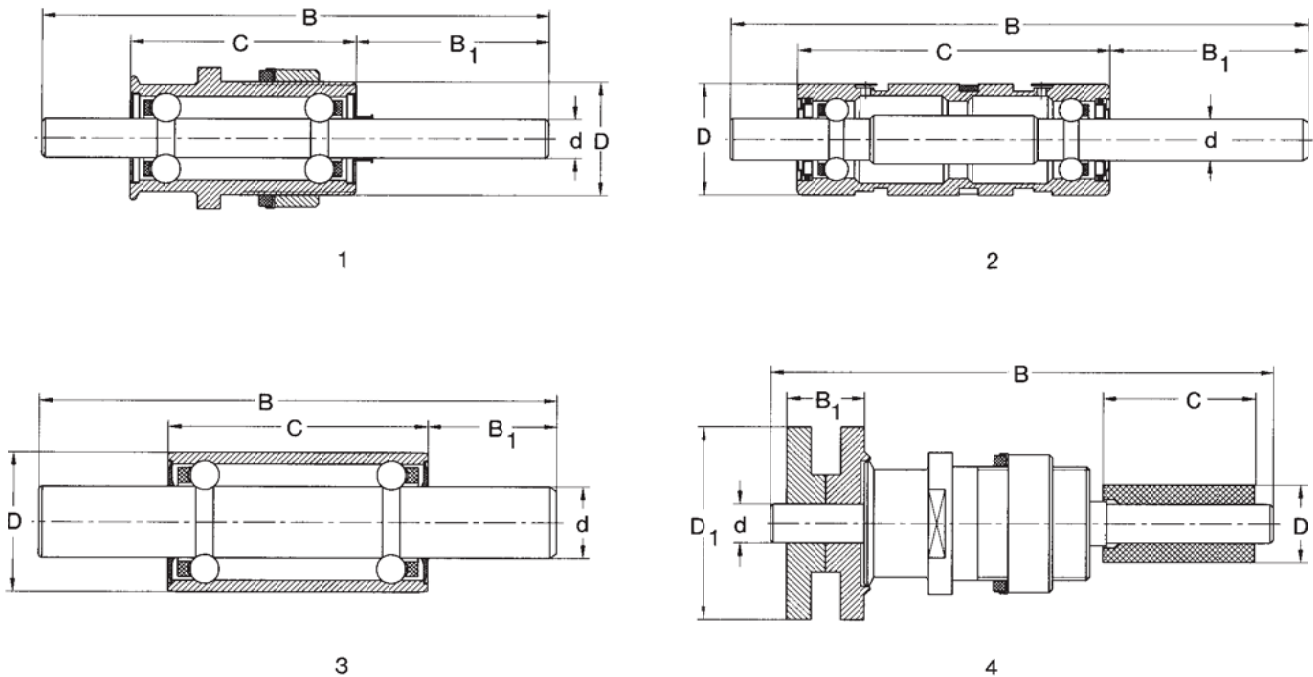


## Double Row Ball Bearings for Textile Machines and Instrument Techniques

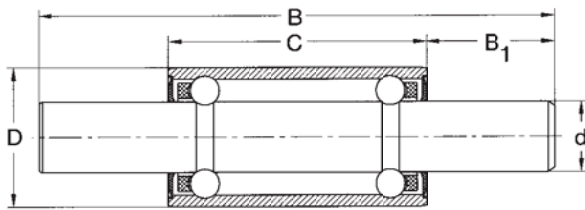


Dimensions					Limiting Speed	Bearing Designation	Weight	Fig.
d	D(D <sub>1</sub> )	B	C	B <sub>1</sub>				
mm					min <sup>-1</sup>		kg	
8	22	85	56	11	6 000	PLC 73-1-4	0,127	3
8,1	20,98	105,5	44,5	39	50 000	PLC 72-2	0,127	1
	20,98	122	44,5	41,1	50 000	PLC 72-2-1	0,136	1
	20,98	103,5	44,5	26,5	50 000	PLC 72-2-3	0,120	1
	20,98	122	44,5	62,5	50 000	PLC 72-2-5	0,136	1
	16,6	105,5	32	16	50 000	PLC 72-2-8	0,151	4 <sup>1)</sup>
	19	105,5	32	16	50 000	PLC 72-2-9	0,154	4 <sup>1)</sup>
	(36)	132,4	50	25	50 000	PLC 72-2-10	0,164	4 <sup>2)</sup>
	(36,5)	132,4	50	30	50 000	PLC 72-2-11	0,166	4 <sup>2)</sup>
	20,98	117	44,5	41,5	50 000	PLC 72-2-14	0,132	1
	20,98	119,5	44,5	39	50 000	PLC 72-2-15	0,142	1
	20,98	105	44,5	14,5	50 000	PLC 72-2-16	0,124	1
	20,98	137	44,5	46,5	50 000	PLC 72-2-17	0,136	1
	20,98	96,5	44,5	21,5	25 000	PLC 72-2-18	0,132	1
	20,98	105,5	44,5	22	50 000	PLC 72-2-19	0,127	1
8,9	22	112	61	28	90 000	PLC 72-6	0,128	2
10	22	92	56	18	40 000	PLC 73-1-13	0,132	2
	22	112	56	18	60 000	PLC 73-1-14	0,130	3
	22	112	56	18	60 000	PLC 73-1-22	0,130	3
	22	112	56	18	75 000	PLC 73-1-24	0,128	3
	22	112	56	18	80 000	PLC 73-1-27	0,111	3

