## 2019 20 PROFESSIONAL



MotoGP™ WORLD CHAMPIONSHIP 2019 2020 2021





PROFESSION LAVOR



Redesigning your brand – especially if it has a long history and is well known – is a process that only strong companies with a clear vision of the future can afford to go through. It means doing some soul searching and accepting new challenges while maintaining a tight focus on the objective that you are pursuing.

The path that Lavorwash has decided to undertake has led to the creation of a new logo that represents something innovative, accompanied by a payoff that summarises the company's mission.

A new logo that is based on two fundamental principles: simplification and recognisability.

Simplification that is also evident in the choice to unify the "LavorHyper" and "LavorPro" product ranges under a single strong, well-recognised brand: LAVOR.

A decision taken to get the maximum benefit from all the initiatives and investments in visibility that the company will make in the coming years.

The strengthening of the LAVOR brand, the presentation of this new trademark and the desire to be increasingly active and visible in the Italian and international markets have also led to the signing of a very important three-year sponsorship with the LCR Honda HRC MotoGP team.

In fact, the LAVOR brand will be on the fairing of the motorcycle and on Cal Crutchlow's racing suit, as well as throughout the LCR HONDA HRC paddock for the three-year period 2019-2021.



### LAVOR



Lavorwash is worldwide leader in cleaning industry since 1975 and offers a wide and complete range of cleaning machinery suitable for any kind of applications, both indoor and outdoor relying on a fortyfour-year experience.

Over the years, Lavorwash has grown to become a specialist manufacturer of professional and household cleaning systems, acquiring various leading brands and diversifying its

own range to offer innovative products of

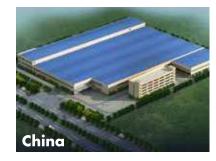


Lavorwash has production plants in Italy and around the world and nowadays it employs over 300 staff and has around 200 associates, with branches in several countries around the world such as France,

the United Kingdom, Spain, Poland, Brazil and

China.

excellence.





Lavorwash is a company with a consolidated reputation at national and international levels. It operates locally through branches located around the world, delivering its products through importers, distributors, agent network and direct relations with large retailing chains







## PROFESSIONAL





**Lavorwash** has an extensive R&D program aimed at improving the performance, durability and quality of its products, as well as developing new models, accessories and services to meet the needs of a market with a high rate of innovation and technological change. We research the development of new products, as well as the improvement and optimization of existing models. Lavorwash tests its research: technical staff employs sophisticated and modern technological systems; products are subjected to continual functional and performance tests.

**Lavorwash** creates attractive products, by combining innovative styling, reliability and ease of use in perfect harmony. We understand the importance of ergonomics: designers and technicians work in close collaboration to manufacture products which are easy to use, safe, efficient and truly stylish.

**Lavorwash** has finalized advanced technologies, thanks to which every product is the result of a sophisticated manufacturing process.

We use production lines equipped with automatic testing stations which immediately identify any problems or defects and the assembly systems ensure constant quality levels.

**Lavorwash** supplies efficient and powerful systems ensuring high performance and the long life of the machines.

**Lavorwash** pursues constant improvement and always sets itself new goals and targets. Wide-ranging and consolidated experience, constant commitment to research, advanced manufacturing processes and customer service are the features which have resulted in Lavorwash becoming a worldleader in cleaning systems.

**Lavorwash** offers its customers consolidated and reliable support, becoming the ideal partner for a successful future.

Investing in research and development also means making strides in terms of product quality and eco-sustainability.

Whereas on the one hand, the improvement of our machines is aimed at meeting the practical needs of users, on the other hand this innovation is developed on the basis of an increasingly strong and shared environmental awareness.

First of all, the use of high pressure cleaners allows for water savings of at least 80% when compared to a normal garden hose. Moreover, we developed vacuum cleaners using high efficiency motors to achieve top performances and reduce energy consumption by 50%.

## LAVOR

## PROFESSIONAL



**Cold water high-pressure cleaners** 

Page 10



Cold water high-pressure cleaners with petrol engine

Page 30



Hot water high-pressure cleaners

Page 40



Hot water high-pressure cleaners with petrol engine

Page 54



**High-pressure pump units-Boilers** 

Page 66



**Dry vacuum cleaners** 

Page 78



Wet & dry vacuum cleaners

M Class

Page 81



Wet & dry vacuum cleaners

Commercial Line

Page 83



Wet & dry vacuum cleaners
Heavy Duty Line

Page 94

## PROFESSION LAVOR



Efficiency, reliability, safety and ease of use are the basic factors for a careful selection of a professional product. On the ground of these standards, Lavor has conceived professional line high-pressure cleaners, in order to match, through high-tech products, perfect hygiene and clean with time/labour saving.

#### Being Manufacturers: from experience to knowledge

In the high-pressure cleaners market companies are divided in those who buy components to assemble products and manufacturers, who have a continuous R&D on all product components.

Lavorwash manufactures all the high-pressure cleaners components entirely and this allows: to spread product knowledge, culture and experience inside the company; to check the entire manufacturing cycle; to adopt possible improvements immediately; better sensitivity to market request adjusting product range design in real time.

#### What high pressure cleaner? Is it better pressure or delivery rate?

The right criteria to define the high-pressure cleaner performances is the washing effectiveness. The elements that influence this value are: delivery rate (water volume processed by the pump in a unity of time) and pressure (I/h water power on a surface). The higher the delivery rate, the faster the washing phase (less rinsing time); the higher the pressure, the deeper the washing (better dirt degreasing). It is often emphasized the pressure only (also



because the pump size and the consequent manufacturing cost are cheaper), but delivery rate is as important as pressure.

#### What pump? Is it better a linear (crankshaft) or an axial one?

It does not exist a winning technology, because both solution can provide same performances and lifetime. What determines the pump quality is the quality of the project itself (linear or axial) and of the components used; for this reason Lavorwash



decided to develop both technologies, taking into consideration a design that grants margin of safety and reliability.

#### Low voltage and delayed **Total Stop:**

To avoid quick and multiple start and shut down of the motor/pump group whenever the gun trigger is pulled and released, this disposal delays of about 15 seconds the machine shut down. Prevention, energy saving, top safety and pump longer life.



#### Linear pump:

The movement of the (3) pistons occurs through a system of connecting rods CRANKSHAFT and crankshaft. The longitudinal axle of the pistons (placed at the same level or linear) is perpendicular to the motor rotation axle. It is more versatile to bear high delivery rates (from 21 I/ min) and it has a better self priming.



#### Motor low rotation speed:

The electric motor transfers the same number of revolutions to

the pump. With a 4 poles motor there is a lower rotation speed of the components (1400 RPM in case of 50Hz or 1750 RPM in case of 60 Hz) granting longer pump life. Extending lifetime solution.



#### Water cooled motor:

Water flows through the S. S. coil around the motor, this allows a better thermal exchange (and so a

cooling) than air also in those countries where inlet water could reaches 60°C. This allows a drop in operating temperature of the motor and pump mechanical elements, granting a better reliability and longer life.



Total Releasing the gun trigger the pump stops automatically avoiding element damages during the by-pass phase. Pulling the trigger, the high-pressure cleaner starts automatically. Max pump protection.



## Cold water high-pressure cleaner



		Page	Operating pressure (max pressure)	Operating pressure (max pressure)	Delivery rate	Delivery rate	Absorbed power	RPM	Voltage	Max inlet water temperature	Weight with packaging	Packaging	Pieces for pallet
Code	Model		bar (max bar)	psi (max psi)	l/h	GPM	W	RPM	V - Hz	°C	Kg/lbs	cm	n°(cm x cm)
8.661.0703	MYSTIC 1309 XP	12	130 (150)	1885(2175)	540	2.38	2800	2800	230 - 50	40	32.5/71	60x38 h 72	12(120-80)
8.669.0001	ALASKA 1409 XP	13	140 (180)	2030 (2610)	540	2.4	2800	2800	230 - 50	40	28/62	39x39 h 61	18(120x80)
8.669.0006	HKA 1409 XP	14	140 (180)	2030 (2610)	540	2.40	2800	2800	230 - 50	40	28	39x39 h 71	18(120x80)
8.613.0001	LMX 1211 XP	15	50÷120 (150)	725÷1740(2175)	660	2.91	3300	2800	230 - 50	40	35.5/78	60x37,5 h 72.5	12(120x80)
8.613.0015	LMX 2007 XP	15	50÷200 (220)	725÷2900(3190)	420	1.85	3300	2800	230 - 50	40	35.7/78	60x37,5 h 72.5	12(120x80)
8.668.0027C	BOLT 1510 LP	16	130 (150)	1885(2175)	540	2.38	2800	2800	230 - 50	40	32/70	90x90 h 83	12(120-80)
8.665.0101	ARIZONA 1209 LP	17	120 (150)	1740(2175)	510	2.23	2300	1450	230 - 50	40	30.5/67	60x38 h 72	12(120-80)
8.665.0106	ARIZONA 1311 LP	17	130 (150)	1885(2175)	660	2.90	2900	1450	230 - 50	40	32.5/71	60x38 h 72	12(120-80)
8.665.0110	ARIZONA 1311 LP	17	130 (150)	1885(2175)	660	2.90	2900	1450	230 - 50	40	32.5/71	60x38 h 72	12(120-80)
8.665.0117	HA 1311 LP	18	130 (150)	1885(2175)	660	2.90	2900	1450	230 - 50	40	32.5/71	60x38 h 72	12(120-80)
8.665.0122	HA 1510 LP	18	150 (160)	2175(2320)	600	2.64	2900	1450	230 - 50	40	32.5/71	60x38 h 72	12(120-80)
8.671.0001	TUCSON 1211 LP	19	30÷120(150)	435÷1740(2175)	660	2.91	3000	1450	230 - 50	40	38.6/85	61x40 h 91	9(120x80)
8.671.0002	TUCSON 1509 LP	19	30÷150(160)	435÷2175(2320)	540	2.38	3000	1450	230 - 50	40	35/77	61x40 h 91	9(120x80)
8.671.0003	TUCSON 1713 LP	20	30÷170	435÷2465	780	3.43	6000	1450	400 - 50	40	44/97	61x40 h 91	9(120x80)
8.671.0004	TUCSON 2017 LP	20	30÷200	435÷2900	1000	4.49	9400	1450	400 - 50	40	46/101	61x40 h 91	9(120x80)
8.671.0013	HNR 1509 LP	21	150 (160)	2175 (2320)	540	2.40	3000	1450	230 - 50	40	33	76x41 h 75	9(120x80)
8.671.0014	HNR 1713 LP	21	30÷170	435-2465	780	3.43	6000	1450	400 - 50	40	42	76x41 h 75	9(120x80)
8.671.0015	HNR 2017 LP	21	30÷200	435-2900	1000	4.49	9400	1450	400 - 50	40	44	76x41 h 75	9(120x80)
8.672.0001	TUCSON XL 2015 LP	22	30÷200	435÷2900	900	3.96	7000	1450	400 - 50	40	66/145	61x40 h 91	9 (120x80)
8.672.0002	TUCSON XL 2021 LP	22	30÷200	435÷2900	1260	5.55	9400	1450	400 - 50	40	72.3/159	61x40 h 91	9 (120x80)
8.672.0003	TUCSON XL 2515 LP	22	30÷250	435÷3600	900	3.96	9400	1450	400 - 50	40	73/161	61x40 h 91	9 (120x80)
8.672.0008	HNR XL 2015 LP	23	30÷200	435-2900	900	3.96	7000	1450	400 - 50	40	65	75x40 h 69	6(120x80)
8.672.0009	HNR XL 2021 LP	23	30÷200	435-2900	1260	5.55	9400	1450	400 - 50	40	70	75x40 h 69	6(120x80)
8.672.00010	HNR XL 2515 LP	23	30÷250	435-3600	900	3.96	9400	1450	400 - 50	40	70	75x40 h 69	6(120x80)
8.654.1071	COLUMBIA R 1211 LP	24	30÷120 (150)	435÷1812 (2175)	660	2.91	3000	1450	230 - 50	40	40/88	55x62 h 59	12 (120x100)
8.654.1073	COLUMBIA R 1515 LP	24	30÷150	435÷2175	900	3.96	5000	1450	400 - 50	40	54/118	55x62 h 59	12 (120x100)
8.654.1072	COLUMBIA R 2015 LP	24	30÷200	435÷2900	900	3.96	7000	1450	400 - 50	40	54/118	55x62 h 59	12 (120x100)
8.654.1097	COLUMBIA R Foam 1211 LP	25	30÷125	435-1813	660	2.90	3000	1450	230 - 50	40	60,5	55x62 h 59	12(120x100)
8.654.0111	COLUMBIA R Foam 2015 LP	25	30÷200	435-2900	900	3.96	7000	1450	400 - 50	40	70	55x62 h 59	12(120x100)

## Cold water high-pressure cleaner

LAVOR



		Page	Operating pressure (max pressure)	Operating pressure (max pressure)	Delivery rate	Delivery rate	Absorbed power	RPM	Voltage	Max inlet water temperature	Weight with packaging	Packaging	Pieces for pallet
Code	Model		bar (max bar)	psi (max psi)	l/h	GPM	W	RPM	V - Hz	°C	Kg/lbs	cm	n°(cm x cm)
8.654.0086	HCR 1211 LP	26	30÷125	435-1813	660	2.90	3000	1450	230 - 50	40	60,5	55x62 h 59	12(120x100)
8.654.0087	HCR 1515 LP	26	30÷150	435-2175	900	3.96	5000	1450	400 - 50	40	50	55x62 h 59	12(120x100)
8.654.0088	HCR 2015 LP	26	30÷200	435-2900	900	3.96	7000	1450	400 - 50	40	59	55x62 h 59	12(120x100)
8.654.0089	HCR 2021 LP	26	30÷200	435-2900	1260	5.55	9400	1450	400 - 50	40	50	55x62 h 59	12(120x100)
8.654.0123	HCR 2515 LP	26	30÷250	435-3600	900	3.96	8500	1450	400 - 50	40	50	55x62 h 59	12(120x100)
8.626.0001	MCHPV 1211 LP	27	30÷120	435-1740	660	2.90	3000	1450	230 - 50	40	44	75x50 h 35	9(120x80)
8.626.0002	MCHPV 1515 LP	27	30÷150	435-2175	900	3.96	5000	1450	400 - 50	40	45	75x50 h 35	9(120x80)
8.626.0003	MCHPV 2015 LP	27	30÷200	435-2900	900	3.96	7000	1450	400 - 50	40	48	75x50 h 35	9(120x80)
8.626.0004	MCHPV 2021 LP	27	30÷200	435-2900	1260	5.55	9400	1450	400 - 50	40	60	75x50 h 35	9(120x80)
0.066.0006	INDO 2521 E LP	28	250	435-3600	1250	5.45	10000	1400	400 - 50	80	140	130x82 h 120	1 (130x82)
0.066.0007	INDO 3518 E LP	28	350	435-5076	1080	4.76	12000	1400	400 - 50	80	145	130x82 h 120	1 (130x82)
0.066.0008	LENA 5015 E LP	29	500	7250	900	3.96	15000	1400	400 - 50	60	220	130x82 h 120	1 (130x82)
0.066.0009	LENA 5018 E LP	29	500	7250	1080	4.76	15000	1400	400 - 50	60	260	130x82 h 120	1 (130x82)
0.066.0010	LENA 5021 E LP	29	500	7250	1260	5.55	23000	1400	400 - 50	60	285	130x82 h 120	1 (130x82)
8.601.0107	THERMIC 5H	30	30÷160	435÷2320	570	2.51	5 hp	3000	-	40	37.5/83	54.5x54.5 h 69.5	8 (120x80)
8.601.0175C	THERMIC 6,5	31	30÷180	435÷2610	690	2.77	6,5hp	3600	-	40	38/84	47x57 h57	12 (120x100)
8.601.01880	THERMIC 9 L	32	30÷200	435÷2900	780	3.44	9 hp	3400	-	40	53/116	70x57 h 70	9 (120x80)
8.601.0111	THERMIC 10 D	33	30÷180	435-2610	1020	4.49	10 hp	1600	-	40	95	110x68 h 96	1 (120x80)
8.601.0115	THERMIC 11 H	34	30÷200	435-2900	1080	4.76	11 hp	1700	-	40	64	104x66 h 90	1 (120x80)
8.601.0133	THERMIC 13 H	34	30÷250	435-3600	1080	4.76	13 hp	1700	-	40	61	100x66 h 92	1 (120x80)
8.601.0193	THERMIC 11 HF	35	30÷200	435-2900	1080	4.76	11 hp	1700	-	40	64	104x66 h 90	1 (120x80)
8.601.0194	THERMIC 13 HF	35	30÷250	435-3600	1080	4.76	13 hp	1700	-	40	61	100x66 h 92	1 (120x80)
0.066.00011	THERMIC 22 3521 H	36	350	5076	1260	5.55	22 hp	1560		60	195	130x82 h 120	1 (130x82)
0.066.00012	THERMIC 22 4018 H	36	400	5800	1080	4.76	22 hp	1560	-	60	195	130x82 h 120	1 (130x82)
0.066.00013	THERMIC 22 5015 H	36	500	7250	900	3.96	22 hp	1560		60	195	130x82 h 120	1 (130x82)
0.066.00016	THERMIC 23 3521 K	37	350	5076	1260	5.55	23 hp	1560		60	250	130x82 h 120	1 (130x82)
0.066.00015	THERMIC 23 4018 K	37	400	5800	1080	4.76	23 hp	1560	-	60	250	130x82 h 120	1 (130x82)
0.066.00014	THERMIC 23 5015 K	37	500	7250	900	3.96	23 hp	1560	-	60	250	130x82 h 120	1 (130x82)

#### **Mystic-R**





#### **Equipped with:**

- Three steel pistons, brass axial pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Glicerine pressure gauge.
- Hose holder.
- Accessory holder.
- Ergonomic handle.

Standard equipment:
• 6.001.0143 Gun M22
• 6.002.0322 Lance M22.
<b>*</b>
• 5.012.0478 High pressure nozzle set
• 4.018.0003 High pressure hose 8 m
Power cable 5 m

#### **Optional:**

- 6.608.0071 High-pressure wall mount hose reel (hose not included)
- 3.749.0472 Rotox nozzle head

	Mystic-R 1409 XP
code	8.661.0703
operat. pressure/max	140/180 bar - 2030/2610 psi
delivery rate	540 l/h - 2.4 GPM
abs. power/voltage	2800 W - 230 V ~ 50 Hz - 1 ph
pump type/RPM	MPBX1/2800 RPM
max. water inlet temperature	40 °C
dimension/weight	43x50x85cm/28 Kg - 61,6 lbs



Standard equipment:

#### Alaska



## 6.001.0143 Gun M22 6.002.0322 Lance M22. 5.012.0478 High pressure nozzle set 4.018.0003 High pressure hose 8 m

#### Optional:

• Power cable 5 m

• 3.749.0472 Rotox head

- Three steel pistons, brass axial pump head with built-in by-pass valve.
- Total Stop.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Power cable holder.
- Accessory holder.
- Ergonomic handle.
- 1lt detergent tank.

Alaska 1409 XP 3.669.0001
140/180 bar - 2030/2610 psi
540 l/h - 2.4 GPM
2800 W - 230 V ~ 50 Hz - 1 ph
MPBX1/2800 RPM
40 °C
35 x 40 h 87 - 28 Kg - 61,6 lbs
54 28 W

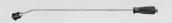


#### **HKA** Standard equipment:

• 3.700.0036 Gun M22 - 3/8.



• 3.701.0027 Lance M22 high/low pressure



• 3.103.0048 Nozzle type 035



• 6.602.0056 ROTOX Lance



• 4.618.0090 High pressure hose R1 8 m



• Power cable 5 m



- Three steel pistons, brass axial pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Power cable holder.
- Hose reel in pressure.
- Accessory holder.
- Ergonomic handle.
- 11 detergent tank.

(		

	HKA 1409 XP
code	8.669.0006
operat. pressure/max	140/180 bar - 2030/2610 psi
delivery rate	540 l/h - 2.4 GPM
abs. power/voltage	2800 W - 230 V ~ 50 Hz - 1 ph
motorpump type/RPM	MPBX1/2800 RPM
max. water inlet temperature	40 °C
dimension/weight	35 x 40 h 96 - 28 Kg - 61,6 lbs



#### **LMX**



## • 3.701.0027 Lance M22 high/low pressure (mod. 1211 XP) • 6.602.0026 Lance M22 high/low pressure with nozzle (mod. 2007 XP) • 3.103.0050 Nozzle type 045 (mod. 1211 XP) • 4.618.0053 High pressure hose 10 m

- Three ceramic coated pistons, brass axial pump head with built-in by-pass valve.
- Total Stop.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Pressure regulator.
- Glicerine pressure gauge.
- Hose reel.
- Accessory holder.
- Ergonomic handle.
- 7,5 lt. detergent tank.

	LMX 1211 XP	LMX 2007 XP
code	8.613.0001	8.613.0015
operat. pressure/max	120/150 bar-1740/2175 psi	200/220 bar-2900/3190 psi
delivery rate	660 l/h-2.91 GPM	420 l/h-1.85 GPM
abs. power/voltage	3300W - 230V~50Hz 1 ph	3300W - 230V~50Hz 1 ph
motorpump type/RPM	MPBX2/2800 RPM	MPBX2/2800 RPM
max. water inlet temperature	40 °C	40 °C
dimension/weight	59x37x87cm/28 Kg - 61,6 lbs	59x37x87cm/28 Kg - 61,6 lbs

#### **Bolt**



#### **Standard equipment:**

• 6.001.0107 Gun M22



• 6.602.0062 Lance M22.



• 4.618.0188 High pressure hose R1 10 m



• 3.102.0011 water filter

• Power cable 5 m

#### **Optional:**

• 5.611.0250 Hose reel set (hose not included)

- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve.
- Total stop
- Suction and delivery S. S. valves.
- Integrated detergent suction with external suction probe
- Pressure regulator.
- Glicerine pressure gauge.
- Accessory holder.
- Ergonomic handle.

	Bolt 1510 LP
code	8.668.0027C
operat. pressure	150 bar-2175 psi
delivery rate	540 l/h-2,37 GPM
abs. power/voltage	2800W - 230V~50Hz 1 ph
pump type/RPM	MP4/1450 RPM
max. water inlet temperature	40 °C
dimension/weight	43x50x85cm/36 Kg - 79,3 lbs

## Cold water high-pressure cleaner





#### **Standard equipment:**

• 6.001.0143 Gun M22



• 6.002.0322 Lance M22.



- 5.012.0478 High pressure nozzle set (mod. 1209 LP)
- 5.012.0401 High pressure nozzle set (mod. 1311 LP)



• 4.618.0128 High pressure hose 8 m



• Power cable 5 m

#### Available versions:

Code: **8.665.0110** 

Arizona 1311 LP **with hose reel** (10 m high pressure hose code 4.618.0053)

Code: 3.749.0472 Rotox head (mod. 1209 LP)

- 4 poles electrical motor (1450 RPM) with thermal protection.
- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Pressure regulator.
- Glicerine pressure gauge.
- Hose reel (optional).
- Accessory holder.
- Hose-holder.
- Ergonomic handle.
- 7,5 lt. detergent tank.

	Arizona 1209 LP	Arizona 1311 LP
code	8.665.0101	8.665.0106
operat. pressure/max	120/1 <i>5</i> 0 bar-1 <i>74</i> 0/21 <i>75</i> psi	130/150 bar-1885/2175 psi
delivery rate	510 l/h-2.23 GPM	660 l/h-2.90 GPM
abs. power/voltage	2300W - 230V~50Hz 1 ph	2900W - 230V~50Hz 1 ph
motorpump type/RPM	MP4/1450 RPM	MP4/1450 RPM
max. water inlet temperature	40 °C	40 °C
dimension/weight	59x37x87cm/26 Kg - 57 lbs	59x37x87cm/28 Kg - 61 lbs
BEGGBS(00000000000		

#### HA



# • 3.700.0036 Gun M22 - 3/8 • 3.701.0027 Lance M22 high/low pressure • 3.103.0050 Nozzle type 045 (mod. 1311 LP) • 3.103.0047 Nozzle type 030 (mod. 1510 LP) • 4.618.0049 High pressure hose 8 m • Power cable 5 m



- 4 poles electrical motor (1450 RPM) with thermal protection.
- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Pressure regulator.
- Glicerine pressure gauge.
- Accessory holder.
- Hose-holder.
- Ergonomic handle.
- 7,5 | detergent tank.

	HA 1311 LP	HA 1510 LP
code	8.665.0117	8.665.0122
operat. pressure/max	130/150 bar-1885/2175 psi	150/160 bar-2175/2320 psi
delivery rate	660 l/h-2.90 GPM	600 l/h-2.64 GPM
abs. power/voltage	2900W - 230V~50Hz 1 ph	2900W - 230V~50Hz 1 ph
motorpump type/RPM	MP4/1450 RPM	MP4/1450 RPM
max. water inlet temperature	40 °C	40 °C
dimension/weight	59x37x87cm / 28 Kg - 61 lbs	59x37x87cm / 28 Kg - 61 lbs



#### **Tucson** single-phase



#### Equipped with:

- 4 poles electrical motor (1450 RPM) with thermal protection.
- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction (2,8 lt.).
- Pressure regulator.
- Glicerine pressure gauge.
- Hose-reel (optional).

# • 3.700.0036 Gun M22 - 3/8. • 3.701.0027 Lance M22 high/low pressure • 3.103.0050 Nozzle type 0.45 (mod. 1211 LP) • 3.103.0047 Nozzle type 0.30 (mod. 1509 LP) • 4.618.0049 High pressure hose 8 m • Power cable 5 m

#### **Available versions:**

Code: **8.671.0005**Tucson 1509 LP **with hose reel** (10 m high pressure hose code 4.618.0053)

	Tucson 1211 LP	Tucson 1509 LP
code	8.671.0001	8.671.0002
operat. pressure/max	120/150 bar-1740/2175 psi	150/160 bar-2175/2320 psi
delivery rate	660 l/h-2.91 GPM	540 l/h-2.37 GPM
abs. power/voltage	3000W - 230V~50Hz 1 ph	3000W - 230V~50Hz 1 ph
motorpump type/RPM	MP4/1450 RPM	MP4/1450 RPM
max. water inlet temperature	40 °C	40 °C
dimension/weight	76x41x75cm/33 kg - 72,6 lbs	76x41x75cm/33 kg - 72,6 lbs

## Cold water high-pressure cleaner

coupling).

Standard equipment:

• 3.700.0030 Gun M22 - 3/8 with rotating

• 3.701.0027 Lance M22 high/low pressure

• 3.103.0052 Nozzle type 055

• 4.618.0143 High pressure hose 10 m

#### Tucson three-phase



• Power cable 5 m

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling
- Three ceramic coated pistons (Tucson 2017). Three full ceramic pistons (Tucson 1713). Brass linear pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Low voltage and delayed Total Stop
- Detergent built-in tank for indirect suction (2,8 lt.).
- Pressure regulator.
- Glicerine pressure gauge.
- Hose-reel (optional).

### Available versions:

Code: **8.671.0006** 

Tucson 1713 LP **with hose reel** (10 m high pressure hose code 4.618.0054)

Code: **8.671.0007** 

Tucson 2017 LP **with hose reel** (10 m high pressure hose code 4.618.0054)

	Tucson 1713 LP	Tucson 2017 LP
code	8.671.0003	8.671.0004
operat. pressure	170 bar-2465 psi	200 bar-2900 psi
delivery rate	780 l/h-3.43 GPM	1000 l/h-4.4 GPM
abs. power/voltage	5200W - 400V~50Hz 3 ph	7500W - 400V~50Hz 3 ph
motorpump type/RPM	MPW4/1450 RPM	MPW4/1450 RPM
max. water inlet temperature	40 °C	40 °C
dimension/weight	76x40x75cm/42 kg - 92,4 lbs	76x40x75cm/44 kg - 96,8 lbs

### Cold water high-pressure cleaner





#### Standard equipment:

• 3.700.0036 Gun M22 - 3/8 (only version 1509)



• 3.700.0030 Gun M22 - 3/8 with rotating coupling



• 3.701.0027 Lance M22 high/low pressure



- 3.103.0052 Nozzle type 055 (mod. 1713 LP
- 3.103.0047 Nozzle type 030 (mod. 1509 LP)



- 4.618.0053 High pressure hose 10 m (mod.
- 4.618.0054 High pressure hose 10 m (mod. 1713 LP 2017 LP)



• Power cable 5 m

#### **Available versions:**

Code: 8.671.0031

HNR 1509 LP without hose reel

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling (mod. 1713 LP 2017 LP)
- Three ceramic coated pistons (Hyper NR 1509/NR 2017).
- Three full ceramic pistons (Hyper NR 1713).
- Built-in by-pass valve nickel plating brass linear pump head with high temperature water seals and bushing.
- Suction and delivery S. S. valves.
- Low voltage and delayed Total Stop (mod. 1713 LP 2017 LP)
- Detergent built-in tank for indirect suction (2,8 lt.).
- Pressure regulator.
- Glicerine pressure gauge.
- Hose-reel.

	HNR 1509 LP	HNR 1713 LP	HNR 2017 LP
code	8.671.0013	8.671.0014	8.671.0015
operat. pressure	150/160 bar-2175/2320 psi	170 bar-2465 psi	200 bar-2900 psi
delivery rate	540 l/h-2.37 GPM	780 l/h-3.43 GPM	1000 l/h-4.4 GPM
abs. power/voltage	3000W - 230V~50Hz 1 ph	5200W - 400V~50Hz 3 ph	7500W - 400V~50Hz 3 ph
motorpump type/RPM	MP4 Ni/1450 RPM	MPW4 Ni/1450 RPM	MPW4 Ni/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C
dimension/weight	76x41x75cm / 33 kg - 72,6 lbs	76x40x75cm / 42 kg - 92,4 lbs	76x40x75cm / 44 kg - 96,8 lbs

#### **Tucson XL**



#### **Standard equipment:**

• 3.700.0030 Gun M22 - 3/8 with rotating coupling).



• 3.701.0027 Lance M22 high/low pressure



- 3.103.0050 Nozzle type 045 (mod. 2015 LP)
- 3.103.0055 Nozzle type 070 (mod. 2021 LP)
  3.103.0049 Nozzle type 040 (mod. 2515 LP)



• 4.618.0054 High pressure hose 10 m



• Power cable 5 m

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three full ceramic pistons, brass linear pump head with by-pass valve.
- $\bullet$  Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction (2,8 lt.).
- Pressure regulator.
- Glicerine pressure gauge.

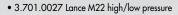
	Tucson XL 2015 LP	Tucson XL 2021 LP	Tucson XL 2515 LP
code	8.672.0001	8.672.0002	8.672.0003
operat. pressure	200 bar-2900 psi	200 bar-2900 psi	250 bar-3600 psi
delivery rate	900 l/h-3.96 GPM	1260 l/h-5.55 GPM	900 l/h-3.96 GPM
abs. power/voltage	7000W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph
pump type/RPM	MPW5/1450 RPM	MPW5/1450 RPM	MPW5/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C
dimension/weight	61x40x91cm/69 Kg - 152 lbs	61x40x91cm/70 Kg - 154 lbs	61x40x91cm/70 Kg - 154 lbs

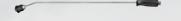
**HNR XL** 



#### **Standard equipment:**

• 3.700.0030 Gun M22 - 3/8 with rotating coupling).





- 3.103.0050 Nozzle type 045 (mod. 2015 LP)
- 3.103.0055 Nozzle type 070 (mod. 2021 LP)
  3.103.0049 Nozzle type 040 (mod. 2515 LP)



• 4.618.0054 High pressure hose 10 m



• Power cable 5 m

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three full ceramic pistons, Nickel plating brass linear pump head with high temperature water seals and bushing.
- Low voltage and delayed Total Stop.
- Suction and delivery S.S. valves.
- Detergent built-in tank for indirect suction (2,8 lt.).
- Pressure regulator.
- Glicerine pressure gauge.

	HNR XL 2015 LP	HNR XL 2021 LP	HNR XL 2515 LP
code	8.672.0008	8.672.0009	8.672.0010
operat. pressure	200 bar-2900 psi	200 bar-2900 psi	250 bar-3600 psi
delivery rate	900 l/h-3.96 GPM	1260 l/h-5.55 GPM	900 l/h-3.96 GPM
abs. power/voltage	7000W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph
motorpump type/RPM	MPW5 Ni/1450 RPM	MPW5 Ni/1450 RPM	MPW5 Ni/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C
dimension/weight	61x40x91cm / 69 Kg - 152 lbs	61x40x91cm / 70 Kg - 154 lbs	61x40x91cm / 70 Kg - 154 lbs

#### Cold water high-pressure death

#### **Columbia-R**



#### **Standard equipment:**

• 3.700.0036 Gun M22 - 3/8" (mod 1211 LP).



• 3.700.0030 Gun M22 - 3/8" with rotating coupling (mod. 1515 LP/2015 LP).



• 3.701.0027 Lance M22 high/low pressure



- 3.103.0050 Nozzle type 045 (mod. 1211 LP/2015 LP)
- 3.103.0053 Nozzle type 060 (mod. 1515 LP)



- 4.618.0049 High pressure hose 8 m (mod. 1211 LP)
- 4.618.0143 High pressure hose 10 m (mod. 1515 LP/2015 LP).



- Power cable 5 m (mod. 1211 LP)
- Power cable 6 m (mod. 1515 LP 2015 LP)

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling (three phase models).
- Three ceramic coated pistons (1 ph), full ceramic pistons (3 ph), brass linear pump head with built-in by-pass valve.
- Low voltage and delayed Total Stop (three phase model).
- Suction and delivery S. S. valves.
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Glicerine pressure gauge.
- Hose reel (optional).
- Accessory holder.
- Power cable holder.
- Steel frame.
- Steel cover.



	Columbia R 1211 LP	Columbia R 1515 LP	Columbia R 2015 LP
code	8.654.1071	8.654.1073	8.654.1072
operat. pressure/max	120/150 bar-1740/2175 psi	150 bar-2175 psi	200 bar-2900 psi
delivery rate	660 l/h-2.91 GPM	900 l/h-3.96 GPM	900 l/h-3.96 GPM
abs. power/voltage	3000W - 230V~50Hz 1 ph	5000W - 400V~50Hz 3 ph	7000W - 400V~50Hz 3 ph
motorpump type/RPM	MP4/1450 RPM	MPW4/1450 RPM	MPW4/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C
dimension/weight	50x90x83cm/37 kg - 81 lbs	50x90x83cm/49 Kg - 108 lbs	50x90x83cm/51 Kg - 112 lbs





# • 3.700.0036 Gun M22 - 3/8" (mod 1211 LP). • 3.700.0036 Gun M22 - 3/8" with rotating coupling (mod. 1515 LP/2015 LP/2021 LP/2515 LP). • 3.701.0027 Lance M22 high/low pressure • 3.103.0050 Nozzle type 045 (mod. 1211 LP /2015 LP) • 3.103.0053 Nozzle type 060 (mod. 1515 LP) • 3.103.0055 Nozzle type 070 (mod. 2021 LP) • 3.103.0049 Nozzle type 040 (mod. 2515 LP) • 4.618.0143 High pressure hose 10 m



best pump coupling (except

model 1211).

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three ceramic pistons, Nickel plating brass linear pump head with high temperature water seals and bushing.
- Integrated elastic joint, for best pump coupling (except model 1211).
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Glicerine pressure gauge.
- Hose reel (optional).
- Steel frame.
- Stainless Steel covers.



	HCR 1211 LP	HCR 1515 LP	HCR 2015 LP	HCR 2021 LP	HCR 2515 LP
code	8.654.0086	8.654.0087	8.654.0088	8.654.0089	8.654.0123
operat. pressure	125 bar-1812 psi	150 bar-2175 psi	200 bar-2900 psi	200 bar-2900 psi	250 bar-3600 psi
delivery rate	660 l/h-2.91GPM	900 l/h-3.96 GPM	900 l/h-3.96 GPM	1260 l/h-5.55 GPM	900 l/h-3.96 GPM
abs. power/voltage	3000W - 230V~50Hz 1ph	5000W - 400V~50Hz 3ph	7000W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph	8500W - 400V~50Hz 3ph
motorpump type/RPM	MPW5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C	40 °C	40 °C
dimension/weight	50x90x83cm / 42 Kg - 92 lbs	50x90x83cm / 54 Kg -119 lbs	50x90x83cm / 56 Kg - 123 lbs	50x90x83cm / 58 Kg - 128 lbs	50x90x83cm / 59 kg - 130 lbs

## LAVOR Cold water high-pressure cleaner with foam device



- 4 poles electrical motor (1450 RPM) with thermal protection
- Pump with Nickel plated brass head with three ceramic pistons, by-pass valve, high temperature resistant seals
- Total Stop and water cooling (three phase models)
- Suction and delivery stainless steel valves
- Pressure regulator.
- Glicerine pressure gauge
- Galvanized steel frame
- Stainless steel cover
- Provided with compressed air connection regulator and pressure gauge perform dense foam cleaning
- By using the detergent lance with 8 meters hose it will be produced a dense foam that will remain attached to the parts to be cleaned, giving more effectiveness to the detergent's action.





 Integrated elastic joint, for best pump coupling (only version 2015)





	Columbia R Foam 1211 LP	Columbia R Foam 2015 LP
code	8.654.1097	8.654.0111
operat. pressure	120 bar-1740 psi	200 bar-2900 psi
delivery rate	660 l/h-2.91 GPM	900 l/h-3.96 GPM
abs. power/voltage	3000 W - 230V~50Hz 1ph	7000W - 400V~50Hz 3ph
motorpump type/RPM	MP4 Ni/1450 RPM	MPWJ5 Ni/1450 RPM
detergent pump	2 x 15 bar - 48 W	2 x 15 bar - 48 W
Dimension/weight	50x90x83cm / 42 Kg - 92 lbs	50x90x83cm / 56 Kg - 123 lbs











Total Stop

Models: 1211 LP





Models: 1515 LP/2015 LP 2021 LP

#### Equipped with:

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling (three phase models).
- Three ceramic coated pistons (1 ph), full ceramic pistons (3 ph), brass linear pump head with built-in by-pass valve.
- Integrated elastic joint, for best pump coupling (three phase models).
- Low voltage and delayed Total Stop (three phase models).
- Suction and delivery S. S. valves.
- Detergent built-in tank for indirect suction.
- Pressure regulator. Glicerine pressure gauge.
- Pressure accumulator (only model 2021).
- Wall mount support (optional code 6.608.0030).
- Galvanized steel frame.
- Plastic covers models MCHPV.



#### Optional: Recommended accessories:

• 6.605.0213 **For food industry**: 3.700.0022 Gun + 3.701.0020 S.S lance + 4.618.0058 10mt Hose AP food + 3.100.0042 Hose adapter + 3.100.0043 Hose adapter/Gun





• 6.605.0214 **For industry**: 3.700.0030 Gun + 3.701.0015 lance + 4.618.0143 10mt Hose AP + 3.100.0042 Hose adapter



- 3.103.0148 Nozzle 045 (mod. 1211 LP)
- 3.103.0150 Nozzle 060 (mod. 1515 LP)
- 3.103.0148 Nozzle 045 (mod. 2015 LP)
- 3.103.0175 Nozzle 075 (mod. 2021 LP)



• 6.608.0030 - Brackets for wall mounting

#### Available:

**8.626.0037** - MCHPX 1211 LP with stainless steel frame and fairings **8.626.0038** - MCHPX 2015 LP with stainless steel frame and fairings



	MCHPV 1211 LP	MCHPV 1515 LP	MCHPV 2015 LP	MCHPV 2021 LP
code	8.626.0001	8.626.0002	8.626.0003	8.626.0004
operat. pressure/max	120 bar-1740 psi	150 bar-2175 psi	200 bar-2900 psi	200 bar-2900 psi
delivery rate	660 l/h-2.91GPM	900 l/h-3.96 GPM	900 l/h-3.96 GPM	1260 l/h-5.55 GPM
abs. power/voltage	3000W - 230V~50Hz 1ph	5000W - 400V~50Hz 3ph	7000W - 400V~50Hz 3ph	9400W - 400V~50Hz 3ph
motorpump type/RPM	MP4/1450 RPM	MPWJ5/1450 RPM	MPWJ5/1450 RPM	MPWJ5/1450 RPM
max. water inlet temperature	40 °C	40 °C	40 °C	40 °C
dimension/weight	75x50x35cm/ 42 Kg - 92 lbs	75x50x35cm/ 43 Ka - 95 lbs	75x50x35cm/ 46 Kg - 101 lbs	75x50x35cm/ 58 Ka - 128 lbs

#### Indo E



- Motor 12-15 hp
- Heavy duty structure with stainless steel covers
- High filtering capacity cartridge suction brass filter
- TW Triplex Premium pumps
- Pressure gauge with stainless steel casing
- Hot water seals 4-poles (1400 rpm) motor well oversized and protected with paint. Ø 300 wheels with brake
- Highly professional unloader valve with external bypass
- Motor-pump with flexible joint
- Timed Total Stop
- Low voltage control panel
- Contactor
- Thermal relay motor protection
- Hose reel with 20 mt hose can be mounted on request (cod. 0.966.0033 mod. 2521/cod. 0.966.0034 mod. 3518)
- Practical and safe housing accessories

#### On request 60Hz version

	Indo 2521 E LP	Indo 3518 E LP
code	0.066.0006	0.066.0007
operat. pressure	250 bar-3626 psi	350 bar-5076 psi
delivery rate	1260 l/h-5.55 GPM	1080 l/h-4.75 GPM
abs. power/voltage	10000W - 415 V~50 Hz 3 ph	12000W - 415 V~50 Hz 3 ph
RPM	1400 RPM	1400 RPM
max. water inlet temperature	80 °C	80 ℃
dimension/weight	126x74x98cm/125 Kg - 275,5 lbs	126x74x98cm/130 Kg - 286,5 lbs

#### Standard equipment:

- 0.966.0003 Gun ML 955 M22 with quick coupling (mod. 2521)
- 0.966.0004 Gun ML 955 M24 with quick coupling (mod. 3518)



- 0.966.0007 lance SF40 mecline M22 (mod.2521)
- 0.966.0008 lance SF40 mecline M24 (mod.3518)
- 0.966.0037 Nozzle type 040 (mod. 3518 LP)
- 0.966.0036 Nozzle type 055 (mod. 2521 LP)



- 0.966.0011 High pressure hose10 m (mod.2521)
- 0.966.0012 High pressure hose10 m (mod.3518)



• Power cable 5 m

#### **Optional:**

Rotox lance

- cod. 0.966.0014 (mod. 2521)
- cod. 0.966.0015 (mod. 3518)

Pipe cleaning hose 25 m.

- cod. 0.966.0020 (mod. 2521)
- cod. 0.966.0021 (mod.3518)

Extension hose 10 m.

