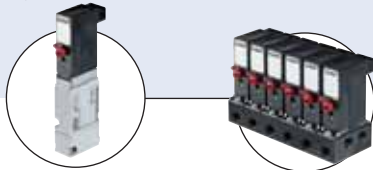




Type 6144 can be combined with...



Type 6524

Servo-assisted pneumatic valve

Type 6144

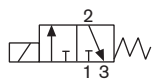
Multiple manifolds (e.g. 6 valves)

3/2-way Flipper Solenoid Valve

- Direct-acting
- 0 to 10 bar
- Low power consumption
- Sub-base connection
- 10mm width per station
- Standard, EEx ia Version

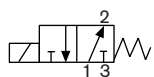
Type 6144 is a direct-action 3/2-way solenoid valve designed for neutral gases and liquids. Through the movement between the 2 end positions, the switching element (flipper) seals one of the two opposing valve seats and connects the other to the working port. This movement is caused by the solenoids magnetic field pushing a permanent magnet that is fixed to the flipper element. In addition to its exceptional performance characteristics, the flipper principle is especially marked by its very low switching noise and its low wear level. Furthermore, integrated medium separation enables use above and beyond pneumatic applications. Depending on the case of operation, various flange connections are available that are suitable for both individual and block mounting. Installation advice: The valve must have a minimum distance of 5 mm from other ferromagnetic materials in order to avoid malfunctioning during operating conditions.

Circuit function C



3/2-way valve, direct acting, de-energized port 2 exhausted

Circuit function D



3/2-way valve, direct acting, de-energized port 2 pressurized

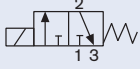
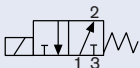
Technical data	
Body material	PPS (Polyphenylsulfide)
Seal material	FKM
Media	Compressed air lubricated, oil-free or dry; neutral gases and liquids (5µm filtering); technical vacuum
Media temperature	0 to +55°C
Ambient temperature	0 to +55°C
Port connection	· Bürkert flange · Lateral flange
Electrical connection	Rectangular plug as standard; on request: · Circular plug M8x1 · Flying lead 0.2 mm ² , 300 mm · Blank connector (5.08 mm)
Type of protection	without II 2G Ex ia IIC T4 T5 T6 PTB01 ATEX 2048 IECEX PTB 07.0063
Operating voltage	24V/DC ¹⁾ 12V/DC ¹⁾ on request Further voltages on request
Voltage tolerance	±10% ²⁾ (Further voltages on request)
Nominal power	0.8W
Switching function	Monostable Bistable (impulse) on request
Duty cycle	100% continuous rating
Installation	As required, preferably with actuator upright; 5mm minimum distance to ferromagnetic materials
Insulation class	3 acc. VDE 0580
Protection class	IP 40, IP 65 by flying leads (without hand lever)
Cycling rate	ca. 1000/min
Electrical control	with SPS possible
Response times	Measurement at the valve outlet, at 20°C and 6 bar inlet pressure, according to DIN ISO 12238: Open (Pressure rise 0 to 10%) ca. 8 ms (Standard) ca. 14 ms (Ex version) Close (Pressure rise 100 to 90%) ca. 10 ms (Standard) ca. 18 ms (Ex version)

¹⁾ Battery voltage; observe polarity as shown on top of the valve

²⁾ Max. allowed ripple

Ordering chart, standard version (other versions on request)

All valves with mounting screws and flange seal; without plug connection (see Accessories)

Circuit function	Port connection	Orifice [mm]	QnN value 1-2 air [l/min] ¹⁾	QnN value 2-3 air [l/min] ¹⁾	Pressure range ²⁾ [bar]	Manual override	Voltage [V]	Nominal power [W]	Item no. rectangular plug	Item no. flying leads with 500mm length
C  3/2-way valve NC	Bürkert flange	0.6	7.0	8.5	0-10 ³⁾	with	12 24	0.8	182 862 181367	215 686 202 578
	Lateral flange	0.6	6.0	7.5	0-10 ³⁾	with	24	0.8	175682	214 196
D  3/2-way valve NO	Bürkert flange	0.6	7.0	8.5	0-10	with	24	0.8	175653	■
	Lateral flange		6.0	7.5					179098	■

¹⁾ QnN value air [l/min]: Measurement with +20°C, 6 bar pressure on the valve input and 1 bar pressure differential

²⁾ Pressure values [bar]: Measured as overpressure to the atmospheric pressure

³⁾ Application with vacuum on request

Mounting screws for Bürkert flange: M1.6x5 for Lateral flange: M1.6x20

i Further versions on request



Electrical connection

Electrical connection left or right-sided alternatively. Possible electrical connections are 2 single flying leads, M8x1 round plugs or plug for contacting circuit board.



Circuit functions

Circuit function A, B and T



Additional

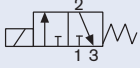
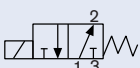
On request, the valve can be delivered with a manual control on the left or right side, but also without.

Version without hand lever and with round plug M8x1 electrical connection or single flying lead has IP65 protection class.

Ordering chart, Ex version

Approval acc. to II 2G Ex ia IIC T4 T5 T6 PTB01 ATEX 2048 and IECx PTB 07.0063

All valves with rectangular plug, mounting screws and flange seal; without plug connection (see Accessories)

Circuit function	Port connection	Orifice [mm]	QnN value 1-2 air [l/min] ¹⁾	QnN value 2-3 air [l/min] ¹⁾	Pressure range ²⁾ [bar]	Manual override	Resistance at 20°C +/-4% [Ω]	Minimum holding current [mA]	Item no.
C  3/2-way valve NC	Bürkert Flange	0.6	7	8.5	0-7	yes	320	29	175 657
	Bürkert Flange	0.6	7	8.5	0-7	yes	510	23	175 656
D  3/2-Wege-Ventil NO	Bürkert Flange	0.6	7	8.5	0-7	yes	320	29	183 550

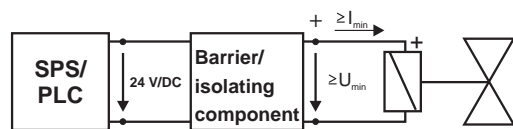
¹⁾ QnN value air [l/min]: Measurement with +20°C, 6 bar pressure on the valve input and 1 bar pressure differential

²⁾ Pressure values [bar]: Measured as overpressure to the atmospheric pressure

³⁾ Vacuum up to 10 bar on request

Mounting screws for Bürkert flange: M1.6x5 for Lateral flange: M1.6x20

Electrical data:

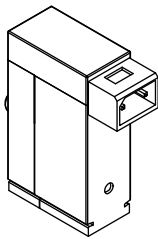


Functional values for valve switching function at 0 °C to +55°C	Permitted maximum values/ value pairs acc. to operating instructions
Min. holding current: 29mA	U _i 35V
Nominal coil resistance 320Ω ±4%	I _i 0.9A
Min. Holding current: 23mA	
Nominal coil resistance 510Ω ±4%	

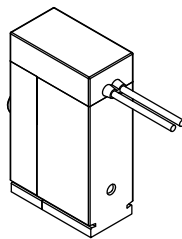
Ordering chart for accessories

Device	Characteristics	Item no.
Bürkert flange		
Single manifold	for Bürkert flange under M3	639 873
Manifold 2-fold	for Bürkert flange, M5	641 911
Manifold 4-fold	for Bürkert flange, M5	641 912
Manifold 6-fold	for Bürkert flange, M5	639 874
Blanking plate kit	for multiple manifolds, Bürkert flange	645 512
Lateral flange		
Single manifold	for lateral flange, M3	639 234
Manifold 2-fold	for lateral flange, M5	641 915
Manifold 4-fold	for lateral flange, M5	641 916
Manifold 6-fold	for lateral flange, M5	639 235
Blanking plate kit	for multiple manifolds, lateral flange	645 513
Tube connector plug		
Screw in fitting connection	Brass, straight, for M3 and tube - \varnothing 4 mm	782 534
Screw in fitting connection	Brass, straight, for M5 and tube - \varnothing 4 mm	787 810

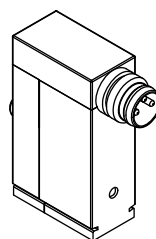
Options for the electrical connection, rectangular plug as standard, other connections on request



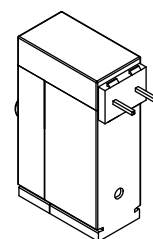
Rectangular plug
Raster 5.08 mm



2 flying leads
0.2 mm², 300 mm long





Circular plug
M8x1, 3-pin



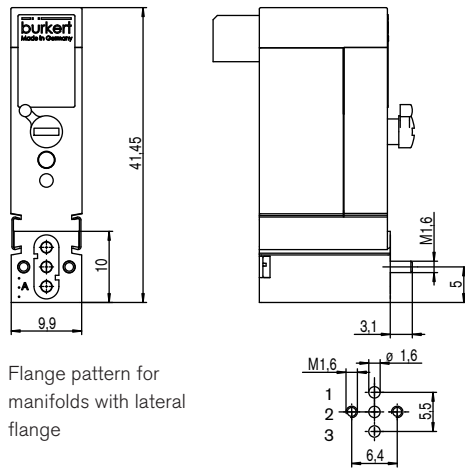
Blank connector
Raster 5.08 mm
(e.g. for board mounted connection 0,63 x 0,63)

Cable plug, Type 2505

	Type 2505, cable version	Item no.
	with 3m	133 486
	with 5m	167 494
	Type 2505, flying lead version	Item no.
	with 300 mm	644 068
	with 600 mm	162 144

Dimensions [mm]

Type 6144 with lateral flange

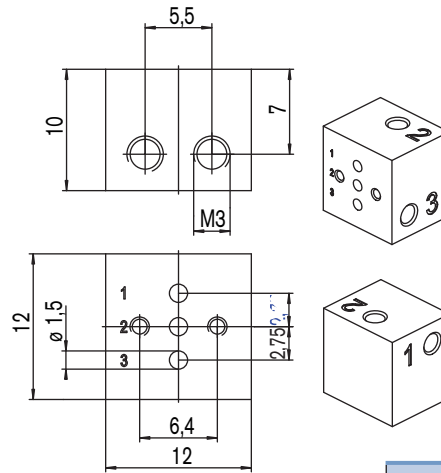


Flange pattern for manifolds with lateral flange

The valve can optionally be delivered with manual override on the left or right hand side (standard: opposite the electrical connection).

Single manifold for lateral flange

Material: Aluminium, M3 threaded

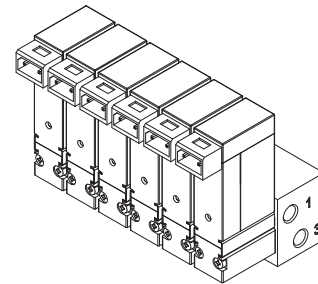
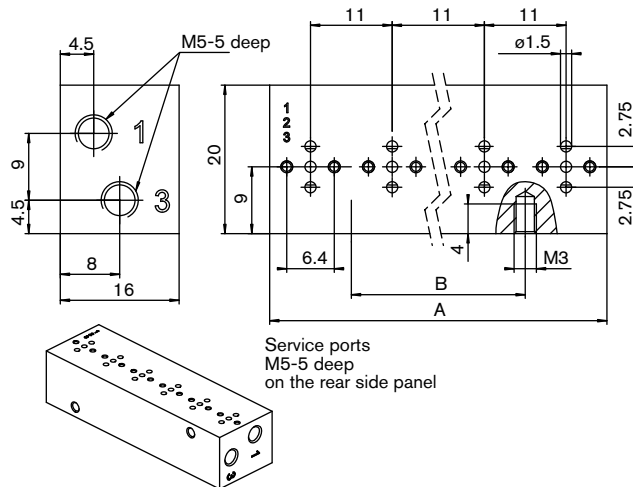


Item no.

639 234

Multiple manifolds for lateral flange

Material: Aluminium, M5 threaded



	A	B	Item no.
2 valves	22	-	641 915
4 valves	44	22	641 916
6 valves	66	44	639 235
8 valves	88	66	672 676
Blanking plate kit			645 513

Dimensions [mm] (cont.)

Type 6144 with Bürkert flange

Flange pattern for manifolds with Bürkert flange

The valve can optionally be delivered with manual override on the left or right hand side (standard: opposite the electrical connection).

Single manifold for Bürkert flange
Material: Aluminium, M3 threaded

Item no.
639 873

Multiple manifolds for Bürkert flange,
Material: Aluminium, M5 threaded

	A	B	Item no.
2 valves	22	-	641 911
4 valves	44	22	641 912
6 valves	66	44	639 874
Blanking plate kit			645 512

To find your nearest Bürkert facility, click on the orange box →

Pilot-Operated Solenoid Valve for Process Actuation



6516/6517 EExi



3/2- or 5/2-Way, PN 2 – 8 bar

- ✓ II2G EEx ia IIC T6 approved
PTB 01 ATEX 2175
- ✓ FM IS / I, II, III /1/ ABCDEFG approved
- ✓ High flow rates
- ✓ Long service life

Hazardous Areas

6516
6517
EExi

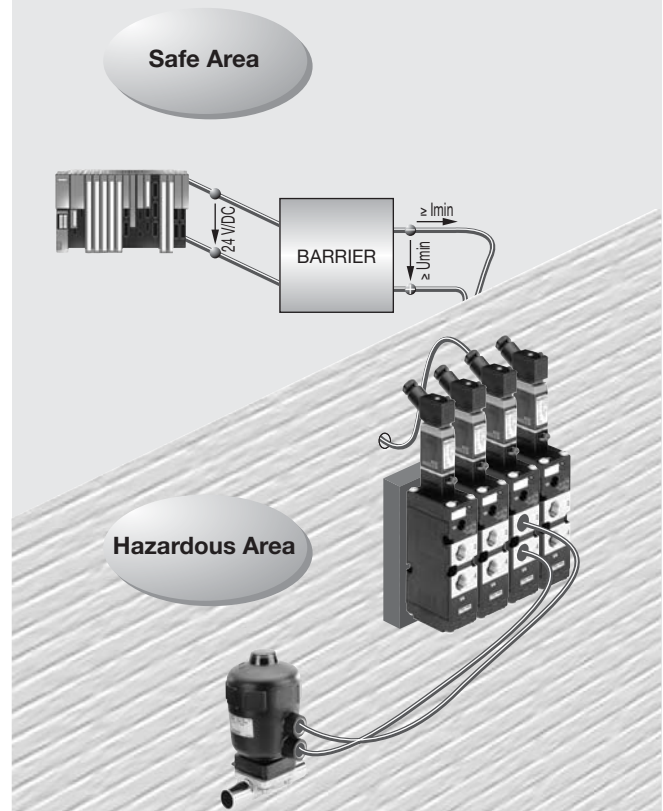
The 6516/6517 EExi valves are used for process actuation in hazardous areas. Thanks to the intrinsically safe design and the possibility of block mounting, the valves can be used in a wide variety of demanding applications.

Process Specification

Nominal voltage	24 V/DC <small>(for further information also consult our data sheet „Recommended Barriers“)</small>
Duty cycle	100% continuously rated
Protection class	IP 65 with cable plug
Materials	
Body	PA
Threaded port material	Brass or stainless steel
Seal	PB (NBR and PUR)
Fluids	Lubricated or unlubricated compressed air, instrument air and nitrogen
Ambient temperatures	
Block assembly	-10 up to +50°C (T6) -10 up to +55°C (T5)
Single mounting	-10 up to +55°C (T6)
Mounting position	Any, preferably solenoid system upright

Applications: Target markets

- Chemical industry
- Pharmaceutical processing equipment
- Industrial waste water treatment
- Oil and gas industry



Pilot-Operated Solenoid Valve for Process Actuation

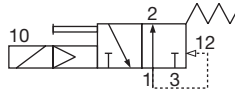


Hazardous Areas

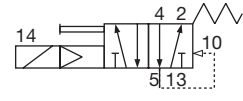
Technical Data

Circuit Function

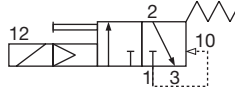
C 3/2-way valve, servo-assisted, in de-energized position, port 2 pressure relieved



H 5/2-way valve, servo-assisted, in de-energized position, pressure port 1 connected to port 2, port 4 exhausted



D 3/2-way valve, servo-assisted, in de-energized position, port 2 pressurized



Type	Circuit function	Orifice DN [mm]	QNn-Value (air) [l/min]	Pressure range [bar]	Response times [ms]		Weight [g]
					opening	closing	
6516 EExi	C (3/2-way)	8.0	1300	2 - 8	35	120	200
6516 EExi	D (3/2-way)	8.0	1300	2 - 8	35	120	200
6517 EExi	H (5/2-way)	8.0	1300	2 - 8	60	200	250

Flow rate: QNn-value air [l/min]

Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference

Pressure ranges [bar]

Measured as overpressure to the atmospheric pressure

Response times [ms]

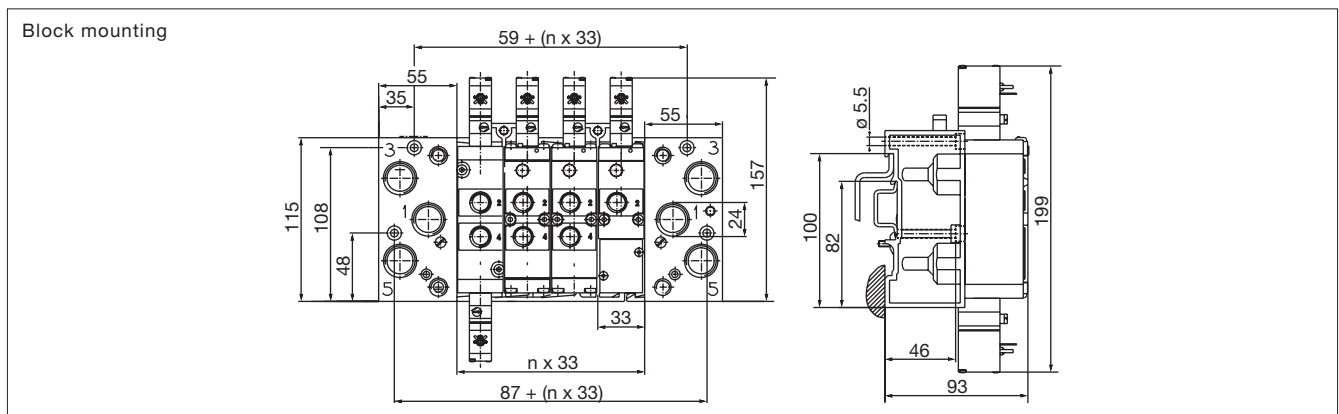
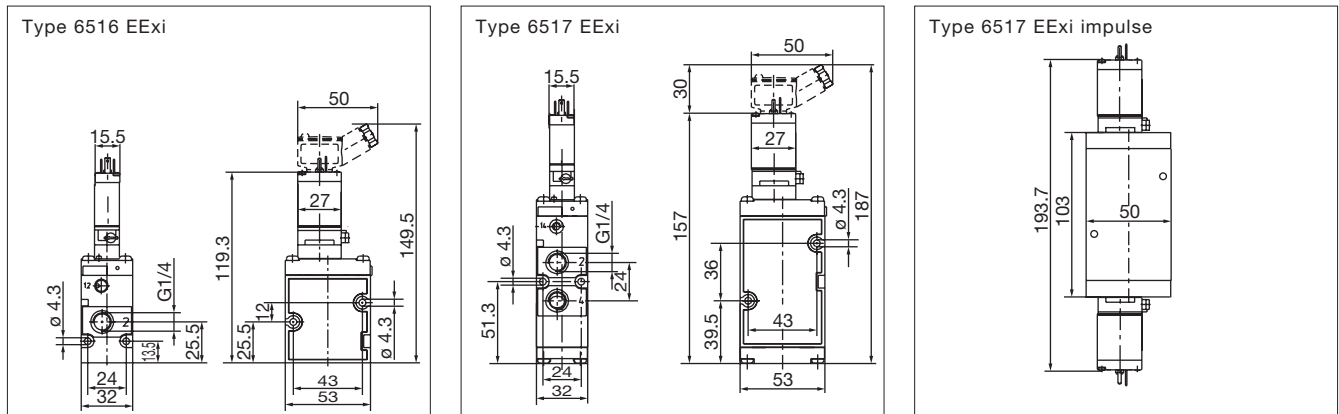
Measured at valve outlet at 6 bar and +20°C
 Opening Pressure rise from 0 to 90%
 Closing Pressure drop from 100 to 10%

Specifications - Ordering Chart (Other Versions on Request)

All valves in EEx ia IIC T6 versions with manual override, G 1/4 threads

Type	Circuit function	Orifice DN [mm]	QNn-Value (air) [l/min]	Supply port material	Pressure range [bar]	Item-No.
6516 EExi	C (3/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 500 L
6516 EExi	D (3/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 502 A
6517 EExi	H (5/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 315 B
6517 EExi	H impulse	8.0	1300	Brass, nickel-plated	2 - 8	140 505 B

Dimensions [mm]



In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.
0603/1_EU-en_00891759

Pilot-Operated Solenoid Valve for Process Actuation



6516/6517 EExi



3/2- or 5/2-Way, PN 2 – 8 bar

- ✓ II2G EEx ia IIC T6 approved
PTB 01 ATEX 2175
- ✓ FM IS / I, II, III /1/ ABCDEFG
approved
- ✓ High flow rates
- ✓ Long service life

Hazardous Areas

6516
6517
EExi

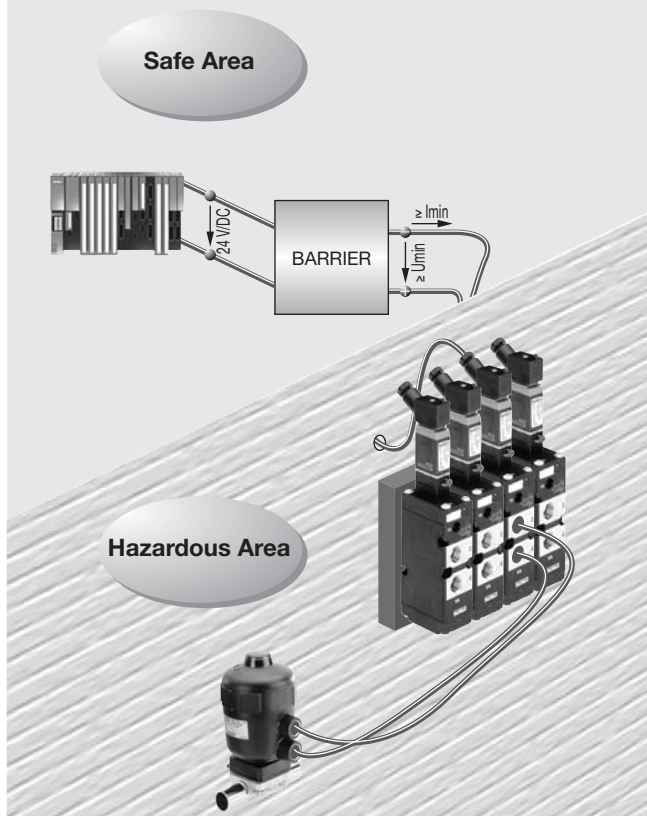
The 6516/6517 EExi valves are used for process actuation in hazardous areas. Thanks to the intrinsically safe design and the possibility of block mounting, the valves can be used in a wide variety of demanding applications.

