

ASAHI

Stainless Steel Ball Bearing Units



JP-1973



ISO 9002
JQA-1973

MUCP200 MUCF200
MUCFL200 MUCT200
MUCPA200 MUCFC200
MB

NEW



ASAHI SEIKO CO., LTD.

Stainless Steel Ball Bearing Units

This series provide the excellent corrosion resistance as well as self-alignment; all stainless steel insert bearings incorporated with solid stainless steel housings. The insert bearings are available with food grade lubricant USDA/FDA compliant, which can serve also at the higher temperature when applied with proper bearing internal clearance and sealing devices.

Feature 1

Excellent corrosion resistance:

Both insert bearings and housings are made of stainless steel suitable against many harsh atmospheres with stainless steel slingers.

Feature 2

Best for Food Processing Machines:

Insert bearing MUC-type can have food grade lubricant, upon request, good for Food Processing Plants. Insert bearing MB-type is pre-lubricated with the food grade lubricant as standard.

Feature 3

Dimensionally Interchangeable with the ordinary JIS-types:

Insert bearing MUC-type is interchangeable with UC-type, and MB-type with B-type ball bearings.

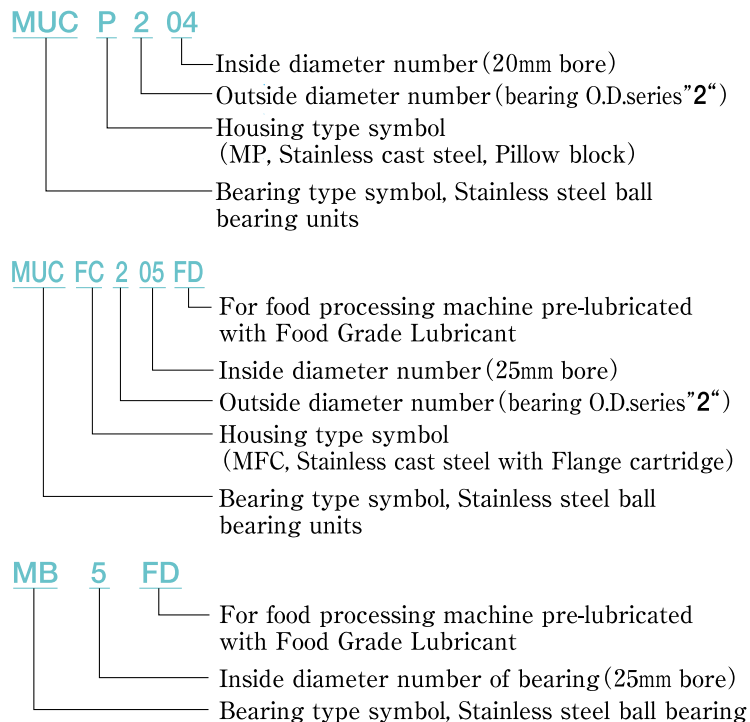
MATERIAL

Parts		Material	
Bearing	Inner & outer rings	Stainless steel	SUS440C (EQ.)
	Balls	Stainless steel	SUS440C
	Slinger	Stainless steel	SUS304
	Retainer	Stainless steel	SUS304
	Rubber seal	Nitril/Silicon	
	Set-screw	Stainless steel	SUS304
Housing		Stainless cast steel	SCS13

RECOMMENDED TIGHTENING TORQUE

Bearing No.	Hex. Key Size	Tightening torque (N·m)
MB4	2.5	2.4
MB5~MB6 MUC201~MUC206	3	3.9
MB7~MB8 MUC207~MUC209	4	8.3
MUC210	5	16

NUMBERING SYSTEM OF BEARING UNITS



CORROSION—RESISTANCE

◎; Excellent ○; Good △; Conditional ×; Poor

Series	Material	Chemicals										
		Distilled water	Sewage	Seawater	Hydrochloric acid	Nitric acid	Sulfuric acid	Sodium hydroxide	Calcium hydroxide	Hydrogen peroxide	Methyl alcohol	
UCP	High carbon chromium bearing steel SUJ2	○	△	×	×	×	×	×	×	×	×	×
	Gray cast iron FC200	○	△	×	×	×	×	×	×	×	×	×

Note: Applicable conditions of the abovementioned chemicals (approx.10% solution) do not mean "fully dipped-in" operation, but splashing each chemical solution over the bearing units.

