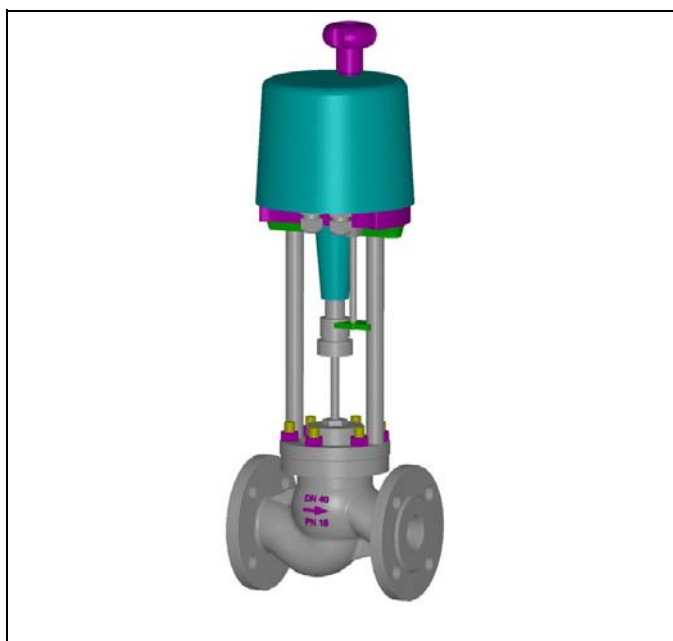


## SINGLE SEAT TWO WAY ON-OFF VALVES



### TYPE 2100 EP

with tension opens and closes

Face-to-face EN 558-1

#### DESCRIPTION

The "UNIWORLD" series type 2100 EP are equipped with EN "straight-through" pattern bodies with EN 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 100

**BODY CONNECTIONS :** flanged EN 1092-1 PN16 ... PN40

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

- **Cast iron EN-GJL-250 UNI EN 1561 PN 16**  
AISI 316 st. st. trim - C40 nickel plated steel bonnet
- **Carbon steel 1.0619 PN 16 ... PN 40**  
AISI 316 st. st. trim - C40 nickel plated steel bonnet
- **Stainless steel AISI 316 1.4408 PN 16 ... PN 40**  
AISI 316 st. st. trim - AISI 316 st. st. bonnet

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

- **PT** – metal seal class V°
- **PT/PTFE** – soft seal class VI° for temperatures  $\leq 150$  °C
- **PT/PTFE/GR** – soft seal class VI° for temperatures  $\leq 190$  °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  $\leq 150$  °C
- PTFE 85% + GRAPHITE 15% for temperatures  $\leq 200$  °C
- PURE GRAPHITE 100% for temperatures from 200° to 400 °C to be used with finned bonnet

**CV = american unit (flow rate 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
- On-off 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)**

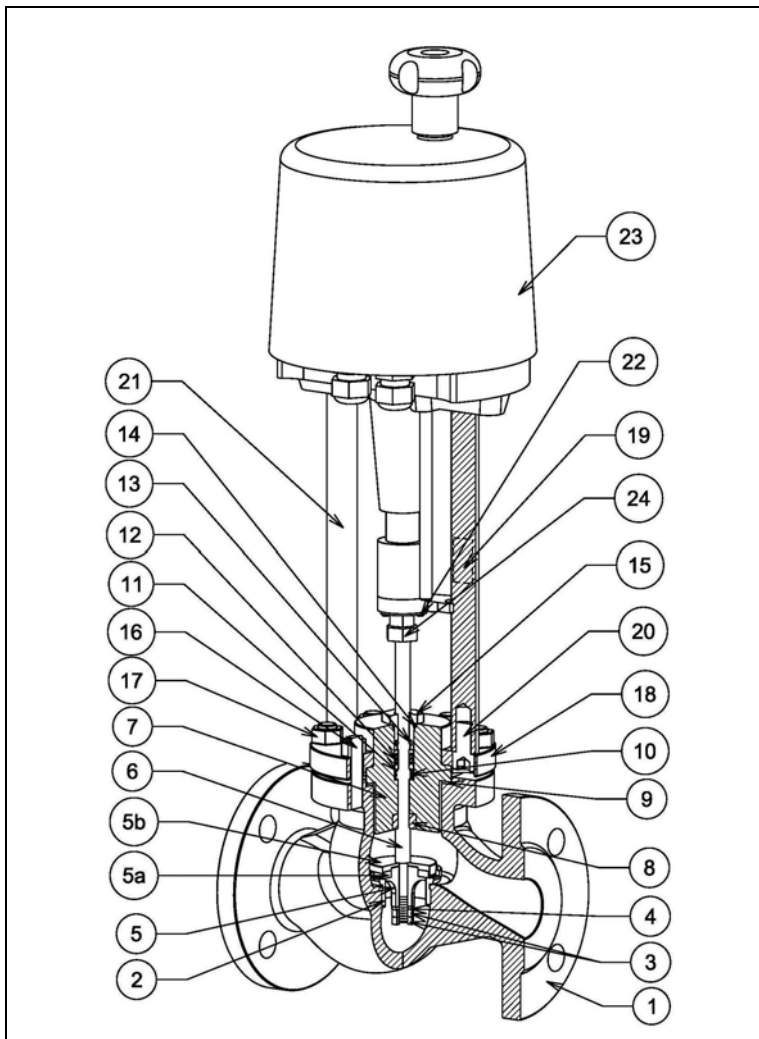
PLUG		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100
Full bore		Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1.1/4"	Ø 1.1/2"	Ø 2"	Ø 2.1/2"	Ø 3"	Ø 4"
PT	CV	3.4	6.6	12.1	19	24	52.7	107.3	129.3	175.4
	KV	2.9	5.7	10.4	16.4	20.7	45.3	92.5	111.5	151.2

