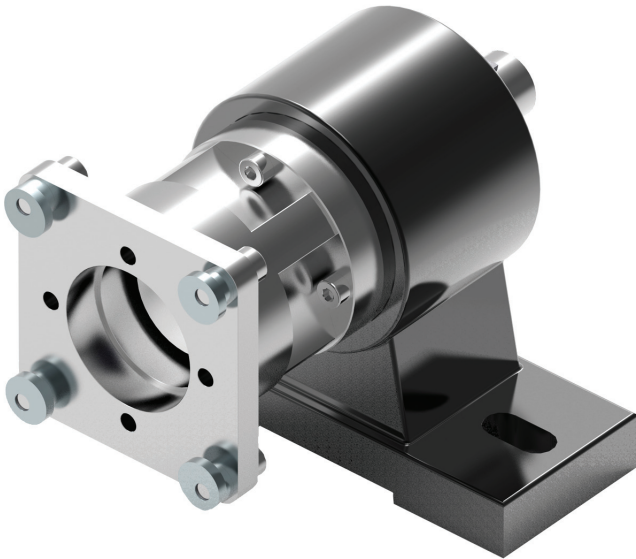


Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Document No.: LB 10103 GE

Date: 27.01.2017



- Assembly of the rotary encoder or incremental encoder via a separate bearing bracket
- Increase in radial bearing load to 500 N
- Connection of rotary encoder shafts by means of groove and disk spring for safety-relevant application
- ATEX category 3, zones 2 and 22, optional
- High shaft loads:
max. 500 N radially, max. 100 N axially
- Large shaft diameters
Ø 16 mm on customer side
Ø 12 mm on rotary encoder side

Mechanical design

Bearing bracket base and flange in cast aluminium with anodised surface - shaft in stainless steel, 16^{h6} mm diameter, with groove and disk spring, face end hole M5x12, mounted in deep groove ball bearings with Nilos ring seal, clamp coupling KK14S for connection to a rotary encoder shaft.

Technical data

■ Permissible shaft load:	Axially 100 N max. Radially 500 N max.
■ Operating speed:	6000 rpm max.
■ Operating torque:	5 Ncm max. at 1000 rpm
■ Starting torque:	1.5 Ncm max.
■ Moment of inertia:	100 gcm ²
■ Service life of the bearings at maximum shaft load:	840 x 106 revolutions
■ Operating temperature range:	-40 °C to + 85 °C
■ Storage temperature range:	-25 °C to + 50 °C (due to packaging)
■ Protection type:	IP 65
■ Weight:	Approx. 1.0 kg

The technical data of the mounted rotary encoders or incremental encoders must additionally be observed.

Scope of delivery

Bearing bracket, lantern with mounting bolts, coupling KK14S or KK14N and installation material for the rotary encoders.

Bearing bracket LB
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Technical data

Article	Rotary encoder	Lantern	Coupling	Groove for feather key in shaft on rotary encoder side (for safety-oriented applications)	Fastening clamps (contained in scope of delivery incl. fastening)	
					4x KL-M5	4x KL66-2-S
LB-01	Rotary encoder design form Ø 58 (e.g. CRD58)	Lantern 01	KK14S/6-12		X	
LB-03	Rotary encoder design form Ø 66 (e.g. CRD66)	Lantern 03	KK14S/10-12		X	
LB-04	Atex design (zones 2 and 22 category 3) Rotary encoder design form Ø 58 (e.g. CRD58 - ATEX design)	Lantern 01	KK14S/6-12-ATEX		X	
LB-05	Rotary encoder design form Ø 66 (e.g. CRD66) and design form 58-K (e.g. KRD58-K, TRA58-K, TRT58-K)	Lantern 03	KK14S/10-12			X
LB-07	Rotary encoder with groove and feather key in the shaft of design form Ø 66, for C and K series with clamping flange (e.g. CRD66 ... S3Z43) and design form 58-K (e.g. TRD58-KPA and TRT58-KPA)	Lantern 03	KK14N/10-12	X		X
LB-08	Rotary encoder design form Ø 66, C series only, not K series (e.g. CRD66...S3Z43)	Lantern 03	KK14N/10-12	X	X	
LB-09	Bearing bracket without lantern and coupling				X	

