

BD5 (dual displacement / *cilindrata doppia*)



| | | 1000 250 | | 1500 400 | | 1900 500 | | | |
|---|----------|----------|--|---|------|--------------------|------|----------------|--|
| Equivalent displacement <i>Cilindrata equivalente</i> | [cc/rev] | 957 | 246 | 1505 | 387 | 1848 | 475 | | |
| Bore <i>Alesaggio</i> | [mm] | 59 | | 74 | | 82 | | | |
| Stroke <i>Corsa</i> | [mm] | 70 | 18 | 70 | 18 | 70 | 18 | | |
| Specific torque <i>Coppia specifica</i> | [Nm/bar] | 15.23 | 3.91 | 23.95 | 6.16 | 29.41 | 7.56 | | |
| Peak pressure <i>Pressione di picco</i> | [bar] | 425 | 425 | 375 | 375 | 350 | 350 | | |
| Peak power <i>Potenza di picco</i> | [kW] | 170 | 150 | 170 | 150 | 170 | 150 | | |
| Continuous speed ⁽³⁾ <i>Velocità in continuo</i> ⁽³⁾ | [rpm] | 475 | 980 | 420 | 840 | 350 | 700 | | |
| Maximum speed <i>Velocità massima</i> | [rpm] | 680 | 1400 | 600 | 1200 | 500 | 1000 | | |
| Approximate weight <i>Peso approssimativo</i> | [kg] | 182 | unit | Motor oil capacity | | [l] | 10 | | |
| | | | <i>unità</i> | <i>Capacità olio motore</i> | | | | | |
| Maximum casing pressure ⁽²⁾ <i>Pressione massima in carcassa</i> ⁽²⁾ | [bar] | 5 | continuous | Admissible temperatures | | [°C] | -20 | minimum | |
| | | 15 | <i>continuo</i> | <i>Temperature ammissibili</i> | | | +80 | <i>minimo</i> | |
| | | | peak | | | | | <i>massimo</i> | |
| | | | <i>picco</i> | | | | | | |
| BD5 change displacement pilot pressure range | [bar] | 25 | Min. pilot press. <i>Min. Press. di pilotaggio</i> | BD5 change displacement pilot oil capacity | | [cm ³] | 6,0 | | |
| <i>Campo di pressione di cambio cilindrata BD5</i> | | 35 | Max. pilot press. <i>Mass. Press. di pilotaggio</i> | <i>Capacità olio di cambio cilindrata BD5</i> | | | | | |

NOTES

(1) Continuous or average working pressure should be chosen depending on the bearing lifetime. For lifetime calculation of the motor bearings, please contact the SAI Technical Department.

(1) *La pressione continua o media di lavoro va determinata in funzione della vita dei cuscinetti. Per un calcolo di vita dei cuscinetti del motore contattare l'Ufficio Tecnico SAI.*

(2) For higher casing pressure please contact the SAI Technical Department.

(2) *Per pressioni più elevate in carcassa contattare l'Ufficio Tecnico SAI.*

(3) For higher continuous speed please contact the SAI Technical Department.