- cod. 0.966.0024 (mod. 2521)
- cod. 0.966.0025 (mod. 3518)

Sand-blasting lance 500 bar

- cod. 0.966.0028 (mod. 2521)
- cod. 0.966.0029 (mod. 3518)



#### Lena E



- Sturdy frame painted with anti-corrosive treatment
- Stainless steel cover panels
- Handy lance and gun storage
- High filtering capacity cartridge suction filter
- Ø 300 industrial wheels with brake
- Electric motor (1400 rpm) 20,25 and 30 HP
- Comet TW 500 Premium pumps
- Motor-pump coupling by means of a flexible joint
- Automatic unloader valve with external bypass and gradual pressure restoring (on 5018 and 5021 models)
- Overheating thermostatic valve
- Low voltage (24V) start-up panel (star-delta)
- Remote switch and motor cut-out with thermal relay
- Emergency stop button
- Hour counter
- Hose reel with 20 mt hose can be mounted on request (cod. 0.966.0035)

#### On request 60Hz version

	Lena 5015 E LP	Lena 5018 E LP	Lena 5021 E LP
code	0.066.0008	0.066.0009	0.066.0010
operat. pressure	500 bar-7252 psi	500 bar-7252 psi	500 bar-7252 psi
delivery rate	900 l/h-3.96 GPM	1080 l/h-4.75 GPM	1260 l/h-5.55 GPM
abs. power/voltage	15000W - 380/415V~50Hz 3 ph	18500W - 380/415V~50Hz 3 ph	23000W - 380/415V~50Hz 3 ph
RPM	1400 RPM	1400 RPM	1400 RPM
max. water inlet temperature	60 °C	60 °C	60 °C
dimension/weight	118,5x74x100 cm/205 Kg - 452 lbs	118,5x74x100 cm/260 Kg - 573 lbs	118,5x74x100 cm/285 Kg - 628 lbs

#### Standard equipment:

• 0.966.0005 Gun ML 960 with quick coupling M24-M24 (mod.5015/5018)

• 0.966.0006 Gun ML 710 with quick coupling M24-M24 (mod.5021)

• 0.966.0009 S/S Lance 500 bar L50 (mod.5015/5018)

• 0.966.0010 S/S Lance 500 bar L70 (mod.5021)



- 0.966.0038 Nozzle type 028 (mod. 5015)
- 0.966.0039 Nozzle type 035 (mod. 5018)
- 0.966.0040 Nozzle type 040 (mod. 5021)



• 0.966.0013 High pressure hose 10 m



• Power cable 5 m

#### Optional:

Rotox lance

- cod. 0.966.0016 (mod. 5015)
- cod. 0.966.0017 (mod. 5018)
- cod. 0.966.0018 (mod. 5021)

Pipe cleaning hose 25 m.

- cod. 0.966.0022 (mod. 5015)
- cod. 0.966.0023 (mod. 5018/5021)

Extension hose 20 m.

• cod. 0.966.0026

Sand-blasting lance 500 bar

- cod. 0.966.0030 (mod. 5015)
- cod. 0.966.0031 (mod. 5018/5021)



### Cold water high-pressure cleaner Heritage line



#### Standard equipment:

• 3.700.0036 Gun M22 - 3/8"



• 3.701.0027 Lance M22 high/low pressure



• 3.103.0048 Nozzle type 035



• 4.618.0049 High pressure hose 8 m



#### **Optional:**

- 6.608.0007 High-pressure hose reel (hose not included)
- 5.012.0319 Suction hose with check valve



- Three ceramic coated pistons, brass axial pump head with built-in by-pass valve.
- Suction and delivery S. S. valves. 5 HP **Honda** GP 160 unleaded gasoline engine.
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Glicerine pressure gauge.
- Hose reel (optional).
- Suction hose with check valve (optional).
- Steel frame.
- Hose holder.
- 3,1 I gasoline tank.

	Thermic 5H
code	8.601.0107
operat. pressure	160 bar-2320 psi
delivery rate	570 l/h-2.51 GPM
engine type/hp	Honda GP 160/5
pump type/RPM	TPBH4/3000 RPM
max. water inlet temp.	40 °C
dimension/weight	70x59x97cm/37 Kg - 81 lbs

#### SHOPES STURY OF STREET

Cold water high-pressure cleaner with combustion engine







- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve.
- Suction and delivery S/S valves.
- 6.5 HP unleaded gasoline engine.
- Integrated detergent suction with external suction probe.
- Glicerine pressure gauge.
- Hose-reel (optional).
- Suction hose with check valve (optional).
- Steel frame.
- Hose holder.
- Nozzles holder.
- 3,1 I gasoline tank.

#### Optional:

- cod. 6.608.0007 High-pressure hose-reel (hose not included)
- Suction hose with check valve 5.012.0319



	Thermic 6,5
code	8.601.0175C
operat. pressure max	180 bar - 2610 PSI
delivery rate	690 l/h - 2.77 GPM
engine type/hp	Lavor/6,5
pump type/RPM	MP4/3600 RPM
max. temp. inlet/oulet	40 °C
dimension/weight	47 x 57 x 57(h) cm/38,5 Kg - 84.9 lbs

LAVOR Cold water high-pressure cleaner with combustion engine

#### Thermic 9 L









#### **Equipped with:**

- Three ceramic coated pistons, brass linear pump head with built-in by-pass valve
- Suction and delivery S/S valves
- 9 HP unleaded gasoline engine.
- By-pass with safety valve.
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Suction hose with check valve (optional).
- Hose holder.
- Nozzles holder.
- 4 l gasoline tank.

#### **Optional:**

• 5.012.0319 Suction hose with check valve



	Thermic 9 L
code	8.601.0188C
operat. pressure/max	220/250 bar - 3190/3625 psi
delivery rate	900 l/h - 3.96 GPM
engine type/hp	Lavor/9
pump type/RPM	TPBH5/3400 RPM
max. water inlet temp.	40 °C
dimension/weight	50x67x 103 cm/45 Kg - 101 lbs



#### Thermic 10 D







#### Equipped with:

- Three ceramic pistons, brass linear pump head with built-in by-pass valve.
- 1450 RPM reducer between engine and pump.
- By-pass with safety valve.
- Automatic RPM regulation.
- Electrical start with engine functions control.
- Lombardini diesel engine 15LD400 (air cooled).
- Integrated detergent suction with external suction probe. Pressure regulator.
- Glicerine pressure gauge.
- Suction hose with check valve (optional).
- Heavy duty steel frame.
- Battery included.
- 30 lt. Diesel tank.

## • 3.700.0030 Gun M22 - 3/8" with rotating coupling. • 3.701.0027 Lance M22 high/low pressure. • 3.103.0053 Nozzle type 060 • 4.618.0143 High pressure hose 10 m

#### **Optional:**

• 5.012.0319 Suction hose with check valve



	Thermic 10 D
code	8.601.0111
operat. pressure	180 bar-2465 psi
delivery rate	1020 l/h-4.49 GPM
engine type/hp	Lombardini 15LD400/10
pump type/RPM	CL5/1450 RPM
max. water inlet temp.	40 ℃
dimension/weight	100x66x92cm / 82 Kg - 180 lbs

#### Thermic 11 H Thermic 13 H

#### **POWERED** by HONDA



- 1450 RPM reducer between engine and pump.
- Automatic RPM regulation.
- By-pass with safety valve.
- Suction and delivery S. S. valves.
- Unleaded gasoline engine 11 HP **Honda** GX 340. (Thermic 11 H)
- Unleaded gasoline engine 13 HP **Honda** GX 390. (Thermic 13 H)
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Glicerine pressure gauge.
- Heavy duty steel frame.
- 6,5 I gasoline tank.
- Suction hose with check valve (**optional** cod. 5.012.0319).

## Standard equipment: • 3.700.0030 Gun M22 - 3/8 with rotating coupling. • 3.701.0027 Lance M22 high/low pressure • 3.103.0054 Nozzle type 065 (Thermic 11 H) • 3.103.0051 Nozzle type 050 (Thermic 13 H) • 4.618.0143 High pressure hose 10 m

#### **Optional:**

- Protective frame with lifting hooking (optional cod. 5.613.0145).
- Hose reel optional cod. 6.608.0060 (hose not included) in combination with protective frame.



	Thermic 11 H	Thermic 13 H
code	8.601.0115	8.601.0133
operat. pressure	200 bar-2900 psi	250 bar-3625 psi
delivery rate	1080 l/h-4.76 GPM	1080 l/h-4.76 GPM
engine type/hp	Honda GX 340/11	Honda GX 390/13
pump type/RPM	CL5/1450 RPM	CL5/1450 RPM
max. water inlet temp.	40 °C	40 °C
dimension/weight	100x66x92cm / 61 Kg - 134 lbs	100x66x92cm / 61 Kg - 134 lbs



## Thermic 11 HF Thermic 13 HF





- Three ceramic pistons, brass linear pump head.
- 1450 RPM reducer between engine and pump.
- Automatic RPM regulation.
- By-pass with safety valve.
- Suction and delivery S. S. valves.
- Unleaded gasoline engine 11 HP Honda GX 340. (Thermic 11 HF)
- Unleaded gasoline engine 13 HP Honda GX 390. (Thermic 13 HF)
- Integrated detergent suction with external suction probe.
- Pressure regulator.
- Glicerine pressure gauge.
- Heavy duty steel frame.
- 6,5 l gasoline tank.
- Suction hose with check valve (optional cod. 5.012.0319).

#### Standard equipment:

• 3.700.0030 Gun M22 - 3/8 with rotating coupling.



• 3.701.0027 Lance M22 high/low pressure



• 6.602.0040 Turbo lance M22 (only mod. 13 HF)



- 3.103.0054 Nozzle type 065 (Thermic 11 H)
- 3.103.0051 Nozzle type 050 (Thermic 13 H)



• 4.618.0143 High pressure hose 10 m



#### **Optional:**

• Hose reel optional cod. 6.608.0060 (hose not included) in combination with protective frame.



	Thermic 11 HF	Thermic 13 HF
code	8.601.0193	8.601.0194
operat. pressure	200 bar-2900 psi	250 bar-3625 psi
delivery rate	1080 l/h-4.76 GPM	1080 l/h-4.76 GPM
engine type/hp	Honda GX 340/11	Honda GX 390/13
pump type/RPM	CL5/1450 RPM	CL5/1450 RPM
max. water inlet temp.	40 °C	40 °C
dimension/weight	100x66x92cm / 65 Kg - 143 lbs	100x66x92cm / 65 Kg - 143 lbs

#### **POWERED** by HONDA

#### Thermic 22 H



- Comet TW Premium, TW 500 bar Premium pumps with brass pump head and ceramic pistons
- Honda engine GX 690
- Gearbox (with 1560 rpm pump)
- Electrical starting
- Ø 300 industrial wheels with brake
- No engine-oil safety device (oil-alert)
- Hour counter
- Automatic decelerator to reduce the number of revs in the bypass phase
- Stainless steel gradual pressure restoration valve with EASY-START
- Thermostatic valve
- Water filter, readily serviceable cartridge type
- Water suction from external tank option (self priming pumps)
- Hose reel with 20 mt hose can be mounted on request (cod. 0.966.0035)

## Standard equipment: • 0.966.0006 Gun ML 710 with quick coupling • 0.966.0010 S/S Lance 500 bar L70 M24 • 0.966.0041 Nozzle 050 - (mod. 3521) • 0.966.0040 Nozzle 040 - (mod. 4018) • 0.966.0038 Nozzle 028 - (mod. 5015) • 0.966.0013 High pressure hose 10 m

#### **Optional:**

#### Rotox lance

- cod. 0.966.0019 (mod.3521)
- cod. 0.966.0018 (mod.4018)
- cod. 0.966.0016 (mod.5015)

#### Pipe cleaning hose 25 m.

- cod. 0.966.0023 (mod.3521/4018)
- cod. 0.966.0022 (mod.5015)

#### Extension hose 20 m.

- cod. 0.966.0027 (mod.3521)
- cod. 0.966.0026 (mod.4018/5015)

#### Sand-blasting lance 500 bar

- cod. 0.966.0032 (mod.3521)
- cod. 0.966.0031 (mod.4018)
- cod. 0.966.0030 (mod.5015)

	Thermic 22 3521 H	Thermic 22 4018 H	Thermic 22 5015 H
code	0.066.0011	0.066.0012	0.066.0013
operat. pressure	350 bar-5076 psi	400 bar-5801 psi	500 bar-7252 psi
delivery rate	1260 l/h-5.55 GPM	1080 l/h-4.75 GPM	900 l/h-3.96 GPM
engine type/hp	Honda GX 690/22	Honda GX 690/22	Honda GX 690/22
pump type/RPM	TW 500/1560 RPM	TW 500/1560 RPM	TW 500/1560 RPM
max. water inlet temp.	60 °C	60 °C	60 °C
dimension/weight	118,5x74x102cm/180 Kg-397 lbs	118,5x74x102cm/180 Kg-397 lbs	118,5x74x102cm/180 Kg-397 lbs



#### Thermic 23 K

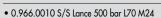
Powered by **KOHLER** 



- Comet TW Premium, TW 500 bar Premium pumps with brass pump head and ceramic pistons
- Kohler engine 12KD477/2
- Gearbox (with 1560 rpm pump)
- Electrical starting
- No engine-oil safety device (oil-alert)
- Automatic decelerator to reduce the number of revs in the bypass phase
- Stainless steel gradual pressure restoration valve with EASY-START
- Thermostatic valve
- Water filter, readily serviceable cartridge type
- Water suction from external tank option (self priming pumps)
- Ø 300 industrial wheels
- Hose reel with 20 mt hose can be mounted on request (cod. 0.966.0035)

#### **Standard equipment:**

• 0.966.0006 Gun ML 710 with quick coupling M24-M24





- 0.966.0041 Nozzle 050 (mod. 3521)
- 0.966.0040 Nozzle 040 (mod. 4018)
- 0.966.0038 Nozzle 028 (mod. 5015)



• 0.966.0013 High pressure hose 10 m



#### **Optional:**

#### Rotox lance

- cod. 0.966.0019 (mod.3521)
- cod. 0.966.0018 (mod.4018)
- cod. 0.966.0016 (mod.5015)

#### Pipe cleaning hose 25 m.

- cod. 0.966.0023 (mod.3521/4018)
- cod. 0.966.0022 (mod.5015)

#### Extension hose 20 m.

- cod. 0.966.0027 (mod.3521)
- cod. 0.966.0026 (mod.4018/5015)

#### Sand-blasting lance 500 bar

- cod. 0.966.0032 (mod.3521)
- cod. 0.966.0031 (mod.4018)
- cod. 0.966.0030 (mod.5015)

	Thermic 23 3521 K	Thermic 23 4018 K	Thermic 23 5015 K
code	0.066.0016	0.066.0015	0.066.0014
operat. pressure	350 bar-5076 psi	400 bar-5801 psi	500 bar-7252 psi
delivery rate	1260 l/h-5.55 GPM	1080 l/h-4.75 GPM	900 l/h-3.96 GPM
engine type/hp	Kohler 12KD477/2 Diesel/23	Kohler 12KD477/2 Diesel/23	Kohler 12KD477/2 Diesel/23
pump type/RPM	TW 500/1560 RPM	TW 500/1560 RPM	TW 500/1560 RPM
max. water inlet temp.	60 °C	60 °C	60 °C
dimension/weight	118,5x74x102cm/235 Kg-518 lbs	118,5x74x102cm/235 Kg-518 lbs	118,5x74x102cm/235 Kg-518 lbs

The hot water high-pressure cleaner is the best tool for tough or non water-soluble dirt removal.

Suitable for different uses and ideal in several sectors like agriculture, food industry and primary and secondary building.

**Excellent for machines** washing like: tools, engines, farm tractors and means of transport (oily dirt); removal or animal and vegetable residuals (stables and food industry), washing of heavy building equipments (cement mixers, cranes, earthmoving equipments etc.). In the food industry has a perfect hygienising effect.

#### Why a hot water high-pressure cleaner?

It is necessary the use of a hot water high-pressure cleaner whenever it is necessary to degrease oily or particularly tough dirt in the shortest time possible. Washing efficiency of hot water is much higher that the cold water one (up to 50% higher on some kind of dirt), because heat assists dirt degrease. Heat effect on the surface produce also fast drying. With the use of a hot water high-pressure cleaner it is possible to have: shorter washing time (under the same kind of dirt), better degrease of non watersoluble dirt, shorter drying time and less quantity of chemical product used: in few words, lower cleaning fixed costs and water saving.

#### The boiler

It is a diesel fuel heater that raises water temperature coming out of the pump; the difference between inlet and outlet water temperature is technically indicated like DeltaT.

Boiler dimensions, in other words coil and diesel fuel consumption, determine the thermal power of the burner.

Under the same conditions, increasing the delivery rate (quantity of water to be heated) the Delta T decreases proportionally. It is easy to understand why high pressure cleaners with higher delivery rates have more powerful burners: to grant the best operating temperature in each working condition. All our boilers have very high thermal efficiency, near 90% or higher. This means very low operating cost with reference to diesel fuel consumption.



#### What changes among high-pressure cleaners with similar performances?

It is necessary to consider besides pressure and delivery rate also the standard equipment (dimensions and type), optional functions (antiscale, total stop, etc.) and the manufacturing specifications (type of materials and applied technology). Nevertheless the most important aspect is the resistance to wear and tear and to continuous use, that raises progressively with the increase of manufacturing components specifications or moving up from a model to the next class one.

Linear pump:

The movement of the (3) pistons CRANKSHAFT occur through a system of connecting rods and crankshaft. The longitudinal axle of the pistons (placed at the same level or linear) is perpendicular to the motor rotation axle. It is more versatile to bear high delivery rates (from 21 l/ min) and it has a better self priming.

Water cooled motor:

Water flows through the S. S. coil around the motor, this allows a better thermal exchange (and so a cooling) than air also in those countries where inlet water could reaches 60°C. This allows a drop in operating temperature of the motor and pump mechanical elements, granting a better reliability and longer life.

Total Stop:

Releasing the gun trigger the pump stops automatically avoiding element damages during the by-pass phase. Pulling the trigger, the high-pressure cleaner starts automatically. Max pump protection.

## Total Stop:

WATER

**5** • Low voltage and delayed

To avoid quick and multiple start and shut down of the motor/pump group whenever the gun trigger is pulled and released, this disposal delays of about 15 seconds the machine shut down. Prevention, energy saving, top safety and pump longer life.

**50** • Low voltage and delayed Total Stop with intelligent shut

down: To avoid quick and multiple start and shut down of the motor/pump group whenever the gun trigger is pulled and released, this disposal delays of about 15 seconds the machine shut down. In case the machine is unused for more than 20 minutes or there are leakages in the pressure circuit, the machine shuts down automatically and completely: control panel power cut-off. Prevention, energy saving, top safety and pump longer life.

Motor low rotation speed:

The electric motor transfers the same number of revolutions to the pump. With a 4 poles motor there is a lower rotation speed of the components (1400 RPM in case of 50Hz or 1750 RPM in case of 60 Hz) granting longer pump life. Extending lifetime solution.



• Pressure accumulator:

The release of the gun trigger produces a strong counterstroke in the pump.

This device amortizes this power with great benefit for the pump components and for the user, because it removes all the vibrations.



## ROFESSIONAL

Hot water high-pressure cleaner















Vulcano

Mississippi R

Dakota R

NPX

Texas R

HSR

LKX

			operating pressure (max pressure)	operating pressure (max pressure)	delivery rate	delivery rate	absorbed power	иди	voltage	outlet temp.	fuel consumption	diesel tank	antiscale tank	heat output	packaging	packaging weight
Code	Model	pag	bar	psi	l/h	GPM usa	W	RPM	٧	°C	l/h - gal/h	l - gal	l - gal	kW	cm	Kg - lbs
8.699.0015	VULCANO 74	42	-	-	-	-	300	-	230~50	max 140°	5,6 - 1.5	18 - 4.8	-	74	113x71x111	103.6 - 228
8.625.0101	MISSISSIPPI R 1310 XP	43	30÷130	435÷1885	330÷600	1.45÷2,64	3000	2800	230~50	max 90°	2,83 - 0.75	14 - 3.7	•	38	65x85x100	71.5 - 157
8.633.0107	DAKOTA R 1509 XP	44	30÷120	435÷1740	330÷540	1.45÷2.91	3200	2800	230~50	max 140°	4,72 - 1.25	18 - 4.8	•	58	69x85x111	94 - 207
8.633.0108	DAKOTA R 2007 XP	44	30÷150	435÷2175	330÷420	1.45÷2.91	4000	2800	400~50	max 140°	4,72 - 1.25	18 - 4.8	-	58	69x85x111	97 - 213
8.633.0109	DAKOTA R 1713 XP	44	30÷170	435÷2465	400÷780	1.76÷3.43	4700	2800	400~50	max 140°	3,7 - 0.97	16 - 4.2	-	58	69x85x111	95 - 209
8.620.0601	NPX 1211 XP	45	30÷120	435÷1740	330÷660	1.45÷2.91	3200	2800	230~50	max 140°	4,72 - 1.25	18 - 4.8	-	58	71x113x111	118 - 260
8.620.0617	NPX 1813 XP	45	30÷180	435÷2610	400÷780	1.76÷3.43	6300	2800	400~50	max 140°	4,72 - 1.25	18 - 4.8	-	58	71x113x111	117.5 - 259
8.630.0101	TEXAS R 1211	46	30÷120	435÷1740	330÷660	1.45÷2.91	3000	1450	230~50	max 140°	3,8 - 1.0	16 - 4.2	-	58	69x85x111	104 - 229
8.630.0102	TEXAS R 1509	46	30÷150	435÷2175	330÷540	1.45÷2.40	3000	1450	400~50	max 140°	3,8 - 1.0	16 - 4.2	-	58	69x85x111	104 - 229
8.630.0103	TEXAS R 1611	46	30÷170	435÷2465	400÷660	1.76÷2.91	4300	1450	400~50	max 140°	3,8 - 1.0	16 - 4.2	-	58	69x85x111	104 - 229
8.630.0107	HSR 1509 LP	49	30÷150	435-2175	345÷540	1.52-2.40	3000	1450	230~50	max 140°	3,78 - 0,99	14 - 3.7	-	42	85x69x111	120 - 264
8.621.2947	LKX 1310 LP	47	30÷110	435÷1595	330÷660	1.45÷2.91	3000	1450	230~50	max 140°	4,72 - 1,25	18 - 4.8	-	58	113x71x111	130.5 - 287
8.621.2934	LKX 1515 LP	47	30÷150	435÷2175	450÷900	1.98÷3.96	5500	1450	400~50	max 140°	5,6 - 1.5	18 - 4.8	-	74	113x71x111	143.4 - 316
8.621.2935	LKX 2015 LP	47	30÷200	435÷2900	450÷900	1.98÷3.96	7300	1450	400~50	max 140°	5,6 - 1.5	18 - 4.8	•	74	113x71x111	146 - 322
8.621.3001	HLR 1211 LP	50	30÷110	435-1595	345÷660	1.52-2.91	3000	1450	230~50	max 140°	4,72 - 1,25	18 - 4.8	•	58	113x71x111	127 - 279
8.621.3002	HLR 1510 LP	50	30÷150	435-2175	345÷600	1.52-2.64	3000	1450	230~50	max 140°	4,72 - 1,25	18 - 4.8	-	58	113x71x111	127 - 279





# Hot water high-pressure cleaner





HTR







HLR Tekna

Thermic 10 HW

Thermic 17 HW

			operating pressure (max pressure)	operating pressure (max pressure)	delivery rate	delivery rate	absorbed power	шді	voltage	outlet temp.	fuel consumption	diesel tank	antiscale tank	heat output	packaging	packaging weight
Code	Model	pag	bar	psi	l/h	GPM usa	W	RPM	V	°C	l/h - gal/h	l - gal	l - gal	kW	cm	Kg - lbs
8.621.3003	HLR 1614 LP	51	30÷160	435-2320	345÷840	1.52-3.70	4200	1450	400~50	max 140°	4,72	18 - 4,7	-	58	113x71x111	148,5 - 327
8.621.1004	HLR 1515 LP	51	30÷150	435-2175	345÷900	1.523.96	5500	1450	400~50	max 140°	5,6 - 1.5	18 - 4,7	-	74	113x71x111	148,5 - 327
8.621.1005	HLR 2015 LP	51	30÷200	435-2900	450÷900	1.98-3.96	7300	1450	400~50	max 140°	5,6 - 1.5	18 - 4,7	-	74	113x71x111	148,5 - 327
8.621.1006	HLR 2021 LP	51	30÷200	435-2900	630÷1260	2.77-5.55	9700	1450	400~50	max 140°	5,6 - 1.5	18 - 4,7	-	74	113x71x111	148,5 - 327
8.622.0901	TEKNA 1515 LP	48	30÷150	435÷2175	450÷900	1.98÷3.96	5500	1450	400~50	max 140°	4,72 - 1.25	22 - 5.8	2,4 - 0.6	58	130x78x111	161 - 355
8.622.0902	TEKNA 2015 LP	48	30÷200	435÷2900	450÷900	1.98÷3.96	7300	1450	400~50	max 140°	4,72 - 1.25	22 - 5.8	2,4 - 0.6	58	130x78x111	172 - 379
8.622.0921	TEKNA 2021 LP	48	30÷200	435÷2900	630÷1260	2.77÷5.55	9700	1450	400~50	max 140°	6,6 - 1,75	22 - 5.8	2,4 - 0.6	88	130x78x111	180 - 396
8.623.0939	HTR 2015 LP	52	30÷200	435-2900	450÷900	1.98-3.96	7300	1450	400~50	max 140°	6,6 - 1,75	22 - 5,8	2.4	88	130x78x111	187 - 412
8.623.0940	HTR 2021 LP	52	30÷200	435-2900	630÷1260	2.77-5.55	9700	1450	400~50	max 140°	6,6 - 1,75	22 - 5,8	2.4	88	130x78x111	181,5 - 400
8.623.0951	HTR 2515 LP	52	30÷250	435-3600	450÷900	1.98-3.96	8700	1450	400~50	max 140°	6,6 - 1,75	22 - 5,8	2.4	88	130x78x111	187 - 412
8.624.0601	HHPV 1211 LP	53	30÷120	435÷1740	345÷660	1.52÷2.91	3000	1450	230 - 50	max 140°	4,72 - 1.25	20 - 5.3	-	58	80x120x185	199 - 438
8.624.0603	HHPV 2015 LP	53	30÷200	435÷2900	450÷900	1.98÷3.96	7300	1450	400 - 50	max 140°	4,72 - 1.25	20 - 5.3	-	58	80x120x185	199 - 438
8.624.0604	HHPV 2021 LP	53	30÷200	435÷2900	630÷1260	2.77÷5.55	9700	1450	400 - 50	max 140°	4,72 - 1.25	20 - 5.3	-	58	80x120x185	210 - 463
8.601.0099	THERMIC 10 HW	54	30÷170	435÷2465	1020	4,49	10hp	1700	-	max 140°	4,72 - 1.25	30 - 7.9	-	58	120x80x107	160 - 352
8.601.0052	THERMIC 17 HW	55	30÷200	435÷2900	1320	5,82	17hp	1700	-	max 140°	5,6 - 1.5	40 - 10.5	-	74	120x85x112	355 - 781





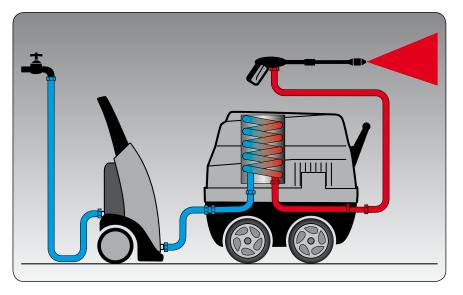
#### Vulcano 74



#### **Equipped with:**

Boiler feeding: Diesel High thermal efficiency vertical burner.

- Shock-resistant self-bearing frame.
- 4 big wheels for easy move.
- Gasoil tank high capacity ensuring longer working.
- Quick couplings supplied with the machine.
- Diesel tank capacity 18 l.
- High pressure hose 3/8" Ø 5/16" 10 m, to connect any cold high pressure cleaner to Vulcano **(optional)**.



#### **Optional:**

 $4.618.0012\,$  high presssure hose  $3/8''\,$ ø  $5/16''\,$ 10m, to connect any cold high pressure cleaner to the Vulcano.



	Vulcano 74
code	8.699.0015
operat. pressure allowed max.	200 bar-2900 psi
delivery rate allowed max.	1260 l/h-5.55 GPM
abs. power/voltage	300W/230V~50Hz 1 ph
max. temp. outlet	140 °C
heat output	74 kW
dimension/weight	94x65x90cm/44 Kg - 88 lbs

## Mississippi-R



# • 3.700.0036 Gun M22 - 3/8" • 3.701.0015 Lance M22 high/low pressure • 3.103.0047 Nozzle type 030 • 4.618.0049 High pressure hose 8 m • Power cable 5 m

#### **Equipped with:**

- Three ceramic coated pistons, brass axial pump head with built-in by-pass valve.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge.
- Diesel pump with by-pass valve.
- Detergent built-in tank for indirect suction (2,4 lt.)
- Pressure regulator.
- Glicerine pressure gauge.
- Power cable holder.
- Accessory holder.
- Ergonomic handle.

	Mississippi-R 1310 XP
code	8.625.0101
operat. pressure/max	130/150 bar-1885/2175 psi
delivery rate	600 l/h-2.64 GPM
abs. power/voltage	3000W - 230V~50Hz 1ph
motorpump type/RPM	MPBX2/2800 RPM
max. water inlet/outlet temp.	40/90 °C
dimension/weight	80x55x83cm/55 Kg - 121 lbs

#### **Dakota-R**



#### **Equipped with:**

- Three ceramic coated pistons, brass axial pump head with built-in by-pass valve.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge.
- Low fuel lamp.
- Safety valve.
- Detergent built-in tank (4,2 lt) for indirect suction.
- Pressure regulator.
- Glicerine pressure gauge.
- Panel with analogic controls.
- Hose reel with brake (optional).



#### **Optional:**

• 6.608.0073 Hose reel with brake (hose not included)

	Dakota-R 1509 XP	Dakota-R 2007 XP	Dakota-R 1713 XP
code	8.633.0107	8.633.0108	8.633.0109
operat. pressure/max	150/160 bar-2175/2320 psi	200 bar-2900 psi	170 bar-2465 psi
delivery rate	540 l/h-2.37 GPM	420 l/h-1.84 GPM	780 l/h-3.43 GPM
abs. power/voltage	3200W - 230V~50Hz 1ph	3300W - 230V~50Hz 1ph	4700W - 400V~50Hz 3 ph
motorpump type/RPM	MPBX2/2800 RPM	MPBX2/2800 RPM	MPBX2/2800 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C
dimension/weight	85x65x97 cm/74 Kg - 163 lbs	85x65x97 cm/74 Kg - 163 lbs	85x65x97 cm/76 Kg - 167 lbs

Hot water high-pressure cleaner

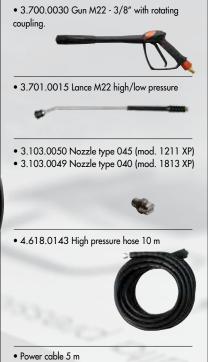


Standard equipment:

#### **NPX**



- Three ceramic coated pistons, brass axial pump head with built-in by-pass valve. • Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge.
- Low fuel lamp.
- Safety valve.
- Detergent built-in tank (3 lt) for indirect suction.
- Pressure regulator.
- Glicerine pressure gauge.
- Panel with analogic controls.
- Heavy duty steel frame.
- Accessory holder.
- Two ways fuel pump.
- Hose reel with brake (optional).



#### **Optional:**

• 6.608.0001 Hose reel with brake (hose not included)

	NPX 1211 XP	NPX 1813 XP
code	8.620.0601	8.620.0617
operat. pressure/max	120/150 bar-1740/2175 psi	180 bar-2610 psi
delivery rate	660 l/h-2.91 GPM	780 l/h-3.43 GPM
abs. power/voltage	3200W - 230V~50Hz 1ph	6300W - 400V~50Hz 3 ph
motorpump type/RPM	MPBX2/2800 RPM	MPBX2/2800 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C
dimension/weight	94x65x90cm/97 Kg - 213 lbs	94x65x90cm/99 Kg - 217 lbs

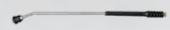


#### **Standard equipment:**

• 3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.701.0015 Lance M22 high/low pressure



- 3.103.0050 Nozzle type 045 (mod. 1211 LP)
- 3.103.0048 Nozzle type 035 (mod. 1611 LP)
- 3.103.0047 Nozzle type 030 (mod. 1509 LP)



- 4.618.0049 High pressure hose 8 m (mod 1211 LP)
- 4.618.0143 High pressure hose 10 m (mod 1509/1611 LP)



• Power cable 5 m

## Equipped with:

- 4 poles electrical motor (1450 RPM) with thermal protection.
- Three ceramic coated pistons (1 ph), full ceramic pistons (3 ph), brass linear pump head with built-in by-pass valve.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Detergent built-in tank (4,2 lt) for indirect suction.
- Auxiliary motor for burner.
- Hose reel with brake (optional).

#### **Optional:**

• 6.608.0073 Hose reel with brake (hose not included)

	Texas-R 1211 LP	Texas-R 1509 LP	Texas-R 1611 LP
code	8.630.0101	8.630.0102	8.630.0103
operat. pressure/max	120/150 bar-1740/2175 psi	150 bar-2175 psi	160 bar-2320 psi
delivery rate	660 l/h-2.91 GPM	540 l/h-3.17 GPM	660 l/h-2.91 GPM
abs. power/voltage	3000W - 230V~50Hz 1ph	3000W - 230V~50Hz 1ph	4300W - 400V~50Hz 3 ph
motorpump type/RPM	MP4/1450 RPM	MP4/1450 RPM	MP4/1450 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C
dimension/weight	85x65x97 cm/112 Kg - 246 lbs	85x65x97 cm/113 Kg - 275 lbs	85x65x97 cm/128 Kg - 282 lbs

## Hot water high-pressure cleaner



#### **HSR**



#### **Standard equipment:** • 3.700.0030 Gun M22 - 3/8" with rotating



• 3.701.0015 Lance M22 high/low pressure



• 3.103.0047 Nozzle type 030



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

#### **Equipped with:**

- 4 poles electrical motor (1450 RPM) with thermal protection.
- Three ceramic coated pistons.
- Built-in by-pass valve nickel plating brass linear pump head with high temperature water seals and bushing.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Detergent built-in tank (4,2 lt) for indirect suction.
- Auxiliary motor for burner.
- Heavy duty steel frame.
- Hose reel with brake (optional).

#### **Optional:**

• 6.608.0073 Hose reel with brake (hose not included)

	HSR 1509 LP
code	8.630.0107
operat. pressure	150 bar-2175 psi
delivery rate	540 l/h-3.17 GPM
engine type/hp	3000W-230V~50Hz 1 ph
pump type/RPM	MP4 Ni/1450 RPM
max. water inlet/outlet temp.	40/140 °C
dimension/weight	85x65x97 cm / 113 Kg - 275 lbs



## **LKX**





#### **Standard equipment:**

• 3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.701.0015 Lance M22 high/low pres. (mod. 1310 LP)



- 3.103.0050 Nozzle type 045 (mod. 1111 LP)
- 3.103.0053 Nozzle type 060 (mod. 1515 LP)
- 3.103.0050 Nozzle type 045 (mod. 2015 LP)



• 4.618.0143 H. P. hose 10 m



• Power cable 5 m

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling (three phase models).
- Three ceramic coated pistons (1 ph), full ceramic pistons (3 ph), brass linear pump head with builtin by-pass valve.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Detergent built-in tank (3 lt) for indirect suction.
- Auxiliary motor for burner.
- Heavy duty steel frame.
- Hose reel with brake (optional).

#### **Optional:**

- 6.608.0077 Hose reel with brake (hose not included)
- On request models with header tank and/or antiscale device.
- 3.697.0044 Antiscale LC-PRECAL (pcs. 4 x 5 lt.)
- Code 8.621.2944 LKX 2015 with header
- Code 8.621.3032 LKX 2015 with header tank and antiscale device

	LKX 1310 LP	LKX 1515 LP	LKX 2015 LP
code	8.621.2947	8.621.2934	8.621.2935
operat. pressure/max	110/150 bar-1595/2175 psi	150 bar-2175 psi	200 bar-2900 psi
delivery rate	660 l/h-2.91 GPM	900 l/h-3.96 GPM	900 l/h-3.96 GPM
abs. power/voltage	3000W - 230V~50Hz 1ph	5500W - 400V~50Hz 3 ph	7300W - 400V~50Hz 3 ph
motorpump type/RPM	MP4/1450 RPM	MPW4/1450 RPM	MPW4/1450 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C
dimension/weight	94x65x90cm / 112 Kg - 246 lbs	94x65x90cm / 125 Kg - 275 lbs	94x65x90cm / 128 Kg - 282 lbs



# CRANKSHAFT

## **HLR** single-phase models



#### Standard equipment:

• 3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.701.0015 Lance M22 high/low pressure



- 3.103.0050 Nozzle type 045 (mod. 1211 LP)
- 3.103.0047 Nozzle type 030 (mod. 1510 LP)



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

#### **Equipped with:**

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three ceramic coated pistons.
- Built-in by-pass valve nickel plating brass linear pump head with high temperature water seals and bushing.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Detergent built-in tank (3 lt) for indirect suction.
- Auxiliary motor for burner.
- Heavy duty steel frame.
- Hose reel with brake (optional).

#### **Optional:**

• 6.608.0077 - Hose reel with brake (hose not included)

	HLR 1211 LP	HLR 1510 LP
code	8.621.3001	8.621.3002
operat. pressure	110/150 bar-1595/2175 psi	150 bar-2175 psi
delivery rate	660 l/h-2.91 GPM	600 l/h-2.64 GPM
engine type/hp	3000W - 230V~50Hz 1ph	3000W - 230V~50Hz 1ph
pump type/RPM	MP4 Ni/1450 RPM	MP4 Ni/1450 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C
dimension/weight	94x65x90cm / 112 Kg - 246 lbs	94x65x90cm / 112 Kg - 246 lbs

## HLR three-phase models





Model: 1515 LP 2015 LP 2021 LP



#### Standard equipment:

 $\bullet$  3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.701.0015 Lance M22 high/low press. (1211 LP)



- 3.103.0048 Nozzle type 035 (mod. 1614 LP)
- 3.103.0053 Nozzle type 060 (mod. 1515 LP)
- 3.103.0050 Nozzle type 045 (mod. 2015 LP)
- 3.103.0055 Nozzle type 070 (mod. 2021 LP)



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling (except HLR 1614 LP model).
- Three ceramic pistons, three ceramic coated pistons (mod. 1614 LP)
- Built-in by-pass valve nickel plating brass linear pump head with high temperature water seals and bushing.
- Integrated elastic joint, for best pump coupling (1614 Excluded).
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Detergent built-in tank 3 l.

**Equipped with:** 

- Auxiliary motor for burner air cooling and mechanical two ways fuel pump.
- Hose reel (optional).



Integrated elastic joint, for best pump coupling (1614 Excluded)

#### Optional:

- 6.608.0077 Hose reel with brake (hose not included)
- On request models with header tank and/or antiscale device.
- 3.697.0044 Antiscale LC-PRECAL (pz. 4 x 5 lt.)
- Turbo Lance code:

6.602.0040 - (mod. 1614-2015) 6.602.0042 - (mod. 1515-2021)

	HLR 1614 LP	HLR 1515 LP	HLR 2015 LP	HLR 2021 LP
code	8.621.3003	8.621.1004	8.621.1005	8.621.1006
operat. pressure	160 bar-2321 psi	150 bar-2175 psi	200 bar-2900 psi	200 bar-2900 psi
delivery rate	840 l/h-3.70 GPM	900 l/h-3.96 GPM	900 l/h-3.96 GPM	1260 l/h-5.55 GPM
engine type/hp	4200W - 400V~50Hz 3ph	5500W - 400V~50Hz 3ph	7300W - 400V~50Hz 3ph	9700W - 400V~50Hz 3 ph
pump type/RPM	MP4 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C	40/140 °C
dimension/weight	94x65x90cm / 109 Kg - 240 lbs	94x65x90cm / 127 Kg - 280 lbs	94x65x90cm / 129 Kg - 284 lbs	94x65x90cm / 131 Kg - 288 lbs

## Hot water high-pressure cleaner







- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling. Three ceramic pistons, brass linear pump head with built-in by-pass valve.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Vertical burner with high thermal efficiency steel coil.
- High pressure detergent flow with 22 liters integrated detergent tank
- Auxiliary motor for burner air-cooling and two ways fuel pump.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Low fuel lamp and cut off.
- Safety valve.
- Header tank and antiscale device. Panel with analogic controls. Hose reel (optional).

#### Standard equipment:

**Tekna** 

• 3.700.0030 Gun M22 - 3/8" with rotating



• 3.708.0001 Lance with quick connection.



- 3.103.0052 Nozzle type 055 (mod. 1515 LP)
- 3.103.0050 Nozzle type 045 (mod. 2015 LP)
- 3.103.0055 Nozzle type 070 (mod. 2021 LP)



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

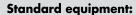
#### **Optional:**

- 6.608.0005 Hose reel with brake (hose not included)
- 3.697.0044 Antiscale LC-PRECAL (pcs. 4

	TEKNA 1515 LP	TEKNA 2015 LP	TEKNA 2021 LP
code	8.622.0901	8.622.0902	8.622.0921
operat. pressure	150 bar-2175 psi	200 bar-2900 psi	200 bar-2900 psi
delivery rate	900 l/h-3.96 GPM	900 l/h-3.96 GPM	1260 l/h-5.55 GPM
abs. power/voltage	5500W - 400V~50Hz 3ph	7300W - 400V~50Hz 3 ph	9700W - 400V~50Hz 3 ph
motorpump type/RPM	MPW5/1450 RPM	MPW5/1450 RPM	MPW5/1450 RPM
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C
dimension/weight	125x69x87cm/138 Kg - 304 lbs	125x69x87cm/143 Kg - 315 lbs	125x69x87cm/145 Kg - 319 lbs

#### **HTR**





• 3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.708.0001 Lance with quick connection.



- 3.103.0050 Nozzle type 045 (mod. 2015 LP) 3.103.0055 Nozzle type 070 (mod. 2021 LP)
- 3.103.0049 Nozzle type 040 (mod. 2515 LP)



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

#### **Equipped with:**

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three ceramic pistons, Nickel plating brass linear pump head with high temperature water seals and bushing.
- Integrated elastic joint, for best pump coupling.
- Low voltage and delayed Total Stop.
- Vertical burner with high thermal efficiency steel coil.
- High pressure detergent flow with 22 liters integrated detergent tank
- Auxiliary motor for burner air-cooling and two ways fuel pump.
- Temperature regulation gauge with high sensitive stainless steel sensor.
- Header tank and antiscale device.
- Pressure accumulator for hose and gun vibrations prevention.
- Hose reel (optional).





Integrated elastic joint, for best pump coupling

#### **Optional:**

- 6.608.0005 Hose reel with brake (hose not included)
- 3.697.0044 Antiscale LC-PRECAL (pz. 4 x 5 lt.)
- Turbo Lance code: 6.602.0040 - (mod. 2015)

6.602.0042 - (mod. 2021)

	HTR 2015 LP	HTR 2021 LP	HTR 2515 LP				
code	8.623.0939	8.623.0940	8.623.0951				
operat. pressure	200 bar-2900 psi	200 bar-2900 psi	250 bar-3600 psi				
delivery rate	900 l/h-3.96 GPM	1260 l/h-5.55 GPM	900 l/h-3.96 GPM				
engine type/hp	7300W - 400V~50Hz 3 ph	9700W - 400V~50Hz 3 ph	8700W - 400V~50Hz 3 ph				
pump type/RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM	MPWJ5 Ni/1450 RPM				
max. water inlet/outlet temp.	40/140 °C	40/140 °C	40/140 °C				
dimension/weight	125x69x89cm / 169 Kg - 372 lbs	125x69x89cm / 171 Kg - 376 lbs	125x69x89cm / 173 Kg - 381 lbs				



#### **HHPV**









#### **Standard equipment:**

• 3.700.0030 Gun M22 - 3/8" with rotating coupling.



