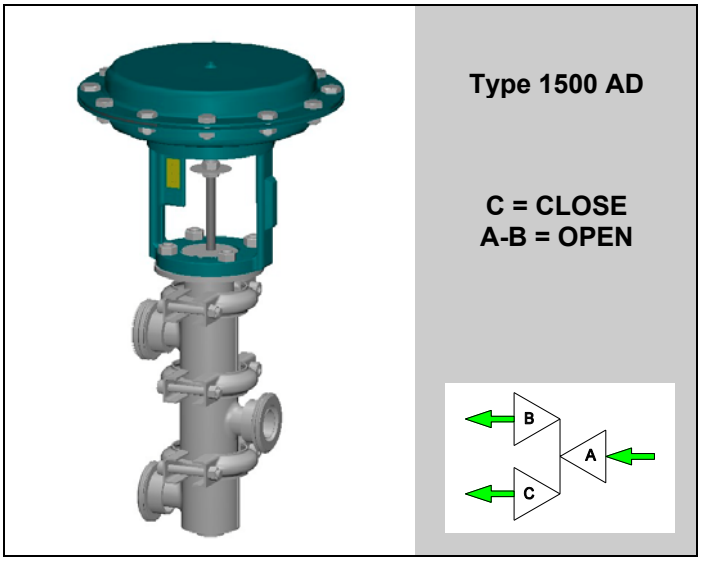
THREE WAY DIVERTING CONTROL VALVES PED 97/23/CE Art.3 Section.3



TYPE 1500 AD

Normally closed port "C" on air failure

DESCRIPTION

The 1500 "HYGIENIC" pneumatic control valves are with three way diverting body with revolving connections.
They are suggested for modulating service in food and pharmaceutical where very high levels of flexibility and hygienic conditions are normally required. The three way diverting control valves are with one inlet port and two outlet ports with fluid opens. Modulating plug suitable for control of virtually all line media. Compact construction assembled with "UNIWORLD" multisprings pneumatic actuator having 3 - 15 psi …6 – 18 psi… 6 – 30 psi standard control signals.
On request they can be equipped with a pneumatic or electro-pneumatic pilot positioner.

SIZES : from DN 15 to DN 100

BODY CONNECTIONS :

- **Smooth welding caps according to DIN (Standard) A316 L**
- **Male tappared according to DIN 11851 A316L**
- **Female screwed according to DIN 11851 A316L**
- **Complete union according to DIN 11851 A316L**
- **Snap – clamp system according to DIN 405 A316L**
- **Flanged UNI 2277/78 PN 10-16 A316L**

MATERIALS OF BODY GROUP :

- **Stainless steel AISI 316 L – X2 Cr Ni Mo 1712 PN 10**
  Polished version or satin version

PLUG :

- **PL** = linear class IV°
- On request reduced bores and microflow

BONNET : Standard for temperature from -5 to + 160 °C

PACKING : N° 2 "O" rings FPM 70 ≤ 160°C

TECHNICAL CHARACTERISTICS OF PNEUMATIC ACTUATOR:

- Actuator : diaphragm type
- Control signals : 3-15 psi …6-18 psi …6-30 psi
- Max air supply pressure : 35 psi (2,5 bar)
- Ambient temperature : -20 ... +70 °C
- Painted actuator casing mat. : Fe P11
- S.S. actuator casing material : Stainless steel AISI 304
- Diaphragm material : EPDM 70
- Painted yoke material : GGG 50
- S.S. yoke material : Stainless steel CF8 (AISI 304)
- Pneumatic connections : ISO 7 Rp – 1/8"

MAX WORKING CONDITIONS :

- Max inlet pressure and temperature : 10 bar –15°C….+ 160°C
- Valve sizing : see leaflet 100/VP
- Rangeability : see leaflet GRAFICI/I

ON REQUEST :

- Soft viton insert ≤160°C classe VI°
- Reduced bores (see below table)
- Pneumatic Pilot Positioner 3-15 psi … 3-9 psi … 9-15 psi
- Electro pneumatic pilot positioner 4-20 mA…4-12 mA..12-20 mA
- Air filter regulator
- Proximity limit switches
- 3-way solenoid valve
- Top – work manual handweel

CV = american unit (flowrate in US GPM With 1 psi of differential pressure)

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

Plug Full bore		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	5	8	13		18		26		45		72		105		160	
	KV	4.26	6.82	11.08		15.34		22.15		38.34		61.34		89.46		136.32	
Reduced bore*		n.a.	1/2"	1/2"	3/4"	3/4"	1"	1"	1.1/4"	1.1/4"	1.1/2"	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 time (PL only)