Process Specification

Nominal voltage	24 V/DC <small>(for further information also consult our data sheet „Recommended Barriers“)</small>
Duty cycle	100% continuously rated
Protection class	IP 65 with cable plug
Materials	
Body	PA
Threaded port material	Brass or stainless steel
Seal	PB (NBR and PUR)
Fluids	Lubricated or unlubricated compressed air, instrument air and nitrogen
Ambient temperatures	
Block assembly	-10 up to +50°C (T6) -10 up to +55°C (T5)
Single mounting	-10 up to +55°C (T6)
Mounting position	Any, preferably solenoid system upright

Applications: Target markets

- Chemical industry
- Pharmaceutical processing equipment
- Industrial waste water treatment
- Oil and gas industry



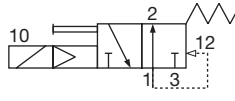
Pilot-Operated Solenoid Valve for Process Actuation



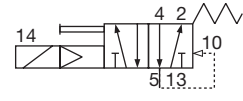
Technical Data

Circuit Function

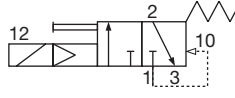
C 3/2-way valve, servo-assisted, in de-energized position, port 2 pressure relieved



H 5/2-way valve, servo-assisted, in de-energized position, pressure port 1 connected to port 2, port 4 exhausted



D 3/2-way valve, servo-assisted, in de-energized position, port 2 pressurized



Type	Circuit function	Orifice DN [mm]	QNn-Value (air) [l/min]	Pressure range [bar]	Response times [ms]		Weight [g]
					opening	closing	
6516 EExi	C (3/2-way)	8.0	1300	2 - 8	35	120	200
6516 EExi	D (3/2-way)	8.0	1300	2 - 8	35	120	200
6517 EExi	H (5/2-way)	8.0	1300	2 - 8	60	200	250

Flow rate: QNn-value air [l/min]

Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference

Pressure ranges [bar]

Measured as overpressure to the atmospheric pressure

Response times [ms]

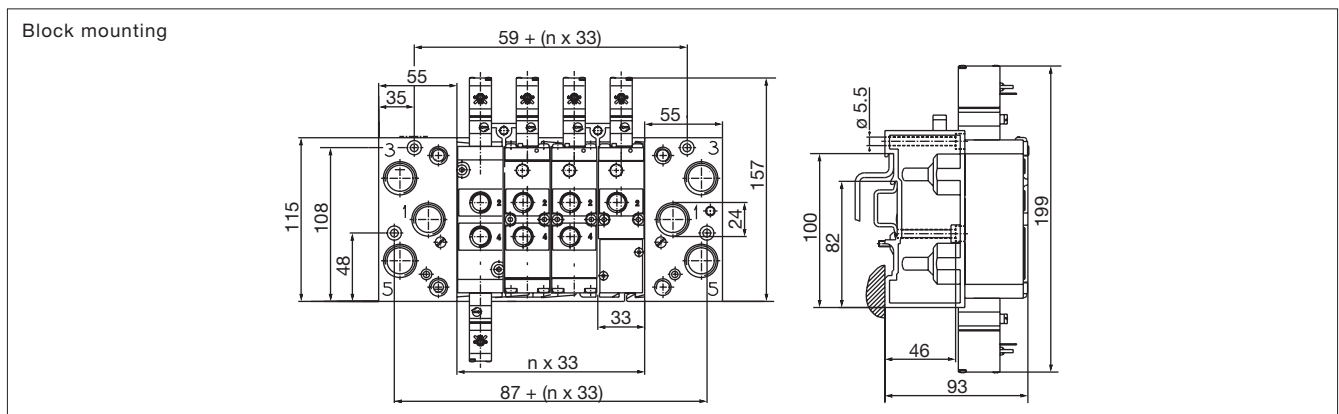
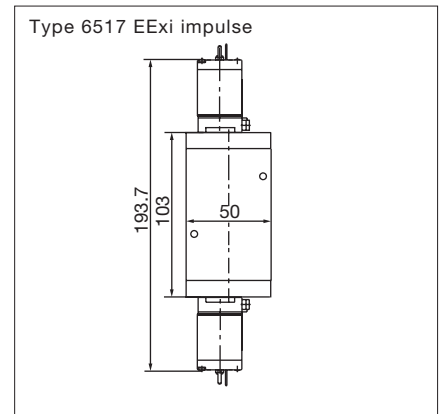
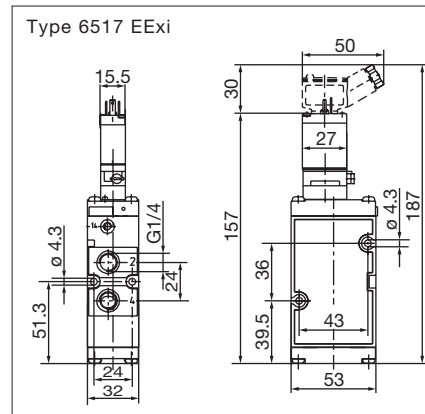
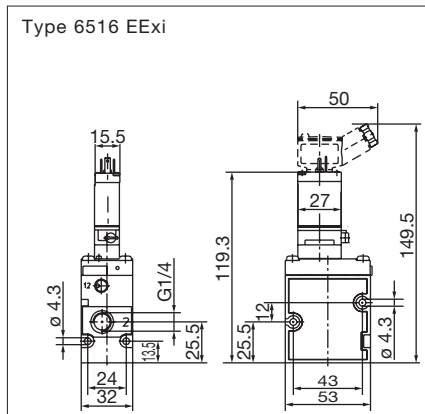
Measured at valve outlet at 6 bar and +20°C
Opening Pressure rise from 0 to 90%
Closing Pressure drop from 100 to 10%

Specifications - Ordering Chart (Other Versions on Request)

All valves in EEx ia IIC T6 versions with manual override, G 1/4 threads

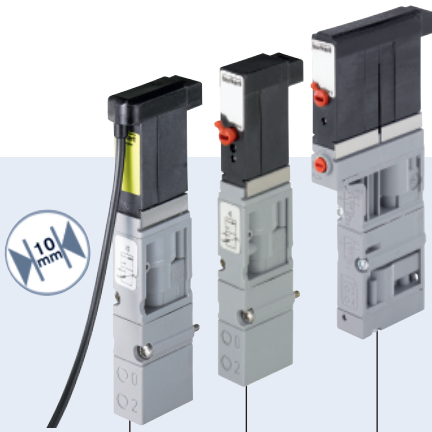
Type	Circuit function	Orifice DN [mm]	QNn-Value (air) [l/min]	Supply port material	Pressure range [bar]	Item-No.
6516 EExi	C (3/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 500 L
6516 EExi	D (3/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 502 A
6517 EExi	H (5/2-way)	8.0	1300	Brass, nickel-plated	2 - 8	140 315 B
6517 EExi	H impulse	8.0	1300	Brass, nickel-plated	2 - 8	140 505 B

Dimensions [mm]



In case of special requirements please consult for advice.

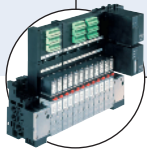
We reserve the right to make technical changes without notice.
0603/1_EU-en_00891759



3/2-way and 2 x 3/2-way Solenoid Valve for pneumatics

- Compact design
- Single and manifold mounting
- Low power consumption
- Fast response times
- Second connection shut-off function

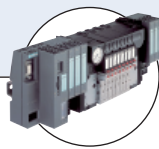
Type 6524 can be combined with...



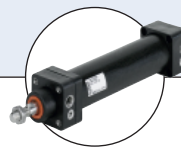
Type 8640
Valve island



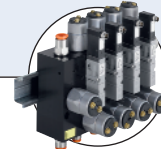
Type 2031
Diaphragm valve



Type 8644
Valve island



Type 0044
Cylinder



Type MKRS
Redundancy bloc

The Type 6524 consists of the pilot flipper solenoid valve Type 6144 and a pneumatic seat valve. The flipper principle allows switching of high pressures together with low power consumption and fast response times. All valves are equipped with manual override as a standard.

The 2 x 3/2-way valve version is the combination of two pilot flipper solenoid valves Type 6144 and a pneumatic seat valve.

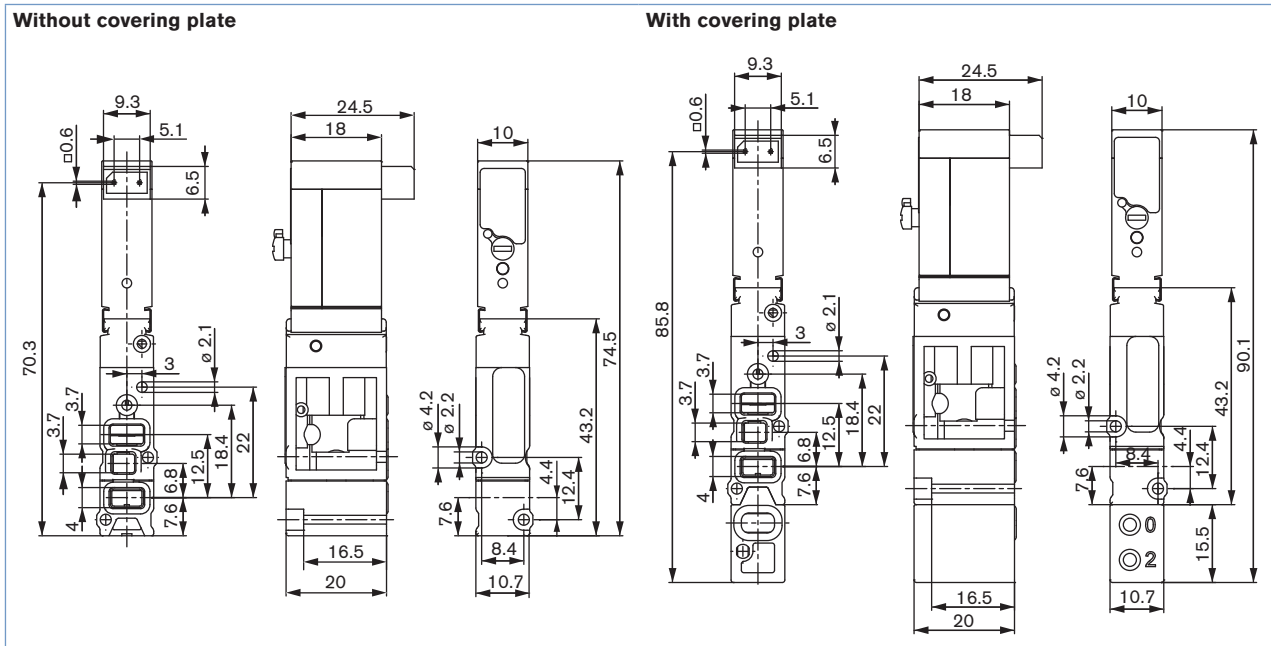
The valve is also available with a second connection (pressed cable), whereby a safety-related shut-off function is realized

Technical data	3/2-way valve	2 x 3/2-way valve
Orifice	DN4.0	
Body material	PPS, PA	
Seal material	FKM, NBR	
Medium	Lubricated, oilfree, dry compressed air; neutral gases (5 µm filter recommended)	
Medium temperature	-10...+50°C	
Ambient temperature	-10...+55 °C	
Manual override	Standard	
Port connection	Flange for MP11	
Pneumatic module	Type MP11 with M5, M7, push-in connection Ø 6 mm	
Voltage tolerance	±10%	
Cycle rate	approx. 1000 c.p.m.	
Voltage	24 V DC *	
Nominal power	0.8 W	2 x 0.8 W
Duty cycle	Continuous operation (100% ED)	
Electrical connection on valve	Rectangular plug with 2-pole raster 5.08 mm	Rectangular plug with 3-pole raster 2.54 mm
Type of protection	IP40 with rectangular plug	
Protection class	3 acc. to VDE 0580	
Weight	20 g	40 g
Mounting	with 2 screws M2 x 20	with 2 screws M2 x 28
Installation	As required, preferably with actuator upright	

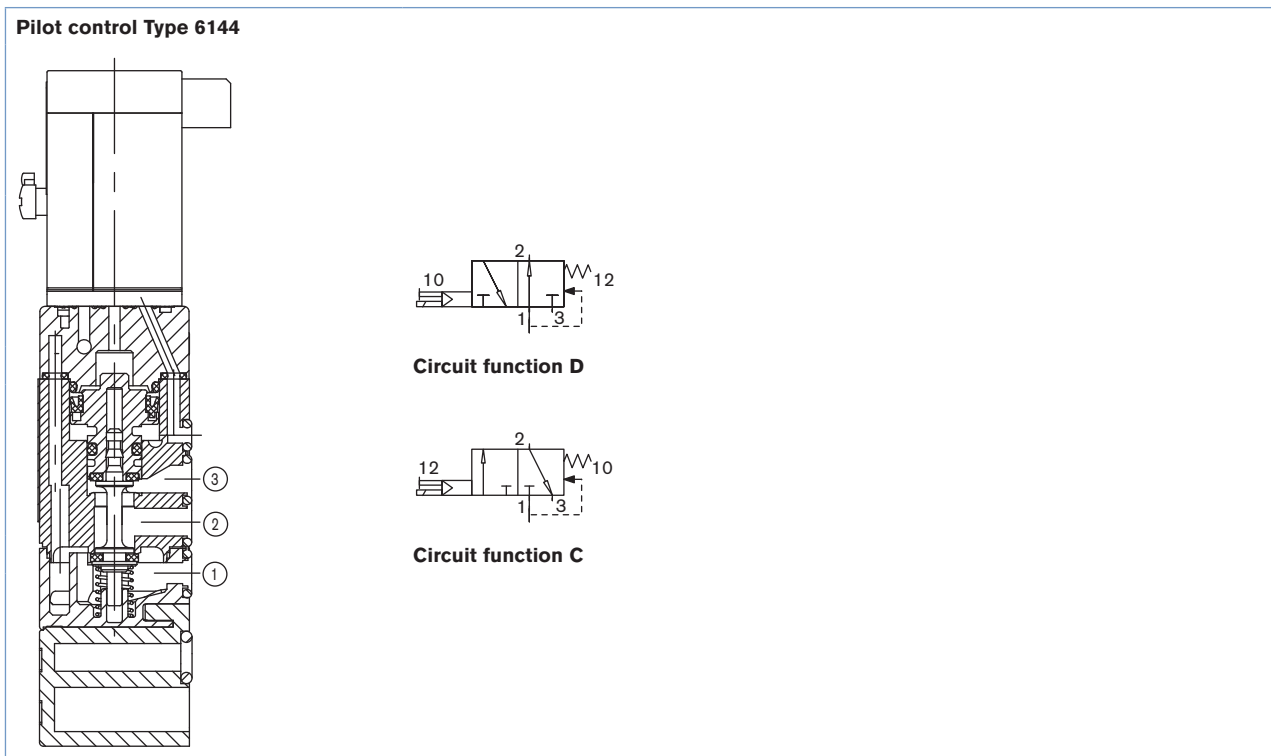
* 10% residual ripple allowed

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

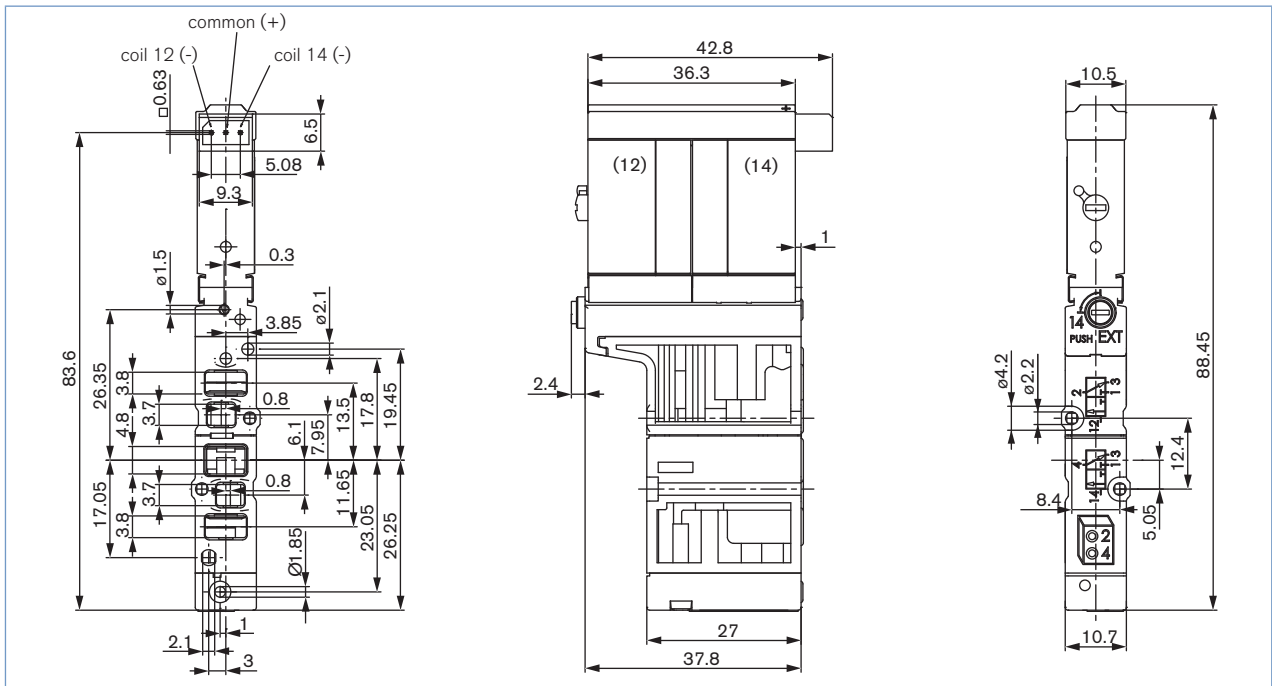
Dimensions [mm] 3/2-way solenoid valve - Standard version



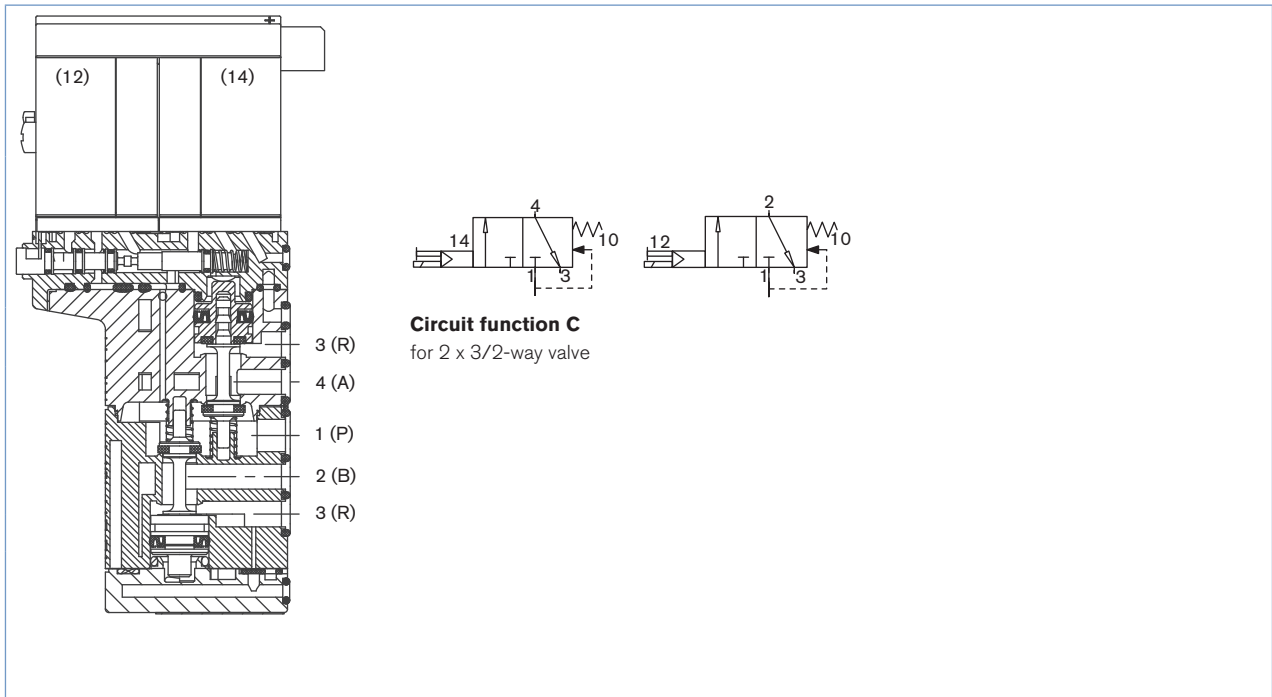
Sectional drawing 3/2-way solenoid valve - Standard version



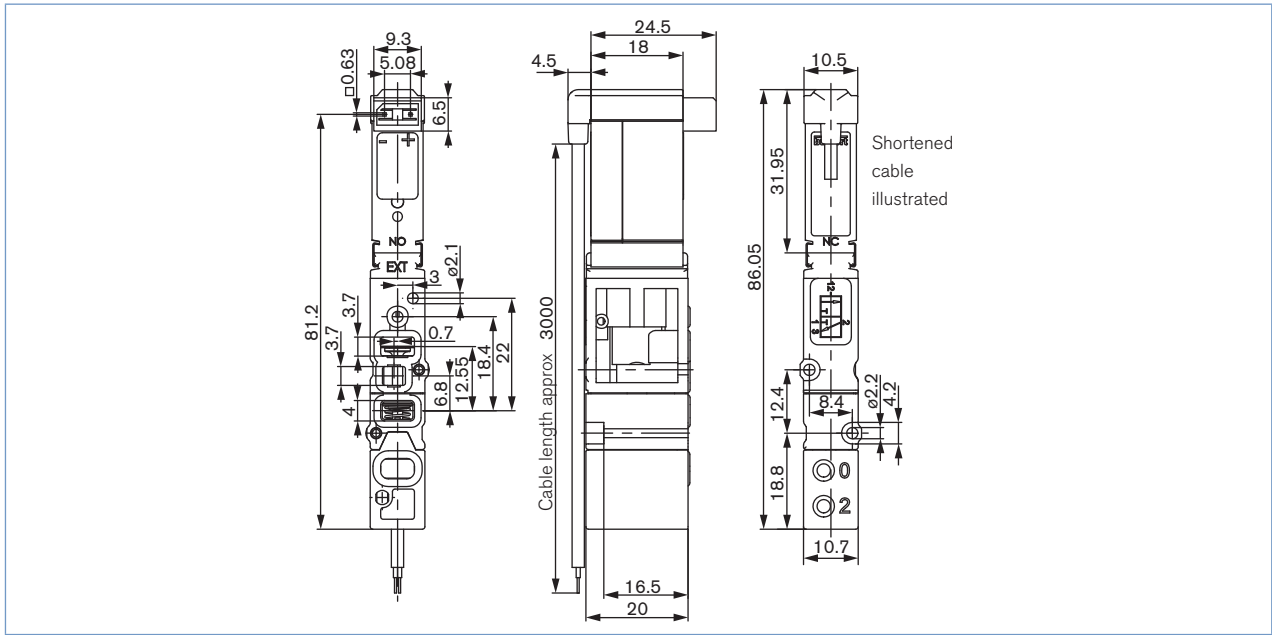
Dimensions [mm] 2 x 3/2-way solenoid valve - Standard version



