

# Housing units

<b>Mounting and dismounting</b>	Radial insert ball bearings must be handled with care before and during mounting. Their trouble-free operation is also dependent on the care taken during mounting.
<b>Delivered condition</b>	The housings have a coating of black primer paint (RAL 9005). The radial insert ball bearings are greased using a grease in grease group GA13, see Catalogue HR 1, Rolling Bearings. The housing units are supplied with a loose packed lubrication nipple and integrated end cap for the lubrication nipple as well as an Allen key.
<b>Storage and shelf life</b>	The units should be stored in dry, clean rooms with a temperature as constant as possible and at a relative humidity of max. 65%. The storage life of radial insert ball bearings is limited by the shelf life of the grease, see chapter Technical principles in Catalogue HR 1, Rolling Bearings.
<b>Removal from packaging</b>	Perspiration causes corrosion. Hands must therefore be kept clean and dry. Bearings should not be removed from their original packaging until immediately before mounting.
<b>Preparation for mounting</b>	The following preparatory measures for mounting should be taken: <ul style="list-style-type: none"><li>■ Ensure that the mounting tools and fixing screws are present.</li><li>■ Clean the shaft and remove any burrs.</li><li>■ Inspect the bearing seating surfaces on the shaft.</li><li>■ Keep bearing seating surfaces clean, dry and free of grease.</li></ul>

## Mounting of plummer block and flanged housing units

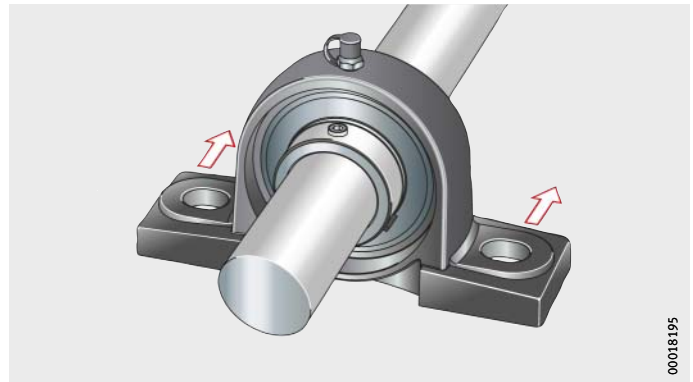


The assembly area should be as dry and clean as possible:

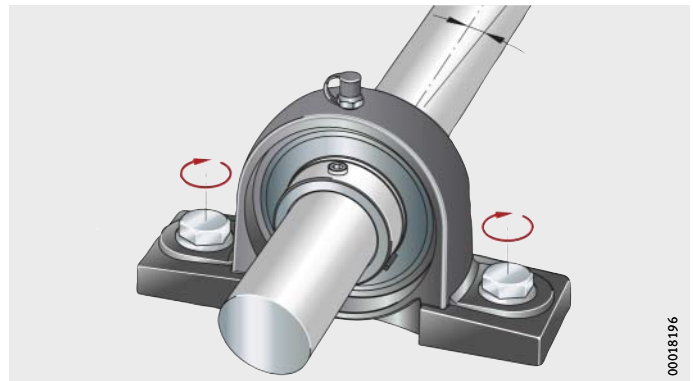
- The specified shaft tolerances must be observed, see page 29.
- Mounting forces must never be directed through the rolling elements.
- Blows should never be applied directly to the bearing rings and flinger shields or seals.
- Observe the tightening torques  $M_A$  for grub screws and adapter sleeve, see tables, page 32.

If the following sequence is observed, the bearing will align itself on the shaft in such a way that no undesirable stresses occur:

- ▶ Slide the housing unit onto the shaft and align it with the fixing holes in the adjacent construction, *Figure 8*.
- ▶ Tighten the fixing screws for all housings finger tight in the adjacent construction and align the shaft, *Figure 9*.
- ▶ Tighten both grub screws in the inner ring (for radial insert ball bearing UC) or the locknut of the adapter sleeve (for radial insert ball bearing UK) using a tightening torque (with an additional adapter if necessary) to the specified tightening torque, *Figure 10*, page 32.
- ▶ Locate the housings on the adjacent construction using the recommended tightening torque, see page 29.

