

C
Vacuum Products

Vacuum Products

Vacuum Cups

PFG Flat Cups



- Precision molded single lip flat cup for smooth or slightly curved surfaces.
- Low profile design makes flat pads ideal for fast response.
- Cup Sizes: 1.5mm to 200mm

C4

PBG Bellows Cups



- Versatile bellows cup design provides a flexible sealing lip for products with irregular, smooth, curved surfaces, and flexible products
- Cup sizes: 10mm to 150mm

C17

P5V-CFS Flat Cups



- Precision molded double lip flat cup for slightly curved surfaces
- Double lip for additional security. If outside lip bends and loses its seal, the inner lip remains sealed.
- Outer ribs prevent the cup lip from being cut
- Cup Sizes: 50mm to 150mm

C29

PJG Short Bellows Cups



- Versatile bellows cup design provides a flexible sealing lip for products with irregular, smooth, curved surfaces, and slightly flexible products
- Shorter stroke provides fast response
- Cup sizes: 6mm to 80mm

C30

PCG Multiple Bellows Cups



- Versatile bellows cup design provides a flexible sealing lip for products with irregular, smooth, or curved surfaces
- 2-1/2 bellows design minimizes contact pressure applied to products
- Cup sizes: 5mm to 90mm

C42

PUGB Flat Swivel Cups



- 30° swivel single lip flat cup for smooth surfaces, slightly curved surfaces, and flexible products
- Rigid stem or level compensator provides good stability for horizontal lift
- Cup Sizes: 60mm to 100mm

C50

Vacuum Generators

MCA, CV, CV-CK Inline Generators



- MCA: Light weight vacuum generator
- CV: Basic aluminum body vacuum generator
- CV-CK: Basic aluminum body vacuum generator with mechanical switch for part present confirmation

C54

CHF Inline Generators



- CHF- High Flow Series is a multistage vacuum generator
- Intended for high flow vacuum applications
- Ideal for porous applications
- Standard with flow thru exhaust mufflers to reduce clogging in dirty environments

C56

MC22 Integrated Generators



- Compact vacuum generator includes vacuum and blow-off solenoids and vacuum filters
- Optional check valve and MPS-23 pressure sensor
- Air-economizing function with MVS-201 pressure sensor
- Inline version can be mounted on manifolds up to 8 stations

C58

MC72 Integrated Generators



- Light weight vacuum generator includes vacuum and blow-off solenoids.
- Includes check valve, vacuum filter and optional MPS-23 pressure sensor
- Air-economizing function with MVS-201 pressure sensor
- Inline version can be mounted on manifolds up to 5 stations

C61

CEK Integrated Generators



- Air-economizing functions with emergency stop logic that maintains degree of vacuum with loss of output power
- Includes vacuum and blow-off solenoids, check valve, vacuum filter and optional MPS-23 pressure sensor
- Inline versions can be mounted in manifolds up to 5 stations

C64

CVXCEK Integrated Generators



- Basic 2 station CEK generator manifold with additional electrical capabilities
- Integrates MPS-23 sensor for on board air-economizing programming
- M12 electrical wiring package with optional 18-pin single connection

C67

Vacuum Generator Sensors

MPS-23 Integrated Generator Sensors



- 0 to -30 inHg, -14.7 to 72.5 PSIG
- Output type: (2) NPN / PNP
- Media: air, non-corrosive gas
- IP65
- Hysteresis output mode: variable, 100% F.S.
- Output setting: push button
- LED display (Red)

C69

MVS-201 Integrated Generator Sensors



- 0 to -30 inHg, -14.7 to 72.5 PSIG
- Output type: (2) NPN / PNP
- Media: air, non-corrosive gas
- IP65
- Hysteresis output mode: variable, 100% F.S.
- Output setting: push button
- LED display (Red)

C71

Pressure Sensors / Cables

MPS-33 Pressure Sensors



- 0 to -30 inHg, 0 to 145 PSIG
- Output type: (2) PNP or (1) NPN with analog
- Media: air, non-corrosive gas
- IP50
- Hysteresis output mode: variable, 100% F.S.
- Output setting: push button
- LED display (Red)

C73

MPS-34 Pressure Sensors



- 0 to -30 inHg, 0 to 145 PSIG
- Output type: (2) PNP or (1) NPN with analog
- Media: air, non-corrosive gas
- IP50
- Hysteresis output mode: variable, 100% F.S.
- Output setting: push button
- LED display (Red)

C75

SCP01 Pressure Sensor



- Stainless steel body
- Compact construction
- Shock and vibration proof
- Resistant to pressure spikes
- Accuracy +/- 0.5% FS

C77

SCPSD Pressure Sensors



- CV-CK is a Venturi Generator with adjustable open contact mechanical switch for vacuum confirmation.
- Great for low cost vacuum confirmation.

C78

Cables – continued

Cables



- M8, M12 male / female connector
- Length: 2m or 5m
- Cover: PVC or PUR
- Connection type: swivel straight or angled
- IP67 swivel connector

C80

Vacuum Generator Accessories

FSV Metered Flow Sensing Valve



- Pick and place randomly placed products
- Minimize vacuum loss when cup seal is lost
- Direct mounting to cups
- 1/8 to G3/8 connection
- Integrated bronze filter

C81

CH01 One Way Check Valve



- Poppet design
- Low leakage
- Low cracking pressure

C82

VF & VFL Vacuum Filters



- Filters the vacuum system to protect the components from damaging particles absorbed from the environment
- Elements easily replaced

C83

VFP Vacuum Filters



- Provides easy monitoring, economy and safety
- 10 micron porous plastic element prolongs element life
- Shatterproof and airtight
- Replaceable filter element

C84

Vacuum Silencers



- Pressure up to 128 PSIG
- Temperature 41°F to 132°F (5°C to 55.5°C)
- Silencing effect 20 dB

C85

PFG Flat Vacuum Cup Series

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

Operating information

Cup material	Nitrile	Nitrile ESD*	Silicon	Silicon ESD*	Urethane
Material code	NBR	NBRE	SI	SIE	U
Operating temperature	-20°C to 120°C (-4°F to 248°F)	0°C to 60°C (32°F to 40°F)	-60° to 250°C (-76°F to 482°F)	-10° to 130°C (-14°F to 266°F)	-20° to 75°C (-4°F to 167°F)
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	—	5 to 15	—

* 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

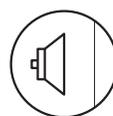


Corrugated sheet handling



Ø 120/200 only

High lifting force



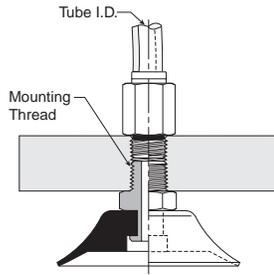
Vertical lift

PFTM Series Male Thread Connector

Simple male connection for low profile positions secured to a plate or bracket. NPT, G, metric threads.
 Fitting material: aluminum.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	M5	PFTM-5A-NBR-M5	PFG-5A-NBR	PFTM-5A-SI-M5	PFG-5A-SI	FTM-5A-M5H
5	1/8 BSPP	PFTM-5A-NBR-G1	PFG-5A-NBR	PFTM-5A-SI-G1	PFG-5A-SI	FTM-5A-G1
6	M5	PFTM-6A-NBR-M5	PFG-6A-NBR	PFTM-6A-SI-M5	PFG-6A-SI	FTM-5A-M5H
6	1/8 BSPP	PFTM-6A-NBR-G1	PFG-6A-NBR	PFTM-6A-SI-G1	PFG-6A-SI	FTM-5A-G1
8	M5	PFTM-8A-NBR-M5	PFG-8A-NBR	PFTM-8A-SI-M5	PFG-8A-SI	FTM-5A-M5H
8	1/8 BSPP	PFTM-8A-NBR-G1	PFG-8A-NBR	PFTM-8A-SI-G1	PFG-8A-SI	FTM-5A-G1
10	M5	PFTM-10A-NBR-M5	PFG-10A-NBR	PFTM-10A-SI-M5	PFG-10A-SI	FTM-5A-M5H
10	1/8 BSPP	PFTM-10A-NBR-G1	PFG-10A-NBR	PFTM-10A-SI-G1	PFG-10A-SI	FTM-5A-G1
15	M5	PFTM-15A-NBR-M5	PFG-15A-NBR	PFTM-15A-SI-M5	PFG-15A-SI	FTM-5A-M5H
15	1/8 BSPP	PFTM-15A-NBR-G1	PFG-15A-NBR	PFTM-15A-SI-G1	PFG-15A-SI	FTM-5A-G1
20	1/8 BSPP	PFTM-20B-NBR-G1	PFG-20B-NBR	PFTM-20B-SI-G1	PFG-20B-SI	FTM-20B-G1H
20	1/4 BSPP	PFTM-20B-NBR-G2	PFG-20B-NBR	PFTM-20B-SI-G2	PFG-20B-SI	FTM-20B-G2
20	M10	PFTM-20B-NBR-M10	PFG-20B-NBR	PFTM-20B-SI-M10	PFG-20B-SI	FTM-20B-M10
20	1/8 NPT	PFTM-20B-NBR-N1	PFG-20B-NBR	PFTM-20B-SI-N1	PFG-20B-SI	FTM-20B-N1
30	1/8 BSPP	PFTM-30-NBR-G1	PFG-30-NBR	PFTM-30-SI-G1	PFG-30-SI	FTM-20B-G1H
30	1/4 BSPP	PFTM-30-NBR-G2	PFG-30-NBR	PFTM-30-SI-G2	PFG-30-SI	FTM-20B-G2
30	M10	PFTM-30-NBR-M10	PFG-30-NBR	PFTM-30-SI-M10	PFG-30-SI	FTM-20B-M10
30	1/8 NPT	PFTM-30-NBR-N1	PFG-30-NBR	PFTM-30-SI-N1	PFG-30-SI	FTM-20B-N1
40	1/8 BSPP	PFTM-40-NBR-G1	PFG-40-NBR	PFTM-40-SI-G1	PFG-40-SI	FTM-20B-G1H
40	1/4 BSPP	PFTM-40-NBR-G2	PFG-40-NBR	PFTM-40-SI-G2	PFG-40-SI	FTM-20B-G2
40	M10	PFTM-40-NBR-M10	PFG-40-NBR	PFTM-40-SI-M10	PFG-40-SI	FTM-20B-M10
40	1/8 NPT	PFTM-40-NBR-N1	PFG-40-NBR	PFTM-40-SI-N1	PFG-40-SI	FTM-20B-N1
50	1/8 BSPP	PFTM-50-NBR-G1	PFG-50-NBR	PFTM-50-SI-G1	PFG-50-SI	FTM-50-G1H
50	1/4 BSPP	PFTM-50-NBR-G2	PFG-50-NBR	PFTM-50-SI-G2	PFG-50-SI	FTM-50-G2
50	1/8 NPT	PFTM-50-NBR-N1	PFG-50-NBR	PFTM-50-SI-N1	PFG-50-SI	FTM-50-N1
60	1/4 BSPP	PFTM-60-NBR-G2	PFG-60-NBR	PFTM-60-SI-G2	PFG-60-SI	FTM-60-G2
60	M10	PFTM-60-NBR-M10	PFG-60-NBR	PFTM-60-SI-M10	PFG-60-SI	FTM-60-M10
60	1/4 NPT	PFTM-60-NBR-N2	PFG-60-NBR	PFTM-60-SI-N2	PFG-60-SI	FTM-60-N2
80	1/4 BSPP	PFTM-80-NBR-G2	PFG-80-NBR	PFTM-80-SI-G2	PFG-80-SI	FTM-60-G2
80	M10	PFTM-80-NBR-M10	PFG-80-NBR	PFTM-80-SI-M10	PFG-80-SI	FTM-60-M10
80	1/4 NPT	PFTM-80-NBR-N2	PFG-80-NBR	PFTM-80-SI-N2	PFG-80-SI	FTM-60-N2
95	1/4 BSPP	PFTM-95-NBR-G2	PFG-95-NBR	PFTM-95-SI-G2	PFG-95-SI	FTM-60-G2
95	M10	PFTM-95-NBR-M10	PFG-95-NBR	PFTM-95-SI-M10	PFG-95-SI	FTM-60-M10
95	1/4 NPT	PFTM-95-NBR-N2	PFG-95-NBR	PFTM-95-SI-N2	PFG-95-SI	FTM-60-N2

Most popular.

C	Vacuum Cups
	Vacuum Products
	PFG Series
	PBG Series
	P5V-CFS Series
	PJG Series
	PCG Series
	PUGB Series

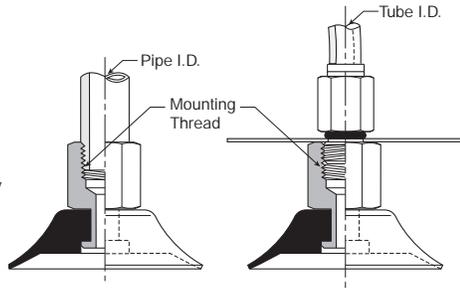


PFTF Series Female Thread Connector

Simple female connection for low profile positions secured to a plate or bracket. NPSF, G threads. Fitting material: aluminum.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	M5	PFTF-5A-NBR-M5	PFG-5A-NBR	PFTF-5A-SI-M5	PFG-5A-SI	FTF-5A-M5
5	1/8 BSPP	PFTF-5A-NBR-G1	PFG-5A-NBR	PFTF-5A-SI-G1	PFG-5A-SI	FTF-5A-G1
6	M5	PFTF-6A-NBR-M5	PFG-6A-NBR	PFTF-6A-SI-M5	PFG-6A-SI	FTF-5A-M5
6	1/8 BSPP	PFTF-6A-NBR-G1	PFG-6A-NBR	PFTF-6A-SI-G1	PFG-6A-SI	FTF-5A-G1
8	M5	PFTF-8A-NBR-M5	PFG-8A-NBR	PFTF-8A-SI-M5	PFG-8A-SI	FTF-5A-M5
8	1/8 BSPP	PFTF-8A-NBR-G1	PFG-8A-NBR	PFTF-8A-SI-G1	PFG-8A-SI	FTF-5A-G1
10	1/8 BSPP	PFTF-10A-NBR-G1	PFG-10A-NBR	PFTF-10A-SI-G1	PFG-10A-SI	FTF-5A-G1
10	M5	PFTF-10A-NBR-M5	PFG-10A-NBR	PFTF-10A-SI-M5	PFG-10A-SI	FTF-5A-M5
15	1/8 BSPP	PFTF-15A-NBR-G1	PFG-15A-NBR	PFTF-15A-SI-G1	PFG-15A-SI	FTF-5A-G1
15	M5	PFTF-15A-NBR-M5	PFG-15A-NBR	PFTF-15A-SI-M5	PFG-15A-SI	FTF-5A-M5
20	1/8 BSPP	PFTF-20B-NBR-G1	PFG-20B-NBR	PFTF-20B-SI-G1	PFG-20B-SI	FTF-20B-G1
30	1/8 BSPP	PFTF-30-NBR-G1	PFG-30-NBR	PFTF-30-SI-G1	PFG-30-SI	FTF-20B-G1
30	1/4 BSPP	PFTF-30-NBR-G2	PFG-30-NBR	PFTF-30-SI-G2	PFG-30-SI	FTF-20B-G2
40	1/8 BSPP	PFTF-40-NBR-G1	PFG-40-NBR	PFTF-40-SI-G1	PFG-40-SI	FTF-20B-G1
40	1/4 BSPP	PFTF-40-NBR-G2	PFG-40-NBR	PFTF-40-SI-G2	PFG-40-SI	FTF-20B-G2
50	1/8 BSPP	PFTF-50-NBR-G1	PFG-50-NBR	PFTF-50-SI-G1	PFG-50-SI	FTF-50-G1
50	1/4 BSPP	PFTF-50-NBR-G2	PFG-50-NBR	PFTF-50-SI-G2	PFG-50-SI	FTF-50-G2
60	1/4 BSPP	PFTF-60-NBR-G2	PFG-60-NBR	PFTF-60-SI-G2	PFG-60-SI	FTF-60-G2
60	1/4 NPT	PFTF-60-NBR-N2	PFG-60-NBR	PFTF-60-SI-N2	PFG-60-SI	FTF-60-N2
80	1/4 BSPP	PFTF-80-NBR-G2	PFG-80-NBR	PFTF-80-SI-G2	PFG-80-SI	FTF-60-G2
80	1/4 NPT	PFTF-80-NBR-N2	PFG-80-NBR	PFTF-80-SI-N2	PFG-80-SI	FTF-60-N2
95	1/4 NPT	PFTF-95-NBR-N2	PFG-95-NBR	PFTF-95-SI-N2	PFG-95-SI	FTF-60-N2
95	1/4 BSPP	PFTF-95-NBR-G2	PFG-95-NBR	PFTF-95-SI-G2	PFG-95-SI	FTF-60-G2
120	1/2 BSPP	PFTF-120-NBR-G4	PFG-120-NBR	PFTF-120-SI-G4	PFG-120-SI	FTF-120-G4
120	1/2 NPT	PFTF-120-NBR-N4	PFG-120-NBR	PFTF-120-SI-N4	PFG-120-SI	FTF-120-N4
150	1/2 NPT	PFTF-150-NBR-G4	PFG-150-NBR	PFTF-150-SI-G4	PFG-150-SI	FTF-120-G4
150	1/2 NPT	PFTF-150-NBR-N4	PFG-150-NBR	PFTF-150-SI-N4	PFG-150-SI	FTF-120-N4
200	1/2 BSPP	PFTF-200-NBR-G4	PFG-200-NBR	PFTF-200-SI-G4	PFG-200-SI	FTF-120-G4
200	1/2 NPT	PFTF-200-NBR-N4	PFG-200-NBR	PFTF-200-SI-N4	PFG-200-SI	FTF-120-N4

Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 PSV-CFS Series
 PJG Series
 PCG Series
 PUGB Series



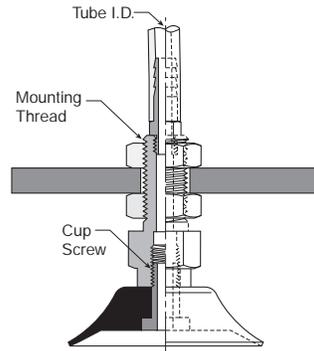
PFTK Series Barbed Bulkhead

Top stem connectors secured with jam nuts and allow tubing connections at the top side. Fitting material: nickel plated brass.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	Barb	PFTK-5A-NBR	PFG-5A-NBR	PFTK-5A-SI	PFG-5A-SI	FTK-5A
6	Barb	PFTK-6A-NBR	PFG-6A-NBR	PFTK-6A-SI	PFG-6A-SI	FTK-5A
8	Barb	PFTK-8A-NBR	PFG-8A-NBR	PFTK-8A-SI	PFG-8A-SI	FTK-5A
10	Barb	PFTK-10A-NBR	PFG-10A-NBR	PFTK-10A-SI	PFG-10A-SI	FTK-5A
15	Barb	PFTK-15-NBR	PFG-15-NBR	PFTK-15-SI	PFG-15-SI	FTK-15
20	Barb	PFTK-20-NBR	PFG-20-NBR	PFTK-20-SI	PFG-20-SI	FTK-20
30	Barb	PFTK-30-NBR	PFG-30-NBR	PFTK-30-SI	PFG-30-SI	FTK-25
40	Barb	PFTK-40-NBR	PFG-40-NBR	PFTK-40-SI	PFG-40-SI	FTK-25
50	Barb	PFTK-50-NBR	PFG-50-NBR	PFTK-50-SI	PFG-50-SI	FTK-50
60	1/8 BSPP	PFTK-60-NBR-G1	PFG-60-NBR	PFTK-60-SI-G1	PFG-60-SI	FTK-60-G1
60	1/8 NPT	PFTK-60-NBR-N1	PFG-60-NBR	PFTK-60-SI-N1	PFG-60-SI	FTK-60-N1
80	1/8 BSPP	PFTK-80-NBR-G1	PFG-80-NBR	PFTK-80-SI-G1	PFG-80-SI	FTK-60-G1
80	1/8 NPT	PFTK-80-NBR-N1	PFG-80-NBR	PFTK-80-SI-N1	PFG-80-SI	FTK-60-N1
95	1/8 BSPP	PFTK-95-NBR-G1	PFG-95-NBR	PFTK-95-SI-G1	PFG-95-SI	FTK-60-G1
95	1/8 NPT	PFTK-95-NBR-N1	PFG-95-NBR	PFTK-95-SI-N1	PFG-95-SI	FTK-60-N1

 Most popular.



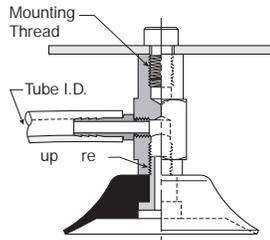
PFYK Series 90° Barbed Adapter

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. Fitting material: plated brass.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	Barb	PFYK-5A-NBR	PFG-5A-NBR	PFYK-5A-SI	PFG-5A-SI	FYK-5A
6	Barb	PFYK-6A-NBR	PFG-6A-NBR	PFYK-6A-SI	PFG-6A-SI	FYK-5A
8	Barb	PFYK-8A-NBR	PFG-8A-NBR	PFYK-8A-SI-M5	PFG-8A-SI	FYK-5A
10	Barb	PFYK-10A-NBR	PFG-10A-NBR	PFYK-10A-SI	PFG-10A-SI	FYK-5A
15	Barb	PFYK-15-NBR	PFG-15-NBR	PFYK-15-SI	PFG-15-SI	FYK-15
20	Barb	PFYK-20-NBR	PFG-20-NBR	PFYK-20-SI	PFG-20-SI	FYK-20
30	Barb	PFYK-30-NBR	PFG-30-NBR	PFYK-30-SI	PFG-30-SI	FYK-25
40	Barb	PFYK-40-NBR	PFG-40-NBR	PFYK-40-SI	PFG-40-SI	FYK-25
50	Barb	PFYK-50-NBR	PFG-50-NBR	PFYK-50-SI	PFG-50-SI	FYK-50
60	1/8 BSPP	PFYK-60-NBR-G1	PFG-60-NBR	PFYK-60-SI-G1	PFG-60-SI	FYK-60-G1
60	1/8 NPT	PFYK-60-NBR-N1	PFG-60-NBR	PFYK-60-SI-N1	PFG-60-SI	FYK-60-N1
80	1/8 BSPP	PFYK-80-NBR-G1	PFG-80-NBR	PFYK-80-SI-G1	PFG-80-SI	FYK-60-G1
80	1/8 NPT	PFYK-80-NBR-N1	PFG-80-NBR	PFYK-80-SI-N1	PFG-80-SI	FYK-60-N1
95	1/8 BSPP	PFYK-95-NBR-G1	PFG-95-NBR	PFYK-95-SI-G1	PFG-95-SI	FYK-60-G1
95	1/8 NPT	PFYK-95-NBR-N1	PFG-95-NBR	PFYK-95-SI-N1	PFG-95-SI	FYK-60-N1
120	1/8 BSPP	PFYK-120-NBR-G1	PFG-120-NBR	PFYK-120-SI-G1	PFG-120-SI	FYK-120-G1
120	1/8 NPT	PFYK-120-NBR-N1	PFG-120-NBR	PFYK-120-SI-N1	PFG-120-SI	FYK-120-N1
150	1/8 BSPP	PFYK-150-NBR-G1	PFG-150-NBR	PFYK-150-SI-G1	PFG-150-SI	FYK-120-G1
150	1/8 NPT	PFYK-150-NBR-N1	PFG-150-NBR	PFYK-150-SI-N1	PFG-150-SI	FYK-120-N1
200	1/8 BSPP	PFYK-200-NBR-G1	PFG-200-NBR	PFYK-200-SI-G1	PFG-200-SI	FYK-120-G1
200	1/8 NPT	PFYK-200-NBR-N1	PFG-200-NBR	PFYK-200-SI-N1	PFG-200-SI	FYK-120-N1

Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 PSV-CFS Series
 PJG Series
 PCG Series
 PUGB Series

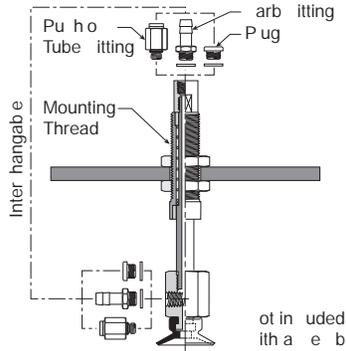


PFTYS Series Bulkhead Level Compensator

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.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup dia. (mm)	Vacuum port	Stroke (mm)	Spring compression Force lbf (N)		Cup material Nitrile assembly (NBR)	Replacement cup Nitrile (NBR)	Cup material Silicon assembly (SI)	Replacement cup Silicon (SI)	Level Compensator P/N
			0%	100%					
5	M5	10	.14 (.61)	.26 (1.17)	PFTYS5A10NBRM5	PFG-5A-NBR	PFTYS5A10SIM5	PFG-5A-SI	TYS-5A-10
5	M5	15	.15 (.64)	.26 (1.17)	PFTYS5A15NBRM5	PFG-5A-NBR	PFTYS5A15SIM5	PFG-5A-SI	TYS-5A-15
6	M5	10	.14 (.61)	.26 (1.17)	PFTYS6A10NBRM5	PFG-6A-NBR	PFTYS6A10SIM5	PFG-6A-SI	TYS-5A-10
6	M5	15	.15 (.64)	.26 (1.17)	PFTYS6A15NBRM5	PFG-6A-NBR	PFTYS6A15SIM5	PFG-6A-SI	TYS-5A-15
8	M5	10	.14 (.61)	.26 (1.17)	PFTYS8A10NBRM5	PFG-8A-NBR	PFTYS8A10SIM5	PFG-8A-SI	TYS-5A-10
8	M5	15	.15 (.64)	.26 (1.17)	PFTYS8A15NBRM5	PFG-8A-NBR	PFTYS8A15SIM5	PFG-8A-SI	TYS-5A-15
10	M5	10	.11 (.49)	.13 (.59)	PFTYS10A10NBRM5	PFG-10A-NBR	PFTYS10A10SIM5	PFG-10A-SI	TYS-5A-10
10	M5	15	.11 (.49)	.13 (.59)	PFTYS10A15NBRM5	PFG-10A-NBR	PFTYS10A15SIM5	PFG-10A-SI	TYS-5A-15
15	M5	10	.11 (.49)	.13 (.59)	PFTYS15A10NBRM5	PFG-15A-NBR	PFTYS15A10SIM5	PFG-15A-SI	TYS-5A-10
15	M5	15	.11 (.49)	.13 (.59)	PFTYS15A15NBRM5	PFG-15A-NBR	PFTYS15A15SIM5	PFG-15A-SI	TYS-5A-15
20	M5	15	.56 (2.5)	.79 (3.4)	PFTYS20B15NBRM5	PFG-20B-NBR	PFTYS20B15SIM5	PFG-20B-SI	TYS-20B-15
20	M5	30	.56 (2.5)	1.2 (4.9)	PFTYS20B30NBRM5	PFG-20B-NBR	PFTYS20B30SIM5	PFG-20B-SI	TYS-20B-30
30	M5	15	.56 (2.5)	.79 (3.4)	PFTYS3015NBRM5	PFG-30-NBR	PFTYS3015SIM5	PFG-30-SI	TYS-20B-15
30	M5	30	.56 (2.5)	1.2 (4.9)	PFTYS3030NBRM5	PFG-30-NBR	PFTYS3030SIM5	PFG-30-SI	TYS-20B-30
40	M5	15	.56 (2.5)	.79 (3.4)	PFTYS4015NBRM5	PFG-40-NBR	PFTYS4015SIM5	PFG-40-SI	TYS-20B-15
40	M5	30	.56 (2.5)	1.2 (4.9)	PFTYS4030NBRM5	PFG-40-NBR	PFTYS4030SIM5	PFG-40-SI	TYS-20B-30
50	M5	15	.56 (2.5)	1.2 (4.9)	PFTYS5015NBRM5	PFG-50-NBR	PFTYS5015SIM5	PFG-50-SI	TYS-50-15
50	M5	30	.67 (2.9)	1.4 (5.9)	PFTYS5030NBRM5	PFG-50-NBR	PFTYS5030SIM5	PFG-50-SI	TYS-50-30
60	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PFTYS6030NBRN1	PFG-60-NBR	PFTYS6030SIN1	PFG-60-SI	TYS-60-30
60	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PFTYS6050NBRN1	PFG-60-NBR	PFTYS6050SIN1	PFG-60-SI	TYS-60-50
80	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PFTYS8030NBRN1	PFG-80-NBR	PFTYS8030SIN1	PFG-80-SI	TYS-60-30
80	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PFTYS8050NBRN1	PFG-80-NBR	PFTYS8050SIN1	PFG-80-SI	TYS-60-50
95	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PFTYS9530NBRN1	PFG-95-NBR	PFTYS9530SIN1	PFG-95-SI	TYS-60-30
95	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PFTYS9550NBRN1	PFG-95-NBR	PFTYS9550SIN1	PFG-95-SI	TYS-60-50
120	1/4 NPT	20	3.6 (15.6)	6.8 (29)	PFTYS12020NBRN2	PFG-120-NBR	PFTYS12020SIN2	PFG-120-SI	TYS-120-20
120	1/4 NPT	70	3.4 (14.7)	6.8 (29)	PFTYS12070NBRN2	PFG-120-NBR	PFTYS12070SIN2	PFG-120-SI	TYS-120-70
150	1/4 NPT	20	3.6 (15.6)	6.8 (29)	PFTYS15020NBRN2	PFG-150-NBR	PFTYS15020SIN2	PFG-150-SI	TYS-120-20
150	1/4 NPT	70	3.4 (14.7)	6.8 (29)	PFTYS15070NBRN2	PFG-150-NBR	PFTYS15070SIN2	PFG-150-SI	TYS-120-70
200	1/4 NPT	20	3.6 (15.6)	6.8 (29)	PFTYS20020NBRN2	PFG-200-NBR	PFTYS20020SIN2	PFG-200-SI	TYS-120-20
200	1/4 NPT	70	3.4 (14.7)	6.8 (29)	PFTYS20070NBRN2	PFG-200-NBR	PFTYS20070SIN2	PFG-200-SI	TYS-120-70

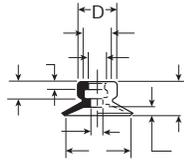
Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 P5V-CFS Series
 PJG Series
 PCG Series
 PUGB Series

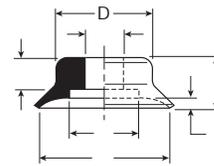


PFG Series Replacement Cup Dimensions

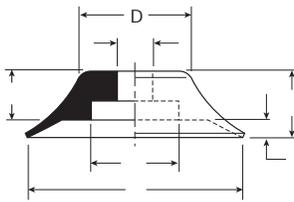
**PFG-5A
PFG-15A**



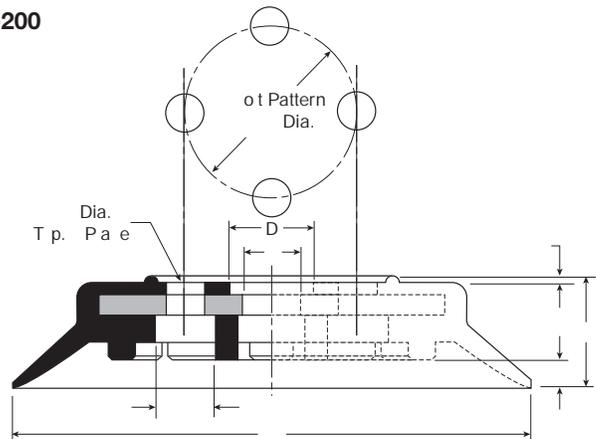
**PFG-15 thru
PFG-40**



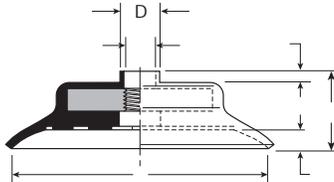
PFG-50



**PFG-120 thru
PFG-200**



**PFG-60 thru
PFG-95**



Model number	ØA	ØB	ØC	ØD	E	F	G	H	ØJ
PFG-5A-*	.20 (5)	.16 (4)	.06 (1.4)	.30 (7.5)	.26 (6.5)	.03 (.8)	.16 (4)	.08 (2)	.24 (6)
PFG-6A-*	.24 (6)	.16 (4)	.08 (2)	.30 (7.5)	.26 (6.5)	.03 (.8)	.16 (4)	.08 (2)	.24 (6)
PFG-8A-*	.31 (8)	.16 (4)	.08 (2)	.31 (8)	.28 (7)	.05 (1.2)	.16 (4)	.08 (2)	.24 (6)
PFG-10A-*	.39 (10)	.16 (4)	.08 (2)	.33 (8.5)	.30 (7.5)	.06 (1.5)	.16 (4)	.08 (2)	.24 (6)
PFG-15-*	.59 (15)	—	.31 (7.8)	.47 (12)	.31 (8)	.07 (1.9)	—	—	—
PFG-15A-*	.59 (15)	.16 (4)	.08 (2)	.35 (9)	.31 (8)	.08 (2)	.16 (4)	.08 (2)	.24 (6)
PFG-20-*	.79 (20)	.18 (4.6)	.43 (11)	.59 (15)	.39 (10)	.09 (2.3)	—	.18 (4.5)	—
PFG-20B-*	.79 (20)	.24 (6)	.43 (11)	.59 (15)	.49 (12.5)	.09 (2.3)	—	.28 (7)	—
PFG-30-*	1.18 (30)	.24 (6)	.43 (11)	.55 (14)	.47 (12)	.08 (2)	—	.28 (7)	—
PFG-40-*	1.57 (40)	.24 (6)	.43 (11)	.94 (24)	.55 (14)	.16 (4)	—	.28 (7)	—
PFG-50-*	1.97 (50)	.31 (8)	.79 (20)	1.06 (27)	.59 (15)	.14 (3.5)	—	.28 (7)	—
PFG-60-*	2.36 (60)	M10x1.25	—	.79 (12.5)	.73 (18.5)	.20 (5)	—	.10 (2.5)	—
PFG-80-*	3.15 (80)	M10x1.25	—	.79 (12.5)	.81 (20.5)	.24 (6)	—	.10 (2.5)	—
PFG-95-*	3.74 (95)	M10x1.25	—	.79 (12.5)	.83 (21)	.24 (6)	—	.10 (2.5)	—
PFG-120-*	4.72 (120)	.55 (14)	.55 (14)	.79 (20)	1.00 (25.5)	.24 (6)	4xØ8.7xØ40	.059 (1.5)	—
PFG-150-*	5.91 (150)	.51 (13)	.55 (14)	.79 (20)	1.28 (32.5)	.35 (9)	4xØ8.7xØ40	.059 (1.5)	—
PFG-200-*	7.87 (200)	.51 (13)	.47 (12)	.79 (20)	1.48 (37.5)	.51 (13)	4xØ8.7xØ40	.059 (1.5)	—

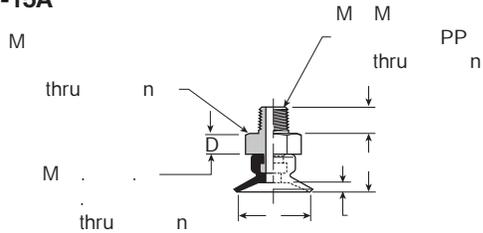
Inches (mm)
* Cup material

C
Vacuum Cups
Vacuum Products
PFG Series
PBG Series
PSV-CFS Series
PJG Series
PCG Series
PUGB Series

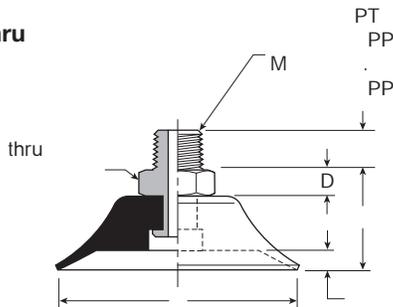


Dimensions

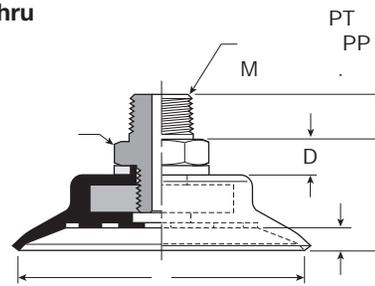
**PFTM-5A thru
PFTM-15A**



**PFTM-20B thru
PFTM-50**



**PFTM-60 thru
PFTM-95**



Model number	ØA	B	C (M3)	C (M5)	C (N1 / G1)	C (M10 / G2)	C (N2)	D	E
PFTM-5A-*†	.20 (5)	.39 (10)	—	.18 (4.5)	.31 (8)	—	—	See Dwg.	.31 (8)
PFTM-6A-*†	.24 (6)	.39 (10)	—	.18 (4.5)	.31 (8)	—	—	See Dwg.	.31 (8)
PFTM-8A-*†	.31 (8)	.41 (10.5)	—	.18 (4.5)	.31 (8)	—	—	See Dwg.	.05 (1.2)
PFTM-10A-*†	.39 (10)	.43 (11)	—	.18 (4.5)	.31 (8)	—	—	See Dwg.	.06 (1.5)
PFTM-15A-*†	.59 (15)	.45 (11.5)	—	.18 (4.5)	.31 (8)	—	—	See Dwg.	.08 (2)
PFTM-20B-*†	.79 (20)	.69 (17.5)	—	—	.31 (8)	.39 (10)	—	.20 (5)	.10 (2.5)
PFTM-30-*†	1.18 (30)	.67 (17)	—	—	.31 (8)	.39 (10)	—	.20 (5)	.08 (2)
PFTM-40-*†	1.57 (40)	.75 (19)	—	—	.31 (8)	.39 (10)	—	.20 (5)	.14 (3.5)
PFTM-50-*†	1.97 (50)	.79 (20)	—	—	.31 (8)	.39 (10)	—	.20 (5)	.16 (4)
PFTM-60-*†	2.36 (60)	.90 (23)	—	—	—	.39 (10)	.59 (15)	.28 (7)	.20 (5)
PFTM-80-*†	3.15 (80)	.98 (25)	—	—	—	.39 (10)	.59 (15)	.28 (7)	.24 (6)
PFTM-95-*†	3.74 (95)	1.00 (25.5)	—	—	—	.39 (10)	.59 (15)	.28 (7)	.24 (6)

