

Wiper AY Profile

Catalog EPS 5370/USA



AY Profile, Premium Double-Lipped Wiper

The AY profile can be used as a heavy to light duty wiper. When used in high pressure applications in conjunction with the proper Parker rod seals, the AY compliments the sealing system by providing an additional beveled sealing lip, yielding excellent film-breaking and the driest rod sealing available. These dual acting features also enable it to be used by itself in low pressure applications as both the rod seal and the wiper. Knife-trimmed sealing lips ensure the best possible film breaking.

IMPORTANT: When using the AY wiper in conjunction with other rod seals, it is important to select a rod seal profile that enables pressure relief of fluid into the system, otherwise a pressure trap may form between the wiper and rod seal. Suggested rod profiles are the BT, BS, and B3 u-cups.

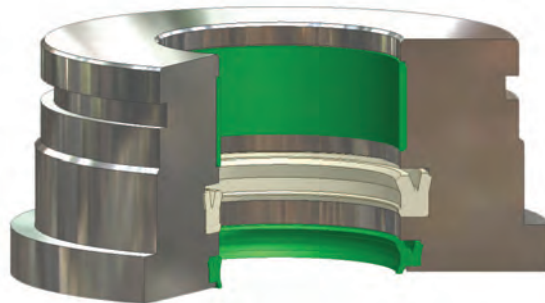
Technical Data

Standard Materials*	Temperature Range	Surface Speed
P4300A90	-65°F to 275°F (-54°C to 135°C)	<1.6 ft/s (0.5 m/s)
P4301A90	-35°F to 225°F (-37°C to 107°C)	<1.6 ft/s (0.5 m/s)
P4700A90	-65° to 200°F (-54°C to 93°C)	<1.6 ft/s (0.5 m/s)

***Alternate Materials:** For applications that may require an alternate material, please contact your local Parker Seal representative.



