

ESZ linear rubber sliding bearing GLS^{DBP}

with supervisory approval,
Approval no. Z-16.32-417

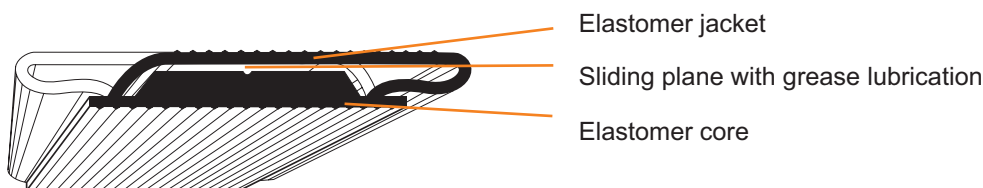


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INFORMATION REGARDING THE USE OF BEARINGS AND TYPES OF DELIVERY

- 1. Purpose**

The ESZ linear rubber sliding bearing GLS^{DBP} allows safe sliding between concrete (or timber) construction components under conditions of high bearing compressions. The bearing is intended for installation between prefabricated parts or concrete components cast in situ, or a combination of these. Provided for this purpose are 3 types, each available in 2 bearing widths. The 60 mm version of the bearing has supervisory approval; approval no. Z-16.32-417. The 40-mm-wide bearing has a General Building Authority Test Certificate for use in accordance with DIN 4141-3, bearing class 2.
- 2. Working principle**

The 40 or 20 mm wide elastomer core together with the elastomer jacket surrounding it acts to dissipate vertical loads and, at the same time, serves as a reservoir and dispenser for the lubricant. Long-lasting sliding between the core and the jacket is assured by the silicone grease lubricant, which is also used in bridge bearing construction. The self-contained design protects against environmental influences, bearing failure and the effects of wear, and guarantees low starting friction and a very low friction coefficient for a long period of time.
- 3. Deformations**

For all types, the maximum sliding distance \perp to the bearing axis is ± 25 mm and \parallel to the bearing axis ± 15 mm. Bearing cushioning of $\leq 25\%$ is to be expected when subject to the maximum permissible vertical load.
- 4. Mating surfaces**

Standard case is reinforced concrete mating surfaces. The bearings should be laid within the reinforcement to prevent concrete spalling. Slight unevenness in the mating surfaces can be compensated by the elastomer material on the upper and lower sides.
- 5. Temperature range in use**

The bearing is intended for a temperature range of -35 °C to $+70$ °C.
- 6. Fire resistance classes**

A slightly modified design of the bearing complies with fire resistance class F 90-B as defined by DIN 4102.
- 7. Tests/Quality Assurance**

Tests by the MPA Stuttgart "Basic tests with ESZ sliding bearing hose no. 946 011 000". Production is officially externally monitored.
- 8. Supplied as**
 - for prefabricated construction: Type 1**

Bearing widths 40 or 60 mm, bearing height 10 mm, choice of bearing length or can be cut to length from the roll by customer, max. roll length 10 metres.
 - for prefabricated and in-situ concrete construction: Type 2**

Bearing widths 40 or 60 mm, bearing height 10 mm, standard length including blind formwork 1000 mm, custom lengths or off the roll on request.
 - for in-situ concrete construction: Type 3**

Bearing widths 40 or 60 mm, bearing height 10 mm, standard length including blind formwork 1000 mm, custom lengths or off the roll on request.
- 9. Advantages**
 - simple to install
 - no contamination of the sliding surfaces
 - good frictional adhesion to the adjacent construction components
 - can be cut from the roll on the construction site

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with supervisory approval, approval no. Z-16.32-417



The technology for safe sliding

Design table*

(Permissible loads from characteristic exposure)

ESZ linear rubber sliding bearing GLS ^{DBP}							
	Type 1		Type 2		Type 3		
Overall bearing width a [mm]	60	40	60	40	60	40	
Blind formwork width a _G [mm]	-	-	Dependent on the support width available				
Bearing thickness [mm]	10	10	10	10	10	10	
Bearing length [mm]	as required		Standard: 1,000 (or as required)				
Permissible applied load [kN/m]	300	150	120	60	300	150	
Permissible torsion α [%]	15	25	15	25	15	25	
Permissible compression** [N/mm ²]	7,50						
Perm. sliding distance ⊥ to bearing axis [mm]	± 25						
Perm. sliding distance to bearing axis [mm]	± 15						
Friction coefficient μ to -25 °C ***	0,03						
Friction coefficient μ to -35 °C ***	0,05						

