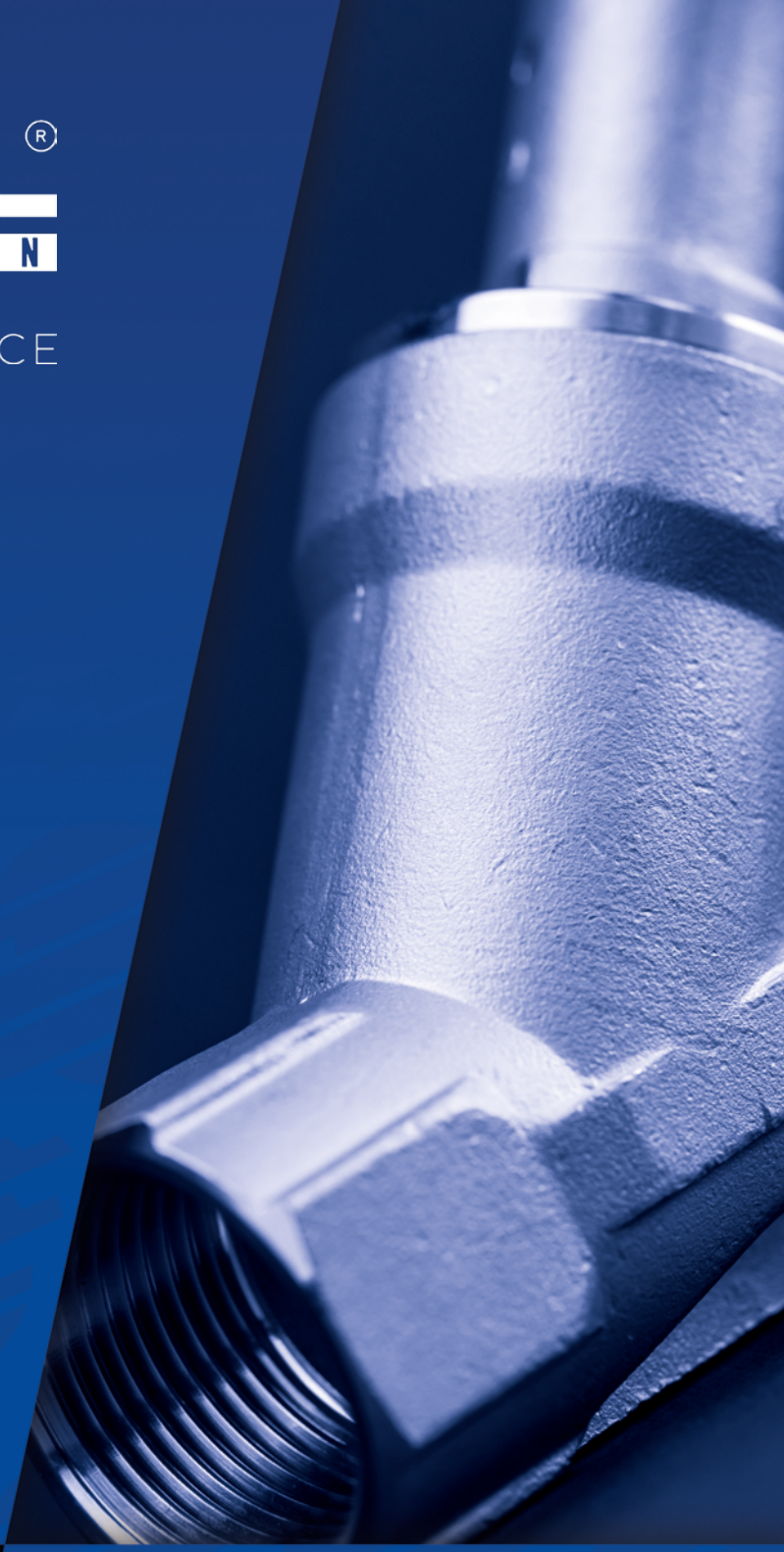
OMAL AUTOMATION

EMPOWERED PERFORMANCE

# ANGLE SEAT VALVES

CATALOGUE



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DN25 PN25 1.4408 1

3.4

# VALVOLE A FLUSSO AVVIATO

# *ANGLE SEAT VALVES*

# VALVOLE A FLUSSO AVVIATO
# *ANGLE SEAT VALVES*

**PN 25**

**Acciaio inox**

**ARES** da 3/8" a 2"; **ATENA** versione compatta da 3/8" a 3/4" **con attuatore ø40**.

***Stainless steel***

***ARES** from 3/8" to 2"; **ATENA** compact version from 3/8" to 3/4" **with actuator ø40.***

**PN 16**

**Bronzo**

**ZEUS**: Versione in bronzo da 3/8" a 2"

***Bronze***

***ZEUS**: bronze versions from 3/8" to 2"*

## CARATTERISTICHE GENERALI:

- Attacchi valvola filettati secondo EN 10226-1 Rp (ex ISO 7/1) per valvole ARES; ISO 228/1 per valvole ZEUS. Altri tipi di attacchi a richiesta.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da 3/8" a 2" nelle versioni doppio effetto, semplice effetto normalmente chiusa da sopra e sotto l'otturatore, semplice effetto normalmente aperta da sotto l'otturatore.
- **Conforme alla direttiva Europea 2014/68/UE "PED".**
- **Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.**
- Le diverse versioni degli azionamenti, le varie combinazioni della valvola e la possibilità di intercettare il flusso da sopra o sotto l'otturatore, danno origine a molteplici versioni della valvola automatica.
- Nelle tabelle seguenti sono elencate le versioni standard con i principali parametri di funzionamento.
- In base al tipo di valvola ed alla variazione di pressione ΔP che deve essere intercettata tra monte e valle della stessa, viene individuata la pressione di comando necessaria all'azionamento e conseguentemente il codice della valvola corrispondente.
- A richiesta: versioni per vuoto e per uso ossigeno.

## *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.*

## FLUIDO DI COMANDO:

- Fluido di pilotaggio: aria compressa lubrificata o secca, gas e fluidi neutri.
- Temperatura ambiente: da -10°C a +60° C.

## FLUIDO INTERCETTATO:

- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc..(comunque compatibili con A 351 CF8M O CuSn5Zn5Pb5-B).
- Pressione di utilizzo da 0 a 16 / 25 bar (vapore a 180°C da 0 a 10 bar) in funzione della misura e della versione scelta (vedi pagine seguenti).
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

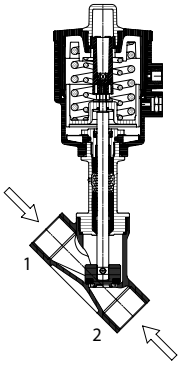
## *CONTROL MEDIA:*

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

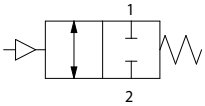
## *OPERATING MEDIA:*

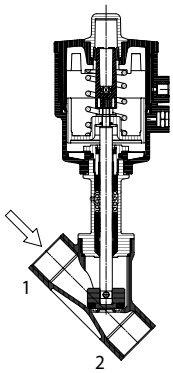
- *Air,water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with* A 351 CF8M O CuSn5Zn5Pb5-B*).*
- *Pressure from 0 to 16 / 25 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen (see following pages).*
- *Temperature from –10°C to 180°C.*
- *Max. viscosity 600 cst ($mm^2/s$).*

## MODALITÀ DI IMPIEGO *METHODS OF USE*



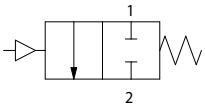

N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.
Ingresso sopra l'otturatore per fluidi comprimibili.
*N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.*
*Flow from above the plug for condensable media.*

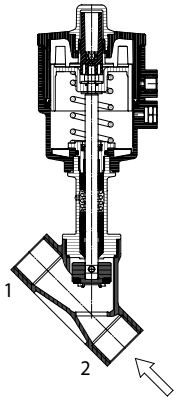


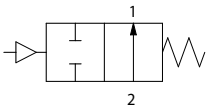

N.C. Normalmente chiusa con ingresso sopra l'otturatore.
Ingresso sopra l'otturatore per fluidi comprimibili.

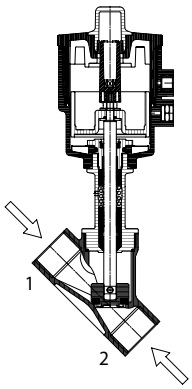
*N.C. Normally Closed with the flow from above the plug.*
*Flow from above the plug for condensable media.*



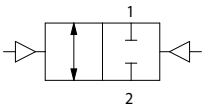




N.A. Normalmente aperta con ingresso sotto l'otturatore
*N.O. Normally Open with flow from below the plug*




Doppio effetto bidirezionale
*Double Acting bidirectional*




# SCHEMA DI CODIFICA VALVOLE A FLUSSO AVVIATO
# *ANGLE SEAT VALVES CODE PLAN*

| J | 4 | - | P | G | - | - | - | - | Y | X |
|---|---|---|---|---|---|---|---|---|---|---|
| | 9 | | | | | | | | | |

**Versione *Version***
**P** = Standard
**X** = Per uso ossigeno
For oxygen

**ø teste di comando**
***ø control heads***
14 = Ø 40
16 = Ø 50
18 = Ø 63
21 = Ø 90
23 = Ø 110

**YX solo per la versione ATEX**
***YX only for ATEX version***

**Versione *Version***
**4** = **ARES - ATENA**
**9** = **ZEUS**

**Versione *Version***
**S** = N.C. sottosede anticolpo d'ariete
*below the plug anti water hammer*
**C** = N.C. soprasede *above the plug*
**A** = N.A. - *N.O.*
**D** = doppio effetto - *double acting*

**Tipo di connessioni *Connection types***
**0** = Filettate *Threaded*
- EN 10226-1 Rp (ex ISO 7/1) ARES;
- ISO 228/1 ZEUS.

**4** = Filettate *Threaded*
NPT
Per altri attacchi ARES vedere "ARES con attacchi speciali".
*For other thread see "ARES with special ends".*

**Misura valvola *Valve size***

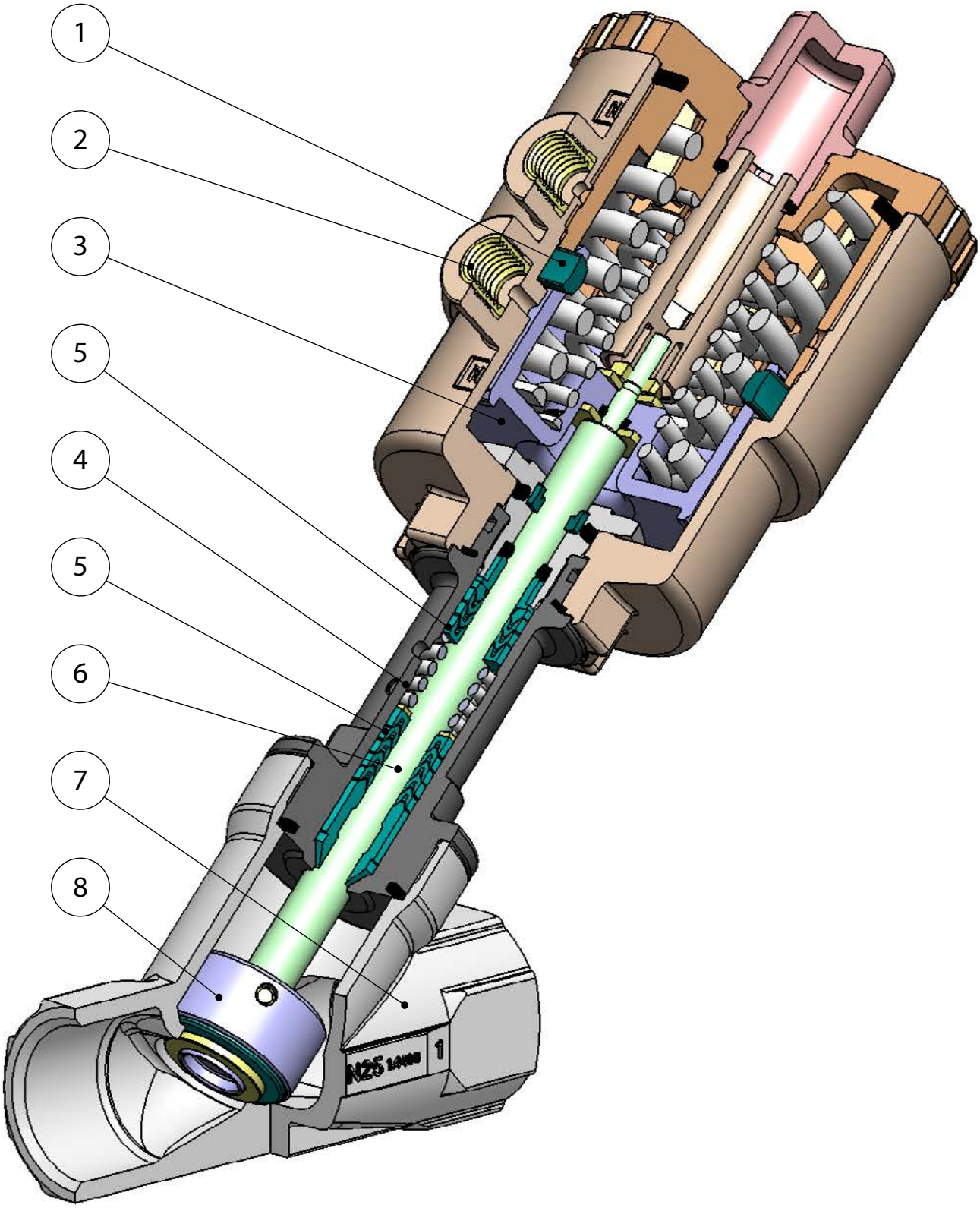
| | |
|---|---|
| **3** = 3/8" | |
| **4** = 1/2" | **4** = DN 15 |
| **5** = 3/4" | **5** = DN 20 |
| **6** = 1" | **6** = DN 25 |
| **7** = 1" 1/4 | **7** = DN 32 |
| **8** = 1" 1/2 | **8** = DN 40 |
| **9** = 2" | **9** = DN 50 |

A richiesta versione per vuoto e per uso ossigeno *On request: versions for vacuum and oxygen service*
Per versioni con teste di comando differenti dallo standard contattare l'ufficio commerciale OMAL.
*For versions with control head different from standard executions, please contact our sales department*

# ARES

## VALVOLA INCLINATA

## *ANGLE SEAT VALVE*

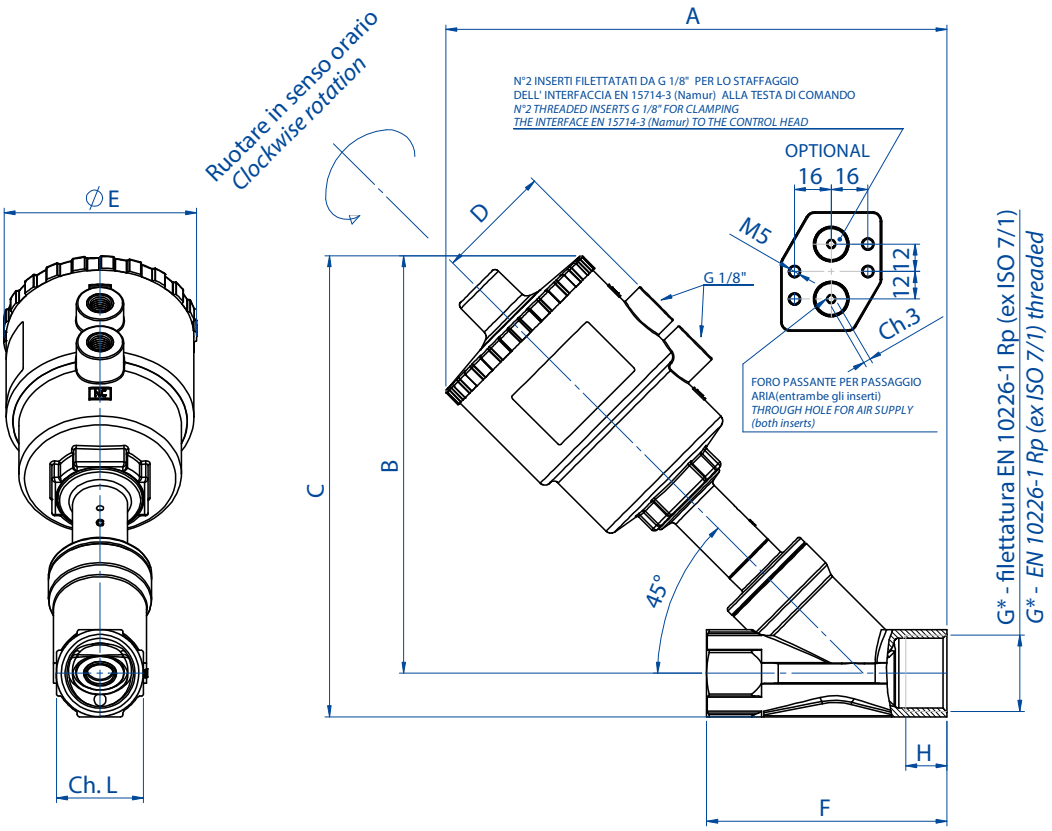


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone.<br><br>*Seal placed in the cylinder rather than on the piston.* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico).<br><br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss).* |
| | | Minor usura della guarnizione.<br><br>*Less wear of the seal.* |
| 2 | Inserti della testa di comando in 303 S.S..<br><br>*Piloting head inserts in 303 S.S..* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni.<br><br>*Increases considerably the corrosion resistance caused by external agents.* |
| 3 | Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron).<br><br>*Starting from DN63 metal piston with CHEMICAL NICKEL coating (10-15 micron).* | Si riduce l'usura del pistone grazie al raggiungimento di una maggior durezza superficiale(700-750 HV).<br><br>*Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV).* |
| 4 | Guarnizioni precaricate da molla.<br><br>*Seals pre-loaded by spring.* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno.<br><br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche.<br><br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions.* |
| 5 | Guarnizioni tipo "chevron" (a "v") con 5 guarnizioni nella parte inferiore e 3 nella parte superiore della molla.<br><br>*CHEVRON seals (V shape) with 5 seals in the lower part of the spring and 3 seals in the upper part.* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br><br>*It ensures a perfect tightness even after a high number of cycles* |
| 6 | Albero rullato.<br><br>*Rolled shaft.* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento.<br><br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft.* |
| 7 | *Scartamento lungo.*<br><br>*Longer face to face.* | Miglior fluidodinamica con riduzione delle turbolenze.<br><br>*Better fluidodynamic with reduction of the turbulences.* |
| 8 | Otturatore oscillante/autoallineante.<br><br>*Oscillating / self-aligning shutter.* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta.<br><br>*It fits perfectly to the valve body ensuring the maximum tightness.* |
| | Certificato ATEX.<br><br>*ATEX Certificate.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br><br>*Installation is allowed in a potential explosive environment.* |
| | Certificato PED.<br><br>*PED Certificate.* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.<br><br>*Full compliance with European Safety Standards for Pressure Equipment.* |

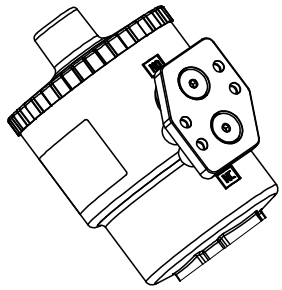
# ARES

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



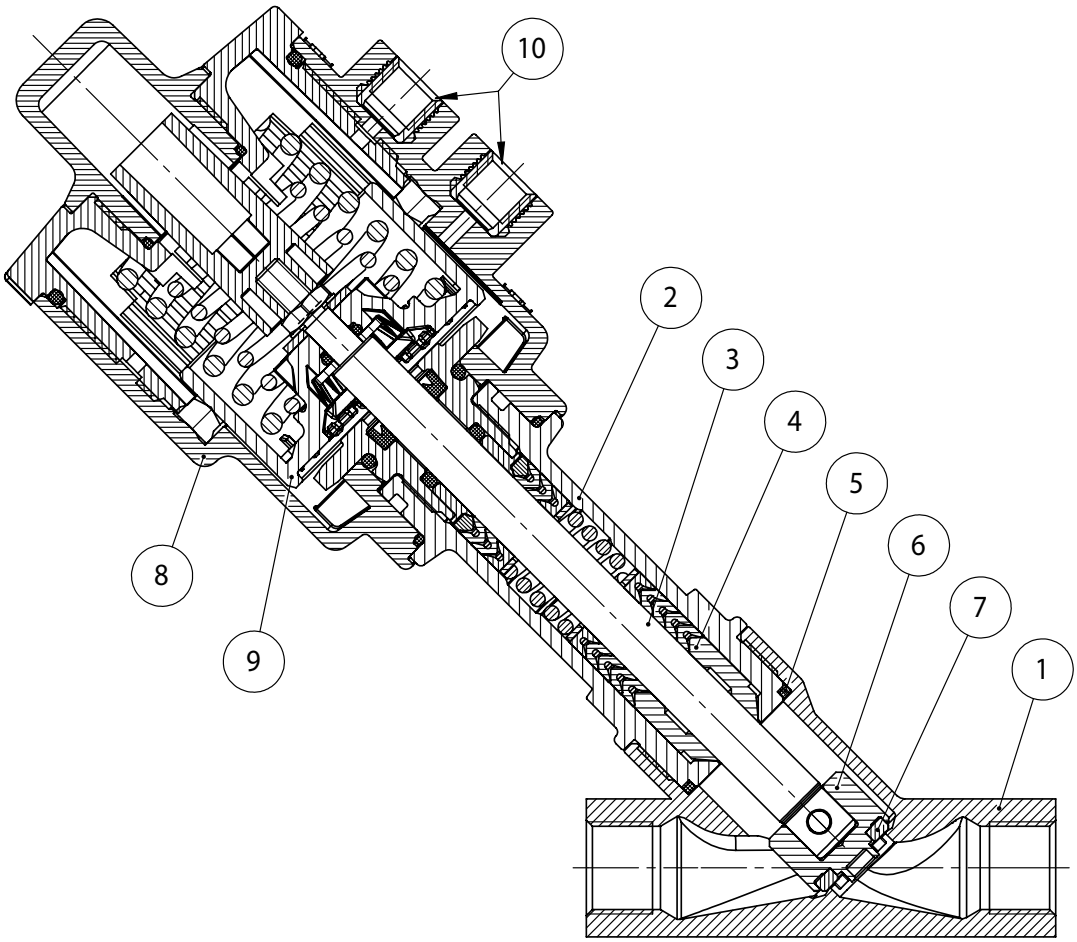

Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*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***



| DIMENSIONI *DIMENSIONS* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G * [inch]** | **ATTUATORE** *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 |
| * A richiesta la versione con filettatura NPT *On request NPT-threading* | | | | | | | | | | |

