

PFG Flat Vacuum Cups



Features

- **Universal Flat Design for Most Smooth Surface Applications**
- **Stable Vertical / Horizontal Lift**
- **Strong Low Profile Design for Fast Response Needed for Short Cycles**
- **1 mm to 200 mm Diameters**

Applications

Exceptional for any smooth flat or surface that will benefit from stability and fast response of the cup design. This is a multi-versatile and multi-industry cup. Typical applications could be chip mounting, electrical components, semiconductor chips, glass, injection mold, sheet metal, press transfer, fixtures, woodworking.

PFG Series Vacuum Cups

Precision molded single lip flat cup for smooth or slightly curved surfaces.

PFTM Series Male Thread Connector

Simple male connection for low profile positions secured to a plate or bracket.

Fitting Material: Aluminium.



PFTF Series Female Thread Connector

Simple female connection for low profile positions secured to a plate or bracket.

Fitting Material: Aluminium.



PFTK Series Barbed Bulkhead

Top stem connectors secured with jam nuts and allow tubing connections at the top side. Nickel plated brass materials.



PFYK Series 90° Barbed Adapter

Side stem connectors allow you to secure the stem with a bolt thru a plate or "L" bracket to allow the tube connection from the side port. Nickel plated brass materials.



PFTYS Series Bulkhead Level Compensator

303 stainless steel construction secured with jam nuts. Spring biased compensators can absorb impacts of down-strokes and adjust for different levels of pick up points. 303 stainless corrosion resistant materials with drymet bushings increases the strength and life.





Model Number Index

PFG - 2A - NBR

Cup Diameter [mm]			
1	1	30	30
1.5	1,5	35	35
2A	2	40	40
3.5A	3,5	50	50
5A	5	60	60
6A	6	80	80
8A	8	95	95
10A	10	120	120
15A	15	150	150
20B	20	200	200
25	25		

Cup Material	
NBR	Nitrile Rubber
SI	Silicone
U	Urethane

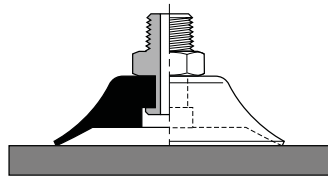
More materials on request.
Please see page 8 for material specifications.

Application Guide

Flat - Smooth Surface

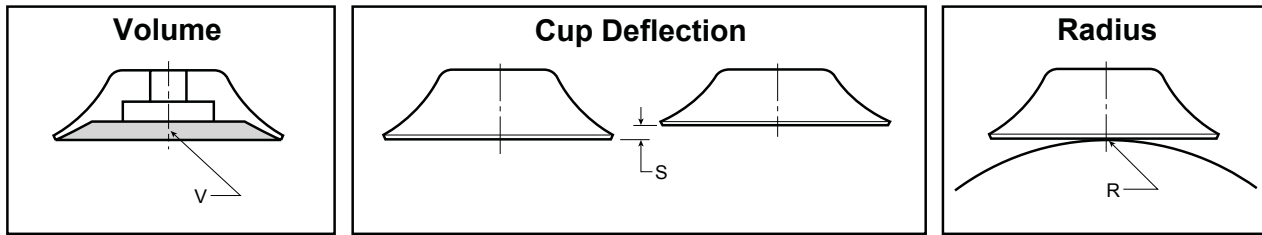


**Ø 120/200
Only**



- Products With Smooth Surfaces
- Products With Minimum Flex
- Products That Will Not Permanently Deform

Main Data for Flat PFG Cups

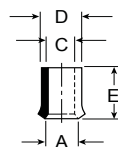


Model Number	Cup Diameter [mm]	Area [cm ²]	Volume [V] Liters	Lifting Force @60% [N]		Cup Deflection [S] [mm]	Radius [R] [mm]
PFG-1-*	1	0,008	0,00000015	0,05	0,025	0,1	1,6
PFG-1.5-*	1,5	0,01	0,00000053	0,10	0,05	0,1	3,5
PFG-2A-*	2	0,03	0,0000007	0,19	0,09	0,1	1,75
PFG-3.5A-*	3	0,10	0,000002	0,59	0,29	0,2	2,0
PFG-5A-*	5	0,20	0,000005	1,20	0,6	0,5	3,5
PFG-6A-*	6	0,28	0,000008	1,70	0,85	1,0	4,0
PFG-8A-*	8	0,50	0,00003	3,10	1,5	1,4	5,0
PFG-10A-*	10	0,79	0,00007	4,80	2,4	1,5	6,0
PFG-15A-*	15	1,77	0,0004	10,8	5,4	1,9	6,0
PFG-20B-*	20	3,14	0,0008	19,2	9,6	2,3	13,0
PFG-25-*	25	4,91	0,0013	30,0	15,0	3,0	17,5
PFG-30-*	30	7,07	0,0018	43,2	21,6	2,0	26
PFG-35-*	35	9,62	0,0026	58,9	29,5	3,0	31
PFG-40-*	40	12,60	0,004	76,9	38,5	3,5	37
PFG-50-*	50	19,60	0,007	120	60	4,0	41
PFG-60-*	60	28,30	0,0090	173	87	5,0	70
PFG-80-*	80	50,30	0,025	308	154	6,0	100
PFG-95-*	95	70,90	0,035	434	267	6,0	150
PFG-120-*	120	113,00	0,078	692	346	6,0	365
PFG-150-*	150	176,70	0,177	1081	541	9,0	380
PFG-200-*	200	314,20	0,425	1922	961	13,0	430

