Ductile Iron Pillow Block Housings
General and Heavy Duty

SCHAEFFLER GROUP
INDUSTRIAL

Ductile Iron Housings

Selecting the most appropriate housing material should be the result of careful analysis of the operating and environmental conditions of the application. When the demands placed upon the pillow block do not allow for compromises, the material choice becomes increasingly obvious: ductile iron.

Optimum Material, Maximum Performance

FAG utilizes ductile iron as a high grade material for standard housing production. This remarkably versatile material possesses a number of engineering advantages, including:

- the fluid casting properties of cast iron
- superb material consistency comparable to carbon cast steel, with the inherent high tensile and yield strengths (see chart)
- tremendous resistance to corrosion
- the strength to withstand substantial mechanical shock
- resilient to brittle fracture at low temperatures
- extended service life in severe operating conditions

Series Availability

FAG offers an extensive standard selection of ductile iron pillow blocks for general duty and heavy duty applications. Series SAF...D and AFD general duty housings are designed for shafts ranging from 1 7/16" to 7 15/16", whereas heavy duty series SDD accommodate shaft diameters as great as 43 inches.

In addition to standard series production, FAG also utilizes ductile iron for special design housings unique to their specific industrial applications.

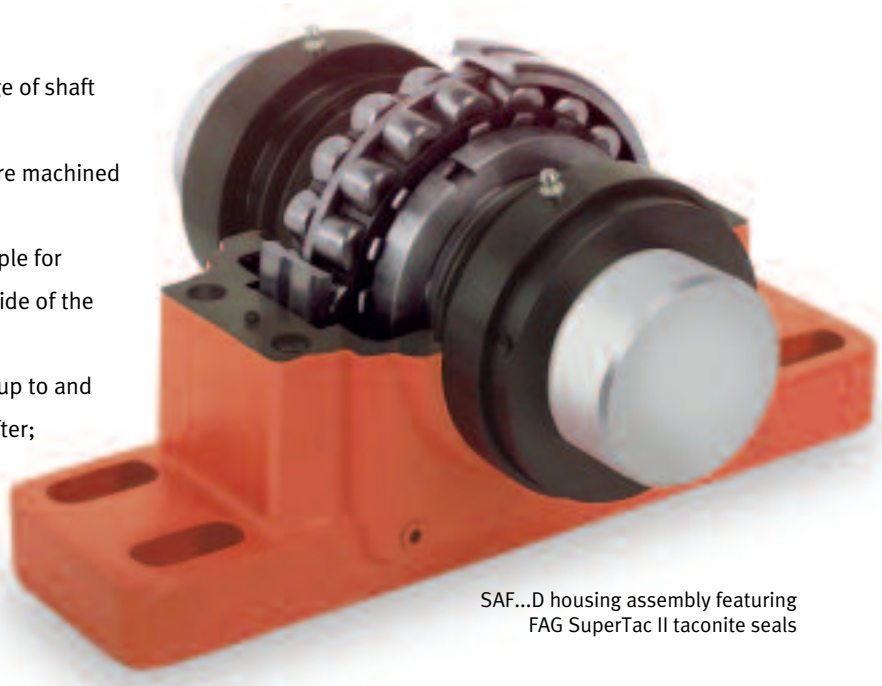
Comparison: Housing Material Properties

Material	A.S.T.M. Designation	Grade	Tensile Strength psi	Yield Strength psi	Elongation (% in 2 in.)
Cast Iron	A48-64	30	30,000	—	—
Ductile Iron	A-536	65-45-12	65,000	45,000	12
Cast Steel	A27	65-35	65,000	35,000	24

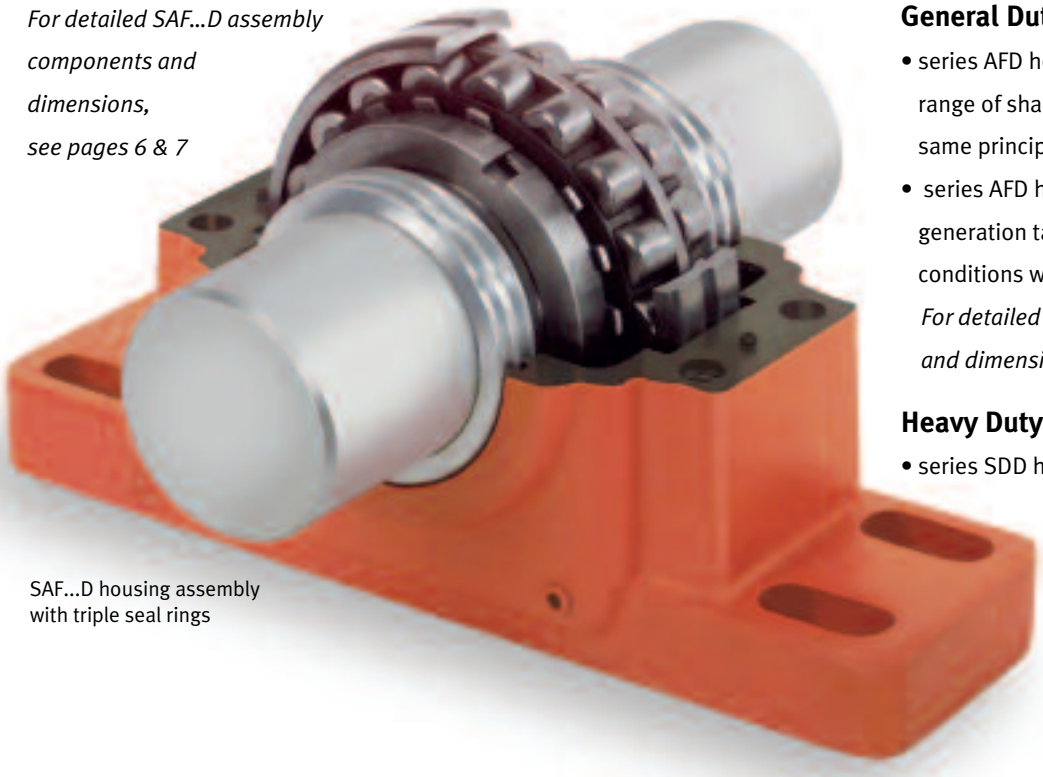
General Duty Series SAF...D

- series SAF...D housings are designed to accept a full range of shaft diameters from 1 7/16" to 7 15/16"
- housing sizes within this standard production program are machined to accommodate inch or metric shaft dimensions
- housings are supplied with a central grease inlet and nipple for relubrication of the bearing, and an outlet hole on each side of the block for drainage
- housings are equipped with a 2-bolt base for shaft sizes up to and including 3 7/16" (SAF520D), and with a 4-bolt base thereafter; 4-bolt bases are also available by specifying FSAF...D for shafts ranging from 2 3/16" to 3 7/16" (FSAF513D to FSAF520D)
- series SAF...D housings can be supplied with triple seal rings for normal service conditions, or SuperTac II taconite seals for severe service conditions
- bearings can be installed as floating bearings, or located with fixing rings

