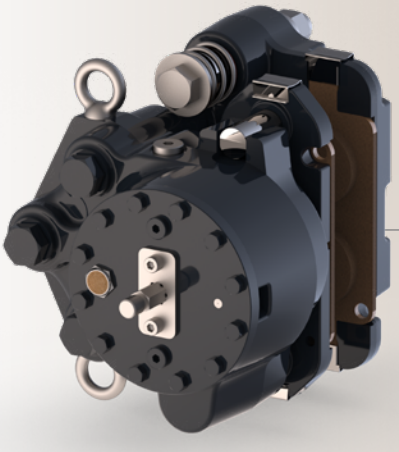
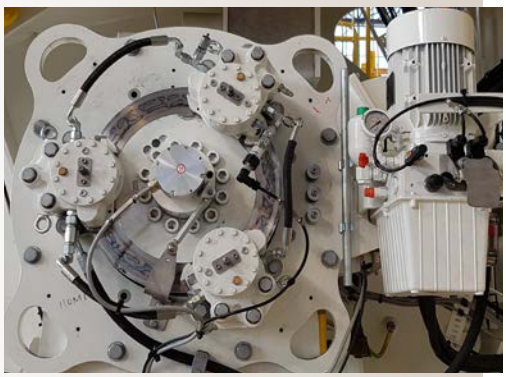




Industrial Brakes

Stromag SHD1

Hydraulic Disc Brakes

This fail-safe single-spring caliper is the smallest and the most compact caliper of its range.

This emergency caliper offers modular and economical braking solutions to meet requirements of offshore applications such as heavy lift cranes, steel industry, people transportation, and port applications.

Robust construction and simplicity of operation bring to this caliper a high reliability. It allows an easy mounting and maintenance, and insures maximum efficiency in the most severe environmental conditions.

The modular design of the SHD1 caliper enables standardisation on multiple installations: availibility in a large range of torque and possible association with different disc thicknesses and diameters.

Applications

- Heavy Lift Offshore Cranes
- Steel and Port Cranes
- Stage and Theater
- Belt Conveyors
- Mass Transport

Benefits include

- Braking force: 2000 – 11000 N
- Direct acting caliper / few components
- Short response time / fast braking
- Designed for 200,000 cycles
- Compact and lightweight design
- Strain absorbing system with column
- Low temperature materials and marine protection
- Thick linings
- Options: indicators of opening, lining wear and temperature

Stromag®
Altra Industrial Motion

TECHNICAL DATA / DIMENSIONS

Revision number: T10098-01-G Revision date: 16.09.2021

Caliper SHD1

- Emergency brake / Fail safe braking
- Braking by spring application
- Hydraulic release
- Mechanical holding of the brake in open position for pads changing
- Manual wear centering and compensation
- Possible association with discs thickness: 12,7 (1/2»), 20 and 30mm.
- Lining wear detectors
- Lining pads type US2-1 or ES3-7
- Protection C5-M M

Working conditions:

- Ambient temperature:
  Dynamic braking : -30°C to +70°C
  Brake applied (parking): -40°C to +70°C
- Relative humidity ≤ 70%
- Dust in atmosphere ≥ 65µm

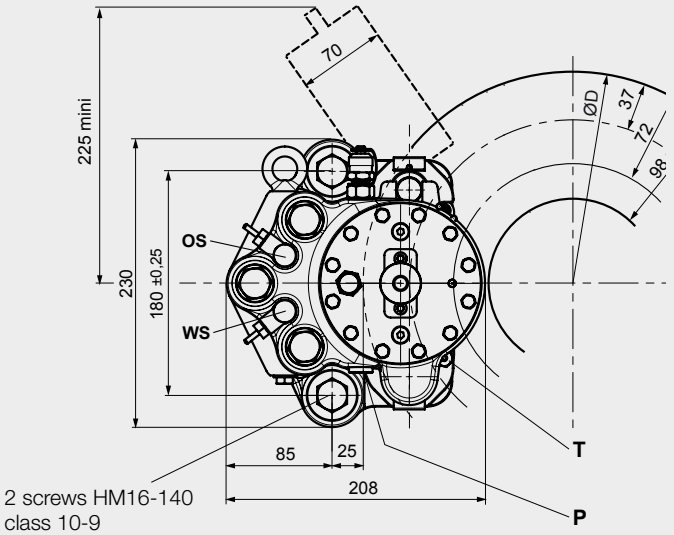
Other conditions, consult Stromag.

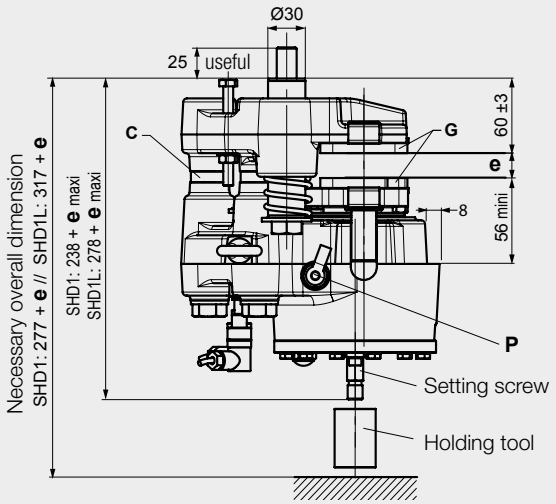
Use:

- The brake should be applied only in case of emergency stop, overspeed or shutdown of electric mains.

Options:

- Opening proving switch (**OS**)
- Lining wear proving switch (**WS**)
- All non-standard disc th. > 12,7mm (1/2")
- Lining temperature sensor (**T**)
- Mechanical release tool (**DM**)
- **SHD1L** : caliper with manual wear compensation at half wear:
  braking force before wear = +10% max.
  braking force at half wear = -10% max.





Weight: 24 kg

C = Spacers according to disc thickness
G = Linings : Thickness of new lining 8 mm
Thickness to wear 6 mm
Each 1 mm of wear on each side:
manual centering and compensation
P = 2 oil ports 1/4»G
Pressure tap delivered separately
T = PT100 sensor (option)
ØD : from 300 to 1000 mm
e = disc thickness

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

Designation	Caliper		5	4	3	2	1	5	4	3	2	1
	Lining		ES3-7					US2-1				
Braking force BF for air gap disc/lining of 2x1mm	Dynamic	N	11 000	8 000	6 000	4 000	2 000	11 000	8 000	6 000	4 000	3 000
	Static	N	9 900	7 200	5 400	3 600	1 800	9 680	7 040	5 280	3 520	2 640
Linear speed of the disc		m/s	≤ 50					≤ 10				
Dynamic braking torque BT (m.N) for 1 caliper and disc ØD (mm) / 300 ≤ D ≤ 1000 mm		N.m	BT = BF (D/2000-0,037)									
Regulation pressure	Minimum	bar	150									
	Maximum	bar	170									
Setting pressure limit valve of hydraulic unit		bar	190									
Total volume of oil displaced for air gap disc/lining of:	2 x 1mm (nominal opening)		5 cm^3									
	2 x 2mm (wear+opening)		9 cm^3									
	2 x 4mm SHD1L (wear+open.)		18 cm^3									

Stromag® Altra Industrial Motion

www.stromag.com

Stromag France SAS
Avenue de l'Europe
18150 La Guerche sur L'Aubois - France
sales@stromag.com