Inches (mm)
* Cup material
† Thread size

C
Vacuum Cups
Vacuum Products

PFG
Series

PBG
Series

P5V-CFS
Series

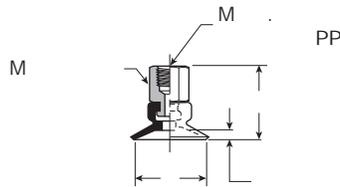
PJG
Series

PCG
Series

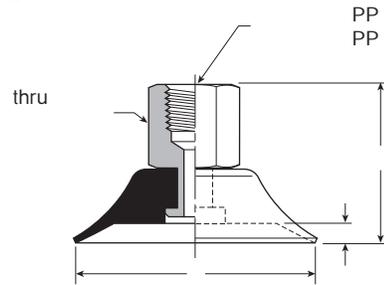
PUGB
Series

Dimensions

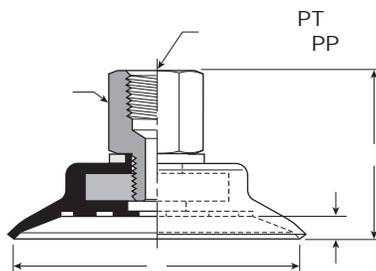
**PFTF-5A thru
PFTF-15A**



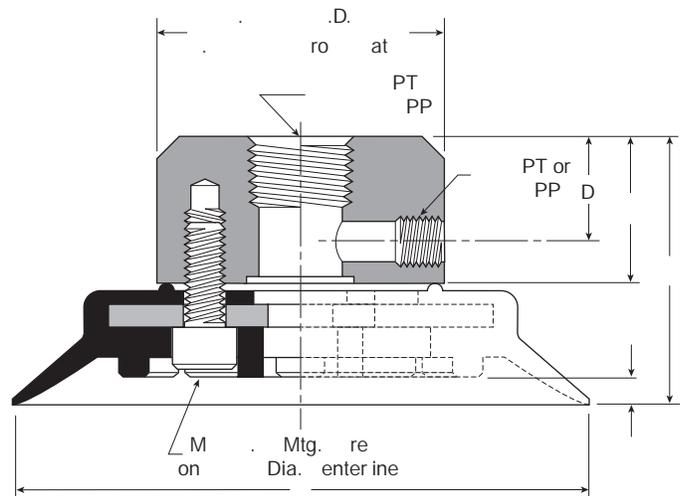
**PFTF-20B thru
PFTF-50**



**PFTF-60 thru
PFTF-95**



**PFTF-120 thru
PFTF-200**



Model number	ØA	B	B (M5)	C	D	E
PFTF-5A-*†	.20 (5)	.57 (14.5)	.81 (20.5)	—	—	.03 (.8)
PFTF-6A-*†	.24 (6)	.57 (14.5)	.81 (20.5)	—	—	.03 (.8)
PFTF-8A-*†	.31 (8)	.59 (15)	.83 (21)	—	—	.05 (1.2)
PFTF-10A-*†	.39 (10)	.57 (14.5)	.81 (20.5)	—	—	.06 (1.5)
PFTF-15A-*†	.59 (15)	.63 (16)	.87 (22)	—	—	.08 (2)
PFTF-20B-*†	.79 (20)	1.04 (26.5)	—	—	—	.10 (2.5)
PFTF-30-*†	1.18 (30)	1.02 (26)	—	—	—	.08 (2)
PFTF-40-*†	1.57 (40)	1.10 (28)	—	—	—	.16 (4)
PFTF-50-*†	1.97 (50)	1.14 (29)	—	—	—	.16 (4)
PFTF-60-*†	2.36 (60)	1.40 (35.5)	—	—	—	.20 (5)
PFTF-80-*†	3.15 (80)	1.48 (37.5)	—	—	—	.24 (6)
PFTF-95-*†	3.74 (95)	1.50 (38)	—	—	—	.24 (6)
PFTF-120-*†	4.72 (120)	1.83 (46.5)	—	.94 (24)	.51 (13)	.24 (6)
PFTF-150-*†	5.91 (150)	2.11 (53.5)	—	.94 (24)	.51 (13)	.35 (9)
PFTF-200-*†	7.87 (200)	2.30 (58.5)	—	.94 (24)	.51 (13)	.51 (13)

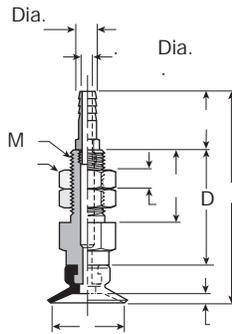
Inches (mm)
* Cup material
† Thread size

C
Vacuum Cups
Vacuum Products
Series
PFG
Series
PBG
Series
P5V-CFS
Series
PJG
Series
PCG
Series
PUGB
Series

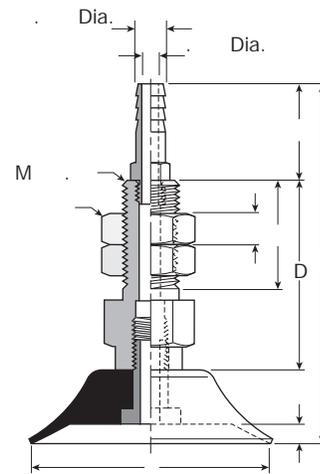


Dimensions

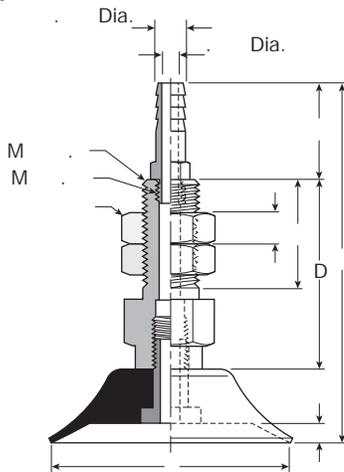
**PFTK-5A thru
PFTK-10A**



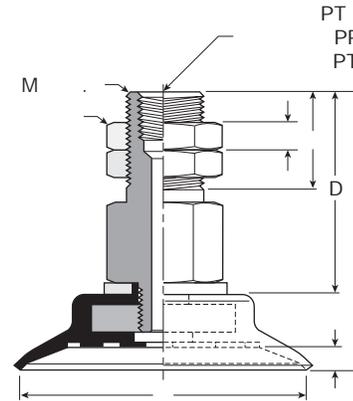
**PFTK-15 thru
PFTK-20**



**PFTK-30 thru
PFTK-50**



**PFTK-60 thru
PFTK-95**



Model number	ØA	B	C	D	E	F	G	Wt oz. (g)
PFTK-5A-*	.20 (5)	1.20 (30.5)	.39 (10)	.55 (14)	.03 (.8)	.61 (15.5)	.12 (3)	.39 (11)
PFTK-6A-*	.24 (6)	1.20 (30.5)	.39 (10)	.55 (14)	.03 (.8)	.61 (15.5)	.12 (3)	.39 (11)
PFTK-8A-*	.31 (8)	1.22 (31)	.39 (10)	.55 (14)	.05 (1.2)	.61 (15.5)	.12 (3)	.39 (11)
PFTK-10A-*	.39 (10)	1.81 (46)	.63 (16)	.88 (22.5)	.06 (1.5)	.61 (15.5)	.12 (3)	.53 (15)
PFTK-15-*	.59 (15)	1.81 (46)	.63 (16)	.86 (22)	.07 (1.9)	.59 (15)	.12 (3)	.71 (20)
PFTK-20-*	.79 (20)	1.89 (48)	.63 (16)	.86 (22)	.09 (2.3)	.59 (15)	.20 (5)	.71 (20)
PFTK-30-*	1.18 (30)	2.36 (60)	.63 (16)	1.26 (32)	.08 (2)	.71 (20)	.20 (5)	1.41 (40)
PFTK-40-*	1.57 (40)	2.44 (62)	.63 (16)	1.26 (32)	.14 (3.5)	.71 (20)	.20 (5)	1.41 (40)
PFTK-50-*	1.97 (50)	2.48 (63)	.63 (16)	1.26 (32)	.16 (4)	.71 (20)	.20 (5)	1.77 (50)
PFTK-60-*,†	2.36 (60)	2.30 (58.5)	—	1.67 (42.5)	.20 (5)	.79 (20)	.24 (6)	4.59 (130)
PFTK-80-*,†	3.15 (80)	2.38 (60.5)	—	1.67 (42.5)	.24 (6)	.79 (20)	.24 (6)	6.00 (170)
PFTK-95-*,†	3.74 (95)	2.40 (61)	—	1.67 (42.5)	.24 (6)	.79 (20)	.24 (6)	7.77 (220)

Inches (mm)
* Cup material
† Vacuum port

C
Vacuum Cups
Vacuum Products

PFG
Series

PBG
Series

P5V-CFS
Series

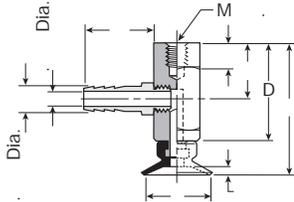
PJG
Series

PCG
Series

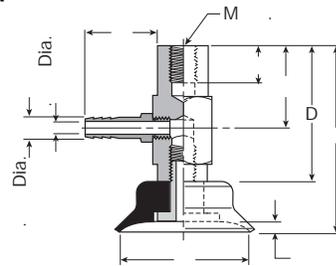
PUGB
Series

Dimensions

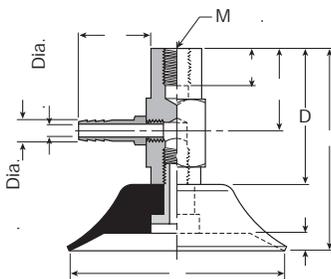
**PFYK-5A thru
 PFYK-10A**



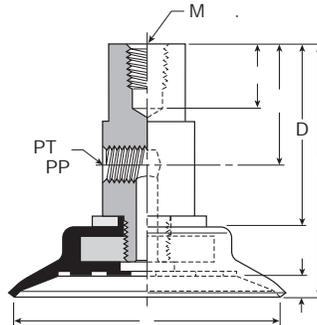
**PFYK-15 thru
 PFYK-20**



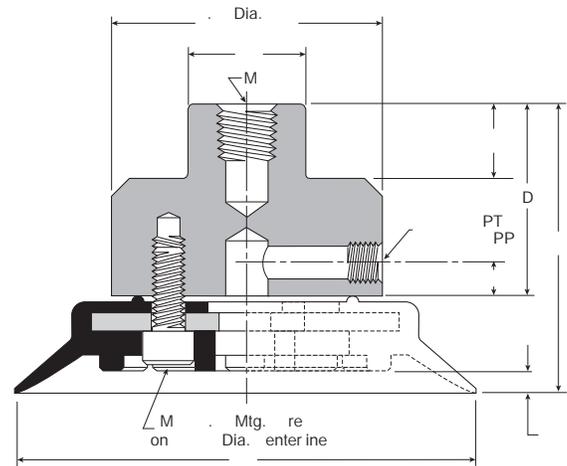
**PFYK-30 thru
 PFYK-50**



**PFYK-60 thru
 PFYK-95**



**PFYK-120 thru
 PFYK-200**



Model number	ØA	B	C	D	E	F	G	Wt oz (g)
PFYK-5A-*	.20 (5)	1.14 (29)	.51 (13)	.89 (22.5)	.03 (.8)	.24 (6)	.63 (16)	.56 (16)
PFYK-6A-*	.24 (6)	1.14 (29)	.51 (13)	.89 (22.5)	.03 (.8)	.24 (6)	.63 (16)	.56 (16)
PFYK-8A-*	.31 (8)	1.16 (29.5)	.51 (13)	.89 (22.5)	.05 (1.2)	.24 (6)	.63 (16)	.56 (16)
PFYK-10A-*	.39 (10)	1.18 (30)	.51 (13)	.89 (22.5)	.06 (1.5)	.24 (6)	.63 (16)	.56 (16)
PFYK-15-*	.59 (15)	1.18 (30)	.55 (14)	.87 (22)	.07 (1.9)	.24 (6)	.63 (16)	.71 (20)
PFYK-20-*	.79 (20)	1.26 (32)	.55 (14)	.87 (22)	.09 (2.3)	.24 (6)	.63 (16)	.71 (20)
PFYK-30-*	1.18 (30)	1.73 (44)	.79 (20)	1.26 (32)	.08 (2)	.31 (8)	.63 (16)	1.41 (40)
PFYK-40-*	1.57 (40)	1.81 (46)	.79 (20)	1.26 (32)	.14 (3.5)	.31 (8)	.63 (16)	1.77 (50)
PFYK-50-*	1.97 (50)	1.85 (47)	.79 (20)	1.26 (32)	.16 (4)	.31 (8)	.63 (16)	1.94 (55)
PFYK-60-*-†	2.36 (60)	2.30 (58.5)	1.10 (28)	1.57 (40)	.20 (5)	.43 (11)	—	4.24 (120)
PFYK-80-*-†	3.15 (80)	2.38 (60.5)	1.10 (28)	1.57 (40)	.24 (6)	.43 (11)	—	5.65 (160)
PFYK-95-*-†	3.74 (95)	2.40 (61)	1.10 (28)	1.57 (40)	.24 (6)	.43 (11)	—	7.42 (210)
PFYK-120-*-†	4.72 (120)	2.94 (75.5)	.47 (12)	1.97 (50)	.24 (6)	.79 (20)	1.18 Dia. (30)	22.6 (640)
PFYK-150-*-†	5.91 (150)	3.25 (82.5)	.47 (12)	1.97 (50)	.35 (9)	.79 (20)	1.18 Dia. (30)	32.1 (910)
PFYK-200-*-†	7.87 (200)	3.44 (87.5)	.47 (12)	1.97 (50)	.51 (13)	.79 (20)	1.18 Dia. (30)	42.4 (1200)

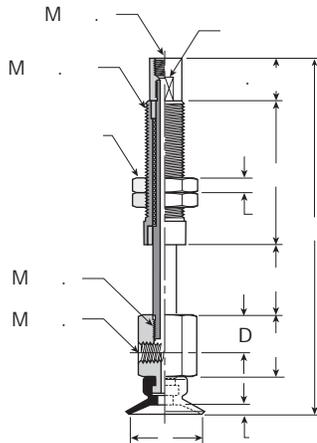
Inches (mm)
 * Cup material
 † Vacuum port

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 PSV-CFS Series
 PJG Series
 PCG Series
 PUGB Series

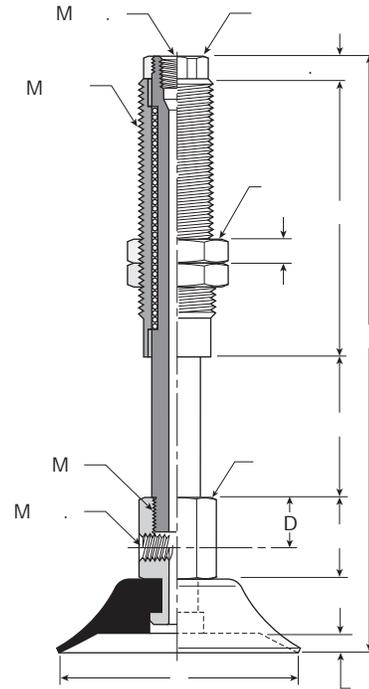


Dimensions

**PFTYS5A thru
PFTYS15A**



**PFTYS20B thru
PFTYS50**



Model number	ØA	B	C	D	E	F	G	H	Wt oz (g)
PFTYS5A10**	.20 (5)	2.42 (61.5)	.51 (13)	.31 (8)	.03 (.8)	.39 (10)	.12 (3)	.91 (23)	.65 (18.5)
PFTYS5A15**	.20 (5)	2.91 (74)	.51 (13)	.31 (8)	.03 (.8)	.59 (15)	.12 (3)	1.20 (30.5)	.74 (21)
PFTYS6A10**	.24 (6)	2.42 (61.5)	.51 (13)	.31 (8)	.03 (.8)	.39 (10)	.12 (3)	.91 (23)	.65 (18.5)
PFTYS6A15**	.24 (6)	2.91 (74)	.51 (13)	.31 (8)	.03 (.8)	.59 (15)	.12 (3)	1.20 (30.5)	.74 (21)
PFTYS8A10**	.31 (8)	2.44 (62)	.51 (13)	.31 (8)	.05 (1.2)	.39 (10)	.12 (3)	.91 (23)	.65 (18.5)
PFTYS8A15**	.31 (8)	2.93 (74.5)	.51 (13)	.31 (8)	.05 (1.2)	.59 (15)	.12 (3)	1.20 (30.5)	.74 (21)
PFTYS10A10**	.39 (10)	2.48 (63)	.51 (13)	.31 (8)	.06 (1.5)	.39 (10)	.12 (3)	.91 (23)	.65 (18.5)
PFTYS10A15**	.39 (10)	2.95 (75)	.51 (13)	.31 (8)	.06 (1.5)	.59 (15)	.12 (3)	1.20 (30.5)	.74 (21)
PFTYS15A10**	.59 (15)	2.50 (63.5)	.51 (13)	.31 (8)	.08 (2)	.39 (10)	.12 (3)	.91 (23)	.65 (18.5)
PFTYS15A15**	.59 (15)	2.97 (75.5)	.51 (13)	.31 (8)	.08 (2)	.59 (15)	.12 (3)	1.20 (30.5)	.74 (21)
PFTYS20B15**	.79 (20)	3.37 (85.5)	.67 (17)	.39 (10)	.09 (2.3)	.59 (15)	.20 (5)	1.42 (36)	2.5 (71)
PFTYS20B30**	.79 (20)	4.82 (122.5)	.67 (17)	.39 (10)	.09 (2.3)	1.18 (30)	.20 (5)	2.28 (58)	3.4 (96)
PFTYS3015**	1.18 (30)	3.35 (85)	.67 (17)	.39 (10)	.08 (2)	.59 (15)	.20 (5)	1.42 (36)	2.5 (72)
PFTYS3030**	1.18 (30)	4.80 (122)	.67 (17)	.39 (10)	.08 (2)	1.18 (30)	.20 (5)	2.28 (58)	3.5 (97)
PFTYS4015**	1.57 (40)	3.43 (87)	.67 (17)	.39 (10)	.14 (3.5)	.59 (15)	.20 (5)	1.42 (36)	2.7 (76)
PFTYS4030**	1.57 (40)	4.88 (124)	.67 (17)	.39 (10)	.14 (3.5)	1.18 (30)	.20 (5)	2.28 (58)	3.6 (101)
PFTYS5015**	1.97 (50)	3.46 (88)	.67 (17)	.39 (10)	.16 (4)	.59 (15)	.20 (5)	1.42 (36)	3.0 (85)
PFTYS5030**	1.97 (50)	4.92 (125)	.67 (17)	.39 (10)	.16 (4)	1.18 (30)	.20 (5)	2.28 (58)	3.9 (110)

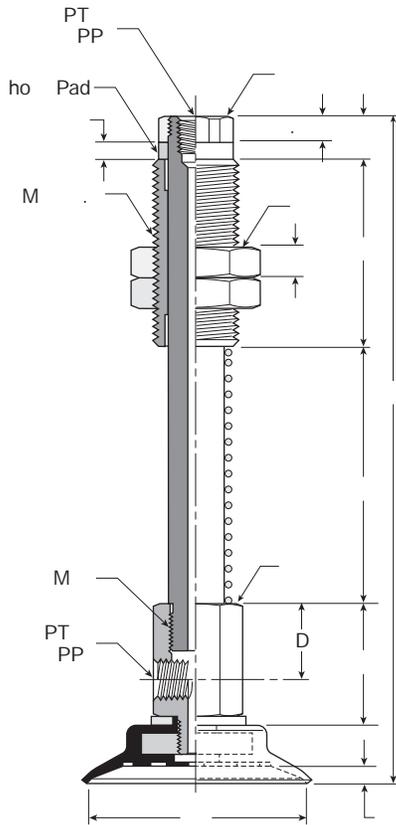
Inches (mm)
* Cup material
† Vacuum port

C
Vacuum Cups
Vacuum Products
PFG Series
PBG Series
P5V-CFS Series
PJG Series
PCG Series
PUGB Series

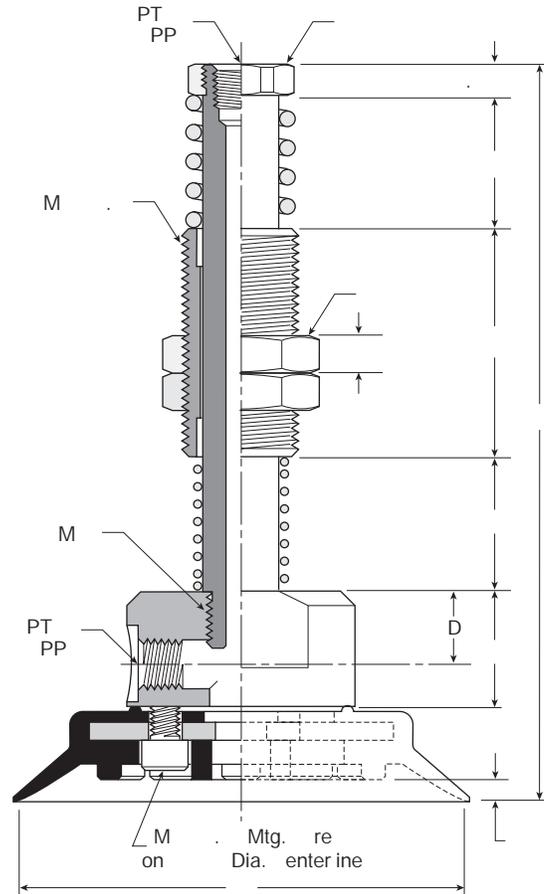


Dimensions

**PFTYS60 thru
PFTYS95**



**PFTYS120 thru
PFTYS200**



C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 PSV-CFS Series
 PJG Series
 PCG Series
 PUGB Series

Model number	ØA	B	C	D	E	F	G	H	J	Wt oz (g)
PFTYS6030**	2.36 (60)	6.02 (153)	1.28 (32.5)	.78 (20)	.20 (5)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	9.7 (282)
PFTYS6050**	2.36 (60)	7.01 (178)	1.28 (32.5)	.78 (20)	.20 (5)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	11.2 (316)
PFTYS8030**	3.15 (80)	6.10 (155)	1.28 (32.5)	.78 (20)	.24 (6)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	11 (310)
PFTYS8050**	3.15 (80)	7.09 (180)	1.28 (32.5)	.78 (20)	.24 (6)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	12.2 (344)
PFTYS9530**	3.74 (95)	6.12 (156)	1.28 (32.5)	.78 (20)	.24 (6)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	12.4 (350)
PFTYS9550**	3.74 (95)	7.11 (181)	1.28 (32.5)	.78 (20)	.24 (6)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	13.6 (384)
PFTYS12020**	4.72 (120)	7.56 (192)	1.28 (32.5)	.71 (18)	.24 (6)	1.38 (35)	.39 (10)	2.36 (60)	1.38 (35)	41.2 (1165)
PFTYS12070**	4.72 (120)	10.12 (257)	1.28 (32.5)	.71 (18)	.24 (6)	3.94 (100)	.39 (10)	2.36 (60)	1.38 (35)	44 (1246)
PFTYS15020**	5.91 (150)	7.83 (199)	1.28 (32.5)	.71 (18)	.35 (9)	1.38 (35)	.39 (10)	2.36 (60)	1.38 (35)	49 (1389)
PFTYS15070**	5.91 (150)	10.39 (264)	1.28 (32.5)	.71 (18)	.35 (9)	3.94 (100)	.39 (10)	2.36 (60)	1.38 (35)	52 (1471)
PFTYS20020**	7.87 (200)	8.03 (204)	1.28 (32.5)	.71 (18)	.51 (13)	1.38 (35)	.39 (10)	2.36 (60)	1.38 (35)	62 (1755)
PFTYS20070**	7.87 (200)	10.59 (269)	1.28 (32.5)	.71 (18)	.51 (13)	3.94 (100)	.39 (10)	2.36 (60)	1.38 (35)	64.9 (1836)

Inches (mm)
 * Cup material
 † Vacuum port



PBG Bellows Vacuum Cup Series

These cups are for curved, corrugated, lightly textured surfaces and flexible product. Under vacuum, the bellow cup will collapse on contact and lift the product for a short distance. This inherent performance facilitates lifting and destack operations by breaking the vacuum between stacked product. The bellow style adds level compensation for applications that have inconsistent stack heights or uneven surfaces. The inclusive 30-degree rotation of the bellow helps maintain the vacuum seal when lifting sheet products that flex. Because of its shape however the bellows suction cup is not very well suitable for applications involving lifting vertical surfaces.



Features

- Bellows design for level compensation within restricted clearances
- Sheet separation for flexible and stacked products
- Soft seal lip for flexible products
- 10mm to 150mm diameters

Styles

- PBTM series male thread connector
- PBTF series female thread connector
- PBTk series barbed bulkhead
- PBYK series 90° barbed adapter
- PBTYS series bulkhead level compensator

Operating information			
Cup material	Nitrile	Silicon	Urethane
Material code	NBR	SI	U
Operating temperature	-20°C to 120°C (-4°F to 248°F)	-60° to 250°C (-76°F to 482°F)	-20° to 75°C (-4°F to 167°F)
Color	Black	White	Blue
Hardness, shore A (°Sh)	55 ±5	55 ±5	55 ±5
* 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. PBTM-20B-NBR-G1 becomes PBTM-20B-U-G1. Inquire with factory for availability.

Application guide

Bellows

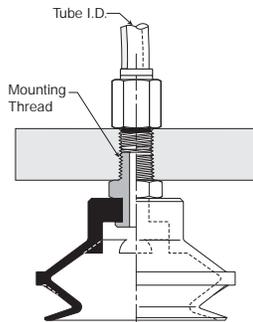
Flat surface, thin section	Flat surface, any section	Slightly bowed surface, thin section	Slightly bowed surface, any section	Bowed surface, thin section	Bowed surface, any section	Soft porous material, any section	Differences in heights and levels	Corrugated sheet handling	Not for vertical lift	Metal sheet handling

PBTM Series Male Thread Connector

Simple male connection for low profile positions secured to a plate or bracket. NPT, G, metric threads.
 Fitting material: aluminum.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
10	M5	PBTM-10A-NBR-M5	PBG-10A-NBR	PBTM-10A-SI-M5	PBG-10A-SI	FTM-5A-M5H
10	1/8 BSPP	PBTM-10A-NBR-G1	PBG-10A-NBR	PBTM-10A-SI-G1	PBG-10A-SI	FTM-5A-G1
15	M5	PBTM-15A-NBR-M5	PBG-15A-NBR	PBTM-15A-SI-M5	PBG-15A-SI	FTM-5A-M5H
15	1/8 BSPP	PBTM-15A-NBR-G1	PBG-15A-NBR	PBTM-15A-SI-G1	PBG-15A-SI	FTM-5A-G1
20	1/8 BSPP	PBTM-20B-NBR-G1	PBG-20B-NBR	PBTM-20B-SI-G1	PBG-20B-SI	FTM-20B-G1H
20	1/4 BSPP	PBTM-20B-NBR-G2	PBG-20B-NBR	PBTM-20B-SI-G2	PBG-20B-SI	FTM-20B-G2
20	M10	PBTM-20B-NBR-M10	PBG-20B-NBR	PBTM-20B-SI-M10	PBG-20B-SI	FTM-20B-M10
20	1/8 NPT	PBTM-20B-NBR-N1	PBG-20B-NBR	PBTM-20B-SI-N1	PBG-20B-SI	FTM-20B-N1
30	1/8 BSPP	PBTM-30-NBR-G1	PBG-30-NBR	PBTM-30-SI-G1	PBG-30-SI	FTM-20B-G1H
30	1/4 BSPP	PBTM-30-NBR-G2	PBG-30-NBR	PBTM-30-SI-G2	PBG-30-SI	FTM-20B-G2
30	M10	PBTM-30-NBR-M10	PBG-30-NBR	PBTM-30-SI-M10	PBG-30-SI	FTM-20B-M10
30	1/8 NPT	PBTM-30-NBR-N1	PBG-30-NBR	PBTM-30-SI-N1	PBG-30-SI	FTM-20B-N1
40	1/8 BSPP	PBTM-40-NBR-G1	PBG-40-NBR	PBTM-40-SI-G1	PBG-40-SI	FTM-20B-G1H
40	1/4 BSPP	PBTM-40-NBR-G2	PBG-40-NBR	PBTM-40-SI-G2	PBG-40-SI	FTM-20B-G2
40	M10	PBTM-40-NBR-M10	PBG-40-NBR	PBTM-40-SI-M10	PBG-40-SI	FTM-20B-M10
40	1/8 NPT	PBTM-40-NBR-N1	PBG-40-NBR	PBTM-40-SI-N1	PBG-40-SI	FTM-20B-N1
50	1/8 BSPP	PBTM-50-NBR-G1	PBG-50-NBR	PBTM-50-SI-G1	PBG-50-SI	FTM-50-G1H
50	1/4 BSPP	PBTM-50-NBR-G2	PBG-50-NBR	PBTM-50-SI-G2	PBG-50-SI	FTM-50-G2
50	1/8 NPT	PBTM-50-NBR-N1	PBG-50-NBR	PBTM-50-SI-N1	PBG-50-SI	FTM-50-N1
75	1/4 BSPP	PBTM-75-NBR-G2	PBG-75-NBR	PBTM-75-SI-G2	PBG-75-SI	FTM-60-G2
75	M10	PBTM-75-NBR-M10	PBG-75-NBR	PBTM-75-SI-M10	PBG-75-SI	FTM-60-M10
75	1/4 NPT	PBTM-75-NBR-N2	PBG-75-NBR	PBTM-75-SI-N2	PBG-75-SI	FTM-60-N2

Most popular.



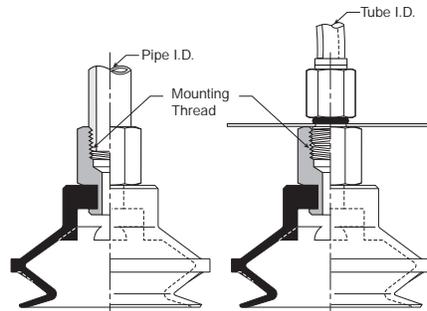
PBTF Series Female Thread Connector

Simple female connection for low profile positions secured to a plate or bracket. NPSF, G threads.
 Fitting material: aluminum.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
10	1/8 BSPP	PBTF-10A-NBR-G1	PBG-10A-NBR	PBTF-10A-SI-G1	PBG-10A-SI	FTF-5A-G1
10	M5	PBTF-10A-NBR-M5	PBG-10A-NBR	PBTF-10A-SI-M5	PBG-10A-SI	FTF-5A-M5
15	1/8 BSPP	PBTF-15A-NBR-G1	PBG-15A-NBR	PBTF-15A-SI-G1	PBG-15A-SI	FTF-5A-G1
15	M5	PBTF-15A-NBR-M5	PBG-15A-NBR	PBTF-15A-SI-M5	PBG-15A-SI	FTF-5A-M5
20	1/8 BSPP	PBTF-20B-NBR-G1	PBG-20B-NBR	PBTF-20B-SI-G1	PBG-20B-SI	FTF-20B-G1
30	1/8 BSPP	PBTF-30-NBR-G1	PBG-30-NBR	PBTF-30-SI-G1	PBG-30-SI	FTF-20B-G1
30	1/4 BSPP	PBTF-30-NBR-G2	PBG-30-NBR	PBTF-30-SI-G2	PBG-30-SI	FTF-20B-G2
40	1/8 BSPP	PBTF-40-NBR-G1	PBG-40-NBR	PBTF-40-SI-G1	PBG-40-SI	FTF-20B-G1
40	1/4 BSPP	PBTF-40-NBR-G2	PBG-40-NBR	PBTF-40-SI-G2	PBG-40-SI	FTF-20B-G2
50	1/8 BSPP	PBTF-50-NBR-G1	PBG-50-NBR	PBTF-50-SI-G1	PBG-50-SI	FTF-50-G1
50	1/4 BSPP	PBTF-50-NBR-G2	PBG-50-NBR	PBTF-50-SI-G2	PBG-50-SI	FTF-50-G2
75	1/4 BSPP	PBTF-75-NBR-G2	PBG-75-NBR	PBTF-75-SI-G2	PBG-75-SI	FTF-60-G2
75	1/4 NPT	PBTF-75-NBR-N2	PBG-75-NBR	PBTF-75-SI-N2	PBG-75-SI	FTF-60-N2
110	1/2 BSPP	PBTF-110-NBR-G4	PBG-110-NBR	PBTF-110-SI-G4	PBG-110-SI	FTF-120-G4
110	1/2 NPT	PBTF-110-NBR-N4	PBG-110-NBR	PBTF-110-SI-N4	PBG-110-SI	FTF-120-N4
150	1/2 BSPP	PBTF-150-NBR-G4	PBG-150-NBR	PBTF-150-SI-G4	PBG-150-SI	FTF-120-G4
150	1/2 NPT	PBTF-150-NBR-N4	PBG-150-NBR	PBTF-150-SI-N4	PBG-150-SI	FTF-120-N4

 Most popular.

Vacuum Cups Vacuum Products	C
	PFG Series
	PBG Series
	P5V-CFS Series
	PJG Series
	PCG Series
	PUGB Series

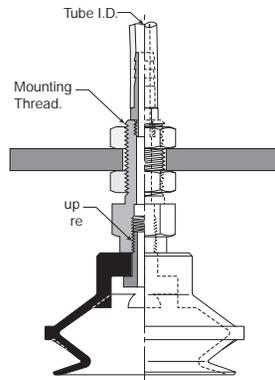


PBTK Series Barbed Bulkhead

Top stem connectors secured with jam nuts and allow tubing connections at the top side. Fitting material: nickel plated brass.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
10	Barb	PBTK-10A-NBR	PBG-10A-NBR	PBTK-10A-SI	PBG-10A-SI	FTK-5A
15	Barb	PBTK-15A-NBR	PBG-15A-NBR	PBTK-15A-SI	PBG-15-SI	FTK-5A
20	Barb	PBTK-20-NBR	PBG-20-NBR	PBTK-20-SI	PBG-20-SI	FTK-20
30	Barb	PBTK-30-NBR	PBG-30-NBR	PBTK-30-SI	PBG-30-SI	FTK-25
40	Barb	PBTK-40-NBR	PBG-40-NBR	PBTK-40-SI	PBG-40-SI	FTK-25
50	Barb	PBTK-50-NBR	PBG-50-NBR	PBTK-50-SI	PBG-50-SI	FTK-50
75	1/8 BSPP	PBTK-75-NBR-G1	PBG-75-NBR	PBTK-75-SI-G1	PBG-75-SI	FTK-60-G1
75	1/8 NPT	PBTK-75-NBR-N1	PBG-75-NBR	PBTK-75-SI-N1	PBG-75-SI	FTK-60-N1

Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 PSV-CFS Series
 PJG Series
 PCG Series
 PUGB Series



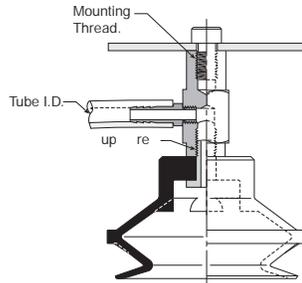
PBYK Series 90° Barbed Adapter

Side stem connectors allow you to secure the stem with a bolt through a plate or "L" bracket to allow the tube connection from the side port. Fitting material: nickel plated brass.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
10	Barb	PBYK-10A-NBR	PBG-10A-NBR	PBYK-10A-SI	PBG-10A-SI	FYK-5A
15	Barb	PBYK-15A-NBR	PBG-15A-NBR	PBYK-15A-SI	PBG-15A-SI	FYK-15
20	Barb	PBYK-20-NBR	PBG-20-NBR	PBYK-20-SI	PBG-20-SI	FYK-20
30	Barb	PBYK-30-NBR	PBG-30-NBR	PBYK-30-SI	PBG-30-SI	FYK-25
40	Barb	PBYK-40-NBR	PBG-40-NBR	PBYK-40-SI	PBG-40-SI	FYK-25
50	Barb	PBYK-50-NBR	PBG-50-NBR	PBYK-50-SI	PBG-50-SI	FYK-50
75	1/8 BSPP	PBYK-75-NBR-G1	PBG-75-NBR	PBYK-75-SI-G1	PBG-75-SI	FYK-60-G1
75	1/8 NPT	PBYK-75-NBR-N1	PBG-75-NBR	PBYK-75-SI-N1	PBG-75-SI	FYK-60-N1
110	1/8 BSPP	PBYK-110-NBR-G1	PBG-110-NBR	PBYK-110-SI-G1	PBG-110-SI	FYK-120-G1
110	1/8 NPT	PBYK-110-NBR-N1	PBG-110-NBR	PBYK-110-SI-N1	PBG-110-SI	FYK-120-N1
150	1/8 BSPP	PBYK-150-NBR-G1	PBG-150-NBR	PBYK-150-SI-G1	PBG-150-SI	FYK-120-G1
150	1/8 NPT	PBYK-150-NBR-N1	PBG-150-NBR	PBYK-150-SI-N1	PBG-150-SI	FYK-120-N1

 Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFJ Series
 PBG Series
 P5V-CFS Series
 PJG Series
 PCG Series
 PUGB Series



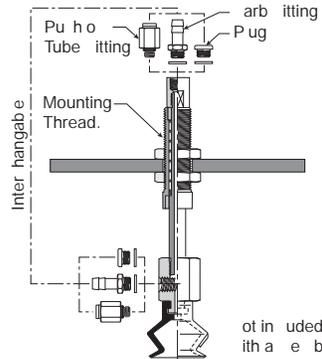
PBTYS Series Bulkhead Level Compensator

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.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage. Shown are interchangeable connectors & plugs for port connections.



