



# CRAFT BEARINGS

Quality Minded



## GENERAL CATALOG

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**SPHERICAL PLAIN BEARINGS GE**  
**Series: GE.. GEZ.. GEG.. GEEW.. GEEM..**



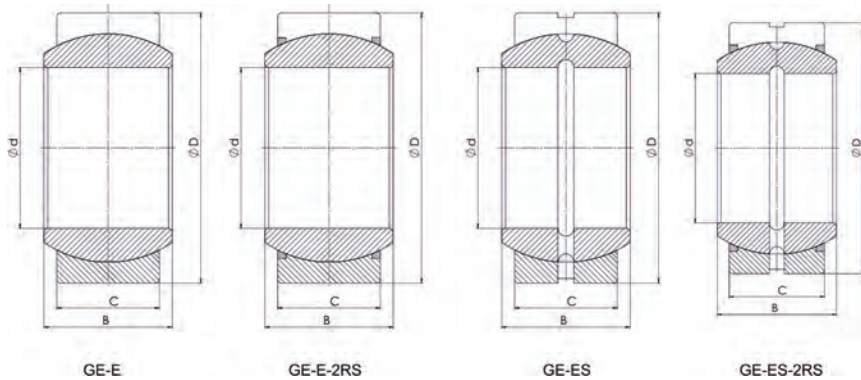
Subject	Symbol	Description
Series	GE	Single-split outer ring, metric (mm)
	GEZ	Single-split outer ring, imperial (in)
	GEG	Single-split outer ring. Wider inner ring and larger outside diameter compared to GE..ES
	GEEW	Single-split outer ring. An extended inner ring on both sides
	GEEM	Single-split outer ring. An extended inner ring on both sides which width equals the bore diameter
Type	2RS	Rubber seals on both sides
	E	Single-split outer ring
	S	Inner and outer rings have lubrication groove and holes

**Features**

Spherical plain bearings are radial plain bearings consists of an outer ring and an inner ring made of bearing steel and with spherical sliding contact surface. These bearing are suitable for arrangements with heavy radial load at low misalignment and oscillation. Moreover, spherical plain bearings can carry specific axial loads in both directions.

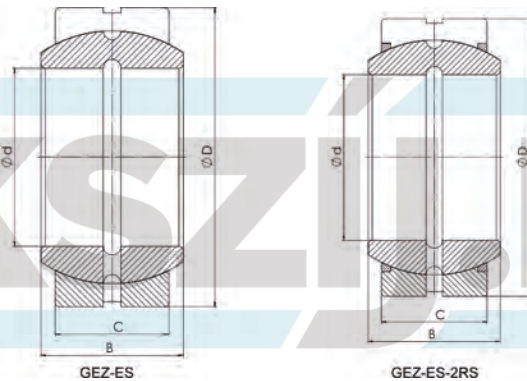
**Sealing**

Most popular sizes of CRAFT bearings plain bearings are available without seals or sealed on both sides. Standard sealed bearings can increase the service life of a bearing and save space, while reducing inventory and assembly costs. Spherical plain bearings GE series fitted on both sides with the rubber seals (2RS) are very effective, under normal operating conditions, at keeping, under normal operating conditions, at keeping contaminants away from the sliding contact surfaces. These seals also effectively retain the grease and therefore are appropriate for bearings requiring maintenance.



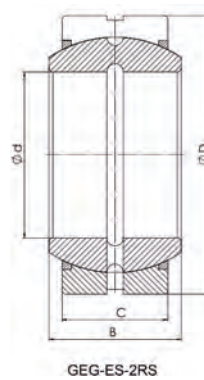
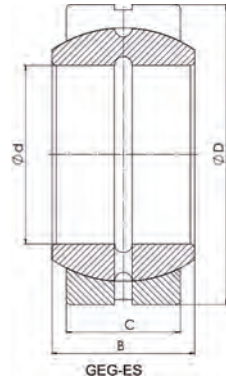
ISO	Dimensions (mm)							Basic Load Rating (N)		Weight (kg)
	d	D	B	C	d <sub>k</sub>	R <sub>ts</sub>	R <sub>zs</sub>	Dyn. C	Stat. C <sub>0</sub>	
						min	min			
GE5E	5	14	6	4	10	0.30	0.30	3400	17000	0.005
GE6E	6	14	6	4	10	0.30	0.30	3400	17000	0.004
GE8E	8	16	8	5	13	0.30	0.30	5500	27500	0.007
GE10E	10	19	9	6	16	0.30	0.30	8150	40500	0.011
GE12E	12	22	10	7	18	0.30	0.30	10800	54000	0.016
GE15ES	15	26	12	9	22	0.30	0.30	17000	85000	0.025
GE15ES 2RS	15	26	12	9	22	0.30	0.30	17000	85000	0.025
GE16ES	16	30	14	10	25	0.30	0.30	21200	106000	0.041
GE16ES 2RS	16	30	14	10	25	0.30	0.30	21200	106000	0.041
GE17ES	17	30	14	10	25	0.30	0.30	21200	106000	0.041
GE17ES 2RS	17	30	14	10	25	0.30	0.30	21200	106000	0.041
GE20ES	20	35	16	12	29	0.60	0.30	30000	146000	0.061
GE20ES 2RS	20	35	16	12	29	0.60	0.30	30000	146000	0.061
GE25ES	25	42	20	16	35.5	0.60	0.60	48000	240000	0.110
GE25ES 2RS	25	42	20	16	35.5	0.60	0.60	48000	240000	0.110
GE30ES	30	47	22	18	40.7	0.60	0.60	62000	310000	0.140
GE30ES 2RS	30	47	22	18	40.7	0.60	0.60	62000	310000	0.140
GE35ES	35	55	25	20	47	0.60	1.00	80000	400000	0.220
GE35ES 2RS	35	55	25	20	47	0.60	1.00	80000	400000	0.220
GE40ES	40	62	28	22	53	0.60	1.00	100000	500000	0.300
GE40ES 2RS	40	62	28	22	53	0.60	1.00	100000	500000	0.300
GE45ES	45	68	32	25	60	0.60	1.00	127000	640000	0.410
GE45ES 2RS	45	68	32	25	60	0.60	1.00	127000	640000	0.410
GE50ES	50	75	35	28	66	0.60	1.00	156000	780000	0.530
GE50ES 2RS	50	75	35	28	66	0.60	1.00	156000	780000	0.530
GE55ES	55	85	40	32	74	0.60	1.00	200000	1000000	0.940
GE55ES 2RS	55	85	40	32	74	0.60	1.00	200000	1000000	0.940
GE60ES	60	90	44	36	80	1.00	1.00	245000	1220000	1.000
GE60ES 2RS	60	90	44	36	80	1.00	1.00	245000	1220000	1.000
GE70ES	70	105	49	40	92	1.00	1.00	315000	1560000	1.500
GE70ES 2RS	70	105	49	40	92	1.00	1.00	315000	1560000	1.500
GE80ES	80	120	55	45	105	1.00	1.00	400000	2000000	2.200
GE80ES 2RS	80	120	55	45	105	1.00	1.00	400000	2000000	2.200
GE90ES	90	130	60	50	115	1.00	1.00	490000	2450000	2.700
GE90ES 2RS	90	130	60	50	115	1.00	1.00	490000	2450000	2.700
GE100ES	100	150	70	55	130	1.00	1.00	610000	3050000	4.300
GE100ES 2RS	100	150	70	55	130	1.00	1.00	610000	3050000	4.300
GE110ES	110	160	70	55	140	1.00	1.00	655000	3250000	4.700
GE110ES 2RS	110	160	70	55	140	1.00	1.00	655000	3250000	4.700
GE120ES	120	180	85	70	160	1.00	1.00	950000	4750000	8.000
GE120ES 2RS	120	180	85	70	160	1.00	1.00	950000	4750000	8.000
GE140ES	140	210	90	70	180	1.00	1.00	1080000	5400000	11.000
GE140ES 2RS	140	210	90	70	180	1.00	1.00	1080000	5400000	11.000

