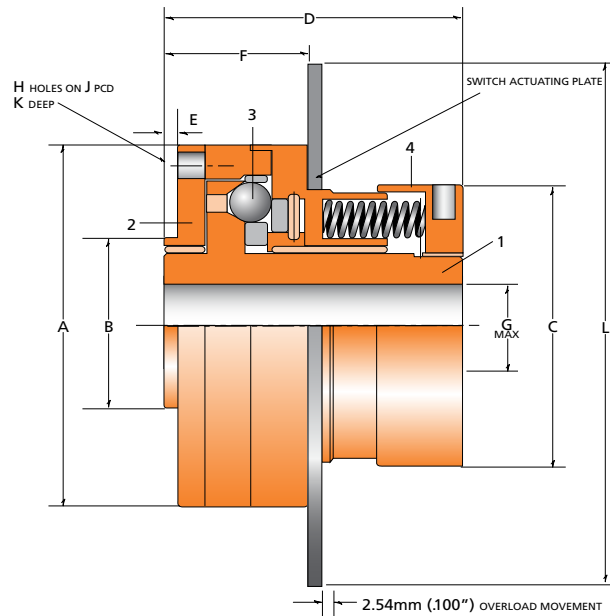


Brunel Torque Limiting Clutches

Type JCB

Automatic Reset Release Torque: 10 to 150 lb ft, 14 to 210Nm



Technical Features

- Instant release at pre-set torque
- Smooth hold-out for one revolution
- Means for motor switch-off
- Automatic self-engagement on restart without loss of phasing

Model	① Release Torque		④ Max Speed rpm	Dimensions in mm and inches											Weight Kg lb
	Min. Nm lb ft	Max. Nm lb ft		A	③ B	C	D	E	F	G Max	H	J	K	L	
JCB1	14	48	250	76	35	60	62	2.5	31	16	3-	66	8	120	1.36
	10	35		2.98	1.376/1.377	2.37	2.44	0.098	1.23	0.63	1/4-20	2.60	0.31	4.72	3
JCB3	42	210	250	94	54	87	66	3	34	28	6-	84	11	130	2.80
	30	150		3.70	2.123/2.125	3.44	2.60	0.118	1.33	1.13	1/4-20	3.31	0.44	5.11	6.20

- ① Lower release torques can be achieved. Consult Brunel Corporation.
- ② Tolerance on spigot diameter B is F7 to BS 4500:1969.
- ③ For higher release torques use Type B on page 9.
- ④ Standard tolerances on keyways is JS9 and on bores H8 to BS 4500:1969.
- ⑤ Applicable to all variants.

Normal Running

The drive is transmitted between the hub flange 1 and the housing 2 by the balls 3, spring-loaded into the pockets on the flange face.

Disengagement

On overload, the balls are displaced axially through the housing, further compressing the springs. Once out of their pockets, the balls roll on the face of the hub flange for one revolution before re-engaging and synchronizing the drive.

Torque Adjustment

The release torque is set by tightening nut 4 thus increasing the spring pressure. After setting, the nut is locked with a set screw and plug.

Installation

Clutches can be supplied pilot bored or finish bored and keywayed. The hub may be fitted to either shaft and should be located against a shoulder to resist the resetting spring force and locked by means of set screw in the hub flange. The drive flange may be replaced by a sprocket, pulley, etc., or connected to a coupling. See pages 12 and 13.

Application

This type of protection is ideally suited to drives such as wrapping and packing machinery where it is essential to restart in the correct sequence and where access for manual resetting is not available.

Type JC clutches should always be used with a limit switch to bring the drive to rest within a few revolutions thus preventing possible damage by continual releasing and resetting.