

DOUBLE SEAT TWO WAY CONTROL VALVES

TYPE 5800 EP / 5800 AMS

with tension opens and closes

Face-to-face ASME / ANSI B16.10



DESCRIPTION

The "UNIWORLD" series Type 5800 EP / 5800 AMS are equipped with EN "straight-through" pattern double seat bodies having EN – ANSI – JIS flanges.

Type 5800 EP is with linear actuator.

Type 5800 AMS 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 5800 EP : 3 points modulating / 4-20 mA / 0-10 V

Signals Type 5800 AMS : 4-20 mA / 0-10 V

SIZES : from DN 50 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 JIS 10**
 (Cast iron version available from DN125 to DN200 only)
 Internal st. steel AISI 316
- **Carbon st. ASTM A216 WCB PN16/40 ANSI1500/300 JIS10/20**
 Internal st. steel AISI 316
- **Acc.Inox AISI316 CF8M PN16/40 ANSI 150/300 JIS10/20**
 Internal st. steel AISI 316 - bonnet st. steel AISI 316

PLUGS :

- **EQP** (DN50-100) **EQV** (DN125-200) = eq. percentage class II°
- **PL** (DN50-200) = linear class II°
- **PT** (DN50-200) = quick lift class II°

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)

Full bore plugs		DN50	DN65	DN80	DN100	DN125	DN150	DN200					
		Ø 2"	Ø 2.1/2"	Ø 3"	Ø 4"	Ø 5"	Ø 6"	Ø 8"					
EQP	CV	58.5	81.1	122.5	215.4	301	440	770					
	KV	50.4	69.9	105.6	185.7	259.4	379.3	663.7					
PL	CV	58.5	98.9	149.9	234.2	366	527	937					
	KV	50.4	85.3	129.2	201.9	315.5	454.3	807.7					
PT	CV	58.5	98.9	149.9	234.2	366	527	937					
	KV	50.4	85.3	129.2	201.9	315.5	454.3	807.7					
Reduced bore *		n.a.	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 (EQP/EQV-PL onlv)

TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATORS :

	5800 EP	5800 AMS
Std power supply	220 V AC	
Protection degree	IP65 EN 60529	
Control signal	3 points modulating	4-20 mA / 0-10 V
Ambient temp.	-20 / +60 °C	
Cover material	Polycarbonate	
Electric connections	2 x PG13	

5800EP	PSL201	PSL202	PSL204	PSL210	PSL214
Power VA	25,9	37 / 40	44 / 47	51 / 53	51 / 53
Velocity mm/s	0,25	0,5	0,5	0,45	0,45

5800 AMS	PSL202 AMS11	PSL204 AMS11	PSL210 AMS11	PSL214 AMS12
Power VA	30	30	30	93
Velocity mm/s	0,45 – 0,9	0,45 – 0,9	0,2 - 0,35	0,65 – 1,3

ON REQUEST :

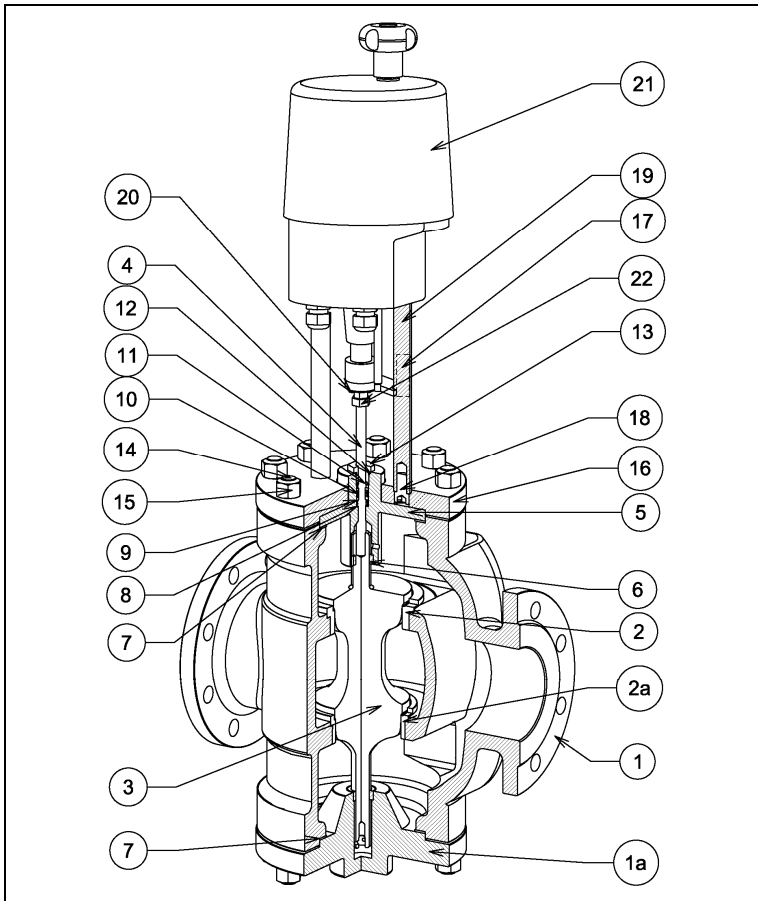
	5800 EP	5800 AMS
Seal	PTFE/GR ≤190°C class VI°	
	PTFE ≤150°C class VI°	
Lapping	Seat - Plug class V°	
Stellite	degree 6 on seat-plug and bush	
Reduced bores	(see table CV and KV)	
Power supply	24Vdc – 2VAC – 110 V AC	
Potentiometer	1000 Ohm 1 o 2	Included
Positioner	4-20 mA / 0-10 V	Included
Trasmitter	4-20 mA	Included
Protection degree	IP67	
Limit switches	2 x SPDT mechanical – silver contacts	
Wire and Software	Not applicable	Required