For detailed SAF...D assembly components and dimensions, see pages 6 & 7



SAF...D housing assembly featuring FAG SuperTac II taconite seals



SAF...D housing assembly with triple seal rings

General Duty Series AFD

- series AFD housings are available for the same range of shaft sizes as series SAFD, and with the same principle design features
- series AFD housings are equipped with 1st generation taconite seals for severe service conditions without substitution

For detailed AFD assembly components and dimensions, see pages 8 & 9

Heavy Duty Series SDD

- series SDD housings are available for larger shaft diameters as great as 43 inches

For SDD housing dimensions and bearing selection, see pages 10 & 11

Triple Seal Rings

- series SAF...D and SDD housings are generally equipped with an efficient non-contact radial labyrinth seal commonly referred to as a triple seal ring (series LER for SAF...D and TSG for SDD housings)
- this rotating ring automatically locates itself relative to the labyrinth groove of the housing (Figure 1)

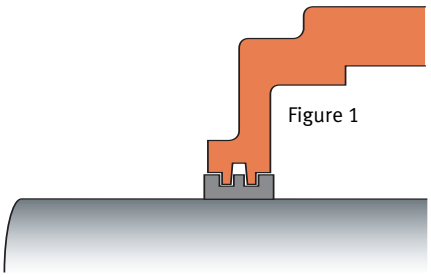


Figure 1

Taconite Seals

- for severe service conditions, SAF...D housings can be equipped with SuperTac II taconite seals (Figure 2) without any modification to the housing (see additional information below and opposite)
- series AFD housings are standardly equipped with 1st generation FAG taconite seals (Figure 3) without substitution

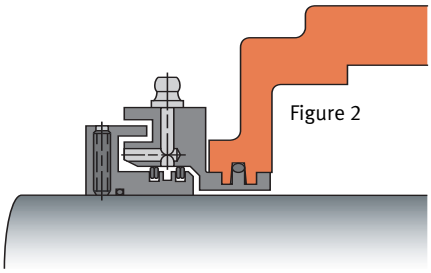


Figure 2

- taconite seals are also available for series SDD housings, and in special designs

If any housing is to be closed on one side, an endcover is installed in the annular groove of the housing.

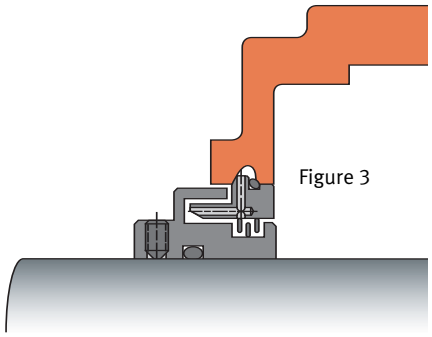
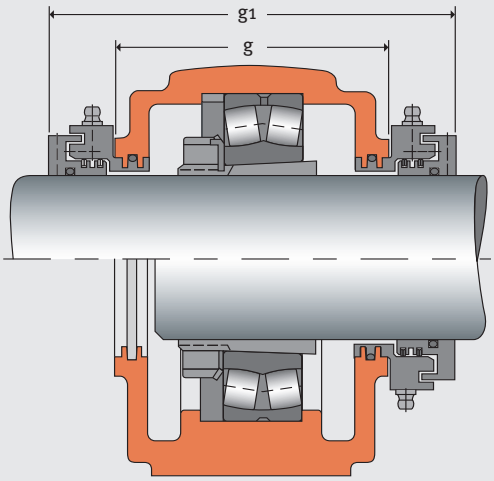


Figure 3

At the Sign of Contamination, the Seal that Delivers: SuperTac II

Design Features

- FAG SuperTac II seals are manufactured from high grade steel with black oxide coating as standard; special design option of nickel plating is available upon request
- the internal design features a radial / axial web barrier to external contaminants
- a grease packed radial labyrinth is formed by high grade spring steel laminar rings that align into two close running barriers, separated by a lubricant distribution channel
- working together with the grease purged axial labyrinth, the result is a web that stands virtually impenetrable
- the seal flinger is equipped with 2 set screws spaced at a 65° interval for maximum holding power to the shaft
- an o-ring in the flinger bore prevents the ingress of fluids between the seal and shaft



