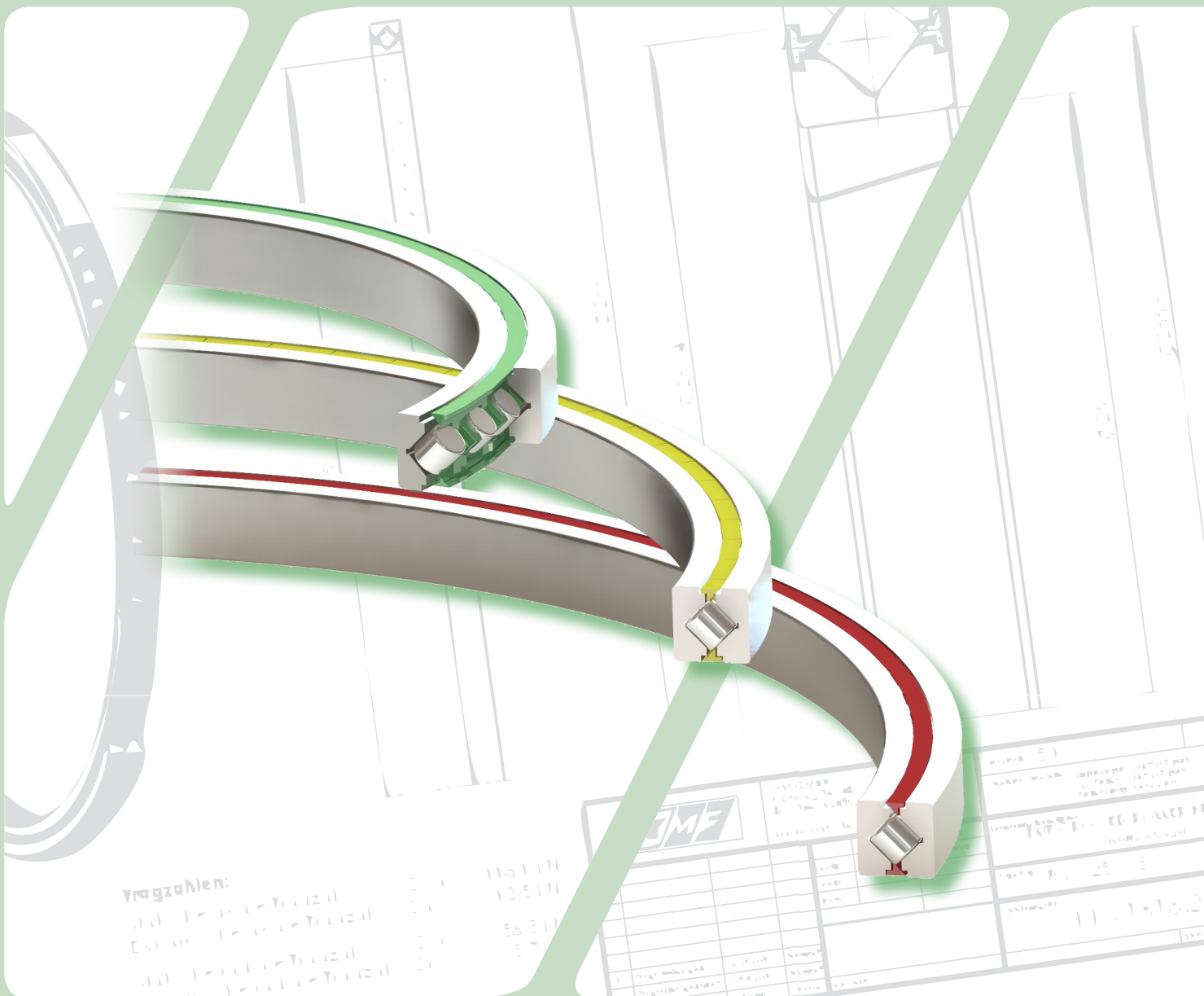
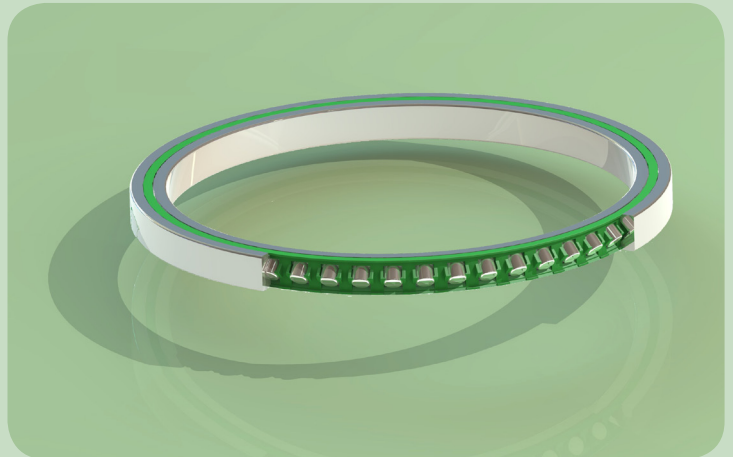


