

# LabTecta<sup>®</sup>66

Eliminate over 50% of bearing failures with the LabTecta<sup>®</sup>66 IP66 certified bearing protector



## 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

## Bearing Protection

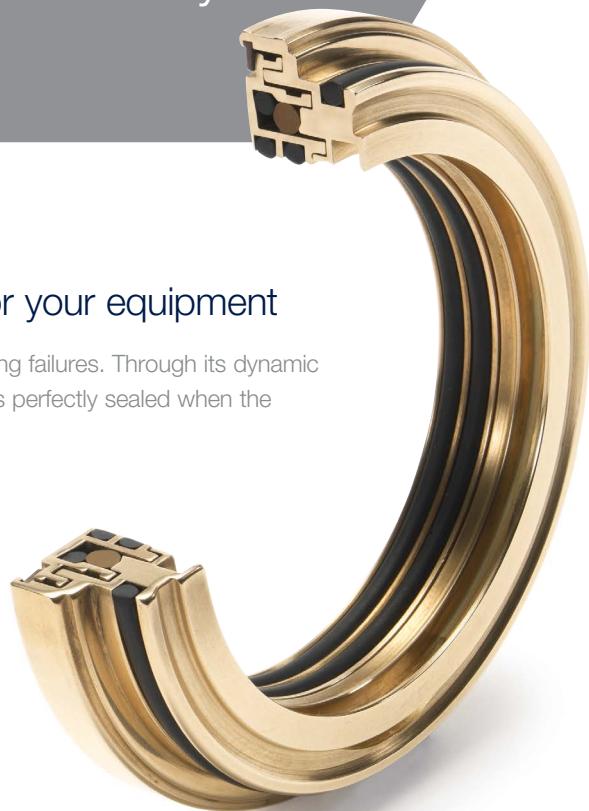
The most cost effective reliability upgrade for your equipment

The LabTecta®66 range can eliminate the cause of 52% of your bearing failures. Through its dynamic lift technology, it allows the equipment to breathe when running, but is perfectly sealed when the equipment isn't running, preventing the ingress of contaminants.

### Application specific designs

LabTecta®66 can be used to upgrade applications that are used in difficult locations, or are prone to premature bearing failure.

- Steam turbines (LabTecta®66ST),
- Axial movement (LabTecta®66AX),
- Oil flooded applications (LabTecta®66FS),
- Split-seal designs for easier installation (LabTecta®66RDS),
- Pillow blocks (LabTecta®66PB),
- Top / side entry (LabTecta®66TE / SE)
- Inboard / outboard air purge for difficult environments (LabTecta®66IAP / OAP).



LabTecta®66IAP



LabTecta®66ST



LabTecta®66AX



LabTecta®66FS



LabTecta®66SE



LabTecta®66PB

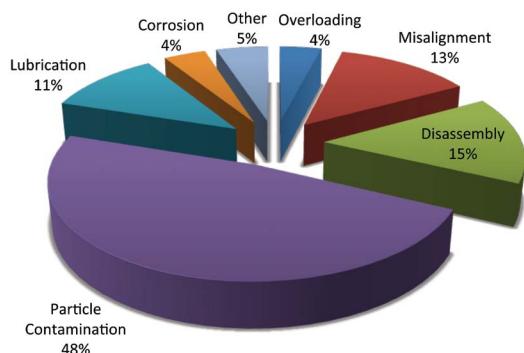
**“** 52% of Bearing failures are due to contamination of the bearing oil\* **”**

## 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.

Causes of Bearing Failure



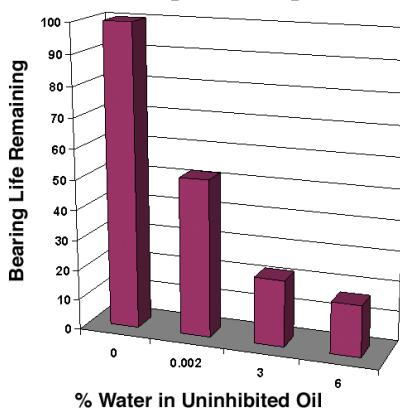
## Reducing Water Contamination

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®66 reduces bearing failure by:

- Preventing water ingress
- Preventing dust ingress
- Eliminating shaft damage due to rubbing

## Water Contamination Reduces Bearing Life Significantly



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

LabTecta®66 can reduce bearing oil contamination to as low as 0.0003%



The effect of water contamination



## LabTecta®66 Features & Benefits

- **Zenith Barrier** - Prevents loss of oil from the bearing chamber
- **Multi tiered labyrinth** - Keeps water, dust & contaminants out, improving bearing life
- **Water Expulsion Port** - Further protects against water ingress
- **Withstands jet washing** - Meets the requirements of IP66 for applications where jet washing takes place
- **Sealed to the requirements of IP66** - Meets the requirements of IEEE std 841-2001 for electrical motors. Improves safety and reliability
- **Non wearing** - Eliminates shaft wear in operation
- **Maintenance free** - No routine maintenance required
- **ATEX Certification** - ATEX certified to directive 94/9/EC

## LabTecta®66 is Sealed to IP66

Proven protection through 3rd party testing

### Ingress Protection code rating . . . . .

The premier third-party standard for Ingress Protection.

