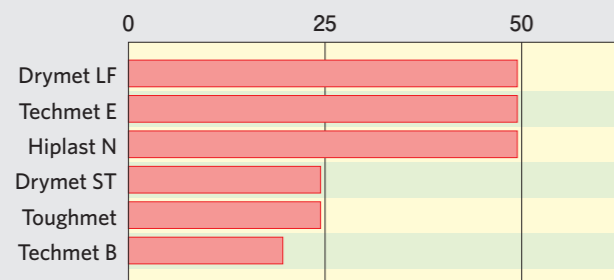
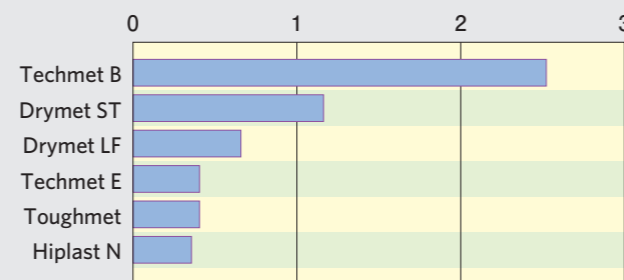


# Selection Guide

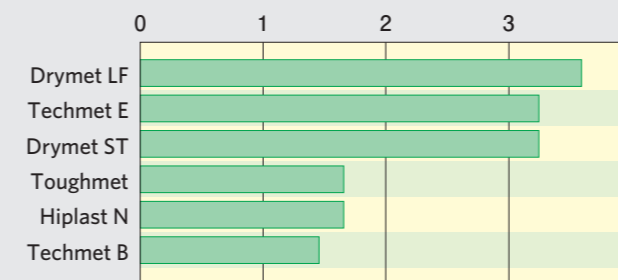
■ Allowable Pressure P (under high load applications) N/mm<sup>2</sup>



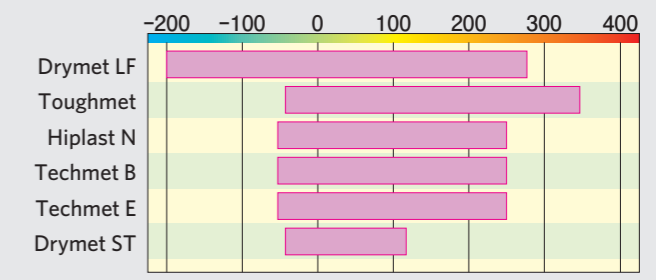
■ Allowable Velocity V (under high speed condition) m/s



■ Allowable PV Value N/mm<sup>2</sup> · m/s



■ Temperature Range (From low to high temperature range) °C



These graphs show the standard characteristics of bearings that can be used under self-lubricating conditions.

## Scope of Application

The value shown below are obtained in shaft rotation condition in the atmosphere.