(3) *Per velocità in continuo maggiori contattare l'Ufficio Tecnico SAI.*

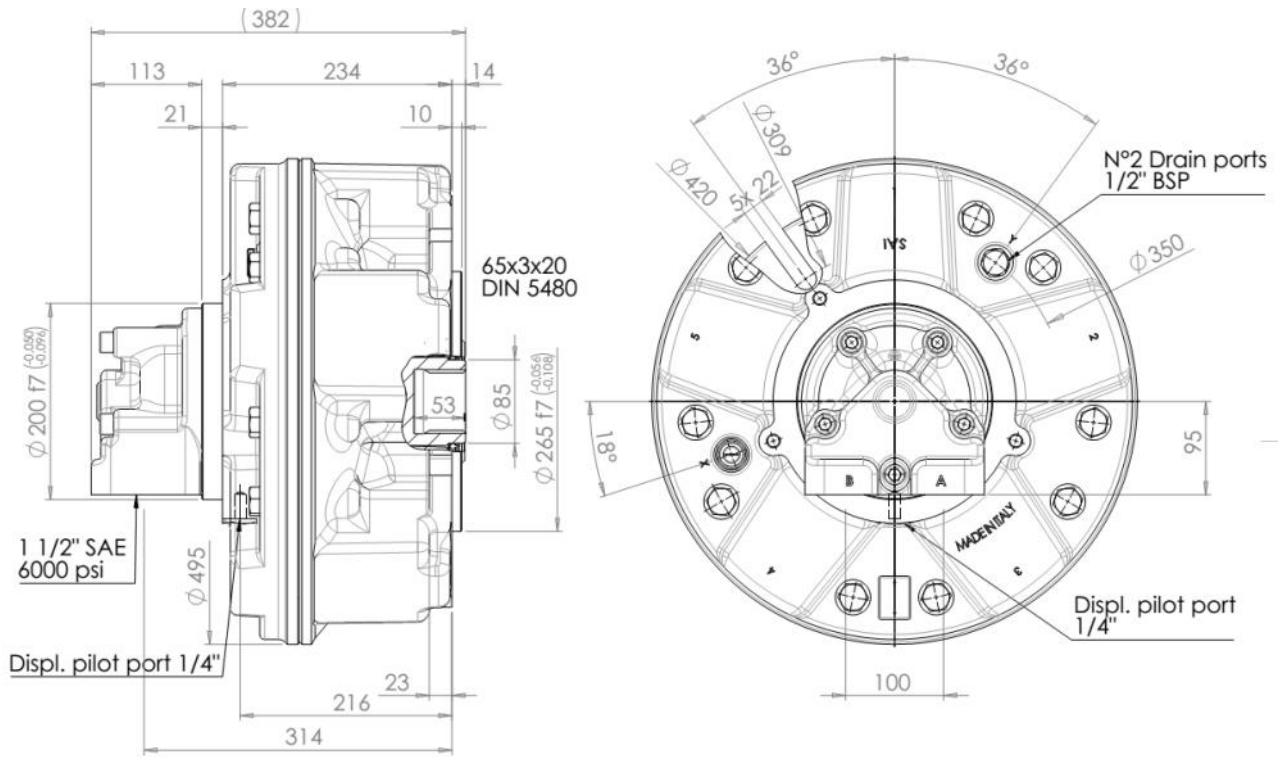
(4) Continuous working over 300 bar pressure, please contact the SAI Technical Department.

(4) *Per uso continuo sopra i 300 bar contattare l'Ufficio Tecnico SAI.*

INSTALLATION NOTES

| | | | | | | | | |
|---|------|-------------|-------------------------|-------------|---------------------|--|-----|------|
| Bolt torque setting <i>Coppia serraggio viti</i> | [Nm] | 397,0÷490,0 | coarse <i>grossa</i> | 419,0÷523,0 | fine <i>fine</i> | Suggested bolt type <i>Viti suggerite</i> | M18 | 12.9 |
|---|------|-------------|-------------------------|-------------|---------------------|--|-----|------|

DIMENSIONAL DRAWINGS
DISEGNI D'INGOMBRO

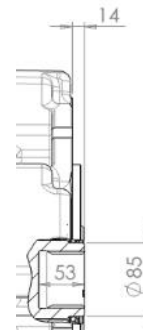
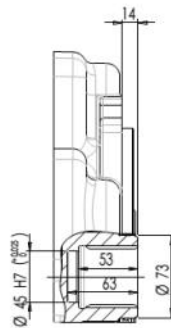
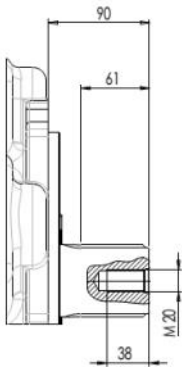


