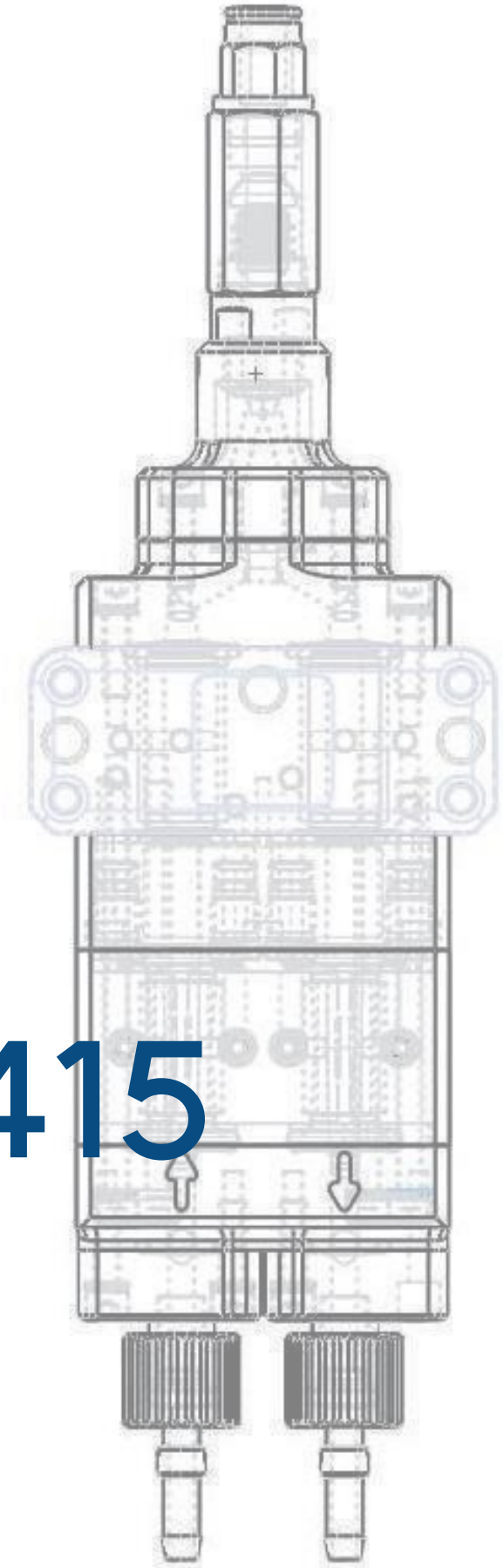
ENGLISH

VERNE
TECHNOLOGY

Customer Product
Manual Part /N 10045-_ _



Low pressure dense phase transport system

NEA 415

Table of Contets

VERNE TECHNOLOGY

Contact us

VERNE TECHNOLOGY welcomes requests for information, comments, and inquiries about its products. General information about VERNE TECHNOLOGY can be found on the Internet using the following address: http://www.vernetechnology.it.

Note

CONTACTS

ADMINISTRATIVE HEADQUARTERS:

Verne Technology S.r.l.
Via Montenapoleone, 8
20121 - MILANO (MI) - ITALY-
Tel. +39 (0)2-783275 | Fax +39 (0)2-784087

e-mail: info@vernetechnology.it
www.vernetechnology.it

LOGISTICS:
(shipping and delivery)

Via Elettrochimica1, 23900
LECCO (LC) - ITALY -
Tel. +39 (0)341-423183

e-mail: logistica@vernetechnology.it

Safety

Read and follow these safety instructions. Task-and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Vere Technology equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Intended Use

Use of NEA 415 equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.
Some examples of unintended use of equipment include
- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Verne Technology equipment will be voided if instructions for installation, operation, and service are not followed.

All phases of equipment installation must comply with all federal, state, and local codes.

Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.

- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.

- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.

- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.

- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection device Grounding inside and around the booth openings must comply with NFPA requirements for Class 2, Division 1 or 2 Hazardous Locations. Refer to NFPA 33, NFPA 70 (NEC articles 500, 502, and 516), and NFPA 77, latest conditions.

- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.
- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Vere Technology representative for parts information and advice.

Grounding

WARNING: Operating faulty electrostatic equipment is hazardous and can cause electrocution, fire, or explosion. Make resistance checks part of your periodic maintenance program. If you receive even a slight electrical shock or notice static sparking or arcing, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected

- All electrically conductive objects in the spray areas shall be electrically connected to ground with a resistance of not more than 1 megohm as measured with an instrument that applies at least 500 volts to the circuit being evaluated.
- Equipment to be grounded includes, but is not limited to, the floor of the spray area, operator platforms, hoppers, photoeye supports, and blow-off nozzles. Personnel working in the spray area must be grounded.
- There is a possible ignition potential from the charged human body. Personnel standing on a painted surface, such as an operator platform, or wearing non-conductive shoes, are not grounded. Personnel must wear shoes with conductive soles or use a ground strap to maintain a connection to ground when working with or around electrostatic equipment.
- Operators must maintain skin-to-handle contact between their hand and the gun handle to prevent shocks while operating manual electrostatic spray guns. If gloves must be worn, cut away the palm or fingers, wear electrically conductive gloves, or wear a grounding strap connected to the gun handle or other true earth ground.
- Shut off electrostatic power supplies and ground gun electrodes before making adjustments or cleaning powder spray guns.
- Connect all disconnected equipment, ground cables, and wires after servicing equipment.

Intervention in case of malfunction

If a system or equipment in your system malfunctions, immediately turn off the system and perform the following steps:

- Disconnect and lock the power supply. Close the stop valves of the pneumatic system and release the pressures.
- Identify the reason for the malfunction and correct the problem before restarting the equipment.

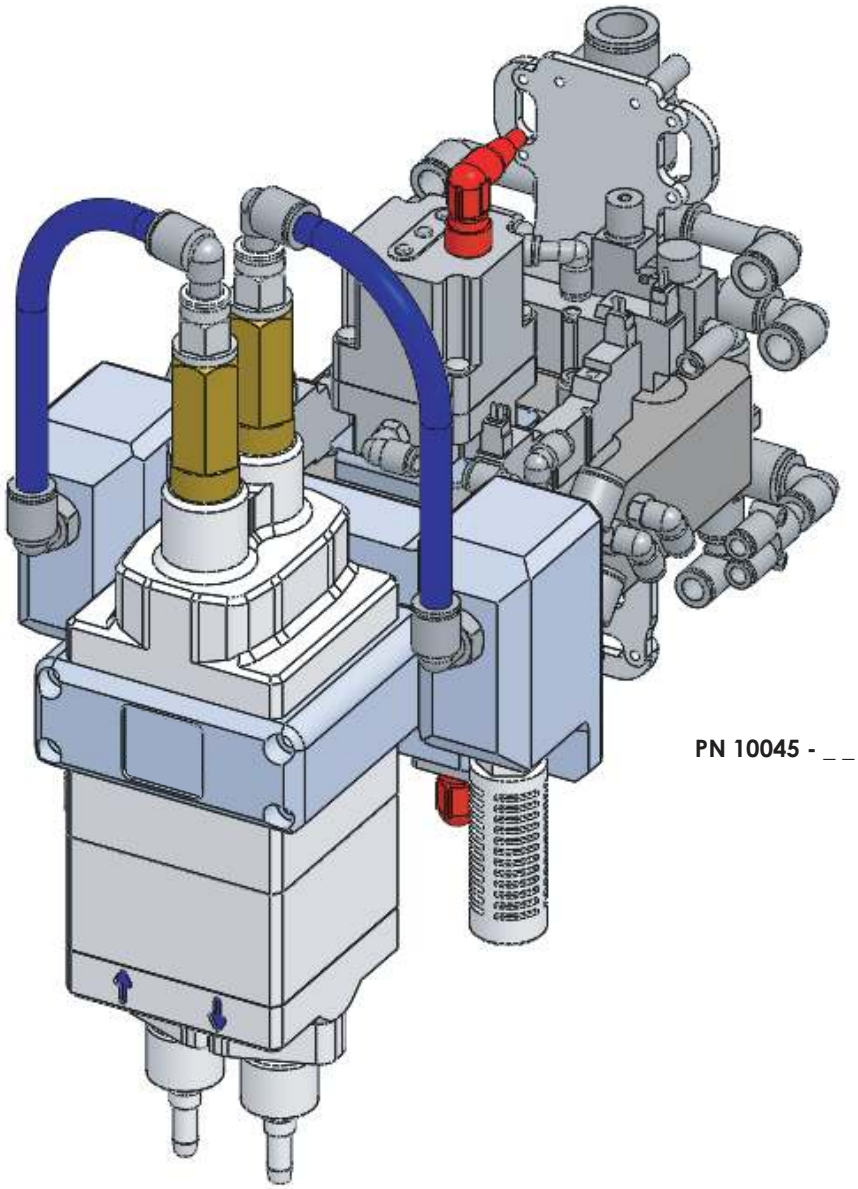
Disposal

Dispose of the equipment and materials used for its operation, repair and maintenance in accordance with local regulations.