Coupling KK14: See data sheet [KK12301](#)

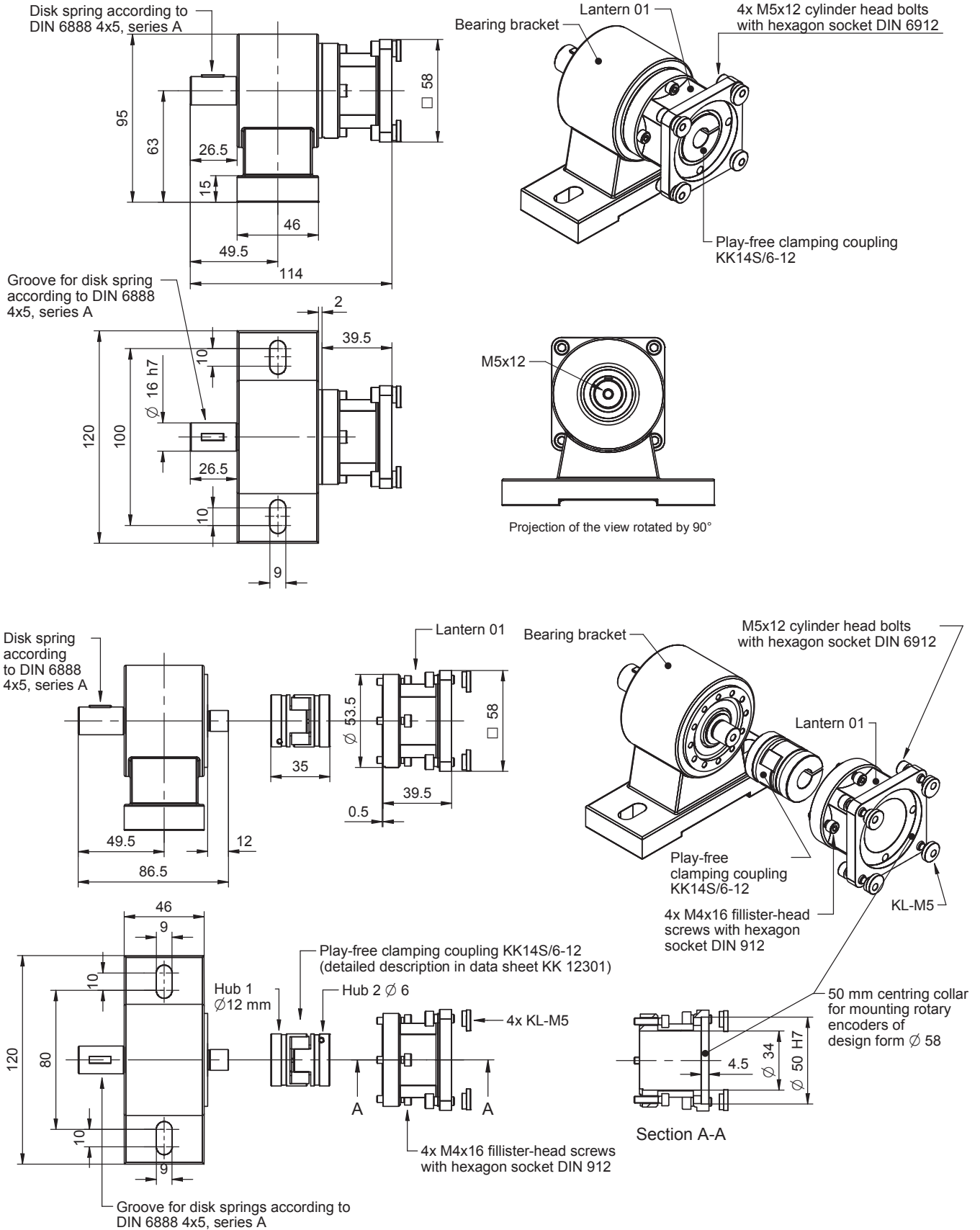
Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Installation drawings

