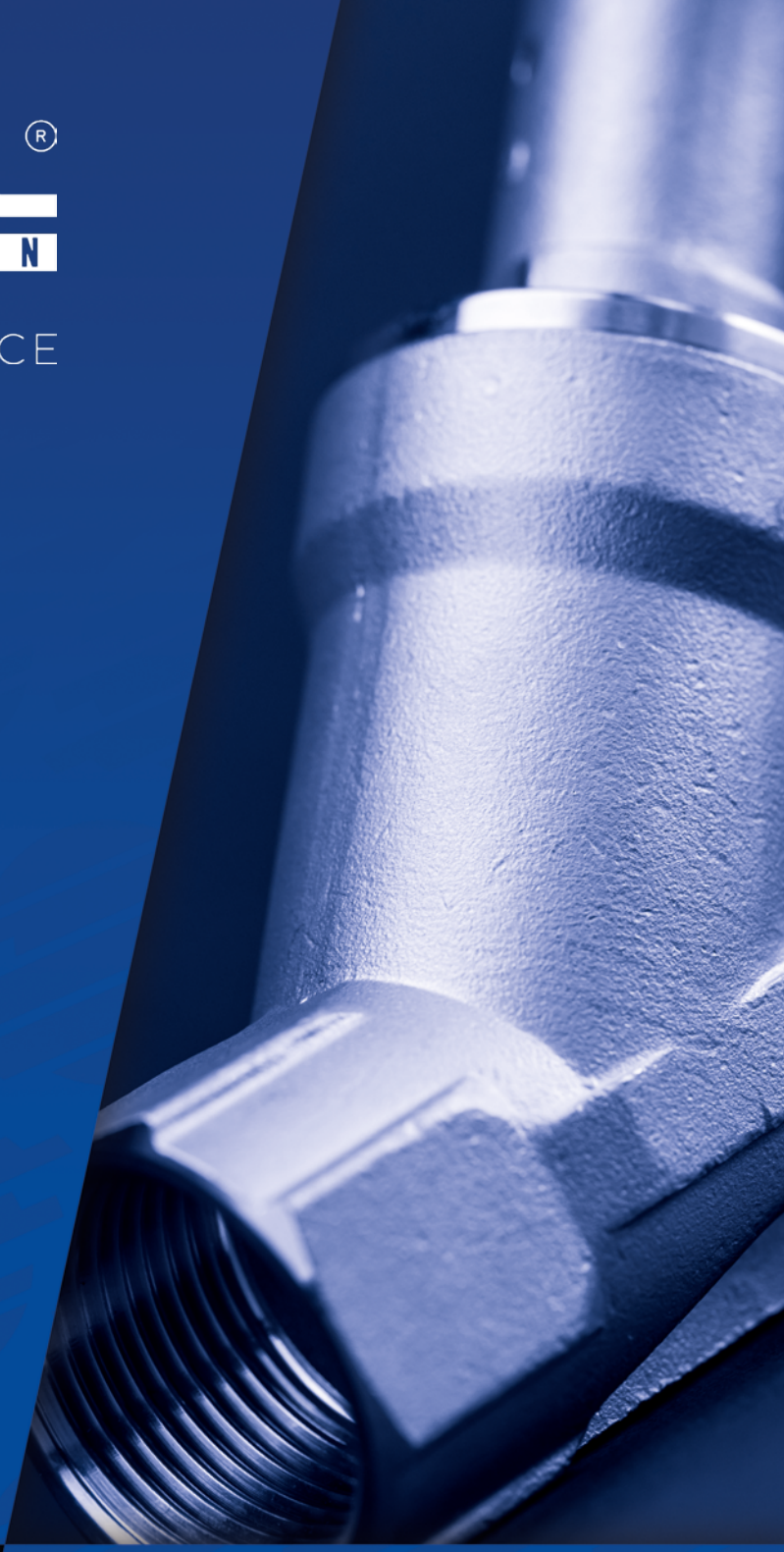
OMAL AUTOMATION

EMPOWERED PERFORMANCE

ANGLE SEAT VALVES

CATALOGUE



www.omal.com

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).

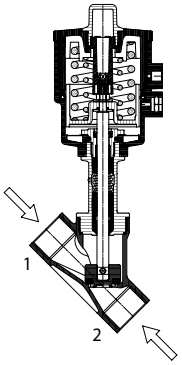
CONTROL MEDIA:

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

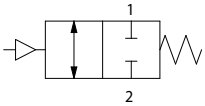
OPERATING MEDIA:

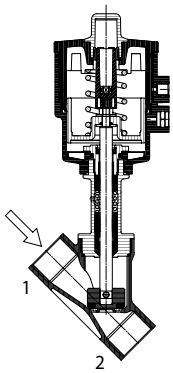
- *Air,water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with* A 351 CF8M O CuSn5Zn5Pb5-B*).*
- *Pressure from 0 to 16 / 25 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen (see following pages).*
- *Temperature from –10°C to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

MODALITÀ DI IMPIEGO *METHODS OF USE*



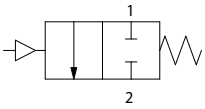
N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.
Ingresso sopra l'otturatore per fluidi comprimibili.
N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.
Flow from above the plug for condensable media.

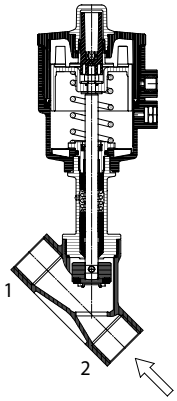




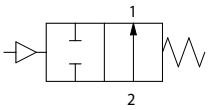
N.C. Normalmente chiusa con ingresso sopra l'otturatore.
Ingresso sopra l'otturatore per fluidi comprimibili.

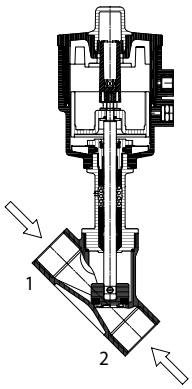
N.C. Normally Closed with the flow from above the plug.
Flow from above the plug for condensable media.



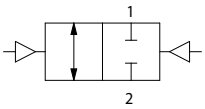


N.A. Normalmente aperta con ingresso sotto l'otturatore
N.O. Normally Open with flow from below the plug





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*

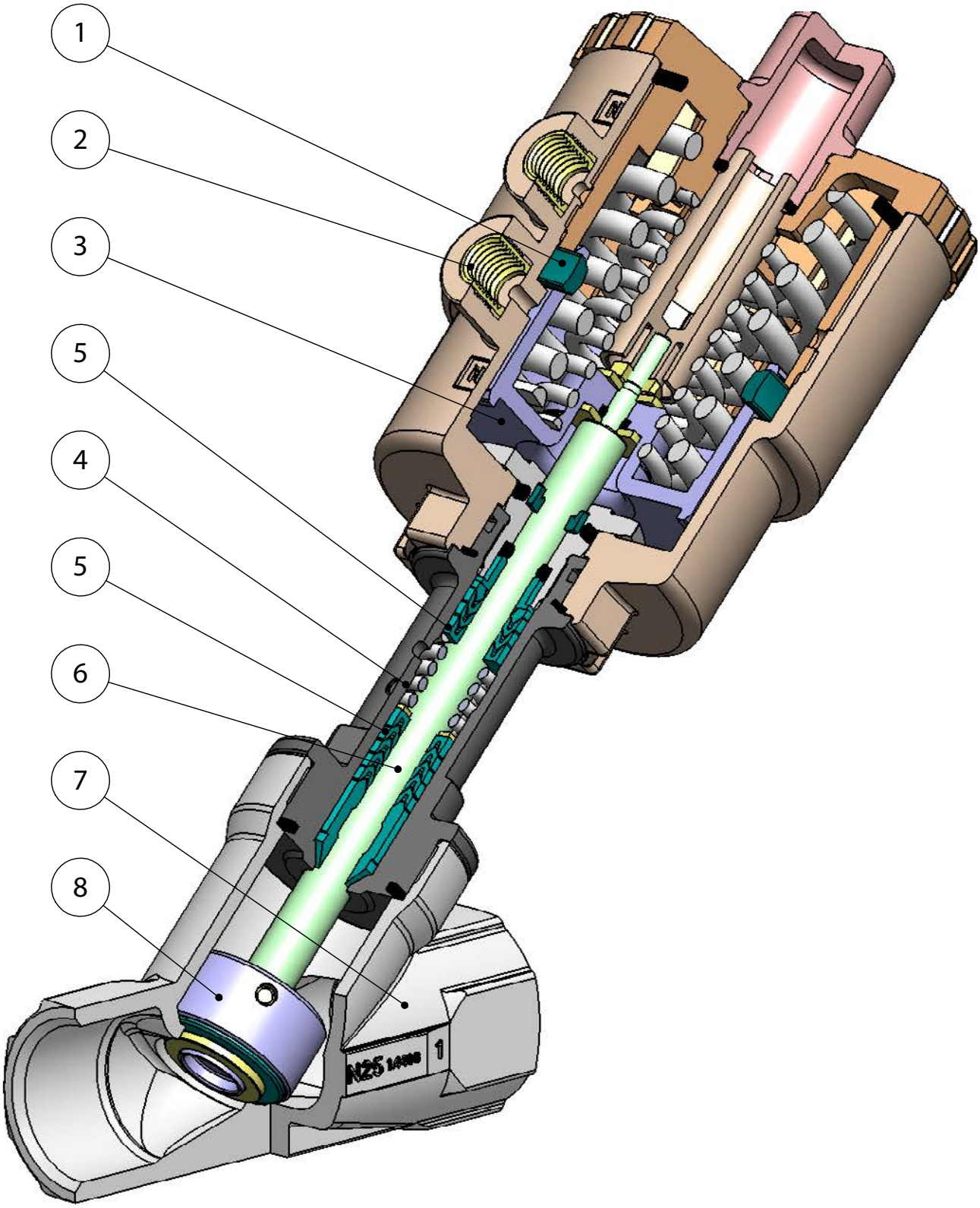
3 = 3/8"	
4 = 1/2"	**4** = DN 15
5 = 3/4"	**5** = DN 20
6 = 1"	**6** = DN 25
7 = 1" 1/4	**7** = DN 32
8 = 1" 1/2	**8** = DN 40
9 = 2"	**9** = DN 50

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

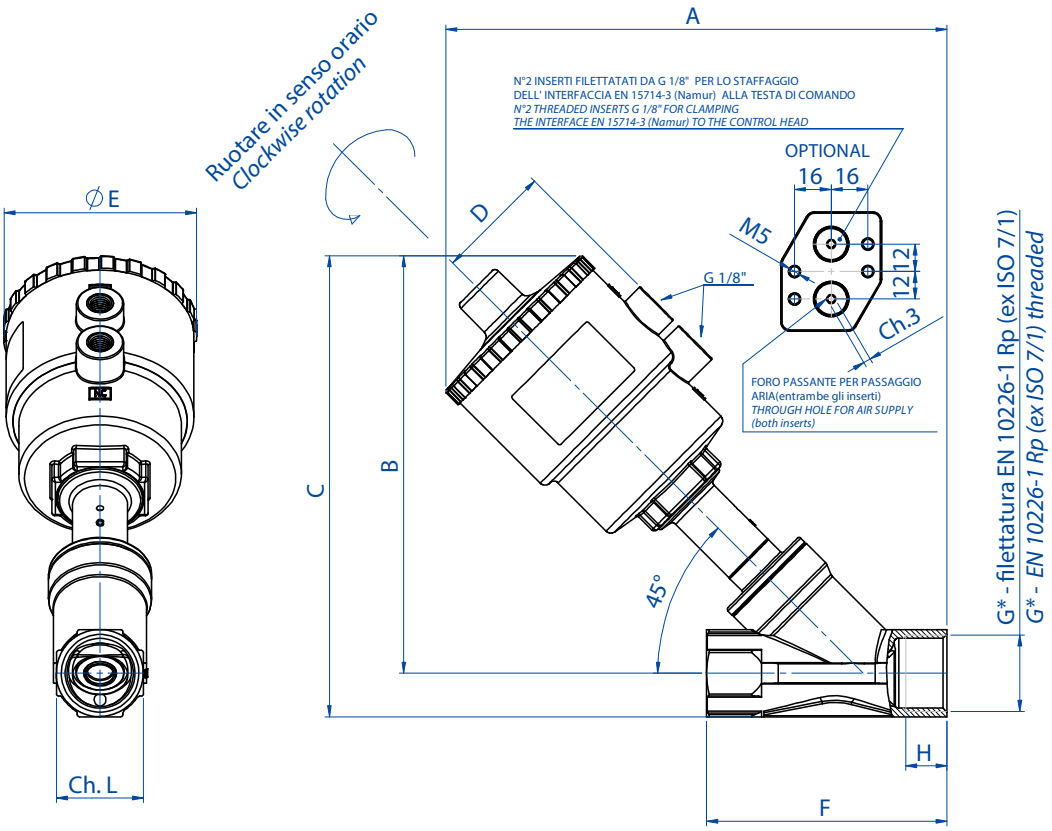


FEATURES & BENEFITS

1	Guarnizione posizionata nel cilindro anziché sul pistone. *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). *Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss).*
		Minor usura della guarnizione. *Less wear of the seal.*
2	Inserti della testa di comando in 303 S.S.. *Piloting head inserts in 303 S.S..*	Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni. *Increases considerably the corrosion resistance caused by external agents.*
3	Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron). *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). *Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV).*
4	Guarnizioni precaricate da molla. *Seals pre-loaded by spring.*	Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno. *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. *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. *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 *It ensures a perfect tightness even after a high number of cycles*
6	Albero rullato. *Rolled shaft.*	Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento. *Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft.*
7	*Scartamento lungo.* *Longer face to face.*	Miglior fluidodinamica con riduzione delle turbolenze. *Better fluidodynamic with reduction of the turbulences.*
8	Otturatore oscillante/autoallineante. *Oscillating / self-aligning shutter.*	Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta. *It fits perfectly to the valve body ensuring the maximum tightness.*
	Certificato ATEX. *ATEX Certificate.*	Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo. *Installation is allowed in a potential explosive environment.*
	Certificato PED. *PED Certificate.*	Piena conformità alle norme di sicurezza europee per i dispositivi in pressione. *Full compliance with European Safety Standards for Pressure Equipment.*

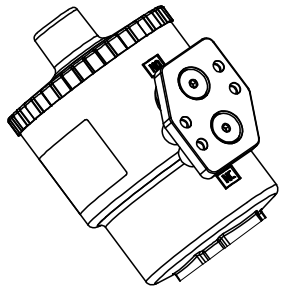
ARES

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



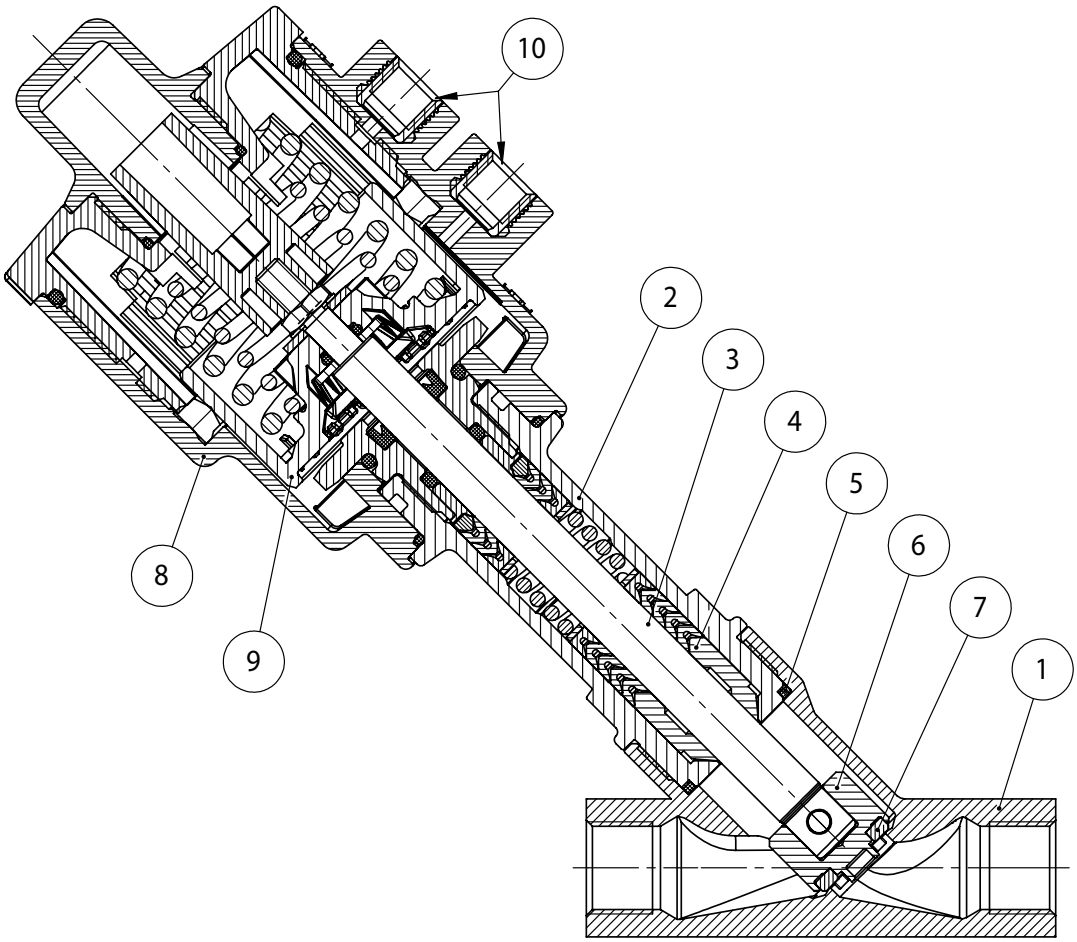
Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR
Codice: KBNJ0001

