

Ventose modulari piGRIP®

Un concetto unico di ventose modulari che consiste in componenti separati ottimizzati per la presa, il sollevamento e la compensazione in altezza.

piGRIP® modular suction cups

A unique modular suction cup concept with individually optimized parts for gripping, lifting and levelling.

ATTACCHI

In applicazioni con una pompa del vuoto centralizzata, il foro calibrato riduce la portata in perdita e mantiene il vuoto ad alti livelli quando si manipolano oggetti a tenuta.



FITTINGS

In applications with a centralized vacuum pump, flow restrictors reduce vacuum flow and maintain high vacuum levels when handling non-leaking objects.

SUPPORTI

Un singolo supporto per taglia consente il montaggio di tutti i soffietti o direttamente dei labbri (nel caso di ventose piane).



SUPPORTS

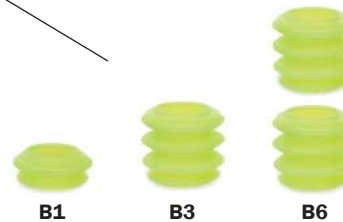
One only support per size fits with all bellows or directly with lips (in the case of flat cups).

SOFFIETTI

I robusti e stabili soffietti con 1, 3 e 6 involuzioni permettono di raggiungere elevate velocità della macchina. Il ridotto spessore delle pareti interne agevola la compressione del soffietto utilizzando meno forza ed energia. La robustezza del materiale è in grado di incrementare la capacità di sollevamento tra il 30 ed il 50% rispetto alle ventose convenzionali.

BELLOWS

Firm and stable 1, 3 and 6 folded bellows allow for faster machine speeds. Thin-wall design makes them faster to compress using less force and energy. The strength of the material increases lifting capacity between 30-50% compared to similar conventional cups.

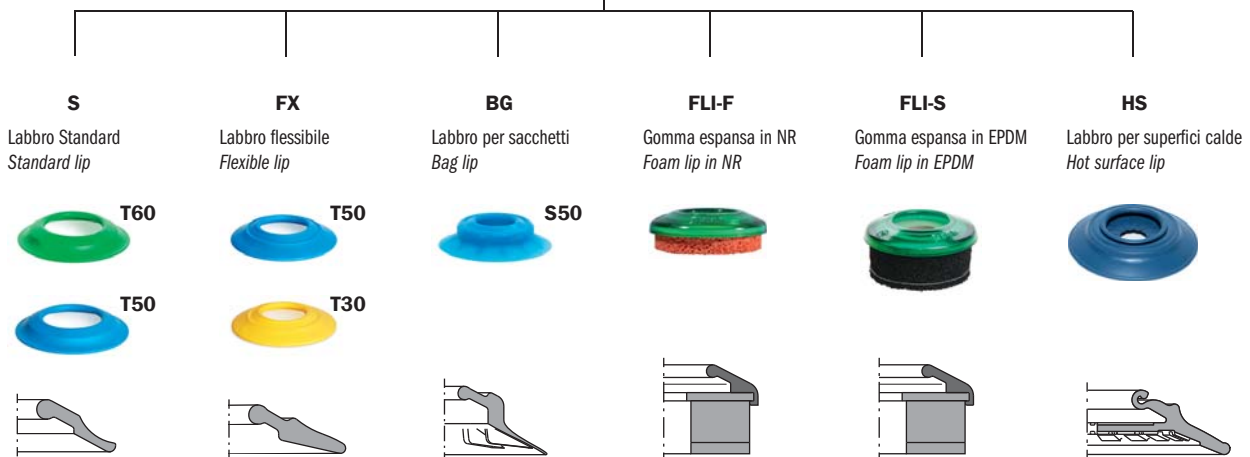


LABBRI

Per ottenere un'eccellente presa del prodotto è determinante scegliere il labbro idoneo all'applicazione.

LIPS

Get an excellent grip on almost anything with the right lip for your application.



