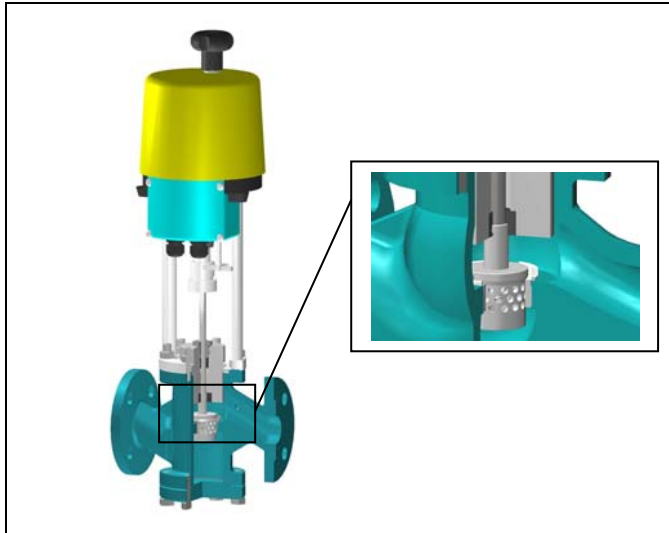


SINGLE SEAT TWO WAY CONTROL VALVES – LOW NOISE CE



TYPE 5200 EP / 5200 AMS

Simple Cage

With tension opens and closes

Face-to-face ASME / ANSI B16.10

DESCRIPTION

The "UNIWORLD" series type 5200 EP / 5200 AMS are equipped with "straight-through" pattern bodies having ANSI face-to-face dimensions and EN – ANSI – JIS flanges.

Modulating integral cage plug (low-noise) for control of virtually all line media.

Type 5200 EP is with linear actuator.

Type 5200 AMS is with SMART actuator.

Modulating plug is suitable for control of virtually all pipeline media.

Compact construction, assembled with "made in Germany" linear electric actuator fixed to the body by means of two steel columns.

Signals Type 5200 EP : 3 points modulating / 4-20 mA / 0-10 V

Signals Type 5200 AMS : 4-20 mA / 0-10 V

SIZES : from DN 15 to DN 50

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

MATERIALS OF BODY GROUP (1) :

- **Cast iron EN-GJL-250 UNI EN 1561 PN16 ANSI 150 JIS 10**
Internal st. steel AISI316
- **Carbon st. ASTM A216 WCB PN16/40 ANSI 150/300 JIS10/20**
Internal st. steel AISI316
- **St. Steel AISI316 CF8M PN16/40 ANSI150/300 JIS10/20**
Internal st. steel AISI316 – bonnet st. steel AISI316

PLUGS :

- **SIMPLE CAGE** = linear class IV°
- **RANGEABILITY DN15/25** = 1/75
- **RANGEABILITY DN32/50** = 1/160

BONNET (2) :

- Standard for temperatures from -5 to +200 °C
- Finned for temperatures > 200 °C
- Extended for temperatures < -5 °C
- Bellow sealed for thermal oil or hazardous media
PN16 – 25 - 40 and safety gland arrangement

GLAND ARRANGEMENT (PACKING) (3) :

- PTFE 100% rings for temperatures ≤150 °C
- PTFE 85% + graphite 15% for temperatures ≤ 200 °C
- 100% pure graphite rings for temperatures from 200 to 400 °C with finned bonnet

MAX WORKING CONDITIONS :

- Max inlet pressure and temperature : see leaflet 101/VP
- Valve sizing : see leaflet 100/VP
- Rangeability : see leaflet GRAFICI/I

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)

TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATORS :

	5200 EP	5200 AMS
Std power supply	220 V AC	
Protection degree	IP65 EN 60529	
Control signal	3 points modulating Control signal	
Ambient temp.	-20 / +60 °C	
Cover material	Polycarbonate	
Electric connections	2 x PG13	

5200EP	PSL201	PSL202	PSL204	PSL210
Power VA	25,9	37 / 40	44 / 47	51 / 53
Velocity mm/s	0,25	0,5	0,5	0,45

