GRIZZLY SUPPLIES

Reference Guide

SEAL IT, MOVE IT

SAP Parts

Mechanical Face Seals

Moving You Forward Since 1998

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GRIZZLY SUPPLIES

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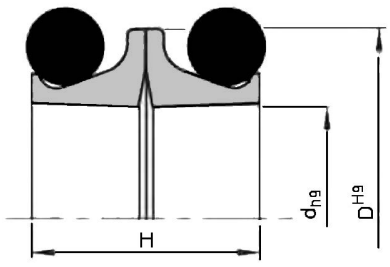
Grizzly Supplies Part Number Identification Guide

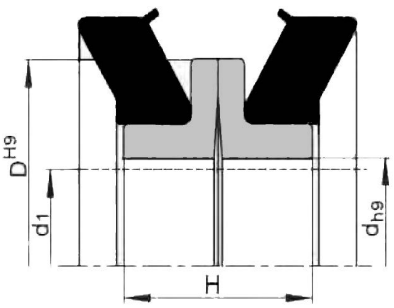
DUO- C1 L 0100 0079 030 NB 60 LT

- Prefix
- Seal Ring Material
- (If Present) Trapezoid Loader
- Seal OD (mm)
- Seal ID (mm)
- Seal Width (mm) (both rings together)
- Toric Material
- Toric Hardness (Shore A)
- (If Present) Low Temperature

DO TYPE (O-Ring Toric)



DL TYPE (Trapezoid Toric)



Seal Ring Material Identification

C1 = Ni Hard

NiHard is an iron based casting alloy which has ledeburite with fine graphite in its microstructure. NiHard is offered by Grizzly Supplies/SAP Parts. The Pressure/Velocity characteristics are greater than other steel and cast alloys. Even under extreme operating conditions Ni Hard demonstrates excellent resistance to micro-welding and material transfer. The free graphite in the matrix further improves the material's thermal conductivity, thus helping to dissipate heat in order to prevent a thermal degradation of the oil film. The tribological properties of NiHard are excellent. It has a moderate resistance to corrosion and abrasion.

C2 = FC15CR3MO

FC15Cr3Mo has been designed for the harshest operating environments where abrasive and corrosive elements are present. FC15Cr3Mo formulation is iron based with a high chromium alloy content designed to provide maximum wear and corrosion resistance. FC15Cr3Mo cast seals should be specified for applications frequently exposed to abrasive and corrosive conditions with moderate rotational speeds. Typical applications include crawler tractor final drives and various undercarriage applications.

F1 = SAE 52100

Forged seals are available on a limited basis. These seals have been used successfully on undercarriage applications where minor wear is present and seal cost is critical.

Toric or Load Ring Material

NB = Nitrile
Nitrile is compatible with most mineral-based lubricant oils and offers the maximum resistance to abrasion. It is the most common load ring material choice and is used in most standard axle, final drive, and undercarriage applications.
Temp= -35°C/-31°F to 120°C/248°F

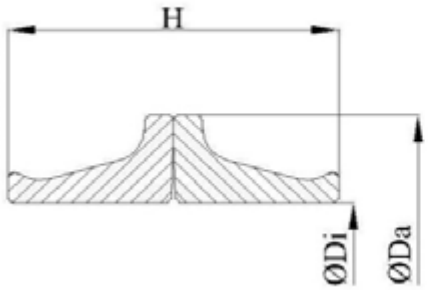
NB60 LT= LOW TEMP NITRILE
Low-temperature Nitrile was specifically developed for highly abrasive, low-temperature applications. Typical applications include undercarriage idlers, rollers and final drives.
Temp= -50 °C/-58 °F to 100 °C/212 °F

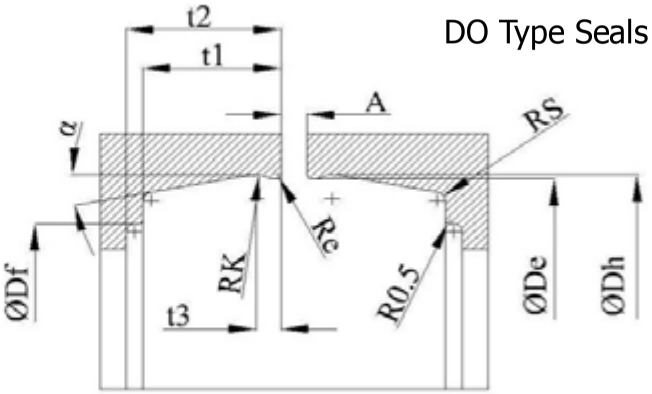
HN = Hydrogenated Nitrile
Hydrogenated Nitrile is a Nitrile-based material and has very similar abrasion resistance characteristics to standard Nitrile, but Hydrogenated Nitrile has better temperature resistance to permanent deformation
Temp= -40 °C/-40 °F to 135 °C/275 °F

FP = FLUOROELASTOMER
FP is a fluoroelastomer and is typically used where extremely high temperatures applications where low temperatures are not expected.
Temp= -10 °C/-20 °F to 190 °C/374 °F

SI = SILICONE
Silicone is used in extreme high (wet disc brake systems) or extreme low (arctic environment) temperature applications.
Temp= -50 °C/-58 °F to 200 °C/392 °F

Dimensional Part Number Listing





SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
1	DUO-F100450034014NB60	1.5	45	34	14	47	46.5	42	6.5		1	0.5	1	1	10°
2	DUO-F100500039014NB60	1.5	50	39	14	52	51.5	46	6.5	8	1	0.5	1	1	10°
3	DUO-F100510038204NB60	3	51	38	20.4	53.7	53	46	9	11	1.8	0.5	2	1	10°
4	DUO-F100520040020NB60	3	52	40	20	55	54.2	46	9	11	1	0.5	1	1	10°
5	DUO-F100580043024NB60	3	58	43	24	61.6	60.8	53.4	10	12	1.8	0.5	2.5	1	10°
6	DUO-F100580045216NB60	3	58	45	21.6	61.6	61	54	10.5	12.5	1.8	0.5	2.5	1	10°
7	DUO-F100580048144NB60	1.5	58	48	14.4	59.9	59.4	55	6.3	8	1.5	0.5	1.7	1	10°
8	DUO-F100590046020NB60	3	59	46	20	61.6	61.2	53	9	11	2	0.5	2.5	1	10°
9	DUO-F100620048026NB60	3	62	48	26	68	67.2	58	12	14	2	0.5	3	1	10°
10	DUO-F100700555022NB60	3	70	55.5	22	73.8	73.1	65.5	10	11.5	2.4	0.5	5	1	10°
11	DUO-F100700056026NB60	3	70	56	26	76	75.2	66	12	14	2	0.5	2.5	1	10°
12	DUO-F100730061176NB60	3	73	61	17.6	75.8	75.5	66.8	6.5	7.5	1	0.5	1.4	1	10°
13	DUO-F100740060206NB60	3	74	60	20.6	78.4	77.4	70	9	11	1.9	0.5	2.5	1	10°
14	DUO-F100750058027NB60	3	75	58	27	79.2	78.6	66	12	14	2	0.5	2.5	1	10°
15	DUO-F107750057356NB60	3	77.5	57	35.6	81.4	80.7	68.5	15.2	20.9	3.5	0.5	4.8	1	10°
16	DUO-F100780064025NB60	3	78	64	25	84.6	83.8	74	12.5	14.5	2	0.5	3	1	10°
17	DUO-F108250635318NB60	3	82.5	63.5	31.8	86.5	85.7	73.5	15.2	16.8	3.5	0.5	4.8	1	10°
18	DUO-F100840069024NB60	3	84	69	24	89.6	88.6	78.5	11	13	1.9	0.5	3	1	10°
19	DUO-F100840071020NB60	3	84	71	20	87.4	86.7	80.8	8.5	10	1.8	0.5	2	1	10°
20	DUO-F108650675318NB60	3	86.5	67.5	31.8	91	90	78	14.5	17	2.8	0.5	5	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
21	DUO-F108650074225NB60	3	86.5	74	22.5	91.4	90.7	80	9.5	11.5	2	0.5	3	1	10°
22	DUO-F108760775136NB60	3	87.6	77.5	13.6	90.7	90.2	89.5	7.5	8	1.4	0.5	1.5	1	10°
23	DUO-F108850735204NB60	3	88.5	73.5	20.4	90.2	89.4	82	12.7	14.3	2.2	0.5	2.8	1	10°
24	DUO-F100890069024NB60	3	89	69	24	92.5	91.5	83	11	13.5	2.8	0.5	5	1	10°
25	DUO-F100900070029NB60	3	90	70	29	95.5	94.7	84	13.5	15.5	2	0.5	3	1	10°
26	DUO-F109190731318NB60	3	91.9	73.1	31.8	96	95.2	83	15.2	16.8	3.5	0.5	4.8	1	10°
27	DUO-F100920725356NB60	3	92	72.5	35.6	96	95.2	83	15.2	20.9	3.5	0.5	4.8	1	10°
28	DUO-F100920073318NB60	3	92	73	31.8	96.2	95.4	84	15	17	2.8	0.5	4	1	10°
29	DUO-F109250795020NB60	3	92.5	79.5	20	96	95.3	88	8.5	10.5	1.8	0.5	2	1	10°
30	DUO-F100940075029NB60	3	94	75	29	101.4	100.6	89	14.5	16.5	2	0.5	3	1	10°
31	DUO-F100980081028NB60	3	98	81	28	102.3	101.3	91	12.5	14.5	2.8	0.5	5	1	10°
32	DUO-F101000080030NB60	3	100	80	30	104.1	103.3	93	15	18	2.3	0.5	2.5	1	10°
33	DUO-F101020825356NB60	3	102	82.5	35.6	107.3	106.5	94.3	15.2	20.9	3.5	0.5	4.8	1	10°
34	DUO-F101050090026NB60	3	105	90	26	107.3	106.7	100.4	11.5	14	2.9	0.5	2.8	1	10°
35	DUO-F110650094023NB60	3	106.5	94	23	111.6	110.8	102	9.5	11.5	2	0.5	3	1	10°
36	DUO-F110680965136NB60	3	106.8	96.5	13.6	109.7	109.2	108.5	7.5	8	1.4	0.5	1.5	1	10°
37	DUO-F101090090032NB60	3	109	90	32	112.5	111.7	104	14.5	17	3.2	0.5	3	1	10°
38	DUO-F110940904318NB60	3	109.4	90.4	31.8	113.4	112.7	100.4	15.2	16.8	3.5	0.5	4.8	1	10°
39	DUO-F110950904356NB60	3	109.5	90.4	35.6	113.4	112.7	100.4	15.2	20.9	3.5	0.5	4.8	1	10°
40	DUO-F110950092022NB60	3	109.5	92	22	113.8	113	105	9.5	11.5	2	0.5	3	1	10°
41	DUO-F101110095024NB60	3	111	95	24	115.6	114.8	108	11	12.5	1.8	0.5	2	1	10°
42	DUO-F101140095032NB60	3	114	95	32	120	119.2	107	15	17	2.5	0.5	3	1	10°
43	DUO-F101170104022NB60	3	117	104	22	121	120.2	107	9.5	11.5	2	0.5	3	1	10°
44	DUO-F101190100318NB60	3	119	100	31.8	123	122.2	110	15.2	16.8	3.5	0.5	4.8	1	10°
45	DUO-F101220103032NB60	3	122	103	32	127.2	126.2	115	15.5	17.5	2.5	0.5	3	1	10°
46	DUO-F112250104225NB60	3	122.5	104	22.5	125.5	125.1	117.5	9.5	11.5	2	0.5	3	1	10°