Bearing bracket LB-01 with lantern 01 for rotary encoder design form 58

Dimensions in mm



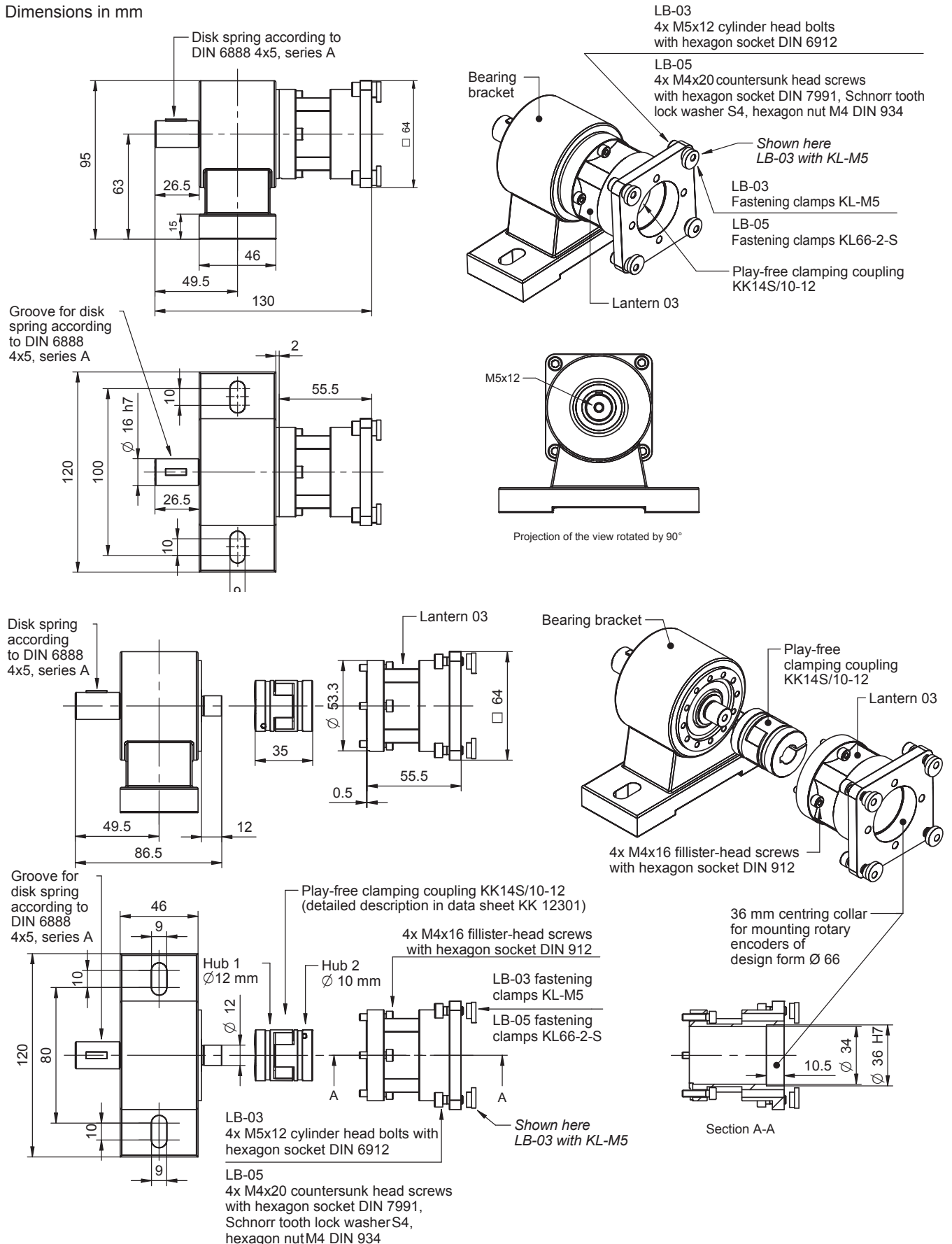
Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Installation drawings

Bearing brackets LB-03 and LB-05 with lantern 03 for rotary encoder design form 66

Dimensions in mm



Bearing bracket LB**Robust mounting for rotary encoders and incremental encoders****Installation drawings****Bearing bracket LB-04 with lantern 01 for rotary encoder design form 58 with ATEX certificate**

