

## ARES weld ends 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).

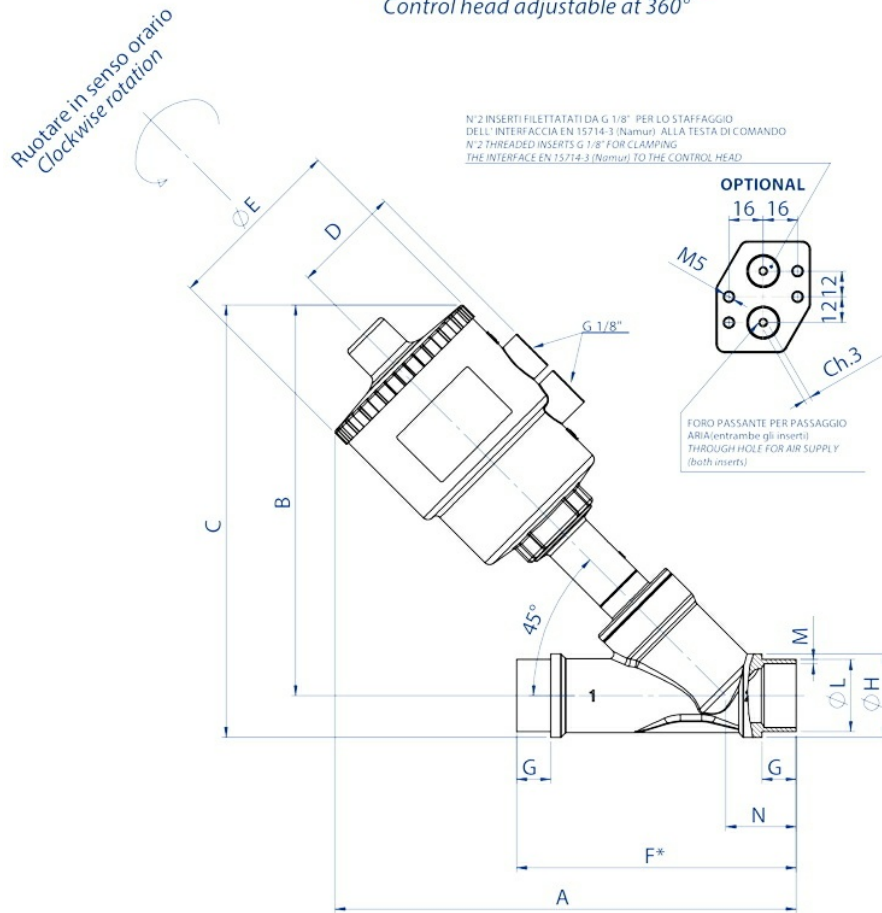
Pressure from 0 to 16 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen see following pages.

Temperature from -10°C to 180°C.

Max. viscosity 600 cst (mm<sup>2</sup>/s).

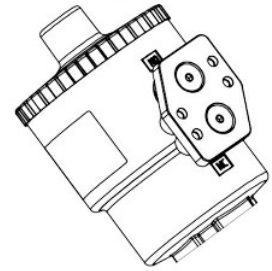
## dimensions

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



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



#### On request versions:

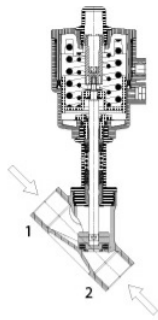
EN 10357 series A (ex DIN 11850 2) - ISO 2037

