TYPE 2100 AD

Normally open – air closes

Face-to-face EN 558-1

DESCRIPTION

The "UNIWORLD" series type 2100 AD are equipped with EN "straight-through" pattern bodies with EN flanges.
Quick lift plug with soft seal class VI or with metal seal class V.
Compact construction assembled with multisprings pneumatic actuator
The pneumatic actuator is suitable for 2-6 bar pneumatic signal.

Type 2100 AD can be equipped with all accessories on request.

SIZES : from DN 15 to DN 100

BODY CONNECTIONS : flanged EN 1092-1 form B - 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 GP240GH+N 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 ≤ +150 °C
- **PT/PTFE/GR** – soft seal class VI° for temperatures ≤ +190 °C

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 PNEUMATIC ACTUATOR :

- Actuator : diaphragm type
- Signal : min.2 … max 6 bar
- Ambient temperature : 70 °C ≤ 3 bar *see on request
- Ambient temperature : 50 °C > 3 bar *see on request
- Actuator casing material : P11 carbon steel
- Diaphragm material : EPDM 70
- Yoke material : EN-GJS500-7 spheroidal cast iron
- Pneumatic connections : ISO 7 Rp – 1/8"

MAX WORKING CONDITIONS :

- Materials : see general data sheet UNIWORLD/I/E
- Valve Sizing : see general data sheet UNIWORLD/I/E
- Rangeability: see general data sheet UNIWORLD/I/E

ON REQUEST :

- Air filter regulator
- Proximity limit switches
- 3-way solenoid valve
- Lubricator on finned bonnet for temperatures ≥ +250 °C
- Top-work manual handwheel
- ATEX 2014/34/UE dedicated configuration according to the fluid
- Kit diaphragm and actuator seals certified for a.t. ≥ - 50 °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		DN 15 Ø 1/2"	DN 20 Ø 3/4"	DN 25 Ø 1"	DN 32 Ø 1.1/4"	DN 40 Ø 1.1/2"	DN 50 Ø 2"	DN 65 Ø 2.1/2"	DN 80 Ø 3"	DN 100 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

CONFLOW s.p.a.

COMPANY WITH
QUALITY SYSTEM
CERTIFIED UNI EN ISO 9001

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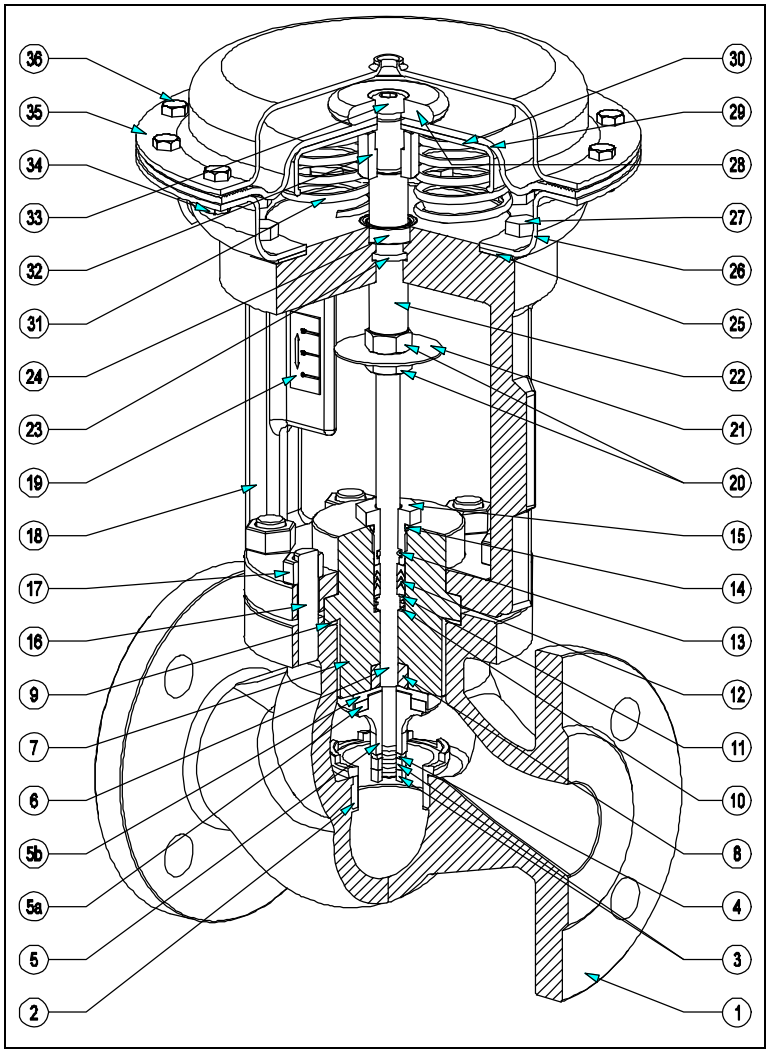
20864 AGRATE BRIANZA (MB)
Tel. 039/651.705 - 650.397
Mail: sales@conflow.it
www.conflow.it

