Type PH

Planox® Friction Clutches
Type PH – hydraulically actuated

PH 11 – GB
DESCH Planox® Friction Clutches

The DESCH Planox® friction clutches are engageable resp. disengageable dry-friction clutches which transmit torque by friction.

These clutches permit rapid acceleration of the driven machines or machinery groups as well as reliable torque transmission. Machines connected with friction clutches are protected against damage which can occur through peak torques during operation or during the engaging/disengaging process.

Hydraulically actuated
Hydraulically actuated Planox® clutches, type PH, have the design and mode operation as the pneumatically actuated Planox® clutches. The oil is supplied axially by a rotary union.

The torque indicated in the list is configured for an oil pressure of 35 bar. Special ventilation springs enable safe operation even when the machine is inclined. All versions of the clutch can be equipped with an additional flexible clutch for reducing the torsional vibrations. For the use of hydraulic pumps, we provide complete drive units comprised of pump drive and Planox® clutch.

Examples

Road Milling Machine

DESCH Planox® friction clutch
Type PH-143/1-SZ
with highly flexible coupling
Technology

Drive system 1

- directly mounted on motor

Examples of drive system 1

- stable bearing support without pilot bearing
- with pilot bearing

Drive system 2

- mounted on pump drive gear box

Example of drive system 2

- mounting at PVG
## Technical data

<table>
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<tr>
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<th>max. speed PHA rpm</th>
<th>need of oil per actuation with new friction discs</th>
<th>need of oil per actuation with worn friction discs</th>
<th>dimensions of installation</th>
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Reduction of torsional vibrations using a combination of Planox® clutch and flexible coupling.

**Measurements under operating conditions**

Measurement of vibration and torque through telemetry at side

![Graph 1](image1.png)

**Torsional vibrations measured without flexible coupling.**

![Graph 2](image2.png)

**Torsional vibrations measured with flexible coupling.**
Example of hydraulic actuating device

The hydraulic control of the clutch in the example consists of a 4/2-way-valve, an adjustable throttle-check-valve and an accumulator. A manometer and pressure switch are used for pressure monitoring. The clutch is connected to the hydraulic unit by a rotary union and a short flexible hose. To ensure a smooth engagement, the pressure build-up can be controlled via the throttle-check-valve.

The accumulator is used to absorb pressure peaks and adjust pressure fluctuations. For disengagement the oil is to be led back pressure free into the tank. Alternatively, the DESCHcontrolS system can be used for synchronising large masses.
• Verkoop elektro-mechanische aandrijvingen (motoren, reductoren, lineaire aandrijvingen, componenten) en regelaars.
• Engineering en productie van speciale aandrijvingen.

• Engineering en productie van bestuuringsoplossingen en paneelbouw.
• Verkoop van frequentieregelaars, servoaandrijvingen en complete besturingen.

• Regionale verkoop elektro-mechanische aandrijvingen (motoren, reductoren, lineaire aandrijvingen, componenten) en regelaars.
• Specialist in servo-tandoverbrengingen en koppelingen.

• Regionale verkoop elektro-mechanische aandrijvingen en regelaars.
• Reparatie en revisie van alle fabrikanten aandrijfcomponenten.
• Maintenance Repair Overhaul
• Wikkelen en balanceren van elektromotoren.

• Maintenance Repair Overhaul
• Preventief en correctief onderhoud van aandrijvingen in productie-omgevingen.
• Revisie generatorsets.
• Specialist in ATEX onderhoud.
• Verkoop elektro-mechanische aandrijvingen en regelaars.

• Verkoop in België en Luxemburg van elektro-mechanische aandrijvingen (motoren, reductoren, lineaire aandrijvingen, componenten) en regelaars.
• Engineering en productie van speciale aandrijvingen.