• 3.708.0001 Lance with quick connection.



- 3.103.0051 Nozzle type 050 (mod. 2015 LP) 3.103.0056 Nozzle type 075 (mod. 2021 LP)



• 4.618.0143 High pressure hose 10 m



• Power cable 5 m

#### **Equipped with:**

- 4 poles electrical motor (1450 RPM) with thermal protection and water cooling.
- Three full ceramic pistons, brass linear pump head with built-in by-pass valve.
- Integrated elastic joint, for best pump coupling.
- Low voltage and delayed Total Stop.
- Suction and delivery S. S. valves.
- Detergent built-in tank 25 l.
- Vertical burner with high thermal efficiency steel coil.
- High pressure detergent dosing pump.
- Control panel with protection cover.
- Accessory holder.
- S. S. fixing base support.
- Varnished steel structure.
- Rotating booms (optional).

#### **Optional:**

- 6.608.0032 Rotating Booms
- Flame sensor (on request)
- Low temperature internal insulation protection/heating (on request)
- With header tank and anti scale device (on request)

	HHPV 2015 LP	HHPV 2021 LP
code	8.624.0603	8.624.0604
operat. pressure	200 bar-2900 psi	200 bar-2900 psi
delivery rate	900 l/h-3.96 GPM	1260 l/h-5.55 GPM
abs. power/voltage	7300W - 400V~50Hz 3ph	9700W - 400V~50Hz 3 ph
motorpump type/RPM	MPWJ5/1450 RPM	MPWJ5/1450 RPM
max. water inlet/outlet temp. 40/140 °C		40/140 °C
dimension/weight	76x48x180cm / 190 Kg - 418 lbs	76x48x180cm / 192 Kg - 422 lbs

#### Thermic 10 HW Hot water self-contained unit









#### **Equipped with:**

- Three ceramic pistons, brass linear pump head with built-in by-pass valve.
- By-pass thermal protection with safety valve.
- Electrical start with full engine functions control.
- Auxiliary belt driven sturdy alternator.
- Lombardini diesel engine 15LD440 (air cooled).
- Pump-motor gearbox (1.650 RPM).
- Automatic engine RPM regulator.
- Integrated detergent suction with external suction probe.
- Electrical start with engine functions control.
- Unique diesel tank for engine and burner.
- Battery included.

# Standard equipment: • 3.700.0030 Gun M22 - 3/8" with rotating coupling. • 3.701.0015 Lance M22 high/low press. • 3.103.0052 Nozzle type 055 • 4.618.0143 High pressure hose 10 m

#### **Optional:**

- 5.613.0252 S. S. header tank (high pressure chemical)
- 6.608.0014 Varnished soundproofing steel cover set code
- 6.608.0020 Trolley set with inflateable wheels & handles



	Thermic 10 HW
code	8.601.0099
operat. pressure	170 bar-2465 psi
delivery rate	1020 l/h-4.49 GPM
engine type/voltage	Lombardini 15LD440/10
motorpump type/RPM	CL5/1650 RPM
max. water inlet/outlet temp.	40/140 °C
dimension/weight	68x99x74cm / 140 Kg - 208 lbs

LAVOR

#### Thermic 17 HW

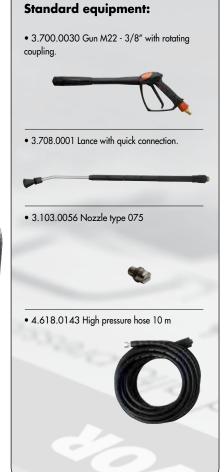
Hot water self-contained unit with integrated electric generator







- By-pass thermal protection with safety valve.
- 2 cylinder water cooled diesel engine with electrical start.
- Three ceramic pistons, brass linear pump head with built-in by-pass valve.
- Auxiliary belt driven sturdy alternator.
- Lombardini diesel engine LDW702 (air cooled).
- Belt driven pump.
- Automatic engine RPM regulator.
- Socket tool 230V max 1.5 kW
- Front panel with engine function led and automatic power cut-off.
- Unique diesel tank for engine and burner.
- Battery included.
- Integrated detergent suction with external suction probe.



#### **Optional:**

• 6.608.0013 Varnished soundproofing steel cover set



	Thermic 17 HW
code	8.601.0052
operat. pressure	200 bar-2900 psi
delivery rate	1320 l/h-5.82 GPM
engine type/voltage	Lombardini ISLD 440/17
motorpump type/RPM	CL5/1450 RPM
max. water inlet/outlet temp.	40/140 °C
dimension/weight	113x75x85cm / 220 Kg - 480 lbs





#### High-pressure nozzle



3.103.0027	high-pressure nozzle 0.30
3.103.0037	high-pressure nozzle 0.35
3.103.0028	high-pressure nozzle 0.40
3.103.0034	high-pressure nozzle 0.45
3.103.0029	high-pressure nozzle 0.50
3.103.0030	high-pressure nozzle 0.55
3.103.0031	high-pressure nozzle 0.60
3.103.0025	high-pressure nozzle 0.70
3.103.0070	high-pressure nozzle 0.75
3.103.0033	high-pressure nozzle 0.90



3.103.0047	high-pressure nozzle 0.30
3.103.0048	high-pressure nozzle 0.35
3.103.0049	high-pressure nozzle 0.40
3.103.0050	high-pressure nozzle 0.45
3.103.0051	high-pressure nozzle 0.50
3.103.0052	high-pressure nozzle 0.55
3.103.0053	high-pressure nozzle 0.60
3.103.0055	high-pressure nozzle 0.70
3.103.0056	high-pressure nozzle 0.75
3.103.0058	high-pressure nozzle 0.85



3.103.0018	high-pressure nozzle 0.30
3.103.0020	high-pressure nozzle 0.35
3.103.0009	high-pressure nozzle 0.40
3.103.0016	high-pressure nozzle 0.45
3.103.0017	high-pressure nozzle 0.50
3.103.0019	high-pressure nozzle 0.55
3.103.0021	high-pressure nozzle 0.60
3.103.0067	high-pressure nozzle 0.70
3.103.0068	high-pressure nozzle 0.75
3.103.0069	high-pressure nozzle 0.90



3.749.0200 rotary nozzle max 500 bar - 0.40
3.749.0201 rotary nozzle max 500 bar - 0.45
3.749.0202 rotary nozzle max 500 bar - 0.50
3.749.0203 rotary nozzle max 500 bar - 0.55
3.749.0204 rotary nozzle max 500 bar - 0.60
3.749.0205 rotary nozzle max 500 bar - 0.65
3.749.0206 rotary nozzle max 500 bar - 0.70
3.714.0020 rotary nozzle max 350 bar - 0.40

## Rotary head nozzle

## **Rotary nozzle max 350/500 bar:** G 1/4"F with S. S. body and seat/nozzle in

G 1/4"F with S. S. body and seat/nozzle in highly shock-resistant tungsten carbide

#### Extension set for rotary nozzle:

1/4"M - 1/4"M codes 3.749.0004 + 4.006.0099 Spare coupling for gun M 22





## 1) Sand-blasting heads max 250 bar, are not supplied with nozzles.

Orders will be always placed with the nozzle required.

Sand-blasting heads max 250 bar

3.749.0207	Sand blasting head - blade type
3.749.0208	Sand blasting head - round type
3.749.0209	Sand blasting head - prolonged type

#### 2) Prolonged adjustable probe for sand-blasting

3.749.0210 S. S. prolonged adjustable  $\varnothing$  21 probe L = 500 mm

#### Sand-blasting head

#### Sand-blasting nozzles

3.749.0434	nozzle 0.40
3.749.0433	nozzle 0.45
3.749.0432	nozzle 0.50



#### Cold water high-pressure cleaner accessories

10 m Extension high pressure hose 10 m Extension high pressure hose 20 m Extension high pressure hose

#### High pressure hose

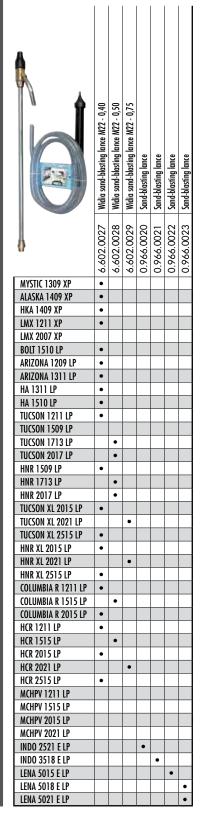
## 3.0049 8 m High pressure hose - 3/8" M22 - 8 1/4" - 210 bar 3.0012 10 m High pressure hose - 3/8" - 8 5/16" - 310 bar 3.0056 20 m High pressure hose - 3/8" - 8 5/16" - 400 bar 3.0057 20 m High pressure hose - 3/8" - 8 3/8" - 400 bar 3.0058 10 m High pressure hose - 3/8" FF - 8 3/8" R2 3.0050 10 m High pressure hose - 1/4" M22 - 8 1/4" 210 bar

	4.618.0	4.618.0	4.618.0	4.618.0	4.618.0	4.618.0	4.018.0	0.996.0	0.996.0	0 044 0
MYSTIC 1309 XP										Г
ALASKA 1409 XP										
HKA 1409 XP										Г
LMX 1211 XP		•					•			
LMX 2007 XP		•								Г
BOLT 1510 LP										
ARIZONA 1209 LP										Г
ARIZONA 1311 LP							•			
HA 1311 LP	•									Г
HA 1510 LP	•									
TUCSON 1211 LP	•						•			Г
TUCSON 1509 LP	•									
TUCSON 1713 LP		•	•	•	•					Г
TUCSON 2017 LP		•	•	•	•					
HNR 1509 LP		*	*	*	*					
HNR 1713 LP		*	*	*	*					
HNR 2017 LP		*	*	*	*					
TUCSON XL 2015 LP		•	•	•	•					
TUCSON XL 2021 LP		•	•	•	•					
TUCSON XL 2515 LP		•	•	•	•					
HNR XL 2015 LP		•	•	•	•					Г
HNR XL 2021 LP		•	•	•	•					
HNR XL 2515 LP		•	•	•	•					Г
COLUMBIA R 1211 LP										
COLUMBIA R 1515 LP		•	•	•	•	•				Г
COLUMBIA R 2015 LP		•	•	•	•	•				
HCR 1211 LP		•	•	•	•					
HCR 1515 LP		•	•	•	•					
HCR 2015 LP		•	•	•	•					
HCR 2021 LP		•	•	•	•					
HCR 2515 LP		•	•	•	•					
MCHPV 1211 LP		•	•	•	•					
MCHPV 1515 LP		•	•	•	•					
MCHPV 2015 LP		•	•	•	•					
MCHPV 2021 LP		•	•	•	•					
INDO 2521 E LP								•		
INDO 3518 E LP									•	Ĺ
LENA 5015 E LP										•
LENA 5018 E LP										•
LEMA COOL E LD										

#### **Turbo lance**

	O40 Lance Rotox type 1 M22 - 0,45	6.602.0041 Lance Rotox type 2 M22 - 0,55	6.602.0042 Lance Rotox type 3 M22 - 0,70	O56   Lance Rotox M22 - 0,35	6.602.0060 Lance Rotox M22 - 0,30	O24   Lance Rotox	O25 Lance Rotox	0.966.0016 Lance Rotox	0.966.0017 Lance Rotox	O18 Lance Rotox
目	6.602.0040	.602.0	.602.0	6.602.0056	.602.0	0.966.0024	0.966.0025	9.996	9.996	0.966.0018
HANCELE TOOO AD	9	9	9	9	9	o.	o.	o.	o.	0
MYSTIC 1309 XP				•						
ALASKA 1409 XP				•						
HKA 1409 XP										
LMX 1211 XP LMX 2007 XP	•									
BOLT 1510 LP					•					
ARIZONA 1209 LP					_					
ARIZONA 1311 LP	•									
HA 1311 LP	•									
HA 1510 LP	Ť				•					
TUCSON 1211 LP	•				-					
TUCSON 1509 LP					•					
TUCSON 1713 LP		•								
TUCSON 2017 LP	•									
HNR 1509 LP					•					
HNR 1713 LP		•								
HNR 2017 LP		•								
TUCSON XL 2015 LP	•									
TUCSON XL 2021 LP			•							
TUCSON XL 2515 LP	•									
HNR XL 2015 LP	•									
HNR XL 2021 LP					•					
HNR XL 2515 LP	•									
COLUMBIA R 1211 LP	•									
COLUMBIA R 1515 LP		•								
COLUMBIA R 2015 LP	•									
HCR 1211 LP	•									
HCR 1515 LP		•								
HCR 2015 LP	•									
HCR 2021 LP					•					
HCR 2515 LP	•									
MCHPV 1211 LP	•									
MCHPV 1515 LP		•								
MCHPV 2015 LP	•									
MCHPV 2021 LP					•	•				
INDO 2521 E LP INDO 3518 E LP						•				
LENA 5015 E LP								•		
LENA 5013 E LP									•	
LENA 5021 E LP										•

#### Sand blasting lance



LENA 5021 E LP

<sup>• =</sup> Suitable ★ = Suitable (not on hose reels) ▲ = Suitable (with adapter 3.100.0043)



#### Hot water high-pressure cleaner accessories

#### High pressure hose

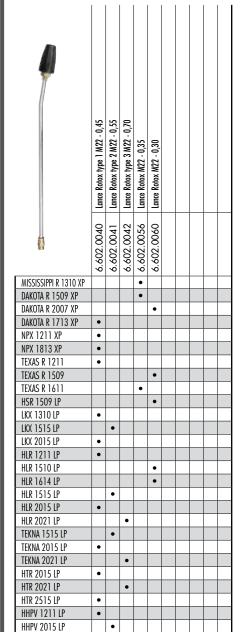


4.618.0012 10 m High pressure hose - 3/8" - Ø 5/16" - 310 bar	4.618.0056 20 m High pressure hose - 3/8" - Ø 5/16" - 400 bar	4.618.0057 20 m High pressure hase - 3/8" - Ø 3/8" - 400 bar	4.618.0058 10 m High pressure hose for food industry - 3/8" - Ø 3/8" -	4.618.0059 10 m High pressure hose - 3/8" F F - Ø 3/8" R2			
4.618.0012	4.618.0056	4.618.0057	4.618.0058	4.618.0059			

	4.618.	4.618.	4.618.	4.618.	4.618.			
MISSISSIPPI R 1310 XP								
DAKOTA R 1509 XP								
DAKOTA R 2007 XP								
DAKOTA R 1713 XP								
NPX 1211 XP	•	•			•			
NPX 1813 XP	•	•			•			
TEXAS R 1211								
TEXAS R 1509	•	•			•			
TEXAS R 1611	•	•			•			
HSR 1509 LP	•	•	•	•	•			
LKX 1310 LP	•	•			•			
LKX 1515 LP	•	•			•			
LKX 2015 LP	•	•	•	•	•			
HLR 1211 LP	•	•	•	•	•			
HLR 1510 LP	•	•	•	•	•			
HLR 1614 LP	•	•	•	•	•			
HLR 1515 LP	•	•	•	•	•			
HLR 2015 LP	•	•	•	•	•			
HLR 2021 LP	•	•	•	•	•			
TEKNA 1515 LP	•	•			•			
TEKNA 2015 LP	•	•	•	•	•			
TEKNA 2021 LP			•	•	•			
HTR 2015 LP	•	•	•	•	•			
HTR 2021 LP	•	•	•	•	•			
HTR 2515 LP	•	•	•	•	•			
HHPV 1211 LP	•	•	•	•	•			
HHPV 2015 LP	•	•	•	•	•			
HHPV 2021 LP	•	•	•	•	•			

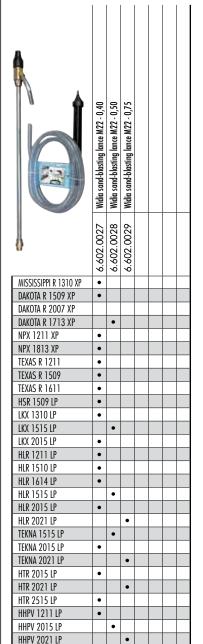
#### 

#### **Turbo lance**



HHPV 2021 LP

#### Sand blasting lance



#### Water flow adjuster coupling

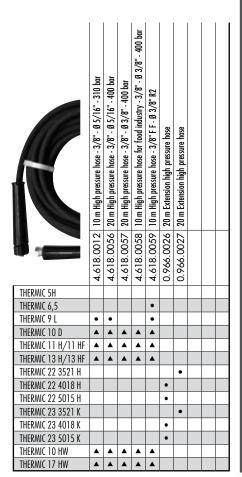


Code	Inlet	Outlet	Max. pressure			Max fl	ow rate	Max temperature		
	Α	В	bar	psi	MPa	l/m	GPM	°C	°F	
3.703.0023	M22 Ø14	M22FØ14	280	4061	28	30	7.93	160	320	
3.703.0024	1/4″ M	M22FØ14	280	4061	28	30	7.93	160	320	
3.703.0009	1/4" M	1/4″ F	280	4061	28	30	7.93	160	320	



#### High-pressure cleaner with combustion engine accessories

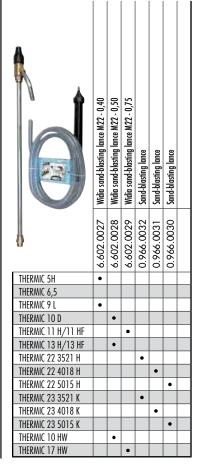
#### High pressure hose



Turbo	lance

6.602.0040 Lance Rolox type 1 M22 - 0,45 6.602.0041 Lance Rolox type 2 M22 - 0,55 6.602.0042 Lance Rolox type 3 M22 - 0,70 6.602.0056 Lance Rolox M22 - 0,30 6.602.0060 Lance Rolox M22 - 0,30 6.602.0060 Lance Rolox M22 - 0,30 6.602.0060 Lance Rolox M22 - 0,30 6.966.0019 Lance Rolox 6.966.0016 Lance Rolox	
6.602.0040 6.602.0040 6.602.0041 6.602.0042 6.602.0056 6.602.0060 0.966.0018 0.966.0018	
THERMIC 5H	
THERMIC 6,5	
THERMIC 9 L	
THERMIC 10 D •	
THERMIC 11 H/11 HF   •	
THERMIC 13 H/13 HF   •	
THERMIC 22 3521 H	
THERMIC 22 4018 H	
THERMIC 22 5015 H	
THERMIC 23 3521 K	
THERMIC 23 4018 K	
THERMIC 23 5015 K	
THERMIC 10 HW •	
THERMIC 17 HW	

#### Sand blasting lance



#### • = Suitable ▲ = Suitable (with adapter 3.100.0043)

#### Adapters for high pressure hoses



Code: 3.100.0023

3/8" M

M 22



Code: 4.606.0053

1/4" M

M 22



Code: 4.006.0062

3/8" M



Code: 3.100.0043

#### Quick coupling kit hose/gun – brass - inlet 3/8" F - outlet 3/8" M - 200 bar Code: 6.608.0003



Quick coupling kit hose/gun – brass inlet 1/4" F - outlet 1/4" M - 200 bar Code: 6.608.0002

#### Quick coupling kit hose/gun

Quick coupling kit hose/gun – inlet 3/8" F - outlet 3/8" M - 250 bar Code: 6.602.0021





#### **Accessories High-pressure cleaners**





Code	Description
3.700.0025	Gun RL 30 3/8"M - 1/4"F (only for lance 6.602.0049 - 6.602.0050)
6.602.0049	mm 1700 S. S. 1/4"M - 1/8"F high/low press. (for det. suction) for gun 3.700.0025
6.602.0050	mm 1700 S. S. 1/4"M - 1/8"F lance with nozzle-holder - for gun 3.700.0025

#### Food industry high pressure accessories

For food industry



10 m H. P. Hose - 400 bar 3/8''F - 3/8''F -  $\varnothing$  3/8'' -  $\max$   $150^{\circ}$  C- R2





4.618.0058

#### Steam hose R2 with rubber hose bend Ø 3/8"

#### For food industry

Code	M	ax. pressu	ire	Length Inlet		Outlet	Max. temperature
	bar	psi	MPa	m			°C
4.618.0059	400	5801	40	10	3/8″F	3/8″F	135



#### Wall mount hose reel

Wall mount hose reel with brakets without hose (capability 20 m hose 3/8")

Code	Description	Inlet	Outlet
6.608.0071	Wall mount hose reel with brakets without hose	3/8″F	3/8″F



#### **Automatic hose reel**

Automatic hose reel (capability 20 m hose)

Code	Description	Inlet	Outlet
3.749.0508	Varnished steel automatic hose reel	3/8″M	3/8″F
3.749.0510	Stainless steel automatic hose reel	3/8″M	3/8″F
3.749.0509	Varnished steel automatic hose reel with 20mt hose	3/8″F	3/8″F





#### **Double lance**

Double lance mm 500 with regulator knob max 250 bar:

Double lance mm 500 with regulator knob max 250 bar with nozzle

3.701.0025 Double lance with regulator mm 500

#### Foam lance



Foam lance max 250 bar:

Foam lance max temperature  $90^{\circ}$  C. For gun M 22 max 250 bar

6.602.0003 Foam lance



#### Foam lance with regulator

#### Foam lance with regulator max 180 bar

Foam lance with regulator max temp.  $60^{\circ}$  C - with M22 coupling

6.602.0055 Foam lance



#### Foam lance with regulator

#### Foam lance max 180 bar with tank 1 lt.

Foam lance with regulator max temp.  $60^{\circ}$  C - with M22 coupling

6.602.0053 Foam lance with tank 1 lt.

Water filter

Calibrated sand



#### Water filter

Water filter - 3/4 F - 3/4 M 80 micron

3.102.0011 Water filter



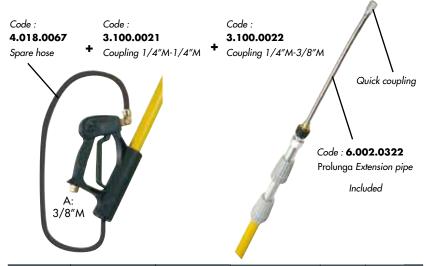
#### Calibrated sand

Calibrated sand - 6 pieces of 5 kg

0.011.0001 Calibrated sand (6 x 5 kg)



#### Gun with extensible telescopic lance



Code		Pressure		Flow	rate	Len	gth	Coupling	Tempe	rature
	bar	psi	MPa	l/m	GPM	min. mm	max. mm	Α	°C	°F
3.749.0488	250	3625	25	40	10.5	2000	5000	3/8″M	150	302

Quick coupling code: 4.607.0275 + adapter for nozzle 1/4" code: 3.100.0032 Quick coupling code: 4.607.0275 + adapter for nozzle 1/8" code: 3.100.0338

#### **Motorized head**

- S. S. motorized head for case and tank cleaning
- Complete orbital internal coverage
- Complete with nozzles and converter

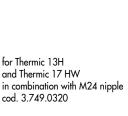
Motorized head	
code	3.749.0196
operat. pressure	220 bar - 3190 psi
allowed pressure	250 bar - 3625 psi
operat. delivery rate	1260 l/h - 5,56 GPM
nominal temperature	90° C
min. diameter	Ø 40 mm
nozzle type	2 x M4



#### **Floor Cleaning Lance**





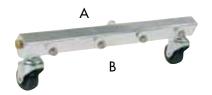


S. S. floor cleaning lance (nozzle not included)
Complete with RL 35 gun
For washing terraces and external floors in general.

Floor Cleaning Lance	
code	6.602.0020
operat. pressure	250 bar - 3625 psi
allowed pressure	280 bar - 4060 psi
operat. delivery rate	1200 l/h - 5,3 GPM
nominal temperature	160° C
nozzle dimension	.060



## Stainless steel floor cleaning lance with wheels (without nozzles)



Code		Pressure	;	Flow	rate	Length	Coupli	ng	Temperature	
	bar	psi	MPa	l/m	GPM	mm	Α	В	°C	°F
6.602.0052	250	3625	25	20	5.29	500	1/4″F	1/8″F	160	320

#### Pipe cleaning nozzles

	Code	Description	Thread	Туре
	3.103.0035	Pipe cleaning nozzle with side holes	3/8″M	0.55
	3.103.0106	Rounded head pipe cleaning nozzle	3/8″M	0.55
GE.	3.103.0107	Pipe cleaning nozzle with side holes	3/8″F	0.55
Wine.	3.103.0119	Pipe cleaning nozzle with side holes	1/4″F	0.55

#### Kit pipe cleaning hose with nozzle



Code	Description	Length	M	lax. press	ure	Inlet	Outlet
		m	bar	psi	MPa		
6.608.0054	Kit pipe cleaning hose	10	210	3045	21	M 22 - M	Stainless steel nozzle
6.608.0045	Kit pipe cleaning hose	20	210	3045	21	M 22 - M	Stainless steel nozzle

#### Fixed and rotating brushes



Fixed and rotating brushes max 250 bar: mm 700, max temperature  $90^{\circ}$  C, for gun M 22

6.602.0035	Fixed brush with extension pipe mm 700
6.602.0036	Rotating brush with extension pipe mm 700

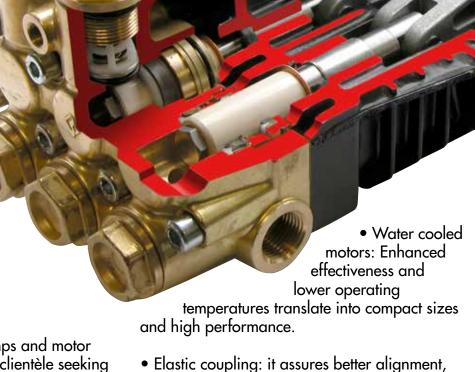


Lavor Hyper offers a comprehensive range of pumps and motor pumps constructed and designed to meet any requirement of the market, providing a long-lasting and reliable solution to address cleaning needs...

No compromises!

Lavor Hyper's offering of pumps and motor pumps intentionally targets a clientèle seeking top quality and durability for this kind of products:

 4-pole motors: They assure 1450 RPM speed, resulting in a decrease of pump and motor's operating temperatures, reduction in wear of consumables, lower oil deterioration inside the pump.



the pump from the motor.

dissipation of the heat from the motor rotor,

lower stress on bearings, easy disassembly of

 Pump body in die cast aluminium: the casing design focuses on assuring stress is reduced to the minimum and operating temperatures are reduced, with the aim of guaranteeing

unlimited service life.

## PROFESSION

### Pumps and motorpumps



- Forged brass pump head: improved mechanical strength, superior resistance to corrosion and oxidation phenomena.
- Nickel plated forged brass (CW5) pump head: the perfect surface finish, jointly with the properties of the plating, assure improved resistance to chemicals and lower chance of deterioration caused by cavitation phenomena.

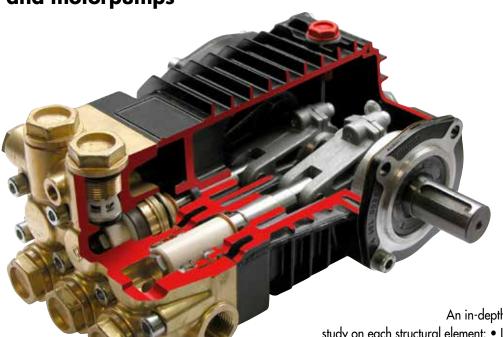
 Double gasket seal system the choice of the "U" gasket profile represents the maximum

quality standard, assuring lower wear due to friction.

- High temperature seals (CW5):
   They assure optimal durability up to 85° operation.
  - Valves with stainless steel plate and spherical seal: high fluid dynamics performance.
- Ceramic pistons (according to the models): to assure longer service life of the pistons and guarantee lower wear of water seals and improved resistance to thermal shocks.
- Double housing connecting rods (CL5-CW 5): ease of maintenance.
- "READY TO USE" pumps (CL4): This range provides built-in by-pass valve, low pressure detergent injector, total stop actuation microswitch, pressure regulation and pressure gauge, making installation easier and speeding up replacement and maintenance operations.



#### **Pumps and motorpumps**



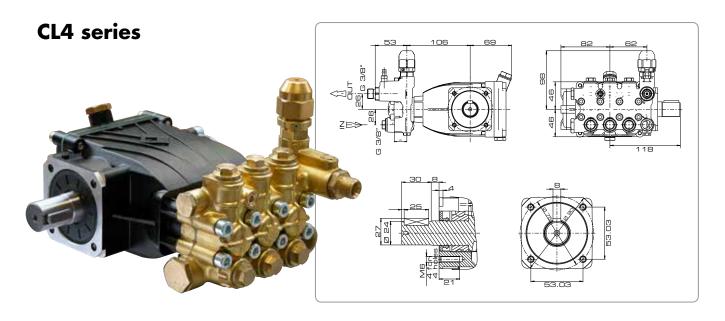
An in-depth and comparative study on each structural element: • Low wear and tear ceramic pistons • Low friction connecting rod, built in aluminium alloy; double body for easy disassembly • Minimum charge on the cone-shaped bearings (through electronic calibration of the drive shaft rotation) • Very low operating temperature, favored by the use of water cooled motor • Top range up to 21 l/min.

CL5 21-200

Model	Omnia 12	Omnia 15	C14	CL5	CW5
Pump type	Axial	Axial	Linear	Linear	Linear
Head	Brass	Brass	Brass	Brass	Brass nickel plated
Pistons	Stainless steel	Ceramic coated	Ceramic coated-Ceramic	Ceramic	Ceramic
Pistons Ø	12 mm	15 mm	15 mm/18 mm	20 mm	20 mm
By-pass valve	Integrated	Integrated	Integrated	Separated	Separated
Pressure regulator	Integrated	Integrated	Integrated	On by-pass	On by-pass
Max operating pressure	140 bar	200 bar	200 bar	200 bar	200 bar
Max delivery rate	9 l/min	13 l/min	15 l/min	21 l/min	21 l/min
Motor	2 poles air cooled	2 poles air cooled	4 poles air cooled 4 poles H <sub>2</sub> O cooled	4 poles H <sub>2</sub> O cooled	4 poles H <sub>2</sub> O cooled
Total Stop	Available	Available	Available	Available	Available

## High-pressure pumps units

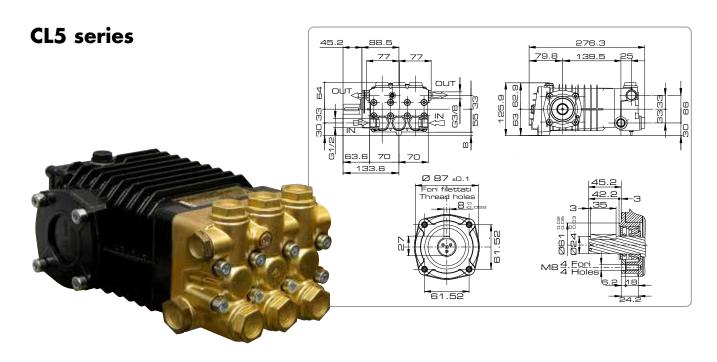




#### **Equipped with:**

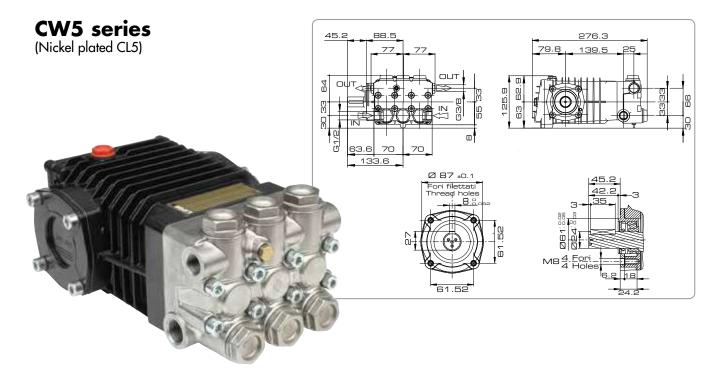
• Pressure adjuster included

Model	Right shaft ver.	Left shaft ver.	RPM		М	ax. pressu	re		Flow	rate		R	lequeste	ed powe	er	We	eight
	Code	Code			bar	psi	MPa	1/	m	GF	M	Н	IP.	k١	N	kg	lbs
CL 44-15 9-200	5.702.0018	5.702.0019	1450 17	50	200	2900	20	9	11	2.4	2.9	4,9	6	3,6	4,4	6,6	14,5
CL 44-15 11-200	5.702.0020	5.702.0021	1450 17	50	200	2900	20	11	13	2.9	3.5	6	6,5	4,4	4,8	6,6	14,5
CL 44-18 15-200	5.703.0006	5.703.0007	1450 17	50	200	2900	20	15	18	4	4.7	7,5	9,2	5,5	6,9	7	15,4



Model	Right shaft ver.	Left shaft ver.	RPM		Mo	Max. pressure		Flow rate			Requested power				Weight		
	Code	Code			bar	psi	MPa	1/	m	GF	M	Н	IP	k۱	W	kg	lbs
CL 54-20 11-200	6.605.0183	6.605.0184	1450	1750	200	2900	20	11	13	2.9	3.5	6	6,5	4,4	4,8	9,8	21,6
CL 54-20 15-200	6.605.0185	6.605.0186	1450	1750	200	2900	20	15	18	4	4.7	7,5	9,2	5,5	6,9	9,8	21,6
CL 54-20 21-200	6.605.0187	6.605.0188	1450	1750	200	2900	20	21	25	5.5	6.6	10,5	12,8	7,7	9,5	9,8	21,6

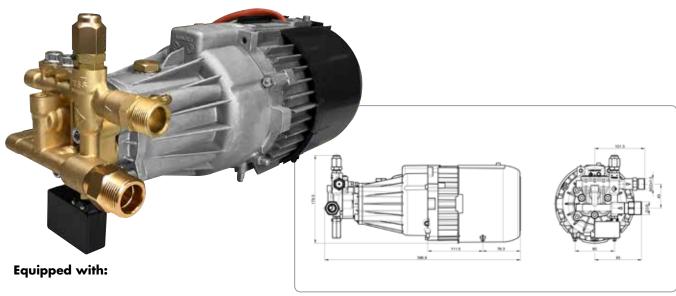




Model	Right shaft ver.	Left shaft ver.	RP	RPM		Max. pressure			Flow rate				Requested power				Weight	
	Code	Code			bar	psi	MPa	1/	m	GF	M	Н	P	k١	W	kg	lbs	
CW 54-20 11-200	6.605.0192	6.605.0193	1450	1750	200	2900	20	11	13	2.9	3.5	6	6,5	4,4	4,8	9,8	21,6	
CW 54-20 15-200	6.605.0194	6.605.0195	1450	1750	200	2900	20	15	18	4	4.7	7,5	9,2	5,5	6,9	9,8	21,6	
CW 54-20 21-200	6.605.0196	6.605.0197	1450	1750	200	2900	20	21	25	5.5	6.6	10,5	12,8	7,7	9,5	9,8	21,6	

#### **MPBX1** series

(Omnia 12 Pump)



- High-pressure motor pumps units
- Fixing bracked included

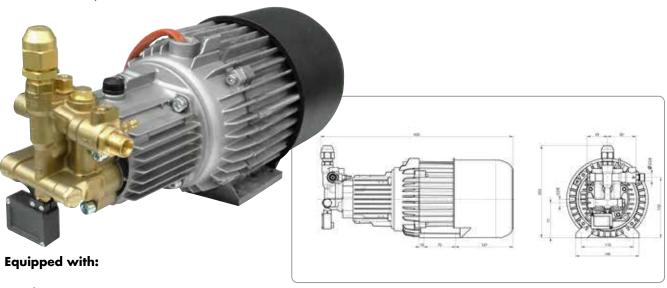
Model	Left shaft ver.	RPM	Mo	ax. press	ure	Flow	ow rate Requested power		Power supply	We	ight
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPBX 1-12 9-140	on request	2800	140	2030	14	9	2.37	2.8	1 Ph 230V~50Hz	13	28,6
MPBX 1-12 9-140	on request	3400	140	2030	14	9	2.37	2.8	1 Ph 220V~60Hz	13	28,6

# High-pressure pumps units



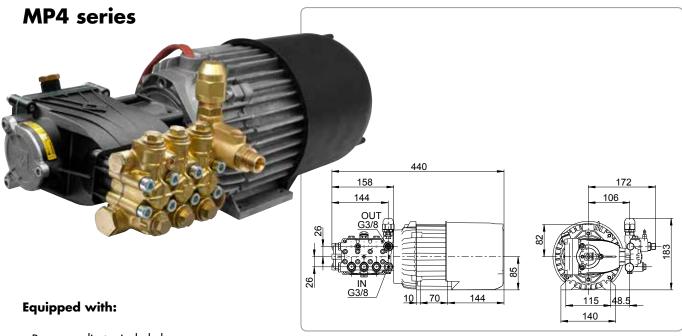
#### **MPBX2** series

(Omnia 15 Pump)



- High-pressure motor pumps units
- Fixing bracked included

Model	Left shaft ver.	RPM	Max. pressure		Flow	rate	Requested power	Power supply	Weight		
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPBX 2-15 11-120	8.680.0046	2800	120	1740	12	11	2.9	3	1Ph 230V~50Hz	20,5	45,2
MPBX 2-15 07-200	8.680.0049	2800	200	2900	20	7	1.8	3	1Ph 230V~50Hz	21	46,2
MPBX 2-15 11-150	8.680.	2800	150	2175	15	11	2.9	4	3Ph 400V~50Hz	21	46,2



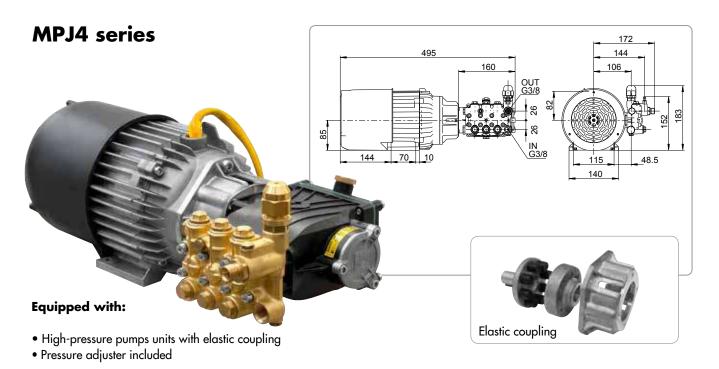
• Pressure adjuster included

Model	Left shaft ver.	RPM	Max. pressure		Flow rate		Requested power	Power supply	Weight		
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MP 34-15 11-120	8.680.0100	1450	120	1740	12	11	2,9	3	1Ph 230V~50Hz	22	49,2
MP 34-15 11-120	8.680.0101	1750	120	1740	12	11	2,9	3	1Ph 220V~60Hz	22	49,2
MP 34-15 11-150	8.680.0102	1450	150	2175	15	11	2,9	4	3Ph Y 400V~50Hz	22,5	49,6
MP 34-15 11-150	8.680.0103	1 <i>75</i> 0	150	2175	15	11	2,9	4	3Ph Y 400V~60Hz	22,5	49,6

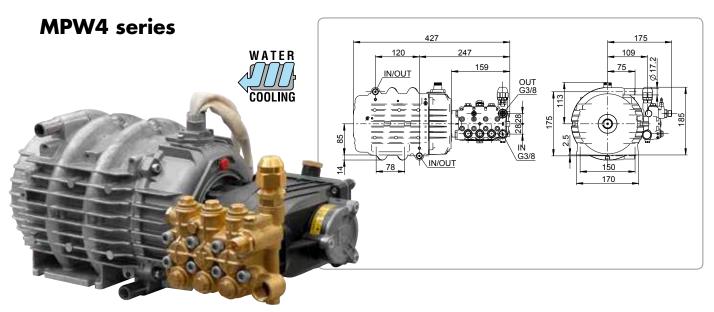
## LAVOR

## PANOREFELDE

High-pressure pumps units



Model	Left shaft ver.	RPM	Mo	Max. pressure			rate	Requested power	Power supply	We	Weight	
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs	
MPJ 34-15 11-12	0 8.680.0104	1450	120	1740	12	11	2,9	3	1Ph 230V~50Hz	22,5	49,6	
MPJ 34-15 11-12	0 8.680.0105	1750	120	1740	12	11	2,9	3	1Ph 220V~60Hz	22,5	49,6	
MPJ 34-15 15-15	0 8.680.0106	1450	150	2175	15	11	2,9	4	3Ph Y 400V~50Hz	23	50,6	
MPJ 34-15 15-15	0 8.680.0107	1750	150	2175	15	11	2,9	4	3Ph Y 400V~60Hz	23	50,6	



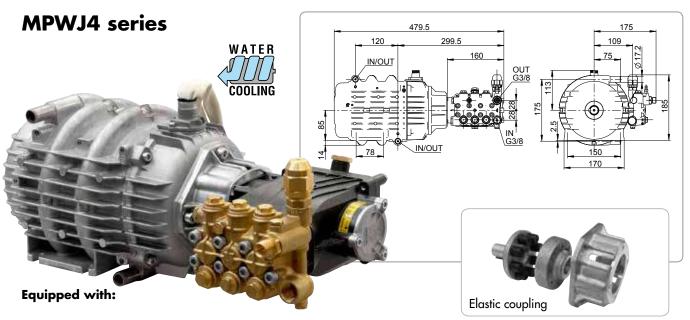
#### **Equipped with:**

- Fixing bracked included
- Pressure adjuster included

Model	Left shaft ver.	RPM	Max. pressure			Flow rate		Requested power	Power supply	We	ight
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPW 34-18 15-150	8.680.0108	1450	150	2175	15	15	4	5	3Ph Y 400V~50Hz	28,8	63,5
MPW 34-18 15-200	8.680.0109	1450	200	2900	20	15	4	7	3Ph Y 400V~50Hz	30,8	67,9
MPW 34-15 13-200	8.680.0110	1750	200	2900	20	13	3,4	8,4	3Ph Y 400V~60Hz	28,5	62,8

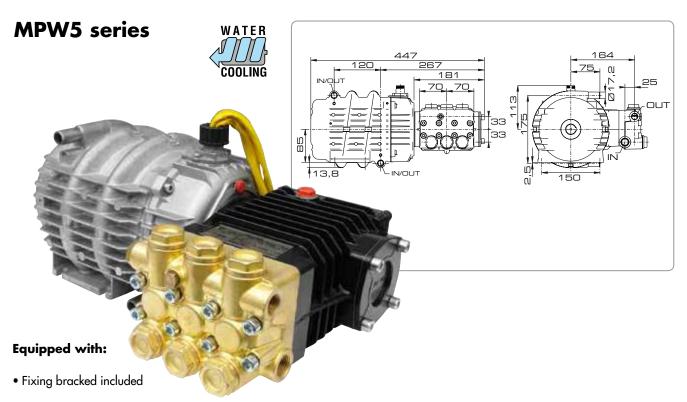
# High-pressure pumps units





- High-pressure pumps units with elastic coupling
- Fixing bracked included
- Pressure adjuster included

Model	Left shaft ver.	RPM	Max. pressure		Flow rate		Requested power	Power supply	Weight		
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPWJ 34-18 15-150	8.680.0111	1450	150	2175	15	15	4	5	3Ph Y 400V~50Hz	29,3	64,6
MPWJ 34-18 15-200	8.680.0112	1450	200	2900	20	15	4	7	3Ph Y 400V~50Hz	31,3	69
MPWJ 34-15 13-200	8.680.0113	1750	200	2900	20	13	3,4	8,4	3Ph Y 400V~60Hz	29	63,9

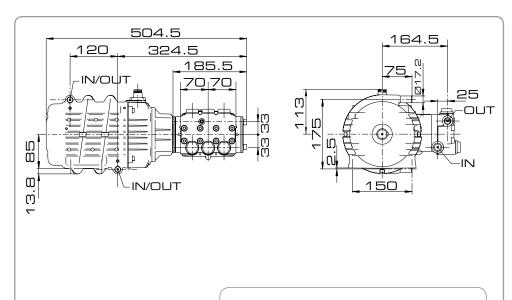


Model	Left shaft ver.	RPM	Max. pressure			Flow rate		Requested power	Power supply	Weight	
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPW 54-20 15-150	8.680.0022	1450	150	2175	15	15	4	5	3Ph Y 400V~50Hz	32	70,5
MPW 54-20 15-200	8.680.0023	1450	200	2900	20	15	4	7	3Ph Y 400V~50Hz	34	74,9

## LAVOR

High-pressure pumps units

#### **MPWJ5** series









• High-pressure pumps units with elastic coupling

• Fixing bracked included

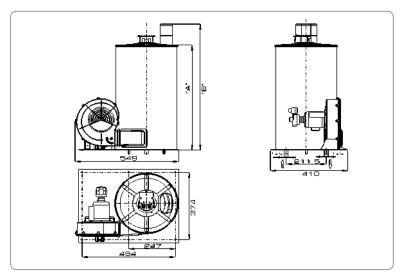
Model	Left shaft ver.	RPM	Max. pressure		Flow rate		Requested power	Power supply	Weight		
	Code		bar	psi	MPa	l/m	GPM	kW		kg	lbs
MPWJ 54-20 15-150	8.680.0028	1450	150	2175	15	15	4	5	3Ph Y 400V~50Hz	32,5	71,6
MPWJ 54-20 15-200	8.680.0029	1450	200	2900	20	15	4	7	3Ph Y 400V~50Hz	34,5	76
MPWJ 54-20 21-200	8.680.0030	1450	200	2900	20	21	5,5	9,4	3Ph Y 400V~50Hz	37,5	82,6

# Complete boilers for high-pressure cleaners



# High 08/Low 08 series





(\*) Available in various voltages

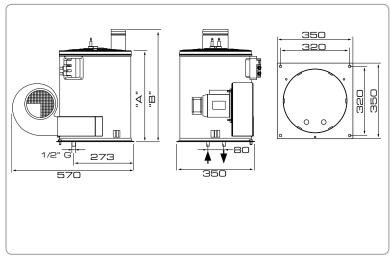
#### **Equipped with:**

• Complete boilers for high-pressure cleaners

Model	Code	Mo	ax. pressi	Jre	Flow	rate	Requested power	Power supply (*)	Thermal power	Coil lenght	Dimension	We	ight
		bar	psi	MPa	l/m	GPM	W					kg	lbs
Low 08	8.690.0069	200	2900	20	15	3.96	300	230V ~ 50Hz	49.000 Kcal/h	28 m	471 mm (A) - 587 mm (B)	50	110,2
High 08	8.690.0070	200	2900	20	21	5.55	300	230V ~ 50Hz	73.500 Kcal/h	34 m	586 mm (A) - 702 mm (B)	62,4	137,5

# Top/High/Low series





(\*) Available in various voltages

#### **Equipped with:**

• Complete boilers for high-pressure cleaners

Model	Code	Mo	ax. pressi	Jre	Flow	rate	Requested power	Power supply (*)	Thermal power	Coil lenght	Dimension	We	eight
		bar	psi	MPa	l/m	GPM	W					kg	lbs
Тор	8.690.0010	200	2900	20	12	3.17	300	230V ~ 50Hz	49000 Kcal/h	20 m	405 mm (A) - 510 mm (B)	38	85,9
Low	8.690.0001	200	2900	20	15	3.96	300	230V ~ 50Hz	63000 Kcal/h	29,5 m	465 mm (A) - 565 mm (B)	48,5	106,8
High	8.690.0002	200	2900	20	21	5.55	300	230V ~ 50Hz	63000 Kcal/h	36,5 m	600 mm (A) - 690 mm (B)	54	120

Power, air suction, depressure: which technical data is most important?