AY Cross-Section

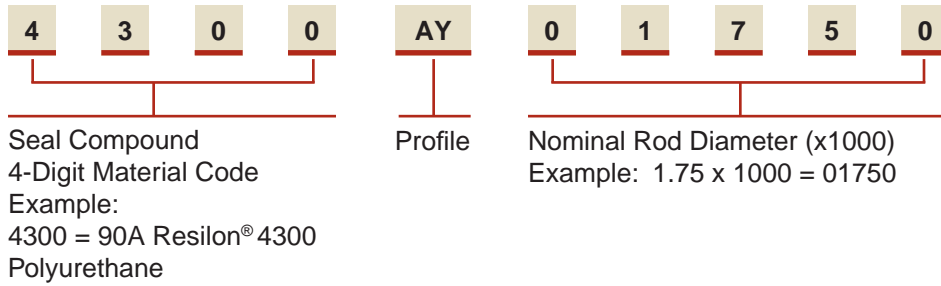


AY installed in Rod Gland

AY Profile

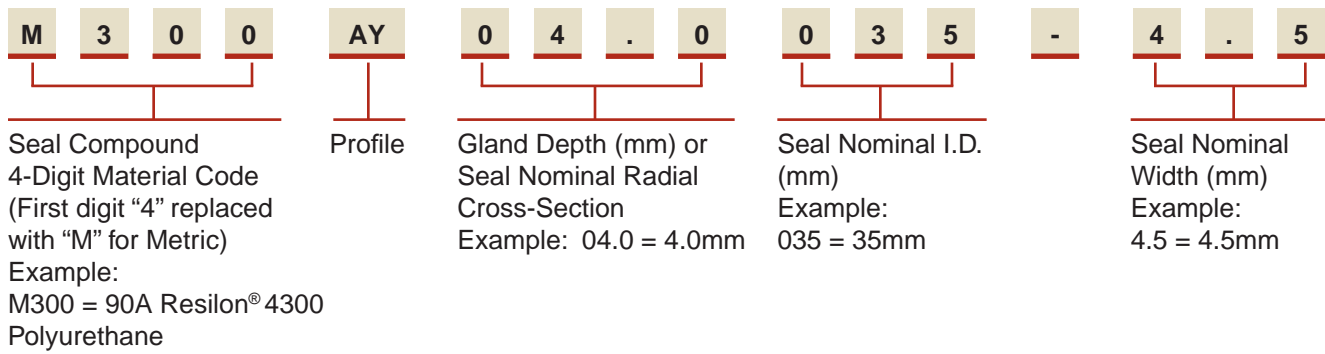
Part Number Nomenclature — AY Profile

Table 8-12. AY Profile — Inch



Part Number Nomenclature — AY Profile

Table 8-13. AY Profile — Metric



Gland Dimensions — AY Profile — Inch

AY gland dimensions are provided in Table 8-15 on page 8-23.

8 Gland Dimensions — AY Profile — Metric

AY gland dimensions for metric sizes are provided in Table 8-16 on page 8-26.

Wiper H and 8600 Profiles

Catalog EPS 5370/USA



H and 8600 Profiles, Performance Double-Lip Wiper

Parker's H and 8600 style wipers are double-lip excluders sharing identical geometries for combining the actions of rod sealing and wiping. H wipers, available in plastic compounds, are intended for medium pressure hydraulic applications as a redundant rod seal or for low pressure systems as the sole rod seal and wiper. 8600 wipers, available in rubber compounds, are typically used for pneumatic cylinders where lower friction is required. As with the H wiper, the 8600 can be used in tandem with another rod seal or by itself as a dual-acting sealing/wiping unit.

IMPORTANT: When using H and 8600 wipers in conjunction with other rod seals, it is important to select a rod seal profile that enables pressure relief of fluid into the system, otherwise a pressure trap may form between the wiper and rod seal. Suggested rod profiles are the BT, BS, B3, 8400, 8500 and E5 u-cups.

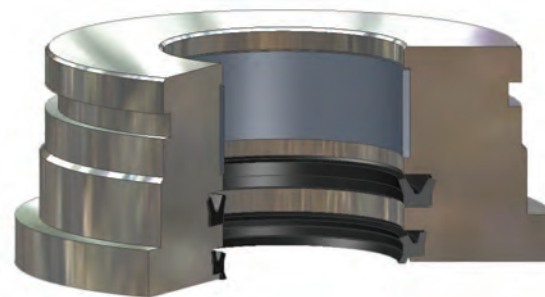


H / 8600 Cross-Section

Technical Data

Standard Materials*	Temperature Range	Surface Speed
P4615A90 (H)	-65°F to 200°F (-54°C to 93°C)	<1.6 ft/s (0.5 m/s)
P5065A88 (H)	-70°F to 200°F (-57°C to 93°C)	<1.6 ft/s (0.5 m/s)
N4181A80 (8600)	-40°F to 250°F (-40°C to 121°C)	<3.3 ft/s (1.0 m/s)

***Alternate Materials:** For applications that may require an alternate material, please contact your local Parker Seal representative.

