

H1C



POMPE / MOTORI A CILINDRATA FISSA

FIXED DISPLACEMENT PUMPS / MOTORS

DATI TECNICI
TECHNICAL DATA

Dimensione / Size				006	012	020	030	040	055
Cilindrata Displacement		V _g	cm ³ /rev [in ³ /rev]	6.067 [0.37]	10.9 [0.66]	19.6 [1.20]	30.0 [1.83]	40.1 [2.45]	54.8 [3.34]
Pressione max. Max. pressure	cont.	p _{nom}	bar [psi]			350 [5100]			
	picco peak	p _{max}	bar [psi]			450 [6500]			
* Velocità max. * Max. speed	motore motor	n _{0 max}	rpm	6000	5590	5590	4500	4350	3900
	pompa ⁽¹⁾ pump ⁽¹⁾	n _{1 max}	rpm	5000	4300	4300	3000	3300	2600
Portata max. Max. flow	motore motor	q _{max}	l/min [U.S. gpm]	36.4 [9.61]	61 [16.1]	109 [28.7]	135 [35.6]	175 [46.1]	214 [56.4]
	pompa ⁽²⁾ pump ⁽²⁾	q _{1 max}	l/min [U.S. gpm]	30.3 [7.99]	47 [12.4]	84 [22.2]	90 [23.7]	132 [34.8]	143 [37.7]
Potenza max. a p _{nom} Max. power at p _{nom}	motore motor	P _{max}	kW [hp]	21.2 [28.4]	35.5 [47.5]	64 [85.5]	79 [106]	102 [136.8]	125 [167.5]
	pompa ⁽²⁾ pump ⁽²⁾	P _{1 max}	kW [hp]	17.7 [23.7]	27 [36]	49 [65]	53 [71]	77 [103]	83 [111]
Costante di coppia Torque costant		T _k	Nm/bar [lbf·ft/psi]	0.097 [0.005]	0.17 [0.0087]	0.31 [0.016]	0.48 [0.024]	0.64 [0.032]	0.87 [0.044]
Coppia max. Max. torque	cont. (p _{nom})	T _{nom}	Nm [lbf·ft]	33.8 [24.9]	60.5 [44.5]	109 [80]	167 [123]	223 [164]	306 [225]
	picco peak (p _{max})	T _{max}	Nm [lbf·ft]	43.5 [32.1]	76 [56]	139 [102]	216 [159]	288 [212]	391 [288]
Momento di inerzia ⁽³⁾ Moment of inertia ⁽³⁾		J	kg·m ² [lbf·ft ²]	0.0007 [0.016]	0.0007 [0.016]	0.002 [0.047]	0.002 [0.047]	0.004 [0.094]	0.004 [0.094]
Peso ⁽³⁾ Weight ⁽³⁾		m	kg [lbs]	5.5 [12.1]	5.5 [12.1]	13 [28.7]	13 [28.7]	22 [48.5]	22 [48.5]
Portata di drenaggio ⁽⁴⁾ External drain flow ⁽⁴⁾		q _d	l/min [U.S. gpm]	0.4 [0.10]	0.4 [0.10]	0.4 [0.10]	0.6 [0.16]	0.7 [0.18]	0.8 [0.21]

(Valori teorici, senza considerare η_{hm} e η_v ; valori arrotondati). Le condizioni di picco non devono durare più dell'1% di ogni minuto. Evitare il funzionamento contemporaneo alla massima velocità e alla massima pressione.

* I valori relativi alle pompe si riferiscono all'impiego in circuito aperto.

(Theoretical values, without considering η_{hm} e η_v approximate values). Peak operations must not exceed 1% of every minute. A simultaneous maximum pressure and maximum speed not recommended.

* Pump values refer to open circuit operation.

Dimensione / Size				075	090	108	160	226
Cilindrata Displacement		V _g	cm ³ /rev [in ³ /rev]	75.3 [4.60]	87.0 [5.30]	107.5 [6.56]	160.8 [9.81]	225.1 [13.73]
Pressione max. Max. pressure	cont.	p _{nom}	bar [psi]			350 [5100]		
	picco peak	p _{max}	bar [psi]			450 [6500]		
* Velocità max. * Max. speed	motore motor	n _{0 max}	rpm	3450	3450	3000	2700	2400
	pompa ⁽¹⁾ pump ⁽¹⁾	n _{1 max}	rpm	2300	2500	2000	1800	1600
Portata max. Max. flow	motore motor	q _{max}	l/min [U.S. gpm]	259 [68.3]	300 [79.2]	322 [85]	434 [114.5]	540 [142.5]
	pompa ⁽²⁾ pump ⁽²⁾	q _{1 max}	l/min [U.S. gpm]	173 [45.6]	217 [57.3]	215 [56.7]	289 [76.3]	360 [95]
Potenza max. a p _{nom} Max. power at p _{nom}	motore motor	P _{max}	kW [hp]	151 [202.5]	175 [234.5]	188 [252]	253 [339]	315 [422]
	pompa ⁽²⁾ pump ⁽²⁾	P _{1 max}	kW [hp]	101 [135]	127 [170]	125 [167]	169 [226]	210 [281]
Costante di coppia Torque costant		T _k	Nm/bar [lbf·ft/psi]	1.20 [0.0061]	1.38 [0.070]	1.71 [0.087]	2.56 [0.130]	3.58 [0.182]
Coppia max. Max. torque	cont. (p _{nom})	T _{nom}	Nm [lbf·ft]	420 [310]	485 [357]	599 [442]	896 [661]	1254 [925]
	picco peak (p _{max})	T _{max}	Nm [lbf·ft]	540 [398]	623 [460]	770 [568]	1152 [849]	1613 [1189]
Momento di inerzia ⁽³⁾ Moment of inertia ⁽³⁾		J	kg·m ² [lbf·ft ²]	0.008 [0.190]	0.013 [0.308]	0.013 [0.308]	0.025 [0.593]	0.040 [0.949]
Peso ⁽³⁾ Weight ⁽³⁾		m	kg [lbs]	30 [66.1]	45 [99.2]	45 [99.2]	61 [134.5]	86 [189.6]
Portata di drenaggio ⁽⁴⁾ External drain flow ⁽⁴⁾		q _d	l/min [U.S. gpm]	0.9 [0.23]	1.0 [0.26]	1.2 [0.31]	1.8 [0.47]	2.5 [0.66]

(Valori teorici, senza considerare η_{hm} e η_v ; valori arrotondati). Le condizioni di picco non devono durare più dell'1% di ogni minuto. Evitare il funzionamento contemporaneo alla massima velocità e alla massima pressione.