Angular roller bearing PSR-08



### Description of shape

Angular roller bearings are generally in its foundation engineering form single-row roller bearings. Constructing a new design using this type of bearings, the angular roller bearing can't be used alone however, but as a combined bearing pair with a second bearing. For the transmission of axial-, radial-, and moment loads, the angular roller bearing can just be used in a combined version.

Most commonly this bearing is used in a combined version as a bearing pair (two angular roller systems) in a face-to-face or back-to-back-arrangement. The choose of the arrangement depends on the conditions of the construction and the load positions.

KMF-ANGULAR-ROLLER-BEARINGS are made as all KMF-SLIM-SPLIT-BEARINGS and consist therefore of two non-cutting manufactured and opened bearing rings, which are completed with a separator strip filled with cylinder rollers.

All rolling elements are arranged in one running direction, the pressure angle is 45°.

The separator strip with holden and guided rolling elements causes due to its special shape a cover of the bearing gap and protects therefore the raceway system for entering of rough dirt and on the other side, it makes it more difficult for the bearing grease to get out of the raceway system.

KMF-ANGULAR-ROLLER-BEARINGS can be supplied in

two different types. The type series PSR-08 with radial manufactured bearing rings and the type series PSA-08 with axial manufactured bearing rings. Both have in common the same bearing cross cut of 8 x 8 mm.

The type series PSR-08 is the preferred type series in this bearing range, as it offers a more simple and easier to manufacture construction. This high stiffness bearing solution with its high load capacities is integrated especially in applications which require higher accuracy and a smooth running without heavier noise development. The need for specially paired bearings, as it is common at conventional bearings is not given. KMF can supply all bearing types of the complete diameter range within the preferred series and above in short terms. Also all sizes in between the preferred series can be realized within short terms.

### Materials

The bearings are made of stainless steel X46Cr13 (material code 1.4034). The separator is made of Polyamide 12.

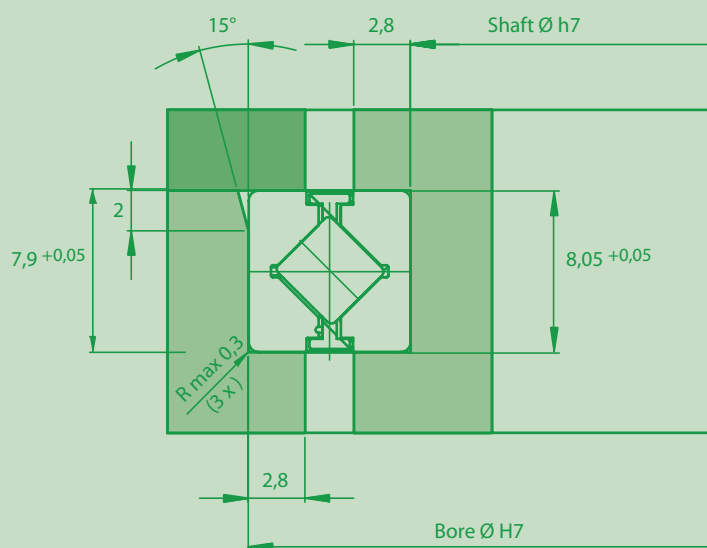
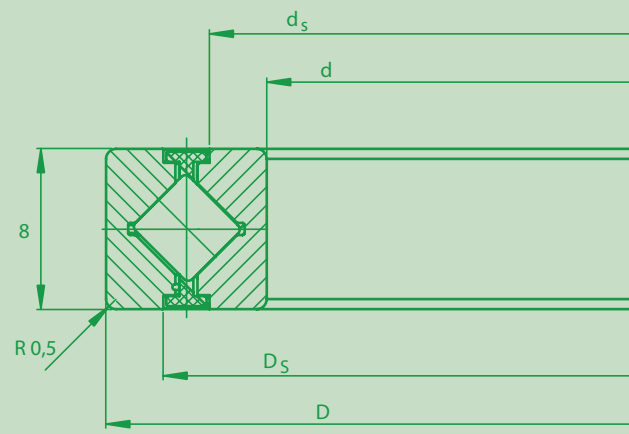
### Operating conditions

