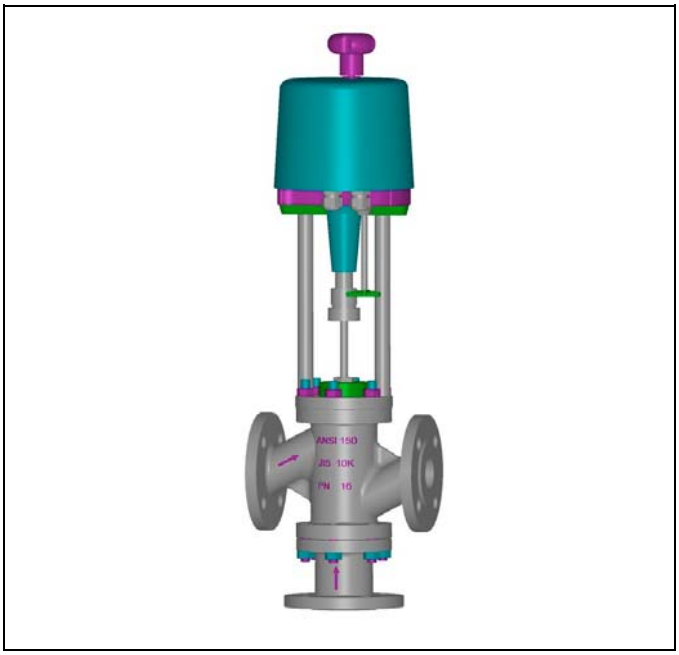
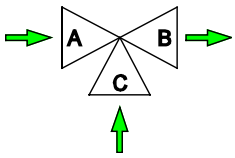
THREE-WAY MIXING CONTROL VALVES CE



TYPE 5600 EP

with tension opens and closes AB and CB

Face-to-face ASME / ANSI B16.10



DESCRIPTION

The "UNIWORLD" series type 5600 EP are equipped with "straight-through" pattern bodies having ANSI face-to-face dimensions and EN – ANSI – JIS flanges.
Type 5600 EP three-way mixing control valves (two inlet ports and one outlet port with fluid opens) have a modulating plug suitable for control of virtually all line media.
Compact construction assembled with "made in Germany" linear electric actuator fixed to the body by means of two steel columns.
The electric actuator works with standard 3 points modulating control signal or can be equipped with a potentiometer and with a pilot positioner having 0 (4) - 20 mA or 0 (2) - 10 V control signal.

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

- **PL** (DN15-20) **LV** (DN25-200) = linear class IV°
- **PT** (DN15-20) **VPT** (DN25-200) = quick lift class IV°

BONNET (2) :

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

TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATOR :

• Standard power supply	:	220 V AC
• Degree of protection	:	IP 65 DIN 40050
• Control signal	:	3 points modulating input
• 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 and temperature	:	see leaflet n° 101/VP
• Valve sizing	:	see leaflet n° 100/VP
• Rangeability	:	see leaflet n° GRAFICI/I

ON REQUEST :

- Lapping on seat and plug class V°
- Stellite (degree 6°) on seat and plug
- Stellite (degree 6°) on guide bush
- Power supply 24 V DC – 24 V AC – 110 V AC
- Potentiometer 1000 Ohm, simple or double
- Positioner 0 (4)–20 mA … 0 (2)–10 V, 2 wires, c/w potentiometer
- Card with mechanical limit switches
- Card for 4-20 mA feedback signal (2 wires system)
- IP 67 DIN 40050 protection
- Heating resistor for ambient temperature up-to - 30 °C

