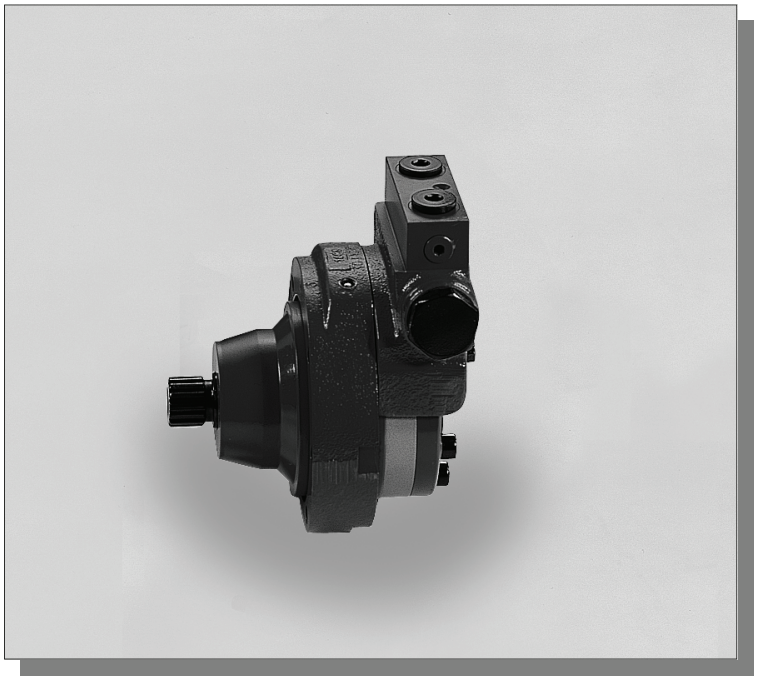
BRZ



MOTORI ORBITALI

ORBITAL MOTORS

CARATTERISTICHE DEI MOTORI
MOTORS FEATURES

MOTORI CORTI PER RIDUTTORE

BRZ *- Motori idraulici con organo motore tipo roller e distribuzione radiale. Disponibili nelle cilindrate da 50 a 400 cm³/giro per potenze sino a 13 kW. Sono disponibili valvole flangiabili per il controllo della traslazione e attacco per lo sblocco freno.*

• *Versioni:*
- ***BRZL:*** *Motore con bocche filettate.*
- ***BRZV:*** *Motore predisposto per l'utilizzo delle valvole opzionali.*

• *Valvole opzionali ed accessori:*
- ***VCT11-SF:*** *Valvola controllo traslazione standard.*
- ***VCT11-AF:*** *Valvola controllo traslazione con selettrice apertura freno.*
- ***CMZ:*** *Collettore modulare.*

SHORT MOTOR FOR GEAR BOXES

BRZ - Orbital motor with roller design and spool valve distributor. Motion control valve and disengagment brake port as optional. Available with displacement from 50 up to 400 cm³/giro [from 3.05 up to 24.4 in³/rev and power up to 13 kW [17.4 hp].

• Versions:
- **BRZL:** Threaded ports motor.
- **BRZV:** Valves version motor.

• Optional valves and accessories:
- **VCT11-SF:** Standard motion control valve.
- **VCT11-AF:** Motion control valve with disengagment brake port.
- **CMZ:** Flangeable manifold.

CODICE DI ORDINAZIONE
ORDERING CODE

Serie Series: **BRZV**

CODICE CODE	*Serie* Series
BRZV	*Motore BRZV* BRZV Motor
BRZL	*Motore BRZL (*)* BRZL Motor (*)

Cilindrata Displacemet: **50**

CODICE CODE	*Cilindrata* Displacement
50	51.6 cm³/giro [3.14 in³/rev]
65	64.9 cm³/giro [3.95 in³/rev]
80	80.4 cm³/giro [4.9 in³/rev]
100	100 cm³/giro [6.1 in³/rev]
130	125.7 cm³/giro [7.66 in³/rev]
160	160 cm³/giro [9.76 in³/rev]
200	200 cm³/giro [12.2 in³/rev]
250	250 cm³/giro [15.2 in³/rev]
315	314.5 cm³/giro [19.1 in³/rev]
400	393 cm³/giro [23.9 in³/rev]

Albero Shaft: **S14**

CODICE CODE	*Albero* Shaft
S14	*Scanalato B 25x22 DIN 5482 B 25x22 DIN 5482 Splined*

Valvola Valve: **VCT 11 AF**

CODICE CODE	*Valvola*** Valve**
VCT 11 SF	VCT 11 SF
VCT11 AF	VCT11 AF
VCT 11 SF SAE	VCT 11 SF SAE
VCT11 AF SAE	VCT11 AF SAE
CMZ SF	CMZ SF
CMZ AF	CMZ AF

Opzioni Options: **HPS**

CODICE CODE	*Opzioni* Options
HPS	Guarnizione alta pressione Pressure high seal
TAC-U	Tachimetro + Guarnizione alta pressione Tachometer + Pressure high seal