TOLERANCES

(1) TOLERANCE FOR BEARINGS

Unit : μm

Inner ring							Outer ring					
Nominal bore dia. (mm)		Deviation of mean bore dia. in plane of inner ring (Δd_{mp})		Variation of bore dia. in plane of inner ring. V_{dp}	Deviation of width ΔB_s (reference)		Radial runout of inner ring K_{ia} (reference)	Nominal outside dia. (mm)		Deviation of mean outside dia. (ΔD_m)		Radial runout of outer ring K_{ea} (reference)
Over	Incl.	High	Low		High	Low		Over	Incl.	High	Low	
6	10	+12	0	8	0	-120	15	30	50	0	-11	20
10	18	+15	0	10	0	-120	15	50	80	0	-13	25
18	30	+18	0	12	0	-120	18	80	120	0	-15	35
30	50	+21	0	14	0	-120	20					

(2) TOLERANCES FOR HOUSINGS

Unit : μm

Housing No.	Pillow type	Flange type				Take-Up type				
MP,MPA MF,MFL MFC MT	Deviation of distance from mounting face to centre of spherical seat ΔH_s	Positional tolerance of bolt hole X ΔA_2s	Deviation of spigot joint outside diameter ΔH_3s	Deviation of raceway groove width ΔA_1s	Deviation of distance between both groove bottoms ΔH_1s	Symmetricity tolerance of both groove-side face X (Max.)				
							High	Low	High	Low
203~206 207~210	± 150	± 500	700	0 0	-46 -54	+200	0	0	-500	500

SHAFT TOLERANCES

Recommended shaft tolerances for this series are shown in the table below and the shaft must be straight and without burrs.

Shaft dia. (mm)		Recommended shaft tolerances (μm)		
		Normal		Tight
Over	Incl.	js7	h7	m6
6	10	± 7.5	0~-15	+15~+6
10	18	± 9	0~-18	+18~+7
18	30	± 10.5	0~-21	+21~+8
30	35	± 12.5	0~-25	+25~+9

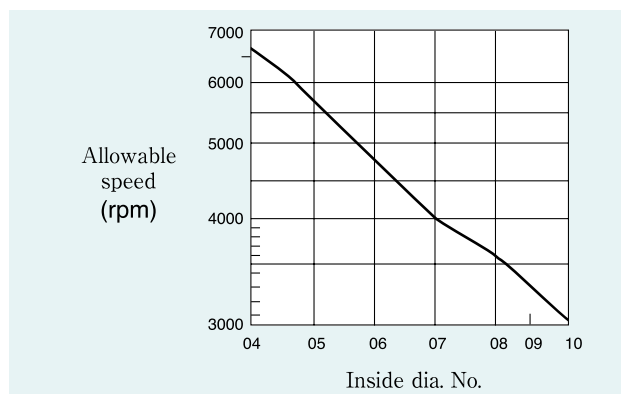
OPERATING TEMPERATURE RANGE

※ MB-FD	-15~+100°C
MUC200	-20~+120°C
※ MUC200FD	-20~+120°C
※ MUC200C4HR20	-20~+200°C

※ The insert bearings are supplied with Food Grade Lubricant authorized by USDA (United States Department of Agriculture) approved as USDA H-1 grade grease.

To specify, add suffix "C4HR20" for food processing machinery and high temperature application. Please be careful, however, for the grease not to touch food directly.

ALLOWABLE SPEED



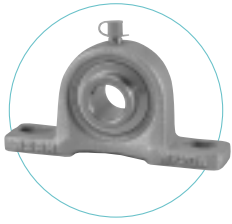
TYPICAL APPLICATIONS

Food processing machinery,
Chemical and Agricultural machinery, etc.

