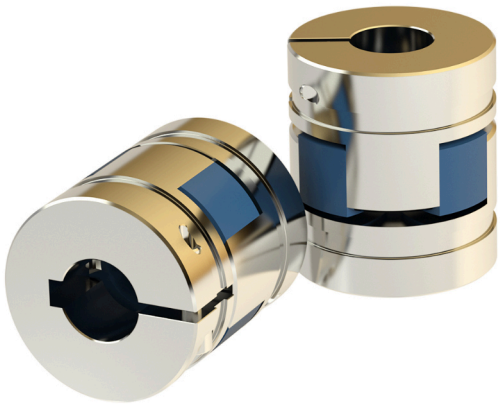
SUPREME SENSORING

Clamping coupling Model KK14

Document no.:
KK 12301 CE
27.03.2024



- **Max. torque: 8 Nm**
- **Three-piece, axially pluggable coupling which is play-free under pre-tension**
  - □ **Hub with diameter d1**
  - □ **Ring gear**
  - □ **Hub with diameter d2**
- **Play-free torque transfer, ideally adapted stiffness and optimal vibration damping**
- **Safety version with groove available**
- **ATEX 95 version available on request**

KEY INFORMATION OVERVIEW

DESIGN & FUNCTION

CLAMPING COUPLING KK14 (OPTIONAL WITH ELECTRICAL INSULATED HUBS)

Play-free shaft coupling KK14/x-y consists of two identical halves with aluminium hubs (clamping rings) which can be supplied with different bores x, y (fit size H7) for mounting the shafts.

The coupling can be pulled apart and assembled axially without having to release the two halves from their shafts. An involute ring gear manufactured from elastic polyurethane pre-tensions the two halves positively and joins them together without play.

Thanks to adherence to gap dimension 'S', model KK14S/x-y also attains electrical insulation in addition to achieving a long service life. The coupling is particularly suitable for use at high accelerations and for transmitting high torques.

CLAMPING COUPLING WITH GROOVE

Model KK14N/x-y: The clamping coupling can be optionally equipped with a groove for feather key according to DIN 6885 P.1-JS9.

CLAMPING COUPLING ACCORDING TO ATEX 95

Model: KK14X/x-y - ATEX: The couplings have been assessed and confirmed according to EU Directives 94/9/EC (ATEX 95) as category 2G/2D devices, and are thus suitable for use in zone G1, G2, D21 and D22 areas which are at risk from explosion.

Clamping coupling
Model KK14

Document no.:
KK 12301 CE
27.03.2024

GENERAL INFORMATION

INSTALLATION INSTRUCTIONS

- Recommended shaft fit is h6.
- The values for torque and axial offset are not allowed to exceed the specified value on assembly.
- Adherence to offset value and torque value is required for a long service life in continuous operation. Particular attention in this regard is given to the lateral offset.
- Additionally securing the threaded screws is not required.

TECHNICAL DATA

MECHANICAL DATA

Rated torque	4 Nm
Max. torque	8 Nm
Max. rotational speed	12,000 rpm
Static rotary spring stiffness	60.2 Nm/rad
Dynamic rotary spring stiffness	180 Nm/rad
Radial spring stiffness	153 N/mm
Mass moment of inertia	per hub: 2.8 x 10^{-6} kgm^2
Mass moment of inertia	ring gear: 0.457 x 10^{-6} kgm^2
Bore fit size	H7
Max. parallel offset	≤ 0.2 mm (lateral offset)
Max. axial displacement	≤ 1 mm
Max. angular offset	≤ 1°
Operating temperature	- 50 °C .... + 80 °C (permanently) - 60 °C .... + 120 °C (temporarily)
Ring gear Shore hardness	80 Shore A
Material	Polyurethane (ring gear) AlMgSiSnBi - Stanal 32 (clamping hub)
Weight	ca. 50 g (with bore diameter d1 = Ø 6, d2 = Ø 10 mm)
Options	groove for feather key DIN 6885 P. 1-J59 ATEX 95 (on request) clamping hubs made of stainless steel (on request)

ORDER CODE FORMAT

KK14	S /	12 -	12	STANDARD VERSION

KK14	Play-free clamping coupling model KK14		
S		S N	Leave blank for no electrical insulation or no groove With electrical insulation With groove for feather key (DIN 6885 P.1-JS9)
12	Bore diameter Ø d1*	6 8 10 12 15 16	Bore diameter in mm, tolerance H7
12	Bore diameter Ø d2*	6 8 10 12 15 16	Bore diameter in mm, tolerance H7

