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Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it/./FilesProdotti/80843-Angleseatvalves-IT-EN-DE-ES-0522.pdf in **/var/www/vhost/www.omal.it/htdocs/prodotto-printable.php** on line **65**

Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it/./FilesProdotti/Certificato-PED-DNV.pdf in **/var/www/vhost/www.omal.it/htdocs/prodotto-printable.php** on line **65**

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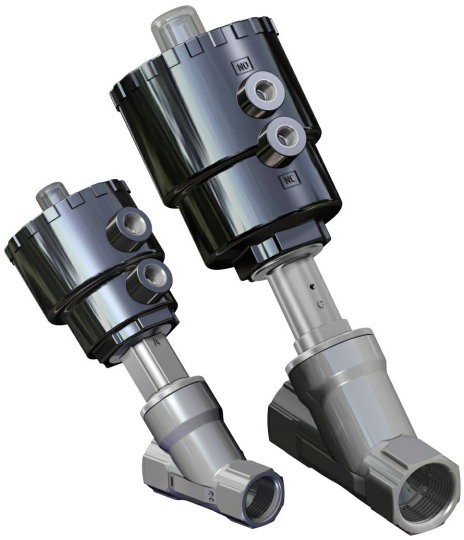
Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it/./FilesProdotti/UIT00A81OX-Aresezeus-ossigeno-10-18-IT-EN.pdf in **/var/www/vhost/www.omal.it/htdocs/prodotto-printable.php** on line **65**

ARES-ATENA pneumatic valve



Macro Pneumatic valves

Category Angle seat valves

Subcategory ARES-ATENA

benefits

ARES

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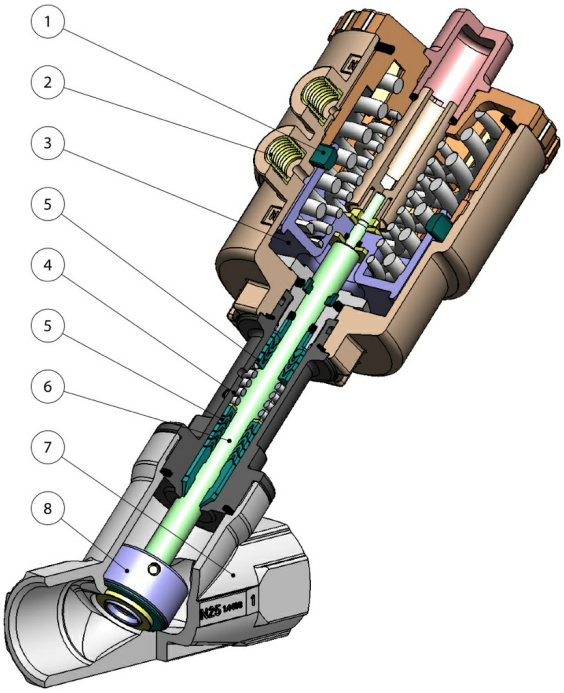


1. Seal placed in the cylinder rather than on the piston.
Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss).
Less wear of the seal.

2. Piloting head inserts in 303 S.S.
Increases considerably the corrosion resistance caused by external agents.

3. Starting from DN63 metal piston with CHEMICAL NICKEL coating (10-15 micron).
Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV).

4. Seals pre-loaded by spring.
Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.
Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions.

5. CHEVRON seals (V shape) with 5 seals in the lower part of the spring and 3 seals in the upper part.
It ensures a perfect tightness even after a high number of cycles

6. Rolled shaft.
Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft.

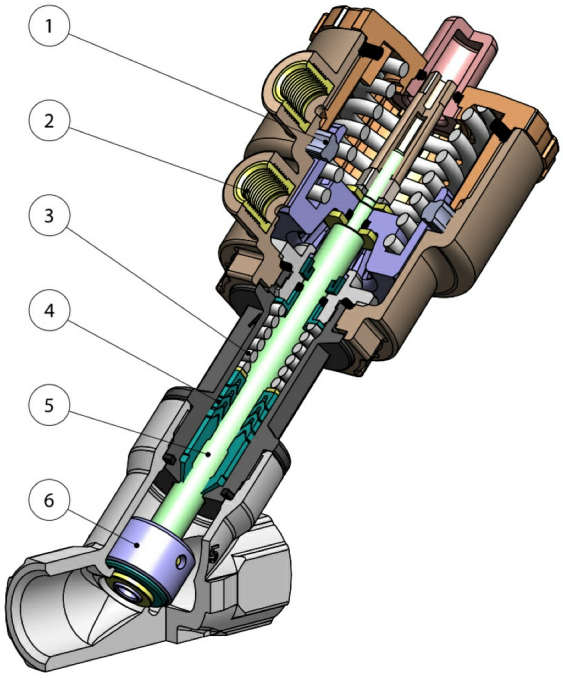
7. Longer face to face.
Better fluidodynamic with reduction of the turbulences.

