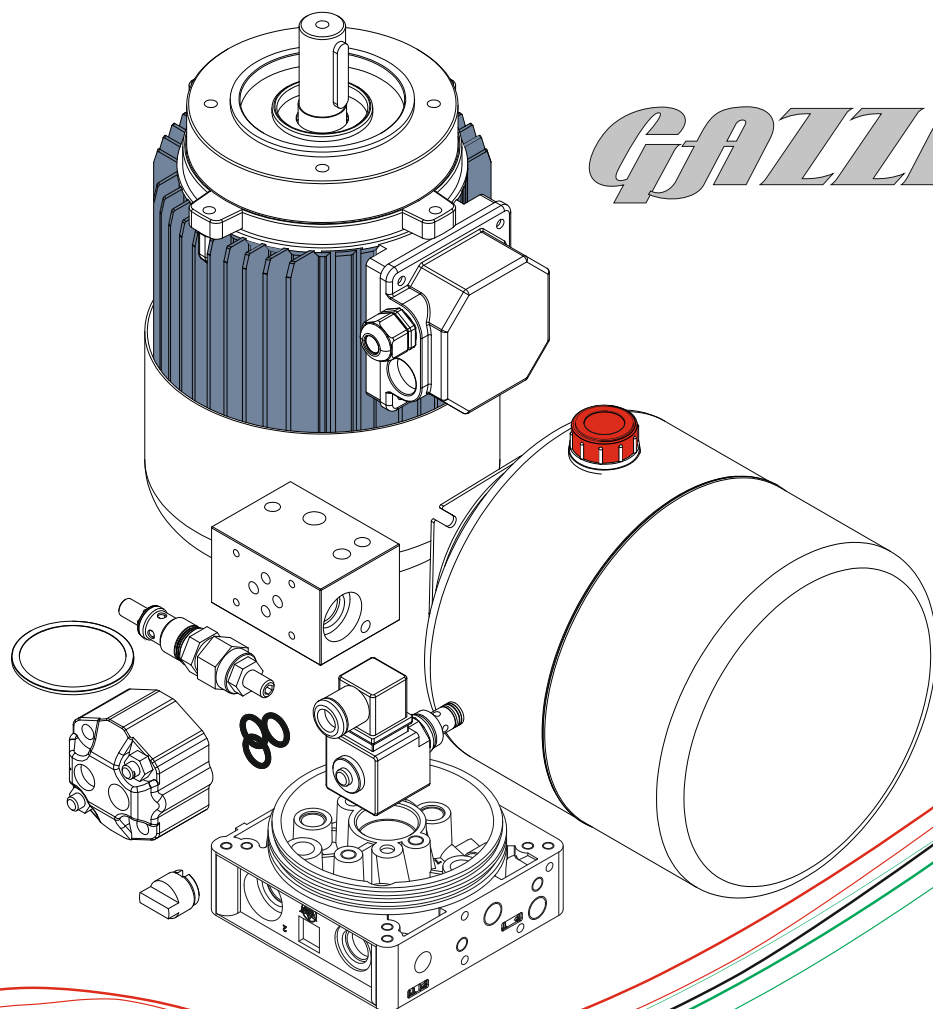


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hydraulic division



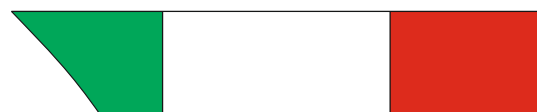
HYDRAULIC POWER PACK



www.gazzeraitaly.com
info@gazzeraitaly.com

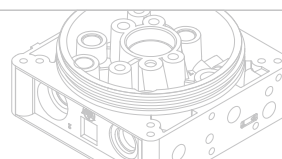


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since 1989

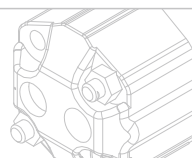


2024/a

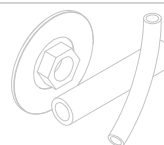
1 Collettori centrali *central manifolds*



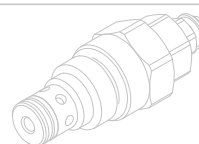
2 Pompe *pumps*



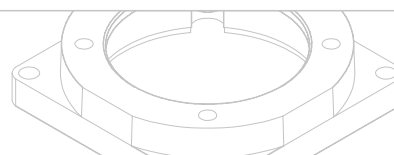
3 Aspirazione e scarico *suction and return*



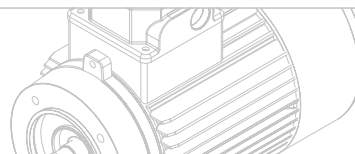
4 Valvole e tappi *valves and plugs*



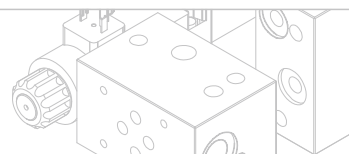
5 Elementi di connessione *junction elements*



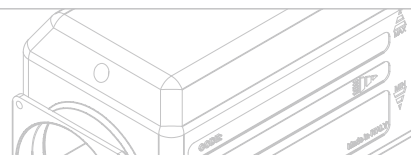
6 Motori elettrici *electric motors*



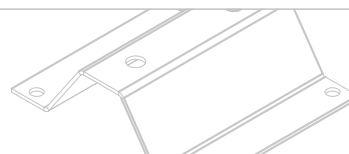
7 Elementi modulari *modular elements*



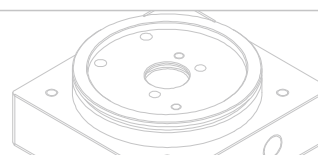
8 Serbatoi *oil tanks*



9 Accessori *accessories*

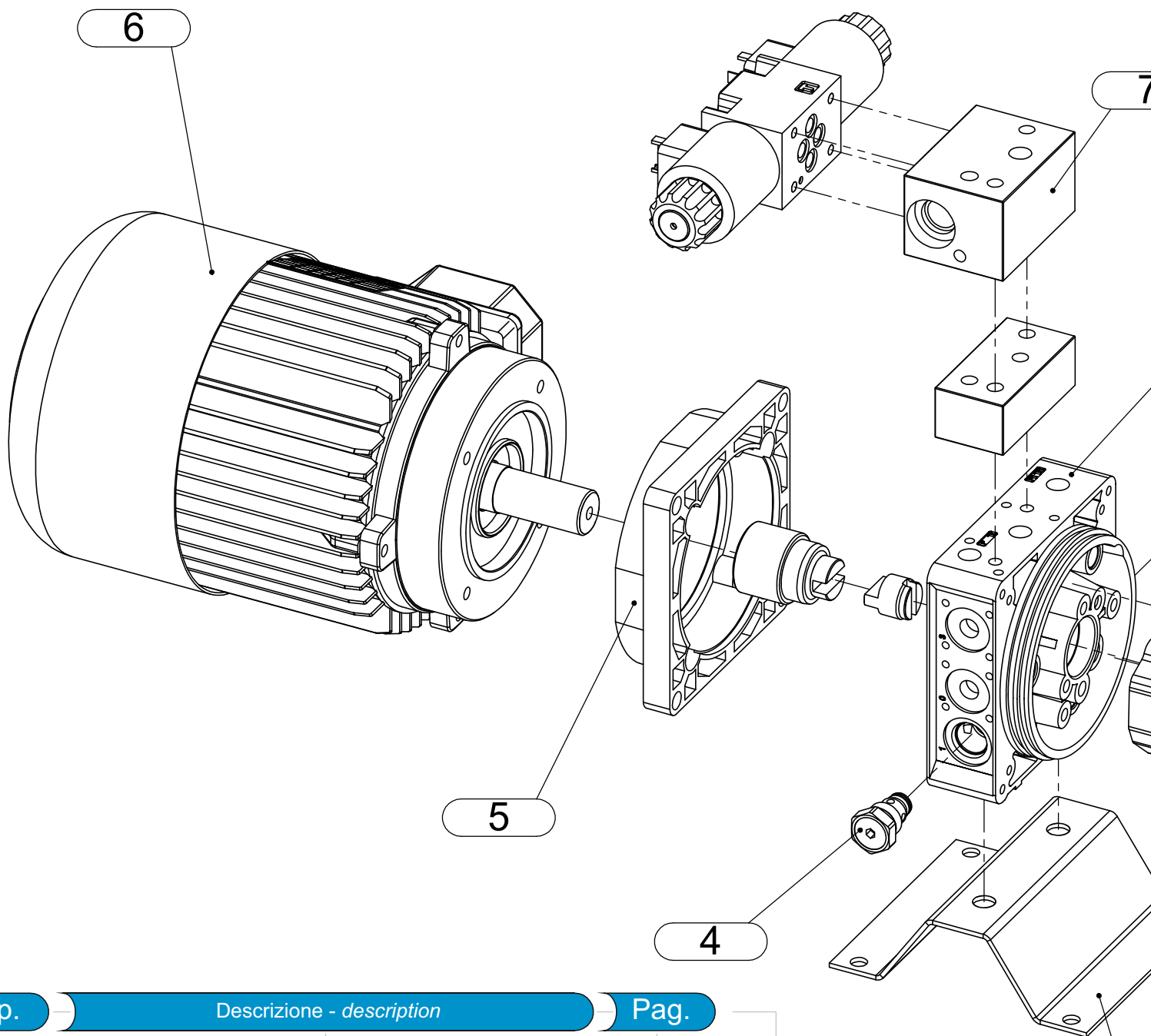


10 Gruppo 05 *05 group*

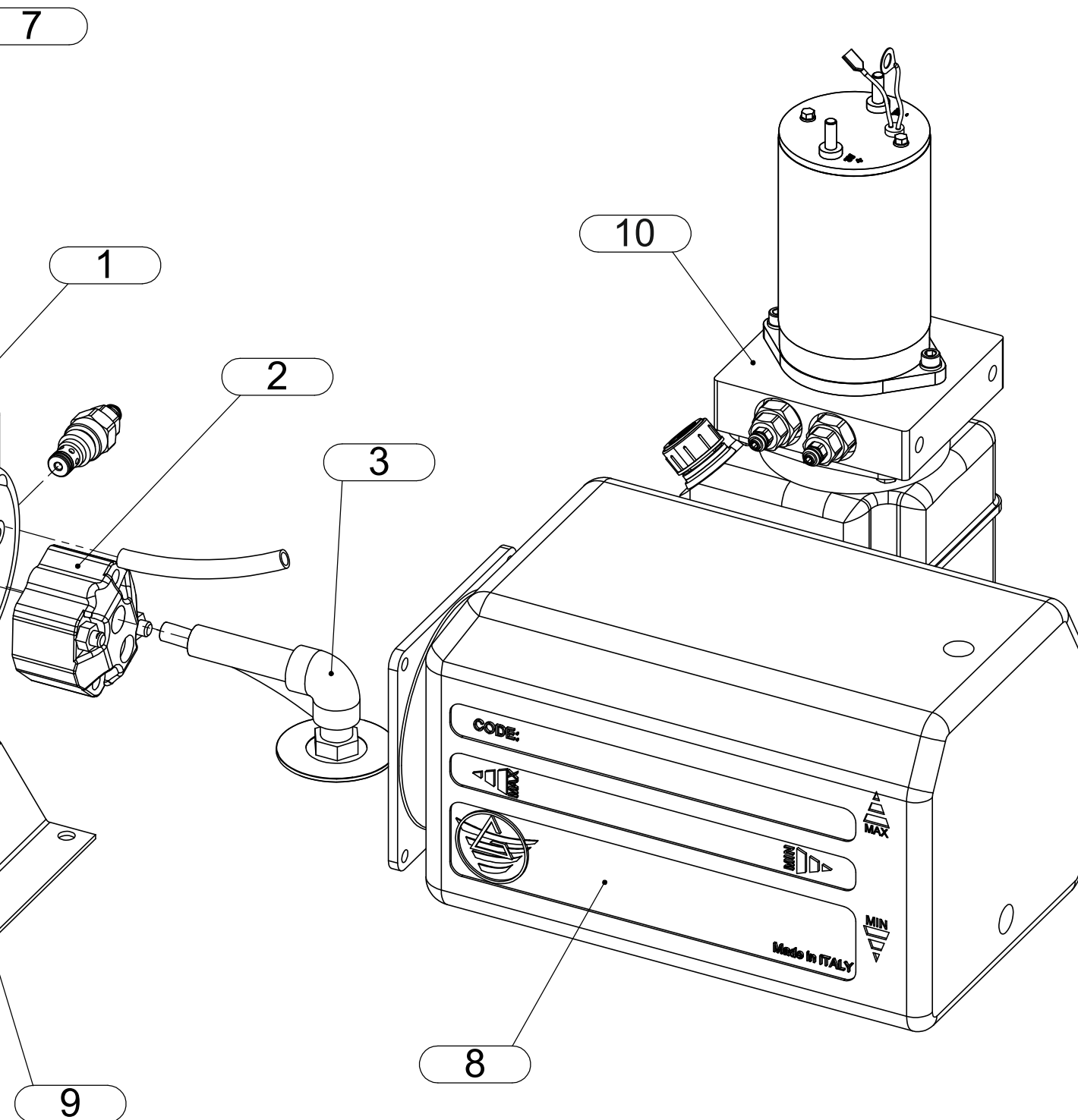


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Cap.	Descrizione - description	Pag.
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2	Pompe - pump	12
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4	Valvole e tappi - valves and plugs	22
5	Elementi di connessione - junction elements	40
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9	Accessori - accessories	75
10	Gruppo 05 - 05 group	78



Limiti di funzionamento - working constraints

Temperatura olio - oil temperature

temperatura ambiente -15 +40 °C (con picchi di 50°C)
environment temperature -15 +40 °C (with peaks of 50°C)

Viscosità - viscosity

min 15 mm²/s

max 80 mm²/s

massima viscosità all'avviamento - max viscosity at start up 250 mm²/s

Pressione - pressure

Pressione massima in funzione della pompa e della valvola di massima montate
maximum pressure depending on pump and relief valve used

Istruzioni di montaggio

mounting instructions

Valvole ed elettrovalvole devono essere ingrassate in corrispondenza di tutti gli o-ring montati su di esse e chiuse con la coppia di serraggio indicata sulla scheda tecnica corrispondente.

Valves and solenoid valves must be greased where o-ring are mounted on them and closed with the torque indicated on the data sheet.

Le valvole di massima (con filettatura M20x1,5) sono corredate di rondella in rame che deve essere alloggiata sul codolo della valvola prima della chiusura della stessa.

Relief valves (with M20x1,5 thread) are provided with a copper washer that must be fitted on the shank of the valve before the close of it.

Tutti i collari dei serbatoi devono essere ingrassati prima dell'accoppiamento con i corpi centrali e controllare che siano lisci, esenti da bave o da scorie di saldatura.

All the tank's collars must be greased before coupling with the center manifolds and check that they are smooth and free of burrs or welding slag.

I giunti motore ed i giunti pompa devono essere ingrassati nelle zone di accoppiamento.

Motor couplings and pump couplings must be greased in the coupling zones.

Il montaggio della pompa deve avvenire previo ingrassaggio del codolo anteriore che accoppierà con il centraggio del corpo. La chiusura delle due viti deve essere effettuata con una coppia di serraggio indicata sulla scheda tecnica corrispondente.

The pump mounting must be placed after greasing the front shank that will coupling with the centering of the manifold. The closure of the screws must be made with the torque indicated on the data sheet.

Installazione

installation

Non ci sono limiti nella posizione di montaggio, evitare qualsiasi installazione che potrebbe compromettere l'aspirazione della pompa.

Quando la centrale deve essere montata su strutture soggette a vibrazione, sarebbe meglio posizionare dei blocchi anti-vibranti nei punti di fissaggio.

There are no limits in mounting positions, just avoid any installation that could compromise pump's suction.

When power module is to be fitted on structures liable to vibrations, it is better to place vibration-clamping blocks in fixing points.

Pulizia e manutenzione

cleaning and maintenance

La sostituzione dell'olio viene effettuata la prima volta dopo 100 ore di lavoro, e poi ogni 3000 ore di lavoro (in ogni caso almeno una volta l'anno).

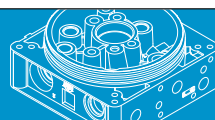
You have to substitute the oil after 100 hours of duty the first time, and then every 3000 hours of duty (in any case at least once a year).

Cablaggio e avviamento

wiring and starting

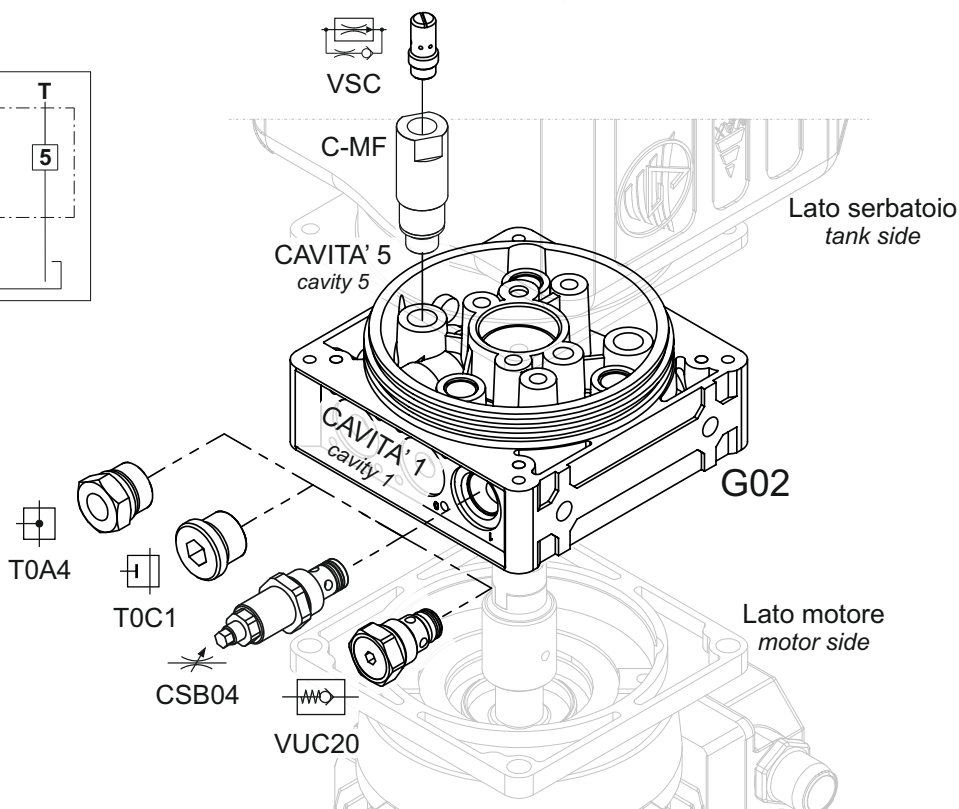
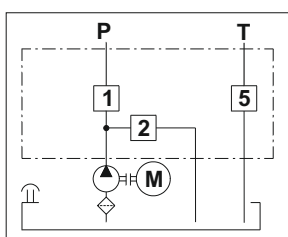
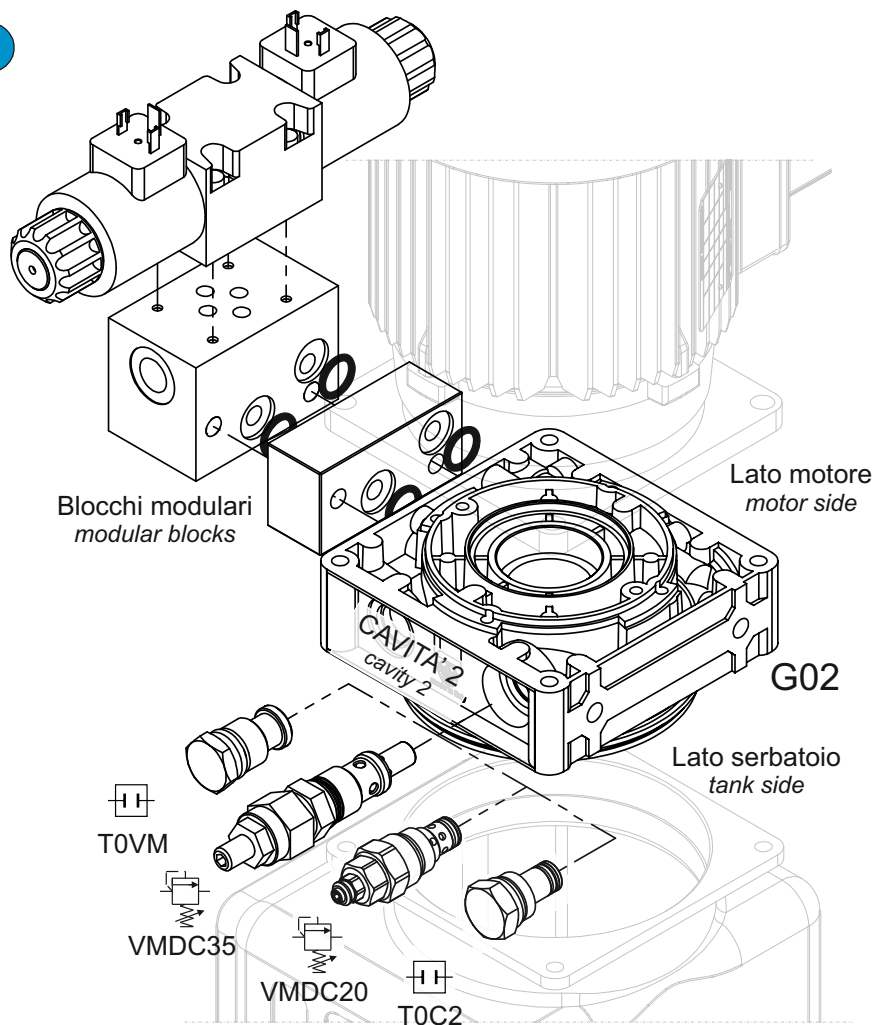
All'avviamento assicurarsi della corretta rotazione della pompa. E' rigorosamente vietato invertire la direzione di rotazione. Effettuare l'avvio previo svitamento totale della valvola di massima pressione.

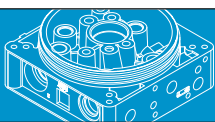
The starting must assure proper pump direction of rotation. It is strictly forbidden to invert the direction of rotation. The start-up must be done after the total unscrewing of the relief valve.



G02

2



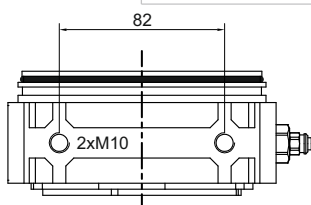
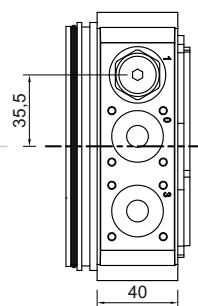
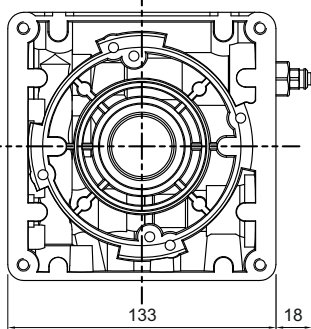
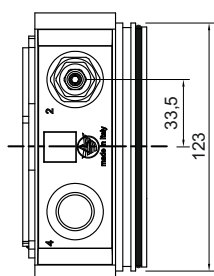
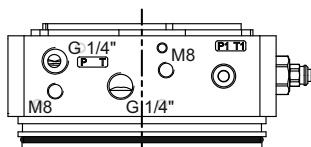
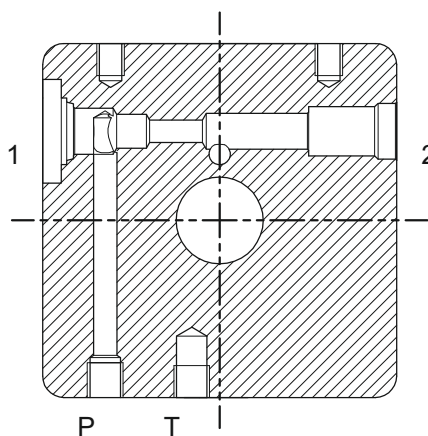
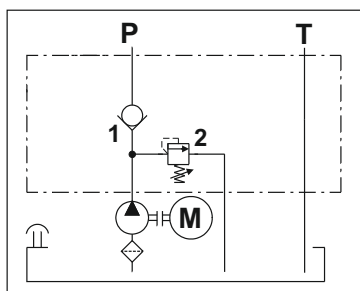


Collettori centrali central manifolds

1

3

G02



Codice ordinazione - ordering code

G 0 2
1 2

1 Tipo - type

G0 = Collettore 2 cavità
central manifold 2 cavities

2 Serie - series

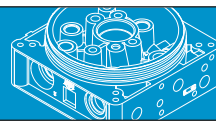
0 = M20x1,5
2 = 3/4" - 16 UNF (std)

Lato motore
motor side

VMDC20

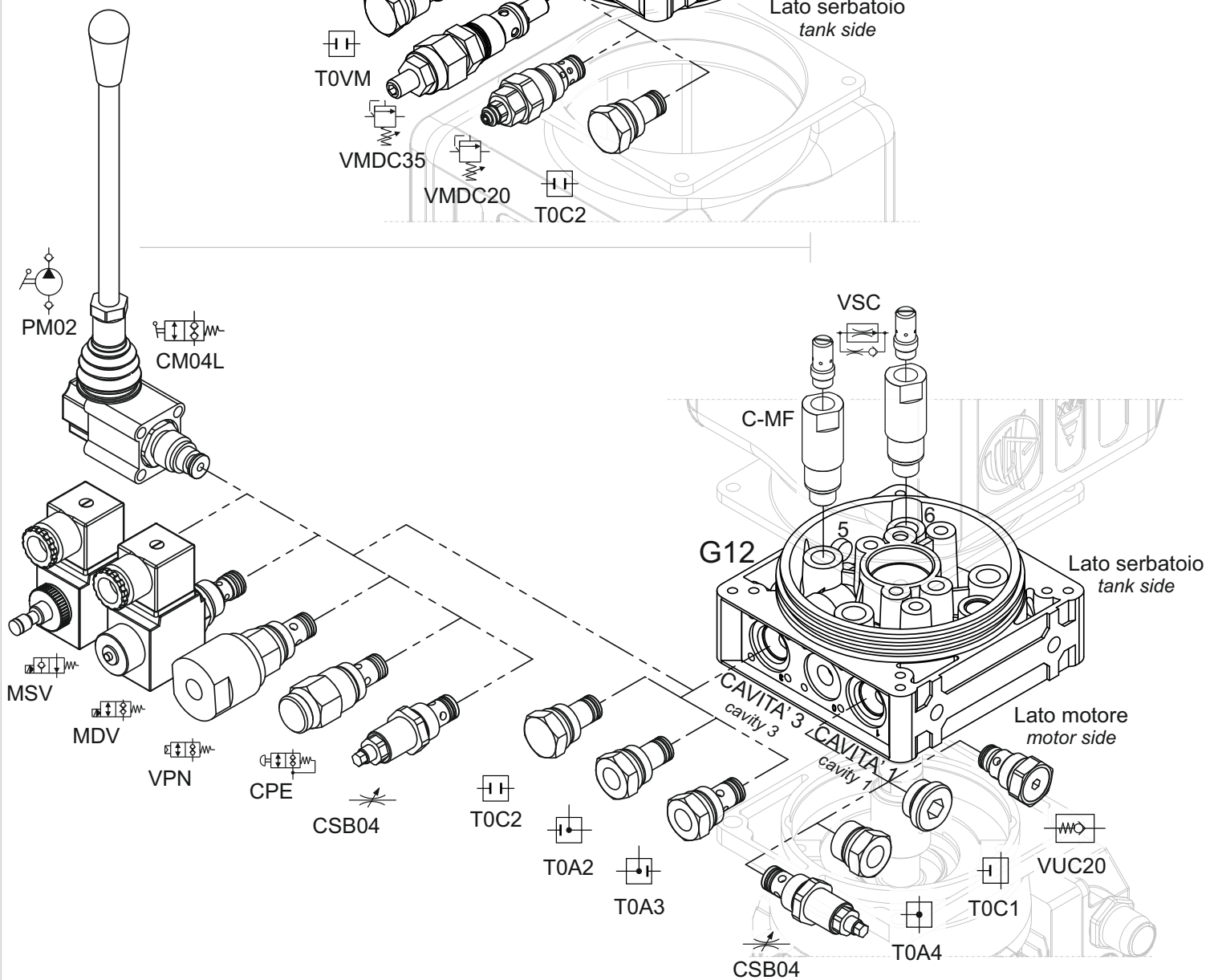
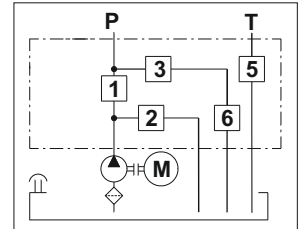
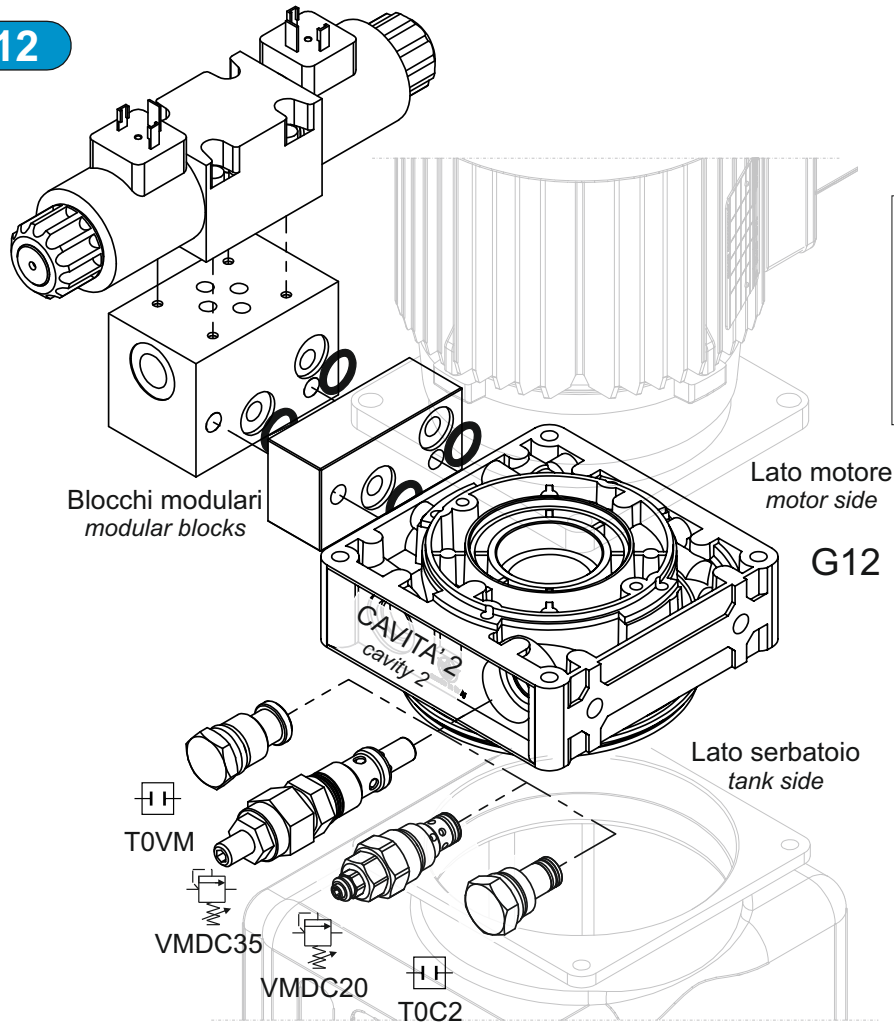
VUC20

Lato serbatoio
tank side



G12

4



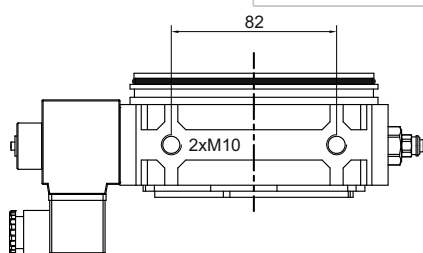
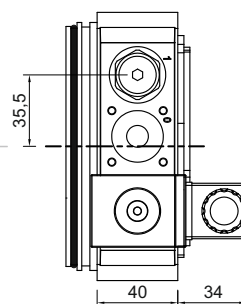
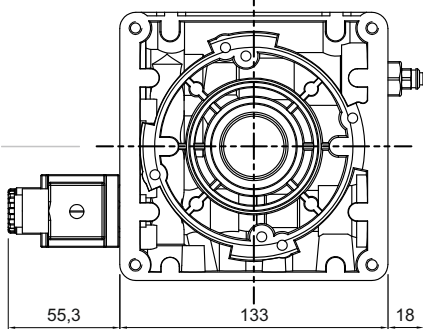
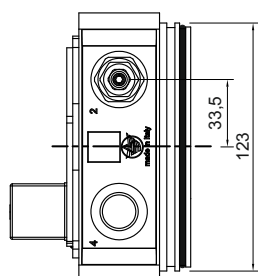
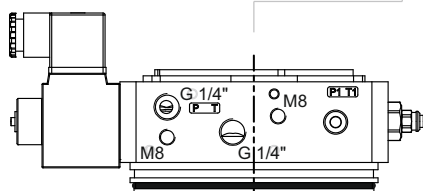
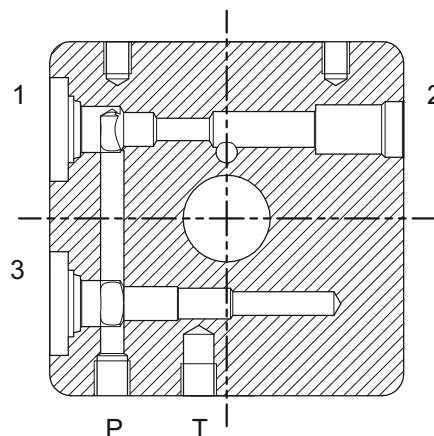
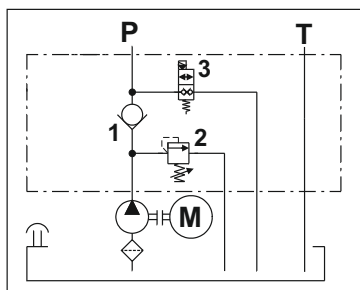


Collettori centrali central manifolds

1

5

G12



Codice ordinazione - ordering code



1 Tipo - type

G1 = Collettore 3 cavità
central manifold 3 cavities

2 Serie (cavità 2 - cavity 2)

0 = M20x1,5
2 = 3/4" - 16 UNF (std)

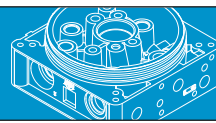
Lato motore
motor side

VMDC20

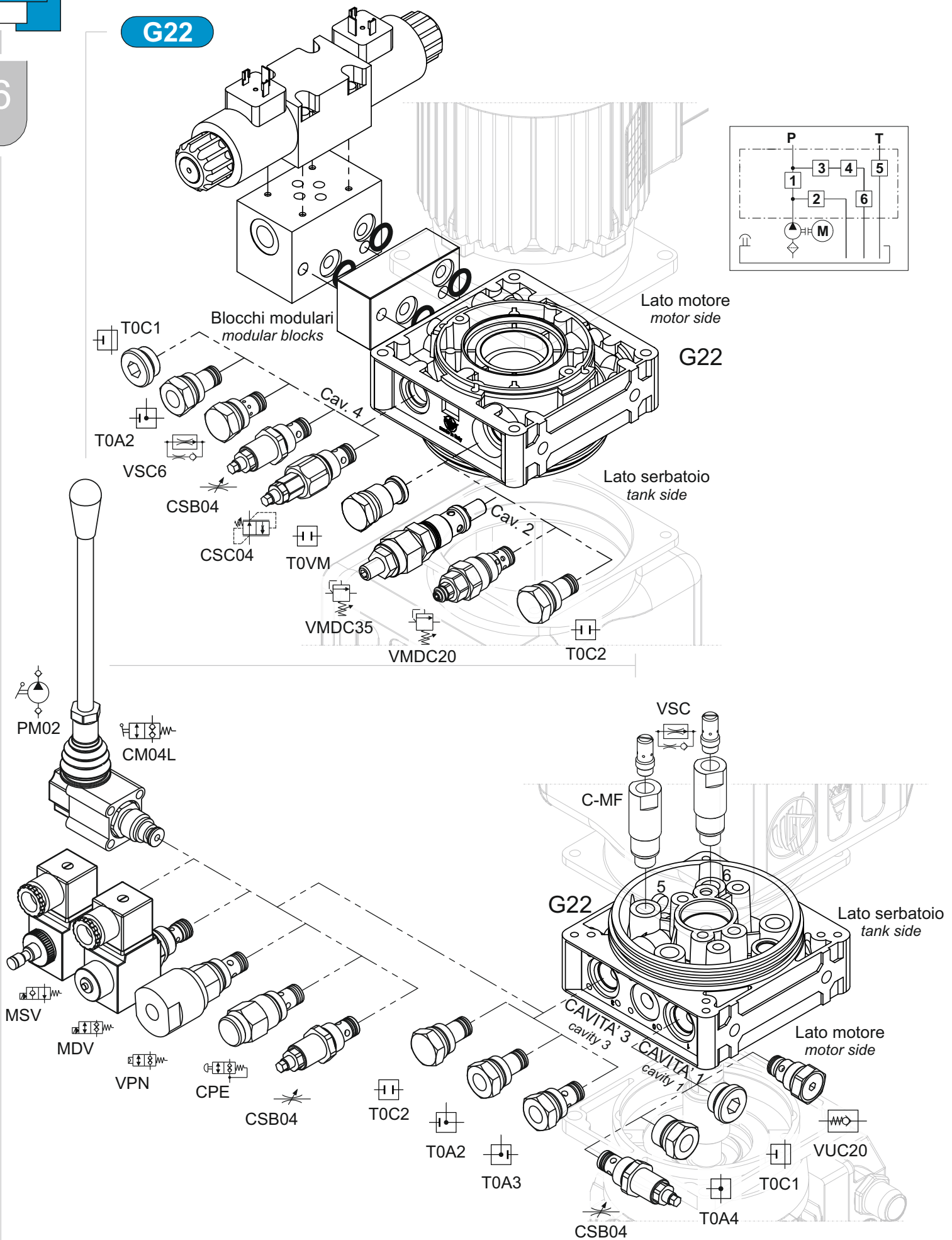
VUC20

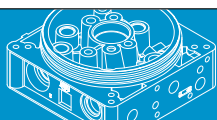
MDV

Lato serbatoio
tank side



G22



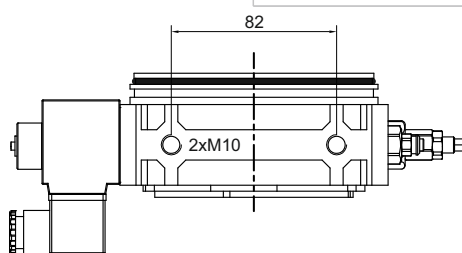
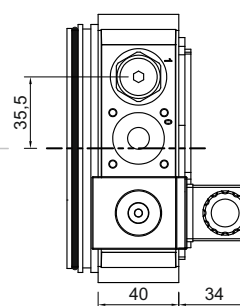
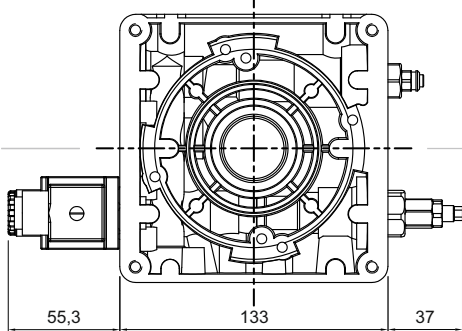
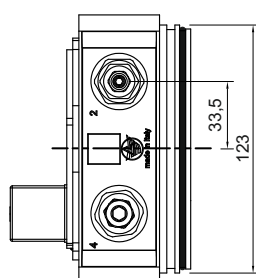
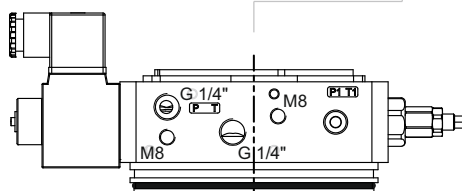
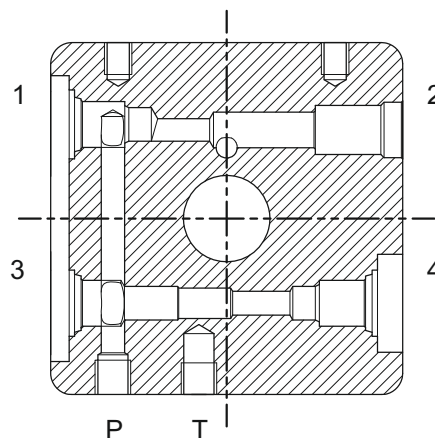
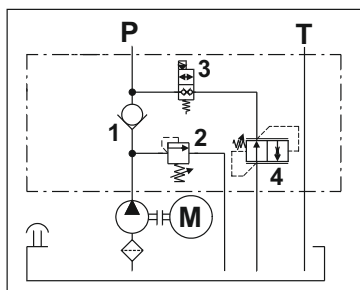


Collettori centrali central manifolds

1

7

G22



Codice ordinazione - ordering code

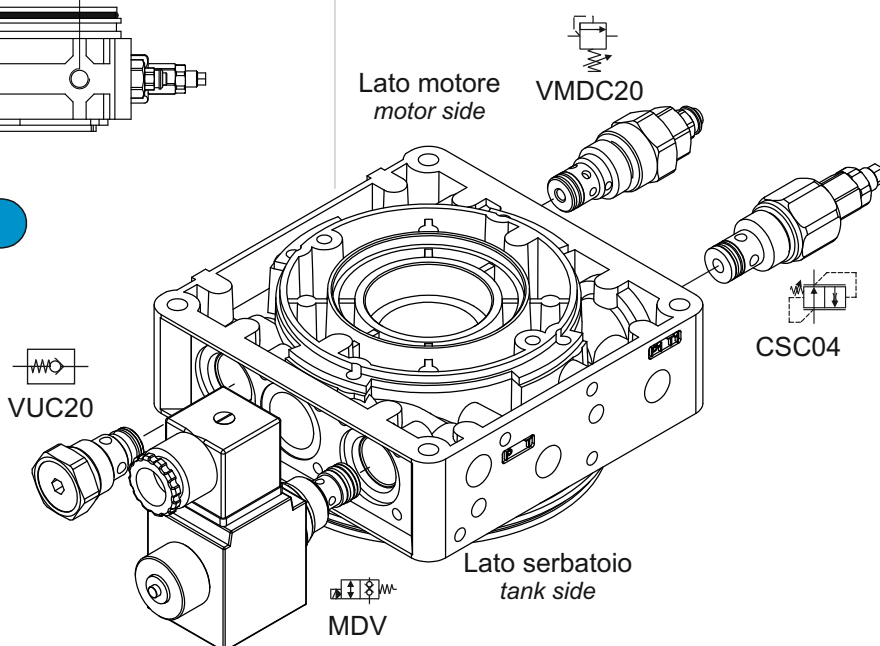


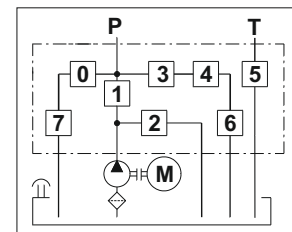
1 Tipo - type

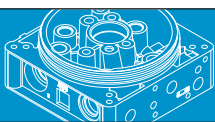
G2 = Collettore 4 cavità
central manifold 4 cavities

2 Serie - series

0 = M20x1,5
2 = 3/4" - 16 UNF (std)





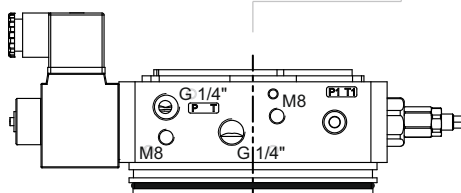
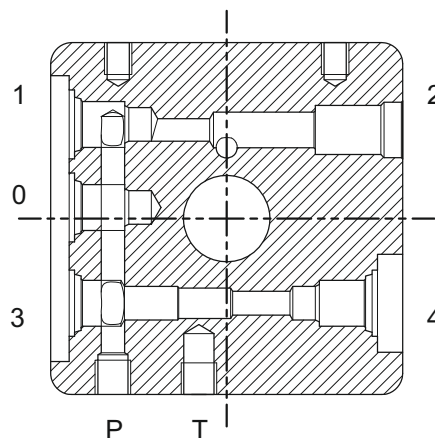
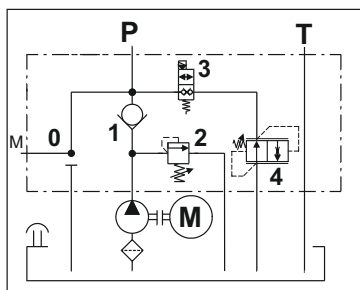


Collettori centrali central manifolds

1

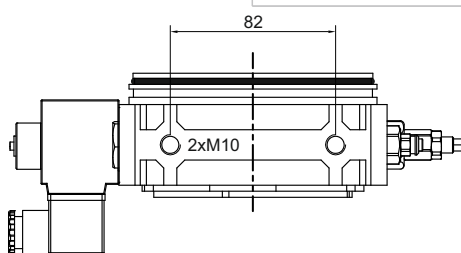
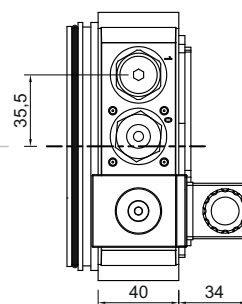
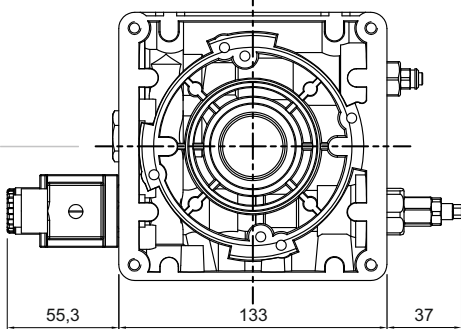
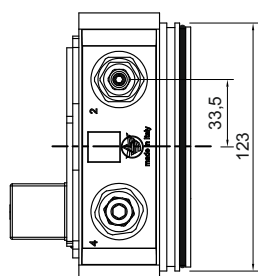
9

G32



NB: Il collettore G32 può montare pompe sinistre solo in presenza di tappi T0A3 e T0C2 alloggiati nella cavità 0. Per circuiti completi usare pompe destre.