5200 AMS	PSL202AMS11	PSL204AMS11	PSL210AMS11
Power VA	30	30	30
Velocity mm/s	0,45 – 0,9	0,45 – 0,9	0,2 - 0,35

ON REQUEST :

	5200 EP	5200 AMS
Seal	PTFE/GR ≤190°C class VI°	
	PTFE ≤150°C class VI°	
Lapping	Seat – plug class V°	
Stellite	degree 6 on seat-plug and bush	
Reduced bores	(see table CV and KV)	
Power supply	24Vdc – 2VAC – 110 V AC	
Potentiometer	1000 Ohm 1 o 2	Included
Positioner	4-20 mA / 0-10 V	Included
Trasmitter	4-20 mA	Included
Protection degree	IP67	
Limit switches	2 x SPDT mechanical – silver contacts	
Wire and Software	Not applicable	Required

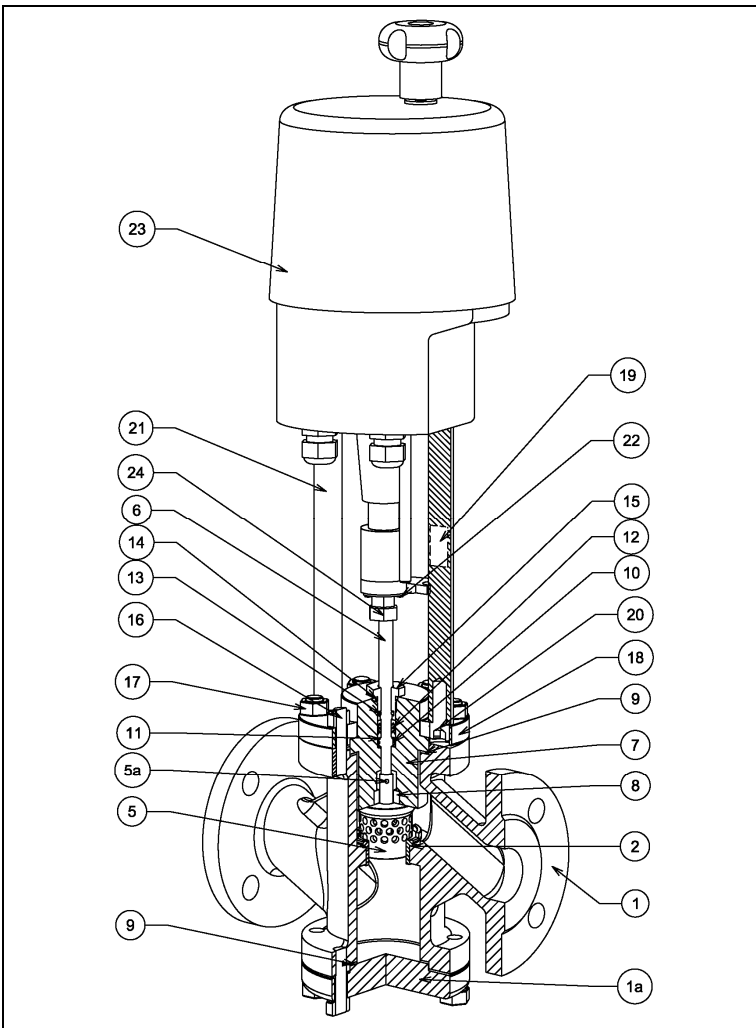
Plugs Full bore	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1.1/4"	Ø 1.1/2"	Ø 2"
CV	3,13	5,11	9,68	16,77	24,15	40,82
KV	2,67	4,36	8,26	14,30	20,60	34,82
CV		(Ø 1/2") 3,13	(Ø 3/4") 5,11	(Ø 1") 9,68	(Ø 1.1/4") 16,77	(Ø 1.1/2") 24,15
KV		(Ø 1/2") 2,67	(Ø 3/4") 4,36	(Ø 1") 8,26	(Ø 1.1/4") 14,30	(Ø 1.1/2") 20,60
CV			(Ø 1/2") 3,13	(Ø 3/4") 5,11	(Ø 1") 9,68	(Ø 1.1/4") 16,77
KV			(Ø 1/2") 2,67	(Ø 3/4") 4,36	(Ø 1") 8,26	(Ø 1.1/4") 14,30
CV				(Ø 1/2") 3,13	(Ø 3/4") 5,11	(Ø 1") 9,68
KV				(Ø 1/2") 2,67	(Ø 3/4") 4,36	(Ø 1") 8,26
CV					(Ø 1/2") 3,13	(Ø 3/4") 5,11
KV					(Ø 1/2") 3,67	(Ø 3/4") 4,36
CV						(Ø 1/2") 3,13
KV						(Ø 1/2") 2,67