The right technical data of a vacuum cleaner is the vacuum efficiency, that is the mix of different values, i.e. air suction, motor power and depression. Air suction is the vacuumed air volume, commonly expressed in litres per seconds (I/sec) and it is the result of the average air speed multiplied by hose diameter. The depression is the vacuum power (it can be defined as the vacuum power to collect dirt) and it is commonly expressed in kPA or in mbar. It is an inverse relation to air suction: the narrower the flex diameter, the least vacuumed air volume but the best strength to pick up

Power motor is expressed in Watt and it is not proportional to vacuum efficiency!

If the vacuum cleaner is not well-done, it wastes a lot of electric power without having the best performances possible. Summing up, the vacuum cleaner efficiency is a relationship between air suction (resulting in multiplication of pressure and air suction) and motor power. All our vacuum cleaners have a top efficiency and are manufactured considering essence and user's benefit.

# Fixed or tilting trolley, which one to choose?

The choice of the trolley must be made considering the type of use needed. Generally, tilting trolley is much more useful to collect dust and solids, because the tilting tank make it easier the emptying or pouring.
The fixed trolley is better
for liquids vacuuming,
because it is equipped with
drain hose system, emptying is
fast and step by
step, avoiding the
effort of lifting the

# What kind of tank material is to be preferred?

Our vacuum cleaner range includes plastic tanks (polypropylene or PP) or stainless steel tanks. The PP tank is flexible, shock proof and resistant to chemical products. It is recommended for frequent moving uses or vacuuming of particularly aggressive chemicals (for example in combination with a single disc machine). The stainless steel tank is more rigid, steadier, resistant to mechanical abrasion and it is aesthetically agreeable. It is recommended for static use, with abrasive materials or in a public place.

dirt.

# Dry vacuum cleaners/wet & dry vacuum cleaners and Injection extraction









# Number of motors:

It explains how

many motors there are in the vacuum cleaner. Ignition is independent in order to increase progressively the performances.

The working system (whenever it is more than one) is in parallel, so the air suction increases and the depressure is steady whenever the motors are progressively switched on.



#### Anti electrostatic current device

Dust rubbing at high speed against vacuum cleaner walls creates a magnetic

field that neutralizes on the user with small and annoying discharges also through plastic material. This certified system removes this phenomenon on the machine, granting best comfort and safety for the user.



#### Paper collector filter

Allows filtering and collection (with a valve) of rough dirt without dirty the tank

whenever it is time to replace it.

It is useful for dry waste, also in combination of other thinner filters.



#### **Cloth filter**

The cloth consistency and its shape allow a simple cleaning phase and the re-

usage of the filter.

It can be used only for vacuuming dry waste; if combined with nylon filter it is possible to work for a longer period of time.



#### Cartridge filter

The continuous folders arranged in circle allow a higher filtering surface in a

smaller area.

More cleaning autonomy with a thin filtering action. It can be used only for vacuuming dry waste and it is re-usable.



#### **HEPA** filter

High Efficiency Particulate Arrestance. Hepa filter is 99,97% efficient until 0,3 micron impurities.



#### Multipurpose washable filter

It combines all the advantages of the cartridge filter but with the plus that it can vacuum both dry and wet at the

same time.

It can be washed with tap water.



#### Filter shaker

It clears filter from dust without touching it or opening the vacuum cleaner; the

vacuum efficiency is kept at max.



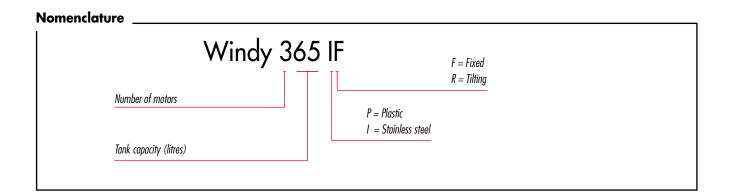
#### Foam system:

the machine is equipped with connection for compressed air and pressure gauge for foam

cleaning. Using the lance with the hose a thick foam can be produced that will stay on the dirty components, giving more effectiveness to the detergent.



Dry vacuum cleaners/wet & dry vacuum cleaners and Injection extraction





Silent Whisper PRO Worker Windy 120 IF Windy 130 IF Windy 165 PF/IF Windy 265 PF Windy 265 IF Windy 365 IF Windy 278 / 378 PF Windy 278 IF

Code	Model	Page	Voltage	Motor power	Column depresion	Air suction	Tank capadity	Noise level	Packaging L x I x H	Packaging weight	Packaging weight	Pieces for pallet	
			V - Hz	W/W max	kPa/mmH <sub>2</sub> 0	l/s	- 1	dB (A)	cm	kg	lbs	Ν°	
8.246.0001	SILENT	78	230V - 50Hz	800/900	24/2400	44 l/s	121	72 dB (A)	39x39x42	7,4	16	30	
8.246.0007	SILENT FR	79	230V - 50Hz	800/900	24/2400	44 l/s	121	72 dB (A)	39x39x42	7,4	16	30	
8.214.0601	WHISPER	80	230V - 50Hz	800/900	24/2400	44 l/s	151	72 dB (A)	49x39x42	9,5	20	20	
0.052.0019	PRO WORKER	82	220/240V - 50/60Hz	1200/1400	24/2400	70 l/s	30	75 dB (A)	51x36x56	11	24	16	
8.249.0001	WINDY 120 IF	83	230V - 50Hz	1200/1400	24/2400	65 l/s	201	79 dB (A)	38x37x62	10	22	18	
8.250.0001	WINDY 130 IF	84	230V - 50Hz	1200/1400	24/2400	65 l/s	30	79 dB (A)	38x37x70	11	24	18	
8.263.0002	WINDY 165 PF	85	230V - 50Hz	1200/1400	24/2400	65 l/s	65	79 dB (A)	75x60x103	30,5	67	4	
8.263.0001	WINDY 165 IF	86	230V - 50Hz	1200/1400	24/2400	65 l/s	65	79 dB (A)	75x60x103	30,5	67	4	
8.239.0008	WINDY 265 PF	87	230V - 50Hz	2000/2400	22/2200	130 l/s	65	79 dB (A)	60x48x87	18,8	41	8	
8.239.0001	WINDY 265 IF	88	230V - 50Hz	2000/2400	22/2200	130 l/s	65	79 dB (A)	60x48x87	19,8	44	8	
8.240.0001	WINDY 365 IR	89	230V - 50Hz	3000/3600	22/2200	195 l/s	65	79 dB (A)	65x55x104	25,5	56	4	
8.247.0002	WINDY 278 PF	90	230V - 50Hz	2000/2400	22/2200	130 l/s	781	79 dB (A)	75x60x103	29,6	65	4	
8.247.0001	WINDY 278 IF	91	230V - 50Hz	2000/2400	22/2200	130 l/s	781	79 dB (A)	75x60x103	29,6	65	4	
8.256.0002	WINDY 378 PF	93	230V - 50Hz	3000/3600	22/2200	195 l/s	781	79 dB (A)	75x60x103	30,5	67	4	





Windy 378 IR Zeus IF Domus/Taurus PR Domus/Taurus IR GBP 20 Jupiter Apollo IF Solaris IF Costellation IR Windy IE Foam

Code	Model	Page	Voltage	Motor power	Column depresion	Air suction	Tank capadity	Noise level	Packaging L×1×H	Packaging weight	Packaging weight	Pieces for pallet
			V - Hz	W/W max	kPa/mmH <sub>2</sub> 0	l/s	- 1	dB (A)	cm	kg	lbs	N°
8.248.0001	WINDY 378 IR	94	230V - 50Hz	3000/3600	22/2200	195 l/s	781	79 dB (A)	75x60x103	30,5	67	4
8.215.0501	ZEUS IF	95	230V - 50Hz	1200/1400	24/2400	53 l/s	50	71 dB (A)	64x54x92	21,5	47	4
8.213.0509	DOMUS PR	96	230V - 50Hz	2000/2400	24/2400	108 l/s	781	74 dB (A)	75x60x103	30,5	67	4
8.216.0502	DOMUS IF	97	230V - 50Hz	2000/2400	24/2400	108 l/s	781	74 dB (A)	75x60x103	30,5	67	4
8.213.0501	DOMUS IR	98	230V - 50Hz	2000/2400	24/2400	108 l/s	781	74 dB (A)	75x60x103	33,5	74	4
8.212.0508	TAURUS PR	99	230V - 50Hz	3000/3600	24/2400	162 l/s	77	76 dB (A)	75x60x103	32,5	71	4
8.212.0501	TAURUS IR	101	230V - 50Hz	3000/3600	24/2400	162 l/s	781	76 dB (A)	75x60x103	34,5	76	4
8.212.0523	TAURUS IR 2 Way	102	230V - 50Hz	3000/3600	24/2400	162 l/s	781	76 dB (A)	75x60x103	32	70	4
8.204.0066	GBP 20 Pro	103	230V - 50Hz	1200/1400	27/2700	70 l/s	20	75 dB (A)	40x39x64	9,5	20,9	18
0.065.0001	JUPITER	104	230V - 50Hz	1100	23/2300	50 l/s	6,51	70 dB (A)	55x35x64	14	31	12
8.220.0501	APOLLO IF	105	230V - 50Hz	1200/1400	24/2400	53 l/s	50	71 dB (A)	64x54x92	24	53	4
8.221.0508	SOLARIS IF	106	230V - 50Hz	2200/2400	24/2400	108 l/s	781	74 dB (A)	75x60x103	37	82	4
8.221.0501	COSTELLATION IR	107	230V - 50Hz	2200/2400	24/2400	108 l/s	781	74 dB (A)	75x60x103	37	82	4
8.239.0017	WINDY IE Foam	108	230V - 50Hz	2000/2400	22/2200	130 l/s	65	79 dB (A)	65x55x104	26,5	58,5	4

## **Silent**





Professional ultra silent vacuum cleaners Lavor were conceived to meet the needs of floor care sector.

#### **Equipped with:**

- Silenced single stage motor (high efficiency).
- Integrated accessory holder.
- Shock and overturn proof design.
- 12 litre plastic tank (PP)
- Cloth filter
- Rotating ON/OFF switch
- Paper collector filter.
- Accessories Ø 35



#### **Optional:**

• Power cable 7,5 m

- code. 5.212.0023 Paper collector filter set (10 pcs)
- code. 5.212.0149 Microfiber collector filter set (10 pcs)
- code. 6.205.0199 Paper collector filter set (300 pcs)
- code. 6.205.0200 Paper collector filter set (550 pcs)
- code. 3.754.0081 Brush carpet Turbo brush Type 2
- code. 5.212.0163 HEPA filter



	Silent
code	8.246.0001
voltage	230-240V ~ 50-60Hz
n°motors - power	1 - 800 W
column depression	24 kPα/2400 mmH <sub>2</sub> O
air suction	44  /s
total volume	12 l.
dimension/weight	39x39x42 cm/6,8 kg
dimension/weight	37837842 UII) 0,0 Kg



## Silent FR





Professional ultra silent vacuum cleaners Lavor were conceived to meet the needs of floor care sector.

#### **Equipped with:**

- Silenced single stage motor (high efficiency).
- Integrated accessory holder.
- Shock and overturn proof design.
- 12 litre plastic tank (PP)
- HEPA filter
- Rotating ON/OFF switch
- Microfiber collector filter HEPA flow
- High visibility safety power cable 12 m.



#### **Optional:**

- code. 5.212.0023 Paper collector filter set (10 pcs)
- code. 5.212.0149 Microfiber collector filter set (10 pcs)
- code. 3.754.0081 Brush carpet Turbo brush Type 2
- code. 6.205.0199 Paper collector filter set (300 pcs)
- code. 6.205.0200 Paper collector filter set (550 pcs)



	Silent FR
code	8.246.0007
voltage	220-240V ~ 50-60Hz
n°motors - power	1 - 800 W
column depression	24 kPa/2400 mmH <sub>2</sub> O
air suction	44 l/s
total volume	12 l.
dimension/weight	39x39x42 cm/6,8 kg



# Dry vacuum cleaners













#### Standard equipment:

• 5.209.0077 Hose 2,5 m



• 3.753.0103



• 3.754.0015

• 3.754.0005



• 3.754.0205



• 3.754.0004



• 3.752.0115



• 3.752.0093



• Power cable 15 m

#### **Equipped with:**

- Ultra silenced single stage motor (high efficiency).
- Paper and cartridge filter.
- Full collector filter indicator.
- Exaust air filter. Integrated accessory holder.
- Quick power cable (15 m) replacing system.
- Shock & overturn proof design.
- Traceless wheels.

#### **Optional:**

- code. 3.752.0092 HEPA filter
- code. 5.212.0023 Paper collector filter set (10 pcs)
- code. 3.754.0081 Brush carpet Turbo brush Type 2
- code. 5.212.0149 Microfiber collector filter set (10 pcs)

	Whisper
code	8.214.0601
voltage	230-240V ~ 50-60Hz
n°motors - power (max)	1 - 800 W
column depression	24 kPα/2400 mmH <sub>2</sub> O
air suction	44 l/s
total volume/dust	15 l./10 l.
dimension/weight	47x34x36 cm / 5,5 kg



# New commercial wet & dry range of vacuum cleaners



**PROWORKER** is the NEW LAVOR wet and dry vacuum cleaner with power tool socket, automatic filter shaker and blowing system, ideal for challenging and heavy applications with required suction directly from the tool. The constant use of PROWORKER helps the maintenance of a healthy and clean working environment.

Essential to comply with the directives on hazardous dust extraction/emission, it offers a multilevel filtering system made of M/E10 suction filter with NANO TECH coating, microbiber collector filter, and M/E10 output air filter which classify it as a **CLASS M** Certified vacuum cleaner.

**WINDY range** is the commercial vacuum cleaners line suitable for wet and dry applications: three models equipped with 1 up to 3 professional single stage motor (from 1,2 up to 3,6 kW), stainless steel or anti shock plastic tank, tilting or fixed tank: WINDY are mainly designed for daily light industrial use and are perfectly suited to the most common demand of cleaning contractors, garages, workshops etc...

They are equipped with the new manual RF (reverse flow) filter cleaning system, granting high cleaning efficiency and longer lifespan of the motors.

Practical in every situation, the new WINDY range offers accessories holder, cable holder and a new rotating ON/OFF switch, simple and resistant to daily use.

Equipped with professional accessories and professional filter, WINDY is the answer to your requests!





Standard equipment:



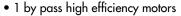
## **PRO Worker EM**

Wet & Dry vacuum cleaner with power tool socket with remote control and automatic filter shaker









- Suction system with by-pass cooling
- Power tool socket (max 2200 W)
- Automatic ON/OFF filter shaker
- Shock proof tank (PP)
- Liquid float valve
- Dirty filter indicator
- Rotary switch
- M/E10 filter
- Microfiber collector filter
- M/E10 suction filter with NANO TECH coating
- Extension steel pipe
- Multidiameter tool adapter
- Flex hose elastic fastening
- Accessories Ø35.



• 0.952.0058 + 3.753.0003	Q
• 6.205.0109	
• 3.754.0168	54 NS
• 3.754.0169	-
• 3.754.0170	-
• 3.754.0005	
• 4.208.0063	
• 0.952.0054	
• 2x 3.752.02	92
• 0.952.0055	
• 0.952.0056	
• 0.952.0057	
• 7.5 m neopre power cable	ene Co
Optional:	W.
• code. 5.212 filter set (5 pc	2.0165 Microfiber collecto s)
	atch the video on youtube: w.youtube.com/lavorpro

	PRO Worker EM
code	0.052.0019
voltage	220-240V ~ 50-60Hz
n°motors - power	1 - 1400 W
column depression	24 kPα/2400 mmH <sub>2</sub> O
air suction	70 l/s
volume	30 l.
dimension/weight	51x36x56 cm/11 kg



# Windy 120 IF





#### **Equipped with:**

- High efficiency by pass motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Accessories Ø 35.
- Handy accessory holder.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set 10 pcs
- code. 5.212.0043 Cloth filter
- code. 3.754.0205 Brush flor/carpet with wheels
- code. 3.754.0081 Brush carpet Turbo brush Type 2
- code. 5.212.0157 Cartridge filter
- code. 5.212.0158 HEPA filter
- code. 5.212.0155 Washable filter

	Windy 120 IF
code	8.249.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	24 kPa/2400 mmH <sub>2</sub> O
air suction	65 l/s
total volume/dust/liquid	20 1./14 1./16 1.
dimension/weight	35x35x66 cm/8 Kg

# Windy 130 IF









## **Equipped with:**

- High efficiency by pass motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Shock proof trolley.
- Liquid float valve.
- Washable filter.
- 7,5 m power cable.
- Accessories Ø 35.
- Handy accessory holder.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set - 10 pcs
- code. 5.212.0043 Cloth filter
- code. 3.754.0205 Brush flor/carpet with wheels
- code. 3.754.0081 Brush carpet Turbo brush Type 2
- code. 5.212.0157 Cartridge filter
- code. 5.212.0158 HEPA filter

Windy 130 IF
8.250.0001
220-240V ~ 50-60Hz
1 - 1200 (1400) W
24 kPα/2400 mmH <sub>2</sub> O
65 l/s
30 l./15 l./17 l.
37x37x71 cm/8,5 Kg

# Wet & dry vacuum cleaners









## **Standard equipment:**

• 5.209.0021 Hose 2,5



• 6.205.0126

• 3.754.0048

• 3.754.0049

• 3.754.0185

• 3.754.0169

• 3.754.0170

• 6.205.0011

• 6.205.0008

• Power cable 10 m

# **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.212.0094 Nylon filter
- code. 5.212.0157 Cartridge filter
- code. 5.212.0158 HEPA filter
- code. 5.212.0155 Washable filter



Watch the video on youtube: www.youtube.com/lavorpro

# **Equipped with:**

- High efficiency by pass motor.
- Suction system with by-pass cooling.
- Plastic tank (PP).
- Professional closing hooks.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.

	Windy 165 PF
code	8.263.0002
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	24 kPα/2400 mmH <sub>2</sub> O
air suction	65 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	44x46x96 cm/13 kg







**Equipped with:** 

- High efficiency by pass motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.212.0094 Nylon filter
- code. 5.212.0157 Cartridge filter
- code. 5.212.0158 HEPA filter
- code. 5.212.0155 Washable filter

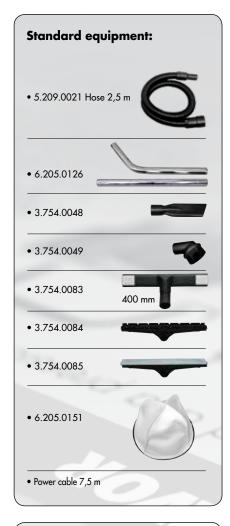


	Windy 165 IF
code	8.263.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	24 kPα/2400 mmH <sub>2</sub> O
air suction	65 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	44x46x96 cm/13 kg





- 2 high efficiency by pass motors.
- Suction system with by-pass cooling.
- Filter cleaning system.
- Plastic tank (PP).
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set 10 pcs
- code. 5.209.0177 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter



	Windy 265 PF
code	8.239.0008
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W
column depression	22 kPa/2200 mmH <sub>2</sub> O
air suction	130 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	44x46x96 cm/13 kg

# Windy 265 IF











• 2 high efficiency by pass motors.

- Suction system with by-pass cooling.
- Filter cleaning system.
- S. S. tank.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set - 10 pcs
- code. 5.209.0177 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter



	Windy 265 IF
code	8.239.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W
column depression	22 kPα/2200 mmH <sub>2</sub> O
air suction	130 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	44x46x96 cm/14,5 kg





- 3 high efficiency by pass motors.
- Suction system with by-pass cooling.
- Filter cleaning system.
- S. S. tank.
- Static electric shock inhibitor.
- Tilting tank.
- Fully removable tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.

#### **Optional:**

- code. 5.212.0022 Paper collector filter set - 10 pcs
- code. 5.209.0177 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter



	Windy 365 IR
code	8.240.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W
column depression	22 kPa/2200 mmH <sub>2</sub> O
air suction	195 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	62x51x100 cm/20 kg

# Windy 278 PF









- Suction system with by-pass cooling.
- Filter cleaning system.
- Plastic tank (PP).
- Shock proof trolley.
- Liquid float valve.
- Drain hose system.
- Cloth filter.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set - 10 pcs
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 Hepa filter



	Windy 278 PF
code	8.247.0002
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W High efficiency motor.
column depression	22 kPa/2200 mmH <sub>2</sub> O
air suction	130 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x96 cm/21,5 kg













Windy 278 IF

## Standard equipment:

• 5.209.0021 Hose 2,5 m

• 6.205.0126

• 3.754.0048

• 3.754.0049

• 3.754.0083

• 3.754.0084

• 3.754.0085

• 5.509.2176

• Power cable 7,5 m

#### **Optional:**

- code. 5.212.0022 Paper collector filter set 10 pcs
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 Hepa filter



Watch the video on youtube: www.youtube.com/lavorpro

# Equipped with:

- 2 high efficiency by pass motors.
- Suction system with by-pass cooling.
- Filter cleaning system.
- S. S. tank.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- Drain hose system.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.

	Windy 278 IF
code	8.247.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W High efficiency motor.
column depression	22 kPα/2200 mmH <sub>2</sub> O
air suction	130 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x96 cm/23 kg





- 3 high efficiency by pass motors.
- Suction system with by-pass cooling.
- Filter cleaning system.
- Plastic tank (PP).
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- Drain hose system.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.

#### **Optional:**

- code. 5.212.0022 Paper collector filter set 10 pcs
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 Hepa filter



	Windy 378 PF
code	8.256.0002
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W High efficiency motor.
column depression	22 kPα/2200 mmH <sub>2</sub> O
air suction	195 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm/23,5 kg



Standard equipment: • 5.209.0021 Hose 2,5 m • 6.205.0126 • 3.754.0048 • 3.754.0049 • 3.754.0083 • 3.754.0084 • 3.754.0085 • 5.509.2176 • Power cable 7,5 m

- Suction system with by-pass cooling.
- Filter cleaning system.
- S. S. tank.
- Static electric shock inhibitor.
- Tilting tank.
- Fully removable tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 7,5 m power cable.
- Traceless wheels.
- Accessories Ø 40.
- Handy accessory holder.

#### **Optional:**

- code. 5.212.0022 Paper collector filter
- set 10 pcs
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 Hepa filter



	Windy 378 IR
code	8.248.0001
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W High efficiency motor.
column depression	22 kPa/2200 mmH <sub>2</sub> O
air suction	195 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm/26 kg

## Heavy duty range



The Professional range of Lavor vacuum cleaners provides the solution for every kind of heavy duty daily use. The models of the wet and dry series are equipped with 1 up to 3 double stage motor (1.2 to 3.6 kW), different tank capacities (50 or 78 l.), tilting or fixed tank and PP antishock or stainless steel tanks. Designed to be user friendly, they are equipped with ergonomic handle, big wheels and stable trolley offering the final answer to the needs of cleaning contactors, industries, workshops, car washing station etc. The accessories sets allowing all the different operation of wet and dry suction , are designed to be stressless for the end user (using longer extension pipes) and can easily fit and change quickly one to the other. The antischock feature has to be considered a big advantage when metal dust , flour and all the different types of dirt creating ESD electrostatic discharge are collected inside the tank. This feature avoids shocks to the end user, making usage easier.

Wide cloth filter bag (standard) grants good performances of the motor also when it is used for a long period; HEPA, cartridge, nylon, sponge and collector bag can be equipped easily (Optional). The filter area is reachable easily and the wide float seat grants stability on the floor during filter cleaning session.

The ANTIFOAM device (optional) must be used in case of mixture chemical/water suction, avoiding the foam to reach motor.





## **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.212.0094 Nylon filter
- code. 5.212.0160 Washable filter
- code. 5.212.0161 Cartridge filter
- code. 5.212.0162 HEPA filter



- Silenced two stage motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Drain hose system.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.

	Zeus IF
code	8.215.0501
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	21,6 kPa/2200 mmH <sub>2</sub> O
air suction	53 l/s
total volume/dust/liquid	50 l./21 l./35 l.
dimension/weight	62x51x85 cm / 16,5 kg





• 2 silenced two stage motor.

• Suction system with by-pass cooling.

- Plastic tank (PP).
- Professional closing hooks.
- Tilting tank.
- Fully removable tank.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Cable holder.
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter



	Domus PR
code	8.213.0509
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W silenced two stage motor
column depression	22 kPa/2240 mmH <sub>2</sub> O
air suction	108 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 28,5 kg











- 2 silenced two stage motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Drain hose system.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter



	Domus IF
code	8.216.0502
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W silenced two stage motor
column depression	22 kPα/2240 mmH <sub>2</sub> O
air suction	108 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x85 cm / 28 kg









• 2 silenced two stage motor.

- Suction system with by-pass cooling.
- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Tilting tank.
- Fully removable tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Cable holder.
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter



	Domus IR
code	8.213.0501
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W silenced two stage motor
column depression	22 kPa/2240 mmH <sub>2</sub> O
air suction	108 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 32 kg











• 3 silenced two stage motor.

• Suction system with by-pass cooling.

- Plastic tank (PP).
- Professional closing hooks.
- Tilting tank.
- Fully removable tank.
- Static electric shock inhibitor.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Cable holder.
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter



	Taurus PR
code	8.212.0508
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W silenced two stage motor
column depression	22 kPα/2240 mmH <sub>2</sub> O
air suction	162 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 29,5 kg









• 3 silenced two stage motor.

• Suction system with by-pass cooling.

- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Tilting tank.
- Fully removable tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Cable holder.
- Traceless wheels.
- Accessories Ø 40.



#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter



	Taurus IR
code	8.212.0501
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W silenced two stage motor
column depression	22 kPα/2240 mmH <sub>2</sub> O
air suction	162 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 33 kg



# Taurus IR 2 Way



# **Standard equipment:** • 2 x 5.209.0082 Hose 5 m • 2 x 3.754.0048 • 2 x 3.754.0049 • 5.509.0039 • Power cable 10 m

#### **Equipped with:**

- 3 silenced two stage motor.
- S. S. tank.
- Professional closing hooks.
- Static electric shock inhibitor.
- Suction system with by-pass cooling.
- Tilting tank.
- Fully removable tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Cable holder.
- Traceless wheels.
- Accessories Ø 40.

#### **Optional:**

- code 6.205.0126 Ø 40 chromium plated steel curve and extension pipe kit
- code 6.205.0121 Ø 40 complete accessories kit (holder accessories, floor brush, wet tool, carpet tool)
- code. 5.212.0093 Cloth filter for fine



	Taurus IR 2 Way
code	8.212.0523
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	3 - 3000 (3600) W silenced two stage motor
column depression	22 kPa/2240 mmH <sub>2</sub> O
air suction	162 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 33 kg

# Injection extraction range



Lavor professional extraction/injection machines: GBP 20 Pro, Jupiter, Apollo, Solaris, Costellation and the innovative Windy Foam are the real solution to clean any type of textiles!

Machines equipped with 6,5 up to 78 liters tanks, 1 or 2 double stage motors, 1 or 2 detergent pumps to assure always the right flow of injected chemical.

Provided with a full range of accessories capable to suit each deep cleaning textile application: carpets, vehicle seats, sofas, tents, chairs, mats, etc... To be used in the **HO-RE-CA**, **Automotive** and **Industrial** cleaning, they will perfectly fit any requirements.

Windy IE Foam, a range of injection/extraction cleaning machines ideal for car cleaning, as they can be used with thick foam or liquid detergent.

Windy IE Foam is equipped with a connection for compressed air with pressure regulator and an external tank of 12 liters capacity, which allows detergent refilling without opening the machine.

Windy IE Foam Compressor is equipped with an air compressor unit and an external tank of 12 liters capacity, which allows detergent refilling without opening the machine.







# Vacuum cleaners - Injection extraction





GBP 20 Pro









## **Equipped with:**

- Silenced single stage motor.
- Suction system with by-pass cooling.
- 20 lt. plastic tank (PP)
- 2 lt. Solution tank
- Shock proof trolley.
- Liquid float valve.
- 7,5 m power cable.
- Washable filter
- Paper collector filter
- Pressure 7 bar max
- Accessories Ø 35.

Optional:	
	Hygienic PERFUME OPTIONAL
	Code 0.010.0035 100 ml x 4 pcs
• code 3. foaming s	697.0072 LC-PREFOAM (no system)

	GBP 20 Pro
code	8.204.0066
voltage	230V ~ 50Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	27 kPa/2700 mmH <sub>2</sub> O
air suction	70 l/s
total volume	20 l.
dimension/weight	10×39×64 cm/9 5 kg

# Jupiter





- Spray-extraction cleaner with a separate anti-foaming tank.
- Designed for rug, carpet, and upholstery cleaning in offices, clinics, cinemas and households, as well as car upholstery.
- Thorough cleaning through the 4 bar spray pressure and 230 mbar suction power.
- Spray and extraction functions are separately operable.
- Separate fresh and wastewater tanks, each containing 6,5 l. Separate container for anti-foaming agent.
- Clear, ergonomic nozzles.
- Long stainless steel vacuum tube for convenient, effortless work.
- Rubber-coated castor wheels and large back wheels.

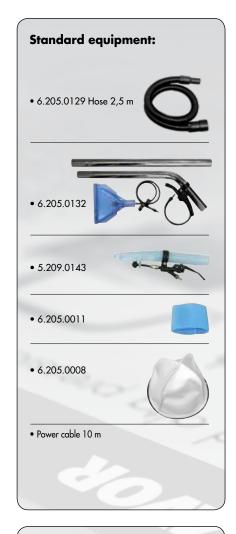




Jupiter
0.065.0001
230V ~ 50Hz
1 - 1100 W
23 kPα/2300 mmH <sub>2</sub> O
50 l/s
6,5 l./5 l./6 l.
55 x 35 x 63,5 cm/13 kg







## **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.212.0094 Nylon filter
- code. 5.212.0160 Washable filter
- code. 5.212.0161 Cartridge filter
- code. 5.212.0162 HEPA filter

- Suction system with by-pass cooling.
- S. S. tank.

Detergent pump  $(1\times26W - 1.2 \text{ l/m} - 2.5\text{bar})$ 

- Professional closing hooks.
- Static electric shock inhibitor.
- Drain hose system.
- 11 l. detergent tank.
- Shock proof trolley. Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.

	Apollo IF
code	8.220.0501
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	1 - 1200 (1400) W
column depression	21,6 kPa/2200 mmH <sub>2</sub> O
air suction	53 l/s
total volume/dust/liquid	50 l./21 l./35 l.
dimension/weight	62x51x85 cm / 22 kg



## Solaris IF







#### **Standard equipment:**

• 6.205.0129 Hose 2,5 m





• 5.209.0143



• 5.509.0039



• Power cable 10 m

- Suction system with by-pass cooling.
- S. S. tank.
- Detergent pump (2x48W 1 l/m 7 bar).
- Professional closing hooks.
- Static electric shock inhibitor.
- Drain hose system.
- 25 l. detergent tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.

#### **Optional:**

- code. 5.212.0022 Paper collector filter set (10 pcs)
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0021 Washable filter
- code. 5.212.0034 HEPA filter

	Solaris IF
code	8.221.0508
voltage	230V ~ 50Hz
n°motors - power (max)	2 - 2200 (2400) W silenced two stage motor
column depression	22 kPa/2240 mmH <sub>2</sub> O
air suction	108 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x96 cm / 33 kg

# Vacuum cleaners - Injection extraction





Standard equipment:

• 6.205.0129 Hose 2,5 m





• 5.209.0143

ELECTROSTATIC



• 5.509.0039



• Power cable 10 m

#### **Equipped with:**

- 2 silenced two stage motor.
- Suction system with by-pass cooling.
- S. S. tank.
- Detergent pump (2x48W 0.7-1.2 l/m 5 bar).
- Professional closing hooks.
- Static electric shock inhibitor.
- Tilting tank.
- Fully removable tank.
- 11 l. detergent tank.
- Shock proof trolley.
- Liquid float valve.
- Cloth filter.
- 10 m power cable.
- Easy standing head (during filter cleaning).
- Traceless wheels.
- Accessories Ø 40.

#### **Optional:**

- code. 5.512.0021 Washable filter
- code. 5.509.1405 Cloth filter for fine dust
- code. 5.212.0093 Nylon filter
- code. 5.212.0034 HEPA filter

	Costellation IF
code	8.221.0518
voltage	230V ~ 50Hz
n°motors - power (max)	2 - 2200 (2400) W silenced two stage motor
column depression	22 kPa/2240 mmH <sub>2</sub> O
air suction	108 l/s
total volume/dust/liquid	78 l./35 l./48 l.
dimension/weight	62x51x99 cm / 35,5 kg













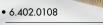
## **Standard equipment:**

• 5.209.0021 Hose 2,5 m















• 5.212.0141



• 3.754.0048



- 2 high efficiency by-pass motors
- Suction system with by-pass cooling
- Stainless steel tank
- Detergent pump (48W 1 l/m 15 bar)
- Steel closing hooks
- Static electric shock inhibitor
- Fully removable tank
- 12 l. detergent tank
- Shock proof trolley Safety floating
- Washable cartridge filter
- 7,5 m power cable
- Traceless wheels
- Accessories Ø 40
- Equipped with connection for compressed air and pressure gauge with pressure adjuster for foam cleaning.



Watch the video on youtube: www.youtube.com/lavorpro

#### **Optional:**

- 5.212.0022 Paper collector filter set (10 pcs)
- 5.209.0177 Cloth filter for fine dust
- 5.212.0093 Nylon filter

• 3.697.0072 LC prefoam

- 0.110.0020 Antifoam device
- 3.697.0036 Anti-foaming for recovery tank
- 3.697.0058 (4x5 Kg) Acid-based det. for toilets
- 3.697.0057 (4x5 Kg) Alkaline-based det. alimentary environments
- 3.697.0056 (4x5 Kg) Det. for fabrics and carpeting

	Windy IE Foam
code	8.239.0017
voltage	220-240V ~ 50-60Hz
n°motors - power (max)	2 - 2000 (2400) W high efficiency motor
column depression	22 kPα/2200 mmH <sub>2</sub> O
air suction	130 l/s
total volume/dust/liquid	65 l./30 l./40 l.
dimension/weight	44x46x96 cm / 24 kg





Windy IE Foam is an injection/extraction cleaning machine ideal for car cleaning, as it can be used with thick foam or liquid detergent. Windy IE Foam is equipped with a connection for compressed air with pressure regulator and an external tank of 12 liters capacity, which allows the detergent refilling without opening the machine.

A compressorwith the following technical data is required: Pressure 6 bar, Delivery rate 250 lt/min.

Thanks to the special brush the foam can be spread quickly and easily on the car seats or mats and can be removed after few seconds with the transparent nozzle. Being equipped with two high depression vacuum motors, 90% of the foam is recovered with the great advantage of a very fast drying (20 min.) and a better cleaning performace.





Windy IE Foam is ideal for the pre-washing of the car body, rims and engine. Using the lance with the 7 (2 x 3,5) meters hose can be produced a thick foam that will stay on the dirty components, giving more effectiveness to the detergent. Windy IE Foam is also an excellent two motors wet & dry vacuum cleaner with 65 liters tank capacity.

## **Fields of applications**

Washing of: car body and interiors, carpets, sofas, restrooms, kitchens and wherever is necessary to wash and sanitize.

#### **Users:**

Car dealers, car washers, garages, car body shops, contractor cleaners and any other user which is provided with a source of compressed air; in the absence of a compressed air system, Windy IE Foam can also be used in combination with a small 24 liters compressor.





## Flexible hose Ø 35

Code	Description	m	Ø
3.753.0063	Roll of flexible hose without swivel	30	35

Code	Description	Ø
3.752.0118	Sleeve tank side	35
3.752.0028	Swivel straight accessories side	35
3.753.0077	Swivel curved accessories side	35



## Flexible hose Ø 40

Code	Description	m	Ø
3.753.0038	Roll of flexible hose without swivel	30	40

Coae	Description	Ø
3.754.0047	Sleeve tank side	40
3.754.0046	Straight accessories side	40

## Complete flexible hose Ø 40



Code	Description	m	Ø
5.209.0082	Flexible hose	5	40
6.205.0130	Flexible hose for Injection extraction	5	40
6.205.0131	Flexible hose for Injection extraction	10	40





 $\varnothing$  40 Spacer for plastic bag 58 l. (for Domus/Taurus/Solaris/Costellation models) This accessory is necessary when using collector bag: the use of collector bag is not possible without PVC spacer.

The use of the collector bag grants easy filter cleaning and its quick replacement whenever necessary, saving time also during the operation of tank cleaning.



Ø 40 Gangway tool (only for Domus PR/Domus IR/Taurus PR/ Taurus IR/Costellation IR models)

A set made of special accessory with front and back squeegee + a flex connection hose in order to vacuum easily and quickly water and liquid from the floor.

0.911.0210 front squeegee strip with hole 0.911.0211 rear squeegee strip without hole

## Gangway tool (only for liquid suction)

Code 0.110.0062







## Turbo brush Ø 35

Code 3.754.0081





## **Antifoam device**

Code 0.110.0020

This device avoids the forming of foam that may affect the operation of the float. (For Zeus, Domus, Taurus, Apollo, Solaris, Costellation models)

## Why wider filtering area is not making automatically a better machine?

In the industrial sector, productivity, resistance and breakeven expectations are growing. The ideal vacuum would be then a machine filtering any kind of dust (also the thinnest) being able to work continuously without the need to clean the filter and without any maintenance. It is more important to get close effectively to this target rather than the way we can reach this. This is the reason why is useless having a big filtering area if the filter is still clogging up fast and more often I need to stop working to clean it. In our machines we developed the best prevention of the problem (avoiding dust is reaching quickly the filter) rather than trying a solution afterwards (since the filter is clogging up quickly, extending the filtering area it is supposed to extend the effectiveness). It doesn't matter how wide is the filter, but for how long can work the machine without the need to clean the filter...

And with this issue, we are the best.

## When either more airflow or more depressure is necessary?

The airflow helps the dirt transport trough long pipes. Longer is the hose, better is bigger airflow; still with light dust it is better having lower depressure: the inlet air speed will be lower, the harder the dirt is getting in touch with the filter.

When residuals have high specific weight, depressure is more important than airflow to win gravity force of dirt attached to the surface.







#### **Number of motors:**

It explains how many motors there are in the vacuum cleaner.

Ignition is independent in order to increase progressively the performances. The working system (whenever it is more than one) is in parallel, so the air suction increases and the depressure is steady whenever the motors are progressively switched on.



**Cloth filter** The cloth consistency and its shape allow a simple cleaning phase and the re-usage of the filter. It can be used only for vacuuming dry waste; if combined with nylon filter it is possible to

work for a longer period of time.



## Pneumatic filter shaker (international copyright)

Through the selector, the airflow is inverted to feed an internal pneumatic hammer that shakes and blows the filter, cleaning it again completely. It is not necessary to touch the filter or worst to clean it outside the machine spreading again dust everywhere.



#### Antistatic machines and accessories

Using specific conductive materials and engineering, there's the prevention of ignition sparks from the machine side, up to the end of

any tool available for this machine range.



