

DOUBLE-ACTING AIR-OPERATED PISTON PUMPS



AIR-OPERATED
PISTON
PUMPS

CSF INOX SPA

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The CSF **AIR-OPERATED PISTON PUMPS** are available in various executions, both with regard to constructional features, materials and the various applications for which they are to be used. They have been designed to meet the widest variety of requirements of pumping products with extremely high viscosities to transfer, feed, convey, spray and for whichever equipment requiring an adjustable delivery rate.

Thanks to the compressed air motor they are also suitable in environments with potentially explosive atmospheres and in compliance with Atex directives. Heads vary from 0 to 150 bar and deliveries from 1 to 80 l/min. They are made up of a compressed air motor, which in its alternated movement provides the pumping shaft with the power necessary to move the product from the in-take to the outlet. Sealing parts and pumping elements are available in a wide range of materials and shapes all designed and tested for the various applications.



FOOD INDUSTRY:

Creams, puddings, sweet stuffing, ice-creams, eggs, egg flip, honey, yoghurt, mustard, tomato sauce, dairy cream, melted cheese, jams, ragout, vegetable soup, "polenta", mayonnaise, melted chocolate, oils.

DRINKS INDUSTRY:

Syrups, juices, wines, spirits, glucose, concentrates, essences, flavours.

PHARMACEUTICAL AND COSMETIC INDUSTRIES:

Extracts, essences, solutions, soaps, shampoo, bubble bath, tooth paste, shaving creams, beauty creams.

CHEMICAL, TEXTILE, PRINTING INDUSTRIES:

Acids, bases, solution or dispersed salts, solvents, liquefied gases, oils paints, enamels, filler, plasters, resins, inks, adhesives, glues.





PERFORMANCES			
PUMPS	Pressure ratio	Recomm. max. cycles per minute	Max. flow rate l/min for viscosity of 1000 cP
PA 20 A- 45	25 : 1	150	1
* PA 30 A- 45	5 : 1	150	2
* PA 50 A- 63	3,4 : 1	120	7,6
* PA 50 A- 80	5,3 : 1	90	10
* PA 50 A-100	8,4 : 1	60	7,5
PA 50 A-130	14,6: 1	50	10,6
PA 50 A-150	20 : 1	50	6,2
* PA 65 A- 80	1,6 : 1	80	20
* PA 65 A-100	2,5 : 1	60	17
* PA 65 A-130	4 : 1	50	24
PA 65 A-150	6 : 1	50	14
* PA 80 A-100	2 : 1	60	24
* PA 80 A-130	3,3 : 1	50	33
* PA 80 A-150	4,5 : 1	50	20
PA 80 A-210	9 : 1	50	32
* PA 100A-100	1 : 1	60	37
* PA 100A-130	1,8 : 1	50	52
* PA 100A-155	2,5 : 1	50	52
* PA 100A-210	5 : 1	50	50
* PA 140A-130	1,6 : 1	50	100
* PA 140A-155	2,2 : 1	50	100
* PA 140A-210	4 : 1	50	95

* Available with Atex 2G and 3G certification

MANUFACTURE

Manufactured in AISI 304 / 316 stainless steel, mirror finish internally and externally. Rod and piston seal in rubber for foodstuff, Teflon or special materials.

Outlet port with female threaded fitting DIN 11851.

Pump components secured together by quick-release clamps.

Note: Available on request with different connections conforming to CLAMP - SMS - IDF - BS / RJT - DS standards.

CHARACTERISTICS

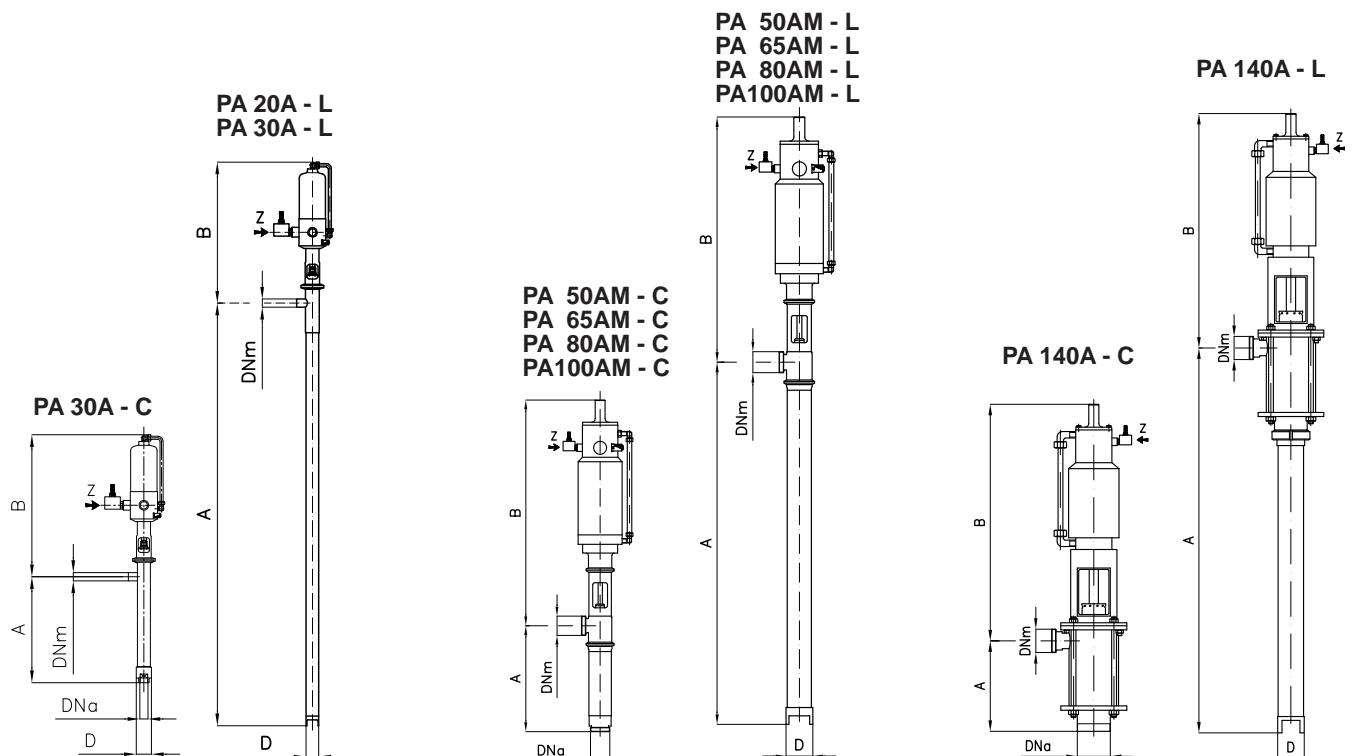
Double acting piston pump with pistons of various shapes depending on the liquids or pastes to be pumped. The pumps are fitted to the various pneumatic motors by clamps to facilitate their disassembly when cleaning.

Each pump is mainly made up of the following:

- In-take port with relative ball or mushroom valve
- Cylinder obtained from weld-free tubes
- Collar (rod seal holder and discharge port) generally obtained by casting
- Rod with valve carrying pumping piston

The pumps are normally light and very handy. The heavier pumps can be fitted on special trolleys (Art. 54), lifting vertically or with clamp (Art. 50-51-55-403) to secure the pump to the edge of the tank, to the container to be emptied or to the wall. The pumps are quickly and easily disassembled for their inspection and internal cleaning on a periodic basis. Each part of the pump can be reached and inspected. They can be used in environments with potentially explosive atmospheres as they are operated pneumatically. They can also be used in sterile environments as the air outlet can be conveyed outside the room. Their operation is adjustable likewise for most pneumatic pumps.