Codici di ordinazione

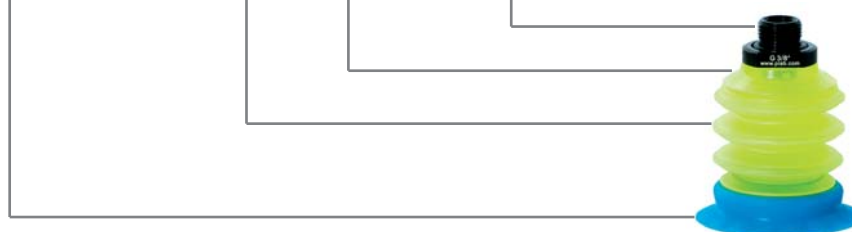
S25	Labbro standard Ø25mm Ø25mm Standard lip	T60	TPE con durezza 60 Sh.A	
S35	Labbro standard Ø35mm Ø35mm Standard lip		TPE with 60 Sh.A hardness	
S50	Labbro standard Ø50mm Ø50mm Standard lip		TPE con durezza 50 Sh.A	
S70	Labbro standard Ø70mm Ø70mm Standard lip	T50	TPE with 50 Sh.A hardness	
FX28	Labbro flessibile Ø28mm Ø28mm Flexible lip	T50	TPE con durezza 50 Sh.A	
FX39	Labbro flessibile Ø39mm Ø39mm Flexible lip		TPE with 50 Sh.A hardness	
FX55	Labbro flessibile Ø55mm Ø55mm Flexible lip		TPE con durezza 30 Sh.A	
FX77	Labbro flessibile Ø77mm Ø77mm Flexible lip	T30	TPE with 30 Sh.A hardness	
BG34	Labbro per sacchetti Ø34mm Ø34mm Bag lip	S50	Silicone con durezza 50 Sh.A	
BG48	Labbro per sacchetti Ø48mm Ø48mm Bag lip		Silicone with 50 Sh.A hardness	
BG63	Labbro per sacchetti Ø63mm Ø63mm Bag lip			
FLI25F	Gomma espansa Ø25mm Ø25mm Foam lip	F	NR (tenace) NR (firm)	
FLI35F	Gomma espansa Ø35mm Ø35mm Foam lip			
FLI50F	Gomma espansa Ø50mm Ø50mm Foam lip			
FLI70F	Gomma espansa Ø70mm Ø70mm Foam lip			
FLI25S	Gomma espansa Ø25mm Ø25mm Foam lip	F	EDPM (soffice) EDPM (soft)	
FLI35S	Gomma espansa Ø35mm Ø35mm Foam lip			
FLI50S	Gomma espansa Ø50mm Ø50mm Foam lip			
FLI70S	Gomma espansa Ø70mm Ø70mm Foam lip			
HS29	Labbro per superfici calde Ø29mm Ø29mm Hot surface lip	HN50	HNBR con durezza 50 Sh.A	
HS39	Labbro per superfici calde Ø39mm Ø39mm Hot surface lip			HNBR with 50 Sh.A hardness
HS58	Labbro per superfici calde Ø58mm Ø58mm Hot surface lip			
HS79	Labbro per superfici calde Ø79mm Ø79mm Hot surface lip			

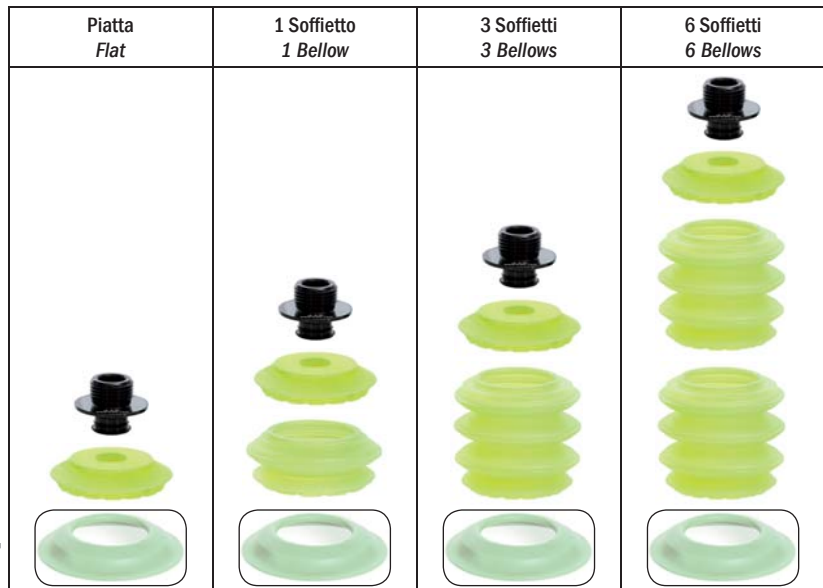
Ordering codes


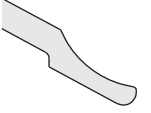

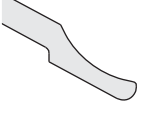

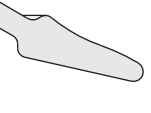

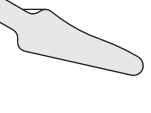








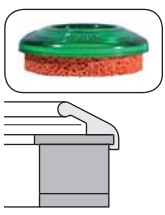

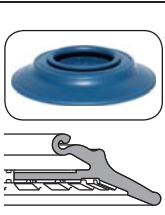
F	Piatta Flat	B1	1 Soffietto 1 Bellow	B3	3 Soffietti 3 Bellows	S1	Supporto Support	G	Filettatura G G-Thread	18	1/8"	M	Maschio Male
B6	6 Soffietti 6 Bellows	14	1/4"	38	3/8"								