ISO	Dimensions (mm)						Basic Load Rating (N)		Weight (kg)	
	d	D	B	C	d <sub>k</sub>	R <sub>1s</sub>	R <sub>2s</sub>	Dyn. C		Stat. C <sub>0</sub>
						min	min			
GE160ES	160	230	105	80	200	1.00	1.00	1360000	6800000	14.000
GE160ES 2RS	160	230	105	80	200	1.00	1.00	1360000	6800000	14.000
GE180ES	180	260	105	80	225	1.00	1.00	1530000	7650000	18.500
GE180ES 2RS	180	260	105	80	225	1.00	1.00	1530000	7650000	18.500
GE200ES	200	290	130	100	250	1.10	1.10	2120000	10600000	28.000
GE200ES 2RS	200	290	130	100	250	1.10	1.10	2120000	10600000	28.000
GE220ES	220	320	135	100	275	1.10	1.10	2320000	11600000	35.510
GE220ES 2RS	220	320	135	100	275	1.10	1.10	2320000	11600000	35.510
GE240ES	240	340	140	100	300	1.10	1.10	2550000	12700000	39.910
GE240ES 2RS	240	340	140	100	300	1.10	1.10	2550000	12700000	39.910
GE260ES	260	370	150	110	325	1.10	1.10	3030000	15190000	51.540
GE260ES 2RS	260	370	150	110	325	1.10	1.10	3030000	15190000	51.540
GE280ES	280	400	155	120	350	1.10	1.10	3570000	17850000	65.060
GE280ES 2RS	280	400	155	120	350	1.10	1.10	3570000	17850000	65.060
GE300ES	300	430	165	120	375	1.10	1.10	3800000	19100000	78.070
GE300ES 2RS	300	430	165	120	375	1.10	1.10	3800000	19100000	78.070



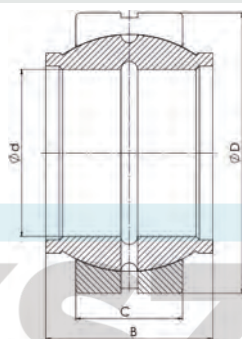
ISO	Dimensions (in)						Basic Load Rating (N)		Weight (kg)	
	d	D	B	C	d <sub>k</sub>	R <sub>1s</sub>	R <sub>2s</sub>	Dyn. C		Stat. C <sub>0</sub>
						min	min			
GEZ12ES	0.5	0.875	0.437	0.375	0.709	0.15	0.60	2922	9217	0.022
GEZ15ES	0.625	1.0625	0.547	0.469	0.906	0.15	0.60	4945	14612	0.036
GEZ19ES	0.75	1.25	0.656	0.562	1.083	0.30	0.60	6969	21356	0.053
GEZ22ES	0.875	1.4375	0.756	0.656	1.26	0.30	0.60	9441	28549	0.085
GEZ25ES	1	1.625	0.875	0.75	1.437	0.30	0.60	12589	37316	0.121
GEZ31ES	1.25	2	1.093	0.937	1.791	0.60	0.60	19332	58447	0.230
GEZ34ES	1.375	2.1875	1.187	1.031	1.929	0.60	1.00	22929	69686	0.350
GEZ38ES	1.5	2.4375	1.312	1.125	2.154	0.60	1.00	28099	84298	0.420
GEZ44ES	1.75	2.8125	1.531	1.312	2.516	0.60	1.00	38215	114645	0.640
GEZ50ES	2	3.1875	1.75	1.5	2.874	0.60	1.00	50354	150613	0.930
GEZ57ES	2.25	3.5625	1.969	1.687	3.228	0.60	1.00	62943	191076	1.300
GEZ63ES	2.5	3.9375	2.187	1.875	3.622	1.00	1.00	79802	238283	1.800
GEZ69ES	2.75	4.375	2.406	2.062	3.937	1.00	1.00	9329	280994	2.400
GEZ76ES	3	4.75	2.625	2.25	4.311	1.00	1.00	112397	337192	3.100
GEZ82ES	3.25	5.125	2.844	2.437	4.685	1.00	1.00	131505	395639	3.800
GEZ88ES	3.5	5.5	3.062	2.625	5.039	1.00	1.00	152861	458582	4.800
GEZ95ES	3.75	5.875	3.281	2.812	5.394	1.00	1.00	17534	530516	5.800
GEZ101ES	4	6.25	3.5	3	5.748	1.00	1.00	202315	595706	7.000
GEZ107ES	4.25	6.625	3.719	3.187	6.102	1.00	1.00	224795	674385	8.400
GEZ114ES	4.5	7	3.937	3.375	6.476	1.00	1.00	25177	764303	9.800
GEZ120ES	4.75	7.375	4.156	3.562	6.831	1.00	1.00	280994	842981	11.500