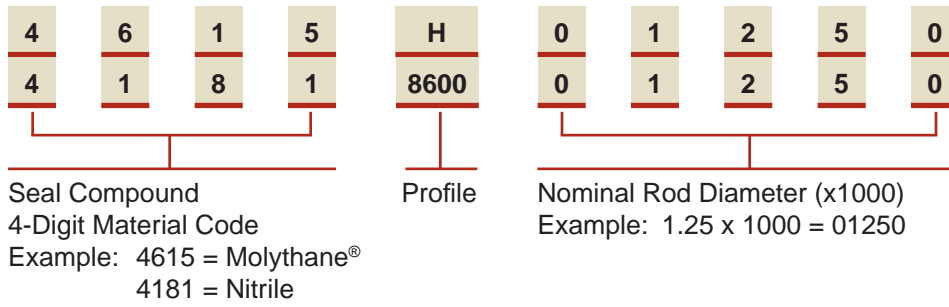


H and 8600 installed in Rod Gland

H and 8600 Profiles

Part Number Nomenclature — H and 8600 Profiles

Table 8-14. H and 8600 Profiles — Inch



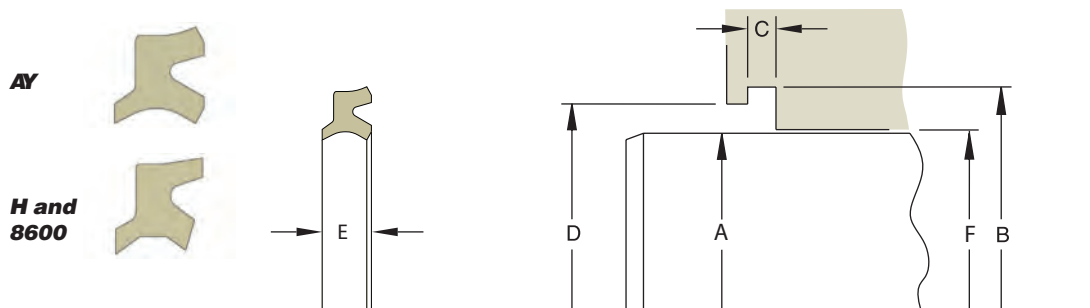
Gland Dimensions — H and 8600 Profiles

H and 8600 gland dimensions are provided in Table 8-15 on page 8-23.

Wiper AY, H and 8600 Gland Dimensions

Catalog EPS 5370/USA

Gland Dimensions — AY, H and 8600 Profiles — Inch



Please refer to Engineering Section 2, page 2-8 for surface finish and additional hardware considerations.

Table 8-15. AY, H and 8600 Gland Dimensions — Inch

A Rod Diameter	B Groove Diameter	C Groove Width	D Shoulder Diameter	E Max. Wiper Axial Width	F Throat Diameter	Profile Code (X = Standard Offering)			Part Number		
						AY	H	8600	Compound Code	Profile	Rod Size
+0.000/-0.002	+0.002/-0.000	+0.005/-0.000	+0.002/-0.000		+0.002/-0.000						
0.250	0.552	0.203	0.370	0.245	0.251		x	x	XXXX	xxxx	00250
0.312	0.615	0.203	0.432	0.245	0.313		x	x	XXXX	xxxx	00312
0.375	0.677	0.203	0.495	0.245	0.376		x	x	XXXX	xxxx	00375
0.437	0.740	0.203	0.557	0.245	0.438		x	x	XXXX	xxxx	00437
0.500	0.802	0.203	0.620	0.245	0.501	x	x	x	XXXX	xxxx	00500
0.562	0.865	0.203	0.682	0.245	0.563		x	x	XXXX	xxxx	00562
0.625	0.927	0.203	0.745	0.245	0.626	x	x	x	XXXX	xxxx	00625
0.687	0.990	0.203	0.808	0.245	0.688		x	x	XXXX	xxxx	00687
0.750	1.052	0.203	0.870	0.245	0.751	x	x	x	XXXX	xxxx	00750
0.812	1.177	0.218	0.947	0.275	0.813		x		XXXX	xxxx	00812
0.875	1.240	0.218	1.010	0.275	0.876	x	x	x	XXXX	xxxx	00875
0.937	1.302	0.218	1.072	0.275	0.938		x		XXXX	xxxx	00937
1.000	1.365	0.218	1.135	0.275	1.001	x	x	x	XXXX	xxxx	01000
1.062	1.427	0.218	1.197	0.275	1.063		x		XXXX	xxxx	01062
1.125	1.490	0.218	1.260	0.275	1.126	x	x	x	XXXX	xxxx	01125
1.187	1.552	0.218	1.322	0.275	1.188		x		XXXX	xxxx	01187
1.250	1.615	0.218	1.385	0.275	1.251	x	x	x	XXXX	xxxx	01250
1.312	1.702	0.218	1.447	0.275	1.313		x	x	XXXX	xxxx	01312
1.375	1.740	0.218	1.510	0.275	1.376	x	x	x	XXXX	xxxx	01375
1.437	1.802	0.218	1.572	0.275	1.438		x		XXXX	xxxx	01437
1.500	1.865	0.218	1.635	0.275	1.501	x	x	x	XXXX	xxxx	01500
1.562	1.927	0.218	1.697	0.275	1.563		x		XXXX	xxxx	01562
1.625	1.990	0.218	1.760	0.275	1.626	x	x	x	XXXX	xxxx	01625
1.687	2.052	0.218	1.823	0.275	1.688		x		XXXX	xxxx	01687
1.750	2.115	0.218	1.885	0.275	1.751	x	x	x	XXXX	xxxx	01750
1.812	2.177	0.218	1.947	0.275	1.813		x		XXXX	xxxx	01812
1.875	2.240	0.218	2.010	0.275	1.876	x	x	x	XXXX	xxxx	01875
1.937	2.302	0.218	2.072	0.275	1.938		x		XXXX	xxxx	01937
2.000	2.365	0.218	2.135	0.275	2.001	x	x	x	XXXX	xxxx	02000