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47	DUO-F101250104028NB60	3	125	104	28	128.5	127.5	117	12.5	14	2.8	0.5	5	1	10°
48	DUO-F101250107024NB60	3	125	107	24	130.4	129.4	119.5	11	13.5	2.8	0.5	5	1	10°
49	DUO-F101280110032NB60	3	128	110	32	133	132	121	14.5	17	2.5	0.5	3	1	10°
50	DUO-F101280111022NB60	3	128	111	22	132.5	132	123	10.6	12.3	2.8	0.5	3	1	10°
51	DUO-F101291145235NB60	3	129	114.5	23.5	134.1	133.1	126	10.4	11.9	2.8	0.5	5	1	10°
52	DUO-F101320109032NB60	3	132	109	32	136.5	135.5	124	15.5	17.5	2.5	0.5	3	1	10°
53	DUO-F101330111032NB60	5	133	111	32	137	136.5	124.5	14.5	18	2.8	0.5	5	1	10°
54	DUO-F101370115031NB60	3	137	115	31	141.8	140.8	130	14.5	16.5	2.5	0.5	3	1	10°
55	DUO-F101380117318NB60	3	138	117	31.8	142.5	141.5	132	14.5	17	2.8	0.5	5	1	10°
56	DUO-F101390120318NB60	3	139	120	31.8	143	142	129.3	14.3	17.4	3	0.5	5.4	1	10°
57	DUO-F101391265268NB60	3	139	126.5	26.8	143.8	143.1	136.9	11.8	14.2	2.9	0.5	2.8	1	10°
58	DUO-F101400117028NB60	3	140	117	28	142.5	141.5	132	12.5	14	2.8	0.5	5	1	10°
59	DUO-F101400119028NB60	3	140	119	28	142.5	141.5	132	12.5	14	2.8	0.5	5	1	10°
60	DUO-F101410120318NB60	3	141	120	31.8	144	143	138	14.5	17.5	2.8	0.5	5	1	10°
61	DUO-F101410124022NB60	3	141	124	22	146.4	145.3	136	10.6	12.3	2.8	0.5	3	1	10°
62	DUO-F101410127029NB60	3	141	127	29	144	143	136	12	14.5	2.8	0.5	5	1	10°
63	DUO-F114120127254NB60	3	141.2	127	25.4	143.8	143.1	136.9	11.8	14.2	2.9	0.5	2.8	1	10°
64	DUO-F101420120038NB60	4	142	120	38	149	148	133	17	19	2.5	0.5	3	1	10°
65	DUO-F114410125318NB60	3	144.1	125	31.8	148.5	147.5	136	14.3	17.4	3	0.5	5	1	10°
66	DUO-F101460126318NB60	3	146	126	31.8	150	149.2	137	15.2	16.8	3.5	0.5	4.8	1	10°
67	DUO-F101460127318NB60	4	146	127	31.8	150.5	149.5	138	14.5	17.5	2.8	0.5	5	1	10°
68	DUO-F115050130032NB60	3	150.5	130	32	155.6	154.6	144	14.5	16.5	2.5	0.5	5	1	10°
69	DUO-F101520130385NB60	3	152	130	38.5	159	158	144	18.5	20.5	2.5	0.5	3	1	10°
70	DUO-F115691427254NB60	3	156.9	142.7	25.4	159.7	158.9	152.1	11.8	14.2	2.9	0.5	2.8	1	10°
71	DUO-F101570144026NB60	3	157	144	26	160	159	154.5	12	14.5	2.8	0.5	5	1	10°
72	DUO-F101600143027NB60	4	160	143	27	164	163	154	12	14.5	2.8	0.5	5	1	10°

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73	DUO-F101670147028NB60	3	167	147	28	171	170	160	13	15.5	2.8	0.5	5	1	10°
74	DUO-F101680146038NB60	4	168	146	38	176.8	175.9	159	18	20.5	3	0.5	6.5	1	10°
75	DUO-F101680154027NB60	3	168	154	27	171	170	162.5	12	14.5	2.3	0.5	3	1	10°
76	DUO-F116811539254NB60	3	168.1	153.9	25.4	171	170.2	164	11.8	14.2	2.9	0.5	2.8	1	10°
77	DUO-F101690154022NB60	3	169	154	22	174.5	173.5	166	9.2	11	2.3	0.5	3	1	10°
78	DUO-F101700148031NB60	4	170	148	31	175.6	174.6	164	15	17	2.5	0.5	3	1	10°
79	DUO-F101700154021NB60	3	170	154	21	175.1	174.1	167	9.2	10	2.3	0.5	3	1	10°
80	DUO-F117150152032NB60	3	171.5	152	32	175.4	174.7	162.5	15.2	16.8	3.5	0.5	4.8	1	10°
81	DUO-F117150153028NB60	3	171.5	153	28	176.3	175.3	164.5	12.5	14.5	2.8	0.5	5	1	10°
82	DUO-F117171463038NB60		171.7	146.3	38	176.8	175.9	158.9	18.4	20.3	3.7	0.5	6.3	1	10°
83	DUO-F101720150040NB60	4	172	150	40	179	178	165	18	20	2.5	0.5	2	1	10°
84	DUO-F117350154032NB60	3	173.5	154	32	178	177	166	14.5	17	2.8	0.5	6.5	1	10°
85	DUO-F101750146038NB60	6	175	146	38	180.5	179.5	162	17.7	20.5	3	0.5	6.3	1	10°
86	DUO-F101810165027NB60	3	181	165	27	185	184	176.5	12	14.5	2.7	0.5	4	1	10°
87	DUO-F101890164030NB60	3	189	164	30	193.5	192.5	179	14.5	17	2.8	0.5	5	1	10°
88	DUO-F101901725254NB60	3	190	172.5	25.4	192.7	191.8	188	12.7	14.3	2.3	0.5	2.8	1	10°
89	DUO-F101900174254NB60	3	190	174	25.4	192.7	191.8	188	12.7	14.3	2.3	0.5	2.8	1	10°
90	DUO-F119121633038NB60	6	191.2	163.3	38	196.8	195.8	178.9	18.4	20.3	3.7	0.5	6.3	1	10°
91	DUO-F119131633046NB60	6	191.3	163.3	46	196.8	195.9	178.9	18.4	24.1	3.7	0.5	6.3	1	10°
92	DUO-F119740180214NB60	3	197.4	180	21.4	202.2	201.9	196	9.4	10.6	1.2	0.5	3	1	10°
93	DUO-F101990178032NB60	3	199	178	32	203.6	202.4	190	23	16	3	0.5	5	1	10°
94	DUO-F102000177031NB60	3	200	177	31	204.5	203.4	191	14.5	17	3.1	0.5	5	1	10°
95	DUO-F102000178038NB60	4	200	178	38	210.6	209.6	192	19	21	3	0.5	4	1	10°
96	DUO-F102020183028NB60	3	202	183	28	206	205	195	12.5	14.5	2.8	0.5	5	1	10°
97	DUO-F102030186254NB60	3	203	186	25.4	205.7	204.9	190.5	14.5	16	2.3	0.5	2.8	1	10°
98	DUO-F102100191028NB60	3	210	191	28	214	213	203	12.5	14.5	2.8	0.5	5	1	10°