8. Oscillating / self-aligning shutter.
It fits perfectly to the valve body ensuring the maximum tightness.

ATEX Certificate.
Installation is allowed in a potential explosive environment.

PED Certificate.
Full compliance with European Safety Standards for Pressure Equipment.

ATENA



1. Seal placed in the cylinder rather than on the piston.
Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss).
Less wear of the seal.

2. Piloting head inserts in 303 S.S.
Increases considerably the corrosion resistance caused by external agents.

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Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions.

4. CHEVRON seals (V shape) with 5 seals in the lower part of the spring and 3 seals in the upper part.
It ensures a perfect tightness even after a high number of cycles

5. Rolled shaft.
Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft.

6. Oscillating / self-aligning shutter.
It fits perfectly to the valve body ensuring the maximum tightness.

ATEX Certificate.
Installation is allowed in a potential explosive environment.

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features

GENERAL FEATURES:
Threaded valve ends, as per EN 10226-1 Rp (ex ISO 7/1) for Ares valves; ISO 228/1 for Zeus valves. Other types available on request.
Assembling is possible in all positions: upright, flat or angled.
Range available from 3/8" to 2" in the Double Acting versions, Spring Return N.C. from above and below the plug, Spring Return N.O. from below the plug.
According to 2014/68/EU "PED".
2014/34/EU ATEX configuration to request at time of order.
The variations in the actioning of the valve, the several combinations and the possibility to intercept the fluid from above or below the plug, originate multiple versions of the automatic valve.
In the table below are indicated the standard versions with the main parameters.
On the basis of the kind of valve and the variations of pressure ΔP that must be intercepted, the necessary control pressure can be individuated, and consequently, the code for the corresponding valve.
On request: versions for vacuum and oxygen service.

CONTROL MEDIA:
Driving media: compressed air, lubricated or dry, gas or neutral media.
Ambient temperature: -10°C to +60°C

OPERATING MEDIA:
Air,water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with A 351 CF8M O CuSn5Zn5Pb5-B).
Pressure from 0 to 16 / 25 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen (see following pages).
Temperature from –10°C to 180°C.
Max. viscosity 600 cst (mm2/s).

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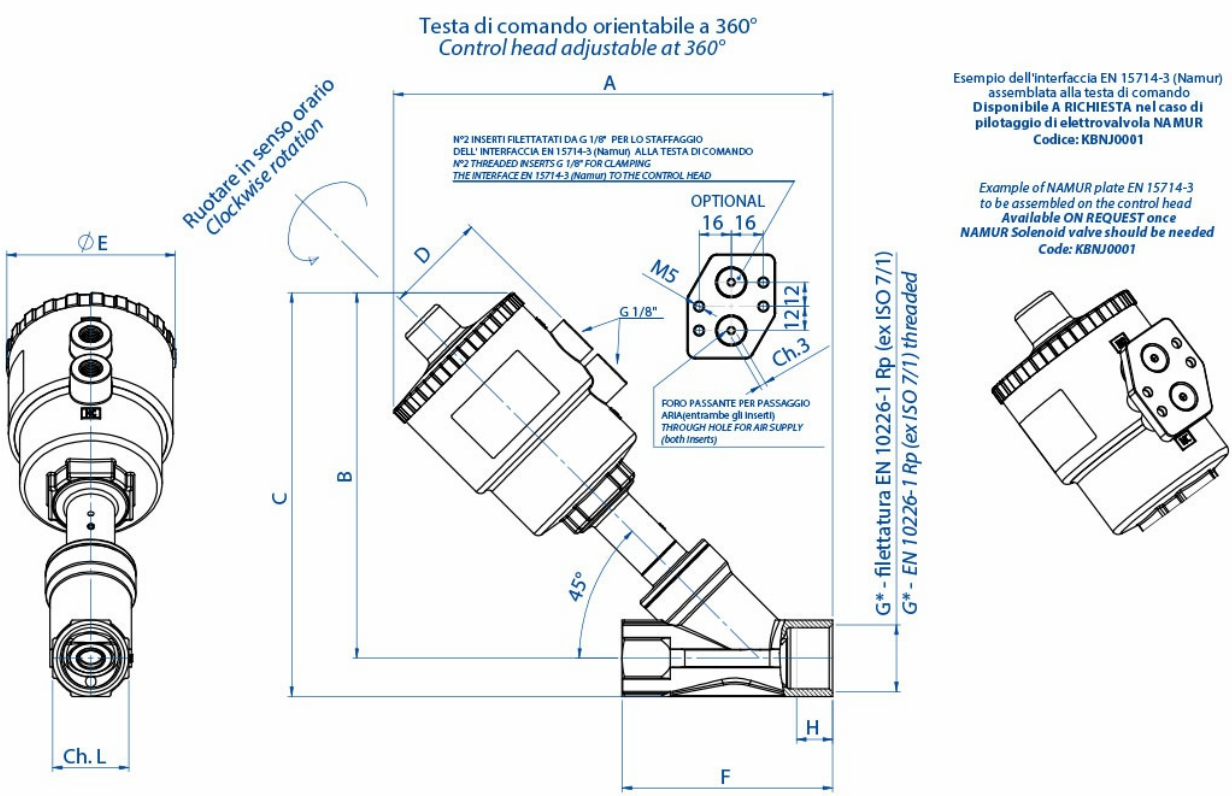
dimensions