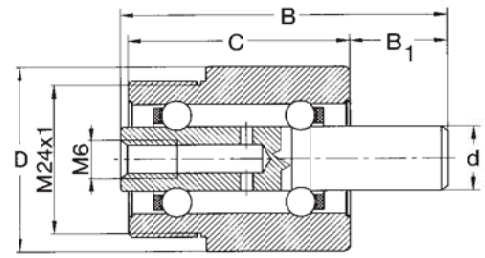
<sup>1)</sup> Used Bearing PLC 72-2; D<sub>1</sub> = 36

<sup>2)</sup> Used Bearing PLC 72-2-1; D = 14

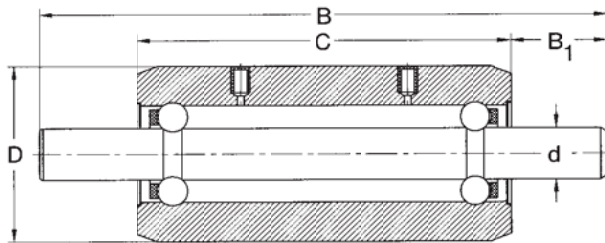
## Double Row Ball Bearings for Textile Machines and Instrument Techniques



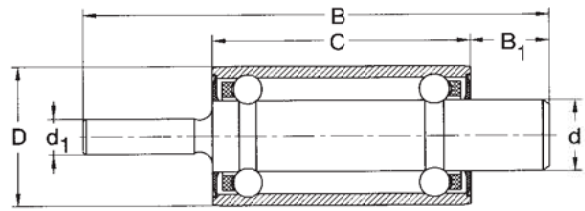
1



2



3

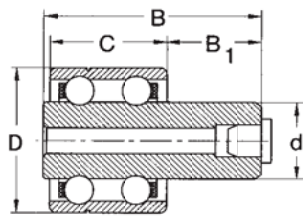


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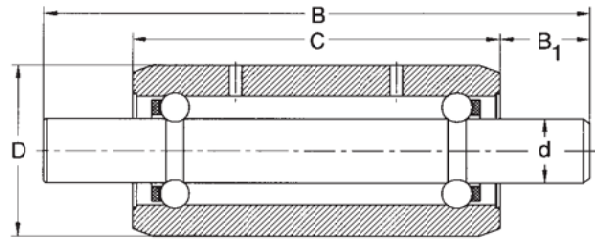
d	c <sub>1</sub>	Dimensions				Limiting Speed	Bearing Designation	Weight	Fig.
		D	B	C	B <sub>1</sub>				
		mm				min <sup>-1</sup>		kg	
10		28	50,5	35	15	15 000	PLC 73-1-28	0,060	2
		22	112	56	18	80 000	PLC 73-1-31	0,128	1
		28	50,5	35	15	15 000	PLC 73-1-32	0,060	2 <sup>1)</sup>
		34	110	74	17	15 000	PLC 73-1-35	0,450	3
		22,4	95	56	19,5	15 000	PLC 73-1-36	0,150	1
		24	65	42	11,5	15 000	PLC 73-1-40	0,068	1
	24	65	41,8	11,6	15 000	PLC 73-1-43	0,065	1	
5		22	70	44,5	8,5	6 000	PLC 73-4	0,089	4

<sup>1)</sup> Lubrication hole from opposite shaft side.

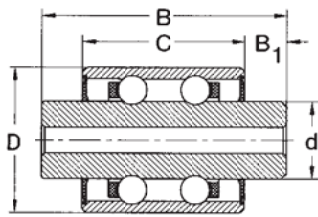
## Double Row Ball Bearings for Textile Machines and Instrument Techniques



