A80–FR2

MANUALE D'ISTRUZIONE
GENERAL INSTRUCTION BOOK

TESTINA AUTOMOVENTE
PER LAVAGGIO FRONTALE

–Testina volumetrica , la velocità di rotazione è proporzionale alla portata in ingresso.
–Portata ridotta, alta pressione, elevata forza di impatto.
–Velocità di rotazione indipendente dalla temperatura dell'acqua.
–Filtro in entrata.
–Costruzione in acciaio inox.
–Idonea per impiego settore alimentare.

ATTENZIONE !

–La Testina STANDARD è fornita di guarnizioni (DINAMICHE) in PTFE + O–Ring EPDM.
–Lubrificare esclusivamente con GRASSO SILICONICO codice: 14.6552.00
–Per l'utilizzo di liquidi detergenti, additivi chimici ecc. non compatibili con le guarnizioni standard è indispensabile contattare il nostro UFFICIO TECNICO.
–A richiesta le guarnizioni (DINAMICHE) O–RING sono disponibili anche in diverso materiale, NBR–FFKM(kalrez)–FKM(viton).
–Le guarnizioni (STATICHE) sono in FKM (viton).

SELF ROTATING
CLEANING HEAD FOR FRONT WASHING

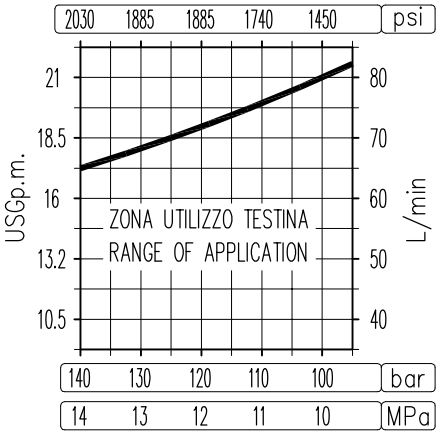
–This is a self–propelled tank cleaning head: when the flow rate increases, the head rotates faster.
–Reduced flow, high pressure, high cleaning impact.
–Rotating speed indipendent from water temperature.
–Inlet filter.
–Stainless steel construction.
–Suitable for utilization in food industry.

ATTENTION !