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.
	Basetta namur *Namur plate* (OPTIONAL)	PA66 +GF30%, inserti ottone *brass inserts*

* 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

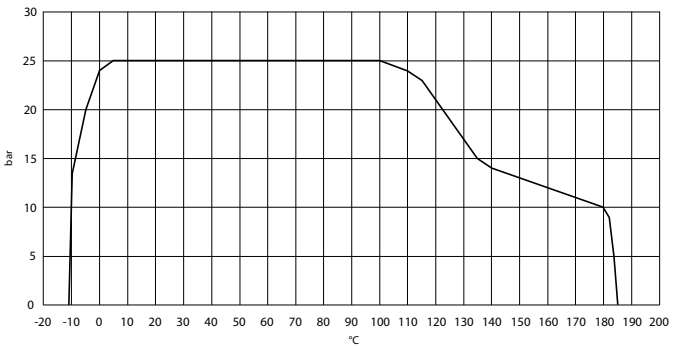
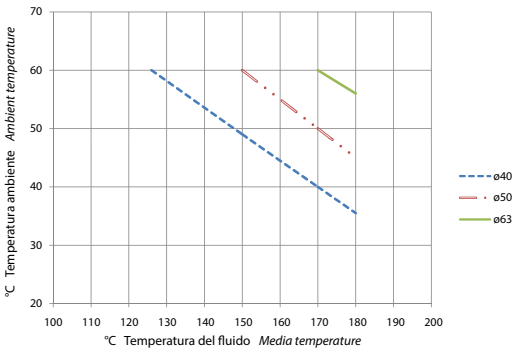


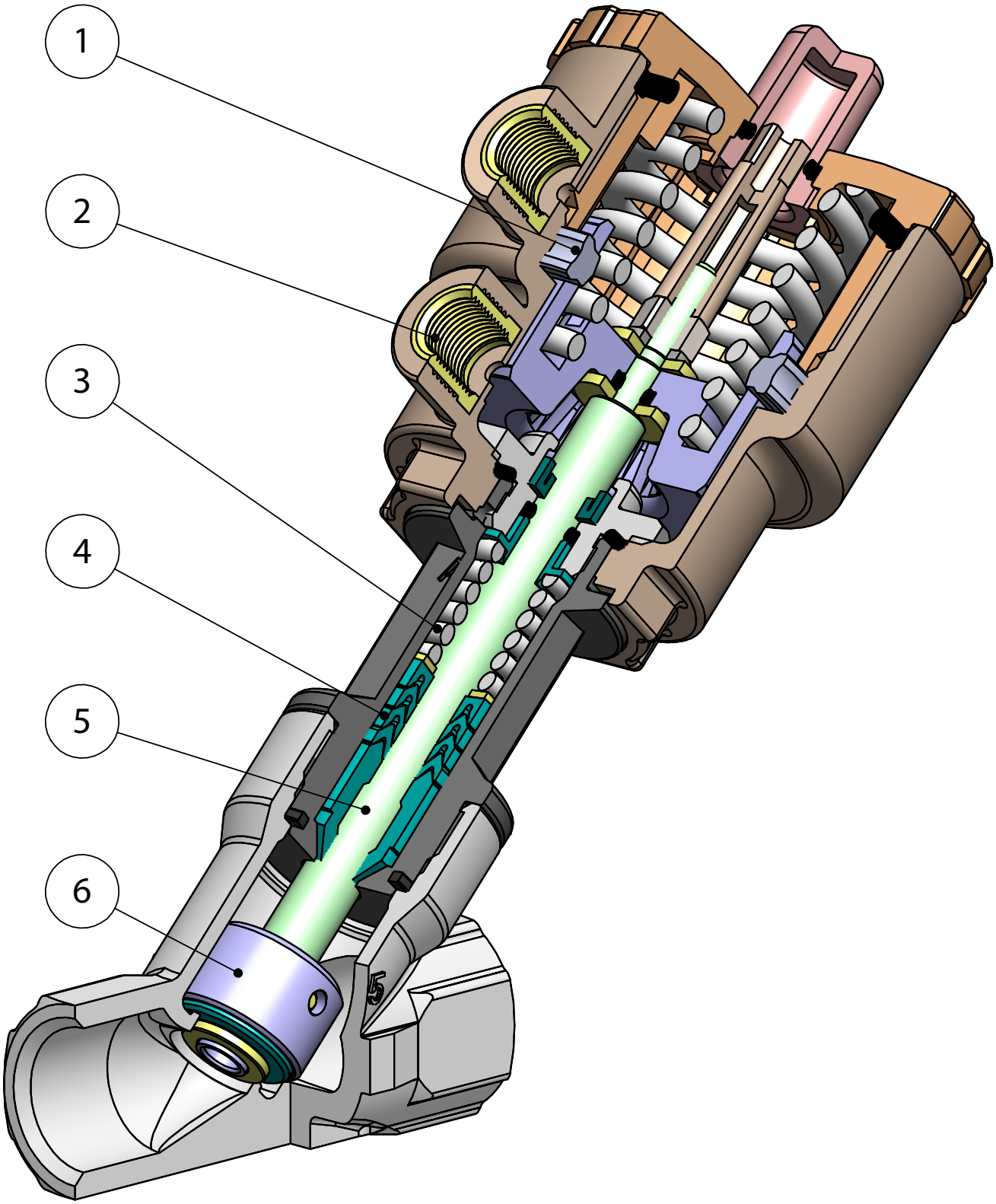
DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM



ATENA

VALVOLA INCLINATA

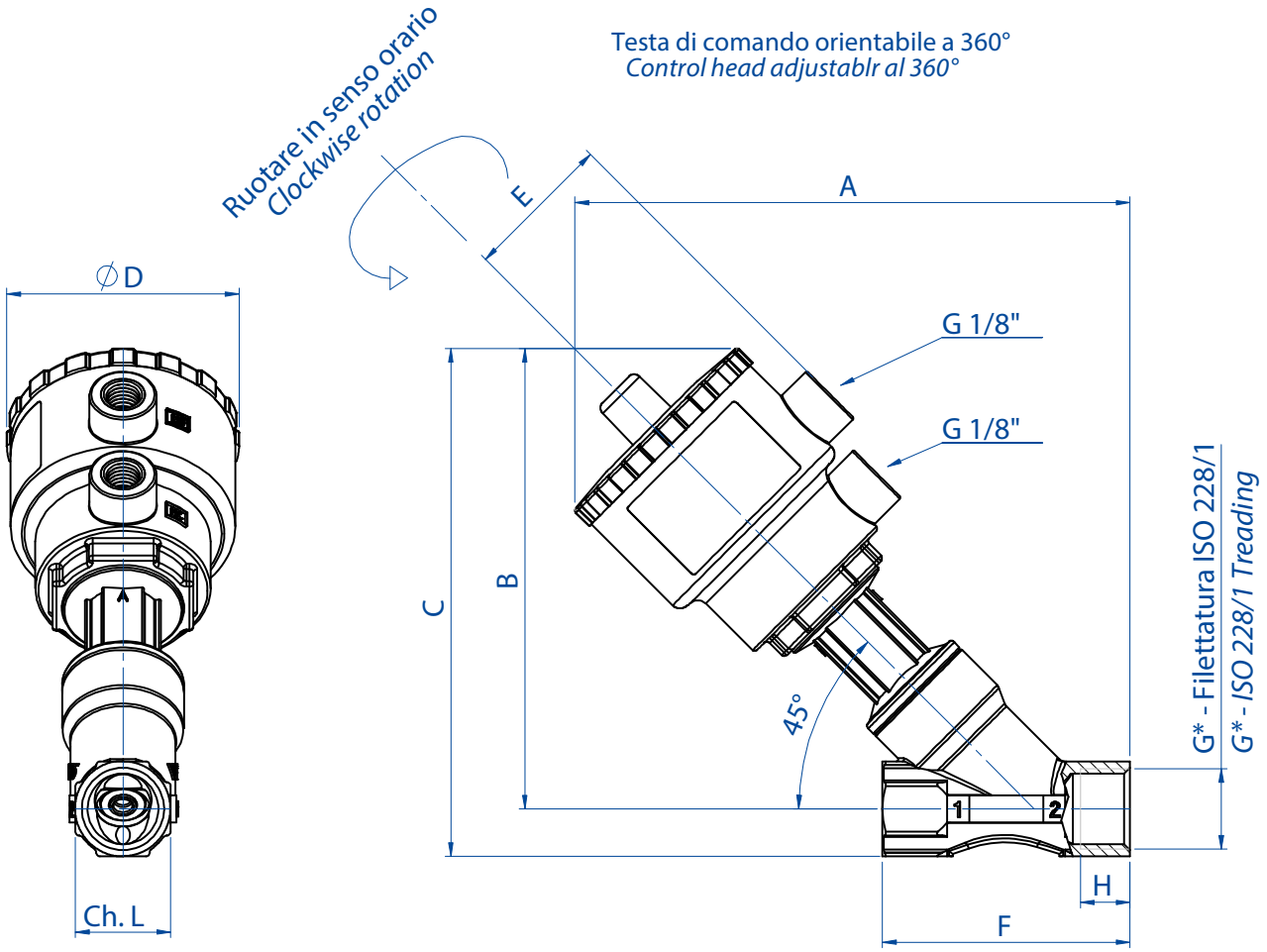
ANGLE SEAT VALVE



FEATURES & BENEFITS

1	Guarnizione posizionata nel cilindro anziché sul pistone *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) *Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)*
		Minor usura della guarnizione *Less wear of the seal*
2	Inserti della testa di comando in 303 S.S. *Piloting head inserts in 303 S.S.*	Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni *Increases considerably the corrosion resistance caused by external agents*
3	Guarnizioni precaricate da molla *Seals pre-loaded by spring*	Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite verso l'esterno *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 *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 *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 *It ensures a perfect tightness even after a high number of cycles*
5	Albero rullato *Rolled shaft*	Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento *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 *Oscillating / self-aligning shutter*	Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta *It fits perfectly to the valve body ensuring the maximum tightness*
	Certificato ATEX *ATEX Certificate*	Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo *Installation is allowed in a potential explosive environment*

ATENA TESTA ø40 *HEAD ø40*



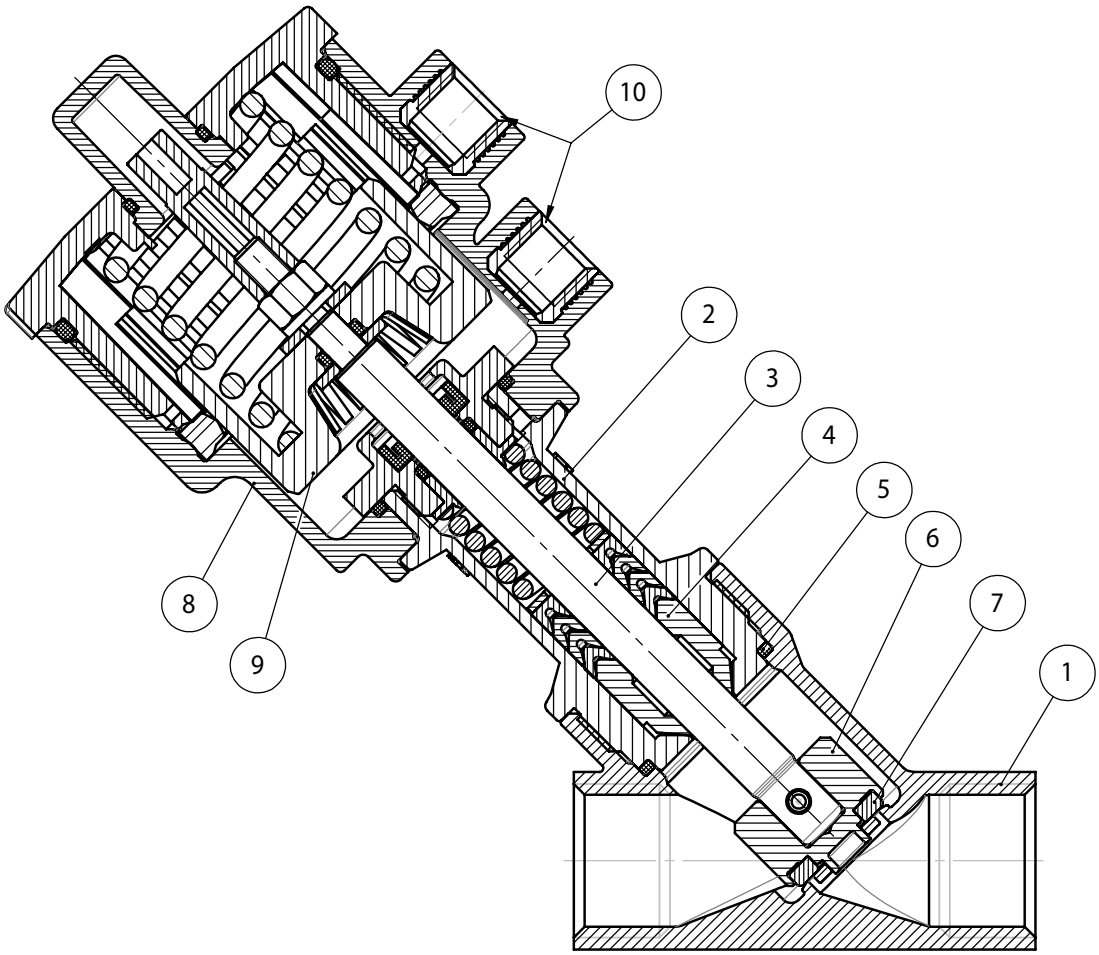
Per la testa Ø40 non è disponibile la basetta Namur.
For actuator Ø40 namur plate is not available.