DIMENSIONS											
PUMPS	Z	A		B	Outlet port	Inlet port			Max. consumption of air in l/min at feeding pressure	Weight kg	
	∅ Air inlet	Height between inlet and outlet ports		DNm	DNm	Long	Short			Long	Short
		Long	Short			D	D	DNa			
PA 20 A - 45	1/8" Gas	494	-	292	1/4" Gas F	∅ 27	-	-	17	3,5	-
PA 30 A - 45	1/8" Gas	1097	472	304	3/8" Gas F	∅ 34	∅ 39	1/2" Gas F	17	4	3,5
PA 50AM- 63	1/4" Gas	1194	302	441	DN32F/DIN 11851	∅ 51	-	DN32F/DIN 11851	42	12	10,5
PA 50AM- 80	1/4" Gas	1194	302	488	DN32F/DIN 11851	∅ 51	-	DN32F/DIN 11851	90	15	12,5
PA 50AM- 100	1/2" Gas	1194	302	636,5	DN32F/DIN 11851	∅ 51	-	DN32F/DIN 11851	104	19	16,5
PA 50AM- 130	1/2" Gas	1194	302	751	DN32F/DIN 11851	∅ 51	-	DN32F/DIN 11851	250	23	20,5
PA 50AM- 150	1/2" Gas	1194	302	600	DN32F/DIN 11851	∅ 51	-	DN32F/DIN 11851	200	22	19,5
PA 65AM- 80	1/4" Gas	1133	360	505	DN40F/DIN 11851	∅ 84	-	DN40F/DIN 11851	80	26	21
PA 65AM- 100	1/2" Gas	1133	400	644	DN40F/DIN 11851	∅ 84	-	DN40F/DIN 11851	104	27	22
PA 65AM- 130	1/2" Gas	1133	400	767	DN40F/DIN 11851	∅ 84	-	DN40F/DIN 11851	250	31	26
PA 65AM- 150	1/2" Gas	1133	360	654	DN40F/DIN 11851	∅ 84	-	DN40F/DIN 11851	200	30	25
PA 80AM- 100	1/2" Gas	1130	397	697,5	DN50F/DIN 11851	∅ 89	-	DN50F/DIN 11851	104	32	26
PA 80AM- 130	1/2" Gas	1131	397	750	DN50F/DIN 11851	∅ 89	-	DN50F/DIN 11851	250	35	29
PA 80AM- 150	1/2" Gas	1131	397	764	DN50F/DIN 11851	∅ 89	-	DN50F/DIN 11851	200	34	28
PA 80AM- 210	3/4" Gas	1131	397	781	DN50F/DIN 11851	∅ 89	-	DN50F/DIN 11851	620	40	34
PA100AM-100	1/2" Gas	899	458	693	DN50F/DIN 11851	∅ 120	-	DN65F/DIN 11851	104	38	30
PA100AM-130	1/2" Gas	899	471,5	760	DN50F/DIN 11851	∅ 120	-	DN65F/DIN 11851	250	42	34
PA100AM-155	1/2" Gas	899	468	763	DN50F/DIN 11851	∅ 120	-	DN65F/DIN 11851	200	41	33
PA100AM-210	3/4" Gas	899	471,5	763	DN50F/DIN 11851	∅ 120	-	DN65F/DIN 11851	620	47	39
PA 140 A - 130	1/2" Gas	1293	300,5	791	DN50F/DIN 11851	∅ 110	-	DN80F/DIN 11851	250	-	48
PA 140 A - 155	1/2" Gas	1293	300,5	791	DN50F/DIN 11851	∅ 110	-	DN80F/DIN 11851	440	-	50
PA 140 A - 210	3/4" Gas	1293	300,5	804	DN50F/DIN 11851	∅ 110	-	DN80F/DIN 11851	620	-	53





PERFORMANCES			
PUMPS	Pressure ratio	Recomm. max. cycles per minute	Max. flow rate l/min for viscosity of 1000 cP
* PA 401 - 63	5,5 : 1	120	4,8
* PA 401 - 80	8,8 : 1	90	6,4
* PA 401 -100	14 : 1	60	4,7
PA 401 -130	24,4: 1	50	6,7
PA 401 -150	33,2: 1	50	4
* PA 501 - 63	2,5 : 1	120	9
* PA 501 - 80	4 : 1	90	12
* PA 501 -100	6 : 1	60	8,8
PA 501 -130	11 : 1	50	12,5
PA 501 -150	15 : 1	50	7,4
* PA 651 - 80	1,6 : 1	80	20
* PA 651 -100	2,5 : 1	60	17
* PA 651 -130	4 : 1	50	24
PA 651 -150	6 : 1	50	14
* PA 801 -100	2 : 1	60	24
* PA 801 -130	3,3 : 1	50	33
* PA 801 -150	4,5 : 1	50	20
PA 801 -210	9 : 1	50	32

* Available with Atex 2G and 3G certification

MANUFACTURE

In AISI 316 stainless steel.

Piston ring and rod seal in pure Teflon or special materials, pump components screwed together, outlet ports with cylindrical GAS threading.

CHARACTERISTICS

Double acting piston pump with pistons of various shapes depending on the liquids or pastes to be pumped. They are screwed to the pneumatic motor.

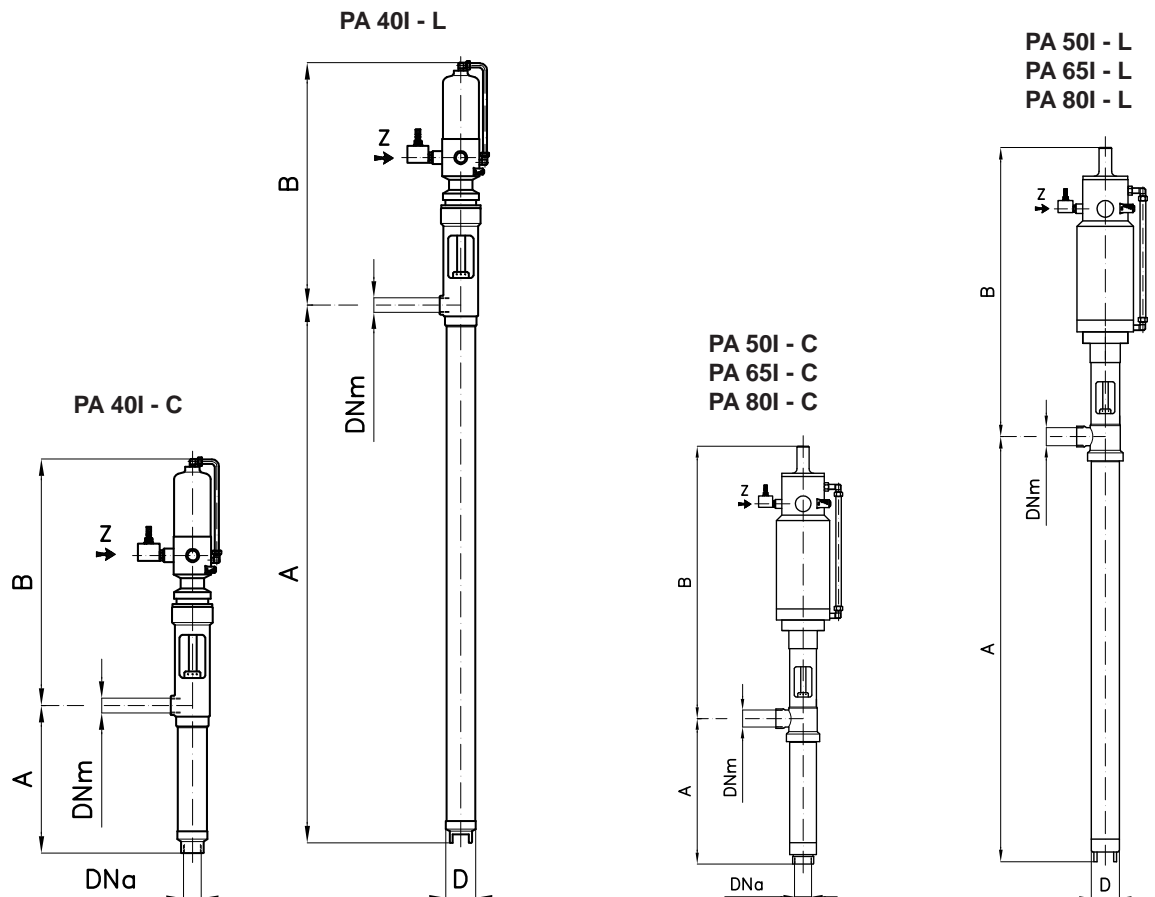
Each pump is mainly made up of the following:

