Disc brakes

Technical data and dimensions

Caliper SH1

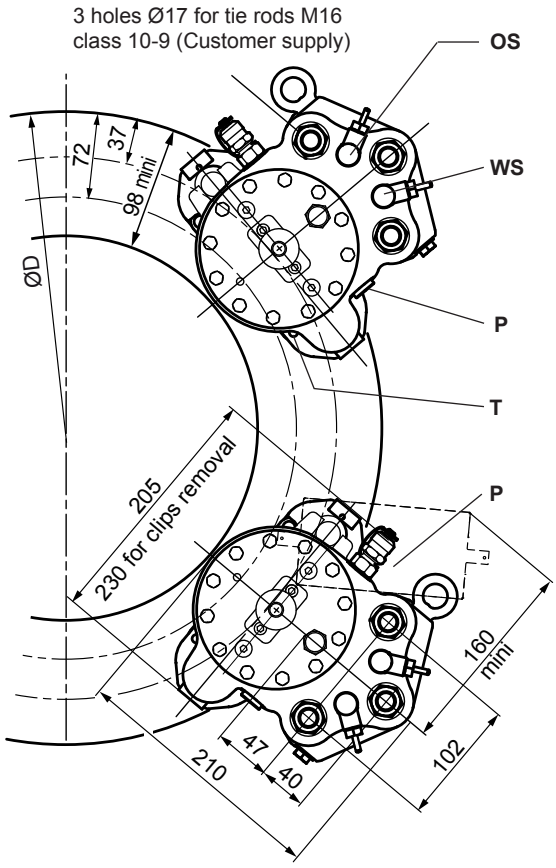
Emergency brake
Fail to safe
Spring application
Hydraulic release
Linings with wear indicators
Holding tool for maintenance operation
Manual wear centering and compensation
Asociation with discs thickness: 12,7 (1/2"), 15, 20 and 30mm.
Lining pads type **US2-1** or **ES3-7**
Lining pads with full wear indicators
Protection C5-M M

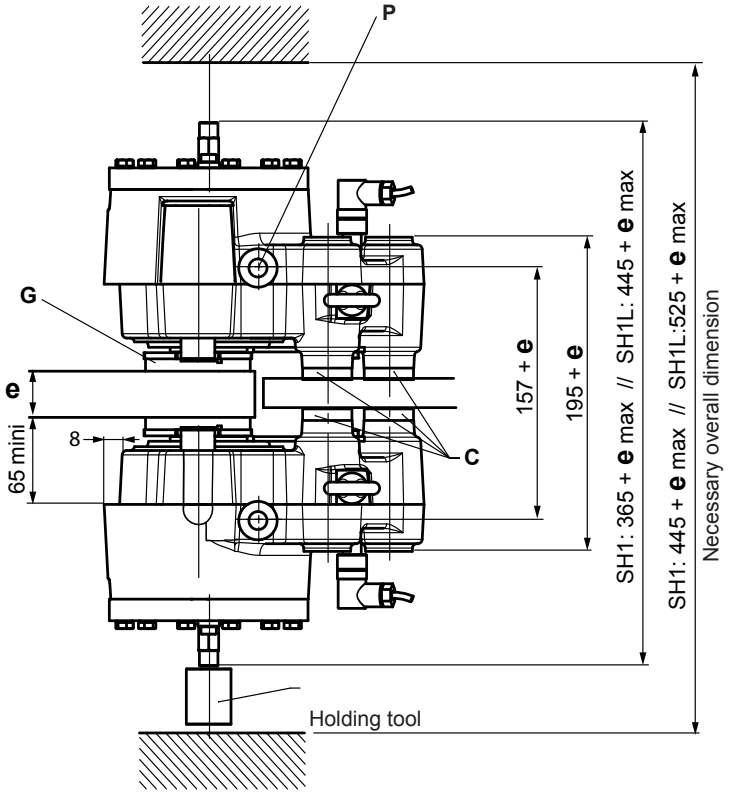
Operating conditions:
- Ambient temperature:
  Dynamic braking : -30°C to +70°C
  Brake applied (parking): -40°C to +70°C
- Relative humidity: ≤ 70%
- Dust in atmosphere ≥ 65µm

Other conditions: consult us.

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

Options:
- Opening proving switch (**OS**)
- Lining wear proving switch (**WS**)
- All non-standard disc thickness > 12,7mm (1/2")
- Lining temperature sensor (**T**)
- Mechanical release tool (**DM**)
- **SH1L** : caliper requiring no manual wear compensation:
  - braking force before lining wear = +10% maxi.
  - braking force after lining wear = -10% maxi.