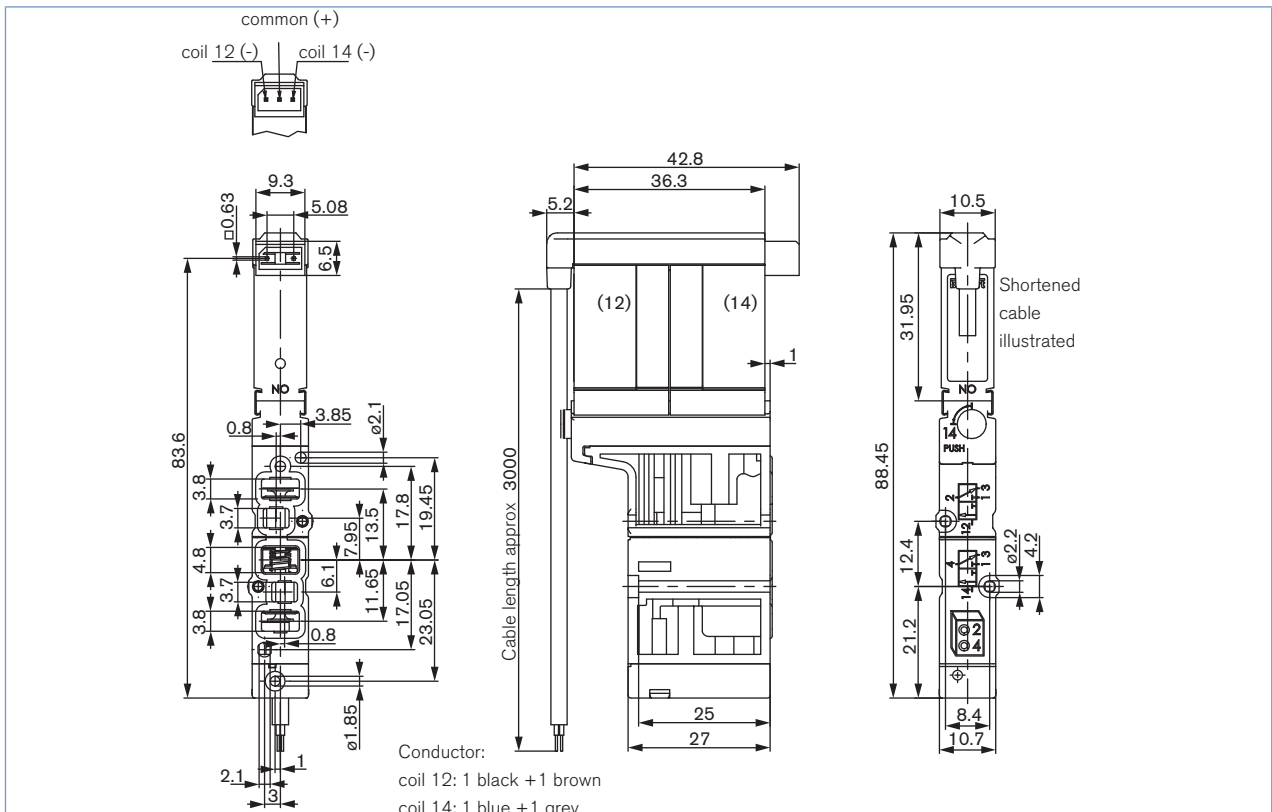
Sectional drawing 2 x 3/2-way solenoid valve - Standard version



Dimensions [mm] 3/2-way solenoid valve - Second connection shut-off function

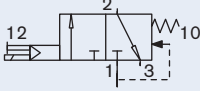
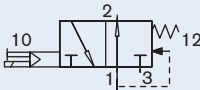


Dimensions [mm] 2 x 3/2-way solenoid valve - Second connection shut-off function



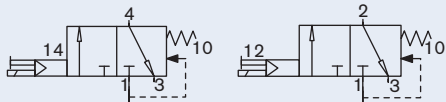
Ordering chart for valves - Standard version

3/2-way solenoid valve

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Voltage/frequency [V/Hz]	Item no.
C 3/2-way valve 	4	300	Vac...10 ¹⁾	24 V DC *	186 258
			1...10	24 V DC *	186 257
			2.5...10	24 V DC *	184 043
D 3/2 way valve 	4	300	2.5...10	24 V DC *	184 400

* 10% residual ripple allowed

2 x 3/2-way solenoid valve

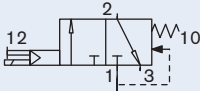
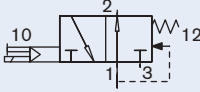
Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Voltage/frequency [V/Hz]	Integrated power savings electronics	Item no.
C 2 x 3/2 way valve 	4	300	Vac...10 ¹⁾	24 V DC *	Yes ⁴⁾	186 259
			2.5...10	24 V DC *	Yes ⁴⁾	186 260
			2.5...10	24 V DC *	No	204 710

* 10% residual ripple allowed

¹⁾ Version with auxiliary pilot air²⁾ Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference³⁾ Measured as overpressure to the atmospheric pressure⁴⁾ Applicable on valve island 8640, AirLine system 8644 or valve blocks

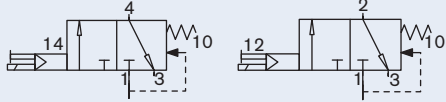
Ordering chart for valves - Second connection shut-off function

3/2-way solenoid valve, without manual override

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Voltage/frequency [V/Hz]	Item no.
C 3/2-way valve 	4	300	Vac...10 ¹⁾	24 V DC *	On request
			1...10	24 V DC *	On request
			2.5...10	24 V DC *	285 545
D 3/2 way valve 	4	300	2.5...10	24 V DC *	On request

* 10% residual ripple allowed

2 x 3/2-way solenoid valve, without manual override

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Voltage/frequency [V/Hz]	Integrated power savings electronics	Item no.
C 2 x 3/2 way valve 	4	300	Vac...10 ¹⁾	24 V DC *	Yes ⁴⁾	On request
			2.5...10	24 V DC *	Yes ⁴⁾	285 547
			2.5...10	24 V DC *	No	On request

* 10% residual ripple allowed

¹⁾ Version with auxiliary pilot air²⁾ Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference³⁾ Measured as overpressure to the atmospheric pressure⁴⁾ Applicable on valve island 8640, AirLine system 8644 or valve blocks

Ordering chart for accessories

Accessory	Version	Features	Item no.
Rectangular cable plug for 6524 single valve	Raster 5.08 mm	with 3 m cable 2-pins	133 486
		with 300 mm flying leads 2-pins	644 068
		with 2 single contacts	644 067
Covering plate for 5/2-way valve position	Complete	for 1 unused valve position	650 373
Covering plate for 2 x 3/2-way valve position		for 1 unused valve position	661 092
Pneumatic connector module	Left	G 1/4	144 750
		NPT 1/4	144 751
	Right	G 1/4	144 753
		NPT 1/4	144 754
Pneumatic basic module MP11, 2 valves wide	Push-in connection Ø 6 mm	without check valve	144 903
		without check valve for 2 x 3/2-way valve	170 261
		with check valve in R+S for 2 x 3/2-way valve	170 266
	Connection M7	without check valve	144 905
		without check valve for 2 x 3/2-way valve	170 263
		with check valve in R+S for 2 x 3/2-way valve	170 276
Pneumatic basic module MP11, 8 valves wide	Push-in connection Ø 6 mm	without check valve	144 912
		without check valve for 2 x 3/2-way valve	170 279
		with check valve in R+S for 2 x 3/2-way valve	170 285
	Connection M7	without check valve	144 914
		without check valve for 2 x 3/2-way valve	170 282
		with check valve in R+S for 2 x 3/2-way valve	170 287

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In case of special application conditions,
please consult for advice.

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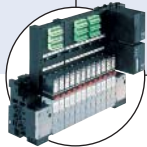
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5/2-way Flipper Solenoid Valve for pneumatics



- Compact design
- Single and manifold mounting
- Low power consumption
- Fast response times
- Second connection shut-off function

Type 6525 can be combined with...



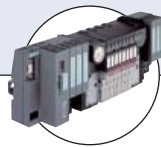
Type 8640

Valve island



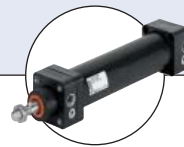
Type 2031

Diaphragm valve



Type 8644

Valve island



Type 0044

Cylinder



Type MKRS

Redundancy bloc

The Type 6525 consist of a pilot flipper valve Type 6144 and a pneumatic seat valve. The flipper principle allows switching of high pressures together with low power consumption and fast response times.

All valves are equipped with manual override as a standard.

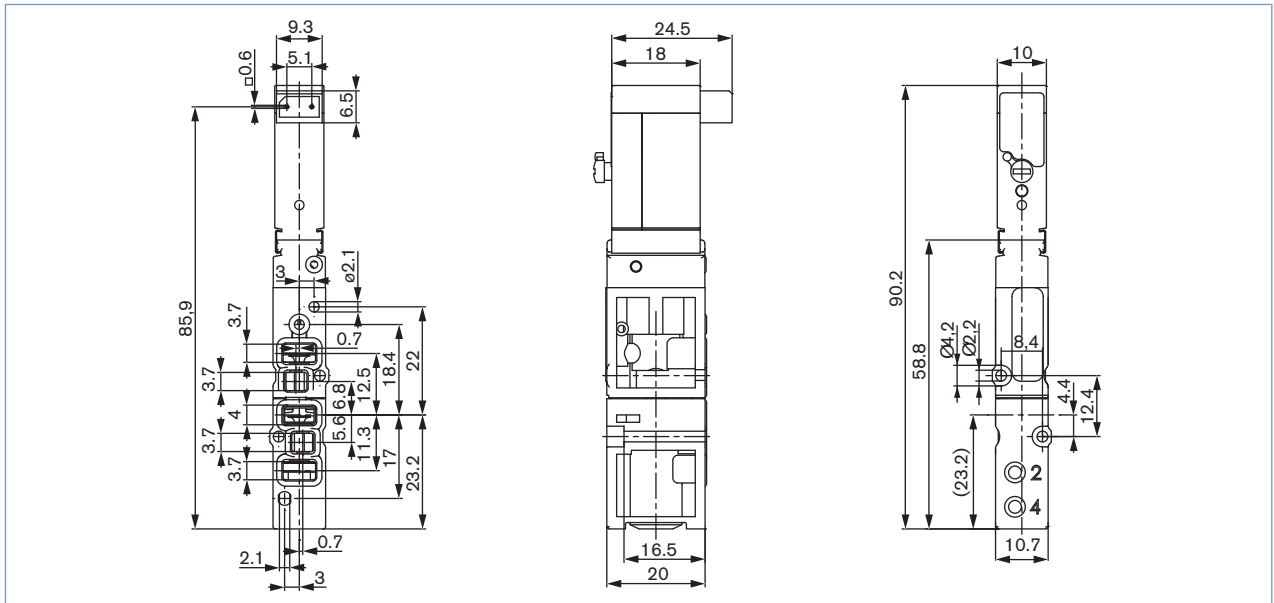
The valve is also available with a second connection (pressed cable), whereby a safety-related shut-off function is realized

Technical data	
Orifice	DN4,0
Body material	PPS, PA
Seal material	FKM, NBR and PUR
Medium	Lubricated, oil free, dry compressed air; neutral gases (5 µm filter recommended)
Medium temperature	-10...+50°C
Ambient temperature	-10...+55°C
Manual override	Standard
Port connection	Flange for MP11
Pneumatic module	Type MP11 with M5, M7, push-in connection Ø 6 mm
Voltage tolerance	±10%
Cycling rate	approx. 1000 c.p.m.
Voltage	24 V DC *
Nominal power	0.8 W
Duty cycle	Continuous operation (100% ED)
Electrical connection on valve	Rectangular plug with Raster 5.08 mm
Type of protection	IP40 with rectangular plug
Protection class	3 acc. to VDE 0580
Weight	21 g
Mounting	with 2 screws M2 x 20
Installation	As required, preferably with actuator upright

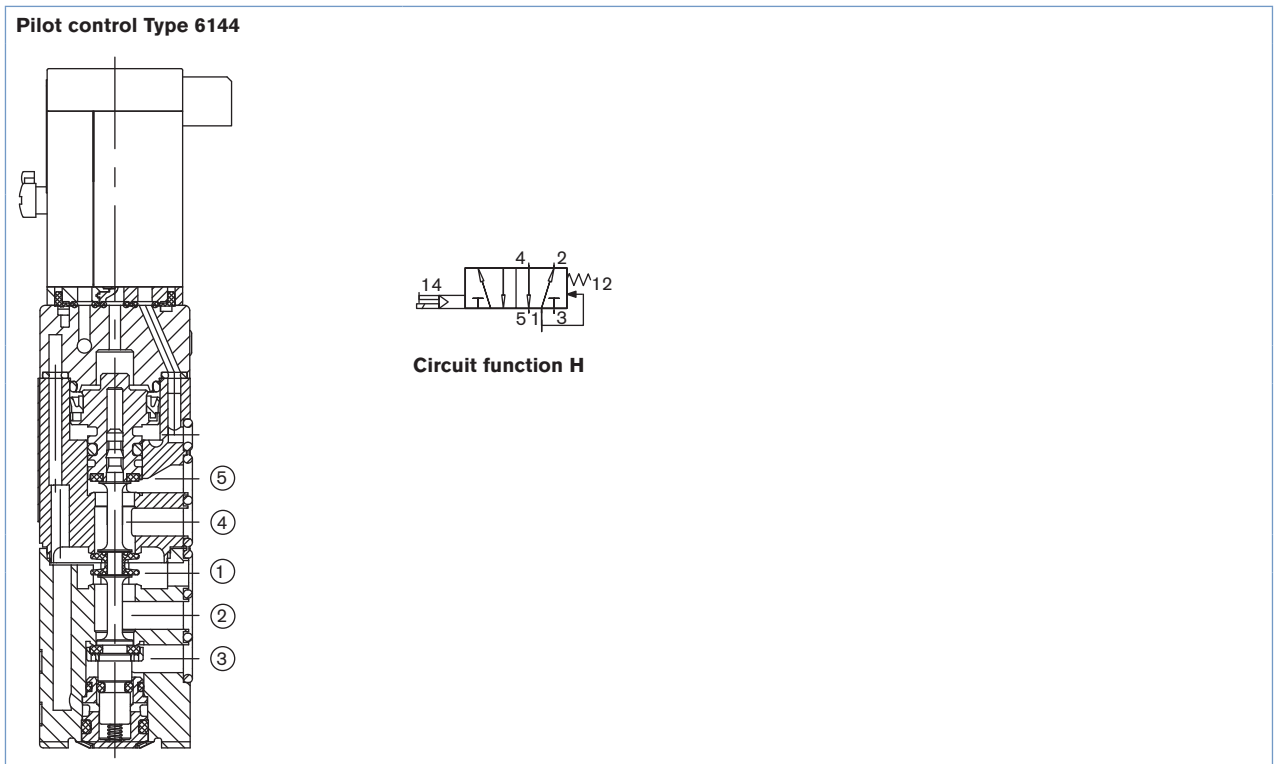
* 10% residual ripple allowed

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

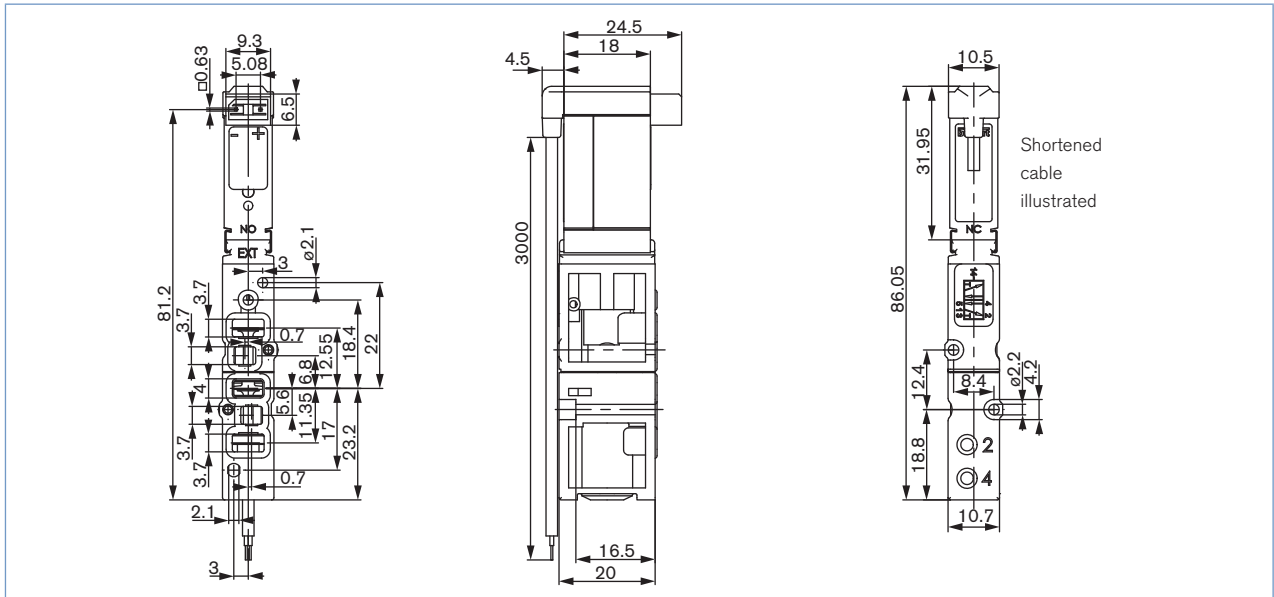
Dimensions [mm] - Standard version



Sectional drawing - Standard version



Dimensions [mm] - Second connection shut-off function



Ordering chart for valves

Standard version

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Response times			Item no.
				Opening [ms]	Closing [ms]	Voltage/frequency [V/Hz]	
 H 5/2-way valve	4	300	1...10 ¹⁾	<10	<10	24 V DC *	186 271
			2,5...10	<10	<10	24 V DC *	179 938

* 10% residual ripple allowed

¹⁾ Version with auxiliary pilot air²⁾ Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference³⁾ Measured as overpressure to the atmospheric pressure

Second connection shut-off function, without manual override

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min] ²⁾	Pressure range [bar] ³⁾	Response times			Item no.
				Opening [ms]	Closing [ms]	Voltage/frequency [V/Hz]	
 H 5/2-way valve	4	300	1...10 ¹⁾	<10	<10	24 V DC *	On request
			2,5...10	<10	<10	24 V DC *	285 544

* 10% residual ripple allowed

¹⁾ Version with auxiliary pilot air²⁾ Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference³⁾ Measured as overpressure to the atmospheric pressure

Ordering chart for accessories

Accessory	Version	Features	Item no.
Rectangular cable plug	Raster 5.08 mm	with 3 m cable 2-pin	133 486
		with 300 mm flying leads 2-pin	644 068
		with 2 single contacts	644 067
Protective cover for 5/2-way valve position	complete	for 1 unused valve position	650 373
Pneumatic connector module	left	G 1/4	144 750
		NPT 1/4	144 751
	right	G 1/4	144 753
		NPT 1/4	144 754
Pneumatic basic module MP11, 2 valve wide	Push-in connection Ø 6 mm	without check valve	144 903
		with check valve in R and S	144 906
	Connection M7	without check valve	144 905
		with check valve in R and S	144 908
Pneumatic basic module MP11, 8 valve wide	Push-in connection Ø 6 mm	without check valve	144 912
		with check valve in R and S	144 915
	Connection M7	without check valve	144 914
		with check valve in R and S	144 917

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In case of special application conditions,
please consult for advice

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The AirLINE product program

The standard product program provides a supplement to the product overview for Pneumatics and Process Interfaces to help you choose the suitable valve island Type 8640 and the automation system Type 8644. Other examples of applications and references from the sectors of Food and Beverages, Pharmaceuticals, Water Treatment, Chemicals, Gas Handling, General Machine and Plant Construction can be found in our Control Cabinet Solutions brochure.

Type 8640

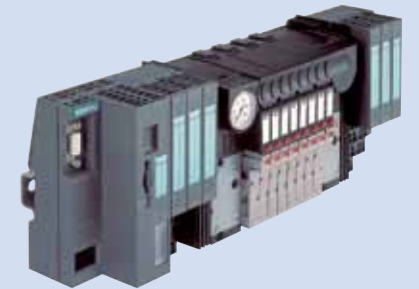
8640 & 8644
Standard

- Coarse modular valve island: 8-, 12-, 16-, 20- and 24-fold
- Conventional connection technology: single wire, common connection & multipin
- Fieldbus technology: Profinet IO, Ethernet/IP, Modbus TCP, Profibus DP, DeviceNet, CANopen
- Processing of digital input signals (max. 32)
- Standard order numbers starting on page 4
- Pneumatic & electric accessories starting on page 20



Type 8644

- Fine modular automation system: 2- to 64-fold (in steps of 2)
- Cooperation partners: Siemens, Wago, Phoenix Contact & Rockwell
- Fieldbus technology: Profinet IO, Ethernet/IP, Modbus TCP, EtherCAT, CC-Link, Profibus DP, DeviceNet, CANopen, Interbus, IO-Link, sercos III
- Processing of digital and analog input and output signals
- Use in Ex Zone 2



8640 & 8644
AirLINE Quick

- Functions as Type 8640 Standard
- Easy adaptation to the valve cabinet (wall or bottom of cabinet)
- Adapter sizes (max. number of valve functions): 4x (8), 8x (16), 12x (24), 16x (16)
- Materials: anodised aluminium and stainless steel 1.4301 for hygienic processes
- Standard order numbers starting on page 8
- Pneumatic & electric accessories starting on page 20



- Functions as Type 8644 Standard
- Easy adaptation to the valve cabinet (wall or bottom of cabinet)
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Materials: anodised aluminium and stainless steel 1.4301 for hygienic processes
- Use in Ex Zone 2
- Standard order numbers starting on page 14
- Pneumatic & electric accessories starting on page 20



8614 & 8615
valve cabinet

- Standardised valve cabinet with valve islands Type 8640 Standard and AirLINE Quick
- Customised valve cabinet
- Certified valve cabinet for use in Ex areas
- Materials: plastic, sheet steel, stainless steel, stainless steel hygienic design
- Control cabinet solutions starting on page 18

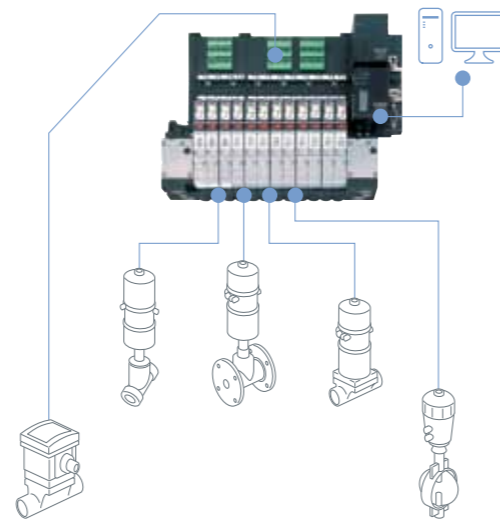


- Standardised valve cabinet with automation system Type 8644 Standard and AirLINE Quick
- Customised valve cabinet
- Certified valve cabinet for use in Ex areas
- Materials: plastic, sheet steel, stainless steel, stainless steel hygienic design
- Control cabinet solutions starting on page 18



Type 8640 Standard 3/2 and 5/2-way functions

The standard versions of the product program for Type 8640 facilitate the selection of the right valve island. If you opt for a standard version, you will benefit from shorter availability times, faster installation and availability of your system.