1



2



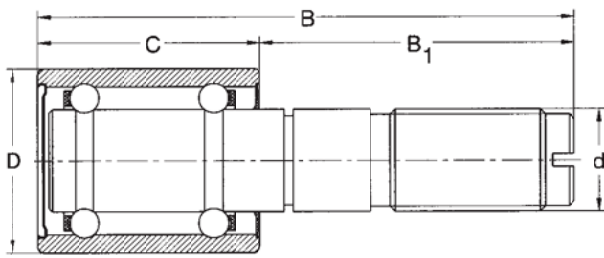
3

d	Dimensions				Limiting Speed	Bearing Designation	Weight	Fig.
	D	B	C	B <sub>1</sub>				
mm					min <sup>-1</sup>		kg	
11,2	22	33,5	17,35	15,65	8 000	PLC 73-7-3	0,080	1
	22	33,5	17,35	15,65	8 000	PLC 73-7-4	0,080	1 <sup>1)</sup>
12	24	48,5	27	21,5	7 500	PLC 73-7-5	0,100	1
	34	110	74	17	30 000	PLC 74-5-4	0,460	2
12,2	34	112	74	19	30 000	PLC 74-4	0,465	2
	34	112	74	14,8	30 000	PLC 74-4-1	0,465	2
16	30	36	25	3,5	15 000	PLC 76-2-1	0,108	3
	30	38,2	25	6,7	15 000	PLC 76-2-2	0,095	3
	30	38,2	25	6,7	15 000	PLC 76-2-3	0,095	3 <sup>2)</sup>
	30	73	39	17,1	10 000	PLC 76-3	0,180	3

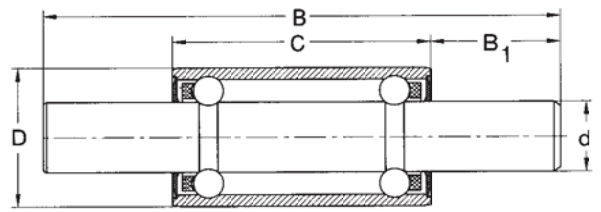
<sup>1)</sup> Solid Shaft

<sup>2)</sup> Lubrication Holes

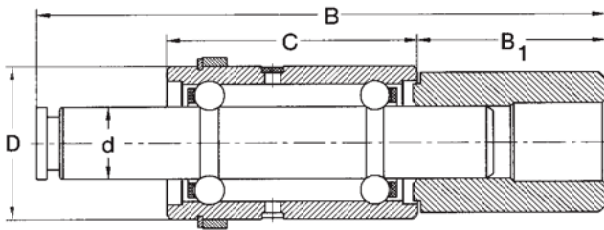
## Double Row Ball Bearings for Textile Machines and Instrument Techniques



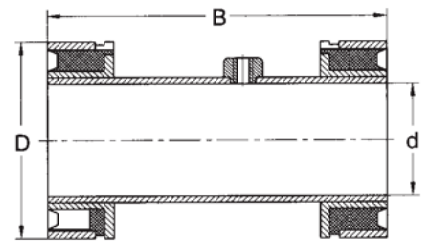
1



2



3



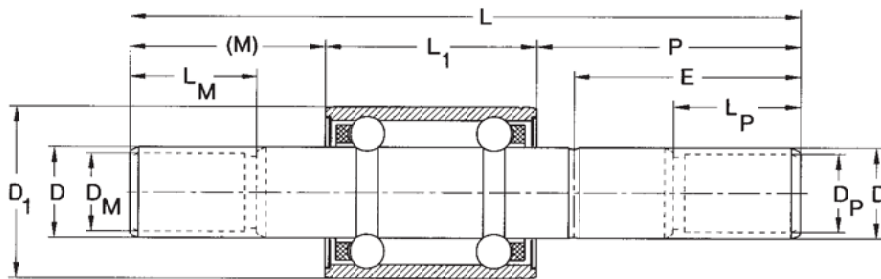
4

Dimensions					Limiting Speed	Bearing Designation	Weight	Fig.
d	D	B	C	B <sub>1</sub>				
mm					min <sup>-1</sup>		kg	
14,15	28	126,5	57,5	42	8 000	PLC 74-10-2	0,390	3
16	30	96	39	57	12 000	PLC 76-3-1	0,220	1
	30	115	60	27,5	10 000	PLC 76-4	0,318	2
16,3	38	170	117	25	25 000	PLC 76-5	0,833	2
22	38	70				PLC 83-15	0,100	4 <sup>1)</sup>
	38	69				PLC 83-18-2	0,100	4 <sup>2)</sup>

