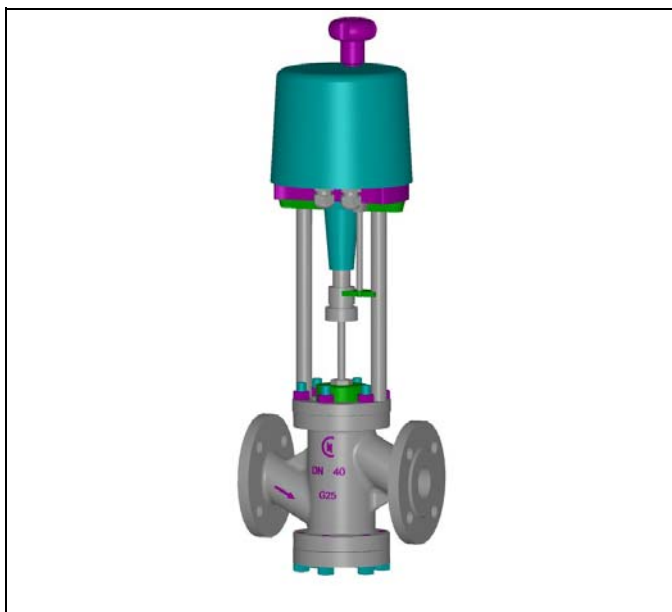


## SINGLE SEAT TWO WAY ON-OFF VALVES



### TYPE 5100 EP

with tension opens and closes

Face-to-face ASME / ANSI B16.10

#### DESCRIPTION

The "UNIWORLD" series type 5100 EP are equipped with "straight-through" pattern bodies having ANSI face-to-face dimensions and EN – ANSI – JIS flanges. Quick opening plug with both standard metal seal (leakage class V) and soft seal for perfect tightness (leakage class VI). Compact construction assembled with "made in Germany" linear electric actuator fixed to the body by means of two steel columns. The standard on-off signal is a relay contact to open and close the valve.

**SIZES :** from DN 15 to DN 200

**BODY CONNECTIONS :** flanged EN 1092-1 PN16 ... PN40  
flanged ANSI B 16.5 150 RF 300 RF  
flanged JIS B2220 10K 20K

**MATERIALS OF BODY GROUP (1) :**

- **Cast iron EN-GJL-250 UNI EN 1561 PN 16 ANSI 150 JIS10**  
AISI 316 st. st. trim - C40 nickel plated steel bonnet
- **Carbon steel ASTM A216 WCB PN16/40 ANSI 150/300 JIS10/20**  
AISI 316 st. st. trim - C40 nickel plated steel bonnet
- **Stainless steel AISI 316 CF8M PN16/40 ANSI 150/300 JIS10/20**  
AISI 316 st. st. trim - AISI 316 st. st. bonnet

**PLUG :** PT (DN15-50, 125-200) - VPT (DN 65-100):

- **PT** – metal seal class V°
- **PT/PTFE** – soft seal class VI° for temperatures ≤ 150 °C
- **PT/PTFE/GR** – soft seal class VI° for temperatures ≤ 190 °C

**BONNET (2) :**

- **Standard** : -5 to + 200 °C
- **Finned** : > 200 °C
- **Extended** : below - 5 °C
- **Bellows sealed** : for thermal oil or hazardous media with (PN 16 - 25 - 40) standard safety gland arrangement

**GLAND ARRANGEMENT (PACKING) (3) with safety "0-rings" :**

- PTFE 100% for temperatures ≤ 150 °C
- PTFE 85% + GRAPHITE 15% for temperatures ≤ 200 °C
- PURE GRAPHITE 100% for temperatures from 200° to 400 °C to be used with finned bonnet

**CV = american unit (flowrate in USGPM with 1 psi of differential pressure)**

#### TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATOR :

- Standard power supply : 220 V AC
- Degree of protection : IP 65 DIN 40050
- Control signal : opens and closes
- Ambient temperature : -20 ... +60 °C
- Actuator case material : die cast aluminium
- Actuator cover material : polycarbonate
- Manual handwheel : standard included
- Electric connections : cable gland PG13 (2 off)

#### MAX WORKING CONDITIONS :

- Max inlet pressure : see leaflet n° 101/VP
- Max temperature : see leaflet n° 101/VP
- Valve sizing : see leaflet n° 100/VP

#### ON REQUEST :

- Power supply : 24 V DC – 24 V AC – 110 V AC
- Card with mechanical limit switches
- Potentiometer 1000 Ohm, simple or double
- IP 67 DIN 40050 protection
- Heating resistor for ambient temperature up-to - 30 °C

