

**SH11C**



***POMPE / MOTORI A CILINDRATA FISSA***

**FIXED DISPLACEMENT PUMPS / MOTORS**

Dimensione / Size				055	063	075	090	108	125	160	180
Cilindrata Displacement		V <sub>g</sub>	cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	56.35 [3.437]	63.26 [3.859]	77.82 [4.747]	86.23 [5.26]	108.4 [6.612]	124.8 [7.613]	163.9 [9.998]	178.1 [10.864]
Pressione max. Max. pressure	cont.	p <sub>nom</sub>	bar [psi]	430 [6235]	430 [6235]	430 [6235]	430 [6235]	430 [6235]	430 [6235]	430 [6235]	430 [6235]
	picco peak	p <sub>max</sub>	bar [psi]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]
Velocità max. Max. speed	Motore (cont.) Motor (cont.)	n <sub>0 max</sub>	rpm	5000	5000	4500	4500	4000	4000	3600	3600
	Pompa Pump	n <sub>1 max cont.</sub>	rpm	2000		1800	1800	1600	1550	1400	
		n <sub>1 max int.</sub> <sup>(1)</sup>	rpm	3750		3350	3350				
Portata max. Max. flow	Motore Motor	q <sub>max</sub>	l/min [U.S. gpm]	282 [74.45]	316 [83.42]	350 [92.4]	388 [102.5]	433 [114.31]	500 [132]	590 [155.76]	641 [169.22]
	Pompa <sup>(2)</sup> Pump <sup>(2)</sup>	q <sub>1 max</sub>	l/min [U.S. gpm]	112 [29.5]		144 [38.01]	155 [40.92]	172 [45.41]	193 [50.95]	230 [60.72]	
Potenza max. a p <sub>nom</sub> Max. power at p <sub>nom</sub>	Motore Motor	P <sub>max</sub>	kW [hp]	202 [270.68]	226 [302.84]	251 [336.34]	278 [372]	310 [415.4]	358 [479.72]	423 [566.82]	459 [615.06]
	Pompa <sup>(2)</sup> Pump <sup>(2)</sup>	P <sub>1 max</sub>	kW [hp]	80.5 [107.87]		100 [134]	110 [147.4]	123 [164.82]	138 [102.98]	165 [221.1]	
Costante di coppia Torque constant		T <sub>k</sub>	Nm/bar [lbf-ft/psi]	0.9 [0.045]	1 [0.05]	1.2 [0.06]	1.4 [0.07]	1.7 [0.085]	2 [0.1]	2.6 [0.13]	2.8 [0.14]
Coppia max. Max. torque	cont. (p <sub>nom</sub> )	T <sub>nom</sub>	Nm [lbf-ft]	386 [284.48]	433 [319.12]	533 [392.82]	590 [435.13]	742 [546.85]	855 [630.13]	1122 [826.91]	1219 [898.40]
	picco peak (p <sub>max</sub> )	T <sub>max</sub>	Nm [lbf-ft]	431 [317.65]	484 [356.71]	595 [438.51]	659 [486.05]	829 [610.97]	954 [703.10]	1253 [923.46]	1361 [1003.06]
Momento di inerzia <sup>(3)</sup> Moment of inertia <sup>(3)</sup>		J	kg·m <sup>2</sup> [lbf·ft <sup>2</sup> ]	0.004 [0.094]	0.004 [0.094]	0.007 [0.1645]	0.007 [0.1645]	0.012 [0.2820]	0.012 [0.2820]	0.022 [0.5170]	0.022 [0.5170]
Peso <sup>(3)</sup> Weight <sup>(3)</sup>		m	kg [lbs]	19 [41.876]	19 [41.876]	23.7 [52.23]	23.7 [52.23]	35 [77.14]	35 [77.14]	48 [105.79]	48 [105.79]
Portata di drenaggio <sup>(4)</sup> External drain flow <sup>(4)</sup>		q <sub>d</sub>	l/min [U.S. gpm]	1.2 [0.317]	1.2 [0.317]	2.5 [0.66]	2.5 [0.66]	3 [0.79]	3 [0.79]	3 [0.79]	3 [0.79]

(Valori teorici, senza considerare  $\eta_{hm}$  e  $\eta_v$ ; 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  $\eta_{hm}$  e  $\eta_v$  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.

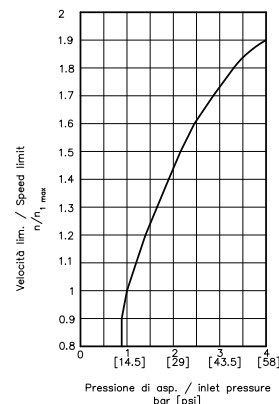
## **Note: Determinazione della velocità ammissibile**

<sup>(1)</sup> 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<sub>0 max</sub> 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. <sup>(2)</sup> Valori validi per un regime di rotazione pari ad n<sub>1 max</sub>. <sup>(3)</sup> Valori indicativi. <sup>(4)</sup> Valori medi a 250 bar con olio minerale a 45°C e viscosità 35 cSt.

