

DESCRIZIONE

Le valvole Serie K150 sono del tipo a tre vie a **corpo unico** con funzione miscelatrice (due ingressi, una uscita) o deviatrice (un ingresso, due uscite).

Progettate per garantire un controllo preciso ed efficace su tutto il campo di regolazione, in tutte le condizioni di esercizio, le valvole Serie K150 sono dotate di attuatori pneumatici o elettrici per soddisfare tutte le esigenze di controllo e di regolazione quali: acqua, acqua surriscaldata, vapore saturo, olio diatermico, gas e tutti gli altri fluidi purché compatibili con i materiali impiegati.

DESCRIPTION

The OMC K150 series is a three ways **enbloc valve** construction, mixing design (2 inlets, 1 outlet) or diverting design (1 inlet, 2 outlets)

Designed to grant an accurate and reliable control, the K150 series can be provided with pneumatic actuators or , electric actuators to satisfy all the control needs of numerous industrial requirements.They can be used for : water, superheated water, saturated steam, diatermic oil, gases, other fluids as long as compatible with selected materials.



Directive 97/23/EC
Direttiva 97/23/CE

PED



Disponibile - Available
94/9/EC (ATEX): II 2 G D c IIC X

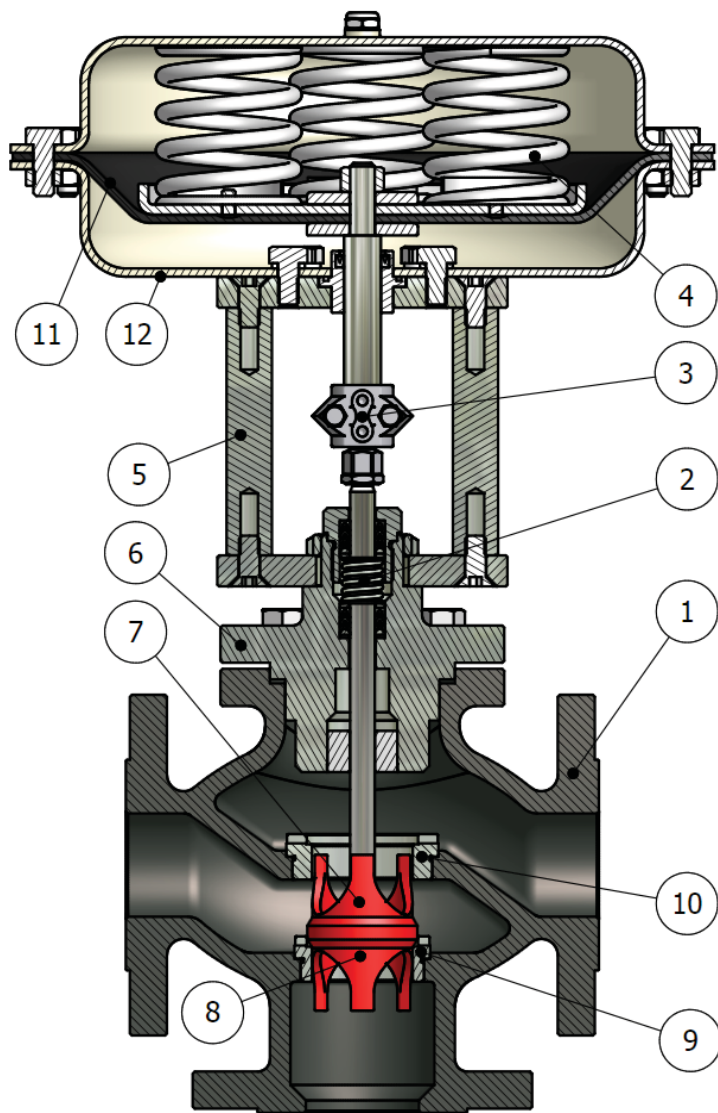
ATEX

CARATTERISTICHE

Classe di tenuta V Std
Possibilità di interni ridotti, stellati,
Possibilità tenuta a soffietto per tenuta perfetta
Possibilità di bonnet allungato per basse temperature
Possibilità di bonnet alettato per alte temperature
Ampia gamma di attuatori per differenti shut-off

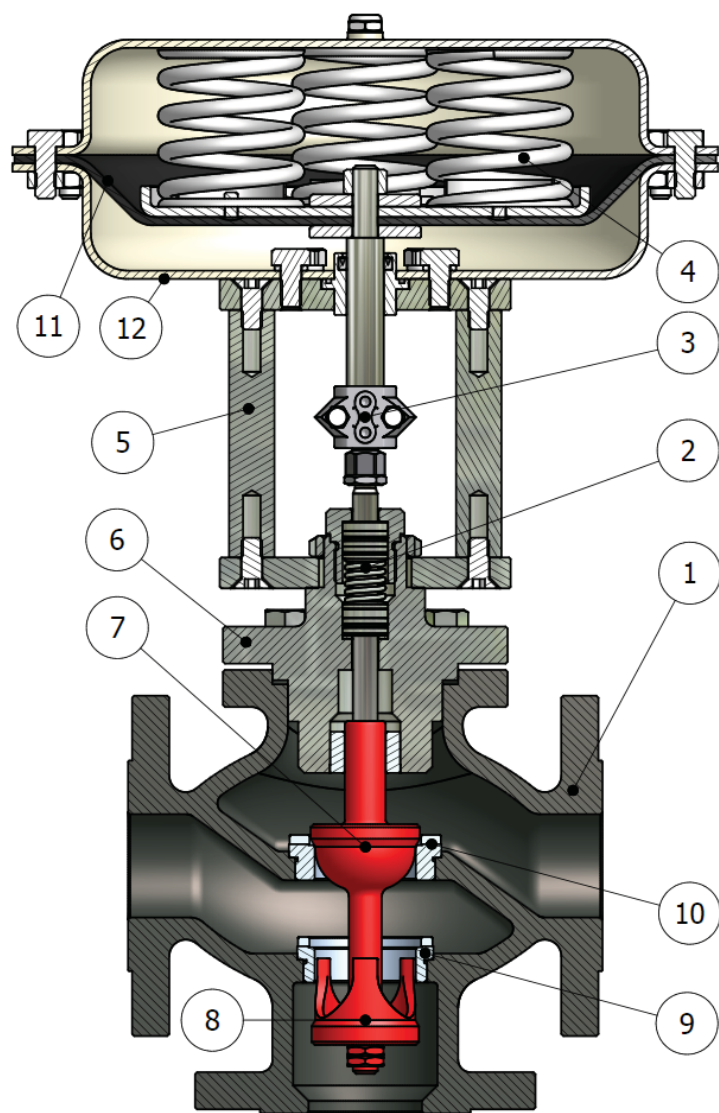
FEATURES

Tight shutoff : standard leakage Class V
Reduced & hardened trims
Bellows seal to meet zero emissions
Extended bonnet for low temperature
Finned bonnet for high temperature
Variety actuators to handle different pressure drops



