AESSEAL®
EXPERIENCE THE EXCEPTIONAL

LabTecta®M

Engineered Bearing Protection for motors

Improved

- Equipment life
- Process uptime
- Operational profit
- Environment

Reduced

- Bearing failures
- Maintenance cost
- Operational losses
- Clean-up costs

Improving Rotating Equipment Reliability by Preventing Bearing Failure

LabTecta®M — for motors

The LabTecta®M is specifically designed for use on electric motors.

The LabTecta®M (Flush Mount Electric Motor Design) range of products are intended for use as a bearing protection device on electric motors which require flush mounted bearing isolators due to limited outboard space. This design is also available with a VFD (variable frequency drive) Grounding Ring installed to prevent premature bearing failure due to electrical fluting caused by the stray currents created when using VFD motor controllers.

Reducing Bearing Failure

52% of bearing failures are due to contamination of the bearing oil*. This represents 20.8% of all rotating equipment failures.

A major study into equipment reliability has shown 48% of all bearing failures are due to particle contamination of the bearing oil, with an additional 4% due to corrosion caused by contamination of the bearing oil.

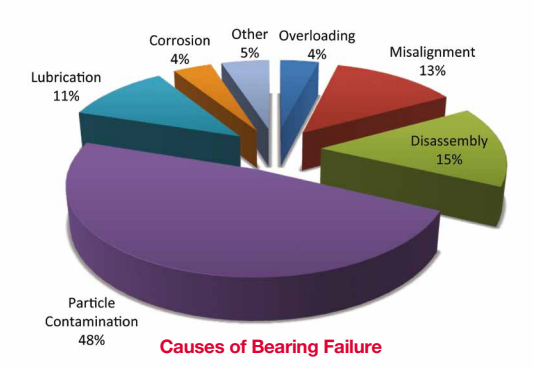
Reducing Water Contamination

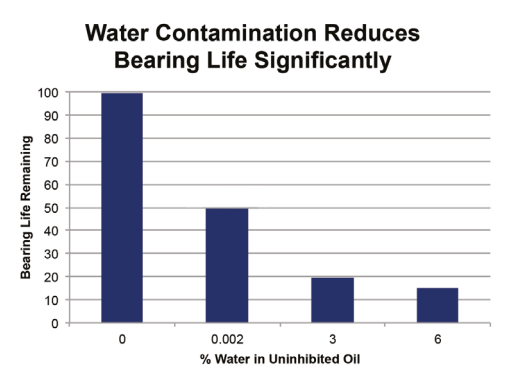
Research conducted by a major academic institution has shown that water contamination as low as 0.002% (20ppm) in some oils can reduce bearing life by as much as 48%.

LabTecta®M reduces bearing failure by:

- Preventing water ingress
- Preventing dust ingress
- Eliminating shaft damage due to rubbing
- Non-contacting design, thus no wearing of O'ring

* Bloch, Heinz; "Pump Users Handbook: Life Extension" 2011.



