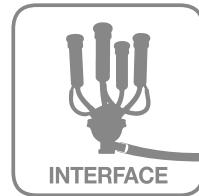
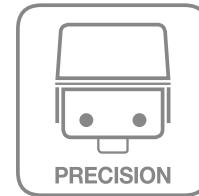


**InterPuls®**

## **Essential Product Guide**



INTERFACE



PRECISION



CONTROL

# Company Profile

**Profile**

**Established in:** 1974  
**Presence:** 70 countries across the 5 continents  
**30 patents in the last 5 years**  
**10% of the annual turnover invested in R&D**

**Employees:** 85  
**Average age:** 37  
**University graduates:** 20%

**Designed & Manufactured in Italy**

**InterPuls S.p.A.**

[sales@interpuls.com](mailto:sales@interpuls.com)  
[www.interpuls.com](http://www.interpuls.com)

[YouTube](#) [f](#) [Twitter](#) [g+](#)

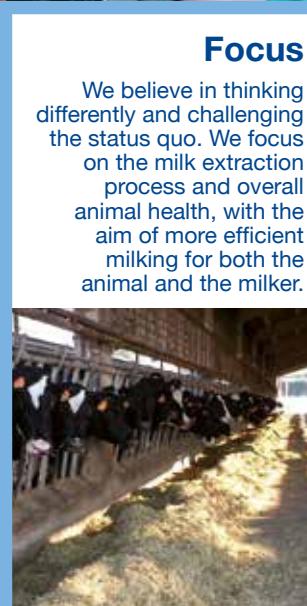




## Milkrite Goals

Our customers benefit from enhanced value through improved milking efficiency, better teat health and superior on farm performance.

Our goal is to permanently improve on farm milking conditions, through our products, support and advice



## Focus

We believe in thinking differently and challenging the status quo. We focus on the milk extraction process and overall animal health, with the aim of more efficient milking for both the animal and the milker.

## Milkrite Europe

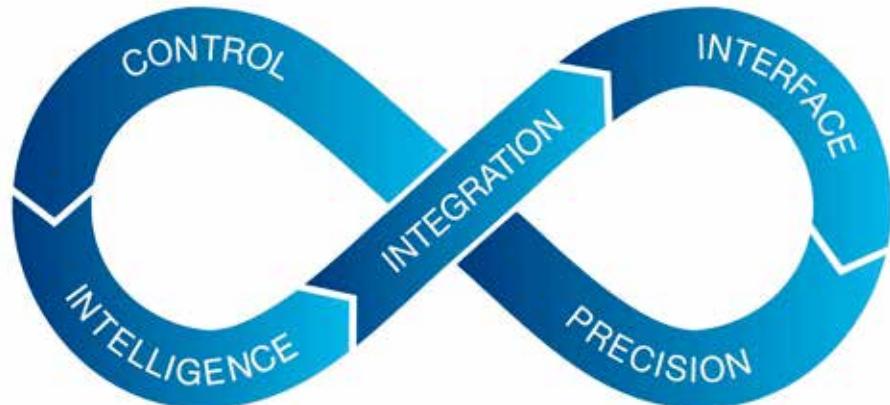
Hampton Park West  
Semington Road / Melksham  
Wiltshire / SN12 6NB / UK

Tel: +44 (0) 1225 89 64 26  
Fax: +44 (0) 1225 89 63 07

[sales@milkrite.com](mailto:sales@milkrite.com)  
[www.milkrite.com](http://www.milkrite.com)

## InterPuls member of Avon Dairy Solutions since August 2015.

Milkrite | InterPuls is the leading producer of milking point technology, providing complete teat to pipeline solutions for the Dairy sector. Milkrite | InterPuls has a long history in the heart of milking, manufacturing liners and tubing with the latest technology as well as high tech pulsation, measurement and milking control equipment, distributing in 80 countries worldwide.



# InterPuls

## First in Pulsation!

Erano gli anni 70 quando venne lanciato sul mercato il Pulsatore Universal. Oggi InterPuls vanta una gamma di Pulsazione che la rende Leader mondiale del settore.

La tecnologia all'avanguardia, unita ad immutata Passione, ci permettono di fornire a O.E.M., distributori e impiantisti una Pulsazione con la "P" maiuscola!

InterPuls Passion pulses here!

① D. Che cos'è la Pulsazione?

R. La Pulsazione è l'apertura e la chiusura ciclica di una guaina, generata dal Pulsatore, ed è composta da due parametri: Frequenza e Rapporto di mungitura.

It was the 70's when the Pulsator "Universal" had been launched on the market. Today the InterPuls Pulsation range makes us a world leader in this sector.

The advanced technology together with the same Passion, allow us to supply O.E.M., distributors and technical dealers with Pulsation with the capital "P"!

InterPuls Passion pulses here!

① Q. What's Pulsation?

A. Pulsation is the alternating opening and closing of a liner, generated by a Pulsator, and it is composed by two parameters: Milking rate and ratio.



> Universal  
**1970**



> L3  
**1974**



> L80  
**1978**



> LL90  
**1994**



> LE20  
**1998**

**Interpuls®**



INTERPULS



INTERPULS®



② D. Cos'è la Frequenza di Mungitura?

R. La Frequenza di Mungitura è il numero di volte in cui la guaina si apre e si chiude nell'intervallo di tempo, governando la velocità del ciclo di Pulsazione che è composto da 4 fasi, chiamate A,B,C e D. In caso di un aumento della frequenza di Pulsazione muteranno solamente la fase B (Mungitura) e la fase D (Massaggio). Le fasi A e C, dette transitorie, dipendono dalla lunghezza e dalla sezione dei tubi di Pulsazione.

② Q. What is the Milking rate?

A. The Milking rate is the number of times a liner opens and closes in the time interval, thus regulating the rate of the Pulsation cycle which is composed by 4 phases, called A, B, C and D.

If ever the Pulsation Frequency increases, only the phase B (Milking) and D (massage) will change. Phases A and C, so called transitory, depend on the length and section of the Pulsation tubes.

③ D. Cos'è il Rapporto di Mungitura?

R. Il Rapporto di Mungitura è la % di tempo necessario per aprire e mantenere aperta la guaina (fase A+B), permettendo così l'estrazione del latte attraverso il capezzolo, grazie all'azione del vuoto, rispetto al tempo necessario per chiudere e mantenere chiusa la guaina (fase C+D) per effettuare la fase di massaggio.

③ Q. What is Milking ratio?

A. The Milking ratio is the percentage of time necessary to open (and keep open) the liner (phase A+B), thus allowing the milk to be drawn through the teat, thanks to the vacuum action and compared to the time required to close (and keep closed) the liner (phases C+D) in order to massage.

**4 D. Quindi anche il vuoto è importante?**

R. Il livello di vuoto è basilare, perché è ciò che permette il deflusso del latte, vincendo l'effetto del muscolo dello sfintere del capezzolo. E' però molto importante che il livello non superi certi limiti; la ricerca indica che a dai 40-42kPa il capezzolo delle bovine è già completamente aperto. Un livello di vuoto elevato provoca stress all'animale e congestione dell'estremità del capezzolo. Un livello di vuoto basso allunga il tempo di mungitura, fa scivolare le guaine con conseguente rischio di caduta del gruppo; rendendo inefficace anche la fase di massaggio.

**4 Q. So, is the vacuum important as well?**

A. The vacuum level is fundamental, because it allows the milk outflow, overcoming the effect of orifice's muscle of the teat. It's really important yet that the vacuum level doesn't exceed certain limits; researches show that at 40-42kPa the cows' teat is completely open. A high vacuum level causes stress for the animal and congestion at the teat's ends. A low vacuum level extends the milking time, it squeezes the liners with a consequent risk for cluster falling and it makes the massage not effective.

# Pulsation Timeline



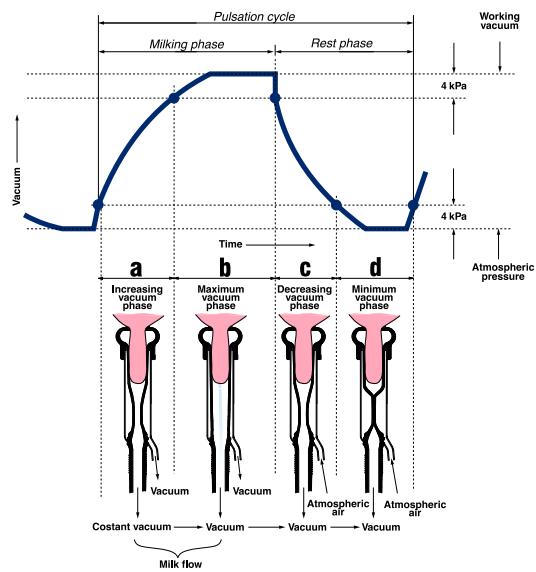
Animal breed	Vacuum level [kPa]		Rate [ppm]	Ratio [%]
	High line & bucket	Low line		
Cow	48 - 50	42 - 44	60	60:40
Goat	42 - 44	38 - 40	90	60:40
Sheep	40 - 42	36 - 38	120	50:50
Buffalo	50 - 52	44 - 46	60	60:40
Horse & Donkey	40 - 42	36 - 38	90	60:40
Camel	40 - 42	36 - 38	80	60:40

Norme di riferimento ISO (ED. 2007)

ISO 3918 Impianti di mungitura - Terminologia  
ISO 5707 Impianti di mungitura - Costruzione e prestazioni  
ISO 6690 Impianti di mungitura - Prove meccaniche

ISO International Standards (ED. 2007)

ISO 3918 Milking machine installations - Vocabulary  
ISO 5707 Milking machine installations - Construction and Performance  
ISO 6690 Milking machine installations - Mechanical tests



# Top 30

## Operazione convenienza - Saving Opportunity

Q.ty		TOP 30 Set Ref.	Note
25 x		<b>1000221</b>	- Vite fissaggio parete laterale - Lateral cover screw
50 x		<b>1000225</b>	- Or di tenuta - O-ring
25 x		<b>1000286</b>	- Kit manutenzione 60/40 Alt. - Maintenance kit Alt. 60/40
3 x		<b>1010156</b>	- Filtro LL90
25 x		<b>1010191</b>	- LL90 Filter
50 x		<b>1010192</b>	- Membrana principale - Main diaphragm
25 x		<b>1010246</b>	- Kit manutenzione 60/40 Alt. - Maintenance kit Alt. 60/40
10 x		<b>1060235</b>	- Guarnizione Superiore LE/LP/CV30 - Upper Gasket LE/LP/CV30
10 x		<b>1060236</b>	- Guarnizione Inferiore LE/LP/CV30 - Lower Gasket LE/LP/CV30
5 x		<b>1030318</b>	- Bobina 3,2W 24V/DC - 24V/DC solenoid
5 x		<b>1030319</b>	- Bobina 3,2W 12V/DC - 12V/DC solenoid
25 x		<b>1030298</b>	- Setto filtrante - Retrofit filter
25 x		<b>1030299</b>	- Nucleo mobile - Piston
10 x		<b>1030499</b>	- Kit di revisione LE/LP20 - LE/LP20 Service kit
50 x		<b>1050115</b>	- Membrana inversione - Small diaphragm
20 x		<b>1900063</b>	- Nipplo allungamento gemellare - Pulsation tubes extension nipple
25 x		<b>1050124</b>	- Kit manutenzione 60/40 Alt. - Maintenance kit Alt. 60/40
25 x		<b>1050125</b>	- Kit manutenzione 70/30 Alt. - Maintenance kit. Alt. 70/30

Q.ty		TOP 30 Set Ref.	Note
25 x		<b>1530291</b>	- Tappo bloccaggio valvola - Locking valve plug
25 x		<b>1580141</b>	- Tappo bloccaggio valvola - Locking valve plug
50 x		<b>1530292</b>	- Guarnizione piccola - Small gasket
25 x		<b>1530428</b>	- Valvola chiusura - Shut-off valve
25 x		<b>1570047</b>	- Valvola chiusura Lunik - Lunik Shut-off valve
100 x		<b>1570024</b>	- Chiodo per tappo protezione Lunik200 - Lunik200 bowl protection plug pin
25 x		<b>1530315</b>	- Guarnizione - Gasket
25 x		<b>1580140</b>	- Guarnizione - Gasket
25 x		<b>1900036</b>	- Tappo chiusura guaina 22-24 mm - Inflation plug 22-24 mm
50 x		<b>1900061</b>	- Anello fermatubi D.35 - Retaining ring D. 35
50 x		<b>1900062</b>	- Anello fermatubi D.32 - Retaining ring D. 32
50 x		<b>1900052</b>	- Nuovi anelli fermatubo piatti D.32 - Retaining Flat Band D.32
50 x		<b>1900051</b>	- Nuovi anelli fermatubo piatti D.35 - Retaining Flat Band D.35
20 x		<b>1900039</b>	- Jetter D. 22
20 x		<b>1900040</b>	- Jetter D. 24
10 x		<b>2079016</b>	- Sistema automatico ITP 207 - ITP 207 automatic system
10 x		<b>2059016</b>	- Sistema automatico ITP 205 - ITP 205 automatic system
10 x		<b>2050018</b>	- Deflettore ITP 205 - ITP 205 deflector
30 x		<b>2060078</b>	- Curva plastica con foro - Plastic bend vented
30 x		<b>2060079</b>	- Curva plastica senza foro - Plastic bend not vented
25 x		<b>2809114</b>	- Adattatore - Adapter
10 x		<b>3100054</b>	- Guarnizione per coperchio - Gasket for lid
25 x		<b>3420015</b>	- Valvola drenaggio 1/2" - Drain Valve 1/2"
25 x		<b>5200122</b>	- Moschettone DVC 1000 - DVC Snap hook



# LE30/LP30

## Servo-Direct Pulsators



### ✓ Patented

I Pulsatori Servo-Direct LE30-LP30 rappresentano quanto di meglio esiste attualmente in fatto di precisione, robustezza ed affidabilità nel tempo.

