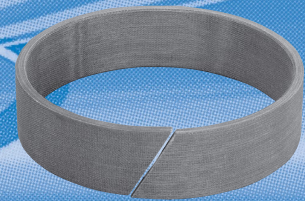
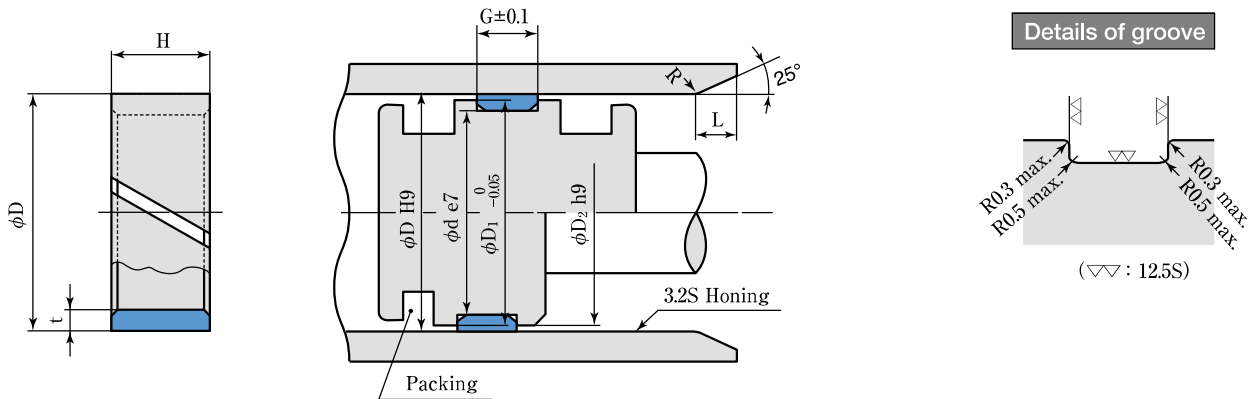


SW-Wear rings

Wear rings for high-load pistons
(Installable in one-piece groove)



Dimension table



Note: ● Refer to the L dimension specified by the packing in the sealing system.
● For information on preferred values of surface finish (roughness), see page 14.

Dimension table of SW-Wear rings

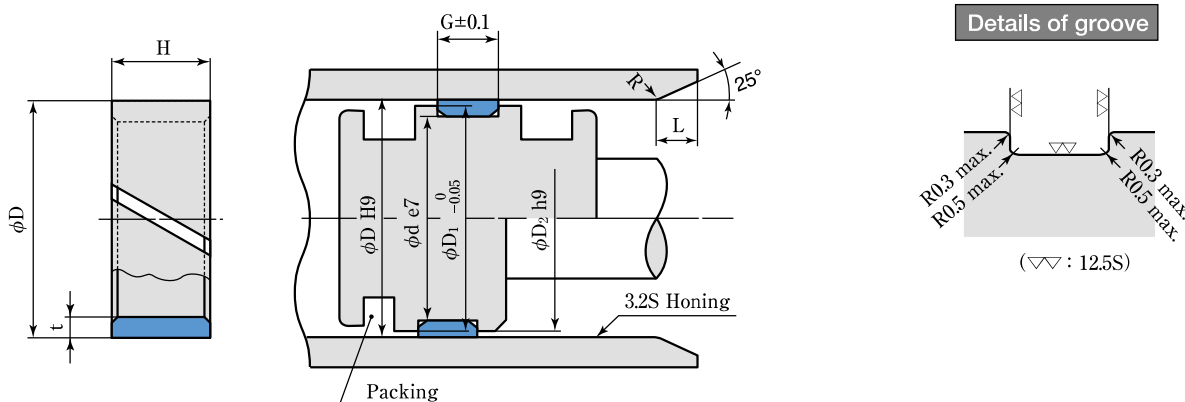
(Unit : mm)

Wear ring & Groove dimensions							Part No.
D	d	H	t	G	D ₁	D ₂	Standard material(PB201)
30	26	5	2	5	29.5	29	SW- 30
31.5	27.5	8	2	8	31	30	SW- 31.5
32	28	8	2	8	31.5	30.5	SW- 32
35	31	8	2	8	34.5	33.5	SW- 35
35.5	31.5	10	2	10	35	34	SW- 35.5
40	36	10	2	10	39.5	38.5	SW- 40
45	41	12	2	12	44.5	43.5	SW- 45
50	46	12	2	12	49.5	48.5	SW- 50
53	47	16	3	16	52.4	51	SW- 53
55	49	16	3	16	54.4	53	SW- 55
56	50	16	3	16	55.4	54	SW- 56
60	54	16	3	16	59.4	58	SW- 60
63	57	16	3	16	62.4	61	SW- 63
65	59	16	3	16	64.4	63	SW- 65
70	64	20	3	20	69.4	68	SW- 70
71	65	20	3	20	70.4	69	SW- 71
75	69	20	3	20	74.4	73	SW- 75
80	74	20	3	20	79.4	78	SW- 80
85	79	20	3	20	84.4	83	SW- 85
90	84	25	3	25	89.4	88	SW- 90
95	89	25	3	25	94.4	93	SW- 95
100	94	25	3	25	99.4	98	SW-100
105	99	25	3	25	104.4	103	SW-105
110	104	30	3	30	109.4	108	SW-110
112	106	30	3	30	111.4	110	SW-112
115	109	30	3	30	114.4	113	SW-115
120	114	30	3	30	119.4	118	SW-120
125	119	30	3	30	124.3	123	SW-125

★Orders and inquiries are accepted on part numbers.

