



2/2-way Angle-Seat Valve for medium up to +180°C, threaded port connection, DN 15-65

- High flow rate
- Long life cycle
- NC and NO universal actuators with modular universal accessory program up to control heads
- Deliverable with flow direction below or above seat
- Simple conversion of the control function

Type 2000 can be combined with...



Typ 8691

Control head



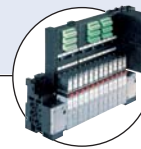
Typ 8690

Pneum. control unit with feedback



Type 1062

Electrical position feedback



Type 8640/8644

Valve block



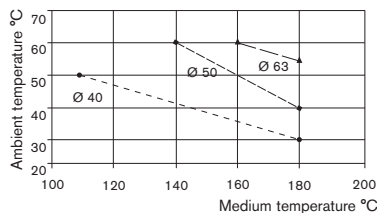
Type 6012/6014 P

Pilot valve

The externally piloted angle-seat valve is operated with a single or double-acting piston actuator. The actuator is available in two different materials, PA and PPS depending on the ambient temperature. The reliable self-adjusting packing gland provides high sealing integrity. High flow rates are attained with the gunmetal or cast stainless steel 2-way body. These maintenance-free and robust valves can be retrofitted with a comprehensive range of accessories for position indication, stroke limitation or manual override.

For valves with port connection clamp and weld end please see separate datasheets.

¹⁾ **Note:** For PA actuators in the sizes 40, 50 and 63, the combination of max. medium temperature and max. ambient temperature is as shown in the following chart



Technical data	
Orifice	DN 15 to 65
Body materials	Gunmetal, cast stainless steel 316L
Actuator material	PA or PPS
Seal material	PTFE (NBR, FKM, EPDM on request)
Medium	Water, alcohol, oils, fuel, hydraulic fluids, salt solution, alkali solutions, organic solvents, steam
Viscosity	max. 600 mm ² /s
Packing gland (with silicone grease)	PTFE V-rings with spring compensation
Medium temperature¹⁾	-10 to +180 °C with PTFE seal
Ambient temperature	
PA actuator ¹⁾	-10 to +60 °C
PPS actuator ¹⁾ Ø 40-80	+5 to +140 °C
PPS actuator ¹⁾ Ø 100-125	+5 to +90 °C, briefly up to +140 °C
Installation	As required, preferably with actuator in upright position
Control medium	Neutral gases, air
Max. pilot pressure	
Actuator size Ø 40-80	PA and PPS 10 bar
Actuator size Ø 100	PA 10 bar
Actuator size Ø 100	PPS 7 bar
Actuator size Ø 125	PA and PPS 7 bar
Port connection	G 3/8 to G 2 1/2 (NPT on request)

Content



Valve specifications

Type 2000 threaded port

Technical data & ordering info.

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System spec. On/Off Classic

**Type 8801-YA/
8803-YA**

Ordering info. & technical data

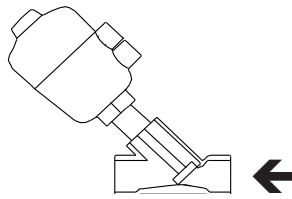
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Request for quotation

**Type 8801-YA/
8803-YA**

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Technical data Type 2000 threaded port, flow direction below seat (for gases and liquid)



Flow direction below seat

Orifice [mm]	Actuator size [mm]	Kv value water (m ³ /h)	Min. pilot pressure CFA [bar]	Max. operating pressure up to ±180°		Weight [kg]
				CFA [bar]	CFB [bar]	
15	40	3.7	4.0	15	16	0.8
	50	4.2	3.9	16	16	0.8
20	40	7.0	4.0	6.5	16	0.9
	50	8.5	3.9	11	16	1.0
	63	9.0	4.5	16	–	1.4
25	50	10	–	–	16	1.2
	63	18	4.5	11	16	1.8
	80	18	5.0	16	16	2.2
32	63	25	4.5	6	16	2.2
	80	27	5.0	14	16	3.1
40	63	35	–	–	16	2.7
	80	38	5.0	9	16	3.5
	100	40	4.4	12.5	–	7.6
	125	40	3.2	16	–	9.0
50	63	49	–	–	13	4.0
	80	52	–	–	15	4.8
	100	55	4.4	7.2	–	7.0
	125	55	3.2	10	–	9.4
65	80	77	–	–	15	6.4
	125	90	3.2	5.2	–	11.0

Kv value water [m³/h]: Measured at +20 °C, 1 bar pressure at valve inlet and free outlet
 Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Pilot pressure diagram with control function B and flow direction below seat

Diagram 1

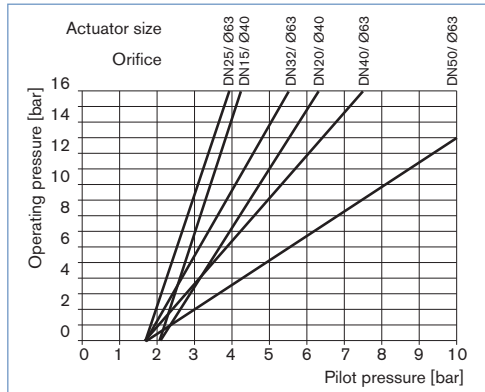
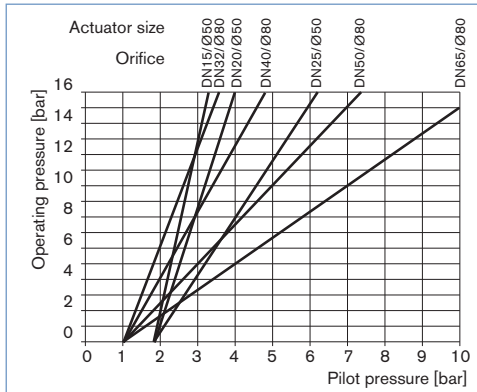
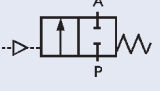
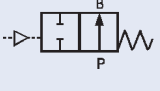


