



HKS(I) / HKDS(I) Safety Couplings

For fail-safe encoder attachments operating under extreme conditions

- Safety couplings with ATEX / IECEx
- Fault exclusion (PL e) to IEC 61800-5-2
- Ex zones 1 & 2 (gas), 21 & 22 (dust)
- FEM optimized construction
- Spring washers made of high strength steel
- Calculated and exhaustively tested
- Designed for extreme operating conditions
- No failure due to corrosion



- Torsion resistant and backlash free
- Longer encoder lifetime
 - No unplanned plant downtimes
 - Overload events do not affect availability
- Optionally with insulation against shaft currents (not for Ex applications)



Additional claws ensure availability even if spring washers fracture due to overload.



Insulation made of glass-fiber reinforced plastic prevents shaft currents damaging bearings on inverter controlled drives. (Not for Ex applications.)



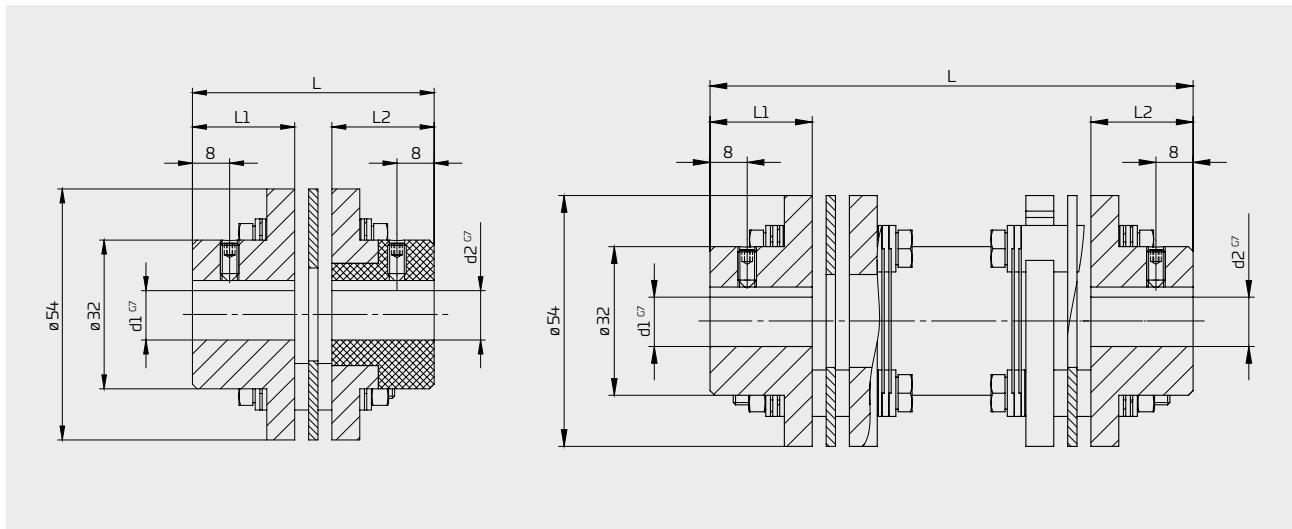
Reliable under changing dynamic load stress cycles thanks to keyed shaft-hub connection.

Single joint couplings HKS(I)

Compensates angular misalignments

Double joint couplings HKDS(I)

Compensates shaft misalignments



Example 1: HKS(I) including insulation
(optional: HKS without insulation)

Example 2: HKDS(I) without insulation
(optional: HKDS(I) including insulation)

Hub and overall length

Typ	L [mm]	L1 [mm]	L2 [mm]
HKS(I) 522	52	22	22
HKS(I) 532	60	30	22
HKS(I) 533	68	30	30

Typ	L [mm]	L1 [mm]	L2 [mm]
HKDS(I) 522	104	22	22
HKDS(I) 532	112	30	22
HKDS(I) 533	120	30	30
HKDS(I) 568	68	15	15

	Bore diameter (other diameters on request)											
Ø d₁ [mm] (Drive side) and / or Ø d₂ [mm] (Encoder side)	8	10	11	12	13	14	15	16	18	19	20	22

insulated couplings (without ATEC / IECEx certification): Ø d₂ (Encoder side) available from 10 mm to 14 mm

Mechanical data	
Shock resistance	100 g briefly (to DIN EN 60068-2-27); 10 g permanent
Vibration resistance	20 g briefly (to DIN EN 60068-2-6); 3 g permanent
Max. torque	3 Nm
Temperature range	-50 to +120 °C; -25 to +85 °C (insulated version); -50 to +70 °C (Ex version)
Max. speed	6.000 rpm
Mounting precision	HKS(I): axial misalignment ± 1 mm; angle 0,5° HKDS(I): axial misalignment ± 1,5 mm; radial misalignment ± 0,5 mm
Certifications	suitable for mounting solutions with fault exclusion (PL e) suitable for use in potentially explosive atmosphere zones 1 & 2 and 21, 22 (ATEX / IECEx) – for all non-insulated couplings