VG . BG 48 S 50 B 3 S 1 G 3 8 M






			Piatta Flat	1 Soffietto 1 Bellow	3 Soffietti 3 Bellows	6 Soffietti 6 Bellows
Labbro standard in TPE con durezza 60 Sh.A <i>Standard lip in TPE with 60 Sh.A hardness</i>	 	Ø25 mm	VG.S25T60FS1	VG.S25T60B1S1	VG.S25T60B3S1	VG.S25T60B6S1
		Ø35 mm	VG.S35T60FS1	VG.S35T60B1S1	VG.S35T60B3S1	VG.S35T60B6S1
		Ø50 mm	VG.S50T60FS1	VG.S50T60B1S1	VG.S50T60B3S1	VG.S50T60B6S1
		Ø70 mm	VG.S70T60FS1	VG.S70T60B1S1	VG.S70T60B3S1	VG.S70T60B6S1
Labbro standard in TPE con durezza 50 Sh.A <i>Standard lip in TPE with 50 Sh.A hardness</i>	 	Ø25 mm	VG.S25T50FS1	VG.S25T50B1S1	VG.S25T50B3S1	VG.S25T50B6S1
		Ø35 mm	VG.S35T50FS1	VG.S35T50B1S1	VG.S35T50B3S1	VG.S35T50B6S1
		Ø50 mm	VG.S50T50FS1	VG.S50T50B1S1	VG.S50T50B3S1	VG.S50T50B6S1
		Ø70 mm	VG.S70T50FS1	VG.S70T50B1S1	VG.S70T50B3S1	VG.S70T50B6S1
Labbro flessibile in TPE con durezza 50 Sh.A <i>Flexible lip in TPE with 50 Sh.A hardness</i>	 	Ø28 mm	VG.FX28T50FS1	VG.FX28T50B1S1	VG.FX28T50B3S1	VG.FX28T50B6S1
		Ø39 mm	VG.FX39T50FS1	VG.FX39T50B1S1	VG.FX39T50B3S1	VG.FX39T50B6S1
		Ø55 mm	VG.FX55T50FS1	VG.FX55T50B1S1	VG.FX55T50B3S1	VG.FX55T50B6S1
		Ø77 mm	VG.FX77T50FS1	VG.FX77T50B1S1	VG.FX77T50B3S1	VG.FX77T50B6S1
Labbro flessibile in TPE con durezza 30 Sh.A <i>Flexible lip in TPE with 30 Sh.A hardness</i>	 	Ø28 mm	VG.FX28T30FS1	VG.FX28T30B1S1	VG.FX28T30B3S1	VG.FX28T30B6S1
		Ø39 mm	VG.FX39T30FS1	VG.FX39T30B1S1	VG.FX39T30B3S1	VG.FX39T30B6S1
		Ø55 mm	VG.FX55T30FS1	VG.FX55T30B1S1	VG.FX55T30B3S1	VG.FX55T30B6S1
		Ø77 mm	VG.FX77T30FS1	VG.FX77T30B1S1	VG.FX77T30B3S1	VG.FX77T30B6S1
Labbro per sacchetti in Silicone con durezza 50 Sh.A <i>Bag lip in Silicone with 50 Sh.A hardness</i>	 	Ø34 mm	VG.BG34S50FS1	VG.BG34S50B1S1	VG.BG34S50B3S1	VG.BG34S50B6S1
		Ø48 mm	VG.BG48S50FS1	VG.BG48S50B1S1	VG.BG48S50B3S1	VG.BG48S50B6S1
		Ø63 mm	VG.BG63S50FS1	VG.BG63S50B1S1	VG.BG63S50B3S1	VG.BG63S50B6S1