*SPECIALE A RICHIESTA - SPECIAL ON REQUEST

** Solo motore BRZV - Only BRZV motor

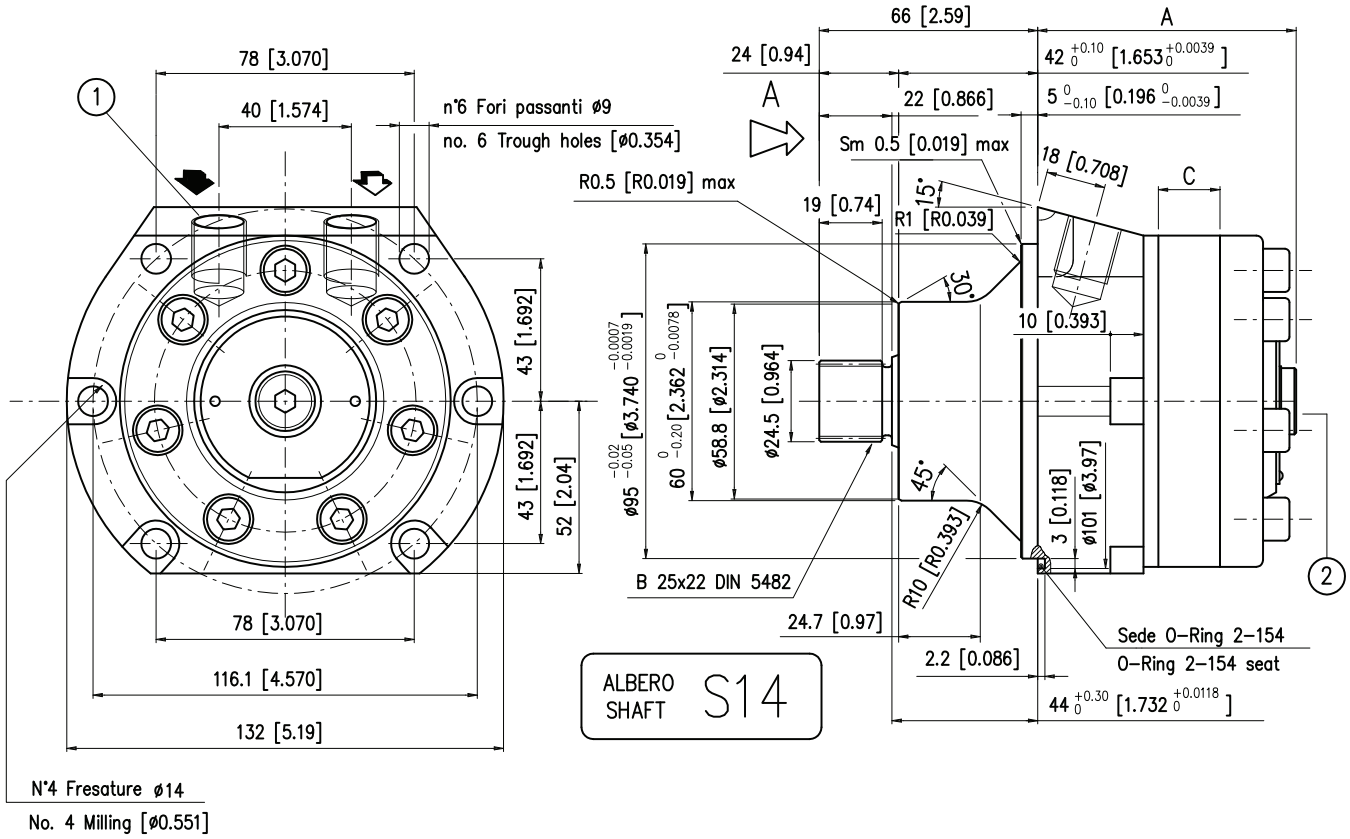
In caso di caratteristiche non elencate, contattare Uff.Tecnico.
Please contact technical departement for not listed features.