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

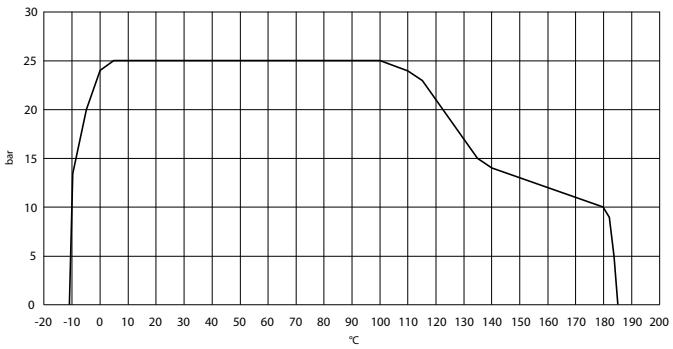
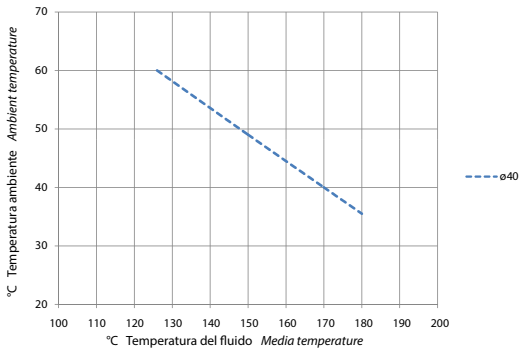


DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM



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*

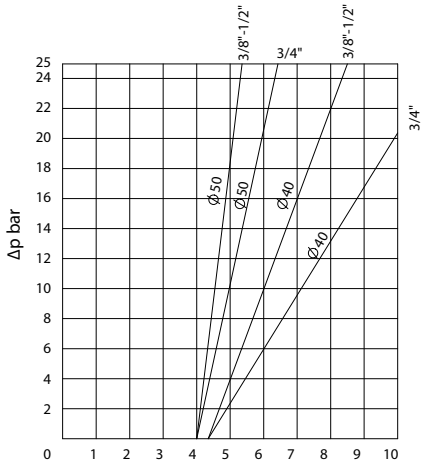


diagramma 1
diagram 1
testa *head*
Ø40-Ø50

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

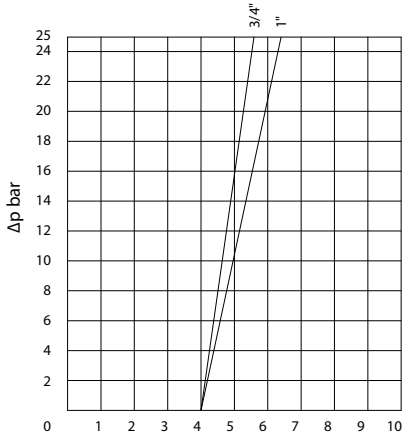


diagramma 2
diagram 2
testa *head*
Ø63

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

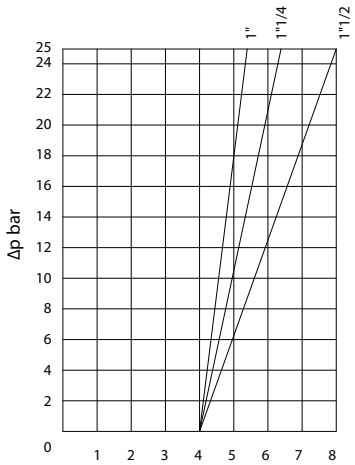


diagramma 3
diagram 3
testa *head*
Ø90

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

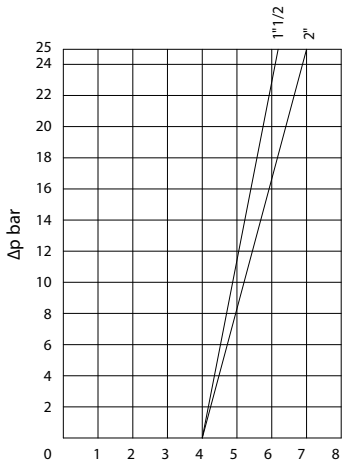


diagramma 4
diagram 4
testa *head*
Ø110

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.

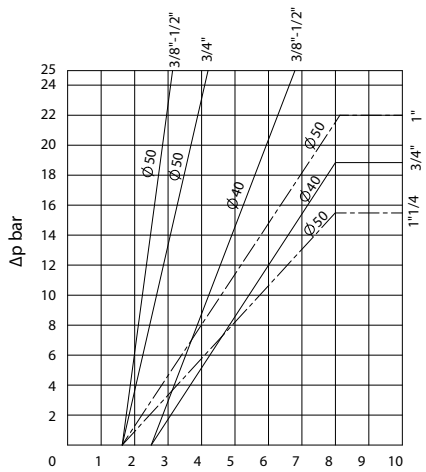


diagramma 5
diagram 5
testa *head*
Ø40-Ø50

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

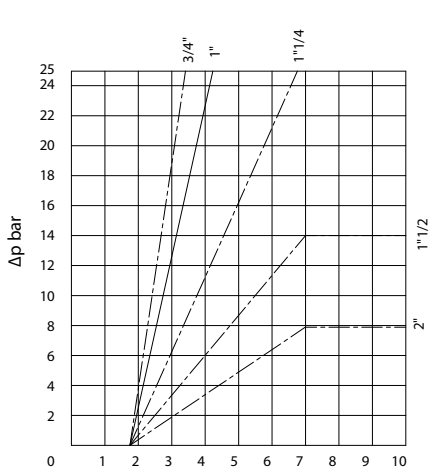


diagramma 6
diagram 6
testa *head*
Ø63

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

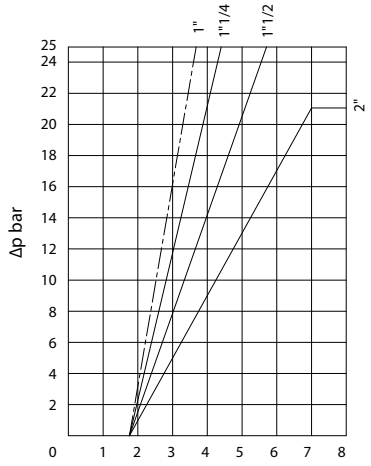


diagramma 7
diagram 7
testa *head*
Ø90

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

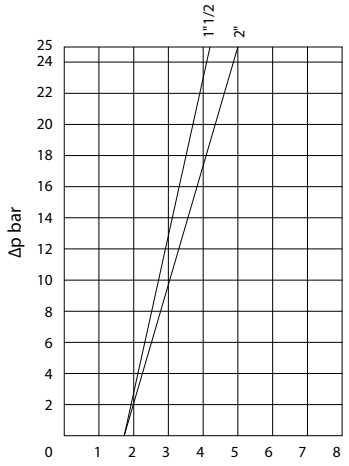


diagramma 8
diagram 8
testa *head*
Ø110

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.

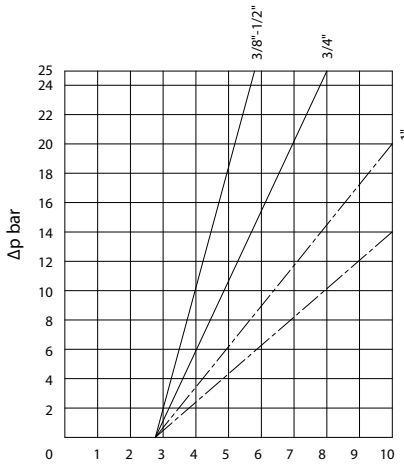


diagramma 9
diagram 9
testa *head*
Ø50

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

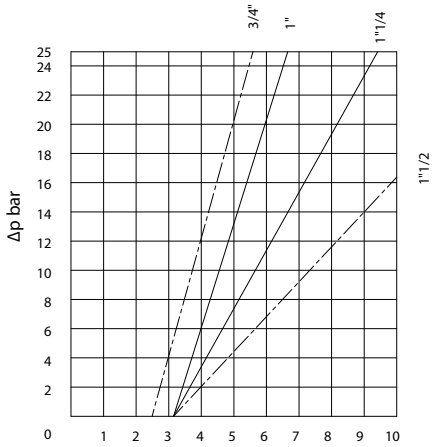


diagramma 10
diagram 10
testa *head*
Ø63

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

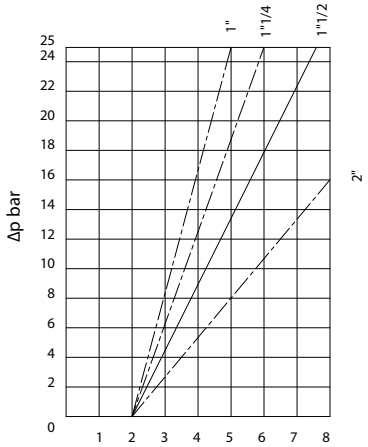


diagramma 11
diagram 11
testa *head*
Ø90

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

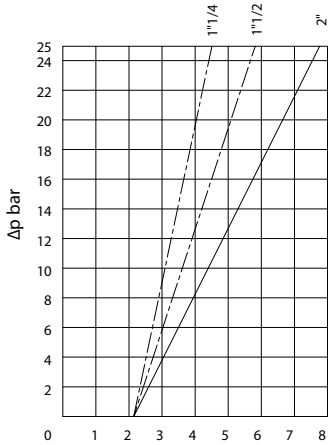


diagramma 12
diagram 12
testa *head*
Ø110

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.

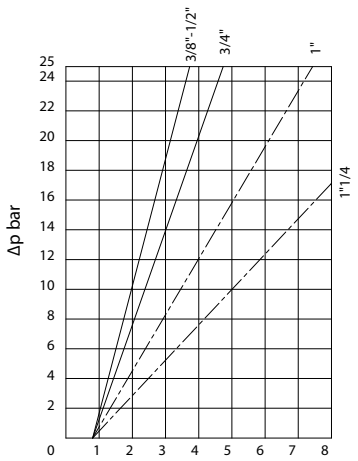


diagramma 13
diagram 13
testa *head*
Ø50

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

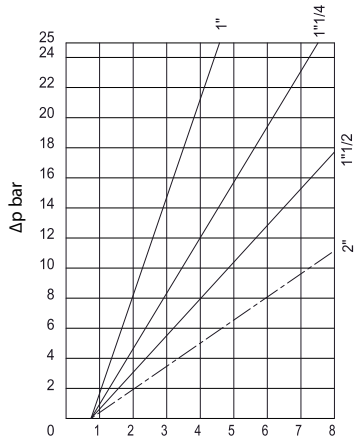


diagramma 14
diagram 14
testa *head*
Ø63

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

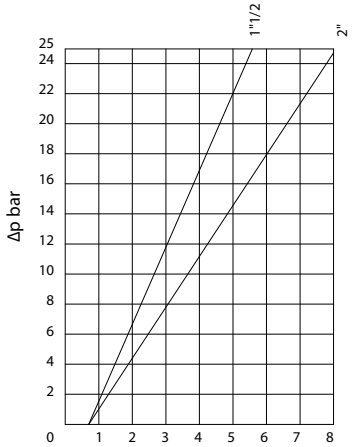


diagramma 15
diagram 15
testa *head*
Ø90

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

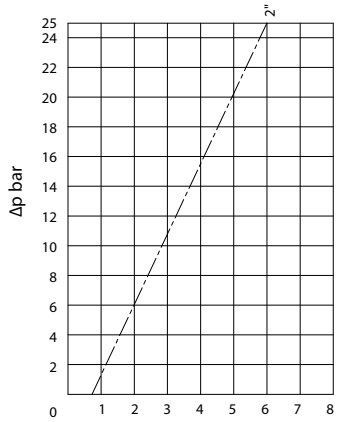


diagramma 16
diagram 16
testa *head*
Ø110

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

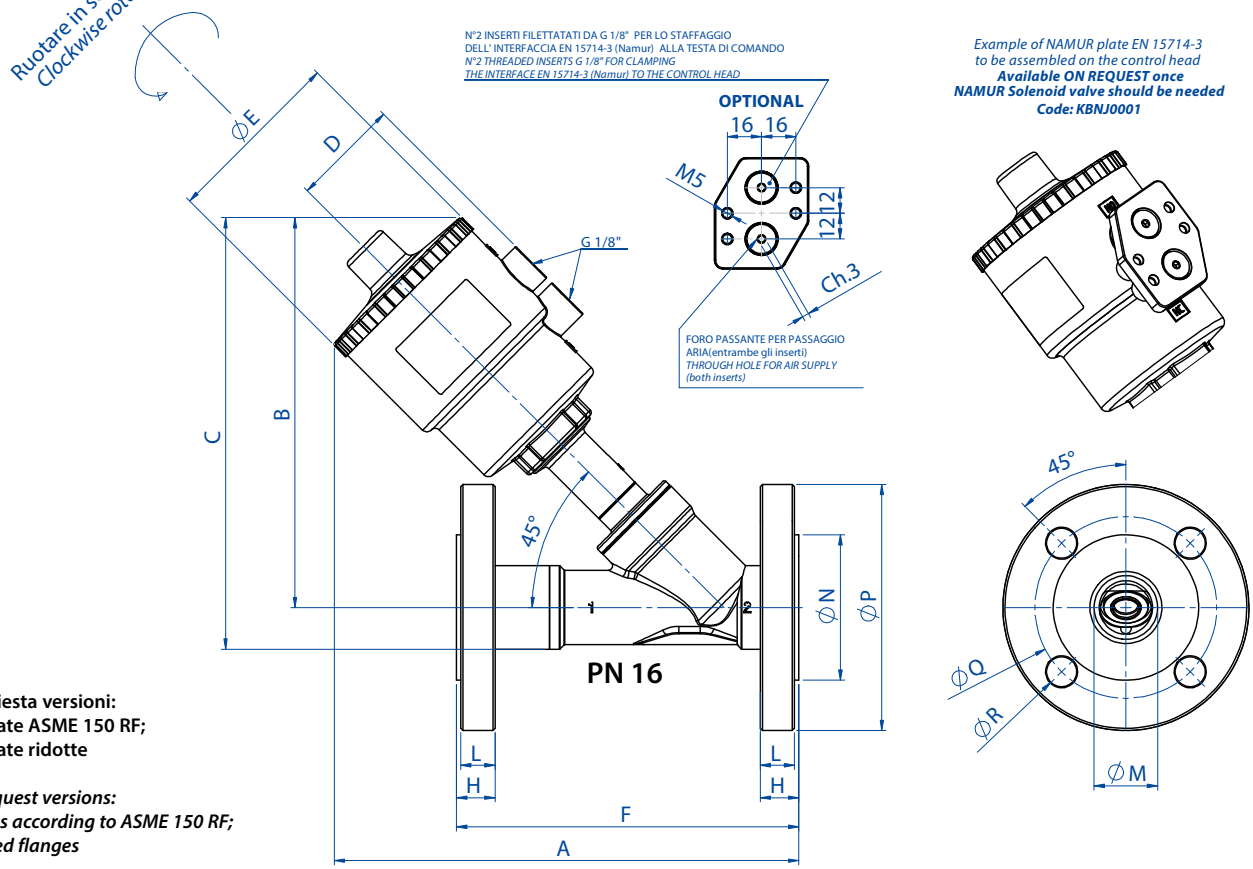
Per versioni con teste di comando differenti dallo standard contattare l'ufficio commerciale OMAL.
For versions with control head different from standard executions, please contact our sales department

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*

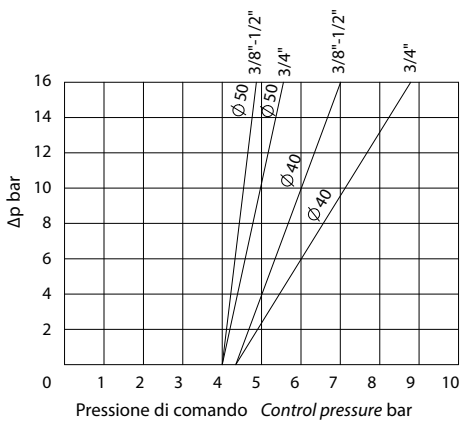
DN [mm]	CODICE *CODE* CF3M	Kv m^3/h	Ø Testa comando *Ø Control head*	P comando bar *P control bar* Min	Max	P intercettata *P operating* ΔP max. bar	Peso *Weight* Kg.	KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT*	KIT TESTA DI RICAMBIO *HEAD SPARE KIT*
15	**J4SPG1664**	5,7	50	4	10	16	2,4	**KGJP1003**	**J4SPG16R4**
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.

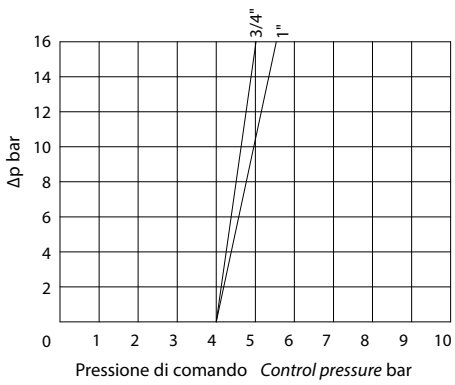
CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
diagram 1
testa *head*
Ø40-Ø50



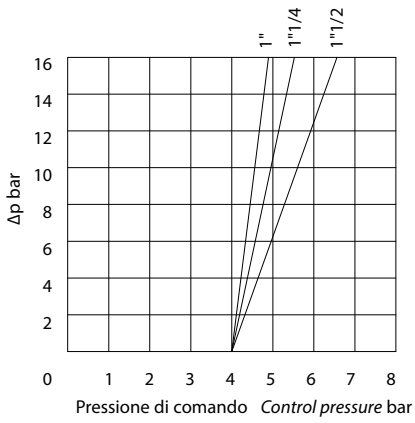
ø40: aria 0,031 dm^3/cilclo
ø50: aria 0,051 dm^3/cilclo
ø40: air 0,031 dm^3/cycle
ø50: air 0,051 dm^3/cycle

diagramma 2
diagram 2
testa *head*
Ø63



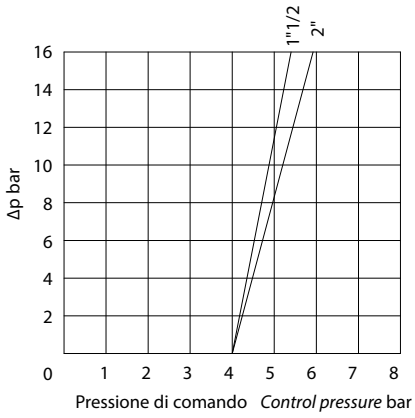
aria 0,108 dm^3/cilclo
air 0,108 dm^3/cycle

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.

