



## The GGB Advantage



### LOW FRICTION, HIGH WEAR RESISTANCE

Low coefficients of friction eliminate the need for lubrication while reducing wear and extending service life.



### MAINTENANCE-FREE

Ideal for applications requiring long service life without regular maintenance or operating conditions with little or no lubrication.



### LOWER SYSTEM COST

Reduce shaft costs by eliminating the need for hardening and machining grease paths. Compact, one-piece construction provides space and weight savings and simplifies assembly.



### ENVIRONMENTAL

Greaseless, lead-free solutions comply with increasingly stringent environmental regulations such as the RoHS directive for electrical and electronic equipment.

# PUSHING BOUNDARIES TO CO-CREATE A HIGHER QUALITY OF LIFE

GGB offers a comprehensive selection of products to meet the world's most demanding surface engineering needs. We manufacture metal-polymer, engineered plastics, fiber reinforced composite, metal and bimetal bearings and polymer coatings, along with a range of supporting assemblies.

### Industries served include:

- Aerospace
- Agriculture
- Automotive
- Construction
- E-Mobility
- Energy
- Fluid Power
- Industrial
- Medical
- Mining
- Oil & Gas
- Primary Metals
- Railway
- Recreational

### GLOBAL FOOTPRINT

GGB has manufacturing, sales, service and support locations around the globe. This vast network of resources and expertise enables us to respond promptly to your bearing needs wherever you do business.



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FL9051ENG03-23HN

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## Solutions for Solar Power Applications

**BRINGING NEW POSSIBILITIES TO LIGHT**

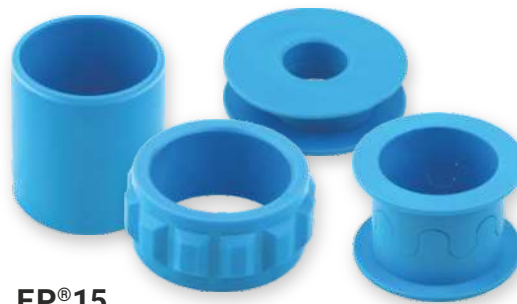


# Specialized Solutions for Solar Applications

As the solar industry grows, photovoltaic (PV) solar power facilities demand specialized solutions that can withstand the intense UV rays and abrasive sand and dust common in the arid, windy environments ideal for solar power generation. GGB solutions—optimized for solar applications—offer mechanical characteristics that support accurate, smooth tracking with reduced wear, longer life, lower operational costs and increased overall system performance.

## STATE-OF-THE-ART MATERIALS SUPPORT SUSTAINABILITY

The new GGB EP<sup>®</sup>15 engineered plastics solution was developed specifically for use in photovoltaic solar power generation facilities with tracking solar panels. The EP<sup>®</sup>15 material features excellent UV and abrasion resistance in addition to a low coefficient of friction and lightweight design. All EP<sup>®</sup> Series products are compliant with EVL, WEEE and RoHS specifications. GGB also offers a range of fiber reinforced composite bearings for solar power production.



### EP<sup>®</sup>15

#### CHARACTERISTICS:

- Good operating performance in dry, oil-lubricated and grease-lubricated applications
- Corrosion, abrasion and UV resistant
- Lightweight
- Low coefficient of friction
- Unlimited dimension and design features



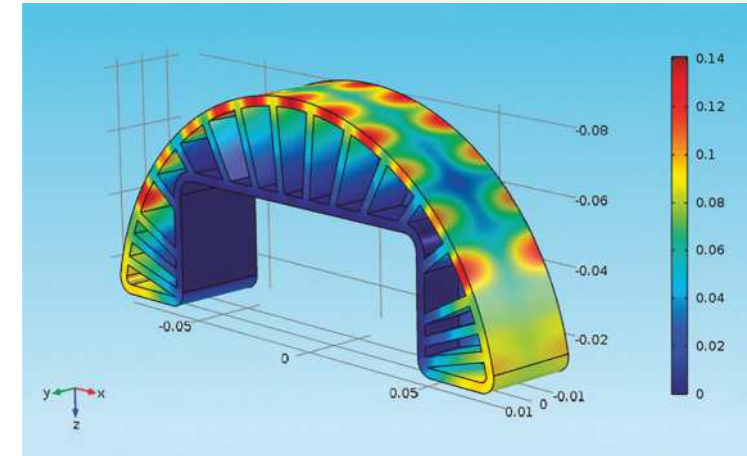
#### MECHANICAL PROPERTIES

Material	POM + solid lubricant
Maximum specific load at room temperature, $p_{max}$	65 N/mm <sup>2</sup>
Operating temperature range	- 40°C – 125°C
Coefficient of friction, f (dry)	0,09 – 0,15



### FINITE ELEMENT ANALYSIS OF EP<sup>®</sup>15

Negligible displacement/distortion under pressure



## Partner With GGB

By partnering with you early in the design process, the GGB engineering team is able to review your assemblies and make sure both the bearing and surrounding components are optimized for performance and cost-effectiveness.

Contact your local GGB sales representative for bearing product selection and design assistance.

To learn more, visit: <https://www.ggbearings.com/en>