Note: with G32 manifold it's possible to use anti-clockwise pumps only in presence of T0A3 and T0C2 plugs mounted into cavity 0. For complete circuits use clockwise pumps.



Codice ordinazione - ordering code



1 Tipo - type

G3 = Collettore 5 cavità
central manifold 5 cavities

2 Serie - series

0 = M20x1,5
2 = 3/4" - 16 UNF (std)



VUC20



T0A3

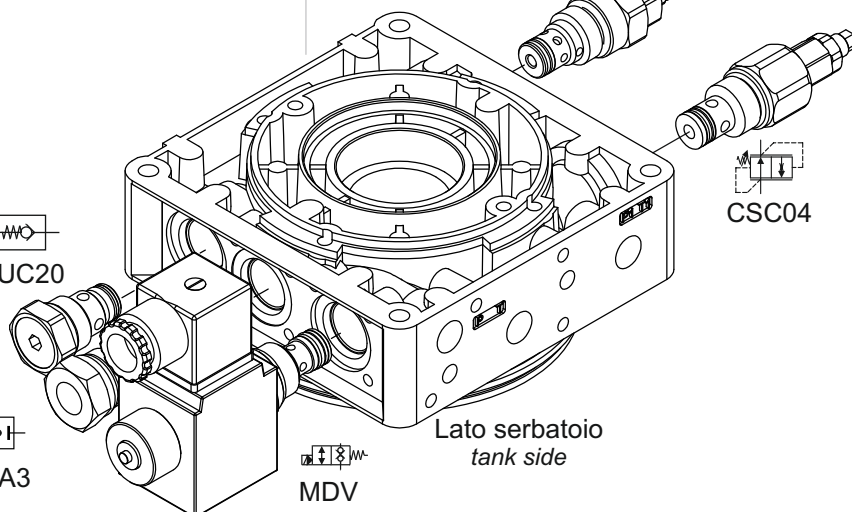


VMDC20

Lato motore
motor side

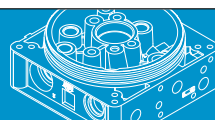


CSC04



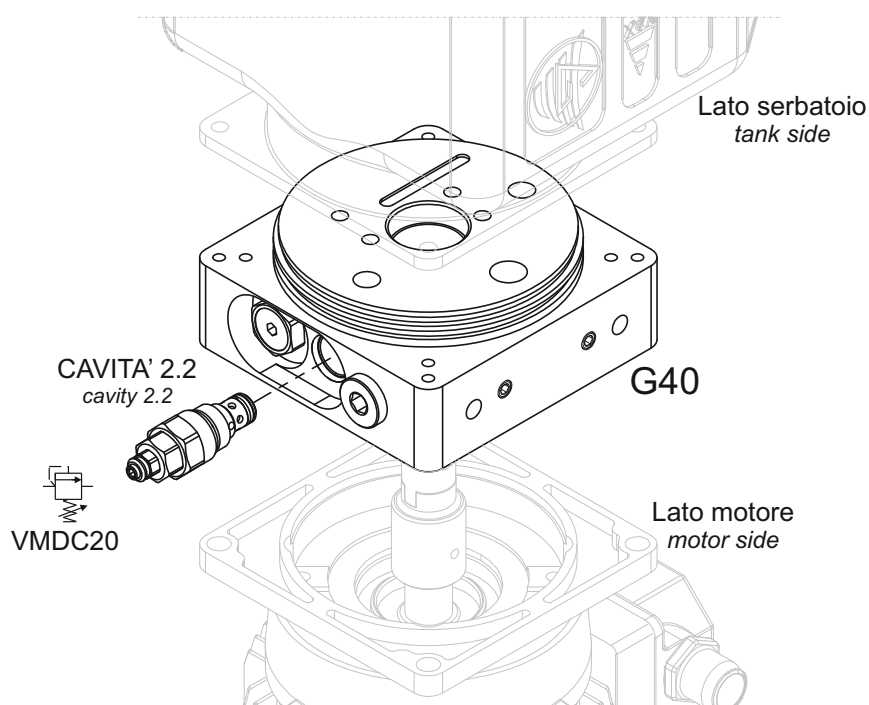
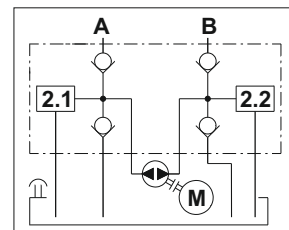
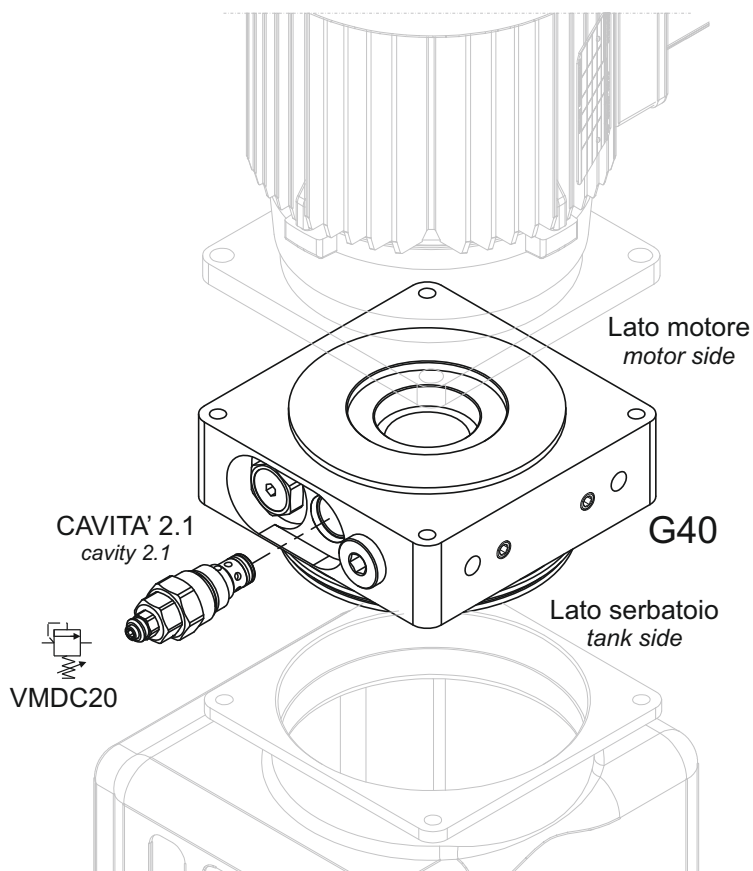
Lato serbatoio
tank side

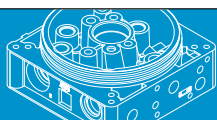
MDV



G40

10



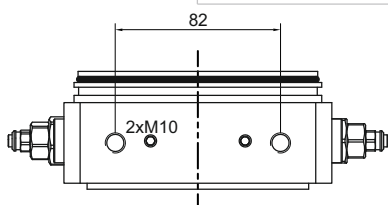
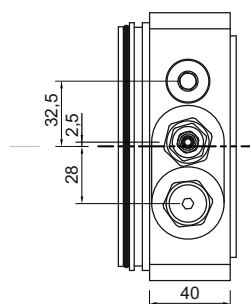
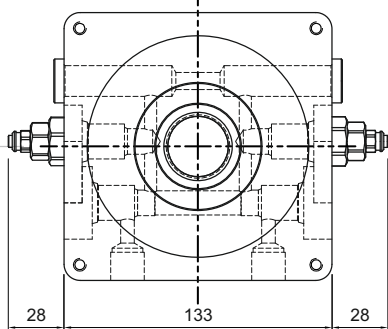
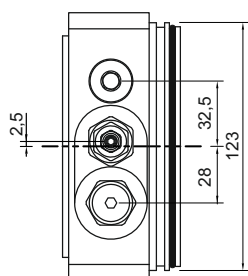
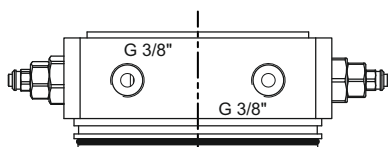
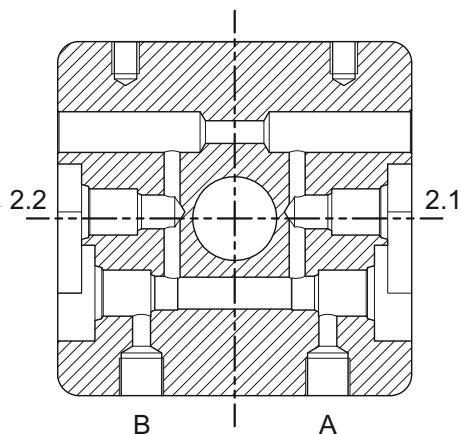
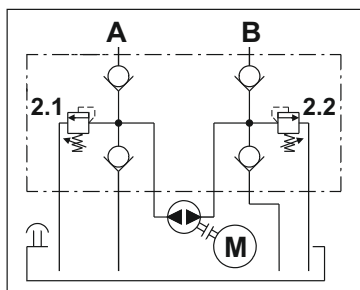


Collettori centrali central manifolds

1

11

G40



Codice ordinazione - ordering code

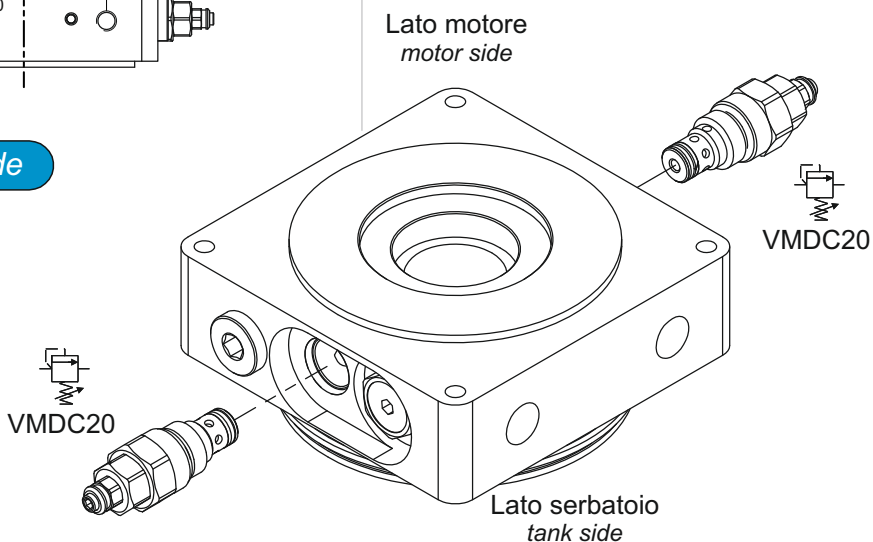
G	4	0
1	2	

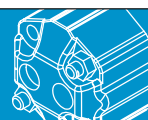
1 Tipo - type

G4 = Collettore reversibile
reversible central manifold

2 Serie - series

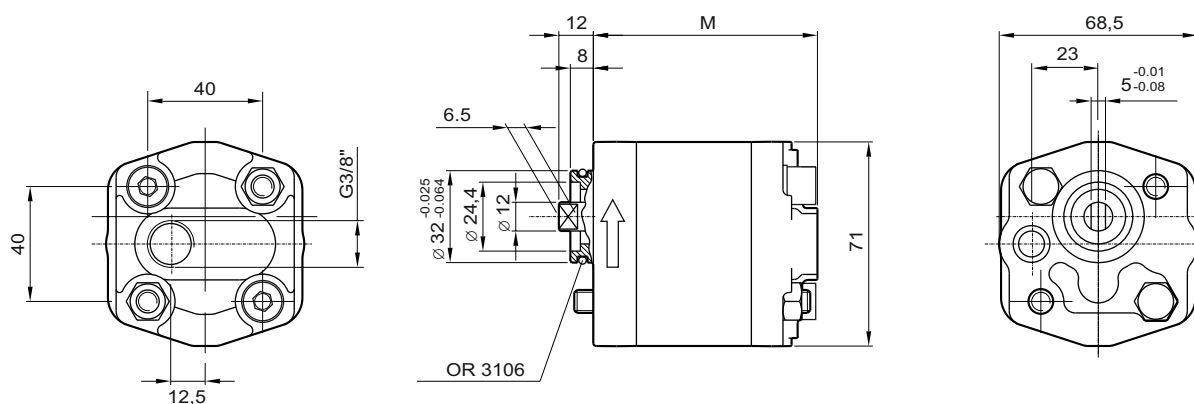
0 = Standard





Pompe ad ingranaggi singole - single gear pumps

12



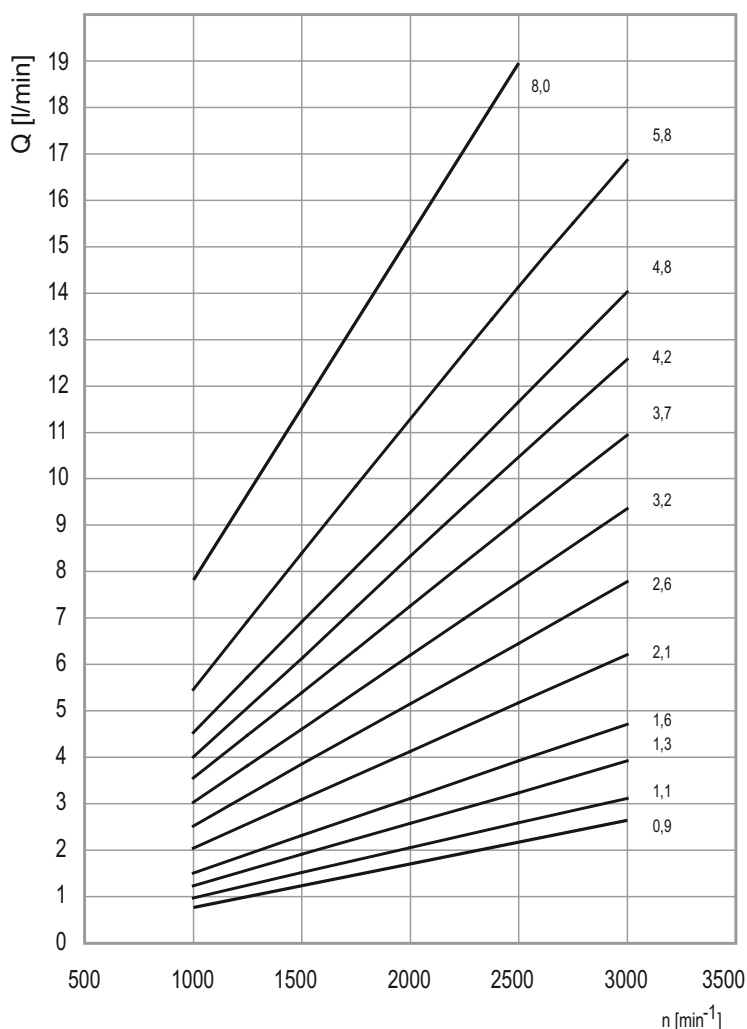
Pompe standard rotazione sinistra. Rotazione destra su richiesta.
Standard pump anti-clockwise rotation. Clockwise rotation on request.

Montaggio pompa: n°2 viti M8, con coppia di serraggio fissata a 23 ± 24 Nm.

To mount the pump: nr. 2 M8 screws, with a torque wrench setting fixed at 23 ± 24 Nm.

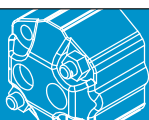
Modelli - models			
Code	cc/rev	P.max	M mm
PA109	0,9	210	47
PA111	1,1	210	47,5
PA113	1,3	210	48,5
PA116	1,6	210	49,5
PA121	2,1	210	51
PA126	2,6	210	53
PA132	3,2	190	54,5
PA137	3,7	190	56,5
PA142	4,2	190	58
PA148	4,8	170	60
PA158	5,8	170	63,5
PA180	8,0	160	100

Pompa per applicazione immersa
Immersed pump application



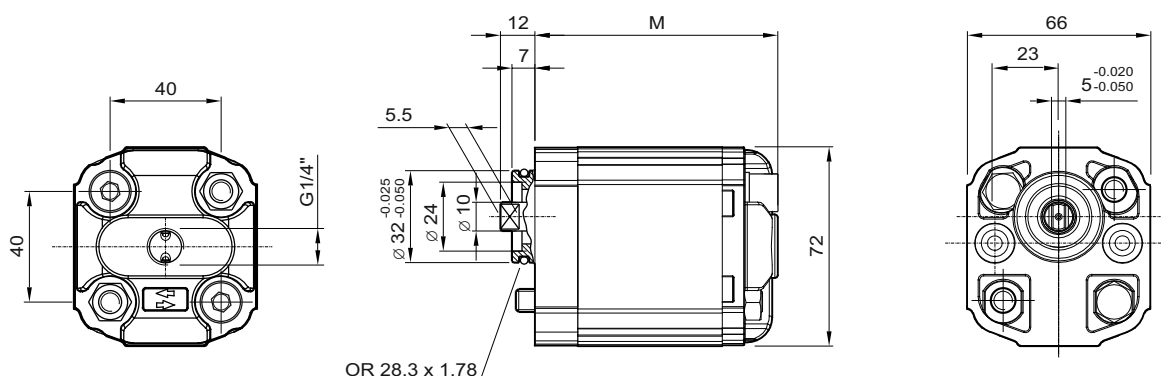
Le curve sono indicative e sono state ottenute alla temperatura di 50 °C, utilizzando olio con viscosità 30 cSt.

Each curve are only indicative and have been obtained at 50 °C, using oil with viscosity 30 cSt.



Pompe reversibili - reversible pumps

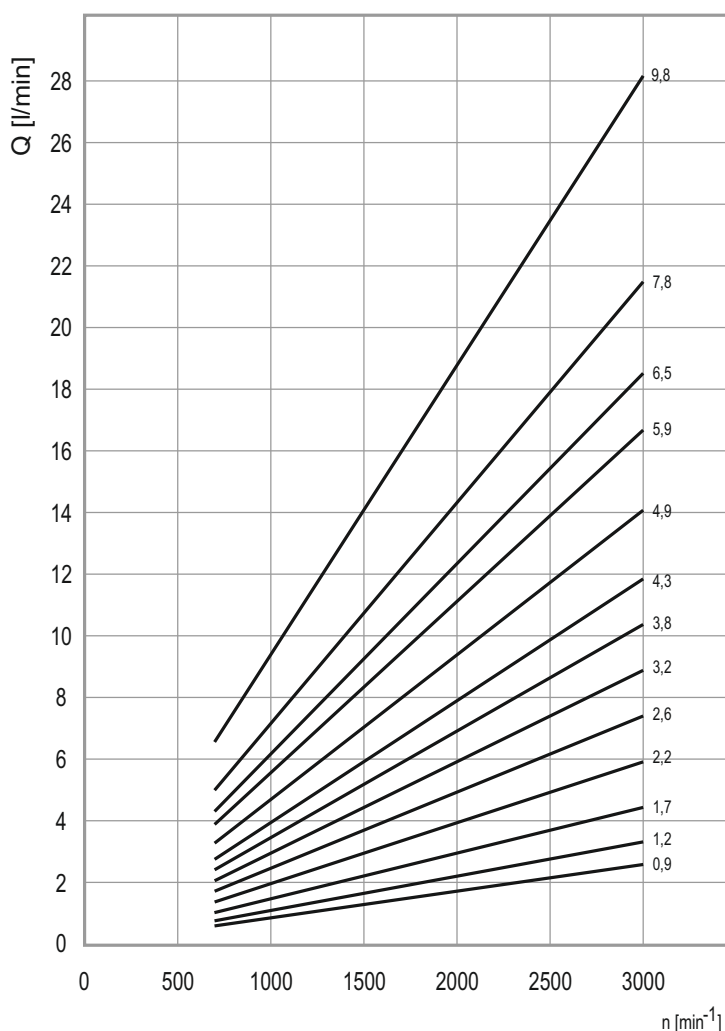
13



Pressione massima drenaggio $0,3 \div 0,5$ bar.
Max drain pressure: $0,3 \div 0,5$ bar.

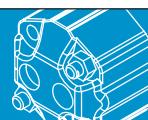
Montaggio pompa: n°2 viti M8, con coppia di serraggio fissata a $24,5 \div 29,4$ Nm.
To mount the pump: nr. 2 M8 screws, with a torque wrench setting fixed at $24,5 \div 29,4$ Nm.

Modelli - models			
Code	cc/rev	P.max	M mm
PR109	0,9	240	77,1
PR112	1,2	250	78
PR117	1,7	250	79
PR122	2,2	250	81,5
PR126	2,6	250	83,5
PR132	3,2	250	85,5
PR138	3,8	250	87,5
PR143	4,3	250	89,5
PR149	4,9	250	92,5
PR159	5,9	250	96
PR165	6,5	250	97,5
PR178	7,8	220	102,5
PR198	9,8	190	111,5



Pompa per applicazione immersa
Immersed pump application

Le curve sono indicative e sono state ottenute alla temperatura di 40°C , utilizzando olio con viscosità 68 cSt.
Each curve are only indicative and have been obtained at 40°C , using oil with viscosity 68 cSt.



Note

Pulizia dell'impianto e filtrazione *Cleaning and filtering the system*

È ormai universalmente riconosciuto che la maggior parte dei prematuri cali di prestazioni delle pompe è dovuta ad un loro funzionamento con fluidi contaminati; l'estrema riduzione delle tolleranze che contraddistinguono i componenti delle pompe e il loro conseguente funzionamento con giochi ridotti, possono essere irrimediabilmente compromessi se non si pone estrema cura nel mantenere il fluido pulito.

It is widely known that most pumps early failures are due to contaminated fluids. The extreme reduction of the tolerances required in the design of the pumps and therefore their operation with minimum clearances, are heavily influenced by a fluid that is not perfectly clean.

È comunemente accertato che le particelle circolanti continuamente nel fluido agiscono come agente abrasivo danneggiando le superfici con cui vengono a contatto e contribuendo alla formazione di ulteriore contaminante.

It is proved that particles circulating in the fluid act as abrasive agents, damaging the surfaces they touch and increasing the quantity of contaminant.

Per questo raccomandiamo di porre molta attenzione alla pulizia in fase di avviamento e al mantenimento della stessa nell'impianto. Gli interventi necessari per controllare e limitare il grado di contaminazione devono essere effettuati in maniera preventiva e correttiva.

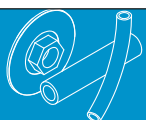
For this reason, ensure that system is perfectly clean during startup and keep it clean for its whole operating life. Necessary interventions to check and limit contamination should be performed in a preventive and corrective way.

Le azioni preventive comprendono l'accurata pulizia dell'impianto durante la fase di montaggio, la conseguente eliminazione delle bave residue, delle scorie delle saldature ecc., ed il trattamento del fluido prima del riempimento; prevedere una adeguata filtrazione anche al momento del riempimento dell'impianto e comunque ad ogni rabbocco. Dimensionare adeguatamente il serbatoio facendo in modo che abbia una capacità proporzionata al volume del fluido spostato dalla pompa in un minuto di funzionamento.

Preventive actions include: proper cleaning of the system during assembly, deburring, eliminating the welding scum and fluid filtering before filling up. Always pre-filter the fluid when filling up or topping up the system. Fit a proper tank; its capacity should be proportional to the volume displaced by the pump in one working minute.

Il controllo e la correzione dei livelli di contaminazione del fluido durante il funzionamento si ottiene attraverso l'installazione di filtri aventi la funzione di trattenere le particelle trasportate dal fluido. Due sono i parametri che determinano la buona scelta del filtro: il potere assoluto di filtrazione e il rapporto di filtrazione β . Bassi valori di potere assoluto di filtrazione e alti valori del rapporto di filtrazione β per particelle di piccole dimensioni concorrono a garantire buone caratteristiche di filtrazione. È pertanto molto importante limitare, oltre alle dimensioni massime, anche il numero delle particelle di più piccole dimensioni che oltrepassano il filtro. Risulta pertanto evidente che, all'aumentare della pressione di esercizio e al grado di sofisticazione dell'impianto, la filtrazione deve diventare sempre più efficace.

Fluid contamination level check and correction during operation can be obtained through filters that retain the particles in the fluid. Two parameters tell which filter is most suitable: absolute filtering power and β filtering ratio. Low absolute filtering power and high β filtering ratio for small particles help ensuring good filtration. It is then very important to limit not only max. dimensions, but also the number of smaller particles that pass through the filter. It goes without saying that with an operating pressure increase and according to the system sophistication degree, filtering should become more and more efficient.



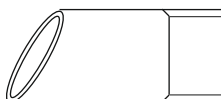
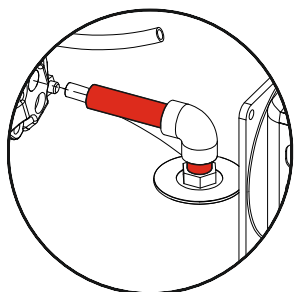
Aspirazione e scarico suction and return

3

15

EPD60R 3/8

Serie tubi di aspirazione G3/8" in EPD
Series of EPD G3/8" suction hoses

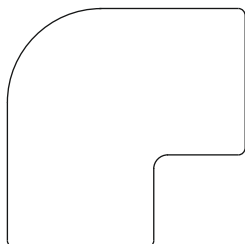
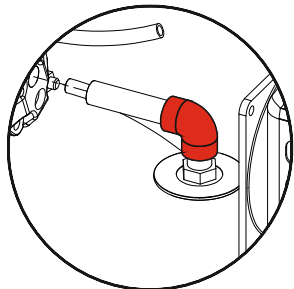


Lunghezze disponibili
available lengths

30	40	60
80	100	120
140	160	180
185	200	225
250	350	385

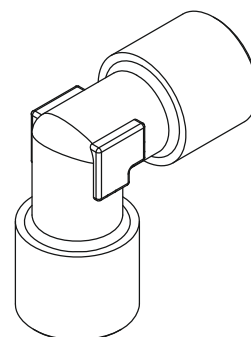
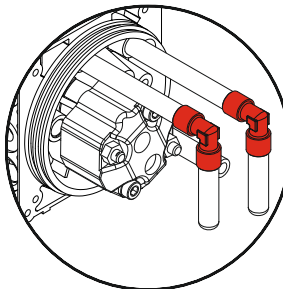
E602

Raccordo G3/8" in PVC 90° per kit aspirazione orizzontale
90° G3/8" PVC fitting for horizontal suction kit



SZ31440

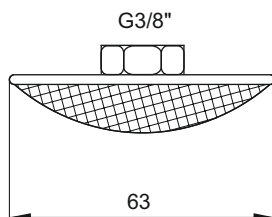
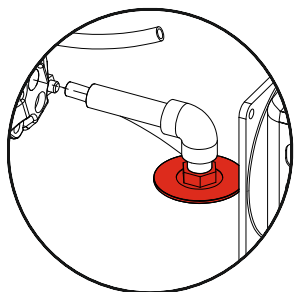
Raccordo G1/4" in ottone nichelato 90° per kit di scarico
90° G1/4" nickel-plated brass fitting for return kit



Raccordo per kit di scarico ad uso orizzontale (KR)
Fitting for return kit to horizontal use (KR)

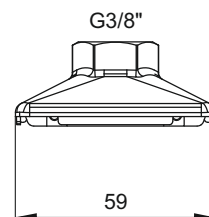
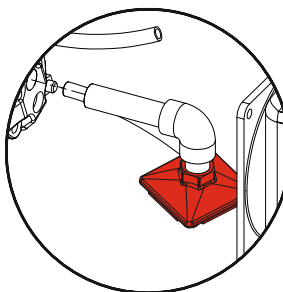
FT90

Elemento filtrante 90µ Repts FeZN 12 lt/min ΔP 0,1 bar
Filtering element 90µ Repts FeZN 12 lt/min ΔP 0,1 bar

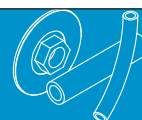


FT180

Elemento filtrante 180µ Repts FeZN 15 lt/min ΔP 0,1 bar
Filtering element 180µ Repts FeZN 15 lt/min ΔP 0,1 bar

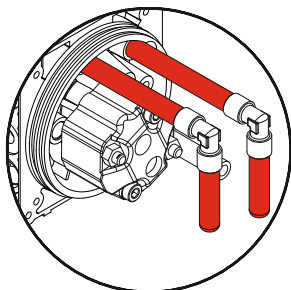


Aspirazione e scarico suction and return



EPD60R 1/4

Tubo rigido per linee di scarico G1/4" in EPD
EPD G1/4" rigid pipes for return lines



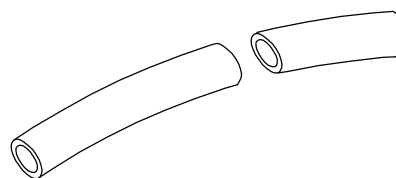
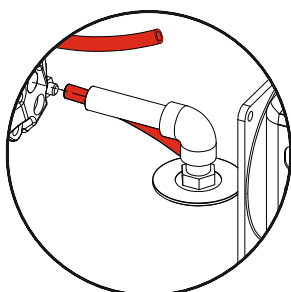
Lunghezze 115mm
lengths 115mm



Lunghezze 60mm
(filettato da una sola parte)
lengths 60mm
(threaded on one side only)

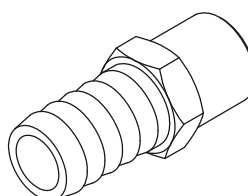
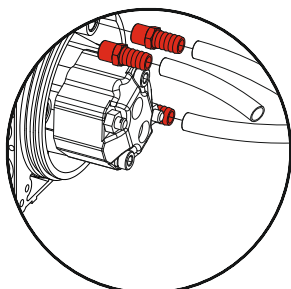
C010-T12-10

Tubo rilsan per linee di scarico antischiuma nel serbatoio
Rilsan hose for in-tank anti foam return lines



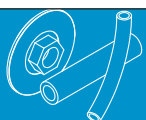
SS21042

Portagomma
Hose connector



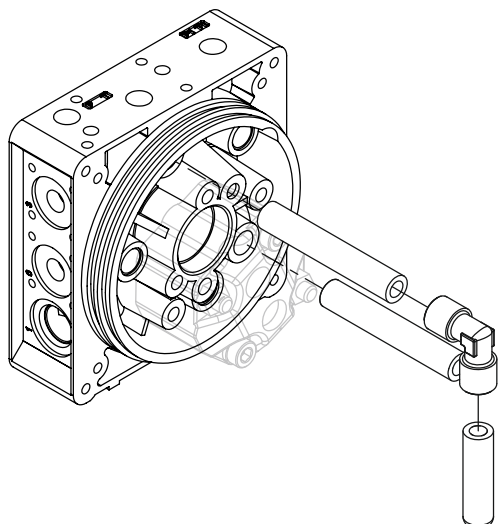
Caratteristiche principali main features

Materiale material	Ottone nichelato nickel-plated brass
Filettatura thread	G 1/4"

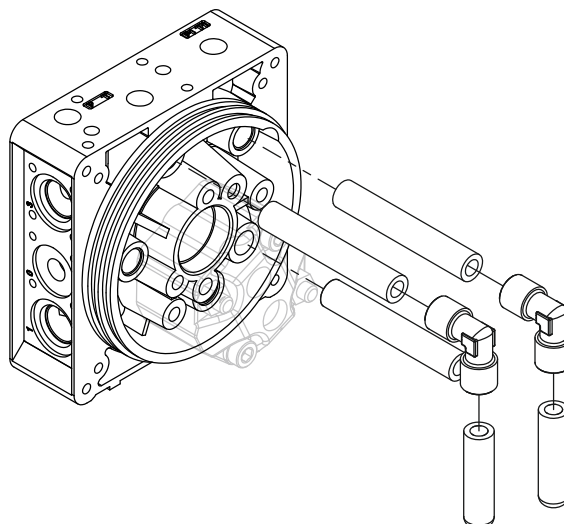


KR

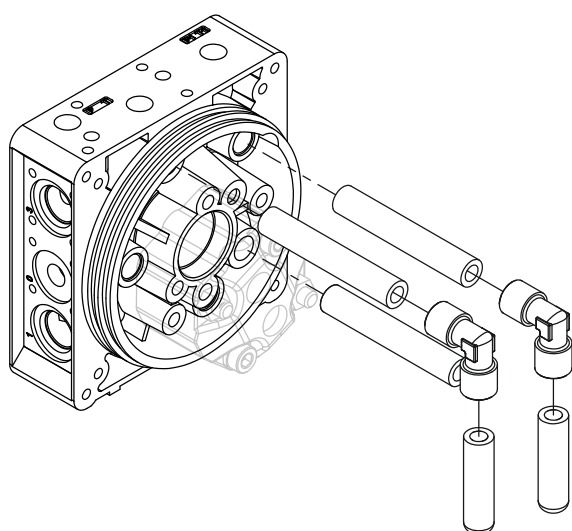
Kit di scarico per serbatoi orizzontali
Return kit for horizontal tanks



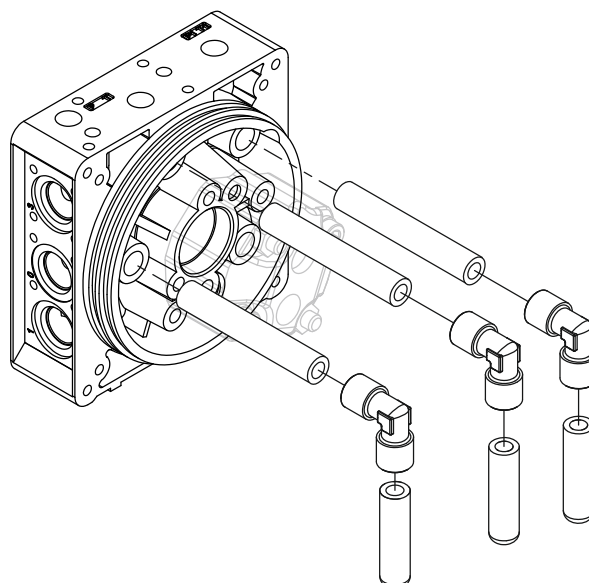
G0 collettore G02 - G02 manifold



G1 collettore G12 - G12 manifold



G2 collettore G22 - G22 manifold



G3 collettore G32 - G32 manifold

In caso di serbatoi CS010 e CS020 o collettori reversibili (G40), per il kit di scarico contattare l'ufficio tecnico
in case of CS010 and CS020 tanks or reversible manifold (G40), for the return kit, contact our technical department

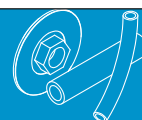
Codici ordinazione - ordering codes

K	R	G	2
1		2	

1 Kit scarico - return kit
KR

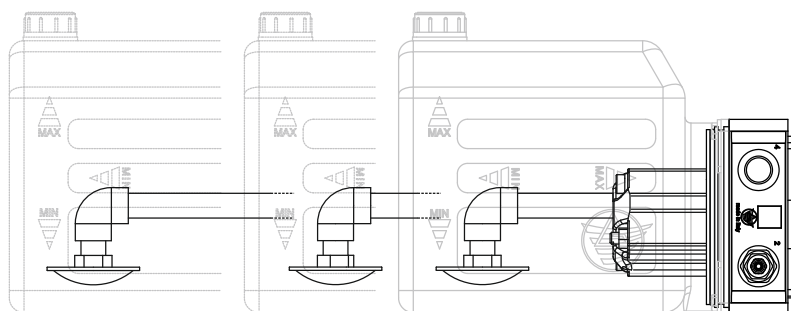
2 Collettore - manifold

G0 = 2xEPD60R1/4 115 + SZ31440 + EPD60R1/4 60
G1 = 3xEPD60R1/4 115 + 2xSZ31440 + 2xEPD60R1/4 60
G2 = 3xEPD60R1/4 115 + 2xSZ31440 + 2xEPD60R1/4 60
G3 = 3xEPD60R1/4 115 + 3xSZ31440 + 3xEPD60R1/4 60



KOPE

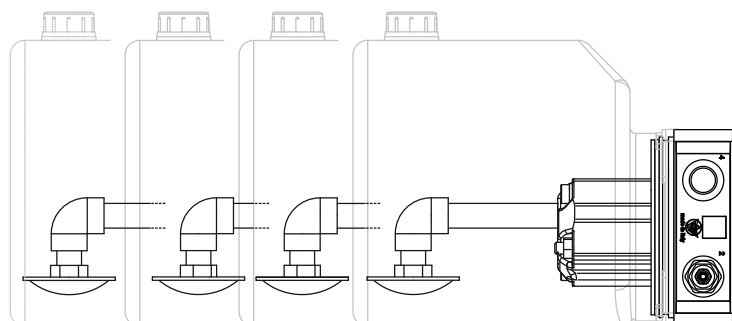
Kit aspirazione orizzontale per serbatoi PE
Suction horizontal kit for PE tanks



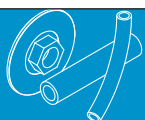
PE120	12 lt.	PE080	8 lt.	PE050	5 lt.
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KOPC

Kit aspirazione orizzontale per serbatoi PC
Suction horizontal kit for PC tanks



PC110	11 lt.	PC090	9 lt.	PC070	7 lt.	PC050	5 lt.
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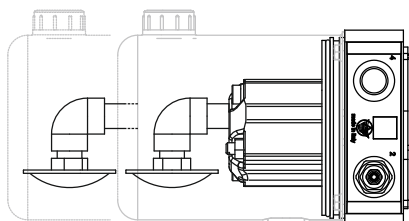
Aspirazione e scarico suction and return

3

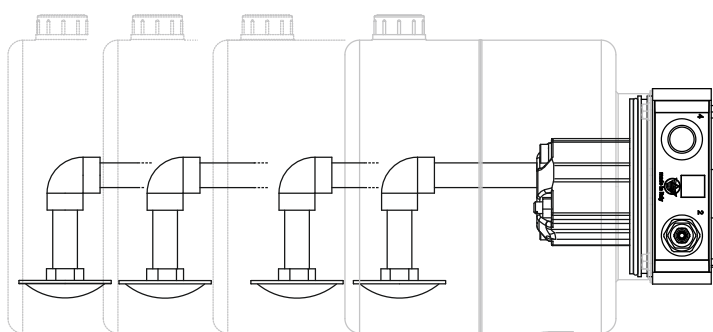
KOCS

Kit aspirazione orizzontale per serbatoi CS
Suction horizontal kit for CS tanks

19



CS020 2,5 lt. CS010 1,5 lt.