Example for application

Valve functions	Digital inputs	Profinet IO	Profibus DP	RIO Slave	Collective socket	Multipin
8x 3/2	8	253 644	216 223	187 663	203 956	706 532
		253 651	230 792	237 091	*	231 603
8x 5/2	16	253 767	210 182	253 242	227 951	706 854
		253 769	224 071	253 245	*	253 244
8x 2x3/2	16	253 679	189 667	237 096	208 382	224 404
		253 683	237 110	237 097	*	237 073
12x 5/2	24	253 770	710 531	253 251	189 279	708 412
		253 771	710 046	253 247	*	207 607
12x 2x3/2	24	253 703	208 176	218 304	235 702	182 089
		253 706	218 307	218 308	*	173 571
16x 3/2	16	253 656	189 291	235 597	708 042	706 713
		253 666	178 229	174 333	*	177 419
16x 5/2	32	253 773	709 711	710 317	708 751	169 891
		253 774	234 195	253 253	*	253 254
24x 3/2	24	253 672	710 320	710 457	202 871	169 920
		253 675	215 422	214 681	*	707 368
24x 5/2		253 776	182 710	253 258	181 735	182 716

Important: - Our fieldbus modules (Profinet IO, Profibus DP, Ethernet/IP, Modbus TCP) can be combined with up to 7 RIO slave modules under one bus address.
- Valve islands with Ethernet/IP or Modbus TCP on request.

Order quantity & availability:

≤ 10 items: 5 days	≤ 20 items: 10 days	≤ 30 items: 15 days	
	≤ 20 items: 10 days	≤ 30 items: 15 days	
		20 days	

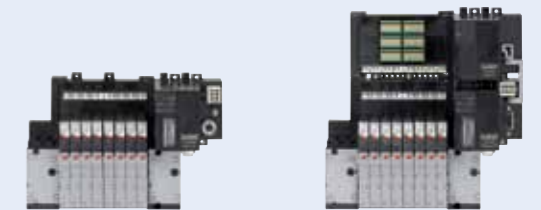
* technically not possible

Applications

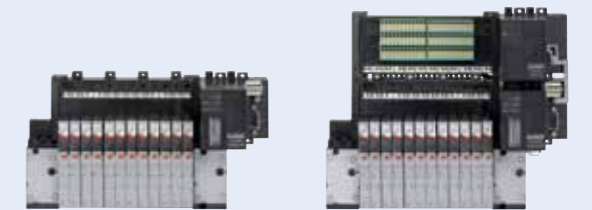
For general applications

Functions

Flow rate of valves (QNn value)	300 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8640 with 8x 2x3/2-way valves with Profibus DP (with 16 digital inputs – in picture at right)



Type 8640 with 12x 2x3/2-way valves with Profibus DP (with 24 digital inputs – in picture at right)



Type 8640 with 16x 5/2-way valves with Profibus DP (with 32 digital inputs – in picture at right)

Type 8640 Standard with 3/2 and 5/2-way functions

Including process reliability functions, pneumatic HotSwap and check valves



Our pneumatic hot-swap function and the integrated check valves add reliability to your process! The availability of your system will be increased, since the pneumatic HotSwap function allows replacement of valves during operation. Integrated check valves prevent pressure build-up on the valve island in the event of a malfunction and ensure reliable ventilation of the actuators.

Valve functions	Digital inputs	Manual / Automatic switch	Profinet IO	Profibus DP	RIO Slave	Collective socket	Multipin
8x 3/2		Yes	253 646	218 900	236 139	208 250	219 010
	8		253 648	218 898	237 057	*	237 069
	8	Yes	253 652	219 041	229 922	*	237 075
8x 5/2			253 654	218 894	237 092	*	219 572
	8		253 589	218 906	237 093	213 074	707 131
	16		253 595	218 902	237 094	*	237 076
8x 2x3/2			253 599	218 904	237 095	*	229 577
	16		253 681	236 022	237 071	226 084	179 369
12x 2x3/2			253 684	230 105	164 850	*	237 077
	24		253 705	235 781	173 388	226 086	226 360
16x 3/2			253 708	230 102	236 014	*	179 368
	16		253 658	219 042	236 140	219 386	217 779
	16	Yes	253 670	212 180	227 905	*	237 079
	32	Yes	253 676	212 179	237 099	*	237 080
16x 5/2			253 664	212 182	220 612	*	237 083
	16	Yes	253 669	212 181	220 611	*	237 081
	32		253 601	218 956	237 100	225 861	237 084
	32	Yes	253 603	218 955	237 101	*	237 085
24x 3/2			253 606	212 184	237 104	*	237 089
	16	Yes	253 608	212 183	237 102	*	237 088
	32		253 627	212 187	230 230	*	229 588
	32	Yes	253 628	215 840	215 841	*	237 090
24x 5/2			253 680	213 292	214 416	183 055	171 115
	24	Yes	253 674	213 291	213 491	*	*
	24	Yes	253 677	212 109	212 115	*	707 369
24x 5/2			250 280	207 661	212 111	*	*
	24		253 629	172 040	237 106	213 280	217 482
	24	Yes	253 631	237 108	237 107	*	*
	24	Yes	253 638	213 459	213 503	*	707 370
			253 641	213 458	213 493	*	*

Important: - Our fieldbus modules (Profinet IO, Profibus DP, Ethernet/IP, Modbus TCP) can be combined with up to 7 RIO slave modules under one bus address.
- Valve islands with Ethernet/IP or Modbus TCP on request.

Order quantity & availability:

≤ 3 items: from warehouse	≤ 10 items: 5 days	≤ 20 items: 10 days	≤ 30 items: 15 days
	≤ 10 items: 5 days	≤ 20 items: 10 days	≤ 30 items: 15 days
		≤ 20 items: 10 days	≤ 30 items: 15 days
			20 days

* technically not possible

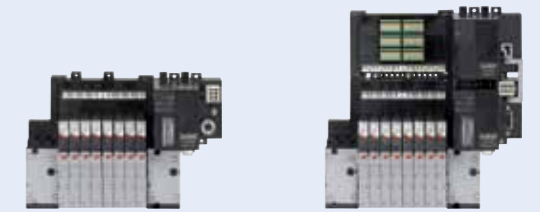
Applications

For general and hygienic applications

Functions

- With pneumatic HotSwap function
- With check valves in R and S channel

Flow rate of valves (QNn value)	150 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8640 with 8x 2x3/2-way valves with Profibus DP (with 16 digital inputs – in picture at right)



Type 8640 with 12x 2x3/2-way valves with Profibus DP (with 24 digital inputs – in picture at right)



Type 8640 with 16x 5/2-way valves with Profibus DP (with 32 digital inputs – in picture at right)

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

AirLINE Quick bridges the gap between central and decentralised automation concepts.

Equipped with an aluminium or stainless steel flange plate, AirLINE Quick can be mounted directly on the wall of a cabinet.

The installation is in the direct vicinity of the process or the machine environment. This reduces the distance to the actuator in the field.

AirLINE Quick features:

- Reduction of the distance to the valves directly in the cleaning environment
- Cost savings due to fewer cables and pneumatic hoses in the valve cabinet
- Time savings due to faster installation in the valve cabinet
- Space savings due to small valve cabinets

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Profibus DP	RIO Slave	Collective socket	Multipin
4x 2x3/2		Anodised aluminium	**	**	**	243 003	247 995
8x 2x3/2	16		253 359	230 189	233 843	230 292	230 619
			253 495	230 195	233 933	*	230 543
12x 2x3/2	24		253 539	230 196	233 953	230 295	230 616
			253 544	230 198	236 050	*	230 620
16x 5/2	32		253 556	247 613	247 571	247 621	247 887
			253 560	247 618	247 625	*	247 895

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Profibus DP	RIO Slave	Collective socket	Multipin
4x 2x3/2		Stainless steel 1.4301	**	**	**	247 986	247 997
8x 2x3/2	16		253 360	230 183	233 886	230 290	230 617
			253 496	230 193	233 936	*	230 542
12x 2x3/2	24		253 540	230 197	233 954	230 293	230 615
			253 552	230 200	236 041	*	230 622
16x 5/2	32		253 557	247 615	247 587	247 622	247 892
			253 561	246 868	247 628	*	247 896

Important: - Our fieldbus modules (Profinet IO, Profibus DP, Ethernet/IP, Modbus TCP) can be combined with up to 7 RIO slave modules under one bus address.
 - Valve islands with Ethernet/IP or Modbus TCP on request.

Order quantity & availability:

≤ 10 items: **5 days** ≤ 20 items: **10 days** ≤ 30 items: **15 days**
 20 days

* technically not possible
 ** on request

Applications

- For general applications with AirLINE Quick in aluminium
- For hygienic applications with AirLINE Quick in stainless steel

Functions

Flow rate of valves (QNn value)	300 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8640 AirLINE Quick with 4x 2x3/2-way valves with multipin



Type 8640 AirLINE Quick with 8x 2x3/2-way valves with Profibus DP and 16 digital inputs



Type 8640 AirLINE Quick with 12x 2x3/2-way valves with Profibus DP and 24 digital inputs



Type 8640 AirLINE Quick with 16x 5/2-way valves with Profibus DP and 32 digital inputs

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

Including process reliability functions, pneumatic HotSwap and check valves



AirLINE Quick bridges the gap between central and decentralised automation concepts. Equipped with an aluminium or stainless steel flange plate, AirLINE Quick can be mounted directly on the wall of a cabinet. The installation is in the direct vicinity of the process or the machine environment. This reduces the distance to the actuator in the field.

AirLINE Quick features:

- Reduction of the distance to the valves directly in the cleaning environment
- Cost savings due to fewer cables and pneumatic hoses in the valve cabinet
- Time savings due to faster installation in the valve cabinet
- Space savings due to small valve cabinets

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Profibus DP	RIO Slave	Common connection	Multipin
4x 2x3/2		Anodised aluminium	**	**	**	247 987	247 998
8x 2x3/2	16		253 362	230 711	233 865	231 117	230 860
			253 535	230 712	233 935	*	230 871
12x 2x3/2	24		253 541	230 749	233 957	230 846	230 506
			253 553	230 876	236 047	*	230 841
16x 5/2	32		253 558	247 616	247 603	247 624	247 893
			253 562	247 619	247 629	*	247 899

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Profibus DP	RIO Slave	Common connection	Multipin
4x 2x3/2		Stainless steel 1.4301	**	**	**	247 991	248 000
8x 2x3/2	16		253 444	230 709	233 794	231 113	230 859
			253 538	230 714	233 930	*	230 870
12x 2x3/2	24		253 543	230 808	233 955	230 845	230 840
			253 555	230 154	235 991	*	230 842
16x 5/2	32		253 559	247 617	247 605	247 626	247 894
			253 563	247 620	247 630	*	247 900

Important: - Our fieldbus modules (Profinet IO, Profibus DP, Ethernet/IP, Modbus TCP) can be combined with up to 7 RIO slave modules under one bus address.
- Valve islands with Ethernet/IP or Modbus TCP on request.

Order quantity & availability:

≤ 3 items: from warehouse	≤ 10 items: 5 days	≤ 20 items: 10 days	≤ 30 items: 15 days	
	≤ 10 items: 5 days	≤ 20 items: 10 days	≤ 30 items: 15 days	
			20 days	

* technically not possible
** on request

Applications

- For general applications with AirLINE Quick in aluminium
- For hygienic applications with AirLINE Quick in stainless steel

Functions

- With pneumatic HotSwap function
- With check valves in R and S channel

Flow rate of valves (QNn value)	150 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8640 AirLINE Quick with 4x 2x3/2-way valves with multipin



Type 8640 AirLINE Quick with 8x 2x3/2-way valves with Profibus DP and 16 digital inputs



Type 8640 AirLINE Quick with 12x 2x3/2-way valves with Profibus DP and 24 digital inputs



Type 8640 AirLINE Quick with 16x 5/2-way valves with Profibus DP and 32 digital inputs

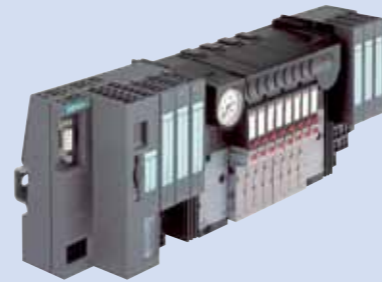
The AirLINE Type 8644 product program

Type 8644 Standard

8644 with Siemens
ET 200S

Modular pneumatic automation system with fieldbus and digital and analog I/O modules.
This system is ideal for all functions, including use in ATEX Zone 2 explosive areas.

- Field bus interfaces:
- Profinet IO
 - Profibus DP



Type 8644 AirLINE Quick

- Easy adaptation to the valve cabinet (wall or bottom of cabinet)
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Materials: Anodised aluminium and stainless steel 1.4301
- I/O modules with a maximum height of 135 mm can be mounted on the floor or wall of the control cabinet



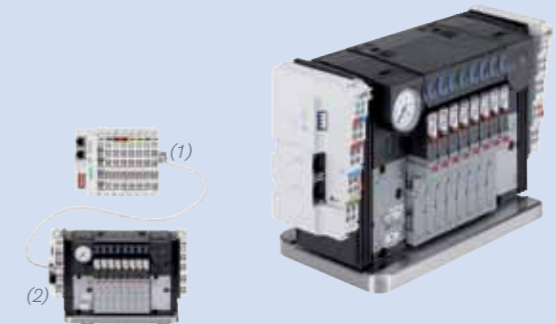
8644 with Wago
I/O system 750

AirLINE is fully compatible with the Wago I/O system 750 and integrated pneumatic valves, I/O functions and fieldbus communication in one compact and flexible assembly. Ideal for applications in ATEX Zone 2 explosive areas.

- Field bus interfaces:
- Profinet IO
 - Ethernet/IP
 - Modbus TCP
 - EtherCAT
 - Profibus DP
 - DeviceNet
 - CANopen
 - CC-Link
 - Interbus



- Easy adaptation to the valve cabinet
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Required modules for terminal bus extension (as shown in the photo at right)
- End terminal for terminal bus extension⁽¹⁾: ID 258 706
- Coupler terminal for terminal bus extension⁽²⁾: ID 258 709



8644 with Phoenix
Inline system

Fully compatible with the Phoenix Contact Inline system. Also for applications in ATEX Zone 2 explosive areas.

- Field bus interfaces:
- Profinet IO
 - Ethernet/IP
 - Modbus TCP
 - Profibus DP
 - DeviceNet
 - CANopen
 - IO-Link
 - AS-i
 - sercos III



- Easy adaptation to the valve cabinet (wall or bottom of cabinet)
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Materials: Anodised aluminium and stainless steel 1.4301
- I/O modules with a maximum height of 135 mm can be mounted on the floor or wall of the control cabinet



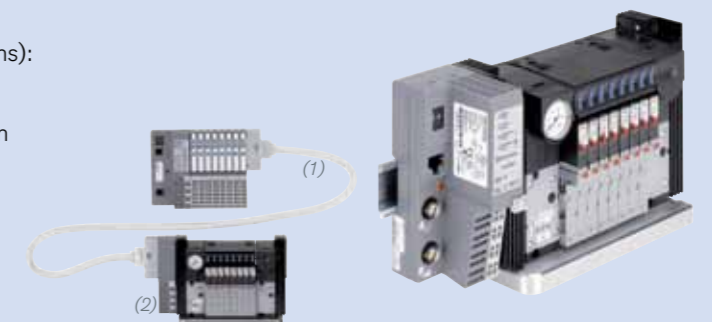
8644 with Rockwell
Point I/O system

AirLINE integrates valve functions in a Rockwell Point I/O system. The pneumatic element has a fine modular design in steps of 2, from 2 to 64 valve functions.

- Communication options:
- Ethernet/IP
 - Profibus DP
 - ControlNet
 - DeviceNet



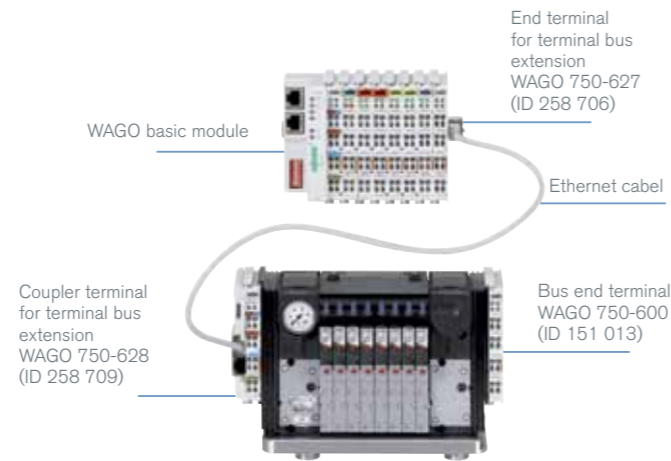
- Easy adaptation to the valve cabinet
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Required modules for terminal bus extension (as shown in the photo at right)
- Extension cable 1 meter⁽¹⁾: ID 684 207
- Extension cable 3 meter⁽¹⁾: ID 684 208
- Power supply module⁽²⁾: ID 218 868



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

The following tables provide the standard order numbers for Type 8644 with AirLINE Quick adapter plate in anodised aluminium and stainless steel 1.4301. The pneumatic components are compatible with the components of the respective cooperation partner.

This purely pneumatic valve module from Bürkert can easily be integrated directly in the I/O systems of Siemens ET 200S, Wago I/O System 750, Phoenix Contact Inline and Rockwell Point I/O.



2-row version of AirLINE Quick with WAGO

Valve functions	AirLINE Quick	compatible with			
		Siemens ET 200S	Wago I/O System 750	Rockwell Point I/O	Phoenix Contact INLINE
8x 3/2	Anodised aluminium	239 952	239 982	254 389	254 323
8x 5/2		239 956	239 987	254 428	254 334
8x 2x3/2		239 948	239 978	245 818	254 282
12x 5/2		252 396	253 757	254 437	254 432
12x 2x3/2		246 849	248 097	254 340	254 242
16x 5/2		239 958	239 990	254 554	241 610
16x 2x3/2		239 950	239 980	254 560	240 906
16x 2x3/2 *		254 934	254 944	254 571	254 606
24x 5/2		248 090	248 104	254 564	254 610
24x 2x3/2 *		248 099	248 094	254 575	254 614

Valve functions	AirLINE Quick	compatible with			
		Siemens ET 200S	Wago I/O System 750	Rockwell Point I/O	Phoenix Contact INLINE
8x 3/2	Stainless steel 1.4301	239 941	239 970	254 390	254 331
8x 5/2		239 944	239 973	254 429	254 335
8x 2x3/2		239 937	239 967	254 330	254 283
12x 5/2		253 751	253 759	254 438	254 434
12x 2x3/2		248 117	248 100	254 329	254 275
16x 5/2		239 946	239 975	254 555	241 586
16x 2x3/2		239 939	233 301	254 561	254 586
16x 2x3/2 *		254 935	254 945	254 572	254 607
24x 5/2		248 091	248 105	254 565	254 611
24x 2x3/2 *		246 870	248 095	254 577	254 669

* with medium supply module

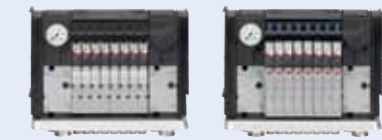
Order quantity & availability:
20 days

Applications

- For general applications with AirLINE Quick in aluminium
- For hygienic applications with AirLINE Quick in stainless steel

Functions

Flow rate of valves (QNn value)	300 l/min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8644 AirLINE Quick with 8x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 12x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 16x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 24x 5/2 or 2x3/2-way valves

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

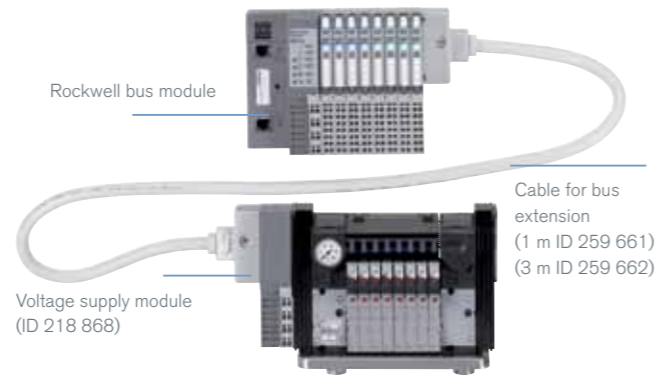
Including process reliability functions, pneumatic HotSwap and check valves



The following tables provide the standard order numbers for Type 8644 with AirLINE Quick adapter plate in anodised aluminium and stainless steel 1.4301.

The pneumatic components are compatible with the components of the respective cooperation partner.

This purely pneumatic valve module from Bürkert can easily be integrated directly in the I/O systems of Siemens ET 200S, Wago I/O System 750, Phoenix Contact Inline and Rockwell Point I/O.



