



Max. Operating Conditions	
Temperature (°C)	- 30 / + 110 / + 200
Speed (m/s)	≤ 1
Media:	Hydraulic fluids upon oil-basis, hardly inflaming hydraulic fluids, HFA-, HFB-Liquids

Recommended Surface Finish		
Surface roughness	R_a	R_t
Groove bottom	≤ 1,6 µm	≤ 16 µm
Groove flanks	≤ 1,6 µm	≤ 16 µm
Running surface	≤ 0,3 µm	≤ 3 µm

Material	
NBR	N
FKM (Viton®)	V

Technical Description

The wiper/scraper ring **W4** is manufactured in NBR as standard.

This wiper/scraper ring has a metal cage on the outside diameter. The overdimension on the outside diameter of the wiper/scraper ring provides for a tight seating in the groove.

The energised wiping edge lying on the piston rod prevents the penetration of foreign matters and water.

The wiper/scraper ring is also available in FPM (Viton®) and appropriate for temperatures of up to +200 °C.

Type designation	∅ d	∅ D	H ₁	H	L	L ₁
W4 - 8 - 15 - N	8	15	3,5	5,0	3,0	0,6
W4 - 10 - 16 - N	10	16	3,0	4,5	3,0	0,6
W4 - 10 - 20 - N	10	20	5,0	8,0	5,0	1,0
W4 - 12 - 20 - N	12	20	4,0	6,0	4,0	0,8
W4 - 14 - 22 - N	14	22	3,0	4,0	3,0	0,6
W4 - 16 - 22 - N	16	22	3,0	4,0	3,0	0,6
W4 - 16 - 26 - N	16	26	5,0	8,0	5,0	1,0
W4 - 18 - 28 - N	18	28	5,0	7,0	5,0	0,8
W4 - 18 - 28/1 - N	18	28	7,0	10,0	7,0	1,4
W4 - 18 - 28/2 - N	18	28	7,0	12,0	7,0	1,4
W4 - 18 - 32 - N	18	32	5,0	9,0	5,0	1,2
W4 - 20 - 28 - N	20	28	3,5	5,0	3,5	0,8
W4 - 20 - 30 - N	20	30	4,0	6,0	4,0	0,8
W4 - 20 - 30/1 - N	20	30	5,0	8,0	5,0	1,0
W4 - 20 - 30/2 - N	20	30	7,0	10,0	7,0	1,4
W4 - 20 - 35 - N	20	35	7,0	10,0	7,0	1,4
W4 - 21 - 28 - N	21	28	3,5	5,0	3,5	0,8
W4 - 22 - 28 - N	22	28	5,0	9,0	5,0	1,0
W4 - 22 - 32 - N	22	32	5,0	7,0	5,0	0,8
W4 - 22 - 32/1 - N	22	32	7,0	10,0	7,0	1,4
W4 - 22 - 35 - N	22	35	5,0	8,0	5,0	1,0
W4 - 24 - 32 - N	24	32	5,0	7,0	5,0	0,8
W4 - 25 - 35 - N	25	35	5,0	8,0	5,0	1,0
W4 - 25 - 35/1 - N	25	35	7,0	10,0	7,0	1,4
W4 - 28 - 38 - N	28	38	5,0	8,0	5,0	1,0
W4 - 28 - 38/1 - N	28	38	7,0	10,0	7,0	1,4
W4 - 28 - 40 - N	28	40	7,0	10,0	7,0	1,4
W4 - 30 - 40 - N	30	40	5,0	8,0	5,0	1,0

Wiper/Scraper ring Type

Dimension

Material/Type

Ordering example: Wiper/Scraper Ring ∅ d 20 x 30 7 / 10 NBR

Order designation: W4 - 20 x 30 x 7,0 / 10 - N

Designation of material:
N - NBR
V - FKM (Viton®)