Description

The NEA 415 Powder Feed Pump (Dense Low-Pressure Phase) delivers precise amounts of powder from a power source to a powder spray gun.

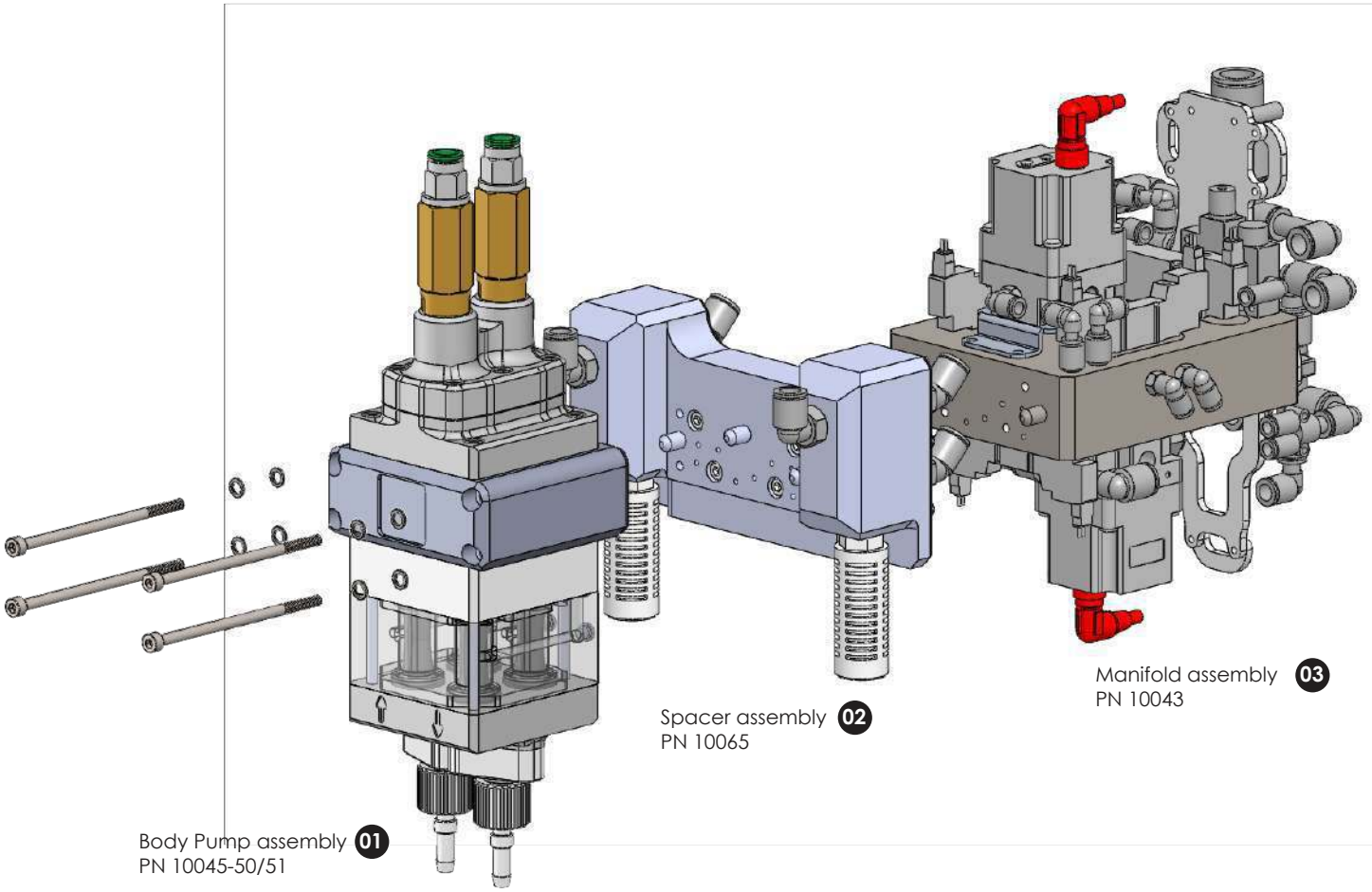
The design of the pump and the small diameter powder tube allow a quick and accurate dust purge for fast color



PN 10045 - _ _

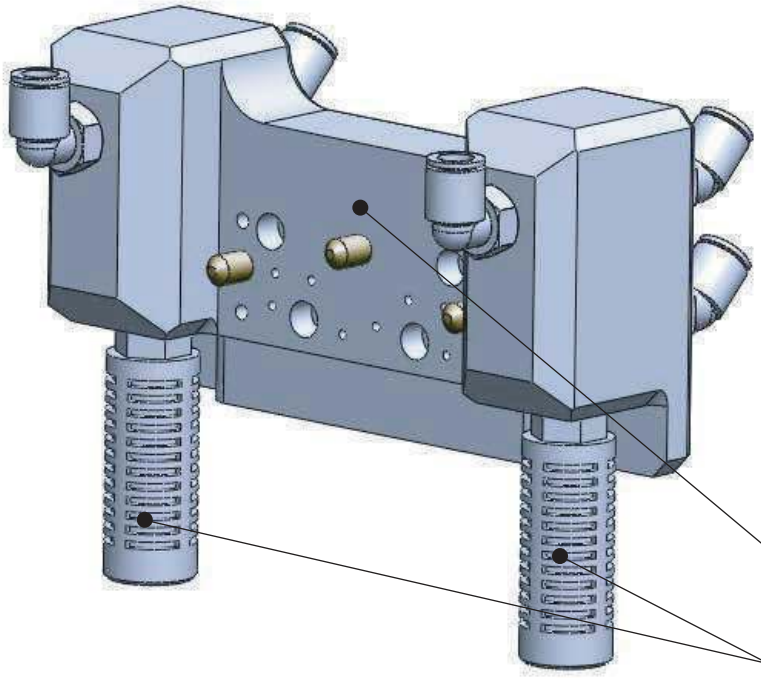
Figura 1
High density pump unitNEA 415

Pump group parts



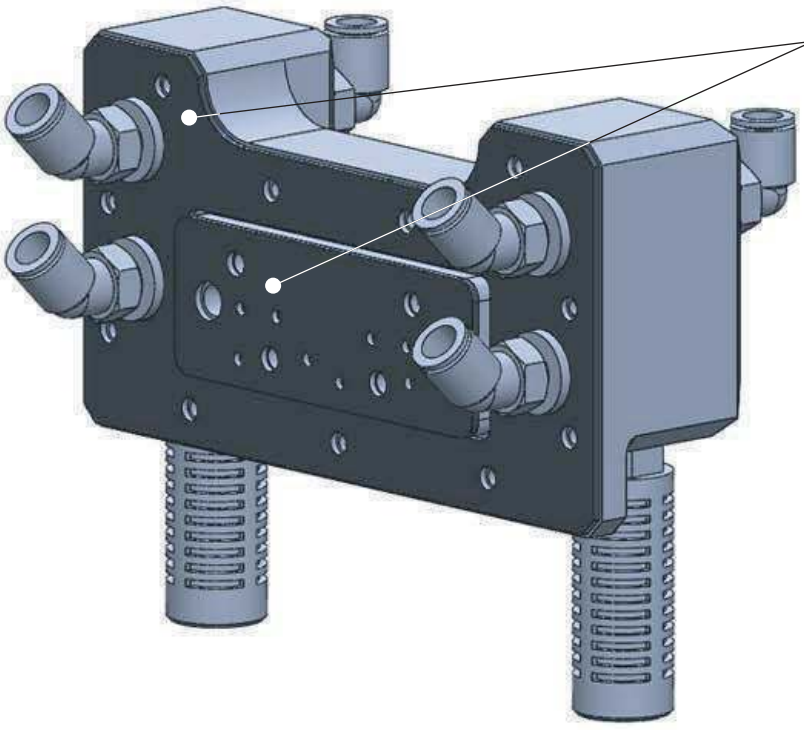
01	**PN 10045-50/51 - BODY PUMP ASSEMBLY: NEA 415**
02	**PN 10065 - SPACER ASSEMBLY: NEA 415**
03	**PN 10043 - MANIFOLD ASSEMBLY: NEA 415**