Maximum permissible pressure drops in Kg/cm2

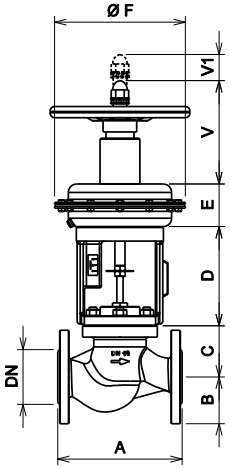
Function			NORMALLY OPENS ON AIR FAILURE				
Fluid direction			OPEN (under the plug)				
Air pressure in bar			2	3	4	5	6
DN	Stroke in mm	Actuator	Δp permissible				
15	11	T200	35	40	40	40	40
20	11	T200	30	40	40	40	40
25	11	T200	20	40	40	40	40
32	19	T200	17	30	35	40	40
40	19	T200	7	18	22	36	40
50	19	T200	3	15	20	30	38
65	19	T250	3	6.5	9	13	18
80	19	T250	1.5	4	5.5	8	11
100	19	T250	0.9	2.1	3	4.5	7

COMPONENTS LIST AND MATERIALS



COMPONENTS LIST	1. MATERIALI
1. Body	1. See note (1) at page 1
2. Seat	2. AISI 316 stainless steel
3. Plug locknuts	3. AISI 304 stainless steel
4. Spring washer	4. AISI 304 stainless steel
5. Lower plug profile	5. AISI 316 stainless steel
5a. Soft ring	5a. PTFE or PTFE/graphite
5b. Upper plug profile	5b. AISI 316 stainless steel
6. Stem	6. AISI 316 stainless steel
7. Bonnet	7. See notes (1)-(2) at page1
8. Guide bush	8. AISI 304 stainless steel
9. Body gasket	9. Europil WS 3640 or PTFE
10. Packing spring	10. AISI 302 stainless steel
11. Packing washer	11. AISI 304 stainless steel
12. Packing rings	12. See note (3) at page 1
13. Internal “O” ring	13. Viton FPM 70
14. External “O” ring	14. Viton FPM 70
15. Packing adjusting nut	15. AISI 303 stainless steel
16. Stud-bolts	16. Galvanized steel
17. Body locknuts	17. DIN 934 galvanized steel
18. Yoke	18. GGG50 spheroidal c. iron
19. Travel indicator plate	19. Policarbonate
20. Position indicator locknuts	20. DIN 936 galvanized steel
21. Position indicator	21. Aluminium
22. Diaphragm rod	22. AISI 303 stainless steel
23. “O” ring	23. NBR
24. Airtight	24. NBR
25. Yoke gasket	25. Cork – rubber
26. Lower diaphragm casing	26. P11 steel
27. Lower diaphragm casing internal bolts	27. DIN 933 galvanized steel
28. Diaphragm spacer	28. Galvanized steel
29. Diaphragm	29. EPDM 70
30. Diaphragm plate	30. P01 steel
31. Springs	31. C98 UNI 3823
32. Diaphragm bush	32. AISI 303 stainless steel
33. Diaphragm locknut	33. ISO 7380 galvanized steel
34. Diaphragm casing bolts	34. DIN 934 galvanized steel
35. Upper diaphragm casing	35. P11 steel
36. Diaphragm casing locknuts	36. DIN 933 galvanized steel

DIMENSIONS in mm.