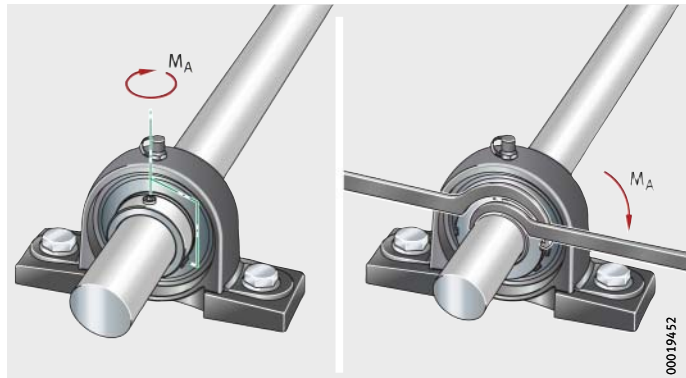


*Figure 8*  
Sliding the unit onto the shaft



*Figure 9*  
Screw mounting  
the housing finger tight

## Housing units



*Figure 10*  
Fully tightening the grub screws or locknut in the inner ring

### Tightening torques for grub screws

Width across flats W		Thread		Tightening torques <sup>1)</sup> $M_A$
mm	inch	ISO	UNF	Nm
3	1/8	M6×0,75	1/4"-28	6
4	5/32	M8×1	5/16"-24	14
5	3/16	M10×1,25	3/8"-24	26
6	1/4	M12×1,5	1/2"-20	42

<sup>1)</sup> The tightening torques are valid for original FAG grub screws only.

### Tightening torques for locknut

Locknut	Tightening torques $M_A$ Nm
AN05	25
AN06	30
AN07	40
AN08	50
AN09	60
AN10	75
AN11	100
AN12	130
AN13	150
AN15	170
AN16	200
AN17	230
AN18	270

### Dismounting

The units are dismantled in the reverse sequence.

- ▶ Loosen the grub screws in the inner ring or the locknut of the adapter sleeve.
- ▶ Unscrew the housing.

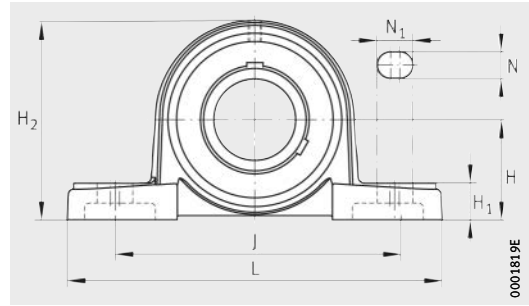
**Accuracy** The flake graphite cast iron housings conform to JIS B 1559.  
Accuracy of fitted radial insert ball bearings: see page 13.

**Dimensional tolerances** The dimensional tolerances for the machined surfaces of the flake graphite cast iron housings are  $\pm 0,25$  mm.  
Dimensions without tolerance conform to JIS B 0403:

- unfinished dimensions to Table 1, class CT 10
- finished dimensions to Table 5.

# Plummer block housing units

Flake graphite cast iron housing  
with long base  
With grub screws in inner ring

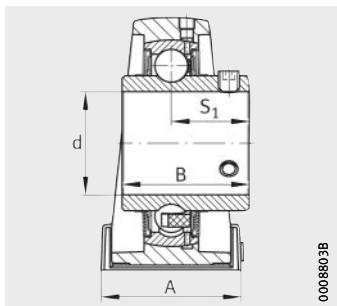


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**Dimension table** · Dimensions in mm and *inch*

