



# de pala

The Motorized Valves Expert

**Catalogo-listino**

*Catalogue-price list*

**G-219**



## DE PALA: l'Azienda



Stabilimenti  
Factory Plants

Costituita nel 1985 per iniziativa del suo attuale proprietario Ing. Valerio Zambon, sulla base delle rilevanti competenze maturate nel settore dell'Industria Termotecnica, De Pala vanta una quarantennale esperienza nella produzione di valvole a sfera motorizzate e di componenti per la termoregolazione per il settore HVAC. Grazie al know-how ed a tecnologie produttive avanzate, ha avuto nel tempo un sempre più importante apprezzamento nel competitivo mercato sia dei grossisti che dei costruttori di sistemi idronici in Italia e all'estero, dove colloca più del 50% della propria produzione, consolidando rapporti pluridecennali con importanti clienti Europei. La produzione è totalmente interna e, grazie alla flessibilità del comparto produttivo e all'ottima organizzazione logistica dei magazzini, è possibile avere una gestione "just in time" rispettando le aspettative della clientela.

Da sempre la parola chiave che contraddistingue De Pala è personalizzazione del prodotto in base alle esigenze del cliente. L'ufficio tecnico è specializzato nello studiare prodotti ad hoc, garantendo esclusività e trovando sempre nuove soluzioni per rendere il lavoro del Cliente più facile e più veloce.

Il segreto per garantire la qualità De Pala si spiega facilmente: progettazione, produzione ed assemblaggio sia del corpo valvola che del servomotore da abbinare : **know how vincente per rendere al Cliente il prodotto giusto per le Sue esigenze!**



Tornio automatico CNC  
CNC Automatic lathe



Reparto lavorazione meccanica  
Manufacturing department

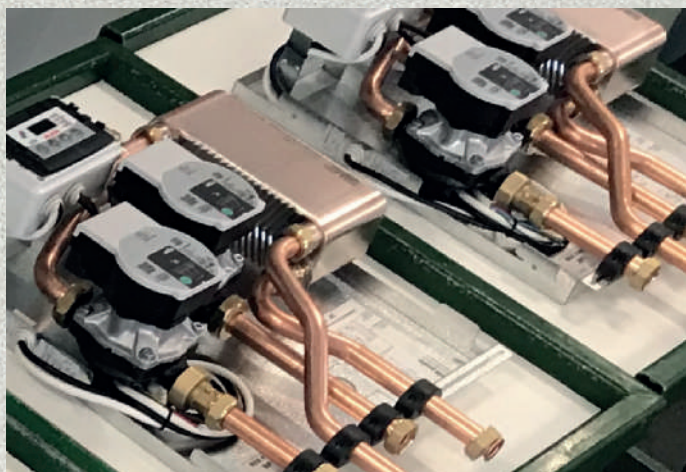
## DE PALA: the Company

*Founded in 1985 on the inspiration of its current owner, Eng. Valerio Zambon, on the basis of the relevant skills previously acquired in the Thermotechnical Industry sector, De Pala can count on forty years of experience in the production of motorised ball valves and temperature control components for the HVAC sector. Thanks to its know-how and advanced production technologies, over time it has become more and more appreciated in the competitive market of both wholesalers and hydronic systems manufacturers in Italy and abroad, where it places more than 50% of its production, consolidating decades-long relationships with important European Customers. Production is totally in-house and, thanks to the flexibility of the production department and the excellent logistical organisation of the warehouses, it is possible to have a "just in time" management that meets the expectations of the Customers.*

*The key word that has always distinguished De Pala is product customisation according to the Customer's needs. The technical department is specialized in studying tailored made products, ensuring exclusivity and always finding new solutions to make the Customer's work easier and faster. The secret to guarantee De Pala's quality is easily explained: project, production and assembly of both the valve body and the servomotor to be combined: **winning know-how to give the Customer the right product for his needs!***



## DE PALA: la produzione



Assemblaggio moduli Box Fire  
Box Fire assembling department

Tutte le lavorazioni meccaniche sono eseguite nella nostra azienda o su nostro disegno, con controlli intermedi in linea del prodotto. Le moderne macchine utensili a controllo numerico come transfer, centri di lavoro, torni automatici e macchine per la piegatura e sagomatura del tubo rame, condotte da tecnici qualificati, permettono di realizzare i componenti con tolleranze di alta precisione.

L'assemblaggio dei corpi valvola, eseguito nel nostro reparto di meccanica da personale altamente qualificato e di lungo corso, permette di garantire costanza di qualità e assoluta affidabilità delle valvole prodotte. I Servomotori con riduttori a nostro disegno montano ingranaggi in acciaio a denti temperati. Gli azionatori e gli switch di fine corsa sono di alta tecnologia europea; essi vengono assemblati nel nostro reparto elettrico, con metodologie ed attrezzature all'avanguardia.

La rispondenza alle specifiche norme tecniche dei prodotti finiti, in uscita dal ciclo di montaggio, viene verificata su banchi di collaudo sia idraulici che elettrici ed interessa il 100% della produzione. Una sala prove interna e vari impianti civili sono usati per le prove di durata ripetute ciclicamente.



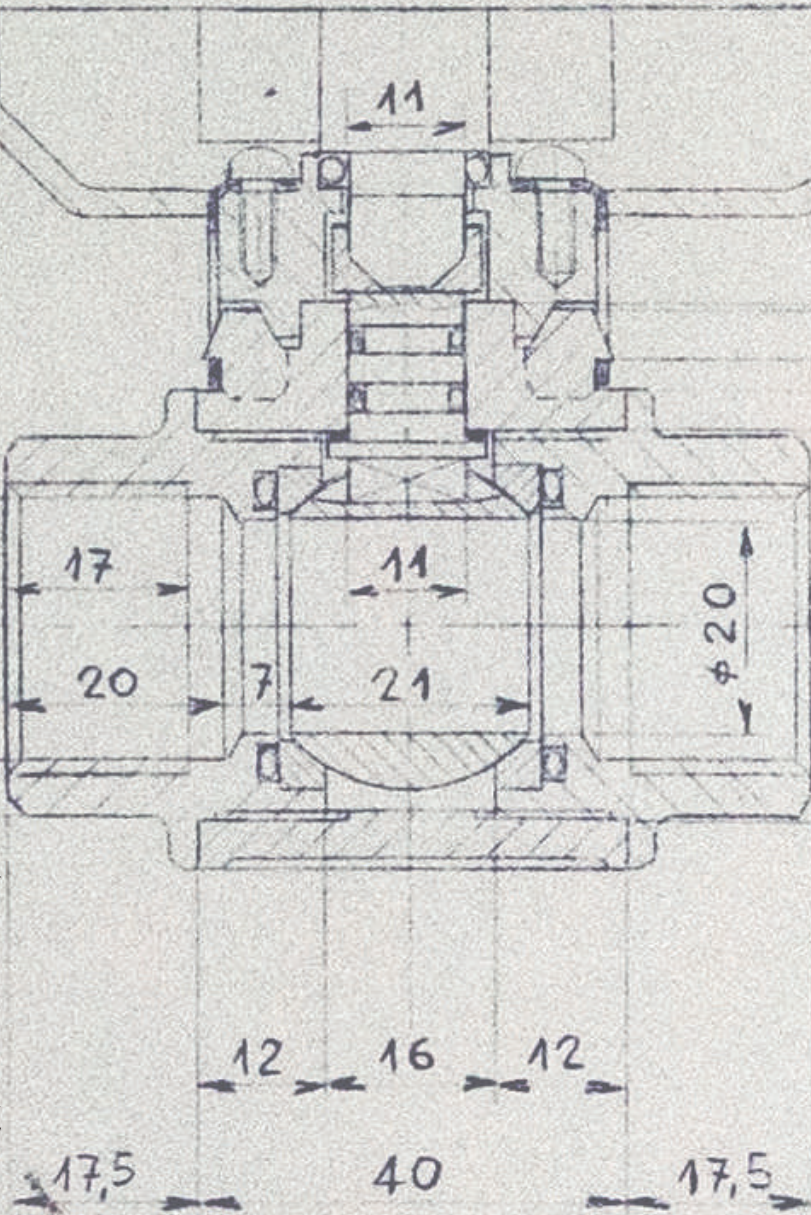
Reparto curvatura tubo rame  
CNC copper tube bending machine

## DE PALA: the production

All the manufacturing phases are carried out in our factory or according to our standards and are subject to intermediate check on the production lines. By the use of modern CNC machines: transfer machine tools, machine centers, automatic lathes and copper tube forming/bending machines, lead by qualified technicians, we carry out finished parts according to very precise tolerances. The gearboxes use steel gears with hardened teeth. Internal motors and microswitches come from the best European producers. The assembly of body valves and servomotors is carried out by skilled engineers with specific equipment, which have been developed internally as a result of our know-how.

This is the guarantee for an unquestionable reliability of the whole range of our products. All De Pala products are methodically checked with instruments of measurement during the manufacturing phase. The data are elaborated and recorded by a computer system.

In order to guarantee our high quality, every produced piece is subjected to hydraulic and electric tests. Moreover there are further periodical reliability trials to verify the real resistance of products, with special cyclic actuators and simulating the worse working condition.





## MERCATI E SETTORI

Grazie all'eccezionale flessibilità del comparto produttivo ed all'ottima organizzazione logistica, l'evasione degli ordini avviene in tempi rapidissimi.

Ogni giorno De Pala consegna i suoi prodotti sia in Italia che in molti paesi all'estero: tutti importanti mercati dove i prodotti De Pala sono presenti con pieno successo da molti anni.

Oltre all'impiantistica termoidraulica, De Pala è presente in diversi settori tecnologici come ad esempio :

- Applicazioni in pompe di calore / chiller o altri generatori
- Agricolo / zootecnico
- Enologico
- Navale
- Elettrodomestico industriale

## MARKETS AND SECTORS

*Thanks to the exceptional flexibility of the production department and the excellent logistical organisation, orders are processed very quickly.*

*Every day De Pala delivers its products both in Italy and in many countries abroad: all important markets where De Pala products have been successfully present for many years. In addition to the classic sector of thermo-hydraulic systems, De Pala is present in towards different technological sectors such as :*

- *Applications in heat pumps / chillers or other generators*
- *Farming / zootechnical*
- *Oenological*
- *Naval*
- *Industrial household appliances*

### DE PALA NEL MONDO

### DE PALA IN THE WORLD





**PAGINE**  
**PAGES**

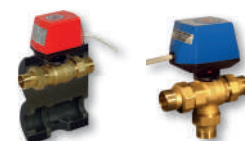
**6-13 Valvole compatte: FAST** *Compact valves: FAST*

Valvole a sfera motorizzate compatte 2-3-4 vie da 1/2" a 1"  
*Compact 2/3/4-ways motorized ball valves from 1/2" to 1"*



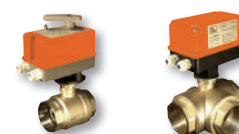
**14-25 Valvole: SFERA** *Valves: SFERA*

Valvole a sfera motorizzate 2-3-4 vie da 1/2" a 1 1/2" filettate ed a compressione  
Servomotori a 230 Vac / 24 Vac e 12 Vcc / 24 Vcc  
*2/3/4-ways motorized ball valves from 1/2" to 1 1/2" threaded & compression fittings*  
*Actuators 230 Vac / 24 Vac and 12 Vdc / 24 Vdc*



**26-37 Valvole: ISO** *Valves: ISO*

Valvole sfera motorizzate 2-3 vie con attacco ISO 5211 – Diametri da 1/2" a 4"  
*2/3-ways motorized ball valves ISO 5211 connection – Diameters from 1/2" to 4"*



**38-45 Valvole: FRIGO IP65** *Valves: IP65 FRIGO*

Valvole sfera 2-3 vie nichelate – Motori IP65 – Distanziali per coibentazione  
*2/3-ways nickel-plated ball valves – IP 65 actuators – Spacers for pipes insulation*



**46-49 Valvole: INOX** *Valves: Stainless steel*

Valvole a sfera in acciaio INOX AISI 316 motorizzate 2-3 vie – Diametri da 1/2" a 2"  
*AISI 316 stainless steel 2/3-ways motorized ball valves – Diameters from DN15 to DN50*



**50-53 Valvole: PVC** *Valves: PVC*

Valvole a sfera in PVC motorizzate 2 vie ad incollaggio o filettate – da DN15 a DN50  
*PVC motorised 2-way bonded/threaded ball valves - from DN15 to DN50*



**54-55 Valvole: FARFALLA** *Valves: Butterfly*

Valvole a farfalla motorizzate 2 vie - Attacchi filettati femmina da 1/2" a 2"  
*2-way motorized butterfly valves - Female threaded connections from 1/2" to 2"*



**56-63 Valvole: MISCELATRICI** *Valves: Mixers*

Valvole di miscelazione e regolazione a sfera 2-3 vie – Diametri da 1/2" a 1 1/2"  
Valvole di miscelazione in ottone/ghisa a 2-3-4 vie filettate e flangiate fino a DN100  
Miscelatori termostatici – Valvole deviatrici termostatiche – Valvole anticondensa  
*2/3-ways mixing and regulation ball valves – Diameters from 1/2" to 1 1/2"*  
*Brass and cast-iron mixing valves 2-3-4 ways threaded and flanged up to DN100*  
*Thermostatic mixing valves - Deviating thermostatic valves - Anticondensation valves*



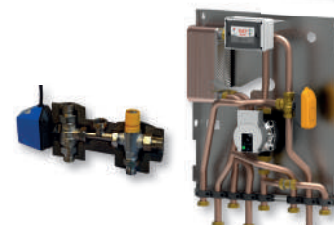
**64-67 Regolazione: CENTRALINE** *Regolation: Control unit*

Regolatori digitali, termostati, cronotermostati, centraline per solare e biomassa  
*Climatic regulators, thermostats, chronothermostats, control units solar circuits and biomass*



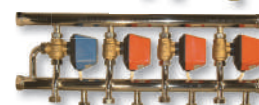
**68-72 Rinnovabili: BIOMASSA E SOLARE** *Renewables: Biomass and solar*

Modulo di separazione tra fonte biomassa - impianto-caldia con produzione di ACS  
opzionale - Kit solare-caldia per produzione di acqua calda sanitaria  
*Interface Kit between fireplace-heating - plant-boiler with DHW production available.*  
*Solar-gas boiler Kit for domestic hot water production*



**73 Distribuzione: COLLETTORI** *Distribution: Manifolds*

Collettori Multizona con valvole motorizzate a sfera  
*Multizone manifolds with motorized ball valves*



**74 Valvole: BILANCIAMENTO** *Valves: Balancing*

Valvole di bilanciamento con flussimetro incorporato  
*Balancing valves with built-in flow meter*



**74 Servizio: RICAMBI** *Service post sales: Spare parts*

Ricambistica  
*Spare parts*







## Valvole: **FAST**

Valves : **FAST**



### VALVOLE A SFERA MOTORIZZATE TIPO COMPATTO Attacchi: femmina-bocchettone / solo bocchettone Ø 1/2" - 3/4" - 1"

COMPACT MOTORIZED BALL VALVES - Connections: female - pipe union / only pipe union - Ø 1/2" - 3/4" - 1"

#### CORPI VALVOLA:

Corpo valvola : Ottone CW617N ( UNI 12165 )  
Sfera : Ottone CW617N ( UNI 12165 ) Nichelata-Cromata  
Sedi Sfera : PTFE più O-RING in EPDM  
Asta : con doppio O-RING in EPDM ed anello antigrippaggio in PTFE  
Pressione massima di esercizio : 10 bar  
Pressione differenziale massima :  $\Delta p = 4$  bar  
Temperatura di esercizio del fluido : 0 °C + 100 °C  
Fluido utilizzabile : Acqua, acqua glicolata o liquidi compatibili con tenute in PTFE ed EPDM  
Perdite di carico : basse  
Innesto: rapido con molla ad anello

#### BODY VALVES:

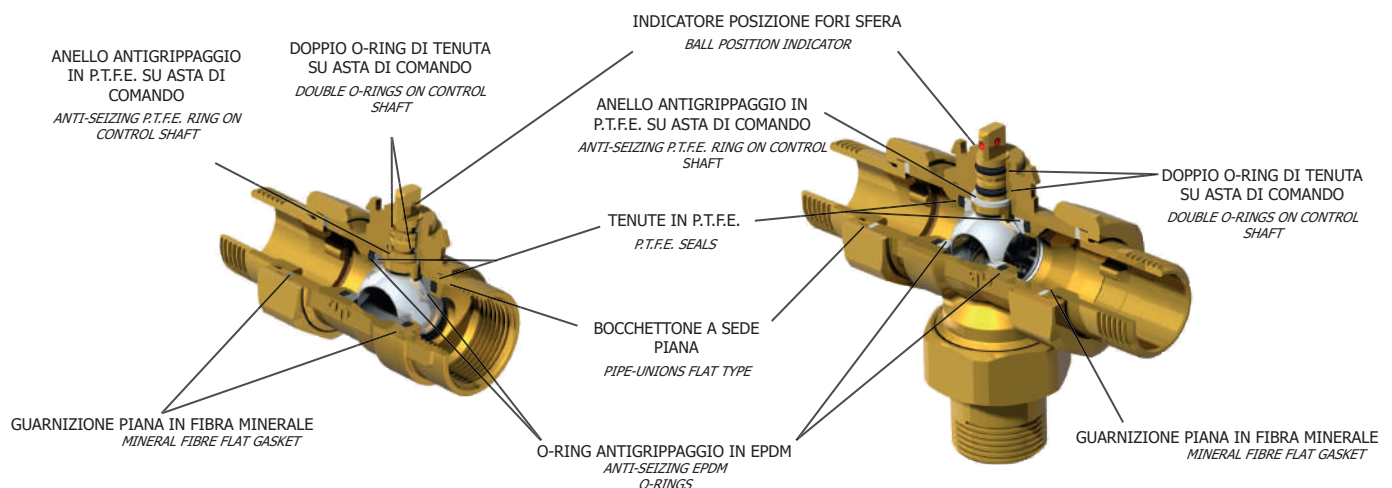
Valve body : BRASS CW617N (UNI 12165)  
Ball : BRASS CW617N (nickel-chromium plated)  
SEALS : PTFE and EPDM O-RINGS  
Shaft with double EPDM O-RING and anti-seizing PTFE ring  
Nominal operating pressure : 10 bar  
Maximum differential operating pressure :  $\Delta p$  4 bar  
Fluid temperature : 0 °C + 100 °C  
Utilisable fluids : Water; water with glycol or compatible fluids with PTFE and EPDM  
Load loss: minimum  
Quick release ring spring coupling system

#### SERVOMOTORI ACCOPPIATI:

Tempi di apertura / chiusura : 12"  
Tensioni disponibili : 230Vac - 24Vac  
Contatti Ausiliari : 1 (Contatto pulito)  
Grado di protezione elettrica : IP54  
Tipo di comando: a 2 fili (relè interno) / a 3 fili (Comune - Apre - Chiude)

#### COUPLED SERVOMOTORS:

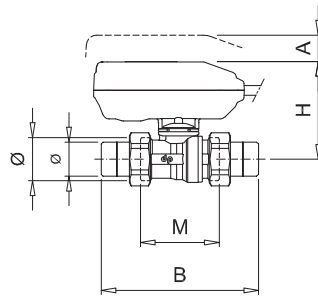
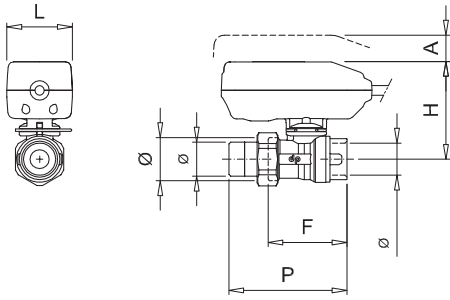
Opening / closing time: 12"  
Supply Voltage: 230Vac - 24Vac  
Auxiliary Switch: 1 (Free voltage signal)  
Electric protection rating: IP54  
Control type: 2 wires (relay inside) / 3 wires (C-NO-NC)



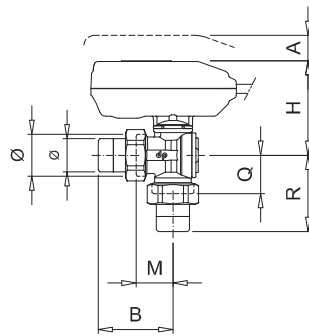
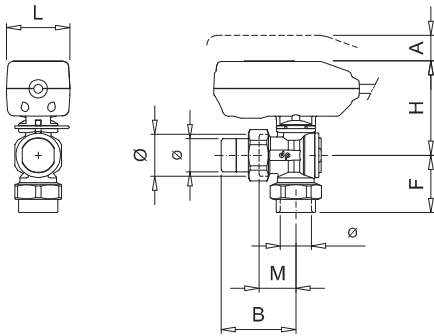


# INGOMBRI VALVOLE E SERVOMOTORI

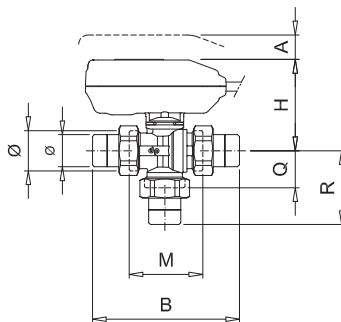
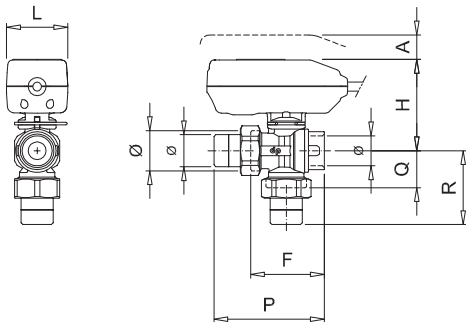
## OVERALL DIMENSIONS VALVES & ACTUATORS



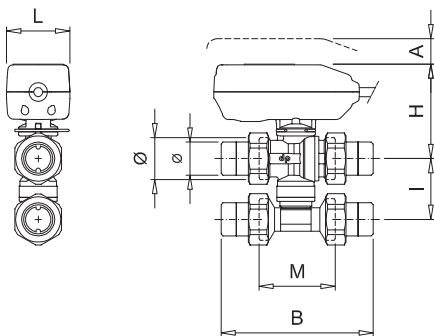
Ø	Ø	H	A min.	M	B	F	P	L
1/2"	3/4"	75	20	59	113	59	86	50
3/4"	1"			60	120	60	90	
1"	1" 1/4	78		72	141	72	107	



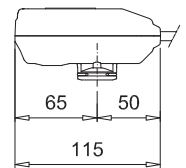
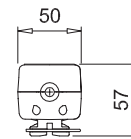
Ø	Ø	H	A min.	M	B	Q	R	F	L
1/2"	3/4"	75	20	28	55	29	50	43	50
3/4"	1"			29	59	30	60	45	
1"	1" 1/4	78		34	69	35	70	52	



Ø	Ø	H	A min.	M	B	Q	R	F	P	L
1/2"	3/4"	75	20	59	113	29	56	59	86	50
3/4"	1"			60	120	30	60	60	90	
1"	1" 1/4	78		72	141	35	70	72	107	

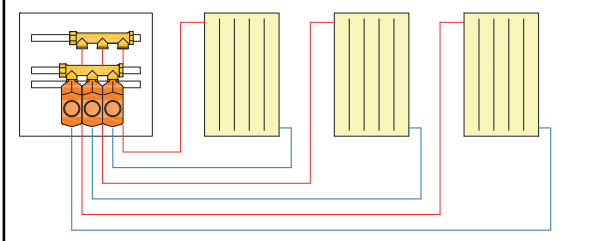


Ø	Ø	H	A min.	M	B	I	L
3/4"	1"	75	20	60	120	48 ÷ 60	50
1"	1" 1/4	78		72	141	52 ÷ 60	

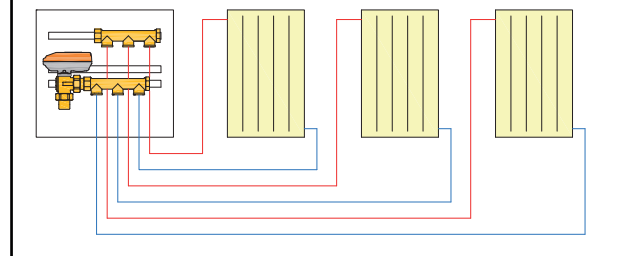


## INSTALLAZIONI POSSIBILI POSSIBLE INSTALLATIONS

Valvole a 2 vie su collettori con interasse 50mm.  
2-ways valve on manifold with 50mm CTC distance



Valvole a 2 vie a squadra in ingresso al collettore  
2-ways square valve on manifold inlet.





## VALVOLE E SERVOMOTORI IN KIT

*KIT WITH VALVES AND ACTUATORS*

1 contatto ausiliario  
*1 auxiliary switch*

Alimentazione  
*Supply voltage*

Ø

**Con motore a 3 fili**  
*With 3-wires actuator*

**Codice**  
*Code*

**Con motore a 2 fili**  
*With 2-wires actuator*

**Codice**  
*Code*



### 2 VIE ATTACCHI FEMMINA - BOCCHETTONE

*2-WAYS VALVES FEMALE-PIPE UNION CONNECTIONS*



	1/2"	<b>M2B32FB</b>	<b>R2B32FB</b>
<b>230 Vac</b>	3/4"	<b>M2B02FB</b>	<b>R2B02FB</b>
	1"	<b>M2B12FB</b>	<b>R2B12FB</b>
	1/2"	<b>M2C32FB</b>	<b>R2C32FB</b>
<b>24 Vac</b>	3/4"	<b>M2C02FB</b>	<b>R2C02FB</b>
	1"	<b>M2C12FB</b>	<b>R2C12FB</b>

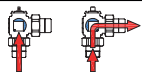


### 2 VIE ATTACCHI A BOCCHETTONE

*2-WAYS VALVES PIPE UNION CONNECTIONS*



	1/2"	<b>M2B32B</b>	<b>R2B32B</b>
<b>230 Vac</b>	3/4"	<b>M2B02B</b>	<b>R2B02B</b>
	1"	<b>M2B12B</b>	<b>R2B12B</b>
	1/2"	<b>M2C32B</b>	<b>R2C32B</b>
<b>24 Vac</b>	3/4"	<b>M2C02B</b>	<b>R2C02B</b>
	1"	<b>M2C12B</b>	<b>R2C12B</b>

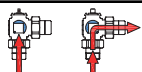


### 2 VIE A SQUADRA ATTACCHI FEMMINA - BOCCHETTONE

*2-WAYS SQUARE VALVES FEMALE-PIPE UNION CONNECTIONS*



	1/2"	<b>M2B3SFB</b>	<b>R2B3SFB</b>
<b>230 Vac</b>	3/4"	<b>M2B0SFB</b>	<b>R2B0SFB</b>
	1"	<b>M2B1SFB</b>	<b>R2B1SFB</b>
	1/2"	<b>M2C3SFB</b>	<b>R2C3SFB</b>
<b>24 Vac</b>	3/4"	<b>M2C0SFB</b>	<b>R2C0SFB</b>
	1"	<b>M2C1SFB</b>	<b>R2C1SFB</b>



### 2 VIE A SQUADRA ATTACCHI A BOCCHETTONE

*2-WAYS SQUARE VALVES PIPE UNION CONNECTIONS*



	1/2"	<b>M2B3SB</b>	<b>R2B3SB</b>
<b>230 Vac</b>	3/4"	<b>M2B0SB</b>	<b>R2B0SB</b>
	1"	<b>M2B1SB</b>	<b>R2B1SB</b>
	1/2"	<b>M2C3SB</b>	<b>R2C3SB</b>
<b>24 Vac</b>	3/4"	<b>M2C0SB</b>	<b>R2C0SB</b>
	1"	<b>M2C1SB</b>	<b>R2C1SB</b>



## VALVOLE E SERVOMOTORI IN KIT

*KIT WITH VALVES AND ACTUATORS*

1 contatto ausiliario  
*1 auxiliary switch*

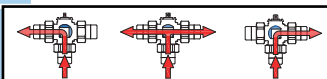
Durante la rotazione  
il flusso è sempre  
possibile

*During rotation the flow is  
always possible*

Alimentazione <i>Supply voltage</i>	Ø	<b>Con motore a 3 fili</b> <i>With 3-wires actuator</i>	<b>Con motore a 2 fili</b> <i>With 2-wires actuator</i>
		<b>Codice</b> <i>Code</i>	<b>Codice</b> <i>Code</i>

### 3 VIE DEVIATRICI A 3 FORI ATTACCHI FEMMINA - BOCCHETTONE

*3-WAYS "T" BORED VALVES FEMALE-PIPE UNION CONNECTIONS*

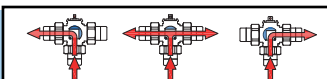


<b>230 Vac</b>	1/2"	<b>M2B33FB</b>	<b>R2B33FB</b>
	3/4"	<b>M2B03FB</b>	<b>R2B03FB</b>
	1"	<b>M2B13FB</b>	<b>R2B13FB</b>
<b>24 Vac</b>	1/2"	<b>M2C33FB</b>	<b>R2C33FB</b>
	3/4"	<b>M2C03FB</b>	<b>R2C03FB</b>
	1"	<b>M2C13FB</b>	<b>R2C13FB</b>



### 3 VIE DEVIATRICI A 3 FORI ATTACCHI A BOCCHETTONE

*3-WAYS "T" BORED VALVES PIPE UNION CONNECTIONS*



<b>230 Vac</b>	1/2"	<b>M2B33B</b>	<b>R2B33B</b>
	3/4"	<b>M2B03B</b>	<b>R2B03B</b>
	1"	<b>M2B13B</b>	<b>R2B13B</b>
<b>24 Vac</b>	1/2"	<b>M2C33B</b>	<b>R2C33B</b>
	3/4"	<b>M2C03B</b>	<b>R2C03B</b>
	1"	<b>M2C13B</b>	<b>R2C13B</b>



### 3 VIE DEVIATRICI LATERALI ATTACCHI FEMMINA - BOCCHETTONE

*3-WAYS LATERAL DIVERTING VALVES FEMALE-PIPE UNION CONNECTIONS*

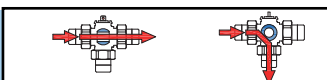


<b>230 Vac</b>	1/2"	<b>M2B33FBL</b>	<b>R2B33FBL</b>
	3/4"	<b>M2B03FBL</b>	<b>R2B03FBL</b>
	1"	<b>M2B13FBL</b>	<b>R2B13FBL</b>
<b>24 Vac</b>	1/2"	<b>M2C33FBL</b>	<b>R2C33FBL</b>
	3/4"	<b>M2C03FBL</b>	<b>R2C03FBL</b>
	1"	<b>M2C13FBL</b>	<b>R2C13FBL</b>



### 3 VIE DEVIATRICI LATERALI ATTACCHI A BOCCHETTONE

*3-WAYS LATERAL DIVERTING VALVES PIPE UNION CONNECTIONS*

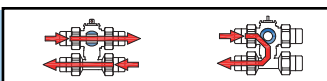


<b>230 Vac</b>	1/2"	<b>M2B33BL</b>	<b>R2B33BL</b>
	3/4"	<b>M2B03BL</b>	<b>R2B03BL</b>
	1"	<b>M2B13BL</b>	<b>R2B13BL</b>
<b>24 Vac</b>	1/2"	<b>M2C33BL</b>	<b>R2C33BL</b>
	3/4"	<b>M2C03BL</b>	<b>R2C03BL</b>
	1"	<b>M2C13BL</b>	<b>R2C13BL</b>



### 4 VIE TELESCOPICHE CON BY PASS ATTACCHI A BOCCHETTONE

*4-WAYS BY-PASS TELESCOPIC VALVES PIPE UNION CONNECTIONS*



<b>230 Vac</b>	<b>3/4"</b>	<b>M2B04B</b>	<b>R2B04B</b>
	48-60mm.		
	<b>1"</b>	<b>M2B14B</b>	<b>R2B14B</b>
	52-60mm.		