CONFLOW s.p.a.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

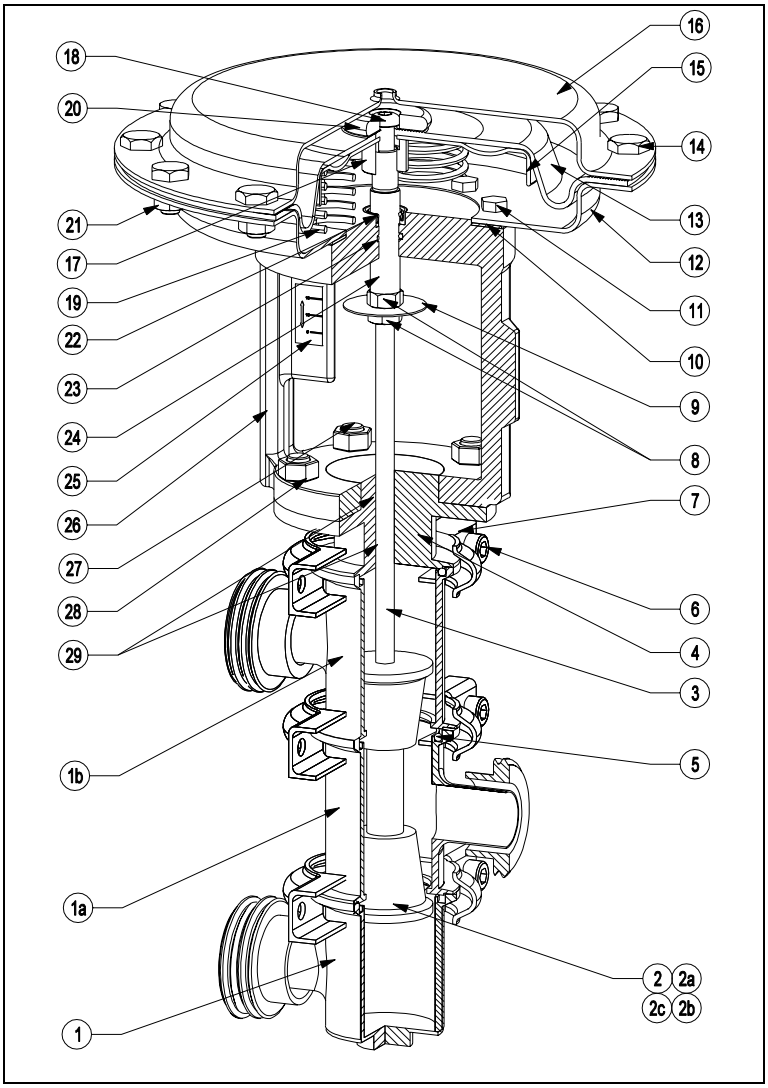
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20041 AGRATE BRIANZA (MI)
Tel. 039/651.705 - 650.397
Fax 039/654.018
www.conflow.it

Maximum permissible pressure drops in Kg/cm2 (fluid opens)
Strokes in mm – Signals in psi

Actuator Type	Signal psi	DN 15 Stroke 11	DN 20 Stroke 11	DN 25 Stroke 11	DN 32 Stroke 19	DN 40 Stroke 19	DN 50 Stroke 19	DN 65 Stroke 28	DN 80 Stroke 28	DN 100 Stroke 28
T200	3-15 psi	12	8	5	3	-	-	-	-	-
	6-18 psi	25	16	9	6	-	-	-	-	-
	6-30 psi	65	40	22	11	-	-	-	-	-
T250	3-15 psi	27	17	9	6	4	2.4	-	-	-
	6-18 psi	55	34	19	12	8	3	-	-	-
	6-30 psi	110	68	38	20	14.5	7	-	-	-
T310	3-15 psi	-	-	15.5	10	7	3.5	2.5	1.7	0.9
	6-18 psi	-	-	31	20	14	7	4.5	2.8	1.3
	6-30 psi	-	-	62	30	21	12	6.5	4.7	2.6
T400	3-15 psi	-	-	-	14.5	10.5	5	3.8	2.5	1.4
	6-18 psi	-	-	-	29.5	20.5	12	6.7	4	2.8
	6-30 psi	-	-	-	45	31.5	18	16	11	6.3
T500	3-15 psi	-	-	-	24.5	17.5	10	5.5	4.2	2.4
	6-18 psi	-	-	-	49	34.5	19.5	12.2	7	4.9
	6-30 psi	-	-	-	75	52.5	30.3	26	16	10.5

