



The POWER
BEYOND the LIMIT

La POTENZA OLTRE i LIMITI

HYDROCAR[®]

INTERPUMP
HYDRAULICS

A MEMBER OF



® INTERPUMP
GROUP



POMPE AD INGRANAGGI - GEAR PUMPS

1

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2

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3

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4

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5

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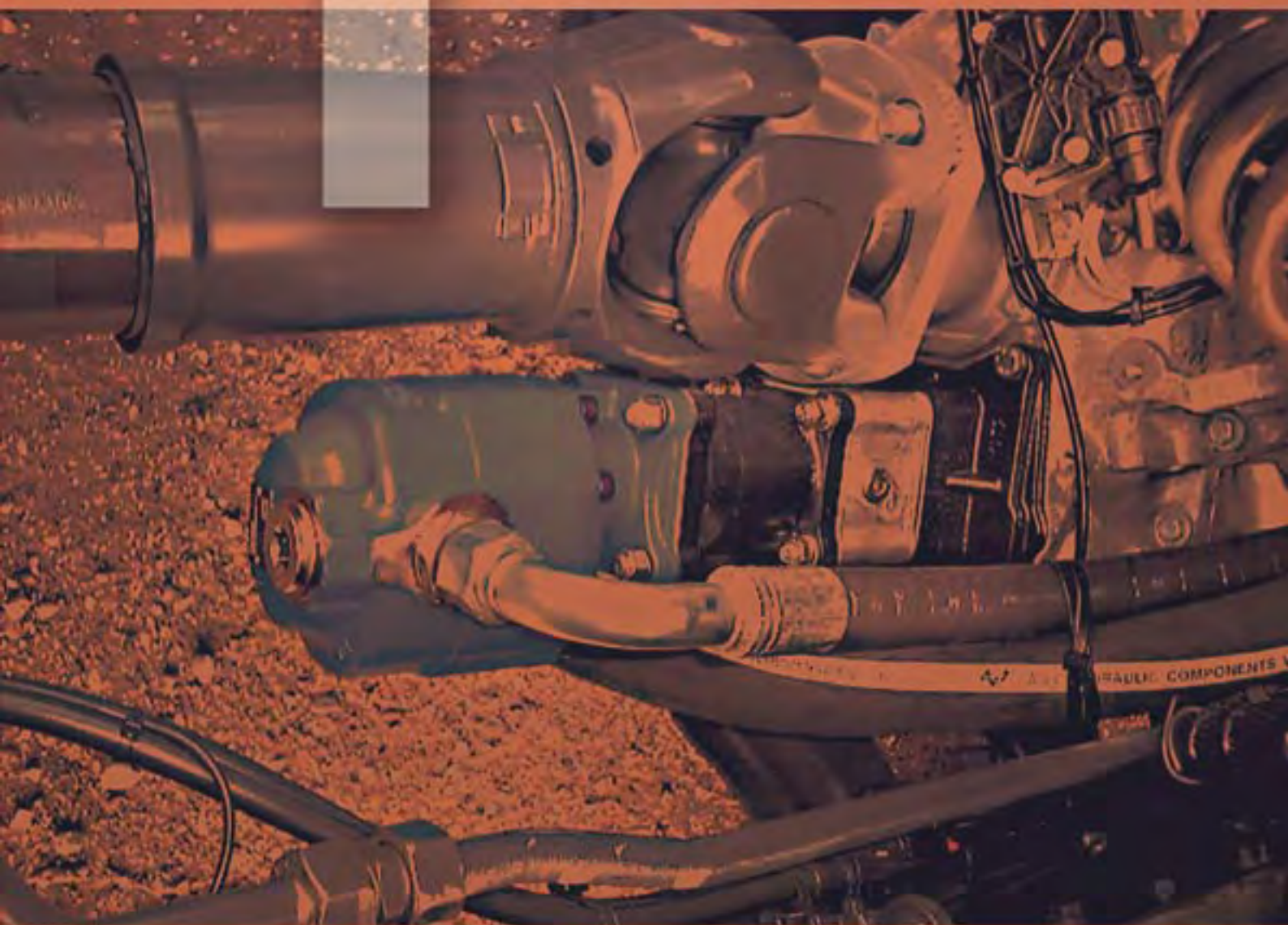


NOTE PER LA CONSULTAZIONE DEL CATALOGO

1

POMPE AD INGRANAGGI

GEARS PUMPS





POMPE AD INGRANAGGI

La vasta gamma di pompe ad ingranaggi offerte da Hydrocar è stata studiata per dare una risposta a tutte le diverse tipologie di applicazioni idrauliche sui veicoli industriali.

Costruite con attacchi a 3 fori (21 UNI 222 e DIN 5482), 4 fori (SE DIN 5462) e in versione SAE B (13 denti), possono essere accoppiate direttamente su tutti i modelli di PTO presenti nei vari mercati.

La flessibilità delle configurazioni degli attacchi di aspirazione e mandata ne agevola l'installazione, semplificando le configurazioni degli impianti idraulici e riducendone i tempi di montaggio.

Progettate con diversi concetti costruttivi, sono ideali per coprire con prodotti mirati sia le applicazioni a bassa pressione che quelle ad alta pressione; la gamma, che si compone di più di 15 serie di tipologie costruttive ben distinte e circa un centinaio di modelli, è più che adeguata ad offrire una risposta a qualsiasi esigenza tecnica della nostra clientela.

GEAR PUMPS

The wide range of gear pumps made by Hydrocar has been studied for satisfying all kinds of hydraulic applications on industrial vehicles. Available in 3 or 4 UNI / DIN hole versions and in SAE B model, they may be directly fitted on most of the worldwide manufactured PTOs'. The flexibility of the configurations in the inlet and outlet connections helps the application and simplifies the executions of the hydraulic circuits, in order to reduce assembly times.

Designed with different manufacturing concepts, they can satisfy both low and high-pressure applications. The range, composed of 15 manufacturing types, is absolutely capable of satisfying any technical requirement of the Customer.

DAB

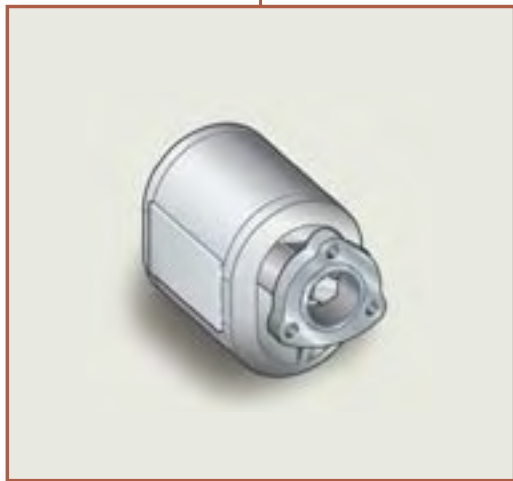
Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 | **DAB** | **2** | **10** | **D** | **0**
 | | | | | |
 | | | | | **DIN 5482**
 | | | | | ROTAZIONE/ROTATION
 | | | | | D = DESTRO/CLOCKWISE
 | | | | | S = SINISTRO/ANTICLOCKWISE
 | | | | | CILINDRATA/DISPLACEMENT
 | | | | | GRUPPO POMPA/PUMP GROUP
 | | | | | TIPO/TYPE
 | | | | | POMPA AD INGRANAGGI/GEAR PUMP

DIN
5 4 8 2

DAB 2 10
DAB 2 15
DAB 2 25
DAB 2 36
DAB 3 25
DAB 3 36
DAB 3 46
DAB 3 55



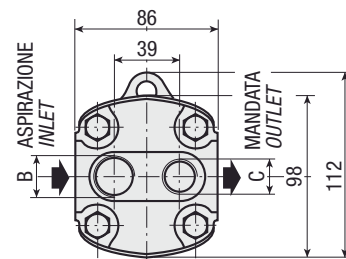
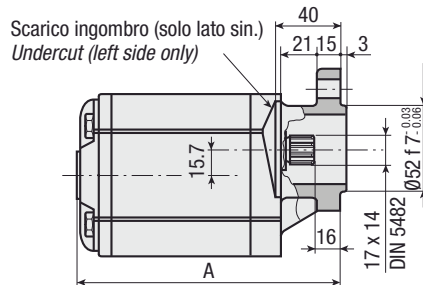
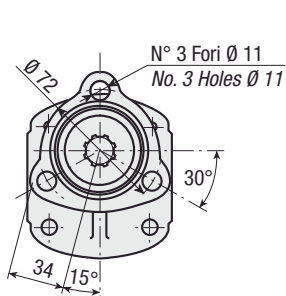
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B ASPIRAZIONE INLET	C MANDATA OUTLET	PESO WEIGHT kg
DAB 2 10	200DAB210 D S 0	10	139	3/4" G	1/2" G	2.7
DAB 2 15	200DAB215 D S 0	15	148	3/4" G	1/2" G	3.0
DAB 2 25	200DAB225 D S 0	25	164.5	3/4" G	1/2" G	3.2
DAB 2 36	200DAB236 D S 0	35	181.5	3/4" G	1/2" G	3.7
DAB 3 25	200DAB325 D S 0	25	160.5	1" G	3/4" G	4.1
DAB 3 36	200DAB336 D S 0	36	171	1" G	3/4" G	5.4
DAB 3 46	200DAB346 D S 0	46	180	1" G	3/4" G	5.8
DAB 3 55	200DAB355 D S 0	55	188.5	1" G	3/4" G	6.2

**KIT RASAMENTI
THRUST PLATES KIT
COD. 2D441215000**

**KIT GUARNIZIONI COMPLETO
COMPLETE SEALS KIT
COD. 2D551215000**

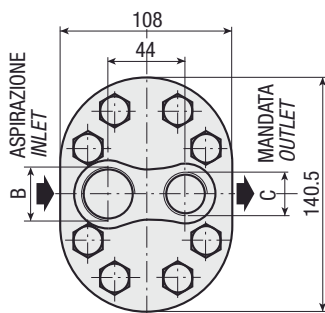
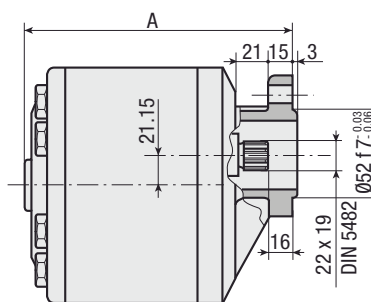
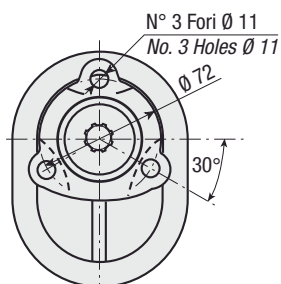
DAB 2



**KIT RASAMENTI
THRUST PLATES KIT
COD. 2D441325000**

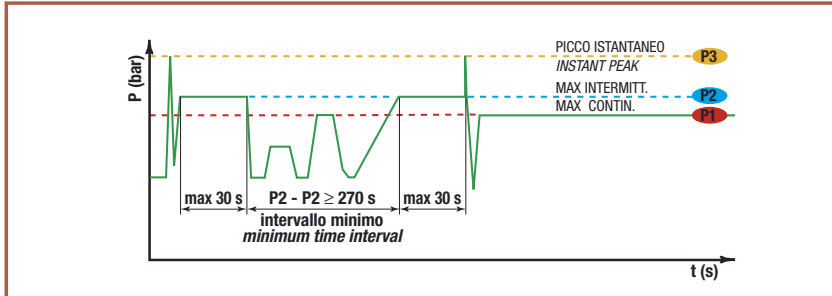
**KIT GUARNIZIONI COMPLETO
COMPLETE SEALS KIT
COD. 2D551325000**

DAB 3



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

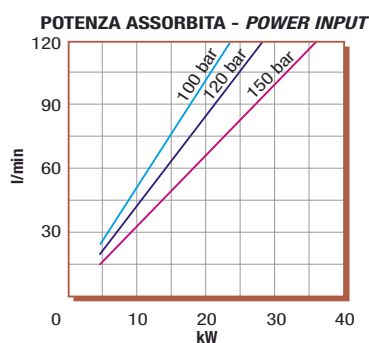
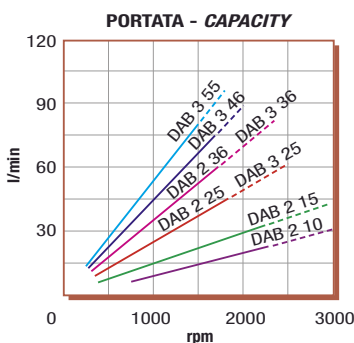


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination NAS 1638		Filtro - Filter βx = 75
	ISO 4406		
≤ 200 bar	12	21/18	40 μm

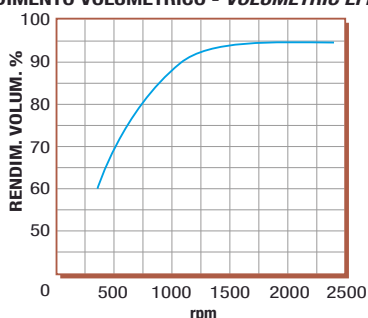
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			DAB 2 10	DAB 2 15	DAB 2 25	DAB 2 36	DAB 3 25	DAB 3 36	DAB 3 46	DAB 3 55
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	10	15	25	35	25	36	46	55
Pressione massima continua Max continuous operating pressure	P1	bar	180	140	120	100	130	130	120	120
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		200	160	150	120	150	150	140	140
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		270	210	180	150	200	200	180	180
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	3000	3000	2500	2100	2500	2300	2000	1800
Velocità massima continua Max continuous speed (≤ P1)	n1		1500	1500	1500	1400	1500	1500	1500	1300
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		800	650	650	600	600	550	550	550

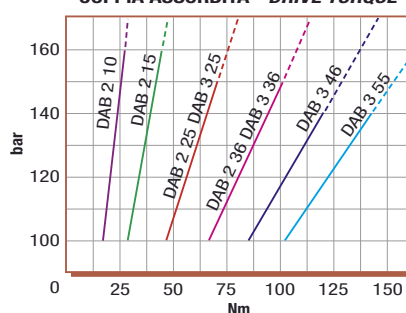


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

DAB 2

KED

Pompa DAB 2 + Distributore Elettrico
DAB 2 Pump + Electric Tipping Valve Group

CODICE DI ORDINAZIONE - ORDERING CODE

KED2 0 10 **D** 13 1

1 = 12 V DC
 2 = 24 V DC

TARATURA VALVOLA MASSIMA PRESS.
 PRES. RELIEF VALVE SETTING
 13 MPa (130 bar) STANDARD

ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE

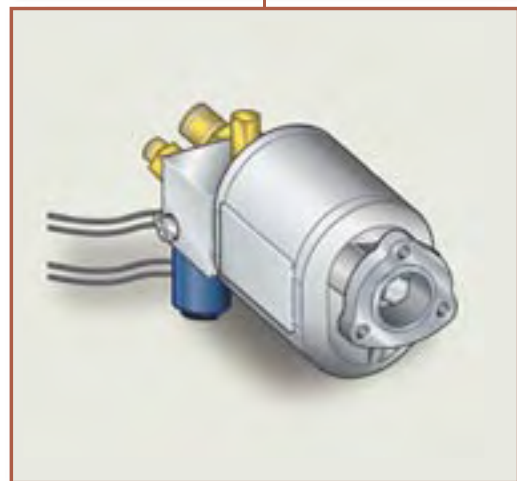
CILINDRATA POMPA/PUMP DISPLACEMENT

VERSIONI/VERSIONS

TIPO/TYPE

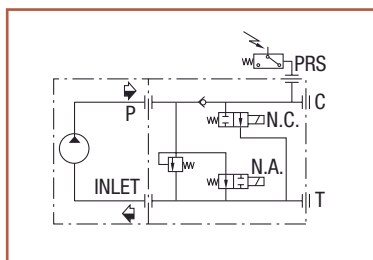
DIN KED 2 10
 KED 2 15
 KED 2 25

5 4 8 2

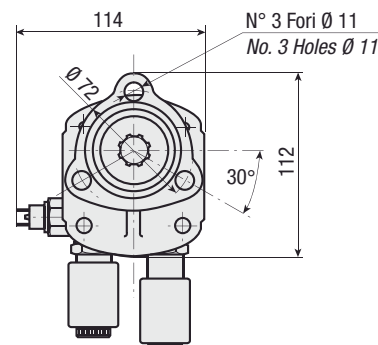
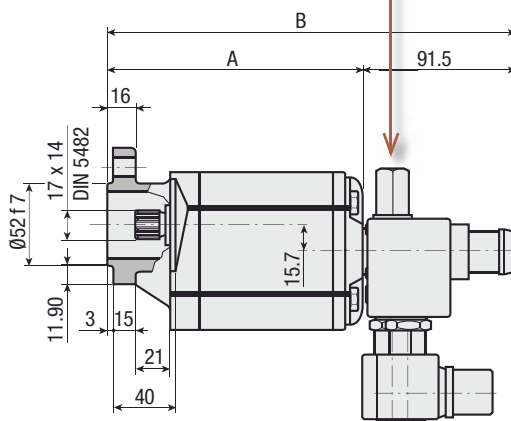
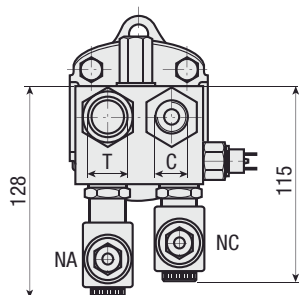


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	T ASPIRAZIONE INLET	C MANDATA OUTLET	PESO WEIGHT kg
KED 2 10	KED2010 D S 13 1 2	139	230.5	Ø 26	1/2" G	4.2
KED 2 15	KED2015 D S 13 1 2	148	239.5	Ø 26	1/2" G	4.5
KED 2 25	KED2025 D S 13 1 2	164.5	256	Ø 26	1/2" G	4.7



ATTENZIONE: Evitare di far intervenire la valvola di massima pressione per un periodo prolungato ≥ 10 s in quanto il riscaldamento potrebbe provocare danni alla pompa.
WARNING: Avoid relief valve insertion time longer than (≥ 10 s) since overheating might damage the pump.

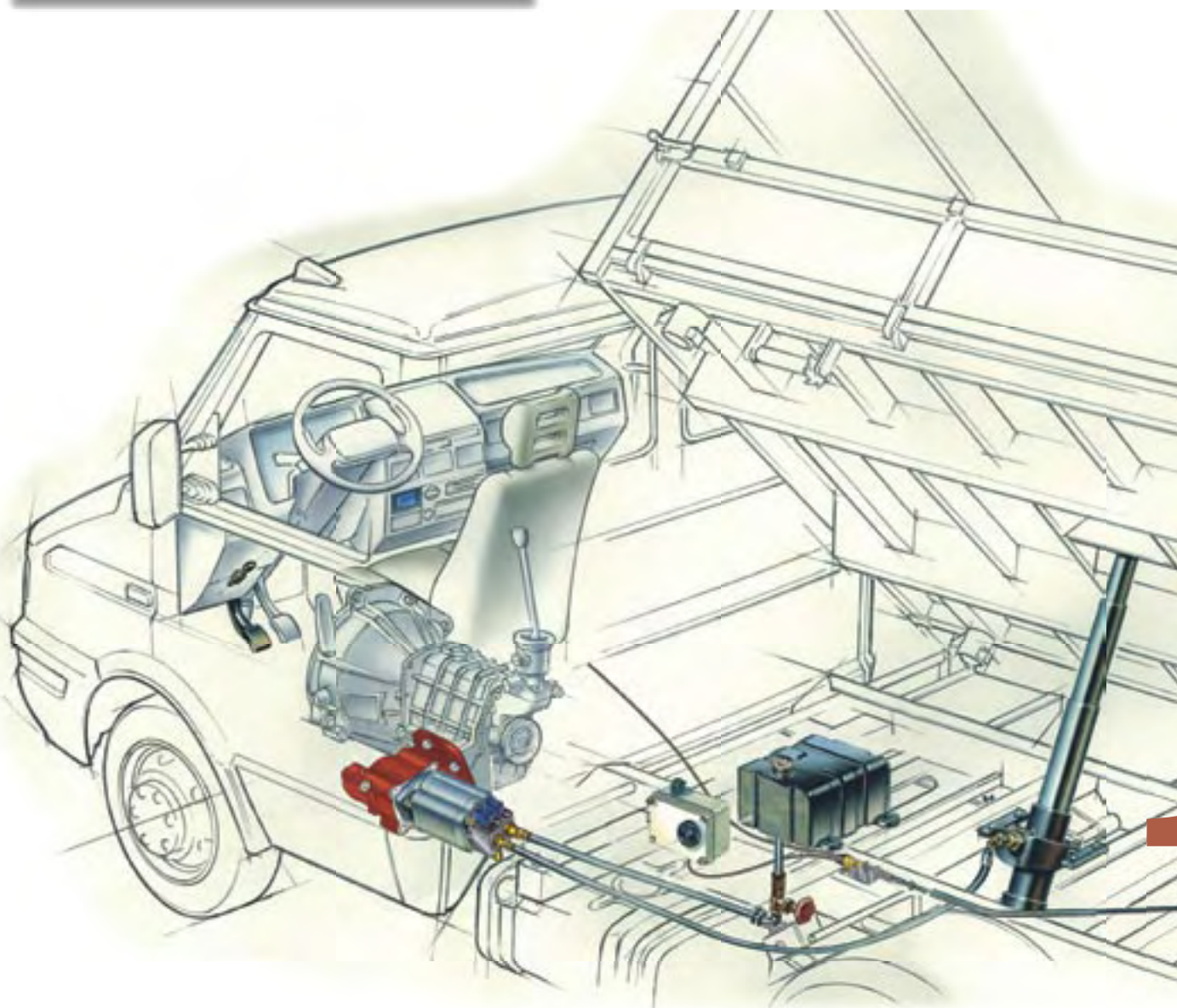


Portata massima <i>Flow max</i>	25 l/min	Temperatura fluido °C (t): <i>Fluid temperature °C (t):</i>	-25° + 80°C
Campo viscosità <i>Viscosity range</i>	12-100 cSt	Fluido olio minerale <i>Mineral oil</i>	HLP (DIN 51525)

- > Gruppo distributore a **comando elettrico integrato su pompa ad ingranaggi**, per portata massima di 25 l/min.
- > Consente il comando di **salita e discesa** con ricircolo olio su mandata pompa in posizione di riposo.
- > La **valvola di massima pressione** è posizionata in P, la **valvola di ritegno** in C.

- > *This group made of an **electrically operated tipping valve allowing raising and lowering** independent control (12 and 24 volt) integrated with gear pump DAB2 is particularly suitable for tippers requiring oil flows up to 25 l/min in the idle position, oil flows goes directly from the pump into the suction line.*
- > *Check line valve is built in on the C line and relief valve on the P one.*

ESEMPIO DI INSTALLAZIONE - INSTALLATION DIAGRAM

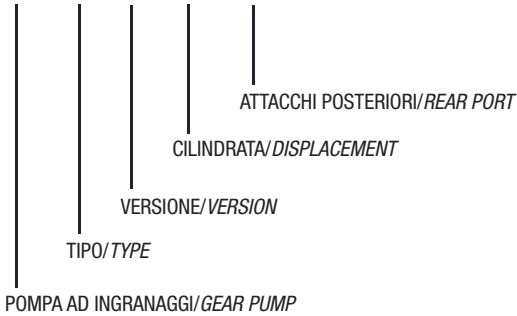


GP

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 GP 0 015 AT



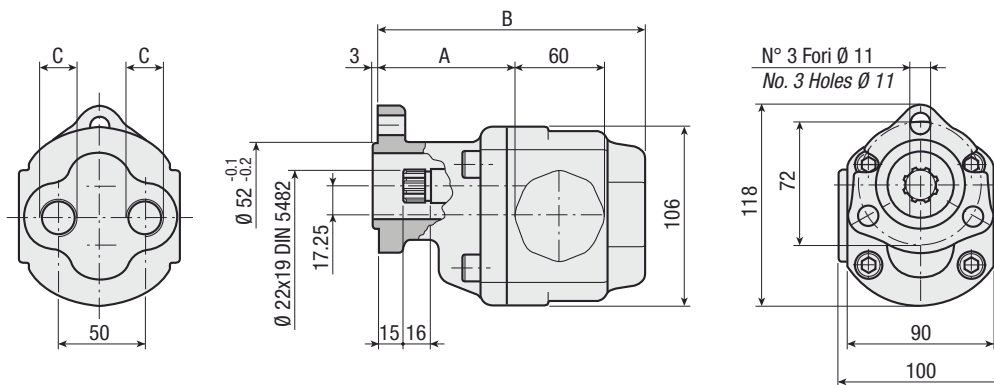
DIN 5 4 8 2

GP 15 AT
GP 25 AT
GP 40 AT



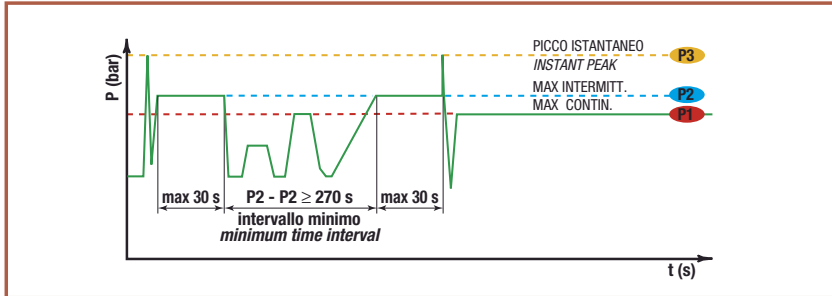
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C		PESO WEIGHT kg
					ASPIRAZIONE INLET	MANDATA OUTLET	
GP 15 AT	200GP0015AT	15.5	82	143	3/4" G	3/4" G	5.4
GP 25 AT	200GP0025AT	26.1	86	158	3/4" G	3/4" G	6.1
GP 40 AT	200GP0040AT	38.8	88	176	3/4" G	3/4" G	6.8



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

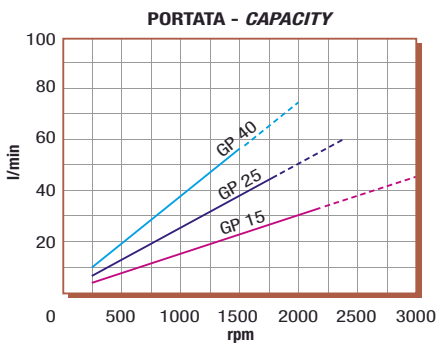


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

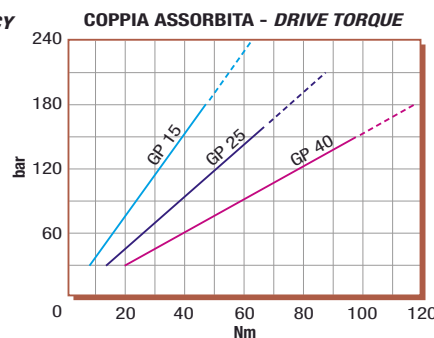
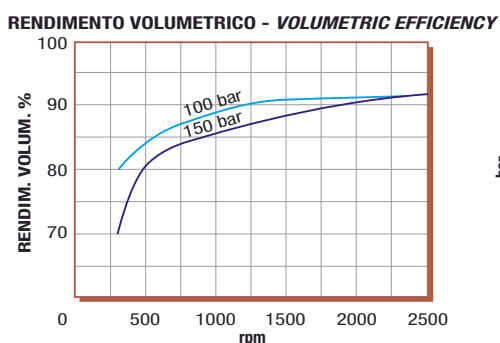
Pressione Lavoro Working Press. P2	Contaminazione - Contamination NAS 1638		Filtro - Filter βx = 75
	ISO 4406		
≤ 200 bar	12	21/18	40 μm

◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		GP15AT	GP25AT	GP40AT
Cilindrata Displacement	Vg	15.5	26.1	38.8
Pressione massima continua Max continuous operating pressure	P1	160	140	130
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2	180	160	150
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3	250	210	200
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	3000	2500	2000
Velocità massima continua Max continuous speed (≤ P1)	n1	1800	1500	1300
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4	600	500	500



DIAGRAMMI - DIAGRAMS



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

NFL

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 | **NFL** | **011** | **D** | **0**
 | | | | |
 TIPO/TYPE | CILINDRATA/DISPLACEMENT | ROTAZIONE/ROTATION
 0 = ATTACCHI POSTERIORI / REAR PORT
 L = ATTACCHI LATERALI / SIDE PORT
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 POMPA AD INGRANAGGI/GEAR PUMP

DIN
5 4 8 2

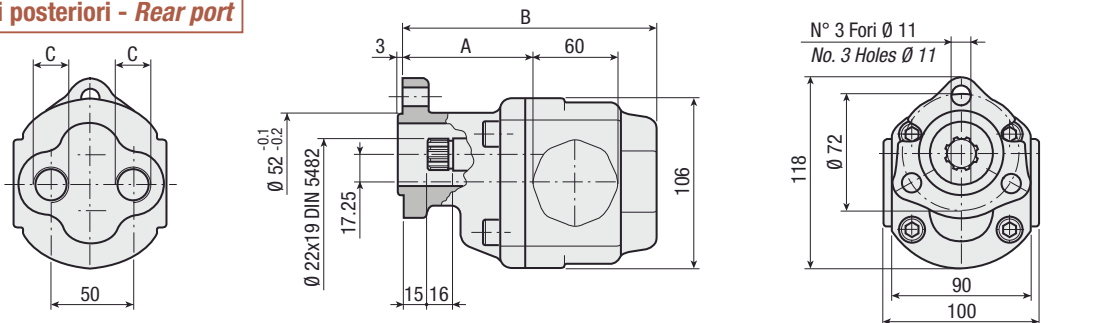
NFL 11-0
NFL 15-0
NFL 15-L
NFL 25-0
NFL 40-0



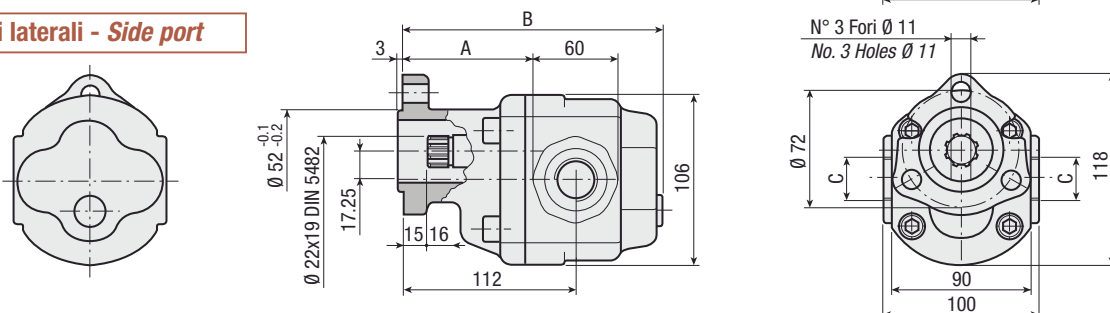
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C		PESO WEIGHT kg
					ASPIRAZIONE INLET	MANDATA OUTLET	
NFL 11 - 0	200NFL011 D 0	11.3	80	139	3/4" G	3/4" G	5.2
NFL 15 - 0	200NFL015 D 0	15.5	82	143	3/4" G	3/4" G	5.4
NFL 15 - L	200NFL015 D L	15.5	82	148	3/4" G	3/4" G	5.4
NFL 25 - 0	200NFL025 D 0	26.1	86	158	3/4" G	3/4" G	6.1
NFL 40 - 0	200NFL040 D 0	38.8	88	176	3/4" G	3/4" G	6.8

Attacchi posteriori - Rear port

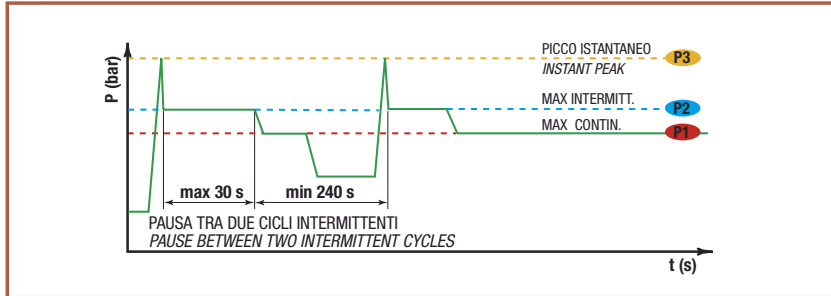


Attacchi laterali - Side port



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

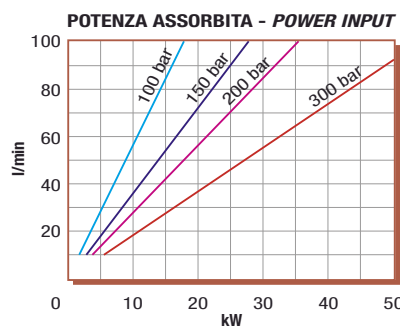
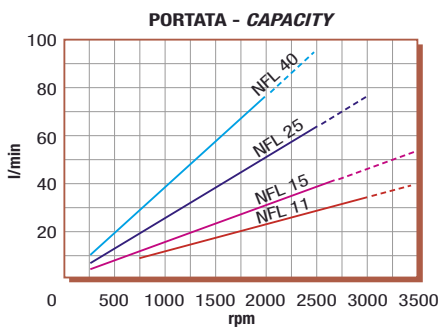


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

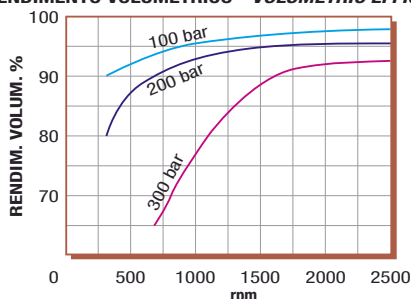
◀ FILTRAZIONE CONSIGLIATA (ritorno o mandata)
 RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		NFL11	NFL(15 - 15L)	NFL 25	NFL 40	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	11.3	15.5	26.1	38.8
Pressione massima continua Max continuous operating pressure	P1	bar	300	250	200	150
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2	bar	330	300	230	180
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3	bar	400	375	300	250
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	3500	3500	3000	2500
Velocità massima continua Max continuous speed (≤ P1)	n1	n/min r.p.m.	2800	2500	2000	1700
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4	n/min r.p.m.	750	450	450	450

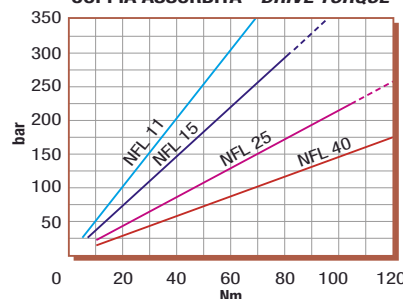


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



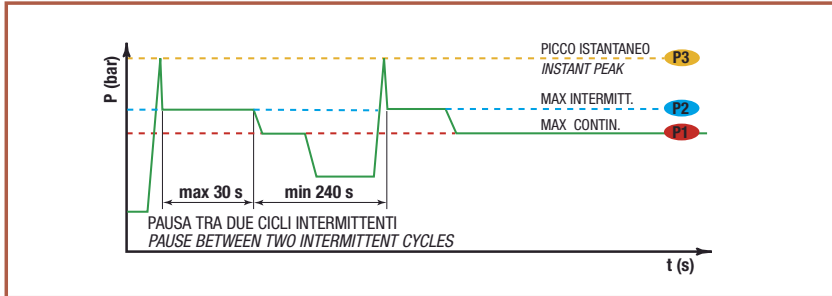
COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
 ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS
 REFER TO OIL TYPE ISO
 VG 46 AT 50° C (√=30 cSt)

DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

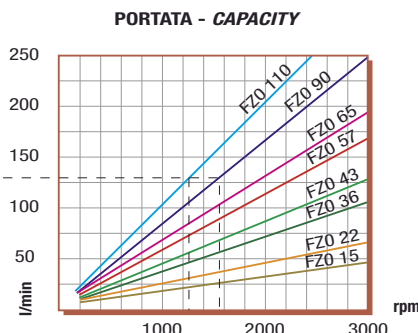
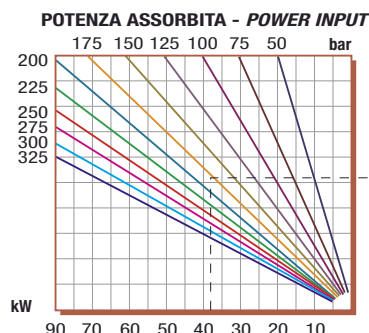


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

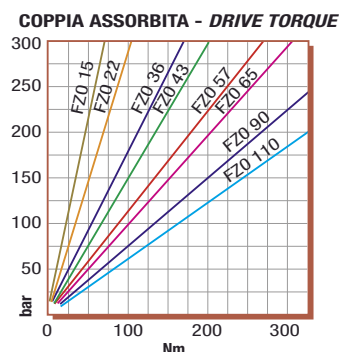
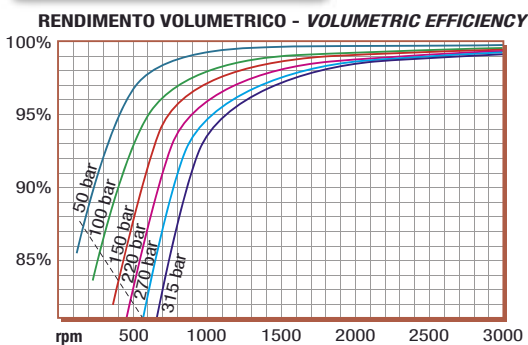
Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZ015	FZ022	FZ036	FZ043	FZ057	FZ065	FZ090	FZ0110
	Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	15	22	36	43	57	65	84
Pressione massima continua Max continuous operating pressure	P1	bar	315	305	300	280	240	220	210	180
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		340	330	325	305	265	240	230	200
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		450	450	450	400	380	330	300	250
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	4000	4000	3500	3500	3500	3500	3500	3000
Velocità massima continua Max continuous speed (≤ P1)	n1		2500	2500	2200	2200	2000	1800	1500	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		450	450	350	350	300	300	300	300



DIAGRAMMI - DIAGRAMS



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

FZO

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 FZO 015 D S
 | | | | |
 TIPO/TYPE CILINDRATA/DISPLACEMENT ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 DIN 5462
 POMPA AD INGRANAGGI/GEAR PUMP

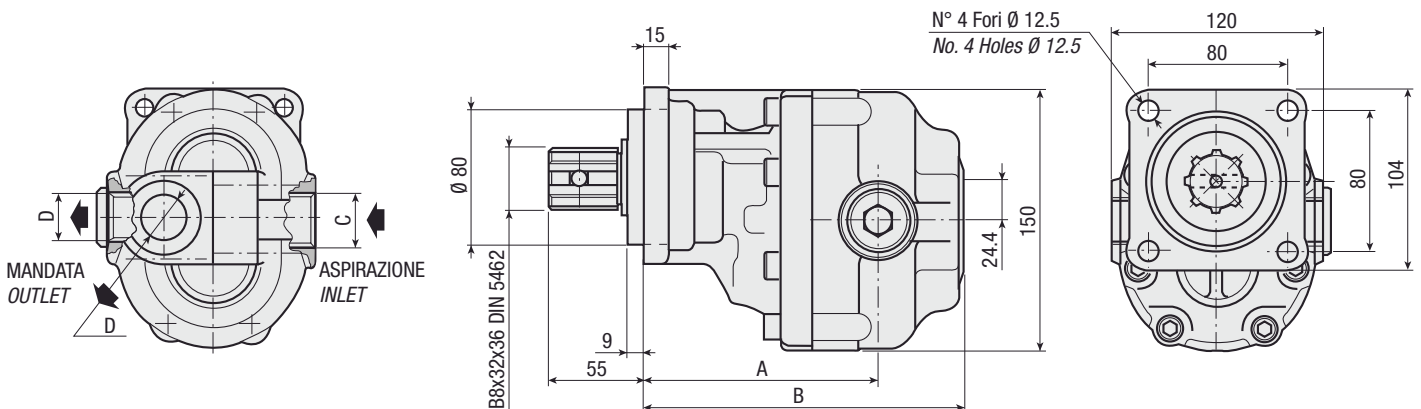
DIN
5 4 6 2
SE

FZO 15
 FZO 22
 FZO 36
 FZO 43
 FZO 57
 FZO 65
 FZO 90
 FZO 110



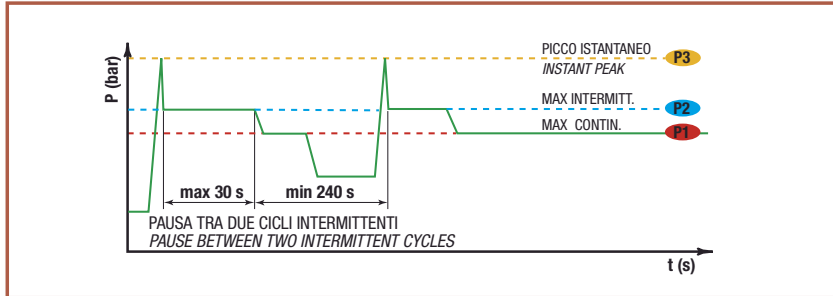
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZO 15	200FZ0015 D S	15	123	169	3/4" G	1/2" G	10.8
FZO 22	200FZ0022 D S	22	128	174	3/4" G	1/2" G	11.3
FZO 36	200FZ0036 D S	36	126	184	3/4" G	1/2" G	12
FZO 43	200FZ0043 D S	43	131	189	1" G	3/4" G	12.4
FZO 57	200FZ0057 D S	57	138	199	1" G	3/4" G	13.2
FZO 65	200FZ0065 D S	65	143	204	1" G	3/4" G	13.7
FZO 90	200FZ0090 D S	84	152,5	219	1" 1/4 G	1" G	14.7
FZO 110	200FZ0110 D S	105	164,5	231	1" 1/4 G	1" G	16.5



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



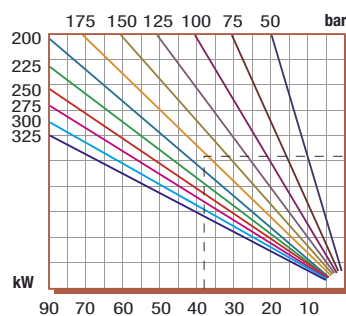
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

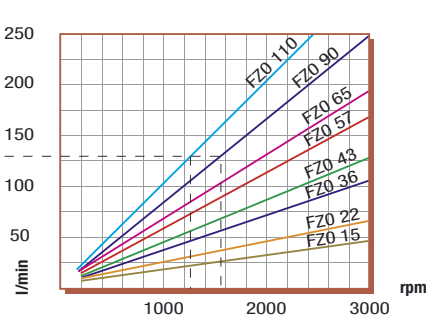
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZ015	FZ022	FZ036	FZ043	FZ057	FZ065	FZ090	FZ0110
	Vg	cm ³ /n cm ³ /rev.	15	22	36	43	57	65	84	105
Cilindrata Displacement										
Pressione massima continua Max continuous operating pressure		P1	315	305	300	280	240	220	210	180
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s)	P2	340	330	325	305	265	240	230	200
Pressione massima di picco Max peak pressure	(≤ 0.1 s)	P3	450	450	450	400	380	330	300	250
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar)	n3	4000	4000	3500	3500	3500	3500	3500	3000
Velocità massima continua Max continuous speed	(≤ P1)	n1	2500	2500	2200	2200	2000	1800	1500	1500
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s)	n4	450	450	350	350	300	300	300	300

POTENZA ASSORBITA - POWER INPUT

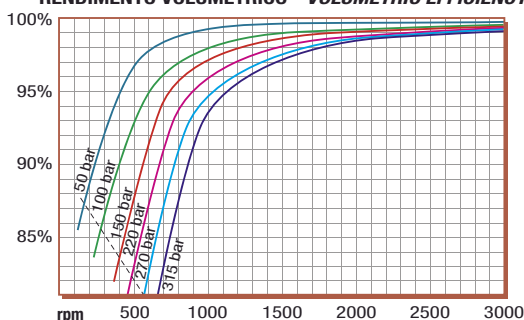


PORTATA - CAPACITY

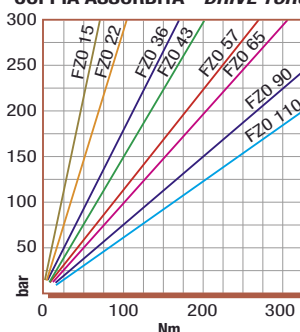


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

FZL

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 **FZL** **015** **D** **S**
 | | | | |
 TIPO/TYPE CILINDRATA/DISPLACEMENT ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 DIN 5462
 POMPA AD INGRANAGGI/GEAR PUMP

DIN
5 4 6 2
SE

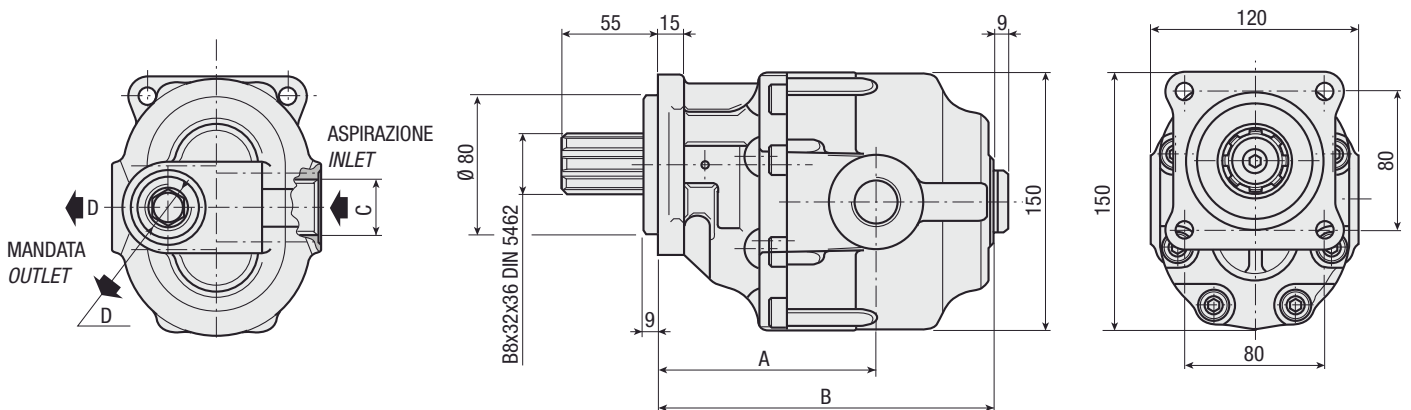
FZL 15
 FZL 22
 FZL 36
 FZL 43
 FZL 57
 FZL 65
 FZL 90
 FZL 110



