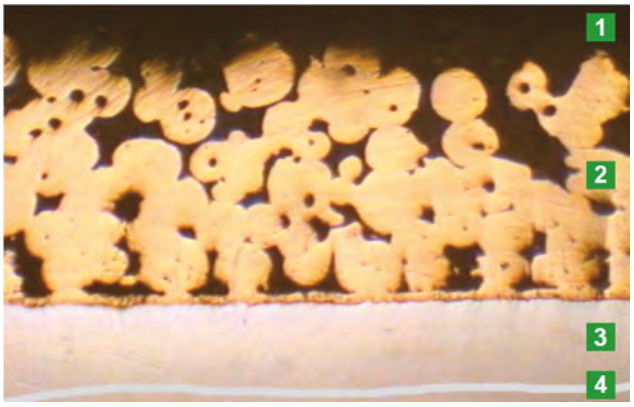
METAL / COMPOSITE
BUSHINGS

Engineering for motion

KASTAŞ

K780

Steel-PTFE Bushing



MATERIAL STRUCTURE

1 PTFE Mixture
2 Porous Bronze
3 Steel Support
4 Tin coating

Kastaş K780 bushings used high quality low-carbon steel plate as base, sintered porous bronze as its interlayer and the compound of PTFE as its surface. It offers the property of good self-lubricaiton, low wear, low friction, good sliding characteristics, low noise.

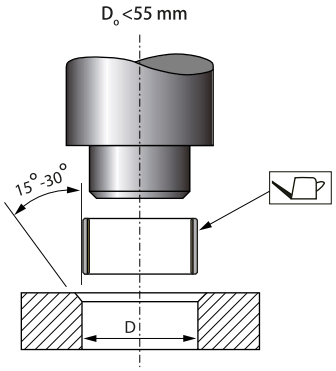
ADVANTAGES

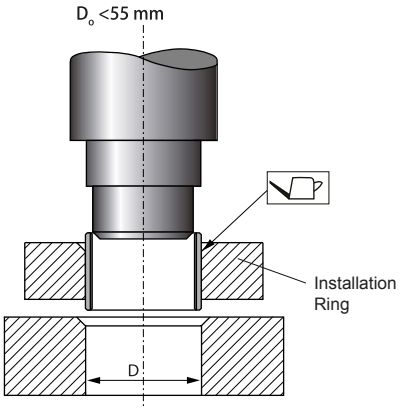
- Working under oilless or minim oil state condition
- Abrasion Resistance
- Low fricton coefficient and long service life
- Long service life
- Good thermal conductivity and size stability
- Forms a transferred film during operation to protect shaft
- High load resistance

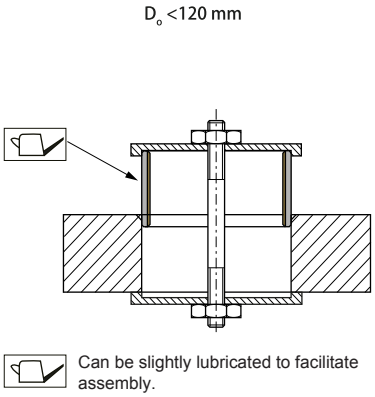
TECHNICAL DATA

Maximum Load	Static Very Low Speed Oscillation/Rotation	250 N/mm² 140 N/mm² 60 N/mm²
Maximum PV (Dry Working)	Short work Long work	3.6 N/mm².m/s 1.8 N/mm².m/s
Temperature Limit		-195°C~+280°C
Coefficient of Friction		0.05~0.02 μ
Maximum Speed	Dry Work Hydrodynamic Work	2 m/s 5 m/s
Thermal Conductivity		42 $W(m.K)^{-1}$
Thermal Expansion Coefficient		$11x10^{-6}.K^{-1}$