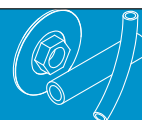
CS120 12 lt. CS100 10 lt. CS080 8 lt. CS050 5 lt.

NB: I kit aspirazione sono validi per tutti i tipi di collettori e pompe, esclusi il G40 (collettore reversibile) e PA180 (pompa 8cc/rev). In caso di impiego di questi componenti, rivolgersi al nostro ufficio tecnico.
Note: Suction kits are valid for all type of manifolds and pumps, except G40 (reversible manifold) and PA180 (8cc/rev pump). When using these components, please contact our technical department.

Codici ordinazione - ordering codes

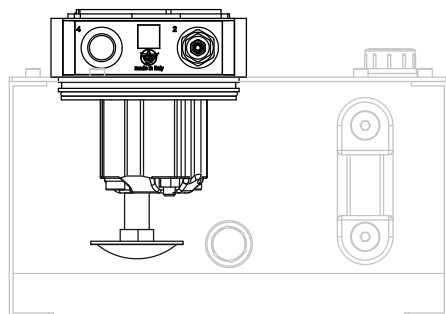
K O P E 0 8
1 2 3

1	Kit orizzontale - horizontal kit	2	Serie serbatoio - tank series	3	Volume serbatoio - tank volume		
	KO (2xEPD60R3/8 + E602 + FT90)		PE PC CS		PE	PC	CS
					05 = 5,0 lt	05 = 5,0 lt	01 = 1,5 lt
					08 = 8,0 lt	07 = 7,0 lt	02 = 2,5 lt
					12 = 12,0 lt	09 = 9,0 lt	05 = 5,0 lt
						11 = 11,0 lt	08 = 8,0 lt
							10 = 10,0 lt
							12 = 12,0 lt

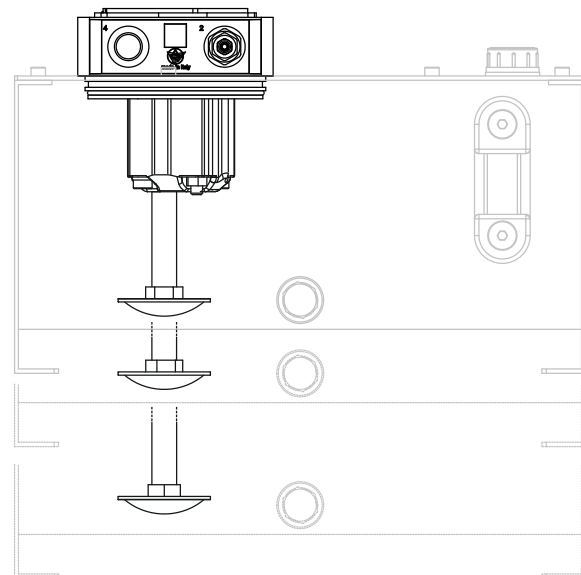


KVLM

Kit aspirazione per serbatoi LM
Suction kit for LM tanks



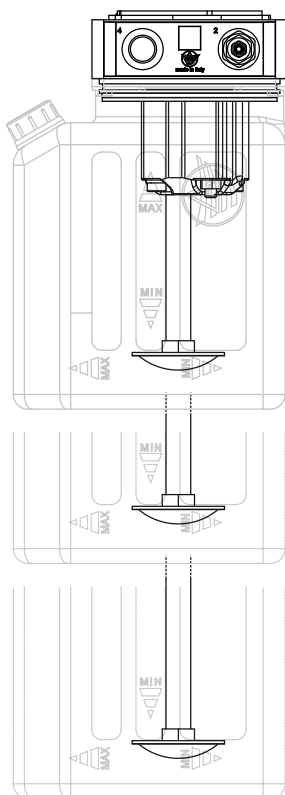
LM07 7 lt.



LM15 15 lt. LM20 20 lt. LM30 30 lt.

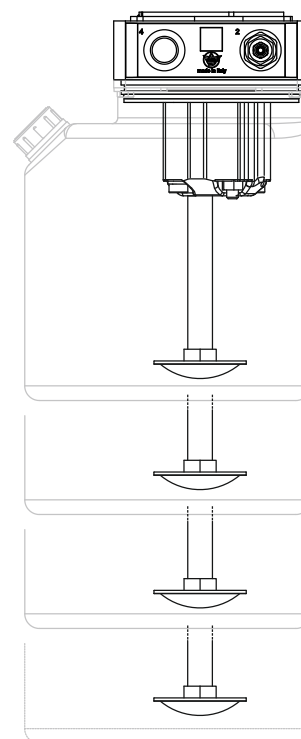
KVPE

Kit aspirazione verticale per serbatoi PE
Suction vertical kit for PE tanks



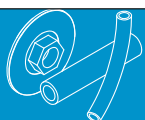
KVPC

Kit aspirazione verticale per serbatoi PC
Suction vertical kit for PC tanks



PE05V 5 lt. PE08V 8 lt. PE12V 12 lt.

PC05V 5 lt. PC07V 7 lt. PC09V 9 lt. PC11V 11 lt.



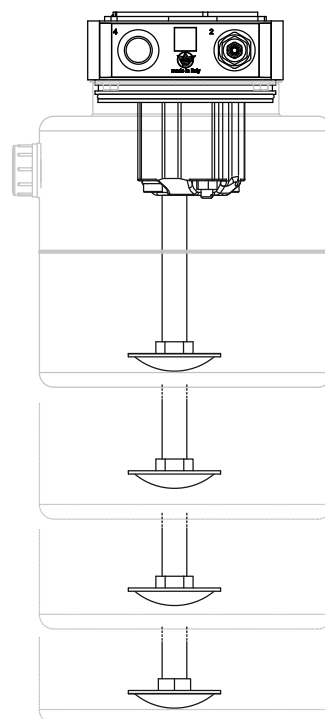
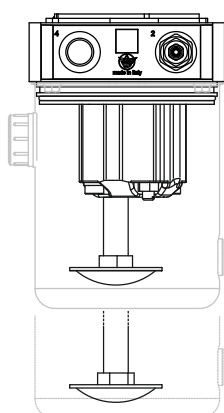
Aspirazione e scarico suction and return

3

KVCS

Kit aspirazione verticale per serbatoi CS
Suction certical kit for CS tanks

21



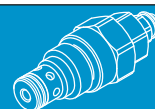
CS01V	1,5 lt.	CS02V	2,5 lt.	CS05V	5 lt.	CS08V	8 lt.	CS10V	10 lt.	CS12V	12 lt.
-------	---------	-------	---------	-------	-------	-------	-------	-------	--------	-------	--------

NB: I kit aspirazione sono validi per tutti i tipi di collettori e pompe, esclusi il G40 (collettore reversibile) e PA180 (pompa 8cc/rev). In caso di impiego di questi componenti, rivolgersi al nostro ufficio tecnico.
Note: Suction kits are valid for all type of manifolds and pumps, except G40 (reversible manifold) and PA180 (8cc/rev pump). When using these components, please contact our technical department.

Codici ordinazione - ordering codes

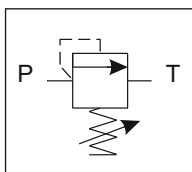
K	V	C	S	1	0
1	2	3			

1	Kit verticale - vertical kit	2	Serie serbatoio - tank series	3	Volume serbatoio - tank volume			
	KV (EPD60R3/8 + FT90)	PE		LM	PE	PC	CS	
		PC		07 = 7,0 lt	05 = 5,0 lt	05 = 5,0 lt	01 = 1,5 lt	
		CS		15 = 15,0 lt	08 = 8,0 lt	07 = 7,0 lt	02 = 2,5 lt	
		LM		20 = 20,0 lt	12 = 12,0 lt	09 = 9,0 lt	05 = 5,0 lt	
				30 = 30,0 lt		11 = 11,0 lt	08 = 8,0 lt	
							10 = 10,0 lt	
							12 = 12,0 lt	



VMDC35

Valvola di massima pressione ad azione diretta
Direct acting relief valve



Caratteristiche principali main features	
Pressione max max pressure	320 bar
Portata max max flow	30 l/min
Peso weight	0,16 Kg

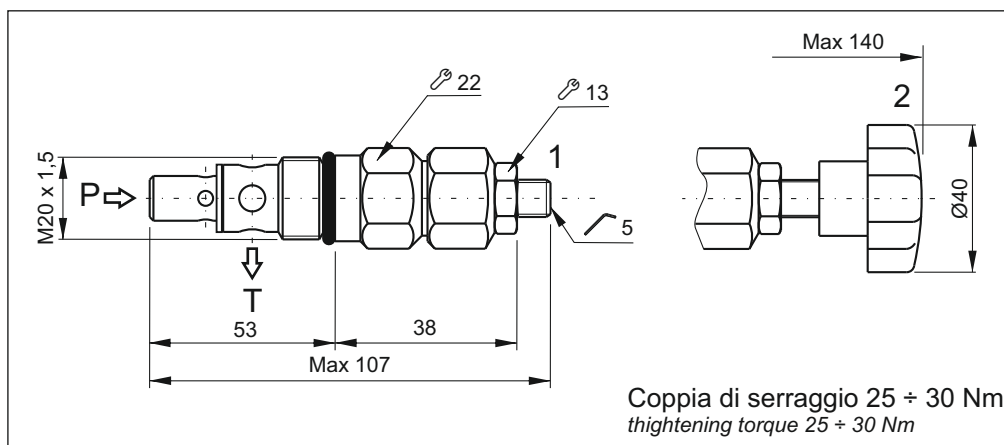
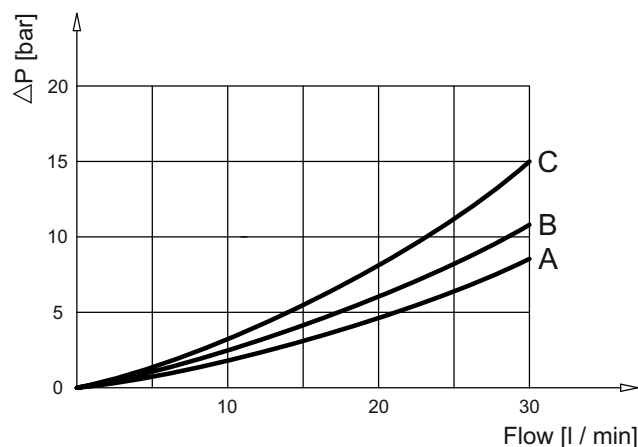


Diagramma perdita di carico - pressure drop diagram



NB: Valori misurati sulla sola valvola.

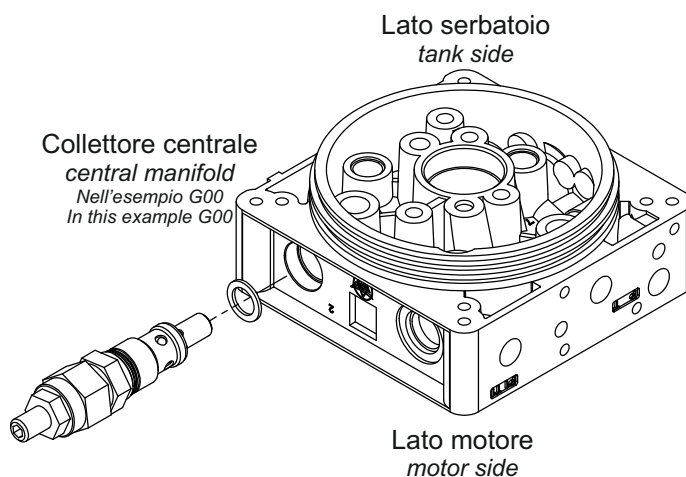
La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

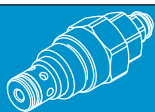
Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

Codice ordinazione - ordering code

V	M	D	C	3	5	B	1	0
1		2		3		4		5

1	Tipo di valvola - valve type VMDC	2	Grandezza nominale - nominal size M20x1,5	3	Range di lavoro - working range A = 10 ÷ 90 bar B = 20 ÷ 210 bar C = 70 ÷ 350 bar
4	Dispositivo di regolazione - adjusting device 1 = Vite - screw (standard) 2 = Manopola - handknob	5	Serie - series 0 = Standard		





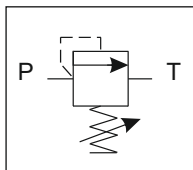
Valvole e tappi valves and plugs

4

VMDC20

Valvola di massima pressione ad azione diretta
Direct acting relief valve

23



Caratteristiche principali main features	
Pressione max max pressure	350 bar
Portata max max flow	20 l/min
Peso weight	0,10 Kg

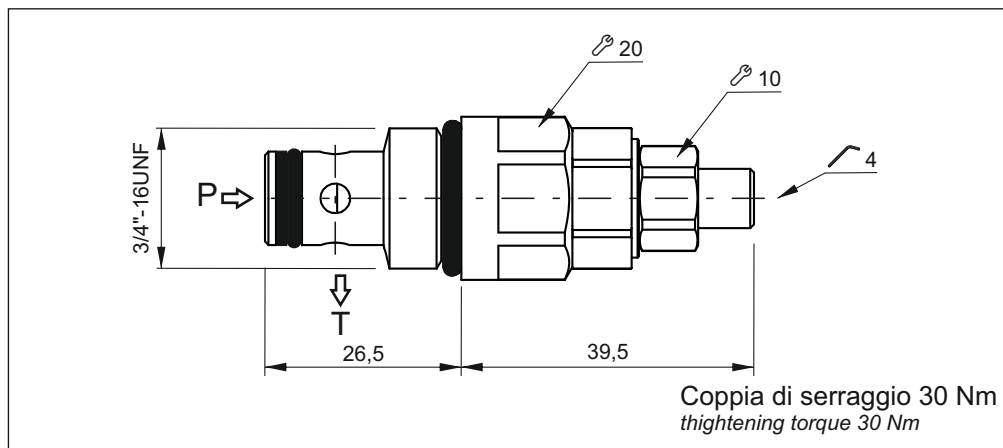
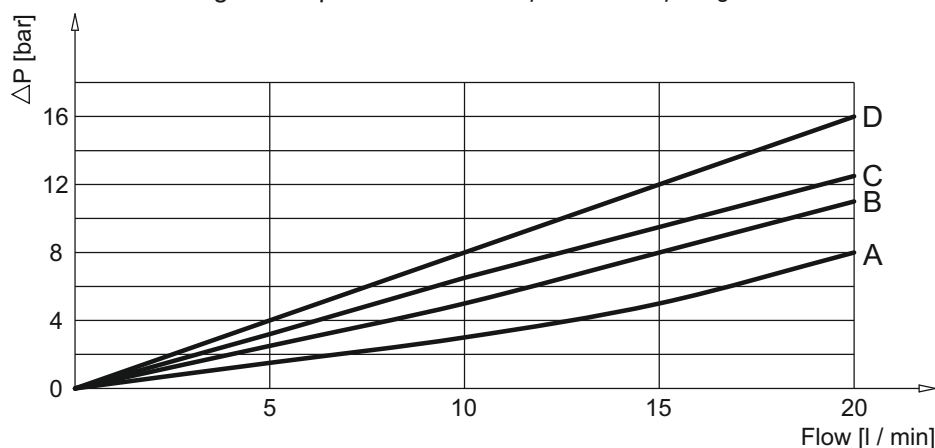
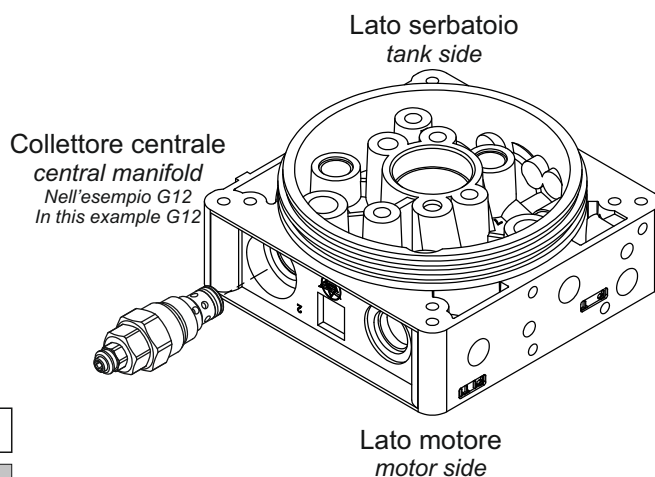


Diagramma perdita di carico - pressure drop diagram



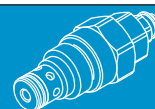
NB: Valori misurati sulla sola valvola.
Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.
Note: Values measured on valve alone.
The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.



Codice ordinazione - ordering code

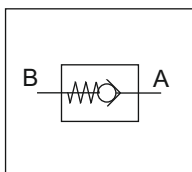
V	M	D	C	2	0	C	1	0
1		2		3		4		5

1	Tipo di valvola - valve type VMDC	2	Grandezza nominale - nominal size 3/4"-16 UNF	3	Range di lavoro - working range A = 10 ÷ 60 bar C = 50 ÷ 250 bar B = 30 ÷ 150 bar D = 80 ÷ 360 bar
4	Dispositivo di regolazione - adjusting device 1 = Vite - screw	5	Serie - series 0 = Standard		



VUC20

Valvola unidirezionale
Check valve



Caratteristiche principali main features	
Pressione max max pressure	350 bar
Portata max max flow	30 l/min
Peso weight	0,07 Kg

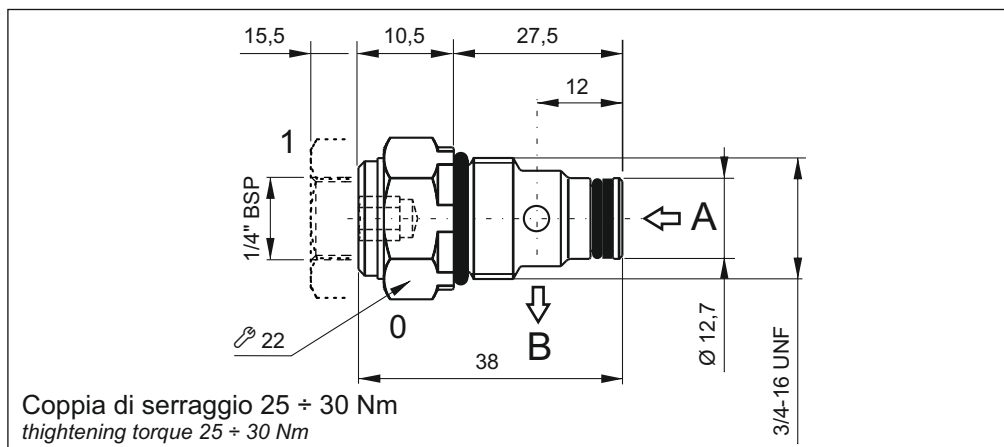
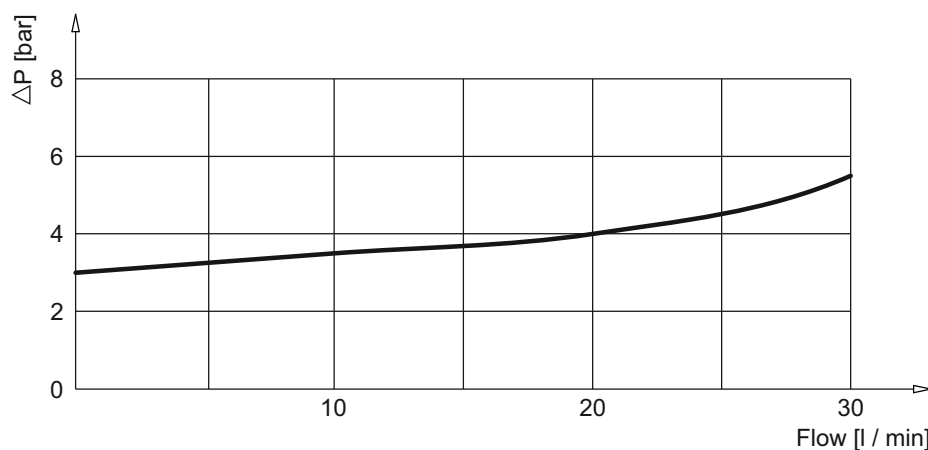


Diagramma perdita di carico - pressure drop diagram



NB: Valori misurati sulla sola valvola.

La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

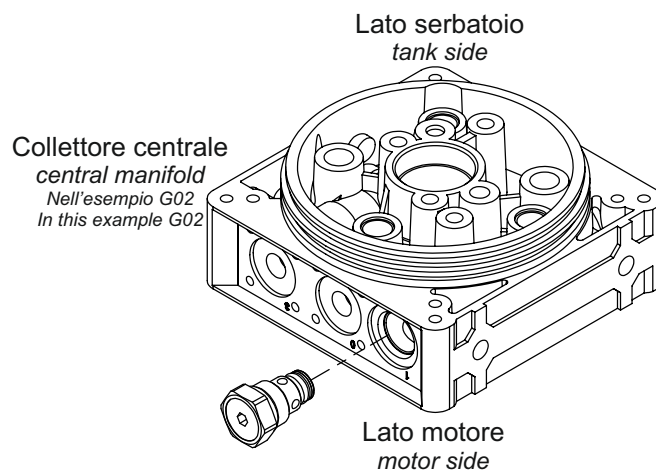
Codice ordinazione - ordering code

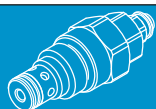
V	U	C	2	0	0
1	2	3			

1 Tipo di valvola - valve type
VUC

2 Grandezza nominale - nominal size
3/4"-16 UNF

3 Serie - series
0 = Standard
1 = 1/4" BSP





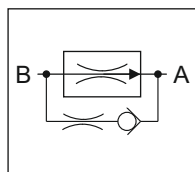
Valvole e tappi valves and plugs

4

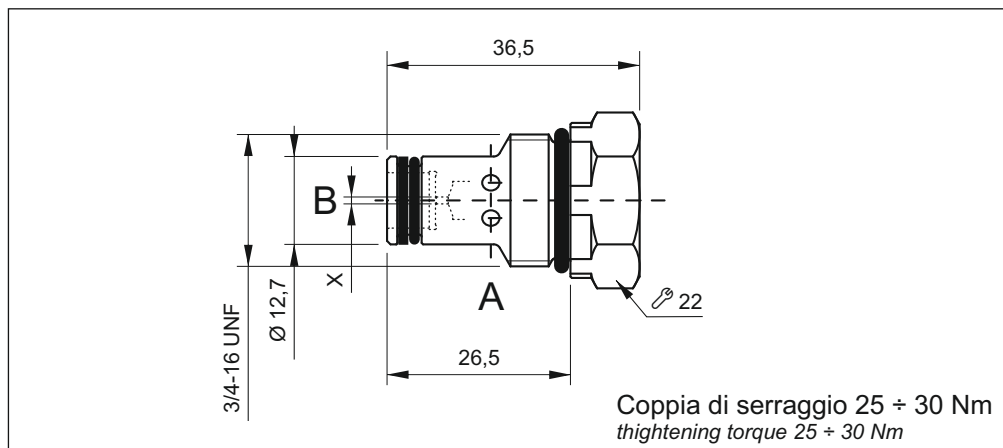
25

VSC6

Strozzatore fisso a pressione compensata
Fixed compensated pressure throttle



Caratteristiche principali main features	
Pressione max max pressure	250 bar
Portata max max flow	12 l/min
Peso weight	0,06 Kg



Flusso controllato - controlled flow

Code	ø X [mm]
VSC60	chiusa closed
VSC6A	0,8
VSC6B	1
VSC6C	1,25
VSC6D	1,5
VSC6E	1,75
VSC6F	1,8
VSC6G	1,9
VSC6H	2
VSC6I	2,25
VSC6L	2,6

NB: Portata nominale controllata, misurata con Δp di 50bar. La caduta di pressione può variare a seconda della viscosità e della temperatura.

Note: nominal controlled flow, measured with Δp of 50bar. Pressure drop may change depending on fluid viscosity and temperature.

Codice ordinazione - ordering code

V	S	C	6	C	0
1	2	3	4		

1 Tipo di valvola - valve type
VSC

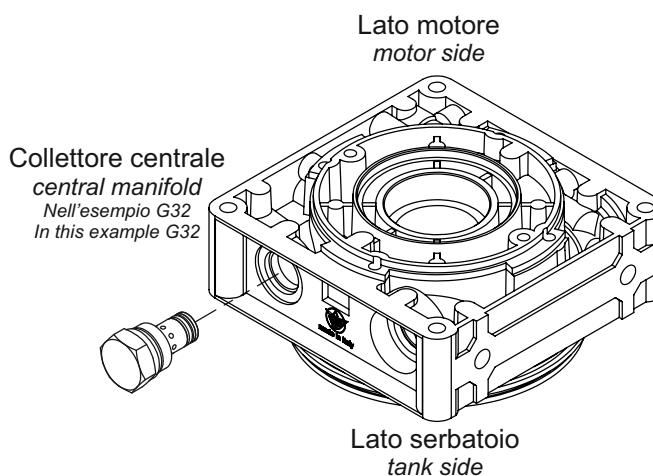
2 Grandezza nominale - nominal size
3/4"-16 UNF

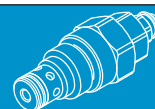
3 Flusso controllato - controlled flow

4 Serie - series

A = 1,0 lt/min D = 4,0 lt/min G = 7,0 lt/min L = 12 lt/min
B = 2,0 lt/min E = 5,0 lt/min H = 8,0 lt/min O = chiusa - closed
C = 3,0 lt/min F = 6,0 lt/min I = 10 lt/min

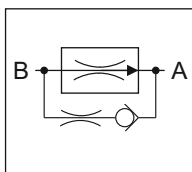
0 = Standard



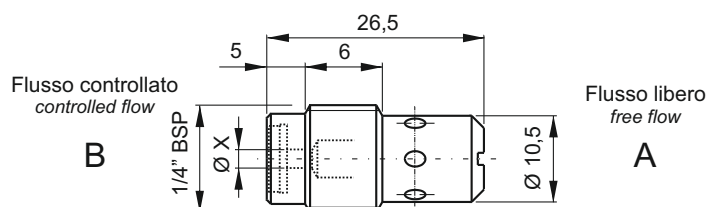


VSC01

Strozzatore fisso a pressione compensata
Fixed compensated pressure throttle



Caratteristiche principali main features	
Pressione max max pressure	250 bar
Portata max max flow	12 l/min
Peso weight	0,015 Kg



Coppia di serraggio 6 Nm
tightening torque 6 Nm

Flusso controllato - controlled flow

Code	ø X [mm]
VSC010	chiusa closed
VSC01A	1
VSC01B	1,2
VSC01C	1,5
VSC01D	1,7
VSC01E	1,9
VSC01F	2,1
VSC01G	2,3
VSC01H	2,4
VSC01I	2,8
VSC01L	3,3

NB: Portata nominale controllata, misurata con Δp di 50bar. La caduta di pressione può variare a seconda della viscosità e della temperatura.

Note: nominal controlled flow, measured with Δp of 50bar.
Pressure drop may change depending on fluid viscosity and temperature.

Codice ordinazione - ordering code

V	S	C	0	1	E	0
1	2	3	4			

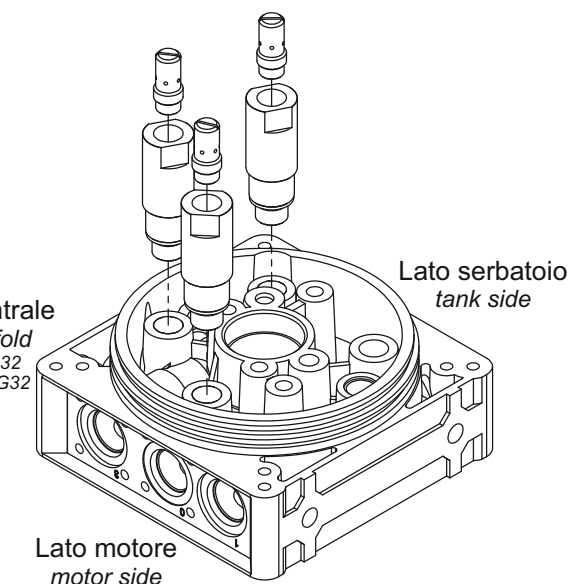
1 Tipo di valvola - valve type
VSC

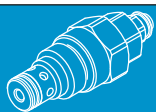
2 Grandezza nominale - nominal size
1/4" BSP

3 Flusso controllato - controlled flow

4 Serie - series

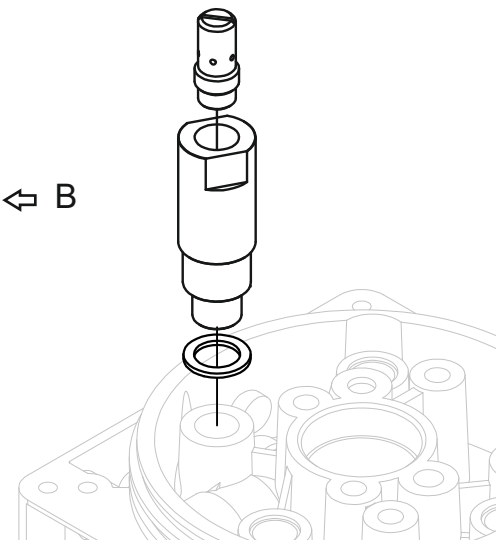
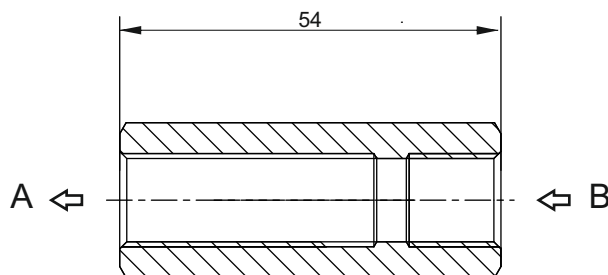
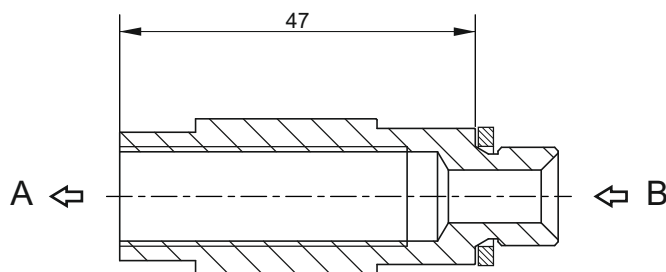
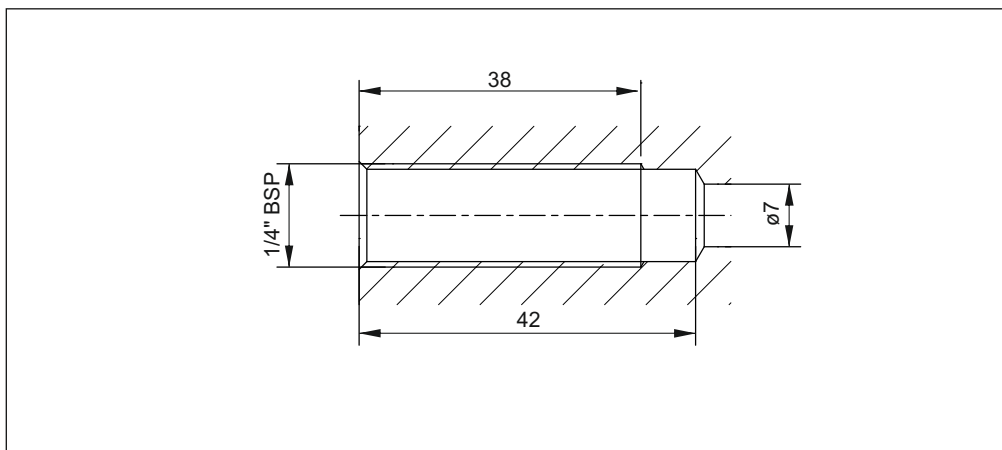
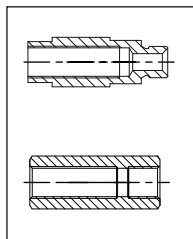
A = 1,0 lt/min D = 4,0 lt/min G = 7,0 lt/min L = 12 lt/min
B = 2,0 lt/min E = 5,0 lt/min H = 8,0 lt/min O = chiusa - closed
C = 3,0 lt/min F = 6,0 lt/min I = 10 lt/min





CMF

Corpo per montaggio in linea VSC
Body for VSC in-line mount

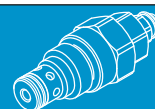


Code	Tipo type
CMF059	F - M
CMF060	F - F

Codice ordinazione - ordering code

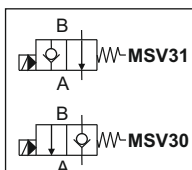
C	M	F	0	5	9	0
1			2		3	

1	Corpo - body	2	Tipo - type	3	Serie - series
	CMF		059 = MF (Std) 060 = FF		0 = Standard



MSV

Valvola elettrica pilotata singola tenuta
Pilot operated two-ways single locking solenoid valve

Caratteristiche principali
main features

Pressione max max pressure	350 bar
Portata max max flow	40 l/min
Peso (con bobina) weight (with coil)	0,27 Kg

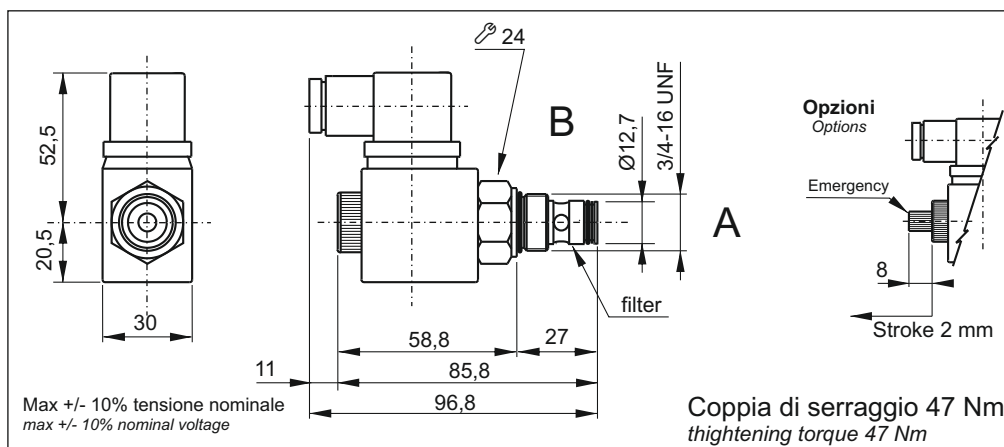
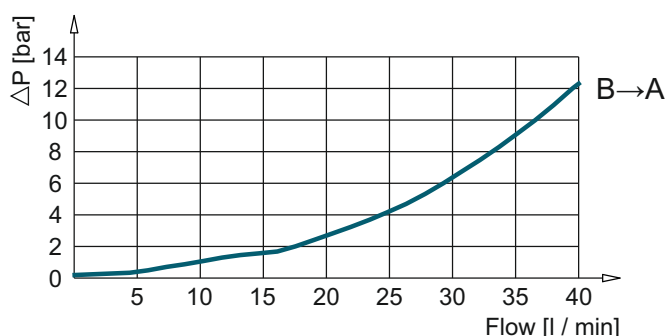


Diagramma perdita di carico - pressure drop diagram



Tipologia valvola valve type	Tipologia bobina coil type	Potenza assorbita power consumption
MSV3000	HDB...DC/RAC	18W
MSV30E0	HDB...DC/RAC	18W
MSV3100	HDB...DC/RAC	18W
MSV31E0	HDB...DC/RAC	18W

NB: Valori misurati sulla sola valvola.