NOTA: Albero uscita non supportato
 NOTE: Output shaft not supported

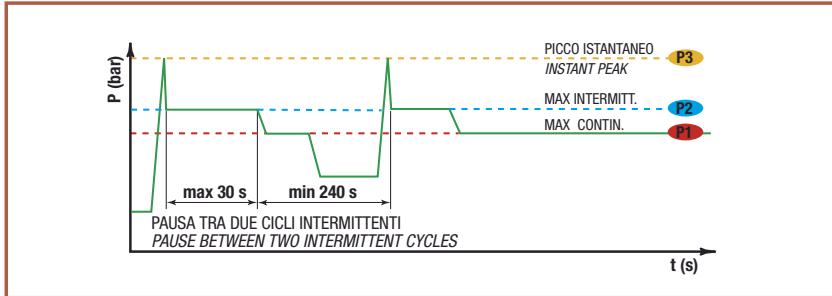
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZL 15	200FZL015 D S	15	96.5	142.5	3/4" G	1/2" G	8.6
FZL 22	200FZL022 D S	22	101.5	147.5	3/4" G	1/2" G	9.1
FZL 36	200FZL036 D S	36	99.5	157.5	3/4" G	1/2" G	9.8
FZL 43	200FZL043 D S	43	104.5	162.5	1" G	3/4" G	10.2
FZL 57	200FZL057 D S	57	111.5	172,5	1" G	3/4" G	11
FZL 65	200FZL065 D S	65	116.5	177.5	1" G	3/4" G	11.5
FZL 90	200FZL090 D S	84	126	192.5	1" 1/4 G	1" G	12.5
FZL 110	200FZL110 D S	105	138	204.5	1" 1/4 G	1" G	14.3



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



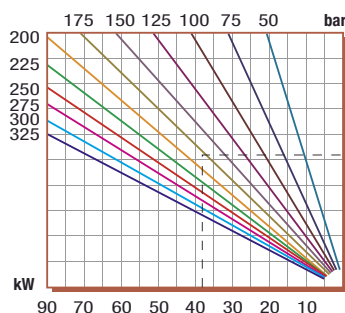
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

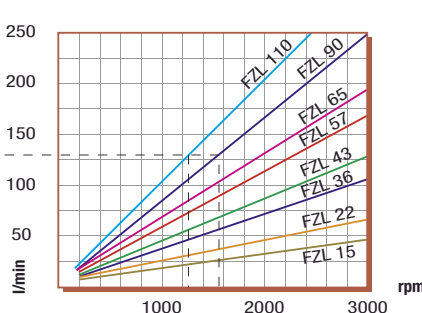
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZL15	FZL22	FZL36	FZL43	FZL57	FZL65	FZL90	FZL110
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	15	22	36	43	57	65	84	105
Pressione massima continua Max continuous operating pressure	P1	bar	315	305	300	280	240	220	210	180
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		340	330	325	305	265	240	230	200
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		360	350	345	325	285	260	250	220
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	4000	4000	3500	3500	3500	3500	3500	3000
Velocità massima continua Max continuous speed (≤ P1)	n1		2500	2500	2200	2200	2000	1800	1500	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		450	450	350	350	300	300	300	300

POTENZA ASSORBITA - POWER INPUT

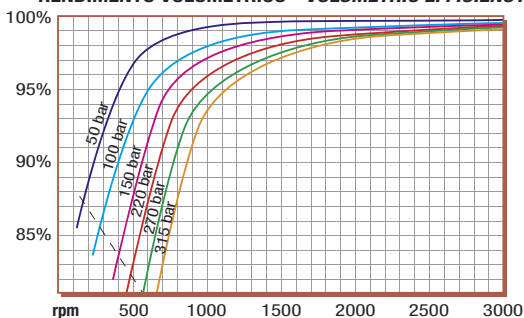


PORTATA - CAPACITY

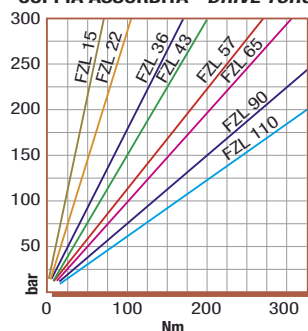


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√ = 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√ = 30 cSt)

FZS

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

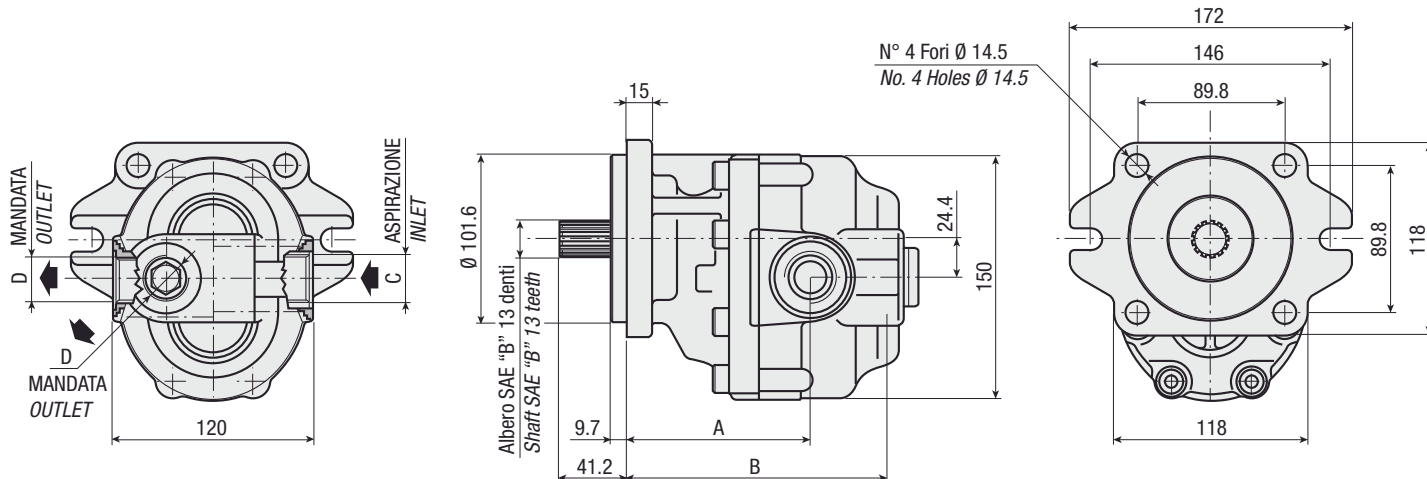
200 FZS 015 D S 2
 | | | | |
 TIPO/TYPE (SAE "B" 13 DENTI) (SAE "B" 13 TEETH)
 CILINDRATA/DISPLACEMENT
 ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 FILETTATURA IN POLLICI GAS
 THREAD IN GAS INCHES

SAE
 FZS 15
 FZS 22
 FZS 36
 FZS 43
 FZS 57
 FZS 65
 FZS 90
 FZS 110



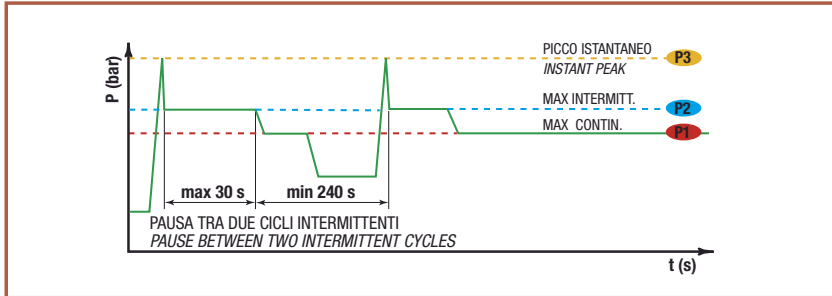
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZS 15	200FZS015 D S 2	15	96.5	142.5	3/4" G	1/2" G	11.8
FZS 22	200FZ0022 D S 2	22	101.5	147.5	3/4" G	1/2" G	12.3
FZS 36	200FZS036 D S 2	36	99.5	157.5	3/4" G	1/2" G	13
FZS 43	200FZS043 D S 2	43	104,5	104.5	1" G	3/4" G	13.4
FZS 57	200FZS057 D S 2	57	111.5	172.5	1" G	3/4" G	14.2
FZO 65	200FZS065 D S 2	65	116.5	177.5	1" G	3/4" G	14.7
FZS 90	200FZS090 D S 2	84	126	192.5	1" 1/4 G	1" G	15.7
FZS 110	200FZS110 D S 2	105	138	204.5	1" 1/4 G	1" G	17.5



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

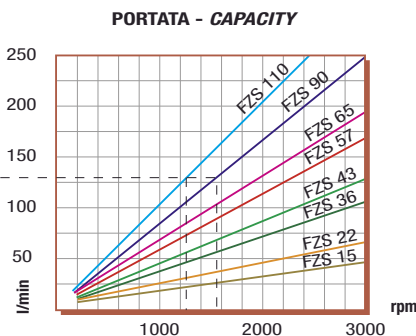
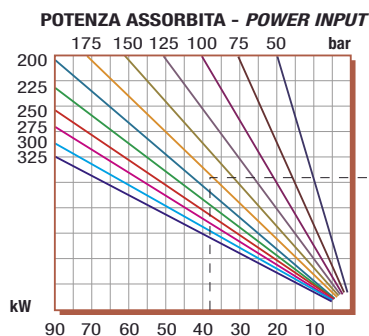
CONVERSIONI UNITÀ DI MISURA - MEASUREMENT UNIT CONVERSIONS

1 m = 39.370 in	1 Kw = 1.341 hp
1 kg = 2.204 lb	1 l/min = 0.264 gpm
1 bar = 14.503 psi	1 N·m = 0.737 lbf·ft

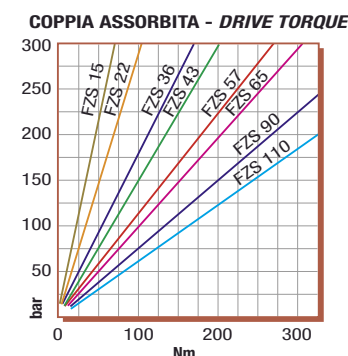
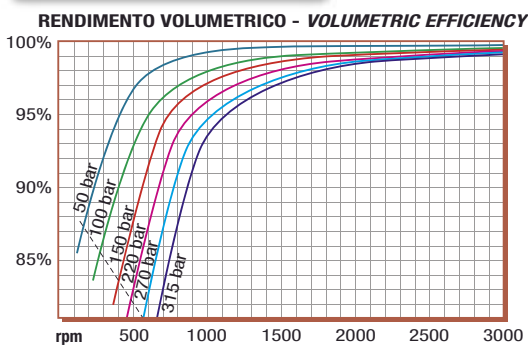
Pressione Lavoro Working Press. P2	Contaminazione - Contamination NAS 1638		Filtro - Filter βx = 75
	ISO 4406		
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZS15	FZS22	FZS36	FZS43	FZS57	FZS65	FZS90	FZS110
			Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	15	22	36	43	57
Pressione massima continua Max continuous operating pressure	P1	bar	315	305	300	280	240	220	210	180
Pressione massima intermittente Max intermitt. operat. pressure (max 30 s)	P2		340	330	325	305	265	240	230	200
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		450	450	450	400	380	330	300	250
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	4000	4000	3500	3500	3500	3500	3500	3000
Velocità massima continua Max continuous speed (≤ P1)	n1		2500	2500	2200	2200	2000	1800	1500	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		450	450	350	350	300	300	300	300



DIAGRAMMI - DIAGRAMS



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

TANDEM FZOT

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 FZ0 036 D S T

21 UNI 222

ROTAZIONE/ROTATION
D = DESTRO/CLOCKWISE
S = SINISTRO/ANTICLOCKWISE

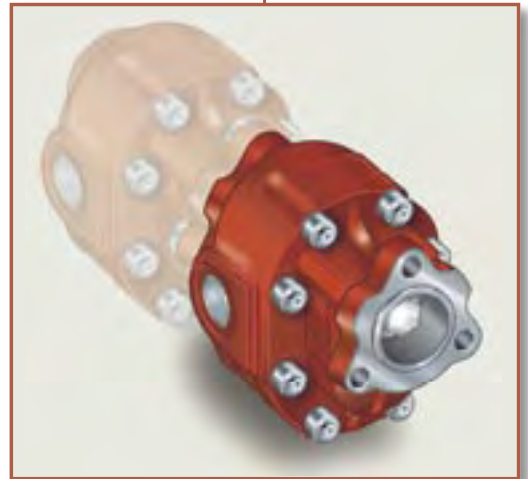
CILINDRATA/DISPLACEMENT

TIPO/TYPE

POMPA AD INGRANAGGI/GEAR PUMP

UNI
21-222

FZ0 36 T
FZ0 43 T
FZ0 57 T
FZ0 65 T
FZ0 90 T



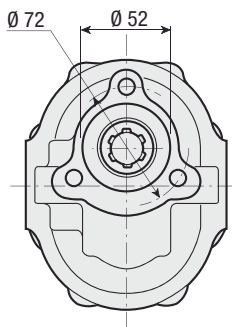
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZ0 36 T	200FZ0036 D S T	36	99.5	160	3/4" G	1/2" G	9.3
FZ0 43 T	200FZ0043 D S T	43	104.5	165	1" G	3/4" G	10.5
FZ0 57 T	200FZ0057 D S T	57	111.5	175	1" G	3/4" G	11.3
FZ0 65 T	200FZ0065 D S T	65	116.5	180	1" G	3/4" G	11.8
FZ0 90 T	200FZ0090 D S T	84	126	195	1" 1/4 G	1" G	12.8

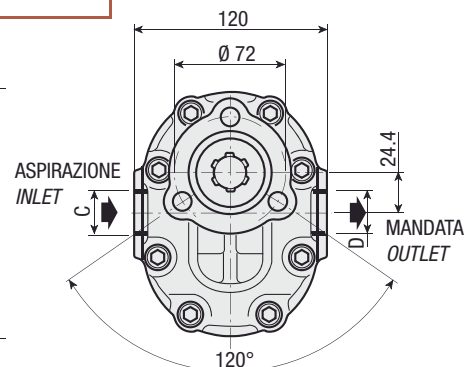
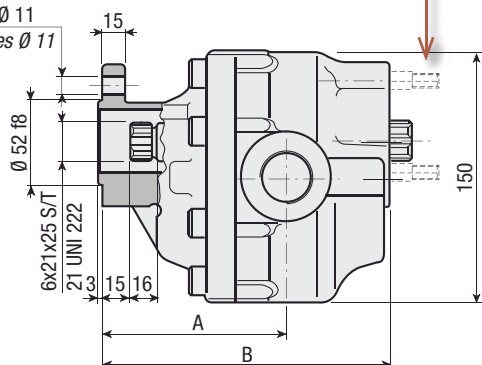
KIT ACCOPPIAMENTO POSTERIORE:
per pompa ad ingranaggi tipo

REAR MOUNTING KIT:
for gear pump type

PE	
B	198KPP02000
NF	
FZO	
NFL	198KPP03000
GP	

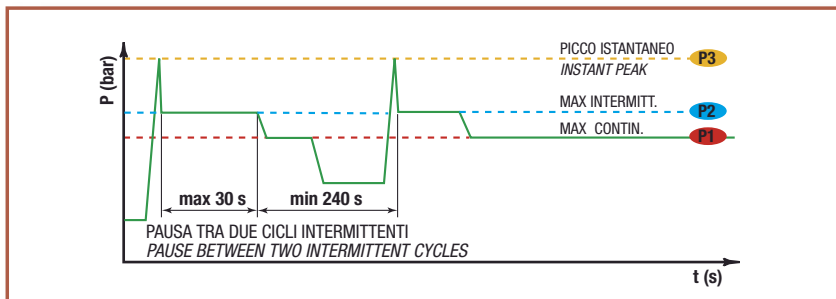


N° 3 Fori Ø 11
No. 3 Holes Ø 11



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



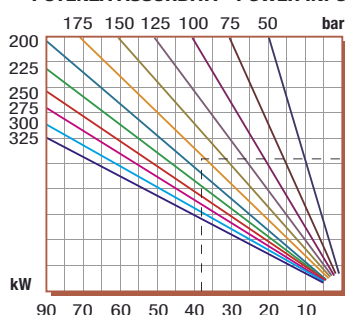
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

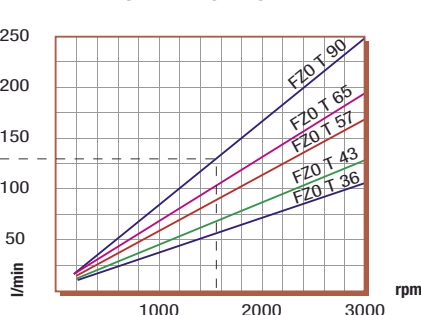
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZ036T	FZ043T	FZ057T	FZ065T	FZ090T
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	36	43	57	65	84
Pressione massima continua Max continuous operating pressure	P1	bar	300	280	240	220	210
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s) P2		325	305	265	240	230
Pressione massima di picco Max peak pressure	(≤ 0.1 s) P3		450	400	380	330	300
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar) n3	n/min r.p.m.	3500	3500	3500	3500	3500
Velocità massima continua Max continuous speed	(≤ P1) n1		2200	2200	2000	1800	1500
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s) n4		350	350	300	300	300

POTENZA ASSORBITA - POWER INPUT



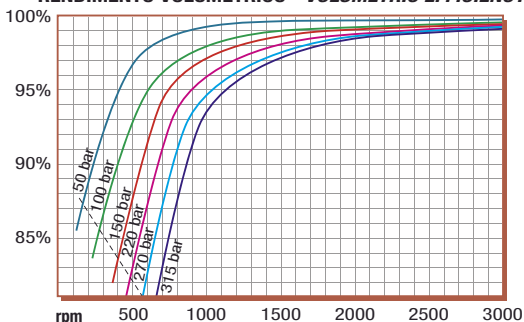
PORTATA - CAPACITY



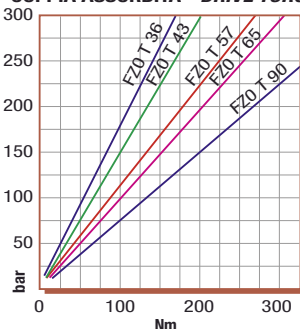
Coppia massima prelevabile
sull'albero della 1° pompa 300 Nm.
Max torque on the primary pump
300 Nm.

DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

TANDEM FZO V

**Pompa ad Ingranaggi
Gear Pump**

CODICE DI ORDINAZIONE - ORDERING CODE

200 FZO 036 D S V

D S

DIN 5462

ROTAZIONE/ROTATION

D = DESTRO/CLOCKWISE

S = SINISTRO/ANTICLOCKWISE

CILINDRATA/DISPLACEMENT

TIPO/TYPE

POMPA AD INGRANAGGI/GEAR PUMP

**DIN
5 4 6 2
SE**

FZO 36 V

FZO 43 V

FZO 57 V

FZO 65 V

FZO 90 V



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZO 36 V	200FZ0036 D S V	36	126	186.5	3/4" G	1/2" G	12.2
FZO 43 V	200FZ0043 D S V	43	131	191.5	1" G	3/4" G	12.6
FZO 57 V	200FZ0057 D S V	57	138	201.5	1" G	3/4" G	13.4
FZO 65 V	200FZ0065 D S V	65	143	206.5	1" G	3/4" G	13.9
FZO 90 V	200FZ0090 D S V	84	152.5	221.5	1" 1/4 G	1" G	14.9

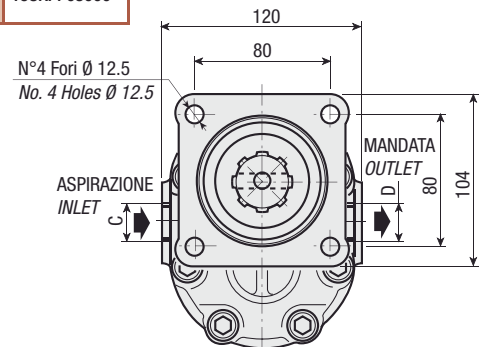
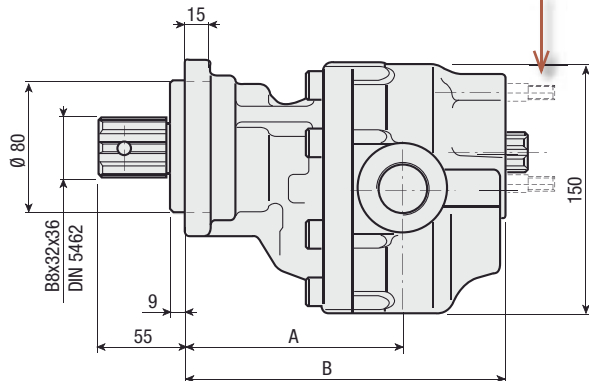
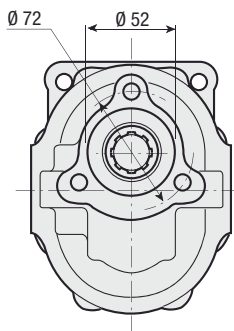
KIT ACCOPPIAMENTO POSTERIORE:

per pompa ad ingranaggi tipo

REAR MOUNTING KIT:

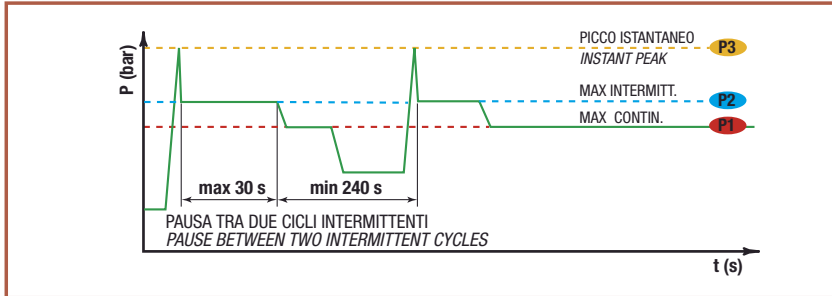
for gear pump type

PE	
B	198KPP02000
NF	
FZO	
NFL	198KPP03000
GP	



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



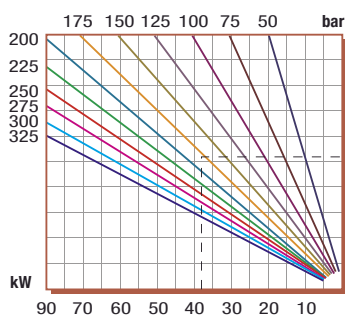
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

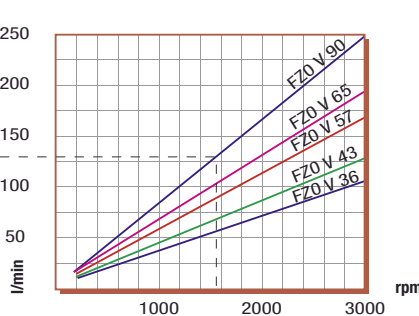
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZ036V	FZ043V	FZ057V	FZ065V	FZ090V	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	36	43	57	65	84	
Pressione massima continua Max continuous operating pressure	P1	bar	300	280	240	220	210	
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s)		P2	325	305	265	240	230
Pressione massima di picco Max peak pressure	(≤ 0.1 s)		P3	450	400	380	330	300
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar)	n3	3500	3500	3500	3500	3500	
Velocità massima continua Max continuous speed	(≤ P1)	n1	2200	2200	2000	1800	1500	
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s)	n4	350	350	300	300	300	

POTENZA ASSORBITA - POWER INPUT



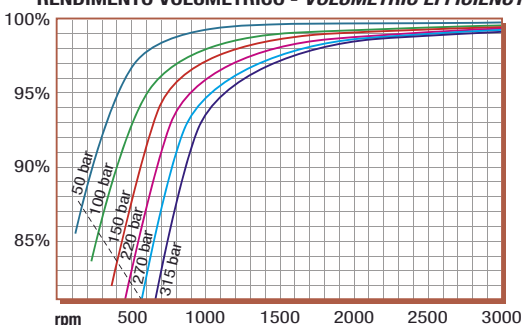
PORTATA - CAPACITY



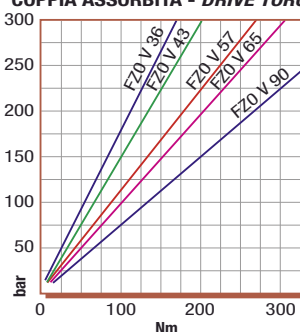
Coppia massima prelevabile
sull'albero della 1° pompa 300 Nm.
Max torque on the primary pump
300 Nm.

DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

FZH

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 FZH 075 D S 0

21 UNI 222

ROTAZIONE/ROTATION
D = DESTRO/CLOCKWISE
S = SINISTRO/ANTICLOCKWISE

CILINDRATA/DISPLACEMENT

TIPO/TYPE

POMPA AD INGRANAGGI/GEAR PUMP

UNI
21-222

FZH 75

FZH 85

FZH 100

FZH 116

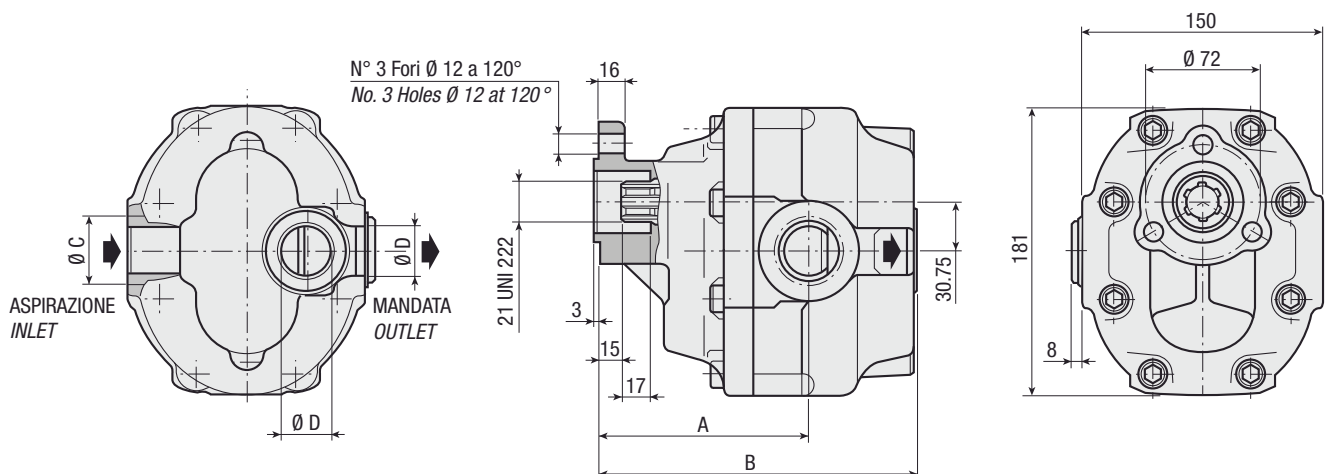
FZH 130

FZH 150



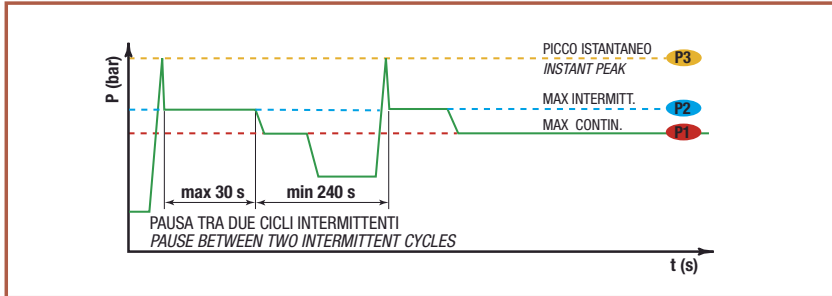
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZH 75	200FZH075 D S 0	73	127	194	1" 1/4 G	1" G	16.3
FZH 85	200FZH085 D S 0	84	129.5	198	1" 1/4 G	1" G	17.2
FZH 100	200FZH100 D S 0	100	139	204	1" 1/4 G	1" G	18.1
FZH 116	200FZH116 D S 0	116	139	210	1" 1/4 G	1" G	19
FZH 130	200FZH130 D S 0	132	135	216	1" 1/2 G	1" G	19.9
FZH 150	200FZH150 D S 0	148	143	222	1" 1/2 G	1" G	20.8



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



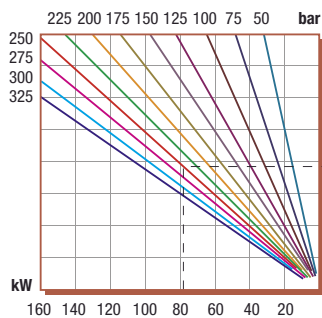
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

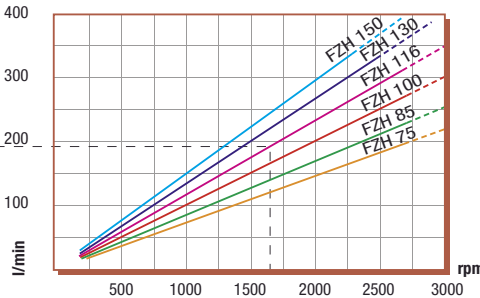
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZH75	FZH85	FZH100	FZH116	FZH130	FZH150	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	73	84	100	116	132	148	
Pressione massima continua Max continuous operating pressure	P1	bar	300	250	250	240	210	180	
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s)		P2	320	280	270	260	210	180
Pressione massima di picco Max peak pressure	(≤ 0.1 s)		P3	450	375	375	340	315	270
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar)	n3	3800	3500	3500	3000	3000	3000	
Velocità massima continua Max continuous speed	(≤ P1)	n1	1800	1800	1500	1500	1500	1500	
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s)	n4	300	300	250	250	250	250	

POTENZA ASSORBITA - POWER INPUT

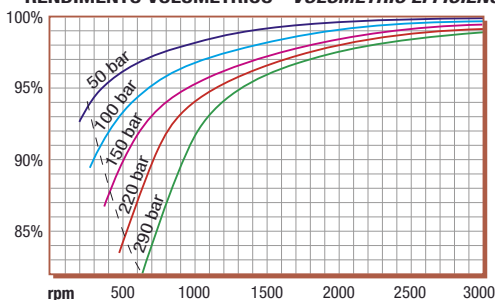


PORTATA - CAPACITY

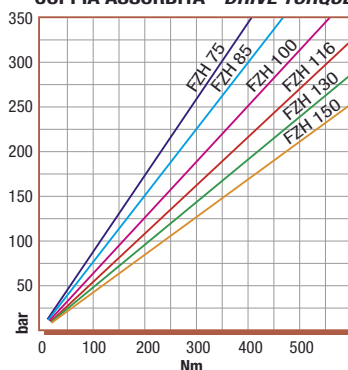


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

FZH

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

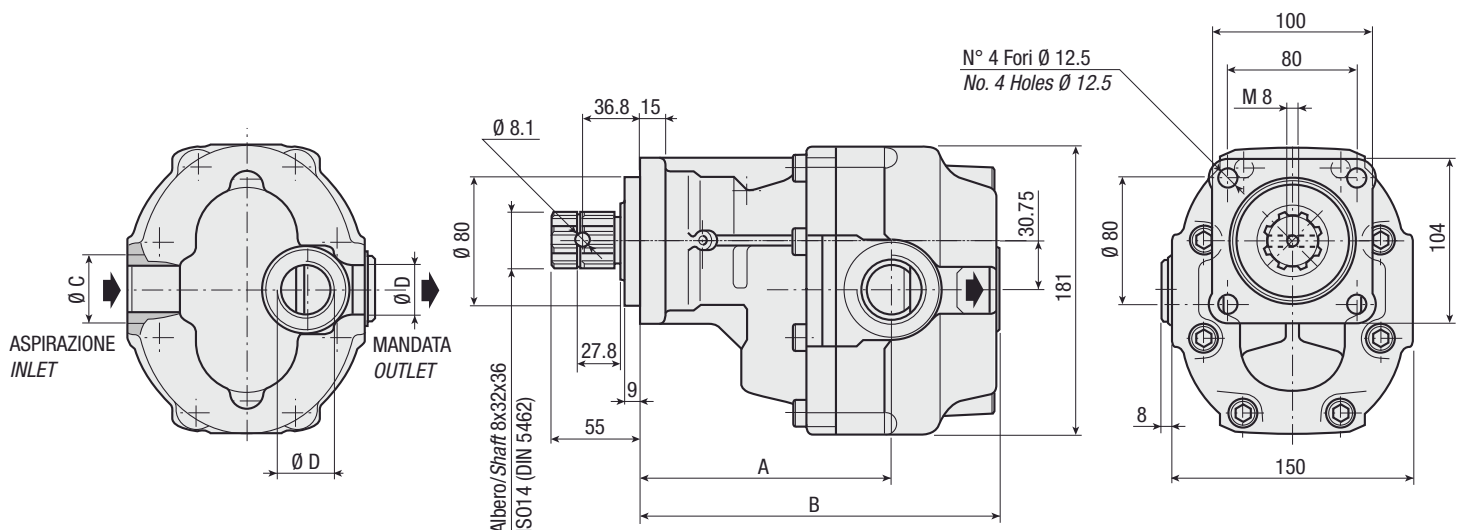
200 **FZH** **075** **D** **S**
 | | | | |
 TIPO/TYPE CILINDRATA/DISPLACEMENT ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 DIN 5462
 POMPA AD INGRANAGGI/GEAR PUMP

DIN **FZH 75**
5 4 6 2 **FZH 85**
SE **FZH 100**
FZH 116
FZH 130
FZH 150



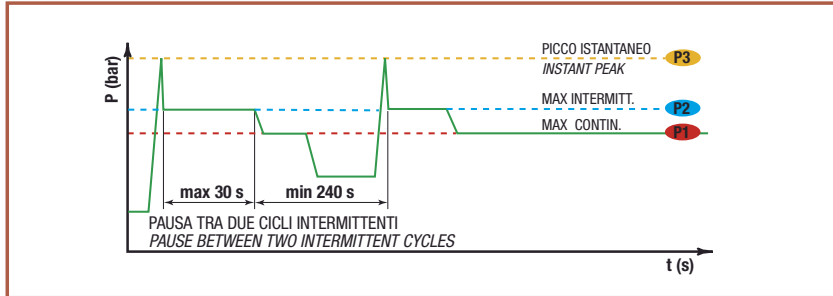
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZH 75	200FZH075 D S	73	127.5	194.5	1" 1/4 G	1" G	18
FZH 85	200FZH085 D S	84	130	198.5	1" 1/4 G	1" G	18.9
FZH 100	200FZH100 D S	100	139.5	204.5	1" 1/4 G	1" G	19.8
FZH 116	200FZH116 D S	116	139.5	210.5	1" 1/4 G	1" G	20.7
FZH 130	200FZH130 D S	132	135.5	216.5	1" 1/2 G	1" G	21.6
FZH 150	200FZH150 D S	148	143.5	222.5	1" 1/2 G	1" G	22.5



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



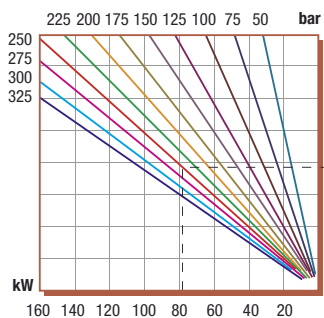
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

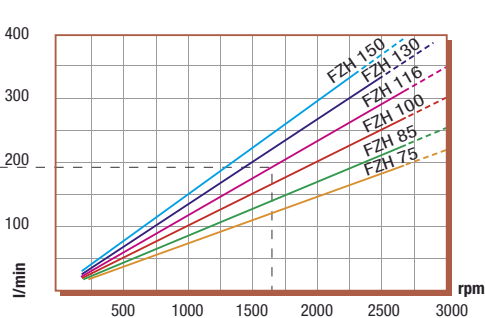
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			FZH75	FZH85	FZH100	FZH116	FZH130	FZH150	
			Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	73	84	100	116
Pressione massima continua Max continuous operating pressure	P1	bar	300	270	260	250	230	190	
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s)		P2	320	310	290	280	270	230
Pressione massima di picco Max peak pressure	(≤ 0.1 s)		P3	450	375	375	340	315	270
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar)	n3	3800	3500	3500	3000	3000	3000	
Velocità massima continua Max continuous speed	(≤ P1)	n1	1800	1800	1500	1500	1500	1500	
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s)	n4	300	300	250	250	250	250	

POTENZA ASSORBITA - POWER INPUT

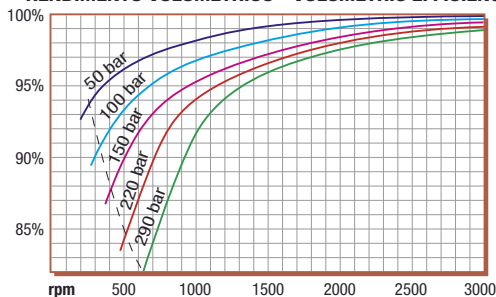


PORTATA - CAPACITY

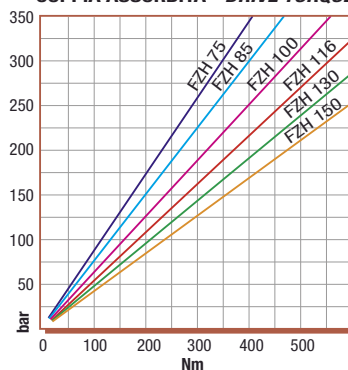


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

FZP

Pompa ad Ingranaggi Gear Pump

CODICE DI ORDINAZIONE - ORDERING CODE

200 **FZP** **075** **D** **S**
 | | | | |
 TIPO/TYPE CILINDRATA/DISPLACEMENT ROTAZIONE/ROTATION
 D = DESTRO/CLOCKWISE
 S = SINISTRO/ANTICLOCKWISE
 DIN 5462
 POMPA AD INGRANAGGI/GEAR PUMP

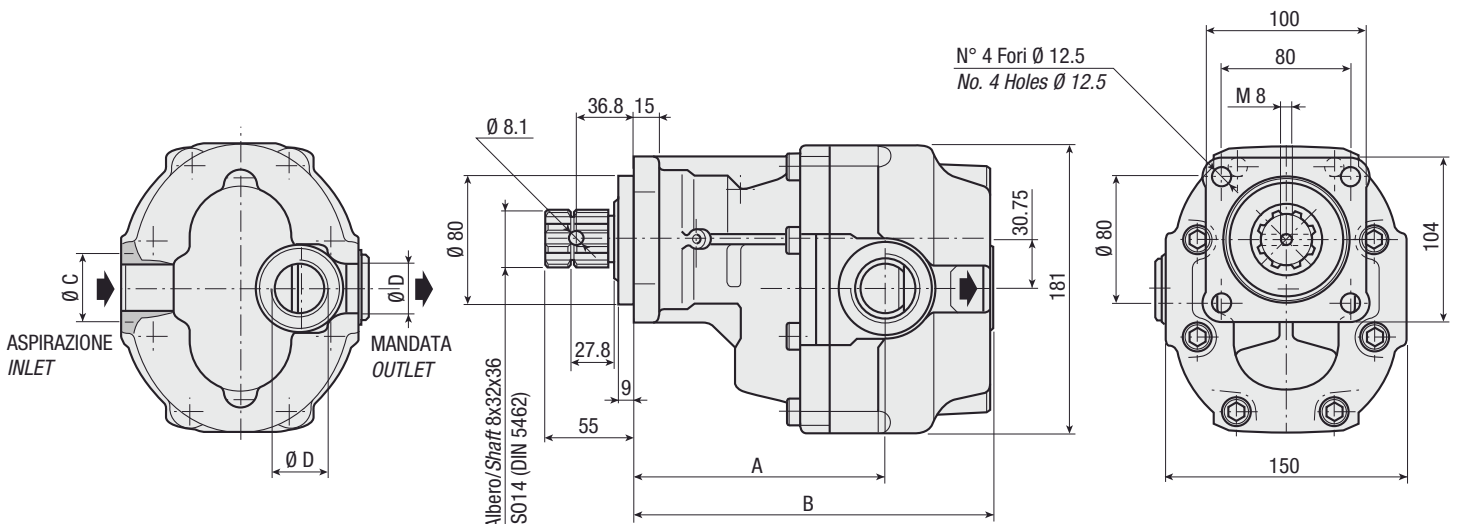
DIN FZP 75
5 4 6 2 FZP 85
SE FZP 100
 FZP 116
 FZP 130
 FZP 150



NOTA: Albero uscita non supportato
 NOTE: Output shaft not supported

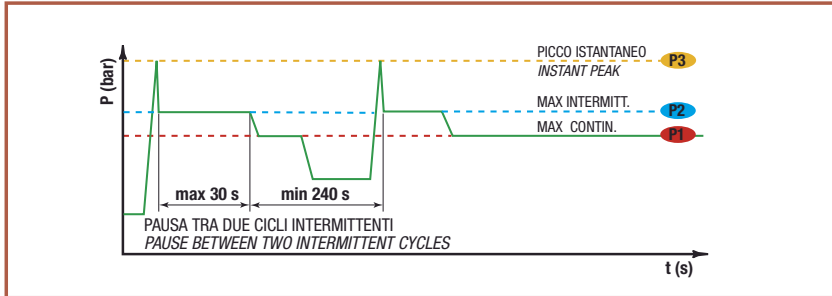
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CILINDRATA DISPLACEMENT cm ³ /rev.	A mm	B mm	C ASPIRAZIONE INLET	D MANDATA OUTLET	PESO WEIGHT kg
FZP 75	200FZP075 D S	73	127.5	194.5	1" 1/4 G	1" G	18
FZP 85	200FZP085 D S	84	130	198.5	1" 1/4 G	1" G	18.9
FZP 100	200FZP100 D S	100	139.5	204.5	1" 1/4 G	1" G	19.8
FZP 116	200FZP116 D S	116	139.5	210.5	1" 1/4 G	1" G	20.7
FZP 130	200FZP130 D S	132	135.5	216.5	1" 1/2 G	1" G	21.6
FZP 150	200FZP150 D S	148	143.5	222.5	1" 1/2 G	1" G	22.5



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



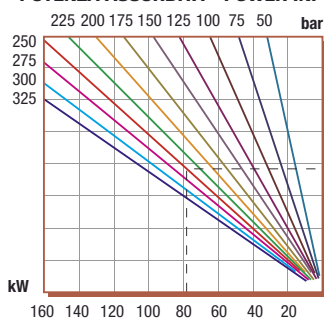
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

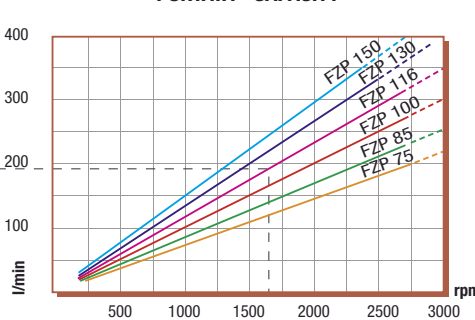
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		FZP75	FZP85	FZP100	FZP116	FZP130	FZP150	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	73	84	100	116	132	148
Pressione massima continua Max continuous operating pressure	P1	bar	300	270	260	250	230	190
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s) P2		320	310	290	280	270	230
Pressione massima di picco Max peak pressure	(≤ 0.1 s) P3		450	375	375	340	315	270
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar) n3	n/min r.p.m.	3800	3500	3500	3000	3000	3000
Velocità massima continua Max continuous speed	(≤ P1) n1		1800	1800	1500	1500	1500	1500
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s) n4		300	300	250	250	250	250

POTENZA ASSORBITA - POWER INPUT

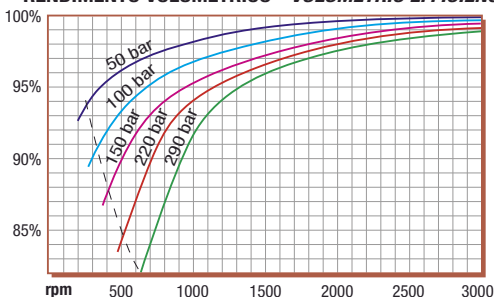


PORTATA - CAPACITY

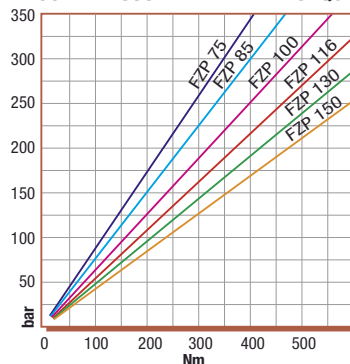


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



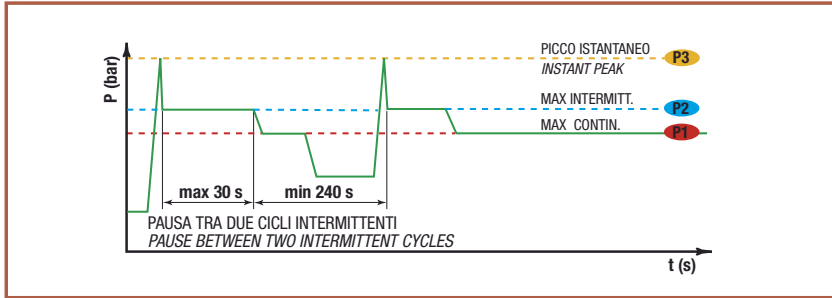
COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



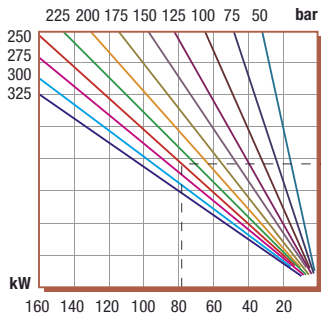
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

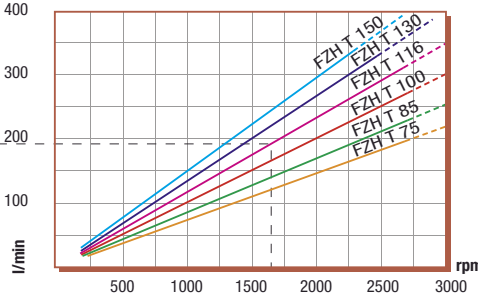
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		FZH75T	FZH85T	FZH100T	FZH116T	FZH130T	FZH150T	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	73	84	100	116	132	148
Pressione massima continua Max continuous operating pressure	P1	bar	300	250	250	240	210	180
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s) P2		320	280	270	260	210	180
Pressione massima di picco Max peak pressure	(≤ 0.1 s) P3		450	375	375	340	315	270
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar) n3	n/min r.p.m.	3800	3500	3500	3000	3000	3000
Velocità massima continua Max continuous speed	(≤ P1) n1		1800	1800	1500	1500	1500	1500
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s) n4		300	300	250	250	250	250

POTENZA ASSORBITA - POWER INPUT



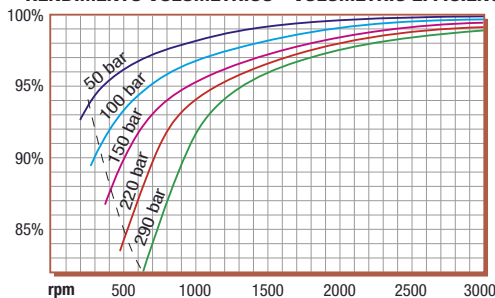
PORTATA - CAPACITY



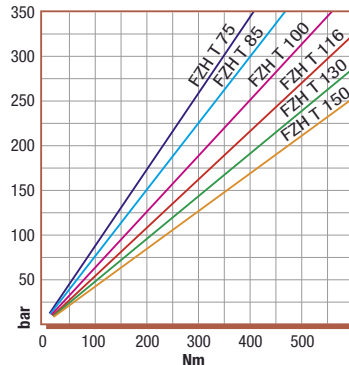
Coppia massima prelevabile
sull'albero della 1° pompa 300 Nm.
Max torque on the primary pump
300 Nm.

DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



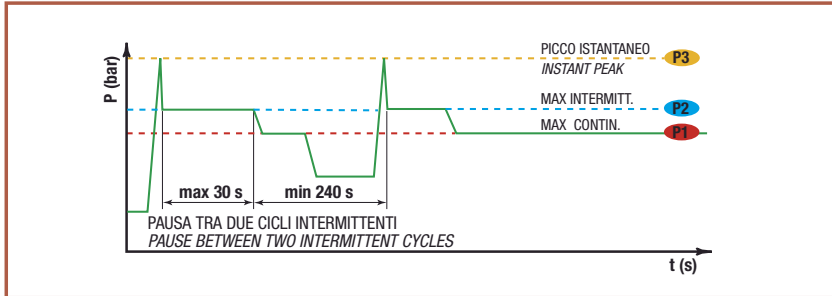
COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES



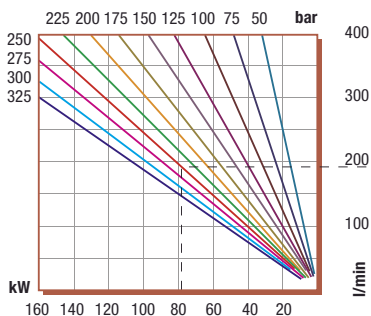
Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination NAS 1638		Filtro - Filter βx = 75
	ISO 4406		
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

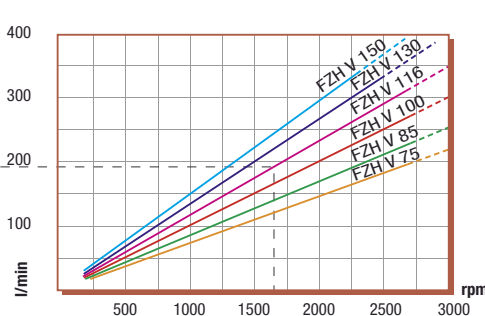
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		FZH75V	FZH85V	FZH100V	FZH116V	FZH130V	FZH150V	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	73	84	100	116	132	148
Pressione massima continua Max continuous operating pressure	P1	bar	300	270	260	250	230	190
Pressione massima intermittente Max intermitt. operat. press.	(max 30 s) P2		320	310	290	280	270	230
Pressione massima di picco Max peak pressure	(≤ 0.1 s) P3		450	375	375	340	315	270
Velocità massima intermittente Max intermittent speed	(P ≤ 20 bar) n3	n/min r.p.m.	3800	3500	3500	3000	3000	3000
Velocità massima continua Max continuous speed	(≤ P1) n1		1800	1800	1500	1500	1500	1500
Velocità minima intermittente Min intermittent speed	(≤ P2 x 0.5) (max 30 s) n4		300	300	250	250	250	250

POTENZA ASSORBITA - POWER INPUT

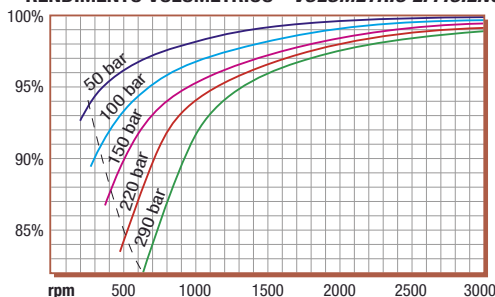


PORTATA - CAPACITY

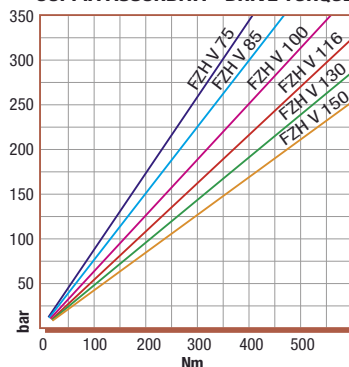


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



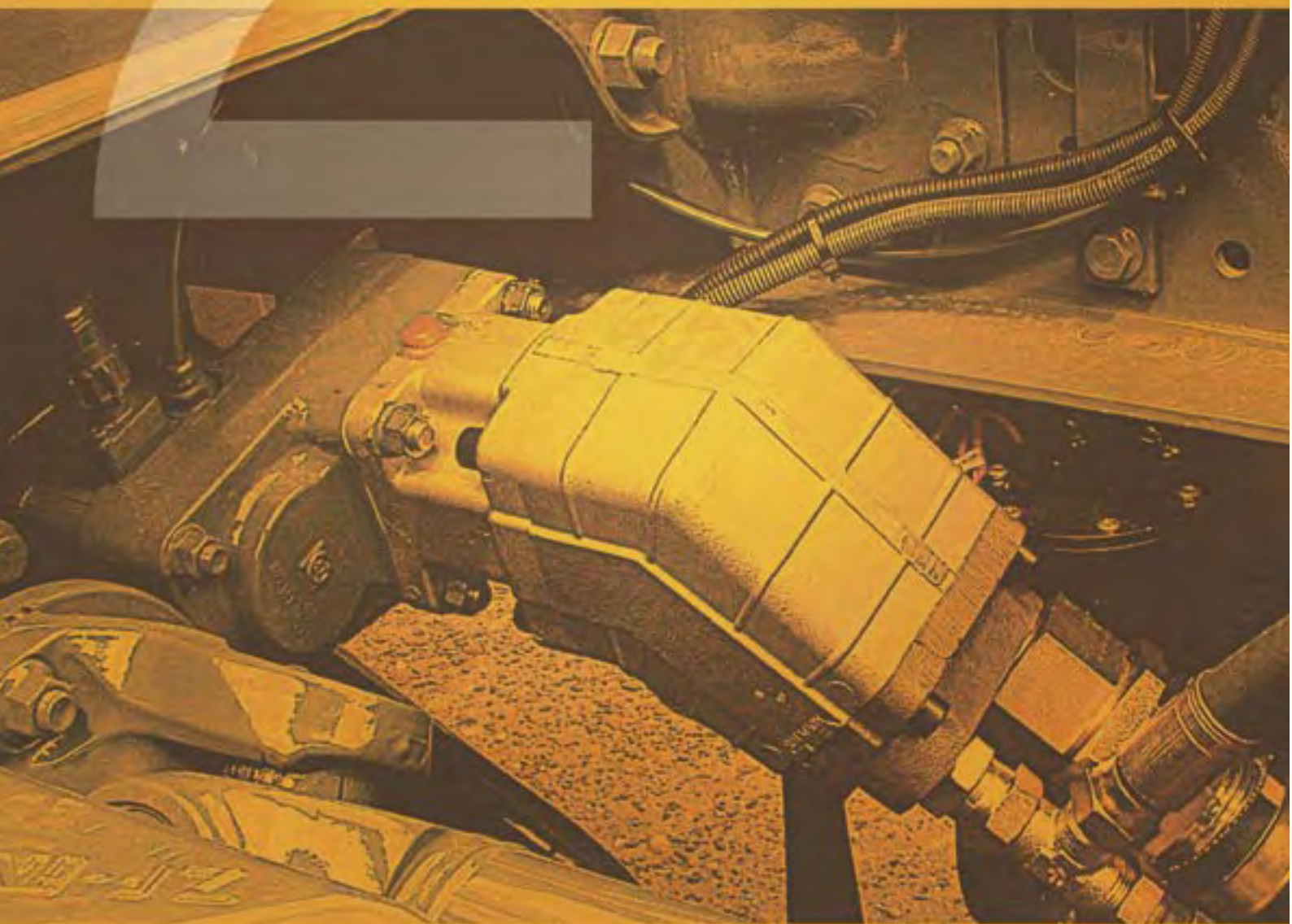
COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (ν = 30 cSt)

POMPE A PISTONI

PISTON PUMPS



POMPE A PISTONI

Studiate specificatamente per applicazioni gravose con pressioni di lavoro elevate e configurate appositamente per le applicazioni sui veicoli industriali, le nostre pompe a pistoni sono costruite con attacchi a 3 fori (21 UNI 222) e 4 fori (SE DIN 5462) in modo da poter facilmente essere accoppiate direttamente su tutti i modelli di PTO disponibili nel mercato. Le loro peculiarità più rilevanti sono:

- Reversibilità del senso di rotazione (solo serie "PE")
- Ingombri contenuti
- Peso ridotto
- Buoni rendimenti funzionali
- Competitività commerciale

Con la serie ad asse inclinato "PAI", siamo in grado di fornire prestazioni di pressione di tutto rispetto, sempre nell'ottica di soddisfare le esigenze di un mercato in continua e costante evoluzione.

PISTON PUMPS

Specifically developed for applications which require high working pressures and properly configured for industrial vehicles, they are manufactured in 3 or 4 UNI / DIN hole versions, and can be directly fitted on most of the PTOs' on the worldwide market. The main features are:

- * *Reversibility of rotation ("PE" series)*
- * *Reduced size*
- * *Light weight*
- * *High functional efficiency*
- * *Competitive price*

With the bent-axis "PAI" series, we are able to obtain high-level pressure outputs with the aim of satisfying the needs of a continuously and constantly evolving market.



PE

Pompa a Pistoni Piston Pump

CODICE DI ORDINAZIONE - ORDERING CODE

201 PE 014 0 00



UNI
21-222

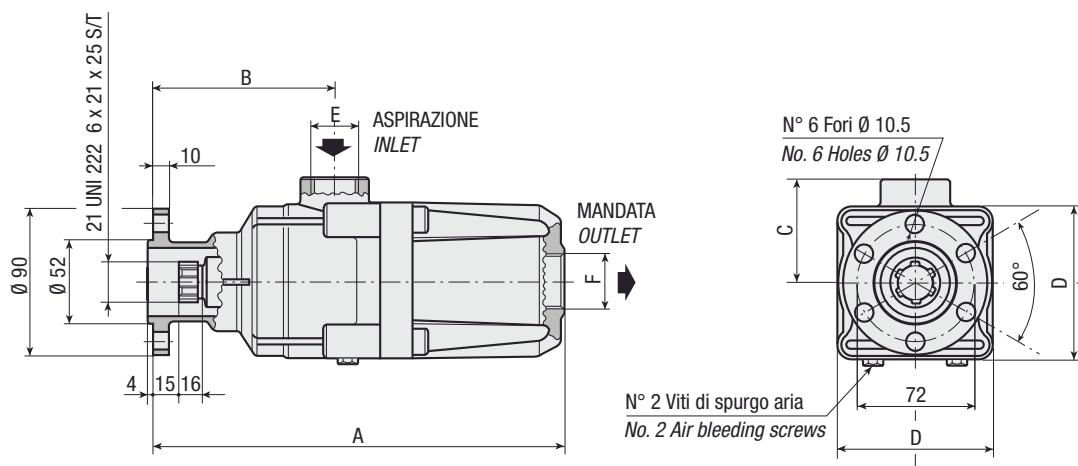
- PE 14
- PE 19
- PE 25
- PE 30



Pompa reversibile con senso di flusso invariato
Reversible pump with unchanged flux

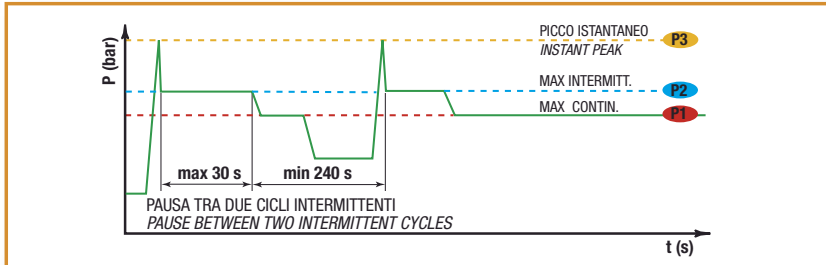
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 14	201PE014000	253	112	63	95	1"	1"	10.1
PE 19	201PE019000							10.0
PE 25	201PE025000							9.9
PE 30	201PE030000							9.7



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

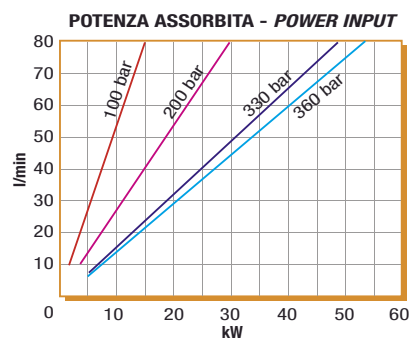
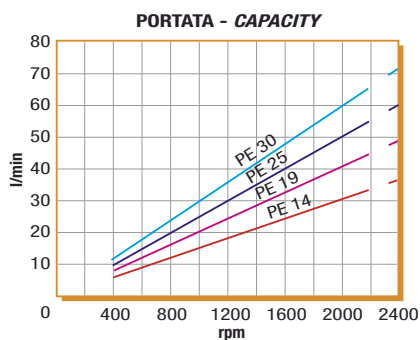


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

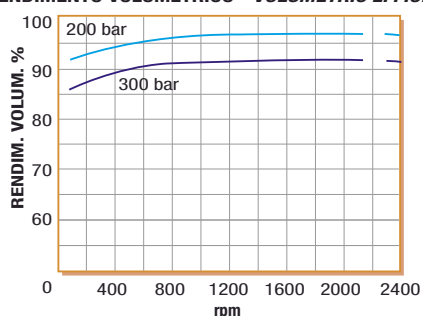
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		PE14	PE19	PE25	PE30	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	16.0	21.3	26.7	32.0
Pressione massima continua Max continuous operating pressure	P1	bar	330	330	330	330
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		360	360	360	360
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	500	500	500
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	2400	2400	2400	2400
Velocità massima continua Max continuous speed (≤ P1)	n1		1800	1800	1800	1800
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		400	400	350	350

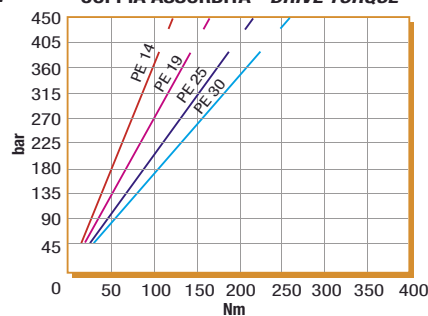


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

PE

Pompa a Pistoni
Piston Pump



CODICE DI ORDINAZIONE - ORDERING CODE

201 PE 014 0 SE

TIPO/TYPE
CILINDRATA/DISPLACEMENT
VERSIONE/VERSION
DIN 5462

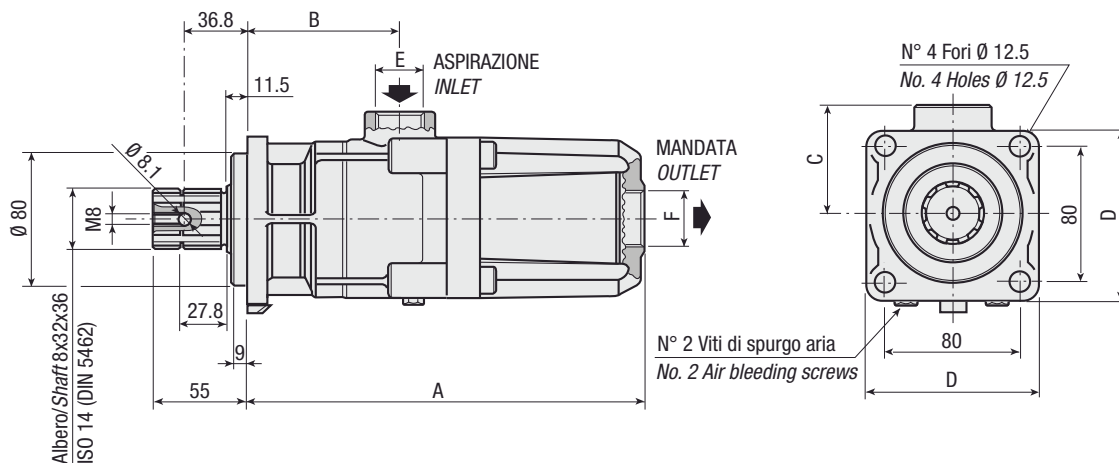
DIN
5 4 6 2
SE

PE 14
PE 19
PE 25
PE 30

POMPA A PISTONI/PISTON PUMP

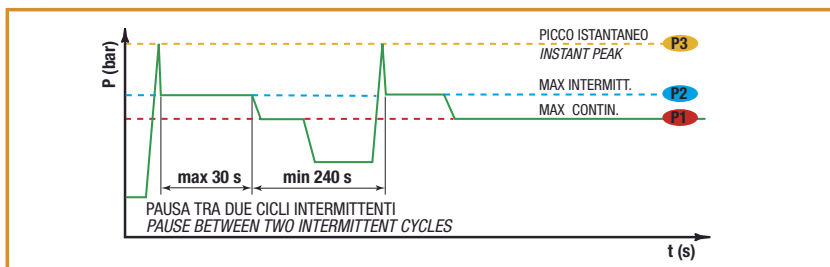
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 14	201PE0140SE	230	88.5	63	100	1"	1"	10.8
PE 19	201PE0190SE							10.7
PE 25	201PE0250SE							10.6
PE 30	201PE0300SE							10.5



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

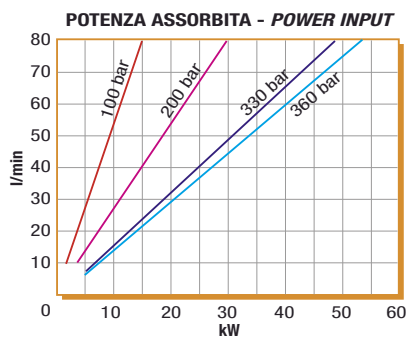
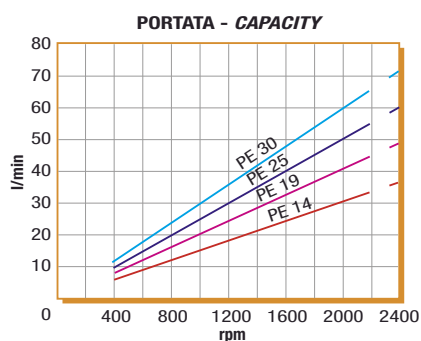


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

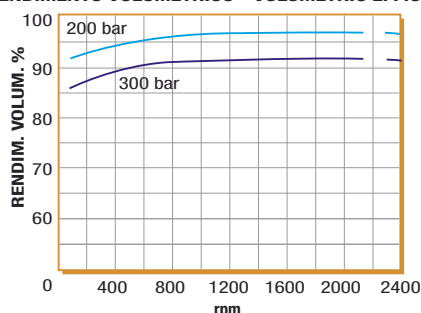
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		PE14	PE19	PE25	PE30	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	16.0	21.3	26.7	32.0
Pressione massima continua Max continuous operating pressure	P1	bar	330	330	330	330
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		360	360	360	360
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	500	500	500
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	2400	2400	2400	2400
Velocità massima continua Max continuous speed (≤ P1)	n1		1800	1800	1800	1800
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		400	400	350	350

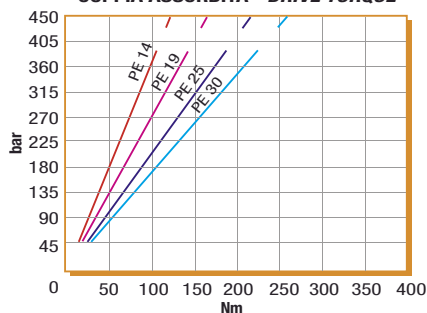


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

PE

Pompa a Pistoni Piston Pump

CODICE DI ORDINAZIONE - ORDERING CODE

201 PE 040 Z 00



UNI
21-222

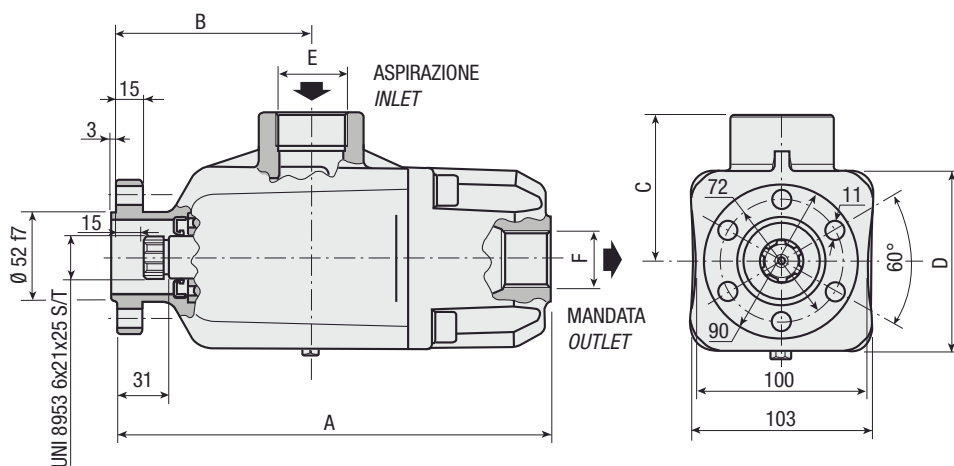
PE 40
PE 50
PE 60



Pompa reversibile con senso di flusso invariato
Bidirectional pump with unchanged flux

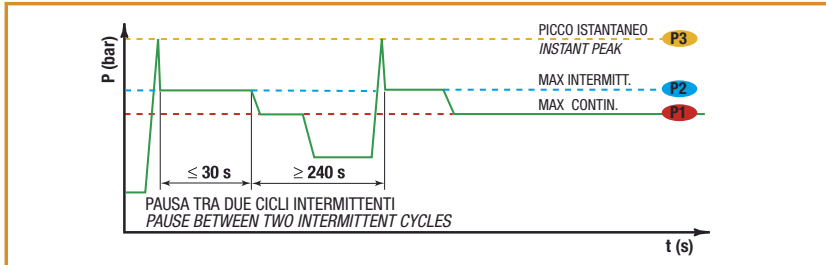
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 40	201PE040Z00	253	113	85	106	1" 1/4 G	1"	10.4
PE 50	201PE050Z00							10.4
PE 60	201PE060Z00							10.4



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

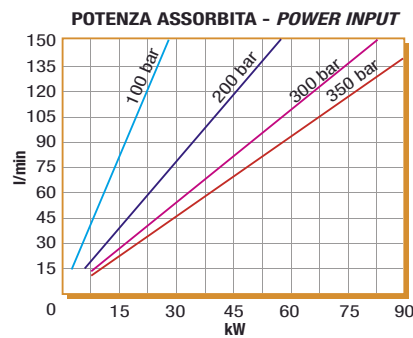
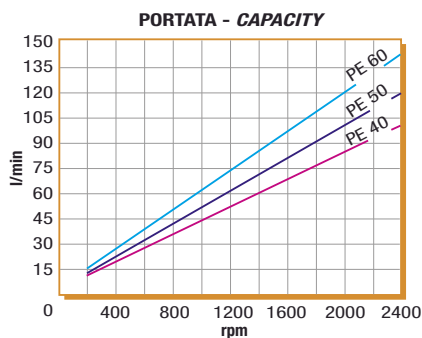


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter $\beta_x = 75$
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μ m
≥ 200 bar	11	20/17	25 μ m

FILTRAZIONE CONSIGLIATA (ritorno o mandata)
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		PE40	PE50	PE60
Cilindrata Displacement	Vg	37	50	60
Pressione massima continua Max continuous operating pressure	P1	330	330	290
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2	360	360	340
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3	500	500	400
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	2400	2400	2100
Velocità massima continua Max continuous speed ($\leq P1$)	n1	1800	1800	1700
Velocità minima intermittente Min intermittent speed ($\leq P2 \times 0.5$) (max 30 s)	n4	400	400	300

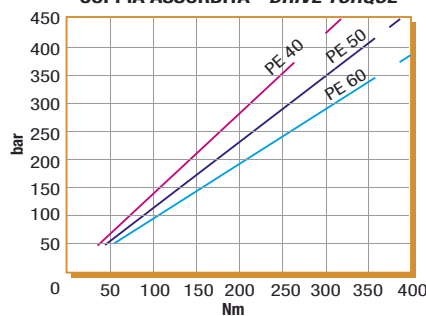


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



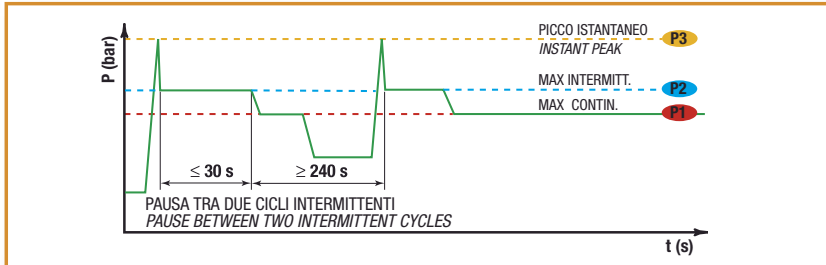
COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
 ISO VG 46 A 50° C ($\sqrt{V} = 30$ cSt)
 THE ABOVE SPECIFICATIONS
 REFER TO OIL TYPE ISO
 VG 46 AT 50° C ($\sqrt{V} = 30$ cSt)

DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

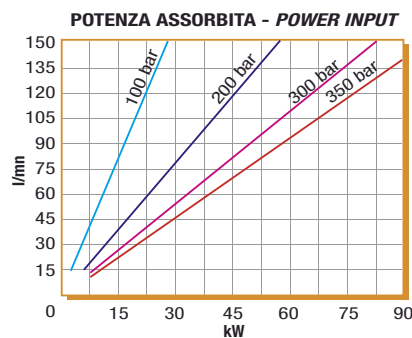
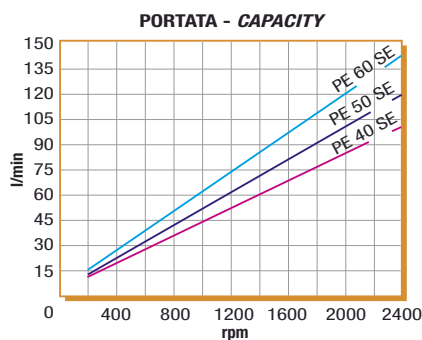


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

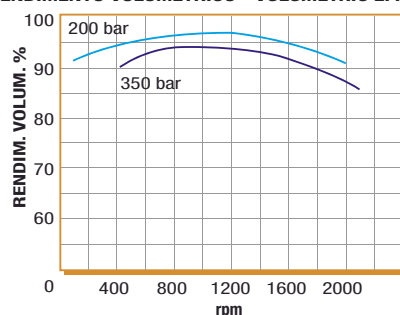
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		PE40	PE50	PE60	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	37	50	60
Pressione massima continua Max continuous operating pressure	P1	bar	330	330	290
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		360	360	340
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	500	400
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	2400	2400	2100
Velocità massima continua Max continuous speed (≤ P1)	n1		1800	1800	1700
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		400	400	300

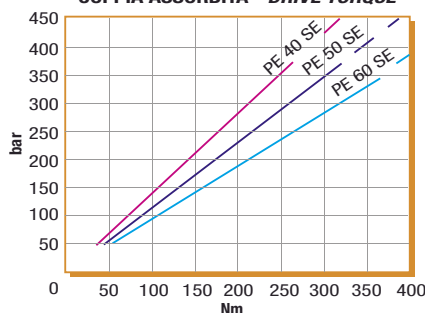


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
 ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS
 REFER TO OIL TYPE ISO
 VG 46 AT 50° C (√=30 cSt)

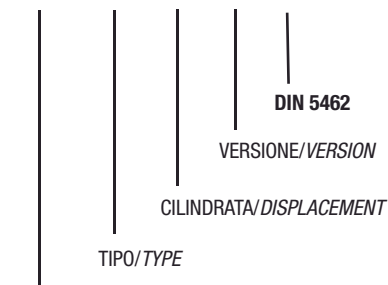
PE

Pompa a Pistoni Piston Pump



CODICE DI ORDINAZIONE - ORDERING CODE

201 PEC 70 W SE

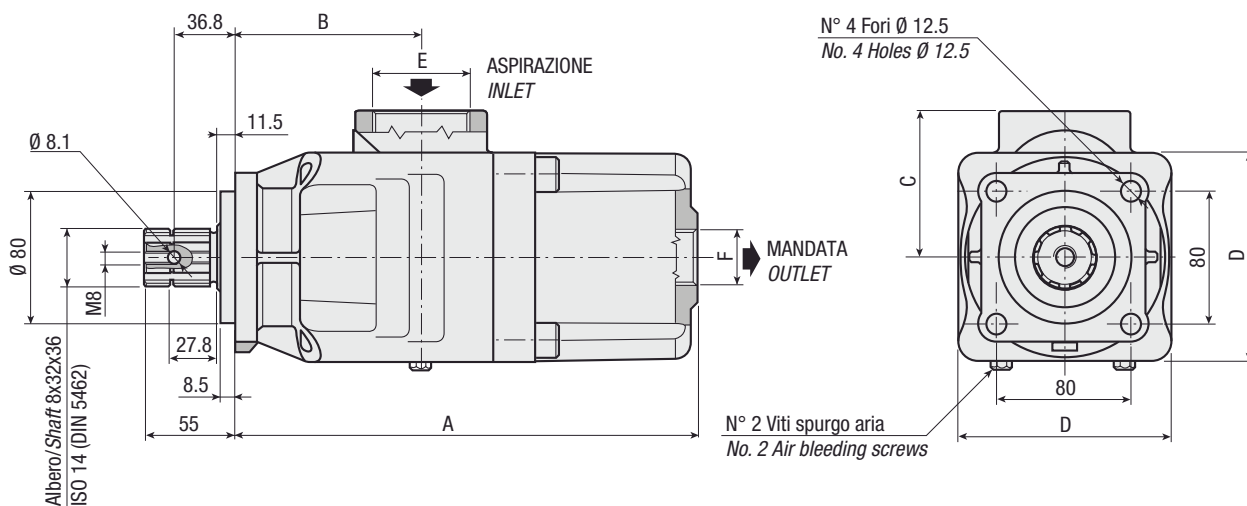


DIN 5462 SE
 PE 70
 PE 80
 PE 90
 PE 100

POMPA A PISTONI/PISTON PUMP

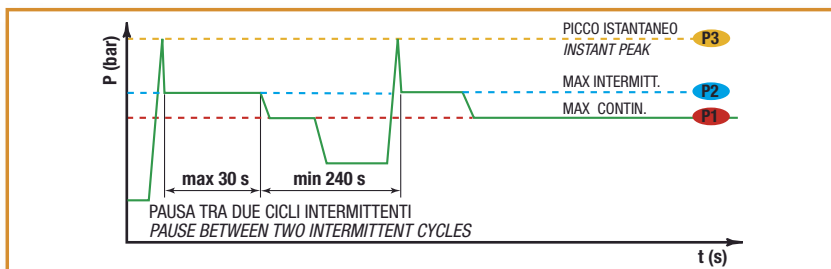
CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 70	201PEC70WSE	263	111	88	125	2"	1"	21.2
PE 80	201PEC80WSE							21.2
PE 90	201PEC90WSE							21.0
PE 100	201PEC98WSE							20.8



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

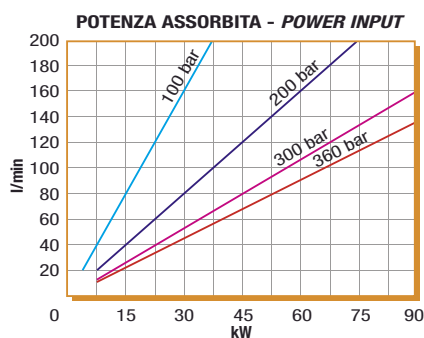
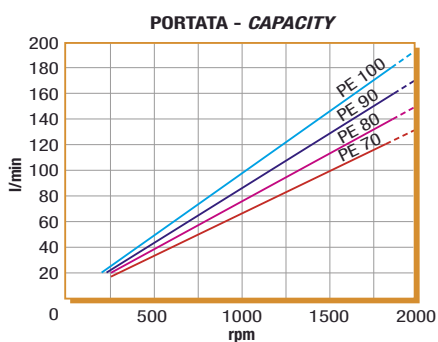


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

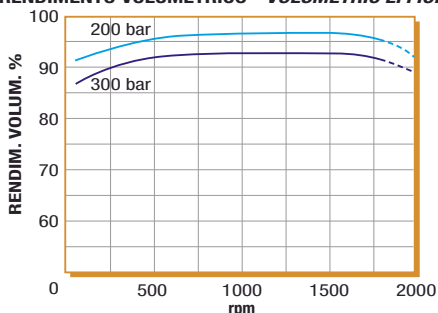
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE		PE70	PE80	PE90	PE100	
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	68.1	77.9	87.6	97.3
Pressione massima continua Max continuous operating pressure	P1	bar	330	300	300	290
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		360	350	350	340
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		450	450	450	450
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	2000	2000	2000	2000
Velocità massima continua Max continuous speed (≤ P1)	n1		1500	1500	1500	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		300	300	300	300

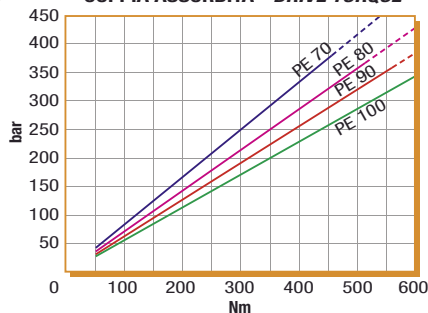


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



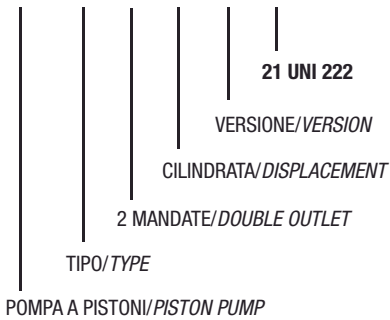
RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

PE

Pompa a Pistoni Piston Pump

CODICE DI ORDINAZIONE - ORDERING CODE

201 PE 2 40 0 00



UNI
21-222

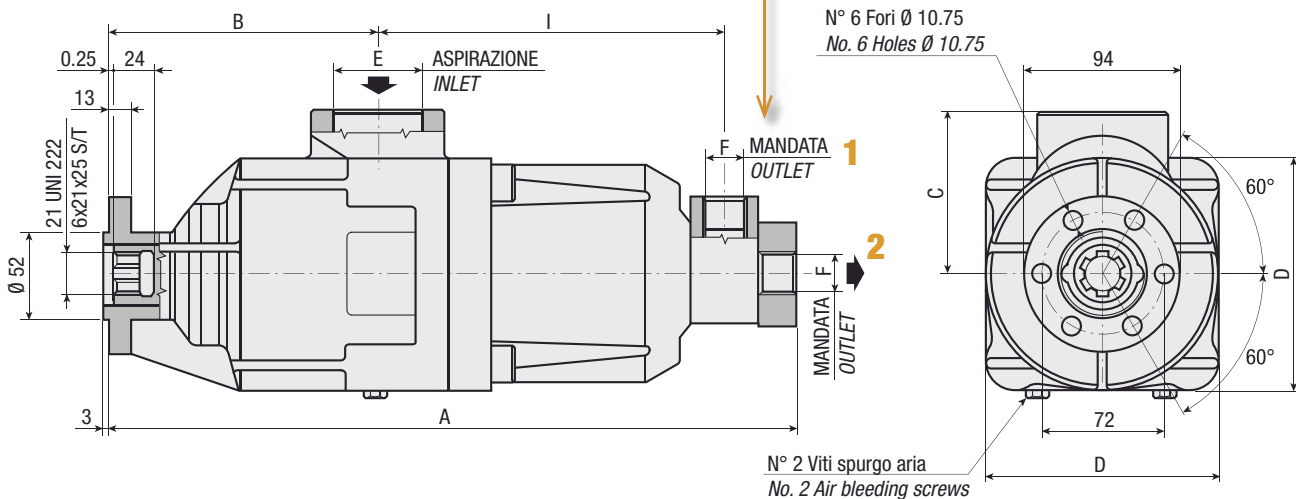
PE 40 + 40
PE 50 + 50



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

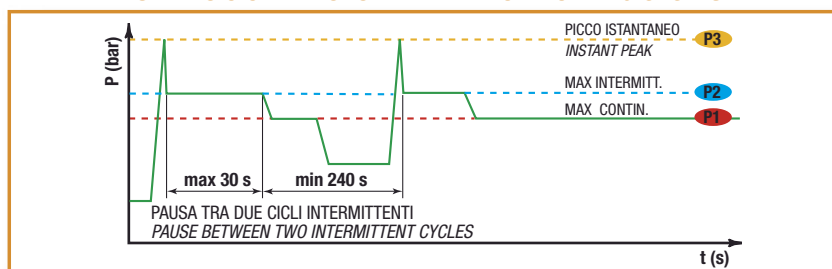
TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	I mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 40 + 40	201PE240000	366	144	98	140	180	2"	3/4"	26.4
PE 50 + 50	201PE250000								25.9

NOTA:
Mandata 1 orientabile (allentando il raccordo mandata 2).
NOTE:
Outlet 1 adjustable (by loosening outlet 2 connector).



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

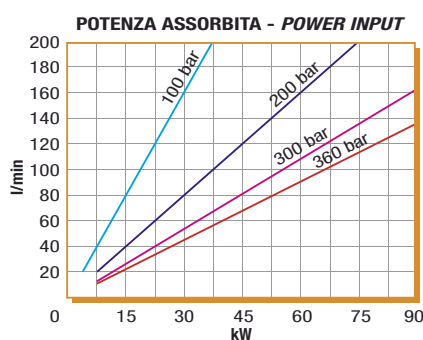
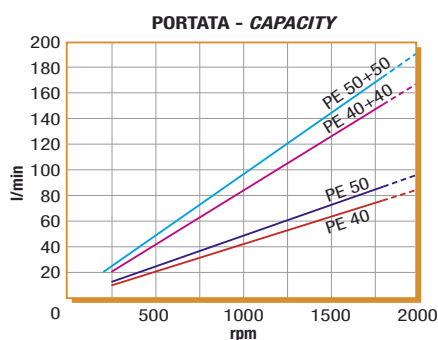


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

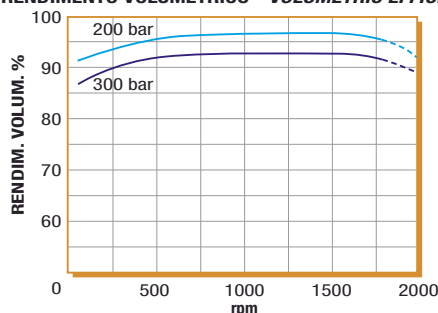
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE			PE40 + 40	PE50 + 50
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	2x37.8	2x47.2
Pressione massima continua Max continuous operating pressure	P1	bar	300	270
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		350	270
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		450	420
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.	2000	2000
Velocità massima continua Max continuous speed (≤ P1)	n1		1500	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		400	300

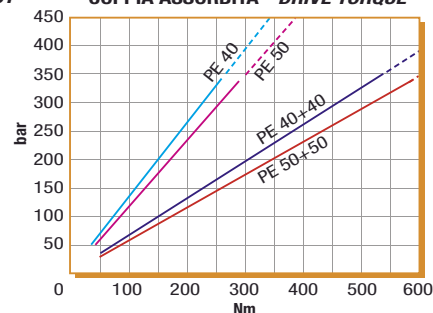


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (ν = 30 cSt)

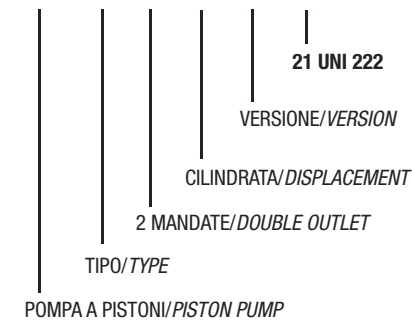
PE

Pompa a Pistoni
Piston Pump



CODICE DI ORDINAZIONE - ORDERING CODE

201 PE 2 40 W SE

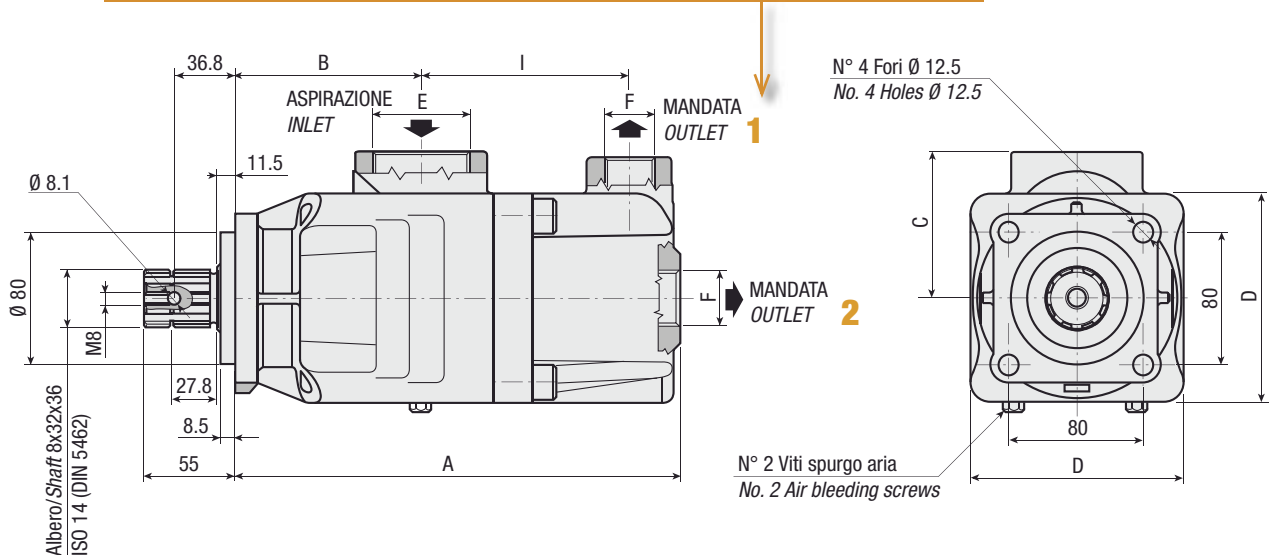


DIN
5 4 6 2
SE
PE 40 + 40
PE 50 + 50

CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

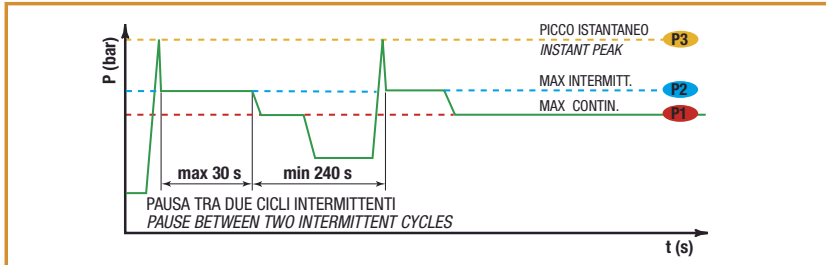
TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	I mm	E ASPIRAZIONE INLET	F MANDATA OUTLET	PESO WEIGHT kg
PE 40 + 40 SE	201PE240WSE	263	111	88	125	124	2"	1"	21.5
PE 50 + 50 SE	201PE250WSE								21.3

NOTA: a richiesta la mandata **1** può essere orientata a $\pm 90^\circ$ o 180° rispetto all'aspirazione.
NOTE: on request outlet **1** can be placed $\pm 90^\circ$ or 180° with reference to the inlet.