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

DN		50	65	80	100	125	150	200	
stroke mm		19		28			50		
PSL	PSL201	Kg/cm ²	29	n.a.					
		Vel. sec	76	n.a.					
	PSL202	Kg/cm ²	58	27	25	22	n.a.		
		Vel. sec	38	56	56	56	n.a.		
	PSL204	Kg/cm ²	117	55	52,0	44	n.a.		
		Vel. sec	38	56	56	56	n.a.		
	PSL210	Kg/cm ²	n.a.	138	129	110	n.a.		
		Vel. sec	n.a.	84	84	84	n.a.		
	PSL214	Kg/cm ²	n.a.	n.a.	n.a.	n.a.	70	65	60
		Vel. sec	n.a.	n.a.	n.a.	n.a.	84	84	84
AMS	PSL202	Kg/cm ²	67	31	29	25	n.a.	n.a.	n.a.
		Vel. sec	42 ..21	62 ..31	62 ..31	62 ..31	n.a.	n.a.	n.a.
	PSL204	Kg/cm ²	n.a.	62	58	49	n.a.	n.a.	n.a.
		Vel. sec	n.a.	62 ..31	62 ..31	62 ..31	n.a.	n.a.	n.a.
	PSL210	Kg/cm ²	n.a.	n.a.	129	110	n.a.	n.a.	n.a.
		Vel. sec	n.a.	n.a.	140 ..80	140 ..80	n.a.	n.a.	n.a.
	PSL214	Kg/cm ²	n.a.	n.a.	n.a.	n.a.	70	65	60
		Vel. sec	n.a.	n.a.	n.a.	n.a.	140 ..80	140 ..80	140 ..80

- 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



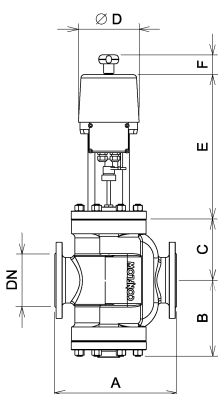
COMPONENTS LIST

- Body
- Lower flange
- Upper seat
- Lower seat
- Plug
- Stem
- Bonnet
- Guide bush
- Body gasket
- Packing spring
- Packing washer
- Packing rings
- Internal "O" ring
- External "O" ring
- Packing adjusting nut
- Stud-bolts
- Body locknuts
- Upper bonnet flange
- Travel indicator plate
- N° 2 column fixing screws
- Actuator columns
- Flange + locking screws
- Electric actuator
- Stem nut

MATERIALS

- See note (1) I° pag.
- C40 Carbon steel
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 316
- See note (1) e (2) I° pag.
- St. steel AISI 304
- Europil WS 3640 or PTFE
- St. steel AISI 302
- St. steel AISI 304
- See note (3) I° pag.
- Viton FPM 70
- Viton FPM 70
- St. steel AISI 303
- Galvanized steel
- Galv. steel DIN 934
- C40 nickel plated
- Polycarbonate
- Galv. steel DIN 912
- St. steel AISI 430
- St. steel A2
- See technical data at page 1
- Galv. steel DIN 936

DIMENSIONI in mm.



BODY GROUP

DN	Ø	A(1)	A(2)	B	C - Bonnet		
					Std	Finned	Bellows
50	2"	254	266	144	86	218	218
65	2.1/2"	276	292	184	111	309	309
80	3"	298	317	194	135	333	333
100	4"	352	368	224	160	363	363
125	5"	403	425	271	252	435	435
150	6"	450	472	297	258	442	442
200	8"	543	568	351	283	465	465

ACTUATOR

PSL202-204-210-214		
Ø D	E	F
176	410	50
176	417	50
176	417	50
176	419	50
180	490	55
180	490	55
180	490	55

A(1) cast iron = PN16 – ANSI150 - JIS10K A(2) 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.