**IP 66**

### Protection Rating against solids . . . . .

**Level 6** — Defined as “No ingress of dust; complete protection against contact.”

### Protection Rating against water . . . . .

**Level 6** — Defined as “Water projected in powerful jets (0.5” / 12.5mm nozzle) against the enclosure from all practicable angles shall have no harmful effects”. Tested with at least 26 US gallons (100 litres) per minute for at least 3 minutes, while equipment is both static & rotating.

## ATEX Certification

LabTecta®66 is available with full ATEX certification, the world's first bearing protectors to be certified to the latest harmonised standards, complying with ATEX directive 94/9/EC. **Certificate Number: Sira 13ATEX6360U**



## The Problem with Lip-Seals – What is the True Cost?

Extensive testing shows conclusively that lip-seals cannot effectively protect your bearing oil. Recognized problems with lip-seals include:

- Have a short effective lifespan
- Ineffectiveness at keeping contamination from bearing housings
- Serious wear of shafts, causing extensive equipment damage and added cost
- The loss of lubrication, leading to catastrophic bearing and equipment failure

For these reasons API 610 11th edition, section 6.10.2.6 states  
“Lip-type seals shall not be used”

Comparison of Lip-Seal versus LabTecta®66

Requirement	Lip Seal	LabTecta®66
Ability to keep oil in bearing	No lasting ability	Yes
Protection against water ingress	No lasting protection	IP66
Protection against ingress of particles	No lasting protection	IP66
Shaft wear	Significant	None

## Non Contacting. No Wear. No Loss of Protection

Seal Type	New	100 hours Use	1000 hours Use	1 Year Use
Lip Seal	Effective Sealing	Deterioration of Lip Seal	Visible Shaft Wear*	Significant loss of protection
Bearing Isolator	Effective Sealing	No Change	No Change	No Change

\*After a little over a 100 hours shaft wear can be perceived

Lip-seals wear grooves in shafts



## Dynamic Lift O-ring:

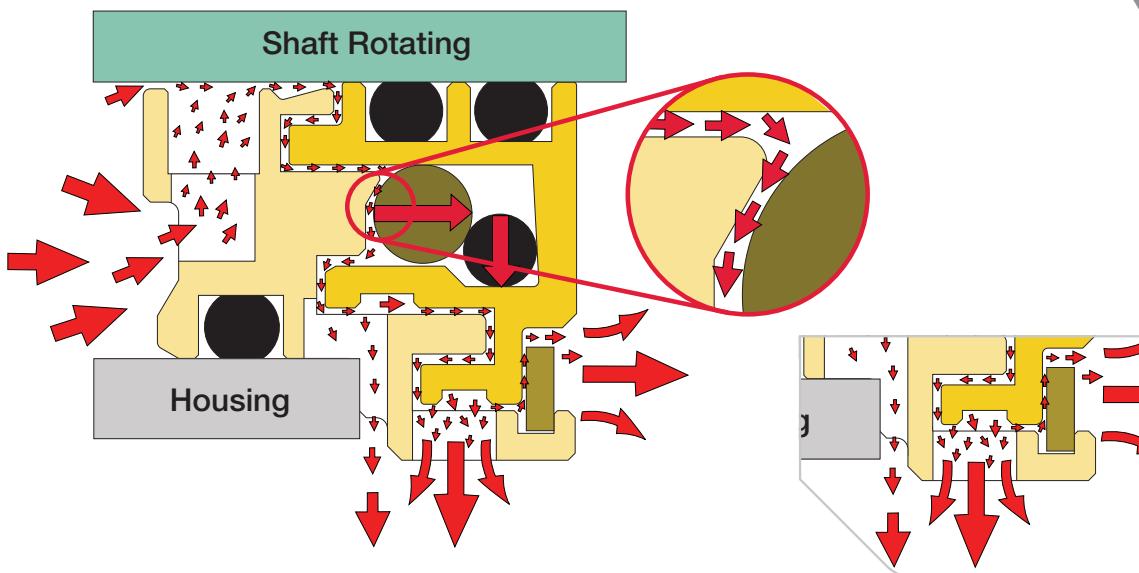
LabTecta®66 uses dynamic lift technology to prevent premature bearing failure.

As the equipment rotates, centrifugal force causes a temporary micro gap to be created, (allowing the expansion of the oil / air mixture in the bearing housing).

When equipment stops, the centrifugal force ceases and the micro-gap is closed. This stops atmosphere from being sucked back into the bearing-housing, preventing moisture laden air from coming in.