LEGENDA

1- Corpo valvola
2- Gruppo Premistoppa
3- Connessione accessori IEC534
4- Molle Attuatore
5- Castello
6- Bonnet
7- Profilo superiore Otturatore
8- Profilo inferiore Otturatore
9- Sede Inferiore
10- Sede Superiore
11- Membrana Attuatore
12- Box Attuatore



LEGENDA

1- Body Valve
2- Packing
3- Top Stem Connector (IEC 534)
4- Actuator Springs
5- Yoke
6- Valve Bonnet
7- Upper Plug
8- Lower Plug
9- Lower Seat
10- Upper Seat
11- Diaphragm
12- Actuator casing

DATI TECNICI

DIAMETRI NOMINALI	da DN25 a DN50
ATTACCHI CORPO	flangiati UNI EN 1092 PN16 - PN25

TECHNICAL DATA

SIZES	from DN25 to DN50
BODY CONNECTIONS	flanged UNI EN 1092 PN16 / PN25

MATERIALI GRUPPO CORPO STD

Corpo Valvola (PN16/PN25): Ghisa sferoidale EN-GJS-400-18 (EN-JS1025) verniciatura epossidica	Bonnet: Acciaio al carbonio C40
	Interni: EN10088 X2CrNiMo1810
Altri materiali disponibili su richiesta	

BODY & TRIM MATERIALS COMBINATION

Valve Body (PN16/PN25): Ductil iron EN-GJS-400-18 (EN-JS1025) painted	Bonnet: C40 carbon steel
	Trim: EN10088 X2CrNiMo1810
Other materials available on request	

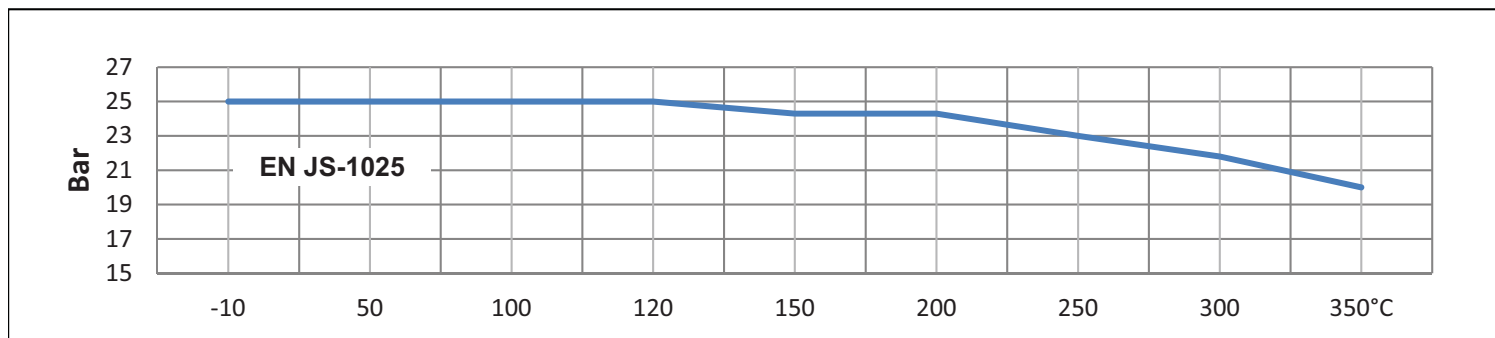
Equivalenza materiali corpo

	European Std	ASTM Std	Limiti di Temperatura Temperature Application Limits
Ghisa GGG40.3 Ductil Iron GGG40.3	EN-GJS-400-18	A395	-10+350°C

Body materials cross reference

Relazione Pressione / Temperatura in accordo alla norma EN 1092-1

Relation between Pressure/Temperature according to EN 1092-1



BONNET

STANDARD	Standard per temp. da -5 a +200°C
A RICHIESTA	Alettato per temp. >200°C
	Allungato per temp. <-5°C

BONNET

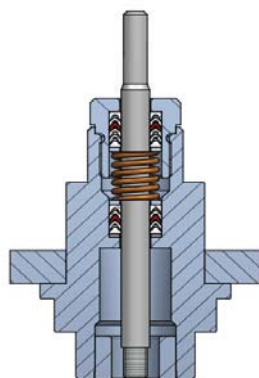
STANDARD TYPE	Standard from -5 to +200°C
ON REQUEST	Finned for temp. >200°C
	Extended for temp. <-5°C

