

## Industrial Brakes

# SH18B ATEX

## Hydraulic Disc Brakes

### This brake meets requirements of the handling applications with harsh and explosive environment.

This emergency brake has a reinforced an explosion-proof design (ATEX certification) and an anti-corrosion protection against harsh atmosphere. It is a new answer to the technological challenge imposed by harsch and explosive environments such as offshore oil and gas drilling.

The SH18B caliper is a emergency hydraulic brake with a symmetrical design : Its robust construction and simplicity of operation meet already customer approval for quality and safety in handling applications such as cranes and conveyors with severe operating conditions.

#### Applications

- Marine winches
- Bop cranes
- Mast cranes
- Drilling rigs
- Cable drums

#### Benefits include

- Fail-safe hydraulic braking
- Direct acting brake
- Pivoting shoes
- Proximity opening proving switches
- Independent stroke setting of each half-caliper
- Low force loss per add. air gap mm
- Offshore protection (breather pot, special seals, anti-corrosion protection, opening switch protected by watertight cover)
- ATEX zone : 1 and 2



## TECHNICAL DATA / DIMENSIONS

Revision number: T03907-10-C Revision date: 22.09.2015

### Caliper SH18B OFFSHORE ATEX

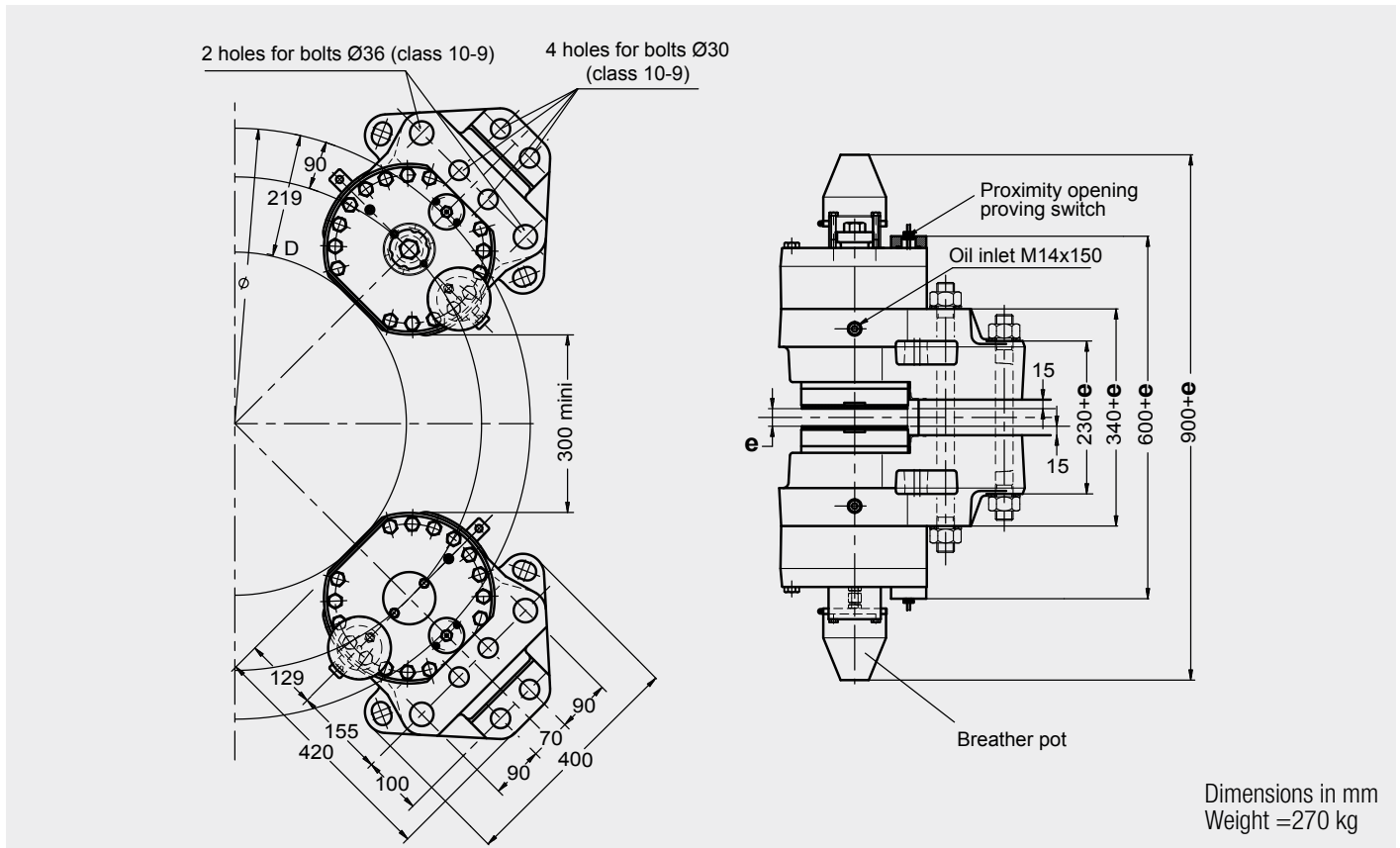
- Emergency brake
- Fail safe
- Spring application
- Hydraulic release
- Proximity opening proving switches
- Offshore protection

### Working conditions:

- Ambient temperature: -10°C to +60°C
- Relative humidity: ≤ 90%
- Dust in atmosphere ≥ 65µ
- ATEX zone : 1 and 2
- Other conditions: consult us.

### Use:

- The brake should be applied only in case of emergency stop, overspeed or shutdown of electric mains and maximum one time per hour for emergency brakes. Other use, consult us.



Designation	Caliper		SH18B	
	Lining *		UX2-1	
	Air gap disc/lining		2 x 1 mm	2 x 2 mm
BRAKING FORCE BF on stainless steel disc	Dynamic	N	150 000	138 000
	Static	N	135 000	124 200
Linear speed of the disc		m/s	≤ 6	
Dynamic braking torque BT (N.m) for 1 caliper and disc ØD (mm)	1000 mm	N.m	61 500	56 580
	1200 mm	N.m	76 500	70 380
	1500 mm	N.m	99 000	91 080
	2000 mm	N.m	136 500	125 580
BT for other ØD (mm)		N.m	BT = BF (D/2000 - 0.09)	
Regulation pressure:	mini.	bar	180	
	maxi.	bar	200	
Setting pressure limit valve of hydr. unit		bar	225	
Total volume of oil displaced for one stroke disc/lining (nominal wear & opening)		cm³	85	119

Torque and effort values are subject to a variation of ±10%

### Opening proving switches

Supply of the proximity switches must be provided through switch amplifiers.



Reference NJ2-12GM-N-V1

Rated operating voltage : 8,2 V DC

Current consumption : - target undetected : ≥ 3mA

- target detected : ≤ 1mA

delivered with a M12 female connector fitted with a 15 m long, 2 x 0,34 mm² cable.

\* **UX2-1**: disc temperature during one braking ≤ 150°C