


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 l/min | (1) MAX TEMPERATURE °C | 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°C (140°F). It can resist a t the max temperature of 100°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°C involves for the operator the use of adequate safety devices, such as gloves, etc.

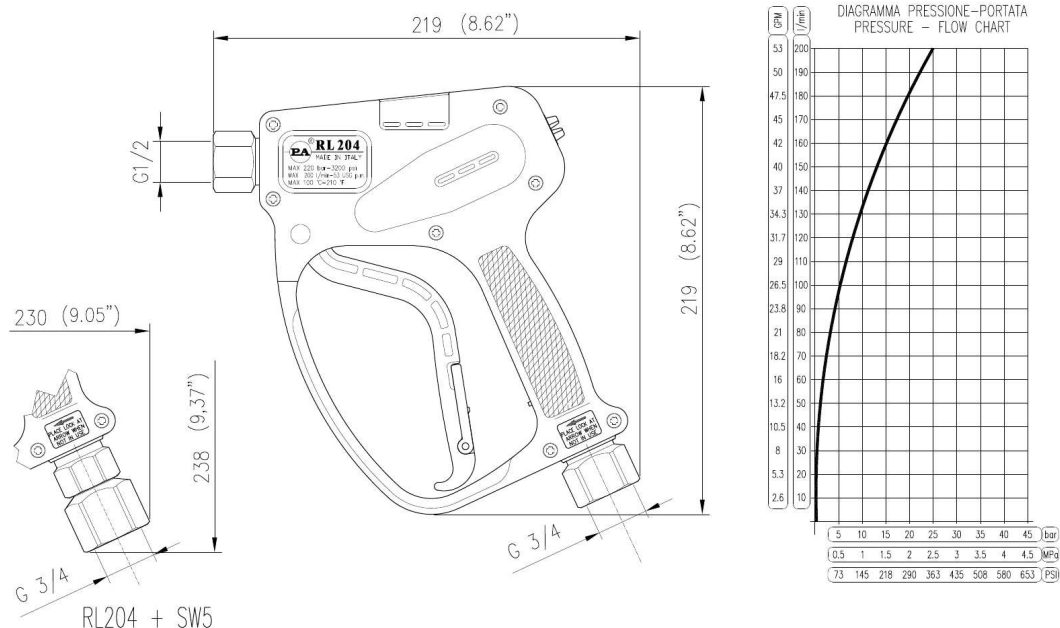
Attention !!!

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.
 For a correct utilization, follow the directions of this manual
Re-print them on the Use and Maintenance booklet of the machine.

n. 12.9129.00

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 **hot water** (in compliance with the technical specs). Provide the plant generating **hot water** 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 adjust 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

| PROBLEMS | PROBABLE CAUSES | SOLUTIONS |
|---|---|---|
| Leakage from the nozzle side of the gun | Presence of impurities Gun seat worn out | Clean 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 Use and maintenance 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-

