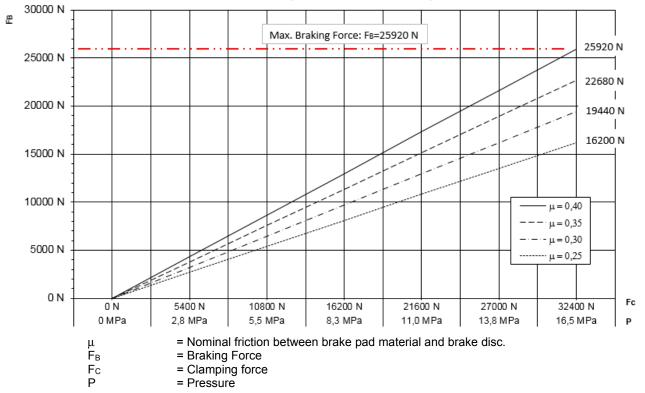
DATA SHEET

Name: DEB-0050-001 Date: 22.11.2013

Revision: C

TECHNICAL DATA AND CALCULATION FUNDAMENTALS FOR DISC BRAKE BSAB 50-X-2XX (REAR MOUNT)



$$M_{\rm B} = \mathbf{a} \cdot \mathbf{F}_{\rm B} \cdot \frac{(\mathbf{D}_{\rm O} - 0.056)}{2} \quad [Nm]$$

$$F_{\rm B} = F_{\rm C} \cdot 2 \cdot \mu \quad [N]$$

$$F_{\rm C} = \mathbf{A} \cdot \mathbf{P} \cdot 100 \quad [N]$$

Where:

a is the number of callipers acting on the disc

F_B is the braking force according to table above [N]

Do is the disc outer diameter [m]

Fc 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: 154 x133 (+C) x120 mm

Pad width: 62 mm
Brake pad thickness for new pad (organic): 14 mm
Pad area (organic): 7030 mm² (*)

Max. wear of pad (organic): 6 mm (*) (=8 mm thick)

Nominal coefficient of friction: $\mu = 0.4$ Total piston area - each caliper: 19.63 cm² Volume for each caliper at 1 mm stroke: 19.63 cm³ Volume for each caliper at 3 mm stroke: 58,90 cm³ 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 P=16.5 MPa Max. operating pressure:

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 in minimum thickness before replacement

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

