



bürkert
FLUID CONTROL SYSTEMS

Standard Product Program

AirLINE & AirLINE Quick
Type 8640 & Type 8644

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

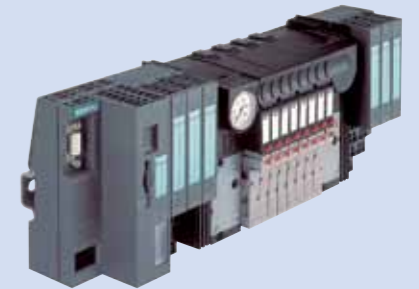
8640 & 8644
Standard

- 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

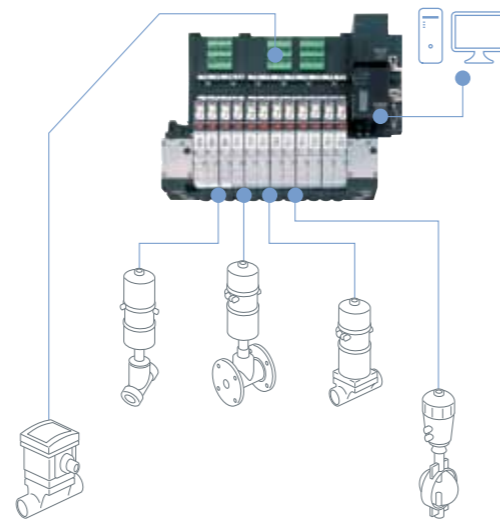


- Standardised valve cabinet with automation system Type 8644 Standard and AirLINE Quick
- Customised valve cabinet
- Certified valve cabinet for use in Ex areas
- Materials: plastic, sheet steel, stainless steel, stainless steel hygienic design
- Control cabinet solutions starting on page 18



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	Ethernet/IP	Profibus DP	RIO Slave	Collective socket	Multipin
8x 3/2	8	253 644	262 566	216 223	187 663	203 956	706 532
		253 651	262 569	230 792	237 091	*	231 603
8x 5/2	16	253 767	262 816	210 182	253 242	227 951	706 854
		253 769	262 818	224 071	253 245	*	253 244
8x 2x3/2	16	253 679	262 699	189 667	237 096	208 382	224 404
		253 683	262 703	237 110	237 097	*	237 073
12x 5/2	24	253 770	262 705	710 531	253 251	189 279	708 412
		253 771	262 706	710 046	253 247	*	207 607
12x 2x3/2	24	253 703	262 819	208 176	218 304	235 702	182 089
		253 706	262 820	218 307	218 308	*	173 571
16x 3/2	16	253 656	262 572	189 291	235 597	708 042	706 713
		253 666	262 573	178 229	174 333	*	177 419
16x 5/2	32	253 773	262 822	709 711	710 317	708 751	169 891
		253 774	262 823	234 195	253 253	*	253 254
24x 3/2	24	253 672	262 578	710 320	710 457	202 871	169 920
		253 675	262 581	215 422	214 681	*	707 368
24x 5/2		253 776	262 824	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 Modbus TCP on request.

Order quantity & availability: (For larger quantities please contact your Bürkert sales representative.)

