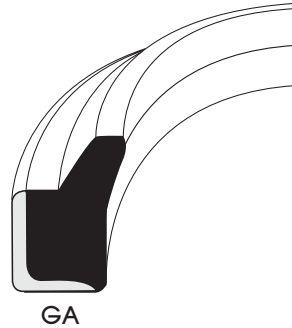


Wipers

GA

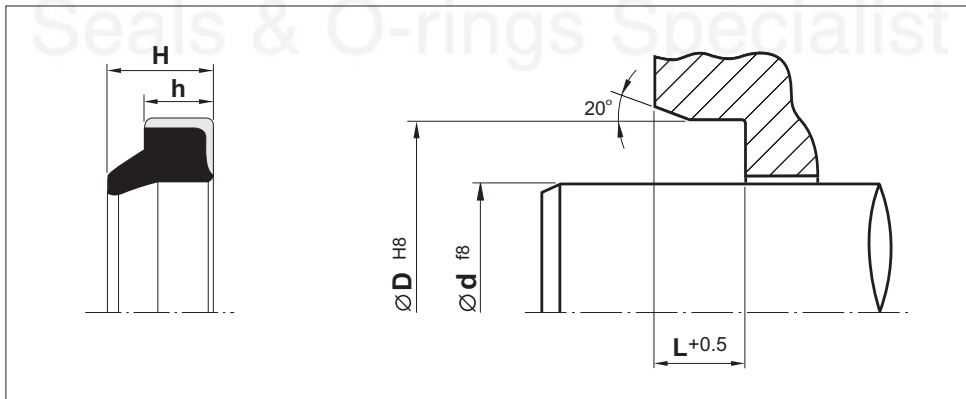
(Metric Size)



Material	Temp. (°c)	Speed (m/s)
NBR - Metal	-30 +120	1

- Space saving construction.
- Low cost, economical solution.
- Simple, easy-construction groove.
- Firm fit in the groove due to metallic press fit.

Installation Recommendation



Surface roughness	Ra	Rt
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Sliding surface	$\leq 0.3 \mu\text{m}$	$\leq 4 \mu\text{m}$
Surface of housing	$\leq 1.8 \mu\text{m}$	$\leq 10 \mu\text{m}$
Sides of housing	$\leq 3.0 \mu\text{m}$	$\leq 16 \mu\text{m}$

Metal Case Wiper - GA



(Metric Size)