ISO	Dimensions (in)							Basic Load Rating (N)		Weight (kg)
	d	D	B	C	d <sub>k</sub>	R <sub>1s</sub>	R <sub>2s</sub>	Dyn. C	Stat. C <sub>0</sub>	
						min	min			
GEZ127ES	5	7.75	4.375	3.75	7.205	1.00	1.00	314713	932899	13.500
GEZ152ES	6	8.75	4.75	4.125	8.15	1.00	1.00	388895	1168933	17.500
GEZ165ES	6.5	9.75	4.875	4.062	8.78	1.10	1.10	411375	1236372	22.900
GEZ177ES	7	10.5	5.25	4.375	9.449	1.10	1.10	476565	1436439	28.600
GEZ190ES	7.5	11.25	5.625	4.687	10.118	1.10	1.10	548499	1649994	35.100
GEZ203ES	8	12	6	5	10.827	1.10	1.10	622682	1877037	42.600
GEZ215ES	8.5	12.75	6.375	5.312	11.496	1.10	1.10	703608	2117568	51.100
GEZ228ES	9	13.5	6.75	5.625	12.165	1.10	1.10	78903	2360346	60.700
GEZ241ES	9.5	14.25	7.125	5.937	12.835	1.10	1.10	878948	2630100	71.400
GEZ254ES	10	15	7.5	6.25	13.504	1.10	1.10	97561	2933573	83.300
GEZ266ES	10.5	15.75	7.875	6.562	14.173	1.10	1.10	1074520	3214567	96.400
GEZ279ES	11	16.5	8.25	6.875	14.843	1.10	1.10	1180173	3529280	110.800
GEZ292ES	11.5	17.25	8.625	7.187	15.551	1.10	1.10	1290323	3866472	126.700
GEZ304ES	12	18	9	7.5	16.22	1.10	1.10	1404968	4203664	143.900
GEZ19ES 2RS	0.75	1.25	0.656	0.562	1.083	0.30	0.60	6969	21356	0.053
GEZ22ES 2RS	0.875	1.4375	0.756	0.656	1.26	0.30	0.60	9441	28549	0.085
GEZ25ES 2RS	1	1.625	0.875	0.75	1.437	0.30	0.60	12589	37316	0.121
GEZ31ES 2RS	1.25	2	1.093	0.937	1.791	0.60	0.60	19332	58447	0.232
GEZ34ES 2RS	1.375	2.1875	1.187	1.031	1.929	0.60	1.00	22929	69686	0.351
GEZ38ES 2RS	1.5	2.4375	1.312	1.125	2.154	0.60	1.00	28099	84298	0.422
GEZ44ES 2RS	1.75	2.8125	1.531	1.312	2.516	0.60	1.00	38215	114645	0.641
GEZ50ES 2RS	2	3.1875	1.75	1.5	2.874	0.60	1.00	50354	150613	1.330
GEZ57ES 2RS	2.25	3.5625	1.969	1.687	3.228	0.60	1.00	62943	191076	1.850
GEZ63ES 2RS	2.5	3.9375	2.187	1.875	3.622	1.00	1.00	79802	238283	2.420
GEZ69ES 2RS	2.75	4.375	2.406	2.062	3.937	1.00	1.00	9329	280994	3.100
GEZ76ES 2RS	3	4.75	2.625	2.25	4.311	1.00	1.00	112397	337192	3.820
GEZ82ES 2RS	3.25	5.125	2.844	2.437	4.685	1.00	1.00	131505	395639	4.790
GEZ88ES 2RS	3.5	5.5	3.062	2.625	5.039	1.00	1.00	152861	458582	5.780
GEZ95ES 2RS	3.75	5.875	3.281	2.812	5.394	1.00	1.00	17534	530516	6.990
GEZ101ES 2RS	4	6.25	3.5	3	5.748	1.00	1.00	202315	595706	7.000
GEZ107ES 2RS	4.25	6.625	3.719	3.187	6.102	1.00	1.00	224795	674385	8.410
GEZ114ES 2RS	4.5	7	3.937	3.375	6.476	1.00	1.00	25177	764303	9.790
GEZ120ES 2RS	4.75	7.375	4.156	3.562	6.831	1.00	1.00	280994	842981	11.500
GEZ127ES 2RS	5	7.75	4.375	3.75	7.205	1.00	1.00	314713	932899	13.500
GEZ152ES 2RS	6	8.75	4.75	4.125	8.15	1.00	1.00	388895	1168933	17.500
GEZ165ES 2RS	6.5	9.75	4.875	4.062	8.78	1.10	1.10	411375	1236372	22.900
GEZ177ES 2RS	7	10.5	5.25	4.375	9.449	1.10	1.10	476565	1436439	28.600
GEZ190ES 2RS	7.5	11.25	5.625	4.687	10.118	1.10	1.10	548499	1649994	35.100
GEZ203ES 2RS	8	12	6	5	10.827	1.10	1.10	622682	1877037	42.600
GEZ215ES 2RS	8.5	12.75	6.375	5.312	11.496	1.10	1.10	703608	2117568	51.100
GEZ228ES 2RS	9	13.5	6.75	5.625	12.165	1.10	1.10	78903	2360346	60.700
GEZ241ES 2RS	9.5	14.25	7.125	5.937	12.835	1.10	1.10	878948	2630100	71.400
GEZ254ES 2RS	10	15	7.5	6.25	13.504	1.10	1.10	97561	2933573	83.300
GEZ266ES 2RS	10.5	15.75	7.875	6.562	14.173	1.10	1.10	1074520	3214567	96.400
GEZ279ES 2RS	11	16.5	8.25	6.875	14.843	1.10	1.10	1180173	3529280	110.800
GEZ292ES 2RS	11.5	17.25	8.625	7.187	15.551	1.10	1.10	1290323	3866472	126.700
GEZ304ES 2RS	12	18	9	7.5	16.22	1.10	1.10	1404968	4203664	143.900