**Kv = metric unit (flowrate in m3/h with 1 bar of differential pressure)**

PLUG		DN15	DN 20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Full bore		Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1.1/4"	Ø 1.1/2"	Ø 2"	Ø 2.1/2"	Ø 3"	Ø 4"	Ø 5"	Ø 6"	Ø 8"
PT	CV	3.4	6.6	12.1	19	24	52.7	107.3	129.3	175.4	354	517	929
	KV	2.9	5.7	10.4	16.4	20.7	45.3	92.5	111.5	151.2	305	445	800

# CONFLOW s.p.a.

FLOW CONTROL SOLUTIONS

COMPANY  
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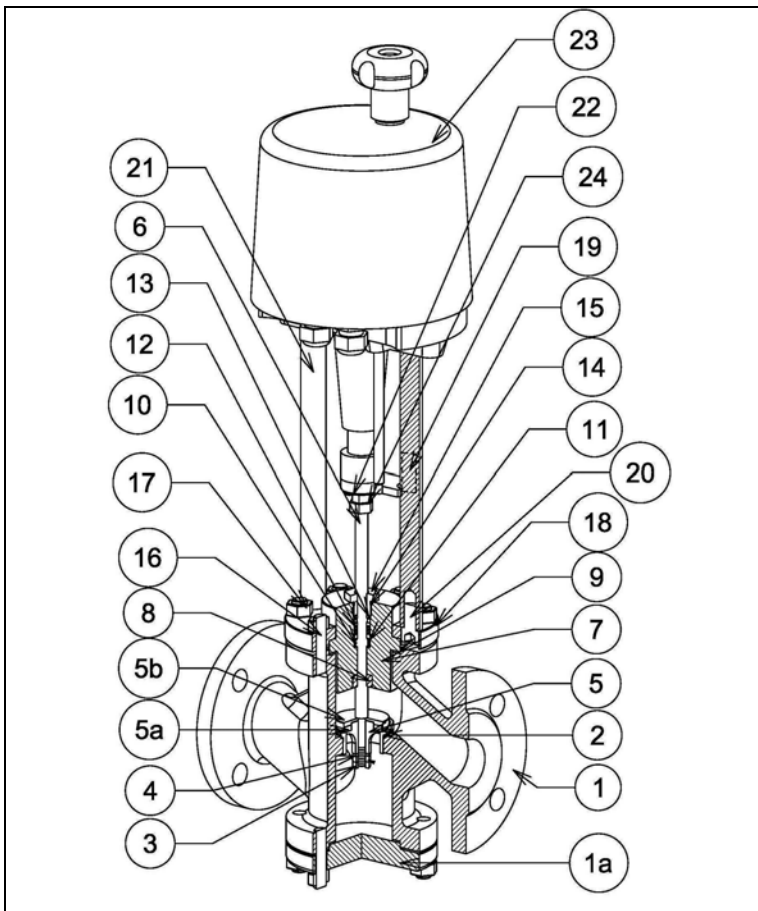
Via Lecco, 69/71  
20864 AGRATE BRIANZA (MB)  
Tel. 039/651.705 - 650.397  
Fax 039/654.018  
www.conflow.it

**Maximum permissible pressure drops in Kg/cm<sup>2</sup> (fluid opens) with alive motor  
Power and Current absorbed – Speed in second for total stroke in mm**

Actuator Type Power absorbed		NOMINAL DIAMETER											
		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PSL201 50/60 Hz 26 VA	Kg/cm <sup>2</sup>	50	31	18	12	8	4.5	-	-	-	-	-	-
	speed sec	44	44	44	76	76	76	-	-	-	-	-	-
	stroke mm	11	11	11	19	19	19	-	-	-	-	-	-
PSL202 50/60 Hz 37/40 VA	Kg/cm <sup>2</sup>	-	62	36	24	16	9	6	4	2.2	-	-	-
	speed sec	-	22	22	38	38	38	56	56	56	-	-	-
	stroke mm	-	11	11	19	19	19	28	28	28	-	-	-
PSL204 50/60 Hz 44/47 VA	Kg/cm <sup>2</sup>	-	-	85	55	38	22	13.5	9.4	5.3	3.4	2.3	1.3
	speed sec	-	-	22	38	38	38	56	56	56	100	100	100
	stroke mm	-	-	11	19	19	19	28	28	28	50	50	50
PSL210 50/60 Hz 72/68 VA	Kg/cm <sup>2</sup>	-	-	-	-	94	54	33.5	23.5	13	8.5	5.5	3.3
	speed sec	-	-	-	-	38	57	84	84	84	150	150	150
	stroke mm	-	-	-	-	19	19	28	28	28	50	50	50
PSL214 50/60 Hz 88/73 VA	Kg/cm <sup>2</sup>	-	-	-	-	-	-	-	-	-	9.5	6.5	3.8
	speed sec	-	-	-	-	-	-	-	-	-	84	84	84
	stroke mm	-	-	-	-	-	-	-	-	-	50	50	50

- The values given are referred to the force of the actuator and they can be used within the limit of the body rating.
- Electric actuators suitable for operating force up-to 25 kN are available on request.