For custom groove calculations, see Appendix C.



09/01/07

Table 8-15. AY, H and 8600 Gland Dimensions — Inch (Continued)

A Rod Diameter	B Groove Diameter	C Groove Width	D Shoulder Diameter	E Max. Wiper Axial Width	F Throat Diameter	Profile Code (X = Standard Offering)			Part Number		
						AY	H	8600	Compound Code	Profile	Rod Size
+0.00/-0.003	+0.003/-0.000	+0.005/-0.000	+0.003/-0.000		+0.003/-0.000						
2.062	2.427	0.218	2.197	0.275	2.063		x		XXXX	xxxx	02062
2.125	2.490	0.218	2.260	0.275	2.126	x	x	x	XXXX	xxxx	02125
2.187	2.683	0.281	2.323	0.351	2.188		x		XXXX	xxxx	02187
2.250	2.745	0.281	2.385	0.351	2.251	x	x	x	XXXX	xxxx	02250
2.312	2.807	0.281	2.447	0.351	2.313		x		XXXX	xxxx	02312
2.375	2.870	0.281	2.510	0.351	2.376		x		XXXX	xxxx	02375
2.437	2.932	0.281	2.572	0.351	2.438		x	x	XXXX	xxxx	02437
2.500	2.995	0.281	2.635	0.351	2.501	x	x	x	XXXX	xxxx	02500
2.562	3.057	0.281	2.697	0.351	2.563		x		XXXX	xxxx	02562
2.625	3.120	0.281	2.760	0.351	2.626		x		XXXX	xxxx	02625
2.687	3.183	0.281	2.823	0.351	2.688		x		XXXX	xxxx	02687
2.750	3.245	0.281	2.885	0.351	2.751	x	x	x	XXXX	xxxx	02750
2.812	3.307	0.281	2.947	0.351	2.813		x		XXXX	xxxx	02812
2.875	3.370	0.281	3.010	0.351	2.876		x	x	XXXX	xxxx	02875
2.937	3.433	0.281	3.073	0.351	2.938		x	x	XXXX	xxxx	02937
3.000	3.495	0.281	3.135	0.351	3.001	x	x	x	XXXX	xxxx	03000
3.125	3.620	0.281	3.260	0.351	3.126		x		XXXX	xxxx	03125
3.250	3.745	0.281	3.385	0.351	3.251		x	x	XXXX	xxxx	03250
3.375	3.870	0.281	3.510	0.351	3.376		x		XXXX	xxxx	03375
3.437	3.932	0.281	3.572	0.351	3.438			x	XXXX	xxxx	03437
3.500	3.995	0.281	3.635	0.351	3.501		x	x	XXXX	xxxx	03500
3.625	4.120	0.281	3.760	0.351	3.626		x		XXXX	xxxx	03625
3.750	4.245	0.281	3.885	0.351	3.751		x	x	XXXX	xxxx	03750
3.875	4.370	0.281	4.010	0.351	3.876		x		XXXX	xxxx	03875
4.000	4.495	0.281	4.135	0.351	4.001	x	x	x	XXXX	xxxx	04000
4.125	4.620	0.281	4.260	0.351	4.126		x		XXXX	xxxx	04125
4.250	4.745	0.281	4.385	0.351	4.251		x	x	XXXX	xxxx	04250
4.375	4.870	0.281	4.510	0.351	4.376		x		XXXX	xxxx	04375
4.500	4.995	0.281	4.635	0.351	4.501		x	x	XXXX	xxxx	04500
4.625	5.120	0.281	4.760	0.351	4.626		x		XXXX	xxxx	04625
4.750	5.245	0.281	4.885	0.351	4.751		x		XXXX	xxxx	04750
4.875	5.370	0.281	5.010	0.351	4.876		x		XXXX	xxxx	04875
5.000	5.495	0.281	5.135	0.351	5.001		x	x	XXXX	xxxx	05000
5.125	5.620	0.281	5.260	0.351	5.126		x		XXXX	xxxx	05125
5.187	5.682	0.281	5.322	0.351	5.188			x	XXXX	xxxx	05187
5.250	5.745	0.281	5.385	0.351	5.251		x		XXXX	xxxx	05250
5.375	5.870	0.281	5.510	0.351	5.376		x		XXXX	xxxx	05375
5.500	5.995	0.281	5.635	0.351	5.501		x	x	XXXX	xxxx	05500
5.625	6.120	0.281	5.760	0.351	5.626		x		XXXX	xxxx	05625
5.750	6.245	0.281	5.885	0.351	5.751		x		XXXX	xxxx	05750
5.875	6.370	0.281	6.010	0.351	5.876		x		XXXX	xxxx	05875
6.000	6.495	0.281	6.135	0.351	6.001		x	x	XXXX	xxxx	06000