DATI TECNICI - TECHNICAL DATA

ESEMPIO CICLI LAVORO - EXAMPLE OF WORKING CYCLES

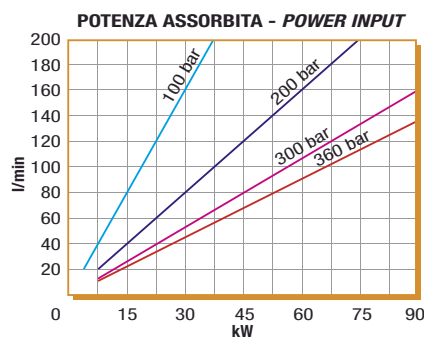
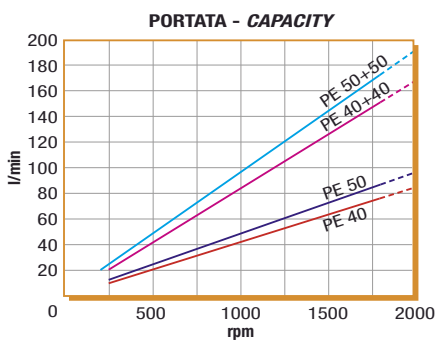


Pressione d'aspirazione: Inlet pressure:	0.7 ÷ 1.5 bar (assoluti/absolute)
Campo viscosità lavoro: Operating viscosity range:	12 ÷ 100 cSt
Temperatura fluido °C (t): Fluid temperature °C (t):	-10° + 80° C

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	12	21/18	40 μm
≥ 200 bar	11	20/17	25 μm

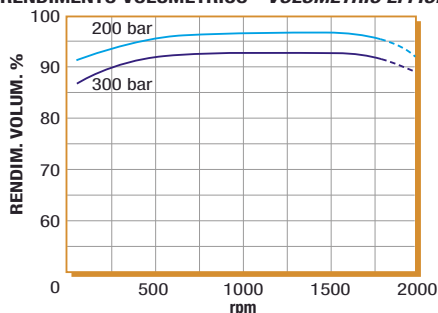
◀ **FILTRAZIONE CONSIGLIATA (ritorno o mandata)**
RECOMMENDED FILTERING (return or outlet)

TIPO - TYPE				PE 40 + 40	PE 50 + 50
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.		2x43.1	2x48.7
Pressione massima continua Max continuous operating pressure	P1	bar		300	290
Pressione massima intermittente Max intermitt. operat. press. (max 30 s)	P2		350	340	
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		450	450	
Velocità massima intermittente Max intermittent speed (P ≤ 20 bar)	n3	n/min r.p.m.		2000	2000
Velocità massima continua Max continuous speed (≤ P1)	n1		1500	1500	
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		400	300	

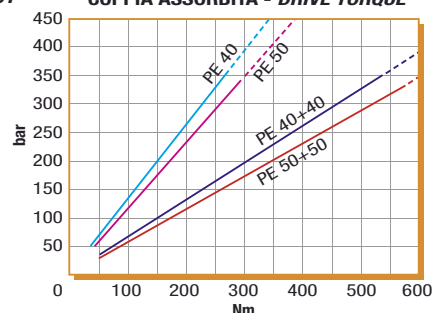


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



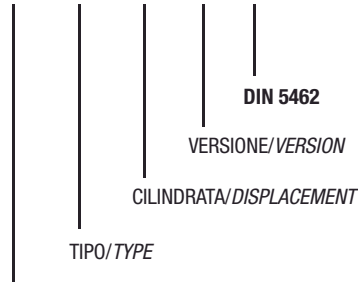
RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C (√= 30 cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C (√=30 cSt)

Asse inclinato REVERSIBILI Bent-axis BIDIRECTIONAL

PAI

CODICE DI ORDINAZIONE - ORDERING CODE

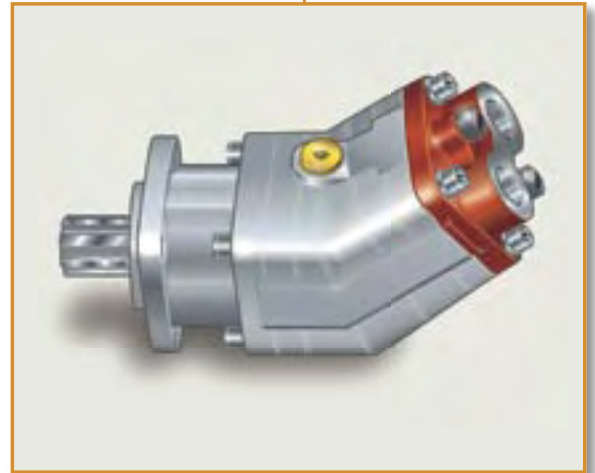
201 PV 030 0 SE



POMPA A PISTONI/PISTON PUMP

DIN 5462 SE PAI 30

Pompa a Pistoni Piston Pump

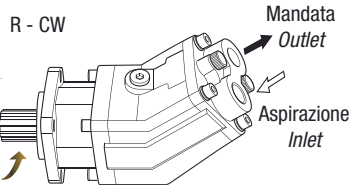


> Nelle pompe a pistoni serie **PAI REVERSIBILI** occorre solo determinare il senso di rotazione, senza smontare il coperchio, procedere come nel disegno a lato:

> In the **REVERSIBLE** piston pumps belonging to the **PAI** series, it is possible to choose the rotation sense without removing the rear cover, for rotation sense change please refer to the drawing:

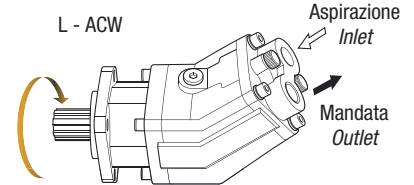
POMPA ROTAZIONE DESTRA
(P.T.O. ROTAZIONE SINISTRA)

CLOCKWISE ROTATING PUMP
(ANTICLOCKWISE ROTATING P.T.O.)



POMPA ROTAZIONE SINISTRA
(P.T.O. ROTAZIONE DESTRA)

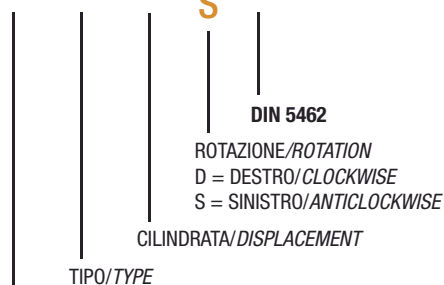
ANTICLOCKWISE ROTATING PUMP
(CLOCKWISE ROTATING P.T.O.)



Asse inclinato MONODIREZIONALI Bent-axis MONODIRECTIONAL

CODICE DI ORDINAZIONE - ORDERING CODE

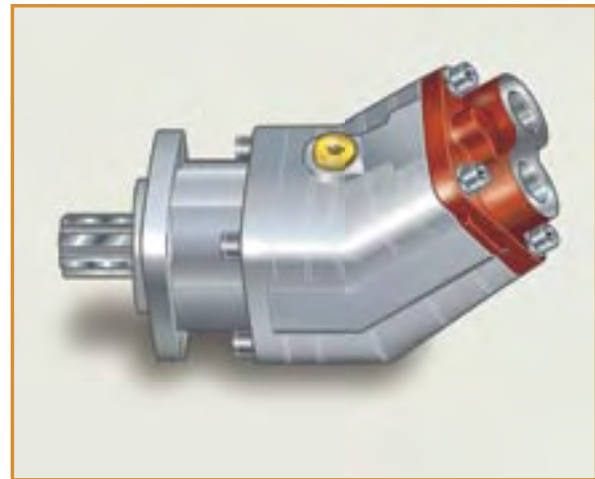
201 PV 043 D S SE



POMPA A PISTONI/PISTON PUMP

PAI

DIN 5462 SE PAI 43 M
PAI 60 M
PAI 80 M
PAI 80 W
INGOMBRI RIDOTTI
REDUCED SIZES



> Pompa PAI MONODIREZIONALE

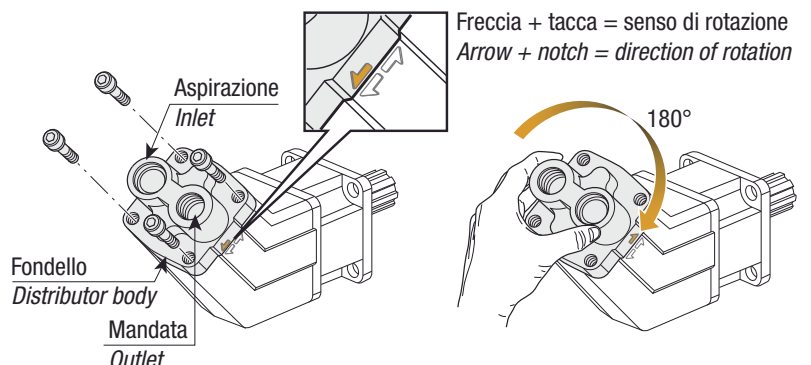
Per invertire il senso di rotazione, togliere le 4 viti e, tenendo accostato il fondello, ruotarlo di 180°. Serrare le 4 viti a 70 ± 5 Nm.

NB: durante l'operazione il fondello non deve mai distaccarsi dal corpo pompa per più di 2 mm.

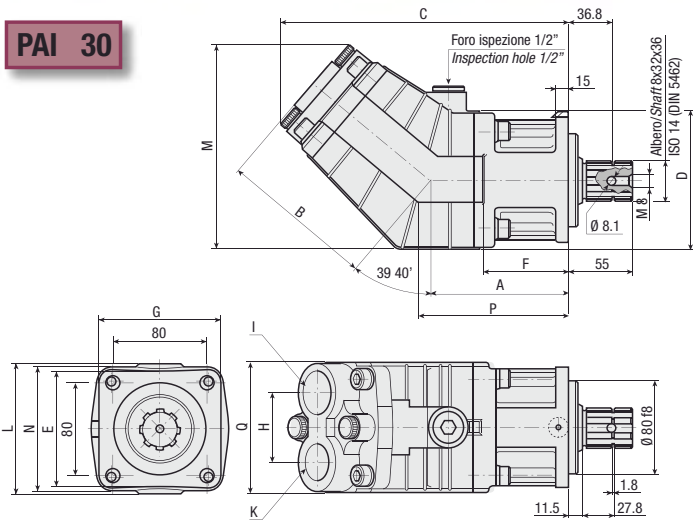
> MONODIRECTIONAL PAI pumps

To change the direction of rotation remove the 4 screws and, keeping the distributor body close to the pump, rotate it by 180°. Tighten the 4 screws at 70 ± 5 Nm.

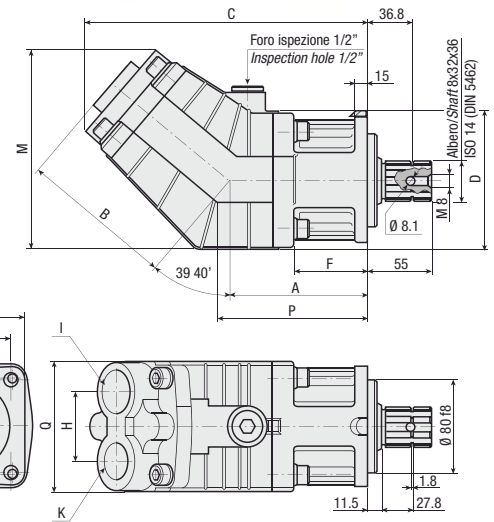
WARNING: during this operation the distributor body must not move away from the pump body more than 2 mm.



PAI 30



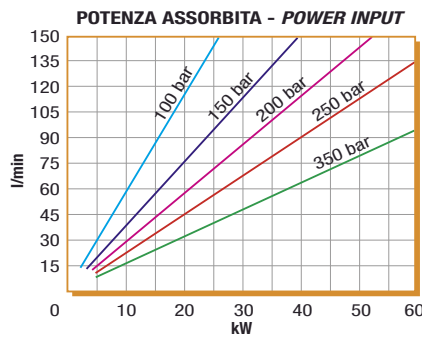
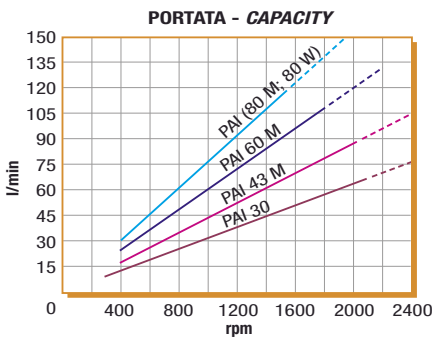
**PAI 43 M
PAI 60 M
PAI 80 M
PAI 80 W**
INGOMBRI RIDOTTI
REDUCED SIZES



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

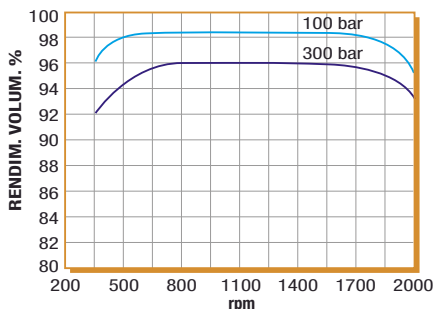
TIPO TYPE	CODICE CODE		A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I	K	L mm	M mm	N mm	P mm	Q mm	PESO WEIGHT kg
PAI 30 (*)	201PV030	0 SE	103	119	217	206	98	55	106	50	3/4" G	3/4" G	106	158	106	110	98	7.2
PAI 43 M	201PV043	D S SE	118	129	240	116	100	60	104	60	1" G	3/4" G	112	174	112	125	112	10
PAI 60 M	201PV060	D S SE	118	129	240	116	100	60	104	60	1" G	3/4" G	112	174	112	125	112	10
PAI 80 M	201PV080	D S SE	126	160	275	135	100	36	102	60	1" 1/4 G	1" G	127	210	120	136	127	15
PAI 80 W INGOMBRI RIDOTTI REDUCED SIZES	201PV08W	D S SE	118	131	242	116	100	60	104	60	1" 1/4 G	1" G	112	175	112	125	112	10

(*) POMPA REVERSIBILE/BIDIRECTIONAL PUMP

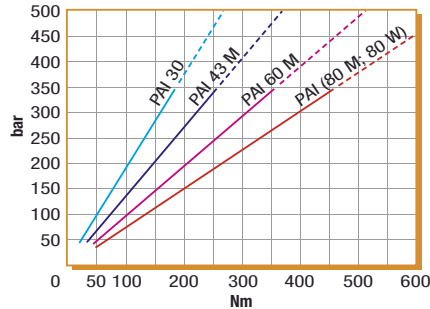


DIAGRAMMI - DIAGRAMS

RENDIMENTO VOLUMETRICO - VOLUMETRIC EFFICIENCY



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C ($\sqrt{v} = 30$ cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C ($\sqrt{v} = 30$ cSt)



Asse inclinato REVERSIBILI
Bent-axis REVERSIBLE

DIN PAI 30
5 4 6 2
SE

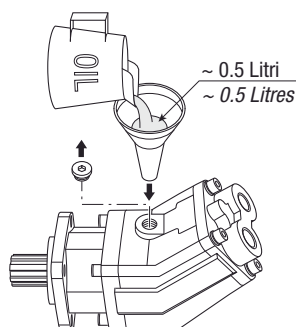
PAI

Asse inclinato MONODIREZIONALI
Bent-axis MONODIRECTIONAL

DIN PAI 43 M
PAI 60 M
5 4 6 2 PAI 80 M
SE PAI 80 W INGOMBRI RIDOTTI
REDUCED SIZES

CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO - TYPE			PAI 30	PAI 43 M	PAI 60 M	PAI 80 M	PAI 80 W <small>INGOMBRI RIDOTTI REDUCED SIZES</small>
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	32.4	43.8	60.2	78.2	77.6
Pressione massima Max operating pressure	P1	bar	350	350	350	350	320
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	450	450	400	400
Velocità massima intermittente Max intermittent speed (P ≤ 30 bar)	n3	n/min r.p.m.	2700	2400	2200	2000	2200
Velocità massima continua Max continuous speed (≤ P1)	n1		2000	1800	1500	1300	1500
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		200	400			
Pressione in aspirazione (assoluta) Suction pressure (absolute)	P	bar	0.7 ÷ 2		0.7 ÷ 2		
Campo di viscosità lavoro Operating viscosity range	√	cST	9 ÷ 75		9 ÷ 75		
Campo di viscosità ottimale Optimal viscosity range	√		15 ÷ 35		15 ÷ 35		
Massima viscosità avviamento Start up max viscosity	√		1000		1000		
Temperatura fluido °C (t) Fluid temperature °C (t)	t	°C	-25 ÷ 80		-25 ÷ 80		



SCELTA DELLE TUBAZIONI - PIPING CHOICE

> In funzione della velocità massima di lavoro prevista. > Has to be done according to the expected max rotation speed under normal working conditions.

VELOCITÀ ROTATION SPEED rpm				PORTATA TEORICA NOMINAL FLOW l/min	ASPIRAZIONE INLET	MANDATA OUTLET
PAI 30	PAI 43 M	PAI 60 M	PAI 80 M PAI 80 W			
≤ 1000	≤ 700	≤ 500	≤ 400	30	Ø 19 (3/4")	Ø 13 (1/2")
≤ 1250	≤ 1000	≤ 660	≤ 500	40	Ø 25 (1")	Ø 13 (1/2")
≤ 1900	≤ 1500	≤ 1000	≤ 750	60	Ø 32 (1 1/4")	Ø 13 (1/2")
-	≤ 2200	≤ 1500	≤ 1100	90	Ø 32 (1 1/4")	Ø 19 (3/4")
-	-	≤ 2200	≤ 1600	130	Ø 38 (1 1/2")	Ø 25 (1")
-	-	-	≤ 2000	160	Ø 45 (2")	Ø 32 (1 1/4")

NOTE:

- > I diametri indicati sono validi per lunghezza di 1 metro, priva di gomiti o strozzature, con pompa installata sottobattente.
- > Tubazioni per alta pressione, flessibili o rigide (acciaio). La tubazione rigida deve avere un segmento flessibile per evitare tensioni fra pompa e macchina.

NOTES:

- > Above diameters refer to a length of 1 meter with no angles nor bottlenecks, with pump mounted below tank level.
- > High pressure pipings can be either flexible or hard (steel). Hard piping must be equipped with a flexible segment to avoid mechanical problems between pump and vehicle.

FILTRAZIONE - FILTERING

- > Si raccomanda filtrazione sul ritorno (o mandata) come da tabella a lato. La filtrazione in aspirazione è sconsigliata in quanto può generare fenomeni di cavitazione. Qualora si rendesse indispensabile, rispettare i valori limite di depressione previsti di -0,3 bar (corrispondente a 0,7 bar assoluti).
- > Filtering on return line (or outlet) recommended. Refer to the side table. A filter on the inlet is not recommended because of possible cavitation problems. If it is necessary, the suction pressure limit of -0,3 bar (corresponding to 0,7 absolute bar) must be respected.

IN RITORNO O IN MANDATA - RETURN LINE OR OUTLET

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter βx = 75
	NAS 1638	ISO 4406	
≤ 200 bar	10	19/16	25 μm
< 300 bar	9	18/15	20 μm
≥ 300 bar	8	17/14	10 μm

RACCORDERIA - FITTINGS

- > Avvitare sulla pompa raccordi GAS-CILINDRICO (BSP) a tenuta frontale. **NON** applicare raccordi con filettatura conica (NPT).
- > Make use of cylindric gas-fittings (BSP) with O-ring, bonded-seal on the pump. Do **NOT** use fittings with conical thread (NPT).

TEMPERATURA FLUIDO °C (t) FLUID TEMPERATURE °C (t)	Olio idraulico minerale ad alto indice di viscosità (I.V. ≥100). La classe di viscosità ISO-VG va scelta in funzione della t °C di lavoro. Vedi tabella: Make use of high viscosity index (I.V. ≥100) mineral hydraulic oil. ISO-VG viscosity class must be chosen according to the working temperature (t °C). Please refer to the table:				
	VG 10 - 15	VG 22	VG 32	VG 46	VG 68
Temperatura minima di avviamento Min start up temperature	- 30° C	- 20° C	- 10° C	- 5° C	0° C
Temperatura minima di lavoro Min operating temperature	0° C	+ 10° C	+ 20° C	+ 30° C	+ 40° C
Temperatura massima di lavoro Max operating temperature	+ 50° C	+ 65° C	+ 80° C	+ 80° C	+ 80° C
Temperatura ottimale di lavoro Optimal operating temperature	+ 15° C	+ 35° C	+ 45° C	+ 50° C	+ 60° C

NOTE:

1) L'avviamento si intende a bassa velocità (~500 rpm), senza carico ad intervalli.

2) SOLO PER PAI 30

Sono ammessi oli a base vegetale, purché omologati dal costruttore. Gli oli ininfiammabili HFA-HFB non sono ammessi. Per gli oli HFC-D consultare il costruttore.

NOTES:

1) Start up must be done at low speed (~500 rpm) sunloaded, at intervals.

2) ONLY FOR PAI 30

Vegetal base oils are admitted, if homologated by manufacturer. HFA-HFB oil types are not admitted. For HFC-D oil type please check manufacturer.

PAI 30 UTILIZZO COME MOTORE - USE LIKE AN HYDRAULIC MOTOR

- > Collegare l'attacco di drenaggio (foro ispezione 1/2" Gas sul corpo) al serbatoio, senza filtri, sottobattente. La pompa-motore contempla le medesime caratteristiche funzionali.
- > Connect drainage outlet (inspection hole 1/2" gas on pump housing) to tank, without filters, below tank level. Pump in a motor-like configuration keeps same functional specifications.

Asse inclinato MONODIREZIONALI
Bent-axis MONODIRECTIONAL

FOX

CODICE DI ORDINAZIONE - ORDERING CODE

201 **FX** 025 **D** **S** **SE**

TIPO/TYPE
POMPA A PISTONI/PISTON PUMP

CILINDRATA/DISPLACEMENT

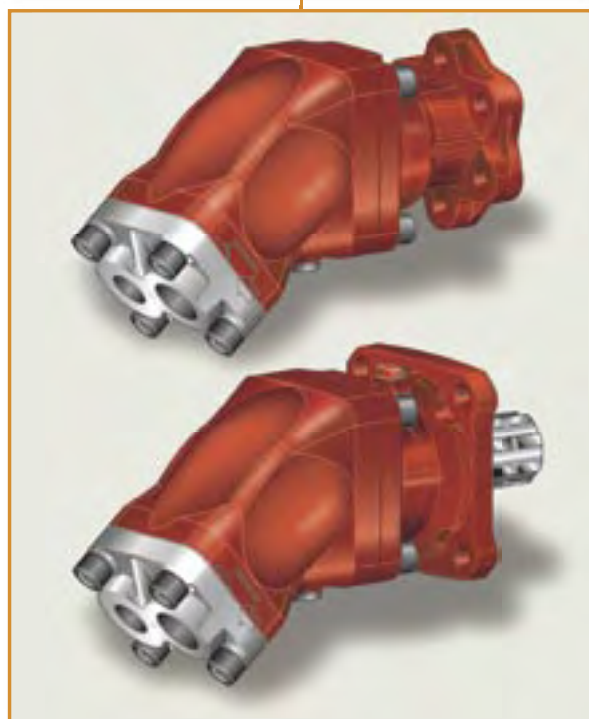
ROTAZIONE/ROTATION
D = DESTRO/CLOCKWISE
S = SINISTRO/ANTICLOCKWISE

00 = 21 UNI 222
SE = DIN 5462

UNI FOX 12
FOX 16
21-222 FOX 25

DIN FOX 12
5 4 6 2 FOX 16
SE FOX 25

Pompa a Pistoni Piston Pump

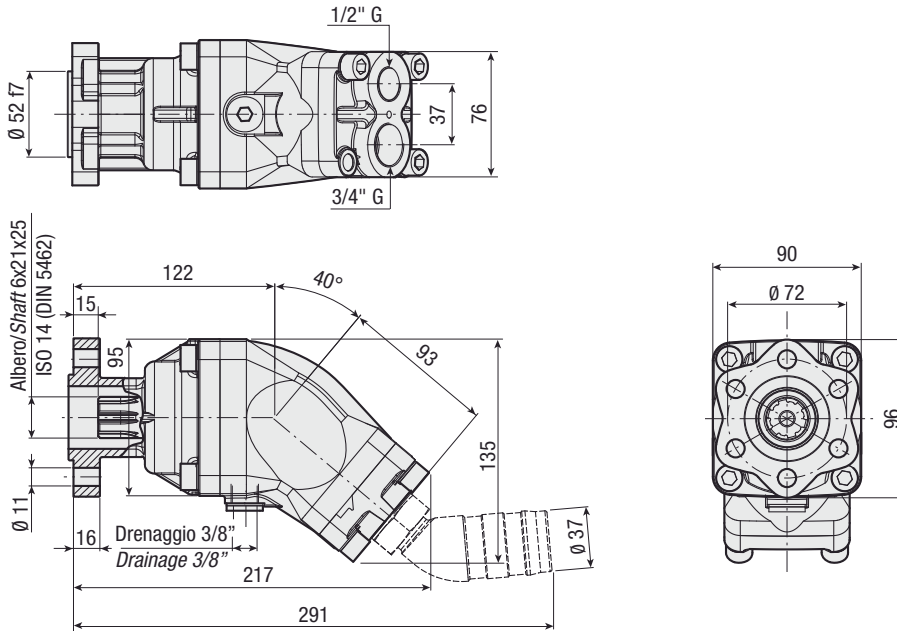


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO - TYPE			FOX 12	FOX 16	FOX 25
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	12.01	16.81	25.61
Pressione massima Max operating pressure	P1	bar	450	450	450
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	500	500
Velocità massima intermittente Max intermittent speed (P ≤ 30 bar)	n3	n/min r.p.m.	3100	3100	3000
Velocità massima continua Max continuous speed (≤ P1)	n1		2800	2800	2600
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		300		
Pressione in aspirazione (assoluta) Suction pressure (absolute)	P	bar	0.7 ÷ 1.5		
Campo di viscosità lavoro Operating viscosity range	✓	cST	9 ÷ 75		
Campo di viscosità ottimale Optimal viscosity range	✓		15 ÷ 46		
Massima viscosità avviamento Start up max viscosity	✓		1000		
Temperatura fluido °C (t) Fluid temperature °C (t)	t	°C	-25 ÷ 80		

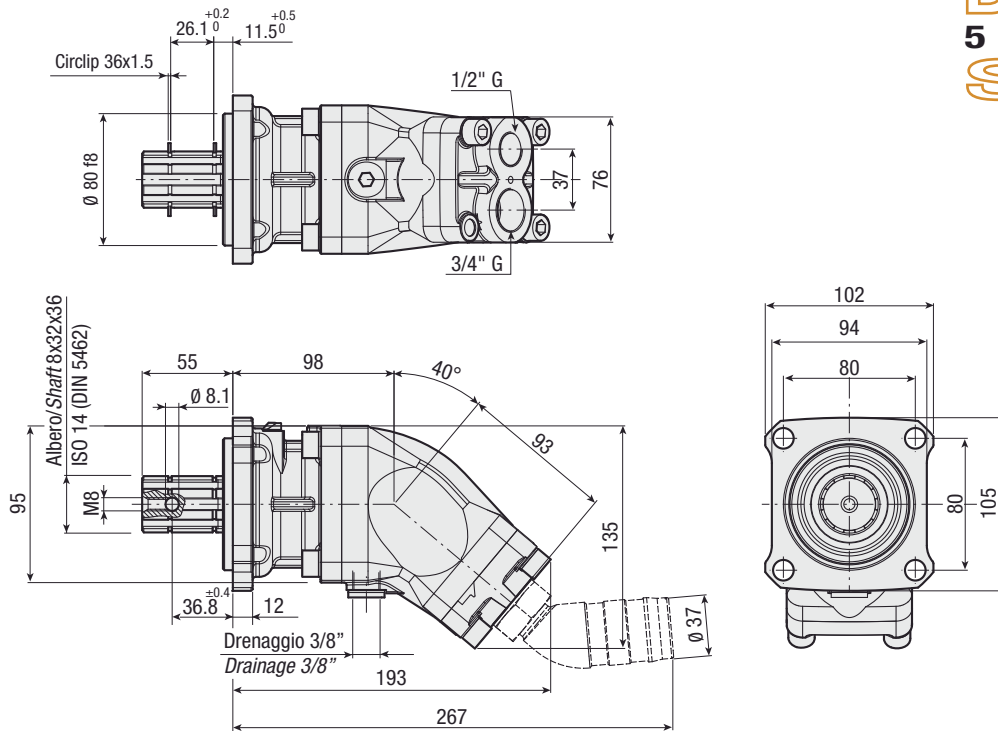
DIMENSIONI - DIMENSIONS

UNI
21-222



DIMENSIONI - DIMENSIONS

DIN
5462
SE



Asse inclinato MONODIREZIONALE
Bent-axis MONODIRECTIONAL

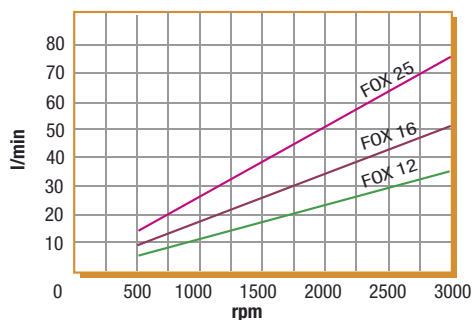
FOX 12

FOX 16

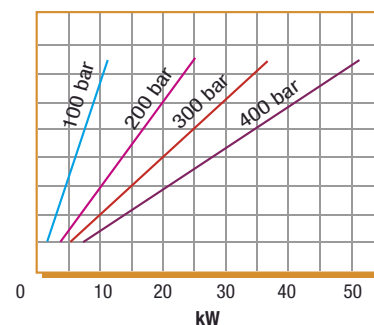
FOX 25

DIAGRAMMI - DIAGRAMS

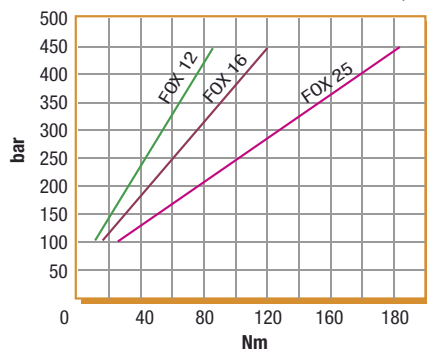
PORTATA - CAPACITY



POTENZA ASSORBITA - POWER INPUT



COPPIA ASSORBITA - DRIVE TORQUE



RILIEVI ESEGUITI CON OLIO
ISO VG 46 A 50° C ($\nu = 30$ cSt)
THE ABOVE SPECIFICATIONS
REFER TO OIL TYPE ISO
VG 46 AT 50° C ($\nu = 30$ cSt)

FILTRAZIONE - FILTERING

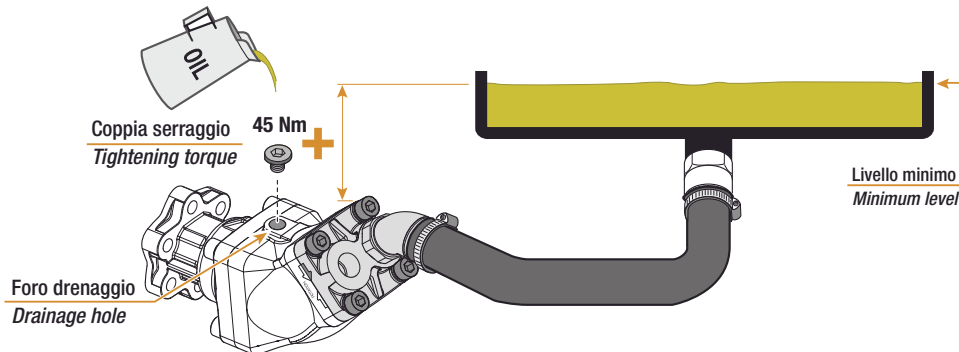
- > Si raccomanda filtrazione sul ritorno (o mandata) come da tabella a lato.
La filtrazione in aspirazione è sconsigliata in quanto può generare fenomeni di cavitazione. Qualora si rendesse indispensabile, rispettare i valori limite di depressione previsti di -0,3 bar (corrispondente a 0,7 bar assoluti).
- > *Filtering on return line (or outlet) recommended. Refer to the side table.*
A filter on the inlet is not recommended because of possible cavitation problems. If it is necessary, the suction pressure limit of -0,3 bar (corresponding to 0,7 absolute bar) must be respected.

Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter $\beta_x = 75$
	NAS 1638	ISO 4406	
≤ 200 bar	10	19/16	25 μm
< 300 bar	9	18/15	20 μm
≥ 300 bar	8	17/14	10 μm

RACCORDERIA - FITTINGS

- > Avvitare sulla pompa raccordi GAS-CILINDRICO (BSP) a tenuta frontale. **NON** applicare raccordi con filettatura conica (NPT).
- > *Make use of cylindric gas-fittings (BSP) with O-ring, bonded-seal on the pump. Do **NOT** use fittings with conical thread (NPT).*

NORME PER L'INSTALLAZIONE - INSTALLATION INSTRUCTIONS

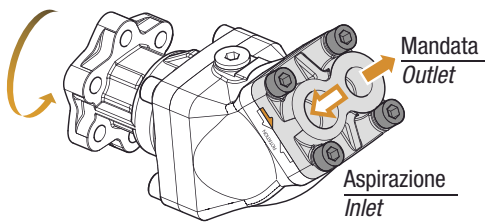


PRIMA DELL'AVVIAMENTO ASSICURARSI CHE LA POMPA SIA RIEMPIA D'OLIO O SPURGANDO L'ARIA DAL FORO DI DRENAGGIO O RIEMPENDOLA PREVENTIVAMENTE.

BEFORE STARTING UP MAKE SURE THAT THE PUMP IS FILLED WITH OIL, EITHER BY BLEEDING THE AIR THROUGH THE DRAINAGE HOLE OR BY FILLING THE PUMP UP PREVIOUSLY.

**Il mancato rispetto della norma può provocare danneggiamenti alla pompa.
Failing to observe this rule may cause damages to the pump.**

SENSO DI ROTAZIONE/CAMBIO ROTAZIONE - DIRECTION OF ROTATION/CHANGE OF ROTATION

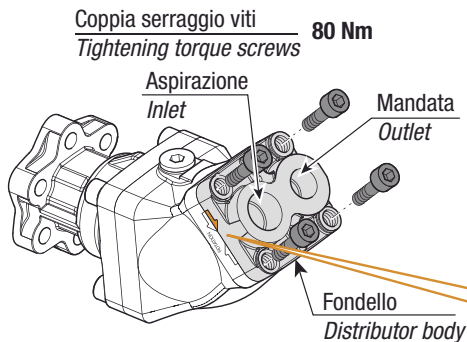


Determinazione senso di rotazione.

Choosing the direction of rotation.

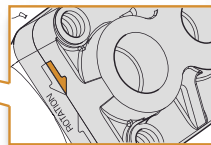
POMPA ROTAZIONE DESTRA
(P.T.O. ROTAZIONE SINISTRA)

CLOCKWISE ROTATING PUMP
(ANTICLOCKWISE ROTATING P.T.O.)



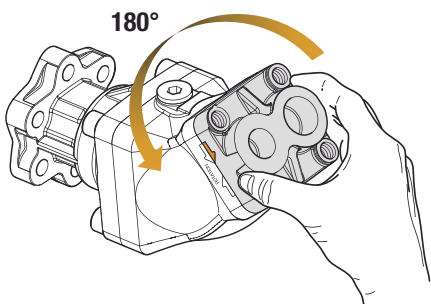
Per invertire il senso di rotazione, togliere le 4 viti e, tenendo accostato il fondello, ruotarlo di 180°.
Serrare le 4 viti a 80 ± 5 Nm.

To change the direction of rotation remove the 4 screws and, keeping the distributor body close to the pump, rotate it by 180°.
Tighten the 4 screws at 80 ± 5 Nm.



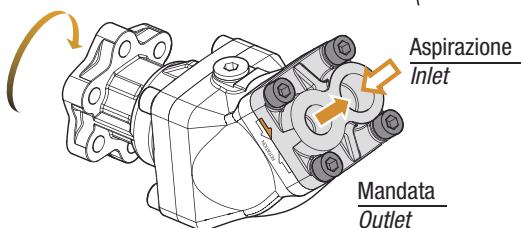
FRECCIA + TACCA = SENSO DI ROTAZIONE

ARROW + NOTCH = DIRECTION OF ROTATION



NB: durante l'operazione il fondello non deve mai distaccarsi dal corpo pompa per più di 2 mm.

WARNING: during this operation the distributor body must not move away from the pump body more than 2 mm.



POMPA ROTAZIONE SINISTRA
(P.T.O. ROTAZIONE DESTRA)

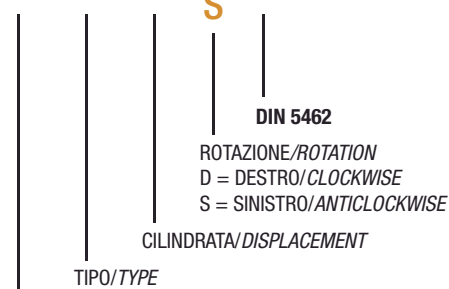
ANTICLOCKWISE ROTATING PUMP
(CLOCKWISE ROTATING P.T.O.)

Asse inclinato MONODIREZIONALI
Bent-axis MONODIRECTIONAL

FOX

CODICE DI ORDINAZIONE - ORDERING CODE

201 FX 034 D S SE



POMPA A PISTONI/PISTON PUMP

DIN
5 4 6 2
SE

FOX 34
FOX 47
FOX 64
FOX 84
FOX 108

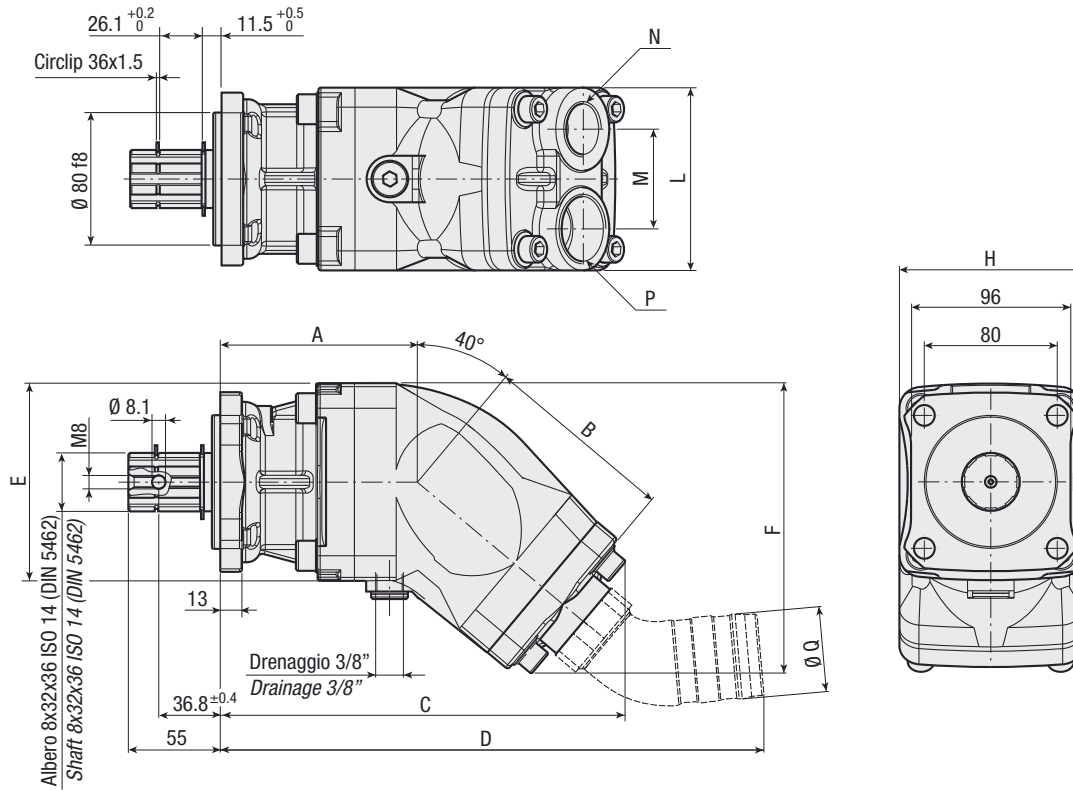
Pompa a Pistoni Piston Pump



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO - TYPE			FOX 34	FOX 47	FOX 64	FOX 84	FOX 108
Cilindrata Displacement	Vg	cm ³ /n cm ³ /rev.	34.60	47.39	64.08	84.38	107.70
Pressione massima Max operating pressure	P1	bar	450	450	450	400	350
Pressione massima di picco Max peak pressure (≤ 0.1 s)	P3		500	500	500	450	400
Velocità massima intermittente Max intermittent speed (P ≤ 30 bar)	n3	n/min r.p.m.	3000	2600	2500	2400	2200
Velocità massima continua Max continuous speed (≤ P1)	n1		2400	2100	2000	1900	1700
Velocità minima intermittente Min intermittent speed (≤ P2 x 0.5) (max 30 s)	n4		300				
Pressione in aspirazione (assoluta) Suction pressure (absolute)	P	bar	0.7 ÷ 1.5				
Campo di viscosità lavoro Operating viscosity range	√	cST	9 ÷ 75				
Campo di viscosità ottimale Optimal viscosity range	√		15 ÷ 46				
Massima viscosità avviamento Start up max viscosity	√		1000				
Temperatura fluido °C (t) Fluid temperature °C (t)	t	°C	-25 ÷ 80				

DIMENSIONI - DIMENSIONS



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M mm	MANDATA OUTLET N	ASPIRAZIONE INLET		PESO WEIGHT kg
													P	Q mm	
FOX 34	201FX034 D S S	109	113	220	308	107	157	107.5	102	95	46	3/4" G	1" G	45	10.5
FOX 47	201FX047 D S S	109	113	220	308	107	157	107.5	102	95	46	3/4" G	1" G	45	10.5
FOX 64	201FX064 D S S	118	128	240	328	118	173	107.5	110	110	60	1" G	1" 1/4 G	51	13.5
FOX 84	201FX084 D S S	118	128	240	328	118	173	107.5	110	110	60	1" G	1" 1/4 G	51	13.5
FOX 108	201FX108 D S S	118	128	240	328	118	173	107.5	110	110	60	1" G	1" 1/4 G	51	13.5

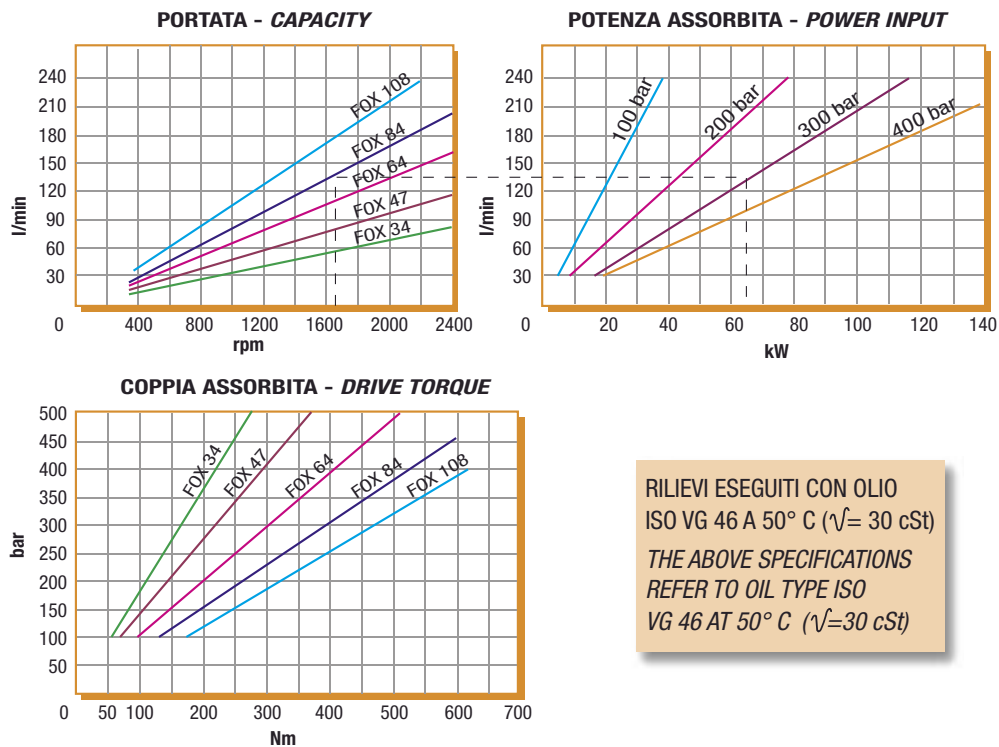
Asse inclinato MONODIREZIONALI
Bent-axis MONODIRECTIONAL

FOX

DIN
5 4 6 2
SE

FOX 34
FOX 47
FOX 64
FOX 84
FOX 108

DIAGRAMMI - DIAGRAMS



FILTRAZIONE - FILTERING

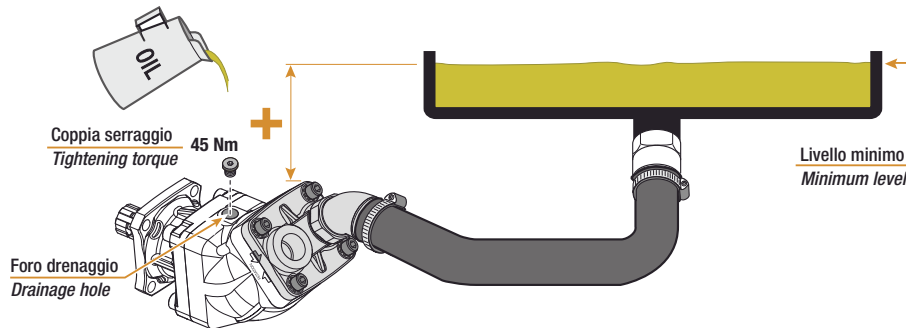
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Pressione Lavoro Working Press. P2	Contaminazione - Contamination		Filtro - Filter $\beta_x = 75$
	NAS 1638	ISO 4406	
≤ 200 bar	10	19/16	25 μm
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NORME PER L'INSTALLAZIONE - INSTALLATION INSTRUCTIONS

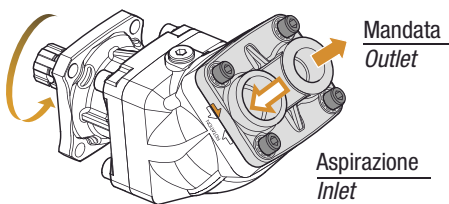


PRIMA DELL'AVVIAMENTO ASSICURARSI CHE LA POMPA SIA RIEMPITA D'OLIO O SPURGANDO L'ARIA DAL FORO DI DRENAGGIO O RIEMPENDOLA PREVENTIVAMENTE.

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SENSO DI ROTAZIONE/CAMBIO ROTAZIONE - DIRECTION OF ROTATION/CHANGE OF ROTATION



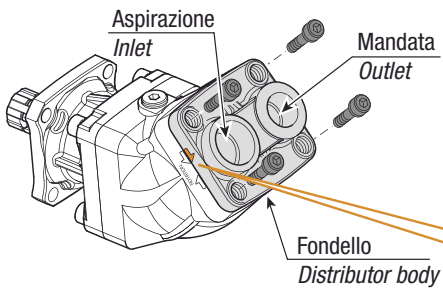
Determinazione senso di rotazione.

Choosing the direction of rotation.