| Product | Product Name               | Allowable max pressure P<br>N/mm <sup>2</sup><br>{kgf/cm <sup>2</sup> } | Allowable max velocity V<br>m/s<br>{m/min}                               | Allowable max PV value<br>N/mm <sup>2</sup> · m/s<br>{kgf/cm <sup>2</sup> · m/min} | Temperature range<br>°C<br>{°F} |
|---------|----------------------------|---|--|--|---------------------------------|
|         | Oiles<br><b>Drymet ST</b>  | 24.5<br>{250}<br>※ 137<br>※ {1,400}                                     | 1.15<br>{69}   | 3.25<br>{1,990}  | -40 ~ +120<br>{-40 ~ +248}      |
|         | Oiles<br><b>Drymet LF</b>  | 49.0<br>{500}<br>※ 137<br>※ {1,400}                                     | 0.65<br>{39}   | 3.60<br>{2,200}  | -200 ~ +280<br>{-328 ~ +536}    |
|         | Oiles<br><b>Techmet B</b>  | 19.5<br>{199}<br>※ 137<br>※ {1,400}                                     | 2.50<br>{150}  | 1.45<br>{887}  | -50 ~ +250<br>{-58 ~ +482}      |
|         | Oiles<br><b>Techmet E</b>  | 49<br>{500}<br>※ 137<br>※ {1,400}                                       | 0.5<br>{30}  | 3.27<br>{2000}   | -50 ~ +250<br>{-58 ~ +482}      |
|         | Oiles<br><b>Toughmet</b>   | 24.5<br>{250}<br>※ 49<br>※ {500}  | 0.40<br>{24}   | 1.65<br>{1,010}  | -40 ~ +350<br>{-40 ~ +662}      |
|         | Oiles<br><b>Toughmet D</b> | 50<br>{510}<br>※ 100<br>※ {1,020}                                       | Periodic lubrication<br>1.00<br>{60}<br>Oil lubrication<br>5.00<br>{300} | Periodic lubrication<br>3.26<br>{2,000}<br>Oil lubrication<br>4.89<br>{3,000}      | -40 ~ +150<br>{-40 ~ +302}      |
|         | Oiles<br><b>Hiplast N</b>  | 49.0<br>{500}   | 0.35<br>{21}   | 1.65<br>{1,010}  | -50 ~ +250<br>{-58 ~ +482}      |
|         | Oiles<br><b>Hiplast E</b>  | 49.0<br>{500}   | 0.35<br>{21}   | 1.65<br>{1,010}  | -50 ~ +250<br>{-58 ~ +482}      |

※ Static bearing pressures defined: Bearing pressures in applications with no motion or very small motion (≦0.0017m/s{0.1m/min}).

= Conductive

## Caution

- The allowable values shown below are obtained when tested in the standard bearing test methods of Oiles Corporation. Please contact us when you use products under conditions over the allowable values.
- Conditions differ with machines. Consider that these values are for reference only.

| Lubrication          | Atmosphere | In oil | In water | In seawater | In chemical | Corrosive condition | Standard part codes  | Product outline | Product detail | Dimensions                                |
|----------------------|------------|--------|----------|-------------|-------------|---------------------|--|-----------------|----------------|---|
| Dry                  | ○          | ○      | ×        | ×           | ×           | ×                   | Drymet ST Bushings ——— 70B<br>Washers ——— 70W<br>Plates ——— 70P  | P.51            | P.141          | P.145<br>P.149<br>P.150                   |
| Dry                  | ○          | ○      | △        | ×           | △           | △                   | Drymet LF Bushings ——— LFB<br>Flange bushings — LFF<br>Washers ——— LFW<br>Plates ——— LFP<br>Drymet LF(t0.5) Flange bushings — LFCF | P.51            | P.151          | P.155<br>P.159<br>P.161<br>P.163<br>P.162 |
| Dry                  | ○          | ○      | ×        | ×           | ×           | ×                   | Custom-made<br>Techmet Bushings ——— TCB  | P.51            | P.164          | P.166                                     |
| Dry                  | ○          | ○      | ×        | ×           | ×           | ×                   | Custom-made  | P.52            | P.167          | —   |
| Dry                  | ○          | ○      | △        | △           | △           | △                   | Toughmet Bushings ——— TMB  | P.52            | P.168          | P.169                                     |
| Periodic lubrication | ○          | ○      | ×        | ×           | ×           | ×                   | Toughmet D Bushings ——— TMDB<br>Plates ——— TMDP  | P.53            | P.171          | P.173<br>P.175                            |
| Oil lubrication      | ○          | ○      | ×        | ×           | ×           | ×                   |  |                 |                |   |
| Dry                  | ○          | ○      | △        | △           | △           | △                   | Hiplast Flange bushings ——— HPF  | P.53            | P.177          | P.180                                     |
| Dry                  | ○          | ○      | △        | △           | △           | △                   | Custom-made  | P.53            | P.177          | —   |

○ = usable △ = usable under some condition × = unusable — = N/A, For detail, please refer to page 361.