ARES



ARES DIMENSIONS										
DN [mm]	G * [inch]	ACTUATOR	A	B	C	D	øE	F	ch. L	H
15	3/8"	Ø 50	190	156,5	169	44	70	85	25	12
15	1/2"	Ø 50	190	156,5	169	44	70	85	25	15
20	3/4"	Ø 50	195	160,5	176	44	70	95	31	16,3
20	3/4"	Ø 63	213	178,5	194,4	50,5	84,4	95	31	16,3
25	1"	Ø 50	200	164	183	44	70	105	38	19,5
25	1"	Ø 63	219	183	202	50,5	84,4	105	38	19,5
25	1"	Ø 90	259	223	242	66,2	116,4	105	38	19
32	1"1/4	Ø 50	208	167,5	191	44	70	120	47	19
32	1"1/4	Ø 63	226	185,5	209	50,5	84,4	120	47	19
32	1"1/4	Ø 90	266	225,5	249	66,2	116,4	120	47	18
32	1"1/4	Ø 110	302	261,5	285	77,4	140,6	120	47	18
40	1"1/2	Ø 63	231	191	218	50,5	84,4	130	54	18
40	1"1/2	Ø 90	271	231	258	66,2	116,4	130	54	20
40	1"1/2	Ø 110	307	266	294	77,4	140,6	130	54	20
50	2"	Ø 63	245	200	233	50,5	84,4	150	66	20
50	2"	Ø 90	285	241	274	66,2	116,4	150	66	20
50	2"	Ø 110	321	276	310	77,4	140,6	150	66	20
*On request NPT-threading										

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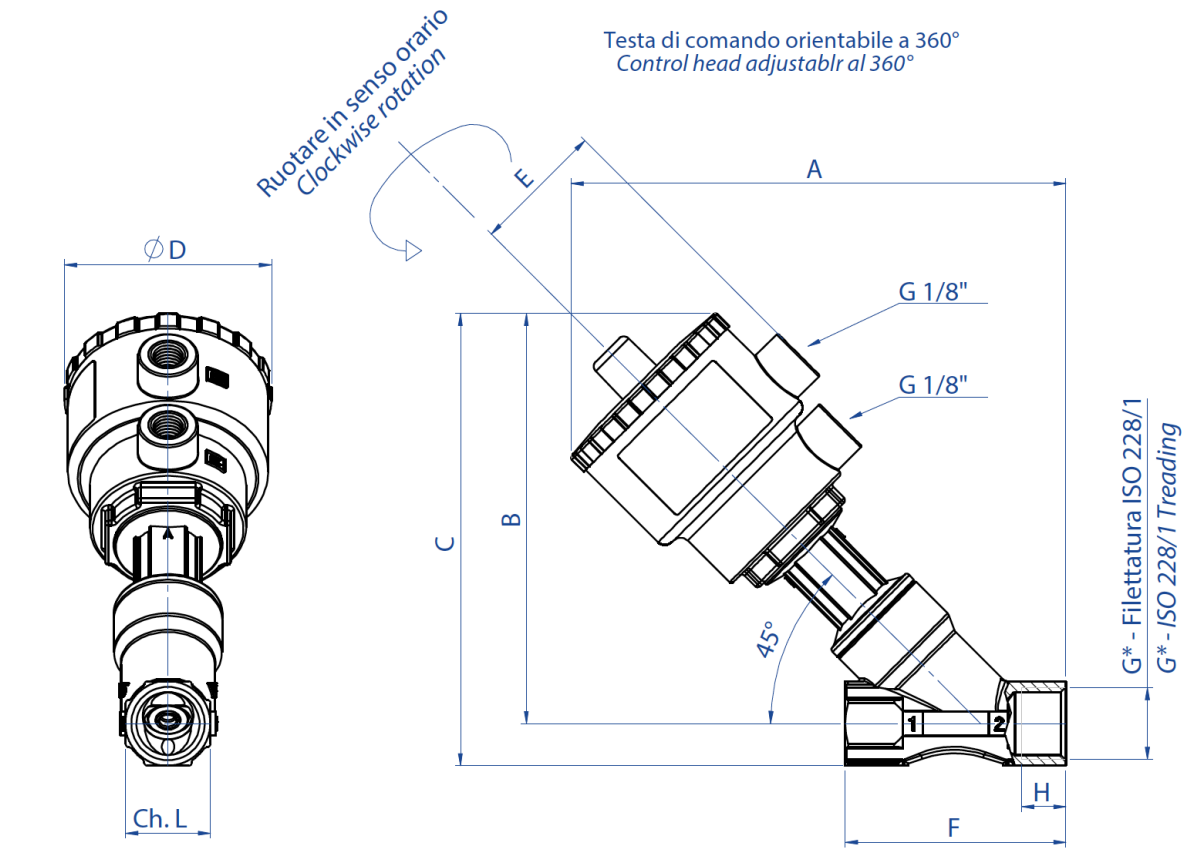
ATENA HEAD Ø40