Standard

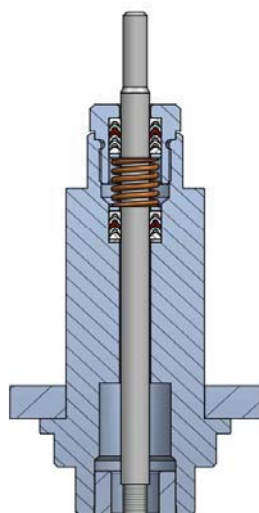
Extended

Finned

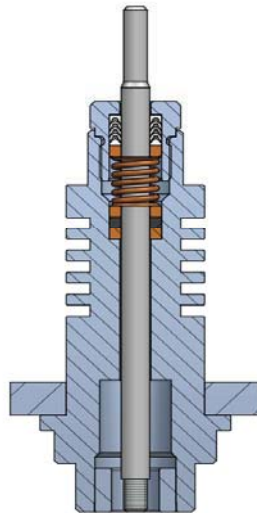
Bellows



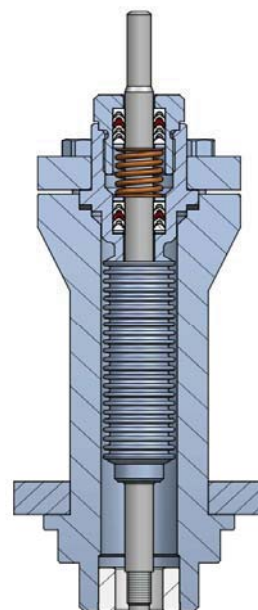
Standard



Prolungato



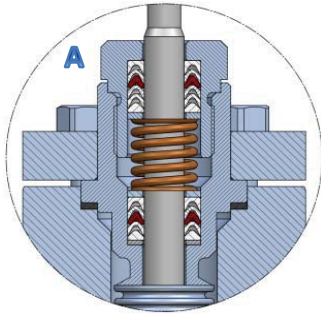
Alettato



Soffietto

TENUTA STELO

STANDARD	PTFE/GR per temp. $\leq 190^{\circ}\text{C}$
A RICHIESTA	(A) HT200 per temp. $\leq 200^{\circ}\text{C}$
	(C) HTS300 per temp. $\leq 300^{\circ}\text{C}$
	(B) GRAFITE PURA per temp. $\leq 400^{\circ}\text{C}$
	Soffietto per fluidi pericolosi PN16 - PN25 - PN40 da DN32 a DN100

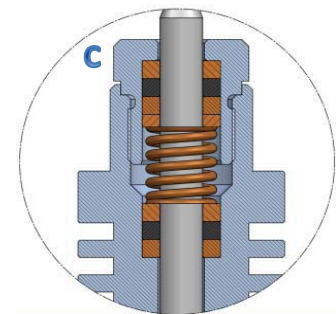
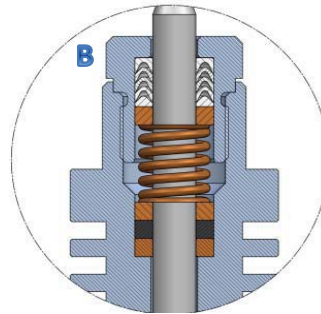


TRIMS

Caratteristica otturatore lineare LV	
Una valvola con otturatore lineare fornisce una portata direttamente proporzionale alla corsa dell'otturatore.	
TENUTA	Tenuta metallica - Classe V°
CORSA	20mm

PACKING

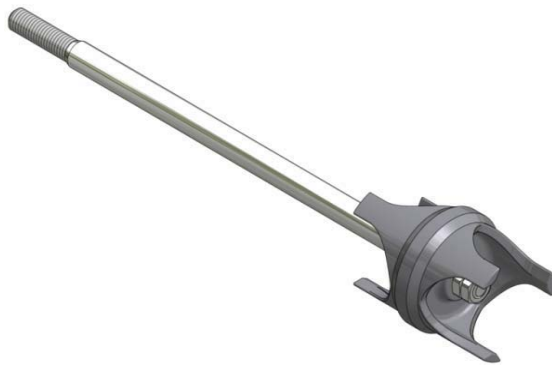
STANDARD	PTFE/GR for temp. $\leq 190^{\circ}\text{C}$
ON REQUEST	(A) HT200 for temp. $\leq 200^{\circ}\text{C}$
	(C) HTS300 for temp. $\leq 300^{\circ}\text{C}$
	(B) PURE GRAPHITE for temp. $\leq 400^{\circ}\text{C}$
	Bellows sealed for dangerous fluids - PN16 - PN25 - PN40 from DN32 to DN100



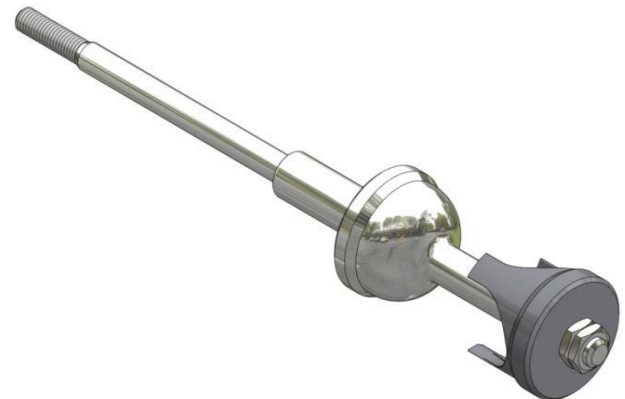
TRIMS

LV Linear characteristic	
A valve with linear characteristic provide a flow rate directly proportional to travel.	
SEAL	Metal seat tightness - Class V°
STROKE	20mm

OTTURATORE PER VALVOLA MISCELATRICE

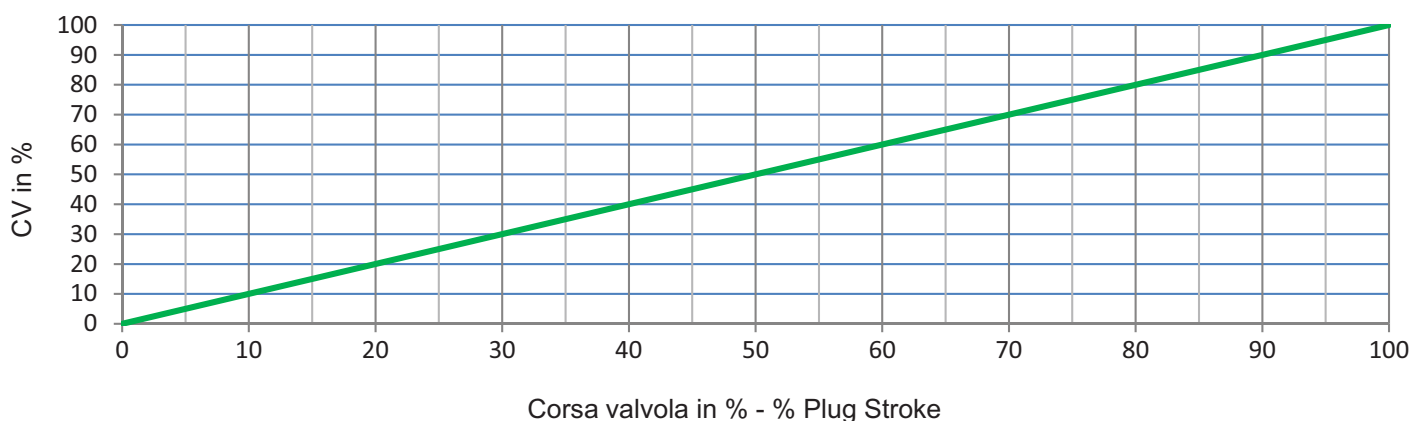


OTTURATORE PER VALVOLA DEVIATRICE



LINEAR TYPE FOR MIXING VALVES

LINEAR TYPE FOR DIVERTING VALVES



COEFFICIENTI DI PORTATA		FLOW RATE COEFFICIENTS			
(CV= portata in GPM con 1 psi di pressione differenziale) (Kv= portata in m³/h con 1 bar di pressione differenziale)		(CV= flowrate in USGPM with 1 psi of differential Pressure) (Kv= flowrate in m³/h with 1 bar of differential Pressure)			
CV	Kv	DIAMETRO NOMINALE - SIZES			
		DN 25	DN 32	DN 40	DN 50
11	9.4	std			
18	15.4		std		
27	22.2			std	
47	40.1				std
73	63.4				
105	89.7				
160	136.7				