* I valori relativi alle pompe si riferiscono all'impiego in circuito aperto.

Note: Determinazione della velocità ammissibile

⁽¹⁾ La velocità di rotazione della pompa può essere aumentata aumentando la pressione sulla bocca di aspirazione. La velocità di rotazione massima della pompa non deve superare in ogni caso il valore n_{0 max} indicato in tabella. Per la determinazione della velocità massima di rotazione ammissibile in funzione della pressione sulla bocca di aspirazione utilizzare il diagramma a lato. ⁽²⁾ Valori validi per un regime di rotazione pari ad n_{1 max}. ⁽³⁾ Valori indicativi. ⁽⁴⁾ Valori medi a 250 bar con olio minerale a 45°C e viscosità 35 cSt.

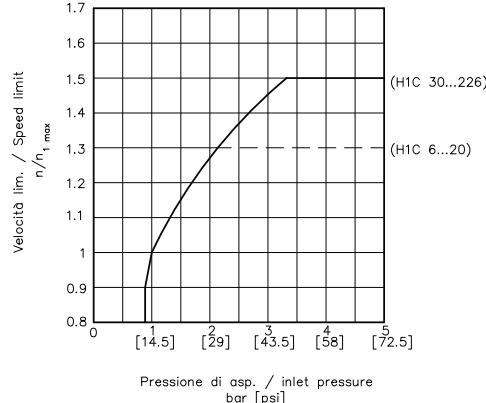
Notes: Calculation of permissible speed

⁽¹⁾ The pump rotation speed may be increased by increasing the suction pressure. The max. pump speed must be always less than value n_{0 max} shown in table. To calculate the max. permissible speed related to the pump suction pressure see the diagram at side. ⁽²⁾ The values are valid for a rotating speed of n_{1 max}. ⁽³⁾ Approximate values. ⁽⁴⁾ Average values at 250 bar [3600 psi] with mineral oil at 45°C [113°F] and 35 cSt of viscosity.

(Theoretical values, without considering η_{hm} e η_v approximate values). Peak operations must not exceed 1% of every minute. A simultaneous maximum pressure and maximum speed not recommended.

* Pump values refer to open circuit operation.

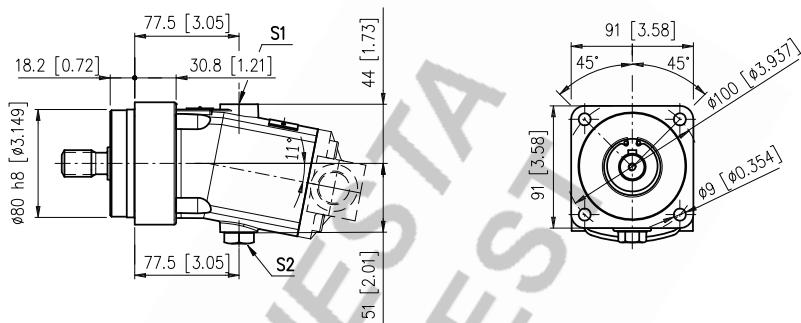
Determinazione della velocità limite / Speed limits calculation



S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 3/8 G (BSPP)

