

## P.A. - S.p.A. - EQUIPAGGIAMENTI TECNICI DEL LAVAGGIO

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# **RL204** – Spray gun 200 bar – 20 MPa

Technical manual : **E 129** 

Gun suitable for use with 200 bar - 20 MPa rated pressure pumps. No fluid passage upon trigger release.

**DN15** 



- 30.5200.00 RL204 G3/4F G1/2F
   30.5230.00 RL204+SW5 SW G3/4F G1/2F
  - Covered by shockproof plastic semi-housings
  - Sturdy construction of Sst & brass with dynamic teflon seals
  - Seat and shutter pin in Sst
  - Gun with minimum load loss, see pressure drop chart
  - Assembly on hoses equipped with G 3/4 fittings
  - Entirely built of Sst & body in brass
  - Ergonomic construction
  - Minimum fatigue for trigger opening

# TECHNICAL SPECIFICATIONS

P/N	RATED PRESSURE bar - MPa	PERMISSIBLE PRESSURE bar - MPa	MAX FLOW RATE I/min	(1) MAX TEMPERATURE ℃	INLET	OUTLET	WEIGHT gr
30.5200.00	200 - 20	220 - 22	200	100	G3/4 F	G1/2 F	1348
30.5230.00	200 - 20	220 - 22	200	100	SW G3/4 F	G1/2 F	1485

(1) The gun has been designed for continuous use, at a water temperature of  $60^{\circ}$ C (140°F). It can resist a t the max temperature of  $100^{\circ}$ C (210°F) for short periods only , as, when the gun shuts off, the heater continues to transmit the heat to the water, thus increasing both temperature and pressure up to high, dangerous values.

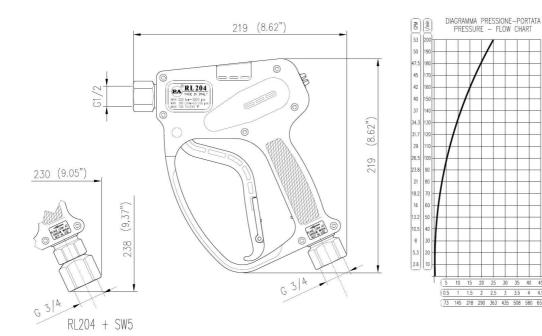
Using the gun at a water temperature higher than 60℃ involves for the operator the use of adequate safety devices, such as gloves, etc.

## Attention!!!

In order to prevent any risk of INSTABILITY of the gun due to pressure spikes, CHECK in the enclosed CHART (fig. 3) the use of safety devices (SHOULDER REST) in function of the Pressure / Flow Rate parameters.

Instruction manual, maintenance, installation, spare parts.	40.0400.00
For a correct utilization, follow the directions of this manual	n. 12.9129.00
Re-print them on the Use and Maintenance booklet of the machine.	

## DIMENSIONAL DRAWING AND PRESSURE DROP CHART



### **INSTRUCTIONS**

This product is to be utilized with clean fresh water, even slightly additivated with normal detergents. For use involving different or corrosive liquids, contact the PA Technical department. Appropriate filtration should be installed when using unclean liquids. Choose the gun in line with the data of nominal running (system rated pressure, max flow and max temperature). In any case, the pressure of the machine should not exceed the permissible pressure rate imprinted on the gun.

### **INSTALLATION**

This gun was designed to operate with <u>hot water</u> (in compliance with the technical specs). Provide the plant generating <u>hot water</u> with an equipment limiting the incidental increase of the fluid temperature.

Always fit a safety valve to protect the delivery conduct when the latter is under pressure.

Choose a suitable nozzle and ad just the valve mounted in the front of the gun, thus obtaining a constant supply and avoiding unpleasant pressure spike when closing the system.

If the nozzle wears out, the pressure falls. When you install a new nozzle, adjust the system back to the original pressure.

## **OPERATIONS**

The gun opens and closes a high pressure conduct by means of a piston acting on a seat; the return is controlled by a spring which releases the trigger. Attention: during pump activation always set the gun with its safety latch connected in order to prevent accidental openings.

## **WATER HOSE FEED**

By high or very unsteady pressure values on delivery, it is necessary to mount a pressure reducer , both to level the flow rate on delivery and to protect the system components.

## PROBLEMS AND SOLUTIONS

TROBLEMO AND COLOTIONS								
PROBLEMS	PROBABLE CAUSES	SOLUTIONS						
Leakage from the nozzle side of the	Presence of impurities	Clean						
gun	Gun seat worn out	Replace the seat						
Leakages from the seals	Seals worn out	Replace the seals						
The trigger opens up with difficulty	The pressure inside the circuit is too high	Check the bypass valve and adjust it if necessary						

### **REGULATIONS**

The design and construction of our products comply with: norm CEI EN 60335-2-79 first edition, published in 1999-03 and its respective variations on the project norm prEN 1829.

## Read this manual before starting the assembly.

For a correct utilization, follow the directions described in this manual and re-print them on the <u>Use and maintenance</u> manual of the machine.

The present manual is valid for all the guns named RL 204.

#### **SPARES**

Use original PA spares only in order to get both a correct operation and a long lasting, reliable product.

## **MAINTENANCE**

Maintenance has to be carried out by Specialized Technicians.

STANDARD: every 400 working hours (circa 10,000 cycles), check and lubricate the seals with water resistant grease.

SPECIAL: every 800 working hours( circa 20,000 cycles), check the wear of the seals and internal parts and if necessary, replace with original PA parts, taking care during installation to lubricate with water resistant grease.

