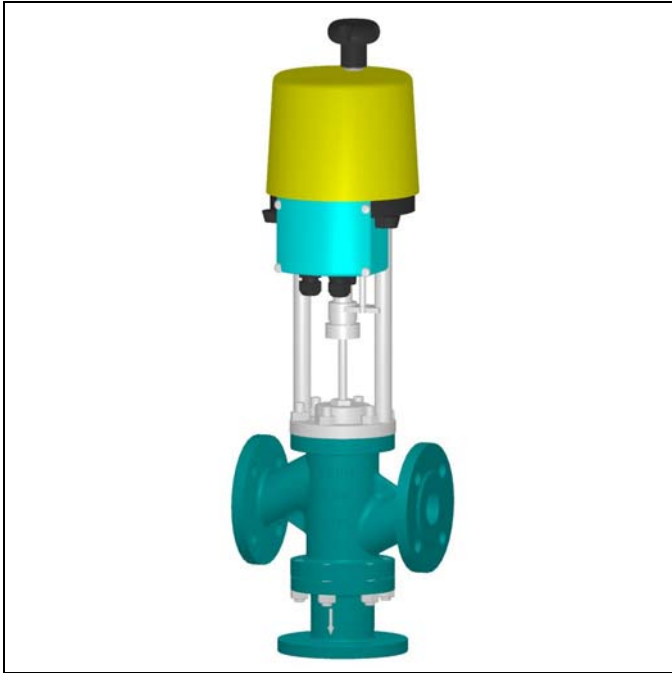
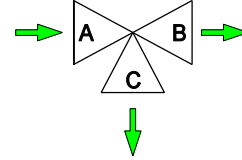


## THREE-WAY DIVERTING CONTROL VALVES



### TYPE 5700 EP / 5700 AMS DN15/100

with tension opens and closes AB and AC  
Face-to-face ASME / ANSI B16.10



### DESCRIPTION

The "UNIWORLD" series Type 5700 EP / 5700 AMS are equipped with EN "straight-through" pattern 3 way bodies having EN – ANSI – JIS flanges.

Type 5700 EP is with linear actuator.

Type 5700 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 5700 EP : 3 points modulating / 4-20 mA / 0-10 V

Signals Type 5700 AMS : 4-20 mA / 0-10 V

**SIZES :** from DN 15 to DN 100

**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**  
Internal st. steel AISI 316
- **Acc.Carb. ASTM A216 WCB PN16/40 ANSI 1500/300 JIS10/20**  
Internal st. steel AISI 316
- **St. Steel AISI316 CF8M PN16/40 ANSI 150/300 JIS10/20**  
Internal st. steel AISI 316 - bonnet Internal st. steel AISI 316

#### TIPI DI OTTURATORE :

- **PL (DN15-20) LV (DN25-100) = linear class IV°**
- **PT (DN15-20) VPT (DN25-100) = quick lift class IV°**

#### 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		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100						
		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"						
PL	CV	3.4	6.6	10	23.4	28	36.4	72.7	89.3	123.8						
	KV	2.9	5.7	8.6	20.1	24.1	31.4	62.7	77.0	106.7						
PT	CV	3.4	6.6	13.8	30.3	38.7	52	107.3	129.3	175.4						
	KV	2.9	5.7	11.9	26.1	33.4	44.8	92.5	111.5	151.2						
Reduced bore*		n.a.	1/2"	1/2"	3/4"	3/4"	1"	1"	1.1/4"	1.1/4"	1.1/2"	2"	2"	2.1/2"	2.1/2"	3"

n.a. = not applicable

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

#### TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATORS :

	5700 EP	5700 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	

5700EP	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

5700 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 :