Per la testa Ø40 non è disponibile la basetta Namur.
For actuator Ø40 namur plate is not available.

ATENA DIMENSIONS

			CF8M version							
DN [mm]	G * [inch]	ACTUATOR	A	B	C	øD	E	F	H	ch. L
15	3/8"	Ø 40	144	121	134	61	39	65	12	25
15	1/2"	Ø 40	144	121	134	61	39	65	11	25
20	3/4"	Ø 40	151	128	143	61	39	75	14	31
*On request NPT-threading										

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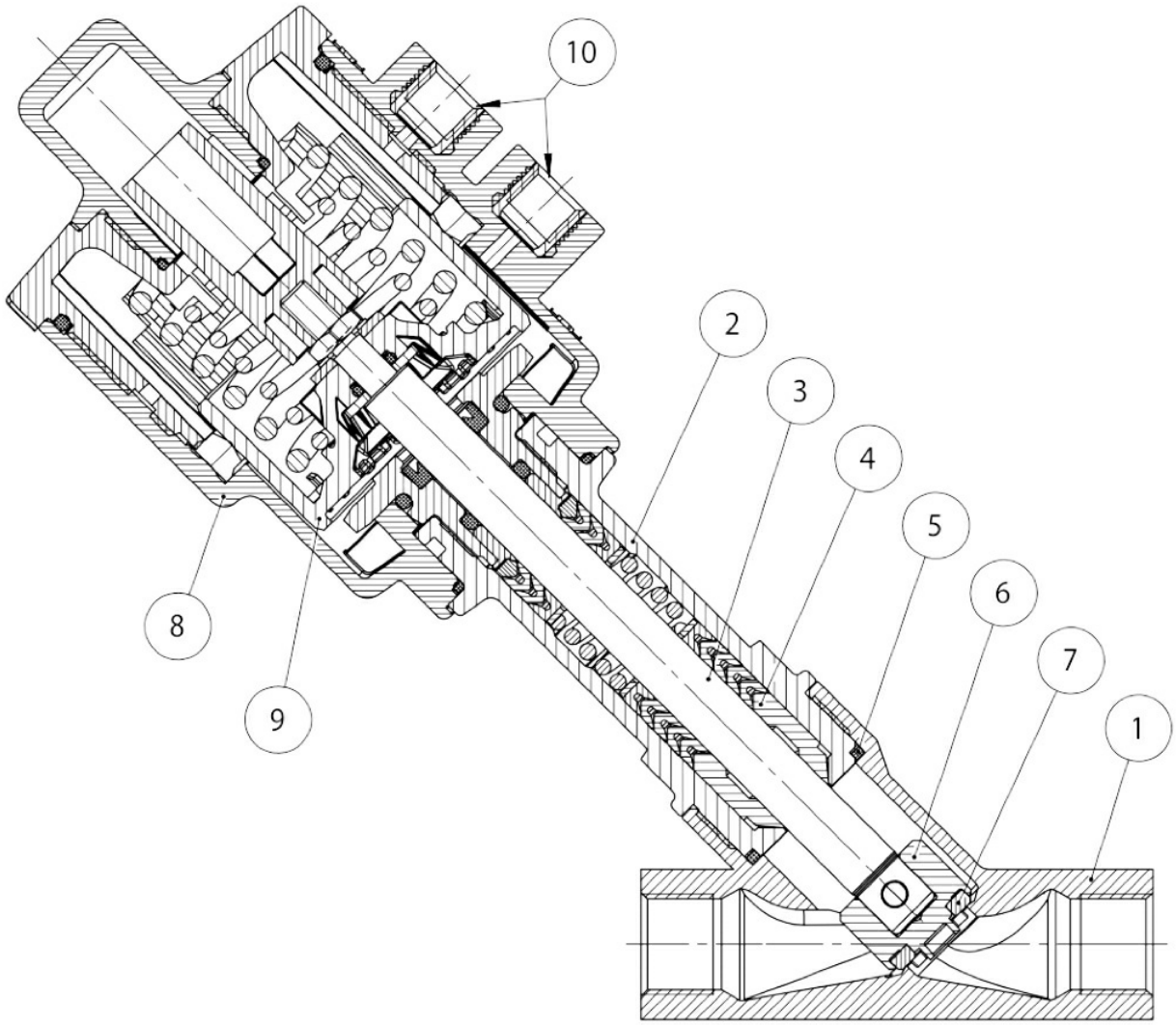
materials