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

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

PLUG Full bore		DN15 Ø 1/2"	DN 20 Ø 3/4"	DN25 Ø 1"	DN32 Ø 1.1/4"	DN40 Ø 1.1/2"	DN50 Ø 2"	DN65 Ø 2.1/2"	DN80 Ø 3"	DN100 Ø 4"	DN125 Ø 5"	DN150 Ø 6"	DN200 Ø 8"
PL	CV	3.4	6.6	10	23.4	28	36.4	72.7	89.3	123.8	290.9	357.3	578.1
	KV	2.9	5.7	8.6	20.1	24.1	31.4	62.7	77	106.7	250.8	308	498.3
PT	CV	3.4	6.6	13.8	30.3	38.7	52	99.6	116.2	162.4	355.3	429.8	658.6
	KV	2.9	5.7	11.9	26.1	33.4	44.8	85.8	100.1	140	306.3	370.5	567.7
Reduced bore *		n.a.	½"	½" ¾"	¾" 1"	1" 1.1/4"	1.1/4" 1.1/2"	1.1/2" 2"	2" 2.1/2"	2.1/2" 3"	3" 4"	4" 5"	5" 6"

n.a. = not applicable

* CV and KV values are referred to the selected diameter and plug type (PL/LV only)

CONFLOW s.p.a.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

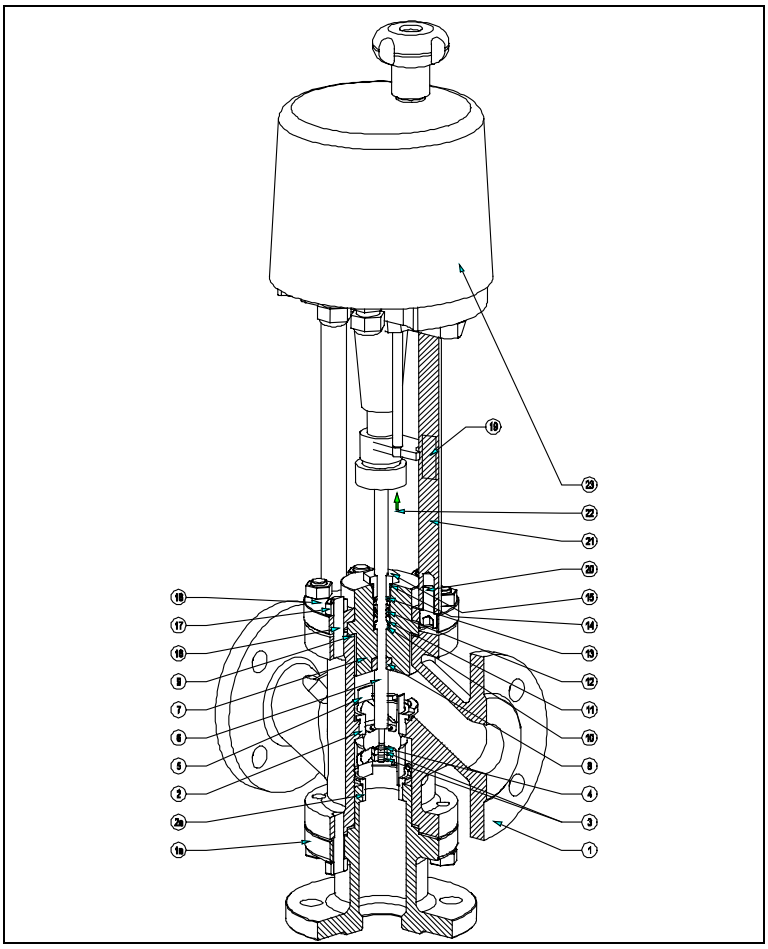
Via Lecco, 69/71
20041 AGRATE BRIANZA (MI)
Tel. 039/651.705 - 650.397
Fax 039/654.018