Spacer assembly



01 PN 10065 - SPACER ASSEMBLY: NEA 415

02 PN 10021 - MUFFLER: NEA 230|415|430



03 PN 10066 - SPACER GASKET KIT: NEA 415

Manifold: valve diagram

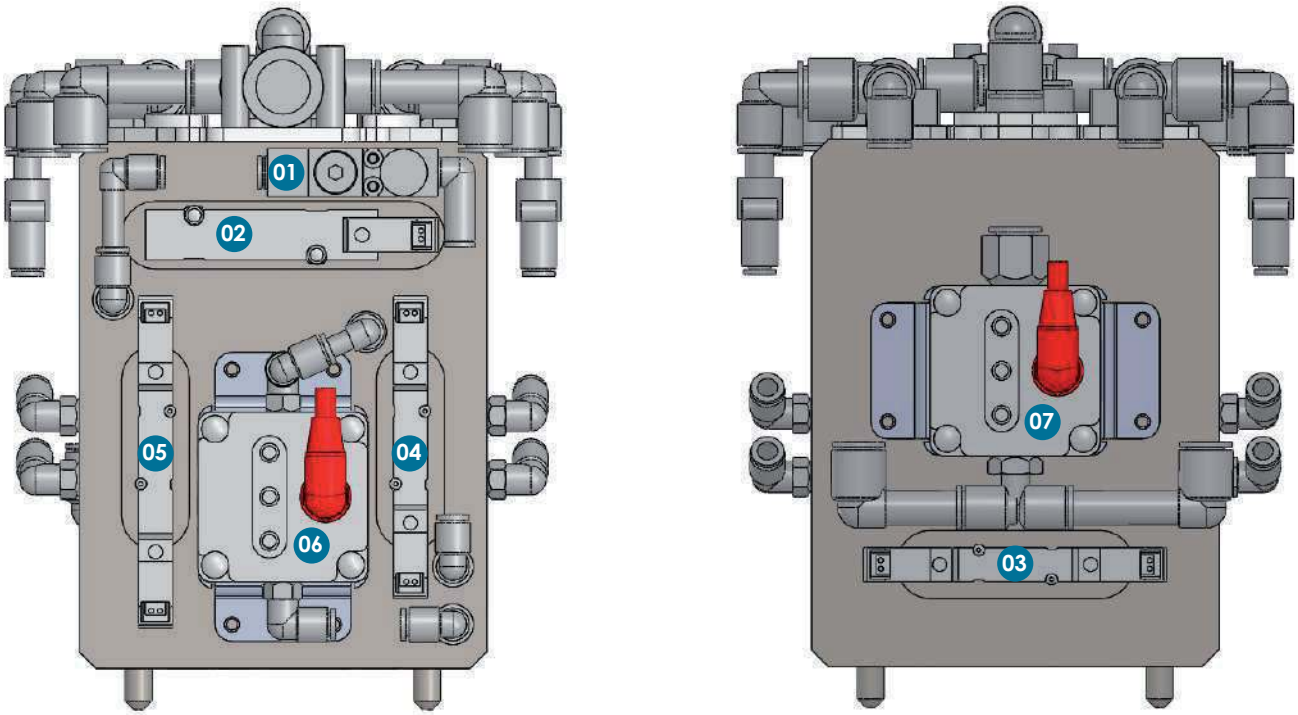
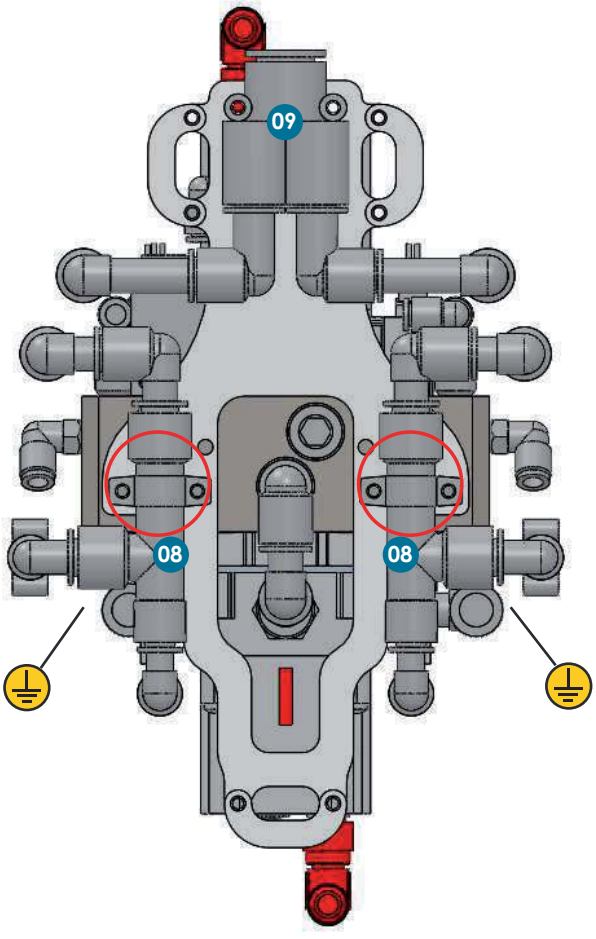


Figura 4
Manifold valve diagram high density pump NEA 415

Cod./PN	PNEUMATIC MANIFOLD SCHEME
01 **PN 10067**	**R 1 :** PINCH VALVES REGULATOR - NEA 415
02 **PN 10068**	**EV 1:** ON/OFF SOLENOID VALVE – NEA 415
03 **PN 10069**	**EV 2:** PINCH VALVES SOLENOIDE VALVE - NEA 415
04 **PN 10070**	**EV 3:** EV 3 - RIGHT TUBES SOLENOID VALVE – NEA 415
05 **PN 10071**	**EV 4:** LEFT TUBES SOLENOID VALVE - NEA 415
06 **PN 10072**	**R 2 :** TRANSPORT REGULATOR - NEA 415
07 **PN 10073**	**R 3 :** RECOVERY REGULATOR - NEA 415
08 **PN 10023***	VACUUM GENERATOR - NEA 230|415|430
09 **PN 10062**	KIT FITTINGS SUPPLY|PURGE – NEA 415



ATTENTION*

If the PN 10023 is replaced, disassemble and install one part at a time.

NEA 415 pump manifold group

See fig. 4.

n° Item	Description	Function
Air control components		
1	Control valve for fluidization tubes of DX ***EV3***	Apply positive and negative compressed air to the right fluidization tubes alternately.
2	Control valve for fluidization tubes of SX ***EV4***	Apply positive and negative compressed air to the left fluidization tubes alternately.
3	Control valve of the pinch valve ***EV2***	Apply compressed air between the pinch valves alternately.
4	Cycle activation check valve ***EV1***	It supplies all the pneumatic components on the MANIFOLD body.
5	Regulator and pressure gauge (RECOVERY) ***R3***	Adjusts the pressure of the vacuum generators. Variable from PLC.
6	Regulator and pressure gauge (TRANSPORT) ***R2***	Adjusts the transport pressure of the product. Variable from PLC.
7	Regulator and pressure gauge (PINCH VALVES) ***R1***	Adjusts the closing pressure of the pinch valves. Set at 2,5 bar.
8	Silencers	Allows a silent output of the pump operating air.
9	Vacuum generators	Based on the venturi principle, it generates the negative air pressure necessary to attract dust into the fluidization tubes.