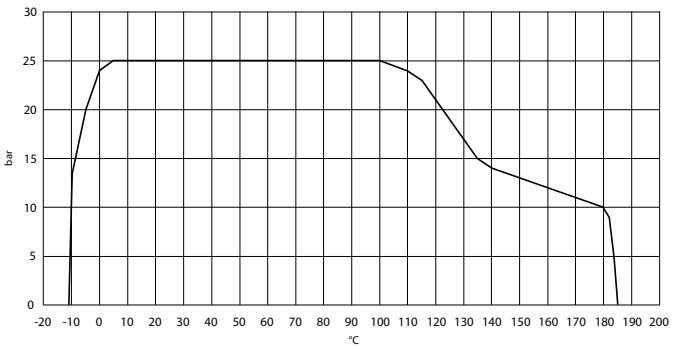
# ARES



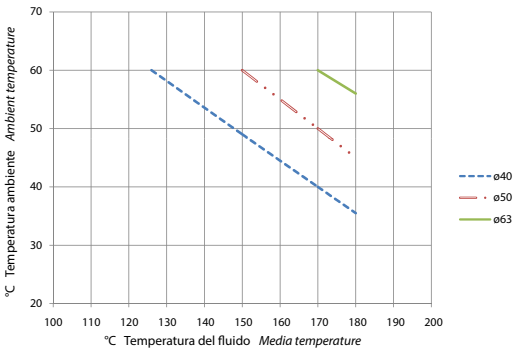

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | A351-CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | A351-CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | Ottone nichel chimico *Brass chem-nickel* (PBT + GF 20% testa/head ø40 - ø50) |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*



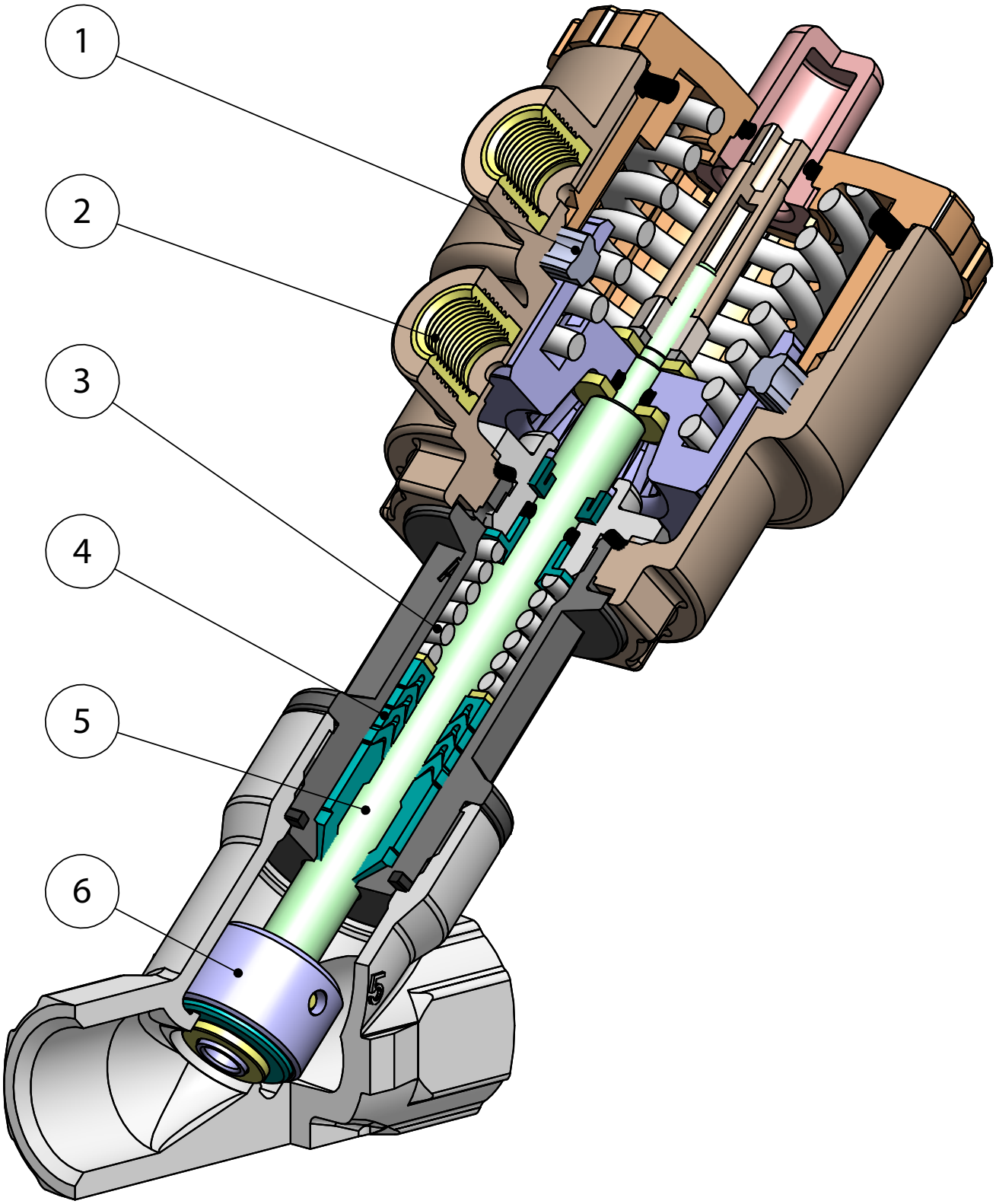

## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ATENA

## VALVOLA INCLINATA

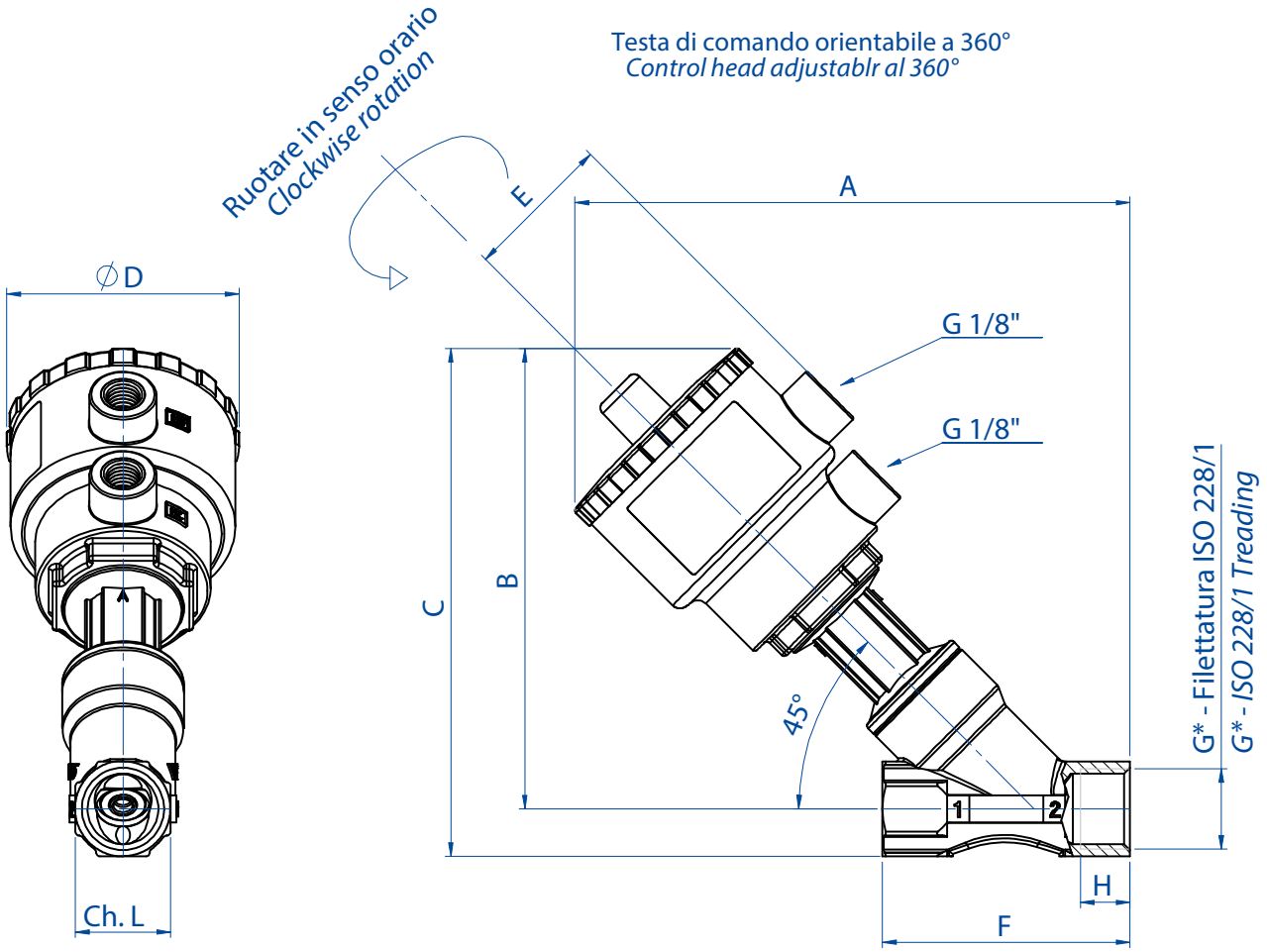
## *ANGLE SEAT VALVE*



## FEATURES & BENEFITS

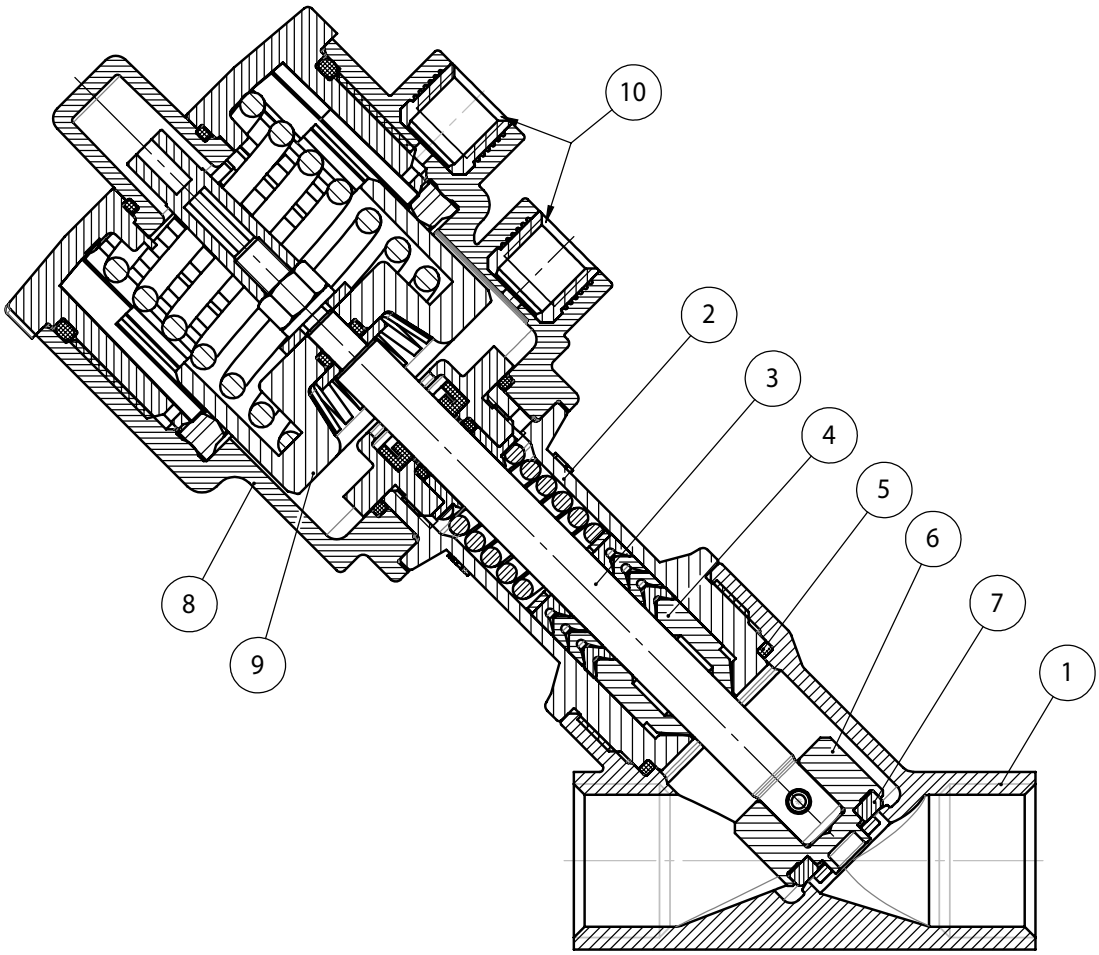
| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone<br><br>*Seal placed in the cylinder rather than on the piston* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico)<br><br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)* |
| | | Minor usura della guarnizione<br><br>*Less wear of the seal* |
| 2 | Inserti della testa di comando in 303 S.S.<br><br>*Piloting head inserts in 303 S.S.* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni<br><br>*Increases considerably the corrosion resistance caused by external agents* |
| 3 | Guarnizioni precaricate da molla<br><br>*Seals pre-loaded by spring* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite verso l'esterno<br><br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche<br><br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions* |
| 4 | Guarnizioni tipo "chevron" (a "V") con 4 guarnizioni nella parte rivolta al fluido<br><br>*CHEVRON seals (V shape) with 4 seals in the part towards the fluid* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br><br>*It ensures a perfect tightness even after a high number of cycles* |
| 5 | Albero rullato<br><br>*Rolled shaft* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento<br><br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft* |
| 6 | Otturatore oscillante/autoallineante<br><br>*Oscillating / self-aligning shutter* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta<br><br>*It fits perfectly to the valve body ensuring the maximum tightness* |
| | Certificato ATEX<br><br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br><br>*Installation is allowed in a potential explosive environment* |

# ATENA TESTA ø40 *HEAD ø40*




| DIMENSIONI *DIMENSIONS* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Versioni in CF8M *CF8M version* | | | | | | | |
| DN [mm] | G *[inch] | ATTUATORE *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 |
| * A richiesta la versione con filettatura NPT *On request NPT-threading* | | | | | | | | | | |

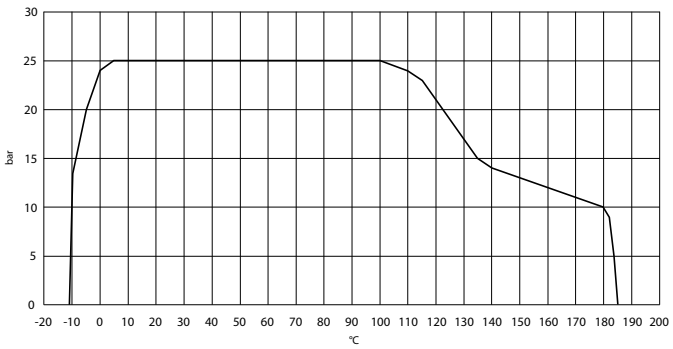
# ATENA TESTA ø40 *HEAD ø40*



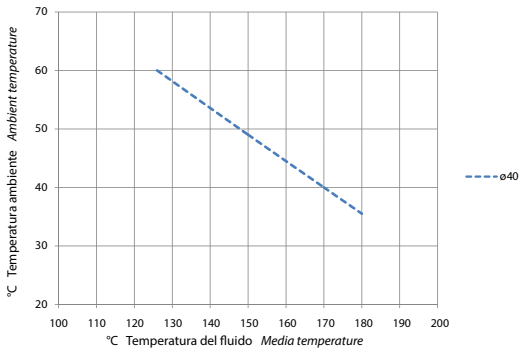

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | A351-CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | A351-CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | PBT + GF 20% |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ARES - ATENA

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4SPG1403** | 4,5 | 40 (ATENA) | 4,2 | 10 | 16 | 1 | **KGJP1303** | **J4SPG14R3** |
| 15 | 3/8" | **J4SPG1603** | 4,9 | 50 | 4 | 10 | 16 | 1,1 | **KGJP1003** | **J4SPG16R3** |
| 15 | 1/2" | **J4SPG1404** | 5,3 | 40 (ATENA) | 4,2 | 10 | 16 | 1 | **KGJP1303** | **J4SPG14R4** |
| 15 | 1/2" | **J4SPG1604** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 20 | 3/4" | **J4SPG1405** | 9,2 | 40 (ATENA) | 4,2 | 10 | 8 | 1,2 | **KGJP1305** | **J4SPG14R5** |
| 20 | 3/4" | **J4SPG1605** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | 3/4" | **J4SPG1805** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP1005** | **J4SPG18R5** |
| 25 | 1" | **J4SPG1806** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP1006** | **J4SPG18R6** |
| 25 | 1" | **J4SPG2106** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP1106** | **J4SPG21R6** |
| 32 | 1"1/4 | **J4SPG2107** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 40 | 1"1/2 | **J4SPG2108** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 40 | 1"1/2 | **J4SPG2308** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |
| 50 | 2" | **J4SPG2309** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

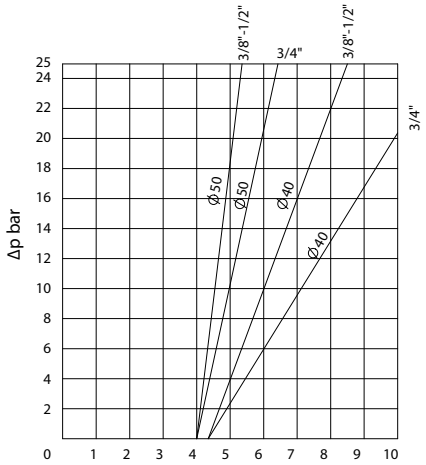



diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

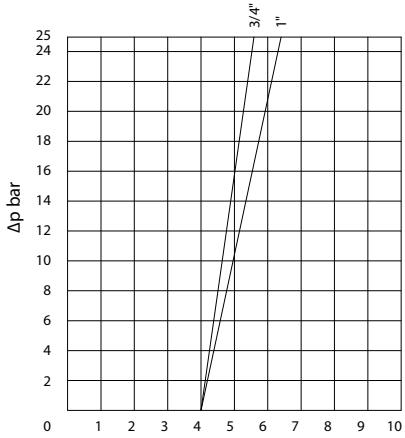



diagramma 2
*diagram 2*
**testa *head***
**Ø63**

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

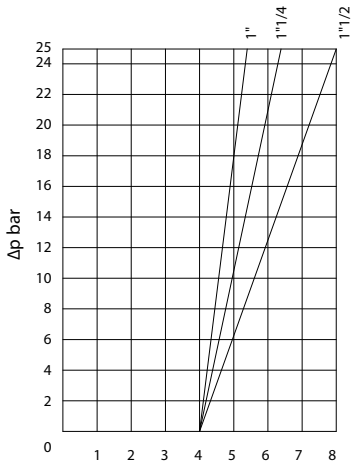



diagramma 3
*diagram 3*
**testa *head***
**Ø90**

aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

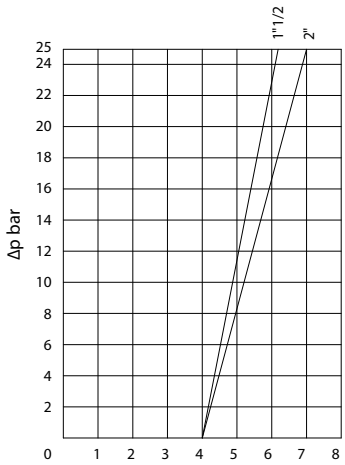



diagramma 4
*diagram 4*
**testa *head***
**Ø110**

aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES - ATENA

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore

## *N.C. Normally Closed with the flow from above the plug*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4CPG1403** | 4,5 | 40 (ATENA) | 2,5 | 10 | diagram n° 5 | 1 | **KGJP1303** | **J4CPG14R3** |
| 15 | 3/8" | **J4CPG1603** | 4,9 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R3** |
| 15 | 1/2" | **J4CPG1404** | 5,3 | 40 (ATENA) | 2,,5 | 10 | diagram n° 5 | 1 | **KGJP1303** | **J4CPG14R4** |
| 15 | 1/2" | **J4CPG1604** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | 3/4" | **J4CPG1405** | 9,2 | 40 (ATENA) | 2,5 | 10 | diagram n° 5 | 1,2 | **KGJP1305** | **J4CPG14R5** |
| 20 | 3/4" | **J4CPG1605** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | 1" | **J4CPG1806** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | 1"1/4 | **J4CPG2107** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | 1"1/2 | **J4CPG2108** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 40 | 1"1/2 | **J4CPG2308** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | 2" | **J4CPG2109** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 50 | 2" | **J4CPG2309** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