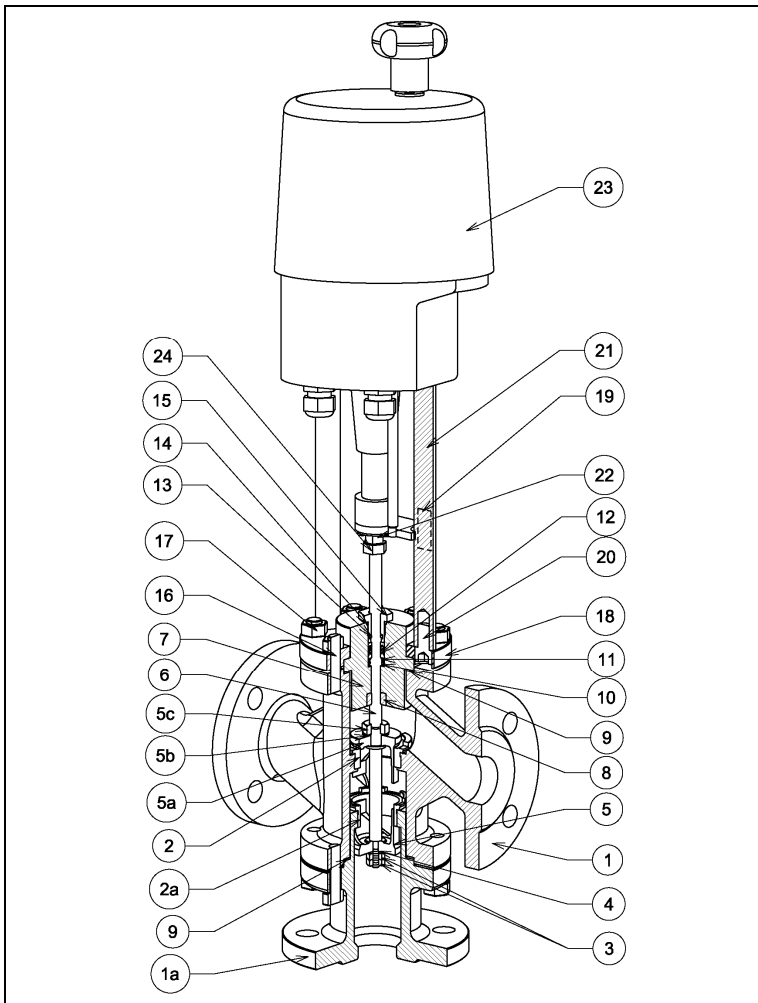
	5700 EP	5700 AMS
Seal	PTFE/GR ≤190°C class VI°	
	PTFE ≤150°C class VI°	
Lapping	Seat - Plug class V°	
Stellite	degree 6 on seat-plug and bush	
Reduced bores	(see table CV and KV)	
Power supply	24Vdc – 2VAC – 110 V AC	
Potentiometer	1000 Ohm 1 o 2	Included
Positioner	4-20 mA / 0-10 V	Included
Trasmitter	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/cm<sup>2</sup> (fluid opens) with alive motor Speed in second for total stroke in mm

DN		15	20	25	32	40	50	65	80	100	
stroke mm		11			19			28			
EP	PSL201	Kg/cm <sup>2</sup>	50	31.3	17.6	11.3	8	4.6	n.a.	n.a.	n.a.
		Vel. sec	44	44	44	76	76	76			
	PSL202	Kg/cm <sup>2</sup>	n.a.	62.7	35.2	22.6	15.7	9.1	5.2	3.6	2
		Vel. sec	n.a.	22	22	38	38	38	56	56	56
	PSL204	Kg/cm <sup>2</sup>	n.a.	n.a.	70.3	45.2	31.5	18.2	10.3	7.1	4
		Vel. sec	n.a.	n.a.	22	38	38	38	56	56	56
	PSL210	Kg/cm <sup>2</sup>	n.a.	n.a.	n.a.	n.a.	78.7	45.5	25.8	17.8	10.1
		Vel. sec	n.a.	n.a.	n.a.	n.a.	38	57	84	84	84
AMS	PSL202	Kg/cm <sup>2</sup>	115	72	40	26	18	9.5	5.9	4.1	2.3
		Vel. sec	25 .. 12,5	25 .. 12,5	25 .. 12,5	42 .. 21	42 .. 21	42 .. 21	62 .. 31	62 .. 31	62 .. 31
	PSL204	Kg/cm <sup>2</sup>	n.a.	n.a.	n.a.	50	35	18.6	11.6	10.8	4.5
		Vel. sec	n.a.	n.a.	n.a.	42 .. 21	42 .. 21	62 .. 31	62 .. 31	62 .. 31	
	PSL210	Kg/cm <sup>2</sup>	n.a.	n.a.	n.a.	n.a.	78	45.5	25.8	17.8	10.1
		Vel. sec	n.a.	n.a.	n.a.	n.a.	95 .. 54	95 .. 54	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