	VEDI SERIE V250	std	standard
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ATTUATORE PNEUMATICO DI REGOLAZIONE	CONTROL PNEUMATIC ACTUATOR
PRESSIONI DIFFERENZIALI MASSIME AMMISSIBILI IN BAR (Fluido Apre)	MAXIMUM PERMISSIBLE PRESSURE DROPS IN BAR (Fluid Open)

ATTUATORE ACTUATOR	DN	SEGNALE SIGNAL	CV 11	CV 18	CV 27	CV 47
			cl.V	cl.V	cl.V	cl.V
AT-230.1	DN15 ÷ DN50	3÷15 psi	9	5	3,5	
		6÷18 psi	11	6,5	4	
		6÷30 psi	15	10	6	
		0÷35 psi	18	13	7	
AT-280.1	DN15 ÷ DN 50	3÷15 psi	16	8	6	3,5
		6÷18 psi	20	12	10	5
		6÷30 psi	25	16	12	6,5
		0÷35 psi				
AT-340.1	DN 25 ÷ DN50	3÷15 psi	50	20	10	10
		6÷18 psi	60	30	15	13
		6÷30 psi	80	40	20	16
		0÷35 psi				
AT-435.1	DN40 ÷ DN50	3÷15 psi			40	25
		6÷18 psi			48	30
		6÷30 psi			60	50
		0÷35 psi				

I valori espressi in tabella si riferiscono alla forza del servomotore, il rating del corpo ne limita l'applicazione.

I valori sono stati verificati supponendo che il segnale regolante provenga da un **covertitore elettropneumatico con segnale minimo di 3 psi** sempre in linea.

A richiesta sono disponibili campi diversi con pressioni differenziali maggiori.

The pressure drop values are referred to closed valves. They have been verified by a control signal coming from an electro-pneumatic converter with an enduring minimum signal of 3 psi.

Special spring drops available on request.

The pressure drop values must be used within the body reating limit.

TIPO ATTUATORE	multimolle a membrana	TYPE	diaphragm type - multispring
SEGNALI DI COMANDO	3+15psi, 6+18psi 6+30psi, 0+35psi	CONTROL SIGNAL	3+15psi, 6+18psi 6+30psi, 0+35psi
MASSIMA PRESSIONE ARIA APPLICABILE	50psi (3,5bar)	MAX AIR SUPPLY PRESSURE	50psi (3,5bar)
TEMPERATURA AMBIENTE	-20...+70°C	AMBIENT TEMPERATURE	-20...+70°C
MATERIALE CUSTODIA	Acciaio al Carbonio Fe410.1 Verniciatura Epossidica	ACTUATOR CASING MATERIAL	Carbon Steel Fe410.1 anti corrosive paint
MATERIALE MEMBRANA	NBR70 telata	DIAPHRAGM MATERIAL	NBR70
CASTELLO A COLONNE	Acciaio al Carbonio Zincato (IEC 534)	YOKE MATERIAL	Zinc plated carbon steel (IEC 534)
CONNESSIONI PNEUMATICHE	1/4"NPT-F	PNEUMATIC CONNECTIONS	1/4"NPT-F

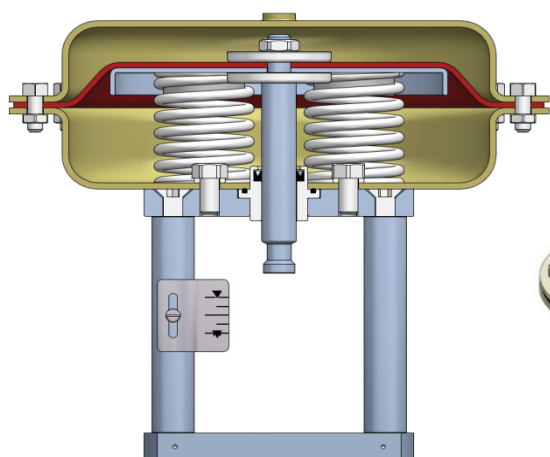
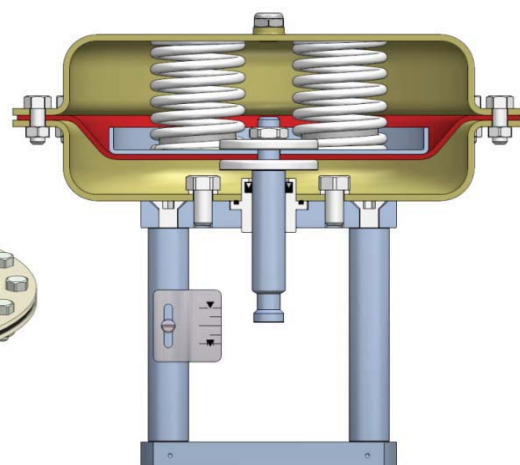


Fig.1



Fig.2



		DEVIATRICE	MISCELATRICE			DIVERTING VALVE	MIXING VALVE
AZIONE DIRETTA	Fig.1	NORMALMENTE APERTA LA VIA DIRITTA	NORMALMENTE APERTA LA VIA A 90°	DIRECT ACTION	Fig.1	NORMALLY OPEN STRAIGHT WAY	NORMALLY OPEN 90° WAY
AZIONE INVERSA	Fig.2	NORMALMENTE APERTA LA VIA A 90°	NORMALMENTE APERTA LA VIA DIRITTA	REVERSE ACTION	Fig.2	NORMALLY OPEN 90° WAY	NORMALLY OPEN STRAIGHT WAY