2-row version of AirLINE Quick with Rockwell

Valve functions	AirLINE Quick	compatible with			
		Siemens ET 200S	Wago I/O System 750	Rockwell Point I/O	Phoenix Contact INLINE
8x 3/2	Anodised aluminium	239 953	239 983	254 391	254 332
8x 5/2		239 957	239 988	254 430	254 336
8x 2x3/2		239 949	239 979	244 856	254 284
12x 5/2		171 778	253 758	254 439	254 435
12x 2x3/2		248 121	244 418	254 342	254 280
16x 5/2		239 959	239 991	254 557	254 584
16x 2x3/2		239 951	239 981	254 562	254 605
16x 2x3/2 *		254 938	254 946	254 573	254 608
24x 5/2		248 092	248 107	254 566	254 612
24x 2x3/2 *		248 101	248 096	254 580	254 672

Valve functions	AirLINE Quick	compatible with			
		Siemens ET 200S	Wago I/O System 750	Rockwell Point I/O	Phoenix Contact INLINE
8x 3/2	Stainless steel 1.4301	239 942	239 971	254 392	254 333
8x 5/2		239 945	239 974	254 431	254 337
8x 2x3/2		239 938	239 968	254 388	241 661
12x 5/2		253 755	253 760	254 440	254 436
12x 2x3/2		244 417	248 123	254 348	254 281
16x 5/2		239 947	239 977	254 559	245 257
16x 2x3/2		239 940	239 969	254 563	241 662
16x 2x3/2 *		254 943	254 947	254 574	254 609
24x 5/2		248 093	248 108	254 567	254 613
24x 2x3/2 *		248 102	248 098	254 581	254 674

Order quantity & availability:
20 days

* with medium supply module

Applications

- For general applications with AirLINE Quick in aluminium
- For hygienic applications with AirLINE Quick in stainless steel

Functions

- With pneumatic HotSwap function
- With check valves in R and S channel

Flow rate of valves (Q _{Nn} value)	150 l/ min
Pressure range	2,5 – 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



Type 8644 AirLINE Quick with 8x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 12x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 16x 5/2 or 2x3/2-way valves



Type 8644 AirLINE Quick with 24x 5/2 or 2x3/2-way valves

Bürkert Inquiry Form for Pneumatic Control Cabinets

Customer and contact

Industry

Application / project name

1. Explosion-protected area

Zone / device category Zone 1/ 2 G Zone 2/ 3 G Zone 21/ 2 D Zone 22/ 3 D

Ambient temperature range

Temperature class T3 T4

2. Material and construction of control cabinet

Material of control cabinet Plastic Stainless steel (1.4301) Sheet steel

Other View window HD design

Additional components Heating Ventilation Maintenance unit / filter controller

Power pack Lighting

Multiple cable glands Single bulkhead plug connector

Comments

3. Valve island/pneumatic and electrical system

Valve functions and air capacity Number 300 l/min 700 l/min

Valve type 3/2-way 2x3/2-way 5/2-way

Number of electric signals Digital inputs Digital outputs

Analog inputs Analog outputs

Communication / connection Common connection Multipin

Fieldbus

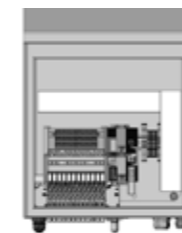
Valve island type 8640 8644 8650

I/O system (8644) Siemens WAGO Phoenix Rockwell

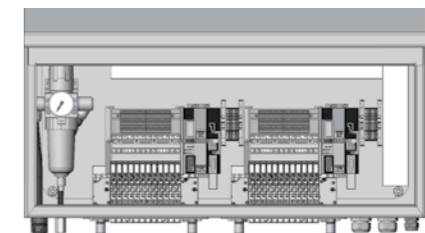
4. Pneumatic features

Process reliability functions HotSwap function & check valves

AirLINE Quick (floor installation plate) in stainless steel in anodised aluminium



Hygienic Design control cabinet with one valve island
AirLINE Quick Type 8640
(max. 24 valve functions and 24 digital inputs)



Hygienic Design control cabinet with 2 valve islands
AirLINE Quick Type 8640
(max. 48 valve functions, 48 digital inputs)

Technical data	
Control cabinet	Compact HD 1.4301
Size (W, H, D in mm)	390/430-549/210 510/430-549/210
Type valve island	AirLINE Quick Type 8640 stainless steel
Max. valve functions	24x 3/2 or 12x 5/2-way functions
Max. flow rate per valve	300 l/min
Digital return inputs	0 – 24
Electrical connection	Profibus / multipin / common connection
Material of electrical lead-in	Plastic, stainless steel
Filter / pressure controller	Optional

Technical data	
Control cabinet	Compact HD 1.4301
Size (W, H, D in mm)	760/430-549/210
Type valve island	AirLINE Quick Type 8640 stainless steel
Max. valve functions	48x 3/2 or 24x 5/2-way functions
Max. flow rate per valve	300 l/min
Digital return inputs	0 – 48
Electrical connection	Profibus / multipin / common connection
Material of electrical lead-in	Plastic, stainless steel
Filter / pressure controller	Optional

The Hygienic Design valve cabinets are configured and assembled at our Bürkert Systemhaus locations. The cabinets are encrypted using the system type 8614.

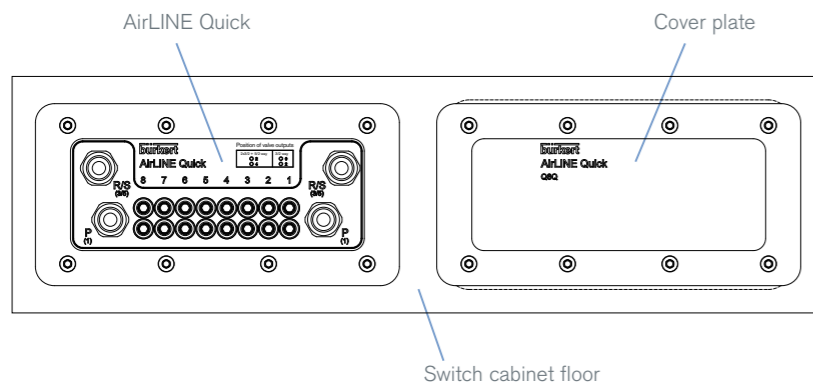
Accessories for AirLINE Type 8640 & 8644

Pneumatic accessories for Type 8640 & 8644

Description	Order no.
Pilot controlled double check valve – without mounting base (5/3-way function)	167 126
Pilot controlled double check valve – with mounting base (5/3-way function)	167 127
Polyamide hose, blue, outer diameter 6 mm, length 50 m	780 643
Thrust collar for plug-in coupler, diameter 6 mm	015 401
Straight screw/plug connection G 1/4", outer diameter 8 mm	780 006
Bulkhead screw/plug connection, diameter 6 mm	780 049
Sound absorber G1/4"	780 780
Adapter set from G1/4" to plug-in connection, diameter 10 mm	230 612

Cover plates for AirLINE Quick

A cover plate for covering an existing flange pattern for AirLINE Quick on the control cabinet wall or floor.

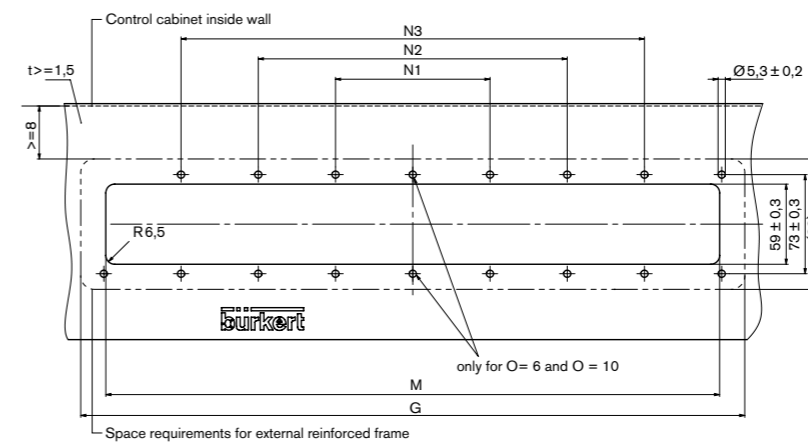


Order table, cover plates for 8640 & 8644:

Material	Number of valve ports	Order no. for 8640	Order no. for 8644
Anodised aluminium	4	246 937	–
	8	246 933	246 933
	12	246 929	246 929
	16	246 925	246 925
	16*	–	246 935
	24	–	246 927
	24*	–	246 931
Stainless steel 1.4301	4	246 938	–
	8	246 934	246 934
	12	246 930	246 930
	16	246 926	246 926
	16*	–	246 936
	24	–	246 928
	24*	–	246 932

* with medium supply module

Dimensions of flange patterns for AirLINE Quick



Version	Dimensions					
	M	N ₁	N ₂	N ₃	O	G
4x	111 ± 0,4	114 ± 0,4	-	-	6	148
8x	155 ± 0,4	54 ± 0,3	158 ± 0,4	-	8	192
12x	199 ± 0,4	68 ± 0,3	202 ± 0,4	-	8	236
16x	243 ± 0,4	123 ± 0,4	246 ± 0,4	-	10	280
16x*	276 ± 0,4	140 ± 0,4	279 ± 0,4	-	10	313
24x	331 ± 0,4	66 ± 0,3	200 ± 0,4	334 ± 0,4	12	368
24x*	364 ± 0,4	73 ± 0,3	219 ± 0,4	367 ± 0,4	12	401

* with medium supply module

Electric accessories for Type 8640

Order table, extension bus cable for Profibus DP, Profinet IO

Description	Order no.
RIO expansion bus cable (1 m)	917 498
RIO expansion bus cable (2 m)	917 499

Order table, multipin

Description	Order no.
Multipin cable for valve piloting (5 m)	917 494
Multipin cable for valve piloting (10 m)	917 495
Multipin cable for digital position indicator (5 m)	917 496
Multipin cable for digital position indicator (10 m)	917 497

Order table, Profibus DP

Description	Order no.
Ready-made plug connector, M12 plug	918 198
Ready made plug connector, M12 coupler straight	918 447
Bus Y-piece	902 098
Terminating resistor, M12 plug	902 553
Ready made plug connector, M12 coupler straight (5-pin)	917 116

Electric accessories for Type 8644

For electric accessories for Type 8644, please see the manuals of our cooperation partners:

- Siemens ET 200S
- Rockwell Point I/O
- Wago I/O Series 750
- Phoenix Contact Inline

Possible functions – AirLINE product program

		Type 8640 Standard	Type 8640 AirLINE Quick	Type 8644 Standard with Siemens ET 200S	Type 8644 AirLINE Quick with Siemens ET 200S	Type 8644 Standard with Wago I/O System 750	Type 8644 AirLINE Quick with Wago I/O System 750	Type 8644 Standard with Phoenix Inline	Type 8644 AirLINE Quick with Phoenix Inline	Type 8644 Standard with Rockwell Point I/O	Type 8644 AirLINE Quick with Rockwell Point I/O
Electrical piloting	Single wire	●	●								
	Common connection	●	●								
	Multipin	●	●								
	Profinet IO	●	●	●	●	●	●	●	●		
	Ethernet/IP	●	●			●	●	●	●	●	●
	Modbus TCP	●	●			●	●	●	●		
	EtherCAT					●	●				
	CC-Link					●	●				
	Profibus DP	●	●	●	●	●	●	●	●	●	●
	DeviceNet	●	●			●	●	●	●	●	●
	CANopen	●	●			●	●	●	●		
	ControlNet									●	●
	Interbus					●	●	●	●		
I/O functions	Digital inputs	●	●	●	●	●	●	●	●	●	●
	Digital outputs			●	●	●	●	●	●	●	●
	Analog inputs			●	●	●	●	●	●	●	●
	Analog outputs			●	●	●	●	●	●	●	●
Valve function	3/2-way	●	●	●	●	●	●	●	●	●	●
	2x 3/2-way	●	●	●	●	●	●	●	●	●	●
	5/2-way	●	●	●	●	●	●	●	●	●	●
	5/2-way pulse	●		●		●		●		●	
	5/3-way	●		●		●		●		●	
Flow rate	200 l/ min	●		●		●		●		●	
	300 l/ min	●	●	●	●	●	●	●	●	●	●
	500 l/ min	●		●		●		●		●	
	700 l/ min	●		●		●		●		●	
	1300 l/ min	●				●					
Pressure range	1 to 10 bar	●	●	●	●	●	●	●	●	●	●
Temperature range	0 to +55 °C	●	●	●	●	●	●	●	●	●	●
Protection type	IP 20	●	●	●	●	●	●	●	●	●	●
	IP 65 if installed in a closed cabinet	●	●	●	●	●	●	●	●	●	●
Certification	ATEX Zone 1	●*	●*								
	ATEX Zone 2	●**	●**	●	●	●	●	●	●	●	●
	UL			●**	●**	●**	●**	●**	●**	●**	●**

* possible as a valve block with single-wired Ex valves
 ** on request

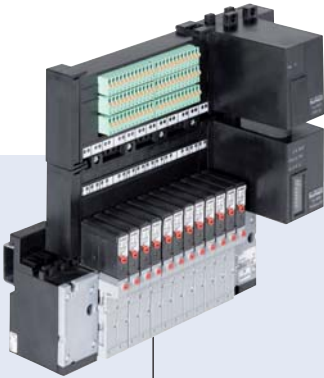
Bürkert – Always Near You

A world map highlighting Bürkert's global presence. Blue squares indicate distribution locations across various continents. Labels for these locations include:

- Canada
- USA
- Argentina
- Brazil
- South Africa
- Australia
- New Zealand
- United Arab Emirates
- Austria
- Belgium
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Italy
- Netherlands
- Norway
- Poland
- Portugal
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom
- Russia
- China
- Hong Kong
- India
- Japan
- Korea
- Malaysia
- Philippines
- Singapore
- Taiwan

Credits: © and concept: Christian Bürkert GmbH & Co. KG | Realization: WOLF, Berlin | Photography: Münch Lichtbildneri, Stuttgart; Studio Flamisch, Düsseldorf | 3D-Drawings: 3D Sales Technologies GmbH. All people shown are employees at Bürkert. Thank you for your support (and spirit).

AirLINE and AirLINE Quick – Modular pneumatic valve unit



Type 8640 can be combined with...



Type 8032

Switch



Type 6212

Solenoid valve



Type 2012

Process valve



Type 8695

Control head






Type 0498

Double pilot controlled
check valve




- 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)

The 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.

Specification	Type 0460/6524/6525 	Type 6526/6527 	Type 5470 
Mounting dimensions	11 mm	16.5 mm	18 mm
Ambient temperature	0 to +55°C (by use of type 0460: 0 to +50°C)	0 to +55°C	-10 to +55°C
Pressure range	Vac. – 10 bar	Vac. – 10 bar	2 – 10 bar
Operating voltage	24 V/DC	24 V/DC	24 V/DC
Voltage tolerance	±10%	±10%	±10%
Degree of protection	3 acc. to VDE 0580	3 acc. to VDE 0580	3 acc. to VDE 0580
Duty cycle	Continuous operation (100% ED)	Continuous operation (100% ED)	Continuous operation (100% ED)
Circuit functions	C and D (3/2), H (5/2), H (5/2) Impulse, L (5/3) in middle position all ports closed N (5/3) in middle position all ports vented	C and D (3/2), H (5/2),	C and D (3/2), G (4/2),
Flow rate	300 l/min (200 l/min circuit functions H-Impulse, L and N)	700 l/min	300 l/min
Rated power	1 W	2 W, 1 W	1 W, 2 W, 3 W
No. of valve functionalities per unit	Max. 24	Max. 24	Max. 24
Feedback	Max. 32	Max. 32	Max. 32
Degree of protection	IP 20 with terminals	IP 20 with terminals	IP 20 with terminals

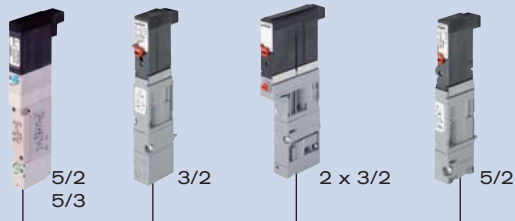
Continued on page 2

Specification	Type 0460/6524/6525 	Type 6526/6527 	Type 5470 
Electric Connection	<ul style="list-style-type: none"> ▪ Common connection (parallel connection) ▪ Multipin (D-Sub, 25 pole) ▪ Profibus-DP ▪ DeviceNet ▪ CANopen ▪ Internal bus extension by Profibus DP ▪ Profinet IO ▪ Ethernet I/P ▪ Modbus TCP 		
Total current with common connection with multipin connection with fieldbus connection	<p>as a function of the electrical connection technique max. 3A (sum of current through individual valves) max. 3A (sum of current through individual valves) + max. 3A (repeater) $I_{TOTAL} = I_{BASE} + (n \times I_{VALVE}) + (m \times I_{REPEATER})$ n=quantity of valves, m=quantity of repeaters, I_{VALVE}= rated current of each valve I_{REPEATER}= rated current of each repeater, m x I_{REPEATER}=max. 650 mA I_{BASE}= 200 mA spec. base current Profibus-DP 200 mA spec. base current DeviceNet</p>		

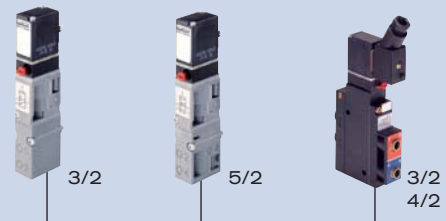
The 8640 valve island system

Solenoid valves

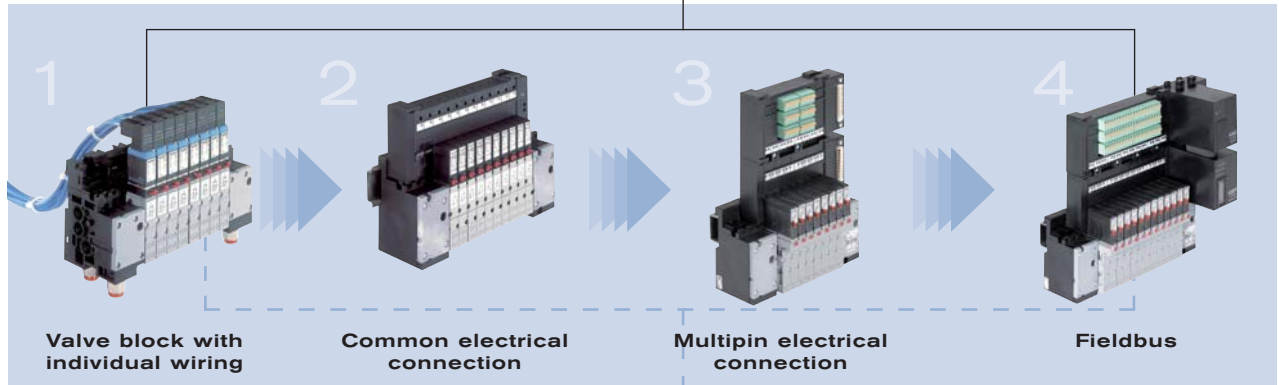
0460/6524/6525



6526/6527



5470



Valve block with individual wiring

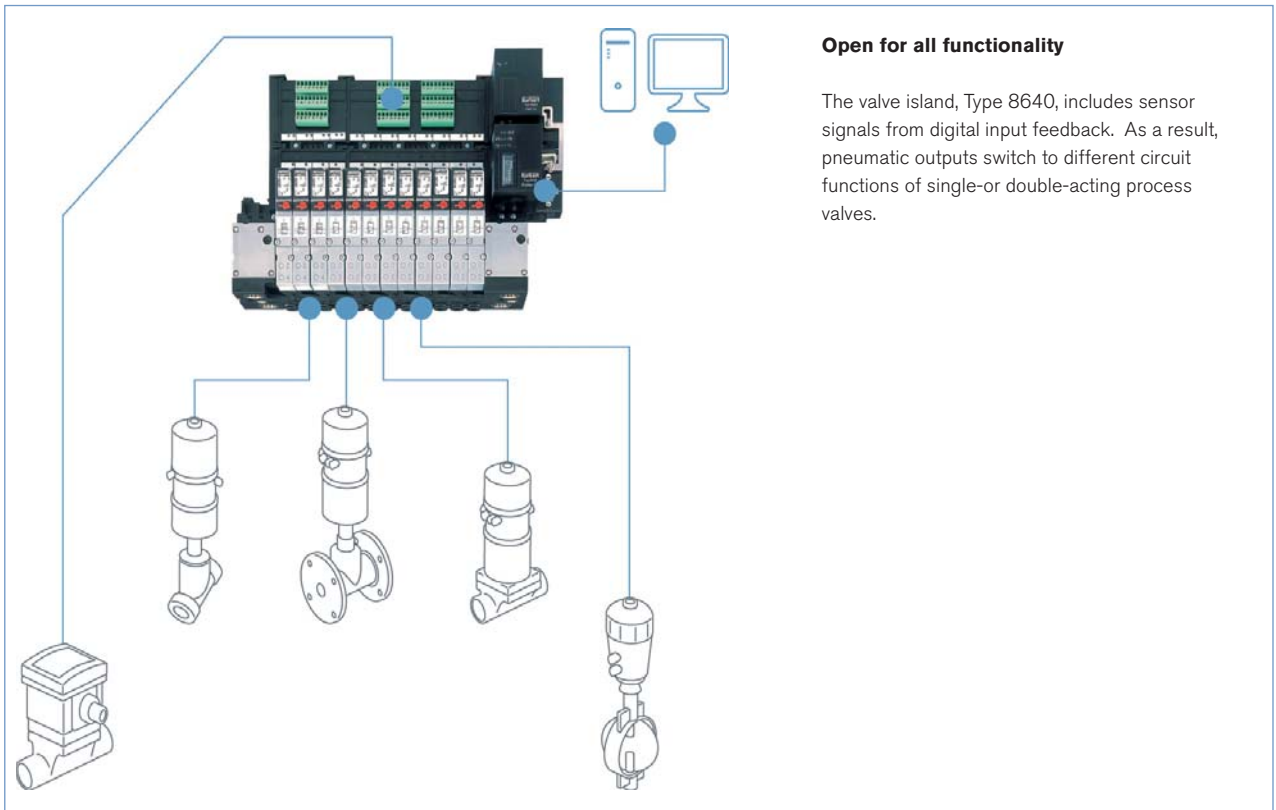
Common electrical connection

Multipin electrical connection

Fieldbus



AirLINE Quick
Adapter for valve islands on the control cabinet floor or control cabinet wall

Application example**Open for all functionality**

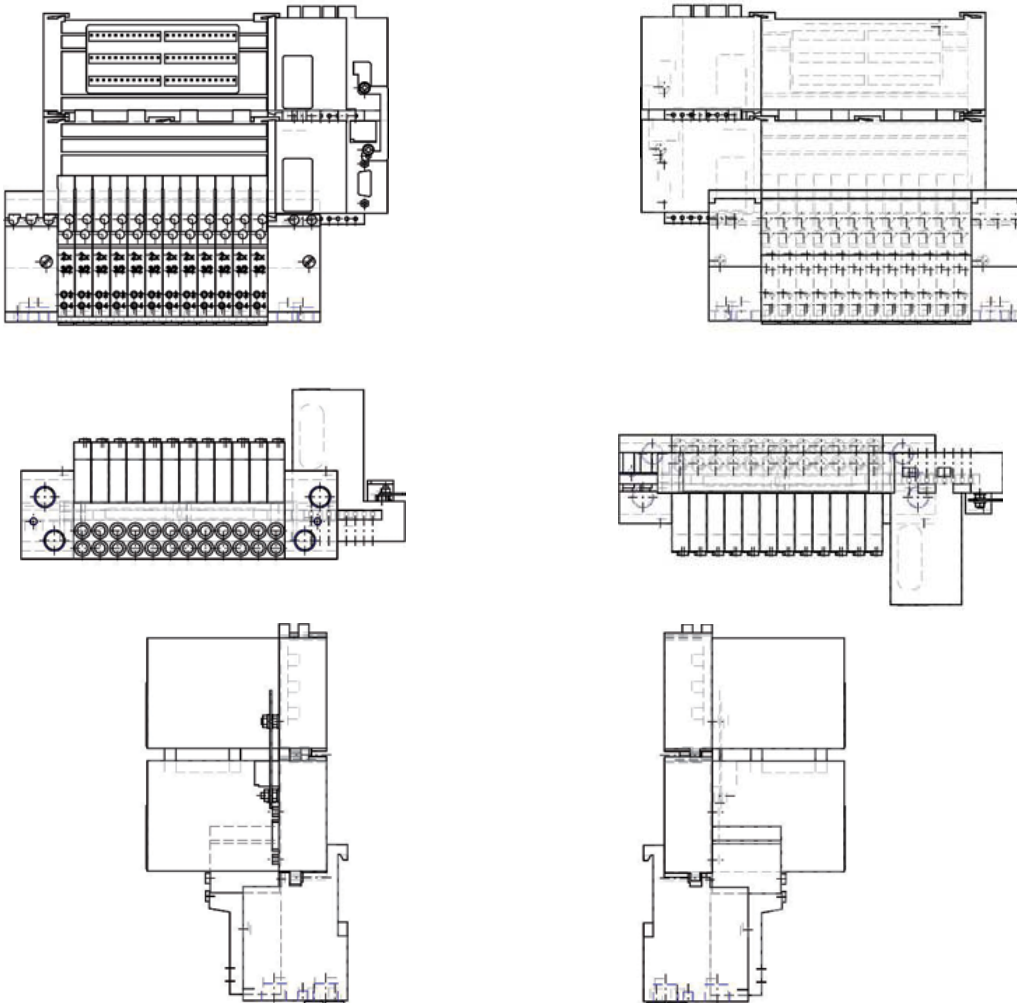
The valve island, Type 8640, includes sensor signals from digital input feedback. As a result, pneumatic outputs switch to different circuit functions of single- or double-acting process valves.