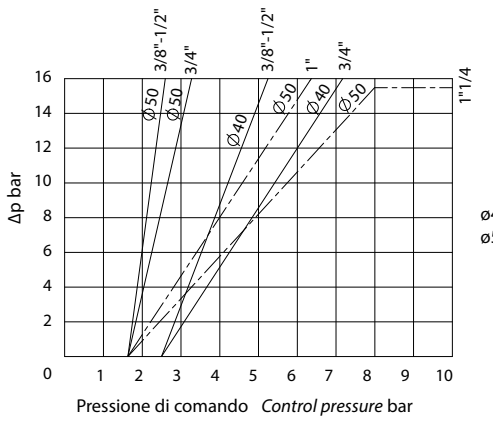
N.C. Normally Closed with the flow from above the plug.

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.

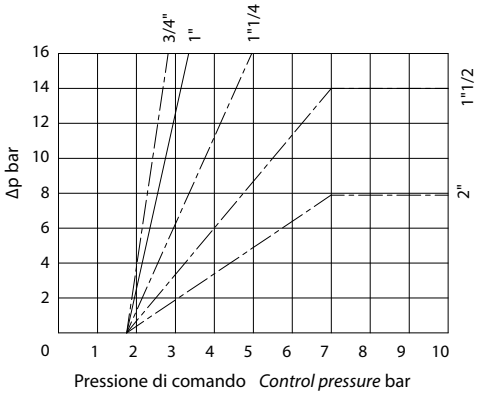
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
The shutter "replacement Kit" includes the shutter and the necessary seals.

diagramma 5
diagram 5
testa *head*
Ø40-Ø50



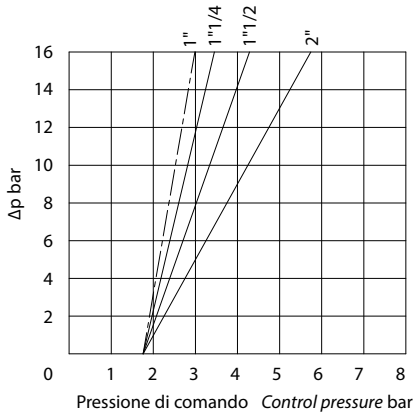
ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
ø40: air 0,031 dm³/cycle
ø50: air 0,051 dm³/cycle

diagramma 6
diagram 6
testa *head*
Ø63



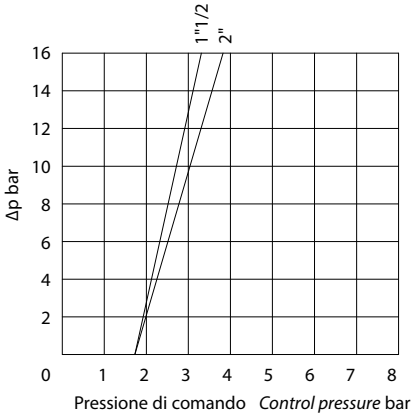
aria 0,108 dm³/cilclo
air 0,108 dm³/cycle

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.

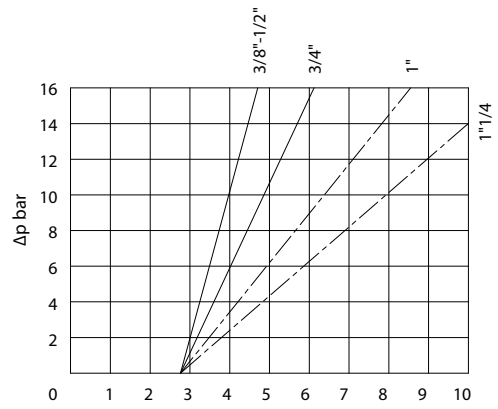


diagramma 9
diagram 9
testa *head*
Ø50

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

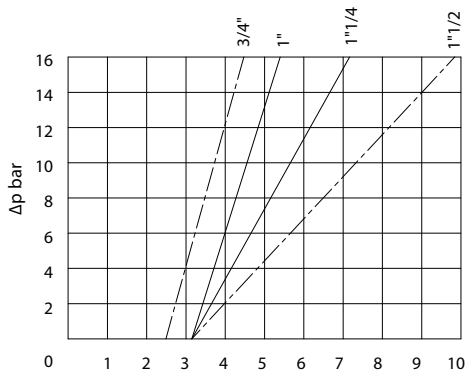


diagramma 10
diagram 10
testa *head*
Ø63

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

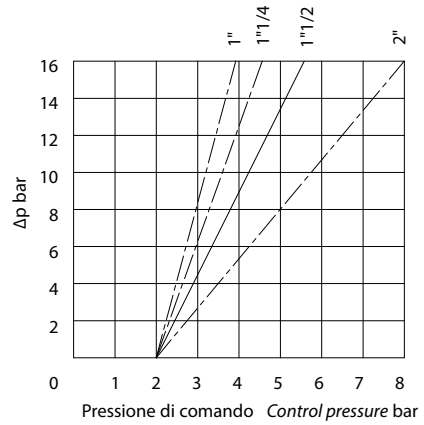


diagramma 11
diagram 11
testa *head*
Ø90

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

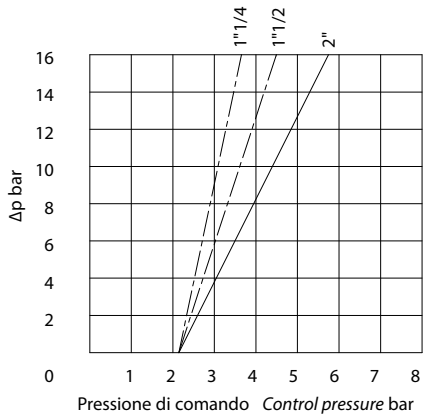


diagramma 12
diagram 12
testa *head*
Ø110

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.

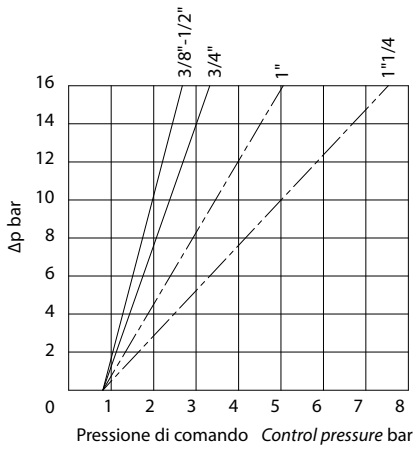


diagramma 13
diagram 13
testa *head*
Ø50

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

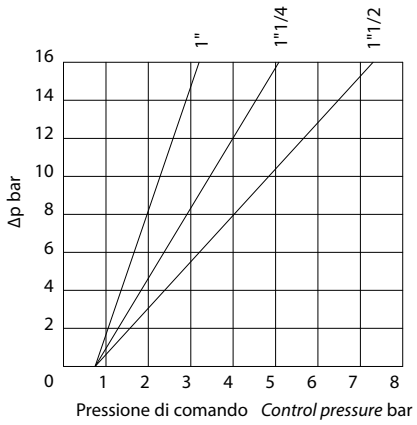


diagramma 14
diagram 14
testa *head*
Ø63

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

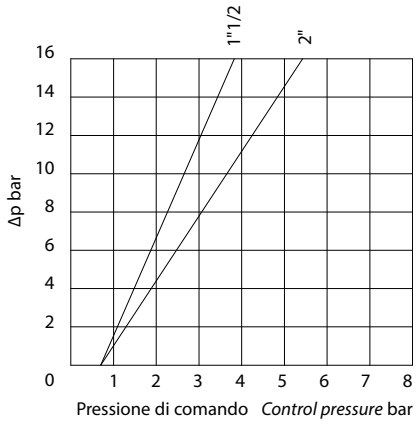


diagramma 15
diagram 15
testa *head*
Ø90

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

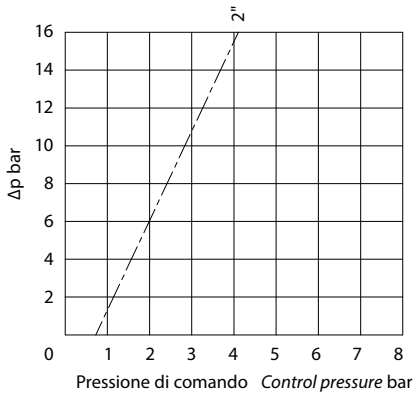


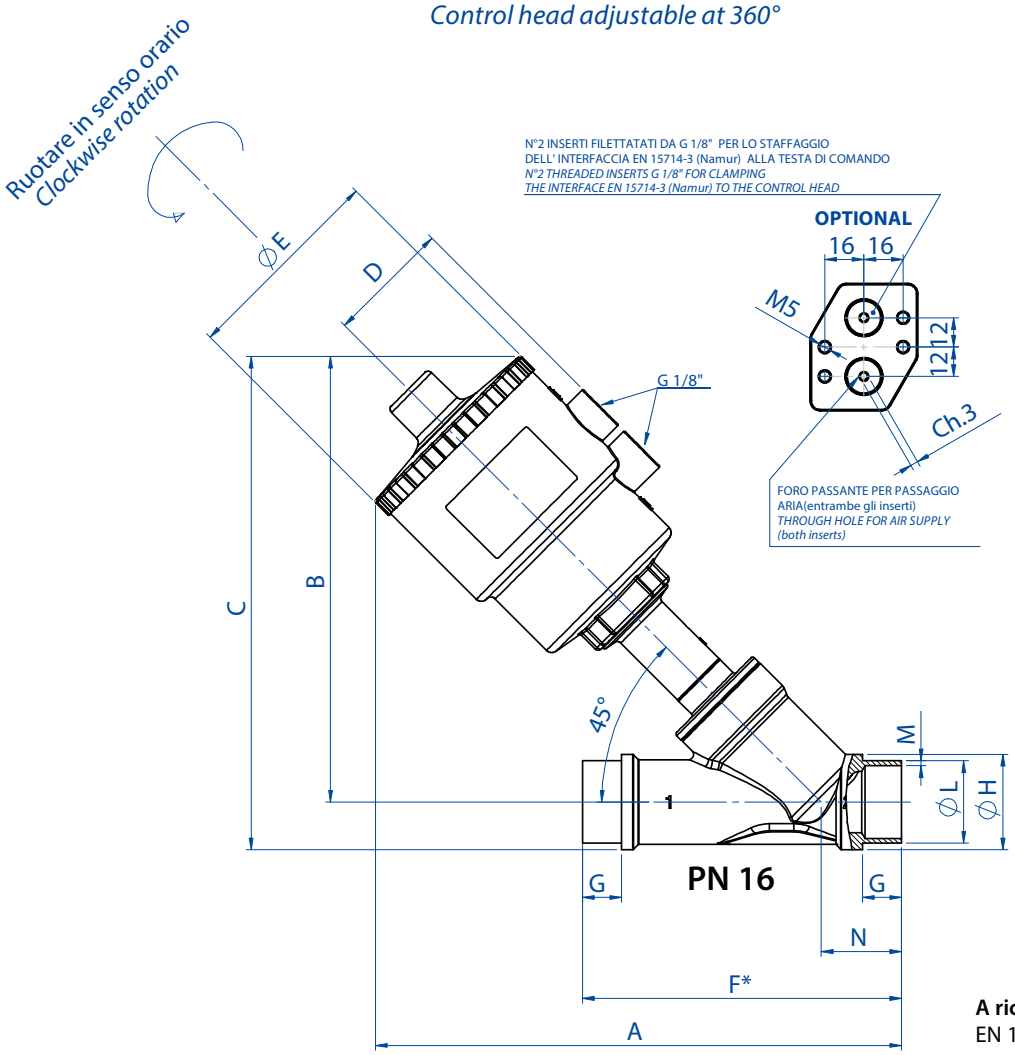
diagramma 16
diagram 16
testa *head*
Ø110

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.*

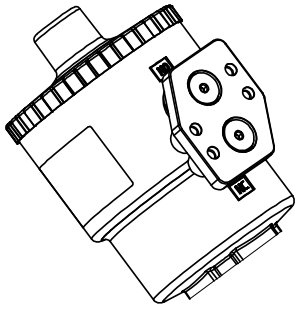
ARES DA SALDARE UNI ISO 4200
WELD ENDS UNI ISO 4200

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).

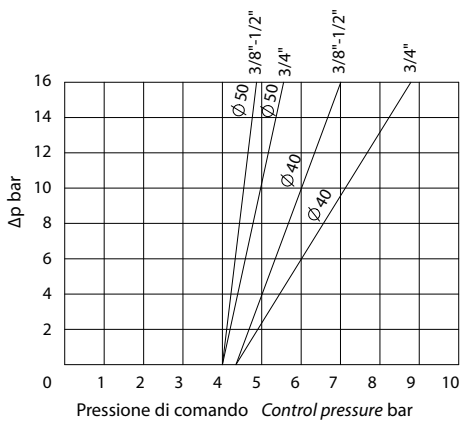
CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

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*

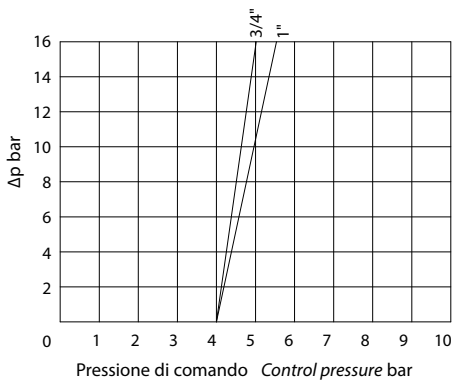
diagramma 1
diagram 1
testa *head*
Ø40-Ø50



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

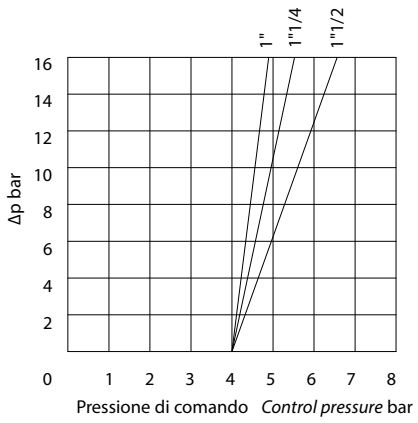
Pressione di comando
Control pressure bar

diagramma 2
diagram 2
testa *head*
Ø63



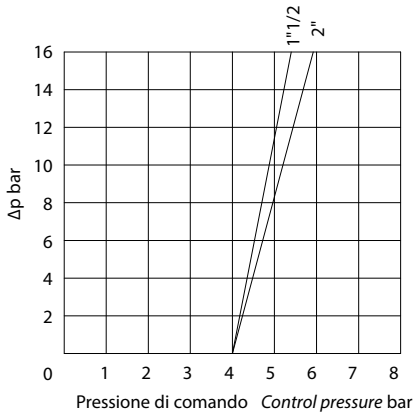
aria 0,108 dm^3/cilclo
air 0,108 dm^3/cycle

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*

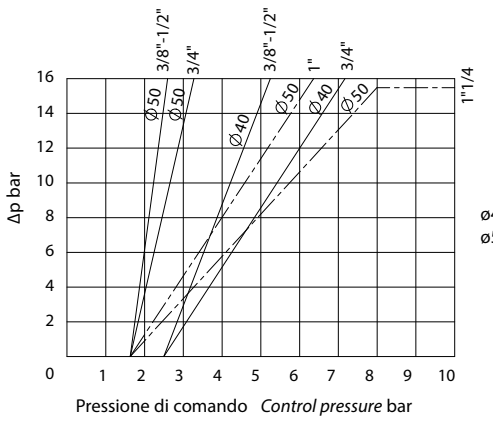
N.C. Normalmente Chiusa con ingresso sopra l'otturatore

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**

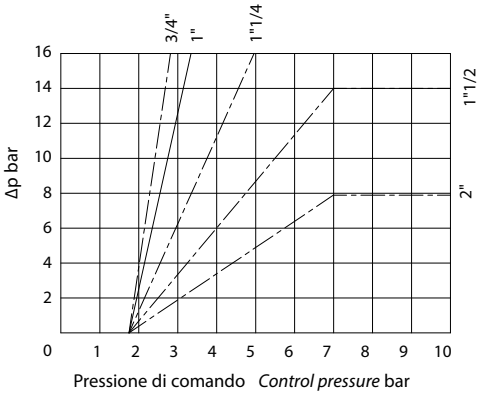
Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
The "piloting head replacement Kit" includes the complete item without the valve body only.

diagramma 5
diagram 5
testa *head*
Ø40-Ø50



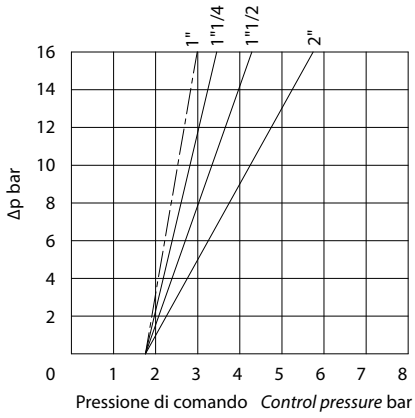
ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
ø40: air 0,031 dm³/cycle
ø50: air 0,051 dm³/cycle

diagramma 6
diagram 6
testa *head*
Ø63



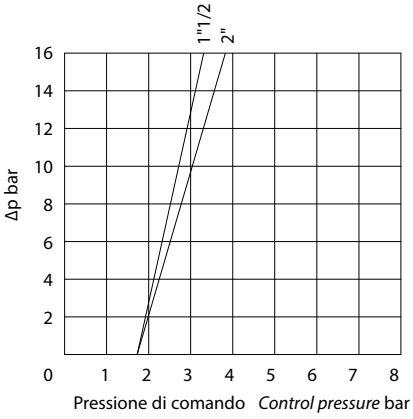
aria 0,108 dm³/cilclo
air 0,108 dm³/cycle

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.