### Vantaggi

- ✓ Il principio di Pulsazione brevettato "Servo-Direct" permette un controllo preciso del segnale
- ✓ Progettato per minimizzare i consumi di vuoto in modo da assicurare un'eccellente stabilità del vuoto stesso
- ✓ Basso consumo elettrico così da evitare problemi di ossidazione dei contatti e risparmiare energia
- ✓ Nel caso in cui il latte venga aspirato nel Pulsatore, per esempio attraverso la rotura di una guaina, è possibile aspirare acqua pulita dai tubi di pulsazione, senza doverlo smontare
- ✓ Facile e rapido da revisionare: la manutenzione completa può essere portata a termine in meno di 1 minuto

### Benefits

- ✓ The patented "Servo-Direct" Pulsation system enables precise signal control
- ✓ Designed to minimise vacuum consumption and ensure excellent vacuum stability
- ✓ Low electrical consumption to reduce the risk of oxidation of electrical contacts and save energy
- ✓ If milk escapes into the Pulsator, as a result of a split liner for example, clean water may simply be flushed through via the pulsation tubes, without having to dismantle the unit
- ✓ Quick and easy to service: complete maintenance takes less than 1 minute

### Avantages

- ✓ Le principe de Pulsation breveté « Servo-Direct » permet de contrôler le signal avec précision
- ✓ Conçu pour réduire les consommations de vide afin de garantir une excellente stabilité du vide
- ✓ Faible consommation électrique pour éviter l'oxydation des contacts et faire des économies d'énergie
- ✓ Si le lait est aspiré dans le Pulsateur en raison, par exemple, d'une fissure dans le manchon, il est possible d'aspirer de l'eau claire par les tuyaux d'aspiration, sans devoir tout démonter
- ✓ Facile et rapide à réviser : la maintenance complète peut être faite en moins de 1 minute

Пульсаторы LE30-LP-30 Сервоуправление представляют собой наилучшую разработку на данный момент в плане точности, прочности, надежности.



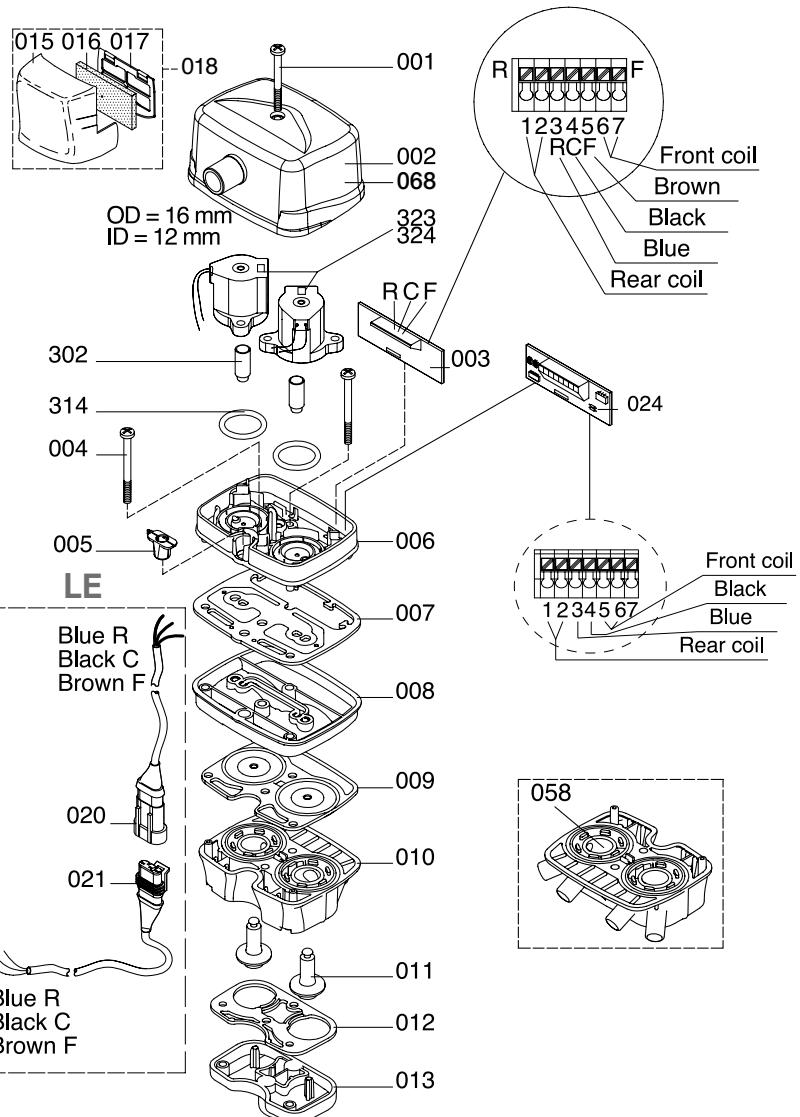
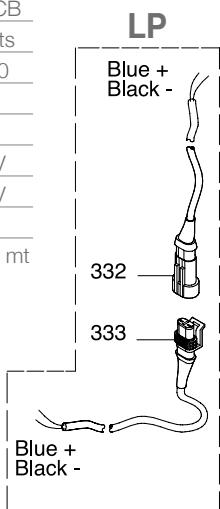
### Преимущества

- ✓ Принцип запатентованной пульсации "Сервоуправление" позволяет с точностью контролировать сигналы
- ✓ Спроектирован специально с целью уменьшить потребление вакуума, гарантируя стабильность вакуума
- ✓ Низкое потребление электроэнергии, что позволяет защитить контакты от окисления и сократить расходы на потребление энергии
- ✓ В случае попадания молока внутрь пульсатора в следствии изнашивания резины, можно очистить при помощи чистой воды, подаваемой из шлангов пульсатора, не разбирая пульсатор
- ✓ Простой и быстрый в обслуживании: полный текущий ремонт можно провести в течение нескольких минут

# LE30 & LP30

Pos.	Ref.	Note	
001	1060023		
002	1060024	LE30	
003	1030046	LE PCB	
004	1030151		
005	1060011		
006	1060005		
<b>Top 30</b>	<b>007</b>	<b>1060235</b>	
008	1060102		
009	1060034		
010	1060109	2 Exits	
011	1060090		
<b>Top 30</b>	<b>012</b>	<b>1060236</b>	
013	1060133		
015	1030108		
<b>Top 30</b>	<b>016</b>	<b>1030298</b>	
017	1030109		
018	1030111		
020	1030274	LE	
021	1030272	LE 1,5 mt	
024	1030476	LP PCB	
058	1060110	4 Exits	
068	1060031	LP30	
<b>Top 30</b>	<b>302</b>	<b>1030299</b>	
314	2800122		
<b>Top 30</b>	<b>323</b>	<b>1030318</b>	24 V
<b>Top 30</b>	<b>324</b>	<b>1030319</b>	12 V
332	1030275	LP	
333	1030273	LP 1,5 mt	

**Top 30 pag. 6-7**



## LE/LP/CV30 service kit



Ref.

1060115

## A frequenza-rate

Rate	1	2	3
55	OFF	OFF	OFF
60	ON	OFF	OFF
90	OFF	ON	OFF
120	ON	ON	OFF
150	OFF	ON	ON
180	OFF	OFF	ON

## B rapporto-ratio

Front	Rear	4	5	6
50/50	60/40	OFF	OFF	OFF
55/45	60/40	ON	OFF	OFF
50/50	50/50	OFF	ON	OFF
60/40	60/40	ON	ON	OFF
65/35	65/35	OFF	OFF	ON
70/30	70/30	ON	OFF	ON

## Dati Tecnici

Tipo: Alternato o Simultaneo  
Tensione di alimentazione: 12\*/24VDC  
Assorbimento: 260 mA (130 mA per bobina 24V);  
540 mA (270 mA per bobina 12V)  
Collegamento al vuoto: 1/2" Gas femmina  
Sistema di azionamento: Servo-Diretto  
Materiale del corpo: Resina termoplastica  
Dimensioni: 85x90x105 mm  
Peso: 0,40 Kg

\*12V Articolo speciale disponibile su richiesta

## Technical Data

Type: Alternate or Simultaneous  
Operating Voltage: 12\*/24VDC  
Power Consumption: 260 mA (130 mA per bobina 24V);  
540 mA (270 mA per bobina 12V)  
Vacuum Connection: 1/2" Bsp female  
Operating System: Servo-Direct  
Body Material: Thermoplastic resin  
Dimensions: 85x90x105 mm  
Weight: 0,40 Kg  
\*12V Special item available on demand



- ✓ Protezione totale contro l'umidità e i getti d'acqua.
- ✓ Totally sealed to provide total protection against moisture and humidity.
- ✓ Protection totale contre l'humidité et les projections d'eau.
- ✓ Полная защита от попадания воды и влаги.

#### LE30 Electronic Pulsators

	24 VDC	12 VDC
	1069001	1069005
	1069002	1069006
	1069003	1069007
	1069004	1069008

#### IUC - Control Boxes

	Model	24 VDC output	12 VDC output
	IUC24	-	1049130 100 - 260 VAC @ 50/60 Hz 200 VA
	IUC32	1049133 100 - 260 VAC @ 50/60 Hz 200 VA	-

#### LP30 Individual Electronic Pulsators

	24 VDC	12 VDC
	1069009	1069013
	1069162 CombiFast vers.	
	1069010	1069014
	1069011	1069015
	1069012	1069016

#### IUP - Universal Power Supply

		24 VDC output
	IUP	1049131 100 - 260 VAC @ 50/60 Hz 320 W - 13 A up to 50 LP - Pulsators

Accessories	Ref.	Description
	1060016	Restrictor for C phase adjusting
	1060095	Restrictor D.4 for A & C phase

# IUC24 - IUC32

## Control Box



Easy to program



Protection class IP54

Ad ampliamento della gamma Control Box, InterPuls ha sviluppato l'innovativa IUC.

To extend the IC - Control Box range, InterPuls has developed the innovative IUC.

InterPuls a mis au point et réalisé l'extraordinaire IUC pour compléter la gamme Control Box.

С целью расширения гаммы IC - Control Box, InterPuls разработал и создал новинку IUC.

### Dati Tecnici

Tensione di alimentazione: 100-260 VAC @50/60 Hz  
 Potenza erogata: 200 VA  
 Assorbimento: 3,5 A @115 VAC - 1,7 A @230 VAC  
 Tensione in uscita: 24 VDC / 12 VDC  
 Dimensioni: 150x270x370 mm  
 Peso: 2,7 Kg

### Technical Data

Input Voltage: 100-260 VAC @50/60 Hz  
 Power Supplied: 200 VA  
 Absorption: 3,5 A @115 VAC - 1,7 A @230 VAC  
 Output Voltage: 24 VDC / 12 VDC  
 Dimensions: 150x270x370 mm  
 Weight: 2,7 Kg

### IUC - Control Boxes

	Model	24 VDC output	12 VDC output
	IUC24	-	<b>1049130 *</b> 100 - 260 VAC @ 50/60 Hz 200 VA
	IUC32	<b>1049133</b> 100 - 260 VAC @ 50/60 Hz 200 VA	-

\* Special item available on demand.



# IUP

## Universal Power Supply



### Protection class IP54

Ideale per tutte le utenze che necessitano di un'alimentazione a 24VDC. Alimenta fino a 20 stacchi completi ACR o fino a 50 Pulsatori individuali LP20 o LP30. IUP è protetto contro: corto circuiti, sovraccarichi, sovratensioni, surriscaldamento

Competitive solution for 24VDC input devices. Up to 20 ACR complete milking points or up to 50 LP20/LP30 individual Pulsators. IUP is protected against: short-circuits, over-load, over-voltage, over-heat

Idéal pour tous services qu'ils ont besoin d'alimentation à 24VDC. Jusqu'à 20 systèmes complets Du boîtier de commande ACR où jusqu'à 50 Pulsateurs individuels LP20/LP30. IUP est protégé contre court-circuits, surcharges, surtensions, surchauffe

Идеален для всех устройств, питаемых напряжением 24VDC. Питает до 20 ACR в комплекте с автосъемом. Питает до 50 отдельных пульсаторов LP20 или LP30. IUP защищает от: коротких замыканий, перегрузок, перенапряжения, перегрева

#### Dati Tecnici

Alimentazione: 100-260VAC @50/60Hz  
Potenza Massima: 320W  
Corrente Massima: 13A  
Output: 24VDC regolati  
Dimensioni: 150x270x370mm  
Peso: 2,7 Kg

#### Technical Data

Input Voltage: 100-260VAC @50/60Hz  
Max Power: 320W  
Max Current: 13Amp  
Output Voltage: 24VDC stabilized  
Dimensions: 150x270x370mm  
Weight: 2,7 Kg

#### IUP - Universal Power Supply

Ref.	Note
1049131	up to 50 LP - Pulsators



# REVOLUTIONAir.



## ✓ Patented

L02 è stato sovralimentato! Le già consolidate performances di mungitura sono state migliorate grazie al 50% in più di AirBoost!

L02 has been supercharged! The well-known milking performances have been improved thanks to the 50% more AirBoost!

L02 a été suralimenté! Les déjà consolidées performances de traite ont été améliorées grâce au 50% en plus d'AirBoost!

L02 достигло наивысшей производительности! Улучшены характеристики пульсации благодаря увеличению напора воздуха на 50%!