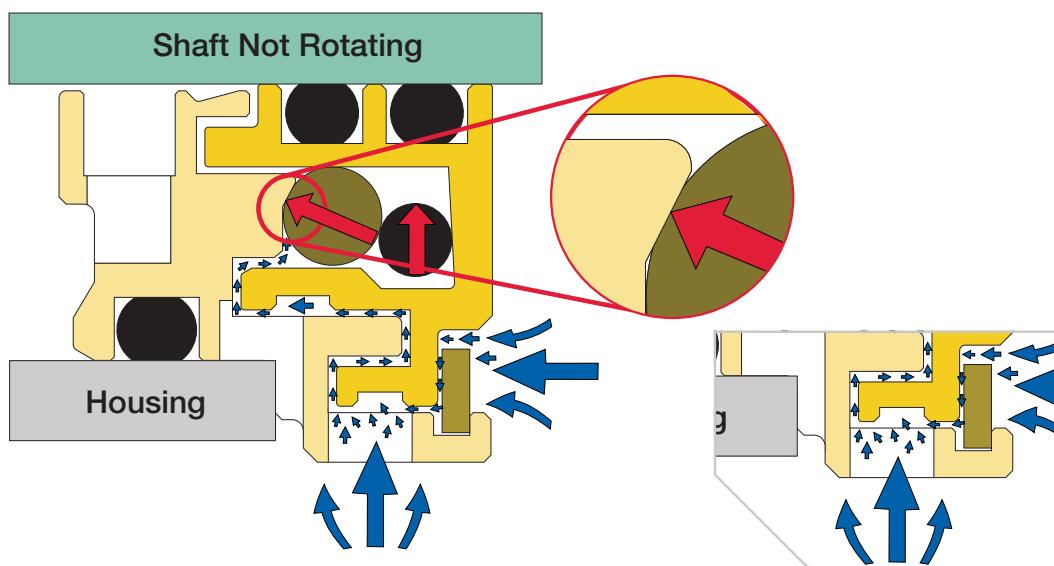
### Essential Micro-Gap When Rotating

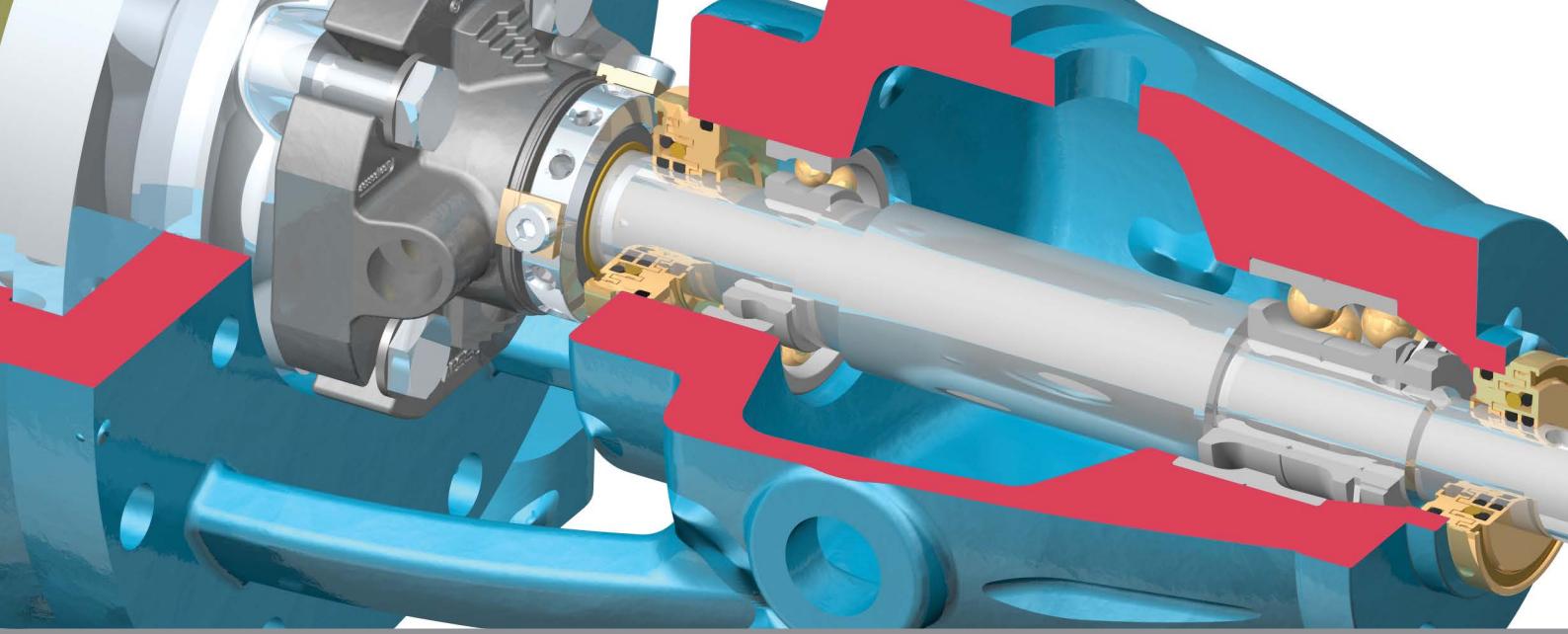
During equipment rotation a micro-gap is created, allowing equipment to breathe.



### Effective Vapour-Seal When Not Rotating

Once equipment stops the micro-gap closes, forming a perfect seal. Atmosphere and water vapour are prevented from entering the bearing chamber.



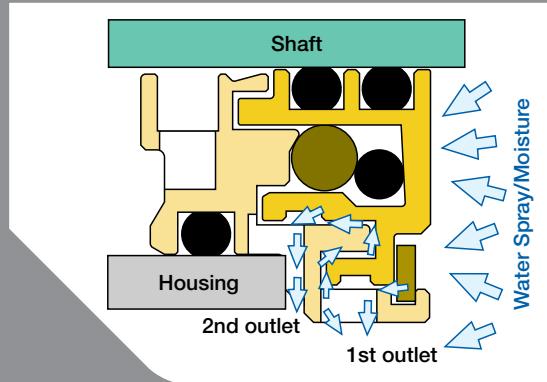


## Design Features

### Multi Tiered Labyrinth

#### Designed to keep Contaminants Out

The labyrinth design of the LabTecta®66 features a multi tiered expulsion system, stopping any water that has passed the micro labyrinth from entering further into the bearing protector.