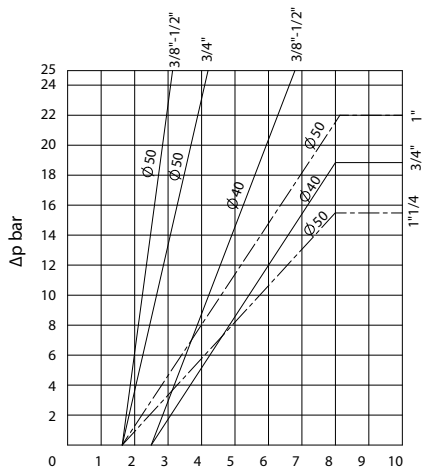



diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

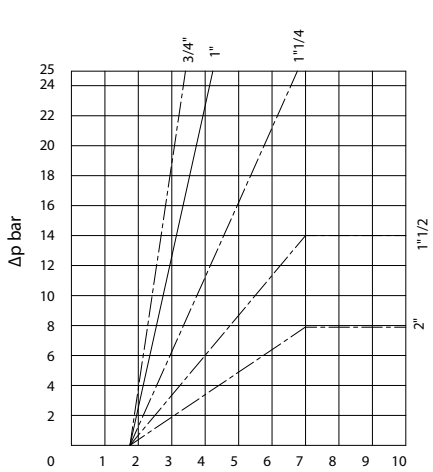



diagramma 6
*diagram 6*
**testa *head***
**Ø63**

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

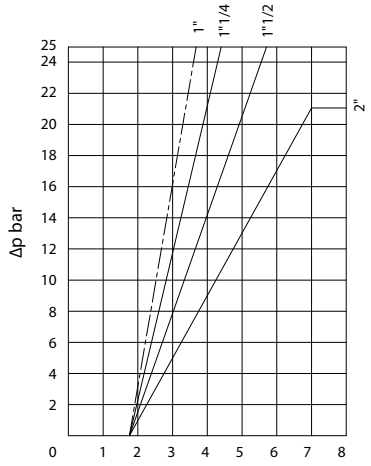



diagramma 7
*diagram 7*
**testa *head***
**Ø90**

aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

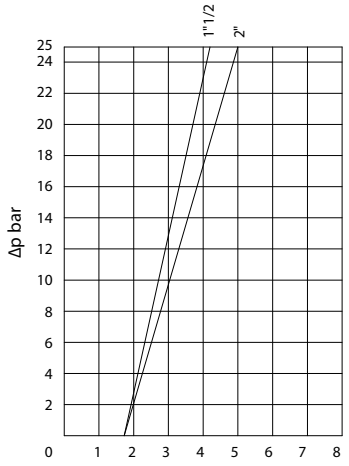



diagramma 8
*diagram 8*
**testa *head***
**Ø110**

aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES

## N.A. Normalmente Aperta con ingresso sotto l'otturatore

## *N.O. Normally Open with flow from below the plug*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4APG1603** | 4,9 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R3** |
| 15 | 1/2" | **J4APG1604** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 20 | 3/4" | **J4APG1605** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 25 | 1" | **J4APG1806** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP1006** | **J4APG18R6** |
| 32 | 1"1/4 | **J4APG1807** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP1007** | **J4APG18R7** |
| 40 | 1"1/2 | **J4APG2108** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |
| 50 | 2" | **J4APG2309** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP1109** | **J4APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

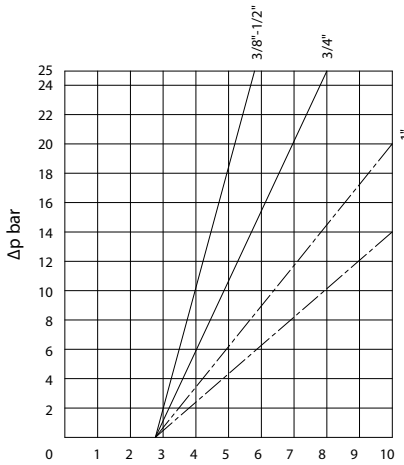



diagramma 9
*diagram 9*
**testa *head***
**Ø50**

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

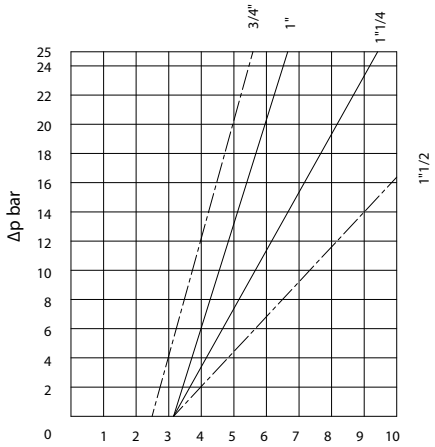



diagramma 10
*diagram 10*
**testa *head***
**Ø63**

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

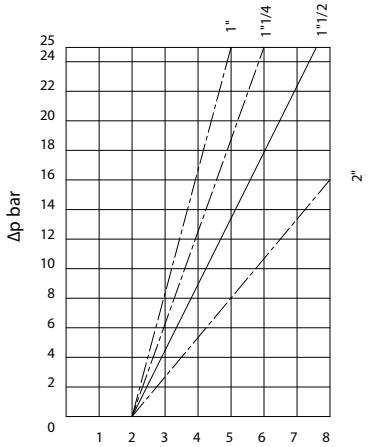



diagramma 11
*diagram 11*
**testa *head***
**Ø90**

aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

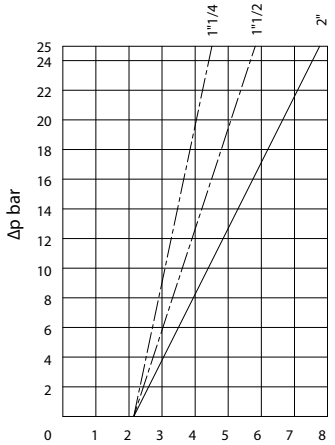



diagramma 12
*diagram 12*
**testa *head***
**Ø110**

aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES
## Doppio effetto bidirezionale
## *Double acting bidirectional*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4DPG1603** | 4,9 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R3** |
| 15 | 1/2" | **J4DPG1604** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 20 | 3/4" | **J4DPG1605** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 25 | 1" | **J4DPG1806** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP1006** | **J4DPG18R6** |
| 32 | 1"1/4 | **J4DPG1807** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP1007** | **J4DPG18R7** |
| 40 | 1"1/2 | **J4DPG1808** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | 1"1/2 | **J4DPG2108** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |
| 50 | 2" | **J4DPG2109** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP1009** | **J4DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

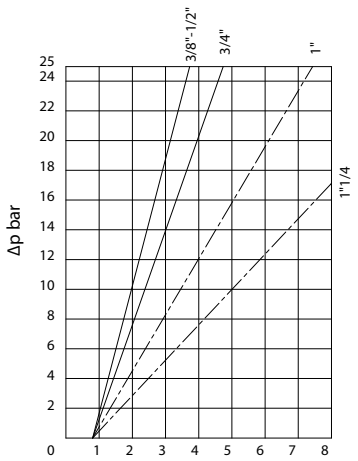



diagramma 13
*diagram 13*
**testa *head***
**Ø50**

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

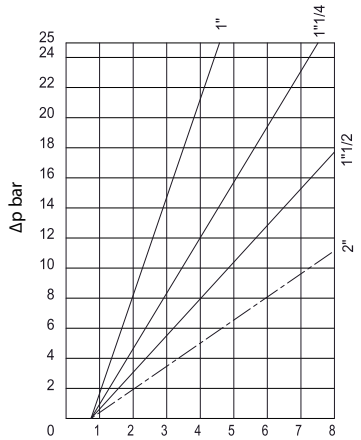



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

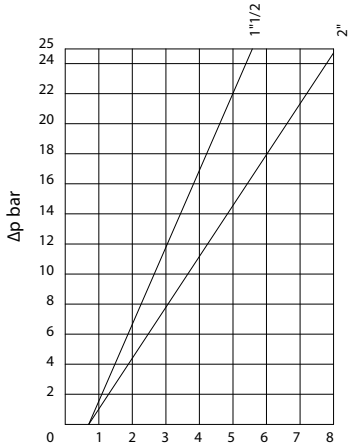



diagramma 15
*diagram 15*
**testa *head***
**Ø90**

aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

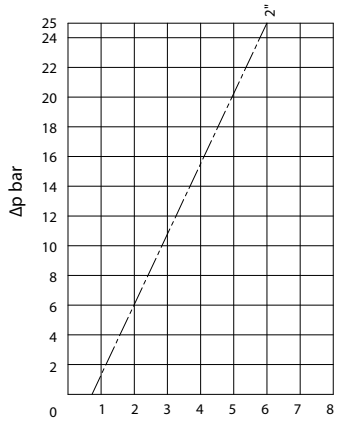



diagramma 16
*diagram 16*
**testa *head***
**Ø110**

aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CON ATTACCHI SPECIALI
# *ARES WITH SPECIAL ENDS*

### CARATTERISTICHE GENERALI
- Materiale del corpo valvola: A351-CF3M (316L S.S.).
- Attacchi valvola: Vedi schema di codifica.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da DN 15 a DN 50 nelle versioni doppio effetto; semplice effetto: normalmente chiusa, normalmente chiusa anticolpo d'ariete e normalmente aperta.
- Le prestazioni e i diagrammi delle pressioni sono le medesime delle versioni standard ma limitate a PN16.
- A richiesta: versioni per vuoto e per uso ossigeno.
- Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.

### *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.*

### FLUIDO DI COMANDO
- Fluido di pilotaggio: aria compressa lubrificata o secca, gas e fluidi neutri.
- Temperatura ambiente: da -10°C a +60° C .

### FLUIDO INTERCETTATO
- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc.. (comunque compatibili con CF3M (316L S.S.) e PTFE).
- Pressione di utilizzo da 0 a 16 bar (vapore a 180°C da 0 a 10 bar) in funzione della misura e della versione scelta vedi pagine seguenti.
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

### *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 ($mm^2/s$).*

## SCHEMA DI CODIFICA VALVOLE ARES *ARES VALVES CODE PLAN*

**J4 - PG -- - - YX**

**Versione *Version***
**S** = N.C. sottosede anticolpo d'ariete
*below the plug anti water hammer*
**C** = N.C. soprasede *above the plug*
**A** = N.A. - *N.O.*
**D** = doppio effetto - *double acting*

**ø teste di comando *ø control heads***
16 = Ø50; 18 = Ø63; 21 = Ø90; 23 = Ø110

**Tipo di connessioni *Connection types***
**9** = da saldare *weld ends* ISO 4200
**6** = flangiate *flanged* UNI EN1092-1
**U** = triclamp USA 3A - BS4825
**R=** Ricambio *Spare part*

**Misura valvola *Valve size***
**4**=DN 15; **5**=DN 20; **6**=DN 25; **7**=DN 32; **8**=DN 40; **9**=DN 50

**YX solo per versioni ATEX**
***YX only for ATEX versions***

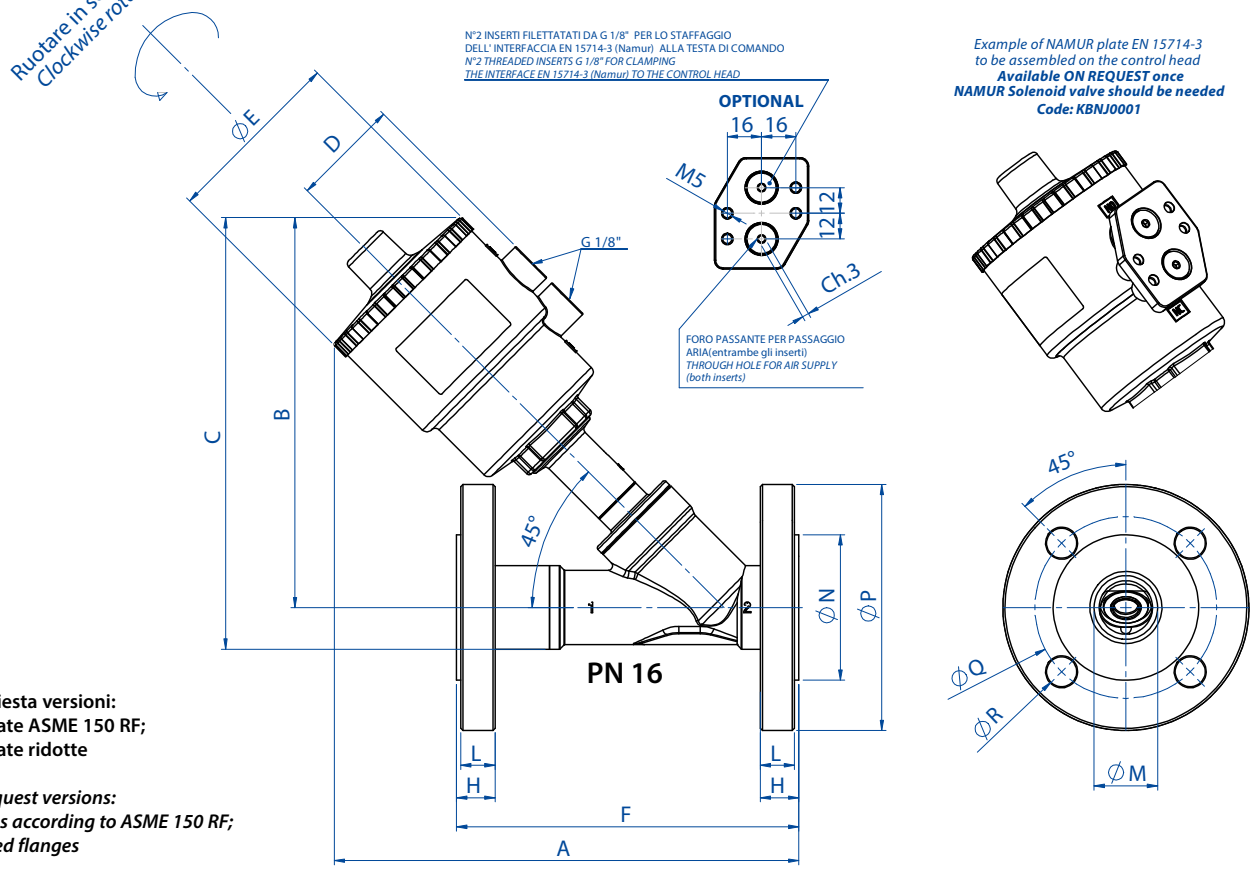
Per versioni con teste di comando differenti dallo standard contattare l'ufficio commerciale OMAL.
*For versions with control head different from standard executions, please contact our sales department*

# ARES FLANGIATA UNI EN 1092-1
# *FLANGED UNI EN 1092-1*

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***




**A richiesta versioni:**
**flangiate ASME 150 RF;**
**flangiate ridotte**

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

| VALVOLA FLANGIATA ANSI 150RF SCART.ASME B16.10 A1 *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 |

| VALVOLA FLANGIATA RIDOTTA *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 |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **Testa di comando** ***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** |

In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta. *Suggested executions are in bold. Other combinations on request.*

# ARES FLANGIATA *FLANGED*

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

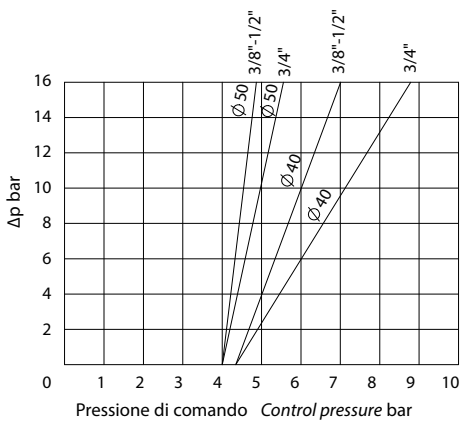
| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4SPG1664** | 5,7 | 50 | 4 | 10 | 16 | 2,4 | **KGJP1003** | **J4SPG16R4** |
| 20 | **J4SPG1665** | 10,5 | 50 | 4 | 10 | 10 | 3,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | **J4SPG1865** | 10,8 | 63 | 4 | 10 | 16 | 3,1 | **KGJP1005** | **J4SPG18R5** |
| 25 | **J4SPG1866** | 20 | 63 | 4 | 10 | 11 | 3,8 | **KGJP1006** | **J4SPG18R6** |
| 25 | **J4SPG2166** | 20 | 90 | 4 | 8 | 16 | 3,9 | **KGJP1106** | **J4SPG21R6** |
| 32 | **J4SPG2167** | 29 | 90 | 4 | 8 | 14 | 6,6 | **KGJP1107** | **J4SPG21R7** |
| 40 | **J4SPG2168** | 46 | 90 | 4 | 8 | 11 | 7,5 | **KGJP1108** | **J4SPG21R8** |
| 40 | **J4SPG2368** | 46,5 | 110 | 4 | 8 | 16 | 8,1 | **KGJP1108** | **J4SPG23R8** |
| 50 | **J4SPG2369** | 67 | 110 | 4 | 8 | 10 | 11,2 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

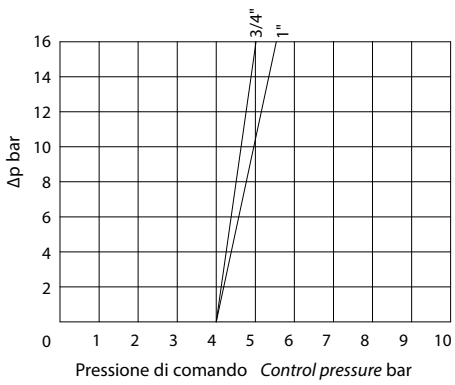
### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



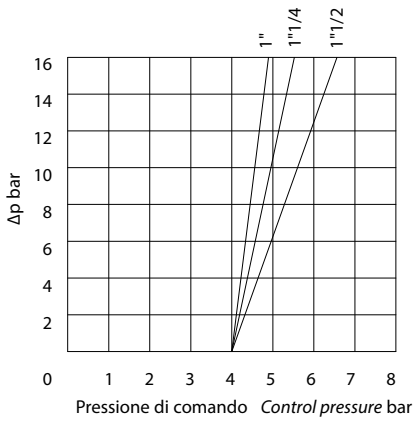

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



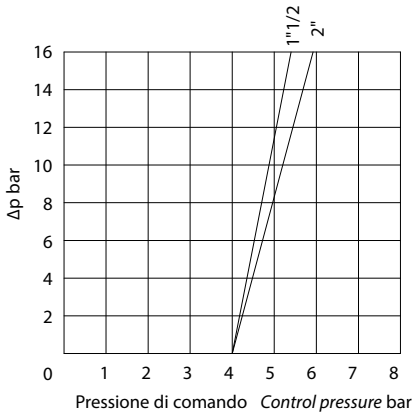

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES FLANGIATA *FLANGED*

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

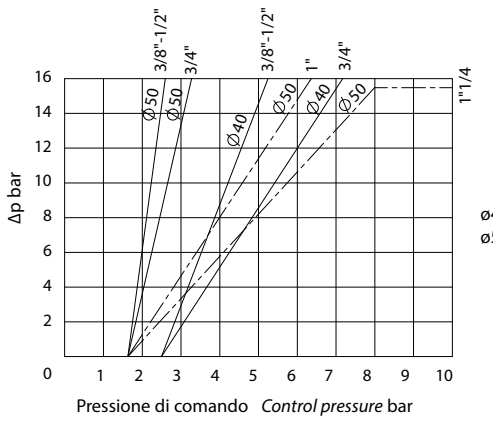
## *N.C. Normally Closed with the flow from above the plug.*

| DN [mm] | CODICE *CODE* CF3M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4CPG1664** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | **J4CPG1665** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | **J4CPG1866** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | **J4CPG2167** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | **J4CPG2168** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 50 | **J4CPG2169** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 40 | **J4CPG2368** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | **J4CPG2369** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

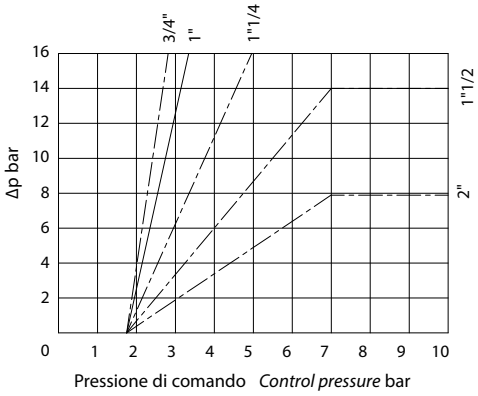
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



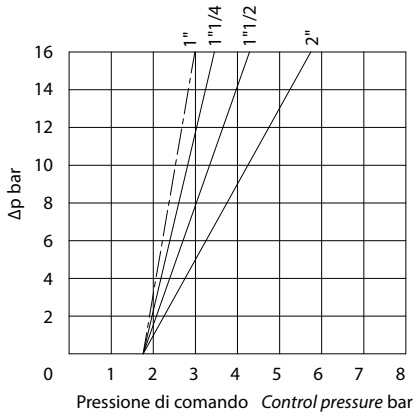

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



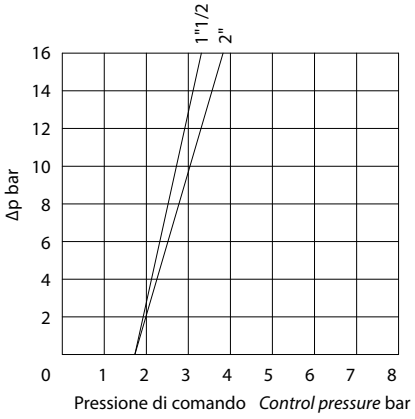

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES FLANGIATA *FLANGED*

## N.A. Normalmente Aperta con ingresso sotto l'otturatore.

## *N.O. Normally Open with flow from below the plug.*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4APG1664** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 2,4 | **KGJP1003** | **J4APG16R4** |
| 20 | **J4APG1665** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 3,1 | **KGJP1005** | **J4APG16R5** |
| 25 | **J4APG1866** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 3,8 | **KGJP1006** | **J4APG18R6** |
| 32 | **J4APG1867** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 5,5 | **KGJP1007** | **J4APG18R7** |
| 40 | **J4APG2168** | 46 | 90 | 2 | 8 | diagram n° 11 | 7,5 | **KGJP1108** | **J4APG21R8** |
| 50 | **J4APG2369** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 11,2 | **KGJP1109** | **J4APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