The temperature limits of the standard bearing in continuous operation are -40°C and +100°C, for short periods up to +120°C.

### Features

- Considerably simplification of constructions with angular roller bearings and their connecting parts (economic construction of the connecting parts)
- Free choice of material for the connecting parts, e. g. aluminium
- Corrosion resistant and low maintenance
- High static and dynamic Basic load ratings at maximal stiffness (low deformation)
- Low Mass
- Easy to install
- Dimensions beneath preferred series can be supplied within short terms

# ANGULAR-ROLLER-SLIM-SPLIT-BEARING

**Fitted dimensions**

**Bearing dimensions**

**Table of dimensions (Type series PSR-08)**

KMF-type <sup>1)</sup>	Bearing dimension				Mass kg	Basic load ratings				Limiting speeds	
	d	D	d <sub>s</sub>	D <sub>s</sub>		Axial		Radial		Bearing play n <sub>G</sub>	Pre- load n <sub>G grease</sub>
						Dyn.	Stat.	Dyn.	Stat.		
						C <sub>a</sub>	C <sub>oa</sub>	C <sub>r</sub> <sup>2)</sup>	C <sub>or</sub> <sup>2)</sup>	min <sup>-1</sup>	min <sup>-1</sup>
mm	mm	mm	mm	kg	kN	kN	kN	kN	min <sup>-1</sup>	min <sup>-1</sup>	
PSR 080 08	80	96	85,6	90,4	0,11	10,10	60,0	4,3	12,0	1070	535
PSR 090 08	90	106	95,6	100,4	0,12	10,80	66,0	4,5	13,3	950	475
PSR 100 08	100	116	105,6	110,4	0,13	11,70	76,0	4,9	15,1	860	430
PSR 110 08	110	126	115,6	120,4	0,14	12,20	82,0	5,1	16,4	780	390
PSR 120 08	120	136	125,6	130,4	0,16	12,80	91,0	5,4	18,2	720	360
PSR 130 08	130	146	135,6	140,4	0,17	13,40	97,0	5,6	19,5	660	330
PSR 140 08	140	156	145,6	150,4	0,18	13,70	104,0	5,8	20,7	610	305
PSR 150 08	150	166	155,6	160,4	0,20	14,40	112,0	6,1	22,6	570	285
PSR 160 08	160	176	165,6	170,4	0,21	14,70	120,0	6,2	23,8	540	270
PSR 170 08	170	186	175,6	180,4	0,22	15,20	126,0	6,4	25,0	510	255
PSR 180 08	180	196	185,6	190,4	0,23	15,70	134,0	6,6	27,0	480	240
PSR 190 08	190	206	195,6	200,4	0,25	16,10	140,0	6,8	28,0	450	225
PSR 200 08	200	216	205,6	210,4	0,26	16,40	148,0	6,8	29,5	430	215
PSR 210 08	210	226	215,6	220,4	0,27	17,10	156,0	7,2	31,5	410	205
PSR 220 08	220	236	225,6	230,4	0,29	17,40	162,0	7,3	32,5	390	195
PSR 230 08	230	246	235,6	240,4	0,30	17,70	168,0	7,4	34,0	380	190



