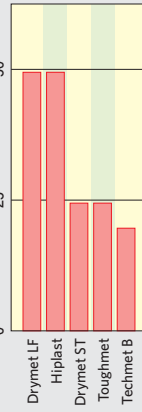
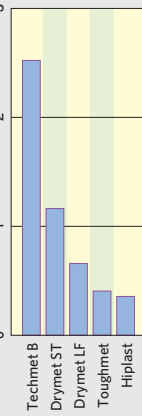


# Selection Guide

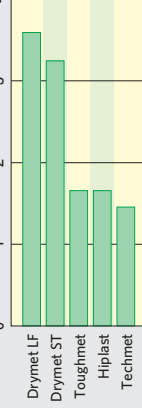
■ Allowable Pressure P (under high load applications) N/mm<sup>2</sup>



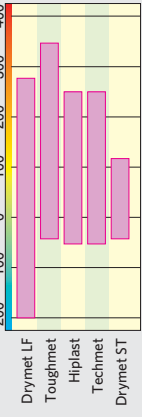
■ Allowable Velocity V (under high speed condition) m/s



■ 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 N/mm <sup>2</sup> kgf/cm <sup>2</sup>	Allowable max velocity V m/s (rpm)	Allowable max PV value N/mm <sup>2</sup> ·m/s kgf/cm <sup>2</sup> ·m/min	Temperature range °C [°F]
Oiles Drymet ST	REPSZ ELY	24.5 (250)	1.15 (69)	3.25 (1,990)	-40 ~ +120 [-40 ~ +248]
		** 137 ** (1,400)			
Oiles Drymet LF	REPSZ ELY	49.0 (500)	0.65 (39)	3.60 (2,200)	-200 ~ +280 [-328 ~ +536]
		** 137 ** (1,400)			
Oiles LF Guides	REPSZ ELY	Allowable weight: W N/kgf	0.67 (40)	3.60 (2,200)	-30 ~ +130 [-22 ~ +266]
		dynamic 235 ~ 1,323 [24 ~ 1,351] static 706 ~ 3,969 [72 ~ 405]			
Oiles Techmet B	REPSZ ELY	19.5 (199)	2.50 (150)	1.45 (887)	-50 ~ +250 [-58 ~ +482]
		** 137 ** (1,400)			
Oiles Techmet E	REPSZ ELY	49 (500)	0.5 (30)	3.27 (2,000)	-50 ~ +250 [-58 ~ +482]
		** 137 ** (1,400)			

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

= Conductive = Lead free

# MULTI-LAYER BEARINGS

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## 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 Washers ——— 70W Plates ——— 70P	P52	P.141	P.145 P.149 P.150
Dry	○	○	△	×	△	△	Drymet LF Bushings ——— LFB Flange bushings — LFF Washers ——— LFW Plates ——— LFP Drymet LF (0.5) Flange bushings — LFCF	P52	P.151	P.155 P.159 P.161 P.163 P.162
Dry	○	○	×	×	△	△	LF Guides ——— LFG	P52	P.164	P.165
Dry	○	○	×	×	×	×	Custom-made Techmet Bushings ——— TCB	P53	P.166	P.168
Dry	○	○	×	×	×	×	Custom-made	P53	P.169	—

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

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# MULTI-LAYER BEARINGS

## Scope of Application

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

Product	Product Name	Allowable max pressure P N/mm <sup>2</sup> kgf/cm <sup>2</sup>	Allowable max velocity V m/s ft/min	Allowable max PV value N/mm <sup>2</sup> · m/s kgf/cm <sup>2</sup> · m/min	Temperature range °C {°F}
	<b>Oiles Toughmet</b>	24.5 {250}	0.40 {24}	1.65 {1,010}	-40 ~ +350 {-40 ~ +662}
		**49 ※{500}			
	<b>Oiles Toughmet D</b>	50 {510}	Periodic lubrication 1.00 {60}	Periodic lubrication 3.26 {2,000}	-40 ~ +150 {-40 ~ +302}
		**100 ※{1,020}	Oil lubrication 5.00 {300}	Oil lubrication 4.89 {3,000}	
	<b>Oiles Hiplast N</b>	49.0 {500}	0.35 {21}	1.65 {1,010}	-50 ~ +250 {-58 ~ +482}
	<b>Oiles Hiplast E</b>	49.0 {500}	0.35 {21}	1.65 {1,010}	-50 ~ +250 {-58 ~ +482}

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

= Lead free

Lubrication	Atmosphere	In oil	In water	In seawater	In chemical	Corrosive condition	Standard part codes	Product outline	Product detail	Dimensions
Dry	○	○	△	△	△	△	Toughmet Bushings ——— TMB	P53	P.170	P.171
Periodic lubrication	○	○	×	×	×	×	Toughmet D Bushings ——— TMDB Plates ——— TMDP	P54	P.173	P.175 P.177
Dry	○	○	△	△	△	△	Hiplast Flange bushings ——— HPF	P54	P.179	P.182
Dry	○	○	△	△	△	△	Custom-made	P54	P.179	—

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