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

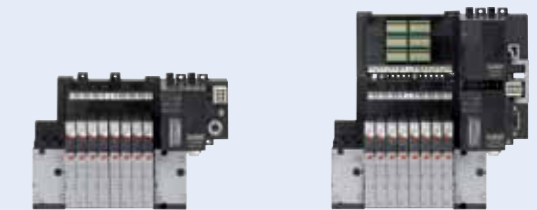
* technically not possible

Applications

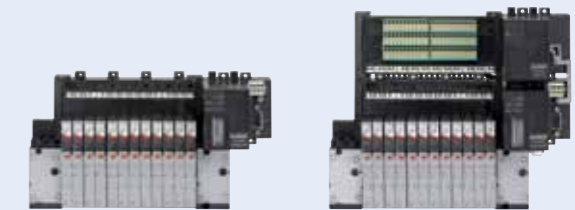
For general applications

Functions

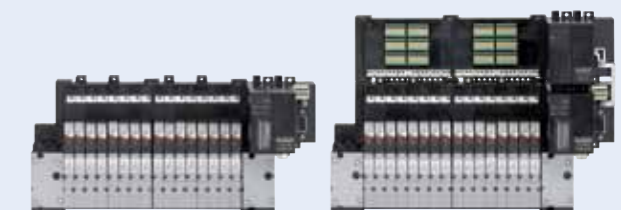
Flow rate of valves (QNn value)	300 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



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	Ethernet/IP	Profibus DP	RIO Slave	Collective socket	Multipin
8x 3/2	8	Yes	253 646	262 567	218 900	236 139	208 250	219 010
			253 648	262 568	218 898	237 057	*	237 069
		Yes	253 652	262 570	219 041	229 922	*	237 075
8x 5/2	8	Yes	253 654	262 571	218 894	237 092	*	219 572
			253 589	262 536	218 906	237 093	213 074	707 131
		253 595	262 537	218 902	237 094	*	237 076	
8x 2x3/2	16	Yes	253 599	262 538	218 904	237 095	*	229 577
			253 681	262 702	236 022	237 071	226 084	179 369
		253 684	262 704	230 105	164 850	*	237 077	
12x 2x3/2	24	Yes	253 705	261 975	235 781	173 388	226 086	226 360
			253 708	262 213	230 102	236 014	*	179 368
		253 658	262 037	219 042	236 140	219 386	217 779	
16x 3/2	16	Yes	253 670	262 574	212 180	227 905	*	237 079
			253 676	262 575	212 179	237 099	*	237 080
		32	253 664	262 576	212 182	220 612	*	237 083
		32	Yes	253 669	262 577	212 181	220 611	*
16x 5/2	16	Yes	253 601	262 539	218 956	237 100	225 861	237 084
			253 603	262 540	218 955	237 101	*	237 085
		253 606	262 541	212 184	237 104	*	237 089	
		Yes	253 608	262 542	212 183	237 102	*	237 088
		32	253 627	262 453	212 187	230 230	*	229 588
24x 3/2	24	Yes	253 628	262 543	215 840	215 841	*	237 090
			253 680	262 579	213 292	214 416	183 055	171 115
		253 674	262 580	213 291	213 491	*	*	
		253 677	262 698	212 109	212 115	*	707 369	
		Yes	250 280	262 813	207 661	212 111	*	*
24x 5/2	24	Yes	253 629	262 544	172 040	237 106	213 280	217 482
			253 631	262 546	237 108	237 107	*	*
		253 638	262 547	213 459	213 503	*	707 370	
		Yes	253 641	262 565	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 Modbus TCP on request.

Order quantity & availability: (For larger quantities please contact your Bürkert sales representative.)

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

* technically not possible

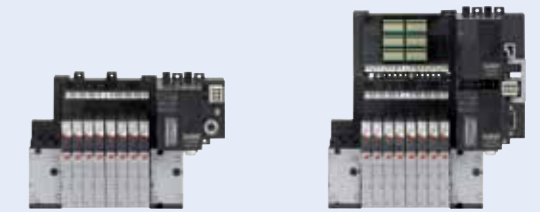
Applications

For general and hygienic applications

Functions

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

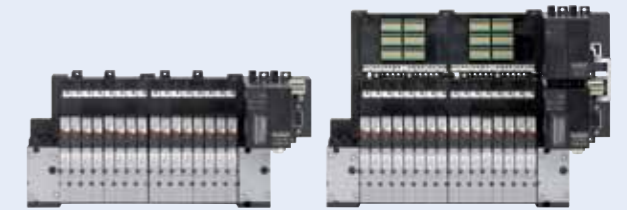
Flow rate of valves (QNn value)	150 l/ min
Pressure range	2,5– 10 bar
Pneumatic supply	G 1/4
Pneumatic working connections	6 mm push-in