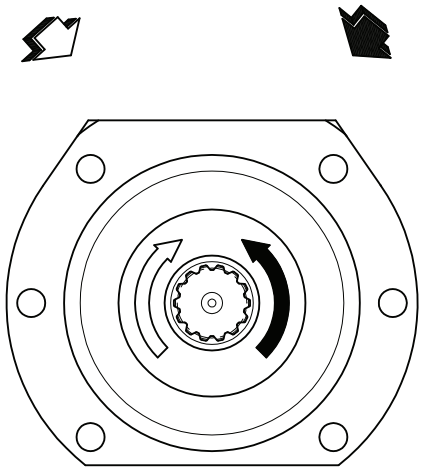
Motore Motor	Cilindrata Displacement cm³/rev [in³/rev]	Pressione max ingresso Max. input pressure bar [psi]	Pressione diff. max. Max. differential pressure bar [psi]	Coppia max. Max. torque Nm [lbf·ft]	Portata max. Max. flow l/min [U.S. gpm]	Velocità max. Max. speed giri/min [rpm]	Potenza max. Max. power kW [hp]
BRZ 50	51.6 [3.14]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 140 [2030] Int[1] 175 [2540] Peak[2] 225 [3262]	Cont 103 [75.9] Int[1] 126 [92.8]	Cont 40 [10.6] Int[1] 50 [13.2]	Cont 775 Int[1] 969	Cont 6.8 [9.1] Int[1] 8.4 [11.2]
BRZ 65	64.9 [3.95]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 150 [2175] Int[1] 185 [2682] Peak[2] 225 [3262]	Cont 140 [103.1] Int[1] 166 [122.3]	Cont 50 [13.2] Int[1] 60 [15.9]	Cont 770 Int[1] 924	Cont 9.2 [12.3] Int[1] 10.6 [14.2]
BRZ 80	80.4 [4.9]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 175 [2537] Int* 200 [2900] Peak[2] 225 [3262]	Cont 197 [145.1] Int* 218 [160.6]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 746 Int[1] 933	Cont 13 [17.4] Int[1] 15 [20.1]
BRZ 100	100 [6.1]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 237 [174.6] Int[1] 277 [204.1]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 600 Int[1] 750	Cont 13 [17.4] Int[1] 15 [20.1]
BRZ 130	125.7 [7.66]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 300 [221.1] Int[1] 340 [250.5]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 477 Int[1] 597	Cont 12.5 [16.8] Int[1] 14.5 [19.4]
BRZ 160	160 [9.76]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 140 [2030] Int[1] 175 [2540] Peak[2] 225 [3262]	Cont 296 [218.1] Int[1] 375 [276.3]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 375 Int[1] 469	Cont 10 [13.4] Int[1] 12.5 [16.8]
BRZ 200	200 [12.2]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 115 [1667] Int[1] 140 [2030] Peak[2] 225 [3262]	Cont 297 [218.8] Int[1] 380 [280]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 300 Int[1] 375	Cont 8.5 [11] Int[1] 10 [13.4]
BRZ 250	250 [15.2]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 90 [1305] Int[1] 120 [1740] Peak[2] 225 [3262]	Cont 297 [218.8] Int[1] 377 [277.8]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 240 Int[1] 300	Cont 7.1 [9.5] Int[1] 8.5 [11]
BRZ 315	314.5 [19.1]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 70 [1020] Int[1] 100 [1450] Peak[2] 210 [3045]	Cont 300 [221.1] Int[1] 420 [309.5]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 191 Int[1] 238	Cont 5 [6.7] Int[1] 6.6 [8.8]
BRZ 400	393 [23.9]	Cont 175 [2537] Int[1] 200 [2900] Peak[2] 225 [3262]	Cont 55 [800] Int[1] 85 [1230] Peak[2] 175 [2537]	Cont 292 [215.2] Int[1] 425 [313.2]	Cont 60 [15.9] Int[1] 75 [19.8]	Cont 153 Int[1] 191	Cont 4.1 [5.4] Int[1] 6.1 [8.1]

Motore Motor	*Max press. di scarico con drenaggio aperto* Max back pressure with drain line bar [psi]	*Pressione max avviamento a vuoto* Max starting pressure in unloaded conditions bar [psi]	*Coppia min di spunto* Min starting torque Nm [lbf·ft]
BRZ 50	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	10 [145]	at Δp max Cont 75[55.3] at Δp max Int* 95[70.0]
BRZ 65	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	10 [145]	at Δp max Cont 120[88.4] at Δp max Int* 140[103.1]
BRZ 80	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	10 [145]	at Δp max Cont 160[118] at Δp max Int* 180[133]
BRZ 100	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	10 [145]	at Δp max Cont 200[147] at Δp max Int* 225[166]
BRZ 130	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	9 [131]	at Δp max Cont 255[188] at Δp max Int* 290[214]
BRZ 160	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	7 [102]	at Δp max Cont 250[184] at Δp max Int* 300[221]
BRZ 200	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	5 [72.5]	at Δp max Cont 250[184] at Δp max Int* 320[236]
BRZ 250	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	5 [72.5]	at Δp max Cont 250[184] at Δp max Int* 310[228]
BRZ 315	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	5 [72.5]	at Δp max Cont 250[184] at Δp max Int* 300[221]
BRZ 400	Cont 175 [2538] Int[1] 200 [2900] Peak[2] 225 [3263]	5 [72.5]	at Δp max Cont 250[184] at Δp max Int* 320[236]

** Le condizioni intermittenti non devono durare più del 10% di ogni minuto.* Intermittent duty must not exceed 10% each minute.
*** Le condizioni di picco non devono durare più del 1% di ogni minuto.* Peak duty must not exceed 1% each minute.
Per le caratteristiche tecniche non elencate fare riferimento alla parte del catalogo relativa ai motori BR.
As regards not specified technical features, please refer to the section of the catalogue that concerns BR motors.