DIMENSIONS												
DN [mm]	Control head	A	B	C	D	∅E	F *	G	∅H	∅L	M	N
15	∅ 50	<b>180</b>	<b>156</b>	<b>170</b>	<b>44</b>	<b>70</b>	<b>100</b>	<b>12</b>	<b>26,3</b>	<b>21,3</b>	<b>1,6</b>	<b>26</b>
20	∅ 50	<b>190</b>	<b>160</b>	<b>177</b>	<b>44</b>	<b>70</b>	<b>115</b>	<b>14</b>	<b>33</b>	<b>26,9</b>	<b>1,6</b>	<b>31</b>
20	∅ 63	208	178	195	50,5	84,4	115	14	33	26,9	1,6	31
25	∅ 50	165	164	184	44	70	130	14	39	33,7	2	32,96
<b>25</b>	<b>∅ 63</b>	<b>214</b>	<b>182</b>	<b>202</b>	<b>50,5</b>	<b>84,4</b>	<b>130</b>	<b>14</b>	<b>39</b>	<b>33,7</b>	<b>2</b>	<b>32,96</b>
25	∅ 90	254	222	242	66,2	116,4	130	14	39	33,7	2	32,96
32	∅ 50	200	168	193	44	70	145	14	49	42,4	2	34
<b>32</b>	<b>∅ 63</b>	<b>218</b>	<b>186</b>	<b>211</b>	<b>50,5</b>	<b>84,4</b>	<b>145</b>	<b>14</b>	<b>49</b>	<b>42,4</b>	<b>2</b>	<b>34</b>
32	∅ 90	258	226	251	66,2	116,4	145	14	49	42,4	2	34
32	∅ 110	294	261	286	77,4	140,6	145	14	49	42,4	2	34
40	∅ 63	226	190	218	50,5	84,4	160	14	55	48,3	2	37,6
<b>40</b>	<b>∅ 90</b>	<b>266</b>	<b>230</b>	<b>258</b>	<b>66,2</b>	<b>116,4</b>	<b>160</b>	<b>14</b>	<b>55</b>	<b>48,3</b>	<b>2</b>	<b>37,6</b>
40	∅ 110	302	266	294	77,4	140,6	160	14	55	48,3	2	37,6
50	∅ 63	241	200	234	50,5	84,4	175	16	66,5	60,3	2,3	41,37
50	∅ 90	281	240	274	66,2	116,4	175	16	66,5	60,3	2,3	41,37
<b>50</b>	<b>∅ 110</b>	<b>317</b>	<b>276</b>	<b>310</b>	<b>77,4</b>	<b>140,6</b>	<b>175</b>	<b>16</b>	<b>66,5</b>	<b>60,3</b>	<b>2,3</b>	<b>41,37</b>

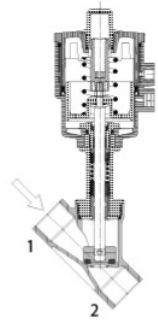
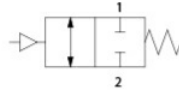
Suggested executions are in bold. Other combinations on request.

specifications

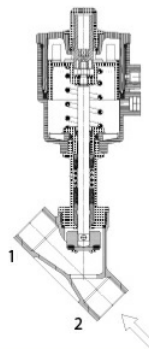
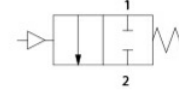
METHODS OF USE



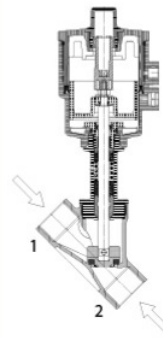
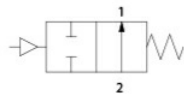
N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.  
 Ingresso sopra l'otturatore per fluidi comprimibili.  
 N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.  
 Flow from above the plug for condensable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



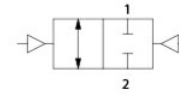
N.C. Normalmente chiusa con ingresso sopra l'otturatore.  
 Ingresso sopra l'otturatore per fluidi comprimibili.  
 N.C. Normally Closed with the flow from above the plug.  
 Flow from above the plug for condensable media.



