

# Piab Automotive suction cups







# Overview

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Less energy

consumtion

Low sound level

**Piab is introducing** a new series of Automotive cups – Addressing applications in Body- and Part assembly as well as in low/medium speed press lines. The new line of cups are supporting industry standard related to dimensions and interfaces, all to simplify deployment and installation. The cups could be a good alternative for applications outside Automotive industry as well.

All cups are made of 60 shore (A), black silicon free Nitril-PVC, a durable straightforward material giving a cost effective cup. The cups has friction cleats to better withstand shear-forces during operation. All cups has a molded-in Aluminum insert, so you can either attach your own fitting solution or use one of the other fitting options provided by Piab, including also a quick-connect system – T-slot. We have put effort in making the cups actuate at low vacuum levels, meaning you have a good vacuum "reserve" for the lift itself.

> **PAB – Piab Automotive Bellows,** (5 cups, sizes 30-80 mm), designed for thin metal sheets in Automotive applications. Suitable for flat and uneven/curved surfaces or if level compensation is needed, for example in de-stacking applications. Designed to handle both dry and oily workpieces and can withstand high shear forces. The PAB inner support gives stability and good grip during movement in any orientation.

**Friction pattern on** hub and lip prevents sheets from slipping. Wide sealing surface for better sealing over dust and debris. Round, bellow suction cup for dynamic handling of flat and uneven/curved metal sheet parts.

The cups are available with all major automotive industry standard fittings as well as a quick-connect system - T-slot

(speedir	ng up	change	and	keeping	Oval	cups	in	correct	position	).

				BAF* (N)			
Name	Size mm	Height** mm	Stroke mm	Vertical Dry	Parallell Dry	Parallell oily	Min Curve Radius (mm) on object
PAB80	80	49,5	22	224	263	133	45
PAB60	60	41	14,5	143	155	74	40
PAB50	50	36,5	11,5	101	114	41	30
PAB40	40	31	10	68	80	28	25
PAB30	30	31	9	40	47	18	15

\* BAF (Break Away Force), measured at 60 -kPa on a flat metal surface. Values could vary depending on application (not including safety factor). \*\* Height with mounted T-slot

## Features

### Material

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Made of black Nitril-PVC, 60 shore (A), silicon free. A durable material giving a cost effective good performing cup for automotive applications. Could also be usable for other types of industries.

### Design

Friction pattern on hub and lip prevents sheets from slipping. Wide sealing surface for better sealing over dust and debris. Round, bellow suction cup for dynamic handling of flat and uneven/curved metal sheet parts.

Performance

Low required vacuum level for actuation, gives good vacuum reserve for the lift itself. Good stability and resistance to horizontal forces. Good for level compensation. Handling of thin sheets without deformation or denting objects. For dry as well as oily sheets.