## Vantaggi

- ✓ Superficie filtrante maggiorata
- ✓ Mungitura delicata e uniforme
- ✓ Ottima fase di massaggio
- ✓ Affidabile sistema di assemblaggio SUREMATCH®
- ✓ Pulizia filtro semplificata
- ✓ Inversione pneumatica performante e a lunga durata

## Benefits

- ✓ Oversized filtering surface
- ✓ Gentle and uniform milking
- ✓ Excellent massage phase
- ✓ Reliable SUREMATCH® coupling system
- ✓ Easy-to-clean filter
- ✓ Performant, long-life pneumatic reversal mechanism

## Avantages

- ✓ Surface filtrante augmentée
- ✓ Traite delicate et uniforme
- ✓ Phase de massage optimale
- ✓ Système d'accouplement SUREMATCH® fiable
- ✓ Nettoyage du filtre simplifié
- ✓ Inversion pneumatique performante et à long terme

## Преимущества

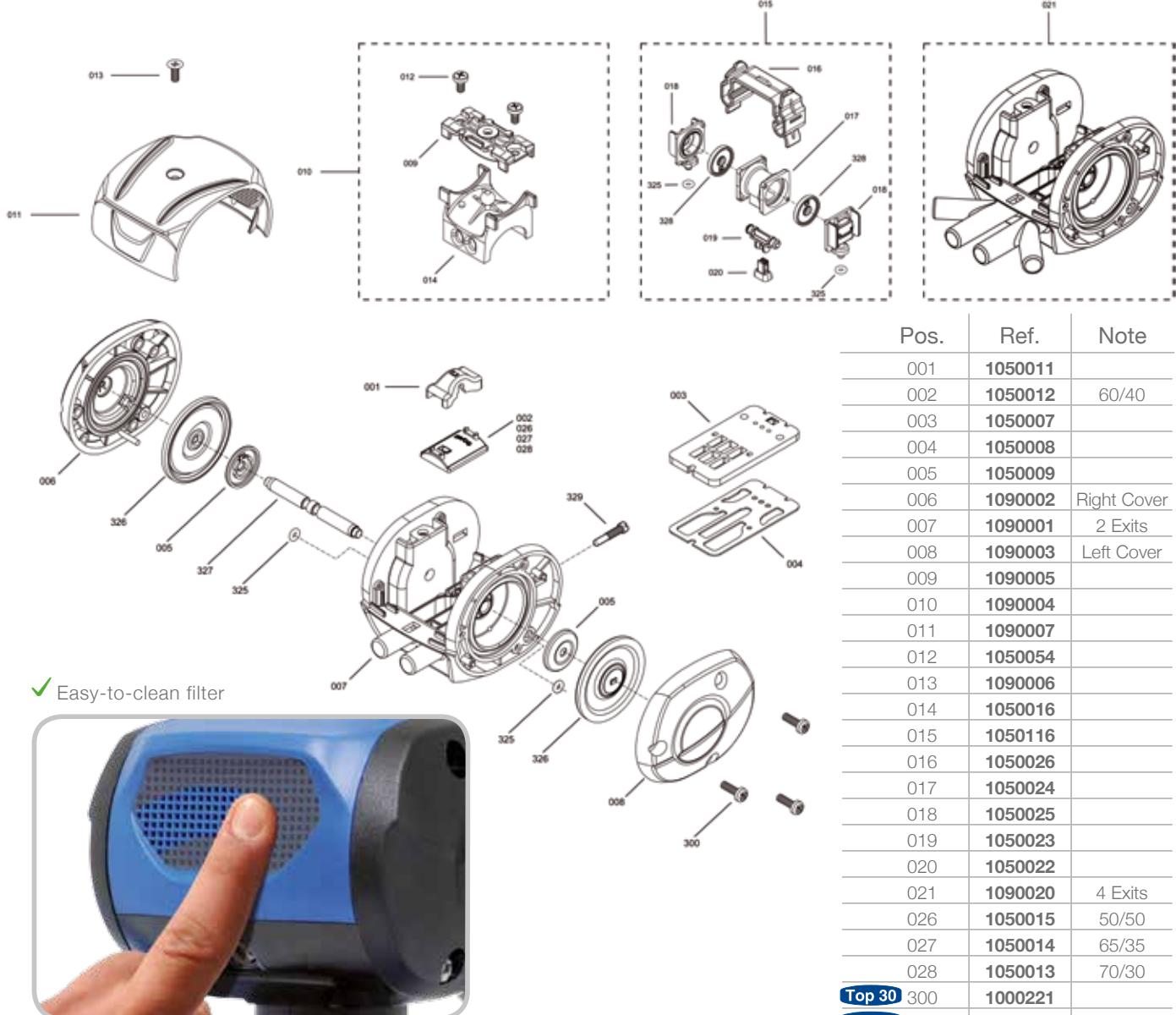
- ✓ Более широкая поверхность фильтрации
- ✓ Стабильный и щадящий процесс доения
- ✓ Оптимальная фаза массажа
- ✓ Надежная система соединения частей SUREMATCH®
- ✓ Упрощенная чистка фильтра
- ✓ Высокопроизводительный и долговечный инверсионный пневматический механизм

## Dati Tecnici

Modello: L02Air  
Tipo di Pulsazione: Alternato  
Frequenza: 50 ÷ 180 ppm  
Rapporto: 50/50, 60/40, 65/35, 70/30  
Alimentazione: Vuoto  
Principio di Funzionamento: Membrane  
Dimensioni: 102x87x64 mm  
Peso: 0,30 Kg

## Technical Data

Model: L02Air  
Pulsation Type: Alternate  
Rate: 50 ÷ 180 ppm  
Milking Ratio: 50/50, 60/40, 65/35, 70/30  
Operating System: Vacuum  
Working Principle: Diaphragms  
Dimensions: 102x87x64 mm  
Weight: 0,30 Kg



Pos.	Ref.	Note
001	1050011	
002	1050012	60/40
003	1050007	
004	1050008	
005	1050009	
006	1090002	Right Cover
007	1090001	2 Exits
008	1090003	Left Cover
009	1090005	
010	1090004	
011	1090007	
012	1050054	
013	1090006	
014	1050016	
015	1050116	
016	1050026	
017	1050024	
018	1050025	
019	1050023	
020	1050022	
021	1090020	4 Exits
026	1050015	50/50
027	1050014	65/35
028	1050013	70/30
<b>Top 30</b>	300	1000221
<b>Top 30</b>	325	1000225
<b>Top 30</b>	326	1010192
	327	1050047
<b>Top 30</b>	328	1050115
	329	1050004

**Top 30 pag. 6-7**



Accessories	Ref.	Note		
	<b>Top 30</b> 1050124 1050118 <b>Top 30</b> 1050119 <b>Top 30</b> 1050125 <b>Top 30 pag. 6-7</b>	Alt. 60/40 Alt. 50/50 Alt. 65/35 Alt. 70/30		
L02 Air		Ratio		
Alt.	60/40	50/50	65/35	70/30
	1099001	1099002	1099003	1099004
	1099013	1099014	1099015	-

# L80/LL90

## Vacuum Pulsators



I Pulsatori L80 e LL90 InterPuls, facili da installare, precisi, semplici nell'assistenza, instancabili nel lavoro, sono la risposta giusta alle esigenze di oggi.

The InterPuls L80 & LL90 Pulsators, easy to install, accurate, durable, simple to maintain, are the right answer to today's pulsation needs.

Les Pulsateurs InterPuls L80 & LL90, faciles à installer, précis, simples pour le service après-vente, infabables dans le travail, sont la réponse la plus juste aux exigences d'aujourd'hui.

Пульсаторы L80 и LL90 ИнтерПульс, легко устанавливаются, точные, простые в обслуживании, легко устанавливаются, и полностью отвечают запросам современного рынка.

## Vantaggi

- ✓ DUSTOP® Filter (LL90): ampia superficie, elevata capacità filtrante garantiscono funzionamento regolare nel tempo e lunga durata dei componenti
- ✓ SUREMATCH® Slide & Valve: i materiali sono stati studiati per lavorare accoppiati con la massima efficienza
- ✓ Inversione pneumatica performante e a lunga durata

## Benefits

- ✓ DUSTOP® Filter (LL90): large surface area, high filtering capacity protects the Pulsator components and ensure consistent running over a long period
- ✓ SUREMATCH® Slide & Valve: the materials have been specially designed to work together for maximum efficiency
- ✓ Performant, long-life pneumatic reversal mechanism

## Avantages

- ✓ DUSTOP® Filter (LL90): vaste surface, haute capacité filtrante assure un fonctionnement régulier longtemps et une longue durée des composants
- ✓ SUREMATCH® Slide & Valve: les matériaux ont été spécialement projetés à travailler ensemble pour maximum efficacité
- ✓ Inversion pneumatique performante et à long terme

## Преимущества

- ✓ DUSTOP® фильтр (LL90): широкая поверхность, высокая фильтрация гарантируют стабильную работу на протяжение долгого периода времени, высокий срок службы компонентов
- ✓ SUREMATCH® Пластина & Клапан: материалы были подобраны таким образом чтобы гарантировать совместную работу с максимальной эффективностью
- ✓ Высокопроизводительный и долговечный инверсионный пневматический механизм

## Dati Tecnici

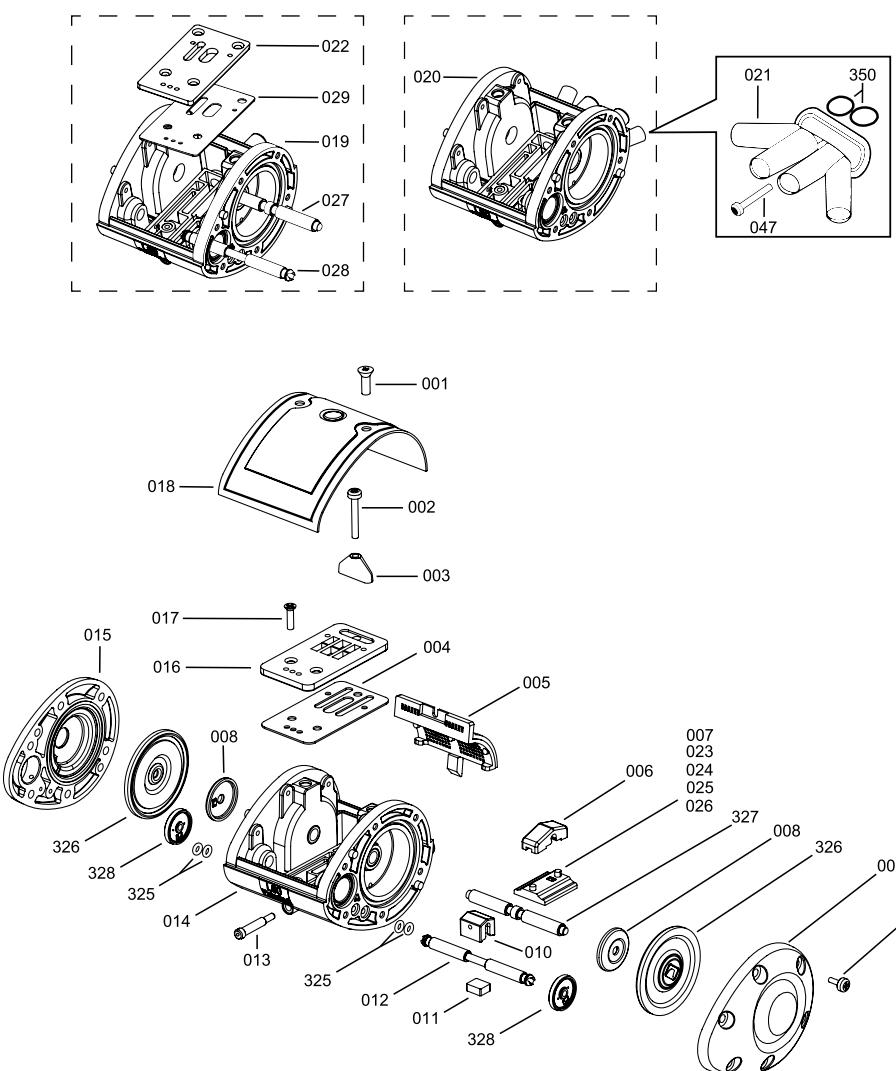
Tipo: Alternato o Simultaneo  
Frequenza: Regolabile  
Rapporto di mungitura (Alternato): 50/50, 60/40, 65/35, 70/30  
Rapporto di mungitura (Simultaneo): 60/40  
Sistema di Azionamento: Pneumatico  
Sistema di Inversione: a membrane  
Materiale del corpo: Resina termoplastica  
Dimensioni: 102x87x64 mm  
Peso: 0,30 Kg

## Technical Data

Pulsation Type: Alternate or Simultaneous  
Rate: Adjustable  
Milking Ratio (Alternate): 50/50, 60/40, 65/35, 70/30  
Milking Ratio (Simultaneous): 60/40  
Operating system: Pneumatic  
Working principle: diaphragms  
Body material: Thermoplastic resin  
Dimensions: 102x87x64 mm  
Weight: 0,30 Kg

# L80

## Vacuum Pulsator



✓ Don't lubricate

Pos.	Ref.	Note
001	1000030	
002	1010093	
003	1010092	
004	1000364	Alt.
005	1000322	
006	1000326	Alt. 50/50
007	1000328	
009	1000006	Right Cover
010	1000309	
011	1000311	
012	1000162	Alt.
013	1000321	
014	1000001	Alt. 2 Exits
015	1000005	Left Cover
016	1010085	Alt.
017	1000037	
018	1000024	
019	1000003	Sim.
020	1000002	Alt. 4 Exits
021	1000083	4 Exits
022	1010099	Sim.
023	1000328	Alt. 70/30
024	1000330	Alt. 65/35
025	1000324	Alt. 60/40
026	1010024	Sim. 60/40
027	1000050	Sim.
028	1000054	Sim.
029	1000036	Sim.
047	1000084	
<b>Top 30</b> 300	1000221	
<b>Top 30</b> 325	1000225	
<b>Top 30</b> 326	1010192	
327	1050047	Alt.
<b>Top 30</b> 328	1050115	
350	1000085	