ACCESSORI DISPONIBILI

Contatti di allarme
Posizionatore elettropneumatico
Posizionatore pneumatico
Posizionatore SMART
Convertitore I/P
Trasmittitore di posizione
Filtro riduttore
Volantino di manovra
Elettrovalvole
Dispositivo pneumatico di blocco (Lock UP)

VARIANTI DISPONIBILI

Castello INOX
Custodia INOX
Viteria INOX
Verniciatura per ambienti Marini

ACCESSORIES

Alarm contacts
Elettropneumatic positioner
Pneumatic positioner
SMART positioner
I/P Converter
4-20 mA Position feedback
Air filter regulator
Top mounted handwheel
Solenoid valves
Lock-Up pneumatic device

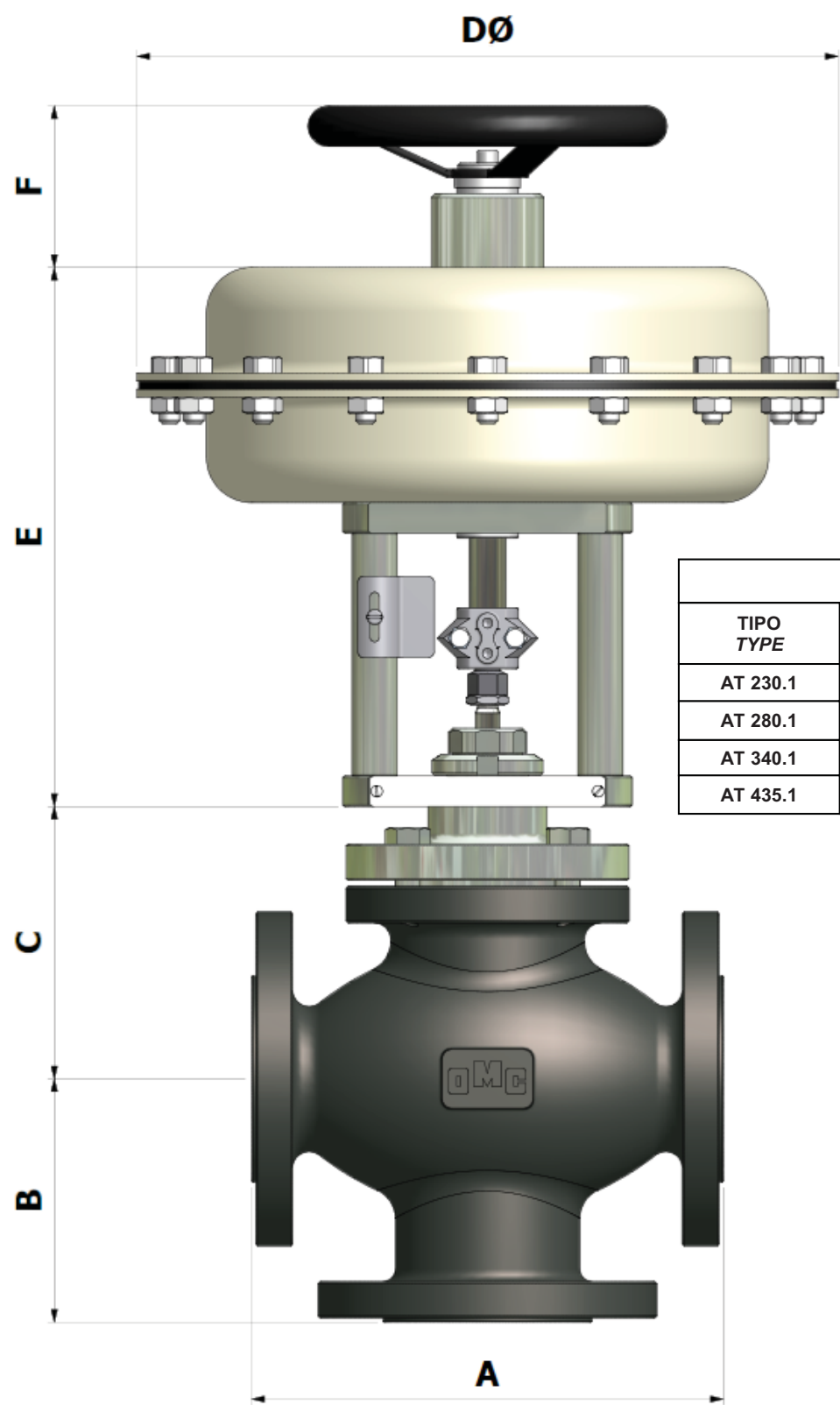
OPTIONS

St. Steel yoke
St. Steel casing
St. Steel bolts & nuts
Off-Shore painting

DIMENSIONI

DIMENSIONS

GRUPPO CORPO - BODY ASSY						
DN	A (mm)	B (mm)	C (mm)			
			CAPPELLO - BONNET			
			Standard	Alettato <i>Finned</i>	Prolungato <i>Extended</i>	Soffietto <i>Bellows</i>
DN 25	160	85	125	220		
DN 32	180	100				
DN 40	200	105				
DN 50	230	120	95			



SERVOMOTORE - ACTUATOR			
TIPO TYPE	Ø D (mm)	E (mm)	F (mm)
AT 230.1	230	235	110
AT 280.1	275	240	110
AT 340.1	335	265	150
AT 435.1	430	295	170

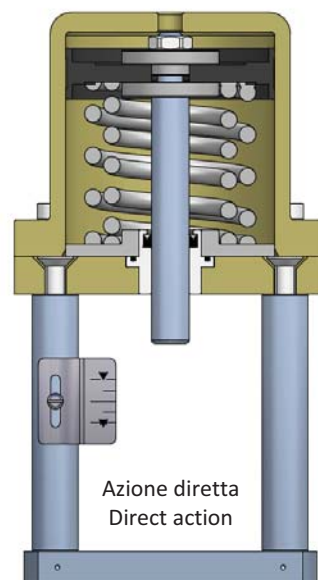
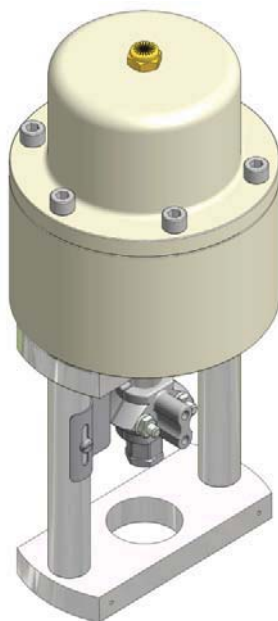
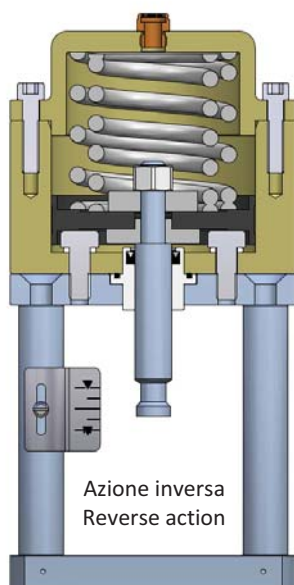
ATTUATORE PNEUMATICO A PISTONE