INSTALLATION

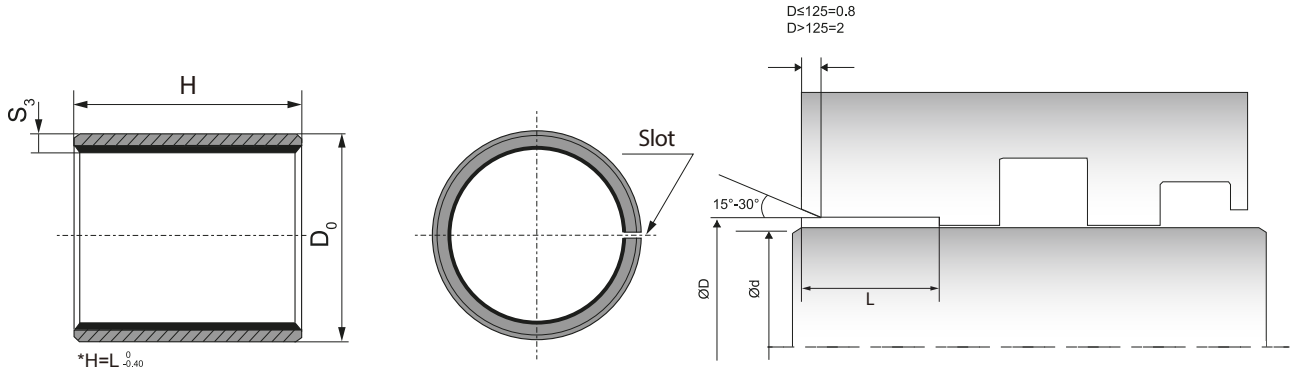






K780

Steel-PTFE Bushing



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K780-008/2	8	10	8	20001085
K780-010	10	12	15	20001086
K780-012	12	14	15	20001087
K780-012/1	12	14	20	20001088
K780-012/2	12	14	10	20001089
K780-016	16	18	15	20001090
K780-016/1	16	18	12	20001091
K780-016/2	16	18	25	20007007
K780-017	17	19	20	20001092
K780-017/1	17	19	25	20001093
K780-020	20	23	15	20001094
K780-020/1	20	23	20	20001095
K780-020/2	20	23	30	20001096
K780-020/4	20	23	25	20001097
K780-020/5	20	22	15	20001098
K780-022	22	25	26.5	20001099
K780-025	25	28	30	20001100
K780-025/1	25	28	20	20001101
K780-025/2	25	28	25	20001102
K780-028	28	32	30	20001103
K780-028/1	28	32	25	20001104
K780-030	30	34	30	20001105
K780-030/1	30	34	20	20001106
K780-030/2	30	34	15	20001107
K780-032	32	36	40	20001108
K780-032/1	32	36	30	20001109
K780-035	35	40	60	20001110
K780-035/1	35	39	20	20006509
K780-036	36	40	30	20001111
K780-038	38	42	38	20001112
K780-040	40	44	20	20001113
K780-040/1	40	44	25	20001114

KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K780-040/2	40	44	30	20001115
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K780-045/1	45	50	60	20001120
K780-045/2	45	50	50	20001121
K780-050	50	55	30	20001123
K780-050/1	50	55	20	20001124
K780-050/2	50	55	40	20001125
K780-050/3	50	55	50	20001126
K780-055	55	60	60	20001128
K780-055/1	55	60	30	20001129
K780-055/2	55	60	40	20001130
K780-060	60	65	20	20001131
K780-060/1	60	65	30	20001132
K780-060/2	60	65	40	20001133
K780-060/3	60	65	50	20001134
K780-060/4	60	65	60	20001135
K780-065	65	70	50	20001136
K780-065/1	65	70	30	20001137
K780-065/2	65	70	60	20001138
K780-065/3	65	70	40	20001139
K780-070	70	75	30	20001140
K780-070/1	70	75	40	20001141
K780-070/2	70	75	50	20001142
K780-070/3	70	75	80	20001143
K780-070/4	70	75	35	20001144
K780-070/5	70	75	15	20001145
K780-075	75	80	30	20001146
K780-075/1	75	80	40	20001147
K780-075/2	75	80	35	20001148
K780-075/3	75	80	60	20001149
K780-075/4	75	80	50	20006766
K780-080	80	85	30	20001150