SHAFT OPTIONS
OPZIONI ALBERO

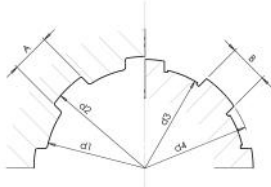
Splined
Calettato 56 UNI 221 1

Internally splined 55-2-26 3
Calettato interno DIN5482

Internally splined 65-3-20 10
Calettato interno DIN5480

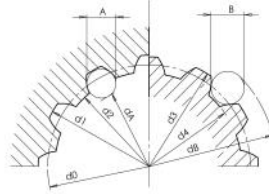


SPLINE DATA CALETTATURE



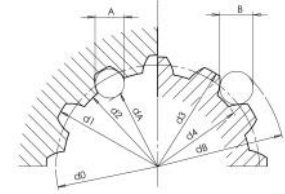
56 UNI 221

| | | | |
|----|----------|------------------|-----|
| d1 | Ø 56,000 | +0,030 +0 | H7 |
| d2 | Ø 65,000 | +0,190 +0 | H11 |
| A | Ø 10,000 | +0,028 +0,013 | F7 |
| d3 | Ø 56,000 | -0,010 -0,029 | g6 |
| d4 | Ø 65,000 | -0,100 -0,190 | d11 |
| B | Ø 10,000 | -0,013 -0,028 | f7 |



65-3-20 DIN 5480

| | | | |
|----|----------|--------------|-----|
| d0 | Ø 60,000 | | |
| d1 | Ø 65,000 | +0,740 +0 | H14 |
| d2 | Ø 59,000 | +0,190 +0 | H11 |
| A | Ø 5,250 | | |
| dA | Ø 54,101 | | H11 |
| d3 | Ø 64,400 | -0 -0,190 | h11 |
| d4 | Ø 58,400 | -0 -0,740 | h14 |
| B | Ø 6,000 | | |
| dB | Ø 70,999 | | f8 |



55-2-26 DIN 5482

| | | | |
|----|----------|--------------|-----|
| d0 | Ø 52,000 | | |
| d1 | Ø 55,000 | +0,300 +0 | H12 |
| d2 | Ø 50,000 | +0,160 +0 | H11 |
| A | Ø 3,500 | | |
| dA | Ø 46,902 | | H10 |
| d3 | Ø 54,500 | -0 -0,190 | h11 |
| d4 | Ø 49,000 | -0 -0,300 | h12 |
| B | Ø 3,500 | | |
| dB | Ø 56,953 | | e9 |

GRAPHS GRAFICI

Bearing lifetime has been estimated according to L_{10} (according to ISO 281:1990).

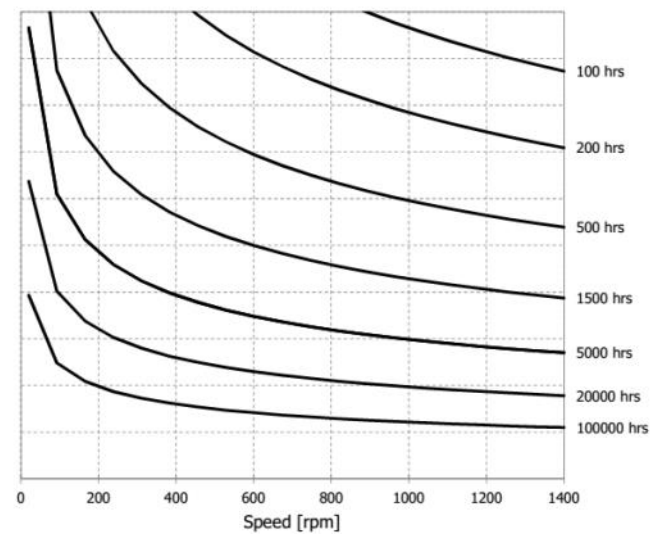
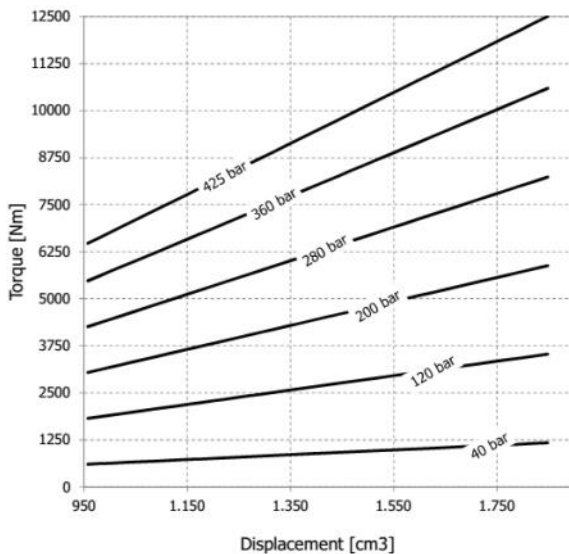
The following graph has been plotted using the **maximum** displacements with the stroke of 70 mm.