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99	DUO-F121031823038NB60	6	210.3	182.3	38	215.4	214.4	197.5	18.4	20.3	3.7	0.5	6.3	1	10°
100	DUO-F121031824046NB60	6	210.3	182.4	46	215.4	214.4	197.5	18.4	24.1	3.7	0.5	6.3	1	10°
101	DUO-F102150192033NB60	4	215	192	33	220.8	219.8	207	16.5	18.5	3	0.5	4	1	10°
102	DUO-F121650195032NB60	3	216.5	195	32	221	220	207	14.5	17	2.8	0.5	5	1	10°
103	DUO-F122230202265NB60	3	222.3	202	26.5	224.9	224.1	217.9	11.8	14.2	2.9	0.5	2.8	1	10°
104	DUO-F102270205030NB60	3	227	205	30	231.5	230.5	219	14.5	17	2.8	0.5	5	1	10°
105	DUO-F122850200038NB60	6	228.5	200	38	233.5	232.5	215.5	18	20.5	3.1	0.5	6.3	1	10°
106	DUO-F102340209042NB60	4	234	209	42	242.6	241.6	224	19.5	22.5	3	0.5	4	1	10°
107	DUO-F123950220032NB60	3	239.5	220	32	244	243	232	14.5	16.5	2.8	0.5	5	1	10°
108	DUO-F125142235038NB60	6	251.4	223.5	38	256.5	255.7	238.7	18.4	20.3	3.7	0.5	6.3	1	10°
109	DUO-F125152235046NB60	6	251.5	223.5	46	256.6	255.7	238.7	18.4	24.1	3.7	0.5	6.3	1	10°
110	DUO-F102520225038NB60	4	252	225	38	258	257	241	19	21	3	0.5	4	1	10°
111	DUO-F125962316038NB60	6	259.6	231.6	38	264.7	263.8	247	18.4	20.5	3.7	0.5	6.3	1	10°
112	DUO-F102610238032NB60	3	261	238	32	265.5	264.5	254	14.5	17	2.8	0.5	5	1	10°
113	DUO-F126280240038NB60	3	262.8	240	38	273.5	272.5	255.5	18	20.5	3.1	0.5	6.5	1	10°
114	DUO-F126450245032NB60	3	264.5	245	32	268.9	267.9	255	14.5	17	2.8	0.5	5	1	10°
115	DUO-F102680239040NB60	4	268	239	40	274.2	273.2	257	20.5	22.5	3	0.5	4	1	10°
116	DUO-F102760250044NB60	4	276	250	44	284.6	283.6	266	20.5	24	3	0.5	4	1	10°
117	DUO-F102800252038NB60	3	280	252	38	285.5	284.5	265	18	20	3.1	0.5	6.5	1	10°
118	DUO-F129280265046NB60	6	292.8	265	46	297.8	297	280	18.4	24.1	3.7	0.5	6.3	1	10°
119	DUO-F102930265038NB60	4	293	265	38	298	297	280	18	20.5	3.1	0.5	6.3	1	10°
120	DUO-F103030275038NB60	3	303	275	38	308	307	290	18	20.5	3.1	0.5	6.5	1	10°
121	DUO-F131082829038NB60	6	310.8	282.9	38	316.3	315.4	298.4	18.4	20.3	3.7	0.5	6.3	1	10°
122	DUO-F103250300038NB60	3	325	300	38	335.5	334.5	318	17.5	20.5	3.1	0.5	6.5	1	10°
123	DUO-F103280300040NB60	4	328	300	40	333	332	315	18.5	21	3	0.5	4	1	10°
124	DUO-F103280301038NB60	6	328	301	38	333	332.1	315.1	18.4	20.3	3.7	0.5	6.3	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
125	DUO-F103410318038NB60	3	341	318	38	351.5	350.5	334	18	20.5	3.1	0.5	6.5	1	10°
126	DUO-F134643185038NB60	6	346.4	318.5	38	351.6	350.7	333.7	18.4	20.3	3.7	0.5	6.3	1	10°
127	DUO-F134650319046NB60	6	346.5	319	46	351.6	350.7	333.7	18.4	24.1	3.7	0.5	6.3	1	10°
128	DUO-F103680340040NB60	3	368	340	40	374.8	373.8	358	19	21.5	3	0.5	4	1	10°
129	DUO-F103693395040NB60	4	369	339.5	40	374.8	373.8	358	19	21.5	3	0.5	4	1	10°
130	DUO-F103750350038NB60	3	375	350	38	385	384.5	368	17.5	20.5	3.1	0.5	6.5	1	10°
131	DUO-F139443665038NB60	6	394.4	366.5	38	399.5	398.6	381.7	18.4	20.3	3.7	0.5	6.3	1	10°
132	DUO-F139453665048NB60	6	394.5	366.5	48	399.5	398.6	381.7	18.4	24.1	3.7	0.5	6.3	1	10°
133	DUO-F139453672038NB60	6	394.5	367.2	38	399.5	398.6	381.7	18.4	20.3	3.7	0.5	6.3	1	10°
134	DUO-F103980370038NB60	3	398	370	38	403.5	402.6	385	17.5	20.5	3	0.5	6.5	1	10°
135	DUO-F104053805040NB60	4	405	380.5	40	412.2	410.5	395	17	22	3	0.5	4	1	10°
136	DUO-F104150387038NB60	3	415	387	38	420.3	419.3	402	17.5	20.5	3.1	0.5	6.5	1	10°
137	DUO-F104544285037NB60	4	454	428.5	37	462.3	461.3	444.6	18.5	21	3	0.5	4	1	10°
138	DUO-F145724292038NB60	6	457.2	429.2	38	462.3	461.4	444.4	18.4	20.3	3.7	0.5	6.3	1	10°
139	DUO-F105000470050NB60	3	500	470	50	512.2	510.2	490	23.5	25.5	13	0.5	6	1	10°
140	DUO-F153345054044NB60	6	533.4	505.4	44	538.5	537.6	520.6	21.3	26.2	3.7	0.5	6.3	1	10°
141	DUO-F105600530050NB60	3	560	530	50	572.2	570.2	545	23.5	25.5	4	0.5	6	1	10°
142	DUO-F106080580436NB60	6	608	580	43.6	613	611	596	19.7	21.7	4	0.5	6.5	1	10°
143	DUO-F106230591050NB60	5	623	591	50	635.2	632.1	613	23.5	25.5	4	0.5	6	1	10°
144	DUO-F107000667044NB60	6	700	667	44	705.6	704.6	687.6	18.4	23.4	3.7	0.5	6.3	1	10°
145	DUO-F107500710050NB60	3	750	710	50	762.2	760.2	740	23.5	25.5	4	0.5	6	1	10°
146	DUO-F108860830080NB60	17	886	830	80	891.6	890.6	860	34.5	39.5	4.4	0.5	10	1	10°

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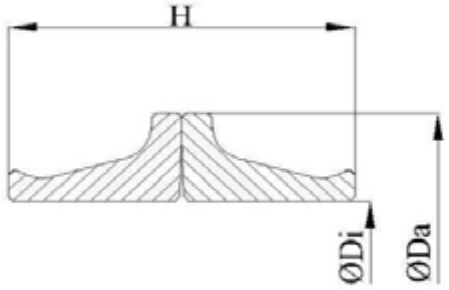