1. The values given are referred to the force of actuator and they can be used within the limit of the body rating.
2. The actuator DELTA-PI (PRESSURE DROPS with CLOSED VALVE) are obtained without a residual thrust of air into the actuator
3. The actuator DELTA-PI given in the column 6-30 psi are also valid for ON-OFF service with air supply at 30/35 psi

COMPONENT LIST AND MATERIALS

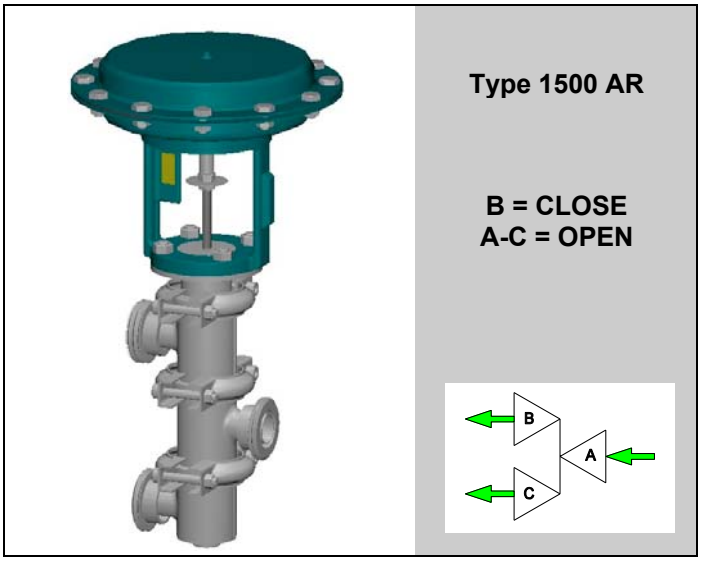


	COMPONENTS	MATERIALS
1.	Lower body	AISI 316 L St. steel
1a.	Middle body	AISI 316 L St. steel
1b.	Upper body	AISI 316 L St. steel
2.	Metal seal plug	AISI 316 L St. steel
2a.	Soft seal plug	AISI 316 L St. steel
2b.	Soft viton insert	Viton FPM 70
2c.	Upper plug profile	AISI 316 L St. steel
3.	Stem	AISI 316 L St. steel
4.	Bonnet	AISI 316 L St. steel
5.	Body gasket	Viton FPM 70
6.	Clamp bolts	AISI 304 L St. steel
7.	Clamp	AISI 304 L St. steel
8.	Indicator bolts	AISI 304 L St. steel
9.	Position indicator	AISI 304 L St. steel
10.	Yoke gasket	Cork-rubber
11.	Yoke bolts	DIN 933 galvanized steel or AISI 304 L St. steel
12.	Lower diaphragm casing	P11 steel or AISI 304 L St. steel
13.	Diaphragm	EPDM 70
14.	Diaphragm casing locknuts	DIN 933 galvanized steel or AISI 304 L St. steel
15.	Diaphragm plate	P01 steel
16.	Upper diaphragm casing	P11 steel or AISI 304 L St. steel
17.	Diaphragm bush	AISI 303 L St. steel
18.	Diaphragm locknut	ISO 7380 galvanized steel
19.	Springs	C98 UNI 3823
20.	Diaphragm spacer	Galvanized steel
21.	Diaphragm casing bolts	DIN 934 galvanized steel or AISI 304 L St. steel
22.	Airtight	NBR
23.	"O" ring	NBR
24.	Diaphragm rod	AISI 303 L St. steel
25.	Travel indicator plate	Policarbonate
26.	Yoke	GGG50 or AISI 304 L St. steel
27.	Stud-bolts	AISI 304 L St. steel
28.	Yoke bolts	DIN 934 galvanized steel or AISI 304 L St. steel
29.	"O" rings	Viton FPM 70

DIMENSIONS (See leaflet DIMHY/I/E)

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.

THREE WAY DIVERTING CONTROL VALVES PED 97/23/CE Art.3 Section.3



TYPE 1500 AR

Normally closed port "B" on air failure

DESCRIPTION

The 1500 "HYGIENIC" pneumatic control valves are with three way diverting body with revolving connections.
They are suggested for modulating service in food and pharmaceutical where very high levels of flexibility and hygienic conditions are normally required. The three way diverting control valves are with one inlet port and two outlet ports with fluid opens. Modulating plug suitable for control of virtually all line media. Compact construction assembled with "UNIWORLD" multisprings pneumatic actuator having 3 - 15 psi …6 –18 psi… 6 – 30 psi standard control signals.
On request they can be equipped with a pneumatic or electro-pneumatic pilot positioner.