## **Nomenclature**

S = Universal (motor) D = Induction (motor)

M = Single phase (motor)

SMX 77 2-24 S

Filter shaker

 $\frac{T = Tri-Phase (motor)}{V = Varnishing (tank)}$ 

X = S. S. (tank)

n° Motor



SMX77 2-24 SMX77 3-36



DMX80 1-22 S DTX 80 1-30 S

Code	Model	Page	Voltage	Abs. Power	Column depression	Suction air	Tank capacity	Noise level	Filtering surface	Packaging	Packaging weight	Packaging weight	Pieces for pallet
			V~Hz (Ph)	W	kPa	l/s	I	dB(A)	cm <sup>2</sup>	cm L x l x H	kg	lbs	n°
0.056.0002	SMX77 2-24	114	230 V~50-60 Hz (1Ph)	2000	24 kPa	108 l/s	77 l.	74 dB(A)	4300 cm <sup>2</sup>	70x91x141	66	145,5	1
0.056.0004	SMX77 3-36	114	230 V~50-60 Hz (1Ph)	3000	24 kPa	162 l/s	77 l.	76 dB(A)	4300 cm <sup>2</sup>	70x91x141	67	147,7	1
0.045.0031	DMX 80 1-22 S	115	230 V~50 Hz (1Ph)	2200	32 kPa	97 l/s	80 l.	<74 dB(A)	4300 cm <sup>2</sup>	50x50x140	80	176	1
0.045.0032	DTX 80 1-30 S	115	400 V~50 Hz (3Ph)	3000	32 kPa	97 l/s	80 l.	<74 dB(A)	4300 cm <sup>2</sup>	50x50x140	85	187	1



**SMX 77** 



Models: 2-24

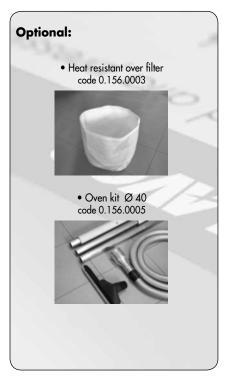


Models: 3-36





**Standard equipment:** • Reduction Ø 70 - Ø 50 mm Cloth filter



## **Equipped with:**

- 3 silenced two stage motor (SMX 3-36 model).
- 2 silenced two stage motor (SMX 2-24 model).
- Suction system with by-pass cooling.
- S. S. tank.
- Manual filter shaker.
- Professional closing hooks.
- Static electric shock inhibitor.
- Liquid float valve.
- Cloth filter. Filters (optional) against thin dust or Hepa.
- Though integrated accessory storage facility.
- Non-overturning steel structure.
- Available with body and cover entirely made of S. S. AISI 304.
- Traceless wheels.
- Accessories Ø 50.

	SMX77 2-24	SMX77 3-36
code	0.056.0002	0.056.0004
abs. power W	2000	3000
n°/type motor	2x two stages universal	3x two stages universal
column depression	23,6 kPa (2400 mmH2O)	23,6 kPa (2400 mmH2O)
suction air	108 l/s	162 l/s
tank volume/dust capacity/liquid capacity	77  /45  /50	77  /45  /50
noise level	74 dB(A)	76 dB(A)
voltage	230 V~50-60 Hz (1Ph)	230 V~50-60 Hz (1Ph)
filtering surface	4300 cm <sup>2</sup>	4300 cm <sup>2</sup>
filtering capacity	5 µm	5 μm
cable lenght	7,5 m	7,5 m
dimensions/weight	70x91x141cm/66Kg-145.2 lbs	70x91x141cm/67Kg-147.4 lbs













## **Equipped with:**

- IP 65 silenced turbine motor.
- Liquid float valve.
- S. S. tank.
- Manual filter shaker.
- Professional closing hooks.
- Static electric shock inhibitor.
- Non-overturning steel structure.
- Drain hose system.
- Epoxy varnishing.
- Steering wheels with brake.
- Air intake safety valves for turbine motor protection.







	DMX80 1-22 S	DTX80 1-30 S
code	0.045.0031	0.045.0032
abs. power W	2200	3000
n°/type motor	1x induction	1x induction
column depression	21 kPa (2100 mmH2O)	32 kPa (3200 mmH2O)
suction air	97 l/s	97 l/s
tank volume/dust capacity/liquid capacity	80/36/49 lt	80/36/49 lt
noise level	74 dB(A)	74 dB(A)
voltage	230 V~50 Hz (1Ph)	400 V~50 Hz (3Ph)
filtering surface	4300 cm <sup>2</sup>	4300 cm <sup>2</sup>
filtering capacity	5 μm	5 μm
cable lenght	10 m	10 m
dimensions/weight	50x50x140cm/80Kg -176 lbs	50x50x140cm/85Kg -187 lbs



## **Optional accessories**

			SMX77 9-94	
	0.144.0047	Rubber sleeve for hose Ø 38 (2 necessary for hose 3.753.0050)	О	0
	0.144.0001	Antistatic rubber sleeve for hose Ø 50 (2 necessary for hose 7.753.0053)	С	
	0.144.0002	Rubber sleeve for hose Ø 50 (2 necessary for hose 7.753.0051 o 7.753.0054)	С	
	3.753.0050	EVA CONDUCTIVE Ø 38 - min 5 mt or multiple, max 30 mt. (add also 2 x 0.144.0047, 2 x 3.099.1077 + 0.144.0011)	О	
And the state of t	3.753.0051	EVA CONDUCTIVE Ø 50 - min 5 mt or multiple, max 30 mt. (add also 2 x 0.144.0002, 2 x 3.099.1077 + 0.144.0011)	С	0
	3.753.0053	PUR ANTISTATIC Ø 50 - min 5 mt or multiple, max 30 mt. (add also 2 x 0.144.0001, 2 x 3.099.1077 + 0.144.0011)	С	0
	3.753.0054	PUR OILPROOF Ø 50 - min 5 mt or multiple, max 30 mt. (add also 2 x 0.144.0002, 2 x 3.099.1077 + 0.144.0011)	C	0
7	3.099.1077	Steel clamps for rubber sleeve Ø 50/Ø 38 (2 pcs for each hose)	С	0
	0.144.0011	Steel connection with button Ø 50/Ø 38 - accessory side	С	0
	0.144.0012	Ø 50 - steel double curve with joint coupling	С	0
	0.144.0013	Ø 50 - steel extension with joint coupling	C	0
	0.144.0014	Ø 50 - steel flat lance mm 500	С	0
	0.144.0021	Ø 50 - antistatic rubber conic bend lance	C	0
	0.144.0022	Ø 50 - antistatic rubber conic lance	C	0
	0.144.0015	Ø 50 - antistatic rubber round lance	C	0
	0.144.0019	Ø 50 - antistatic rubber suction lance	С	0
	0.144.0026	Ø 50 - stainless steel accessory for dust suction	C	0
	0.144.0027	Ø 50 - stainless steel accessory for wet suction	C	0
	0.144.0017	Ø 50 - PVC flat lance	C	0
-	0.144.0018	Ø 50 - PVC round brush	С	0
O = optional		•		

O = optional



Optional acces	sories			
			DMX80 1-22	DTX80 1-30
The second second second	5.209.0021	Flexible hose Ø 40 mm - 2,5 m	0	
	5.209.0127	Flexible hose Ø 40 mm - 4,0 m	0	0
	5.209.0082	Flexible hose Ø 40 mm - 5,0 m	0	0
	6.205.0126	KIT chromium plated pipe + curved chromium plated pipe Ø 40 mm	0	0
	3.754.0048	Flat lance 250 mm - Ø 40 mm	0	0
=>	3.754.0049	Roud brush - Ø 40 mm	0	0
	3.754.0083	Multipurpose accessories Ø 40 mm - 400 mm	0	0
	3.754.0185	Multipurpose accessories Ø 40 mm - 300 mm	0	0
	3.754.0084	Bristle accessory for dry suction (for floors) 400 mm	0	0
	3.754.0169	Bristle accessory for dry suction (for floors) 300 mm	0	
	3.754.0085	Accessory for wet suction 400 mm	0	0
	3.754.0170	Accessory for wet suction 300 mm	0	
	3.754.0086	Accessory for carpet 400 mm	0	0
	3.754.0171	Accessory for carpet 300 mm	0	0
=	3.754.0046	swivel straight sleeve Ø40 mm (accessory side)	0	0
	3.754.0047	Straight sleeve Ø40 mm (tank side)	0	0
	3.753.0038	Flexible hose Ø40 mm - 30 m	0	0
O - aptional				

O = optional

## Which are key components in a single disc machine?

The procedure to choose the right product for specific application must take into consideration of: the weight (that is the pressure over the brush), the surface to work, the RPM / type of construction of the motor and the transmission type.

Generally speaking, the lower is the rotation speed, the most effective is the pressure over the brush and deeper is dirt removal.

With the increasing of rotation speed, lower is the effect of the pressure

over the floor.

Different accessories combinations, rotation speed and motor power can provide the solution for any application: from dewaxing or deep scrub, up to polishing or buffing; from the crystallization up to spray cleaning; also

carpet cleaning

or sanding. Please

see application chapter on the next pages.



Together with its construction simplicity there are the worst danger for the operator who has to control the machine for long working sessions.

Only the perfect components and weights distribution on the machine allows a perfect balanced and ergonomic working posture, without any vibration and any strange effort to keep it in place.

A cheap construction (less strength) not considering the perfect ergonomic for the user, further to the waste of money (less productivity), it's a serious danger for the health!



## • Brush speed:

Means Rotation Per Minute of the brush.



## • Transmission: helical gear system:

Up to 400 RPM the reduction and transmission system is

made with Transmission helical gear system.

Grants continuous power, long life and noiselessness of the machine.



#### Constant brush pressure:

The pressure of brushes on the floor is made by the heavy brush plate that follows irregularity on the floor and gives always the top pressure without any adjustment still with shorter bristles.

## How much power is necessary?

There is not a set rule, if not the common sense: higher is the friction over the floor (a combination of type of working, type of surface and type of accessory used), the higher will be the power request to the motor. So more powerful is the motor, the harder the job being able to be done.

Application	Page	Code	Ø brush	Stripping synthetic floor (PVC)	Stripping cork present floor (linoleum)	Wet scrubbing/basic cleaning of stones, files and lino (sensitive floors)	Wet scrubbing/basic cleaning of syn- thetic or non sensitive floors pvc	Crystallizing	Carpet shampooing	Sanding wood	Sanding cement	Spray polishing and buffing
SDM-R 45 G 16-130	119	0.055.0302	430 - 17"	•	•	•	•	•	•	•		
SDM-R 45 G 16-160	119	0.055.0303	430 - 17"	•	•	•	•	•	•		•	
SDM-R 45 G 16-180	119	0.055.0304	430 - 17"	•	•	•	•	•	•			
SDM-R 45 G 40-160	119	0.055.0307	430 - 17"									•
SDM-R 53 G 150-130	120	0.055.0306	510 - 20"									•



## **SDM-R 45 G**



Scrubbers

## • SDM-R 45 G:

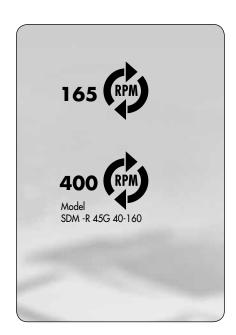
Complete range of single disc machines professional, sturdy, manageable, practical and simple to use. Ergonomic handle with integrated safety controls. Strong handle joint. Powerful and noiseless motor. Adapted in order to satisfy all the cleaning requirements, marble restoration and treatment and natural stones, woods and parquet, moquette, dewaxing, hard scrubbing.

**Polishers** 

#### • SDM-R 45G 40-160:

Professional single disc machine for maintenance cleaning or for polishing whichever type of natural floor or treating with metalized waxes. Ergonomic handle with integrated safety controls. Strong handle joint. Powerful and noiseless motor





## **Optional:**

 Code 0.955.0001K
 11 I detergent tank (only for low speed models)



Accessories and brushes are not included. For available accessories refer to accessories pages.

	SDM-R 45G 16-130	SDM-R 45G 16-160	SDM-R 45G 16-180	SDM-R 45G 40-160
code	0.055.0302	0.055.0303	0.055.0304	0.055.0307
type	low speed	low speed	low speed	medium speed
brush speed	165 RPM	165 RPM	165 RPM	400 RPM
scrubbing width	430 mm	430 mm	430 mm	430 mm
voltage	230V / 50HZ	230V / 50HZ	230V / 50HZ	230V / 50HZ
abs. power	1300 W	1600 W	1800 W	1600 W
transmission		helical ge	ar system	
brush contact pressure	40,8 g/cm <sup>2</sup>	41,3 g/cm <sup>2</sup>	44,3 g/cm <sup>2</sup>	34,9 g/cm <sup>2</sup>
noise level	60 dB(A)	60 dB(A)	60 dB(A)	60 dB(A)
cable lenght	12 m	12 m	12 m	12 m
body height	280 mm	280 mm	280 mm	280 mm
dimensions / weight	54,2x42,5x120 cm/35 Kg	54,2x42,5x120 cm/41 Kg	54,2x42,5x120 cm/52 Kg	62,5x50,5x120 cm/45 Kg

**SDM-R 53 G** 











Scrubbers

## • SDM-R 53 G:

Professional ultra-highspeed and high efficiency single disc machine ideal for polishing whichever type of natural or treated with metalized waxes floors (brush not included).

Ergonomic handle with integrated controls and sturdy joint. Powerful and quiet motor. Vacuum system. Inlcuding a paper collector bag (5 pcs set optional, code 0.955.0300K).

Flexible disc holder counterbalancing eventual unevenness

## **Optional:**

- 0.955.0300K Paper collector bag (5 pcs).
- 0.955.0299K Abrasive disc.

	SDM-R 53G 150-130
code	0.055.0306
type	High speed
brush speed	1500 RPM
scrubbing width	510 mm
voltage	230V/50HZ
abs. power	1300 W
transmission	Neither belt system
brush contact pressure	46 g/cm <sup>2</sup>
noise level	56 dB(A)
cable lenght	12 m
body height	280 mm
dimensions / weight	- cm/48,8 Kg



Accessories	Description	Code	Models	Stripping synthetic floor (PVC)	Stripping cork present floor (linoleum)	Wet scrubbing/basic cleaning of stones, tiles and lino (sensitive floors)	Wet scrubbing/basic cleaning of synthetic or non sensitive floors pvc	Crystallizing	Carpet shampooing	Sanding wood	Sanding cement	Spray cleaning	Spray polishing and buffing
Durches (*)	Description	Code	Models	- 0,	0,0		- "		Ŭ		-	<u> </u>	<u> </u>
Brushes (*)	C .I I	0.055.001.4	CD11 D 150										
	Carpet brush	0.955.0014	SDM-R 45G						X				
	Scrubbing brush PP 0,6 mm	0.955.0007	SDM-R 45G		х	х							
AND THE PERSON NAMED IN	Tynex brush	0.955.0004	SDM-R 45G	х			х						
A STATE OF THE STA													
Pad Holder													
A STATE OF THE PARTY OF THE PAR	EWU pad holder	0.955.0016	SDM-R 45G	х	х	х	х	х			х	х	
	EWU pad holder	0.955.0017	SDM-R 45G 40-160									х	х
	Abrasive Disc Holder	0.955.0022	SDM-R 45G							х	х		
	Abrasive Disc Holder	0.955.0299K	SDM-R 53G										х
Special Disc													
THE STREET	Carborondum disc	0.955.0027	SDM-R 45G								х		
Pads													
	Pad micro fiber 5 pcs	6.508.0116	SDM-R 45G						x				
	Pad beige 5 pcs	6.508.0032	SDM-R 45 G 40-160										х
RELIES -	Pad red 5 pcs	6.508.0118	SDM-R 45G			х						х	
	Pad green 5 pcs	6.508.0039	SDM-R 45G		х		х						
	Pad black 5 pcs	6.508.0046	SDM-R 45G	x					_				
	Pad silver Inox 5 pcs	6.508.0121	SDM-R 45G					х					
	Emery paper GR24 disc		SDM-R 45G							х			
	Emery paper GR60 disc	0.955.0024								х			
	Vidia disc GR24	0.955.0026									х		
	Vidia disc GR36	0.955.0025	SDM-R 45G								Х		$\vdash$
Y = suitable = (*\s Brushes and 6						1125							

X = suitable - (\*): Brushes code 0.955.0014, 0.955.0007 and 0.955.0004 must not be used with medium speed model SDM-R 45G 40-160 (code 0.055.0307)

## **Applications pads**

MICROFIBER PAD - Ideal for "gres & porcelain" and carpet/moquette if used with dried foam shampoo.

**BEIGE PAD - POLISHING - Polyester.** To polish all kinds of floor. Use dry.

**GREEN PAD - INTERMEDIATE CLEANING ACTION - Nylon.** To remove all the old superficial wax, rests, obtaining ready floors to be recoated. Use wet.

**BLACK PAD - WET STRIPPING - Nylon.** For wet stripping of heavy layers of wax. Ideal to remove old floor finish scu and cement marks.



Direct experience of professional people has resulted in Lavor floor scrubbers range: easy to handle, powerful, efficient, carefully conceived and designed by using top-quality materials.

## Why cilindric brush?

High speed rotation for a polishing effect; great dirt degrease in floors with grout; possibility to link together the sweeping function; the rotation direction assists forwarding in models without traction.

#### Why disc brush?

Extended mechanical action of the bristles on the floor, ideal for persistent dirt: the special setting of the brush plate allows a balanced gripping effect, assisting easy use in the non traction models. Complete cleaning also next to walls is possible and the compact washing element lower at the sides is studied to scrub also under edges.

## How a squeegee should be designed?

The shape and the material used grant a perfect drying in every condition, also on floors with grout or when quick U turns are necessary.

The floating body can stay in the machine operating space (compact/room saving)

The manual adjusting system grants a perfect drying on each kind of floors.

#### How long do battery charges last?

It is impossible to determine exactly how long a battery charge lasts and so how long a machine can work in autonomy.

Battery autonomy changes depending on type of surface, dirt quantity, brush type and way in which traction system is used (speed and slope).

Battery life is made up of number of charge cycles (also incomplete), if usage conditions, charging and service are perfectly observed.

Manufacturing technology diversifies numbers of cycles, service needed, usage/charging conditions and performances.









## Number of disc brushes:

The scrubbing group meets different cleaning

path need with 1, 2 or 3 disc brushes.





 Number of cilindric brushes: Scrubbing group offer 1 or 2 roller brush solutions together with the sweeping capability.

Bristles of different material allows perfect cleaning in any conditions, (carpet and parquet included).



 Cilindric brush quick connection and release: The fittings and releasing of brushes is toolless. Ordinary cleaning maintenace are simple and quick for anybody.



### Constant brush pressure:

The pressure of brushes on the floor is made by the heavy brush plate that follows irregularity on the floor and gives

always the top pressure without any adjustment still with shorter bristles.





#### Solenoid valve:

Together with the reliable mechanical solution faucet, this system reduce chemical consumption **STOP** and avoid solution waste. The flow is open

only when brush is working, there is no accidental leak with machine stopped. The system is protected by a filter with easy maintenance.



#### Integrated battery charger

Some models are equipped with integrated battery charger, other ones have the predisposition only. It **CHARGER** is possible to charge batteries in different rooms,

without coming back to the same place.



#### Integrated battery

Standard integrated battery is built with a maintenance free technology and it does not require restrictions about the place for battery

charging. The non stop research allow to use always up-to-date batteries that combined with appropriate battery charger grant machine top performances.



#### Hour meter

Useful to check work sessions and to plan stops for battery charging. Best output and investment protection.





## Charge meter and battery protection

It informs when the autonomy is finishing, allowing the end of the cleaning task (stopping brushes first and then the rest). It prevents

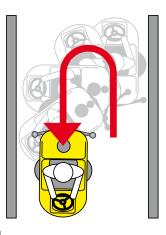
damages to the batteries, preventing the complete discharge with any kind of technologies.

## **ECO** • Eco Energy System

ENERGY no-stop and separate control of water quantity and chemical product concentration with automatic and delayed stop of the supply when the machine stops (Automatic Detergent Measuring System).

#### U-turns in closed area

The space (length X width) needed to make a U-turn is the min. width in which it is possible to work with the machine. The smaller this room is, the higher the machine output, because less maneuvering is needed. The technical features of our floor scrubber driers (the front wheel shaft is close to the rear one in the walk behind models and the tight steering radius of ride-on ones) grant the minimum



room for U-turns. On each ride-on models there is an automatic device that lowers speed when turning, raising the safety level also for inexperienced users.

## **Applications pads**



**BEIGE PAD - POLISHING - Polyester** To polish all kinds of floor. Use dry.



## **GREEN PAD - INTERMEDIATE CLEANING ACTION**

 Nylon To remove all the old superficial wax, rests, obtaining ready floors to be recoated. Use wet.



**BLACK PAD - WET STRIPPING - Nylon** For wet stripping of heavy layers of wax. Ideal to remove old floor finish scu and cement marks.



## Floor scrubber-driers



		Page	Power supply	Brushes	Scrubbing width	Squeegee width	Max working capacity	Solution tank capacity	Recovery tank capacity	Packaging	Weight	Weight	pcs × pallet
Code	Model		٧	n°	mm	mm	m²/h - ft²/h	l/gal	l/gal	LxlxH cm/inc	kg	lbs	n°
8.501.0501	Sprinter	126	230V/50HZ	1	290	320	1015-10925	2,8/0,74	5,6/1,48	116X40X36/46x16x14	17	37	10
8.501.0508	Crystal Clean	128	230V/50HZ	1	290	320	1015-10925	2,8/0,74	5,6/1,48	100x40x42/39x16x17	19	42	15
0.008.0004	Ready 32B	130	36V	2	320	340	1500-16145	3,5/0,92	6,0/1,59	65x51x36/25,5x20x14	18	39	8
8.518.0004	Quick 36E	132	230V/50HZ	1	360	460	1260-13562	11/2,91	12/3,17	81x56x80/32x22x32	62	135	1
8.518.0003	Quick 36B	132	12V	1	360	460	1260-13562	11/2,91	12/3,17	81x56x80/32x22x32	70	154	1
8.581.0001	Dart 36E	134	230V/50HZ	1	360	460	1260-13562	15/3.96	16/4.23	98x47x78 /39x19x31	79	174	1
8.581.0002	Dart 36B	134	24V	1	360	460	1260-13562	15/3.96	16/4.23	98x47x78 /39x19x31	67	147	1
8.581.0003	Dart 36B	134	24V	1	360	460	1260-13562	15/3.96	16/4.23	98x47x78 /39x19x31	105	231	1
8.524.3302	Speed 45E Eco	136	230V/50HZ	1	450	800	1575-16952	25/6,61	28/7,39	113x61x110/44x24x43	93	205	1
8.524.0002	Speed 45B	136	24V	1	450	800	1575-16952	25/6,61	28/7,39	113x61x110/44x24x43	73	161	1
8.524.1002	Speed 45B	136	24V	1	450	800	1575-16952	25/6,61	28/7,39	113x61x110/44x24x43	114	251	1
8.580.0001	Dynamic 45E	138	230V/50HZ	1	450	540	1500-16145	30/7,9	35/9,24	117x58x78/46x22x30	88	194	1











		Page	Power supply	Brushes	Scrubbing width	Squeegee width	Max working capacity	Solution tank capacity	Recovery tank capacity	Packaging	Weight	Weight	pcs × pallet
Code	Model		٧	n°	mm	mm	m²/h - ft²/h	l/gal	l/gal	LxlxH cm/inc	kg	lbs	n°
8.580.0002	Dynamic 45B	138	24V	1	450	540	1500-16145	30/7,9	35/9,24	117x58x78/46x22x30	74	163	1
8.580.0003	Dynamic 45B	138	24V	1	450	540	1500-16145	30/7,9	35/9,24	117x58x78/46x22x30	112	247	1
8.527.0003	Free EVO 50E	140	230V/50HZ	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	117	258	1
8.527.0004	Free EVO 50B	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	83	183	1
8.527.0001	Free EVO 50B	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	84	187	1
8.527.0010	Free EVO 50B	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	138	304	1
8.527.0011	Free EVO 50BT	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	87	187	1
8.527.0002	Free EVO 50BT	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	88	191	1
8.527.0012	Free EVO 50BT	140	24V	1	500	800	2000-21527	44/11,63	50/13,21	125x57x116/49,5x22,5x46	142	313	1
8.525.1301	Next EVO 55BT	142	24V	1	550	800	2200-24210	55/14,52	65/17,17	142x72x123/56x28x48	133	293	1
8.525.1302	Next EVO 66BTA	142	24V	2	660	800	2640-28416	55/14,52	65/17,17	142x72x123/56x28x48	138	304	1
8.516.0406	Easy-R 50BT	144	24V	1	500	800	2250-24218	67/17,70	77/20,35	142x72x123/56x28x48	132	291	1
8.516.0407	Easy-R 55BT	144	24V	2	550	800	2475-26640	67/17,70	77/20,35	142x72x123/56x28x48	127	279	1
8.516.0415	Easy-R 66BT	144	24V	2	660	800	2970-31968	67/17,70	77/20,35	142x72x123/56x28x48	122	268	1
8.517.0105	Midi-R 75BT	146	24V	2	750	900	4275-46015	88/23,25	91/24,04	156x74x128/61x29x50	180	396	1
8.579.0001	Comfort XXS 66	148	24V	2	660	855	3250-34982	75/19,81	80/21,13	140x82x135/56x33x53	175	390	1
8.579.0002	Comfort XXS 66	148	24V	2	660	855	3250-34982	75/19,81	80/21,13	140x82x135/56x33x53	247	544	1
8.579.0011	Comfort XXS 66	148	24V	2	660	855	3250-34982	75/19,81	80/21,13	140x82x135/56x33x53	177	394	1
8.574.4001	Comfort XS-R 75 Essential	150	24V	2	750	900	3750-40364	110/29,06	130/34,34	152x97x154/59x39x61	217	478	1
8.574.4003	Comfort XS-R 85 Essential	150	24V	2	750	900	3750-40364	110/29,06	130/34,34	152x97x154/59x39x61	222	489	1
8.574.4101	Comfort XS-R 75 UP	152	24V	2	750	900	3750-40364	110/29,06	130/34,34	152x97x154/59x39x61	223	491	1
8.574.4103	Comfort XS-R 85 UP	152	24V	2	820	1000	6200-66000	110/29,06	130/34,34	152x97x154/59x39x61	229	504	1
8.575.0010	Comfort S-R 90	154	24V	2	900	1000	5740-61784	140/36,99	150/39,63	200x118x171/79x46x67	307	676	1
8.578.0004	Comfort M102	156	36V	2	1020	1250	7140-76854	200/52,84	210/55,48	200x118x171/79x46x67	386	850	1
8.572.0002	Comfort L122	158	36V	3	1220	1450	8540-91923	280/73,97	315/83,22	230x135x190/91x53x74	684	1507	1



## **Sprinter**

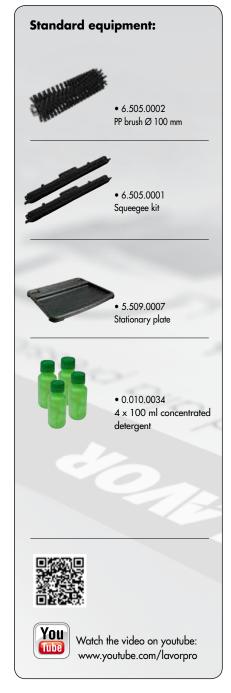






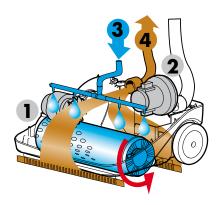


- Suitable to work in high congested areas like small shops, offices, kitchens, schools, hospitals, bars, gyms, restaurants
- Three controls for brush drive, washing and drying operations
- Double floor squeegee for both forward and reverse drying
- Sound pressure 68 dB (A)
- Min. working height required 200 mm
- Structure built with durable materials
- Suitable load on the brush for an optimal cleaning efficiency
- Detachable detergent/recovery tank
- Cable holder
- 7mt electric cable
- Non-marking wheels.



	Sprinter
code	8.501.0501
power supply	230 V - 50 Hz
scrubbing/squeegee width	290/320 mm
max working capacity	1015 m²/h
solution tank capacity	2.8 I/0.74 gal
recovery tank capacity	5.6 l/1.48 gal
traction	mechanical
RPM/pressure on the brushes	1000/7 kg/15,43 lbs
brush motor power	200 W
noise level dB (A)	68
depression/vacuum motor	1428 mmH <sub>2</sub> O/800 W
dimensions/weight	37 x 37 x 113 cm/13 kg



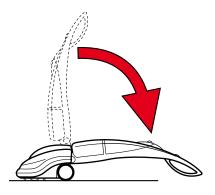


- 1) Brush motor
- 2) Vacuum motor
- 3) Detergent solution flow
- 4) Dirty liquid flow

Double squeegee for both forward and reverse washing and drying. PP brush suitable for most common floors (brush for carpet and moquette cleaning available).

ABS shock-proof covers. Nonmarking rubber wheels.



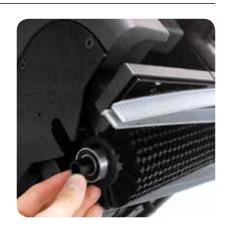


Minimun working height 200 mm, allowing perfect cleaning under furnitures, chairs, tables, beds, etc.

The tilting handle makes easy and stressless the daily use of the machine.

Large tank capacity avoiding frequent refilling of the unit

Cylindrical brush quick connection and release: the fitting and releasing of the brush does not require the use of tools. Ordinary cleaning and maintenance are simple and quick for anybody





## **Crystal Clean**

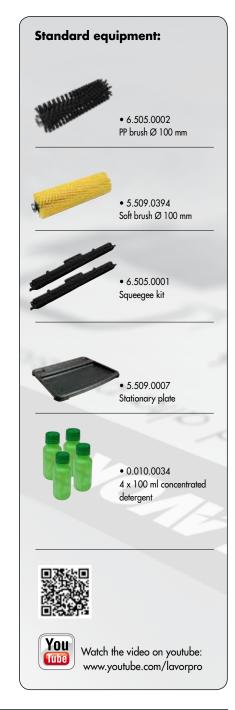






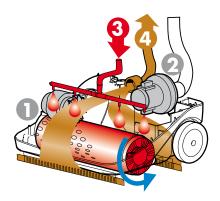


- Suitable to work in high congested areas like small shops, offices, kitchens, schools, hospitals, bars, gyms, restaurants
- 90°C hot scrubbing
- Three controls for brush drive, washing and drying operations
- Double floor squeegee for both forward and reverse drying
- Sound pressure 68 dB (A)
- Min. working height required 200 mm
- Structure built with durable materials
- Suitable load on the brush for an optimal cleaning efficiency
- Detachable detergent/recovery tank
- Cable holder
- 10 mt electric cable
- Non-marking wheels.



	Crystal Clean
code	8.501.0508
power supply	230 V - 50 Hz
scrubbing/squeegee width	290/320 mm
max working capacity	1015 m²/h
solution tank capacity	2.8 I/0.74 gal
recovery tank capacity	5.6 l/1.48 gal
traction	mechanical
RPM/pressure on the brushes	1000/7 kg/15,43 lbs
brush motor power	200 W
noise level dB (A)	68
depression/vacuum motor	1428 mmH <sub>2</sub> O/800 W
dimensions/weight	37 x 37 x 113 cm/13 kg
depression/vacuum motor	1428 mmH <sub>2</sub> O/800 W



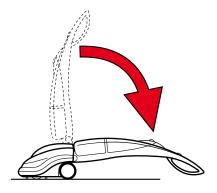


- 1) Brush motor
- 2) Vacuum motor
- 3) Hot water with detergent solution flow
- 4) Dirty liquid flow



Double squeegee for both forward and reverse washing and drying. PP brush suitable for most common floors and soft brush for carpet and moquette cleaning. Hot water cleaning for a faster and perfect removal of the most common organic dirt ( grease, mud, oil, etc.)





Minimun working height 200 mm, allowing perfect cleaning under furnitures, chairs, tables, beds, etc.

The tilting handle makes easy and stressless the daily use of the machine.

Large tank capacity avoiding frequent refilling of the unit

Cylindrical brush quick connection and release: the fitting and releasing of the brush does not require the use of tools. Ordinary cleaning and maintenance are simple and quick for anybody





## DROHESSIONA DISSELONA



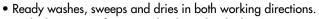












- High cleaning performance thanks to the dual contra-rotating cylindrical brushes.
- Key features: sweeping action, bi-directional drying, multi-surface capabilities (including carpets and rugs).
- "Start-stop" safety handle.
- Lightweight (only 15Kg) and easy to handle, cleaning the floor has never been less tiring.
- Maintenance and lubrication free
- Low running noise <70 dB



code0.008.0004power supply36V (battery and charger included)scrubbing/squeegee width320/340 mmmax working capacity1500 m²/hsolution tank capacity3,5 l/0.92 galrecovery tank capacity6,0 l/1.59 galtractionmechanicalRPM/pressure on the brushes650/17 kg/37.50 lbs	
scrubbing/squeegee width 320/340 mm max working capacity 1500 m²/h solution tank capacity 3,5 1/0.92 gal recovery tank capacity 6,0 1/1.59 gal traction mechanical	
max working capacity  1500 m²/h  solution tank capacity  7,50 m²/h  6,0 l/1.59 gal  8,0 l/1.59 gal  9,0 l/1.59 gal  1,0 l/1.59 gal	
solution tank capacity 3,5 1/0.92 gal recovery tank capacity 6,0 1/1.59 gal traction mechanical	
recovery tank capacity 6,0 1/1.59 gal traction mechanical	
traction mechanical	
PPM/pressure on the brushes 450/17 kg/37 50 lbs	
Kiny pressure on the brushes 050/17 kg/57.50 lbs	
brush motor power 200 W	
noise level dB (A) <70	
depression/vacuum motor 1000 mmH2O/100 W	
dimensions/weight 49x41x112 cm/15 Kg	

# PROFESSION LAVOR



Dual contra-rotating cylindrical brushes offer up to 40% more cleaning performance in a single pass, significantly increasing productivity. The machine features a safety handle for switching it on and off instantaneously. Flexibility of use thanks to the bi-directional handle and floor squeegee which allow

the machine to be used in any working direction.

Sweeping function thanks to the dual contra-rotating cylindrical brushes, combined with a special "mechanical" recovery system, Ready washes, sweeps and dries at the same time.

Multi-surface use thanks to dual brushes, has been designed





for use on all floor surfaces, including carpets and rugs: it is suited for wood, cotto, ceramic floor tiles, stone, marble, textured flooring, bolted rubber flooring, carpet tiles and carpets with ease.

The perfect balance: the centrally mounted motor and tank ensure a perfect balance, the essential

prerequisite for light weight and good handling in all conditions. Completely protected components: the only fully sealed machine: no water, dust or residue of any kind can get into it.



# **Optional accessories:** • 0.105.0108 Black brush - hard (all-purpose for hard floors) • 0.105.0107 Fast charger



- Suitable to work in high congested areas like small shops, offices, kitchens, schools, hospitals, bars, gyms, restaurants
- Adjustable flow (automatic start-stop with solenoid valve) of the detergent solution depending on type of surface
- Brush with quick release
- Removable recovery tank
- Available in battery version (36B) with integrated battery charger with data memory and for any type of batteries
- Battery included
- Squeegee lifting lever
- Compact reclining handle with control switches
- Easy access and simple service of the components.

## **Standard equipment:**



• 5.511.1346 PP brush Ø 360 mm - 14"



• 4.508.1100 Front squeegee blade L.537 mm - Th. 1,5 mm • 4.508.1101 Rear squeegee blade L.590 mm - Th. 2,5 mm



• 0.108.0061 On-board Battery charger 12V 8A only for model code: 8.518.0003



• 0.107.0061 Maintenance free battery 12V MFP 50 65Ah C20/50Ah C-5 only for model code: 8.518.0003

• 0.108.0025 Power cable 1,5 mt. for battery charger only for model code: 8.518.0003





Watch the video on youtube: www.youtube.com/lavorpro

	Quick 36E	Quick 36B
code	8.518.0004	8.518.0003
power supply	220/240 V - 50/60 Hz	12 V (batteries and charger included)
scrubbing/squeegee width	360/460 mm	360/460 mm
max working capacity	1260 m²/h	1260 m²/h
solution tank capacity	11 l/2.91 gal	11 l/2.91 gal
recovery tank capacity	12-13 l/3.2 gal	12-13 l/3.2 gal
traction	mechanical	mechanical
RPM/pressure on the brushes	130/18 kg/40 lbs	130/18 kg/40 lbs
brush motor power	370 W	250 W
detergent solution system	solenoid valve	solenoid valve
depression/vacuum motor	850 mmH <sub>2</sub> O/400 W	650 mmH <sub>2</sub> O/180 W
dimensions/weight	120x43x97 cm/49kg	120x43x97 cm/57kg
TOTAL PROPERTY AND ADDRESS OF THE PARTY AND AD	THE RESERVE OF THE PARTY OF THE	



The unit can be supplied mains (15 m optional extension cable available) or battery powered. Reclining handle: fit on any operator's height and allowing the perfect cleaning also on 90° corners. Shock-absorbing covers, simple cleaning of the recovery tank, non marking wheels.

Easy access to mechanical parts (easy maintenance of each component), removable recovery tank without tools.





User friendly analogic control panel. Control lever for brush operation and detergent water outflow.

General ON/OFF switch, brush and vacuum motor switch, solenoid valve operation switch.

Parabolic squeegee, easy rubber blades replacement.
The floating brush plate and squeegee grant the right cleaning pressure on any type of floor.



## **Optional accessories:**



• 0.107.0050 Battery AGM 12V 55Ah



• 0.108.0051 Booster battery charger



4.508.1058 Polyurethane front blade L.537 TH. 2,5
4.508.1059 Polyurethane rear blade L.590 TH. 3



• 5.511.1413 Tynex brush Ø 360 mm-14" • 5.511.1411 PP 0,03 brush Ø 360 mm-14" • 5.511.1412 PES brush Ø 360 mm-14"



• 5.511.1129 EWU pad driver Ø 360mm-14"



• 6.508.0143 Abrasive pad Ø 381 mm-15"

beige (5 pcs.)
6.508.0144
Abrasive pad Ø

Abrasive pad Ø 381 mm-15" - green (5 pcs.)

• 6.508.0141 Abrasive pad

Abrasive pad Ø 381 mm-15" - black (5 pcs.)



• 4.512.0068 Extension electric cord 15 m with Schuko plug



## **Dart**















- Ideal for small and medium floors up to 1260 sqm, especially when congested by people or furnishing like in wellness centres, gyms, car showroom, retail shops, hospitals and schools.
- Automatic brush attachment, discharge and delayed cut-off.
- Narrow body with both side brush protrusion and 300° squeegee spin.
- Tool less removable recovery tank with large visual inspection window and stretchable discharge hose.
- Adjustable driving handle with dead man switches, soft touch controls and diagnosis (Eco Energy mode and battery low level automatic cut-off for DC version).
- Large non marking working wheels and sturdy rear roller for displacements.

## Standard equipment:



• 5.511.2151 PP brush Ø 360 mm - 14"



• 4.508.1100 Front squeegee blade L.537 mm - Th. 1,5 mm • 4.508.1101 Rear squeegee blade L.590 mm - Th. 2,5 mm



• 0.108.0076 On-board Battery charger only for model code: 8.581.0002 8.581.0003



• 2x 0.107.0083 AGM NP3312 12 V 33 Ah C20/28 Ah C5 (only for model code: 8.581.0003)

	Dart 36E	Dart 36B	Dart 36B
code	8.581.0001	8.581.0002	8.581.0003
power supply	220/240 V 50/60Hz	24V (battery charger included)	24V (batteries and charger included)
scrubbing/squeegee width	360/460 mm	360/460 mm	360/460 mm
max working capacity	1260 m <sup>2</sup> /h	1260 m²/h	1260 m²/h
solution tank capacity	15 l/3.96 gal	15 l/3.96 gal	15 l/3.96 gal
recovery tank capacity	16 l/4.23 gal	16 l/4.23 gal	16 l/4.23 gal
traction	mechanical	mechanical	mechanical
RPM/pressure on the brushes	130/18 kg/40 lbs	130/18 kg/40 lbs	130/18 kg/40 lbs
brush motor power	300 W	400 W	400 W
detergent solution system	solenoid valve	solenoid valve	solenoid valve
depression/vacuum motor	850 mmH <sub>2</sub> O/350 W	850 mmH <sub>2</sub> O/270 W	850 mmH <sub>2</sub> O/270 W
dimensions/weight	98x47x99 cm/57 kg	98x47x99 cm/46 kg	98x47x99 cm/87 kg



On/off switch protecting unintentional use.
Protection against overloads, battery discharge abuse (DC only) and undesired run.
Convenient one switch maintenance over the brush.
Eco Energy setting for extensive working time and extremely quite operations (DC only).

Accessible on-board charger (DC only, when provided), far away from sprays.

Time saving convenient foot operating squeegee lift.

Handle can be easily adjusted to fit comfort of operators even in narrow spaces.





Easy access and handling to clean recovery tank and floater.
Less downtimes due to simple maintenance and construction
Great visibility and cleaning capability on hard to reach edges on both sides of the brush.

Extensive squeegee spin for easy blade replacement and perfect suction even on corners Easy setting and automatic solution release to save chemical and fit different floor conditions. High stability and capability to overtake small steps.



## **Optional accessories:**



- 4.508.1058 Polyurethane front blade L.537 TH. 2,5
- 4.508.1059 Polyurethane rear blade L.590 TH. 3



- 5.511.2169 Tynex brush Ø 360 mm-14"
- 5.511.2171 PP 0,03 brush Ø 360 mm-14"
- 5.511.2170 PES brush Ø 360 mm 14"



• 5.511.0543 EWU pad driver Ø 360 mm-14"



- 6.508.0143
- Abrasive pad Ø 381 mm-15"
- beige
- 6.508.0144
- Abrasive pad Ø 381 mm-15"
- green
- 6.508.0141
- Abrasive pad Ø 381 mm-15"
- black



• 4.512.0068 Extension electric cord 15 m with Schuko plug (Dart 36 E)

## Walk-behind floor scrubber driers



- Suitable to work in high congested areas like wellness centres and medical environments in general, gyms, retail outlets, car shops, sales points and health care
- Solution water filter and solenoid valve (battery model only)
- User friendly control panel
- Hour meter (optional)
- Recovery water tank with visual inspection
- Reclining handle with control lever (battery model only)
- Low noise operation thanks to the protected positioning of vacuum motor
- Recovery tank drain hose with adjustable flow system
- Indicator of the solution water tank fill level
- Easy access to the recovery tank
- Non-marking wheels.

## **Standard equipment:**



• 5.511.1688 PP brush Ø 430 mm - 17"



Front squeegee blade L.830 mm Shore 40 Th. 2,5 mm
• 4.508.X467
Rear squeegee blade L.870 mm Shore 40 Th. 3 mm

• 4.508.X468



• 0.108.0042 On-board Battery charger 24V 10A only for model code: 8.524,1002

8.524.0002



• 2 x 0.107.0061 Maintenance free battery 12 MFP 50 - 12V 50Ah only for model code: 8.524.0002





Watch the video on youtube: www.youtube.com/lavorpro

	Speed 45E	Speed 45B	Speed 45B
code	8.524.3302	8.524.1002	8.524.0002
power supply	230 V - 50 Hz	24V (battery charger included)	24V (batteries and charger included)
scrubbing/squeegee width	430/800 mm	430/800 mm	430/800 mm
max working capacity	1575 m²/h	1575 m²/h	1 <i>5</i> 75 m²/h
solution tank capacity	25 l/6.61 gal	25 l/6.61 gal	25 l/6.61 gal
recovery tank capacity	25-28 l/6.61 gal	25-28 l/6.61 gal	25-28 l/6.61 gal
traction	mechanical	mechanical	mechanical
RPM/pressure on the brushes	140/25 kg/39,68 lbs	150/18 kg/39,68 lbs	150/18 kg/39,68 lbs
brush motor power	550 W	450 W	450 W
detergent solution system	mechanical	solenoid valve	solenoid valve
depression/vacuum motor	$1100 \text{ mmH}_2\text{O}/400 \text{ W}$	1100 mmH <sub>2</sub> O/370 W	1100 mmH <sub>2</sub> O/370 W
dimensions/weight	106x50x88 cm/76 kg	106x50x88 cm/76kg	106x50x88 cm/117kg



User friendly analogic control panel. Control lever for brush operation and detergent water outflow. ON/OFF and battery cutout key switch, brush and vacuum motor switch, thermal circuit breaker to protect vacuum and brush motor, battery level indicator, hour meter (optional).

