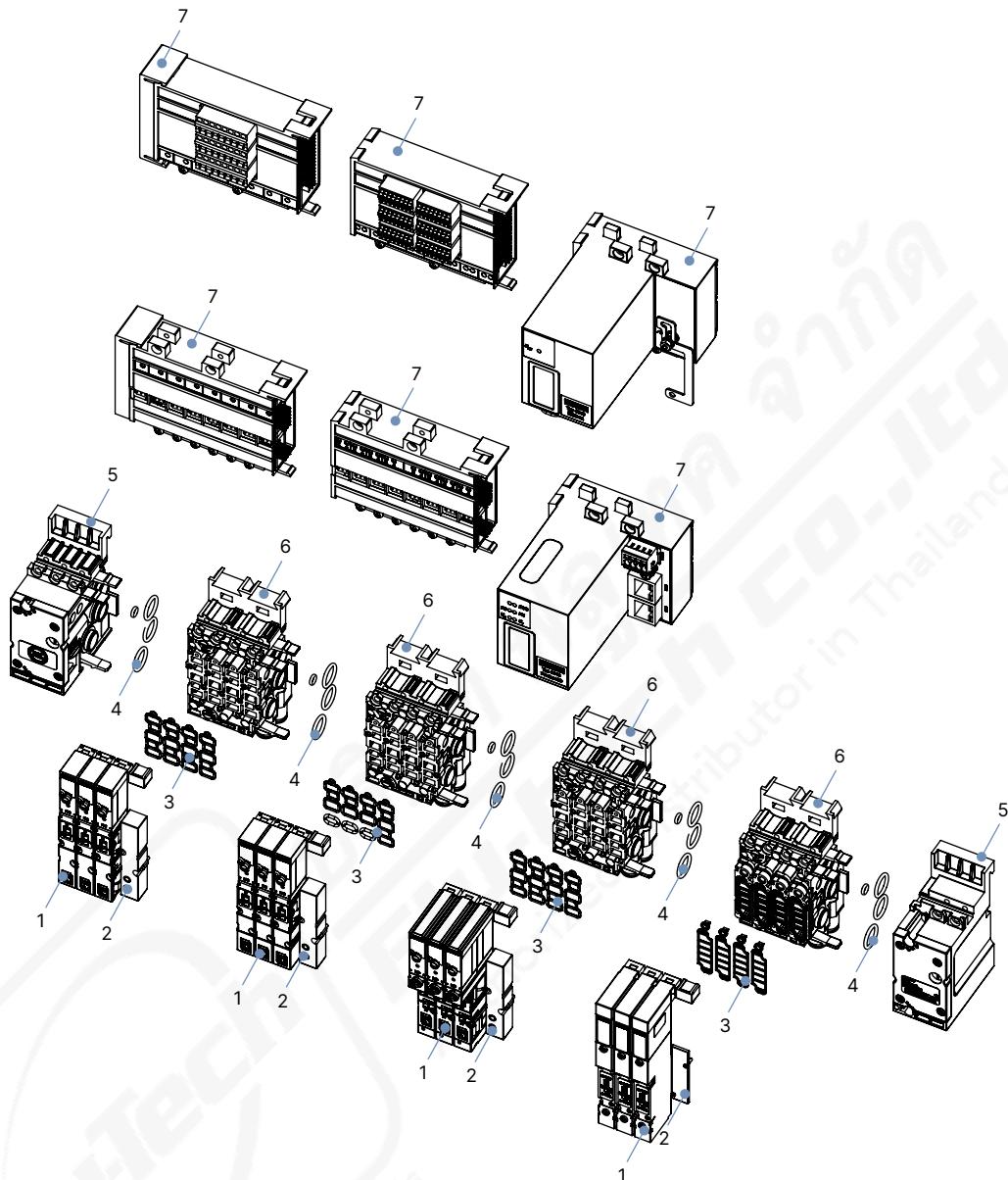
o. r. = on request



Spare parts SVVI for Type 8640, REV3 – Pneumatics 11 mm width per station

Pos.	Description	Content	Article no.
1	Spare valves see "9.3. Ordering chart replacement valves" on page 23	–	–
2	Cover plate see "9.4. Ordering chart accessories" on page 27	–	–
3	Set of valve seals Spare valve seals FM20 for Type 6524, 2 × 3/2-way solenoid valve Spare valve sealss FM24 for Type 6524 Spare valve seals FM16 for Type 0460	12 12 12	20016305 ☰ 20024336 ☰ 20024330 ☰
4	Sets of module seals Spare module seals for Type MP16	– 4	– 20024339 ☰
5	Connection units Supply unit right for Type 8640, 11 mm, G 1/4 Supply unit left for Type 8640, 11 mm, G 1/4	– 1 1	– 20040351 ☰ 20040352 ☰
6	Base modules Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D6, FM20 Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D6, FM20, Hot Swap, RSV Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D1/4, FM20 Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D1/4, FM20, Hot Swap, RSV Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D6, FM16 Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D6, FM16, RSV Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D1/4, FM16 Base unit for Type 8640, 8644, 8647, 11 mm, 4-fold, D1/4, FM16, RSV	o. r. 1 1 1 1 1 1 1 1	o. r. 20040334 ☰ 20040335 ☰ 20040337 ☰ 20040339 ☰ 20040340 ☰ 20040343 ☰ 20040344 ☰ 20040345 ☰
7	Electronic modules Electrical base module for Type 8644, 11 mm, 2-fold, impulse valve Electrical base module for Type 8644, 11 mm, 8-fold, impulse valve Electrical base module for Type 8644, 11 mm, 2-fold, single valve Electrical base module for Type 8644, 11 mm, 8-fold, single valve Electrical base module for Type 8644, 11 mm, 2-fold, double valve Electrical base module for Type 8644, 11 mm, 8-fold, double valve	– 1 1 1 1 1	– 20040558 ☰ 20040559 ☰ 20040560 ☰ 20040561 ☰ 20040562 ☰ 20040563 ☰
8	AirLINE Quick spare parts see "9.4. Ordering chart accessories" on page 27	–	–

o. r. = on request



Spare parts SVVI for Type 8640, REV3 – Pneumatics 16 mm width per station

Pos.	Description	Content	Article no.
1	Spare valves see "9.3. Ordering chart replacement valves" on page 23	-	-
2	Cover plate see "9.4. Ordering chart accessories" on page 27	-	-
3	Set of valve seals Spare valve seals FM17 for Type 6526 and Type 6527	12	20016307 ☰
4	Sets of module seals Spare module seals for type MP17	-	-
5	Connection units Right supply unit for Type 8640, 16 mm, G ¾ Left supply unit for Type 8640, 16 mm, G ¾	1 1	20042796 ☰ 20042793 ☰
6	Base modules Base unit for Type 8640, 16 mm, 4-fold, D8, FM17 Base unit for Type 8640, 16 mm, 4-fold, D8, FM17, RSV	1 1	20042790 ☰ 20042792 ☰
7	Electronic modules	o. r.	o. r.

o. r. = on request

