



The BM6S is the bearingless motor of our BM6 family, large volume, disc valve, high pressure motor.

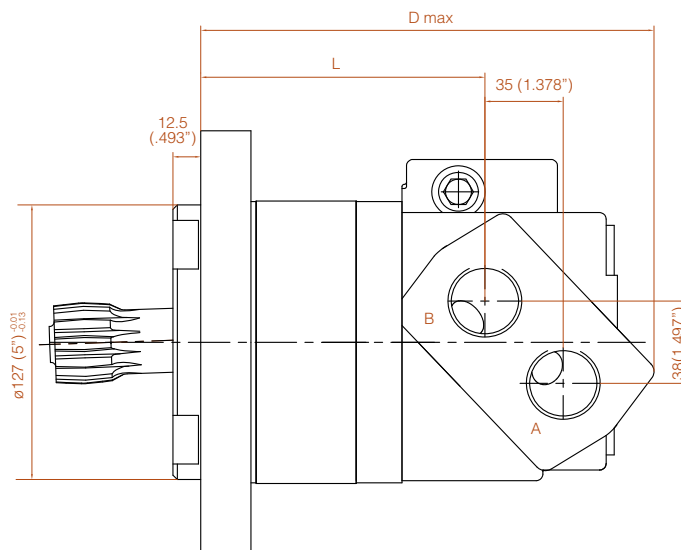
CHARACTERISTIC FEATURES

- Advanced design in disc distribution flow, which can provide better performance at low speed.
- The valve can automatically compensate for wear, so the volumetric efficiency is higher.
- Double taper roller bearings permit high radial loads. The motors can be used on heavier vehicles in traction drive applications.

Main Specification

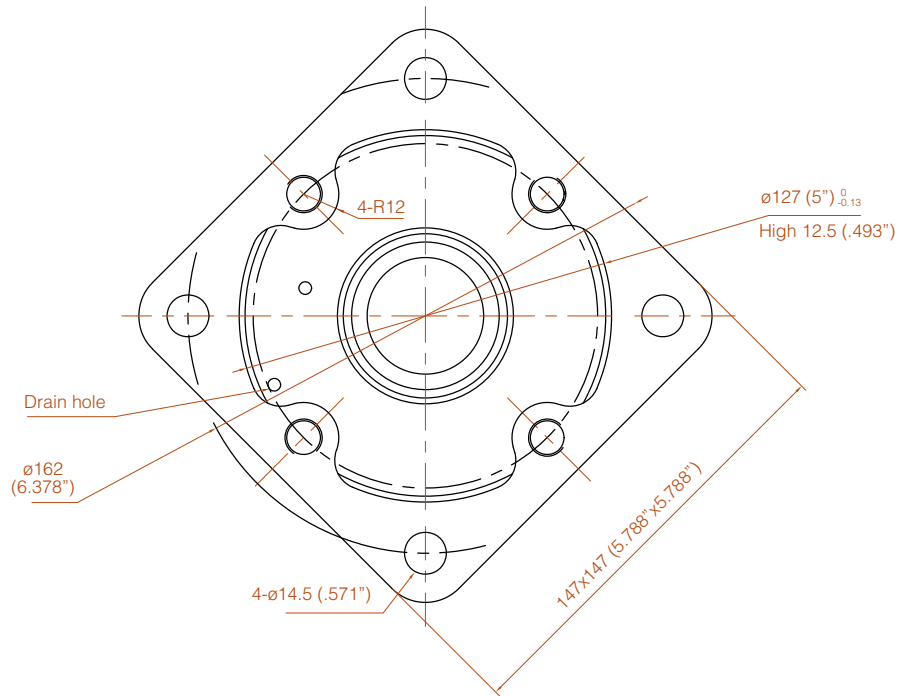
The main specification and performance data are same as BM6, please refer to the BM6 section on page 51-53.

