

Stromag®
Altra Industrial Motion

Industrial Brakes

Stromag SHD5A

Hydraulic Disc Brakes

Emergency stopping brake for Tower and Port Cranes.

Stromag completes the SHD range SIME Brakes by introducing the SHD5A caliper.

This fail-safe single-spring hydraulical caliper is a new answer to the technological challenge imposed by lifting equipment.

Robust construction and simplicity of operation bring to this caliper a high reliability. Its compact and light weight design allows an easy mounting and operation in a restricted space.

Hydraulic Power Pack and further options can be provided in accordance with the installation requirement.

Applications

- Tower Cranes
- Port Cranes
- Offshore applications

Benefits include

- Hydraulic caliper
- Direct acting caliper / few components
- Designed for 200,000 cycles
- Compact and light weight design
- Braking force up to 56 kN
- Protection level C3-H
- Positive lining fastening : easy replacement
- Opening and wear monitoring switches preset in factory
- Option : Closing monitoring switch

TECHNICAL DATA/DIMENSIONS

Revision number: T10131-02-E Revision date: 27.09.2018

Caliper SHD5A-M2

- Fail safe braking
- Braking by spring application
- Hydraulic release
- Opening proximity
- Holding tool
- Lining wear detectors
- Protection level C3-H standard ISO 12944-2
- Association with discs thickness 30 mm

Working conditions:

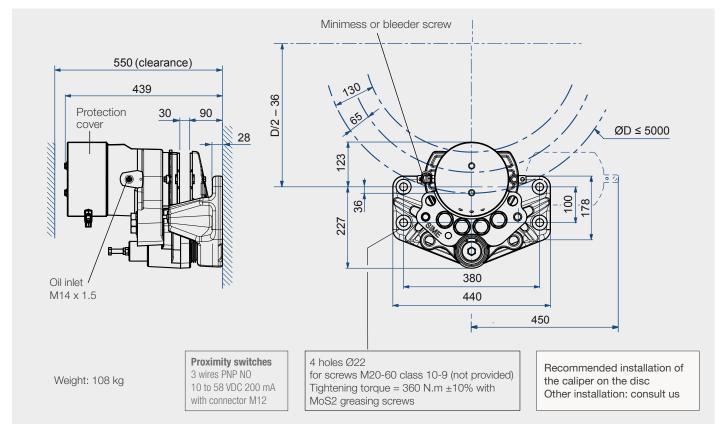
- Ambient temperature: -10°C to +60°C
- Relative humidity ≤ 70%
- Dust in atmosphere ≥ 65µm Other conditions, consult Stromag.

Use:

- Emergency stopping brake in case of overspeed or loss of electrical supply
- Service life: 200 000 cycles

Options:

- Lining wear proximity switch
- Closing proximity switch
- Low temperature:
- dynamic braking: -30°C to +60°C
- brake closed (park position): -40°C to +60°C
- Protection level C5M-H



Torque and effort values are subject to a variation of $\pm 10\%$ Response time at nominal torque ≤ 0.3

Designation	Caliper SHD5AM2		1	2	3	4	5	6	7	8
	Lining		US2-1							
Braking force BF for air gap disc/lining of 2x1mm	Dynamic	N	15500	17700	20000	28000	33000	41000	48000	56000
	Static	N	13650	15600	17600	24650	29050	36100	42250	49300
Linear speed of the disc m/s		≤ 10								
Dynamic braking torque BT (m.N) for 1 caliper and disc \emptyset D (mm) / D max \leq 2000mm		BT = BF (D/2000 - 0,065)								
Regulation pressure	Minimum Maximum	bar bar	60 80	60 80	85 115	85 115	110 140	140 160	140 160	180 200
Setting pressure limit valve of hydraulic unit bar		105	105	140	140	165	190	190	225	
Total volume of oil displaced		12.7 per stroke (for nominal disc/lining stroke of 1 mm per side)								
Max. oil volume of the jack		cm ³	76							