			Piatta Flat	1 Soffietto 1 Bellow	3 Soffietti 3 Bellows	6 Soffietti 6 Bellows
						
Gomma espansa in NR (tenace) <i>Foam lip in NR (firm)</i>		Ø25 mm	VG.FLI25FFS1	VG.FLI25FB1S1	VG.FLI25FB3S1	VG.FLI25FB6S1
		Ø35 mm	VG.FLI35FFS1	VG.FLI35FB1S1	VG.FLI35FB3S1	VG.FLI35FB6S1
		Ø50 mm	VG.FLI50FFS1	VG.FLI50FB1S1	VG.FLI50FB3S1	VG.FLI50FB6S1
		Ø70 mm	VG.FLI70FFS1	VG.FLI70FB1S1	VG.FLI70FB3S1	VG.FLI70FB6S1
Gomma espansa in EPDM (soffice) <i>Foam lip in EPDM (soft)</i>		Ø25 mm	VG.FLI25SFS1	VG.FLI25SB1S1	VG.FLI25SB3S1	VG.FLI25SB6S1
		Ø35 mm	VG.FLI35SFS1	VG.FLI35SB1S1	VG.FLI35SB3S1	VG.FLI35SB6S1
		Ø50 mm	VG.FLI50SFS1	VG.FLI50SB1S1	VG.FLI50SB3S1	VG.FLI50SB6S1
		Ø70 mm	VG.FLI70SFS1	VG.FLI70SB1S1	VG.FLI70SB3S1	VG.FLI70SB6S1
Labbro per superfici calde in HNBR con durezza 50 Sh.A <i>Hot surface lip in HNBR with 50 Sh.A hardness</i>		Ø29 mm	VG.HS29HN50FS1	VG.HS29HN50B1S1	VG.HS29HN50B3S1	VG.HS29HN50B6S1
		Ø39 mm	VG.HS39HN50FS1	VG.HS39HN50B1S1	VG.HS39HN50B3S1	VG.HS39HN50B6S1
		Ø58 mm	VG.HS58HN50FS1	VG.HS58HN50B1S1	VG.HS58HN50B3S1	VG.HS58HN50B6S1
		Ø79 mm	VG.HS79HN50FS1	VG.HS79HN50B1S1	VG.HS79HN50B3S1	VG.HS79HN50B6S1

Tutte le ventose sono disponibili con tre taglie di attacchi maschio.

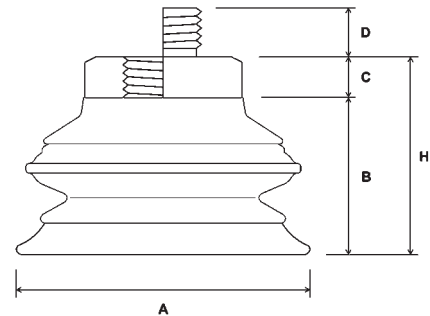
All cups are available with three sizes of male fittings.

		G	Codice Code
Attacchi <i>Fittings</i>		1/8"	G18M
		1/4"	G14M
		3/8"	G38M

Dimensioni della ventosa (mm)

Suction cup dimensions (mm)

Tipo labbro e taglia Lip type and size		A	B			
	S25	25	10.9	18.7	29.8	48.7
	S35	35	12.4	23.3	38.8	65.2
	S50	50	14.7	30.3	52.4	90.1
	S70	70	17.8	39.6	70.6	123.4
	FX28	28	11.4	19.2	30.3	49.2
	FX39	38	13.1	24	39.5	65.9
	FX55	55	15.7	31.3	53.4	91.1
	FX77	77	19.2	41	72	124.8
	BG34	34	15.5	23.3	34.4	53.3
	BG48	48	18.4	29.3	44.8	71.2
	BG63	63	21.3	36.9	59	96.7
	FLI25F	25	16	23.8	34.9	53.8
	FLI35F	35	17	27.9	43.4	69.8
	FLI50F	50	21.1	36.7	58.8	96.5
	FLI70F	70	23.1	44.9	75.9	128.7
	FLI25S	25	17.5	25.3	36.4	55.3
	FLI35S	35	21.5	32.4	47.9	74.3
	FLI50S	50	32.1	47.7	69.8	107.5
	FLI70S	70	34.1	55.9	86.9	139.7
	HS29	29	13.4	21.2	32.3	51.2
	HS39	39	15.6	26.5	42	68.4
	HS58	58	19.5	35.1	57.2	94.9
	HS79	79	24.3	46.1	77.1	129.6



Dimensioni attacco (mm)

Fitting dimensions (mm)

Codice Code	C	D	Dimensioni raccomandate di attacco per non penalizzare le prestazioni (1) Recommended fitting size for best performance (1)				
			Ø25÷29	Ø34÷39	Ø48÷58	Ø63÷79	
	G18M	5	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	G14M	6	9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	G38M	6	10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(1) Nessuna restrizione di flusso o eccessivo volume da evacuare che limitano le prestazioni del circuito di vuoto.

(1) No flow restriction or excessive volume for evacuation, which impair vacuum system performance.