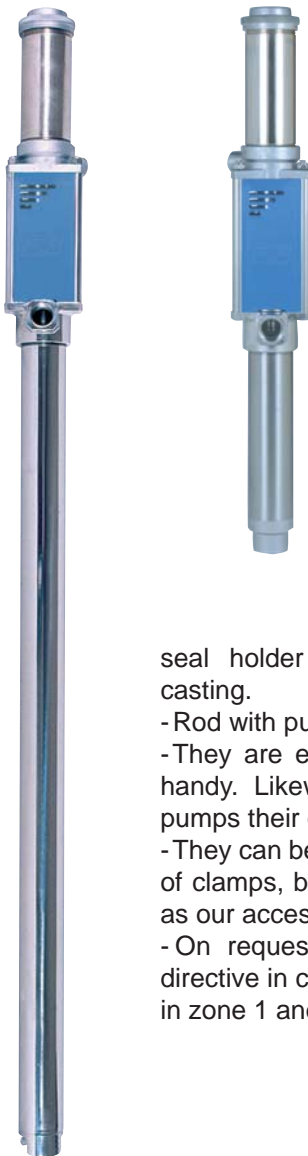
- In-take port with relative ball or mushroom valve
- Cylinder obtained from weld-free tubes
- Collar (seal holder) achieved by investment casting
- Rod with valve carrying pumping piston

The pumps are normally light and very handy. The heavier pumps can be fitted on special trolleys (Art. 53) or with clamp (Art. 50-51-55-403) to secure the pump to the edge of the tank, to the container to be emptied or to the wall.

The pumps are easily disassembled for their inspection and internal cleaning on a periodic basis. Each part of the pump can be reached and inspected. They can be used in environments with potentially explosive atmospheres as they are operated pneumatically. Their operation is adjustable likewise for most pneumatic pumps.

DIMENSIONS										
PUMPS	Z	A		B	DNm	Inlet port		Max. consumption of air in l/min at feeding pressure	Weight kg	
	∅ Air inlet	Height between inlet and outlet ports		Outlet port	D	Long	Short		Long	Short
		Long	Short			DNa				
PA 40 I - 63	1/4" Gas	1020	230	428	1/2" Gas F	∅ 42	3/4" Gas F	42	14	12
PA 40 I - 80	1/4" Gas	1020	230	537	1/2" Gas F	∅ 42	3/4" Gas F	90	16	14
PA 40 I -100	1/2" Gas	1020	230	670	1/2" Gas F	∅ 42	3/4" Gas F	104	16	14
PA 40 I -130	1/2" Gas	1020	230	758	1/2" Gas F	∅ 42	3/4" Gas F	250	23	21
PA 40 I -150	1/2" Gas	1020	230	665	1/2" Gas F	∅ 42	3/4" Gas F	200	24	22
PA 50 I - 63	1/4" Gas	1015	273	476	3/4" Gas F	∅ 55	1" Gas F	42	13	8
PA 50 I - 80	1/4" Gas	1015	273	476	3/4" Gas F	∅ 55	1" Gas F	90	15	11
PA 50 I -100	1/2" Gas	1015	273	652	3/4" Gas F	∅ 55	1" Gas F	104	19	16,5
PA 50 I -130	1/2" Gas	1015	273	713	3/4" Gas F	∅ 55	1" Gas F	250	23	20,5
PA 50 I -150	1/2" Gas	1015	334	643	3/4" Gas F	∅ 55	1" Gas F	200	22	19,5
PA 65 I - 80	1/4" Gas	1133	408	491	1 1/2" Gas F	∅ 75	1" 1/2" Gas F	80	26	21
PA 65 I -100	1/2" Gas	1133	408	646	1 1/2" Gas F	∅ 75	1" 1/2" Gas F	104	27	22
PA 65 I -130	1/2" Gas	1133	408	763	1 1/2" Gas F	∅ 75	1" 1/2" Gas F	250	31	26
PA 65 I -150	1/2" Gas	1133	408	641	1 1/2" Gas F	∅ 75	1" 1/2" Gas F	200	30	25
PA 80 I -100	1/2" Gas	1133	379	685	2" Gas F	∅ 95	3" Gas F	104	32	26
PA 80 I -130	1/2" Gas	1133	379	750	2" Gas F	∅ 95	3" Gas F	250	35	29
PA 80 I -150	1/2" Gas	1133	379	680	2" Gas F	∅ 95	3" Gas F	200	34	28
PA 80 I -210	3/4" Gas	1133	379	765	2" Gas F	∅ 95	3" Gas F	620	40	34





MANUFACTURE

In AISI 316 stainless steel in aluminium and galvanised iron. Piston ring and rod seal in PTFE, pump components screwed together, discharge ports with cylindrical GAS threading

CHARACTERISTICS

Pneumatic piston pumps, lightweight for lighter duty requirements. They are screwed to the pneumatic motor.

Each pump is made up of the following:

- In-take port with ball or mushroom valve
- Cylinder obtained from weld-free tubes
- Pump casing (rod-seal holder and outlet) achieved by casting.

- Rod with pumping piston and valve.

- They are easy to assemble, light and handy. Likewise for all our pneumatic pumps their operation is adjustable.

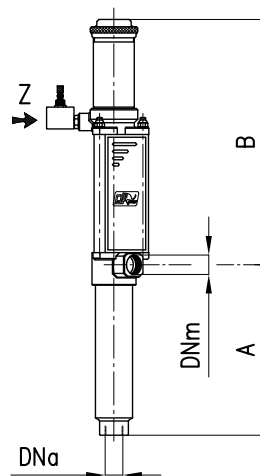
- They can be secured with various types of clamps, brackets or trolleys, supplied as our accessories.

- On request in compliance with Atex directive in category 2G and 3G for uses in zone 1 and 2.

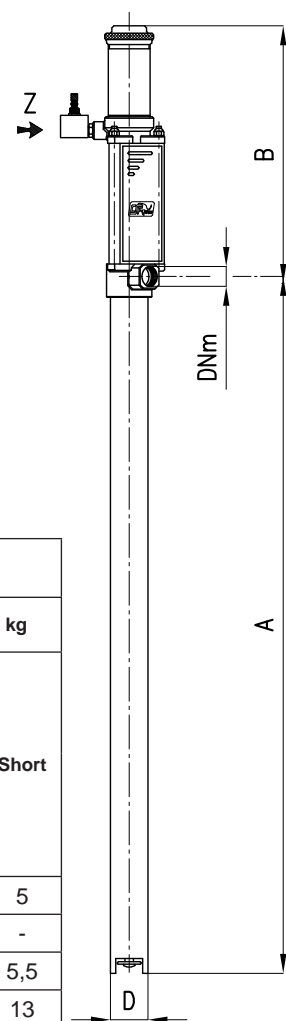
PERFORMANCES

PUMPS	Pressure ratio	Recomm. max. cycles per minute	Max. flow rate l/min for viscosity of 1000 cP
PAR 30 - 50	4 : 1	180	7,5
PAR 40 - 50	2 : 1	180	12
PAR 50 - 50	1 : 1	180	25
PAR 50 - 65	2 : 1	160	25
PAR 65 - 50	0,7 : 1	160	55
PAR 65 - 65	0,7 : 1	160	55

PAR - C



PAR - L



DIMENSIONS

PUMPS	Z Ø Air inlet	A		B	Outlet port DNm	Inlet port		Max. consumption of air in l/min at feeding pressure	Weight kg	
		Long	Short			Long	Short		Long	Short
PAR 30 - 50	1/4" Gas	1041	211	373	3/4" Gas F	Ø 34	1/2" Gas F	75	6	5
PAR 40 - 50	1/4" Gas	1027	259	373	3/4" Gas F	Ø 42	3/4" Gas F	75	7	-
PAR 50 - 50	1/4" Gas	1005	265	368	3/4" Gas F	Ø 54	3/4" Gas F	75	8,5	5,5
PAR 50 - 65	3/8" Gas	1062	339	469	1 1/2" Gas F	Ø 54	3/4" Gas F	125	15,5	13
PAR 65 - 50	3/8" Gas	1231	-	471,5	1 1/2" Gas F	Ø 54	-	125	15	-
PAR 65 - 65	3/8" Gas	1103	324	469	1 1/2" Gas F	Ø 88	2" Gas F	125	17	14,5



Air-operated piston pumps applications.