SPECIALE A RICHIESTA - SPECIAL ON REQUEST

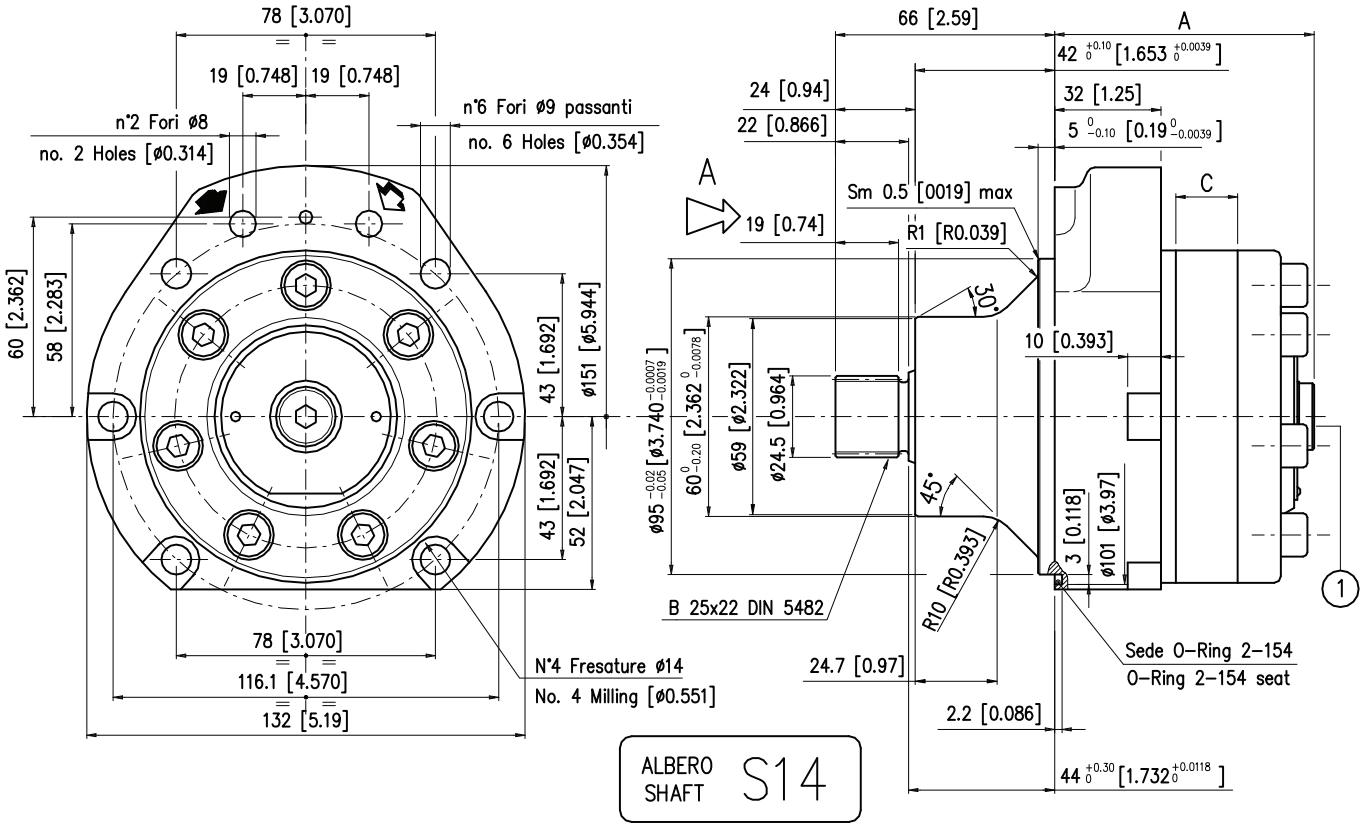


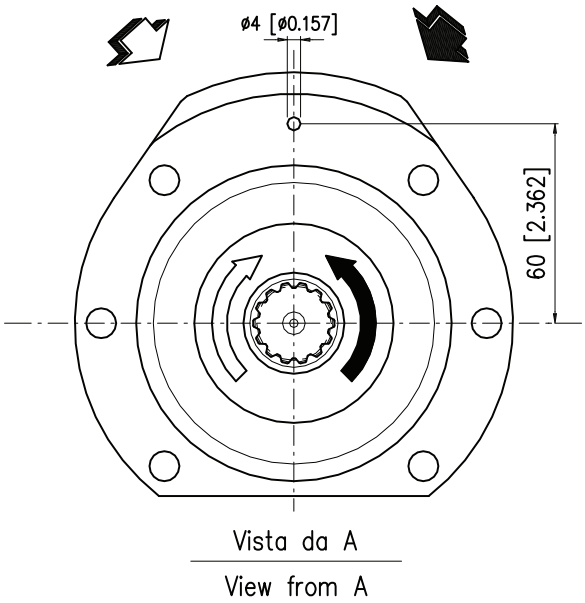


1) *N° 2 fori di alimentazione 3/8 G (BSPP) profondità filetto 17 mm*
No. 2 *3/8 G (BSPP)* main ports thread depth 0.66 in.

2) *Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm Max*
1/4 G (BSPP) motor drain thread depth 0.59 in Max

		BRZL 50	BRZL 65	BRZL 80	BRZL 100	BRZL 130	BRZL 160	BRZL 200	BRZL 250	BRZL 315	BRZL 400
A	**mm [in]**	67.5 [2.65]	69.8 [2.74]	72.5 [2.85]	75.9 [2.98]	80.3 [3.16]	86.3 [3.39]	93.3 [3.67]	102 [4.01]	113.3 [4.46]	126.9 [4.99]
C	**mm [in]**	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
Peso **Weight**	**kg [lb]**	5.6 [12.3]	5.8 [12.7]	5.9 [13.0]	6.2 [13.7]	6.5 [14.3]	6.8 [15.0]	7.1 [15.6]	7.6 [16.8]	8.3 [18.3]	9.5 [20.9]