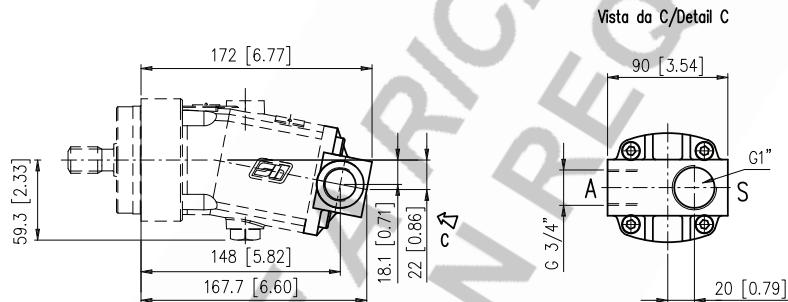
A, B: Utenze / Service line ports

S: Aspirazione / Suction port



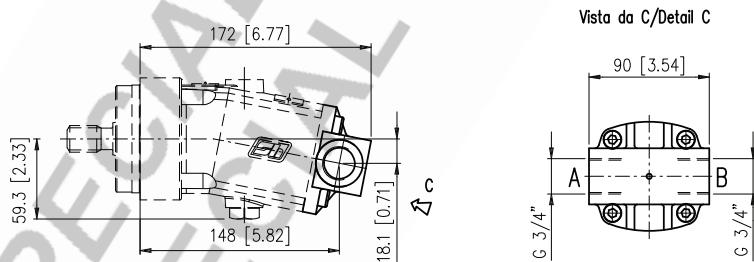
FP1

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



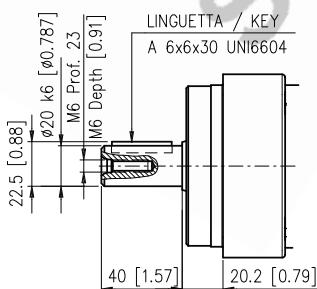
LM1

Per funzionamento come motore
For motor operation



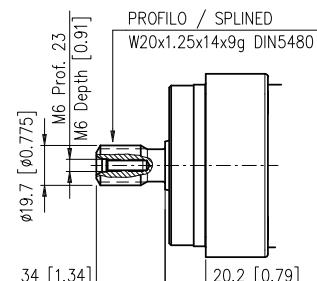
CAV

Albero cilindrico
Parallel keyed shaft

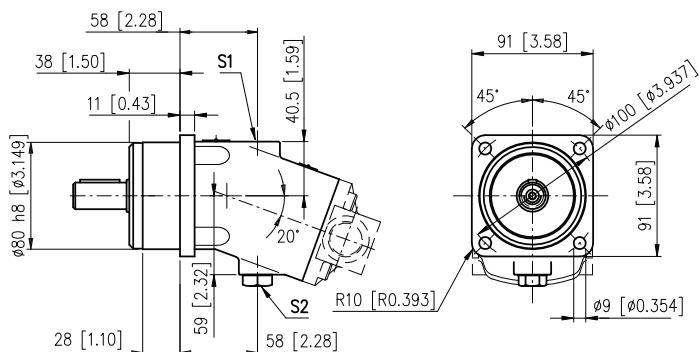


SAF

Albero scanalato
Splined shaft



S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 3/8 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port

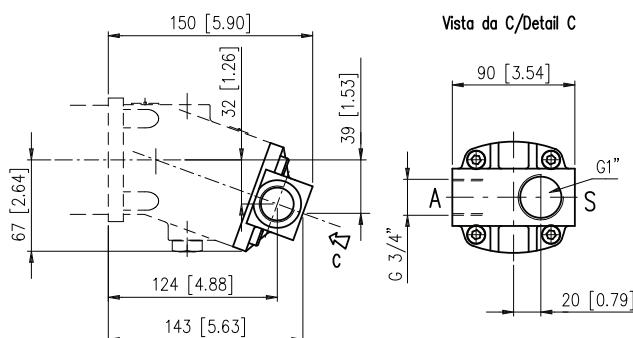


FP1

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)

LM1

Per funzionamento come motore
For motor operation



FM1

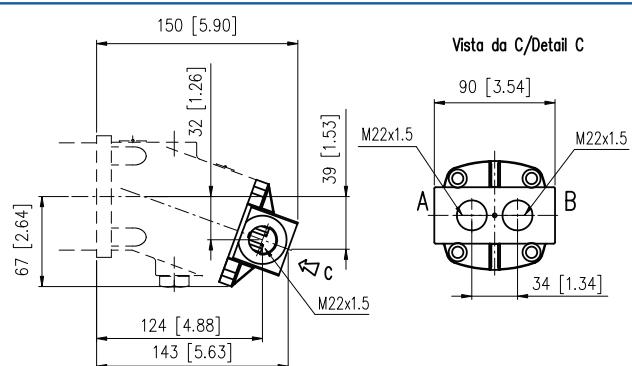
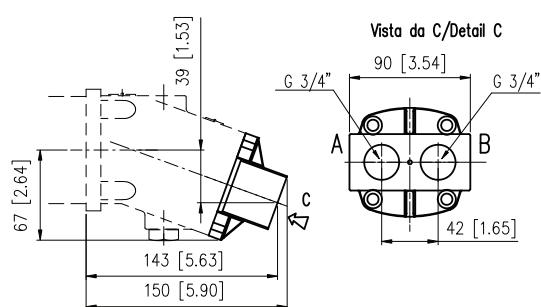
Per funzionamento come motore
For motor operation

A RICHIESTA
UPON REQUEST

FLM

Per funzionamento come motore
For motor operation

A RICHIESTA
UPON REQUEST

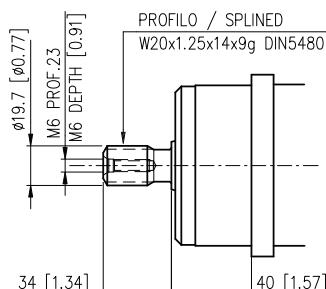
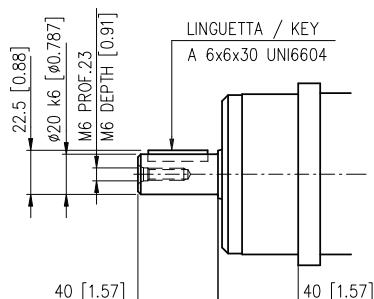


CAV

Albero cilindrico
Parallel keyed shaft

SAF

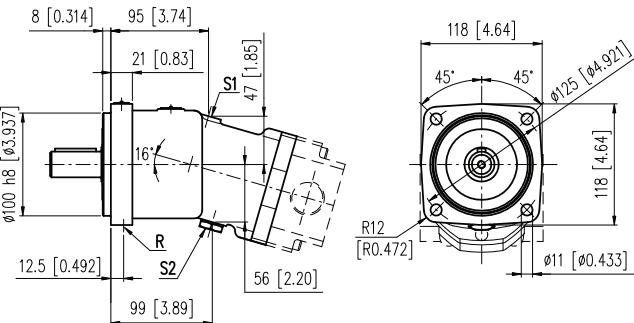
Albero scanalato
Splined shaft



DIMENSIONI FLANGIA ISO 4 FORI (OB)
DIMENSIONS ISO 4 BOLTS FLANGE (OB)

H1C 020 ME

S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 3/8 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)