Cyclic pressures

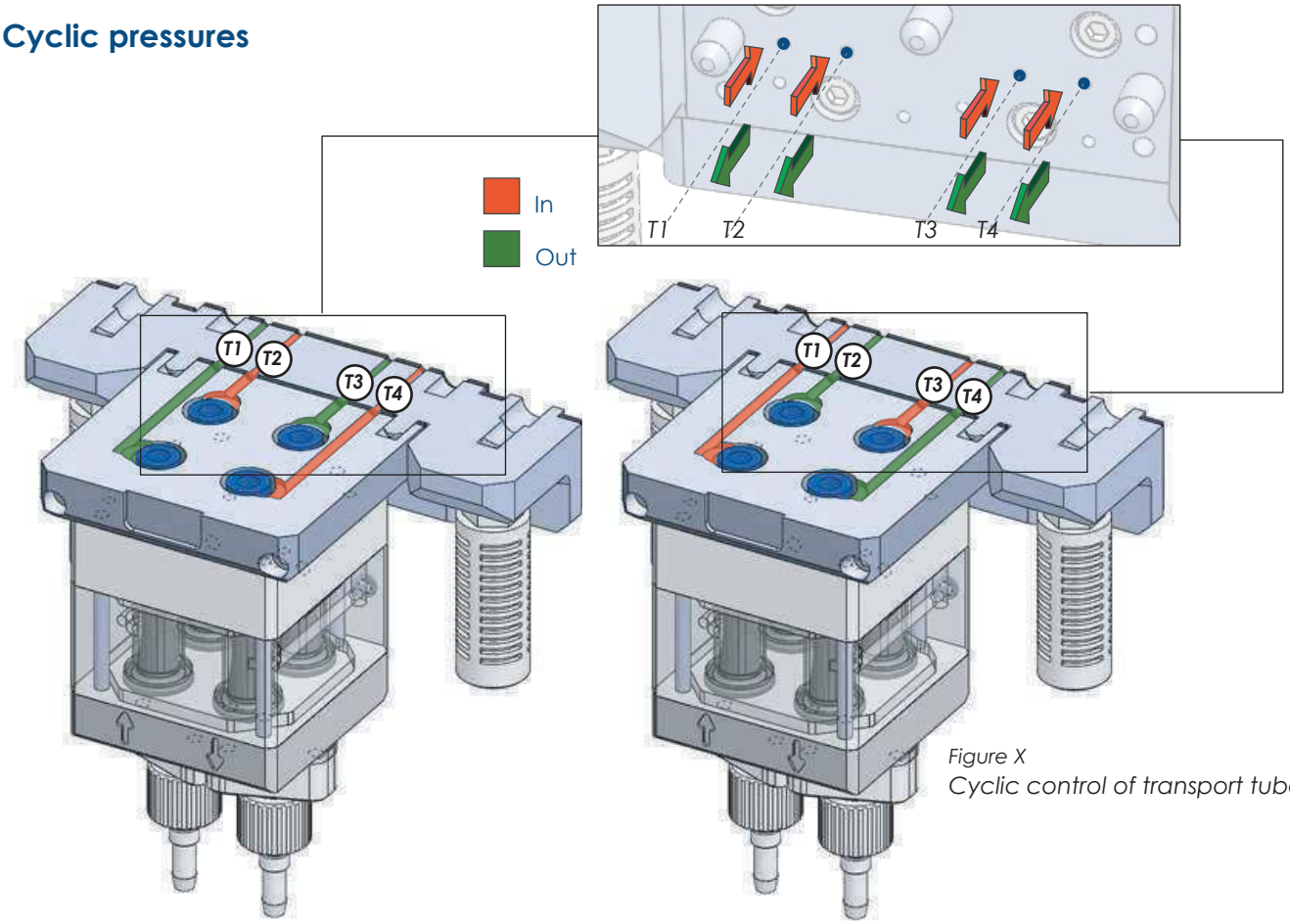


Figure X
Cyclic control of transport tubes

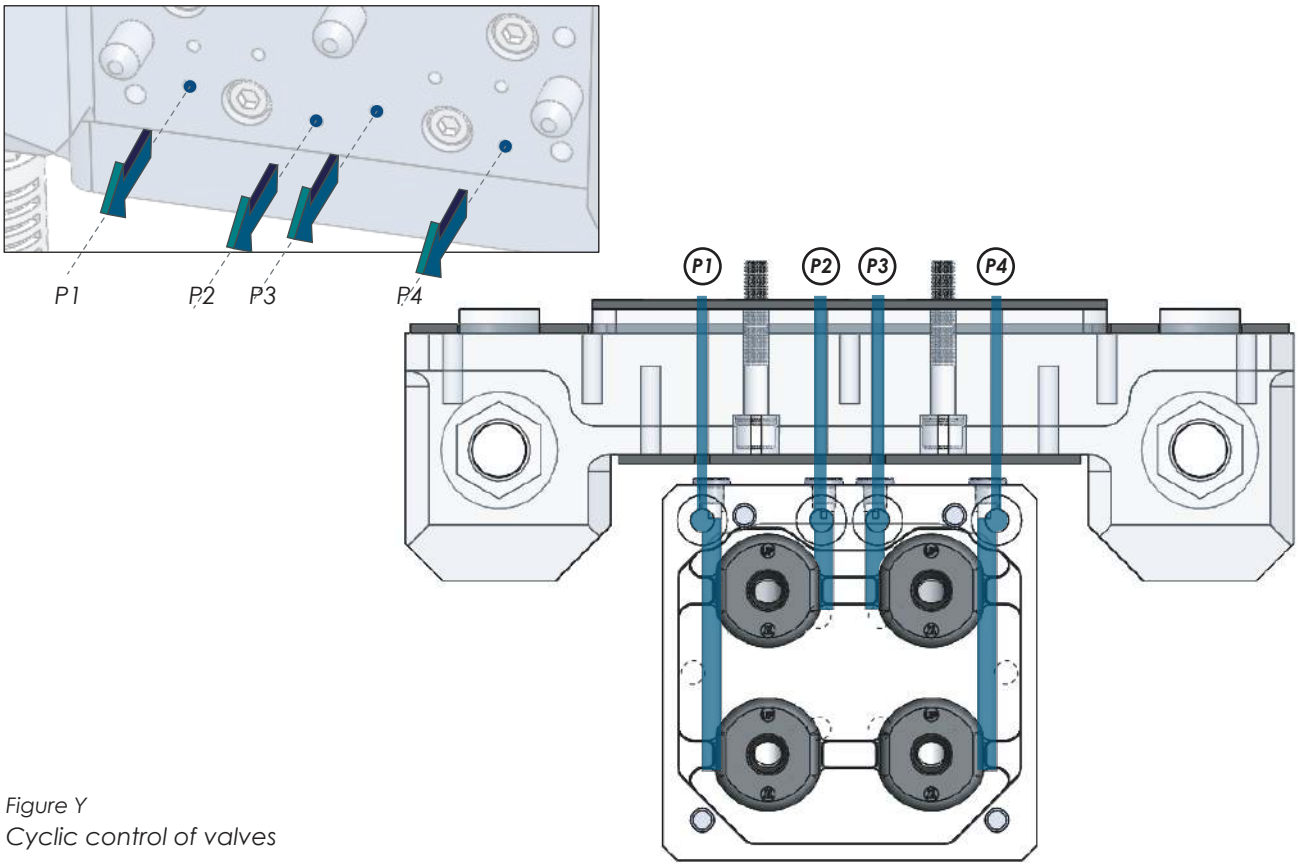
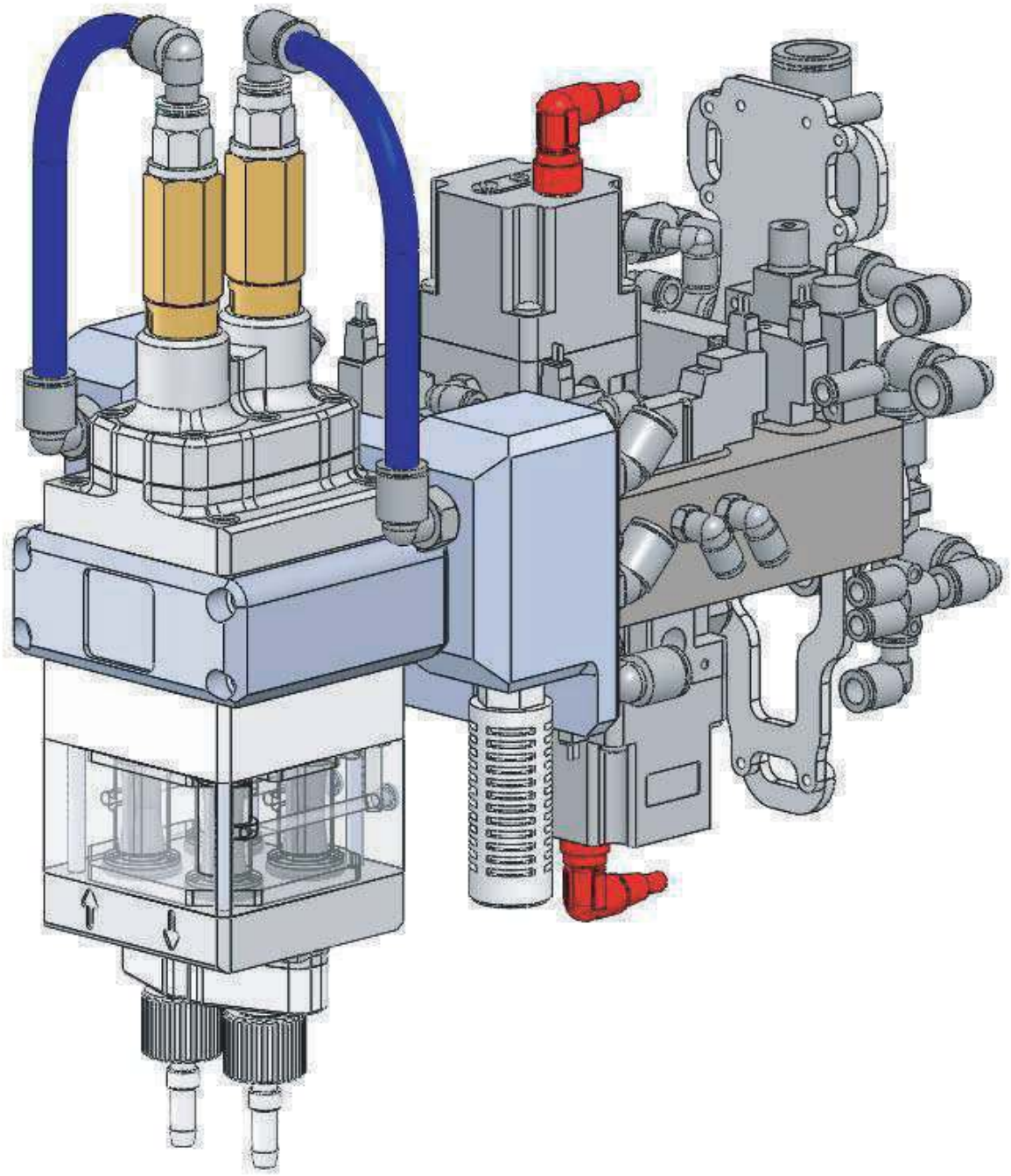