DN	Ø	A	B	C - Bonnet			D	V	V1
				Std	Finned	Bellows			
15	1/2 “	130	47.5	49	181	181	147	166	11
20	3/4 “	150	52.5	58	190	190	147	166	11
25	1 “	160	57.5	68	200	200	147	166	11
32	1.1/4 “	180	70	70	202	202	147	166	19
40	1.1/2 “	200	75	82	214	214	160	166	19
50	2 “	230	82.5	86	218	218	160	166	19
65	2.1/2 “	290	92.5	111	309	309	160	166	19
80	3 “	310	100	135	333	333	160	166	19
100	4“	350	118	160	363	363	204	166	19

Actuator.	E	Ø F
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T250	70	292
T250	70	292
T250	70	292

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TYPE 2100 AR

Normally closed – air opens

Face-to-face EN 558-1

DESCRIPTION

The "UNIWORLD" series type 2100 AR are equipped with EN "straight-through" pattern bodies with EN flanges.
Quick lift plug with soft seal class VI or with metal seal class V.
Compact construction assembled with multisprings pneumatic actuator
The pneumatic actuator is suitable for 2-6 bar pneumatic signal.

Type 2100 AR can be equipped with all accessories on request.

SIZES : from DN 15 to DN 100

BODY CONNECTIONS : flanged EN 1092-1 form B - 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 GP240GH+N 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 ≤ +150 °C
- **PT/PTFE/GR** – soft seal class VI° for temperatures ≤ +190 °C

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 PNEUMATIC ACTUATOR :

- Actuator : diaphragm type
- Signal : min.2 … max 6 bar
- Ambient temperature : 70 °C ≤ 3 bar *see on request
- Ambient temperature : 50 °C > 3 bar *see on request
- Actuator casing material : P11 carbon steel
- Diaphragm material : EPDM 70
- Yoke material : EN-GJS500-7 spheroidal cast iron
- Pneumatic connections : ISO 7 Rp – 1/8"

MAX WORKING CONDITIONS :

- Materials : see general data sheet UNIWORLD/I/E
- Valve Sizing : see general data sheet UNIWORLD/I/E
- Rangeability: see general data sheet UNIWORLD/I/E

ON REQUEST :

- Air filter regulator
- Proximity limit switches
- 3-way solenoid valve
- Lubricator on finned bonnet for temperatures ≥ +250 °C
- Top-work manual handwheel
- ATEX 2014/34/UE dedicated configuration according to the fluid
- Kit diaphragm and actuator seals certified for a.t. ≥ - 50 °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		DN 15 Ø 1/2"	DN 20 Ø 3/4"	DN 25 Ø 1"	DN 32 Ø 1.1/4"	DN 40 Ø 1.1/2"	DN 50 Ø 2"	DN 65 Ø 2.1/2"	DN 80 Ø 3"	DN 100 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

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TYPE 2100 DE

Double acting – air closes – air opens

Face-to-face EN 558-1

DESCRIPTION

The "UNIWORLD" series type 2100 DE are equipped with EN "straight-through" pattern bodies with EN flanges.
Quick lift plug with soft seal class VI or with metal seal class V.
Compact construction assembled with double acting pneumatic actuator : air closes, air opnes
The pneumatic actuator is suitable for 2-6 bar pneumatic signal from DN 15 to DN 50 and for 2-4 bar pneumatic signal from DN 65 to DN 100.