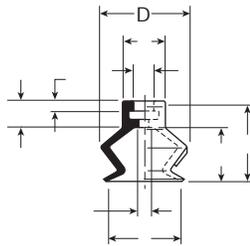
Cup dia. (mm)	Vacuum port	Stroke (mm)	Spring compression Force lbf (N)		Cup material Nitrile assembly (NBR)	Replacement cup Nitrile (NBR)	Cup material Silicon assembly (SI)	Replacement cup Silicon (SI)	Level Compensator P/N
			0%	100%					
10	M5	10	.11 (.49)	.13 (.59)	PBTYS10A10NBRM5	PBG-10A-NBR	PBTYS10A10SIM5	PBG-10A-SI	TYS-5A-10
10	M5	15	.11 (.49)	.13 (.59)	PBTYS10A15NBRM5	PBG-10A-NBR	PBTYS10A15SIM5	PBG-10A-SI	TYS-5A-15
15	M5	10	.11 (.49)	.13 (.59)	PBTYS15A10NBRM5	PBG-15A-NBR	PBTYS15A10SIM5	PBG-15A-SI	TYS-5A-10
15	M5	15	.11 (.49)	.13 (.59)	PBTYS15A15NBRM5	PBG-15A-NBR	PBTYS15A15SIM5	PBG-15A-SI	TYS-5A-15
20	M5	15	.56 (2.5)	.79 (3.4)	PBTYS20B15NBRM5	PBG-20B-NBR	PBTYS20B15SIM5	PBG-20B-SI	TYS-20B-15
20	M5	30	.56 (2.5)	1.2 (4.9)	PBTYS20B30NBRM5	PBG-20B-NBR	PBTYS20B30SIM5	PBG-20B-SI	TYS-20B-30
30	M5	15	.56 (2.5)	.79 (3.4)	PBTYS3015NBRM5	PBG-30-NBR	PBTYS3015SIM5	PBG-30-SI	TYS-20B-15
30	M5	30	.56 (2.5)	1.2 (4.9)	PBTYS3030NBRM5	PBG-30-NBR	PBTYS3030SIM5	PBG-30-SI	TYS-20B-30
40	M5	15	.56 (2.5)	.79 (3.4)	PBTYS4015NBRM5	PBG-40-NBR	PBTYS4015SIM5	PBG-40-SI	TYS-20B-15
40	M5	30	.56 (2.5)	1.2 (4.9)	PBTYS4030NBRM5	PBG-40-NBR	PBTYS4030SIM5	PBG-40-SI	TYS-20B-30
50	M5	15	.56 (2.5)	1.2 (4.9)	PBTYS5015NBRM5	PBG-50-NBR	PBTYS5015SIM5	PBG-50-SI	TYS-50-15
50	M5	30	.67 (2.9)	1.4 (5.9)	PBTYS5030NBRM5	PBG-50-NBR	PBTYS5030SIM5	PBG-50-SI	TYS-50-30
75	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PBTYS7530NBRN1	PBG-75-NBR	PBTYS7530SIN1	PBG-75-SI	TYS-60-30
75	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PBTYS7550NBRN1	PBG-75-NBR	PBTYS7550SIN1	PBG-75-SI	TYS-60-50
110	1/4 NPT	20	3.6 (15.6)	6.8 (29)	PBTYS12020NBRN2	PBG-110-NBR	PBTYS11020SIN2	PBG-110-SI	TYS-120-20
110	1/4 NPT	70	3.4 (14.7)	6.8 (29)	PBTYS12070NBRN2	PBG-110-NBR	PBTYS11070SIN2	PBG-110-SI	TYS-120-70
150	1/4 NPT	20	3.6 (15.6)	6.8 (29)	PBTYS15020NBRN2	PBG-150-NBR	PBTYS15020SIN2	PBG-150-SI	TYS-120-20
150	1/4 NPT	70	3.4 (14.7)	6.8 (29)	PBTYS15070NBRN2	PBG-150-NBR	PBTYS15070SIN2	PBG-150-SI	TYS-120-70

Most popular.

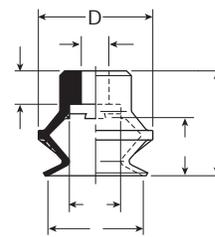


PBG Series Replacement Cup Dimensions

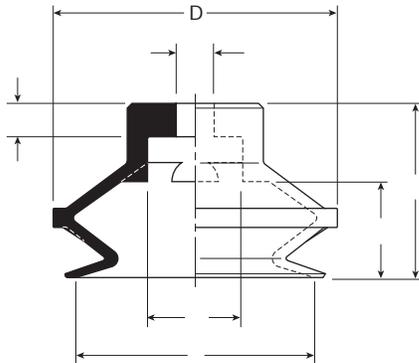
**PBG-10A and
PBG-20B**



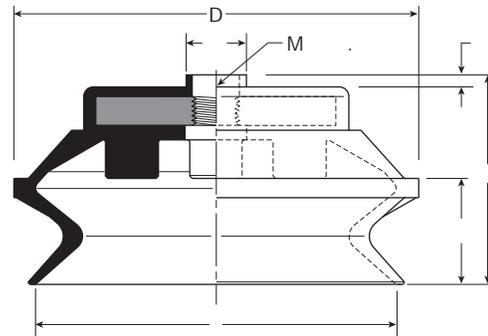
**PBG-20 thru
PBG-40**



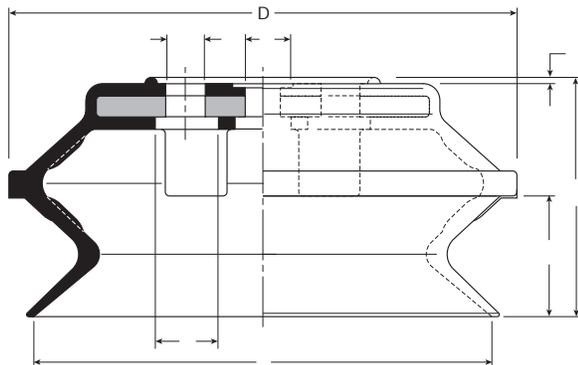
PBG-50



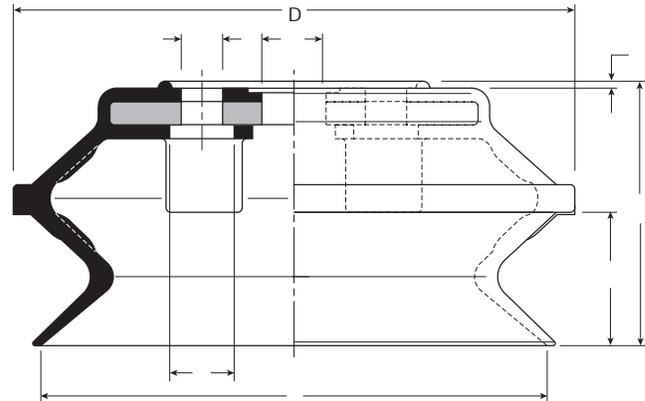
PBG-75



PBG-110



PBG-150



Model number	ØA	ØB	ØC	ØD	E	F	G	H	ØJ
PBG-10A-*	.42 (10.6)	.16 (4)	.08 (2)	.49 (12.4)	.53 (13.5)	.30 (7.5)	.24 (6)	.08 (2)	.24 (6)
PBG-15A-*	.59 (15)	.16 (4)	.16 (4)	.67 (17)	.63 (16)	.39 (10)	.24 (6)	.08 (2)	.24 (6)
PBG-20B-*	.79 (20)	.24 (6)	.43 (10.8)	.94 (24)	.87 (22)	.47 (12)	—	.28 (7)	—
PBG-20-*	.79 (20)	.18 (4.6)	.43 (10.8)	.94 (24)	.77 (19.5)	.47 (12)	—	.18 (4.5)	—
PBG-30-*	1.18 (30)	.23 (5.8)	.43 (10.8)	1.42 (36)	1.20 (30.5)	.67 (17)	—	.28 (7)	—
PBG-40-*	1.57 (40)	.23 (5.8)	.43 (10.8)	1.81 (46)	1.20 (30.5)	.61 (15.5)	—	.28 (7)	—
PBG-50-*	1.97(50)	.31 (7.8)	.78 (19.8)	2.34 (59.5)	1.44 (36.5)	.79 (20)	—	.28 (7)	—
PBG-75-*	2.95 (75)	.49 (12.5)	—	3.31 (84)	1.71 (43.5)	.87 (22)	—	.10 (2.5)	—
PBG-110-*	4.33 (110)	.55 (14)	.55 (14)	4.80 (122)	2.26 (57.5)	1.14 (29)	—	.059 (1.5)	—
PBG-150-*	5.91 (150)	.79 (20)	.55 (14)	6.57 (167)	3.01 (76.5)	1.50 (38)	4xØ9xØ40	.059 (1.5)	—

Inches (mm)
* Cup material

C

Vacuum Cups
Vacuum Products

PFG
Series

PBG
Series

P5V-CFS
Series

PJG
Series

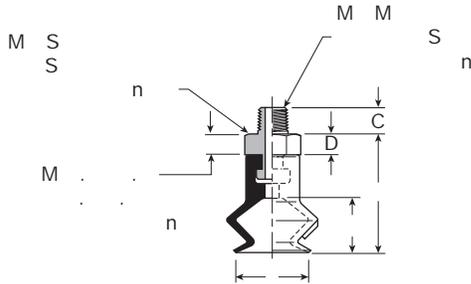
PCG
Series

PUGB
Series

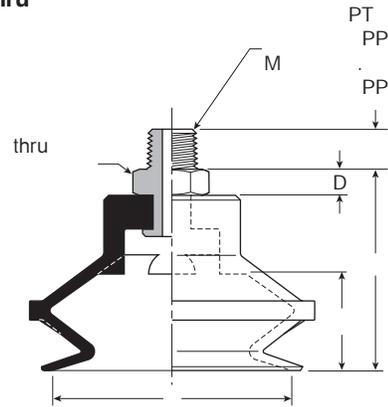


Dimensions

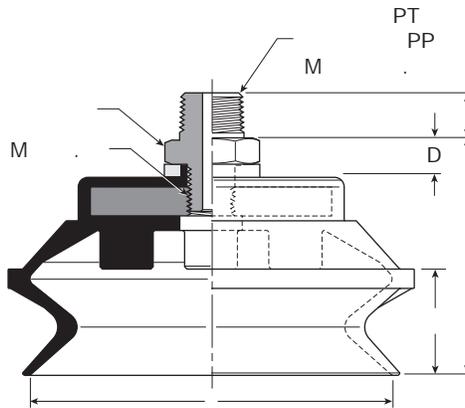
**PBTM-10A thru
PBTM-15**



**PBTM-20B thru
PBTM-50**



PBTM-75



Model number	ØA	B	C (M5)	C (N1 / G1)	C (M10 / G2)	C (N2)	D	E
PBTM-10A-*†	.39 (10)	.67 (17)	.18 (4.5)	.31 (8)	—	—	See Dwg.	.30 (7.5)
PBTM-15A-*†	.59 (15)	.77 (19.5)	.18 (4.5)	.31 (8)	—	—	See Dwg.	.39 (10)
PBTM-20B-*†	.79 (20)	1.06 (27)	—	.31 (8)	.39 (10)	—	.20 (5)	.47 (12)
PBTM-30-*†	1.18 (30)	1.40 (35.5)	—	.31 (8)	.39 (10)	—	.20 (5)	.67 (17)
PBTM-40-*†	1.57 (40)	1.40 (35.5)	—	.31 (8)	.39 (10)	—	.20 (5)	.61 (15.5)
PBTM-50-*†	1.97 (50)	1.63 (41.5)	—	.31 (8)	.39 (10)	—	.20 (5)	.79 (20)
PBTM-75-*†	3.74 (95)	1.99 (50.5)	—	—	.39 (10)	.59 (15)	.28 (7)	.87 (22)

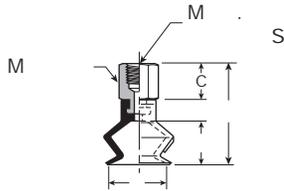
Inches (mm)
* Cup material
† Thread size

C
Vacuum Cups
Vacuum Products

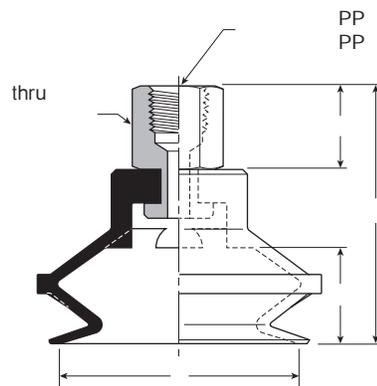
Series
PFG
PBG
PSV-CFS
PIG
PCG
PUGB

Dimensions

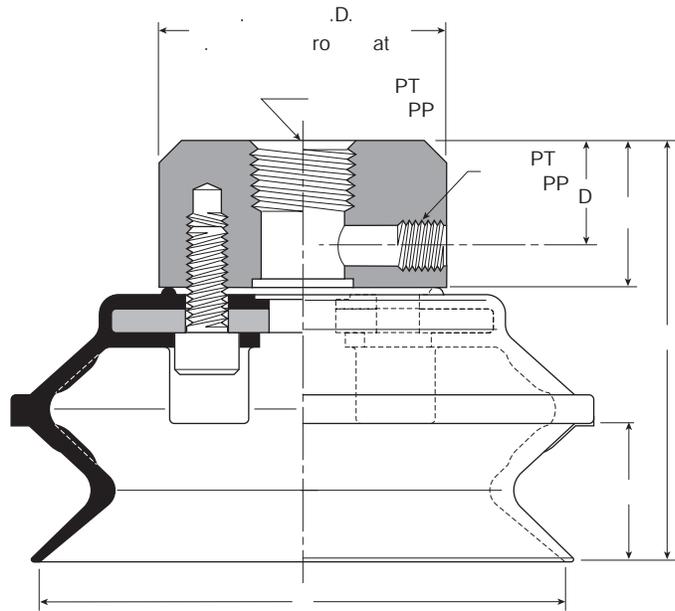
**PBTF-10A thru
 PBTF-15A**



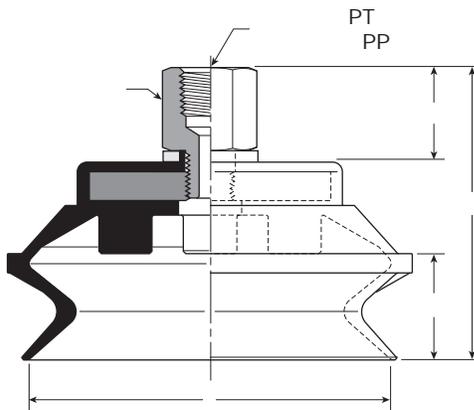
**PBTF-20B thru
 PBTF 50**



**PBTF-110 thru
 PBTF-150**



PBTF-75



Model number	ØA	B	B (M5)	C	C (M5)	D	E
PBTF-10A-*†	.39 (10)	.85 (21.5)	1.08 (27.5)	.31 (8)	.55 (14)	—	.30 (7.5)
PBTF-15A-*†	.59 (15)	.94 (24)	1.18 (30)	.31 (8)	.55 (14)	—	.39 (10)
PBTF-20B-*†	.79 (20)	1.42 (36)	—	.55 (14)	—	—	.47 (12)
PBTF-30-*†	1.18 (30)	1.75 (44.5)	—	.55 (14)	—	—	.70 (17)
PBTF-40-*†	1.57 (40)	1.75 (44.5)	—	.55 (14)	—	—	.61 (15.5)
PBTF-50-*†	1.97 (50)	1.99 (50.5)	—	.55 (14)	—	—	.79 (20)
PBTF-75-*†	3.74 (95)	2.38 (60.5)	—	.77 (19.5)	—	—	.87 (22)
PBTF-110-*†	4.72 (120)	3.07 (78)	—	.94 (24)	—	.51 (13)	1.14 (29)
PBTF-150-*†	5.91 (150)	3.82 (97)	—	.94 (24)	—	.51 (13)	1.50 (38)

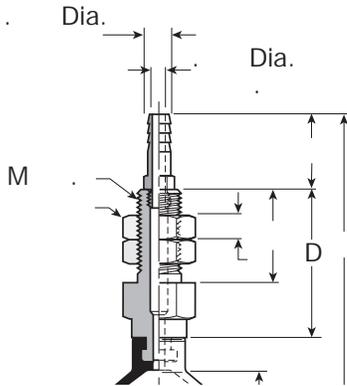
Inches (mm)
 * Cup material
 † Thread size

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 P5V-CFS Series
 PJG Series
 PCG Series
 PUGB Series

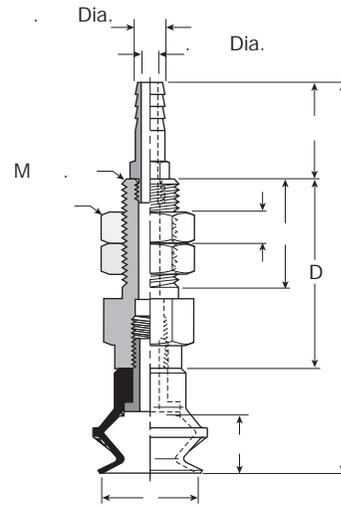


Dimensions

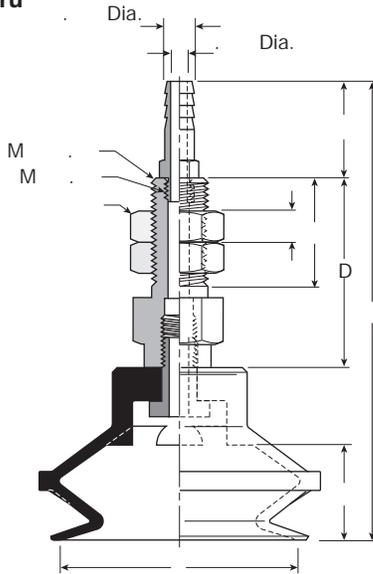
**PBTK-10A thru
 PBTK-15A**



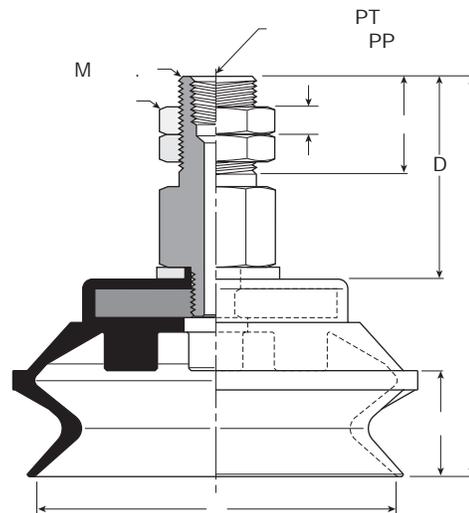
PBTK-20



**PBTK-30 thru
 PBTK-50**



PBTK-75



Model number	ØA	B	C	D	E	F	G	Wt oz (g)
PBTK-10A-*	.39 (10)	2.05 (52)	.39 (10)	.89 (22.5)	.30 (7.5)	.24 (6)	.61 (15.5)	.5 (15)
PBTK-15A-*	.59 (15)	2.15 (54.5)	.39 (10)	.89 (22.5)	.39 (10)	.24 (6)	.61 (15.5)	.5 (15)
PBTK-20-*	.79 (20)	2.26 (57.5)	.63 (16)	.87 (22)	.47 (12)	.24 (6)	.59 (15)	.7 (21)
PBTK-30-*	1.18 (30)	3.09 (78.5)	.63 (16)	1.26 (32)	.67 (17)	.24 (6)	.79 (20)	1.6 (45)
PBTK-40-*	1.57 (40)	3.09 (78.5)	.63 (16)	1.26 (32)	.61 (15.5)	.24 (6)	.79 (20)	1.7 (48)
PBTK-50-*	1.97 (50)	3.33 (84.5)	.63 (16)	1.26 (32)	.79 (20)	.24 (6)	.79 (20)	2.2 (62)
PBTK-75-*-†	3.74 (95)	3.29 (83.5)	—	1.67 (42.5)	.87 (22)	.43 (11)	—	6.5 (186)

Inches (mm)
 * Cup material
 † Vacuum port

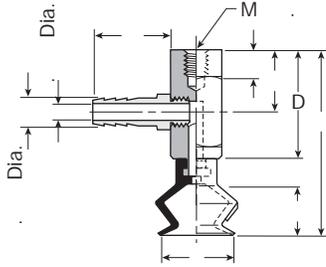
C
 Vacuum Cups
 Vacuum Products

Series
 PFG
 PBG
 PSV-CFS
 PJG
 PCG
 PUGB

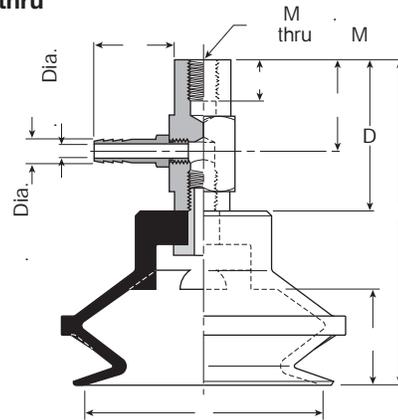


Dimensions

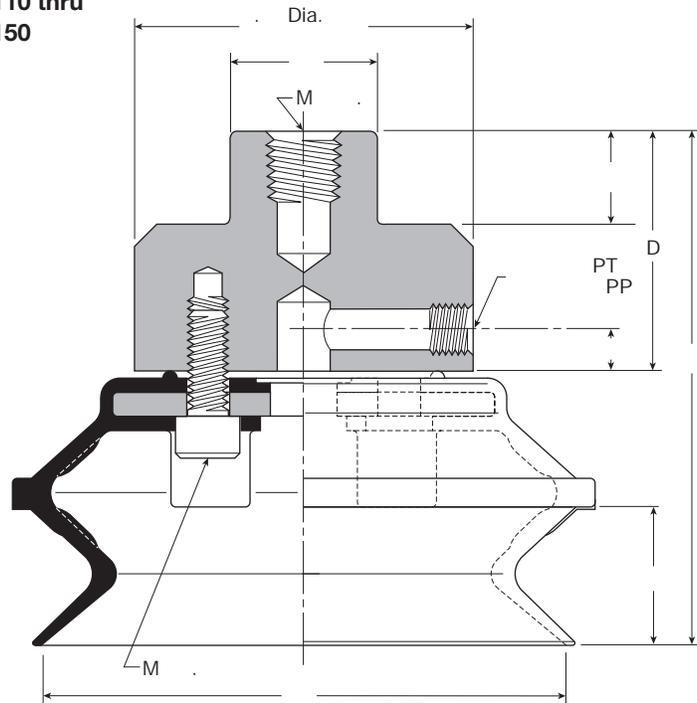
**PBYK-10A thru
PBYK-15A**



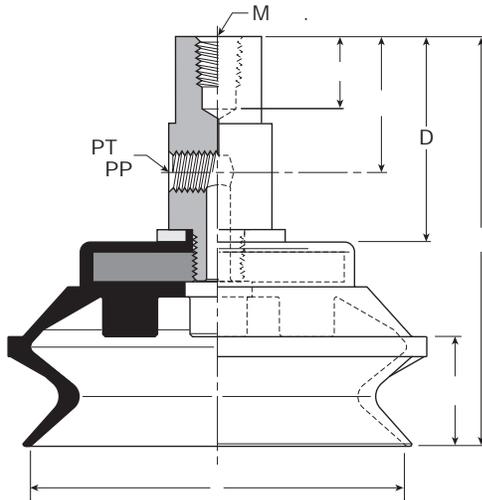
**PBYK-20 thru
PBYK-50**



**PBYK-110 thru
PBYK-150**



PBYK-75



Model number	ØA	B	C	D	E	F	G	Wt oz (g)
PBYK-10A-*	.39 (10)	1.42 (36)	.51 (13)	.89 (22.5)	.29 (7.5)	.24 (6)	.63 (16)	.6 (16)
PBYK-15A-*	.59 (15)	1.52 (38.5)	.51 (13)	.89 (22.5)	.39 (10)	.24 (6)	.63 (16)	.6 (16)
PBYK-20-*	.79 (20)	1.63 (41.5)	.55 (14)	.87 (22)	.47 (12)	.24 (6)	.63 (16)	.7 (21)
PBYK-30-*	1.18 (30)	2.46 (62.5)	.79 (20)	1.26 (32)	.67 (17)	.24 (6)	.63 (16)	1.6 (45)
PBYK-40-*	1.57 (40)	2.46 (62.5)	.79 (20)	1.26 (32)	.61 (15.5)	.24 (6)	.63 (16)	2.0 (58)
PBYK-50-*	1.97 (50)	2.70 (68.5)	.79 (20)	1.26 (32)	.78 (20)	.24 (6)	.63 (16)	2.4 (67)
PBYK-75-*-†	3.74 (95)	3.29 (83.5)	1.10 (28)	1.67 (42.5)	.86 (22)	.43 (11)	—	6.9 (176)
PBYK-110-*-†	4.72 (120)	4.17 (106)	.47 (12)	1.97 (50)	1.14 (29)	.79 (20)	1.18 Dia. (30)	26.4 (670)
PBYK-150-*-†	5.91 (150)	4.92 (125)	.47 (12)	1.97 (50)	1.50 (38)	.79 (20)	1.18 Dia. (30)	46.5 (1180)

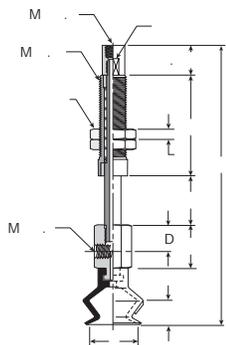
Inches (mm)
* Cup material
† Vacuum port

C
Vacuum Cups
Vacuum Products
PFG Series
PBG Series
P5V-CFS Series
PJG Series
PCG Series
PUGB Series

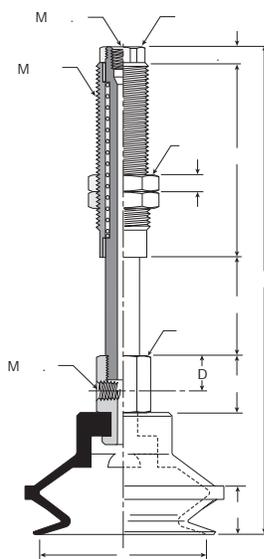


Dimensions

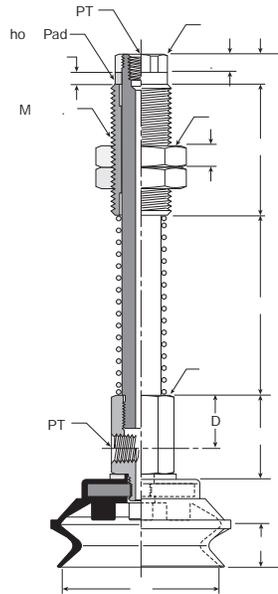
**PBTYS10A thru
PBTYS15A1**



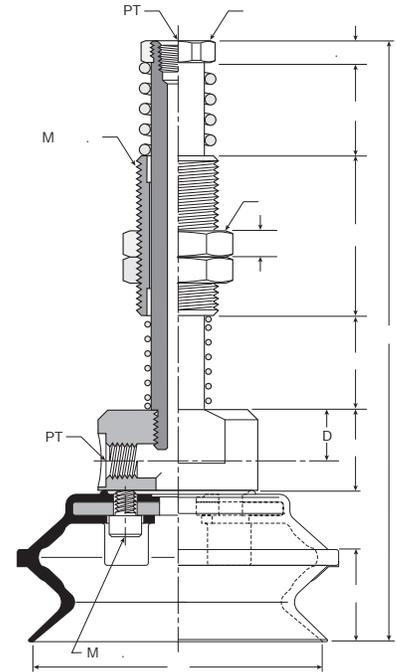
**PBTYS20B thru
PBTYS50**



PBTYS75



**PBTYS110 thru
PBTYS150**



Model number	ØA	B	C	D	E	F	G	H	J	Wt oz (g)
PBTYS10A10*	.39 (10)	2.70 (68.5)	.51 (13)	.31 (8)	.30 (7.5)	.39 (10)	.12 (3)	.91 (23)	—	.65 (18.5)
PBTYS10A15*	.39 (10)	3.19 (81)	.51 (13)	.31 (8)	.30 (7.5)	.59 (15)	.12 (3)	1.20 (30.5)	—	.7 (21)
PBTYS15A10*	.59 (15)	2.80 (71)	.51 (13)	.31 (8)	.39 (10)	.39 (10)	.12 (3)	.91 (23)	—	.65 (18.5)
PBTYS15A15*	.59 (15)	3.29 (83.5)	.51 (13)	.31 (8)	.39 (10)	.59 (15)	.12 (3)	1.20 (30.5)	—	.7 (21)
PBTYS20B15*	.79 (20)	3.90 (99)	.67 (17)	.39 (10)	.47 (12)	.59 (15)	.20 (5)	1.42 (36)	—	2.5 (72)
PBTYS20B30*	.79 (20)	5.36 (136)	.67 (17)	.39 (10)	.47 (12)	1.18 (30)	.20 (5)	2.28 (58)	—	3.4 (97)
PBTYS3015**†	1.18 (30)	4.07 (103.5)	.67 (17)	.39 (10)	.67 (17)	.59 (15)	.20 (5)	1.42 (36)	—	3.4 (97)
PBTYS3030**†	1.18 (30)	5.53 (140.5)	.67 (17)	.39 (10)	.67 (17)	1.18 (30)	.20 (5)	2.28 (58)	—	3.6 (102)
PBTYS4015**†	1.57 (40)	4.07 (103.5)	.67 (17)	.39 (10)	.61 (15.5)	.59 (15)	.20 (5)	1.42 (36)	—	2.9 (83)
PBTYS4030**†	1.57 (40)	5.53 (140.5)	.67 (17)	.39 (10)	.61 (15.5)	1.18 (30)	.20 (5)	2.28 (58)	—	3.8 (108)
PBTYS5015**†	1.97 (50)	4.31 (109.5)	.67 (17)	.39 (10)	.78 (20)	.59 (15)	.20 (5)	1.42 (36)	—	3.4 (97)
PBTYS5030**†	1.97 (50)	5.77 (146.5)	.67 (17)	.39 (10)	.78 (20)	1.18 (30)	.20 (5)	2.28 (58)	—	4.3 (122)
PBTYS7530**†	2.95 (75)	7.01 (178)	1.28 (32.5)	.78 (20)	.87 (22)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	12 (339)
PBTYS7550**†	2.95 (75)	7.99 (203)	1.28 (32.5)	.78 (20)	.87 (22)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	13 (373)
PBTYS11020**†	4.33 (110)	8.82 (224)	1.18 (30)	.71 (18)	1.14 (29)	1.38 (35)	.39 (10)	2.36 (60)	1.38 (35)	42 (1194)
PBTYS11070**†	4.33 (110)	11.38 (289)	1.18 (30)	.71 (18)	1.14 (29)	3.94 (100)	.39 (10)	2.36 (60)	1.38 (35)	45 (1276)
PBTYS15020**†	5.91 (150)	9.57 (243)	1.18 (30)	.71 (18)	1.50 (38)	1.38 (35)	.39 (10)	2.36 (60)	1.38 (35)	60 (1704)
PBTYS15070**†	5.91 (150)	12.13 (308)	1.18 (30)	.71 (18)	1.50 (38)	3.94 (100)	.39 (10)	2.36 (60)	1.38 (35)	63 (1786)

Inches (mm)
* Cup material
† Vacuum port

- C**
- Vacuum Cups
- Vacuum Products
- Series
- PFG
- Series
- PBG
- Series
- PSV-CFS
- Series
- PJG
- Series
- PCG
- Series
- PUGB
- Series



P5V-CFS Vacuum Cup Series

Features

- Double sealing lips for flexible sheet handling
- Vacuum cup grooves on underside increase holding area
- Resists acceleration and deceleration shear forces
- Strong low profile for fast response
- Metal insert fitting for stable vertical and horizontal lifts

Applications

These suction cups are ideal for applications where the product may flex when being lifted. All cups have a double sealing lip and cleats to increase holding capacity. The top of the cup has a ribbed outer lip to prevent it from rolling over the surface to be lifted.

Dual sealing lips provide 2 seals for vacuum. As the product flexes, the outer lip seal may break, but the inner lip seal will hold the degree of vacuum for continued lifting capacity. In these types of applications, sizing should be done on the inner diameter cup dimension.

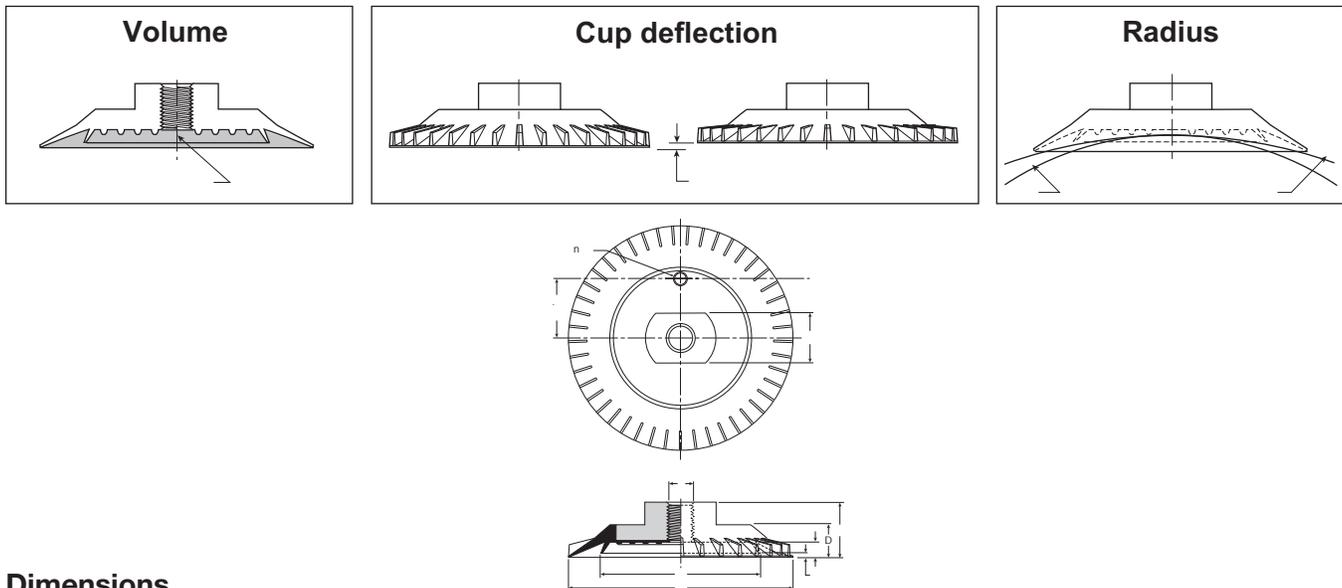


Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Area*** cm ²	Cup volume (V) liters	Deflection (S) (mm)	Radius R (mm)	
						R1*	R2**
50	1/8 BSPP	P5V-CFS05011N	19.6	.001	.16 (4)	3.86 (98)	3.15 (80)
100	3/8 BSPP	P5V-CFS10013N	78.5	.0667	.30 (8)	10.00 (254)	6.34 (161)
150	1/2 BSPP	P5V-CFS15014N	176.7	.2083	.43 (11)	12.17 (309)	9.92 (252)

* Minimum permissible radius for lifting using inner lip.

** Minimum permissible radius for lifting using outer lip.

*** Area based on Outer Cup Diameter



Dimensions

Model number	ØA	B	ØC	D	E	F	G	H
P5V-CFS50*	1.97 (50)	G1/8	1.38 (35)	0.43 (11)	0.71 (18)	0.087 (2.2)	0.51 (13)	0.146 (3.7)
P5V-CFS100*	3.94 (100)	G3/8	2.83 (72)	0.71 (18)	1.10 (28)	0.197 (5)	0.87 (22)	0.295 (7.5)
P5V-CFS150*	5.91 (150)	G1/2	4.17 (106)	1.02 (26)	1.65 (42)	0.276 (7)	1.06 (27)	0.43 (11)

Inches (mm)

* Cup material

 Most popular.



PJG Short Bellows Vacuum Cup Series

Versatile bellow cup design provides increased sealing lip and level compensation for products with irregular, smooth, curved surfaces, or flexible sheets.

