AirLINE - The valve island optimized for process automation

- Compact design
- Diagnosis in cleartext at the LC-Display
- Process reliability with pneumatics functions
- Optimized for installation at the cabinet bottom

Type 8652 can be combined with…

Type 8905
Online Analysis System

Type ME43
Feldbus-Gateway

Type 8098
FLOWave SAW-Flowmeter

Type 2012
2/2 way globe valve

Type 8695
Control head

Type 0498
Double pilot controlled check valve

The pneumatic valve island type 8652 AirLINE is especially developed for applications in process automation. New diagnosis functions can be visualiced at the LC-Display. Both cleartext as well as symbols show information which makes easy to relate the shown diagnosis. This saves time during installation and commissioning.

Furthermore the diagnosis information is also available in the PLC which enables a fast ouverview about the plant status. The hardware is optimized for installation at the cabinet bottom. Of course to fix the AirLINE at DIN rail is possible as well.

Besides important pneumatics functions ensure increased process safety. For instance the checkvalves make sure not to get an unplanned actuation due to pressure peaks.

Technical data	
Width/station	11 mm
Circuit functions	C 2×3/2 way (NC/NC) D 2×3/2 way (NO/NO) H (5/2 way) Z (5/2 way) impulse / bistable
Flow rate	310 l/min[1)]
Pressure range	Vac. up to 10 bar
Outlet port	Plug-in coupling diameter 6 mm, D1/4"
Connection air supply	Plug-in coupling diameter 10 mm, D3/8"
Max. number of modules	3 (later up to 6 modules possible)
Number of valve positions per module	4 valve positions (max. 8 valve functions)
Max. number valve functions	24 (later up to 48 valve functions possible)
Communication interfaces	PROFIBUS DP Industrial Ethernet (PROFINET I/O, EtherNet IP, Modbus TCP, EtherCAT) CANopen / büS (when networking with Bürkert devices)
Electrical modules	Type ME43
Operating voltage	24 V DC
Voltage tolerance	± 10 %
Nominal power per valve	0.7 W (0.1 W after power reduction)
Rated current per valve	29 mA (10 mA after power reduction)
Temperatures	
Ambient	-10…+55 °C
Storage	-10…+60 °C
Protection class	IP20
Approvals	ATEX & IECEx, Zone 2 & Zone 22 (in preparation) FM Div2 Class 1 & Class 2 (in preparation) cULus Class 2 (in preparation)

[1)] Maximum flow depending on the valve function – see chart on page 4.

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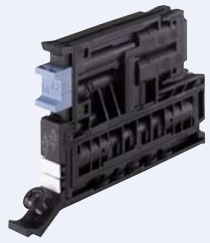
Further technical data



At the heart of AirLINE, Type 8652 are the pilot valves of Type 6534. They consist of a pilot valve and a booster valve. The 6164 pilot valve is the perfect base for the pilot valve 6534 with its above-average service life.

The booster is designed as a slide valve, ensuring maximum flexibility and reliability. The combination of the components allows the switching of high pressures with low power consumption and with short switching times. The pilot control valves are equipped with a manual operation as standard.

Specification	
Body material	PA (Polyamide)
Seam materials	NBR and PUR
Medium	compressed air, oil free, dry; neutral gases (5 µm Filter recommended)
Port connection	Flange for MP15
Connection air supply	Flange for MP15
Manual override available / lockable	Yes / yes
Installation	As required
Mounting	1 screw M4 × 10
Flow rate: Q_{Nn} value air [l/min]:	Measured at +20 °C, 6 bar pressure at valve inlet and 1 bar pressure difference
Pressure values [bar]:	Overpressure with respect to atmospheric pressure
Response times [ms]:	Measured according to ISO 12238