Electrical data:

Inductive switches of opening and wear (options):
3 wires PNP NO
12 to 24 VDC 200mA
with male connector M12 / 5 positions
according to standard IEC61076-2-101 / code A

Sensor PT100 (option)
Detection of the temperature threshold : 100°C ± 5
Cable length = 2,5 meters
2 wires red/yellow

R	136,6 Ω	95°C
	138,5 Ω	100°C
	140,4 Ω	105°C

C = Spacers according to disc thickness
G = Linings : Thickness of new lining 8 mm
Thickness to wear 6 mm
Each 1mm of wear on each side: manual centering and compensation
OS = Opening switch (option)
WS = Lining wear switch (option)
P = 2 oil ports 1/4"G per half-caliper
Bleeder screws delivered separately
T = PT100 sensors (option)
ØD = Disc diameter = 300 mm minimum
e = Disc thickness

Dimensions in mm
Weight = 35 kg

Due to continuous development and improvement, all dimensions and characteristics are subject to change without notice.

Installation and maintenance	Leaflet	No. M10097-01	Safety data sheets	ES3-7	No.	FDS00028-01
Spare parts		No. S10097-01		US2-1	No.	FDS00015-01

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T10097-01-H

Disc brakes

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Caliper SH1

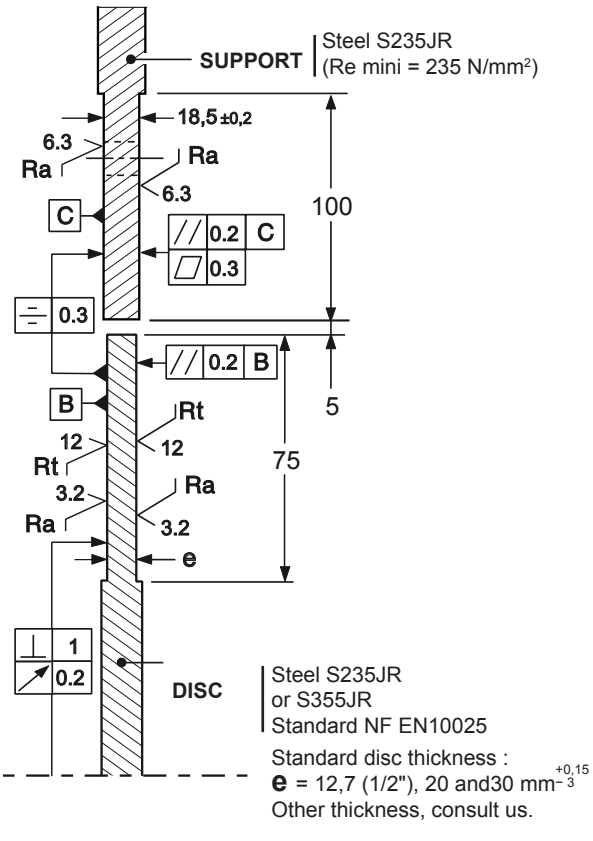
Torque and effort values are subject to a variation of ±10% - Closing time at nominal torque ≤ 0.3s

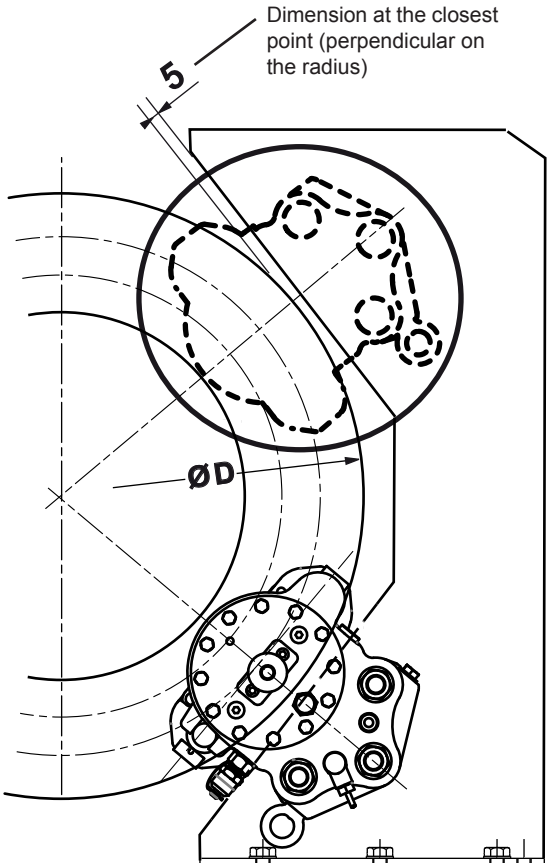
Designation	Caliper SH1-		5	4	3	2	1	5	4	3	2	1
	Lining ∗		US2-1					ES3-7				
Braking force BF for air gap disc/lining of 2x1mm	**Dynamic**	N	11 000	8 000	6 000	4 000	3 000	11 000	8 000	6 000	4 000	2 000
	Static	N	9 680	7 040	5 280	3 520	2 640	9 900	7 200	5 400	3 600	1 800
Linear speed of the disc ▲		m/s	≤ 10					≤ 50				
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 Maximum	bar bar	150 170									
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)	cm^3	5 cm^3									
	2 x 3mm (wear+opening)	cm^3	13 cm^3									
	2 x 7mm **SH1L** (wear+open.)	cm^3	29 cm^3									

▲ For higher speed, consult us.

∗ **ES3-7**: disc temperature during one braking ≤ 600°C
US2-1: disc temperature during one braking ≤ 100°C

Disc and support :





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