The short stroke bellow suction cup has an extra thin sealing edge and shorter stroke versus the traditional bellows for faster response. The cups are good for corrugated and smooth surfaces.

Features

- Short bellows for fast response
- More lip seal contact for corrugated, textured surfaces
- Soft sealing lip
- 6mm to 80mm



Styles

- PJTM series male thread connector
- PJTF series female thread connector
- PJTK series barbed bulkhead
- PJYK series 90° barbed adapter
- PJTYS series bulkhead level compensator

Operating information

Cup material	Nitrile	Nitrile ESD*	Silicon	Silicon ESD*
Material code	NBR	NBRE	SI	SIE
Operating temperature	-20°C to 120°C (-4°F to 248°F)	0°C to 60°C (32°F to 40°F)	-60° to 250°C (-76°F to 482°F)	-10° to 130°C (-14°F to 266°F)
Color	Black	Black / Blue Dot	White	Black / Red Dot
Hardness, shore A (°Sh)	55 ±5	70 ±5	55 ±5	55 ±5
Electrical resistance (Ωm)	—	800 to 1000	—	5 to 15

* 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 silicon ESD (SIE), replace (NBR) with (SIE) in the part number. PJTM-20B-NBR-G1 becomes PJTM-20B-SIE-G1. Inquire with factory for availability.

Application guide

Short Bellows

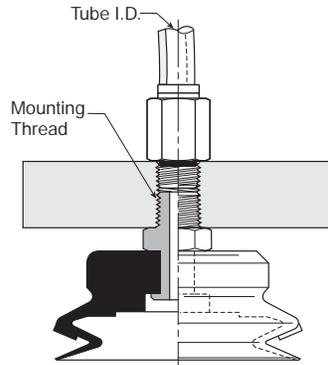
Flat surface, thin section	Flat surface, any section	Slightly bowed surface, thin section	Slightly bowed surface, any section	Bowed surface, thin section	Soft porous material, thin section	Soft porous material, any section	Metal sheet handling	Corrugated sheet handling	Not for vertical lift

PJTM Series Male Thread Connector

Simple male connection for low profile positions secured to a plate or bracket. NPT, G, metric threads.
 Fitting material: aluminum.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
6	M5	PJTM-6-NBR-M5	PJG-6-NBR	PJTM-6-SI-M5	PJG-6-SI	FTM-5A-M5H
6	1/8 BSPP	PJTM-6-NBR-G1	PJG-6-NBR	PJTM-6-SI-G1	PJG-6-SI	FTM-5A-G1
8	M5	PJTM-8-NBR-M5	PJG-8-NBR	PJTM-8-SI-M5	PJG-8-SI	FTM-5A-M5H
8	1/8 BSPP	PJTM-8-NBR-G1	PJG-8-NBR	PJTM-8-SI-G1	PJG-8-SI	FTM-5A-G1
10	M5	PJTM-10-NBR-M5	PJG-10-NBR	PJTM-10-SI-M5	PJG-10-SI	TN-PF-15-M5
15	M5	PJTM-15-NBR-M5	PJG-15-NBR	PJTM-15-SI-M5	PJG-15-SI	TN-PF-15-M5
20	M5	PJTM-20-NBR-M5	PJG-20-NBR	PJTM-20-SI-M5	PJG-20-SI	TN-PF-20-M5
30	1/8 BSPP	PJTM-30-NBR-G1	PJG-30-NBR	PJTM-30-SI-G1	PJG-30-SI	FTM-20B-G1H
30	1/4 BSPP	PJTM-30-NBR-G2	PJG-30-NBR	PJTM-30-SI-G2	PJG-30-SI	FTM-20B-G2
30	M10	PJTM-30-NBR-M10	PJG-30-NBR	PJTM-30-SI-M10	PJG-30-SI	FTM-20B-M10
30	1/8 NPT	PJTM-30-NBR-N1	PJG-30-NBR	PJTM-30-SI-N1	PJG-30-SI	FTM-20B-N1
40	1/8 BSPP	PJTM-40-NBR-G1	PJG-40-NBR	PJTM-40-SI-G1	PJG-40-SI	FTM-20B-G1H
40	1/4 BSPP	PJTM-40-NBR-G2	PJG-40-NBR	PJTM-40-SI-G2	PJG-40-SI	FTM-20B-G2
40	M10	PJTM-40-NBR-M10	PJG-40-NBR	PJTM-40-SI-M10	PJG-40-SI	FTM-20B-M10
40	1/8 NPT	PJTM-40-NBR-N1	PJG-40-NBR	PJTM-40-SI-N1	PJG-40-SI	FTM-20B-N1
50	1/8 BSPP	PJTM-50-NBR-G1	PJG-50-NBR	PJTM-50-SI-G1	PJG-50-SI	FTM-50-G1H
50	1/4 BSPP	PJTM-50-NBR-G2	PJG-50-NBR	PJTM-50-SI-G2	PJG-50-SI	FTM-50-G2
50	1/8 NPT	PJTM-50-NBR-N1	PJG-50-NBR	PJTM-50-SI-N1	PJG-50-SI	FTM-50-N1
60	1/4 BSPP	PJTM-60-NBR-G2	PJG-60-NBR	PJTM-60-SI-G2	PJG-60-SI	FTM-60-G2
60	M10	PJTM-60-NBR-M10	PJG-60-NBR	PJTM-60-SI-M10	PJG-60-SI	FTM-60-M10
60	1/4 NPT	PJTM-60-NBR-N2	PJG-60-NBR	PJTM-60-SI-N2	PJG-60-SI	FTM-60-N2
80	1/4 BSPP	PJTM-80-NBR-G2	PJG-80-NBR	PJTM-80-SI-G2	PJG-80-SI	FTM-60-G2
80	M10	PJTM-80-NBR-M10	PJG-80-NBR	PJTM-80-SI-M10	PJG-80-SI	FTM-60-M10
80	1/4 NPT	PJTM-80-NBR-N2	PJG-80-NBR	PJTM-80-SI-N2	PJG-80-SI	FTM-60-N2

Most popular.

C
 Vacuum Cups
 Vacuum Products
 PFG Series
 PBG Series
 P5V-CFS Series
 PJG Series
 PCG Series
 PUGB Series

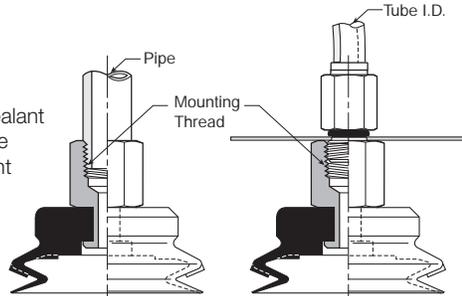


PJTF Series Female Thread Connector

Simple female connection for low profile positions secured to a plate or bracket. NPSF, G threads.
 Fitting material: aluminum.

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
6	M5	PJTF-6-NBR-M5	PJG-6-NBR	PJTF-6-SI-M5	PJG-6-SI	FTF-5A-M5
6	1/8 BSPP	PJTF-6-NBR-G1	PJG-6-NBR	PJTF-6-SI-G1	PJG-6-SI	FTF-5A-G1
8	M5	PJTF-8-NBR-M5	PJG-8-NBR	PJTF-8-SI-M5	PJG-8-SI	FTF-5A-M5
8	1/8 BSPP	PJTF-8-NBR-G1	PJG-8-NBR	PJTF-8-SI-G1	PJG-8-SI	FTF-5A-G1
10	M5	PJTF-10-NBR-M5	PJG-10-NBR	PJTF-10-SI-M5	PJG-10-SI	FTF-5A-M5
10	1/8 BSPP	PJTF-10-NBR-G1	PJG-10-NBR	PJTF-10-SI-G1	PJG-10-SI	FTF-5A-G1
15	M5	PJTF-15-NBR-M5	PJG-15-NBR	PJTF-15-SI-M5	PJG-15-SI	FTF-5A-M5
15	1/8 BSPP	PJTF-15-NBR-G1	PJG-15-NBR	PJTF-15-SI-G1	PJG-15-SI	FTF-5A-G1
30	1/8 BSPP	PJTF-30-NBR-G1	PJG-30-NBR	PJTF-30-SI-G1	PJG-30-SI	FTF-20B-G1
30	1/4 BSPP	PJTF-30-NBR-G2	PJG-30-NBR	PJTF-30-SI-G2	PJG-30-SI	FTF-20B-G2
40	1/8 BSPP	PJTF-40-NBR-G1	PJG-40-NBR	PJTF-40-SI-G1	PJG-40-SI	FTF-20B-G1
40	1/4 BSPP	PJTF-40-NBR-G2	PJG-40-NBR	PJTF-40-SI-G2	PJG-40-SI	FTF-20B-G2
50	1/8 BSPP	PJTF-50-NBR-G1	PJG-50-NBR	PJTF-50-SI-G1	PJG-50-SI	FTF-50-G1
50	1/4 BSPP	PJTF-50-NBR-G2	PJG-50-NBR	PJTF-50-SI-G2	PJG-50-SI	FTF-50-G2
60	1/4 BSPP	PJTF-60-NBR-G2	PJG-60-NBR	PJTF-60-SI-G2	PJG-60-SI	FTF-60-G2
60	1/4 NPT	PJTF-60-NBR-N2	PJG-60-NBR	PJTF-60-SI-N2	PJG-60-SI	FTF-60-N2
80	1/4 BSPP	PJTF-80-NBR-G2	PJG-80-NBR	PJTF-80-SI-G2	PJG-80-SI	FTF-60-G2
80	1/4 NPT	PJTF-80-NBR-N2	PJG-80-NBR	PJTF-80-SI-N2	PJG-80-SI	FTF-60-N2

Most popular.



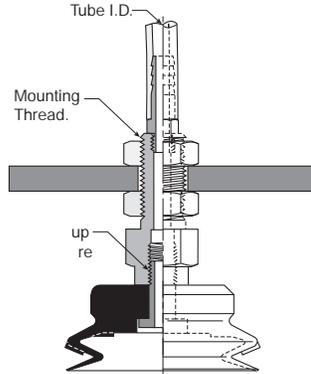
PJTK Series Barbed Bulkhead

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

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
6	Barb	PJTK-6-NBR	PJG-6-NBR	PJTK-6-SI	PJG-6-SI	FTK-5A
8	Barb	PJTK-8-NBR	PJG-8-NBR	PJTK-8-SI	PJG-8-SI	FTK-5A
10	Barb	PJTK-10-NBR	PJG-10-NBR	PJTK-10-SI	PJG-10-SI	FTK-15
15	Barb	PJTK-15-NBR	PJG-15-NBR	PJTK-15-SI	PJG-15-SI	FTK-15
20	Barb	PJTK-20-NBR	PJG-20-NBR	PJTK-20-SI	PJG-20-SI	FTK-20
30	Barb	PJTK-30-NBR	PJG-30-NBR	PJTK-30-SI	PJG-30-SI	FTK-25
40	Barb	PJTK-40-NBR	PJG-40-NBR	PJTK-40-SI	PJG-40-SI	FTK-25
50	Barb	PJTK-50-NBR	PJG-50-NBR	PJTK-50-SI	PJG-50-SI	FTK-50
60	1/8 BSPP	PJTK-60-NBR-G1	PJG-60-NBR	PJTK-60-SI-G1	PJG-60-SI	FTK-60-G1
60	1/8 NPT	PJTK-60-NBR-N1	PJG-60-NBR	PJTK-60-SI-N1	PJG-60-SI	FTK-60-N1
80	1/8 BSPP	PJTK-80-NBR-G1	PJG-80-NBR	PJTK-80-SI-G1	PJG-80-SI	FTK-60-G1
80	1/8 NPT	PJTK-80-NBR-N1	PJG-80-NBR	PJTK-80-SI-N1	PJG-80-SI	FTK-60-N1

Most popular.



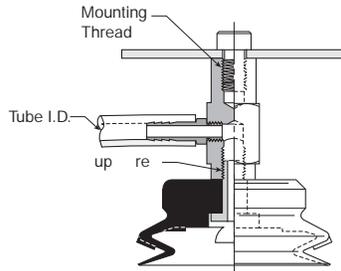
PJYK Series 90° Barbed Adapter

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

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
6	Barb	PJYK-6-NBR	PJG-6-NBR	PJYK-6-SI	PJG-6-SI	FYK-5A
8	Barb	PJYK-8-NBR	PJG-8-NBR	PJYK-8-SI	PJG-8-SI	FYK-5A
10	Barb	PJYK-10-NBR	PJG-10-NBR	PJYK-10-SI	PJG-10-SI	FYK-15
15	Barb	PJYK-15-NBR	PJG-15-NBR	PJYK-15-SI	PJG-15-SI	FYK-15
20	Barb	PJYK-20-NBR	PJG-20-NBR	PJYK-20-SI	PJG-20-SI	FYK-20
30	Barb	PJYK-30-NBR	PJG-30-NBR	PJYK-30-SI	PJG-30-SI	FYK-25
40	Barb	PJYK-40-NBR	PJG-40-NBR	PJYK-40-SI	PJG-40-SI	FYK-25
50	Barb	PJYK-50-NBR	PJG-50-NBR	PJYK-50-SI	PJG-50-SI	FYK-50
60	1/8 BSPP	PJYK-60-NBR-G1	PJG-60-NBR	PJYK-60-SI-G1	PJG-60-SI	FYK-60-G1
60	1/8 NPT	PJYK-60-NBR-N1	PJG-60-NBR	PJYK-60-SI-N1	PJG-60-SI	FYK-60-N1
80	1/8 BSPP	PJYK-80-NBR-G1	PJG-80-NBR	PJYK-80-SI-G1	PJG-80-SI	FYK-60-G1
80	1/8 NPT	PJYK-80-NBR-N1	PJG-80-NBR	PJYK-80-SI-N1	PJG-80-SI	FYK-60-N1

Most popular.

- C**
- Vacuum Cups
- Vacuum Products
- Series
- PFG Series
- PBG Series
- PSV-CFS Series
- PJG Series
- PCG Series
- PUGB Series



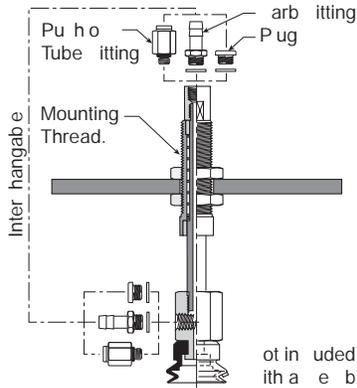
PJTYS Series Bulkhead Level Compensator

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.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage. Shown are interchangeable connectors & plugs for port connections.



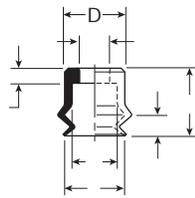
Cup dia. (mm)	Vacuum port	Stroke (mm)	Spring compression Force lbf (N)	0%	100%	Cup material Nitrile assembly (NBR)	Replacement cup Nitrile (NBR)	Cup material Silicon assembly (SI)	Replacement cup Silicon (SI)	Level Compensator P/N
10	M5	10	.56 (2.5)	1.2 (4.9)		PJTYS1010NBRM5	PJG-10-NBR	PJTYS1010SIM5	PJG-10-SI	JTYS-10-10
10	M5	15	.67 (2.5)	1.4 (5.9)		PJTYS1015NBRM5	PJG-10-NBR	PJTYS1015SIM5	PJG-10-SI	JTYS-10-15
15	M5	10	.56 (2.5)	1.2 (4.9)		PJTYS15A10NBRM5	PJG-15A-NBR	PJTYS15A10SIM5	PJG-15A-SI	JTYS-10-10
15	M5	15	.67 (2.5)	1.4 (5.9)		PJTYS15A15NBRM5	PJG-15A-NBR	PJTYS15A15SIM5	PJG-15A-SI	JTYS-10-15
30	M5	15	.56 (2.5)	.79 (3.4)		PJTYS3015NBRM5	PJG-30-NBR	PJTYS3015SIM5	PJG-30-SI	TYS-20B-15
30	M5	30	.67 (2.9)	1.4 (5.9)		PJTYS3030NBRM5	PJG-30-NBR	PJTYS3030SIM5	PJG-30-SI	TYS-20B-30
40	M5	15	.56 (2.5)	.79 (3.4)		PJTYS4015NBRM5	PJG-40-NBR	PJTYS4015SIM5	PJG-40-SI	TYS-20B-15
40	M5	30	.67 (2.9)	1.4 (5.9)		PJTYS4030NBRM5	PJG-40-NBR	PJTYS4030SIM5	PJG-40-SI	TYS-20B-30
50	M5	15	.56 (.25)	1.2 (4.9)		PJTYS5015NBRM5	PJG-50-NBR	PJTYS5015SIM5	PJG-50-SI	TYS-50-15
50	M5	30	.67 (2.9)	1.4 (5.9)		PJTYS5030NBRM5	PJG-50-NBR	PJTYS5030SIM5	PJG-50-SI	TYS-50-30
60	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)		PJTYS6030NBRN1	PJG-60-NBR	PJTYS6030SIN1	PJG-60-SI	TYS-60-30
60	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)		PJTYS6050NBRN1	PJG-60-NBR	PJTYS6050SIN1	PJG-60-SI	TYS-60-50
80	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)		PJTYS8030NBRN1	PJG-80-NBR	PJTYS8030SIN1	PJG-80-SI	TYS-60-30
80	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)		PJTYS8050NBRN1	PJG-80-NBR	PJTYS8050SIN1	PJG-80-SI	TYS-60-50

Most popular.

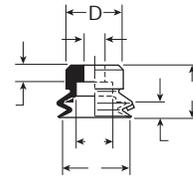


PJG Series Replacement Cup Dimensions

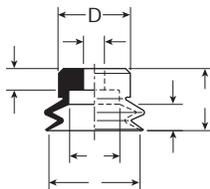
**PJG-6 and
 PJG-8**



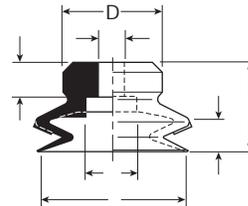
**PJG-10 and
 PJG-15**



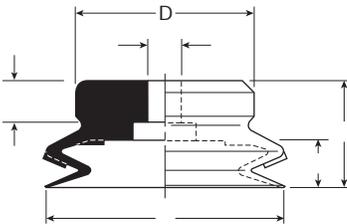
PJG-20



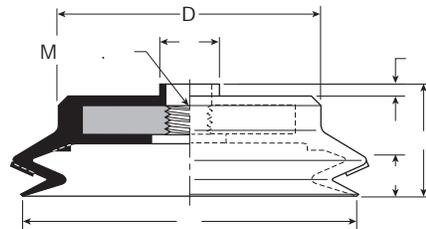
**PJG-30 thru
 PJG-40**



PJG-50



**PJG-60 thru
 PJG-80**



C
 Vacuum Cups
 Vacuum Products

Series
 PFG
 PBG
 PSV-CFS
 PJG
 PCG
 PUGB

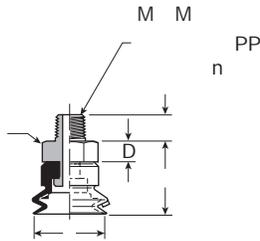
Model number	ØA	ØB	ØC	ØD	E	F	H
PJG-6-*	.24 (6)	.16 (4)	.24 (6)	.30 (7.5)	.35 (9)	.17 (4.2)	.08 (2)
PJG-8-*	.31 (8)	.16 (4)	.24 (6)	.31 (8)	.35 (9)	.16 (4)	.08 (2)
PJG-10-*	.39 (10)	.18 (4.6)	.31 (7.8)	.43 (11)	.37 (9.5)	.12 (3)	.14 (3.5)
PJG-15-*	.59 (15)	.18 (4.6)	.31 (7.8)	.47 (12)	.43 (11)	.13 (3.3)	.14 (3.5)
PJG-20-*	.79 (20)	.18 (4.6)	.43 (10.8)	.59 (15)	.51 (13)	.22 (5.5)	.18 (4.5)
PJG-30-*	1.18 (30)	.23 (5.8)	.43 (10.8)	.78 (20)	.71 (18)	.28 (7)	.28 (7)
PJG-35-*	1.38 (35)	.23 (5.8)	.43 (10.8)	.98 (25)	.71 (18)	.28 (7)	.28 (7)
PJG-40-*	1.57 (40)	.23 (5.8)	.43 (10.8)	1.18 (30)	.71 (18)	.28 (7.2)	.28 (7)
PJG-50-*	1.97 (50)	.31 (7.8)	.78 (19.8)	1.57 (40)	.79 (20)	.35 (9)	.28 (7)
PJG-60-*	2.36 (60)	.49 (12.5)	—	1.77 (45)	.89 (22.5)	.31 (8)	.10 (2.5)
PJG-70-*	2.75 (70)	.49 (12.5)	—	2.17 (55)	.93 (23.5)	.37 (9.5)	.10 (2.5)
PJG-80-*	3.15 (80)	.49 (12.5)	—	2.68 (68)	.93 (23.5)	.37 (9.5)	.10 (2.5)

Inches (mm)
 * Cup material

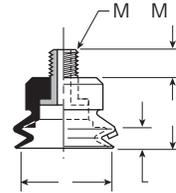


Dimensions

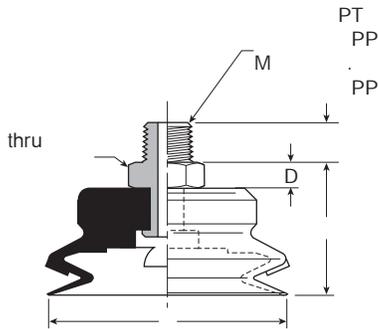
**PJTM-6 and
 PJTM-8**



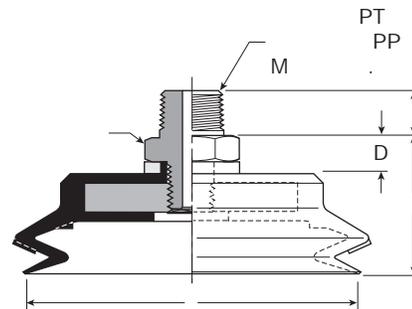
**PJTM-10 thru
 PJTM-20**



**PJTM-30 thru
 PJTM-50**



**PJTM-60 thru
 PJTM-80**



Model number	ØA	B	C (M5)	C (N1 / G1)	C (M10 / G2)	C (N2)	D
PJTM-6-*†	.24 (6)	.49 (12.5)	.18 (4.5)	.31 (8)	—	—	.14 (3.5)
PJTM-8-*†	.31 (8)	.49 (12.5)	.18 (4.5)	.31 (8)	—	—	.14 (3.5)
PJTM-10-*†	.39 (10)	.37 (9.5)	.20 (5)	—	—	—	—
PJTM-15-*†	.59 (15)	.43 (11)	.20 (5)	—	—	—	—
PJTM-20-*†	.79 (20)	.51 (13)	.20 (5)	—	—	—	—
PJTM-30-*†	1.18 (30)	.91 (23)	—	.31 (8)	.39 (10)	—	.20 (5)
PJTM-40-*†	1.57 (40)	.91 (23)	—	.31 (8)	.39 (10)	—	.20 (5)
PJTM-50-*†	1.97 (50)	.98 (25)	—	.31 (8)	.39 (10)	—	.20 (5)
PJTM-60-*†	2.36 (60)	1.06 (27)	—	—	.39 (10)	.59 (15)	.28 (7)
PJTM-80-*†	3.15 (80)	1.10 (28)	—	—	.39 (10)	.59 (15)	.28 (7)

Inches (mm)
 * Cup material
 † Thread size

C
 Vacuum Cups
 Vacuum Products

PFG Series

PBG Series

P5V-CFS Series

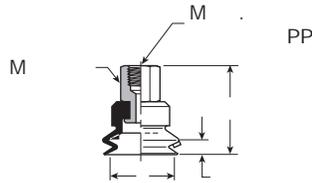
PJG Series

PCG Series

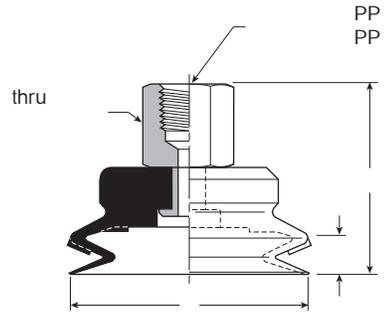
PUGB Series

Dimensions

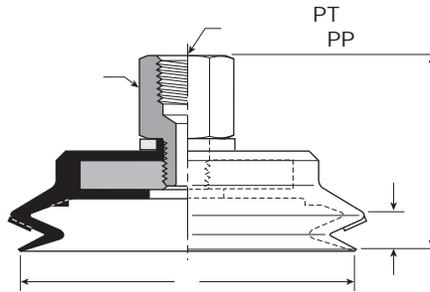
**PJTF-6 and
 PJTF-8**



**PJTF-30 thru
 PJTF-50**



**PJTF-60 thru
 PJTF-80**



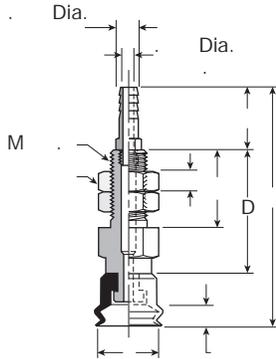
C Vacuum Cups Vacuum Products	Series	PF6
	Series	PB6
	Series	PSV-CFS
	Series	PJ6
	Series	PC6
	Series	PUGB

Model number	ØA	B	B (M5)	E
PJTF-6-*†	.24 (6)	.79 (20)	.55 (14)	.16 (4)
PJTF-8-*†	.31 (8)	.79 (20)	.55 (14)	.16 (4)
PJTF-10-*†	.39 (10)	.79 (20)	.55 (14)	.12 (3)
PJTF-15-*†	.59 (15)	.79 (20)	.55 (14)	.13 (3.3)
PJTF-30-*†	1.18 (30)	1.25 (32)	—	.28 (7)
PJTF-40-*†	1.57 (40)	1.25(32)	—	.28 (7.2)
PJTF-50-*†	1.97 (50)	1.34 (34)	—	.35 (9)
PJTF-60-*†	2.36 (60)	1.56 (39.5)	—	.31 (8)
PJTF-80-*†	3.15 (80)	1.59 (40.5)	—	.37 (9.5)

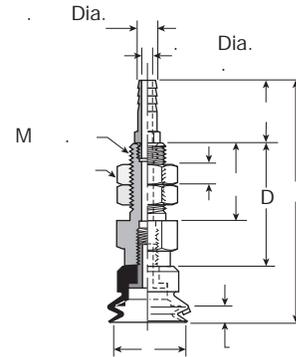
Inches (mm)
 * Cup material
 † Thread size

Dimensions

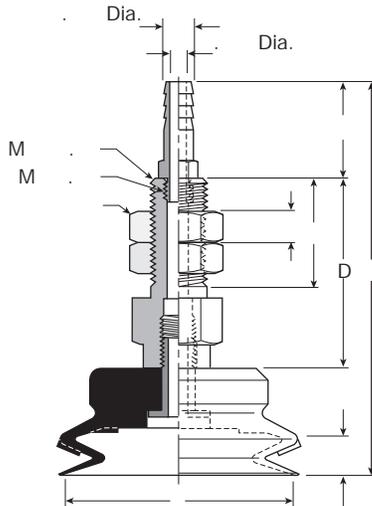
**PJTK-6 and
 PJTK-8**



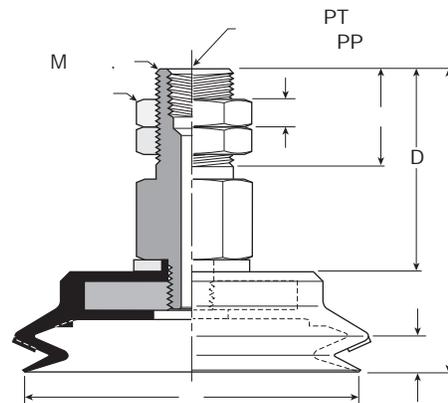
**PJTK-10 thru
 PJTK-20**



**PJTK-30 thru
 PJTK-50**



**PJTK-60 thru
 PJTK-80**



Model number	ØA	B	C	D	E	F	G	Wt oz (g)
PJTK-6-*	.24 (6)	1.30 (33)	.39 (10)	.55 (14)	.17 (4.2)	.47 (12)	.12 (3)	.4 (11)
PJTK-8-*	.31 (8)	1.30 (33)	.39 (10)	.55 (14)	.16 (4)	.47 (12)	.12 (3)	.4 (11)
PJTK-10-*	.39 (10)	1.87 (47.5)	.63 (16)	.87 (22)	.12 (3)	.59 (15)	.12 (3)	.5 (14)
PJTK-15-*	.59 (15)	1.93 (49)	.63 (16)	.87 (22)	.13 (3.3)	.59 (15)	.12 (3)	.5 (15)
PJTK-20-*	.79 (20)	2.01 (51)	.63 (16)	.87 (22)	.22 (5.5)	.59 (15)	.20 (5)	.6 (17)
PJTK-30-*	1.18 (30)	2.60 (66)	.63 (16)	1.26 (32)	.28 (7)	.79 (20)	.20 (5)	1.5 (42)
PJTK-40-*	1.57 (40)	2.60 (66)	.63 (16)	1.26 (32)	.28 (7.2)	.79 (20)	.20 (5)	1.6 (44)
PJTK-50-*	1.97 (50)	2.68 (68)	.63 (16)	1.26 (32)	.35 (9)	.79 (20)	.20 (5)	25.0 (58)
PJTK-60-*-†	2.36 (60)	2.46 (62.5)	—	1.67 (42.5)	.31 (8)	.79 (20)	.24 (6)	5.1 (144)
PJTK-80-*-†	3.15 (80)	2.50 (63.5)	—	1.67 (42.5)	.37 (9.5)	.79 (20)	.24 (6)	6.7 (190)

Inches (mm)
 * Cup material
 † Vacuum port

C

Vacuum Cups
 Vacuum Products

PFG
 Series

PBG
 Series

P5V-CFS
 Series

PJG
 Series

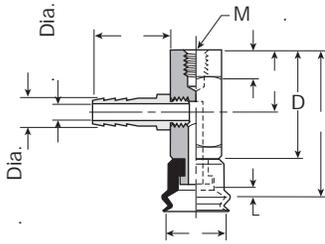
PCG
 Series

PUGB
 Series

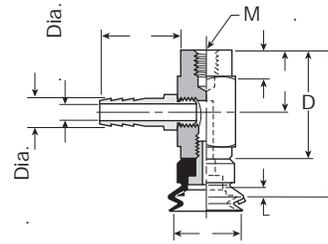


Dimensions

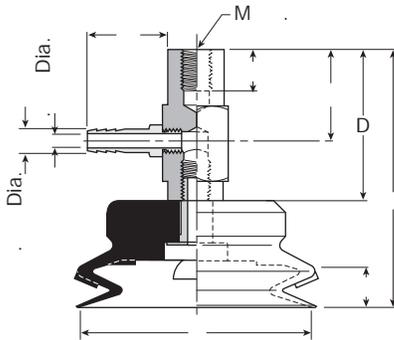
**PJYK-6 and
 PJYK-8**



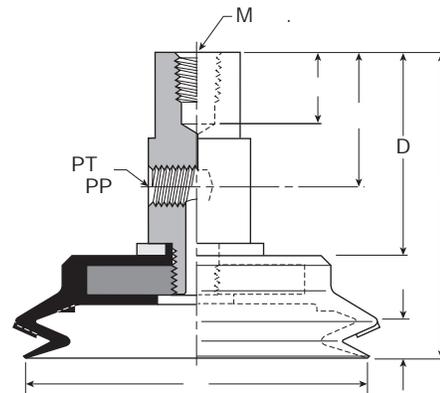
**PJYK-10 thru
 PJYK-20**



**PJYK-25 thru
 PJYK-50**



**PJYK-60 thru
 PJYK-80**



C
 Vacuum Cups
 Vacuum Products
 Series
 PFG
 Series
 PBG
 Series
 PSV-CFS
 Series
 PJG
 Series
 PCG
 Series
 PUGB
 Series

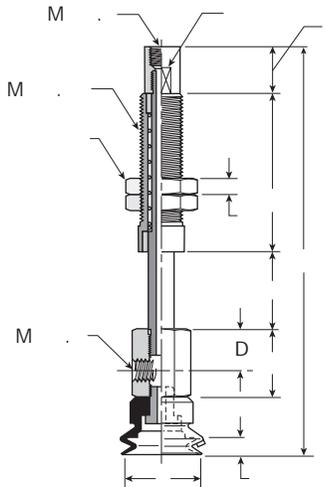
Model number	ØA	B	C	D	E	F	G	Wt oz (g)
PJYK-6-*	.24 (6)	1.24 (31.5)	.51 (13)	.89 (22.5)	.17 (4.2)	.24 (6)	.63 (16)	.56 (16)
PJYK-8-*	.31 (8)	1.24 (31.5)	.51 (13)	.89 (22.5)	.17 (4.2)	.24 (6)	.63 (16)	.56 (16)
PJYK-10-*	.39 (10)	1.24 (31.5)	.55 (14)	.87 (22)	.12 (3)	.24 (6)	.63 (16)	.59 (17)
PJYK-15-*	.59 (15)	1.30 (33)	.55 (14)	.87 (22)	.13 (3.3)	.24 (6)	.63 (16)	.63 (18)
PJYK-20-*	.79 (20)	1.38 (35)	.55 (14)	.87 (22)	.22 (5.5)	.24 (6)	.63 (16)	.7 (20)
PJYK-30-*	1.18 (30)	1.97 (50)	.79 (20)	1.26 (32)	.28 (7)	.31 (8)	.63 (16)	1.6 (46)
PJYK-40-*	1.57 (40)	1.97 (50)	.79 (20)	1.26 (32)	.28 (7.2)	.31 (8)	.63 (16)	1.7 (48)
PJYK-50-*	1.97 (50)	2.05 (52)	.79 (20)	1.26 (32)	.35 (9)	.31 (8)	.63 (16)	2.2 (62)
PJYK-60-*-†	2.36 (60)	2.46 (62.5)	1.10 (28)	1.67 (42.5)	.31 (8)	.43 (11)	—	4.9 (139)
PJYK-80-*-†	3.15 (80)	2.50 (63.5)	1.10 (28)	1.67 (42.5)	.37 (9.5)	.43 (11)	—	6.5 (185)

Inches (mm)
 * Cup material
 † Vacuum port

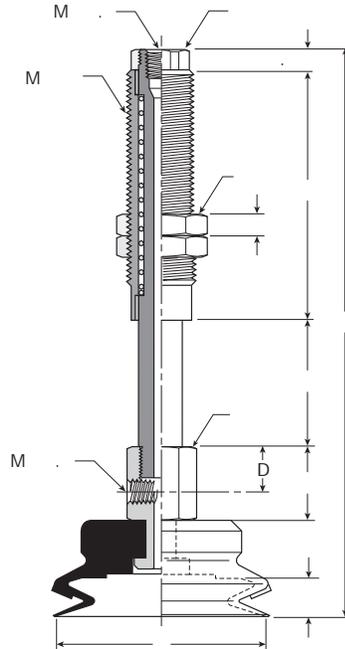


Dimensions

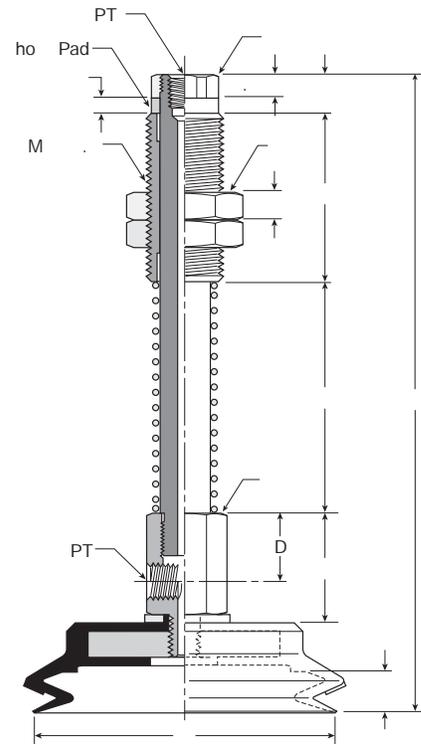
**PJTYS10 thru
PJTYS20**



**PJTYS30 thru
PJTYS50**



**PJTYS60 thru
PJTYS80**



Model number	ØA	B	C	D	E	F	G	H	J	Wt oz (g)
PJTYS1010**†	.39 (10)	2.52 (64)	.51 (13)	.31 (8)	.12 (3)	.39 (10)	.20 (5)	.91 (23)	—	1.1 (31)
PJTYS1015**†	.39 (10)	3.01 (76.5)	.51 (13)	.31 (8)	.12 (3)	.59 (15)	.20 (5)	1.20 (30.5)	—	1.2 (33.5)
PJTYS1510**†	.59 (15)	2.60 (66)	.51 (13)	.31 (8)	.13 (3.3)	.39 (10)	.20 (5)	.91 (23)	—	1.1 (32)
PJTYS1515**†	.59 (15)	3.07 (78)	.51 (13)	.31 (8)	.13 (3.3)	.59 (15)	.20 (5)	1.20 (30.5)	—	1.3 (34.5)
PJTYS2010**†	.79 (20)	2.83 (72)	.51 (13)	.31 (8)	.22 (5.5)	.39 (10)	.20 (5)	.91 (23)	—	1.1 (32)
PJTYS2015**†	.79 (20)	4.29 (109)	.51 (13)	.31 (8)	.22 (5.5)	.59 (15)	.20 (5)	1.20 (30.5)	—	1.3 (34.5)
PJTYS3015**†	1.18 (30)	3.58 (91)	.67 (17)	.39 (10)	.28 (7)	.59 (15)	.20 (5)	1.42 (36)	—	2.6 (74)
PJTYS3030**†	1.18 (30)	5.04 (128)	.67 (17)	.39 (10)	.28 (7)	1.18 (30)	.20 (5)	2.28 (58)	—	3.5 (99)
PJTYS3515**†	1.38 (35)	3.58 (91)	.67 (17)	.39 (10)	.28 (7)	.59 (15)	.20 (5)	1.42 (36)	—	2.7 (76.5)
PJTYS3530**†	1.38 (35)	5.04 (128)	.67 (17)	.39 (10)	.28 (7)	1.18 (30)	.20 (5)	2.28 (58)	—	3.6 (101.5)
PJTYS4015**†	1.57 (40)	3.58 (91)	.67 (17)	.39 (10)	.28 (7.2)	.59 (15)	.20 (5)	1.42 (36)	—	2.8 (78.5)
PJTYS4030**†	1.57 (40)	5.04 (128)	.67 (17)	.39 (10)	.28 (7.2)	1.18 (30)	.20 (5)	2.28 (58)	—	3.7 (103.5)
PJTYS5015**†	1.97 (50)	3.66 (93)	.67 (17)	.39 (10)	.35 (9)	.59 (15)	.20 (5)	1.42 (36)	—	3.3 (94)
PJTYS5030**†	1.97 (50)	5.12 (130)	.67 (17)	.39 (10)	.35 (9)	1.18 (30)	.20 (5)	2.28 (58)	—	4.2 (119)
PJTYS6030**†	2.36 (60)	6.18 (157)	1.18 (30)	.79 (20)	.31 (8)	1.18 (45)	.39 (10)	1.97 (50)	.47 (12)	10.4 (294)
PJTYS6050**†	2.36 (60)	7.17 (182)	1.18 (30)	.79 (20)	.31 (8)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	11.6 (328)
PJTYS8030**†	3.15 (80)	6.22 (158)	1.18 (30)	.79 (20)	.37 (9.5)	1.18 (45)	.39 (10)	1.97 (50)	.47 (12)	11.9 (338)
PJTYS8050**†	3.15 (80)	7.20 (183)	1.18 (30)	.79 (20)	.37 (9.5)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	13.1 (372)

Inches (mm)
** Cup material
† Vacuum port

C

Vacuum Cups
Vacuum Products

PFG Series

PBG Series

P5V-CFS Series

PJG Series

PCG Series

PUGB Series



PCG Multiple Bellows Vacuum Cup Series

2-1/2 bellows design minimizes contact pressure applied to the product. The soft seal lip and touch allows the cup to conform to the product's surface to make a vacuum seal.