**CAUTION:** re-assemble the gun restoring the original conditions.

The manufacturer is not to be considered responsible for damage as a result from incorrect fitting and maintenance-

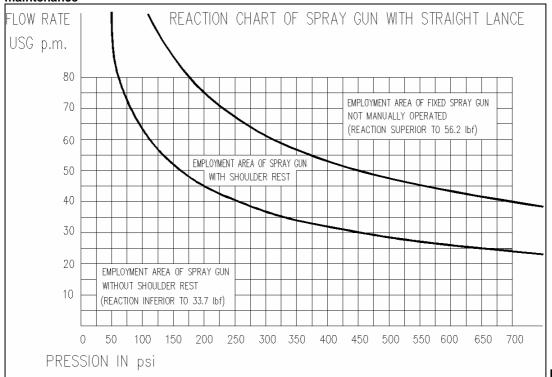
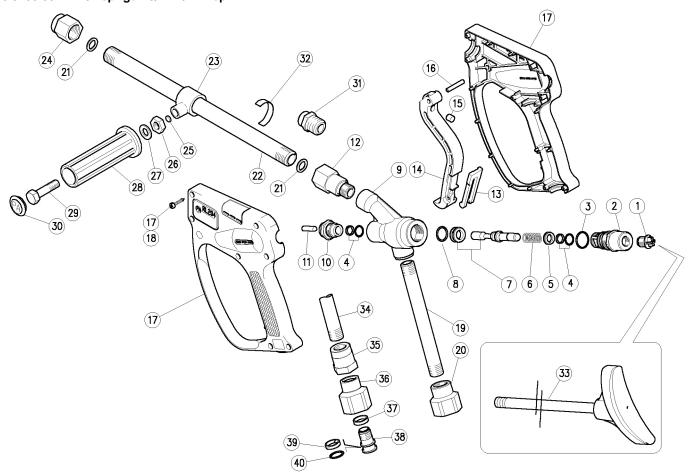


Fig. 3

Technical data, descriptions and illustrations are indicative and liable to modification without notice.

# 30.5200.00 RL 204 spr.gun 3/4F-1/2F Bsp



Pos.	P/N	Description	Q.ty	K1I	Κ2	К3	K4	
1	30.5815.84	Plug, 1/4M Bsp DIN259 Plast. black	1					10
2	30.4037.31	Spring holder, 1/4F Bsp-M26x1M brs.	1					5
3	10.3072.01	O-ring, 1,78x20,35 mm Ni 85	1	$ \cdot $				10
4	10.2027.00	Stem seal, 10x15x2,2 mm +O-ring	2	•				4
5	30.4040.31	Spacer ring, 10,1x15,8x3,8 mm brass	1					3
6	30.4042.51	Spring, 2,4x15,3x30 mm Sst.	1	•				10
7	30.4045.24	Piston+Seat Kit, -RL204	1	•				1
8	10.3068.01	O-ring, 1,78x17,17 mm Ni 85	1	•				10
9	30.5205.35	Housing -RL204, brass	1					1
10	30.4038.31	Front plug, M18x1,5 brass	1					10
11	30.4041.31	Parallel pin, 6x25,8 mm brass	1					3
12	30.5306.51	Coupling, 1/2 Bsp Sst.	1					3
13	30.1510.84	Safety latch, PA red	1					10
14	30.5303.84	Trigger, black	1					5
15	30.0675.51	Stop pin, 8x7,1mm Sst.	1					10
16	30.2517.31	Parallel pin, 5x27,5 mm brass	1					10
17	30.5212.24	Casing-kit -RL 204 +screws	1					1
18	16.3075.51	S/tapping screw, DIN7981 3,5x18 mm Sst.	7					10

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Pos	. P/N	Description	Q.ty	K1I	<2	K3	K4	
19	30.5104.56	Tube, M18x1,5 138,5 mm Sst.	1					5
20	30.5204.51	Coupling, 3/4" Bsp Sst.	1					3
21	14.3802.00	Washer, 12x18x1,5 mm Cu **	2					10
22	30.5016.56	Tube, 1/2Bsp MM 390 mm Sst. **	1					1
22	30.5026.56	Tube, 1/2Bsp MM 790 mm Sst. **	1					1
22	30.5037.56	Tube, 1/2Bsp MM 1250mm Sst. **	1					1
23	30.5017.35	Tube fastener, 1/2" Bsp	1		•			5
24	30.5015.51	Nozzle Holder, 1/2F Bsp-1/4F Npt Sst.	1					3
25	13.5305.00	Plate, 8x1,5 mm Cu	2		•			10
26	11.4627.00	Hex. nut, M10	1		•	•		10
27	14.3799.00	Washer, 10x21x2 mm	1			•		10
28	41.0409.84	Knob, 32x115 mm PP black	1		•	•		5
29	16.2035.00	Screw, DIN933 M10x35 mm z.pl.	1			•		10
30	41.0411.84	Plug, Knob PP black	1					5
31	30.5018.51	Nzl.holder,sst, RL84-RL204 1/2M Bsp **	1					1
32	15.3815.00	Label "56MPa Tubo inox - PA"	1		Ī			1
33	30.5060.00	Shoulder rest -RL600 1/4M Bsp 300mm **	1					1

<sup>\*\*</sup> On request

Kit	P/N		Description	
K1	30.4046.24	Spares kit -RL204, 6x1pcs.		1
K2	30.5038.24	Spares kit -Lance knob		1
К3	30.4019.24	Knob-kit, M10x35		5