

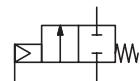


# MINI-VALVES

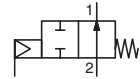
pressure operated  
stainless steel body

food connections to DIN 11851 - DN 10 to 20

NC



NO



2/2  
Series  
Y290

## FEATURES

- High flow due to angled seat design
- Anti-waterhammer design (fluid entry under the disc)
- External threads to DIN 11851
- Vacuum operation up to  $10^{-2}$  mbar
- Piston-type operators 32 mm dia. rotatable through  $360^\circ$
- Valve body pickled in nitric/fluoric acid bath (NET-INOX passivation treatment)
- High performance, maintenance-free stuffing box
- The valves satisfy Pressure Equipment Directive 97/23/EC, article 3.3
- The valves in conformity with IEC 61508 Standard (2010 route 2<sub>H</sub> version) certified with integrity levels: SIL 2 for HFT = 0

## GENERAL

Differential pressure	See «SPECIFICATIONS» [1 bar = 100 kPa]
Maximum allowable pressure	16 bar
Ambient temperature range	-10°C to +60°C
Maximum viscosity	600 cSt (mm <sup>2</sup> /s)
Pilot fluid	Filtered air or water <sup>(1)</sup>
Max. pilot pressure	10 bar
Min. pilot pressure	See below
Pilot fluid temperature	-10°C to +60°C
Response time	See page V402-7

fluids (*)	temperature range	disc seal (*)
air and gas groups 1 & 2 water, oil, liquids groups 1 & 2 and steam	- 10°C to + 184°C	PTFE

## MATERIALS IN CONTACT WITH FLUID

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

Valve body	All AISI 316L
Stuffing box housing	AISI 316L <sup>(2)</sup>
Stem	AISI 316L
Disc	AISI 316L
Stuffing box packing	PTFE chevrons
Wiper seal	FPM
Disc seal	PTFE
Valve body seal	PTFE

## OTHER MATERIALS

Operator	Glass fibre filled PA
Optical position indicator	Optional on NC valves

<sup>(1)</sup> For dia. 32 operators: At service fluid temperatures inside the valve body above 100°C, it is prohibited to pilot the valve with water.

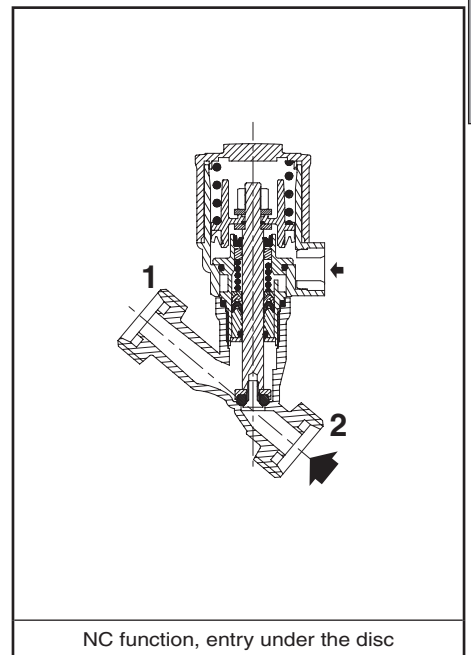
<sup>(2)</sup> NET-INOX passivation treatment included.

## SPECIFICATIONS

piping		flow coefficient Kv		pilot pressure (bar)		operating pressure differential (bar)				operator diameter (mm)	catalogue number
pipe size	DN	(m <sup>3</sup> /h)	(l/min)	min.	max.	min..	max.				
DIN 11851							air, inert gas, aggressive fluids (*)	water, oil, liquids, aggressive liquids (*)	steam (*) (≤184°C)		
<b>NC - Normally closed, entry under the disc <sup>(3)</sup></b>											
RD 28 x 1/8	10	2,8	47	4	10	0	16	16	10	32	Y290A791
RD 34 x 1/8	15	4,1	68	4	10	0	12	12	10	32	Y290A792
RD 44 x 1/6	20	6,5	108	4	10	0	6	6	6	32	Y290A793
<b>NO - Normally open, entry under the disc</b>											
RD 28 x 1/8	10	2,8	47	IX (*)	10	0	16	16	10	32	Y290A794
RD 34 x 1/8	15	4,1	68	IX (*)	10	0	16	16	10	32	Y290A795
RD 44 x 1/6	20	6,5	108	IX (*)	10	0	16	16	10	32	Y290A796
<b>NC - Normally closed, entry above the disc (version recommended for rapid-cycling steam applications)</b>											
RD 28 x 1/8	10	2,8	47	X (*)	10	0	10	-	10	32	Y290A797
RD 34 x 1/8	15	4,1	68	X (*)	10	0	10	-	10	32	Y290A798
RD 44 x 1/6	20	6,5	108	X (*)	10	0	10	-	10	32	Y290A799