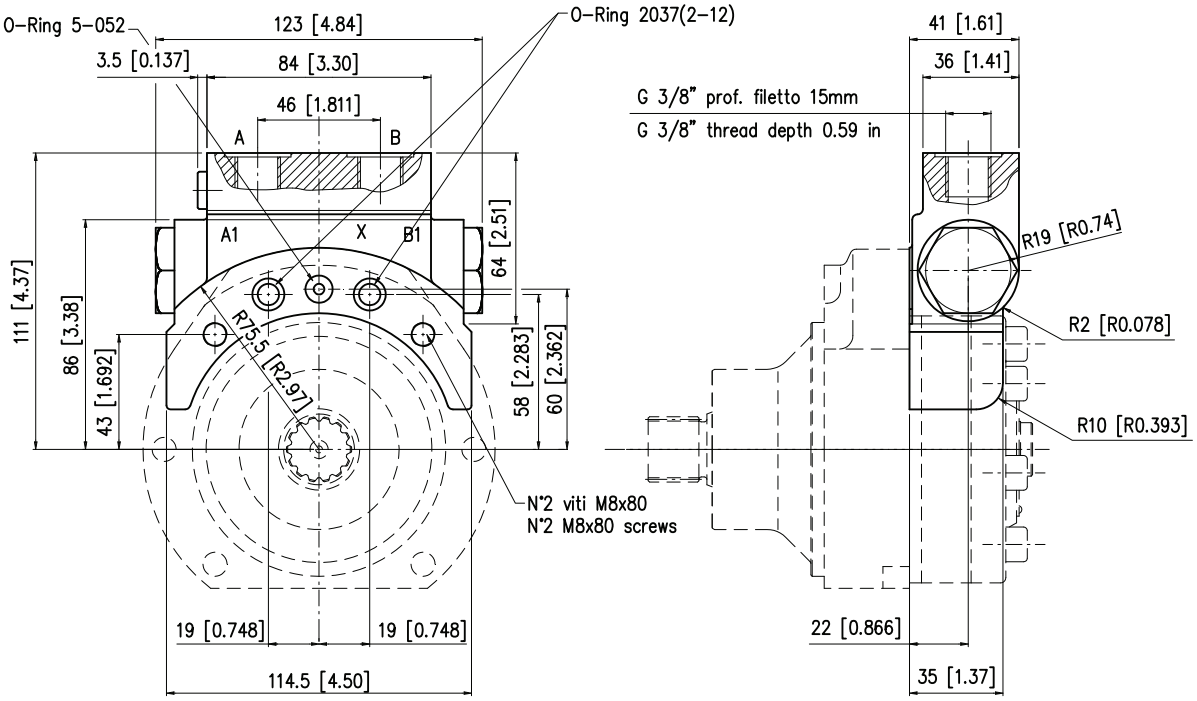




1) *Drenaggio motore 1/4 G (BSPP) profondità filetto 15 mm Max*
1/4 G (BSPP) motor drain thread depth 0.59 in Max

Per l'alimentazione del motore sono disponibili le due valvole VCT11-SF e VCT11-AF ed il collettore modulare CMZ-SF e CMZ-AF.
VCT11-SF and VCT11-AF valves and *CMZ-SF and CMZ-AF* manifold are available to allow motor connection.

		BRZV 50	BRZV 65	BRZV 80	BRZV 100	BRZV 130	BRZV 160	BRZV 200	BRZV 250	BRZV 315	BRZV 400
A	**mm [in]**	67.5 [2.65]	69.8 [2.74]	72.5 [2.85]	75.9 [2.98]	80.3 [3.16]	86.3 [3.39]	93.3 [3.67]	102 [4.01]	113.3 [4.46]	126.9 [4.99]
C	**mm [in]**	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
Peso **Weight**	**kg [lb]**	5.6 [12.3]	5.8 [12.7]	5.9 [13.0]	6.2 [13.7]	6.5 [14.3]	6.8 [15.0]	7.1 [15.6]	7.6 [16.8]	8.3 [18.3]	9.5 [20.9]

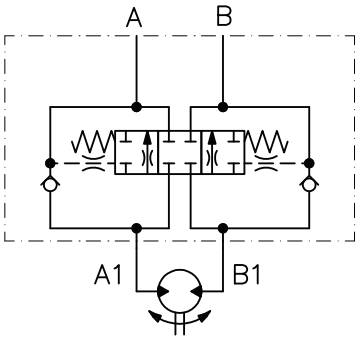


VERSIONE METRICA
METRIC VERSION

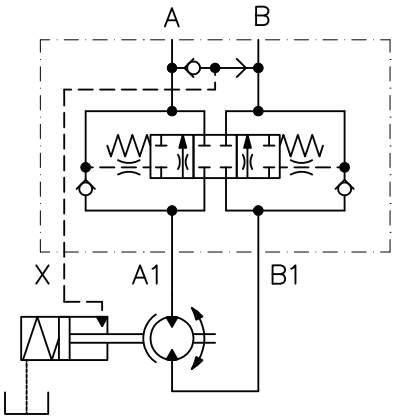
A-B = 3/8 G (BSPP) prof. filetto 15mm
3/8 G (BSPP) thread depth [0.59 in]