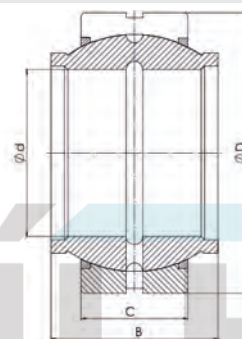


ISO	Dimensions (mm)					Basic Load Rating (N)		Weight (kg)
	d	D	B	C	$d_k$	Dyn. C	Stat. C <sub>0</sub>	
GEG4E	4	14	7	4	10	34000	17000	0.005
GEG5E	5	16	9	5	13	55000	27000	0.009
GEG6E	6	16	9	5	13	55000	27000	0.010
GEG8E	8	19	11	6	16	81000	40000	0.014
GEG10E	10	22	12	7	18	10000	53000	0.021
GEG12E	12	26	15	9	22	16000	84000	0.036
GEG15ES	15	30	16	10	25	21000	106000	0.049
GEG17ES	17	35	20	12	29	30000	146000	0.083
GEG20ES	20	42	25	16	35.5	48000	240000	0.153
GEG25ES	25	47	28	18	40.7	62000	310000	0.203
GEG30ES	30	55	32	20	47	79000	399000	0.286
GEG35ES	35	62	35	22	53	99000	495000	0.386
GEG40ES	40	68	40	25	60	127000	637000	0.518
GEG45ES	45	75	43	28	66	156000	780000	0.670
GEG50ES	50	90	56	36	80	245000	1220000	1.388
GEG60ES	60	105	63	40	92	313000	1560000	2.012
GEG70ES	70	120	70	45	105	400000	2000000	3.010
GEG80ES	80	130	75	50	115	488000	2440000	3.640
GEG90ES	90	150	85	55	130	607000	3030000	5.220
GEG100ES	100	160	85	55	140	654000	3270000	6.050
GEG110ES	110	180	100	70	160	950000	4750000	9.680
GEG120ES	120	210	115	70	180	1070000	5350000	14.010
GEG140ES	140	230	130	80	200	1360000	6800000	18.500
GEG160ES	160	260	135	80	225	1530000	7650000	25.000
GEG180ES	180	290	155	100	250	2120000	10600000	35.500
GEG200ES	200	320	165	100	275	2320000	11600000	45.280
GEG220ES	220	340	175	100	300	2550000	12700000	50.900
GEG240ES	240	370	190	110	325	3030000	15190000	65.300
GEG260ES	260	400	205	120	350	3570000	17850000	82.000
GEG280ES	280	430	210	120	375	3800000	19100000	96.600
GEG15ES 2RS	15	30	16	10	25	21000	106000	0.049
GEG17ES 2RS	17	35	20	12	29	30000	146000	0.083
GEG20ES 2RS	20	42	25	16	35.5	48000	240000	0.153
GEG25ES 2RS	25	47	28	18	40.7	62000	310000	0.203
GEG30ES 2RS	30	55	32	20	47	79000	399000	0.286
GEG35ES 2RS	35	62	35	22	53	99000	495000	0.386
GEG40ES 2RS	40	68	40	25	60	127000	637000	0.518
GEG45ES 2RS	45	75	43	28	66	156000	780000	0.670
GEG50ES 2RS	50	90	56	36	80	245000	1220000	1.388
GEG60ES 2RS	60	105	63	40	92	313000	1560000	2.012
GEG70ES 2RS	70	120	70	45	105	400000	2000000	3.010
GEG80ES 2RS	80	130	75	50	115	488000	2440000	3.640
GEG90ES 2RS	90	150	85	55	130	607000	3030000	5.220

ISO	Dimensions (mm)					Basic Load Rating (N)		Weight (kg)
	d	D	B	C	d <sub>k</sub>	Dyn. C	Stat. C <sub>0</sub>	
GEG100ES 2RS	100	160	85	55	140	654000	3270000	6.050
GEG110ES 2RS	110	180	100	70	160	950000	4750000	9.680
GEG120ES 2RS	120	210	115	70	180	1070000	5350000	14.010
GEG140ES 2RS	140	230	130	80	200	1360000	6800000	18.500
GEG160ES 2RS	160	260	135	80	225	1530000	7650000	25.000
GEG180ES 2RS	180	290	155	100	250	2120000	10600000	35.500
GEG200ES 2RS	200	320	165	100	275	2320000	11600000	45.280
GEG220ES 2RS	220	340	175	100	300	2550000	12700000	50.900
GEG240ES 2RS	240	370	190	110	325	3030000	15190000	65.300
GEG260ES 2RS	260	400	205	120	350	3570000	17850000	82.000
GEG280ES 2RS	280	430	210	120	375	3800000	19100000	96.600

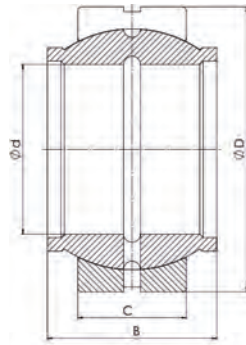


GEEW-ES

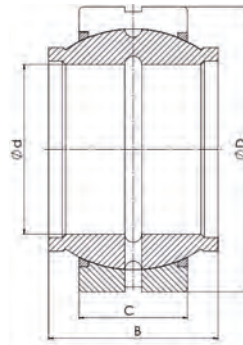


GEEW-ES-2RS

ISO	Dimensions (mm)					Basic Load Rating (N)		Weight (kg)
	d	D	B	C	d <sub>k</sub>	Dyn. C	Stat. C <sub>0</sub>	
GEEW12ES	12	22	12	7	18	10000	53000	0.022
GEEW15ES	15	26	15	9	22	16000	84000	0.031
GEEW16ES	16	28	16	9	23	17000	85000	0.035
GEEW17ES	17	30	17	10	25	21000	106000	0.044
GEEW20ES	20	35	20	12	29	30000	146000	0.071
GEEW25ES	25	42	25	16	35.5	48000	240000	0.131
GEEW30ES	30	47	30	18	40.7	62000	310000	0.168
GEEW32ES	32	52	32	18	43	65000	328000	0.182
GEEW35ES	35	55	35	20	47	79000	399000	0.253
GEEW40ES	40	62	40	22	53	99000	495000	0.338
GEEW45ES	45	68	45	25	60	127000	637000	0.481
GEEW50ES	50	75	50	28	66	156000	780000	0.558
GEEW60ES	60	90	60	36	80	245000	1220000	1.150
GEEW63ES	63	95	63	36	83	253000	1260000	1.250
GEEW70ES	70	105	70	40	92	313000	1560000	1.710
GEEW80ES	80	120	80	45	105	400000	2000000	2.390
GEEW90ES	90	130	90	50	115	488000	2440000	3.210
GEEW100ES	100	150	100	55	130	607000	3030000	4.790
GEEW110ES	110	160	110	55	140	654000	3270000	5.780
GEEW125ES	125	180	125	70	160	950000	4750000	8.500
GEEW160ES	160	230	160	80	200	1360000	6800000	16.500
GEEW200ES	200	290	200	100	250	2120000	10600000	32.100
GEEW250ES	250	400	250	120	350	3750000	17800000	101.000
GEEW320ES	320	520	320	160	450	6200000	30500000	225.000



