

COUNTEX®

Backlash-free shaft encoder couplings

Double-cardanic for measuring drives



For legend of pictogram please refer to flapper on the cover



COUNTEX® Hub material aluminium/spacer PEEK

Size	Torque [Nm]		Dimensions [mm]						Displacements			Torsion spring stiffness C_T [Nm/rad]	Radial stiffness C_R [N/mm]	Axial restoring force C_A [N]
	T_{KN}	$T_{Kmax.}$	min. d	max. d	D	l_1/l_2	E	L	radial ΔK_r [mm]	axial ΔK_a [mm]	angular ΔK_w [°]			
6	0,3	0,6	2	6	15	4	4	12	0,05	-0,3/+0,6	0,36	48	26	10
12	0,5	1,0	2	12	22	6	3,5	15,5	0,10	-0,5/+1,0	0,45	120	65	25
14	1,0	2,0	5	14	31	8	4	20	0,12	-0,5/+1,0	0,57	235	70	27

General description

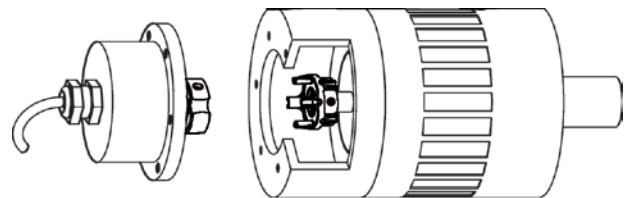
COUNTEX® is a three-part, backlash-free and torsionally stiff coupling specifically developed for the demands in measuring and control technology.

Its axial plug-in ability combined with the geometry of hubs results in a coupling system with a specifically easy assembly offering options of mounting fitting with processing. The material of the spacer is resistant to high temperatures ensuring almost continuous properties of the coupling system even with temperatures up to 160 °C.

Applications

The measuring and control technology demands for a high torsion spring stiffness of the coupling in order to realize reproducible positioning. At the same time the coupling has to compensate for displacements without the large forces causing stresses for the adjacent filigree components.

With its spacer made of highly temperature-resistant nylon our COUNTEX® ensures an almost constant torsion spring stiffness even with high temperatures. The double-cardanic principle of COUNTEX® reduces the restoring forces to a minimum. Nevertheless it has very compact dimensions which make it excellently suitable for tight mounting spaces.



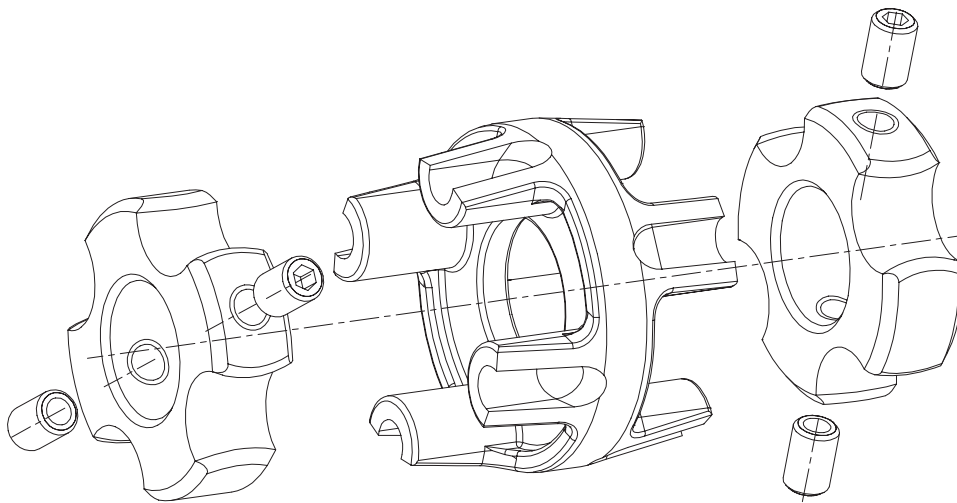
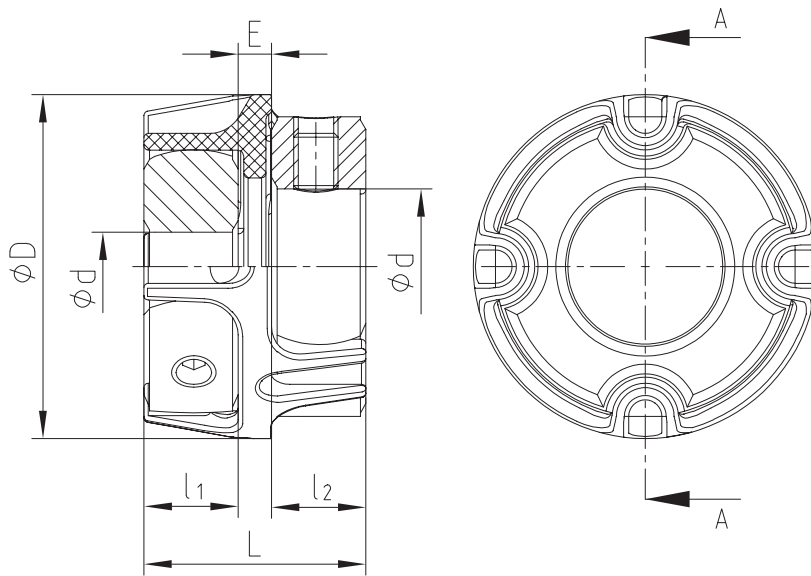
Use in explosive applications

COUNTEX® couplings are suitable for positioning transmission in drives used in explosive areas. The couplings are certified and confirmed according to EC standard 94/9/EC (ATEX 95) as units of category 2G/2D and thus suitable for the use in hazardous areas of zone 1, 2, 21 and 22. Please read through our information included in the respective Type Examination Certificate and the operating and mounting instructions at www.ktr.com.

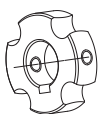


Ordering-example:

COUNTEX® 14	1.1	Ø6,35	1.1	Ø10
Coupling size	Hub type	Finish bore Ød1	Hub type	Finish bore Ød2

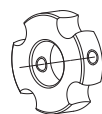


Hub types



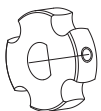
Type 1.0 with keyway and set screw

Positive locking power transmission. Perm. torque depending on the permissible surface pressure. Not suitable for backlash-free power transmission with heavily reversing operation.



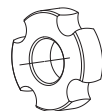
Type 1.1
without keyway, with setscrew

Non-positive torque transmission, suitable for backlash-free transmission of very small torques.
Standard



Type 1.3
with spline bore

Positive locking power transmission. Spline on request of customers (e. g. sfor shaft with flattening)



Type 1.2 Hub
without feather keyway without setscrew

For low torques. Suitable for bonding or pressing onto the shaft.