**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								
		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100
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	9,5	5,2
	speed sec	-	-	22	38	38	38	56	56	56
	stroke mm	-	-	11	19	19	19	28	28	28
PSL210 50/60 Hz 72/68 VA	Kg/cm <sup>2</sup>	-	-	-	-	94	54	33,5	23,5	13
	speed sec	-	-	-	-	38	57	84	84	84
	stroke mm	-	-	-	-	19	19	28	28	28

- 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**



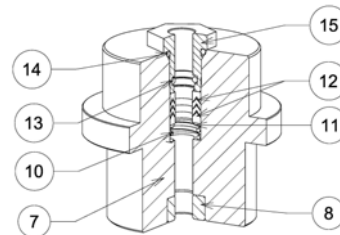
**COMPONENTS LIST**

- Body
- Seat
- Plug locknuts
- Spring washer
- Lower plug profile
- Upper plug profile
- Stem
- Bonnet
- Guide bush
- Body gasket
- Packing spring
- Packing washer
- Packing rings
- Internal "O" ring
- External "O"
- Packing adjusting nut
- Stud-bolts
- Body locknuts
- Upper bonnet flange
- Travel indicator plate
- Column fixing screws
- Actuator columns
- Flange + locking screws
- Electric actuator
- Stem nut

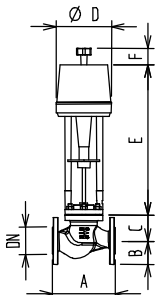
**MATERIALS**

- See note (1) at page 1
- AISI 316 stainless steel
- AISI 304 stainless steel
- AISI 304 stainless steel
- AISI 316 stainless steel
- AISI 316 stainless steel
- AISI 316 stainless steel
- See notes (1)(2) at page 1
- AISI 304 stainless steel
- Europil WS 3640 or PTFE on request
- AISI 302 stainless steel
- AISI 304 stainless steel
- See note (3) at page 1
- Viton FPM 70
- Viton FPM 70
- AISI 303 stainless steel
- Galvanized steel
- DIN 934 galvanized steel
- C40 nickel plated steel
- Polycarbonate
- DIN 912 galvanized steel
- AISI 430 stainless steel
- A2 stainless steel
- See technical data at page 1
- DIN 936 galvanized steel

**BONNET DETAILS**



**DIMENSIONS in mm.**



**BODY GROUP**

DN	Ø	A	B	C - Bonnet		
				Std	Finned	Bellows
15	1/2"	130	47.5	49	181	181
20	3/4"	150	52.5	58	190	190
25	1"	160	57.5	68	200	200
32	1.1/4"	180	70	70	202	202
40	1.1/2"	200	75	82	214	214
50	2"	230	82.5	86	218	218
65	2.1/2"	290	92.5	111	309	309
80	3"	310	100	135	333	333
100	4"	350	118	160	363	363

**ACTUATOR**

PSL201 - PSL202 PSL204 - PSL210		
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