These multiple bellow cups are designed for applications that require additional level compensation, more flexibility, or minimum back pressure for a "soft touch". The multiple bellow has a soft sealing edge good for a variety of sensitive applications; such as food packaging, CD / DVD, medical packaging, and highly irregular curved surfaces. Cups can also be used to assist with sheet separation in destack operations.



Features

- Soft touch
- Extra level compensation
- Flexible sealing lip for irregular curved surfaces
- 5mm to 90mm in diameter

Styles

- PCTM series male thread connector
- PCTF series female thread Connector
- PCTK series barbed bulkhead

Operating information

Cup material	Nitrile	Nitrile ESD*	Silicon	Silicon ESD*	Urethane
Material code	NBR	NBRE	SI	SIE	U
Operating temperature	-20°C to 120°C (-4°F to 248°F)	0°C to 60°C (32°F to 40°F)	-60° to 250°C (-76°F to 482°F)	-10° to 130°C (-14°F to 266°F)	-20° to 75°C (-4°F to 167°F)
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	—	5 to 15	—

* 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. PCTM-20B-NBR-G1 becomes PCTM-20B-U-G1. Inquire with factory for availability.

Application guide

2-1/2 Bellows



Flat surface,
any section

Bowed
surface, thin
section

Slightly
bowed
surface, any
section

Bowed
surface, any
section

Soft material

Metal sheet
handling

Corrugated
sheet handling

Differences in
heights and
levels

Not for
vertical lift

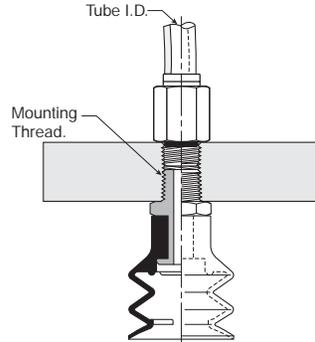
PCTM Series Male Thread Connector

Simple male connection for low profile positions secured to a plate or bracket. NPT, G, metric threads.
 Fitting material: aluminum.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	M5	PCTM-5-NBR-M5	PCG-5-NBR	PCTM-5-SI-M5	PCG-5-SI	FTM-5A-M5H
7	M5	PCTM-7-NBR-M5	PCG-7-NBR	PCTM-7-SI-M5	PCG-7-SI	FTM-5A-M5H
10	M5	PCTM-10-NBR-M5	PCG-10-NBR	PCTM-10-SI-M5	PCG-10-SI	CTM-10-M5H
10	G1	PCTM-10-NBR-G1	PCG-10-NBR	PCTM-10-SI-G1	PCG-10-SI	CTM-10-G1H
15	M5	PCTM-15-NBR-M5	PCG-15-NBR	PCTM-15-SI-M5	PCG-15-SI	CTM-10-M5H
15	G1	PCTM-15-NBR-G1	PCG-15-NBR	PCTM-15-SI-G1	PCG-15-SI	CTM-10-G1H
20	M5	PCTM-20-NBR-M5	PCG-20-NBR	PCTM-20-SI-M5	PCG-20-SI	CTM-10-M5H
20	G1	PCTM-20-NBR-G1	PCG-20-NBR	PCTM-20-SI-G1	PCG-20-SI	CTM-10-G1H
30	G1	PCTM-30-NBR-G1	PCG-30-NBR	PCTM-30-SI-G1	PCG-30-SI	CTM-30-G1H
30	G2	PCTM-30-NBR-G2	PCG-30-NBR	PCTM-30-SI-G2	PCG-30-SI	CTM-30-G2
30	N1	PCTM-30-NBR-N1	PCG-30-NBR	PCTM-30-SI-N1	PCG-30-SI	CTM-30-N1
40	G1	PCTM-40-NBR-G1	PCG-40-NBR	PCTM-40-SI-G1	PCG-40-SI	CTM-30-G1H
40	G2	PCTM-40-NBR-G2	PCG-40-NBR	PCTM-40-SI-G2	PCG-40-SI	CTM-30-G2
40	N1	PCTM-40-NBR-N1	PCG-40-NBR	PCTM-40-SI-N1	PCG-40-SI	CTM-30-N1
60	G1	PCTM-60-NBR-G1	PCG-60-NBR	PCTM-60-SI-G1	PCG-60-SI	CTM-30-G1H
60	N1	PCTM-60-NBR-N1	PCG-60-NBR	PCTM-60-SI-N1	PCG-60-SI	CTM-30-N1
90	G2	PCTM-90-NBR-G2	PCG-90-NBR	PCTM-90-SI-G2	PCG-90-SI	CTM-90-G2
90	N2	PCTM-90-NBR-N2	PCG-90-NBR	PCTM-90-SI-N2	PCG-90-SI	CTM-90-N2

Most popular.

C	Vacuum Cups
	Vacuum Products
	PFG Series
	PBG Series
	P5V-CFS Series
	PJG Series
	PCG Series
	PUGB Series



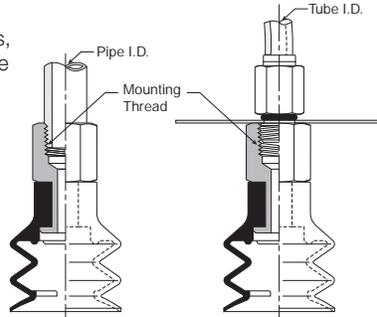
PCTF Series Female Thread Connector

Simple female connection for low profile positions secured to a plate or bracket. NPSF, G threads.
 Fitting material: aluminum.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	M5	PCTF-5-NBR-M5	PCG-5-NBR	PCTF-5-SI-M5	PCG-5-SI	FTF-5A-M5
7	M5	PCTF-7-NBR-M5	PCG-7-NBR	PCTF-7-SI-M5	PCG-7-SI	FTF-5A-M5
10	1/8 BSPP	PCTF-10-NBR-G1	PCG-10-NBR	PCTF-10-SI-G1	PCG-10-SI	CTF-10-G1
15	1/8 BSPP	PCTF-15-NBR-G1	PCG-15-NBR	PCTF-15-SI-G1	PCG-15-SI	CTF-10-G1
20	1/8 BSPP	PCTF-20-NBR-G1	PCG-20-NBR	PCTF-20-SI-G1	PCG-20-SI	CTF-10-G1
30	1/8 BSPP	PCTF-30-NBR-G1	PCG-30-NBR	PCTF-30-SI-G1	PCG-30-SI	CTF-30-G1
30	1/8 NPT	PCTF-30-NBR-N1	PCG-30-NBR	PCTF-30-SI-N1	PCG-30-SI	CTF-30-N1
40	1/8 BSPP	PCTF-40-NBR-G1	PCG-40-NBR	PCTF-40-SI-G1	PCG-40-SI	CTF-30-G1
40	1/8 NPT	PCTF-40-NBR-N1	PCG-40-NBR	PCTF-40-SI-N1	PCG-40-SI	CTF-30-N1
60	1/8 NPT	PCTF-60-NBR-N1	PCG-60-NBR	PCTF-60-SI-N1	PCG-60-SI	CTF-30-G1
60	1/4 NPT	PCTF-60-NBR-N1	PCG-60-NBR	PCTF-60-SI-N1	PCG-60-SI	CTF-30-N1
90	1/4 BSPP	PCTF-90-NBR-G2	PCG-90-NBR	PCTF-90-SI-G2	PCG-90-SI	CTF-90-G2
90	1/4 NPT	PCTF-90-NBR-N2	PCG-90-NBR	PCTF-90-SI-N2	PCG-90-SI	CTF-90-N2

Most popular.

- C
- Vacuum Cups
- Vacuum Products
- PFG Series
- PBG Series
- PSV-CFS Series
- PJG Series
- PCG Series
- PUGB Series

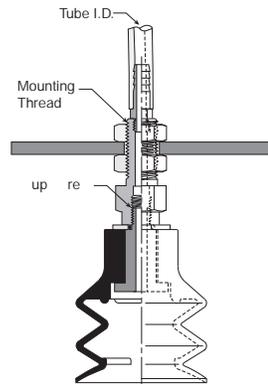


PCTK Series Barbed Bulkhead

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

Installation

Note:
 When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



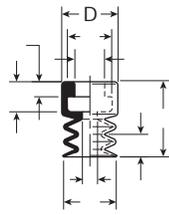
Cup diameter (mm)	Vacuum port	Complete assembly Nitrile (NBR)	Replacement cup Nitrile (NBR)	Complete assembly Silicon (SI)	Replacement cup Silicon (SI)	Replacement cup fitting
5	Barb	PCTK-5-NBR	PCG-5-NBR	PCTK-5-SI	PCG-5-SI	FTK-5A
7	Barb	PCTK-7-NBR	PCG-7-NBR	PCTK-7-SI	PCG-7-SI	FTK-5A
10	Barb	PCTK-10-NBR	PCG-10-NBR	PCTK-10-SI	PCG-10-SI	CTK-10
15	Barb	PCTK-15-NBR	PCG-15-NBR	PCTK-15-SI	PCG-15-SI	CTK-10
20	Barb	PCTK-20-NBR	PCG-20-NBR	PCTK-20-SI	PCG-20-SI	CTK-10
30	Barb	PCTK-30-NBR	PCG-30-NBR	PCTK-30-SI	PCG-30-SI	CTK-30
40	Barb	PCTK-40-NBR	PCG-40-NBR	PCTK-40-SI	PCG-40-SI	CTK-30
60	Barb	PCTK-60-NBR	PCG-60-NBR	PCTK-60-SI	PCG-60-SI	CTK-30
90	NPT	PCTK-90-NBR-N1	PCG-90-NBR	PCTK-90-SI-N1	PCG-90-SI	CTK-90-N1
90	BSPP	PCTK-90-NBR-G1	PCG-90-NBR	PCTK-90-SI-G1	PCG-90-SI	CTK-90-G1

Most popular.

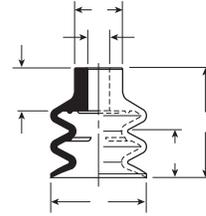


PCG Series Replacement Cup Dimensions

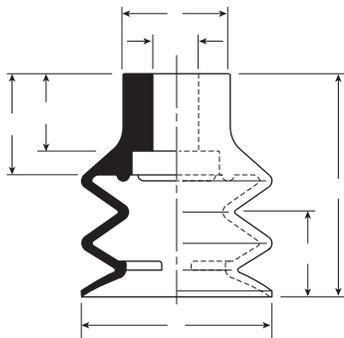
**PCG-5 and
 PCG-7**



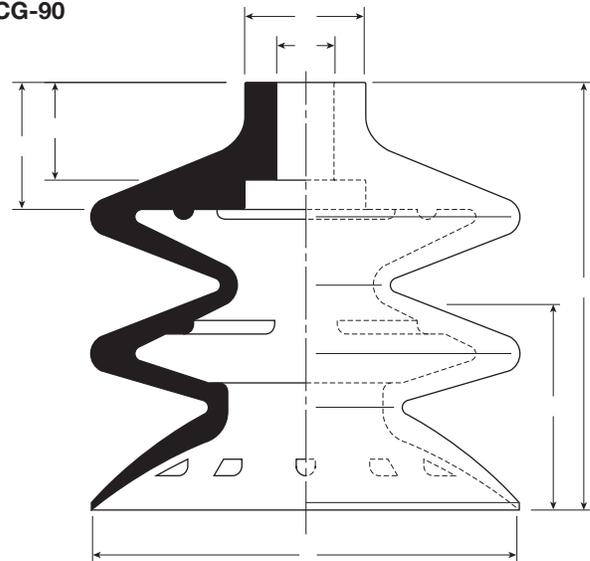
**PCG-10 thru
 PCG-20**



**PCG-30 thru
 PCG-60**



PCG-90



C
 Vacuum Cups
 Vacuum Products

Series
 PFG
 PBG
 PSV-CFS
 PJG
 PCG
 PUGB

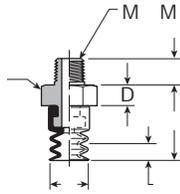
Model number	ØA	ØB	ØC	ØD	E	F	G	H	J
PCG-5-*	.20 (5)	.16 (4)	.08 (2)	.30 (7.5)	.37 (9.5)	.12 (3)	.16 (4)	.08 (2)	.24 (6)
PCG-7-*	.28 (7)	.16 (4)	.08 (2)	.30 (7.5)	.39 (10)	.12 (3)	.16 (4)	.08 (2)	.24 (6)
PCG-10-*	.35 (9)	.20 (5)	—	—	.59 (15)	.12 (3)	.28 (7)	—	.35 (9)
PCG-15-*	.60 (15.2)	.20 (5)	—	—	.90 (22)	.39 (10)	.35 (9)	—	.39 (10)
PCG-20-*	.79 (20)	.20 (5)	—	—	.91 (23)	.39 (10)	.35 (9)	—	.39 (10)
PCG-30-*	1.26 (32)	.31 (8)	—	—	1.48 (37.5)	.57 (14.5)	.67 (17)	.51 (13)	.71 (18)
PCG-40-*	1.65 (42)	.31 (8)	—	—	1.81 (46)	.87 (22)	.67 (17)	.51 (13)	.79 (20)
PCG-60-*	2.44 (62)	.31 (8)	—	—	2.17 (55)	1.06 (27)	.71 (18)	.51 (13)	.85 (21.5)
PCG-90-*	3.46 (88)	.47 (12)	—	—	3.44 (87.5)	1.65 (42)	1.02 (26)	.79 (20)	.98 (25)

Inches (mm)
 * Cup material

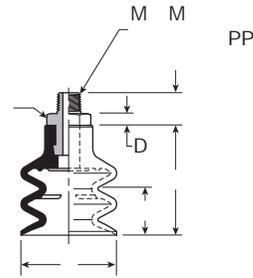


Dimensions

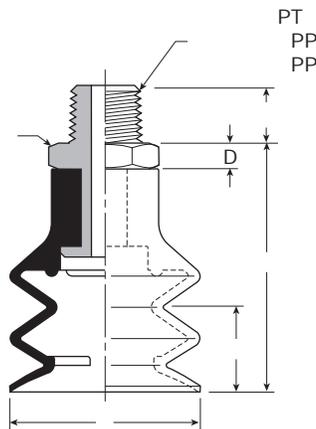
**PCTM-5 and
PCTM-7**



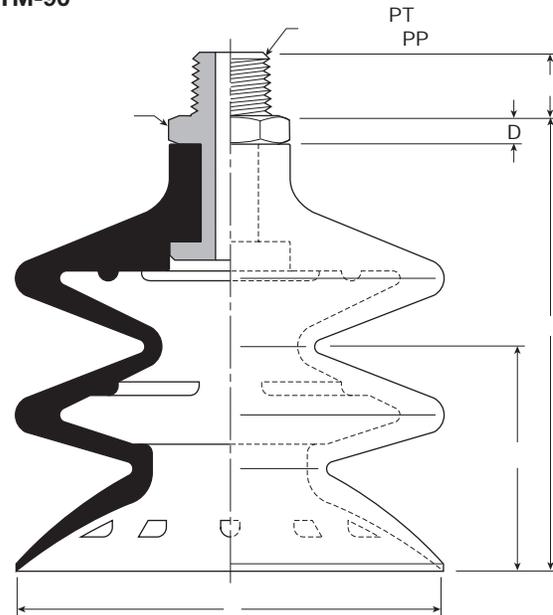
**PCTM-10 thru
PCTM-20**



**PCTM-30 thru
PCTM-60**



PCTM-90



Model number	ØA	B	C (M5)	C (N1 / G1)	C (M10 / G2)	C (N2)	D	E
PCTM-5-*†	.20 (5)	.51 (13)	.18 (4.5)	—	—	—	.14 (3.5)	.12 (3)
PCTM-7-*†	.28 (7)	.53 (13.5)	.18 (4.5)	—	—	—	.14 (3.5)	.12 (3)
PCTM-10-*†	.35 (9)	.69 (17.5)	.18 (4.5)	.31 (8)	—	—	.10 (2.5)	.12 (3)
PCTM-15-*†	.60 (15.2)	1.04 (25.5)	.18 (4.5)	.31 (8)	—	—	.10 (2.5)	.39 (10)
PCTM-20-*†	.79 (20)	1.04 (25.5)	.18 (4.5)	.31 (8)	—	—	.10 (2.5)	.39 (10)
PCTM-30-*†	1.26 (32)	1.67 (42.5)	—	.31 (8)	.39 (10)	—	.20 (5)	.57 (14.5)
PCTM-40-*†	1.65 (42)	2.01 (51)	—	.31 (8)	.39 (10)	—	.20 (5)	.87 (22)
PCTM-60-*†	2.44 (62)	2.36 (60)	—	.31 (8)	.39 (10)	—	.20 (5)	1.06 (27)
PCTM-90-*†	3.46 (88)	3.64 (92.5)	—	—	.39 (10)	.59 (15)	.20 (5)	1.65 (42)

Inches (mm)
* Cup material
† Thread size

C
Vacuum Cups
Vacuum Products

PFG
Series

PBG
Series

P5V-CFS
Series

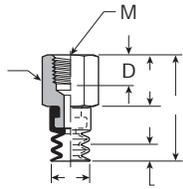
PJG
Series

PCG
Series

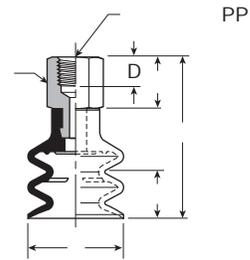
PUGB
Series

Dimensions

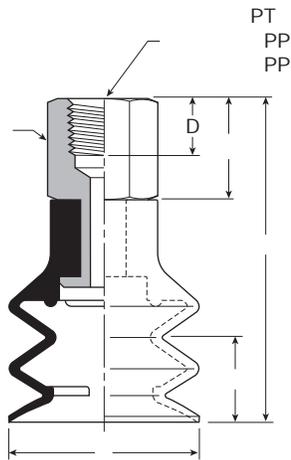
**PCTF-5 and
PCTF-7**



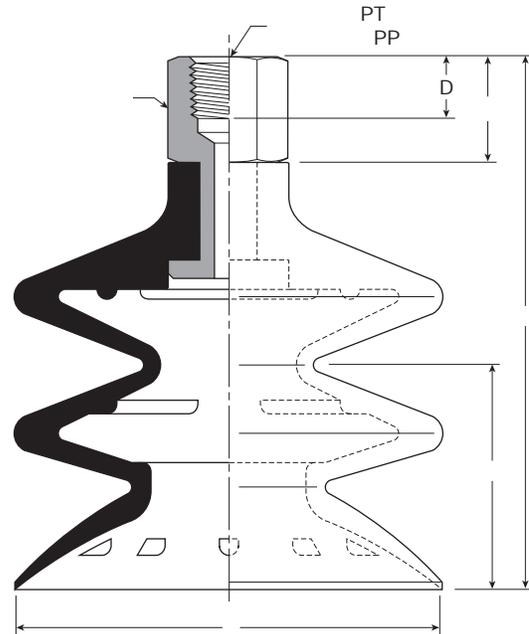
**PCTF-10 thru
PCTF-20**



**PCTF-30 thru
PCTF-60**



PCTF-90



C
Vacuum Cups
Vacuum Products
Series
PFG
Series
PBG
Series
PSV-CFS
Series
PJG
Series
PCG
Series
PUGB
Series

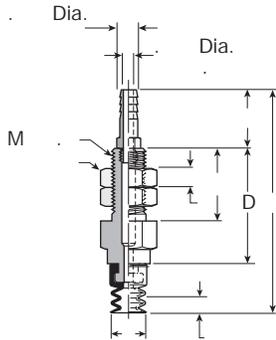
Model number	ØA	B	C	D	E
PCTF-5*†	.20 (5)	.85 (21.5)	.47 (12)	.31 (8)	.12 (3)
PCTF-7*†	.28 (7)	.87 (22)	.47 (12)	.31 (8)	.12 (3)
PCTF-10*†	.35 (9)	1.06 (27)	.47 (12)	.31 (8)	.12 (3)
PCTF-15*†	.60 (15.2)	1.38 (35)	.47 (12)	.31 (8)	.39 (10)
PCTF-20*†	.79 (20)	1.38 (35)	.47 (12)	.31 (8)	.39 (10)
PCTF-30*†	1.26 (32)	2.03 (51.5)	.55 (14)	.31 (8)	.57 (14.5)
PCTF-40*†	1.65 (42)	2.36 (60)	.55 (14)	.31 (8)	.87 (22)
PCTF-60*†	2.44 (62)	2.72 (69)	.55 (14)	.31 (8)	1.06 (27)
PCTF-90*†	3.46 (88)	4.13 (105)	.69 (17.5)	.39 (10)	1.65 (42)

Inches (mm)
* Cup material
† Thread size

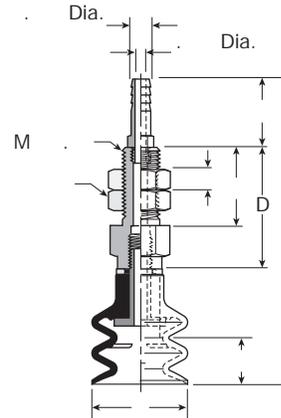


Dimensions

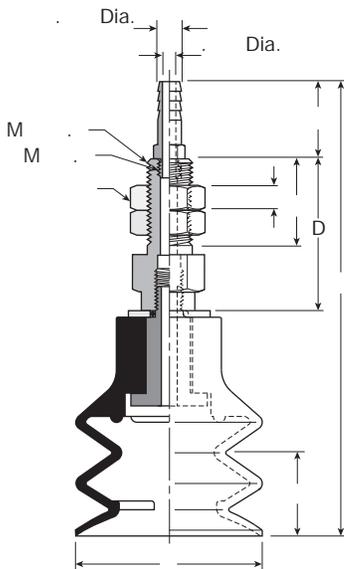
**PCTK-5 and
PCTK-7**



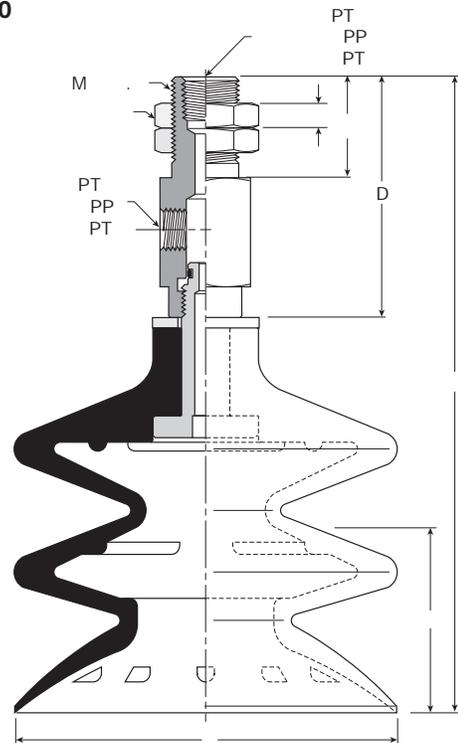
**PCTK-10 thru
PCTK-20**



**PCTK-30 thru
PCTK-60**



PCTK-90



Model number	ØA	B	C	D	E	F	G	Wt oz. (g)
PCTK-5-*	.20 (5)	1.32 (33.5)	.39 (10)	.55 (14)	.12 (3)	.47 (12)	.12 (3)	.56 (11)
PCTK-7-*	.28 (7)	1.34 (34)	.39 (10)	.55 (14)	.12 (3)	.47 (12)	.12 (3)	.56 (11)
PCTK-10-*	.35 (9)	2.21 (56.2)	.63 (16)	.88 (22.5)	.12 (3)	.59 (15)	.16 (4)	.78 (22)
PCTK-15-*	.60 (15.2)	2.53 (64.2)	.63 (16)	.86 (22)	.39 (10)	.59 (15)	.16 (4)	.78 (22)
PCTK-20-*	.79 (20)	2.53 (64.2)	.63 (16)	.86 (22)	.39 (10)	.59 (15)	.16 (4)	.78 (22)
PCTK-30-*	1.26 (32)	3.42 (86.8)	.63 (16)	1.26 (32)	.57 (14.5)	.79 (20)	.20 (5)	1.62 (46)
PCTK-40-*	1.65 (42)	3.75 (95.3)	.63 (16)	1.26 (32)	.86 (22)	.79 (20)	.20 (5)	1.94 (55)
PCTK-60-*	2.44 (62)	4.11 (104.3)	.63 (16)	1.26 (32)	1.06 (27)	.79 (20)	.20 (5)	3.00 (85)
PCYK-90-*	3.46 (88)	5.70 (144.8)	.91 (23)	2.17 (55)	1.65 (42)	.43 (11)	—	10.58 (300)

Inches (mm)
* Cup material
† Vacuum port

C
Vacuum Cups
Vacuum Products
PFG Series
PBG Series
P5V-CFS Series
PJG Series
PCG Series
PUGB Series



PUGB Flat Swivel Vacuum Cup Series

30° inclusive swivel, single lip cup for smooth, slightly curved surfaces and flexible products. Rigid construction provides good stability against acceleration and deceleration forces during product transfer.

The single edge swivel cup is for smooth surfaces with slightly curved surfaces or flexible sheets with substantial weights. Typically, lift capacities and break away forces are higher for flat cups which may be necessary for good stability during lift and transfer. The position of the internal swivel joint minimizes moments during lift and transfer. The swivel joint compensates for load and angular misalignment instead of the cup material, prolonging cup life. Maintenance costs are minimized by replacing only the cup portion of the assembly.



Features

- Internal swivel joint design
- 30° Inclusive angle for flexible products
- Increased stability for horizontal lifts
- Lower maintenance costs
- 60mm to 100mm diameters

Styles

- PUTK series barbed bulkhead
- PUTYS series bulkhead level compensator

Operating information

Cup material	Nitrile	Silicon
Material code	NBR	SI
Operating temperature	-20°C to 120°C (-4°F to 248°F)	-60° to 250°C (-76°F to 482°F)
Color	Black	White
Hardness, shore A (°Sh)	55 ±5	55 ±5

* ESD: Electric Static Dissipative Material

Application guide

Swivel Bellows



Flat surface, thin section

Flat surface, any section

Slightly bowed surface, thin section

Slightly bowed surface, any section

Metal sheet handling

Not for vertical lift

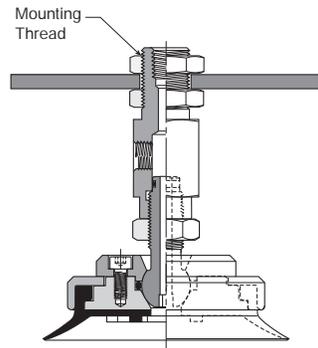
PUTK Series Barbed Bulkhead

Top stem connectors secured with jam nuts and allow tubing connections at the top side. Fitting material: nickel plated brass.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage.



Cup size	Vacuum port	Cup material Nitrile assembly (NBR)	Replacement PUGB swivel with cup only	Replacement cup only (NBR)	Cup fitting
60	1/8 NPT	PUTK-60-NBR-N1	PUGB-60-NBR	PUG-60-NBR	UTK-60-N1
80	1/8 NPT	PUTK-80-NBR-N1	PUGB-80-NBR	PUG-80-NBR	UTK-60-N1
100	1/8 NPT	PUTK-100-NBR-N1	PUGB-100-NBR	PUG-100-NBR	UTK-60-N1

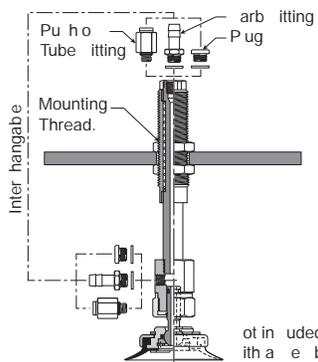
PUTYS Series Bulkhead Level Compensator

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.

Installation

Note:

When installing cup assemblies, use a sealant material to secure the assembly and prevent vacuum leakage. Shown are interchangeable connectors & plugs for port connections.



Cup diameter (mm)	Vacuum port	Stroke (mm)	Spring compression Force lbf (N)		PUTYS assembly (NBR)	Replacement PUGB swivel with cup only	Replacement cup only NBR	Level compensator P/N
			0%	100%				
60	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PUTYS6030NBRN1	PUGB-60-NBR	PUG-60-NBR	UTYS-60-30
60	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PUTYS6050NBRN1	PUGB-60-NBR	PUG-60-NBR	UTYS-60-50
80	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PUTYS8030NBRN1	PUGB-80-NBR	PUG-80-NBR	UTYS-60-30
80	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PUTYS8050NBRN1	PUGB-80-NBR	PUG-80-NBR	UTYS-60-50
100	1/8 NPT	30	1.6 (6.8)	3.6 (15.6)	PUTYS10030NBRN1	PUGB-100-NBR	PUG-100-NBR	UTYS-60-30
100	1/8 NPT	50	1.9 (8.3)	4.5 (19.6)	PUTYS10050NBRN1	PUGB-100-NBR	PUG-100-NBR	UTYS-60-50

Most popular.

C

Vacuum Cups
Vacuum Products

PFG Series

PBG Series

P5V-CFS Series

PVG Series

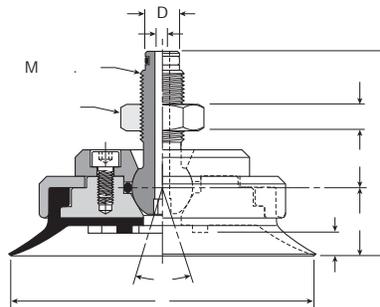
PCG Series

PUGB Series



PUGB Series Barbed Bulkhead Dimensions

**PUGB-60 thru
PUGB-100**



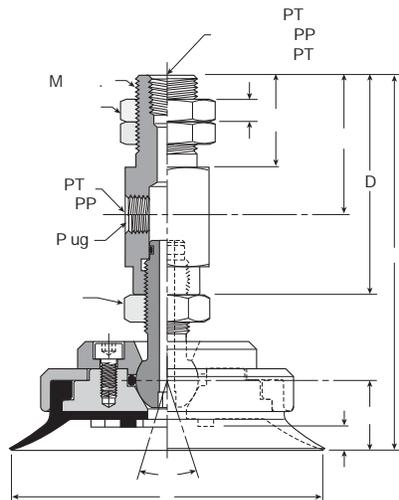
Model number	ØA	ØB	C	ØD	E	F	G	H
PUGB-60-*	2.36 (60)	.15 (3.9)	.63 (16)	.35 (9)	2.05 (52)	.20 (5)	.59 (15)	.28 (7)
PUGB-80-*	3.15 (80)	.15 (3.9)	.71 (18)	.35 (9)	2.13 (54)	.24 (6)	.59 (15)	.28 (7)
PUGB-100-*	3.94 (100)	.15 (3.9)	.71 (18)	.35 (9)	2.13 (54)	.24 (6)	.59 (15)	.28 (7)

Inches (mm)
* Cup material

C
Vacuum Cups
Vacuum Products
PFG Series
PBG Series
PSV-CFS Series
PJG Series
PCG Series
PUGB Series

PUTK Series Barbed Bulkhead Dimensions

**PUTK-60 thru
PUTK-100**



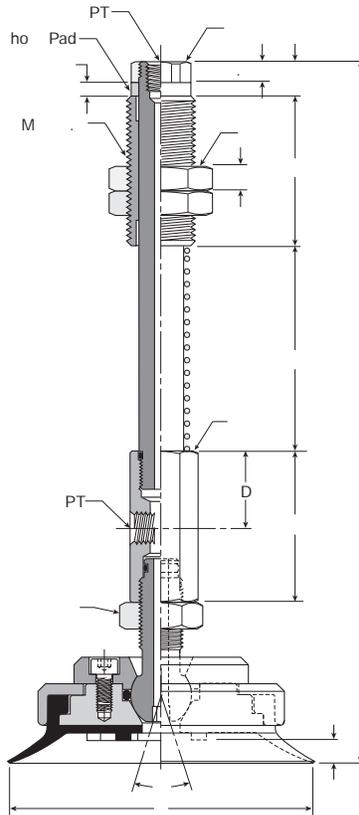
Model number	ØA	B	C	D	E	F	G	H	Wt oz (g)
PUTK-60-*	2.36 (60)	3.66 (93)	.63 (16)	1.89 (48)	.20 (5)	.91 (23)	.24 (6)	.63 (16)	12.4 (352)
PUTK-80-*	3.15 (80)	3.74 (95)	1.38 (35)	2.16 (55)	.24 (6)	.91 (23)	.24 (6)	.71 (18)	15.7 (444)
PUTK-100-*	3.94 (100)	3.74 (95)	1.38 (35)	2.16 (55)	.24 (6)	.91 (23)	.24 (6)	.71 (18)	20.0 (568)

Inches (mm)
* Cup material



Dimensions

**PUTYS60 thru
 PUTYS100**



Model number	ØA	B	C	D	E	F	G	H	J	Wt oz (g)
PUTYS6030*	2.36 (60)	7.28 (185)	1.57 (40)	.79 (20)	.20 (5)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	17.2 (487)
PUTYS6050*	2.36 (60)	8.27 (210)	1.57 (40)	.79 (20)	.20 (5)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	18.4 (521)
PUTYS8030*	3.15 (80)	7.36 (187)	1.57 (40)	.79 (20)	.24 (6)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	19.7 (559)
PUTYS8050*	3.15 (80)	8.35 (212)	1.57 (40)	.79 (20)	.24 (6)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	20.1 (595)
PUTYS10030*	1.18 (30)	7.36 (187)	1.57 (40)	.79 (20)	.24 (6)	1.77 (45)	.39 (10)	1.97 (50)	.47 (12)	25.7 (729)
PUTYS10050*	1.18 (30)	8.35 (212)	1.57 (40)	.79 (20)	.24 (6)	2.76 (70)	.39 (10)	1.97 (50)	.47 (12)	26.7 (756)

Inches (mm)
 * Cup material

C
 Vacuum Cups
 Vacuum Products

PFG
 Series

PBG
 Series

P5V-CFS
 Series

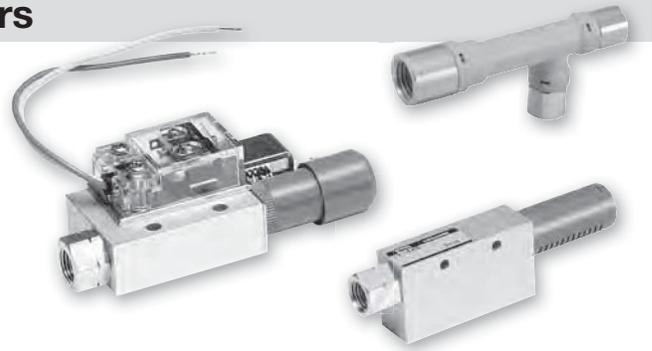
PJG
 Series

PCG
 Series

PUGB
 Series

MCA, CV, CV-CK Vacuum Generators

Parker Inline Single Stage Vacuum Generators is a compact design offering multiple vacuum flow ranges in 3 styles. These Generators are meant to be mounted near the vacuum application for improved vacuum response time. A Normally Open or Normally Closed 3 way valve can be used to control the supply pressure to obtain up to a 27 InHg degree of vacuum.