VERSIONE SAE
SAE VERSION

A-B = 3/4-16 UNF prof. filetto 15mm
3/4-16 UNF thread depth [0.59 in]

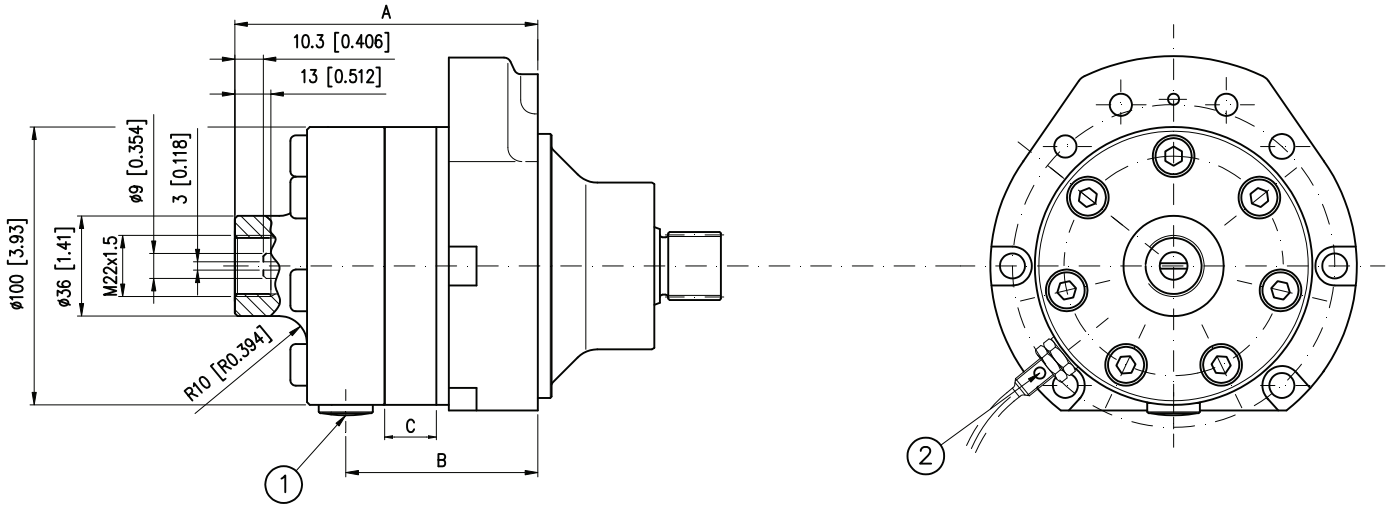


VCT 11 – SF



VCT 11 - AF

Peso - Weight (kg [lb])	1.8 [3.97]



1) *Drenaggio motore 1/4 G (BSPP) profondità 12 mm*
1/4 G (BSPP) drain port thread depth 0.472 in

2) *Attacco sensore M8x1*
Sensor connection M8x1

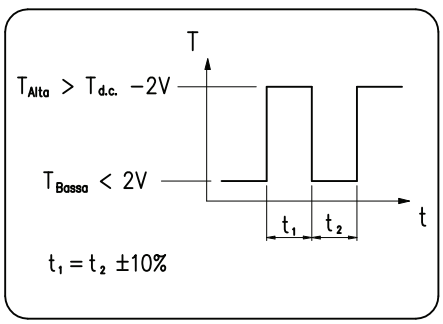
ATTENZIONE:
- *L'alberino contagiri ha velocità pari a 6 volte quella dell'albero primario del motore e senso di rotazione opposto.*
- *N.B.: Non sono accettati carichi assiali o radiali sull'albero contagiri. Coppia massima trasmissibile 1 Nm.*
- *Il motore viene fornito senza il sensore elettronico: se necessario, richiederlo in fase di ordinazione.*
- *Pressione massima ammessa sulla guarnizione dell'albero contagiri con drenaggio chiuso: 25 bar.*

WARNING:
- Tacho shaft has a 6 times higher revolution speed than the motor shaft and opposite direction of rotation.
- NOTE: Axial or radial load on tacho shaft must be avoided. Max torque on tacho 1 Nm [0.737 lbf·ft].
- The electronic sensor is not supplied: if required, please state it clearly on order form.
- Max pressure admissible on the shaft seal with closed drain port 25 bar [362 psi].

		BRZV 50	BRZV 65	BRZV 80	BRZV 100	BRZV 130	BRZV 160	BRZV 200	BRZV 250	BRZV 315	BRZV 400
A	**mm [in]**	100 [3.93]	102.3 [4.02]	105 [4.13]	108.4 [4.26]	112.8 [4.44]	118.8 [4.67]	125.8 [4.95]	134.5 [5.29]	145.8 [5.74]	159.4 [6.27]
B	**mm [in]**	60.4 [2.37]	62.7 [2.46]	65.4 [2.57]	68.8 [2.70]	73.2 [2.88]	79.2 [3.11]	86.2 [3.39]	94.9 [3.73]	106.2 [4.18]	119.8 [4.71]
C	**mm [in]**	9 [0.354]	11.3 [0.444]	14 [0.551]	17.4 [0.68]	21.8 [0.85]	27.8 [1.09]	34.8 [1.37]	43.5 [1.71]	54.8 [2.15]	68.38 [2.69]
Peso **Weight**	**kg [lb]**	6.1 [13.4]	6.3 [13.8]	6.4 [14.1]	6.7 [14.8]	7.0 [15.4]	7.3 [16.1]	7.6 [16.8]	8.1 [17.9]	8.8 [19.4]	9.5 [20.9]