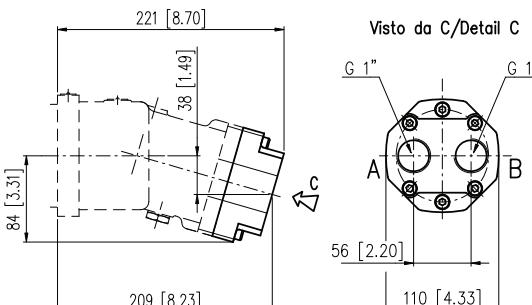
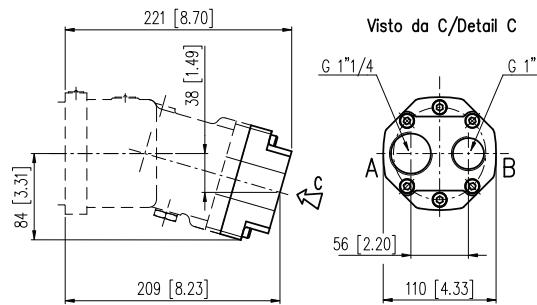


FP1

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)

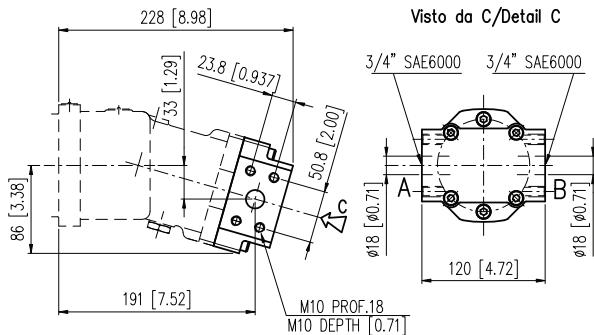
FM1

Per funzionamento come motore
For motor operation



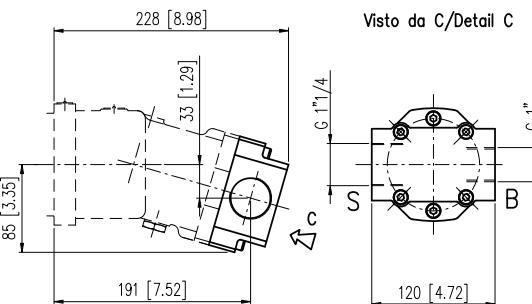
LM2

Per funzionamento come motore
For motor operation



LP1

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



CBM

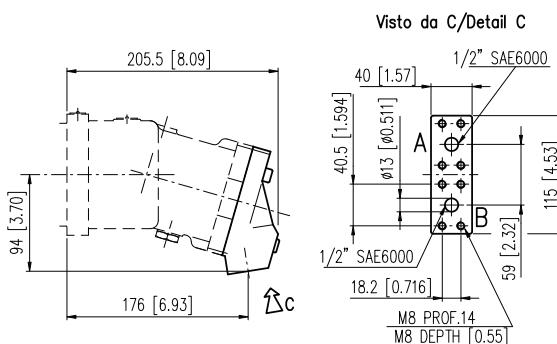
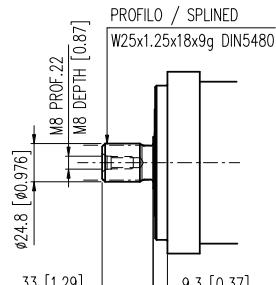
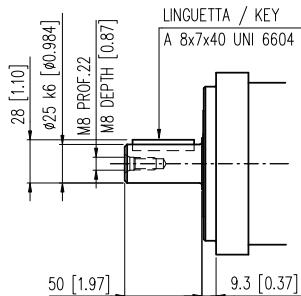
Albero cilindrico
Parallel keyed shaft

SAG

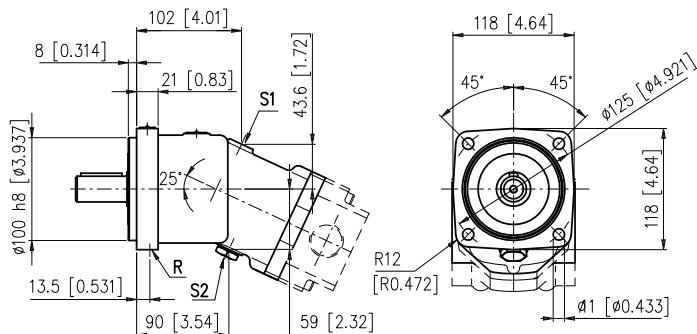
Albero scanalato
Splined shaft

VM2

Per funzionamento come motore
For motor operation



S1, S2: Drenaggio (1 tappato) G 3/8" / Drain ports (1 plugged) - 3/8 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port

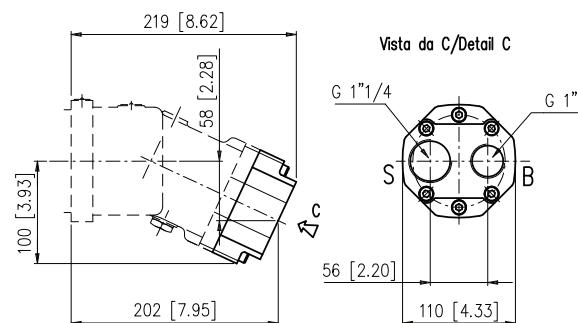


FP1

Per funzionamento come pompa (ciclo aperto)
For pump operation (open circuit)

FM1

Per funzionamento come motore
For motor operation

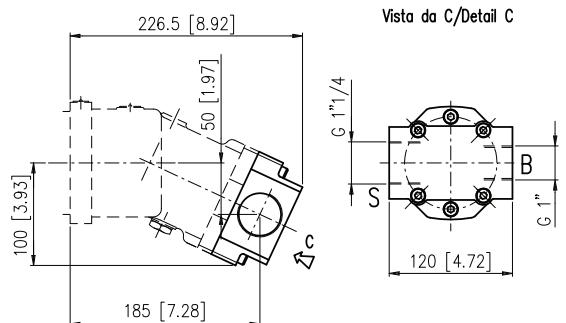


LP1

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)

