Value Line

# **VALUE LINE**

Good performance at a value price





# Value Line

Piab has a wide experience in various applications and industries, from pick and placing small candies to handling large heavy boxes. We strive to increase productivity, thus reinforcing your edge in the market. We also aim to reduce your energy consumption and improve your working environment. Partnering with Piab means more than having a reliable supplier of vacuum solutions.

#### **Value Line**

Piab has traditionally focused on developing products and being the market leader in applications that are challenging or demanding from a vacuum point of view.

We are now expanding our focus and looking into more basic applications where speed and surfaces to be gripped are less challenging, such as with case erectors, loading sheet metals, injection molding etc.

The new product line is called Value Line – Good performance at a value price.

However, for more challenging applications our other lines of suction cups such as piGRIP®, DURAFLEX® etc., are still available.

#### Other benefits of Value Line

The Value Line is available globally and can be delivered to you for off the shelf delivery.

To simplify the buying, Value Line suction cups are available in single pieces and at a discounted price for big packs with breakpoints at 30 and 100.

(The recommended prices are available at piab.com/valueline)

## **Typical applications for Value Line**

- Sheet metal loading
- Case erecting
- Injection molding

# Typical applications for Value Line

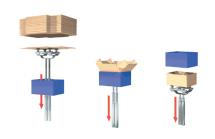
Piab's Value Line vacuum products are well suited to handle or clamp generic materials such as cardboard, smooth plastic (0 – 60/80\* °C) and dry metal sheets in applications with low/medium machine speed.

\* Max Temperature short term contact, <10 sec and 50% intermittence, ambient temperature 15 – 30 °C, mechanical properties will start to degrade.



# Sheet metal loading and unloading

The Value Line Flat-Concave cups have stability and a low build height that fits gripper tools for metal forming machines, such as folding, bending and laser cutting machines. For light weight installations on grippers and a decentralized vacuum safety approach with high gripper flexibility, the Value Line ejectors are an appropriate choice.



Case and carton erecting

To minimize case erectors jamming due to case—to—case variation and imperfections, the compliant and abrasion resistant Value Line cups with built in level compensation (even on the Flat—Concave style cups) are a good and reliable choice. A broad selection of sizes and models facilitates finding the correct cup for your application.



Parts removal – injection molding automation

If picking temperature is below 80°C and the surface is smooth, the mark and silicone–free Value Line cups are suitable for plastic part removal of injection molds. The light weight Value Line ejectors, with basic functionality, is a cost–effective vacuum generator choice for gripper tools in injection mold automation.



# Vacuum ejector pumps & suction cups

Value Line is Piab's line of cost-effective vacuum automation components. Value Line products offer good performance at cost-effective pricing. For applications and machines where "value for the money" is mandatory, Piab's Value Line is the solution.



#### Value Line ejector - Inline design

Light weight and small size ejector. Compressed air and vacuum ports are "inline" with integrated push–in style fittings. Easy installation directly on the hose makes for a close connection to the suction cup.



## Value Line ejector T-design

Light weight and small size ejector. Integrated push-in fitting for compressed air, vacuum and exhaust ports. Exhaust air can easily be piped away if needed. Mounting bracket is included.



# Value Line cups - Flat Concave design

Program of 7 flat-concave cups from 20 to 75mm diameter. The design gives good stability, a possibility to handle curved surfaces and it gives a small degree of level compensation thanks to the slightly concave design.



# Value Line cups - Bellows design

Program of 7 bellows cups from 20 to 75mm diameter. The bellows design allows for more level compensation (less machine accuracy needed) and a possibility to handle curved areas and small radius. Limited capacity to handle forces parallel to the surface of the object.



# Value Line cups - Long Bellows design

Program of 7 long bellows cups from 20 to 75mm diameter. The long bellows gives extra level compensation (less machine accuracy needed) and better ability to grip on difficult geometries. The long stroke can be used to help separate thin sheets/objects. Not recommended when force is parallel to surface of the object.



## Value Line - Cup fittings

Optional push-on fittings with male and female threads in same fitting for easy installation. An internal hexagon grip makes it easy to tighten and untighten the cup. Material brass.



# Technical data

A broad selection of new Value Line suction cups in flat, bellows and long bellows designs.