Please contact the SAI Technical Department for other graphs relating to this product.

La durata dei cuscinetti è stata calcolata in accordo con la formula L_{10} (secondo ISO 281:1990).

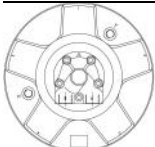
Il grafico che segue è stato ricavato usando le cilindrate **massime** e la corsa di 70 mm.

Vi preghiamo di contattare l'Ufficio Tecnico SAI per altri grafici relativi a questo prodotto.

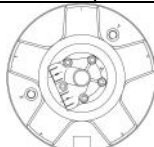


ORDER CODES CODICI D'ORDINE

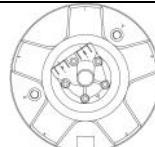
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|---|---|---|--|---|--|---|-----|---|--|
| | BD5 | + | | + | EG | + | D90 | + | |
| 1 Displacement | see table | | <i>1 Cilindrata</i> | | vedere tabella | | | | |
| | 1 | = male 56 UNI 221 | | | 1 | = maschio 56 UNI 221 | | | |
| 2 Shaft options | 3 | = female 55-2-26 DIN5482 | <i>2 Opzioni albero</i> | | 3 | = femmina 55-2-26 DIN5482 | | | |
| | 10 | = female 65-3-20 DIN5480 | | | 10 | = femmina 65-3-20 DIN5480 | | | |
| 3 Bearings | EG | = reinforced spherical roller bearings. | <i>3 Cuscinetti</i> | | EG | = cuscinetti a rulli di botte maggiorati. | | | |
| | U | = without shaft seal | | | U | = senza tenuta albero | | | |
| 4 Other options | SV | = shaft seal protection | <i>4 Altre opzioni</i> | | SV | = protezione tenuta albero | | | |
| | V | = high temperature seals | | | V | = guarnizioni per alte temperature | | | |
| | I | = 3 bar pressure relief valve | | | I | = valvola di sfiato 3 bar | | | |
| 5 Distributor | see distributor catalogue, D90 standard | | <i>5 Distributore</i> | | vedere catalogo distributori, D90 standard | | | | |
| 6 Distributor options | K | = tachometer prearrangement hole | <i>6 Opzioni distributore</i> | | K | = foro predisposizione contagiri | | | |
| | J | = tachometer prearrangement | | | J | = predisposizione contagiri | | | |
| 7 Direction of rotation (viewed from the output side) with flow in port A, out in port B. | No code | = clockwise rotation | <i>Direzione d'uscita</i> (visto dal lato d'uscita) con portata in ingresso in porta A, uscita in L | | Nessun codice | = rotazione oraria | | | |
| | L | = anti-clockwise rotation | | | L | = rotazione anti-oraria | | | |
| 8 Distributor cover orientation | No code | = position 1 | <i>Orientamento cover perchio distributore</i> | | Nessun codice | = posizione 1 | | | |
| | DM2 | = position 2 | | | DM2 | = posizione 2 | | | |
| | DM3 | = position 3 | | | DM3 | = posizione 3 | | | |
| | DM4 | = position 4 | | | DM4 | = posizione 4 | | | |
| | DM5 | = position 5 | | | DM5 | = posizione 5 | | | |



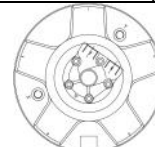
Position 1
Posizione 1
DM1



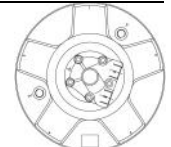
Position 2
Posizione 2
DM2



Position 3
Posizione 3
DM3



Position 4
Posizione 4
DM4



Position 5
Posizione 5
DM5

Ex.

BD5 1500-400 10EG D90
(standard)

BD5 1500-400 10EGV D90L

(options: high temperature seals and anti-clockwise sense of rotation)

(opzioni: guarnizioni per alte temperature e direzione d'uscita in rotazione anti-oraria)