<sup>1)</sup> For Bearings PLC 73-1-24, PLC 73-1-31

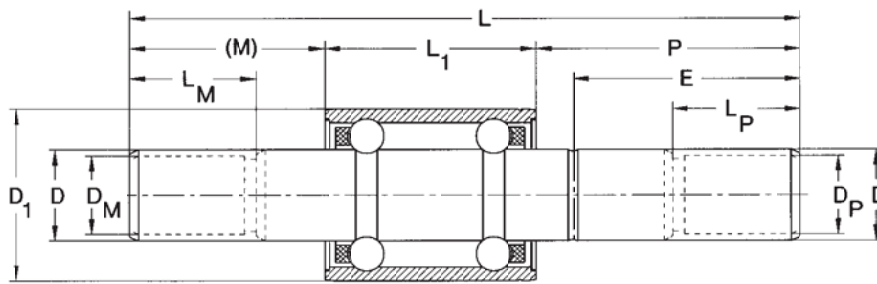
<sup>2)</sup> For Bearings PLC 72-6

## Double Row Ball Bearings for Water Pumps of Combustion Motors



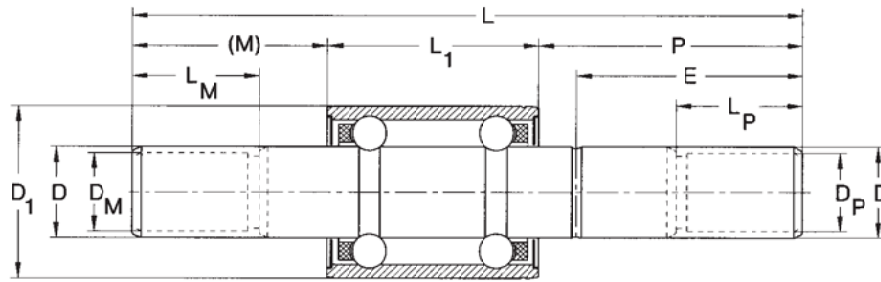
Bearing Designation	Dimensions											
	D <sub>1</sub>	L	D	L <sub>1</sub>	M	P	D <sub>M</sub>	D <sub>P</sub>	L <sub>M</sub>	L <sub>P</sub>	E	
mm												
K101	24,00	81,50	12,000	27,00	16,50	38,00						
K102	24,00	85,00	12,037	27,00	21,00	37,00						
K032	24,00	82,73	12,038	33,40	16,00	33,33						
K025	26,00	89,50	12,000	39,00	16,50	34,00						
K103	30,00	58,50	15,000	24,00	10,00	24,50		10,000			23,50	
K104	30,00	97,50	15,006	38,90	23,50	35,10						
K132	30,00	88,00	15,918	27,00	18,00	43,10						
K126	30,00	91,85	15,918	38,90	32,64	20,31	12,674		29,43			
K118	30,00	94,35	15,918	38,90	17,50	37,95						
K125	30,00	94,49	15,918	38,90	21,44	34,15	12,738	12,738	19,81	31,13		
K001	30,00	98,43	15,918	38,90	22,47	37,06		12,008			33,93	
K122	30,00	98,00	15,918	38,91	16,99	42,10						
K127	30,00	98,17	15,918	38,90	40,77	18,50	12,235		38,99			
K040	30,00	102,9	15,918	38,90	23,10	40,90						38,35
K112	30,00	102,87	15,918	38,90	22,57	41,40		12,675		38,23		
K124	30,00	102,87	15,918	38,90	23,04	40,93						
K042	30,00	102,90	15,918	38,90	23,10	40,90						
K120	30,00	103,50	15,918	38,91	25,80	38,80						
K015	30,00	111,51	15,918	38,90	23,79	48,82						42,47
K123	30,00	112,00	15,918	38,90	46,10	27,00						
K003	30,00	119,08	15,918	38,90	37,30	42,88						36,53
K109	30,00	123,24	15,918	57,15	25,45	40,64						
K113	30,00	123,24	15,918	57,15	25,45	40,64						

## Double Row Ball Bearings for Water Pumps of Combustion Motors



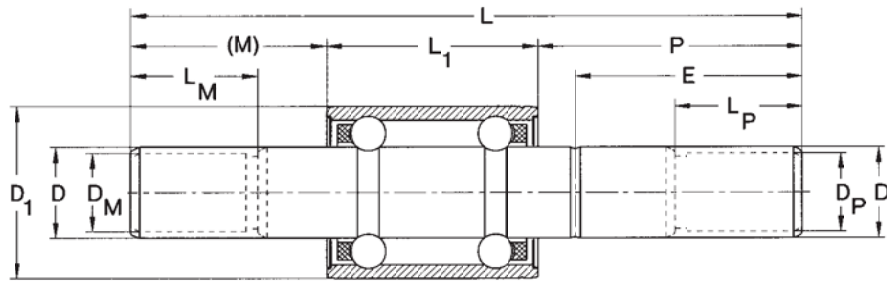
Bearing Designation	Dimensions										
	D <sub>1</sub>	L	D	L <sub>1</sub>	M	P	D <sub>M</sub>	D <sub>P</sub>	L <sub>M</sub>	L <sub>P</sub>	E
mm											
K129	30,00	123,44	15,918	57,15	25,60	40,69					
K020	30,00	123,67	15,918	38,90	31,73	53,04					44,45
K116	30,00	127,78	15,918	38,91	25,80	63,10					56,75
K119	30,00	128,00	15,918	57,15	23,00	47,85					
K110	30,00	136,66	15,918	38,90	39,17	58,59					
K036	30,00	138,10	15,918	38,90	58,33	40,87					34,54
K037	30,00	138,10	15,918	38,90	58,33	40,87					
K039	30,00	138,10	15,918	38,90	58,33	40,87					34,54
K111	30,00	141,98	15,918	57,15	32,12	52,71					
K121	30,00	146,00	15,918	38,91	61,70	45,40					
K018	30,00	101,50	15,939	38,90	17,49	45,11					
K015	30,00	122,25	15,939	38,90	40,17	43,18					38,28
K038	30,00	132,13	15,939	38,90	40,17	53,06					48,29
K001OS	30,00	98,43	15,969	38,90	22,47	37,06		12,057			33,93
K019OS	30,00	103,20	15,969	38,90	23,41	40,89					36,09
K015OS	30,00	111,51	15,969	38,90	23,79	48,82					42,47
K003OS	30,00	119,08	15,969	38,90	37,30	42,86					36,53
K020OS	30,00	123,67	15,969	38,90	31,73	53,04					44,45
K018OS	30,00	101,50	15,989	38,90	17,49	45,11					
K016OS	30,00	122,25	15,989	38,90	40,17	43,18					38,28
K021OS	30,00	132,13	15,989	38,90	40,17	53,06					48,29
K002OS	30,00	154,23	15,989	38,90	29,76	85,57					79,22
K108	30,00	106,25	15,994	38,90	26,22	41,13					