For custom groove calculations, see Appendix C.

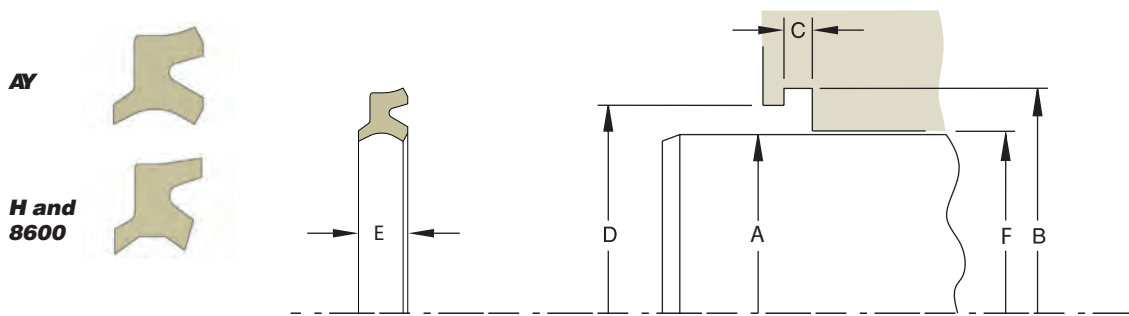
Table 8-15. AY, H and 8600 Gland Dimensions — Inch (Continued)