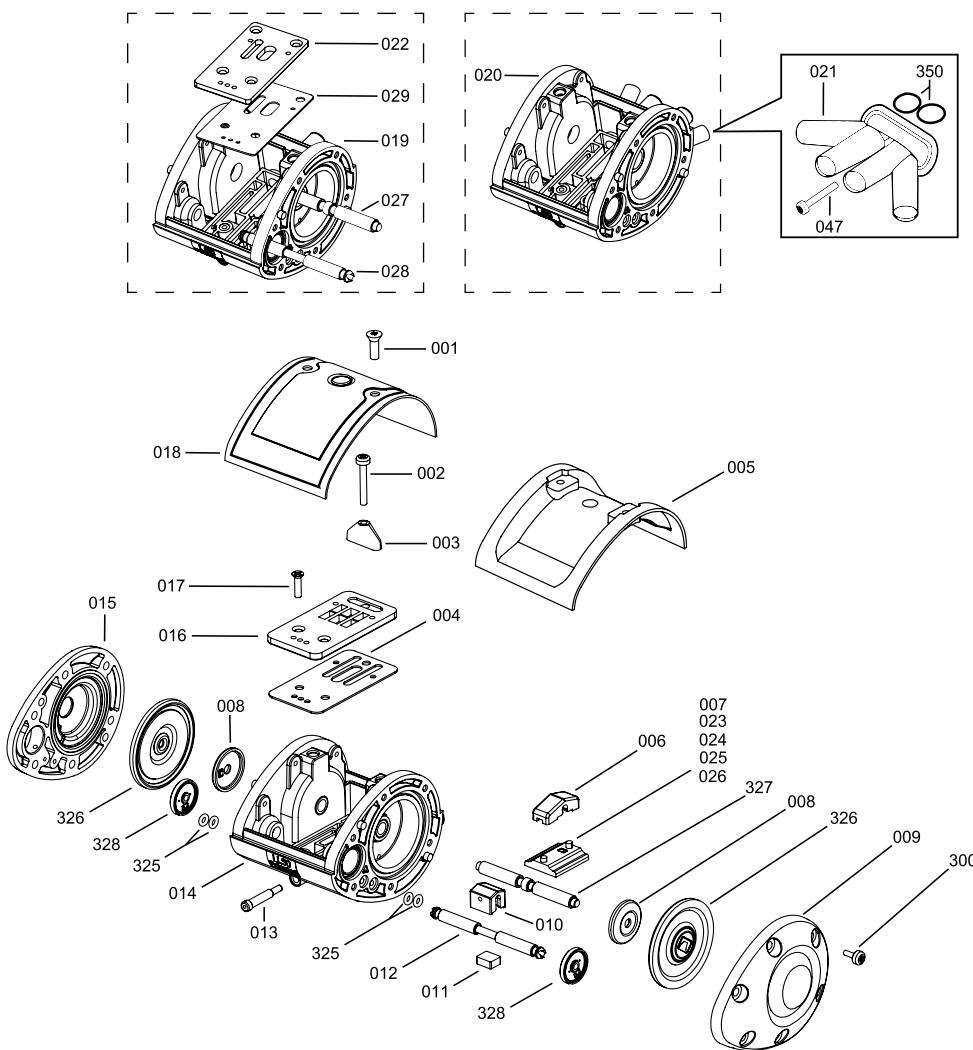
**Top 30 pag. 6-7**

L80	Ref.			
Alt.	60/40	50/50	65/35	70/30
Alt.	1009042	1009010	1009002	1009090
Alt.	1009051	-	1009203	-

Spare Parts	Ref.	Note
L80 service kit	<b>Top 30</b> 1000286 1000276 1000277 1000278	Alt. 60/40 Alt. 50/50 Alt. 65/35 Alt. 70/30

# LL90

## Vacuum Pulsator



Pos.	Ref.	Note
001	1010010	
002	1010093	
003	1010092	
004	1000364	Alt.
<b>Top 30</b> 005	1010156	3 Filters 1010006
<b>Top 30</b> 005	1010191	25 Filters 1010006
006	1000322	
007	1000326	Alt. 50/50
008	1000312	
009	1000006	Right Cover
010	1000309	
011	1000311	
012	1000162	Alt.
013	1000321	
014	1010005	Alt. 2 Exits
015	1000005	Left Cover
016	1010085	Alt.
017	1000037	
018	1010011	
019	1010022	Sim.
020	1010023	Alt. 4 Exits
021	1000083	4 Exits
022	1010099	Sim.
023	1000328	Alt. 70/30
024	1000330	Alt. 65/35
025	1000324	Alt. 60/40
026	1010024	Sim. 60/40
027	1000050	Sim.
028	1000054	Sim.
029	1000036	Sim.
047	1000084	
<b>Top 30</b> 300	1000221	
<b>Top 30</b> 325	1000225	
<b>Top 30</b> 326	1010192	
327	1050047	Alt.
<b>Top 30</b> 328	1050115	
350	1000085	

**Top 30 pag. 6-7**

✓ Don't lubricate

LL90	Ref.	60/40	50/50	65/35	70/30
Alt.					
		1019014	1019013	1019015	1019016

Alt.	Ref.	1019018	1019119

Spare Parts	Ref.	Note	Spare Parts	Ref.	Note
	<b>Top 30</b> 1010246 1010237 1010238 1010239	Alt. 60/40 Alt. 50/50 Alt. 65/35 Alt. 70/30		<b>Top 30</b> 1010156 1010191	3 Filters 1010006 25 Filters 1010006

LL90  
service kit



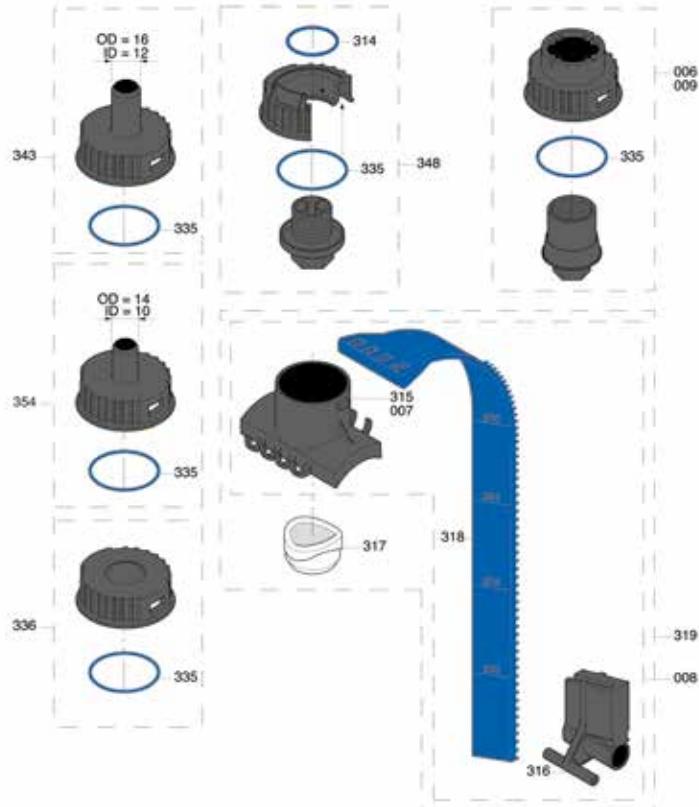
# Quick Mounting

## Fastening Family

Vacuum line 52÷110 mm



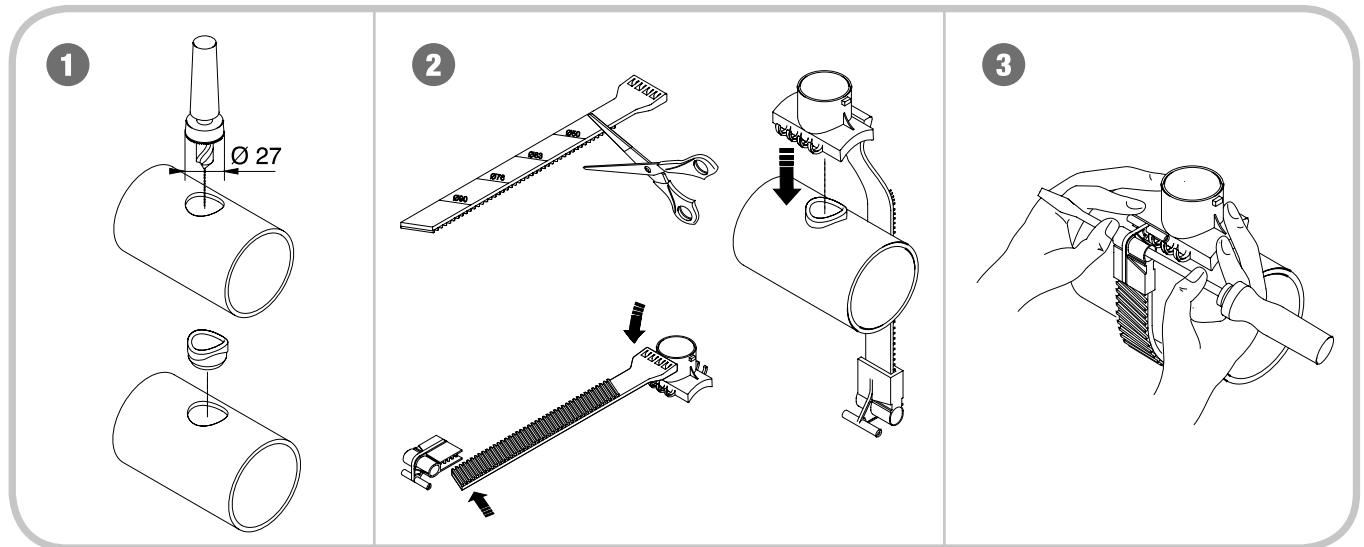
✓ Patented



Pos.	Ref.	Note
006	2800186	Blank
007	2800185	Blank
008	2800188	Blank
009	2800187	ID 21,5
314	2800122	
315	2800124	
316	2800128	
317	2800135	
318	2800136	
319	2800137	
335	2800123	ID 32,9
336	2800155	
343	2800153	
348	2800132	
354	2800234	

Quick fit mounting (52 ÷ 114 mm)	Note	Ref.	Adapter	Ref.
		2800137 2800188 Blank		
	Electronic Pulsator & CV	2809078		2800132
	Clear airline	2809079 D. 16		2800153
	Not included 2809116	2809133 D. 14		2800234
	Sanivac	2809088 Blank		2800186 Blank
	Servo pilot valve	2809089		2800187
	Blanking cap			2800155

## 3 Step Mounting





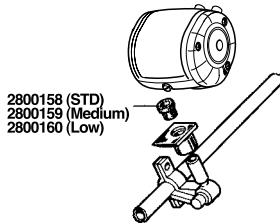
# Adapters



Ref.	Note
<b>Top 30</b> 2809114	High - STD (26 mm)

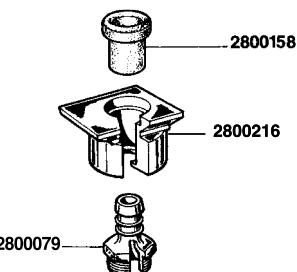
**Top 30 pag. 6-7**

- Attacco standard.
- Standard adapter.
- Attache standard.
- Стандартный адаптер.



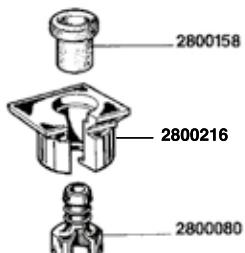
Ref.	Note
<b>2809093</b>	1/2" - M

- Attacco std completo di portagomma.
- Standard adapter complete with fitting.
- Attache std pour prise de vide en salle de traite.
- Стандартный адаптер укомплектован фитингом.



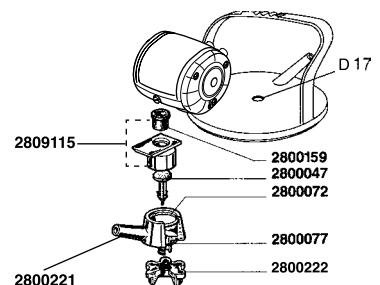
Ref.	Note
<b>2809094</b>	1/2" - F

- Attacco std completo di portagomma.
- Standard adapter complete with fitting.
- Attache std pour prise de vide en salle de traite.
- Стандартный адаптер укомплектован фитингом.



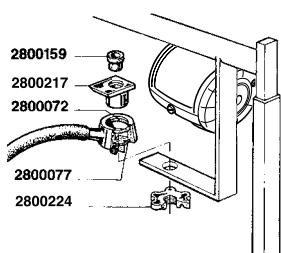
Ref.	Note
<b>2809120</b>	

- Attacco dotato di volantino di fissaggio e valvola, per l'applicazione sul coperchio inox.
- Adapter complete with fixing handwheel and valve for use on stainless steel bucket lid.
- Attache avec ecrou et clapet pour l'application sur couvercle en acier inox.
- Адаптер с маховиком крепления и клапаном для применения на крышках из нержавеющей стали.



Ref.	Note
<b>2809121</b>	

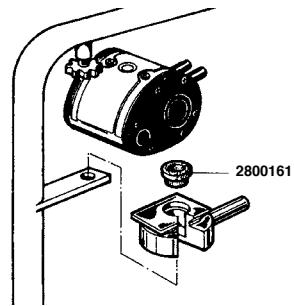
- Attacco dotato di volantino di fissaggio per l'applicazione su mungitrici carrellate e impianti trasporto latte.
- Adapter complete with fixing handwheel for use on mobile milking machines and pipeline installations.
- Attache avec ecrou sans clapet pour l'application sur chariot trayeur et bras de traite.
- Адаптер с маховиком крепления для использования в установках доильных индивидуальных и при доении в молокопровод.



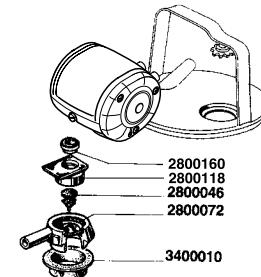
\* Special Item available on demand.