## Double Row Ball Bearings for Water Pumps of Combustion Motors



Bearing Designation	Dimensions										
	$D_1$	$L$	$D$	$L_1$	$M$	$P$	$D_m$	$D_p$	$L_m$	$L_p$	$E$
	mm										
K128	30,00	67,00	16,000	38,90	26,50	2,00					
K117	30,00	88,75	16,000	36,00	19,25	33,50					
K135	30,00	90,50	16,000	38,90	12,10	39,50		12,067		36,50	
K106	30,00	92,00	16,000	39,00	15,50	37,50					34,50
K114	30,00	98,00	16,000	38,90	18,10	41,00					38,00
K107	30,00	106,00	16,000	39,00	26,00	41,00					38,00
K115	30,00	106,00	16,000	38,90	26,10	41,00					38,00
K105	30,00	115,00	16,000	39,00	26,00	50,00					43,00
K130	30,00	115,50	16,000	38,90	41,55	35,05	15,000				
K131	30,00	131,00	16,000	38,90	57,05	35,05	15,000				
K139	36,00	103,00	19,000	34,00	38,50	30,50	12,000	15,000	38,00	30,00	
K026	38,10	112,67	18,961	41,28	28,59	42,80	15,918	24,13	39,62		
K010	38,10	127,48	18,961	54,10	30,91	42,47	15,918	15,918	14,35	39,30	
K006	38,10	132,08	18,961	54,10	29,72	48,26	15,918	15,918	12,32	43,18	
K014	38,10	134,88	18,961	54,10	37,22	43,56		15,918		41,02	
K012	38,10	136,40	18,961	54,10	36,07	46,23	15,918	15,918	12,32	43,43	
K023	38,10	135,64	18,961	54,10	31,76	49,78		15,918		47,24	
K138	38,10	136,40	18,961	54,10	36,10	46,20	15,918	15,918	12,30	43,40	
K022	38,10	143,48	18,961	54,10	30,71	58,67	15,918	15,918	12,24	50,55	
K008	38,10	146,05	18,961	54,10	36,20	55,75	15,918	15,918	13,72	51,56	
K017	38,10	146,05	18,961	54,10	36,20	55,75	15,918	15,918	30,10	51,56	
K140	38,10	146,05	18,961	54,10	44,32	47,63		15,918		44,50	
K035	38,10	148,84	18,961	54,10	40,89	53,85	15,918	15,918	34,93	49,66	
K007	38,10	150,50	18,961	54,10	34,93	61,47		15,918		58,30	

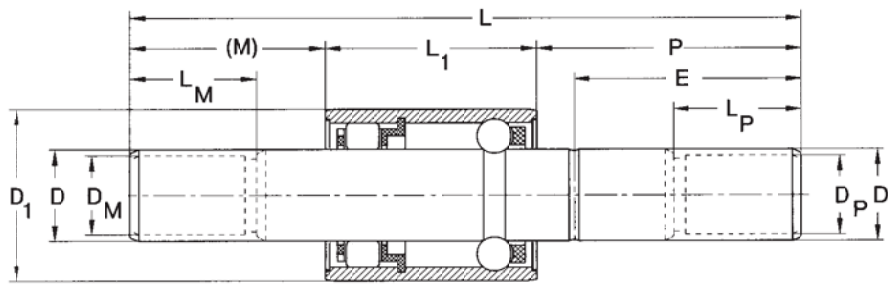
## Double Row Ball Bearings for Water Pumps of Combustion Motors