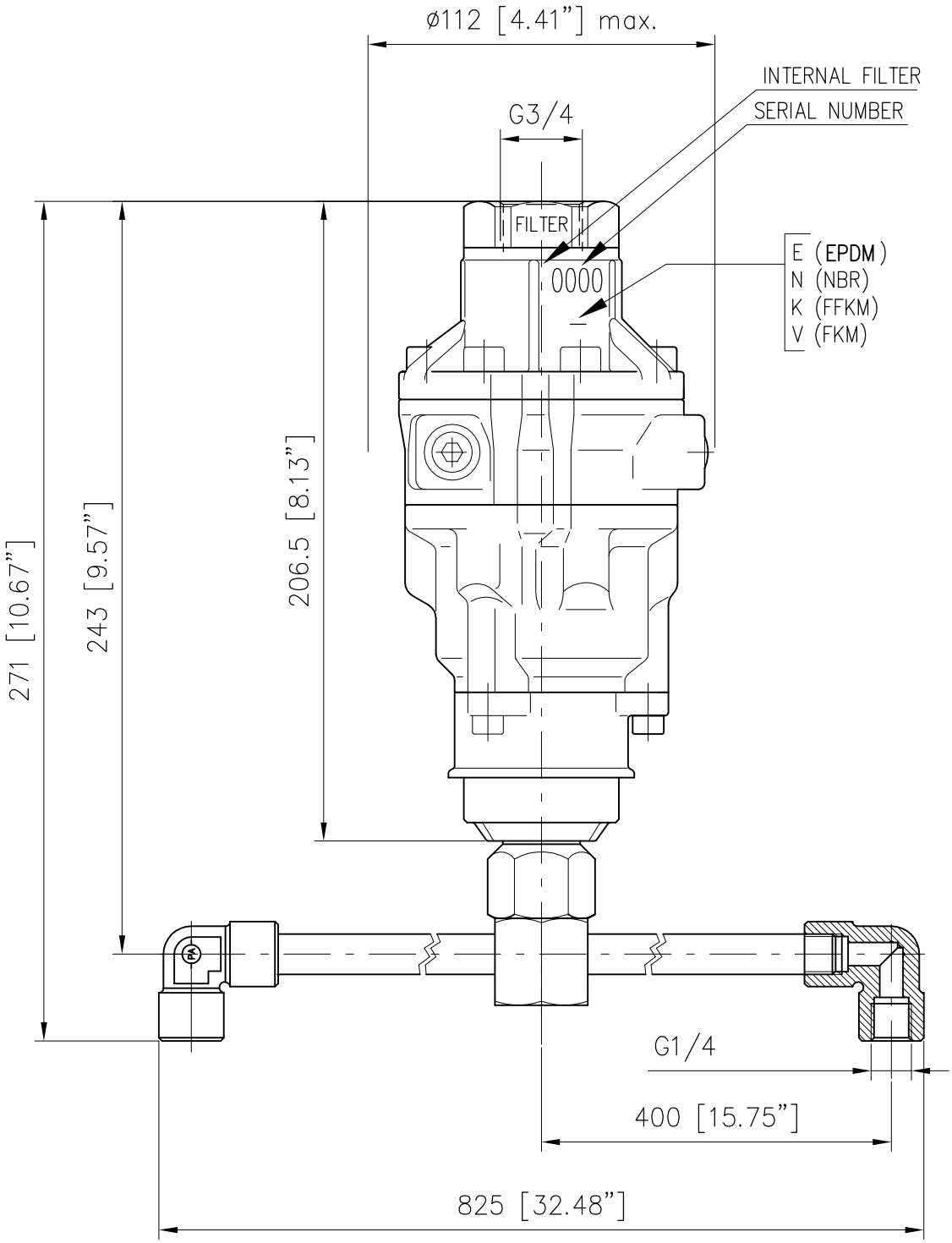
–The STANDARD Tank cleaning head is supplied with seals (DYNAMIC) in PTFE + O–Ring EPDM.
–Lubricate ONLY with SILICONE GREASE P/N: 14.6552.00
–For use with Detergent liquid, Chemical additives etc that are not compatible with the standard seals, it is essential to contact our TECHNICAL OFFICE for further information.
–On request, the O–RING seals (DYNAMIC) are available in different materials such as NBR–FFKM(kalrez)–FKM(viton).
–The STATIC seals are in FKM (viton).

CARATTERISTICHE TECNICHE – *TECHNICAL SPECIFICATIONS*

– PRESSIONE MASSIMA *MAX WORKING PRESSURE*	30÷140 bar–3÷14 MPa *(435–2000 psi)*
– PORTATA *FLOW*	20–80 l/min *(5.3–21.1 USGp.m.)*
– TEMPERATURA MASSIMA ACQUA *MAX WORKING TEMPERATURE*	0–90°C *(32–195°F)*
– VELOCITA' ROTAZ. ASSE PRINCIP. *MAIN AXIS ROTATING SPEED*	50–150 giri/min *(RPM)*
– ATTACCO ALIMENTAZIONE ACQUA *INLET CONNECTION SIZE*	G 3/4"
– FILTRO IN INGRESSO *INLET FILTER*	550 µm
– ATTACCO UGELLI *NOZZLES CONNECTION*	G 1/4"