## **Notes: Calculation of permissible speed**

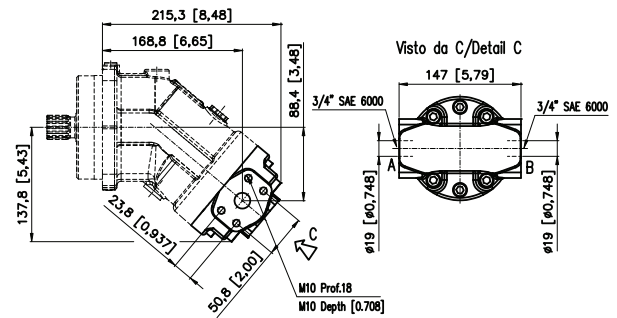
<sup>(1)</sup> The pump rotation speed may be increased by increasing the suction pressure. The max. pump speed must be always less than the value n<sub>0 max</sub> shown in table. To calculate the max. permissible speed related to the pump suction pressure see the diagram at side. <sup>(2)</sup> The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

## **Determinazione della velocità limite / Speed limits calculation**

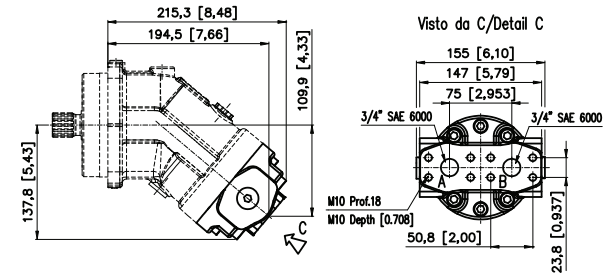


# SH11C 055-063 ME

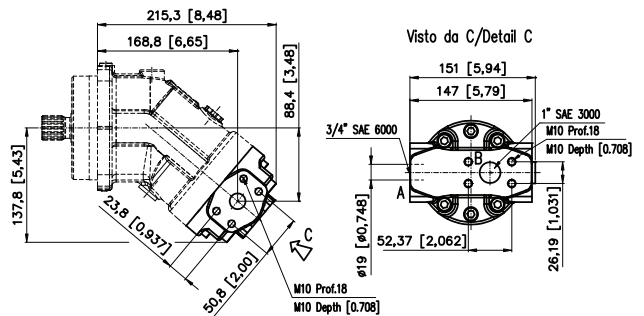
**LM2** *Per funzionamento come motore*  
For motor operation



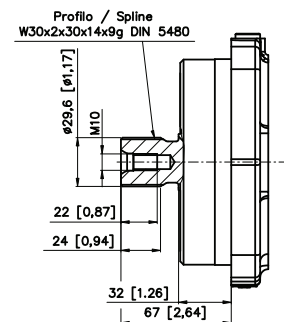
**FM2** *Per funzionamento come motore*  
For motor operation



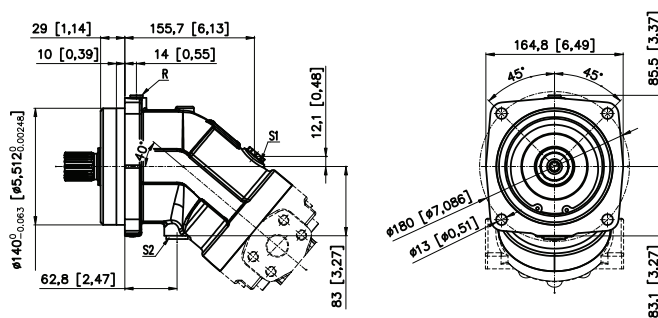
**FP2** *Per funzionamento come pompa*  
For pump operation



**SAI** *Albero scanalato*  
Splined shaft

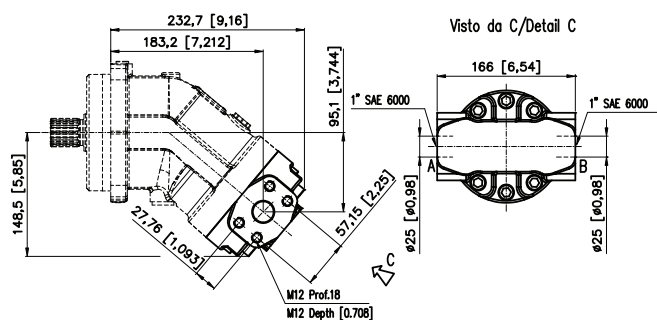


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)  
 A, B: Utenze / Service line ports  
 R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