CARATTERISTICHE TECNICHE DEL SENSORE ELETTRONICO
ELECTRONIC SENSOR TECHNICAL FEATURES

Segnale in uscita versione elettronica
Output signal electronic tacho



Numero d'impulsi per giro = 90
Principio di funzionamento induttivo
Funzione di uscita PNP
Tensione nominale 10-65 V d.c.
Caricabilità massima 300 mA
Frequenza massima 10000 Hz
Campo di temperatura -25C +85C
Grado di protezione IP 67

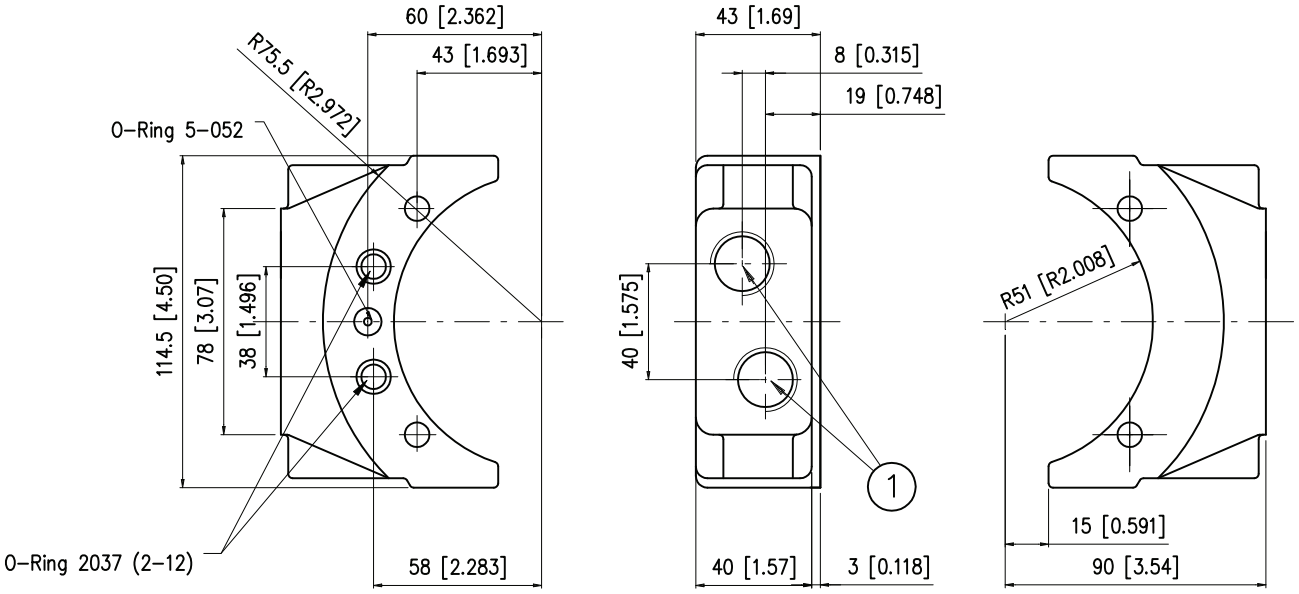
Versioni disponibili:
- *Sensore con cavo a tre fili lunghezza 2 metri (cod.424.0050.0000)*
- *Sensore con attacco per connettore tipo binder (cod.424.0060.0000) + connettore tipo binder*
- *con cavo a tre fili lunghezza 5 metri (cod.424.0080.0000)*

Number of pulses per revolution = 90
Inductive principle
Ouput current PNP
Voltage 10-65 V d.c.
Max load 300 mA
Max frequency 10000 Hz
Temperature range -25C +85C
Enclosure IP 67

Available versions:
- Sensor with 2 metres three wires cable (cod.424.0050.0000)
- Sensor with binder plug connection (cod.424.0060.0000)

