



Product Description

1. Single seal configuration
2. Unbalanced design
3. Independent of direction of rotation
4. For plain shafts
5. Rotary elastomer bellows design

Technical Features

1. Low cost seal solution
2. Suitable for mild sterile applications
3. No damage to the shaft
4. Can be employed for low solids content
5. Multifaceted application usage

Typical Industrial Applications

Acids	Hydrocarbons
Aqueous solutions	Lubricating liquid
Caustics	Marine
Chemicals	Solvents
Crystallizing fluids	Water and waste water
Food and beverage	

Performance Capabilities

Shaft diameter	$d_1 = 10 \dots 100 \text{ mm (0.375" ... 4")}$
Pressure	$p_1 = 12 \text{ bar (174 PSI)}$, vacuum up to 0.5 bar (7.25 PSI), up to 1 bar (14.5 PSI) with seat locking
Temperature	$t = -20 \text{ }^\circ\text{C} \dots +140 \text{ }^\circ\text{C}$ ($-4^\circ\text{F} \dots +284 \text{ }^\circ\text{F}$)
Speed	10 m/s(33ft/s)
Axial movement	$\pm 0.5 \text{ mm}$

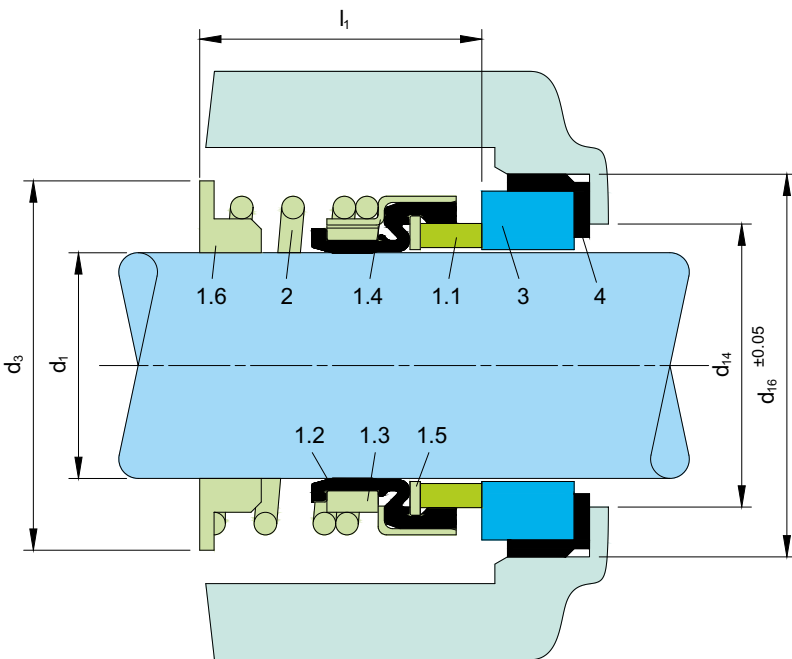
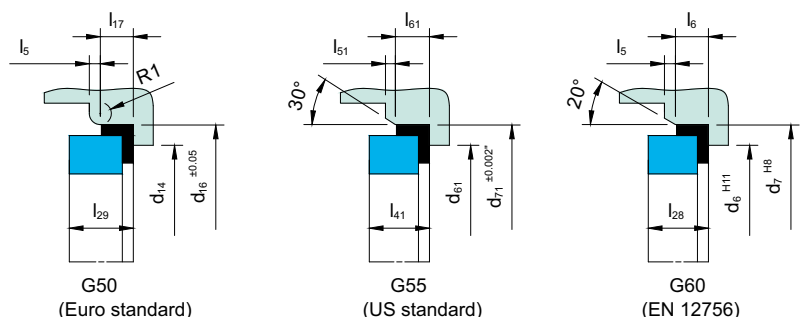
Standards

EN 12756
FDA

Materials

Seal face	Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Silicon carbide (Q1) Seat: Silicon carbide (Q1, Q2), Aluminum oxide (V) Elastomer: NBR(P), EPDM (E), FKM (D), HNBR (X4)
Metal parts	CrNiMo steel (G)

Stationary Seals



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Notes

A modular principle comprising a bellows unit for each shaft diameter and a corresponding cylindrical spring for individual length compensation to l_1 installation length. UG943 can also be used as a multiple seal in tandem or in a back-to-back arrangement. The entire UG943 series is available in metric and inch sizes.