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

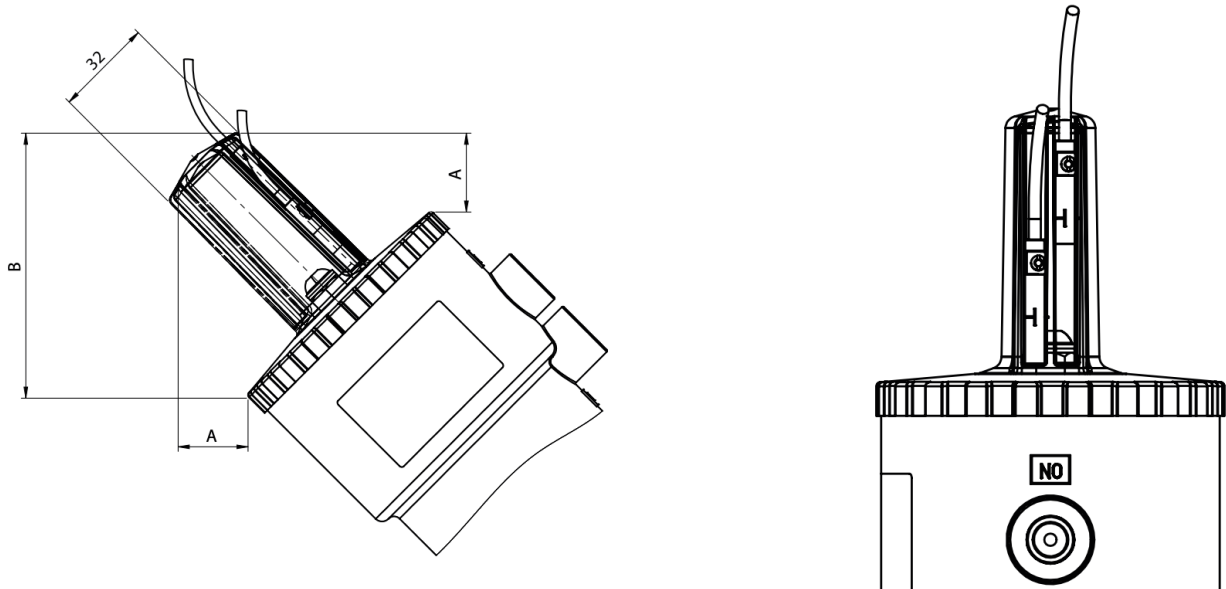


Doppio effetto bidirezionale  
 Double Acting bidirectional



## accessories

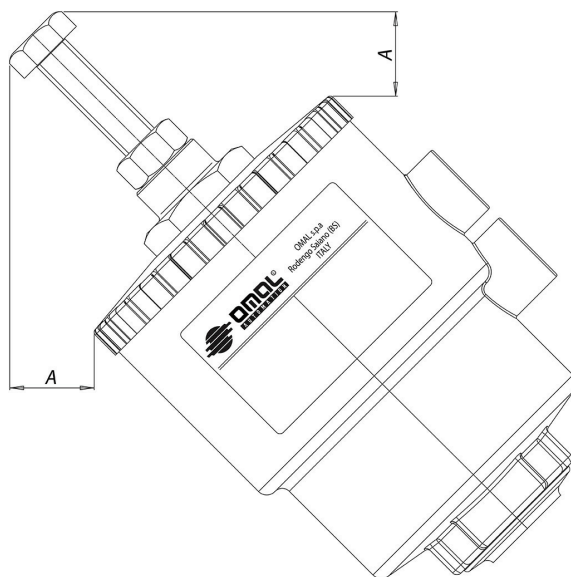
## Limit switch cap



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.

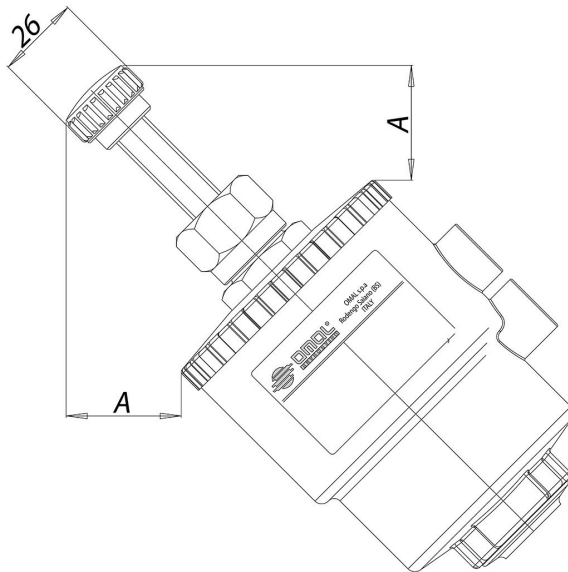


### Stroke limiter

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.



