





BRAKE EXPLANATION – K-DAF/1120-DS

K = KateelD = DirectA = Acting

F = Fail-safe brake

1120 = Clamping force - 1120 = 2,60,000 N

DS = Dual Spring

CALCULATION

 $FB = FC \times 2 \times \mu$

 $M_B = a X F_B X \frac{(D_O - 0.2)}{2}$

MB = Braking torque (Nm)

a = Number of calipers acting on the disc

FB = Braking force according to table (N)

D0 = Braking disc outer diameter (m)

 μ (Co-efficient of friction) = 0.4

0.2= Brake pad width (m)

COMMON FEATURES

Weight: ~ 250 kg

Brake pad width: 200 mm

Area per brake pad: 37,224 mm2 – sintered material

Max. wear of each brake pad: 5 mm

Total piston area: 176 cm2

Oil volume - 1mm stroke: 17.6 cm3

Pressure connection port: 2 ports – 1/2" B.S.P.

Min. recommended pipe size: 10/8 - Ø10 mm (OD)

Ø8mm(ID)

Max. operating pressure: 230 bar

Temperature range: -20°C to +80°C

Min Outer Disc Diameter: 800mm

Max. Outer Coupling Diameter: 412mm

Disc thickness: 20 mm – 50 mm

The K-DAF/1120-DS is a spring applied and hydraulically released fail safe disc brake with a clamping force up to 2,60,000 N.

Brake type	Max. Clamping force		Fb Braking Force		Operating
	1mm Air Gap	2mm Air Gap	1mm Air Gap	2mm Air Gap	pressure
K-DAF/1020-DS	46000 N	39100 N	36800 N	31280 N	40 bar
K-DAF/1030-DS	67000 N	56950 N	53600 N	45560 N	50 bar
K-DAF/1040-DS	88000 N	74800 N	70400 N	59840 N	65 bar
K-DAF/1050-DS	110000 N	93500 N	88000 N	74800 N	80 bar
K-DAF/1060-DS	132000 N	112200 N	105600 N	89760 N	95 bar
K-DAF/1070-DS	154000 N	130900 N	123200 N	105600 N	115 bar
K-DAF/1080-DS	176000 N	149600 N	140800 N	119680 N	130 bar
K-DAF/1090-DS	197000 N	167450 N	157600 N	133960 N	145 bar
K-DAF/1100-DS	218000 N	185300 N	174400 N	148240 N	160 bar
K-DAF/1110-DS	238000 N	202300 N	190400 N	161840 N	175 bar
K-DAF/1120-DS	260000 N	221000 N	208000 N	176800 N	190 bar

K-DAF-1120-DS-DUAL SPRING

- 1. Few moving parts enable short response time and fast braking.
- 2. Mounting is very easy due to that reduced installation costs.
- 3. Replacement of brake pad is easy with removable brake pad holder.
- 4. Retraction springs for automatic retraction, when the brake is withdrawn.
- 5. Drain ports for any hydraulic oil leakage.

FEATURES

- 1. Brake ON/OFF and pad wear switches.
- 2. Sintered brake pads.
- 3. Hydraulic power pack to operate the brake.



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