SIZES : from DN 15 to DN 100

BODY CONNECTIONS :

- **Smooth welding caps according to DIN (Standard) A316 L**
- **Male tappared according to DIN 11851 A316L**
- **Female screwed according to DIN 11851 A316L**
- **Complete union according to DIN 11851 A316L**
- **Snap – clamp system according to DIN 405 A316L**
- **Flanged UNI 2277/78 PN 10-16 A316L**

MATERIALS OF BODY GROUP :

- **Stainless steel AISI 316 L – X2 Cr Ni Mo 1712 PN 10**
  Polished version or satin version

PLUG :

- **PL** = linear class IV°
- On request reduced bores and microflow

BONNET : Standard for temperature from -5 to + 160 °C

PACKING : N° 2 "O" rings FPM 70 ≤ 160°C

TECHNICAL CHARACTERISTICS OF PNEUMATIC ACTUATOR:

- Actuator : diaphragm type
- Control signals : 3-15 psi…6-18 psi …6-30 psi
- Max air supply pressure : 35 psi (2,5 bar)
- Ambient temperature : -20 ... +70 °C
- Painted actuator casing mat. : Fe P11
- S.S. actuator casing material : Stainless steel AISI 304
- Diaphragm material : EPDM 70
- Painted yoke material : GGG 50
- S.S. yoke material : Stainless steel CF8 (AISI 304)
- Pneumatic connections : ISO 7 Rp – 1/8"

MAX WORKING CONDITIONS :

- Max inlet pressure and temperature : 10 bar –15°C….+ 160°C
- Valve sizing : see leaflet 100/VP
- Rangeability : see leaflet GRAFICI/I

ON REQUEST :

- Soft viton insert ≤160°C class VI°
- Reduced bores (see below table)
- Pneumatic pilot positioner 3-15 psi … 3-9 psi … 9-15 psi
- Electro pneumatic pilot positioner 4-20 mA…4-12 mA..12-20 mA
- Air filter regulator
- Proximity limit switches
- 3-way solenoid valve
- Top – work manual handweel

CV = american unit (flowrate in US GPM With 1 psi of differential pressure)

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

Plug Full bore		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	5	8	13		18		26		45		72		105		160	
	KV	4.26	6.82	11.08		15.34		22.15		38.34		61.34		89.46		136.32	
Reduced bore*		n.a.	1/2"	1/2"	3/4"	3/4"	1"	1"	1.1/4"	1.1/4"	1.1/2"	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 time (PL only)

CONFLOW s.p.a.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

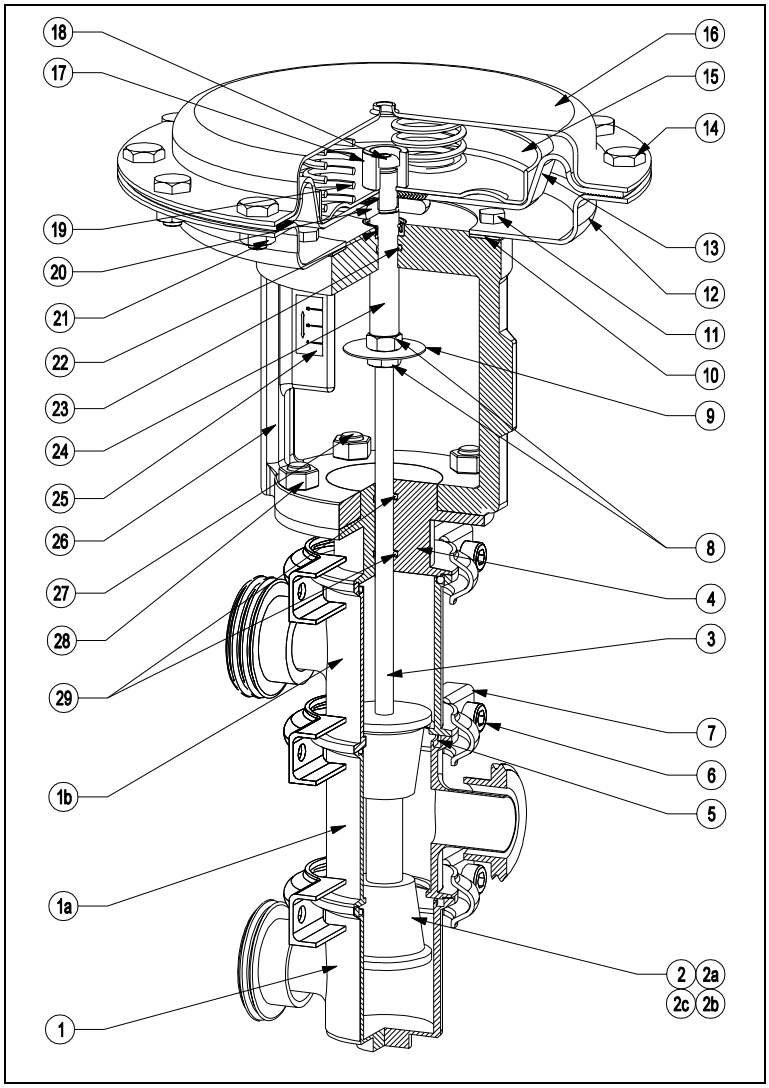
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Fax 039/654.018
www.conflow.it