## CORPI VALVOLA

VALVE BODIES

Ø	DN	Kv	PN	Codice Code
---	----	----	----	----------------



### 2 VIE ATTACCHI FEMMINA - BOCCHETTONE

2-WAYS VALVES FEMALE-PIPE UNION CONNECTIONS



Ø	DN	Kv	PN	Codice Code
1/2"	15	10,3	16	<b>232FB</b>
3/4"	15	10,3		<b>202FB</b>
1"	20	18,0		<b>212FB</b>

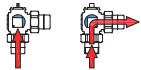


### 2 VIE ATTACCHI A BOCCHETTONE

2-WAYS VALVES PIPE UNION CONNECTIONS



Ø	DN	Kv	PN	Codice Code
1/2"	15	10,3	16	<b>232B</b>
3/4"	15	10,3		<b>202B</b>
1"	20	18,0		<b>212B</b>

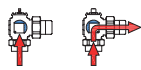


### 2 VIE A SQUADRA ATTACCHI FEMMINA - BOCCHETTONE

2-WAYS SQUARE VALVES FEMALE-PIPE UNION CONNECTIONS



Ø	DN	Kv	PN	Codice Code
1/2"	15	3,8	16	<b>23SFB</b>
3/4"	15	3,8		<b>20SFB</b>
1"	20	4,4		<b>21SFB</b>



### 2 VIE A SQUADRA ATTACCHI A BOCCHETTONE

2-WAYS SQUARE VALVES PIPE UNION CONNECTIONS



Ø	DN	Kv	PN	Codice Code
1/2"	15	3,8	16	<b>23SB</b>
3/4"	15	3,8		<b>20SB</b>
1"	20	4,4		<b>21SB</b>



### 4 VIE INTERASSE RIDOTTO PER UNITA' FAN COIL ATTACCHI MASCHIO

4-WAYS REDUCED CTC DISTANCE FOR FAN COIL UNITS MALE ATT.



Ø	DN	Kv	PN	Codice Code
3/4"	38-41mm.	Interasse telescopico 1,0 / 0,7	16	<b>204M0</b>
		1,6 / 1,1		<b>204M1</b>
		Telescopic CTC Distance 2,5 / 1,8		<b>204M2</b>
		4,0 / 2,2		<b>204M4</b>

## CORPI VALVOLA

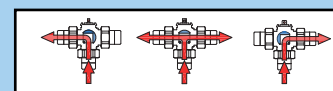
VALVE BODIES

Durante la rotazione il flusso è sempre possibile  
 During rotation the flow is always possible

Ø	DN	Kv	PN	Codice Code
---	----	----	----	----------------

### 3 VIE A 3 FORI ATTACCHI FEMMINA - BOCCHETTONE

3-WAYS "T" BORED VALVES FEMALE-PIPE-UNION CONNECTIONS

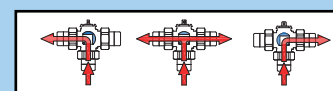


1/2"	15	5,6		<b>233FB</b>
3/4"	15	5,6	16	<b>203FB</b>
1"	20	10,9		<b>213FB</b>



### 3 VIE A 3 FORI ATTACCHI A BOCCHETTONE

3-WAYS "T" BORED VALVES PIPE-UNION CONNECTIONS

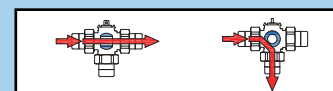


1/2"	15	5,6		<b>233B</b>
3/4"	15	5,6	16	<b>203B</b>
1"	20	10,9		<b>213B</b>



### 3 VIE DEVIATRICI LATERALI ATTACCHI FEMMINA - BOCCHETTONE

3-WAYS LATERAL DIVERT. VALVES FEMALE-PIPE-UNION CONNECTIONS

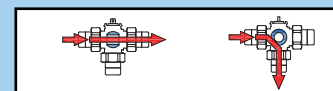


1/2"	15	10,3 / 3,5		<b>233FBL</b>
3/4"	15	10,3 / 3,5	16	<b>203FBL</b>
1"	20	18,0 / 4,2		<b>213FBL</b>



### 3 VIE DEVIATRICI LATERALI ATTACCHI A BOCCHETTONE

3-WAYS LATERAL DIVERTING VALVES PIPE-UNION CONNECTIONS

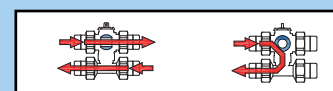


1/2"	15	10,3 / 3,5		<b>233BL</b>
3/4"	15	10,3 / 3,5	16	<b>203BL</b>
1"	20	18,0 / 4,2		<b>213BL</b>



### 4 VIE CON BY-PASS - INTERASSE TELESCOPICO

4-WAYS BY PASS VALVES - TELESCOPIC CTC DISTANCE



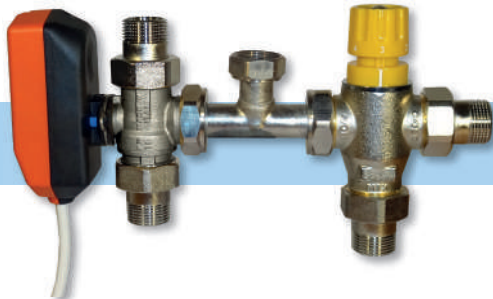
3/4"	Interasse CTC Distance <b>48-60mm.</b>	10,3 / 1,0		<b>204B</b>
			16	
1"	Interasse CTC Distance <b>52-60mm.</b>	18,0 / 1,1		<b>214B</b>





# PRODUZIONE ACS CON DUE FONTI DI CALORE

DHW INTEGRATION KIT



Alimentazione  
Supply voltage

Ø

Kv

Codice  
Code

## KIT MOTORIZZATO DEVIAZIONE IMPIANTO SOLARE E CALDAIA

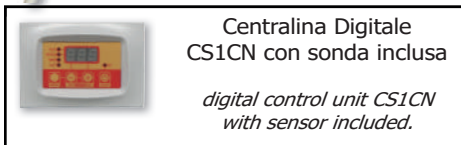
SOLAR BOILER CIRCUIT DIVERTING KIT WITH MOTORIZED VALVE

230 Vac

3/4"

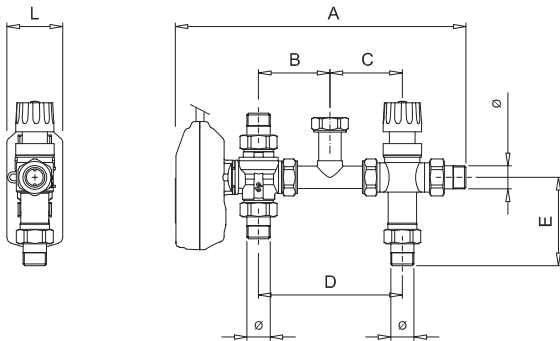
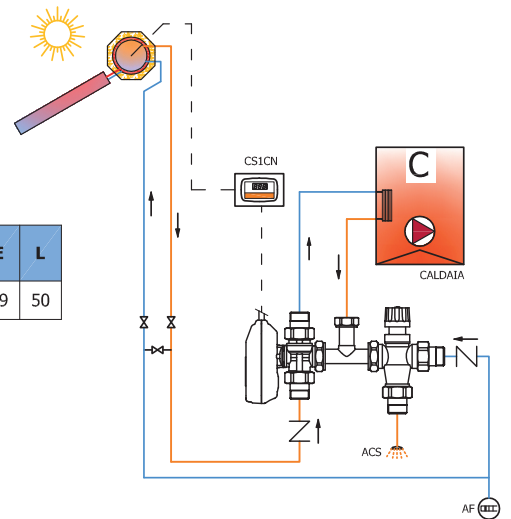
2,7 m<sup>3</sup>/h

KSCM-S



Centralina Digitale  
CS1CN con sonda inclusa

digital control unit CS1CN  
with sensor included.



Ø	A	B	C	D	E	L
3/4"	274	65	70	135	79	50



Alimentazione  
Supply voltage

Controllo  
Control

Codice  
Code

## KIT DUE ATTUATORI NA + NC PER PRODUZIONE ACS CON DUE FONTI DI CALORE

SET INCLUDING TWO ACTUATORS (NO-NC) FOR DHW PRODUCTION WITH TWO HEAT SOURCES

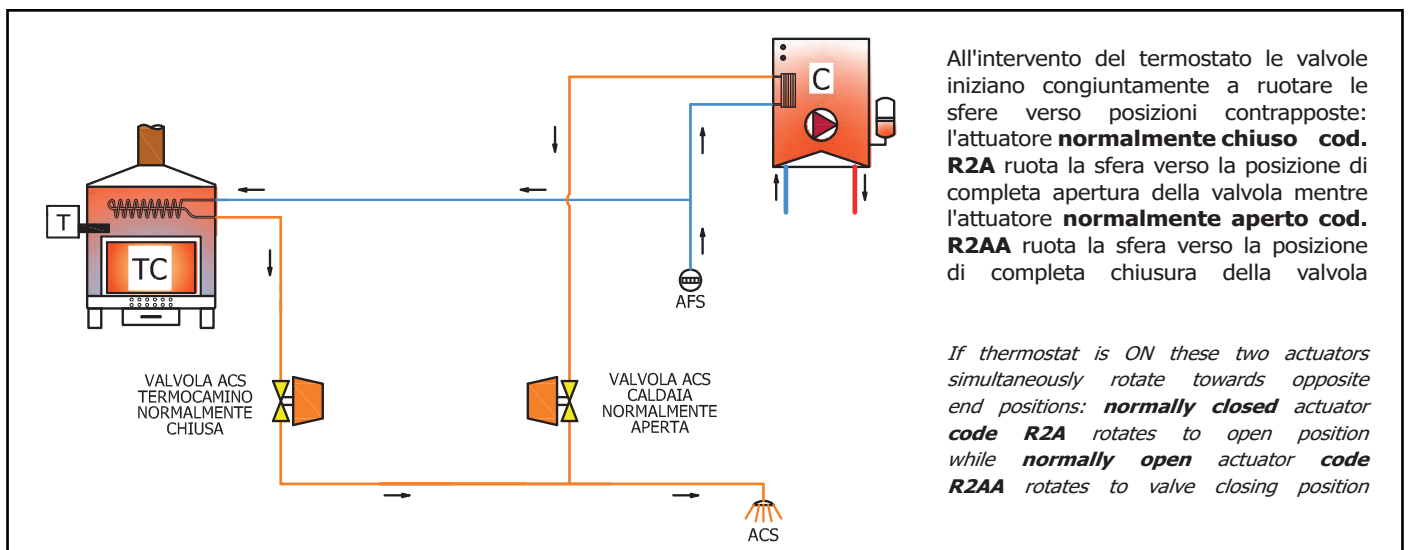


230 Vac

A 2 fili  
2-wires control

NCNA-S

Senza contatto ausiliario - Without auxiliary switch



All'intervento del termostato le valvole iniziano congiuntamente a ruotare le sfere verso posizioni contrapposte: l'attuatore **normalmente chiuso cod. R2A** ruota la sfera verso la posizione di completa apertura della valvola mentre l'attuatore **normalmente aperto cod. R2AA** ruota la sfera verso la posizione di completa chiusura della valvola

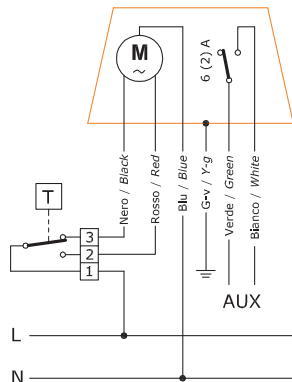
If thermostat is ON these two actuators simultaneously rotate towards opposite end positions: **normally closed actuator code R2A** rotates to open position while **normally open actuator code R2AA** rotates to valve closing position

## SERVOMOTORI CON COMANDO A 3 FILI

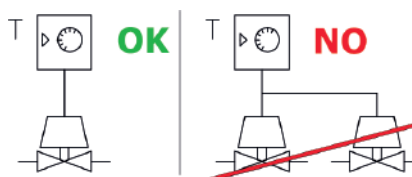
*3-WIRES control ACTUATORS*



Protezione <i>IP rating</i>	Apertura <i>Opening</i>	Alimentazione <i>Supply voltage</i>	Cont. AUX. <i>Aux. switch</i>	Codice <i>Code</i>
IP54	12" x 90°	230 Vac	1 contatto ausiliario	<b>M2B</b>
		24 Vac	1 auxiliary switch	<b>M2C</b>



I servomotori con comando a 3 fili non possono essere collegati in parallelo ad un unico termostato / controllo



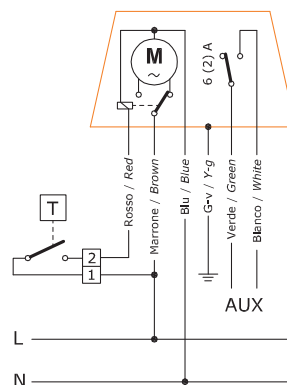
*3-wires actuators cannot be connected in parallel to a single thermostat / control unit*

## SERVOMOTORI CON COMANDO A 2 FILI

*2-WIRES control ACTUATORS*



Protezione <i>IP rating</i>	Apertura <i>Opening</i>	Alimentazione <i>Supply voltage</i>	Cont. AUX. <i>Aux. switch</i>	Codice <i>Code</i>
IP54	12" x 90°	230 Vac	1 contatto ausiliario	<b>R2B</b>
		24 Vac	1 auxiliary switch	<b>R2C</b>



I servomotori con comando a 2 fili possono essere collegati in parallelo ad un unico termostato / controllo



*2-wires actuators can be connected in parallel to a single thermostat / control unit*

## ACCESSORI *Accessories*

	Vie <i>Ways</i>	Ø	Codice <i>Code</i>
Guscio di coibentazione in polietilene reticolato espanso  <i>Cross-linked polyethylene closed-cell insulating shell</i>	2	1/2" - 3/4"	<b>GCF02</b>
	2	1"	<b>GCF12</b>
	3	1/2" - 3/4"	<b>GCF03</b>
	3	1"	<b>GCF13</b>







# Valvole: **SFERA**

Valves : **SFERA**



## **VALVOLE A SFERA MOTORIZZATE A PASSAGGIO TOTALE**

**Attacchi Femmina / Maschio / Bocchettone :**

**Ø 1/2" - 3/4" - 1" - 1" 1/4 - 1"1/2**

**Attacchi a Compressione :**

**British Standard Ø 15 - 16 - 18 - 22 - 28 - 42 o Irish Standard Ø 1/2" - 3/4" - 1"**

*FULL BORED MOTORIZED BALL VALVES*

*Female - Male - Pipe unions attachments : Diameter Ø 1/2" - 3/4" - 1" - 1" 1/4 - 1"1/2*

*Compression fittings: British Standard Ø 15 - 16 - 18 - 22 - 28 - 42 or Irish Standard Ø 1/2" - 3/4" - 1"*



**NUOVI SERVOMOTORI IN CORRENTE CONTINUA**  
**24Vcc - 12Vcc a 2 fili**

*New 24Vdc - 12Vdc 2 wires DC actuators*

# CARATTERISTICHE TECNICHE VALVOLE A SFERA MOTORIZZATE

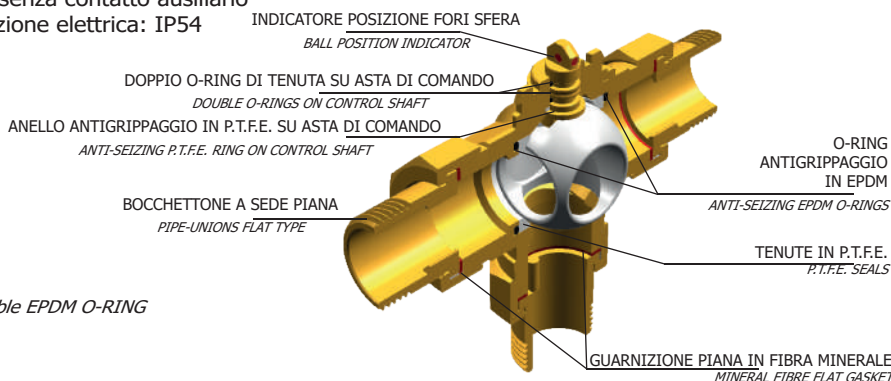
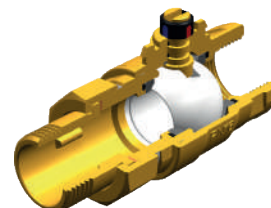
## TECHNICAL FEATURES MOTORIZED BALL VALVES

Corpo valvola : Ottone CW617N ( UNI 12165 )  
 Sfera : Ottone CW617N ( UNI 12165 ) Nichelata-Cromata  
 Sedi Sfera : PTFE e O-RING in EPDM  
 Asta : Ottone CW614N (UNI 12164 ) con doppio O-RING in EPDM ed anello ANTIGRIPPAGGIO in PTFE  
 Pressione massima di esercizio : 16 bar  
 Pressione differenziale massima :  $\Delta p = 6$  bar  
 Temperatura di esercizio del fluido : 0 °C + 110 °C - **PER VALORI ESTREMI SI RACCOMANDA**

### L'APPLICAZIONE DEL DISTANZIALE

Fluido utilizzabile : Acqua, acqua glicolata o liquidi compatibili con tenute in PTFE ed EPDM  
 Perdite di carico : pressochè nulle (PASSAGGIO TOTALE)  
 Innesco rapido con molla ad anello

SERVOMOTORI ACCOPPIATI: Tempi di apertura / chiusura: 8" - 15" - 30" - 60" - 120"  
 Tensioni disponibili: 230VAC - 24VAC - (serie speciali 110VAC - 12Vcc - 24Vcc)  
 Tipo di comando: a due fili (con relè incorporato) / a tre fili in deviazione  
 Versioni con e senza contatto ausiliario  
 Grado di protezione elettrica: IP54



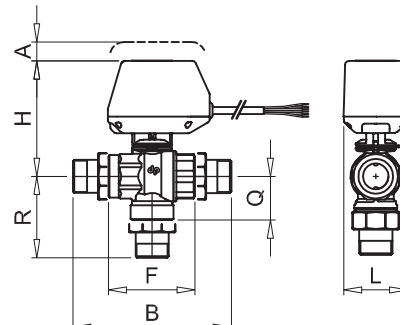
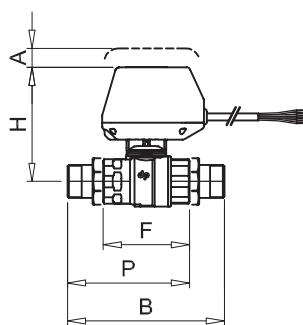
Valve body : BRASS CW617N (UNI 12165)  
 Ball : BRASS CW617N (nickel-chromium plated)  
 SEALS: PTFE and EPDM O-RINGS  
 Shaft : DRAWN BRASS CW614N (UNI 12164) with double EPDM O-RING and anti-seizing PTFE ring  
 Nominal operating pressure : 16 bar  
 Maximum differential operating pressure :  $\Delta p$  6 bar  
 Fluid temperature : FROM 0 °C TO 110 °C - **FOR EXTREME VALUES WE RECOMMEND**

### THE APPLICATION OF THE SPACER

Utilisable fluids : WATER; WATER with GLYCOL or Fluids which are compatible with PTFE and EPDM rubber  
 Load loss : no effect (FULL BORE)  
 Quick release ring spring coupling system  
 COUPLED SERVOMOTORS: Opening / closing time: 8" - 15" - 30" - 60" - 120"  
 Supply Voltage: 230VAC - 24VAC - (SPECIAL TYPE : 110VAC - 12VDC - 24VDC)  
 Control type: 2 wires (relay inside) / 3 wires  
 Auxiliary switch version available  
 Electric protection level: IP54

## INGOMBRI VALVOLE E MOTORI OVERALL DIMENSIONS VALVES & ACTUATORS

**F & B:** diam. filetto attacco femmina, bocchettone e femmina-bocchetone  
*F & B: female, female pipe-unions and pipe-unions thread connection diameter*  
**M:** diam. filetto maschio  
*M: Male thread diameter*  
**DN:** Diametro nominale foro sfera  
*DN: Nominal diameter bore*  
**H1:** quota "H" base  
*H1: base dimension "H"*  
**H2:** quota "H" maggiorata per attuatori con lettera "W" e "X" finale  
*H2: increased dimension "H" for actuators with letter "W" and final "X".*  
**H3:** quota "H" maggiorata per attuatori in corrente continua con lettera "C" finale  
*HW: increased dimension "H" for DC actuators with final letter "C".*



F&B	M	DN	H1	H2	H3	A min.	F	P	B	L	H1	H2	H3	A min.	F	B	Q	R	L
1/2"	3/4"	15	110	117	127	20	77	105	131	64	110	117	127	20	76	130	38	65	64
3/4"	1"	20						108	139							136		68	
1"	1" 1/4	25	115	122	132	20	87	121	156	64	115	122	132	20	86	155	43	78	64
1" 1/4	1" 1/2	32	120	127	137		94	133	172		120	127	137		94	172	47	86	
1" 1/2	-	40	128	135	145	20	108	151	193	72	128	135	145	20	108	193	60	102	72

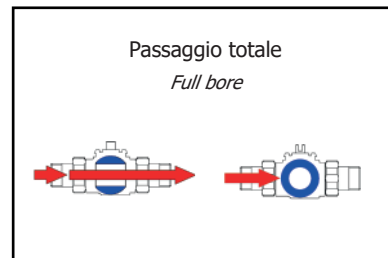


# VALVOLE A SFERA MOTORIZZATE

MOTORIZED BALL VALVES

# 2 VIE

-WAYS



Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina <i>Female</i>	12,5	1/2"	<b>632 F</b>
		15,6	3/4"	<b>602 F</b>
		31,3	1"	<b>612 F</b>
		50,0	1" 1/4	<b>622 F</b>
		98,0	1"1/2	<b>642 F</b>
	Maschio <i>Male</i>	12,5	3/4"	<b>602 M</b>
		15,6	1"	<b>612 M</b>
		31,3	1" 1/4	<b>622 M</b>
		50,0	1" 1/2	<b>642 M</b>
	Femmina - Bocchettone <i>Female - Pipe-unions</i>	12,2	1/2"	<b>632FB</b>
		15,1	3/4"	<b>602FB</b>
		30,6	1"	<b>612FB</b>
		49,1	1" 1/4	<b>622FB</b>
	Bocchettone <i>Pipe-unions</i>	96,0	1"1/2	<b>642FB</b>
		12,0	1/2"	<b>632 B</b>
		14,9	3/4"	<b>602 B</b>
30,0		1"	<b>612 B</b>	
48,2		1" 1/4	<b>622 B</b>	
	94,1	1"1/2	<b>642 B</b>	

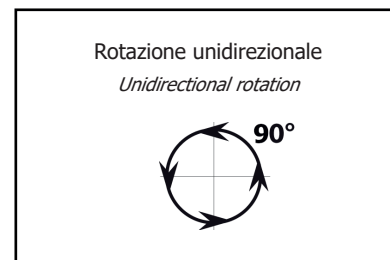
A compressione con ogive in ottone per tubo rame  <i>Compression fittings with brass olives for copper pipes</i>	BRITISH STANDARD		
	11,0	15	<b>632 BE</b>
	12,0	16	<b>602 BE</b>
	13,0	18	<b>642 BE</b>
	14,9	22	<b>612 BE</b>
	30,0	28	<b>622 BE</b>
	IRISH STANDARD		
	12,0	1/2"	<b>632 BI</b>
	14,9	3/4"	<b>602 BI</b>
	30,0	1"	<b>612 BI</b>

## ACCESSORI *Accessories*

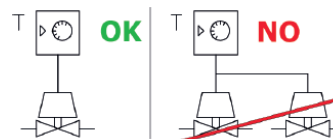
	Ø M <i>Ø M</i>	Ø F/ BOC. <i>Ø F/ P.U.</i>	Codice <i>Code</i>
Maniglia per azionamento manuale <i>Handle for manual drive</i>	Tutti <i>All</i>		<b>HM2</b>
Guscio di coibentazione in polietilene reticolato espanso  <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC02</b>
	1"1/4	1"	<b>GC12</b>
	1"1/2	1"1/4	<b>GC22</b>
	-	1"1/2	<b>GC42</b>



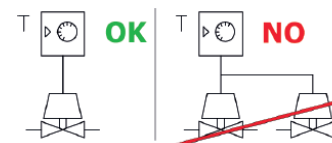
**SERVOMOTORI ABBINABILI**  
MATCHABLE ACTUATORS



<b>CORRENTE ALTERNATA 230 Vca - 24 Vca</b> ALTERNATING CURRENT 230 Vac - 24 Vac				
Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>M6A2</b>
		24V		<b>M6S2</b>
		230V	30"	<b>M6A2V</b>
		24V		<b>M6S2V</b>
		230V	15"	<b>M6A2W</b>
		24V		<b>M6S2W</b>
	230V	8"	<b>M6A2X</b>	
	24V		<b>M6S2X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>M6B2</b>
		24V		<b>M6C2</b>
		230V	30"	<b>M6B2V</b>
		24V		<b>M6C2V</b>
		230V	15"	<b>M6B2W</b>
		24V		<b>M6C2W</b>
230V		8"	<b>M6B2X</b>	
24V			<b>M6C2X</b>	
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>R6A2</b>
		24V		<b>R6S2</b>
		230V	30"	<b>R6A2V</b>
		24V		<b>R6S2V</b>
		230V	15"	<b>R6A2W</b>
		24V		<b>R6S2W</b>
	230V	8"	<b>R6A2X</b>	
	24V		<b>R6S2X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>R6B2</b>
		24V		<b>R6C2</b>
		230V	30"	<b>R6B2V</b>
		24V		<b>R6C2V</b>
		230V	15"	<b>R6B2W</b>
		24V		<b>R6C2W</b>
230V		8"	<b>R6B2X</b>	
24V			<b>R6C2X</b>	



<b>CORRENTE CONTINUA 24 Vcc - 12 Vcc</b> DIRECT CURRENT 24 Vdc - 12 Vdc				
Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>no aux.switch</i>	12V	25"	<b>M6A2C 12VCC</b>
		24V	50"	<b>M6A2C 24VCC</b>
1 contatto aux. <i>1 aux. switch</i>	12V	25"		<b>M6B2C 12VCC</b>
		24V	50"	<b>M6B2C 24VCC</b>



<b>KIT 2 SERVOMOTORI NA+NC per PRODUZIONE ACS</b> KIT 2 ACTUATORS NO+NC for DHW PRODUCTION				
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	no cont. aux. <i>no aux.switch</i>	230V	60"	<b>NCNA-A</b>
	1 cont. aux. <i>1 aux. switch</i>			<b>NCNA-B</b>



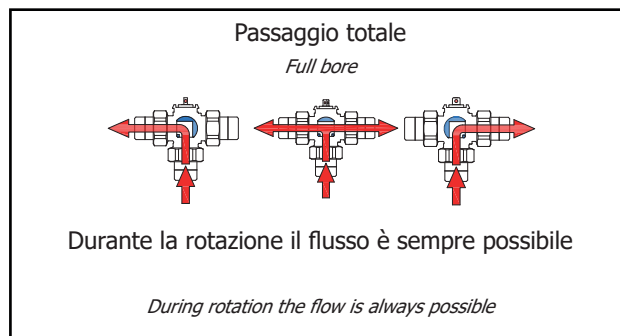





**VALVOLE A SFERA MOTORIZZATE**

MOTORIZED BALL VALVES

**3 VIE DEVIATRICI A 3 FORI**

-WAYS "T" BORED BALL



Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina Female	10,2	1/2"	<b>633 T</b>
		11,0	3/4"	<b>603 T</b>
		15,0	1"	<b>613 T</b>
		20,8	1" 1/4	<b>623 T</b>
		28,0	1" 1/2	<b>643 T</b>
	Maschio Male	10,2	3/4"	<b>603 V</b>
		11,0	1"	<b>613 V</b>
		15,0	1" 1/4	<b>623 V</b>
		20,8	1" 1/2	<b>643 V</b>
	Bocchettone Pipe-unions	9,7	1/2"	<b>633 U</b>
		10,5	3/4"	<b>603 U</b>
		13,9	1"	<b>613 U</b>
		19,0	1" 1/4	<b>623 U</b>
		25,5	1" 1/2	<b>643 U</b>



A compressione con ogive in ottone per tubo rame

Compression fittings with brass olives for copper pipes

**BRITISH STANDARD**

6,0	15	<b>633 UE</b>
6,5	16	<b>603 UE</b>
7,3	18	<b>643 UE</b>
8,1	22	<b>613 UE</b>
13,1	28	<b>623 UE</b>
8,1	22	<b>613 UC</b>

**IRISH STANDARD**

7,2	1/2"	<b>633 UI</b>
8,3	3/4"	<b>603 UI</b>
11,3	1"	<b>613 UI</b>

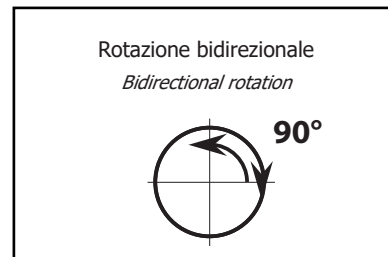
**ACCESSORI** Accessories

	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Maniglia per azionamento manuale Handle for manual drive	Tutti All		<b>HM3M</b>
Guscio di coibentazione in polietilene reticolato espanso Insulation shell made off crossed linked polyethylene foam	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>
	-	1"1/2	<b>GC43</b>

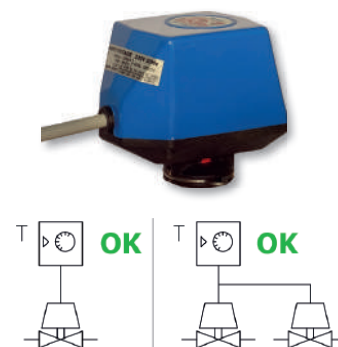
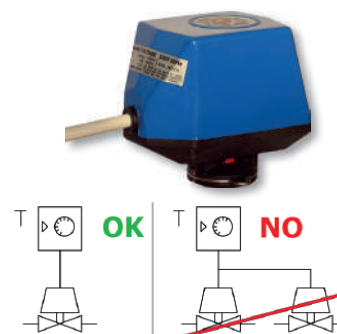
 Utilizzabile in alternativa al motore  
Usable as an alternative to the motor


# SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS



<b>CORRENTE ALTERNATA 230 Vca - 24 Vca</b> <i>ALTERNATING CURRENT 230 Vac - 24 Vac</i>				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>M7A3</b>
		24V		<b>M7S3</b>
		230V	30"	<b>M7A3V</b>
		24V		<b>M7S3V</b>
		230V	15"	<b>M7A3W</b>
		24V		<b>M7S3W</b>
	230V	8"	<b>M7A3X</b>	
	24V		<b>M7S3X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>M7B3</b>
		24V		<b>M7C3</b>
		230V	30"	<b>M7B3V</b>
		24V		<b>M7C3V</b>
		230V	15"	<b>M7B3W</b>
		24V		<b>M7C3W</b>
230V		8"	<b>M7B3X</b>	
24V			<b>M7C3X</b>	
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>R7A3</b>
		24V		<b>R7S3</b>
		230V	30"	<b>R7A3V</b>
		24V		<b>R7S3V</b>
		230V	15"	<b>R7A3W</b>
		24V		<b>R7S3W</b>
	230V	8"	<b>R7A3X</b>	
	24V		<b>R7S3X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>R7B3</b>
		24V		<b>R7C3</b>
		230V	30"	<b>R7B3V</b>
		24V		<b>R7C3V</b>
		230V	15"	<b>R7B3W</b>
		24V		<b>R7C3W</b>
230V		8"	<b>R7B3X</b>	
24V			<b>R7C3X</b>	



