

Under mass-production

Cam-type One-Way Clutch equipped with Bearings - BB series

Product description

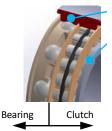
Power transmission is maximized via cams which are strategically positioned between the inner and outer races to transmit torque equally. Bearings are equipped to guarantee concentricity of input and output shafts.

Features

Compact clutches with bearing function achieving high torque transmission

Clutches and bearings come preinstalled as a package.

→ Axial space saving is realized whilst maintaining power transmission capability.



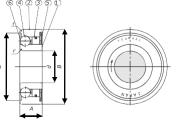
Outer race

Inner race

Product Line-up

Applicable shaft diameter: 15mm – 40mm, 7 types Clutches are press-fit to the shaft and housing

in the same way as the bearing.



Inner race
Outer race

3. Cam cage

4. Ball bearing

5. Shield

🕂 Space savings

Engine drives

the Pump

Chain

Motor drives

the Pump

Tower transmission capability	er transmission capab	ility
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Numerous small cams provide bigger torque transmission capacity than a shell-type roller clutch of the same size.

Compactness

The dimensions are identical to that of the standard series 6200 bearing with the added functionality of the one-way clutch.

Usability

The inner and outer rings are shared by the clutch and bearings, and are easily installed on the shaft.

Part	Rated	Ο.D. φB mm	l.D. φd mm	Width A mm	Bearing Loads		Weight
Number	Torque N∙m				Dynamic N	Static N	g
BB15	29	35	15	11	5,940	3,230	50
BB17	43	40	17	12	7,000	3700	80
BB20	61	47	20	14	8,500	4900	120
BB25	78	52	25	15	10,700	6,300	150
BB30	140	62	30	16	11,900	7,900	230
BB35	173	72	35	17	13,500	9,700	320
BB40	260	80	40	22	14,500	11,700	400

*Keyways are optional for both shaft and hole mounting types. *Please contact us for specifications other than listed above.

Motor

Cam Clutches

Benefits

Easy installation, making your products smaller and energy-efficient

As there is no need to consider the clutch and bearing separately, the customer's design efforts are greatly reduced. In addition, since there is no need for hardening and grinding to the mounting shafts, one-way clutch functions can be easily implemented. Furthermore, the size and weight of the customer's products can be reduced, greatly contributing to improved torque transmission efficiency.

Applications

Driving pumps with dual-drive

Each power source drives a pump in the most efficient area, and the power is seamlessly switched by the cam clutch.

Idling, reversing and slowing down (engine off)

- Pump is driven by the motor.
- Cam clutch A engages and drives the pump. Cam clutch B idles and does not transmit torque to the transmission.

Cruising (engine on)

- Pump is driven by the transmission.
- Cam clutch A idles and does not transmit torque to the motor. Cam clutch B engages and drives the pump.

With its unrivaled reliability, long life, and compact size, Tsubaki cam clutches contribute to the efficiency improvement of electrified vehicles.

Engine

transmissio

^{6.} Retainer