ARES



N°	ARES MATERIALS	
1	Valve body	A351-CF8M (316 S.S.)
2	Sleeve	A351-CF8M (316 S.S.)
3	Stem	316L S.S.
4*	Stem seals	PTFE-CF
5*	Body seal	GRAPHITE
6	Plug	316L S.S.
7	Plug seal	PTFE
8	Actuator cylinder	Poliammide PA 66 + GF 30%
9	Piston	Brass chem-nickel (PBT + GF 20% head ø40 - ø50)
10	Threading inserts	303 S.S.
	Namur plate (OPTIONAL)	PA66 +GF30%, brass inserts
* For high purity application are allowable stem seals in virgin PTFE and body seals in Peek		

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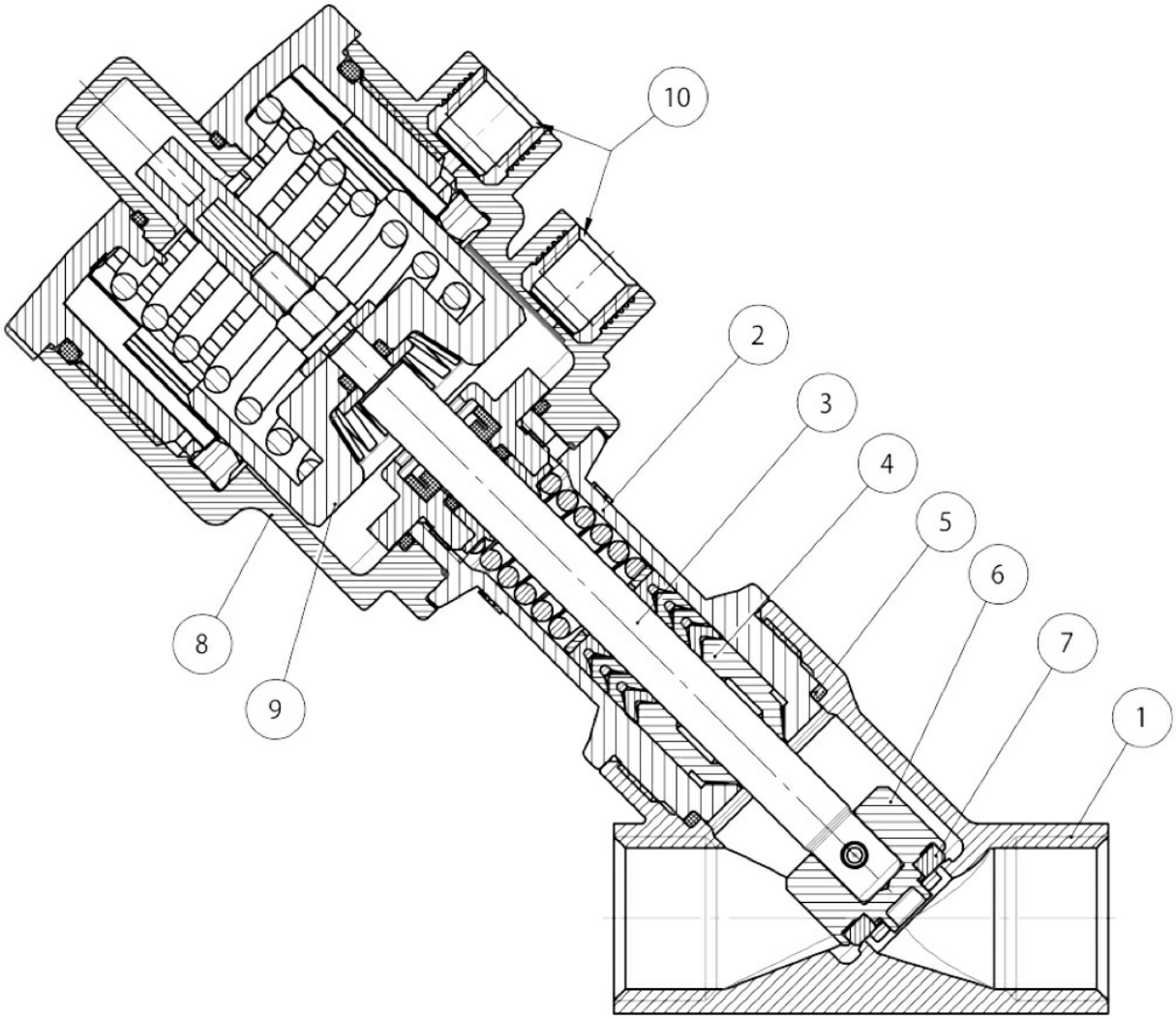
ATENA