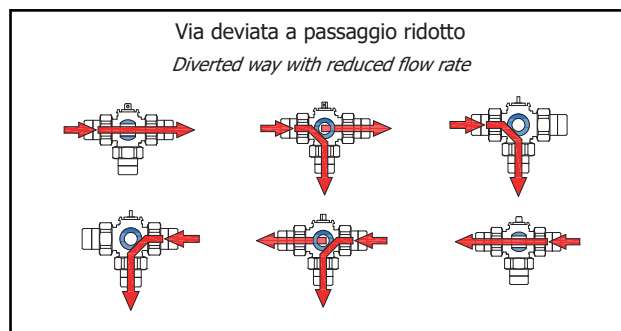
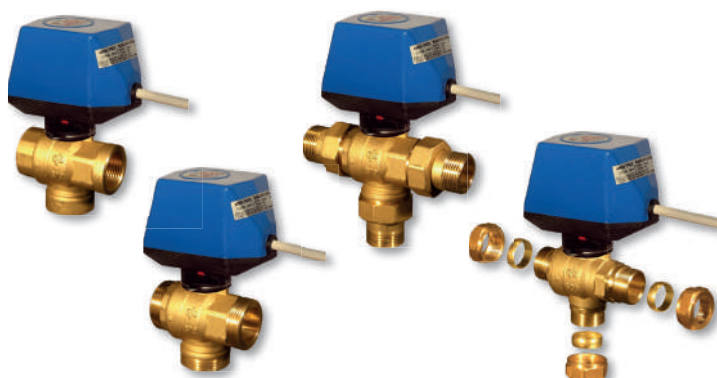
<b>CORRENTE CONTINUA 24 Vcc - 12 Vcc</b> <i>DIRECT CURRENT 24 Vdc - 12 Vdc</i>				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	1 contatto aux. <i>1 aux. switch</i>	12V	25"	<b>R7B3C</b> 12VCC
		24V	50"	<b>R7B3C</b> 24VCC
		12V	7"	<b>R7B3CW</b> 12VCC
		24V	12"	<b>R7B3CW</b> 24VCC

<b>SERVOMOTORI CON DOPPIO CONTATTO AUX.</b> <i>DOUBLE AUXILIARY SWITCH ACTUATORS</i>				
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>M7X3</b>
	24V	<b>M7Y3</b>		



**VALVOLE A SFERA MOTORIZZATE**

MOTORIZED BALL VALVES

**3 VIE DEVIATRICI LATERALI**  
 -WAYS **LATERAL** DEVIATING


Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina <i>Female</i>	7,1 / 5,5	1/2"	<b>633 FL</b>
		7,5 / 5,5	3/4"	<b>603 FL</b>
		26,0 / 6,5	1"	<b>613 FL</b>
		50,0 / 7,3	1" 1/4	<b>623 FL</b>
		98,0 / 11,3	1"1/2	<b>643 FL</b>
	Maschio <i>Male</i>	7,1 / 5,5	3/4"	<b>603 ML</b>
		7,5 / 5,5	1"	<b>613 ML</b>
		26,0 / 6,5	1" 1/4	<b>623 ML</b>
		50,0 / 7,3	1" 1/2	<b>643 ML</b>
	Bocchettone <i>Pipe-unions</i>	6,8 / 5,2	1/2"	<b>633 BL</b>
		7,2 / 5,2	3/4"	<b>603 BL</b>
		24,8 / 6,2	1"	<b>613 BL</b>
48,2 / 7,1		1" 1/4	<b>623 BL</b>	
		94,1 / 10,9	1"1/2	<b>643 BL</b>

A compressione con ogive in ottone per tubo rame  Compression fittings with brass olives for copper pipes	<b>BRITISH STANDARD</b>		
	5,6 / 4,2	15	<b>633 LE</b>
	6,1 / 4,6	16	<b>603 LE</b>
	6,3 / 4,8	18	<b>643 LE</b>
	6,6 / 5,0	22	<b>613 LE</b>
	22,0 / 5,9	28	<b>623 LE</b>
	<b>IRISH STANDARD</b>		
	6,1 / 4,6	1/2"	<b>633 LI</b>
	6,6 / 5,0	3/4"	<b>603 LI</b>
	22,0 / 5,9	1"	<b>613 LI</b>

**ACCESSORI** *Accessories*

	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Maniglia per azionamento manuale <i>Handle for manual drive</i>	Tutti <i>All</i>		<b>HM3M</b>
Guscio di coibentazione in polietilene reticolato espanso  <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>
	-	1"1/2	<b>GC43</b>

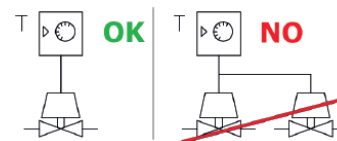
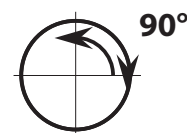




# SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS

Rotazione bidirezionale  
Bidirectional rotation

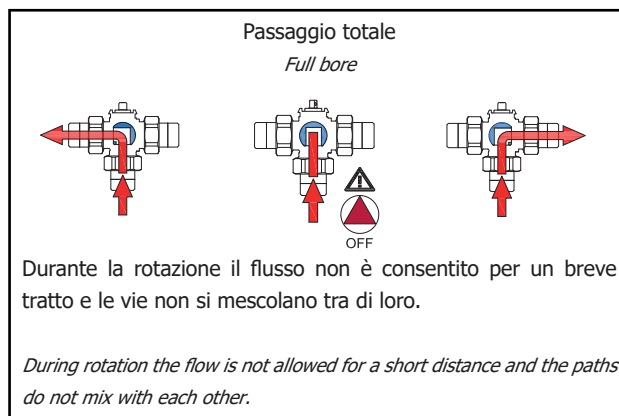


<b>CORRENTE ALTERNATA 230 Vca - 24 Vca</b> <i>ALTERNATING CURRENT 230 Vac - 24 Vac</i>				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>M7A3</b>
		24V		<b>M7S3</b>
		230V	30"	<b>M7A3V</b>
		24V		<b>M7S3V</b>
		230V	15"	<b>M7A3W</b>
		24V		<b>M7S3W</b>
	230V	8"	<b>M7A3X</b>	
	24V		<b>M7S3X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>M7B3</b>
		24V		<b>M7C3</b>
		230V	30"	<b>M7B3V</b>
		24V		<b>M7C3V</b>
		230V	15"	<b>M7B3W</b>
		24V		<b>M7C3W</b>
230V		8"	<b>M7B3X</b>	
24V			<b>M7C3X</b>	
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>R7A3</b>
		24V		<b>R7S3</b>
		230V	30"	<b>R7A3V</b>
		24V		<b>R7S3V</b>
		230V	15"	<b>R7A3W</b>
		24V		<b>R7S3W</b>
	230V	8"	<b>R7A3X</b>	
	24V		<b>R7S3X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>R7B3</b>
		24V		<b>R7C3</b>
		230V	30"	<b>R7B3V</b>
		24V		<b>R7C3V</b>
		230V	15"	<b>R7B3W</b>
		24V		<b>R7C3W</b>
230V		8"	<b>R7B3X</b>	
24V			<b>R7C3X</b>	

<b>CORRENTE CONTINUA 24 Vcc - 12Vcc</b> <i>DIRECT CURRENT 24 Vdc - 12 Vdc</i>				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	1 contatto aux. <i>1 aux. switch</i>	12V	25"	<b>R7B3C</b> 12VCC
		24V	50"	<b>R7B3C</b> 24VCC
		12V	7"	<b>R7B3CW</b> 12VCC
		24V	12"	<b>R7B3CW</b> 24VCC

<b>SERVOMOTORI CON DOPPIO CONTATTO AUX.</b> <i>DOUBLE AUXILIARY SWITCH ACTUATORS</i>				
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>M7X3</b>
	24V	<b>M7Y3</b>		

**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**3 VIE DEVIATRICI A 2 FORI**  
 -WAYS "L" BORED BALL


Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina Female	10,2	1/2"	<b>633 F</b>
		11,0	3/4"	<b>603 F</b>
		15,0	1"	<b>613 F</b>
		20,8	1" 1/4	<b>623 F</b>
	Maschio Male	10,2	3/4"	<b>603 M</b>
		11,0	1"	<b>613 M</b>
		15,0	1" 1/4	<b>623 M</b>
		20,8	1" 1/2	<b>643 M</b>
	Bocchettone Pipe-unions	9,7	1/2"	<b>633 B</b>
		10,5	3/4"	<b>603 B</b>
		13,9	1"	<b>613 B</b>
		19,0	1" 1/4	<b>623 B</b>

A compressione con ogive in ottone per tubo rame  <i>Compression fittings with brass olives for copper pipes</i>	BRITISH STANDARD		
	6,0	15	<b>633 BE</b>
	6,5	16	<b>603 BE</b>
	7,3	18	<b>643 BE</b>
	8,1	22	<b>613 BE</b>
	13,1	28	<b>623 BE</b>
	IRISH STANDARD		
	7,2	1/2"	<b>633 BI</b>
	8,3	3/4"	<b>603 BI</b>
	13,1	1"	<b>613 BI</b>

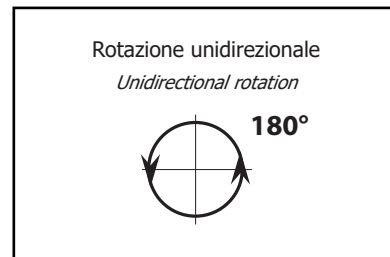
**ACCESSORI** *Accessories*

	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Maniglia per azionamento manuale <i>Handle for manual drive</i>	Tutti All		<b>HM3D</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>

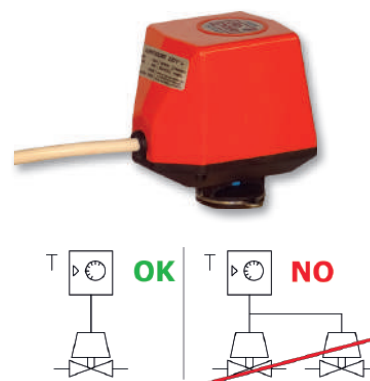
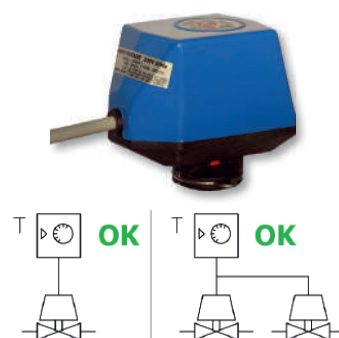
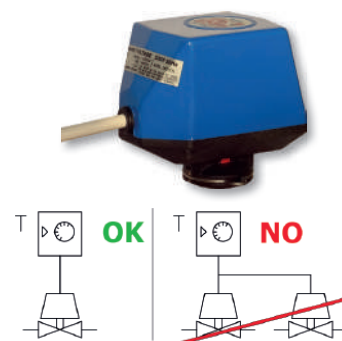
Utilizzabile in alternativa al motore  
*Usable as an alternative to the motor*



**SERVOMOTORI ABBINABILI**  
MATCHABLE ACTUATORS



<b>CORRENTE ALTERNATA 230 Vca - 24 Vca</b> ALTERNATING CURRENT 230 Vac - 24 Vac					
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>	
<b>Comando a 3 FILI</b>  <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	120"	<b>M6A3L</b>	
		24V		<b>M6S3L</b>	
		230V	60"	<b>M6A3</b>	
		24V		<b>M6S3</b>	
		230V	30"	<b>M6A3W</b>	
		24V		<b>M6S3W</b>	
	230V	16"	<b>M6A3X</b>		
	24V		<b>M6S3X</b>		
	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>M6B3L</b>	
				24V	<b>M6C3L</b>
		230V	60"	<b>M6B3</b>	
		24V		<b>M6C3</b>	
		230V	30"	<b>M6B3W</b>	
		24V		<b>M6C3W</b>	
		230V	16"	<b>M6B3X</b>	
		24V		<b>M6C3X</b>	
<b>Comando a 2 FILI</b>  <i>2-WIRES Control</i>		Senza contatto aux. <i>No aux. switch</i>	230V	120"	<b>R6A3L</b>
			24V		<b>R6S3L</b>
	230V		60"	<b>R6A3</b>	
	24V			<b>R6S3</b>	
	230V		30"	<b>R6A3W</b>	
	24V			<b>R6S3W</b>	
	230V	16"	<b>R6A3X</b>		
	24V		<b>R6S3X</b>		
	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>R6B3L</b>	
				24V	<b>R6C3L</b>
		230V	60"	<b>R6B3</b>	
		24V		<b>R6C3</b>	
		230V	30"	<b>R6B3W</b>	
		24V		<b>R6C3W</b>	
		230V	16"	<b>R6B3X</b>	
		24V		<b>R6C3X</b>	



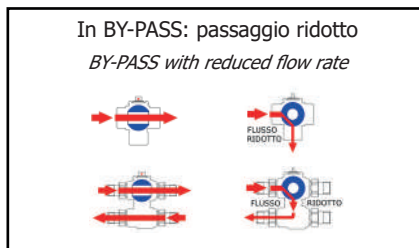
<b>CORRENTE CONTINUA 24 Vcc - 12 Vcc</b> DIRECT CURRENT 24 Vdc - 12 Vdc				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 3 FILI</b>  <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	12V	50"	<b>M6A3C 12VCC</b>
		24V	100"	<b>M6A3C 24VCC</b>
	1 contatto aux. <i>1 aux. switch</i>	12V	50"	<b>M6B3C 12VCC</b>
		24V	100"	<b>M6B3C 24VCC</b>




<b>SERVOMOTORI CON DOPPIO CONTATTO AUX.</b> DOUBLE AUXILIARY SWITCH ACTUATORS				
<b>Comando a 3 FILI</b>  <i>3-WIRES Control</i>	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>M6X3</b>
		24V		<b>M6Y3</b>





**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**3&4 VIE CON BY-PASS**  
 -WAYS with BY-PASS


Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h) Full bored/by-pass	Ø	Codice Code
	Femmina <i>Female</i>	11,2 / 0,6	1/2"	<b>633 R</b>
		12,9 / 0,6	3/4"	<b>603 R</b>
		26,1 / 1,0	1"	<b>613 R</b>
		50,0 / 1,7	1" 1/4	<b>623 R</b>
	Maschio <i>Male</i>	11,2 / 0,6	3/4"	<b>603 Z</b>
		12,9 / 0,6	1"	<b>613 Z</b>
		26,1 / 1,0	1" 1/4	<b>623 Z</b>
		50,0 / 1,7	1" 1/2	<b>643 Z</b>
	Bocchettone <i>Pipe-unions</i>	10,7 / 0,6	1/2"	<b>633 S</b>
		12,2 / 0,6	3/4"	<b>603 S</b>
		24,8 / 1,0	1"	<b>613 S</b>
		48,2 / 1,7	1" 1/4	<b>623 S</b>



	BRITISH STANDARD		
	A compressione, con ogiva in ottone per tubo rame  <i>Compression fitting                      with brass olives                      for copper pipes</i>	8,8 / 0,5	15
10,3 / 0,6		16	<b>603 SE</b>
10,5 / 0,6		18	<b>643 SE</b>
10,7 / 0,6		22	<b>613 SE</b>
22,0 / 1,0		28	<b>623 SE</b>
	IRISH STANDARD		
	8,8 / 0,5	1/2"	<b>633 SI</b>
	10,7 / 0,6	3/4"	<b>603 SI</b>
	22,0 / 1,0	1"	<b>613 SI</b>

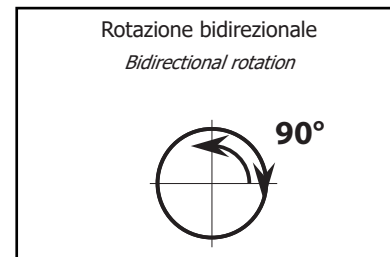
	INTERASSE CTC DISTANCE	CORPO VALVOLA 4 VIE CON BY PASS 4-WAY VALVE BODY WITH BY-PASS	
	Bocchettone <i>Pipe-unions</i>	50 mm	3/4"
55 mm		3/4"	<b>604S5</b>
60 mm		3/4"	<b>604S6</b>
60 mm		1"	<b>614S6</b>
70 mm		1"	<b>614S7</b>
200 mm		3/4"	<b>604SS</b>
250 mm		3/4"	<b>604ST</b>
200 mm		1"	<b>614SS</b>
250 mm		1"	<b>614ST</b>



## SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS

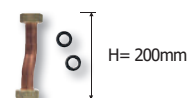
CORRENTE ALTERNATA 230 Vca - 24 Vca				
ALTERNATING CURRENT 230 Vac - 24 Vac				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>M7A3</b>
		24V	60"	<b>M7S3</b>
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>M7B3</b>
		24V	60"	<b>M7C3</b>
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>R7A3</b>
		24V	60"	<b>R7S3</b>
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>R7B3</b>
		24V	60"	<b>R7C3</b>



## ACCESSORI *Accessories*

	Ø F/ BOC. <i>Ø F/ P.U.</i>	Codice <i>Code</i>
Maniglia per azionamento manuale <i>Handle for manual valve drive</i>	1/2" - 1"1/2	<b>HM3M</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	1/2" - 3/4"	<b>GC03</b>
	1"	<b>GC13</b>
	1"1/4	<b>GC23</b>
	1"1/2	<b>GC43</b>
Distanziale H = 200mm. <i>Spacer H = 200mm.</i>	3/4"	<b>DL34</b>
3 dadi da 3/4" + 3 codoli da 1/2" - NICHELATO <i>3 pcs 3/4" nuts + 3 pcs 1/2" shanks - NICKEL-PLATED</i>		<b>BOC12</b>
3 dadi da 1" + 3 codoli da 3/4" - NICHELATO <i>3 pcs 1" nuts + 3 pcs 3/4" shanks - NICKEL-PLATED</i>		<b>BOC34</b>
3 dadi da 1"1/4 + 3 codoli da 1" - NICHELATO <i>3 pcs 1"1/4 nuts + 3 pcs 1" shanks - NICKEL-PLATED</i>		<b>BOC10</b>
3 dadi da 1"1/2 + 3 codoli da 1"1/4" - NICHELATO <i>3 pcs 1"1/2 nuts + 3 pcs 1"1/4 shanks - NICKEL-PLATED</i>		<b>BOC54</b>
3 dadi da 3/4" + 3 codoli da 1/2" - OTTONE GIALLO <i>3 pcs 3/4" nuts + 3 pcs 1/2" shanks - YELLOW BRASS</i>		<b>BOC120T</b>
3 dadi da 1" + 3 codoli da 3/4" - OTTONE GIALLO <i>3 pcs 1" nuts + 3 pcs 3/4" shanks - YELLOW BRASS</i>		<b>BOC340T</b>
3 dadi da 1"1/4 + 3 codoli da 1" - OTTONE GIALLO <i>3 pcs 1"1/4 nuts + 3 pcs 1" shanks - YELLOW BRASS</i>		<b>BOC100T</b>
3 dadi da 1"1/2 + 3 codoli da 1"1/4" - OTTONE GIALLO <i>3 pcs 1"1/2 nuts + 3 pcs 1"1/4 shanks - YELLOW BRASS</i>		<b>BOC540T</b>

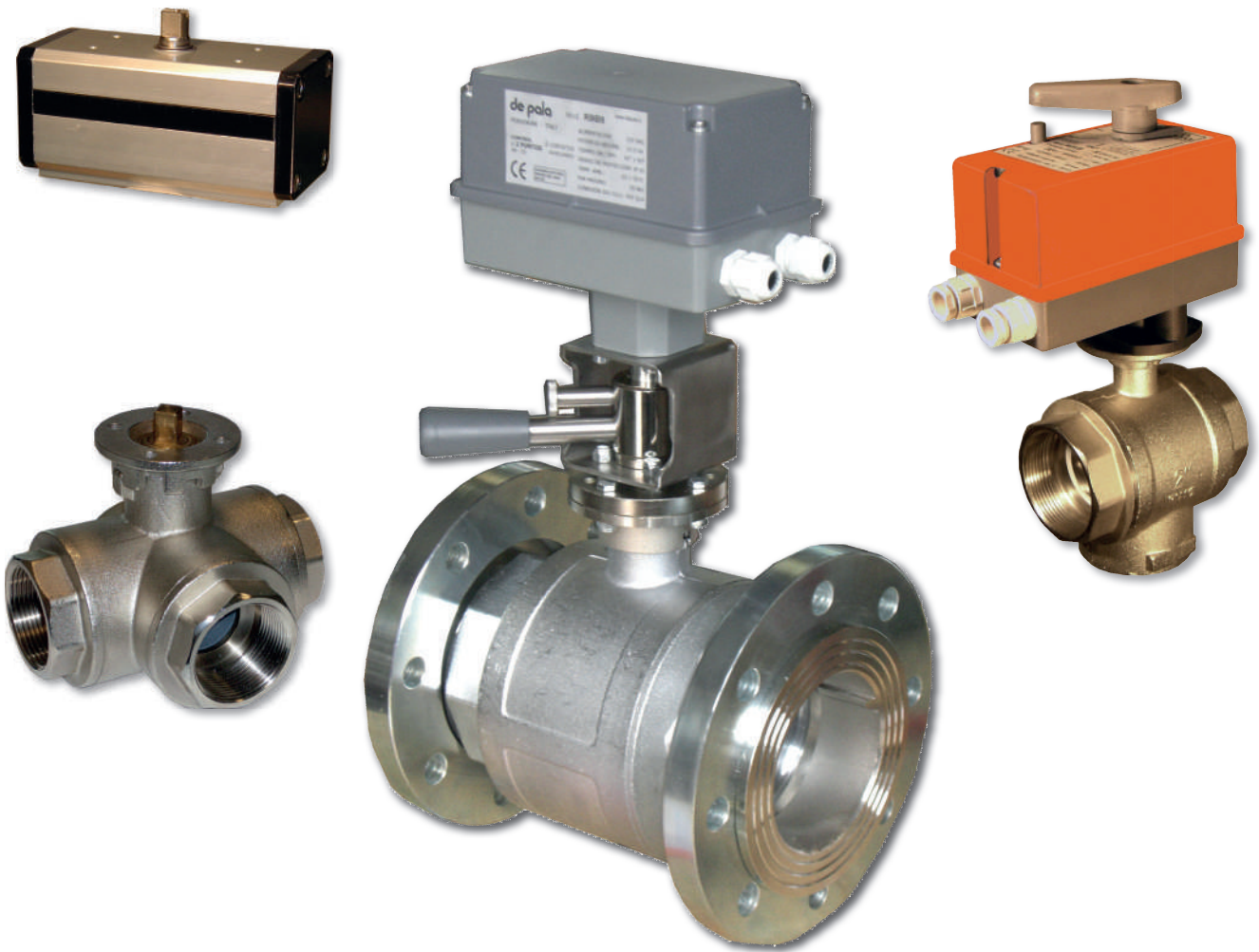
Utilizzabile in alternativa al motore  
*Usable as an alternative to the motor*





# Valvole: **ISO**

Valves : **ISO**



## **VALVOLE A SFERA MOTORIZZATE A PASSAGGIO TOTALE CON FLANGIA DI ATTACCO AL SERVOMOTORE ISO 5211**

a 2 VIE - 3 VIE con possibilità di azionamento manuale

Diametri : Ø 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4"

**FILETTATE / FLANGIATE\*** (\* DISPONIBILE SOLTANTO PER ALCUNI MODELLI)

*FULL BORED MOTORIZED BALL VALVES with ISO 5211 FLANGE FOR ACTUATORS*

*2-WAYS & 3-WAYS - with manual override available*

*Diameters : Ø 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4"*

*THREADED / FLANGED\* (\* NOT AVAILABLE FOR ALL MODELS)*



## CARATTERISTICHE TECNICHE VALVOLE A SFERA MOTORIZZATE TIPO ISO

### TECHNICAL FEATURES MOTORIZED BALL VALVES ISO type

Corpo valvola : Ottone CW617N nichelato  
 Sfera : Ottone CW614N cromata o CW617N cromata  
 Sedi Sfera : PTFE e O-RING in EPDM  
 Asta : Ottone CW614N ( UNI 12164 ) con doppio O-RING in EPDM ed anello antigrippaggio in PTFE  
 Pressione massima di esercizio : 16 bar / 25 bar / 40 bar (a seconda del modello di valvola)  
 Pressione differenziale massima :  $\Delta p = 6$  bar  
 Temperatura di esercizio del fluido :  $-10\text{ }^{\circ}\text{C} + 100\text{ }^{\circ}\text{C}$  - **PER VALORI ESTREMI SI RACCOMANDA L'APPLICAZIONE DEL DISTANZIALE**

Fluido utilizzabile : Acqua o liquidi compatibili con tenute in PTFE ed EPDM

Perdite di carico : pressochè nulle (PASSAGGIO TOTALE)

Piastra portamotore: ISO 5211

Estremità flangiate dove presenti: flange girevoli PN16 UNI EN 1092-1

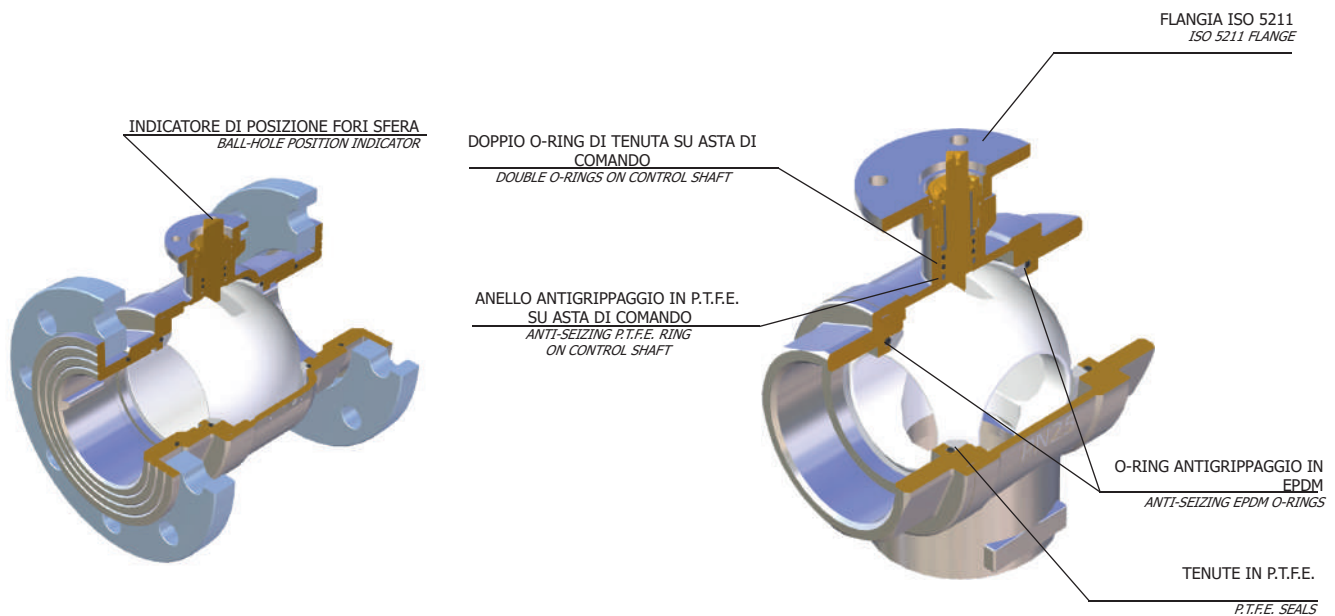
SERVOMOTORI ACCOPPIATI: Tempi di apertura / chiusura: 60" (altri tempi su richiesta)

Tensioni disponibili: 230 VAC - 24 VAC (12 e 24 Vdc su richiesta)

Tipo di comando: a due fili (con relè incorporato) / a tre fili

Versioni con 1 oppure 2 contatti ausiliari.

Grado di protezione elettrica: IP42 / IP54 / IP65



Valve body : BRASS CW617N Nickel-Plated

Ball : BRASS CW614N Chromium-plated or CW617N Chromium-plated

SEALS : P.T.F.E. and EPDM O-RINGS

Shaft : DRAWN BRASS CW614N (UNI 12164) with double EPDM O-RING and anti-seizing ring

Nominal operating pressure : 16 bar / 25 bar / 40 bar (depending on the valve type and dimension)

Maximum differential operating pressure : 6 bar

Fluid temperature range : FROM  $-10\text{ }^{\circ}\text{C}$  TO  $100\text{ }^{\circ}\text{C}$  - **FOR EXTREME VALUES WE RECOMMEND THE APPLICATION OF THE SPACER**

Usable fluids : WATER or Fluids which are compatible with PTFE and EPDM

Load loss : no effect (FULL BORE)

Servomotor flange: ISO 5211

Flanged attachments where present: swivel flanges PN16 UNI EN 1092-1

COUPLED SERVOMOTORS: Opening / closing time: 60" - (other times on request)

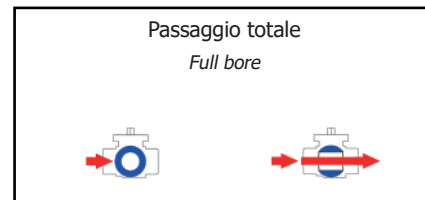
Supply Voltage: 230 VAC - 24 VAC (12 and 24 Vdc on request)

Control type: 2 wires (relay inside) / 3 wires

One or two auxiliary switches available.