Installation drawing as LB-01 but with coupling "KK14S/6-12-ATEX"

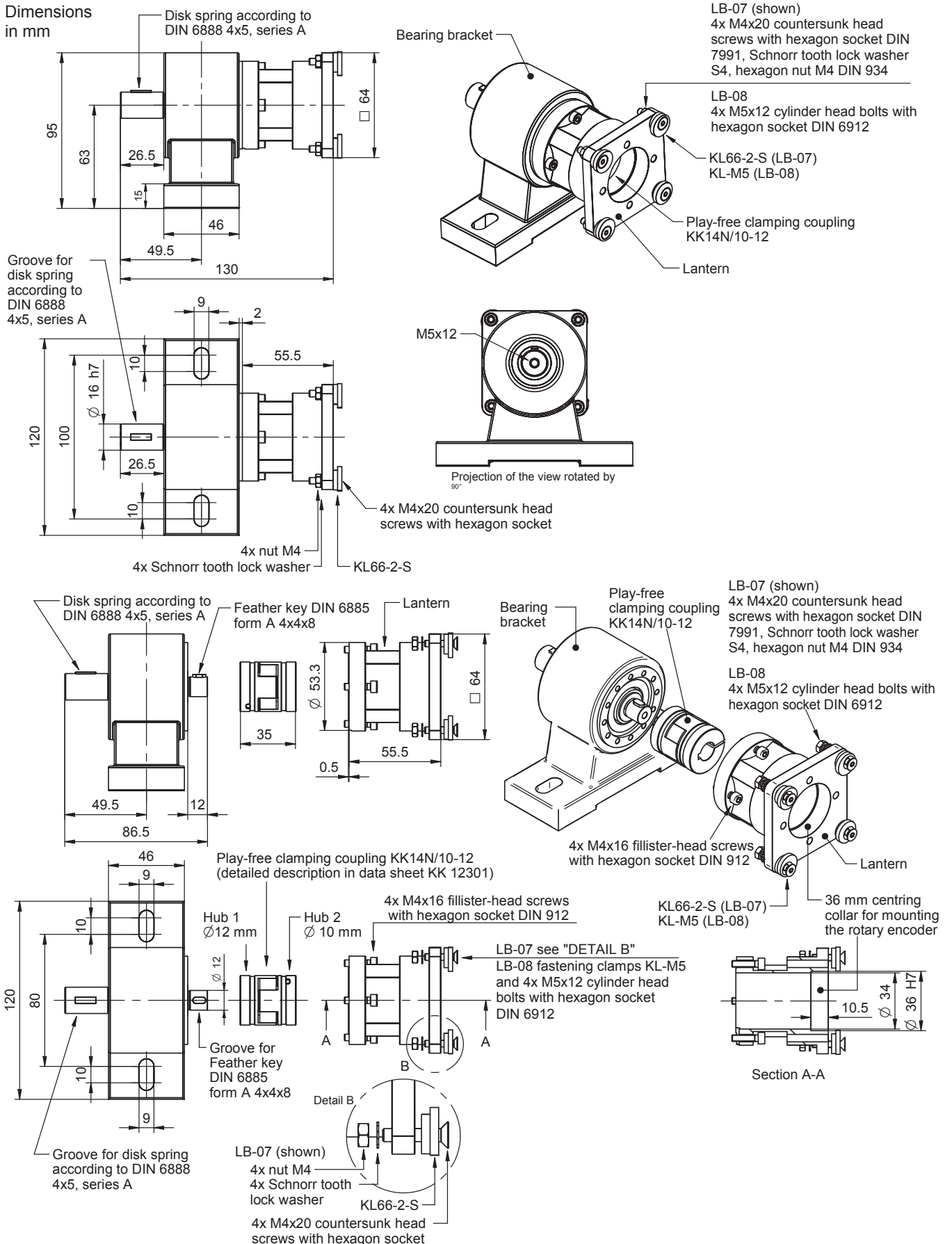
Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Installation drawings

Bearing brackets LB-07 and LB-08 with lantern 03 for rotary encoder design form 66