- Emptying of standard or special barrels
- With immersed pump
- With scraping plate
- Short version for special applications

PA.AP HIGH PRESSURE INDUSTRIAL SERIES CHARACTERISTICS



PA 30 AP



2 PA 50 AP with air motor



PA 65 AP

PERFORMANCES

PUMPS	Pressure ratio	Recomm. max. cycles per minute	Max. flow rate l/min for viscosity of 1000 cP
PA 30AP- 63	10 : 1	80	1,6
PA 30AP- 80	16 : 1	60	2
PA 30AP-100	25 : 1	50	2
PA 30AP-135	44 : 1	50	2
PA 30AP-150	61 : 1	40	1,6
PA 40AP- 63	5,6 : 1	80	3
PA 40AP- 80	8,8 : 1	60	4
PA 40AP-100	14 : 1	50	3,7
PA 40AP-135	24 : 1	50	3,7
PA 40AP-150	33 : 1	40	3
PA 50AP-100	7,5 : 1	50	7
PA 50AP-135	13 : 1	50	7
PA 50AP-150	18 : 1	40	5,6
PA 50AP-210	34 : 1	30	6,7
PA 65AP-130	7 : 1	50	13
PA 65AP-150	9,4 : 1	40	10,5
PA 65AP-210	18 : 1	30	12,7

MANUFACTURE

In AISI 304 stainless steel

Piston with CHEVRON pack Teflon seal with springs.

PUMP COMPONENTS

- Screwed together in types PA 30 AP and PA 40 AP and secured together by flanges and tie rods in types PA 50 AP, PA 65 AP, PA 80 AP.
- GAS male in-take port
- GAS female pumping port

CHARACTERISTICS

Pneumatic piston pumps for high pressures, manufactured in thickness suitable for the duty. Secured to pneumatic motors with special flanged connection supports.

- Cylinders obtained from weld-free high pressure tubes.
- Seal holder shell obtained from full block.
- Piston rod with hard chrome insert and Rulon guide.
- Piston in Teflon with ball valve and return spring.
- Teflon seal with return spring.
- In-take port with ball valve.

Easy to install pumps in either barrels or containers or wall-mounted with special shelves. They are completed with scraper plates for emptying barrels.

Each pump part can be easily reached and disassembled for cleaning and maintenance purposes.

Their operation is adjustable likewise for all pneumatic pumps.

Not available with Atex certification.

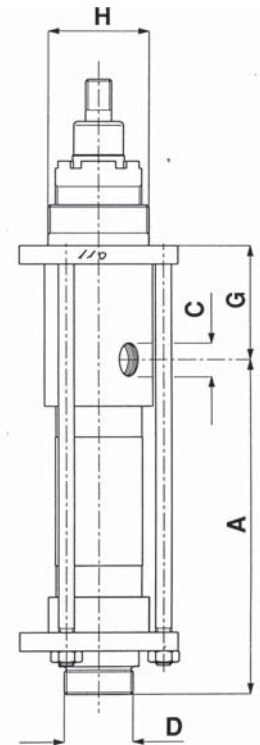
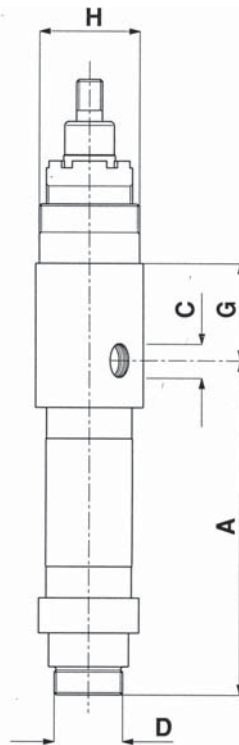
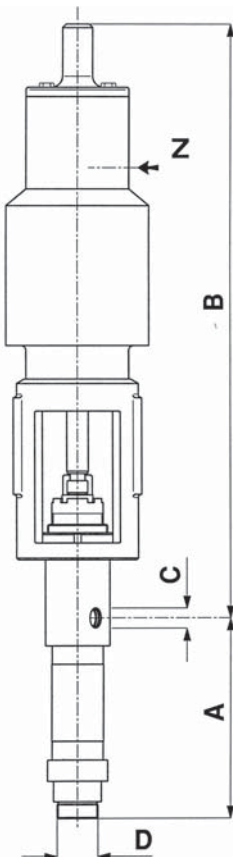
PERFORMANCE

The pneumatic pumps of the PA..AP series are available in many versions.

They are combined with various motors and thanks to the cycle variation they offer ample performance. In the twin version (2PA..) they are offered for pumping two different products.

DIMENSIONS

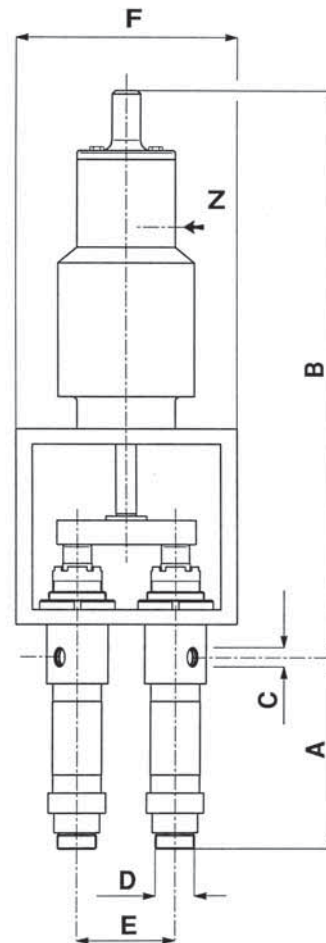
PUMPS	Z	A	B	C	D	G	H	Max. consumption of air in l/min at feeding pressure	Weight kg
	∅ Air inlet	Height between inlet and outlet ports		Outlet port	Inlet port				
PA 30AP- 63	1/4" Gas	215	526	1/2" Gas F	3/4" Gas M	68	50 x 1,5	22	
PA 30AP- 80	1/4" Gas	215	557	1/2" Gas F	3/4" Gas M	68	50 x 1,5	45	
PA 30AP-100	3/8" Gas	215	699	1/2" Gas F	3/4" Gas M	68	50 x 1,5	66	
PA 30AP-135	1/2" Gas	215	774	1/2" Gas F	3/4" Gas M	68	50 x 1,5	11	
PA 30AP-150	1/2" Gas	215	705	1/2" Gas F	3/4" Gas M	68	50 x 1,5	126	
PA 40AP- 63	1/4" Gas	230	495	1/2" Gas F	1" Gas M	66	50 x 1,5	22	
PA 40AP- 80	1/4" Gas	230	540	1/2" Gas F	1" Gas M	66	50 x 1,5	45	
PA 40AP-100	3/8" Gas	230	698	1/2" Gas F	1" Gas M	66	50 x 1,5	66	
PA 40AP-135	1/2" Gas	230	772	1/2" Gas F	1" Gas M	66	50 x 1,5	115	
PA 40AP-150	1/2" Gas	230	703	1/2" Gas F	1" Gas M	66	50 x 1,5	126	
PA 50AP-100	3/8" Gas	238	700	3/4" Gas F	1 1/2" Gas M	69	70 x 2	66	
PA 50AP-135	1/2" Gas	238	775	3/4" Gas F	1 1/2" Gas M	69	70 x 2	115	
PA 50AP-150	1/2" Gas	238	706	3/4" Gas F	1 1/2" Gas M	69	70 x 2	126	
PA 50AP-210	3/4" Gas	238	785	3/4" Gas F	1 1/2" Gas M	69	70 x 2	291	
PA 65AP-130	1/2" Gas	380	738	1 1/2" Gas F	2" Gas M			115	
PA 65AP-150	1/2" Gas	380	743	1 1/2" Gas F	2" Gas M			126	
PA 65AP-210	3/4" Gas	380	823	1 1/2" Gas F	2" Gas M			291	