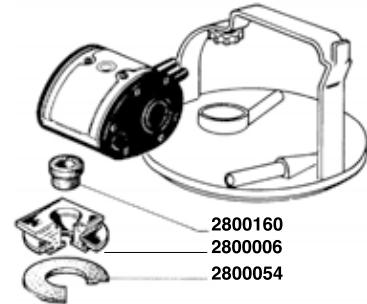
Ref.	Note
<b>2809025</b>	<ul style="list-style-type: none"> <li>- Attacco dotato di volantino di fissaggio per l'applicazione su mungitrici carrellate.</li> <li>- Adapter complete with fixing handwheel for use on mobile milking machines.</li> <li>- Attache avec écrou sans clapet pour l'application sur chariot trayeur.</li> <li>- Адаптер с маховиком крепления для использования в индивидуальных доильных установках.</li> </ul>



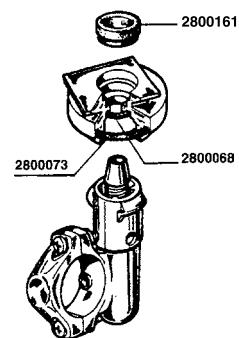
Ref.	Note
<b>2809122</b>	<ul style="list-style-type: none"> <li>- Attacco dotato di valvola per l'applicazione sul coperchio in acciaio inox DeLaval e Manus.</li> <li>- Adapter complete with valve for use on DeLaval and Manus stainless steel bucket lid.</li> <li>- Attache avec clapet pour l'application sur le couvercle en acier inox DeLaval et Manus.</li> <li>- Адаптер с клапаном применяется на крышках из нержавеющей стали тип DeLaval и Manus.</li> </ul>



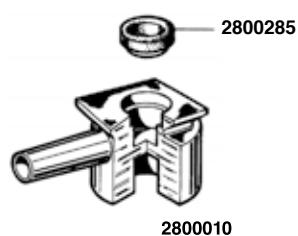
Ref.	Note
<b>2809013</b>	<ul style="list-style-type: none"> <li>- Attacco basso per l'applicazione sul coperchio in plastica o alluminio DeLaval.</li> <li>- Low adapter for use on DeLaval plastic or aluminium bucket lid.</li> <li>- Attache basse pour l'application sur le couvercle en plastique ou aluminium DeLaval.</li> <li>- Адаптер низкий применяется на крышках из пластика и алюминия тип DeLaval.</li> </ul>



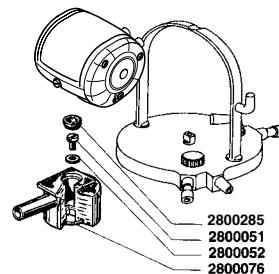
Ref.	Note
<b>2809113</b>	<ul style="list-style-type: none"> <li>- Attacco con innesto a baionetta per l'applicazione su impianti trasporto latte, sale di mungitura e mungitrici carrellate DeLaval - Manus.</li> <li>- Bayonet adapter for use on pipeline installations, milking parlours and DeLaval - Manus mobile milking machines.</li> <li>- Attache à baïonnette pour l'application sur les transferts à lait, salles de traite et trayeuses à chariots DeLaval - Manus.</li> <li>- Адаптер с клапаном применяется на крышках из нержавеющей стали тип DeLaval и Manus.</li> </ul>



Ref.	Note
<b>2809139</b>	<ul style="list-style-type: none"> <li>- Attacco per l'applicazione sul coperchio Miele-export.</li> <li>- Adapter for use on Miele-export lid.</li> <li>- Attache pour l'application sur couvercle Miele-export.</li> <li>- Адаптер для применения на крышках Miele-export.</li> </ul>



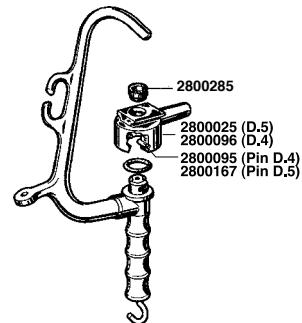
Ref.	Note
<b>2809032</b>	<ul style="list-style-type: none"> <li>- Attacco per l'applicazione sul coperchio WestfaliaSurge tipo nuovo.</li> <li>- Adapter for use on WestfaliaSurge lid, new type.</li> <li>- Attache pour l'application sur le couvercle WestfaliaSurge, nouveau type.</li> <li>- Адаптер для применения на крышках WestfaliaSurge нового типа.</li> </ul>





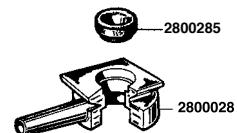
Ref.	Note
<b>2809140</b>	Spina - Pin D. 5 mm
<b>2809141</b>	Spina - Pin D. 4 mm

- Attacco con innesto a baionetta per l'applicazione su impianti WestfaliaSurge.  
- Bayonet adapter for use on WestfaliaSurge installations.  
- Attache à baïonnette pour l'application sur les installations WestfaliaSurge.  
- Адаптер с входом для штыкового соединения применяется на доильных установках WestfaliaSurge.



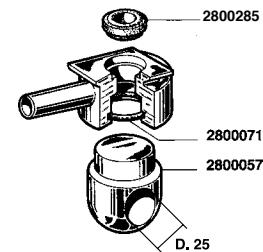
Ref.	Note
<b>2809040</b>	

- Attacco per l'applicazione sul coperchio Fullwood.  
- Adapter for use on Fullwood lid.  
- Attache pour l'application sur le couvercle Fullwood.  
- Адаптер для применения на крышке Fullwood.



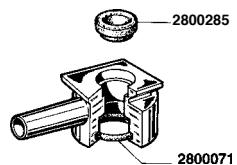
Ref.	Note
<b>2809137</b>	

- Attacco per l'applicazione su impianti trasporto latte e sale di mungitura Fullwood.  
- Adapter for use on Fullwood pipeline installations and milking parlours.  
- Attache pour l'application sur les transferts à lait et salles de traite Fullwood.  
- Адаптер для применения на доильных установках при доении в молокопровод и доильных залах Fullwood.



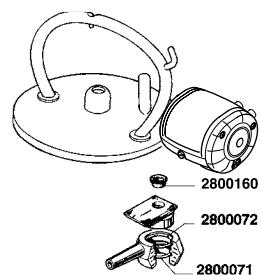
Ref.	Note
<b>2809136</b>	

- Attacco per l'applicazione su impianti Fullwood, senza tampone.  
- Adapter for use on Fullwood installations, without plug.  
- Attache pour l'application sur installations Fullwood, sans bouchon.  
- Адаптер для применения в доильных установках Fullwood без заглушки.



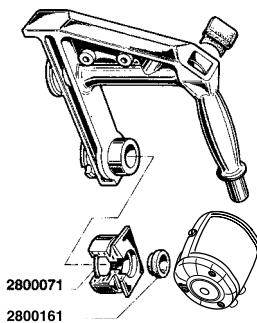
Ref.	Note
<b>2809043</b>	

- Attacco per l'applicazione sul coperchio inox Effectiv (SAC).  
- Adapter for use on Effectiv (SAC) stainless steel lid.  
- Attache pour l'application sur le couvercle inox Effectiv (SAC).  
- Адаптер для применения на крышке из нержавеющей стали Effectiv.



Ref.	Note
<b>2809046</b>	

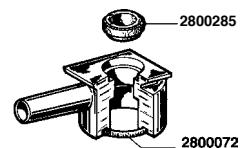
- Attacco per l'applicazione su impianti trasporto latte Melotte, n.t.  
- Adapter for use on Melotte pipeline installations.  
- Attache pour l'application sur les poignées Melotte, nouveau modèle.  
- Адаптер для применения на доильных установках при доении в молокопровод Melotte.





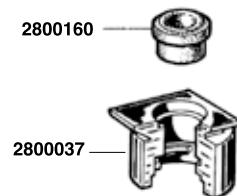
Ref.	Note
<b>2809138</b>	

- Attacco per l'applicazione sul coperchio Gascoigne.
- Adapter for use on Gascoigne lid.
- Attache pour l'application sur le couvercle Gascoigne.
- Адаптер для применения на крышке Gascoigne.



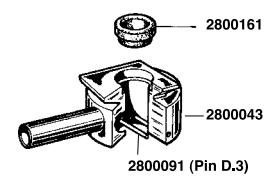
Ref.	Note
<b>2809050</b>	

- Attacco con innesto a baionetta adattabile A.H.I.
- Bayonet adapter suitable for A.H.I.
- Attache à baïonnette avec joint adaptable A.H.I.
- Адаптер с входом для штыкового соединения для доильных установок тип А.Н.И.



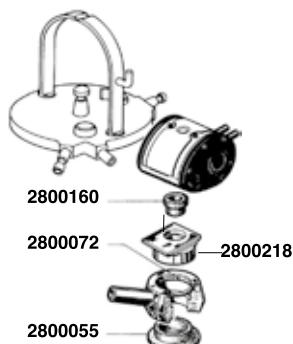
Ref.	Note
<b>2809056</b>	

- Attacco per l'applicazione sul coperchio inox Melotte.
- Adapter for use on Melotte stainless steel lid.
- Attache pour l'application sur le couvercle inox Melotte.
- Адаптер для применения на крышке из нержавеющей стали Melotte.



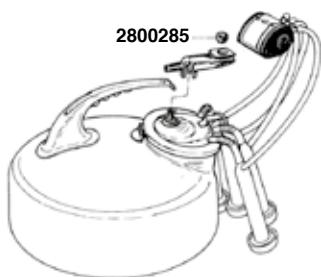
Ref.	Note
<b>2809034</b>	

- Attacco per l'applicazione sul coperchio WestfaliaSurge, tipo vecchio.
- Adapter for use on WestfaliaSurge lid, old type.
- Attache pour l'application sur le couvercle WestfaliaSurge, ancien type.
- Адаптер для применения на крышке WestfaliaSurge, старого типа.



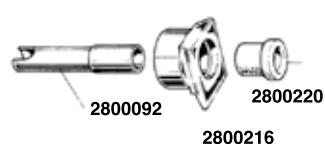
Ref.	Note
<b>2809061</b>	

- Attacco per l'applicazione sul coperchio Surge, secchio sospeso.
- Adapter for use on Surge lid, suspended bucket.
- Attache pour l'application sur le couvercle Surge, pot suspendu.
- Адаптер для применения на крышке Surge, подвесное ведро.



Ref.	Note
<b>2809117</b>	

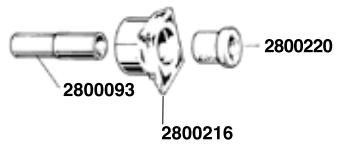
- Attacco per l'applicazione su sale di mungitura Boumatic.
- Adapter for use on Boumatic milking parlours.
- Attache pour l'application sur les salles de traite Boumatic.
- Адаптер для применения в доильных залах Boumatic.





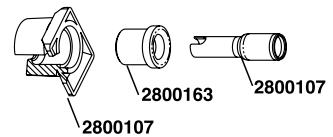
Ref.	Note
2809118	

- Attacco per l'applicazione su sale di mungitura DeLaval.
- Adapter for use on DeLaval milking parlours.
- Attache pour l'application sur le salles de traite DeLaval.
- Адаптер для применения в доильных залах DeLaval.



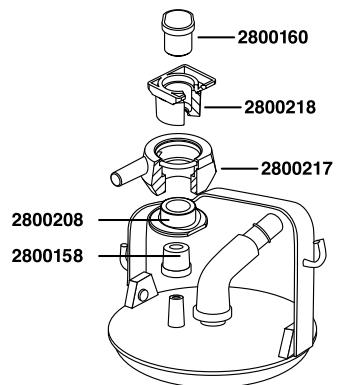
Ref.	Note
2809119	

- Attacco per applicazione UNIVERSAL.
- Adapter for UNIVERSAL installations.
- Attache pour l' application UNIVERSAL.
- Адаптер для универсального применения.



Ref.	Note
2809106	

- Attacco per applicazione su coperchio russo.
- Adapter for use on Russian lid.
- Attache pour l' application sur le couvercle russe.
- Адаптер для применения на крышке доильного ведра русского типа.



## Clamp



Ref.	Note
3400053	Clamp for tube D.30
3400054	Clamp for tube D.40
3400055	Clamp for tube D.50

# Stabilvac

## Spring Vacuum Regulator



✓ Patented

### Vantaggi

- ✓ Facile da installare
- ✓ Regolazione del vuoto stabile ed affidabile
- ✓ Indicato per piccoli impianti
- ✓ Silenziosa

### Benefits

- ✓ Easy to install
- ✓ Stable, reliable vacuum regulation
- ✓ Designed for small systems
- ✓ Silent

### Avantages

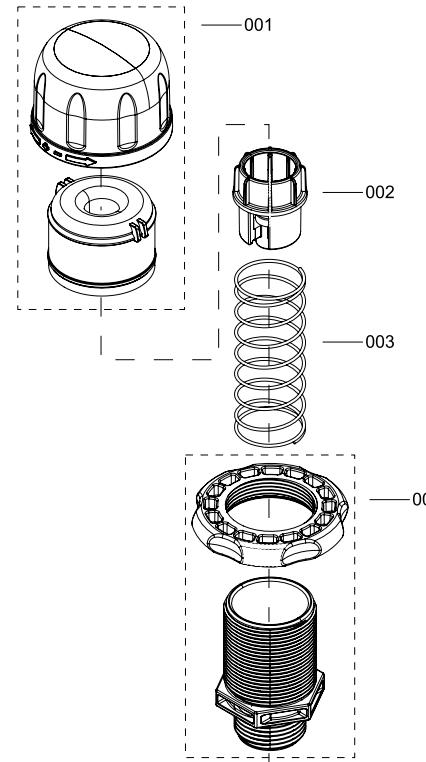
- ✓ Facile à installer
- ✓ Réglage du niveau de vide stable et fiable
- ✓ Indiqué pour les petites installations de traite
- ✓ Silencieux

### Преимущества

- ✓ Легко установить
- ✓ Стабильная и надежная регулировка вакуума
- ✓ Предназначен для использования в небольших доильных установках
- ✓ Бесшумный

	Ref.	Note
	5069001	Spring vacuum Regulator 1" Vacuum pump capacity: 250 l/min
	5049001	Spring vacuum Regulator 1" Vacuum pump capacity: 500 l/min

Pos.	Ref.	Note
001	5060008	
002	5060004	
003	5060003	
004	5060007	





# Stabilvac 1500-3600

## Servo Vacuum Regulators



### ✓ Patented

I regolatori del vuoto Stabilvac garantiscono un vuoto stabile ed affidabile in ogni condizione operativa, salvaguardando la salute degli animali.

The Stabilvac vacuum regulators grant a stable and reliable vacuum in any condition, protect animal's health.

Les régulateurs du vide Stabilvac assurent un vide constant et fiable en toutes conditions de travail, en protégeant la santé des animaux.

Вакуумрегуляторы Стабилвак гарантируют стабильный и надежный уровень вакуума при любых условиях работы, тем самым сохраняя здоровье животных.

### Vantaggi

- ✓ Elevata precisione del segnale e grande sensibilità della valvola permettono di reagire tempestivamente nella regolazione del vuoto
- ✓ Progettate specificatamente per minimizzare il consumo di vuoto
- ✓ Installazione facile e veloce

### Benefits

- ✓ High accuracy of the signal and great sensitivity of the valve allow a quick reaction when regulating the vacuum system
- ✓ Designed expressly to minimise the vacuum consumption avoiding to reduce unnecessarily the vacuum reserve of the milking system
- ✓ Quick and easy to install

### Avantages

- ✓ La haute précision du signal et la grande sensibilité de la valve permettent d'intervenir instantanément dans la régulation du vide
- ✓ La conception vise spécifiquement à réduire au minimum la consommation de vide et à éviter d'entamer la réserve utile de la machine
- ✓ Installation simple et rapide

### Преимущества

- ✓ Высокая точность сигнала и высокая точность клапана позволяют своевременно реагировать на регуляцию уровня вакуума
- ✓ Специально спроектированы для уменьшения потребления вакуума продлевая срок службы установки
- ✓ Легко и быстро монтируется

### Dati Tecnici

Raccordo filettato: 1" Gas Maschio  
Dimensioni: 131x131x181 mm  
Peso: 0,415 Kg

### Technical Data

Connection thread: 1" Bsp Male  
Dimensions: 131x131x181 mm  
Weight: 0,415 Kg





# Stabilvac 4000-6000

## Servo Vacuum Regulators



### ✓ Patented

I regolatori del vuoto Stabilvac garantiscono un vuoto stabile ed affidabile in ogni condizione operativa, salvaguardando la salute degli animali.