K780

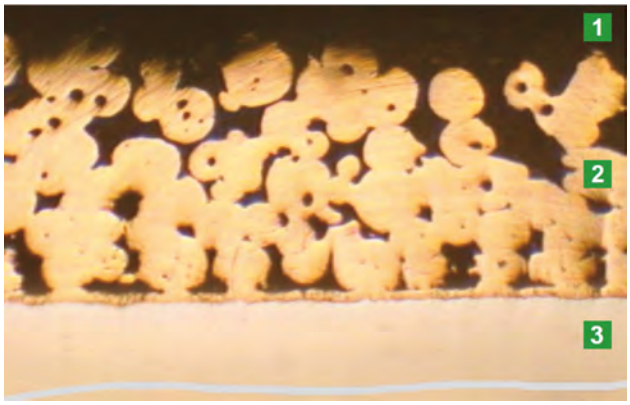
Steel-PTFE Bushing

KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K780-080/1	80	85	40	20001151
K780-080/2	80	85	35	20001152
K780-080/3	80	85	60	20001153
K780-085	85	90	30	20001154
K780-085/1	85	90	40	20001155
K780-085/2	85	90	35	20001156
K780-085/3	85	90	60	20001157
K780-090	90	95	30	20001158
K780-090/1	90	95	40	20001159
K780-090/2	90	95	20	20001160
K780-090/3	90	95	35	20001161
K780-090/4	90	95	50	20001162
K780-090/5	90	95	60	20001163
K780-095	95	100	30	20001164
K780-095/1	95	100	40	20001165
K780-095/2	95	100	60	20001166
K780-095/3	95	100	50	20001167
K780-100	100	105	30	20001168
K780-100/1	100	105	35	20001169
K780-100/2	100	105	50	20001170
K780-100/3	100	105	60	20001171
K780-100/4	100	105	40	20001172
K780-100/5	100	105	20	20001173
K780-105	105	110	60	20001174
K780-105/1	105	110	50	20001175
K780-105/2	105	110	35	20001176
K780-105/3	105	110	40	20001177
K780-110	110	115	50	20001178
K780-110/1	110	115	55	20001179
K780-110/2	110	115	35	20001180
K780-110/3	110	115	40	20001181
K780-110/4	110	115	30	20001182

KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K780-110/5	110	115	60	20001183
K780-115	115	120	35	20001184
K780-115/1	115	120	60	20001185
K780-115/2	115	120	50	20001186
K780-115/4	115	120	45	20001187
K780-120	120	125	35	20001188
K780-120/1	120	125	45	20001189
K780-120/2	120	125	20	20001190
K780-120/3	120	125	40	20001191
K780-120/4	120	125	50	20001192
K780-120/5	120	125	60	20001193
K780-125	125	130	50	20001194
K780-130	130	135	50	20001195
K780-130/1	130	135	60	20001196
K780-130/2	130	135	40	20001197
K780-130/3	130	135	100	20001198
K780-135	135	140	100	20001199
K780-140	140	145	40	20001200
K780-140/1	140	145	60	20001201
K780-140/2	140	145	50	20001202
K780-140/3	140	145	55	20001203
K780-145	145	150	60	20001204
K780-150	150	155	40	20001205
K780-150/1	150	155	50	20001206
K780-150/2	150	155	60	20001207
K780-160	160	165	40	20001208
K780-160/1	160	165	80	20001209
K780-160/2	160	165	50	20001210
K780-160/3	160	165	60	20001211
K780-180	180	185	60	20001212
K780-210	210	215	60	20001213
K780-210/1	210	215	80	20001214

K781

Bronze-PTFE Bushing



MATERIAL STRUCTURE

1 Fibered PTFE
2 Porous Bronze
3 Bronze Support

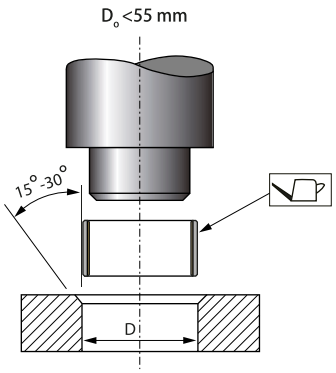
K781 bushings particularly appropriate for high temperature environment where machine must be successive on long period working condition. Bronze backing provides high performance even if PTFE side gets worn.