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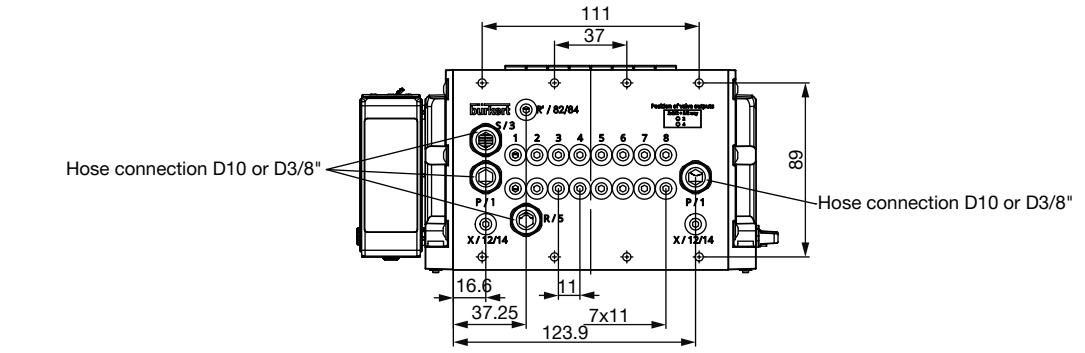
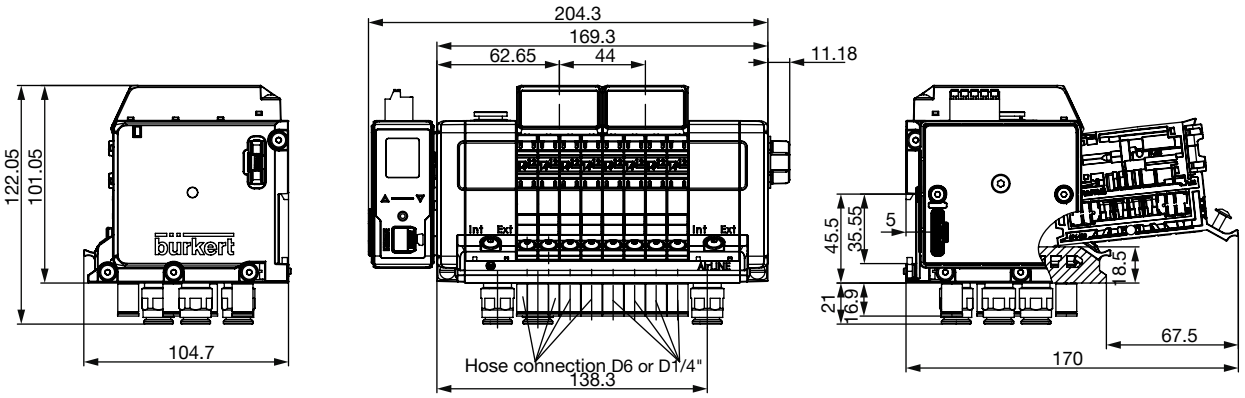
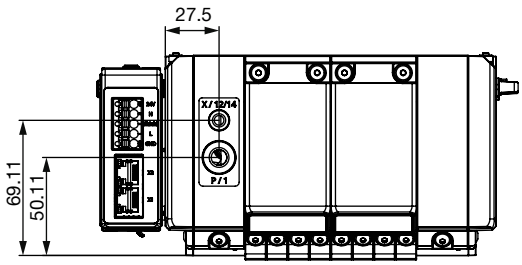
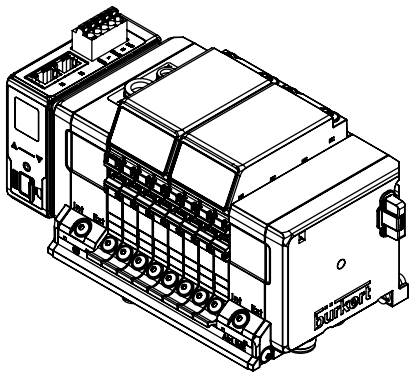
Dimensions [mm]







Isometric view



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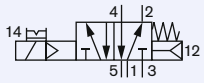
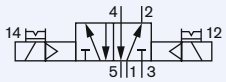
Ordering chart

Circuit function	Orifice [mm]	Q_{Nn} value[2] air [l/min]	Pressure range [bar]	Response times		Voltage/ Frequency [V/Hz]	Item no incl. screw
				Opening [ms]	Closing [ms]		
C  2 × 3/2 way servo-controlled solenoid valve, normally closed, with manual override	4	270 l/min	Vac. 10[1] 3…10	15	15	24 V DC	301 374
D  2 x 3/2 way servo-controlled solenoid valve, normally open, with manual override	4	290 l/min	Vac. 10[1] 3…10	15	15	24 V DC	301 375
H  5/2 way servo-controlled solenoid valve, with manual override	4	290 l/min	Vac. 10[1] 3…10	20	25	24 V DC	301 376
Z  5/2 way solenoid valve, with 2 impulse coils and manual override	4	310 l/min	Vac. 10[1] 3…10	20	25	24 V DC	301 377

[1] Separate control auxiliary air min. 3 bar
[2] With HotSwap function, ca. 3 % flow reduction

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