Electric protection level: IP42 / IP54 / IP65

**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**2** VIE  
 -WAYS


FLANGE GIREVOLI PER TUBAZIONI PN16 SECONDO UNI EN 1092-1

SWIVEL FLANGES FOR PN16 PIPES ACCORDING TO UNI EN 1092-1

Corpi valvola Valve bodies	Flangia Flange	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	ISO 5211 F03 □9	Filettati Threaded	23	1/2"	<b>632 FI</b>
			43	3/4"	<b>602 FI</b>
			63	1"	<b>612 FI</b>
 	ISO 5211 F05 □11	Filettati Threaded	105	1" 1/4	<b>622 FI</b>
			170	1" 1/2	<b>642 FI</b>
			250	2"	<b>652 FI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	170	DN 40	<b>642 FL</b>
			250	DN 50	<b>652 FL</b>
 	ISO 5211 F05 □14	Filettati Threaded	530	2" 1/2	<b>662 FI</b>
			790	3"	<b>672 FI</b>
			1230	4" (#)	<b>682 FI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	530	DN 65	<b>662 FL</b>
			790	DN80	<b>672 FL</b>
			1230	DN100 (#)	<b>682 FL</b>

 (#) Ø 4"/DN100 : FLANGIA ISO 5211 F07 □14.  
 PER LA MOTORIZZAZIONE NECESSARIO IL DISTAZIALE K9154 O DMI54

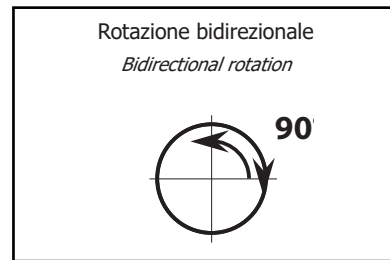
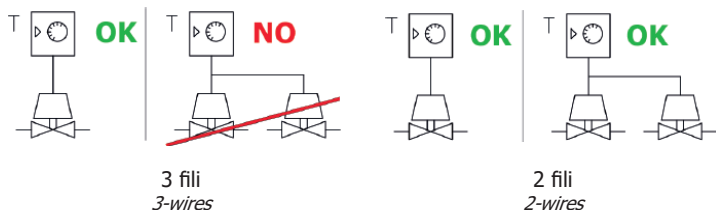
 (#) Ø 4"/DN100 : FLANGE ISO 5211 F07 □14.  
 THE K9154 OR DMI54 SPACER IS REQUIRED FOR THE MOTORIZATION

**MANIGLIA PER AZIONAMENTO MANUALE**  
 HANDLE FOR MANUAL DRIVE


Flangia Flange	Codice Code
ISO 5211 F03 □9	<b>DMI09</b>
ISO 5211 F05 □11	<b>DMI11</b>
ISO 5211 F05 □14	<b>DMI14</b>

## SERVOMOTORI ABBINABILI

*MATCHABLE ACTUATORS*



Tempo corsa <i>Running time</i>	Contatto Aux. <i>Aux. switch</i>	IP	Controllo <i>Control type</i>	Alimentazione <i>Supply</i>	Codice <i>Code</i>	Attuatori <i>Actuators</i>
60"	1 contatto aux. <i>1 aux. switch</i>	IP54	3 fili <i>3-wires</i>	230 Vac	<b>M7IB9</b>	 Coppia Massima 12 Nm <i>Maximum Torque</i>
				24 Vac	<b>M7IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R7IB9</b>	
				24 Vac	<b>R7IC9</b>	
		IP65	3 fili <i>3-wires</i>	230 Vac	<b>P7IB9</b>	
				24 Vac	<b>P7IC9</b>	
2 fili <i>2-wires</i>	230 Vac	<b>T7IB9</b>				
	24 Vac	<b>T7IC9</b>				
60"	1 contatto aux. <i>1 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9</b>	 Coppia Massima 20 Nm <i>Maximum Torque</i>
				24 Vac	<b>M8IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IB9</b>	
				24 Vac	<b>R8IC9</b>	
		IP65 <i>(*)</i>	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9P</b>	
				24 Vac	<b>M8IC9P</b>	
	2 fili <i>2-wires</i>	230 Vac	<b>R8IB9P</b>			
		24 Vac	<b>R8IC9P</b>			
	2 contatti aux. <i>2 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IE9</b>	 Coppia Massima 50 Nm <i>Maximum Torque</i>
				24 Vac	<b>M8IF9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IE9</b>	
				24 Vac	<b>R8IF9</b>	
IP65 <i>(*)</i>		3 fili <i>3-wires</i>	230 Vac	<b>M8IE9P</b>		
			24 Vac	<b>M8IF9P</b>		
2 fili <i>2-wires</i>	230 Vac	<b>R8IE9P</b>				
	24 Vac	<b>R8IF9P</b>				
60"	2 contatti aux. <i>2 aux. switch</i>	IP65	3 fili <i>3-wires</i>	230 Vac	<b>M9IB9</b>	
				24 Vac	<b>M9IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R9IB9</b>	
				24 Vac	<b>R9IC9</b>	

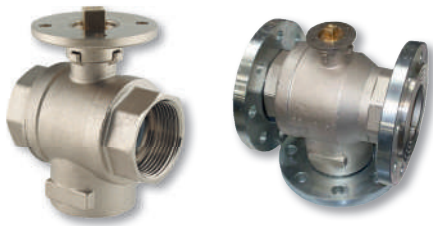
**(\*) IP65 SENZA COMANDO MANUALE**  
**(\*) IP65 WITHOUT MANUAL OVERRIDE**

DISTANZIALE PER VALVOLE MOTORIZZATE ISO <i>SPACERS FOR ISO MOTORIZED VALVES</i>		Flangia <i>Flange</i>	Codice <i>Code</i>
 Senza leva per comando manuale <i>Without lever for manual override</i>		F03 □9	<b>K3S7</b>
		F05 □11	<b>K8I51</b>
		F05 □14	<b>K9I54</b>
 Con leva per comando manuale <i>With lever for manual override</i>		F03 □9	<b>K3M7</b>
		F05 □11	<b>DMI51</b>
		F05 □14	<b>DMI54</b>



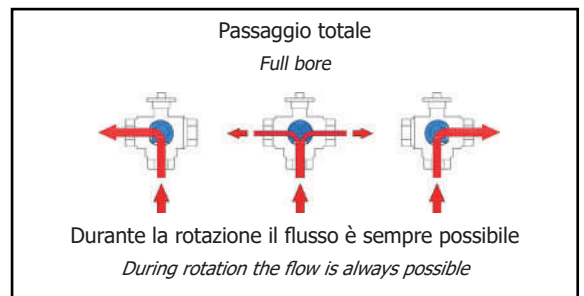
# VALVOLE A SFERA MOTORIZZATE **3** VIE DEVIATRICI **COMPLANARI** A 3 FORI

MOTORIZED BALL VALVES -WAYS **COPLANAR** DEVIATING "T" **BORED**



FLANGE GIREVOLI PER TUBAZIONI  
PN16 SECONDO UNI EN 1092-1

SWIVEL FLANGES FOR PN16 PIPES  
ACCORDING TO UNI EN 1092-1

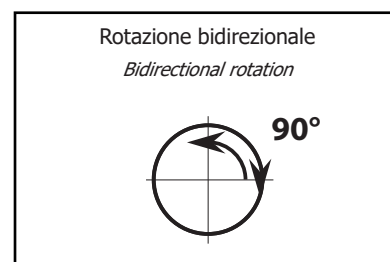
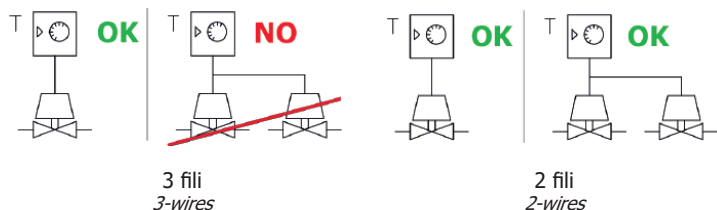


Corpi valvola <i>Valve bodies</i>	Flangia <i>Flange</i>	Attacchi <i>Connections</i>	Kv (m <sup>3</sup> /h)	Ø	Codice <i>Code</i>
	ISO 5211 F03 □9	Filettati <i>Threaded</i>	2,3	1/2"	<b>633 TI</b>
			5,5	3/4"	<b>603 TI</b>
			11	1"	<b>613 TI</b>
	ISO 5211 F05 □11	Filettati <i>Threaded</i>	17	1" 1/4	<b>623 TI</b>
			25	1" 1/2	<b>643 TI</b>
			45	2"	<b>653 TI</b>
	ISO 5211 F05 □14	Filettati <i>Threaded</i>	65	3"	<b>673 TI</b>
		Flangiati per tubazioni PN16 <i>Flanged for PN16 pipes</i>	65	DN 80	<b>673 FT</b>

MANIGLIA PER AZIONAMENTO MANUALE <i>HANDLE FOR MANUAL VALVE DRIVE</i>	Flangia <i>Flange</i>	Codice <i>Code</i>
	ISO 5211 F03 □9	<b>DMI09</b>
	ISO 5211 F05 □11	<b>DMI11</b>
	ISO 5211 F05 □14	<b>DMI14</b>

## SERVOMOTORI ABBINABILI

*MATCHABLE ACTUATORS*



Tempo corsa <i>Running time</i>	Contatto Aux. <i>Aux. switch</i>	IP	Controllo <i>Control type</i>	Alimentazione <i>Supply</i>	Codice <i>Code</i>	Attuatori <i>Actuators</i>
60"	1 contatto aux. <i>1 aux. switch</i>	IP54	3 fili <i>3-wires</i>	230 Vac	<b>M7IB9</b>	<p>Coppia Massima 12 Nm <i>Maximum Torque</i></p> <p>Coppia Massima 20 Nm <i>Maximum Torque</i></p> <p>Coppia Massima 50 Nm <i>Maximum Torque</i></p>
				24 Vac	<b>M7IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R7IB9</b>	
				24 Vac	<b>R7IC9</b>	
		IP65	3 fili <i>3-wires</i>	230 Vac	<b>P7IB9</b>	
				24 Vac	<b>P7IC9</b>	
2 fili <i>2-wires</i>	230 Vac	<b>T7IB9</b>				
24 Vac	<b>T7IC9</b>					
60"	1 contatto aux. <i>1 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9</b>	
				24 Vac	<b>M8IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IB9</b>	
				24 Vac	<b>R8IC9</b>	
		IP65 <i>(*)</i>	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9P</b>	
				24 Vac	<b>M8IC9P</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IB9P</b>	
				24 Vac	<b>R8IC9P</b>	
	2 contatti aux. <i>2 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IE9</b>	
				24 Vac	<b>M8IF9</b>	
		2 fili <i>2-wires</i>	230 Vac	<b>R8IE9</b>		
			24 Vac	<b>R8IF9</b>		
IP65 <i>(*)</i>	3 fili <i>3-wires</i>	230 Vac	<b>M8IE9P</b>			
		24 Vac	<b>M8IF9P</b>			
	2 fili <i>2-wires</i>	230 Vac	<b>R8IE9P</b>			
		24 Vac	<b>R8IF9P</b>			
60"	2 contatti aux. <i>2 aux. switch</i>	IP65	3 fili <i>3-wires</i>	230 Vac	<b>M9IB9</b>	
				24 Vac	<b>M9IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R9IB9</b>	
				24 Vac	<b>R9IC9</b>	

**(\*) IP65 SENZA COMANDO MANUALE**

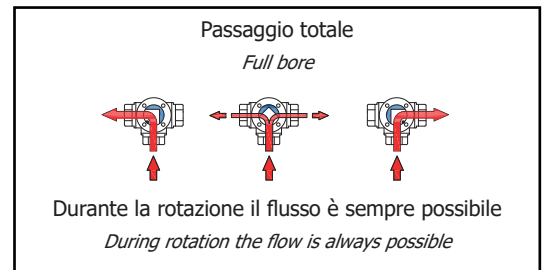
*(\*) IP65 WITHOUT MANUAL OVERRIDE*

<b>DISTANZIALE PER VALVOLE MOTORIZZATE ISO</b> <i>SPACERS FOR ISO MOTORIZED VALVES</i>		Flangia <i>Flange</i>	Codice <i>Code</i>
<p>Senza leva per comando manuale <i>Without lever for manual override</i></p>	F03 □9	<b>K3S7</b>	
	F05 □11	<b>K8I51</b>	
	F05 □14	<b>K9I54</b>	
<p>Con leva per comando manuale <i>With lever for manual override</i></p>	F03 □9	<b>K3M7</b>	
	F05 □11	<b>DMI51</b>	
	F05 □14	<b>DMI54</b>	

**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**3 VIE DEVIATRICI FRONTALI A 2 FORI**  
 -WAYS **FRONTAL DEVIATING "L" BORED**

 FLANGE GIREVOLI PER TUBAZIONI  
 PN16 SECONDO UNI EN 1092-1

 SWIVEL FLANGES FOR PN16 PIPES  
 ACCORDING TO UNI EN 1092-1


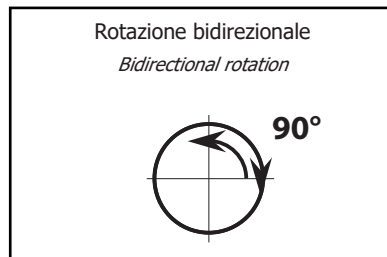
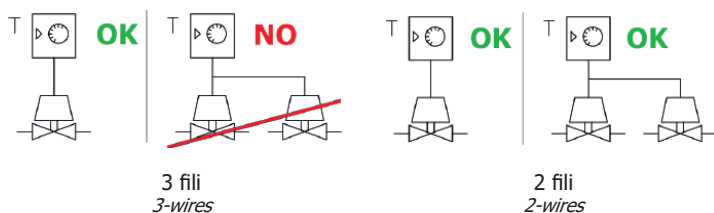
Corpi valvola Valve bodies	Flangia Flange	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	ISO 5211 F03 □9	Filettati Threaded	2,3	1/2"	<b>63A LI</b>
			5,5	3/4"	<b>60A LI</b>
	ISO 5211 F05 □11	Filettati Threaded	11	1"	<b>61A LI</b>
			17	1" 1/4	<b>62A LI</b>
			25	1" 1/2	<b>64A LI</b>
			45	2"	<b>65A LI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	25	DN40	<b>643 FF</b>
	45	DN50	<b>653 FF</b>		
	ISO 5211 F05 □14	Filettati Threaded	60	2" 1/2	<b>66A LI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	60	DN 65	<b>663 FF</b>




MANIGLIA PER AZIONAMENTO MANUALE HANDLE FOR MANUAL VALVE DRIVE	Flangia Flange	Codice Code
	ISO 5211 F03 □9	<b>DMI09</b>
	ISO 5211 F05 □11	<b>DMI11</b>
	ISO 5211 F05 □14	<b>DMI14</b>



## SERVOMOTORI ABBINABILI



*MATCHABLE ACTUATORS*



Tempo corsa <i>Running time</i>	Contatto Aux. <i>Aux. switch</i>	IP	Controllo <i>Control type</i>	Alimentazione <i>Supply</i>	Codice <i>Code</i>	Attuatori <i>Actuators</i>
60"	1 contatto aux. <i>1 aux. switch</i>	IP54	3 fili <i>3-wires</i>	230 Vac	<b>M7IB9</b>	 Coppia Massima 12 Nm <i>Maximum Torque</i>
				24 Vac	<b>M7IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R7IB9</b>	
				24 Vac	<b>R7IC9</b>	
		IP65	3 fili <i>3-wires</i>	230 Vac	<b>P7IB9</b>	
				24 Vac	<b>P7IC9</b>	
2 fili <i>2-wires</i>	230 Vac	<b>T7IB9</b>				
24 Vac	<b>T7IC9</b>					
60"	1 contatto aux. <i>1 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9</b>	 Coppia Massima 20 Nm <i>Maximum Torque</i>
				24 Vac	<b>M8IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IB9</b>	
				24 Vac	<b>R8IC9</b>	
		IP65 (*)	3 fili <i>3-wires</i>	230 Vac	<b>M8IB9P</b>	
				24 Vac	<b>M8IC9P</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R8IB9P</b>	
				24 Vac	<b>R8IC9P</b>	
	2 contatti aux. <i>2 aux. switch</i>	IP42	3 fili <i>3-wires</i>	230 Vac	<b>M8IE9</b>	
				24 Vac	<b>M8IF9</b>	
		2 fili <i>2-wires</i>	230 Vac	<b>R8IE9</b>		
			24 Vac	<b>R8IF9</b>		
IP65 (*)	3 fili <i>3-wires</i>	230 Vac	<b>M8IE9P</b>			
		24 Vac	<b>M8IF9P</b>			
	2 fili <i>2-wires</i>	230 Vac	<b>R8IE9P</b>			
		24 Vac	<b>R8IF9P</b>			
60"	2 contatti aux. <i>2 aux. switch</i>	IP65	3 fili <i>3-wires</i>	230 Vac	<b>M9IB9</b>	 Coppia Massima 50 Nm <i>Maximum Torque</i>
				24 Vac	<b>M9IC9</b>	
			2 fili <i>2-wires</i>	230 Vac	<b>R9IB9</b>	
				24 Vac	<b>R9IC9</b>	

(\*) IP65 SENZA COMANDO MANUALE

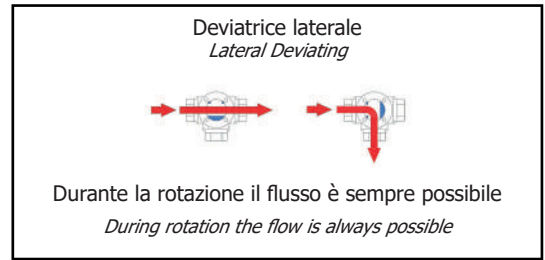
(\*) IP65 WITHOUT MANUAL OVERRIDE

DISTANZIALE PER VALVOLE MOTORIZZATE ISO <i>SPACERS FOR ISO MOTORIZED VALVES</i>		Flangia <i>Flange</i>	Codice <i>Code</i>
	Senza leva per comando manuale <i>Without lever for manual override</i>	F03 □9	<b>K3S7</b>
		F05 □11	<b>K8I51</b>
		F05 □14	<b>K9I54</b>
	Con leva per comando manuale <i>With lever for manual override</i>	F03 □9	<b>K3M7</b>
		F05 □11	<b>DMI51</b>
		F05 □14	<b>DMI54</b>

**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**3 VIE DEVIATRICI LATERALI**  
 -WAYS **LATERAL DEVIATING**

 FLANGE GIREVOLI PER TUBAZIONI  
 PN16 SECONDO UNI EN 1092-1

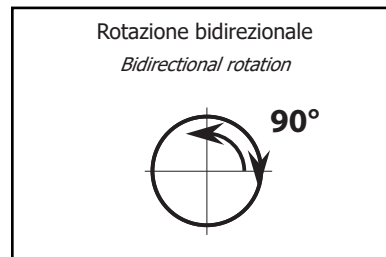
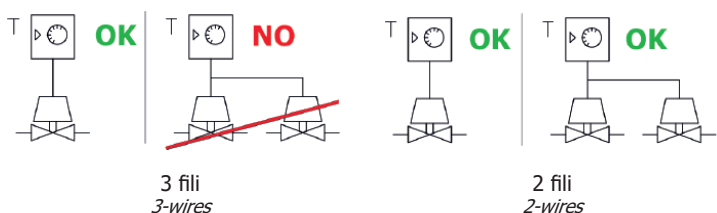
 SWIVEL FLANGES FOR PN16 PIPES  
 ACCORDING TO UNI EN 1092-1


Corpi valvola Valve bodies	Flangia Flange	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	ISO 5211 F03 □9	Filettati Threaded	16 / 2,3	1/2"	<b>63A TI</b>
			23 / 5,5	3/4"	<b>60A TI</b>
	ISO 5211 F05 □11	Filettati Threaded	43 / 11	1"	<b>61A TI</b>
			64 / 17	1" 1/4	<b>62A TI</b>
			110 / 25	1" 1/2	<b>64A TI</b>
			160 / 45	2"	<b>65A TI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	110 / 25	DN40	<b>643 FD</b>
	160 / 45	DN50	<b>653 FD</b>		
	ISO 5211 F05 □14	Filettati Threaded	240 / 60	2" 1/2	<b>66A TI</b>
		Flangiati per tubazioni PN16 Flanged for PN16 pipes	220 / 60	DN 65	<b>663 FD</b>

MANIGLIA PER AZIONAMENTO MANUALE HANDLE FOR MANUAL VALVE DRIVE	Flangia Flange	Codice Code
	ISO 5211 F03 □9	<b>DMI09</b>
	ISO 5211 F05 □11	<b>DMI11</b>
	ISO 5211 F05 □14	<b>DMI14</b>

## SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS



Tempo corsa Running time	Contatto Aux. Aux. switch	IP	Controllo Control type	Alimentazione Supply	Codice Code	Attuatori Actuators	
60"	1 contatto aux. 1 aux. switch	IP54	3 fili 3-wires	230 Vac	<b>M7IB9</b>	<p>Coppia Massima 12 Nm Maximum Torque</p>	
				24 Vac	<b>M7IC9</b>		
			2 fili 2-wires	230 Vac	<b>R7IB9</b>		
				24 Vac	<b>R7IC9</b>		
		IP65	3 fili 3-wires	230 Vac	<b>P7IB9</b>		
				24 Vac	<b>P7IC9</b>		
2 fili 2-wires	230 Vac	<b>T7IB9</b>					
	24 Vac	<b>T7IC9</b>					
60"	1 contatto aux. 1 aux. switch	IP42	3 fili 3-wires	230 Vac	<b>M8IB9</b>		<p>Coppia Massima 20 Nm Maximum Torque</p>
				24 Vac	<b>M8IC9</b>		
			2 fili 2-wires	230 Vac	<b>R8IB9</b>		
				24 Vac	<b>R8IC9</b>		
		IP65 (*)	3 fili 3-wires	230 Vac	<b>M8IB9P</b>		
				24 Vac	<b>M8IC9P</b>		
			2 fili 2-wires	230 Vac	<b>R8IB9P</b>		
				24 Vac	<b>R8IC9P</b>		
	2 contatti aux. 2 aux. switch	IP42	3 fili 3-wires	230 Vac	<b>M8IE9</b>		
				24 Vac	<b>M8IF9</b>		
		2 fili 2-wires	230 Vac	<b>R8IE9</b>			
			24 Vac	<b>R8IF9</b>			
IP65 (*)	3 fili 3-wires	230 Vac	<b>M8IE9P</b>				
		24 Vac	<b>M8IF9P</b>				
	2 fili 2-wires	230 Vac	<b>R8IE9P</b>				
		24 Vac	<b>R8IF9P</b>				
60"	2 contatti aux. 2 aux. switch	IP65 (*)	3 fili 3-wires	230 Vac	<b>M9IB9</b>	<p>Coppia Massima 50 Nm Maximum Torque</p>	
				24 Vac	<b>M9IC9</b>		
			2 fili 2-wires	230 Vac	<b>R9IB9</b>		
				24 Vac	<b>R9IC9</b>		

(\*) IP65 SENZA COMANDO MANUALE  
(\*) IP65 WITHOUT MANUAL OVERRIDE

DISTANZIALE PER VALVOLE MOTORIZZATE ISO SPACERS FOR ISO MOTORIZED VALVES	Flangia Flange	Codice Code
<p>Senza leva per comando manuale Without lever for manual override</p>	F03 □9	<b>K3S7</b>
	F05 □11	<b>K8I51</b>
	F05 □14	<b>K9I54</b>
<p>Con leva per comando manuale With lever for manual override</p>	F03 □9	<b>K3M7</b>
	F05 □11	<b>DMI51</b>
	F05 □14	<b>DMI54</b>



# SERVOMOTORE PNEUMATICO DOPPIO EFFETTO

*PNEUMATIC ACTUATORS DOUBLE EFFECT*



Ø	Coppia Max a 6 bar Max Torque at 6 bar	Codice Code
1/2"	15 Nm	<b>MP612</b>
3/4"		
1"		
1" 1/4"	45 Nm	<b>MP812</b>
1" 1/2"		
2"		
2" 1/2"	90 Nm	<b>MP912</b>
3"		
4"		

Adatto a tutti i tipi di valvole con attacco ISO 5211  
*Suitable for all valve models with ISO 5211 connection*

Pressione massima di lavoro: 8 bar  
*Max operating pressure: 8 bar*

Coppia motrice: da 15 Nm a 90 Nm  
*Torque on shaft: from 15 to 90 Nm*

Temperatura ambiente: 0° +80° C  
*Ambient temperature: 0° +80° C*

Rotazione Bidirezionale  
*Bidirectional Actuator*



ACCESSORI <i>accessories</i>		Codice Code
	Valvola tipo 5/2 per comando manuale con attacchi G1/8 <i>5/2 type valve for manual control with G1/8 attachments</i>	<b>V52LA</b>
	Basetta per il montaggio di qualsiasi elettrovalvola a norma NAMUR. O-Ring inclusi <i>Adapting kit for any kind of NAMUR standard valve. O-Ring included</i>	<b>KBN17</b>
	Elettrovalvola NAMUR con piastra di interfaccia 5/2 con O-Ring di tenuta. <i>NAMUR solenoid valve with 5/2 interface plate and O-Rings</i>	<b>ER818</b>
	Indicatore visivo della posizione di apertura o chiusura della valvola <i>Visual position indicator of valve position</i>	<b>KI02P</b>
	Microinterruttori di finecorsa meccanici del tipo a pulsante con kit di montaggio. <i>Mechanic limit switch with push button and assembling kit</i>	<b>KFE3A</b>

## INGOMBRI VALVOLE ED ATTUATORI PNEUMATICI

*OVERALL DIMENSIONS VALVES & PNEUMATIC ACTUATORS*

	Attacchi filettati <i>Threaded connections</i>										Attacchi flangiati <i>Flanged connections</i>							
	1/2"	3/4"	1"	1"1/4"	1"1/2"	2"	2"1/2"	3"	4"	3" T	F	1/2"	3/4"	1"	1"1/4"	1"1/2"	2"	2"1/2"
<b>F</b>	56	68	78	90	100	115	141	159	195	180	<b>F</b>	82	90	106	120	142	165	194
<b>H</b>	121	125	129	154	159	165	190	200	227	202	<b>H</b>	124	127	149	153	159	166	189
<b>C</b>	48	52	56	68	73	79	92	102	129	104	<b>C</b>	51	54	63	67	73	80	91
<b>P</b>	30	34	41	47	53	62	-	-	-	114	<b>G</b>	41	45	53	60	71	83	97

	Attacchi flangiati <i>Flanged connections</i>						Attacchi flangiati <i>Flanged connections</i>			
	DN40	DN50	DN65	DN80	DN100	DN80 T	F	DN40	DN50	DN65
<b>F</b>	146	167	190	214	254	235	<b>F</b>	187	215	241
<b>H</b>	200	217	190	201	225	202	<b>H</b>	159	166	189
<b>C</b>	114	131	92	103	127	104	<b>C</b>	73	80	91
<b>P</b>		-	-	-	-	140	<b>G</b>	116	108	121
<b>D</b>	Ø150	Ø165	Ø185	Ø200	Ø220	Ø200	<b>D</b>	Ø150	Ø165	Ø185

Dimensioni flange per tubazioni e relativi fori secondo tabelle UNI EN 1092-1  
*Dimensions of pipe flanges and holes according to EN 1092-1 tables*

**INGOMBRI VALVOLE, DISTANZIALI E SERVOMOTORI ISO**  
 OVERALL DIMENSIONS ISO VALVES, SPACERS AND ACTUATORS

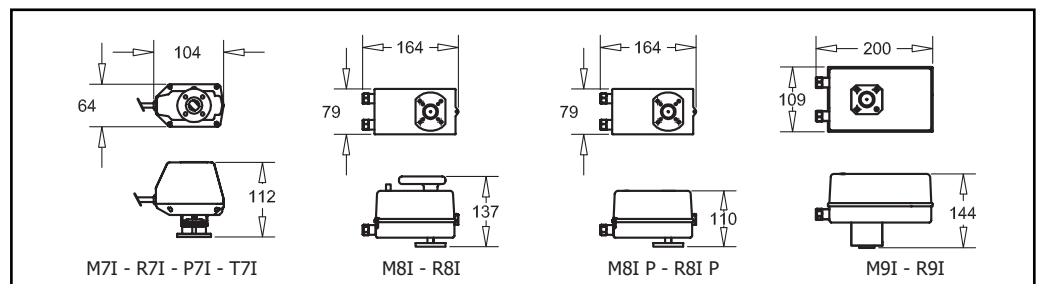
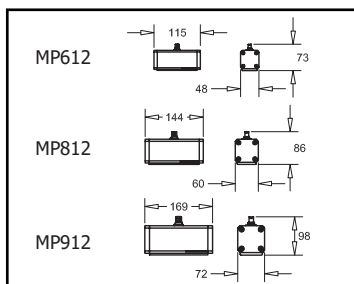
2 VIE 2-WAYS																
		1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"		DN40	DN50	DN65	DN80	DN100
	<b>F</b>	56	68	78	90	100	115	141	159	195	<b>F</b>	146	167	190	214	254
	<b>H1</b>	160	164	168	205	210	216	235	245	272	<b>H1</b>	251	268	235	246	270
	<b>A1</b>	180	184	188	295	300	306	325	335	362	<b>A1</b>	341	358	325	336	360
	<b>H2</b>	202	206	210	255	260	266	285	295	322	<b>H2</b>	301	318	285	296	320
	<b>A2</b>	222	226	230	338	343	349	395	405	432	<b>A2</b>	384	401	395	405	432
	<b>H3</b>	-	-	-	248	253	259	305	315	342	<b>H3</b>	294	311	305	316	340
<b>A3</b>	256	260	264	338	343	349	325	335	362	<b>A3</b>	384	401	395	406	430	
	-	-	-	-	-	-	-	-	-	<b>D</b>	Ø150	Ø165	Ø185	Ø200	Ø220	

3 VIE COMPLANARE 3-WAYS COPLANAR																
		1/2"	3/4"	1"	1"1/4	1"1/2	2"	-	3"	-		-	-	-	DN80	-
	<b>F</b>	56	68	78	90	100	115	-	180	-	<b>F</b>	-	-	-	235	-
	<b>H1</b>	160	164	168	205	210	216	-	247	-	<b>H1</b>	-	-	-	247	-
	<b>A1</b>	180	184	188	295	300	306	-	337	-	<b>A1</b>	-	-	-	337	-
	<b>H2</b>	202	206	210	255	260	266	-	297	-	<b>H2</b>	-	-	-	297	-
	<b>A2</b>	222	226	230	338	343	349	-	405	-	<b>A2</b>	-	-	-	407	-
	<b>H3</b>	-	-	-	248	253	259	-	317	-	<b>H3</b>	-	-	-	317	-
<b>A3</b>	256	260	264	338	343	349	-	406	-	<b>A3</b>	-	-	-	407	-	
<b>P</b>	30	34	41	47	53	62	-	114	-	<b>P</b>	-	-	-	140	-	
	-	-	-	-	-	-	-	-	-	<b>D</b>	-	-	-	Ø200	-	

3 VIE FRONTALE 3-WAYS FRONTAL																
		1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	-	-		DN40	DN50	DN65	-	-
	<b>F</b>	82	90	106	120	142	165	194	-	-	<b>F</b>	187	215	241	-	-
	<b>H1</b>	163	166	200	204	210	217	234	-	-	<b>H1</b>	210	217	234	-	-
	<b>A1</b>	183	186	290	294	300	307	324	-	-	<b>A1</b>	300	307	324	-	-
	<b>H2</b>	205	208	250	254	260	267	284	-	-	<b>H2</b>	260	267	284	-	-
	<b>A2</b>	225	228	333	337	343	350	395	-	-	<b>A2</b>	343	350	394	-	-
	<b>H3</b>	-	-	270	274	280	287	304	-	-	<b>H3</b>	253	260	304	-	-
<b>A3</b>	259	262	333	337	343	350	395	-	-	<b>A3</b>	343	350	394	-	-	
<b>G</b>	41	45	53	60	71	83	97	-	-	<b>G</b>	116	108	121	-	-	
	-	-	-	-	-	-	-	-	-	<b>D</b>	Ø150	Ø165	Ø185	-	-	





# Valvole: **FRIGO IP65**

Valves: **IP65 FRIGO**



## **VALVOLE A SFERA NICHELATE A PASSAGGIO TOTALE CON ATTUATORI SIGILLATI**

ATT. :FEMMINA/MASCHIO/BOCCHETTONE: Ø 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2  
DISTANZIALI per COIBENTAZIONE SEMPLICI  
O CON AZIONAMENTO MANUALE

*FULL BORED NICKEL-PLATED BALL VALVES - SEALED ACTUATORS*

*FEMALE - MALE - PIPE-UNIONS ATTACHMENTS : Diameter Ø 1/2" - 3/4" - 1" - 1" 1/4 - 1" 1/2*

*SPACERS FOR PIPES INSULATION WITH OR WITHOUT MANUAL OVERRIDE*

IMPIEGHI TIPO: CONDIZIONAMENTO / REFRIGERAZIONE / ENOLOGICO /  
POMPE DI CALORE / POMPE GEOTERMICHE

*APPLICATIONS: AIR CONDITIONING / REFRIGERATION / WINE / HEAT PUMPS /  
GEOTHERMAL HEAT PUMPS*



## **CONNETTORE RAPIDO PRESA-SPINA (opzionale)**

*QUICK CONNECTOR PLUG-JACK (optional)*

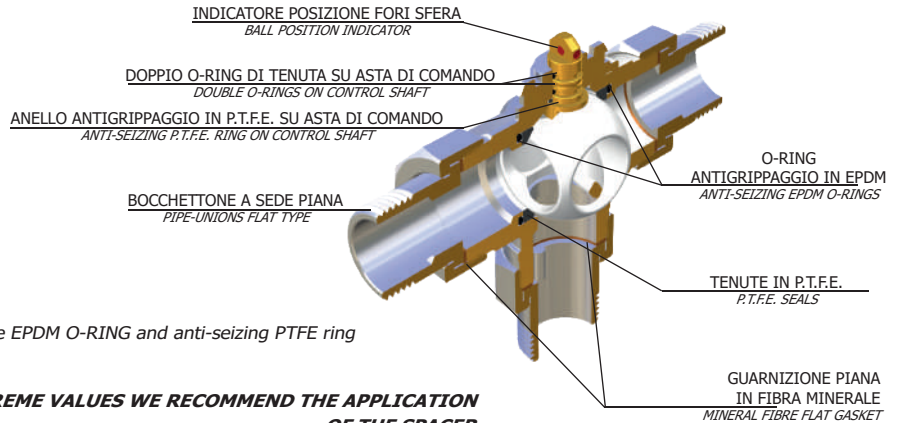
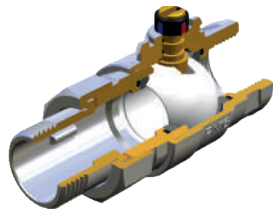


