

ARES flanged pneumatic valve



Macro Pneumatic valves

Category Angle seat valves

Subcategory ARES with special ends

features

GENERAL FEATURES:

Body valve material: A351-CF3M (316L S.S.).

Valve ends: see code plan.

Assembling is possible in all positions: upright, flat or angled.

Range available from DN 15 to DN 50 in the Double Acting versions, Spring

Return N.C. from above and below the plug, Spring Return N.O. from below the plug.

The performance and the pressure's diagrams are the same as per Standard versions but limited at PN16

On request: versions for vacuum and oxygen service 2014/34/EU ATEX configuration to request at time of order.

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 CF3M (316L S.S.) or PTFE).

Pressure from 0 to 16 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.

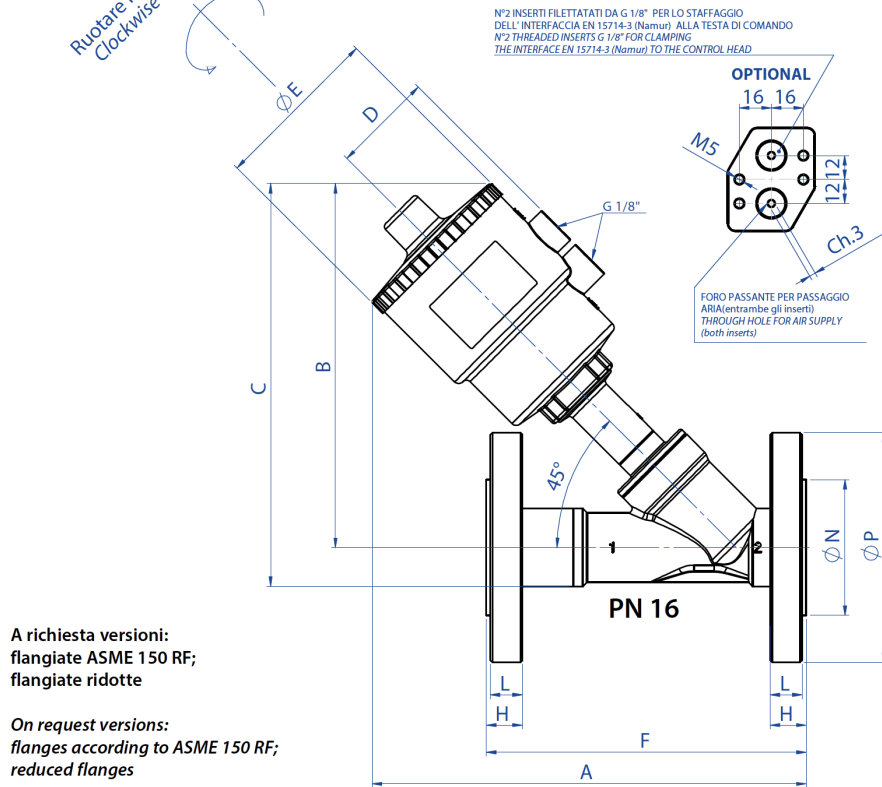
Max. viscosity 600 cst (mm²/s).

dimensions

Flanged UNI EN1092-1

Testa di comando orientabile a 360°
 Control head adjustable at 360°

Ruotare in senso orario
 Clockwise rotation

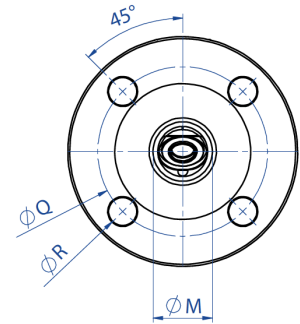
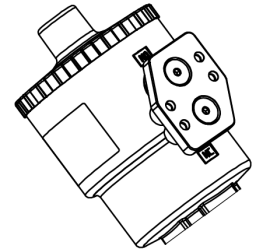


A richiesta versioni:
 flangiate ASME 150 RF;
 flangiate ridotte

On request versions:
 flanges according to ASME 150 RF;
 reduced flanges

Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
 Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR
 Codice: KBNJ0001

Example of NAMUR plate EN 15714-3 to be assembled on the control head
 Available ON REQUEST once
 NAMUR Solenoid valve should be needed
 Code: KBNJ0001