GEEM-ES



GEEM-ES-2RS

ISO	Dimensions (mm)					Basic Load Rating (N)		Weight (kg)
	d	D	B	C	d <sub>k</sub>	Dyn. C	Stat. C <sub>0</sub>	
GEEM17ES 2RS	17	30	21	10	25	21200	106000	0.040
GEEM20ES 2RS	20	35	24	12	29	30000	146000	0.073
GEEM25ES 2RS	25	42	29	16	35.5	48000	240000	0.130
GEEM30ES 2RS	30	47	30	18	40.7	62000	310000	0.170
GEEM35ES 2RS	35	55	35	20	47	79000	399000	0.250
GEEM40ES 2RS	40	62	38	22	53	99000	495000	0.350
GEEM45ES 2RS	45	68	40	25	60	127000	637000	0.490
GEEM50ES 2RS	50	75	43	28	66	156000	780000	0.600
GEEM60ES 2RS	60	90	54	36	80	245000	1220000	1.150
GEEM70ES 2RS	70	105	65	40	92	313000	1560000	1.650
GEEM80ES 2RS	80	120	74	45	105	400000	2000000	2.500
GEEM90ES 2RS	90	130	80	50	115	488000	2440000	2.880
GEEM100ES 2RS	100	150	90	55	130	607000	3030000	4.650
GEEM120ES 2RS	120	180	108	70	160	950000	4750000	8.440





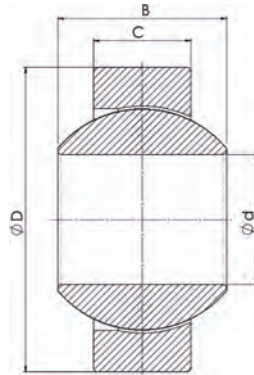
Subject	Symbol	Description
Series	S	Without lubrication groove and holes, non-split outer ring
	SS	With lubrication groove and hole in inner ring, non-split outer ring
	SSP	With lubrication groove and hole in inner ring, single-split outer ring
	SSL	With lubrication groove and hole in inner ring, double-split outer ring
Type	-	Inner ring has lubrication groove and hole
	K	Inner and outer rings have lubrication groove and holes
	K1	Outer ring has lubrication groove and hole

**Features**

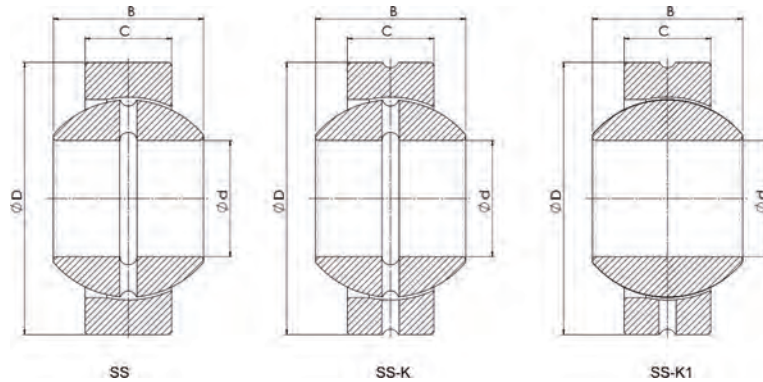
Spherical plain bearings are radial plain bearings consists of an outer ring and an inner ring made of bearing steel and with spherical sliding contact surface. These bearing are suitable for arrangements with heavy radial load at low misalignment and oscillation. Moreover, spherical plain bearings can carry specific axial loads in both directions.

**Sealing**

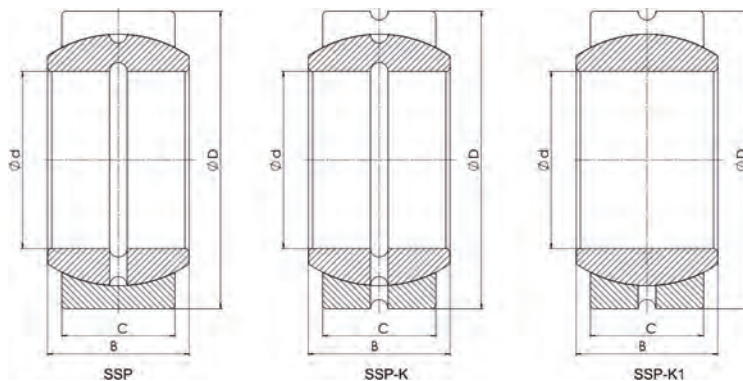
Most popular sizes of CRAFT bearings plain bearings are available without seals or sealed on both sides. Standard sealed bearings can increase the service life of a bearing and save space, while reducing inventory and assembly costs. Spherical plain bearings S series fitted on both sides with the rubber seals (2RS) are very effective, under normal operating conditions, at keeping, under normal operating conditions, at keeping contaminants away from the sliding contact surfaces. These seals also effectively retain the grease and therefore are appropriate for bearings requiring maintenance.



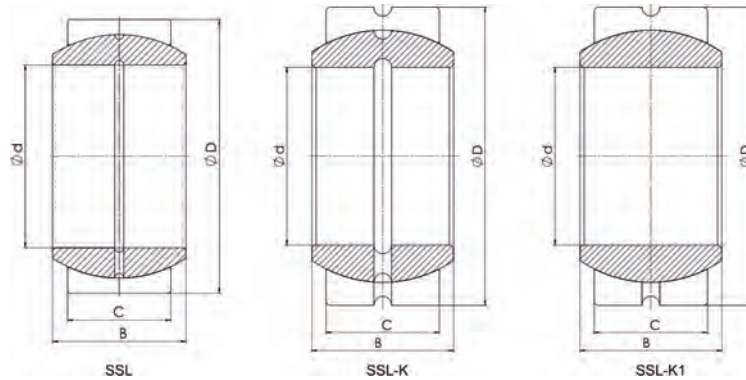
ISO	GOST	Dimensions (mm)				Basic Load Rating (N)		Weight (kg)
		d	D	B	C	Dyn. C	Stat. C <sub>0</sub>	
S5	Ш5	5	14	6	4	3400	17000	0.005
S6	Ш6	6	14	6	4	3400	17000	0.005
S8	Ш8	8	17	8	5	5525	27625	0.008
S10	Ш10	10	20	9	6	8160	40800	0.012
S12	Ш12	12	22	10	7	10710	53550	0.012
2S12	2Ш12	12	32	10	7	15470	77350	0.065
S15	Ш15	15	28	12	7	13685	68425	0.035
2S15	2Ш15	15	35	18	14	34510	172550	0.082
S17	Ш17	17	32	14	10	22100	110500	0.048
2S17	2Ш17	17	40	21	14	38080	190400	0.148
S20	Ш20	20	35	16	12	29580	147900	0.065
2S20	2Ш20	20	47	26	15	44625	223125	0.190
S25	Ш25	25	42	20	16	48280	241400	0.115
S30	Ш30	30	47	22	18	62271	311355	0.158
S35	Ш35	35	55	26	21	83895	419475	0.238
S40	Ш40	40	62	28	22	99110	495550	0.330
S45	Ш45	45	70	32	25	127500	637500	0.460
S50	Ш50	50	75	35	28	157080	785400	0.560
S55	Ш55	55	85	40	32	204000	1020000	0.880
S60	Ш60	60	90	44	36	244800	1224000	0.942