LM2

Per funzionamento come motore
For motor operation



CBN

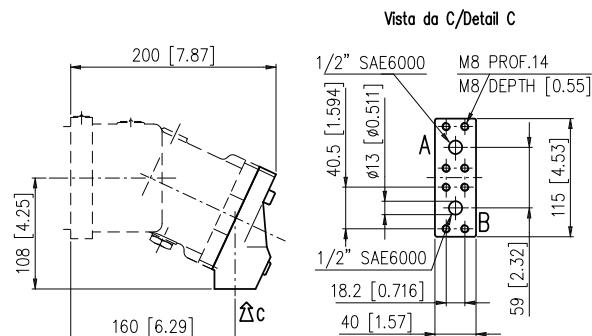
Albero cilindico
Parallel keyed shaft

SAG

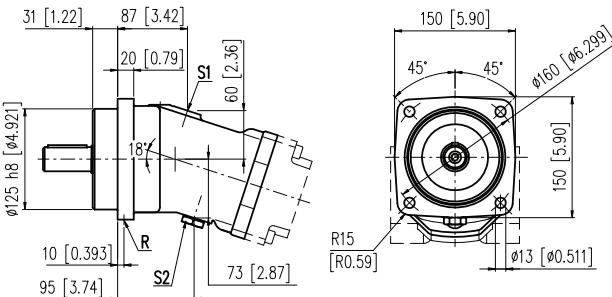
**Albero scanalato
Splined shaft**

VM2

Per funzionamento come motore
For motor operation

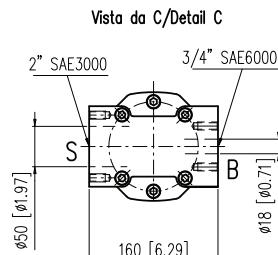
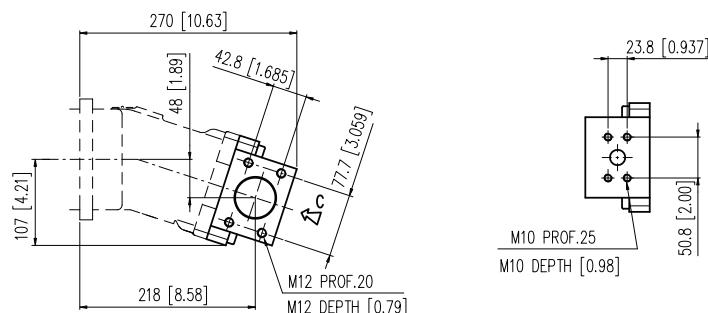


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



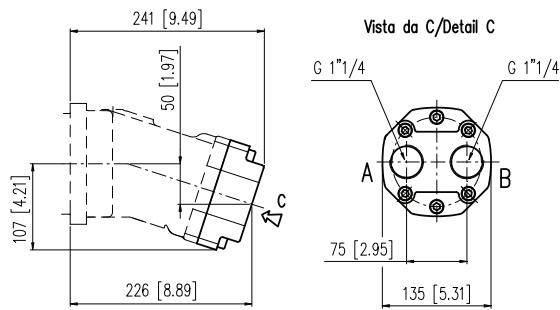
LP2

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



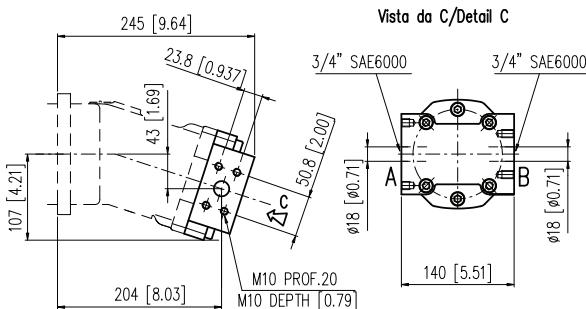
FM1-FP1

Per funzionamento come pompa (circuito aperto)/motore
For pump operation (open circuit)/motor



LM2

Per funzionamento come motore
For motor operation

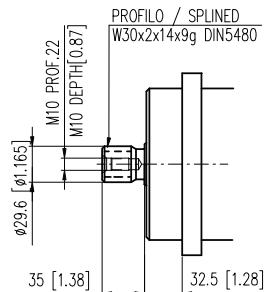
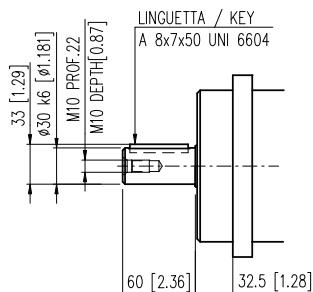


