

## WAY/WASY

Rotary shaft seal equivalent to WA type in the Y design, pressurisable. It has a shorter, stronger, spring-energised sealing lip. In addition, this model is available with a protective lip (WASY) on the air side.

### Standard materials

NBR 80  
Colour: black  
Colour WASY: blue  
Energised spring: non-alloy spring steel according to DIN EN 10270-1  
Metal insert: non-alloy steel according to DIN EN 10139

### Areas of application

Sealing of rotating machine elements such as shafts, hubs and axles when pressurised. The main area of application is in pressurised systems such as pumps and hydro-motors.

### Function

The WAY/WASY is a single action rotary shaft seal for rotating or pivoting shafts with optional protective lip sealing action (WASY) on the side facing away from the medium, against dirt accumulation from the outside. The shorter, thicker, spring-energised sealing lip enables pressure application of up to 10 bar (depending on the rotational speed). The elastomer outer sheath provides good static sealing, good thermal expansion balance, e.g. in light-metal housing, better sealing with greater roughness and secure sealing for split housings as well as good static sealing with thin fluid or gaseous media.

### Media

Good chemical resistance to many mineral oils and greases. Please also refer to our media resistance tables on page 22 of this catalogue.

### Operational application limits

Pressure (Mpa/bar):  $\leq 10$  bar depending on the rotational speed  
Temperature ( $^{\circ}\text{C}$ ):  $-40$  to  $+100$   
Peripheral speed (m/s):  $\leq 10$   
Please also refer to our rotational speed diagram on page 20 of this catalogue.

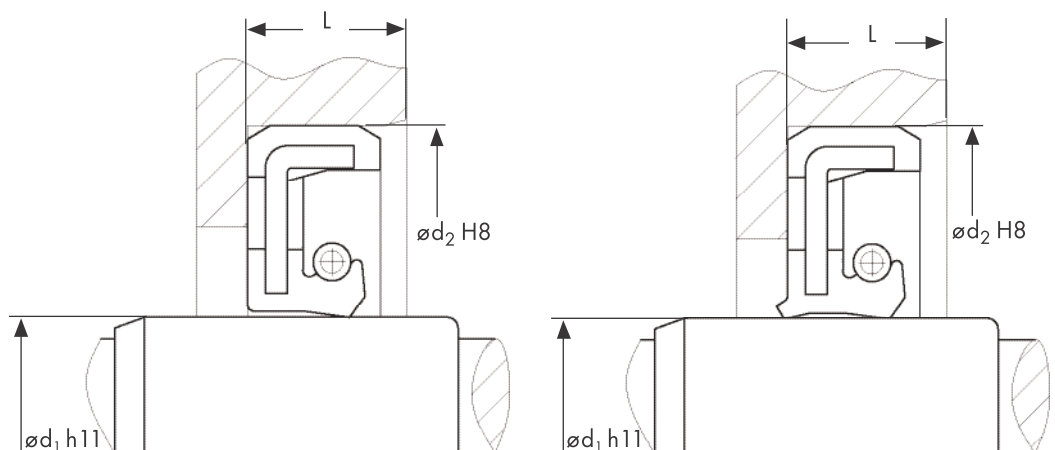
### Installation

Suitable tools should be used for installation. It is recommended that the installation housing is designed to provide the rotary shaft seal with axial support. Please also refer to our general installation instructions on page 30 of this catalogue.

### Remarks

The nominal widths mentioned on the following pages represent the standard dimensions.

Other dimensions and different designs, e.g. springs or metal inserts made of other steel grades can be produced as well as some special designs. Minimum quantities may be obligatory for dimensions outside of the standard.



