



## DISC BRAKES EKB

## ENGAGED BY SPRINGS AND DISENGAGED BY ELECTROMAGNET

THEY ARE APPLIED WHERE REQUESTS FOR BRAKING OF ROTATING MACHINE PARTS OR OF DRIVE ARE ASKED - BY ACCIDENTAL BREAK OF ELECTRIC ENERGY OR IN THAT CASES WHERE THE CLUTCH IS TO BE ENGAGED FOR A LONGER PART OF THE WORKING CYCLE. THEY ARE USED FOR EXAMPLE ON DRIVES OF ROLLING MILLS FOR SECURING OF THE POSITION OF ADJUSTABLE ROLLS, IN DRIVES OF WIND-POWER PLATNS, RESPECTIVELY IN EQUIPMENT WITH ANALOGOUS WORKING CHARACTERISTIC.



## MAIN TECHNICAL DATA AND DIMENSIONS (mm)

Size			EKB 25	EKB 63	EKB 100	EKB 160	EKB 250	EKB 400	EKB 630	EKB 1000
Torque Max.torque Coil by 20°C	Nm Nm		250	630 750	1000 1200	1600 1920	2500 3000	4000 4800	6300 7560	10000 12000
- Voltage - Current - Input	V A W		24 5 120	24 7.5 180	110 2 220	110 2.8 308	110 3.45 380	110 4.14 455	110 5 550	110 5.5 605
Dimensions:	A B C E R S	mm mm mm mm mm	237 193 115 100 12xM8 4x8	305 256 155 130 12xM10 4x10	360 300 180 150 12xM10 4x10	470 410 230 260 12xM12 4x12	530 440 250 280 16xM12 4x12	590 526 280 310 16xM16 4x16	675 610 310 350 16xM16 4x16	765 660 350 400 16xM20 4x20
Bore range: dH7			35 40 45	45 50 55	50 55 60	65 70 75 80 85	85 90 95 100	100 105 110 115	105 110 115 120	120 130 140 150
Length dimensions:	J K L L <sub>2</sub> L <sub>1</sub> P <sub>1</sub> P <sub>2</sub>	 mm mm mm mm mm mm	3 18 77 105 - 0.3 0.5	4 25 92 128 - 0.6 1	4 30 110 150 - 0.6 1.1	6 23 115 185 15 0.7 1.2	6 13 125 185 15 0.9 1.5	6 13 135 200 20 1	8 18 140 220 30 1.2 1.9	8 18 165 255 35 1.4 2.2
Angle in degrees  Moment of innert.,,J"  Weight  Maxim. revolutions'	х	kgm² kg min-1	15 15 0.009 23 1500	15 15 0.035 46 1500	15 15 0.077 75 1500	15 9 0.313 148 1500	18 9 0.515 208 1200	18 9 0.995 290 1200	18 9 1.884 417 1000	18 15 3.185 603 1000

<sup>\*</sup>to agree the higher rotatioins with producer

By electrically actuated disk clutches the torque is caused by friction between the functional surfaces of the brake, which are compressed by set of compressing springs when the electric energy supply is broken up. The brake is disengaged when it is under voltage. By clutches, which are for longer time of running under voltage, it is recommended to execute the connection so, that simultaneously with releasing of the brake the time switch reduces the higher component of field voltage on to the running voltage. By running voltage the current in coil is reduced on to the half of the values, which are stated in the table.

The electrically actuated disc brakes consist of unrotating member and rotating one.

The unrotating member is formed by magnet body with field coil and a set of functional compressing springs, on which the geared shell including the adjustable cover and its securing are rigidly fixed. There is an axial shiftable metal plate in the guide bush. In the front wall of magnet body the screws and pins are located on the same pitch circle, by means of which the complete brake is fixed on to the immoveable working equipment.

The rotating member is formed by a carrier and a brake disk with reveted on the friction facing. The brake disk is axially shiftable in guiding bush of the carrier. The brake is ringless. The cable outlets from the field coil are leakaged in the steady terminal board. By size EKB 100 and larger the earthing pin is lead into the terminal board. The brake is secured for working in not lubricated environment. The air gap of the disk brake is changeable. During the operation the wear of friction facing enlarges and it is to be controlled and adjusted to specified value.

By brakes, used for higher revolutions than the maximum, the braking disc is produced of forged steel. In the brake disk there are pressed-on the friction rollers with double-sided friction layer - diafrikt K4 (sinterbronze).



750 53 PŘEROV • CZECH REPUBLIC TEL. 0641/23 36 30, 23 36 33 FAX 0641/20 31 82, 20 31 60



Quality system certified according to DIN ISO 9001