Features

- **MCA:**
 - light weight vacuum generator
 - vacuum flow rates to 1.26 SCFM
- **CV:**
 - basic aluminum body generator with exhaust muffler
 - vacuum flow rates to 12.36 SCFM
 - degree of vacuum to 27 inHg
- **CV-CK**
 - basic aluminum body generator with mechanical vacuum switch
 - vacuum flow rates to 5.85 SCFM
 - degree of vacuum to 27 inHg

Operating information

Media:	Non-lubricated air, non-corrosive gases
Operating pressure:	14 to 114 PSI
Operating temperature:	32° to 120°F (0°C to 49°C) (MCA, CV); 32 to 140°F (0°C to 60°C) (CV-CK)
CV-CK Switch:	
Hysteresis:	1.1 to 3.9 inHg
Switch output:	N.O., AC125V; 5A, AC250V: 3A, DC250V: 0.2A

Material specifications

MCA	Polycarbonate, Aluminum fittings
Body	Aluminum (CV, CV-CK)
Nozzle	Nickel plated brass (CV, CV-CK)

MCA, CV, CV-CK Vacuum Generators

Symbol	Port size			Max. vacuum flow SCFM	Air consumption SCFM	Max. degree of vacuum inHg	Part number	
	Pressure	Vacuum	Exhaust				NPT	BSPP
MCA Series								
	1/8	1/8	1/4	1.68	1.68	24	MCA10HSN1N1N2	MCA10HSG1G1N2
	1/8	1/8	1/4	2.81	2.81	24	MCA13HSN1N1N2	MCA13HSG1G1G2
CV Series								
	1/8	1/8	Muffler	0.21	0.46	27	CV05HSN	CV05HSG
	1/8	1/8	Muffler	0.32	0.46	17	CV05LSN	CV05LSG
	1/8	1/8	Muffler	0.95	1.55	27	CV10HSN	CV10HSG
	1/8	1/8	Muffler	1.27	1.55	17	CV10LSN	CV10LSG
	1/4	3/8	Muffler	2.22	3.53	27	CV15HSN	CV15HSG
	1/4	3/8	Muffler	3.35	3.53	17	CV15LSN	CV15LSG
	1/4	3/8	Muffler	3.88	6.36	27	CV20HSN	CV20HSG
	1/4	1/2	Muffler	5.85	6.36	17	CV20LSN	CV20LSG
	3/8	1/2	Muffler	5.65	9.36	27	CV25HSN	CV25HSG
	3/8	1/2	Muffler	8.83	9.36	17	CV25LSN	CV25LSG
CV-CK Series								
	1/8	1/8	—	0.95	1.55	27	CV10HSCKN	CV10HSCKG
	1/4	1/4	—	2.22	3.53	27	CV15HSCKN	CV15HSCKG
	1/4	3/8	—	3.88	6.36	27	CV20HSCKN	CV20HSCKG

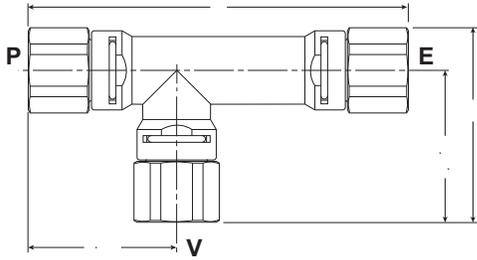
Most popular.

C
 Vacuum Generators
 Vacuum Products
 MCA, CV, CV-CK
 Series
 CHF
 Series
 MC22
 Series
 MC72
 Series
 CEK
 Series
 CVXCEK
 Series

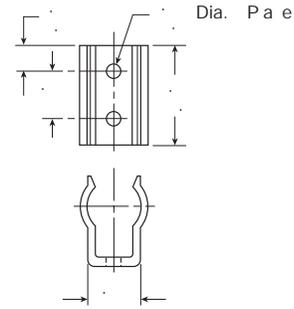


Dimensions

MCA



MCA Mounting bracket: MCA-B

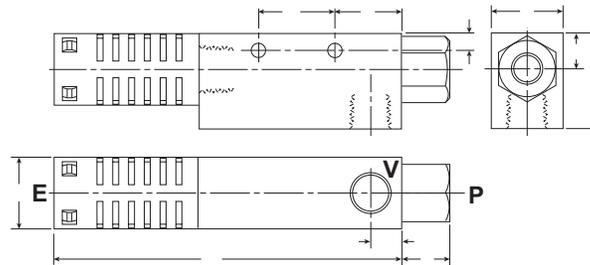


MCA**N1N1N2**

Part number	A	B
MCA10HS*****	2.76 (70)	1.16 (29.5)
MCA13HS*****	2.76 (70)	1.16 (29.5)

Inches (mm)

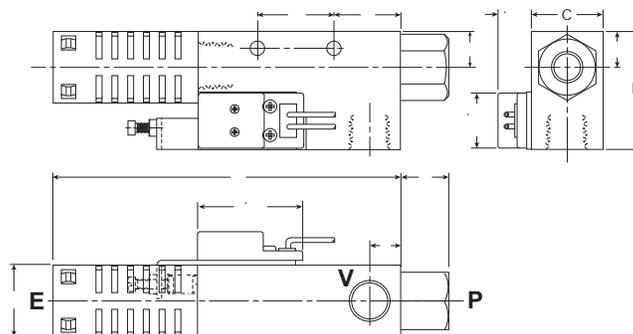
CV



Part number	A	B	C	D	E	F	G	H	J	K
CV05HS/LS	3.19 (81)	.73 (18.5)	.63 (16)	1.30 (33)	.39 (10)	.31 (8)	.39 (10)	.18 (4.5)	.55 (14)	.79 (20)
CV10HS/LS	3.19 (81)	.73 (18.5)	.63 (16)	1.30 (33)	.39 (10)	.31 (8)	.39 (10)	.18 (4.5)	.55 (14)	.79 (20)
CV15HS/LS	4.27 (108.5)	.79 (20)	.79 (20)	1.38 (35)	.59 (15)	.39 (10)	.43 (11)	.20 (5)	.79 (20)	.98 (25)
CV20HS/LS	5.73 (145.5)	1.18 (30)	1.18 (30)	1.57 (40)	.79 (20)	.51 (13)	.59 (15)	.28 (7)	1.10 (28)	1.26 (32)
CV25HS/LS	7.72 (196)	1.57 (40)	1.57 (40)	2.36 (60)	.67 (17)	.63 (16)	.79 (20)	.22 (5.5)	.79 (20)	1.97 (50)
CV30AHS/ALS	8.43 (214)	1.57 (40)	1.57 (40)	2.36 (60)	.79 (20)	.79 (20)	.79 (20)	.22 (5.5)	1.30 (33)	1.97 (50)

Inches (mm)

CV-CK



Part number	A	B	C	D	E	F	G	H	J	K
CV10HS/LSCK	3.19 (81)	.73 (18.5)	.63 (16)	1.30 (33)	.39 (10)	.31 (8)	.39 (10)	.18 (4.5)	17 (4.2)	.79 (20)
CV15HS/LSCK	4.27 (108.5)	.79 (20)	.79 (20)	1.38 (35)	.59 (15)	.39 (10)	.43 (11)	.20 (5)	.18 (4.5)	.98 (25)
CV20HS/LSCK	5.73 (145.5)	1.18 (30)	1.18 (30)	1.57 (40)	.79 (20)	.51 (13)	.59 (15)	.28 (7)	.24 (6)	1.26 (32)

Inches (mm)

C
 Vacuum Generators
 Vacuum Products
 MCA, CV, CV-CK
 CHF Series
 MC22 Series
 MC72 Series
 CEK Series
 CVXCEK Series



CHF High Flow Vacuum Generators

CHF- High Flow Series is a multistage vacuum generator. CHF unit is ideal for porous applications.

4 bolt mounting pattern with gauge opposite of vacuum and pressure inlet ports enables this generator to be panel mounted.

CHF Series comes standard with flow thru exhaust mufflers to reduce clogging in dirty environments. Additional Pneumatic Control Valve is required to create vacuum flow.



Features

- Classic multi-stage venturi
- Anodized aluminum body
- Aluminum body includes exhaust muffler
- Maximum vacuum level, 27.3 inHg
- Vacuum flow rates from 12.5 to 31.8 SCFM
- Mounting brackets included

Operating information

Media:	Non-lubricated air, non-corrosive gases
Operating pressure:	80 PSI
Operating temperature:	32°F to 120°F (0°C to 49°C)

Material specifications

Body	Aluminum
Seals	BUNA N
Nozzle & Diffuser	Polymer

CHF High Flow Vacuum Generators

Symbol	Port size			Max. vacuum flow SCFM	Air consumption SCFM	Max. degree of vacuum inHg	Part number NPT
	Pressure	Vacuum	Exhaust				
	1/4	3/8	Muffler	20.9	6.5	27	CHF-20ZNE
	1/4	3/8	Muffler	26.3	9.6	27	CHF-30ZNE
	1/4	3/8	Muffler	31.8	14.0	27	CHF-40ZNE

Accessories

Port size	Description	Part number
3/8	Filter with 10 micron element	VFP2CFC01
1/2		VFP3CFC01
3/8	Filter with 10 micron element and 2 replacement elements	VFP2CFC03
1/2		VFP3CFC03

See Accessories Section for more options

VFP Series filter



Replacement components

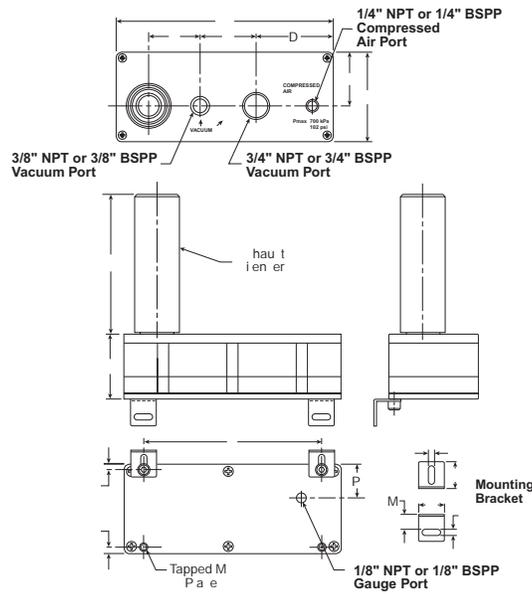
Description	Part number
CHF- Repair kit	SFCHF90NN
0 to 30 inHg gauge	266298A
Bracket kit (Includes 4 brackets & 4 M5 x 15 screws)	SFBW15
Silencer (flow thru)	SIS-001

Most popular.

C
 Vacuum Generators
 Vacuum Products
 MCA, CV, CV-CK
 CHF Series
 MC22 Series
 MC72 Series
 CEK Series
 CVXCEK Series



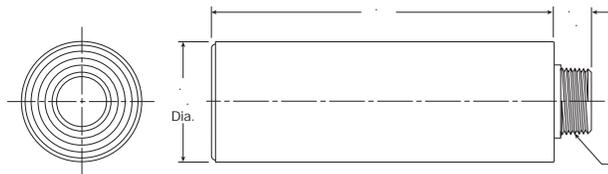
Dimensions



Part number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	Weight (grams)
CHF-20	7.64 (194)	3.15 (80)	1.89 (48)	2.72 (69)	1.97 (50)	1.81 (46)	4.84 (123)	1.69 (43)	.22 (5.5)	.94 (24)	.91 (23)	.51 (13)	6.26 (159)	1.26 (32)	.20 (5)	875
CHF-30	7.64 (194)	3.15 (80)	1.89 (48)	2.72 (69)	1.97 (50)	1.81 (46)	4.84 (123)	1.69 (43)	.22 (5.5)	.94 (24)	.91 (23)	.51 (13)	6.26 (159)	1.26 (32)	.20 (5)	885
CHF-40	7.64 (194)	3.15 (80)	1.89 (48)	2.72 (69)	1.97 (50)	1.81 (46)	4.84 (123)	2.28 (58)	.22 (5.5)	.94 (24)	.91 (23)	.51 (13)	6.26 (159)	1.26 (32)	.20 (5)	965

Inches (mm)

SIS-001 silencer dimensions



C
 Vacuum Generators
 Vacuum Products
 MCA, CV,
 CV-CK
 CHF
 Series
 MC22
 Series
 MC72
 Series
 CEK
 Series
 CVXCEK
 Series



MC22 Vacuum Generators

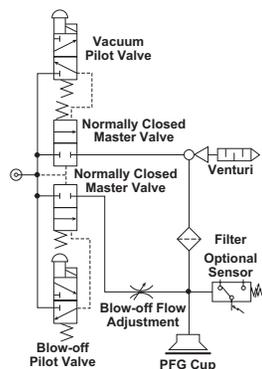
The MC22 is a complete package for factory automation. The MC22 has integrated vacuum generating and blow-off release pilot valves to minimize the response time to achieve vacuum. The small foot print and lightweight body allows the unit to be located close to the suction cup for maximum performance. The MC22 has additional features; regulating blow-off needle, 37 micron mesh filter, and a sensor platform for vacuum confirmation. The MC22 can be assembled into a maximum 8 station manifold. The unit can be ordered normally open or normally closed, with or without MPS-23 or MVS-201 pressure sensors.

Features

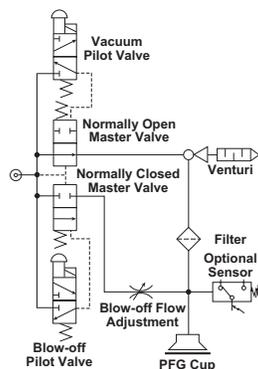
- Vacuum generating pilot valve
- Vacuum blow-off pilot valve
- Vacuum sensor - filter - silencer available
- Regulating blow-off adjustment
- Manifold system
- Short cycle times for high speed pick and place
- Vacuum flow rates to 1.55 SCFM



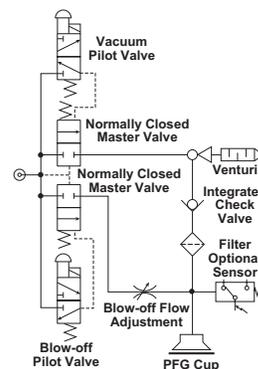
Add-A-Fold Manifold



MC22, Normally Closed Vacuum Valve



MC22, Normally Open Vacuum Valve



MC22, Normally Closed Vacuum Valve with Integrated Check Valve

Operating information

Media	Non-lubricated compressed air, non-corrosive gases
Operating pressure	21 to 84 PSI (1.5 to 6 kgf/cm ²)
Optimum operating pressure	70 PSI (5 kgf/cm ²)
Humidity	35 to 85%
Pressure port	N: 1/8 NPT female, G: 1/8 BSPP female
Vacuum port	M5 female
Operating temperature	41 to 132°F (5 to 50°C)
Material	Aluminum, Polyamide, NBR
Vacuum generating and blow-off release pilot	
Type of control valve	Pilot valve, includes 300mm clip wire connector
Manual operation	Non-locking manual override
Electrical connection	Clip type connector with LED and surge protection
Power supply	24VDC ± 10%
Power consumption	1W
Pressure range	21 to 84 PSI (1.5 to 6 kgf/cm ²)
Pilot valve air supply	Normally closed
Generator weight	4.1 oz. (117G) without sensor
Manifold weight	2-Station: 1.4 oz. (40g), 3-Station: 2 oz. (54g), 4-Station: 2.4 oz. (68g), 5-Station: 2.8 oz. (82g) 6-Station: 3.4 oz. (96g), 7-Station: 3.8 oz. (110g), 8-Station: 4.4 oz. (124g)

MC2 Unit Without Integrated Check Valve, Normally Closed Vacuum Valve

Port size			Max. vacuum flow SCFM	Max. degree of vacuum inHg	Sensor option	Part number	
Pressure	Vacuum	Exhaust				NPT	BSPP
1/8	M5	Muffler	1.55	24	None	MC22S10HSZL4BLN	MC22S10HSZL4BLG
1/8	M5	Muffler	1.55	24	MPS-V23C-PC, PNP	MC22S10HS42L4BLN	MC22S10HS42L4BLG
1/8	M5	Muffler	1.55	24	MVS-201-PCP, PNP	MC22S10HS06L4BLN	MC22S10HS06L4BLG
1/8	M5	Muffler	1.55	24	MPS-V23C-NC, NPN	MC22S10HS41L4BLN	MC22S10HS41L4BLG
1/8	M5	Muffler	1.55	24	MVS-201-NC, NPN	MC22S10HS01L4BLN	MC22S10HS01L4BLG

MC2 Unit Without Integrated Check Valve, Normally Open Vacuum Valve

Port size			Max. vacuum flow SCFM	Max. degree of vacuum inHg	Sensor option	Part number	
Pressure	Vacuum	Exhaust				NPT	BSPP
1/8	M5	Muffler	1.55	24	None	MC22S10HSZL4ALN	MC22S10HSZL4ALG
1/8	M5	Muffler	1.55	24	MPS-V23C-PC, PNP	MC22S10HS42L4ALN	MC22S10HS42L4ALG
1/8	M5	Muffler	1.55	24	MPS-V23C-NC, NPN	MC22S10HS41L4ALN	MC22S10HS41L4ALG

MC2 Unit With Integrated Check Valve, Normally Closed Vacuum Valve

Port size			Max. vacuum flow SCFM	Max. degree of vacuum inHg	Sensor option	Part number	
Pressure	Vacuum	Exhaust				NPT	BSPP
1/8	M5	Muffler	1.55	24	None	MC22S10HSZLC4BLN	MC22S10HSZLC4BLG
1/8	M5	Muffler	1.55	24	MPS-V23C-PC, PNP	MC22S10HS42LC4BLN	MC22S10HS42LC4BLG
1/8	M5	Muffler	1.55	24	MVS-201-PCP, PNP	MC22S10HS06LC4BLN	MC22S10HS06LC4BLG
1/8	M5	Muffler	1.55	24	MPS-V23C-NC, NPN	MC22S10HS41LC4BLN	MC22S10HS41LC4BLG
1/8	M5	Muffler	1.55	24	MVS-201-NC, NPN	MC22S10HS01LC4BLN	MC22S10HS01LC4BLG

Add-A-Fold assembly ordering information



Station 1 Station 2

Example 1: Application requires a 2-Station MC22 manifold with NPT supply ports.

Qty.	Part number	Comment
1	AAMC2-M02N	Add-A-Fold
1	MC22S10HS42L4BLN.....	Station #1
1	MC22S10HS42L4BLN.....	Station #2

Alternative Method

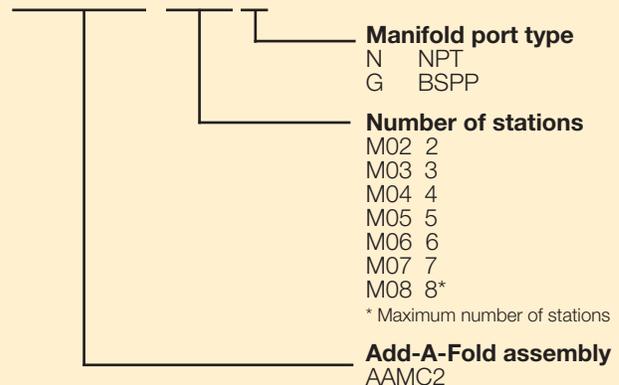
1	AAMC2-M02N	Add-A-Fold
2	MC22S10HS42L4BLN.....	Station #1-2

Most popular.

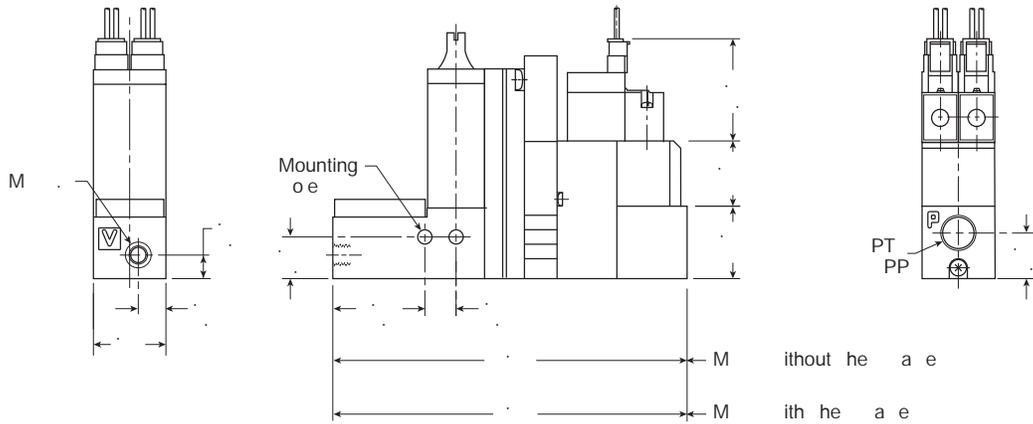
How to order Add-A-Fold assemblies

1. Manifold assemblies are multiple line item listings.
2. First line item must be the Add-A-Fold assembly part number.
3. Subsequent line items listed identify each station in the manifold starting with station number 1.
4. Station number 1 is the left most generator when looking at the manifold generator ports.
5. List either a part number of the MC22 Generator or a blank plate for each station of the manifold.
6. See model number index code for MC22 Generator number and MC22 accessories for blank plate part numbers.

AAMC2-M08N

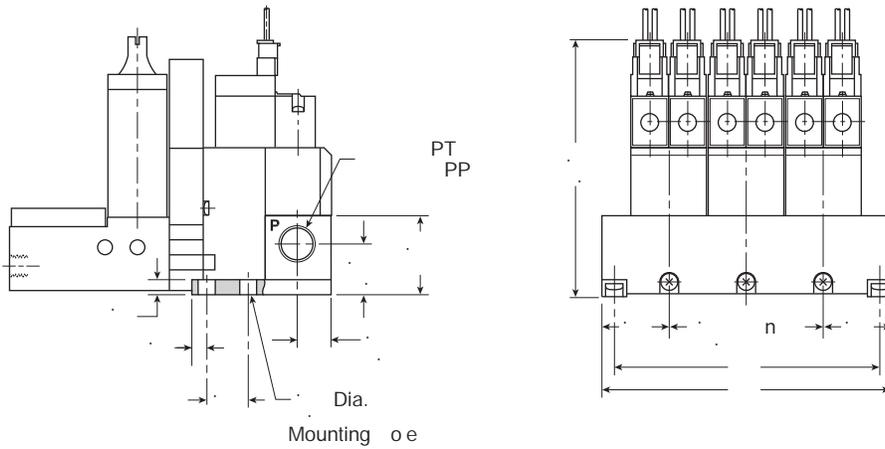


Dimensions



Manifold

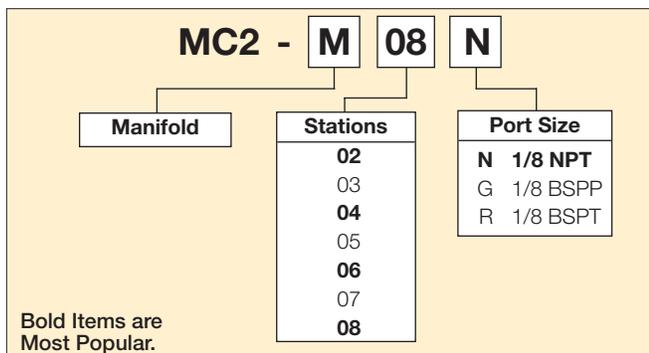
3-Station manifold without check valve shown



n	2	3	4	5	6	7	8
A	2.22 (56.5)	3.03 (77)	3.84 (97.5)	4.65 (118)	5.45 (138.5)	6.26 (159)	7.07 (179.5)
B	1.91 (48.5)	2.72 (69.0)	3.52 (89.5)	4.33 (110)	5.14 (130.5)	5.95 (151)	6.75 (171.5)

Inches (mm)
 n = Number of stations

Manifold part number



C
 Vacuum Generators
 Vacuum Products
 MCA, CV,
 CV-CK
 Series
 CHF
 Series
 MC22
 Series
 MC72
 Series
 CEK
 Series
 CVXCEK
 Series

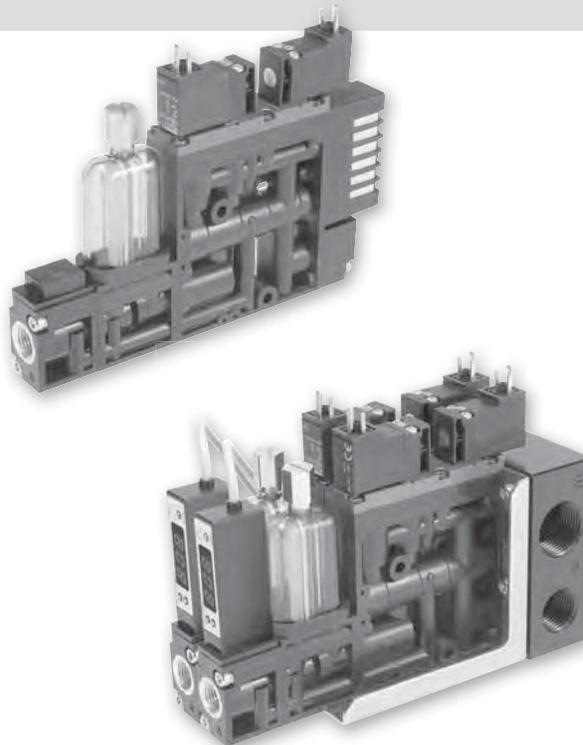


MC72 Vacuum Generators

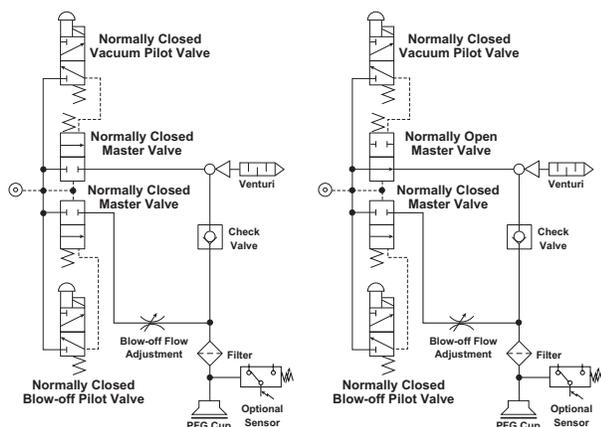
The MC72 Series vacuum generator provides a complete solution for factory automation. The MC72 is perfect for non-porous applications such as material handling, critical applications involving glass, or general transfer applications. The MC72 has integrated vacuum pilot and blow-off release pilot valves to minimize response times. The MC72 has additional features; regulating blow-off needle, 130 micron filter, optional check valve, and a sensor platform for vacuum confirmation. The MC72 can be assembled into a maximum 5 station manifold. The unit can be ordered normally open or normally closed.

Features

- Vacuum generating pilot valve
- Vacuum release pilot valve option
- Vacuum sensor - filter - silencer available
- Regulating blow-off
- Check valve option
- Air-economizing controls
- Manifold system
- Vacuum flow rates from 2.1 to 5.5 SCFM
- 3-Pin, EN175301-803, 15mm, 8mm 3-Pin



Add-A-Fold assembly (Silencer included)



Operating information

Media	Non-lubricated compressed air, non-corrosive gases
Optimum operating pressure	70 PSI (5 kgf/cm ²)
Humidity	35 to 85%
Pressure port	N: 1/4 NPT female, G: 1/4 BSPP female
Vacuum port	N: 1/4 NPT female, G: 1/4 BSPP female
Operating temperature	41 to 132°F (5 to 50°C)
Material	Body (PA and PBT) with other internal components (Brass, Al.NBR, SUS, FKM), filter elements (PVF)
Manual operation	Non-locking manual override
Electrical connection	DIN connector with LED and surge protection, connectors included
Power supply	24VDC ± 10%
Power consumption	1.8W
Operating pressure	70 PSI (5 kgf/cm ²)
Pilot valve air supply	Normally closed
Generator weight	12.0 oz. (340g)
Manifold weight	2-Station: 24 oz. (680g), 3-Station: 31 oz. (880g), 4-Station: 38 oz. (1080g), 5-Station: 45 oz. (1280g)

MC72 Unit With Integrated Check Valve, Normally Closed Vacuum Valve

Port size			Max. vacuum flow SCFM	Max. degree of vacuum inHg	Sensor option	Part number	
Pressure	Vacuum	Exhaust				NPT	BSPP
1/4	1/4	Muffler	2.20	24	No sensor	MC72S15HSZSC4BPN	MC72S15HSZSC4BPG
1/4	1/4	Muffler	2.20	24	MPS-V23C-PC, PNP	MC72S15HS42C4BPN	MC72S15HS42C4BPG
1/4	1/4	Muffler	2.20	24	MVS-201-PCP, PNP	MC72S15HS06C4BPN	MC72S15HS06C4BPG
1/4	1/4	Muffler	2.20	24	MPS-V23C-NC, NPN	MC72S15HS41C4BPN	MC72S15HS41C4BPG
1/4	1/4	Muffler	2.20	24	MVS-201-NC, NPN	MC72S15HS01C4BPN	MC72S15HS01C4BPG
1/4	1/4	Muffler	3.67	24	No sensor	MC72S20HSZSC4BPN	MC72S20HSZSC4BPG
1/4	1/4	Muffler	3.67	24	MPS-V23C-PC, PNP	MC72S20HS42C4BPN	MC72S20HS42C4BPG
1/4	1/4	Muffler	3.67	24	MVS-201-PCP, PNP	MC72S20HS06C4BPN	MC72S20HS06C4BPG
1/4	1/4	Muffler	3.67	24	MPS-V23C-NC, NPN	MC72S20HS41C4BPN	MC72S20HS41C4BPG
1/4	1/4	Muffler	3.67	24	MVS-201-NC, NPN	MC72S20HS01C4BPN	MC72S20HS01C4BPG
1/4	1/4	Muffler	5.20	24	No sensor	MC72S25HSZSC4BPN	MC72S25HSZSC4BPG
1/4	1/4	Muffler	5.20	24	MPS-V23C-PC, PNP	MC72S25HS42C4BPN	MC72S25HS42C4BPG
1/4	1/4	Muffler	5.20	24	MVS-201-PCP, PNP	MC72S25HS06C4BPN	MC72S25HS06C4BPG
1/4	1/4	Muffler	5.20	24	MPS-V23C-NC, NPN	MC72S25HS41C4BPN	MC72S25HS41C4BPG
1/4	1/4	Muffler	5.20	24	MVS-201-NC, NPN	MC72S25HS01C4BPN	MC72S25HS01C4BPG

MC72 Unit With Integrated Check Valve, Normally Open Vacuum Valve

Port size			Max. vacuum flow SCFM	Max. degree of vacuum inHg	Sensor option	Part number	
Pressure	Vacuum	Exhaust				NPT	BSPP
1/4	1/4	Muffler	2.20	24	No sensor	MC72S15HSZSC4APN	MC72S15HSZSC4APG
1/4	1/4	Muffler	2.20	24	MPS-V23C-PC, PNP	MC72S15HS42C4APN	MC72S15HS42C4APG
1/4	1/4	Muffler	2.20	24	MPS-V23C-NC, NPN	MC72S15HS41C4APN	MC72S15HS41C4APG
1/4	1/4	Muffler	3.67	24	No sensor	MC72S20HSZSC4APN	MC72S20HSZSC4APG
1/4	1/4	Muffler	3.67	24	MPS-V23C-PC, PNP	MC72S20HS42C4APN	MC72S20HS42C4APG
1/4	1/4	Muffler	3.67	24	MPS-V23C-NC, NPN	MC72S20HS41C4APN	MC72S20HS41C4APG
1/4	1/4	Muffler	5.20	24	No sensor	MC72S25HSZSC4APN	MC72S25HSZSC4APG
1/4	1/4	Muffler	5.20	24	MPS-V23C-PC, PNP	MC72S25HS42C4APN	MC72S25HS42C4APG
1/4	1/4	Muffler	5.20	24	MPS-V23C-NC, NPN	MC72S25HS41C4APN	MC72S25HS41C4APG

Add-A-Fold assembly ordering information



How to order Add-A-Fold assemblies

1. Manifold assemblies are multiple line item listings.
2. First line item must be the Add-A-Fold assembly part number.
3. Subsequent line items listed identify each station in the manifold starting with station number 1.
4. Station number 1 is the left most generator when looking at the manifold generator ports.
5. List either a part number of the manifold type generator or a blank plate for each station of the manifold.
6. See model number index code for MC72 Generator number and accessories for blank plate part numbers.

Most popular.



C
 Vacuum Generators
 Vacuum Products
 MCA, CV,
 CV-CK
 Series
 CHF
 Series
 MC22
 Series
 MC72
 Series
 CEK
 Series
 CVXCEK
 Series

Example 1: Shown above is a 2-Station MC72 manifold with sensors and NPT Ports.

Qty.	Part number	Comment
1	AAMC72-M02N.....	Add-A-Fold
1	MC72SHS42C4BPN.....	Station #1
1	MC72SHS42C4BPN.....	Station #1
Alternative Method		
1	AAMC72-M02N.....	Add-A-Fold
2	MC72SHS42C4BPN.....	Station #1-2

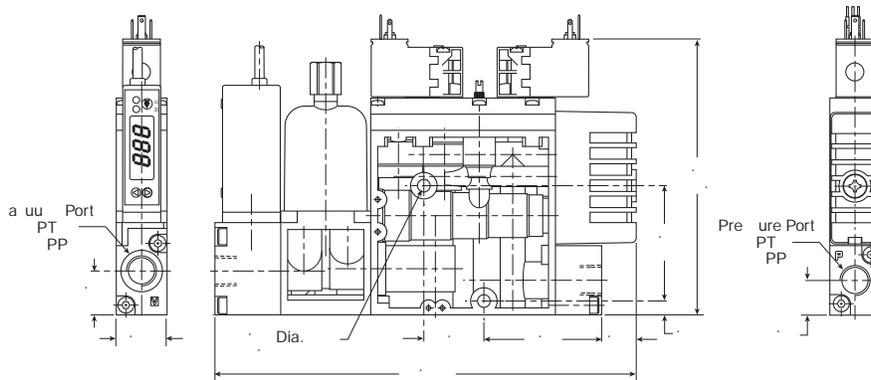
AAMC72-M02N

Port type
 N NPT
 G BSPP

Number of stations
 M02 2
 M03 3
 M04 4
 M05 5*
 * Maximum number of stations

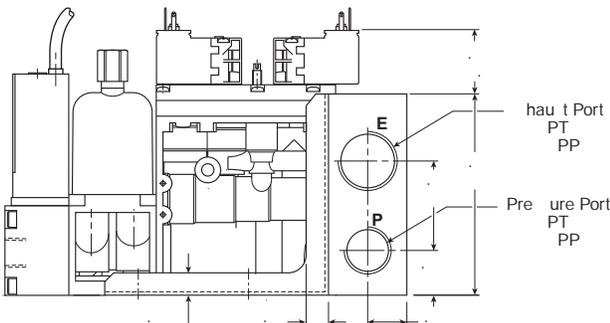
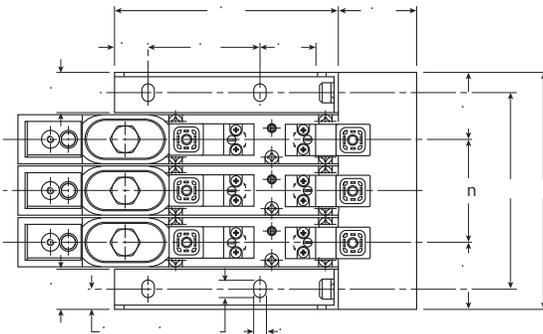
Add-A-Fold assembly
 AAMC72

Dimensions



Manifold

3-Station manifold shown



Manifold part number

MC72 - M 05 N

Manifold	Stations	Port Size
	02	N 1/8 NPT
	03	G 1/8 BSPP
	04	
	05	

Bold Items are Most Popular.

n	2	3	4	5
A	3.27 (83)	4.17 (106)	5.08 (129)	5.98 (152)
B	2.56 (65)	3.46 (88)	4.37 (111)	5.28 (134)

Inches (mm)
 n = Number of Stations

C

Vacuum Generators
 Vacuum Products

MCA, CV,
 CV-CK

CHF
 Series

MC22
 Series

MC72
 Series

CEK
 Series

CVXCEK
 Series

CEK Emergency Stop Vacuum Generators

The CEK is a Normally Closed Vacuum On / Off valve that maintains the last state of air during an emergency stop or power loss. In addition to this, an air-economizing valve has been added to interrupt the air supply by connecting the output signal from the sensor to minimize air consumption.

This unit is ideal for non-porous applications that require fast response of large vacuum and blow-off release flow.