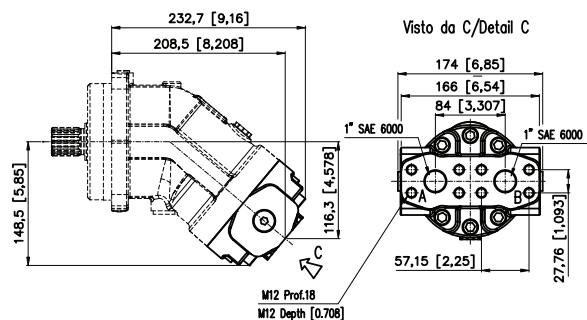
## LM2

Per funzionamento come motore  
 For motor operation



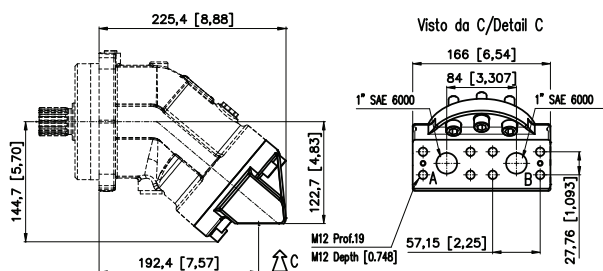
## FM2

Per funzionamento come motore  
 For motor operation



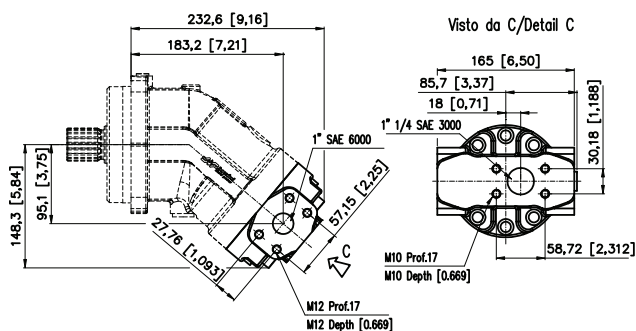
## VM2

Per funzionamento come motore  
 For motor operation



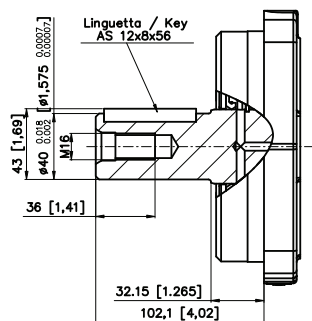
## FP2

Per funzionamento come pompa  
 For pump operation



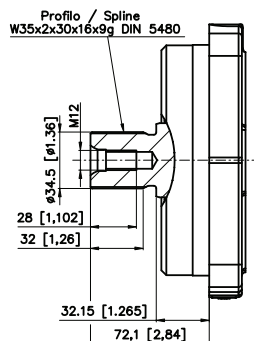
## CBP

Albero cilindrico  
 Parallel keyed shaft



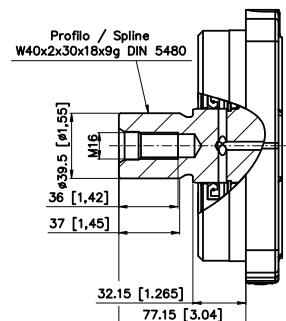
## SAM

Albero scanalato  
 Splined shaft



## SAO

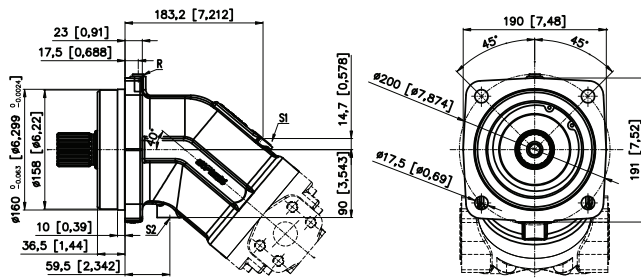
Albero scanalato  
 Splined shaft



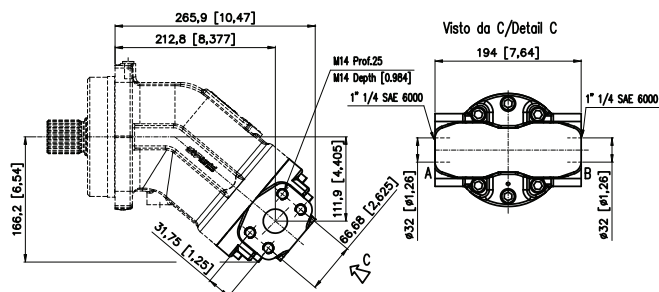
# DIMENSIONI FLANGIA ISO 4 FORI (OE) DIMENSIONS ISO 4 BOLTS FLANGE (OE)