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	Ethernet/IP	Profibus DP	RIO Slave	Collective socket	Multipin
4x 2x3/2		Anodised aluminium	**	**	**	**	243 003	247 995
8x 2x3/2	16		253 359	262 443	230 189	233 843	230 292	230 619
			253 495	262 465	230 195	233 933	*	230 543
12x 2x3/2	24		253 539	262 474	230 196	233 953	230 295	230 616
			253 544	262 509	230 198	236 050	*	230 620
16x 5/2	32		253 556	262 516	247 613	247 571	247 621	247 887
			253 560	262 528	247 618	247 625	*	247 895

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Ethernet/IP	Profibus DP	RIO Slave	Collective socket	Multipin
4x 2x3/2		Stainless steel 1.4301	**	**	**	**	247 986	247 997
8x 2x3/2	16		253 360	262 452	230 183	233 886	230 290	230 617
			253 496	262 471	230 193	233 936	*	230 542
12x 2x3/2	24		253 540	262 478	230 197	233 954	230 293	230 615
			253 552	262 511	230 200	236 041	*	230 622
16x 5/2	32		253 557	262 517	247 615	247 587	247 622	247 892
			253 561	262 531	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 Modbus TCP on request.

Order quantity & availability: (For larger quantities please contact your Bürkert sales representative.)

≤ 10 items: **5 days** ≤ 20 items: **10 days** ≤ 30 items: **15 days** ≤ 20 items: **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	Ethernet/IP	Profibus DP	RIO Slave	Common connection	Multipin
4x 2x3/2		Anodised aluminium	**	**	**	**	247 987	247 998
8x 2x3/2	16		253 362	262 454	230 711	233 865	231 117	230 860
			253 535	262 472	230 712	233 935	*	230 871
12x 2x3/2	24		253 541	262 483	230 749	233 957	230 846	230 506
			253 553	262 514	230 876	236 047	*	230 841
16x 5/2	32		253 558	262 524	247 616	247 603	247 624	247 893
			253 562	262 532	247 619	247 629	*	247 899

Valve functions	Digital inputs	AirLINE Quick	Profinet IO	Ethernet/IP	Profibus DP	RIO Slave	Common connection	Multipin
4x 2x3/2		Stainless steel 1.4301	**	**	**	**	247 991	248 000
8x 2x3/2	16		253 444	262 477	230 709	233 794	231 113	230 859
			253 538	262 473	230 714	233 930	*	230 870
12x 2x3/2	24		253 543	262 485	230 808	233 955	230 845	230 840
			253 555	262 515	230 154	235 991	*	230 842
16x 5/2	32		253 559	262 525	247 617	247 605	247 626	247 894
			253 563	262 533	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 Modbus TCP on request.

* technically not possible
** on request

Order quantity & availability: (For larger quantities please contact your Bürkert sales representative.)

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

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 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