Designation	Mass m ≈kg	Dimensions		H	L	J
		d				
		mm	<i>inch</i>			
UCP201	0,64	12	–	30,2	127	95
UCP201-08	0,64	12,7	1/2			
UCP202-09	0,63	14,288	9/16			
UCP202	0,62	15	–			
UCP202-10	0,62	15,875	5/8			
UCP203	0,61	17	–			
UCP203-11	0,61	17,462	11/16			
UCP204-12	0,66	19,05	3/4	33,3		
UCP204	0,65	20	–			
UCP205-13	0,83	20,638	13/16			
UCP205-14	0,82	22,225	7/8	36,5	140	105
UCP205-15	0,81	23,812	15/16			
UCP205	0,79	25	–			
UCP205-16	0,79	25,4	1			
UCP206-17	1,33	26,988	1 1/16	42,9	165	121
UCP206-18	1,31	28,575	1 1/8			
UCP206	1,29	30	–			
UCP206-19	1,29	30,162	1 3/16			
UCP206-20	1,27	31,75	1 1/4			
UCP207-20	1,6	31,75	1 1/4	47,6	167	127
UCP207-21	1,58	33,338	1 5/16			
UCP207-22	1,55	34,925	1 3/8			
UCP207	1,55	35	–			
UCP207-23	1,52	36,512	1 7/16	49,2	184	137
UCP208-24	1,89	38,1	1 1/2			
UCP208-25	1,85	39,688	1 9/16			
UCP208	1,84	40	–	54	190	146
UCP209-26	2,29	41,275	1 5/8			
UCP209-27	2,25	42,862	1 11/16			
UCP209-28	2,21	44,45	1 3/4			
UCP209	2,2	45	–	57,2	206	159
UCP210-29	2,89	46,038	1 13/16			
UCP210-30	2,85	47,625	1 7/8			
UCP210-31	2,8	49,212	1 15/16			
UCP210	2,77	50	–			
UCP210-32	2,75	50,8	2			



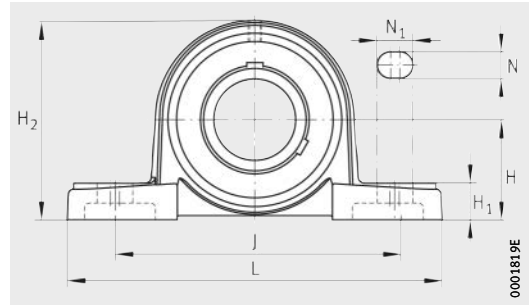
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A	N <sub>1</sub>	N	H <sub>1</sub>	H <sub>2</sub>	B	S <sub>1</sub>	Housing	Radial insert ball bearing
38	19	13	14	62	31	18,3	P203	UC201
								UC201-08
								UC202-09
								UC202
				65	P204	UC202-10		
						UC203		
						UC203-11		
						UC204-12		
38	19	13	15	71	34,1	19,8	P205	UC204
								UC205-13
								UC205-14
								UC205-15
								UC205-16
48	21	17	17	83	38,1	22,2	P206	UC205
								UC206-17
								UC206-18
								UC206-19
								UC206-20
48	21	17	18	93	42,9	25,4	P207	UC207
								UC207-20
								UC207-21
								UC207-22
								UC207-23
54	21	17	18	99	49,2	30,2	P208	UC208
								UC208-24
								UC208-25
54	21	17	20	106	49,2	30,2	P209	UC209
								UC209-26
								UC209-27
								UC209-28
60	25	20	21	114	51,6	32,6	P210	UC209
								UC210-29
								UC210-30
								UC210-31
								UC210-32

# Plummer block housing units

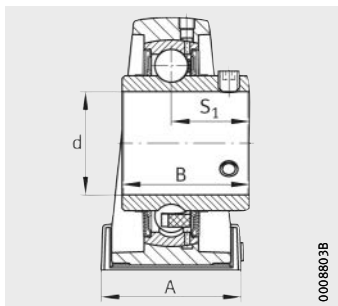
Flake graphite cast iron housing  
with long base  
With grub screws in inner ring