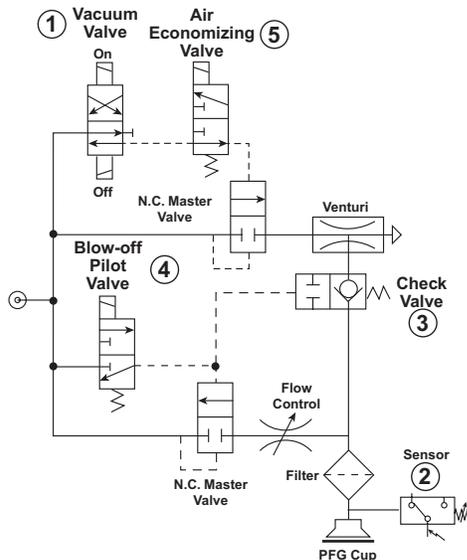
Typically, with a normally closed air circuit, the user controls vacuum with a command signal. During an Emergency Stop Event or power failure event, the vacuum command signal is lost, but, the Vacuum valve (1) remains in the current operating position due to the construction of the valve. The air-economizing valve (5), in a Normally Open configuration, passes the air supply from the Vacuum On / Off valve (1). The Sensor (2) output activates the air-economizing valve (5) closing the air supply to the Normally Closed master valve. The Check Valve (3) maintains the achieved vacuum level until the hysteresis value of the Sensor (2) is reached or when the Vacuum valve (1) has been returned to the closed position to stop the vacuum operation.



Features

- Integrated double solenoid for last state
- Integrated vacuum pilot
- Integrated blow-off pilot
- Integrated filter, silencer
- Air economizing capabilities
- Manifolds for up to 5 units

Valve controlled emergency stop circuit



Model numbers

Nozzle size	Maximum degree of vacuum	Sensor option	Valve option	Part number
1.5mm	27 inHg	No Sensor	24 VDC, PNP	CEK15HSZC24PBLN
		MPS-V23 (NPN)	24 VDC, NPN	CEK15HS41C24NBLN
		MPS-V23 (PNP)	24 VDC, PNP	CEK15HS42C24PBLN
2.0mm	27 inHg	No Sensor	24 VDC, PNP	CEK20HSZC24PBLN
		MPS-V23 (NPN)	24 VDC, NPN	CEK20HS41C24NBLN
		MPS-V23 (PNP)	24 VDC, PNP	CEK20HS42C24PBLN
2.7mm	27 inHg	No Sensor	24 VDC, PNP	CEK27HSZC24PBLN
		MPS-V23 (NPN)	24 VDC, NPN	CEK27HS41C24NBLN
		MPS-V23 (PNP)	24 VDC, PNP	CEK27HS42C24PBLN

Most popular.

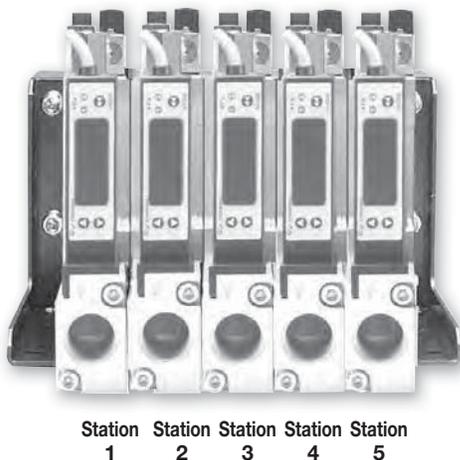
C
 Vacuum Generators
 Vacuum Products
 MCA, CV,
 CV-CK
 Series
 CHF
 Series
 MC22
 Series
 MC72
 Series
 CEK
 Series
 CVXCEK



Operating information

Media	Non-lubricated compressed air, non-corrosive gases	
Operating pressure	70 PSI (5 kgf/cm ²)	
Humidity	35 to 85%	
Pressure port	N: 1/4 NPT female, G: 1/4 BSPP female	
Vacuum port	N: 3/8 NPT female, G: 3/8 BSPP female	
Operating temperature	41 to 132°F (5 to 50°C)	
Material	Aluminum, Brass, NBR	
Air-economizing valve and blow-off release pilot		Emergency stop valve
Type of control valve	Pilot valve	Double solenoid
Manual operation	Manual override	Manual overrides
Electrical connection	Clip connector with LED and surge	Clip connector with LED and surge
Power supply	24VDC ± 10%	24VDC ± 10%
Power consumption	0.9W	0.9W
Operating pressure	70 PSI (5 kgf/cm ²)	70 PSI (5 kgf/cm ²)
Air supply	Normally closed	Normally closed
Generator weight	26.3 oz. (750g)	
Manifold weight	2-Station: 24 oz. (680g), 3-Station: 31 oz. (880g), 4-Station: 38 oz. (1080g), 5-Station: 45 oz. (1280g)	

Add-A-Fold assembly ordering information

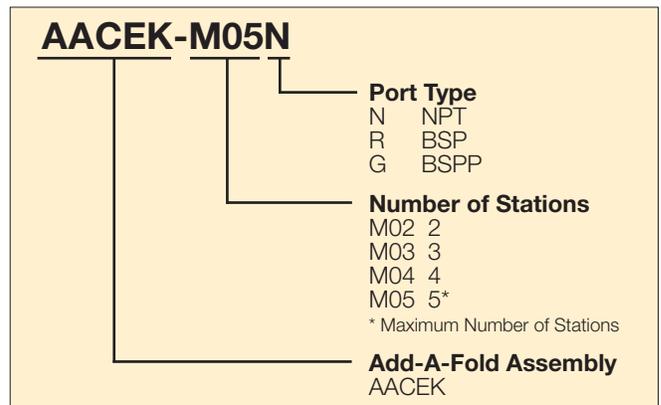


How to order Add-A-Fold assemblies

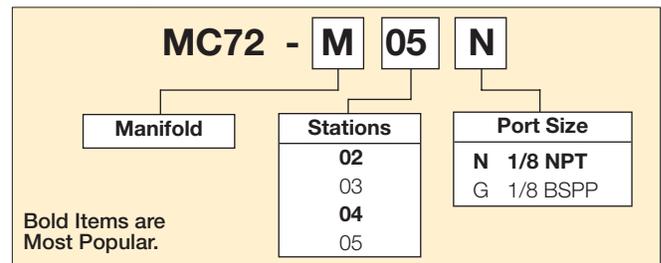
1. Manifold assemblies are multiple line item listings.
2. First line item must be the Add-A-Fold assembly part number.
3. Subsequent line items listed identify each station in the manifold starting with station number 1.
4. Station number 1 is the left most generator when looking at the manifold generator ports.
5. List either a part number of the manifold type generator or a blank plate for each station of the manifold.
6. See model number index code for CEK Generator number and accessories for blank plate part numbers.

Example 1: Shown above is a 5-Station CVK manifold with sensors and NPT Ports.

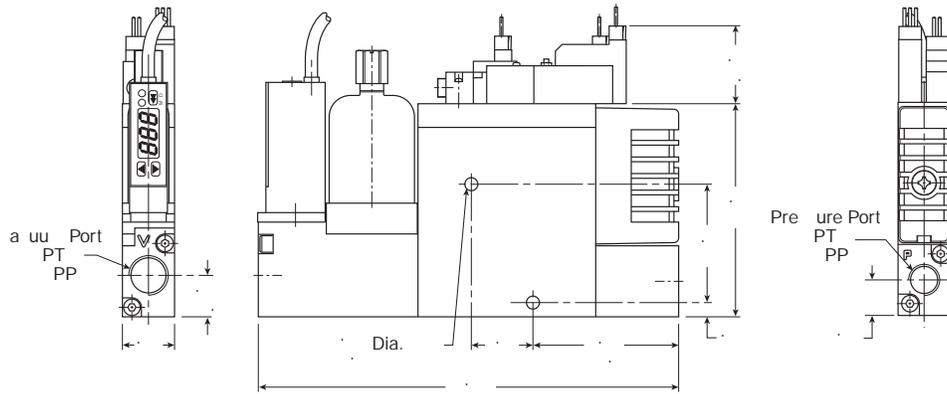
Qty.	Part number	Comment
1	AACEK-M04N.....	Add-A-Fold
1	CEK15HS21C24NBLN	Station #1
1	CEK15HS21C24NBLN	Station #2
1	CEK20HS21C24NBLN	Station #3
1	CEK20HS21C24NBLN	Station #4
1	CEK27HS21C24NBLN	Station #5
<i>Alternative Method</i>		
1	AACEK-M04N.....	Add-A-Fold
2	CEK15HS21C24NBLN	Station #1-2
2	CEK20HS21C24NBLN	Station #3-4
1	CEK27HS21C24NBLN	Station #5



Manifold part number

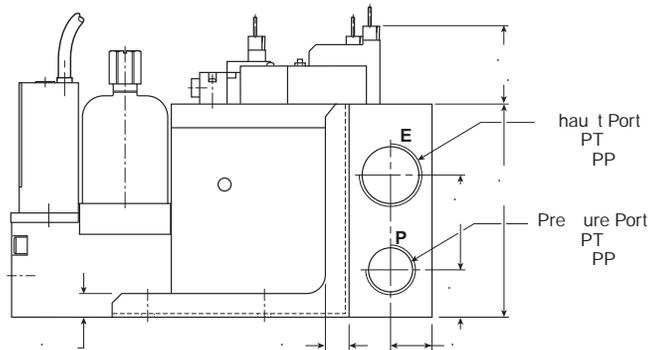
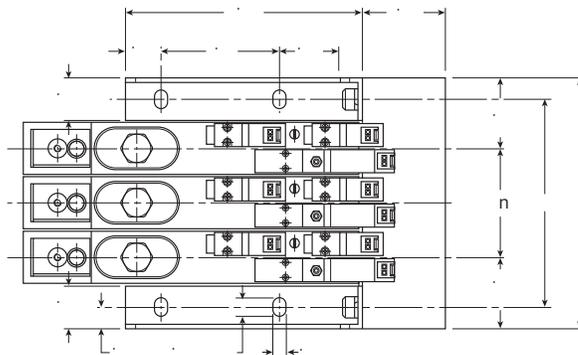


Dimensions



Manifold

3-Station manifold shown



n	2	3	4	5
A	3.27 (83)	4.17 (106)	5.08 (129)	5.98 (152)
B	2.56 (65)	3.46 (88)	4.37 (111)	5.28 (134)

Inches (mm)
 n = Number of stations

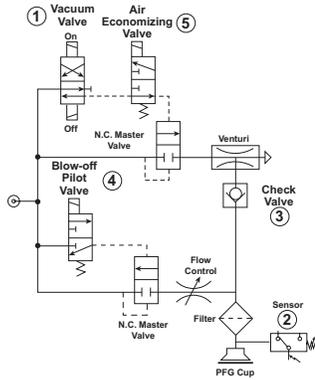
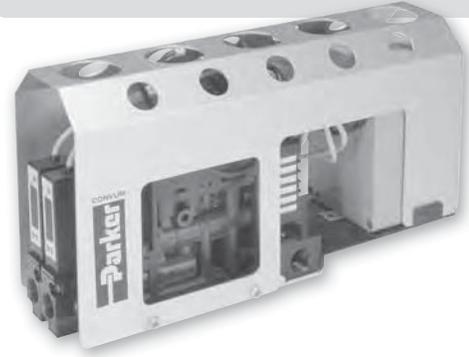
- C**
- Vacuum Generators
Vacuum Products
- MCA, CV,
CV-CK
- CHF
Series
- MC22
Series
- MC72
Series
- CEK
Series
- CVXCEK
Series



CVXCEK Vacuum Generators

The CVXCEK vacuum generator creates vacuum and blow-off pressure in a vacuum system and has additional Air-economizing and emergency operating system functions.

Each CVXCEK unit consists of 2 independent vacuum generators labeled channel 1 and channel 2. Each vacuum generator has a vacuum ON / OFF solenoid pilot valve, blow-off solenoid pilot valve, Air-Economizing valve, blow-off needle control valve, pressure sensor, vacuum check valve, vacuum filter, and exhaust filter. Each Vacuum Generator is mounted to a 2-Station bar manifold with an optional electrical mounting kit. The pressure provided to inlet port of the bar manifold is common to both vacuum generators.



Features

- Integrated double solenoid for hold last state conditions
- Integrated vacuum pilot
- Integrated blow-off pilot
- Integrated filter, silencer
- Air economizing capabilities

General operation of CVXCEK vacuum units

A vacuum generator is a single stage Venturi that creates vacuum pressure using compressed air. In principle, compressed air is throttled as the air exits the nozzle and is discharged into the diffuser. This increased velocity of air lowers the pressure in the diffusion chamber. The volume of air within the closed vacuum system flows into the low-pressure area of the diffusion chamber and is exhausted thru the diffuser. This effect increases the vacuum level and evacuates most of the air within the closed vacuum. The vacuum generator will produce the specified degrees of vacuum as cataloged if the vacuum system is closed, inlet pressure is to design pressure, and there are no major restrictions in the exhaust flow.

Vacuum is created when the unit receives a momentary or maintained command vacuum "ON" signal, (high signal is sent

to Vacuum Pilot Valve (1). Once a preset vacuum degree (P-1) of the pressure sensor (2) is achieved, the Air-Economizing Valve is enabled to conserve compressed air. The vacuum level will be maintained by the Check Valve (3) until (P-2). At this point vacuum is turned back "ON" until the switch point (P-1) is achieved again. This cycle, which is called Air-economizing, will repeat until a blow-off signal is sent to the unit. When the Blow-off Pilot Valve (4) is activated to decay the vacuum pressure, the unit will release the part. Command vacuum "ON" should be turned "OFF" when command blow-off is turned "ON". The Emergency Stop operating system provides Air-Economizing or maximum degree of vacuum at the time of disruption of Input and Output Power.

Model Number Index

CVXCEK 27 D3 2 49 N B

Nozzle Diameter 27 27HS 2.5mm	Electrical Enclosure D1 M12, 110VAC D3 M12, 24VDC, PNP D4 M12, 110VAC, w/ Mtg. Plate D6 M12, 24VDC, PNP w/ Mtg. Plate N1 M18, 110VAC N3 M18, 24VDC, PNP N4 M18, 110VAC, w/ Mtg. Plate N6 M18, 24VDC, PNP w/ Mtg. Plate	Number of Channels 1 Generator w/ Blanking Plate 2 Generators	Voltage 49 24VDC 53 110VAC	Engineering Level B Current
			Port Threads N NPT G BSPP	

Bold Items are Most popular.

C
 Vacuum Generators
 Vacuum Products
 MCA, CV, CV-CK
 CHF Series
 MC22 Series
 MC72 Series
 CEK Series
 CVXCEK Series



Operating information

Media	Non-lubricated compressed air, non-corrosive gases		
Operating pressure	70 PSI		
Humidity	35 to 85%		
Pressure port	N: 1/4 NPT female, G: 1/4 BSPP female		
Vacuum port	N: 3/8 NPT female, G: 3/8 BSPP female		
Operating temperature	41 to 132°F (5 to 50°C)		
Material	Body (PA and PBT) with other internal components (Brass, Al.NBR, SUS, FKM), filter elements (PVF)		
Air-economizing valve and blow-off release pilot	Vacuum pilot valve	Sensors	
Type of control	Single solenoid	Double solenoid	MPS-23 Pressure Sensor
Manual operation	Manual override	Manual overrides	N/A
Electrical connection	Clip connector	Clip connector	M8, 4-pin
Power supply*	24VDC ± 10%	24VDC ± 10%	10.8 to 30VDC
Solenoid power consumption	0.6W with LED and surge	2.0W with LED and surge	55mA
Operating pressure	70 PSI	70 PSI	-14.7 PSI to 72.5 PSI
Air supply	Normally closed	Normally closed	N/A
Manifold weight	1-Station: 49 oz. (1404g), 2-Station: 63 oz. (1787g)		

* 110VAC units use 24VDC solenoids and sensors.

Performance

Series / nozzle diameter	Nozzle diameter (mm)	Vacuum degree at 70 PSI (inHg)	Vacuum flow per channel (SCFM)	Air consumption per channel (SCFM)
CVXCEK27	2.5	24	5.20	10.41

Evacuation time

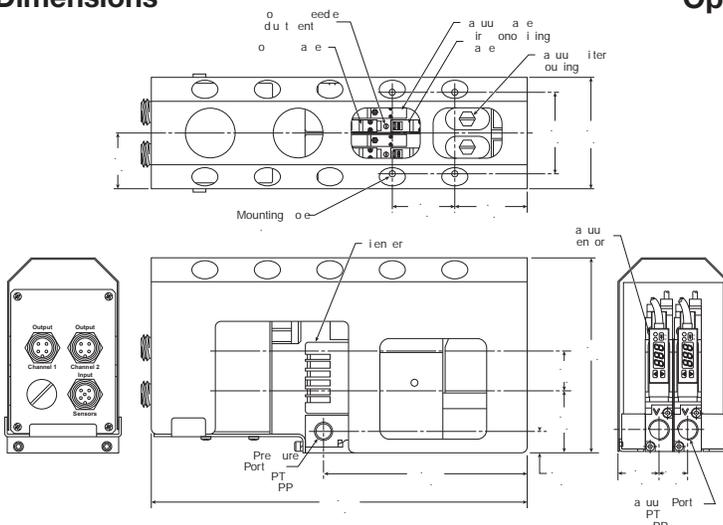
Series / nozzle diameter	Air supply pressure PSI	Air consumption per channel SCFM	Evacuation time per channel in sec / ft ³ * to reach different vacuum levels (inHg)								
			3	6	9	12	15	18	21	24	27
CVXCEK27	70	10.42	0.66	2.19	3.29	6.14	9.3	14.55	23.21	46.13	—

* 1 ft³ = 28.31 liters

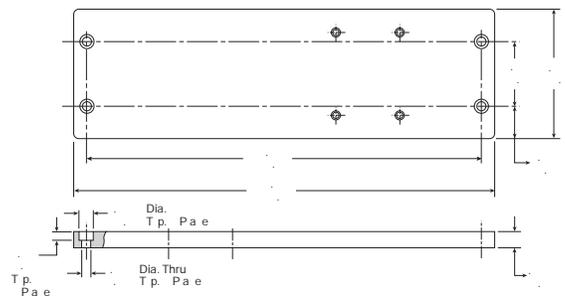
Vacuum flow (SCFM)

Nozzle diameter	inHg											
	0	3	6	9	12	15	18	21	24	27	30	
25HS	5.20	4.61	4.01	3.41	2.82	2.22	1.63	1.04	0.46	—	—	

Dimensions



Optional mounting plate



C
 Vacuum Generators
 Vacuum Products
 MCA, CV, CV-CK Series
 CHF Series
 MC22 Series
 MC72 Series
 CEK Series
 CVXCEK Series



MPS-23 1-Color Generator Mount

Features

- Pressure range:
 Vacuum pressure: 0 to -30 inHg
- Sensor output:
 2 NPN or PNP open collector
 Transistor output, 30VDC, 125mA
- Switch Point and Window Comparator Mode
- Selectable units of measure
- Output response time less than 2.0 milliseconds
- RoHS
- Air and non-corrosive gases
- Error message



MPS-23 Sensor Only Ordering Numbers

Pressure range	Port thread	Electrical output	Electrical connection	Part number
0-30 inHg	Ejector mount	(2) PNP	M8 on 1M cable, 4-pin	MPS-V23C-PC
0-30 inHg	Ejector mount	(2) NPN	M8 on 1M cable, 4-pin	MPS-V23C-NC

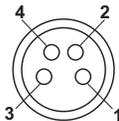
MPS-23 Accessories

M8, 4-pin, 2 meter cable	CB-M8-4P-2M-PUR
M8, 4-pin, 5 meter cable	CB-M8-4P-5M-PUR

Sensor pin out

Pin

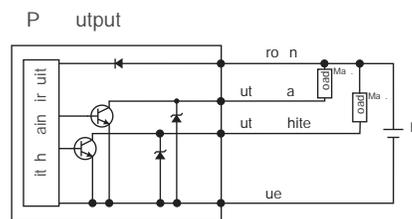
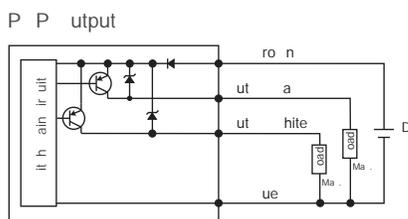
- 1 Brown: 24VDC
- 2 White: PNP/NPN Open Collector Output 2
- 3 Blue: 0VDC
- 4 Black: PNP/NPN Open Collector Output 1



Programming options

Outputs change N.O. / N.C.	✓
Units of measure change	✓
Hysteresis mode	✓
Window comparator mode	✓
Auto teach mode	✓
Output response time	✓
Lockout option	✓
Password lockout	—
Max. value display	✓
Min. value display	✓
Zero reset	✓
Error output mode	✓

Internal circuit for open collector and analog output wiring



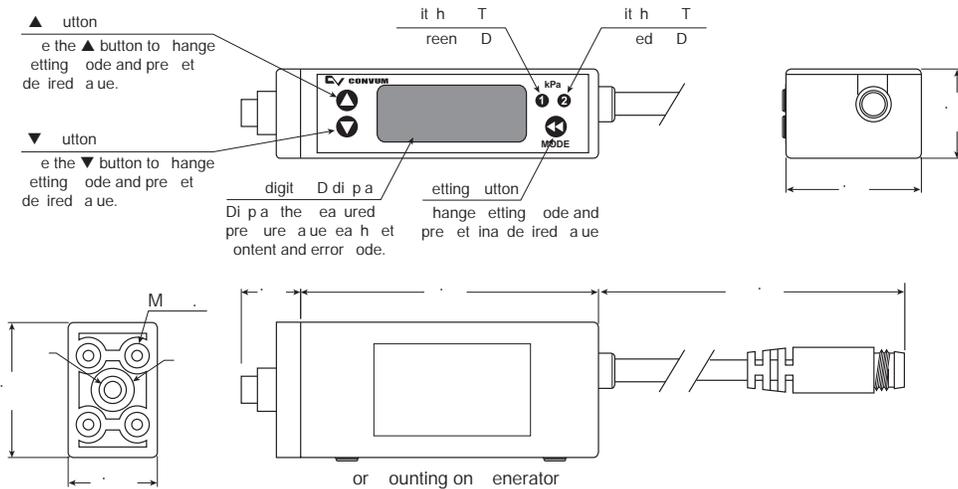
Most popular.

Operating information

Pressure range	-101.3 - 0 kPa (-14.5 to 0 PSI)
Proof pressure	0.3 Mpa (44 PSI)
Display resolution, Units of measure	0.1, kPa
	0.001, kgf/cm ²
	0.001, bar
	0.01, PSI
	0.1, inHg
	1, mmHg
	0.1, mmH ₂ O
Media	Air & non-corrosive gases, incombustible gases
Pressure port	Generator mount only
Operating temperature	32 to 122°F (0 to 50°C)
Storage temperature	-4 to 140°F (-20 to 60°C)
Humidity	40 - 85% RH (no condensation)
Electrical connection	(C) 4-pin, M8 connector on 1M lead wire
Power supply	12 to 24VDC ±10% or less, Ripple (Vp-p) 10% or less
Display	3 + 1/2 digit, 1 color, 7-segment RED LED
Display refresh	.1 to 3.0 Seconds, Variable (factory set at 0.1)
Control output	NPN (Sinking), PNP (Sourcing), Open collector, max 80mA, 2 output
Switch output	Output signal, NPN or PNP, Normally open or closed, LED indicator
Output indicator	Green LED (OUT1), Red LED (OUT2)
Output modes	Hysteresis or Window Comparator
Response time	≤ 2.5ms (chattering-proof function: 24ms, 192ms, 786m selections)
Repeatability	± 0.2% of F.S. ± 1 digit or less
Thermal error	≤ ± 2% of F.S. or less at range of 32 to 122°F (0 to 50°C)
General protection	IP40, CE marked, EMC-EN61000-6-2: 2001
Current consumption	<55mA
Vibration resistance	10 to 150Hz, Double amplitude 1.5mm, XYZ, 2 hrs.
Shock resistance	980 m/s ² (about 10G), 3 times/each directions X, Y, Z
Noise resistance	Vp-p400V, 10 ms, 0.5µs noise simulator
Material	Housing: ABS (black) , Pressure port: Zinc die-cast, Diaphragm: Silicon
Mass	2 oz. (65g) (including 1m cable)

Dimensions

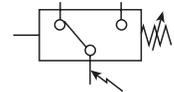
Generator mount



C
Generator Sensors
Vacuum Products
MPS-23
Series
MVS-201
Series

MVS-201 Integrated Generator Sensor

The MVS-201 is a winning combination with the MC2, CVR-2, and CVK vacuum generators. The MVS-201 automatically provides an output signal for the blow-off function without the need of an additional output from the PLC. Begin the vacuum cycle with an output signal from the PLC to the "201" sensor. The "201" sensor has one NPN or PNP output for vacuum confirmation and a control output that interfaces directly with the blow-off release pilot valve. With programmable time control features and a special chip driver, the sensor automatically activates the blow-off release when the NPN or PNP vacuum signal from the PLC is discontinued. This eliminates, THE PREVIOUSLY REQUIRED, PLC output to activate the blow-off release. This technology eliminates PLC output requirements by 50% and reduces installation to a simple 4 wire system by wiring the sensor only. There are 3 modes of operation for various applications. The output response time of the sensor is less than 2.5 msec. Peak limit prevention maintenance feature is automatically recorded internally.

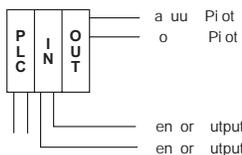


For use with MC22 / MC72 generators

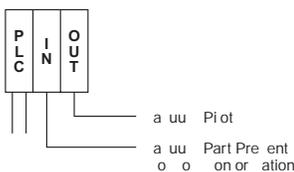
Features

- Time controlled sensor
- Intelligent simple 4-wire system
- Eliminate I/O for release valve
- 2 functions with one rung of code
- Automatic timer (0-9.9 Sec.) function by sensor control driver for vacuum generating and release valves
- Peak value preventative maintenance confirmation
- Response time less than 2 milliseconds

Basic PLC System



PLC System with 201 Sensor



Programming options

Outputs change N.O. / N.C.	✓
Units of measure change	✓
Hysteresis mode	✓
Lockout option	✓
Zero reset	✓
Energy savings mode	✓
Air conservation / blow-off timer	✓
Vacuum timer option	✓
Signal controlled vacuum	✓
Blow-off activation timer	✓
Blow-off timer	✓
Vacuum confirmation signal	✓
Blow-off confirmation signal	✓
Peak vacuum error message	✓
Vacuum response error message	✓
Blow-off time error message	✓

MVS-201 Ordering Numbers

Pressure range	Output circuit	Input circuit	Electrical connector *	Part number
-14.7 to 72.5 PSI	PNP sourcing	PNP sourcing	4 Pin, M8	MVS-201-PCP
	NPN sinking	NPN sinking		MVS-201-NC

* Requires sensor to valve electrical connector

Note:

Output Circuit provides vacuum and blow-off confirmation signal (Input Signal to PLC).
 Input Circuit controls vacuum solenoid valve (Output Signal from PLC).

Sensor to valve electrical connector

Generator series	Sensor connection	Valve connection	Part number
MC22	5 Pin Clip Type	2 with clip type	MC22-C201G
MC72		2 wire leads	CVK-D201G

Most popular.

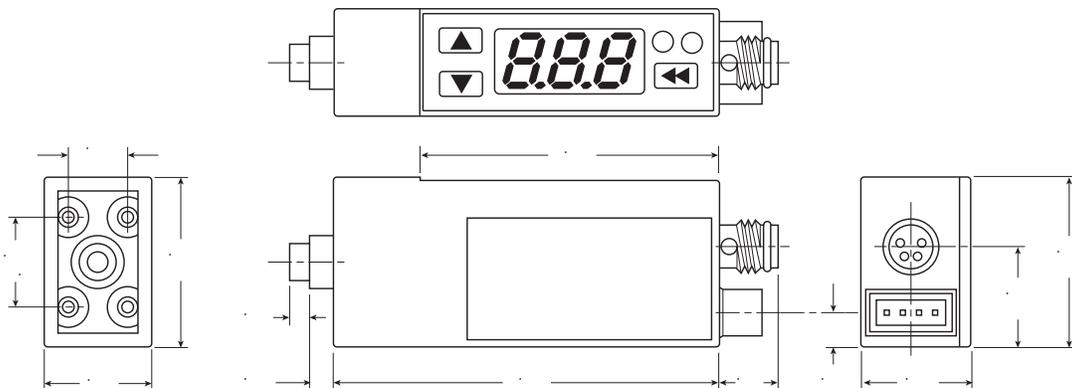


Operating information

Pressure range	Compound pressure: -14.7 to 72.5 PSI
	bar: 0.01
Display resolution, Units of measure	kPa: 1
	kgf/cm ² : 0.01
	PSI: 0.1
Media	Non-lubricated air and non-corrosive gases
Proof pressure	116.0 PSI
Operating temperature	32 to 122°F (0 to 50°C)
Storage temperature	14 to 140°F (-10 to 60°C)
Humidity	35 to 85% RH
Electrical connection	4-pin, M8 connector
Power supply	10.8 to 30VDC, Ripple Vp-p 10% Max., Reverse voltage protection
Display	3-Digit, 7-Segment LED
Display frequency	5Hz
Circuit	NPN (Sinking), PNP (Sourcing) open collector transistor
Digital output	Individually selectable N.O. or N.C., max 125mA, 30V, with overcurrent protection
Mode	OP1, OP2, OP3 hysteresis: 0 to 100% of switch point
Response time	< 2ms
Repeatability	± 0.3% F.S.
Thermal error	±0.2% F.S. in temperature range: 32 to 122°F (0 to 50°C)
General protection	IP40, CE marked, EMC-EN55011 Class B, EN50082-1
Current consumption	< 45mA, < 25mA when utilizing screen saver option
Spike protection	350 Vp, 1, μs
Dielectric strength	1000 VAC 1 min.
Insulation resistance	> 100M ohms at 500VDC
Vibration resistance	10 to 55Hz, 1.5mm, XYZ, 2 hrs.
Shock resistance	10 G, XYZ
Material	Body: Polycarbonate
Mass	1.7 oz. (45g)

Dimensions

M8, 4-pin

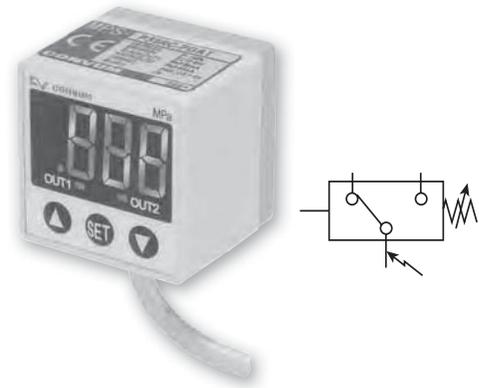


C
 Generator Sensors
 Vacuum Products
 MPS-23 Series
 MVS-201 Series

MPS-33, 1-Color Panel Mount Pressure Sensor

Features

- Sensor output:
 - 2 NPN or PNP open collector
 - Transistor output, 30VDC, 125mA with
 - Analog output, 1 to 5VDC
- Output response time less than 2.0 milliseconds
- RoHS
- Air and non-corrosive gases



Programming options

Outputs change N.O. / N.C.	✓
Units of measure change	✓
Hysteresis mode	✓
Window comparator mode	✓
Auto teach mode	✓
Output response time	✓
Lockout option	✓
Password lockout	—
Max. value display	✓
Min. value display	✓
Zero reset	✓
Red LED display	✓
Error output mode	✓

MPS-33 Sensor Only Ordering Numbers

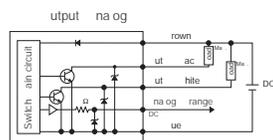
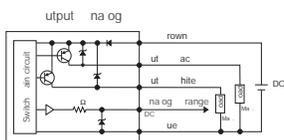
Pressure range	Electrical output	Electrical connection	Part number	
			1/8 NPSF Female	1/8 BSPP Female
0-30 inHg	(2) PNP with (1) 1-5VDC	2M 5 wire lead wire	MPS-V33N-PGAT	MPS-V33G-PGAT
0-30 inHg	(2) NPN with (1) 1-5VDC	2M 5 wire lead wire	MPS-V33N-NGAT	MPS-V33G-NGAT
-14.5 to 72 PSI	(2) PNP with (1) 1-5VDC	2M 5 wire lead wire	MPS-R33N-PGAT	MPS-R33G-PGAT
-14.5 to 72 PSI	(2) NPN with (1) 1-5VDC	2M 5 wire lead wire	MPS-R33N-NGAT	MPS-R33G-NGAT
0-145 PSI	(2) PNP with (1) 1-5VDC	2M 5 wire lead wire	MPS-P33N-PGAT	MPS-P33G-PGAT
0-145 PSI	(2) NPN with (1) 1-5VDC	2M 5 wire lead wire	MPS-P33N-NGAT	MPS-P33G-NGAT

MPS-33 Accessories

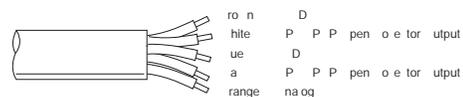
Description	Part Number
Panel mounting bracket Note : Add "H" in suffix of Sensor Only Part Number to include with sensor	MPS-ACCH8
Surface mounting bracket Note : Add "K" in suffix of Sensor Only Part Number to include with sensor	MPS-ACCK8

Example: MPS-P33N-PGAT**K**, includes sensor MPS-P33N-PGA with bracket MPS-ACCK8

Internal circuit for open collector and analog output wiring



Lead wiring



Most popular.

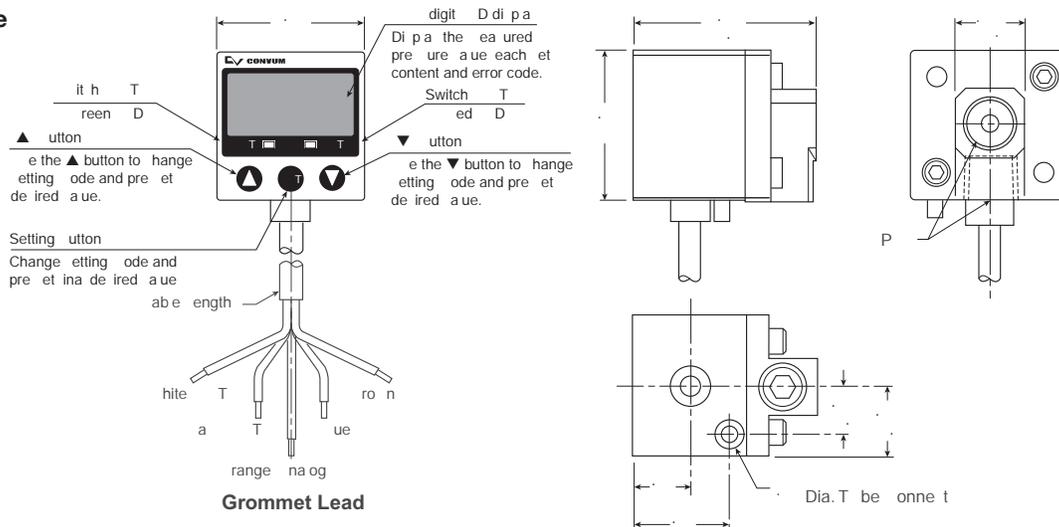


Operating information

	Vacuum (V)	Compound (R)	Positive (P)
Pressure range	-101.3 - 0 kPa (-14.5 to 0 PSI)	0 - 500 kPa (0 to 72 PSI)	-0.1 - 1 Mpa (0 to 145 PSI)
Proof pressure	0.3 Mpa (44 PSI)	0.8 Mpa (116 PSI)	1.5 Mpa (218 PSI)
Display resolution, Units of measure	0.1, kPa	1, kPa	0.001, Mpa
	0.001, kgf/cm ²	0.01, kgf/cm ²	0.01, kgf/cm ²
	0.001, bar	0.01, bar	0.01, bar
	0.01, PSI	0.1, PSI	0.1, PSI
	0.1, inHg	—	—
	1, mmHg	—	—
	0.1, mmH ₂ O	—	—
Media	Air & non-corrosive gases, incombustible gases		
Pressure port	(N) 1/8" NPSF, (G) 1/8" BSPP female		
Operating temperature	32 to 122°F (0 to 50°C)		
Storage temperature	-4 to 140°F (-20 to 60°C)		
Humidity	40 - 85% RH (no condensation)		
Electrical connection	(G) Grommet open lead, 5 wire (0.15mm ²)		
Power supply	12 to 24VDC ±10% or less, Ripple (Vp-p) 10% or less		
Display	3 + 1/2 digit, 1 color, 7-segment RED LED		
Display refresh	.1 to 3.0 Seconds, Variable (factory set at 0.1)		
Control output	NPN (Sinking), PNP (Sourcing), Open collector, max 80mA, 2 output		
Analog output	1 to 5VDC ≤ ±2.5% F.S. Linearity ≤1% of F.S.;		
Switch output	Output signal, NPN or PNP, Normally open or closed, LED indicator		
Output indicator	Green LED (OUT1), Red LED (OUT2)		
Output modes	Hysteresis or Window Comparator		
Response time	≤ 2.5ms (chattering-proof function: 24ms, 192ms, 786m selections)		
Repeatability	± 0.2% of F.S. ± 1 digit or less		
Thermal error	≤ ± 2% of F.S. or less at range of 32 to 122°F (0 to 50°C)		
General protection	IP65, CE marked, EMC-EN61000-6-2: 2001, with dust tube connection		
Current consumption	<55mA		
Vibration resistance	10 to 150Hz, Double amplitude 1.5mm, XYZ, 2 hrs.		
Shock resistance	980 m/s ² (about 10G), 3 times/each directions X, Y, Z		
Noise resistance	Vp-p400V, 10 ms, 0.5µs noise simulator		
Material	Housing: ABS (gray) , Pressure port: Zinc die-cast, Diaphragm: Silicon		
Mass	3.3 oz. (105g) (including cable)		

Dimensions

1/8" Female

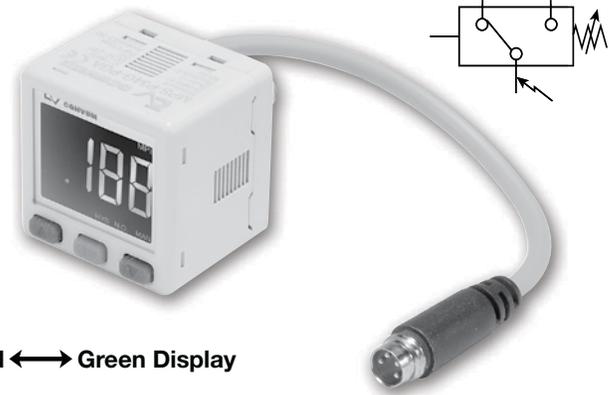


C
Pressure Sensors
Vacuum Products
MPS-33 Series
MPS-34 Series
SCP01 Series
SCP5D Series
Cables

MPS-34, 1-Color Panel Mount Pressure Sensor

Features

- Sensor output:
 - PNP Open collector
 - Transistor output, 30VDC, 125mA with
 - Analog output, 4 to 20mA
- Output response time less than 2.0 milliseconds
- RoHS
- Air and non-corrosive gases
- Sensor face includes icons to show sensor programming status



Red ←→ Green Display

Programming options

Outputs change N.O. / N.C.	✓
Units of measure change	✓
Hysteresis mode	✓
Window comparator mode	✓
Auto teach mode	✓
Output response time	✓
Lockout option	✓
Password lockout	—
Max. value display	✓
Min. value display	✓
Zero reset	✓
Red / Green LED display options	✓
Error output mode	✓

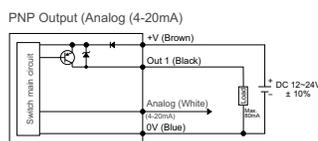
MPS-34 Sensor Only Ordering Numbers

Pressure range	Electrical output	Electrical connection	Part number	
			1/8 NPSF male	1/8 BSPP male
0-30 inHg	(1) PNP with (1) 4-20ma	M8, 4 Pin	MPS-V34N-PCI	MPS-V34G-PCI
0-145 PSI	(1) PNP with (1) 4-20ma	M8, 4 Pin	MPS-P34N-PCI	MPS-P34G-PCI

MPS-34 Accessories

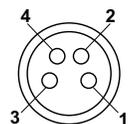
Description	Part number
Panel mounting bracket Note : Add "H" in suffix of Sensor Only Part Number to include with sensor	MPS-ACCH9
Surface mounting bracket Note : Add "K" in suffix of Sensor Only Part Number to include with sensor	MPS-ACCK10
Example: MPS-P34N-PCIK , includes sensor MPS-P34N-PCI with bracket MPS-ACCK10	
M8, 4-pin, 2 meter cable	CB-M8-4P-2M-PUR
M8, 4-pin, 5 meter cable	CB-M8-4P-5M-PUR

Internal circuit for open collector and analog output wiring



Sensor pin out with analog output

- Pin #
- 1 Brown: 24VDC
 - 2 White: 4 to 20mA
 - 3 Blue: 0VDC
 - 4 Black: PNP Open Collector Output 1



Most popular.