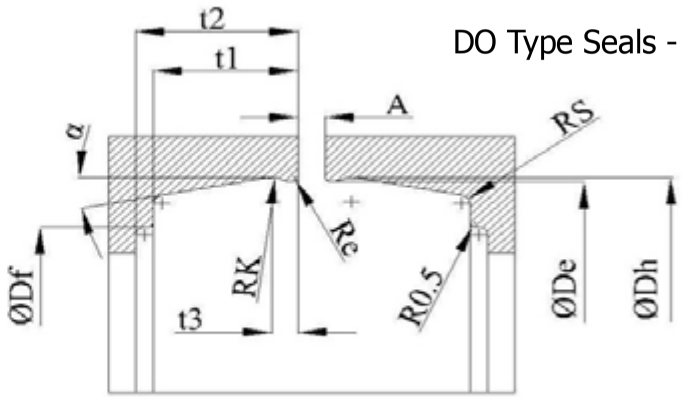

SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
1	DUO-CI00510038020NB60	3	51	38	20	53.7	53	46	9	11	1.8	0.5	2	1	10°
2	DUO-CI00510038020NB601	3	51	38	20	53.7	53	46	10	11.5	1.8	0.5	2	1	10°
3	DUO-C100580045021NB60	3	58	45	21	61.6	60.8	53.4	10	12	1.8	0.3	2.5	1	10°
4	DUO-C100590046020NB60	3	59	46	20	62.5	61.8	56	8.5	10.5	1.8	0.5	2	1	10°
5	DUO-C106220048025NB60	3	62.15	48	25	68	67.2	58	12	14	2	0.4	3	1	10°
6	DUO-C100700555022NB60	3	70	55.5	22	73.8	73.1	65.5	10	11.5	2.4	0.5	5	1	10°
7	DUO-C100700555022NB601	3	70	55.5	22	73.8	73.1	65.5	10	11.5	2.4	0.5	5	1	10°
8	DUO-C100700555022NB602	3	70	55.5	22	74.8	74.1	65.5	10	11.5	2.4	0.5	5	1	10°
9	DUO-C100700555022NB603	3	70	55.5	22	73.8	73.1	65.5	10	11.5	2.4	0.5	5	1	10°
10	DUO-C100730602020NB60	3	73	60.2	20	76.5	75.8	69	8.5	10.5	1.8	0.5	2	1	10°
11	DUO-C100780064025NB60	3	78	64	25	84.6	83.8	74	12.5	14.5	2	0.4	3	1	12°
12	DUO-C100800067020NB60	3	80	67	20	83.4	82.7	76.8	8.5	10.5	1.8	0.5	2	1	10°
13	DUO-C108050063026NB60	3	80.5	63	26	84	83.2	72	11.5	13	2.5	0.5	5	1	10°
14	DUO-C108240635032NB60	3	82.4	63.5	32	87	86	74.5	14.5	17.5	2.8	0.5	5	1	10°
15	DUO-C100840071020NB60	3	84	71	20	87.4	86.7	80.8	8.5	10.5	1.8	0.5	2	1	10°
16	DUO-C108650675318NB60	3	86.5	67.5	31.8	91	90	78	14.5	17	2.8	0.5	5	1	10°
17	DUO-C100890685024NB60	3	89	68.5	24	92.5	91.5	83	11	13.5	2.8	0.5	5	1	10°
18	DUO-C100920073032NB60	3	92	73	32	96.5	95.5	84	14.5	17.5	2.8	0.5	5	1	10°
19	DUO-C109250795020NB60	3	92.5	79.5	20	96	95.3	88	8.5	10.5	1.8	0.5	2	1	10°
20	DUO-C100980081028NB60	3	98	81	28	102.3	101.3	91	12.5	14.5	2.8	0.5	5	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
21	DUO-C101000079030NB60	3	100	79	30	105.2	104.2	92	15	17	2.5	0.7	3	1	10°
22	DUO-C101000080029NB60	3	100	80	29	104	103.2	92	14.5	16.5	2	0.4	3	1	10°
23	DUO-C101020083028NB60	3	102	83	28	105.5	104.5	94	12.5	15	2.8	0.5	5	1	10°
24	DUO-C110450905026NB60	3	104.5	90.5	26	107.4	106.6	100.4	11.8	14.2	2.9	1.2	2.8	1	10°
25	DUO-C101080088024NB60	3	108	88	24	111.5	110.5	102	1	13.5	2.8	0.5	5	1	10°
26	DUO-C110950905032NB60	3	109.5	90.5	32	114	113	101.5	14.5	17.5	2.8	0.5	5	1	10°
27	DUO-C101100091032NB60	3	110	91	32	114	113	101.5	14.5	17.5	2.8	0.5	5	1	10°
28	DUO-C101110962024NB60	3	111	96.2	24	115.6	114.8	108	11	12.5	1.8	0.5	2	1	10°
29	DUO-C101160097032NB60	3	116	97	32	120.5	119.5	108	14.5	17.5	2.8	0.5	5	1	10°
30	DUO-C101170103020NB60	3	117	103	20	119.8	119	112.5	9	11	1.8	0.5	2	1	10°
31	DUO-C101190100032NB60	3	119	100	32	123.5	122.5	111	14.5	17.5	2.8	0.5	5	1	10°
32	DUO-C101200099028NB60	3	120	99	28	123.5	122.5	112	12.5	14.5	2.8	0.5	5	1	10°
33	DUO-C101230107023NB60	3	123	107	23	125.5	125.1	117.5	9.5	11.5	1.8	0.7	3	1	10°
34	DUO-C101250104028NB60	3	125	104	28	128.5	127.5	117	12.5	14	2.8	0.5	5	1	10°
35	DUO-C101250107024NB60	3	125	107	24	130.4	129.4	119.5	11	13.5	2.8	0.5	5	1	10°
36	DUO-C101280110032NB60	3	128	110	32	133	132	121	15	17	2.5	0.7	3	1	12°
37	DUO-C101291145021NB60	3	129	114.5	21	134.1	133.1	126	9.2	10	2.3	0.5	3	1	10°
38	DUO-C101380120032NB60	3	138	120	32	143	142	132	14.5	17	2.8	0.5	5	1	10°
39	DUO-C101380120032NB601	3	138	120	32	142.5	141.5	132	14.5	17	2.8	0.5	5	1	10°
40	DUO-C101390120318NB60	3	139	120	31.8	143.8	142.8	132	14.5	17	2.8	0.5	5	1	10°
41	DUO-C113951185028NB60	3	139.5	118.5	28	143	142	131.5	12.5	15	2.8	0.5	5	1	10°
42	DUO-C101400117029NB60	3	140	117	29	142.5	141.5	132	13	14	2.8	0.5	5	1	10°
43	DUO-C114070127025NB60	3	140.7	127	25	144	143.2	135	12.7	15.2	2.7	1	2.8	1	10°
44	DUO-C101410127029NB60	3	141	127	29	144	143	136	12	14.5	2.3	0.5	3	1	10°
45	DUO-C101410127029NB601	3	141	127	29	148	147	138	13	15.5	2.8	0.5	5	1	10°
46	DUO-C101410127029NB602	3	141	127	29	148.2	147.2	135	13.2	15.5	2.8	0.5	5	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
47	DUO-C101420120038NB60	4	142	120	38	149	148	133	17	19	2.5	0.7	3	1	10°
48	DUO-C101440125318NB60	3	144	125	31.8	148.5	147.5	136	14.5	17	2.8	0.5	5	1	10°
49	DUO-C101460127032NB60	3	146	127	32	150.5	149.5	138	14.5	17.5	2.8	0.5	5	1	10°
50	DUO-C101460127031NB60	3	146	127	31	150.2	149.4	137	14.5	16.5	2.6	0.5	5	1	10°
51	DUO-C115451355028NB60	3	154.5	135.5	28	158.3	157.3	146.5	12.5	14	2.8	0.5	5	1	10°
52	DUO-C101570143027NB60	3	157	143	27	160	159	152	12	14.5	2.3	0.5	3	1	10°
53	DUO-C101600143027NB60	3	160	143	27	164	163	154	12	14.5	2.8	0.5	5	1	10°
54	DUO-C101670150028NB60	3	167	150	28	17	170	160	13	15.5	2.8	0.5	5	1	10°
55	DUO-C101680154027NB60	3	168	154	27	171	170	162.5	12	14.5	2.3	0.5	3	1	10°
56	DUO-C101680154027NB601	3	168	154	27	171	170	163	12	14.5	2.3	0.5	3	1	10°
57	DUO-C101690154022NB60	3	169	154	22	174.5	173.5	166	9.5	1	2.3	0.5	3	1	10°
58	DUO-C101690154022NB601	3	169	154	22	174.5	173.5	166	9.2	1	2.3	0.5	3	1	10°
59	DUO-C101700154021NB60	3	170	154	21	175.1	174.1	167	9.2	1	2.3	0.5	3	1	10°
60	DUO-C117150153028NB60	3	171.5	153	28	176.3	175.3	164.5	12.5	14.5	2.8	0.5	5	1	10°
61	DUO-C101710146038NB60	3	172	146	38	177	176	159	18	20.5	3.1	0.5	6.5	1	10°
62	DUO-C101720150040NB60	4	172	150	40	179	178	165	18	20	2.5	0.7	3	1	10°
63	DUO-C117350154032NB60	3	173.5	154	32	178	177	166	14.5	17	2.8	0.5	5	1	10°
64	DUO-C101800154038NB60	3	180	154	38	185	184	167	18	20.5	3.1	0.5	6.5	1	10°
65	DUO-C118050165027NB60	3	180.5	165	27	185	184	176.5	12	14.5	2.3	0.5	3	1	10°
66	DUO-C101890164030NB60	3	189	164	30	193.5	192.5	179	14.5	17	2.8	0.5	5	1	10°
67	DUO-C119150163038NB60	3	191.5	163	38	196.5	195.5	178.5	18	20.5	3.1	0.5	6.5	1	10°
68	DUO-C119440172318NB60	3	194.4	172	31.8	198.9	197.9	186	14.5	16.5	2.8	0.5	5	1	10°
69	DUO-C101950176028NB60	3	195	176	28	199.8	198.8	188	12.5	14.5	2.8	0.5	5	1	10°
70	DUO-C101990178032NB60	3	199	178	32	203.6	202.6	190	14.5	17	2.8	0.5	5	1	10°
71	DUO-C102000177030NB60	3	200	177	30	204.5	203.5	19	14.5	17	2.8	0.5	5	1	10°
72	DUO-C102050178038NB60	4	205	178	38	210.6	209.6	192	19	2	3	0.8	4	1	10°