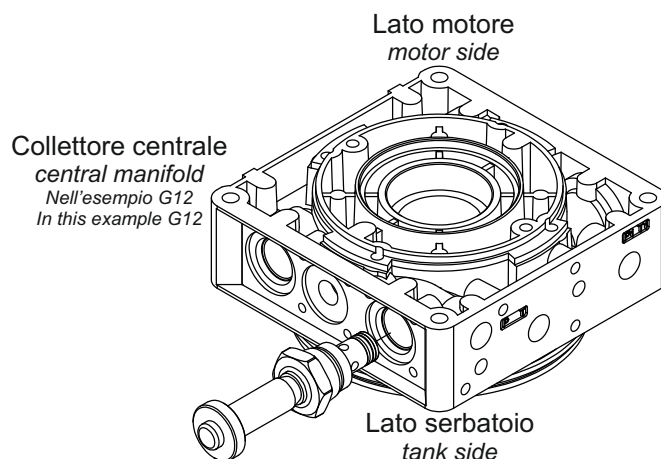
La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

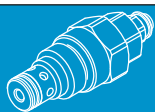
Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

Codice ordinazione - ordering code

M	S	V	3	0	0	0
1	2	3	4			

1 Tipo di valvola - valve type MSV	2 Operazione - operation 30 = normalmente chiusa - normally closed 31 = normalmente aperta - normally open	3 Opzioni - options 0 = Senza opzioni - no options (Std) E = Comando manuale - manual override
4 Serie - series 0 = Standard		





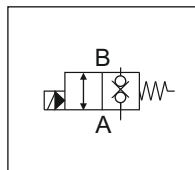
Valvole e tappi valves and plugs

4

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MDV

Valvola elettrica pilotata doppia tenuta
Direct operated two-ways double locking solenoid valve



Caratteristiche principali main features	
Pressione max max pressure	250 bar
Portata max max flow	15 l/min
Peso (con bobina) weight (with coil)	0,35 Kg

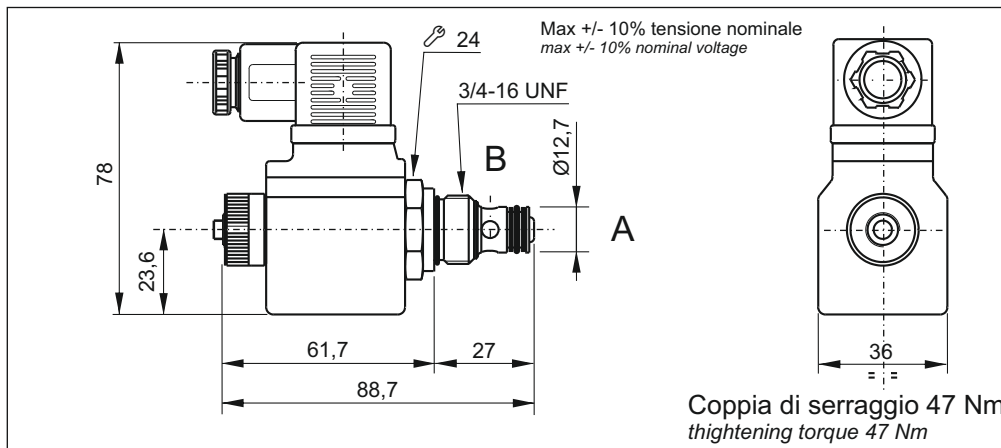
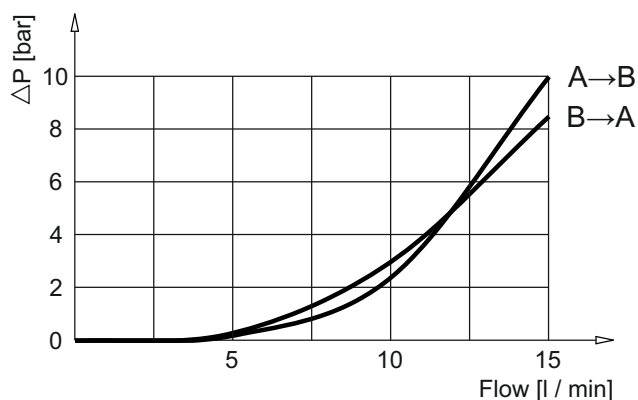
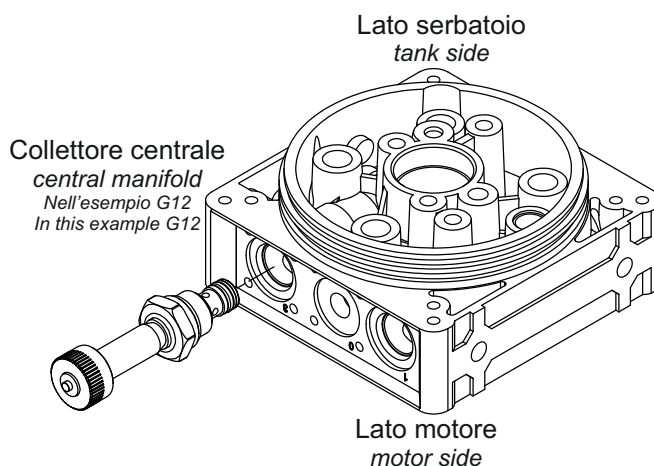


Diagramma perdita di carico - pressure drop diagram



Tipologia valvola valve type	Tipologia bobina coil type	Potenza assorbita power consumption
MDV30E0	HDB...DC/RAC	22W

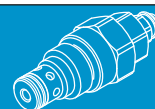
NB: Valori misurati sulla sola valvola.
La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.
Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.



Codice ordinazione - ordering code

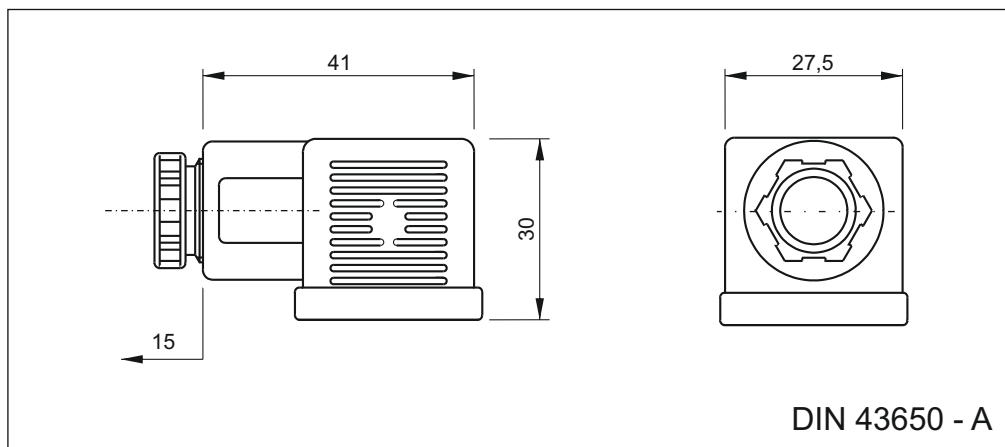
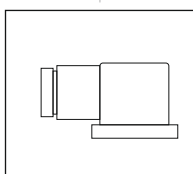
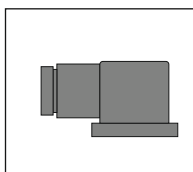
M	D	V	3	0	E	0
1	2	3	4			

1 Tipo di valvola - valve type MDV	2 Operazione - operation 30 = normalmente chiusa - normally closed	3 Opzioni - options E = Comando manuale - manual override
4 Serie - series 0 = Standard		



AM

Connettori elettrici
Electric connectors



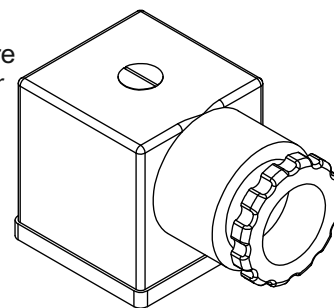
HDB

Bobine
coils

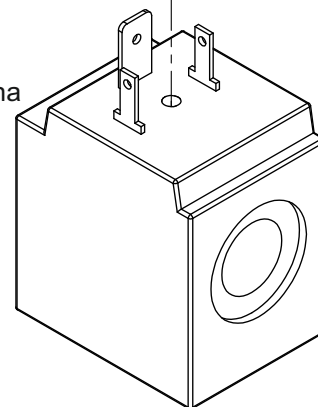
HDC

cod. connettore connector code	cod. bobina coil code
18 W Potenza - power	
AM5111, AM5128/1	HDB0012DC0
AM5111, AM5128/2	HDB0024DC0
AM5111/RD, AM5128/2/RD	HDB024RAC0
AM5111/RD, AM5128/4/RD	HDB220RAC0

Connettore
connector



Bobina
coil



Codici ordinazione - ordering codes

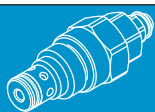
A M 5 1 2 8 / 2 / R D
1 2 3

1 Connettore - connector AM5111 = nero - black (Std) AM5128 = luminoso - LED	2 Tensione (solo LED) - voltage (only LED) 1 = 12 V 2 = 24 V 3 = 110 - 220 V	3 Raddrizzatore - rectifier RD = con raddrizzatore - with rectifier Omettere se non richiesto - omit if not request
--	---	---

Per connettore AM5111 omettere punto 2 - for AM5111 omit point 2

H D B 2 2 0 R A C 0
1 2 3

1 Bobina - coil HDB = 18W	2 Tensione - voltage 0012DC, 0024DC = corrente continua - DC current 024RAC, 220RAC = corrente raddrizzata - RAC current	3 Serie - series 0 = Standard
------------------------------	--	----------------------------------



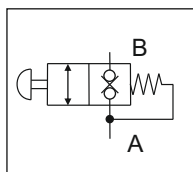
Valvole e tappi valves and plugs

4

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CPE

Valvola direzionale a due vie con comando a pulsante
Button operated two-ways directional valve



Caratteristiche principali main features	
Pressione max max pressure	320 bar
Portata max max flow	15 l/min
Peso weight	0,12 Kg

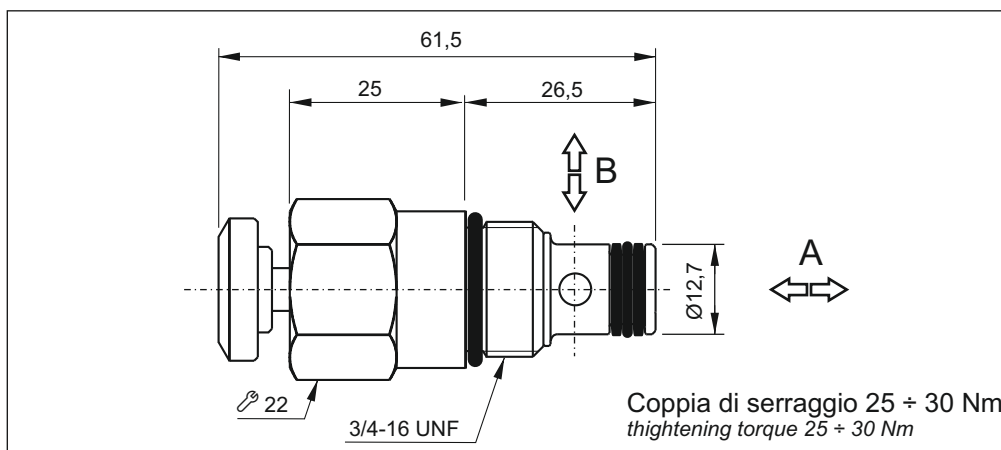
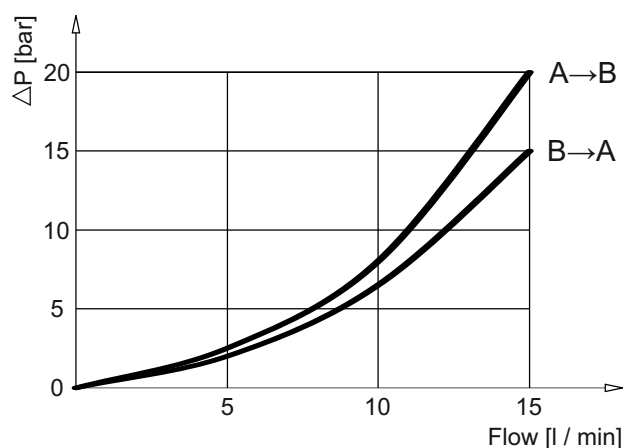


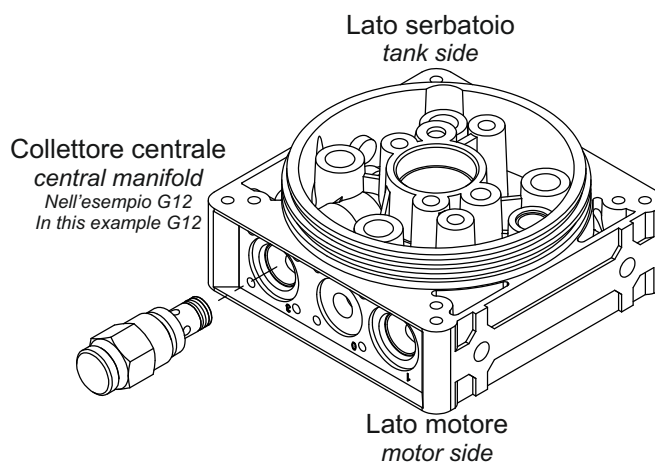
Diagramma perdita di carico - pressure drop diagram



NB: Valori misurati sulla sola valvola.

La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

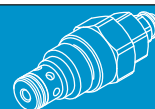


Codice ordinazione - ordering code

C	P	E	0	4	P	0
1	2	3	4			

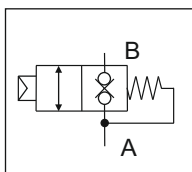
1	Tipo di valvola - valve type	2	Grandezza nominale - nominal size	3	Dispositivo di comando - operation device
	CPE		3/4"-16 UNF		P = bottone - press button

4	Serie - series
	0 = Standard



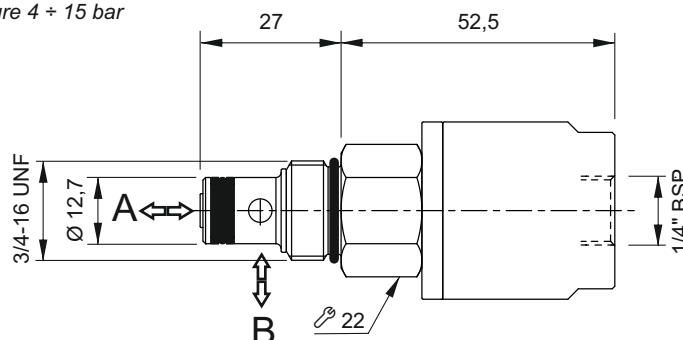
VPN

Valvola direzionale a due vie a cartuccia con comando pneumatico
Pneumatic operated two-ways directional cartridge valve



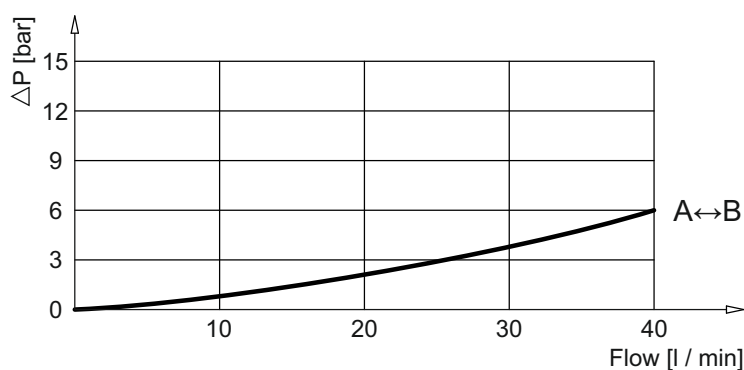
Caratteristiche principali main features	
Pressione max max pressure	350 bar
Portata max max flow	40 l/min
Peso weight	0,16 Kg

Pressione di pilotaggio 4 ÷ 15 bar
pilot pressure 4 ÷ 15 bar



Coppia di serraggio 25 ÷ 30 Nm
tightening torque 25 ÷ 30 Nm

Diagramma perdita di carico - pressure drop diagram



NB: Valori misurati sulla sola valvola.

La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

Codice ordinazione - ordering code

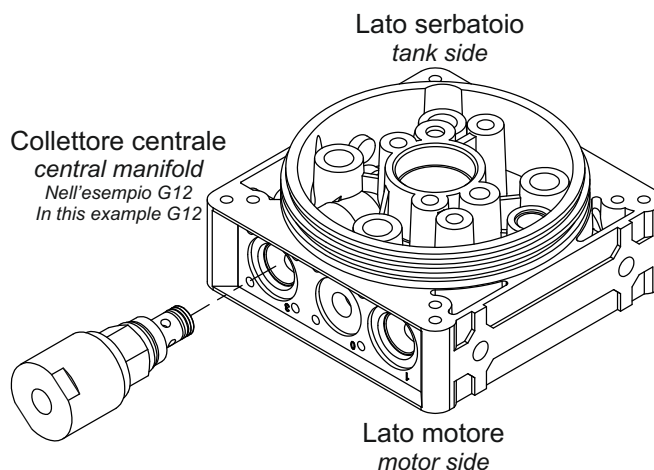


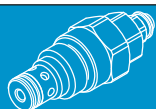
1 Tipo di valvola - valve type

VPN

2 Serie - series

0 = Standard





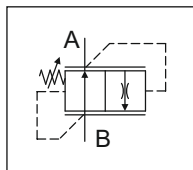
Valvole e tappi valves and plugs

4

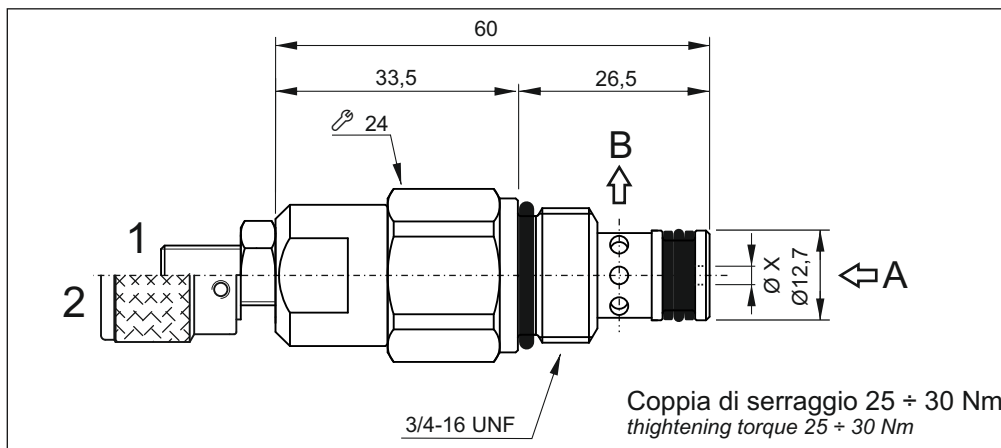
33

CSC04

Valvola di controllo flusso compensata regolabile
Adjustable compensated flow control valve



Caratteristiche principali main features	
Pressione max max pressure	350 bar
Portata max max flow	18 l/min
Peso weight	0,21 Kg

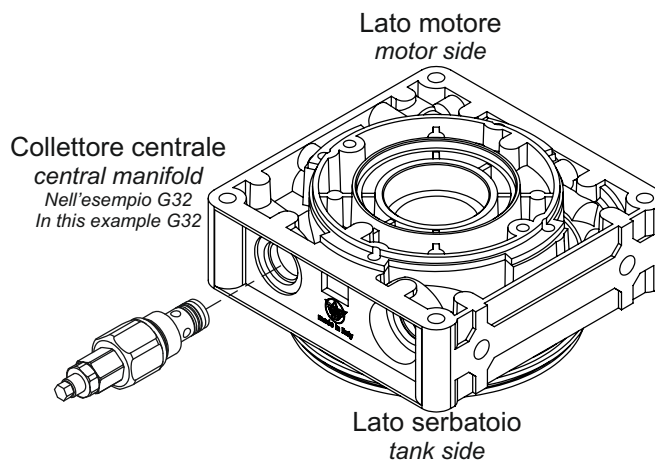


Flusso controllato - controlled flow

Code	Ø X [mm]
CSC04A	0,9
CSC04B	1
CSC04C	1,3
CSC04D	1,5
CSC04E	1,7
CSC04F	2,2
CSC04G	2,8

NB: Portata nominale controllata, misurata con Δp di 50bar. La caduta di pressione può variare a seconda della viscosità e della temperatura.

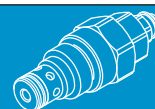
Note: nominal controlled flow, measured with Δp of 50bar. Pressure drop may change depending on fluid viscosity and temperature.



Codice ordinazione - ordering code

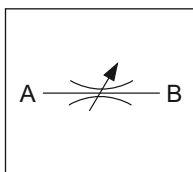
C	S	C	0	4	C	1	0
1				2		3	4

1 Tipo di valvola - valve type	2 Flusso controllato - controlled flow		
CSC04	A = 0,6 ÷ 2,2 lt/min	D = 1,9 ÷ 6,8 lt/min	G = 7,2 ÷ 18,0 lt/min
	B = 0,8 ÷ 3,0 lt/min	E = 2,6 ÷ 9,1 lt/min	
	C = 1,3 ÷ 5,1 lt/min	F = 4,0 ÷ 14,4 lt/min	
3 Dispositivo di regolazione - adjusting device	4 Serie - series		
1 = Vite - screw (standard)	0 = Standard		
2 = Manopola - handknob			



CSB

Valvola bidirezionale di controllo di flusso
Bidirectional flow control valve



Caratteristiche principali main features	
Pressione max max pressure	300 bar
Portata max max flow	20 l/min
Peso weight	0,09 Kg

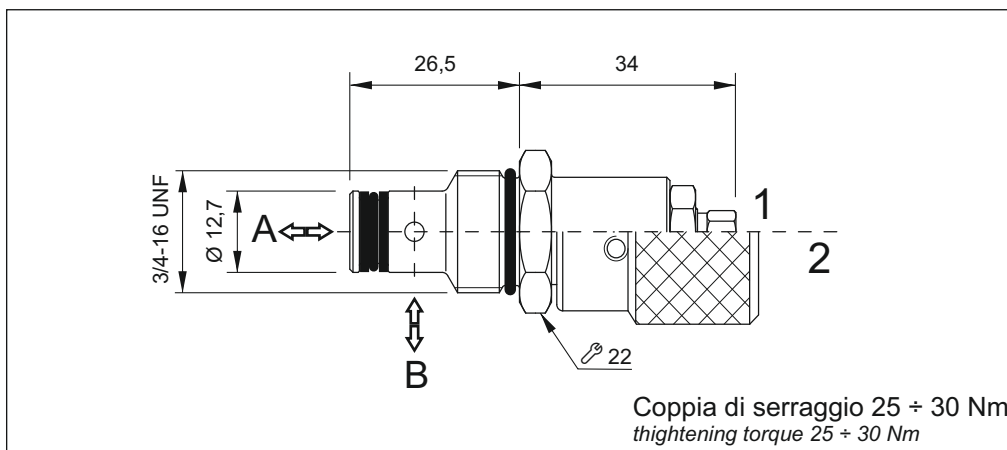
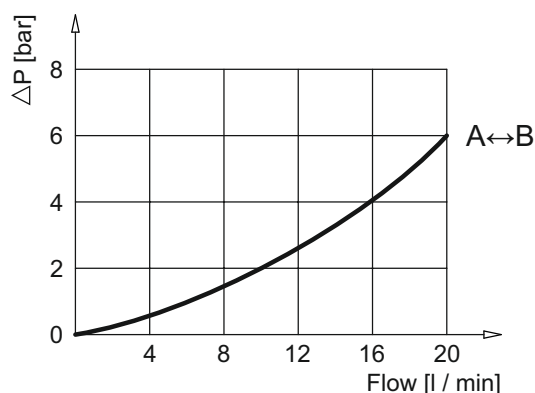


Diagramma perdita di carico - pressure drop diagram



NB: Valori misurati sulla sola valvola.

La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura. Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.

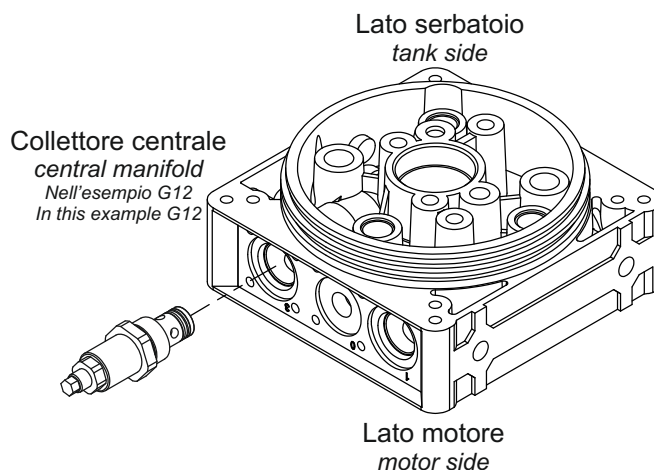
Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature. The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

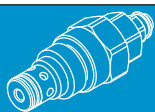
Codice ordinazione - ordering code

C	S	B	0	4	C	0
1	2	3	4			

1 Tipo di valvola - valve type CSB	2 Grandezza nominale - nominal size 3/4"-16 UNF	3 Dispositivo di regolazione - adjusting device C = Vite - screw (standard) V = Manopola - handknob
---------------------------------------	--	---

4 Serie - series 0 = Standard





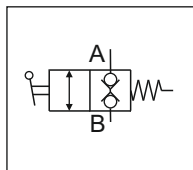
Valvole e tappi valves and plugs

4

CM04L

Valvola direzionale a due vie a cartuccia con comando a leva
Lever operated two-ways directional valve

35



Caratteristiche principali main features

Pressione max max pressure	320 bar
Portata max max flow	25 l/min
Peso weight	0,39 Kg

NB: Valori misurati sulla sola valvola.
La perdita di carico potrebbe variare a seconda della viscosità del liquido e della temperatura.

Note: Values measured on valve alone. Pressure drop may change depending on fluid viscosity and temperature.

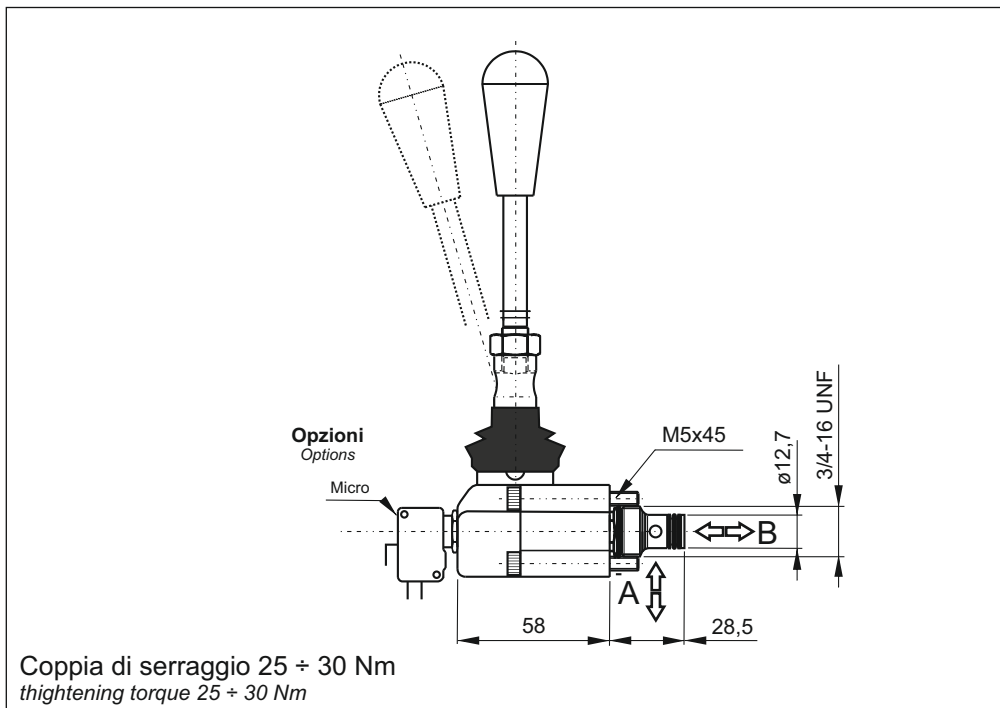
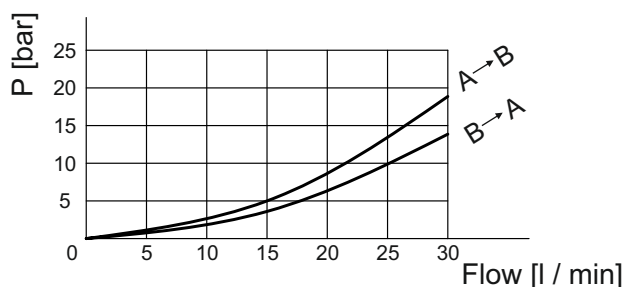


Diagramma perdita di carico - pressure drop diagram



Le curve sopra riportate sono state ottenute alla temperatura di 40°C, utilizzando olio con viscosità 46 cSt.
The curves above, have been obtained at 40°C, using oil with viscosity 46 cSt.

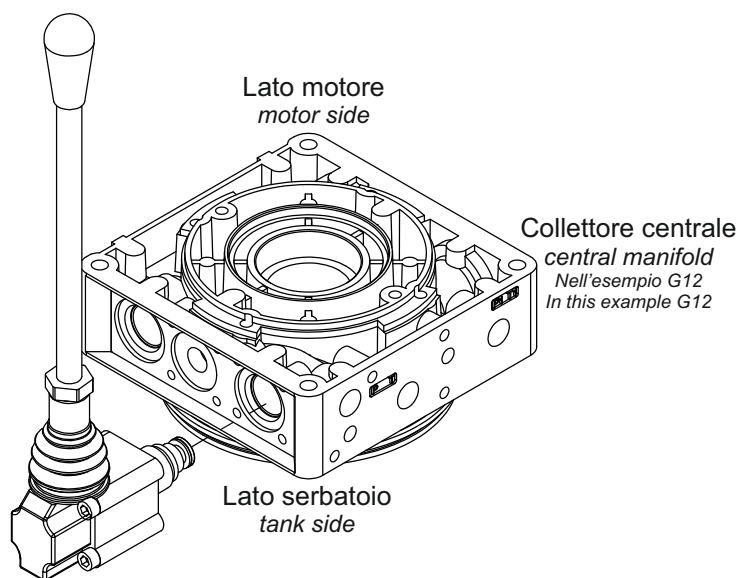
Codice ordinazione - ordering code

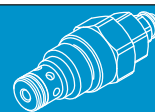
C	M	0	4	L	M	0
1				2		3

1 Tipo di valvola - valve type
CM04L

2 Opzioni - options
0 = senza micro - without micro (Std)
M = con micro - with micro

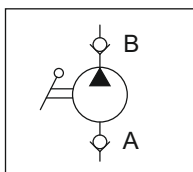
3 Serie - series
0 = Standard





PM02

Pompa manuale doppio effetto
Double acting hand pump



Caratteristiche principali
main features

Pressione max max pressure	200 bar
Cilindrata displacement	2 cc
Peso weight	0,40 Kg

NB: Valori misurati sulla sola valvola.
Note: Values measured on valve alone.

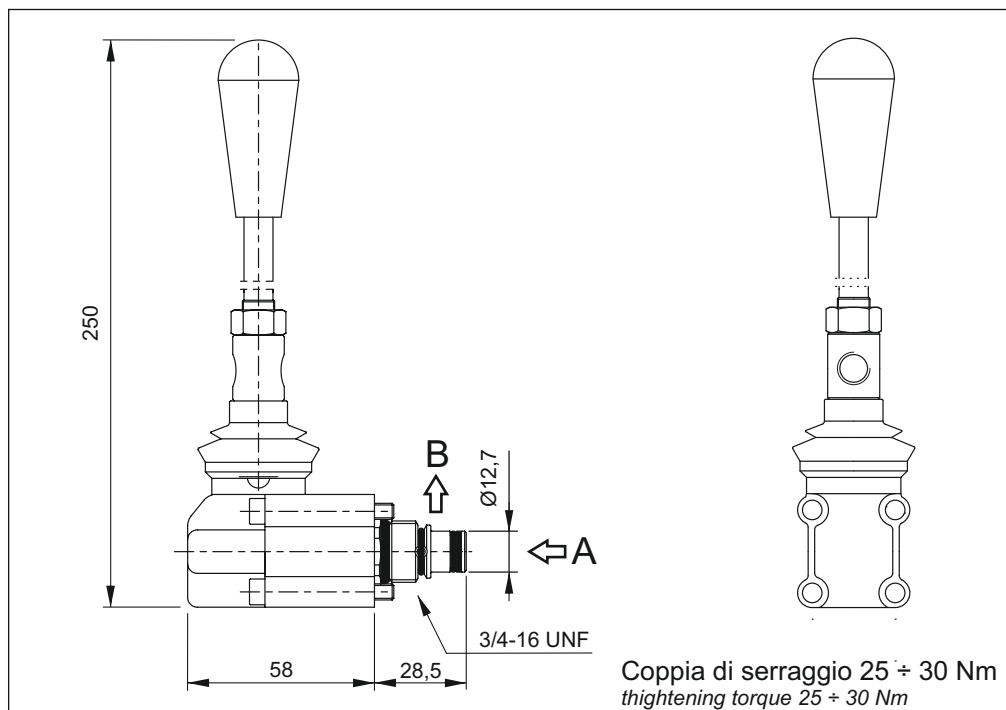
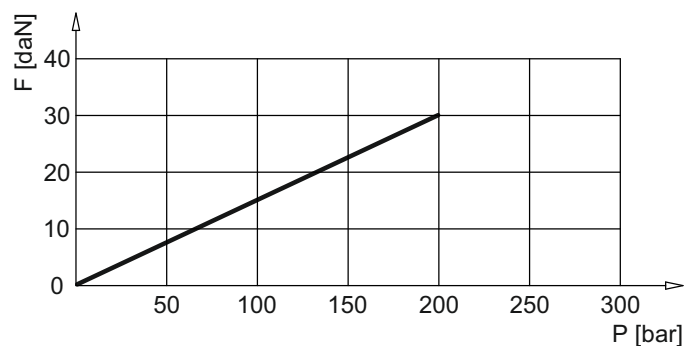
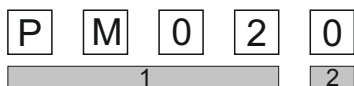


Diagramma forze azionamento - actuating forces diagram

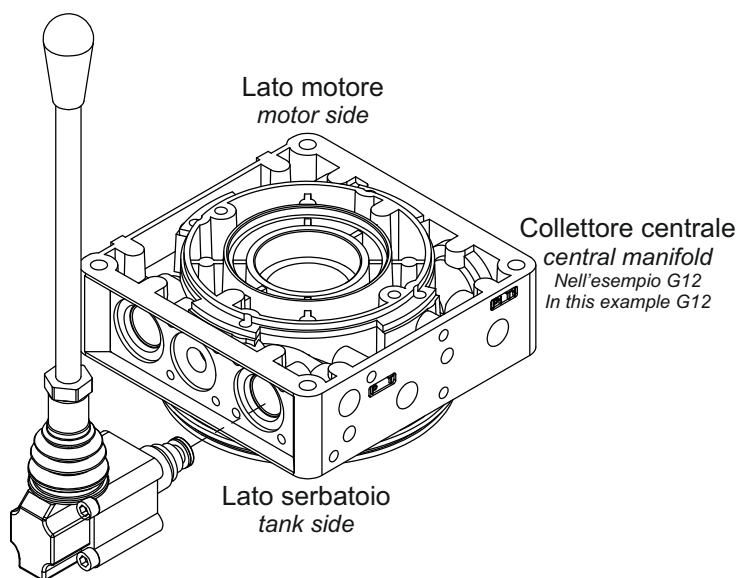


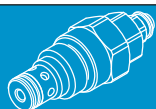
Codice ordinazione - ordering code



1 Tipo di valvola - valve type
PM02

2 Serie - series
0 = Standard



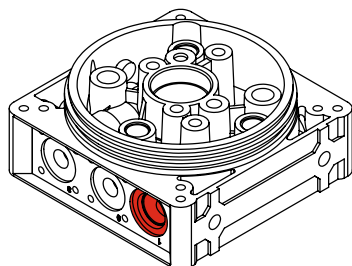


Valvole e tappi valves and plugs

4

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CAV. 1



Collettori - manifolds

Tutti - all

Cavità - cavity

3/4"-16 UNF-2B

Valvole - valves

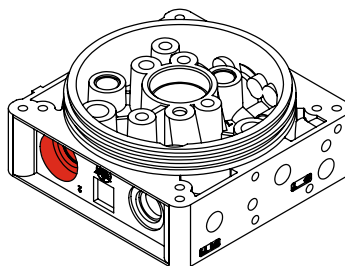
VUC20

CSB04

T0A4

T0C1

CAV. 2



Collettori - manifolds

Tutti - all

Cavità - cavity

M20x1,5

3/4"-16 UNF-2B (std)

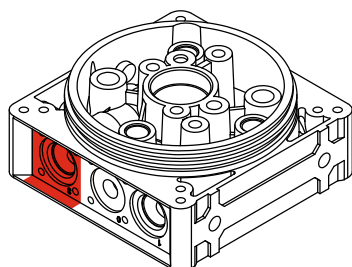
Valvole - valves

VMDC35 (G10)

T0VM

VMDC20

CAV. 3



Collettori - manifolds

G12, G22, G32

Cavità - cavity

3/4"-16 UNF-2B

Valvole - valves

MSV

PM02

MDV

CM04L

VPN

T0C2

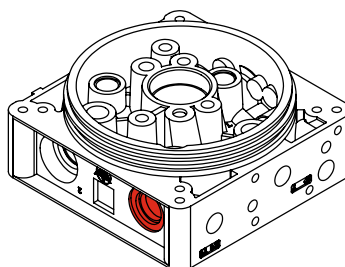
CPE

T0A2

CSB04

T0A3

CAV. 4



Collettori - manifolds

G22, G32

Cavità - cavity

3/4"-16 UNF-2B

Valvole - valves

CSC04

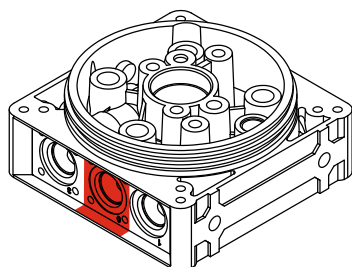
CSB04

VSC6

T0A2

T0C1

CAV. 0



Collettori - manifolds

G32

Cavità - cavity

3/4"-16 UNF-2B

Valvole - valves

MSV

PM02

MDV

CM04L

VPN

T0C2

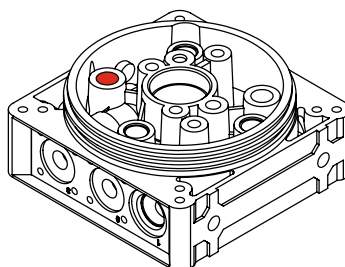
CPE

T0A2

CSB04

T0A3

CAV. 5



Collettori - manifolds

Tutti - all

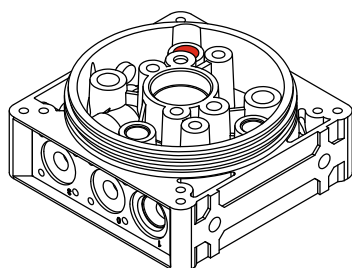
Cavità - cavity

G 1/4"

Valvole - valves

VSC

CAV. 6



Collettori - manifolds

Tutti - all

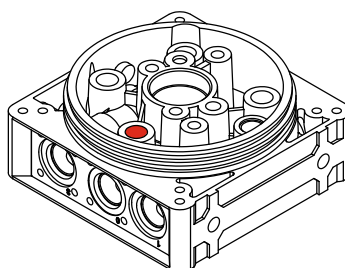
Cavità - cavity

G 1/4"

Valvole - valves

VSC

CAV. 7



Collettori - manifolds

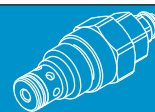
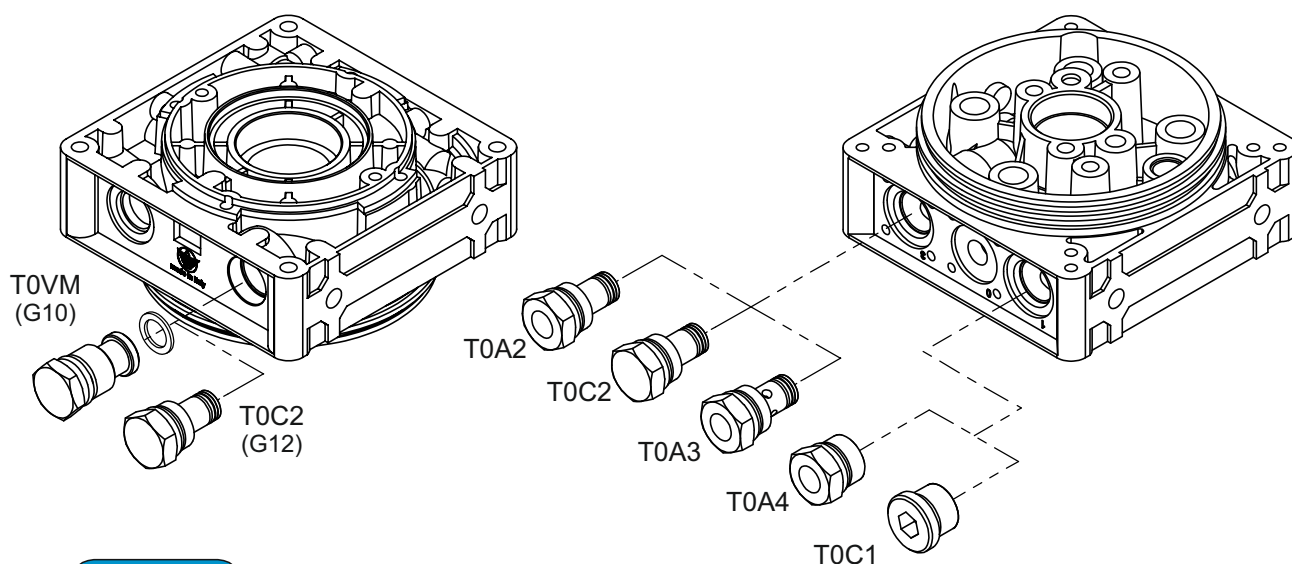
G32

Cavità - cavity

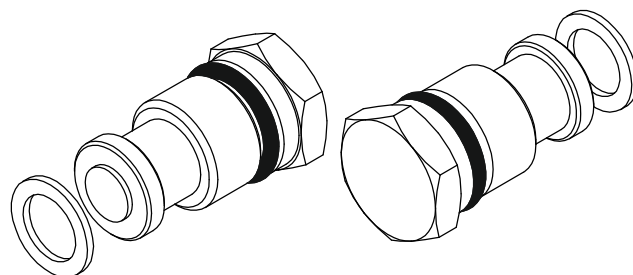
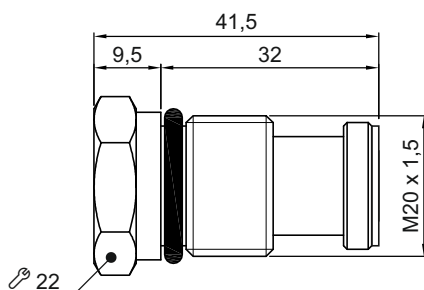
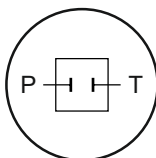
G 1/4"

