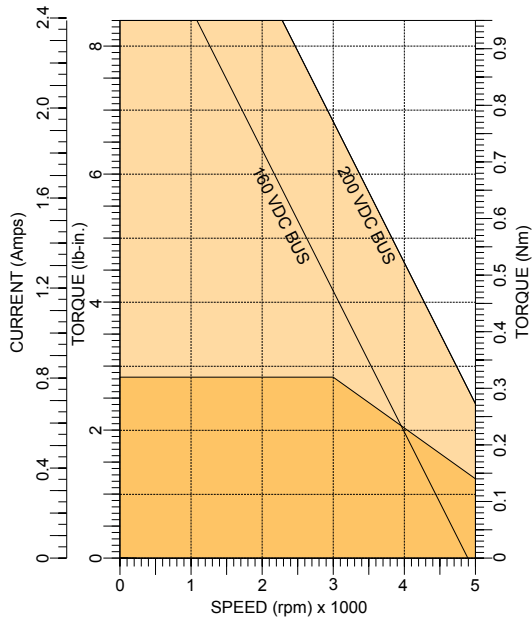


# BSM R performance and specification

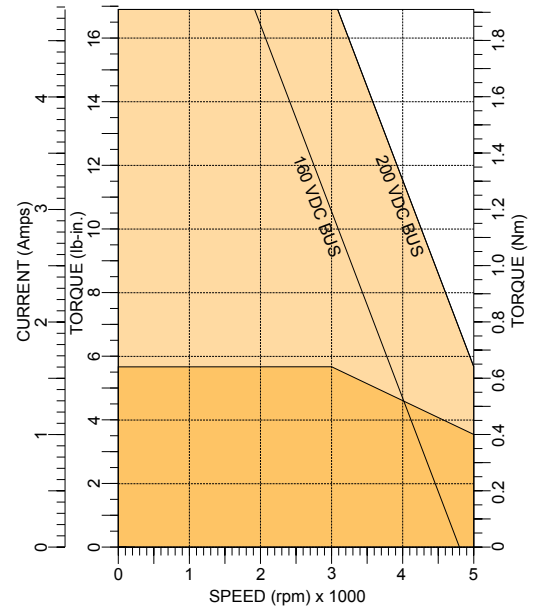
| Catalog Number                                                              |             | BSM60R-140XX | BSM60R-240XX | BSM60R-340XX | BSM80R-340XX |
|-----------------------------------------------------------------------------|-------------|--------------|--------------|--------------|--------------|
| Output power <div>1</div>                                                   | Watts       | 100          | 200          | 400          | 750          |
| General                                                                     |             |              |              |              |              |
| Rated torque                                                                | Nm          | 0.32         | 0.64         | 1.27         | 2.39         |
| Rated current                                                               | Arms        | 0.9          | 1.7          | 3.3          | 5.0          |
| Peak torque                                                                 | Nm          | 0.95         | 1.91         | 3.82         | 7.16         |
| Peak current                                                                | Arms        | 2.6          | 5.0          | 9.7          | 14.5         |
| Continuous stall torque                                                     | N·m         | 0.32         | 0.64         | 1.27         | 2.39         |
| Continuous current                                                          | Arms        | 0.8          | 1.6          | 3.2          | 4.8          |
| Rated speed                                                                 | rpm         | 3000         | 3000         | 3000         | 3000         |
| Electrical                                                                  |             |              |              |              |              |
| Torque constant                                                             | N·m/amp     | 0.38         | 0.39         | 0.40         | 0.50         |
| Voltage constant                                                            | Vrms/krpm   | 23.0         | 23.7         | 24.0         | 30.1         |
| Resistance                                                                  | Ohms        | 13.47        | 5.00         | 1.93         | 0.87         |
| Inductance                                                                  | mH          | 33.33        | 16.00        | 7.33         | 5.20         |
| Electrical time constant                                                    | ms          | 2.5          | 3.2          | 3.8          | 6.0          |
| Mechanical                                                                  |             |              |              |              |              |
| Inertia <div>[with brake]</div> <div>[without brake]</div>                  | kg·cm²      | 0.18         | 0.27         | 0.43         | 1.30         |
|                                                                             |             | 0.086        | 0.18         | 0.34         | 1.06         |
| Maximum speed                                                               | rpm         | 5000         | 5000         | 5000         | 5000         |
| Mechanical time constant <div>[with brake]</div> <div>[without brake]</div> | ms          | 2.5          | 1.3          | 0.8          | 0.7          |
|                                                                             |             | 1.2          | 0.9          | 0.6          | 0.6          |
| Number of motor poles                                                       |             | 8            | 8            | 8            | 8            |
| Max radial load                                                             | N (at 20mm) | 78.4         | 196.0        | 196.0        | 343.0        |
| Max thrust load                                                             | N           | 39.2         | 68.6         | 68.6         | 98           |
| Weight <div>[with brake]</div> <div>[without brake]</div>                   | kg          | 0.9          | 1.4          | 1.8          | 3.4          |
|                                                                             |             | 0.6          | 0.9          | 1.3          | 2.5          |
| Brake data                                                                  |             |              |              |              |              |
| Rated voltage                                                               | VDC ±10%    | 24           | 24           | 24           | 24           |
| Rated torque (min)                                                          | Nm          | 1.27         | 1.27         | 1.27         | 2.39         |
| Rated current                                                               | Arms        | 0.33         | 0.33         | 0.33         | 0.33         |
| Rated input power                                                           | W           | 8            | 8            | 8            | 8            |
| Armature release time (max)                                                 | ms          | 20           | 20           | 20           | 30           |
| Armature pull-in time (max)                                                 | ms          | 50           | 50           | 50           | 60           |