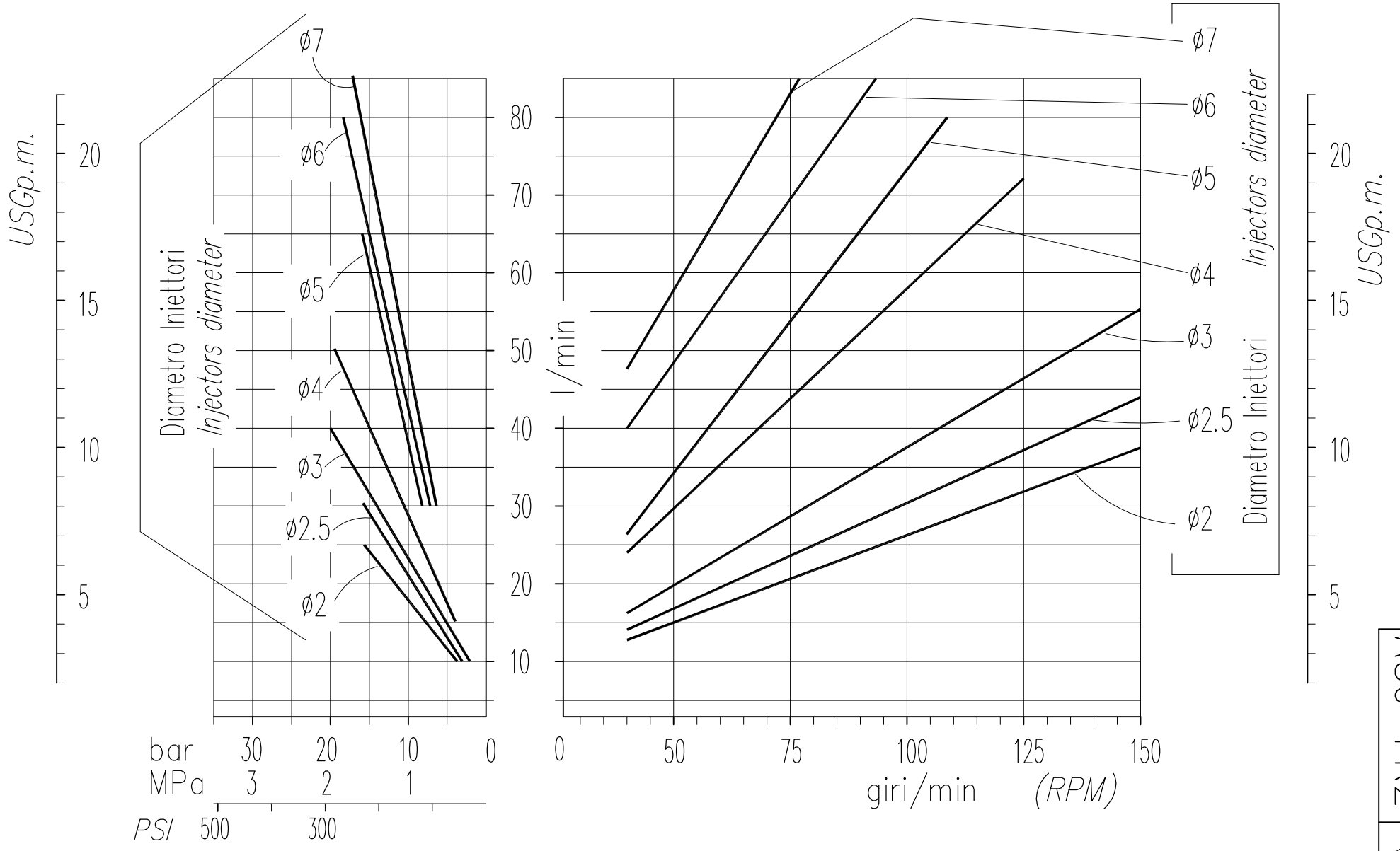


MISURE D'INGOMBRO
OVERALL DIMENSIONS



CADUTA DI PRESSIONE IN FUNZIONE DELLA PORTATA
LOSS OF PRESSURE IN RELATION TO FLOW

VARIAZIONE DEI GIRI IN FUNZIONE DELLA PORTATA
RPM VARIATION IN RELATION TO FLOW



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ATTENTION !

