

# Bearings

The motors are provided with bearings according to the tables below.

Greater axial forces can be tolerated if the motors are provided with angular contact ball bearings.

## Standard design: deep groove ball bearings

Foot- and flange-mounted motor			
Motor size		D-end	N-end
63		6202-2Z/C3	6201-2Z/C3
71		6203-2Z/C3	6202-2Z/C3
80		6204-2Z/C3	6203-2Z/C3
90		6205-2Z/C3	6204-2Z/C3
100		6306-2Z/C3	6205-2Z/C3
112		6306-2Z/C3	6205-2Z/C3
132 <sup>1)</sup>		6208-2Z/C3	6206-2Z/C3
132 <sup>2)</sup>		6308-2Z/C3	6206-2Z/C3
160		6309-2Z/C3	6209-2Z/C3
180		6310-2Z/C3	6209-2Z/C3
200		6312-2Z/C3	6210-2Z/C3
225		6313-2Z/C3	6212-2Z/C3
250		6315-2Z/C3	6213-2Z/C3
280	2 pole	6315/C3	6213/C3
280	4-8 pole	6316/C3	6213/C3

<sup>1)</sup> all types except <sup>2)</sup>SM\_

Note that in such cases the axial force must only operate in one direction.

Motor versions with roller bearings tolerate greater radial forces.

## Alternative design with roller bearings

It is recommended to use roller bearings in belt drives for motor sizes 160 to 280.

See variant code 037 under the heading “Bearings and lubrication”.

Foot- and flange-mounted motor			
Motor size		D-end	N-end
63		-	6201-2Z/C3
71		-	6202-2Z/C3
80		-	6203-2Z/C3
90		NU 205	6204-2Z/C3
100		NU 306	6205-2Z/C3
112		NU 306	6205-2Z/C3
132 <sup>1)</sup>		NU 208	6206-2Z/C3
132 <sup>2)</sup>		NU 308	6206-2Z/C3
160		NU 309 ECP	6209-2Z/C3
180		NU 310 ECP	6209-2Z/C3
200		NU 312 ECP	6210-2Z/C3
225		NU 313 ECP	6212-2Z/C3
250		NU 315 ECP	6213-2Z/C3
280	2 pole	NU 315 ECP	6213/C3
280	4-8 pole	NU 316 ECP	6213/C3

<sup>1)</sup> all types except <sup>2)</sup>SM\_

## Alternative design: angular contact ball bearings

See variant codes 058 and 059 under the heading “Bearings and lubrication”.

Motor size	D-end		N-end	
		058		059
63		-		-
71		-		-
80		-		-
90		7205 B		7204 B
100		7306 B		7205 B
112		7306 B		7205 B
132 <sup>1)</sup>		7208 B		7206 B
132 <sup>2)</sup>		7308 B		7206 B
160		7309 BEP		7209 BEP
180		7310 BEP		7209 BEP
200		7312 BEP		7210 BEP
225		7313 BEP		7212 BEP
250		7315 BEP		7213 BEP
280	2 pole	7315 BEP		7213 BEP
280	4-8 pole	7316 BEP		7213 BEP

<sup>1)</sup> all types except <sup>2)</sup>SM\_

## Transport locking

Motors provided with roller bearings or angular contact ball bearings are fitted with a transport lock to prevent damage to the bearings, due to vibration, during transport.

## Axially locked bearings

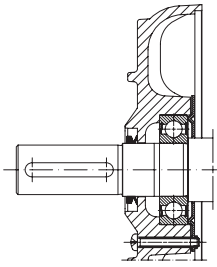
The table below shows which of the motor's bearings are axially locked in the bearing seat. In motor size 63 the locking is done by an internal retaining ring, in motor sizes 71 to 280 by an inner bearing cover.

Motor size	Foot-mounted motors	Flange-mounted motors	
		Large flange	Small flange
63	On request at D-end	On request at D-end	On request at D-end
71-132	D-end <sup>1)</sup>	D-end 1)	D-end 1)
160-280	D-end	D-end	-

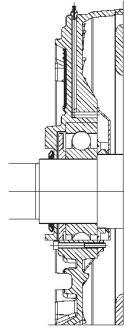
<sup>1)</sup> A spring-washer at the N-end presses the rotor toward the D-end.

## Bearing seals

Motor size	Number of poles	Standard design, axial seal		Alternative design Radial seal (Din3760) Variant code 073
		D-end	N-end	
71	2-12	V-16A	Labyrinth seal	17x28x7
80	2-12	V-20A	Labyrinth seal	20x40x7
90	2-12	V-25A	Labyrinth seal	25x42x7
100	2-12	V-30A	Labyrinth seal	30x47x7
112	2-12	V-30A	Labyrinth seal	30x47x7
132	2-12	V-40A	Labyrinth seal	40x62x7
160	2-12	V-45A	V-45A	45x65x8
180	2-12	V-50A	V-45A	50x72x8
200	2-12	V-60A	V-50A	60x80x8
225	2-12	V-65A	V-60A	65x85x8
250	2-12	V-75A	V-65A	75x95x8



Motor sizes 71 - 132



Motor sizes 160 - 250