Maximum permissible pressure drops in Kg/cm2 (fluid opens)
Strokes in mm – Signals in psi

Actuator Type	Signal psi	DN 15 Stroke 11	DN 20 Stroke 11	DN 25 Stroke 11	DN 32 Stroke 19	DN 40 Stroke 19	DN 50 Stroke 19	DN 65 Stroke 28	DN 80 Stroke 28	DN 100 Stroke 28
T200	3-15 psi	12	8	5	3	-	-	-	-	-
	6-18 psi	25	16	9	6	-	-	-	-	-
	6-30 psi	65	40	22	11	-	-	-	-	-
T250	3-15 psi	27	17	9	6	4	2.4	-	-	-
	6-18 psi	55	34	19	12	8	3	-	-	-
	6-30 psi	110	68	38	20	14.5	7	-	-	-
T310	3-15 psi	-	-	15.5	10	7	3.5	2.5	1.7	0.9
	6-18 psi	-	-	31	20	14	7	4.2	2.8	1.3
	6-30 psi	-	-	62	30	21	12	6.5	4.7	2.6
T400	3-15 psi	-	-	-	14.5	10.5	5	3.8	2.5	1.4
	6-18 psi	-	-	-	29.5	20.5	12	6.7	4	2.8
	6-30 psi	-	-	-	45	31.5	18	16	11	6.3
T500	3-15 psi	-	-	-	24.5	17.5	9.5	5.5	4.2	2.4
	6-18 psi	-	-	-	49	34.5	19.5	12.2	7	4.9
	6-30 psi	-	-	-	75	52.5	30.3	26	16	10.5

1. The values given are referred to the force of actuator and they can be used within the limit of the body rating.
2. The actuator DELTA-PI (PRESSURE DROPS with CLOSED VALVE) are obtained without a residual thrust of air into the actuator
3. The actuator DELTA-PI given in the column 6-30 psi are also valid for ON-OFF service with air supply at 30/35 psi

COMPONENT LIST AND MATERIALS



	COMPONENTS	MATERIALS
1.	Lower body	AISI 316 L St. steel
1a.	Middle body	AISI 316 L St. steel
1b.	Upper body	AISI 316 L St. steel
2.	Metal seal plug	AISI 316 L St. steel
2a.	Soft seal plug	AISI 316 L St. steel
2b.	Soft viton insert	Viton FPM 70
2c.	Upper plug profile	AISI 316 L St. steel
3.	Stem	AISI 316 L St. steel
4.	Bonnet	AISI 316 L St. steel
5.	Body gasket	Viton FPM 70
6.	Clamp bolts	AISI 304 L St. steel
7.	Clamp	AISI 304 L St. steel
8.	Indicator bolts	AISI 304 L St. steel
9.	Position indicator	AISI 304 L St. steel
10.	Yoke gasket	Cork-rubber
11.	Yoke bolts	DIN 933 galvanized steel or AISI 304 L St. steel
12.	Lower diaphragm casing	P11 steel or AISI 304 L St. steel
13.	Diaphragm	EPDM 70
14.	Diaphragm casing locknuts	DIN 933 galvanized steel or AISI 304 L St. steel
15.	Diaphragm plate	P01 steel
16.	Upper diaphragm casing	P11 steel or AISI 304 L St. steel
17.	Diaphragm bush	AISI 303 L St. steel
18.	Diaphragm locknut	ISO 7380 galvanized steel
19.	Springs	C98 UNI 3823
20.	Diaphragm spacer	Galvanized steel
21.	Diaphragm casing bolts	DIN 934 galvanized steel or AISI 304 L St. steel
22.	Airtight	NBR
23.	“O” ring	NBR
24.	Diaphragm rod	AISI 303 L St. steel
25.	Travel indicator plate	Policarbonate
26.	yoke	GGG50 or AISI 304 L St. steel
27.	Stud-bolts	AISI 304 L St. steel
28.	Yoke bolts	DIN 934 galvanized steel or AISI 304 L St. steel
29.	“O” rings	Viton FPM 70