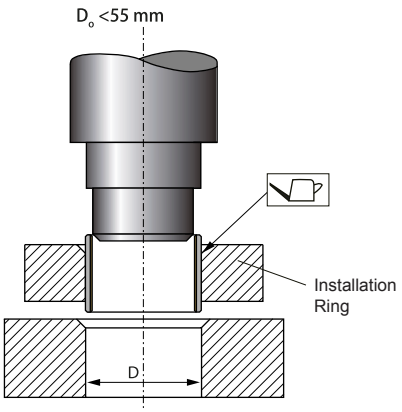
ADVANTAGES

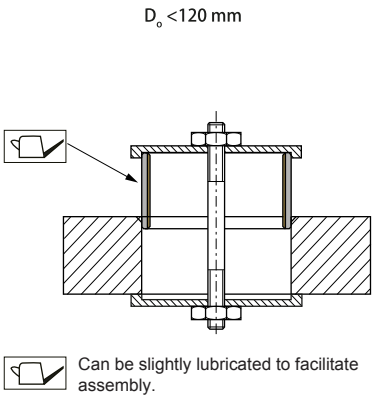
- Due good thermal conductivity of bronze , it diverts heat.
- Due to good anti-corrosion ability of bronze it can be used in the feeble acid and alkali condition.
- High load resistance.

TECHNICAL DATA		
Maximum Load	Static Very Low Speed Oscillation/Rotation	250 N/mm² 140 N/mm² 60 N/mm²
Maximum PV (Dry Working)	Short work Non-stop Work	3.6 N/mm².m/s 1.8 N/mm².m/s
Temperature Limit		-195°C~+280°C
Coefficient of Friction		0.03~0.02 μ
Maximum Speed	Dry Work Hydrodynamic Work	2 m/s 5 m/s
Thermal Conductivity		60 W(m.K)$^{-1}$
Thermal Expansion Coefficient		18x10^{-6}.K^{-1}