KMF-type <sup>1)</sup>	Bearing dimension				Mass kg	Basic load ratings				Limiting speeds	
	d	D	d <sub>s</sub>	D <sub>s</sub>		Axial		Radial		Bearing play n <sub>Gfett</sub>	Pre-load n <sub>Ggrease</sub>
						Dyn.	Stat.	Dyn.	Stat.		
	C <sub>a</sub>	C <sub>oa</sub>	C <sub>r</sub> <sup>2)</sup>	C <sub>or</sub> <sup>2)</sup>		min <sup>-1</sup>	min <sup>-1</sup>				
mm	mm	mm	mm	kg	kN	kN	kN	kN	min <sup>-1</sup>	min <sup>-1</sup>	
PSR 240 08	240	256	245,6	250,4	0,31	18,30	178,0	7,7	35,5	360	180
PSR 250 08	250	266	255,6	260,4	0,33	18,60	184,0	7,8	37,0	350	175
PSR 260 08	260	276	265,6	270,4	0,35	18,90	190,0	7,9	38,0	330	165
PSR 270 08	270	286	275,6	280,4	0,37	19,40	200,0	8,1	40,0	320	160
PSR 280 08	280	296	285,6	290,4	0,39	19,60	206,0	8,3	41,0	310	155
PSR 290 08	290	306	295,6	300,4	0,41	19,90	212,0	8,4	42,5	300	150
PSR 300 08	300	316	305,6	310,4	0,43	20,40	222,0	8,6	44,5	290	145
PSR 310 08	310	326	315,6	320,4	0,45	20,80	228,0	8,7	45,5	280	140
PSR 320 08	320	336	325,6	330,4	0,47	21,00	234,0	8,8	47,0	270	135
PSR 330 08	330	346	335,6	340,4	0,49	21,50	244,0	9,0	48,5	260	130
PSR 340 08	340	356	345,6	350,4	0,50	21,80	250,0	9,1	50,0	250	125
PSR 350 08	350	366	355,6	360,4	0,52	22,00	256,0	9,2	51,0	250	125
PSR 360 08	360	376	365,6	370,4	0,53	22,20	266,0	9,4	53,0	240	120
PSR 370 08	370	386	375,6	380,4	0,55	22,60	272,0	9,5	54,0	230	115
PSR 380 08	380	396	385,6	390,4	0,56	22,80	278,0	9,6	56,0	230	115
PSR 390 08	390	406	395,6	400,4	0,58	23,50	288,0	9,8	57,0	220	110
PSR 400 08	400	416	405,6	410,4	0,59	23,70	294,0	9,9	59,0	220	110
PSR 410 08	410	426	415,6	420,4	0,61	23,80	300,0	10,0	60,0	210	105
PSR 420 08	420	436	425,6	430,4	0,62	24,30	308,0	10,2	62,0	210	105
PSR 430 08	430	446	435,6	440,4	0,64	24,50	314,0	10,3	63,0	220	100
PSR 440 08	440	456	445,6	450,4	0,65	25,00	324,0	10,5	65,0	194	97
PSR 450 08	450	466	455,6	460,4	0,67	25,20	330,0	10,6	66,0	190	95
PSR 460 08	460	476	465,6	470,4	0,68	25,50	336,0	10,7	67,0	186	93
PSR 470 08	470	486	475,6	480,4	0,70	25,90	346,0	10,9	69,0	182	91
PSR 480 08	480	496	485,6	490,4	0,71	26,00	352,0	10,9	70,0	178	89
PSR 490 08	490	506	495,6	500,4	0,73	26,40	358,0	11,0	72,0	174	87
PSR 500 08	500	516	505,6	510,4	0,74	26,70	368,0	11,2	74,0	172	86

1) Other dimensions on request

2) Load capacities only for absolut radial loads

 With in pairs arranged camps is valid: C<sub>or</sub> x 2 und C<sub>r</sub> x 1,625