CAW

Albero cilindrico
Parallel keyed shaft

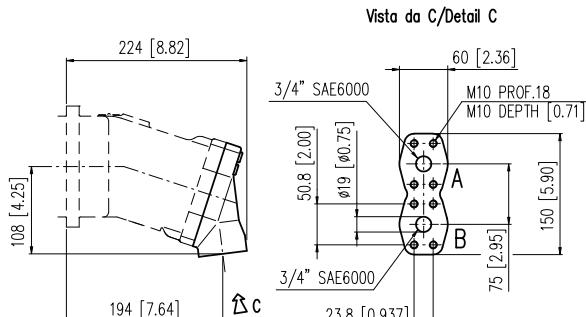
SAI

Albero scanalato
Splined shaft

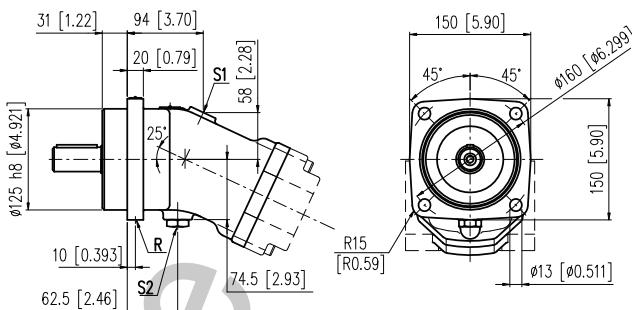


VM2

Per funzionamento come motore
For motor operation

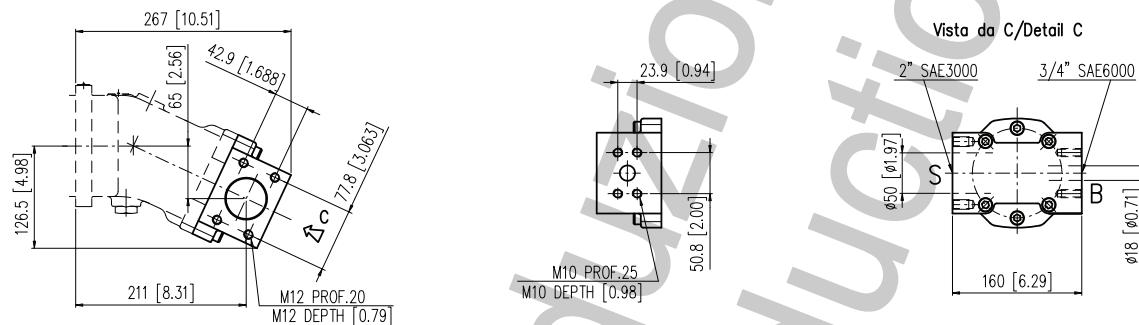


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



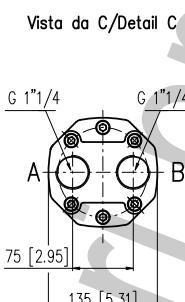
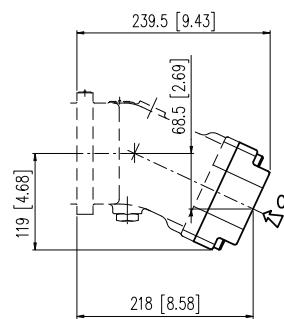
LP2

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



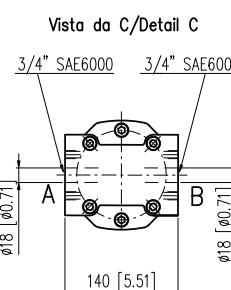
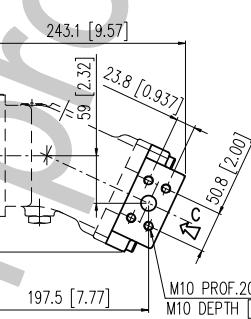
FM1-FP1

Per funzionamento come pompa (circuito aperto)/motore
For pump operation (open circuit)/motor



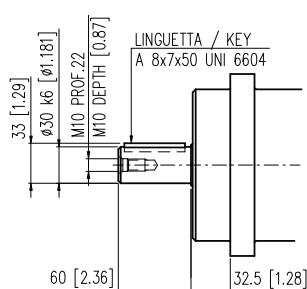
LM2

Per funzionamento come motore
For motor operation



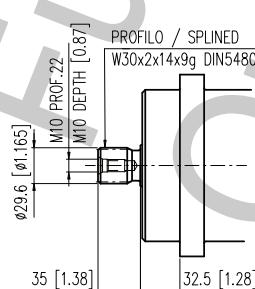
CAW

Albero cilindrico
Parallel keyed shaft



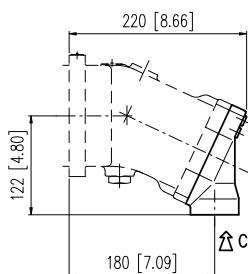
SAI

Albero scanalato
Splined shaft

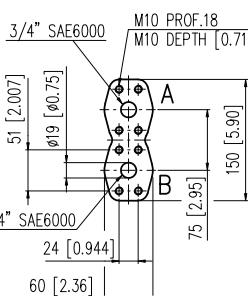


VM2

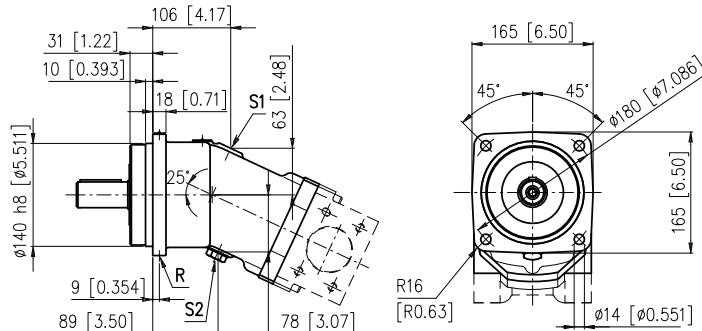
Per funzionamento come motore
For motor operation



Vista da C/Detail C



S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)

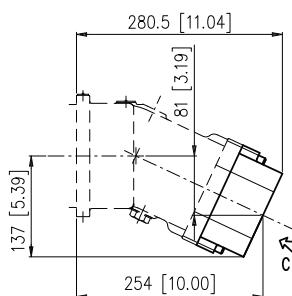
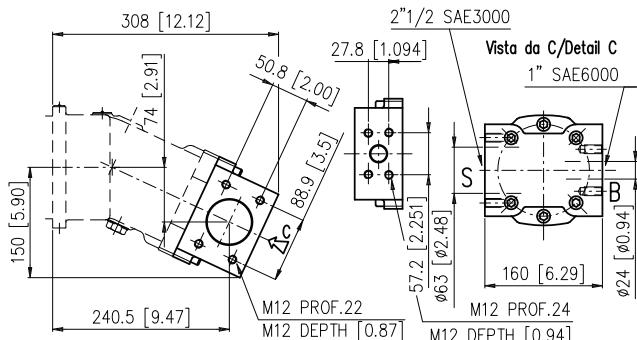


LP2

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)

FM1-FP1

Per funzionamento come pompa (circuito aperto)/motore
For pump operation (open circuit)/motor