# SH11C 108-125 ME

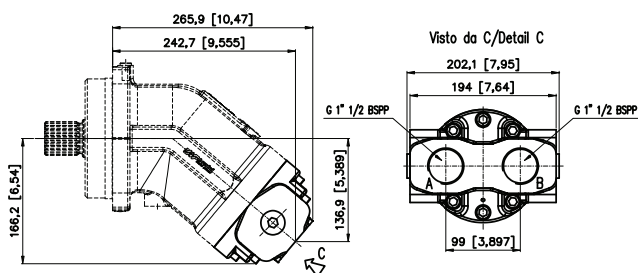
S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1/2 G (BSPP)  
A, B: Utenze / Service line ports  
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



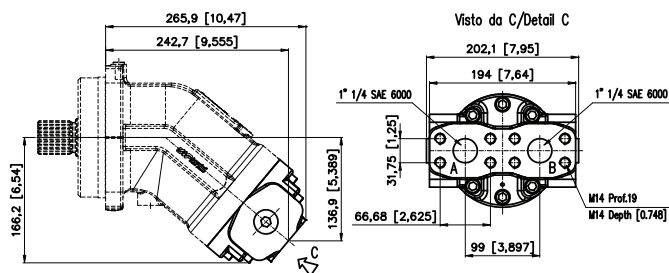
**LM2** Per funzionamento come motore  
For motor operation



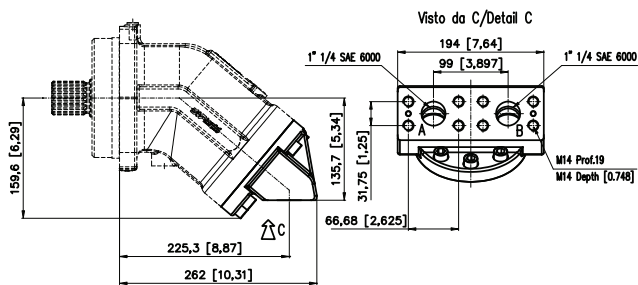
**FM1** Per funzionamento come motore  
For motor operation



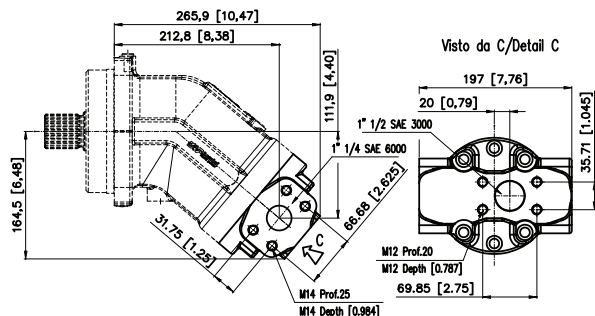
**FM2** Per funzionamento come motore  
For motor operation



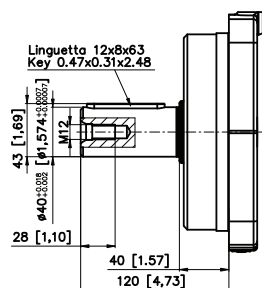
**VM2** Per funzionamento come motore  
For motor operation



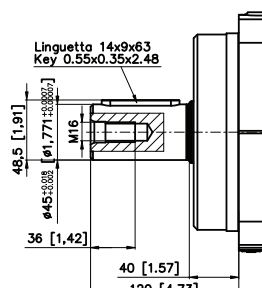
**FP2** Per funzionamento come pompa  
For pump operation



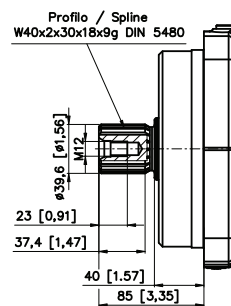
**CAK** Albero cilindrico  
Parallel keyed shaft



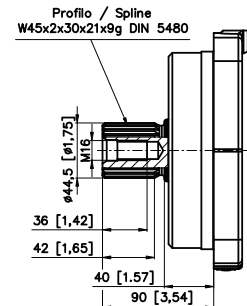
**CAJ** Albero cilindrico  
Parallel keyed shaft



**SAO** Albero scanalato  
Splined shaft



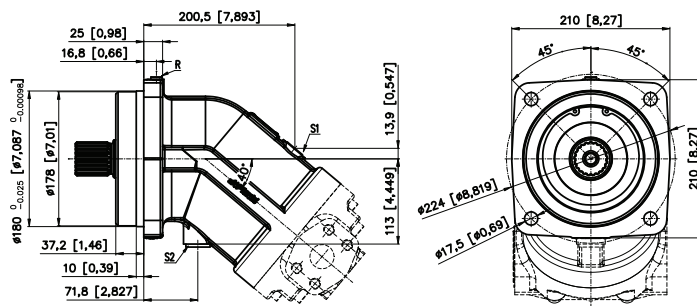
**SAP** Albero scanalato  
Splined shaft