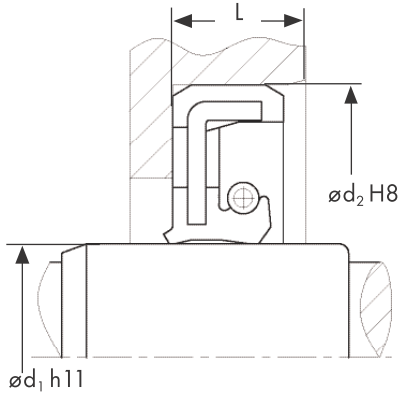
**WASY**

**Sizes  
metric**

Part No.	Dimensions in mm			Part No.	Dimensions in mm		
	ød <sub>1</sub>	ød <sub>2</sub>	L		ød <sub>1</sub>	ød <sub>2</sub>	L
129964	7	20	7	157294	22	32	7
129965	8	18	7	24348	22	35	6
78301	8	22	6	130521	22	35	7
129966	8	22	7	129978	22	35	8
118681	9	20	6	143688	22	40	8
157286	10	20	6	129979	22	42	11
118682	10	22	6	153104	22	47	7
129967	10	25	7	129980	23	42	11
132607	11	22	7	124844	24	33	5
81240	12	22	5.5	24352	24	40	6
77834	12	22	6	116485	24	40	7
131157	12	22	7	129981	24	40	8
157287	12	24	7	126226	24	47	7
129968	12	25	7	34898	25	33	6
107740	12	28	7	72947	25	35	6
107741	12	32	7	118690	25	36	6
120668	12.7	22	6	118691	25	37	6
129969	13	28	7	34899	25	40	6
157288	14	24	7	44364	25	40	7
129970	14	28	7	129982	25	40	8
107742	15	24	7	118692	25	42	6
118683	15	25	6	129983	25	45	11
157289	15	25	7	84958	25	47	6
116484	15	30	7	56152	25	52	7
118684	15	32	7	129984	26	42	8
118685	15	35	6	157295	27	42	7
150473	16	26	7	27343	27	44	7
157290	16	28	7	129985	27	47	11
128113	16	30	4.5	34896	28	40	6
129972	16	30	7	157276	28	40	7
157291	17	28	6	118693	28	40	8
157292	17	28	7	118694	28	40	9
24350	17	30	6	129986	28	48	11
126041	17	30	7	126224	30	40	5
43719	17	35	7	149520	30	40	7
129975	17	35	8	46488	30	42	6
118686	18	30	6	126225	30	42	7
131159	18	30	7	44660	30	45	7
44454	18	32	6	157296	30	47	7
129806	18	35	5	45109	30	50	7
118687	18	35	6	129987	30	50	11
129973	18	35	8	118695	30	52	7
124965	19	35	5	157297	32	44	7
129974	19	35	8	34897	32	47	6
118688	20	30	4.5	157298	32	47	7
157293	20	30	5	38332	32	48	7
133950	20	30	7	133486	32	52	6
118689	20	32	7	56233	32	52	7
129976	20	32	8	129988	32	52	11
24347	20	35	6	156191	32	72	10
127087	20	35	7	129989	34	54	11
129977	20	40	11	34815	35	47	6
125012	20	42	6	121488	35	47	7
124966	22	31	6.5	7839	35	50	7
78169	22	32	6	24349	35	52	6