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73	DUO-C102090192030NB60	3	209	192	30	213.5	212.5	200	14.5	17	2.8	0.5	5	1	10°
74	DUO-C102100191028NB60	3	210	191	28	214	213	203	12.5	14.5	2.8	0.5	5	1	10°
75	DUO-C121050182038NB60	3	210.5	182	38	215.5	214.5	197.5	18	20.5	3.1	0.5	6.5	1	10°
76	DUO-C121650195318NB60	3	216.5	195	31.8	221	220	207	14.5	17	2.8	0.5	5	1	10°
77	DUO-C122282087026NB60	3	222.8	208.7	26	225.4	224.4	217	11.5	13.5	2.2	0.5	2.5	1	10°
78	DUO-C102270205030NB60	3	227	205	30	231.5	230.5	219	14.5	17	2.8	0.5	5	1	10°
79	DUO-C122850200038NB60	3	228.5	200	38	233.5	232.5	215.5	18	20.5	3.1	0.5	6.5	1	10°
80	DUO-C102370216030NB60	3	237	216	30	241.5	240.5	229	14.5	17	2.8	0.5	5	1	10°
81	DUO-C123950220318NB60	3	239.5	220	31.8	244	243	232	14.5	16.5	2.8	0.5	5	1	10°
82	DUO-C102410220025NB60	3	241.4	220	25	244.7	244	233.5	11	13.5	2.2	0.5	4	1	10°
83	DUO-C125150223038NB60	3	251.5	223	38	256.5	255.5	238.5	18	20.5	3.1	0.5	6.5	1	10°
84	DUO-C125970235038NB60	5	259.7	235	38	264.7	263.7	247	18	20.5	3.1	0.5	6.5	1	10°
85	DUO-C102610238318NB60	3	261	238	31.8	265.5	264.5	254	14.5	17	2.8	0.5	5	1	10°
86	DUO-C126280240038NB60	3	262.8	240	38	273.5	272.5	255.5	18	20.5	3.1	0.5	6.5	1	10°
87	DUO-C126280242040NB60	3	262.8	242	40	273.5	272.5	255.5	18	20.5	3.1	0.5	6.5	1	10°
88	DUO-C102700250030NB60	3	270	250	30	274.7	273.7	262	14	15.5	2.8	0.5	5	1	10°
89	DUO-C128050252038NB60	3	280.5	252	38	285.5	284.5	267.5	18	20.5	3.1	0.5	6.5	1	10°
90	DUO-C102880262040NB60	7	288	262	40	294	293	276	17	20	3.8	1.2	6	3	10°
91	DUO-C102930265038NB60	3	293	265	38	298	297	280	18	20.5	3.1	0.5	6.5	1	10°
92	DUO-C103030275038NB60	3	303	275	38	308	307	290	18	20.5	3.1	0.5	6.5	1	10°
93	DUO-C132470300038NB60	3	324.65	300	38	335.5	334.5	318	17.5	20.5	3.1	0.5	6.5	1	10°
94	DUO-C103250300038NB60	3	325	300	38	336.5	335.5	318	17.5	20.5	3.1	0.5	6.5	1	10°
95	DUO-C103280300038NB60	4	328	300	38	333	332	315	19.5	22	3.1	0.8	4	1	10°
96	DUO-C103410318038NB60	3	341	318	38	351.5	350.5	334	17.5	20.5	3.1	0.5	6.5	1	10°
97	DUO-C103460318038NB60	3	346	318	38	351.5	350.5	334	18	20.5	3.1	0.5	6.5	1	10°
98	DUO-C103540326030NB60	3	354	326	30	358.7	357.7	346	15	16.5	2.8	0.5	5	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
99	DUO-C136850340038NB60	3	368.5	340	38	374.8	373.2	358	19	21.5	3	0.5	4	1	10°
100	DUO-C103750350038NB60	3	375	350	38	385.5	384.5	368	17.5	20.5	3.1	0.5	6.5	1	10°
101	DUO-C103750355038NB60	3	375	355	38	385.5	384.5	368	17.5	20.5	3.1	0.5	6.5	1	10°
102	DUO-C139440366038NB60	3	394.4	366	38	399.5	398.6	381	17.5	20.5	3	0.5	6.5	1	10°
103	DUO-C139440366040NB60	6	394.4	366	40	399.5	398.6	381	17.5	20.5	3	0.5	6.5	1	10°
104	DUO-C103980370038NB60	3	398	370	38	403.5	402.6	385	17.5	20.5	3	0.5	6.5	1	10°
105	DUO-C104050382040NB60	6	405	382	40	412	411	395	17	22	3.8	1.1	6	3	10°
106	DUO-C104150388038NB60	3	415	388	38	420.3	419.4	402	17.5	20.5	3	0.5	6.5	1	10°
107	DUO-C141620388038NB60	3	416.2	388	38	421.6	420.7	402	17.5	20.5	3	0.5	6.5	1	10°
108	DUO-C104570430038NB60	3	457	430	38	462.3	461.3	444	17.5	20.5	3	0.5	6.5	1	10°
109	DUO-C145920430038NB60	3	459.2	430	38	464.5	463.5	444	17.5	20.5	3	0.5	6.5	1	10°
110	DUO-C104800450050NB60	3	480	450	50	492.2	490.2	470	23.5	25.5	4	0.5	6	1	10°
111	DUO-C104950465436NB60	3	495	465	43.6	500.7	498.5	482.9	21.2	22.9	4.7	0.7	7	1	10°
112	DUO-C149720465436NB60	3	497.2	465	43.6	503.1	500.9	482.9	21.2	23	4.7	0.7	7	1	10°
113	DUO-C105000470050NB60	3	500	470	50	512.2	510.2	490	23.5	25.5	4	0.5	6	1	10°
114	DUO-C153340505436NB60	6	533.4	505	43.6	538.4	537.4	521	19.7	21.7	4	1.3	6.5	1	10°
115	DUO-C153580505436NB60	3	535.8	505	43.6	541.8	539.7	521	19.7	21.7	4.2	0.5	6.5	1	10°
116	DUO-C105480508060NB60	15	548	508	60	553	551.5	528	22	26	5	1.1	9	3	10°
117	DUO-C105600530050NB60	3	560	530	50	572.2	570.2	545	23.5	25.5	4	0.5	6	1	10°
118	DUO-C156680538436NB60	6	566.8	538	43.6	572.2	571.2	554	19.7	21.7	4	1.3	6.5	1	10°
119	DUO-C105900559050NB60	3	590	559	50	602.2	600.2	575	23.5	25.5	4	0.5	6	1	10°
120	DUO-C106080576436NB60	6	608	576	43.6	613	612	569	19.7	21.7	4	1.3	6.5	1	10°
121	DUO-C106085815436NB60	6	608	581.5	43.6	613	612	569	19.7	21.7	4	1.3	6.5	1	10°
122	DUO-C106230591050NB60	5.25	623	591	50	635.2	633.2	613	23.5	25.5	4	0.5	6	1	10°
123	DUO-C106280596050NB60	5.25	628	596	50	640.2	638.2	618	23.5	25.5	4	0.5	6	1	10°
124	DUO-C106950660053NB60	13	695	660	53	705.3	703.3	680	20	25.5	4	0.5	6	1	10°

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SR. No.	Part No.	A	ØDa	ØDi	H	ØDh	ØDe	ØDf	t1	t2 min	t3	RE	RK	RS	α
125	DUO-C107000667436NB60	9	700	667	43.6	705.6	704.3	687	21.3	24	3.7	0.7	6.3	1	10°
126	DUO-C107000667050NB60	12	700	667	50	705.6	704.7	687.7	21.3	26.2	3.7	1.2	6.3	1	10°
127	DUO-C107500718050NB60	3	750	718	50	762.2	760.2	740	23.5	25.5	4	0.5	6	1	10°
128	DUO-C108010740080NB60	17	801	740	80	816.9	815.9	784	34.5	39.5	4.4	1.1	10	1	10°
129	DUO-C108260770080NB60	17	826	770	80	831.9	830.9	800	34.5	39.5	4.4	1.1	10	1	10°
130	DUO-C108360780080NB60	17	836	780	80	841.9	840.9	810	34.5	39.5	4.4	1.1	10	1	10°
131	DUO-C108650817466NB60	12	865	817	46.6	870.6	869.7	852.7	21.3	26.2	3.8	1.2	6.3	1	10°
132	DUO-C186550825048NB60	11	865.5	825	48	870.6	869.7	852.7	18.4	23.3	3.7	1.2	6.3	1	10°
133	DUO-C108860834080NB60	17	886	834	80	819.9	890.9	860	34.5	39.5	4.5	1.1	10	1	10°
134	DUO-C109410902060NB60	16	941	902	60	946.3	945.2	922.4	23.8	25.2	4.65	1.4	8	1	10°
135	DUO-C109510890080NB60	17	951	890	80	956.9	955.9	924	30	34	4.4	1.1	10	5	10°
136	DUO-C109760920080NB60	17	976	920	80	981.9	980.9	950	34.5	39.5	4.4	1.1	10	1	10°
137	DUO-C110851030080NB60	17	1085	1030	80	1090.9	1089.9	1058	34.5	39.5	4.4	1.1	10	1	10°
138	DUO-C111051044080NB60	17	1105	1044	80	1110.9	1109.9	1078	34.5	39.5	4.4	1.1	10	1	10°
139	DUO-C112361175080NB60	26	1236	1175	80	1241.9	1240.4	1209	32.5	37.5	4.4	0.5	10	1	10°
140	DUO-C114251372080NB60	26	1425	1372	80	1430.9	1429.9	1398	32.5	37.5	4.4	1.1	10	1	10°

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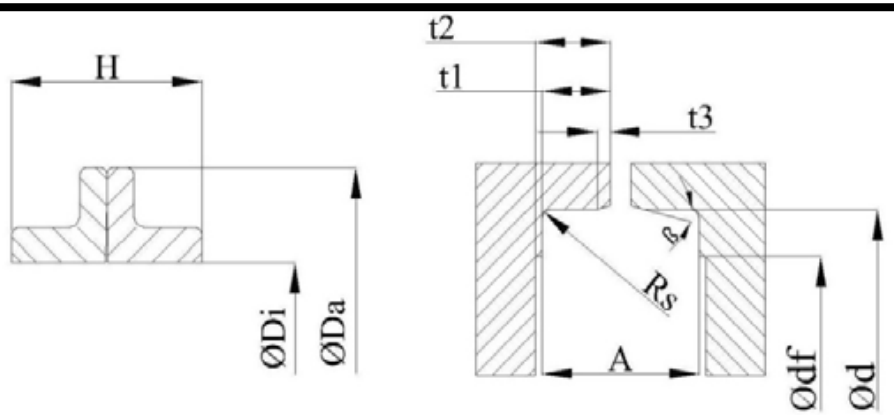