The Stabilvac vacuum regulators grant a stable and reliable vacuum in any condition, protect animal's health.

Les régulateurs du vide Stabilvac assurent un vide constant et fiable en toutes conditions de travail, en protégeant la santé des animaux.

Вакуумрегуляторы Стабилвак гарантируют стабильный и надежный уровень вакуума при любых условиях работы, тем самым сохраняя здоровье животных.

### Vantaggi

- ✓ Elevata precisione del segnale e grande sensibilità della valvola permettono di reagire tempestivamente nella regolazione del vuoto
- ✓ Eccellente silenziosità
- ✓ Installazione facile e veloce

### Benefits

- ✓ High accuracy of the signal and great sensitivity of the valve allow a quick reaction when regulating the vacuum system
- ✓ Excellent quietness
- ✓ Quick and easy to install

### Avantages

- ✓ La haute précision du signal et la grande sensibilité de la valve permettent d'intervenir instantanément dans la régulation du vide
- ✓ Très silencieuse
- ✓ Installation simple et rapide

### Преимущества

- ✓ Высокая точность сигнала и высокая чувствительность позволяют своевременно реагировать на регуляцию уровня вакуума
- ✓ Бесшумный
- ✓ Простой и быстрый монтаж

#### Dati Tecnici SPV

Filetto di raccordo: 1/2" Gas Maschio  
Dimensioni: 108x108x114 mm  
Peso: 0,210 Kg

#### SPV Technical Data

Connection thread: 1/2" Bsp Male  
Dimensions: 108x108x114 mm  
Weight: 0,210 Kg

#### Dati Tecnici MCV

Filetto di raccordo: 1 - 1/2" Gas Maschio  
Dimensioni: 140x140x237 mm  
Peso: 1,150 Kg

#### MCV Technical Data

Connection thread: 1 - 1/2" Bsp Male  
Dimensions: 140x140x237 mm  
Weight: 1,150 Kg



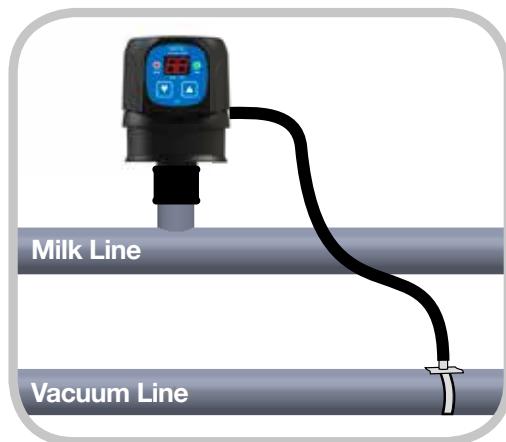
Vacuum pump maximum capacity	50 kPa (15" Hg)		Monoblock		Separate		Separate	
	I/min	cfm	4000	6000	4000	6000	2 x 4000	2 x 6000
	2100	74						
	2500	88	OPTIMUM		OPTIMUM			
	3000	106						
	3300	115						
	2 x 1500	2 x 53		OPTIMUM		OPTIMUM		
	3 x 1500	3 x 53					OPTIMUM	
	2 x 3000	2 x 106						OPTIMUM
	2 x 3300	2 x 115						

Vacuum Regulators	Ref.
SPV	 <b>5009024</b> With Q.M. kit
MCV	 <b>5009001</b> MCV 4000 <b>5009002</b> MCV 6000
Accessories	Ref.
	<b>Top 30</b> <b>3420015</b> <b>3420014</b>  <b>Top 30 pag. 6-7</b>  Drain Valve - 1/2" - Thread part Drain Valve - 3/4" - Thread part



# Turbo Wash 4000 & 4000 P

## Air Injector



### Vantaggi

- ✓ Lavaggio e sanificazione efficace dell'impianto
- ✓ Alte prestazioni, fino a 4000 l/min. di portata
- ✓ Bassi consumi elettrici
- ✓ Elettronica affidabile ed programmazione intuitiva
- ✓ Facile da installare ed esente da manutenzione

### Benefits

- ✓ Effective cleaning and sanitization of the system
- ✓ High performance, up to 4000 l/min of air capacity
- ✓ Low energy consumption
- ✓ Reliable electronic and easy to program
- ✓ Easy to install, service-free

### Avantages

- ✓ Lavage et nettoyage efficace de l'installation
- ✓ Haute performances, jusqu'à 4000 l/min. capacité
- ✓ Faible consommation d'énergie
- ✓ Electronique fiable et programmation intuitive
- ✓ Facile à installer et sans entretien

### Преимущества

- ✓ Эффективная промывка и санитизация доильной системы
- ✓ Высокая производительность, объём до 4000 л/мин
- ✓ Низкие электрорасходы
- ✓ Надёжная электроника и лёгкое программирование
- ✓ Простая установка и не требует особых обработок

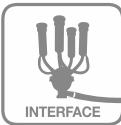
### Dati Tecnici

Alimentazione: 24 V DC/AC  
 Diametro tubo fissaggio: 40 mm  
 Dimensioni: 130x150x130 mm  
 Peso: 670 g  
 Consumo: 130 mA

### Technical Data

Power supply: 24 V DC/AC  
 Diameter of fixing pipe: 40 mm  
 Dimensions: 130x150x130 mm  
 Weight: 670 g  
 Consumption: 130 mA

Turbo Wash	Ref.	Description
	5079001	TurboWash 4000 P - 24V AC/DC programmable version (with PCB)
	1049122	IT01 Power Unit 230 VAC @50/60 Hz
	5079002	TurboWash 4000 - 24V AC/DC Top Wash version (without PCB)
	3410026	Rubber adapter D.38 mm



# ITP 203-205-207

## Sheep & Goats, Claws & System



### ✓ Patented

Dopo anni di ricerche ed esperienze fatte al fianco degli allevatori, InterPuls presenta una nuova e più performante serie di componenti per la corretta mungitura dei piccoli ruminanti.

After many years of research and development in close cooperation with animal breeders, InterPuls is pleased to present its new range of high performance components for the efficient milking of small ruminants.

Après des années de recherche et d'expérience aux côtés des éleveurs, InterPuls présente une nouvelle série de composants, plus performants, pour traire correctement les ruminants de petite taille.

На протяжении многих лет совместно с животноводами проводились исследования в результате ИнтерПульс может представить новую серию компонентов для правильного доения маленьких жвачных животных.



ITP 203 Alternate

ITP 203 Simultaneous

### Dati Tecnici ITP203

Capacità: 120 cc  
Peso: 170 g  
Tubi entrata latte: 14x10 mm  
Tubi uscita latte: 18x14 mm  
Tubi ingresso aria: 10x7,5 mm  
Tubi uscita aria: 10x7,5 mm  
Dimensioni: 122x66x163 mm

### ITP203 Technical Data

Capacity: 120 cc  
Weight: 170 g  
Milk inlet tube: 14x10 mm  
Milk outlet tube: 18x14 mm  
Puls. tube (long): 10x7,5 mm  
Puls. tube (short): 10x7,5 mm  
Dimensions: 122x66x163 mm

### Dati Tecnici ITP205/207

Capacità: 20 cc  
Peso: 30 g  
Tubi entrata latte: 14x10 mm  
Tubi uscita latte: 14x10 mm  
Dimensioni: 97x40x79 mm

### ITP205/207 Technical Data

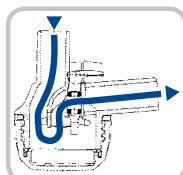
Capacity: 20 cc  
Weight: 30 g  
Milk inlet tube: 14x10 mm  
Milk outlet tube: 14x10 mm  
Dimensions: 97x40x79 mm



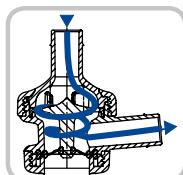
ITP 205

ITP 207

### ITP 205



### ITP 207

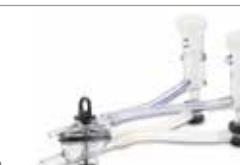
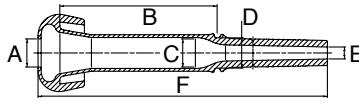
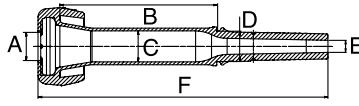
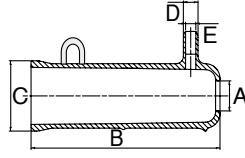
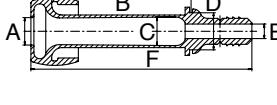
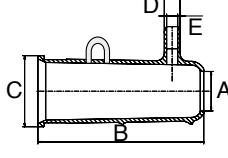




ITP 203	Ref.	ITP 203	Ref.
	With vent <b>2039006</b> - With Shut-off <b>2039051*</b> - With Shut-off - PSU		With vent <b>2039018</b> - With Shut-off <b>2039057*</b> - With Shut-off - PSU
	Without vent <b>2039005</b> - With Shut-off <b>2039049</b> - With Shut-off - PSU		Without vent <b>2039017</b> - With Shut-off <b>2039059*</b> - With Shut-off - PSU
	With vent <b>2039008*</b> - Without Shut-off <b>2039053*</b> - Without Shut-off - PSU		Without vent <b>2039029</b> - With Shut-off
	Without vent <b>2039012*</b> - Without Shut-off <b>2039055*</b> - Without Shut-off - PSU		
ITP 207	Ref.	ITP 205	Ref.
	<b>Top 30</b> <b>2079016</b> Automatic without spring Normally closed <b>Top 30 pag. 6-7</b>		<b>Top 30</b> <b>2059016</b> Semi-Automatic Normally open <b>Top 30 pag. 6-7</b>

Classic for Goats	Ref.	Classic for Sheep	Ref.
	<b>2059012</b> ITP205		<b>2059013</b> ITP205
Vanguard for Goats	Ref.	Vanguard for Sheep	Ref.
	<b>2039032</b> ITP205		<b>2039033</b> ITP205
	<b>2039034</b> ITP205 Without Shut-off valve		<b>2039036</b> ITP205
	<b>2039035</b> ITP205		<b>2039037</b> ITP205 Without Shut-off valve

\*Special item available on demand.

Classic for Goats	Ref.	Classic for Sheep	Ref.																												
	<b>2079003</b> ITP207		<b>2079004</b> ITP207 <b>2079011</b> with sheep liner D. 17 Ref. liner 2000075																												
Vanguard for Goats	Ref.	Vanguard for Sheep	Ref.																												
	<b>2039038</b> ITP207		<b>2039039</b> ITP207																												
Sim.																															
	<b>2039040</b> ITP207 Without Shut-off valve	Sim.																													
Sim.																															
	<b>2039041</b> ITP207		<b>2039042</b> ITP207																												
Alt.																															
	<b>2039043</b> ITP207 Without Shut-off valve	Alt.																													
Alt.																															
Goats Liner & TCS	Ref.	Note																													
	<b>2000082*</b> - D. 18 <b>2000081</b> - D. 20	 <table border="1"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <td>Goats</td> <td>18</td> <td>112</td> <td>20</td> <td>21,5</td> <td>8,5</td> <td>206</td> </tr> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>Goats</td> <td>20</td> <td>112</td> <td>20</td> <td>21,5</td> <td>8,5</td> <td>206</td> </tr> </table>			A	B	C	D	E	F	Goats	18	112	20	21,5	8,5	206		A	B	C	D	E	F	Goats	20	112	20	21,5	8,5	206
	A	B	C	D	E	F																									
Goats	18	112	20	21,5	8,5	206																									
	A	B	C	D	E	F																									
Goats	20	112	20	21,5	8,5	206																									
Rounded head																															
	<b>2000083</b>	 <table border="1"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <td>Goats</td> <td>20</td> <td>112</td> <td>22</td> <td>20</td> <td>8,5</td> <td>206</td> </tr> </table>			A	B	C	D	E	F	Goats	20	112	22	20	8,5	206														
	A	B	C	D	E	F																									
Goats	20	112	22	20	8,5	206																									
Flat head																															
	<b>2000076</b>	 <table border="1"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> <tr> <td>Goats</td> <td>20,5</td> <td>129</td> <td>48</td> <td>10</td> <td>7</td> </tr> </table>			A	B	C	D	E	Goats	20,5	129	48	10	7																
	A	B	C	D	E																										
Goats	20,5	129	48	10	7																										
Sheep Liner & TCS	Ref.	Note																													
	<b>2000075*</b> - D. 17 <b>2000069</b> - D. 18,5	 <table border="1"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <td>Sheep</td> <td>17</td> <td>94</td> <td>19,3</td> <td>25</td> <td>9,8</td> <td>149</td> </tr> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>Sheep</td> <td>18,5</td> <td>94</td> <td>19,3</td> <td>25</td> <td>9,8</td> <td>149</td> </tr> </table>			A	B	C	D	E	F	Sheep	17	94	19,3	25	9,8	149		A	B	C	D	E	F	Sheep	18,5	94	19,3	25	9,8	149
	A	B	C	D	E	F																									
Sheep	17	94	19,3	25	9,8	149																									
	A	B	C	D	E	F																									
Sheep	18,5	94	19,3	25	9,8	149																									
	<b>2000077</b>	 <table border="1"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> <tr> <td>Sheep</td> <td>25</td> <td>105</td> <td>45</td> <td>10</td> <td>7</td> </tr> </table>			A	B	C	D	E	Sheep	25	105	45	10	7																
	A	B	C	D	E																										
Sheep	25	105	45	10	7																										

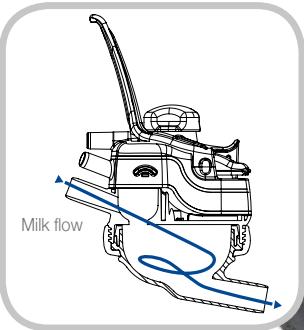
\*Special item available on demand.