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**Dimension table** (continued) - Dimensions in mm and *inch*

Designation	Mass m ≈kg	Dimensions				
		d		H	L	J
		mm	<i>inch</i>			
UCP211-32	3,56	<b>50,8</b>	2	63,5	219	171
UCP211-33	3,5	<b>52,388</b>	2 <sup>1/16</sup>			
UCP211-34	3,44	<b>53,975</b>	2 <sup>1/8</sup>			
UCP211	3,41	<b>55</b>	–			
UCP211-35	3,39	<b>55,562</b>	2 <sup>3/16</sup>			
UCP212-36	4,75	<b>57,15</b>	2 <sup>1/4</sup>	69,8	241	184
UCP212-37	4,68	<b>58,738</b>	2 <sup>5/16</sup>			
UCP212	4,62	<b>60</b>	–			
UCP212-38	4,6	<b>60,325</b>	2 <sup>3/8</sup>			
UCP212-39	4,53	<b>61,912</b>	2 <sup>7/16</sup>			
UCP213-40	5,63	<b>63,5</b>	2 <sup>1/2</sup>	76,2	265	203
UCP213	5,55	<b>65</b>	–			
UCP213-41	5,55	<b>65,087</b>	2 <sup>9/16</sup>			
UCP214-42	6,29	<b>66,675</b>	2 <sup>5/8</sup>	79,4	266	210
UCP214-43	6,2	<b>68,262</b>	2 <sup>11/16</sup>			
UCP214-44	6,1	<b>69,85</b>	2 <sup>3/4</sup>			
UCP214	6,1	<b>70</b>	–			
UCP215-45	6,9	<b>71,438</b>	2 <sup>13/16</sup>	82,6	275	217
UCP215-46	6,81	<b>73,025</b>	2 <sup>7/8</sup>			
UCP215-47	6,7	<b>74,612</b>	2 <sup>15/16</sup>			
UCP215	6,67	<b>75</b>	–			
UCP215-48	6,58	<b>76,2</b>	3			
UCP216-49	8,53	<b>77,787</b>	3 <sup>1/16</sup>	88,9	292	232
UCP216-50	8,4	<b>79,375</b>	3 <sup>1/8</sup>			
UCP216	8,4	<b>80</b>	–			
UCP216-51	8,28	<b>80,962</b>	3 <sup>3/16</sup>			
UCP217-52	10,3	<b>82,55</b>	3 <sup>1/4</sup>	95,2	310	247
UCP217-53	10,17	<b>84,137</b>	3 <sup>5/16</sup>			
UCP217	10,1	<b>85</b>	–			
UCP217-55	9,9	<b>87,312</b>	3 <sup>7/16</sup>			
UCP218-56	12,3	<b>88,9</b>	3 <sup>1/2</sup>	101,6	327	262
UCP218	12,2	<b>90</b>	–			



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A	N <sub>1</sub>	N	H <sub>1</sub>	H <sub>2</sub>	B	S <sub>1</sub>	Housing	Radial insert ball bearing
60	25	20	23	126	55,6	33,4	P211	UC211-32
								UC211-33
								UC211-34
								UC211
70	25	20	25	138	65,1	39,7	P212	UC212-36
								UC212-37
								UC212
								UC212-38
70	29	25	27	151	65,1	39,7	P213	UC213-40
								UC213
								UC213-41
72	31	25	27	157	74,6	44,4	P214	UC214-42
								UC214-43
								UC214-44
								UC214
74	31	25	28	163	77,8	44,5	P215	UC215-45
								UC215-46
								UC215-47
								UC215
78	31	25	30	175	82,6	49,3	P216	UC216-49
								UC216-50
								UC216
								UC216-51
83	31	25	32	187	85,7	51,6	P217	UC217-52
								UC217-53
								UC217
								UC217-55
88	33	27	33	200	96	56,3	P218	UC218-56
								UC218