ANSI 150RF FLANGED VALVE FACE TO FACE ASME B16.10 A1							
DN [mm]	H	L	ØN	ØP	ØQ	ØR	F
15	11,3	9,7	35,1	89,0	60,5	16,0	108,0
20	12,8	11,2	42,9	99,0	69,8	16,0	117,0
25	15,0	13,4	50,8	108,0	79,2	16,0	127,0
32	15,8	14,2	63,5	117,0	88,9	16,0	140,0
40	18,0	16,4	73,0	127,0	98,6	16,0	165,0
50	19,1	17,5	91,9	152,0	120,6	19,0	178,0

REDUCED FLANGES VALVES						
DN [mm]	H	ØP	ØQ	ØR	F	
15	7,0	70,0	50,0	7,0	104,5	
20	8,0	75,0	55,0	9,0	119,5	
25	9,0	80,0	60,0	9,0	134,5	
32	9,0	90,0	70,0	9,0	149,5	
40	10,0	100,0	80,0	9,0	164,5	
50	10,0	110,0	90,0	11,0	179,5	

On request versions:
 flanges according to ASME 150 RF;
 reduced flanges

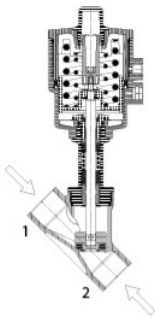
DIMENSIONS

DN [mm]	Control head	A	B	C	D	øE	F	H	L	øM	øN	øP	øQ	øR
15	ø 50	182,5	156	203,5	44	70	130	16	14	18,1	45	95	65	14
20	ø 50	192,3	160	212,5	44	70	150	18	16	23,7	58	105	75	14
20	ø 63	210,3	178	230,5	50,5	84,4	150	18	16	23,7	58	105	75	14
25	ø 50	197,36	164	221,5	44	70	160	18	16	29,7	68	115	85	14
25	ø 63	216,36	182	239,5	50,5	84,4	160	18	16	29,7	68	115	85	14
25	ø 90	256,36	222	279,5	66,2	116,4	160	18	16	29,7	68	115	85	14
32	ø 50	202,5	168	238	44	70	180	18	16	38,4	78	140	100	18
32	ø 63	220,5	186	256	50,5	84,4	180	18	16	38,4	78	140	100	18
32	ø 90	260,5	226	296	66,2	116,4	180	18	16	38,4	78	140	100	18
32	ø 110	296,5	261	331	77,4	140,6	180	18	16	38,4	78	140	100	18
40	ø 63	228,6	190	265	50,5	84,4	200	18	15	44,3	88	150	110	18
40	ø 90	268,6	230	305	66,2	116,4	200	18	15	44,3	88	150	110	18
40	ø 110	304,2	266	341	77,4	140,6	200	18	15	44,3	88	150	110	18
50	ø 63	241,87	200	282,5	50,5	84,4	230	18	15	55,7	102	165	125	18
50	ø 90	281,87	240	322,5	66,2	116,4	230	18	15	55,7	102	165	125	18
50	ø 110	317,87	276	358,5	77,4	140,6	230	18	15	55,7	102	165	125	18

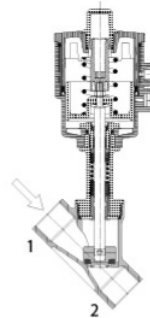
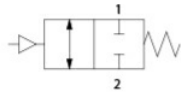
Suggested executions are in bold. Other combinations on request.

specifications

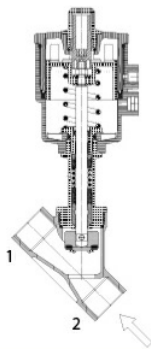
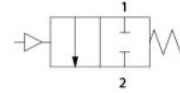
METHODS OF USE



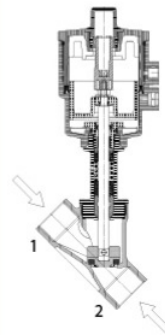
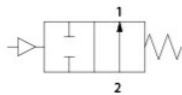
N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.
 Ingresso sopra l'otturatore per fluidi comprimibili.
 N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.
 Flow from above the plug for condensable media.



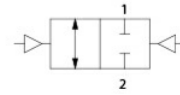
N.C. Normalmente chiusa con ingresso sopra l'otturatore.
 Ingresso sopra l'otturatore per fluidi comprimibili.
 N.C. Normally Closed with the flow from above the plug.
 Flow from above the plug for condensable media.