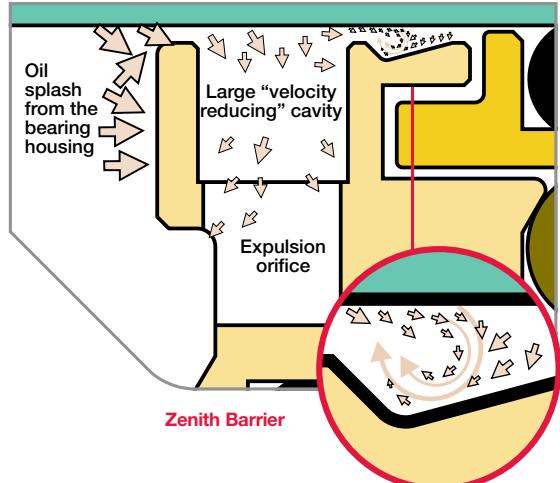
Contaminants are expelled in one of the two expulsion spaces

### Zenith Barrier

#### Designed to keep Oil In

Most of the oil splash from the bearing housing is expelled back through the velocity-reducing stator cavity and expulsion orifice.

Any oil that remains is subjected to centrifugal forces from the rotating shaft. Combined with the profile of the stator and the close proximity to the shaft, this creates a standing vortex, acting as a secondary physical barrier to further oil egress.



### Atex Certified

Complying with ATEX directive 94/9/EC, LabTecta®66 is the first range of bearing protection products to be certified to the latest harmonised EN Standards.



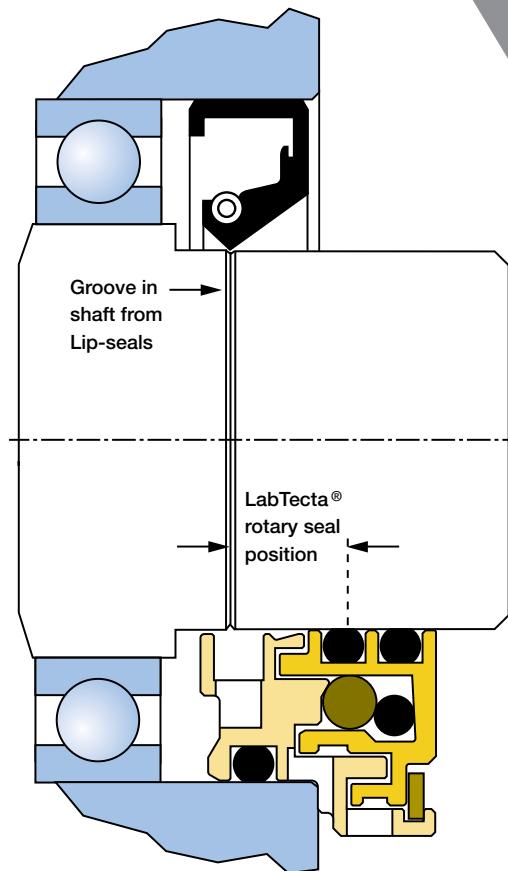
“ Our purpose is to give our customers such exceptional service that they need never consider alternative sources of supply. ”

## No Need to Refurbish a Lip-Seal Damaged Shaft

Never refurbish or replace a lip-seal worn shaft: the permanent upgrade could be cheaper.

Lip-seals wear shafts, causing expensive damage. LabTecta®66 can permanently eliminate this expense. Additionally, you can often upgrade to a LabTecta®66 without replacing or refurbishing the shaft damaged by the old lip-seal.

Why pay for a replacement shaft when upgrading to LabTecta®66 costs less?



### Eliminate Shaft Refurbishment Costs

Because LabTecta®66 is positioned differently on the shaft there is no need to refurbish before you upgrade

## Field Repairable in Just Three Minutes for Minimal Cost



The LabTecta®66 is field repairable in three minutes for the cost of an inexpensive spares kit.

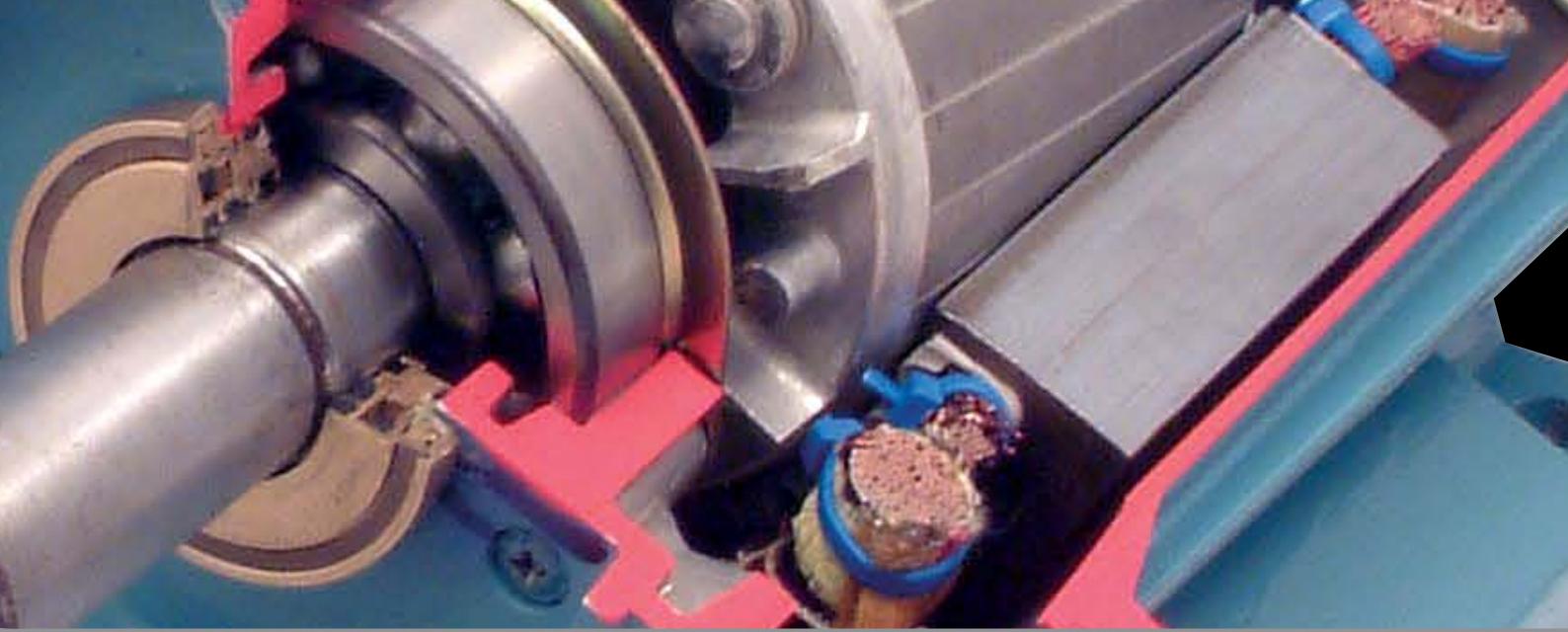
No special disassembly tools are required, just one small conventional screwdriver and/or an 'O' Ring extraction tool.



