









Industrial Brakes

# **Stromag SH32**

Hydraulic Disc Brakes

# **Emergency Disc Brake for Lifting** equipments of very high capacity.

The brake type SH32 is a powerful, spring-actuated, hydraulically released brake that provides fail-safe, emergency braking. It is especially designed to operate in severe conditions. It answers to the technological challenge imposed by lifting equipments of very high capacity.

Robust construction and simplicity of operation bring to this brake a high reliability. It complies with the specific quality and safety requirements of applications such as boatlifts, ladle cranes, offshore cranes, conveyors or nuclear power plants.

## **Applications**

- Hydropower Plant
- Offshore Applications
- Mining and Conveyors
- Nuclear Power Plant
- Steel Industry

## **Benefits include**

- Powerful hydraulic spring applied caliper
- Direct acting caliper / few components
- Braking force up to 330 kN
- Pivoting shoes
- Positive lining pads fastening: easy replacement
- Steel, nuclear, offshore protections available
- Association with any thickness of discs from 30 to 50 mm
- Opening monitoring switch preset in factory
- Options : Wear monitoring switch Progressive braking system

# **TECHNICAL DATA/DIMENSIONS**

#### **Caliper SH32**

- Emergency brake
- Fail safe
- Spring application
- Hydraulic release
- Opening proving switches
- Lining wear indicator wires

# Revision number: T10040-01-C Revision date: 15.06.2012

#### Working conditions:

- Ambient temperature: -10°C to +60°C
- Relative humidity  $\leq 70\%$
- Dust in atmosphere  $\ge 65 \mu m$
- Other conditions, consult Stromag.

#### Use:

• The brake should be applied only in case of emergency stop, overspeed or shutdown of electric mains. Other use, consult us

#### **Options:**

- · Lining wear proving switches
- Progressive braking system
- Marine protection



| Designation   |         | Caliper |                 | SH32                              |
|---|---------|---------|-----------------|-----------------------------------|
|   |         | Lining  |                 | US2-1                             |
| Braking force BF<br>for air gap disc/lining of 2 x 1.5 mm         |         | Dynamic | Ν               | 333,800                           |
|   |         | Static  | Ν               | 300,000                           |
| Braking force BF<br>for air gap disc/lining of 2 x 2 mm           |         | Dynamic | Ν               | 320,000                           |
|   |         | Static  | Ν               | 288,000                           |
| Linear speed of the disc  |         |         | m/s             | ≤ 10                              |
| Dynamic braking torque BT (m.N)<br>for 1 caliper and disc ØD (mm) |         |         | Nm              | BT = BF (D/2,000-0.129)           |
| Regulation pressure   | Minimum |         | bar             | 180                               |
|   | Maximum |         | bar             | 200                               |
| Setting pressure of the limit valve of the hydraulic unit         |         |         | bar             | 225                               |
| Total volume of oil displaced for air gap/lining of 2 x 2 mm      |         |         | cm <sup>3</sup> | 191<br>for one stroke disc/lining |

#### IMPORTANT

**BRAKING FORCE** and **TORQUE** values correspond to lining quality **US2-1** and disc steel S235JR or S355JR (standard NF EN10025), these values are subject to a variation of  $\pm 10\%$ . Response time at nominal torgue  $\leq 0.3s$ 

#### Electrical data :

#### Opening proving switches Wear proving switches (optional) :

- 250VAC max., 5A max., with interrupting capacity: 50VA max.
- 220VDC max., 5A max., with interrupting capacity: 50W max.
  Compatible with PLC (Programmable Logic Controllers).

An opening switch used with other equipment than PLC must not be reused with a PLC.



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