Bearing Designation	Dimensions										
	$D_1$	$L$	$D$	$L_1$	$M$	$P$	$D_M$	$D_P$	$L_M$	$L_P$	$E$
	mm										
K011	38,10	152,40	18,961	54,10	35,43	62,87	15,918	15,918	15,27	58,39	
K009	38,10	152,91	18,961	54,10	46,23	52,58	15,918	15,918	28,58	43,26	
K013	38,10	156,59	18,961	54,10	39,50	62,99		15,918		59,82	
K137	38,10	156,60	18,961	54,10	39,50	63,00		15,918		59,80	
K004	38,10	161,93	18,961	54,10	35,44	72,39	15,918	15,918	15,27	70,05	
K136	38,10	175,70	19,000	54,10	53,00	68,70	16,000	16,000	14,00	64,00	
K010OS	38,10	127,48	19,012	54,10	30,91	42,47	15,918	15,969	14,35	39,30	
K006OS	38,10	132,08	19,012	54,10	29,72	48,26	15,918	15,969	12,32	43,18	
K014OS	38,10	134,88	19,012	54,10	37,22	43,56		15,969		41,02	
K012OS	38,10	136,40	19,012	54,10	36,07	46,23	15,918	15,969	12,32	43,43	
K023OS	38,10	135,64	19,012	54,10	31,76	49,78		15,969		47,24	
K022OS	38,10	143,48	19,012	54,10	30,71	58,67	15,918	15,969	12,24	50,55	
K141	38,10	143,48	19,012	54,10	30,71	58,67	15,918	15,977	12,24	50,55	
K008OS	38,10	146,05	19,012	54,10	36,20	55,75	15,918	15,969	13,72	51,56	
K017OS	38,10	146,05	19,012	54,10	36,20	55,75	15,969	15,969	30,10	51,56	
K007OS	38,10	150,50	19,012	54,10	34,93	61,47		15,969		58,30	
K011OS	38,10	152,40	19,012	54,10	35,43	62,87	15,918	15,969	15,27	58,39	
K009OS	38,10	152,91	19,012	54,10	46,23	52,58	15,918	15,969	28,58	43,26	
K013OS	38,10	156,59	19,012	54,10	39,50	62,99		15,969		59,82	
K024OS	38,10	161,04	19,012	54,10	46,61	60,33	15,918	15,969	33,15	55,88	
K004OS	38,10	161,93	19,012	54,10	35,44	72,39	15,918	15,969	15,27	70,05	