No press / special tools needed for repair



No torches / heat needed for repair

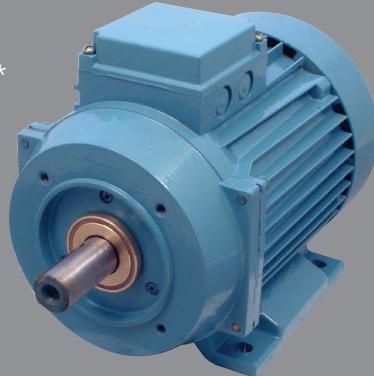


## Protecting Electrical Motors

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

LabTecta®66 products;

- Protect against the major cause of bearing failure
- Meet the requirements of IEEE standard 841-2001
- Improve electrical safety by preventing water ingress
- Eliminate motor shaft damage due to rubbing
- Are maintenance free



IEEE 841-2001 (the premier standard for electrical motors) requires an ingress protection rating of IP66 and the use of a non-contacting rotating device to seal contaminants from the bearing chamber.

\*\* IEEE Petrochem Paper PCIC-94-01

## Technical Data

### Standard Sizes:

16mm - 145mm (0.750" – 5.875")

### Typical incremental Size:

1mm & 0.062"

### Materials:

Stator Housing Phosphor Bronze

Rotary Phosphor Bronze

**Elastomer Options:** Viton (standard), others available on request.

### Maximum Shaft Peripheral Speed:

Dry running	20 m/s (3940 ft/min)
Oil Splash Lubrication	20 m/s (3940 ft/min)
Grease	20 m/s (3940 ft/min)

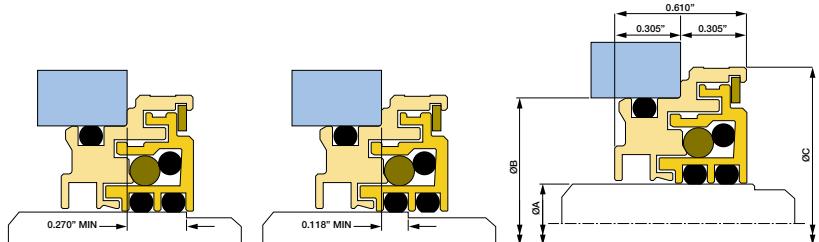
(API 7th Edition and earlier/Flow through oil mist systems only) (For faster shaft speed applications, contact Bearing Protection division)

**Operating Process Temperature range:** -20°C to 180°C (-4°F to 356°F)

**Dependent upon:** Bearing Isolator material of construction, particularly elastomers – consult AESSEAL® Bearing Protection Division if in doubt.



# LabTecta®66 Dimensions — 0.750" - 5.875"



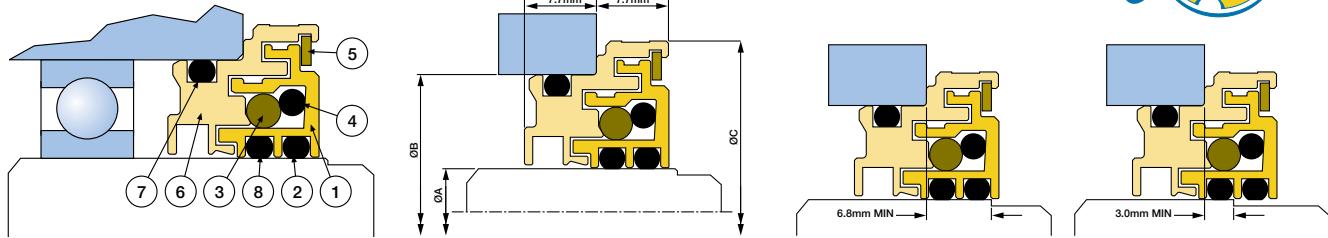
Twice the chance of fitting onto an unmarked shaft surface