# CARATTERISTICHE TECNICHE VALVOLE TIPO FRIGO

## TECHNICAL FEATURES FRIGO TYPE VALVES

Corpo valvola : Ottone CW617N ( UNI 12165 ) Nichelato  
 Sfera : Ottone CW617N ( UNI 12165 ) Nichelata-Cromata  
 Sedi Sfera : PTFE e O-RING in EPDM  
 Asta : Ottone CW614N ( UNI 12164 ) con doppio O-RING in EPDM ed anello antigrippaggio in PTFE  
 Pressione massima di esercizio : 16 bar  
 Pressione differenziale massima :  $\Delta p = 6$  bar  
 Temperatura di esercizio del fluido : -15 °C + 110 °C - **PER VALORI ESTREMI SI RACCOMANDA L'APPLICAZIONE DEL DISTANZIALE**

Fluido utilizzabile : Acqua, acqua glicolata o liquidi compatibili con tenute in PTFE ed EPDM  
 Perdite di carico : pressochè nulle (PASSAGGIO TOTALE)  
 Innesto rapido con molla ad anello  
 SERVOMOTORI ACCOPPIATI: Tempi di apertura / chiusura: 8" - 15" - 30" - 60" - 120"  
 Tensioni disponibili: 230VAC - 24VAC - (12 e 24 Vdc su richiesta)  
 Tipo di comando: a due fili (con relè incorporato) / a tre fili in deviazione  
 Versioni con uno, due e senza contatti ausiliari.  
 Grado di protezione elettrica: IP65



Valve body : BRASS CW617N (UNI 12165)  
 Ball : BRASS CW617N (nickel-chromium plated)  
 SEALS : PTFE and EPDM O-RINGS  
 Shaft : DRAWN BRASS CW614N (UNI 12164) with double EPDM O-RING and anti-seizing PTFE ring  
 Nominal operating pressure : 16 bar  
 Maximum differential operating pressure :  $\Delta p$  6 bar  
 Fluid temperature: FROM -15 °C TO 110 °C - **FOR EXTREME VALUES WE RECOMMEND THE APPLICATION OF THE SPACER**

Utilisable fluids : WATER; WATER with GLYCOL or Fluids which are compatible with PTFE and EPDM  
 Load loss : no effect (FULL BORE)  
 Quick release ring spring coupling system  
 COUPLED SERVOMOTORS: Opening / closing time: 8" - 15" - 30" - 60" - 120"  
 Supply Voltage: 230VAC - 24VAC - (12 and 24 Vdc on request)  
 Control type: 2 wires (relay inside) / 3 wires  
 1 or 2 auxiliary switches versions available  
 Electric protection level: IP65

## INGOMBRI VALVOLE E SERVOMOTORI

### OVERALL DIMENSIONS VALVES & ACTUATORS

<p><b>F &amp; B:</b> diam. filetto attacchi Femmina o Bocchettone. F &amp; B: Female or Pipe-unions thread connection diameter.</p> <p><b>M:</b> diam. filetto maschio. M: Male thread diameter.</p> <p><b>DN:</b> Diam. nominale foro sfera. DN: Nominal diameter bore.</p>															
F & B	M	DN	h	H	A min.	F	P	B	h	H	A min.	F	B	Q	R
1/2"	3/4"	15	159	193	20	77	105	131	159	193	20	76	130	38	65
3/4"	1"	20					108	139					136		
1"	1" 1/4	25	164	198		87	121	156	164	198		86	155	43	78
1" 1/4	1" 1/2	32	169	203		94	133	172	169	203		94	172	47	86
1"1/2	-	40	177	211		108	151	193	177	211		108	193	60	102

**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**2 VIE - MOTORE UNIDIREZIONALE**  
 - WAYS WITH **UNIDIRECTIONAL** ACTUATOR

Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina <i>Female</i>	12,5	1/2"	<b>632 FN</b>
		15,6	3/4"	<b>602 FN</b>
		31,3	1"	<b>612 FN</b>
		50,0	1" 1/4	<b>622 FN</b>
		98,0	1" 1/2	<b>642FN</b>
	Maschio <i>Male</i>	12,5	3/4"	<b>602 MN</b>
		15,6	1"	<b>612 MN</b>
		31,3	1" 1/4	<b>622 MN</b>
		50,0	1" 1/2	<b>642 MN</b>
	Femmina / Bocchettone <i>Female / Pipe-unions</i>	12,2	1/2"	<b>632 FBN</b>
		15,1	3/4"	<b>602 FBN</b>
		30,6	1"	<b>612 FBN</b>
		49,1	1" 1/4	<b>622 FBN</b>
		96,0	1" 1/2	<b>642 FBN</b>
	Bocchettone <i>Pipe-unions</i>	12,0	1/2"	<b>632 BN</b>
		14,9	3/4"	<b>602 BN</b>
30,0		1"	<b>612 BN</b>	
48,2		1" 1/4	<b>622 BN</b>	
94,1		1" 1/2	<b>642 BN</b>	

Servomotori - Actuators	Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<p>Rotazione unidirezionale <i>Unidirectional rotation</i></p> <p>OK NO</p> <p>OK OK</p>	<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>P6A2</b>
			24V		<b>P6S2</b>
			230V	15"	<b>P6A2W</b>
			24V		<b>P6S2W</b>
			230V	8"	<b>P6A2X</b>
			24V		<b>P6S2X</b>
		1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>P6B2</b>
			24V		<b>P6C2</b>
			230V	15"	<b>P6B2W</b>
			24V		<b>P6C2W</b>
			230V	8"	<b>P6B2X</b>
			24V		<b>P6C2X</b>
	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>P6X2</b>	
		24V		<b>P6Y2</b>	
		230V	15"	<b>P6X2W</b>	
		24V		<b>P6Y2W</b>	
		230V	8"	<b>P6X2X</b>	
		24V		<b>P6Y2X</b>	
	<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>T6A2</b>
			24V		<b>T6S2</b>
			230V	15"	<b>T6A2W</b>
			24V		<b>T6S2W</b>
			230V	8"	<b>T6A2X</b>
			24V		<b>T6S2X</b>
1 contatto aux. <i>1 aux. switch</i>		230V	60"	<b>T6B2</b>	
		24V		<b>T6C2</b>	
		230V	15"	<b>T6B2W</b>	
		24V		<b>T6C2W</b>	
		230V	8"	<b>T6B2X</b>	
		24V		<b>T6C2X</b>	

ACCESSORI <i>Accessories</i>	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Distanziale per coibentazione semplice <i>Spacer for pipes insulation without manual override</i>	Tutti <i>All</i>		<b>K2S6</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC02</b>
	1"1/4	1"	<b>GC12</b>
	1"1/2	1"1/4	<b>GC22</b>
	-	1"1/2	<b>GC42</b>



# VALVOLE A SFERA MOTORIZZATE

MOTORIZED BALL VALVES



# 2 VIE - MOTORE BIDIREZIONALE

-WAYS WITH **BIDIRECTIONAL** ACTUATOR

Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
	Femmina <i>Female</i>	12,5	1/2"	<b>632 FND</b>
		15,6	3/4"	<b>602 FND</b>
		31,3	1"	<b>612 FND</b>
		50,0	1" 1/4	<b>622 FND</b>
	Maschio <i>Male</i>	98,0	1" 1/2	<b>642FND</b>
		12,5	3/4"	<b>602 MND</b>
		15,6	1"	<b>612 MND</b>
		31,3	1" 1/4	<b>622 MND</b>
	Femmina / Bocchettone <i>Female / Pipe-unions</i>	50,0	1" 1/2	<b>642 MND</b>
		12,2	1/2"	<b>632 FBND</b>
		15,1	3/4"	<b>602 FBND</b>
		30,6	1"	<b>612 FBND</b>
	Bocchettone <i>Pipe-unions</i>	49,1	1" 1/4	<b>622 FBND</b>
		96,0	1" 1/2	<b>642 FBND</b>
		12,0	1/2"	<b>632 BND</b>
		14,9	3/4"	<b>602 BND</b>
		30,0	1"	<b>612 BND</b>
		48,2	1" 1/4	<b>622 BND</b>
		94,1	1" 1/2	<b>642 BND</b>





Servomotori - Actuators	Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<p>Rotazione bidirezionale <i>Bidirectional rotation</i></p> <p><b>OK</b> <b>NO</b></p> <p><b>OK</b> <b>OK</b></p>	<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>P7A3</b>
			24V		<b>P7S3</b>
			230V	15"	<b>P7A3W</b>
			24V		<b>P7S3W</b>
			230V	8"	<b>P7A3X</b>
			24V		<b>P7S3X</b>
		1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>P7B3</b>
			24V		<b>P7C3</b>
			230V	15"	<b>P7B3W</b>
			24V		<b>P7C3W</b>
			230V	8"	<b>P7B3X</b>
			24V		<b>P7C3X</b>
	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>P7X3</b>	
		24V		<b>P7Y3</b>	
		230V	15"	<b>P7X3W</b>	
		24V		<b>P7Y3W</b>	
		230V	8"	<b>P7X3X</b>	
		24V		<b>P7Y3X</b>	
	<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>T7A3</b>
			24V		<b>T7S3</b>
			230V	15"	<b>T7A3W</b>
			24V		<b>T7S3W</b>
			230V	8"	<b>T7A3X</b>
			24V		<b>T7S3X</b>
1 contatto aux. <i>1 aux. switch</i>		230V	60"	<b>T7B3</b>	
		24V		<b>T7C3</b>	
		230V	15"	<b>T7B3W</b>	
		24V		<b>T7C3W</b>	
		230V	8"	<b>T7B3X</b>	
		24V		<b>T7C3X</b>	


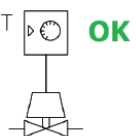
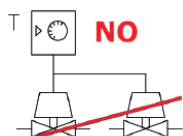



ACCESSORI Accessories	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Distanziale per coibentazione semplice <i>Spacer for pipes insulation without manual override</i>	Tutti <i>All</i>		<b>K2S7</b>
Distanziale per coibentazione con azionamento manuale <i>Spacer for pipes insulation with manual override</i>			<b>K3M7</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC02</b>
	1"1/4	1"	<b>GC12</b>
	1"1/2	1"1/4	<b>GC22</b>
	-	1"1/2	<b>GC42</b>



**VALVOLE A SFERA MOTORIZZATE**  
 MOTORIZED BALL VALVES

**3 VIE DEVIATRICI A 3 FORI**  
 -WAYS "T" BORED BALL

Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
 <p>Durante la rotazione il flusso è sempre possibile</p> <p>During rotation the flow is always possible</p>   	Femmina <i>Female</i>	10,2	1/2"	<b>633 TN</b>
		11,0	3/4"	<b>603 TN</b>
		15,0	1"	<b>613 TN</b>
		20,8	1" 1/4	<b>623 TN</b>
		28,0	1" 1/2	<b>643 TN</b>
	Maschio <i>Male</i>	10,2	3/4"	<b>603 VN</b>
		11,0	1"	<b>613 VN</b>
		15,0	1" 1/4	<b>623 VN</b>
		20,8	1" 1/2	<b>643 VN</b>
	Bocchettone <i>Pipe-unions</i>	9,7	1/2"	<b>633 UN</b>
		10,5	3/4"	<b>603 UN</b>
		13,9	1"	<b>613 UN</b>
		19,0	1" 1/4	<b>623 UN</b>
		25,5	1" 1/2	<b>643 UN</b>

Servomotori - Actuators	Controllo Control	Contacto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<p>Rotazione bidirezionale <i>Bidirectional rotation</i></p>  <p>OK NO</p>    <p>OK OK</p>  	<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>P7A3</b>
			24V		<b>P7S3</b>
			230V	15"	<b>P7A3W</b>
			24V		<b>P7S3W</b>
			230V	8"	<b>P7A3X</b>
			24V		<b>P7S3X</b>
		1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>P7B3</b>
			24V		<b>P7C3</b>
			230V	15"	<b>P7B3W</b>
			24V		<b>P7C3W</b>
			230V	8"	<b>P7B3X</b>
			24V		<b>P7C3X</b>
	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>P7X3</b>	
		24V		<b>P7Y3</b>	
		230V	15"	<b>P7X3W</b>	
		24V		<b>P7Y3W</b>	
		230V	8"	<b>P7X3X</b>	
		24V		<b>P7Y3X</b>	
<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>		Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>T7A3</b>
			24V		<b>T7S3</b>
	230V		15"	<b>T7A3W</b>	
	24V			<b>T7S3W</b>	
	230V		8"	<b>T7A3X</b>	
	24V			<b>T7S3X</b>	
	1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>T7B3</b>	
		24V		<b>T7C3</b>	
		230V	15"	<b>T7B3W</b>	
		24V		<b>T7C3W</b>	
		230V	8"	<b>T7B3X</b>	
		24V		<b>T7C3X</b>	

ACCESSORI Accessories	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Distanziale per coibentazione semplice <i>Spacer for pipes insulation without manual override</i>	Tutti <i>All</i>		<b>K3S7</b>
Distanziale per coibentazione con azionamento manuale <i>Spacer for pipes insulation with manual override</i>			<b>K3M7</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>
	-	1"1/2	<b>GC43</b>





# VALVOLE A SFERA MOTORIZZATE

MOTORIZED BALL VALVES



# 3 VIE DEVIATRICI LATERALI

-WAYS LATERAL DEVIATING

Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code
<p>Via deviata a passaggio ridotto Diverted way with reduced passage</p>	Femmina <i>Female</i>	7,1 / 5,5	1/2"	<b>633 FC</b>
		7,5 / 5,5	3/4"	<b>603 FC</b>
		26,0 / 6,5	1"	<b>613 FC</b>
		50,0 / 7,3	1" 1/4	<b>623 FC</b>
		98,0 / 11,3	1" 1/2	<b>643 FC</b>
	Maschio <i>Male</i>	7,1 / 5,5	3/4"	<b>603 MC</b>
		7,5 / 5,5	1"	<b>613 MC</b>
		26,0 / 6,5	1" 1/4	<b>623 MC</b>
		50,0 / 7,3	1" 1/2	<b>643 MC</b>
		Bocchettone <i>Pipe-unions</i>	6,8 / 5,2	1/2"
	7,2 / 5,2		3/4"	<b>603 BC</b>
	24,8 / 6,2		1"	<b>613 BC</b>
48,2 / 7,0	1" 1/4		<b>623 BC</b>	
		94,1 / 10,9	1" 1/2	<b>643 BC</b>

Servomotori - Actuators	Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<p>Rotazione bidirezionale <i>Bidirectional rotation</i></p> <p>90°</p> <p>OK NO</p> <p>OK OK</p>	<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>P7A3</b>
			24V		<b>P7S3</b>
			230V	15"	<b>P7A3W</b>
			24V		<b>P7S3W</b>
			230V	8"	<b>P7A3X</b>
			24V		<b>P7S3X</b>
		1 contatto aux. <i>1 aux. switch</i>	230V	60"	<b>P7B3</b>
			24V	<b>P7C3</b>	
			230V	15"	<b>P7B3W</b>
			24V	<b>P7C3W</b>	
			230V	8"	<b>P7B3X</b>
			24V	<b>P7C3X</b>	
	2 contatti aux. <i>2 aux. switch</i>	230V	60"	<b>P7X3</b>	
		24V	<b>P7Y3</b>		
		230V	15"	<b>P7X3W</b>	
		24V	<b>P7Y3W</b>		
		230V	8"	<b>P7X3X</b>	
		24V	<b>P7Y3X</b>		
	<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	60"	<b>T7A3</b>
			24V		<b>T7S3</b>
			230V	15"	<b>T7A3W</b>
			24V		<b>T7S3W</b>
			230V	8"	<b>T7A3X</b>
			24V		<b>T7S3X</b>
1 contatto aux. <i>1 aux. switch</i>		230V	60"	<b>T7B3</b>	
		24V	<b>T7C3</b>		
		230V	15"	<b>T7B3W</b>	
		24V	<b>T7C3W</b>		
		230V	8"	<b>T7B3X</b>	
		24V	<b>T7C3X</b>		

ACCESSORI Accessories	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Distanziale per coibentazione semplice <i>Spacer for pipes insulation without manual override</i>	Tutti <i>All</i>		<b>K3S71</b>
Distanziale per coibentazione con azionamento manuale <i>Spacer for pipes insulation with manual override</i>			<b>K3M71</b>
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>
	-	1"1/2	<b>GC43</b>



# VALVOLE A SFERA MOTORIZZATE

MOTORIZED BALL VALVES



## 3 VIE DEVIATRICI A 2 FORI

-WAYS "L" BORED BALL

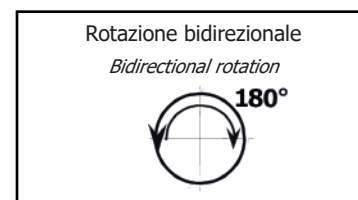
Corpi valvola - Valve bodies	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	Codice Code	
<p>Durante la rotazione il flusso non è consentito per un breve tratto e le vie non si mescolano tra di loro.</p> <p>During rotation the flow is not allowed for a short distance and the paths do not mix with each other.</p>	Femmina <i>Female</i>	10,2	1/2"	<b>633 FN</b>	
		11,0	3/4"	<b>603 FN</b>	
		15,0	1"	<b>613 FN</b>	
	Maschio <i>Male</i>	20,8	1" 1/4	<b>623 FN</b>	
		10,2	3/4"	<b>603 MN</b>	
		11,0	1"	<b>613 MN</b>	
	Bocchettone <i>Pipe-unions</i>	15,0	1" 1/4	<b>623 MN</b>	
		20,8	1" 1/2	<b>643 MN</b>	
		9,7	1/2"	<b>633 BN</b>	
		10,5	3/4"	<b>603 BN</b>	
			13,9	1"	<b>613 BN</b>
			19,0	1" 1/4	<b>623 BN</b>

Servomotori - Actuators	Controllo Control	Contatto Aux. Aux. switch	Alimentaz. Supply	Tempo corsa Running time	Codice Code
<p>Rotazione unidirezionale <i>Unidirectional rotation</i></p> <p>180°</p> <p>OK NO</p> <p>OK OK</p>	<b>Comando a 3 FILI</b> <i>3-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	120"	<b>P6A3</b>
			24V		<b>P6S3</b>
			230V	30"	<b>P6A3W</b>
			24V		<b>P6S3W</b>
			230V	16"	<b>P6A3X</b>
			24V		<b>P6S3X</b>
		1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>P6B3</b>
			24V		<b>P6C3</b>
			230V	30"	<b>P6B3W</b>
			24V		<b>P6C3W</b>
			230V	16"	<b>P6B3X</b>
			24V		<b>P6C3X</b>
	2 contatti aux. <i>2 aux. switch</i>	230V	120"	<b>P6X3</b>	
		24V		<b>P6Y3</b>	
		230V	30"	<b>P6X3W</b>	
		24V		<b>P6Y3W</b>	
		230V	16"	<b>P6X3X</b>	
		24V		<b>P6Y3X</b>	
	<b>Comando a 2 FILI</b> <i>2-WIRES Control</i>	Senza contatto aux. <i>No aux. switch</i>	230V	120"	<b>T6A3</b>
			24V		<b>T6S3</b>
			230V	30"	<b>T6A3W</b>
			24V		<b>T6S3W</b>
			230V	16"	<b>T6A3X</b>
			24V		<b>T6S3X</b>
1 contatto aux. <i>1 aux. switch</i>		230V	120"	<b>T6B3</b>	
		24V		<b>T6C3</b>	
		230V	30"	<b>T6B3W</b>	
		24V		<b>T6C3W</b>	
		230V	16"	<b>T6B3X</b>	
		24V		<b>T6C3X</b>	

ACCESSORI Accessories	Ø M Ø M	Ø F/ BOC. Ø F/ R.U.	Codice Code
Distanziale per coibentazione semplice <i>Spacer for pipes insulation without manual override</i>	Tutti <i>All</i>		<b>K3S6</b>
Distanziale per coibentazione con azionamento manuale <i>Spacer for pipes insulation with manual override</i>			<b>K3M6</b> ***
Guscio di coibentazione in polietilene reticolato espanso <i>Insulation shell made off crossed linked polyethylene foam</i>	3/4"-1"	1/2" - 3/4"	<b>GC03</b>
	1"1/4	1"	<b>GC13</b>
	1"1/2	1"1/4	<b>GC23</b>



<b>SERVOMOTORI PER VALVOLE A 3 VIE A DUE FORI</b> <b>ABBINABILI A DISTANZIALI CON AZIONAMENTO MANUALE</b> <i>3 WAYS "L" BORED ACTUATORS FOR SPACERS WITH MANUAL OVERRIDE (COD. K3M6)</i>				
Controllo <i>Control</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo corsa <i>Running time</i>	Codice <i>Code</i>
<b>Comando a 3 FILI</b>  <i>3-WIRES Control</i>	1 contatto aux.  <i>1 aux. switch</i>	230V	120"	<b>U7B3</b>
		24V	120"	<b>U7C3</b>
		230V	30"	<b>U7B3W</b>
		24V	30"	<b>U7C3W</b>
	2 contatti aux.  <i>2 aux. switch</i>	230V	120"	<b>U7X3</b>
		24V	120"	<b>U7Y3</b>
		230V	30"	<b>U7X3W</b>
		24V	30"	<b>U7Y3W</b>
<b>Comando a 2 FILI</b>  <i>2-WIRES Control</i>	1 contatto aux.  <i>1 aux. switch</i>	230V	120"	<b>V7B3</b>
		24V	120"	<b>V7C3</b>
		230V	30"	<b>V7B3W</b>
		24V	30"	<b>V7C3W</b>



### COPRIATTUATORE IN ACCIAIO INOX

Di semplice installazione: si aggancia e sgancia con un click

*STAINLESS STEEL actuator COVER.*  
*Easy click-on installation.*



<b>Codice</b> <i>Code</i>
<b>CMTF</b>



### NUOVO CONNETTORE RAPIDO PRESA-SPINA A 6 POLI PRECABLATO (IP68)

*IP68 NEW 6-PIN QUICK PLUG-JACK CONNECTOR*



<b>Codice</b> <i>Code</i>
<b>P/T--K</b>

Utile per evitare la presenza della scatola elettrica di connessione con la linea di alimentazione/comando.

*Useful for avoiding the presence of the electrical connection box with the power/control line.*

Per avere il connettore rapido precablato presa-spina aggiungere la lettera "K" alla fine del codice del motore.

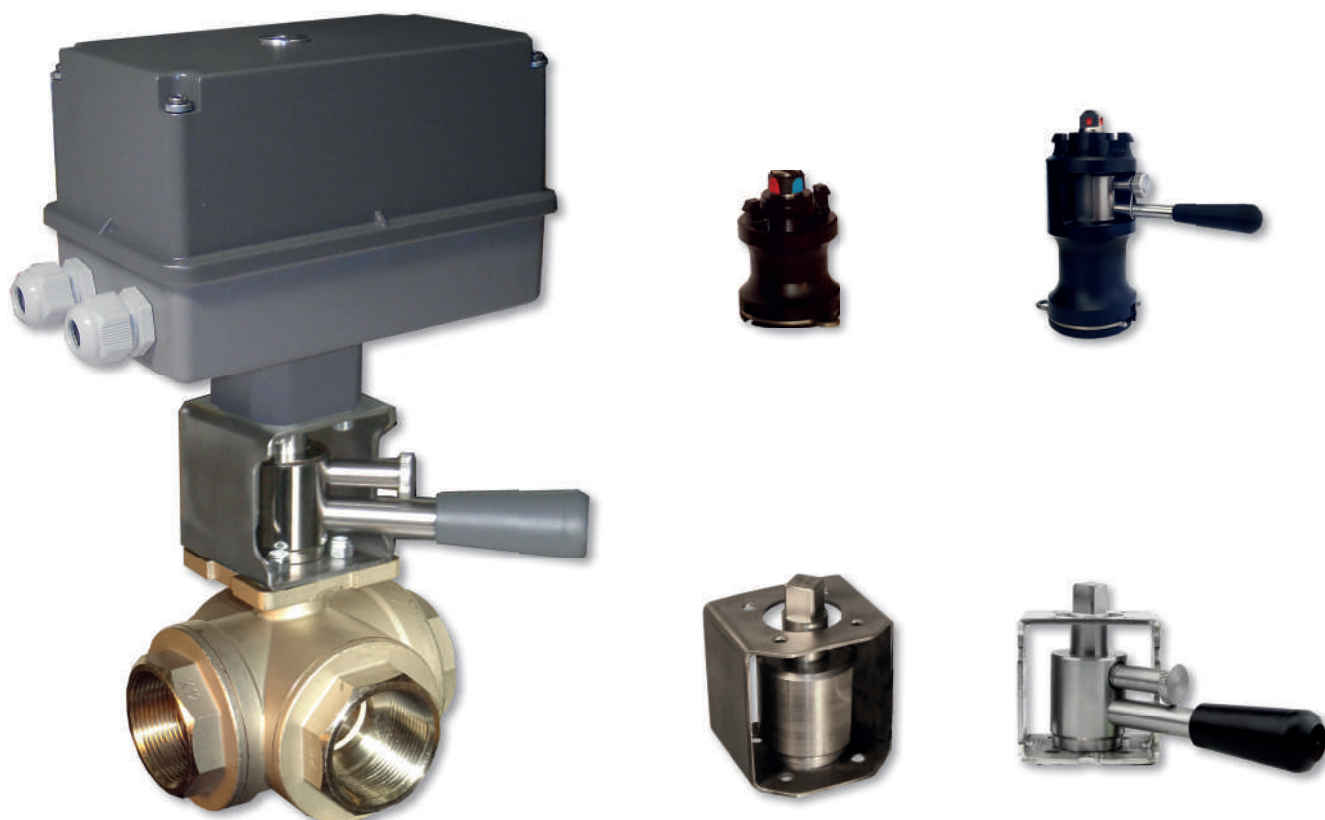
*In order to have the prewired quick plug - jack connector add the letter "K" at the end of the actuator code.*

Non disponibile per i motori con doppio contatto ausiliario  
*Not available for motors with double auxiliary contact*



# Valvole: **INOX**

Valves : **STAINLESS STEEL**



**VALVOLE A SFERA A PASSAGGIO TOTALE IN ACCIAIO INOX AISI 316  
COSTRUITE PER USI INDUSTRIALI, IMPIANTI CHIMICI E CIVILI PER  
IL CONVOGLIAMENTO DI FLUIDI, COMPRESI OLII ED IDROCARBURI.  
FLANGIA ISO 5211 PER ATTACCO SERVOMOTORE  
NON ADATTE PER VAPORE**

*AISI 316 STAINLESS STEEL FULL BORE BALL VALVES*

*DESIGNED FOR INDUSTRIAL, CHEMICAL AND CIVIL APPLICATIONS FOR THE HANDLING OF FLUIDS, INCLUDING OILS  
AND HYDROCARBONS.*

*ISO 5211 FLANGE FOR SERVOMOTOR CONNECTION NOT SUITABLE FOR STEAM*



# CARATTERISTICHE TECNICHE VALVOLE IN ACCIAIO INOX AISI 316

## TECHNICAL FEATURES AISI 316 STAINLESS STEEL VALVES

Corpo valvola : AISI 316  
Valve body : AISI 316

Sfera : AISI 316  
Ball : AISI 316

Sedi : PTFE caricato  
Seals : Reinforced PTFE

Asta : AISI 316 con O-ring in FKM (Viton®)  
Rod : AISI 316 with FKM (Viton®) O-ring

Pressione massima di esercizio : 63 bar  
Nominal operating pressure : 63 bar

Pressione differenziale massima :  $\Delta p = 6$  bar  
Maximum differential operating pressure :  $\Delta p$  6 bar

Temperatura di esercizio del fluido : -25 °C + 180 °C (\*)  
Fluid temperature field : -25 °C + 180 °C

(\*) Per valori inferiori a 0°C e maggiori di 100°C installare i distanziali a protezione del servomotore  
For values below 0°C and above 100°C, install spacers to protect the servomotor.