Indicator of clean water tank level. Recovery tank drain hose with adjustable flow system.





Easy access to recovery water tank with visual inspection. Extremely silent (62 dB) thanks to the particular housing of the vacuum motor and the use of soundproofing material.

Thanks to the special squeegee support it is easily possible the tilting of the machine to carry out the drying of the floor without scrubbing. The oversize wheels facilitate maneuverability and effortless use.



## **Optional accessories:**



• 0.107.0050 Batteria AGM 12V 55Ah



• 4.508.1178 Polyurethane front blade L.830 TH. 3 • 4.508.1177 Polyurethane rear blade L.870 TH. 4



• 5.511.1713 Tynex brush Ø 430 mm-17" • 5.511.1711 PP 0,03 brush Ø 430 mm-17" • 5.511.1712 PES brush Ø 430 mm - 17"



• 5.511.1095 EWU pad driver Ø 430 mm-17"



6.508.0032 Abrasive pad Ø 430 mm-17" - beige (5 pcs.)

• 6.508.0039

Abrasive pad Ø 430 mm-17" green (5 pcs.)

• 6.508.0046

Abrasive pad Ø 430 mm-17" - black (5 pcs.)



4.512.0068 Extension electric cord 15 m with Schuko plug



- Ideal for small and medium floors up to 1600sqm, especially when congested by people or furnishing like in wellness centres, gyms, car showroom, retail shops, hospitals and schools.
- Automatic brush attachment, discharge and delayed cut-off.
- Adjustable solution release with automatic cut-off.
- Narrow body with both side brush protrusion and 300° squeegee spin.
- Tool less removable recovery tank with large visual inspection window and stretchable discharge hose.
- Adjustable driving handle with dead man switches, soft touch controls and diagnosis (Eco Energy mode and battery low level automatic cut-off for DC version).
- Large non marking working wheels and sturdy rear roller for displacements.

## Standard equipment:



• 5.511.1941 PP brush Ø 430 mm - 17"



• 4.508.1319 Front squeegee blade Shore 40 Th. 2,5 mm • 4.508.1320 Rear squeegee blade Shore 40 Th. 3,0 mm



• 0.108.0073 On-board Battery charge 24V 10A

(only for model code: 8.580.0002/8.580.0003)



• 2 x 0.107.0061 Maintenance free battery 12 MFP 50 - 12V 50Ah only for model code: 8.580.0003



Watch the video on youtube: www.youtube.com/lavorpro

	Dynamic 45E	Dynamic 45B	Dynamic 45B
code	8.580.0001	8.580.0002	8.580.0003
power supply	230V 50Hz	24V (battery charger included)	24V (batteries and charger included)
scrubbing/squeegee width	450/540 mm	450/540 mm	450/540 mm
max working capacity	1600 m²/h	1600 m <sup>2</sup> /h	1600 m²/h
solution tank capacity	30 l/7.92 gal	30 l/7.92 gal	30 l/7.92 gal
recovery tank capacity	32-35  /8.45 - 9.24 gal	32-35  /8.45 - 9.24 gal	32-35  /8.45 - 9.24 gal
traction	mechanical	mechanical	mechanical
RPM/pressure on the brushes	150/18 kg/39,68 lbs	150/18 kg/39,68 lbs	150/18 kg/39,68 lbs
brush motor power	300 W	400 W	400 W
detergent solution system	solenoid valve	solenoid valve	solenoid valve
depression/vacuum motor	1200 mmH <sub>2</sub> O/800 W	1200 mmH <sub>2</sub> O/400 W	1200 mmH <sub>2</sub> O/400 W
dimensions/weight	117x58x78 cm/66 kg	117x58x78 cm/53 kg	117x58x78 cm/94 kg



On/off switch protecting unintentional use.
Protection against overloads, battery discharge abuse (DC only) and undesired run.
Convenient one switch maintenance over the brush.
Eco Energy setting for extensive working time and extremely quite operations (DC only).

Accessible on-board charger (DC only, when provided), far away from sprays.

Time saving convenient foot

operating squeegee lift.

Handle can be easily adjusted to fit comfort of operators even in narrow spaces.





Easy access and handling to clean recovery tank and floater. Less downtimes due to simple maintenance and construction Great visibility and cleaning capability on hard to reach edges on both sides of the brush.

Extensive squeegee spin for easy blade replacement and perfect suction even on corners Easy setting and automatic solution release to save chemical and fit different floor conditions. High stability and capability to overtake small steps.



## **Optional accessories:**



• 2 x 0.107.0050 Battery AGM 12V 55Ah



- 4.508.1324 Polyurethane front blade TH. 3
- 4.508.1325 Polyurethane rear blade TH. 4



- 5.511.1942 Tynex brush Ø 430 mm-17" • 5.511.1943
- PP 0,03 brush Ø 430 mm-17"
- 5.511.1944 PES brush Ø 430 mm - 17"



• 5.511.0229 EWU pad driver Ø 430 mm-17"



- 6.508.0032
- Abrasive pad Ø 430 mm-17"
- beige (5 pcs.)
- 6.508.0039
- Abrasive pad Ø 430 mm-17"
- green (5 pcs.)
- 6.508.0046
- Abrasive pad Ø 430 mm-17" black (5 pcs.)



• 4.512.0068 Extension electric cord 15 m with Schuko plug



- Very compact scrubbing machines suitable to work for the maintenance cleaning of limited-size areas (up to 1.500 m²)
- Especially suitable for cleaning: car shops, sales points, gym, health care
- Control panel with operator presence safety system
- Low level battery indicator: brush/vacuum and traction progressive cut off
- Solution water filter and solenoid valve
- Easy access to the battery compartment
- Quick drain and easily inspectable recovery tank
- Non-marking wheels
- Roto-molded polyethylene tanks, shock and acid resistant
- The lower tank also serves as battery compartment
- Low noise operation thanks to the protected positioning of vacuum motor.

## **Standard equipment:**



• 5.511.2167 PP brush Ø 483 mm - 19"



4.508.X468
 Front squeegee blade L.830 mm Shore 40 Th. 2.5 mm
 4.508.X467

Rear squeegee blade L.870 mm Shore 40 Th. 3 mm



• 0.108.0042 On-board Battery charger 24V 10A only for model code: 8.527.0001 - 8.527.0002 8.527.0010 - 8.527.0012



• 2 x 0.107.0054 Maintenance free battery 12V 75Ah BT DC 5.5 only for model code: 8.527.0010 - 8.527.0012

#### Other available versions:

- 8.527.0010 Free Evo 50B with batteries and battery charger
- 8.527.0012 Free Evo 50BT with batteries and battery charger





Watch the video on youtube: www.youtube.com/lavorpro

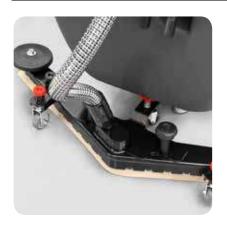
	Free Evo 50E	Free Evo 50B	Free Evo 50B	Free Evo 50BT	Free Evo 50BT
code	8.527.0003	8.527.0004	8.527.0001	8.527.0011	8.527.0002
power supply	230 V - 50 Hz	24V	24V (battery charger included)	24V	24V (battery charger included)
scrubbing/squeegee width	500/800 mm	500/800 mm	500/800 mm	500/800 mm	500/800 mm
max working capacity	2000 m <sup>2</sup> /h	2000 m <sup>2</sup> /h	2000 m <sup>2</sup> /h	2000 m <sup>2</sup> /h	2000 m <sup>2</sup> /h
solution tank capacity	44 l/11,63 gal	44 l/11,63 gal	44 l/11,63 gal	44 l/11,63 gal	44 l/11,63 gal
recovery tank capacity	50-60 l/13,21-16 gal	50-60 l/13,21-16 gal	50-60 l/13,21-16 gal	50-60 l/13,21-16 gal	50-60 l/13,21-16 gal
traction/traction motor	mechanical	mechanical	mechanical	automatic/150W	automatic/150W
RPM/pressure on the brushes	150/20 kg/44,09 lbs	150/18 kg/44,09 lbs	150/18 kg/44,09 lbs	150/18 kg/44,09 lbs	150/18 kg/44,09 lbs
brush motor power	550W	550W	550W	550W	550W
detergent solution system	solenoid valve	solenoid valve	solenoid valve	solenoid valve	solenoid valve
depression/vacuum motor	1700 mmH <sub>2</sub> O/800W	1280mmH2O/400W	1280 mmH <sub>2</sub> O/400W	1280 mmH <sub>2</sub> O/400W	1280 mmH <sub>2</sub> O/400W
dimensions/weight	116x46x98cm/95 kg	116x51x98cm/62 kg	116x51x98cm/63 kg	116x51x98cm/66 kg	116x51x98cm/67 kg



Powerful gearmotor; metal brush plate with integrated plastic splash guard/bumper.

The outflow of the detergent solution is controlled by a solenoid valve. The actuation of the solenoid valve is operated by the control lever, avoiding the detergent solution outflow when the brush is stopped during the interruptions of work.





Renovated squeegee with new pressure adjusting system. The squeegee blades are easily replaceable without the use of tools. Quick and easy squeegee coupling through the two large knobs; the squeegee is released without any damage in the event of accidental impact.

Easy and intuitive controls. The outflow of the cleaning solution is easily controlled using the mechanical lever placed on the control panel. Inspectable mesh filter to trap any existing solid body in the cleaning solution.



## **Optional accessories:**



• 2 x 0.107.0002 Tubular battery Pb-acid 12V 118Ah C5



• 2 x 0.107.0063 GEL Battery 12 MFP 105 12V 105Ah C5



- 4.508.1178 Polyurethane front blade L.830 TH. 3
- 4.508.1177 Polyurethane rear blade L.870 TH. 4



- 5.511.1098 Tynex brush Ø 483 mm-19" • 5.511.1128 PP 0,03 brush Ø 483 mm-19" • 5.511.1206 PES brush Ø 483 mm - 19"

• 5.511.1099 EWU pad driver Ø 483 mm-19"



- 6.508.0034
- Abrasive pad Ø 483 mm-19"
- beige (5 pcs.)
- 6.508.0041
- Abrasive pad Ø 483 mm-19"
- green (5 pcs.)
- 6.508.0048
- Abrasive pad Ø 483 mm-19"
- black (5 pcs.)



• 4.512.0068 Extension electric cord 15 m with Schuko plug

## **Next Evo**



- Designed for the maintenance and deep cleaning of large areas (up to 1.700 m²)
- Especially suitable for cleaning: car shops, sales points, gym, health care
- User friendly control panel
- Hour meter
- Automatic brush lifting (model 66BTA only)
- Fully accessible recovery water tank with visual inspection
- Automatic detergent measuring system
- Big size traction wheels
- Handle with control lever.

## **Standard equipment:**



#### Next Evo 55

• 5.511.1113 PP brush Ø 533 mm - 21"



#### Next Evo 66

• 2 x 5.511.1105 PP brush Ø 330 mm - 13"



• 4.508.X468 Front squeegee blade L.830 mm Shore 40 Th. 2.5 mm

• 4.508.X467 Rear squeegee blade L.870 mm Shore 40 Th. 3 mm

#### Next Evo 66

• 4.508.1524

Front squeegee blade L.860 mm Shore 33 Th. 4 mm

• 4.508.1523 Rear squeegee blade L.900 mm Shore 40 Th. 4 mm



• 0.108.0059 On-board Battery charger

24V 12A



Watch the video on youtube: www.youtube.com/lavorpro

	Next Evo 55BT	Next Evo 66BTA
code	8.525.1301	8.525.1302
power supply	24V (battery charger included)	24V (battery charger included)
scrubbing/squeegee width	550/800 mm	660/800 mm
max working capacity	2200 m²/h	2640 m²/h
solution tank capacity	55 l/14.5 gal	55 l/14.5 gal
recovery tank capacity	55-65 l/14.52-17.17 gal	55-65  /14.52-17.17 gal
traction/traction motor	automatic/200W	automatic/200W
RPM/pressure on the brushes	165/30 kg/66 lbs	175/33 kg/72 lbs
brush motor power	550 W	2 x 400 W
detergent solution system	solenoid valve	solenoid valve
depression/vacuum motor	1200 mmH <sub>2</sub> O/400 W	1200 mmH <sub>2</sub> O/400 W
dimensions/weight	128x71x106 cm/106 kg	128x71x106 cm/110 kg
The second secon	The second secon	NAME OF THE PERSON AND ADDRESS OF THE PERSON

## LAVOR



User friendly analogic control panel. Control lever for brush operation and detergent water outflow. ON/OFF and battery cutout key switch, brush and vacuum motor switch, detergent regulation device. Thermal circuit breaker to protect vacuum motor and brush motor, battery charge level indicator.

Hour meter, clean water tank

level indicator. Detergent regulation device. Recovery tank drain hose with adjustable flow system. Automatic brush lifting (only model 66BTA).





Automatic detergent dosing system. Fully accessible recovery water tank with visual inspection. Easy access to the recovery tank. Easy access and simple service of the components without use of tools.

Battery trolley for a quick and easy battery change. Big size wheels for better maneuverability and effortless use.



#### **Optional accessories:**



• 2 x 0.107.0002 Tubular battery Pb-acid 12V 118Ah C5



• 2 x 0.107.0063 GEL Battery 12 MFP 105 12V 105Ah C5



• 0.108.0001 Battery Charger 24V 12A 220-240/50-60



- 4.508.1178 Polyurethane front blade L.830 TH. 3
- 4.508.1177 Polyurethane rear blade L.870 TH. 4
- 4.508.1526 Polyurethane front blade L.860 TH. 4
- 4.508.1525 Polyurethane rear blade L.900 TH. 4



- 5.511.1114 Tynex brush Ø 533 mm-21"
- 5.511.1106 Tynex brush Ø 330 mm-13" 2x
- 5.511.1794 PP brush Ø 533 mm-21"
- 5.511.1255 PP 0,03 brush Ø 330 mm-13" 2x
- 5.511.1207 PES brush Ø 533 mm-21"
- 5.511.1202 PES brush Ø 330 mm-13" 2x



- 5.511.1115 EWU pad driver Ø 533mm-21"
- 2x 5.511.1107 EWU pad driver Ø 330mm-13"



#### (5 pcs package)

- 6.508.0035 Ø 533 mm-21"- beige
- 6.508.0042 Ø 533 mm-21"- green
- 6.508.0049 Ø 533 mm-21" black
- 6.508.0030 Ø 340 mm-13"- beige • 6.508.0037 - Ø 340 mm-13"- green
- 6.508.0044 Ø 340 mm-13"- black





- Suitable to work for the maintenance and deep cleaning of large areas (up to 2.200 m²)
- User friendly control panel: forward speed setting, scrubbing and vacuuming selectors, battery charge indicator, traction direction indicator, key main switch
- Large handle with traction driving lever for forward and backward directions
- Self levelling brush plate
- Cover removable without tools provided with self locking system
- Quick vacuum motor and filter inspection, without tools
- Detergent solution tank with large opening protected by quick locking cap
- Parking brake directly on the wheel
- Non-marking wheels
- Easy squeegee regulation without tools
- Movable shock-proof squeegee
- Hour meter and solenoid valve.



	Easy-R 50BT	Easy-R 55BT	Easy-R 66BT
code	8.516.0406	8.516.0407	8.516.0415
power supply	24V	24V	24V
scrubbing/squeegee width	500/800 mm	550/800 mm	660/800 mm
max working capacity	2250 m²/h	2475 m²/h	2970 m²/h
solution tank capacity	67 l/17.70 gal	67 l/17.70 gal	67 l/17.70 gal
recovery tank capacity	75-95 I/20.35-25 gal	75-95 I/20.35-25 gal	75-95 I/20.35-25 gal
traction/traction motor	automatic/200W	automatic/200W	automatic/200W
RPM/pressure on the brushes	150/35 kg/77.16 lbs	150/45 kg/99.20 lbs	150/24 kg/52.91 lbs
brush motor power	600 W	600 W	600 W
detergent solution system	solenoid valve	solenoid valve	solenoid valve
depression/vacuum motor	1280 mmH <sub>2</sub> O/400W	1280 mmH <sub>2</sub> O/400W	1280 mmH <sub>2</sub> O/400W
dimensions/weight	135x56x102 cm/101 kg	135x56x102 cm/100 kg	135x56x102 cm/93 kg

Walk-behind floor scrubber driers

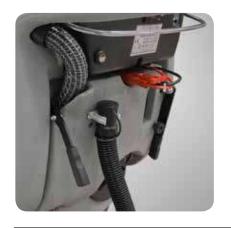




User friendly control panel. Speed adjustment selectors. General ON/OFF and key switch, brush and vacuum motor switch. Thermal circuit breaker to protect vacuum motor and brush motor, battery level control, hour meter.

Easy access to battery and vacuum motor compartment, without using tools. Large tank capacity, at the top in the category (67 l). 2 x 12V -118 Ah C5 batteries to grant long work autonomy, up to 3 hours.





Control lever for brush operation and detergent water outflow. Recovery tank drain hose. Quick fitting battery charger plug.

Heavy duty 15 mm steel monobloc brush plate. Great pressure on the floor for a deep cleaning even on the toughest dirt. Self levelling system. Solenoid valve to stop the detergent water outflow during the work interruptions.



### **Optional accessories:**



• 2 x 0.107.0002 Tubular battery Pb-acid 12V 118Ah C5



• 2 x 0.107.0063 GEL Battery 12 MFP 105 12V 105Ah C5



• 0.108.0001 Battery Charger 24V 12A 220-240/50-60



• 5.511.1494 On-board Battery charger kit - 24V - 12A



- 4.508.1178 Polyurethane front blade L.830 TH. 3
- 4.508.1177 Polyurethane rear blade L.870 TH. 4



- 5.511.1098 Tynex brush Ø 483 mm-19"
- •2x 5.511.1102 Tynex brush Ø 275 mm-10"
- •2x 5.511.1106 Tynex brush Ø 330 mm-13"
- 5.511.1128 PP 0,03 brush Ø 483 mm-19"
- •2x 5.511.1254 PP 0,03 brush Ø 275 mm-10"
- •2x 5.511.1255 PP 0,03 brush Ø 330 mm-13"
- 5.511.1206 PES brush Ø 483 mm - 19"
- •2x 5.511.1201
- PES brush Ø 275 mm-10"
- •2x 5.511.1202 PES brush Ø 330 mm-13"



- 5.511.1099
- EWU pad driver Ø 483mm-19"
- 2x 5.511.1103 EWU pad driver Ø 275mm-10"
- 2x 5.511.1107 EWU pad driver Ø 330mm-13"



(5 pcs package)

- 6.508.0034 Ø 483 mm-19"- beige • 6.508.0041 - Ø 483 mm-19"- green
- 6.508.0048 Ø 483 mm-19" black
- 6.508.0095 Ø 280 mm-11"- beige
- 6.508.0096 Ø 280 mm-11"- green • 6.508.0097 - Ø 280 mm-11"- black
- 6.508.0030 Ø 340 mm-13"- beige
- 6.508.0037 Ø 340 mm-13"- green • 6.508.0044 - Ø 340 mm-13"- black



## Standard equipment:

### Midi-R 75BT



• 2 x 5.511.1168 PP brush Ø 360 mm - 14"



• 4.508.0646 Front squeegee blade L.925 mm Shore 40 Th. 3 mm

• 4.508.0605 Rear squeegee blade L.1015 mm Shore 30 Th. 4 mm

- Capable to work for the maintenance and deep cleaning of large areas (up to 2.600 m²)
- User friendly control panel: forward speed setting, scrubbing and vacuuming selectors, battery charge indicator, traction direction indicator, key main switch
- Large handle with traction driving lever for forward and backward directions
- Self levelling brush plate
- Cover removable without tools
- Quick vacuum motor and filter inspection, without tools
- Detergent solution filter
- Detergent solution tank provided with large opening protected by quick locking cap.

Midi-R 75BT
8.517.0105
24V
750/900 mm
4275 m²/h
88 l/23.25 gal
91-95 l/24.04-25 gal
automatic/300 W
150 - 48,5 kg/107.48 lbs
1000 W
solenoid valve
1733 mmH <sub>2</sub> O/550 W
133x73x117 cm/150 kg



Easy access to battery and vacuum motor compartment, without using tools. Large capacity shock and acid proof polyethilene tanks (88 l) avoid frequent refilling and idle time. 4 x 6V -180 Ah C5 batteries granting continuous working time up to 4-5 hours.

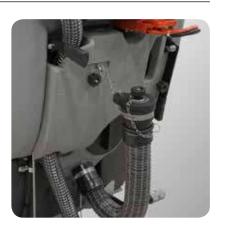
Adjustable speed ensures high precision in cleaning congested areas with obstacles. Intuitive controls reduce operator's training time. Safety thermal breakers prevent motor problems in case of overheating or operator's misuse.





Heavy duty V-shaped squeegee ensures perfect drying of every type of floor, even with large joints. Non-marking wheels avoid marks after the drying. Completely adjustable to fit any surface.

Strong mechanical control levers for heavy duty use. Large size drain hose for a fast emptying and a better cleaning of the recovery tank. Quick fitting battery charger plug.



### **Optional accessories:**



• 4 x 0.107.0004 Tubular battery Pb-acid 6V 180Ah C20 + 2 x 5.511.0561 connection cable batteries



• 4 x 0.107.0072 Gel battery 6 MFP 180 6V 180Ah C5





• 0.108.0002 Battery Charger 24V 25A 220-240/50-60



• 5.511.1495 On-board Battery charger kit - 24V - 25A



4.508.0901 Polyurethane front blade L.925 TH.3 Sh.40
4.508.0900 Polyurethane rear blade L.1015 TH.4 Sh.40



• 2x 5.511.1246 Tynex brush Ø 360 mm-14"

• 2x 5.511.1169 PP 0,03 brush Ø 360 mm-14"

• 2x 5.511.1203 PES brush Ø 360 mm - 14"



• 2x 5.511.1129 EWU pad driver Ø 360 mm-14"



(5 pcs package)

• 6.508.0143 - Ø 380 mm-15"- beige

• 6.508.0144 - Ø 380 mm-15"- green

• 6.508.0141 - Ø 380 mm-15"- black



## **Comfort XXS**







STOP











Only code 8.579.0002

Designed for the maintenance and deep cleaning of large areas (up to 3200 m².) with a very important reduction of cleaning cost. Very compact size and great maneuverability like walk behind models: suited for maintenance cleaning.

- 32 kg. of constant pressure on the brushes.
- Double counter rotating brush (66 cm of scrubbing width) obtaining better stability and constant pressure.
- Great working autonomy thanks to the possibility to use 4 batteries 6 V 240 Ah and to rear wheel-drive.
- Large load tank capacity (real load of 85 l.), resulting in reduced numbers of stops and maximum use of battery for effective operation of the machine.
- Ergonomic steering wheel of new design with user friendly controls and digital display.
- Easy access to electrical components.
- Inspection cover for fast and easy cleaning and sanification of dirt water tank.
- Automatic device that stops brushes and detergent water outflow when the machine is stationary.
- Self-levelling brush plate.
- Automatic detergent dosing system.

### **Standard equipment:**



• 2 x 5.511.1789 PP Brush Ø 330 mm - 13"



• 4.508.1619 Front squeegee blade L.960 mm Th. 2,5 mm

• 4.508.1618 Rear squeegee blade L.1000 mm Th. 3 mm



• 0.108.0054 On-board Battery charger 24V 20A (only for models code: 8.579.0002 - 8.579.0011)



• 2 x 0.107.0063 Gel battery 12V 105 A/C 5/120A C20 (only for model code: 8.579.0002)





Watch the video on youtube: www.youtube.com/lavorpro

	Comfort XXS 66 BT	Comfort XXS 66 BT	Comfort XXS 66 BT
code	8.579.0001	8.579.0011	8.579.0002
power supply	24V	24V (battery charger included)	24V (batteries and battery charger included)
scrubbing/squeegee width	660/855 mm	660/855 mm	660/855 mm
max working capacity	3250 m²/h	3250 m <sup>2</sup> /h	3250 m²/h
solution tank capacity	80 l/19.81 gal	80 l/19.81 gal	80 l/19.81 gal
recovery tank capacity	80-85 l/19.81-21.13 gal	80-85 l/19.81-21.13 gal	80-85 l/19.81-21.13 gal
traction	rear wheel-drive/400 W	rear wheel-drive/400 W	rear wheel-drive/400 W
RPM/pressure on the brushes	170/32 kg/70.54 lbs	170/32 kg/70.54 lbs	170/32 kg/70.54 lbs
brush motor power	2 X 400 W	2 X 400 W	2 X 400 W
max gradient empty/full tank	13%/10%	13%/10%	13%/10%
depression/vacuum motor	1300 mmH <sub>2</sub> O/400 W	1300 mmH <sub>2</sub> O/400 W	1300 mmH <sub>2</sub> O/400 W
dimensions/weight	123x63x121 cm/139 kg	123x63x121 cm/142 kg	123x63x121 cm/217 kg



Great working autonomy thanks to the possibility to use 4 batteries 6 V 180 Ah granting continuous working up. Possibility to use also 2 batteries 12V. Less battery consumption thanks to rear wheeldrive. Large load tanks made of shock and acid proof polyethylene (real load of 85 l.), avoiding frequent stop for refilling.

User friendly control panel. Steering wheel with digital controls and display. Squeegee and brush plate mechanical and user friendly lifting lever: min. maintenance cost training time for the users. Scrubbing unit with double brush with brush plate made of steel for a great pressure (32 Kg.) on the floor resulting in an easy and deep cleaning of any kind of dirt.





Rear wheel-drive on 2 wheels allows the machine to get over remarkable slopes. Detergent solution is cleansed by an external completely accessible filter, that holds any impurities, thus protecting the solenoid valve. The easy access to all internal components of XXS make it possible to reduce maintenance cost. Detergent tank 2lt.

The comfortable and ergonomic seat allows the operator to work effortless for a long time, improving productivity. Its very compact size make it perfect to work in small areas where walk behind models are usually used. The use of XXS makes working easier and quicker with a huge saving of time.



### **Optional accessories:**



• 4 x 0.107.0004 Tubular battery Pb-acid 6V 180Ah C20 + 2 x 5.511.0561 connection cable batteries



• 4 x 0.107.0072 Gel battery 6 MFP 180 6V 180Ah C5 + 2 x 5.511.0561 connection cable batteries



• 2 x 0.107.0002 Tubular battery Pb-acid 12V 118 Ah C5



• 0.108.0002 Battery charger 24V 25A 220-240/50-60



4.508.1594 Polyurethane front blade L.960 TH.3 Sh.40
4.508.1596 Polyurethane rear blade L.1000 TH.4 Sh.40



• 2 x 5.511.1106 Tynex brush Ø 330 mm-13" • 2 x 5.511.1255 PP 0,03 brush Ø 330 mm-13" • 2 x 5.511.1202

PES brush Ø 330 mm - 13"



• 2 x 5.511.1107 EWU pad driver Ø 330 mm-13"



• 6.508.0030 - Ø 340 mm -13"- beige (5 pcs.)

• 6.508.0037 - Ø 340 mm - 13"- green (5 pcs.)

• 6.508.0044 - Ø 340 mm -13"- black (5 pcs.)

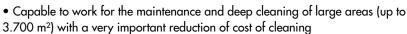
• 6.505.0062 Flashing light





## **Comfort XS-R** Essential





- More than 50 kg of constant pressure on the brushes
- Large load tank capacity, resulting in reduced number of stops and maximum use of battery charge for effective operation of the machine
- Compact size (810 mm)
- Stability even when fully loaded, front independent wheeldrive with tight steering radius
- Recovery tank control window for cleaning and easy ordinary maintenance
- Easy access to electrical components
- Automatic device that stops brushes and detergent water outflow when the machine is stationary
- Self-levelling brushes.

### **Standard equipment:**



### Comfort XS-R 75

• 2 x 5.511.1168 PP brush Ø 360 mm - 14"



### Comfort XS-R 85

• 2 x 5.511.1688 PP brush Ø 430 mm - 17"



• 4.508.0646 Front squeegee blade L.925 mm Shore 40 Th. 3 mm

• 4.508.0605 Rear squeegee blade L.1015 mm Shore 30 Th. 4 mm

### Comfort XS-R 85

• 4.508.119

Front squeegee blade L.1027 mm Shore 40 Th. 3 mm

• 4.508.1195

Rear squeegee blade L.1150 mm Shore 33 Th. 4 mm





Watch the video on youtube: www.youtube.com/lavorpro

	Comfort XS-R 75 Essential	Comfort XS-R 85 Essential
code	8.574.4001	8.574.4003
power supply	24V	24V
scrubbing/squeegee width	750/900 mm	850/1000 mm
max working capacity	3750 m²/h	4100 m²/h
solution tank capacity	110 l/29.05 gal	110 l/29.05 gal
recovery tank capacity	130-155 I/34.35-40.95 gal	130-155 I/34.35-40.95 gal
traction type/power	front motorwheel/600 W	front motorwheel/600 W
RPM/pressure on the brushes	170/50 kg/110.23 lbs	170/50 kg/110.23 lbs
brush motor power	2 x 400 W	2 x 400 W
max gradient empty/full tank	13%/10%	13%/10%
depression/vacuum motor	1300 mmH <sub>2</sub> O/400W	1300 mmH <sub>2</sub> O/400W
dimensions/weight	146x81x138 cm/184 kg	146x81x138 cm/187 kg
THE RESIDENCE OF THE PARTY OF T	PROTECTION OF THE PROTECTION O	AND

## 4

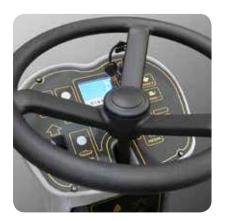
# LAVOR



The detergent water tank serves as battery compartment, allowing the housing of great capacity batteries granting continuous working time up. Large capacity shock and acid proof polyethylene tank (1101) improves productivity avoiding frequent refilling and idle time.

Simple and intuitive controls reduce operator's training time. Easy mechanical brush plate and squeegee lifting system, for low maintenance costs. The enbloc brush plate apply a very high pressure (50 kg) to the floor, strongly and deeply removing any kind of dirt.





New control panel with digital controls and display. Digital display: with hour meter, battery charge level indicator, empty water tank level indicator, forward/reverse traction indicator. Speed control adjustment, horn, suction motor switch with delayed switch-off, brush plate lifting/lowering selector switch, brush motor switch.

The ergonomic and comfortable shape of the machine allows the operator to work effortless for a long time, improving productivity.



### **Optional accessories:**



• 4 x 0.107.0004 Tubular battery Pb-acid 6V 180Ah C5



• 4 x 0.107.0072 GEL Battery 6 MFP 180 6V 180Ah C5



• 0.108.0002 Battery Charger 24V 25A 220-240/50-60



• 5.511.1641 On-board Battery charger kit - 24V - 20A



- 4.508.0901 Polyurethane front blade L.925 TH.3 Sh.40
- 4.508.0900 Polyurethane rear blade L.1015 TH.4 Sh.40
- 4.508.1251 Polyurethane front blade L.1027 TH.3
  4.508.1252 Polyurethane rear blade L.1150 TH.4



- •2x 5.511.1246 Tynex brush Ø 360 mm-14"
- •2x 5.511.1169 PP 0,03 brush Ø 360 mm-14"
- •2x 5.511.1203 PES brush Ø 360 mm - 14"
- •2x 5.511.1713 Tynex brush Ø 430 mm-17"
- •2x 5.511.1711 PP 0,03 brush Ø 430 mm-17"
- •2x 5.511.1712 PES brush Ø 430 mm - 17"



- •2x 5.511.1592 EWU pad driver Ø 380 mm-15"
- •2x 5.511.1095 EWU pad driver Ø 430 mm-17"



- 6.508.0143 Ø 380 mm -15"- beige (5 pcs.) • 6.508.0144 - Ø 380 mm -
- 15"- green (5 pcs.) • 6.508.0141 - Ø 380 mm -15"- black (5 pcs.)
- 6.508.0032 Ø 430 mm 17"- beige (5 pcs.)
- 6.508.0039 Ø 430 mm 17"- green (5 pcs.)
- 6.508.0046 Ø 430 mm -17"- black (5 pcs.)













- Capable to work for the maintenance and deep cleaning of large areas (up to 4.000 m<sup>2</sup>) with a considerable reduction of cleaning costs
- More than 50 kg of constant pressure on the brushes
- Large load tank capacity, resulting in reduced number of stops and maximum use of battery charge for effective operation of the machine
- Compact size (810 mm)
- Stability even when fully loaded, front independent wheeldrive with tight steering radius
- Recovery tank control window for cleaning and easy ordinary maintenance
- Automatic brush plate lifting system
- Automatic squeegee lifting system
- Automatic squeegee lifting while reverse going
- Automatic device that stops brushes and detergent water outflow when the machine is stationary
- Antifoam device
- Self-levelling brushes
- Integrated on-board battery charger (only for model code:

8.574.4101 - 8.574.4103).

### **Standard equipment:**



### Comfort XS 75 Up

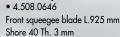
• 2 x 5.511.1168 PP brush Ø 360 mm - 14"



### Comfort XS 85 Up

• 2 x 5.511.1688 PP brush Ø 430 mm - 17"





4.508.0605 Rear squeegee blade L.1015 mm Shore 30 Th. 4 mm

### Comfort XS 85 Up

• 4.508.1196

Front squeegee blade L.1027 mm Shore 40 Th. 3 mm

Rear squeegee blade L.1150 mm Shore 33 Th. 4 mm



• 0.108.0054 On-board Battery charger 24V 20A (only for model code: 8.574.4101 - 8.574.4103)





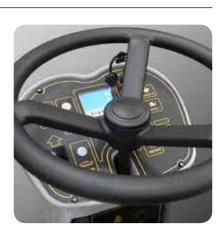
Watch the video on youtube: www.youtube.com/lavorpro

	Comfort XS-R 75 Up	Comfort XS-R 85 Up	Comfort XS-R 85 Up
code	8.574.4101	8.574.4114	8.574.4103
power supply	24V (battery charger included)	24V	24V (battery charger included)
scrubbing/squeegee width	750/900 mm	850/1000 mm	850/1000 mm
max working capacity	3750 m²/h	4100 m²/h	4100 m²/h
solution tank capacity	110 l/29.05 gal	110 l/29.05 gal	110 l/29.05 gal
recovery tank capacity	130-155  /34.35-40.95 gal	130-155 l/34.35-40.95 gal	130-155 I/34.35-40.95 gal
traction type/power	front motorwheel/600 W	front motorwheel/600 W	front motorwheel/600 W
RPM/pressure on the brushes	170/50 kg/110.23 lbs	170/50 kg/110.23 lbs	170/50 kg/110.23 lbs
brush motor power	2 x 400 W	2 x 400 W	2 x 400 W
max gradient empty/full tank	13%/10%	13%/10%	13%/10%
depression/vacuum motor	1300 mmH <sub>2</sub> O/400W	$1300 \text{ mmH}_2\text{O}/400\text{W}$	1300 mmH <sub>2</sub> O/400W
dimensions/weight	146x81x138 cm/189 kg	146x81x138 cm/195 kg	146x81x138 cm/195 kg



The easy access to the recovery tank allows fast cleaning and sanification of the tank; the tilting tank together with a large size drain hose allow the complete emptying of the tank and the removal of any type of solid dirt. The antifoam device protects suction motor, as well as the electronic floating switch that stops suction when the tank is full.

Comfort XS-R Up is equipped with actuators for the automatic lifting of the brush plate and squeegee. New control panel with digital controls and display. Digital display: with hour meter, battery charge level indicator, empty water tank level indicator and forward/reverse traction indicator. Speed control adjustment, horn, suction motor





switch with delayed switch-off, brush plate lifting/lowering selector switch, brush motor switch. All motors are protected by thermal breakers. The detergent water tank serves as battery compartment, allowing the housing of great capacity batteries. Battery charger and suction motor are placed the recovery tank; the housing of the

vacuum motor allows to drastically reduce the operating noise. The ergonomic and comfortable shape of the machine allows the operator to work effortless for a long time, improving productivity. Thanks to the compact dimensions the machine can work with agility even in narrow spaces.



### **Optional accessories:**



• 4 x 0.107.0004 Tubular battery Pb-acid 6V 180Ah C5



• 4 x 0.107.0072 GEL Battery 6 MFP 180 6V 180Ah C5



- 4.508.0901 Polyurethane front blade L.925 TH.3 Sh.40
   4.508.0900 Polyurethane rear blade L.1015 TH.4 Sh.40
- 4.508.1251 Polyurethane front blade L.1027 TH.3
  4.508.1252 Polyurethane rear blade L.1150 TH.4



- •2x 5.511.1246 Tynex brush Ø 360 mm-14" •2x 5.511.1169 PP 0,03 brush Ø 360 mm-14" •2x 5.511.1203 PES brush Ø 360 mm - 14"
- •2x 5.511.1713 Tynex brush Ø 430 mm-17"
- •2x 5.511.1711 PP 0,03 brush Ø 430 mm-17" •2x 5.511.1712
- •2x 5.511.1712 PES brush Ø 430 mm - 17"



- •2x 5.511.1592 EWU pad driver Ø 380 mm-15"
- •2x 5.511.1095 EWU pad driver Ø 430 mm-17"



- 6.508.0143 Ø 380 mm -
- 15"- beige (5 pcs.)
- 6.508.0144 Ø 380 mm -
- 15"- green (5 pcs.)
- 6.508.0141 Ø 380 mm 15"- black (5 pcs.)
- 6.508.0032 Ø 430 mm 17"- beige (5 pcs.)
- 6.508.0039 Ø 430 mm -
- 17"- green (5 pcs.)
- 6.508.0046 Ø 430 mm 17"- black (5 pcs.)

## **Comfort S-R**









- Suitable for maintenance and deep cleaning of medium and large areas (up to 4.500 m²) with a considerable reduction of cleaning costs
- More than 50 kg of constant pressure on the brushes
- Large load tank capacity, resulting in reduced number of stops and maximum use of battery charge for effective operation of the machine
- Stability even when fully loaded
- Front independent wheel-drive with tight steering radius
- Easy access to electrical components
- Automatic brush plate lifting system
- Automatic squeegee lifting system
- Automatic squeegee lifting while reverse going
- Automatic device that stops brushes and detergent water outflow when the machine is stationary
- Antifoam device
- Self-levelling brushes
- High-performance batteries resulting in high-working efficiency.

### Standard equipment:



• 2 x 5.511.1845 PP brush Ø 457 mm - 18"



• 4.508.1196 Front squeegee blade L.1027 mm Shore 40 Th. 3 mm

• 4.508.1195 Rear squeegee blade L.1150 mm Shore 33 Th. 4 mm



Watch the video on youtube: www.youtube.com/lavorpro

	Comfort S-R 90
code	8.575.0010
power supply	24V
scrubbing/squeegee width	900/1000 mm
max working capacity	6200 m²/h
solution tank capacity	140 l/36.99 gal
recovery tank capacity	150-180 I/39.6-47 gal
traction type/power	front motorwheel/1000 W
RPM/pressure on the brushes	150/50 kg/176 lbs
brush motor power	1250 W
max gradient empty/full tank	10%/7%
depression/vacuum motor	1734 mmH <sub>2</sub> O/550W
dimensions/weight	180x103x150 cm/264 kg





Quick lock recovery tank cap allows for fast and esy cleaning and sanification of the tank; the tilting tank together with a large size drain hose allow the complete emptying of the tank and the removal of any type of solid dirt. The antifoam device protects suction motor, as well as the electronic floating switch that stops suction when the tank is full.

Comfortable steering wheel. User friendly control panel, provided with hour meter, speed adjustment knob and detergent solution low level warning light. All motors are protected by thermal breakers.





50 kg of continuous brush plate pressure with Self Leveling System to strongly and deeply removing any kind of dirt on any kind of floor. Strong oil-proof polyurethane wheels. 500 Ah C5 battery box allowing continuous working time up to 5 hours.

Built with strong components, Comfort S-R have been designed to resist even to extreme stresses; the frame is made of steel profiles with a thickness varying from 5 to 12 mm, protected with a high resistance corrosion-proof paint.



### **Optional accessories:**



- 0.107.0008 Battery box Pb-acid 24V 500Ah C5
- 0.107.0011 Gel battery box 24V 400Ah C5



• 0.108.0003 Battery Charger 24/36V 50/60A - 220-240/50-60



- 4.508.1251 Polyurethane front blade L.1027 TH. 3
- 4.508.1252 Polyurethane rear blade L.1150 TH. 4



- •2x 5.511.1848 Tynex brush Ø 457 mm-18" •2x 5.511.1849
- PP 0,03 brush Ø 457 mm-18 •2x 5.511.1847 PES brush Ø 457 mm-18"



•2x 5.511.1850 EWU pad driver Ø 457 mm-18"



- 6.508.0150 Ø 457 mm-18"beige (5 pcs.)
- 6.508.0151 Ø 457 mm-18"green (5 pcs.)
- 6.508.0142 Ø 457 mm-18"black (5 pcs.)



## **Comfort M**

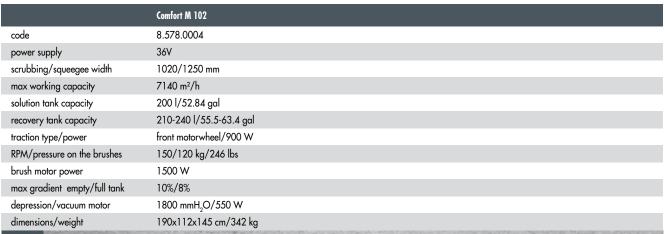


- Suitable for maintenance and deep cleaning of medium and large areas (up to 6.000 m²)
- More than 90/120 kg of constant pressure on the brushes
- Large load tank capacity, resulting in reduced number of stops and maximum use of battery charge for effective operation of the machine
- Stability even when fully loaded
- Front independent wheel-drive with tight steering radius
- Easy access to electrical components
- Automatic brush plate lifting system
- Automatic squeegee lifting system
- Automatic squeegee lifting while reverse going
- Automatic control system for brush rotation and detergent water outflow
- Antifoam device
- Self-levelling brush plate
- Hour meter
- High-performance batteries resulting in high-working efficiency.



Watch the video on youtube:

www.youtube.com/lavorpro





The unique anti foam device dramatically reduces the foam generation and prevents it from touching the suction motor, thus protecting its operation.

The electronic floating switch stops suction when the tank is full. Large tank opening for fast and easy cleaning and sanification.

The strong V-shaped floor squeegee made of steel profile is widely adjustable and allows to combine the operation of the rubber blades with the high suction power, to get a perfect drying result on every surface.

The special filter box retains solid debris and prevents the obstruction of the suction hose.

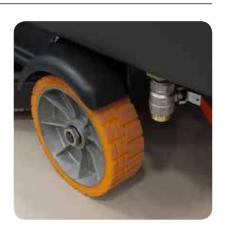




Comfort M scrubbers are easy to use thanks to the simple and user friendly controls. From the control panel the operator can adjust the maximum forward speed and the quantity of cleaning solution outflow, selecting the options most suitable to the dirt type. Job is simplified and made faster by the automatic lifting of the squeegee and of the brush plate.