**COMPONENTS LIST and MATERIALS**

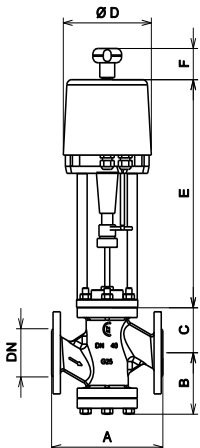


**COMPONENTS LIST**

**MATERIALS**

- |                             |                                       |
|-----------------------------|---------------------------------------|
| 1. Body                     | 1. See note (1) at page 1             |
| 1a. Bottom flange           | 1a. C40 carbon steel                  |
| 2. Seat                     | 2. AISI 316 stainless steel           |
| 3. Plug locknuts            | 3. AISI 304 stainless steel           |
| 4. Spring washer            | 4. AISI 304 stainless steel           |
| 5. Lower plug profile       | 5. AISI 316 stainless steel           |
| 5a. Soft ring               | 5a. PTFE or PTFE/graphite             |
| 5b. Upper plug profile      | 5b. AISI 316 stainless steel          |
| 6. Stem                     | 6. AISI 316 stainless steel           |
| 7. Bonnet                   | 7. See notes (1)(2) at page 1         |
| 8. Guide bush               | 8. AISI 304 stainless steel           |
| 9. Body gasket              | 9. Europil WS 3640 or PTFE on request |
| 10. Packing spring          | 10. AISI 302 stainless steel          |
| 11. Packing washer          | 11. AISI 304 stainless steel          |
| 12. Packing rings           | 12. See note (3) at page 1            |
| 13. Internal "O" ring       | 13. Viton FPM 70                      |
| 14. External "O"            | 14. Viton FPM 70                      |
| 15. Packing adjusting nut   | 15. AISI 303 stainless steel          |
| 16. Stud-bolts              | 16. Galvanized steel                  |
| 17. Body locknuts           | 17. DIN 934 galvanized steel          |
| 18. Upper bonnet flange     | 18. C40 nickel plated steel           |
| 19. Travel indicator plate  | 19. Polycarbonate                     |
| 20. Column fixing screws    | 20. DIN 912 galvanized steel          |
| 21. Actuator columns        | 21. AISI 430 stainless steel          |
| 22. Flange + locking screws | 22. A2 stainless steel                |
| 23. Electric actuator       | 23. See technical data at page 1      |
| 24. Stem nut                | 24. DIN 936 galvanized steel          |

**DIMENSIONS in mm.**



**BODY GROUP**

DN	Ø	A(1)	A(2)	B	C - Bonnet		
					Std	Finned	Bellows
15	1/2"	184	196	67	49	181	181
20	3/4"	184	196	67	58	190	190
25	1"	184	196	90	68	200	200
32	1.1/4"	200	212	92	70	202	202
40	1.1/2"	222	234	108	82	214	214
50	2"	254	266	108	86	218	218
65	2.1/2"	276	292	148	111	309	309
80	3"	298	317	148	135	333	333
100	4"	352	368	176	160	363	363
125	5"	403	425	223	252	435	435
150	6"	450	472	229	258	442	442
200	8"	543	568	254	283	465	465

**ACTUATOR**

PSL201-202-204-210-214		
Ø D	E	F
176	410	50
176	410	50
176	410	50
176	410	50
176	410	50
176	410	50
176	417	50
176	417	50
176	419	50
176	430	50
176	430	50
176	430	50

A(1) cast iron = PN16 – ANSI150 – JIS10K

A(2) carbon and st. steel = PN16 – PN40 – ANSI150 – ANSI300 – JIS10K – JIS20K

Specifications given are only indicative and not binding for the manufacturer who reserve the right to carry-out any modifications deemed necessary without prior notice. **All data sheets by CONFLOW SpA, are available last update on our internet web site [www.conflo.it](http://www.conflo.it).**