# DIMENSIONI FLANGIA ISO 4 FORI (OF) DIMENSIONS ISO 4 BOLTS FLANGE (OF)

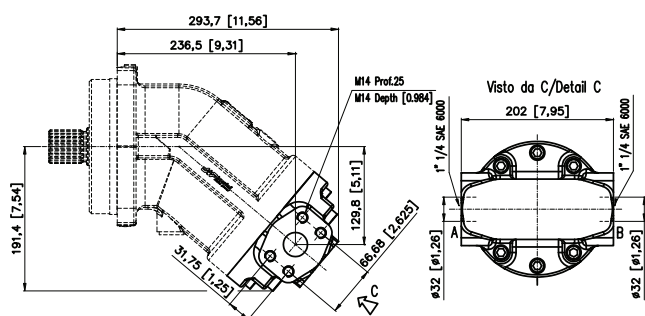
# SH11C 160-180 ME

S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 3/4 G (BSPP)  
A, B: Utenze / Service line ports  
R: Spurgo (tappato) / Air bleed (plugged) - 1/8 G (BSPP)



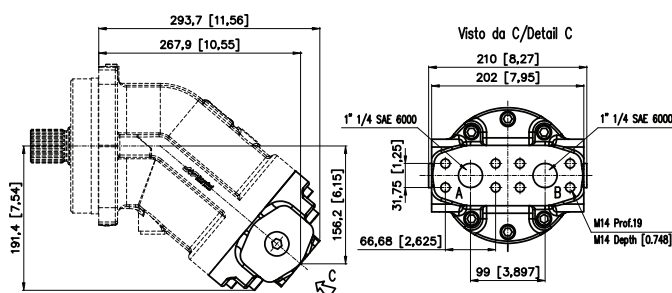
## LM2

Per funzionamento come motore  
For motor operation



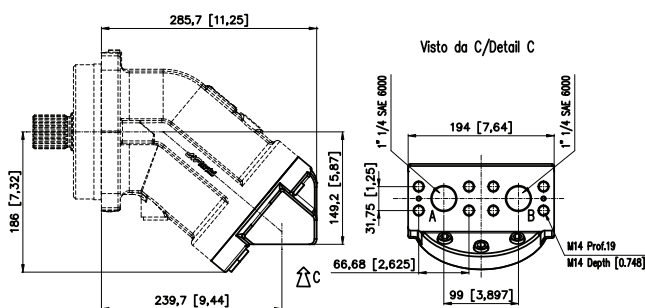
## FM2

Per funzionamento come motore  
For motor operation



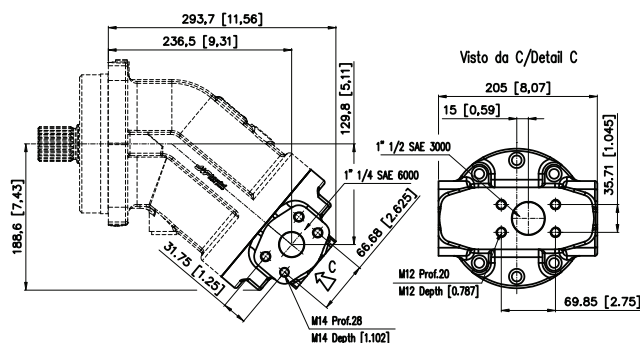
## VM2

Per funzionamento come motore  
For motor operation



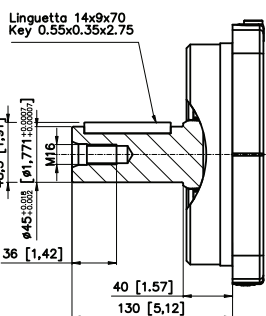
## FP2

Per funzionamento come pompa  
For pump operation



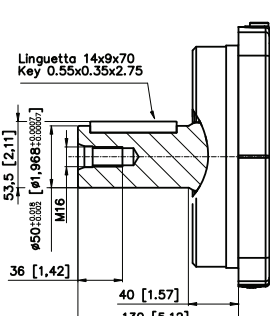
## CBQ

Albero cilindrico  
Parallel keyed shaft



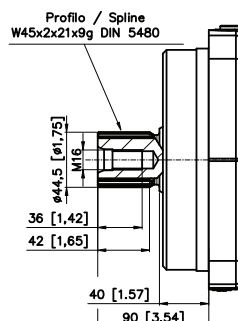
## CAX

Albero cilindrico  