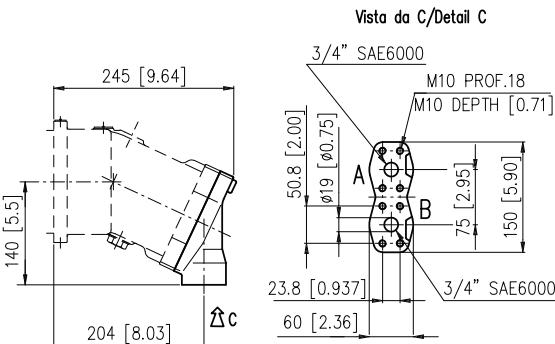
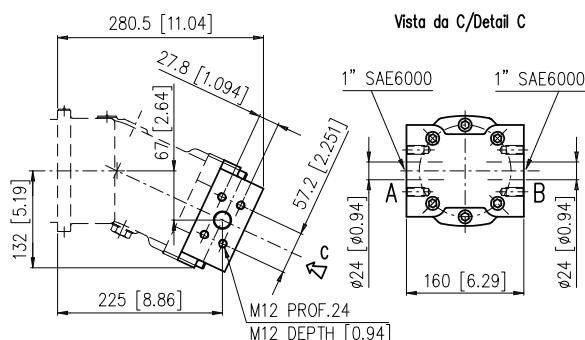


LM2

Per funzionamento come motore
For motor operation

VM2

Per funzionamento come motore
For motor operation



CAY

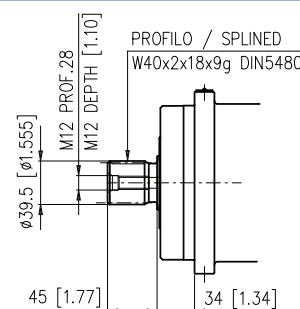
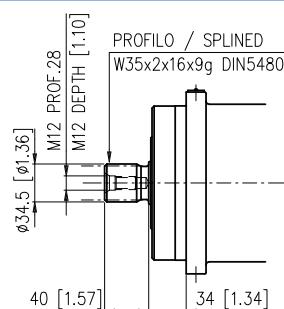
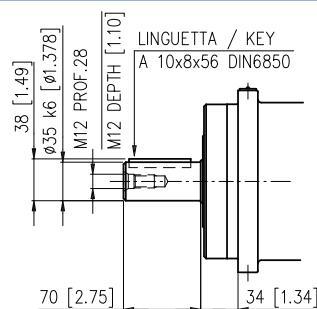
Albero cilindrico
Parallel keyed shaft

SAM

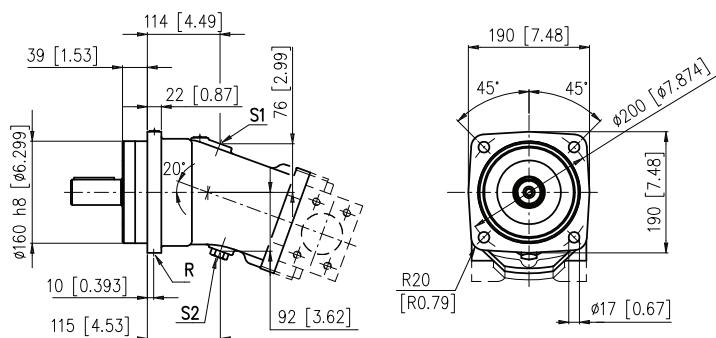
Albero scanalato
Splined shaft

SAO

Albero scanalato
Splined shaft

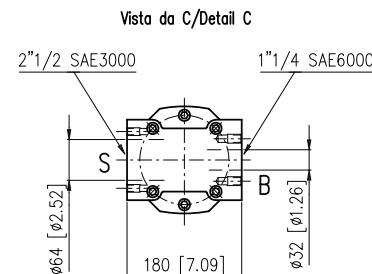
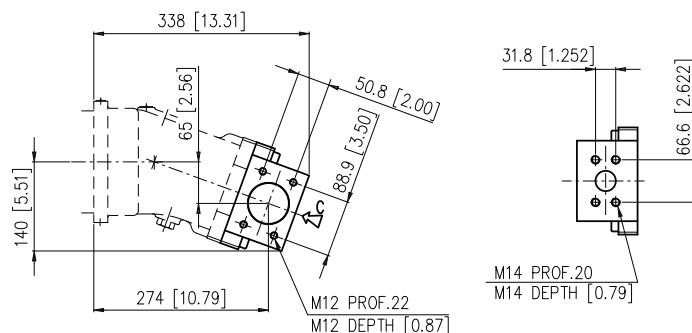


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



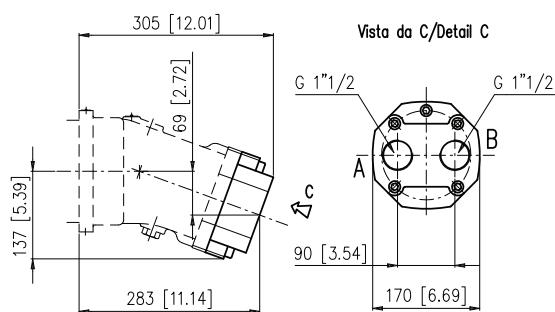
LP2

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



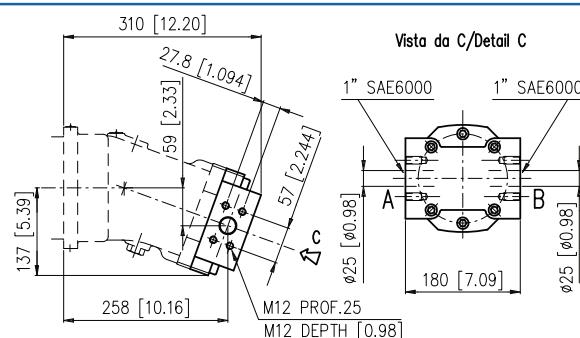
FM1-FP1

Per funzionamento come pompa (circuito aperto)/motore
For pump operation (open circuit)/motor