Caratteristiche dei materiali

Material specifications

	Durezza <i>Hardness</i>	Componente <i>Item</i>	Colore <i>Colour</i>	Temperatura di esercizio <i>Temperature range</i>	T Max. (2) <i>Max T (2)</i>	Proprietà speciali <i>Special qualities</i>	
TPE	80-87 Sh.A	Supporto S1 <i>Support S1</i>	Lime <i>Lime</i>	-20 ÷ 60°C.	100°C.	Esente da Silicone/PWIS, antialone, resistente agli oli <i>Silicone/PWIS free, mark free, oil resistant</i>	
TPE	87 Sh.A	Soffietti <i>Bellows</i>	Lime <i>Lime</i>				
TPE	60 Sh.A	Labbro standard (S) T60 <i>Standard lip (S) T60</i>	Verde <i>Green</i>				
TPE	50 Sh.A	Labbro standard (S) T50 <i>Standard lip (S) T50</i>	Blu <i>Blue</i>	-40 ÷ 60°C.		FDA	
TPE	50 Sh.A	Labbro flessibile (FX) T50 <i>Flexible lip (FX) T50</i>	Blu <i>Blue</i>				
TPE	30 Sh.A	Labbro flessibile (FX) T30 <i>Flexible lip (FX) T30</i>	Giallo <i>Yellow</i>				
SIL	50 Sh.A	Labbro per sacchetti (BG) S50 <i>Bag lip (BG) S50</i>	Blu <i>Blue</i>	-40 ÷ 200°C.			
EPDM	-	Gomma espansa (FLI-S) <i>Foam lip (FLI-S)</i>	Nero <i>Black</i>	-40 ÷ 120°C.			Gomma espansa ultra soffice <i>Ultra soft cellular rubber</i>
NR	-	Gomma espansa (FLI-F) <i>Foam lip (FLI-F)</i>	Arancio <i>Orange</i>	-20 ÷ 80°C.			Gomma naturale tenace <i>Firm natural rubber</i>
PU	60 Sh.A	Supporto per gomma espansa <i>Foam lip holder</i>	Verde <i>Green</i>	+10 ÷ 50°C.			
HNBR	50 Sh.A	Labbro per superfici calde <i>Hot surface lip</i>	Blu <i>Blue</i>	-30 ÷ 120°C.	150°C.	Esente da Silicone/PWIS, antialone, resistente agli oli <i>Silicone/PWIS free, mark free, oil resistant</i>	

(2)
Temperatura Max. per un contatto breve, <10 sec. con intermittenza al 50%,
temperatura ambiente 15-30°C., le proprietà meccaniche inizieranno a degradare.

(2)
Max Temperature for short term contact, <10 sec. and 50% intermittence, ambient
temperature 15-30°C., mechanical properties will start to degrade.

Resistenza dei materiali

Material resistances

	Durezza <i>Hardness</i>	Usura <i>Wear resistance</i>	Olii <i>Oils</i>	Agenti atmosferici e ozono <i>Weather & ozone</i>	Idrolisi <i>Hydrolysis</i>	Petrolio <i>Petrol</i>	Acidi concentrati <i>Concentrated acids</i>	Alcool <i>Alcohol</i>	Ossidazione <i>Oxidation</i>
TPE	30 Sh.A 50 Sh.A	Discreta <i>Fair</i>	Scarsa <i>Poor</i>	Eccellente <i>Excellent</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Eccellente <i>Excellent</i>	Buona <i>Good</i>
TPE	60 Sh.A	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Discreta <i>Fair</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Buona <i>Good</i>	Buona <i>Good</i>
SIL	50 Sh.A	Buona <i>Good</i>	Scarsa <i>Poor</i>	Eccellente <i>Excellent</i>	Discreta <i>Fair</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Buona <i>Good</i>	Eccellente <i>Excellent</i>
EPDM	-	Discreta <i>Fair</i>	Scarsa <i>Poor</i>	Eccellente <i>Excellent</i>	Buona <i>Good</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>
NR	-	Buona <i>Good</i>	Scarsa <i>Poor</i>	Discreta <i>Fair</i>	Buona <i>Good</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>	Scarsa <i>Poor</i>
PU	60 Sh.A	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Discreta <i>Fair</i>	Discreta <i>Fair</i>	Discreta <i>Fair</i>	Discreta <i>Fair</i>	Scarsa <i>Poor</i>
HNBR	50 Sh.A	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Eccellente <i>Excellent</i>	Buona <i>Good</i>	Eccellente <i>Excellent</i>	Discreta <i>Fair</i>	Buona <i>Good</i>	Eccellente <i>Excellent</i>