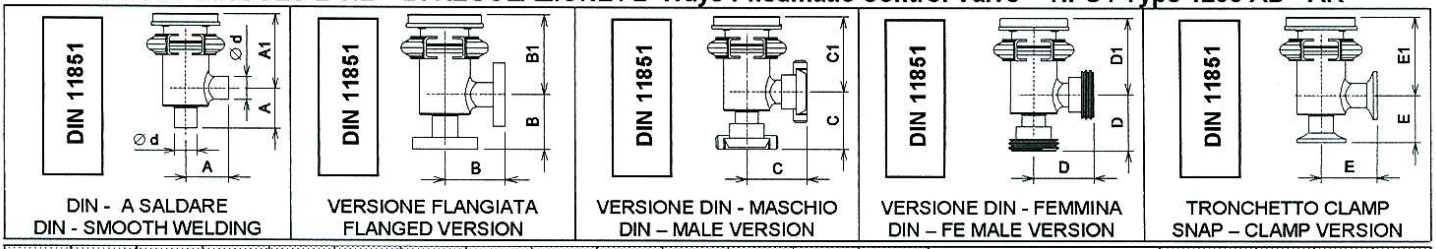
DIMENSIONS (See leaflet DIMHY/I/E)

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.

DIMENSIONI DI INGOMBRO / Dimensions (mm)

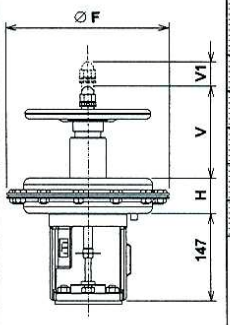
DIMHY/I/E	
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SEGGIO SINGOLO 2 VIE – DI REGOLAZIONE / 2 Ways Pneumatic Control Valve TIPO / Type 1200 AD - AR



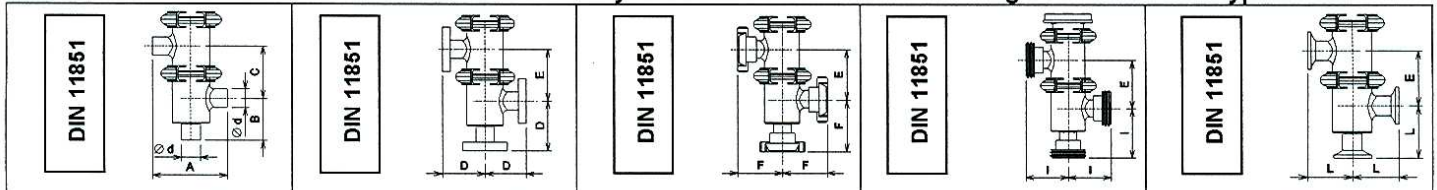
DIN - A SALDARE / DIN - SMOOTH WELDING | VERSIONE FLANGIATA / FLANGED VERSION | VERSIONE DIN - MASCHIO / DIN – MALE VERSION | VERSIONE DIN - FEMMINA / DIN – FE MALE VERSION | TRONCHETTO CLAMP / SNAP – CLAMP VERSION

DN	Ø	A	A1	Ø d	B	B1	C	C1	D	D1	E	E1	V1
15	½"	38	66	18	65	66	43	66	47	66	50.7	66	11
20	¾"	38	66	22	70	66	44	66	50	66	50.7	66	11
25	1"	52	68	28	75	68	59	68	66	68	64.7	68	11
32	1 ¼"	56	71	34	90	71	63	71	70	71	68.7	71	19
40	1 ½"	64	75.5	40	95	75.5	70	75.5	77	75.5	76.7	75.5	19
50	2"	72	76	52	105	66	78	66	85	66	84.7	66	19
65	2 ½"	86	78	70	115	78	93	78	101	78	98.7	78	28
80	3"	109	89.5	85	125	89.5	116	89.5	125	89.5	121.7	89.5	28
100	4"	119	98	101.6	135	98	126	98	137	98	131.7	98	28



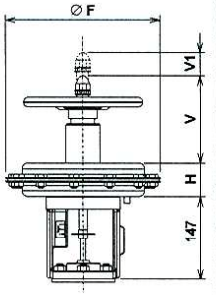
Servom.	H	V	Ø F
T200	70	166	210
T250	70	166	292
T310	95	166	336
T400	119	166	408
T500	119	166	520

TRE VIE MISCELATRICE–DI REGOLAZIONE / 3 Ways Pneumatic Control Valve Mixing Service TIPO / Type 1400 AD-AR