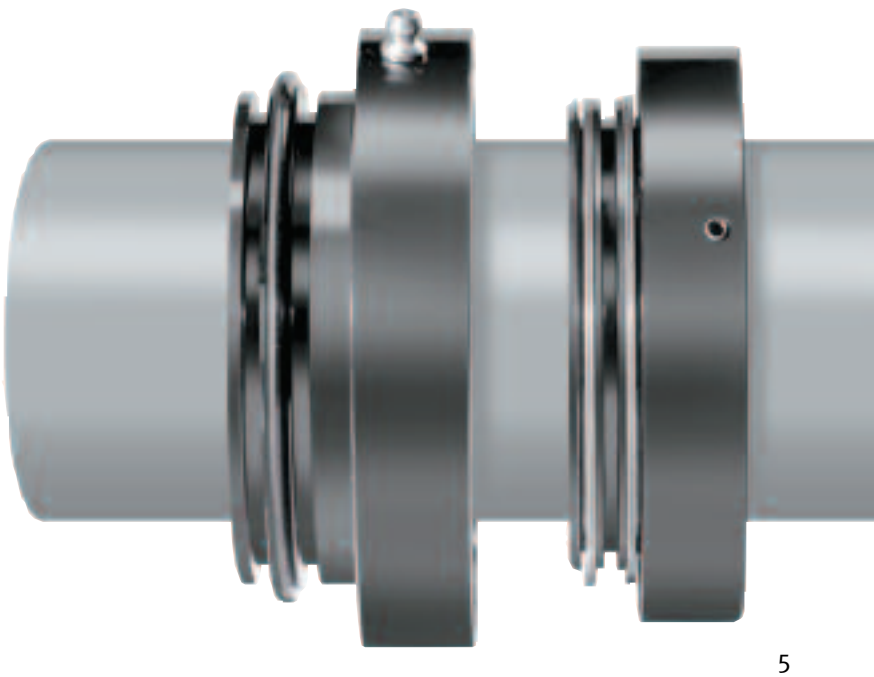
Dimensions “g” and “g1” apply to SuperTac II seals installed with FAG series SAF5..D pillow blocks. Dimensions may vary when using SuperTac II seals with non-ductile iron FAG SAF series pillow blocks, or with a non-FAG pillow block SuperTac II seals are unavailable for some metric shaft sizes due to inadequate space between the shaft and housing seal grooves to accommodate the seal design.

FAG Super Tac II Taconite Seals

Shaft in./mm	Pillow Block	FAG Seal No.	Dimensions g in./mm	g1 in./mm
1 7/16	SAF509	TA17A	3.420 87	5.910 150
1 11/16	SAF510	TA20A	3.420 87	5.910 150
1 15/16 50	SAF511	TA24A TA24A.M	3.750 95	6.269 159
2 3/16	SAF513	TA29A	4.250 108	6.782 172
2 7/16	SAF515	TA37A	4.625 117	7.367 187
2 11/16 70	SAF516	TA44A TA44A.M	4.750 121	7.520 191
2 15/16 75	SAF517	TA53A TA53A.M	4.813 122	7.740 197
3 3/16 80	SAF518	TA188A TA188A.M	5.500 140	8.138 207
3 7/16 90	SAF520	TA102A TA102A.M	5.813 148	9.025 229
3 15/16 100	SAF522	TA109A TA109A.M	6.438 164	9.682 246
4 3/16	SAF524	TA113A	7.125 181	10.314 262
4 7/16 115	SAF526	TA117A TA117A.M	7.750 197	11.214 285
4 15/16 125	SAF528	TA122A TA122A.M	7.375 187	10.818 275
5 3/16 135	SAF530	TA125A TA125A.M	8.125 206	11.890 302
5 7/16 140	SAF532	TA130A TA130A.M	8.500 216	12.215 310
5 15/16 150	SAF534	TA140A TA140A.M	9.250 235	13.150 334
6 7/16 160	SAF536	TA148A TA148A.M	9.625 244	13.720 348
6 15/16 170	SAF538	TA155A TA155A.M	10.500 267	14.671 373
7 3/16 180	SAF540	TA159A TA159A.M	11.000 279	15.417 392
7 15/16 200	SAF544	TA167A TA167A.M	11.750 298	16.265 413

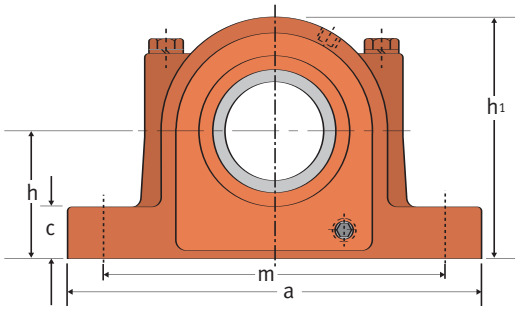
Operating Benefits

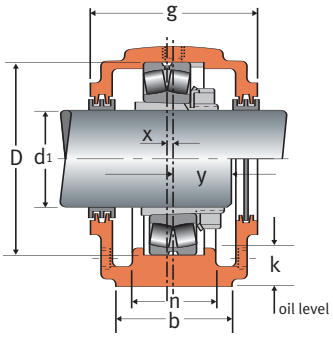
- FAG SuperTac II is designed as a drop-in fit to the seal grooves of FAG series SAF pillow blocks, as well as many competitive designs, eliminating the need for special housing features
- the non-contact seal design eliminates shaft wear common to competitive designs
- SuperTac II seals accept greater misalignments than lip seals
- exceptional speed characteristics: equivalent to bearing speed limits