SR. No.	Part No.	A	Ø D_a	Ø D_i[mm]	H	Ø d	Ø df	t1	t2	t3	RS	ß
1	DUO-F1L00590042020NB60	23	59	42	20	65	53	10	8	2	1	15°
2	DUO-F1L00620047020NB60	23	62	47	20	70	58	10	8	2	1	15°
3	DUO-F1L00650505019NB60	22.5	65	50.5	19	76.2	63	10	8	2	1	15°
4	DUO-F1L00730054022NB60	26	73	54	22	80	67	11.5	10	1.5	1	15°
5	DUO-F1L00730585019NB60	23	73	58.5	19	82.5	65	10	8	2	1	15°
6	DUO-F1L00800586196NB60	21	80	58.6	19.6	84	71	9	7.5	1.5	1	15°
7	DUO-F1L00810635019NB60	21	81	63.5	19	87.8	71	9	8	1	1	15°
8	DUO-F1L08620067020NB60	23	86.2	67	20	95.4	82	10	8	2	1	15°
9	DUO-F1L08620068020NB60	24	86.2	68	20	95.6	82	10	8	2	1	15°
10	DUO-F1L00870067025NB60	28	87	67	25	95	81	12.5	11	1.5	1	15°
11	DUO-F1L09170067020NB60	23.5	91.7	67	20	95.4	82	10	8	2	1	15°
12	DUO-F1L09280738020NB60	23	92.8	73.8	20	102.2	88	10	8	2	1	15°
13	DUO-F1L00970077025NB60	28	97	77	25	105	87	12.5	11	1.5	1	15°
14	DUO-F1L00990074020NB60	24	99	74	20	102.2	88	10	8	2	1	15°
15	DUO-F1L01000825022NB60	25	100	82.5	22	114.3	97	11	9	2	1	15°
16	DUO-F1L10150817020NB60	23.5	101.5	81.7	20	110.2	96	10	8	2	1	15°
17	DUO-F1L01090875175NB60	20	109	87.5	17.5	113	100	8.5	7	1.5	1	15°
18	DUO-F1L11150875019NB60	23	111.5	87.5	19	115.8	102	10	8.5	1.5	1	15°
19	DUO-F1L11250094024NB60	28	112.5	94	24	125.8	109	12.5	10	2.5	1	15°
20	DUO-F1L01130092024NB60	28	113	92	24	125.8	109	12.5	10	2.5	1	15°

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SR. No.	Part No.	A	Ø D_a	Ø D_i[mm]	H	Ø d	Ø df	t1	t2	t3	RS	ß
21	DUO-F1L01200099175NB60	20	120	99	17.5	124	110	8.5	7	1.5	1	15°
22	DUO-F1L01230099019NB60	23	123	99	19	127.3	113	10	7	3	1	15°
23	DUO-F1L01240105244NB60	30.6	124	105	24.4	134.9	125	13.3	12	1.3	1	15°
24	DUO-F1L01260104024NB60	27	126	104	24	135	114	12	10	2	1	15°
25	DUO-F1L13320114026NB60	28	133.2	114	26	147.9	130	12	10.5	1.5	1	15°
26	DUO-F1L01380114026NB60	28	138	114	26	148	126	12	10	2	1	15°
27	DUO-F1L01440124032NB60	40	144	124	32	162.5	141.5	18.5	17	1.5	1	15°
28	DUO-F1L01560133028NB60	32.5	156	133	28	171.5	151	13	11	2	1	15°
29	DUO-F1L01681485324NB60	38	168	148.5	32.4	184.1	164	16.5	15	1.5	1	15°
30	DUO-F1L01750150030NB60	35	175	150	30	190	170	15	13	2	1	15°
31	DUO-F1L01800154036NB60	41.3	180	154	36	194	174	18.4	17	1.4	1	15°
32	DUO-F1L01800158018NB60	22	180	158	18	190	174	8	7	1	1	15°
33	DUO-F1L01950169033NB60	35.2	195	169	33	206.2	191.5	15.1	14	1.1	1	15°
34	DUO-F1L02071777029NB60	33.2	207	177.7	29	218.9	197	16.6	15	1.6	1	15°
35	DUO-F1L21430193031NB60	41.8	214.3	193	31	238.9	215	19.4	18	1.4	1	15°
36	DUO-F1L21450194031NB60	40.2	214.5	194	31	238.8	214	20.1	19	1.1	1	15°
37	DUO-F1L02240198035NB60	40	224	198	35	245	223	17	15	2	1	15°
38	DUO-F1L02590233035NB60	38	259	233	35	280	250	17	15	2	1	15°
39	DUO-F1L26050228041NB60	53	260.5	228	41	277.1	247.5	23.5	22	1.5	1	15°
40	DUO-F1L27352415036NB60	37	273.5	241.5	36	279.4	260.6	17.5	16.5	1	1	15°
41	DUO-F1L03030275036NB60	37	303	275	36	309.4	290	17.5	16.5	1	1	15°
42	DUO-F1L03050283042NB60	40	305	283	42	329.4	307	18.5	17	1.5	1	15°
43	DUO-F1L35250320040NB60	42	352.5	320	40	365.1	343	20	18.5	1.5	1	15°
44	DUO-F1L03920355396NB60	47.8	392	355	39.6	401.7	380	23	21.5	1.5	1	15°
45	DUO-F1L04700442041NB60	39.3	470	442	41	488.7	467	18.4	17	1.4	1	15°
46	DUO-F1L05300492043NB60	41.8	530	492	43	546.1	532	19.9	18.4	1.5	1	15°

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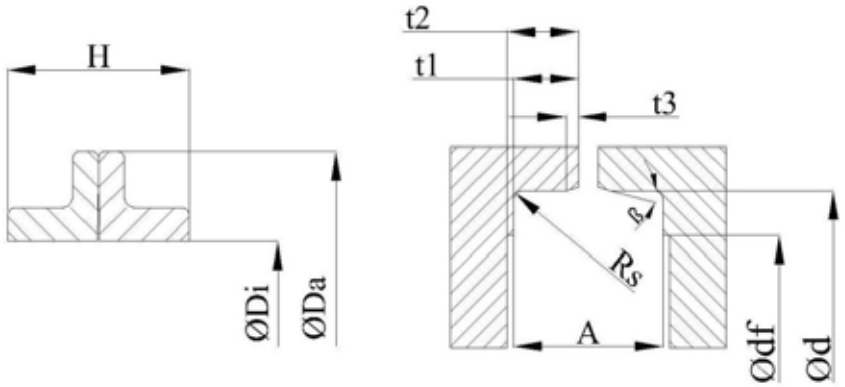

SR. No.	Part No.	A	Ø D_a	Ø D_i[mm]	H	Ø d	Ø df	t1	t2	t3	RS	ß
1	DUO-C1L62500485256NB60	22.7	62.5	48.5	25.6	76.3	62.9	10.6	14	1.6	1	30°
2	DUO-C1L00650045022NB60	24.7	65	45	22	70.1	58	11.5	12.1	1.5	1	30°
3	DUO-C1L00760056021NB60	22.9	76	56	21	82.6	70.1	10.6	11.7	1	1	30°
4	DUO-C1L00800060024NB60	28	80	60	24	85	70	10.5	10.5	1	1	30°
5	DUO-C1L00900076017NB60	18	90	76	17	95	83	8	9.5	1	1	30°
6	DUO-C1L00930735020NB60	23.3	93	73.5	20	102.4	88.4	10.8	11.2	1	1	30°
7	DUO-C1L01040088019NB60	20	104	88	19	113	98	8	9.5	1	1	20°
8	DUO-C1L01200094025NB60	27.8	120	94	25	125.8	109.1	13	13.6	1.5	1	30°
9	DUO-C1L01410115028NB60	33.5	141	115	28	152.4	131.4	15.9	15.9	1.5	1	30°
10	DUO-C1L01580132031NB60	34	158	132	31	171.5	151.8	15.4	15.9	1.5	1.5	30°
11	DUO-C1L01611425024NB60	27.7	161	142.5	24	173	139.7	11.1	11.3	1.5	1	30°
12	DUO-C1L01720148029NB60	34.7	172	148	29	184.5	164.7	16.5	16.5	1.5	1.5	30°
13	DUO-C1L02180192032NB60	32.2	218	192	32	231	206	15.2	17.1	1	1.5	30°
14	DUO-C1L02380201036NB60	44.5	238	201	36	254	235.5	21.2	21.2	1	1.5	30°
15	DUO-C1L02382135274NB60	32	238	213.5	27.4	254	240	13.7	13.7	1.5	1	30°
16	DUO-C1L02640239034NB60	36.5	264	239	34	279.4	261.9	17.5	18.2	1.6	1	45°
17	DUO-C1L02650225040NB60	48.9	265	225	40	277.1	247.8	23.7	23.7	1.5	1.5	30°
18	DUO-C1L02652357030NB60	33.8	265	235.7	30	273.1	230	15.6	15.7	1.5	1	30°
19	DUO-C1L02820256030NB60	32.8	282	256	30	292.1	276.2	15.6	16.2	1.5	1	30°
20	DUO-C1L03190283034NB60	39.1	319	283	34	329.4	307.3	18.5	18.5	1.5	1	45°