Perdite di carico : basse (passaggio totale)  
Load loss: minimum (full bore)

Attacchi: filettati femmina (ISO 228)  
Connections to pipe: female thread (ISO 228)

### SERVOMOTORI ACCOPPIATI - COUPLED SERVOMOTORS:

Tempi di apertura / chiusura - Opening / closing time: 60"

Tensioni disponibili - Supply Voltage: 230Vac - 24Vac (12 Vcc - 24 Vcc su richiesta / on demand)

Contatti Ausiliari - Auxiliary Switch: 2 (Contatto pulito) - (Free voltage)

Grado di protezione elettrica - Electric protection rating: IP42 - IP54 - IP65

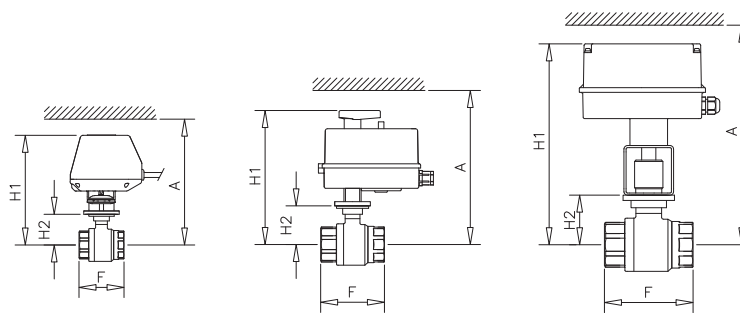
Tipo di comando: a 2 fili (relè interno) - a 3 fili (Comune - Apre - Chiude)

Control type: 2 wires (relay inside) - 3 wires (C-NO-NC)



### INGOMBRI VALVOLE MOTORIZZATE A 2 VIE - 2-WAYS MOTORIZED VALVES OVERALL DIMENSIONS

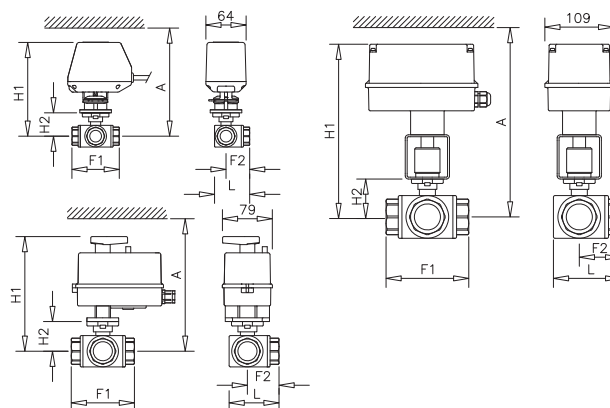
Ø	F	H1	H2	A	Flangia Flange
1/2"	57	149	37	169	ISO 5211 F03/F04 - □9
3/4"	64	155	43	175	
1"	77	183	46	198	ISO 5211 F04/F05 - □11
1 1/4"	90	191	54	206	
1 1/2"	105	274 *	60	294	ISO 5211 F05/F07 - □14
2"	125	282 *	68	302	



(\*) COMPRESO DISTANZIALE - INCLUDING SPACER

### INGOMBRI VALVOLE MOTORIZZATE A 3 VIE - 3-WAYS MOTORIZED VALVES OVERALL DIMENSIONS

Ø	F1	F2	L	H1	H2	A	Flangia Flange
1/2"	75	37.5	57.5	149	37	169	ISO 5211 F03/F04 - □9
3/4"	85	42.5	65.5	178	41	193	
1"	100	50.0	79.0	184	47	199	ISO 5211 F04/F05 - □11
1 1/4"	122	61.0	97.0	270 *	56	290	
1 1/2"	131	66.5	106.5	274 *	60	294	ISO 5211 F05/F07 - □14



(\*) COMPRESO DISTANZIALE - INCLUDING SPACER

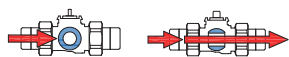
Per le valvole a tre vie, durante la rotazione il flusso è sempre possibile

*For 3-ways valves, during rotation the flow is always possible*

## CORPI VALVOLA

*BODY VALVES*

Ø	DN	Kv (m <sup>3</sup> /h)	Flangia ISO <i>ISO Flange</i>	PN	Codice <i>Code</i>
---	----	------------------------	----------------------------------	----	-----------------------



### 2 VIE ATTACCHI FEMMINA

*2-WAYS VALVES FEMALE CONNECTIONS*



1/2"	15	10,0	ISO 5211 F03/F04 □9	63	<b>832FI</b>
3/4"	20	18,0			<b>802FI</b>
1"	25	30,0	ISO 5211 F04/F05 □11		<b>812FI</b>
1"1/4	32	49,0			<b>822FI</b>
1"1/2	40	68,0	ISO 5211 F05/F07 □14		<b>842FI</b>
2"	50	126,0			<b>852FI</b>



### 3 VIE A 2 FORI ATTACCHI FEMMINA

*3-WAYS "L" BORED VALVES FEMALE CONNECTIONS*



1/2"	15	3,8	ISO 5211 F03/F04 □9	63	<b>83ALI</b>
3/4"	20	7,7	ISO 5211 F04/F05 □11		<b>80ALI</b>
1"	25	13,7			<b>81ALI</b>
1"1/4	32	20,0	ISO 5211 F05/F07 □14		<b>82ALI</b>
1"1/2	40	31,0			<b>84ALI</b>



### 3 VIE DEVIATRICI LATERALI ATTACCHI FEMMINA

*3-WAYS LATERAL DIVERTING VALVES FEMALE CONNECTIONS*



1/2"	15	3,8	ISO 5211 F03/F04 □9	63	<b>83ATI</b>
3/4"	20	7,7	ISO 5211 F04/F05 □11		<b>80ATI</b>
1"	25	13,7			<b>81ATI</b>
1"1/4	32	20,0	ISO 5211 F05/F07 □14		<b>82ATI</b>
1"1/2	40	31,0			<b>84ATI</b>

### DISTANZIALE per VALVOLE INOX

*SPACERS for STAINLESS STEEL VALVES*



Per attuatori M7I - R7I - P7I - T7I  
*With actuators M7I - R7I - P7I - T7I*

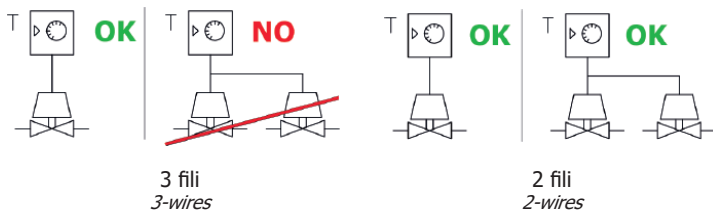
Per attuatori M8I - R8I  
*With actuators M8I - R8I*

Per attuatori M9I - R9I  
*With actuators M9I - R9I*

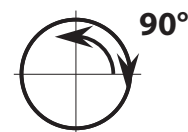
Tipo <i>Type</i>	Codice <i>Code</i>
Senza leva - <i>Without lever</i>	<b>K3S7</b>
Con leva - <i>With lever</i>	<b>K3M7</b>
Senza leva - <i>Without lever</i>	<b>K8I51</b>
Con leva - <i>With lever</i>	<b>DMI51</b>
Senza leva - <i>Without lever</i>	<b>K9I54</b>
Con leva - <i>With lever</i>	<b>DMI54</b>




## SERVOMOTORI ABBINABILI

### MATCHABLE ACTUATORS



Rotazione bidirezionale  
Bidirectional rotation



ISO 5211	Tempo corsa Running time	Contatto Aux. Aux. switch	IP	Controllo Control	Tensione Supply	Codice Code	Attuatori Actuators	
<b>F03 □ 9</b>	60"	1 contatto aux. 1 aux. switch	IP54	3 fili 3-wires	230 Vac	<b>M7IB9</b>	 Coppia Massima 12 Nm Maximum Torque	
				3-wires	24 Vac	<b>M7IC9</b>		
				2 fili 2-wires	230 Vac	<b>R7IB9</b>		
				2-wires	24 Vac	<b>R7IC9</b>		
			IP65	3 fili 3-wires	230 Vac	<b>P7IB9</b>		
				3-wires	24 Vac	<b>P7IC9</b>		
				2 fili 2-wires	230 Vac	<b>T7IB9</b>		
				2-wires	24 Vac	<b>T7IC9</b>		
<b>F05 □ 11</b>	60"	1 contatto aux. 1 aux. switch	IP42	3 fili 3-wires	230 Vac	<b>M8IB9</b>	 Coppia Massima 20 Nm Maximum Torque <b>(*) IP65 SENZA COMANDO MANUALE</b> <i>(*) IP65 WITHOUT MANUAL OVERRIDE</i>	
				3-wires	24 Vac	<b>M8IC9</b>		
				2 fili 2-wires	230 Vac	<b>R8IB9</b>		
				2-wires	24 Vac	<b>R8IC9</b>		
			IP65 (*)	3 fili 3-wires	230 Vac	<b>M8IB9P</b>		
				3-wires	24 Vac	<b>M8IC9P</b>		
				2 fili 2-wires	230 Vac	<b>R8IB9P</b>		
				2-wires	24 Vac	<b>R8IC9P</b>		
		2 contatti aux. 2 aux. switch	IP42	3 fili 3-wires	230 Vac	<b>M8IE9</b>		
				3-wires	24 Vac	<b>M8IF9</b>		
				2 fili 2-wires	230 Vac	<b>R8IE9</b>		
				2-wires	24 Vac	<b>R8IF9</b>		
				IP65 (*)	3 fili 3-wires	230 Vac		<b>M8IE9P</b>
					3-wires	24 Vac		<b>M8IF9P</b>
<b>F05 □ 14</b>	60"	2 contatti aux. 2 aux. switch	IP65	3 fili 3-wires	230 Vac	<b>M9IB9</b>	 Coppia Massima 50 Nm Maximum Torque	
				3-wires	24 Vac	<b>M9IC9</b>		
				2 fili 2-wires	230 Vac	<b>R9IB9</b>		
				2-wires	24 Vac	<b>R9IC9</b>		



# Valvole: **PVC**

Valves: **PVC**



## **VALVOLE A SFERA A PASSAGGIO TOTALE IN PVC , POLIVINILCLORURO NON PLASTIFICATO, PER UTILIZZO CON ACQUA FREDDA**

ATTACCHI FILETTATI FEMMINA : Ø 1/2"- 3/4"- 1" - 1"1/4 - 1"1/2 - 2"  
ATTACCHI AD INCOLLAGGIO : Ø 20 - 25 - 32 - 40 - 50 - 63

*FULL BORE BALL VALVES IN PVC, NON-PLASTICATED POLYVINICLORIDE, TO BE USED WITH COLD WATER*

*FEMALE THREADED CONNECTIONS : Ø 1/2 " - 3/4" - 1 " - 1" 1/4 - 1 "1/2 - 2"*

*GLUING SLEEVES : Ø 20 - 25 - 32 - 40 - 50 - 63*



## CARATTERISTICHE TECNICHE VALVOLE IN PVC-U

### TECHNICAL FEATURES PVC-U VALVES

Corpo valvola, sfera ed asta : PVC - U  
*Valve body, ball and rod: PVC - U*

Sedi : PTFE  
*Seals : PTFE*

Tenute asta : doppio O-ring in EPDM  
*Rod seals: double EPDM O-rings*

Pressione massima di esercizio : 16 bar  
*Nominal operating pressure : 16 bar*

Pressione differenziale massima :  $\Delta p = 6$  bar  
*Maximum differential operating pressure :  $\Delta p$  6 bar*

Temperatura di esercizio del fluido : 0 °C + 60 °C  
*Fluid temperature field : 0 °C + 60 °C*

Perdite di carico : basse (passaggio totale)  
*Load loss: minimum (full bore)*

Attacchi: con manicotti ad incollaggio oppure filettati femmina (ISO 228)  
*Connections to pipe: gluing sleeves or female thread (ISO 228)*

Certificazioni : CE, WRAS  
*Certificate : CE, WRAS*

**SERVOMOTORI ACCOPPIATI - COUPLED SERVOMOTORS:**

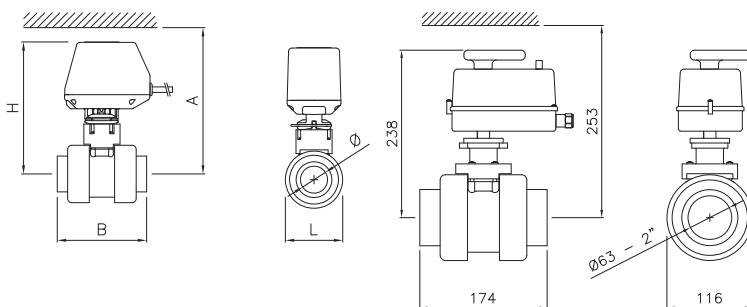
- Tempi di apertura / chiusura - *Opening / closing time: 60"*
- Tensioni disponibili - *Supply Voltage: 230Vac - 24Vac - 24Vdc - 12Vdc*
- Contatti Ausiliari - *Auxiliary Switch: 2 (Contatto pulito - Free voltage)*
- Grado di protezione elettrica - *Electric protection rating: IP42 - IP54 - IP65*
- Tipo di comando: a 2 fili (relè interno) - a 3 fili (Comune - Apre - Chiude)  
*Control type: 2 wires (relay inside) & 3 wires (C-NO-NC)*



**CORPO VALVOLA ISPEZIONABILE**  
*FULLY INSPECTIONABLE BODY VALVE*

**DN 15 ÷ DN 40**

**DN 50**



DN	Incollaggio <i>Bonding</i> Ø	Filettato <i>Threaded</i> Ø	H	A	B	L
15	20	1/2"	143	163	81	64
20	25	3/4"	150	170	92	64
25	32	1"	157	177	107	68
32	40	1"1/4	165	185	123	80
40	50	1"1/2	177	197	146	96
50	63	2"	238	253	174	116

**Impieghi consigliati per valvole motorizzate in PVC:**

- Piscine / irrigazione
- Impianti ad osmosi inversa
- Ambienti industriali
- Stalle ed allevamenti

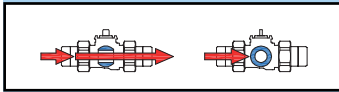
*Suggested applications for U-PVC Motorized ball valves:*

- *Swimming pools / irrigation*
- *Reverse osmosis circuits*
- *Industrial applications*
- *Cattle shed water circuit*

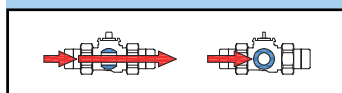
## CORPI VALVOLA

VALVE BODIES

Ø	DN	Kv (m <sup>3</sup> /h)	PN	Codice <i>Code</i>
<b>2 VIE CON MANICOTTI AD INCOLLAGGIO</b> <i>2-WAYS VALVES SOLVENT CEMENT CONNECTIONS</i>				



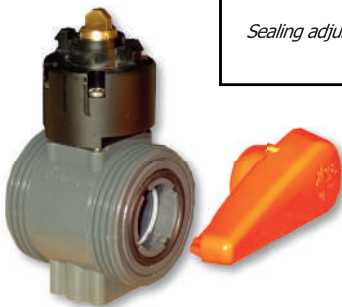
20	15	11,0	16	<b>432IK</b>
25	20	23,0		<b>402IK</b>
32	25	42,0		<b>412IK</b>
40	32	60,0		<b>422IK</b>
50	40	102,0		<b>442IK</b>
<b>63</b>	<b>50</b>	192,0		<b>452IK</b>



<b>2 VIE CON MANICOTTI FILETTATI FEMMINA</b> <i>2-WAYS VALVES FEMALE THREADED CONNECTIONS</i>				
1/2"	15	11,0	16	<b>432FK</b>
3/4"	20	23,0		<b>402FK</b>
1"	25	42,0		<b>412FK</b>
1"1/4	32	60,0		<b>422FK</b>
1"1/2	40	102,0		<b>442FK</b>
<b>2"</b>	<b>50</b>	192,0		<b>452FK</b>

Smontaggio valvola e serraggio guarnizioni mediante maniglia incorporata, non necessita di utensili aggiuntivi

*Sealing adjustment and disassembling by key incorporated on the handle (no need of any separate tool)*



Con inserti in ottone filettati per fissaggio semplificato della valvola

*Effortless valve fixing by means of threaded brass nuts.*



### DISTANZIALE PER VALVOLE IN PVC-U *SPACERS FOR PVC-U VALVES*



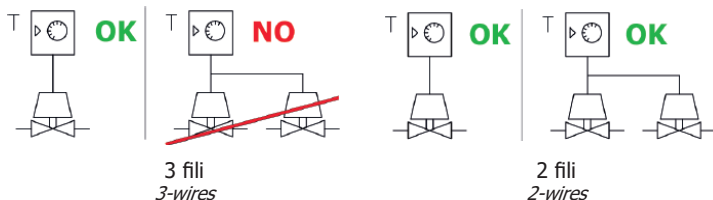
Per attuatori M7I - R7I - P7I - T7I  
*With actuators M7I - R7I - P7I - T7I*

Per attuatori M8I - R8I  
*With actuators M8I - R8I*

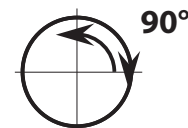
Tipo <i>Type</i>	Codice <i>Code</i>
Senza leva - <i>Without lever</i>	<b>K3S7</b>
Con leva - <i>With lever</i>	<b>K3M7</b>
Senza leva - <i>Without lever</i>	<b>K8I51</b>
Con leva - <i>With lever</i>	<b>DMI51</b>

## SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS



Rotazione bidirezionale  
Bidirectional rotation



DN	Tempo corsa Running time	Contatto Aux. Aux. switch	IP	Controllo Control type	Tensione Supply	Codice Code	Attuatori Actuators		
DN 15 ÷ DN 40	60"	1 contatto aux. 1 aux. switch	IP54	3 fili 3-wires	230 Vac	<b>M7B3XS</b>			
					24 Vac	<b>M7C3XS</b>			
				2 fili 2-wires	230 Vac	<b>R7B3XS</b>			
					24 Vac	<b>R7C3XS</b>			
			IP65	3 fili 3-wires	230 Vac	<b>P7B3XS</b>			
					24 Vac	<b>P7C3XS</b>			
	7" 12" 7" 12"			IP54	2 fili 2-wires	230 Vac		<b>T7B3XS</b>	
						24 Vac		<b>T7C3XS</b>	
				IP65	2 fili 2-wires	12Vdc		<b>R7B3CW12VCC</b>	
						24Vdc		<b>R7B3CW24VCC</b>	
	DN 50	60"	1 contatto aux. 1 aux. switch	IP42	3 fili 3-wires	230 Vac		<b>M8IB9</b>	
						24 Vac		<b>M8IC9</b>	
2 fili 2-wires					230 Vac	<b>R8IB9</b>			
					24 Vac	<b>R8IC9</b>			
IP65 (*)				3 fili 3-wires	230 Vac	<b>M8IB9P</b>			
					24 Vac	<b>M8IC9P</b>			
2 contatti aux. 2 aux. switch			IP42	2 fili 2-wires	230 Vac	<b>R8IB9P</b>			
					24 Vac	<b>R8IC9P</b>			
			IP65 (*)	3 fili 3-wires	230 Vac	<b>M8IE9</b>			
					24 Vac	<b>M8IF9</b>			
				2 fili 2-wires	230 Vac	<b>R8IE9</b>			
					24 Vac	<b>R8IF9</b>			
7" 12" 7" 12"				IP42	3 fili 3-wires	230 Vac	<b>M8IE9P</b>		
						24 Vac	<b>M8IF9P</b>		
				IP65 (*)	2 fili 2-wires	230 Vac	<b>R8IE9P</b>		
						24 Vac	<b>R8IF9P</b>		

(\*) IP65 SENZA  
COMANDO MANUALE

(\*) IP65 WITHOUT  
MANUAL OVERRIDE



## Valvole: FARFALLA

Valves: **BUTTERFLY**



**VALVOLE MOTORIZZATE PER APPLICAZIONI GRAVOSE NON ADATTE ALLE VALVOLE A SFERA, COME IN IMPIANTI CON ACQUE SPORCHE O LIQUAMI IN GENERE.**

**MOTORIZZAZIONI DISPONIBILI ANCHE IN CORRENTE CONTINUA**

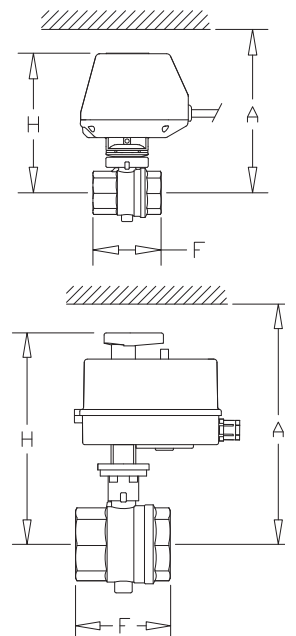
*MOTORIZED VALVES FOR HEAVY-DUTY APPLICATIONS NOT SUITABLE FOR BALL VALVES, SUCH AS IN SYSTEMS WITH DIRTY WATER OR SEWAGE IN GENERAL. DIRECT CURRENT MOTORS ALSO AVAILABLE*


### CARATTERISTICHE TECNICHE TECHNICAL FEATURES

- Attacchi filettati femmina (ISO 228)  
*Connections female thread (ISO 228)*
- Corpo valvola: Ottone CW617N UNI EN 12165 nichelato  
*Valve body: Brass CW617N UNI EN 12165 nickel plated*
- Asta: Ottone CW614N UNI EN 12164 con anello antigrippaggio in PTFE  
*Shaft: Brass CW614N UNI EN 12164 with PTFE anti-seize ring*
- Sede di tenuta : EPDM  
*Seals : EPDM*
- Otturatore a farfalla: tecnopolimero PEI  
*Butterfly shutter: technopolymer PEI*
- Pressione massima di esercizio : 16 bar  
*Nominal operating pressure : 16 bar*
- Pressione differenziale massima :  $\Delta p = 8$  bar  
*Maximum differential operating pressure :  $\Delta p = 8$  bar*
- Temperatura di esercizio del fluido :  $-10$  °C + 100 °C  
*Fluid temperature field :  $-10$  °C + 100 °C*

#### SERVOMOTORI ACCOPPIATI - COUPLED SERVOMOTORS:

Tempi di apertura / chiusura - *Opening / closing time: da 60" a 7" (from 60" to 7")*  
 Tensioni disponibili - *Supply Voltage: 230Vac - 24Vac - 24Vdc - 12Vdc*  
 Contatti Ausiliari - *Auxiliary Switch: massimo 2 maximum 2*  
 Grado di protezione elettrica - *Electric protection rating: IP42 - IP54 - IP65*  
 Tipo di comando: a 2 fili (relè interno) - a 3 fili (Comune - Apre - Chiude)  
*Control type: 2 wires (relay inside) & 3 wires (C-NO-NC)*



CORPI VALVOLA VALVE BODIES	Attacchi Connections	Kv (m <sup>3</sup> /h)	Ø	F	H max	A max	Codice Code
	Femmina Female	8,5	1/2"	49	135	155	<b>VF32F</b>
		14	3/4"	56	138	158	<b>VF02F</b>
		27	1"	64	142	162	<b>VF12F</b>
		43	1" 1/4	76	151	171	<b>VF22F</b>
		80	1" 1/2	82	155	175	<b>VF42F</b>
		140	2"	93	208	238	<b>VF52F</b>



**ACCESSORI :**

- COVER IN ACCIAIO INOX  
Pratica cover di protezione nelle installazioni in ambiente esterno: preserva dai raggi UV e conferisce uno scudo ulteriore di protezione nelle applicazioni più gravose. Si aggancia e si sgancia motore con un semplice click.

- STAINLESS STEEL COVER  
Practical protective cover for outdoor installations: protects from UV rays and provides an additional shield for heavy-duty applications. It can be locked and unlocked to the motor with a simple click.



**Codice**  
Code  
**CMP**

- CONNETTORE RAPIDO PRESA-SPINA A 6 POLI PRECABLATO (IP68)  
Permette lo sgancio e il collegamento rapido del motore in caso di manutenzioni, sostituzioni e tutte le attività ove sia necessario operare velocemente. Tale soluzione evita quindi la presenza della scatola elettrica di connessione con la linea di alimentazione/comando.

- PRE-WIRED 6-PIN QUICK CONNECTOR (IP68)  
Allows quick disconnection and connection of the motor in case of maintenance, replacement and all activities where it is necessary to operate quickly. This solution avoids the need for an electrical box to connect to the power/control line.



**Codice**  
Code  
**P/T--K**

**SERVOMOTORI ABBINABILI**  
*MATCHABLE ACTUATORS*

Rotazione bidirezionale  
*Bidirectional rotation*



**CORRENTE ALTERNATA 230 Vac - 24 Vac - ALTERNATING CURRENT 230 Vac - 24Vac**

Ø	Tipo controllo <i>Control type</i>	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux
		IP54 (senza comando manuale / <i>without manual override</i> )					IP65 (senza comando manuale / <i>without manual override</i> )		
1/2" ÷ 1"	Comando a 3 FILI	<b>M7BGW</b>	230 Vac	15"	1	<b>P7BGW</b>	230 Vac	15"	1
	Comando a 2 FILI	<b>R7BGW</b>	230 Vac	15"	1	<b>T7BGW</b>	230 Vac	15"	1
	Comando a 3 FILI	<b>M7CGW</b>	24 Vac	15"	1	<b>P7CGW</b>	24 Vac	15"	1
	Comando a 2 FILI	<b>R7CGW</b>	24 Vac	15"	1	<b>T7CGW</b>	24 Vac	15"	1
1"1/4	Comando a 3 FILI	<b>M7BFW</b>	230 Vac	15"	1	<b>P7BFW</b>	230 Vac	15"	1
	Comando a 2 FILI	<b>R7BFW</b>	230 Vac	15"	1	<b>T7BFW</b>	230 Vac	15"	1
	Comando a 3 FILI	<b>M7CFW</b>	24 Vac	15"	1	<b>P7CFW</b>	24 Vac	15"	1
	Comando a 2 FILI	<b>R7CFW</b>	24 Vac	15"	1	<b>T7CFW</b>	24 Vac	15"	1
1"1/2	Comando a 3 FILI	<b>M7BFXS</b>	230 Vac	60"	1	<b>P7BFXS</b>	230 Vac	60"	1
	Comando a 2 FILI	<b>R7BFXS</b>	230 Vac	60"	1	<b>T7BFXS</b>	230 Vac	60"	1
	Comando a 3 FILI	<b>M7CFXS</b>	24 Vac	60"	1	<b>P7CFXS</b>	24 Vac	60"	1
	Comando a 2 FILI	<b>R7CFXS</b>	24 Vac	60"	1	<b>T7CFXS</b>	24 Vac	60"	1
Ø	Tipo controllo <i>Control type</i>	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux
		IP42 (con comando manuale / <i>with manual override</i> )					IP65 (senza comando manuale / <i>without manual override</i> )		
2"	Comando a 3 FILI	<b>M8IB9</b>	230 Vac	60"	1	<b>M8IB9P</b>	230 Vac	60"	1
	Comando a 2 FILI	<b>R8IB9</b>	230 Vac	60"	1	<b>R8IB9P</b>	230 Vac	60"	1
	Comando a 3 FILI	<b>M8IC9</b>	24 Vac	60"	1	<b>M8IC9P</b>	24 Vac	60"	1
	Comando a 2 FILI	<b>R8IC9</b>	24 Vac	60"	1	<b>R8IC9P</b>	24 Vac	60"	1
	Comando a 3 FILI	<b>M8IE9</b>	230 Vac	60"	2	<b>M8IE9P</b>	230 Vac	60"	2
	Comando a 2 FILI	<b>R8IE9</b>	230 Vac	60"	2	<b>R8IE9P</b>	230 Vac	60"	2
	Comando a 3 FILI	<b>M8IF9</b>	24 Vac	60"	2	<b>M8IF9P</b>	24 Vac	60"	2
	Comando a 2 FILI	<b>R8IF9</b>	24 Vac	60"	2	<b>R8IF9P</b>	24 Vac	60"	2

**CORRENTE CONTINUA 12 Vcc - 24 Vcc - DC CURRENT 12 Vdc - 24 Vdc**

Ø	Tipo controllo <i>Control type</i>	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux	Codice <i>Code</i>	Alim. <i>Supply</i>	Tempi di corsa <i>Running times</i>	N° aux
		IP54 (senza comando manuale / <i>without manual override</i> )					IP65 (senza comando manuale / <i>without manual override</i> )		
1/2" ÷ 1"	Comando a 2 FILI	<b>R7BGCW12VCC</b>	12 Vcc	7"	1	<b>T7BGCW12VCC</b>	12 Vcc	7"	1
		<b>R7BGCW24VCC</b>	24 Vcc	12"	1	<b>T7BGCW24VCC</b>	24 Vcc	12"	1
1"1/4 1"1/2	Comando a 2 FILI	<b>R7BFCW12VCC</b>	12 Vcc	7"	1	<b>T7BFCW12VCC</b>	12 Vcc	7"	1
		<b>R7BFCW24VCC</b>	24 Vcc	12"	1	<b>T7BFCW24VCC</b>	24 Vcc	12"	1
2"	<b>SU RICHIESTA   ON REQUEST</b>								

Disponibili altri tempi di corsa e n° contatti ausiliari; contattare De Pala.  
*Other running times and no. of auxiliary contacts available; Please contact De Pala.*



# Valvole: **MIX**

Valves : **MIX**



**1) VALVOLE A SFERA MODULANTI E MISCELATRICI A CARATTERISTICA EQUIPERCENTUALE DA 1/2" A 1"1/2 CON TENUTA COMPLETA IN CHIUSURA**

**2) VALVOLE MISCELATRICI E DEVIATRICI A ROTORE/SETTORE DA 3/4" A DN 100**

**3) VALVOLE MISCELATRICI E DEVIATRICI TERMOSTATICHE**

*1) MODULATING AND MIXING BALL VALVES WITH EQUIPERCENTAGE FLOW CURVE FROM 1/2" TO 1"1/2 WITH COMPLETE CLOSING SEAL*

*2) ROTOR/SECTOR MIXING AND DIVERTING VALVES FROM 1/2" TO DN 100*

*3) THERMOSTATIC MIXING AND DIVERTING VALVES*

Ideali per le regolazioni automatiche in:

IMPIANTI DI RISCALDAMENTO E CONDIZIONAMENTO CIVILI ED INDUSTRIALI CHE RICHIEDONO IL CONTROLLO DELLA PORTATA O LA MISCELAZIONE DI DUE FLUSSI CALDO E FREDDO IN INGRESSO PER IL CONTROLLO DELLA TEMPERATURA MISCELATA IN USCITA.