INSTALLATION

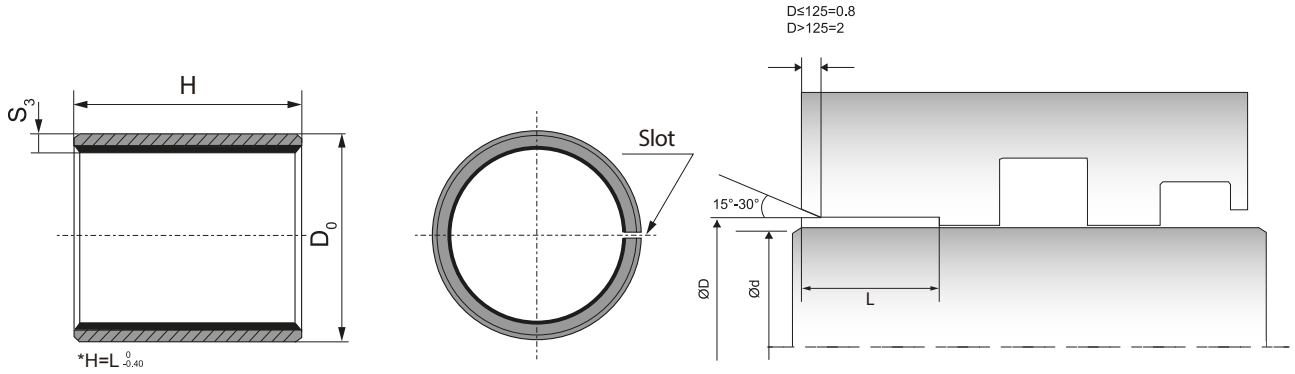






K781

Bronze-PTFE Bushing



KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K781-014	14	16	10	20001253
K781-016	16	18	10	20001254
K781-016/1	16	18	25	20001255
K781-016/3	16	18	15	20001257
K781-020	20	23	15	20001258
K781-020/1	20	23	30	20001259
K781-020/2	20	23	25	20001260
K781-022	22	25	25	20001262
K781-035	35	39	30	20001265
K781-040	40	44	30	20001266
K781-045	45	50	30	20001267
K781-050	50	55	30	20001271
K781-050/1	50	55	40	20001272
K781-055	55	60	30	20001273
K781-060	60	65	20	20001274
K781-060/1	60	65	30	20001275
K781-060/2	60	65	40	20001276
K781-060/3	60	65	50	20001277
K781-060/4	60	65	60	20001278
K781-065	65	70	40	20001279
K781-070	70	75	30	20001280
K781-070/1	70	75	40	20001281
K781-075	75	80	30	20001282
K781-075/1	75	80	40	20001283
K781-080	80	85	30	20001284
K781-080/1	80	85	40	20001285
K781-080/2	80	85	50	20001286
K781-085	85	90	30	20001287
K781-085/1	85	90	40	20001288
K781-090	90	95	30	20001290

KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K781-090/1	90	95	40	20001291
K781-090/2	90	95	50	20001292
K781-090/3	90	95	60	20001293
K781-095	95	100	30	20001294
K781-095/1	95	100	40	20001295
K781-095/2	95	100	50	20001296
K781-095/3	95	100	60	20001297
K781-100	100	105	30	20001301
K781-100/1	100	105	40	20001302
K781-100/2	100	105	50	20001303
K781-100/3	100	105	60	20001304
K781-105	105	110	50	20001305
K781-105/1	105	110	60	20001306
K781-105/2	105	110	35	20001307
K781-110	110	115	50	20001308
K781-110/1	110	115	60	20001309
K781-115	115	120	60	20001310
K781-120	120	125	50	20001311
K781-120/1	120	125	60	20001312
K781-120/2	120	125	70	20001313
K781-125	125	130	50	20001314
K781-130	130	135	60	20001316
K781-140	140	145	55	20001317
K781-150	150	155	60	20001321
K781-170	170	175	15	20006700
K781-220	220	225	15	20006701
K781-240	240	245	15	20006702
K781-270	270	275	15	20006395
K781-300	300	305	15	20006496

K782

Steel-Pom Bushing

MATERIAL STRUCTURE

1 Fibered POM
2 Porous Bronze
3 Steel Support
4 Tin or Copper Coating

K782 self lubricated bushings use high quality steel as base, sintered porous bronze as its interlayer and the fibered POM as its surface.

K782 offers the property of low friction coefficient, silent operating and low wear in mining, automotive, steel mill industries.

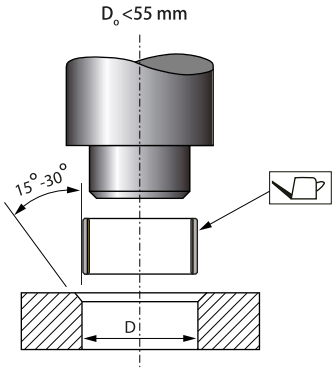
ADVANTAGES

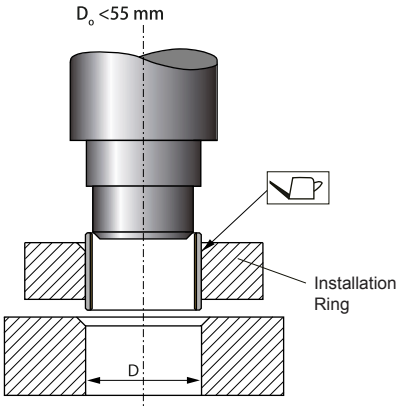
- Dry running
- Wear resistance
- Low friction forces and long service life
- High surface load resistance
- Ability in working at low speed rotational motion