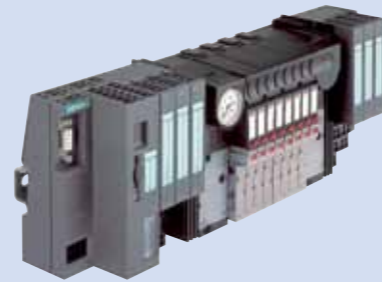
The AirLINE Type 8644 product program

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



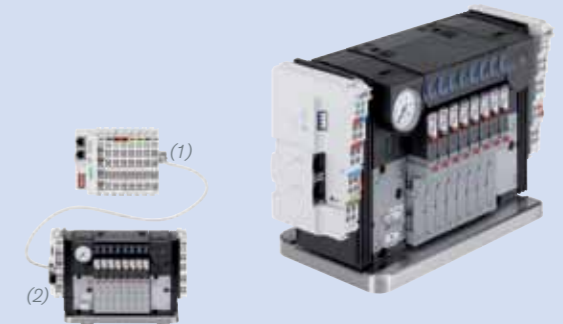
8644 with Wago
I/O system 750

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



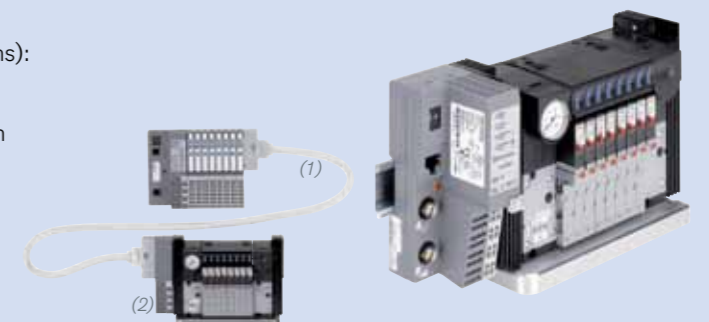
8644 with Rockwell
Point I/O system

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



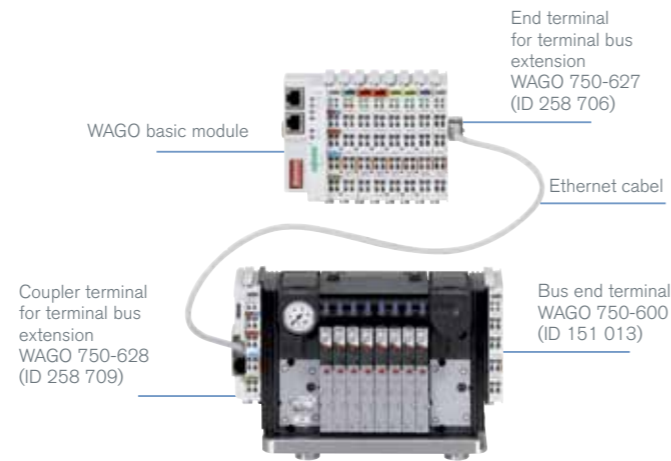
- Easy adaptation to the valve cabinet
- Adapter sizes (max. number of valve functions): 8x (16), 12x (24), 16x (32), 24x (48)
- Required modules for terminal bus extension (as shown in the photo at right)
- Extension cable 1 meter⁽¹⁾: ID 684 207
- Extension cable 3 meter⁽¹⁾: ID 684 208
- Power supply 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: (For larger quantities please contact your Bürkert sales representative.)

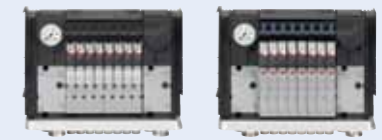
≤ 5 Items: **10 Days** ≤ 20 Items: **20 Days** ≤ 20 Items: **20 Days**

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

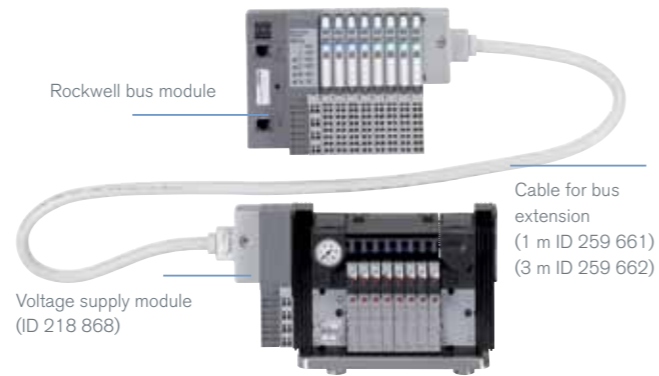
Including process reliability functions, pneumatic HotSwap and check valves



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

* with medium supply module

Order quantity & availability: (For larger quantities please contact your Bürkert sales representative.)