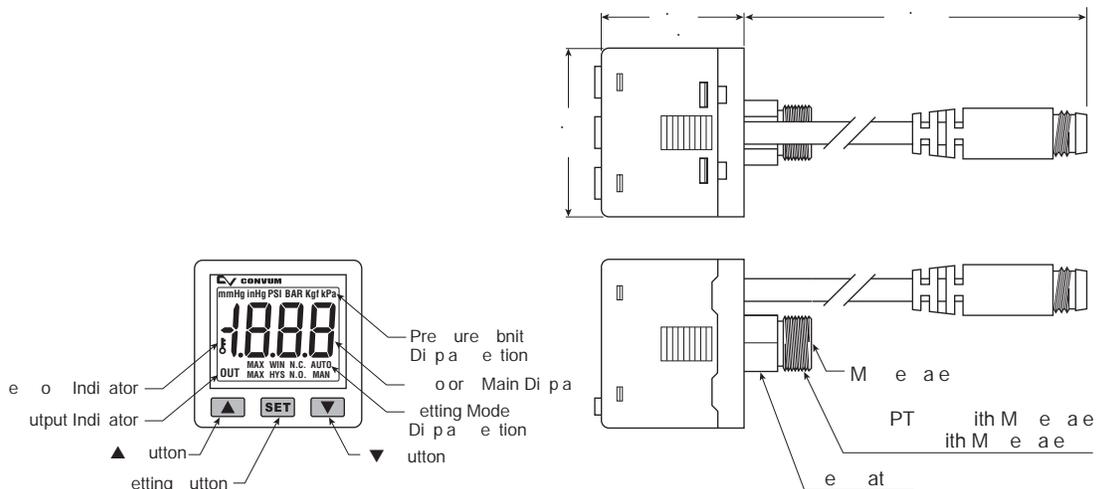


Operating information

	Vacuum (V)	Positive (P)
Pressure range	-101.3 to 0 kPa (-14.5 to 0 PSI)	-0.1 to 1 Mpa (0 to 145 PSI)
Proof pressure	0.3 Mpa (44PSI)	1.5 Mpa (218 PSI)
Display resolution, Units of measure	0.1, kPa	1, kPa
	0.001, kgf/cm ²	0.01, kgf/cm ²
	0.001, bar	0.01, bar
	0.01, PSI	0.1, PSI
	0.01, inHg	-
	1, mmHg	-
Media	Air & non-corrosive gases	
Pressure port	(N) 1/8" NPT male, (G) 1/8 BSPP male both with M5 female port	
Operating temperature	32 to 122°F (0 to 50°C)	
Storage temperature	-4 to 140°F (-20 to 60°C)	
Humidity	35 to 85% RH (no condensation)	
Electrical connection	(C) 4-pin, M8 connector on 150mm lead wire	
Power supply	12 to 24VDC ±10%, Ripple (P-P) 10% or less	
Display	3 + 1/2 digit, 2 color, 7-segment RED / GREEN LED	
Display refresh	Timing update : 0.1 ~ 3 sec. (Factory Set Unit: 0.1 sec.)	
Switch output	Output signal, PNP, Normally open or closed, LED indicator, 125 mA max. output load	
Output modes	Hysteresis or Window Comparator	
Response time	≤ 2.5ms (chattering-proof function: 24ms, 250ms, 500ms, 1000ms and 1500ms selections)	
Repeatability	± 0.2% of F.S. ± 1 digit	
Output current	Output current 4 to 20mA; Linearity ±1.0% of F.S.; Maximum load impedance 300Ω at power supply of 12V; 600Ω at power supply of 12V; Minimum load impedance 50Ω	
Thermal error	32 to 122°F (0 to 50°C) 25°C (77°C) + 2% of F.S. or less at range of 32 to 122°F (0 to 50°C)	
General protection	IP40, CE marked, EMC-EN61000-6-2: 2001	
Current consumption	45mA (with no load)	
Vibration resistance	10 to 150Hz, Double amplitude 1.5mm, XYZ, 2 hrs.	
Shock resistance	980 m/s ² (about 10G), 3 times/each directions X, Y, Z	
Noise Resistance	Vp-p400V, 10 ms, 0.5μs noise simulator	
Material	Housing: ABS (gray) , Pressure port: Zinc die-cast, Diaphragm: Silicon	
Mass	1.45 oz. (45g) with M8 connector	

Dimensions

1/8" Male



C
Pressure Sensors
Vacuum Products
 MPS-33 Series
 MPS-34 Series
 SCP01 Series
 SCP5D Series
 Cables

SCP01 High Pressure 316 Stainless Steel Pressure Sensor

SCP01 Pressure Sensors are industrial pressure sensors offering long-term stability, resistance to interference and rugged construction. They are available in a wide range of standard and configured to order versions to meet your application needs.

These sensors are manufactured with the highest quality standards for reliable and repeatable measurements.

Features:

- Stainless steel body
- Compact construction
- Shock and vibration proof
- Resistant to pressure spikes
- Accuracy +/- 0.5% FS

Applications include:

- Test and measurement
- Hydraulic power units
- Power generation
- Mobile hydraulics



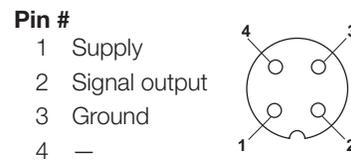
SCP01 Ordering Numbers

Pressure range (psi)	Electrical output	Electrical connection	Part number	
			1/4 NPT male	7/16-20UNF-2A, male SAE-4 with o-ring
-14.5 to 250	4 - 20 mA, 3 wire	M12 X 1, 4 pin	SCP01-0250P-25-07	SCP01-0250P-27-07
0 to 1000	4 - 20 mA, 3 wire	M12 X 1, 4 pin	SCP01-1000P-25-07	SCP01-1000P-27-07
0 to 3000	4 - 20 mA, 3 wire	M12 X 1, 4 pin	SCP01-3000P-25-07	SCP01-3000P-27-07
0 to 5000	4 - 20 mA, 3 wire	M12 X 1, 4 pin	SCP01-5000P-25-07	SCP01-5000P-27-07
0 to 9000	4 - 20 mA, 3 wire	M12 X 1, 4 pin	SCP01-9000P-25-07	N/A

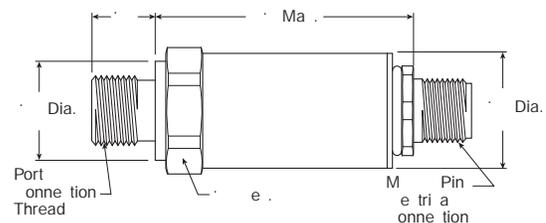
Operating information

Overload pressure	200% FS
Burst pressure	250% FS
Accuracy	+/- 0.5% FS
Protection class	IP67
Response time	< 1ms
Long term stability	< 0.1% FS/a
Load reversals	> 20 M
Electrical protection	Short circuit, reverse polarity, overload protection
Supply voltage	9-30VDC
Temperature range:	
Environmental	-40°F to 185°F
Media, storage	-40°F to 257°F
Compensated	-4°F to 185°F
Temperature coefficient	< +/- 0.3% FS/10K
Vibration resistance	Meets IEC 60068-2-29
Shock resistance	Meets IEC 60068 2-32
EMI compatibility	DIN EN 61000-6-3, DIN EN 61000-6-2
Material - housing	304 SS
Material - fitting	630 SS
Material - seal	Fluorocarbon
Sensing element	Thin film (poly Si on SiO ₂)
Pressure bore	0.024 in.
Long term stability	< 0.1% FS/a
Load reversals	> 20 M

Sensor pin out with analog output



Dimensions



Most popular.



SCPSD High Pressure 316 Stainless Steel Pressure Sensor

Features

- Stainless steel or ceramic diaphragms
- UL listed and CE marked
- Sensor outputs
 - 2 PNP Open collector transistor
 - Output, 30 VDC, 100mA
- Optional additional current, 4 to 20mA
- Output response time less than 5.0ms
- Polarity protected
- Short circuit protected
- 4 digit LED display
- Display head swivels 290°



SCPSD-1000P-1727 SCPSD-600-14-15

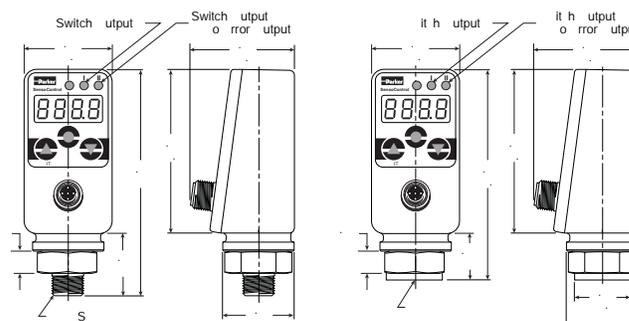
SCPSD Ordering Numbers

Pressure range	Port size	Electrical output	Electrical connection	Part number
-14.7 to 250 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP	M12, 4 Pin	SCPSD-0250P-0727
-14.7 to 250 PSI	7/16-20 UNF-2b (SAE-4)	(1) PNP with 4-20MA	M12, 4 Pin	SCPSD-0250P-1727
0 to 1000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP with 4-20MA	M12, 5 Pin	SCPSD-1000P-1725
0 to 1000 PSI	7/16-20 UNF-2b (SAE-4)	(1) PNP with 4-20MA	M12, 4 Pin	SCPSD-1000P-1727
0 to 3000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP	M12, 4 Pin	SCPSD-3000P-0727
0 to 3000 PSI	7/16-20 UNF-2b (SAE-4)	(1) PNP with 4-20MA	M12, 4 Pin	SCPSD-3000P-1727
0 to 3000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP with 4-20MA	M12, 5 Pin	SCPSD-3000P-1725
0 to 5000 PSI	7/16-20 UNF-2b (SAE-4)	(1) PNP with 4-20MA	M12, 4 Pin	SCPSD-5000P-1727
0 to 5000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP with 4-20MA	M12, 5 Pin	SCPSD-5000P-1725
0 to 9000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP	M12, 4 Pin	SCPSD-9000P-0727
0 to 9000 PSI	7/16-20 UNF-2b (SAE-4)	(2) PNP with 4-20MA	M12, 4 Pin	SCPSD-9000P-1725
-1 to 16 Bar	1/4 BSPP Male	(2) PNP	M12, 4 Pin	SCPSD-016-04-17
-1 to 16 Bar	1/4 BSPP Male	(2) PNP with 4-20ma	M12, 5 Pin	SCPSD-016-14-15
0 to 250 Bar	1/4 BSPP Male	(2) PNP	M12, 4 Pin	SCPSD-250-04-17
0 to 250 Bar	1/4 BSPP Male	(2) PNP with 4-20ma	M12, 5 Pin	SCPSD-250-14-15
0 to 600 Bar	1/4 BSPP Male	(2) PNP	M12, 4 Pin	SCPSD-600-04-17
0 to 600 Bar	1/4 BSPP Male	(2) PNP with 4-20ma	M12, 5 Pin	SCPSD-600-14-15

Programming options

Outputs change N.O. / N.C.	✓
Units of measure change	✓
Hysteresis mode	✓
Window comparator mode	✓
Auto teach mode	—
Output response time	✓
Lockout option	—
Password lockout	✓
Max. value display	—
Min. value display	—
Zero reset	✓
Red / Green LED display options	—
Error output mode	✓
Setting of decimal point	✓

Dimensions



☐ Most popular.



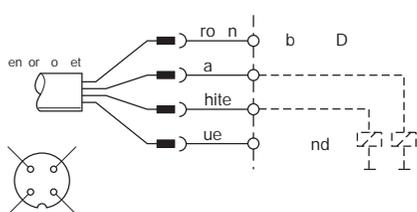
C
 Pressure Sensors
 Vacuum Products
 MPS-33 Series
 MPS-34 Series
 SCP01 Series
 SCPSD Series
 Cables

Operating information

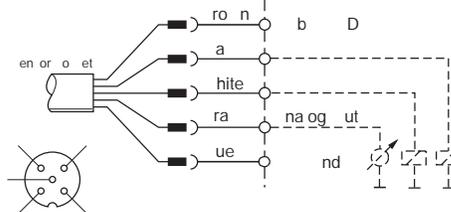
Pressure code	0250	016	1000	3000	5000	9000	250	600
Measure range PSI, (bar)	-14.7 to 250	(-1 to 16)	0 to 1000	0 to 3000	0 to 5000	0 to 9000	(0 to 250)	(0 to 600)
Overload pressure PSI, (bar)	725	(40)	2900	7250	11600	21750	(500)	(1200)
Burst pressure PSI, (bar)	725	(50)	11600	17400	24650	31900	(1200)	(2200)
Sensing element	Ceramic			Stainless steel				
Parts in contact with media	Stainless steel 1.4404			Stainless steel 1.4404, 1.4542, NBR*				
	Ceramic AL203, NBR*							
	*FPDM, EPDM special request							
Units of measure	PSI, bar, MPA							
Switch cycles	>100 million							
Output response time	< 10ms							
Power supply	15 to 30VDC, Class 2 power supply							
Short circuit protection	Yes, 2.4 amp / open collector output							
Reverse polarity protection	Yes							
Overload protection	Yes							
Current consumption	< 100mA							
Output circuit	2 PNP (Sourcing) open collector transistor							
Analog output	0/4...20mA, Programmable, freely scaleable							
Output functions	Hysteresis, Window comparator							
Switching voltage	-1.5VDC							
Maximum current output	1A with 2 open collector outputs, .5A per output							
Accuracy	± 0.5% F.S. Typ., ± 1% Max.							
Repeatability	± 0.25% F.S.							
Display accuracy	± 0.5% F.S. Typ., ± 1 Digit							
Thermal error max.	±0.03% F.S. at -4 to 185°F (-20 to 85°C)							
Material	Pressure Die-cast zinc Z 410: Surface-finishing							
Display material	Polyester							
General protection	IP 67, EN60529, UL, CE Marked, EMC-EN50082-2 Class B, EN 50081-2							
Temperature range of media	-4 to 185°F (-20 to 85°C)							
Ambient temperature range	-4 to 185°F (-20 to 85°C)							
Storage temperature	-40 to 212°F (-40 to 100°C)							
Display	4-Digit, 7-Segment LED, Red, 9mm height							
Tightening torque	35Nm							
Vibration resistance	20G, 10 to 500Hz, IEC60068-2-6							
Shock resistance	50 G, XYZ, 11ms, IEC60068-2-29							
Mass	10.6 oz. (300g)							

Internal circuit

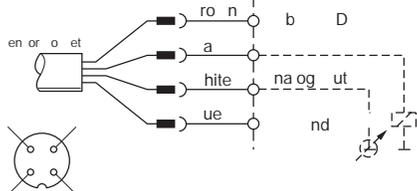
M12, 4-Pin, (2) PNP Outputs



M12, 5-Pin, (2) PNP Outputs with 4 to 20mA Analog



M12, 4-Pin, (1) PNP Output with 4 to 20mA Analog



Note: M12, 5-pin Female Cable Connector will fit on both M12, 4-pin and 5-pin Male Sensor Connector.

Cables

Features

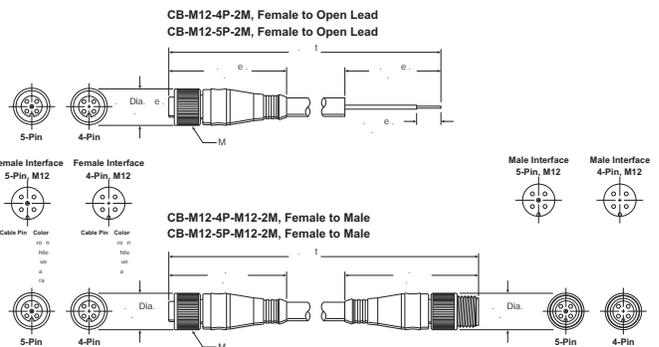
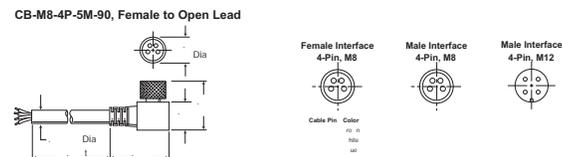
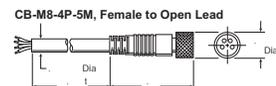
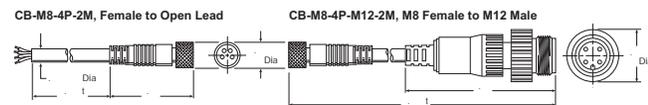
- M8, M12 male / female connector
- Length: 2m or 5m
- Cover: PVC or PUR
- Connection type: Swivel straight or angled
- IP67 swivel connector



Common Part Numbers

Connector	Contacts	Length	Cover	Part number
M8 female	4	2m	PUR	CB-M8-4P-2M-PUR
M8 female	4	5m	PUR	CB-M8-4P-5M-PUR
M8 angled female	4	5m	PUR	CB-M8-4P-5M-90-PUR
M8 female to M12 male	4	2m	PVC	CB-M8-4P-M12-2M
M12 female	4	2m	PVC	CB-M12-4P-2M
M12 female	5	2m	PVC	CB-M12-5P-2M
M12 female to M12 male	4	2m	PVC	CB-M12-4P-M12-2M
M12 female to M12 male	5	2m	PVC	CB-M12-5P-M12-2M

Dimensions



Most popular.



C
 Pressure Sensors
 Vacuum Products
 MPS-33 Series
 MPS-34 Series
 SCP01 Series
 SCP5D Series
 Cables

FSV Series – M5, G1, G2 & G3 Flow Sensing Valve

Maintaining an acceptable level of vacuum is critical to the performance of vacuum systems that have a single source vacuum generator with multiple cups. The Parker Flow Sensing Valve assists in maintaining an acceptable vacuum level if the vacuum cup does not make a proper seal. The valve will automatically close if the cup loses the seal with the product during a pick and place motion.

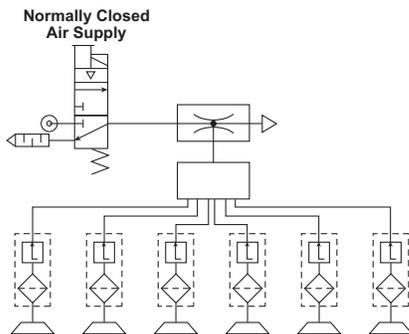
The Parker Flow Sensing Valve is a normally open valve that switches to a closed metered state when the vacuum flow rate from the cup side to the generator side is greater than the switching flow rate of the flow sensing valve. The Flow Sensing Valve “Checks” the vacuum flow. The vacuum flow rate of the generator must be more than the switching flow rate of the Flow Sensing Valve or it will not switch to a “Checked” position.

When using multiple Flow Sensing Valves per generator, the flow rate of the generator must be more than the combined switching flow rates of the flow valves and any other leak path. For example, a CV20-HSN has a maximum flow rate of 3.88 SCFM and a 1/8 Flow Sensing Valve has a switching flow rate of 0.28 SCFM. Therefore 13 Flow Sensing Valves can be connected in parallel to a CV20-HSN.

Once a Flow Sensing Valve is “Checked”, a small amount of by-pass flow occurs. This leakage allows a generator to be turned on prior to the cup being in place on a product and is the flow path used to evacuate the cup volume. The by-pass flow will decrease the maximum degree of vacuum in a system, and is considered a leak path when the cup is not sealed on a product. Blow off functions will still operate by forcing the Flow Sensing Valve to a full open position, allowing the part to be blown off.

Features

- Pick and place randomly placed products
- Minimize vacuum loss when cup seal is lost
- Direct mounting to cups
- 1/8 to G3/8 connection
- Integrated bronze filter



FSV Series Ordering Information

Description	Part number
1/8" BSPP	FSV-G1
1/4" BSPP	FSV-G2
3/8" BSPP	FSV-G3

 Most popular.



Operation

When the flow of air from the cup side to the generator side is greater than the switching flow rate of the valve, the float is drawn back against the spring and seals on the housing. In this state, flow passes through an orifice on the float. Vacuum flow is “Checked”. (See Figure 1).

When the cup comes in contact and seals on a product, flow is reduced and the spring forces the float towards the cup side inlet. This breaks the seal at the float and the full open state is restored. (See Figure 2).

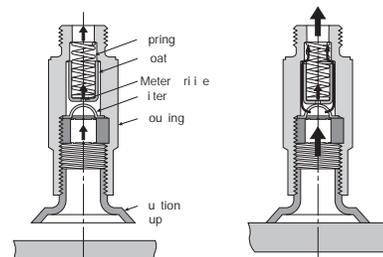
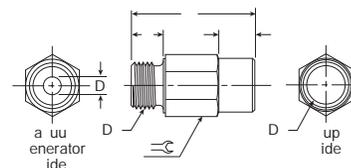


Figure 1
(Closed, Metered Flow)

Figure 2
(Open, Full Flow)

Operating information

Description	FSV-G1	FSV-G2	FSV-G3
Switching flow rate:	0.28 SCFM		0.875 SCFM
Nominal size:	4mm		
Housing material:	Anodized aluminum		
Filter material:	Al-Niro mesh		
Temperature range:	14°F to 140°F (-10°C to 60°C)		
Maximum pressure:	145 PSI		115 PSI
Media:	Atmospheric air		
Weight (grams):	0.009	0.016	0.029



Dimensions

	B	B1	D	D1	L	⌀
FSV-G1	0.26 (6.5)	0.43 (11)	0.16 (4)	G	1.42 (36)	0.51 (13)
FSV-G2	0.33 (8.5)	0.43 (11)	0.16 (4)	G1/4	1.50 (38)	0.67 (17)
FSV-G3	0.47 (12)	0.51 (13)	0.16 (4)	G3/8	1.65 (42)	0.87 (22)

inches (mm)



CH01 Series Check Valve

The CH check valve is used to hold a degree of vacuum downstream from the check valve when the vacuum generator upstream from the check valve is turned off. A separate blow-off connection downstream from the CH check valve is required to destroy the vacuum pressure and blow off the part.

This check valve is an open or passing flow path when there is a differential pressure from the pad side to the generator side.



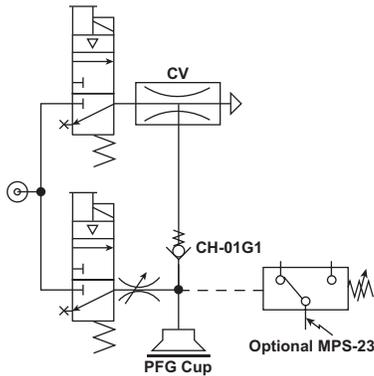
Features

- Poppet design
- Low leakage
- Low cracking pressure

Operating information

Temperature range:	32°F to 140°F (0° to 60°C)
Operating vacuum:	-4.25 to -13.89 PSIG (-8.7 to -28.3 inHg)
Port size:	Pad side = 1/4", Generator side = 1/8"
Leakage rate:	0.2 PSI / minute (0.4 inHg / minute)
Cracking pressure:	2.9 PSIG (5.9 inHg)

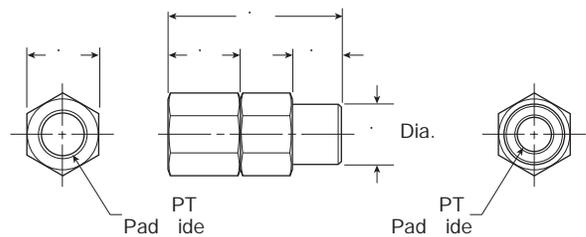
Normally Closed Air Supply with Blow-off & Optional Sensor



Material specifications

Valve body / Fittings	Brass / Aluminum
Seals	BUNA
Spring	SUS

Dimensions



CH01 Series Ordering Information

Description	Part number
BSPP Ports	CH-01G1
NPT Ports	CH-01N1

 Most popular.

VF & VFL Series Filters

Always filtrate the vacuum system to protect the components from damaging particles absorbed from the environment. Elements should be replaced periodically to prevent slower response and overall performance of the system.

Material specifications

Part number	Material housing	Material element	Weight (oz.)
VF-2G	Aluminum	Acrylic, Stainless steel	1.54
VF-3G	Aluminum	PC, Polyvinyl	3.10
VF-5G	Aluminum	PC, Polyvinyl	5.15
VF-6G	Aluminum	PC, Polyvinyl	8.25
VFL-44	Poly-carbonate	PC, Polyvinyl	0.67
VFL-66	Poly-carbonate	PC, Polyvinyl	0.74
VFL-88	Poly-carbonate	PC, Polyvinyl	0.81



Operating information

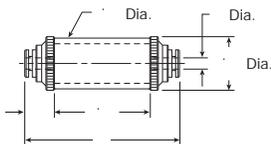
Media:	Non-corrosive air
Operating vacuum:	0 to 28 inHg
Maximum pressure:	60 PSI
Operating temperature:	32°F to 140°F (0°C to 60°C)
Filtration:	120 μm (VF-2), 130 μm (VF-3, VF-5, VF-6, VFL-44, 66, 88)

VF & VL Series Ordering Information

Application	Male connection	Replacement elements	Replacement cover, o-ring	Part number
CV-05, CV-10	G1/8"	VF-2E	—	VF-2G
CV-05, CV-10	G1/8"	VF-3E	VF-3K	VF-3G
CV-15, MCA-10/13	G1/4"	VF-5E	VF-3K	VF-5G
CV-20/25/30	G3/8"	VF-6E	VF-3K	VF-6G
General use	4mm - Tube	VFL-E	VFL-44K	VFL-44
General use	6mm - Tube	VFL-E	VFL-66K	VFL-66
General use	8mm - Tube	VFL-88E	VFL-88K	VFL-88

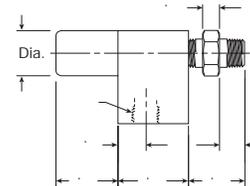
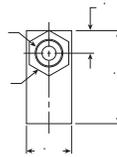
Dimensions

VFL Series

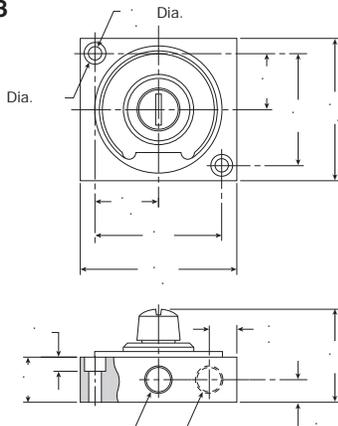


Part number	A	B	C
VFL-44	0.16 (4)	2.17 (55)	0.41 (10.5)
VFL-66	0.24 (6)	2.28 (58)	0.47 (12)
VFL-88	0.31 (8)	2.44 (62)	0.55 (14)

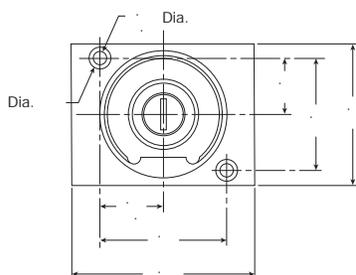
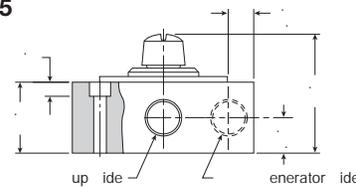
VF-2



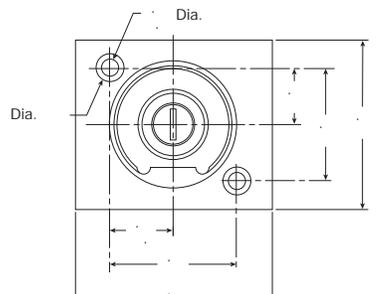
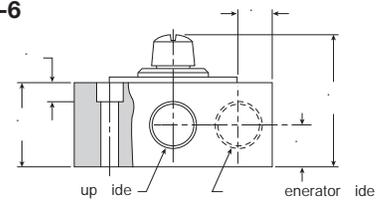
VF-3



VF-5



VF-6



Most popular.

VFP Series Filters

Parker plastic in-line filters provide easy monitoring, economy and safety. These shatterproof filters are airtight and can withstand high pressures.

A 10 micron porous plastic element prolongs element life under the most adverse environmental conditions.

Features

- To filter dust and other small particles from the vacuum flow
- Reduces the risk of operation breakdown or stoppage in the vacuum pump
- Replaceable filter element
- Made in the U.S.A.

Operating information

Media:	Non-corrosive air
Temperature range:	-4°F to 176°F (-20°C to 80°C)
Operating vacuum:	-14.5 to 0 PSI (0 to 28 inHg)
Maximum pressure:	150 PSI
Removal efficiency:	10 µm

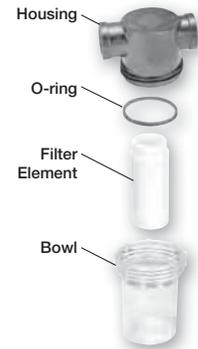
Material specifications

Housing	Polypropylene (PP)
Bowl	Polyamide nylon (PA)
Filter element	Polyethylene (PE)



Replacement components

Description	Size	Part number
Clear Bowl Kit (Includes O-ring)	1/8, 1/4, 3/8	PS577601
	1/2, 3/4	PS577602
	1, 1-1/2	PS577603
BUNA O-ring	1/8, 1/4, 3/8	PS577701
	1/2, 3/4	PS577702
	1, 1-1/2	PS577703
Filter Element Kit*	1/8, 1/4	PS577801
	3/8	PS577801
	1/2, 3/4	PS577802
	1	PS577803
	1-1/2	PS577804



* All Filter Elements are sold as a 3-pack.

VFP Series Ordering information

Port size	Flow SCFM*	Weight (oz)	Internal Volume in ³	Filter area in ²	Basic filter with element		Basic filter with 2 spare elements	
					NPT	BSPP	NPT	BSPP
1/8	25	1.7	2.10	4.9	VFP0CFC01	VFP0CFC11	VFP0CFC03	VFP0CFC13
1/4	35	1.98	2.4	4.9	VFP1CFC01	VFP1CFC11	VFP1CFC03	VFP1CFC13
3/8	45	2.47	2.7	4.9	VFP2CFC01	VFP2CFC11	VFP2CFC03	VFP2CFC13
1/2	130	6.61	11.9	16.0	VFP3CFC01	VFP3CFC11	VFP3CFC03	VFP3CFC13
3/4	175	6.42	12.5	16.0	VFP4CFC01	VFP4CFC11	VFP4CFC03	VFP4CFC13
1	290	15	30.2	29.5	VFP5CFC01	VFP5CFC11	VFP5CFC03	VFP5CFC13
1-1/2	430	18.80	41.2	35.0	VFP6CFC01	VFP6CFC11	VFP6CFC03	VFP6CFC13

* 90 PSIG inlet and 5 PSIG pressure drop

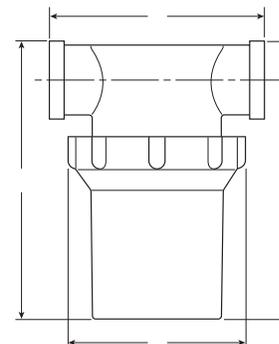
Dimensions

Part number	A	B	C	D	E
VFP0CFC*1 , VFP1CFC*1 , VFP2CFC*1	3.1 (78.7)	2.4 (61)	1.9 (48.3)	2.0 (50.8)	0.4 (10.2)
VFP3CFC*1	3.6 (91.4)	5.1 (129.5)	2.9 (73.6)	4.4 (111.6)	0.7 (17.8)
VFP4CFC*1	3.6 (91.4)	5.1 (129.5)	2.9 (73.6)	4.6 (116.9)	0.5 (12.7)
VFP5CFC*1	4.9 (124.5)	6.4 (162.6)	4.0 (101.6)	5.6 (142.2)	0.8 (20.3)
VFP6CFC*1	5.2 (132.1)	8.1 (209.9)	4.0 (101.6)	6.9 (175.3)	1.2 (30.5)

inches (mm)

* 0 (NPT), 1 (BSPP)

Most popular.



Silencers

Protect the environment against harmful noise levels with quality silencers.



Silencer Ordering Information

For generator series	Male connection	Part number
CV-05, CV-10	G1/8"	MSS-01
CV-05, CV-10	G1/8"	MSS-02
CV-15, MCA-10/13	G1/4"	MSM-01
CV-20	G1/2"	MSL-02
CV-25, CV-30	G3/4"	MS6-01

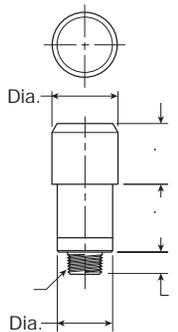
Operating information

Media:	Non-corrosive air
Maximum pressure:	128 PSI
Operating temperature:	41°F to 132°F (5°C to 55.5°C)
Silencing effect:	20 dB

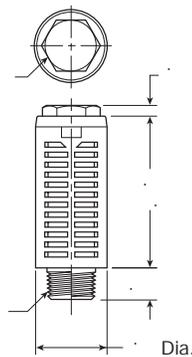
Material specifications

Part number	Material housing	Material element	Media	Weight (oz.)
MSS-01	Polyacetal	Felt, Urethane	Air	0.17
MSS-02	Polyacetal	Stainless steel	Oil	0.17
MSM-01	Polyurethane	Felt	Air	0.24
MSL-02	Nylon	Vinyl	Air	0.88
MS6-01	Nylon	Polyvinyl Forma	Air	2.01

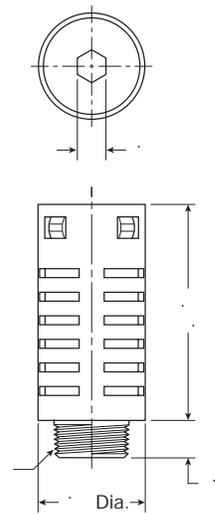
Dimensions



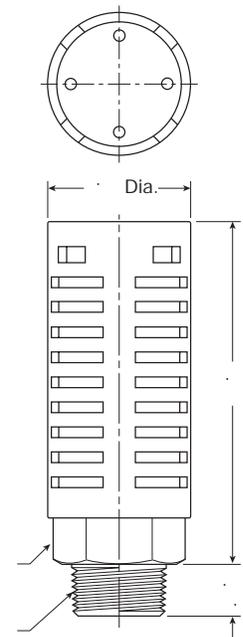
MSS-01



MSM-01



MSL-02



MS6-01

Most popular.

