BWG

BWG-bearings with or without flange are made of casted bronze material with special solid lubricant embedded.

The base metal is aimed for high loads and the solid lubricant makes it possible to use BWG-bearings without additional lubrication.

BWG-bearings show excellent performance without lubrication under conditions of low speeds and extreme high or low temperatures.

The lubrication reservoirs are dispersed in a special way over the bearing surface, therefore the whole bearing surface is lubricated when the movement occurs. These lubrication reservoirs cover about 25-30% of the sliding surface.

Technical data

Material: Bronze bearing with graphite.

Yield point: ($R_{p0,2}$) ca 450N/mm²

Tensile stranght: (R_m) ca 750 N/mm²

Hardness: > 210HB

Friction: 0,03-0,20µ

Max speed: No lubrication < 0,3 m/s
Oil lubritcation <1,0 m/s

Temperature range: -100 / +300 °C

Max load	Movment
150 N/mm²	Static
90 N/mm²	Dynamic

Tolerances:

Housing: Tolerance H7.

Cylindrical bearing: According to drawing or standard: Inside: F7, outside m6. (push fit)

Flanged bearing: According to drawing or standard: Inside: E7, outside r6.

Shaft: Recommended tolerances: d8, e7 or f7.

Lubrication: The BWG-bearing is designed to run without lubrication. but the bearings feature will improve with additional lubrication.

Benefits:
- Extremely high load capacity.
- May be used without additional lubrication.
- Excellent for constructions with low speeds and high loads.
- Suitable for reciprocating, oscillating or intermittent movement.
- Wide range of temperature.
- Good chemical resistance.
- Excellent corrosion resistance.

Special:
- Thrust washers, plates, bars.
- Drawing details.
- Several alternative lubricant materials.
- Several alternative base materials.

Typical applications:
- Casting machines.
- Steel rollers.
- Metallurgic industry.
- Ships.
- Turbines.
- Ship cranes.

D&E Bearings
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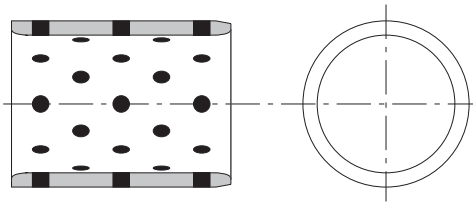
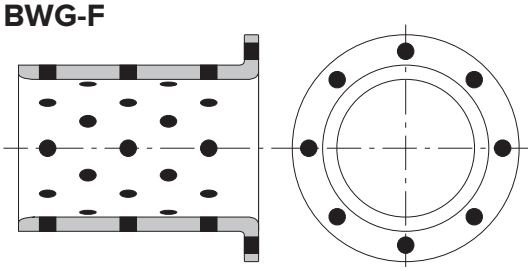
Material data					
Material Composition %	**BWG**	**BWG-S1**	**BWG-S2**	**BWG-S3**	**BWG-S4**
Cu	62-68	85	80	88	80
Sn		5		12	10
Pb		5			10
Zn	Rest	5			
Ni			5		
Al	5-7,5		10		
Fe	2-4		5		
Mn	2,5-5				
Properties					
Yield point N/mm²	>350	>90	>260	>150	>100
Tensile strenght N/mm²	>750	>250	>500	>270	>210
Permitted load N/mm²	100	60	50	70	60
Permitted speed m/min	15	10	20	10	10
Density	8,0	8,8	7,6	8,8	8,9
Hardness HB	>210	>70	>150	>95	>75
Friction µ	0,03~0,20	0,03~0,18	0,03~0,20	0,03~0,18	0,03~0,20
Temperature range	-100/+300°C	-100/+400°C	-100/400°C	-100/+400°C	-100/+400°C

Solid Lubricants:	Properties	Applications
SL1 Graphite+add	Excellent resistance against chemicalattacks. Low friction. Temperature up to 400°C	Suitable for the most common applications above water.
SL4 PTFE+MOS2+CF	Low friciton. Works very well in water conditions. Temperature up to 300°C.	Suitable for applications which are in contact or under water. For example ships, dam gates, turbines, cranes..

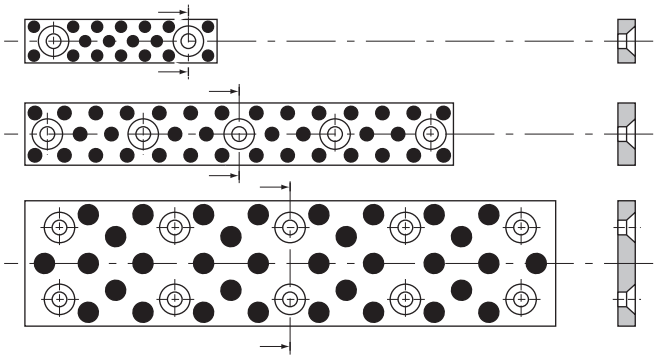
BWG



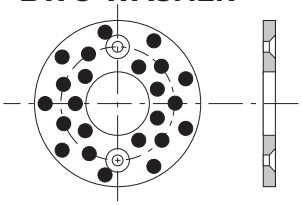
BWG-F



BWG-PLATE



BWG-WASHER



BWG-RAIL