Microflow passage
From DN 15 to DN 25
(on request)

Maximum permissible pressure drops in Kg/cm² (fluid opens) with alive motor
Speed in second for total stroke in mm

DN		15	20	25	32	40	50	
stroke mm		11			19			
EP	PSL201	Kg/cm ²	50	31,3	17,6	11,3	8	4,6
		Vel. sec	44	44	44	76	76	76
	PSL202	Kg/cm ²	n.a.	62,7	35,2	22,6	15,7	9,1
		Vel. sec		22	22	38	38	38
	PSL204	Kg/cm ²	n.a.	n.a.	70,3	45,2	31,5	18,2
		Vel. sec			22	38	38	38
	PSL210	Kg/cm ²	n.a.	n.a.	n.a.	n.a.	78,7	45,5
		Vel. sec					38	57
AMS	PSL202	Kg/cm ²	115	72	40	26	18	9,5
		Vel. sec	25 .. 12,5	25 .. 12,5	25 .. 12,5	42 .. 21	42 .. 21	42 .. 21
	PSL204	Kg/cm ²	n.a.	n.a.	n.a.	50	35	18,6
		Vel. sec				42 .. 21	42 .. 21	42 .. 21
	PSL210	Kg/cm ²	n.a.	n.a.	n.a.	n.a.	78	45,5
		Vel. sec					95 .. 54	95 .. 54

COMPONENTS LIST and MATERIALS



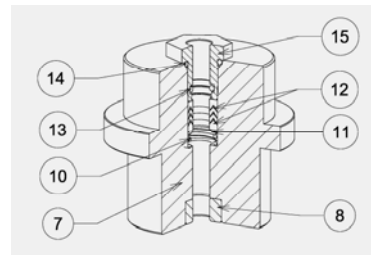
COMPONENTS LIST

1. Body
2. Seat
5. Plug
- 5a. Pin
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" ring
15. Packing adjusting nut
16. Stud-bolts
17. Body locknuts
18. Upper bonnet flange
19. Travel indicator plate
20. N°2 Column fixing screws
21. Colonne attuatore
22. Flangetta + viti di chiusura
23. Electric actuator
24. Stem nut

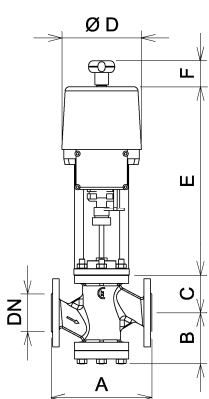
MATERIALS

1. See note (1) I° pag.
2. St. steel AISI 316
5. St. steel AISI 316
- 5a. Carbon steel
6. St. steel AISI 316
7. See note (1) (2) I° pag.
8. St. steel AISI 304
9. Europil WS 3640 or PTFE
10. St. steel AISI 302
11. St. steel AISI 304
12. See note (3) I° pag.
13. Viton FPM 70
14. Viton FPM 70
15. St. steel AISI 303
16. Galvanized steel
17. Galv. steel DIN 934
18. C40 nickel plated steel
19. Polycarbonate
20. Acc. Zincato DIN 912
21. St. steel AISI 430
22. St. steel A2
23. See technical data at page 1
24. Galv. steel DIN 936

BONNET DETAIL



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

ACTUATOR

PSL201-202-204-210		
Ø D	E	F
176	410	50
176	410	50
176	410	50
176	410	50
176	410	50
176	410	50

A(1) cast iron = PN16 – ANSI150 – JIS10K A(2) steel = PN16 – PN40 – ANSI150 – ANSI300 – JIS10K – JIS20K