Type 2100 DE can be equipped with all accessories on request.

SIZES : from DN 15 to DN 100

BODY CONNECTIONS : flanged EN 1092-1 form B - 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 GP240GH+N 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 ≤ 150 °C
- **PT/PTFE/GR** – soft seal class VI° for temperatures ≤ 190 °C

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 PNEUMATIC ACTUATOR :

- Actuator : diaphragm type
- Signal : min.2 max.6 bar DN15..DN50
- Signal : min.2 max.4 bar DN65..DN100
- Ambient temperature : 70 °C ≤ 3 bar *see on request
- Ambient temperature : 50 °C > 3 bar *see on request
- Actuator casing material : P11 carbon steel
- Diaphragm material : EPDM 70
- Yoke material : EN-GJS500-7 spheroidal cast iron
- Pneumatic connections : ISO 7 Rp – 1/8"

MAX WORKING CONDITIONS :

- Materials : see general data sheet UNIWORLD/I/E
- Valve Sizing : see general data sheet UNIWORLD/I/E
- Rangeability: see general data sheet UNIWORLD/I/E

ON REQUEST :

- Air filter regulator
- Proximity limit switches
- 3-way solenoid valve
- Lubricator on finned bonnet for temperatures ≥ +250 °C
- Top-work manual handwheel
- ATEX 2014/34/UE dedicated configuration according to the fluid
- Kit diaphragm and actuator seals certified for a.t. ≥ - 50 °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		DN 15 Ø 1/2"	DN 20 Ø 3/4"	DN 25 Ø 1"	DN 32 Ø 1.1/4"	DN 40 Ø 1.1/2"	DN 50 Ø 2"	DN 65 Ø 2.1/2"	DN 80 Ø 3"	DN 100 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

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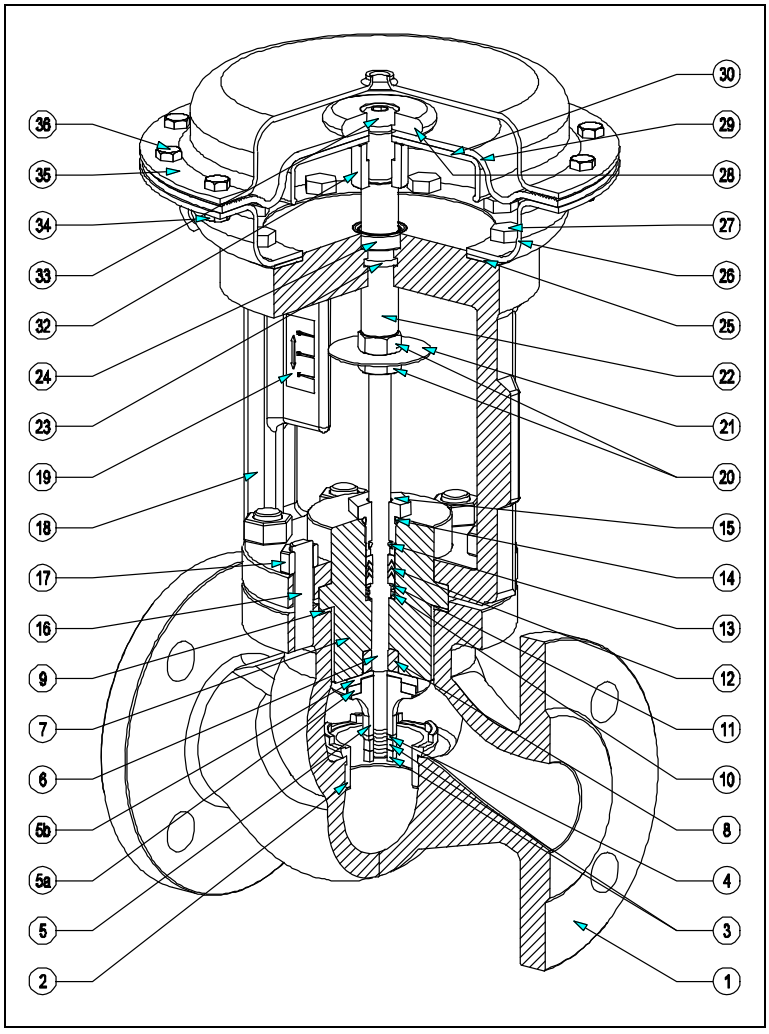
Maximum permissible pressure drops in Kg/cm2