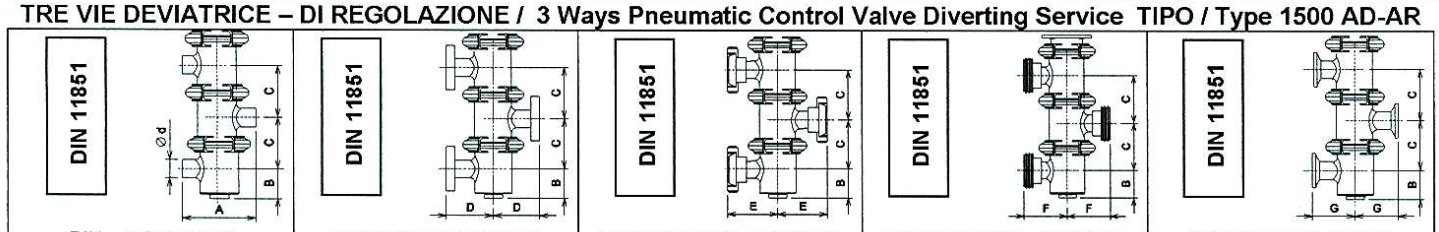
DIN - A SALDARE / DIN - SMOOTH WELDING | VERSIONE FLANGIATA / FLANGED VERSION | VERSIONE DIN - MASCHIO / DIN – MALE VERSION | VERSIONE DIN - FEMMINA / DIN – FE MALE VERSION | TRONCHETTO CLAMP / SNAP – CLAMP VERSION

DN	Ø	A	B	C	Ø d	D	E	F	I	L	V1
15	½"	76	38	66	18	65	66	43	47	50.7	11
20	¾"	76	38	66	22	70	66	44	50	50.7	11
25	1"	104	52	72	28	75	72	59	66	64.7	11
32	1 ¼"	112	56	76	34	90	76	63	70	68.7	19
40	1 ½"	128	64	86	40	95	86	70	77	76.7	19
50	2"	144	72	96	52	105	96	78	85	84.7	19
65	2 ½"	172	86	114	70	115	114	93	101	98.7	28
80	3"	218	109	135	85	125	135	116	125	121.7	28
100	4"	238	119	152	101.6	135	152	126	137	131.7	28



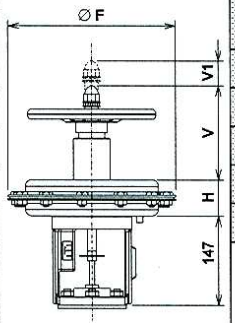
Servom.	H	V	Ø F
T200	70	166	210
T250	70	166	292
T310	95	166	336
T400	119	166	408
T500	119	166	520

TRE VIE DEVIATRICE – DI REGOLAZIONE / 3 Ways Pneumatic Control Valve Diverting Service TIPO / Type 1500 AD-AR



DIN - A SALDARE / DIN - SMOOTH WELDING | VERSIONE FLANGIATA / FLANGED VERSION | VERSIONE DIN - MASCHIO / DIN – MALE VERSION | VERSIONE DIN - FEMMINA / DIN – FE MALE VERSION | TRONCHETTO CLAMP / SNAP – CLAMP VERSION

DN	Ø	A	B	C	Ø d	D	E	F	G	V1
15	½"	76	14	66	18	65	43	47	50.7	11
20	¾"	76	16	66	22	70	44	50	50.7	11
25	1"	104	22	72	28	75	59	66	64.7	11
32	1 ¼"	112	25	78	34	90	63	70	68.7	19
40	1 ½"	128	28	86	40	95	70	77	76.7	19
50	2"	144	34	96	52	105	78	85	84.7	19
65	2 ½"	172	45	114	70	115	93	101	98.7	28
80	3"	218	54	135	85	125	116	125	121.7	28
100	4"	238	61	152	101.6	135	126	137	131.7	28



Servom.	H	V	Ø F
T200	70	166	210
T250	70	166	292
T310	95	166	336
T400	119	166	408
T500	119	166	520

CONFLOW s.p.a.

