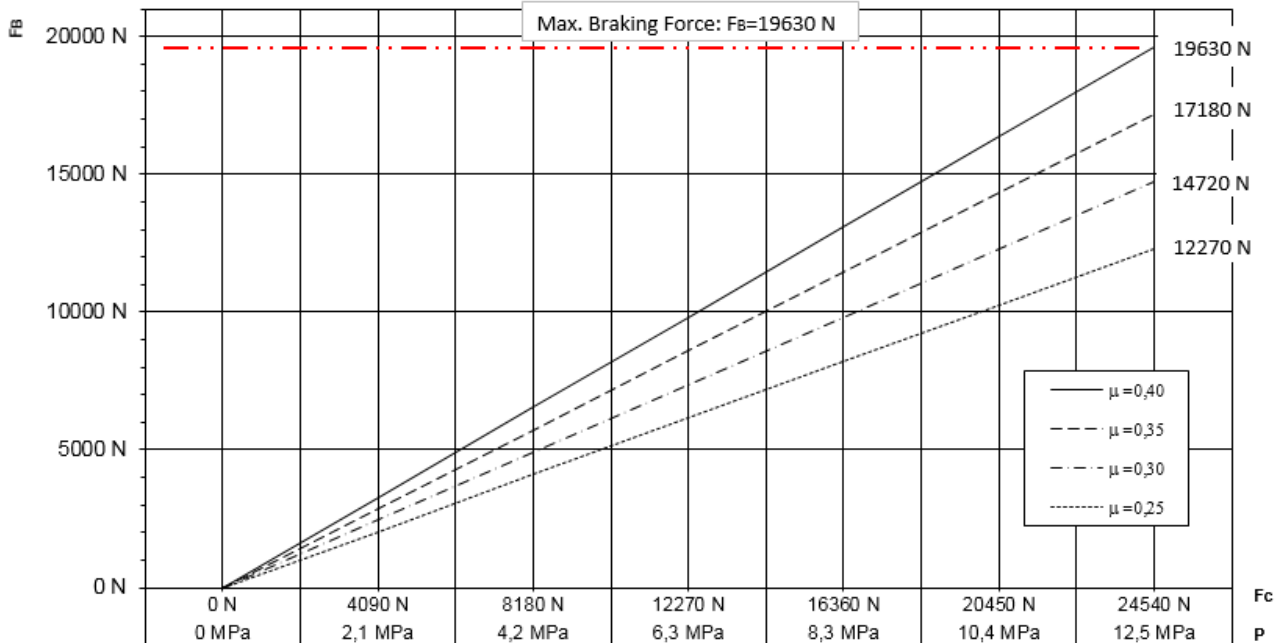


DATA SHEET

Name: DEB-0050-002
 Date: 03.06.2016
 Revision: -

TECHNICAL DATA AND CALCULATION FUNDAMENTALS FOR DISC BRAKE BSAB 50-X-1XX (SIDE MOUNT M24)



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

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

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

$$F_C = A \cdot P \cdot 100 \quad [\text{N}]$$

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 [cm²], P [MPa] and μ 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 WxHxD (approx):	154 x133 (+C) x120 mm
Pad width:	62 mm
Brake pad thickness for new pad (organic):	14 mm
Pad area (organic):	7030 mm ² (*)
Max. wear of pad (organic):	6mm (*) (=8mm thick)
Nominal coefficient of friction:	$\mu = 0.4$
Total piston area - each caliper:	19,63 cm ²
Volume for each caliper at 1 mm stroke:	19,63 cm ³
Volume for each caliper at 3 mm stroke:	58,90 cm ³
Actuating time (guide value for calculation):	0.4 sec
Pressure connection/port:	G1/8
Drain connection port:	G1/8
Recommended pipe size:	8/6 mm
Max. operating pressure:	P=12.5 MPa
Operating temperature range	
General usage:	-20°C to +70°C

(C = Brake disc thickness)

(For temperatures outside this range contact Svendborg Brakes)

(*) On each brake pad - thickness stated is minimum thickness before replacement