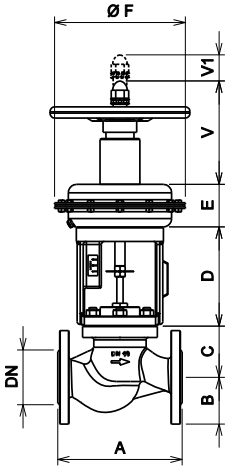
Function			DOUBLE ACTING				
Fluid direction			OPEN (under the plug)				
Air pressure in bar			2	3	4	5	6
DN	Stroke in mm	Actuator	Δp permissible				
15	11	T200	40	40	40	40	40
20	11	T200	40	40	40	40	40
25	11	T200	40	40	40	40	40
32	19	T200	25	40	40	40	40
40	19	T200	18	28	37	40	40
50	19	T200	11	16	21	27	32
65	19	T250	14	22	29	-	-
80	19	T250	10	15	20	-	-
100	19	T250	5	8	11	-	-

COMPONENTS LIST AND MATERIALS



COMPONENTS LIST	1. MATERIALI
1. Body	1. See note (1) at page 1
2. Seat	2. AISI 316 stainless steel
3. Plug locknuts	3. AISI 304 stainless steel
4. Spring washer	4. AISI 304 stainless steel
5. Lower plug profile	5. AISI 316 stainless steel
5a. Soft ring	5a. PTFE or PTFE/graphite
5b. Upper plug profile	5b. AISI 316 stainless steel
6. Stem	6. AISI 316 stainless steel
7. Bonnet	7. See notes (1)-(2) at page1
8. Guide bush	8. AISI 304 stainless steel
9. Body gasket	9. Europil WS 3640 or PTFE
10. Packing spring	10. AISI 302 stainless steel
11. Packing washer	11. AISI 304 stainless steel
12. Packing rings	12. See note (3) at page 1
13. Internal “O” ring	13. Viton FPM 70
14. External “O” ring	14. Viton FPM 70
15. Packing adjusting nut	15. AISI 303 stainless steel
16. Stud-bolts	16. Galvanized steel
17. Body locknuts	17. DIN 934 galvanized steel
18. Yoke	18. GGG50 spheroidal c. iron
19. Travel indicator plate	19. Policarbonate
20. Position indicator locknuts	20. DIN 936 galvanized steel
21. Position indicator	21. Aluminium
22. Diaphragm rod	22. AISI 303 stainless steel
23. “O” ring	23. NBR
24. Airtight	24. NBR
25. Yoke gasket	25. Cork – rubber
26. Lower diaphragm casing	26. P11 steel
27. Lower diaphragm casing internal bolts	27. DIN 933 galvanized steel
28. Diaphragm spacer	28. Galvanized steel
29. Diaphragm	29. EPDM 70
30. Diaphragm plate	30. P01 steel
31. Springs	31. C98 UNI 3823
32. Diaphragm bush	32. AISI 303 stainless steel
33. Diaphragm locknut	33. ISO 7380 galvanized steel
34. Diaphragm casing bolts	34. DIN 934 galvanized steel
35. Upper diaphragm casing	35. P11 steel
36. Diaphragm casing locknuts	36. DIN 933 galvanized steel

DIMENSIONS in mm.