*Mixing valves are suitable for:*

*DOMESTIC AND INDUSTRIAL HEATING AND CONDITIONING PLANTS IN WHICH A PRECISE FLOW RATE CONTROL IS NEEDED OR IN WHICH AN ACCURATE MIXING OF COLD AND HOT INLET FLUIDS IS NEEDED, TO REACH AN OPTIMAL OUTLET FLUID CONTROL.*



A PAG. 64: REGOLATORI CLIMATICI  
CLIMATIC CONTROL UNITS : SEE PAGES 64

## INGOMBRI VALVOLE E SERVOMOTORI

OVERALL DIMENSIONS VALVES & ACTUATORS

Per dimensioni valvole comando a 3 punti vedere pag. 7 e 15 <i>Overall dimensions 3-point control valves see page 7 and 15</i>															
Ø	H	A min.	C	F	P	B	L	H	A min.	C	F	B	Q	R	L
<b>1/2"</b>	137	143	57	77	105	131	73	137	143	57	76	130	38	65	73
<b>3/4"</b>					108	139						136		68	
<b>1"</b>	140	146	60	87	121	156		141	147	61	86	155	43	78	
<b>1"1/4</b>	144	150	64	94	133	172		144	150	64	94	172	47	86	
<b>1"1/2</b>	152	158	72	108	151	193		152	158	72	108	193	60	102	

FILETTATE / *THREADED*

FLANGIATE / *FLANGED*

Ø	A	A/2	DN	A	A/2	B	I	F
<b>3/4"</b>	85	42,5	<b>40</b>	180	90	130	100	14
<b>1"</b>	85	42,5	<b>50</b>	200	100	140	110	14
<b>1"1/4</b>	122	61	<b>65</b>	200	100	160	130	14
<b>1"1/2</b>	135	67,5	<b>80</b>	234	117	190	150	18
<b>2"</b>	180	90	<b>100</b>	160	80	210	170	18

FLANGIE FISSE PER TUBAZIONI PN6 SECONDO UNI EN 1092-1

*FIXED FLANGES FOR PN6 PIPES ACCORDING TO UNI EN 1092-1*





MISCELATRICE / *MIXING*

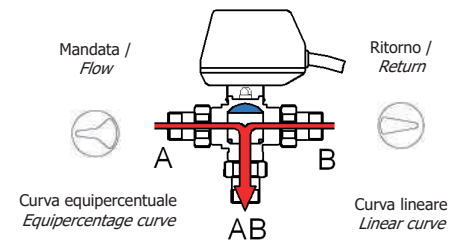
DEVIATRICE / *DIVERTING VALVE*

<b>B:</b> diam. filetto attacchi Bocchettone. <i>B: Pipe-unions thread connection diameter.</i>  <b>M:</b> diam. filetto maschio. <i>M: Male thread diameter.</i>											
B	M	H	M	B	Q	R	H	M	B	Q	R
<b>1/2"</b>	<b>3/4"</b>	66	60	116	52	80	52	60	116	52	80
<b>3/4"</b>	<b>1"</b>	67	70	130	49	79	56	70	130	49	79
<b>1"</b>	<b>1" 1/4</b>	78	96	166	62	97	-	-	-	-	-
<b>1" 1/4</b>	<b>1" 1/2</b>	78	104	180	66	104	-	-	-	-	-

# VALVOLE A SFERA MISCELATRICI MODULANTI e di CONTROLLO di PORTATA VIA MISCELATA CENTRALE

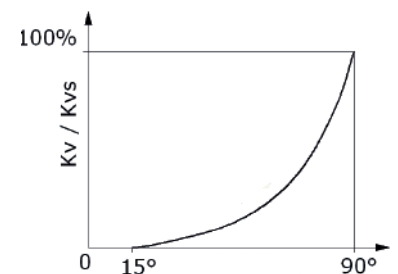
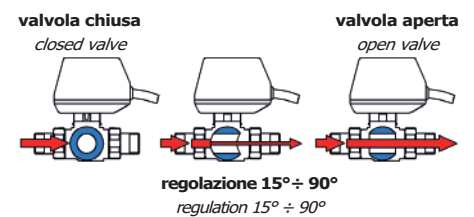
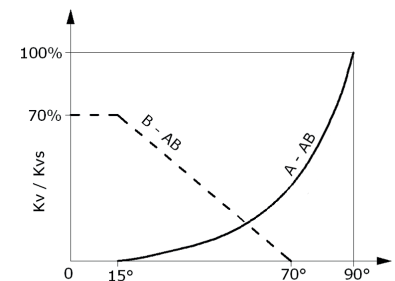
MODULATING EQUIPERCENTAGE MIXING and FLOW CONTROL BALL VALVES - **CENTRAL MIXED WAY**

	Attacchi Connections	Ø	Kvs (m <sup>3</sup> /h)	Codice Code
<b>3 VIE MISCELATRICE MODULANTE EQUIPERCENTUALE</b> 3-WAYS MODULATING MIXER EQUIPERCENTAGE	Femmina Female 	1/2"	0,63	<b>E23F0</b>
			1,0	<b>E23F1</b>
			1,6	<b>E23F2</b>
			2,5	<b>E23F3</b>
			4,0	<b>E23F4</b>
		3/4"	1,6	<b>E33F2</b>
			2,5	<b>E33F3</b>
			4,0	<b>E33F4</b>
		1"	6,3	<b>E33F6</b>
		1"1/4	6,3	<b>E43F6</b>
			10	<b>E43F5</b>
		1"1/2	10	<b>E53F5</b>
	16		<b>E53F8</b>	
	Bocchettone Pipe-unions 	1/2"	0,63	<b>E23B0</b>
			1,0	<b>E23B1</b>
			1,6	<b>E23B2</b>
			2,5	<b>E23B3</b>
			4,0	<b>E23B4</b>
		3/4"	1,6	<b>E33B2</b>
			2,5	<b>E33B3</b>
			4,0	<b>E33B4</b>
		1"	6,3	<b>E33B6</b>
		1"1/4	6,3	<b>E43B6</b>
			10	<b>E43B5</b>
1"1/2		10	<b>E53B5</b>	
	16	<b>E53B8</b>		
<b>2 VIE PER CONTROLLO DI PORTATA EQUIPERCENTUALE</b> 2-WAYS FLOW CONTROL EQUIPERCENTAGE	Femmina Female 	1/2"	0,63	<b>E22F0</b>
			1,0	<b>E22F1</b>
			1,6	<b>E22F2</b>
			2,5	<b>E22F3</b>
			4,0	<b>E22F4</b>
		3/4"	1,6	<b>E32F2</b>
			2,5	<b>E32F3</b>
			4,0	<b>E32F4</b>
		1"	6,3	<b>E42F6</b>
		1"1/4	6,3	<b>E42F5</b>
			10	<b>E52F5</b>
		1"1/2	10	<b>E52F8</b>
	16		<b>E62F8</b>	
	Bocchettone Pipe-unions 	1/2"	0,63	<b>E22B0</b>
			1,0	<b>E22B1</b>
			1,6	<b>E22B2</b>
			2,5	<b>E22B3</b>
			4,0	<b>E22B4</b>
		3/4"	1,6	<b>E32B2</b>
			2,5	<b>E32B3</b>
			4,0	<b>E32B4</b>
		1"	6,3	<b>E32B6</b>
		1"1/4	6,3	<b>E42B6</b>
			10	<b>E42B5</b>
1"1/2		10	<b>E52B5</b>	
	16	<b>E52B8</b>		
1"1/2	16	<b>E62B8</b>		
	25	<b>E62B9</b>		



regolazione sulla  
VIA MISCELATA CENTRALE A-AB  
15° ÷ 90°

regulation on **CENTRAL MIXED WAY**  
A-AB way 15° ÷ 90°





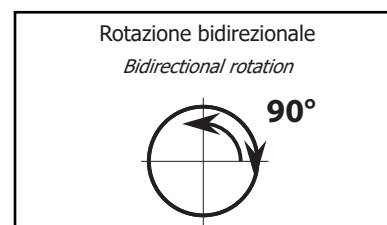
**SERVOMOTORI MODULANTI  
PER VALVOLE CON CARATTERISTICA EQUIPERCENTUALE**  
*MODULATING ACTUATORS  
FOR VALVES WITH EQUIPERCENTAGE FLOW CURVE*

**Comando a 3-punti**  
*3-point control actuators*

Protezione <i>IP Rating</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP54	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>M7B3E</b>
		24V		<b>M7C3E</b>
IP65	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>P7B3E</b>
		24V		<b>P7C3E</b>

**Comando 0-10Vcc / 2-10Vcc / 0-20mA / 4-20mA**  
*0-10Vdc / 2-10Vdc / 0-20mA / 4-20mA control*

Protezione <i>IP Rating</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP65	24V	30"	<b>P7EV9V</b>
		60"	<b>P7EV9</b>
		120"	<b>P7EV9L</b>



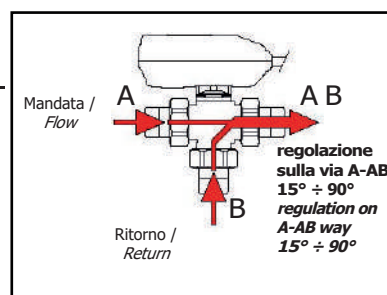
**VALVOLE A SFERA MISCELATRICI MODULANTI  
VIA MISCELATA LATERALE**

*MODULATING EQUIPERCENTAGE MIXING BALL VALVES - LATERAL MIXED WAY*

**VALVOLE MISCELATRICI MODULANTI LATERALI**  
*LATERAL MODULATING MIXING VALVES*

**Corpi valvola - Valve bodies**

	Attacchi <i>Connections</i>	Ø	Kvs (m³/h)	Codice <i>Code</i>
	Bocchettone <i>Pipe-unions</i>	3/4"	3/4"	2,5
4,0				<b>F33B4L</b>
1"		1"	4,0	<b>F43B3L</b>
			6,3	<b>F43B4L</b>



**Comando a 3-punti**  
*3-point control actuators*

Protezione <i>IP Rating</i>	Contatto Aux. <i>Aux. Switch</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP54	NO	230V	60"	<b>M2AL</b>
		24V		<b>M2SL</b>

**Comando 0-10Vcc / 2-10Vcc / 0-20mA / 4-20mA**  
*0-10Vdc / 2-10Vdc / 0-20mA / 4-20mA control*

Protezione <i>IP Rating</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP65	24V	30"	<b>P7FV9V</b>
		60"	<b>P7FV9</b>
		120"	<b>P7FV9L</b>



# VALVOLE MISCELATRICI O DEVIATRICI A SETTORE O ROTORE

MIXING OR DEVIATING VALVES WITH SECTOR OR ROTOR SHUTTER

VALVOLE A **3 VIE** A **SETTORE** - CORPO VALVOLA FILETTATO *3-WAYS SECTOR VALVES - THREADED BODY VALVE CONNECTIONS*



Ø	Kv (m <sup>3</sup> /h)	Codice Code
3/4"	12	<b>303GS</b>
1"	16	<b>313GS</b>
1"1/4	22	<b>323GS</b>
1"1/2	40	<b>343GS</b>
2"	62	<b>353GS</b>



VALVOLE A **3 VIE** A **SETTORE** - CORPO VALVOLA FLANGIATO *3-WAYS SECTOR VALVES - FLANGED BODY VALVE CONNECTIONS*



DN	Kv (m <sup>3</sup> /h)	Codice Code
40	40	<b>343FS</b>
50	62	<b>353FS</b>
65	100	<b>363FS</b>
80	185	<b>373FS</b>
100	330	<b>383FS</b>

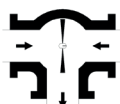
TUBAZIONE  
**PN 6**  
PIPE  
UNI EN  
1092-1

FLANGE FISSE / COLLAR FLANGE

VALVOLE A **3 VIE** A **ROTORE** - CORPO VALVOLA FILETTATO *3-WAYS ROTOR VALVES - THREADED BODY VALVE CONNECTIONS*



Ø	Kv (m <sup>3</sup> /h)	Codice Code
3/4"	12	<b>303GR</b>
1"	16	<b>313GR</b>
1"1/4	22	<b>323GR</b>
1"1/2	40	<b>343GR</b>
2"	62	<b>353GR</b>



VALVOLE A **3 VIE** A **ROTORE** - CORPO VALVOLA FLANGIATO *3-WAYS ROTOR VALVES - FLANGED BODY VALVE CONNECTIONS*



DN	Kv (m <sup>3</sup> /h)	Codice Code
40	40	<b>343FR</b>
50	62	<b>353FR</b>
65	100	<b>363FR</b>
80	185	<b>373FR</b>
100	330	<b>383FR</b>

TUBAZIONE  
**PN 6**  
PIPE

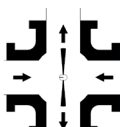
UNI EN  
1092-1

FLANGE FISSE / COLLAR FLANGE

VALVOLE A **4 VIE** A **ROTORE** - CORPO VALVOLA FILETTATO *4-WAYS ROTOR VALVES - THREADED BODY VALVE CONNECTIONS*



Ø	Kv (m <sup>3</sup> /h)	Codice Code
3/4"	12	<b>304GR</b>
1"	16	<b>314GR</b>
1"1/4	22	<b>324GR</b>
1"1/2	40	<b>344GR</b>
2"	62	<b>354GR</b>



VALVOLE A **4 VIE** A **ROTORE** - CORPO VALVOLA FLANGIATO *4-WAYS ROTOR VALVES - FLANGED BODY VALVE CONNECTIONS*



DN	Kv (m <sup>3</sup> /h)	Codice Code
40	40	<b>344FR</b>
50	62	<b>354FR</b>
65	100	<b>364FR</b>
80	185	<b>374FR</b>
100	330	<b>384FR</b>

TUBAZIONE  
**PN 6**  
PIPE

UNI EN  
1092-1

FLANGE FISSE / COLLAR FLANGE

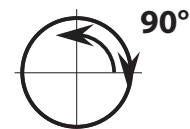
## SERVOMOTORI ABBINABILI

MATCHABLE ACTUATORS

### PER VALVOLE A SETTORE E ROTORE FINO A Ø1"1/4 (DN32)

FOR SECTOR & ROTOR VALVES UP TO Ø1"1/4 (DN 32)

Rotazione bidirezionale  
Bidirectional rotation



<b>Alimentazione 230 Vca - 24Vca - Comando a 3-PUNTI</b> <i>230 Vac - 24 Vac Power Supply - 3-WIRES Control</i>				
Protezione <i>IP Rating</i>	Contatto Aux. <i>Aux. switch</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP54	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>M7BE8</b>
		24V	120"	<b>M7CE8</b>
IP65	1 contatto aux. <i>1 aux. switch</i>	230V	120"	<b>P7BE8</b>
		24V	120"	<b>P7CE8</b>



<b>Comando 0-10Vcc / 2-10Vcc / 0-20mA / 4-20mA</b> <i>0-10Vdc / 2-10Vdc / 0-20mA / 4-20mA control</i>				
IP65	1 contatto aux. <i>1 aux. switch</i>	24V	60"	<b>P7MV8</b>
			120"	<b>P7MV8L</b>



### PER VALVOLE A SETTORE E ROTORE CON DIAMETRI SUPERIORI A Ø1"1/4 - DN32

FOR SECTOR & ROTOR VALVES with diameters over Ø1"1/4 - DN 32

<b>Alimentazione 230 Vca - 24Vca - Comando a 3-PUNTI</b> <i>230 Vac - 24 Vac Power Supply - 3-WIRES Control</i>				
Protezione <i>IP Rating</i>	Contatto Aux. <i>Aux. Switch</i>	Alimentaz. <i>Supply</i>	Tempo manovra <i>Rotation time</i>	Codice <i>Code</i>
IP42	1 contatto aux. <i>1 aux. switch</i>	230V	180"	<b>M8MB9</b>
		24V	180"	<b>M8MC9</b>



<b>Comando 0-10Vcc / 2-10Vcc / 0-20mA / 4-20mA</b> <i>0-10Vdc / 2-10Vdc / 0-20mA / 4-20mA control</i>				
IP42	1 contatto aux. <i>1 aux. switch</i>	24V	180"	<b>M8MV9</b>



## VALVOLA TERMOSTATICA ANTICONDENZA

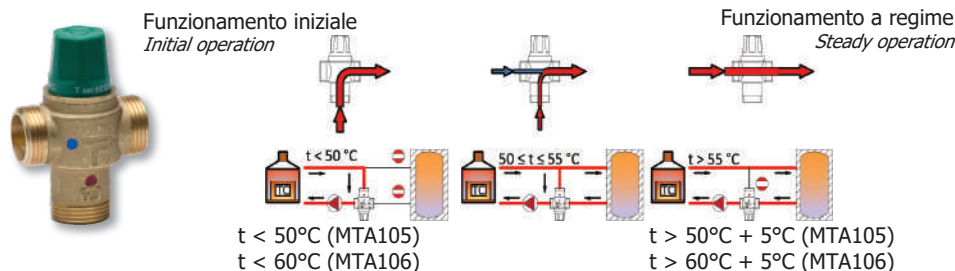
THERMOSTATIC ANTI-DEW VALVE

**Deviazione a 50+5 °C o 60+5 °C**

Attacchi maschio Ø 1"  
Attacchi bocchettone Ø 3/4"

Set Point 50+5 °C or 60+5 °C

Ø 1" Male &  
Ø 3/4" Pipe-unions fittings



Caratteristiche Specifications	Kv (m <sup>3</sup> /h)	Ø	Taratura Set Point	Codice Code
Pressione massima di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> Pressione di lavoro: 0 ÷ 5 bar <i>Working pressure: 0 ÷ 5 bar</i> Temperatura massima acqua calda: 90° C <i>Hot water maximum temperature: 90° C</i> <b>SOLTANTO PER FUNZIONE ANTICONDENZA</b> <i>ONLY FOR ANTICONDENSATION FUNCTION</i>	2,7	1"	50+5°C	<b>MTA105</b>
		3/4"	50+5°C	<b>MTA105B (*)</b>
		1"	60+5°C	<b>MTA106</b>
		3/4"	60+5°C	<b>MTA106B (*)</b>

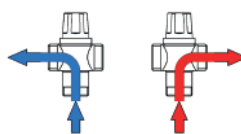
(\*) = Completo Di Kit Bocchettoni      (\*) = With Pipe-Unions Attachments

## VALVOLA DEVIATRICE TERMOSTATICA

THERMOSTATIC DIVERTING VALVE



Quando l'acqua proveniente dalla via centrale arriva a 45° C, la valvola devia l'acqua da un'uscita laterale all'altra



As soon as water coming from middle-way reaches 45° C the thermostatic valve diverts flow from a lateral way to the other.

**Set point deviazione: 45 °C**

Attacchi Maschio Ø 3/4" e 1"  
Attacchi Bocchettone Ø 1/2" e 3/4"

Diverting set point 45 °C

Ø 3/4" and 1" Male  
Ø 1/2" and 3/4" Pipe-unions fittings

Caratteristiche Specifications	Kv (m <sup>3</sup> /h)	Ø	Taratura Set Point	Codice Code
Pressione massima di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> Pressione di lavoro: 1 ÷ 5 bar <i>Working pressure: 1 ÷ 5 bar</i> Temperatura massima acqua calda: 100° C <i>Hot water maximum temperature: 100° C</i> <b>PER UTILIZZO CON ACQUA SANITARIA</b> <i>TO BE USED WITH SANITARY WATER</i>	1,4	3/4"	45 °C	<b>VDT34</b>
		1/2"		<b>VDT34B (*)</b>
	2,0	1"	45 °C	<b>VDT10</b>
		3/4"		<b>VDT10B (*)</b>

(\*) = Completo Di Kit Bocchettoni      (\*) = With Pipe-Unions Attachments

## ACCESSORI PER VALVOLE E MISCELATORI TERMOSTATICI

Accessories for thermostatic valves and mixers

	Ø M Ø M	Ø F/ BOC. Ø F/ P.U.	Codice Code
Guscio di coibentazione in polietilene reticolato espanso per valvole termostatiche filetto Maschio e Bocchettoni	3/4"	1/2"	<b>GC0T</b>
<i>Cross-linked polyethylene closed-cell insulating shell for Male and Pipe-Union threaded thermostatic valves</i>	1"	3/4"	<b>GC1T</b>




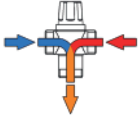

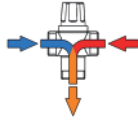

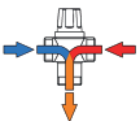

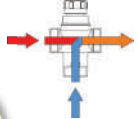


# MISCELATORI TERMOSTATICI

TERMOSTATIC MIXING VALVES

# REGOLANO AD UN VALORE PREFISSATO LA TEMPERATURA DELL'ACQUA IN USCITA MISCELANDO AUTOMATICAMENTE L'ACQUA CALDA E L'ACQUA FREDDA

TERMOSTATIC VALVE THAT REGULATES WATER TEMPERATURE AT A WISHED VALUE BY AN AUTOMATIC **MIXING ACTION** OF HOT AND COLD WATER

Caratteristiche Specifications	Kv (m³/h)	Ø	Codice Code	Corpi valvola Valve bodies
<b>PER ACQUA SANITARIA IN IMPIANTI CON SOLARE TERMICO</b> FOR SANITARY WATER IN DHW SOLAR CIRCUITS - Pressione massima di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> - Pressione di lavoro: 1 ÷ 5 bar <i>Working pressure: 1 ÷ 5 bar</i> - Temperatura massima acqua calda: 100° C <i>Hot water maximum temperature: 100° C</i> - Campo di regolazione temperatura: <b>30 ÷ 65° C</b> <i>Temperature range: 30 ÷ 65° C</i>	1,8	3/4"	<b>MTS34</b>	  <p>Per impianti con solare termico <i>For solar thermal system</i></p>
		1/2"	<b>MTS34B (*)</b>	
	3,2	1"	<b>MTS10</b>	
		3/4"	<b>MTS10B (*)</b>	
	7,4	1"1/4	<b>MTS54</b>	
		1"	<b>MTS54B (*)</b>	
	7,6	1"1/2	<b>MTS64</b>	
		1"1/4	<b>MTS64B (*)</b>	
<b>PER ACQUA SANITARIA (NON ADATTA IN IMPIANTI CON SOLARE TERMICO)</b> FOR SANITARY WATER (NOT SUITABLE FOR SOLAR THERMAL SYSTEMS) - Pressione massima di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> - Pressione di lavoro: 1 ÷ 5 bar <i>Working pressure: 1 ÷ 5 bar</i> - Temperatura massima acqua calda: 85° C <i>Hot water maximum temperature: 85° C</i> - Campo di regolazione temperatura: <b>30 ÷ 65° C</b> <i>Temperature range: 30 ÷ 65° C</i>	1,8	3/4"	<b>MTC34</b>	  <p>Per impianti senza solare termico <i>For systems without solar thermal circuit</i></p>
		1/2"	<b>MTC34B (*)</b>	
	3,2	1"	<b>MTC10</b>	
		3/4"	<b>MTC10B (*)</b>	
		1"1/2	<b>MTC64</b>	
<b>PER RISCALDAMENTO A BASSA TEMP.</b> FOR LOW TEMPERATURE PLANTS - Pressione massima di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> - Pressione di lavoro: 1 ÷ 5 bar <i>Working pressure: 1 ÷ 5 bar</i> - Temperatura massima acqua calda: 85° C <i>Hot water maximum temperature: 85° C</i> - Campo di regolazione temperatura: <i>Temperature range:</i> <b>20 ÷ 65° C (cod. MTP10)</b> <b>20 ÷ 55° C (cod. MTP64)</b>	3,2	1"	<b>MTP10</b>	  <p>Per impianti a pannelli radianti <i>For underfloor heating systems</i></p>
		3/4"	<b>MTP10B (*)</b>	
	7,6	1"1/2	<b>MTP64</b>	
		1"1/4	<b>MTP64B (*)</b>	
		1"	<b>MTB10</b>	
<b>PER RISCALDAMENTO A BASSA E ALTA TEMPERATURA</b> FOR HIGH AND LOW TEMPERATURE PLANTS Pressione max di esercizio: 10 bar <i>Maximum nominal pressure: 10 bar</i> Pressione di lavoro: 0 ÷ 5 bar <i>Working pressure: 0 ÷ 5 bar</i> Temperatura massima ingresso: 90° C <i>Hot water maximum temperature: 90° C</i> Campo di regolazione temperatura : <i>Temperature range:</i> <b>20 ÷ 47° C (cod. MTB10 - MTB10B)</b> <b>35 ÷ 60° C (cod. MTA10 - MTA10B)</b>	2,7	3/4"	<b>MTB10B (*)</b>	  <p><b>MTB10: 20 ÷ 47° C</b> Per impianti a pannelli radianti <i>For underfloor heating systems</i></p> <p><b>MTA10: 35 ÷ 60° C</b> Per impianti ad alta temperatura <i>For high temperature plants</i></p>
		1"	<b>MTA10</b>	
	3,2	1"	<b>MTA10</b>	
		3/4"	<b>MTA10B (*)</b>	

(\*) = Completo Di Kit Bocchettoni

(\*) = With Pipe-Unions Attachments



# CENTRALINE ELETTRONICHE

ELECTRONIC CONTROL UNITS



## REGOLATORI CLIMATICI

DELLA TEMPERATURA AMBIENTE CON SONDA DI MANDATA, ESTERNA ED AMBIENTE  
CENTRALINE DIGITALI PER IMPIANTI SOLARI, E PER TERMOCAMINI / TERMOSTUFE  
TERMOSTATI AMBIENTE MECCANICI E CRONOTERMOSTATI DIGITALI

*HVAC UNIVERSAL DIGITAL CONTROLES  
TO CONTROL ROOM TEMPERATURE WITH EXTERNAL, ROOM AND DELIVERY SENSOR  
DIGITAL TEMPERATURE CONTROLLERS FOR SOLAR SYSTEMS AND FOR FIREPLACES  
MECHANIC ROOM THERMOSTAT AND DIGITAL CHRONOTHERMOSTATS*

## CENTRALINA DI CONTROLLO DIGITALE CON PANNELLO IN VETRO PER MODULI DI INTERFACCIA, IMPIANTI SOLARI E PRODUTTORI ISTANTANEI ACS - CON SEGNALE PWM

### DIGITAL CONTROL UNIT

TO CONTROL INTERFACE MODULES, SOLAR SYSTEMS AND DHW MODULES - WITH PWM OUTPUT SIGNAL

Termoregolatore digitale da incasso/parete a 3 moduli con finitura vetro senza cornice per una alta resa estetica di facile integrazione nelle abitazioni.

#### Comandi Touch

Sonda di temperatura elettronica ad immersione NTC 10K (pozzetto non incluso)

4 termostati con set point di temperatura regolabile

2 ingressi sonda + 1 ingresso flussostato / pressostato

4 uscite di controllo: due contatti ON/OFF (Pompa I° e II°), un contatto in deviazione per valvola a 3 vie ed un contatto pulito per controllo termostato caldaia

*Digital Temperature Controller box 3 module for Inbox/Wall borderless glass finish with sharp beautiful design*




#### Touch screen

*Electronic temperature bulb sensor NTC 10K (tee not included)*

*3 adjustable thermostats to control*

*2 sensor inputs + 1 flow switch / pressure switch input*

*4 control outputs: two SPST contacts (Circulator I & II), one SPDT contact (3-ways valve), one free voltage SPDT contact (for boiler)*

SERIE GDC	Modello / Model	Codice Code
	FINITURA VETRO TOUCH SCREEN ALIMENTAZIONE 230VAC  <i>GLASS TOUCH SCREEN 230VAC POWER SUPPLY</i>	<b>GDCW</b>
	SONDA AD IMMERSIONE PER POZZETTO (POZZETTO NON INCLUSO) <i>BULB SENSOR (TEE NON INCLUDED)</i>	<b>BHW10N</b>
	SONDA PER POZZETTO (POZZETTO NON INCLUSO) <i>BULB SENSOR (TEE NON INCLUDED)</i>	<b>SBF10N</b>

## REGOLATORE DIGITALE TEMPERATURA DI MANDATA ACQUA IMPIANTO

DIGITAL WATER FLOW TEMPERATURE CONTROLLER

REGOLATORE AD AZIONE PID - PROPORZIONALE INTEGRALE DERIVATIVA, PER COMANDO VALVOLE MISCELATRICI O DI REGOLAZIONE PORTATA, MODULANTI CON SEGNALE A 3 PUNTI OPPURE 0 + 10 Vdc

- ingresso digitale per comando da remoto (termostato)

- ingresso digitale per comando estate - inverno

- controllo on/off della pompa di mandata impianto e della produzione di energia in caldo e in freddo

- modulazione invernale a set. p.to fisso o compensato tramite valore temperatura esterna

- modulazione estiva a set. punto fisso (applicabile solo per impianto fan coil)

*PID ACTION REGULATOR - PROPORTIONAL INTEGRAL DERIVATIVE, FOR CONTROLLING MIXING VALVES, OR FLOW REGULATORS, MODULATING WITH 3-POINT SIGNAL OR 0 + 10 Vdc*






*- digital input for remote control (thermostat)*

*- digital input for summer-winter control*

*- on/off control of the system delivery pump and of hot and cold energy production*


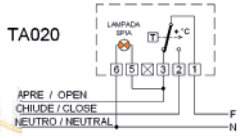
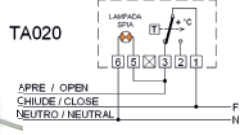

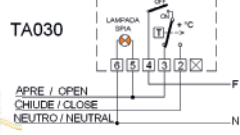
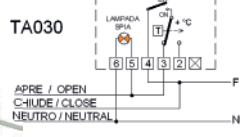

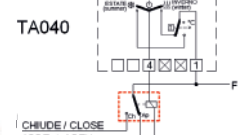
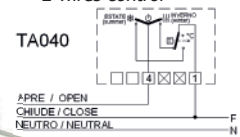

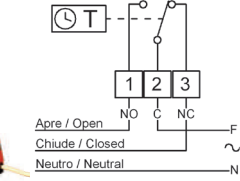
*- winter modulation with fixed set point or compensated by the external temperature value*

*- fixed point summer modulation (applicable only for fan coil system)*

SERIE R4500	Modello / Model	Codice Code
	CON 4 INGRESSI E 5 USCITE ALIMENTAZIONE 230VAC  <i>WITH 4 INPUTS AND 5 OUTPUTS 230VAC POWER SUPPLY</i>	<b>R4500</b>
	SONDA DI MANDATA PER POZZETTO (POZZ. NON INCLUSO) <i>BULB SENSOR (TEE NON INCLUDED)</i>	<b>SP1</b>
	SONDA VELOCE DI MANDATA PER POZZETTO (POZZ. NON INCLUSO) <i>FAST BULB SENSOR (TEE NON INCLUDED)</i>	<b>SP2</b>
	SONDA VELOCE DI MANDATA A BRACCIALE <i>FAST BRACELET SENSOR</i>	<b>SC1</b>
	SONDA DI TEMPERATURA ESTERNA <i>OUTDOOR TEMPERATURE SENSOR</i>	<b>SE1</b>

# TERMOSTATI e CRONOTERMOSTATI AMBIENTE

ROOM THERMOSTATS and CHRONOTHERMOSTATS

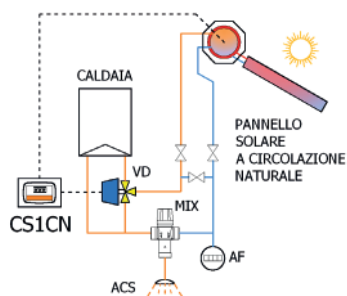
<p>TERMOSTATO AMBIENTE con lampada spia</p> <p><i>ROOM THERMOSTAT with operation light</i></p> 	<p><b>Caratteristiche tecniche</b> <i>Technical features</i></p> <p>Meccanico a 3 fili - azione tutto o niente <i>3-wires mechanical type - on/off action</i></p> <p>Funzionamento mediante dilatazione soffietto - polmone di gas <i>Sensor element: membrane with gas</i></p> <p>Scala da 6° a 30° C <i>Temperature range from 6° to 30° C</i></p> <p>Differenziale inferiore a 1° C <i>Differential temperature : less than 1° C</i></p> <p>Dimensioni 76 x 76 x 38,5 mm <i>Overall dimension : 76 x 76 x 38,5 mm</i></p>	<p><b>Codice</b> <i>Code</i></p> <p><b>TA020</b></p>	<p>Collegamento a 3 fili <i>3-wires control</i></p>  <p>Collegamento a 2 fili <i>2-wires control</i></p> 
<p>TERMOSTATO AMBIENTE con interruttore on-off</p> <p><i>ROOM THERMOSTAT with on-off switch</i></p> 	<p><b>Caratteristiche tecniche</b> <i>Technical features</i></p> <p>Meccanico a 3 fili - azione tutto o niente <i>3-wires mechanical type - on/off action</i></p> <p>Funzionamento mediante dilatazione soffietto - polmone di gas <i>Sensor element: membrane with gas</i></p> <p>Scala da 6° a 30° C <i>Temperature range from 6° to 30° C</i></p> <p>Differenziale inferiore a 1° C <i>Differential temperature : less than 1° C</i></p> <p>Dimensioni 76 x 76 x 38,5 mm <i>Overall dimension : 76 x 76 x 38,5 mm</i></p>	<p><b>Codice</b> <i>Code</i></p> <p><b>TA030</b></p>	<p>Collegamento a 3 fili <i>3-wires control</i></p>  <p>Collegamento a 2 fili <i>2-wires control</i></p> 
<p>TERMOSTATO AMBIENTE con interruttore a 3 posizioni: estate-off-inverno</p> <p><i>ROOM THERMOSTAT with winter / summer switch</i></p> 	<p><b>Caratteristiche tecniche</b> <i>Technical features</i></p> <p>Meccanico a 3 fili - azione tutto o niente <i>3-wires mechanical type - on/off action</i></p> <p>Funzionamento mediante dilatazione soffietto - polmone di gas <i>Sensor element: membrane with gas</i></p> <p>Scala da 6° a 30° C <i>Temperature range from 6° to 30° C</i></p> <p>Differenziale inferiore a 1° C <i>Differential temperature : less than 1° C</i></p> <p>Dimensioni 76 x 76 x 38,5 mm <i>Overall dimension : 76 x 76 x 38,5 mm</i></p>	<p><b>Codice</b> <i>Code</i></p> <p><b>TA040</b></p>	<p>Collegamento a 3 fili <i>3-wires control</i></p>  <p>Collegamento a 2 fili <i>2-wires control</i></p> 
<p>CRONOTERMOSTATO AMBIENTE settimanale</p> <p><i>ROOM CHRONOTHERMOSTAT with weekly settings</i></p> 	<p><b>Caratteristiche tecniche</b> <i>Technical features</i></p> <p>Dimensioni 100 x 80 x 20 mm <i>Overall dimension : 100 x 80 x 20 mm</i></p> <p>Alimentazione 2 pile (1,5V AAA alcaline) <i>Power supply: 2 batteries (1,5V AAA alkaline)</i></p> <p>4 livelli di temperatura: confort-economica-antigelo-spentato <i>nr. 4 temperature levels comfort-economy-antifreeze-off</i></p> <p>3 programmi fissi ed 1 indipendente giornaliero <i>nr. 3 Fixed programs + 1 daily free program</i></p> <p>Differenziale programmabile da 0,2 a 2° C <i>Differential temperature : from 0,2 to 2° C</i></p> <p>Codice PAS a protezione della programmazione <i>PAS code for protected programs</i></p> <p>Avviso batterie esaurite <i>exhausted battery warning</i></p> <p>Scala di temperatura da 5 a 35° C <i>Temperature range : from 5 to 35° C</i></p>	<p><b>Codice</b> <i>Code</i></p> <p><b>CTA10</b></p>	<p>Collegamento a 3 fili <i>3-wires control</i></p> 