POMPA ROTAZIONE DESTRA
(P.T.O. ROTAZIONE SINISTRA)

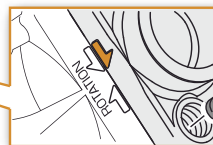
CLOCKWISE ROTATING PUMP
(ANTICLOCKWISE ROTATING P.T.O.)

**Coppia serraggio viti 80 Nm
Tightening torque screws**



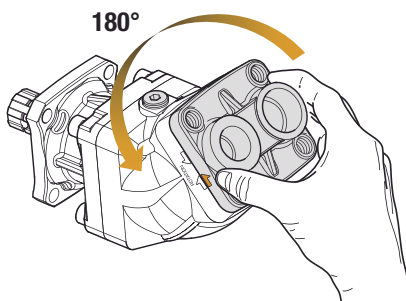
Per invertire il senso di rotazione, togliere le 4 viti e, tenendo accostato il fondello, ruotarlo di 180°.
Serrare le 4 viti a 80 ± 5 Nm.

To change the direction of rotation remove the 4 screws and, keeping the distributor body close to the pump, rotate it by 180°.
Tighten the 4 screws at 80 ± 5 Nm.



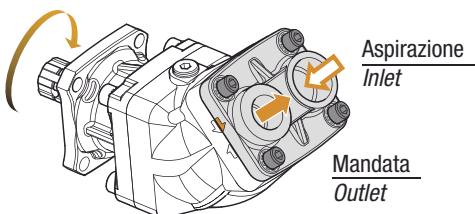
**FRECCIA + TACCA =
SENSO DI ROTAZIONE**

**ARROW + NOTCH =
DIRECTION OF ROTATION**



NB: durante l'operazione il fondello non deve mai distaccarsi dal corpo pompa per più di 2 mm.

WARNING: during this operation the distributor body must not move away from the pump body more than 2 mm.



POMPA ROTAZIONE SINISTRA
(P.T.O. ROTAZIONE DESTRA)

ANTICLOCKWISE ROTATING PUMP
(CLOCKWISE ROTATING P.T.O.)

DISTRIBUTORI IDRAULICI *HYDRAULIC DISTRIBUTORS*



DISTRIBUTORI IDRAULICI

I nostri distributori idraulici sono il perfetto risultato di una profonda conoscenza delle necessità di controllo nella gestione delle operazioni di sollevamento e abbassamento dei cassoni ribaltabili nei veicoli industriali.

Studiati e sviluppati nelle varie grandezze, i nostri distributori idraulici sono prodotti per poter rispondere alle richieste di tutte le classi di veicoli, dai più piccoli da 3,5 tonnellate sino ai più grossi veicoli cava-cantiere o per applicazioni nelle miniere. La continua collaborazione con i più importanti costruttori del settore ci permette di offrire alla nostra clientela prodotti sempre all'avanguardia per scelte tecniche e costruttive.

HYDRAULIC DISTRIBUTORS

The Hydrocar hydraulic distributors represent the perfect result of a long experience in the field of functional controls for raising and lowering tippers on industrial vehicles.

Conceived and developed for different duties, our distributors can be installed on all classes of vehicles, from the smallest 3.5 T, to the biggest tipper or dumper vehicles used in mines and yard. The constant cooperation with the most important fitters of tilting bodies allows us to offer our Customers always updated products in technical and manufacturing matters.



DME 26

Distributore Idraulico
Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

D26F 1 0 01 1 0 0

0 = NO PRESSOSTATO/NO PRESSURE SWITCH
3 = 3 bar PRESSOSTATO/PRESSURE SWITCH 3 bar
7 = 7 bar PRESSOSTATO/PRESSURE SWITCH 7 bar

0 = SENZA FINE CORSA/WITHOUT END-OF-STROKE
F = FINE CORSA MECC./MECHANICAL END-OF-STROKE

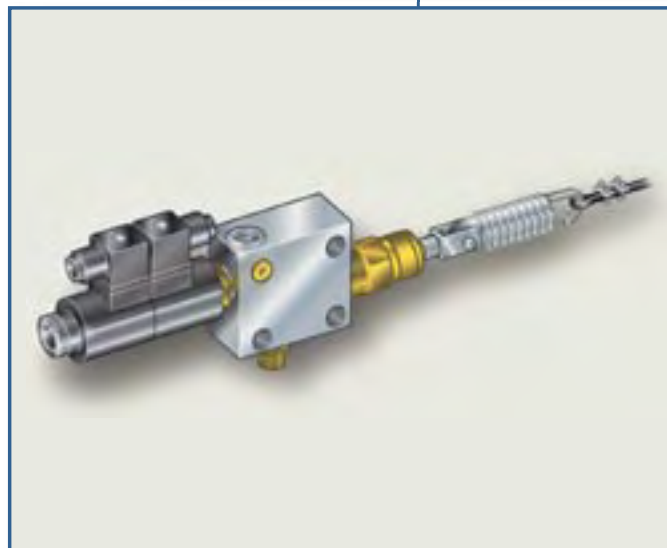
RACCORDO D'ENTRATA/INLET GAUGE
1 = 3/8" GAS STANDARD (ATTACCO MASCHIO/MALE PORT)

TARATURA VALVOLA MASSIMA PRESSIONE/PRES. RELIEF VALVE SETTING
01 ÷ 35 MPa (10-350 bar) senza fine corsa/without end-of-stroke
05 ÷ 20 MPa (50-200 bar) con fine corsa/with end-of-stroke

SOLO DISCESA VELOCE/FAST LOWERING ONLY

1 = 12 V DC 2 = 24 V DC

MODELLO/MODEL



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

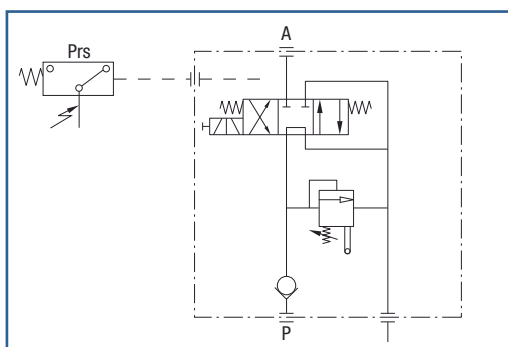
VERSIONE STANDARD (senza fine corsa) STANDARD VERSION (without end-of-stroke)	
Portata massima Flow max	25 l/min
Pressione massima di lavoro Max working pressure	315 bar

VERSIONE (con fine corsa) VERSION (with end-of-stroke)	
Portata massima Flow max	15 l/min
Pressione massima di lavoro Max working pressure	200 bar

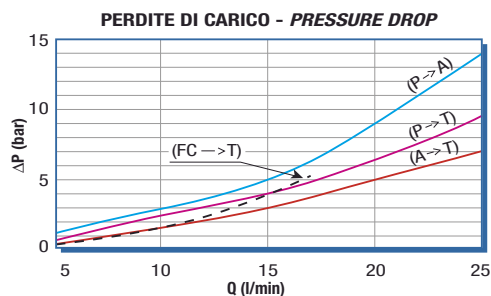
CARATTERISTICHE COMUNI GENERAL SPECIFICATIONS			
Pressione massima di picco (resistenza allo scoppio) Max peak pressure (bursting strength)		< 0.1 s	475 bar
Campo viscosità Viscosity range	12-100 cSt	Filtrazione/Filtering ISO 4406 $\beta_x=75$	20/17 25 μm
Pressione massima su T Max pressure on the T	30 bar	Peso Weight	1.9 kg
Temperatura fluido °C (t) Fluid temperature °C (t)	-25° +80° C	Fluido olio minerale Mineral oil	ISO VG 46

- > Distributore elettrico da 25 l/min per veicoli ribaltabili con sola motrice.
- > Consente la **salita** e la **discesa**.
- > In posizione di riposo la mandata ricircola a serbatoio e l'utenza **A** è chiusa.
- > Sono incorporate le **valvole di ritegno e controllo pressione** in **P**.
- > Flangiabile a **serbatoio**.
- > **Pressostato e/o tirante per fine corsa** A RICHIESTA (vedi codifica).

- > Electrical operated 25 l/min distributor for tipping vehicles with tractor only.
- > It allows **tipping** and **lowering**.
- > In neutral position the oil outlet is open to oil tank and the port **A** is closed.
- > Port **P** **check** and adjustable **relief valves** are included.
- > Flange connection to **tank**.
- > **Pressure switch** and/or **end-of-stroke rope** ON REQUEST (ordering code).

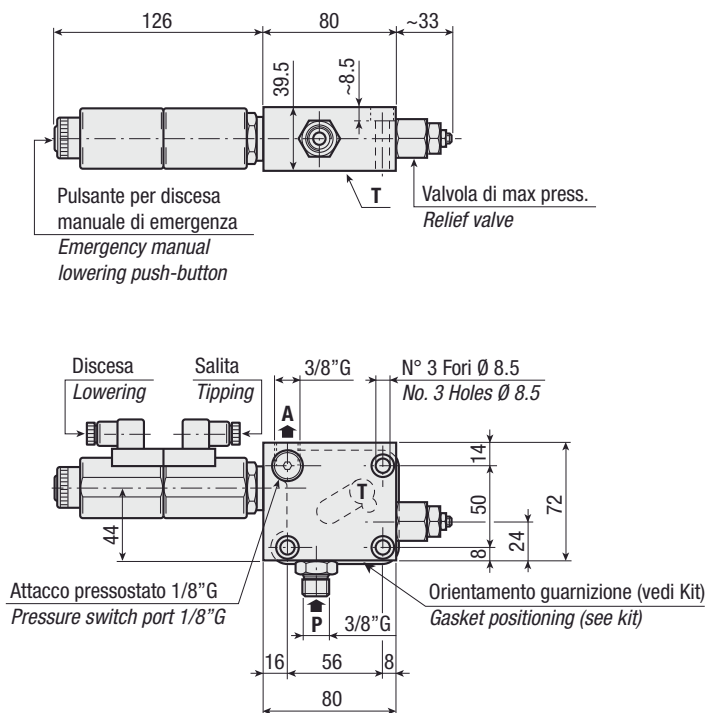


mod. DME 26

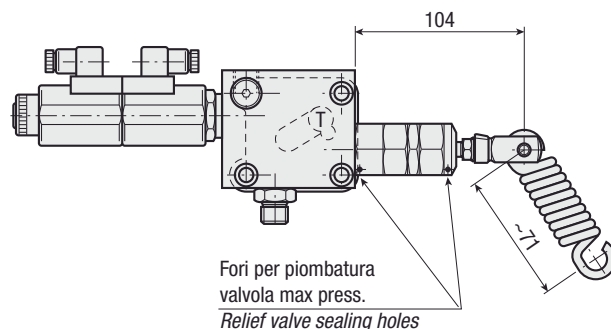


RILIEVI ESEGUITI CON OLIO ISO VG 46 A 20° C ($\nu=135$ cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 20° C ($\nu=135$ cSt)

VERSIONE STANDARD SENZA FINE CORSA
STANDARD VERSION WITHOUT END-OF-STROKE mod. DME 26



VERSIONE CON FINE CORSA
VERSION WITH END-OF-STROKE mod. DME 26



Pressostato con guarnizione
 Coppia di serraggio: 30 ± 5 Nm
 Pressure switch with washer
 Tightening torque: 30 ± 5 Nm

PRESSOSTATO A RICHIESTA UPON REQUEST PRESSURE SWITCH	
Pressostato con intervento 3 bar consigliato per pressioni di lavoro Pressure switch set at 3 bar advised for working pressure	< 150 bar
Pressostato con intervento 7 bar consigliato per pressioni di lavoro Pressure switch set at 7 bar advised for working pressure	> 150 bar

KIT PER FISSAGGIO AL SERBATOIO - TANK MOUNTING KIT

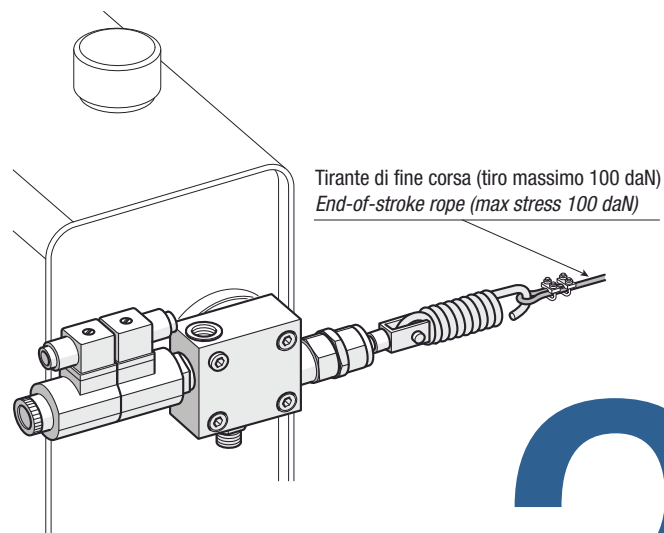
DESCRIZIONE DESCRIPTION	CODICE CODE
Per serbatoio metallico senza piastra For steel tank without flange	30KDF110000
Per serbatoio metallico HYDROCAR "SO" For HYDROCAR "SO" steel tank	30KFSOP3000
Per serbatoio in plastica HYDROCAR "SOP" For HYDROCAR "SOP" plastic tank	30KFSOP3000

> Accessori elettrici a richiesta per DME 26

CODICE: 7PUL0200000, pulsantiera cablaggi DAILY S2000
 CODICE: 7PUL0400000, pulsantiera cablaggi standard
 CODICE: 133KE015000, cablaggio distributore/pulsantiera

> Electric optional for DME 26

CODE: 7PUL0200000, wiring push-button panel DAILY S2000
 CODE: 7PUL0400000, wiring push-button panel standard
 CODE: 133KE015000, distributor/push-button wiring



DM 40

Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

DM40 C 0 08 1 00

DM C 40

DM P 40

00 = FINE CORSA MECCANICO/MECHANICAL END-OF-STROKE

RACCORDO D'ENTRATA/INLET GAUGE
1 = 1/2" GAS STANDARD (ATTACCO MASCHIO/MALE PORT)

TARATURA VALVOLA MASSIMA PRESSIONE/PRESSURE RELIEF VALVE SETTING
08 ÷ 30 MPa (80-300 bar)

SOLO DISCESA VELOCE/FAST LOWERING ONLY
DM C 40 = MECCANICO/MECHANICAL
DM P 40 = PNEUMATICO/PNEUMATICAL

COMANDO MECCANICO/MECHANICAL CONTROL

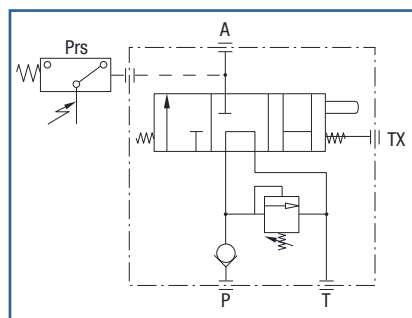
MODELLO/MODEL



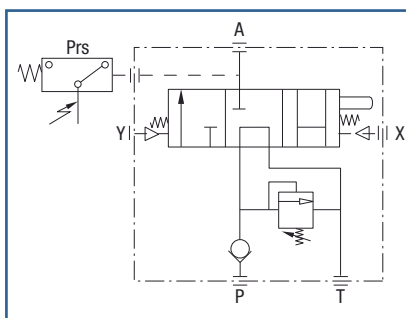
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Portata nominale Flow rate	40 l/min	Temperatura fluido °C (t) Fluid temperature °C (t)	-25° + 80°C
Pressione massima di lavoro Max working pressure	300 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	450 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Pressione massima sul T T port max pressure	30 bar	Peso Weight	2 kg
Fluido olio minerale Mineral oil	ISO VG 46	Pressione pneumatica di lavoro Pneumatical working pressure	5 - 10 bar

- > **DM M 40** distributore da 40 l/min a comando meccanico (a cavo) per veicoli ribaltabili con sola motrice.
- > **DM P 40** distributore da 40 l/min a comando pneumatico per veicoli ribaltabili con sola motrice.
- > Consente la **salita** e la **discesa** veloce.
- > In posizione di riposo la mandata ricircola a serbatoio e l'utenza **A** è chiusa.
- > **Ricentraggio a molla.**
- > Sono incorporate le **valvole di ritegno** e **controllo pressione** in **P**.
- > Disponibile con o senza **tirante per fine corsa**.
- > Flangiabile a **serbatoio** o a **telaio**.
- > Attacco per **pressostato**.
- > **DM M 40** mechanical (operated through cable) 40 l/min distributor for tipping vehicles with tractor only.
- > **DM P 40** pneumatical 40 l/min distributor for tipping vehicles with tractor only.
- > It allows **tipping** and **fast lowering**.
- > In neutral position the oil outlet is open to oil tank and the port **A** is closed.
- > **Recentering through spring.**
- > Port **P** check and adjustable **relief valves** are included.
- > With or without **end-of-stroke rope**.
- > Flange connection to **tank** or **chassis** is available.
- > **Pressure switch gauge.**

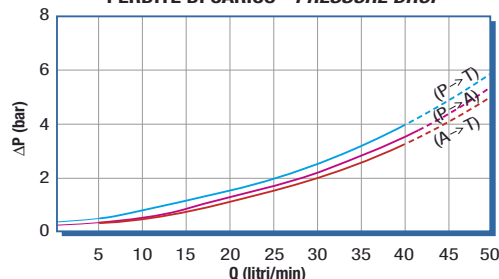


mod. DM C 40



mod. DM P 40

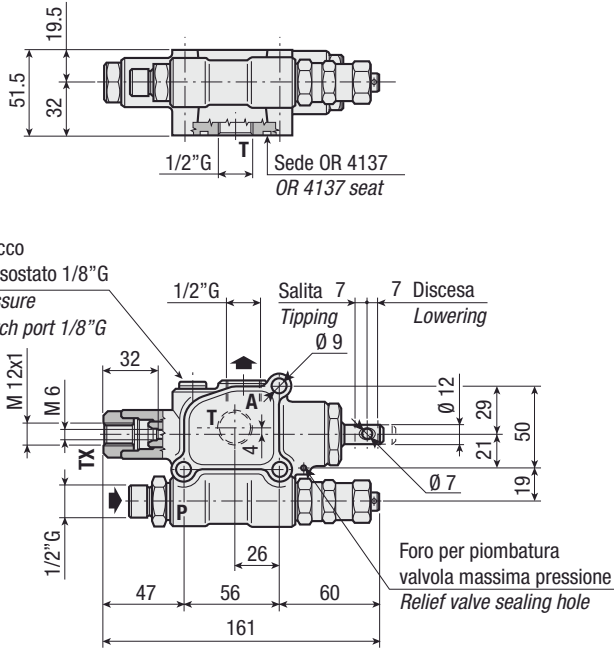
PERDITE DI CARICO - PRESSURE DROP



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (ν = 30 cSt)

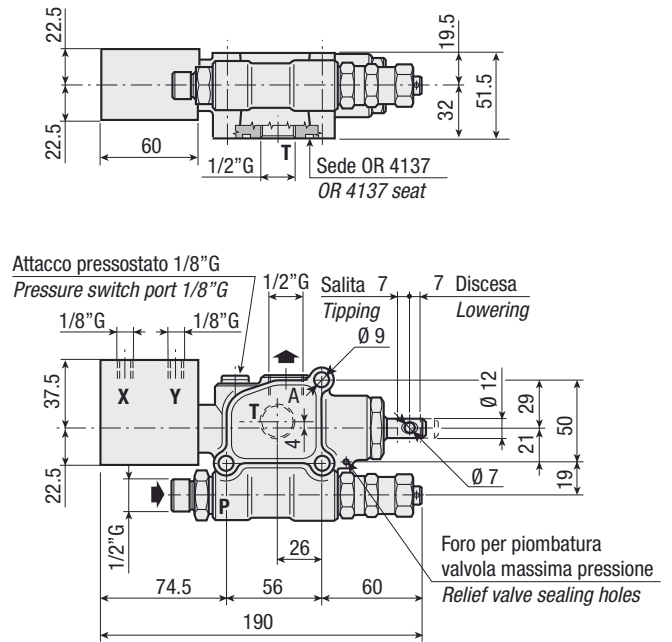
VERSIONE MECCANICA
MECHANICAL VERSION

mod. DM C 40



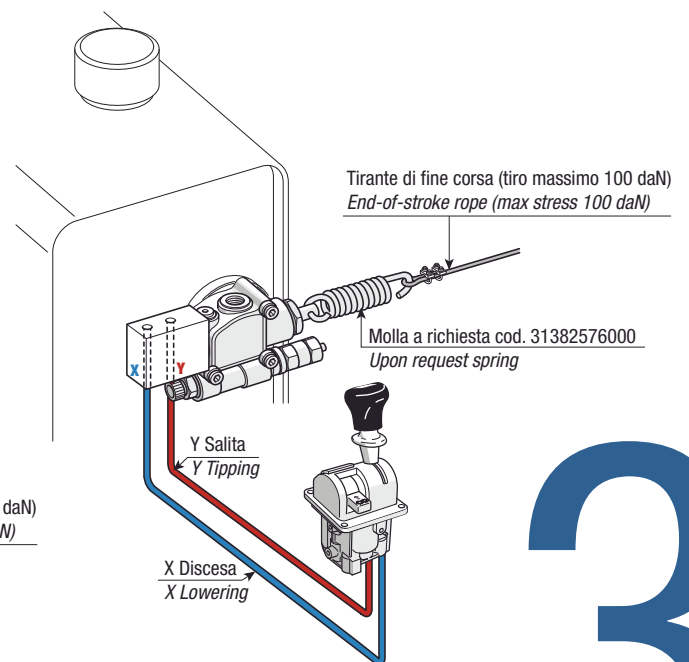
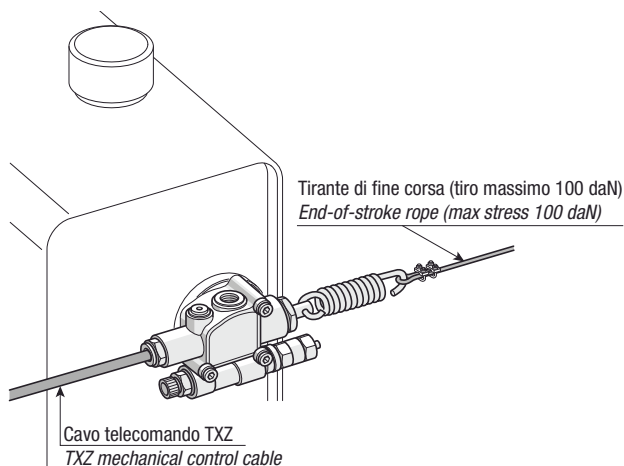
VERSIONE PNEUMATICA
PNEUMATICAL VERSION

mod. DM P 40



KIT PER FISSAGGIO AL SERBATOIO - TANK MOUNTING KIT

DESCRIZIONE DESCRIPTION	CODICE CODE
Per serbatoio metallico senza piastra For steel tank without flange	30KDF120000
Per serbatoio metallico HYDROCAR "SO" For HYDROCAR "SO" steel tank	30KFS040000
Per serbatoio in plastica HYDROCAR "SOP" For HYDROCAR "SOP" plastic tank	30KFSOP4000



DME 50

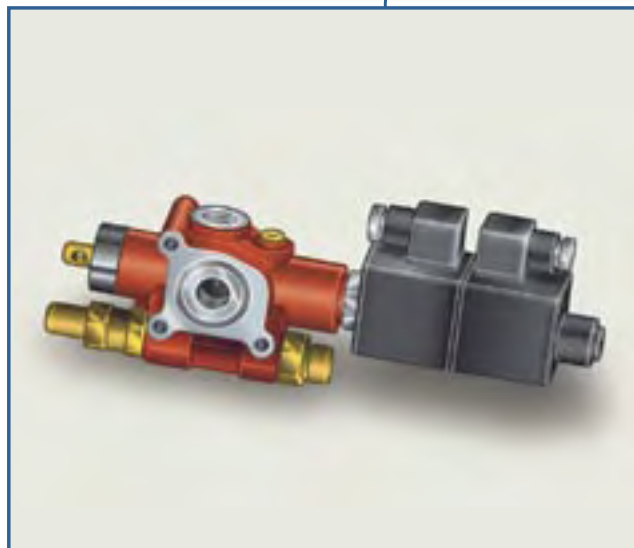
Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

DM50 1 0 08 1 0 0

0 = NESSUN OPTIONAL/NO OPTIONAL
3 = 3 bar PRESSOSTATO/PRESSURE SWITCH
7 = 7 bar PRESSOSTATO/PRESSURE SWITCH
0 = FINE CORSA MECC./MECHANICAL END-OF-STROKE
RACCORDO D'ENTRATA/INLET GAUGE
1 = 1/2" GAS STANDARD (ATTACCO MASCHIO/MALE PORT)
TARATURA VALVOLA MASSIMA PRESSIONE/PRES. RELIEF VALVE SETTING
08 ÷ 24 MPa (80-240 bar)
SOLO DISCESA VELOCE/FAST LOWERING ONLY
1 = 12 V DC 2 = 24 V DC

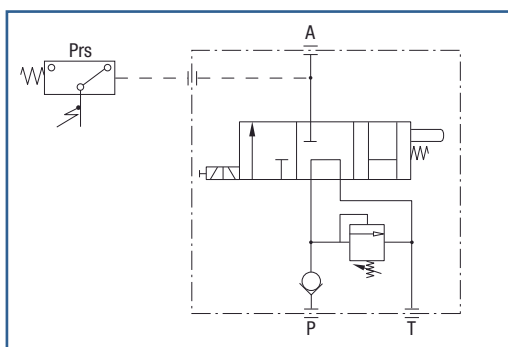
MODELLO/MODEL



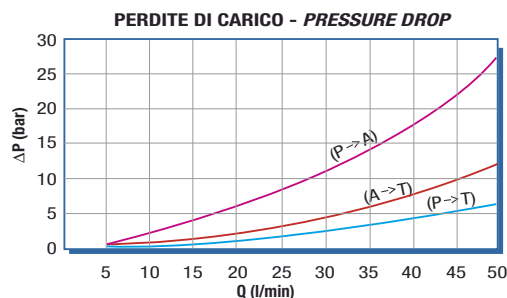
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS			
Portata nominale <i>Flow rate</i>	50 l/min	Temperatura fluido °C (t) <i>Fluid temperature °C (t)</i>	-25° + 80°C
Taratura massima <i>Maximum setting</i>	240 bar	Campo viscosità <i>Viscosity range</i>	12-100 cSt
Taratura standard <i>Standard setting</i>	120 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Fluido olio minerale <i>Mineral oil</i>	ISO VG 46	Peso <i>Weight</i>	2.3 kg

- > Distributore elettrico da 50 l/min per veicoli ribaltabili con sola motrice.
- > Consente la **salita** e la **discesa**.
- > In posizione di riposo la mandata ricircola a serbatoio e l'utenza **A** è chiusa.
- > Sono incorporate le **valvole di ritegno e controllo pressione** in **P**.
- > Flangiabile a **serbatoio**.
- > **Pressostato** e/o **tirante per fine corsa** A RICHIESTA (vedi codifica).

- > *Electrical operated 50 l/min distributor for tipping vehicles with tractor only.*
- > *It allows **tipping and lowering**.*
- > *In neutral position the oil outlet is open to oil tank and the port **A** is closed.*
- > *Port **P** check and adjustable relief valves are included.*
- > *Flange connection to **tank**.*
- > ***Pressure switch** and/or **end-of-stroke rope** ON REQUEST (ordering code).*



mod. DME 50



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (ν = 30 cSt)

DM 70

Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

DM70 P 0 08 2 00

00 = NESSUN OPTIONAL/NO OPTIONALS
PO = ATTACCO PRESSOSTATO/PRESS. SWITCH GAUGE
MO = ATTACCO MANOMETRO/MANOMETER GAUGE

RACCORDO D'ENTRATA/INLET GAUGE
2 = 1/2" GAS STANDARD (ATTACCO FEMMINA/FEMALE PORT)

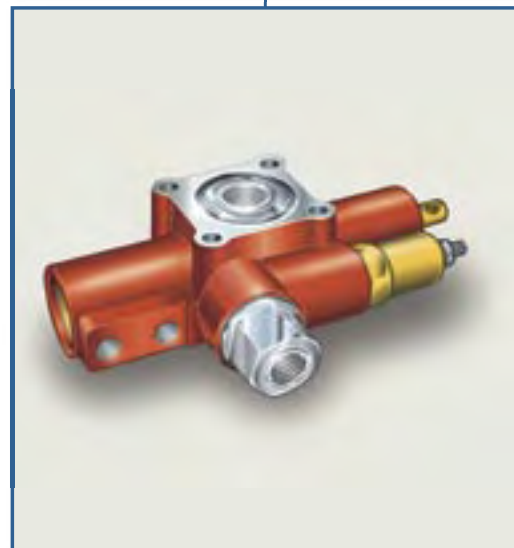
TARATURA VALVOLA MASSIMA PRESSIONE/PRESSURE RELIEF VALVE SETTING
08 ÷ 35 MPa (80-350 bar)

0 = SOLO DISCESA VELOCE/FAST LOWERING ONLY
L = SOLO DISCESA LENTA/SLOW LOWERING ONLY

P = COMANDO PNEUMATICO/PNEUMATIC CONTROL
C = COMANDO MECCANICO/MECHANICAL CONTROL
L = COMANDO A LEVA/LEVER CONTROL

MODELLO/MODEL

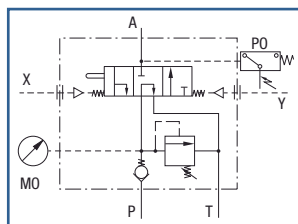
DM 70 P
DM 70 PL
DM 70 C
DM 70 L



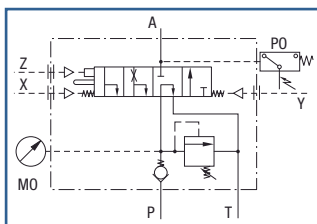
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Portata nominale Flow rate	80 l/min	Temperatura fluido °C (t) Fluid temperature °C (t)	-25° + 80°C
Pressione massima di lavoro Max working pressure	350 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	500 bar	Filtrazione/Filtering ISO 4406 $\beta_x=75$	20/17 25 μm
Pressione massima sul T T port max pressure	30 bar	Peso Weight	3.5 kg
Pressione pneumatica massima Max pneumatic pressure	12 bar	Fluido olio minerale Mineral oil	ISO VG 46

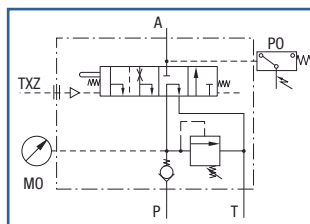
- > Distributore da 80 l/min a comando **pneumatico** o **meccanico** (a cavo o a leva) per veicoli ribaltabili con **sola motrice**.
- > Consente la **salita**, la **discesa veloce** e la **discesa lenta fissa** (mod. DM P DL).
- > Nei modelli **DM M** la discesa lenta è in posizione transitoria.
- > **Ricentraggio a molla**.
- > In posizione di riposo la mandata ricircola a serbatoio e l'utenza **A** è chiusa.
- > Sono incorporate le **valvole di ritegno** e **controllo pressione** in **P**.
- > **Tirante per fine corsa**.
- > Flangiabile a **serbatoio** e a **telaio**.
- > **Attacco manometro** o **pressostato** a richiesta.
- > **Pneumatical** or **mechanical** (operated through cable or lever) **80 l/min** distributor for tipping vehicles, with **tractor only**.
- > It allows **tipping**, **fast lowering** and **settled slow lowering** (model DM P DL).
- > **DM M** versions are provided with a transitory position slow lowering.
- > **Re-centering through spring**.
- > In neutral position the oil outlet is open to oil tank and the port **A** is closed.
- > Port **P** check and adjustable **relief valves** are included.
- > **End-of-stroke rope**.
- > Flange connection to **tank** or **chassis**.
- > Upon request **manometer** or **pressure switch gauge**.



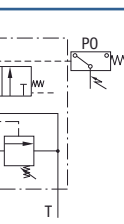
mod. DM 70 P



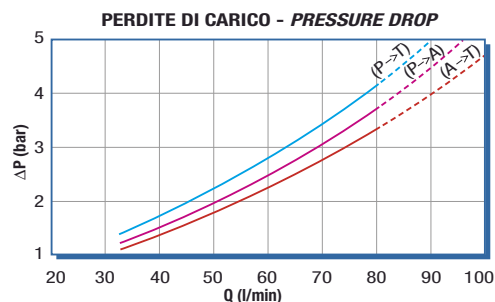
mod. DM 70 PL



mod. DM 70 C



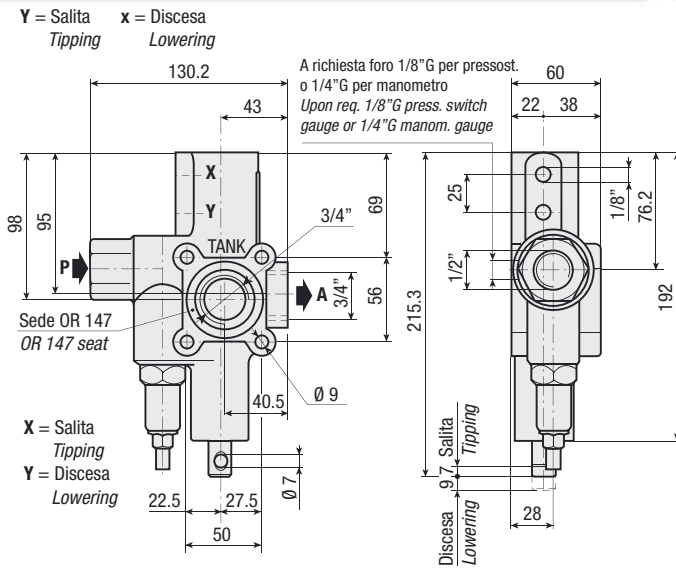
mod. DM 70 L



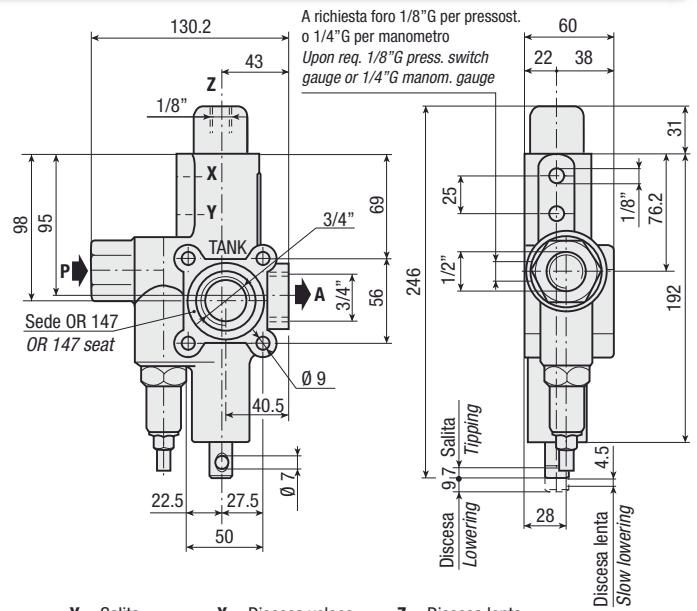
RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C ($\nu=30$ cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C ($\nu=30$ cSt)

VERSIONE STANDARD - STANDARD VERSION

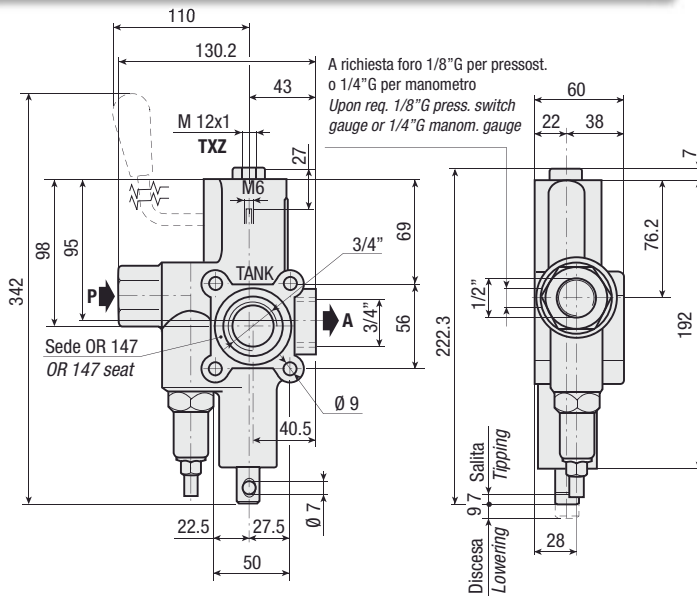
mod. DM 70 P


VERSIONE STANDARD - STANDARD VERSION

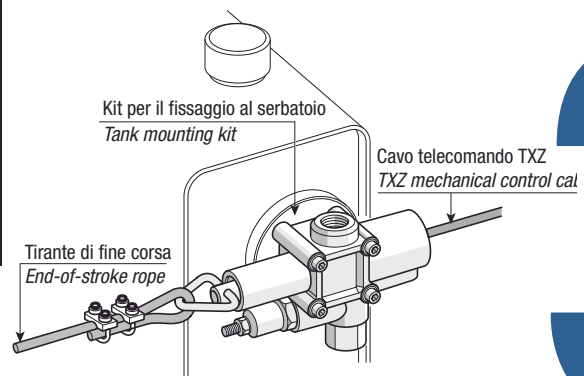
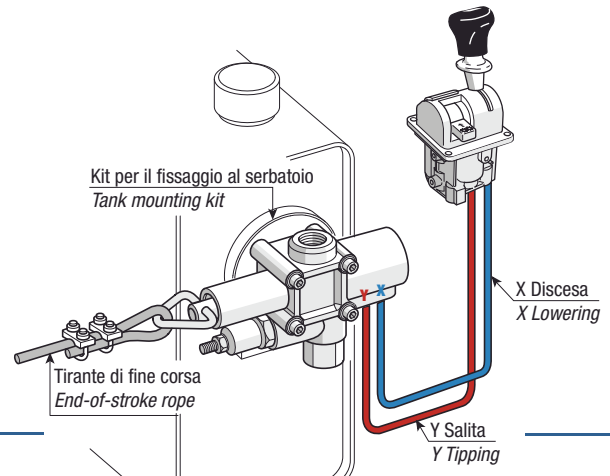
mod. DM 70 PL


VERSIONE STANDARD - STANDARD VERSION

mod. DM 70 C mod. DM 70 L


KIT PER FISSAGGIO AL SERBATOIO - TANK MOUNTING KIT

DESCRIZIONE DESCRIPTION	CODICE CODE
Per serbatoio metallico senza piastra For steel tank without flange	30KDF080000
Per serbatoio metallico HYDROCAR "SO" For HYDROCAR "SO" steel tank	30KFS010000
Per serbatoio in plastica HYDROCAR "SOP" For HYDROCAR "SOP" plastic tank	30KFSOP1000



DM 130

Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

D130 P P 08 4 00

OO = NESSUN OPTIONAL/NO OPTIONALS
 PO = ATTACCO PRESSOSTATO/PRESSURE SWITCH GAUGE
 MO = ATTACCO MANOMETRO/MANOMETER GAUGE
 CO = COPRIMOZZO/PROTECTION CUP
 MC = MANOMETRO E COPRIMOZZO./MANOMETER AND PROT. CUP
 PC = PRESSOSTATO E COPRIMOZZO./PRESSURE AND PROT. CUP

RACCORDO D'ENTRATA/INLET GAUGE
 3/4" GAS STANDARD (ATTACCO FEMMINA/FEMALE PORT)

TARATURA VALVOLA MASSIMA PRESSIONE/PRESSURE RELIEF VALVE SETTING
 08 = 35 MPa (80-350 bar)

P = DISCESA PROGRESSIVA/PROGRESSIVE LOWERING

P = COM. PNEUMATICO/PNEUMATIC CONTROL
 C = COM. MECCANICO MONOSTABILE/MECHANICAL CONTROL MONOSTABLE
 L = COM. A LEVA MONOSTABILE/LEVER CONTROL MONOSTABLE
 D = COM. MECCANICO TRISTABILE/MECHANICAL CONTROL TRISTABLE
 N = COM. LEVA TRISTABILE/LEVER CONTROL TRISTABLE

MODELLO/MODEL

DM 130 P

DM 130 C

DM 130 L

DM 130 D

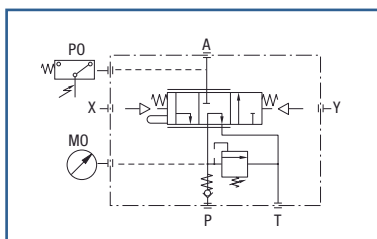
DM 130 N



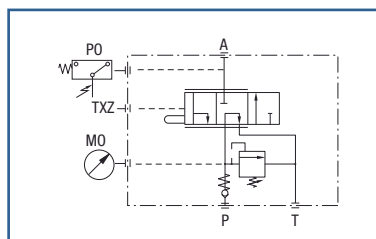
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Portata nominale Flow rate	130 l/min	Temperatura fluido °C (t) Fluid temperature °C (f)	-25° + 80°C
Pressione massima di lavoro Max working pressure	350 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	500 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Pressione massima sul T T port max pressure	30 bar	Peso Weight	4.5 kg
Pressione pneumatica massima Max pneumatic pressure	12 bar	Fluido olio minerale Mineral oil	ISO VG 46

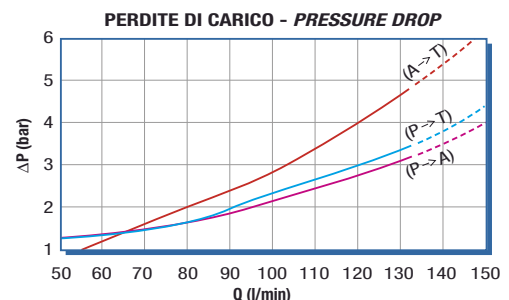
- > Distributore da 130 l/min a comando **pneumatico** o **meccanico**, per veicoli ribaltabili con **sola motrice**.
- > Consente la **salita**, la **discesa veloce** e la **discesa progressiva** (con il telecomando **TXZ** o con il comando pneumatico proporzionale tipo **CP/DP**).
- > Sono incorporate la **valvola di ritegno** in ingresso e la **valvola di massima pressione** regolabile da 140-220 bar (std.=160 bar) o (a richiesta) da 220-350 bar (std.=250 bar).
- > **Tirante per fine corsa** o **coprिमozzo**.
- > Flangiabile a **serbatoio** e a **telaio**.
- > **Attacco manometro** o **pressostato** a richiesta.
- > **Pneumatic** or **mechanical** operated 130 l/min distributor, for tipping vehicles, with **tractor only**.
- > It performs **tipping**, **fast lowering** and **progressive lowering** (by means of mechanical control cable **TXZ** or the progressive pneumatic control like **CP/DP**).
- > The inlet **check valve** and the adjustable **relief valve** are built-in. The **relief valve** range is from 140-220 bar (std.=160 bar) or (upon request) from 220-350 bar (std.=250 bar).
- > **End-of-stroke rope** or **protection cup**.
- > Flange connection to **tank** or **chassis** is available.
- > Upon request **manometer** or **pressure switch gauge**.



mod. DM 130 P



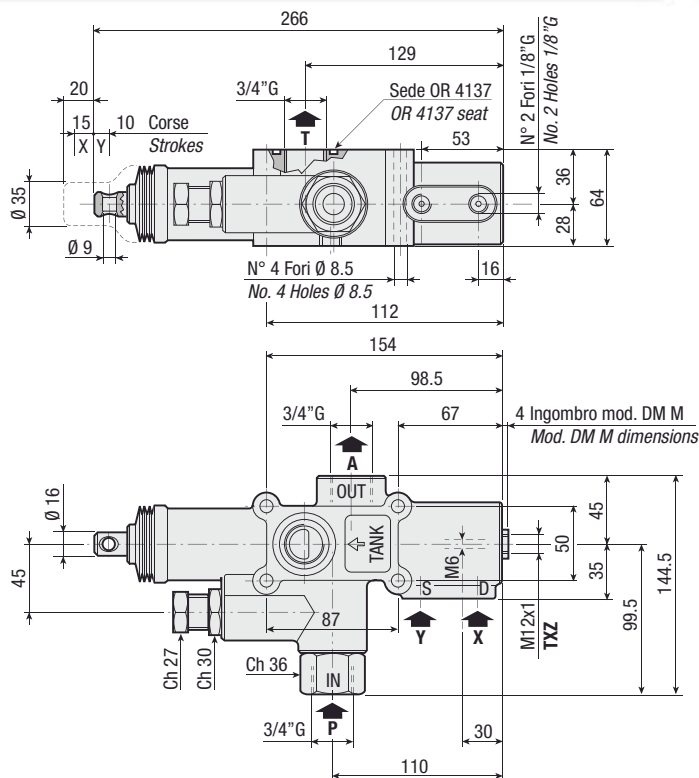
mod. DM 130 C



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (√= 30 cSt)

**VERSIONE STANDARD
STANDARD VERSION**

mod. DM 130



Pressostato con guarnizione
Coppia di serraggio: 30 ± 5 Nm
Pressure switch with washer
Tightening torque: 30 ± 5 Nm

PRESSOSTATO A RICHIESTA - UPON REQUEST PRESSURE SWITCH

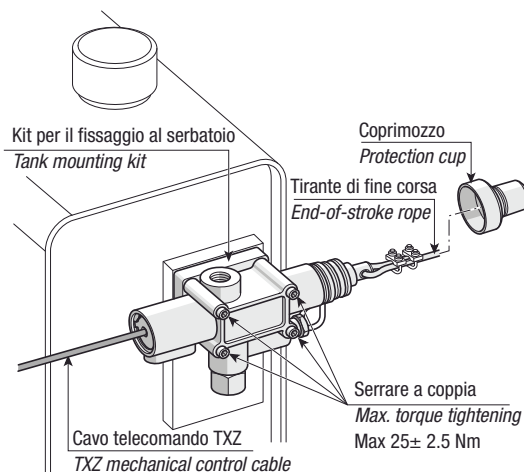
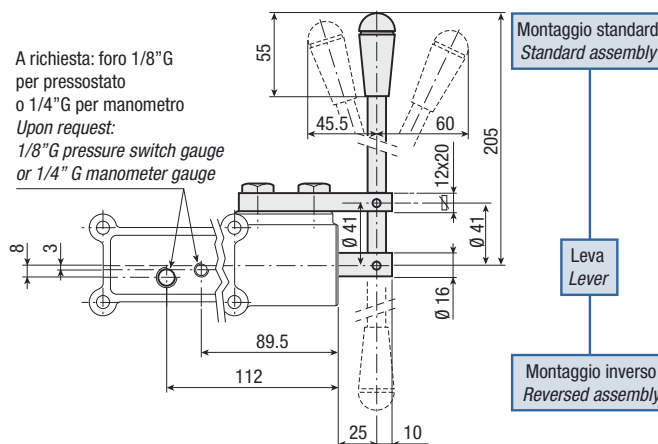
Pressostato con intervento 3 bar consigliato per pressioni di lavoro
Pressure switch set at 3 bar advised for working pressure < 150 bar

Pressostato con intervento 7 bar consigliato per pressioni di lavoro
Pressure switch set at 7 bar advised for working pressure > 150 bar

**KIT LEVA
LEVER KIT**

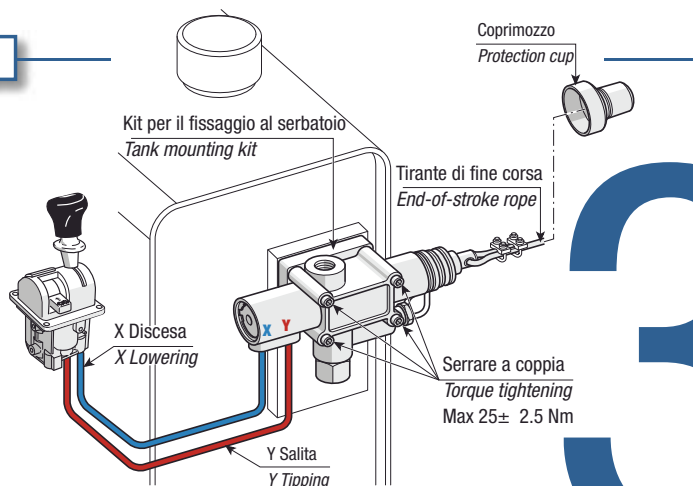
CODICE - CODE

3LDMM800000



KIT PER FISSAGGIO AL SERBATOIO - TANK MOUNTING KIT

DESCRIZIONE DESCRIPTION	CODICE CODE
Per serbatoio metallico senza piastra For steel tank without flange	30KDF070000 (piastra ≠ 20 mm) (plate ≠ 20 mm)
Per serbatoio metallico senza piastra For steel tank without flange	30KDF071000 (piastra ≠ 30 mm) (plate ≠ 30 mm)
Per serbatoio metallico HYDROCAR "SO" oppure fissaggio a telaio For HYDROCAR "SO" steel tank or direct mounting to chassis	30KDF080000



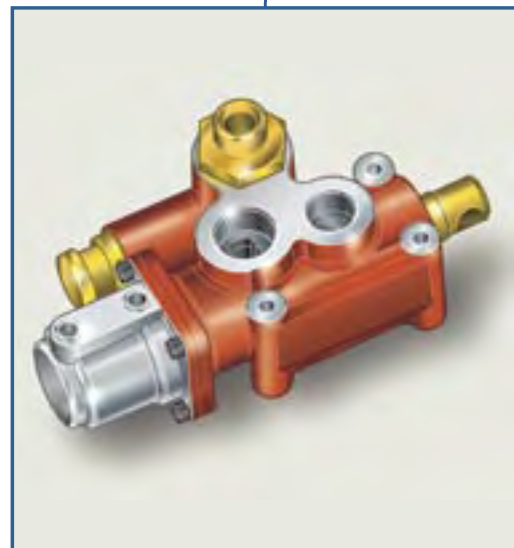
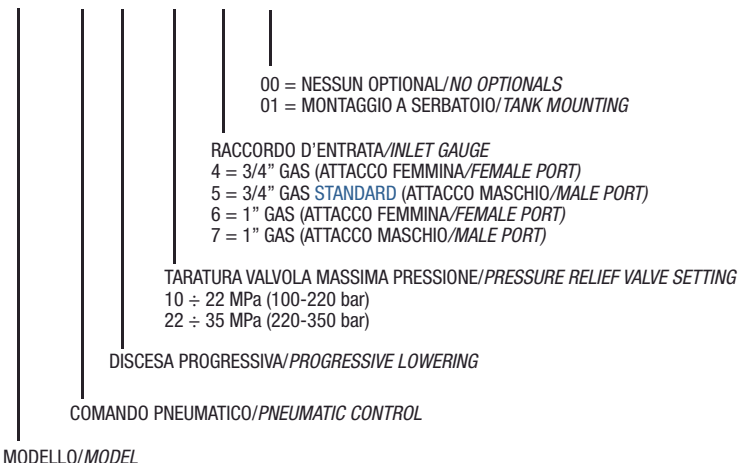
DM 150

Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

D150 P P 10 5 00

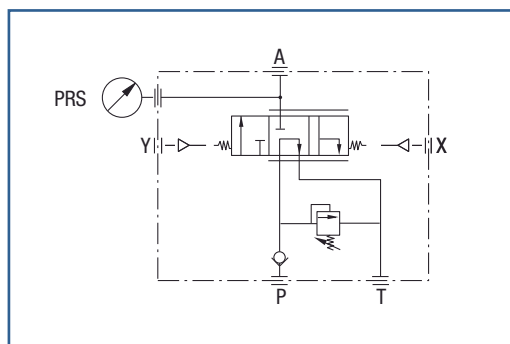
DM 150 P



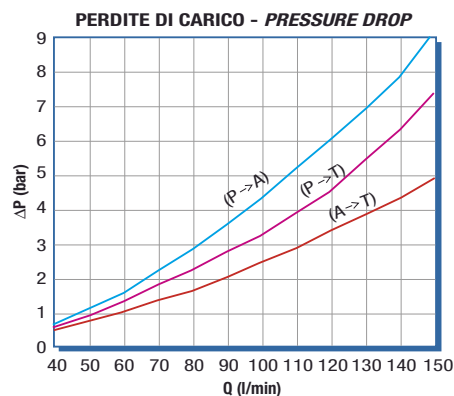
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS			
Portata nominale Flow rate	150 l/min	Temperatura fluido °C (t) Fluid temperature °C (t)	-25° + 80°C
Pressione massima di lavoro Max working pressure	250 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	300 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Pressione massima sul T T port max pressure	30 bar	Peso Weight	5.8 kg
Pressione pneumatica massima Max pneumatic pressure	12 bar	Fluido olio minerale Mineral oil	ISO VG 46

- > Distributore da 150 l/min a comando **pneumatico**, per veicoli ribaltabili con **sola motrice**.
- > Consente la **salita**, la **discesa veloce** e la **discesa progressiva** con comando pneumatico proporzionale.
- > Sono incorporate la **valvola di ritegno** in ingresso e la **valvola di massima pressione** regolabile a richiesta 140-250 bar.
- > Flangiabile a telaio.
- > Attacco **manometro** o **pressostato**.