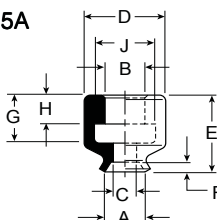
* Cup Material

Dimensions

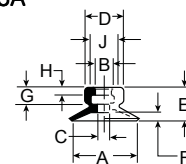
PFG-1
PFG-1.5



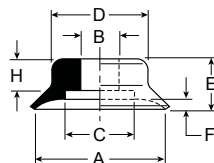
PFG-2A
PFG-3.5A



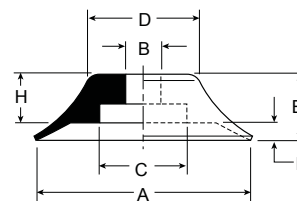
PFG-5A
PFG-15A



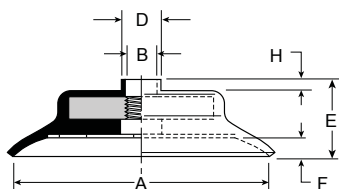
PFG-20B thru
PFG-40



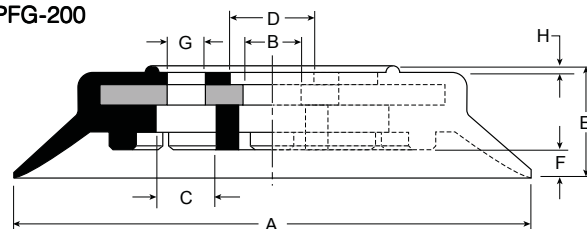
PFG-50



PFG-60 thru
PFG-95



PFG-120 thru
PFG-200



Model Number	ØA	ØB	ØC	ØD	E	F	G	H	ØJ
PFG-1-*	1	—	0,8	1,2	1,6	—	—	—	—
PFG-1.5-*	1,5	—	1,2	1,8	2,5	—	—	—	—
PFG-2A-*	2	2	1,2	4	4	0,5	2,5	1,5	3
PFG-3.5A-*	3,5	2	1,2	4	4	0,5	2,5	1,5	3
PFG-5A-*	5	4	1,4	7,5	6,5	0,8	4	2	6
PFG-6A-*	6	4	2	7,5	6,5	0,8	4	2	6
PFG-8A-*	8	4	2	8	7	1,2	4	2	6
PFG-10A-*	10	4	2	8,5	7,5	1,5	4	2	6
PFG-15-*	15	—	7,8	12	8	1,9	—	—	—
PFG-15A-*	15	4	2	9	8	2	4	2	6
PFG-20-*	20	4,6	11	15	10	2,3	—	4,5	—
PFG-20B-*	20	6	11	15	12,5	2,3	—	7	—
PFG-25-*	25	6	11	16	14	3	—	7	—
PFG-30-*	30	6	11	14	12	2	—	7	—
PFG-35-*	35	6	11	21	14	3	—	7	—
PFG-40-*	40	6	11	24	14	4	—	7	—
PFG-50-*	50	8	20	27	15	3,5	—	7	—
PFG-60-*	60	M10x1,25	—	12,5	18,5	5	—	2,5	—
PFG-80-*	80	M10x1,25	—	12,5	20,5	6	—	2,5	—
PFG-95-*	95	M10x1,25	—	12,5	21	6	—	2,5	—
PFG-120-*	120	14	14	20	25,5	6	4xØ8,7xØ40	1,5	—
PFG-150-*	150	13	14	20	32,5	9	4xØ8,7xØ40	1,5	—
PFG-200-*	200	13	12	20	37,5	13	4xØ8,7xØ40	1,5	—

Millimeter

* Cup Material

A