N°	ATENA MATERIALS	
1	Valve body	A351-CF8M (316 S.S.)
2	Sleeve	A351-CF8M (316 S.S.)
3	Stem	316L S.S.
4*	Stem seals	PTFE-CF
5*	Body seal	GRAPHITE
6	Plug	316L S.S.
7	Plug seal	PTFE
8	Actuator cylinder	Poliammide PA 66 + GF 30%
9	Piston	PBT + GF 20%
10	Threading inserts	303 S.S.
* For high purity application are allowable stem seals in virgin PTFE and body seals in Peek		

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diagrams and breakaway torque

ARES

Diagramma pressione/temperatura
Temperature/pressure diagram

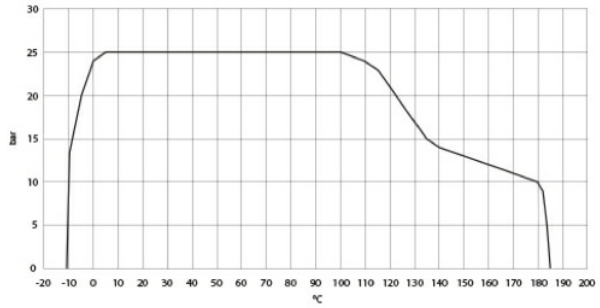
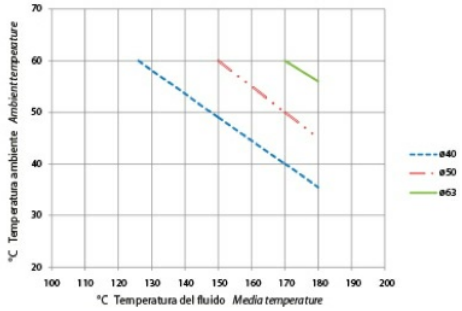


Diagramma T ambiente/T fluido intercettabile
Ambient temperature/Media temperature diagram



ATENA

Diagramma pressione/temperatura
Temperature/pressure diagram

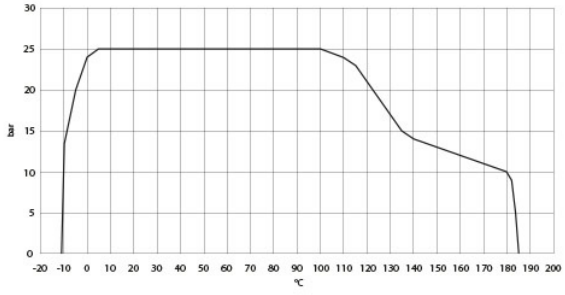
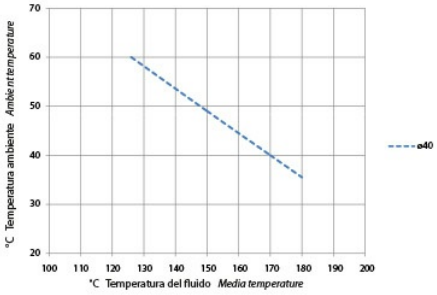


Diagramma T ambiente/T fluido intercettabile
Ambient temperature/Media temperature diagram



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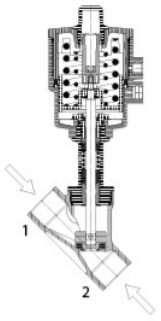
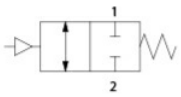
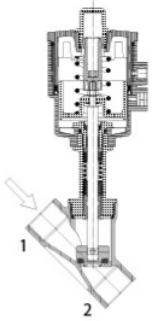
METHODS OF USE



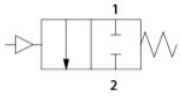
N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.
Ingresso sopra l'otturatore per fluidi comprimibili.
N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.
Flow from above the plug for condensable media.

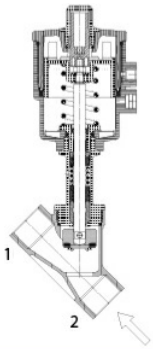




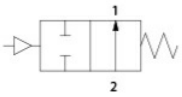
N.C. Normalmente chiusa con ingresso sopra l'otturatore.
Ingresso sopra l'otturatore per fluidi comprimibili.

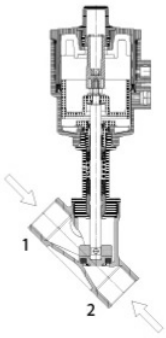
N.C. Normally Closed with the flow from above the plug.
Flow from above the plug for condensable media.