TWIN VERSION

PERFORMANCES

PUMPS	Pressure ratio	Recomm. max. cycles per minute	Max. flow rate l/min for viscosity of 1000 cP
2PA 30AP - 63	5 : 1	80	3,2
2PA 30AP - 80	8 : 1	60	4
2PA 30AP - 100	12,5 : 1	50	4
2PA 30AP - 135	22 : 1	50	4
2PA 30AP - 150	30,5 : 1	40	3,2
2PA 40AP - 80	4,4 : 1	60	8
2PA 40AP - 100	7 : 1	50	7,4
2PA 40AP - 135	12 : 1	50	7,4
2PA 40AP - 150	16,5 : 1	40	6
2PA 50AP - 100	3,8 : 1	50	14
2PA 50AP - 135	6,5 : 1	50	14
2PA 50AP - 150	9 : 1	40	11,2
2PA 50AP - 210	17 : 1	30	13,4



DIMENSIONS

PUMPS	Z	A	B	C	D	E	F	Max. consumption of air in l/min at feeding pressure	Weight kg
	∅ Air inlet	Height between inlet and outlet ports		Outlet port	Inlet port				
2PA 30AP - 63	1/4" Gas	215	535	1/2" Gas F	3/4" Gas M	90	210	22	
2PA 30AP - 80	1/4" Gas	215		1/2" Gas F	3/4" Gas M			45	
2PA 30AP - 100	3/8" Gas	215		1/2" Gas F	3/4" Gas M			66	
2PA 30AP - 135	1/2" Gas	215		1/2" Gas F	3/4" Gas M			115	
2PA 30AP - 150	1/2" Gas	215		1/2" Gas F	3/4" Gas M			126	
2PA 40AP - 80	1/4" Gas	230	588	1/2" Gas F	1" Gas M	90	200	45	
2PA 40AP - 100	3/8" Gas	230	698	1/2" Gas F	1" Gas M	90	200	66	
2PA 40AP - 135	1/2" Gas	230	773	1/2" Gas F	1" Gas M	90	200	115	
2PA 40AP - 150	1/2" Gas	230	703	1/2" Gas F	1" Gas M	90	200	126	
2PA 50AP - 100	3/8" Gas	238	740	3/4" Gas F	1 1/2" Gas M	120	270	66	
2PA 50AP - 135	1/2" Gas	238	815	3/4" Gas F	1 1/2" Gas M	120	270	115	
2PA 50AP - 150	1/2" Gas	238	745	3/4" Gas F	1 1/2" Gas M	120	270	126	
2PA 50AP - 210	3/4" Gas	238	825	3/4" Gas F	1 1/2" Gas M	120	270	291	

ACCESSORIES

Art. 54

Mobile hoist to lift the pump, with balance weight.



Art. 50

2" threaded clamp to fix PA/PAR pumps to standard barrels.



Art. 403

Light clamp with threaded connection to fix PA/PAR pumps on support.



Art. 51

Double clamp to fix the pumps on tanks or containers edge.



Art. 55

Wall brackets for fixing pumps to the wall.



Art. 59-60

Scraping plate to be applied to the short pump.



Art. 52

Bag control linear flow outlet product.



Art. 53

Tripod, with wheels or fixed, for short pumps.



Art. 58

Automatic electrovalve to close/open airflow.





TECHNICAL FEATURES OF AIR-OPERATED MOTOR PAA SERIES

Double acting reciprocating motor with air distributing valve. Air inlet provided with shutting regulator to change the stroke frequency.

The speed is adjustable according to the models from 10 to 150 strokes by turning the regulator.

Made of anticorodal aluminium with internal gears in steel and special alloys.

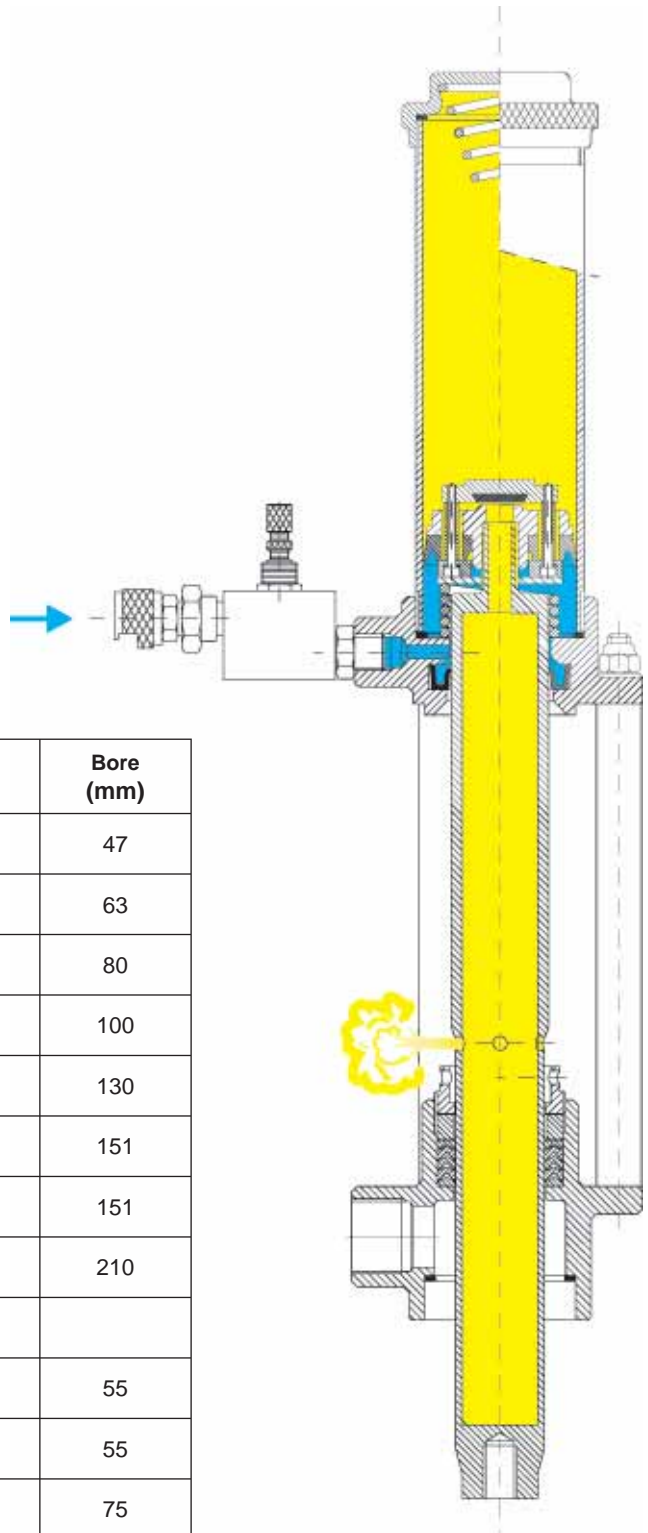
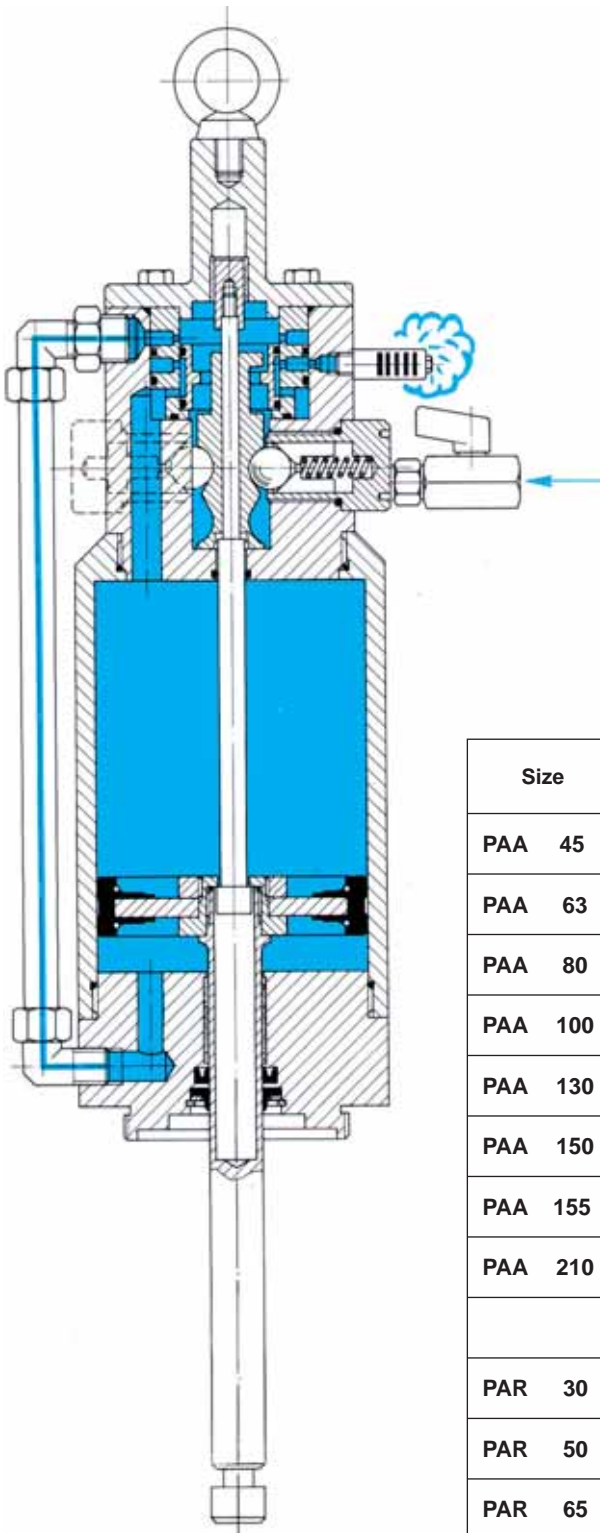
It is available in 8 different models and with corresponding reduced connections and can be coupled with a number of pumps, thus offering various combinations.

