drive with us

KX
FLUID COUPLINGS KX SERIES
**DESCRIPTION**

The KX is a fluid coupling with a special patented fluid circuit designed to start up large inertia machines driven by electric motors. The circuit includes two internal tanks connected by two scoops allowing bidirectional motor operation.

**MAIN FEATURES**

- starting stall torque below 50% of the electric motor nominal torque
- starting torque limitation also below nominal torque
- dynamically balanced
- two versions: KXG with gear couplings and KXD with maintenance free disc couplings. Both designs allow the fluid coupling removal without moving the electric motor or the driven machine avoiding the realignment
- the bearings are greased for life and additionally protected by double seals
- all rotating seals and O-rings are in viton
- the coupling can work either with oil or water (or glycol)

The scoop works like a differential pump transferring fluid from one chamber to the other and finally into the coupling working fluid circuit through external adjustable valves. This double passage allows a long starting time with very low starting torque and current absorption by the electric motor, virtually isolating the effect of the inertia of driven machine.

The fluid quantity in the working circuit is less than in traditional constant fill fluid couplings, as the fluid level is much lower than the rotating axis.

The reduced fluid quantity in the working circuit allows low starting torque. During input rotation the scoop transfers the fluid from tank A to tank B and then, through an adjustable valve for start up time regulation, to the working circuit.

At steady running, the working circuit is completely filled with fluid for minimum slip.

**KX type**

- MI : transmitted torque by fluid coupling
- Mn : starting torque of the electric motor
- ML : load absorbed torque
- Mn : nominal torque at full load
FLUID COUPLINGS
KX series

SELECTION TABLE

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CENTER OF GRAVITY

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<tr>
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MOMENT OF INERTIA J (WR²)

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KXGB (with brake drum)

KXDB (with brake drum)

Brake drum or disc upon request

KXGBP (with brake disc)

KXDBP (with brake disc)

Dimensions are subject to alteration without notice
OTHER TRANSFLUID PRODUCTS

**FLUID COUPLING**
K SERIES
Costant fill
up to 2500 kW

**FLUID COUPLING**
KPT SERIES
Start up and variable
speed drive up to 1700 kW

**FLUID COUPLING**
KSL SERIES
Start up and variable
speed drive up to 3500 kW

**FLEXIBLE COUPLING**
BM - B3M SERIES
Up to 33100 Nm

**DISC AND DRUM BRAKE**
TDFS - NBG SERIES
Up to 19000 Nm

**PNEUMATIC CLUTCH**
TP SERIES
Up to 11500 Nm

Global web site: www.transfluid.eu • E-commerce web site: www.buy-transfluid.com

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