Item	Description	Material
1	LabTecta®66 Rotary	Phosphor Bronze
2	Outboard Rotor O-Ring	Viton®
3	Arknian™ Shut Off Device	Compound Elastomer
4	Arknian™ Energizer	Viton®
5	Face Shield	Composite Material
6	Stator Housing	Phosphor Bronze
7	Stator Housing O-Ring	Viton®
8	Inboard Rotor O-Ring	Viton®

DIM A	DIM B	DIM C	STOCK CODE
0.750	1.500	1.829	L1106-PP-001-I12-
1.625	1.829	L1106-PP-001-I13-	
1.750	1.889	L1106-PP-001-I14-	
1.875	2.014	L1106-PP-001-I15-	
0.875	1.625	1.954	L1107-PP-001-I13-
1.750	1.954	L1107-PP-001-I14-	
1.875	2.014	L1107-PP-001-I15-	
2.000	2.139	L1107-PP-001-I16-	
0.937	1.687	2.016	L11081PP-001-I41
1.812	2.016	L11081PP-001-I51	
1.937	2.076	L11081PP-001-I61	
2.062	2.201	L11081PP-001-I71	
1.000	1.750	2.079	L1108-PP-001-I14-
1.875	2.079	L1108-PP-001-I15-	
2.000	2.139	L1108-PP-001-I16-	
2.125	2.264	L1108-PP-001-I17-	
1.062	1.812	2.141	L11091PP-001-I51
1.937	2.141	L11091PP-001-I61	
2.062	2.201	L11091PP-001-I71	
2.187	2.326	L11091PP-001-I81	
1.125	1.875	2.204	L1109-PP-001-I15-
2.000	2.204	L1109-PP-001-I16-	
2.125	2.264	L1109-PP-001-I17-	
2.250	2.389	L1109-PP-001-I18-	
1.187	1.937	2.266	L11101PP-001-I61
2.062	2.266	L11101PP-001-I71	
2.187	2.326	L11101PP-001-I81	
2.312	2.451	L11101PP-001-I91	
1.250	2.000	2.329	L1110-PP-001-I16-
2.125	2.329	L1110-PP-001-I17-	
2.250	2.389	L1110-PP-001-I18-	
2.375	2.514	L1110-PP-001-I19-	
1.312	2.062	2.391	L11111PP-001-I71
2.187	2.391	L11111PP-001-I81	
2.312	2.451	L11111PP-001-I91	
2.437	2.576	L11111PP-001-I201	
1.375	2.125	2.454	L1111-PP-001-I17-
2.250	2.454	L1111-PP-001-I18-	
2.375	2.514	L1111-PP-001-I19-	
2.500	2.639	L1111-PP-001-I20-	
2.625	2.764	L1112-PP-001-I21-	
1.562	2.312	2.641	L11131PP-001-191
2.437	2.641	L11131PP-001-201	
2.562	2.701	L11121PP-001-211	
1.500	2.250	2.579	L1112-PP-001-I18-
2.375	2.579	L1112-PP-001-I19-	
2.500	2.639	L1112-PP-001-I20-	
2.625	2.764	L1112-PP-001-I21-	
1.625	2.375	2.764	L1113-PP-001-I21-
2.437	2.766	L11141PP-001-201	
2.562	2.766	L11141PP-001-211	
2.687	2.826	L11141PP-001-221	
2.812	2.951	L11141PP-001-231	
1.750	2.500	2.829	L1114-PP-001-I20-
2.625	2.829	L1114-PP-001-I21-	
2.750	2.889	L1114-PP-001-I22-	
2.875	3.014	L1114-PP-001-I23-	
1.812	2.562	2.891	L11151PP-001-211
2.687	2.891	L11151PP-001-221	
2.812	2.937	L11151PP-001-231	
2.937	3.076	L11151PP-001-241	
1.875	2.625	2.954	L1115-PP-001-I21-
2.750	2.954	L1115-PP-001-I22-	
2.875	3.014	L1115-PP-001-I23-	
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2.812	3.016	L11161PP-001-I231	
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DIM A	DIM B	DIM C	STOCK CODE
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2.937	3.141	L11171PP-001-I24-	
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3.000	3.204	L1117-PP-001-I24-	
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3.250	3.389	L1117-PP-001-I26-	
2.187	2.937	3.266	L11181PP-001-I241
3.062	3.266	L11181PP-001-I251	
3.187	3.326	L11181PP-001-I261	
3.312	3.451	L11181PP-001-I271	
2.250	3.000	3.329	L1118-PP-001-I24-
3.125	3.329	L1118-PP-001-I25-	
3.250	3.389	L1118-PP-001-I26-	
2.312	3.062	3.391	L11191PP-001-I241
3.187	3.391	L11191PP-001-I261	
3.312	3.451	L11191PP-001-I271	
2.437	3.000	3.329	L1118-PP-001-I24-
3.125	3.329	L1118-PP-001-I25-	
3.250	3.389	L1118-PP-001-I26-	
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3.437	3.576	L11191PP-001-I281	
2.375	3.125	3.454	L1119-PP-001-I25-
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3.562	3.701	L1211PP-001-I291	
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3.750	3.889	L12231PP-001-I30-	
2.812	3.562	3.891	L12231PP-001-I291
3.687	3.891	L12231PP-001-I301	
3.812	3.951	L12231PP-001-I311	
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2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
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3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
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4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
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3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
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3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
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3.812	4.016	L1241PP-001-I311	
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4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
4.125	4.264	L1242-PP-001-I33-	
2.937	3.076	4.016	L1241PP-001-I301
3.812	4.016	L1241PP-001-I311	
3.937	4.076	L1241PP-001-I321	
4.062	4.201	L1241PP-001-I331	
3.000	3.750	4.079	L1242-PP-001-I30-
3.875	4.079	L1242-PP-001-I31-	
4.000	4.139	L1242-PP-001-I32-	
4.125</td			