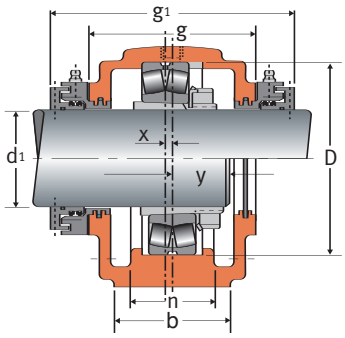


SAF...D Assembly Components and Dimensions

Shaft Diameter mm/in.	Pillow Block No.	Basic Bearing No.	Split Bearing No.	Adapter Sleeve No.	Triple Seal Ring No.	Super Tac II Seal No.	End Cover No.	Fixing Ring No.	pcs.	Complete Weight (approx) lbs.	kgs.
40 1 7/16	SAF509-D	22209-E1-K		H309 H309X107	LER20.M40 LER17.0107	 TA17A	EC509.D2	FRM85/6	1	10.5	4.8
45 1 11/16	SAF510-D	22210-E1-K		H310 H310X111	LER20.M45 LER20.0111	 TA20A	EC510.D2	FRM90/7	1	11.5	5.2
50 1 15/16	SAF511-D	22211-E1-K		H311 H311X115	LER24.M50 LER24.0115	TA24A.M TA24A	EC511.D2	FRM100/6	1	13.5	6.1
60 2 3/16	SAF513-D	22213-E1-K		H313 H313X203	LER35.M60 LER29.0203	 TA29A	EC513.D2	FRM120/8	1	21	9.5
65 2 7/16	SAF515-D	22215-E1-K	222SM.65 222S.207	H315 H315X207	LER38.M65 LER37.0207	 TA37A	EC515.D2	FRM130/6	1	24	10.9
70 2 11/16	SAF516-D	22216-E1-K	222SM.70 222S.211	H316 H316X211	LER44.M70 LER44.0211	TA44A.M TA44A	EC516.D2	FRM140/10	1	32	14.5
75 2 15/16	SAF517-D	22217-E1-K	222SM.75 222S.215	H317 H317X215	LER53.M75 LER53.0215	TA53A.M TA53A	EC517.D2	FRM150/10	1	35	15.9
80 3 3/16	SAF518-D	22218-E1-K	222SM.80 222S.303	H318 H318X303	LER188.M80 LER188.0303	TA188A.M TA188A	EC518.D2	FRM160/10	1	44	20.0
90 3 7/16	SAF520-D	22220-E1-K	222SM.90 222S.307	H320 H320X307	LER102.M90 LER102.0307	TA102A.M TA102A	EC520.D2	FRM180/10	1	74	33.6
100 3 15/16	SAF522-D	22222-E1-K	222SM.100 222S.315	H322 H322X315	LER109.M100 LER109.0315	TA109A.M TA109A	EC522.D2	FRM200/10	1	97	44.0
110 4 3/16	SAF524-D	22224-E1-K	222SM.110 222S.403	H3124 H3124X403	LER113.M110 LER113.0403	 TA113A	EC524.D2	FRM215/10	1	121	54.9
115 4 7/16	SAF526-D	22226-E1-K	222SM.115 222S.407	H3126 H3126X407	LER117.M115 LER117.0407	TA117A.M TA117A	EC526.D2	FRM230/10	1	161	73.1
125 4 15/16	SAF528-D	22228-E1-K	222SM.125 222S.415	H3128 H3128X415	LER122.M125 LER122.0415	TA122A.M TA122A	EC528.D2	FRM250/10	1	174	79.0
135 5 3/16	SAF530-D	22230-E1-K	222SM.135 222S.503	H3130 H3130X503	LER125.M135 LER125.0503	TA125A.M TA125A	EC530.D2	FRM270/10	1	221	100.3
140 5 7/16	SAF532-D	22232-E1-K	222SM.140 222S.507	H3132 H3132X507	LER130.M140 LER130.0507	TA130A.M TA130A	EC532.D2	FRM290/10	1	246	111.7
150 5 15/16	SAF534-D	22234-E1-K	222SM.150 222S.515	H3134 H3134X515	LER140.M150 LER140.0515	TA140A.M TA140A	EC534.D2	FRM310/10	1	310	140.7
160 6 7/16	SAF536-D	22236-E1-K	222SM.160 222S.607	H3136 H3136X607	LER148.M160 LER148.0607	TA148A.M TA148A	EC536.D2	FRM320/10	1	345	156.6
170 6 15/16	SAF538-D	22238-K	222SM.170 222S.615	H3138 H3138X615	LER155.M170 LER155.0615	TA155A.M TA155A	EC538.D2	FRM340/10	1	400	181.6
180 7 3/16	SAF540-D	22240-K	222SM.180 222S.703	H3140 H3140X703	LER159.M180 LER159.0703	TA159A.M TA159A	EC540.D2	FRM360/10	1	492	223.4
200 7 15/16	SAF544-D	22244-K	222SM.200 222S.715	H3144 H3144X715	LER167.M200 LER167.0715	TA167A.M TA167A	EC544.D2	FRM400/10	1	672	305.1