PISTON PNEUMATIC ACTUATOR

PRESSIONI DIFFERENZIALI MASSIME AMMISSIBILI IN BAR (Fluido Apre)

MAXIMUM PERMISSIBLE PRESSURE DROPS IN BAR (Fluid Open)

TYPE	DN	SEGNALE SIGNAL	CV			
			11	18	27	47
MC100.1	DN25 ÷ DN50	6÷10 bar	12	12	12	10



DEVIATRICE			DIVERTING VALVE		
AZIONE DIRETTA	Fig.1	NORMALMENTE APERTA LA VIA DIRITTA	DIRECT ACTION	Fig.1	NORMALLY OPEN STRAIGHT WAY
AZIONE INVERSA	Fig.2	NORMALMENTE APERTA LA VIA A 90°	REVERSE ACTION	Fig.2	NORMALLY OPEN 90° WAY

TIPO ATTUATORE	a pistone con multimolle interne	TYPE	piston type - multispring
SEGNALI DI COMANDO	da 6 a 10 bar	CONTROL SIGNAL	from 6 to 10 bar
MASSIMA PRESSIONE ARIA APPLICABILE	10 bar	MAX AIR SUPPLY PRESSURE	10 bar
TEMPERATURA AMBIENTE	-20...+70°C	AMBIENT TEMPERATURE	-20...+70°C
MATERIALE CASSA	Alluminio Verniciatura Epossidica	ACTUATOR CASTING MATERIAL	Alluminium anti corrosive paint
CASTELLO A COLONNE	Acciaio al Carbonio Zincato (IEC 534)	YOKE MATERIAL	Zinc plated carbon steel (IEC 534)
CONNESSIONI PNEUMATICHE	1/4"NPT-F	PNEUMATIC CONNECTIONS	1/4"NPT-F

ACCESSORI E VARIANTI DISPONIBILI

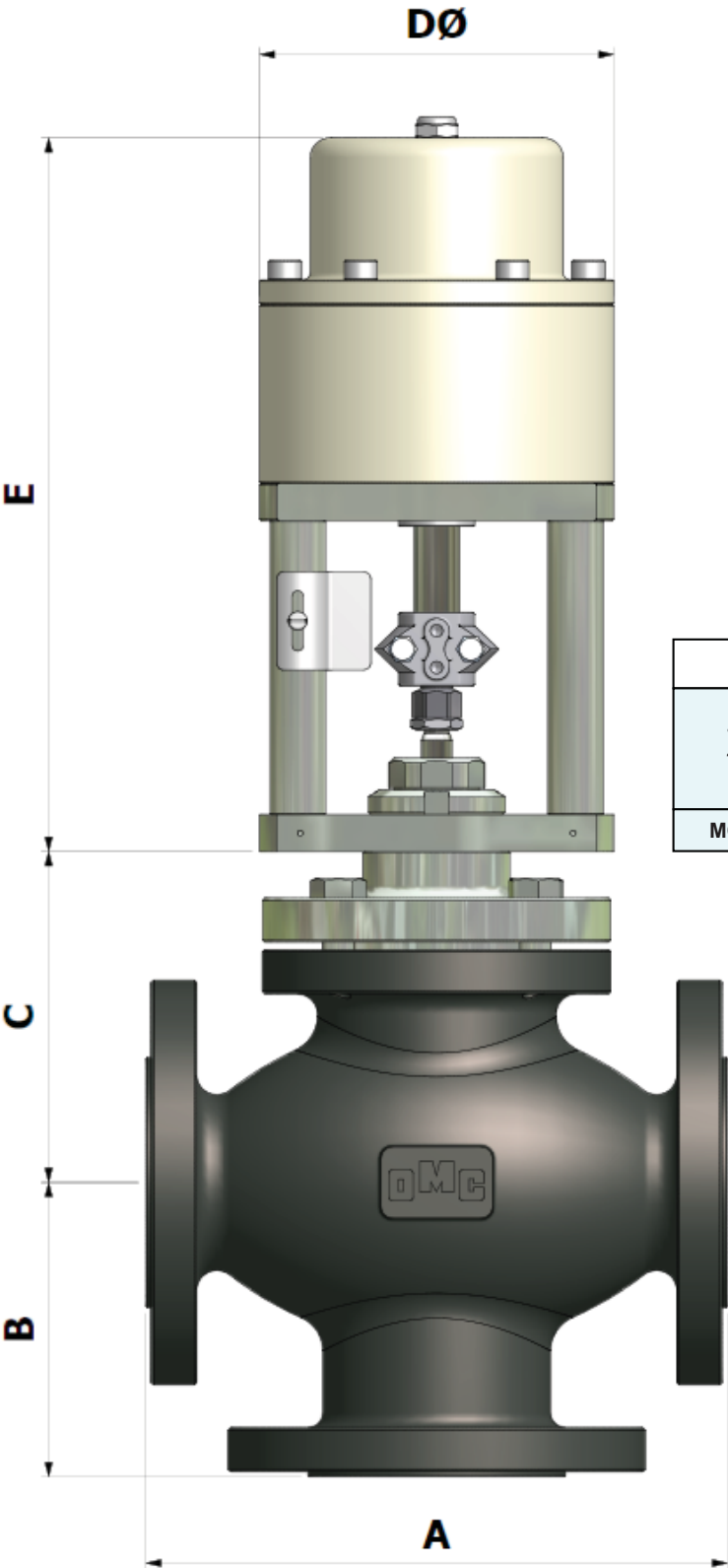
OPTIONS AND ACCESSORIES

Contatti di allarme	Alarm contacts
Elettrovalvole	Solenoid valves
Verniciatura per ambienti Marini	Off-Shore painting