≤ 5 Items: **10 Days** ≤ 20 Items: **20 Days** ≤ 20 Items: **20 Days**

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

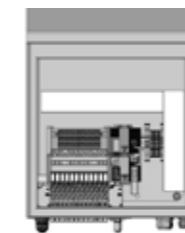
Valve island type 8640 8644 8650

I/O system (8644) Siemens WAGO Phoenix Rockwell

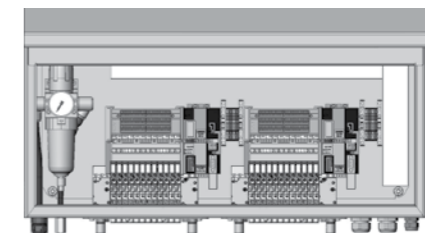
4. Pneumatic features

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.

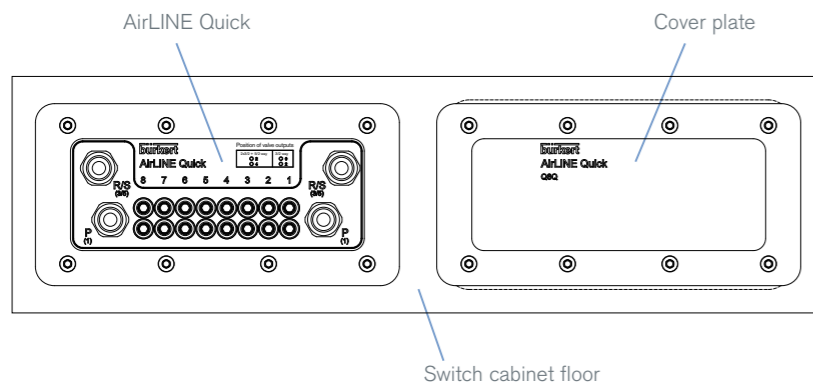
Accessories for AirLINE Type 8640 & 8644

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.

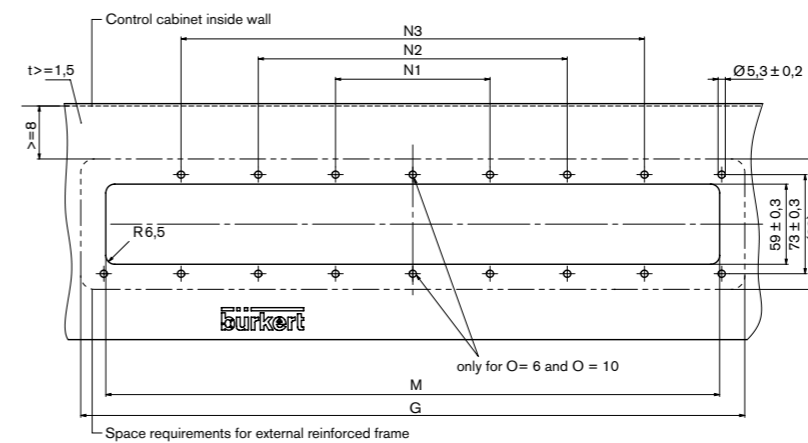


Order table, cover plates for 8640 & 8644:

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	●	●	●	●	●	●	●	●	●	●
	0 to +55 °C	●	●	●	●	●	●	●	●	●	●
Temperature range	0 to +55 °C	●	●	●	●	●	●	●	●	●	●
	IP 20	●	●	●	●	●	●	●	●	●	●
Protection type	IP 65 if installed in a closed cabinet	●	●	●	●	●	●	●	●	●	●
	ATEX Zone 1	●*	●*								
Certification	ATEX Zone 2	●**	●**	●	●	●	●	●	●	●	●
	UL			●**	●**	●**	●**	●**	●**	●**	●**

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

Bürkert – Cloe to You

For up-to-date addresses please visit us at www.burkert.com.





bürkert
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