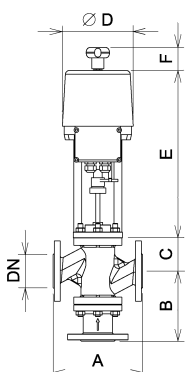
### COMPONENTS LIST

- Body
- Upper seat
- Lower seat
- Lower plug locknuts
- Lower plug washer
- Lower plug
- Upper plug
- Upper plug washer
- Upper plug locknuts
- Stem
- Bonnet
- Guide bush
- Body gasket
- Packing spring
- Packing washer
- Packing rings
- Internal "O" ring
- External "O" ring
- Packing adjusting nuts
- 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) 1° pag.
- C40 Carbon steel
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 304
- St. steel AISI 304
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 304
- St. steel AISI 304
- St. steel AISI 316
- See note (1) (2) 1° pag.
- St. steel AISI 304
- Europil WS 3640 or PTFE
- St. steel AISI 302
- St. steel AISI 304
- See note (3) 1° 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

## DIMENSIONS in mm.



### BODY GROUP

DN	Ø	A(1)	A(2)	B	C - Bonnet		
					Std	Finned	Bellows
15	1/2"	184	196	132	49	181	181
20	3/4"	184	196	134	58	190	190
25	1"	184	196	135	68	200	200
32	1.1/4"	200	212	134	70	202	202
40	1.1/2"	222	234	165	82	214	214
50	2"	254	266	185	86	218	218
65	2.1/2"	276	292	220	111	309	309
80	3"	298	317	222	135	333	333
100	4"	352	368	241	160	363	363

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

### 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
176	417	50
176	417	50
176	419	50

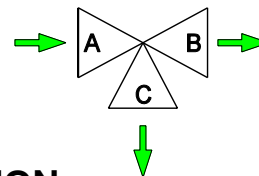
## THREE-WAY DIVERTING CONTROL VALVES CE



### TYPE 5700 EP / 5700 AMS DN 125/200

with tension opens and closes AB and AC

Face-to-face ASME / ANSI B16.10



### DESCRIPTION

The "UNIWORLD" series Type 5700 EP / 5700 AMS are equipped with EN "straight-through" pattern 3 way bodies having EN – ANSI – JIS flanges.

Type 5700 EP is with linear actuator.

Type 5700 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 5700 EP : 3 points modulating / 4-20 mA / 0-10 V

Signals Type 5700 AMS : 4-20 mA / 0-10 V

**SIZES :** from DN 125 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**  
Internal st. steel AISI 316
- **Carbon st. ASTM A216 WCB PN16/40 ANSI1500/300 JIS10/20**  
Internal st. steel AISI 316
- **St. Steel AISI316 CF8M PN16/40 ANSI 150/300 JIS10/20**  
Internal st. steel AISI 316 - bonnet st. steel AISI 316

#### PLUGS :

- **LV (DN125-200)** = linear class IV°
- **LVPT (DN 125-200)** = quick lift class IV°

#### 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	DN125		DN150		DN200	
	Ø 5"		Ø 6"		Ø 8"	
PL	CV	290.9	357.3	357.3	578.1	578.1
	KV	250.8	308	308	498.3	498.3
PT	CV	355.3	429.8	429.8	658.6	658.6
	KV	306.3	370.5	370.5	567.7	567.7
Reduced bore*	3"	4"	4"	5"	5"	6"