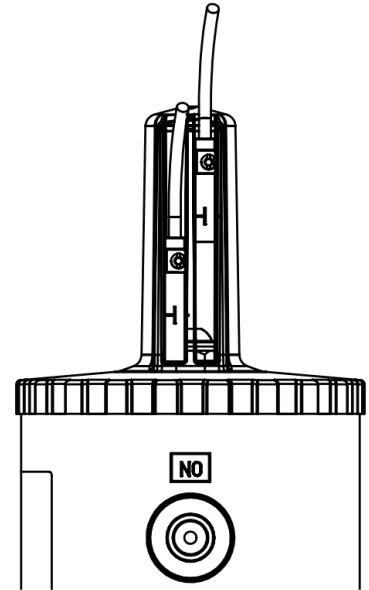
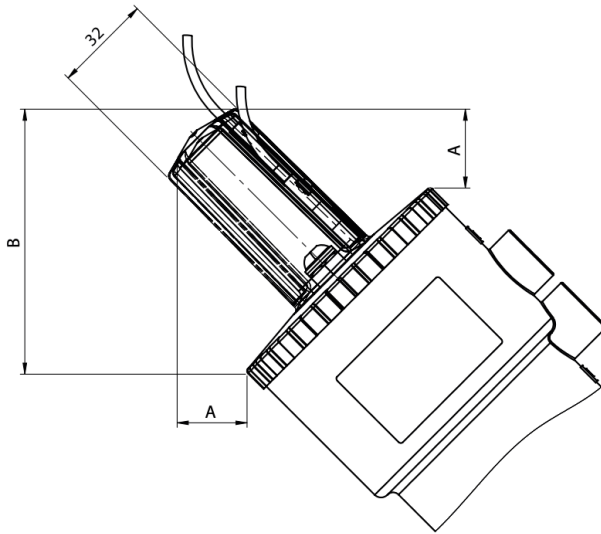


N.A. Normalmente aperta con ingresso sotto l'otturatore
 N.O. Normally Open with flow from below the plug



Doppio effetto bidirezionale
 Double Acting bidirectional

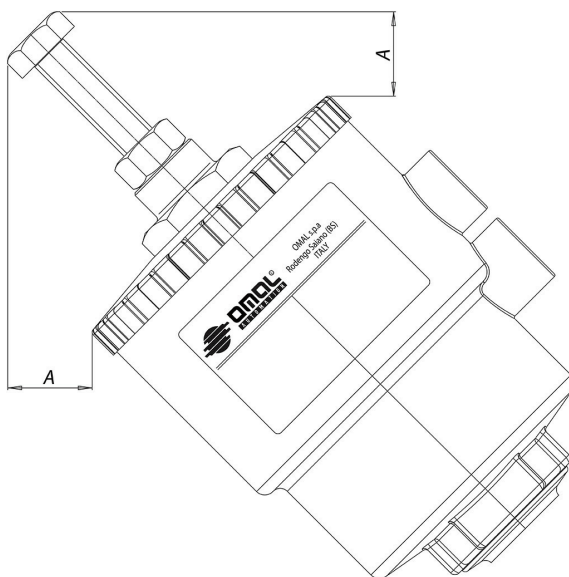


accessories
Limit switch cap


The special cap, made of transparent plastic material, has two grooves for fast attachment and adjustment of magnetic limit switches. The limit switches have an internal LED visible when the limit switch is energized. REED and HALL effect type limit switches are available with free connection or already wired M12. The cap has an IP68 protection rating. Attention: to enable proper fixing in the limit switch housing, the visual indicator, when the valve is fully open, does not reach the end of the plug. The limit switches must be set once the valve is installed in the system.

Kit code	Head size	A mm	B mm
KFJM16	∅ 50	30	77
KFJM18	∅ 63	26	87
KFJM21	∅ 90	15	97
KFJM23	∅ 110	8	107

Kit does not include limit switches.

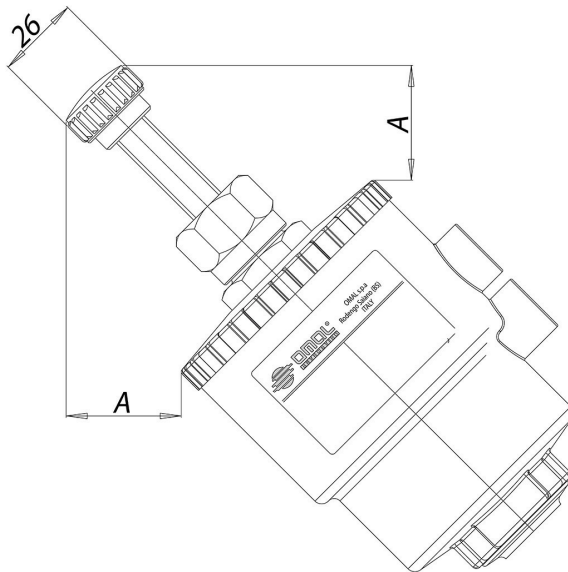


Stroke limiter

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.