- > **Pneumatic** operated 150 l/min distributor, for tippers **without trailer**.
- > It performs **tipping**, **fast lowering** or **progressive lowering** by means of progressive pneumatic control.
- > It includes inlet **check valve** and adjustable **relief valve**. The **relief valve** range is from 140 to 250 bar.
- > Flange connection to **chassis**.
- > Upon **manometer** or **pressure switch gauge**.



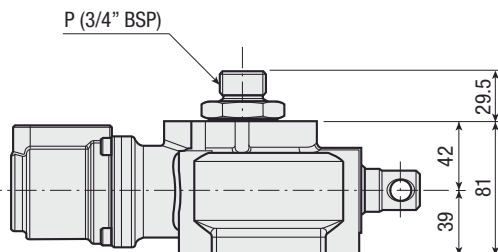
mod. DM 150 P



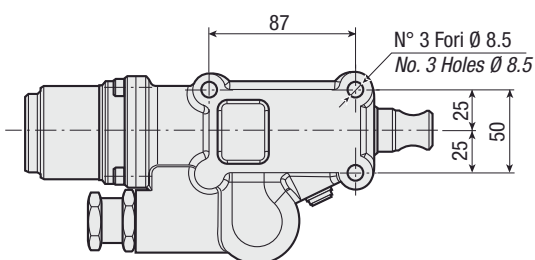
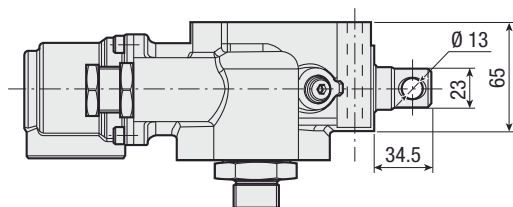
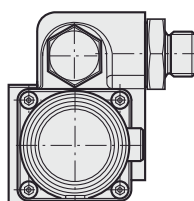
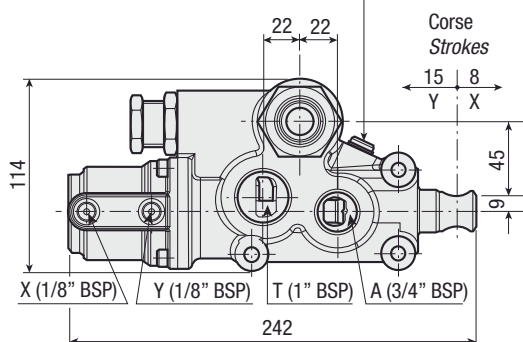
RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (ν = 30 cSt)

VERSIONE STANDARD
STANDARD VERSION

mod. DM 150 P



Foro 1/8" G per pressostato o manometro
Holes 1/8" G for press. switch or manometer



Pressostato con guarnizione
Coppia di serraggio: 30 ± 5 Nm
Pressure switch with washer
Tightening torque: 30 ± 5 Nm

PRESSOSTATO A RICHIESTA
UPON REQUEST PRESSURE SWITCH

<i>Pressostato con intervento 3 bar consigliato per pressioni di lavoro</i> <i>Pressure switch set at 3 bar advised for working pressure</i>	< 150 bar
<i>Pressostato con intervento 7 bar consigliato per pressioni di lavoro</i> <i>Pressure switch set at 7 bar advised for working pressure</i>	> 150 bar

KIT GUARNIZIONI - SEALS KIT

CODICE - CODE

39200028000

KIT FISSAGGIO A TELAIO - CHASSIS MOUNTING KIT

CODICE - CODE

30KFD004000

Montare le viti con loctite frenafilletti 243 e serrare a coppia 20 Nm⁰-2 Nm⁰
Assembly screws using Loctite 243 and tighten with torque 20 Nm⁰-2 Nm⁰

DM 160

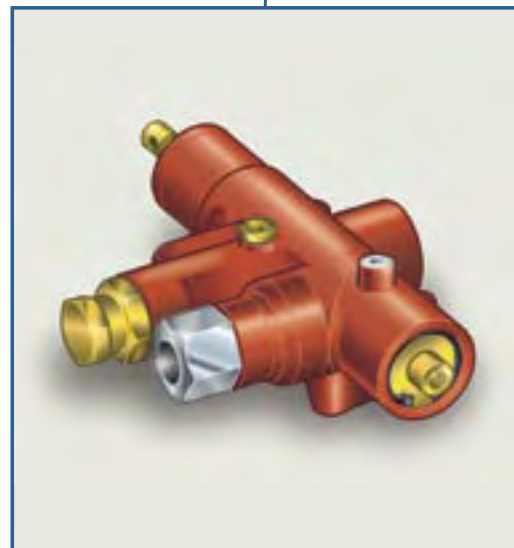
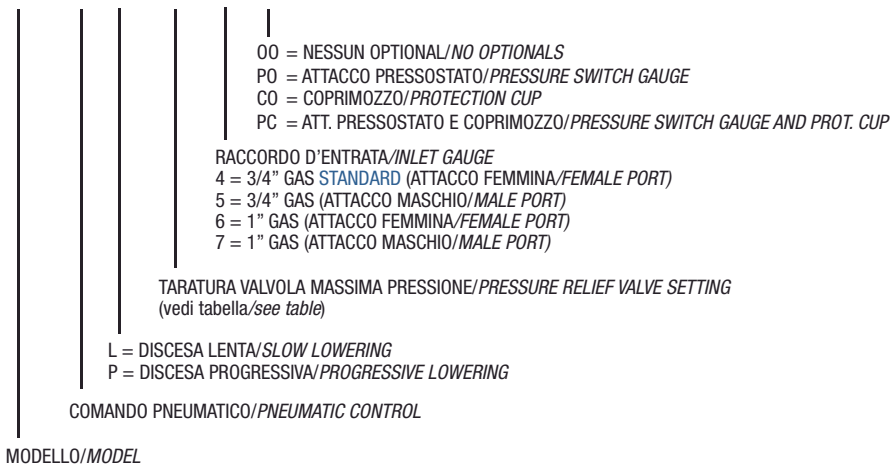
Distributore Idraulico Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

D160 P P 08 4 00

DM 160 PP

DM 160 PL



TABELLA/TABLE

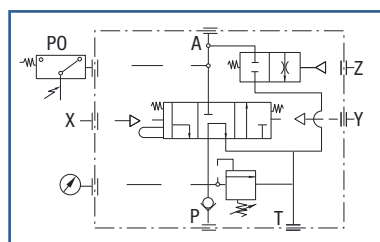
08 ÷ 35	MPa (80-350 bar) con valvola standard (regolabile)/with standard relief valve (adjustable)	D0 ÷ D9	con cartuccia regolabile da 10 a 19 MPa/with adjustable cartridge (from 10 to 19 Mpa)
2B	con valvola pilotata a 2 livelli (stand. 140, 220 bar)/piloted relief valve with 2 settings	E0 ÷ E9	con cartuccia regolabile da 20 a 29 MPa/with adjustable cartridge (from 20 to 29 Mpa)
3B	con valvola pilotata a 3 livelli (stand. 130, 220, 350 bar)/piloted relief valve with 3 settings	F0 ÷ F5	con cartuccia regolabile da 30 a 35 MPa/with adjustable cartridge (from 30 to 35 Mpa)
00	senza valvola (predisposto per cartuccia)/without relief valve (suitable for preset cartridge)	G0	cartuccia regolabile non tarata, non piombata/not setting, not plumbed adjustable cartridge

CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Portata nominale Flow rate	160 l/min	Temperatura fluido °C (t) Fluid temperature °C (t)	-25° + 80°C
Pressione massima di lavoro Max working pressure	350 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	500 bar	Filtrazione/Filtering ISO 4406 β _x =75	20/17 25 μm
Pressione massima sul T T port max pressure	30 bar	Peso Weight	8-9 kg
Pressione pneumatica massima Max pneumatic pressure	12 bar	Fluido olio minerale Mineral oil	ISO VG 46

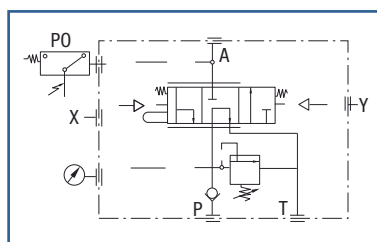
- > Distributore da 160 l/min solo comando **pneumatico**, per veicoli ribaltabili con **sola motrice** (cilindro semplice effetto).
- > Consente la **salita**, la **discesa veloce** e la **discesa lenta** (modello DL) o la **discesa progressiva** (modello DP).
- > Sono incorporate di serie la **valvola di ritegno** in ingresso e la **valvola di controllo pressione** disponibile in 3 versioni: **regolabile**, a **cartuccia regolabile intercambiabile**, **pilotata pretarata a 2 o 3 livelli**.
- > **Tirante per fine corsa meccanico** di serie.
- > Flangiabile a **serbatoio** e a **telaio**.
- > **Attacco manometro** di serie.
- > Varie soluzioni ed optional disponibili (vedi codifica).

- > **Single acting hydraulic tipping valve with oil flow of 160 l/min, pneumatically controlled.**
- > **Available in two versions: DL with double fixed rising/lowering speed (normal and slow) or proportional DP.**
- > **Inlet check valve and overpressure valve are built-in. Concerning overpressure safety device three different versions are available: adjustable, with interchangeable cartridge and switch (either with 2 or 3 different pressure settings).**
- > **Equipped with end-of-stroke device.**
- > **Flange connection to tank or to chassis.**
- > **Manometer threaded hole provided.**
- > **Several other optional versions available (ordering code).**



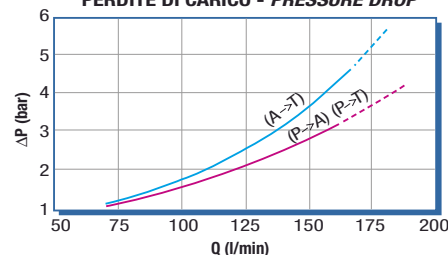
mod. DM 160 PL

74



mod. DM 160 PP

PERDITE DI CARICO - PRESSURE DROP



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (√= 30 cSt)

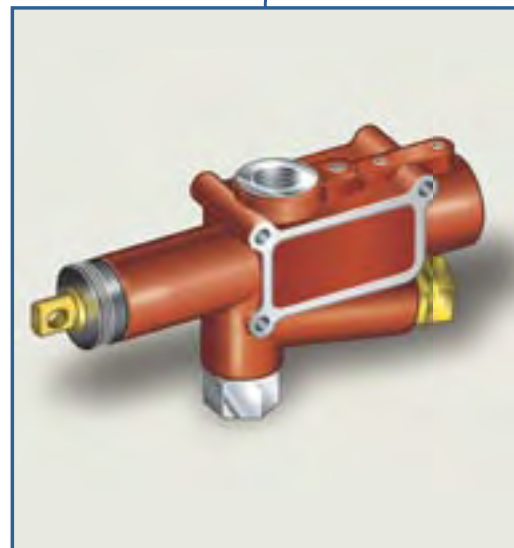
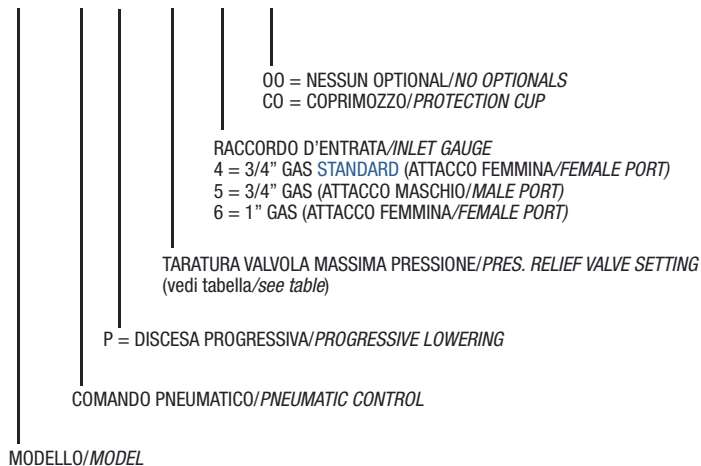
DM 180-250

Distributore Idraulico
Hydraulic Distributor

CODICE DI ORDINAZIONE - ORDERING CODE

DM 180 - 250 P

D180 P P 08 4 00



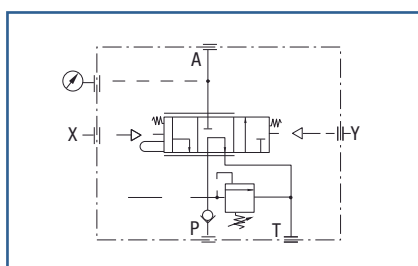
TABELLA/TABLE

08 ÷ 35 MPa (80-350 bar) con valvola standard (regolabile)/with standard relief valve (adjustable)	D0 ÷ D9 con cartuccia regolabile da 10 a 19 MPa/with adjustable cartridge (from 10 to 19 Mpa)
2B con valvola pilotata a 2 livelli (stand. 140, 220 bar)/piloted relief valve with 2 settings	E0 ÷ E9 con cartuccia regolabile da 20 a 29 MPa/with adjustable cartridge (from 20 to 29 Mpa)
3B con valvola pilotata a 3 livelli (stand. 130, 220, 350 bar)/piloted relief valve with 3 settings	F0 ÷ F5 con cartuccia regolabile da 30 a 35 MPa/with adjustable cartridge (from 30 to 35 Mpa)
00 senza valvola (predisposto per cartuccia)/without relief valve (suitable for preset cartridge)	G0 cartuccia regolabile non tarata, non piombata/not setting, not plumbed adjustable cartridge

CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

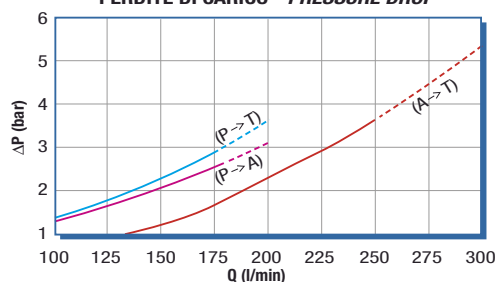
Portata nominale - Massima in ingresso <i>Tipping nom. - Max flow rate</i>	180-200 l/min	Temperatura fluido °C (t) <i>Fluid temperature °C (t)</i>	-25° + 80°C
Portata nominale - Massima in scarico <i>Lowering nom. - Max flow rate</i>	250-300 l/min	Campo viscosità <i>Viscosity range</i>	12-100 cSt
Pressione massima di lavoro <i>Max working pressure</i>	300 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Pressione massima di picco (<0.1 s) <i>Max peak pressure</i>	450 bar	Peso <i>Weight</i>	8-9 kg
Pressione massima sul T <i>T port max pressure</i>	30 bar	Pressione pneumatica massima <i>Max pneumatic pressure</i>	12 bar

- > Distributore da 180 l/min (salita) e 250 l/min (discesa), a comando pneumatico, per veicoli ribaltabili con sola motrice (cilindro semplice effetto).
- > Consente la salita, la discesa veloce e la discesa progressiva.
- > Sono incorporate di serie la valvola di ritegno in ingresso e la valvola di controllo pressione disponibile in 3 versioni: regolabile, a cartuccia pretarata intercambiabile, pilotata a 2 o 3 livelli di taratura.
- > Tirante per fine corsa meccanico di serie.
- > Flangiabile a serbatoio e a telaio.
- > Attacco manometro o pressostato di serie.
- > Coprimozzo a richiesta (vedi codifica).
- > Pneumatic controlled distributor, oil flow 180 l/min (tipping), and 250 l/min (lowering), for tippers without trailer (single-acting cylinder).
- > It performs tipping, fast and progressive lowering.
- > The inlet check valve and the relief valve are built-in. Three models of relief valve are available: adjustable relief valve, interchangeable preset cartridge, piloted relief valve with 2 or 3 possible settings.
- > Standard end-of-stroke rope.
- > Flange connection to tank and chassis.
- > Standard pressure-switch or manometer connection.
- > Protection cup (ordering code).



mod. DM 180-250 P

PERDITE DI CARICO - PRESSURE DROP



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (ν = 30 cSt)
THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (ν = 30 cSt)

4

VALVOLE MOTRICE-RIMORCHIO
TRACTOR-TRAILER VALVES





VALVOLE MOTRICE-RIMORCHIO

Con comando pneumatico a singolo o doppio effetto, questa serie di valvole è ideale per il controllo dell'impianto ribaltabile sulla motrice o sul rimorchio in aggiunta alla normale valvola distributrice per la salita e discesa del cassone oppure per applicazioni combinate ribaltabile e gru o altre applicazioni idrauliche in genere laddove sia necessario sdoppiare gli utilizzi di un singolo gruppo Presa di Forza pompa idraulica.

TRACTOR-TRAILER VALVES

4

VDMR

Valvola Valve

CODICE DI ORDINAZIONE - ORDERING CODE

3 VDMR 0 1 00 00

00 = NESSUN OPTIONAL/NO OPTIONALS
 PP = ATTACCO PRESSOSTATO IN A + B
 PRESSURE SWITCH GAUGE ON A AND B
 OP = ATTACCO PRESSOSTATO IN B
 PRESSURE SWITCH GAUGE ON B
 PO = ATTACCO PRESSOSTATO IN A
 PRESSURE SWITCH GAUGE ON A

1 = **VDMR D** 2 POSIZIONI CON DRENAGGIO/POSITIONS WITH DRAINAGE
 2 = **VDMR CA** 3 POSIZIONI/POSITIONS
 3 = **VDMR T** 2 POSIZIONI/POSITIONS A + B
 4 = **VDMR H** 2 POSIZIONI DOPPIO PILOTAGGIO/POSITIONS DOUBLE PILOTING

ATTACCHI/CONNECTIONS
 0 = MANDATE/OUTLETS A - B 3/4" G
 1 = MANDATE/OUTLETS A - B 1" G

MODELLO/MODEL

ACCESSORI/ACCESSORIES

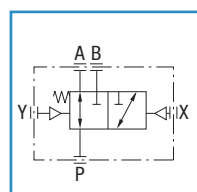
VDMR H
VDMR D
VDMR T
VDMR CA



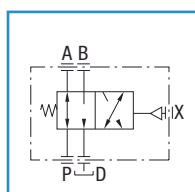
CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Portata nominale <i>Flow rate</i>	160/200 l/min	Temperatura fluido °C (t) <i>Fluid temperature °C (t)</i>	-25° + 80°C
Pressione massima di lavoro <i>Max working pressure</i>	350 bar	Campo viscosità <i>Viscosity range</i>	12-100 cSt
Pressione massima di picco (<0.1 s) <i>Max peak pressure</i>	500 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Pressione massima sul D <i>Drain port max pressure</i>	1.5 bar	Peso <i>Weight</i>	2.6 kg
Pressione pneumatica massima <i>Max pneumatic pressure</i>	12 bar	Fluido olio minerale <i>Mineral oil</i>	ISO VG 46

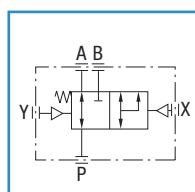
- > **Valvola deviatrice** di portata (motrice-rimorchio) a **comando pneumatico** a **2 o 3 posizioni** (vedi modelli).
- > Permette di alimentare due cilindri in sequenza su impianti dotati di distributore ad una sola mandata.
- > La valvola è da **pilotare normalmente** in **assenza di portata**, ovvero la posizione di lavoro va scelta prima della manovra.
- > Nel modello con drenaggio si permette di mantenere a scarico l'utenza che non lavora.
- > Nel modello **VDMR CA** (a 3 posizioni) il **collegamento simultaneo** di entrambe le utenze avviene in **posizione di riposo**.
- > Nel modello **VDMR T** (a 2 posizioni) avviene in **posizione di lavoro**.
- > **Two or three position pneumatic flow distributor** (tractor-trailer deviator).
- > It allows the control of two in-sequence cylinders in circuits equipped with single outlet distributors.
- > This valve has to be **normally piloted without oil flow**: the work position has to be selected before operating begins.
- > The valve version equipped with drainage enables the sending of unused oil directly to tank.
- > The version **VDMR CA** (3 position) enables the **simultaneous feeding** of both the outlets in the hold **position while**.
- > The version **VDMR T** (2 position) enables it in the **operating position**.



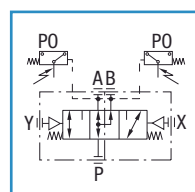
mod. VDMR H



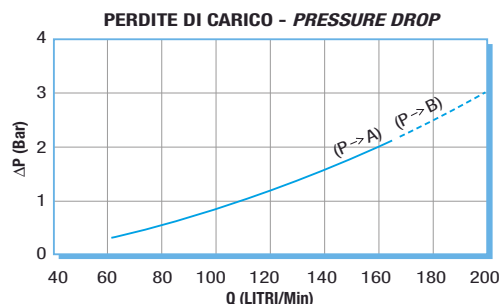
mod. VDMR D



mod. VDMR T



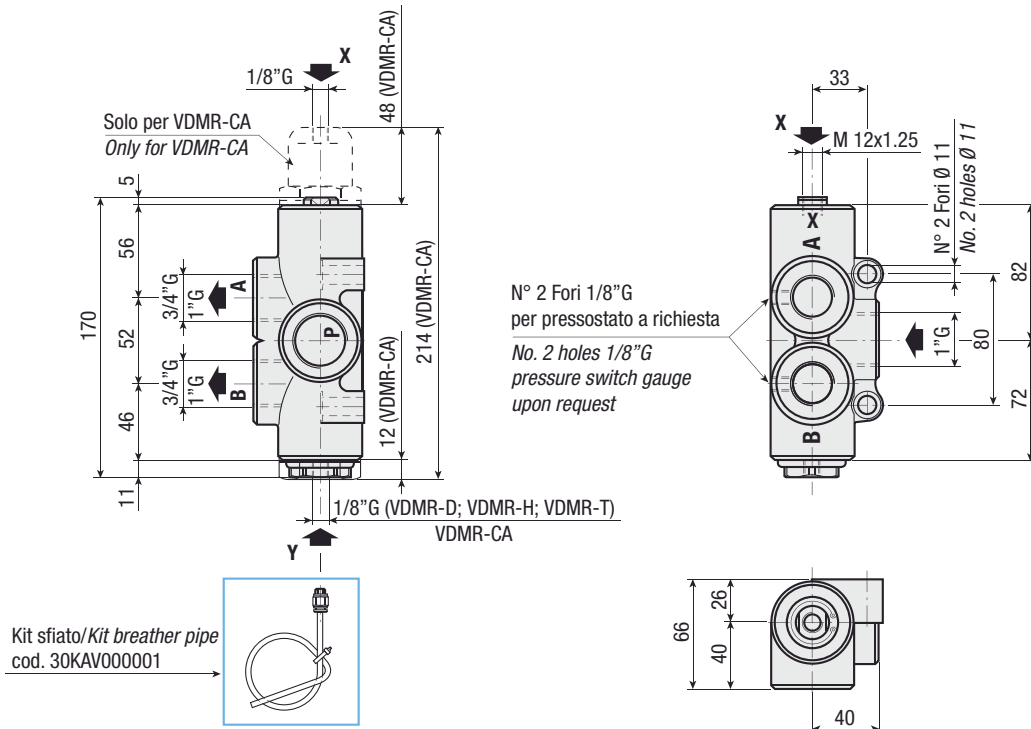
mod. VDMR CA



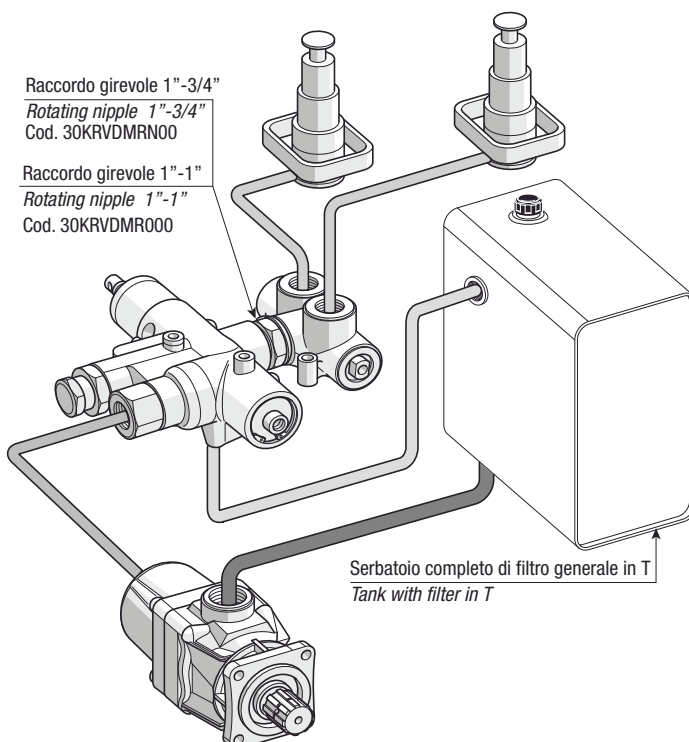
RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (√= 30 cSt)

VERSIONE STANDARD
STANDARD VERSION

mod. VDMR



ESEMPIO DI INSTALLAZIONE
INSTALLATION EXAMPLE



AVVERTENZE
WARNINGS

La valvola va correttamente pilotata a riposo.
È però possibile pilotarla anche durante il
funzionamento, ma solo in bassa o media pressione
di lavoro.

*This valve has to be correctly piloted in the rest
position. It is also possible to pilot it during the
functioning only with low or medium operating
pressure values.*

ATTENZIONE:

nel modello con drenaggio è PROIBITO azionare la
valvola quando uno dei cilindri è ancora in posizione
di sollevamento, poiché nel canale di drenaggio si
creerebbe una contro-pressione superiore a quella
dichiarata nelle caratteristiche tecniche (1,5 bar).

CAUTION:

*in the model with drainage it is FORBIDDEN to
switch when one of the cylinders is in the tipping
port a pressure value higher
then that reported in the technical
specifications (1.5 bar).*

VALVOLE FINE CORSA *END-OF-STROKE VALVES*



VALVOLE FINE CORSA

Deviatore di fine corsa per impiego su semirimorchi e rimorchi. Realizzato appositamente per agevolare e semplificare l'installazione con risparmio di spazio ed eliminazione di raccordi di collegamento. Utilizzabile sia in versione a "Centro aperto", sia a "Centro chiuso". Portata di utilizzo fino a 200 Lt./min. Predisposto di serie per segnalazione apertura sponda posteriore mediante pressostato opzionale.

END-OF-STROKE VALVES

VFCFR

Valvola di Fine Corsa End-of-Stroke Valve

CODICE DI ORDINAZIONE - ORDERING CODE

3 VFCFR 2 200 0



ACCESSORI/ACCESSORIES

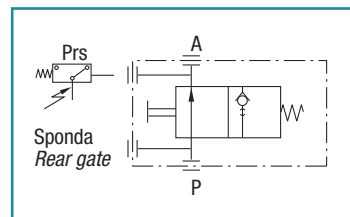


CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS			
Portata nominale Flow rate	200 l/min	Temperatura fluido °C (t) Fluid temperature °C (t)	-25° + 80°C
Pressione massima di lavoro Max working pressure	350 bar	Campo viscosità Viscosity range	12-100 cSt
Pressione massima di picco (<0.1 s) Max peak pressure	400 bar	Filtrazione/Filtering ISO 4406 βx=75	20/17 25 μm
Fluido olio minerale Mineral oil	ISO VG 46	Peso Weight	4.6 kg

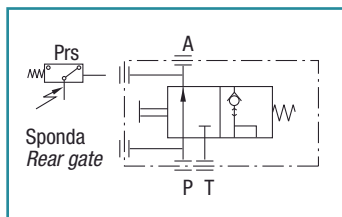
- > **Valvola di fine corsa** a due posizioni a **comando meccanico** (tramite tirante) per veicoli ribaltabili per impianti a un tubo o a due tubi.
- > Flangiabile a **telaio**.
- > **Pressostato** a richiesta.

- > **Mechanical two-way end-of-stroke valve** (through rope) for tipping vehicles for one-pipe or two-pipe systems.
- > Flange connection to **chassis**.
- > **Pressure switch** upon request.

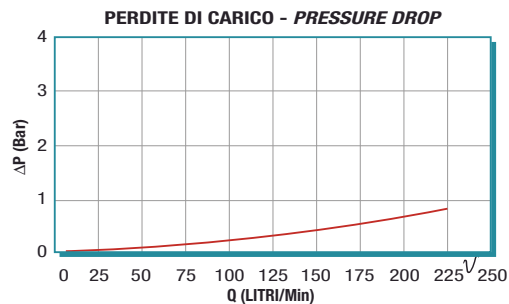
PRESSOSTATO PREDISPOSTO DI SERIE - STANDARD PRESSURE SWITCH



mod. 3 VFCFR 1

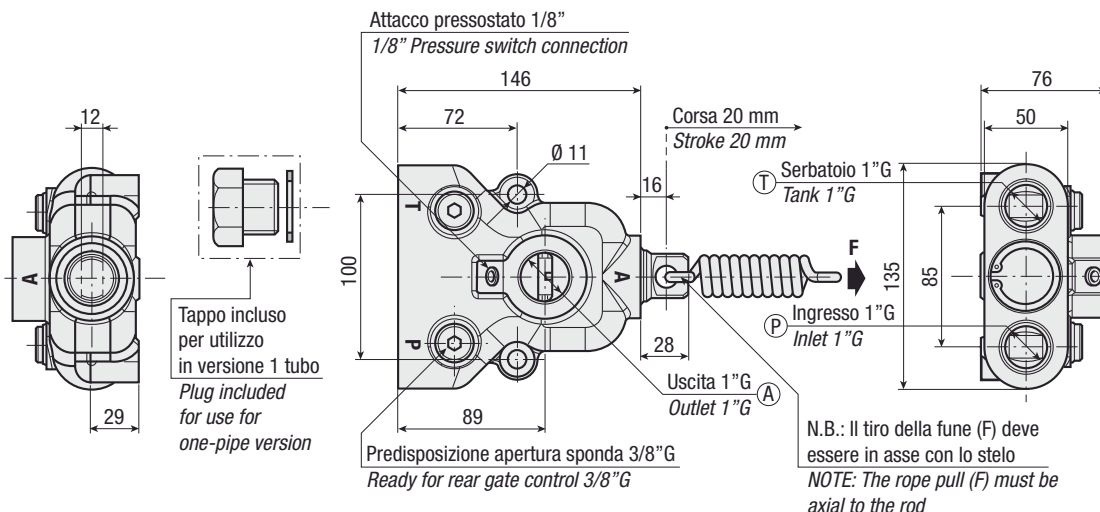


mod. 3 VFFRO 0



RILIEVI ESEGUITI CON OLIO ISO VG 46 A 50° C (√= 30 cSt)
 THE ABOVE SPECIFICATIONS REFER TO OIL TYPE ISO VG 46 AT 50° C (√= 30 cSt)

**VERSIONE STANDARD
STANDARD VERSION**



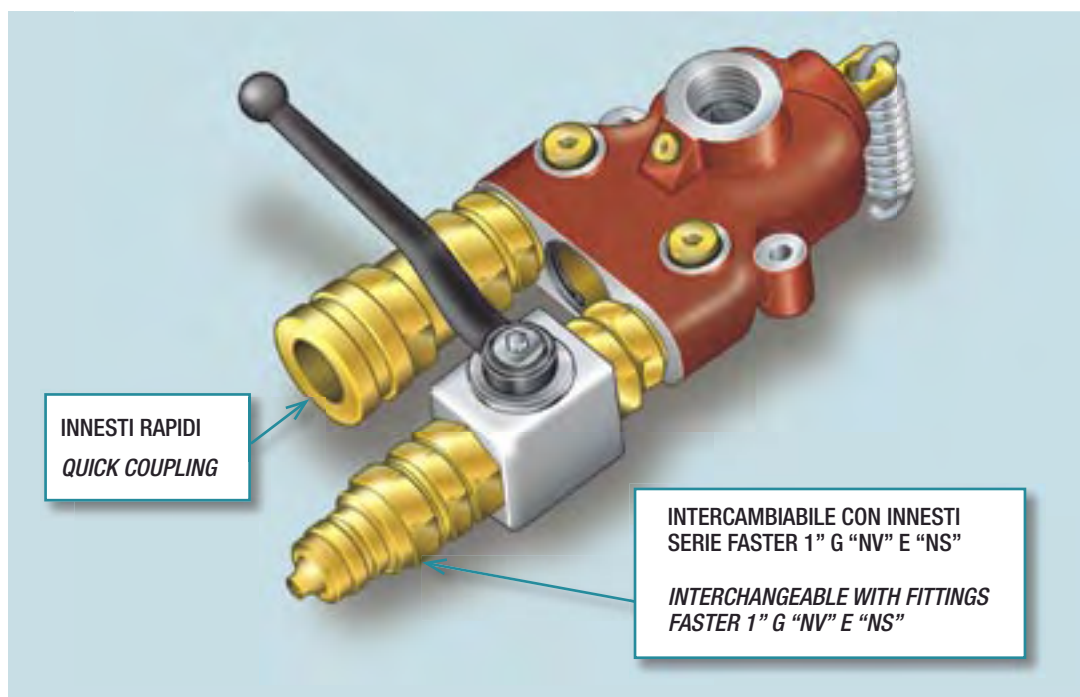
Pressostato con guarnizione
Coppia di serraggio: 30 ± 5 Nm
Pressure switch with washer
Tightening torque: 30 ± 5 Nm

PRESSOSTATO A RICHIESTA - UPON REQUEST PRESSURE SWITCH

Pressostato con intervento 3 bar consigliato per pressioni di lavoro Pressure switch set at 3 bar advised for working pressure	< 150 bar
Pressostato con intervento 7 bar consigliato per pressioni di lavoro Pressure switch set at 7 bar advised for working pressure	> 150 bar

VERSIONE PREASSEMBLATA - PREASSEMBLY VERSION

VFCFR



KIT GUARNIZIONI - SEALS KIT

CODICE - CODE

39300010000

COMANDI PNEUMATICI *PNEUMATIC CONTROLS*



COMANDI PNEUMATICI

La vasta gamma dei comandi pneumatici offerti da Hydrocar è ideale per tutte le più svariate applicazioni sui veicoli industriali, dai più semplici controlli ON/OFF di innesto-disinnesto delle Prese di Forza, al controllo proporzionale delle valvole distributrici per il controllo in precisione delle movimentazioni di salita e discesa dei ribaltabili.

Una serie completa di supporti è disponibile a corredo per semplificarne i montaggi e ridurne l'impatto estetico all'interno di cabine ormai sempre più prossime a standard di finitura automobilistici.

PNEUMATIC CONTROLS

The wide range of Hydrocar pneumatic controls is suitable for any application on the industrial vehicles: from the simple ON/OFF control for PTOs' engagement/disengagement, to the proportional control of distribution valves for raising and lowering systems in tipper equipment.

A range of supports is standardly supplied for simplifying the fitting and matching the application inside cabs closer and closer to the car finishing standards.



DUE UTILIZZI
TWO SECTIONS

CP2000-1

Comando Pneumatico
Pneumatic Control

CODICE DI ORDINAZIONE - ORDERING CODE

400 C2 1 0 00 00

POSSIBILI VERSIONI/AVAILABLE OPTIONS:
00 = LEVA TRISTABILE/TRISTABLE LEVER
0M = LEVA MONOSTABILE/MONOSTABLE LEVER
0N = LEVA BISTABILE/BISTABLE LEVER

VARIANTI: STANDARD
VERSIONS: STANDARD

SENZA SPIA/WITHOUT LIGHT

1 SEZIONE/STAGE

SERIE CP2000/CP2000 SERIES

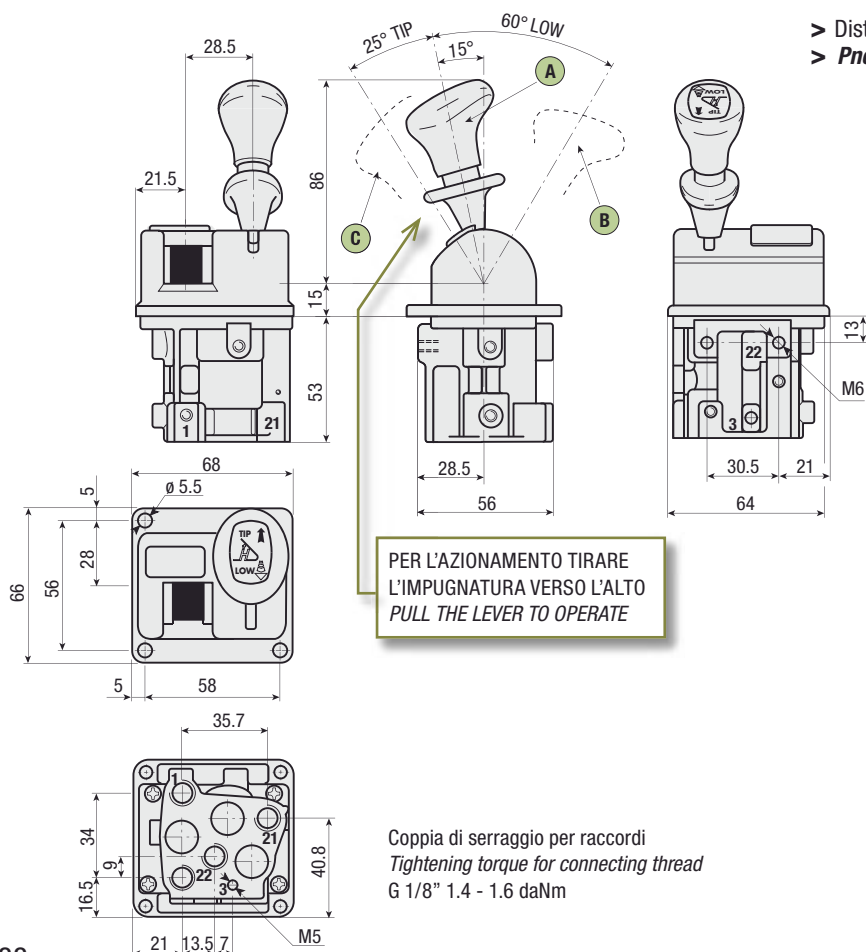
COMANDO PNEUMATICO/PNEUMATIC CONTROL



CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Fluido utilizzato Working medium	aria/air	Temperatura di impiego Operative temperature	- 40° + 80°C
Pressione di esercizio Working pressure	max 12 bar	Passaggio nominale Nominal diameter	Ø 4 mm

> Distributore pneumatico con comando di discesa proporzionale.
> Pneumatic distributor with proportional lowering control.