## LabTecta®66 Dimensions – 16.0mm - 145.0mm



Twice the chance of fitting onto an unmarked shaft surface

DIM A	DIM B	DIM C	STOCK CODE
<b>16.0</b>	36.0	43.4	L1M016PP-001-M036
	41.0	44.9	L1M016PP-001-M041
	34.0	43.4	L1M016PP-001-M034
	38.0	43.4	L1M016PP-001-M038
<b>18.0</b>	38.0	45.4	L1M018PP-001-M038
	43.0	46.9	L1M018PP-001-M043
	36.0	45.4	L1M018PP-001-M036
	40.0	45.4	L1M018PP-001-M040
<b>20.0</b>	40.0	47.4	L1M020PP-001-M040
	45.0	48.9	L1M020PP-001-M045
	38.0	47.4	L1M020PP-001-M038
	42.0	47.4	L1M020PP-001-M042
<b>22.0</b>	42.0	49.4	L1M022PP-001-M042
	47.0	50.9	L1M022PP-001-M047
	40.0	49.4	L1M022PP-001-M040
	44.0	49.4	L1M022PP-001-M044
<b>24.0</b>	44.0	51.4	L1M024PP-001-M044
	49.0	52.9	L1M024PP-001-M049
	42.0	51.4	L1M024PP-001-M042
	46.0	51.4	L1M024PP-001-M046
<b>25.0</b>	45.0	52.4	L1M025PP-001-M045
	50.0	53.9	L1M025PP-001-M050
	43.0	52.4	L1M025PP-001-M043
	47.0	52.4	L1M025PP-001-M047
<b>28.0</b>	48.0	55.4	L1M028PP-001-M048
	53.0	56.9	L1M028PP-001-M053
	46.0	55.4	L1M028PP-001-M046
	50.0	55.4	L1M028PP-001-M050
<b>30.0</b>	50.0	57.4	L1M030PP-001-M050
	55.0	58.9	L1M030PP-001-M055
	48.0	57.4	L1M030PP-001-M048
	52.0	57.4	L1M030PP-001-M052
<b>32.0</b>	52.0	59.4	L1M032PP-001-M052
	57.0	60.9	L1M032PP-001-M057
	50.0	59.4	L1M032PP-001-M050
	54.0	59.4	L1M032PP-001-M054
<b>33.0</b>	53.0	60.4	L1M033PP-001-M053
	58.0	61.9	L1M033PP-001-M058
	51.0	60.4	L1M033PP-001-M051
	55.0	60.4	L1M033PP-001-M055
<b>35.0</b>	55.0	62.4	L1M035PP-001-M055
	60.0	63.9	L1M035PP-001-M060
	53.0	62.4	L1M035PP-001-M053
	57.0	62.4	L1M035PP-001-M057
<b>38.0</b>	58.0	65.4	L1M038PP-001-M058
	63.0	66.9	L1M038PP-001-M063
	56.0	65.4	L1M038PP-001-M056
	60.0	65.4	L1M038PP-001-M060
<b>40.0</b>	60.0	67.4	L1M040PP-001-M060
	65.0	68.9	L1M040PP-001-M065
	58.0	67.4	L1M040PP-001-M058
	62.0	67.4	L1M040PP-001-M062
<b>43.0</b>	63.0	70.4	L1M043PP-001-M063
	68.0	71.9	L1M043PP-001-M068
	61.0	70.4	L1M043PP-001-M061
	65.0	70.4	L1M043PP-001-M065