DIMENSIONI

DIMENSIONS

GRUPPO CORPO - BODY ASSY						
DN	A (mm)	B (mm)	C (mm)			
			CAPPELLO - BONNET			
			Standard	Alettato Finned	Prolungato Extended	Soffietto Bellows
DN 25	160	85	125	220		
DN 32	180	100				
DN 40	200	105				
DN 50	230	120	95			



SERVOMOTORE - ACTUATOR			
TIPO TYPE	Ø D (mm)	E (mm)	
		DN25÷DN40	DN50
MC100.1	140	267	292

ATTUATORE ELETTRICO

ELECTRIC ACTUATOR

TIPO ATTUATORE	Elettrico
SEGNALI DI COMANDO	0÷10 VDC - 2÷10 VDC 0÷20 mA - 4÷20 mA
SEGNALE DI USCITA	0÷10 VDC Std
GRADO DI PROTEZIONE	IP54 (IP65)

TYPE	Electric
CONTROL SIGNAL	0÷10 VDC - 2÷10 VDC 0÷20 mA - 4÷20 mA
OUTPUT SIGNAL	0÷10 VDC Std
ENCLOSURE PROTECTION	IP54 (IP65)

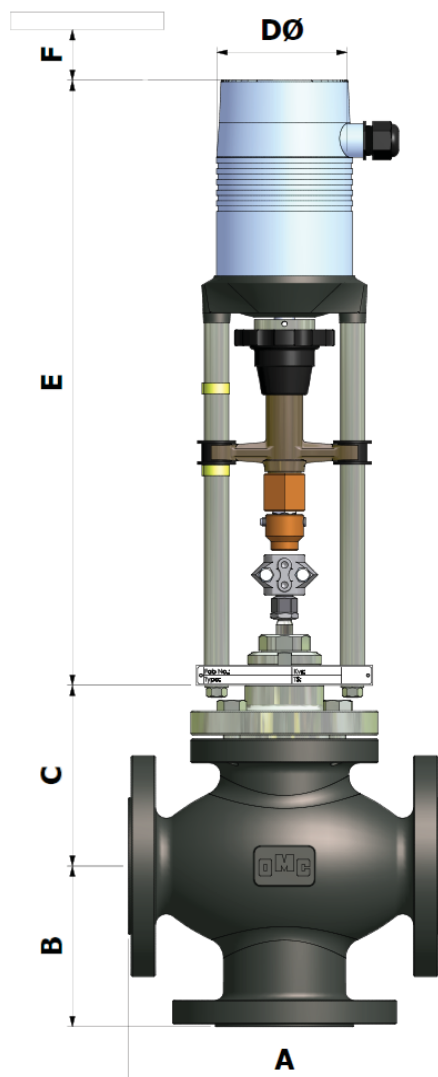
TIPO	FORZA	CORSA MAX	TEMPO DI AZIONAMENTO
MC 163	1.6 kN	30 mm	6 • 4 s/mm
MC 253	2,5 kN	60 mm	5 • 2,5 s/mm

TYPE	THRUST	MAX STROKE	ACTUATING TIME
MC 163	1.6 kN	30 mm	6 • 0,4 s/mm
MC 253	2,5 kN	60 mm	5 • 2,5 s/mm

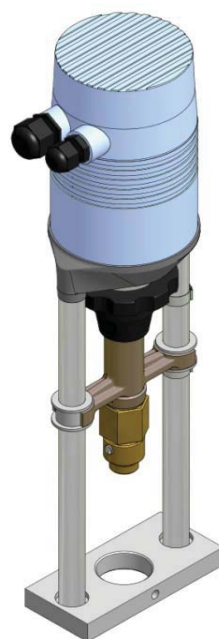
DIMENSIONI

DIMENSIONS

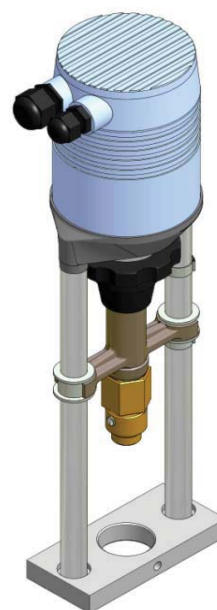
GRUPPO CORPO - <i>BODY ASSY</i>						
DN	A (mm)	B (mm)	C (mm)			
			CAPPELLO - <i>BONNET</i>			
			Standard	Alettato <i>Finned</i>	Prolungato <i>Extended</i>	Soffietto <i>Bellows</i>
DN 25	160	85	125	220		
DN 32	180	100				
DN 40	200	105				
DN 50	230	120	95			



TIPO TYPE	Ø D (mm)	E (mm)	F (mm)
MC 163 (24Vac)	100	428	140
MC 163 (230Vac)	100	453	140
MC 253	135	670	200