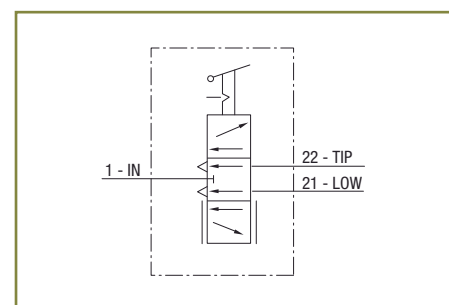


POSIZIONE LEVA - LEVER POSITION

- A Riposo (con arresto) - Rest position (with lock)
- B Azionamento SEZ. 21 - Operation PORT 21
- C Azionamento SEZ. 22 - Operation PORT 22

ATTACCHI ARIA - AIR PORTS

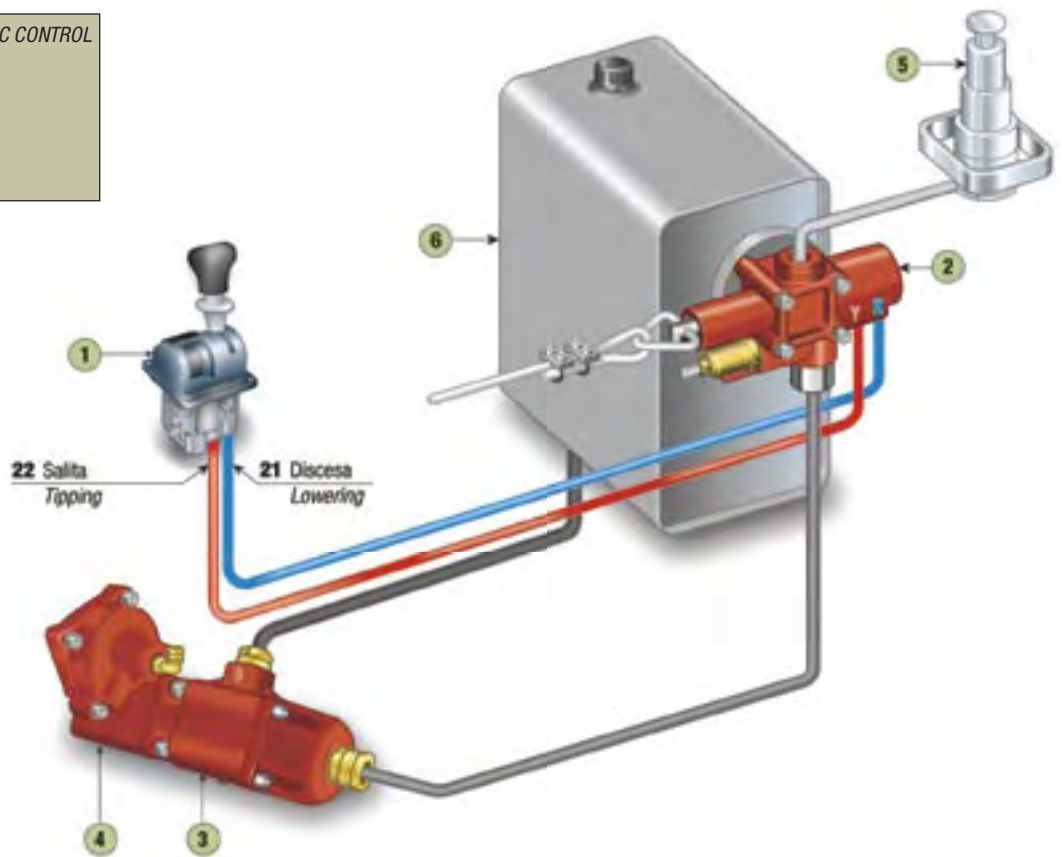
- 1 Alimentazione (IN) G 1/8"
Compressed air supply
- 21 Abbassamento cassone (LOW) G 1/8"
Control lowering
- 22 Sollevamento cassone (TIP) G 1/8"
Control tipping
- 3 Scarico (EX) M5
Free exhaust



mod. CP2000 1

ESEMPIO SCHEMA DI MONTAGGIO - EXAMPLE OF HOOK-UP

- 1 COMANDO PNEUMATICO - PNEUMATIC CONTROL
- 2 DISTRIBUTORE - DISTRIBUTOR
- 3 POMPA - PUMP
- 4 PRESA DI FORZA - POWER TAKE OFF
- 5 CILINDRO - CYLINDER
- 6 SERBATOIO OLIO - OIL TANK

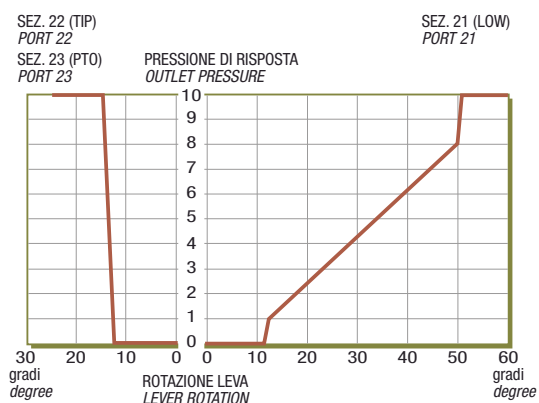


POSSIBILI VERSIONI - OPTIONS

CODICE DISTRIBUTORE DISTRIBUTOR CODE		NOTE - DESCRIPTION
400C2100000 Discesa progressiva Proportional lowering	00	Leva tristabile (a tre posizioni fisse: riposo, discesa, salita). Tristable lever (three stable positions: rest, low, tip).
400C210000M Discesa progressiva Proportional lowering	0M	Leva monostabile (al rilascio la leva torna in posizione di riposo). Monostable lever (when not manually operated, the lever returns to neutral position).
400C210000N Discesa progressiva Proportional lowering	0N	Leva bistabile (ritorna al rilascio solo dalla posizione di salita). Bistable lever (the lever returns to release only from tip position).

DIAGRAMMA - DIAGRAM

CARATTERISTICA CON PRESSIONE DI ALIMENTAZIONE = 10 bar
DIAGRAM REFERRED TO SUPPLY PRESSURE = 10 bar



TRE UTILIZZI
THREE SECTIONS

CP2000-2

CODICE DI ORDINAZIONE - ORDERING CODE

400 C2 2 S 00 00

POSSIBILI VERSIONI/AVAILABLE OPTIONS:
 00 = LEVA TRISTABILE/TRISTABLE LEVER
 0M = LEVA MONOSTABILE/MONOSTABLE LEVER
 0N = LEVA BISTABILE/BISTABLE LEVER
 A0 = LEVA TRISTABILE DISINNESTO AUTOMATICO PTO
 TRISTABLE LEVER AUTOMATIC PTO DISENGAGEMENT
 AM = LEVA MONOSTABILE DISINNESTO AUTOMATICO PTO
 MONOSTABLE LEVER AUTOMATIC PTO DISENGAGEMENT
 AN = LEVA BISTABILE DISINNESTO AUTOMATICO PTO
 BISTABLE LEVER AUTOMATIC PTO DISENGAGEMENT

VARIANTI: STANDARD
VERSIONS: STANDARD

CON SPIA/WITH LIGHT

2 SEZIONI/STAGES

SERIE CP2000/CP2000 SERIES

COMANDO PNEUMATICO/PNEUMATIC CONTROL

Comando Pneumatico Pneumatic Control



CARATTERISTICHE TECNICHE - TECHNICAL SPECIFICATIONS

Fluido utilizzato <i>Working medium</i>	aria/air	Temperatura di impiego <i>Operative temperature</i>	- 40° + 80°C
Pressione di esercizio <i>Working pressure</i>	max 12 bar	Passaggio nominale <i>Nominal diameter</i>	Ø 4 mm
Tensione di esercizio <i>Operating voltage</i>	24 V cc (DC)	Contatti <i>Contacts</i>	Normalmente aperti <i>Normally open</i>

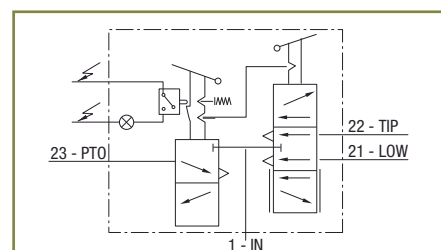
> Distributore pneumatico con comando di discesa proporzionale.
> *Pneumatic distributor with proportional lowering control.*

POSIZIONE LEVA - LEVER POSITION

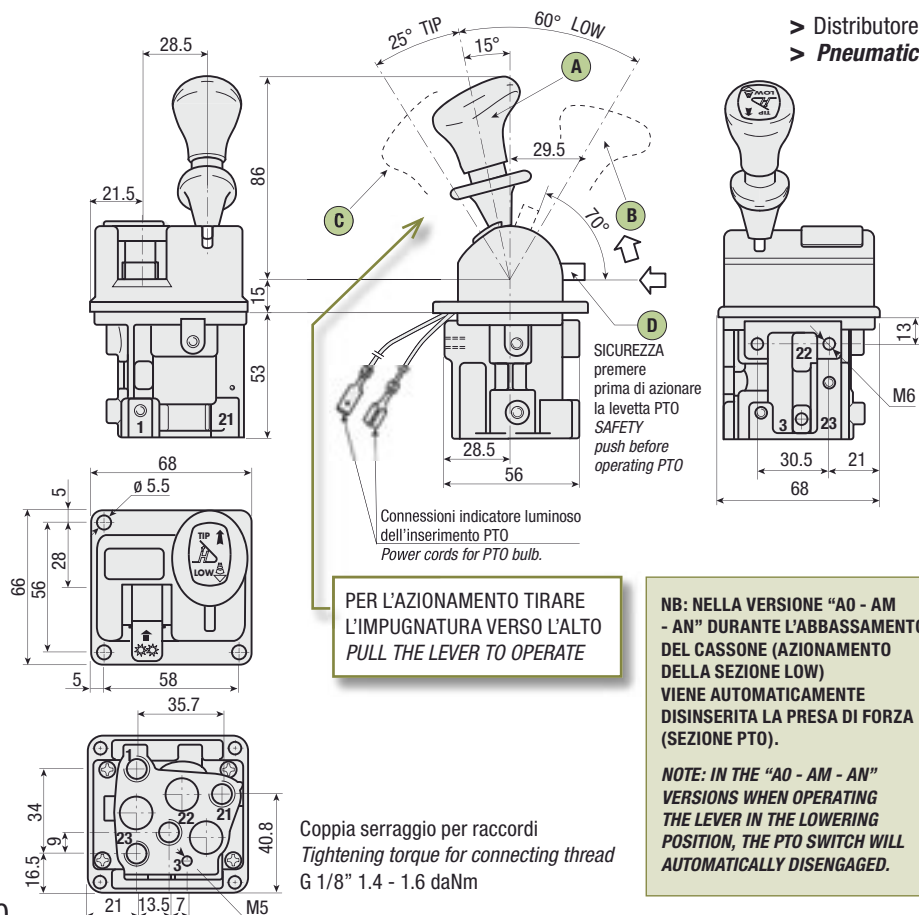
- A Riposo (con arresto) - Rest position (with lock)
- B Azionamento SEZ. 21 - Operation PORT 21
- C Azionamento SEZ. 22 - Operation PORT 22
- D Azionamento SEZ. 23 (con arresto) - Operation PORT 23 (with stop)

ATTACCHI ARIA - AIR PORTS

- 1 Alimentazione (IN) G 1/8" - Compressed air supply
- 21 Abbassamento cassone (LOW) G 1/8" - Control lowering
- 22 Sollevamento cassone (TIP) G 1/8" - Control tipping
- 23 Inserimento presa di forza (PTO) G 1/8" - Power take off engagement
- 3 Scarico (EX) M5 - Free exhaust

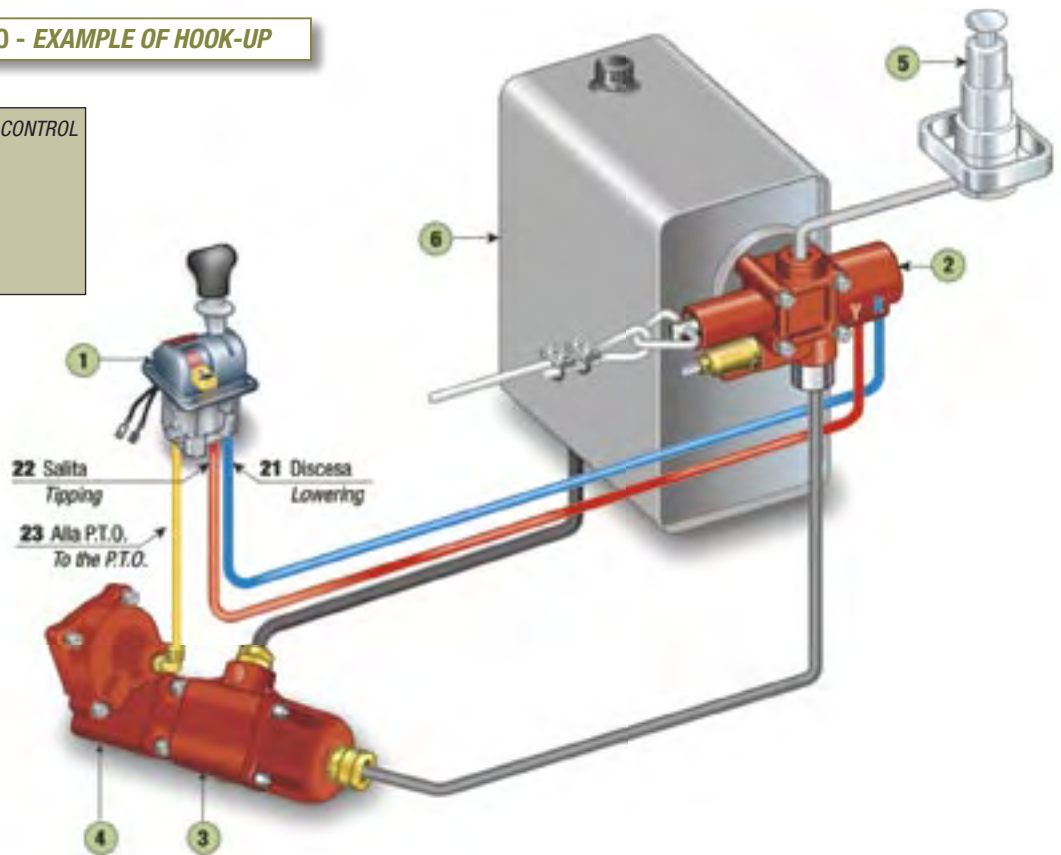


mod. CP2000 2



ESEMPIO SCHEMA DI MONTAGGIO - EXAMPLE OF HOOK-UP

- 1 COMANDO PNEUMATICO - PNEUMATIC CONTROL
- 2 DISTRIBUTORE - DISTRIBUTOR
- 3 POMPA - PUMP
- 4 PRESA DI FORZA - POWER TAKE OFF
- 5 CILINDRO - CYLINDER
- 6 SERBATOIO OLIO - OIL TANK

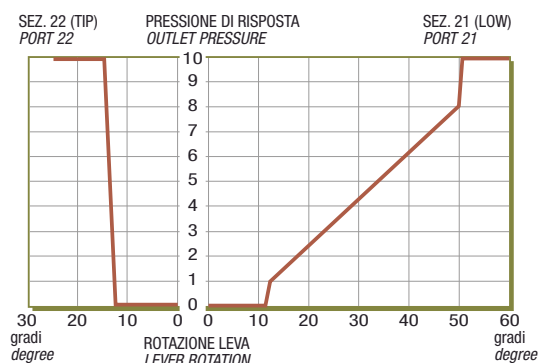


POSSIBILI VERSIONI - OPTIONS

CODICE DISTRIBUTORE DISTRIBUTOR CODE		NOTE - DESCRIPTION
Disinnesto automatico PTO Aut. PTO disengagement	400C22S00A0 Discesa progressiva Proportional lowering	A0 Leva tristabile (a tre posizioni fisse: riposo, discesa, salita). In posizione LOW si ha il disinnesto automatico PTO. <i>Tristable lever (three stable positions: rest, low, tip). With automatic PTO disengagement when body is lowering.</i>
	400C22S00AM Discesa progressiva Proportional lowering	AM Leva monostabile (al rilascio la leva torna nella posizione di riposo). In posizione LOW si ha il disinnesto automatico PTO. <i>Monostable lever (when not manually operated, the lever returns to neutral position). With automatic PTO disengagement when body is lowering.</i>
	400C22S00AN Discesa progressiva Proportional lowering	AN Leva bistabile (ritorna al rilascio solo dalla posizione di salita). In posizione LOW si ha il disinnesto automatico PTO. <i>Bistable lever (the lever returns to release only from TIP position). With automatic PTO disengagement when body is lowering.</i>
	400C22S0000 Discesa progressiva Proportional lowering	00 Leva tristabile (a tre posizioni fisse: riposo, discesa, salita). <i>Tristable lever (three stable positions: rest, low, tip).</i>
	400C22S000M Discesa progressiva Proportional lowering	0M Leva monostabile (al rilascio la leva torna in posizione di riposo). <i>Monostable lever (when not manually operated the lever returns to neutral position).</i>
	400C22S000N Discesa progressiva Proportional lowering	0N Leva bistabile (ritorna al rilascio solo dalla posizione di salita). <i>Bistable lever (the lever returns to release only from TIP position).</i>

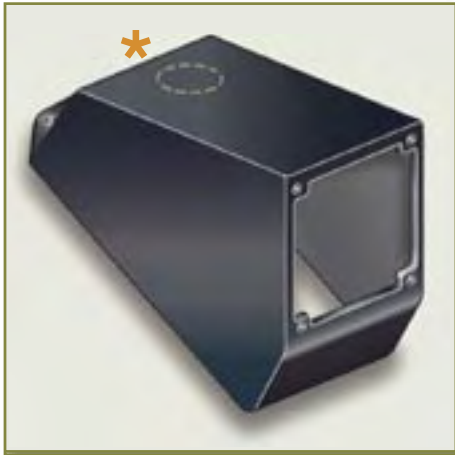
DIAGRAMMA - DIAGRAM

CARATTERISTICA CON PRESSIONE DI ALIMENTAZIONE = 10 bar
DIAGRAM REFERRED TO SUPPLY PRESSURE = 10 bar

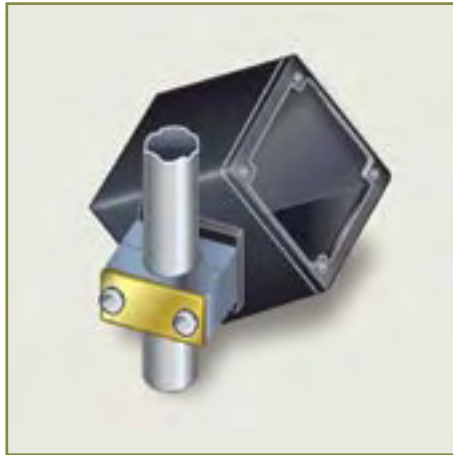


SUPPORTI PER COMANDI PNEUMATICI **CP2000**
 SUPPORTS FOR **CP2000** PNEUMATIC CONTROLS

Supporti - Supports



CODICE - CODE
400KPCS2000

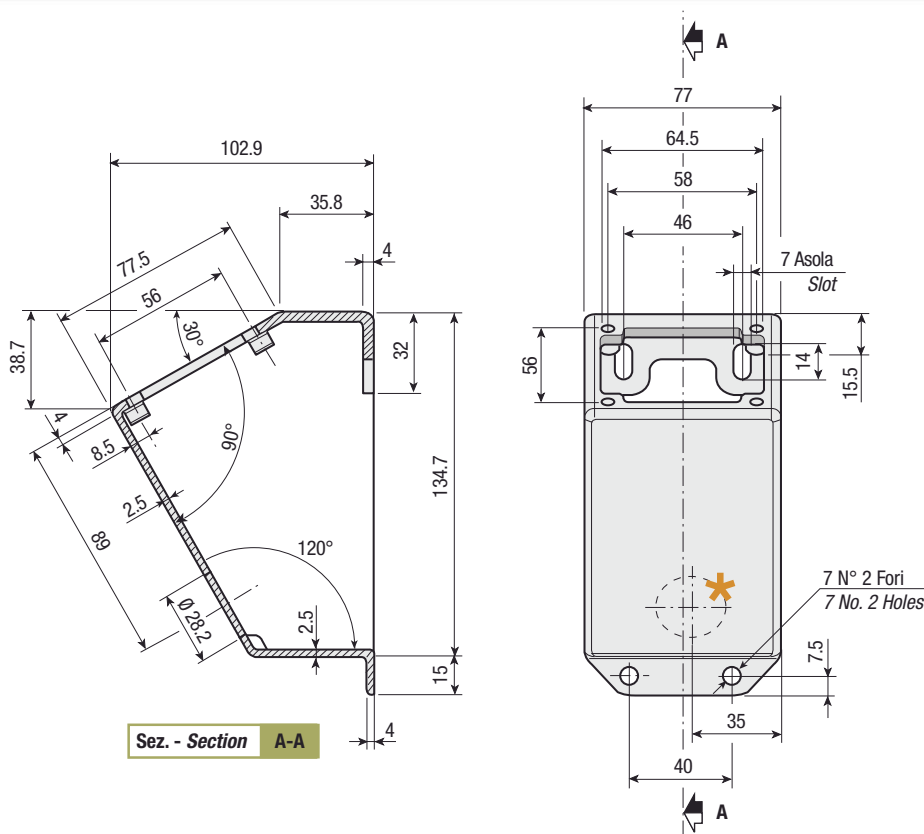


CODICE - CODE
400KPCS0003



CODICE - CODE
400KPCS2002

DIMENSIONI - DIMENSIONS 400KPCS2000

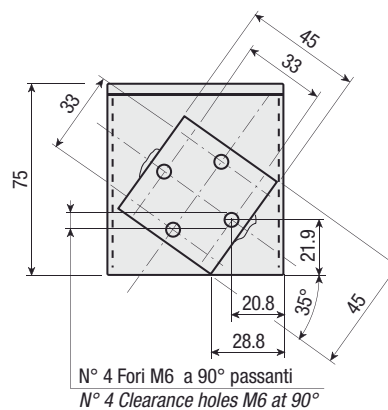
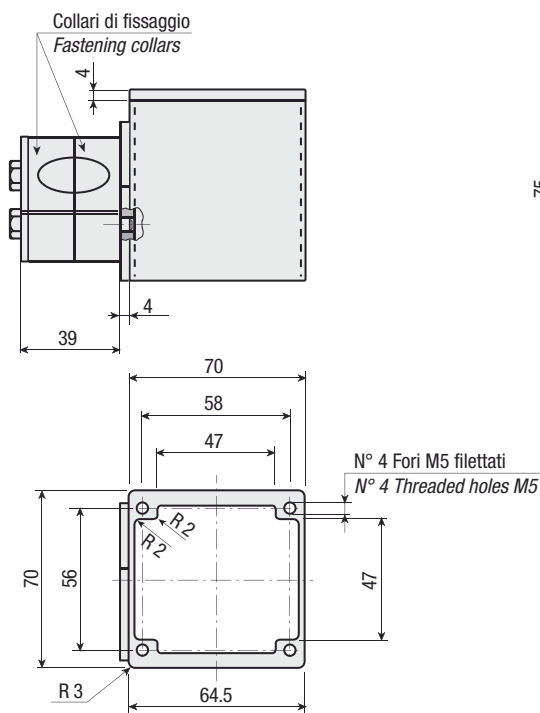


*
 Versione predisposta
 con foro per comando
 ausiliare
 Version with prearranged
 hole for auxiliary control

SUPPORTI PER COMANDI PNEUMATICI CP2000
SUPPORTS FOR CP2000 PNEUMATIC CONTROLS

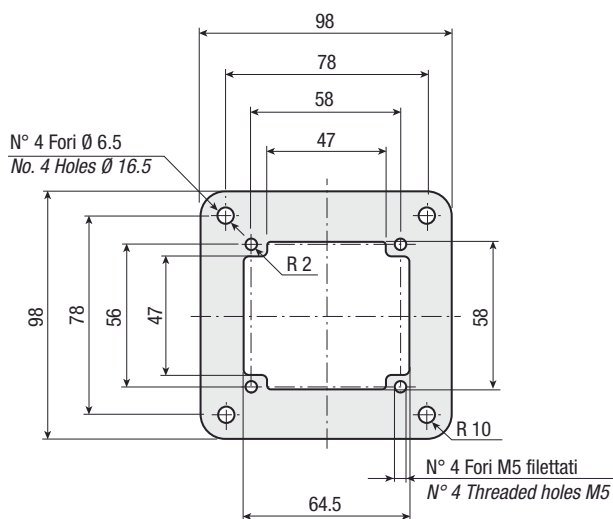
Supporti - Supports

DIMENSIONI - DIMENSIONS 400KPCS2003



Adattabile sia per guida a
DESTRA e SINISTRA.
 Suitable for both
LEFT and RIGHT hand drive.

DIMENSIONI - DIMENSIONS 400KPCS2002

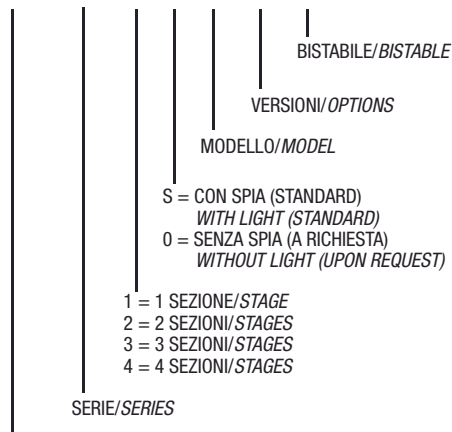


COMANDI PNEUMATICI PNEUMATIC CONTROLS

BISTABILE
BISTABLE

CODICE DI ORDINAZIONE - ORDERING CODE

400 CP 1 S 0 00 0

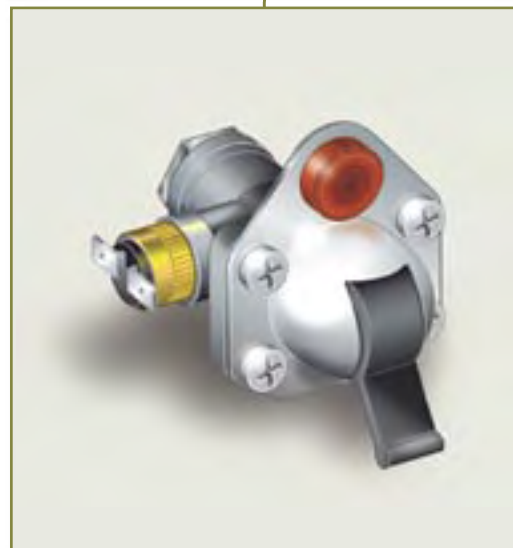


COMANDO PNEUMATICO/PNEUMATIC CONTROL

CP

Comando Pneumatico Pneumatic Control

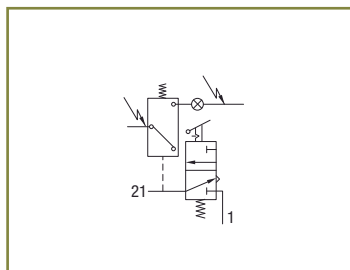
- CP 1
- CP 2
- CP 3
- CP 4



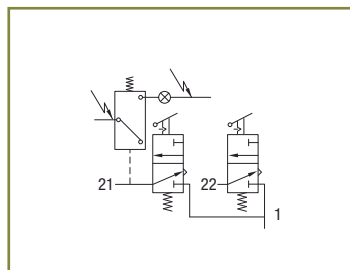
TIPO TYPE	CODICE CODE
CP1	400CP1 S 0 0000
CP2	400CP2 S 0 0000
CP3	400CP3 S 0 0000
CP4	400CP4 S 0 0000

CARATTERISTICHE TECNICHE TECHNICAL SPECIFICATIONS	
Pressione massima di lavoro <i>Max operating pressure</i>	12 bar
Pressione di scoppio <i>Bursting pressure</i>	> 30 bar
Temperatura di lavoro °C (t) <i>Operative temperature °C (t)</i>	- 40° + 80°C
Tensione alimentazione spia <i>Warning light voltage</i>	24 VDC (oppure -or 12 VDC)
Contatti <i>Contacts</i>	Normalmente aperti <i>Normally open</i>

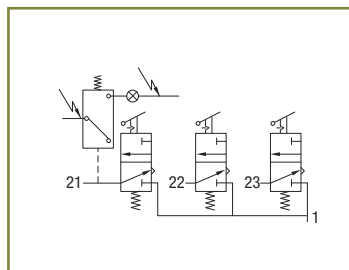
- > **Comando pneumatico**, da una a quattro sezioni, bistabili.
- > È alimentato da un unico ingresso d'aria e gli scarichi sono liberi.
- > A **leve abbassate** (posizione di riposo) le utenze sono a scarico.
- > La versione standard dispone di **pressostato** con spia sulla prima sezione.
- > **Montaggio a pannello.**
- > **Pneumatic control** from 1 up to 4 bistable stages.
- > The inlet is the same for all stages and the exhausts are to atmosphere.
- > Rest position with **levers down**.
- > The standard version has a **pressure-switch** with a warning light on the first stage.
- > **Flange mounting.**



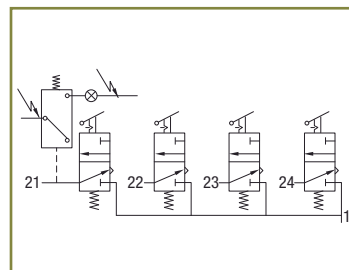
mod. CP 1



mod. CP 2



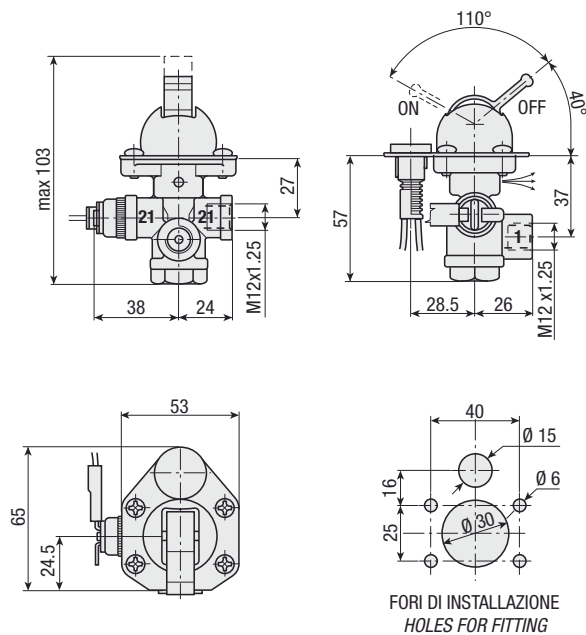
mod. CP 3



mod. CP 4

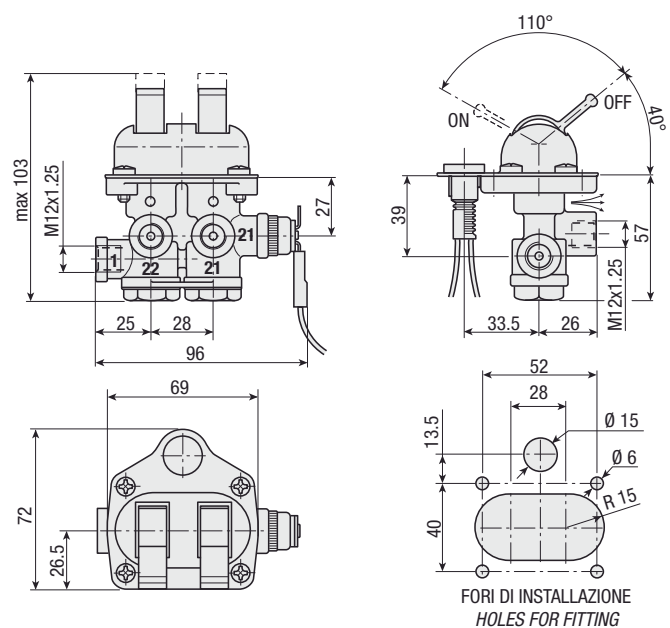
VERSIONE STANDARD - STANDARD VERSION

mod. CP 1 S



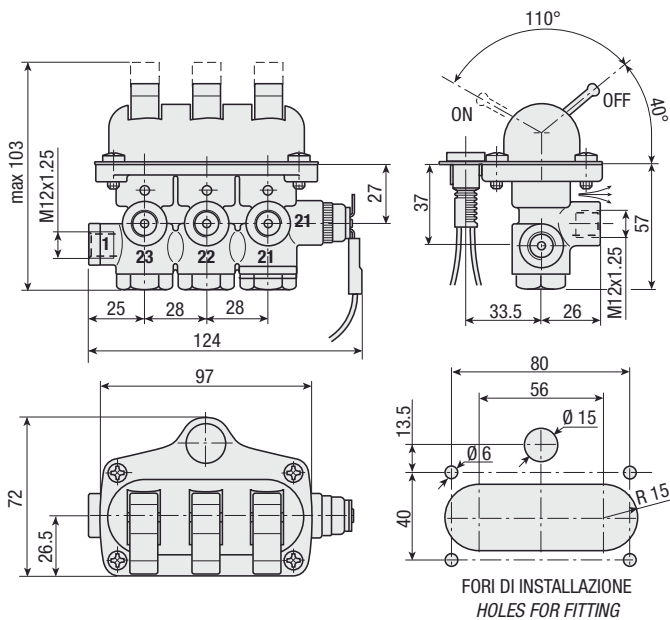
VERSIONE STANDARD - STANDARD VERSION

mod. CP 2 S



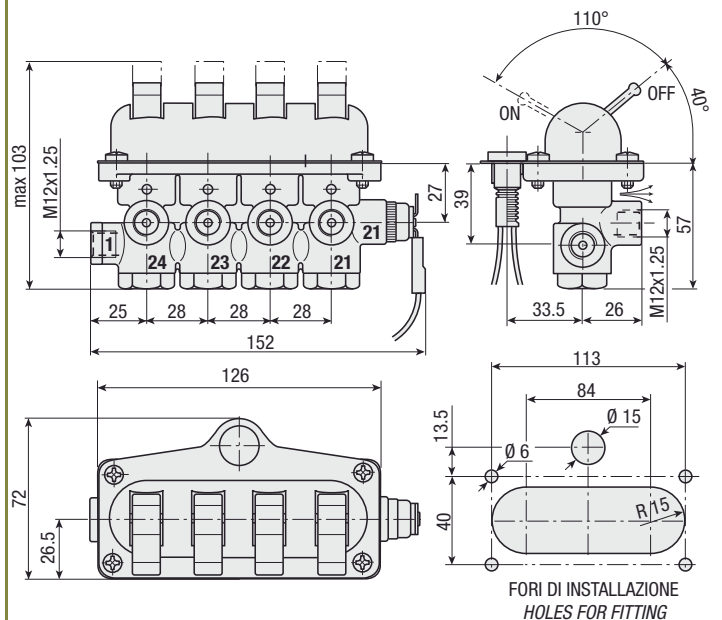
VERSIONE STANDARD - STANDARD VERSION

mod. CP 3 S



VERSIONE STANDARD - STANDARD VERSION

mod. CP 4 S



KIT RIPARAZIONI - REPAIRING KIT

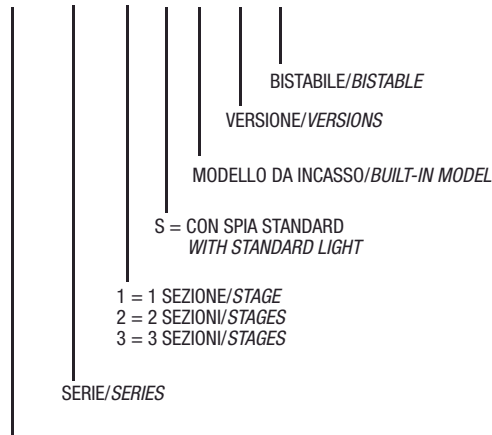
CODICE - CODE

4R111710000

BISTABILE
BISTABLE

CODICE DI ORDINAZIONE - ORDERING CODE

400 CP 1 S I 00 0



COMANDO PNEUMATICO/PNEUMATIC CONTROL

CPI

- CPI 1
- CPI 2
- CPI 3

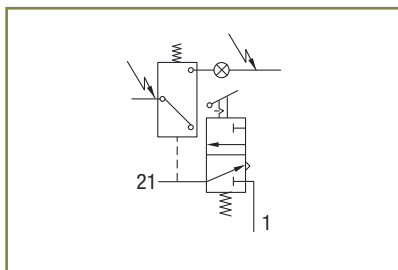
Comando Pneumatico Pneumatic Control



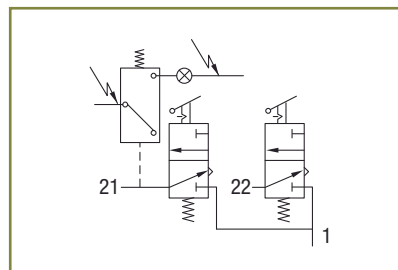
TIPO TYPE	CODICE CODE
CPI1	400CP1SI000
CPI2	400CP2SI000
CPI3	400CP3SI000

CARATTERISTICHE TECNICHE TECHNICAL SPECIFICATIONS	
Pressione massima di lavoro <i>Max operating pressure</i>	12 bar
Pressione di scoppio <i>Bursting pressure</i>	> 30 bar
Temperatura di lavoro °C (t) <i>Operative temperature °C (t)</i>	- 40° + 80°C
Tensione alimentazione spia <i>Warning light voltage</i>	24 VDC (oppure-or 12 VDC)
Contatti <i>Contacts</i>	Normalmente aperti <i>Normally open</i>

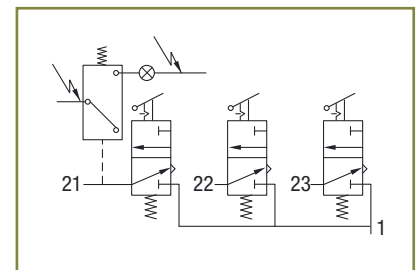
- > **Comando pneumatico**, da una a tre sezioni, bistabili.
- > È alimentato da un unico ingresso d'aria e gli scarichi sono liberi.
- > A **leve abbassate** (posizione di riposo) le utenze sono a scarico.
- > Dispone di **pressostato** con spia sulla prima sezione.
- > **Montaggio a pannello.**
- > **Pneumatic control** from 1 up to 3 bistable stages.
- > The inlet is the same for all stages and the exhausts are to atmosphere.
- > Rest position with **levers down**.
- > It has a **pressure-switch** with a warning light on the first stage.
- > **Flange mounting.**



mod. CP 1 SI



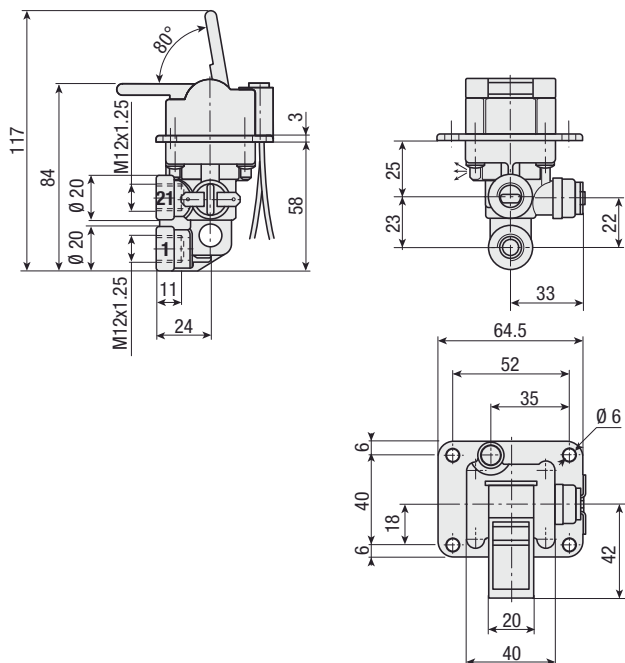
mod. CP 2 SI



mod. CP 3 SI

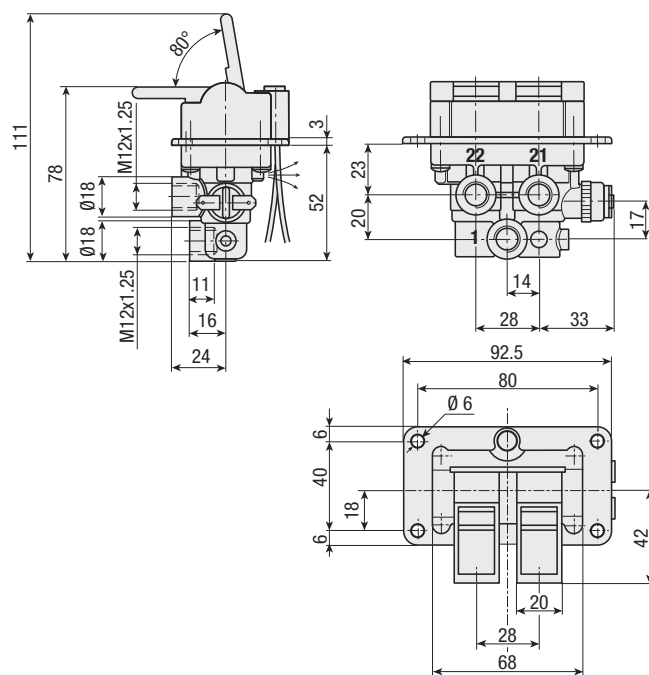
VERSIONE STANDARD - STANDARD VERSION

mod. CP 1 SI



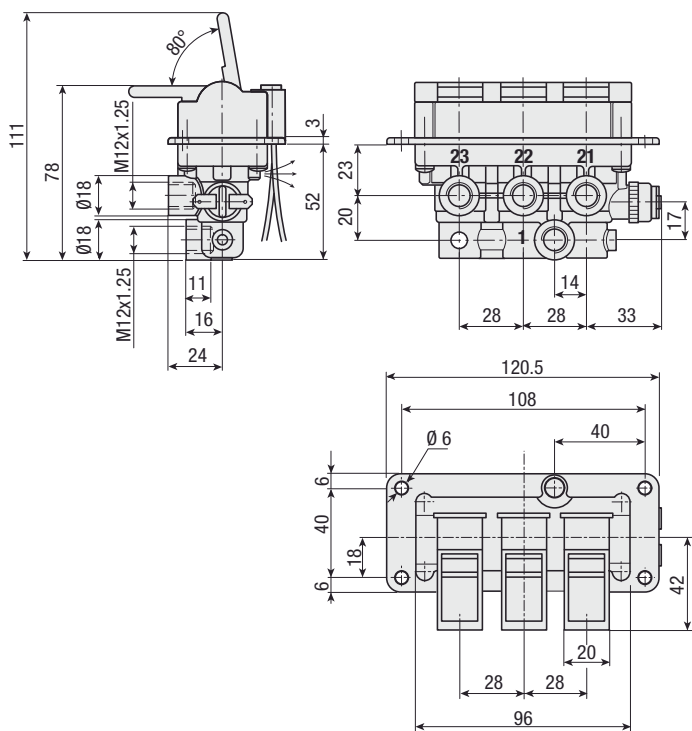
VERSIONE STANDARD - STANDARD VERSION

mod. CP 2 SI

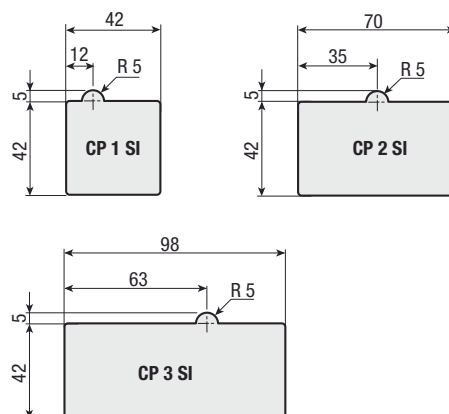


VERSIONE STANDARD - STANDARD VERSION

mod. CP 3 SI



FORI DI INSTALLAZIONE - HOLES FOR FITTING



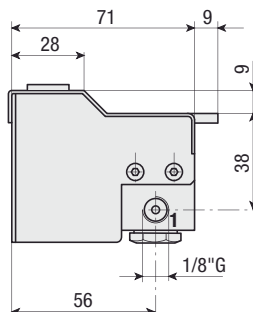
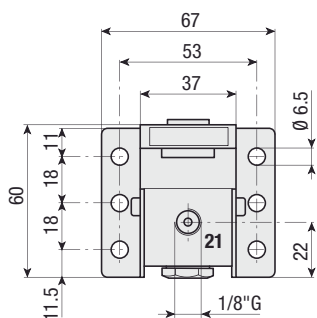
KIT RIPARAZIONI - REPAIRING KIT

CODICE - CODE

4R111711000

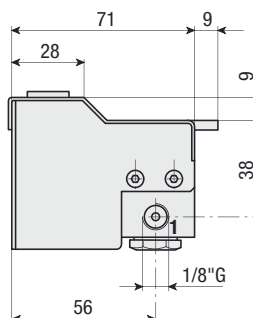
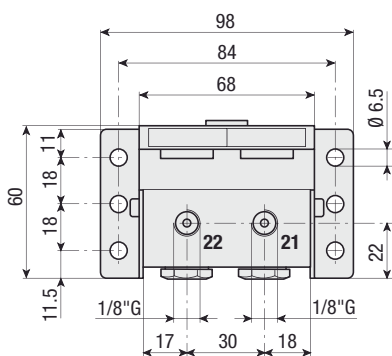
VERSIONE STANDARD - STANDARD VERSION

mod. PS 1



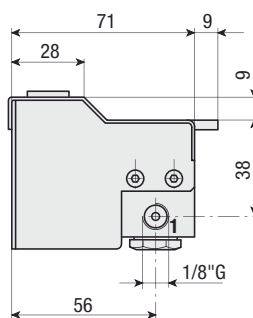
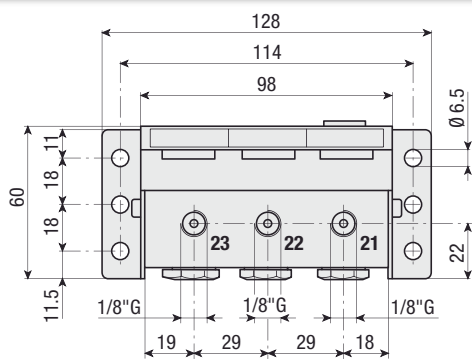
VERSIONE STANDARD - STANDARD VERSION

mod. PS 2



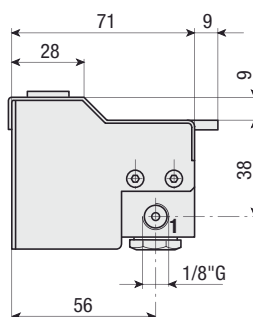
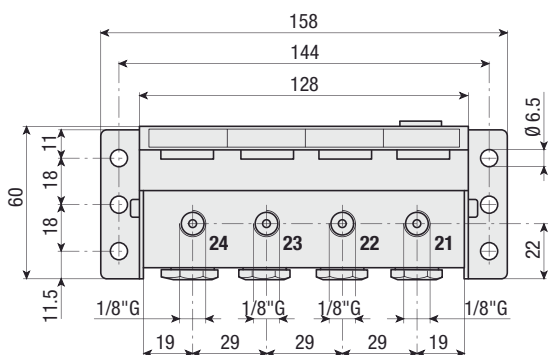
VERSIONE STANDARD - STANDARD VERSION

mod. PS 3



VERSIONE STANDARD - STANDARD VERSION

mod. PS 4



7

COMANDI MECCANICI
MECHANICAL CONTROLS



COMANDI MECCANICI

L'offerta Hydrocar si compone di diverse tipologie in funzione delle varie configurazioni dei telai dei veicoli industriali e delle Prese di Forza e valvole da comandare.

