

BSEU SERIES CAM CLUTCH

General Information

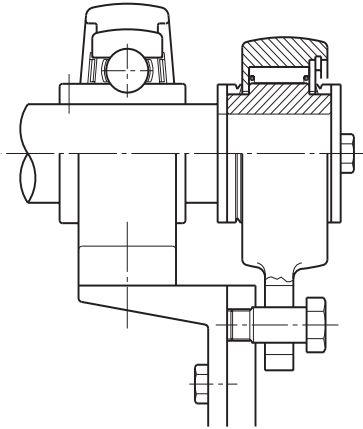
The Tsubaki Backstop Cam Clutch, a one-way clutch with the safest reverse rotation prevention qualities available, is manufactured mainly for installation on the low speed shaft of inclined conveyors or bucket elevators.

Compared to other one-way clutches (ratchet or roller ramp clutch) similar in size, overheating during times when the motor is idling is significantly lower. This helps maintain superb lubrication qualities thereby improving the wear life of the clutch. Extended fatigue life is also obtainable due to the clutch's large torque capacity.

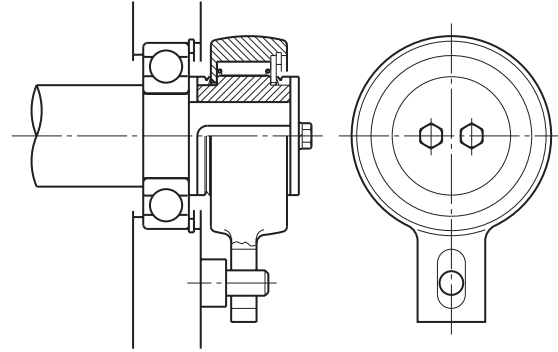
European style BSEU series can be used as reverse rotation prevention for an array of conveyor sizes. Applicable shaft sizes range from $\varnothing 20$ ~ $\varnothing 90$ mm and torque range from 216 ~ 4700Nm.

Other Possible Applications:

BSEU Series Cam Clutches may also be used for low frequency indexing applications. A maximum indexing frequency of no more than 50 cycles/min. and a safety ratio of 2.5 times higher than the working torque are required. Be sure that the stress applied to the torque arm functions at a right angle in relation to the shaft direction. If the stress that is applied to the torque arm is set diagonally, the inner parts of the clutch will entangle causing damage and drastically reduce the operational life of the Cam Clutch.