Parallel keyed shaft



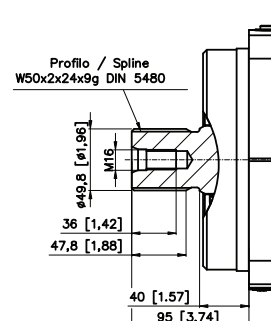
## SAP

Albero scanalato  
Splined shaft

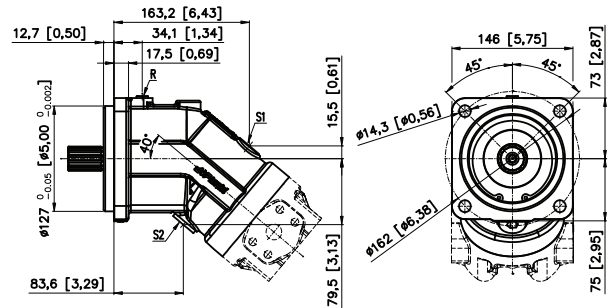


## SAR

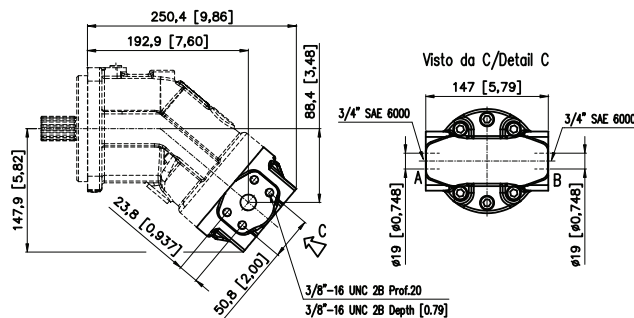
Albero scanalato  
Splined shaft



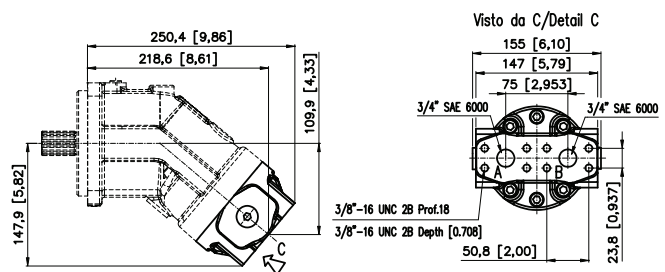
S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1" 1/16-12 UN 2B  
 A, B: Utenze / Service line ports  
 R: Spurgo (tappato) / Air bleed (plugged) - 7/16"-20 UNF



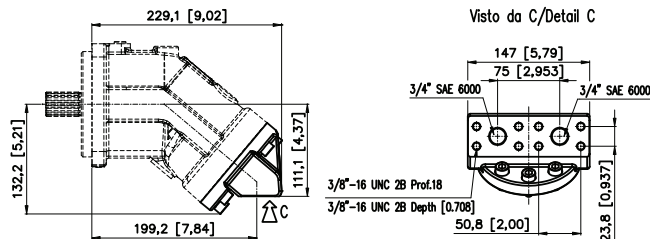
**LM2** Per funzionamento come motore  
 For motor operation



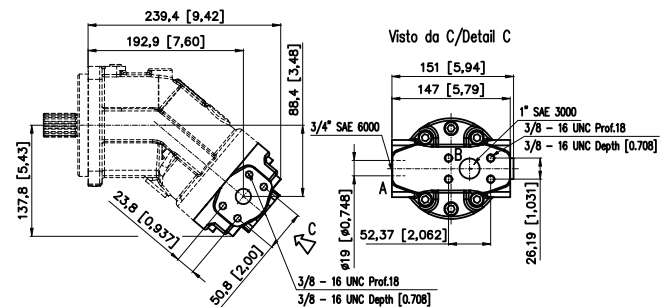
**FM2** Per funzionamento come motore  
 For motor operation



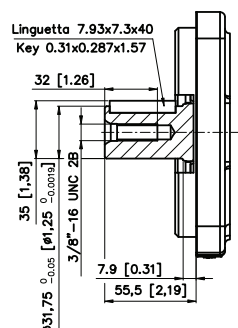
**VM2** Per funzionamento come motore  
 For motor operation



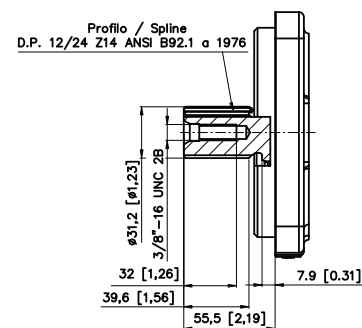
**FP2** Per funzionamento come pompa  
 For pump operation



