

WIPER SEALS

BECA 485



DESCRIPTION

The BECA 485 profile is a double acting composite wiper seal composed of a filled PTFE friction ring and a pre-tightened rubber O'Ring. It meets military standard MS33675.

ADVANTAGES

Low friction coefficient;
no stick-slip effect

Wide temperature range and excellent chemical resistance, depending on the materials selected

Excellent abrasion and wear resistance

Very good wiping effect against external pollutions

APPLICATIONS

Actuators

Brakes systems

Flight controls

Engine systems

Landing gear

MATERIALS

Friction ring

Bronze-filled PTFE

Carbon-filled PTFE

Blue GL PTFE

O'Ring

NBR 70 Shore A

FKM 70 Shore A

TECHNICAL DATA

Temperature	-40°C / +200°C
Speed	5 m/s
Media	Mineral hydraulic oils Fire-resistant liquids Biocompatible fluids Water Others (contact our experts)

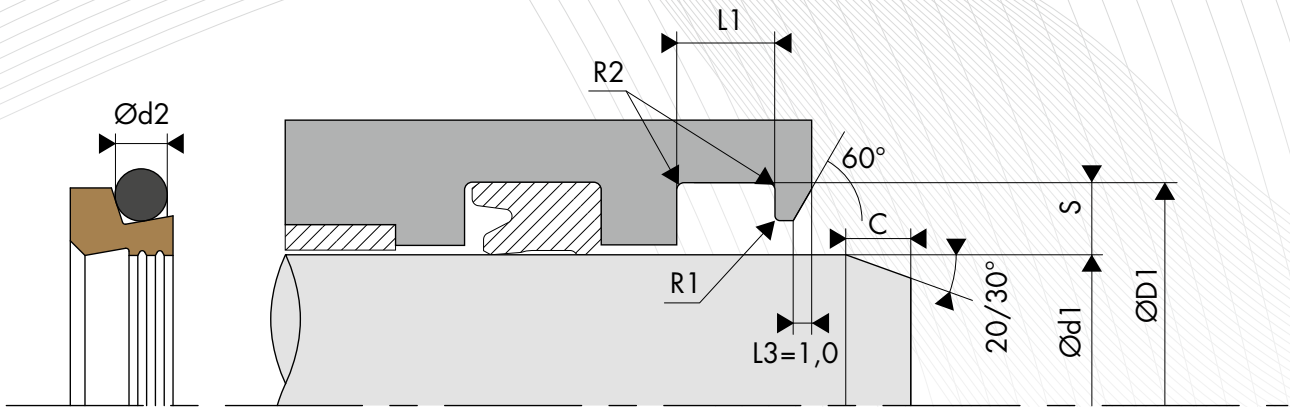
The figures above indicate the maximum values and may not be cumulated. They may be developed, depending on the materials used.

SURFACE ROUGHNESS

Roughness	Dynamic surface area	Static surface area	Groove flanks
Ra	0.05 - 0.2 µm	≤1.6 µm	≤3.2 µm
Rz	0.4 - 1.6 µm	≤6.3 µm	≤10.0 µm
Rmax	0.63 - 2.5 µm	≤10.0 µm	≤16.0 µm

CHAMFERS AND RADIUS

Series	Radius		Chamfer C
	R1 min - max	R2 min - max	
010 - 071	0.13 - 0.26	0.13 - 0.38	2.00



○ GROOVE WIDTHS AND BORE DIAMETERS

Series	Groove width L1 min - max	Bore diameter $\varnothing D2$
001 - 025	4.95 - 5.08	1.07
026 - 071	6.10 - 6.23	1.07

○ TOLERANCES ON THE ROD DIAMETERS AND GROOVE DIAMETERS

Series	Tolerance on rod diameter $\varnothing d1$	Tolerance on groove diameter $\varnothing D1$
001 - 040	-0.050/0	0/+0.025
041 - 060	-0.080/0	0/+0.080
061 - 071	-0.080/0	0/+0.130