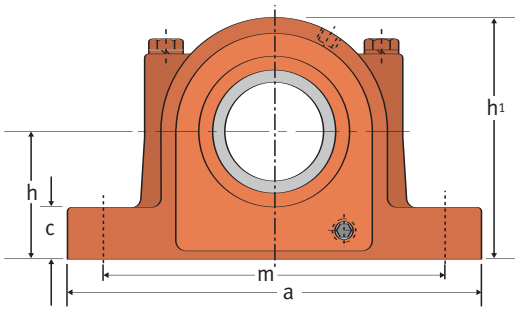


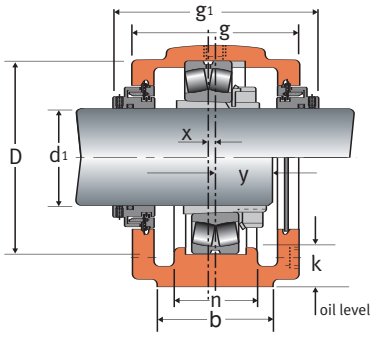
D	h mm/in.	a mm/in.	b mm/in.	c mm/in.	m Max. mm/in.	 Min. mm/in.	n mm/in.	h1 mm/in.	g mm/in.	g1 mm/in.	x mm/in.	k (Static) mm/in.	y mm/in.	Mounting Bolts 2 pcs. mm/in.	 4 pcs. mm/in.
85	57.15 2 1/4	210 8 1/4	60 2 3/8	21 13/16	178 7	159 6 1/4		111 4 3/8	87 3 7/16	150 5 15/16	3.0 .118	25 31/32	30 1 3/16	M12 1/2	
90	63.50 2 1/2	210 8 1/4	60 2 3/8	24 15/16	178 7	165 6 1/2		121 4 3/4	87 3 7/16	150 5 15/16	3.5 .138	28 1 3/32	30 1 3/16	M12 1/2	
100	69.85 2 3/4	244 9 5/8	70 2 3/4	24 15/16	200 7 7/8	187 7 3/8		133 5 1/4	95 3 3/4	159 6 1/4	3.0 .118	32 1 3/16	32 1 1/4	M16 5/8	
120	76.20 3	279 11	79 3 1/8	25 1	241 9 1/2	206 8 1/8	51 2	151 5 15/16	108 4 1/4	172 6 13/16	4.0 .157	32 1 3/32	37 1 7/16	M16 5/8	M12 1/2
130	82.55 3 1/4	286 11 1/4	79 3 1/8	29 1 1/8	244 9 5/8	219 8 5/8	48 1 7/8	162 6 3/8	117 4 5/8	187 7 3/8	3.0 .118	32 1 1/8	38 1 1/2	M16 5/8	M12 1/2
140	88.90 3 1/2	330 13	89 3 1/2	30 1 3/16	279 11	244 9 5/8	54 2 1/8	175 6 7/8	121 4 3/4	191 7 1/2	5.0 .197	35 1 1/4	41 1 5/8	M20 3/4	M16 5/8
150	95.25 3 3/4	330 13	89 3 1/2	32 1 1/4	279 11	251 9 7/8	54 2 1/8	186 7 5/16	122 4 13/16	197 7 3/4	5.0 .197	37 1 3/8	43 1 11/16	M20 3/4	M16 5/8
160	101.60 4	349 13 3/4	98 3 7/8	33 1 5/16	295 11 5/8	264 10 3/8	54 2 1/8	197 7 3/4	140 5 1/2	207 8 1/8	5.0 .197	40 1 1/2	44 1 3/4	M20 3/4	M16 5/8
180	114.30 4 1/2	387 15 1/4	111 4 3/8	44 1 3/4	333 13 1/8	295 11 5/8	60 2 3/8	213 8 3/8	148 5 13/16	229 9	5.0 .197	45 1 21/32	51 2	M24 7/8	M20 3/4
200	125.41 4 15/16	419 16 1/2	121 4 3/4	51 2	368 14 1/2	321 12 5/8	70 2 3/4	244 9 5/8	164 6 7/16	246 9 11/16	5.0 .197	48 1 25/32	54 2 1/8		M20 3/4
215	133.35 5 1/4	419 16 1/2	121 4 3/4	54 2 1/8	368 14 1/2	337 13 1/4	70 2 3/4	260 10 1/4	181 7 1/8	262 10 5/16	5.0 .197	51 1 27/32	59 2 5/16		M20 3/4
230	152.40 6	467 18 3/8	130 5 1/8	60 2 3/8	406 16	371 14 5/8	83 3 1/4	292 11 1/2	197 7 3/4	285 11 3/16	5.0 .197	63 2 11/32	62 2 7/16		M24 7/8
250	152.40 6	511 20 1/8	149 5 7/8	60 2 3/8	435 17 1/8	406 16	86 3 3/8	298 11 3/4	187 7 3/8	275 10 13/16	5.0 .197	56 2 1/32	65 2 9/16		M24 1
270	160.34 6 5/16	540 21 1/4	159 6 1/4	64 2 1/2	464 18 1/4	432 17	95 3 3/4	318 12 1/2	206 8 1/8	302 11 7/8	5.0 .197	56 2	70 2 3/4		M24 1
290	169.86 6 11/16	559 22	159 6 1/4	67 2 5/8	489 19 1/4	441 17 3/8	95 3 3/4	338 13 5/16	216 8 1/2	310 12 3/16	5.0 .197	57 2 1/16	75 2 15/16		M24 1
310	179.39 7 1/16	630 24 3/4	171 6 3/4	70 2 3/4	549 21 5/8	492 19 3/8	108 4 1/4	360 14 3/16	235 9 1/4	334 13 1/8	5.0 .197	61 2 5/32	79 3 1/8		M24 1
320	190.50 7 1/2	679 26 3/4	181 7 1/8	76 3	600 23 5/8	530 20 7/8	117 4 5/8	378 14 7/8	244 9 5/8	348 13 3/4	5.0 .197	67 2 3/8	79 3 1/8		M24 1
340	200.03 7 7/8	711 28	191 7 1/2	79 3 1/8	619 24 3/8	549 21 5/8	114 4 1/2	398 15 11/16	267 10 1/2	373 14 11/16	5.0 .197	69 2 7/16	84 3 5/16		M30 1 1/4
360	209.55 8 1/4	749 29 1/2	203 8	86 3 3/8	635 25	572 22 1/2	127 5	419 16 1/2	279 11	392 15 7/16	5.0 .197	71 2 15/32	89 3 1/2		M30 1 1/4
400	241.30 9 1/2	832 32 3/4	222 8 3/4	95 3 3/4	708 27 7/8	629 24 3/4	133 5 1/4	473 18 5/8	298 11 3/4	413 16 1/4	5.0 .197	88 3 1/8	97 3 13/16		M36 1 1/2

- Dimensions “g1” specific to SAF...D housings with SuperTac II seals
- Specify FSAF...D when ordering 4-bolt bases for pillow block sizes 513 to 520