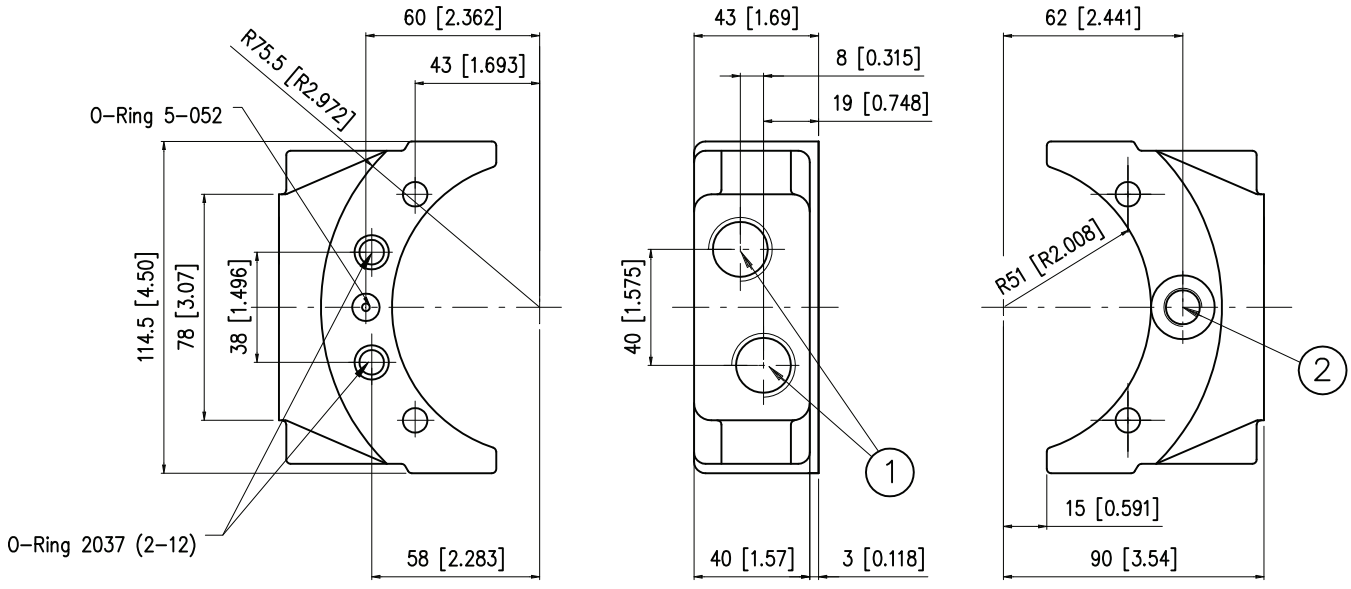
+ binder connecting
- plug with 5 metres three wires cable (cod.424.0080.0000)

Collettore modulare CMZ senza sblocco freno (SF)
Manifold CMZ without brake opening port (SF)



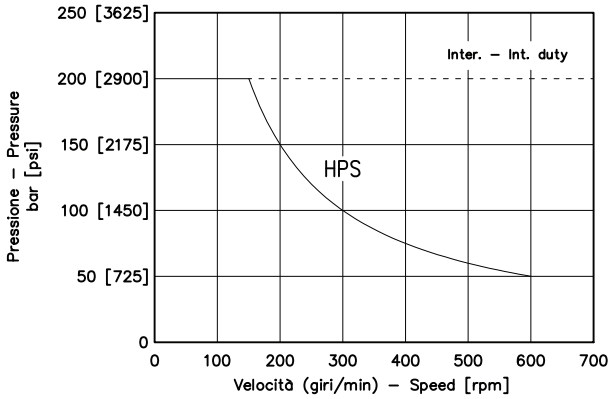
1) *N° 2 Fori d'alimentazione 1/2 G (BSPP) Prof.fil. 19 mm*
N°2 1/2 G (BSPP) main ports thread depth 0.74 in

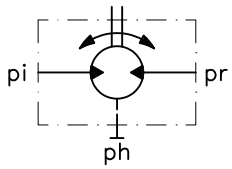
Collettore modulare CMZ con sblocco freno (AF)
Manifold CMZ with brake opening port (AF)



1) *N° 2 Fori d'alimentazione 1/2 G (BSPP) Prof.fil. 19 mm*
N°2 1/2 G (BSPP) main ports thread depth 0.74 in
2) *Apertura freno 1/4 G (BSPP) Prof.fil. 13 mm*
1/4 G (BSPP) drain port thread depth 0.511 in

MASSIMA PRESSIONE AMMESSA SULLA GUARNIZIONE ALBERO
MAX PERMISSIBLE SHAFT PRESSURE





I motori BRZ sono forniti nella versione con guarnizioni ad alta pressione (HPS). Nei motori BRZ non sono presenti le valvole interne di drenaggio. La pressione sulla guarnizione (ph) è la media tra le pressioni di alimentazione e di scarico del motore. Se ph supera il valore massimo ammesso (vedi grafico a fianco) occorre aprire il drenaggio.

Motors are supplied in HPS seal version (HPS) BRZ motors don't feature build-in check valves. The (ph) pressure on the seal is the average between inlet and outlet pressure. If ph exceeds rated figures (see graph on side), the drain line must be connected.

$$Ph = \frac{pi + pr}{2}[bar]$$

ph = pressione in carcassa	ph = housing pressure
pi = pressione di alimentazione	pi = inlet. pressure
pr = pressione di scarico	pr = outlet pressure

Informazioni sul prodotto
Dati i continui sviluppi, le modifiche e le migliorie al prodotto, la S.AM Hydraulik Spa non sarà responsabile per eventuali informazioni che possano indurre in errore, od erronee, riportate da cataloghi, istruzioni, disegni, dati tecnici e altri dati forniti dalla S.A.M. Hydraulik Spa. Non sarà possibile basare alcun procedimento legale su tale materiale.
***Modifiche del prodotto**. La S.A.M. Hydraulik Spa si riserva il diritto di variare i suoi prodotti, anche quelli già ordinati, senza notifica.*

Notice
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