**C17** Albero cilindrico  
 Parallel keyed shaft



**S12** Albero scanalato  
 Splined shaft



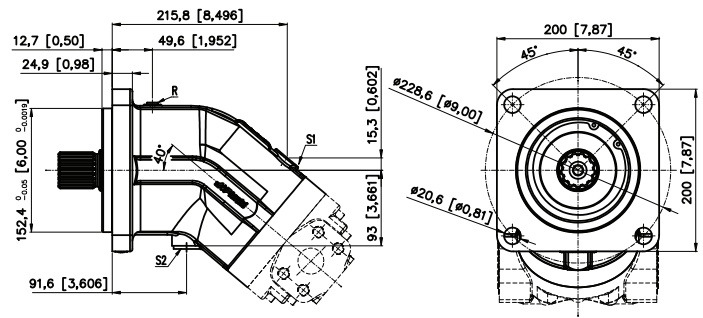


**R: Spurgo (tappato) / Air bleed (plugged) - 7/16"-20 UNF**

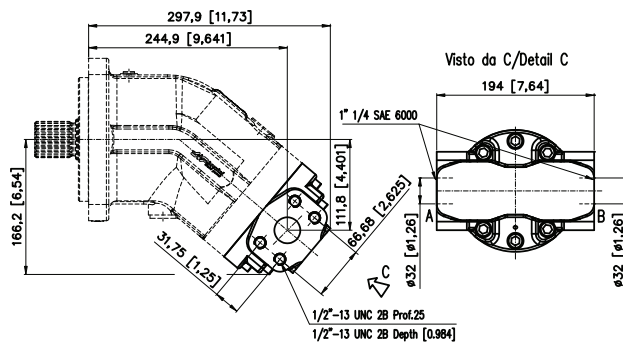




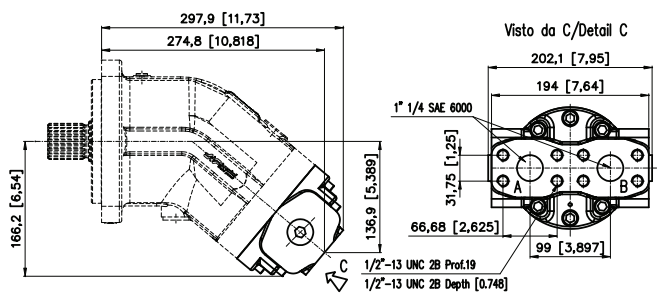
**S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1" 1/16-12 UN 2B**  
**A, B: Utenze / Service line ports**  
**R: Spurgo (tappato) / Air bleed (plugged) - 7/16"-20 UNF**



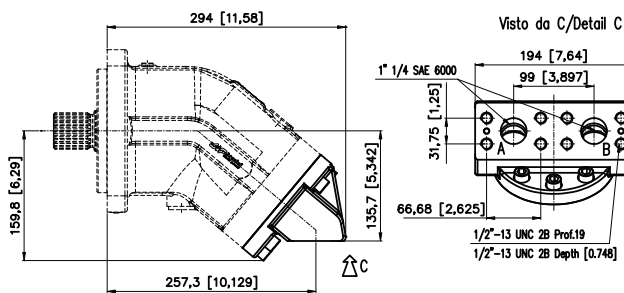
**Per funzionamento come motore**  
**For motor operation**



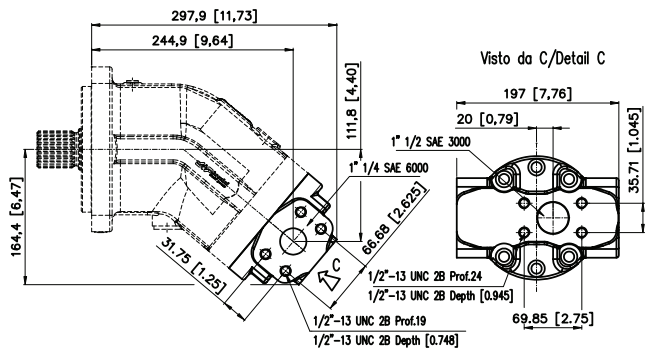
**Per funzionamento come motore**  
**For motor operation**



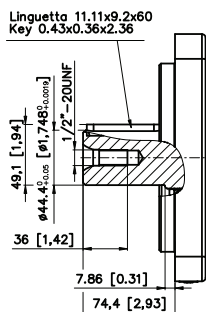
**Per funzionamento come motore**  
**For motor operation**



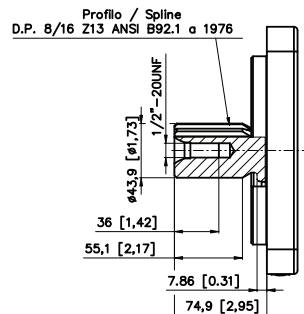
**Per funzionamento come pompa**  
**For pump operation**



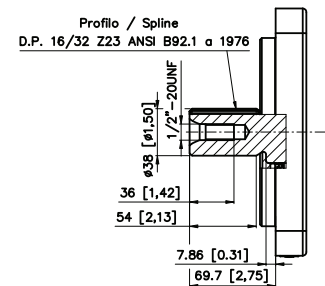
**Albero cilindrico**  
**Parallel keyed shaft**