AFD Assembly Components and Dimensions

Shaft Diameter mm/in.	Pillow Block No.	Basic Bearing No.	Split Bearing No.	Adapter Sleeve No.	Taconite Seal No.	End Cover No.	Fixing Ring No.	pcs.	Complete Weight (approx) lbs.	kgs.	D	h mm/in.
40 1 7/16	AFD509.D2	22209-E1-K		H309 H309X107	TA509.M40 TA509.107	AC509S	FRM85/8	1	12	5.4	85	57.15 2 1/4
45 1 11/16	AFD510.D2	22210-E1-K		H310 H310X111	TA510.M45 TA510.111	AC510S	FRM90/10	1	13	5.9	90	63.5 2 1/2
50 1 15/16	AFD511.D2	22211-E1-K		H311 H311X115	TA511.M50 TA511.115	AC511S	FRM100/10	1	18	8.2	100	69.85 2 3/4
60 2 3/16	AFD513.D2	22213-E1-K		H313 H313X203	TA513.M60 TA513.203	AC513S	FRM120/10	1	26	11.8	120	76.2 3
65 2 7/16	AFD515.D2	22215-E1-K	222SM.65 222S.207	H315 H315X207	TA515.M65 TA515.207	AC515S	FRM130/10	1	31	14.1	130	82.55 3 1/4
70 2 11/16	AFD516.D2	22216-E1-K	222SM.70 222S.211	H316 H316X211	TA516.M70 TA516.211	AC516S	FRM140/10	1	38	17.2	140	88.9 3 1/2
75 2 15/16	AFD517.D2	22217-E1-K	222SM.75 222S.215	H317 H317X215	TA517.M75 TA517.215	AC517S	FRM150/10	1	45	20.4	150	95.25 3 3/4
80 3 3/16	AFD518.D2	22218-E1-K	222SM.80 222S.303	H318 H318X303	TA518.M80 TA518.303	AC518S	FRM160/10	1	51	23.1	160	101.6 4
90 3 7/16	AFD520.D2	22220-E1-K	222SM.90 222S.307	H320 H320X307	TA520.M90 TA520.307	AC520S	FRM180/10	1	72	32.7	180	114.3 4 1/2
100 3 15/16	AFD522.D2	22222-E1-K	222SM.100 222S.315	H322 H322X315	TA522.M100 TA522.315	AC522S	FRM200/10	1	100	45.4	200	125.41 4 15/16
110 4 3/16	AFD524.D2	22224-E1-K	222SM.110 222S.403	H3124 H3124X403	TA524.M110 TA524.403	AC524S	FRM215/10	1	126	57.2	215	133.35 5 1/4
115 4 7/16	AFD526.D2	22226-E1-K	222SM.115 222S.407	H3126 H3126X407	TA526.M115 TA526.407	AC526S	FRM230/10	1	151	68.5	230	152.4 6
125 4 15/16	AFD528.D2	22228-E1-K	222SM.125 222S.415	H3128 H3128X415	TA528.M125 TA528.415	AC528S	FRM250/10	1	184	83.5	250	152.4 6
135 5 3/16	AFD530.D2	22230-E1-K	222SM.135 222S.503	H3130 H3130X503	TA530.M135 TA530.503	AC530S	FRM270/10	1	234	106.1	270	160.34 6 5/16
140 5 7/16	AFD532.D2	22232-E1-K	222SM.140 222S.507	H3132 H3132X507	TA532.M140 TA532.507	AC532S	FRM290/10	1	283	128.4	290	169.86 6 11/16
150 5 15/16	AFD534.D2	22234-E1-K	222SM.150 222S.515	H3134 H3134X515	TA534.M150 TA534.515	AC534S	FRM310/10	1	347	157.4	310	179.39 7 1/16
160 6 7/16	AFD536.D2	22236-E1-K	222SM.160 222S.607	H3136 H3136X607	TA536.M160 TA536.607	AC536S	FRM320/10	1	382	173.3	320	190.5 7 1/2
170 6 15/16	AFD538.D2	22238-K	222SM.170 222S.615	H3138 H3138X615	TA538.M170 TA538.615	AC538S	FRM340/10	1	464	210.5	340	200.03 7 7/8
180 7 3/16	AFD540.D2	22240-K	222SM.180 222S.703	H3140 H3140X703	TA540.M180 TA540.703	AC540S	FRM360/10	1	536	243.1	360	209.55 8 1/4
200 7 15/16	AFD544.D2	22244-K	222SM.200 222S.715	H3144 H3144X715	TA544.M200 TA544.715	AC544S	FRM400/10	1	730	331.1	400	241.3 9 1/2





a	b	c	m		n	h1	g	g1	x	k	y	Mounting Bolts	
			Max.	Min.						(Static)		2 pcs.	4 pcs.
mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.	mm/in.
210	60	21	178	159		110	89	113	4	25	30	M12	
8¼	2⅜	13/16	7	6¼		4⅜6	3½	4⅞6	0.157	1	1⅜6	½	
210	60	29	178	165		121	92	120	5	28	30	M12	
8¼	2⅜	1⅛	7	6½		4¾	3⅝	4¾	0.197	1⅛	1⅜6	½	
251	70	29	200	187		133	98	127	5	32	32	M16	
9⅞	2¾	1⅛	7⅞	7⅜		5¼	3⅞	5	0.197	1¼	1¼	⅝	
279	79	30	241	206		151	114	146	5	32	37	M16	
11	3⅛	1⅜6	9½	8⅛		5⅝6	4½	5¾	0.197	1¼	1⅞6	⅝	
286	79	30	244	219	48	160	114	148	5	32	38	M16	M12
11¼	3⅛	1⅜6	9⅝	8⅝	1⅞	6⅝6	4½	5⅓6	0.197	1¼	1½	⅝	½
330	89	32	279	244	54	171	127	159	5	35	41	M20	M16
13	3½	1¼	11	9⅝	2⅛	6¾	5	6¼	0.197	1⅜	1⅝	¾	⅝
324	89	32	279	251	54	186	132	171	5	37	43	M20	M16
12¾	3½	1¼	11	9⅞	2⅛	7⅝6	5⅜6	6¾	0.197	1⅞6	1⅛6	¾	⅝
349	98	35	295	264	54	197	152	185	5	40	44	M20	M16
13¾	3⅞	1⅜	11⅝	10⅜	2⅛	7¾	6	7¼	0.197	1⅝6	1¾	¾	⅝
387	111	40	333	295	60	219	159	198	5	45	51	M24	M20
15¼	4⅜	1⅝6	13⅛	11⅝	2⅜	8⅝	6¼	7⅓6	0.197	1¾	2	⅞	¾
419	121	44	368	321	70	243	176	216	5	48	54		M20
16½	4¾	1¾	14½	12⅝	2¾	9⅝6	6⅝6	8½	0.197	1⅞	2⅛		¾
419	121	44	368	337	70	260	187	229	5	51	59		M20
16½	4¾	1¾	14½	13¼	2¾	10¼	7⅜	9	0.197	2	2⅝6		¾
467	130	52	406	371	83	289	192	232	5	63	62		M24
18⅜	5⅛	2⅛6	16	14⅝	3¼	11⅜	7⅝6	9⅛	0.197	2½	2⅞6		⅞
511	149	52	435	406	86	302	205	248	5	56	65		M24
20 ⅛	5⅞	2⅛6	17⅛	16	3⅜	11⅞	8⅛6	9¾	0.197	2⅜6	2⅝6		1
540	159	60	464	432	95	322	219	267	5	55	70		M24
21¼	6¼	2⅜	18¼	17	3¾	12⅛6	8⅝	10½	0.197	2⅜6	2¾		1
559	159	60	489	441	95	344	235	283	5	57	75		M24
22	6¼	2⅜	19¼	17⅜	3¾	13⅝6	9¼	11⅛	0.197	2¼	2⅝6		1
629	171	70	549	492	108	368	241	295	5	61	79		M24
24¾	6¾	2¾	21⅝	19⅜	4¼	14½	9½	11⅝	0.197	2⅜	3⅛		1
679	181	76	600	530	117	381	254	306	5	67	79		M24
26¾	7⅛	3	23⅝	20⅞	4⅝	15	10	12⅛6	0.197	2⅝	3⅛		1
711	191	70	619	549	114	412	270	321	5	69	84		M30
28	7½	2¾	24⅜	21⅝	4½	16¼	10⅝	12⅝	0.197	2⅞6	3⅝6		1¼
749	205	76	635	572	127	435	279	337	5	71	89		M30
29½	8⅛6	3	25	22½	5	17⅛	11	13¼	0.197	2¾	3½		1¼
832	222	95	708	629	133	484	298	356	5	88	97		M36
32¾	8¾	3¾	27⅞	24¾	5¼	19⅛6	11¾	14	0.197	3⅜6	3⅓6		1½