Diagram 2



Ordering chart Type 2000 threaded port, flow direction below the seat (for gases and liquid)

Different actuator and body materials

Control function	Port connection	Orifice [mm]	Actuator size Ø [mm]	Kv value water [m³/h]	Minimum pilot pressure [bar]	Max. operating pressure up to 180 °C [bar]	Gunmetal body		Cast st. st. body			
							Item no. PA actuator	Item no. PPS actuator	Item no. PA actuator	Item no. PPS actuator		
A 2/2-way, normally closed (NC) 	G 3/8	15	40	3.7	4.0	15	178 614	178 613	142 613	178 612		
			G 1/2	40	3.8	4.0	15	178 608	178 607	178 606	178 605	
				50	4.2	3.9	16	178 684	178 683	178 682	178 681	
	G 3/4	20	50	8.5	3.9	11	178 680	178 679	178 678	178 677		
			63	9.0	4.5	16	178 666	178 665	178 664	178 663		
			G 1	25	63	18	4.5	11	178 676	178 675	178 674	178 667
	G 1 1/4	32	80	18	5.0	16	186 489	187 565	186 488	187 844		
			G 1 1/2	40	80	38	5.0	9	178 695	178 694	178 693	178 692
			125	40	3.2	16	186 487	–	187 840	–		
	G 2	50	100	55.0	4.4	7.2	001 134	002 170	001 140	001 239		
			125	55.0	3.2	10	001 593	002 171	001 601	–		
			G 2 1/2	65	125	90.0	3.2	5.2	001 368	002 172	001 373	001 703
B 2/2-way, normally open (NO) 	G 3/8	15	40	3.7	see diagram 1 and 2 on previous page	16	140 368	178 610	142 616	178 609		
			G 1/2	40		3.8	16	178 601	178 602	178 603	178 604	
				50		4.2	16	178 691	178 690	178 689	178 688	
	G 3/4	20	50	8.5	16	178 687	179 020	178 686	178 685			
			G 1	25	50	10	16	178 850	178 849	178 848	178 847	
			G 1 1/4	32	63	25	16	178 845	178 853	178 852	178 851	
	G 1 1/2	40	63	35	16	178 864	178 863	178 862	178 861			
			G 2	50	63	49.0	13	001 371	002 179	001 376	001 709	
				80	52	16	001 595	002 180	001 603	002 164		
	G 2 1/2	65	80	77.0	15	001 372	002 181	001 377	001 710			

 Further versions on request


Material
Seal: NBR, FKM, EPDM



Control function
Double-acting actuator



Port connections
Clamp, weld end (see separate datasheets)



Approvals
GL, SIL



Mediums temperature
Valves for mediums temperature up to +200°C or down to -40°C

**2000 threaded port
System On/Off Classic
8801-YA/8803-YA**

Ordering information for valve system On/Off Classic Type 8801-YA/8803-YA

A valve system On/Off Classic Type 8801-YA/8803-YA consists of an angle-seat valve Type 2000 and a valve actuation system control head Type 8691, a pneumatic control unit Type 8690 or an electrical position feedback Type 1062 (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 12 [go to page](#)
You order two components and receive a complete assembled and certified valve.

Ordering the valve system On/Off Classic Type 8801-YA/8803-YA

**Angle-seat valve
Type 2000 threaded port**



Control units



8691
(for actuator
sizes 50-125 mm)



8690
(for actuator
sizes 50-125 mm)



1062

**Angle-seat valve with
desired control unit**

For port connections weld end and clamp, see separate datasheets



**Valve system
On/Off Classic
Type 8801-YA-H
2000 + 8691**



**Valve system
On/Off Classic
Type 8801-YA-K
2000 + 8690**



**Valve system
On/Off Classic
Type 8803-YA
2000 + 1062**

When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

Control head Type 8691



More info.

The new generation of integrated control heads for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The intelligent control head, Type 8691, detects the valve position by means of a contact-free analog position sensor circumventing excessive wear of mechanical parts. Single or double-acting actuators are controlled via the integral pilot valve. Communication interfaces AS-Interface and DeviceNet are available as options.

Main customer benefits:

- Automatic setting of the control head at the push of a button
- Even under dirty or dark environments, a clearly visible status display due to powerful LEDs
- Monitoring and diagnosis: Process valve systems with field bus interface used in modern plant processes
- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaptations allowing additional actuators of the process valve series, Type 20xx or actuators from other manufacturers to be used

**Pneumatic control unit
Type 8690**



More info.

The new generation of integrated controllers for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The pneumatic control unit Type 8690 combines electrical position feedback and pneumatic control for single or double-acting actuators, and is also optionally available as an intrinsically safe model to ATEX.

Main customer benefits:

- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaptations allowing additional actuators of the process valve series, Type 20xx or actuators from other manufacturers to be used

**Electrical Position Feedback
Type 1062**



More info.

Positions are electrically signaled according to switch type:

- open,
- closed or
- open and closed.

LEDs provide optical position indication (except for Namur Ex-version). Mechanical or inductive switches are housed in a compact splash-proof enclosure. The position indicator can be rotated 360° and is easily fitted to the valve. Trip cams do not require adjustment. The unit only needs to be screwed on and connected to be ready for operation.