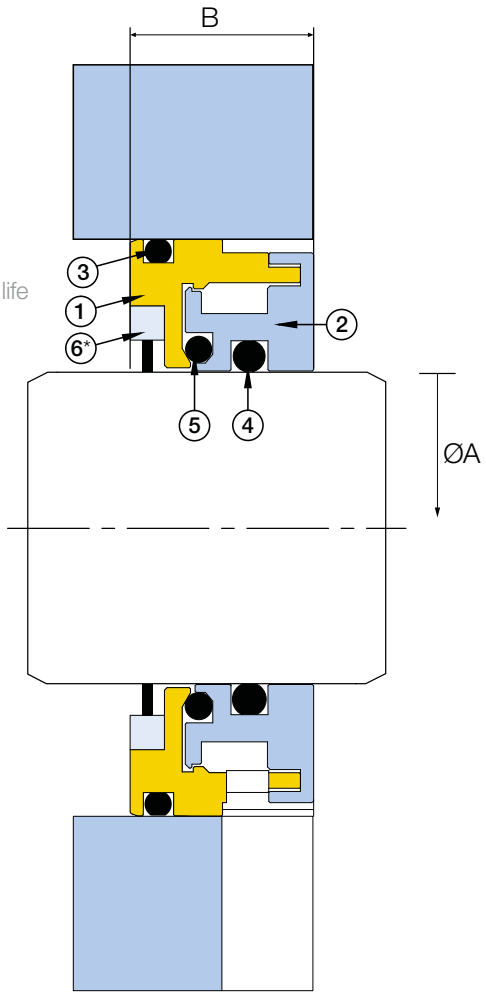


Electric Motors

Designed specifically with Electric Motors in mind, the LabTecta®M can be flush mounted into the equipment housing to avoid any shaft steps or outboard obstructions which commonly occur.

LabTecta®M Features & Benefits

- **Multi-tiered labyrinth -** Keeps water, dust & contaminants out, improving bearing life
- **Water Expulsion Port -** Further protects against water ingress
- **Non-wearing -** Eliminates shaft wear in operation
- **Maintenance free -** No routine maintenance required



ØA	B
16mm - 145mm	17.65mm
0.750" - 5.875"	0.695"

max dimensions shown

Item	Description	Material
1	LabTecta®M Stationary	Phosphor Bronze
2	LabTecta®M Rotary	Stainless Steel (std) / Phosphor Bronze (optional)
3	Stator Housing O-Ring	Viton®
4	Rotor O-Ring	Viton®
5	Dynamic O-Ring	Viton®
6*	VFD grounding ring (*optional)	Aluminium / conductive brush

Protecting Electrical Motors

Approximately 51% of motor failures** are caused by bearing failure.

LabTecta®M products:

- Protect against the major cause of bearing failure
- Meet the requirements of IEEE standard 841-2009
- Improve electrical safety by preventing water ingress
- Eliminate motor shaft damage due to rubbing
- Are maintenance free

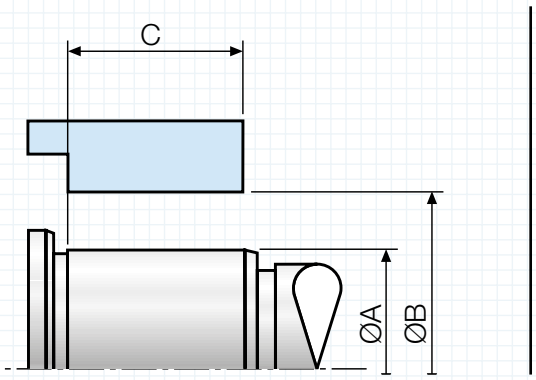
IEEE 841-2009 (the premier standard for electrical motors) requires an ingress protection rating of IP55 and the use of a non-contacting rotating device to seal contaminants from the bearing chamber.

** IEEE Petrochem Paper PCIC-94-01

LabTecta®M — Designed for Your Equipment

Sketch Housing Dimensions:

Either use the “standard” diagram provided or sketch your own below.



Dimensions:

ØA (Shaft Ø): .....

ØB (Housing bore Ø): .....

C (Max. insertion): .....

Application Data:

Speed: .....

Lubrication type / system: .....

Shaft horizontal or vertical: .....

Bearing type: .....

Max. axial movement: .....

Equipment manufacturer: .....

Model number: .....

Has the equipment been modified: .....

Complete the information above and send to:

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Further information about the AESSEAL® LabTecta®66 range is available in the standard LabTecta®66 brochure.

E-mail: **sales@labtecta.com** to request a copy or download it from our website: **www.labtecta.com**

For further information and safe operating limits contact our technical specialists at the locations below.

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

Use double mechanical seals with hazardous products.

Always take safety precautions:

WARNING

- **Guard your equipment**
- **Wear protective clothing**

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