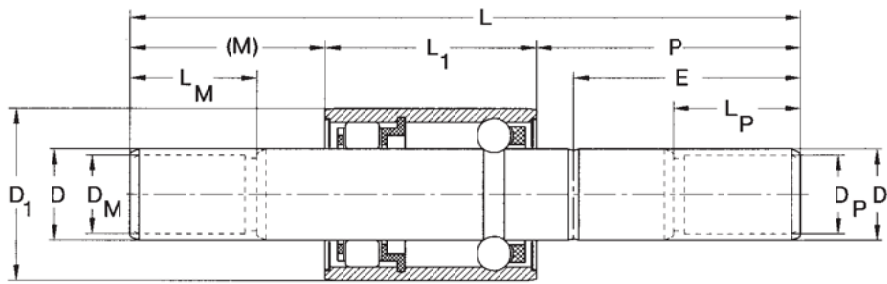


## Double Row Ball Bearings for Water Pumps of Combustion Motors



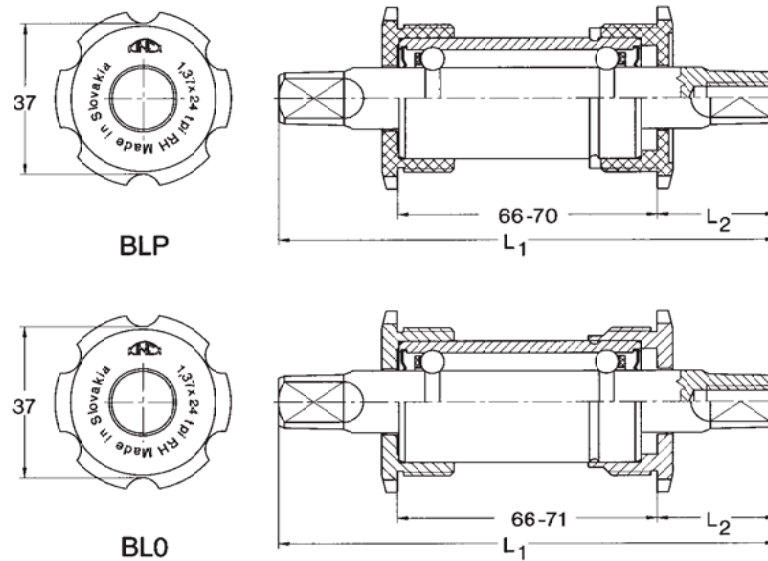
Bearing Designation	Dimensions										
	D <sub>1</sub>	L	D	L <sub>1</sub>	M	P	D <sub>M</sub>	D <sub>P</sub>	L <sub>M</sub>	L <sub>P</sub>	E
mm											
R102	30,00	90,00	15,000	38,90	18,00	33,10		12,000		32,00	
R001	30,00	87,50	15,008	36,00	16,50	35,00		12,000		34,00	
R101	30,00	90,50	15,008	38,90	12,10	39,50		12,067		35,50	
R104	30,00	98,00	15,008	38,90	18,50	40,60		12,067		36,60	
R106	30,00	105,00	15,008	38,90	17,10	49,00		12,067		45,00	
R105	30,00	109,25	15,008	52,00	17,75	39,50					36,00
R107	30,00	109,25	15,008	52,00	17,75	39,50					36,00
R013	30,00	101,00	15,918	38,90	24,99	37,11		12,00		34,98	
R007	30,00	105,41	15,918	38,90	20,31	46,20					41,38
R014	30,00	110,39	15,918	38,90	21,35	50,14					41,00
R002	30,00	111,15	15,918	38,90	25,25	47,00					
R007OS	30,00	105,41	15,969	38,90	20,31	46,20					41,38
R005	30,00	88,75	16,000	36,50	19,25	33,00					31,00
R108	30,00	92,00	16,000	39,00	15,50	37,50					34,50
R110	30,00	101,45	16,000	38,95	19,55	43,00					
R111	30,00	112,00	16,000	39,00	32,00	41,00					38,00
R109	30,00	115,00	16,000	39,00	26,00	50,00					46,00
R004	30,00	117,00	16,000	39,00	26,00	52,00					47,00
R003	30,00	127,00	16,000	39,00	26,00	62,00					57,00
R103	38,10	120,65	15,008	38,90	42,25	39,50		12,067		35,50	
R113	38,10	90,90	18,961	54,10	33,30	3,60					
R006	38,10	120,50	18,961	54,10	25,68	40,72		15,918		39,00	
R009	38,10	151,43	18,961	54,10	30,71	66,62		15,918	12,27	53,49	
R010	38,10	158,24	18,961	54,10	43,05	61,09	15,918	15,918	14,10	56,64	
R011	38,10	157,99	18,961	54,10	46,61	57,28	15,918	15,918	14,78	52,83	
R112	38,10	175,70	19,000	54,00	53,00	68,70	15,918	16,000	14,00	64,00	

## Double Row Ball Bearings for Water Pumps of Combustion Motors



Bearing Designation	Dimensions										
	$D_1$	$L$	$D$	$L_1$	$M$	$P$	$D_M$	$D_P$	$L_M$	$L_P$	$E$
mm											
R008OS	38,10	120,50	19,012	54,10	25,68	40,72	16,000	15,969			39,00
R012OS	38,10	120,50	19,012	54,10	25,68	40,72		12,088			39,09
R009OS	38,10	151,43	19,012	54,10	30,71	66,62	15,918	15,969	12,27		53,49
R125	52,00	98,00	24,000	54,00	33,00	11,00		19,500			11,00
R126	52,00	134,50	25,000	53,50	26,00	55,00		12,500			54,50
R115	55,00	100,00	24,000	60,00	30,00	10,00		20,000			8,50
R114	55,00	127,00	25,000	60,00	25,00	42,00		16,000			41,00
R122	55,00	127,00	25,000	60,00	25,00	42,00		16,000			41,00
R124	55,00	130,00	25,000	60,00	25,00	45,00		15,918			44,00
R118	55,00	145,00	25,000	60,00	25,00	60,00		15,918			59,00
R128	55,00	145,00	25,000	60,00	25,00	60,00		16,000			59,00
R121	55,00	157,00	25,000	60,00	34,00	63,00		16,000			57,00
R117	55,00	171,00	25,000	60,00	38,00	73,00					
R119	55,00	177,00	25,000	60,00	54,00	63,00					
R123	55,00	177,00	25,000	60,00	54,00	63,00					
R116	55,00	178,50	25,000	60,00	45,50	73,00					
R120	55,00	212,00	25,000	60,00	89,00	63,00					

## Bottom Bracket Bearings



### Fastening of the Pedal Crank with a Square

- BLP - Bearing with plastic cups for the frame width of 66-70 mm. BSA or ITA thread.
- BLO - Bearing with steel zinc-coated cups for the frame width of 66-71 mm. BSA or ITA thread.
- BLAL - Bearing with aluminium cups for the frame width of 68-72 mm. BSA or ITA thread.
- BLN; BLNA - The bearing with plastic cups designed for pressing (Thompson) to suit the frame width of 68-70 mm.
- BLN - the cup diameter is 35 mm. BLNA - the cup diameter is 40 mm.

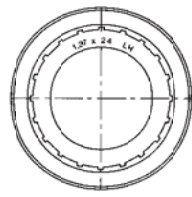
### Fastening of the Pedal Crank With a Key

BLPK - The bearing with plastic cups for the frame width of 66-70 mm. BSA or ITA thread.

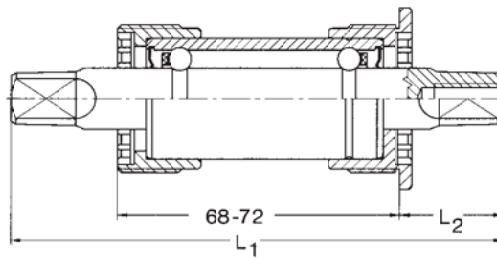
Thread: BSA: 1,37" x 24 mm; ITA: 36 x 24 mm.