ISO	GOST	Dimensions (mm)				Basic Load Rating (N)		Weight (kg)
		d	D	B	C	Dyn. C	Stat. C <sub>0</sub>	
SS5	ШЦ5	5	14	6	4	3400	17000	0.005
SS6	ШЦ6	6	14	6	4	3400	17000	0.005
SS8	ШЦ8	8	17	8	5	5525	27625	0.008
SS10	ШЦ10	10	20	9	6	8160	40800	0.012
SS12	ШЦ12	12	22	10	7	10710	53550	0.012
2SS12	2ШЦ12	12	32	16	12	26520	132600	0.065
SS15	ШЦ15	15	28	12	8	15640	78200	0.035
2SS15	2ШЦ15	15	35	18	14	34510	172550	0.082
SS17	ШЦ17	17	32	14	10	22100	110500	0.048
2SS17	2ШЦ17	17	40	21	14	38080	190400	0.148
SS20	ШЦ20	20	35	16	12	29580	147900	0.065
2SS20	2ШЦ20	20	47	26	15	44625	223125	0.190
SS25	ШЦ25	25	42	20	16	48280	241400	0.115
SS30	ШЦ30	30	47	22	18	62271	311355	0.158
SS35	ШЦ35	35	55	26	21	83895	419475	0.238
SS40	ШЦ40	40	62	28	22	99110	495550	0.330
SS45	ШЦ45	45	70	32	25	127500	637500	0.460
SS50	ШЦ50	50	75	35	28	157080	785400	0.560
SS55	ШЦ55	55	85	40	32	204000	1020000	0.880
SS60	ШЦ60	60	90	44	36	244800	1224000	0.942
SS80	ШЦ80	80	125	76	70	678300	3391500	3.780
9SS110	9ШЦ110	110	150	40	35	242550	2310000	1.900



ISO	GOST	Dimensions (mm)				Basic Load Rating (N)		Weight (kg)
		d	D	B	C	Dyn. C	Stat. C <sub>0</sub>	
SSP6	ШСП6	6	14	6	4	3400	17000	0.005
SSP8	ШСП8	8	17	8	5	5525	27625	0.008
SSP10	ШСП10	10	20	9	6	8160	40800	0.012
SSP12	ШСП12	12	22	10	7	10710	53550	0.012
SSP15	ШСП15	15	28	12	8	15640	78200	0.035
SSP17	ШСП17	17	32	14	10	22100	110500	0.048
SSP20	ШСП20	20	35	16	12	29580	147900	0.065
SSP25	ШСП25	25	42	20	16	48280	241400	0.115
SSP30	ШСП30	30	47	22	18	62271	311355	0.158
SSP35	ШСП35	35	55	26	21	83895	419475	0.238
SSP40	ШСП40	40	62	28	22	99110	495550	0.330
SSP42	ШСП42	42	62	25	22	100640	513540	0.323
SSP45	ШСП45	45	70	32	25	127500	637500	0.460
SSP50	ШСП50	50	75	35	28	157080	785400	0.560
SSP55	ШСП55	55	85	40	32	204000	1020000	0.880
SSP60	ШСП60	60	90	44	34	234500	1130040	0.976
SSP70	ШСП70	70	105	49	40	251233	1300600	1.526
SSP90	ШСП90	90	130	60	50	300120	1450700	2.734



ISO	GOST	Dimensions (mm)				Basic Load Rating (N)		Weight (kg)
		d	D	B	C	Dyn. C	Stat. C <sub>0</sub>	
SSL60	ШЦ/160	60	90	44	36	244800	1224000	0.942
GSSL60	ГШЦ/160	60	105	63	40	336000	1680000	2.082
2SSL60	2ШЦ/160	60	110	60	34	267000	1337000	2.184
6SSL60	6ШЦ/160	60	130	85	70	684250	3421250	5.700
SSL70	ШЦ/170	70	105	49	40	312800	1564000	1.560
GSSL70	ГШЦ/170	70	120	70	45	435000	2173000	2.942
2SSL70	2ШЦ/170	70	125	70	35	314000	1571000	2.410
SSL80	ШЦ/180	80	125	76	70	678300	3391500	3.780
SSL90	ШЦ/190	90	130	60	50	488750	2443750	2.790
2SSL90	2ШЦ/190	90	160	80	50	552500	2762500	6.100
SSL100	ШЦ/100	100	150	70	55	607750	3038750	4.300
SSL110	ШЦ/110	110	160	70	55	654500	3272500	4.700
SSL120	ШЦ/120	120	180	85	70	952000	4760000	8.090
2SSL120	2ШЦ/120	120	215	130	90	1576000	7880000	19.700
SSL130	ШЦ/130	130	200	95	52	773500	3867500	8.930
2SSL150	2ШЦ/150	150	270	160	110	2361000	11805000	39.850

## ROD ENDS

Series: SI/SIL T/K.. SI/SIL P/K.. SA/SAL T/K.. SA/SAL P/K..



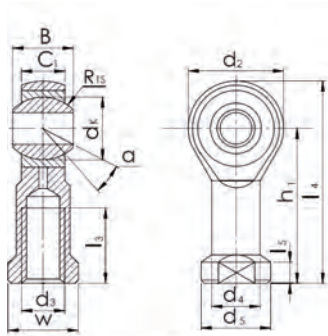
Subject	Symbol	Description
Type	SI	Rod end, right-hand thread.
	SIL	Rod end, left-hand thread.
	SA	Rod end, right-hand thread.
	SAL	Rod end, left-hand thread.
Friction parts	T/K	Steel/PTFE (wrap for smaller bearings and soaked fabric for bigger bearings).
	SS/M	Acid resistant steel/brass.