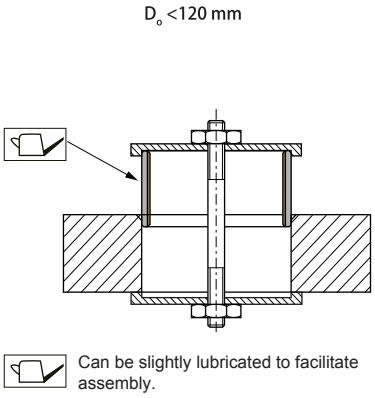
TECHNICAL DATA

Maximum Load	Static Very Low Speed Oscillation/Rotation	250 N/mm² 140 N/mm² 60 N/mm²
Maximum PV (Dry Working)		3 N/mm².m/s
Temperature Limit		-40°C~+110°C
Coefficient of Friction		0.05~0.02 μ
Maximum Speed	Greased Continiously Lubricated	2 m/s >2 m/s
Thermal Conductivity		50 W(m.K)$^{-1}$
Thermal Expansion Coefficient		11x10^{-6}.K^{-1}

INSTALLATION

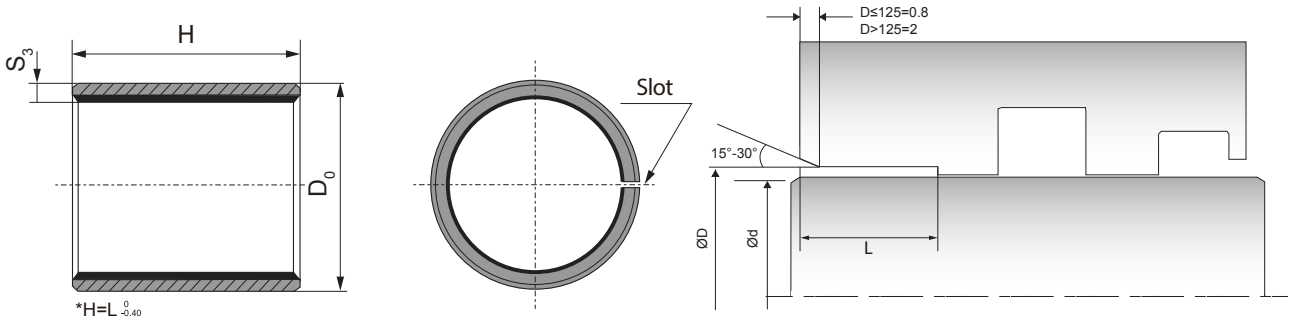






K782

Steel-Pom Bushing



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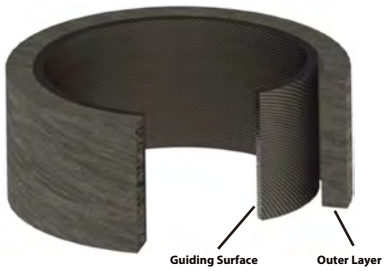
K782-025	25	28	30	20001374
K782-025/1	25	28	20	20001375
K782-028	28	32	30	20001376
K782-028/1	28	32	50	20001377
K782-028/2	28	32	25	20001378
K782-030	30	34	25	20001379
K782-030/1	30	34	30	20001380
K782-030/2	30	34	50	20001381
K782-030/3	30	34	60	20001382
K782-030/4	30	34	40	20001383
K782-032	32	36	20	20001384
K782-035	35	39	20	20001385
K782-035/1	35	39	30	20001386
K782-035/2	35	39	35	20001387
K782-040	40	44	40	20001388
K782-040/1	40	44	50	20001389
K782-040/2	40	45	20	20001390
K782-040/3	40	45	30	20001391
K782-045	45	50	40	20001392
K782-045/1	45	50	50	20001393
K782-045/2	45	50	30	20006768
K782-050	50	55	30	20001394
K782-050/1	50	55	40	20001395
K782-050/2	50	55	45	20001396
K782-050/3	50	55	50	20001397
K782-050/4	50	55	60	20001398
K782-055	55	60	55	20001399
K782-060	60	65	40	20001400
K782-060/1	60	65	50	20001401

KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K782-060/2	60	65	60	20001402
K782-065	65	70	60	20001403
K782-070	70	75	40	20001404
K782-070/1	70	75	50	20001405
K782-070/2	70	75	58	20001406
K782-070/3	70	75	60	20001407
K782-070/4	70	75	90	20001408
K782-075	75	80	40	20001409
K782-075/1	75	80	60	20001410
K782-075/2	75	80	80	20001411
K782-075/3	75	80	90	20001412
K782-080	80	85	40	20001413
K782-080/1	80	85	50	20001414
K782-080/2	80	85	60	20001415
K782-080/3	80	85	90	20001416
K782-085	85	90	60	20001417
K782-085/1	85	90	40	20006767
K782-090	90	95	50	20001419
K782-090/1	90	95	60	20001420
K782-090/2	90	95	90	20001421
K782-095	95	100	45	20001422
K782-095/1	95	100	60	20001423
K782-100	100	105	50	20001425
K782-100/1	100	105	60	20001426
K782-100/2	100	105	90	20001427
K782-100/3	100	105	80	20001428
K782-110	110	115	60	20001429
K782-110/1	110	115	80	20001430
K782-120	120	125	100	20001431
K782-120/1	120	125	60	20001432
K782-130	130	135	100	20001433

K783

High Performance Composite Bushings



Kastaş New Generation Composite Bearings are two-layered. The inner layer consists of a mixture of Teflon and synthetic fiber. The outer layer consists of glass fiber impregnated with epoxy resin, wound at a special angle for durability. The inner layer has a very low coefficient of friction and superior wear resistance. The outer layer can carry high loads and sudden shock loads created by the shaft.

APPLICATIONS

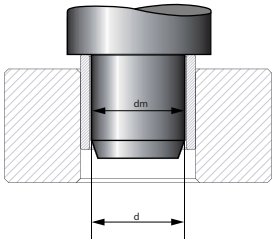
- Valves and Actuators
- Construction Machines
- Agriculture Machines
- Automotive

ADVANTAGES

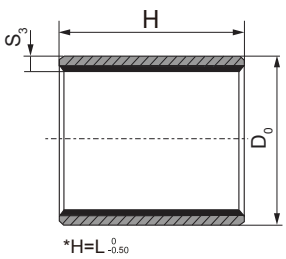
- Work with no maintanence
- Water resistance
- Environmentally friendly
- High surface pressure resistance
- Low friction force and long service life

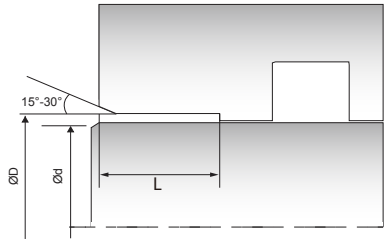
TECHNICAL DATA		
Maximum Load	Static Dynamic	210 N/mm² 140 N/mm²
Maximum PV (Dry Working)		2.80 N/mm².m/s
Temperature Limit		-100°C~+160°C
Coefficient of Friction	Dry Work	0.03~0.20 μ
Maximum Speed	Greased Continiously Lubricated	2 m/s >2 m/s
Thermal Conductivity		0.40 W(m.K)$^{-1}$
Thermal Expansion Coefficient	Radial Axial	13x10^{-6}/K 29x10^{-6}/K
Maximum Friction Speed	Dry Work	0.10 m/s
Density		2.03 g/cm³
Water Intake	24 Hours Immersion	0.11%

INSTALLATION



*K783 composite bushing is to be mounted into the housing by using assembly tools with rounded corners.
*dm= d-0.3 mm/-0.5 mm





KASTAŞ NO	d (f7)	D (H7)	L (+0.3/-0)	KASTAŞ KOD
K783-050	50	58	30	20007024
K783-060	60	65	50	20001453
K783-065	65	70	50	20007025
K783-070	70	75	50	20007026

K784

Brass-Graphite Bushing

K784 is a self-lubricating guiding element with a solid graphite lubricant added to its body with a brass main body.

K784 bushing provides long-term service life in applications where it is difficult to protect the oil film with its lubricant additive.