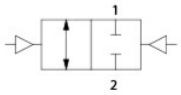


N.A. Normalmente aperta con ingresso sotto l'otturatore
N.O. Normally Open with flow from below the plug





Doppio effetto bidirezionale
Double Acting bidirectional



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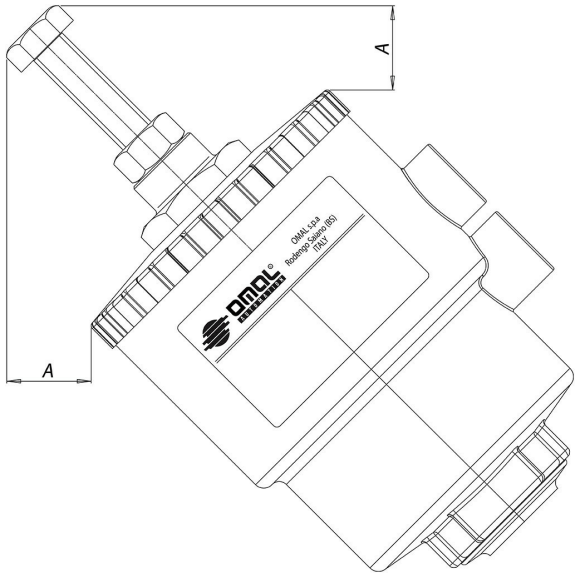
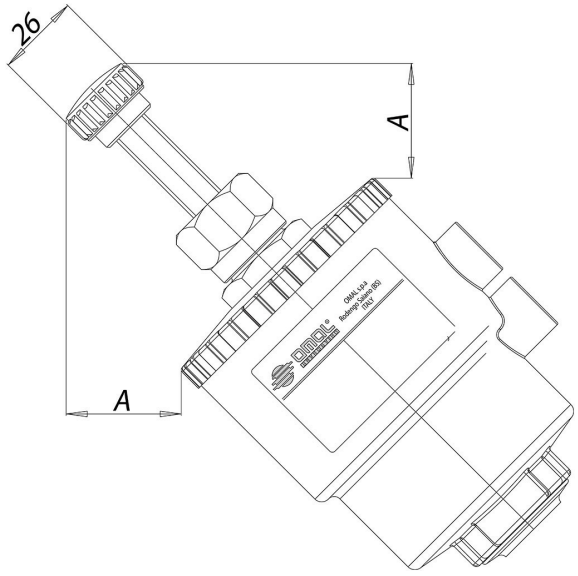
accessories



Stroke limiter
It allows to limit the plug run in opening phase, therefore it regulates the flow. Available on all versions. In spring return normally open version it can be used as an emergency control.

Control	A mm	Code
⌀ 50	25,5	KLJL0016
⌀ 63	21,5	KLJL0018
⌀ 90	5,2	KLJL0021
⌀ 110	5,9	KLJL0023

Not available with ⌀ 40 head.

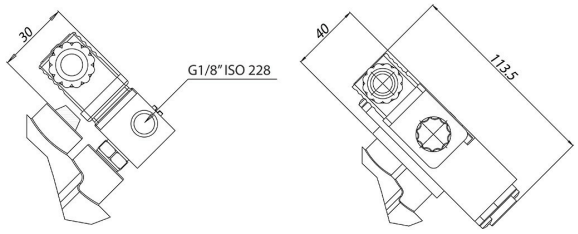


Emergency manual override
It allows to open the valve in emergency cases (lack of pilot fluid, machinery damaged, lack of piloting signal). It is available on all normally closed valves.

Control	A mm	Code
⌀ 50	35,8	KLJA0016
⌀ 63	35,8	KLJA0018
⌀ 90	29,5	KLJA0021
⌀ 110	29,5	KLJA0023

Not available with ⌀ 40 head

Electro-pilot 3/2 - Solenoid valve 3/2 - 5/2



Control solenoid valve
Electro-pilot 3/2 for direct assembling.
Body and reel positionable at 360°.
Standard manual control.
Solenoid valve (NAMUR) sets for selection between function 5/2 or 3/2, achievable by mounting the corresponding plate (both supplied).
Room temperature: from –10°c to +50°C.