Valvole - valves

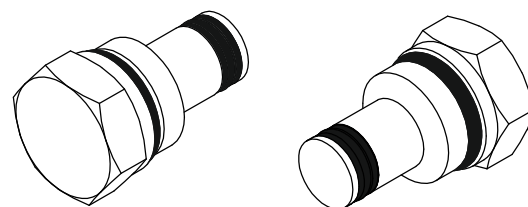
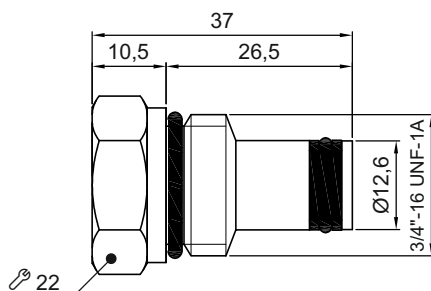
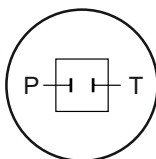
VSC

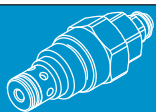
Tappi funzionali - *function plugs*

T0VM

Simbolo
symbol

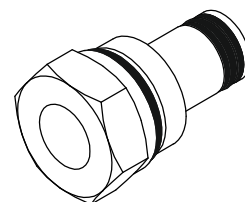
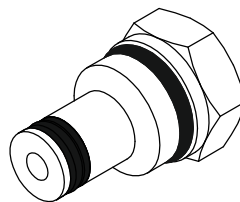
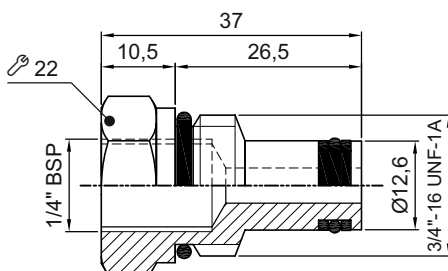
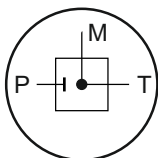
T0C2

Simbolo
symbol



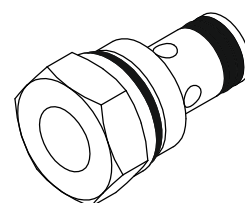
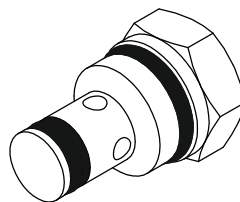
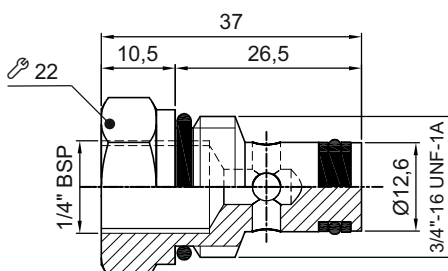
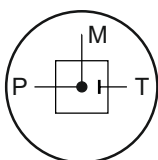
T0A2

Simbolo
symbol



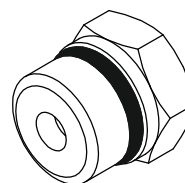
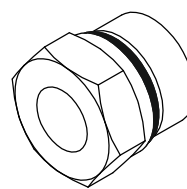
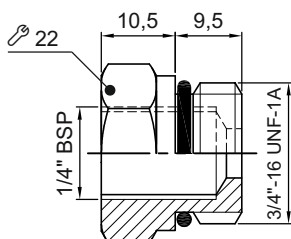
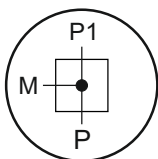
T0A3

Simbolo
symbol



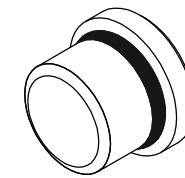
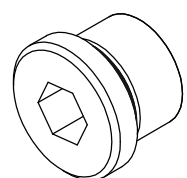
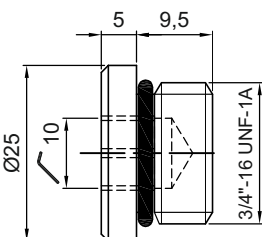
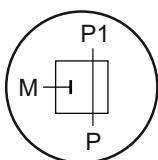
T0A4

Simbolo
symbol



T0C1

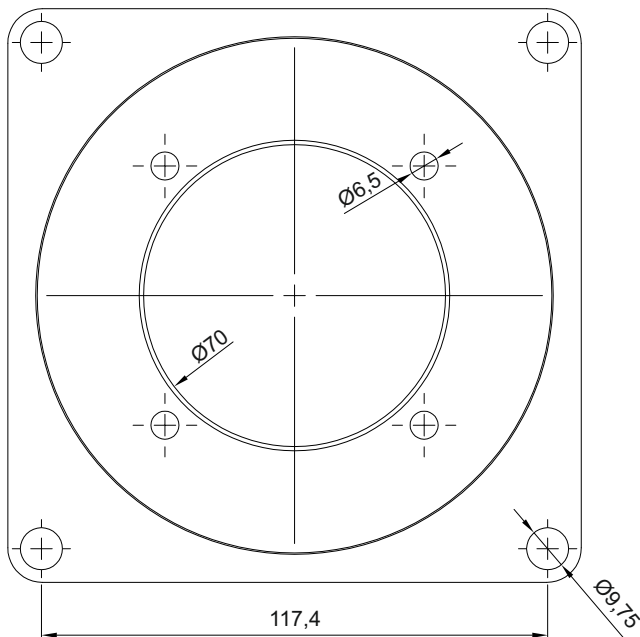
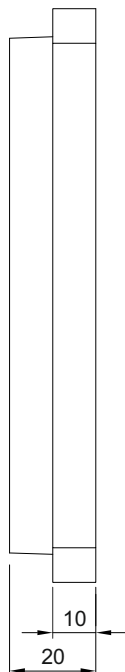
Simbolo
symbol





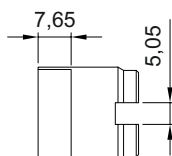
FA 71

Flangia di adattamento
Adapter flange



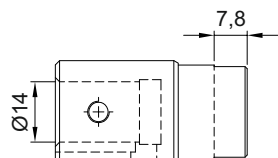
Assemblaggio lato collettore: 4 x viti DIN 6921 M8 x 25
Manifold side assembly: 4 x screws DIN 6921 M8 x 25
Assemblaggio lato motore: 4 x viti DIN 5931 M6 x 16
Motorside assembly: 4 x screws DIN 5931 M6 x 16

K00



Giunto lato pompa
pump side coupling

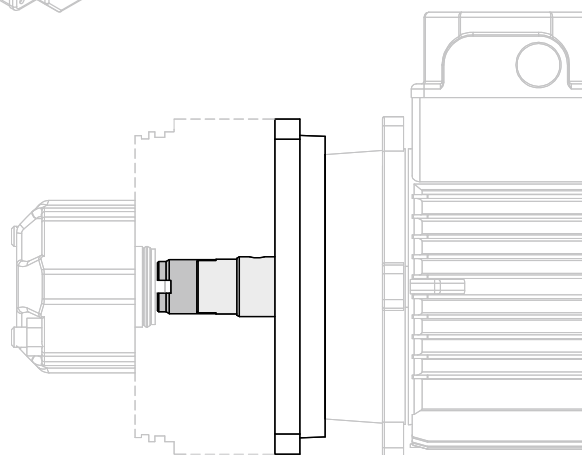
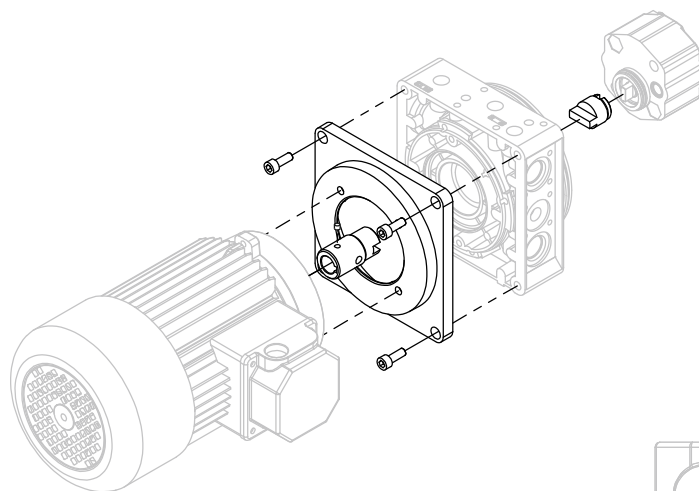
K01

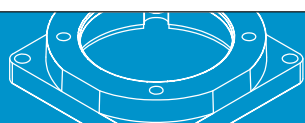


Giunto lato motore
motor side coupling

KIT1471

Codice di ordinazione per kit completo (FA71+K00+K01)
Ordering code for complete kit (FA71+K00+K01)





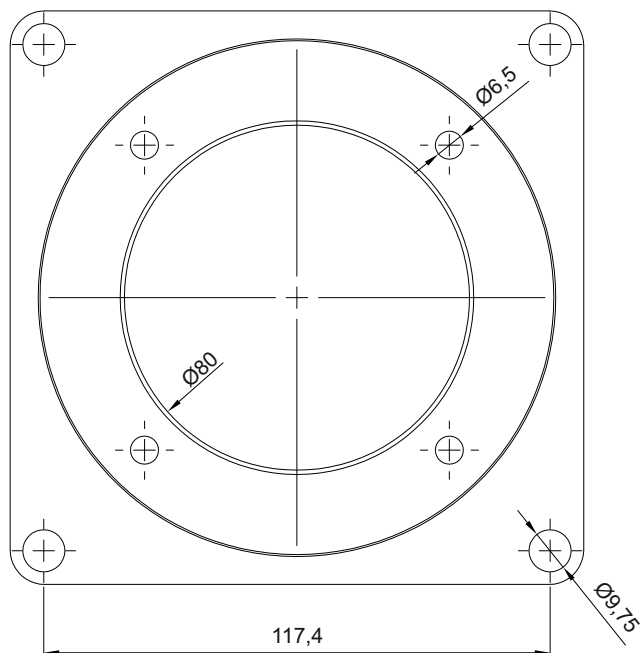
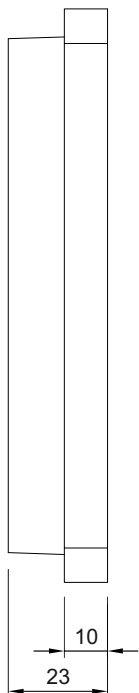
Elementi di connessione *junction elements*

5

41

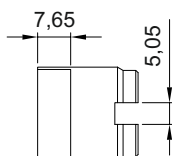
FA 80

Flangia di adattamento
Adapter flange



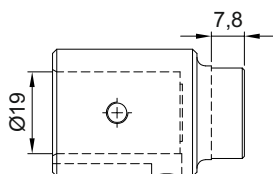
Assemblaggio lato collettore: 4 x viti DIN 6921 M8 x 25
Manifold side assembly: 4 x screws DIN 6921 M8 x 25
Assemblaggio lato motore: 4 x viti DIN 5931 M6 x 16
Motorside assembly: 4 x screws DIN 5931 M6 x 16

K00



Giunto lato pompa
pump side coupling

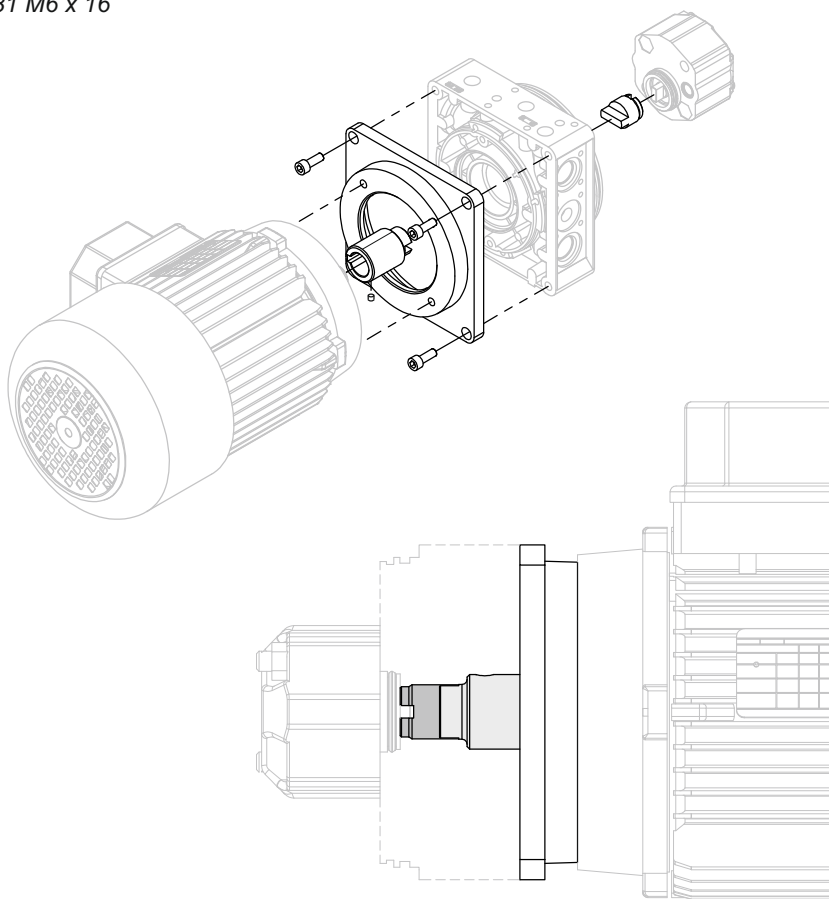
K02



Giunto lato motore
motor side coupling

KIT1480

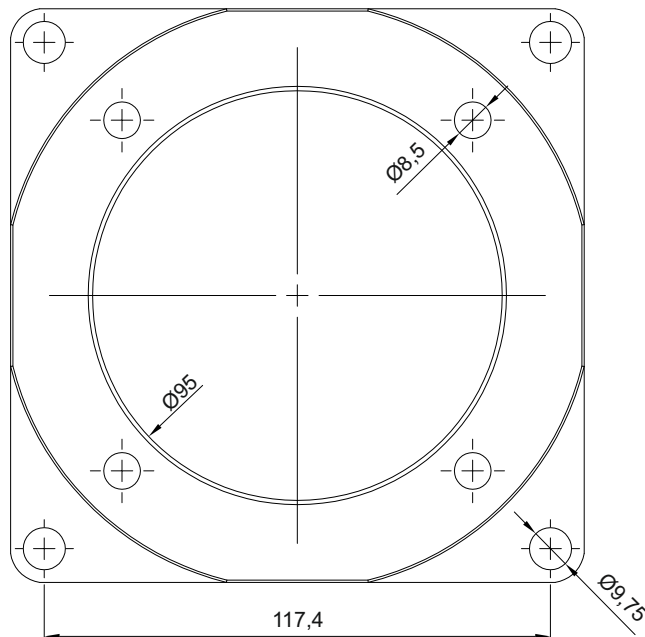
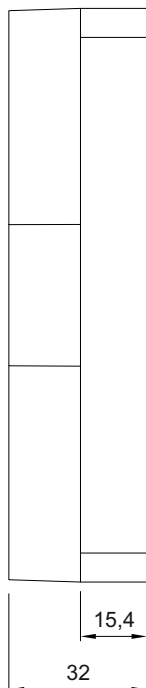
Codice di ordinazione per kit completo (FA80+K00+K02)
Ordering code for complete kit (FA80+K00+K02)





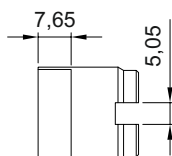
FA 90

Flangia di adattamento
Adapter flange



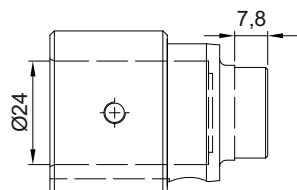
Assemblaggio lato collettore: 4 x viti DIN 6921 M8 x 30
Manifold side assembly: 4 x screws DIN 6921 M8 x 30
 Assemblaggio lato motore: 4 x viti DIN 5931 M8 x 30
Motorside assembly: 4 x screws DIN 5931 M8 x 30

K00



Giunto lato pompa
pump side coupling

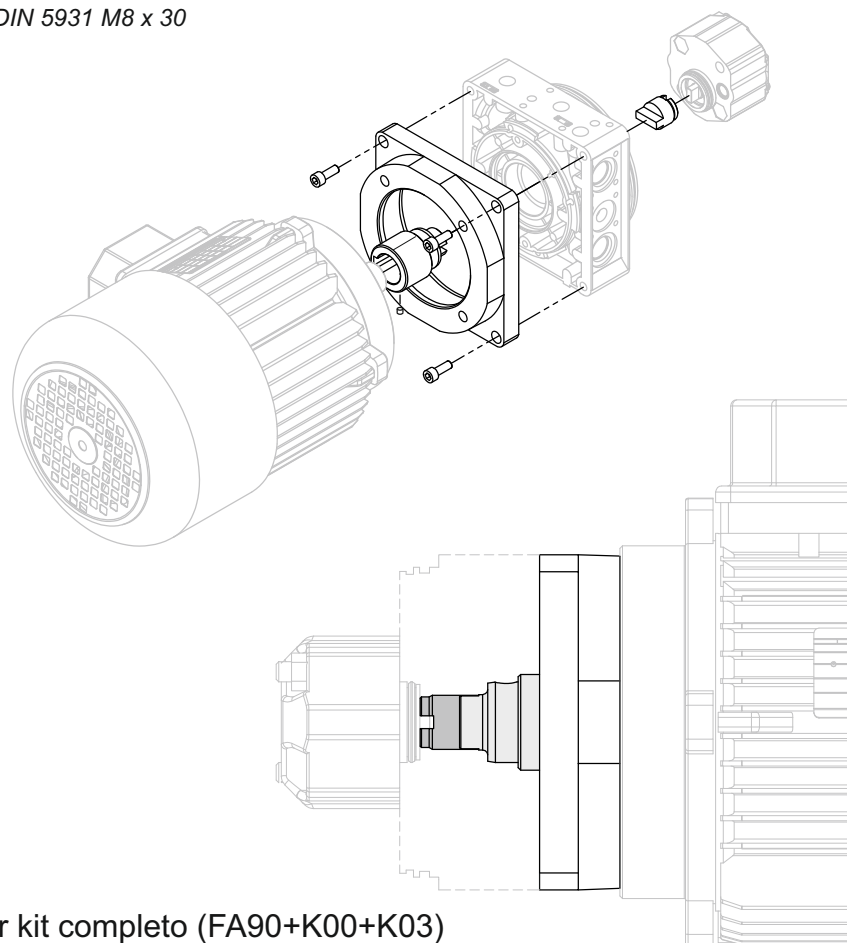
K03

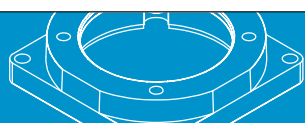


Giunto lato motore
motor side coupling

KIT1490

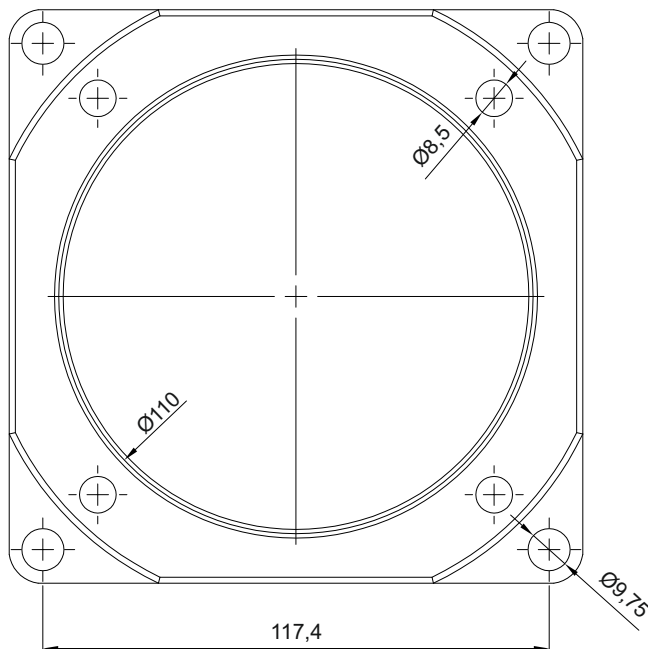
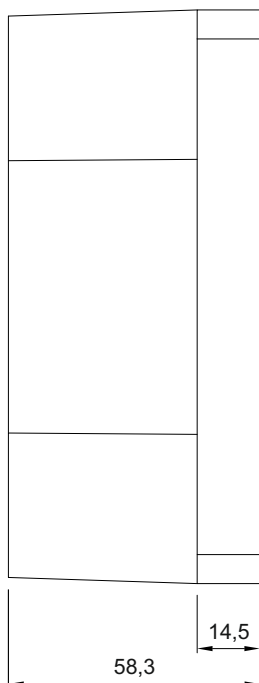
Codice di ordinazione per kit completo (FA90+K00+K03)
Ordering code for complete kit (FA90+K00+K03)





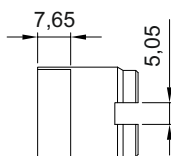
FA 100

Flangia di adattamento
Adapter flange



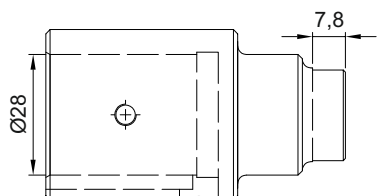
Assemblaggio lato collettore: 4 x viti DIN 6921 M8 x 30
Manifold side assembly: 4 x screws DIN 6921 M8 x 30
Assemblaggio lato motore: 4 x viti DIN 5931 M8 x 60
Motorside assembly: 4 x screws DIN 5931 M8 x 60

K00



Giunto lato pompa
pump side coupling

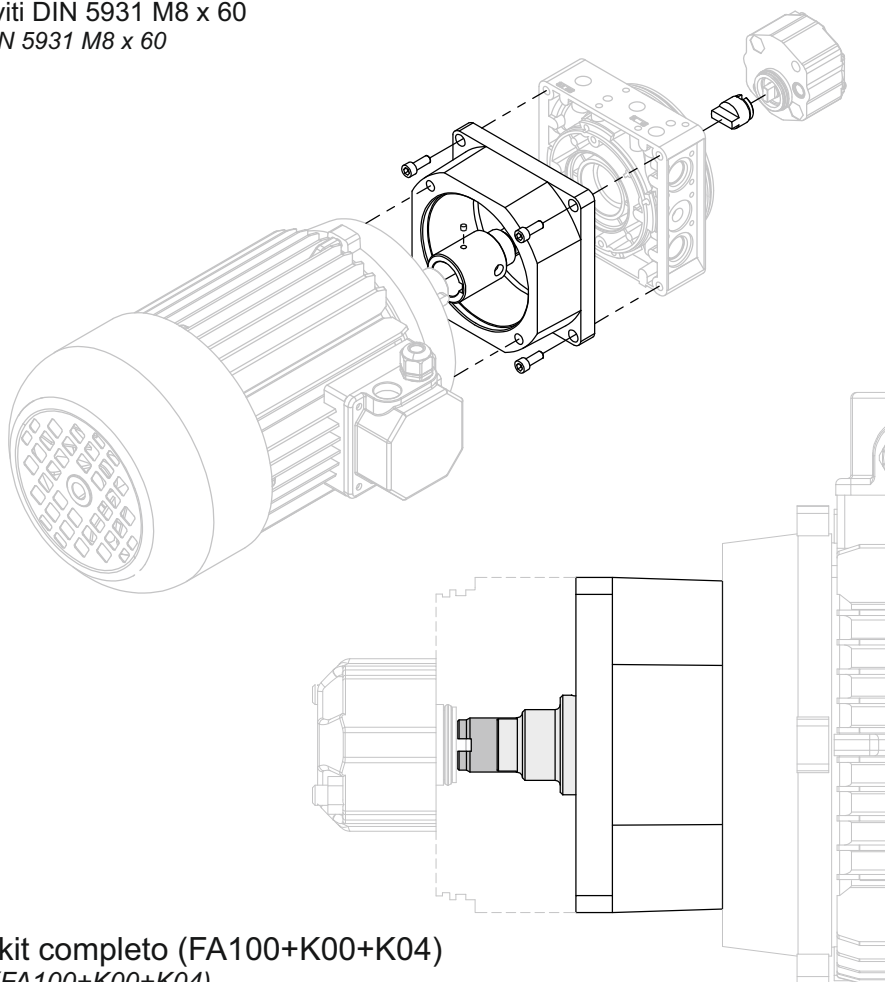
K04

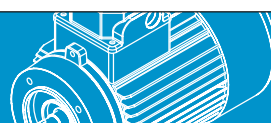


Giunto lato motore
motor side coupling

KIT14100

Codice di ordinazione per kit completo (FA100+K00+K04)
Ordering code for complete kit (FA100+K00+K04)





Motori CA B14 - AC B14 motors

Motori S1 IP 55 50Hz - IP55 50Hz S1 motors

Codice code	Potenza power	Flangia flange	A	øB	C	Flangia flange	Potenza power	Codice code
Monofase - single-phase								
2 poli - two poles							4 poli - four poles	
MM 711-2	0,37	FA71	211	147	125	FA71	0,25	MM 711-4
MM 712-2	0,55	FA71	211	147	125	FA71	0,37	MM 712-4
MM 801-2	0,75	FA80	250	163	146	FA80	0,55	MM 801-4
MM 802-2	1,1	FA80	250	163	146	FA80	0,75	MM 802-4
MM 90S-2	1,5	FA90	262	183	153	FA90	1,1	MM 90S-4
MM 90L-2	2,2	FA90	287	183	153	FA90	1,5	MM 90L-4
	-	-	309	205	165	FA100	2,2	MM100L1-4
Trifase - three-phase								
2 poli - two poles							4 poli - four poles	
MT 711-2	0,37	FA71	211	147	115	FA71	0,25	MT 711-4
MT 712-2	0,55	FA71	211	147	115	FA71	0,37	MT 712-4
MT 801-2	0,75	FA80	250	163	133	FA80	0,55	MT 801-4
MT 802-2	1,1	FA80	250	163	133	FA80	0,75	MT 802-4
MT 90S-2	1,5	FA90	262	183	139	FA90	1,1	MT 90S-4
MT 90L1-2	2,2	FA90	287	183	139	FA90	1,5	MT 90L1-4
MT 100L1-2	3	FA100	309	205	152	FA100	2,2	MT 100L1-4
MT 100L2-2	4	FA100	309	205	152	FA100	3	MT 100L2-4
MT 112L1-2	5,5	FA100	330	221	155	FA100	4	MT 112M-4
	-	-	330	221	155	FA100	5,5	MT 112L1-4

Potenza espressa in kW - power in kW

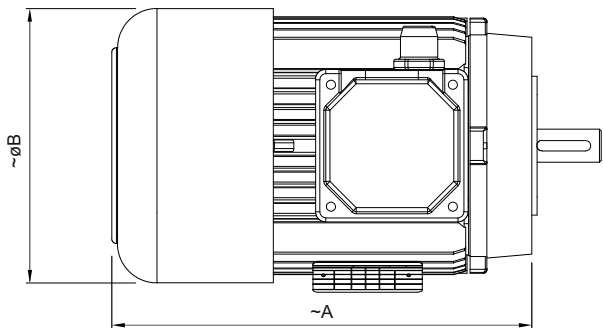
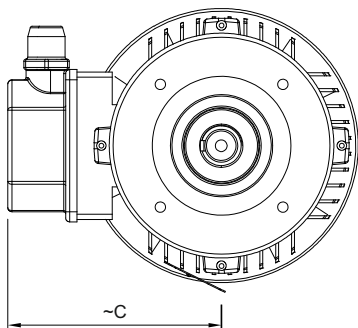
Per i kit di accoppiamento vedi capitolo precedente (6 - elementi di connessione).
For coupling kits see previous section (6 - junction elements).

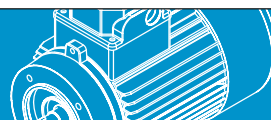
Le caratteristiche tecniche, le dimensioni e gli altri dati non sono vincolanti. Gazzera S.r.l. si riserva il diritto di cambiarle o modificarle in qualsiasi momento senza preavviso e senza obblighi.
The technical characteristics, dimensions and other data are not bindings. Gazzera S.r.l. reserve the right to change them or modify them at any time and without notice.



Motori S3 IP 55 50Hz - IP55 50Hz S3 motors								
Codice code	Potenza power	Flangia flange	A	øB	C	Flangia flange	Potenza power	Codice code
Monofase - single-phase								
2 poli - two poles						4 poli - four poles		
MM3711-2	0,75	FA71	250	163	146	FA71	0,55	MM3711-4
MM3712-2	1,1	FA71	250	163	146	FA80	0,75	MM3801-4
MM3801-2	1,5	FA80	262	183	153	FA80	1,1	MM3802-4
MM390L-2	2,2	FA90	287	183	153	FA90	1,5	MM390S-4
	-	-	309	205	165	FA90	2,2	MM390L-4
	-	-	327	205	165	FA100	3	MM3100L1-4
Trifase - three-phase								
2 poli - two poles						4 poli - four poles		
MT3711-2	0,37	FA71	211	147	115	FA71	0,25	MT3711-4
MT3712-2	0,55	FA71	211	147	115	FA71	0,37	MT3712-4
MT3801-2	0,75	FA80	250	163	133	FA80	0,55	MT3801-4
MT3802-2	1,1	FA80	250	163	133	FA80	0,75	MT3802-4
MT390S-2	1,5	FA90	262	183	139	FA90	1,1	MT390S-4
MT390L1-2	2,2	FA90	287	183	139	FA90	1,5	MT390L1-4
MT3100L1-2	3	FA100	309	205	152	FA100	2,2	MT3100L1-4
MT3100L2-2	4	FA100	309	205	152	FA100	3	MT3100L2-4
MT3112L1-2	5,5	FA100	335	229	167	FA100	4	MT3112M-4
	-	-	335	229	167	FA100	5,5	MT3112L1-4

Potenza espressa in kW - power in kW




S1
Servizio continuo
Continuous running duty

Una volta partito, il motore lavora con un carico costante fino almeno a raggiungimento dell'equilibrio termico. Il motore può quindi funzionare per un tempo illimitato.
Once started, the motor works at a constant load at least until thermal equilibrium is reached. Then that motor may be operated for an unlimited period.

I motori con servizio S1 sono inclusi nel regolamento europeo riguardante i motori ad alta efficienza.

Motors with duty S1 are included in high efficiency European regulation.

S3
Servizio intermittente periodico
Intermittent periodic duty

Sequenza di cicli di funzionamento uguali composti da un periodo di funzionamento a carico costante ed un periodo senza carico e senza alimentazione elettrica.
A sequence of identical duty cycles, made up with a time of operation at constant load and a time at rest. When at rest, the motor is not fed.

La corrente di avviamento non influenza l'innalzamento di temperatura.
Starting current does not significantly influence temperature rise.

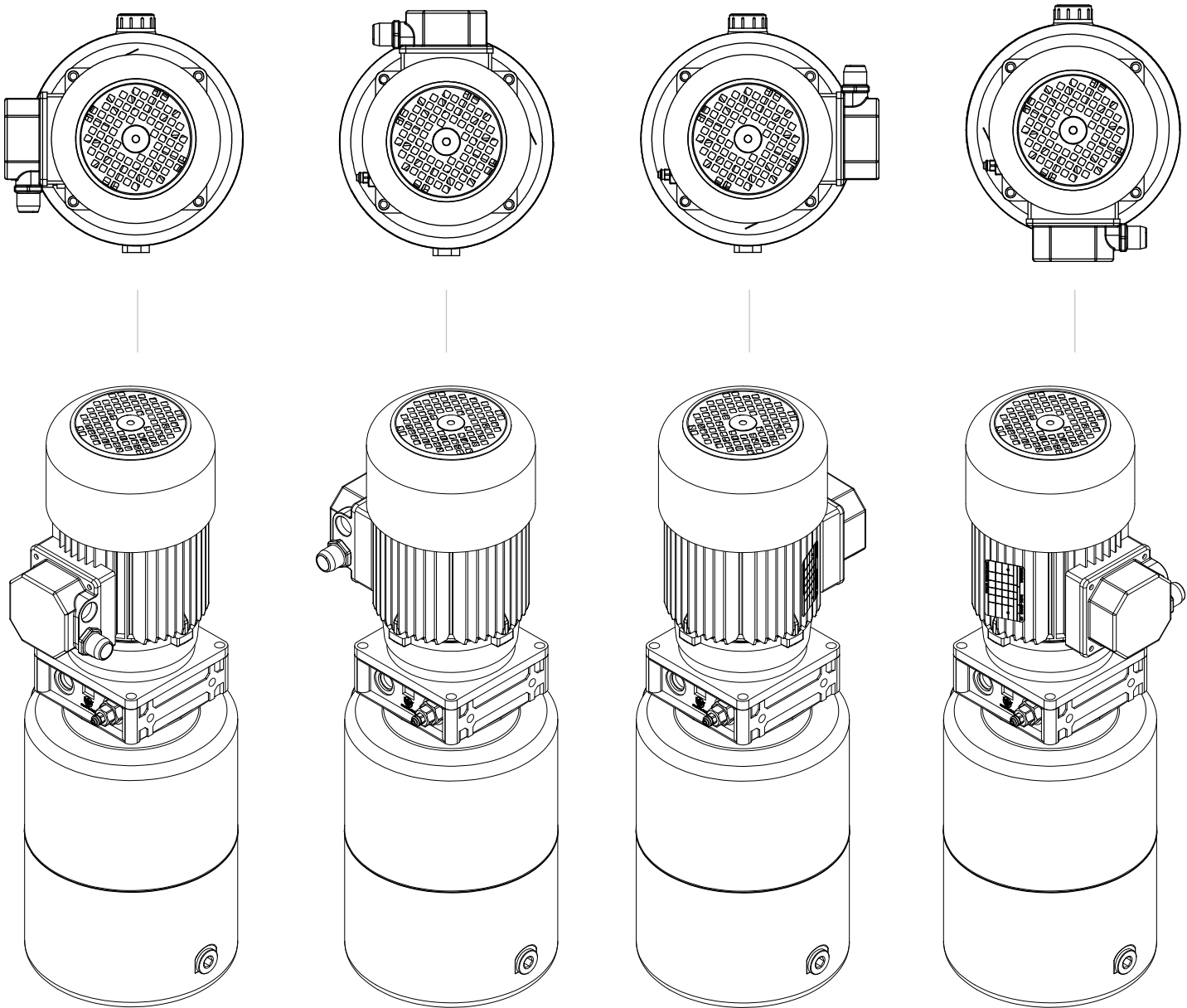
Se non diversamente specificato, la durata di un ciclo per il servizio S3 è di 10 minuti e i rapporti di intermittenza dovranno assumere un valore tra i seguenti: 15%, 25%, 40%, 60%.
Unless otherwise specified, the duration of a cycle for S3 duty shall be 10 minutes and the cycle duration factor shall be one of the following values: 15%, 25%, 40%, 60%.

Il tipo di servizio S3 ha un tempo di riposo (cioè senza carichi esterni applicati) durante il quale il motore ha il tempo di raffreddarsi, permettendo così di sovraccaricarlo rispetto a quando lo stesso è utilizzato con un servizio S1 (e quindi ininterrottamente sotto carico). Inoltre i motori con servizio diverso da S1 non sono inclusi nel regolamento europeo riguardante i motori ad alta efficienza.

The duty type S3 share a time to rest (no external load is applied) during which the motor lowers its temperature, thus affording to overload such motor with respect to the same motor when loaded with S1 duty cycle (then continuously loaded). Moreover motors with duty types different from S1 are not included in high efficiency European regulation.

Per ulteriori informazioni si rimanda alla Norma IEC 60034-1.
Further information can be found in IEC 60034-1 standard.

Orientamento motore - motor positioning



1 Sinistra - left (std)

2 Anteriore - front

3 Destra - right

4 Posteriore - rear

morsettiera stesso lato della
valvola di massima

terminal box same side of the
relief valve

morsettiera lato blocchi
modulari

terminal box on modular blocks
side

morsettiera lato opposto della
valvola di massima

terminal box on opposite side of
the relief valve

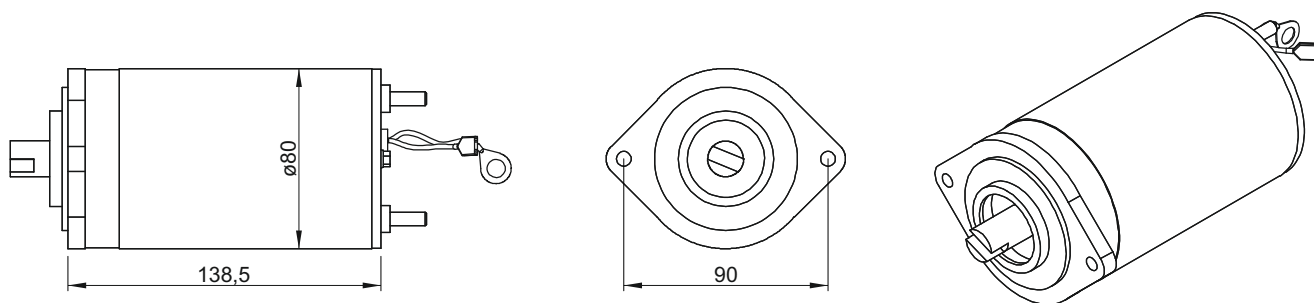
morsettiera lato opposto
blocchi modulari

terminal box on opposite side of
the modular blocks

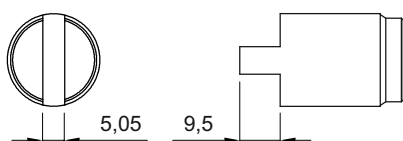
GAZZERA S.r.l. | 12040 CERVERE (CN) - IT | Via dell'Aviazione, sn


Motori CC - DC motors
Motori corrente continua ø80 - Direct current motors ø80

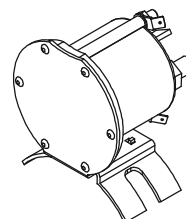
Codice code	Potenza power	Tensione voltage	S2	S3	Kit connessione junction kit	Teleruttore starting switch
	W	V	min	%		
MDC120500T	500	12	2	8	K17	684-1211-212-06
MDC240500T	500	24	2	8		684-2411-212-06
MDC120800T	800	12	2	8		684-1211-212-06
MDC240800T	800	24	2	8		684-2411-212-06


K17

Kit connessione
junction kit


Teleruttore - Starting switch
Caratteristiche principali - main features

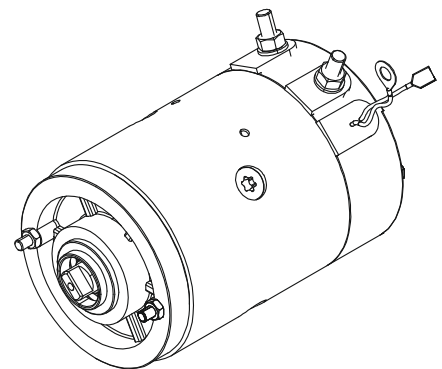
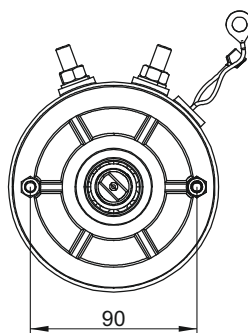
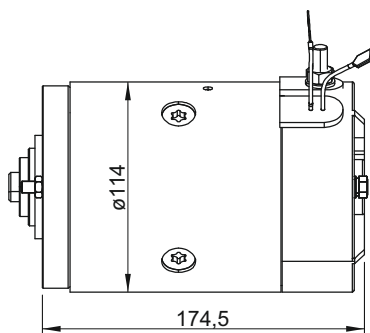
Codice code	Tensione voltage	Servizio duty cycle	Carico resistivo resistive load carry
	V	%	A
684-1211-212-06	12	25	150
684-2411-212-06	24	25	150



Il teleruttore viene fornito con una fascetta per il fissaggio sul motore.
The starting switch is supplied with a clamp for the fastening on the motor.

