

# CENTRIFUGAL BRAKES

## Description

Their main function is to **limit** the descent speed in the event of motor failure. They work through the **action of centrifugal force**, without any additional external supply, making them suitable for safety applications.

The DBQ centrifugal brake is designed to be fitted between motor and gearbox with standard IEC B5 flanges and for speeds of 1500rpm or 1800rpm.

The main feature of the DBQ centrifugal brakes is that **they can be inhibited at will**, quickly and simply. This makes it possible to test the safety brake that acts at greatest speed and is fitted on the same machine.

## Operation

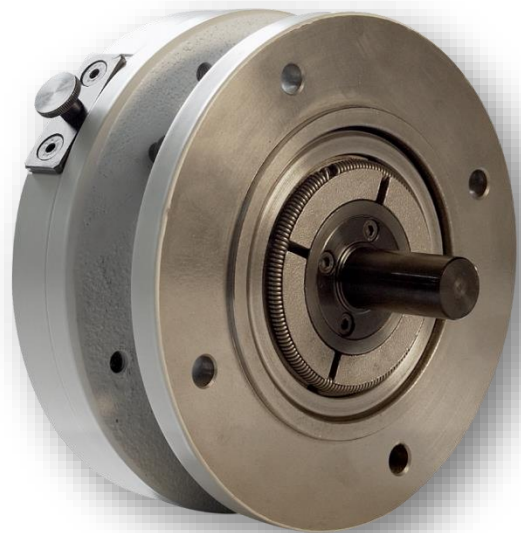
**Motor and brake turn faster than nominal speed with the brake applied.**

When for any reason the turning speed of the brake should exceed the nominal, the flyweights defeat the action of the springs and drag against the internal wall of the fixed drum, causing brake friction.

**Motor and brake turn faster than nominal with the brake disabled.**

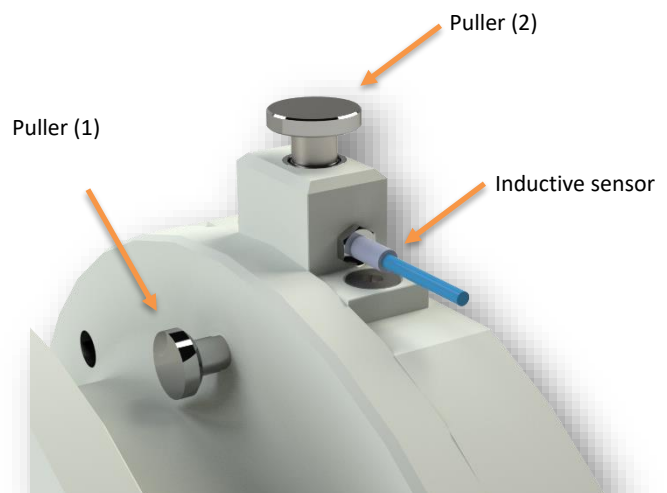
When making a safety brake drop test, the centrifugal brake is disabled to prevent the flyweights exerting a braking force and the brake acts as a passive element and allows the speed to increase sufficiently to bring the safety brake engage.

## DBQ Type



## Release

To release the brake, slide puller (1) and without releasing it, slide puller (2). Finally, release puller (1) and it returns to its initial position alone.

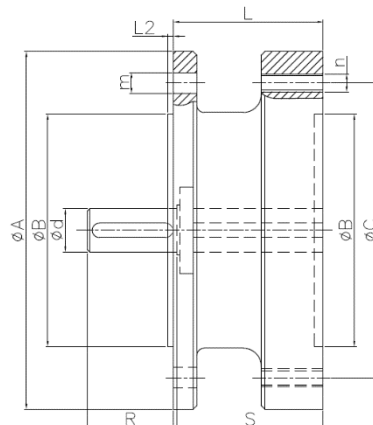


# CENTRIFUGAL SAFETY BRAKES

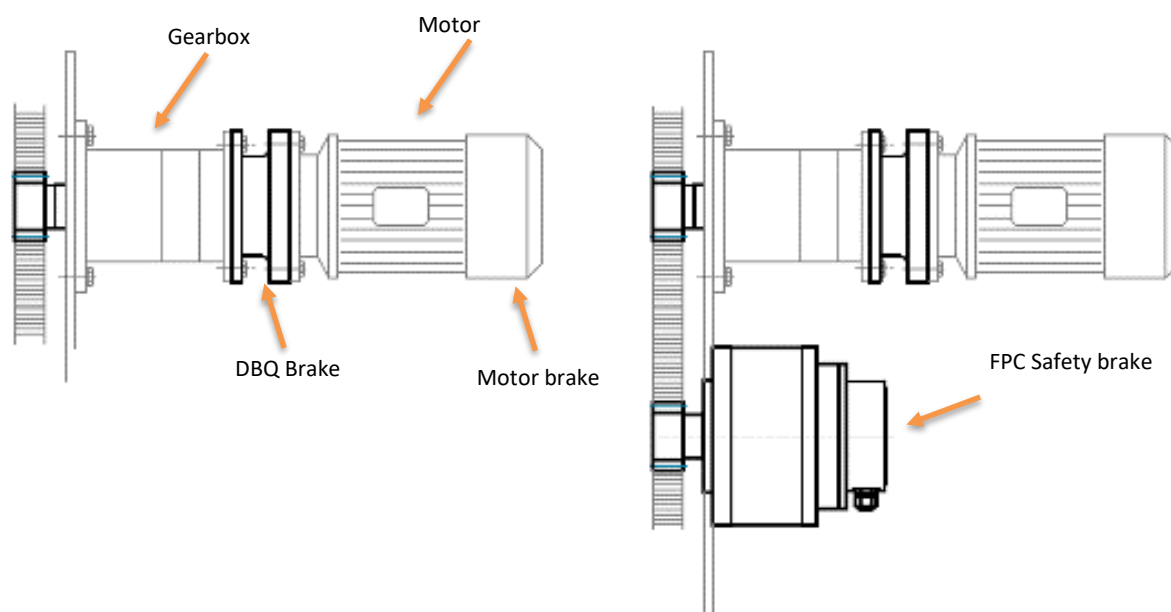
## DBQ Type

## Dimensions

		DBQ-20	DBQ-40	DBQ-80
Maximum power	<b>kW</b>	4.5	12	24
Torque (motor 1500 rpm)	<b>Nm</b>	21@1900 rpm	35@1900 rpm	75@1900 rpm
Torque (motor 1800 rpm)	<b>Nm</b>	23@2300 rpm	45@2200 rpm	80@2200 rpm
Brake starts	<b>rpm</b>	1550/1900	1550/1900	1550/1900
Max. motor	<b>kW</b>	2,2	5.5	11
Weight	<b>kg</b>	15	24	45
J – moment of inertia -	<b>kg cm<sup>2</sup></b>	53	106	225
	<b>A</b>	200	250	300
	<b>B</b>	130	180	230
	<b>C</b>	165	215	265
	<b>d</b>	19/24	28	38
	<b>d1</b>	19/24	28	38
	<b>L</b>	83.5	95.5	129
	<b>L2</b>	3.5	4	4
	<b>m</b>	4 x 11.5	4 x 13.5	4x13.5
	<b>N</b>	4 x M10	4 x M12	4xM12
	<b>R</b>	50	60	80
	<b>S</b>	83.5	93.5	112



## Applications examples



If you want to see the brake in operation, follow the link: <http://bit.ly/DBQEIDE>