The main applications are casting machines, steel - mill industry, plastic injections machines, production lines, mining, marine and steam turbines.

ADVANTAGES

- Dry working ability
- High and low speed working
- Superior wear resistance
- High chemical resistance and anti-corosive

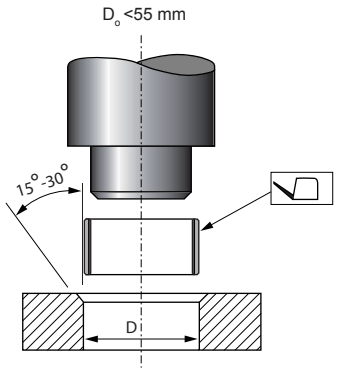
MATERIAL STRUCTURE

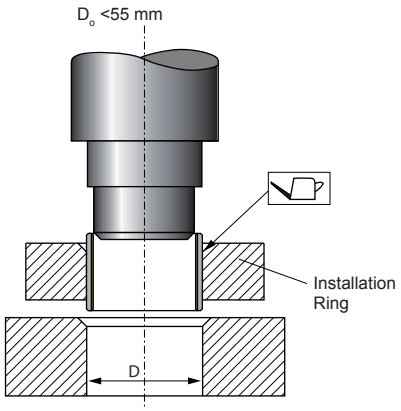
- Brass Body
- Graphite Additive

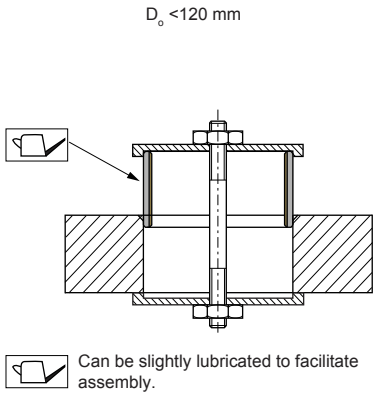
TEKNİK VERİLER

Maksimum Yük (Hareket Halinde)		100 N/mm²
Maksimum PV		3.8 N/mm².m/s
Maksimum Çalışma Sıcaklığı		300°C
Sürtünme Katsayısı (μ)	Kuru	0.16
	Yağlı	0.03
Maksimum Hız	Kuru	0.4 m/s
	Yağlı	0.5 m/s
Sertlik (HB)		>210

INSTALLATION

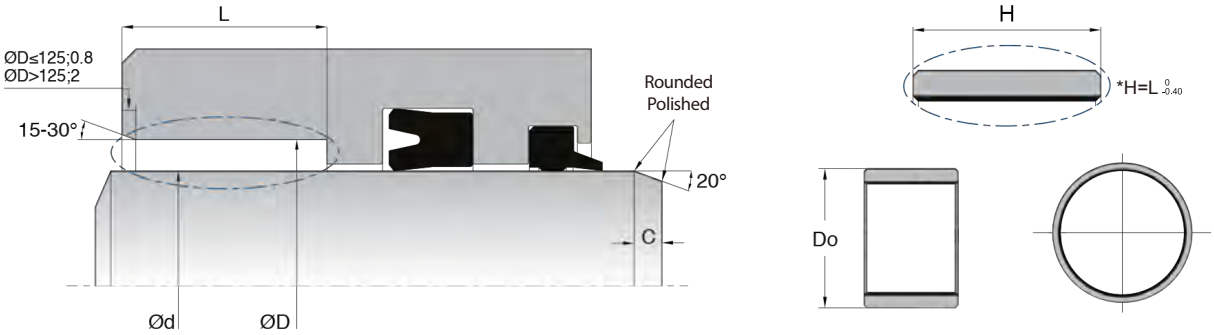






K784

Brass-Graphite Bushing



KASTAŞ NO	d (f7)	D (H7)	L (+0.2/-0)	KASTAŞ CODE
K784-040	40	50	25	20006909
K784-040/1	40	50	40	20006910
K784-050	50	60	30	20006911
K784-055	55	70	50	20006912
K784-070	70	85	60	20006913
K784-080	80	100	100	20006914

KASTAŞ

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