Motori corrente continua ø114 - Direct current motors ø114

Codice code	Potenza power	Tensione voltage	S2	S3	Kit connessione junction kit	Teleruttore starting switch
	W	V	min	%		
MDC121600T	1600	12	2	8	K26	684-1211-212-06
MDC241600T	1600	24	2	5		684-2411-212-06
MDC122200T	2200	12	2	8		684-1211-212-06
MDC242200T	2200	24	2	5		684-2411-212-06



K26

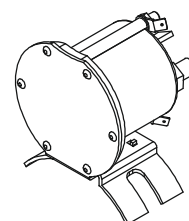
Kit connessione
junction kit



Teleruttore - Starting switch

Caratteristiche principali - main features

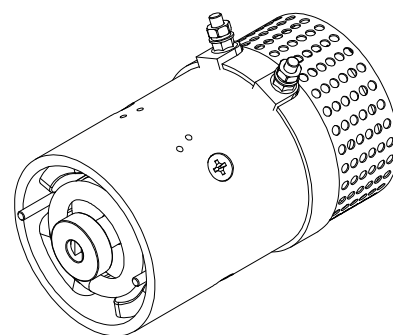
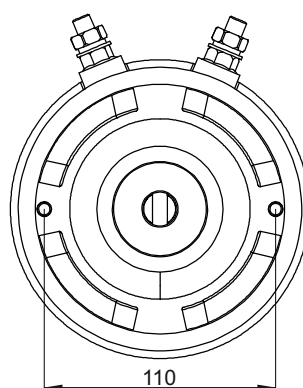
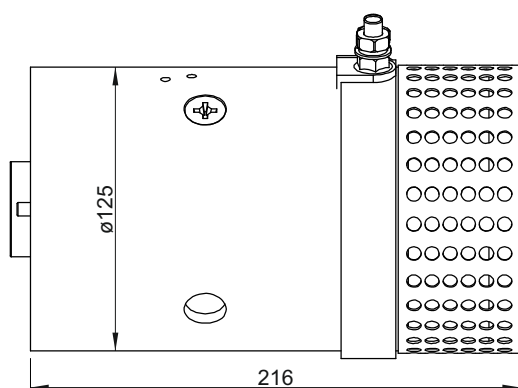
Codice code	Tensione voltage	Servizio duty cycle	Carico resistivo resistive load carry
	V	%	A
684-1211-212-06	12	25	150
684-2411-212-06	24	25	150



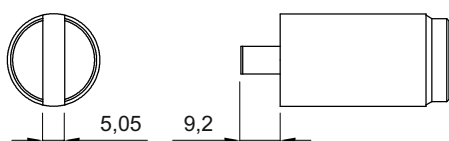
Il teleruttore viene fornito con n°2 viti M5 per il fissaggio sul motore.
The starting switch is supplied with nr.2 M5 screws for the fastening on the motor.


Motori corrente continua ø80 - Direct current motors ø80

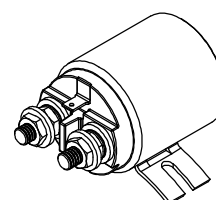
Codice code	Potenza power	Tensione voltage	S2	S3	Kit connessione junction kit	Teleruttore starting switch
	W	V	min	%		
MDC123000T	3000	12	2	8	K19	114-1211-020
MDC243000T	3000	24	2	5		114-2411-020


K19

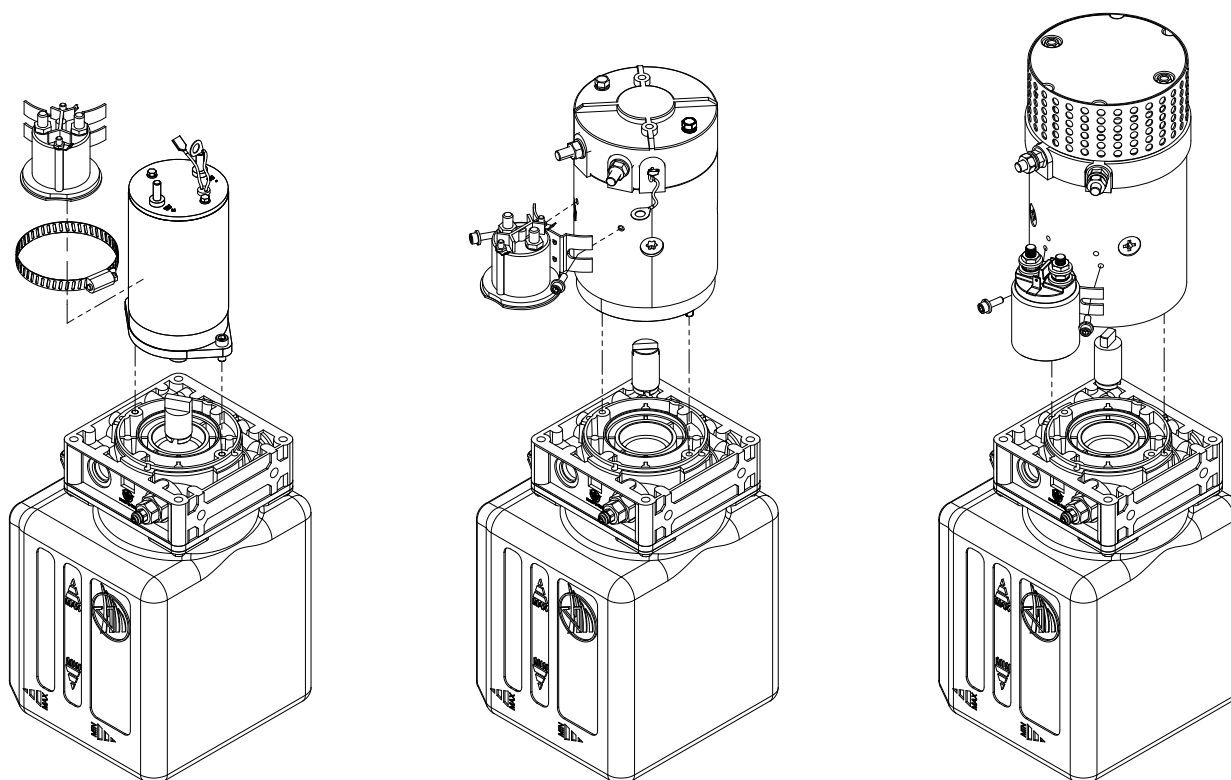
Kit connessione
junction kit


Teleruttore - Starting switch

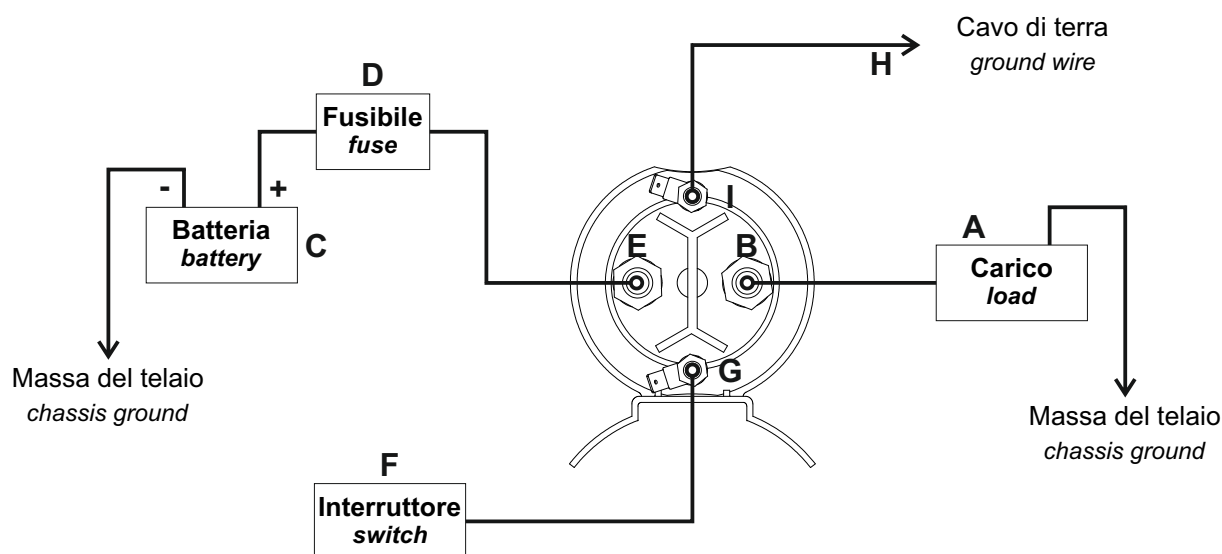
Caratteristiche principali - main features			
Codice code	Tensione voltage	Servizio duty cycle	Carico resistivo resistive load carry
	V		A
114-1211-020	12	50%	225
114-2411-020	24	50%	225



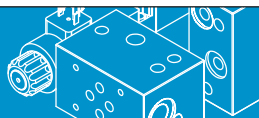
Il teleruttore viene fornito con n°2 viti M5 per il fissaggio sul motore.
 The starting switch is supplied with nr.2 M5 screws for the fastening on the motor.



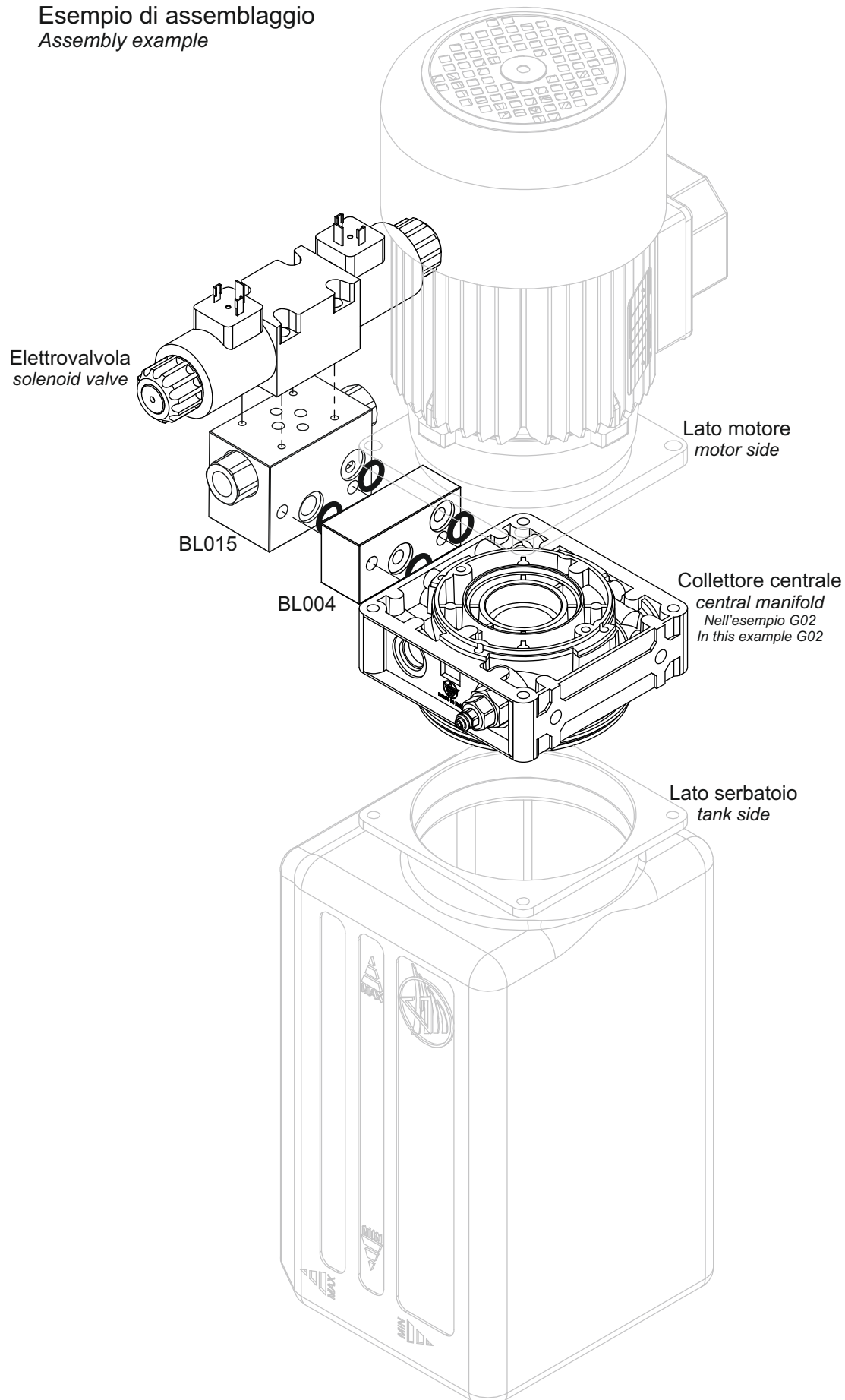
Schema di cablaggio - wiring diagram

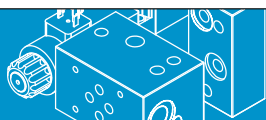


- 1 - Connettere il carico (A) alla borchia (B).
Connect load (A) to stud (B).
- 2 - Connettere il polo positivo della batteria (C) al fusibile (D).
Connect battery positive (C) to fuse (D).
- 3 - Connettere il fusibile (D) alla borchia (E).
Connect fuse (D) to stud (E).
- 4 - Connettere l'interruttore (F) alla borchia (G).
Connect switch (F) to stud (G).
- 5 - Connettere il cavo di terra (H) alla borchia (I).
Connect ground wire (H) to stud (I).

**Blocchi valvole - valve blocks**

Esempio di assemblaggio
Assembly example

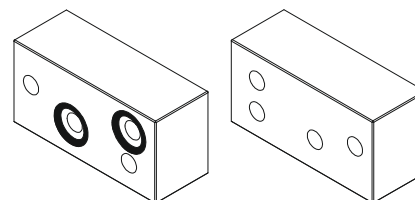
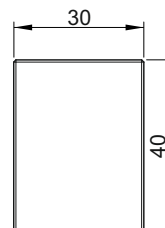
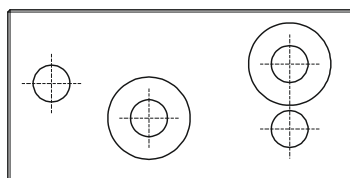
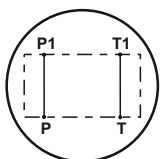




BL004

Distanziale
Spacer element

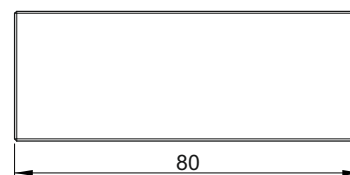
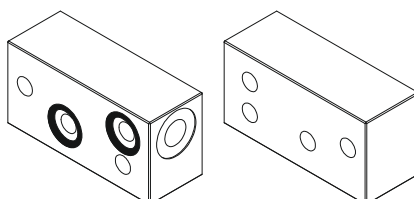
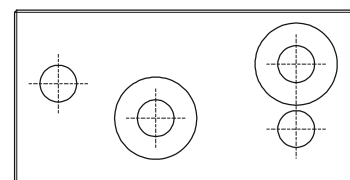
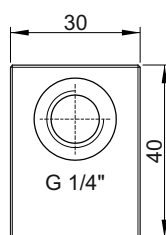
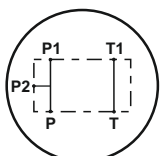
Simbolo
symbol



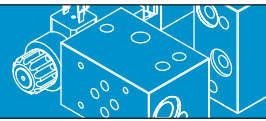
BL004-1

Distanziale con connessione aggiuntiva 1/4" BSP
Spacer element with additional 1/4" BSP port

Simbolo
symbol



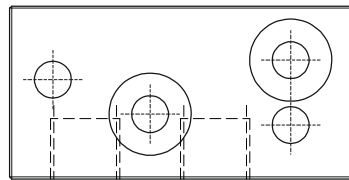
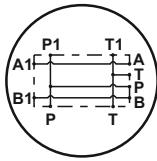
NB: Versione larghezza 40 disponibile con il codice BL004-2 (indispensabile per blocchi in presenza di motore taglia 112).
Note: version width 40 available with code BL004-2 (essential for manifolds in presence of motors size 112).



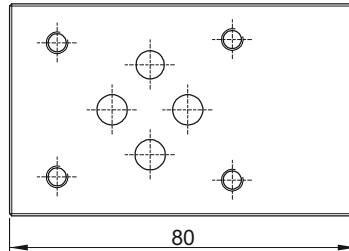
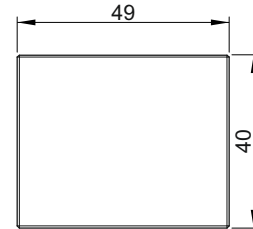
BL008

Blocco modulare con porte posteriori 3/8" BSP
Modular manifold with rear 3/8" BSP ports

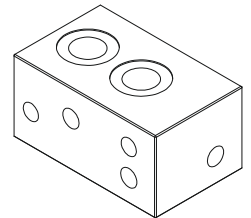
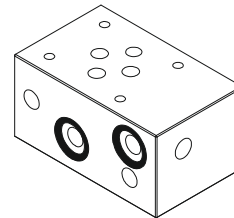
Simbolo
symbol



G 3/8" G 3/8"



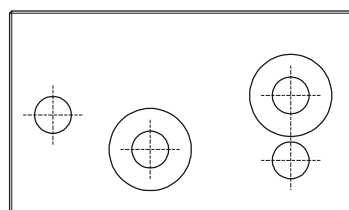
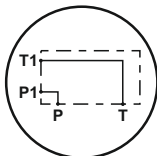
80



BL009

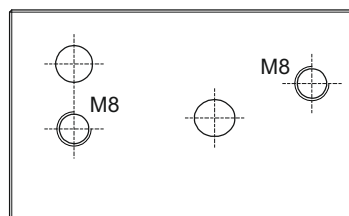
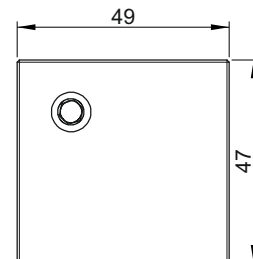
Blocco per rotazione 90° con connessione aggiuntiva 1/4" BSP
90° rotation manifold with additional 1/4" BSP port

Simbolo
symbol

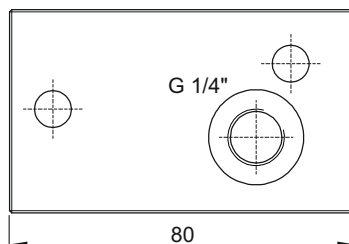


M8

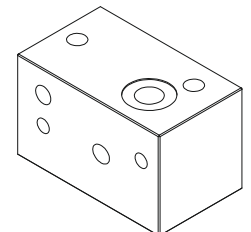
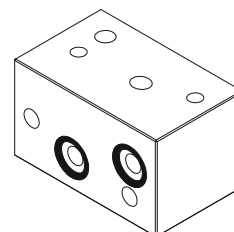
M8

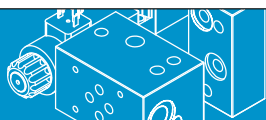


G 1/4"



80

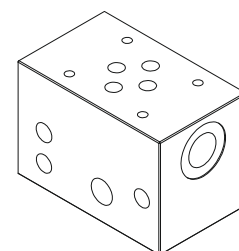
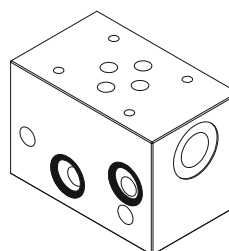
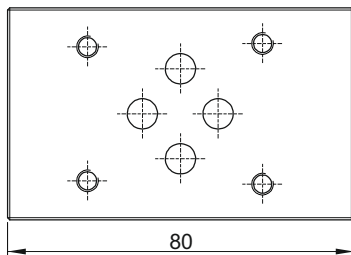
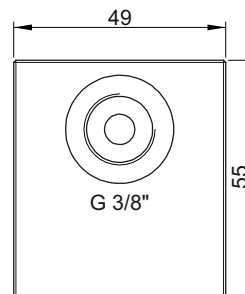
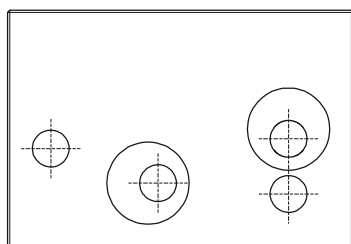
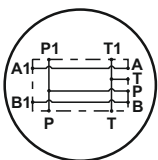




BL010

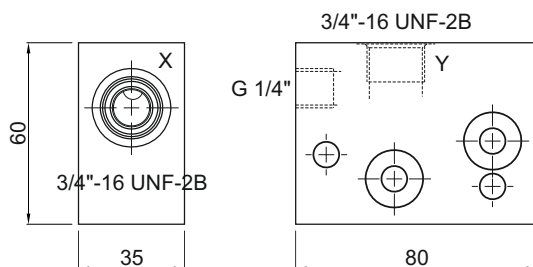
Blocco modulare con porte laterali 3/8" BSP
Modular manifold with lateral 3/8" BSP ports

Simbolo
symbol

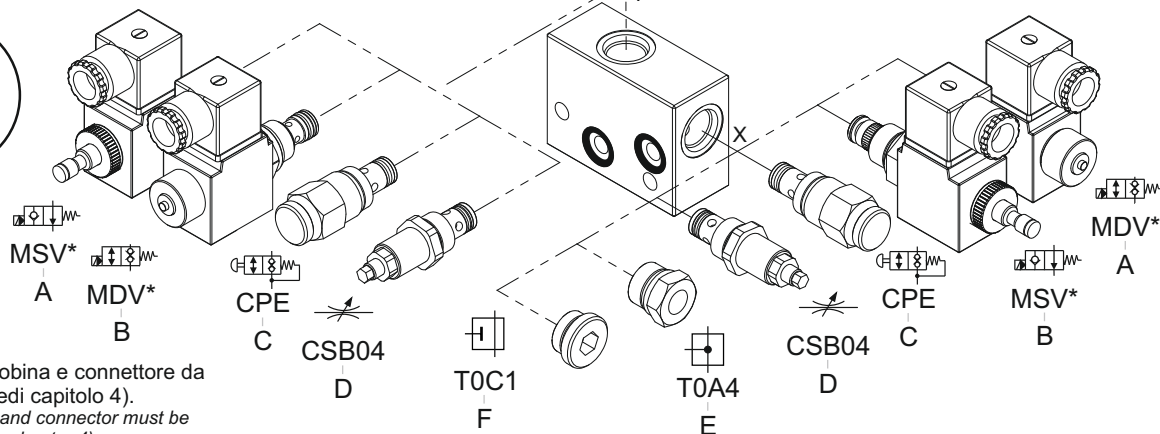
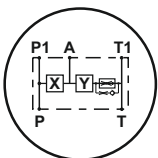


BL011-X-Y

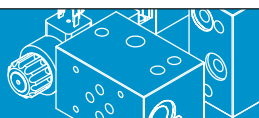
Blocco per circuito semplice effetto aggiuntivo
Manifold for additional single acting circuit



Simbolo
symbol



*NB: Tipo, tensione bobina e connettore da specificare a parte (vedi capitolo 4).
*Note: type, coil voltage and connector must be specified separately (see chapter 4).

**BL015**

Blocco con valvola di ritegno pilotata
Manifold with pilot check valve

Simbolo
symbol

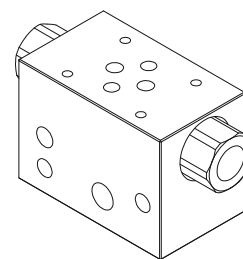
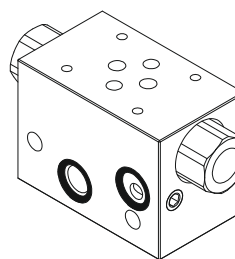
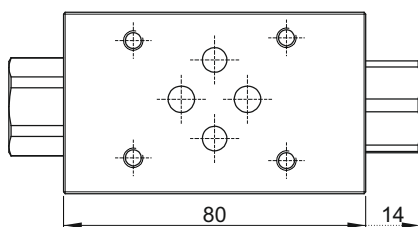
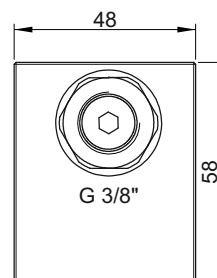
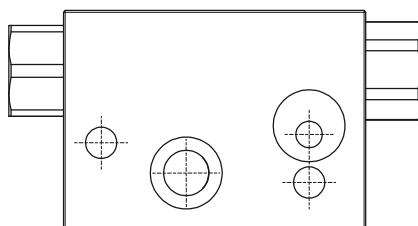
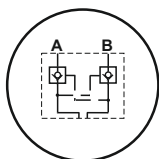
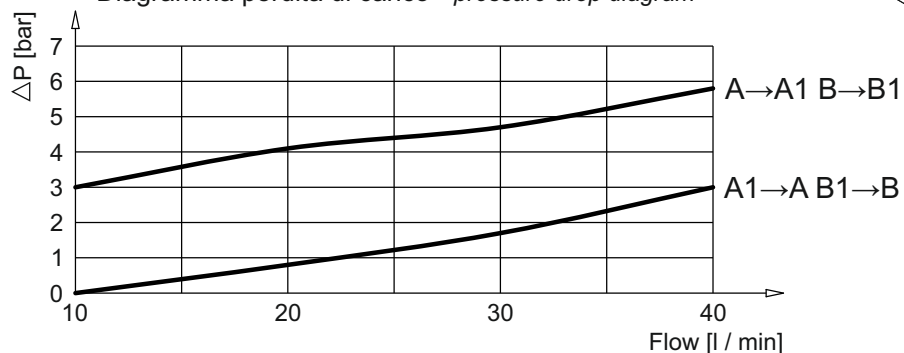
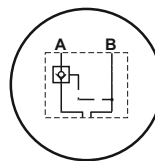


Diagramma perdita di carico - pressure drop diagram

**BL016**

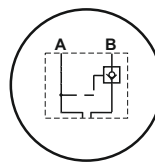
Blocco con valvola di ritegno pilotata su A
Manifold with pilot check valve on A



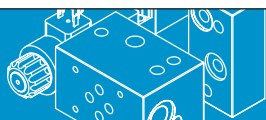
Simbolo
symbol

BL017

Blocco con valvola di ritegno pilotata su B
Manifold with pilot check valve on B



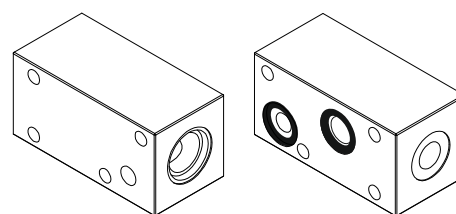
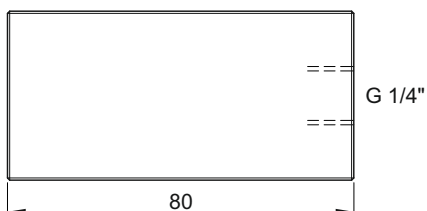
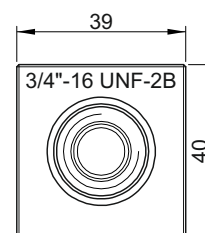
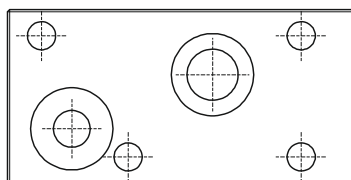
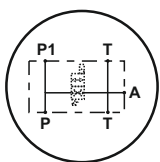
Simbolo
symbol



BL021

Blocco per valvole MSV e MDV
Manifold for MSV and MDV valves

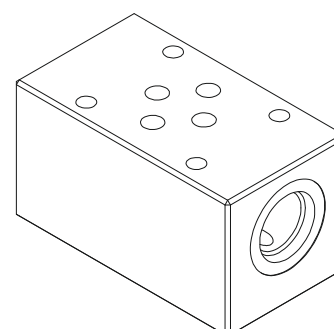
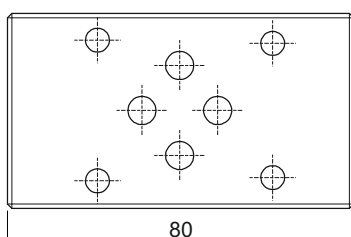
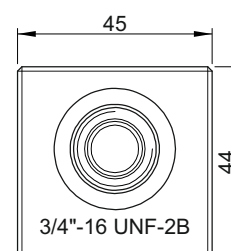
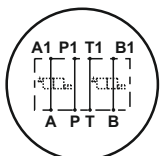
Simbolo
symbol

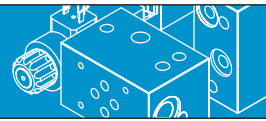


BL022

Blocco modulare per valvole MSV e MDV
Modular manifold for MSV and MDV valves

Simbolo
symbol

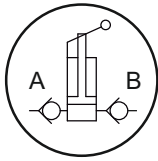




BL023

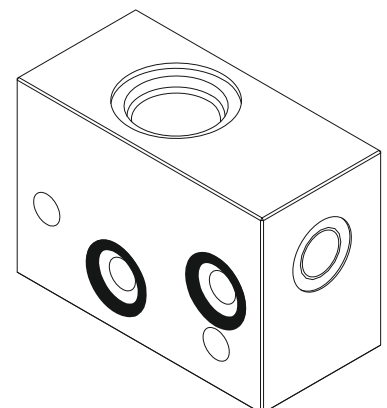
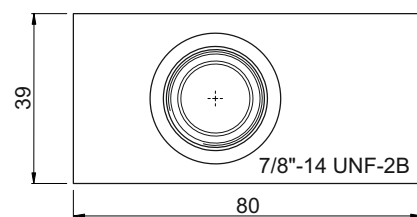
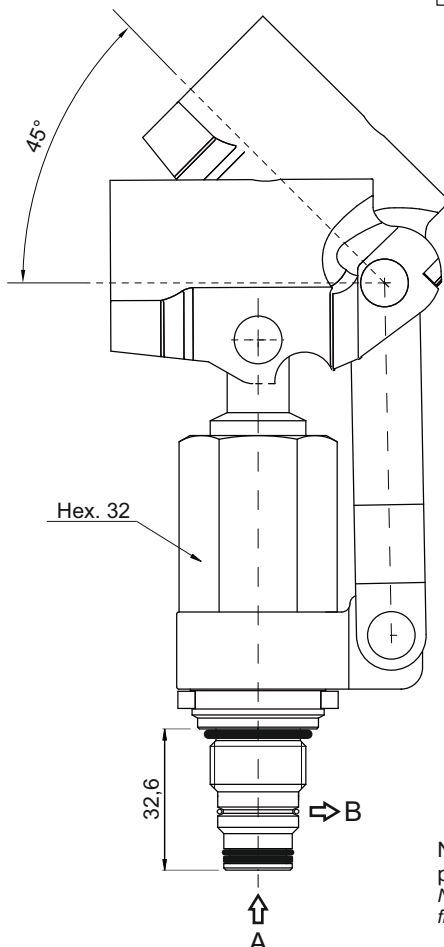
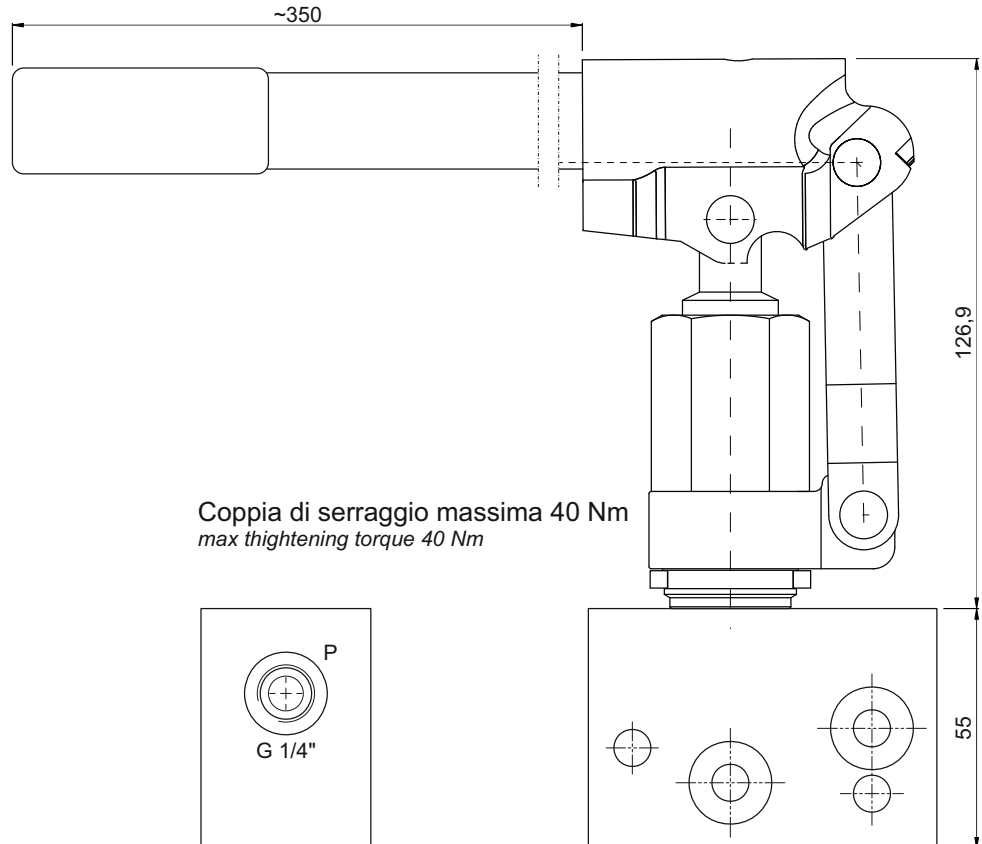
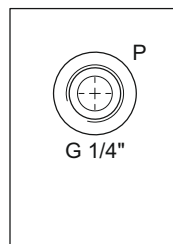
Blocco pompa manuale
Hand pump modular manifold

Simbolo
symbol

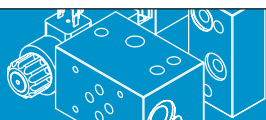


Caratteristiche principali main features	
Pressione max max pressure	210 bar
cc/corsa cc/stroke	8,8
Peso weight	1,9 Kg

Coppia di serraggio massima 40 Nm
max tightening torque 40 Nm



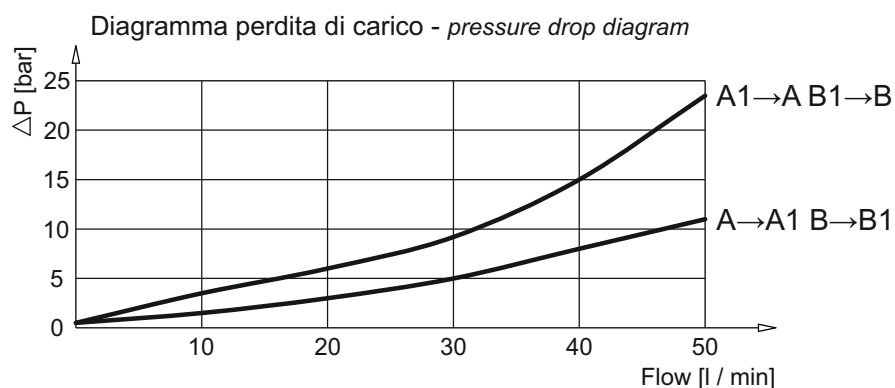
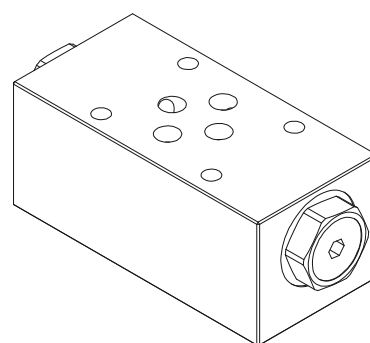
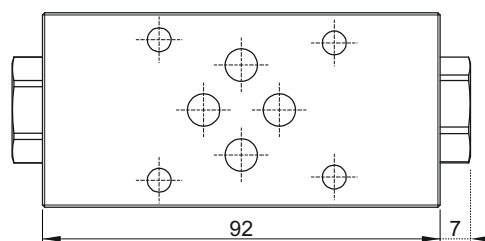
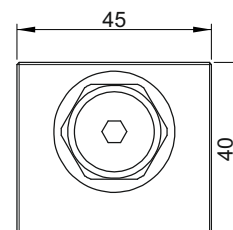
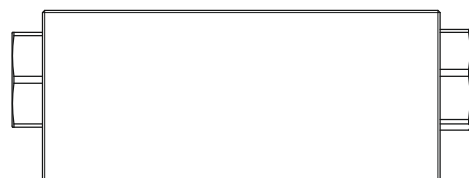
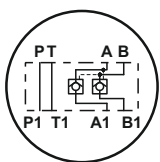
NB: Per facilitare l'aspirazione della pompa, lasciare libero il percorso P
Note: to make suction easier, leave P path free



BL018

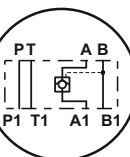
Valvola di blocco modulare
Pilot operated check valve

Simbolo
symbol



BL019

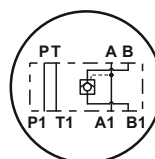
Valvola di blocco modulare bocca A
Pilot operated check valve seal on line A



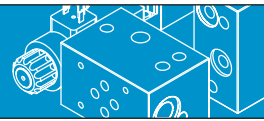
Simbolo
symbol

BL020

Valvola di blocco modulare bocca B
Pilot operated check valve seal on line B

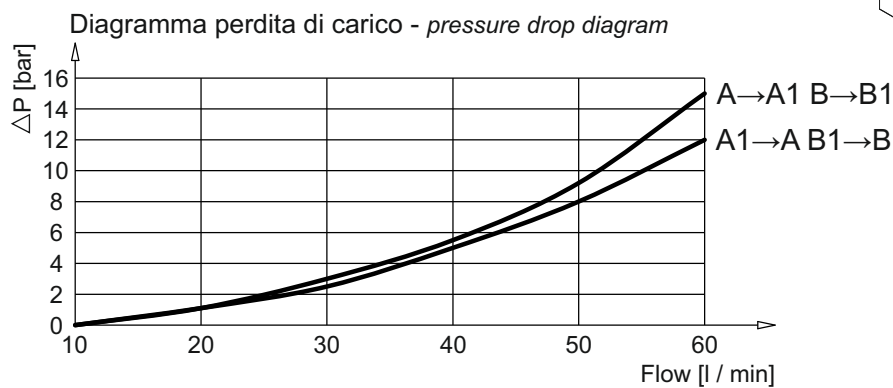
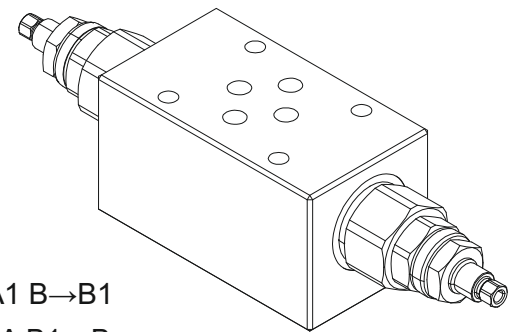
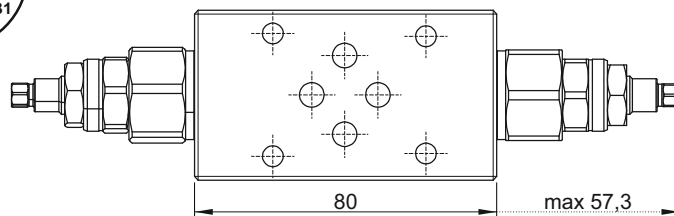
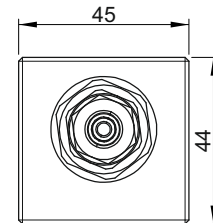
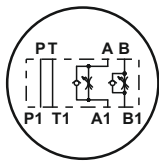


Simbolo
symbol

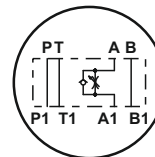
**BL035**

Regolatore di flusso A+B in scarico
Flow regulator valve control in lines A and B

Simbolo
symbol

**BL036**

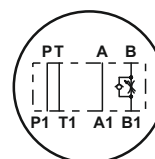
Regolatore di flusso scarico su A
Flow regulator valve control in line A



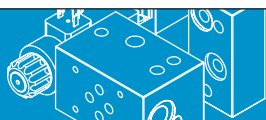
Simbolo
symbol

BL037

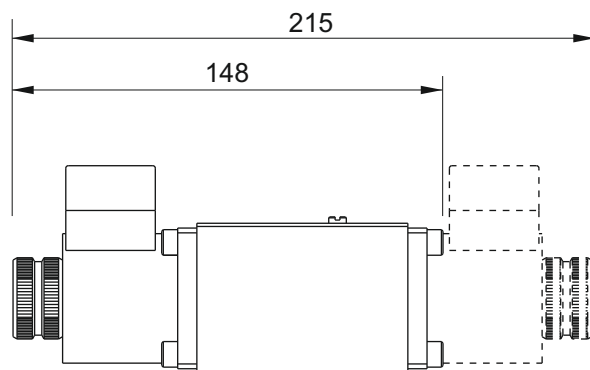
Regolatore di flusso scarico su B
Flow regulator valve control in line B



Simbolo
symbol



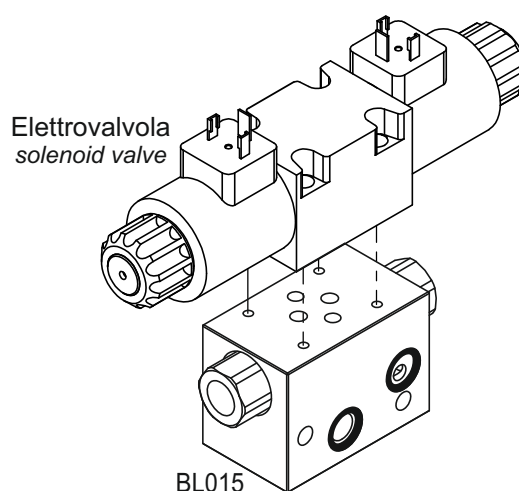
Elettrovalvole - solenoid valves



Schema idraulico - hydraulic scheme

Code	Schema scheme	Code	Schema scheme
DM01		DD01	
DM02		DD02	
DM03		DD03	
DM04		DD04	
		DD05	

Tensioni standard per elettrovalvole: 12DC, 24DC, 48DC, 110/50AC, 230/50AC.
Altre tensioni su richiesta.
Standard voltages for solenoid valves: 12DC, 24DC, 48DC, 110/50AC, 230/50AC.
Others voltages on request.