Maximum permissible pressure drops in Kg/cm2 (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	Kg/cm2	**50**	**31**	**18**	**12**	**8**	**4.5**	-	-	-	-	-	-
50/60 Hz	speed sec	44	44	44	76	76	76	-	-	-	-	-	-
26 VA	stroke mm	11	11	11	19	19	19	-	-	-	-	-	-
PSL202	Kg/cm2	**-**	**62**	**36**	**24**	**16**	**9**	**6**	**4**	**2.2**	**-**	**-**	**-**
50/60 Hz	speed sec	-	22	22	38	38	38	56	56	56	-	-	-
37/40 VA	stroke mm	-	11	11	19	19	19	28	28	28	-	-	-
PSL204	Kg/cm2	**-**	**-**	**85**	**55**	**38**	**22**	**13.5**	**9.4**	**5.3**	-	-	-
50/60 Hz	speed sec	-	-	22	38	38	38	56	56	56	-	-	-
44/47 VA	stroke mm	-	-	11	19	19	19	28	28	28	-	-	-
PSL210	Kg/cm2	**-**	**-**	**-**	**-**	**94**	**54**	**33.5**	**23.5**	**13**	**-**	**-**	**-**
50/60 Hz	speed sec	-	-	-	-	38	57	84	84	84	-	-	-
72/68 VA	stroke mm	-	-	-	-	19	19	28	28	28	-	-	-
PSL312	Kg/cm2	-	-	-	-	-	-	-	-	-	**9.5**	**6.5**	**3.8**
50/60 Hz	speed sec	-	-	-	-	-	-	-	-	-	84	84	84
88/73 VA	stroke mm	-	-	-	-	-	-	-	-	-	50	50	50

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

COMPONENTS LIST and MATERIALS



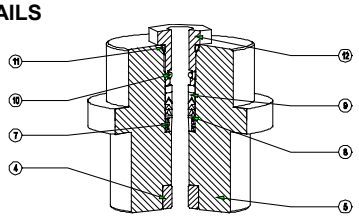
COMPONENTS LIST

1. Body
1a Stud pipe
2. Upper seat
2a Lower seat
3. Plug locknuts
4. Spring washer
5. Plug
6. Stem
7. Bonnet
8. Guide bush
9. Body gasket
10. Packing spring
11. Packing washer
12. Packing rings
13. Internal “O” ring
14. External “O”
15. Packing adjusting nut
16. Stud-bolts
17. Body locknuts
18. Upper bonnet flange
19. Travel indicator plate
20. Column fixing screwes
21. Actuator columns
22. Grub screw
23. Electric actuator

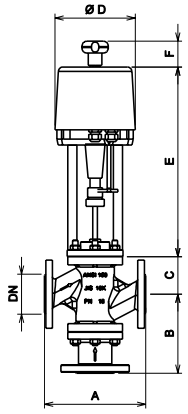
MATERIALS

1. See note (1) at page 1
1a C40 carbon steel
2. AISI 316 stainless steel
2a AISI 316 stainless steel
3. AISI 304 stainless steel
4. AISI 304 stainless steel
5. AISI 316 stainless steel
6. AISI 316 stainless steel
7. See notes (1)(2) at page 1
8. AISI 304 stainless steel
9. Europil WS 3640 or PTFE on request
10. AISI 302 stainless steel
11. AISI 304 stainless steel
12. See note (3) at page 1
13. Viton FPM 70
14. Viton FPM 70
15. AISI 303 stainless steel
16. Galvanized steel
17. DIN 934 galvanized steel
18. C40 nickel plated steel
19. Polycarbonate
20. DIN 912 galvanized steel
21. AISI 430 stainless steel
22. DIN 914 galvanized steel
23. See technical data at page 1

BONNET DETAILS



DIMENSIONS in mm.



BODY GROUP **ACTUATOR**

DN	Ø	A(1)	A(2)	B	C - Bonnet			PSL201-202-204-210			PSL312	
					Std	Finned	Bellows	Ø D	E	F	ØD	E
15	1/2”	184	196	131	49	181	181	176	410	50	-	-
20	3/4”	184	196	134	58	190	190	176	410	50	-	-
25	1”	184	196	135	68	200	200	176	410	50	-	-
32	1.1/4”	200	212	134	70	202	202	176	410	50	-	-
40	1.1/2”	222	234	165	82	214	214	176	410	50	-	-
50	2”	254	266	185	86	218	218	176	410	50	-	-
65	2.1/2”	276	292	220	111	309	309	176	417	50	-	-
80	3”	298	317	222	135	333	333	176	417	50	-	-
100	4”	352	368	241	160	363	363	176	419	50	-	-
125	5	403	425	296	252	435	435	176	430	50	226	530
150	6”	450	472	307	258	442	442	176	430	50	226	530
200	8”	543	568	333	283	465	465	176	430	50	226	530

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 modification deemed necessary without prior notice