Item	Description
1.1	Seal face
1.2	Bellows
1.3	Driver collar
1.4	"L" ring (spring collar)
1.5	Washer
1.6	Corner Ring
2	Spring
3	Seat
4	O-ring
DIN 24250	

Dimensional Data

Dimensions in inch

d ₁	d ₃	d ₆	d ₇	d ₁₄	d ₁₆	d ₆₁	d ₇₁	l ₁	l ₅	l ₆	l ₁₇	l ₂₈	l ₂₉	l ₄₁	l ₅₁	l ₆₁
0.375	0.787	0.669	0.827	0.433	0.969	0.625	0.875	0.941	0.059	0.157	0.295	0.260	0.354	0.313	0.050	0.250
0.500	0.866	0.748	0.906	0.531	1.094	0.750	1.000	0.941	0.059	0.157	0.295	0.260	0.354	0.313	0.050	0.250
0.625	1.024	0.906	1.063	0.669	1.219	0.937	1.250	1.039	0.059	0.157	0.354	0.260	0.413	0.406	0.050	0.344
0.750	1.339	1.142	1.378	0.846	1.406	1.062	1.375	1.083	0.079	0.197	0.354	0.295	0.413	0.406	0.050	0.344
0.875	1.417	1.220	1.457	0.906	1.469	1.187	1.500	1.083	0.079	0.197	0.354	0.295	0.413	0.406	0.050	0.344
1.000	1.535	1.339	1.575	1.043	1.594	1.312	1.625	1.181	0.079	0.197	0.354	0.295	0.413	0.437	0.050	0.375
1.125	1.654	1.457	1.693	1.161	1.876	1.437	1.750	1.280	0.079	0.197	0.413	0.295	0.472	0.437	0.050	0.375
1.250	1.811	1.654	1.890	1.280	2.000	1.563	1.875	1.280	0.079	0.197	0.413	0.295	0.472	0.437	0.050	0.375
1.375	1.929	1.732	1.969	1.437	2.126	1.687	2.000	1.280	0.079	0.197	0.413	0.295	0.472	0.437	0.050	0.375
1.500	2.126	1.929	2.205	1.555	2.250	1.813	2.125	1.339	0.079	0.236	0.413	0.354	0.472	0.437	0.050	0.375
1.625	2.205	2.008	2.283	1.673	2.376	2.000	2.375	1.339	0.079	0.236	0.413	0.354	0.472	0.500	0.050	0.437
1.750	2.402	2.205	2.480	1.811	2.500	2.125	2.500	1.339	0.079	0.236	0.413	0.354	0.472	0.500	0.050	0.437
1.875	2.520	2.323	2.598	1.929	2.626	2.250	2.625	1.339	0.079	0.236	0.413	0.354	0.472	0.500	0.050	0.437
2.000	2.598	2.441	2.756	2.047	2.750	2.375	2.750	1.358	0.098	0.236	0.472	0.374	0.531	0.500	0.050	0.437
2.125	2.717	2.559	2.874	2.185	2.876	2.375	3.000	1.358	0.098	0.236	0.472	0.433	0.531	0.562	0.050	0.500
2.250	3.071	2.756	3.071	2.421	3.126	2.437	3.125	1.555	0.098	0.236	0.472	0.433	0.531	0.562	0.050	0.500
2.375	3.150	2.835	3.150	2.421	3.126	2.563	3.250	1.555	0.098	0.236	0.472	0.433	0.531	0.562	0.050	0.500
2.500	3.268	2.953	3.268	2.559	3.250	2.687	3.375	1.465	0.098	0.236	0.472	0.433	0.531	0.562	0.050	0.500
2.625	3.465	3.189	3.543	2.795	3.750	2.812	3.375	1.465	0.098	0.276	0.571	0.445	0.630	0.625	0.100	0.562
2.750	3.543	3.268	3.622	2.795	3.750	2.937	3.500	1.760	0.098	0.276	0.571	0.445	0.630	0.625	0.100	0.562
2.875	-	-	-	-	-	3.062	3.750	1.760	-	-	-	-	-	0.625	0.100	0.562
3.000	3.898	3.465	3.819	3.051	4.000	3.187	3.875	1.760	0.098	0.276	0.571	0.445	0.630	0.625	0.100	0.562
3.125	4.094	3.740	4.134	3.307	4.500	3.312	4.000	1.744	0.118	0.276	0.728	0.472	0.787	0.781	0.100	0.656
3.250	-	-	-	-	-	3.437	4.125	1.744	-	-	-	-	-	0.781	0.100	0.656
3.375	4.291	3.937	4.331	3.425	4.626	3.562	4.250	1.744	0.118	0.276	0.728	0.551	0.787	0.781	0.100	0.656
3.500	4.488	4.134	4.528	3.681	4.876	3.687	4.375	1.941	0.118	0.276	0.728	0.551	0.787	0.781	0.100	0.656
3.625	-	-	-	-	-	3.812	4.500	1.941	-	-	-	-	-	0.781	0.100	0.656
3.750	4.685	4.331	4.724	3.799	5.000	3.937	4.625	1.941	0.118	0.276	0.728	0.551	0.787	0.781	0.100	0.656
3.875	-	-	-	-	-	4.062	4.750	1.941	-	-	-	-	-	0.781	0.100	0.656
4.000	4.882	4.528	4.921	4.055	5.250	4.187	4.875	1.941	0.118	0.276	0.728	0.551	0.787	0.781	0.100	0.656