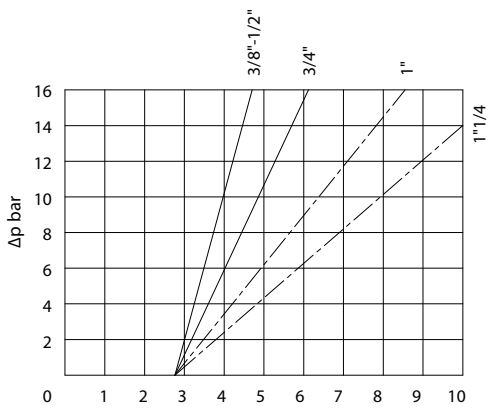


diagramma 9
diagram 9
testa *head*
Ø50

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

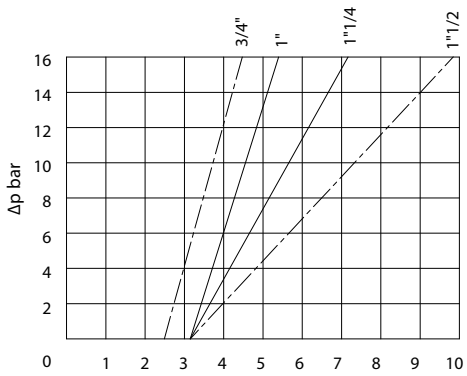


diagramma 10
diagram 10
testa *head*
Ø63

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

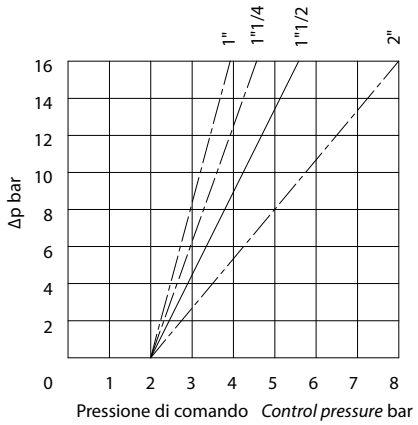


diagramma 11
diagram 11
testa *head*
Ø90

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

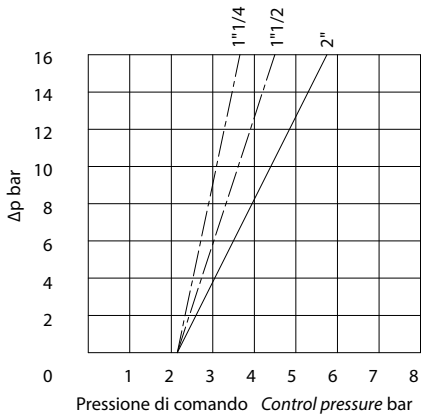


diagramma 12
diagram 12
testa *head*
Ø110

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.

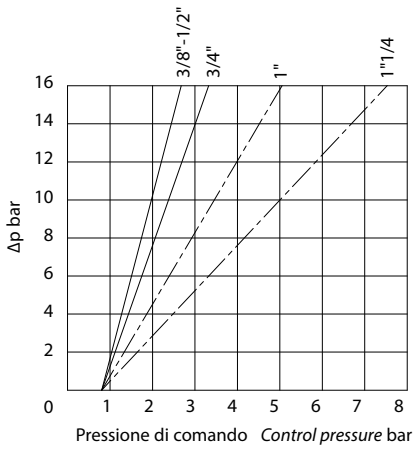


diagramma 13
diagram 13
testa *head*
Ø50

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

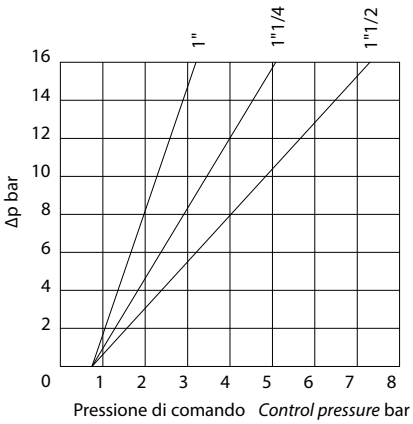


diagramma 14
diagram 14
testa *head*
Ø63

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

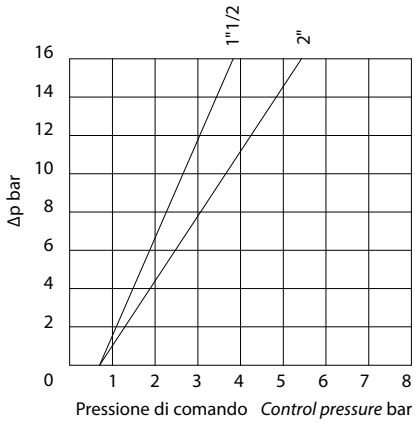


diagramma 15
diagram 15
testa *head*
Ø90

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

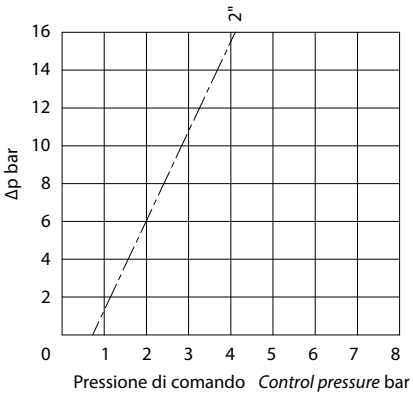


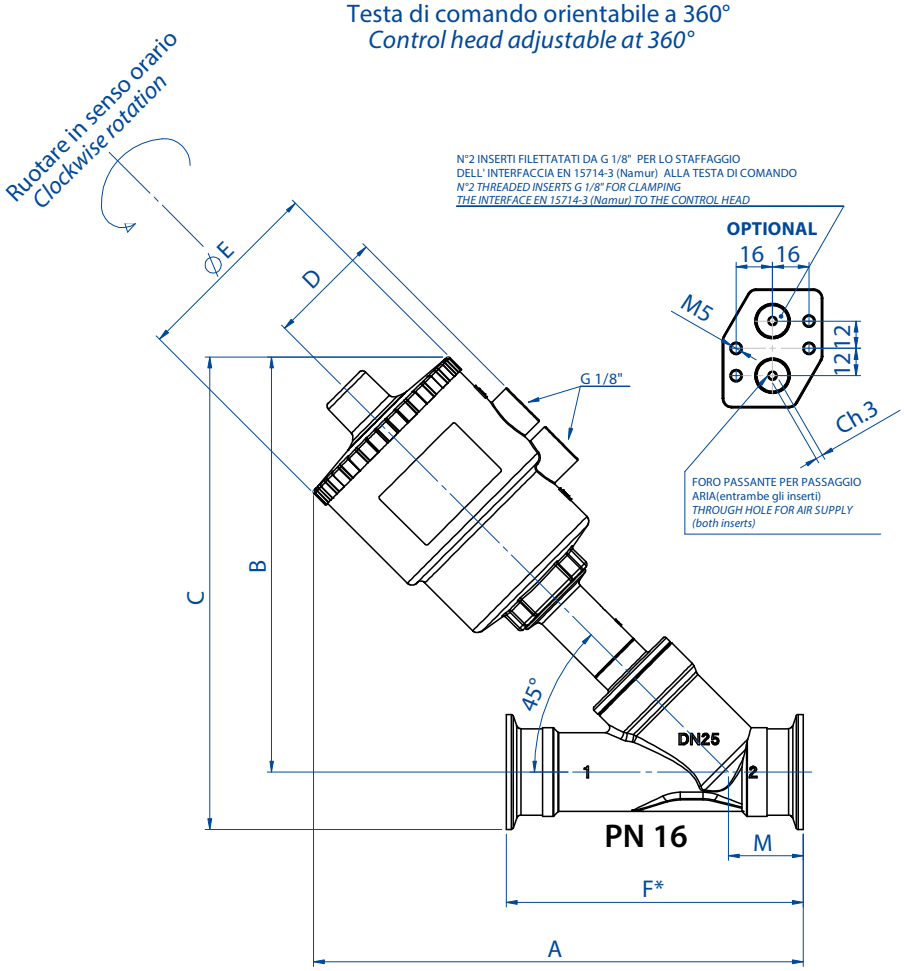
diagramma 16
diagram 16
testa *head*
Ø110

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.*

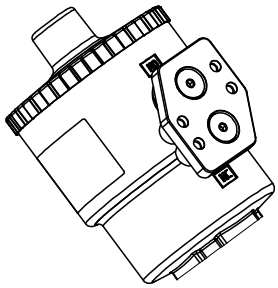
ARES CONNESSIONI CLAMP 3A
TRICLAMP ENDS 3A

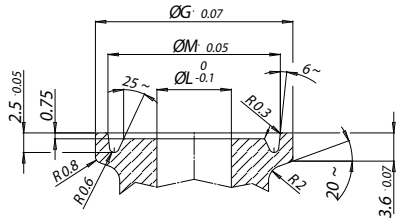
Testa di comando orientabile a 360°
Control head adjustable at 360°



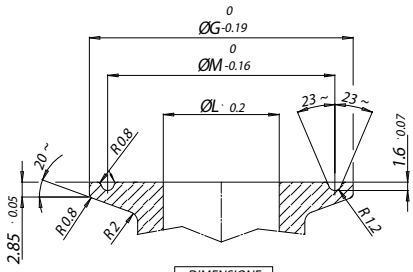
Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR
Codice: KBNJ0001