DIM A	DIM B	DIM C	STOCK CODE
<b>45.0</b>	65.0	72.4	L1M045PP-001-M065
	70.0	73.9	L1M045PP-001-M070
	71.0	74.9	L1M045PP-001-M071
	75.0	78.9	L1M045PP-001-M075
<b>48.0</b>	68.0	75.4	L1M048PP-001-M068
	73.0	76.9	L1M048PP-001-M073
	74.0	77.9	L1M048PP-001-M074
	78.0	81.9	L1M048PP-001-M078
<b>50.0</b>	70.0	77.4	L1M050PP-001-M070
	75.0	78.9	L1M050PP-001-M075
	76.0	79.9	L1M050PP-001-M076
	80.0	83.9	L1M050PP-001-M080
<b>52.0</b>	72.0	79.4	L1M052PP-001-M072
	77.0	80.9	L1M052PP-001-M077
	78.0	81.9	L1M052PP-001-M078
	82.0	85.9	L1M052PP-001-M082
<b>53.0</b>	73.0	80.4	L1M053PP-001-M073
	78.0	81.9	L1M053PP-001-M078
	79.0	82.9	L1M053PP-001-M079
	83.0	86.9	L1M053PP-001-M083
<b>55.0</b>	75.0	82.4	L1M055PP-001-M075
	80.0	83.9	L1M055PP-001-M080
	81.0	84.9	L1M055PP-001-M081
	85.0	88.9	L1M055PP-001-M085
<b>58.0</b>	78.0	85.4	L1M058PP-001-M078
	83.0	86.9	L1M058PP-001-M083
	84.0	87.9	L1M058PP-001-M084
	88.0	91.9	L1M058PP-001-M088
<b>60.0</b>	80.0	87.4	L1M060PP-001-M080
	85.0	88.9	L1M060PP-001-M085
	86.0	89.9	L1M060PP-001-M086
	90.0	93.9	L1M060PP-001-M090
<b>63.0</b>	83.0	90.4	L1M063PP-001-M083
	88.0	91.9	L1M063PP-001-M088
	89.0	92.9	L1M063PP-001-M089
	93.0	96.9	L1M063PP-001-M093
<b>65.0</b>	85.0	92.4	L1M065PP-001-M085
	90.0	93.9	L1M065PP-001-M090
	91.0	94.9	L1M065PP-001-M091
	95.0	98.9	L1M065PP-001-M095
<b>68.0</b>	88.0	95.4	L1M068PP-001-M088
	93.0	96.9	L1M068PP-001-M093
	94.0	97.9	L1M068PP-001-M094
	98.0	101.9	L1M068PP-001-M098
<b>70.0</b>	90.0	97.4	L1M070PP-001-M090
	95.0	98.9	L1M070PP-001-M095
	96.0	99.9	L1M070PP-001-M096
	100.0	103.9	L1M070PP-001-M100
<b>75.0</b>	95.0	102.4	L1M075PP-001-M095
	100.0	103.9	L1M075PP-001-M100
	101.0	104.9	L1M075PP-001-M101
	105.0	108.9	L1M075PP-001-M105
<b>80.0</b>	100.0	107.4	L1M080PP-001-M100
	105.0	108.9	L1M080PP-001-M105
	106.0	109.9	L1M080PP-001-M106
	110.0	113.9	L1M080PP-001-M110

DIM A	DIM B	DIM C	STOCK CODE
<b>85.0</b>	105.0	112.4	L1M085PP-001-M105
	110.0	113.9	L1M085PP-001-M110
	111.0	114.9	L1M085PP-001-M111
	115.0	118.9	L1M085PP-001-M115
<b>90.0</b>	110.0	117.4	L1M090PP-001-M110
	115.0	118.9	L1M090PP-001-M115
	116.0	119.9	L1M090PP-001-M116
	120.0	123.9	L1M090PP-001-M120
<b>95.0</b>	115.0	122.4	L1M095PP-001-M115
	120.0	123.9	L1M095PP-001-M120
	121.0	124.9	L1M095PP-001-M121
	125.0	128.9	L1M095PP-001-M125
<b>100.0</b>	120.0	127.4	L1M100PP-001-M120
	125.0	128.9	L1M100PP-001-M125
	126.0	129.9	L1M100PP-001-M126
	130.0	133.9	L1M100PP-001-M130
<b>105.0</b>	125.0	132.4	L1M105PP-001-M125
	130.0	133.9	L1M105PP-001-M130
	131.0	134.9	L1M105PP-001-M131
	135.0	138.9	L1M105PP-001-M135
<b>110.0</b>	130.0	137.4	L1M110PP-001-M130
	135.0	138.9	L1M110PP-001-M135
	136.0	139.9	L1M110PP-001-M136
	140.0	143.9	L1M110PP-001-M140
<b>115.0</b>	135.0	142.4	L1M115PP-001-M135
	140.0	143.9	L1M115PP-001-M140
	141.0	144.9	L1M115PP-001-M141
	145.0	148.9	L1M115PP-001-M145
<b>120.0</b>	140.0	147.4	L1M120PP-001-M140
	145.0	148.9	L1M120PP-001-M145
	146.0	149.9	L1M120PP-001-M146
	150.0	153.9	L1M120PP-001-M150
<b>125.0</b>	145.0	152.4	L1M125PP-001-M145
	150.0	153.9	L1M125PP-001-M150
	151.0	154.9	L1M125PP-001-M151
	155.0	158.9	L1M125PP-001-M155
<b>130.0</b>	150.0	157.4	L1M130PP-001-M150
	155.0	158.9	L1M130PP-001-M155
	156.0	159.9	L1M130PP-001-M156
	160.0	163.9	L1M130PP-001-M160
<b>135.0</b>	155.0	162.4	L1M135PP-001-M155
	160.0	163.9	L1M135PP-001-M160
	161.0	164.9	L1M135PP-001-M161
	165.0	168.9	L1M135PP-001-M165
<b>140.0</b>	160.0	167.4	L1M140PP-001-M160
	165.0	168.9	L1M140PP-001-M165
	166.0	169.9	L1M140PP-001-M166
	170.0	173.9	L1M140PP-001-M170
<b>145.0</b>	165.0	172.4	L1M145PP-001-M165
	170.0	173.9	L1M145PP-001-M170
	171.0	174.9	L1M145PP-001-M171
	175.0	178.9	L1M145PP-001-M175

Dimensional Information (mm) larger sizes available upon request

USE WITH CAUTION!

WARNING

The use of stainless steel bearing isolators in misaligned equipment will lead to equipment seizure and sparking.



Heinz P .Bloch P.E.

Independent Professional Engineer

I firmly conclude this ingenious field-repairable isolator will prove highly cost effective and lead to demonstrable equipment failure reductions.

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This document is designed to provide dimensional information and an indication of availability. For further information and safe operating limits contact our technical specialists at the locations below.



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that they need never consider alternative sources of supply.'



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