Dimensions in millimeter

d ₁	d ₃	d ₆	d ₇	d ₁₄	d ₁₆	d ₆₁	d ₇₁	l ₁	l ₅	l ₆	l ₁₇	l ₂₈	l ₂₉	l ₄₁	l ₅₁	l ₆₁
10	20	17	21	11.0	24.60	15.88	22.23	23.9	1.5	4	7.5	6.6	9.0	7.95	1.27	6.35
12	22	19	23	13.5	27.80	19.05	25.40	23.9	1.5	4	7.5	6.6	9.0	7.95	1.27	6.35
14	24	21	25	17.0	30.95	-	-	26.4	1.5	4	9.0	6.6	10.5	-	-	-
15	-	-	-	17.0	30.95	-	-	-	-	-	9.0	-	10.5	-	-	-
16	26	23	27	17.0	30.95	23.80	31.75	26.4	1.5	4	9.0	6.6	10.5	10.31	1.27	8.74
18	32	27	33	20.0	34.15	-	-	27.5	2.0	5	9.0	7.5	10.5	-	-	-
20	34	29	35	21.5	35.70	26.97	34.93	27.5	2.0	5	9.0	7.5	10.5	10.31	1.27	8.74
22	36	31	37	23.0	37.30	30.15	38.10	27.5	2.0	5	9.0	7.5	10.5	10.31	1.27	8.74
24	38	33	39	26.5	40.50	-	-	30.0	2.0	5	9.0	7.5	10.5	-	-	-
25	39	34	40	26.5	40.50	33.32	41.28	30.0	2.0	5	9.0	7.5	10.5	11.10	1.27	9.53
28	42	37	43	29.5	47.65	36.50	44.45	32.5	2.0	5	10.5	7.5	12.0	11.10	1.27	9.53
30	44	39	45	32.5	50.80	-	-	32.5	2.0	5	10.5	7.5	12.0	-	-	-
32	46	42	48	32.5	50.80	39.70	47.63	32.5	2.0	5	10.5	7.5	12.0	11.10	1.27	9.53
33	47	42	48	36.5	54.00	39.70	47.63	32.5	2.0	5	10.5	7.5	12.0	11.10	1.27	9.53
35	49	44	50	36.5	54.00	42.85	50.80	32.5	2.0	5	10.5	7.5	12.0	11.10	1.27	9.53
38	54	49	56	39.5	57.15	46.05	53.98	34.0	2.0	6	10.5	9.0	12.0	11.10	1.27	9.53
40	56	51	58	42.5	60.35	50.80	60.33	34.0	2.0	6	10.5	9.0	12.0	12.70	1.27	11.10
43	59	54	61	46.0	63.50	-	-	34.0	2.0	6	10.5	9.0	12.0	-	-	-
45	61	56	63	46.0	63.50	53.98	63.50	34.0	2.0	6	10.5	9.0	12.0	12.70	1.27	11.10
48	64	59	66	49.0	66.70	57.15	66.68	34.0	2.0	6	10.5	9.0	12.0	12.70	1.27	11.10
50	66	62	70	52.0	69.85	60.33	69.85	34.5	2.5	6	12.0	9.5	13.5	12.70	1.27	11.10
53	69	65	73	55.5	73.05	60.33	76.20	34.5	2.5	6	12.0	11.0	13.5	14.27	1.27	12.70
55	71	67	75	58.5	76.20	-	-	34.5	2.5	6	12.0	11.0	13.5	-	-	-
58	78	70	78	61.5	79.40	61.90	79.38	39.5	2.5	6	12.0	11.0	13.5	14.27	1.27	12.70
60	80	72	80	61.5	79.40	65.10	82.55	39.5	2.5	6	12.0	11.0	13.5	14.27	1.27	12.70
63	83	75	83	65.0	82.55	68.25	85.73	39.5	2.5	6	12.0	11.0	13.5	14.27	1.27	12.70
65	85	77	85	68.0	92.10	-	-	39.5	2.5	6	14.5	11.0	16.0	-	-	-
68	88	81	90	71.0	95.25	71.42	85.73	37.2	2.5	7	14.5	11.3	16.0	15.88	2.54	14.27
70	90	83	92	71.0	95.25	74.60	88.90	44.7	2.5	7	14.5	11.3	16.0	15.88	2.54	14.27
75	99	88	97	77.5	101.60	80.95	98.43	44.7	2.5	7	14.5	11.3	16.0	15.88	2.54	14.27
80	104	95	105	84.0	114.30	84.12	101.60	44.3	3.0	7	18.5	12.0	20.0	19.84	2.54	16.66
85	109	100	110	87.0	117.50	90.47	107.95	44.3	3.0	7	18.5	14.0	20.0	19.84	2.54	16.66
90	114	105	115	93.5	123.85	93.65	111.13	49.3	3.0	7	18.5	14.0	20.0	19.84	2.54	16.66
95	119	110	120	96.5	127.00	100.00	117.48	49.3	3.0	7	18.5	14.0	20.0	19.84	2.54	16.66
100	124	115	125	103.0	133.35	106.35	123.83	49.3	3.0	7	18.5	14.0	20.0	19.84	2.54	16.66

Note: Additional technical & dimensional information will be provided on request

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