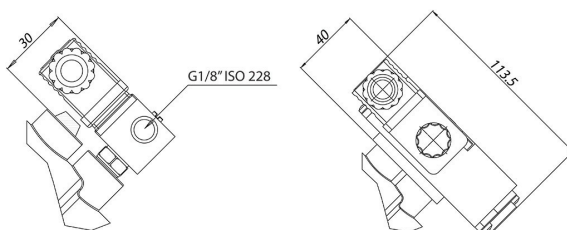
Emergency manual override

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



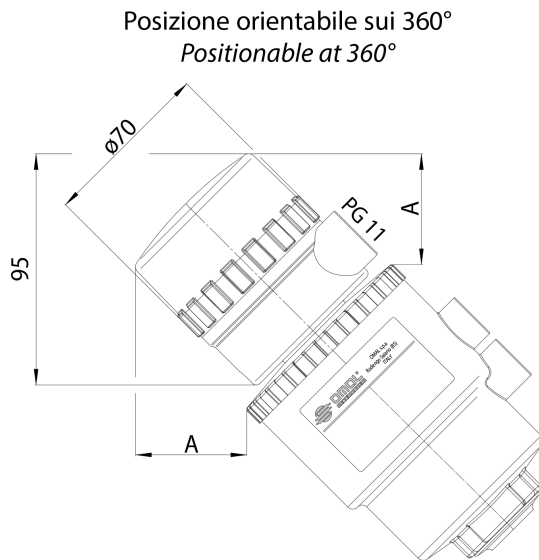
Control solenoid valve

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 Not available with ø 40 head			

* To be used with NAMUR interface only

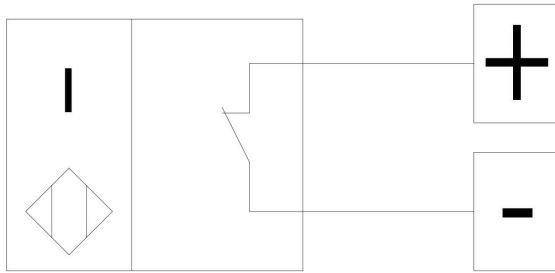


Limit switch box

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



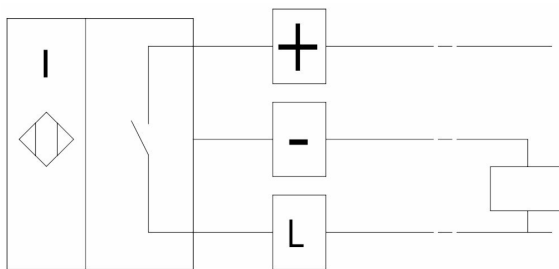
Inductive limit switches NAMUR EExia

Nominal voltage: 8 Vdc

Consumes: working $\leq 1\text{mA}$; resting $\geq 3\text{mA}$

Working temperature: from -20°C to $+70^{\circ}\text{C}$

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



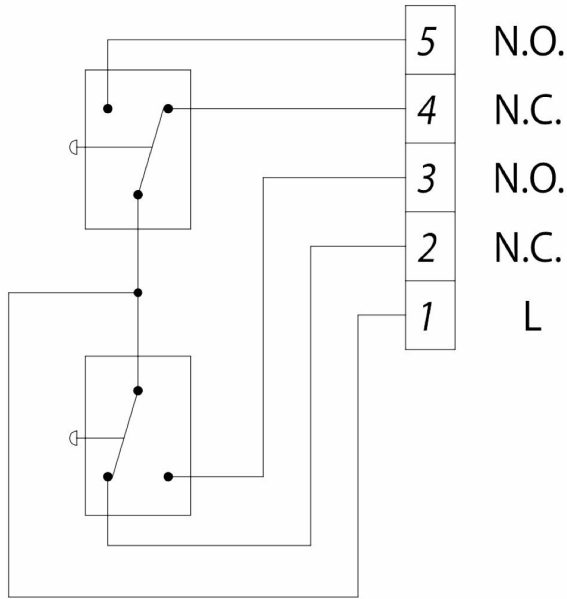
Proximity limit switches

Nominal voltage: $10\pm 30\text{Vdc}$

Consumes: 15mA;

Working temperature: from -20°C to $+70^{\circ}\text{C}$

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



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

Certificati

ATEX - Pneumatic Valves

PED

UKCA

Istruzioni

ISTRUZIONI USO 8_0843