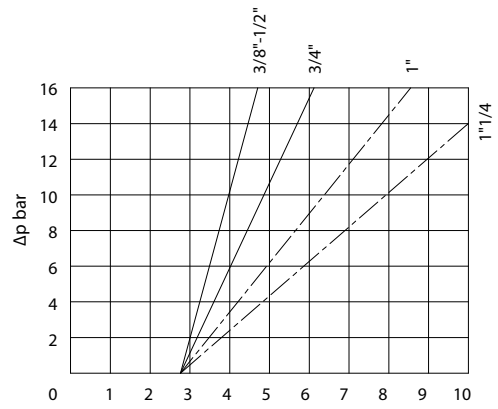



diagramma 9
*diagram 9*
**testa *head***
**Ø50**

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

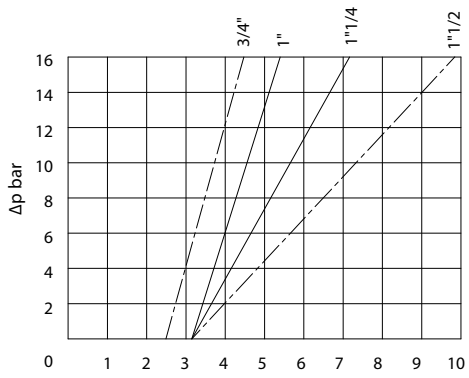



diagramma 10
*diagram 10*
**testa *head***
**Ø63**

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

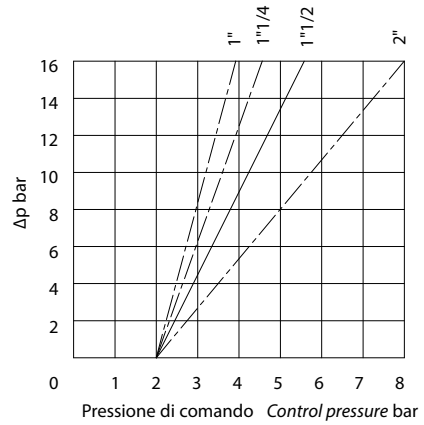



diagramma 11
*diagram 11*
**testa *head***
**Ø90**

aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

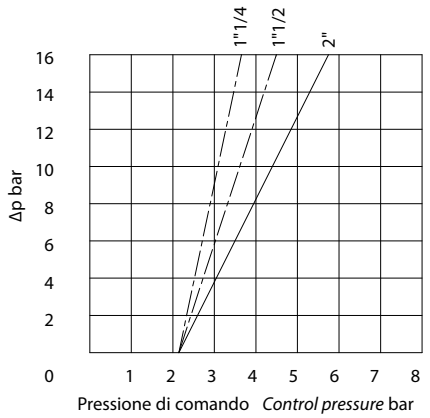



diagramma 12
*diagram 12*
**testa *head***
**Ø110**

aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES FLANGIATA *FLANGED*
## Doppio effetto bidirezionale.
## *Double Acting bidirectional.*

| DN [mm] | CODICE *CODE* CF3M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4DPG1664** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 2,4 | **KGJP1003** | **J4DPG16R4** |
| 20 | **J4DPG1665** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 3,1 | **KGJP1005** | **J4DPG16R5** |
| 25 | **J4DPG1866** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 3,8 | **KGJP1006** | **J4DPG18R6** |
| 32 | **J4DPG1867** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 5,5 | **KGJP1007** | **J4DPG18R7** |
| 40 | **J4DPG1868** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 6,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | **J4DPG2168** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 7,5 | **KGJP1108** | **J4DPG21R8** |
| 50 | **J4DPG2169** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 9,3 | **KGJP1009** | **J4DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

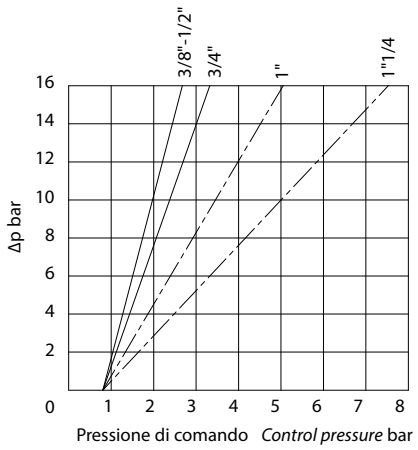



diagramma 13
*diagram 13*
**testa *head***
**Ø50**

aria 0,14 dm³/cilclo
*air 0,14 dm³/cycle*

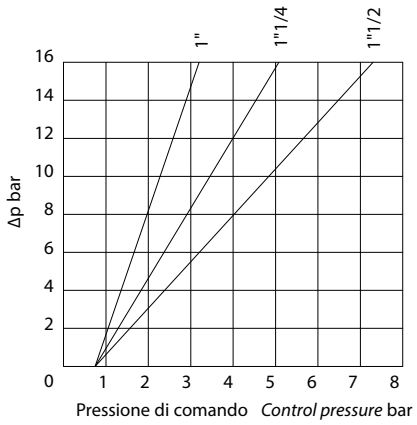



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

aria 0,302 dm³/cilclo
*air 0,302 dm³/cycle*

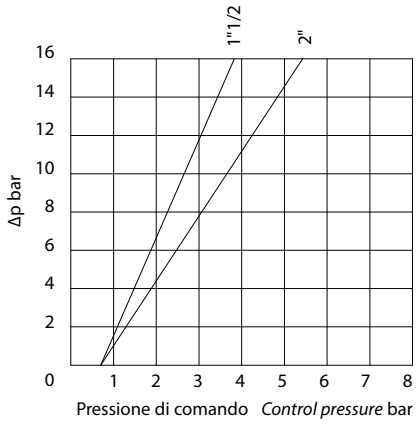



diagramma 15
*diagram 15*
**testa *head***
**Ø90**

aria 0,737 dm³/cilclo
*air 0,737 dm³/cycle*

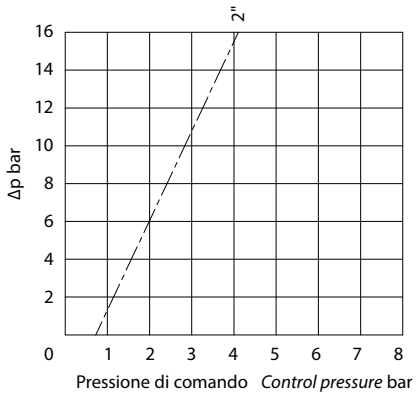


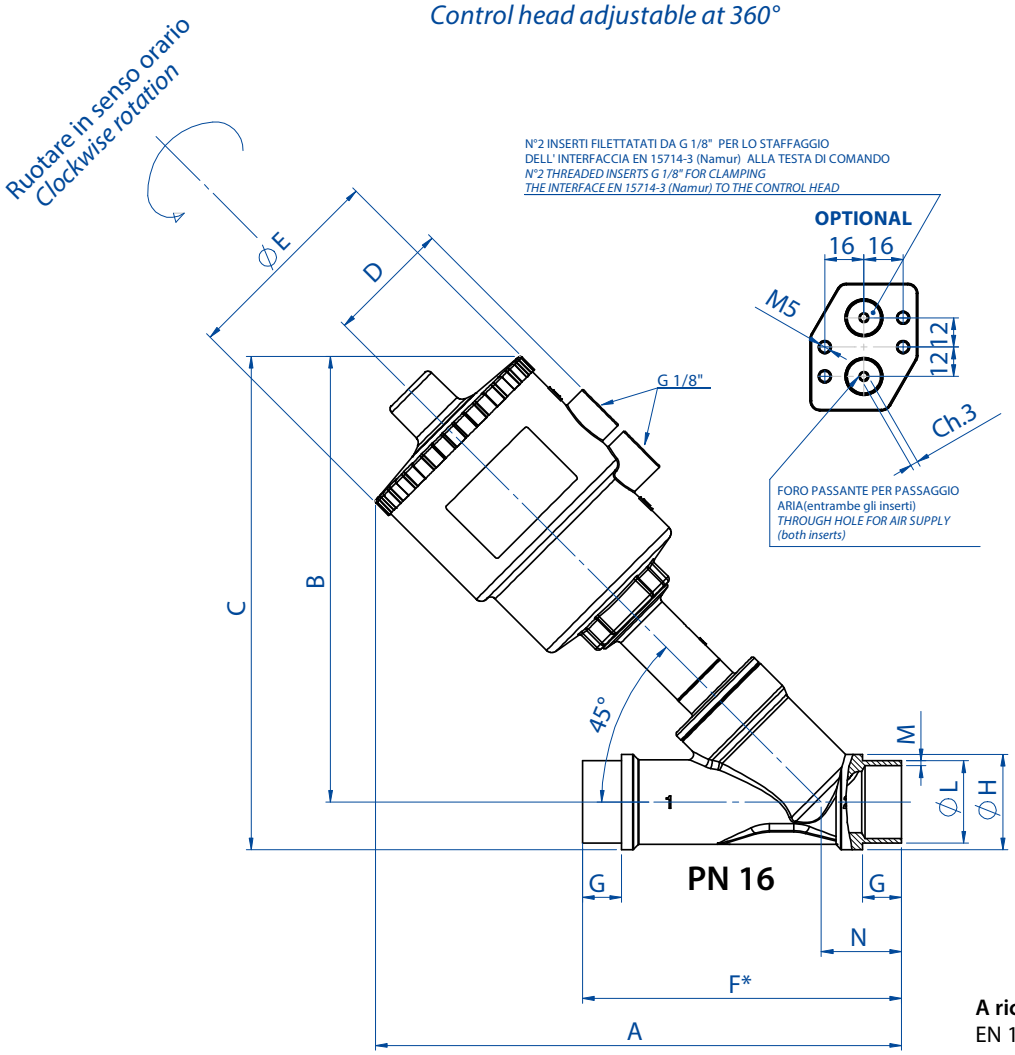

diagramma 16
*diagram 16*
**testa *head***
**Ø110**

aria 1,585 dm³/cilclo
*air 1,585 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

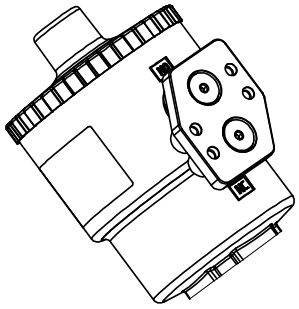
# ARES DA SALDARE UNI ISO 4200
# *WELD ENDS UNI ISO 4200*

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***



* esecuzioni speciali su richiesta e per quantità
* special version on request

**A richiesta versioni:**
EN 10357 seria A (ex DIN 11850 2) - ISO 2037

***On request versions:***
*EN 10357 series A (ex DIN 11850 2) - ISO 2037*

**DIMENSIONI *DIMENSIONS***

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

In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta.
*Suggested executions are in bold. Other combinations on request.*

# ARES DA SALDARE *WELD ENDS*

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

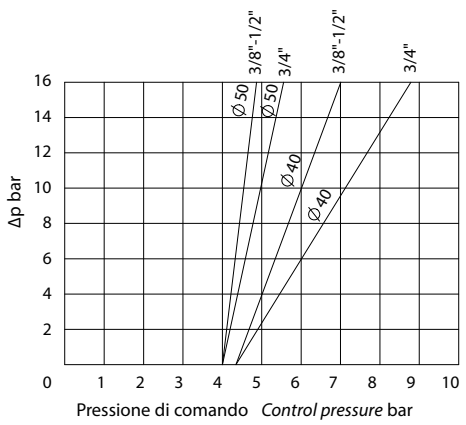
### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4SPG1694** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 20 | **J4SPG1695** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | **J4SPG1895** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP1005** | **J4SPG18R5** |
| 25 | **J4SPG1896** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP1006** | **J4SPG18R6** |
| 25 | **J4SPG2196** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP1106** | **J4SPG21R6** |
| 32 | **J4SPG2197** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 40 | **J4SPG2198** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 40 | **J4SPG2398** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |
| 50 | **J4SPG2399** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

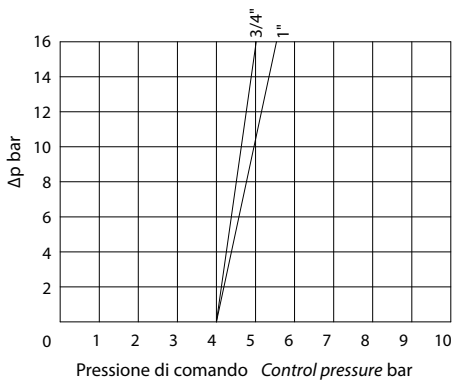
diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**




ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

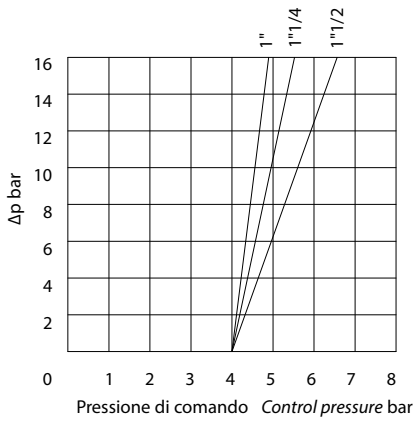
Pressione di comando
*Control pressure* bar

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



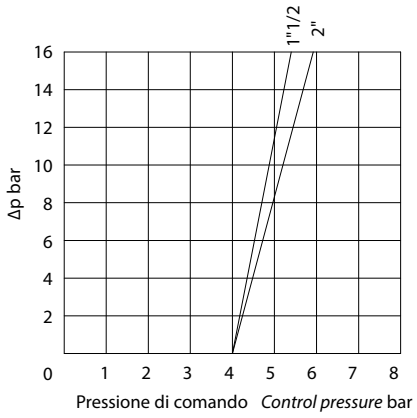

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*

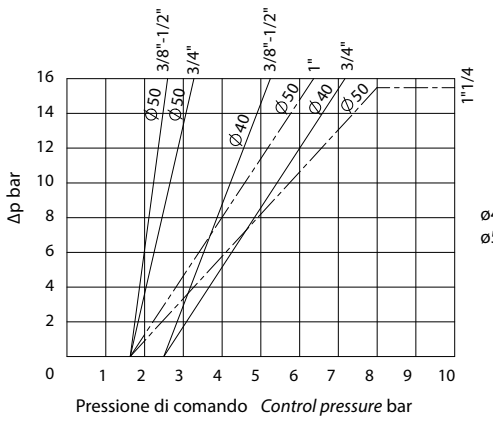
## N.C. Normalmente Chiusa con ingresso sopra l'otturatore

## *N.C. Normally Closed with the flow from above the plug*

| DN [mm] | CODICE *CODE* CF3M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4CPG1694** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | **J4CPG1695** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | **J4CPG1896** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | **J4CPG2197** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | **J4CPG2198** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 50 | **J4CPG2199** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 40 | **J4CPG2398** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | **J4CPG2399** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

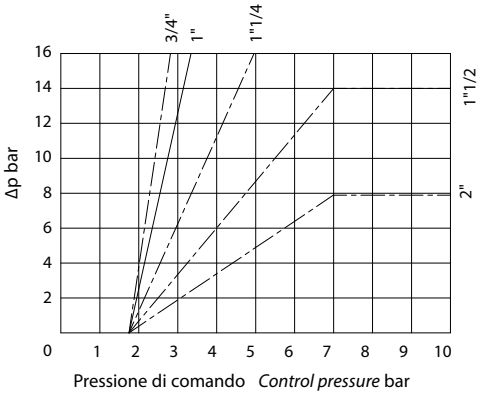
Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



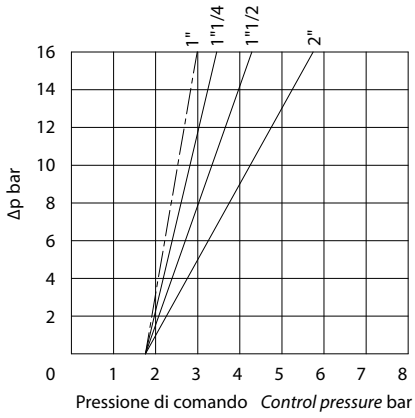

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



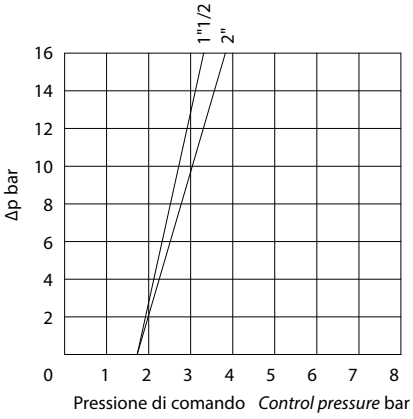

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*

## N.A. Normalmente Aperta con ingresso sotto l'otturatore

## *N.O. Normally Open with flow from below the plug*

| DN [mm] | CODICE *CODE* CF3M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4APG1694** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 20 | **J4APG1695** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 25 | **J4APG1896** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP1006** | **J4APG18R6** |
| 32 | **J4APG1897** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP1007** | **J4APG18R7** |
| 40 | **J4APG2198** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |
| 50 | **J4APG2399** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP1109** | **J4APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

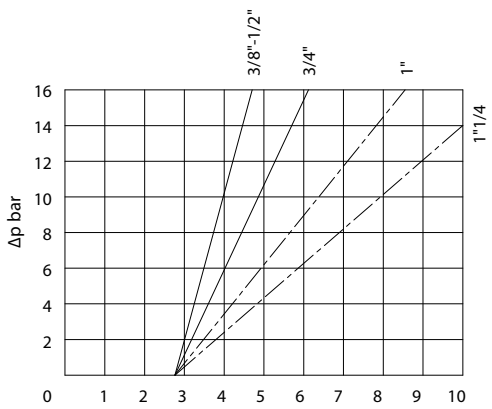



diagramma 9
*diagram 9*
**testa *head***
**Ø50**

aria 0,089 dm³/cilclo
*air 0,089 dm³/cycle*

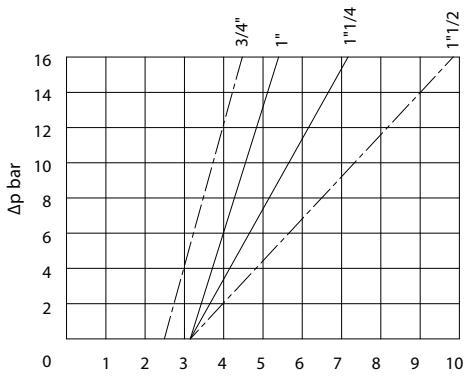



diagramma 10
*diagram 10*
**testa *head***
**Ø63**

aria 0,194 dm³/cilclo
*air 0,194 dm³/cycle*

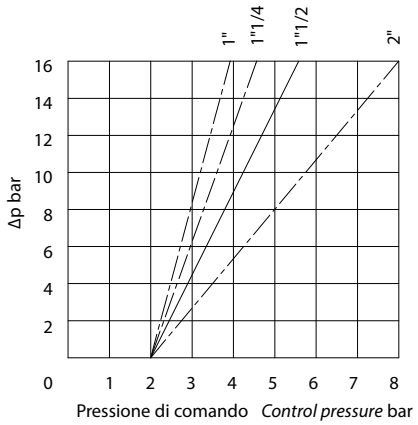



diagramma 11
*diagram 11*
**testa *head***
**Ø90**

aria 0,499 dm³/cilclo
*air 0,499 dm³/cycle*

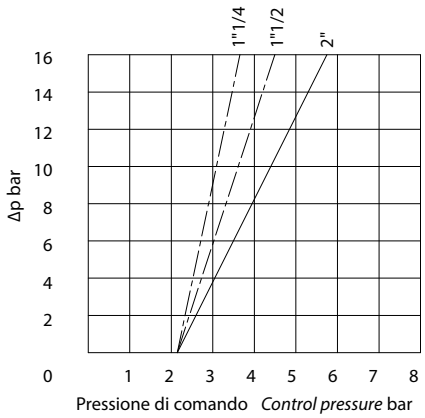



diagramma 12
*diagram 12*
**testa *head***
**Ø110**

aria 1,08 dm³/cilclo
*air 1,08 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*

## Doppio effetto bidirezionale

## *Double Acting bidirectional*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4DPG1694** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 20 | **J4DPG1695** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 25 | **J4DPG1896** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP1006** | **J4DPG18R6** |
| 32 | **J4DPG1897** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP1007** | **J4DPG18R7** |
| 40 | **J4DPG1898** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | **J4DPG2198** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |
| 50 | **J4DPG2199** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP1009** | **J4DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