DIMENSIONS

Part number	Series	Rod diameter	Groove diameter	Groove width	O'Ring Series
		Ød1	ØD1	L1 min	
485.A001	001	12.65	19.46	4.95	113
485.A002	002	14.22	21.03	4.95	114
485.A003	003	15.82	22.63	4.95	115
485.A004	004	17.40	24.21	4.95	116
485.A005	005	19.00	25.81	4.95	117
485.A006	006	20.57	27.38	4.95	118
485.A007	007	22.17	28.98	4.95	119
485.A008	008	23.75	30.56	4.95	120
485.A009	009	25.35	32.16	4.95	121
485.A010	010	26.92	33.73	4.95	122
485.A011	011	28.52	35.33	4.95	123
485.A012	012	30.10	36.91	4.95	124
485.A013	013	31.70	38.51	4.95	125
485.A014	014	33.27	40.08	4.95	126
485.A015	015	34.87	41.68	4.95	127
485.A016	016	36.45	43.26	4.95	128
485.A017	017	38.05	44.86	4.95	129
485.A018	018	41.22	48.03	4.95	131
485.A019	019	44.40	51.21	4.95	132
485.A020	020	47.57	54.38	4.95	135
485.A021	021	50.75	57.56	4.95	137
485.A022	022	53.92	60.73	4.95	139
485.A023	023	57.10	63.91	4.95	141
485.A024	024	60.27	67.08	4.95	143
485.A025	025	63.45	70.26	4.95	145
485.A026	026	66.62	75.46	6.10	232
485.A027	027	69.80	78.64	6.10	233
485.A028	028	72.97	81.81	6.10	234
485.A029	029	76.12	84.96	6.10	235
485.A030	030	79.30	88.14	6.10	236
485.A031	031	82.47	91.31	6.10	237
485.A032	032	85.65	94.49	6.10	238
485.A033	033	88.82	97.66	6.10	239
485.A034	034	92.00	100.84	6.10	240
485.A035	035	95.17	104.01	6.10	241
485.A036	036	98.35	107.19	6.10	242

Part number	Series	Rod diameter	Groove diameter	Groove width	O'Ring Series
		Ød1	ØD1	L1 min	
485.A037	037	101.52	110.36	6.10	243
485.A038	038	104.70	113.54	6.10	244
485.A039	039	107.87	116.71	6.10	245
485.A040	040	111.05	119.89	6.10	246
485.A041	041	114.22	123.06	6.10	247
485.A042	042	117.40	126.24	6.10	248
485.A043	043	120.57	129.41	6.10	249
485.A044	044	123.75	132.59	6.10	250
485.A045	045	126.92	135.76	6.10	251
485.A046	046	130.10	138.94	6.10	252
485.A047	047	133.27	142.11	6.10	253
485.A048	048	136.45	145.29	6.10	254
485.A049	049	139.62	148.46	6.10	255
485.A050	050	142.80	151.64	6.10	256
485.A051	051	145.97	154.81	6.10	257
485.A052	052	149.15	157.99	6.10	258
485.A053	053	152.32	161.16	6.10	258
485.A054	054	158.67	167.51	6.10	259
485.A055	055	165.02	173.86	6.10	260
485.A056	056	171.37	180.21	6.10	261
485.A057	057	177.72	186.56	6.10	262
485.A058	058	184.07	192.91	6.10	263
485.A059	059	190.42	199.26	6.10	264
485.A060	060	196.77	205.61	6.10	265
485.A061	061	203.12	211.96	6.10	266
485.A062	062	215.82	224.66	6.10	268
485.A063	063	228.52	237.36	6.10	270
485.A064	064	241.22	250.06	6.10	272
485.A065	065	253.92	262.76	6.10	274
485.A066	066	266.62	275.46	6.10	275
485.A067	067	279.32	288.16	6.10	276
485.A068	068	292.02	300.86	6.10	277
485.A069	069	304.72	313.56	6.10	278
485.A070	070	317.42	326.26	6.10	278
485.A071	071	330.12	338.96	6.10	279