### Features

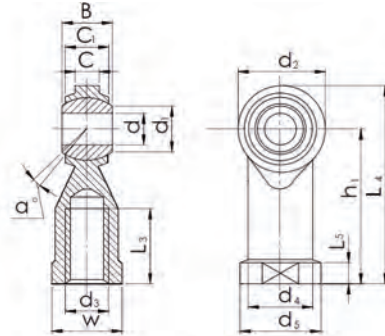
A rod end bearing is a mechanical articulating joint. Such joints are used on the ends of control rods, steering links, tie rods or anywhere a precision articulating joint is required. A ball swivel with an opening through which a bolt or other attaching hardware may pass is pressed into a circular casing with a threaded shaft attached. The threaded portion may be either male or female. Rod ends has spherical plain bearing inserted.

### Designation

Rod ends with built-in plain bearings are ready to mount parts and can be quickly and easily fixed to the interacting machine elements. The wide variety of engineering solutions are based on the one hand on implementing various plain bearings (various materials of friction parts) and on the other hand on various assembly options (internal or external threads, right or left hand threads) enable lots of construction solutions. Standard make (TK) bases on the friction pair steel/PTFE . For heavy duty operation SS/M rod ends are most suitable, where special acid resistant steel and brass constitute the friction part.



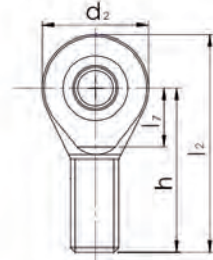
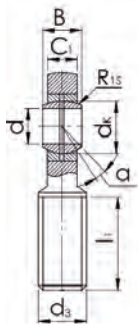
SI(T)



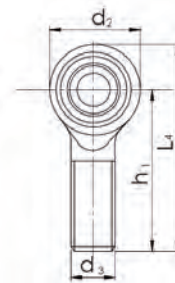
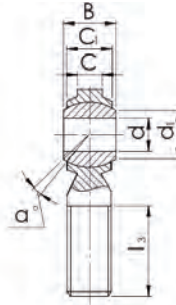
SI(P)

ISO	Dimensions (mm)														Basic Load Rating (N)		Weight (kg)	
	d	D	B	d3	C1	l3	W	h1	l4	l5	d4	d5	dK	R1s	a	Dyn. C		Stat. C <sub>0</sub>
				6H														
SI/SIL5 T/K	5	18	8	M5x0,8	6	10	9	27	36	4	8,5	11	11,1	0,3	13	5700	6000	0,016
SI/SIL6 T/K	6	20	9	M6x1,0	6,75	12	11	30	40	5	10	13	12,7	0,3	13	7200	7650	0,022
SI/SIL8 T/K	8	24	12	M8x1,25	9	16	14	36	48	5	12,5	16	15,875	0,3	14	11600	12900	0,047
SI/SIL10 T/K	10	28	14	M10x1,5	10,5	20	17	43	57	6,5	15	19	19,05	0,3	13	14500	18000	0,077
SI/SIL10-1 T/K	10	28	14	M10x1,25	10,5	20	17	43	57	6,5	15	19	19,05	0,3	13	14500	18000	0,077
SI/SIL12 T/K	12	32	16	M12x1,75	12	22	19	50	66	6,5	17,5	22	22,225	0,3	13	17000	24000	0,100
SI/SIL12-1 T/K	12	32	16	M12x1,25	12	22	19	50	66	6,5	17,5	22	22,225	0,3	13	17000	24000	0,100
SI/SIL14 T/K	14	36	19	M14x2,0	13,5	25	22	57	75	8	20	25	25,4	0,3	16	24000	31000	0,160
SI/SIL14-1 T/K	14	36	19	M14x1,5	13,5	25	22	57	75	8	20	25	25,4	0,3	16	24000	31000	0,160
SI/SIL16 T/K	16	42	21	M16x2,0	15	28	22	64	85	8	22	27	28,575	0,3	15	28500	39000	0,220
SI/SIL16-1 T/K	16	42	21	M16x1,5	15	28	22	64	85	8	22	27	28,575	0,3	15	28500	39000	0,220
SI/SIL18 T/K	18	44	23	M18x1,5	16,5	32	27	71	93	10	25	31	31,75	0,6	15	42500	47500	0,320
SI/SIL20 T/K	20	50	25	M20x1,5	18	33	30	77	102	10	27,5	34	34,925	0,6	14	42500	57000	0,420
SI/SIL22 T/K	22	54	28	M22x1,5	20	37	32	84	111	12	30	38	38,1	0,6	15	57000	68000	0,540
SI/SIL25 T/K	25	60	31	M24x2,0	22	42	36	94	124	12	33,5	42	42,86	0,3	15	68000	85000	0,720
SI/SIL28 T/K	28	66	35	M27x2,0	24	51	41	103	136	14	37	46	47,63	0,6	15	86000	107000	0,820
SI/SIL30 T/K	30	70	37	M30x2,0	25	51	41	110	145	15	40	50	50,8	0,6	17	88000	114000	1,100
SI/SIL30-1 T/K	30	70	37	M27x2,0	25	51	41	110	145	15	40	50	50,8	0,6	17	88000	114000	1,100
SI/SIL35 T/K	35	81	43	M36x2,0	28	56	50	125	16-5,5	17	46	58	57,15	0,6	16	94000	118000	1,600
SI/SIL40 T/K	40	91	49	M42x2,0	33	60	55	142	187,5	19	53	65	66,67	0,6	16	100000	120000	2,400
SI/SIL50 T/K	50	117	60	M48x2,0	45	65	65	160	21-8,5	23	65	75	82,5	0,6	12	112000	125000	5,000