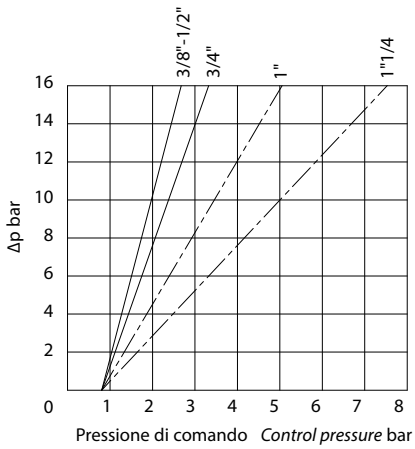



diagramma 13
*diagram 13*
**testa *head***
**Ø50**

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

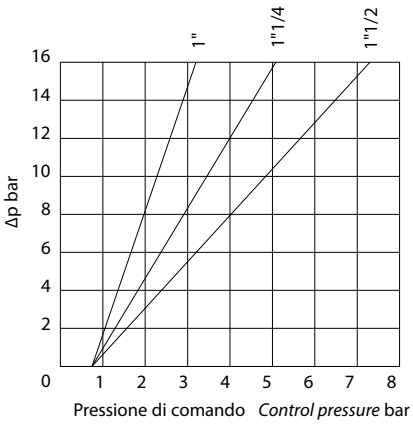



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

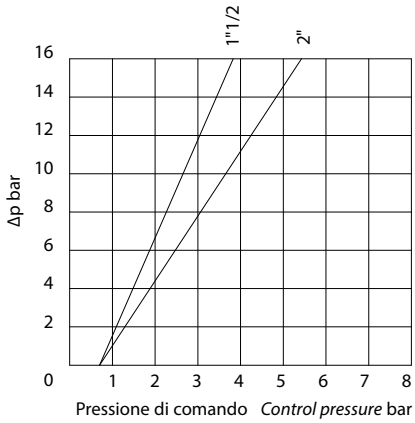



diagramma 15
*diagram 15*
**testa *head***
**Ø90**

aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

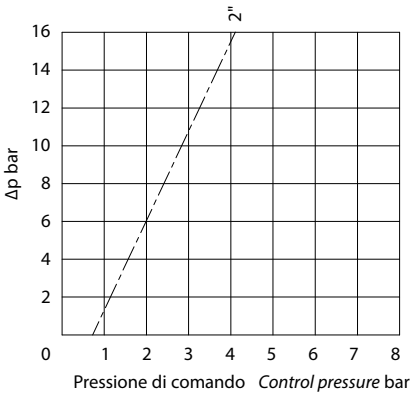


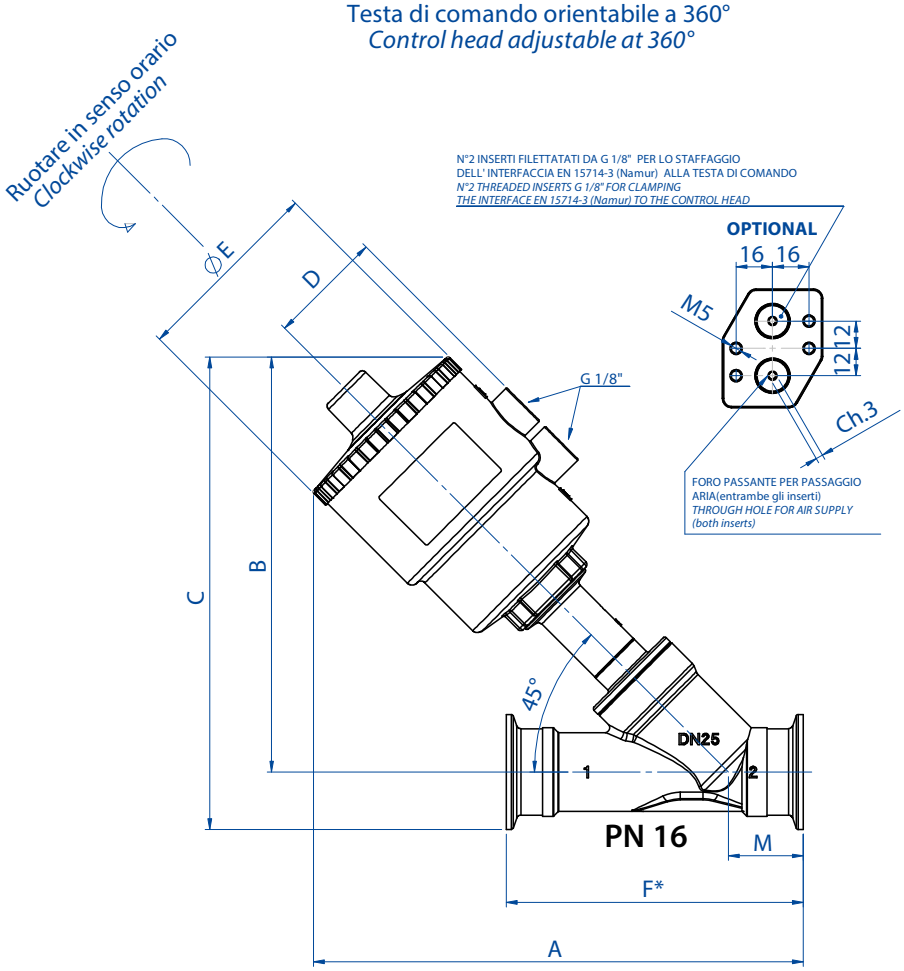

diagramma 16
*diagram 16*
**testa *head***
**Ø110**

aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

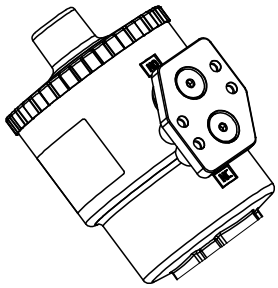
# ARES CONNESSIONI CLAMP 3A
# *TRICLAMP ENDS 3A*

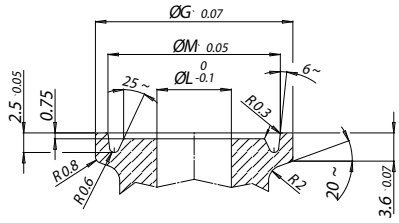
Testa di comando orientabile a 360°
*Control head adjustable at 360°*



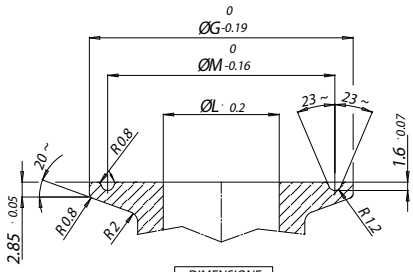

Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*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***






DIMENSIONE
DIMENSION
1/2"-3/4"




DIMENSIONE
DIMENSION
da 1" a 2"

* Esecuzioni speciali su richiesta e per quantità. * Special version on request.

**A richiesta versioni ISO 2852.** ***ISO 2852 version on request.***

**Pressione di utilizzo fino a 16 bar (per il dettaglio vedere relativi diagrammi).** ***Working pressure up to 16 bar (for details see diagrams).***

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CLAMP** *Size* | **Testa di comando** *Control head* | **Passaggio** *Bore* **(mm)** | **A** | **B** | **C** | **D** | **øE** | **F *** | **øG** | **øH** | **øL** | **M** |
| **1/2"** | **Ø 50** | **9,5(*)** | **179** | **156** | **168,6** | **44** | **70** | **88,9** | **25,2** | **19** | **9,5** | **22** |
| **3/4"** | **Ø 50** | **15** | **181,5** | **156** | **168,6** | **44** | **70** | **101,6** | **25,2** | **19** | **15,8** | **22** |
| **1"** | **Ø 50** | **20** | **189,3** | **160** | **185,3** | **44** | **70** | **114,3** | **50,5** | **32** | **22,2** | **43,5** |
| 1" | Ø 63 | 20 | 207,3 | 178 | 203,3 | 50,5 | 84,4 | 114,3 | 50,5 | 23 | 22,2 | 43,5 |
| 1"1/2 | Ø 63 | 32 | 214,6 | 186 | 211,3 | 50,5 | 84,4 | 139,7 | 50,5 | 38 | 34,9 | 43,5 |
| **1"1/2** | **Ø 90** | **32** | **254,6** | **226** | **251,3** | **66,2** | **116,4** | **139,7** | **50,5** | **38** | **34,9** | **43,5** |
| 1"1/2 | Ø 110 | 32 | 290,6 | 261 | 286,3 | 77,4 | 140,6 | 139,7 | 50,5 | 38 | 34,9 | 43,5 |
| 2" | Ø 63 | 40 | 224,7 | 190 | 222 | 50,5 | 84,4 | 158,8 | 64 | 54 | 47,6 | 56,5 |
| **2"** | **Ø 90** | **40** | **264,7** | **230** | **262** | **66,2** | **116,4** | **158,8** | **64** | **54** | **47,6** | **56,5** |
| 2" | Ø 110 | 40 | 300,7 | 266 | 298 | 77,4 | 140,6 | 158,8 | 64 | 54 | 47,6 | 56,5 |

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.** ***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***
In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta. *Suggested executions are in bold. Other combinations on request.*

# ARES CLAMP 3A

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4SPG16U4** | 9,5(*) | 3,4 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 3/4" | **J4SPG16U5** | 15 | 5,7 | 50 | 4 | 10 | 16 | 1,1 | **KGJP1004** | **J4SPG16R4** |
| 1" | **J4SPG16U6** | 20 | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 1" | **J4SPG18U6** | 20 | 10,5 | 63 | 4 | 10 | 16 | 1,4 | **KGJP1005** | **J4SPG18R5** |
| 1"1/2 | **J4SPG21U8** | 32 | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 1"1/2 | **J4SPG23U8** | 32 | 29,5 | 110 | 4 | 8 | 16 | 3,3 | **KGJP1107** | **J4SPG23R7** |
| 2" | **J4SPG21U9** | 40 | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 2" | **J4SPG23U9** | 40 | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

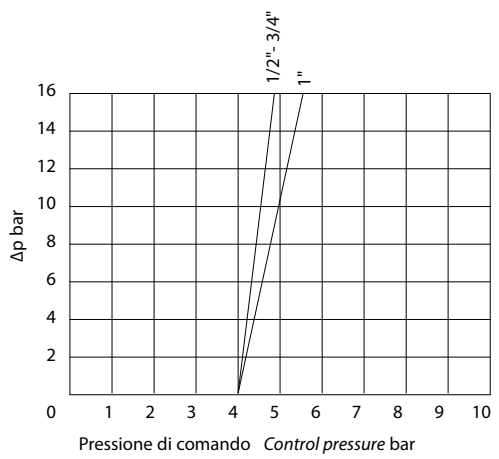



diagramma 1
*diagram 1*
**testa *head***
**Ø50**

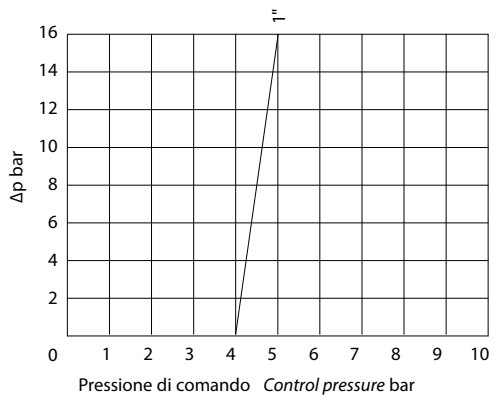



diagramma 2
*diagram 2*
**testa *head***
**Ø63**

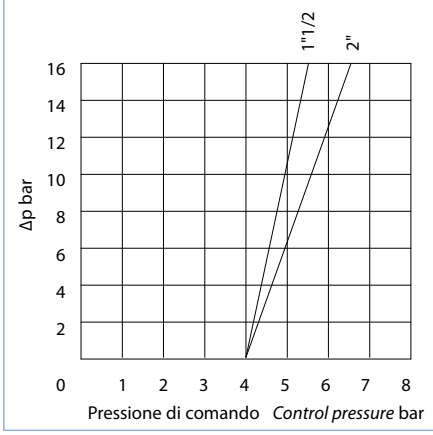



diagramma 3
*diagram 3*
**testa *head***
**Ø90**

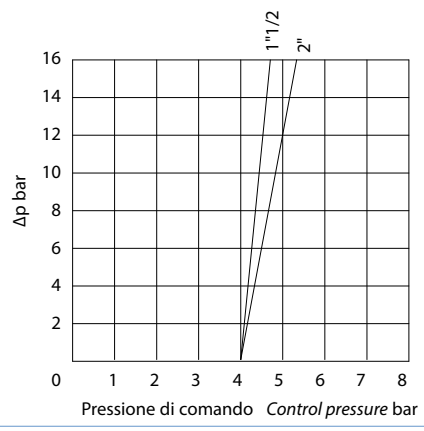



diagramma 4
*diagram 4*
**testa *head***
**Ø110**

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

## *N.C. Normally Closed with the flow from above the plug.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4CPG16U4** | 9,5(*) | 3,4 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 3/4" | **J4CPG16U5** | 15 | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1,1 | **KGJP1004** | **J4CPG16R4** |
| 1" | **J4CPG16U6** | 20 | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 1" | **J4CPG18U6** | 20 | 10,5 | 63 | 1,8 | 10 | diagram n° 6 | 1,4 | **KGJP1005** | **J4CPG18R5** |
| 1"1/2 | **J4CPG18U8** | 32 | 28,5 | 63 | 1,8 | 10 | diagram n° 6 | 2,6 | **KGJP1007** | **J4CPG18R7** |
| 1"1/2 | **J4CPG21U8** | 32 | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 2" | **J4CPG21U9** | 40 | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 2" | **J4CPG23U9** | 40 | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

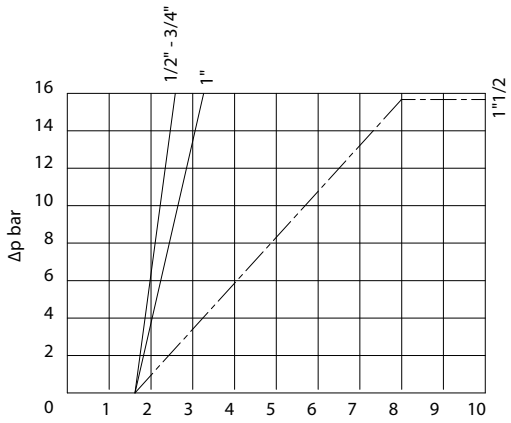



diagramma 5
*diagram 5*
**testa *head***
**Ø50**

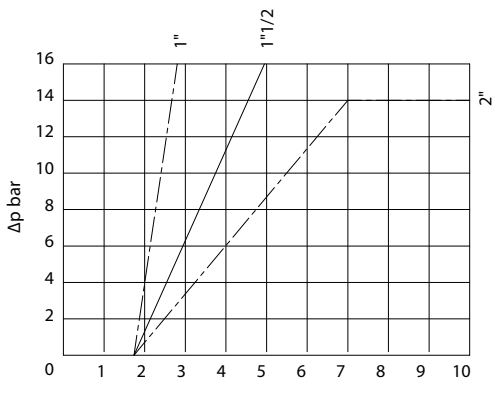



diagramma 6
*diagram 6*
**testa *head***
**Ø63**

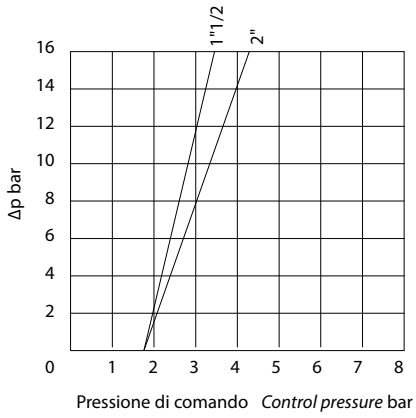



diagramma 7
*diagram 7*
**testa *head***
**Ø90**

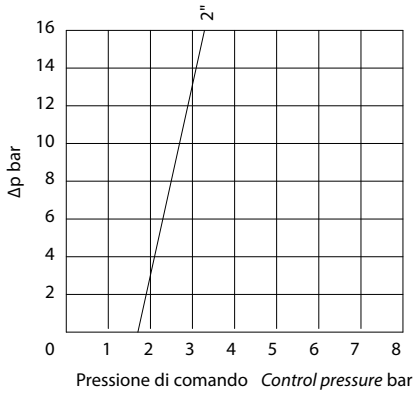



diagramma 8
*diagram 8*
**testa *head***
**Ø110**

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A

## N.A. Normalmente Aperta con ingresso sotto l'otturatore.

## *N.O. Normally Open with flow from below the plug.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4APG16U4** | 9,5(*) | 3,4 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 3/4" | **J4APG16U5** | 15 | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1,1 | **KGJP1004** | **J4APG16R4** |
| 1" | **J4APG16U6** | 20 | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 1"1/2 | **J4APG18U8** | 32 | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2,6 | **KGJP1007** | **J4APG18R7** |
| 2" | **J4APG21U9** | 40 | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

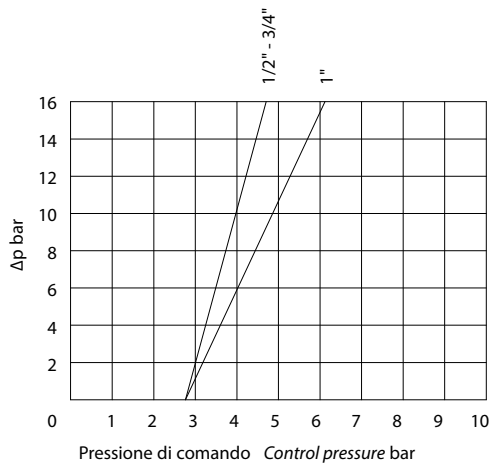



diagramma 9
*diagram 9*
**testa *head***
**Ø50**

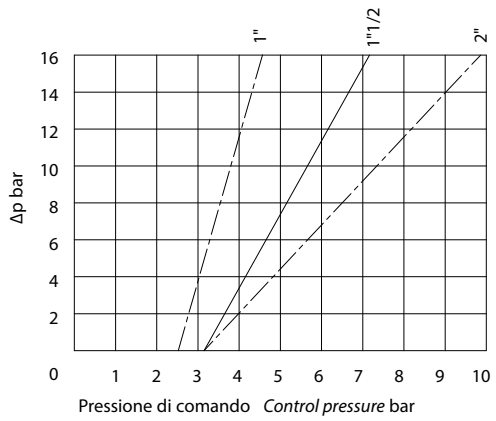



diagramma 10
*diagram 10*
**testa *head***
**Ø63**

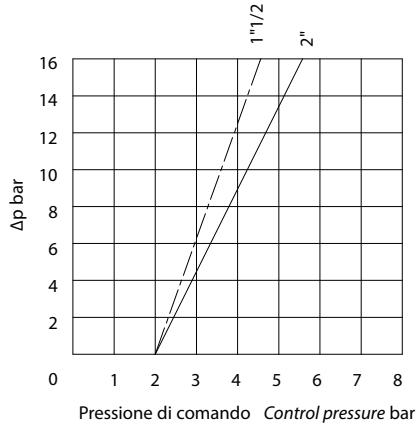



diagramma 11
*diagram 11*
**testa *head***
**Ø90**

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A
## Doppio effetto bidirezionale.
## *Double Acting bidirectional.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4DPG16U4** | 9,5(*) | 3,4 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 3/4" | **J4DPG16U5** | 15 | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1,1 | **KGJP1004** | **J4DPG16R4** |
| 1" | **J4DPG16U6** | 20 | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 1"1/2 | **J4DPG18U8** | 32 | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 2 | **KGJP1007** | **J4DPG18R7** |
| 2" | **J4DPG18U9** | 40 | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 2" | **J4DPG21U9** | 40 | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

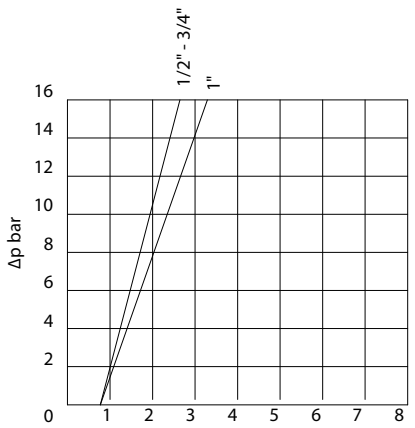



diagramma 13
*diagram 13*
**testa *head***
**Ø50**

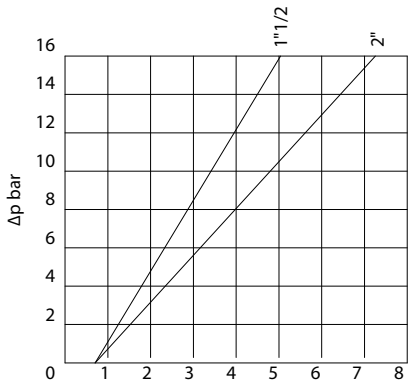



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

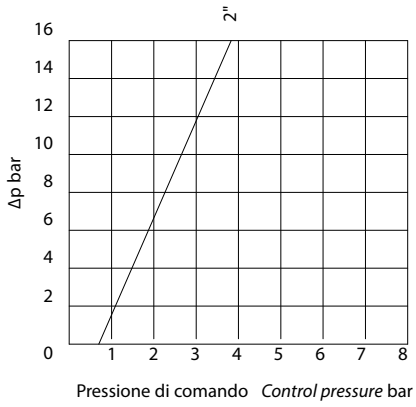



diagramma 15
*diagram 15*
**testa *head***
**Ø90**

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES MANUALE
# *ARES MANUAL DRIVE*

**PN 25**

### CARATTERISTICHE GENERALI:
- Materiale del corpo valvola: A351-CF8M (316 S.S.).
- Attacchi valvola: vedi schema di codifica.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da DN 10 a DN 50.
- Disponibile anche versione con dispositivo di bloccaggio.
- Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.
- A richiesta: versioni per vuoto e per uso ossigeno.