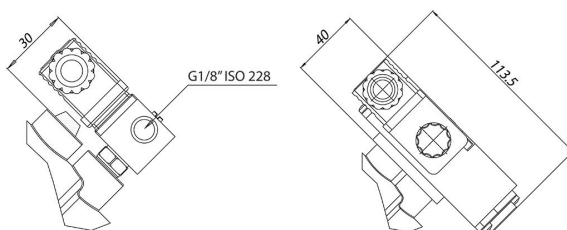
### Emergency manual override

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



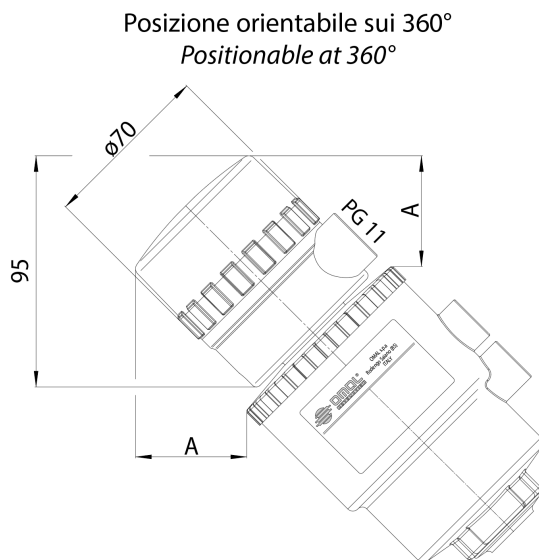
### Control solenoid valve

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

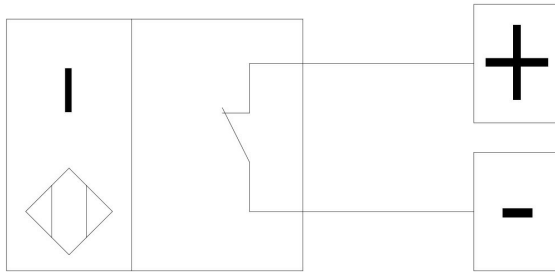


### Limit switch box

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 transparent polymethacrylate).

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

### AVAILABLE LIMIT SWITCH



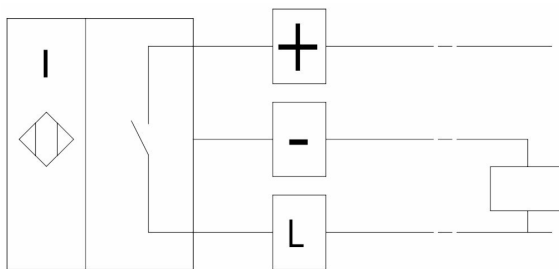
**Inductive limit switches NAMUR EExia**

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



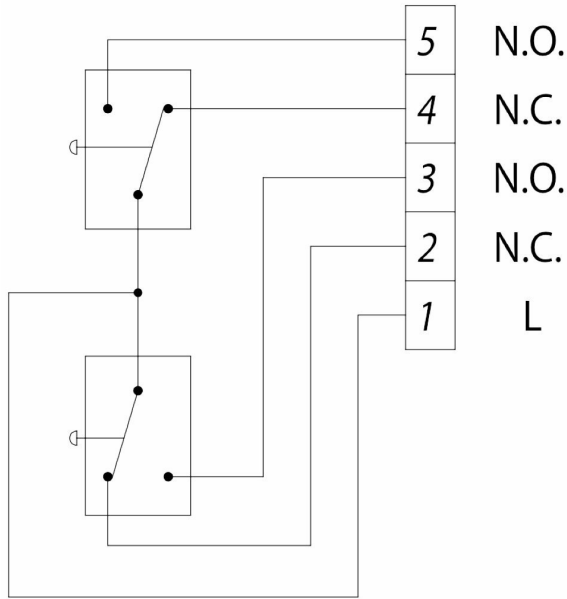
**Proximity limit switches**

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



**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