Thanks to the optimal weight distribution and to the use of strong oil-proof polyurethane wheels the drive is perfect in all working conditions.

The emptying of the solution water tank is quick with a simple and easy accessible mechanical tap.



### **Optional accessories:**



- 0.107.0009 Battery box Pb-acid 36V 360Ah C5
- 0.107.0012 Gel battery box 36V 320Ah C5



• 0.108.0003 Battery Charger 24/36V 50/60A - 220-240/50-60



- 4.508.1167 Polyurethane front blade L.1270 TH. 4
  4.508.0897 Polyurethane rear blade L.1345 TH. 6
- •2x 5
  Tynex
  - •2x 5.511.1098 Tynex brush Ø 483 mm-19'
  - •2x 5.511.1128 PP 0,03 brush Ø 483 mm-19"
  - •2x 5.511.1206 PES brush Ø 483 mm - 19<sup>4</sup>



•2x 5.511.1099 EWU pad driver Ø 483 mm-19"



- 6.508.0034 Ø 483 mm
- 19"- beige (5 pcs.)
- 6.508.0041 Ø 483 mm
- 19"- green (5 pcs.)
- 6.508.0048 Ø 483 mm 19"- black (5 pcs.)



## **Comfort L**



- Suitable for maintenance and deep cleaning of medium and large areas (up to 7.000 m²)
- More than 120-170 kg of constant pressure on the brushes
- 300 litres solution tank capacity allows exceptional autonomy and productivity
- Stability even when fully loaded
- Innovative traction system with three indipendent motor wheels controlled by electronic cards
- Easy access to electrical components Automatic brush plate lifting system
- Automatic squeegee lifting system
- Automatic squeegee lifting while reverse going
- Automatic control system for brush rotation and detergent water outflow
- Antifoam device
- Self-levelling brushes, hour meter, solenoid valve. High-performance batteries resulting in high-working efficiency.

### Standard equipment:



• 3 x 5.511.1109 PP brush Ø 406 mm - 16"



• 4.508.0219 Front squeegee blade L.1500 mm Shore 40 Th. 4 mm

• 4.508.0218 Rear squeegee blade L.1580 mm Shore 33 Th. 6 mm

	Comfort L 122
code	8.572.0002
power supply	36V
scrubbing/squeegee width	1220/1450 mm
max working capacity	8540 m²/h
solution tank capacity	280 I/73.97 gal
recovery tank capacity	315-340 l/83.2-89 gal
traction type/power	3-wheels drive/3 x 600 W
RPM/pressure on the brushes	150/170 kg/374 lbs
brush motor power	3 x 1000 W
max gradient empty/full tank	10%/8%
depression/vacuum motor	1800 mmH <sub>2</sub> O/600 W
dimensions/weight	222x130x169 cm/607 kg



Designed to perform the hardest work and to resist even to extreme stresses with maximum comfort; the frame is made of steel profiles with a thickness varying from 5 to 12 mm, protected with a high resistance corrosion-proof paint.

The unique anti foam device dramatically reduces the foam generation and prevents it from touching the suction motor, thus protecting its operation. The electronic floating switch stops suction when the tank is full. Large tank opening for fast and easy cleaning and sanification.





The cleaning solution tank with an exceptional capacity of 300 liters and the high autonomy of the battery ensure a productivity at the top of the range. The wide rear opening allows for an easy and quick refilling of the cleaning solution tank.

The motorwheels, designed and built by Lavor, grant optimal performances and exceptional reliability (over 30.000 hours). The innovative three-wheel drive system ensures perfect traction in every operating condition. The high power of the three motorwheels allows the machine to get over remarkable slopes.



### **Optional accessories:**



- 0.107.0010 Battery box Pb-acid 36V 525 Ah C5
- 0.107.0013 Gel battery box 36V 400 Ah C5



• 0.108.0003 Battery Charger 24/36V 50/60A - 220-240/50-60



- 4.508.1167 Polyurethane front blade L.1270 TH. 4
- 4.508.0897 Polyurethane rear blade L.1345 TH. 6



- •3x 5.511.1110 Tynex brush Ø 406 mm-16'
- •3x 5.511.1120 PP 0,03 brush Ø 406 mm-16"
- •3x 5.511.1204 PES brush Ø 406 mm - 16"



•3x 5.511.1111 EWU pad driver Ø 406 mm-16



- 6.508.0031 Ø 406 mm 16"- beige (5 pcs.)
- 6.508.0038 Ø 406 mm -
- 16"- green (5 pcs.)
- 6.508.0045 Ø 406 mm 16"- black (5 pcs.)

# SHOWAR Sweepers

wet leaves). The more flexible and thinner the bristles are, the better they collect light and thin dirt . To have a better scraping action, it is necessary to add steel bristle to the PP ones. To collect very thin dirt, it is necessary to use only short round PP bristles. As a consequence of motorization (petrol engine or electric one) and so of indoor or outdoor use, the walk behind models have stiffer or softer bristles, to adapt in best way possible to the type of dirt typically found in the working area.

How long do battery charges last?

Is it better a petrol engine driven or a battery powered model?

The use of a petrol engine implies the presence of exhaust gasses and therefore the machine

must be used only in outside areas or in areas where the operator is not exposed at such risk. The battery models can be used also inside. From the technical and qualitative point of view the sweepers do exactly the same cleaning task, but the petrol engine machine can work nonstop (it is only necessary to fill up the tank with petrol), while the electric models, once the battery is empty, need to be re-charged (an average of 8-10 hours of charge, if battery is completely worn-out)

be?

How should the brush

In the sweepers, there are two types of bushes: the first one rotates with a perpendicular axle to the floor (this is the one called "side brush"), it is useful to move dirt into the collecting area and to reach dirt near borders or under edges; the second one rotates with a parallel axle to the floor (this is the one called "main brush"); it rotates counterclockwise (opposite) to the forward direction of machine and collects dirt into the collection tank. The brushes differ in the shape (round flat the "side brush" and cylindrical the "main brush"), in the type of bristles (the way bristles are arranged on the brush body), in the body material (that accordingly to options, provides resistance still in humid environment or competitive construction) and in the bristle material/diameter/shape.

Generally, the stiffer and rougher the bristles are, the better they collect the heaviest dirt adherent to the floor (typically It is impossible to determine exactly how long a battery charge lasts.

Battery autonomy changes depending on type of surface, dirt quantity, brush type and way in which traction system is used (speed and slope).

Battery life is made up of number of charge cycles (also incomplete), if use conditions, charge and service are perfectly observed.

Manufacturing technology diversifies numbers of cycles, service needed, use/charge conditions and performances.

Which kind of battery technology?

Batteries have different

prices and so it is

important to know

their features in

order to choose

the best one

as far as the

operator's

needs or

habits

are

concerned.
They
divide into
two families
according to
the necessity of
recurrent acid solution
refilling.

Acid lead batteries (Pb-Acid), need refilling, because during the charge cycle a lot

of gasses are generated (for this reason a specific and aired room is necessary for safe working) and the solution vaporizes: it is necessary to add distilled water before the submerged lead parts that are no more covered with water begin to oxidize (compromised efficiency).

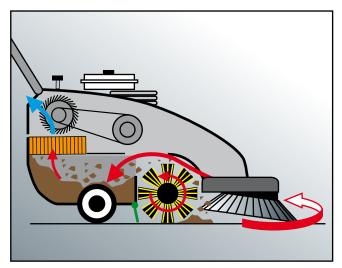
VRLA batteries (Valve Regulated Lead Acid) are airtight, this means that gasses generated during the charge cycle are rearranged inside the battery: refilling is not necessary, it is possible to charge them in any room and they can be carried without risk.



Acid lead batteries divide themselves into categories depending on the thickness of plate they are built of: if the plate is plane, the resistance to discharge is lower and few charge cycles are necessary, if the plate is tubular (or armed, recognizable opening the battery cap and verifying that the plate is made up of a lot of cylinders side by side instead of a thin leaf sheet) there is a higher resistance to discharge and to charge cycles.

VRLA batteries divide themselves depending on the condition (liquid or gel) of the acid solution (that enables energy exchange) and on the way it is kept inside the battery: if it is liquid and kept by a spongy and filamentous material, the battery is called AGM; if it is a gel solution inside a membrane, the battery is called GEL battery. On the market there are a lot of products completely different in features and value and it is very important to know the manufacturing details to couple the right battery charger (it is not sure that any battery charger is suited and get a better result than the ones in our range that are specific for our batteries) and to come up to the working expectations.

Whatever technology may be it is important to know that batteries have a common effect of self discharge (different for each type of manufacturing technology) and so it is important a recurrent charge (each three months approximately) if they are unused for long periods of time. Batteries suffer from incomplete charge cycle (except "pure lead" technology) and so it is necessary to charge them at the end of the working day (our battery charger is going to supply only the necessary energy and the charge cycle is going to finish earlier). It is also important not to cut off the charge before the battery charger has finished the cycle (green light). Respecting these simple rules, the best result and the best machine output will be obtained.





### • Belt drive

The circular section grants a high resistance, stillness, reliability and it doesnt need service.



### Side brush exclusion

It is a system protecting bristles during machine stop or whenever it is not necessary to use it.



### • Dust vacuum system

It can be found in the main brush area. Together with the mechanical action, it conveys waste and dust that are collected

into the tank through the right filters supplied.



### • Front dust vacuum system

As well as traditional vacuum system, a vacuum system can be found in the lateral brush/es collection area.

Dust dispersion outside the machine is limited also before the main collection area is reached.



### • Flap raise system

The main brush collection area is delimited by protections (flaps) touching the ground, better vacuum effect. Whith a big residual

is possible to raise the flap collecting it rather than keep going pushing it on the floor



### Filter shaker

It clears filter from dust without touching it or opening the sweeper; the vacuum efficiency is kept at max, granting the best comfort and

output for the user.



BSW 375 ET BSW 651 M SWL 700 ET SWL 700 ST

SWL 900 ET

SWL 900 ST

SWL R 1000 ET SWL R 1000 ST SWL R 1000 ET Bin-Up SWL R 1000 ST Bin-Up SWL R 1100 ET SWL R 1100 ST

SWL R 1100 ET Bin-Up SWL R 1100 ST Bin-Up

		Page	Type	Traction	Brosse central	Brosse central + 1 lateral	Brosse central + 2 lateral	Capacité du bac de rangement	Rendem. théorique (maxi)	Emballage	Poids brut	Poids brut	Pièces par palette
Référence	Modèle				mm/inc	mm/inc	mm/inc	lt/gal	m2/foot2	LxlxH cm/inc	kg	lbs	n°
0.064.0001	BSW 375 ET	163	electric	Manual	350/13,78	-	375/14,76	2/0,52	1000/10764	30x36x11/11x13x4	2,8	6,16	48
0.042.0101	BSW 651 M	164	manual	Manual	500/19,68	700/27,56	-	40/10,58	1500/16146	79x76x46/31x29x18	25	55	5
0.061.0001	SWL 700 ET	165	electric	Mechanical	510/20,08	680/26,77	-	45/11,89	2620/28201	126x63x85/50x25x34	78	172	1
0.061.0002	SWL 700 ST	165	gasoline motor	Mechanical	510/20,08	680/26,77	-	45/11,89	2620/28201	126x63x85/50x25x34	77	169	1
0.061.0003	SWL 900 ET	166	electric	Mechanical	710/27,95	880/34,64	-	60/15,85	3700/39826	126x83x85/50x33x34	89	196	1
0.061.0004	SWL 900 ST	166	gasoline motor	Mechanical	710/27,95	880/34,64	-	60/15,85	3700/39826	126x83x85/50x33x34	97	213	1
0.061.0006	SWL R 1000 ET	167	electric	hydraulic	700/27,56	920/36,22	1230/48,42	90/16,38	6200/66735	143x91x114/56x36x45	260	572	1
0.061.0007	SWL R 1000 ST	167	gasoline motor	hydraulic	700/27,56	920/36,22	1230/48,42	90/16,38	8280/89124	143x91x114/56x36x45	300	660	1
0.061.0008	SWL R 1000 ET BINUP	168	electric	hydraulic	700/27,56	920/36,22	1230/48,42	90/16,38	6200/66735	163x91x114/66x36x45	310	682	1
0.061.0030	SWL R 1000 ET BINUP	168	electric	hydraulic	700/27,56	920/36,22	1230/48,42	90/16,38	6200/66735	163x91x114/66x36x45	310	682	1
0.061.0009	SWL R 1000 ST BINUP	168	gasoline motor	hydraulic	700/27,56	920/36,22	1230/48,42	90/16,38	8280/89124	163x91x114/66x36x45	350	770	1
0.061.0036	SWL R 1100 ET	169	electric	hydraulic	800/31,50	1050/41,34	1300/51,18	150/30	9700/104409	160x101x130/65x43x52	375	825	1
0.061.0033	SWL R 1100 ST	169	Diesel motor	hydraulic	800/31,50	1050/41,34	1300/51,18	150/30	9700/104409	160x101x130/65x43x52	434	955	1
0.061.0043	SWL R 1100 ET BINUP	170	electric	hydraulic	800/31,50	1050/41,34	1300/51,18	150/30	9700/104409	160x101x130/65x43x52	375	825	1
0.061.0041	SWL R 1100 ST BINUP	170	Diesel motor	hydraulic	800/31,50	1050/41,34	1300/51,18	150/30	9700/104409	160x101x130/65x43x52	434	955	1



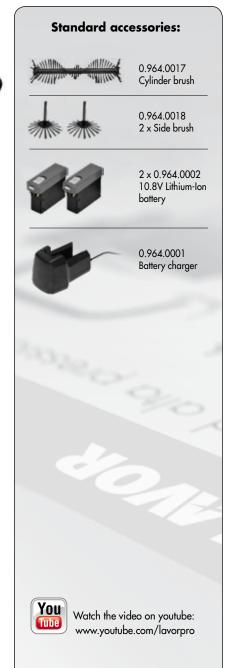








- Industrial battery-powered sweeper for the quick, quiet and cordless intermediate cleaning of all surfaces, indoor and outdoor.
- Ideal for entryways of all kinds, hallways, staircases, driveways, warehouse and office areas, airports and train stations.
- Equipped with two batteries, the operation time lengthens to 90 minutes.
- The powerful Lithium-Ion battery (without memory effect) with 10.8 V and 1.5 Ah allows an operation time of approx. 45 minutes per battery.
- Second battery can be directly stored and carried on the machine itself.
- Quick-charging unit with a charging time of only 70 minutes is included with purchase.
- Large foot pedal for activation without bending over.
- Main cylinder brush and side brushes can be replaced without tools.
- Aluminum telescopic handle for an optimum work position.
- Traceless wheels.
- Enormous waste collection tray with 2 liter capacity.
- Changeable bristled rim on the underside of the housing.
- Low noise volume, and therefore excellent for use during business hours.
- Compact, light, and easy-to-handle for any user.



	BSW 375 ET
code	0.064.0001
main brush + 2 side brush width	375mm/14,76 inc
collector tank	2 lt/0,52 gal
max working capacity	1000 m²/h-10764 ft²/h
Operating voltage	10,8V/1,5 Ah
Max. Power	25 W
Voltage (charging unit)	230 V~50 Hz
dimension/weight	30x36x70cm/2,8 kg
SECTION OF THE PROPERTY AND THE PROPERTY	



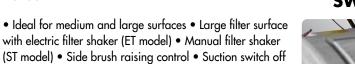
# Walk-behind sweepers



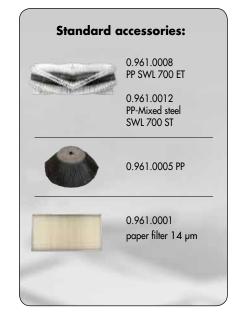
	BSW 651 M
code	0.042.0101
main brush width	500mm / 19,68 inc
main brush + 1 side brush width	700mm / 27,56 inc
collector tank/emptying system	40 lt -10,58 gal / manual
max working capacity	1500 m²/h - 16146 ft²/h
traction	manual
brushes transmission	elastic belt
pressure on the brushes	adjustable
side brush	lifting arm system
dust-laying system	direct
frame material	steel
dimension / weight	79 x 76 x 46 cm/25 kg

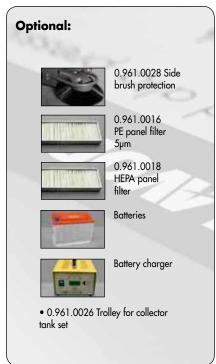






- Flap raise system Panel filter in horizontal position
- Main brush pressure regulation Indirect back collection
- Quick main brush release Long life elastic belts
- Reclining handle Suction selection lever. Traction lever. Antistatic device. Wide collector tank Heavy duty steel frame Side brush mechanical engagement Battery and battery charger not included.





	SWL 700 ET	SWL 700 ST
code	0.061.0001	0.061.0002
main brush width	510mm / 20,08 inc	510mm / 20,08 inc
main brush + 1 side brush width	680mm / 26,77 inc	680mm / 26,77 inc
collector tank	45 lt / 11,89 gal	45 lt / 11,89 gal
max working capacity	2620 m²/h-28201 ft²/h	2620 m²/h-28201 ft²/h
traction	mechanical	mechanical
max speed	4 km/h-2,49 mile/h	4 km/h-2,49 mile/h
motor type / power	12V / 400W	Honda 4 HP / 2,9kW
filtering surface	2 m² / 21,53 ft²	2 m <sup>2</sup> / 21,53 ft <sup>2</sup>
pressure on the brushes	adjustable	adjustable
filter shaker	electric	manual
dimension / weight	126x63x85cm / 78kg	126x63x85cm /77kg

### **SWL 900 ET**



### **Equipped with:**

- Ideal for medium and large surfaces Large filter surface with electric filter shaker (ET model) Manual filter shaker (ST model) Side brush raising control Suction switch off
- Flap raise system Panel filter in horizontal position Main brush pressure regulation • Indirect back collection • Quick main brush release • Long life elastic belts • Reclining handle
- Suction selection lever Traction lever Antistatic device
- Wide collector tank Heavy duty steel frame Side brush mechanical engagement Battery and battery charger not included.

## **SWL 900 ST**



### Standard accessories:



0.961.0009 PP SWL 900 ET

0.961.0013 PP-Mixed steel SWL 900 ST



0.961.0005 PP



0.961.0002 paper filter 14 µm

### **Optional:**



0.961.0028 Side brush protection



0.961.0017 PE panel filter 5µm



0.961.0019 HEPA panel filter



Batteries



Battery charger

• 0.961.0027 Trolley for collector tank set

	SWL 900 ET	SWL 900 ST
code	0.061.0003	0.061.0004
main brush width	710mm / 27,95 inc	710mm / 27,95 inc
main brush + 1 side brush width	880mm / 34,64 inc	880mm / 34,64 inc
collector tank	55 lt / 14,53 gal	55 lt / 14,53 gal
max working capacity	3700m²/h-39826 ft²/h	3700m²/h-39826 ft²/h
traction	mechanical	mechanical
max speed	4 km/h-2,49mile/h	4 km/h-2,49mile/h
motor type / power	12V / 400W	Honda 4 HP / 2,9kW
filtering surface	3,02 m <sup>2</sup> / 32,50 ft <sup>2</sup>	$3,02 \text{ m}^2 / 32,50 \text{ ft}^2$
pressure on the brushes	adjustable	adjustable
filter shaker	electric	manual
dimension / weight	126x83x85 cm / 89 kg	126x83x85 cm / 97 kg



## SWL R 1000 ET SWL R 1000 ST





Equipped with:

Watch the video on youtube: www.youtube.com/lavorpro

• Ideal for large surfaces • Large filter surface distributed on 6 cartridge filters fitted with electric filter shaker • Side brush raising control • **Complete right/left side brush** • Suction switch off
• Lift flap pedal • Flashing light • Main brush pressure regulation • Indirect back collection • Front dust vacuum system • Quick changing of the main brush and side brush without tools • Long life elastic belts
• Suction selection lever • Shock proof steel frame • Traction lever • Antistatic device • Battery level indicator • Wide collector tank • Heavy duty steel frame • Adjustable seat • Perfectly balanced weight of the components, thus resulting in totally safe quick changes of direction • Battery and battery charger not included. • Front light system (optional on request), standard for model code 0.061.0030.

### Standard accessories:



0.961.0011 PP SWL R 1000 ET

0.961.0015 PP-Mixed steel SWL R 1000 ST



2 x 0.961.0007 PP SWL R 1000 ET

2 x 0.961.0023 PP-Mixed steel SWL R 1000 ST



6 x 0.961.0004 paper filter 14 µm

### **Optional:**

- Steel collector tank code: 0.961.0029
- Front light system (on request)
- Anti-trace wheels, code: 0.961.0031
- Polyester filters code: 0.961.0024
- Hepa filters code: 0.961.0025



0.961.0030 Side brush protection

	SWL R 1000 ET	SWL R 1000 ST	SWL R 1000 ET*	SWL R 1000 ST*
code	0.061.0006	0.061.0007	0.061.0030	0.061.0039
main brush width	700 mm / 27,56 inc	700 mm / 27,56 inc	700 mm / 27,56 inc	700 mm / 27,56 inc
main brush + 1 side brush	920 mm / 36,22 inc	920 mm / 36,22 inc	920 mm / 36,22 inc	920 mm / 36,22 inc
main brush + 2 side brushes	1150 mm / 45,28 inc	1150 mm / 45,28 inc	1150 mm / 45,28 inc	1150 mm / 45,28 inc
collector tank	90 lt / 23,78 gal	90 lt / 23,78 gal	90 lt / 23,78 gal	90 lt / 23,78 gal
max working capacity	6200 m²/h-66736 ft²/h	7700 m²/h-82881 ft²/h	6200 m²/h-66736 ft²/h	7700 m²/h-82881 ft²/h
traction / limiting gradient	rear wheels / 12%	front wheel / 14%	rear wheels / 12%	front wheel / 14%
max speed	5,8 km/h-3,60 mile/h	5,8 km/h-3,60 mile/h	5,8 km/h-3,60 mile/h	5,8 km/h-3,60 mile/h
motor type / power	24V / 1150W	Honda 5,5 HP / 4,1kW	24V / 1150W	Honda 5,5 HP / 4,1kW
filtering surface	6 m² / 64,6 ft²	6 m² / 64,6 ft²	6 m <sup>2</sup> / 64,6 ft <sup>2</sup>	6 m <sup>2</sup> / 64,6 ft <sup>2</sup>
filter shaker	electric	electric	electric	electric
dimension / weight	143x91x114cm/260kg	143x91x114cm/300kg	143x91x114cm/260kg	143x91x114cm/300kg



## SWL R 1000 ET Bin-Up SWL R 1000 ST Bin-Up







### **Equipped with:**

• Ideal for large surfaces • Large filter surface distributed on 6 cartridge filters fitted with electric filter shaker • Side brush raising control • Unload device for tank emptying into dust containers up to 110 cm height • Complete right/left side brush • Suction switch off. • Lift flap pedal • Flashing light • Main brush pressure regulation • Indirect back collection • Front dust vacuum system • Quick changing of the main brush and side brush without tools • Long life elastic belts • Suction selection lever • Shock proof steel frame • Traction lever • Antistatic device • Battery level indicator • Wide collector tank • Heavy duty steel frame • Adjustable seat Perfectly balanced weight of the components, thus resulting in totally safe quick changes of direction • Battery and battery charger not included. • Front light system (optional on request).

### Standard accessories:



0.961.0011 PP SWL R 1000 ET

0.961.0015 PP-Mixed steel SWL R 1000 ST



2 x 0.961.0007 PP SWL R 1000 ET

2 x 0.961.0023 PP-Mixed steel SWL R 1000 ST



6 x 0.961.0004 paper filter 14 µm

### **Optional:**

- Steel collector tank code: 0.961.0029
- Front light system (on request)
- Anti-trace wheels, code: 0.961.0031
- Polyester filters code: 0.961.0024
- Hepa filters code: 0.961.0025



0.961.0030 Side brush protection

	SWL R 1000 ET BIN-UP	SWL R 1000 ST BIN-UP	SWL R 1000 ET BIN-UP*
code	0.061.0008	0.061.0009	0.061.0040
main brush width	700mm / 27,56 inc	700mm / 27,56 inc	700mm / 27,56 inc
main brush + 1 side brush	920mm / 36,22 inc	920mm / 36,22 inc	920mm / 36,22 inc
main brush + 2 side brushes	1150 mm / 45,28 inc	1150 mm / 45,28 inc	1150 mm / 45,28 inc
collector tank	90 lt / 23,78 gal	90 lt / 23,78 gal	90 lt / 23,78 gal
max working capacity	6200m²/h-66736 ft²/h	7700 m²/h-82881 ft²/h	6200m²/h-66736 ft²/h
traction / limiting gradient	rear wheels / 12%	front wheel / 14%	rear wheels / 12%
max speed	5,8km/h-3,60mile/h	5,8km/h-3,60mile/h	5,8km/h-3,60mile/h
motor type / power	24V / 1150W	Honda 5,5 HP / 4,1kW	24V / 1150W
filtering surface	6 m <sup>2</sup> / 64,6 ft <sup>2</sup>	6 m² / 64,6 ft²	6 m² / 64,6 ft²
filter shaker	electric	electric	electric
dimension / weight	163x91x114cm/310kg	163x91x114cm/350kg	163x91x114cm/310kg

















## **SWL R 1100 ET SWL R 1100 ST**



• Ideal for large surfaces. • Large filter surface distributed on 8 cartridge filters fitted with electric filter shaker. • Side brush raising control. • On request DSA unload device for tank emptying into dust containers up to 145 cm height. • Complete right/left side brush. • Anti-trace wheels (mod.ET). • Suction switch off. • Lift flap pedal. • Flashing light. • Main brush pressure regulation. • 90° steering angle. • Electric starter. • Service and parking brake. • Hour meter and klaxon. • Antislip platform. • Indirect back collection. • Front dust vacuum system. • Quick changing of the main brush and side brush without tools. • Long life elastic belts. • Suction selection lever. • Shock proof steel frame. • Traction lever. • Antistatic device. • Battery level indicator (mod.ET). • 150 lt wide collector tank. • Heavy duty steel frame. • Adjustable seat. • Battery and battery charger not included. • Front working light system.

## Standard accessories:



0.961.0176 PP SWL R 1100 ET

0.961.0178 PP-Mixed steel SWL R 1100 ST



2 x 0.961.0177 PP SWL R 1100 ET

2 x 0.961.0179 PP-Mixed steel SWL R 1100 ST



8 x 0.961.0020 paper filter 20 µm

### **Optional:**

- Cartridge polyester filter code: 0.961.0020
- Hepa cartridge filter code: 0.961.0180

	SWL R 1100 ET	SWL R 1100 DT
code	0.061.0036	0.061.0033
main brush width	800mm / 31,50 inc	800mm / 31,50 inc
main brush + 1 side brush	1050mm / 41,34 inc	1050mm / 41,34 inc
main brush + 2 side brushes	1300mm / 51,19 inc	1300mm / 51,19 inc
collector tank	150 lt / 39,63 gal	150 lt / 39,63 gal
max working capacity	9700 m²/h-104409 ft²/h	9700 m²/h-104409 ft²/h
traction / limiting gradient	front wheels / 12%	front wheel / 20%
max speed	7,5 km/h-4,66 mile/h	7,5 km/h-4,66 mile/h
motor type / power	24V/1,91 kW	Diesel Yanmar 6,7 Hp/4,92 kW
filtering surface	6,4 m <sup>2</sup> / 68,89 ft <sup>2</sup>	6,4 m <sup>2</sup> / 68,89 ft <sup>2</sup>
filter shaker	electric	electric
dimension / weight	160x101x130 cm/375 kg	160x101x130 cm/434 kg



• Ideal for large surfaces. • Large filter surface distributed on 8 cartridge filters fitted with electric filter shaker. • Side brush raising control. • On request DSA unload device for tank emptying into dust containers up to 145 cm height. • Complete right/left side brush. • Anti-trace wheels (mod.ET). • Suction switch off. • Lift flap pedal. • Flashing light. • Main brush pressure regulation. • 90° steering angle. • Electric starter. • Service and parking brake. • Hour meter and klaxon. • Antislip platform. • Indirect back collection. • Front dust vacuum system. • Quick changing of the main brush and side brush without tools. • Long life elastic belts. • Suction selection lever. • Shock proof steel frame. • Traction lever. • Antistatic device. • Battery level indicator (mod.ET). • 150 It wide collector tank. • Heavy duty steel frame. • Adjustable seat. • Battery and battery charger not included. • Front working light system.

### Standard accessories:



0.961.0176 PP SWL R 1100 ET

0.961.0178 PP-Mixed steel SWL R 1100 ST



2 x 0.961.0177 PP SWL R 1100 ET

2 x 0.961.0179 PP-Mixed steel SWL R 1100 ST



8 x 0.961.0020 paper filter 20 µm

### **Optional:**

- Cartridge polyester filter code: 0.961.0020
- Hepa cartridge filter code: 0.961.0180

	SWL R 1100 ET BIN-UP	SWL R 1100 DT BIN-UP
code	0.061.0043	0.061.0041
main brush width	800mm / 31,50 inc	800mm / 31,50 inc
main brush + 1 side brush	1050mm / 41,34 inc	1050mm / 41,34 inc
main brush + 2 side brushes	1300mm / 51,19 inc	1300mm / 51,19 inc
collector tank	150 lt / 39,63 gal	150 lt / 39,63 gal
max working capacity	9700 m²/h-104409 ft²/h	9700 m²/h-104409 ft²/h
traction / limiting gradient	front wheels / 12%	front wheel / 20%
max speed	7,5 km/h-4,66 mile/h	7,5 km/h-4,66 mile/h
motor type / power	24V/1,91 kW	Diesel Yanmar 6,7 Hp/4,92 kW
filtering surface	6,4 m <sup>2</sup> / 68,89 ft <sup>2</sup>	6,4 m <sup>2</sup> / 68,89 ft <sup>2</sup>
filter shaker	electric	electric
dimension / weight	160x101x130 cm/395 kg	160x101x130 cm/454 kg



Accessories										dD	J.		
			BSW 651 M	SWL 700 ET	SWL 700 ST	SWL 900 ET	SWL 900 ST	SWL R 1000 ET	SWL R 1000 ST	SWL R 1000 ET BIN-UP	SWL R 1000 ST BIN-UP	SWL R 1100 ET	SWL R 1100 DT
	0.961.0001	paper panel filter 14 micron		S	S								
	0.961.0002	paper panel filter 14 micron				S	S						
	0.961.0016	polyester panel filter 5 micron		0	0								
	0.961.0018	Hepa panel filter		0	0								
ALTO CALLED A LICENSE	0.961.0017	polyester panel filter 5 micron				0	0						
	0.961.0019	Hepa panel filter				0	0						
	0.961.0003	cartridge paper filter 14 micron						$\neg$				0	0
W/Williams	0.961.0004	cartridge paper filter 14 micron						S	S	S	S		
No.	0.961.0020	cartridge polyester filter 20 micron	1					Ť				s	S
and the second	0.961.0024	cartridge polyester filter 20 micron	+					0	0	0	0		
A AMERICAN AND A STATE OF THE S	0.961.0025	Hepa cartridge filter	+					0	_		0	$\neg$	
	0.961.0023	Hepa carridge filter	+				$\dashv$	$\exists$		7		0	0
	0.942.0052	PP side brush	S					$\dashv$		-		$\dashv$	<u> </u>
- A - NE	0.942.0052	PP side brush	+ <del>3</del>	S	S	S	S	$\dashv$		$\dashv$		$\dashv$	
		PP side brush	+	3	<u>ა</u>	<u>ა</u>	3			S	0	$\dashv$	$\dashv$
	0.961.0007		-					S	0	3	O		$\overline{}$
	0.961.0177	PP side brush	_				_	$\dashv$				S	0
	0.942.0079	mixed steel side brush	0		_	_	_	$\dashv$				_	
	0.961.0181	mixed steel side brush	+	0	O	0	0					_	
AND THE REAL PROPERTY.	0.961.0023	mixed steel side brush						0	S	0	S		
ALMAN MISSON	0.961.0179	mixed steel side brush								_		0	S
	0.942.0050	PP main brush	S										
												4	
AND THE RESIDENCE OF THE PARTY	0.961.0008	PP - moplen body main brush - bristle d. 0,5 mm	+	S	0			$\dashv$					
William Mary Control	0.961.0009	PP - moplen body main brush - bristle d. 0,5 mm	+	3	$\overline{}$	S	0	$\dashv$				$\dashv$	
Man multipa	0.961.0009	·	+			<u>ی</u>	$\overline{}$	S	0	S	0	$\dashv$	
		PP - moplen body main brush - bristle d. 0,5 mm	+				-	3		3	U	S	0
	0.961.0176	PP - moplen body main brush - bristle d. 0,5 mm						$\dashv$				3	$\subseteq$
	0.961.0012	mixed steel - moplen body main brush		0	S					$\neg$			
The same of the sa	0.961.0013	mixed steel - moplen body main brush				0	S						
THE RESERVE AND ADDRESS OF THE PARTY OF THE	0.961.0015	mixed steel - moplen body main brush						0	S	0	S		
THE REAL PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AN	0.961.0178	mixed steel - moplen body main brush										0	S
Desired in DITINITING SEALS OF THE										_		_	
Contract of the last of the la	0.107.0002	Tubular battery Pb-acid - 12V 118Ah C5	_	01		01						_	
THE WAY A	0.107.0063	GEL Battery - 12V 105Ah C5	_	01		01							
	0.107.0004	Tubular battery Pb-acid - 6V 180Ah C5 (+ 1 x 5.511.0561)	_	O2		O2							
	0.107.0072	GEL Battery - 6V 180Ah C5 (+ 1 x 5.511.0561)		О2		Ο2							
2	0.107.0004	Tubular battery Pb-acid - 6V 180Ah C5 (+ 3 x 5.511.0561)						04		04		04	
9	0.107.0072	GEL Battery - 6V 180Ah C5 (+ 3 x 5.511.0561)						04		04			
-	0.107.0080	Tubular battery Pb-acid - 6V 320Ah C5 (+ 3 x 5.511.0561)						04		04			
	0.107.0082	GEL Battery - 6V 250Ah C5 (+ 3 x 5.511.0561)						04	$\rightarrow$	04		$\neg$	
/## %	0.108.0001	LWS 1-12/24V-12A (for battery 0.107.0002-0.107.0063)		0		0						$\neg$	
	0.108.0002	LWS 2-12/24V-25A (for battery 0.107.0004-0.107.0072)		OΑ		OA		ОВ		ОВ		ОВ	
大公司			+				_	$\dashv$					

 $S = standard\ equipment\ O = optional\ OA = In\ combination\ with\ 5.511.2143\ OB = In\ combination\ with\ 5.511.1948$ 

(1)-(2)-(4)= n° batteries



# GV series is suitable to degrease and sanificate any object or surface in an easy, ecological and definitive way.

GV range is made up of electric generators, vacuum steam generators, vacuum steam generators with foam system. Ideal for food and baking industry, for private and institutional use, for pharmaceutical and mechanical industry, for dairy factories, for building sectors and so on.

## Performances: temperature, steam production and pressure

The same remarks about pressure and delivery rate made for high-pressure cleaners, have to be taken into consideration also for steam generators; in this case, the important difference is the physical relationship (and so not subjective or debatable) that exists between steam pressure and its temperature: to a fixed pressure values correspond right and univocal temperature. Knowing these values it is easy to identify the ones (like us) who show the right double relation between pressure and temperature.

Outlet steam temperature (not boiler temperature, that is higher)

is important because there are natural limits (about 140°C) under which

it is not possible to talk about sanification and so the purpose that led to the machine purchase (clearly wrong) could be unattended.

### Is it better a steam generator or a hot water highpressure cleaner?

As far as the choice is concerned, the aspects to be considered are the analysis of the task that must be done and all the elements that make up the cost of the operation, i.e. working speed (labour cost) and (more and more important) waste treatment (waste disposal cost).

As far as the working speed is considered, it is important the whole cleaning procedure and not only the effective washing time: with the high-pressure cleaner it is not possible an indoor washing, unless there is a filled in collection system, instead it is necessary to move the washing phase outside; with the steam generator it is not necessary to move outside, it is possible to wash the part exactly where it is, because the water generated can be easily dried.



Steam at 180°C allow to degrease dirt also without the use of heavy chemical products. If they are necessary to speed up the washing task, it is very important to consider the cost of draining away dirty water.

The danger of chemical products used is generally proportional to the effectiveness against increasing dirt tenacity.

If we wash with the high-pressure cleaner we produce from 10 to 21 litres of polluted water, that must be collected and drained following the current regulation: in a single wash of a couple of hours 2,5 tons of dirty water is produced!

If we wash with a steam generator, the most powerful machine produces 37 litres per hour, with the most part of the liquid that evaporates, with a two hour wash the remaining dampness and disinfecting product is very low!

Analyzing all these subjects it is clear that in particular circumstances (lack of purification plant for water treatment), the steam generator is more advantageous of a high-pressure cleaner.

On the other side, rinsing speed is the consequence to the delivery rate that hits dirt, so if only the washing phase is considered, high-pressure cleaner is faster.

Steam can be considered water with a related dampness very, very low (superheated steam is just hot air and it doesn't have a significant mechanical action...), with an outlet temperature much higher (180°C) than a high-pressure cleaner: this means that the mechanical power is lower than the one of water, but the degreasing power of steam is much higher.



### • Discharge valve:

Allows a complete discharge of the boiler (not possible even through gun use). In this way it is possible to remove water and limestone residual

inside the boiler and from the coil surface.

This valve maybe opened only when the boiler is not hot, and it is recommended to accomplish regularly.



### Unlimited autonomy:

The boiler is refilled by a water pump that gets water from an external water tank. This system allows an unlimited autonomy, because it is not

necessary to turn off the steam generator and wait a lower temperature to refill with water.

An automatic control recharges the boiler when necessary. In some models there is an acoustic signal advising about low water level inside the water tank.



### • Integrated vacuum:

Dirt is vacuumed inside a tank integrated in the machine



### Multipurpose washable filter

It combines all the advantages of the cartridge filter but with the plus that it can vacuum both dry and wet at the same time.

It can be washed with tap water.



### • Foam system:

the machine is equipped with connection for compressed air and pressure gauge for foam cleaning. Using the lance with the hose a thick

foam can be produced that will stay on the dirty components, giving more effectiveness to the detergent.



GV Kone GV Egon VAC GV Etna 4.1 GV Etna 4.1 FOAM GV Katla GV 3,3 M plus GV 8 T plus

			Absorbed power	Suction motor	Max pressure	Steam production	Max Temperature	Heating and activation time required	Water tank capacity	Detergent tank capacity	Packaging dimensions	Packaging weight	Packaging weight	Pieces for pallet
Code	Model	Page	W	W	bar	Kg/h	°C	min	_	I	mm L x l x h	kg	lbs	n°
8.404.0051	GV KONE	176	2300	-	4	2,6	143	10	2,4		470x330x350	8	17,64	25
8.406.0015	GV Egon VAC	178	1900	1200	5	2,3	152	2	1,2	-	550x400x500	14	30,86	16
8.451.0201	GV ETNA 4.1	180	3000	1100	7	3,25	165	4	5	5	750x600x1030	42,5	93,69	4
8.451.0210	GV ETNA 4.1 FR	180	3000	1100	7	3,25	165	4	5	5	750x600x1030	42,5	93,69	4
8.451.0208	GV ETNA 4.1 FOAM	182	3000	1500	7	3,25	165	4	5	5	750x600x1030	42,5	93,69	4
8.453.0001	GV KATLA	184	3300	-	9	4,62	175	7	5	5	750x600x700	31	91,27	10
8.450.0010	GV 3.3M PLUS	186	3300	-	9	4,62	175	7	5	5	595x435x650	37	81,57	2
8.458.0001	GV 8 T PLUS	188	8000	-	9	13,50	175	6	10	5	595x435x650	40	88,18	2
8.452.0002	GV VESUVIO 18	190	18000	-	10	26,50	180	7	25	5	1300x780x1080	134	295,41	1
8.452.0001	GV VESUVIO 30	190	30000	-	10	44,50	180	7	25	5	1300x780x1080	134	295,41	1















GV Vesuvio

UPDS Fuji (Ultra pressure dry steamer)

GV Metis (Diesel steam generator)

GV Kolumbo (Diesel steam generator)

Graffiti Waster (Diesel steam generator)

			Absorbed power	Suction motor	Max pressure	Steam production dry/wet	Max Temperature	Heating and activation time required	Water tank capacity	Detergent tank capacity	Packaging L×1×H	Packaging weight	Packaging weight	Pieces for pallet	
Code	Model	Page	W	W	bar	Kg/h	°(	min	1	I	mm L x l x h	kg	lbs	n°	
8.455.0001	UPDS FUJI	192	3000	-	10	50/90	178	5	18	-	1130x710x1110	130	242,50	1	
8.457.0001	GV METIS	194	350	-	10	50/90	178	5	18	-	1130x710x1110	110	286,60	1	
8.628.0006	GV KOLUMBO	196	350	-	10	50/90	178	5	25	25	1300x780x1080	140	308,64	1	
8.628.0025	GV KOLUMBO cordless	196	350	-	10	50/90	178	5	25	25	1300x780x1080	140	308,64	1	
8.628.0017	GV KOLUMBO 2 Ways	196	350	-	10	50/90	178	5	25	25	1300x780x1080	140	308,64	1	
8.628.0027	GRAFFITI WASTER	198	350	-	10	50/90	178	5	25	25	1300x780x1080	166	265,97	1	







## **GV** Kone



### **Equipped with:**

- Satured steam at 4 bar at a temperature of 143°C
- Boiler 2,3 kW
- Heating and activation time required: 10 min
- Pressure switch
- Double thermostat
- Cap with protection against anti-unscrewing and safety valve
- Handy accessory compartment with electric cable holder
- Control panel with lamps
- Impact resistant covers
- Steam regulation
- Thermometer
- Power cable 6 m.

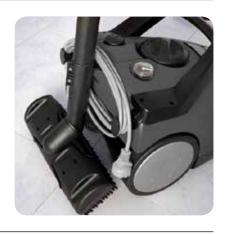


	GV Kone
Code	8.404.0051
Max steam pressure/temperature	4 bar/143° C
Boiler absorbed power	2300 W/220-240V ~ 50Hz
Steam production	80 kg/h max
Boiler type/volume	Alluminium/2,4 l



Lavor steam cleaner GV Kone sanitizes and sterilizes every surface with steam power, without using detergents or disinfectants. GV Kone is environmental friendly.

Steam regulation allows washing adjusting considering the surface to be treated: in this way every kind of surface has the right treatment.





The machine is user friendly and has a wide range of accessories: GV Kone is a confortable and safe daily working tool.

Steam cleaning function is perfect in shops, premises, offices as well as in household application and removes the toughest and hidden dirt while eliminating mites, germs and bacteria.



• 5.211.0090

**Standard Equipment** 

## **GV Egon VAC**



### TUV certified for professional use



	GV Egon VAC
Code	8.406.0015
Max steam pressure/temperature	5 bar/152° C
Boiler absorbed power	1900 W/220/240V ~ 50Hz (Ph 1)
Vacuum motor absorbed power	1200 (max 1400) W
Column depression/Air flow	24 kPa/220 m³/h
Recovery tank capacity	81



GV Egon VAC allows, simply and quickly and with the exclusive use of water, steam cleaning of all surfaces together with dust and liquid vacuuming. It is possible to clean and sanitize all surfaces (ceramic, stainless steel, glass, wood, linoleum, marble, carpet, armchairs and sofas) with high temperature steam, removing mites, germs, bacteria and prevent the onset of allergies.