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*

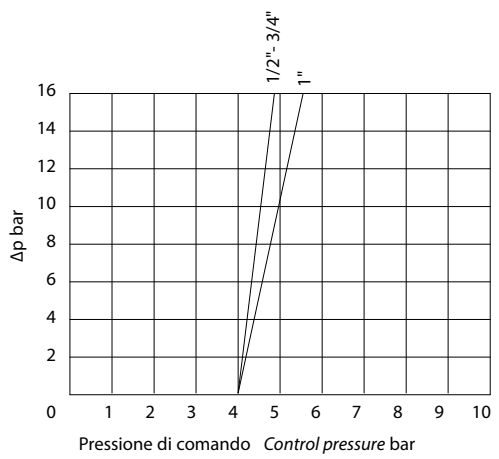


diagramma 1
diagram 1
testa *head*
Ø50

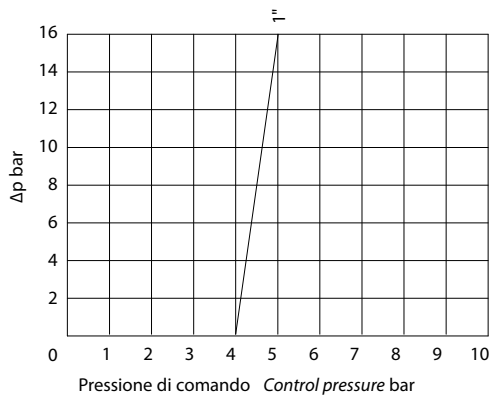


diagramma 2
diagram 2
testa *head*
Ø63

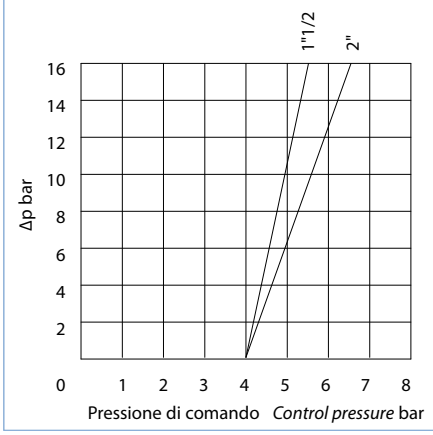


diagramma 3
diagram 3
testa *head*
Ø90

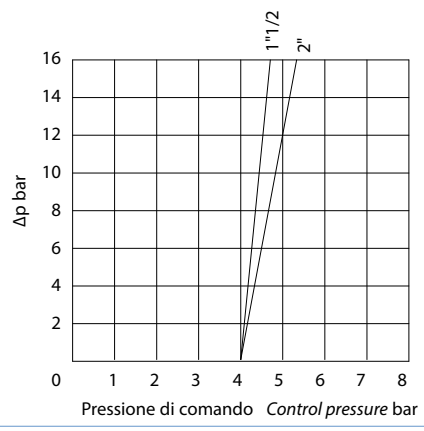


diagramma 4
diagram 4
testa *head*
Ø110

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.***

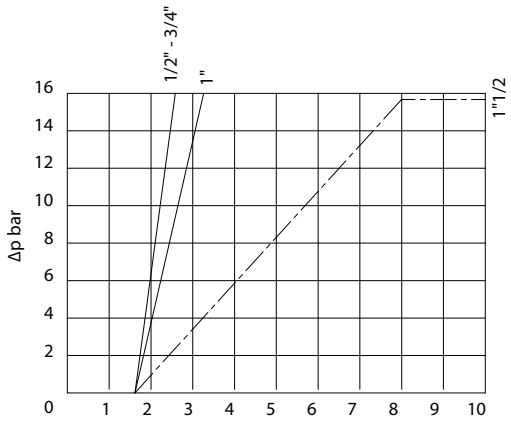


diagramma 5
diagram 5
testa *head*
Ø50

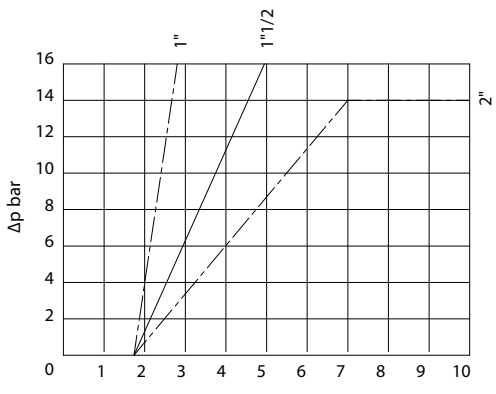


diagramma 6
diagram 6
testa *head*
Ø63

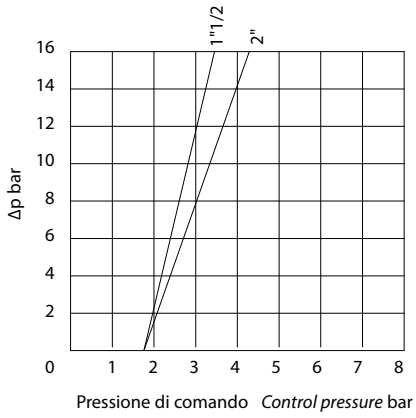


diagramma 7
diagram 7
testa *head*
Ø90

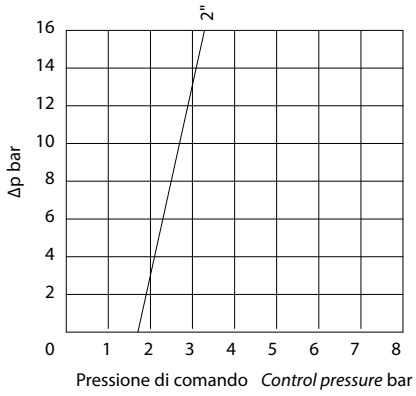


diagramma 8
diagram 8
testa *head*
Ø110

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.***

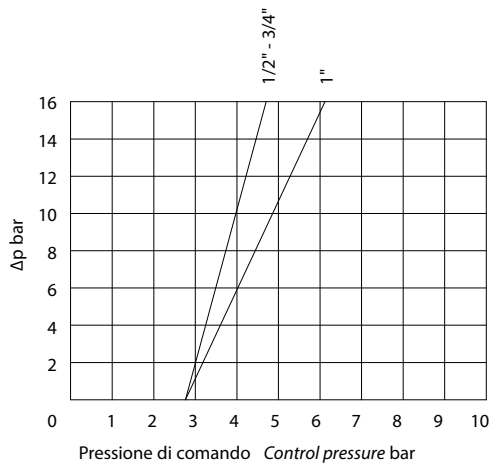


diagramma 9
diagram 9
testa *head*
Ø50

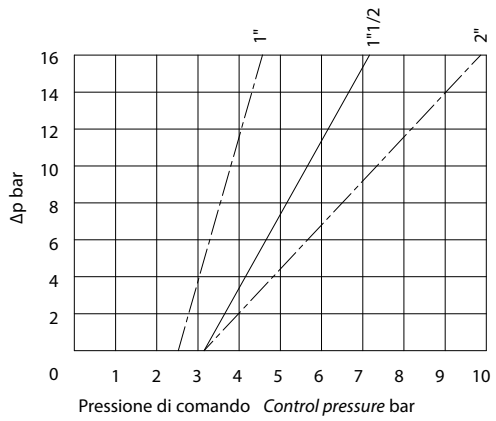


diagramma 10
diagram 10
testa *head*
Ø63

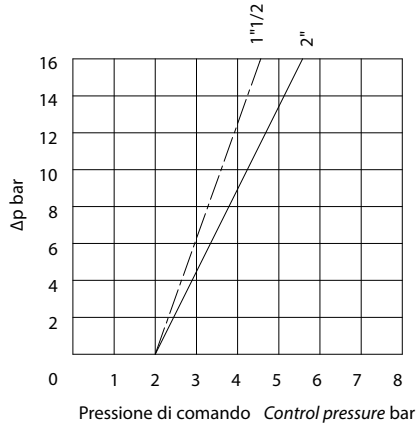


diagramma 11
diagram 11
testa *head*
Ø90

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.***

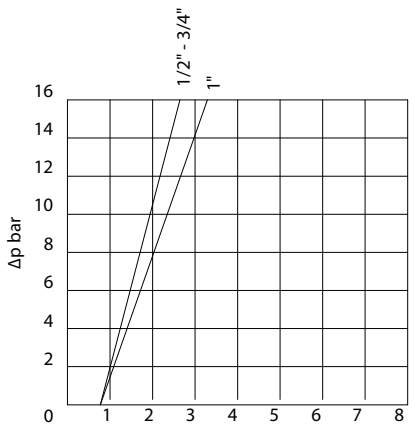


diagramma 13
diagram 13
testa *head*
Ø50

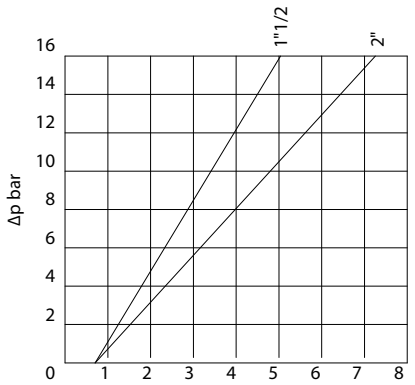


diagramma 14
diagram 14
testa *head*
Ø63

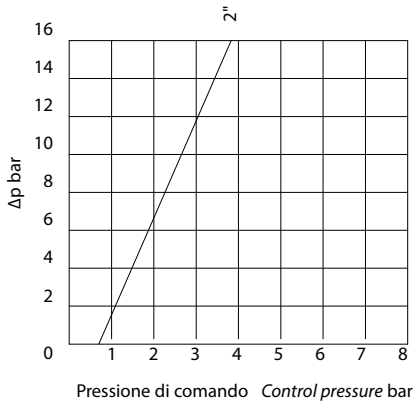


diagramma 15
diagram 15
testa *head*
Ø90

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

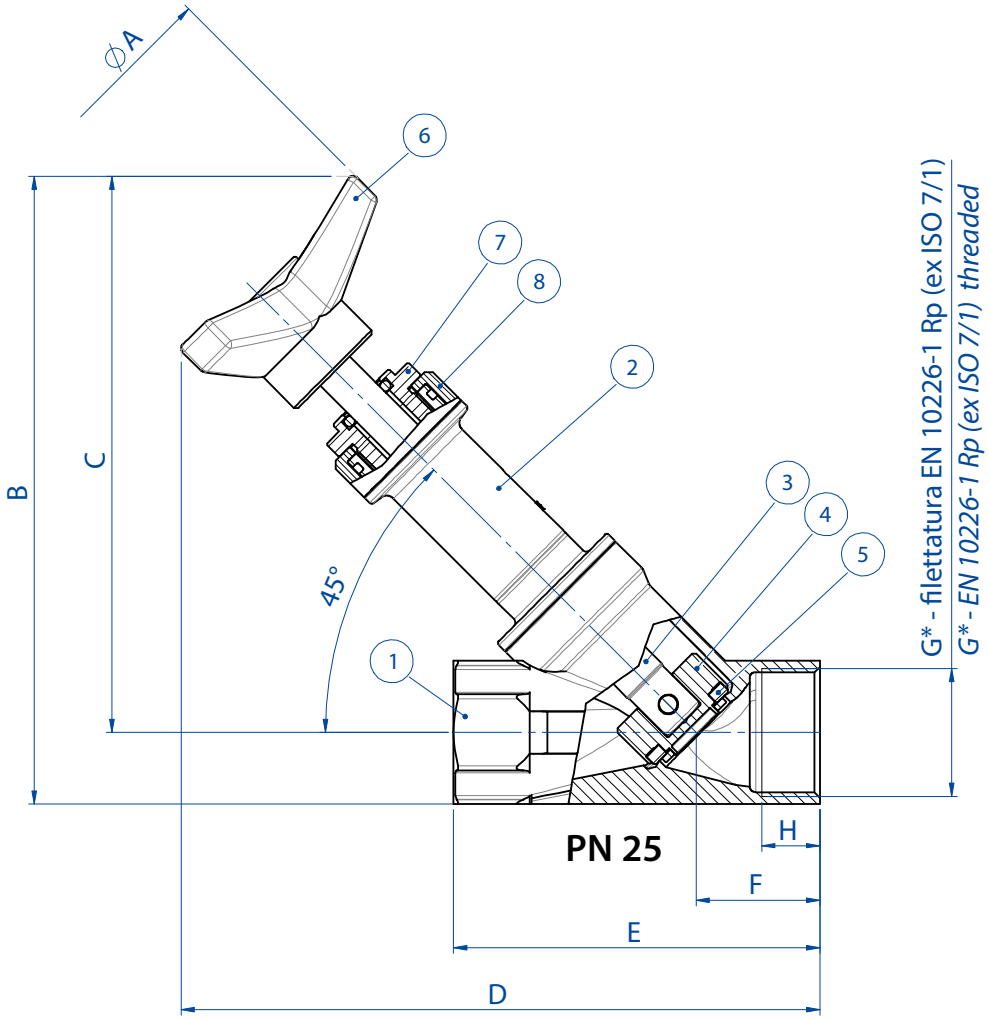
Connessioni a richiesta *Ends on request*
0 = Filettate *Threaded ends* EN 10226-1 Rp (ex ISO 7/1);
4 = Filettate *Threaded ends* NPT;
9 = da saldare *weld ends* ISO 4200;
I = da saldare *weld ends* ISO 2037;
D = da saldare *weld ends* DIN 11852 2;
6 = flangiate *flanged* EN 1092-1;
A = flangiate *flanged* 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

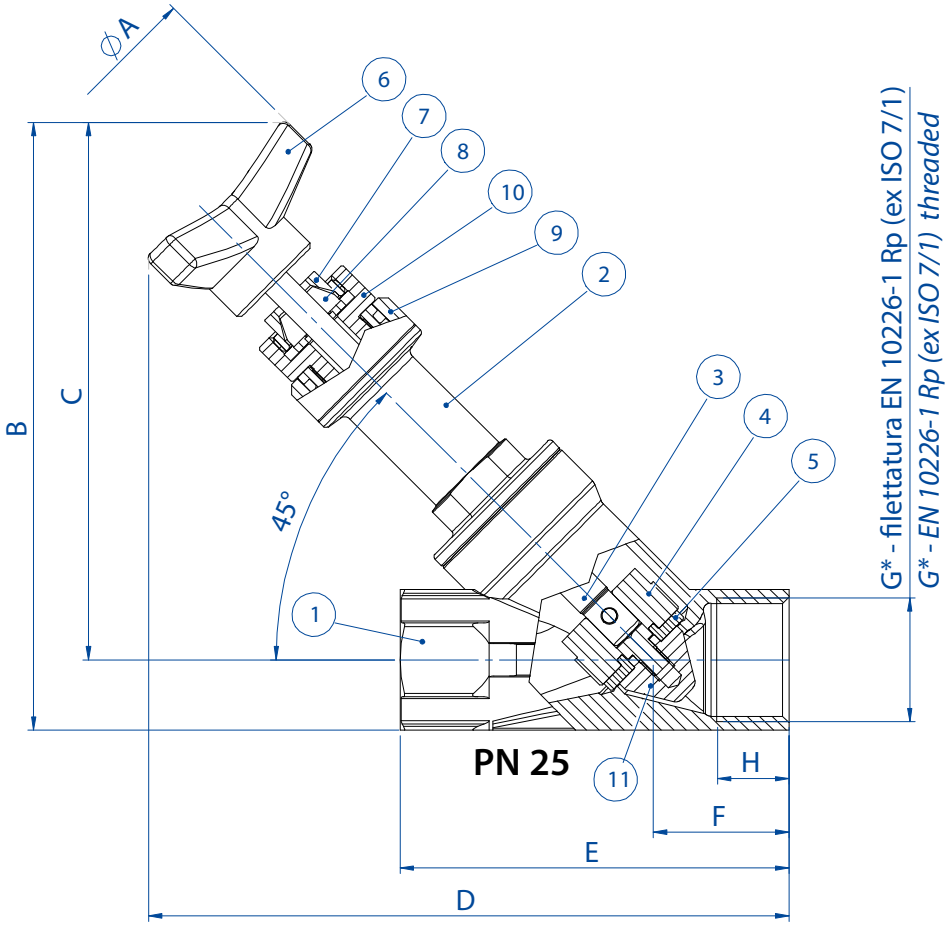
* A richiesta filetto NPT *NPT on request*