TECHNICAL FEATURES OF AIR-OPERATED MOTOR PAR SERIES

Double acting reciprocating motor with spring return device. Air inlet provided with shutting regulator to change the stroke frequency.

The speed is adjustable according to the models from 10 to 180 strokes by turning the regulator.

Made of brass, aluminium and steel, it is built-in the pump and available in 6 models.



Size	Stroke (mm)	Bore (mm)
PAA 45	28	47
PAA 63	45	63
PAA 80	80	80
PAA 100	88	100
PAA 130	150	130
PAA 150	88	151
PAA 155	150	151
PAA 210	143	210
PAR 30	75	55
PAR 50	75	55
PAR 65	85	75



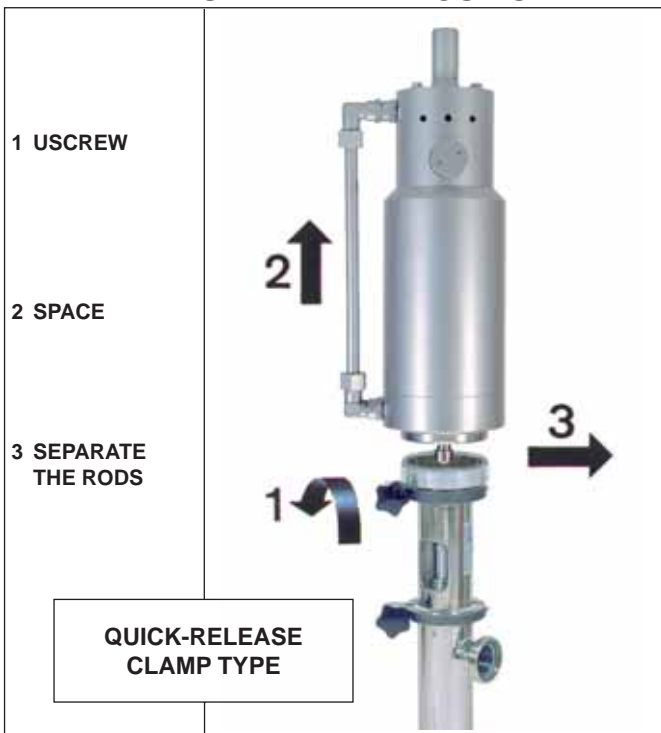
PAA

Pneumatic motor with adjustable speed and automatic stroke and return device

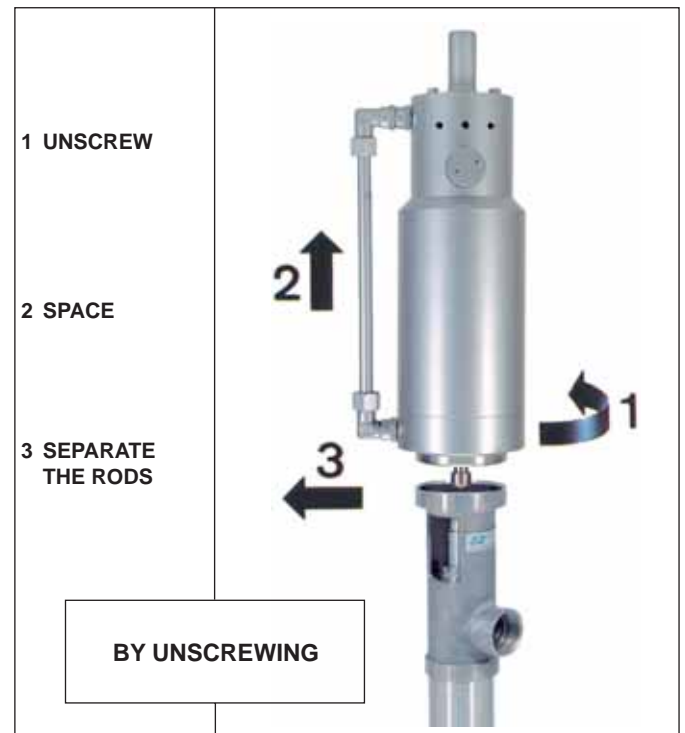


The motor pump rods are coupled by means of bayonet type connection to be screwed or clamped to the structures.