Examples 2D / 3D CAD data

Example 3D CAD model in 3D-Pdf format



Examples 2D DXF drawings in different views



11mm width per station Multi-way solenoid valve Types 6524 and 6525

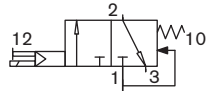
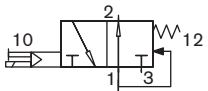
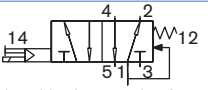
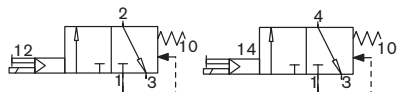


The solenoid valve Types 6524 and 6525 consist of a 6144 flipper pilot valve and a pneumatic seat valve. The flipper principle allows switching of high pressure at low power consumption and fast response times. The pilot valves are equipped with manual override as a standard. The 2x3/2 way valve version is a combination of two flipper pilot valves type 6144 and a pneumatic seat valve.

Spezifikationen	3/2-way valve	2 x 3/2-way valve
Body material	PA (polyamide)	
Seal material	FPM, NBR	
Media	Lubricated and non-lubricated dry air, neutral gases (5 µm-Filter)	
Port connection	Flange for MP11	
Pneumatic module	Type MP11 with push-in connection dimension 6 mm, D1/4, M7	
Manual override	As a standard feature	
Voltage	24 V DC *	
Nominal power	0.8 W	2 x 0.8 W with reduction of power consumption
Duty cycle	Continuous operation (100% ED)	
Elec. connection on valve	Rectangular plug 2-pole with raster 5.08 mm	Rectangular plug 3-pole with raster 2.54 mm
Mounting	With 2 screws M2 x 20	With 2 screws M2 x 28
Installation position	As required, preferably with pilot valve upright	
Flow rate: QNn value air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference	
Pressure ranges [bar]	Measured as overpressure to the atmospheric pressure	
Response times [ms]	Measured according to ISO 12238	

* 10% residual ripple allowed

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Response times		Voltage/Frequency [V/Hz]	Item no.
				Opening [ms]	Closing [ms]		
Circuit function C  3/2-way valve, servo-assisted in de-energized position port 2 to atmosphere	4	300	Vak.-7	15	20	24 V DC *	186 258
			1-10 ¹⁾	15	20	24 V DC *	186 257
			2.5-10	15	28	24 V DC *	184 043
Circuit function D  3/2-way valve, servo-assisted in de-energized position port 2 pressurized			2.5-10	15	28	24 V DC *	184 400
Circuit function H  5/2-way valve, servo-assisted in de-energized position port 1 connected to port 2, port 4 exhausted	4	300	1.0-10 ¹⁾	15	20	24 V DC *	186 271
			2.5-10	20	28	24 V DC *	179 938
Circuit function C  2 x 3/2-way valve, servo-assisted in de-energized position port 2/4 to atmosphere	4	300	1.0-10 ¹⁾	12	20	24 V DC *	186 259 ²⁾
			2.5-10	12	20	24 V DC *	186 260 ²⁾

¹⁾ Version with auxiliary air.

²⁾ Version with integrated reduction of power consumption

* 10% residual ripple allowed

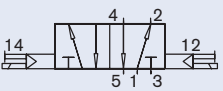
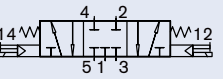
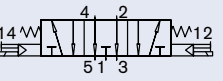
11 mm Anreihmaß: pilot valve Type 0460



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 response times. All valves are equipped with manual override as a standard.

Technical data	
Body material	aluminium
Seal material	NBR
Medium	lubricated and non lubricated dry compressed air; neutral gases (5 µm-filter recommended)
Port connection	Flange
Pneumatic module	MP11
Supply port connection 1 (P), 3 (R), 5 (S)	G 1/4 NPT 1/4
Service port 2 (A), 4 (B)	push-in connection Ø 6 mm push-in connection Ø 1/4" Threaded port M7
Operating voltages	24 V/DC
Electrical connection at the valve	Rectangular plug
Manual override	standard
Flow rate: QNn value Air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference
Pressure values [bar]	Measured as overpressure to the atmospheric pressure
Response times [ms]	Measured according to ISO 12238

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Nominal power [W]	Response times		Item no.
					Opening [ms]	Closing [ms]	
 5/2-way valve, servo-assisted, Impulse version	2,5	200	2,0-7,0	1	15	15	154 183
 5/3-way-valve, pilot-controlled, in middle position all ports locked	2,5	200	2,0-7,0	1	15	20	154 184
 5/3-way-valve, pilot-controlled, in middle position port 2 and 4 exhausted	2,5	200	2,0-7,0	1	15	20	154 185

16.5mm width per station Multi-way for solenoid valve Types 6526 and 6527



The solenoid valve Types 6526 and 6527 consist of a pneumatic valve body fitted with Type 6106 rocker pilot valve. The rocker principle allows switching of high pressure at low power consumption and fast response times. The pilot valves are equipped with manual override as a standard.

Specification	
Body material	PA (polyamide)
Seal material	NBR
Media	Lubricated and non-lubricated dry air, neutral gases (10 µm filter)
Port connection	Flange for MP12
Pneumatic modules	Type MP12 with G 1/8, NPT 1/8 Plug-in coupling Ø 8 mm
Manual override	Standard
Voltage	24 V DC
Nominal power	2 W, 1W
Duty cycle	Continuous operation (100% ED)
Elec. Connection on valve	Tag connector acc. to DIN EN 175301-803 (previously DIN 43650) Form C
Mounting	With 2 screws M3x30
Installation position	As required, preferably with pilot valve upright
Flow rate: QNn value air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference
Pressure ranges [bar]	Measured as overpressure to the atmospheric pressure
Response times [ms]	Measured acc. to ISO 12238

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Nominal power [W]	Response times			Item no.
					Opening [ms]	Closing [ms]	Voltage/Frequency [V/Hz]	
C 3/2-way valve, servo-assisted in de-energized position port 2 to atmosphere	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	156 842
			1,0 - 10 ¹⁾	2	20	12	24 V DC	163 028 ²⁾
			2,0 - 10	2	20	12	24 V DC	156 318
			2,0 - 10	2	20	12	24 V DC	158 944 ²⁾
			2,0 - 8,0	1	20	17	24 V DC	156 840
			2,0 - 8,0	1	20	12	24 V DC	158 947 ²⁾
D 3/2-way valve, servo-assisted in de-energized position port 2 pressurized	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	163 029 ²⁾
			2,0 - 10	2	12	20	24 V DC	156 320
			2,0 - 10	2	20	12	24 V DC	158 946 ²⁾
			2,0 - 8,0	1	17	20	24 V DC	156 841
H 5/2-way valve, servo-assisted in de-energized position port 1 connected to port 2, port 4 exhausted	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	156 828
			1,0 - 10 ¹⁾	2	20	12	24 V DC	163 030 ²⁾
			2,0 - 10	2	20	12	24 V DC	156 337
			2,0 - 10	2	20	12	24 V DC	158 942 ²⁾
			2,0 - 8,0	1	20	17	24 V DC	156 827
			2,0 - 8,0	1	20	12	24 V DC	158 943 ²⁾

¹⁾ version with auxiliary air

²⁾ electric connection with manual override.

³⁾ closing time approx. 5 ms higher when used together with valve unit

More valve options

Covering plates

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

Covering plates	Item no.
Covering plate for solenoid valve Type 6524/6525	650 373
Covering plate for solenoid valve Type 6524 2 x 3/2-way valve	661 092
Covering plate for solenoid valve Type 6526/6527	653 765

Exhaust plates

An exhaust plate is mounted on the pneumatic module of the valve unit and offers an additional possibility to remove compressed air from the system.

Exhaust plates	Item no.
Exhaust air plate complete Type 6524/6525	655 166
Exhaust air plate complete Type 6526/6527	653 697

18 mm Anreihmaß Magnetventil 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 o 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.

The 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.

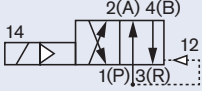
Specification	
Orifice	DN 4.0
Body material	Polyamid (PA)
Valve internal	Ultramid
Seal material	NBR
Media	Compressed air, neutral gases (5 µm-filter)
Medium temperature	-10 ... +50 °C
Ambient temperature	-10 ... +55 °C
Supply port connections 1 and 3	Module flange
Service port connections 2 and 4 (variants)	Threaded port G 1/8 Threaded port NPT 1/8 Tube connection SL 6/4 mm Push-in Ø 6 mm
Operating voltages	24 V DC, 110 - 120 V DC, 220 - 240 V DC, (for alternating current, use valves with UC-coil)
Voltage tolerance	±10 %
Duty cycle	Continuous operation
Elec. Connection on valve	Tag connector acc. to DIN 43 650 Form C, for Cable Plug type 1057 and type 2506 (see accessory); Rectangular plug (5.08)
Ignition protection	EEx ia IIC T6 on request
Type of protection	IP 65 (with cable plug)
Installation position	As required, preferably with pilot valve upright

Order chart for valves

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min]	Service ports 4 and 2	Pressure range [bar]	Nominal power [W]	Voltage/Frequency [V/Hz]	Item no. (Valve island)	Item no. (Valve block)
C 	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 479	135 203
				2 - 10	2	24 V DC	133 148	135 204
				2 - 10	3	110 - 120 DC		132 952
				2 - 10	3	220 - 240 DC		132 953
D 	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 481	136 742
				2 - 10	2	24 V DC	136 741	136 743
				2 - 10	3	110 - 120 DC		136 744
				2 - 10	3	220 - 240 DC		136 745
G 	4	300	Push-in ø 6 mm, front	2 - 8	1	24 V DC	132 487	135 205
				2 - 10	2	24 V DC	133 149	135 206
				2 - 10	3	110 - 120 DC		132 954
				2 - 10	3	220 - 240 DC		132 955
	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 489	135 207
				2 - 10	2	24 V DC	133 150	135 208
				2 - 10	3	110 - 120 DC		132 956
				2 - 10	3	220 - 240 DC		132 957
	4	300	Push-in ø 6 mm, front with throttle-check valve	2 - 8	1	24 V DC	132 488	135 209
				2 - 10	2	24 V DC	133 151	135 210
				2 - 10	3	110 - 120 DC		133 152
				2 - 10	3	220 - 240 DC		133 153

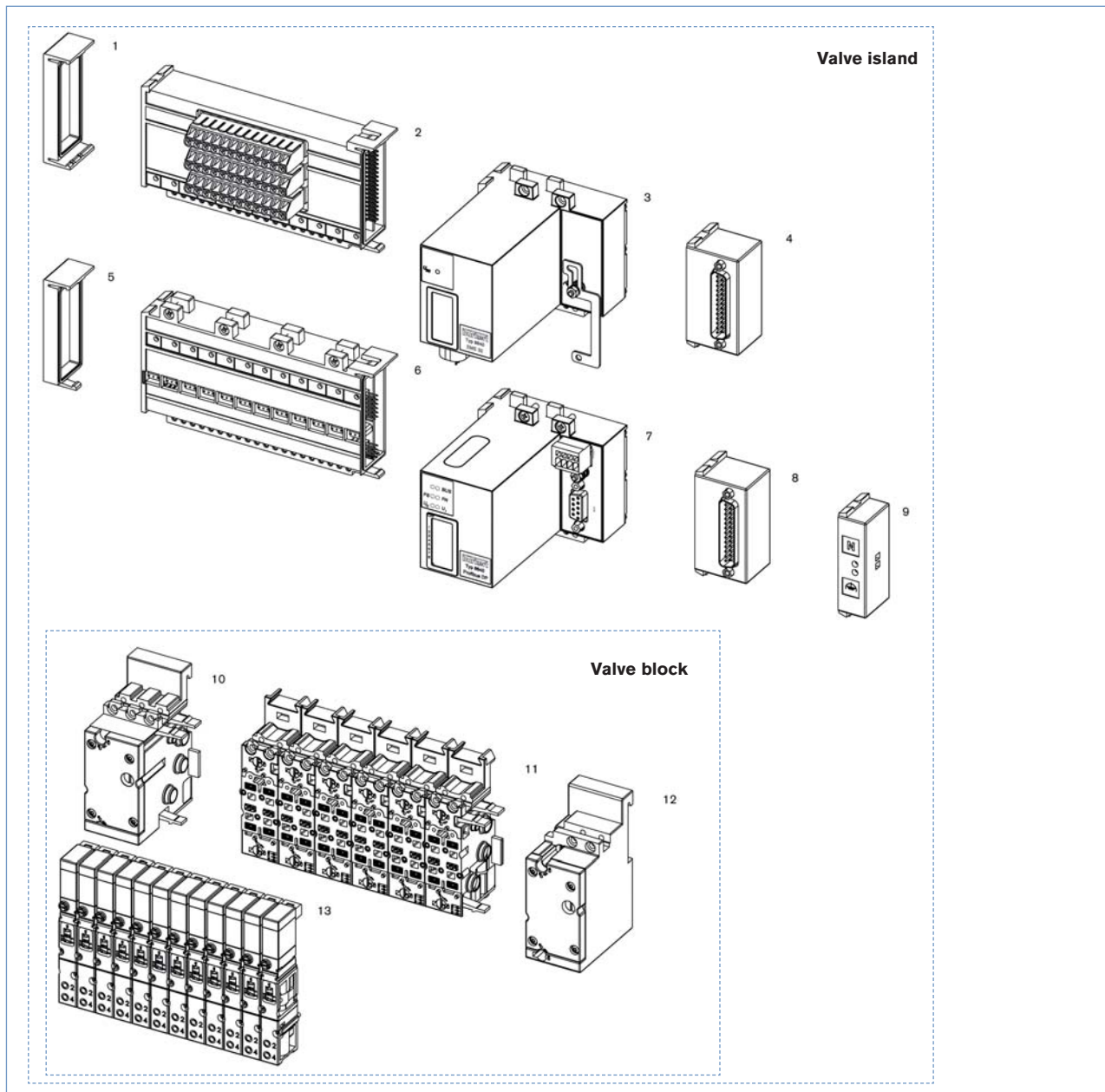
Continued on page 9

Order chart for valves, continued

Circuit function	Orifice [mm]	Q _N value air [l/min]	Service ports 4 and 2	Pressure range [bar]	Nominal power [W]	Voltage/ Frequency [V/Hz]	Item no. (Valve island)	Item no. (Valve block)
G 	4	300	Threaded port G 1/8, front	2 - 8	1	24 V DC	132 483	135 211
				2 - 10	2	24 V DC	133 157	135 212
				2 - 10	3	110 - 120 DC		132 958
				2 - 10	3	220 - 240 DC		132 959
	4	300	Threaded port G 1/8, front, with throttle-check valve	2 - 8	1	24 V DC	132 484	135 213
				2 - 10	2	24 V DC	133 159	135 214
				2 - 10	3	110 - 120 DC		133 160
				2 - 10	3	220 - 240 DC		133 161
	4	300	Tube connection SL6/4 mm, front	2 - 8	1	24 V DC	133 162	135 215
				2 - 10	2	24 V DC	133 163	135 216
				2 - 10	3	110 - 120 DC		133 164
				2 - 10	3	220 - 240 DC		133 166

¹⁾ In operation of alternating current (AC), place a cable plug type 2506 with rectifier upstream.

Composition valve block & valve island



Basic module choice, for further modules see the following pages

- | | |
|--|--|
| 1. Electrical end module left | 2. Terminal module for electronic inputs |
| 3. Extension module for electrical inputs | 4. Multipin repeater inputs (initiators) |
| 5. Electrical end module left | 6. Basic electrical module standard |
| 7. Fieldbus module | 8. Multipin valve outputs |
| 9. Common connection module | 10. Pneumatic connection module left, Type MP11 |
| 11. Basic pneumatic modules, Type MP11 for 12 valves | 12. Pneumatic connection module right, Type MP11 |
| 13. Valves of Type 6525 (5/2-way) | |

Module description

Collective line- and multipol-modules
for single connection of valves and feedback

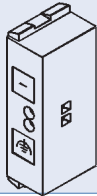
0460/6524/6525
width/station 11mm



6526/6527
width/station 16,5mm



5470
width/station 18mm



Connection via individual stranded wires

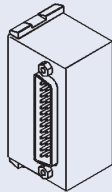
Looped-through ground potential

Max. 24 valves

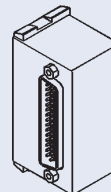
IP20 degree of protection

Screw terminal

Multipin module
Valve outputs



Multipin module
Repeater inputs
(initiators)



Fieldbus modules

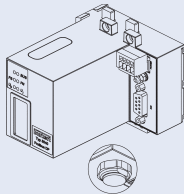
0460/6524/6525
width/station 11mm



6526/6527
width/station 16,5mm



5470
width/station 18mm



Fieldbus PROFIBUS-DP, IP20 degree of protection

Max. 24 valves

Max. 32 repeaters (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-pole male)

Bus connection D-SUB (9-pole female)

With RIO-connection M8 (4-pole)

Internal bus extension RIO-VA module, IP20 degree of protection

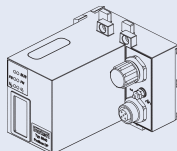
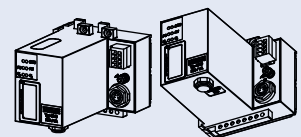
Max. 24 valves

Max. 32 repeaters (in connection with EME module)

Plug connection

RIO cable for bus extension 1m (Item no. 917 498)

2m (Item no. 917 498)



Fieldbus PROFIBUS-DP IP54 degree of protection

on connection with the basic electrical module the complete system meets the degree of protection IP54

Max. 24 valves

Max. 32 repeaters (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 M12 circular plug (4-pole male)

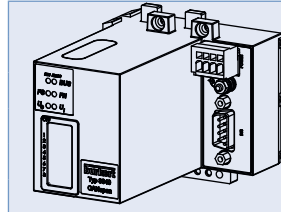
Bus connection M12 (5-pole female)

For a trouble-free assembly use the following Y-piece (Item no. 902 098)

Module description

Fieldbus modules

		
0460/6524/6525 width/station 11mm	6526/6527 width/station 16,5mm	5470 width/station 18mm

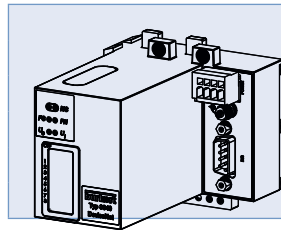
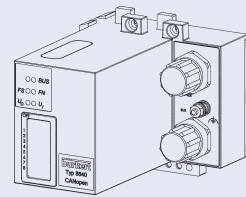


Fieldbus CANopen, IP20 degree of protection

Max. 24 valves,
Max. 32 repeaters (in connection with EME module)
Transmission rates 20, 125, 250 or 500 kBaud
Power supply with rectangular plug (4-pole)
Bus connection D-SUB (9-pole male)

Fieldbus CANopen, IP54 degree of protection on connection with the basic electrical module the complete system meets the degree of protection IP54

Max. 24 valves
Max. 32 repeaters (in connection with EME module)
Transmission rates 20, 125, 250 or 500 kBaud
Power supply with M12 circular plug (4-pole male)
Bus connection M12 (5-pole male)
For a trouble-free assembly use the following Y-piece (Item no. 788 643)

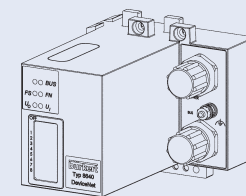


Fieldbus Device Net, IP20 degree of protection

Max. 24 valves
Max. 32 repeaters (in connection with EME module)
Transmission rates 125, 250 or 500 kBaud
Power supply with rectangular plug (4-pole)
Bus connection D-Sub (9-pole male)

Fieldbus Device Net, IP54 degree of protection on connection with the basic electrical module the complete system meets the degree of protection IP54

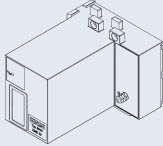
Max. 24 valve
Max. 32 repeaters (in connection with EME module)
Transmission rates 125, 250 or 500 kBaud
Power supply with M12 circular plug (4-pole male)
Bus connection M12 (5-pole male)
For a trouble-free assembly use the following Y-piece (Item no. 788 643)



Module description

Fieldbus modules

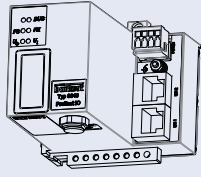
 0460/6524/6525 width/station 11mm	 6526/6527 width/station 16,5mm	 5470 width/station 18mm
--	---	--



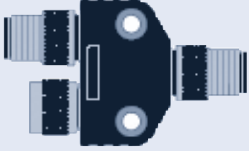
EME module (extension module inputs), IP54 degree of protection

Module for connection of repeater inputs in connection with fieldbus modules

Fieldbus Profinet IO, Ethernet I/P, Modbus TCP Protection class IP20

Max. 24 valves	
Max. 32 repeaters (in connection with EME-module)	
Transmission rates 10/100 Mbits/s with auto crossover	
Power supply with rectangular plug (4-pole)	
Bus connection RJ45 (2x)	
RIO-connection M8 (4-pole)	


Further electrical accessories



Bus Y-piece for PROFIBUS

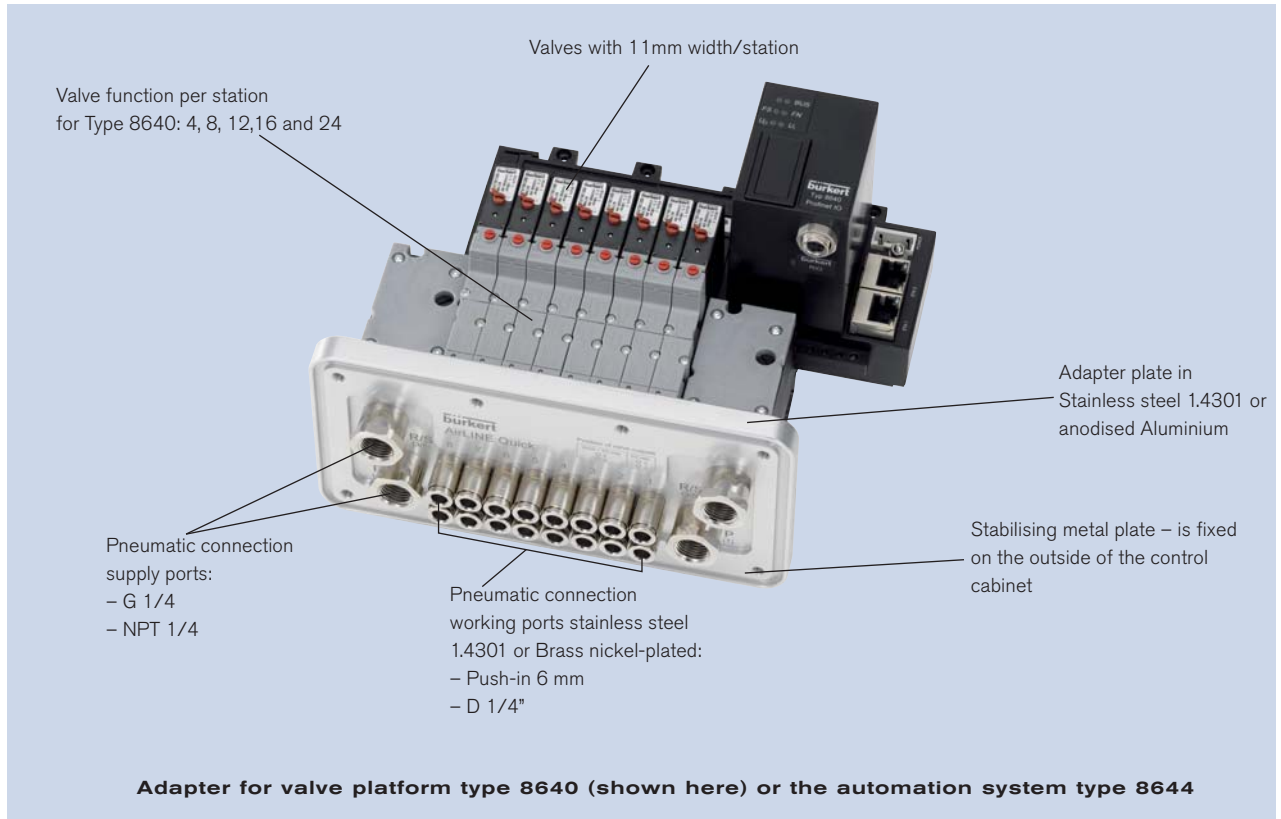
You must use one pre-assembled plug and one plug for free assembly.
(Item no. 902 098)

(Item no. 788 643) **Bus Y-piece for CANopen and DeviceNet**



AirLINE Quick

With AirLINE Quick you can reduce the amount of the components in the control cabinet considerably. With the AirLINE Quick Adapter the valve island is directly adapted on the control cabinet floor or wall.