### *GENERAL FEATURES:*
- *Body valve material: A351-CF8M (316 S.S.).*
- *Valve ends: see code plan.*
- *Assembling is possible in all positions: upright, flat or angled.*
- *Range available from DN 10 to DN 50.*
- *Locking device version available.*
- *2014/34/EU ATEX configuration to request at time of order.*
- *On request: versions for vacuum and oxygen service.*

### FLUIDO INTERCETTATO:
- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc..(comunque compatibili con A 351 CF8M (316 S.S.) e PTFE).
- Pressione di utilizzo da 0 a 25 bar (vapore a 180°C da 0 a 10 bar) in funzione della versione scelta.
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

### *OPERATING MEDIA:*
- *Air, water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with A 351 CF8M (316 S.S.) e PTFE).*
- *Pressure from 0 to 25 bar (steam from 180°C, from 0 to 10 bar) depending on the model chosen.*
- *Temperature from –10°C to 180°C.*
- *Max. viscosity 600 cst ($mm^2/s$).*

## SCHEMA DI CODIFICA ARES MANUALI
## *ARES MANUAL DRIVE CODE PLAN*

**J4 M0 G 0 - - - YX**

**YX solo per versioni ATEX**
***YX only for ATEX versions***

**0 =** Manuale *Manual drive;*
**B =** Manuale con dispositivo di bloccaggio
*Manual drive with locking device*

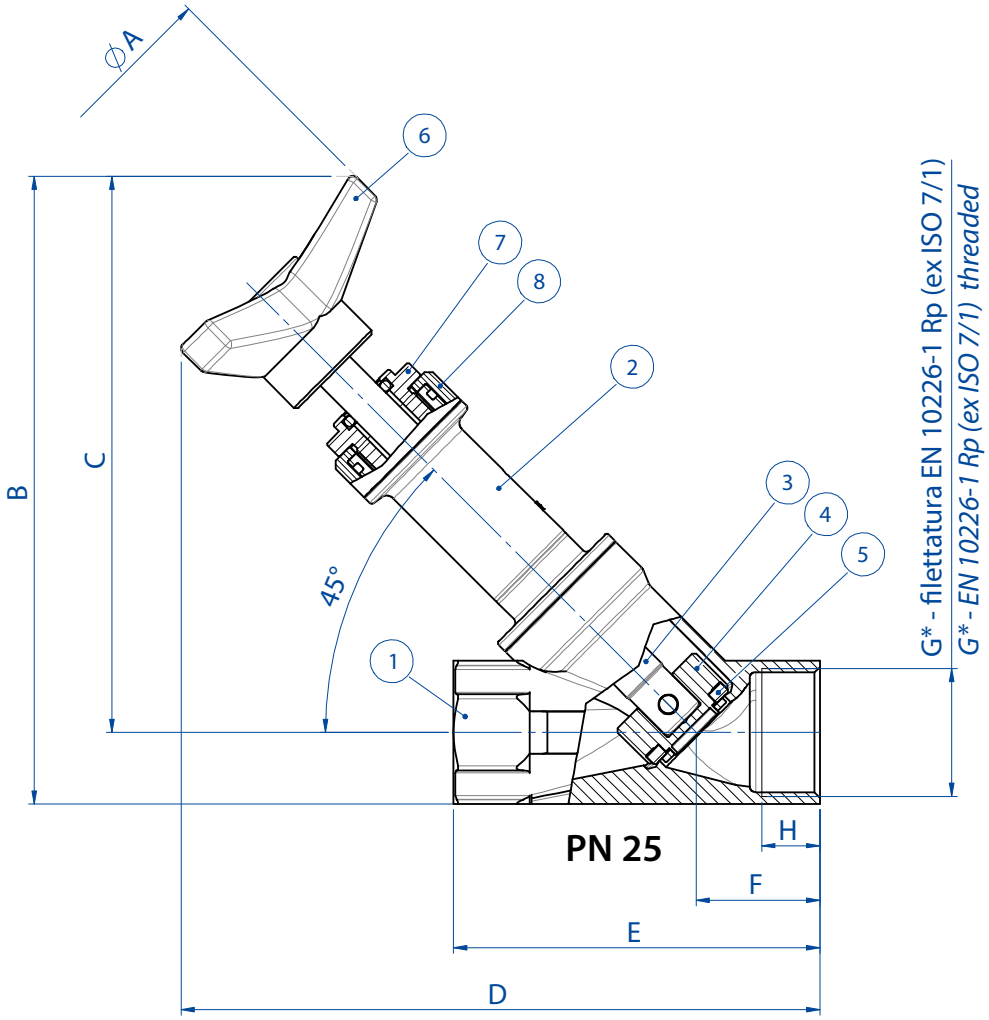
**Connessioni a richiesta *Ends on request***
**0** = Filettate *Threaded ends* EN 10226-1 Rp (ex ISO 7/1);
**4** = Filettate *Threaded ends* NPT;
**9** = da saldare *weld ends* ISO 4200;
**I** = da saldare *weld ends* ISO 2037;
**D** = da saldare *weld ends* DIN 11852 2;
**6** = flangiate *flanged* EN 1092-1;
**A** = flangiate *flanged* ANSI 150 RF;
**B** = flangiate ridotte *reduced flanges;*
**T** = triclamp ISO 2852;
**U** = triclamp USA 3A.

**Misura valvola *Valve size***

| | |
|---|---|
| **3** = 3/8" | |
| **4** = 1/2" | **4** = DN 15 |
| **5** = 3/4" | **5** = DN 20 |
| **6** = 1" | **6** = DN 25 |
| **7** = 1" 1/4 | **7** = DN 32 |
| **8** = 1" 1/2 | **8** = DN 40 |
| **9** = 2" | **9** = DN 50 |

# ARES MANUALE *ARES MANUAL DRIVE*

## ATTACCHI FILETTATI *THREADED VALVE ENDS* EN 10226-1 RP (EX ISO 7/1)




*A richiesta filetto NPT *NPT on request*

| DIMENSIONI *DIMENSIONS* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G * [inch]** | **øA** | **B** | **C** | **D** | **E** | **F** | **H** |
| 15 | 3/8″ | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 12 |
| 15 | 1/2″ | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 15 |
| 20 | 3/4″ | 63 | 148,5 | 133 | 176,2 | 95 | 34,7 | 16,3 |
| 25 | 1″ | 63 | 152 | 133 | 178,1 | 105 | 36,6 | 19,5 |
| 32 | 1″1/4 | 100 | 191,5 | 168 | 222,5 | 120 | 40,5 | 19 |
| 40 | 1″1/2 | 100 | 197 | 170 | 225 | 130 | 41 | 18 |
| 50 | 2″ | 100 | 213 | 180 | 239,5 | 150 | 45,5 | 20 |

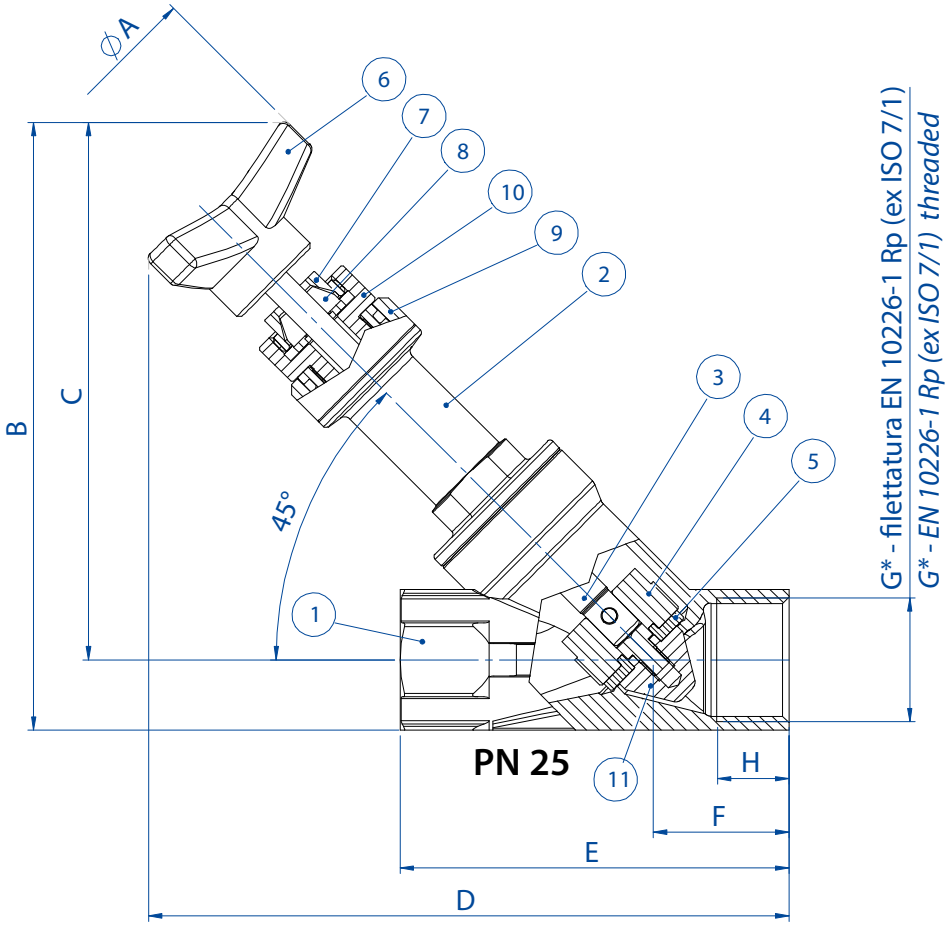
* A richiesta filetto NPT *NPT on request*

| MATERIALI *MATERIALS* | | |
|---|---|---|
| **N°** | **Descrizione** *Description* | **Materiali** *Materials* |
| 1 | Corpo valvola *Valve body* | CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4 | Otturatore *Plug* | 316L S.S. |
| 5 | Guarnizione otturatore *Plug seals* | PTFE |
| 6 | Manopola *Hand grip* | Tecnoplimero *Tecnopolymer* |
| 7 | Premiguarnizione *Gland Nut* | 304 S.S. |
| 8 | Bussola *Bush* | Lega di alluminio *Aluminium Alloy* |

# ARES MANUALE CON DISPOSITIVO DI BLOCCAGGIO

# *ARES MANUAL DRIVE WITH BLOCKING DEVICE*

## ATTACCHI FILETTATI *THREADED VALVE ENDS* EN 10226-1 RP (EX ISO 7/1)




*a richiesta filetto NPT *NPT on request*

**DIMENSIONI *DIMENSIONS***

| DN [mm] | G * [inch] | øA | B | C | D | E | F | H |
|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 12 |
| 15 | 1/2" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 15 |
| 20 | 3/4" | 63 | 148,5 | 133 | 176,2 | 95 | 34,7 | 16,3 |
| 25 | 1" | 63 | 152 | 133 | 178,1 | 105 | 36,6 | 19,5 |
| 32 | 1"1/4 | 100 | 191,5 | 168 | 222,5 | 120 | 40,5 | 19 |
| 40 | 1"1/2 | 100 | 197 | 170 | 225 | 130 | 41 | 18 |
| 50 | 2" | 100 | 213 | 180 | 239,5 | 150 | 45,5 | 20 |

* A richiesta filetto NPT *NPT on request*

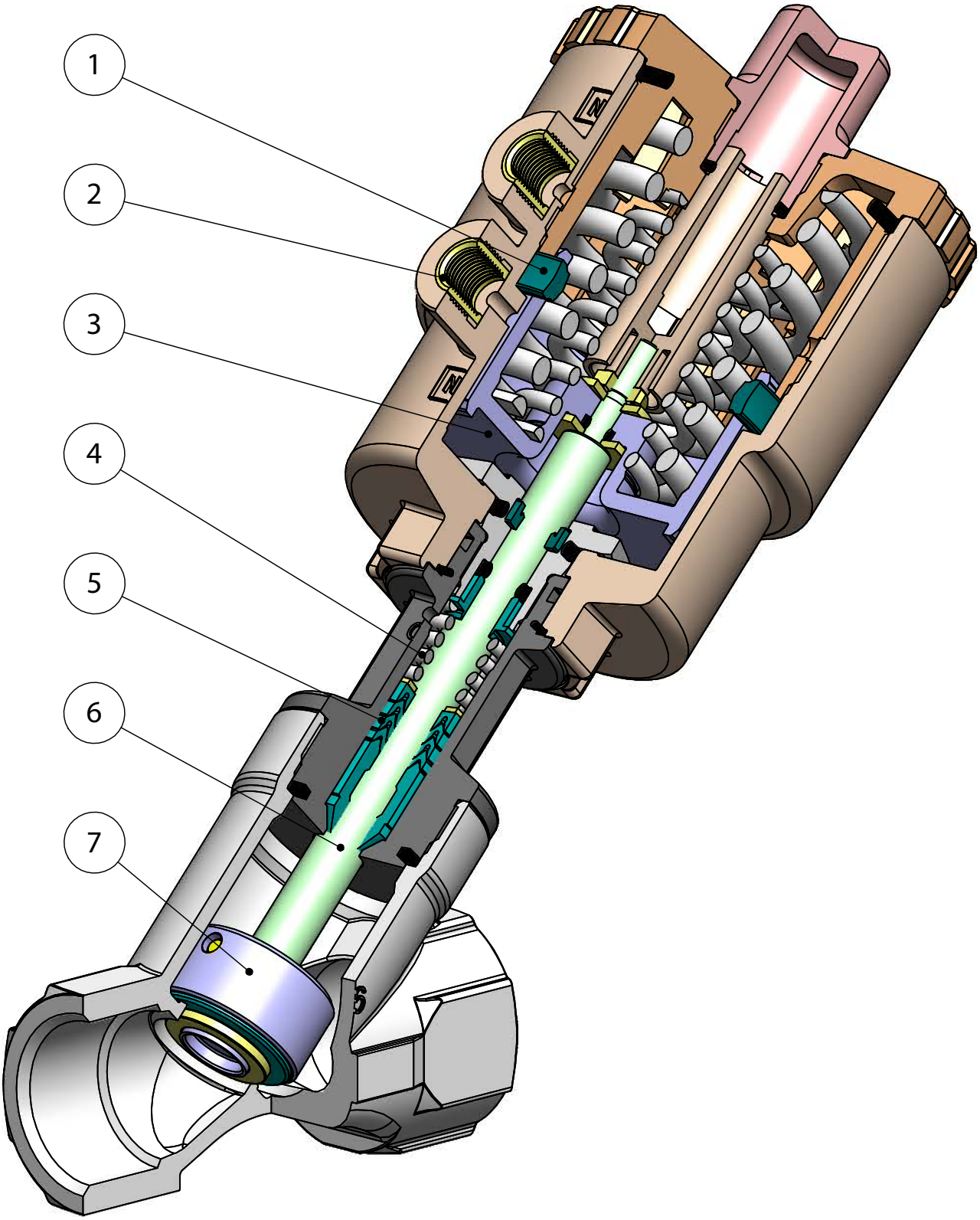
**MATERIALI *MATERIALS***

| N° | Descrizione *Description* | Materiali *Materials* |
|---|---|---|
| 1 | Corpo valvola *Valve body* | CF8M |
| 2 | Cannotto premistoppa *Sleeve* | CF8M |
| 3 | Stelo *Stem* | 316L S.S. |
| 4 | Otturatore *Plug* | 316L S.S. |
| 5 | Guarnizione otturatore *Plug seals* | PTFE |
| 6 | Manopola *Hand grip* | Tecnoplimero *Tecnopolymer* |
| 7 | Ghiera di bloccaggio *Locking nut* | 304 S.S. |
| 8 | Pinza *Pliers* | Ottone *Brass* |
| 9 | Bussola *Bush* | Lega di alluminio *Aluminium Alloy* |
| 10 | Premiguarnizione *Gland Nut* | 304 S.S. |
| 11 | Ogiva *Ogive* | 304 S.S. |

# ZEUS

## VALVOLA INCLINATA

## *ANGLE SEAT VALVE*

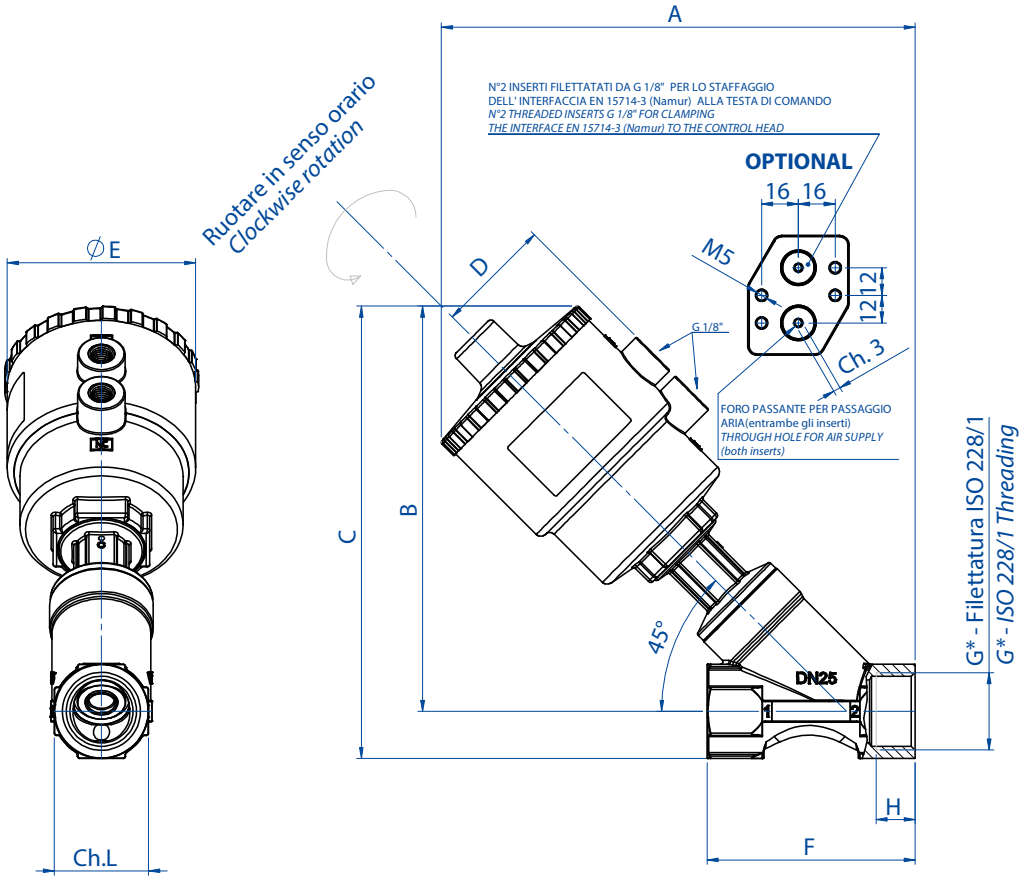


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone<br><br>*Seal placed in the cylinder rather than on the piston* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico)<br><br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)* |
| | | Minor usura della guarnizione<br><br>*Less wear of the seal* |
| 2 | Inserti della testa di comando in 303 S.S..<br><br>*Piloting head inserts in 303 S.S..* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni.<br><br>*Increases considerably the corrosion resistance caused by external agents.* |
| 3 | Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron)<br><br>*Starting from DN63 metal piston with CHEMICAL NICKEL coating (10-15 micron)* | Si riduce l'usura del pistone grazie al raggiungimento di una maggior durezza superficiale(700-750 HV)<br><br>*Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV)* |
| 4 | Guarnizioni precaricate da molla<br><br>*Seals pre-loaded by spring* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno<br><br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche<br><br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions* |
| 5 | Guarnizioni tipo "chevron" (a "v") con 4 guarnizioni nella parte inferiore<br><br>*CHEVRON seals (V shape) with 4 seals in the lower part* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br><br>*It ensures a perfect tightness even after a high number of cycles* |
| 6 | Albero rullato<br><br>*Rolled shaft* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento<br><br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft* |
| 7 | Otturatore oscillante/autoallineante<br><br>*Oscillating / self-aligning shutter* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta<br><br>*It fits perfectly to the valve body ensuring the maximum tightness* |
| | Certificato ATEX<br><br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br><br>*Installation is allowed in a potential explosive environment* |
| | Certificato PED<br><br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br><br>*Full compliance with European Safety Standards for Pressure Equipment* |

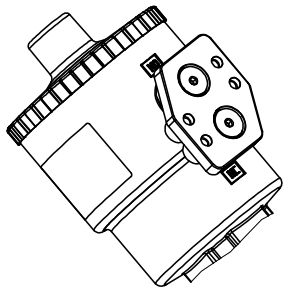
# ZEUS

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***

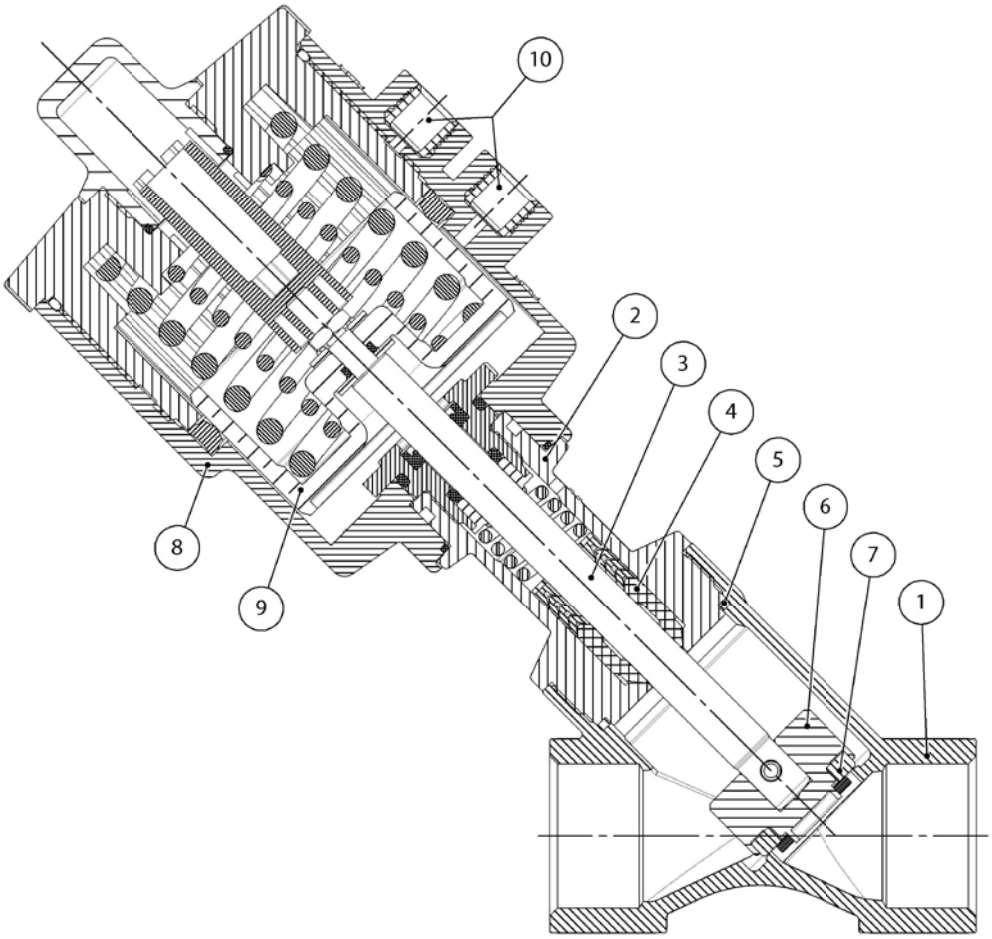


## DIMENSIONI *DIMENSIONS*

| DN [mm] | G * [inch] | Attuatore *Actuator* | A | B | C | D | øE | F | ch. L | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8″ | Ø 50 | 166 | 143 | 157 | 44 | 70 | 65 | 27 | 12 |
| 15 | 1/2″ | Ø 50 | 166 | 143 | 157 | 44 | 70 | 65 | 27 | 11 |
| 20 | 3/4″ | Ø 50 | 174 | 149 | 165 | 44 | 70 | 75 | 33 | 14 |
| 20 | 3/4″ | Ø 63 | 193 | 167 | 184 | 51 | 85 | 75 | 33 | 14 |
| 25 | 1″ | Ø 50 | 188 | 159 | 180 | 44 | 70 | 90 | 41 | 17 |
| 25 | 1″ | Ø 63 | 206 | 172 | 193 | 51 | 85 | 90 | 41 | 17 |
| 25 | 1″ | Ø 90 | 255 | 221 | 242 | 67 | 117 | 90 | 41 | 17 |
| 32 | 1″1/4 | Ø 50 | 197 | 160 | 186 | 44 | 70 | 110 | 50 | 19 |
| 32 | 1″1/4 | Ø 63 | 215 | 180 | 205 | 51 | 85 | 110 | 50 | 19 |
| 32 | 1″1/4 | Ø 90 | 267 | 231 | 256 | 67 | 117 | 110 | 50 | 19 |
| 32 | 1″1/4 | Ø 110 | 300 | 265 | 290 | 78 | 141 | 110 | 50 | 19 |
| 40 | 1″1/2 | Ø 63 | 238 | 202 | 231 | 51 | 85 | 120 | 58 | 18 |
| 40 | 1″1/2 | Ø 90 | 270 | 235 | 264 | 67 | 117 | 120 | 58 | 18 |
| 40 | 1″1/2 | Ø 110 | 306 | 271 | 300 | 78 | 141 | 120 | 58 | 18 |
| 50 | 2″ | Ø 63 | 247 | 206 | 241 | 51 | 85 | 150 | 70 | 20 |
| 50 | 2″ | Ø 90 | 281 | 241 | 276 | 67 | 117 | 150 | 70 | 20 |
| 50 | 2″ | Ø 110 | 317 | 276 | 311 | 78 | 141 | 150 | 70 | 20 |