ISO	Dimensions (mm)														Basic Load Rating (N)		Weight (kg)
	d	D	B	d1	d3	C1	L3	W	h1	L4	l5	d4	d5	a	Dyn. C	Stat. C <sub>0</sub>	
					7H												
SI/SIL5 P/K	5	19	8	7,7	M5x0,8	6	10	9	27	36,5	4	9	11	12	5700	6000	0,0180
SI/SIL6 P/K	6	21	9	8,9	M6x1,0	6,7	12	11	30	40,5	5	10	13	11	7200	7650	0,0260
SI/SIL8 P/K	8	25	12	10,3	M8x1,25	9	16	14	36	48,5	5	12,5	16	12	11600	12900	0,0470
SI/SIL10 P/K	10	29	14	12,9	M10x1,5	11	20	17	43	57,5	6,5	15	19	12	14500	18000	0,0770
SI/SIL10-1 P/K	10	29	14	12,9	M10x1,25	11	20	17	43	57,5	6,5	15	19	12	14500	18000	0,0770
SI/SIL12 P/K	12	33	16	15,4	M12x1,75	12	22	19	50	66,5	6,5	17,5	22	13	17000	24000	0,1000
SI/SIL12-1 P/K	12	33	16	15,4	M12x1,25	12	22	19	50	66,5	6,5	17,5	22	13	17000	24000	0,1000
SI/SIL14 P/K	14	37	19	16,8	M14x2,0	14	25	22	57	75,5	8	20	25	14	24000	31000	0,1600
SI/SIL16 P/K	16	43	21	19,3	M16x2,0	15	28	22	64	85,5	8	22	27	14	28500	39000	0,2200
SI/SIL16-1 P/K	16	43	21	19,3	M16x1,5	15	28	22	64	85,5	8	22	27	14	28500	39000	0,2200
SI/SIL18 P/K	18	47	23	21,8	M18x1,5	17	32	27	71	94,5	10	25	31	14	42500	47500	0,3200
SI/SIL20 P/K	20	51	25	24,3	M20x1,5	18	33	30	77	102,5	10	27,5	34	14	42500	57000	0,4200
SI/SIL22 P/K	22	55	28	25,8	M22x1,5	20	37	32	84	111,5	12	30	38	15	57000	68000	0,5400
SI/SIL25 P/K	25	61	31	29,5	M24x2,0	22	42	36	94	124,5	12	33,5	42	15	68000	85000	0,7200



SA(T)



SA(P)

ISO	Dimensions (mm)													Basic Load Rating (N)		Weight (kg)
	d	D	B	d3	C1	l1	l7	h	l2	dK	R1s	a	Dyn. C	Stat. C <sub>0</sub>		
				6g		min	min									
SA/SAL5 T/K	5	18	8	M5x0,8	6	19	-	33	42	11,1	0,3	13	5,7	6	0,0130	
SA/SAL6 T/K	6	20	9	M6x1,0	6,75	21	-	36	46	12,7	0,3	13	7,2	7,65	0,0200	
SA/SAL8 T/K	8	24	12	M8x1,25	9	25	-	42	54	15,875	0,3	14	11,6	12,9	0,0380	
SA/SAL10 T/K	10	28	14	M10x1,5	10,5	28	-	28	62	19,05	0,3	13	14,5	18	0,0550	
SA/SAL12 T/K	12	32	16	M12x1,75	12	32	-	54	70	22,225	0,3	13	17	24	0,0850	
SA/SAL12-1 T/K	12	32	16	M12x1,25	12	32	-	54	70	22,225	0,3	13	17	24	0,0850	
SA/SAL14 T/K	14	36	19	M14x2,0	13,5	36	18	60	78	25,4	0,3	16	24	31	0,1400	
SA/SAL16 T/K	16	42	21	M16x2,0	15	37	21	66	87	28,575	0,3	15	28,5	39	0,2100	
SA/SAL16-1 T/K	16	42	21	M16x1,5	15	37	21	66	87	28,575	0,3	15	28,5	39	0,2100	
SA/SAL18 T/K	18	44	23	M18x1,5	16,5	41	22	72	94	31,75	0,3	15	42,5	47,5	0,2800	
SA/SAL20 T/K	20	50	25	M20x1,5	18	45	25	78	103	34,925	0,3	14	42,5	57	0,3800	
SA/SAL22 T/K	22	54	28	M22x1,5	20	48	27	84	111	38,1	0,3	15	57	68	0,4800	
SA/SAL25 T/K	25	60	31	M24x2,0	22	55	30	94	124	42,86	0,3	15	68	85	0,6400	
SA/SAL28 T/K	28	66	35	M27x2,0	24	62	33	103	136	47,63	0,3	15	86	107	0,8000	
SA/SAL30 T/K	30	70	37	M30x2,0	25	66	35	110	145	50,8	0,3	17	88	114	1,1000	
SA/SAL35 T/K	35	81	43	M36x2,0	28	85	40	140	180,5	57,15	0,3	16	-	-	1,6400	
SA/SAL40 T/K	40	91	49	M42x2,0	33	90	45	150	195,5	66,67	0,3	17	-	-	2,3000	
SA/SAL50 T/K	50	117	60	M48x2,0	45	105	58	185	243,5	82,5	0,3	12	-	-	4,8000	

ISO	Dimensions mm											Basic Load Rating (N)		Weight (kg)
	d	D	B	d1	d3	C	C2	h1	L4	l3	a	Dyn. C	Stat. C <sub>0</sub>	
					6g									
SA/SAL5 P/K	5	19	8	7,7	M5x0,8	6	2,9	33	42,5	20	12	5700	6000	0,014
SA/SAL6 P/K	6	21	9	8,9	M6x1,0	6,7	2,9	36	46,5	22	11	7200	7650	0,020
SA/SAL8 P/K	8	25	12	10,3	M8x1,25	9	4,5	42	54,5	25	12	11600	12900	0,038
SA/SAL10 P/K	10	29	14	12,9	M10x1,5	11	4,5	48	62,5	29	12	14500	18000	0,055
SA/SAL12 P/K	12	33	16	15,4	M12x1,75	12	6	54	70,5	33	13	17000	24000	0,085
SA/SAL14 P/K	14	37	19	16,8	M14x2,0	14	6,5	60	78,5	36	14	24000	31000	0,140
SA/SAL16 P/K	16	43	21	19,3	M16x2,0	15	7	66	87,5	40	14	28500	39000	0,210
SA/SAL18 P/K	18	47	23	21,8	M18x1,5	17	7	72	95,5	44	14	42500	47500	0,280
SA/SAL20 P/K	20	51	25	24,3	M20x1,5	18	8	78	103,5	47	14	42500	57000	0,380
SA/SAL22 P/K	22	55	28	25,8	M22x1,5	20	8,8	84	111,5	50	15	57000	68000	0,480
SA/SAL25 P/K	25	61	31	29,5	M24x2,0	22	11	94	124,5	57	15	68000	85000	0,640