DN	Ø	A	B	C - Bonnet			D	V	V1
				Std	Finned	Bellows			
15	1/2 “	130	47.5	49	181	181	147	166	11
20	3/4 “	150	52.5	58	190	190	147	166	11
25	1 “	160	57.5	68	200	200	147	166	11
32	1.1/4 “	180	70	70	202	202	147	166	19
40	1.1/2 “	200	75	82	214	214	160	166	19
50	2 “	230	82.5	86	218	218	160	166	19
65	2.1/2 “	290	92.5	111	309	309	160	166	19
80	3 “	310	100	135	333	333	160	166	19
100	4“	350	118	160	363	363	204	166	19

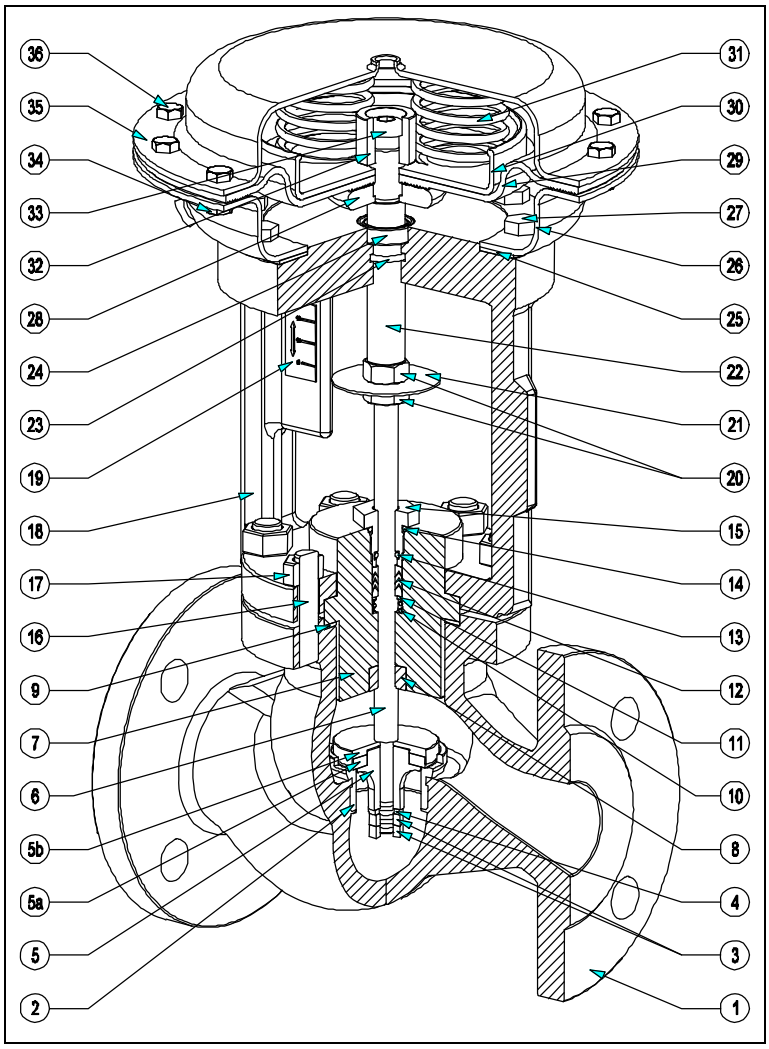
Actuator.	E	Ø F
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T250	70	292
T250	70	292
T250	70	292

Specifications given are only indicative and not binding for the manifacturer 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.conflow.it.**