PA.A SANITARY EXECUTION



PA.I INDUSTRIAL EXECUTION



PAR INDUSTRIAL EXECUTION

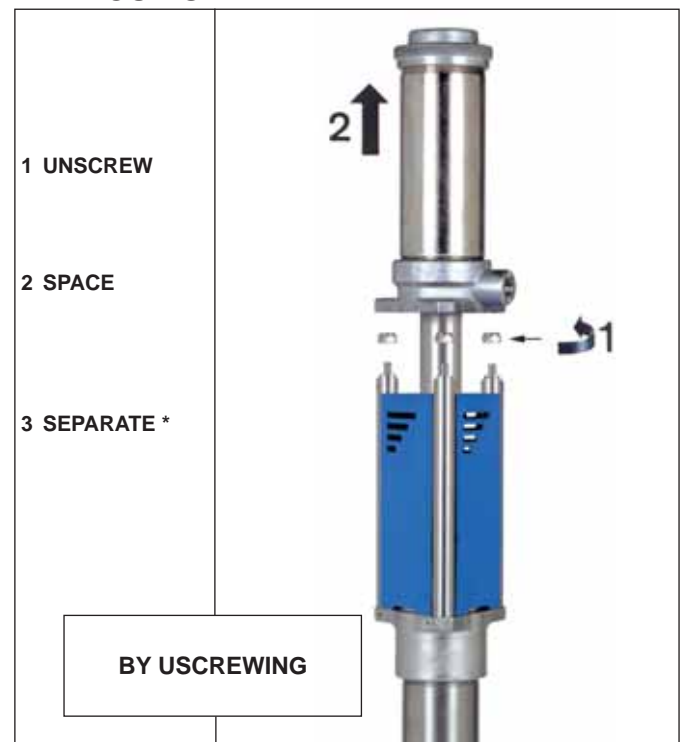
PAR

Pneumatic motor with adjustable speed and spring return device

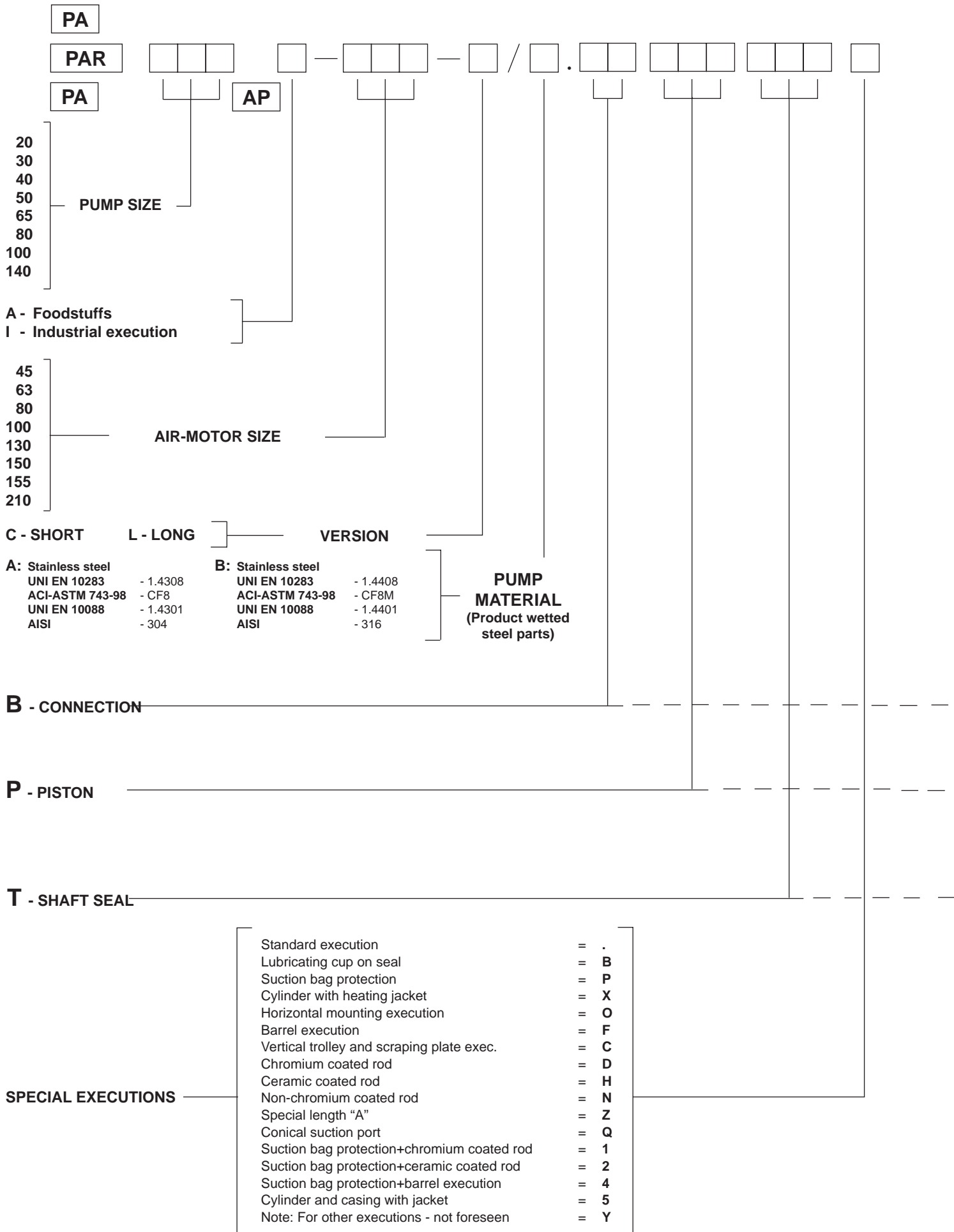


The motor is secured to the pump by means of some connection supports, whereas the rod is screwed.

* To be able to separate the motor / pump the cylinder and tie rod must first be unscrewed.



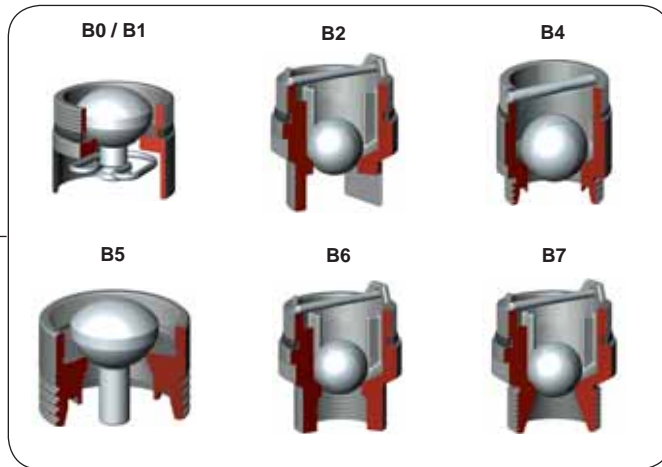
PUMP CODES GUIDE



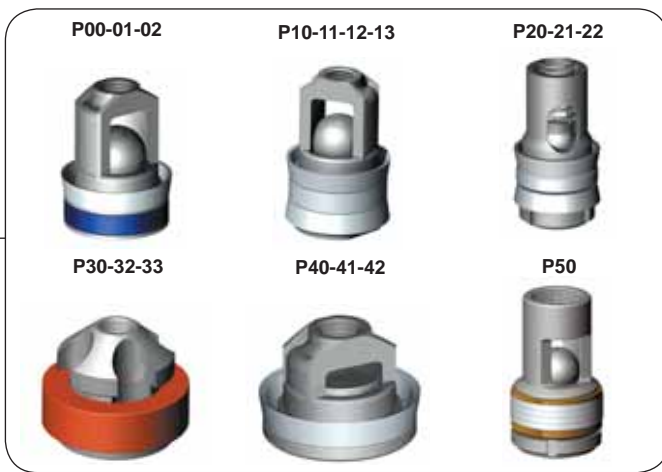
Example: PA 50A-100-C/A.B5P00T00X



CONNECTIONS



- B0** - Immersed mushroom valve (P.T.F.E)
- B1** - Immersed mushroom valve (S.S.I)
- B2** - Immersed ball valve (S.S.)
- B4** - DIN male with ball valve (S.S.)
- B5** - DIN with mushroom valve (S.S.)
- B6** - GAS female with ball valve (S.S.)
- B7** - GAS male with ball valve (S.S.)