Rod Dia.	Groove Dia.	Groove Width	Seal Height	Reference (For order processing)
d	D	L/h	H	
10.0	16.0	3.0	4.5	GA 010-016-3/4.5
10.0	20.0	5.0	8.0	GA 010-020-5/8
12.0	18.0	4.0	6.0	GA 012-018-4/6
12.0	20.0	4.0	6.0	GA 012-020-4/6
14.0	19.8	3.0	4.5	GA 014-019.8-3/4.5
14.0	20.0	3.5	5.0	GA 014-020-3.5/5
14.0	22.0	3.0	4.0	GA 014-022-3/4
14.0	25.0	5.0	8.0	GA 014-025-5/8
15.0	25.0	5.0	8.0	GA 015-025-5/8
15.0	25.0	7.0	10.0	GA 015-025-7/10
16.0	22.0	3.0	4.0	GA 016-022-3/4
16.0	26.0	5.0	8.0	GA 016-026-5/8
18.0	26.0	7.0	10.0	GA 018-026-7/10
18.0	28.0	5.0	7.0	GA 018-028-5/7
18.0	28.0	7.0	10.0	GA 018-028-7/10
18.0	32.0	5.0	9.0	GA 018-032-5/9
20.0	26.0	3.5	5.0	GA 020-026-3.5/5
20.0	26.0	5.0	8.0	GA 020-026-5/8
20.0	28.0	3.5	5.0	GA 020-028-3.5/5
20.0	28.0	5.0	8.0	GA 020-028-5/8
20.0	30.0	4.0	6.0	GA 020-030-4/6
20.0	30.0	5.0	8.0	GA 020-030-5/8
20.0	30.0	7.0	10.0	GA 020-030-7/10
20.0	35.0	7.0	10.0	GA 020-035-7/10
21.0	28.0	3.5	5.0	GA 021-028-3.5/5
22.0	28.0	5.0	9.0	GA 022-028-5/9
22.0	30.0	4.0	5.0	GA 022-030-4/5
22.0	32.0	5.0	7.0	GA 022-032-5/7
22.0	32.0	7.0	10.0	GA 022-032-7/10
22.0	35.0	5.0	8.0	GA 022-035-5/8
23.0	33.0	5.0	8.0	GA 023-033-5/8
24.0	32.0	5.0	7.0	GA 024-032-5/7
25.0	31.0	5.0	7.0	GA 025-031-5/7
25.0	35.0	5.0	8.0	GA 025-035-5/8
25.0	35.0	7.0	10.0	GA 025-035-7/10
28.0	38.0	5.0	8.0	GA 028-038-5/8
28.0	38.0	7.0	10.0	GA 028-038-7/10
28.0	40.0	7.0	10.0	GA 028-040-7/10
30.0	40.0	5.0	8.0	GA 030-040-5/8
30.0	40.0	7.0	10.0	GA 030-040-7/10
32.0	40.0	4.0	7.0	GA 032-040-4/7
32.0	42.0	5.0	7.0	GA 032-042-5/7
32.0	42.0	7.0	10.0	GA 032-042-7/10
32.0	45.0	4.0	8.0	GA 032-045-4/8
32.0	45.0	5.0	7.0	GA 032-045-5/7

Metal Case Wiper - GA

(Metric Size)

Rod Dia.	Groove Dia.	Groove Width	Seal Height	Reference (For order processing)
d	D	L/h	H	
32.0	45.0	7.0	10.0	GA 032-045-7/10
35.0	45.0	5.0	8.0	GA 035-045-5/8
35.0	45.0	7.0	10.0	GA 035-045-7/10
35.0	47.0	7.0	10.0	GA 035-047-7/10
35.0	52.0	7.0	10.0	GA 035-052-7/10
36.0	45.0	7.0	10.0	GA 036-045-7/10
36.0	46.0	5.0	8.0	GA 036-046-5/8
36.0	46.0	7.0	10.0	GA 036-046-7/10
38.0	48.0	7.0	10.0	GA 038-048-7/10
40.0	50.0	5.0	8.0	GA 040-050-5/8
40.0	50.0	7.0	10.0	GA 040-050-7/10
40.0	52.0	5.0	8.0	GA 040-052-5/8
40.0	52.0	7.0	10.0	GA 040-052-7/10
42.0	52.0	7.0	10.0	GA 042-052-7/10
45.0	55.0	7.0	10.0	GA 045-055-7/10
45.0	57.0	7.0	10.0	GA 045-057-7/10
45.0	60.0	7.0	10.0	GA 045-060-7/10
48.0	60.0	7.0	10.0	GA 048-060-7/10
50.0	56.0	5.0	7.0	GA 050-056-5/7
50.0	60.0	5.0	7.0	GA 050-060-5/7
50.0	60.0	7.0	10.0	GA 050-060-7/10
50.0	65.0	7.0	10.0	GA 050-065-7/10
52.0	62.0	7.0	10.0	GA 052-062-7/10
55.0	63.0	7.0	10.0	GA 055-063-7/10
55.0	65.0	5.0	8.0	GA 055-065-5/8
55.0	65.0	7.0	10.0	GA 055-065-7/10
56.0	65.0	7.0	10.0	GA 056-065-7/10
56.0	66.0	7.0	10.0	GA 056-066-7/10
60.0	70.0	7.0	10.0	GA 060-070-7/10
60.0	75.0	7.0	10.0	GA 060-075-7/10
60.0	80.0	7.0	10.0	GA 060-080-7/10
63.0	75.0	7.0	10.0	GA 063-075-7/10
65.0	75.0	7.0	10.0	GA 065-075-7/10
67.0	83.0	7.0	10.0	GA 067-083-7/10
70.0	80.0	7.0	10.0	GA 070-080-7/10
72.0	82.0	7.0	10.0	GA 072-082-7/10
75.0	85.0	7.0	10.0	GA 075-085-7/10
75.0	87.0	5.0	7.0	GA 075-087-5/7
78.0	88.0	7.0	10.0	GA 078-088-7/10
80.0	88.0	7.0	10.0	GA 080-088-7/10
80.0	90.0	7.0	10.0	GA 080-090-7/10
82.0	92.0	7.0	10.0	GA 082-092-7/10
85.0	95.0	7.0	10.0	GA 085-095-7/10
90.0	100.0	7.0	10.0	GA 090-100-7/10
95.0	105.0	7.0	10.0	GA 095-105-7/10