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SR. No.	Part No.	A	Ø D_a	Ø D_i[mm]	H	Ø d	Ø df	t1	t2	t3	RS	ß
21	DUO-C1L03530319036NB60	42.1	353	319	36	365.1	343.7	20	20	1.6	1.5	30°

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Cross Reference Guide

CATERPILLAR® Replacement Part Numbers Available

CTC-0772898	CTC-1320371	CTC-1320435	CTC-1320493
CTC-0774144	CTC-1320377	CTC-1320437	CTC-1320495
CTC-1074889	CTC-1320379	CTC-1320438	CTC-1320497
CTC-1079621	CTC-1320380	CTC-1320440	CTC-1320499
CTC-1082381	CTC-1320382	CTC-1320442	CTC-1320500
CTC-1082382	CTC-1320383	CTC-1320445	CTC-1320502
CTC-1086996	CTC-1320385	CTC-1320447	CTC-1320503
CTC-1086997	CTC-1320386	CTC-1320448	CTC-1320505
CTC-1090861	CTC-1320388	CTC-1320450	CTC-1320506
CTC-1090868	CTC-1320389	CTC-1320455	CTC-1320507
CTC-1090881	CTC-1320393	CTC-1320460	CTC-1320508
CTC-1090885	CTC-1320395	CTC-1320462	CTC-1320509
CTC-1108882	CTC-1320397	CTC-1320463	CTC-1320510
CTC-1109718	CTC-1320399	CTC-1320464	CTC-1320512
CTC-1141497	CTC-1320400	CTC-1320466	CTC-1320513
CTC-1182900	CTC-1320402	CTC-1320467	CTC-1320515
CTC-1253267	CTC-1320404	CTC-1320469	CTC-1320516
CTC-1253677	CTC-1320407	CTC-1320470	CTC-1320518
CTC-1255538	CTC-1320408	CTC-1320471	CTC-1320519
CTC-1306889	CTC-1320410	CTC-1320475	CTC-1320520
CTC-1320356	CTC-1320413	CTC-1320476	CTC-1320521
CTC-1320358	CTC-1320415	CTC-1320479	CTC-1320522
CTC-1320362	CTC-1320416	CTC-1320480	CTC-1320524
CTC-1320363	CTC-1320422	CTC-1320483	CTC-1320525
CTC-1320364	CTC-1320424	CTC-1320484	CTC-1320528
CTC-1320365	CTC-1320428	CTC-1320485	CTC-1320529
CTC-1320367	CTC-1320431	CTC-1320488	CTC-1320531
CTC-1320368	CTC-1320433	CTC-1320490	CTC-1320532
CTC-1320369	CTC-1320434	CTC-1320492	CTC-1320534

All manufacturer's names, part numbers and descriptions are used for reference purposes only. We do not imply that any part shown is the product of these manufacturers.

GRIZZLY SUPPLIES

CATERPILLAR® Replacement Part Numbers Available

CTC-1320535	CTC-1320581	CTC-1320636	CTC-1330511
CTC-1320536	CTC-1320582	CTC-1320637	CTC-1330512
CTC-1320537	CTC-1320584	CTC-1320639	CTC-1330513
CTC-1320538	CTC-1320586	CTC-1320642	CTC-1330526
CTC-1320544	CTC-1320587	CTC-1320643	CTC-1360296
CTC-1320546	CTC-1320588	CTC-1320646	CTC-1372427
CTC-1320547	CTC-1320590	CTC-1320647	CTC-1372428
CTC-1320550	CTC-1320591	CTC-1320649	CTC-1372429
CTC-1320551	CTC-1320592	CTC-1320650	CTC-1374343
CTC-1320552	CTC-1320595	CTC-1320651	CTC-1384162
CTC-1320553	CTC-1320601	CTC-1320652	CTC-1395535
CTC-1320554	CTC-1320604	CTC-1320653	CTC-1395542
CTC-1320555	CTC-1320605	CTC-1320654	CTC-1395949
CTC-1320558	CTC-1320607	CTC-1320657	CTC-1406707
CTC-1320559	CTC-1320609	CTC-1326141	CTC-1409881
CTC-1320560	CTC-1320610	CTC-1330432	CTC-1421579
CTC-1320561	CTC-1320611	CTC-1330433	CTC-1458032
CTC-1320563	CTC-1320612	CTC-1330441	CTC-1471660
CTC-1320564	CTC-1320613	CTC-1330442	CTC-1474446
CTC-1320565	CTC-1320615	CTC-1330445	CTC-1474474
CTC-1320568	CTC-1320617	CTC-1330446	CTC-1475509
CTC-1320569	CTC-1320625	CTC-1330447	CTC-1475510
CTC-1320570	CTC-1320626	CTC-1330449	CTC-1475511
CTC-1320571	CTC-1320627	CTC-1330456	CTC-1483533
CTC-1320572	CTC-1320631	CTC-1330469	CTC-1486633
CTC-1320573	CTC-1320632	CTC-1330471	CTC-1489594
CTC-1320577	CTC-1320633	CTC-1330473	CTC-1493957
CTC-1320578	CTC-1320634	CTC-1330476	CTC-1497581
CTC-1320580	CTC-1320635	CTC-1330510	CTC-1498434

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CATERPILLAR® Replacement Part Numbers Available

CTC-1529157	CTC-1745432	CTC-1953070	CTC-2059683
CTC-1547447	CTC-1752281	CTC-1953495	CTC-2069211
CTC-1551388	CTC-1756294	CTC-1954446	CTC-2069212
CTC-1558358	CTC-1756297	CTC-1959706	CTC-2071571
CTC-1559879	CTC-1756298	CTC-1979203	CTC-2094514
CTC-1614343	CTC-1756299	CTC-1997213	CTC-2105535
CTC-1614456	CTC-1757513	CTC-1997214	CTC-2105536
CTC-1617247	CTC-1758593	CTC-1999897	CTC-2120440
CTC-1617525	CTC-1758631	CTC-1999898	CTC-2122784
CTC-1627862	CTC-1761164	CTC-1C9067	CTC-2134737
CTC-1627863	CTC-1765331	CTC-1C9319	CTC-2137509
CTC-1627864	CTC-1765332	CTC-1C9427	CTC-2147880
CTC-1637368	CTC-1774803	CTC-1C9747	CTC-2156276
CTC-1640341	CTC-1776717	CTC-1C9748	CTC-2156277
CTC-1668815	CTC-1791292	CTC-1M8746	CTC-2156278
CTC-1686384	CTC-1796863	CTC-1M8747	CTC-2156279
CTC-1703452	CTC-1840931	CTC-1M8748	CTC-2156280
CTC-1715811	CTC-1858643	CTC-1M9012	CTC-2156281
CTC-1715825	CTC-1862892	CTC-1Z9354	CTC-2156282
CTC-1715882	CTC-1863277	CTC-2004059	CTC-2156283
CTC-1715883	CTC-1866493	CTC-2015468	CTC-2156284
CTC-1715897	CTC-1866531	CTC-2023206	CTC-2156285
CTC-1715898	CTC-1900270	CTC-2030340	CTC-2156286
CTC-1721619	CTC-1900271	CTC-2046277	CTC-2156287
CTC-1725093	CTC-1904136	CTC-2046452	CTC-2156288
CTC-1725284	CTC-1916128	CTC-2058684	CTC-2156289
CTC-1733071	CTC-1916664	CTC-2059025	CTC-2156290
CTC-1744873	CTC-1920052	CTC-2059115	CTC-2162957
CTC-1744874	CTC-1920061	CTC-2059682	CTC-2454631

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GRIZZLY SUPPLIES

CATERPILLAR® Replacement Part Numbers Available

CTC-2504366	CTC-3144130	CTC-3654924	CTC-3861020
CTC-2513272	CTC-3144132	CTC-3722638	CTC-3861022
CTC-2513279	CTC-3144134	CTC-3731647	CTC-3861024
CTC-2527907	CTC-3151147	CTC-3772182	CTC-3861026
CTC-2527909	CTC-3151149	CTC-3772186	CTC-3861028
CTC-2527912	CTC-3176441	CTC-3772188	CTC-3861029
CTC-2531727	CTC-3181783	CTC-3780592	CTC-3861032
CTC-2552272	CTC-3181785	CTC-3798802	CTC-3861033
CTC-2655193	CTC-3193887	CTC-3804914	CTC-3861034
CTC-2663142	CTC-3208915	CTC-3810705	CTC-3861035
CTC-2693358	CTC-3208917	CTC-3831597	CTC-3861036
CTC-2721012	CTC-3253297	CTC-3834232	CTC-3861037
CTC-2721014	CTC-3317073	CTC-3860992	CTC-3861038
CTC-2726133	CTC-3367869	CTC-3860993	CTC-3861039
CTC-2726134	CTC-3373548	CTC-3860994	CTC-3861041
CTC-2739594	CTC-3373551	CTC-3860996	CTC-3861043
CTC-2739595	CTC-3373554	CTC-3861000	CTC-3861046
CTC-2859346	CTC-3408206	CTC-3861001	CTC-3861047
CTC-2979546	CTC-3418543	CTC-3861003	CTC-3861048
CTC-2J0001	CTC-3443837	CTC-3861005	CTC-3861051
CTC-2M2858	CTC-3519947	CTC-3861006	CTC-3861053
CTC-3057976	CTC-3565452	CTC-3861007	CTC-3861054
CTC-3097664	CTC-3577361	CTC-3861010	CTC-3861055
CTC-3144119	CTC-3580793	CTC-3861011	CTC-3861059
CTC-3144120	CTC-3594800	CTC-3861013	CTC-3861060
CTC-3144122	CTC-3594802	CTC-3861014	CTC-3861061
CTC-3144124	CTC-3594804	CTC-3861015	CTC-3861063
CTC-3144126	CTC-3654920	CTC-3861017	CTC-3861066
CTC-3144128	CTC-3654922	CTC-3861018	CTC-3861068