★SW-Wear rings are made-to-order products. The wear rings for the inner slide are also available upon request.

★Wear rings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and storage.



Note: ● Refer to the L dimension specified by the packing in the sealing system.
 ● For information on preferred values of surface finish (roughness), see page 14.

Dimension table of SW-Wear rings

(Unit : mm)

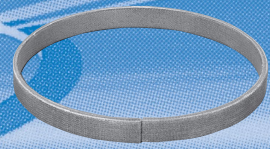
Wear ring & Groove dimensions							Part No.
D	d	H	t	G	D ₁	D ₂	Standard material(PB201)
130	124	30	3	30	129.3	128	SW-130
135	129	30	3	30	134.3	133	SW-135
140	134	40	3	40	139.3	138	SW-140
150	144	40	3	40	149.3	148	SW-150
160	154	40	3	40	159.3	158	SW-160
170	164	50	3	50	169.3	168	SW-170
175	169	50	3	50	174.3	173	SW-175
180	174	50	3	50	179.3	178	SW-180
190	184	50	3	50	189.2	188	SW-190
200	194	50	3	50	199.2	198	SW-200
210	204	50	3	50	209.2	208	SW-210
220	214	60	3	60	219.2	218	SW-220
224	218	60	3	60	223.2	222	SW-224
230	224	60	3	60	229.2	228	SW-230
240	234	60	3	60	239.2	238	SW-240
250	244	60	3	60	249.2	248	SW-250
260	252	60	4	60	259.2	257	SW-260
270	262	60	4	60	269.2	267	SW-270
280	272	60	4	60	279.2	277	SW-280
290	282	60	4	60	289.2	287	SW-290
300	292	60	4	60	299.2	297	SW-300
310	302	70	4	70	309	307	SW-310
320	312	70	4	70	319	317	SW-320
340	332	70	4	70	339	337	SW-340
350	342	70	4	70	349	347	SW-350
360	352	70	4	70	359	357	SW-360
375	367	70	4	70	374	372	SW-375
380	372	70	4	70	379	377	SW-380
400	392	70	4	70	399	397	SW-400

★Orders and inquiries are accepted on part numbers.
 ★SW-Wear rings are made-to-order products. The wear rings for the inner slide are also available upon request.
 ★Wear rings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and storage.

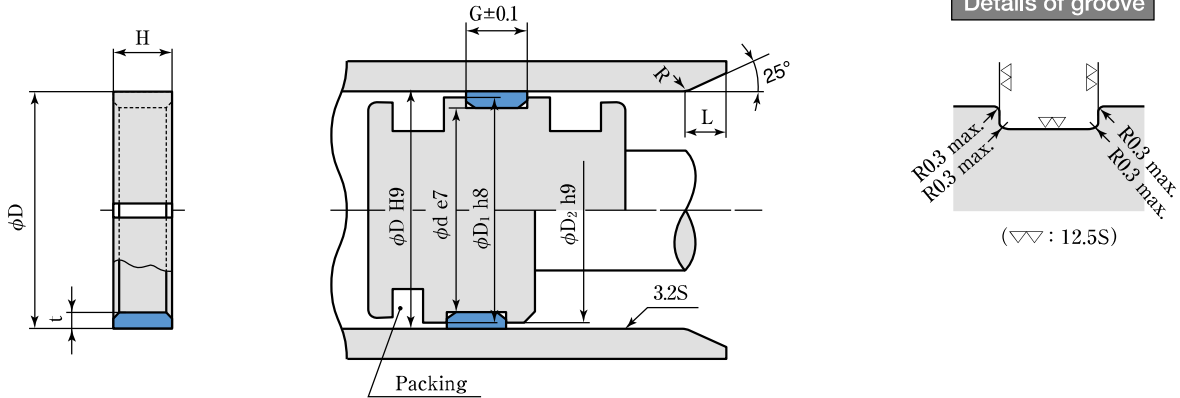
SWA-Wear rings

Wear rings for low-load pistons

(Installable in one-piece groove)



Dimension table



Note: ● Refer to the L dimension specified by the packing in the sealing system.
● For information on preferred values of surface finish (roughness), see page 14.