Codice ordinazione - ordering code

D	M	0	1	0	0	2	4	D	C
1		2		3					

1 Tipo di valvola - valve type

DM = Elettrovalvola singola - single solenoid valve
DD = Elettrovalvola doppia - double solenoid valve

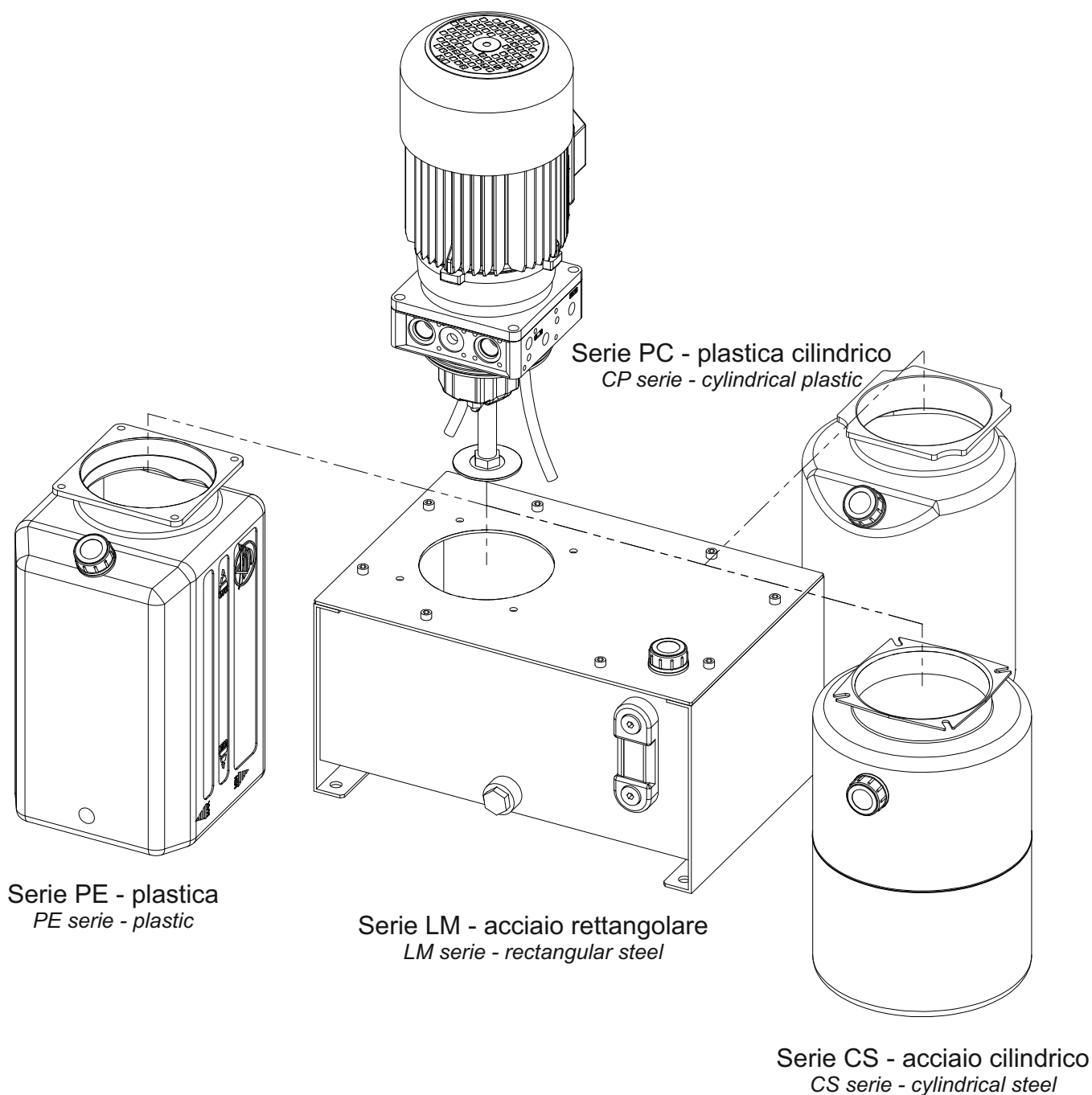
2 Schema idraulico - hydraulic scheme

Vedi tabella sopra - see table above

3 Tensione bobina - coil voltage

0012DC, 0024DC, 0048DC = corrente continua - DC current
0110AC, 0230AC = corrente alternata - AC current

Modello - type



Codice ordinazione - ordering code

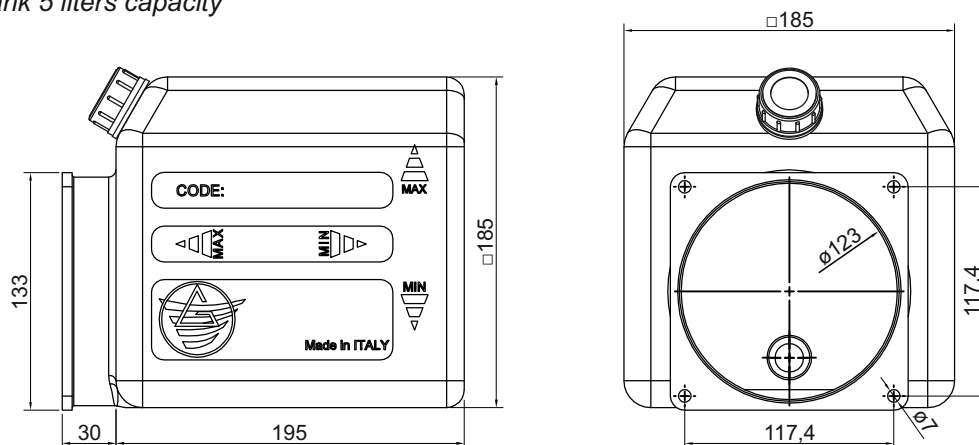
P	E	1	2	V
1	2	3		

1 Serie - series	2 Volume serbatoio - tank volume				3 Tappo di carico - filler cap
PE	PE	LM	CS	PC	O = Orizzontale - horizontal
LM	05 = 5,0 lt	07 = 7,0 lt	01 = 1,5 lt	05 = 5,0 lt	V = Verticale - vertical
CS	08 = 8,0 lt	15 = 15,0 lt	02 = 2,5 lt	07 = 7,0 lt	TF= Stagno (solo LM07)
PC	12 = 12,0 lt	20 = 20,0 lt	05 = 5,0 lt	09 = 9,0 lt	watertight (LM07 only)
		30 = 30,0 lt	08 = 8,0 lt	11 = 11,0 lt	
			10 = 10,0 lt		
			12 = 12,0 lt		

Per serie LM omettere punto 3 - for LM series omit point 3

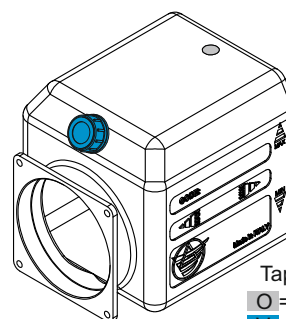
PE05

Serbatoio in plastica capacità 5 litri
Plastic tank 5 liters capacity



Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting

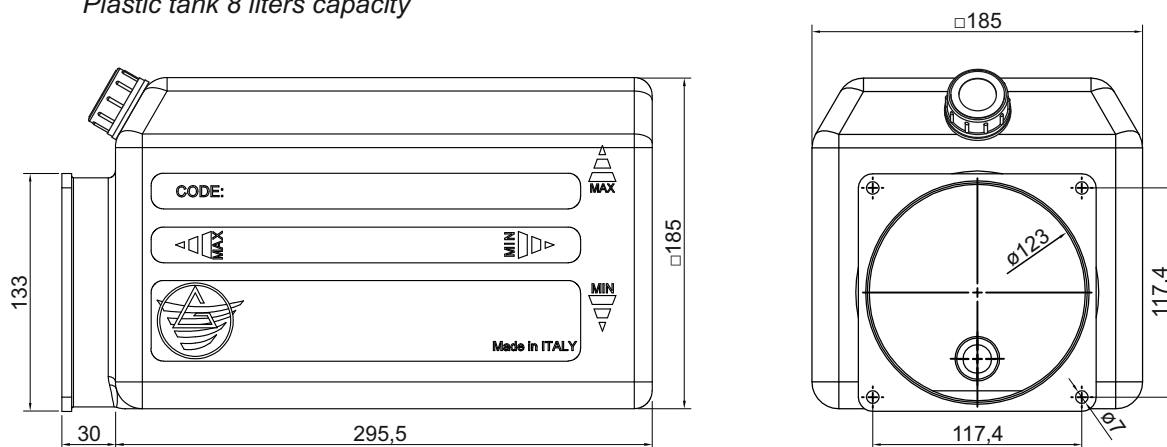


Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical

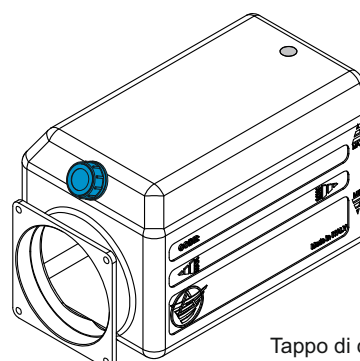
PE08

Serbatoio in plastica capacità 8 litri
Plastic tank 8 liters capacity



Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting



Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical

Plastic tank 12 liters capacity

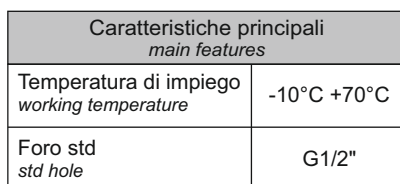
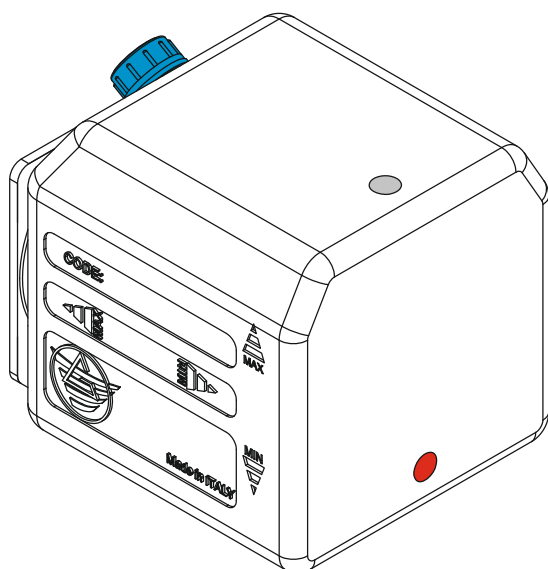


Diagram illustrating the battery unit. The charging cap is located on the top surface of the battery, indicated by a small circle. The cap is labeled "Tappo di carico - filler" (Charging cap - filler).

Legend:

- O = Orizzontale - horizontal
- V = Verticale - vertical

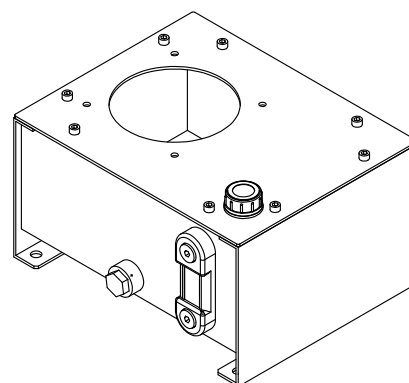
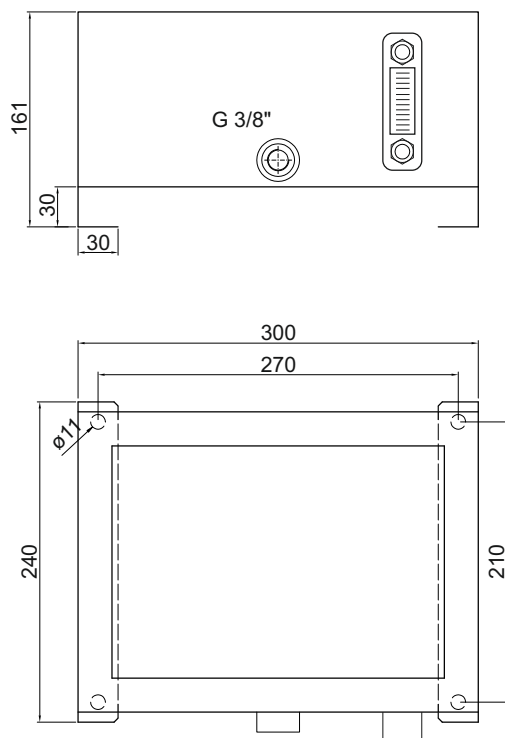
Tappo di carico - *filler cap*
 O = Orizzontale - *horizontal*
 V = Verticale - *vertical*



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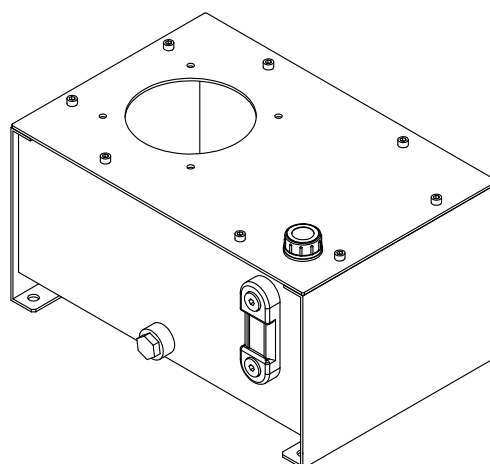
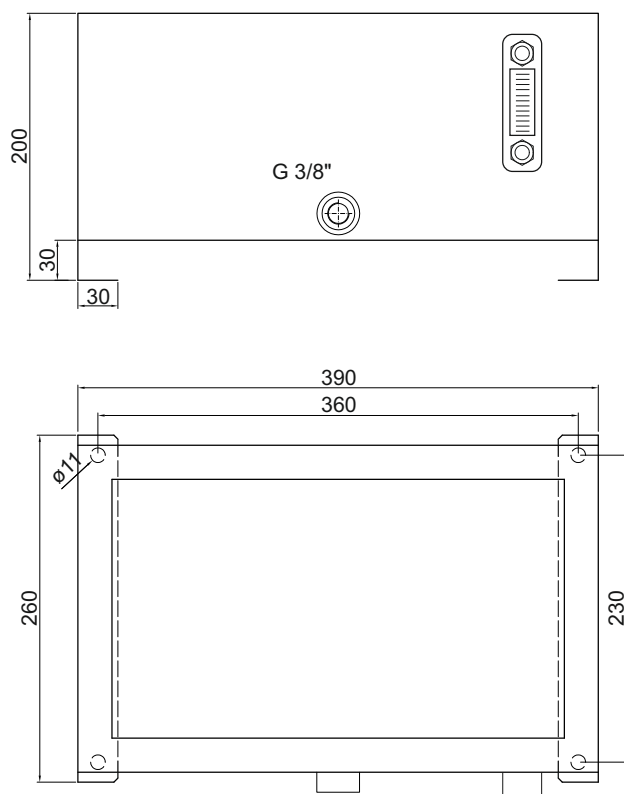
LM07

Serbatoio rettangolare in acciaio capacità 7 litri
7 liters capacity rectangular steel tank



LM15

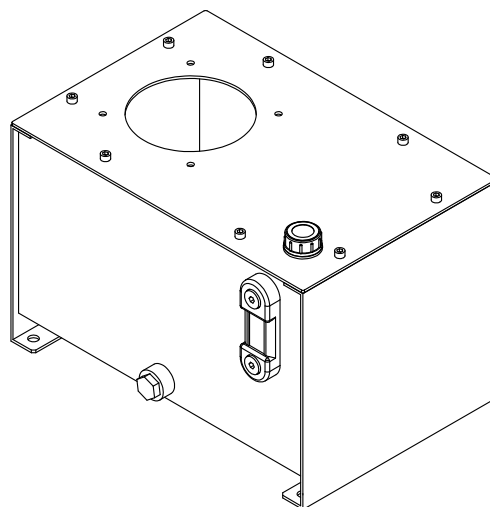
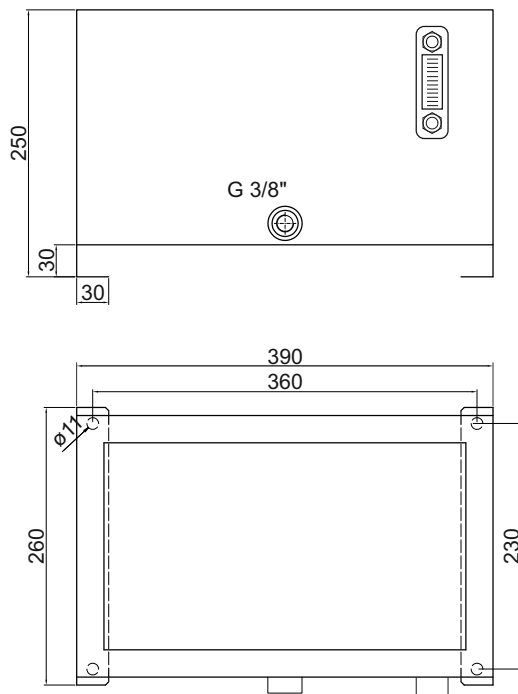
Serbatoio rettangolare in acciaio capacità 15 litri
15 liters capacity rectangular steel tank





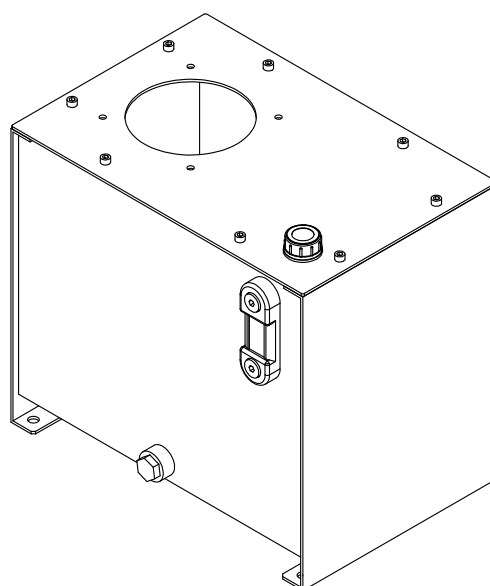
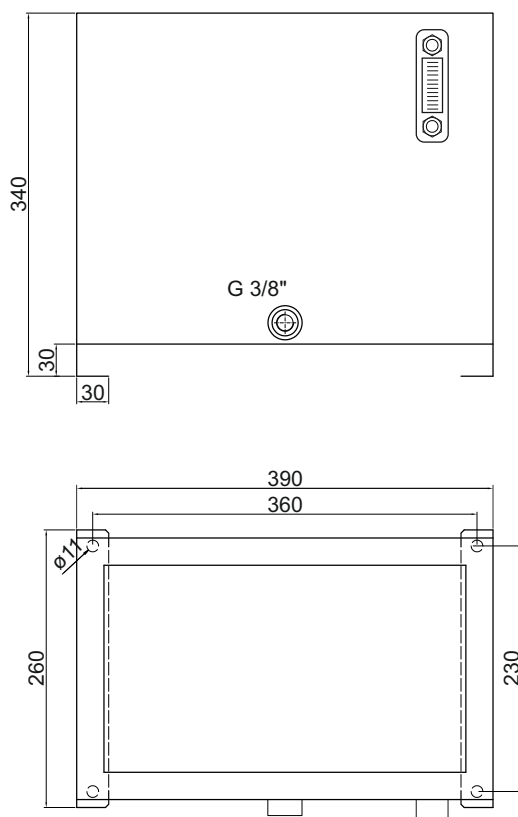
LM20

Serbatoio rettangolare in acciaio capacità 20 litri
20 liters capacity rectangular steel tank



LM30

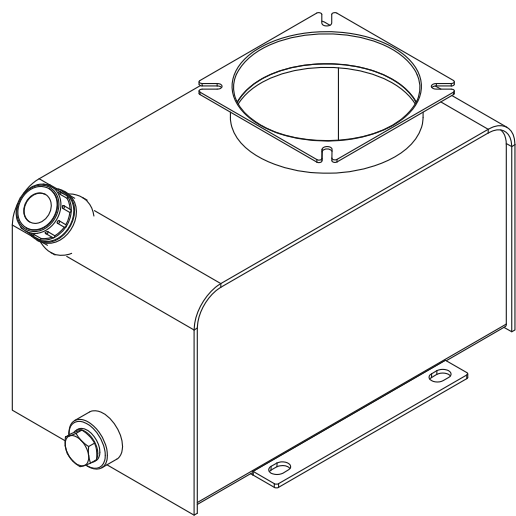
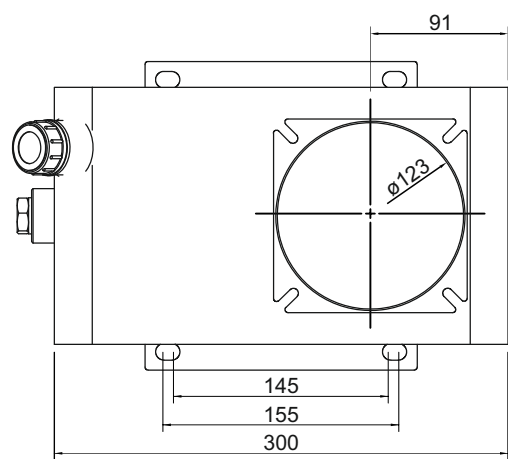
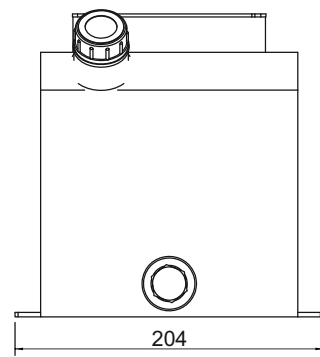
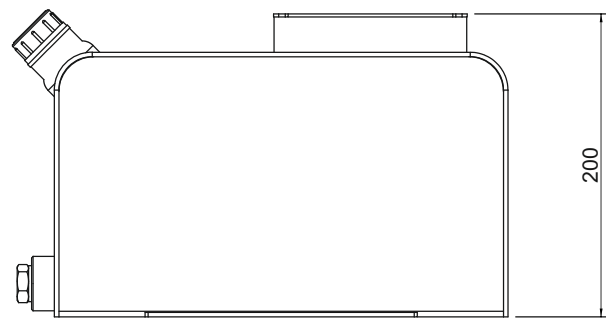
Serbatoio rettangolare in acciaio capacità 30 litri
30 liters capacity rectangular steel tank



LM07TF

Serbatoio stagno in acciaio capacità 7 litri
7 liters capacity watertight steel tank

67

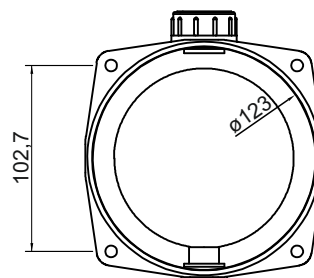
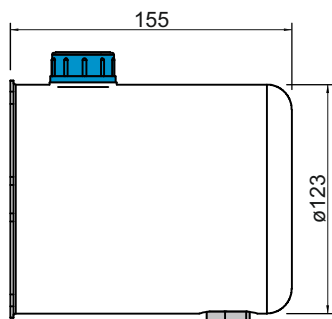


Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"

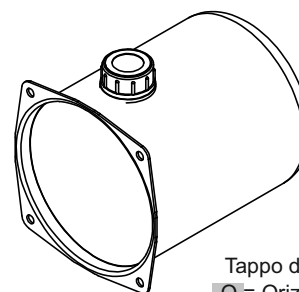
Serbatoi acciaio steel oil tanks

CS01

Serbatoio cilindrico in acciaio capacità 1,5 litri
1,5 liters capacity cylindrical steel tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"

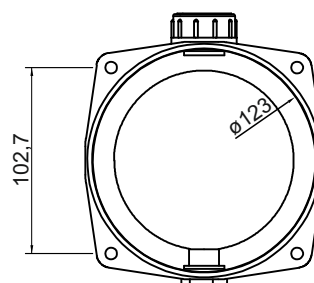
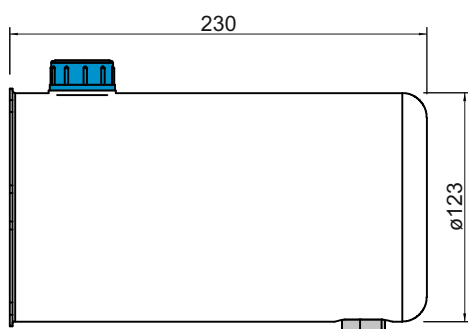


Tappo di carico - filler cap

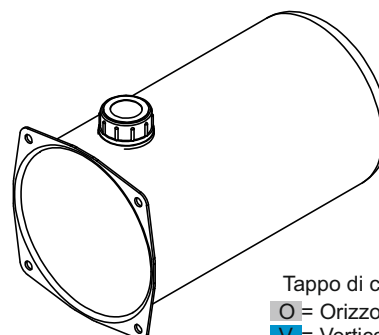
○ = Orizzontale - horizontal
■ = Verticale - vertical

CS02

Serbatoio cilindrico in acciaio capacità 2,5 litri
2,5 liters capacity cylindrical steel tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"

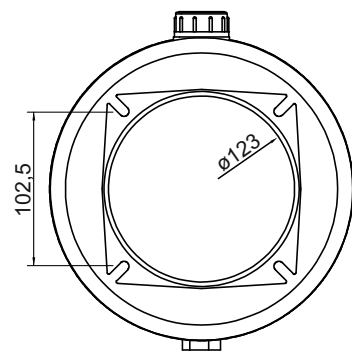
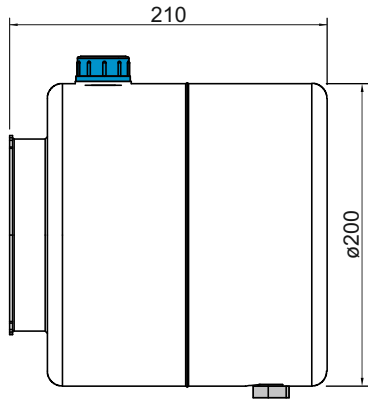


Tappo di carico - filler cap

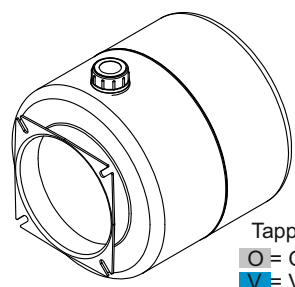
○ = Orizzontale - horizontal
■ = Verticale - vertical

CS05

Serbatoio cilindrico in acciaio capacità 5 litri
5 liters capacity cylindrical steel tank



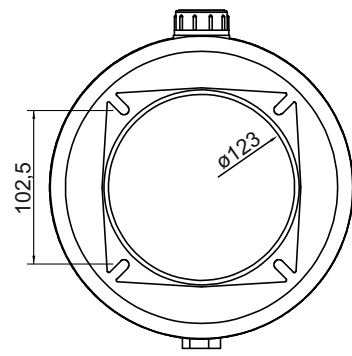
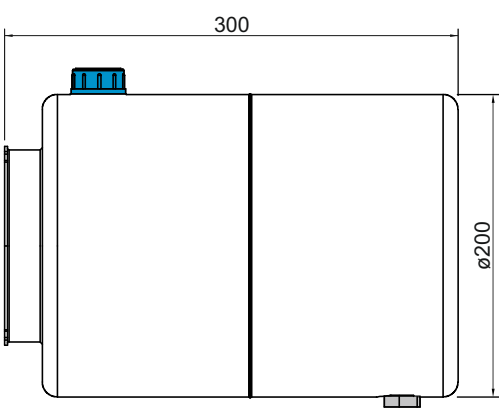
Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"



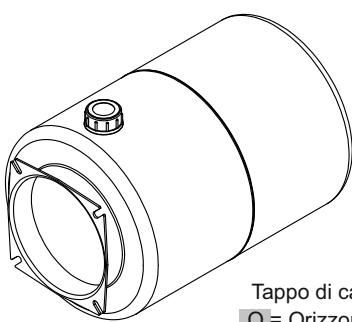
Tappo di carico - filler cap
○ = Orizzontale - horizontal
■ = Verticale - vertical

CS08

Serbatoio cilindrico in acciaio capacità 8 litri
8 liters capacity cylindrical steel tank

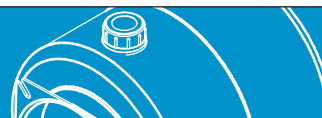


Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"



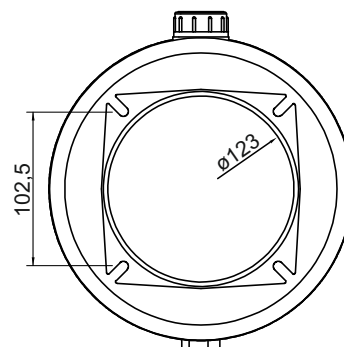
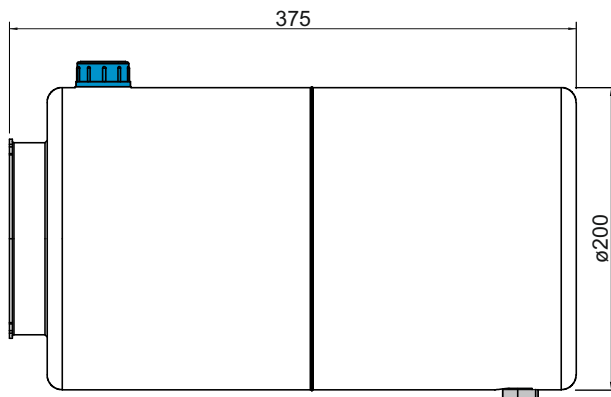
Tappo di carico - filler cap
○ = Orizzontale - horizontal
■ = Verticale - vertical

Serbatoi acciaio steel oil tanks

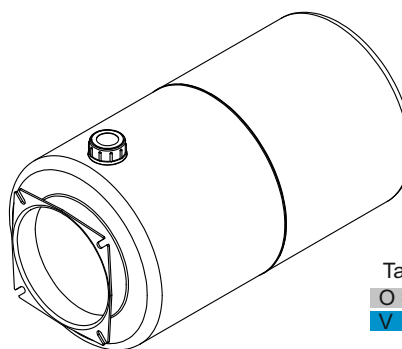


CS10

Serbatoio cilindrico in acciaio capacità 10 litri
10 liters capacity cylindrical steel tank



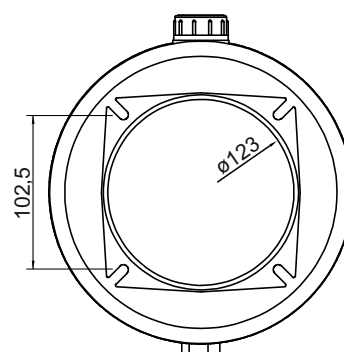
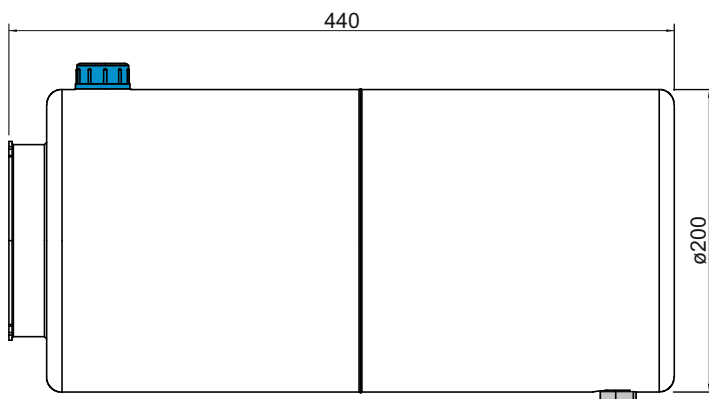
Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"



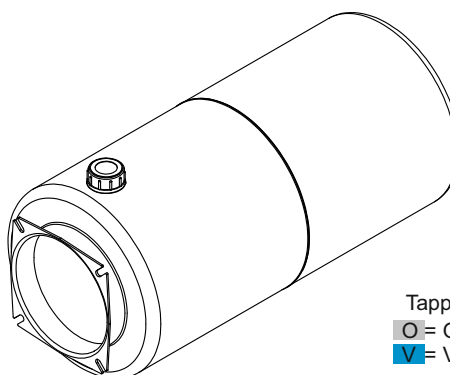
Tappo di carico - filler cap
 = Orizzontale - horizontal
 = Verticale - vertical

CS12

Serbatoio cilindrico in acciaio capacità 12 litri
12 liters capacity cylindrical steel tank



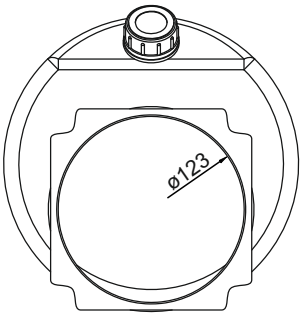
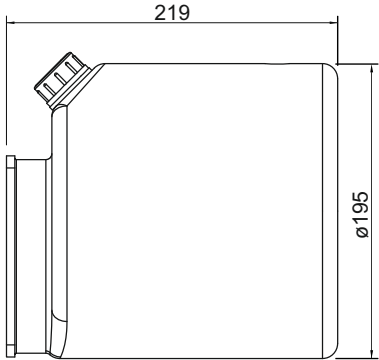
Caratteristiche principali main features	
Temperatura di impiego working temperature	-10°C +80°C
Foro std std hole	G1/2"



Tappo di carico - filler cap
 = Orizzontale - horizontal
 = Verticale - vertical

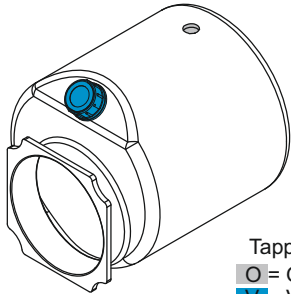
PC05

Serbatoio cilindrico in plastica capacità 5 litri
5 liters capacity cylindrical plastic tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-15°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting

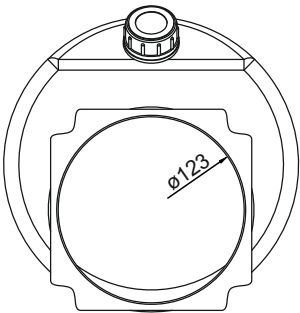
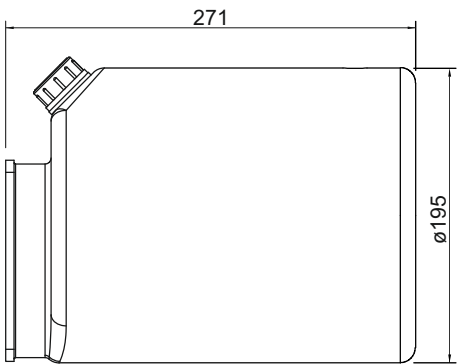


Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical

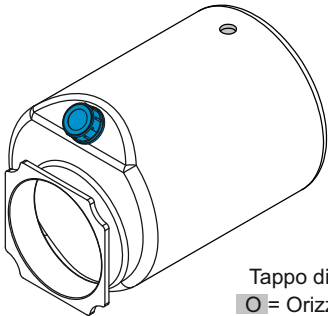
PC07

Serbatoio cilindrico in plastica capacità 7 litri
7 liters capacity cylindrical plastic tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-15°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting



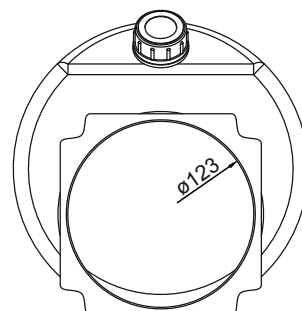
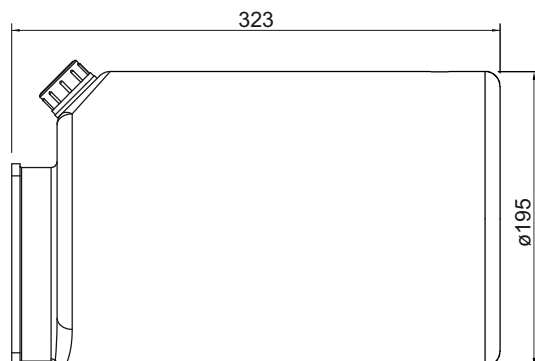
Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical



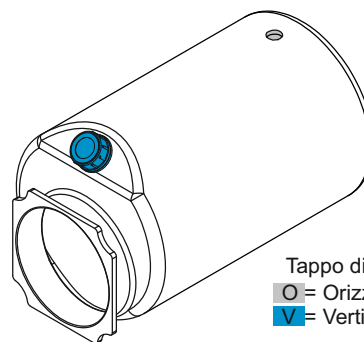
PC09

Serbatoio cilindrico in plastica capacità 9 litri
9 liters capacity cylindrical plastic tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-15°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting

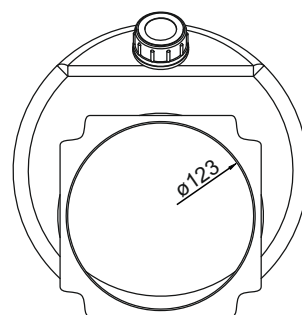
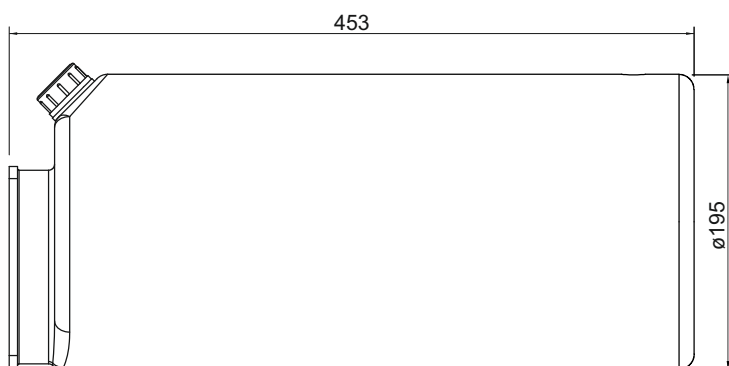


Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical

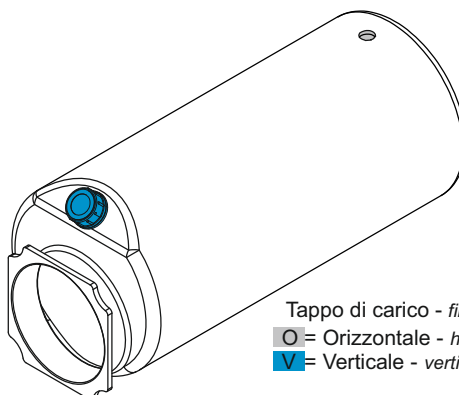
PC11

Serbatoio cilindrico in plastica capacità 11 litri
11 liters capacity cylindrical plastic tank



Caratteristiche principali main features	
Temperatura di impiego working temperature	-15°C +70°C
Foro std std hole	G1/2"

Predisposizione tappo di carico per montaggio orizzontale (O), o verticale (V)
predisposition for filler cap position for horizontal (O), or vertical (V) mounting