I sistemi di comando a cavo sono necessari per l'innesto delle Prese di forza o per l'azionamento delle valvole distributrici per il controllo di salita e discesa dei ribaltabili su tutti i veicoli Light Duty sprovvisti di impianto d'aria compressa.

MECHANICAL CONTROLS

The various Hydrocar mechanical controls are manufactured according to the different configurations of the industrial vehicles and engagement methods of Power Take-offs and hydraulic valves.

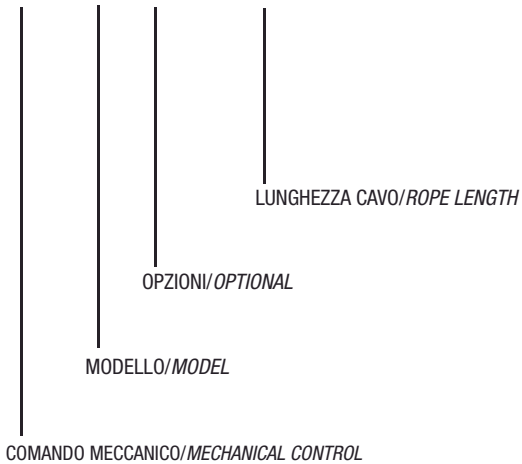
The rope versions are necessary mainly for activating the Power Take-offs or starting the distribution valves for raising and lowering control systems in tipper equipment on Light Duty vehicles without compressed air circuit.



COMANDO A LEVA SEMPLICE
SIMPLE LEVER CONTROL

CODICE DI ORDINAZIONE - ORDERING CODE

405 TXZ 0 00 15



TX

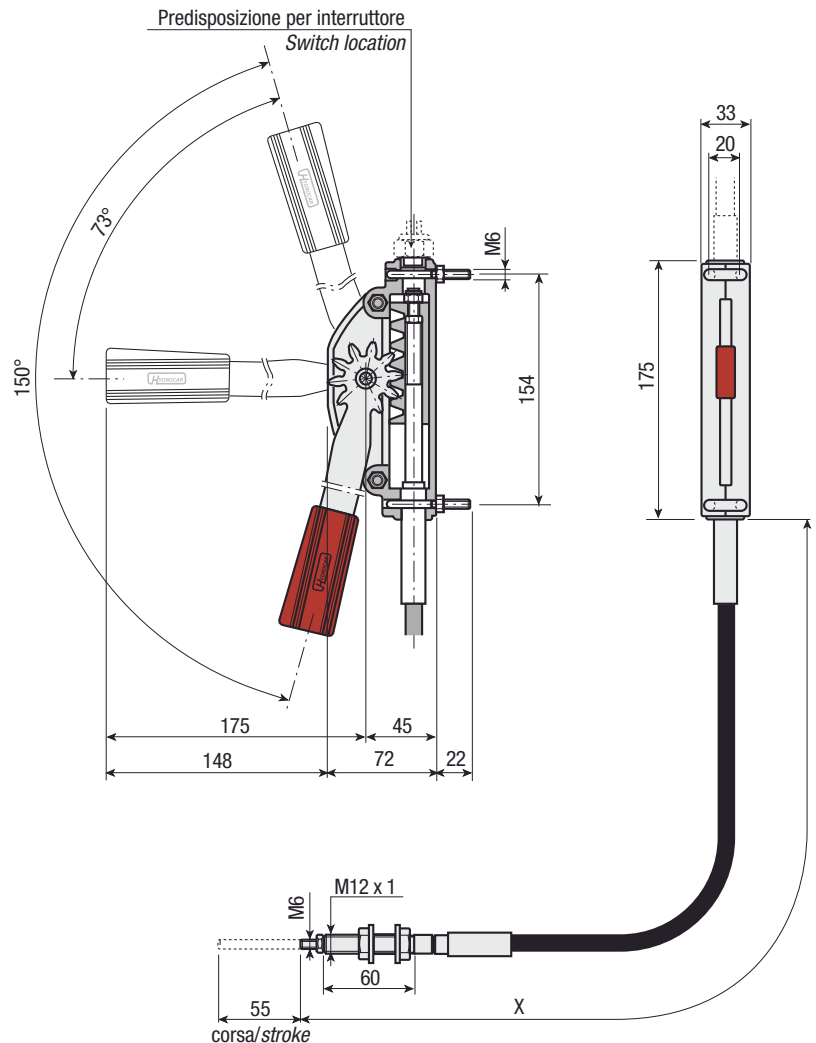
- TXZ 1.5
- TXZ 2
- TXZ 2.5
- TXZ 3
- TXZ 3.5
- TXZ 4
- TXZ 4.5

Comando Meccanico Mechanical Control



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

MODELLO MODEL	CODICE CODE	TIPO TYPE	LUNGHEZZA LENGTH X (mm)
TXZ 1.5	405TXZ00015	15	1320
TXZ 2	405TXZ00020	20	1830
TXZ 2.5	405TXZ00025	25	2340
TXZ 3	405TXZ00030	30	2840
TXZ 3.5	405TXZ00035	35	3320
TXZ 4	405TXZ00040	40	3840
TXZ 4.5	405TXZ00045	45	4320



COMANDO DOPPIO LEVA
DOUBLE LEVER CONTROL

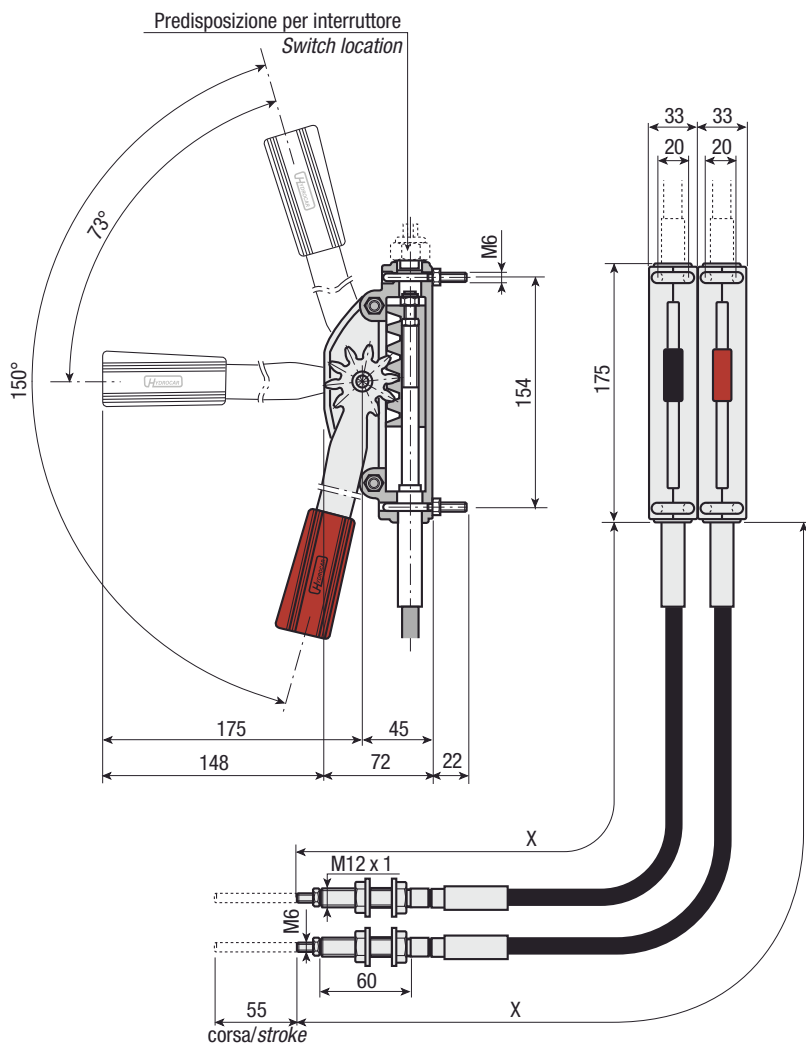
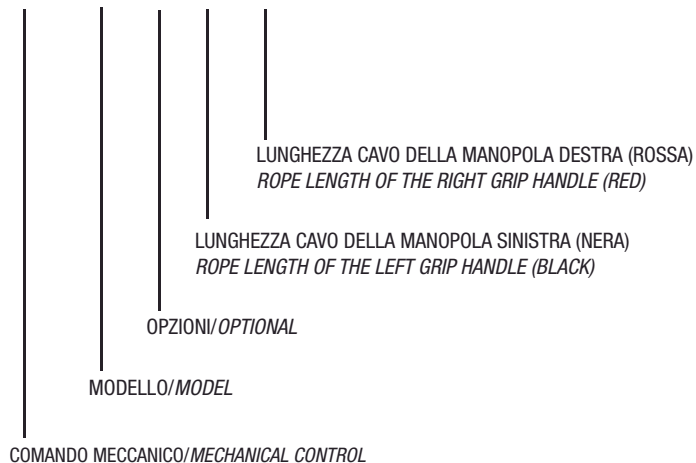
TX

Comando Meccanico
Mechanical Control

CODICE DI ORDINAZIONE - ORDERING CODE

405 TXZ 0 15 15

TXZ 1.5 ÷ 4.5 - 1.5 ÷ 4.5



MODELLO MODEL	CODICE CODE	TIPO TYPE	LUNGHEZZA LENGTH X (mm)
TXZ 1.5	405TXZ00015	15	1320
TXZ 2	405TXZ00020	20	1830
TXZ 2.5	405TXZ00025	25	2340
TXZ 3	405TXZ00030	30	2840
TXZ 3.5	405TXZ00035	35	3320
TXZ 4	405TXZ00040	40	3840
TXZ 4.5	405TXZ00045	45	4320

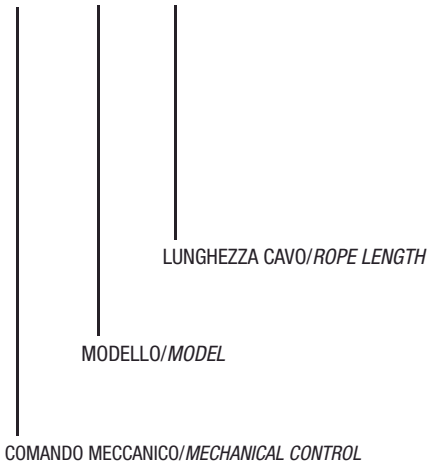
COMANDI MECCANICI MECHANICAL CONTROLS

7

COMANDO A TIRO
PUSH-PULL CABLE

CODICE DI ORDINAZIONE - ORDERING CODE

405 TIZ20 125



I20Z

I20Z 125

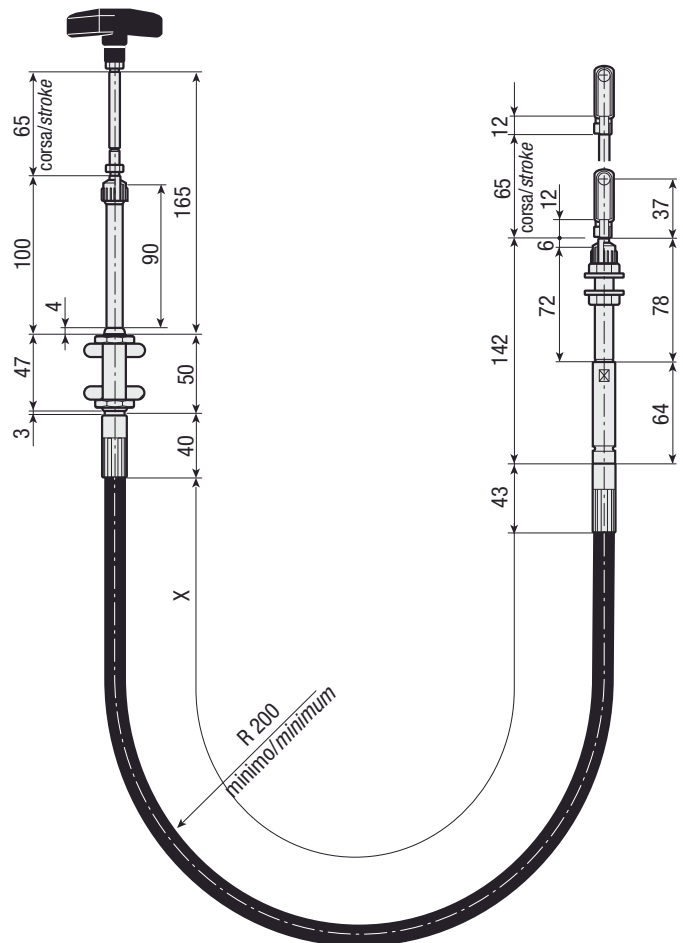
I20Z 200

Comando Meccanico
Mechanical Control



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

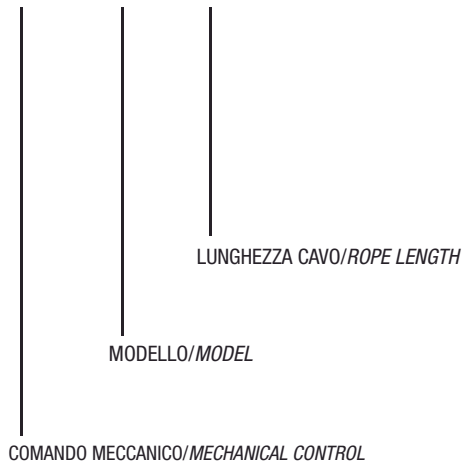
TIPO TYPE	CODICE CODE	LUNGHEZZA CAVO ROPE LENGHT X (mm)
I20Z 125	405TIZ20125	1250
I20Z 200	405TIZ20200	2000



COMANDO A TIRO
PUSH-PULL CABLE

CODICE DI ORDINAZIONE - ORDERING CODE

405 T10020 20



I20

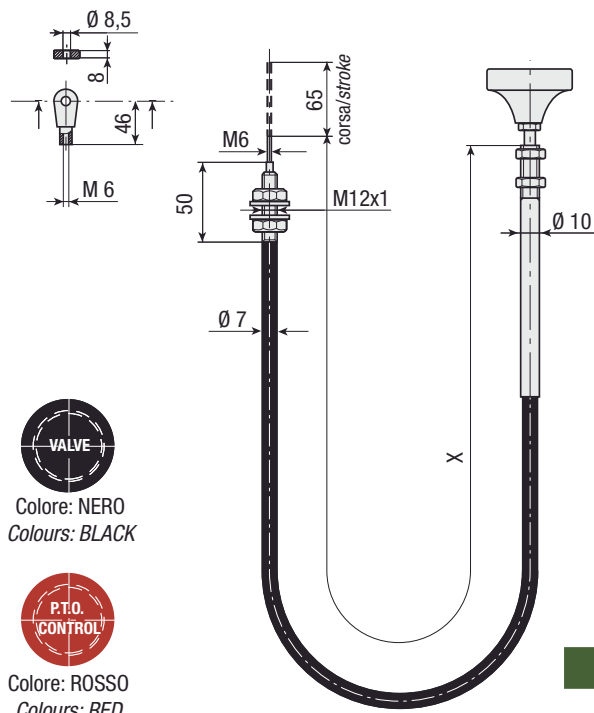
Comando Meccanico Mechanical Control

- I20 08
- I20 20
- I20 25
- I20 30
- I20 35
- I20 40
- I20 45



CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	LUNGHEZZA CAVO ROPE LENGHT X (mm)
I20 08	405T1002008	800
I20 20	405T1002020	2000
I20 25	405T1002025	2500
I20 30	405T1002030	3000
I20 35	405T1002035	3500
I20 40	405T1002040	4000
I20 45	405T1002045	4500



COMANDI MECCANICI MECHANICAL CONTROLS

SERBATOI *TANKS*



SERBATOI

I nostri serbatoi sono studiati per adattarsi a tutte le diverse configurazioni dei telai dei veicoli industriali; con montaggi nel telaio, laterali o retro cabina, la nostra gamma è completa per meglio supportare e agevolare l'installazione dei nostri kit idraulici sui veicoli industriali.

Le versioni aggiuntive con filtrazione sulla tubazione di ritorno al serbatoio, oppure con montaggio delle valvole distributrici direttamente sul serbatoio, completano la nostra offerta proponendo soluzioni orientate alla più ampia flessibilità e alla semplicità di montaggio.

TANKS

Our tanks are designed for fitting to the most configurations of the industrial vehicles' chassis. Our range is very versatile for helping the installation of our hydraulic kits on the industrial vehicles, in case of underbody, side or rear mounting.

The additional models with filtering on the return pipe to the tank or with mounting of the distribution valves directly on the tank, complete our proposals, offering solutions for a greater flexibility and an easier assembly.



MONTAGGIO SOTTO-CASSONE
UNDERBODY MOUNTING

SB PF

Serbatoio
Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB S A 021 D G 0 0

PERSONALIZZAZIONI/PERSONALIZED
0= NESSUNA/NONE

POSIZIONE PIASTRA/PLATE POSITION
0= NO PIASTRA/NO PLATE

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO PREDISPOSTO PER FILTRO CON TAPPO SFIATO
PREARRANGED FOR FILTER TANK WITH BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

S= MONTAGGIO SOTTO-CASSONE/UNDERBODY MOUNTED

MODELLO/MODEL

SERBATOI PREDISPOSTI PER FILTRO
PREARRANGED FOR FILTER TANK

SB PF 21

SB PF 34

SB PF 47

SB PF 60

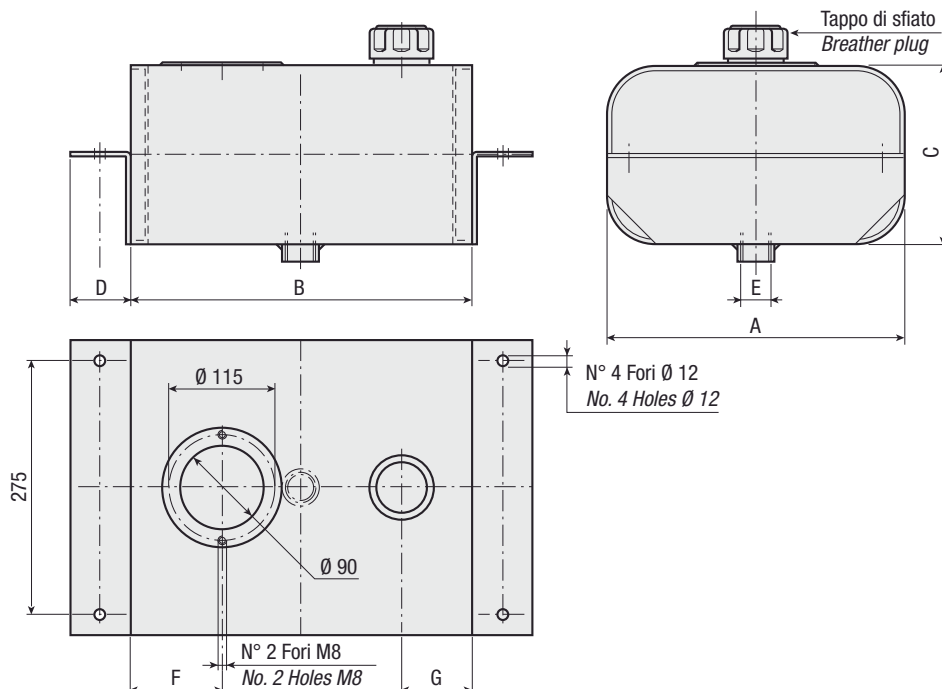


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY (litri - litres)	DIMENSIONI - DIMENSIONS						
			A	B	C	D	E	F	G
SB PF 21	SBSA021DG00	21	370	320	195	65	1'	100	75
SB PF 34	SBSA034DG00	34	370	520	195	65	1'	100	75
SB PF 47	SBSA047DG00	47	360	500	290	65	1' ¼	150	100
SB PF 60	SBSA060DG00	60	360	640	290	65	1' ¼	150	100

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



MONTAGGIO LATERALE SIDE MOUNTING

CODICE DI ORDINAZIONE - ORDERING CODE

SB L A 055 B G 0 0

PERSONALIZZAZIONI/PERSONALIZED
0= NESSUNA/NONE

POSIZIONE PIASTRA/PLATE POSITION
0= NO PIASTRA/NO PLATE

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO BASE + TAPPO SFIATO/STANDARD TANK + BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

L= MONTAGGIO LATERALE/SIDE MOUNTING

MODELLO/MODEL

SB

SB 55

Serbatoio Tank

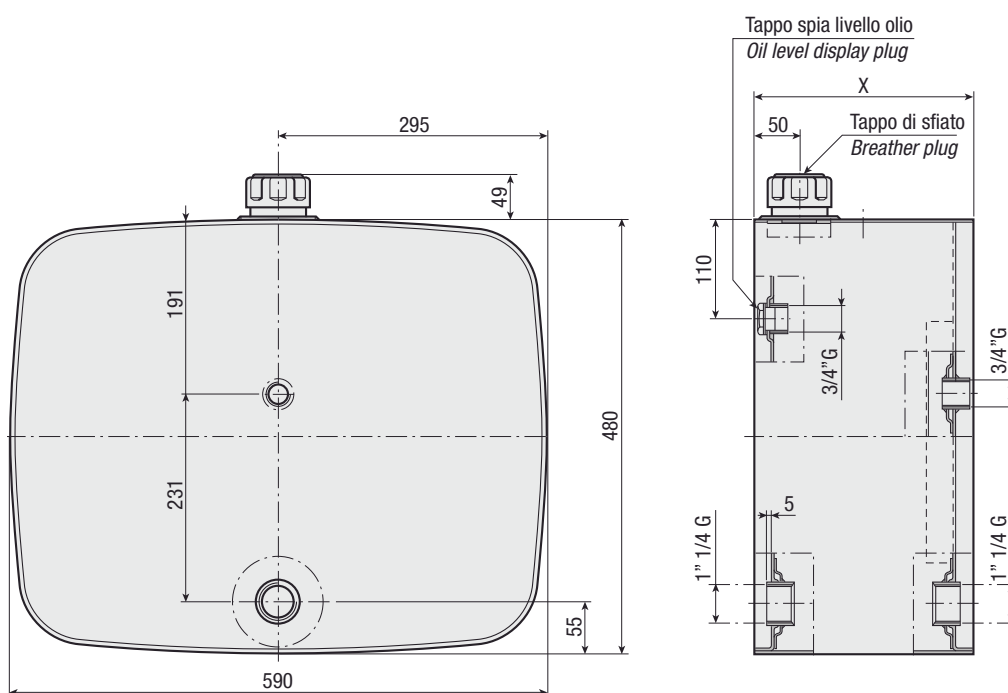


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	X (mm)
SB 55	SBLA055BG00	55 lt	240

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



SERBATOIO TANKS

8

MONTAGGIO LATERALE SIDE MOUNTING

SB DF

Serbatoio Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB L A 080 B G 1 6

PERSONALIZZAZIONI/PERSONALIZED
PIASTRA CON FORATURA PER D130 lt
PLATE WITH BORING FOR D130 lt

POSIZIONE PIASTRA/PLATE POSITION
1= FRONTALE/FONTAL

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO BASE + TAPPO SFIATO/STANDARD TANK + BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

L= MONTAGGIO LATERALE/SIDE MOUNTING

MODELLO/MODEL

SB DF 080

SB DF 100

SB DF 120

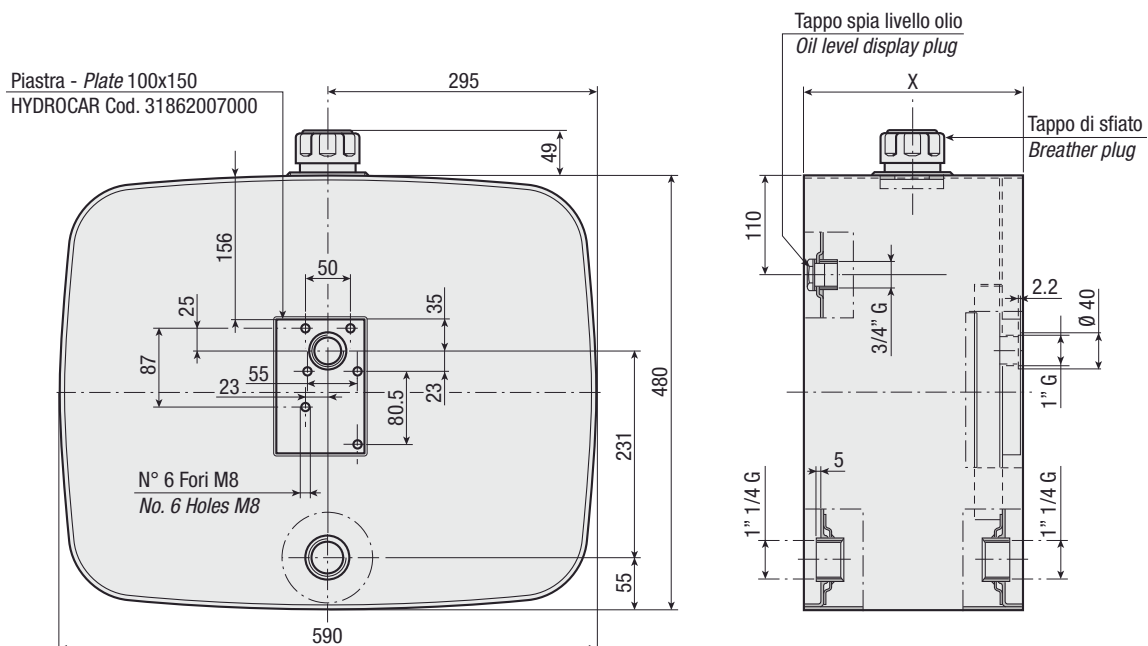


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	X (mm)
SB DF 080	SBLA080BG16	80 lt	320
SB DF 100	SBLA100BG16	100 lt	400
SB DF 120	SBLA120BG16	120 lt	480

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



MONTAGGIO LATERALE SIDE MOUNTING

SB PF

Serbatoio Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB L A 080 D G 0 0

PERSONALIZZAZIONI/PERSONALIZED
0= NESSUNA/NONE

POSIZIONE PIASTRA/PLATE POSITION
0= NO PIASTRA/NO PLATE

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO PREDISPOSTO PER FILTRO CON TAPPO SFIATO
PREARRANGED FOR FILTER TANK WITH BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/ TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

L= MONTAGGIO LATERALE/SIDE MOUNTING

MODELLO/MODEL

SERBATOI PREDISPOSTI PER FILTRO
PREARRANGED FOR FILTER TANK

SB PF 080

SB PF 100

SB PF 120

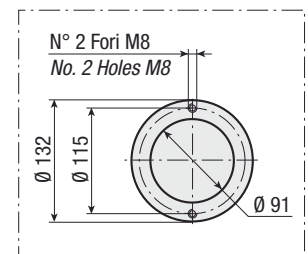
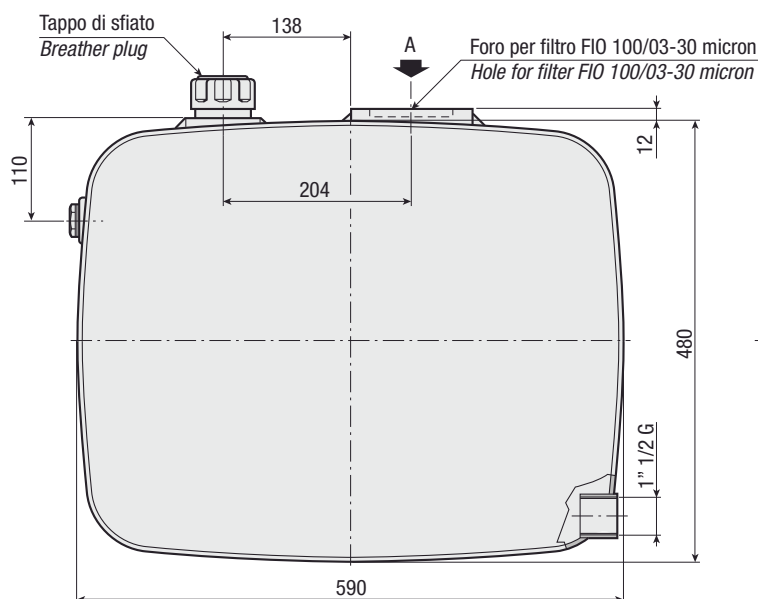


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	X (mm)
SB PF 080	SBLA080DG00	80 lt	320
SB PF 100	SBLA100DG00	100 lt	400
SB PF 120	SBLA120DG00	120 lt	480

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



Vista parziale da A
Partial view from A

SERBATOI TANKS

8

MONTAGGIO LATERALE
SIDE MOUNTING

SB DF

Serbatoio
Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB L A 170 B G 1 5

SB DF 170

SB DF 205



PERSONALIZZAZIONI/PERSONALIZED
PIASTRA CON FORATURA PER D160 E D180 lt
PLATE WITH BORING FOR D160 AND D180 lt

POSIZIONE PIASTRA/PLATE POSITION
1= FRONTALE/FONTAL

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO BASE + TAPPO SFIATO/STANDARD TANK + BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

L= MONTAGGIO LATERALE/SIDE MOUNTING

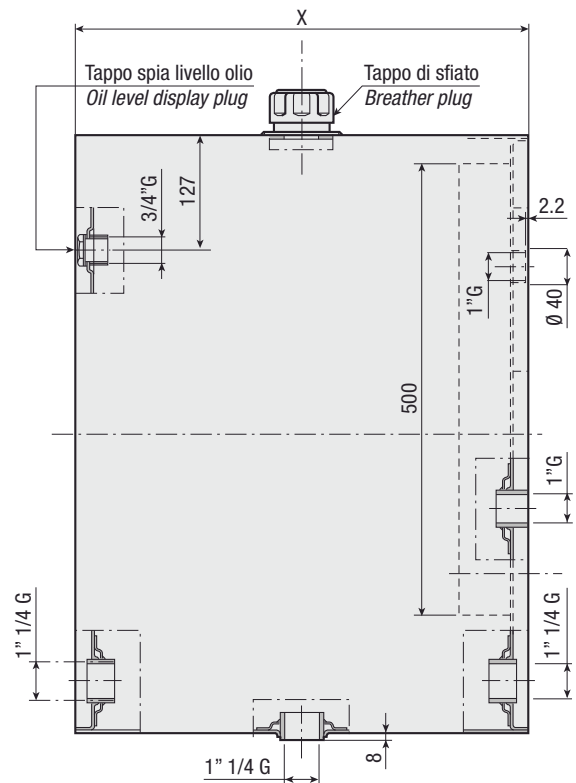
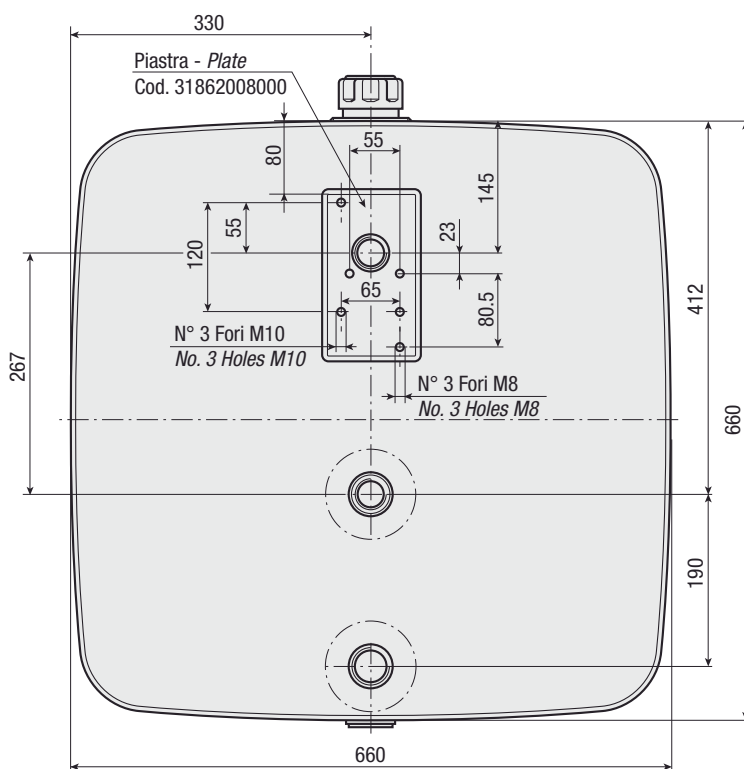
MODELLO/MODEL

CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	X (mm)
SB DF 170	SBLA170BG15	170 lt	420
SB DF 205	SBLA205BG15	205 lt	500

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



MONTAGGIO LATERALE SIDE MOUNTING

SB PF

Serbatoio Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB L A 170 D G 0 0

PERSONALIZZAZIONI/PERSONALIZED
0= NESSUNA/NONE

POSIZIONE PIASTRA/PLATE POSITION
0= NO PIASTRA/NO PLATE

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO PREDISPOSTO PER FILTRO CON TAPPO SFIATO
PREARRANGED FOR FILTER TANK WITH BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

L= MONTAGGIO LATERALE/SIDE MOUNTING

MODELLO/MODEL

SERBATOI PREDISPOSTI PER FILTRO
PREARRANGED FOR FILTER TANK

SB PF 170

SB PF 205

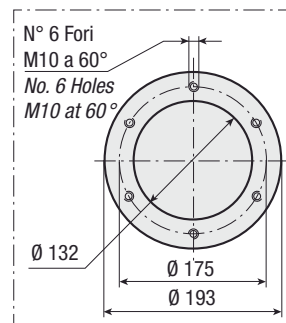
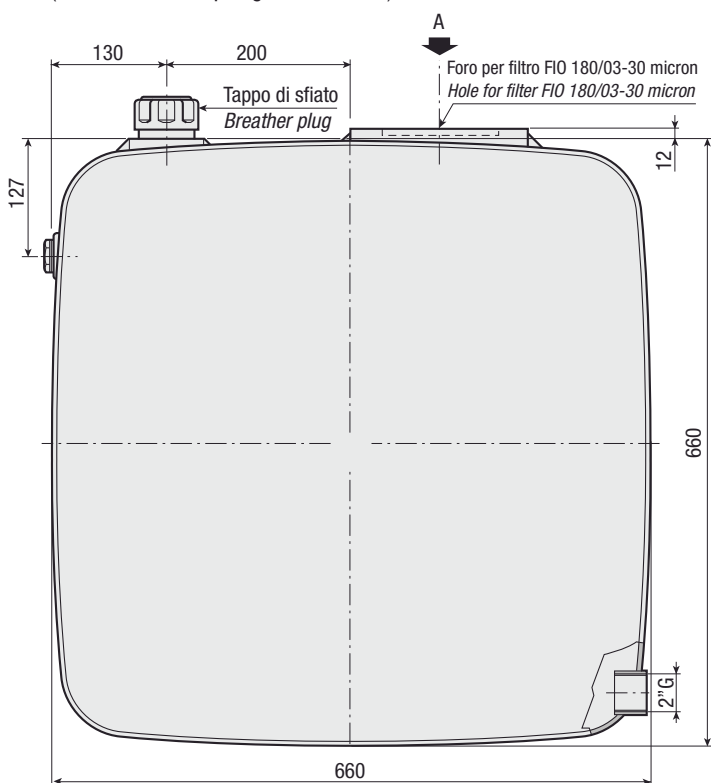


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	X (mm)
SB PF 170	SBLA170DG00	170 lt	420
SB PF 205	SBLA205DG00	205 lt	500

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



Vista parziale da A
Partial view from A

SERBATOI TANKS

MONTAGGIO RETRO-CABINA
REAR MOUNTED

SB DF

SB DF 195

Serbatoio
Tank

CODICE DI ORDINAZIONE - ORDERING CODE

SB R A 195 B G 1 5

PERSONALIZZAZIONI/PERSONALIZED
PIASTRA CON FORATURA PER D160 E D180 lt
PLATE WITH BORING FOR D160 AND D180 lt

POSIZIONE PIASTRA/PLATE POSITION
1= FRONTALE/FONTAL

COLORE/COLOUR
G= GRIGIO/GREY

ALLESTIMENTO/EQUIPMENT
SERBATOIO BASE + TAPPO SFIATO/STANDARD TANK + BREATHER PLUG

CAPACITÀ SERBATOIO (lt)/TANK CAPACITY (lt)

MATERIALE/MATERIAL
A= ACCIAIO/STEEL

R= MONTAGGIO RETRO-CABINA/REAR MOUNTED

MODELLO/MODEL

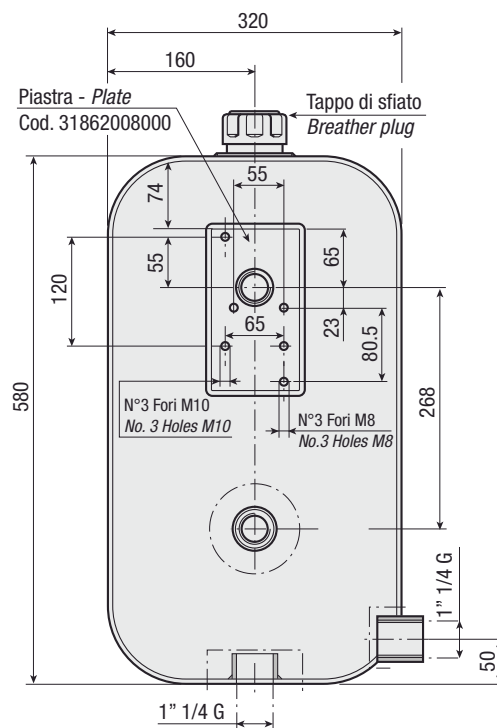
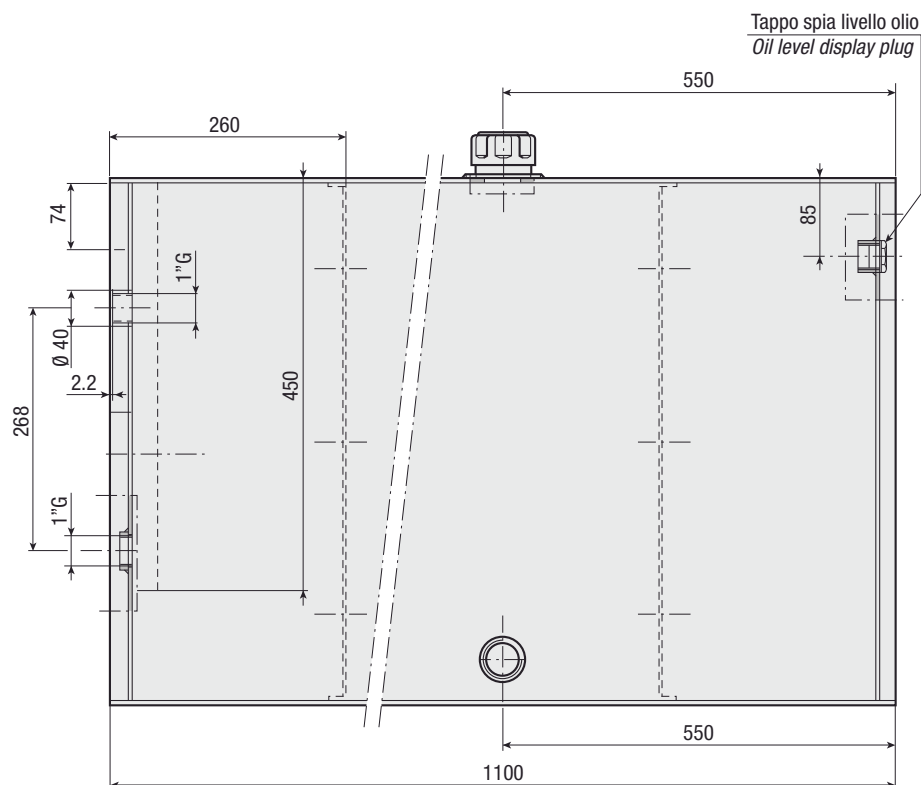


CARATTERISTICHE E DATI TECNICI - SPECIFICATIONS AND TECHNICAL DATA

TIPO TYPE	CODICE CODE	CAPACITÀ CAPACITY	DIMENSIONI DIMENSIONS (mm)
SB DF 195	SBRA195BG15	195 lt	320 x 1100

> Serbatoi in materiale metallico colore standard grigio
(a richiesta altre tipologie e accessori).

> Metallic oil tank- standard colour: grey
(other versions and accessories available upon request).



ACCESSORI/ACCESSORIES

SERIE/SERIES SB

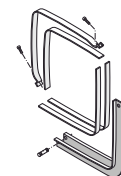
MONTAGGIO LATERALE SIDE MOUNTING



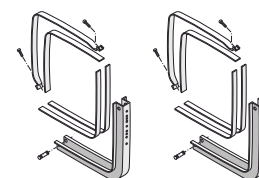
TIPO TYPE	CODICE CODE	SERBATOIO TANK
SB 55	SBLA055BG00	55 lt
SB DF 080	SBLA080BG16	80 lt
SB DF 100	SBLA100BG16	100 lt
SB DF 120	SBLA120BG16	120 lt
SB PF 080	SBLA080DG00	80 lt
SB PF 100	SBLA100DG00	100 lt
SB PF 120	SBLA120DG00	120 lt
SB DF 170	SBLA170BG15	170 lt
SB DF 205	SBLA205BG15	205 lt
SB PF 170	SBLA170DG00	170 lt
SB PF 205	SBLA205DG00	205 lt

KIT STAFFE DI FISSAGGIO BRACKETS KITS

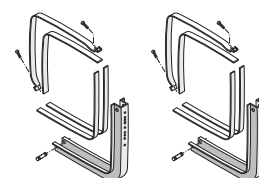
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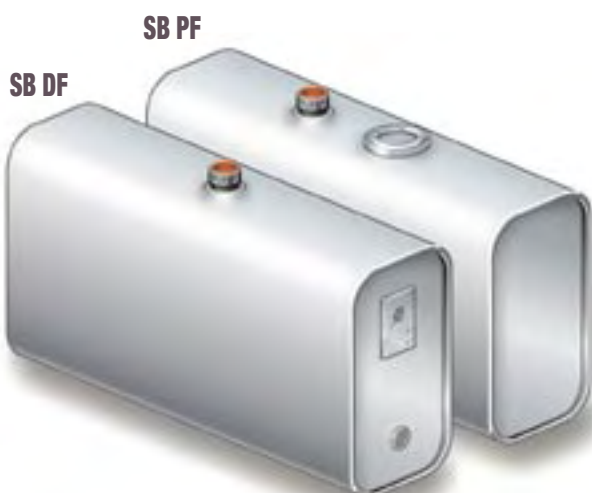
CODICE/CODE: 911SS000002



CODICE/CODE: 911SS000003

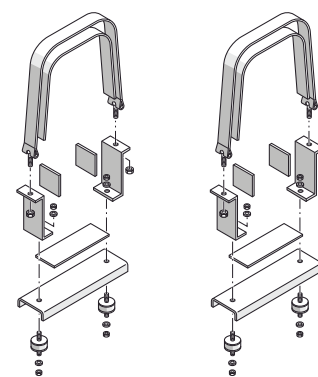


MONTAGGIO RETRO-CABINA REAR MOUNTED

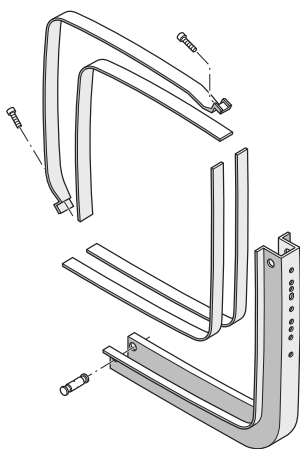


TIPO TYPE	CODICE CODE	SERBATOIO TANK
SB DF	SBRA195BG15	195 lt
SB PF	SBRA195DG00	195 lt

CODICE/CODE: 911SS000004

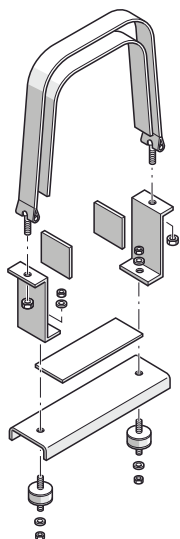


KIT STAFFE DI FISSAGGIO/BRACKETS KITS



PER SERBATOIO LATERALE
SIDE MOUNTED TANK

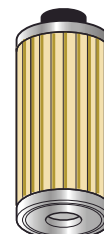
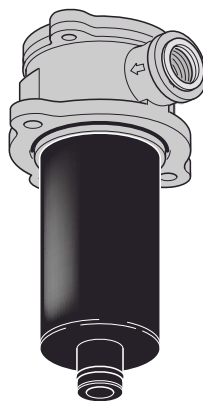
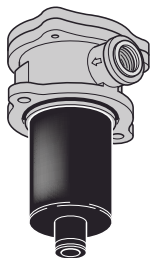
CAPACITÀ CAPACITY (litri - litres)	CODICE KIT KIT CODE	N° STAFFE COMPRESSE NEL KIT BRACKETS INCLUDED IN KIT
55	911SS000001	1
80 - 100 - 120	911SS000002	2
170 - 205	911SS000003	2



PER SERBATOIO RETRO-CABINA
REAR MOUNTED TANK

CAPACITÀ CAPACITY (litri - litres)	CODICE KIT KIT CODE	N° STAFFE KIT BRACKETS INCLUDED
195 R	911SS000004	2

FILTRI PER SERBATOI SB PF/FILTERS FOR TANKS SB PF



CODICE/CODE: 90FR000001

CODICE/CODE: 90CF000001

ATTACCO PORT	FILTRAZIONE FILTERING
1"	30 µm

CODICE/CODE: 90FR000002

CODICE/CODE: 90CF000002

ATTACCO PORT	FILTRAZIONE FILTERING
1" ¼	30 µm



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E-mail: salesexp@hydrocar.com - salesita@hydrocar.com - Web: www.hydrocar.com

HYDROCAR
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HYDROCAR ROMA
(Roma)

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Sorbara (MO)

AVI
Varedo (MI)

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**HYDROCAR
FRANCE**
(Brie Comte Robert)
PARIS



**HYDROCAR
CHILE**
(Quilicura)
SANTIAGO DEL CHILE