Dimension table of SWA-Wear rings

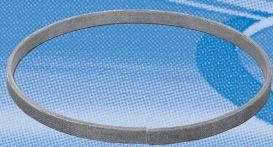
(Unit : mm)

Wear ring & Groove dimensions							Part No.
D	d	H	t	G	D ₁	D ₂	Standard material(PB201)
20	17	3	1.5	3	19.5	19	SWA- 20
25	22	3	1.5	3	24.5	24	SWA- 25
30	27	4	1.5	4	29.5	29	SWA- 30
32	29	4	1.5	4	31.5	31	SWA- 32
35	32	4	1.5	4	34.5	34	SWA- 35
40	36	5	2	5	39.5	39	SWA- 40
45	41	5	2	5	44.5	44	SWA- 45
50	46	5	2	5	49.5	49	SWA- 50
55	51	5	2	5	54.5	54	SWA- 55
60	56	6	2	6	59.5	59	SWA- 60
63	59	6	2	6	62.4	62	SWA- 63
65	61	6	2	6	64.4	64	SWA- 65
70	66	6	2	6	69.4	69	SWA- 70
75	71	6	2	6	74.4	74	SWA- 75
80	76	8	2	8	79.4	79	SWA- 80
85	81	8	2	8	84.4	84	SWA- 85
90	86	8	2	8	89.4	89	SWA- 90
95	91	8	2	8	94.4	94	SWA- 95
100	95	10	2.5	10	99.4	98	SWA-100
120	115	10	2.5	10	119.4	118	SWA-120
125	120	10	2.5	10	124.3	123	SWA-125
140	134	15	3	15	139.3	138	SWA-140
150	144	15	3	15	149.3	148	SWA-150
160	154	15	3	15	159.3	158	SWA-160
180	174	15	3	15	179.3	178	SWA-180
200	194	20	3	20	199.2	198	SWA-200
250	244	20	3	20	249.2	248	SWA-250

★Orders and inquiries are accepted on part numbers.

★SWA-Wear rings are made-to-order products.

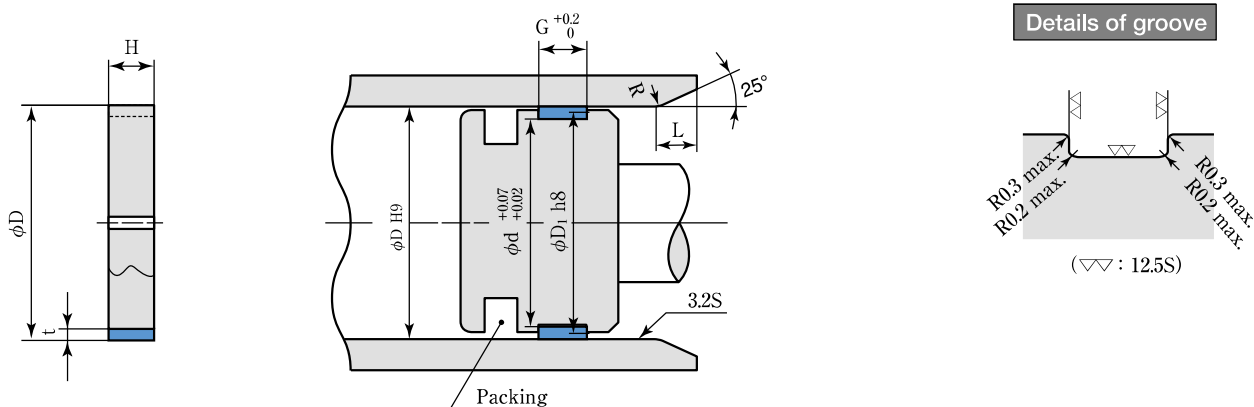
★Wear rings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and storage.



Wear rings for low-load compact type pistons
(Installable in one-piece groove)

SWB-Wear rings

Dimension table



Note: ● Refer to the L dimension specified by the packing in the sealing system.
● For information on preferred values of surface finish (roughness), see page 14.

Dimension table of SWB-Wear rings

(Unit : mm)

Wear ring & Groove dimensions						Part No.
D	d	H	t	G	D ₁	Standard material(PB251)
20	17	2	1.5	2	19.5	SWB- 20
25	22	2	1.5	2	24.5	SWB- 25
30	27	2	1.5	2	29.5	SWB- 30
32	29	3	1.5	3	31.5	SWB- 32
40	37	3	1.5	3	39.5	SWB- 40
50	47	4	1.5	4	49.5	SWB- 50
63	59	4	2	4	62.4	SWB- 63
80	76	5	2	5	79.4	SWB- 80
100	96	6	2	6	99.4	SWB-100
125	121	8	2	8	124.3	SWB-125
140	136	8	2	8	139.3	SWB-140
160	156	8	2	8	159.3	SWB-160
180	176	8	2	8	179.3	SWB-180

★Orders and inquiries are accepted on part numbers.

★SWB-Wear rings are made-to-order products.

★Wear rings are adequately packaged for the optimum storage. Refer to "Cautions" in page 2 for the handling and storage.