Figure Y
Cyclic control of valves

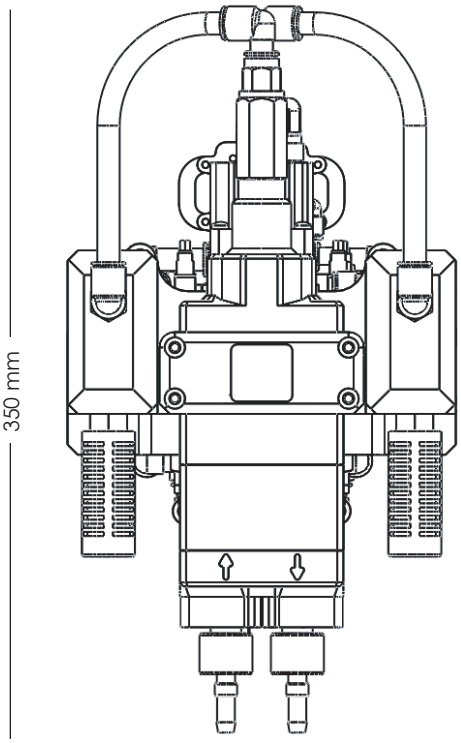
Technical specifications

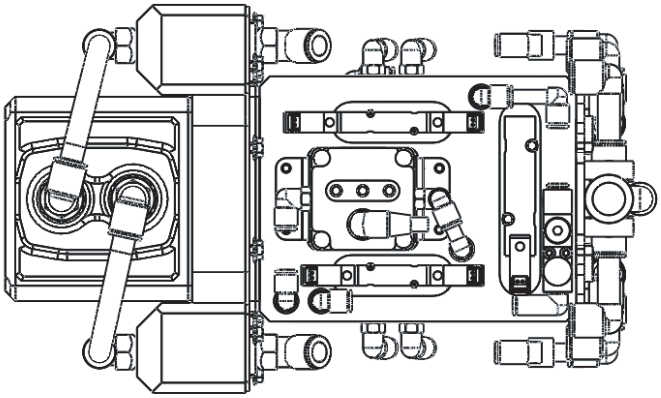


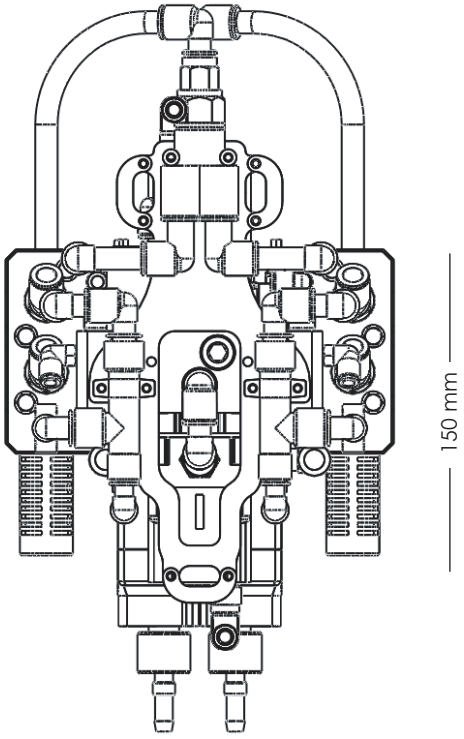
Power supply and transport specifications

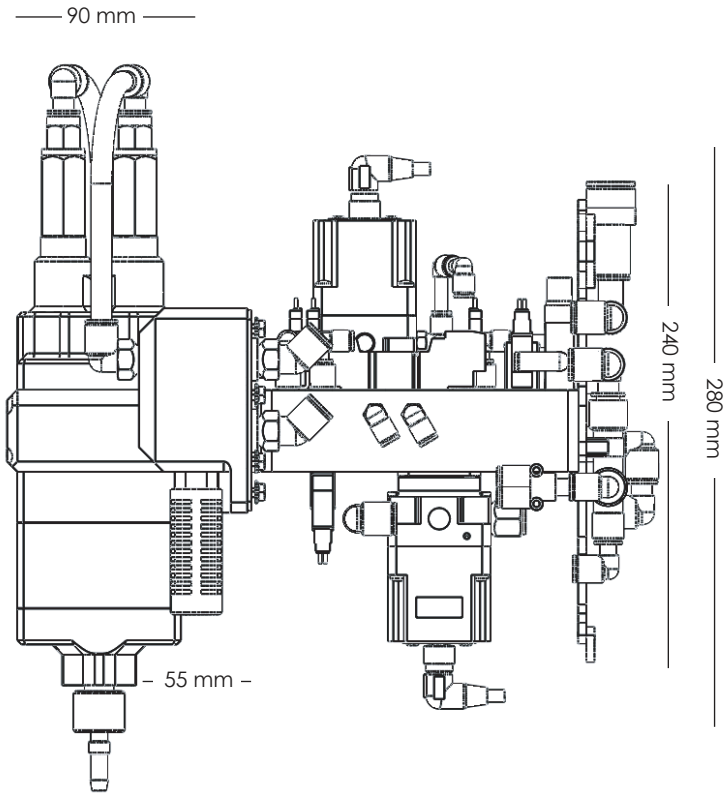
Manifold Group 415 NEA P / N 10043	
Voltage	125 VA with 24 Vdc
Absorbed power	24W, 2.5A
Manifold air IN	6.0 bar (87 psi)
Air intake cleaning (Purge 1 - Purge 2)	Max 7.0 bar (100 psi)
Permissible air humidity	95% without condensation
Operating ambient temperature	da +15 a +40 °C
Working air pressure	
Pinch valves (**R1**)	2,5 bar (35 psi)
Feeding pipe	
Dimension	ø10 mm 6.0 bar (87 psi)
Cleaning pipe	
-- CLEANING VALVE NOT SUPPLIED --	
Dimension	ø16 mm Max 7.0 bar (100 psi)
Pump NEA 415 P/N 10046 -_ _	
Exit (maxim)	400 gr/min
pulsations transport	max 600 pul/min
Powder tube	
Dimension	10 mm ø D Est x 6 mm ø D Int
Lenght	Uscita: 10–35 m (20–98 foot) Ingresso: 1–3 m (3,5–12 foot)
Weight / Dimensions P/N 10050-10051	Kg 14 - See fig. 5