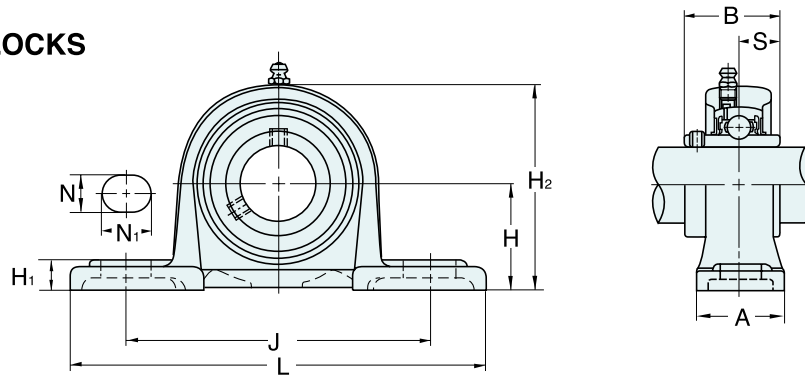
- ◆ Contact **ASAHI** or nearest **ASAHI** distributor for exact bearing selection.
- ◆ For higher security against beverage spillovers or high pressure washes, consult us for stainless steel end caps available in any type of stainless steel housings.

Stainless Steel Ball Bearing Units

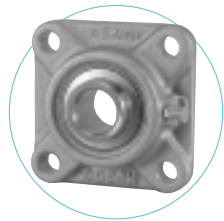
DIMENSIONS



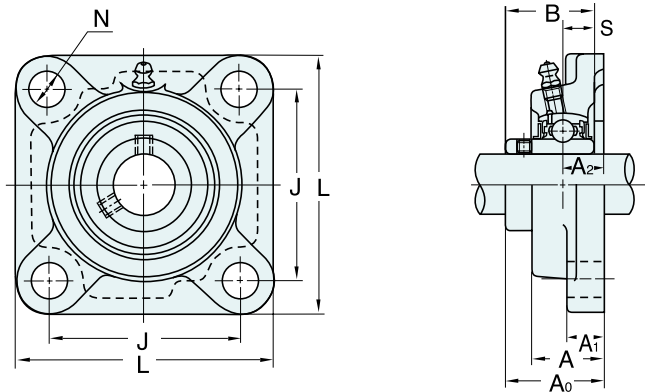
PILLOW BLOCKS MUCP200



Shaft dia. (mm)	Unit No.	Dimensions (mm)										Bolt Size	Bearing		Housing No.	Weight (kg)
		H	L	A	J	N	N ₁	H ₁	H ₂	B	S		Bearing No.	Basic Load Rating(kN) Cr Cor		
12	MUCP201	30.2	127	30	95	13	19	9	64	31	12.7	M10	MUC201	10.9 5.3	MP203	0.55
15	MUCP202	30.2	127	30	95	13	19	9	64	31	12.7	M10	MUC202	10.9 5.3	MP203	0.53
17	MUCP203	30.2	127	30	95	13	19	9	64	31	12.7	M10	MUC203	10.9 5.3	MP203	0.52
20	MUCP204	33.3	127	30	95	13	19	9	64	31	12.7	M10	MUC204	10.9 5.3	MP204	0.5
25	MUCP205	36.5	140	30	105	13	19	10	70	34.1	14.3	M10	MUC205	11.9 6.3	MP205	0.65
30	MUCP206	42.9	165	36	121	17	21	11	82	38.1	15.9	M14	MUC206	16.7 9.05	MP206	0.95
35	MUCP207	47.6	167	38	127	17	21	12	92	42.9	17.5	M14	MUC207	22 12.3	MP207	1.25
40	MUCP208	49.2	184	40	137	17	22	12	98	49.2	19	M14	MUC208	24.9 14.3	MP208	1.5
45	MUCP209	54	190	40	146	17	22	13	105	49.2	19	M14	MUC209	28.1 16.4	MP209	1.75
50	MUCP210	57.2	206	45	159	20	25	14	112	51.6	19	M16	MUC210	30.2 18.6	MP210	2.05

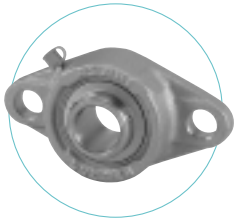


FOUR-BOLT FLANGE UNITS MUCF200

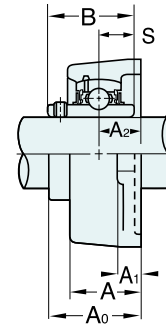
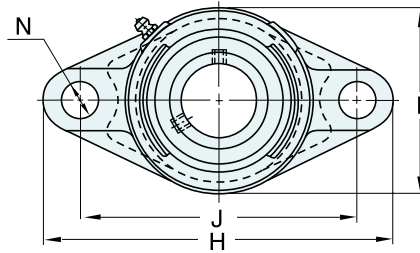