* A richiesta la versione con filettatura NPT *On request NPT-threading*

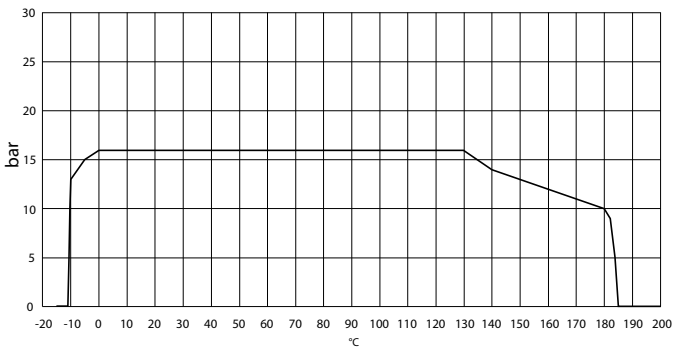
# ZEUS



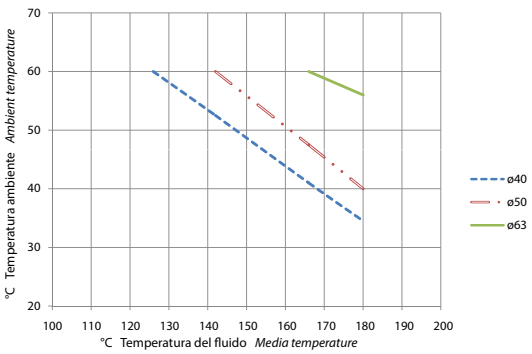

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | Bronzo *Bronze* CuSn5Zn5Pb5-B |
| 2 | Cannotto premistoppa *Sleeve* | Ottone EN 12165 CW617N *Brass EN 12165 CW617N* |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | Ottone nichel chimico *Brass chem-nickel* (PBT + GF 20% testa/head ø50) |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

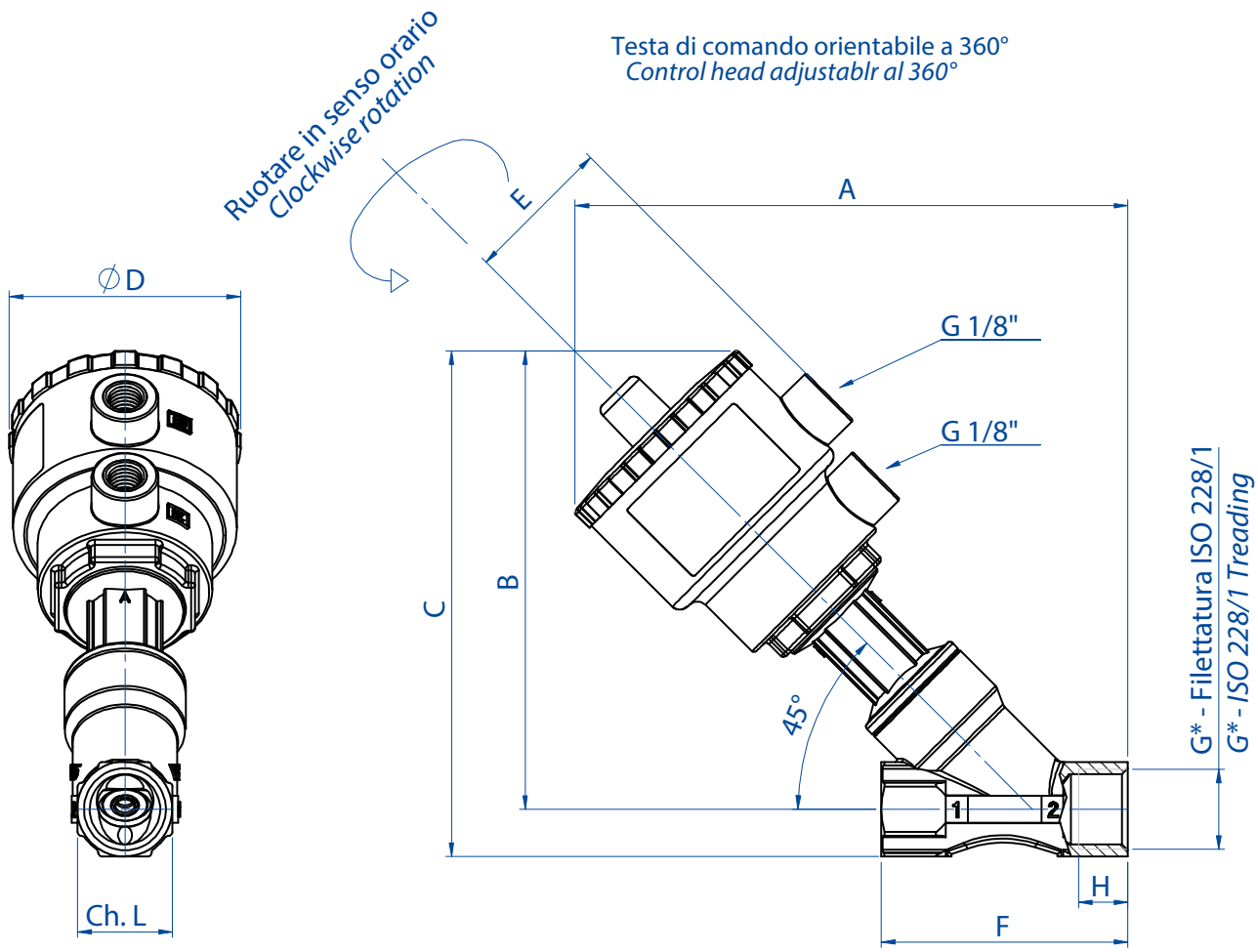
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*

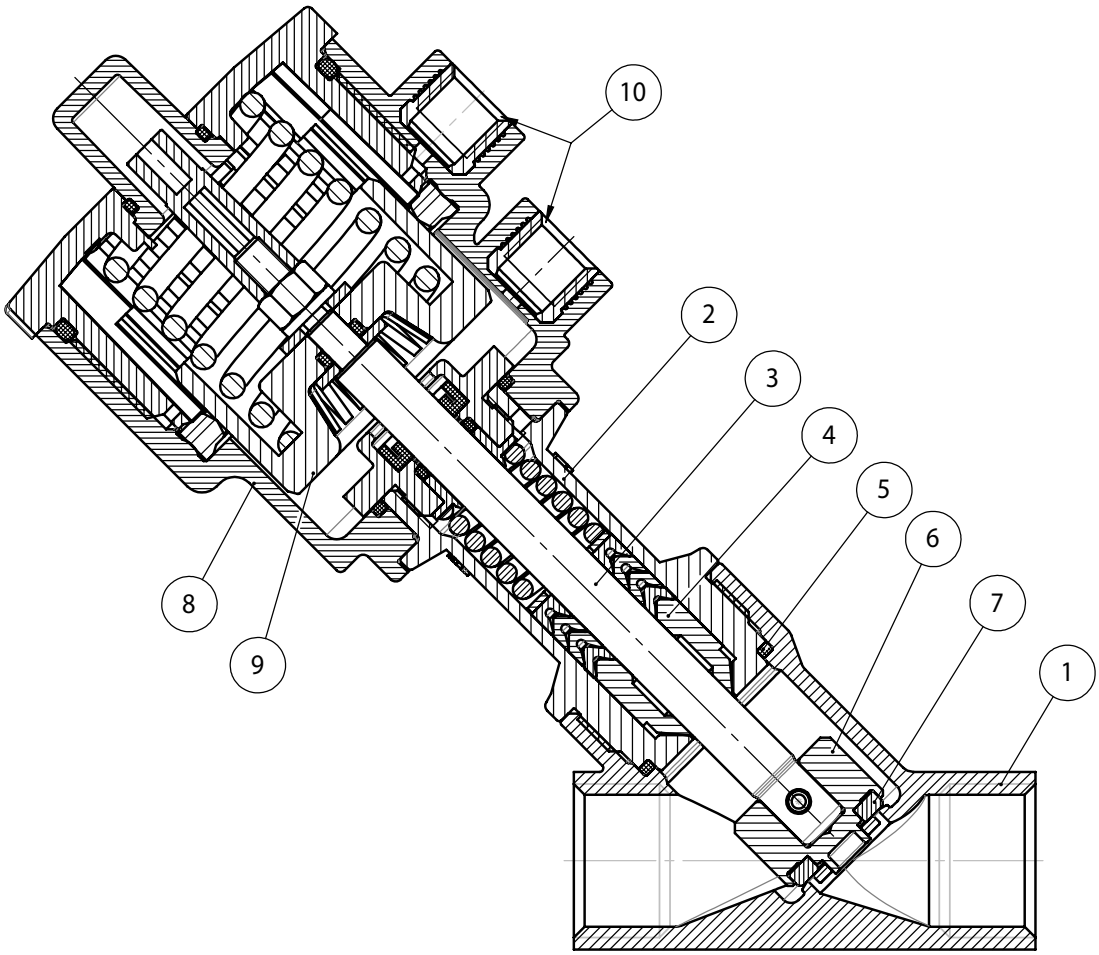


# ZEUS TESTA ø40 *HEAD ø40*




| DIMENSIONI *DIMENSIONS* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G * [inch]** | **Attuatore *Actuator*** | **A** | **B** | **C** | **øD** | **E** | **F** | **H** | **ch. L** |
| 15 | 3/8″ | Ø 40 | 144 | 121 | 134 | 61 | 39 | 65 | 12 | 27 |
| 15 | 1/2″ | Ø 40 | 144 | 121 | 134 | 61 | 39 | 65 | 11 | 27 |
| 20 | 3/4″ | Ø 40 | 151 | 128 | 143 | 61 | 39 | 75 | 14 | 33 |
| * A richiesta la versione con filettatura NPT *On request NPT-threading* | | | | | | | | | | |

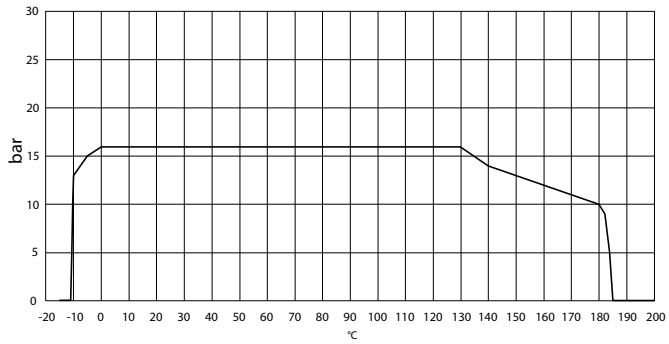
# ZEUS TESTA ø40 *HEAD ø40*



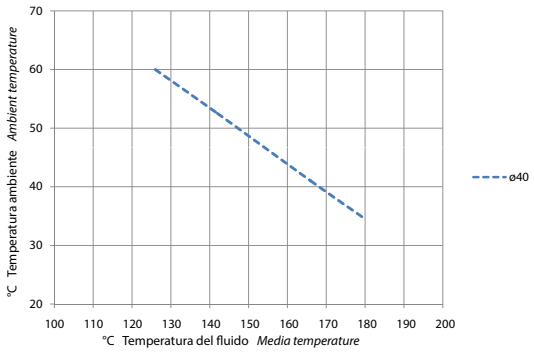

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | Bronzo *Bronze* CuSn5Zn5Pb5-B |
| 2 | Cannotto premistoppa *Sleeve* | Ottone EN 12165 CW617N *Brass EN 12165 CW617N* |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | PBT + GF 20% |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
### *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
### *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*




ZEUS

# ZEUS

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

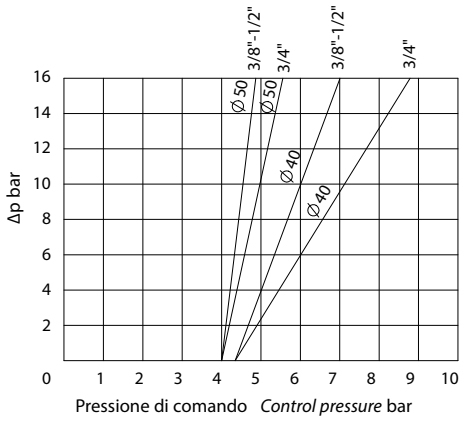
| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9SPG1403** | 4,5 | 40 | 4,2 | 10 | 16 | 1,1 | **KGJP2303** | **J9SPG14R3** |
| 15 | 3/8" | **J9SPG1603** | 4,9 | 50 | 4 | 10 | 16 | 1,1 | **KGJP2003** | **J9SPG16R3** |
| 15 | 1/2" | **J9SPG1404** | 5,3 | 40 | 4,2 | 10 | 16 | 1 | **KGJP2303** | **J9SPG14R4** |
| 15 | 1/2" | **J9SPG1604** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP2003** | **J9SPG16R4** |
| 20 | 3/4" | **J9SPG1405** | 9,2 | 40 | 4,2 | 10 | 8 | 1,2 | **KGJP2305** | **J9SPG14R5** |
| 20 | 3/4" | **J9SPG1605** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP2005** | **J9SPG16R5** |
| 20 | 3/4" | **J9SPG1805** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP2005** | **J9SPG18R5** |
| 25 | 1" | **J9SPG1806** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP2006** | **J9SPG18R6** |
| 25 | 1" | **J9SPG2106** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP2106** | **J9SPG21R6** |
| 32 | 1"1/4 | **J9SPG2107** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP2107** | **J9SPG21R7** |
| 40 | 1"1/2 | **J9SPG2108** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP2108** | **J9SPG21R8** |
| 40 | 1"1/2 | **J9SPG2308** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP2108** | **J9SPG23R8** |
| 50 | 2" | **J9SPG2309** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP2109** | **J9SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

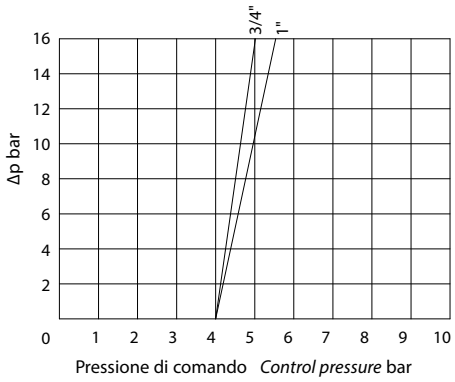
### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



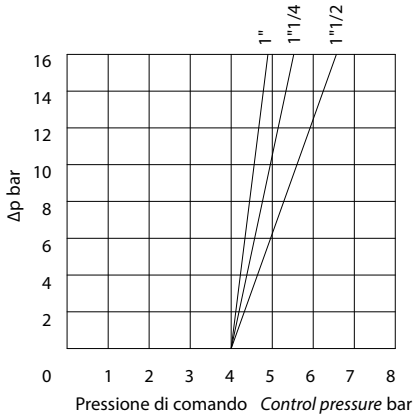

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



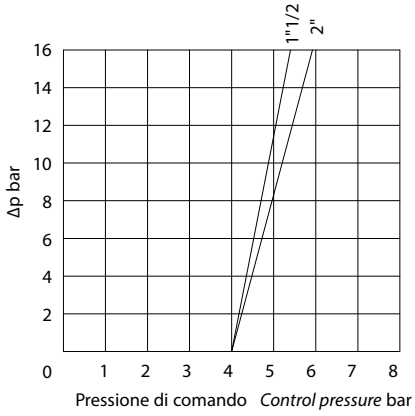

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ZEUS

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

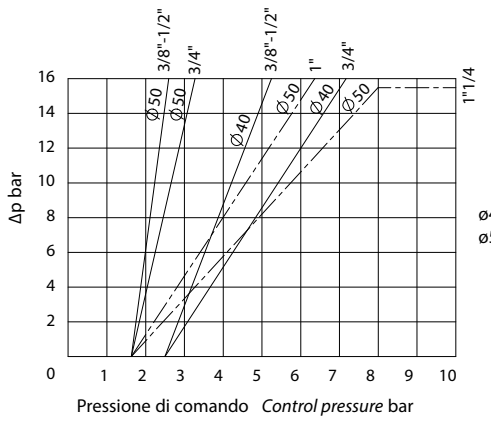
## *N.C. Normally Closed with the flow from above the plug.*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9CPG1403** | 4,5 | 40 | 2,5 | 10 | diagram n° 5 | 1 | **KGJP2303** | **J9CPG14R3** |
| 15 | 3/8" | **J9CPG1603** | 4,9 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP2003** | **J9CPG16R3** |
| 15 | 1/2" | **J9CPG1404** | 5,3 | 40 | 2,,5 | 10 | diagram n° 5 | 1 | **KGJP2303** | **J9CPG14R4** |
| 15 | 1/2" | **J9CPG1604** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP2003** | **J9CPG16R4** |
| 20 | 3/4" | **J9CPG1405** | 9,2 | 40 | 2,5 | 10 | diagram n° 5 | 1,2 | **KGJP2305** | **J9CPG14R5** |
| 20 | 3/4" | **J9CPG1605** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP2005** | **J9CPG16R5** |
| 25 | 1" | **J9CPG1806** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP2006** | **J9CPG18R6** |
| 32 | 1"1/4 | **J9CPG2107** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP2107** | **J9CPG21R7** |
| 40 | 1"1/2 | **J9CPG2108** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP2108** | **J9CPG21R8** |
| 40 | 1"1/2 | **J9CPG2308** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP2108** | **J9CPG23R8** |
| 50 | 2" | **J9CPG2109** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP2109** | **J9CPG21R9** |
| 50 | 2" | **J9CPG2309** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP2109** | **J9CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

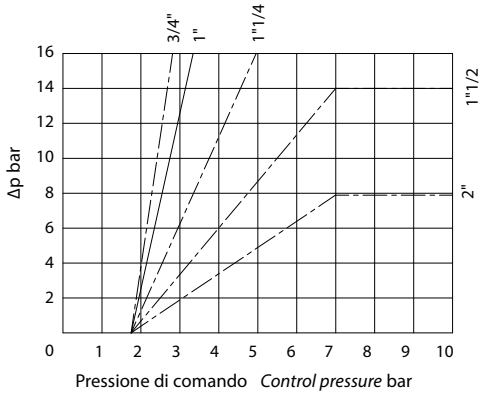
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



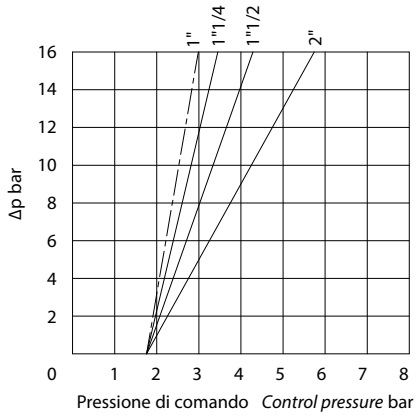

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



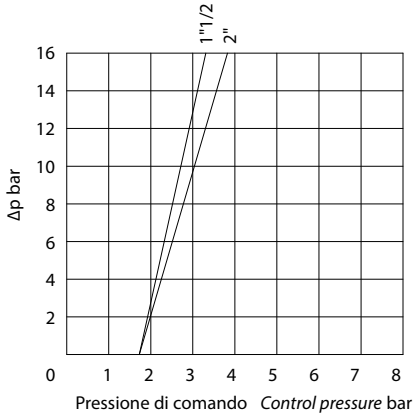

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ZEUS

## N.A. Normalmente Aperta con ingresso sotto l'otturatore

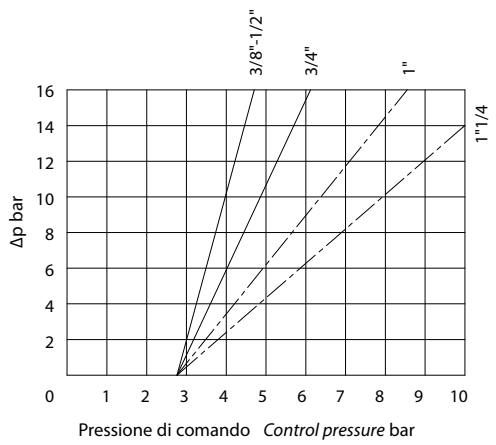
## *N.O. Normally Open with flow from below the plug*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9APG1603** | 4,9 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP2003** | **J9APG16R3** |
| 15 | 1/2" | **J9APG1604** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP2003** | **J9APG16R4** |
| 20 | 3/4" | **J9APG1605** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP2005** | **J9APG16R5** |
| 25 | 1" | **J9APG1806** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP2006** | **J9APG18R6** |
| 32 | 1"1/4 | **J9APG1807** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP2007** | **J9APG18R7** |
| 40 | 1"1/2 | **J9APG2108** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP2108** | **J9APG21R8** |
| 50 | 2" | **J9APG2309** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP2109** | **J9APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