* Valves of type 0460 cannot be installed with AirLINE Quick due to the size.

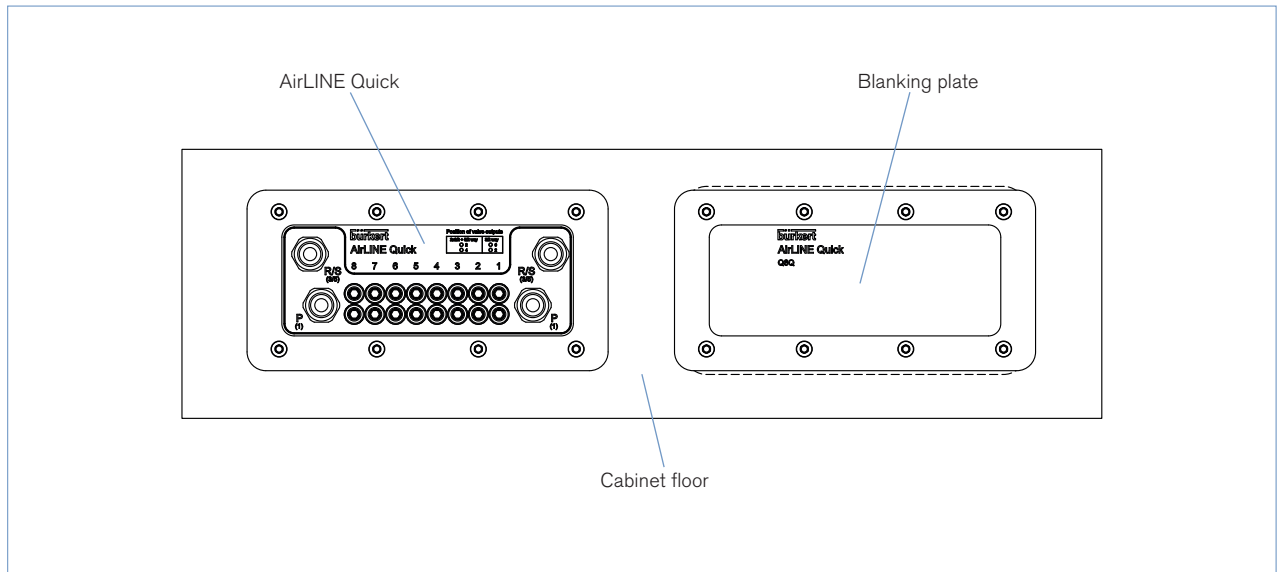
Technical data

Technical data	
Material for AirLINE Quick Adapter	Stainless steel 1.4301 anodised Aluminium
Material Pneumatic connection	Stainless steel 1.4301 Brass nickel-plated
Pneumatic connection, supply ports	G 1/4, NPT 1/4
Pneumatic connection working ports	Push-in D6 mm, D1/4"
Installation	Control cabinet wall Control cabinet floor
Valve function per station	4, 8, 12, 16 and 24

Additional accessories for AirLINE Quick

Blanking plate

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



Order chart blanking plate

Material	Amount of valve slots	Item no.
Aluminium anodised	4	246 937
	8	246 933
	12	246 929
	16	246 925
Stainless steel 1.4301	4	246 938
	8	246 934
	12	246 930
	16	246 926

To find your nearest Bürkert facility, click on the orange box →

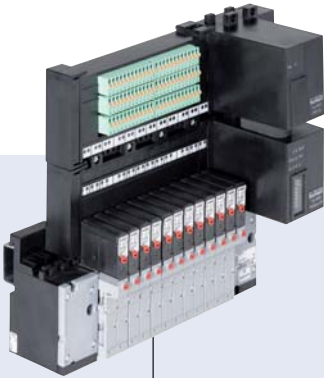


In case of special application conditions,
please consult for advice.

Subject to alteration
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1511/9_EUen_00891940

AirLINE and AirLINE Quick – Modular pneumatic valve unit



Type 8640 can be combined with...



Type 8032

Switch



Type 6212

Solenoid valve



Type 2012

Process valve



Type 8695

Control head






Type 0498

Double pilot controlled
check valve




- 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)

The 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.

Specification	Type 0460/6524/6525 	Type 6526/6527 	Type 5470 
Mounting dimensions	11 mm	16.5 mm	18 mm
Ambient temperature	0 to +55°C (by use of type 0460: 0 to +50°C)	0 to +55°C	-10 to +55°C
Pressure range	Vac. – 10 bar	Vac. – 10 bar	2 – 10 bar
Operating voltage	24 V/DC	24 V/DC	24 V/DC
Voltage tolerance	±10%	±10%	±10%
Degree of protection	3 acc. to VDE 0580	3 acc. to VDE 0580	3 acc. to VDE 0580
Duty cycle	Continuous operation (100% ED)	Continuous operation (100% ED)	Continuous operation (100% ED)
Circuit functions	C and D (3/2), H (5/2), H (5/2) Impulse, L (5/3) in middle position all ports closed N (5/3) in middle position all ports vented	C and D (3/2), H (5/2),	C and D (3/2), G (4/2),
Flow rate	300 l/min (200 l/min circuit functions H-Impulse, L and N)	700 l/min	300 l/min
Rated power	1 W	2 W, 1 W	1 W, 2 W, 3 W
No. of valve functionalities per unit	Max. 24	Max. 24	Max. 24
Feedback	Max. 32	Max. 32	Max. 32
Degree of protection	IP 20 with terminals	IP 20 with terminals	IP 20 with terminals

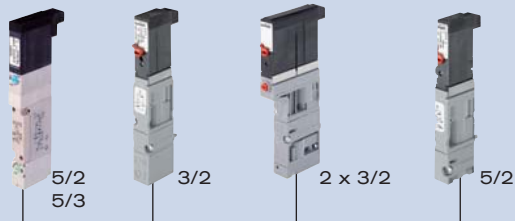
Continued on page 2

Specification	Type 0460/6524/6525 	Type 6526/6527 	Type 5470 
Electric Connection	<ul style="list-style-type: none"> ▪ Common connection (parallel connection) ▪ Multipin (D-Sub, 25 pole) ▪ Profibus-DP ▪ DeviceNet ▪ CANopen ▪ Internal bus extension by Profibus DP ▪ Profinet IO ▪ Ethernet I/P ▪ Modbus TCP 		
Total current with common connection with multipin connection with fieldbus connection	<p>as a function of the electrical connection technique max. 3A (sum of current through individual valves) max. 3A (sum of current through individual valves) + max. 3A (repeater) $I_{TOTAL} = I_{BASE} + (n \times I_{VALVE}) + (m \times I_{REPEATER})$ n=quantity of valves, m=quantity of repeaters, I_{VALVE}= rated current of each valve I_{REPEATER}= rated current of each repeater, m x I_{REPEATER}=max. 650 mA I_{BASE}= 200 mA spec. base current Profibus-DP 200 mA spec. base current DeviceNet</p>		

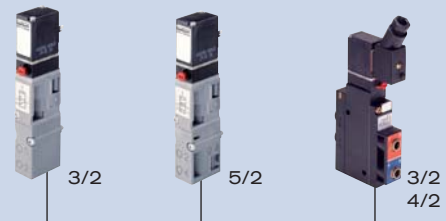
The 8640 valve island system

Solenoid valves

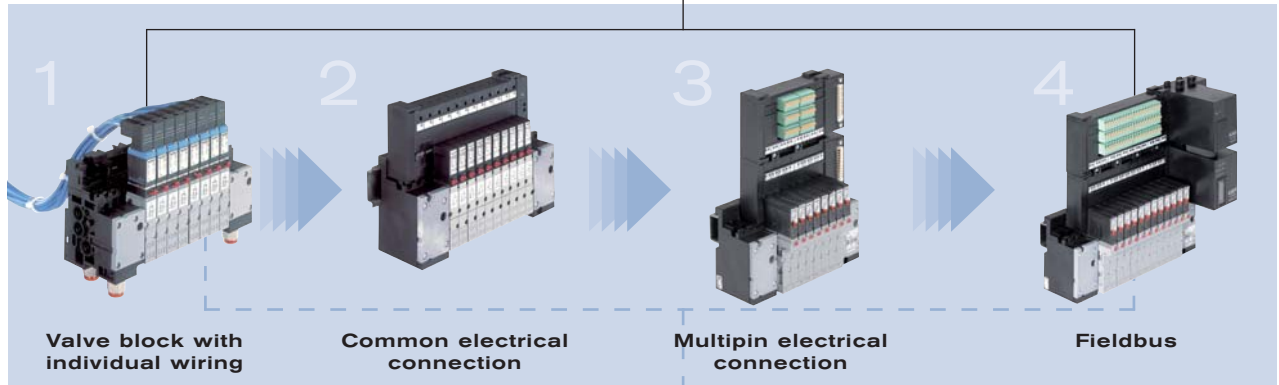
0460/6524/6525



6526/6527



5470



Valve block with individual wiring

Common electrical connection

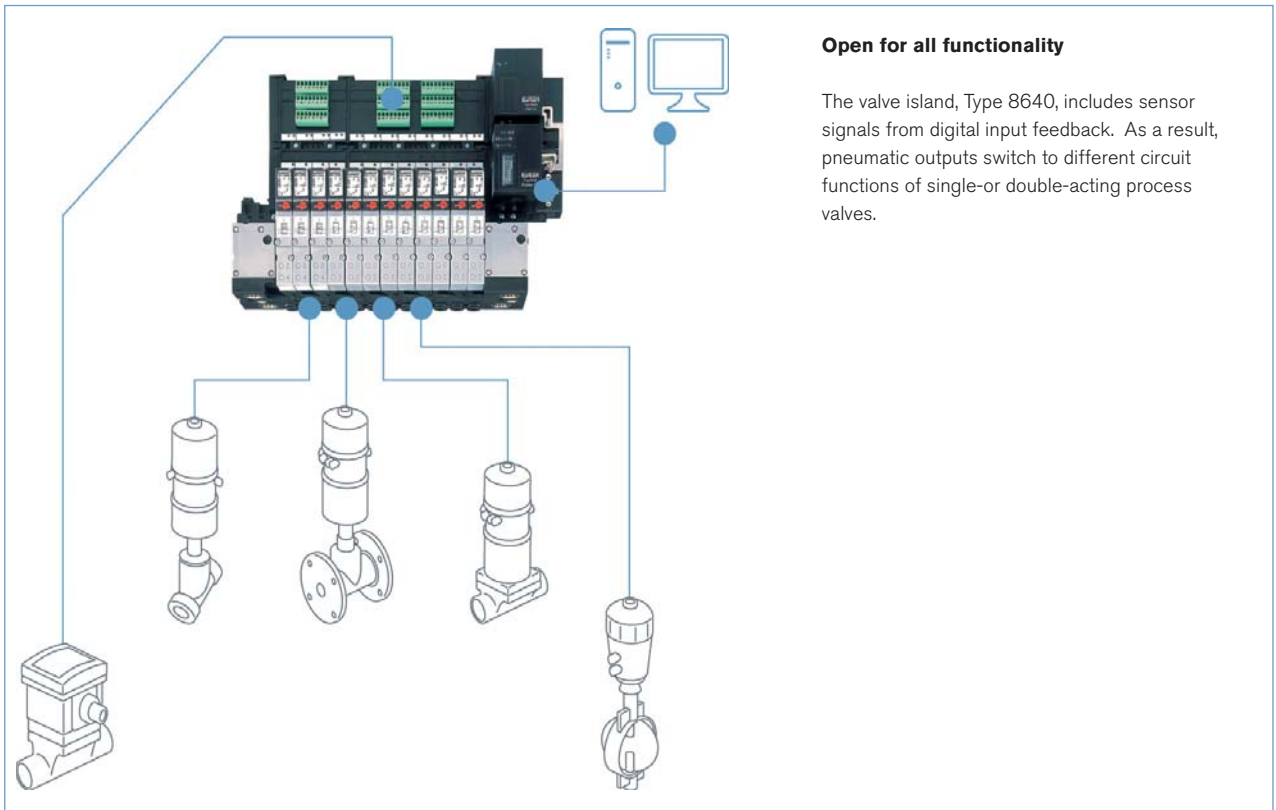
Multipin electrical connection

Fieldbus



AirLINE Quick

Adapter for valve islands on the control cabinet floor or control cabinet wall

Application example**Open for all functionality**

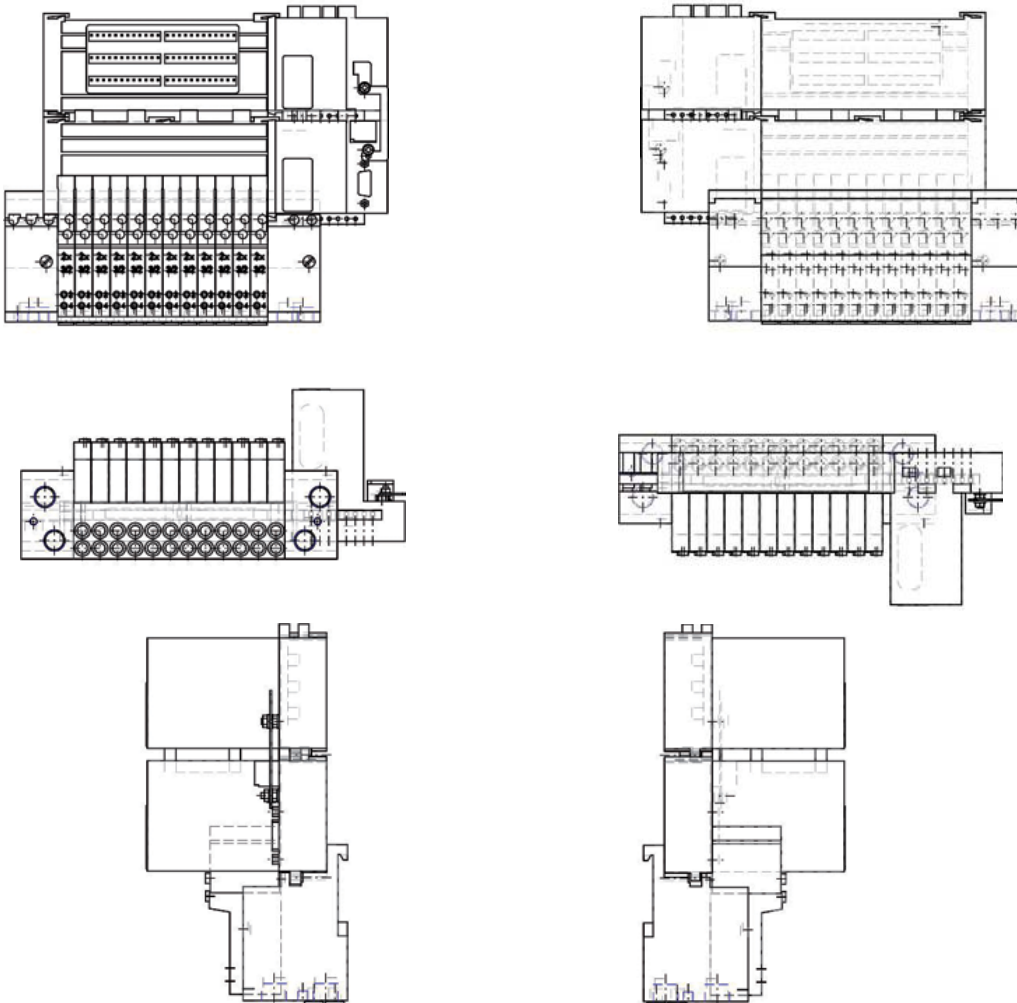
The valve island, Type 8640, includes sensor signals from digital input feedback. As a result, pneumatic outputs switch to different circuit functions of single- or double-acting process valves.

Examples 2D / 3D CAD data

Example 3D CAD model in 3D-Pdf format



Examples 2D DXF drawings in different views



11mm width per station Multi-way solenoid valve Types 6524 and 6525

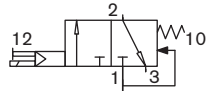
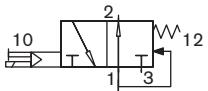
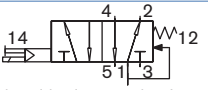
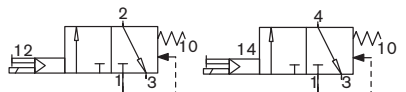


The solenoid valve Types 6524 and 6525 consist of a 6144 flipper pilot valve and a pneumatic seat valve. The flipper principle allows switching of high pressure at low power consumption and fast response times. The pilot valves are equipped with manual override as a standard. The 2x3/2 way valve version is a combination of two flipper pilot valves type 6144 and a pneumatic seat valve.

Spezifikationen	3/2-way valve	2 x 3/2-way valve
Body material	PA (polyamide)	
Seal material	FPM, NBR	
Media	Lubricated and non-lubricated dry air, neutral gases (5 µm-Filter)	
Port connection	Flange for MP11	
Pneumatic module	Type MP11 with push-in connection dimension 6 mm, D1/4, M7	
Manual override	As a standard feature	
Voltage	24 V DC *	
Nominal power	0.8 W	2 x 0.8 W with reduction of power consumption
Duty cycle	Continuous operation (100% ED)	
Elec. connection on valve	Rectangular plug 2-pole with raster 5.08 mm	Rectangular plug 3-pole with raster 2.54 mm
Mounting	With 2 screws M2 x 20	With 2 screws M2 x 28
Installation position	As required, preferably with pilot valve upright	
Flow rate: QNn value air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference	
Pressure ranges [bar]	Measured as overpressure to the atmospheric pressure	
Response times [ms]	Measured according to ISO 12238	

* 10% residual ripple allowed

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Response times		Voltage/Frequency [V/Hz]	Item no.
				Opening [ms]	Closing [ms]		
Circuit function C  3/2-way valve, servo-assisted in de-energized position port 2 to atmosphere	4	300	Vak.-7	15	20	24 V DC *	186 258
			1-10 ¹⁾	15	20	24 V DC *	186 257
			2.5-10	15	28	24 V DC *	184 043
Circuit function D  3/2-way valve, servo-assisted in de-energized position port 2 pressurized			2.5-10	15	28	24 V DC *	184 400
Circuit function H  5/2-way valve, servo-assisted in de-energized position port 1 connected to port 2, port 4 exhausted	4	300	1.0-10 ¹⁾	15	20	24 V DC *	186 271
			2.5-10	20	28	24 V DC *	179 938
Circuit function C  2 x 3/2-way valve, servo-assisted in de-energized position port 2/4 to atmosphere	4	300	1.0-10 ¹⁾	12	20	24 V DC *	186 259 ²⁾
			2.5-10	12	20	24 V DC *	186 260 ²⁾

¹⁾ Version with auxiliary air.

²⁾ Version with integrated reduction of power consumption

* 10% residual ripple allowed

11 mm Anreihmaß: pilot valve 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 response times. All valves are equipped with manual override as a standard.

Technical data	
Body material	aluminium
Seal material	NBR
Medium	lubricated and non lubricated dry compressed air; neutral gases (5 µm-filter recommended)
Port connection	Flange
Pneumatic module	MP11
Supply port connection 1 (P), 3 (R), 5 (S)	G 1/4 NPT 1/4
Service port 2 (A), 4 (B)	push-in connection Ø 6 mm push-in connection Ø 1/4" Threaded port M7
Operating voltages	24 V/DC
Electrical connection at the valve	Rectangular plug
Manual override	standard
Flow rate: QNn value Air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference
Pressure values [bar]	Measured as overpressure to the atmospheric pressure
Response times [ms]	Measured according to ISO 12238

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Nominal power [W]	Response times		Item no.
					Opening [ms]	Closing [ms]	
<p>5/2-way valve, servo-assisted, Impulse version</p>	2,5	200	2,0-7,0	1	15	15	154 183
<p>5/3-way-valve, pilot-controlled, in middle position all ports locked</p>	2,5	200	2,0-7,0	1	15	20	154 184
<p>5/3-way-valve, pilot-controlled, in middle position port 2 and 4 exhausted</p>	2,5	200	2,0-7,0	1	15	20	154 185

16.5mm width per station Multi-way for solenoid valve Types 6526 and 6527



The solenoid valve Types 6526 and 6527 consist of a pneumatic valve body fitted with Type 6106 rocker pilot valve. The rocker principle allows switching of high pressure at low power consumption and fast response times. The pilot valves are equipped with manual override as a standard.