A Rod Diameter	B Groove Diameter	C Groove Width	D Shoulder Diameter	E Max. Wiper Axial Width	F Throat Diameter	Profile Code (X = Standard Offering)			Part Number		
						AY	H	8600	Compound Code	Profile	Rod Size
+ .000/- .004	+ .003/- .000	+ .005/- .000	+ .003/- .000		+ .003/- .000						
6.250	6.745	0.281	6.385	0.351	6.251		x		XXXX	xxxx	06250
6.375	6.870	0.281	6.510	0.351	6.376			x	XXXX	xxxx	06375
6.500	6.995	0.281	6.635	0.351	6.501		x		XXXX	xxxx	06500
6.750	7.245	0.281	6.885	0.351	6.751		x		XXXX	xxxx	06750
7.000	7.495	0.281	7.135	0.351	7.001		x	x	XXXX	xxxx	07000
7.250	7.745	0.281	7.385	0.351	7.251		x	x	XXXX	xxxx	07250
7.500	7.995	0.281	7.635	0.351	7.501		x		XXXX	xxxx	07500
7.750	8.245	0.281	7.885	0.351	7.751		x		XXXX	xxxx	07750
8.000	8.495	0.281	8.135	0.351	8.001		x	x	XXXX	xxxx	08000
8.250	8.745	0.281	8.385	0.351	8.251		x		XXXX	xxxx	08250
8.500	8.995	0.281	8.635	0.351	8.501		x	x	XXXX	xxxx	08500
+ .000/- .005	+ .003/- .000	+ .005/- .000	+ .003/- .000		+ .003/- .000						
8.750	9.245	0.281	8.885	0.351	8.751		x		XXXX	xxxx	08750
9.000	9.495	0.281	9.135	0.351	9.001		x	x	XXXX	xxxx	09000
9.250	9.745	0.281	9.385	0.351	9.251		x		XXXX	xxxx	09250
9.500	9.995	0.281	9.635	0.351	9.501		x		XXXX	xxxx	09500
9.750	10.245	0.281	9.885	0.351	9.751		x	x	XXXX	xxxx	09750
10.000	10.495	0.281	10.135	0.351	10.001		x	x	XXXX	xxxx	10000

For custom groove calculations, see Appendix C.

NOTE: For sizes larger than those shown in the table, please contact your local Parker Seal representative.

Gland Dimensions — AY, H and 8600 Profiles — Metric



Please refer to Engineering Section 2, page 2-8 for surface finish and additional hardware considerations.

Table 8-16. AY Gland Dimensions — Metric

A Rod Diameter	B Groove Diameter	C Groove Width	D Shoulder Diameter	E Max. Wiper Axial Width	F Throat Diameter	Part Number		
f7	H11	+0.2/-0.0	H11		H8	Compound Code	Profile	
For ISO tolerances refer to Appendix F.								
10.0	16.0	4.0	12.5	4.8	10.03	M300	AY	03.0010-3.6
20.0	26.0	4.0	22.5	4.8	20.03	M300	AY	03.0020-3.6
25.0	31.0	4.0	27.5	4.8	25.03	M300	AY	03.0025-3.6
30.0	38.0	5.0	33.0	5.8	30.03	M300	AY	04.0030-4.5
32.0	40.0	5.0	35.0	5.8	32.03	M300	AY	04.0032-4.5
35.0	43.0	5.0	38.0	5.8	35.03	M300	AY	04.0035-4.5
36.0	44.0	5.0	39.0	5.8	36.03	M300	AY	04.0036-4.5
40.0	48.0	5.0	43.0	5.8	40.03	M300	AY	04.0040-4.5
42.0	50.0	5.0	45.0	5.8	42.03	M300	AY	04.0042-4.5
45.0	53.0	5.0	48.0	5.8	45.03	M300	AY	04.0045-4.5
50.0	58.0	5.5	53.0	7.0	50.03	M300	AY	04.0050-5.0
55.0	65.0	5.0	58.0	5.8	55.03	M300	AY	05.0055-4.5
55.0	65.0	6.0	58.0	6.8	55.03	M300	AY	05.0055-5.3
60.0	70.0	6.0	63.0	6.8	60.03	M300	AY	05.0060-5.3
64.0	74.0	6.0	67.0	6.8	64.03	M300	AY	05.0064-5.3
64.0	74.0	6.0	67.0	6.8	64.03	M300	AY	05.0064-5.3
70.0	80.0	6.0	73.0	6.8	70.03	M300	AY	05.0070-5.3
75.0	85.0	6.0	78.0	6.8	75.03	M300	AY	05.0075-5.3
100.0	110.0	6.0	104.0	6.8	100.03	M300	AY	05.0100-5.3
120.0	135.0	8.5	124.0	9.5	120.03	M300	AY	07.5120-7.5