* Concrete mating faces ** Minimum compression 1 N/mm² *** The conditions of approval require the use of a safety margin of a factor of 3: μ = 0.10 with T to -25 °C and μ = 0.15 with T to -35 °C

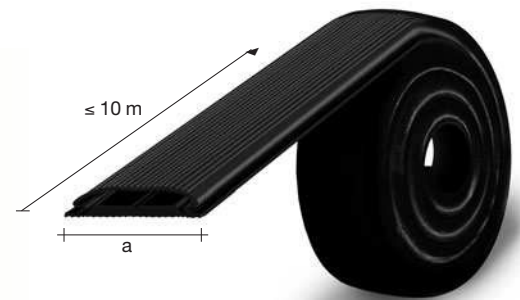
RFP and ordering texts, types of delivery

Linear rubber sliding bearing GLS^{DBP} type 1

Supply and install linear sliding bearings with supervisory approval for the bearing of precast concrete parts.

With a sliding distance of ±25 mm ⊥ to the bearing axis and a sliding distance of ±15 mm || to the bearing axis. Friction coefficient μ = 0.10 for temperatures up to -25 °C.

Bearing type: ESZ linear rubber sliding bearing GLS^{DBP} type 1
 Core width a: 60 or 40 mm
 Quantity: metres
 Fire resistance class F 90: yes / no
 Manufacturer: ESZ W. Becker GmbH, 41564 Kaarst
 Phone 02131 / 758100, Fax 02131 / 758111

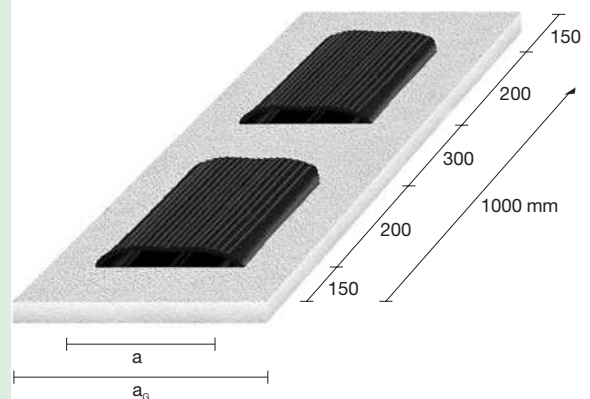


Linear rubber sliding bearing GLS^{DBP} type 2

Supply and installation of linear sliding bearings with supervisory approval for use with prefab parts and in-situ concrete components.

With a sliding distance of ±25 mm ⊥ to the bearing axis and a sliding distance of ±15 mm || to the bearing axis. Friction coefficient μ = 0.10 for temperatures up to -25 °C.

Bearing type: ESZ linear rubber sliding bearing GLS^{DBP} type 2
 Support /masonry width a_G: mm
 Core width a: 60 or 40 mm
 Quantity: metres
 Fire resistance class F 90: yes / no
 Manufacturer: ESZ W. Becker GmbH, 41564 Kaarst
 Phone 02131 / 758100, Fax 02131 / 758111



Linear rubber sliding bearing GLS^{DBP} type 3

Supply and install linear sliding bearings with supervisory approval for the bearing of precast concrete parts.

With a sliding distance of ±25 mm ⊥ to the bearing axis and a sliding distance of ±15 mm || to the bearing axis. Friction coefficient μ = 0.10 for temperatures up to -25 °C.

Bearing type: ESZ linear rubber sliding bearing GLS^{DBP} type 3
 Support /masonry width a_G: mm
 Core width a: 60 or 40 mm
 Quantity: metres
 Fire resistance class F 90: yes / no
 Manufacturer: ESZ W. Becker GmbH, 41564 Kaarst
 Phone 02131 / 758100, Fax 02131 / 758111