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CATERPILLAR® Replacement Part Numbers Available

CTC-3861070	CTC-3861120	CTC-4404292	CTC-5P1605
CTC-3861072	CTC-3861123	CTC-4441244	CTC-5P1607
CTC-3861074	CTC-3861124	CTC-4450455	CTC-5P7143
CTC-3861077	CTC-3861125	CTC-4461424	CTC-5P7146
CTC-3861079	CTC-3861126	CTC-4466653	CTC-5P9121
CTC-3861081	CTC-3861127	CTC-4535929	CTC-6S3285
CTC-3861082	CTC-3861129	CTC-4547635	CTC-6T2815
CTC-3861084	CTC-3861130	CTC-4599259	CTC-6T2981
CTC-3861085	CTC-3861131	CTC-4605369	CTC-6T3377
CTC-3861087	CTC-3861132	CTC-4626304	CTC-6T4316
CTC-3861088	CTC-3P1848	CTC-4667328	CTC-6T6802
CTC-3861089	CTC-3P1850	CTC-4699174	CTC-6T8433
CTC-3861090	CTC-3Q5424	CTC-4731457	CTC-6T8434
CTC-3861093	CTC-3S0303	CTC-4758458	CTC-6T8435
CTC-3861094	CTC-3T1117	CTC-4C1494	CTC-6T8436
CTC-3861095	CTC-3T6541	CTC-4C2002	CTC-6T8437
CTC-3861097	CTC-3T8500	CTC-4D8960	CTC-6T8438
CTC-3861099	CTC-3T9117	CTC-4S8984	CTC-6T8439
CTC-3861101	CTC-4177857	CTC-5K1078	CTC-6T8440
CTC-3861103	CTC-4220069	CTC-5K5288	CTC-6T9984
CTC-3861105	CTC-4221454	CTC-5K6191	CTC-6T9985
CTC-3861109	CTC-4229076	CTC-5M1176	CTC-6T9986
CTC-3861110	CTC-4236536	CTC-5M1177	CTC-6V1800
CTC-3861113	CTC-4240676	CTC-5M7294	CTC-6V1915
CTC-3861114	CTC-4251284	CTC-5M8647	CTC-6V2614
CTC-3861115	CTC-4331348	CTC-5N7639	CTC-6V2615
CTC-3861116	CTC-4341920	CTC-5P0373	CTC-6Y0520
CTC-3861118	CTC-4341922	CTC-5P0374	CTC-6Y0855
CTC-3861119	CTC-4392605	CTC-5P0375	CTC-6Y0857

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GRIZZLY SUPPLIES

CATERPILLAR® Replacement Part Numbers Available

CTC-6Y0859
CTC-6Y0860
CTC-6Y0925
CTC-6Y5218
CTC-6Y5219
CTC-6Y6273
CTC-6Y6275
CTC-6Y6277
CTC-7G0519
CTC-7T0157
CTC-7T0158
CTC-7T0159
CTC-7T0160
CTC-7T2459
CTC-7T4080
CTC-7T4086
CTC-7T4722
CTC-7T5125
CTC-7T5133
CTC-8E1868
CTC-8E1869
CTC-8E1881
CTC-8E4535
CTC-8E5029
CTC-8E5322
CTC-8E5610
CTC-8E5611
CTC-8E5612
CTC-8E6327
CTC-8L5516
CTC-8L5519
CTC-8P1252
CTC-8S5656
CTC-9G5311
CTC-9G5313
CTC-9G5315
CTC-9G5317
CTC-9G5319
CTC-9G5321
CTC-9G5323
CTC-9G5339
CTC-9G5343
CTC-9G5347
CTC-9G5349
CTC-9P9663
CTC-9S3522
CTC-9S3523
CTC-9S3524
CTC-9S4294
CTC-9S4295
CTC-9S4296
CTC-9S4297
CTC-9S4298
CTC-9S4299
CTC-9S4300
CTC-9S4301
CTC-9S4302
CTC-9W0054
CTC-9W1059
CTC-9W1060
CTC-9W2623
CTC-9W3732
CTC-9W4098
CTC-9W4650
CTC-9W4651
CTC-9W4652
CTC-9W5977
CTC-9W5978
CTC-9W5979
CTC-9W6617
CTC-9W6619
CTC-9W6666
CTC-9W6667
CTC-9W6668
CTC-9W6671
CTC-9W6684
CTC-9W6685
CTC-9W6686
CTC-9W6688
CTC-9W6689
CTC-9W6690
CTC-9W6692
CTC-9W6693
CTC-9W6694
CTC-9W6697
CTC-9W6699
CTC-9W6717
CTC-9W7331
CTC-9W8878
CTC-9W9230

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Other OEM Replacement Part Numbers Available

HITACHI®
HIT-0251523
HIT-4066695
HIT-4082631
HIT-4092483
HIT-4114753
HIT-4138544
HIT-4179741
HIT-4245703
HIT-4344155
HIT-4350347
HIT-4514259
HIT-4634693
HIT-4664392
HIT-E12637067
HIT-E12638039
HIT-E4683772
HIT-FYB00000549
HIT-FYB00000641

HYSTER®
HYS-1483803
HYS-1489420

HYUNDAI®
HYU-P297
HYU-ZGBJ-00029

JOHN DEERE®
JD-8428819
JD-AT131736
JD-AT154697
JD-AT368651
JD-AT374827
JD-AT408152
JD-AT410248
JD-F434846
JD-FYB00000549
JD-FYB00000641
JD-TH100463
JD-TH103097
JD-TT07909

KALMAR®
KAL-6146.2683
KAL-80231.0276
KAL-921157.0007
KAL-923436.0775
KAL-923726.0370
KAL-923855.0760

KOMATSU®
KOM-150-27-00025
KOM-150-27-00027
KOM-150-27-00028
KOM-150-27-00330
KOM-150-27-00410
KOM-170-27-00010
KOM-170-27-00020
KOM-170-27-00021
KOM-170-27-00023
KOM-170-27-00024
KOM-170-27-00025
KOM-207-27-00310
KOM-421-33-00021
KOM-423-33-00020
KOM-423-33-00021
KOM-425-33-00111
KOM-428-33-00021
KOM-428-33-00022
KOM-PC0179
KOM-PC0651

ROCKWELL®
ROCKWELL-A1205G2581
ROCKWELL-A1205L2664
RUC-2643 DUO SEAL

TEREX®
TER-066974932
TER-D5151014
TER-X6051068

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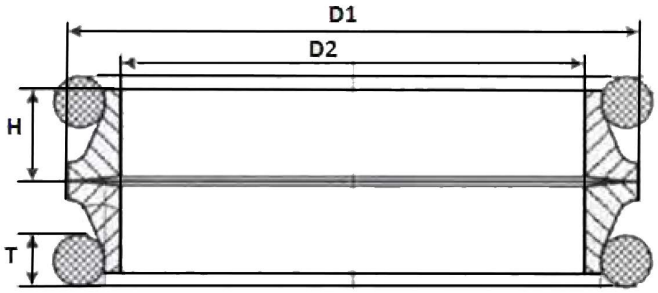
GRIZZLY SUPPLIES

Face Seal Sizing Guide



D1-Largest Outside diameter of metal ring: _____ mm

D2-Smallest Inside diameter of metal ring: _____ mm

H-Height of one metal ring: _____ mm

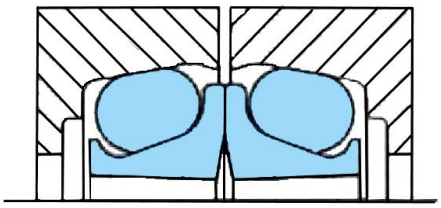
T-Thickness of O-ring: _____ mm

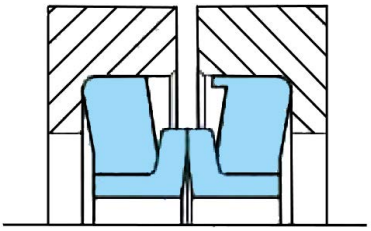
Material of O-ring:

Nitrile (NB) ☐ Hydrogenate Nitrile (HN) ☐ Fluroelastomer (FP) ☐

Silicone (SI) ☐ Low-Temp Nitrile (LT-NB) ☐

Face seal profile:





DO Type: ☐ DL Type: ☐

Application:

Make: _____ Model: _____

Notes: _____

_____

_____

Notes

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SUPPLIES

SEAL IT, MOVE IT

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Tukwila, WA
98188

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International: 1-604-888-7311

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Surrey, BC
V4N 4C4