Specification	
Body material	PA (polyamide)
Seal material	NBR
Media	Lubricated and non-lubricated dry air, neutral gases (10 µm filter)
Port connection	Flange for MP12
Pneumatic modules	Type MP12 with G 1/8, NPT 1/8 Plug-in coupling Ø 8 mm
Manual override	Standard
Voltage	24 V DC
Nominal power	2 W, 1W
Duty cycle	Continuous operation (100% ED)
Elec. Connection on valve	Tag connector acc. to DIN EN 175301-803 (previously DIN 43650) Form C
Mounting	With 2 screws M3x30
Installation position	As required, preferably with pilot valve upright
Flow rate: QNn value air [l/min]	Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference
Pressure ranges [bar]	Measured as overpressure to the atmospheric pressure
Response times [ms]	Measured acc. to ISO 12238

Order chart for valves

Circuit function	Orifice [mm]	QNn value air [l/min]	Pressure range [bar]	Nominal power [W]	Response times			Item no.
					Opening [ms]	Closing [ms]	Voltage/Frequency [V/Hz]	
C 3/2-way valve, servo-assisted in de-energized position port 2 to atmosphere	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	156 842
			1,0 - 10 ¹⁾	2	20	12	24 V DC	163 028 ²⁾
			2,0 - 10	2	20	12	24 V DC	156 318
			2,0 - 10	2	20	12	24 V DC	158 944 ²⁾
			2,0 - 8,0	1	20	17	24 V DC	156 840
			2,0 - 8,0	1	20	12	24 V DC	158 947 ²⁾
D 3/2-way valve, servo-assisted in de-energized position port 2 pressurized	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	163 029 ²⁾
			2,0 - 10	2	12	20	24 V DC	156 320
			2,0 - 10	2	20	12	24 V DC	158 946 ²⁾
			2,0 - 8,0	1	17	20	24 V DC	156 841
H 5/2-way valve, servo-assisted in de-energized position port 1 connected to port 2, port 4 exhausted	6	700	1,0 - 10 ¹⁾	2	20	12	24 V DC	156 828
			1,0 - 10 ¹⁾	2	20	12	24 V DC	163 030 ²⁾
			2,0 - 10	2	20	12	24 V DC	156 337
			2,0 - 10	2	20	12	24 V DC	158 942 ²⁾
			2,0 - 8,0	1	20	17	24 V DC	156 827
			2,0 - 8,0	1	20	12	24 V DC	158 943 ²⁾

¹⁾ version with auxiliary air

²⁾ electric connection with manual override.

³⁾ closing time approx. 5 ms higher when used together with valve unit

More valve options

Covering plates

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

Covering plates	Item no.
Covering plate for solenoid valve Type 6524/6525	650 373
Covering plate for solenoid valve Type 6524 2 x 3/2-way valve	661 092
Covering plate for solenoid valve Type 6526/6527	653 765

Exhaust plates

An exhaust plate is mounted on the pneumatic module of the valve unit and offers an additional possibility to remove compressed air from the system.

Exhaust plates	Item no.
Exhaust air plate complete Type 6524/6525	655 166
Exhaust air plate complete Type 6526/6527	653 697

18 mm Anreihmaß Magnetventil 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 o 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.

The 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.

Specification	
Orifice	DN 4.0
Body material	Polyamid (PA)
Valve internal	Ultramid
Seal material	NBR
Media	Compressed air, neutral gases (5 µm-filter)
Medium temperature	-10 ... +50 °C
Ambient temperature	-10 ... +55 °C
Supply port connections 1 and 3	Module flange
Service port connections 2 and 4 (variants)	Threaded port G 1/8 Threaded port NPT 1/8 Tube connection SL 6/4 mm Push-in Ø 6 mm
Operating voltages	24 V DC, 110 - 120 V DC, 220 - 240 V DC, (for alternating current, use valves with UC-coil)
Voltage tolerance	±10 %
Duty cycle	Continuous operation
Elec. Connection on valve	Tag connector acc. to DIN 43 650 Form C, for Cable Plug type 1057 and type 2506 (see accessory); Rectangular plug (5.08)
Ignition protection	EEx ia IIC T6 on request
Type of protection	IP 65 (with cable plug)
Installation position	As required, preferably with pilot valve upright

Order chart for valves

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min]	Service ports 4 and 2	Pressure range [bar]	Nominal power [W]	Voltage/Frequency [V/Hz]	Item no. (Valve island)	Item no. (Valve block)
C 	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 479	135 203
				2 - 10	2	24 V DC	133 148	135 204
				2 - 10	3	110 - 120 DC		132 952
				2 - 10	3	220 - 240 DC		132 953
D 	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 481	136 742
				2 - 10	2	24 V DC	136 741	136 743
				2 - 10	3	110 - 120 DC		136 744
				2 - 10	3	220 - 240 DC		136 745
G 	4	300	Push-in ø 6 mm, front	2 - 8	1	24 V DC	132 487	135 205
				2 - 10	2	24 V DC	133 149	135 206
				2 - 10	3	110 - 120 DC		132 954
				2 - 10	3	220 - 240 DC		132 955
	4	300	Push-in ø 6 mm, below	2 - 8	1	24 V DC	132 489	135 207
				2 - 10	2	24 V DC	133 150	135 208
				2 - 10	3	110 - 120 DC		132 956
				2 - 10	3	220 - 240 DC		132 957
	4	300	Push-in ø 6 mm, front with throttle-check valve	2 - 8	1	24 V DC	132 488	135 209
				2 - 10	2	24 V DC	133 151	135 210
				2 - 10	3	110 - 120 DC		133 152
				2 - 10	3	220 - 240 DC		133 153

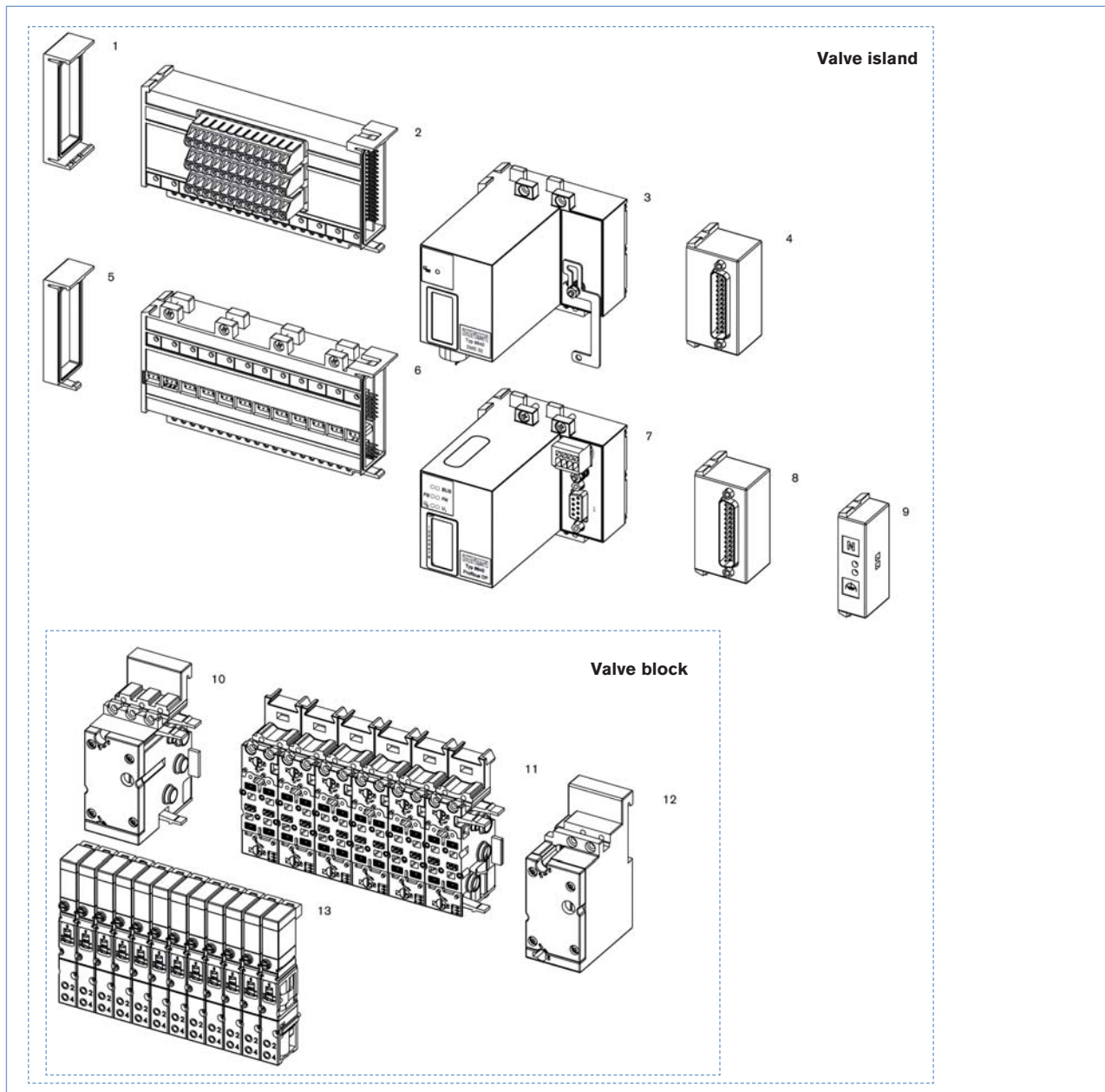
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Order chart for valves, continued

Circuit function	Orifice [mm]	Q _{Nn} value air [l/min]	Service ports 4 and 2	Pressure range [bar]	Nominal power [W]	Voltage/ Frequency [V/Hz]	Item no. (Valve island)	Item no. (Valve block)
G 	4	300	Threaded port G 1/8, front	2 - 8	1	24 V DC	132 483	135 211
				2 - 10	2	24 V DC	133 157	135 212
				2 - 10	3	110 - 120 DC		132 958
				2 - 10	3	220 - 240 DC		132 959
	4	300	Threaded port G 1/8, front, with throttle-check valve	2 - 8	1	24 V DC	132 484	135 213
				2 - 10	2	24 V DC	133 159	135 214
				2 - 10	3	110 - 120 DC		133 160
				2 - 10	3	220 - 240 DC		133 161
	4	300	Tube connection SL6/4 mm, front	2 - 8	1	24 V DC	133 162	135 215
				2 - 10	2	24 V DC	133 163	135 216
				2 - 10	3	110 - 120 DC		133 164
				2 - 10	3	220 - 240 DC		133 166

¹⁾ In operation of alternating current (AC), place a cable plug type 2506 with rectifier upstream.

Composition valve block & valve island



Basic module choice, for further modules see the following pages

- | | |
|--|--|
| 1. Electrical end module left | 2. Terminal module for electronic inputs |
| 3. Extension module for electrical inputs | 4. Multipin repeater inputs (initiators) |
| 5. Electrical end module left | 6. Basic electrical module standard |
| 7. Fieldbus module | 8. Multipin valve outputs |
| 9. Common connection module | 10. Pneumatic connection module left, Type MP11 |
| 11. Basic pneumatic modules, Type MP11 for 12 valves | 12. Pneumatic connection module right, Type MP11 |
| 13. Valves of Type 6525 (5/2-way) | |

Module description

Collective line- and multipol-modules
for single connection of valves and feedback

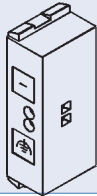
0460/6524/6525
width/station 11mm



6526/6527
width/station 16,5mm



5470
width/station 18mm



Connection via individual stranded wires

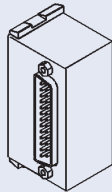
Looped-through ground potential

Max. 24 valves

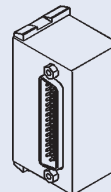
IP20 degree of protection

Screw terminal

Multipin module
Valve outputs



Multipin module
Repeater inputs
(initiators)



Fieldbus modules

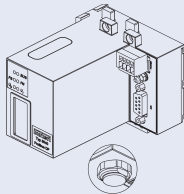
0460/6524/6525
width/station 11mm



6526/6527
width/station 16,5mm



5470
width/station 18mm



Fieldbus PROFIBUS-DP, IP20 degree of protection

Max. 24 valves

Max. 32 repeaters (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-pole male)

Bus connection D-SUB (9-pole female)

With RIO-connection M8 (4-pole)

Internal bus extension RIO-VA module, IP20 degree of protection

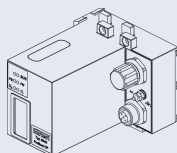
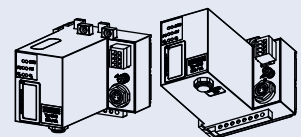
Max. 24 valves

Max. 32 repeaters (in connection with EME module)

Plug connection

RIO cable for bus extension 1m (Item no. 917 498)

2m (Item no. 917 498)



Fieldbus PROFIBUS-DP IP54 degree of protection

on connection with the basic electrical module the complete system meets the degree of protection IP54

Max. 24 valves

Max. 32 repeaters (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 M12 circular plug (4-pole male)

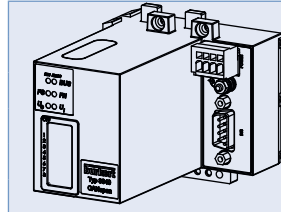
Bus connection M12 (5-pole female)

For a trouble-free assembly use the following Y-piece (Item no. 902 098)

Module description

Fieldbus modules

		
0460/6524/6525 width/station 11mm	6526/6527 width/station 16,5mm	5470 width/station 18mm

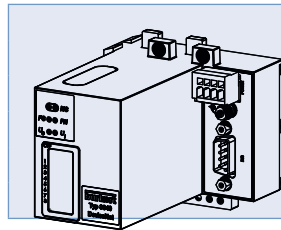
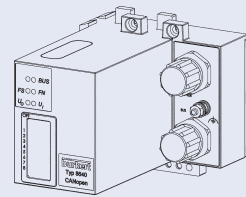


Fieldbus CANopen, IP20 degree of protection

Max. 24 valves,
Max. 32 repeaters (in connection with EME module)
Transmission rates 20, 125, 250 or 500 kBaud
Power supply with rectangular plug (4-pole)
Bus connection D-SUB (9-pole male)

Fieldbus CANopen, IP54 degree of protection on connection with the basic electrical module the complete system meets the degree of protection IP54

Max. 24 valves
Max. 32 repeaters (in connection with EME module)
Transmission rates 20, 125, 250 or 500 kBaud
Power supply with M12 circular plug (4-pole male)
Bus connection M12 (5-pole male)
For a trouble-free assembly use the following Y-piece (Item no. 788 643)

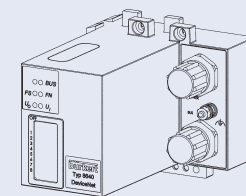


Fieldbus Device Net, IP20 degree of protection

Max. 24 valves
Max. 32 repeaters (in connection with EME module)
Transmission rates 125, 250 or 500 kBaud
Power supply with rectangular plug (4-pole)
Bus connection D-Sub (9-pole male)

Fieldbus Device Net, IP54 degree of protection on connection with the basic electrical module the complete system meets the degree of protection IP54

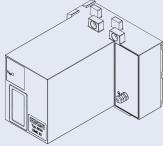
Max. 24 valve
Max. 32 repeaters (in connection with EME module)
Transmission rates 125, 250 or 500 kBaud
Power supply with M12 circular plug (4-pole male)
Bus connection M12 (5-pole male)
For a trouble-free assembly use the following Y-piece (Item no. 788 643)



Module description

Fieldbus modules

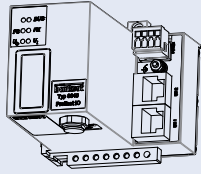
		
0460/6524/6525 width/station 11mm	6526/6527 width/station 16,5mm	5470 width/station 18mm




EME module (extension module inputs), IP54 degree of protection

Module for connection of repeater inputs in connection with fieldbus modules

Fieldbus Profinet IO, Ethernet I/P, Modbus TCP Protection class IP20

Max. 24 valves	
Max. 32 repeaters (in connection with EME-module)	
Transmission rates 10/100 MBits/s with auto crossover	
Power supply with rectangular plug (4-pole)	
Bus connection RJ45 (2x)	
RIO-connection M8 (4-pole)	

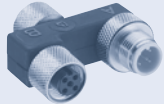
Further electrical accessories



Bus Y-piece for PROFIBUS

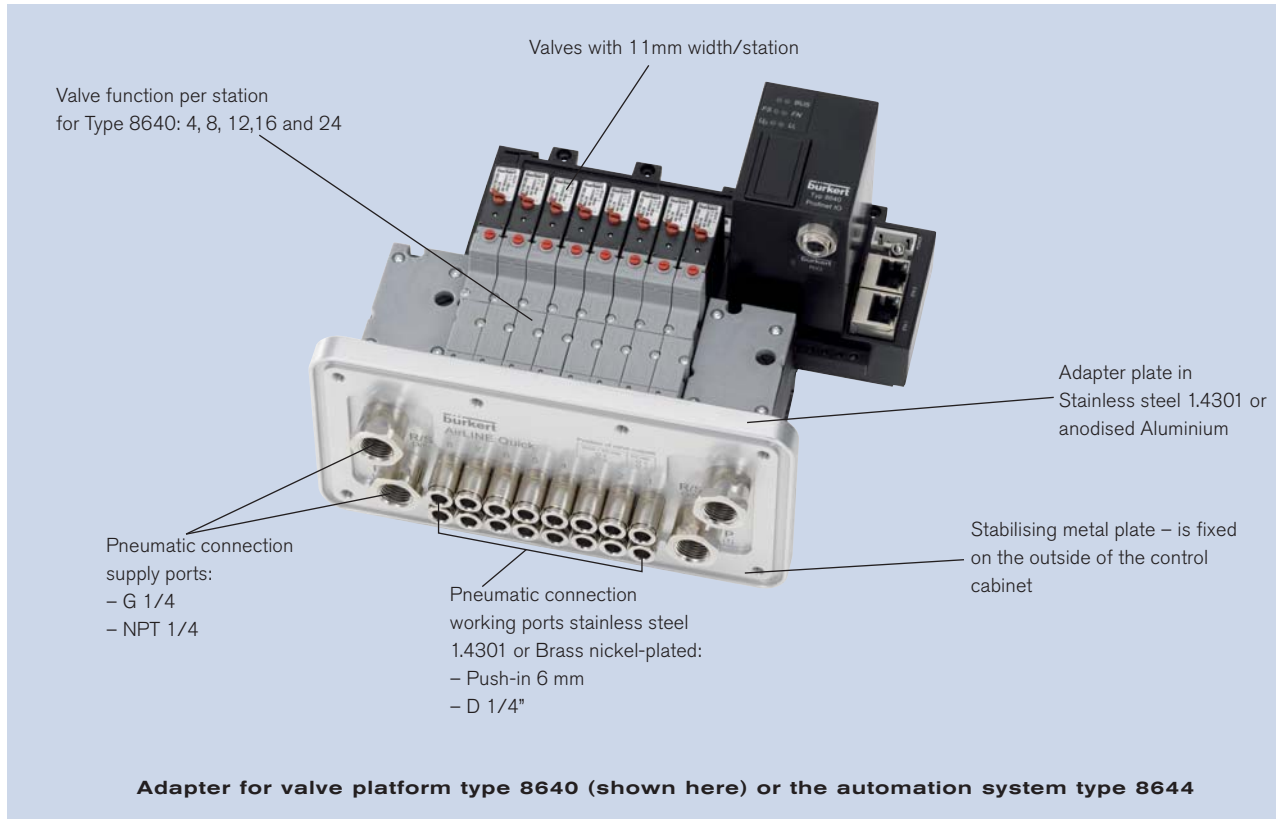
You must use one pre-assembled plug and one plug for free assembly.
(Item no. 902 098)

(Item no. 788 643) **Bus Y-piece for CANopen and DeviceNet**



AirLINE Quick

With AirLINE Quick you can reduce the amount of the components in the control cabinet considerably. With the AirLINE Quick Adapter the valve island is directly adapted on the control cabinet floor or wall.



* Valves of type 0460 cannot be installed with AirLINE Quick due to the size.

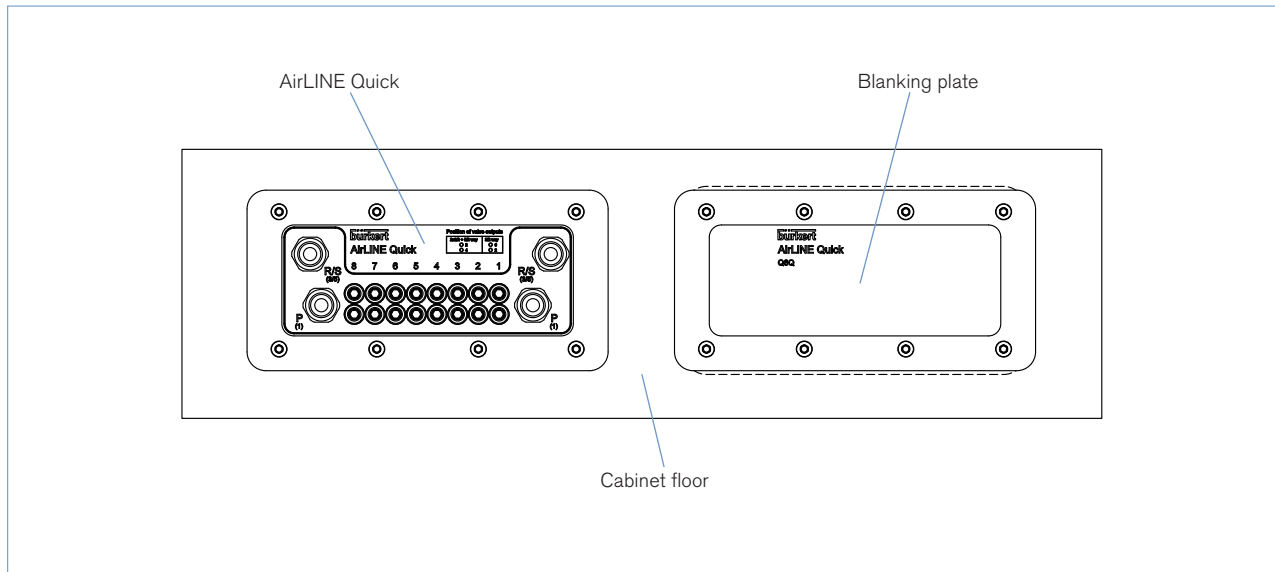
Technical data

Technical data	
Material for AirLINE Quick Adapter	Stainless steel 1.4301 anodised Aluminium
Material Pneumatic connection	Stainless steel 1.4301 Brass nickel-plated
Pneumatic connection, supply ports	G 1/4, NPT 1/4
Pneumatic connection working ports	Push-in D6 mm, D1/4"
Installation	Control cabinet wall Control cabinet floor
Valve function per station	4, 8, 12, 16 and 24

Additional accessories for AirLINE Quick

Blanking plate

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



Order chart blanking plate

Material	Amount of valve slots	Item no.
Aluminium anodised	4	246 937
	8	246 933
	12	246 929
	16	246 925
Stainless steel 1.4301	4	246 938
	8	246 934
	12	246 930
	16	246 926

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In case of special application conditions,
please consult for advice.

Subject to alteration
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