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*

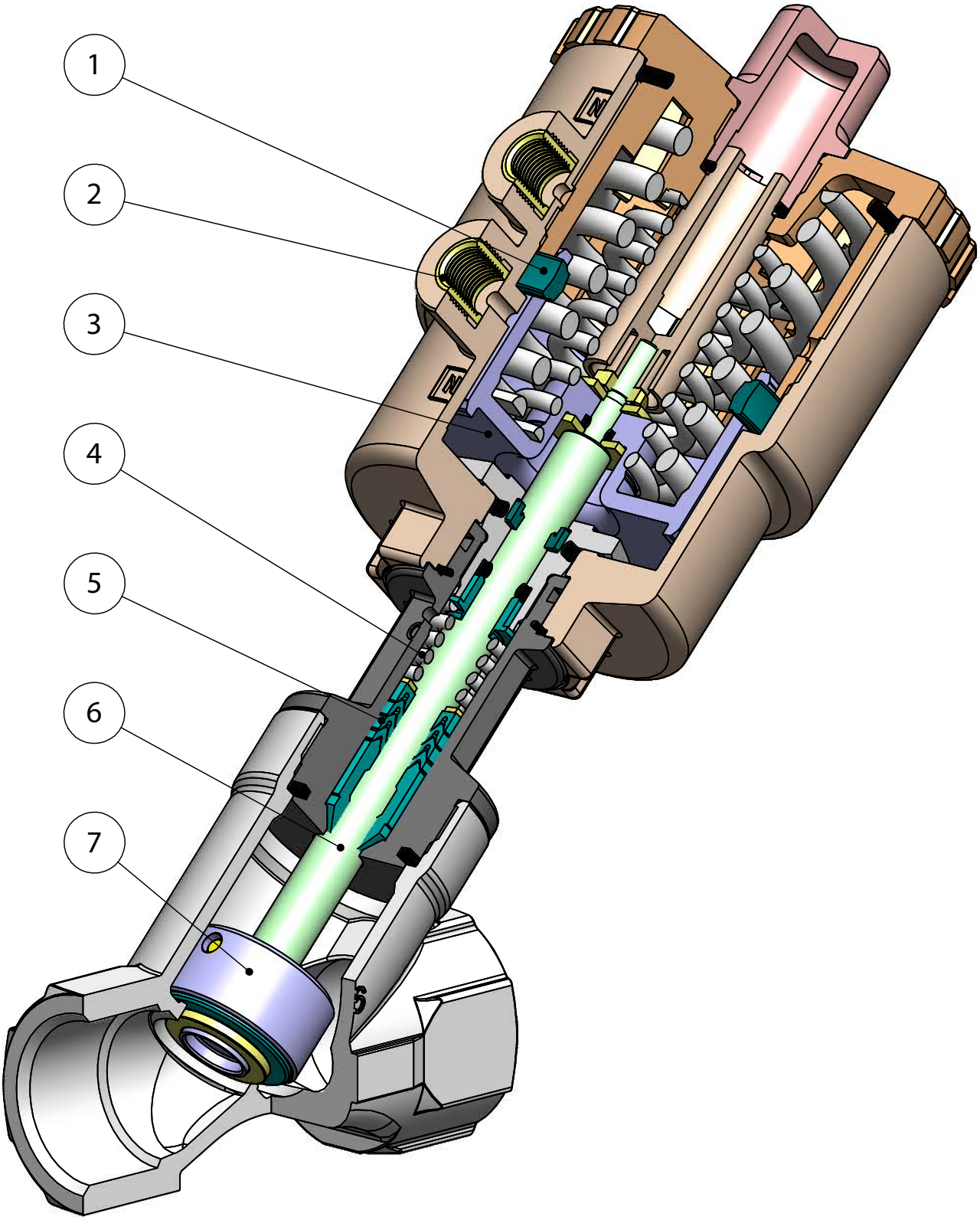
MATERIALI *MATERIALS*

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

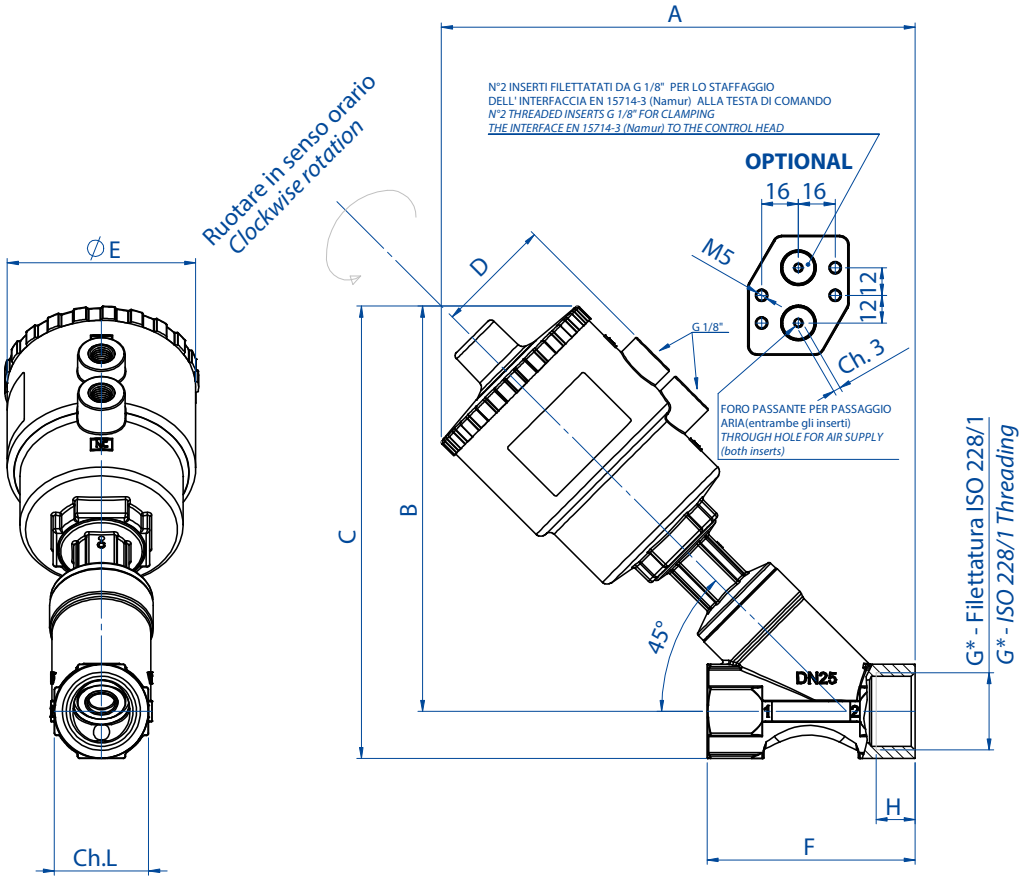


FEATURES & BENEFITS

1	Guarnizione posizionata nel cilindro anziché sul pistone *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) *Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)*
		Minor usura della guarnizione *Less wear of the seal*
2	Inserti della testa di comando in 303 S.S.. *Piloting head inserts in 303 S.S..*	Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni. *Increases considerably the corrosion resistance caused by external agents.*
3	Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron) *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) *Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV)*
4	Guarnizioni precaricate da molla *Seals pre-loaded by spring*	Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno *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 *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 *CHEVRON seals (V shape) with 4 seals in the lower part*	Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli *It ensures a perfect tightness even after a high number of cycles*
6	Albero rullato *Rolled shaft*	Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento *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 *Oscillating / self-aligning shutter*	Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta *It fits perfectly to the valve body ensuring the maximum tightness*
	Certificato ATEX *ATEX Certificate*	Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo *Installation is allowed in a potential explosive environment*
	Certificato PED *PED Certificate*	Piena conformità alle norme di sicurezza europee per i dispositivi in pressione *Full compliance with European Safety Standards for Pressure Equipment*

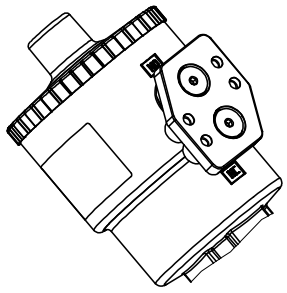
ZEUS

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

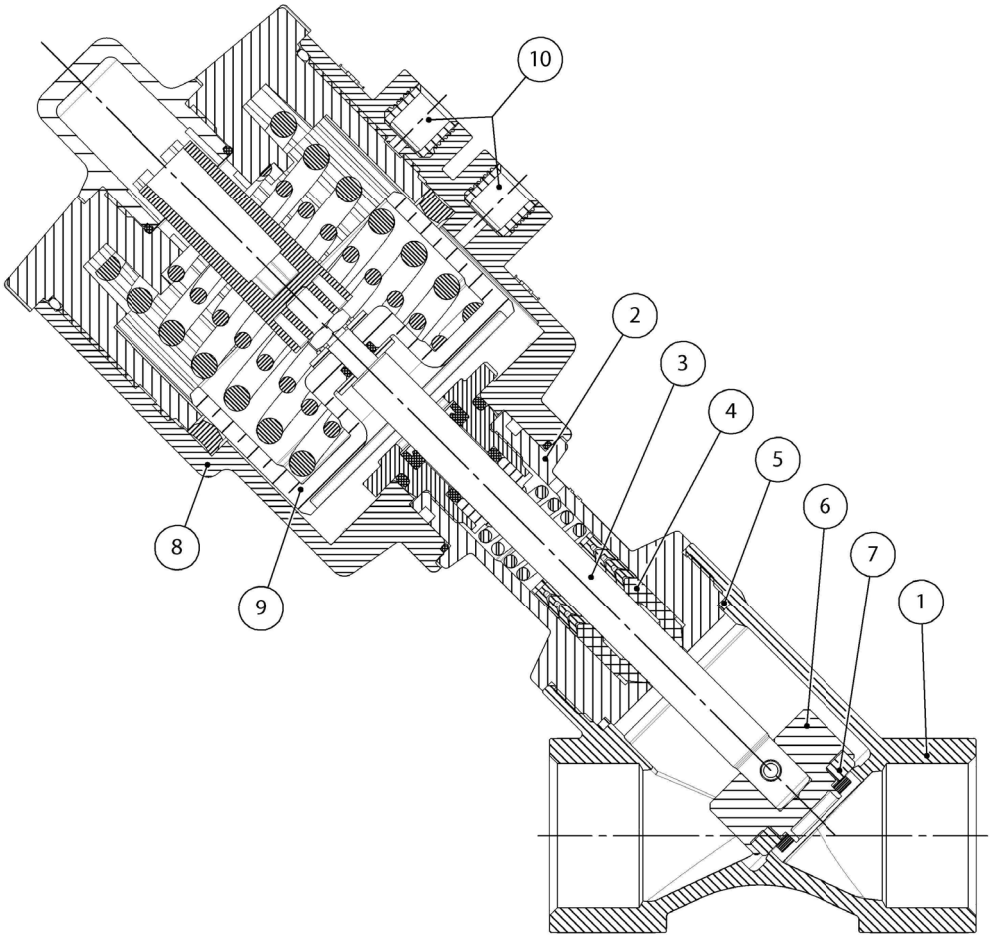


DIMENSIONI *DIMENSIONS*

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.
	Basetta namur *Namur plate* (OPTIONAL)	PA66 + GF30%, inserti ottone *brass inserts*

* 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

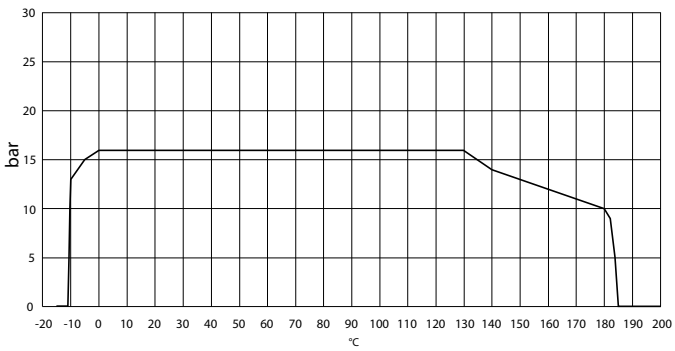
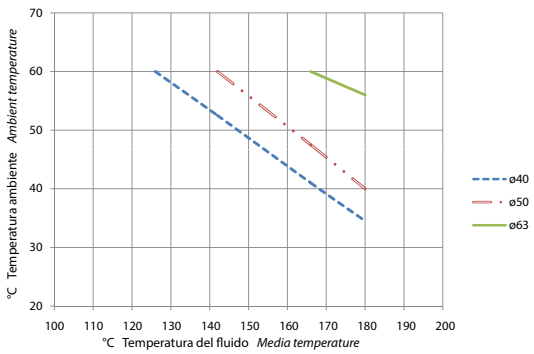
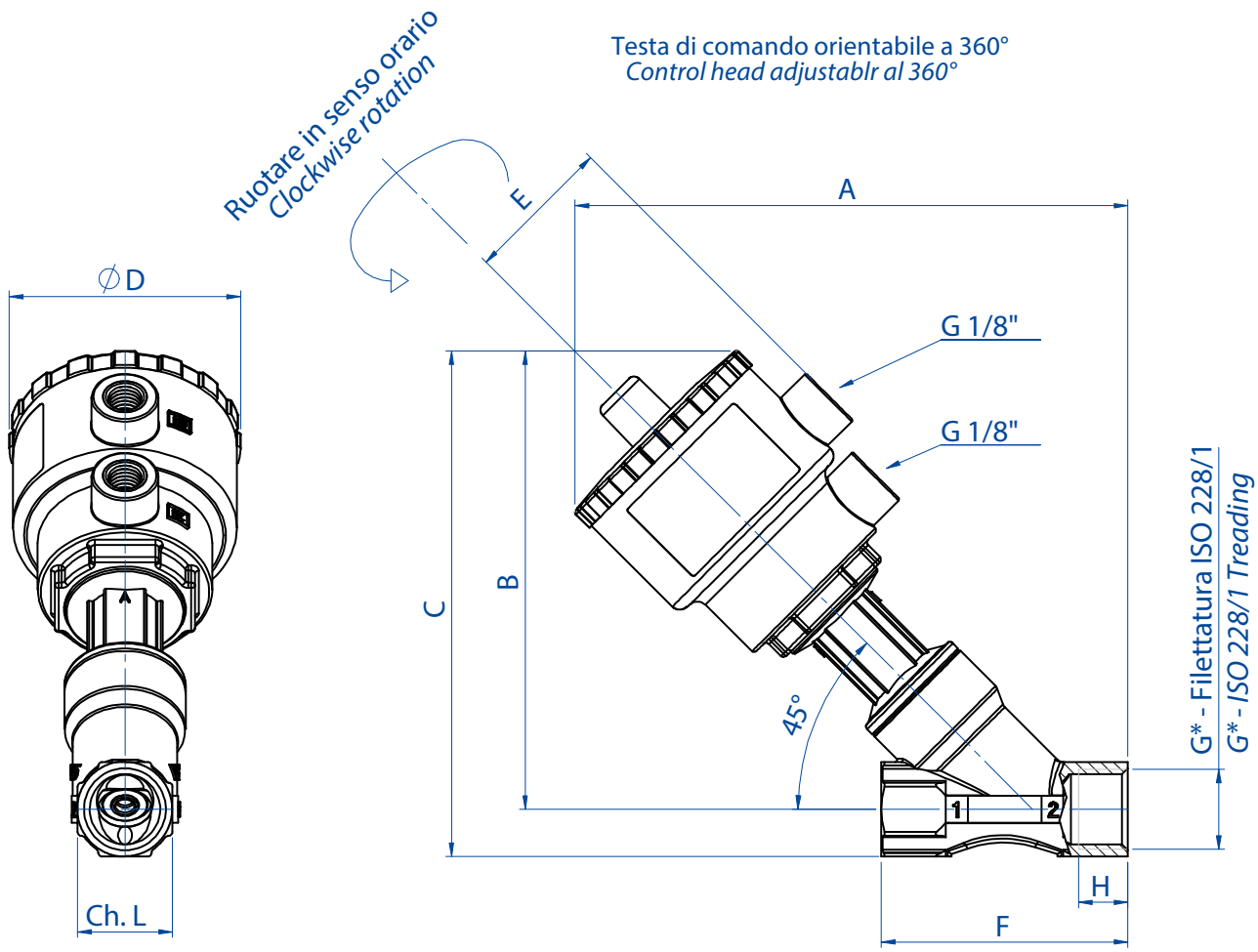


DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM



ZEUS TESTA ø40 *HEAD ø40*



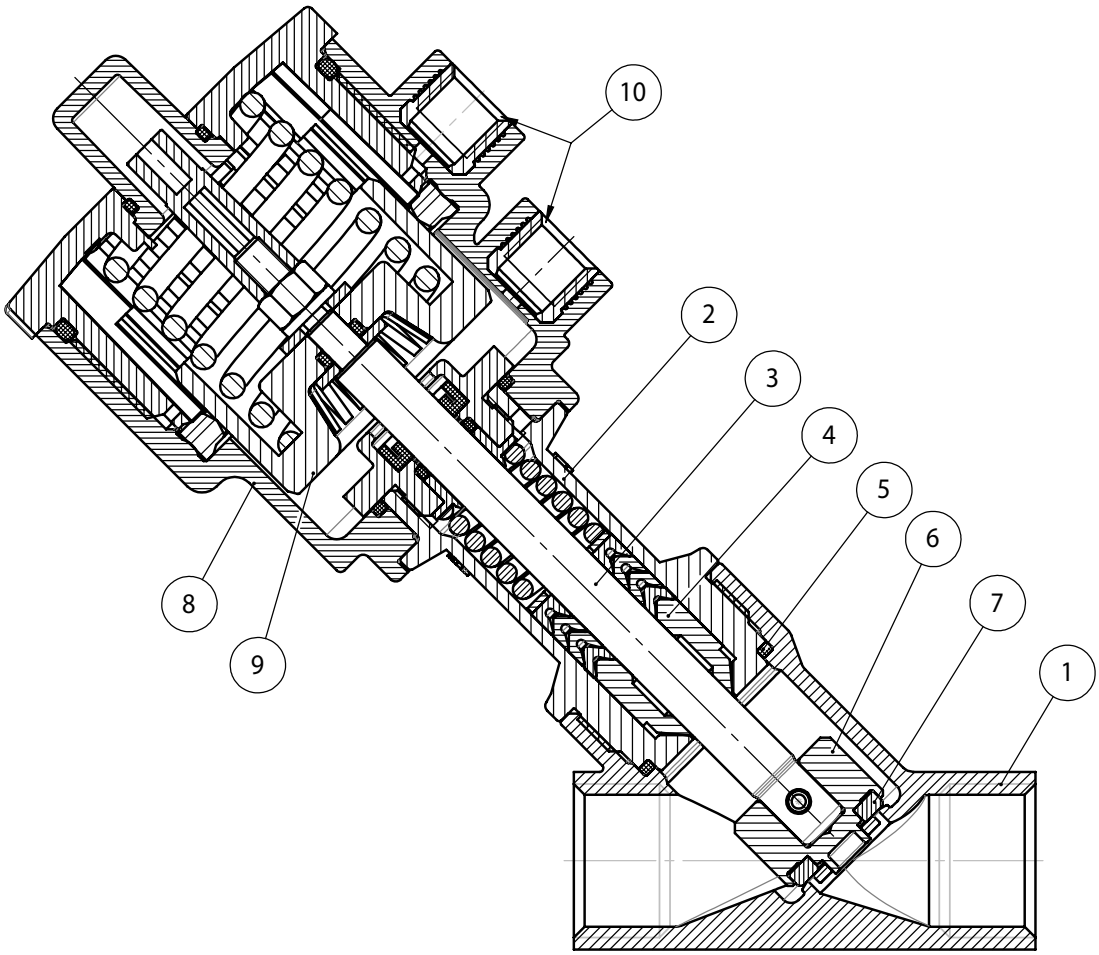
Per la testa Ø40 non è disponibile la basetta Namur.
For actuator Ø40 namur plate is not available.