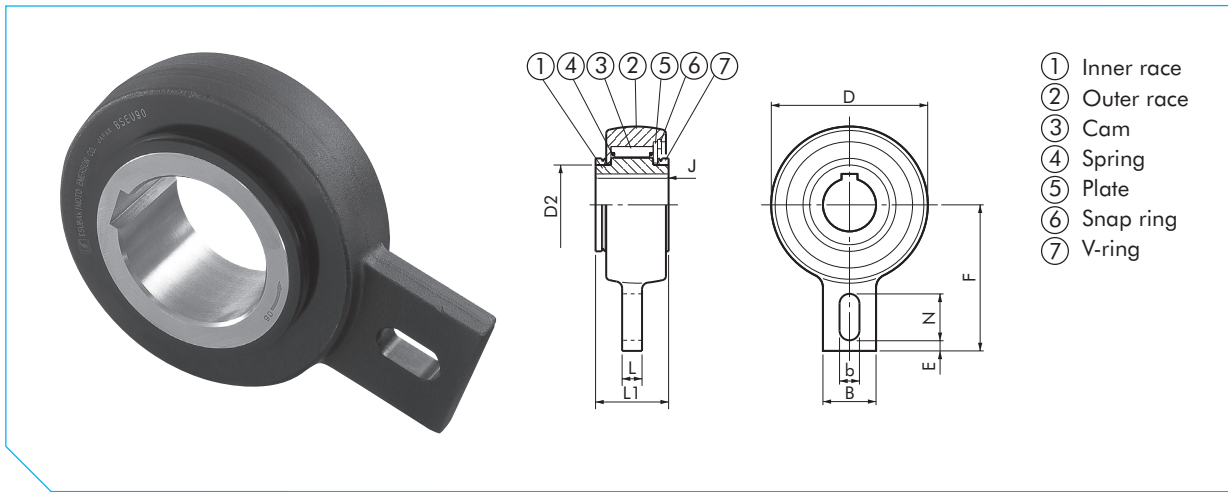


Installation example 1



Installation example 2

BSEU SERIES CAM CLUTCH



BSEU

Dimensions in mm

Model	Torque Capacity Nm	Max. Overrun. r/min	Bore Size H7	Inner Race Keyway	D	D2	L1	L	B	F	b	N	E	J	Approx. Mass kg/pc
BSEU25-20	216	500	20	6 x 2.8	83	42	35	12	40	90	15	35	5	1.5	1.00
BSEU25-25	216	500	25	8 x 3.3	83	42	35	12	40	90	15	35	5	1.5	0.95
BSEU40-20	1440	450	20	6 x 2.8	118	60	55	15	40	110	15	35	8	1.5	3.73
BSEU40-25	1440	450	25	8 x 3.3	118	60	55	15	40	110	15	35	8	1.5	3.65
BSEU40-30	1440	450	30	10 x 3.3	118	60	55	15	40	110	15	35	8	1.5	3.56
BSEU40-35	1440	450	35	12 x 3.3	118	60	55	15	40	110	15	35	8	1.5	3.45
BSEU40-40	1440	450	40	14 x 3.8	118	60	55	15	40	110	15	35	8	1.5	3.32
BSEU70-45	3140	350	45	16 x 4.3	265	90	59	20	80	140	18	35	10	1.5	7.44
BSEU70-50	3140	350	50	18 x 4.4	165	90	59	20	80	140	18	35	10	1.5	7.28
BSEU70-55	3140	350	55	18 x 4.4	165	90	59	20	80	140	18	35	10	2.0	7.09
BSEU70-60	3140	350	60	20 x 4.9	165	90	59	20	80	140	18	35	10	2.0	6.88
BSEU70-65	3140	350	65	20 x 4.9	165	90	59	20	80	140	18	35	10	2.0	6.68
BSEU70-70	3140	350	70	22 x 5.4	165	90	59	20	80	140	18	35	10	2.0	6.43
BSEU90-75	4700	250	75	22 x 5.4	190	120	63	20	80	165	20	40	15	2.0	10.10
BSEU90-80	4700	250	80	22 x 5.4	190	120	63	20	80	165	20	40	15	2.0	9.82
BSEU90-85	4700	250	85	22 x 5.4	190	120	63	20	80	165	20	40	15	2.0	9.82
BSEU90-90	4700	250	90	25 x 5.4	190	120	63	20	80	165	20	40	15	2.0	9.23

Installation and Usage

1. We recommend using a shaft tolerance of h7 or h8 for Cam Clutch installation.
2. ISO R773 (DIN6885.1) keyway is standard.
3. Before installation, verify that the direction of rotation of the inner race of the Cam Clutch (shown by the arrow on the inner race) is the same as the direction of rotation of the conveyor shaft.
4. When installing the Cam Clutch on the shaft, apply pressure only on the surface of the inner race with a soft hammer. Never strike the Cam Clutch with a steel hammer or apply unnecessary impact loads.
5. Always use a parallel key for installation onto the shaft and then fix the Cam Clutch with an end plate. Never use a tapered key. Allow for a clearance between the top of the clutch keyway and the top of the key for pressure ventilation. A pressure ventilation hole is provided on the keyway of the clutch's inner race.
6. Use the frame or a pin to eliminate outer race rotation.
7. Set a 0.5 mm degree clearance between the torque arm and the frame (torque arm stopper) or the long slit in the torque arm and the pin. If the torque arm is rigidly mounted, it will apply a load to the Cam Clutch which may damage it.
8. The Cam Clutch is pre-greased with low temperature grease before shipment and is ready for installation and operation. No lubrication maintenance is required. The ambient operational temperature range is -40°C to +50°C. However, the maximum temperature should be determined depending on the number of shaft revolutions. Further, if the number of shaft revolutions is low, a higher ambient operational temperature range is allowable. Consult Tsubaki for more details.