Series SDD Housings

Heavy Duty Series SDD

Servicing requirements for large size pillow blocks has become a standard practice for FAG, as demonstrated with a complete standard series of extra large ductile iron housings.

Substantiating that size does not prohibit flexibility, series SDD housings are designed to:

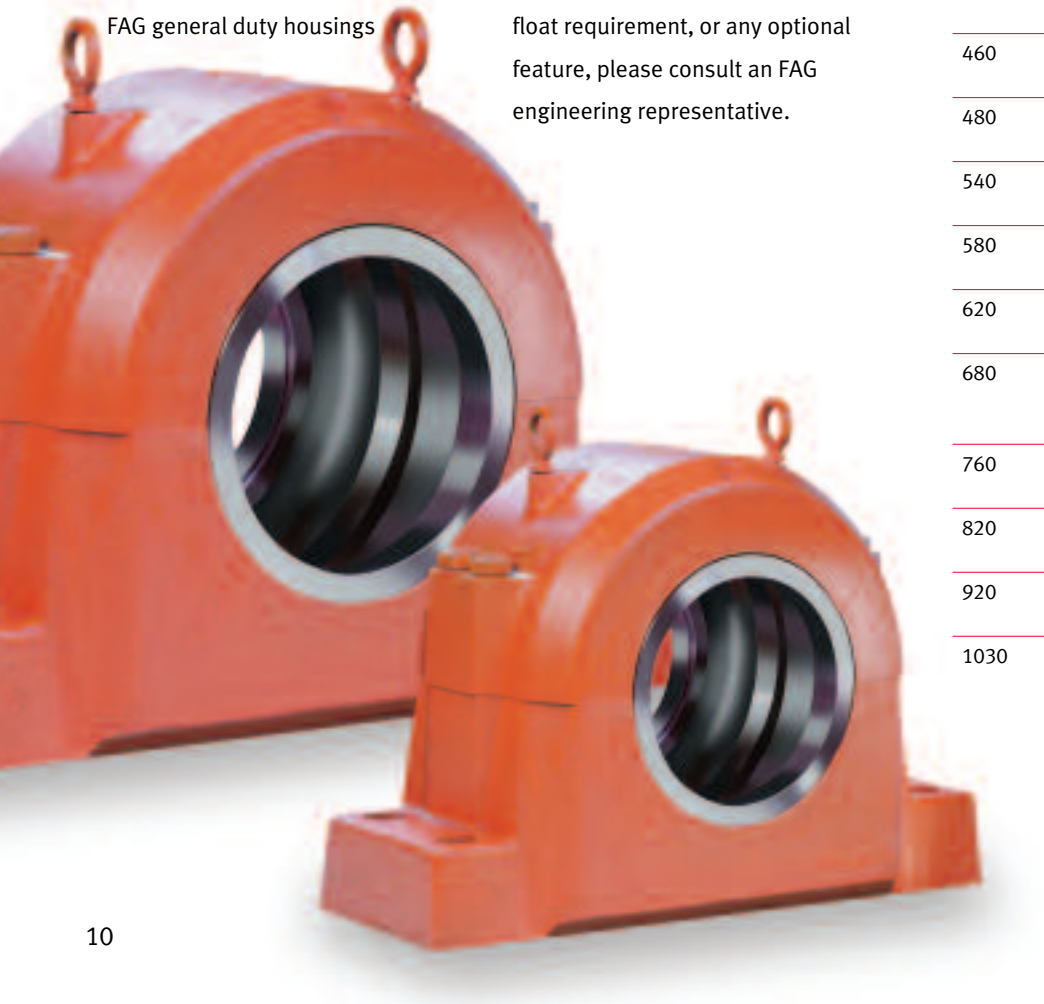
- accept shaft diameters as large as 43"
- accommodate a wide variety of spherical roller bearing options
- provide the optional seal designs and other engineered features relative to FAG general duty housings

SDD Housing Selection

Essentially, SDD housing size is determined by the outside diameter of the bearing. Each housing size can be machined to accept a range of outside diameters and therefore a variety of bearings as illustrated in the table opposite.

This table allows basic housing dimensions to be established when bearing selection has already been made from one of the eight common bearing series.

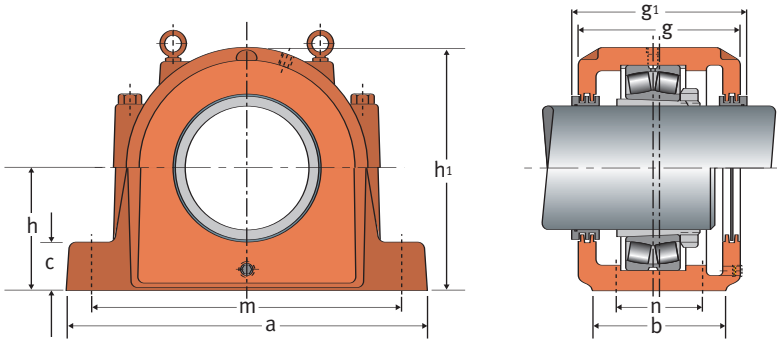
For final details, such as seal design, float requirement, or any optional feature, please consult an FAG engineering representative.