Dimensions in mm



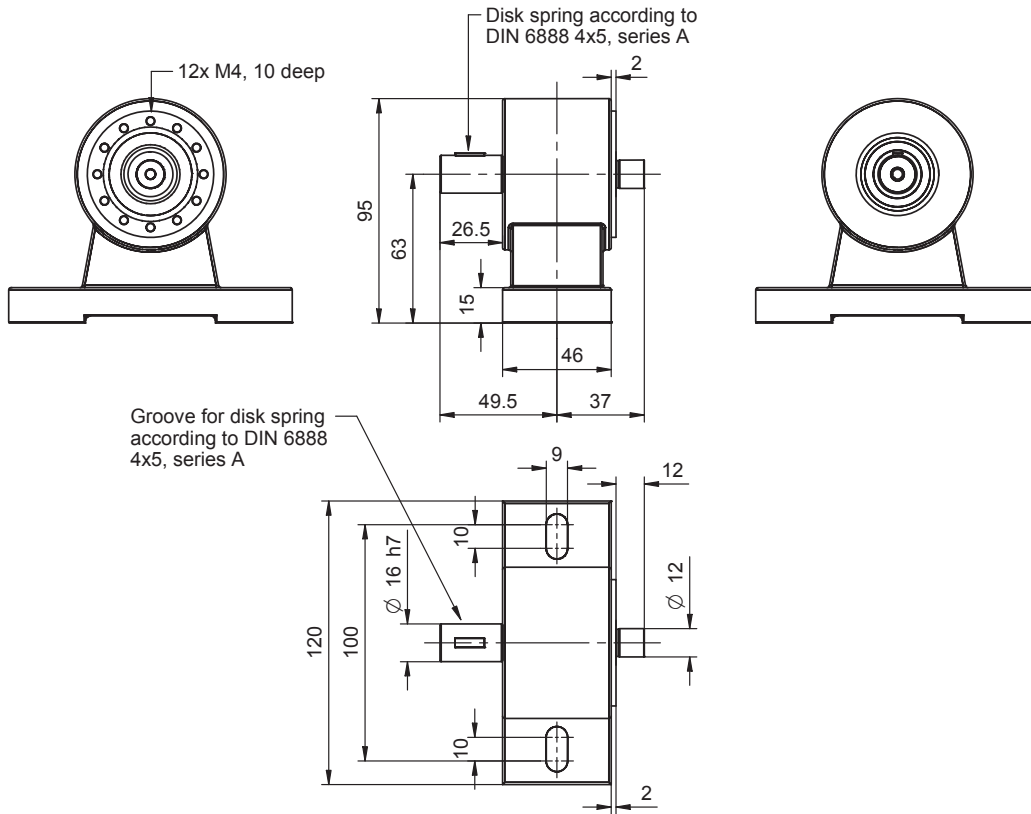
Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Installation drawings

Bearing bracket LB-09

Dimensions in mm



Fastening clamps

KL-M5 series fastening clamps

<ul style="list-style-type: none"> □ Material: Nickel-plated brass □ Required screws: M5x12 cylinder with hexagon socket DIN 6912 (4 units each required) 	
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KL66-2-S series fastening clamps

<ul style="list-style-type: none"> □ Material: Stainless steel 1.4305 □ Required screws: M4x12 countersunk head with hexagon socket DIN 7991 (4 units each required) 	
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Bearing bracket LB

Robust mounting for rotary encoders and incremental encoders

Order number

LB - 01

Electrical and / or mechanical variants*

- 01 Design form 58 with KL-M5 and KK14S/6-12
- 03 Design form 66 with KL-M5 and KK14S/10-12
- 04 Design form 58 with KL-M5 and KK14S/6-12-ATEX (ATEX certified for zone 2 and zone 22)
- 05 Design form 66 with KL66-2-S and KK14S/10-12
- 07 Design form 66 with KL66-2-S, feather key according to DIN 6885 form A 4x4x8 and KK14N/10-12
- 08 Design form 66 with KL-M5, feather key according to DIN 6885 form A 4x4x8 and KK14N/10-12
- 09 LB-09 without lantern and without coupling, with 4 synchronous clamps KL-M5

Model series:

LB Bearing bracket

* The basic versions according to the data sheet have the number 01. Deviations are identified with a variant number and are documented in the factory.