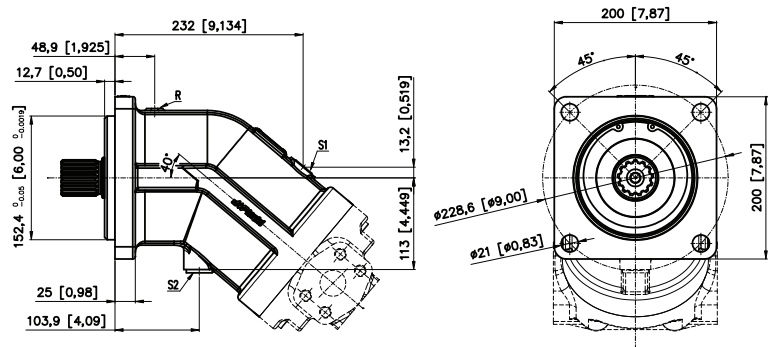
**Albero scanalato**  
**Splined shaft**



**Albero scanalato**  
**Splined shaft**

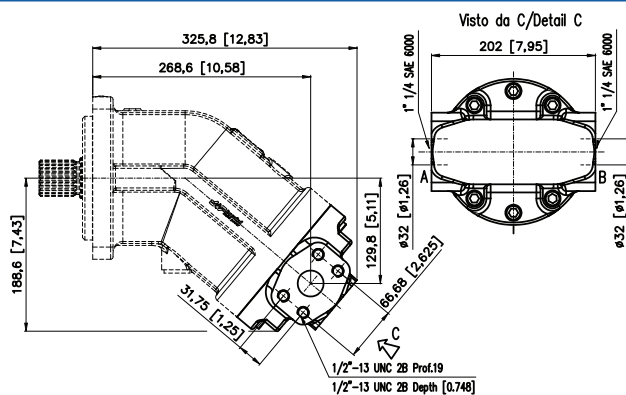


S1, S2: Drenaggi (1 tappato) / Drain ports (1 plugged) - 1" 1/16-12 UN 2B  
 A, B: Utenze / Service line ports  
 R: Spurgo (tappato) / Air bleed (plugged) - 7/16"-20 UNF



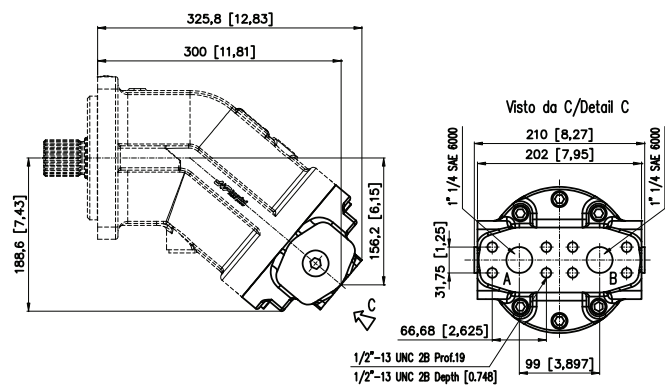
## LM2

Per funzionamento come motore  
 For motor operation



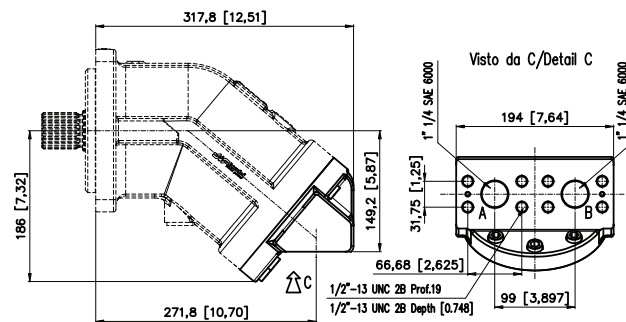
## FM2

Per funzionamento come motore  
 For motor operation



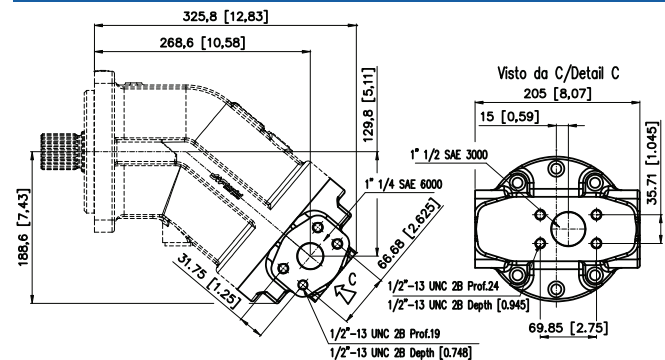
## VM2

Per funzionamento come motore  
 For motor operation



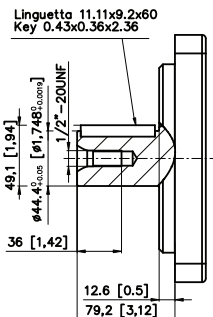
## FP2

Per funzionamento come pompa  
 For pump operation



## C18

Albero cilindrico  
 Parallel keyed shaft



## S15

Albero scanalato  
 Splined shaft