**WASY**

**Sizes  
metric**



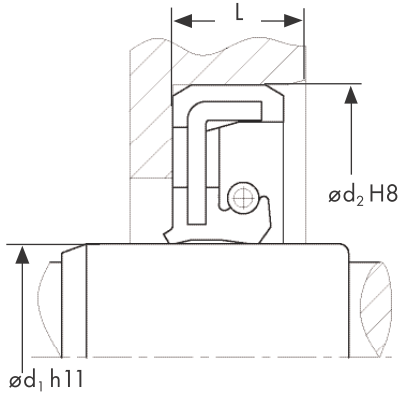
Part No.	Dimensions in mm			Part No.	Dimensions in mm		
	$\varnothing d_1$	$\varnothing d_2$	L		$\varnothing d_1$	$\varnothing d_2$	L
129990	35	55	11	127197	60	75	8
157299	35	62	7	157304	60	75	10
156900	35	72	10	24353	60	80	7
156899	35	80	7	130000	60	82	12
129723	36	48	5	12252	60	85	8
45116	38	50	6	47915	60	90	7
129991	38	58	11	90494	62	75	7.5
157300	38	62	7	79697	62	85	7
117597	40	52	7	130001	62	85	12
129992	40	52	11	157305	65	80	7
36815	40	55	6	157306	65	85	8
116375	40	55	7	118324	65	85	10
118696	40	58	8	152006	65	85	13
151804	40	60	7	48534	65	90	7
84059	40	60	10	48538	65	90	10
78452	40	62	6	133603	65	90	13
134218	40	62	11	157307	68	90	10
128176	40	72	7	24354	70	90	7
118697	42	62	7	157308	70	90	10
157301	42	62	8	130002	70	95	13
129993	42	65	12	157309	70	100	10
46620	45	55	7	116032	72	95	10
120968	45	58	6	48988	75	90	10
118698	45	58	7	118702	75	95	7
129769	45	62	6	81720	75	95	10
24351	45	62	7	117565	75	100	8
35654	45	65	7	157279	75	100	11
7367	45	65	8	130003	75	100	13
129994	45	68	12	24355	80	100	7
118699	47	62	7	130004	80	105	13
157302	47	65	10	127332	80	110	10
129995	48	70	12	44100	85	105	7.5
126723	48	72	10	51001	85	105	12
44457	50	65	7	117566	85	110	8
90610	50	65	8	130005	85	110	13
118700	50	68	7	118703	85	120	7.5
47284	50	68	8	151686	85	120	8
75381	50	70	10	74399	90	110	7.5
79626	50	72	7	128177	90	110	10
129996	50	72	12	39217	90	110	12
157277	52	68	10	130006	90	115	13
130047	52	72	12	157280	90	120	10
129997	52	75	12	51839	90	125	12
120658	55	70	7	118704	95	120	12
155727	55	70	7.5	130007	95	120	13
47561	55	70	8	157310	97	125	12
36816	55	72	7	118705	100	120	7.5
32409	55	72	8	157311	100	120	12
157278	55	75	7	130008	100	125	13
133901	55	75	10	56614	105	130	7.5
129998	55	78	12	130009	105	135	14
107857	55	80	13	157312	105	140	12
157303	58	80	10	48594	110	130	12
129999	58	80	12	155880	110	140	12
118701	60	72	7	157281	110	140	13

**WASY****Sizes  
metric**

Part No.	Dimensions in mm		
	ød <sub>1</sub>	ød <sub>2</sub>	L
130010	110	140	14
118706	110	150	8
134219	115	145	14
118707	120	140	7.5
118708	120	140	10
157313	120	140	13
155881	120	150	10
157314	120	150	12
134220	120	150	14
157315	120	150	15
134221	125	155	14
118709	130	150	7.5
144300	130	160	7.5
157316	130	160	12
134222	130	160	14
127333	135	160	13
134223	135	165	14
118710	140	160	10
134224	140	170	14
48596	140	170	15
157282	140	180	12
118456	146	193.7	10
118711	150	180	8.5
134225	150	180	14
118712	160	185	8.5
157317	160	190	8
157283	160	200	10
157284	170	200	12
157285	170	200	14
115176	170	200	15
131746	170	200	16
118713	180	210	8.5
134896	190	220	15
134226	190	225	16
118714	200	230	13
134891	200	230	15
134892	220	250	15
118715	240	270	8.5
134893	240	270	15
118716	260	280	10
134894	270	300	15
124821	280	303	17
134895	300	340	20
149022	400	450	20
150843	460	500	20

**WASY**

**Sizes  
inch**



Part No.	Dimensions in mm			Dimensions in inch		
	$\varnothing d_1$	$\varnothing d_2$	L	$\varnothing d_1$	$\varnothing d_2$	L
150376	12.7	22.22	6.35	0.5	0.875	0.25
148809	15.9	28.55	8	0.626	1.124	0.315
130465	17.46	28.57	6.35	0.687	1.125	0.25
149913	19.05	30.16	6.35	0.75	1.187	0.25
132902	19.05	31.75	6.35	0.75	1.25	0.25
133546	19.05	33.33	7.93	0.75	1.312	0.312
148810	19.8	44.45	7.9	0.78	1.75	0.311
134560	24.59	42.85	7.95	0.968	1.687	0.313
148811	24.8	44.45	7.9	0.976	1.75	0.311
132903	31.75	44.45	6.35	1.25	1.75	0.25
132904	38.1	57.15	7.93	1.5	2.25	0.312
118455	109.59	158.75	10	4.315	6.25	0.394