Shaft dia. (mm)	Unit No.	Dimensions (mm)										Bolt Size	Bearing		Housing No.	Weight (kg)
		L	A	J	N	A ₁	A ₂	A ₀	B	S	Bearing No.		Basic Load Rating(kN) Cr Cor			
12	MUCF201	86	25.5	64	12	12	15	33.3	31	12.7	M10	MUC201	10.9 5.3	MF204	0.7	
15	MUCF202	86	25.5	64	12	12	15	33.3	31	12.7	M10	MUC202	10.9 5.3	MF204	0.68	
17	MUCF203	86	25.5	64	12	12	15	33.3	31	12.7	M10	MUC203	10.9 5.3	MF204	0.67	
20	MUCF204	86	25.5	64	12	12	15	33.3	31	12.7	M10	MUC204	10.9 5.3	MF204	0.65	
25	MUCF205	95	27	70	12	14	16	35.8	34.1	14.3	M10	MUC205	11.9 6.3	MF205	0.9	
30	MUCF206	108	31	83	12	13.5	18	40.2	38.1	15.9	M10	MUC206	16.7 9.05	MF206	1.2	
35	MUCF207	117	34	92	14	11	19	44.4	42.9	17.5	M12	MUC207	22 12.3	MF207	1.6	
40	MUCF208	130	36	102	16	11	21	51.2	49.2	19	M14	MUC208	24.9 14.3	MF208	2.15	
45	MUCF209	137	38	105	16	13	22	52.2	49.2	19	M14	MUC209	28.1 16.4	MF209	2.55	
50	MUCF210	143	40	111	16	13	22	54.6	51.6	19	M14	MUC210	30.2 18.6	MF210	2.65	

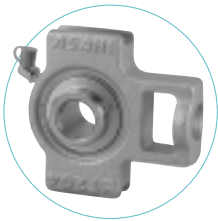
DIMENSIONS



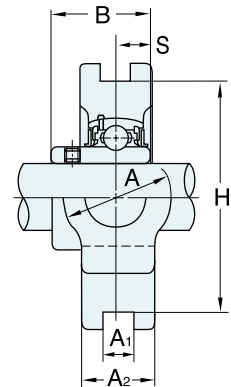
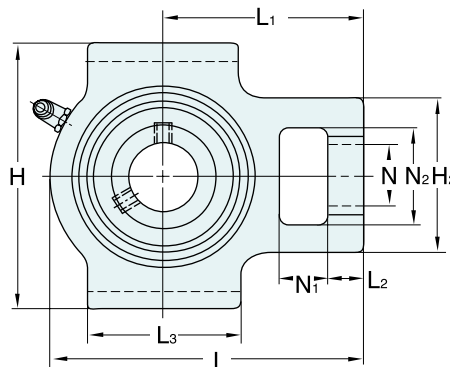
TWO-BOLT FLANGE UNITS MUCFL200



Shaft dia. (mm)	Unit No.	Dimensions (mm)										Bolt Size	Bearing			Housing No.	Weight (kg)
		H	L	A	J	N	A ₁	A ₂	A ₀	B	S		Bearing No.	Basic Load Rating(kN)			
														Cr	Cor		
12	MUCFL201	113	60	25.5	90	12	10	15	33.3	31	12.7	M10	MUC201	10.9	5.3	MFL204	0.4
15	MUCFL202	113	60	25.5	90	12	10	15	33.3	31	12.7	M10	MUC202	10.9	5.3	MFL204	0.38
17	MUCFL203	113	60	25.5	90	12	10	15	33.3	31	12.7	M10	MUC203	10.9	5.3	MFL204	0.37
20	MUCFL204	113	60	25.5	90	12	10	15	33.3	31	12.7	M10	MUC204	10.9	5.3	MFL204	0.35
25	MUCFL205	130	68	27	99	16	10	16	35.8	34.1	14.3	M14	MUC205	11.9	6.3	MFL205	0.5
30	MUCFL206	148	80	31	117	16	10	18	40.2	38.1	15.9	M14	MUC206	16.7	9.05	MFL206	0.8
35	MUCFL207	161	90	34	130	16	11	19	44.4	42.9	17.5	M14	MUC207	22	12.3	MFL207	1.05
40	MUCFL208	175	100	36	144	16	11	21	51.2	49.2	19	M14	MUC208	24.9	14.3	MFL208	1.35
45	MUCFL209	188	108	38	148	19	13	22	52.2	49.2	19	M16	MUC209	28.1	16.4	MFL209	1.65
50	MUCFL210	197	115	40	157	19	13	22	54.6	51.6	19	M16	MUC210	30.2	18.6	MFL210	1.9