12,6 (ISO) 12,73 (JIS)

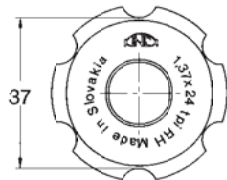
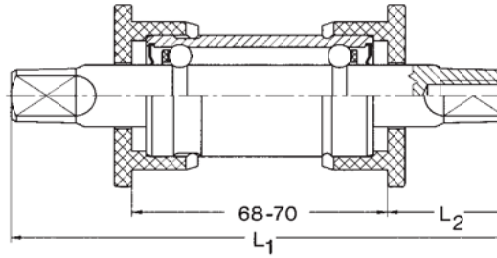
## Bottom Bracket Bearings



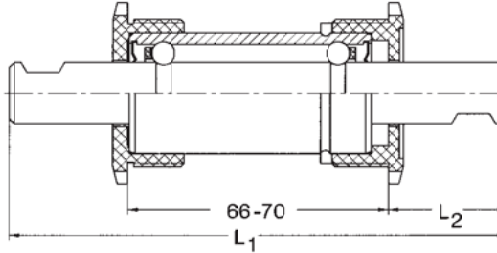
BLAL



BLN, BLNA



BLPK

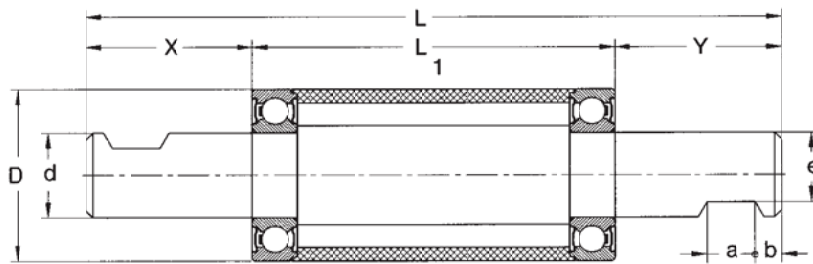


Dimensions		Weight					
L <sub>1</sub>	L <sub>2</sub>	BLP	BLO	BLAL	BLN	BLNA	BLPK
mm		kg					
107	19,5	0,292	0,376	0,301			
110	21	0,296	0,380	0,305			
113	22	0,300	0,384	0,309			
115,5	23,5	0,305	0,389	0,314			
115,5	23,7					0,319	
119	25,5				0,311	0,325	
119	27	0,311	0,395	0,320			
122,5	28,5	0,315	0,399	0,324			
127	29,5	0,323	0,407	0,332	0,323	0,337	
131	33,5	0,330	0,414	0,339			
136	37						0,426

How to order bearings with cups (example)

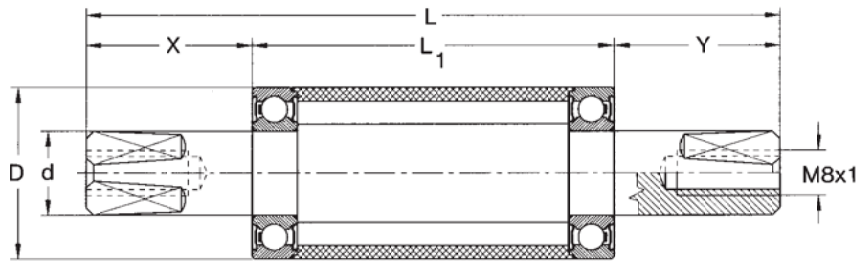
Type	Axis	Length	Square dimensions	Thread (the cup diameter)
BLP	110		JIS	BSA
BLN	119		ISO	∅ 35
BLPK				BSA

## Bottom Bracket Bearings (Fastening of the Pedal Crank With a Key)



Dimensions									Bearing Designation	Weight
d	D	L	L <sub>1</sub>	X	Y	e	a	b		
mm										kg
15,9	30	120,5	76	18,5	26	128	10	5,5	S BS-B-120,5/P	0,315
	30	122,5	76	19,5	27	128	10	5,5	S BS-B-122,5/P	0,320
	30	136	76	26,5	33,5	128	10	5,5	S BS-B-136/P	0,350

## Bottom Bracket Bearings (Fastening of the Pedal Crank With a Square)



Dimensions						Bearing Designation	Weight
d	D	L	L <sub>1</sub>	X	Y		
mm							kg
16	30	115,5	66	24	25,5	S BS-A-115,5/P	0,310
		119	66	24	29	S BS-A-119/P	0,315
		122	66	26	30	S BS-A-122/P	0,320
		127	66	29,5	31,5	S BS-A-127/P	0,340
		131	66	29,5	35,5	S BS-A-131/P	0,350