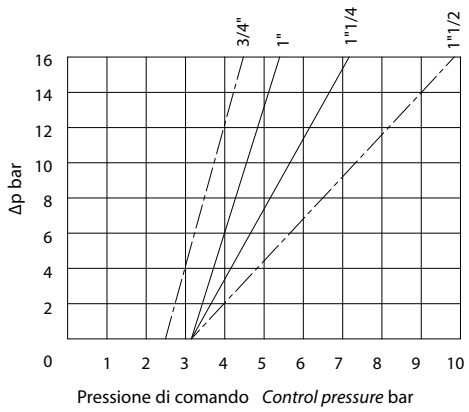
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 9
*diagram 9*
**testa *head***
**Ø50**



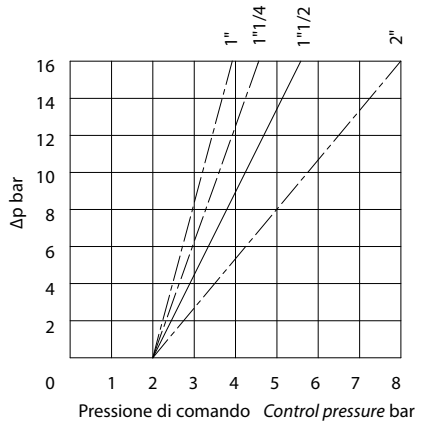

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

diagramma 10
*diagram 10*
**testa *head***
**Ø63**



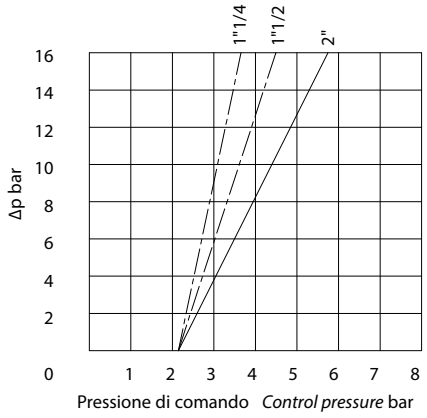

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

diagramma 11
*diagram 11*
**testa *head***
**Ø90**




aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

diagramma 12
*diagram 12*
**testa *head***
**Ø110**




aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ZEUS
## Doppio effetto bidirezionale
## *Double acting bidirectional*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9DPG1603** | 4,9 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP2003** | **J9DPG16R3** |
| 15 | 1/2" | **J9DPG1604** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP2003** | **J9DPG16R4** |
| 20 | 3/4" | **J9DPG1605** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP2005** | **J9DPG16R5** |
| 25 | 1" | **J9DPG1806** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP2006** | **J9DPG18R6** |
| 32 | 1"1/4 | **J9DPG1807** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP2007** | **J9DPG18R7** |
| 40 | 1"1/2 | **J9DPG1808** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP2008** | **J9DPG18R8** |
| 40 | 1"1/2 | **J9DPG2108** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP2108** | **J9DPG21R8** |
| 50 | 2" | **J9DPG2109** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP2009** | **J9DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

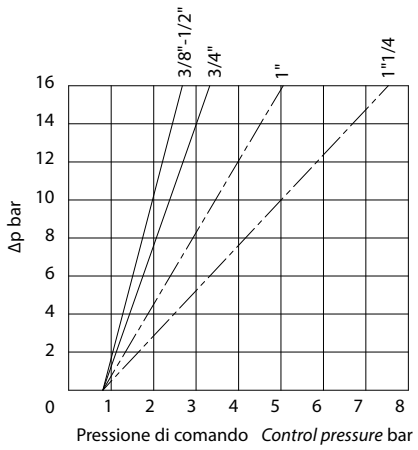



diagramma 13
*diagram 13*
**testa *head***
**Ø50**

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

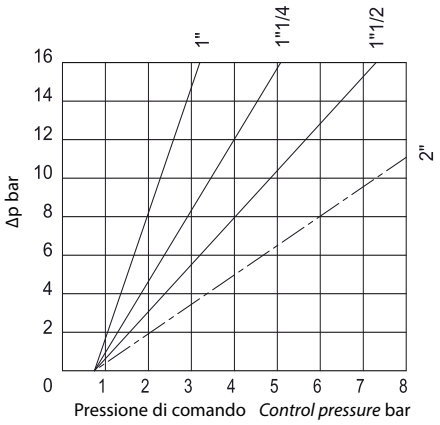



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

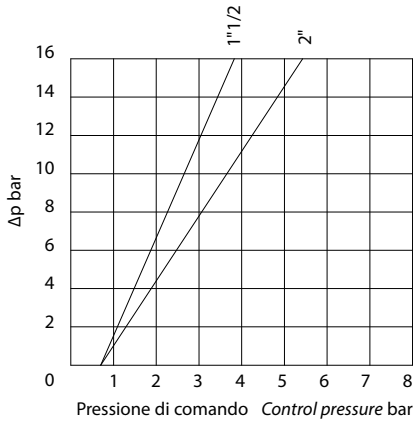



diagramma 15
*diagram 15*
**testa *head***
**Ø90**

aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

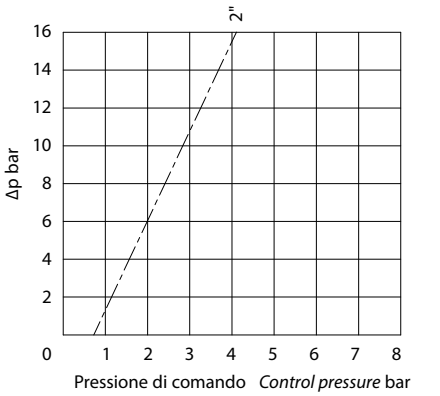



diagramma 16
*diagram 16*
**testa *head***
**Ø110**

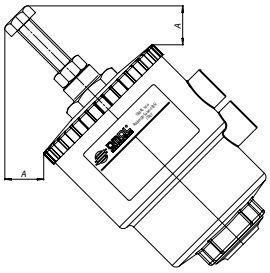
aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ACCESSORI ARES E ZEUS *ARES AND ZEUS ACCESSORIES*

**Limitatore della corsa**
Consente di limitare la corsa dell'otturatore valvola in apertura e quindi di regolare la portata.
Disponibile per tutte le versioni. Nelle versioni semplice effetto normalmente aperte può essere utilizzato anche come comando manuale di emergenza.

***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*

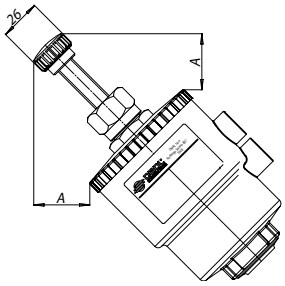



| Comando *Control* | A mm | Codice *Code* |
|---|---|---|
| Ø 50 | 25,5 | KLJL0016 |
| Ø 63 | 21,5 | KLJL0018 |
| Ø 90 | 5,2 | KLJL0021 |
| Ø 110 | 5,9 | KLJL0023 |

Non disponibile con testa Ø 40
*Not available with Ø 40 head*

**Comando manuale di emergenza**
Consente di effettuare l'apertura della valvola in caso di emergenza (mancanza di fluido di pilotaggio, guasto all'impianto, mancanza di segnale di pilotaggio ecc..)
Disponibile per tutte le valvole nelle versioni normalmente chiuse.

***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.*

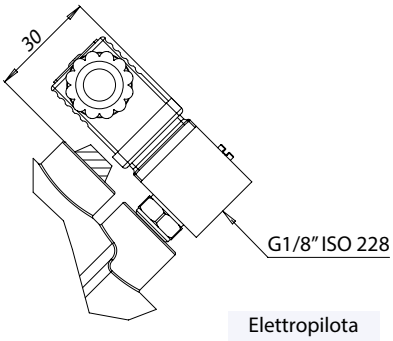



| Comando *Control* | A mm | Codice *Code* |
|---|---|---|
| Ø 50 | 35,8 | KLJA0016 |
| Ø 63 | 35,8 | KLJA0018 |
| Ø 90 | 29,5 | KLJA0021 |
| Ø 110 | 29,5 | KLJA0023 |

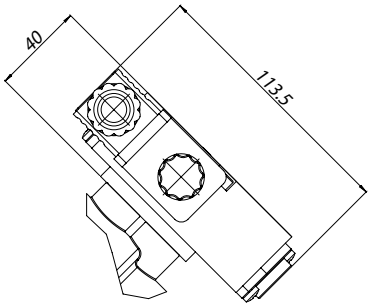
Non disponibile con testa Ø 40
*Not available with Ø 40 head*

**Elettrovalvola di comando**
Elettropilota 3/2 per il montaggio diretto.
Corpo e bobina orientabili sui 360°
Comando manuale standard.
Elettrovalvola (NAMUR) predisposta per la selezione tra la funzione 5/2 e 3/2 che si realizza montando la corrispodente basetta (entrambe fornite).
Comando manuale standard.
Temperatura ambiente da -10°C a +50°C

***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 5/3 or 3/2, achievable by mounting the corresponding plate (both supplied).*
*Room temperature: from –10°c to +50°C.*




Elettropilota
*Electro-pilot*
**3/2**




Elettrovalvola
*Solenoid valve*
**3/2 - 5/2**

| Voltaggio *Voltage* | 24 Vac | 115 Vac | 230 Vac | 24 Vdc |
|---|---|---|---|---|
| Elettropilota *Electro-pilot* | EP415024 | EP415110 | EP415220 | EP412024 |

| Voltaggio *Voltage* | 24 Vac | 115 Vac | 230 Vac | 24 Vdc |
|---|---|---|---|---|
| Elettrovalvola NAMUR* *NAMUR Solenoid valve** | ER8188A2 | ER8188A4 | ER8188A5 | ER8188C2 |
| *Interfaccia NAMUR NAMUR interface* | KBNJ0001 | | | |

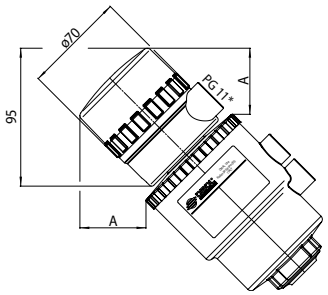
* Da utilizzare solo con interfaccia NAMUR. *To be usedy with NAMUR interface only.*

# ACCESSORI ARES E ZEUS *ARES AND ZEUS ACCESSORIES*

**Box di segnalazione**
Il box di segnalazione per il controllo della posizione aperto o chiuso con due finecorsa meccanici o induttivi é adatto al montaggio su tutta la serie di valvole con attuatori Ø50 - Ø63 - Ø90 - Ø110.
A richiesta sono disponibili i morsetti per collegare l'elettrovalvola e indicatori visivi tramite led.
Grado di protezione IP 65
Temperatura ambiente da -20°C a +70°C
Accesso cavo n°1 PG11
Materiale dell'involucro in poliammide con coperchio in polimetacrilato trasparente.

***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 ).*

Posizione orientabile sui 360°
*Positionable at 360°*



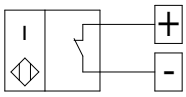

| Comando *Control* | A mm |
|---|---|
| Ø 50 | 52,1 |
| Ø 63 | 47,5 |
| Ø 90 | 37,7 |
| Ø 110 | 29,5 |

* M16x1,5 optional
* M20x1,5 optional

## TIPI DI FINECORSA DISPONIBILI *AVAILABLE LIMIT SWITCH*

**Interruttori di finecorsa induttivi NAMUR EExia**
Tensione nominale: 8 Vdc
Consumo: azionato ≤1 mA; rilasciato ≥3 mA
Temperatura di funzionamento: da -20° C a +70 C

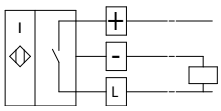
***Inductive limit switches NAMUR EExia***
*Nominal voltage: 8 Vdc*
*Consumes: working ≤1mA; resting ≥3 mA*
*Working temperature: from –20°C to +70°C*




| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 1 finecorsa: alto in posizione di valvola aperta<br>*1 Limit switch at the top: open valve* | KSIN9A0xx |
| 1 finecorsa: basso in posizione di valvola chiusa<br>*1 Limit switch at the bottom: close valve.* | KSIN9C0xx |
| 2 finecorsa valvola aperta e chiusa<br>*2 Limit switch open and close valve* | KSIN920xx |

**Interruttori finecorsa di prossimità**
Tensione nominale: 10÷30 Vdc
Consumo: 15 mA;
Temperatura di funzionamento: da -20° C a +70° C

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



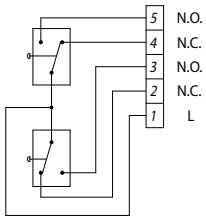

| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 1 finecorsa: alto in posizione di valvola aperta<br>*1 Limit switch at the top: open valve* | KSI09A0xx |
| 1 finecorsa: basso in posizione di valvola chiusa<br>*1 Limit switch at the bottom: close valve.* | KSI09C0xx |
| 2 finecorsa valvola aperta e chiusa<br>*2 Limit switch open and close valve* | KSI0920xx |

**Interruttori di finecorsa meccanici**
***Mechanical limit switches***

Finecorsa alto: valvola aperta
*Limit switch at the top: open valve*

Finecorsa basso: valvola chiusa
*Limit switch at the bottom: close valve*

Carico max. 5A 250 Vac; 1A 250 Vdc
*Max. capacity 5A 250 Vac; 1A 250 Vdc*




| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 2 finecorsa<br>*2 Limit switch* | KSM0C20xx |

**xx** = Ø testa di comando *Ø control heads*
16 = Ø 50
18 = Ø 63
21 = Ø 90
23 = Ø 110

DNV

FULL QUALITY ASSURANCE CERTIFICATE

Certificate No.: C539822

Initial date: 01 January, 2023

Validity: 01 January, 2023 – 31 December, 2025

This certificate consists of 2 pages

This is to certify that the quality system of:

**OMAL S.p.A.**
Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS) - Italy

has been assessed and found to comply with respect to the conformity assessment procedure described in:

**ANNEX III MODULE H OF DIRECTIVE 2014/68/EU ON PRESSURE EQUIPMENT**

This certificate is valid for the following scope:

| | |
|---|---|
| Type of Pressure Equipment | **Pressure Accessory** |
| Product Name | **Ball valves, high pressure ball valves, butterfly valves, pneumatic valves.** |

Place and date:
**Vimercate, 03 December, 2022**

**Check Validity**

ACCREDIA

For the issuing office:
**Notified Body 0496, Italy**
**DNV Business Assurance Italy S.r.l.**

**Nicola Privato**
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ICP-4-5-6-PED-9 rev.0

NOTIFIED BODY 0496: DNV Business Assurance Italy S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. www.dnv.com

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*

INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura : PNEUMATIC VALVES

Type(s)/ Type(s) / Tipo(i) : ANGLE SEAT VALVES ARES-ATENA-ZEUS / PNEUMATIC COAXIAL VALVES VIP-VIP EVO

Marquage/ Marking / Marcatura : Ex II 2 GD

Dépositaire / Applicant / Richiedente : OMAL S.p.A. Via Ponte Nuovo 11 I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 february 2014, acknowledges receipt of file according to the procedure described chapitre 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VAP-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement :

The technical documentation referenced : VAP-19 dated 10/10/2019 is consigned under the reference :

La documentazione tecnica di riferimento : VAP-19 dated 10/10/2019 è depositata con il numero di registrazione :

n° INERIS-EQEN 035242/19.

Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

no INERIS-EQEN 035242/19.

Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

n° INERIS-EQEN 035242/19.

Nel quadro di questa registrazione, INERIS non ha examinato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07

Validity completion date : 2029.11.07

Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,

The Chief Executive Officer of INERIS, By delegation,

Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 Internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Etablissement public à caractère industriel et commercial - RCS Compiègne B 381 984 924 - Siret 381 984 921 00019 - APE 7120B - TVA Intracom FR 73 381 984 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*

ЕАС

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель:** Общество с ограниченной ответственностью «СПЕКТР».
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 124527, РОССИЯ, город Москва, город Зеленоград, корпус 834 Б, квартира 37.
ОГРН: 1207700050491. Номер телефона: +79775865958. Адрес электронной почты: spektr.zel@gmail.com.

**В лице:** генерального директора Голубевой Надежды Сергеевны

**заявляет, что** Арматура промышленная трубопроводная: клапаны пневматические отсечные, серия VIP, типы VNC, VDA, VNA, серия VIP EVO; клапаны пневматические седельные отсечные, серия ZEUS, тип J9, серия ARES, типы J4, J4M, серия ATENA, типы J4, J4M; арматура автоматизированная, серия D, F, G, I, S, T, U, X в комплектации по приложению (см. Приложение № 1 на 1 листе).

**Изготовитель:** «OMAL S.p.A.».
Место нахождения (адрес юридического лица): ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia
Адреса мест осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia; ИТАЛИЯ, Via Brognolo 12, Passirano (BS)
Код ТН ВЭД ЕАЭС 8481809907.
Серийный выпуск.

**Соответствует требованиям**
Технический регламент Таможенного союза «О безопасности машин и оборудования» (ТР ТС 010/2011)

**Декларация о соответствии принята на основании**
Протоколы испытаний № OV001648 от 08.04.2020, № OV000543 от 28.02.2020, № OV000850 от 16.04.2020, №OV000215 от 05.02.2020, № 6/и от 13.12.2019 производственной испытательной лабораторией "OMAL S.p.A.", адрес: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.
Обоснование безопасности OMAL.VALV.01 Об от 06.05.2019.
Технический паспорт пневматического клапана ARES.850 ПС от 21.02.2020.
Руководства по установке и эксплуатации rif. 8_0843 от 01.01.2017, rif. 8_0841 от 01.01.2017.
Чертежи 1_1061 от 01.10.1997, 1_1062 от 01.10.1997, 1_977 от 09.02.2009, 1_983 от 16.01.2017, 1_984 от 09.02.2009, 1_2585 от 10.09.2019.
Схема декларирования: 1д.

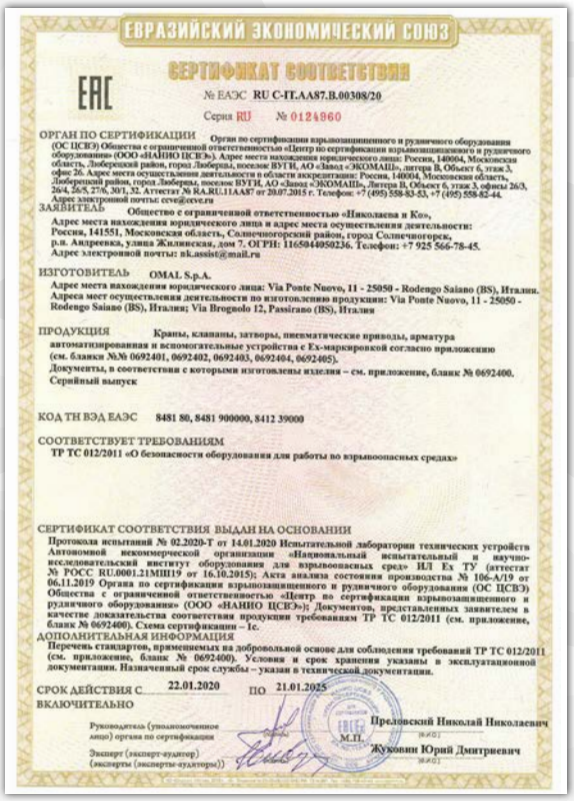
**Дополнительная информация**
Применяемые стандарты: ГОСТ Р 53672-2009 "Арматура трубопроводная. Общие требования безопасности".
Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 10 лет.
Общество с ограниченной ответственностью "СПЕКТР" - уполномоченное изготовителем лицо на основании договора № 04/2020 от 10.04.2020.

**Декларация о соответствии действительна с даты регистрации по 19.07.2025 включительно**

М.П. ГОЛУБЕВА НАДЕЖДА СЕРГЕЕВНА
"СПЕКТР"

**Регистрационный номер декларации о соответствии:** ЕАЭС N RU Д-IT.СП28.В.11053/20

**Дата регистрации декларации о соответствии** 20.07.2020



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

ЕАС

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ЕАЭС RU C-IT.AA87.B.00308/20

Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11AA87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44.

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ
ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ
Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ex ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ
Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации — Преловский Николай Николаевич

М.П.

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*

**OMAL S.p.A.**

Ph. +39 030 8900145 - Fax +39 030 8900423 - info@omal.it - www.omal.com

**HEADQUARTERS**
Via Ponte Nuovo, 11 - 25050 Rodengo Saiano (BS) ITALY

**Coordinates:**
Lat: 45° 35' 53" North; Lon: 10° 05' 21" East

**PRODUCTION SITE**
Via Brognolo, 12 - 25050 Passirano (BS) ITALY

**Coordinates:**
Lat: 45° 35' 51" North; Lon: 10° 05' 18" East