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

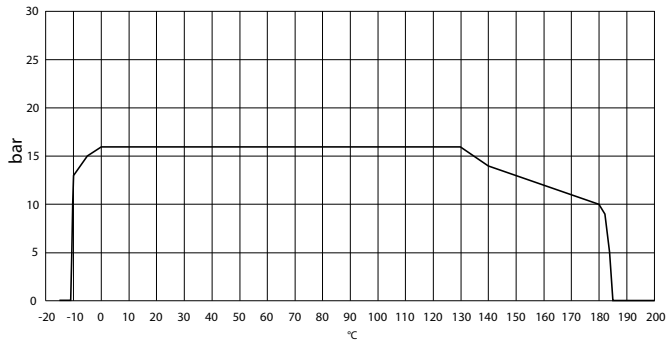
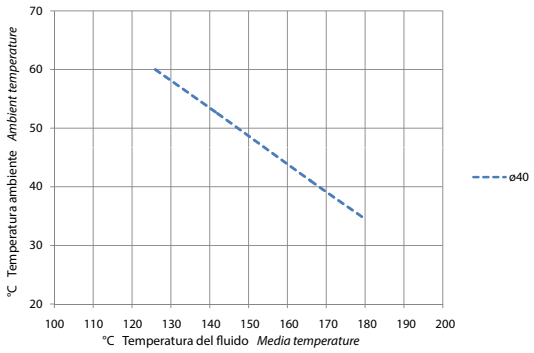


DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM



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*

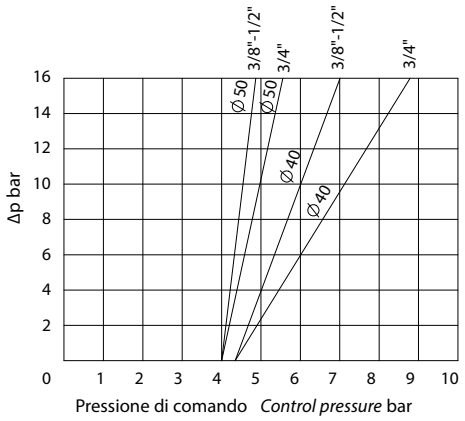
DN [mm]	Filettatura *Threading*	CODICE BRONZO *CODE BRONZE*	Kv m^3/h	Ø Testa comando *Ø Control head*	P comando bar *P control bar* Min	Max	P intercettata *P operating* ΔP max. bar	Peso *Weight* Kg.	KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT*	KIT TESTA DI RICAMBIO *HEAD SPARE KIT*
15	3/8"	**J9SPG1403**	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.

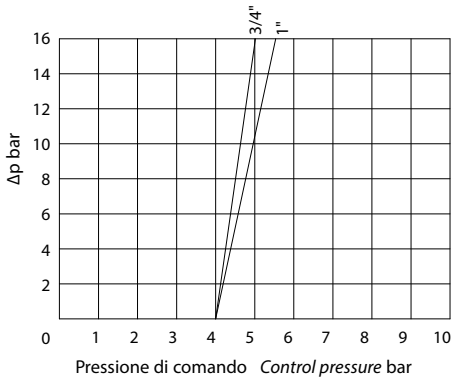
CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
diagram 1
testa *head*
Ø40-Ø50



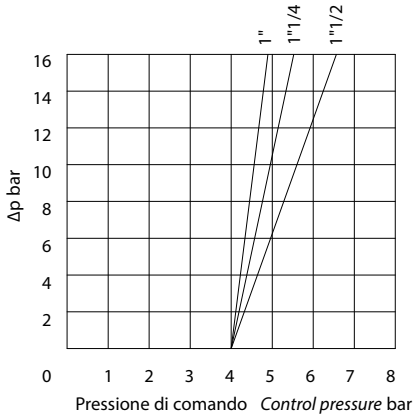
ø40: aria 0,031 dm^3/cilclo
ø50: aria 0,051 dm^3/cilclo
ø40: air 0,031 dm^3/cycle
ø50: air 0,051 dm^3/cycle

diagramma 2
diagram 2
testa *head*
Ø63



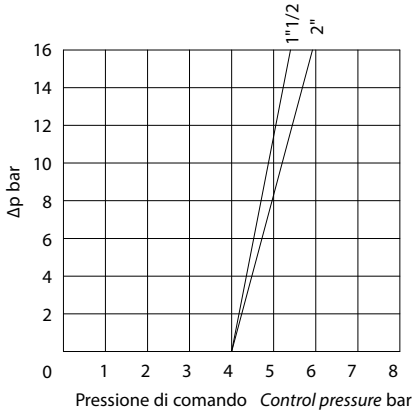
aria 0,108 dm^3/cilclo
air 0,108 dm^3/cycle

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.

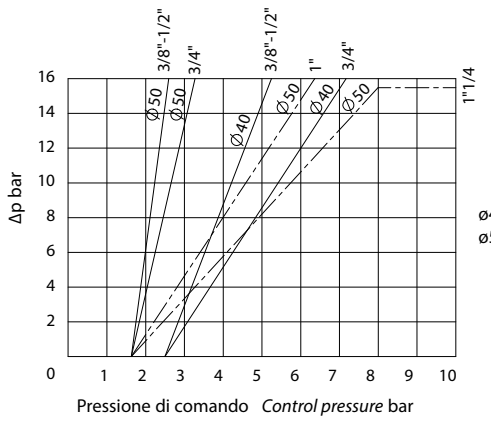
N.C. Normally Closed with the flow from above the plug.

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.

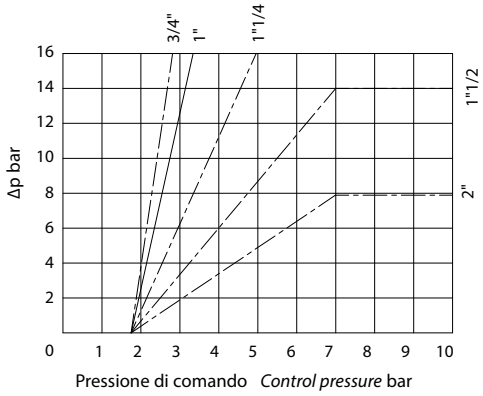
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
The shutter "replacement Kit" includes the shutter and the necessary seals.

diagramma 5
diagram 5
testa *head*
Ø40-Ø50



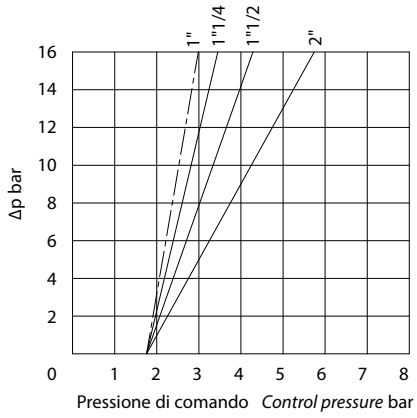
ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
ø40: air 0,031 dm³/cycle
ø50: air 0,051 dm³/cycle

diagramma 6
diagram 6
testa *head*
Ø63



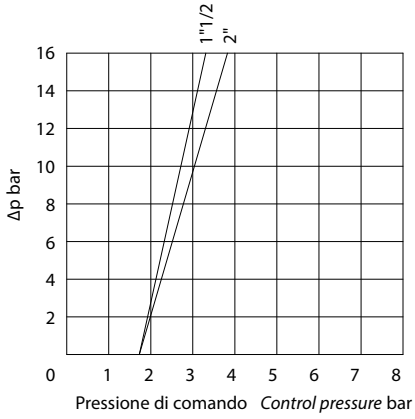
aria 0,108 dm³/cilclo
air 0,108 dm³/cycle

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

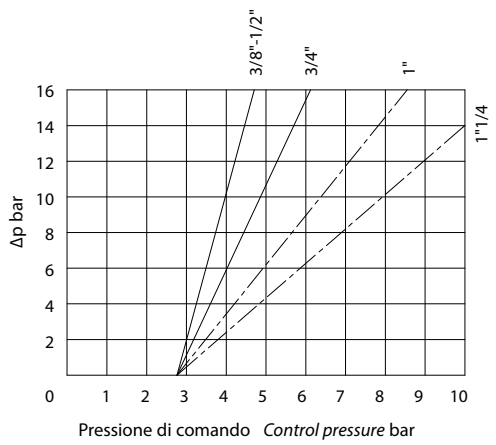
N.O. Normally Open with flow from below the plug

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.

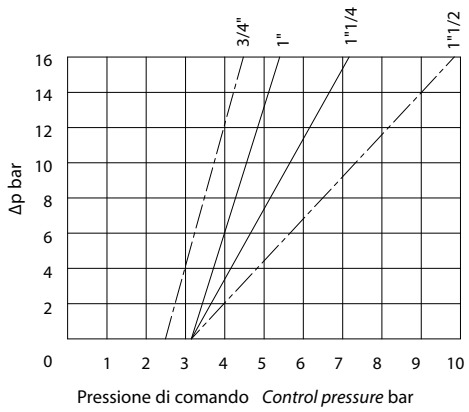
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
The shutter "replacement Kit" includes the shutter and the necessary seals.

diagramma 9
diagram 9
testa *head*
Ø50



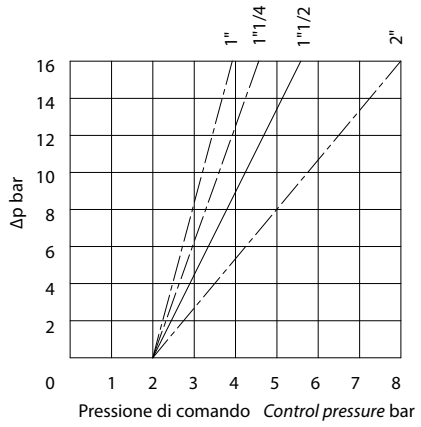
aria 0,089 dm^3/cilclo
air 0,089 dm^3/cycle

diagramma 10
diagram 10
testa *head*
Ø63



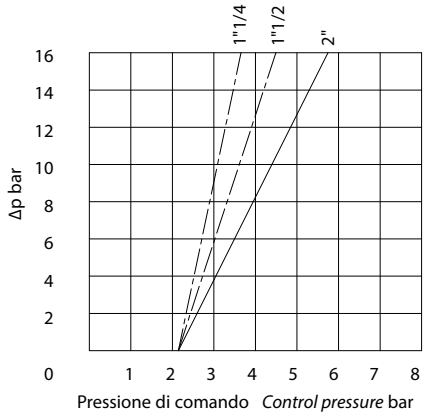
aria 0,194 dm^3/cilclo
air 0,194 dm^3/cycle

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.

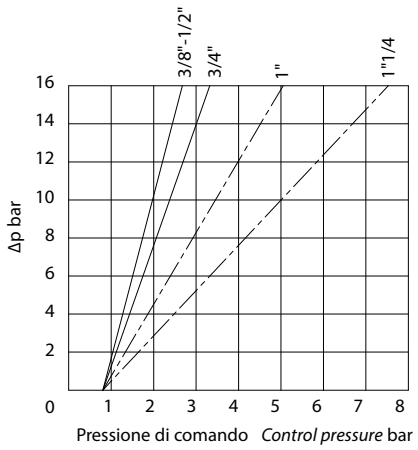


diagramma 13
diagram 13
testa *head*
Ø50

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

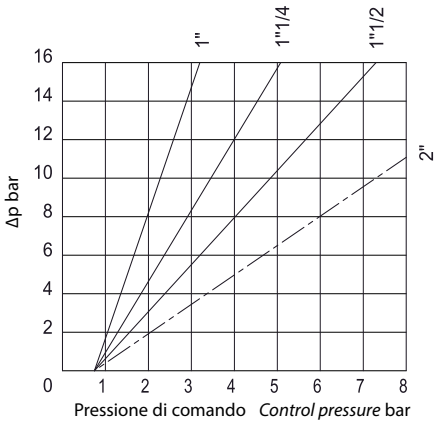


diagramma 14
diagram 14
testa *head*
Ø63

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

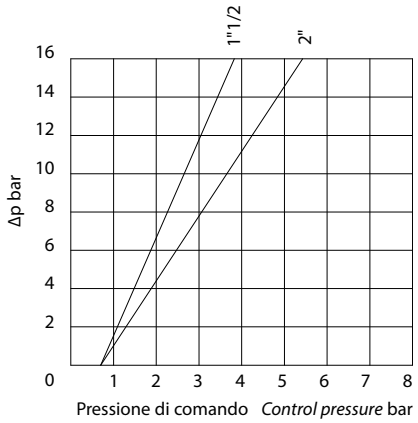


diagramma 15
diagram 15
testa *head*
Ø90

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

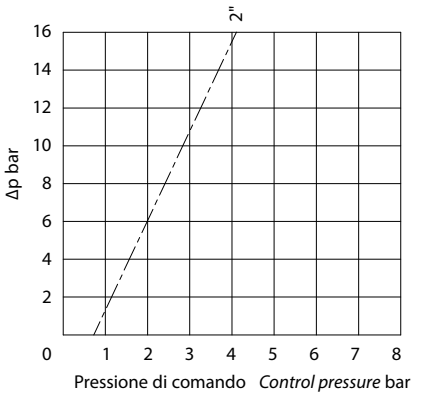


diagramma 16
diagram 16
testa *head*
Ø110

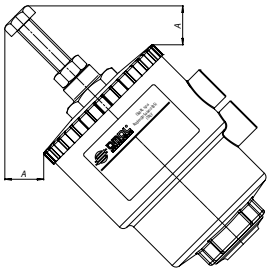
aria 1,585 dm^3/cilclo
air 1,585 dm^3/cycle

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

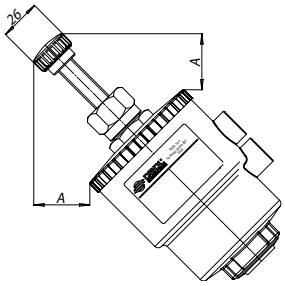


Comando *Control*	A mm	Codice *Code*
Ø 50	25,5	KLJL0016
Ø 63	21,5	KLJL0018
Ø 90	5,2	KLJL0021
Ø 110	5,9	KLJL0023

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.

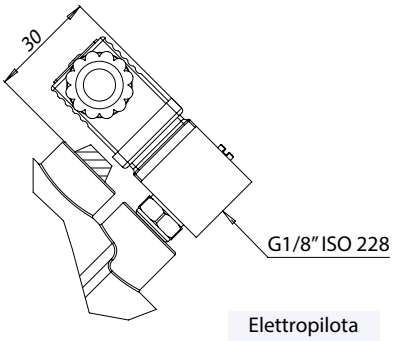


Comando *Control*	A mm	Codice *Code*
Ø 50	35,8	KLJA0016
Ø 63	35,8	KLJA0018
Ø 90	29,5	KLJA0021
Ø 110	29,5	KLJA0023

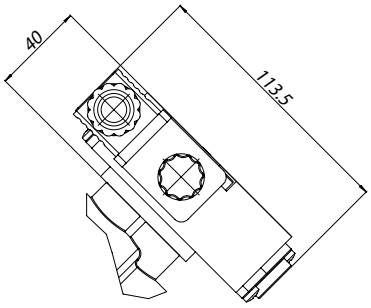
Non disponibile con testa Ø 40
Not available with Ø 40 head

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			

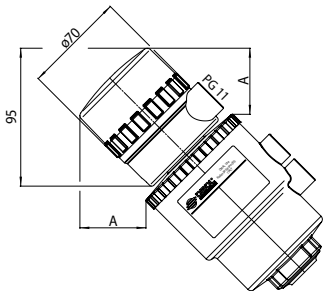
* Da utilizzare solo con interfaccia NAMUR. *To be usedy with NAMUR interface only.*

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°

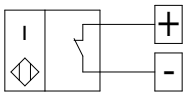


Comando *Control*	A mm
Ø 50	52,1
Ø 63	47,5
Ø 90	37,7
Ø 110	29,5

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

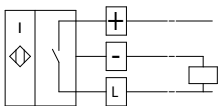
Inductive limit switches NAMUR EExia
Nominal voltage: 8 Vdc
Consumes: working ≤1mA; resting ≥3 mA
Working temperature: from –20°C to +70°C



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



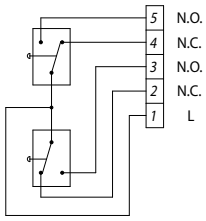
Configurazione *Configuration*	Codice *Code*
1 finecorsa: alto in posizione di valvola aperta *1 Limit switch at the top: open valve*	KSI09A0xx
1 finecorsa: basso in posizione di valvola chiusa *1 Limit switch at the bottom: close valve.*	KSI09C0xx
2 finecorsa valvola aperta e chiusa *2 Limit switch 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 *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 L'ENTE ITALIANO DI ACCREDITAMENTO

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-IS 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 conformita 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 : **n° INERIS-EQEN 035242/19.**

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

Date de fin de validité : **2029.11.07**

The technical documentation referenced : VAP-19 dated 10/10/2019 is consigned under the reference : **no INERIS-EQEN 035242/19.**

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

Validity completion date : **2029.11.07**

La documentazione tecnica di riferimento : VAP-19 dated 10/10/2019 è depositata con il numero di registrazione : **n° INERIS-EQEN 035242/19.**

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

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,

Ce document ne peut être reproduit que dans son intégralité / Only the entire document may be reprinted / Questo documento può essere riprodotto solo integralmente

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.

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