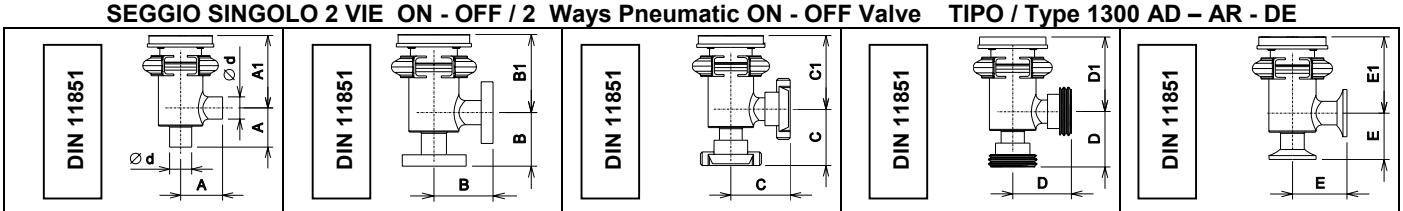
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

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Fax 039/654.018
www.conflow.it

DIMENSIONI DI INGOMBRO / Dimensions (mm)

DIMHY/I/E	
01	2004

SEGGIO SINGOLO 2 VIE ON - OFF / 2 Ways Pneumatic ON - OFF Valve TIPO / Type 1300 AD – AR - DE



DIN - A SALDARE
DIN - SMOOTH WELDING

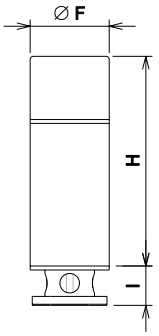
VERSIONE FLANGIATA
FLANGED VERSION

VERSIONE DIN - MASCHIO
DIN – MALE VERSION

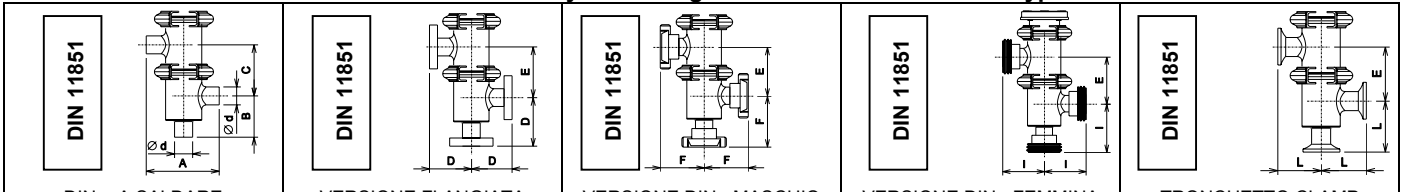
VERSIONE DIN - FEMMINA
DIN – FE MALE VERSION

TRONCHETTO CLAMP
SNAP – CLAMP VERSION

DN	Ø	A	A1	Ø d	B	B1	C	C1	D	D1	E	E1	Ø F	H	I
15	½"	38	66	18	65	66	43	66	47	66	50.7	66	70	230	25
20	¾"	38	66	22	70	66	44	66	50	66	50.7	66	70	230	25
25	1"	52	68	28	75	68	59	68	66	68	64.7	68	70	230	29
32	1 ¼"	56	71	34	90	71	63	71	70	71	68.7	71	88.9	272	42
40	1 ½"	64	75.5	40	95	75.5	70	75.5	77	75.5	76.7	75.5	88.9	272	42
50	2"	72	76	52	105	66	78	66	85	66	84.7	66	88.9	272	42
65	2 ½"	86	78	70	115	78	93	78	101	78	98.7	78	101.6	291	42
80	3"	109	89.5	85	125	89.5	116	89.5	125	89.5	121.7	89.5	141.3	315	55
100	4"	119	98	101.6	135	98	126	98	137	98	131.7	98	141.3	315	55



TRE VIE DEVIATRICE ON - OFF / 3 Ways Diverting Service ON - OFF TIPO / Type 1800 AD - AR - DE



DIN - A SALDARE
DIN - SMOOTH WELDING

VERSIONE FLANGIATA
FLANGED VERSION

VERSIONE DIN - MASCHIO
DIN – MALE VERSION

VERSIONE DIN - FEMMINA
DIN – FE MALE VERSION

TRONCHETTO CLAMP
SNAP – CLAMP VERSION

DN	Ø	A	B	C	Ø d	D	E	F	I	L	Ø F	M	N
15	½"	76	38	66	18	65	66	43	47	50.7	70	230	25
20	¾"	76	38	66	22	70	66	44	50	50.7	70	230	25
25	1"	104	52	72	28	75	72	59	66	64.7	70	230	29
32	1 ¼"	112	56	76	34	90	76	63	70	68.7	88.9	272	42
40	1 ½"	128	64	86	40	95	86	70	77	76.7	88.9	272	42
50	2"	144	72	96	52	105	96	78	85	84.7	88.9	272	42
65	2 ½"	172	86	114	70	115	114	93	101	98.7	101.6	291	42
80	3"	218	109	135	85	125	135	116	125	121.7	141.3	315	55
100	4"	238	119	152	101.6	135	152	126	137	131.7	141.3	315	55