Dimensions









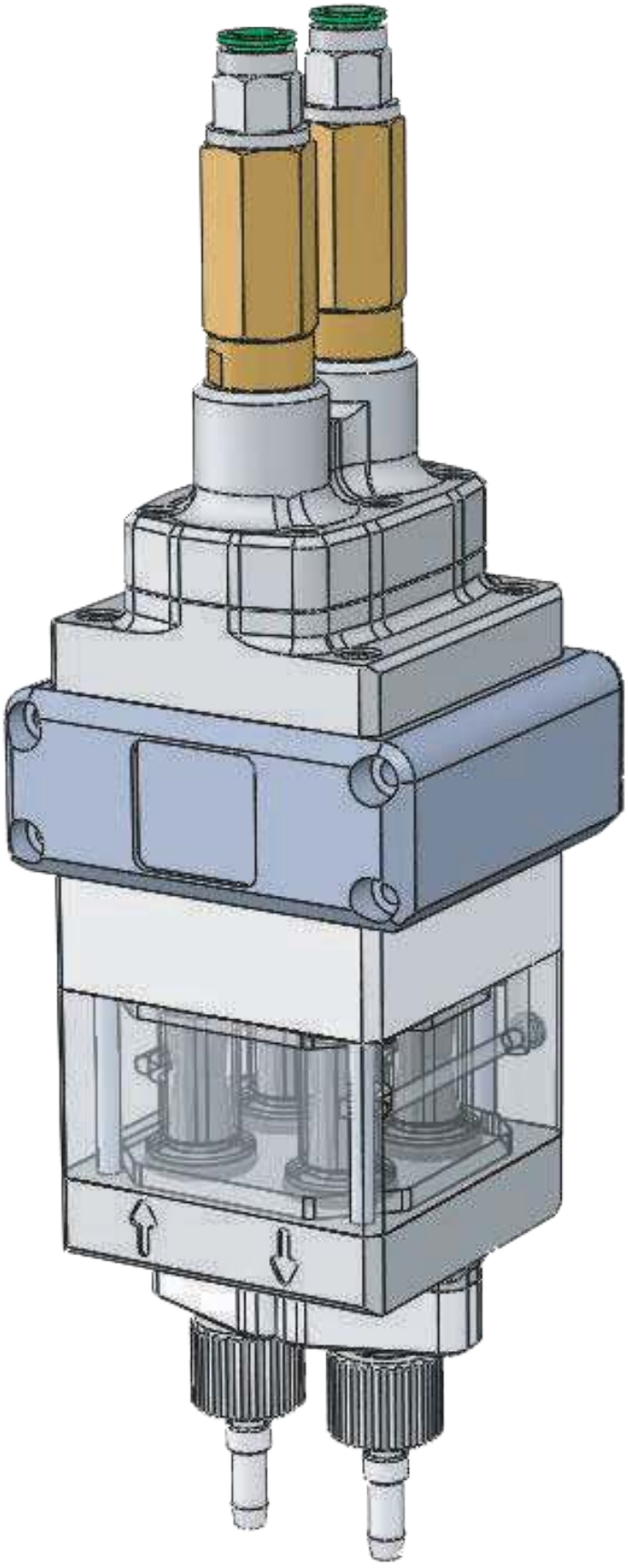


Fig.1 PN 10046-_ _ Body pump NEA 415

Pump components NEA 415

See fig. 2.

n° Item	Description	Function
1	Valve 3/8” 10 - Special	They direct the high pressure purge air through the pump. The check valves prevent dust contamination of the purge valves.
2	Body Cyclone Valve	Body in 2 parts that allows the activation of the cleaning of the body pump allowing a quick change of the product.
3	Tubes fluid	Porous cylinders that attract dust into the pump when a vacuum is applied and expel the powder from the pump when air pressure is applied.
4	Body tubes fluid	Contains fluidization tubes and air passages.
5	Body intermediate	Interface between pinch valves and porous tubes; composed of 4 passages that join the input and output branches of the pump.
6	Body pinch valves	The sleeve valves are housed. Entirely made of plexiglass obtained from processing without any joint.
7	Pinch valves	They open and close to allow dust to be attracted or dispensed.
8	Body IN-OUT	Connect the inlet and outlet fittings to the pump pinch valves.
9	Body tubes fluid gasket	Connect the tube to the source of dust. Connect the hose to the gun and from the beginning.

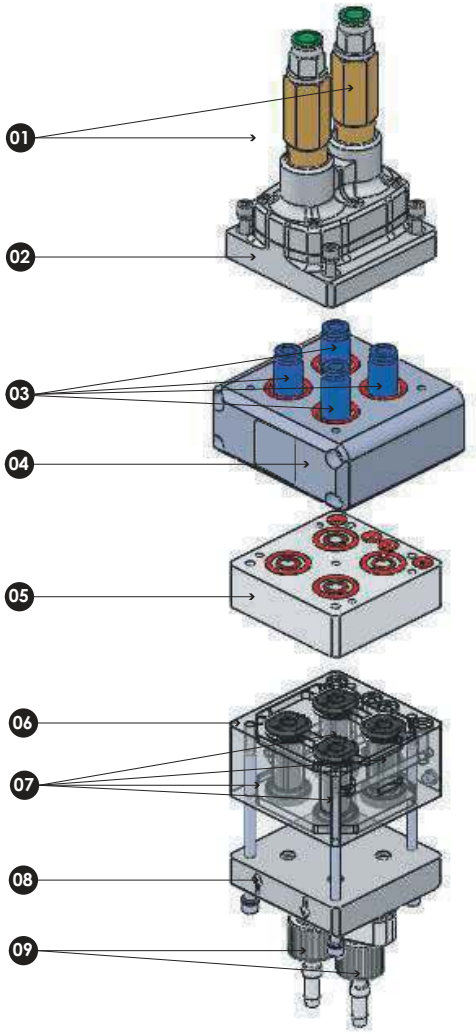


Fig.2 Pump components

Principle of operation

Pumping

The NEA 415 pump consists of two halves that function identically. The two halves alternately attract and dispense the powder from the pump; while one half attracts it, the other half dispenses it.