Indicative dimensions in mm.

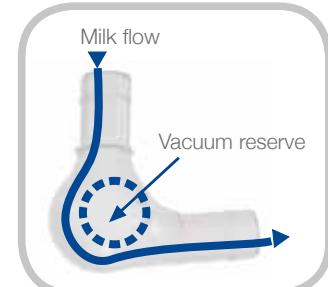
Accessories	Ref.	Note
Gruppo studiato per evitare la strozzatura del capezzolo 		
Cluster studied to prevent the teat blocking. 	2030018	Divaricatore Teat cup positioner Positionneur du faisceau Расширитель
	1900001	Posizionatore a stella Cluster positioner Positionneur du faisceau Установочное устройство для доильного аппарата
	9000278	Saliscendi Up & down hanger Tourniquet reglable Подвесной кронштейн
D. 14x10  D. 14x10	<b>Top 30</b> 2060078 With vent for ITP206 <b>Top 30</b> 2060079 Without vent <b>Top 30 pag. 6-7</b>	
<b>A</b>  <b>B</b> 	A 9000065 Sheep B 9000152 Goats	Coppetta di lavaggio Jetter Jetter cup Емкость для промывки
D. 9x7  D. 17x13	9000074	Deviazione a 4 vie con foro Distributor with vent Distributeur eau avec entré air Отвод на 4 стороны с отверстием
	9000283	Deviazione a 4 vie Distributor Distributeur eau Отвод на 4 стороны
	2000007	Deviazione aria Air distributor Distributeur d'air Воздухоотвод
	2020023	Con foro aria With vent Avec entrée d'air С отверстием для воздуха
	2020009	Senza foro aria W/o vent Sans entrée d'air Без отверстия для воздуха

# ITP 206

## Sheep & Goats ACR claw



✓ Milk Bend



✓ HFS for ITP 206



### ✓ Patented

L'automazione è un'esigenza in costante crescita, anche nella mungitura dei piccoli ruminanti.

Per questo InterPuls ha ideato il nuovo collettore Capre & Pecore ITP206.

There is a constantly growing need for automation: this also applies to the milking process of small ruminants. For this reason InterPuls has devised the new collector for Goats and Sheep ITP206.

L'automatisme est une nécessité de plus en plus présente, y compris pour la traite des petits ruminants. À cet effet, InterPuls propose son nouveau collecteur Chèvres et Brebis ITP206.

Автоматизация дальнего процесса – это потребность, которая постоянно растет также при доении маленьких жвачных животных.

ИнтерПульс создал новый коллектор для доения коз и овец ITP206.

### Vantaggi

- ✓ Elevata stabilità del vuoto
- ✓ Elevata capacità di evacuazione del flusso del latte
- ✓ Valvole «normalmente chiuse» - perdite alla partenza nulle
- ✓ Principio di funzionamento a valvole indipendenti
- ✓ Leggero ed ergonomico
- ✓ Facile da pulire e da ispezionare

### Benefits

- ✓ High vacuum stability
- ✓ High evacuation capacity of the milk flow
- ✓ Valves which are «normally closed» - zero leakages from the start of the milking process
- ✓ Operating principle based on separate valves
- ✓ Lightweight, ergonomic design
- ✓ Easy to clean and inspect

### Avantages

- ✓ Grande stabilité du vide
- ✓ Grande efficacité d'évacuation du lait
- ✓ Vannes «normalement fermées» - chute de vide inexistante au départ
- ✓ Principe de fonctionnement à vannes indépendantes
- ✓ Légèreté et ergonomie
- ✓ Facilité de nettoyage et de contrôle

### Преимущества

- ✓ Высокая стабильность вакуума
- ✓ Высокая способность слива молока
- ✓ Клапаны “Естественно закрыты” нет потерь вакуума на старте
- ✓ Принцип функционирования при помощи независимых клапанов
- ✓ Легкий и эргономичный
- ✓ Легко очистить и проверить

### Dati Tecnici

Capacità: 120 cc  
Peso: 240 g  
Tubi entrata latte: 14x10 mm  
Tubi uscita latte: 18x14 mm  
Tubi di pulsazione: 10x7,5 mm  
Dimensioni versione linea alta: 111x100x173 mm  
Dimensioni versione linea bassa: 111x100x196 mm

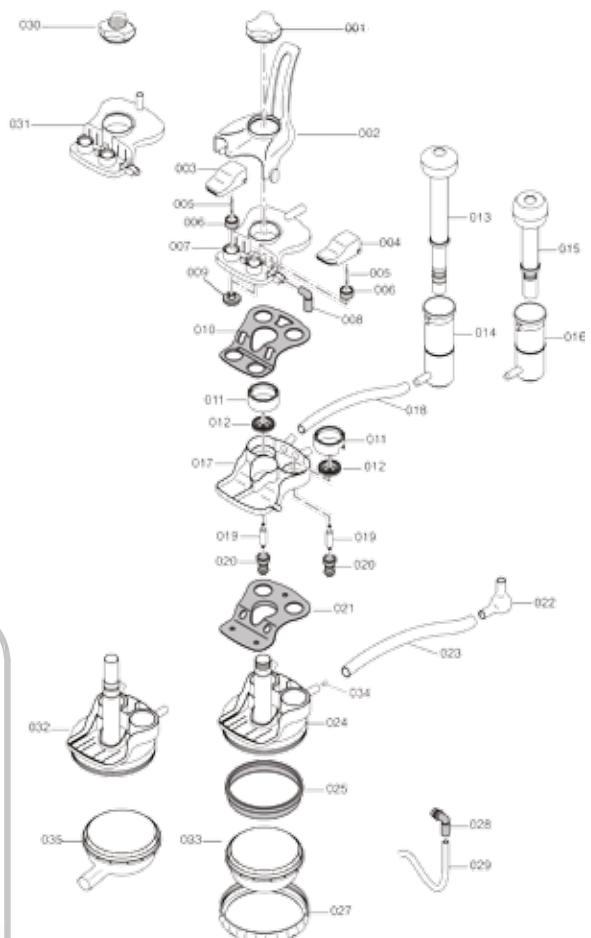
### Technical Data

Capacity: 120 cc  
Weight: 240 g  
Milk inlet tubes: 14x10 mm  
Milk outlet tubes: 18x14 mm  
Pulsation tubes: 10x7,5 mm  
Dimensions high-line version: 111x100x173 mm  
Dimensions low-line version: 111x100x196 mm

Pos.	Ref.	Note
001	2060025	Low Line
002	2060111	
003	2060021	
004	2060020	
005	2060019	
006	2060022	
007	2060036	Low Line
008	2060048	
009	2060018	
010	2060015	
011	2060014	
012	2060097	
013	2000081	Goat D.20
014	2000076	Goat
015	2000069	Sheep D.19
016	2000077	Sheep
017	2060008	

Pos.	Ref.	Note
018	2060055	
019	2060058	
020	2060109	
021	2060007	
Top 30	022	2060060
	023	2060054
	024	2060089 Low Line
	025	2060004
	027	2060096
	028	2060049
	029	2060038
	030	2060024 High Line
	031	2060016 High Line
	032	2060088 High Line
	033	2060001 High Line
	034	2060068
	035	2060080 Low Line 10°

**Top 30 pag. 6-7**

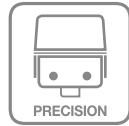


ITP 206 High Line	Ref.	ITP 206 Low Line 10°	Ref.
	2069042 Sim. not vented		2069028 Sim. not vented
Plastic Bend	Ref.	Plastic Bend	Ref.
	Top 30 2060078 Vented for ITP206		Top 30 2060079 not Vented
	Top 30 pag. 6-7		Top 30 pag. 6-7
ITP 206 Cluster for Goats	Ref.	ITP 206 Cluster for Sheep	Ref.
	2069056 High Line Sim.		2069057 High Line Sim.
	2069036 Low Line 10° Sim.		2069037 Low Line 10° Sim.

\*Special item available on demand.

# Libero 14 & 16

Clear Lid



Libero 14-16	Ref.	Note
	3100001	LIBERO 14 
	3100002	LIBERO 16 
Adaptable to 142 mm bucket's handle		<b>OD19 - ID14</b> <b>OD21 - ID16</b>
Libero 16 By Pass	Ref.	Note
	3100014	
Adaptable to 142 mm bucket's handle		
Accessories	Ref.	Note
	3100054 <b>Top 30</b> <b>pag. 6-7</b>	Gasket D. 205 mm
	3100006	Hook
	3100062	By-Pass TB 16
	2800285	Rubber Adaptor Seat
	2800046	Shut-Off Plug



# Clear Lids



✓ Check valve housing



✓ Check valve



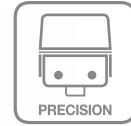
✓ Check valve assembly

ITP 30	Ref.	Note	Gasket	Ref.
	<b>3100056</b> <b>3100055</b> <b>3100066</b>	2 TB 19x14 2 TB 21x16 1 TB 21x16 + 1 TB 19x14		<b>Top 30</b> <b>3100054</b>
	<b>3100058</b> <b>3100059</b>	3 TB 19x14 3 TB 21x16		<b>Top 30</b> <b>pag. 6-7</b>
	<b>3000018</b> <b>3000019</b> <b>3000020</b>	2 TB 17x12 2 TB 21x16 1 TB 17x12 + 1 TB 21x16		<b>3000017</b>
ITP 40	Ref.	Note	Gasket	Ref.
	<b>3000010</b> <b>3000025</b>	3 TB 17x12 3 TB 21x16		
ITP 50	Ref.	Note	Gasket	Ref.
	<b>3000011</b> <b>3000024</b>	2 TB 17x12 2 TB 21x16		<b>3000015</b>

 100%  
Recyclable Polymer

# Ecobucket

23 & 30 L

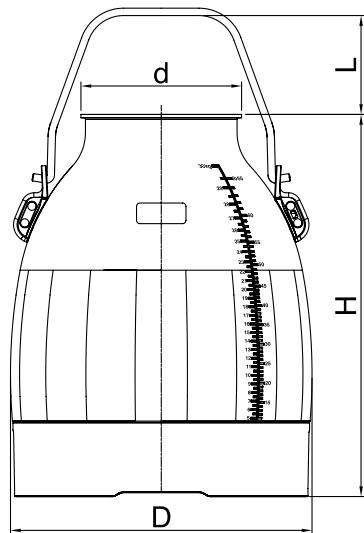


## Vantaggi

- ✓ Costruito con tecnologia all'avanguardia e composto da polimeri 100% riciclabili
- ✓ Materiale traslucido semi-trasparente
- ✓ Scala graduata permanente in kg e in lb
- ✓ Facile da pulire grazie alla superficie interna liscia
- ✓ Stampato in un unico pezzo, senza saldature tra il bordo del fondo e il corpo del bidone

## Benefits

- ✓ Built with advanced technology and composed by 100% recyclable polymers
- ✓ Semi-transparent translucent material
- ✓ Milk level is easily seen on the permanent graduated scale in kg & lb
- ✓ Easy to clean, thanks to the internal smooth surface
- ✓ Moulded in 1 piece, seam less between the bottom rim and the bucket body



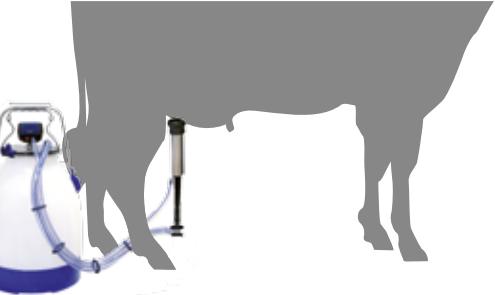
## Avantages

- ✓ Construit avec technologie avancée et composé par 100% recyclables polymères
- ✓ Matériau translucide semi-transparent
- ✓ L'échelle graduée permanente en kg et en lb facilite la lecture du niveau du lait
- ✓ Facilité de nettoyage excellente grâce à la face intérieure lisse
- ✓ Moulé en une seule pièce, sans aucune soudure entre le bord inférieur et le corps du pot trayeur

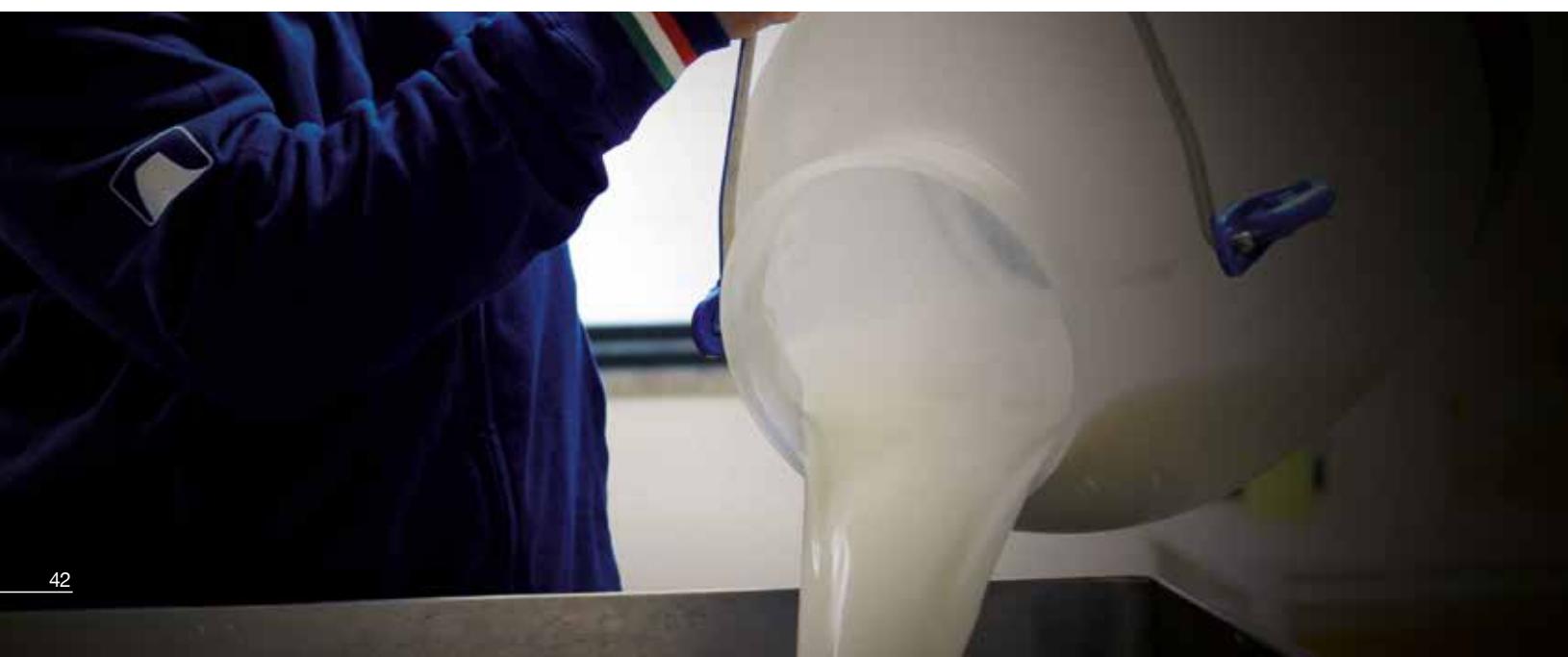
## Преимущества

- ✓ Произведено с передовой технологией и состоит из полимеров подлежащих 100% повторного использования
- ✓ Полимер утвержденный FDA
- ✓ Матовый, полупрозрачный материал
- ✓ Шкала в литрах и килограммах
- ✓ Легко очистить благодаря гладкой внутренней поверхности
- ✓ Отштампован одним цельным элементом без сварных швов между днищем и корпусом бидона