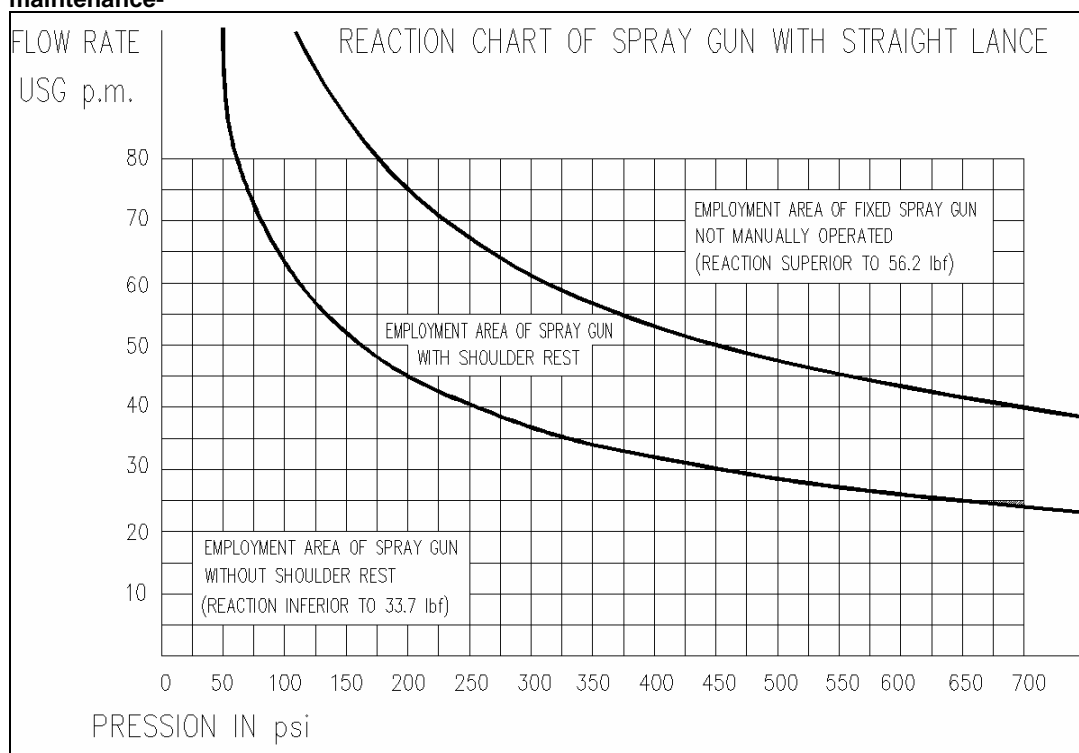
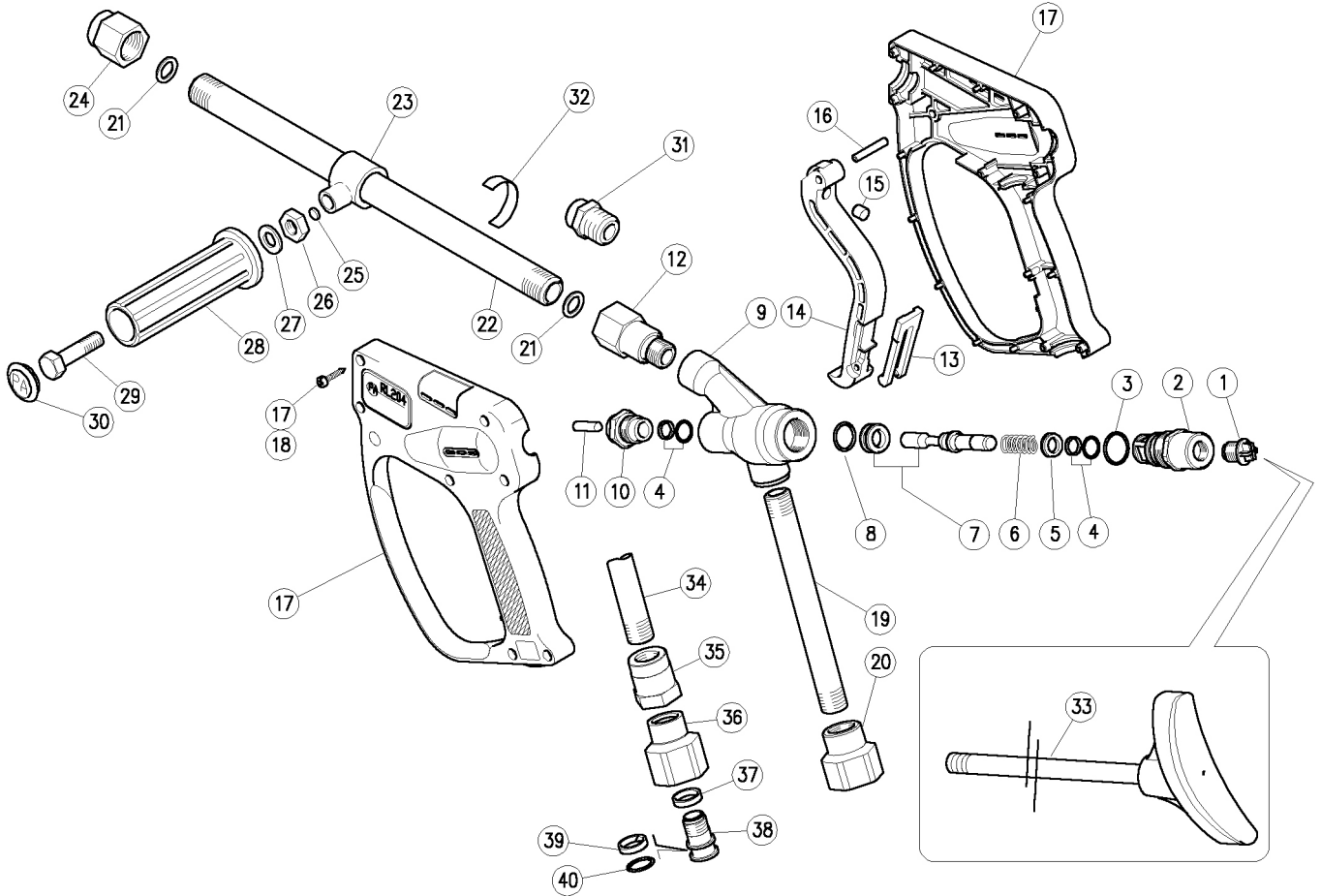