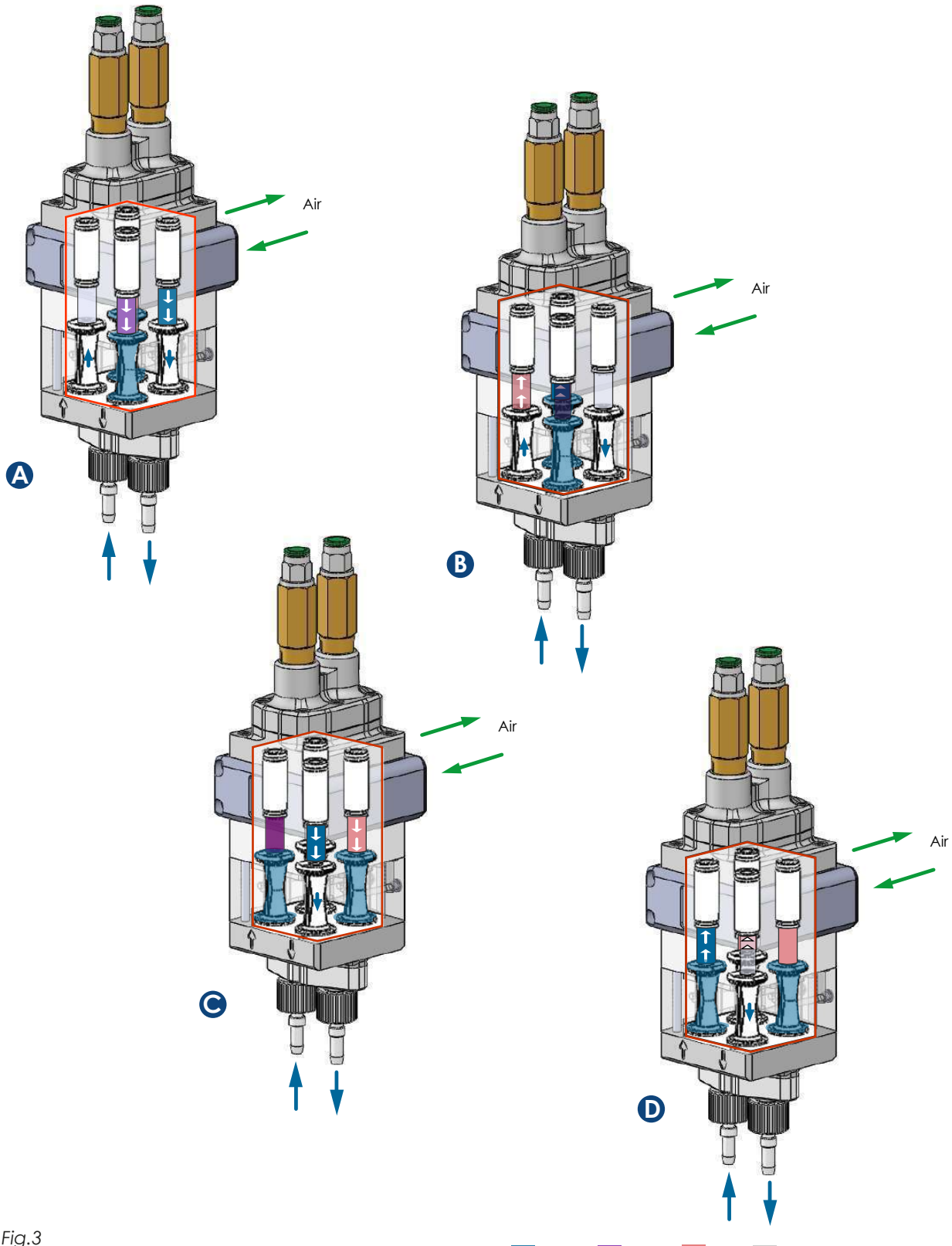


Fig.3
Operating principle - pumping

Purge

When the operator starts a color change, the pump enters a 2-stage purge process.

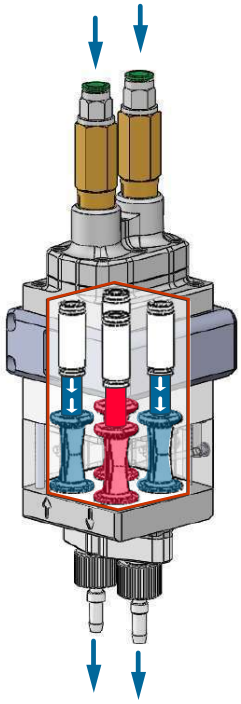
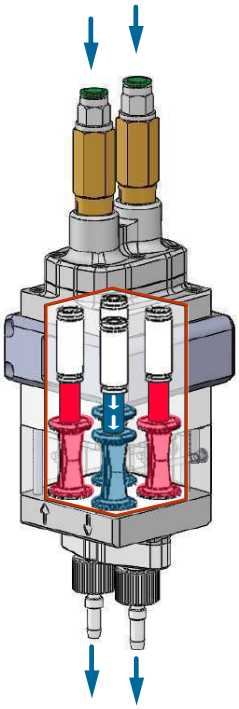


Fig.4
Step1: Purge1

Step 1: Purge 1

While the pump is still in the transport cycle, the sleeve suction valve closes, while the pinch valve opens alternately.

Air releases the powder from both fluidization tubes, passes it through the powder delivery tube and the gun, into the cabin.



Step 2: Purge 2

The sleeve delivery valve opens. The pump air pressure is turned on at maximum, while air pressure pulses are sent down the purge air fittings at the top of the fluidizing tubes.

The air pulses remove all the dust that remains in the pump, the gun and the suction and delivery tubes.