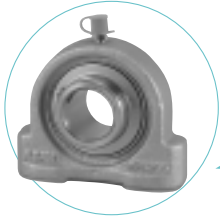
TAKE-UP MUCT200



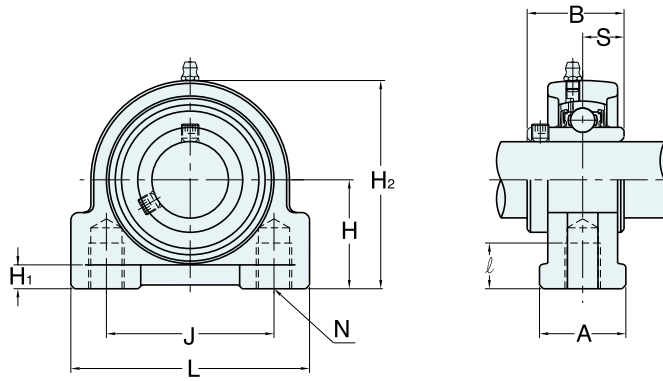
Shaft dia. (mm)	Unit No.	Dimensions (mm)															Bearing			Housing No.	Weight (kg)
		A	A ₁	A ₂	H	H ₁	H ₂	L	L ₁	L ₂	L ₃	N	N ₁	N ₂	B	S	Bearing No.	Basic Load Rating(kN)			
																		Cr	Cor		
12	MUCT201	32	12	21	89	76	46	92	60	10	44	19	18	32	31	12.7	MUC201	10.9	5.3	MT204	0.85
15	MUCT202	32	12	21	89	76	46	92	60	10	44	19	18	32	31	12.7	MUC202	10.9	5.3	MT204	0.83
17	MUCT203	32	12	21	89	76	46	92	60	10	44	19	18	32	31	12.7	MUC203	10.9	5.3	MT204	0.82
20	MUCT204	32	12	21	89	76	46	92	60	10	44	19	18	32	31	12.7	MUC204	10.9	5.3	MT204	0.8
25	MUCT205	32	12	22	89	76	46	96	61	10	44	19	18	32	34.1	14.3	MUC205	11.9	6.3	MT205	0.9
30	MUCT206	36.5	12	27	102	89	52	111	69	10	50	22	18	37	38.1	15.9	MUC206	16.7	9.05	MT206	1.4
35	MUCT207	37	12	30	102	89	58	127	77	13	56	22	18	37	42.9	17.5	MUC207	22	12.3	MT207	1.7
40	MUCT208	49	16	33	114	102	74	142	87	16	72	29	20	49	49.2	19	MUC208	24.9	14.3	MT208	2.6
45	MUCT209	49	16	34	117	102	74	143	87	16	72	29	20	49	49.2	19	MUC209	28.1	16.4	MT209	2.55
50	MUCT210	49	16	37	117	102	74	147	89	16	72	29	20	49	51.6	19	MUC210	30.2	18.6	MT210	2.65

