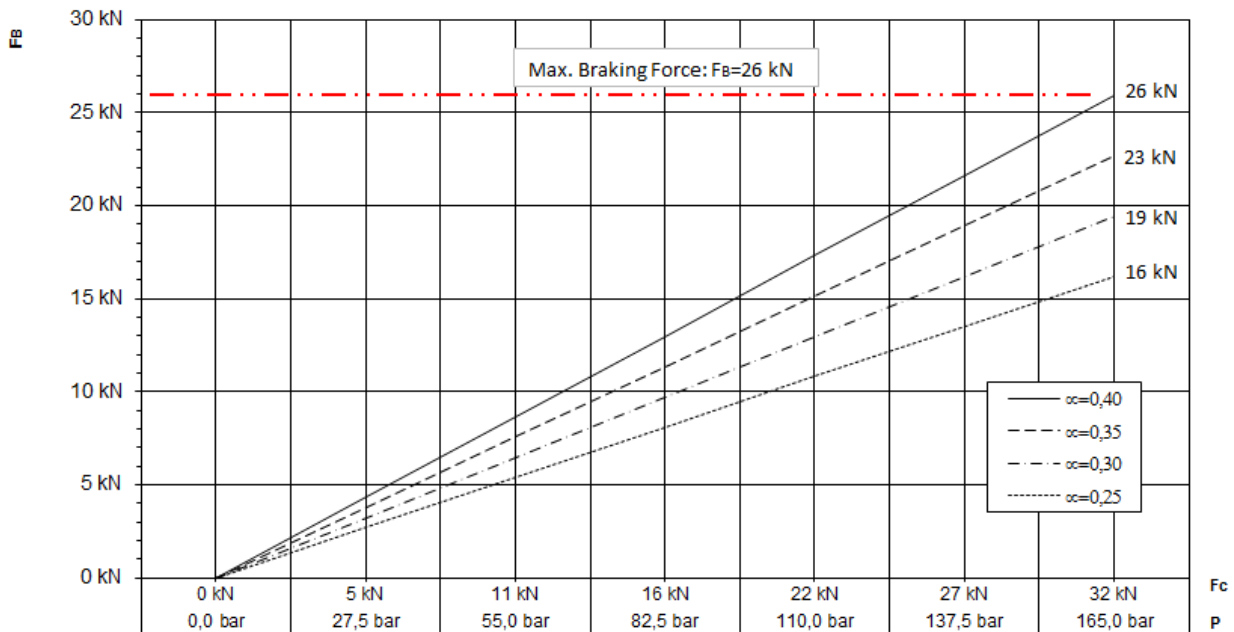


# DATA SHEET

Name: DEB-0050-001  
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 Revision: B

## TECHNICAL DATA AND CALCULATION FUNDAMENTALS FOR DISC BRAKE BSAB 50 (Rear mount)



$\mu$  = Nominal friction between brake pad material and brake disc.  
 $F_B$  = Braking Force  
 $F_C$  = Clamping force  
 $P$  = Pressure

$$M_B = a \cdot F_B \cdot \frac{(D_o - 0,056)}{2} \quad [\text{Nm}]$$

$$F_B = F_C \cdot 2 \cdot \mu \quad [\text{N}]$$

$$F_C = A \cdot P \cdot 0.1 \quad [\text{N}]$$

Where:

$a$  is the number of callipers acting on the disc  
 $F_B$  is the braking force according to table above [N]  
 $D_o$  is the disc outer diameter [m]  
 $F_C$  is the clamping force [N]  
 $A$  [mm<sup>2</sup>],  $P$  [bar] and  $\mu$  see values below

The actual braking torque may vary, depending on friction coefficient.

### BRAKE FUNDAMENTALS

Weight of calliper (incl. organic pads):	Approx. 11 kg
Overall dimensions:	154x146x120 mm
Pad width:	62 mm
Brake pad thickness for new pad (organic):	14 mm
Pad area (organic):	7378 mm <sup>2</sup> (*)
Max. wear of pad (organic):	6 mm (*) (8 mm thick)
Nominal coefficient of friction:	$\mu = 0.4$
Total piston area - each caliper:	1963 mm <sup>2</sup>
Volume for each caliper at 1 mm stroke:	1963 mm <sup>3</sup>
Volume for each caliper at 3 mm stroke:	5890 mm <sup>3</sup>
Actuating time (guide value for calculation):	0.4 sec
Pressure connection/port:	G1/8
Drain connection port:	G1/8
Recommended pipe size:	6-8 mm
Max. operating pressure:	P=165 bar
Operating temperature range	
General usage:	-20°C to +70°C

(For temperatures outside this range contact Svendborg Brakes)

(\*) On each brake pad

The brake is for static braking – For other application contact Svendborg Brakes for more details.