Metal Case Wiper - GA



(Metric Size)

Rod Dia.	Groove Dia.	Groove Width	Seal Height	Reference (For order processing)
d	D	L/h	H	
100.0	110.0	7.0	10.0	GA 100-110-7/10
105.0	115.0	7.0	10.0	GA 105-115-7/10
110.0	120.0	7.0	10.0	GA 110-120-7/10
115.0	125.0	7.0	10.0	GA 115-125-7/10
120.0	130.0	7.0	10.0	GA 120-130-7/10
125.0	135.0	7.0	10.0	GA 125-135-7/10
125.0	140.0	9.0	12.0	GA 125-140-9/12
130.0	145.0	7.0	10.0	GA 130-145-7/10
130.0	145.0	9.0	12.0	GA 130-145-9/12
135.0	145.0	7.0	10.0	GA 135-145-7/10
135.0	150.0	7.0	10.0	GA 135-150-7/10
135.0	150.0	9.0	12.0	GA 135-150-9/12
140.0	150.0	7.0	10.0	GA 140-150-7/10
140.0	155.0	9.0	12.0	GA 140-155-9/12
145.0	160.0	9.0	12.0	GA 145-160-9/12
150.0	165.0	9.0	12.0	GA 150-165-9/12
160.0	175.0	9.0	12.0	GA 160-175-9/12
163.0	175.0	7.0	10.0	GA 163-175-7/10
170.0	185.0	9.0	12.0	GA 170-185-9/12
170.0	185.0	10.0	14.0	GA 170-185-10/14
180.0	195.0	9.0	12.0	GA 180-195-9/12
180.0	195.0	10.0	14.0	GA 180-195-10/14
185.0	200.0	10.0	14.0	GA 185-200-10/14
190.0	215.0	12.0	16.0	GA 190-215-12/16
200.0	220.0	12.0	16.0	GA 200-220-12/16
210.0	230.0	12.0	16.0	GA 210-230-12/16
220.0	240.0	9.0	12.0	GA 220-240-9/12
220.0	240.0	12.0	16.0	GA 220-240-12/16
240.0	260.0	12.0	16.0	GA 240-260-12/16
250.0	270.0	12.0	16.0	GA 250-270-12/16
270.0	290.0	12.0	16.0	GA 270-290-12/16
270.0	295.0	12.0	16.0	GA 270-295-12/16
280.0	300.0	12.0	16.0	GA 280-300-12/16
310.0	340.0	16.0	22.0	GA 310-340-16/22
320.0	340.0	12.0	16.0	GA 320-340-12/16
320.0	345.0	12.0	16.0	GA 320-345-12/16
360.0	380.0	12.0	16.0	GA 360-380-12/16
360.0	380.0	15.0	18.0	GA 360-380-15/18
390.0	420.0	16.0	22.0	GA 390-420-16/22
400.0	420.0	12.0	16.0	GA 400-420-12/16