PISTONS

- P00** - Ball piston with 1 seal (P.T.F.E)
- P01** - Ball piston with 1 seal (Leather)
- P02** - Ball piston with 1 seal (Vulcolan)
- P10** - Ball piston with 2 seals (P.T.F.E)
- P11** - Ball piston with 2 seals (Leather)
- P12** - Ball piston with 2 seals (Vulcolan)
- P13** - Ball piston with 2 seals (Fluorocarbon)
- P20** - Ball piston with 2 seals+spring (P.T.F.E)
- P21** - Ball piston with 2 seals+spring (Leather)
- P22** - Ball piston with 2 seals+spring (Vulcolan)
- P30** - With ring (P.T.F.E)
- P32** - With ring (Vulcolan)
- P33** - With ring (Rubber)
- P40** - With washer and 1 seal (P.T.F.E)
- P41** - With washer and 1 seal (Leather)
- P42** - With washer and 1 seal (Vulcolan)
- P50** - Rings pack (P.T.F.E)



SHAFT SEALS

- T00** - "Chevron" (P.T.F.E)
- T01** - "Chevron" (Mixed leather)
- T02** - "Chevron" + spring (P.T.F.E)
- T03** - "Chevron" + spring (Mixed leather)
- T04** - "Chevron" (Algoflon)
- T05** - "Chevron" (PTFE - Algoflon)
- T10** - "DI" ring (Rubber)
- T11** - "DI" ring (Fluorocarbon)
- T12** - "FM" SAFCO ring (P.T.F.E)
- T13** - "FM" ring + "Chevron" (P.T.F.E)
- T14** - "FM" ring + "Chevron" + "H" (P.T.F.E)
- T20** - "H" ring (Rubber)
- T21** - "H" ring (Fluorocarbon)
- T22** - "H" ring (P.T.F.E.)
- T25** - "H" ring + "Chevron" (Rubber)
- T26** - "H" ring + "Chevron" (Fluorocarbon)
- T27** - "H" ring + "Chevron" (P.T.F.E.)
- T30** - "H" ring + "DI" ring (Rubber)
- T31** - "H" ring + "DI" ring (Fluorocarbon)
- T40** - "H" ring + "Ecopur"
- T41** - "H" ring + "Ecopur" + spring
- T42** - "H" ring + "Ecopur" + "Chevron"

VARIOUS EXECUTIONS

Air-operated piston pump with mobile hoist.



With pneumatic cylinder and control panel.

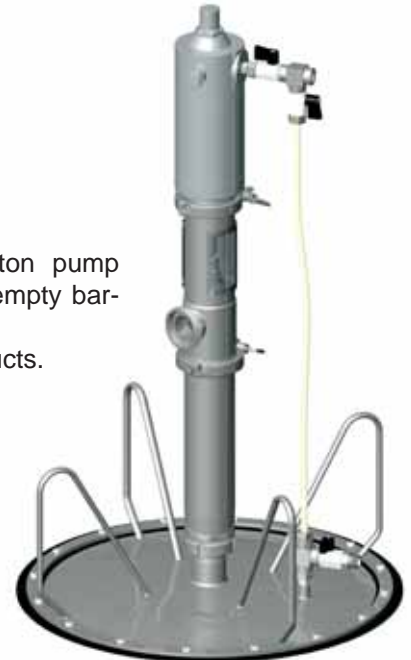
It is realised in a manual sliding model with counterweight for balancing.



Short air-operated piston pump on tripod with wheels or fixed.



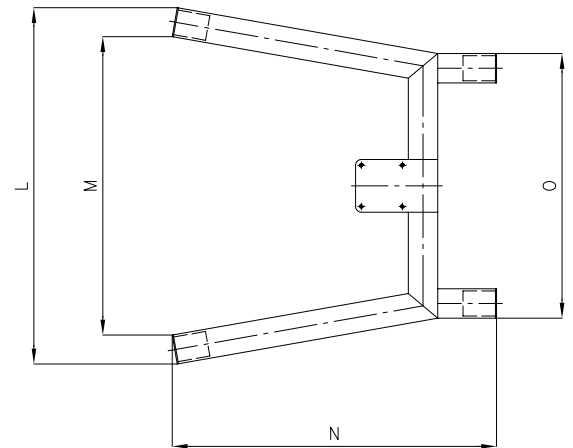
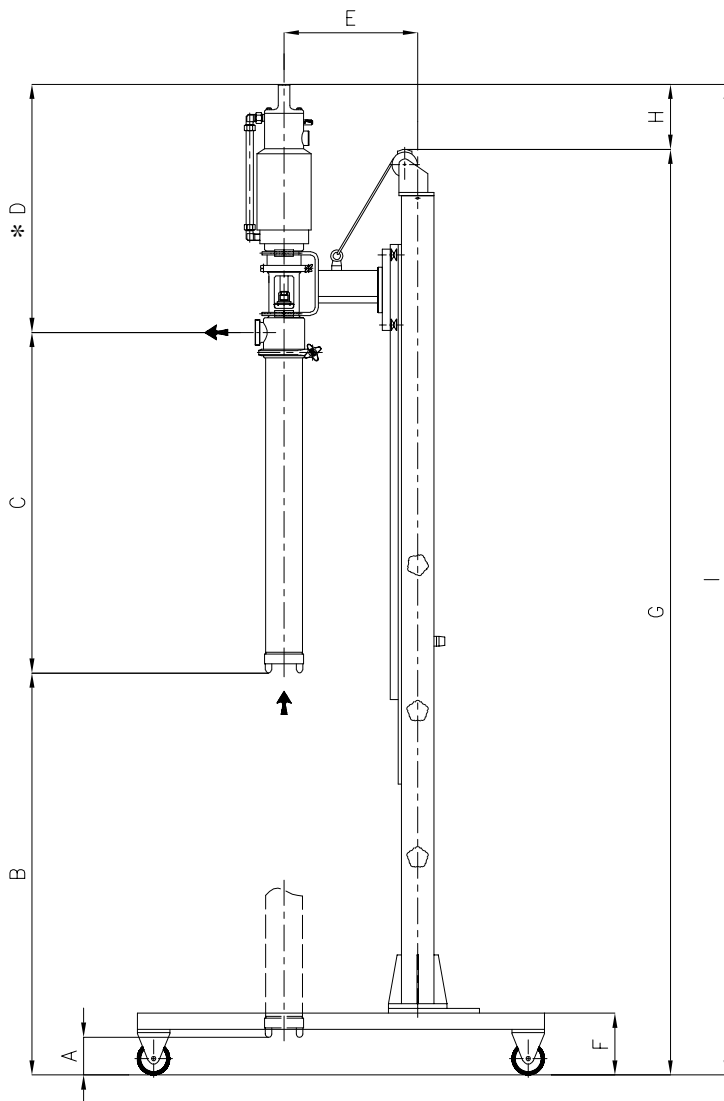
Short air-operated piston pump with scraping plate to empty barrels or cylindrical tanks. For high viscosity products.



Mobile unit with double pneumatic piston for big-sized basins with air-operated piston pump and scraping plate. For mixtures, jams, creams etc...to be transferred after processing.

DIMENSIONS

FOR PUMPS WITH MOBILE HOIST



Pumps	A	B	C	* D	E	F	G	H	I	L	M	N	O	Weight
PA-PAR 50	0	1165	1194	488	318	168	2825	23	2848	1145	953	1039	680	
PA 65	30	1150	1111	767	360	168	2826	202	3028	1145	953	1039	680	
PA 80	30	1150	1129	771	335	190	2847	203	3050	1145	953	1039	680	
PA 100	116	1236	1048	763	411	190	2847	200	3047	1145	953	1039	680	
PA 140	43	1163	1243	791	415	190	3090	107	3197	1145	953	1039	680	

* Dimension referring to PAA 130 motor for PA 65-80-100-140 pumps

The table identifies the standard structure with hoist-mounted base fit for housing an Europallet. Customised realisations can be obtained for what concerns dimensions, manual or pneumatic movement, mobile or fixed, in stainless steel or painted iron.