Type designation	∅ d	∅ D	H ₁	H	L	L ₁
W4 - 30 - 40/1 - N	30	40	7,0	10,0	7,0	1,4
W4 - 32 - 40 - N	32	40	4,0	7,0	4,0	0,8
W4 - 32 - 42 - N	32	42	5,0	7,0	5,0	1,0
W4 - 32 - 42/1 - N	32	42	7,0	10,0	7,0	1,4
W4 - 32 - 45 - N	32	45	4,0	8,0	4,0	0,8
W4 - 32 - 45/1 - N	32	45	5,0	7,0	5,0	1,0
W4 - 32 - 45/2 - N	32	45	7,0	10,0	7,0	1,4
W4 - 35 - 45 - N	35	45	5,0	8,0	5,0	1,0
W4 - 35 - 45/1 - N	35	45	7,0	10,0	7,0	1,4
W4 - 35 - 52 - N	35	52	7,0	10,0	7,0	1,4
W4 - 36 - 45 - N	36	45	7,0	10,0	7,0	1,4
W4 - 36 - 46 - N	36	46	5,0	8,0	5,0	1,0
W4 - 40 - 50 - N	40	50	5,0	8,0	5,0	1,0
W4 - 40 - 50/1 - N	40	50	7,0	10,0	7,0	1,4
W4 - 40 - 52 - N	40	52	5,0	8,0	5,0	1,0
W4 - 42 - 52/1 - N	42	52	7,0	10,0	7,0	1,4
W4 - 45 - 55 - N	45	55	7,0	10,0	7,0	1,4
W4 - 45 - 57 - N	45	57	7,0	10,0	7,0	1,4
W4 - 45 - 60 - N	45	60	7,0	10,0	7,0	1,4
W4 - 48 - 60 - N	48	60	7,0	10,0	7,0	1,4
W4 - 50 - 56 - N	50	56	5,0	8,0	5,0	1,0
W4 - 50 - 60 - N	50	60	5,0	7,0	5,0	1,0
W4 - 50 - 60/1 - N	50	60	7,0	10,0	7,0	1,4
W4 - 50 - 65 - N	50	65	7,0	10,0	7,0	1,4
W4 - 52 - 62 - N	52	62	7,0	10,0	7,0	1,4
W4 - 55 - 63 - N	55	63	7,0	10,0	7,0	1,4
W4 - 55 - 65 - N	55	65	7,0	10,0	7,0	1,4
W4 - 56 - 65 - N	56	65	7,0	10,0	7,0	1,4
W4 - 56 - 66 - N	56	66	7,0	10,0	7,0	1,4
W4 - 60 - 70 - N	60	70	7,0	10,0	7,0	1,4
W4 - 60 - 74 - N	60	74	5,0	8,0	5,0	1,0
W4 - 60 - 75 - N	60	75	7,0	10,0	7,0	1,4
W4 - 60 - 80 - N	60	80	7,0	10,0	7,0	1,4
W4 - 63 - 75 - N	63	75	7,0	10,0	7,0	1,4
W4 - 65 - 75 - N	65	75	7,0	10,0	7,0	1,4
W4 - 70 - 80 - N	70	80	7,0	10,0	7,0	1,4
W4 - 75 - 85 - N	75	85	7,0	10,0	7,0	1,4
W4 - 75 - 87 - N	75	87	5,0	7,0	5,0	1,0

Type designation	∅ d	∅ D	H ₁	H	L	L ₁
W4 - 78 - 88 - N	78	88	7,0	10,0	7,0	1,4
W4 - 80 - 90 - N	80	90	7,0	10,0	7,0	1,4
W4 - 85 - 95 - N	85	95	7,0	10,0	7,0	1,4
W4 - 90 - 100 - N	90	100	7,0	10,0	7,0	1,4
W4 - 95 - 105 - N	95	105	7,0	10,0	7,0	1,4
W4 - 100 - 110 - N	100	110	7,0	10,0	7,0	1,4
W4 - 105 - 115 - N	105	115	7,0	10,0	7,0	1,4
W4 - 110 - 120 - N	110	120	7,0	10,0	7,0	1,4
W4 - 115 - 125 - N	115	125	7,0	10,0	7,0	1,4
W4 - 120 - 130 - N	120	130	7,0	10,0	7,0	1,4
W4 - 125 - 140 - N	125	140	9,0	12,0	9,0	1,8
W4 - 130 - 145 - N	130	145	9,0	12,0	9,0	1,8
W4 - 135 - 145 - N	135	145	7,0	10,0	7,0	1,4
W4 - 135 - 150 - N	135	150	9,0	12,0	9,0	1,8
W4 - 140 - 150 - N	140	150	7,0	10,0	7,0	1,4
W4 - 140 - 155 - N	140	155	9,0	12,0	9,0	1,8
W4 - 150 - 165 - N	150	165	9,0	12,0	9,0	1,8
W4 - 160 - 175 - N	160	175	9,0	12,0	9,0	1,8
W4 - 163 - 175 - N	163	175	7,0	10,0	7,0	1,4
W4 - 170 - 185 - N	170	185	9,0	12,0	9,0	1,8
W4 - 180 - 195 - N	180	195	10,0	14,0	10,0	2,0
W4 - 210 - 230 - N	210	230	12,0	16,0	12,0	2,4
W4 - 220 - 240 - N	220	240	9,0	12,0	9,0	1,8
W4 - 220 - 240/1 - N	220	240	12,0	16,0	12,0	2,4
W4 - 245 - 265 - N	245	265	12,0	16,0	12,0	2,4
W4 - 275 - 300 - N	275	300	12,0	16,0	12,0	2,4
W4 - 280 - 300 - N	280	300	12,0	16,0	12,0	2,4
W4 - 310 - 340 - N	310	340	16,0	22,0	16,0	2,8
W4 - 360 - 380 - N	360	380	15,0	18,0	15,0	2,6
W4 - 390 - 420 - N	390	420	16,0	22,0	16,0	2,8
W4 - 400 - 420 - N	400	420	12,0	16,0	12,0	2,4
W4 - 490 - 520 - N	490	520	16,0	22,0	16,0	2,8

Further dimension and in-between sizes upon request.