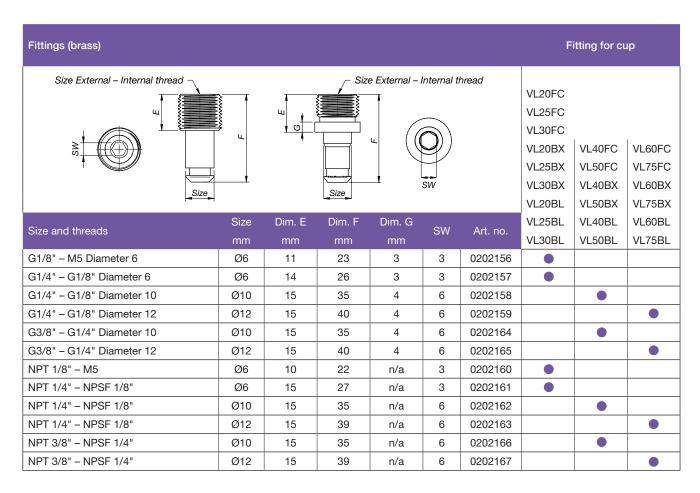


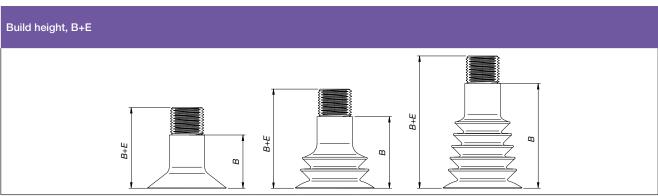
## Value Line cups

- Suction cup program suitable for standard applications, such as carton and cardboard erecting (low to medium speed), metal/wood sheet loading and unloading, parts removal from injection molding machines and clamping/holding.
- Durable material with good wear resistance.
- Thin sealing lip gives good grip even on slightly textured and corrugated surfaces.
- Available with metal fitting or push-on directly to a pipe.
- Every cup size has a few fitting options.

Type Name		Lifting forces vertical to the surface, N, at vacuum level 50 -kPa	Dim. A mm	Dim. B mm	Dim. C mm	Dim. D mm	Art. no.	
Flat Concave		VL20FC	10	Ø20	15	Ø6	9	0202096
		VL25FC	17	Ø25	15.8	Ø6	9	0202097
		VL30FC	23	Ø30	17.5	Ø6	9	0202099
		VL40FC	38	Ø40	27	Ø10	15	0202100
		VL50FC	58	Ø50	29	Ø10	15	0202101
		VL60FC	79	Ø60	35.5	Ø12	18	0202102
		VL75FC	113	Ø75	38.3	Ø12	18	0202103
		VL20BX	7	Ø20	19.5	Ø6	9	0202109
Bellows		VL25BX	12	Ø25	22.3	Ø6	9	0202110
		VL30BX	16	Ø30	25.6	Ø6	9	0202111
		VL40BX	29	Ø40	36.3	Ø10	15	0202113
		VL50BX	44	Ø50	43.6	Ø10	15	0202114
		VL60BX	60	Ø58	52.2	Ø12	18	0202115
		VL75BX	89	Ø71.7	61.2	Ø12	18	0202116
		VL20BL	6	Ø20	27.9	Ø6	9	0202117
Long Bellows		VL25BL	11	Ø25	33.5	Ø6	9	0202118
		VL30BL	15	Ø30	37.1	Ø6	9	0202119
		VL40BL	23	Ø40	53.1	Ø10	15	0202120
		VL50BL	35	Ø50	62.5	Ø10	15	0202121
		VL60BL	48	Ø60	76.3	Ø12	18	0202122
	A	VL75BL	76	Ø75	92.7	Ø12	18	0202123







Material specification					
Material	TPE-U				
Color	Purple				
Temperature	0 – 60/80* °C				

<sup>\*</sup> Max Temperature short term contact, <10 sec and 50% intermittence, ambient temperature 15 – 30 °C, mechanical properties will start to degrade.

# Technical data

Vacuum ejector-pumps in small and light weight designs for easy installation.

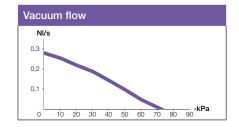


# Value Line ejectors

- ➤ Ejector cartridge with improved vacuum performance compared to corresponding size conventional single-stage ejector.
- Ejector cartridge without flap valves give high reliability in dirty and dusty environments. Virtually no clogging.
- Light weight body.
- Integrated push-in fittings for quick and low cost installation.
- Available in "inline" and "T-design" version. The T-design is suitable if exhaust air needs to be piped away.

# **Technical data**

Description	Unit	Value
Material		PA, NBR, SS, CuZn, Al*, Ni**
Temperature, range	°C	-10 – 80
Feed pressure, max.	MPa	0.7
Optimal feed pressure	MPa	0.5



# **Vacuum performance**

Description	Air consumption*	Max vacuum* -kPa	Evacuation time, s/l, to 50 -kPa*	Art. no.
Inline vacuum generator 6mm	0.32	70	2.6	0202360
T-design vacuum generator 6mm	0.32	70	2.6	0202187
T-design vacuum generator 1/4"	0.32	70	2.6	0202191

<sup>\*</sup> At optimal feed pressure.

# Technical data, specific

Description	Noise level dBA	Weight g	Connection, vacuum	Connection, compressed air	Dim. A	Dim. B mm	Art. no.
Inline vacuum generator 6mm	70 – 83	12	Ø6 mm	Ø6 mm	70	14.2	0202360
T-design vacuum generator 6mm	72 – 78	12	Ø6 mm	Ø6 mm	66.2	31.55	0202187
T-design vacuum generator 1/4"	72 – 78	12	Ø1/4"	Ø1/4"	66.2	31.55	0202191





<sup>\* 0202360, \*\* 0202191.</sup> 



# Good performance at a value price

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