# CENTRALINE ELETTRONICHE per IMPIANTI SOLARI e TERMOCAMINI- TERMOSTUFE

ELECTRONIC UNITS for SOLAR PLANTS and FIREPLACES

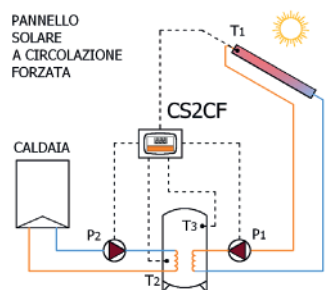
## CENTRALINA DIGITALE PER PANNELLI SOLARI A CIRCOLAZIONE NATURALE DIGITAL TEMPERATURE CONTROLLER FOR SOLAR SYSTEMS WITH NATURAL CIRCULATION SOLAR PANELS



Caratteristiche tecniche <i>Technical features</i>	Codice <i>Code</i>
Termoregolatore digitale da incasso/parete a 3 moduli. Sonda di temperatura elettronica T1 NTC 10K Uscita controllo valvola deviatrice a 3 vie ACS (Acqua Calda Sanitaria) Uscita per integrazione produzione ACS  <i>Digital Temperature Controller box 3 module for                      Inbox/Wall                      Electronic temperature sensor T1 NTC 10K                      Output for 3-ways deviating valve for Hot Sanitary                      Water                      Output signal for Hot Sanitary Water integration</i>	<b>CS1CN</b> da incasso <i>inbox version</i>
	<b>CS3CN</b> da parete <i>wall version</i>



## CENTRALINA DIGITALE PER PANNELLI SOLARI A CIRCOLAZIONE FORZATA DIGITAL TEMPERATURE CONTROLLER FOR SOLAR SYSTEMS WITH FORCED CIRCULATION SOLAR PANELS

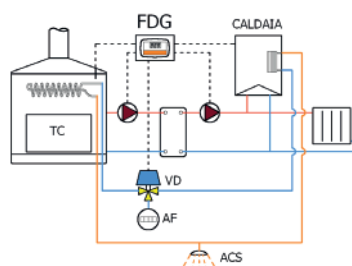


Caratteristiche tecniche <i>Technical features</i>	Codice <i>Code</i>
Termoregolatore digitale da incasso/parete a 3 moduli 3 Sonde di temperatura elettroniche T1 - T2 - T3 NTC 100K Uscita controllo pompa P1 del pannello solare Uscita controllo pompa P2 integrazione caldaia  <i>Digital Temperature Controller box 3 module for                      Inbox/Wall                      3 electronic temperature sensors T1 - T2 - T3 NTC 100K                      Output signal for P1 Solar Panel circulator                      Output signal for P2 Boiler Integration circulator</i>	<b>CS2CF</b> da incasso <i>inbox version</i>
	<b>CS4CF</b> da parete <i>wall version</i>



## CENTRALINA DIGITALE PER TERMOCAMINI DIGITAL TEMPERATURE CONTROLLER FOR FIREPLACE PLANTS INTERFACE

DIGITAL TEMPERATURE CONTROLLER FOR FIREPLACE PLANTS INTERFACE

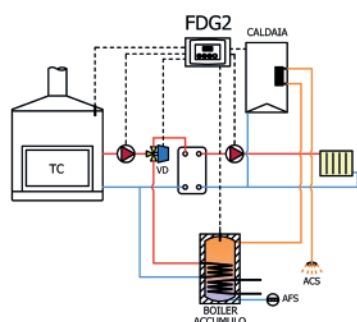


Caratteristiche tecniche <i>Technical features</i>	Codice <i>Code</i>
Termoregolatore digitale da incasso/parete a 3 moduli Sonda di temperatura elettronica NTC 10K più pozzetto 1/2" 3 termostati regolabili temperatura d'intervento termocamino 4 uscite di controllo: Pompa I° e II°, valvola a 3 vie e caldaia  <i>Digital Temperature Controller box 3 module for                      Inbox/Wall                      Electronic temperature sensor NTC 10K with 1/2"                      pocket connection                      3 adjustable thermostats to control                      4 control outputs: Circulator I &amp; II, 3-ways valve,                      boiler</i>	<b>FDG</b> da incasso <i>inbox version</i>
	<b>FDGP</b> da parete <i>wall version</i>



## CENTRALINA DIGITALE PER GESTIONE TERMOCAMINO - CALDAIA - ACCUMULO ACS DIGITAL CONTROL UNIT FOR FIREPLACE - BOILER - ACCUMULATION TANK

DIGITAL CONTROL UNIT FOR FIREPLACE - BOILER - ACCUMULATION TANK



Caratteristiche tecniche <i>Technical features</i>	Codice <i>Code</i>
Termoregolatore digitale da incasso/parete a 3 moduli 2 sonde di temperatura elettronica NTC 10K più pozzetti 1/2" 3 termostati regolabili temperatura d'intervento termocamino 4 uscite di controllo: Pompa I° e II°, valvola a 3 vie e caldaia  <i>Digital Temperature Controller box 3 module for                      Inbox/Wall                      2 electronic temperature sensor NTC 10K with 1/2"                      pocket connection                      3 adjustable thermostats for control                      4 control outputs: Circulator I &amp; II, 3-ways valve,                      boiler</i>	<b>FDG2</b> da incasso <i>inbox version</i>
	<b>FDG2P</b> da parete <i>wall version</i>





## BIOMASSA E SOLARE

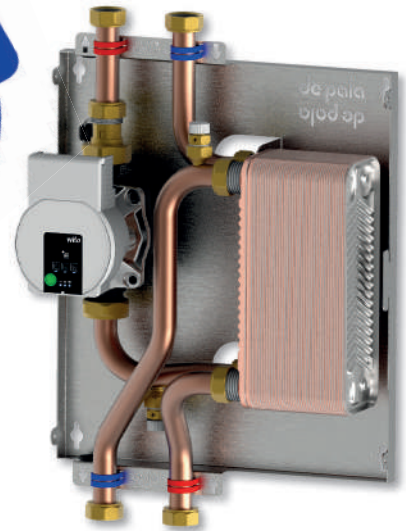
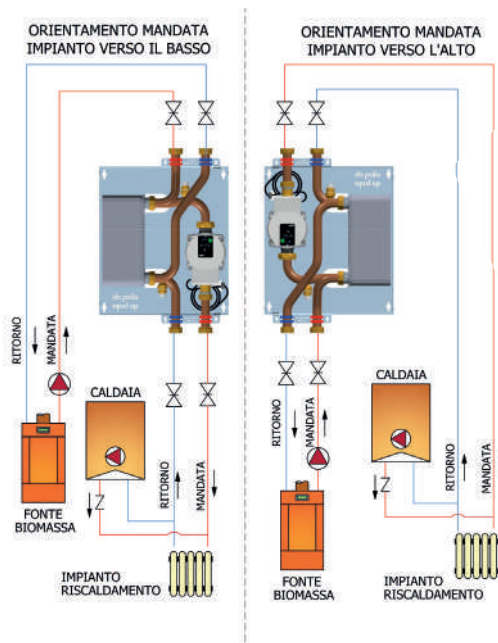
BIOMASS AND SOLAR

### BOX FIRE : MODULI TERMICI PREASSEMBLATI COMPATTI PER LA SEPARAZIONE IDRAULICA DELLE FONTI DI CALORE.

COMPACT PRE-ASSEMBLED THERMAL MODULES FOR THE HYDRAULIC SEPARATION OF HEAT SOURCES.

#### BFE : Modulo Termico Reversibile


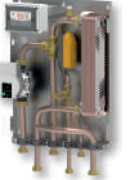


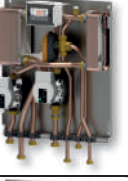




*BFE : Reversible thermal module*



BFE: 30,5x41,0x14,5cm	Modello <i>Model</i>	Versione <i>Version</i>	Caratteristiche <i>Features</i>	Potenza Tcamino <i>Fireplace Power</i>	Codice <i>Code</i>
		Solo dima idraulica <i>Hydraulic jig only</i>	reversibile <i>reversible</i>	25 kW	<b>BFE3</b>
				35 kW	<b>BFE4</b>
		Completo di mantello <i>With metallic cabinet</i>	reversibile <i>reversible</i>	25 kW	<b>BFE3C</b>
				35 kW	<b>BFE4C</b>
		Solo mantello <i>Only metallic cabinet</i>	verniciato a polveri RAL 9010 <i>powder-coated RAL 9010</i>	-	<b>CTE</b>

	Modello <i>Model</i>	Versione <i>Version</i>	Caratteristiche <i>Features</i>	Potenza Tcamino <i>Fireplace Power</i>	Codice <i>Code</i>
<b>BF0:</b> 32,5x50x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF03AC</b>
				35 kW	<b>BF04AC</b>
				45 kW *	<b>BF05AC</b>
			con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF03CC</b>
				35 kW	<b>BF04CC</b>
				35 kW	<b>BF04CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF03AR</b>
				35 kW	<b>BF04AR</b>
				45 kW *	<b>BF05AR</b>
			con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF03CR</b>
				35 kW	<b>BF04CR</b>
				35 kW	<b>BF04CR</b>
	Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF03AN</b>	
			35 kW	<b>BF04AN</b>	
			45 kW *	<b>BF05AN</b>	
		con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF03CN</b>	
			35 kW	<b>BF04CN</b>	
			35 kW	<b>BF04CN</b>	
<b>BF1:</b> 37,5x50x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF13AC</b>
				35 kW	<b>BF14AC</b>
				45 kW	<b>BF15AC</b>
			con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF13CC</b>
				35 kW	<b>BF14CC</b>
				35 kW	<b>BF14CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF13AR</b>
				35 kW	<b>BF14AR</b>
				45 kW	<b>BF15AR</b>
			con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF13CR</b>
				35 kW	<b>BF14CR</b>
				35 kW	<b>BF14CR</b>
	Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF13AN</b>	
			35 kW	<b>BF14AN</b>	
			45 kW	<b>BR15AN</b>	
		con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF13CN</b>	
			35 kW	<b>BF14CN</b>	
			35 kW	<b>BF14CN</b>	
<b>BF2</b> Dimensioni: 45x55x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF23AC</b>
				35 kW	<b>BF24AC</b>
				con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW
			con stacchi caldaia  <i>with boiler connection pipes</i>	35 kW	<b>BF24CC</b>
				35 kW	<b>BF24CC</b>
				35 kW	<b>BF24CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF23AR</b>
				35 kW	<b>BF24AR</b>
				con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW
			con stacchi caldaia  <i>with boiler connection pipes</i>	35 kW	<b>BF24CR</b>
				35 kW	<b>BF24CR</b>
				35 kW	<b>BF24CR</b>
	Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo  <i>no boiler connection</i>	25 kW	<b>BF23AN</b>	
			35 kW	<b>BF24AN</b>	
			con stacchi caldaia  <i>with boiler connection pipes</i>	25 kW	<b>BF23CN</b>
		con stacchi caldaia  <i>with boiler connection pipes</i>	35 kW	<b>BF24CN</b>	
			35 kW	<b>BF24CN</b>	
			35 kW	<b>BF24CN</b>	

[\*] Stesse dimensioni del BF1 / *Same dimensions as BF1*

	Modello <i>Model</i>	Versione <i>Version</i>	Caratteristiche <i>Features</i>	Potenza Tcamino <i>Fireplace Power</i>	Codice <i>Code</i>
<b>BF3: 35x55x15cm</b>		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	con circolatore <i>with circulation pump</i>	30 kW	<b>BF34AC</b>
				42 kW	<b>BF35AC</b>
			senza circolatore <i>without circulation pump</i>	30 kW	<b>BF34SC</b>
				42 kW	<b>BF35SC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	con circolatore <i>with circulation pump</i>	30 kW	<b>BF34AR</b>
				42 kW	<b>BF35AR</b>
			senza circolatore <i>without circulation pump</i>	30 kW	<b>BF34SR</b>
				42 kW	<b>BF35SR</b>
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	con circolatore <i>with circulation pump</i>	30 kW	<b>BF34AN</b>
				42 kW	<b>BF35AN</b>
			senza circolatore <i>without circulation pump</i>	30 kW	<b>BF34SN</b>
				42 kW	<b>BF35SN</b>
<b>BF4: 45x60x15cm</b>		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF43AC</b>
				35 kW	<b>BF44AC</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF43CC</b>
				35 kW	<b>BF44CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF43AR</b>
				35 kW	<b>BF44AR</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF43CR</b>
				35 kW	<b>BF44CR</b>
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF43AN</b>
				35 kW	<b>BF44AN</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF43CN</b>
				35 kW	<b>BF44CN</b>
<b>BF5: 45x60x15cm</b>		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF53AC</b>
				35 kW	<b>BF54AC</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF53CC</b>
				35 kW	<b>BF54CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF53AR</b>
				35 kW	<b>BF54AR</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF53CR</b>
				35 kW	<b>BF54CR</b>
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF53AN</b>
				35 kW	<b>BF54AN</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF53CN</b>
				35 kW	<b>BF54CN</b>



	Modello <i>Model</i>	Versione <i>Version</i>	Caratteristiche <i>Features</i>	Potenza Tcamino <i>Fireplace Power</i>	Codice <i>Code</i>
<b>BF6*</b> : 37,5x50x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	ACS - DHW <b>10l/min</b>	25 kW	<b>BF62AC</b>
			ACS - DHW <b>20l/min</b>	50 kW	<b>BF63AC</b>
			ACS - DHW <b>30l/min</b>	Modelli adatti per accumuli ACS <i>Models suitable for DHW storage tanks</i>	<b>BF64AC</b>
		<b>BF67AC</b>			
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	ACS - DHW <b>10l/min</b>	25 kW	<b>BF62AR</b>
			ACS - DHW <b>20l/min</b>	50 kW	<b>BF63AR</b>
			ACS - DHW <b>30l/min</b>	Modelli adatti per accumuli ACS <i>Models suitable for DHW storage tanks</i>	<b>BF64AR</b>
		<b>BF67AR</b>			
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	ACS - DHW <b>10l/min</b>	25 kW	<b>BF62AN</b>
ACS - DHW <b>20l/min</b>			50 kW	<b>BF63AN</b>	
ACS - DHW <b>30l/min</b>			Modelli adatti per accumuli ACS <i>Models suitable for DHW storage tanks</i>	<b>BF64AN</b>	
	<b>BF67AN</b>				
<b>BF7</b> : 45x60x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73AC</b>
				35 kW	<b>BF74AC</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73CC</b>
				35 kW	<b>BF74CC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73AR</b>
				35 kW	<b>BF74AR</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73CR</b>
				35 kW	<b>BF74CR</b>
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73AN</b>
				35 kW	<b>BF74AN</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73CN</b>
				35 kW	<b>BF74CN</b>
<b>BF7S</b> : 45x60x15cm		Completo di mantello e centralina precablata  <i>Complete with cabinet and pre-wired control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73SC</b>
				35 kW	<b>BF74SC</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73EC</b>
				35 kW	<b>BF74EC</b>
		Con centralina precablata senza mantello  <i>With control unit without cabinet</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73SR</b>
				35 kW	<b>BF74SR</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73ER</b>
				35 kW	<b>BF74ER</b>
		Dima idraulica senza centralina  <i>Without cabinet nor control unit</i>	autonomo <i>no boiler connection</i>	25 kW	<b>BF73SN</b>
				35 kW	<b>BF74SN</b>
			con stacchi caldaia <i>with boiler connection pipes</i>	25 kW	<b>BF73EN</b>
				35 kW	<b>BF74EN</b>

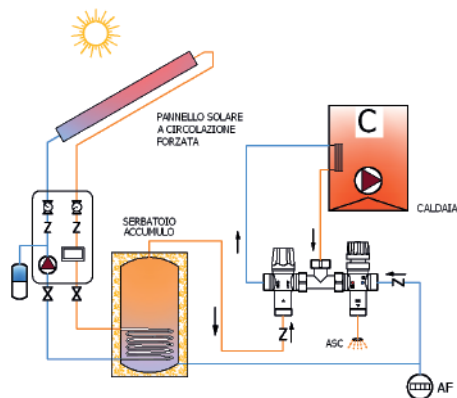
(\*) MODULO BF6 disponibile anche con circolatore a giri variabili e centralina GDCW con segnale MODULANTE indispensabile con acque particolarmente calcaree.

*BF6 MODULE also available with variable speed circulator and GDCW control unit with MODULATING signal, essential with particularly calcareous water.*



# KIT COLLEGAMENTO SOLARE - CALDAIA

SOLAR - GAS BOILER INTEGRATION KIT



Per riscaldamento e produzione ACS con fonti di calore rinnovabili

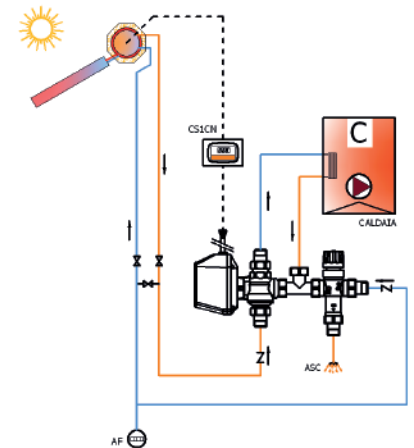
Con deviatrice termostatica o deviatrice motorizzata e centralina

Con attacchi a bocchettone

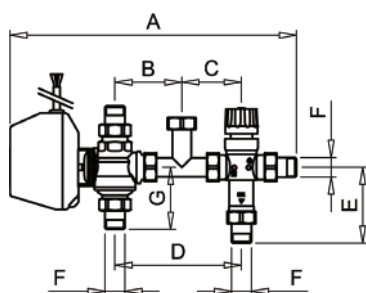
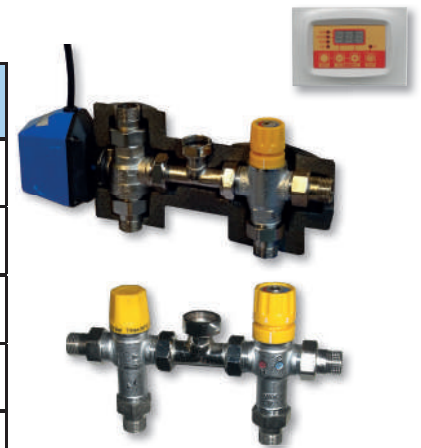
For heating and DHW production with renewable heating sources

With thermostatic or motorized diverting valve e control unit.

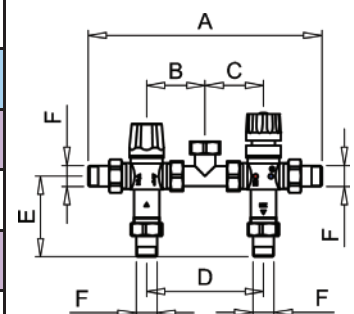
With pipe-union attachments



Descrizione Description	Ø	Codice Code
<b>Kit solare caldaia motorizzato dotato di COIBENTAZIONE e con centralina digitale</b> <i>Kit solar boiler motorized version with INSULATING SHELL and control unit</i>	1/2"	KSCM12
	3/4"	KSCM34
<b>Kit solare caldaia termostatico</b> <i>Kit solar boiler thermostatic version</i>	1/2"	KSCT12
	3/4"	KSCT34
<b>Kit motorizzato deviazione impianto solare e caldaia</b> <i>Solar boiler circuit diverting kit with motorized valve</i>	3/4"	KSCM-S



INGOMBRI - OVERALL DIMENSIONS							
Codice - Code	F Ø	A	B	C	D	E	G
KSCT12	1/2"	231	58	58	116	80	-
KSCT34	3/4"	267	68	68	136	79	-
KSCM12	1/2"	302	70	63	133	80	65
KSCM34	3/4"	315	70	68	138	79	68
KSCM-S	3/4"	274	65	70	135	79	50



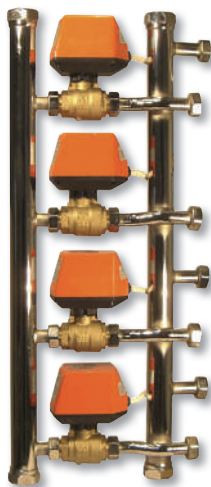


## COLLETTORI DISTRIBUZIONE

**DISTRIBUTION MANIFOLDS**

**COLLETTORE MULTIZONA - TIPO NORMALE** CON VALVOLE A SFERA A 2 VIE  
*MULTIZONE MANIFOLD - NORMAL TYPE with 2-WAYS BALL VALVES*

COLLETTORI IN RAME PREMONTATI - MOTORIZZATI  
*PRE-ASSEMBLED COPPER MANIFOLDS - MOTORISED*



Tipologia Servomotori <i>Servomotor types</i>		Lunghezza <i>Length</i>	N° Zone <i>Zone Nrs.</i>	Codice <i>Code</i>
Comando a 3 FILI <i>3-WIRES Control</i>  * (1)	230 V	315	2	<b>MF2Z</b>
		465	3	<b>MF3Z</b>
		615	4	<b>MF4Z</b>
		765	5	<b>MF5Z</b>
	24 V	315	2	<b>MC2Z</b>
		465	3	<b>MC3Z</b>
		615	4	<b>MC4Z</b>
		765	5	<b>MC5Z</b>
Comando a 2 FILI <i>2-WIRES Control</i>  * (2)	230 V	315	2	<b>RF2Z</b>
		465	3	<b>RF3Z</b>
		615	4	<b>RF4Z</b>
		765	5	<b>RF5Z</b>
	24 V	315	2	<b>RC2Z</b>
		465	3	<b>RC3Z</b>
		615	4	<b>RC4Z</b>
		765	5	<b>RC5Z</b>

\* (1) = per il comando di 1 solo servomotore con 1 termostato \* (2) = per il comando di più servomotori con 1 solo termostato

**COLLETTORE MULTIZONA - TIPO BY PASS** CON VALVOLE A SFERA A 2 VIE E 3 VIE BY PASS  
*MULTIZONE MANIFOLD - BY-PASS TYPE WITH 2-WAYS AND 3-WAYS BY-PASS BALL VALVES*

COLLETTORI IN RAME PREMONTATI - MOTORIZZATI  
*PRE-ASSEMBLED COPPER MANIFOLDS - MOTORISED*





Tipologia Servomotori <i>Servomotor types</i>		Lunghezza <i>Length</i>	N° Zone <i>Zone Nrs.</i>	Codice <i>Code</i>
Comando a 3 FILI <i>3-WIRES Control</i>  * (1)	230 V	385	2	<b>MF2B</b>
		535	3	<b>MF3B</b>
		685	4	<b>MF4B</b>
		835	5	<b>MF5B</b>
	24 V	385	2	<b>MC2B</b>
		535	3	<b>MC3B</b>
		685	4	<b>MC4B</b>
		835	5	<b>MC5B</b>
Comando a 2 FILI <i>2-WIRES Control</i>  * (2)	230 V	385	2	<b>RF2B</b>
		535	3	<b>RF3B</b>
		685	4	<b>RF4B</b>
		835	5	<b>RF5B</b>
	24 V	385	2	<b>RC2B</b>
		535	3	<b>RC3B</b>
		685	4	<b>RC4B</b>
		835	5	<b>RC5B</b>

\* (1) = per il comando di 1 solo servomotore con 1 termostato \* (2) = per il comando di più servomotori con 1 solo termostato



## Valvole: **BILANCIAMENTO**

VALVES : **BALANCING**



Valvole Valves	Diametro Diameter	Kvs (m <sup>3</sup> /h)	Portata Flow range	Attacchi Connection	Codice Code
 DP FLOW	<b>DN25</b>	5,5	5-50 l/min	Femmina / Female 1"	<b>B415</b>
	<b>DN32</b>	9,0	10-80 l/min	Femmina / Female 1"1/4	<b>B420</b>
	<b>DN40</b>	13,0	15-120 l/min	Femmina / Female 1"1/2	<b>B425</b>
	<b>DN50</b>	18,0	20-200 l/min	Femmina / Female 2"	<b>B430</b>
 DP FLOW SM	<b>DN15</b>	1,7	0-8 l/min	Maschio / Male 3/4"	<b>SM00</b>
	<b>DN15</b>	1,7	0-8 l/min	Femmina / Female 1/2"	<b>SM10</b>
	<b>DN20</b>	2,0	0-16 l/min	Femmina / Female 3/4"	<b>SM20</b>

Disponibili opzionalmente gusci di coibentazione in polietilene  
 Optionally available polyethylene insulating shells

## RICAMBI

S/PARE PARTS

### KIT OTTURATORI PER CORPI VALVOLA DI ZONA A SETTORE A 2 E 3 VIE 2 AND 3-WAYS SECTOR VALVES SHUTTERS KIT

Tipo Type	Ø	Codice Code
KIT 2 VIE 2-WAYS KIT 	1/2" - 3/4"	<b>O2F3</b>
	1"	<b>O2F4</b>
	1" 1/4	<b>O2F5</b>
KIT 3 VIE 3-WAYS KIT 	3/4"	<b>O3F3</b>
	1"	<b>O3F4</b>
	1" 1/4	<b>O3F5</b>

### SERVOMOTORI PER VALVOLE DI ZONA CON OTTURATORE A SETTORE ACTUATORS FOR ZONE VALVES WITH SECTOR SHUTTER



\* Con attacco a rettangolo tipo "K"  
 With 'K' type rectangle connection

Comando Control	Auxiliary Microswitch	Aliment. Supply	Codice Code
Comando a 3 FILI 3-WIRES Control * (1)	Senza contatto aux. No aux. switch	230 V	<b>MR</b>
		24 V	<b>MRS</b>
	1 contatto aux. 1 aux. switch	230 V	<b>MRC</b>
		230 V	<b>MRCK *</b>
		24 V	<b>MRCC</b>
		24 V	<b>MRCC</b>

### CENTRALINA MECCANICA COMPATTA PER TERMOCAMINI MECHANICAL TEMPERATURE CONTROLLER FOR FIREPLACES



Caratteristiche tecniche Technical features	Codice Code
Termoregolatore <b>meccanico</b> da incasso a 4 moduli Termostato e termometro analogico a bulbo Termostato di sicurezza e cicalino allarme acustico Uscite di controllo pompa Termocamino, Valvola deviatrice, caldaia e grill  <i>Mechanical Temperature Controller box 4 module            Bulb analogic thermostat and thermometer            Security thermostat with alarm buzzer            4 control outputs: Fireplace circulator, deviating valve, boiler and grill</i>	<b>FMA</b>



## CONDIZIONI GENERALI DI VENDITA

### ORDINI

Tutti gli ordini si intendono assunti a titolo di prenotazione e non impegnano la Venditrice alla consegna, anche parziale, di quanto ordinato.

### PREZZI

I prezzi non includono l'Imposta sul Valore Aggiunto (IVA).

### CONSEGNE

Il termine di consegna riportato sulla copia d'ordine o sulla copia commissione non impegnano la Venditrice.

Difficoltà di consegna dovute a gravi motivi impreveduti all'atto della conferma, autorizzano la Venditrice alla consegna parziale o all'annullamento del contratto di fornitura, senza essere tenuta a corrispondere indennizzo di nessun genere per danni derivanti dalla mancata fornitura.

### MODALITA' DI PAGAMENTO

Il pagamento della fattura deve essere fatto nelle forme, modalità e termini in essa indicati, anche nel caso di ritardo nell'arrivo della merce.

In caso di mancato pagamento, trascorso il termine stabilito, decorrerà l'interesse di mora pari al Tasso Ufficiale di Sconto in vigore aumentato del 3% annuo.

La Venditrice, nel caso di mancato pagamento, si riserva di sospendere le consegne in corso.

### TRASPORTO

La merce viaggia a totale rischio e pericolo dell'Acquirente, anche se convenuto franco destino e non può essere imputata responsabilità alla Venditrice per ammanchi o danneggiamenti nel trasporto.

La spedizione sarà effettuata con il vettore più comodo per la Venditrice o a scelta con mezzo della stessa.

Nel caso il Destinatario sia considerato in disagiata sede, la Venditrice si riserva l'addebito dei maggiori costi di spedizione.

### RECLAMI

Non si accettano reclami riguardanti la quantità e la qualità della merce trascorsi 8 giorni dal ricevimento del materiale stesso da parte dell' Acquirente.

La Venditrice si riserva il diritto di apportare modifiche tecniche migliorative del prodotto, senza obbligo di preavviso all'Acquirente.

### GARANZIA

I vari prodotti sono garantiti entro il termine di 2 anni solari successivi alla data di fabbricazione su di essi impressa.

La garanzia obbliga la Venditrice alla sostituzione o riparazione dei prodotti ritenuti difettosi nei materiali e nelle lavorazioni. L'errata installazione, l'uso improprio o la manomissione del prodotto fanno decadere la garanzia.

La garanzia non implica responsabilità nè la possibilità di rimborso dei danni provocati a persone o cose derivanti dall'impiego dei nostri prodotti.

La merce reclamata difettosa deve essere resa in porto franco alla sede della Venditrice.

### FORO COMPETENTE

Per la risoluzione di ogni controversia è competente l'Autorità Giudiziaria di Pordenone.

Le illustrazioni, le misure ed altri dati numerici hanno soltanto uno scopo illustrativo e possono non essere conformi in ogni dettaglio al prodotto finito.

Ci riserviamo il diritto di modificare i nostri prodotti anche senza preavviso.

Le modifiche ai prodotti hanno lo scopo di migliorare le loro prestazioni, senza che questo modifichi la loro destinazione d'uso.

## GENERAL SALES CONDITIONS

### ORDERS

De Pala reserves the right to cancel or refuse any order.

### PRICES

The list prices are NET and exclude any V.A.T. nor taxes.

### DELIVERY

Delivery times are approximate and represent average delivery times corresponding to the time normally required to process and deliver an order.

De Pala may not be held responsible for any consequences of a delay in delivery.

Delivery time may be extended due to unforeseen circumstances as well as delivery delays from our material suppliers.

### PAYMENT

The purchase price for the products has to be paid, free of any charges, following accurately the payment terms, with no delay.

Until the complete payment of all accounts receivable resulting from current business, De Pala retains the legal title for delivered goods and the corresponding material in the Purchaser's warehouse.

Late payment shall be subject to a delinquency charge, calculated on the basis of three per cent (3%) per month on official bank discount rate, for any unpaid balance from the due date.

### DISPATCH

The merchandise is transported on the risk of the Purchaser. De Pala does everything to deliver the merchandise to the Purchaser in perfect condition, however De Pala cannot be held liable for damages occurred during transport.

Delivery terms: ex-works = EXW Roveredo.

The method of dispatch has to be selected by the Purchaser. Without any shipping instructions from the Purchaser, De Pala reserves the right to arrange the dispatch by any forwarder/courier of its choice. Shipping cost and any additional costs shall be borne by the Purchaser.

### CLAIMS

All the quality or quantity claims should be raised within 8 days after the receipt of the goods.

De Pala reserves the right to introduce design modifications in the interest of technical progress, without notice to the Purchaser.

### WARRANTY

Despite careful testing of our equipment, component or functional failures may occur. De Pala grants a warranty for a period of 24 months from the manufacturing date which is stamped on. During this period De Pala undertakes to repair or replace the equipment, whatever defect it presents, free of charge.

Warranty does not include costs of transporting equipment to and from the repair workshop. No liability is taken for any other claims which may arise due to consequential damage arising from the use of De Pala's products.

### PLACE OF JURISDICTION

For any dispute the place of jurisdiction are the courts based at the headquarters of De Pala.

Pictures and drawings, as well as any technical information and measures are only indicative, and may differ from the product purchased.

Due to continuous improvements on the products, we reserve the right to modify them without prior notice.

**Agenzia**  
*Agency*



De Pala Srl • Via del Lavoro, 10 33080 Roveredo in Piano (PN) • ITALY  
Tel. +39 0434 920466 @: info@depala.it www.depala.it