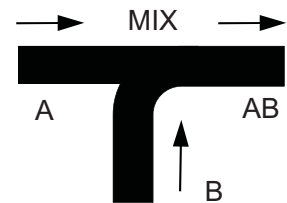
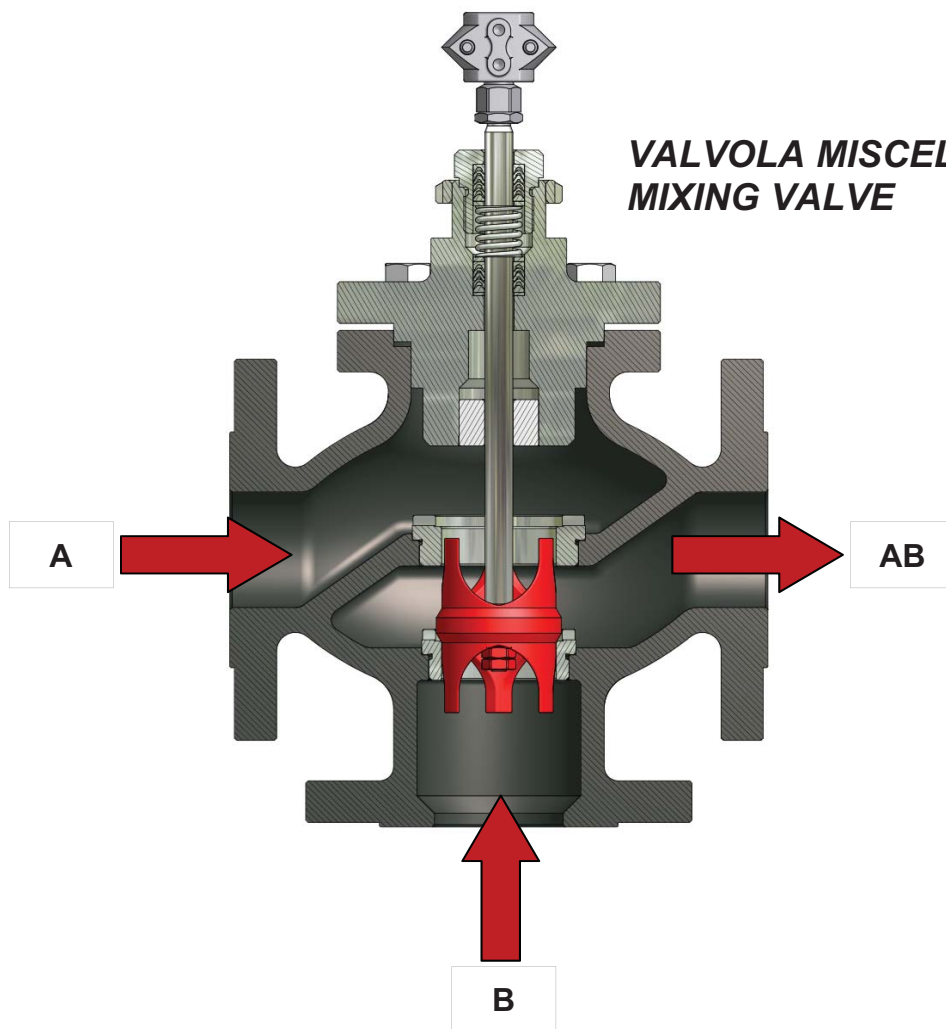


230Vac

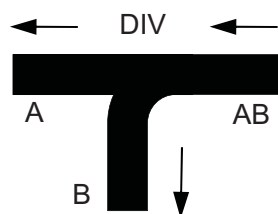
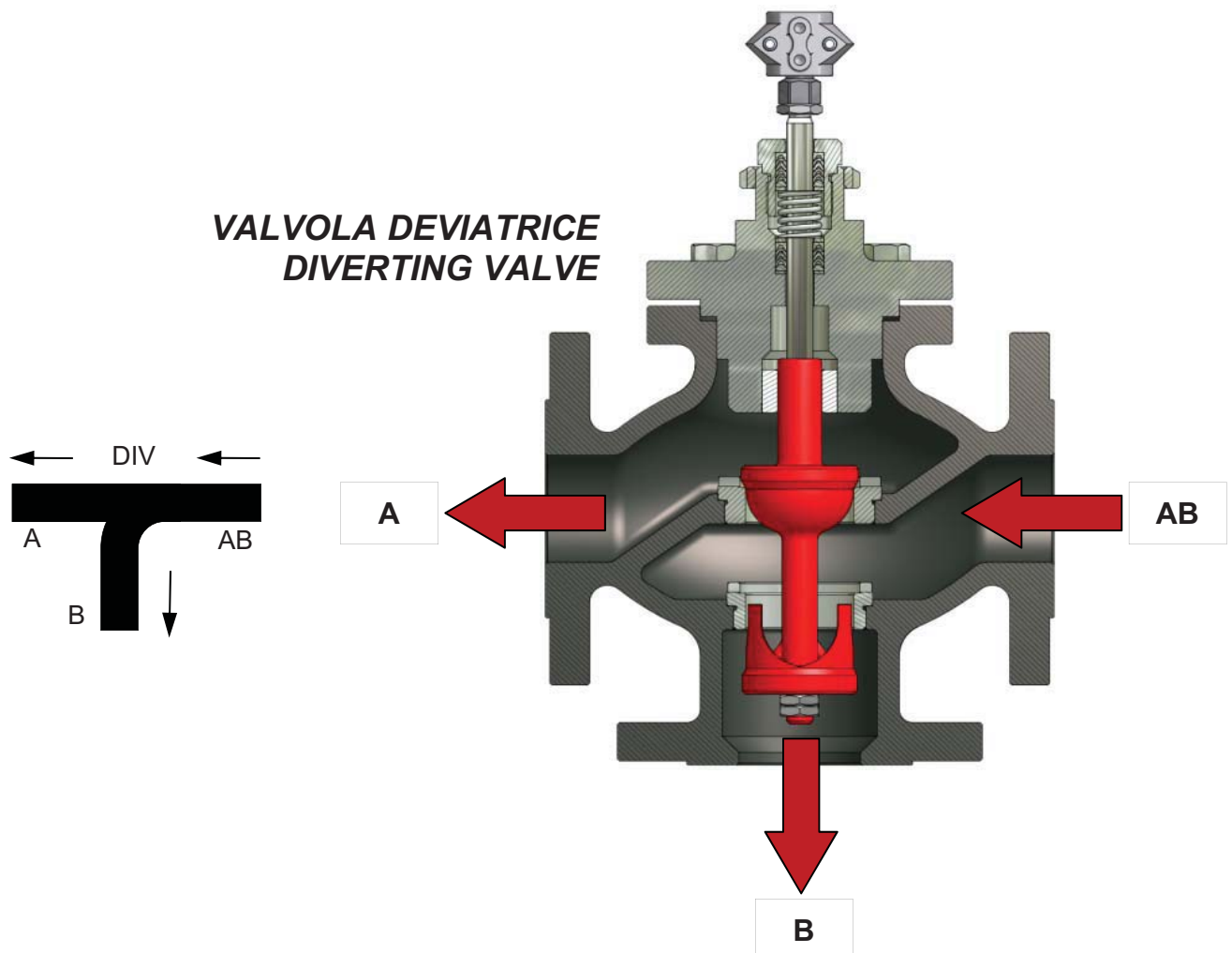


24Vac

**VALVOLA MISCELATRICE
MIXING VALVE**



**VALVOLA DEVIATRICE
DIVERTING VALVE**





OMC s.r.l.

Your Distributor:

Coulton Instrumentation Ltd

17 Somerford Business Park - Christchurch - BH23 3RU - UK

Tel: +44 1202 480 303 - **E-mail:** sales@coulton.com - **Web:** www.coulton.com