Stainless Steel Ball Bearing Units

DIMENSIONS



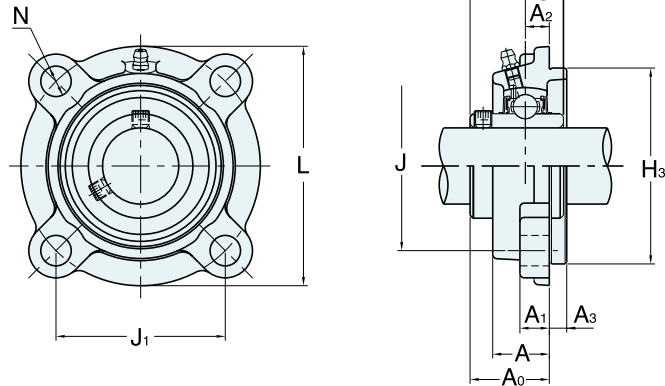
PILLOW BLOCKS MUCPA200



Shaft dia. (mm)	Unit No.	Dimensions (mm)										Bearing		Housing No.	Weight (kg)
		H	L	A	J	N	l	H ₁	H ₂	B	S	Bearing No.	Basic Load Rating(kN) Cr Cor		
12	MUCPA201	30.2	76	25.5	52	M10×1.5	12	5.7	60.9	31	12.7	MUC201	10.9 5.3	MPA204	0.49
15	MUCPA202	30.2	76	25.5	52	M10×1.5	12	5.7	60.9	31	12.7	MUC202	10.9 5.3	MPA204	0.47
17	MUCPA203	30.2	76	25.5	52	M10×1.5	12	5.7	60.9	31	12.7	MUC203	10.9 5.3	MPA204	0.46
20	MUCPA204	30.2	76	25.5	52	M10×1.5	12	5.7	60.9	31	12.7	MUC204	10.9 5.3	MPA204	0.44
25	MUCPA205	36.5	84	30	56	M10×1.5	15	8	70	34.1	14.3	MUC205	11.9 6.3	MPA205	0.61
30	MUCPA206	42.9	94	34	66	M14×2	18	9.4	82	38.1	15.9	MUC206	16.7 9.05	MPA206	0.95



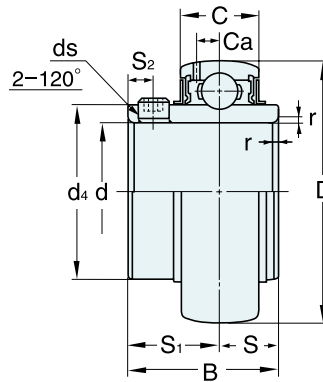
FLANGE CARTRIDGE MUCFC200



Shaft dia. (mm)	Unit No.	Dimensions (mm)										Bolt Size	Bearing		Housing No.	Weight (kg)	
		L	A	J	J ₁	N	A ₁	A ₂	A ₃	H ₃	B		S	Bearing No.			Basic Load Rating(kN) Cr Cor
25	MUCFC205	90	21	90	63.6	12	11	10	6	70	34.1	14.3	M10	MUC205	11.9 6.3	MFC205	0.69
30	MUCFC206	100	23	100	70.7	12	13	10	8	80	38.1	15.9	M10	MUC206	16.7 9.05	MFC206	0.88
35	MUCFC207	110	26	110	77.8	14	13.5	11	8	90	42.9	17.5	M12	MUC207	22 12.3	MFC207	1.14
40	MUCFC208	120	26	120	84.8	14	13.5	11	10	100	49.2	19	M12	MUC208	24.9 14.3	MFC208	1.49

DIMENSIONS

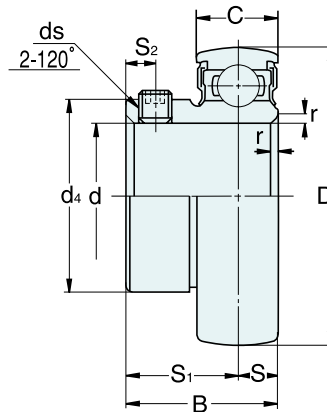
**BALL BEARINGS FOR UNITS
MUC200
MUC200C4HR20**