# BSM R performance and specification

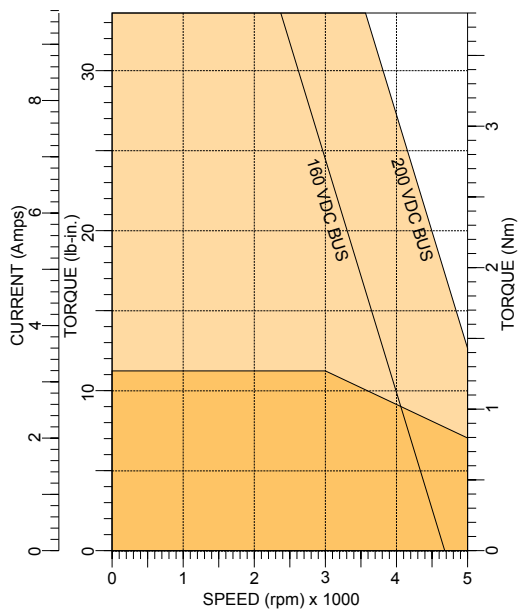
**BSM60R-140**  
**100W**



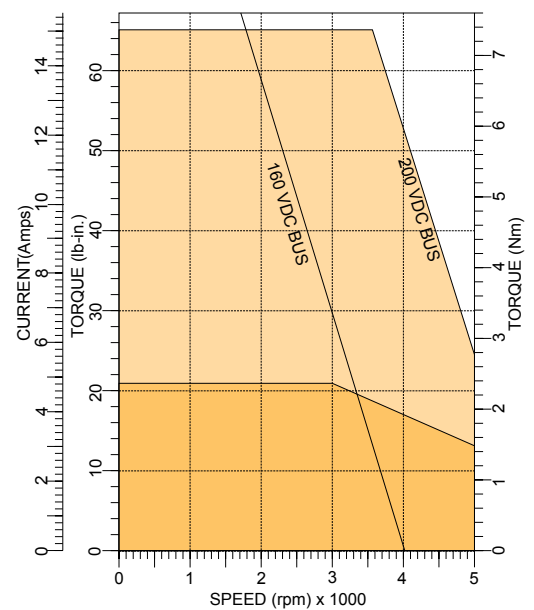
**BSM60R-240**  
**200W**



**BSM60R-340**  
**400W**

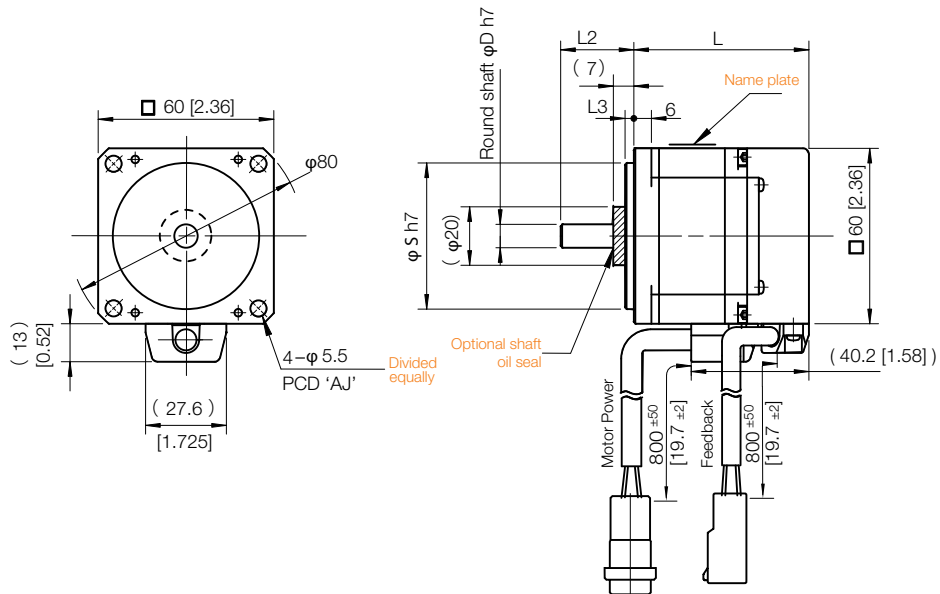


**BSM80R-340**  
**750W**

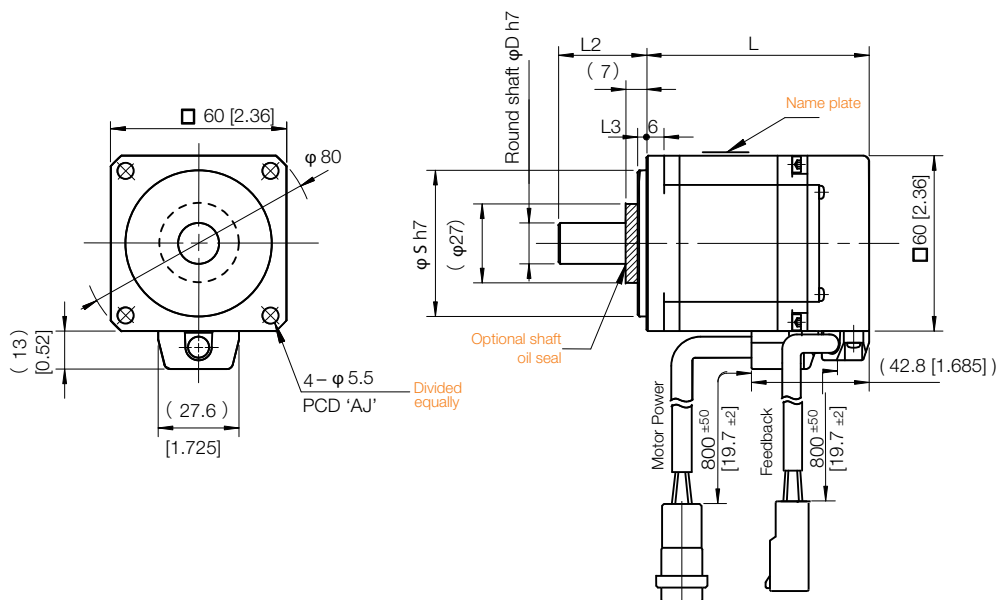


# BSM R dimensions

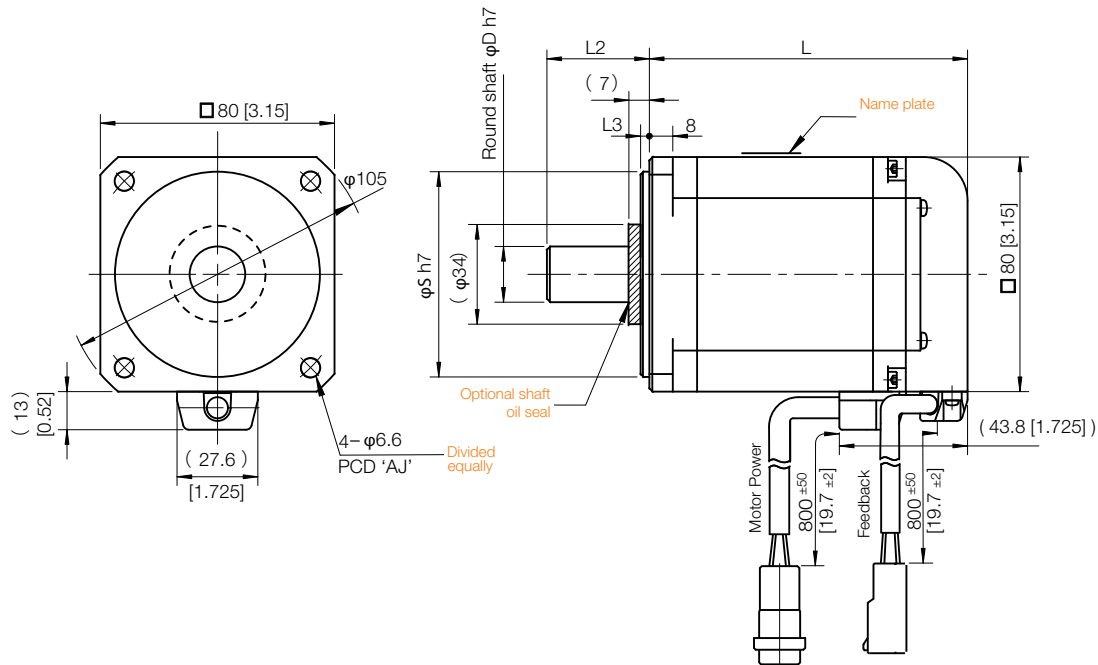
## BSM60R-140



## BSM60R-240 / 340



## BSM80R-340



| Catalog Number | Length (L) mm [in] |            | L2 mm [in] | D mm [in]    | L3 mm [in]  | S mm [in]  | AJ mm [in] |
|----------------|--------------------|------------|------------|--------------|-------------|------------|------------|
|                | W/O brake          | W/brake    |            |              |             |            |            |
| BSM60R-140xx   | 59 [2.35]          | 83 [3.3]   | 30 [1.181] | 8.0 [0.315]  | 3.0 [0.118] | 50 [1.968] | 70 (2.76)  |
| BSM60R-240xx   | 76 [3.0]           | 111 [4.36] | 30 [1.181] | 14.0 [0.551] | 3.0 [0.118] | 50 [1.968] | 70 (2.76)  |
| BSM60R-340xx   | 98 [3.86]          | 132 [5.20] | 30 [1.181] | 14.0 [0.551] | 3.0 [0.118] | 50 [1.968] | 70 (2.76)  |
| BSM80R-340xx   | 108 [4.25]         | 145 [5.7]  | 35 [1.381] | 19.0 [0.748] | 3.0 [0.118] | 70 [2.755] | 90 (3.54)  |

## BSM R ordering information