* Bores d1 and d2 can be combined

Clamping coupling
Model KK14

DOCUMENTATION

DOCUMENTATION

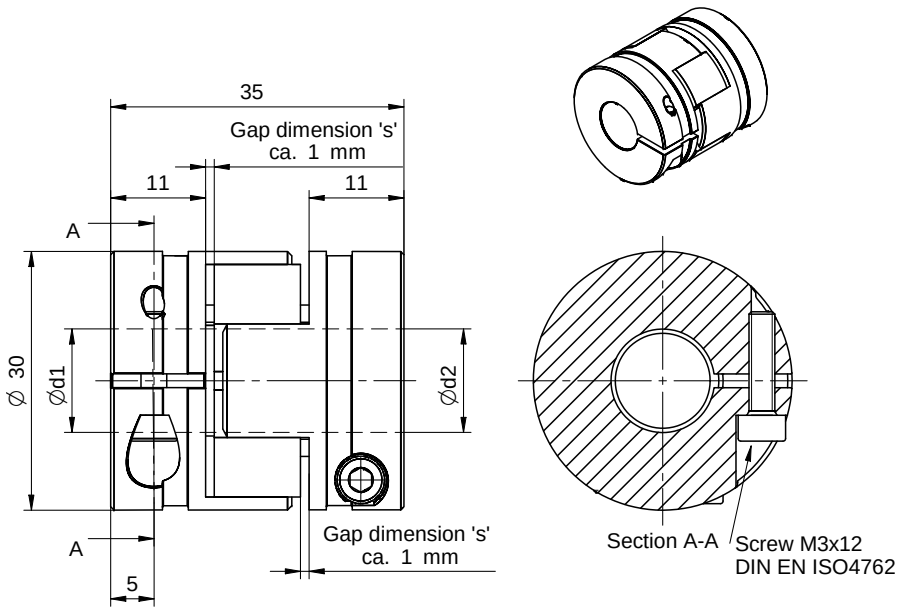
The following documents can be found in the Internet under www.twk.de/en in the documentation area, model KK.

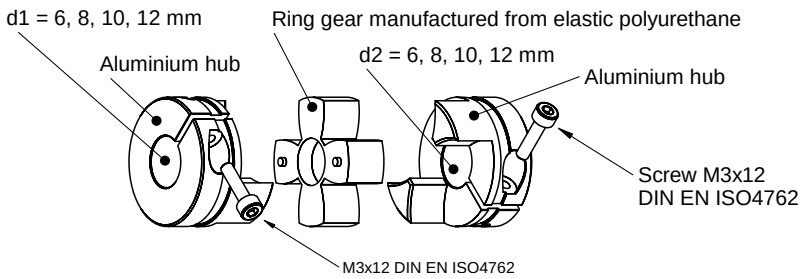
Data sheet KK12301
Declaration of Conformity CE ZE12467
Declaration of Conformity UKCA ZE16569
Reach compliant QS15286
RoHS compliant QS13284

INSTALLATION DRAWINGS

MODEL KK14S WITH ELECTRICAL INSULATION

Dimensions in mm





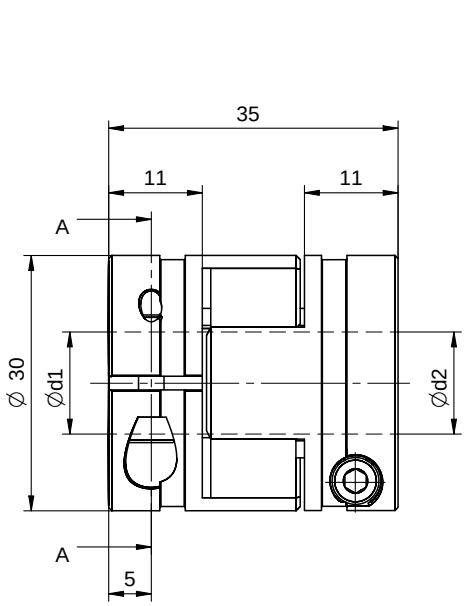
Clamping coupling
Model KK14

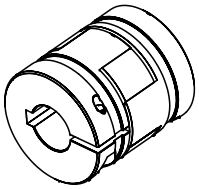
Document no.:
KK 12301 CE
27.03.2024

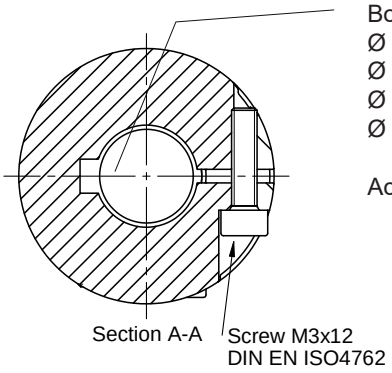
INSTALLATION DRAWINGS

MODEL KK14N WITH GROOVE FOR FEATHER KEY

Dimensions in mm







Bore d1/d2 . . . . . Groove for feather key
Ø 6 . . . . . 2 x 2
Ø 8 . . . . . 2 x 2
Ø 10 . . . . . 3 x 3
Ø 12 . . . . . 4 x 4

According to DIN 6885 P.1 - JS9

TOLERANCE RANGES

Diameter in mm	Tolerance in µm	
	Bore	Shaft
	H7	h6
Ø 6	+12/ 0	0/ -8
Ø 8, 10	+15/ 0	0/ -9
Ø 12, 15, 16	+18/ 0	0/ -11