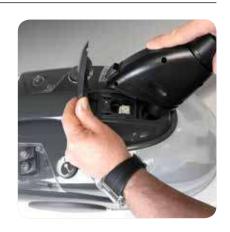
High pressure stainless steel boiler with unlimited autonomy, ready in a few moments and complete with a wide set of accessories.

Silent operation in sensitive and crowded areas, just setting the suction power on the gun.

Thanks to the water filter it is possibile to empty dirt water tank in a few seconds, no need of paper collector filters.

No more waiting for the boiler to cool down, it can be safely refilled, even while you are using it.

Set the boiler, choose the steam intensity. All the controls are on the handle, press the lever to steam, press the button to vacuum.





With high efficiency suction and the electronic control, it is possible to set vacuum power on the gun and to vacuum steam melted with dirt.

It is possible to vacuum dust and liquids with a 4 stage filtering system by adding, optionally, filtering water for greater filtration efficiency.

## Fields of applications

### **Steam system:**

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Food & beverage (food industry, catering, beverage, winery). Industry (industry, trasportation, car washers, car dealers).





GV Etna 4.1







Watch the video on youtube: www.youtube.com/lavorpro



### **Equipped with:**

- Stainless steel body AISI 304
- Ready steam warning lamp
- Boiler 3 kW S.S. AISI 304 Thickness 25/10
- Low level water lamp indicator
- Boiler is refilled continuously
- Switch for using chemicals and detergents mixed with steam
- Device for cleaning hot water mixed with steam
- Washable filter
- Flex hose 4 m
- Recovery tank capacity 64 l
- Drain hose system
- Steam regulation
- Wheels suitable for use in food processing area
- ON/OFF main switch with indicator lamp
- ON/OFF boiler switch with indicator lamp
- Boiler capacity 4 litres.
- Suction speed Control (Only code 8.451.0201)

### Standard equipment:

• 5.211.0123 Hose 4 m (mod. GV Etna 4.1) • 5.211.0124 Hose 4 m (mod. GV Etna 4.1 FR)



,	3.7	<b>753</b>	.01	41
---	-----	------------	-----	----

- 3.754.0278
- 3.754.0005
- 3.754.0192



- 3.754.0108
- 3.754.0110
- 6.405.0245
- 3.754.0194

• 3.754.0215

• 3.754.0196

• 3.754.0197

• 3.754.0204



• 3.754.0260 • 3.754.0271



• 5.212.0178



• 4.408.0454 - Sponge accessory

	GV Etna 4.1	GV Etna 4.1 FR
Code	8.451.0201	8.451.0210
Max steam pressure/temperature/ Steam production	7 bar/165° C/3,25 kg/h	7 bar/165° C/3,25 kg/h
Boiler absorbed power	3000 W/230V ~ 50Hz (Ph 1)	3000 W/230V ~ 50Hz (Ph 1)
Vacuum motor absorbed power	1200 W	1200 W
Column depression/Air flow	20.39 kPa/220 m³/h	20.39 kPa/220 m³/h
Water tank/detergent tank capacity	5   / 5	5   / 5



New simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch with lamp, boiler ON/OFF switch with lamp, steam/detergent regulator/selector, steam flow rate regulator, steam ready warning lamp, low level water indicator lamp with buzzer, steam pressure gauge. Gun with integrated start-up control, adjustment of the vacuum power and steam function activation key.

Unlimited autonomy thanks to the continuous power supply of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work.

Discharge pipe to quickly drain dirty water collected without removing the head. Two-stage bypass vacuum motor with cyclone effect.





Equipped with 3 pumps: boiler, detergent and water.

Maximum safety thanks to the 2 safety thermostats, 1 pressure switch and 1 mechanical maximum pressure valve.

# Fields of applications

**Steam system:** Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Industry (industry, transportation, car washers, car dealers).





# Vacuum steam generators with foam system



- Stainless steel body AISI 304
- Ready steam warning lamp
- Boiler 3 kW S. S. AISI 304 Thickness 25/10
- Low level water lamp indicator
- Boiler is refilled continuously
- Switch for using chemicals and detergents mixed with steam
- Device for cleaning hot water mixed with steam
- Washable filter
- Flex hose 4 m
- Recovery tank capacity 64 l
- Drain hose system
- Steam regulation
- Wheels suitable for use in food processing area
- ON/OFF main switch with indicator lamp
- ON/OFF boiler switch with indicator lamp
- Boiler capacity 4 litres.
- Suction speed Control

• 5.211.0123 Hose 4 m	3
• 3.753.0141	
• 3.754.0278	5
• 3.754.0005	
• 6.402.0106	
• 6.402.0113	0-
• 6.405.0245	<b>₹</b>
• 3.754.0194	25
• 3.754.0215	
3.754.0196	******
3.754.0197	<b>C</b>
• 3.754.0204	<(
• 3.754.0260	
• 3.754.0271	
• 5.212.0178	
• 4.408.0454 - Sponge ac	cessory

	GV Etna 4.1 Foam
Code	8.451.0208
Max steam pressure/temperature/ Steam production	7 bar/165° C/3,25 kg/h
Boiler absorbed power	3000 W/230V ~ 50Hz (Ph 1)
Vacuum motor absorbed power	1200 W
Column depression/Air flow	20.39 kPα/220 m³/h
Water tank/detergent tank capacity	5   / 5

# LAVOR



New simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch with lamp, boiler ON/OFF switch with lamp, steam function/compressed air function selector, water/detergent selector, steam flow rate regulator, steam ready indicator lamp, low water level indicator lamp with buzzer, steam pressure gauge, and air pressure gauge. Gun with integrated start-up control, adjustment of the vacuum power and

steam/foam function activation key.

Multipurpose machine: cleaning with detergent, steam, steam with detergent, foam and hot water. Equipped with a compressed air connection and pressure gauges for air and steam. Unlimited autonomy of steam thanks to the electronically controlled power supply of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work.





Discharge pipe to quickly drain dirty water from the tank. Twostage bypass vacuum motor. Equipped with 3 pumps: boiler, detergent and water. Maximum safety thanks to the 2 safety thermostats, 1 pressure switch and 1 mechanical maximum pressure valve + 11 LC prefoam.

# Fields of applications

**Steam system:** Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Industry (industry, transportation, car washers, car dealers).

**Foam system:** Car dealers, car washers, garages, car body shops, and every other place where a source of compressed air is already available





#### **Equipped with:**

- Satured steam at 9 bar at a temperature of 175°C
- Steam gun with low tension control
- S. S. body AISI 304
- Boiler 3,3 kW S. S. AISI 304. Thickness 25/10
- Low level water lamp indicator
- Device for using chemicals and detergents mixed with steam
- Heating and activation time required: 7 min.
- Steam regulation
- Discharge valve
- Pressure gauge
- The boiler can be refilled from the tank provided (continuous duty)
- Wheels suitable for food and processing areas
- Storage basket.

Standard equipment:
• 5.409.0256 Hose 3 m
• 2 x 3.753.0111
• 3.754.0228
• 3.754.0229
• 3.754.0235
• 3.754.0250
• 3.754.0230
• 6.405.0240
• 6.402.0096
• 3.754.0234
• 6.402.0095
• 3.099.0126
Optional
<ul><li>5.409.0254 Steam gun with hose (10 m)</li><li>3.754.0280 Long steam lance</li></ul>

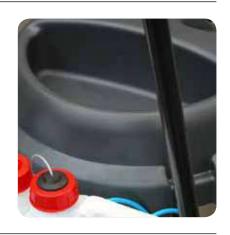
	GV Katla
Code	8.453.0001
Max steam pressure/temperature	9 bar/175° C
Boiler absorbed power	3300 W/230V ~ 50Hz (Ph 1)
Steam production	4,62 kg/h
Boiler type/volume	Inox AISI 304/4 I
Water tank/detergent tank capacity	51/51



Simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch with lamp, boiler ON/OFF switch with lamp, water/detergent selector, steam flow rate regulator, steam ready indicator lamp, low water level indicator lamp with buzzer, steam pressure gauge. Steam gun with integrated steam/detergent function activation key and quick coupling of accessories.

Unlimited autonomy thanks to the continuous power supply of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work, with major time saving in the operating phase. Boiler with saturated steam at 9 bar at a temperature of 175°C.

Equipped with 3 pumps: boiler, detergent and water. Maximum safety thanks to the 1 safety thermostat, 1 pressure switch and





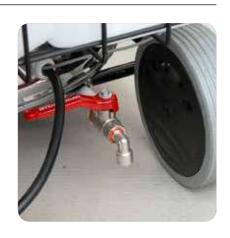
1 mechanical maximum pressure valve. Discharge valve for complete discharge of the boiler; it eliminates water residues and formation of lime scale, thus lengthening the lifespan of the boiler. A 5-litre water and detergent double tank. A rich and complete range of accessories is supplied.

Fieldswater and scale growth, extending boiler's life.

# Fields of applications

### Steam system:

Food & beverage (food industry, catering, beverage, winery). Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare). Industry (industry, transportation, car washers, car dealers).





#### **Equipped with:**

- Satured steam at 9 bar at a temperature of 175°C
- Steam gun with low tension control
- Made of AISI 304 stainless steel
- Boiler 3,3 kW S. S. AISI 304. Thickness 25/10
- Heating and activation time required: 7 min.
- Steam regulation
- Discharge valve
- Pressure gauge
- Device for using chemicals and detergents mixed with steam
- The boiler can be refilled from the tank provided (continuous duty)
- Pivoting wheels with brakes, suitable for use in food processing areas.

# **Standard equipment:** • 5.409.0256 Hose 3 m • 2 x 3.753.0111 • 3.754.0228 • 3.754.0229 • 3.754.0235 • 3.754.0250 • 3.754.0230 • 6.405.0240 • 6.402.0096 • 3.754.0234 • 6.402.0095 • 3.099.0126 **Optional:** • 5.409.0254 Steam gun with hose (10 m) • 3.749.0280 Long steam lance

	GV 3,3 M PLUS
Code	8.450.0010
Max steam pressure/temperature	9 bar/175° C
Boiler absorbed power	3300 W/230V ~ 50Hz (Ph 1)
Steam production	4.62 kg/h
Boiler type/volume	Inox AISI 304/4 I
Water tank/detergent tank capacity	51/51

# LAVOR



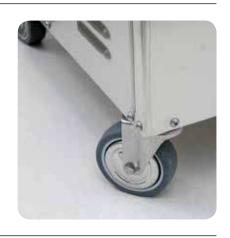
Simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch with lamp, boiler resistance activation lamp, steam flow rate regulator, steam ready indicator lamp, steam pressure gauge. Steam gun with integrated steam/detergent function activation key and quick coupling of accessories. Boiler no water safety stop sensor. No water and water tank full lamp. Water pump activation lamp.

Detergent pump activation lamp. Water/detergent selector key.

Boiler draining key.

Unlimited autonomy thanks to the continuous power supply of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work, with major time saving in the operating phase. Boiler with saturated steam at 9 bar at a temperature of 175°C.

Equipped with 2 pumps: boiler and detergent. Maximum safety thanks to the 1 safety thermostat, 1 pressure switch and 1





mechanical maximum pressure valve.

Discharge valve for complete discharge of the boiler; it eliminates water residues and formation of lime scale, thus lengthening the lifespan of the boiler.

Equipped with 4 pivoting wheels suitable for food environments. A 5-litre water and detergent double tank. A rich and complete range of accessories is supplied.

# Fields of applications

### Steam system:

Steam system: Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Industry (industry, transportation, car washers, car dealers).

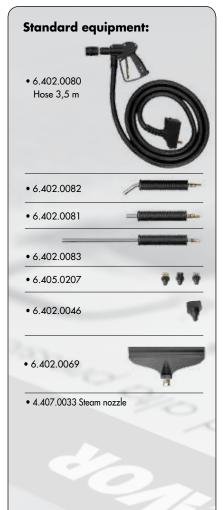


### **GV 8 T Plus**



#### **Equipped with:**

- Built-in AISI 304 stainless steel
- Pivoting wheels with brakes, suitable for use in food processing areas
- The boiler can be refilled from the tank provided (continuous duty)
- Discharge valve
- Pressure gauge
- Device for using chemicals and detergents mixed with steam
- Heating and activation time required: 6 min.
- Control with low tension controls
- Control panel: ON-OFF main switch, indicator lamp,
- Satured steam at 9 bar at a temperature of 175°C.



#### **Optional:**

- 6.402.0087 Steam gun with hose (6 m)
- 6.402.0085 Steam gun with hose (10 m)
- 6.402.0092 Straight lance mm 750 without nozzle
- 6.405.0197 Coupling for tanks Ø 40
- 6.402.0094 Extension 650 mm
- 6.402.0097 Lance with flat nozzle
- 6.402.0098 Brass bristles brush Ø 80
- 6.402.0112 Lance for barrel

	GV 8 T plus
Code	8.458.0001
Max steam pressure/temperature	9 bar/175° C
Boiler absorbed power	8000 W/400V ~ 50Hz (Ph 3)
Steam production	13,50 kg/h
Boiler type/volume	Inox AISI 304/5
Water tank/detergent tank capacity	10 1/5 1

# LAVOR



Simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch with lamp, boiler resistance activation lamp, steam flow rate regulator, steam ready indicator lamp, steam pressure gauge. Steam gun with integrated steam/detergent function activation key and quick coupling of accessories. Boiler no water safety stop sensor. No water and water tank full lamp. Water pump activation lamp. Detergent pump activation lamp. Water/detergent selector key.

Boiler draining key.

Unlimited autonomy thanks to the continuous power supply of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work, with major time saving in the operating phase. Boiler with saturated steam at 9 bar at a temperature of 175°C.

Equipped with 2 pumps: boiler and detergent. Maximum safety thanks to the 1 safety thermostat, 1 pressure switch and 1





mechanical maximum pressure valve.

Discharge valve for complete discharge of the boiler; it eliminates water residues and formation of lime scale, thus lengthening the lifespan of the boiler.

Equipped with 4 pivoting wheels suitable for food environments. A 10l water and 5l detergent double tank. A rich and complete range of accessories is supplied.

# Fields of applications

### Steam system:

Steam system: Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Industry (industry, transportation, car washers, car dealers).





# Steam generators



### **GV Vesuvio**









Watch the video on youtube: www.youtube.com/lavorpro

#### **Equipped with:**

- Built-in AISI 304 stainless steel
- Pivoting wheels with brakes, suitable for use in food processing areas
- The boiler can be refilled from the tank provided (continuous duty)
- Temperature regulator, discharge valve and pressure gauge
- Device for using chemicals and detergents mixed with steam
- Heating and activation time required: 6 min.
- Control with low tension controls
- Control panel: ON-OFF main switch, indicator lamp, thermoregulator, boiler activating key, gun activating key
- Timer cycle.

# Standard equipment:

• 6.402.0080 Hose 3,5 m

- 6.402.0082
- 6.402.0081
- 6.402.0083
- 6.405.0207
- 6.402.0046





- 4.407.0077 Steam nozzle (GV Vesuvio 18)
- 4.407.0079 Steam nozzle (GV Vesuvio 30)

#### **Optional:**

- 6.402.0087 Steam gun with hose (6 m)
- 6.402.0085 Steam gun with hose (10 m)
- 6.402.0093 Steam gun with hose (15 m)
- 6.402.0090 Steam gun with hose (20 m)
- 6.402.0092 Straight lance mm 750 without nozzle
- 6.405.0197 Coupling for tanks Ø 40
- 6.402.0094 Extension 650 mm
- 6.402.0097 Lance with flat nozzle
- 6.402.0098 Brass bristles brush Ø 80
- 6.402.0112 Lance for barrel

	GV Vesuvio 18	GV Vesuvio 30
Code	8.452.0002	8.452.0001
Max steam pressure/temperature	10 bar / 180° C	10 bar / 180° C
Boiler absorbed power	18000 W / 400V ~ 50Hz (Ph 3)	30000 W / 400V ~ 50Hz (Ph 3)
Steam production	26.5 kg/h	44.5 kg/h
Boiler type/volume	Inox AISI 304 / 18 I	Inox AISI 304 / 18 I
Water tank/detergent tank capacity	25   / 5	251/51

# LAVOR



Simple and intuitive control panel, quick-coupling steam gun, main ON/OFF switch, activation lamp, electronic regulator of the temperature with digital display, low water level display with buzzer, boiler activation key, gun activation key, steam pressure gauge, steam selector and detergent selector. Steam gun with integrated steam/detergent function activation key and quick coupling of accessories. Timer cycle.

Unlimited autonomy thanks to the continuous power supply

of the boiler, which enables water top-ups in the tank without having to stop the machine or interrupt work, with major time saving in the operating phase. Boiler with saturated steam at 10 bar at a temperature of 180°C.

Equipped with 2 pumps: detergent and water. Maximum safety thanks to the 2 level controls, 1 thermostat, 1 pressure switch and 1 mechanical pressure valve. Discharge valve for complete discharge of the boiler; it eliminates water residues





and formation of lime scale, thus lengthening the lifespan of the boiler. Double tank: 25 litres for water and 5 litres for detergent. Equipped with 2 pivoting wheels and appropriate brake to use in food environments + 2 fixed wheels. A rich and complete range of accessories is supplied with practical accessory holders.

# **Fields of applications**

### Steam system:

Steam system: Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).
Industry (industry, transportation).









# **UPDS** Fuji **2** in **1**

high pressure

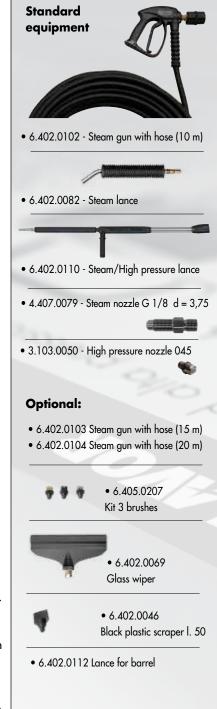




#### **Equipped with:**

Steam: Vertical burner with high thermal efficiency steel coil. Auxiliary motor for burner. Discharge valve: allows a complete discharge of the boiler. Temperature regulator: the temperature is set up by an electronic regulator. Steam pressure gauge. Temperature regulator. Low fuel lamp. Double pipe gasoil pump. User friendly control panel. Unit can be continually refilled. Safety solenoid valve. Device for cleaning hot water mixed with

High pressure water: Three ceramic coated pistons brass linear pump head with built-in by-pass valve.



	UPDS Fuji
Code	8.455.0001
Operat. pressure	120 bar (150 bar max)
Delivery rate max	660 l/h
Max steam pressure/temperature	10 bar / 178° C
Absorbed power	3000 + 350 W / 230V ~ 50Hz (Ph 1)
Steam production dry/wet	50/90 kg/h
Burner type/fuel consumption	Diesel / 2,83 l/h
Fuel tank capacity	181



Ultra Pressure Dry Steamer: a new revolutionary cleaning system.

The advantages of two cleaning systems are combined into one single product. An innovative cleaning system that combines the mechanical force of high-pressure water with the degreasing and disinfecting force of dry steam. Equipped with a 18 liters diesel tank, which makes the high pressure cleaning autonomous. A professional steam generator integrated with a cold

water high-pressure cleaner, dual use for multiple applications in an all-in-one product.

With the cold water high pressure cleaner, which uses the mechanical force of the high pressure, you can quickly remove coarse and superficial dirt.

Thanks to the use of detergents is then possible to act effectively on all kinds of dirt and on all surfaces.

With the degreasing and sanitizing strength of dry steam it is





possible to remove even the more aggressive dirt, allowing to clean car rims, the engine compartment, interior parts, floor mats.

Ideal for: Cleaning and sanitising car interiors, street furniture, playgrounds, removing chewing gum, degreasing mechanical parts in general, etc.

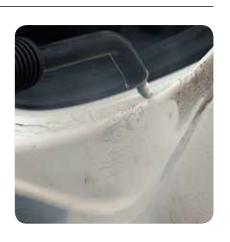
# Fields of applications

### Steam system:

Steam system: Food & beverage (food industry, catering, beverage, winery).

Hospitality, community & healthcare (hospitality, buildings cleaning, spa & sport, education & community, healthcare).

Industry (industry, transportation).





# NEW PERSONAL

# Steam generators with diesel fuel boiler









#### **Equipped with:**

- Vertical burner with high thermal efficiency steel coil
- Auxiliary motor for burner
- Discharge valve: allows a complete discharge of the boiler
- Temperature regulator: the temperature is set-up by an electronic regulator
- Steam pressure gauge
- Low fuel indicator
- Double pipe gasoil pump
- User-friendly control panel
- Unit can be continually refilled
- Provided with 2 outputs for simultaneous work of two different operators.

# **Metis**



#### **Optional:**

- 6.402.0103 Steam gun with hose (15 m)
- 6.402.0104 Steam gun with hose (20 m)
- 6.402.0092 Lance mm 750 without nozzle
- 6.402.0081 Lance mm 175 without nozzle
- 6.402.0083 Lance mm 425 without nozzle
- 6.402.0046 Black plastic scraper l. 50
- 6.402.0069 Glass wiper
- 6.405.0197 Coupling for tanks Ø 40
- 6.402.0094 Extension 650 mm
- 6.402.0097 Lance with flat nozzle
- 6.402.0098 Brass bristles brush Ø 80
- 6.402.0112 Lance for barrel

	Metis
Code	8.457.0001
Max steam pressure/temperature	10 bar / 178° C
Absorbed power	350 W / 230V ~ 50Hz (Ph 1)
Steam production dry/wet	50/90 kg/h
Burner type/fuel consumption	Diesel / 2,83 l/h
Water tank/fuel tank capacity	18   / 18

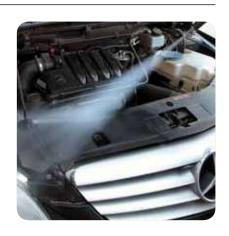




Metis is a portable steam generator with a diesel fuel boiler. Unlimited autonomy thanks to no-stop water tank refilling. It does not leave any residues after cleaning. Metis water saving (over 90%) compared to normal high-pressure systems. Allows sanitisation tasks thanks to the combined use of steam and pressure. The operator does not require special protective overalls and protective masks. Provided with 2 outputs for simultaneous work of two different operators.

Portability: it does not need to be connected neither to the water supply because it is equipped with a water tank. It is easy to move around, easy to use, and ready to use. The advantages compared to normal high-pressure washing:

• Ecological: It consumes very little water (90% less than normal high-pressure cleaners) and does not require connection to the water supply.





- It does not require a collection tank to dispose of water reflux.
- Thanks to the high temperature that degreases and dissolves dirt, no polluting chemical products are required.
- Easy to use where required, it does not require connection to the water supply, the operator does not require special work clothing, excess water is not wasted.
- Ideal for maintenance cleaning and makes the bodywork of your car or motorbike shine without the risk of damaging it with the mechanical action of the high-pressure water.

Ideal for: Eliminating stubborn grease and dirt, leaving surfaces clean and shining. Cleaning is easy, all you need to do is use the cleaning and degreasing action of the steam at high temperature and collect residues with a microfibre cloth. Glass and delicate surfaces. Car interiors and for the most difficult parts to reach. Quick, thorough cleaning and sanitisation of mats without wetting them.





# Rigidal 455 (OMAI

# Steam generators with diesel fuel boiler



#### **Equipped with:**

- Vertical burner with high thermal efficiency steel coil
- Auxiliary motor for burner
- Discharge valve: allows a complete discharge of the boiler
- Temperature regulator: the temperature is set-up by an electronic regulator
- Steam pressure gauge, temperature regulator and low fuel lamp
- Integrated detergent tank with detergent delivery controller by the gun
- Double pipe gasoil pump
- User-friendly control panel
- Unit can be continually refilled
- Standard with double guns for 2 operators model Kolumbo 2Way code 8.628.0017
- Battery version: Kolumbo Cordless code 8.628.0025 (Battery charger 230 V-50 Hz).

### Standard equipment:





• 6.402.0082 (Kolumbo 2way -Two pieces)



• 6.405.0207 (Kolumbo 2way - Two pieces)



- 4.407.0079 Steam nozzle (Kolumbo/Kolumbo cordless)
- 4.407.0077 Steam nozzle (Kolumbo 2 way)

Only Kolumbo cordless standard on board





#### **Optional:**

- 6.402.0080 Steam gun with hose (3,5 m)
- 6.402.0087 Steam gun with hose (6 m)
- 6.402.0093 Steam gun with hose (15 m)
- 6.402.0090 Steam gun with hose (20 m)
- 6.402.0092 Lance mm 750 without nozzle
- 6.402.0081 Lance mm 175 without nozzle
- 6.402.0083 Lance mm 425 without nozzle
- 6.402.0046 Black plastic scraper l. 50
- 6.402.0069 Glass wiper
- 6.405.0197 Coupling for tanks Ø 40
- 6.402.0094 Extension 650 mm
- 6.402.0097 Lance with flat nozzle
- 6.402.0098 Brass bristles brush Ø 80
- 6.402.0112 Lance for barrel

	KOLUMBO	KOLUMBO CORDLESS	KOLUMBO 2way
Code	8.628.0006	8.628.0025	8.628.0017
Max steam pressure/temperature	10 bar / 178° C	10 bar / 178° C	10 bar / 178° C
Absorbed power	350 W / 220/230V ~ 50/60Hz (Ph 1)	350 W / 1 x 12 DC 75 Ah C5	350 W /220/230V ~ 50/60Hz (Ph 1)
Steam production dry/wet	50/90 kg/h	50/90 kg/h	50/90 kg/h
Burner type/fuel consumption	Diesel / 2,83 l/h	Diesel / 2,83 l/h	Diesel / 2,83 l/h
Water tank/fuel tank capacity	25   / 25	25   / 25	25   / 25

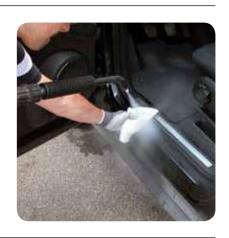


GV Kolumbo is a portable steam generator with a diesel fuel boiler. Unlimited autonomy thanks to no-stop water tank refilling. It does not leave any residues after cleaning. Major water saving (over 90%) compared to normal high-pressure systems. Allows sanitisation tasks thanks to the combined use of steam and detergents. The operator does not require special protective overalls and protective masks.

Portability: it does not need to be connected neither to the water

supply because it is equipped with a water tank, nor to the electrical supply (cordless model) because it has a diesel fuel boiler. It is easy to move around, easy to use, and ready to use. The advantages compared to normal high-pressure washing:

 Ecological: It consumes very little water (90% less than normal high-pressure cleaners) and does not require connection to the water supply.





- It does not require a collection tank to dispose of water reflux.
- Thanks to the high temperature that degreases and dissolves dirt, no polluting chemical products are required.
- Easy to use where required, it does not require connection to the water supply, the operator does not require special work clothing, excess water is not wasted.
- Ideal for maintenance cleaning and makes the bodywork of your car or motorbike shine without the risk of damaging it with the mechanical action of the high-pressure water.

Ideal for: Eliminating stubborn grease and dirt, leaving surfaces clean and shining. Cleaning is easy, all you need to do is use the cleaning and degreasing action of the steam at high temperature and collect residues with a microfibre cloth. Glass and delicate surfaces. Car interiors and for the most difficult parts to reach. Quick, thorough cleaning and sanitisation of mats without wetting them.



### **Graffiti Waster**







#### **Equipped with:**

- Vertical burner with high thermal efficiency steel coil
- Auxiliary motor for burner
- Discharge valve: allows a complete discharge of the boiler
- Temperature regulator: the temperature is set-up by an electronic regulator
- Steam pressure gauge, temperature regulator and Low fuel lamp
- Integrated detergent tank with detergent delivery controller by the gun
- Double pipe gasoil pump
- User-friendly control panel
- Unit can be continually refilled
- Battery and battery charger included (Battery charger 230 V-50 Hz).



#### **Optional:**

- 6.402.0080 Steam gun with hose (3,5 m)
- 6.402.0093 Steam gun with hose (15 m)
- 6.402.0090 Steam gun with hose (20 m)
- 0.011.0001 Calibrated sand (6 x 5 kg)
- 6.402.0112 Lance for barrel

	Graffiti Waster
Code	8.628.0027
Max steam pressure/temperature	10 bar / 178° C
Absorbed power	350 W / 1 x 12 DC 75 Ah C5
Steam production wet/dry	50/90 kg/h
Burner type/fuel consumption	Diesel / 2,83 l/h
Water tank/fuel tank capacity	251/251







Graffiti Waster is a portable steam generator, equipped with diesel fuel boiler, allowing graffiti and dirt removal in general, thanks to the revolutionary system using steam/sand and steam/detergent mashed together. To remove all

types of graffiti away from walls, buildings, floors. To restore and clean statues/monuments. Sandblasting walls andrailings. Clean and sand blasting terracotta tiles, roofing tiles and wood. Pickle machineries and surfaces thanks to a combined use of detergents. Unlimited autonomy: thanks to no-stop water tank

refilling.

# Main plus in comparison to traditional sand blasting systems using air or water:

- It doesn't leave residuals at the end of cleaning task. No water waste.
- Noiseless. Allows sanitization tasks thanks to the combined use of steam and detergents. The operator doesn't need protective overalls and protective masks with filters. Lack of hazardous dust that are pulled down by steam.
- With a LavorPro vacuum cleaner it is possible to carry out a deep cleaning of the area at the end of the cleaning task Portability: it doesn't need to be connected nor to water supply, because it is equipped with water tank, not to the electrical supply, because it has a diesel fuel boiler. Easy to use and always ready to use. Easy to move.

# What you can do with Graffiti Waster...





Watch the video on youtube: www.youtube.com/lavorpro







In order to complete the chemical products supply and to allow a better applicability and effectiveness, the sprayers are the perfect solution when supply wideness, use versatility and dosage saving are taken into consideration.

They are split into two different categories: pneumatic charge and continuous pneumatic charge.

Pneumatic charge sprayers need

to be connected to an air compressor to charge the tank and allow the product vaporization without the connection to the air compressor. They work at high-pressures and so they use capacious steel or stainless steel tanks to allow a greater working autonomy.

Continuous pneumatic foam sprayers need a permanent connection to an air compressor; in this way air mixes with the chemical product producing a soft and voluminous foam that persists on surfaces: with a little chemical product, it is possible to treat wider areas or tough dirt (also on ceilings, inclined and/or slippery walls).

They work at high-pressure and so they use capacious steel or stainless steel tanks to allow a greater working autonomy.



The chemical product spraying is a finishing phase of cleaning task with other machines. The choice of the right product considering the kind of cleaning task grants the best result, complying with the environment and the machine that sprays the chemical product. Our chemical products range has been conceived complying with the strictest rules protecting the environment and avoiding the indiscriminating use of products damaging the environment. The right measuring and respect of the instructions we suggest are the best balance of the economical and technical needs of each up-to-date and aware cleaning task.

			Product	Capacity	Recharging	Working pressure	Category	Single packaging weight	Single packaging weight	Single packaging dimensions	Pieces for pallet	Pallet dimensions
Code	Model	Page		liters		bar		kg	lbs	cm L x l x H	N°	cm L x l x H
6.608.0074	FOAM BOX	201	Foam sprayer	-	Air operating	4	Box	3 kg	9,3	44x13x25	-	-
0.006.0002	SPRAY NV24	202	Sprayer	24	Pneumatic	6	Trolley	17 kg	38	34x34x82	18	102x102x215
0.006.0003	SPRAY NV50	202	Sprayer	50	Pneumatic	6	Trolley	27 kg	60	47x47x107	12	141x107x205
0.006.0007	FOAMJET SV24	203	Foam sprayer	24	Air operating	6	Trolley	17 kg	38	34x34x82	18	102x102x215
0.006.0009	FOAMJET SX24	203	Foam sprayer	24	Air operating	6	Trolley	13 kg	29	34x34x82	18	102x102x215
0.006.0008	FOAMJET SV50	203	Foam sprayer	50	Air operating	6	Trolley	27 kg	60	47x47x107	12	141x107x205
0.006.0010	FOAMJET SX50	203	Foam sprayer	50	Air operating	6	Trolley	20 kg	44	47x47x107	12	141x107x205



### Foam box





# Standard equipment:



• 8m hose 3.099.0705



#### **Optional:**

**3.697.0059** 4x5 kg foaming cleanser for commercial vehicles

**3.697.0057** 4x5 Kg alkaline foaming cleanser for food industry

**3.697.0058** 4x5 Kg foaming cleanser for hygiene facilities

**3.697.0056** 4x5 kg foaming cleanser for cloth and carpets



Device for dense foam production and spreading. Easy to install, it requires only compressed air connection and power supply.

Ideal for cleaning: car body, car interiors, bathrooms, kitchens, slaughterhouses, food processing areas, health care settings, cellars.

	Foam box
code	6.608.0074
voltage	220-240V ~ 50Hz
pumps no power	2 - 100W
air pressure	4 bar
delivery rate	1 l/m
detergent concentration	4%
dimension/weight	44 x 13 h 25/3 Kg

# **Spray**



**Spray:** Pneumatic charge sprayers need to be connected to an air compressor to charge the tank and allow the product vaporization without the connection to the air compressor. They work at high-pressures and so they use capacious steel or stainless steel tanks to allow a greater working autonomy.

# Standard accessories: Professional gun.Lance with nozzle. Integrated inlet and outlet quick.Chemical use hose and gasket. Spray 24 code 0.906.0030 code 0.906.0084 Spray 50 code 0.906.0031 code 0.906.0084

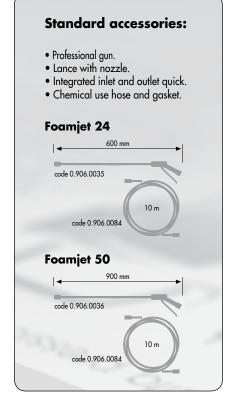
	SPRAY NV24	SPRAY NV50
code	0.006.0002	0.006.0003
capacity/model	24 l/painted	50 l/painted
working pressure	6 bar	6 bar
safety valve	max 8 bar	max 8 bar
pressure indicator	pressure gauge	pressure gauge
level indicator	external column	external column
recharging	pneumatic	pneumatic
pressure regulator	manual	manual
gun connection	1/4" G-F	1/4" G-F
hose type	rilsan	rilsan
hose/lance lenght	10 mt/600 mm	10 mt/900 mm
dimension/weight	28x32x75 cm/15 kg - 33,06 lbs	45x42x100 cm/25 kg - 55,11 lbs

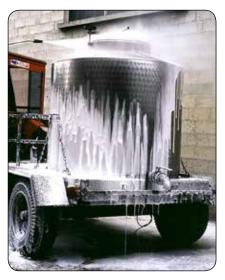


# **Foamjet**









Continuous pneumatic foam sprayers need a permanent connection to an air compressor; in this way air mixes with the chemical product producing a soft and voluminous foam that persists on surfaces: with a little chemical product, it is possible to treat wider areas or tough dirt (also on ceilings, inclined and/or slippery walls). They work at high-pressure and so they use capacious steel or stainless steel tanks to allow a greater working autonomy.

	FOAMJET SV24	FOAMJET SX24	FOAMJET SV50	FOAMJET SX50
code	0.006.0007	0.006.0009	0.006.0008	0.006.0010
capacity/model	24 l/painted	24 l/S. S.	50 l/painted	50 l/s. s.
working pressure	6 bar	6 bar	6 bar	6 bar
safety valve	max 8 bar	max 8 bar	max 8 bar	max 8 bar
pressure indicator	pressure gauge	pressure gauge	pressure gauge	pressure gauge
level indicator	external column	external column	external column	external column
recharging	air operating	air operating	air operating	air operating
pressure regulator	manual	manual	manual	manual
gun connection	1/4" G-F	1/4" G-F	1/4" G-F	1/4" G-F
hose type	rilsan	rilsan	rilsan	rilsan
hose/lance lenght	10 mt/600 mm	10 mt/600 mm	10 mt/900 mm	10 mt/900 mm
dimension/weight	28x32x75 cm/15 kg - 33,06 lbs	28x32x75 cm/11 kg - 24,25 lbs	45x42x100 cm/25 kg - 55,11 lbs	45x42x102 cm/18 kg - 39,68 lbs



# **Chemical products**

### Technology

















#### **Fields**









MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-800F code 3.697.0023	FRAGRANCE-FREE SANITISING DETERGENT	\$1  \$\int\$\int\text{\$\in\text{\$\ext{\$\in\text{\$\ext{\$\in\text{\$\ext{\$\in\text{\$\in\text{\$\exitin\text{\$\in\text{\$\in\text{\$\in\text{\$\in\text{\$\in\text{\$\in\text{\$\in\text{\$\ext{\$\exitin\text{\$	Destroys unpleasant odours, fights the proliferation of bacte- ria, harmful micro-organisms, fungi and moulds. Contains quaternary ammonium salts.	On all types of hard surface, dilute from 1 to 3%. In the case of tenacious contaminations and aggressive unpleasant odours, dilute up to 6%.
Ph 7.8 - 8.2 1,000 g/ml	5000 ml × 4 pz.		ті 📝 т2 🛶 тз 🥻	T5 T7

MODEL LCN-800 code 3.697.0024	DESCRIPTION  FRAGRANCE SANITISING DETERGENT	FIELDS  S1  S3  S4	Destroys unpleasant odours, fights the proliferation of bacte-	USE:  On all types of hard surface, dilute from 1 to 3%. In the case of tenacious contaminations and aggressive unpleasant odours, dilute up to 6%.
Ph 7.8 - 8.2 1,000 g/ml	5000 ml x 4 pz.		T1 T2 T3	T5 🙀 T7 📷

MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-680AL code 3.697.0025	ALCOHOLIC MAINTENAN- CE DETERGENT	S4 (1)	Quick-drying universal neutral detergent. Anti-dust effect for 4-5 days. Leaves a pleasant fragrance in the environment. Does not leave residues.	On all types of washable shiny or hard surface such as glass, stone or ceramic, dilute with water from 0.5% to 1 %.
Ph 6,6 - 7,0 1,000 g/ml	5000 ml x 4 pz.		ті 📝 тз 済 ть 🚉	T7 <b>(</b>

MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-650 code 3.697.0026	NON ALCOHOLIC MAINTENANCE DETERGENT	S4 <b>**</b>	Universal neutral detergent, does not corrode polymers, natural or synthetic waxes. Leaves a pleasant fragrance in the envi- ronment. Does not leave residues.	On all types of washable hard surfaces, even if protected by wax and/or sealants, dilute in water to 0.5%-1%.
Ph 6,3 - 6,7 1,000 g/ml	5000 ml x 4 pz.		T1 7 T3 7 T7	

MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-640WM code 3.697.0027	NON STRATIFYING WAX WASH DETERGENT	S4 <b>**</b>	Cleans and shines surfaces. Regenerates protective and wax treatments. Non filmogenous and leaves a pleasant fragrance in the environment.	On all types of washable hard surfaces, including floors pro- tected by wax and/or sealants, dilute in water to 0.5%-1%.
Ph 8,8 - 9,2 1,000 g/ml	5000 ml x 4 pz.		T1 72 73 73	T5 🚉 T7 🚅

# Chemicals products



#### **Technology**



#### **Fields**

S1 2 vehicles   S2 mechanical s3   S3   tood industry   S4   wildle
---

S1 vehicles	s3  industry	S4 buildi	<mark>ng</mark>	
MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCB-900WR code 3.697.0030	FRAGRANCE-FREE WAX REMOVING DETERGENT	S1	Removes any type of wax or polymer (even if old or stratified).	According to the degree of dirt and the thickness of the film, dilute in water from 1% to 10%. In extreme situations, dilute in water up to 20%.
Ph 8,8 - 9,2 1,000 g/ml	5000 ml x 4 pz.		T1 7 T6 7 T7	
MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCB-740F code 3.697.0031	ALKALINE MULTIPURPOSE DETERGENT	51 <b>2 2 2 3 3 3 3 3 3 3 3 3 3</b>	Dissolves and detaches organic and inorganic dirt.	On all types of hard washable surfaces, ceramic or enamelled surfaces, windows and doors, equipment and industrial machine tools. Dilute in water from 1% to 2%.
Ph (sol. 1%) 6.9 - 7.9 1,000 g/ml	5000 ml × 4 pz.	54 <u>₹</u>	T1 12 74 74	T7

MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-600SVF code 3.697.0033	SOLVENT DETERGENT OF VEGETABLE ORIGIN	\$1 <b>2 3 3 3 3 3 3 3 3 3 3</b>	Eliminates tar, rubber, glue and adhesive residues. Removes even stratified (acrylic or polymer) wax films. Disintegrates persistent dirt of animal or mineral origin.	According to the degree of dirt and thickness of the film, dilute in water from 0.5% to 2%.
Ph 5,8 - 6,2 0,950 g/ml	5000 ml × 4 pz.	S4 <u>₹</u>	T1 72 75	T6 T7

MODEL	DESCRIPTION	FIELDS	PROPERTIES	USE:
LCN-700 code 3.697.0035	CARPET AND TEXTILE WASH DETERGENT	S1 🚂	Removes dirt, regenerates and protects fibres. Does not leave residues and releases a pleasant fragrance.	Dilute in water from 2% to 5%.
Ph 6.8 - 7.2 1,010 g/ml	5000 ml × 4 pz.		тз 済 ть	



# ROFESSION Chemicals products for dense foam production

#### **Technology**











**Fields** 





#### CHEMICAL PRODUCTS FOR DENSE FOAM PRODUCTION

**LC 104F** 



3.697.0059 4x5 kg











#### Foaming detergent for commercial vehicles

Monocomponent and alkaline detergent based on selected surfactants with a penetrating and softening action against both organic and inorganic dirt.

It acts quickly and permanently, leaves no residue, is easy to rinse, does not alter painted parts made of plastic or rubber. Thanks to its high content of sequestrants, it maintains its detergent power even in the presence of hard water. Suitable for self-service high pressure washing plants, it can also be used in washing systems with nebulizer.

# **LC 102F**



**3.697.0057** 4x5 kg



**S3** 











#### Alkaline foaming cleanser for food industry

Alkaline chloroactive fast-acting product, it cleans and sanitizes the surfaces and the equipment which are treated without leaving any residue. Used with a foaming nebulizer, it produces dense foam which sticks on the walls, enhancing its sanitizing action. Also suitable for floors, workbenches, equipment, etc..., it is used in dairy farms, slaughterhouses, salami factories, oil mills.

# **LC 103F**



3.697.0058 4x5 kg





T2 T3 T4 T5











#### Foaming cleanser for hygiene facilities

Concentrated liquid detergent with acid pH. Ideal for cleansing stainless steel surfaces, it is used for cleaning and descaling all the acid-resistant surfaces. It effectively removes scale deposits, ferrous oxides and greasy surface dirt making the surfaces clean and without stains.

# **LC 101F**



**3.697.0056** 4x5 kg











#### Foaming cleanser for cloth and carpets

Product indicated for cleaning car interiors made of fabric and of carpet. Formulated with special suspending additives that have the characteristic of breaking the physicalchemical bonds existing between fiber and dirt, attracting the latter to the surface. These substances also avoid the redeposit of dirt guaranteeing excellent cleaning results. Highly foaming, it has to be used with special extraction vacuum cleaners. It brightens the colors and leaves a pleasant perfume.

**GENERAL TERMS OF SALE** Goods travel at buyer's risk.

Images and technical specifications of products and accessories are not binding and can be modified without notice.