Housing Dimensions by Bearing Selection

Bearing O.D. mm		Basic Bearing Number			
From	To	Series 239..	*Series 230..	Series 240..	*Series 231..
270	280	23940	23036	24036	23132 23134
290	300	23944	23038	24038	23136
310	320	23948	23040	24040	23138
340			23044	24044	23140
360	370	23952	23048	24048	23144
400	420	23960	23052 23056	24052 24056	23148
440		23964			23152
460	480	23968 23972	23060 23064	24060 24064	23156
480	520	23976	23068	24068	23160
540	560	23980 23984	23072 23076	24072 24076	23164
580	600	23988	23080	24080	23168 23172
620	650	23992 23996	23084 23088	24084 24088	23176 23180
680	720	239/530	23092 23096 230/500	24092 24096 240/500	23184 23188
760	800	239/600	230/530	240/530	23192 23196
820	870	239/630	230/560 230/600	240/560 240/600	231/500 231/530
920	980	239/710	230/630 230/670	240/630 240/670	231/560 231/600
1030	1090	239/800	230/710 230/750	240/710 240/750	231/630 231/670

* Preferred bearing series



Series 241..	Series 222..	*Series 232..	Series 223..	h mm/in.	a mm/in.	b mm/in.	c mm/in.	Housing Dimensions m Max. mm/in.	m Min. mm/in.	n mm/in.	h1 mm/in.	g mm/in.	g1 mm/in.	Mounting Bolts mm/in.
	22230	23230	22326	170 6.693	510 20 1/16	180 7 1/8	70 2 3/4	436 17 3/16	424 16 11/16	100 3 15/16	335 13 3/16	230 9 1/16	240 9 7/16	M24 1
	22232	23232	22328	180 7.087	530 20 7/8	190 7 1/2	75 3	456 18	444 17 1/2	110 4 11/32	355 14	240 9 7/16	250 9 27/32	M24 1
24138	22234 22236	23234 23236	22330	190 7.480	560 22 1/16	210 8 1/4	80 3 5/32	486 19 1/8	474 18 21/32	120 4 23/32	375 14 3/4	260 10 1/4	270 10 5/8	M24 1
24140	22238	23238	22332	210 8.268	610 24	230 9 1/16	85 3 11/32	517 20 11/32	503 19 13/16	130 5 1/8	410 16 5/32	280 11 1/32	290 11 13/32	M30 1 1/4
24144	22240	23240	22334	220 8.661	640 25 3/16	240 9 7/16	90 3 17/32	547 21 17/32	533 21	140 5 1/2	435 17 1/8	290 11 13/32	300 11 13/16	M30 1 1/4
	22244	23244	22338 22340	240 9.449	700 27 9/16	260 10 1/4	95 3 3/4	607 23 29/32	593 23 11/32	150 5 29/32	475 18 23/32	310 12 7/32	326 12 27/32	M30 1 1/4
	22248	23248		260 10.236	775 30 1/2	280 11 1/32	100 3 15/16	658 25 29/32	642 25 9/32	160 6 5/16	515 20 9/32	320 12 19/32	337 13 1/4	M36 1 1/2
	22252		22344	280 11.024	790 31 1/8	280 11 1/32	105 4 1/8	678 26 11/16	662 26 1/16	160 6 5/16	550 21 5/8	335 13 3/16	354 13 15/16	M36 1 1/2
24160	22256	23252 23256	22348	300 11.811	830 32 11/16	310 12 7/32	110 4 11/32	718 28 1/4	702 27 5/8	190 7 1/2	590 23 1/4	350 13 25/32	360 14 3/16	M36 1 1/2
	22260	23260	22352	320 12.598	885 34 27/32	330 13	115 4 17/32	758 29 27/32	742 29 7/32	200 7 7/8	630 24 13/16	370 14 9/16	380 14 31/32	M36 1 1/2
24168 24172	22264	23264	22356	360 14.173	1000 39 3/8	370 14 9/16	120 4 23/32	872 34 11/32	848 33 3/8	230 9 1/16	705 27 3/4	410 16 1/8	418 16 7/16	M45 1 3/4
	22268 22272	23268 23272	22360	390 15.354	1118 44	394 15 1/2	127 5	978 38 1/2	952 37 1/2	235 9 1/4	762 30	457 18	468 18 7/16	M50 2
24184	22276 22280	23276 23280		425 16.732	1200 47 1/4	420 16 17/32	127 5	1048 41 1/4	1022 40 1/4	251 9 7/8	841 33 1/8	500 19 11/16	510 20 1/16	M50 2
24192 24196	22284 22288	23284 23288	22376	470 18.504	1454 57 1/4	470 18 1/2	146 5 3/4	1257 49 1/2	1232 48 1/2	260 10 1/4	940 37	562 22 1/8	574 22 19/32	M56 2 1/4
241/500	22292 22296	23292 23296	22380	520 20.472	1530 60 1/4	520 20 1/2	160 6 5/16	1314 51 3/4	1286 50 5/8	270 10 5/8	1030 40 9/16	620 24 7/16	626 24 5/8	M56 2 1/4
241/560 241/600	222/500 222/530	232/500 232/530	22392 22396	575 22.638	1676 66	565 22 1/4	175 6 7/8	1455 57 1/4	1430 56 5/16	292 11 1/2	1140 44 7/8	673 26 1/2	704 27 23/32	M64 2 1/2
241/630 241/670	222/560 222/600	232/560 232/600	223/500 223/530	625 24.606	1830 72	610 24	185 7 1/4	1632 64 1/4	1600 63	314 12 3/8	1245 49	730 28 3/4	740 29 1/8	M64 2 1/2

- This table applies only to SDD series housings
- Bearing series 241.. can be used for direct shaft mount only, without locknut

Special Designs

When the size or application requirements of a bearing housing lie outside the parameter of standard series production, the design concept, the material selection and the manufacturing process require specialized insight and experience. Venturing into new technical territory to solve complex applications is a unique area of expertise for the FAG engineering group.

From meeting special sealing and lubrication requirements to accommodating unique bearing arrangements and mountings, FAG lends its engineering versatility towards functional design innovations that improve long term serviceability and operating costs.

Vertically mounted pillow blocks for dryer rolls

Pillow block housing for wood grinding machinery

Split pillow block for dryer rolls

Schaeffler Canada Inc.
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