Figuration A

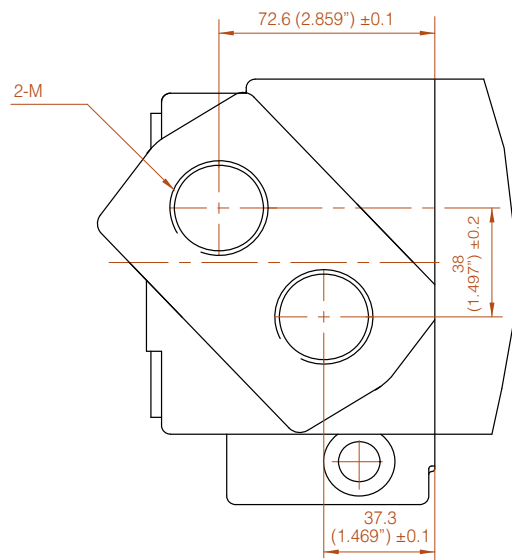


| Displacement | 195 | | 245 | | 310 | | 395 | | 490 | | 625 | | 800 | | 985 | |
|--------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|--------|-----|--------|
| L | 105 | 4.134 | 111 | 4.370 | 118 | 4.646 | 127 | 5.000 | 138 | 5.433 | 153 | 6.024 | 174 | 6.850 | 193 | 7.598 |
| Dmax | 188 | 7.402 | 194 | 7.638 | 200 | 7.874 | 210 | 8.268 | 221 | 8.701 | 235 | 9.252 | 256 | 10.079 | 275 | 10.827 |

Mounting Flange A



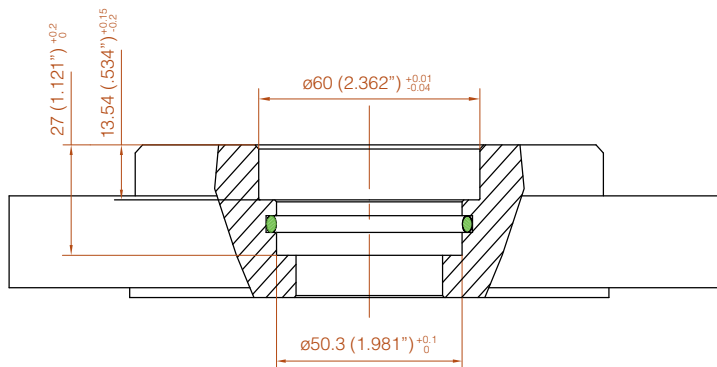
Back Housing A



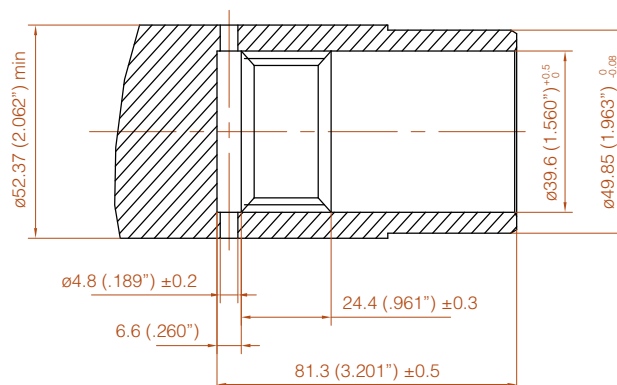
Shaft A

External involute spline data

| | |
|---------------------------------|--|
| Pitch | 8.5/17 (.335"/.670") |
| Pressure angle | 30° |
| Number of teeth | 12 |
| Pitch dia. | ø35.86 (1.412") |
| Major dia. | ø26.6 $^{+0.20}_0$ (1.047 $^{+0.008}_0$) |
| Minor dia. | ø31.8 $^{+0.15}_0$ (1.252 $^{+0.006}_0$) |
| Tooth thickness | 5.7 $^{+0.02}_{-0.06}$ (0.225 $^{+0.0008}_{-0.003}$) |
| Pin dia. | ø4.572 (0.180") |
| Measurement between pins | 42.9 $^{+0.01}_{-0.06}$ (1.689 $^{+0.0004}_{-0.003}$) |



Dimensions of the attached component



BM6S Code number & Order information

Choose an option for each category

BM6S

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

Figuration

A - Standard

Displacement (cc)

A - 195 B - 245 C - 310 D - 395
 E - 490 F - 625 G - 800 H - 985

Flange & Pilot (mm)

A - Square flange 147x147 (5.788"x5.788"), 4- ϕ 14.5 (.571") distributing ϕ 162 (6.378"), Pilot ϕ 127x12.5 (5"x.493")

Shaft (mm)

A - Refer to Drawing Page

Back Housing

A - Refer to Drawing Page

Oil Port

A - 2-G1 B - 2-M33x2 C - 2-1-5/16-12UN

Link Thread on Port Surface

A - None B - 4-M12 C - 4-M10

Drain Port

A - None B - M14x1.5 C - G1/4 D - 9/16-18UNF

Order example: BM6SABAAABBC

Other configuration and/or mounting types are available upon request.