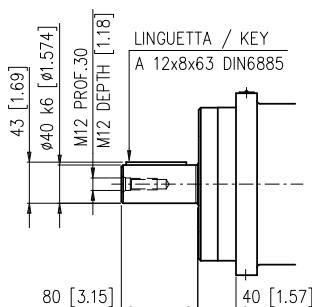
LM2

Per funzionamento come motore
For motor operation



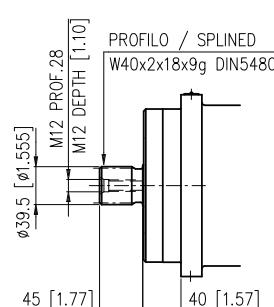
CAK

Albero cilindrico
Parallel keyed shaft



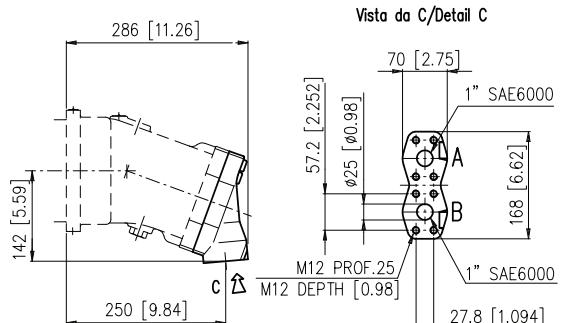
SAO

Albero scanalato
Splined shaft

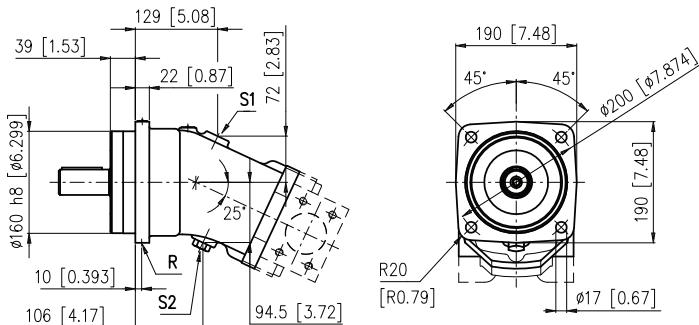


VM2

Per funzionamento come motore
For motor operation

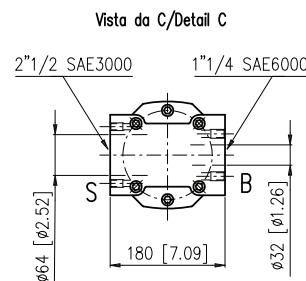
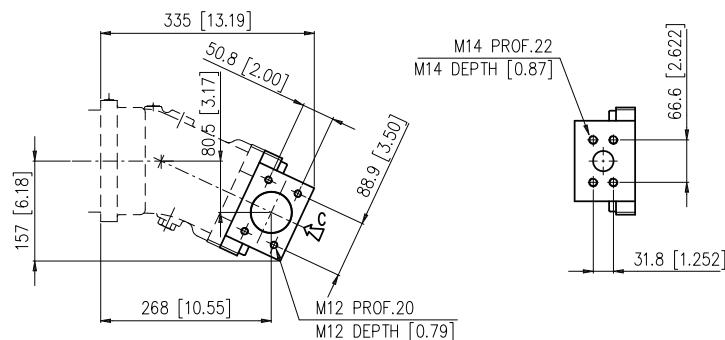


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)
A, B: Utenze / Service line ports
S: Aspirazione / Suction port
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



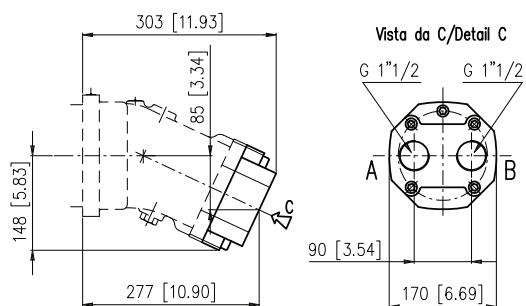
LP2

Per funzionamento come pompa (circuito aperto)
For pump operation (open circuit)



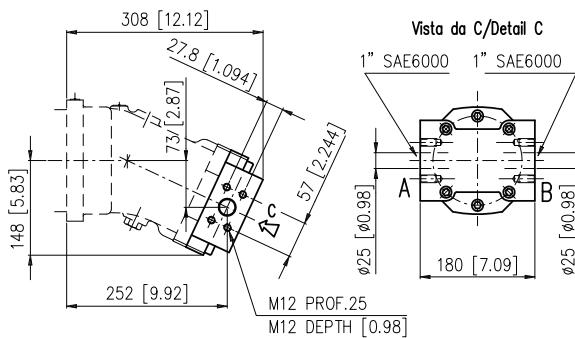
FM1-FP1

Per funzionamento come pompa (circuito aperto)/motore
For pump operation (open circuit)/motor



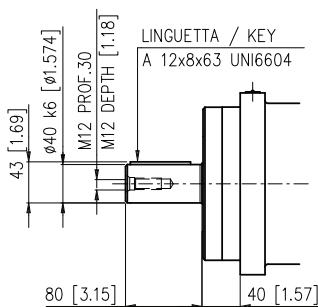
LM2

Per funzionamento come motore
For motor operation



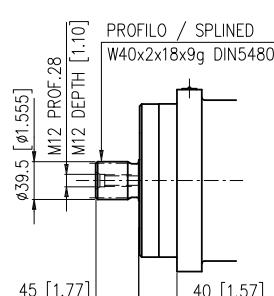
CAK

Albero cilindrico
Parallel keyed shaft



SAO

Albero scanalato
Splined shaft



VM2

Per funzionamento come motore
For motor operation