This type of cleaning head must be held and power supplied by an inflexible tube which prevents swinging.
The lower part of the tank cleaning head rotates thanks to a turbine + epicycloidal reduction gear system which generates a high torque, which must not come in contact with any excess material otherwise jamming may occur.

UTILIZATION

This cleaning head is designed to be used with water up to 90º C - 194ºF, mixed with detergents or disinfectants of general use. Before using specific liquids (high viscosity, very aggressive chemicals or else) consult our technical department.
Make sure the equipment is always used within the limits (Pressure, Temperature, Voltage) as specified in this manual.

INSTALLATION PROCEDURE

In order to avoid bodily injuries and damages to property, the cleaning head must always be connected to a pressure circuit, normally fed by a piston pump, pressure washer or similar equipment, provided with all necessary safety and control features (safety valve, pressure regulator etc..) requested by law. For the connection make sure that a flexible hose with correct capacity and resistance is used, avoiding sharp bends and variation of flow direction in order to reduce pressure drop.
The head must be firmly secured to the tank opening or a suitable support.

CHOICE OF NOZZLES

The solid stream spray nozzles (two) for high pressure washing must be adequate to operating flow rate and pressure (see TAV. 1), bearing in mind that the pressure value to be taken into consideration while choosing, is the one obtained by subtracting from the pump pressure the loss of pressure determined by the delivery line and the head itself, the latter value can be obtained from diagram D2 in this manual.

WORKING AND REGULATION

The head rotation is operated by a hydrokinetic unit made up by a turbine driven by 3 injectors and an epicycloidal reduction gear, using the same water that will do the washing.
The rotation frequency can be adjusted, within the values expressed in the technical specifications, by varying the bore diameter of the three internal injectors (pos.14 of exploded drawing) of the hydrokinetic unit, and is always directly proportional to the flow rate value, as shown in diagram D2 of this manual.
Changes of pressure (at constant flow rate) or water temperature do not modify the value of rotation frequency.

FILTRATION

The fluid sent from the system to the cleaning head has to be filtered in order to prevent the entrance of any body matter due to bad functioning which leads to frequent maintenance.
*The degree of filtration recommended is at least **300 micron**.*
The cleaning head is equipped with a filter of 550 micron which has only a safety function, which we recommend to clean every 100÷300 hours.
If this filter should rupture, dismantle the cleaning head, clean away any eventual material from the inside and replace with a new filter.

SERVICING

After a normal daily usage, wash the internal part of the head only with water minus any additives.
After 100 hours of labour, check the conditions of the internal parts (gears, bearings, dynamic seals).
The incorrect choice of the O-Ring material (dynamic seals) can cause an irregular function and a rapid deterioration of these parts.
*In presence of dimensional alterations (**swelling**) of the dynamic seals (OR+PTFE) , control the compatibility of the O-Rings with the liquids used.*
If they result non-compatible, contact our TECHNICAL OFFICE.
*Check the internal parts every 300÷400 hours of labour in order to verify any premature wear, especially the dynamic seals (pos.9), verify precautionally also the surface way (ceramic coated area) if still in good shape, **otheriwse replace if worn.***
*Check also the conditions of the satellites, bearings, bushings, gears, **replace if damaged.***
Use only original 'PA' spare parts.
If exposed to freezing temperatures make sure that the head is completely emptied after use in order to prevent freeze up.
*Lubricate with **P/N: 14.6552.00 SILICONE** grease only, **DO NOT USE MINERAL GREASE OR OIL , OTHERWISE RUPTURE OF THE INTERNAL PARTS MAY OCCUR.***

SAFETY INFORMATION

- ***Improper use of high pressure jets can be very dangerous***
- ***Never point the jets towards people or electrical appliances***
- ***Make sure that the pumping system is equipped with suitable safety devices***
- ***Original PA parts only must be used for repair and servicing***
- ***High pressure pipes and connections are very important to the general safety of the equipment. Be sure to use only components correctly sized and guaranteed by the manufacturer.***