Fig. 3

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 | K1 | K2 | K3 | K4 | | Pos. | P/N | Description | Q.ty | K1 | K2 | K3 | K4 | |
|------|------------|-------------------------------------|------|----|----|----|----|----|------|-------------|--|------|----|----|----|----|----|
| 1 | 30.5815.84 | Plug, 1/4M Bsp DIN259 Plast. black | 1 | | | | | 10 | 19 | 30.5104.56 | Tube, M18x1,5 138,5 mm Sst. | 1 | | | | | 5 |
| 2 | 30.4037.31 | Spring holder, 1/4F Bsp-M26x1M brs. | 1 | | | | | 5 | 20 | 30.5204.51 | Coupling, 3/4" Bsp Sst. | 1 | | | | | 3 |
| 3 | 10.3072.01 | O-ring, 1,78x20,35 mm Ni 85 | 1 | • | | | | 10 | 21 | 14.3802.00 | Washer, 12x18x1,5 mm Cu ** | 2 | | | | | 10 |
| 4 | 10.2027.00 | Stem seal, 10x15x2,2 mm +O-ring | 2 | • | | | | 4 | 22 | 30.5016.569 | Tube, 1/2Bsp MM 390 mm Sst. ** | 1 | | | | | 1 |
| 5 | 30.4040.31 | Spacer ring, 10,1x15,8x3,8 mm brass | 1 | | | | | 3 | 22 | 30.5026.569 | Tube, 1/2Bsp MM 790 mm Sst. ** | 1 | | | | | 1 |
| 6 | 30.4042.51 | Spring, 2,4x15,3x30 mm Sst. | 1 | • | | | | 10 | 22 | 30.5037.569 | Tube, 1/2Bsp MM 1250mm Sst. ** | 1 | | | | | 1 |
| 7 | 30.4045.24 | Piston+Seat Kit, -RL204 | 1 | • | | | | 1 | 23 | 30.5017.35 | Tube fastener, 1/2" Bsp | 1 | • | | | | 5 |
| 8 | 10.3068.01 | O-ring, 1,78x17,17 mm Ni 85 | 1 | • | | | | 10 | 24 | 30.5015.51 | Nozzle Holder, 1/2F Bsp-1/4F Npt Sst. | 1 | | | | | 3 |
| 9 | 30.5205.35 | Housing -RL204, brass | 1 | | | | | 1 | 25 | 13.5305.00 | Plate, 8x1,5 mm Cu | 2 | • | | | | 10 |
| 10 | 30.4038.31 | Front plug, M18x1,5 brass | 1 | | | | | 10 | 26 | 11.4627.00 | Hex. nut, M10 | 1 | • | • | | | 10 |
| 11 | 30.4041.31 | Parallel pin, 6x25,8 mm brass | 1 | | | | | 3 | 27 | 14.3799.00 | Washer, 10x21x2 mm | 1 | • | • | | | 10 |
| 12 | 30.5306.51 | Coupling, 1/2 Bsp Sst. | 1 | | | | | 3 | 28 | 41.0409.84 | Knob, 32x115 mm PP black | 1 | • | • | | | 5 |
| 13 | 30.1510.84 | Safety latch, PA red | 1 | | | | | 10 | 29 | 16.2035.00 | Screw, DIN933 M10x35 mm z.pl. | 1 | • | • | | | 10 |
| 14 | 30.5303.84 | Trigger, black | 1 | | | | | 5 | 30 | 41.0411.84 | Plug, Knob PP black | 1 | • | • | | | 5 |
| 15 | 30.0674.51 | Stop pin, 8x6,9mm Sst. | 1 | | | | | 10 | 31 | 30.5018.51 | Nzl.holder,sst, RL84-RL204 1/2M Bsp ** | 1 | | | | | 1 |
| 16 | 30.2517.31 | Parallel pin, 5x27,5 mm brass | 1 | | | | | 10 | 32 | 15.3815.00 | Label "56MPa Tubo inox - PA" | 1 | | | | | 1 |
| 17 | 30.5212.24 | Casing-kit -RL 204 +screws | 1 | | | | | 1 | 33 | 30.5060.00 | Shoulder rest -RL600 1/4M Bsp 300mm ** | 1 | | | | | 1 |
| 18 | 16.3075.51 | S/tapping scr. 3,5x18 mm sst. | 7 | | | | | 10 | | | | | | | | | |

** On request

| Kit | P/N | Description | Q.ty |
|-----|------------|----------------------------|------|
| K1 | 30.4046.24 | Spares kit -RL204, 6x1pcs. | 1 |
| K2 | 30.5038.24 | Spares kit -Lance knob | 1 |
| K3 | 30.4019.24 | Knob-kit, M10x35 | 5 |