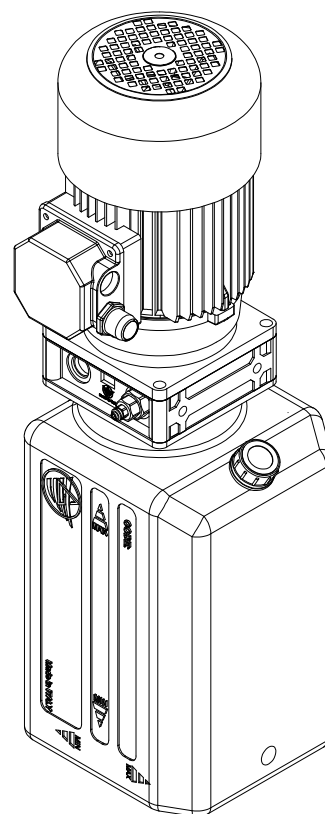
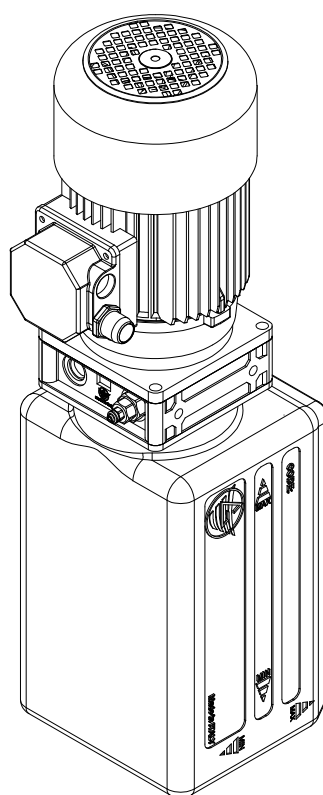
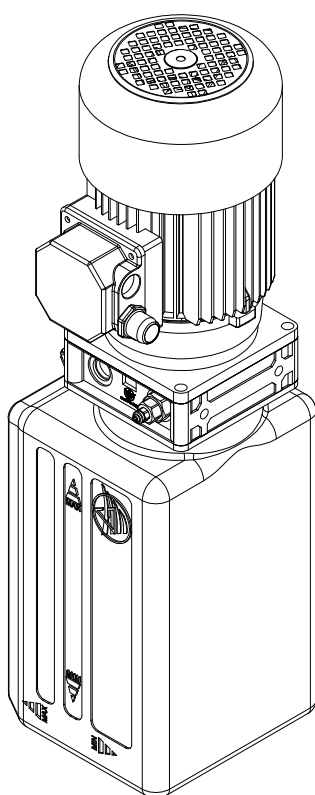
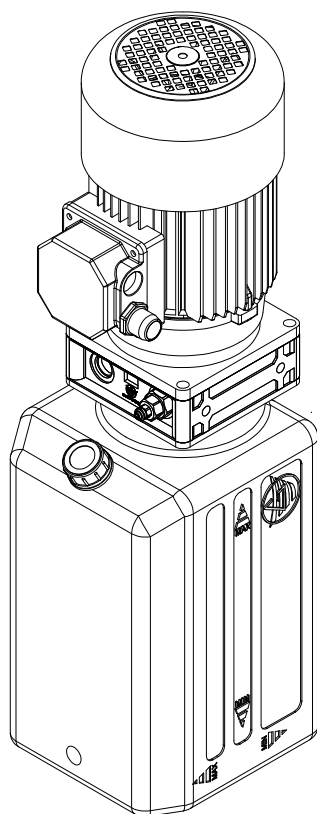
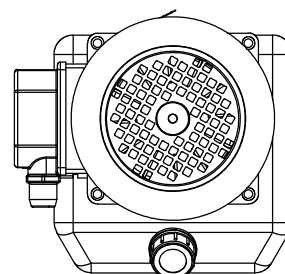
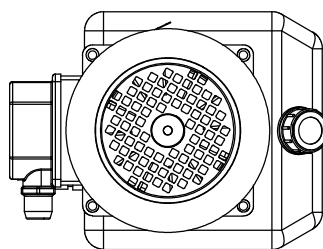
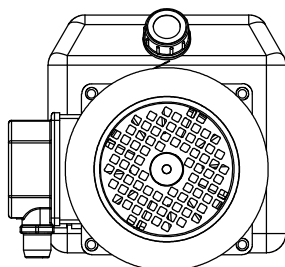
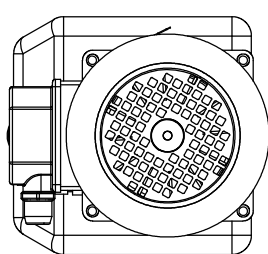
Tappo di carico - filler cap

○ = Orizzontale - horizontal
■ = Verticale - vertical

Orientamento Serbatoi - tanks positioning

Serie PE - CS - PC

73



1 Sinistra - left (std)

tappo di carico stesso lato
della valvola di massima
filler cap same side of the relief
valve

2 Anteriore - front

tappo di carico lato blocchi
modulari
filler cap on modular blocks side

3 Destra - right

tappo di carico lato opposto
della valvola di massima
filler cap on opposite side of the
relief valve

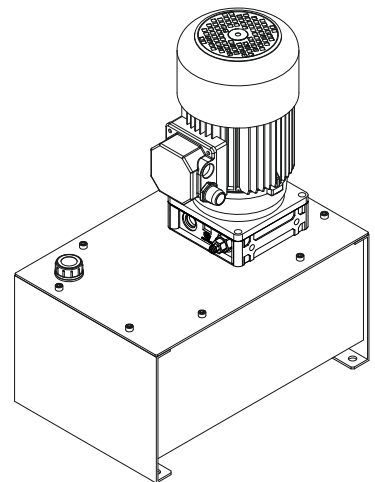
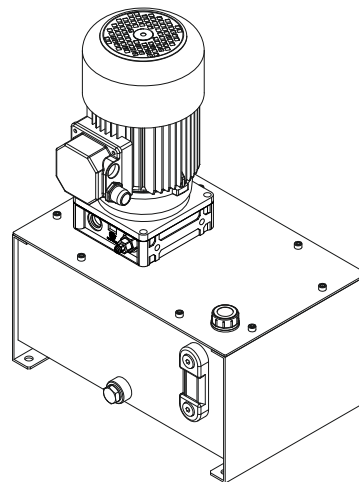
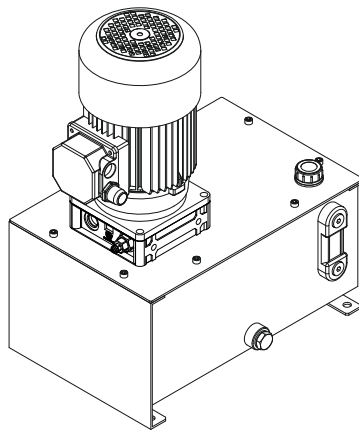
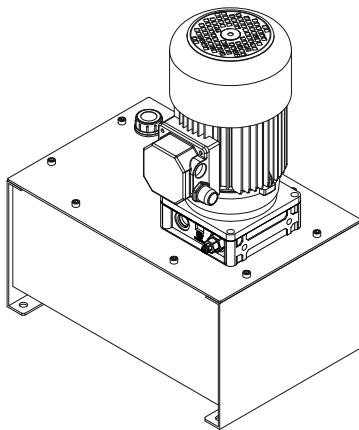
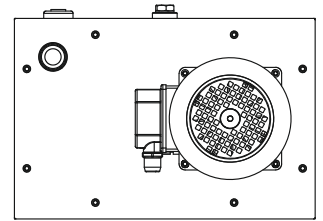
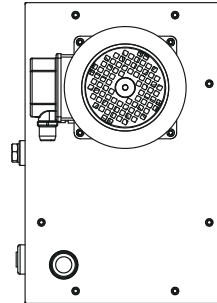
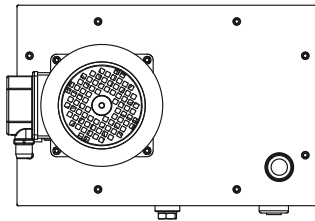
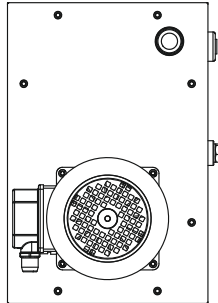
4 Posteriore - rear

tappo di carico lato opposto
blocchi modulari
filler cap on opposite side modular
blocks

Orientamento Serbatoi - tanks positioning

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Serie LM



1 Sinistra - left (std)

tappo di carico verso blocchi modulari
filler cap toward modular blocks

2 Anteriore - front

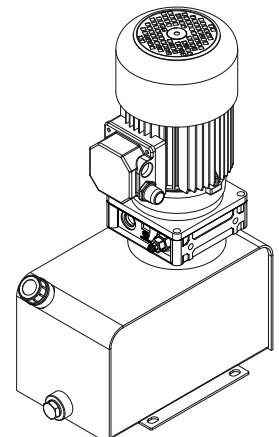
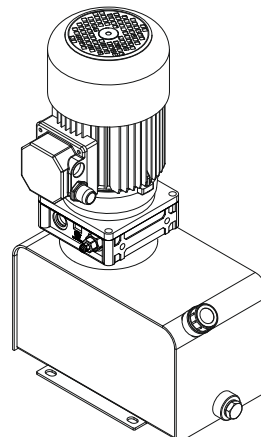
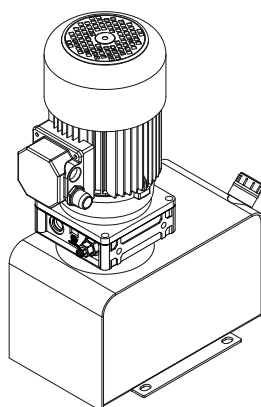
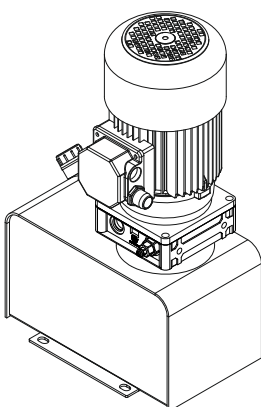
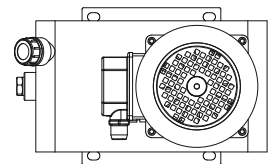
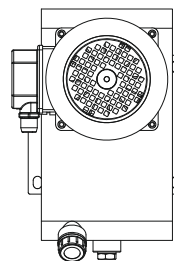
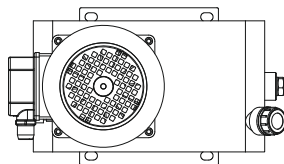
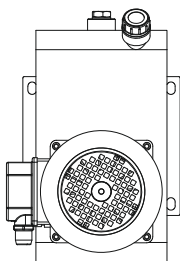
tappo di carico opposto alla valvola di massima
filler cap on opposite side of the relief valve

3 Destra - right

tappo di carico opposto a blocchi modulari
filler cap on opposite side of the modular blocks

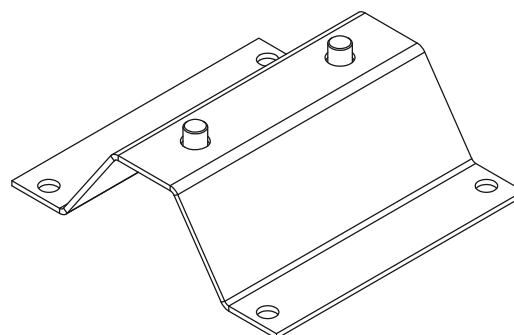
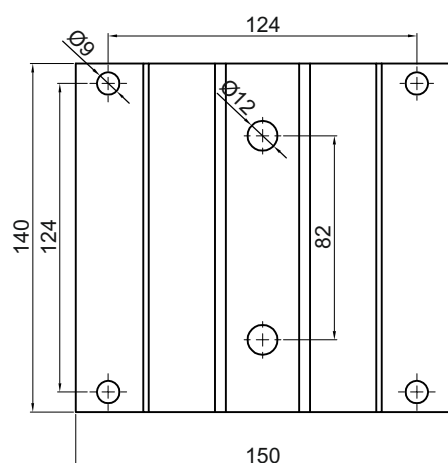
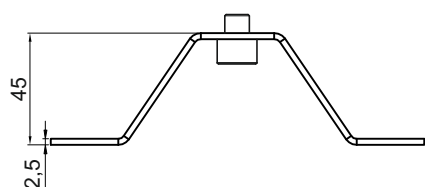
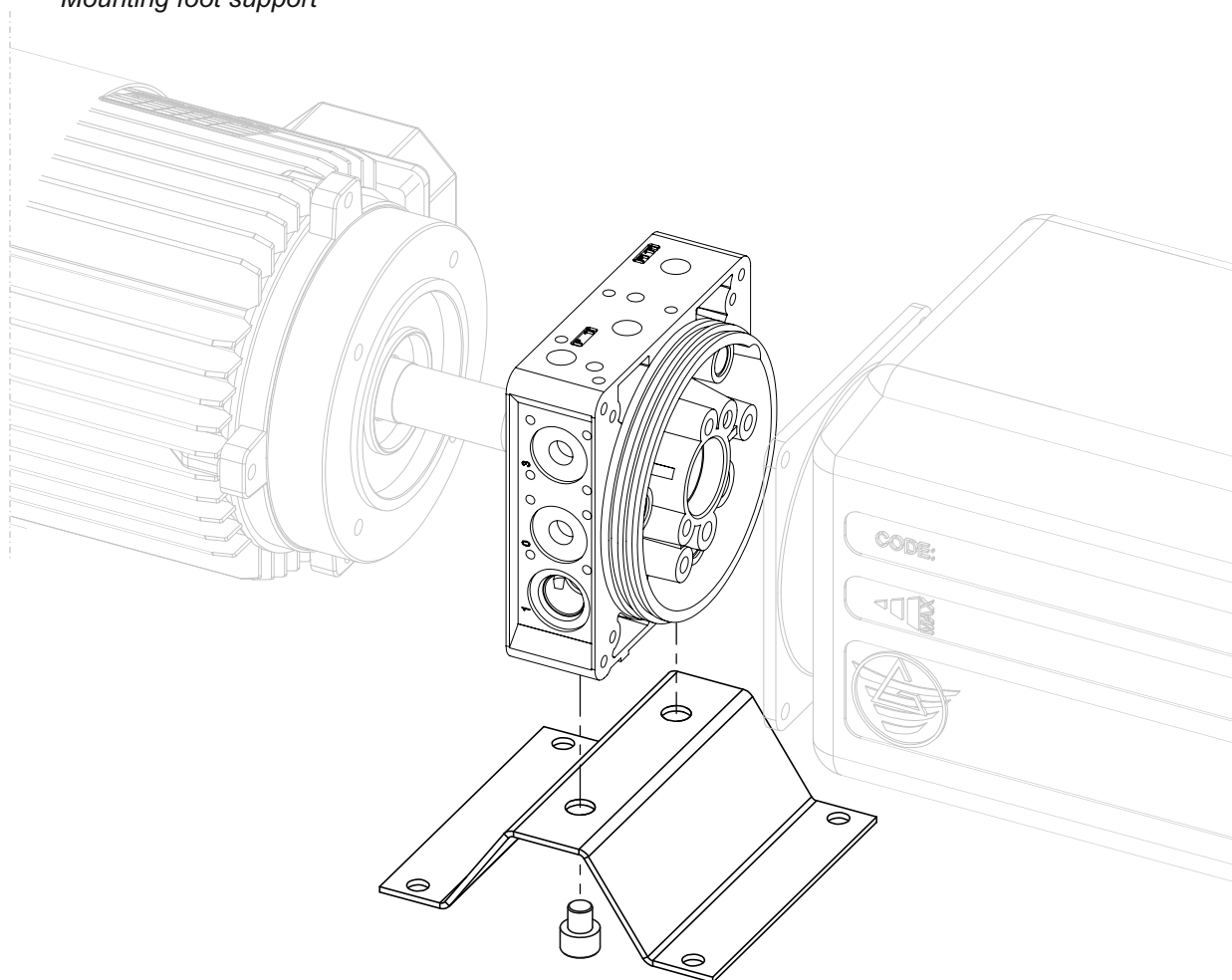
4 Posteriore - rear

tappo di carico verso valvola di massima
filler cap toward relief valve

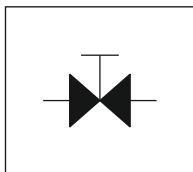


F01

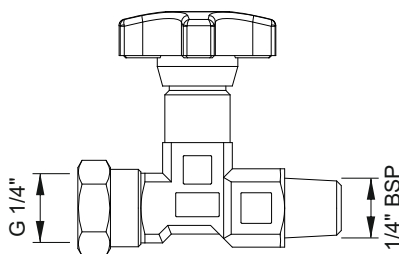
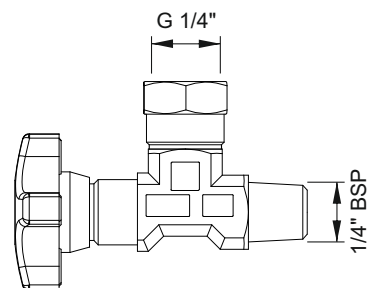
Piedino di supporto centralina
Mounting foot support



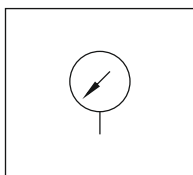
ES

Valvola di esclusione manometro
Pressure gauge isolatorCaratteristiche principali
main features

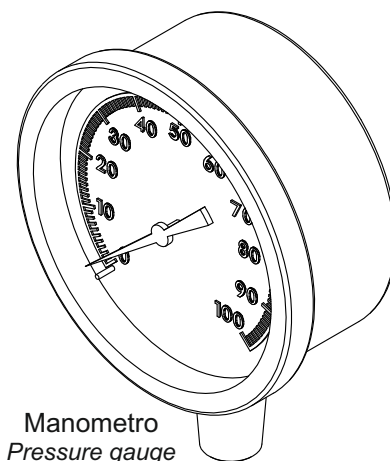
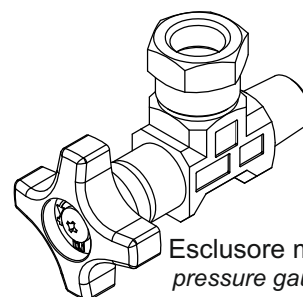
Temp. di impiego working temperature	-20°C+100°C
Connessioni connections	G1/4"
Pressione max max pressure	400 bar

Esclusore manometro attacco in linea
Pressure gauge isolator in-line connectionVersione con connessioni F-F a richiesta
F-F connection version on requestEsclusore manometro attacco 90°
Pressure gauge isolator 90° connection

9022

Manometro
Pressure gaugeCaratteristiche principali
main features

Connessione connection	G1/4"
Diametro nominale nominal diameter	63 mm
Classe di precisione accuracy class	1
Grado di protezione protection degree	IP 65
cod. code	Scala scale
90220310	0 - 60 bar
90220400	0 - 100 bar
90220580	0 - 160 bar
90220660	0 - 250 bar

Manometro
Pressure gaugeEsclusore manometro
pressure gauge isolator

Codici ordinazione - ordering codes

E	S	2	9	0	0
1		2		3	

1 Esclusore - isolator
ES

2 Tipo - type

290 = Connessione in linea - in-line connection
291 = Connessione 90° - 90° connection

3 Serie - series

0 = Standard

9	0	2	2	0	4	0	0
1		2		3			

1 Manometro - gauge
9022

2 Scala - scale

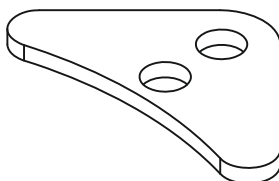
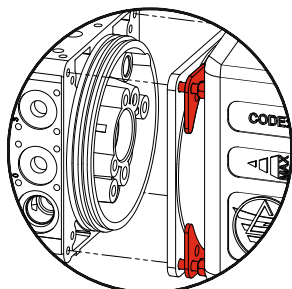
031 = da 0 a 60 bar - from 0 to 60 bar
040 = da 0 a 100 bar - from 0 to 100 bar
058 = da 0 a 160 bar - from 0 to 160 bar
066 = da 0 a 250 bar - from 0 to 250 bar

3 Serie - series

0 = Standard

FFPL

Fazzoletti di fissaggio per serbatoi in plastica
Mounting kit for plastic tanks



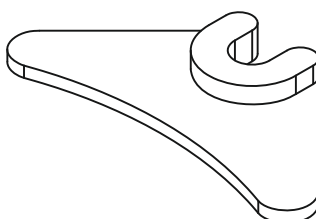
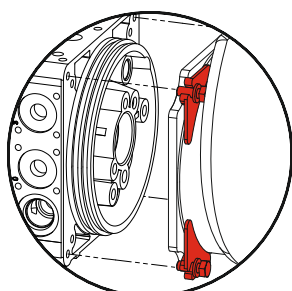
Caratteristiche principali main features

Spessore thickness	2,5 mm
Materiale material	Acciaio zincato galvanized steel

Il kit prevede 4 piastrine di rinforzo
kit includes 4 reinforcement plates

FFPC

Fissaggio per serbatoi in plastica serie PC
Mounting kit for plastic tanks PC serie



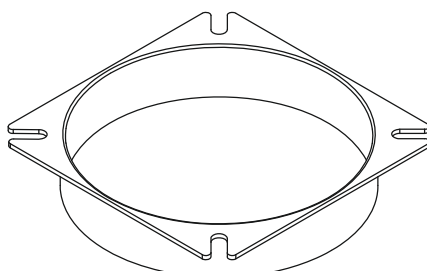
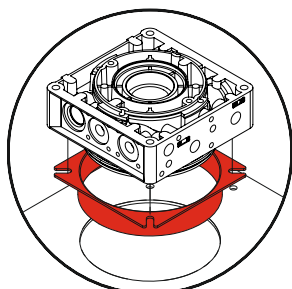
Caratteristiche principali main features

Spessore thickness	2+3 mm
Materiale material	Al pressofuso diecast Al

Il kit prevede 4 piastre indispensabili per il montaggio dei serbatoi serie PC sul collettore
kit includes 4 indispensable plates for mounting the PC serie tanks of the manifold

FLTK

Collare per serbatoi in acciaio
Collar for steel tanks



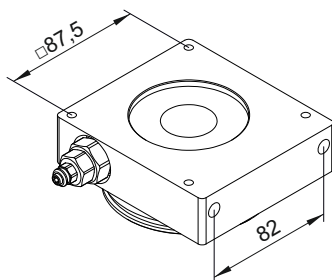
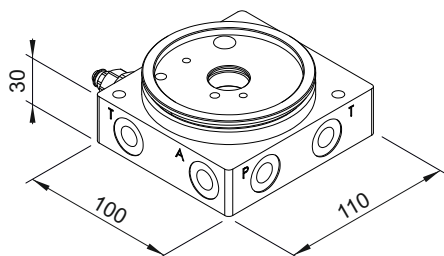
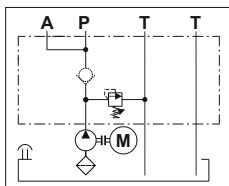
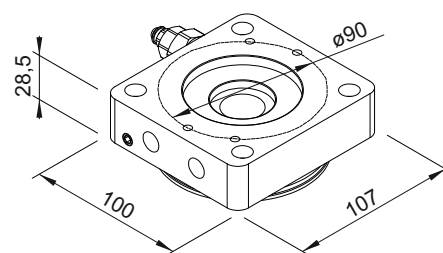
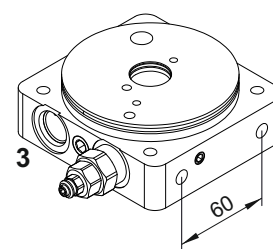
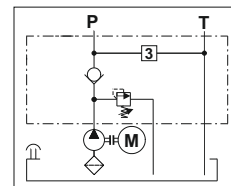
Caratteristiche principali main features

Materiale material	Acciaio steel
Altezza height	25mm

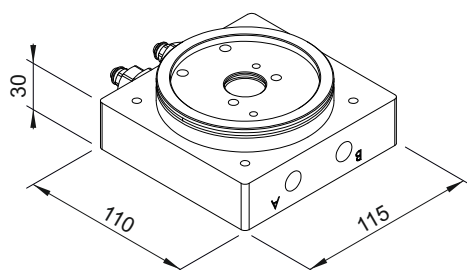
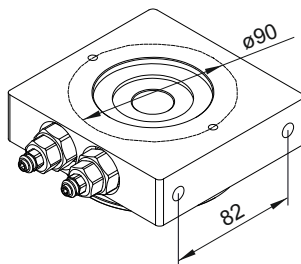
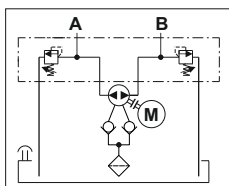
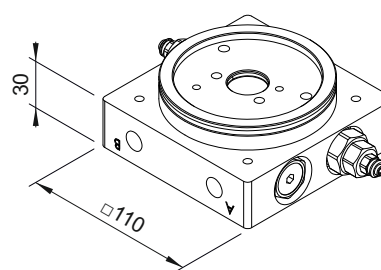
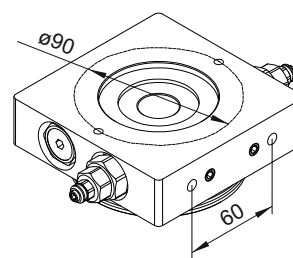
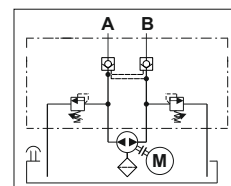
NB: Flangia non verniciata da saldare sul serbatoio. Foro Ø123
NOTE: unpainted flange, to be welded on tanks. Hole Ø123



Collettori centrali - central manifolds

Collettore 2 cavità
Central manifold 2 cavities**M02**Collettore 3 cavità
Central manifold 3 cavities**M12**

Per gli accoppiamenti rivolgersi al nostro UT - For coupling please contact our TD

Collettore reversibile
Reversible central manifold**R01**Collettore reversibile
Reversible central manifold**R02**

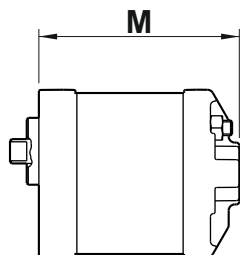


Gruppo 05 05 group

10

79

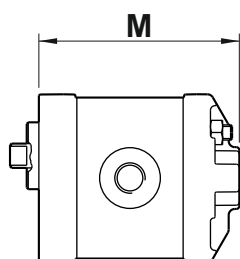
Pompe - pumps



Micropompe
ad ingranaggi
Gear micropumps



cod.	cc/rev.	M mm	Pmax
PA009	0,88	66	230
PA010	1,0	67	230

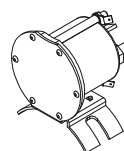
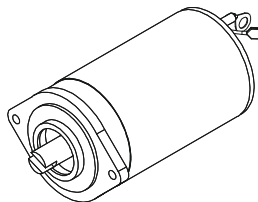


Micropompa
reversibile
Reversible micropump



PR009	0,88	66	190
-------	------	----	-----

Motori - Electric motors



cod.	W	V	Teleruttore starting switch
MDC120500T	500	12	684-1211-212-06
MDC240500T	500	24	684-2411-212-06
MDC120800T	800	12	684-1211-212-06
MDC240800T	800	24	684-2411-212-06

Accessori - accessories



FFPL05

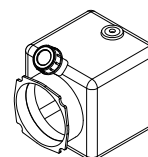
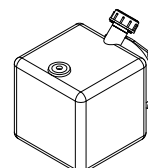
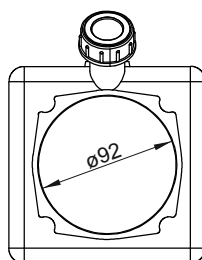
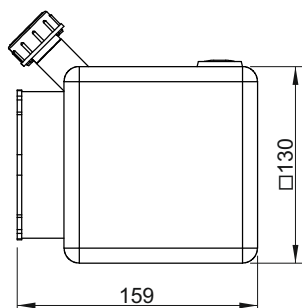


CLAMPCNS100

Serbatoi - tanks

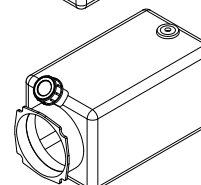
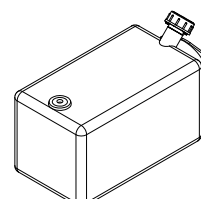
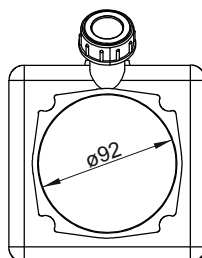
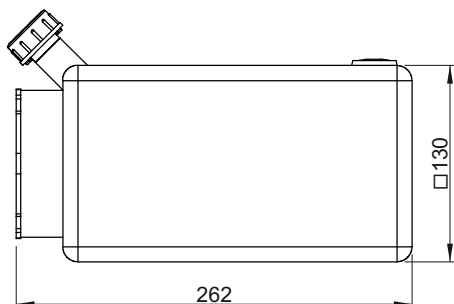
PM01

Serbatoio in plastica capacità 1,5 litri
Plastic tank 1,5 liters capacity



PM02

Serbatoio in plastica capacità 2,5 litri
Plastic tank 2,5 liters capacity



Corpo centrale
central manifold

0

0

1

Valvola di massima
relief valve

cavità 2
cavity 2

0

0

4

Valvole a cartuccia
cartridge valves

cavità 1, 3, 4, 0
cavity 1, 3, 4, 0

0

0

...

*1

4

Tensione elettrovalvole
solenoid voltage

SA, BB, BC, BD, BE

0

0

4

Regolatori di scarico
return regulator

cavità 5, 6, 7
cavity 5, 6, 7

0

0

4

Motore
motor

6

cod. des. pag.

G0 2 cav. 2

G1 3 cav. 4

G2 4 cav. 6

G3 5 cav. 8

G4 rev. 10

cod. des. pag.

00 no valv.

3/4"-16 UNF std

A1 VMDC20A1 23

B1 VMDC20B1 23

C1 VMDC20C1 23

D1 VMDC20D1 23

E1 T0C2 39

M20x1.5

A1 VMDC35A1 22

B1 VMDC35B1 22

C1 VMDC35C1 22

D1 T0VM 38

cavità - cavity 2.1

A VMDC20A1 23

B VMDC20B1 23

C VMDC20C1 23

D VMDC20D1 23

0 no valv.

cavità - cavity 2.2

1 VMDC20A1 23

2 VMDC20B1 23

3 VMDC20C1 23

4 VMDC20D1 23

0 no valv.

cod. des. pag.

09 0,9 cc 12

11 1,1 cc 12

13 1,3 cc 12

16 1,6 cc 12

21 2,1 cc 12

26 2,6 cc 12

32 3,2 cc 12

37 3,7 cc 12

42 4,2 cc 12

48 4,8 cc 12

58 5,8 cc 12

80 8,0 cc 12

09 0,9 cc 13

12 1,2 cc 13

17 1,7 cc 13

22 2,2 cc 13

26 2,6 cc 13

32 3,2 cc 13

38 3,8 cc 13

43 4,3 cc 13

49 4,9 cc 13

59 5,9 cc 13

65 6,5 cc 13

78 7,8 cc 13

98 9,8 cc 13

cod. des. pag.

AA VUC20 24

BA MSV30 28

BB MSV30E 28

BC MSV31 28

BD MSV31E 28

BE MDV30E 29

CA CPE 31

CB VPN 32

CC CSC04 33

CD CSB 34

CE CM04L 35

CF PM02 36

PA T0A4 38

PB T0C1 39

PC T0A3 39

PD T0A2 39

PE T0C2 39

01 cava 1 libera
cavity 1 free

03 cava 3 libera
cavity 3 free

04 cava 4 libera
cavity 4 free

00 cava 0 libera
cavity 0 free

cod. des. pag.

C1 VSC6 11l/min 25

C2 VSC6 21l/min 25

C3 VSC6 31l/min 25

C4 VSC6 41l/min 25

C5 VSC6 51l/min 25

C6 VSC6 61l/min 25

C7 VSC6 71l/min 25

C8 VSC6 81l/min 25

C9 VSC6 101l/min 25

C10 VSC6 121l/min 25

Omettere se non necessario
omit if not required

cod. des. pag.

V1 12V DC

V2 24V DC

V3 24 RAC

V4 220 RAC

00 no bobina
no coil

Solo con valvole MSV e MDV
only with MSV and MDV valves
(BA, BB, BC, BD, BE)

cod. des. pag.

E1 VSC01 11l/min 26

E2 VSC01 21l/min 26

E3 VSC01 31l/min 26

E4 VSC01 41l/min 26

E5 VSC01 51l/min 26

E6 VSC01 61l/min 26

E7 VSC01 71l/min 26

E8 VSC01 81l/min 26

E9 VSC01 101l/min 26

E10 VSC01 121l/min 26

Omettere se non necessario
omit if not required

cod. des. pag.

A 0,25 kW

B 0,37 kW

C 0,55 kW

D 0,75 kW

E 1,1 kW

F 1,5 kW

G 2,2 kW

H 3 kW

I 4 kW

J 5,5 kW

P 500 W

Q 800 W

R 1600 W

S 2000 W

T 2200 W

U 3000 W

W pred. TG 71 40

X pred. TG 80 41

Y pred. TG 90 42

Z pred. TG 100 43

0 no motore
no motor

cod. des. pag.

Trifase - three-phase

A 2-P S1 44

B 4-P S1 44

C 2-P S3 45

D 4-P S3 45

Monofase - single-phase

I 2-P S1 44

L 4-P S1 44

M 2-P S3 45

N 4-P S3 45

Tensione - voltage

X 12 V DC -

Y 24 V DC -

0 no motore
no motor

cod. des. pag.

P 1 AC pos. 1 47

Q 2 AC pos. 2 47

R 3 AC pos. 3 47

S 4 AC pos. 4 47

S con teleruttore
with starting switch

N senza teleruttore
without starting switch

0 no motore
no motor

Es. chiave di codifica - e.g. of speaking code

G1

/

21

/

B1

AA

BD

V2

/

DL3

/

B1

S1

D1

V4

/

FX1

/

24

1

2

4

6

7

8

9



NOTE:

*1 - In caso di valvole, blocchi modulari o accessori aggiuntivi, riportare i codici in modo consecutivo nella rispettiva categoria.
*1 - In case of additional valves, modular elements or accessories, enter the codes consecutively in the respective category.
Tramite la chiave di codifica, se non specificato, vengono forniti i componenti nella loro versione standard. Eventuali personalizzazioni vanno specificate a parte.
Esempi: (4) CE - viene fornita la valvola CM04L senza micro. | I connettori di eventuali bobine vengono forniti neri (AM5111)
Using the speaking code, if not specified, are provided the components in their standard version. Any customization, must be specified apart.
Examples: (4) CE - it's provided the CM04L valve without micro. | Connectors of eventual coils are provided black (AM5111)

Blocchi modulari
modular blocks

Q.tà
Q.ty

0 0 0 0

Q.tà
Q.ty

0 0

Elettrovalvole
solenoids

P.Q.R
S.T.U

0 0 0 0

Serbatoi
tanks

0 0 0 0

Accessori
accessories

0

7

7

8

9

cod.	des.	pag.
A	BL004	53
B	BL004-1	53
C	BL004-2	53
D	BL009	54
0	no distanziale no spacing ele.	

cod.	des.	pag.
P	BL008	54
Q	BL010	55
R	BL015	56
S	BL016	56
T	BL017	56
U	BL022	57
W	BL011-X-Y	55
X	BL021	57
Y	BL023	58
0	no blocchi no blocks	

cod.	des.	pag.
G	BL018	59
H	BL019	59
I	BL020	59
J	BL035	60
K	BL036	60
L	BL037	60

cod.	des.	pag.
A	DM01	61
B	DM02	61
C	DM03	61
D	DM04	61
E	DD01	61
F	DD02	61
G	DD03	61
H	DD04	61
I	DD05	61
0	no elettrovalvole no solenoids	

cod.	Tensione - voltage	pag.
V1	12V DC	63
V2	24V DC	63
V3	48V DC	64
V4	110V AC - 50Hz	65
V5	230V AC - 50Hz	65
00	no elettrovalvole no solenoids	

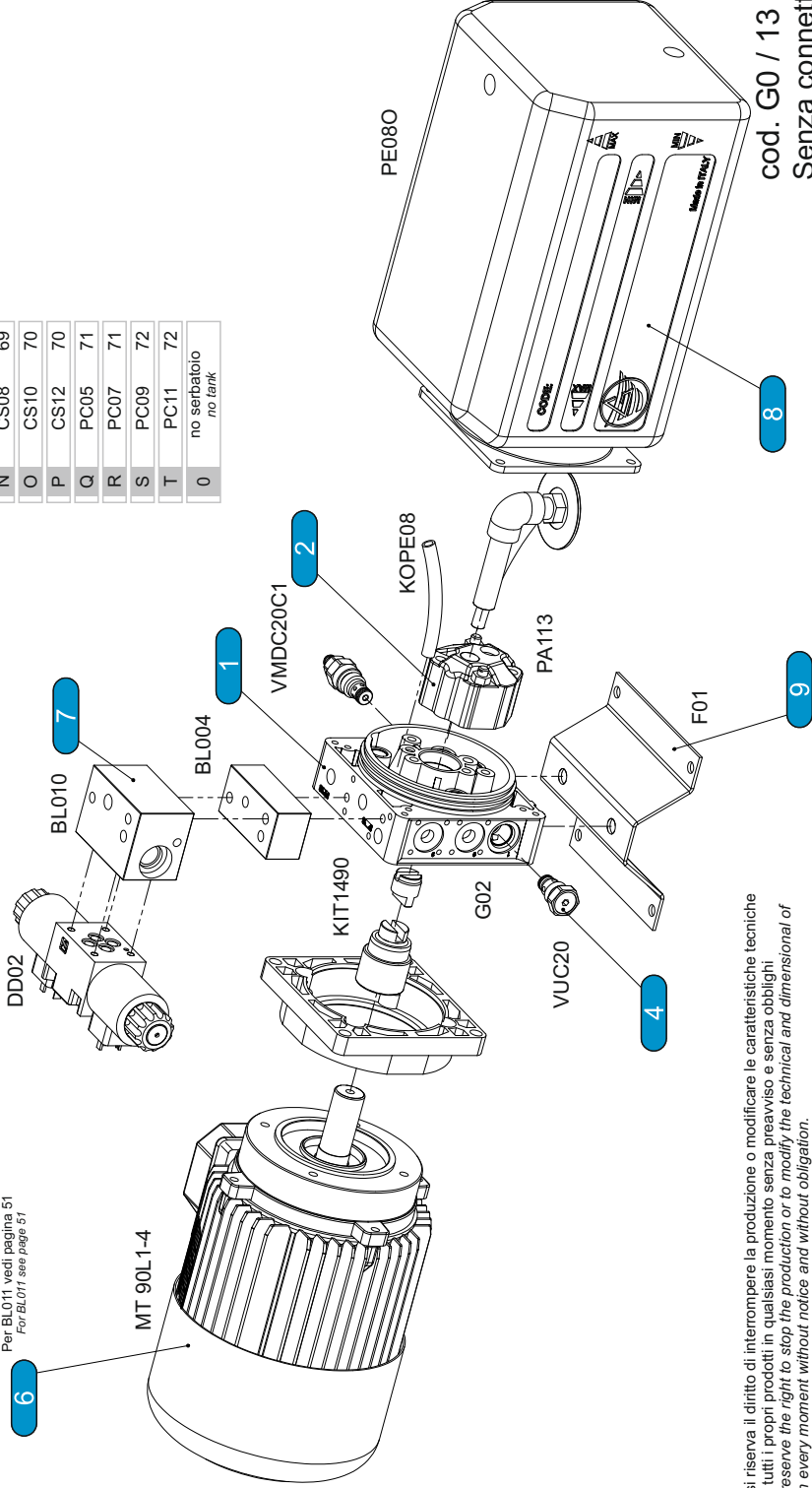
Solo con blocchi - only with blocks:
BL008, BL010, BL015,
BL016, BL017

cod.	Tappo - filler cap	pag.
O	Orizz. - horizontal	73-74
V	Verticale - vertical	73-74
X	Serie LM	73-74
0	no serbatoio no tank	

cod.	des.	pag.
1	pos. 1	73-74
2	pos. 2	73-74
3	pos. 3	73-74
4	pos. 4	73-74
0	no serbatoio no tank	

Orientamento LM a pagina 68
LM positioning at page 68

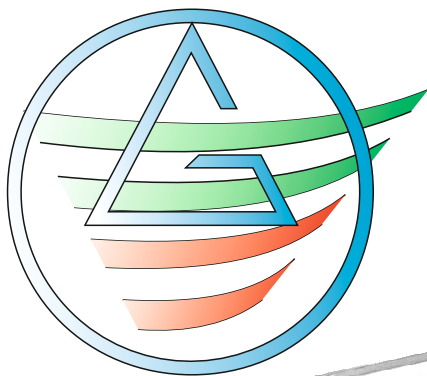
cod.	des.	pag.
1	F01	75
2	ES290	76
3	ES291	76
4	9022031	76
5	9022040	76
6	9022058	76
7	9022066	76
8	FFPL	77
9	FFPC	77
0	no accessori no accessories	



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GAZZERA S.r.l. reserve the right to stop the production or to modify the technical and dimensional of all own product in every moment without notice and without obligation.

cod. G0 / 13 / C1AA / FB1 / A1Q1F1V2 / B02 / 1
Senza connettori - without connectors





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