(\*) Minimum pilot pressure varies with differential pressure, see page V402-7.

<sup>(3)</sup> Calculation of the minimum pilot pressure at max. ΔP with allowable backpressure, contact us (backpressure not recommended with liquids as waterhammer may occur).



NC function, entry under the disc

D

### OPTIONS AND ACCESSORIES (see page V435/V436)

- Optical position indicator, NC function
- Oxygen service, pressure limited to 15 bar, temperature limited to + 60°C
- Vacuum applications up to 1,33 10<sup>-3</sup> mbar
- ATEX 94/9/EC versions for potentially explosive atmospheres
- Other pipe connections are available on request

### INSTALLATION

- The valves can be mounted in any position without affecting operation
- Compatible with ASTM 1, 2 and 3 oils
- Check temperature range of valve body and solenoid pilot valves for suitability. For probability of failure, contact us
- Pipe connections have standard threads to DIN 11851
- Installation/maintenance instructions are included with each valve

### SPARE PARTS KITS

DN	spare parts kit no.
10	<b>C140100</b>
15	<b>C140101</b>
20	<b>C140102</b>

### ORDERING EXAMPLES:

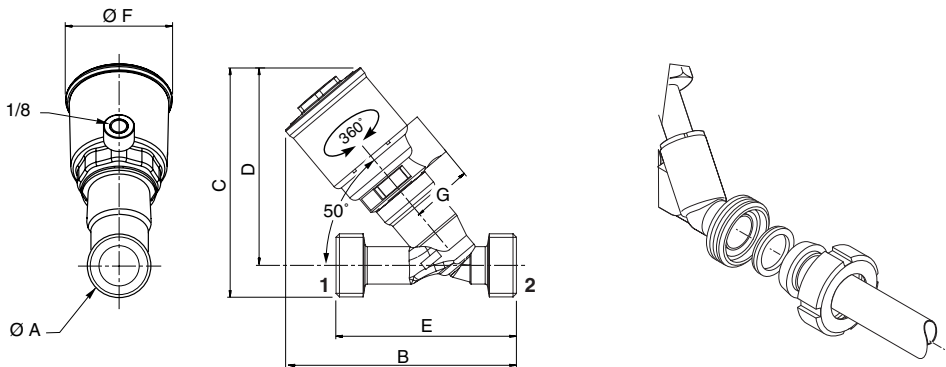
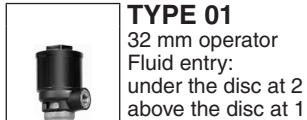
	Y	290	A	791	
	Y	290	A	792	VI
	Y	290	A	799	

pipe thread \_\_\_\_\_  
 basic number \_\_\_\_\_  
 suffix \_\_\_\_\_

### ORDERING EXAMPLES KITS:

	C140102
basic number	_____

### DIMENSIONS (mm), WEIGHT (kg)



type	operator diameter	ØA	B	C	D	E	ØF	G	weight <sup>(1)</sup>
01	32 mm	RD 28 x 1/8	102,5	101,7	87,7	80	43,5	27	0,41
		RD 34 x 1/8	104,9	105,8	88,8	90	43,5	27	0,46
		RD 44 x 1/6	109,6	110,4	88,4	110	43,5	27	0,68

<sup>(1)</sup> Weight of valve without pilot.

Solenoid pilot valves: see V439 (32 mm operator)