Capacity	H	d	D	L (STD)	Weight
30 L	464	195	366	145	3 kg
23 L	390	195	366	145	2,8 kg

Ecobucket 30 L	Ref.	Set Ecobucket 30 L	Ref.
	<b>2619001</b> 145 mm STD Handle		<b>2619013</b> Set 12 x Ecobucket 30 L Standard Handle
Ecobucket 23 L	Ref.	Set Ecobucket 23 L	Ref.
	<b>2619006</b> 145 mm STD Handle		<b>2619017</b> Set 12 x Ecobucket 23 L Standard Handle
Accessories	Ref.	Libero by-pass kit	Ref.
	<b>2610031</b> Side Ear Kit		<b>3100064*</b>
	<b>2610073</b> Bottom Part Only		
Quarter Milker kits	Ref.	Note	
	<b>3100075*</b> <b>3100077*</b>	Quarter Milker kit - L02 Air + ITP205 Quarter Milker kit - L80 + ITP205	

\* Ecobucket not included.



# ITALIA

Portable Milking Machine



InterPuls launches a new concept of "entry level". The sinuous shape, the ergonomic design, the innovative and recyclable materials together with an advanced production technology make the ITALIA portable system a new landmark that only the "Milking component specialist" could mark. 170ITALIA & 220ITALIA grant sturdiness and reliability in every condition, ergonomics in order to answer to the farmer's need and a sophisticated design to distinguish themselves!

Ref.

6009028

Note

170ITALIA 110V @60 Hz US Plug - 1 cow



# Benefits



## Portable Milking Machine



Ideal for low cows and buffaloes



PMM 170					
Ref.	Description	Model	V	Hz	
6019085	PMM 1 Bucket - US Plug	1 Cow	110	60	

### Set up:

Pulsator	1 x L02 S/S cover 60/40
Cluster	1 x Lunik200 + IPL01 Liners
Bucket	1 x Ecobucket 30L
Vacuum Pump	1 x EPV170 dry

# Tagliafieno LH22



Tagliafieno LH22 is the ideal solution for cutting hay bales and silage. Robust and easy-to-handle permits noise-free work, without dust and vibrations. The blades are designed to ensure precise cut, thanks to the optimal penetration, even in case of hard forage. It's advisable to oscillate the blades during the use, in order to benefit of the whole cutting width.



Tagliafieno LH22

Ref.	Note
6209003	Tagliafieno 110V @60Hz
9002523	Cable reel 10 mt

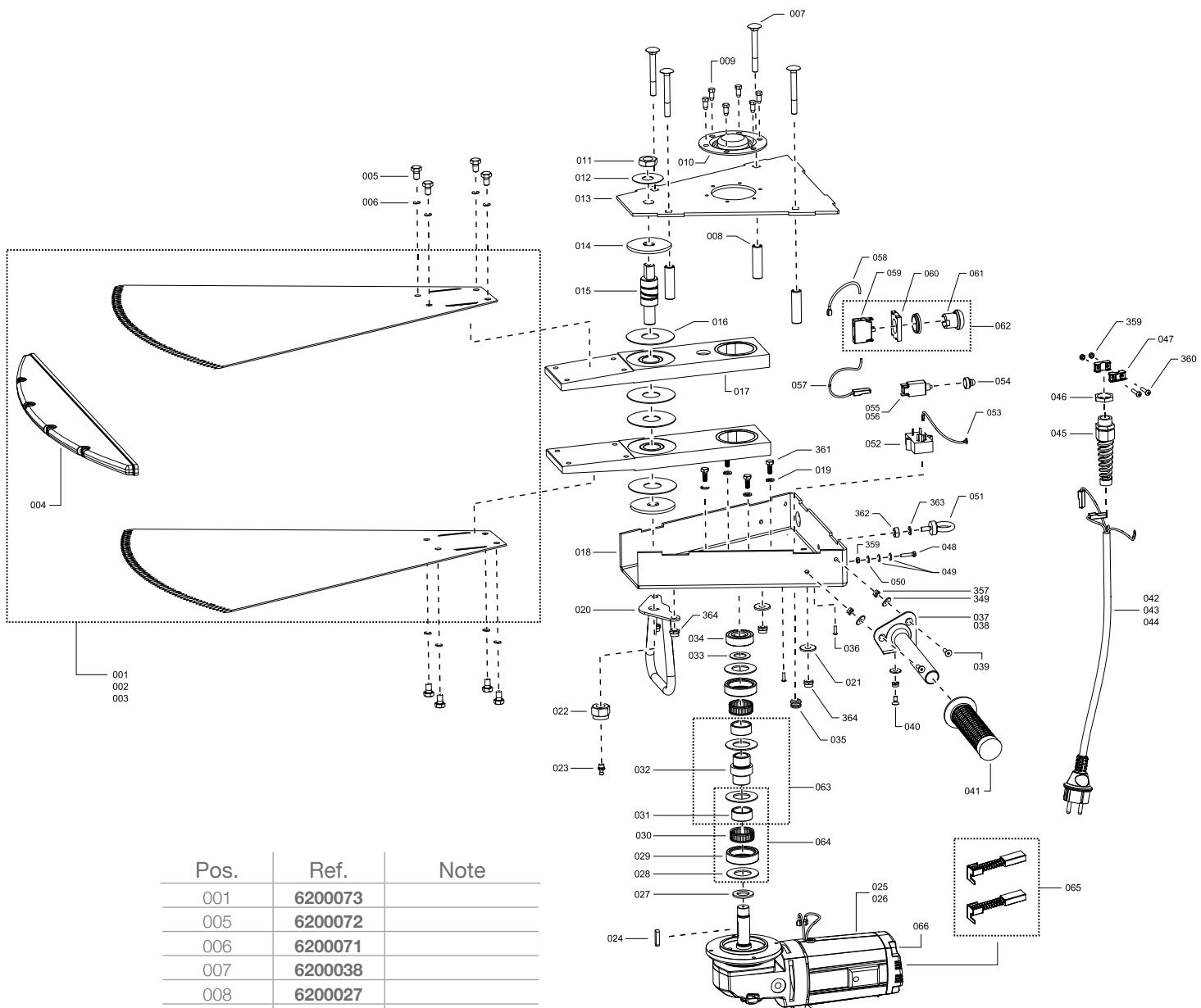
## Dati Tecnici

Voltaggio: 230V @50Hz, 2000 rpm, 1.0kW, 4,5Amp;  
115V @60Hz, 2000 rpm, 0.9kW, 8,6Amp  
Peso: 15Kg  
Larghezza taglio: 50cm  
Profondità taglio: 60cm

## Technical Data

Voltage: 230V @50Hz, 2000 rpm, 1.0kW, 4,5Amp;  
115V @60Hz, 2000 rpm, 0.9kW, 8,6Amp  
Weight: 15Kg  
Cutting width: 50cm  
Cutting depth: 60cm





Pos.	Ref.	Note
001	6200073	
005	6200072	
006	6200071	
007	6200038	
008	6200027	
009	6200033	
010	6200023	
011	6200037	
012	6200030	
013	6200019	
014	6200024	
015	6200029	
016	6200012	
017	6200077	
018	6200018	
019	6200041	
020	6200020	
022	6200062	
023	6200040	
024	6200063	
025	6200004	230 V
026	6200005	110 V
027	6200026	
033	6200025	
034	6200031	
035	6200032	
036	6200042	
037	6200021	
038	6200022	
039	6200065	

Pos.	Ref.	Note
040	6200064	
041	6200066	
042	6200049	EU Plug
044	6200051	US/CAN/JP Plug
045	6200044	
046	6200043	
047	6200039	
048	6200048	
049	6200047	
050	6200046	
051	6200045	
052	6200060	
053	6200054	
055	6200055	4 A
056	6200056	6 A
057	6200053	
058	6200052	
062	6200096	
063	6200078	
064	6200092	
065	6200093	
066	6200006	

# Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---





# New Milking Parlour

## Check List

Tabella • Chart

La progettazione di una nuova sala di mungitura richiede molte considerazioni per ottenere un sistema pratico ed efficiente. La seguente checklist guida "step by step" per un corretto dimensionamento di ogni singolo componente.

### Specifiche sala di mungitura

#### Tipo di sistema

- Secchio mungitore
- Trasporto latte
- Swingover
- Sala
- Giostra

Descrizione	Valore
Dimensioni sala	
Pompa vuoto	
Valvola del vuoto	
Pulsazione	
Gruppi	
Unità terminale	
Pompa latte	
Dimensioni - linea - vuoto	
Dimensioni - linea - latte	
Programmatore di lavaggio	
Gruppi di lavaggio	
Stacco automatico	
Misurazione - manuale	
Misurazione - elettronica	
Dimensioni vasca	
Dairy management	
Identificazione manuale	
Identificazione elettronica	
Rilevamento calori	
Alimentatori automatici	

New milking parlour designing requires a lot of planning in order to reach the target of a practical and cost effective complete system. The checklist below is an useful step by step guide for the correct estimate of each singular device.

### Milking parlour specifications

#### System type

- Bucket milking
- Pipeline
- Swingover
- Side by side
- Rotary

Description	Value
Milking system size	
Vacuum pump	
Vacuum regulator	
Pulsation	
Cluster	
Therminal unit	
Milk pump	
Vacuum line size	
Milk line size	
Automatic washing programmer	
Washing unit	
Automatic cluster remover	
Manual milk meter	
Electronic milk meter	
Wash trough size	
Dairy management	
Manual ID	
Electronic ID	
Heat detection	
Automatic feeding	

# Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

# Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

# Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

# Index

## #Pulsation

LE30/LP30 (pag. 8)  
IUC24/IUC32 (pag. 11)  
IUP (pag. 12)  
L02 Air (pag. 13)  
L80/LL90 (pag. 15)  
Quick Mounting & Adapters (pag. 18-20)  
Clamp (pag. 24)

## #Buckets & PMM

Libero Lid (pag. 39)  
Clear Lids (pag. 40)  
Ecobucket (pag. 41)  
PMM Italia (pag. 43)  
PMM (pag. 44)

## #Vacuum Care

Stabilvac 350/1400 (pag. 25)  
Stabilvac 1500/3600 (pag. 26)  
Stabilvac 4000/6000 (pag. 28)

## #Cleaning Solutions

Turbo Wash 4000 (pag. 31)

## #Sheep & Goats

ITP203/205/207 (pag. 32)  
Classic/Vanguard Milking Cluster (pag. 33-34)  
ITP206 (pag. 37)

## #Smart Solut!ons

Tagliafieno LH22 (pag. 45)

## #Top30

Saving Opportunity (pag. 6-7)

- ✓ È vietato riprodurre anche solo parzialmente i testi, le foto e i disegni senza nostra autorizzazione scritta.
- ✓ InterPuls  è un marchio registrato di proprietà di InterPuls SpA.
- ✓ Le informazioni incluse in questo catalogo non sono impegnative e sono soggette a modifica senza preavviso. I riferimenti a marchi registrati di costruttori riportati in questo catalogo, hanno unicamente una funzione identificativa. Alcuni nomi di prodotti ed aziende utilizzati nel catalogo sono marchi registrati di proprietà dei loro rispettivi depositari.

- ✓ Il est interdit de reproduire, même en partie seulement, les textes, les photographies et les dessins, sans avoir obtenu au préalable notre autorisation écrite.
- ✓ InterPuls  est une marque déposée qui appartient à InterPuls SpA.
- ✓ Les données contenues dans ce catalogue ne représentent pas un engagement. Elles peuvent être modifiées à tout moment et sans préavis. Les références aux marques du producteur, qui figurent sur ce catalogue, ne sont données qu'à titre indicatif. Certains noms de produits et de sociétés, dont le catalogue fait mention, sont des marques appartenant à leurs propriétaires respectifs.

✓ Reproduction, whether in full or in part, of the text, photographs and drawings herein is strictly prohibited without our express, written consent.

InterPuls  is a registered trade mark of InterPuls SpA.

✓ The information contained in this catalogue is not binding and can be modified without notice. References in this catalogue to manufacturer trademarks are for identification only. Certain company and product names used throughout the catalogue are trademarks of their respective owners.

✓ Запрещено воспроизводить даже частично тексты, фотографии и чертежи без письменного разрешения компании ИнтерПульс.

✓ Интерпульс  является зарегистрированной маркой, марка является собственностью ИнтерПульс, Информация изложенная в этом каталоге не является обязательной, и может быть изменена без оповещения.

✓ Ссылки на зарегистрированные марки производителей указанных в этом каталоге, несут сугубо опознавательную функцию. Некоторые названия продуктов и предприятий использованные в каталоге являются собственными зарегистрированными марками, и принадлежат по праву собственнику.

FOLLOW US!