Voltage	24 Vac	115 Vac	230 Vac	24 Vdc
Electro-pilot	EP415024	EP415110	EP415220	EP412024

Voltage	24 Vac	115 Vac	230 Vac	24 Vdc
NAMUR Solenoid valve*	ER8188A2	ER8188A4	ER8188A5	ER8188C2
NAMUR interface	KBNJ0001			

* To be usedy with NAMUR interface only

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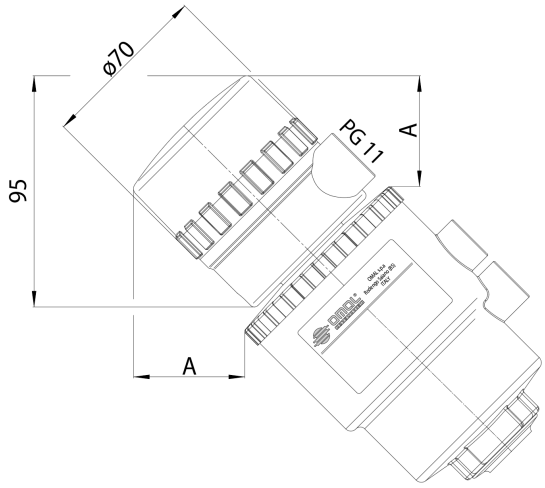
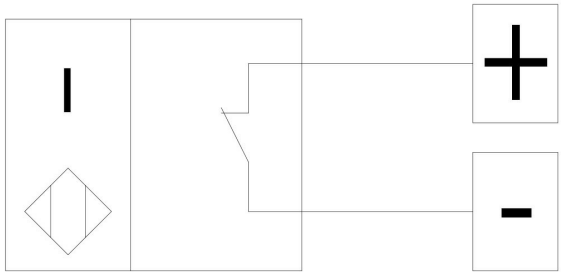
Posizione orientabile sui 360°
Positionable at 360°



Limit switch box
The control box to check the open/close positions with two mechanical limit switches is suitable for assembling on all the range of valves with actuators ø50 - ø63 - ø90 - ø110.
The terminals to connect the solenoid valve and the visual indicators provided with led are optional.
Level of protection: IP 65.
Room temperature: from –20° C to +70°C.
Access lead nr. 1 PG11.
Body material: polyamide (cap in trasparent polymethacrylate).

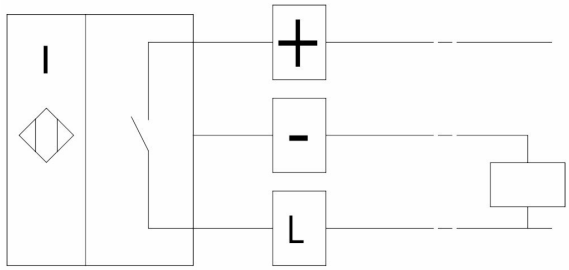
Control	A mm
ø 50	52,1
ø 63	47,5
ø 90	37,7
ø 110	29,5

AVAILABLE LIMIT SWITCH



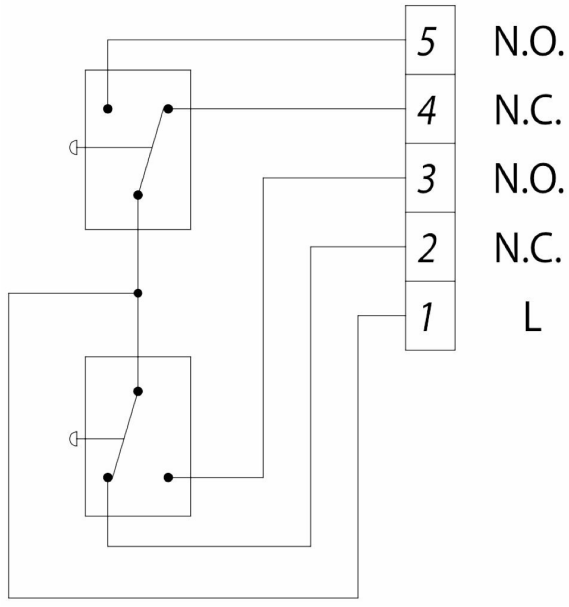
Inductive limit switches NAMUR EExia
Nominal voltage: 8 Vdc
Consumes: working ≤1mA; resting ≥3 mA
Working temperature: from –20°C to +70°C

Configuration	Code
1 Limit switch at the top: open valve	KSIN9A0xx
1 Limit switch at the bottom: close valve.	KSIN9C0xx
2 Limit switch open and close valve	KSIN920xx



Proximity limit switches
Nominal voltage: 10÷30 Vdc
Consumes: 15mA;
Working temperature: from –20°C to +70°C

Configuration	Code
1 Limit switch at the top: open valve	KSI09A0xx
1 Limit switch at the bottom: close valve.	KSI09C0xx
2 Limit switch open and close valve	KSI0920xx



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Mechanical limit switches
Limit switch at the top: open valve
Limit switch at the bottom: close valve
Max. capacity: 5A 250 Vac; 1A 250 Vdc

Configuration	Code
2 Limit switch	KSM0C20xx

xx = Ø control heads
16 = Ø50
18 = Ø63
21 = Ø90
23 = Ø110

documents

Istruzioni

ISTRUZIONI USO 8_0843
ISTRUZIONI ATEX 8_0489-01
ISTRUZIONI USO UIT00A81OX

Certificati

PED