

Vacuum Cups

A

Section A

www.parker.com/pneu/vaccup



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.

Features

- Precision molded single lip flat cup for smooth or slightly curved surfaces.
- Universal flat design for most smooth surface applications
- Stable vertical / horizontal lift
- Strong low profile design for fast response needed for short cycles
- 5mm to 200mm diameters
- Bottom cleats on 60 to 200mm diameters



Styles

- PFTM series male thread connector
- PFTF series female thread connector
- PFTK series barbed bulkhead
- PFYK series 90° barbed adapter
- PFTYS series bulkhead level compensator

Specifications

Cup material	Nitrile	Nitrile ESD*	Silicon	Silicon ESD*	Urethane
Material code	NBR	NBRE	SI	SIE	U
Operating temperature (°C)	-20° to +120°	-30° to +120°	-60° to +250°	-60° to +250°	-30° to +120°
Color	Black	Black / Blue Dot	White	Black / Red Dot	Blue
Hardness, shore A (°Sh)	55 ±5	70 ±5	55 ±5	55 ±5	55 ±5
Electrical resistance (Ωm)	—	800 to 1000	—	800 to 1000	—

* ESD: Electric Static Dissipative Material

How to order

Cups Assemblies and replacement cups are specified by Cup Diameter and Material. Standard Nitrile and silicon are listed on the following pages. To specify an alternative material, replace the cup material with alternative cup material code.

Example: To specify a cup assembly with Urethane (U), replace (NBR) with (U) in the part number. PFTM-20B-NBR-G1 becomes PFTM-20B-U-G1. Inquire with factory for availability.

Application guide

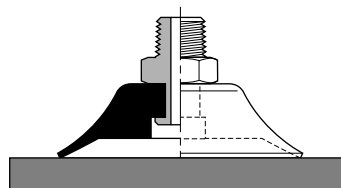
Flat - Smooth surface

Flat surface, thin section	Flat surface, any section	Slightly bowed surface, thin section	Slightly bowed surface, any section	Metal sheet handling	Corrugated sheet handling	High lifting force	Vertical lift

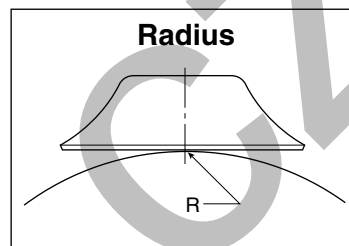
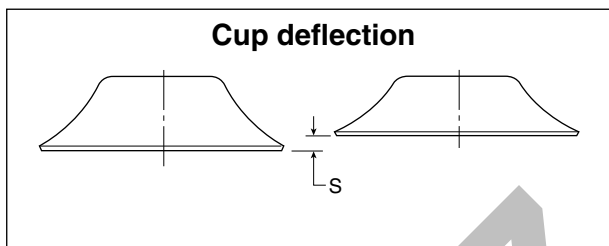
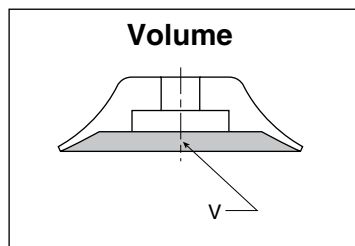
Ø 120/200 only

Applications

- Products with smooth surfaces
- Products with minimum flex
- Products that will not permanently deform



Main data for fat PFG cups

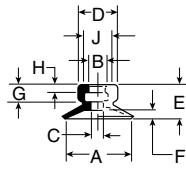


Model number	Cup diameter mm	Area cm ²	Volume (V) liters	Lifting force @60% (N)		Cup deflection (S) mm	Radius (R) mm
PFG-5A-*	5	0.20	0.000005	1.20	0.6	0.5	3.5
PFG-6A-*	6	0.28	0.000008	1.70	0.85	1.0	4.0
PFG-8A-*	8	0.50	0.00003	3.10	1.5	1.4	5.0
PFG-10A-*	10	0.79	0.00007	4.80	2.4	1.5	6.0
PFG-15-*	15	1.77	0.0004	10.8	5.4	1.9	6.0
PFG-15A-*	15	1.77	0.0004	10.8	5.4	1.9	6.0
PFG-20-*	20	3.14	0.0008	19.2	9.6	2.3	9.0
PFG-20B-*	20	3.14	0.0008	19.2	9.6	2.3	13.0
PFG-30-*	30	7.07	0.0018	43.2	21.6	2.0	26
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

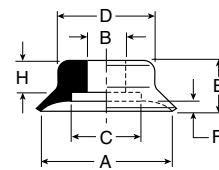
* Cup material

PFG Series Replacement Cup Dimensions

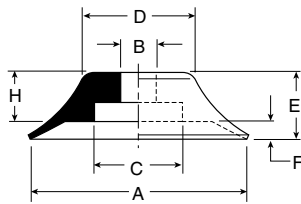
**PFG-5A
PFG-15A**



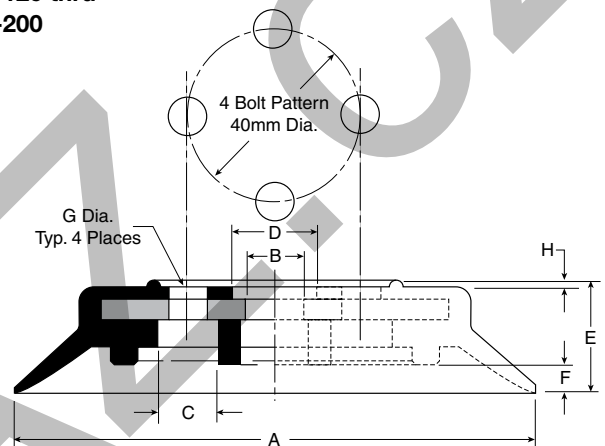
**PFG-15 thru
PFG-40**



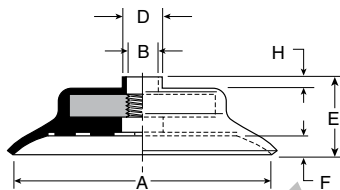
PFG-50



**PFG-120 thru
PFG-200**



**PFG-60 thru
PFG-95**



Dimensions (mm)

Model number	ØA	ØB	ØC	ØD	E	F	G	H	ØJ
PFG-5A-*	5	4	1.4	7.5	6.5	.8	4	2	6
PFG-6A-*	6	4	2	7.5	6.5	.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-30-*	30	6	11	14	12	2	—	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	—

* Cup material