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

#### TECHNICAL CHARACTERISTICS OF ELECTRIC ACTUATORS :

	5700 EP	5700 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	

5700EP	PSL214
Power VA	51 / 53
Velocity mm/s	0,45

5700 AMS	PSL214AMS12
Power VA	93
Velocity mm/s	0,65 – 1,3

#### ON REQUEST :

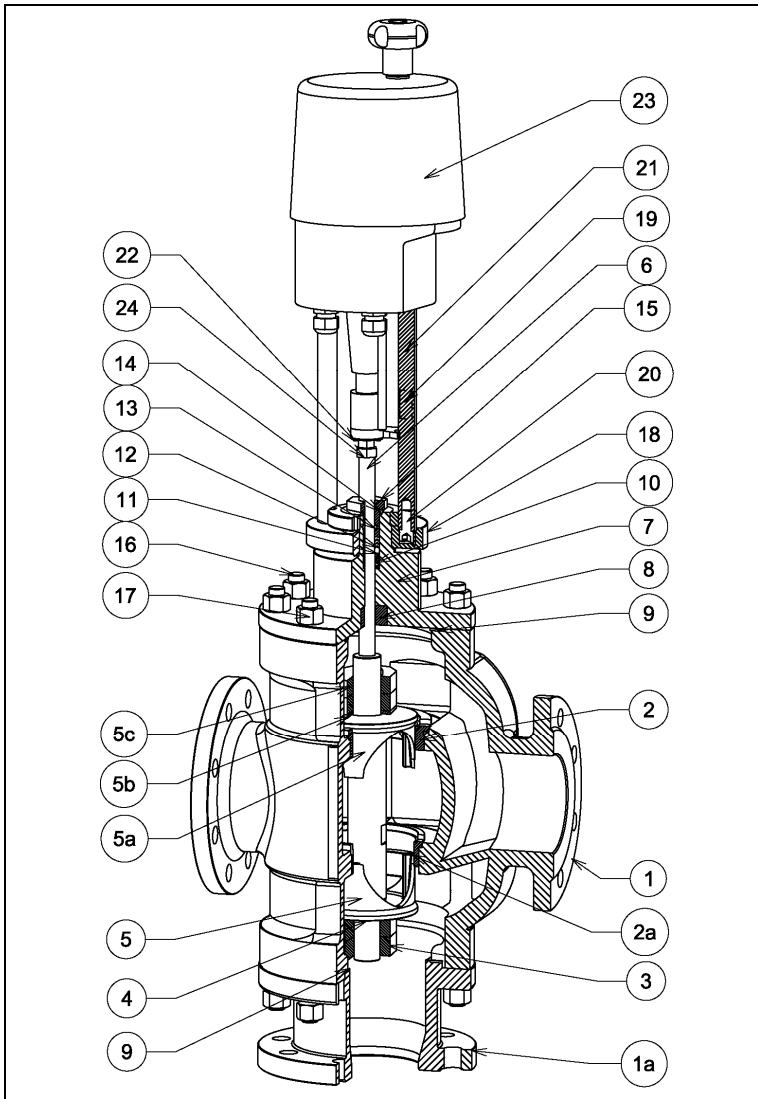
	5700 EP	5700 AMS
Seal	PTFE/GR ≤190°C class VI°	
	PTFE ≤150°C class VI°	
Lapping	Seat - Plug class V°	
Stellite	degree 6 on seat-plug and bush	
Reduced bores	(see table CV and KV)	
Power supply	24Vdc – 2VAC – 110 V AC	
Potentiometer	1000 Ohm 1 o 2	Included
Positioner	4-20 mA / 0-10 V	Included
Trasmitter	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/cm<sup>2</sup> (fluid opens) with alive motor**  
**Speed in second for total stroke in mm**

DN			125	150	200
stroke mm			50	50	50
EP	PSL214	Kg/cm <sup>2</sup>	7,9	5,5	3,1
		Vel. sec	84	84	84
AMS	PSL214	Kg/cm <sup>2</sup>	7,9	5,5	3,1
		Vel. sec	39	39	39

- 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**



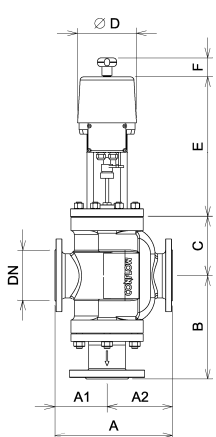
**COMPONENTS LIST**

- Body
- 1a. Stud pipe
- Upper seat
- Lower seat
- Lower plug locknuts
- Lower plug washer
- Lower plug
- 5a. Upper plug
- 5b. Upper plug washer
- 5c. Upper plug locknuts
- Stem
- Plug shaft
- Bonnet
- Guide bush
- Body gasket
- Packing spring
- Packing washer
- Packing rings
- Internal "O" ring
- External "O" ring
- Ghiera premistoppa
- 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) 1° pag.
- 1a. C40 Carbon steel
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 304
- St. steel AISI 304
- St. steel AISI 316
- St. steel AISI 316
- St. steel AISI 304
- St. steel AISI 304
- St. steel AISI 316
- St. steel AISI 316
- See note (1) e (2) 1° pag.
- St. steel AISI 304
- Europil WS 3640 or PTFE
- St. steel AISI 302
- St. steel AISI 304
- See note (3) 1° 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

**DIMENSIONS in mm.**



**BODY GROUP**

DN	Ø	A	A1	A2	B	C - Bonnet		
						Std	Finned	Bellows
125	5"	425	186	239	344	252	435	435
150	6"	473	206	267	375	258	442	442
200	8"	568	234	334	430	283	465	465

**ACTUATOR**

Ø D	PSL 214	
	E	F
180	490	55
180	490	55
180	490	55