Maximum permissible pressure drops in Kg/cm2

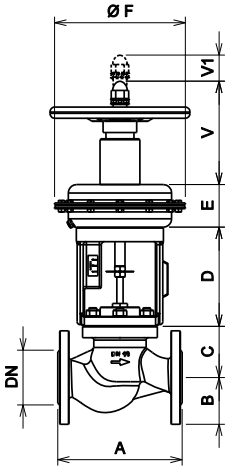
Function			NORMALLY CLOSED ON AIR FAILURE					NORMALLY CLOSED ON AIR FAILURE				
Fluid direction			CLOSE (over the plug)					OPEN (under the plug)				
Air pressure in bar			2	3	4	5	6	2	3	4	5	6
DN	Stroke in mm	Actuator	Δp permissible					Δp permissible				
15	11	T200	40	40	40	40	40	65	65	65	65	65
20	11	T200	40	40	40	40	40	40	40	40	40	40
25	11	T200	35	40	40	40	40	22	22	22	22	22
32	19	T200	27	40	40	40	40	11	11	11	11	11
40	19	T200	18	28	40	40	40	8	8	8	8	8
50	19	T200	11	16	21	27	32	6	6	6	6	6
65	19	T250	14	22	29	36	40	5.7	5.7	5.7	5.7	5.7
80	19	T250	10	15	20	25	30	4	4	4	4	4
100	19	T250	4.5	7	8.3	10	12	2.2	2.2	2.2	2.2	2.2

COMPONENTS LIST AND MATERIALS



COMPONENTS LIST	1. MATERIALI
1. Body	1. See note (1) at page 1
2. Seat	2. AISI 316 stainless steel
3. Plug locknuts	3. AISI 304 stainless steel
4. Spring washer	4. AISI 304 stainless steel
5. Lower plug profile	5. AISI 316 stainless steel
5a. Soft ring	5a. PTFE or PTFE/graphite
5b. Upper plug profile	5b. AISI 316 stainless steel
6. Stem	6. AISI 316 stainless steel
7. Bonnet	7. See notes (1)-(2) at page1
8. Guide bush	8. AISI 304 stainless steel
9. Body gasket	9. Europil WS 3640 or PTFE
10. Packing spring	10. AISI 302 stainless steel
11. Packing washer	11. AISI 304 stainless steel
12. Packing rings	12. See note (3) at page 1
13. Internal “O” ring	13. Viton FPM 70
14. External “O” ring	14. Viton FPM 70
15. Packing adjusting nut	15. AISI 303 stainless steel
16. Stud-bolts	16. Galvanized steel
17. Body locknuts	17. DIN 934 galvanized steel
18. Yoke	18. GGG50 spheroidal c. iron
19. Travel indicator plate	19. Policarbonate
20. Position indicator locknuts	20. DIN 936 galvanized steel
21. Position indicator	21. Aluminium
22. Diaphragm rod	22. AISI 303 stainless steel
23. “O” ring	23. NBR
24. Airtight	24. NBR
25. Yoke gasket	25. Cork – rubber
26. Lower diaphragm casing	26. P11 steel
27. Lower diaphragm casing internal bolts	27. DIN 933 galvanized steel
28. Diaphragm spacer	28. Galvanized steel
29. Diaphragm	29. EPDM 70
30. Diaphragm plate	30. P01 steel
31. Springs	31. C98 UNI 3823
32. Diaphragm bush	32. AISI 303 stainless steel
33. Diaphragm locknut	33. ISO 7380 galvanized steel
34. Diaphragm casing bolts	34. DIN 934 galvanized steel
35. Upper diaphragm casing	35. P11 steel
36. Diaphragm casing locknuts	36. DIN 933 galvanized steel

DIMENSIONS in mm.



DN	Ø	A	B	C - Bonnet			D	V	V1
				Std	Finned	Bellows			
15	1/2 “	130	47.5	49	181	181	147	166	11
20	3/4 “	150	52.5	58	190	190	147	166	11
25	1 “	160	57.5	68	200	200	147	166	11
32	1.1/4 “	180	70	70	202	202	147	166	19
40	1.1/2 “	200	75	82	214	214	160	166	19
50	2 “	230	82.5	86	218	218	160	166	19
65	2.1/2 “	290	92.5	111	309	309	160	166	19
80	3 “	310	100	135	333	333	160	166	19
100	4“	350	118	160	363	363	204	166	19

Actuator	E	Ø F
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T200	70	210
T250	70	292
T250	70	292
T250	70	292

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