Shaft dia. (mm)	Unit No.	Dimensions (mm)											Basic Load Rating (kN)		Weight (kg)
		d	D	B	C	r	S	S ₁	S ₂	ds	Ca	d ₄	Cr	Cor	
12	MUC201	12	47	31	17	1	12.7	18.3	4.5	M 6 × 1	4.5	29	10.9	5.3	0.21
15	MUC202	15	47	31	17	1	12.7	18.3	4.5	M 6 × 1	4.5	29	10.9	5.3	0.19
17	MUC203	17	47	31	17	1	12.7	18.3	4.5	M 6 × 1	4.5	29	10.9	5.3	0.18
20	MUC204	20	47	31	17	1.5	12.7	18.3	4.5	M 6 × 1	4.5	29	10.9	5.3	0.16
25	MUC205	25	52	34.1	17	1.5	14.3	19.8	5	M 6 × 1	4.5	34	11.9	6.3	0.19
30	MUC206	30	62	38.1	19	1.5	15.9	22.2	5	M 6 × 1	5.1	40.5	16.7	9.0	0.31
35	MUC207	35	72	42.9	20	2	17.5	25.4	6	M 8 × 1	5.8	48	22.0	12.3	0.48
40	MUC208	40	80	49.2	21	2	19	30.2	8	M 8 × 1	6.2	53	24.9	14.3	0.62
45	MUC209	45	85	49.2	22	2	19	30.2	8	M 8 × 1	6.5	57.3	28.1	16.4	0.67
50	MUC210	50	90	51.6	23	2	19	32.6	9	M10×1.25	6.5	63	30.2	18.6	0.78

—MADE TO ORDER— For food processing machine pre-lubricated with Food Grade Lubricant, add suffix FD e.g. MUC205FD
For high temperature application of food processing machine, add suffix C4HR20 e.g. MUC205C4HR20

**BALL BEARINGS FOR UNITS
MB**

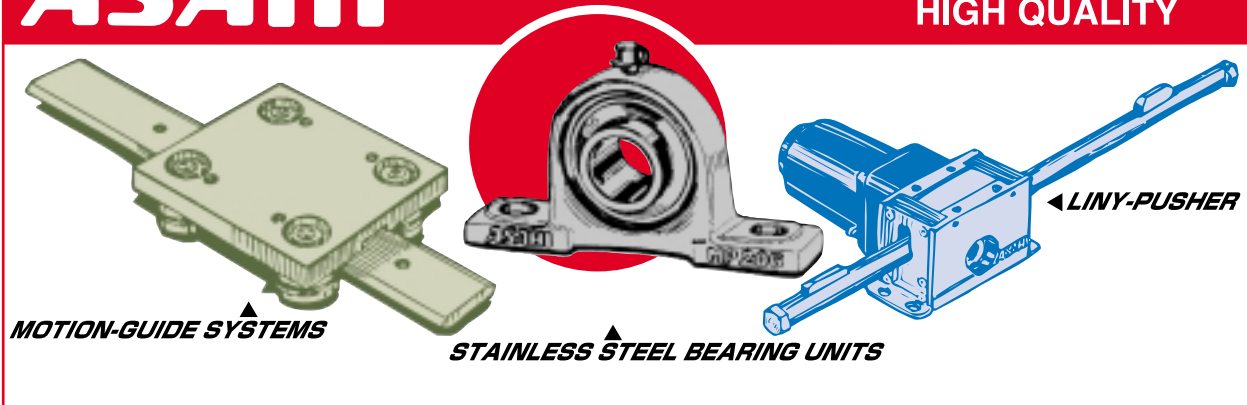


Shaft dia. (mm)	Unit No.	Dimensions (mm)											Basic Load Rating (kN)		Weight (kg)
		d	D	B	C	r	S	S ₁	S ₂	ds	d ₄	Cr	Cor		
20	MB4 FD	20	47	24.7	14	1.5	7	17.7	4.5	M5×0.8	29	10.9	5.3	0.12	
25	MB5 FD	25	52	27	15	1.5	7.5	19.5	5	M6×0.75	34	11.9	6.3	0.16	
30	MB6 FD	30	62	30.3	16	1.5	8	22.3	5	M6×0.75	40.5	16.7	9	0.25	
35	MB7 FD	35	72	32.9	17	2	8.5	24.4	6	M8×1	48	22	12.3	0.38	
40	MB8 FD	40	80	35.5	18	2	9	26.9	8	M8×1	53	24.9	14.3	0.49	

— Designs and specifications are subject to change without prior notice —

ASAHI

VERSATILE &
HIGH QUALITY



<http://www.asahiseiko.co.jp>

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