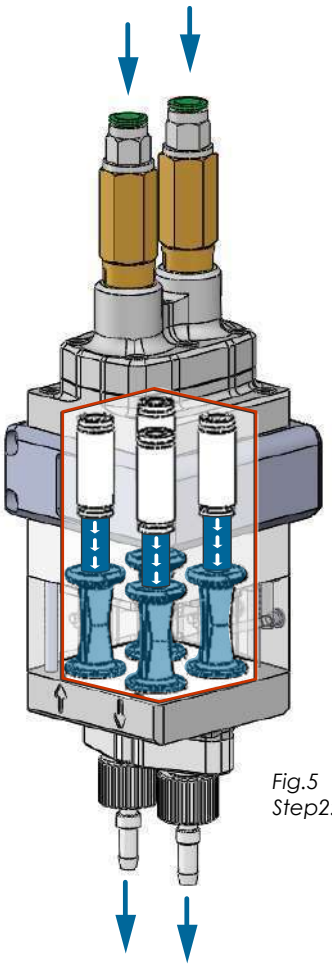


Fig.5
Step2: Purge2

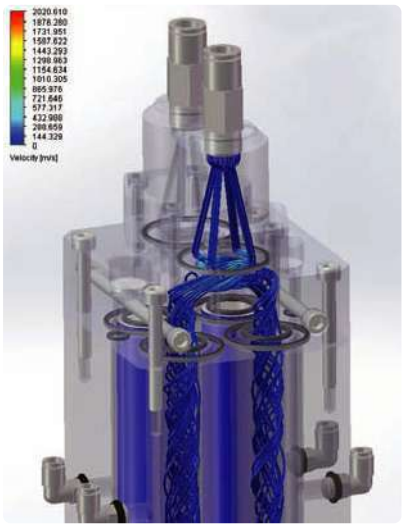


Fig.6
Operating principle - cleaning

Technical data

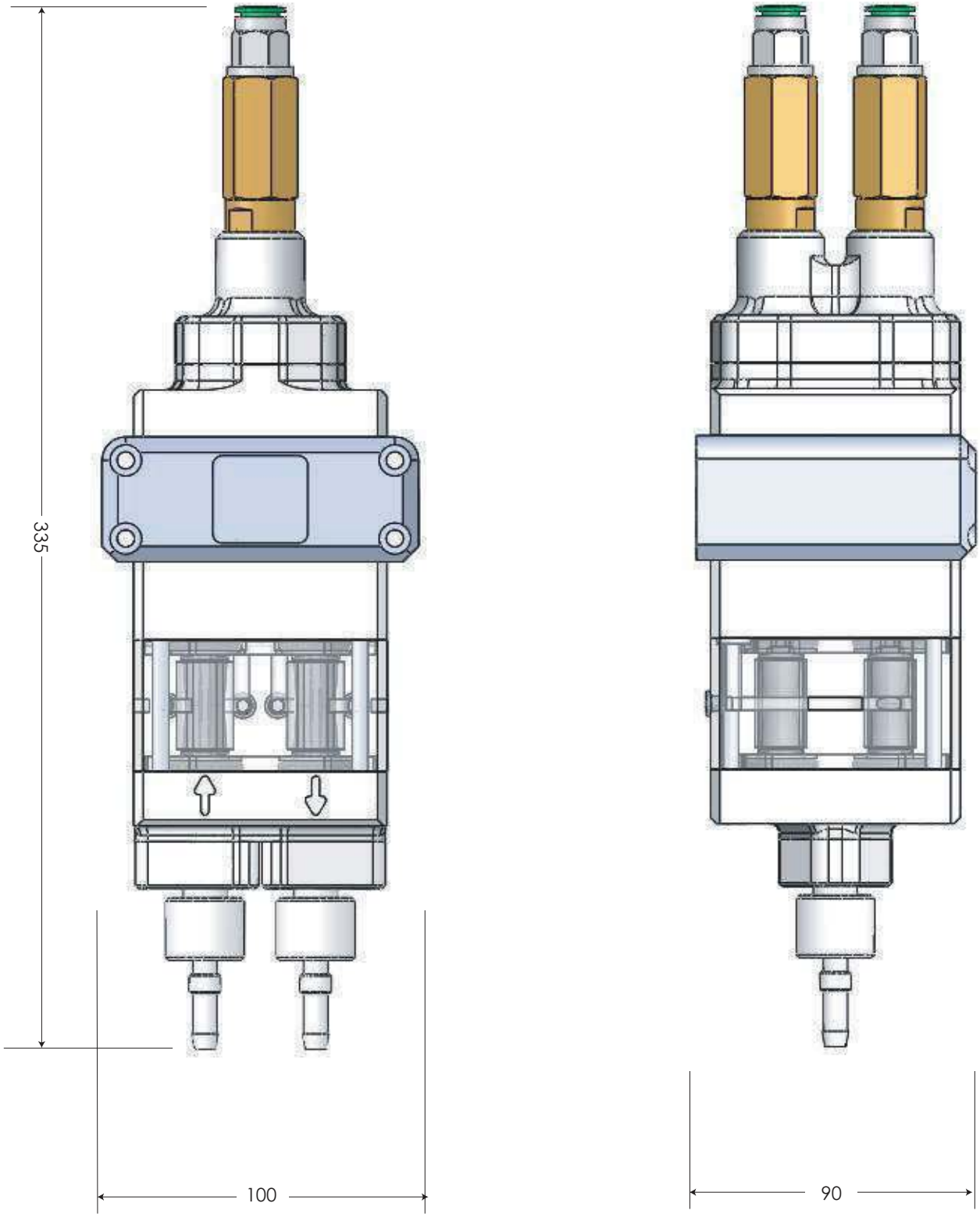


Fig.6 Dimensions of pump NEA 415

Installation of the powder tube

Tube with 10 mm external ø in polyethylene or flexible

NOTE: Cut the tube in polyethylene or flexible according to use with a special cutter. If the powder tube is cut unevenly there may be cross contamination of the powder. See fig. 7

1. Unscrew the tightening nut anticlockwise.
2. Make sure the sealing oring is in the tube adapter housing (03).
3. Insert the nut of the sealing tube adapter and make it reach the end of the thread by turning it clockwise.
4. Push the adapter into the bottom of the IN-OUT input (fig.01).
5. Tighten the nut to the south IN-OUT input as far as it will go.
6. Insert the transport tube.

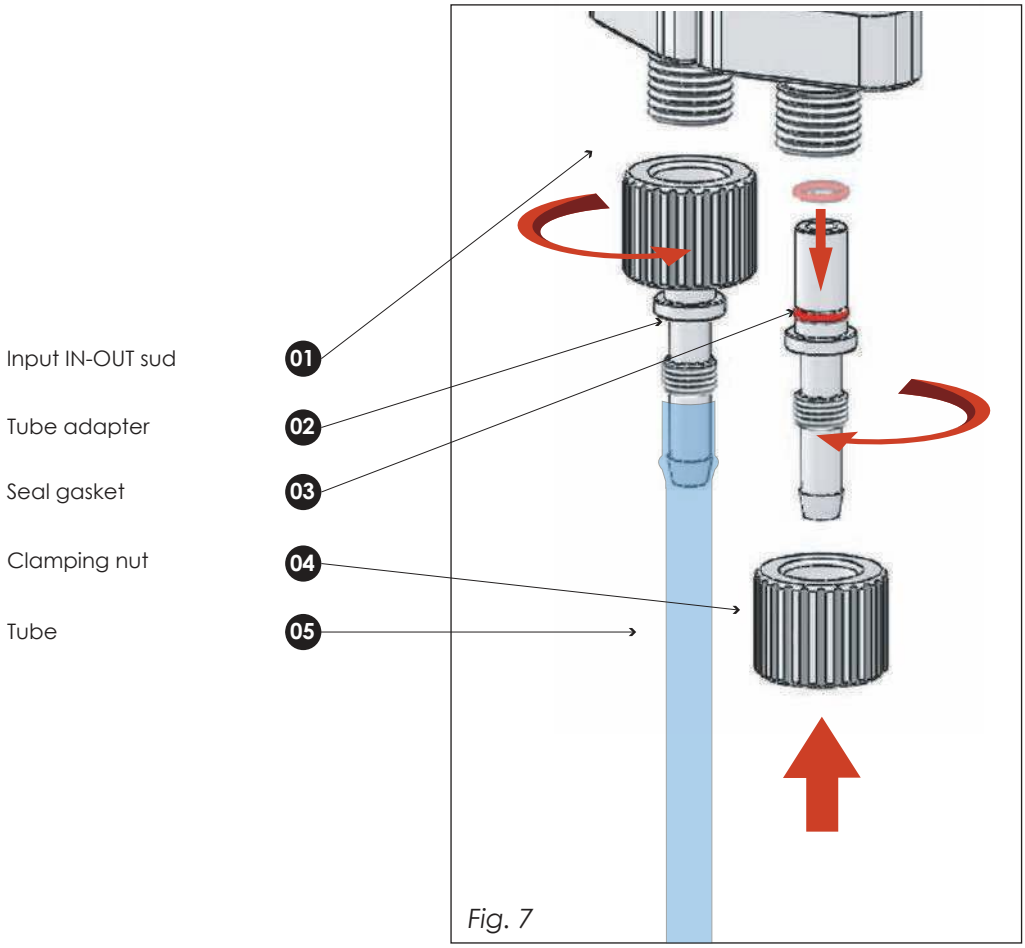


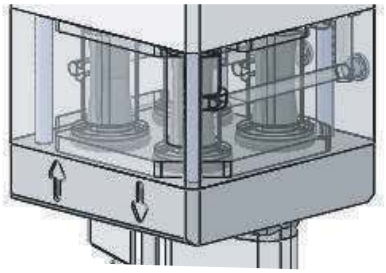
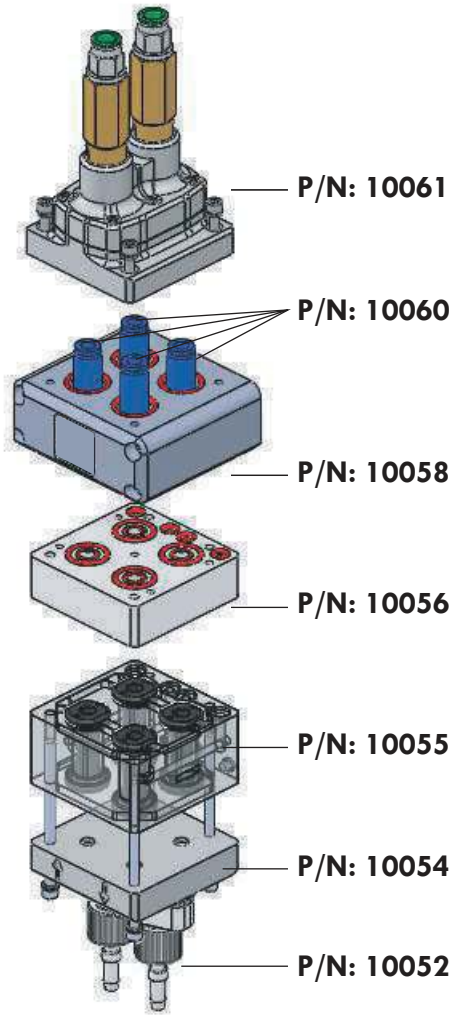
Fig.7 Installation of the dust tube

Maintenance

Perform maintenance operations to ensure that the pump always operates at maximum efficiency.

DANGER: The following operations must be carried out by qualified personnel only. Follow the safety instructions in this manual and in all other manuals used.

NOTE: These operations must be performed with a higher or lower frequency depending on factors such as the experience of the operator and the type of powder used.

Frequency	P/N	Procedure
Daily	 **P/N: 10050 o 10051**	Check to see if the pinch valve body shows signs of dust leakage. In the presence of dust in the sleeve or crackle valve body in the pinch valves, replace the pinch valves and filter discs.
Every four months or every time the pump is dismantled	 **P/N: 10061** **P/N: 10060** **P/N: 10058** **P/N: 10056** **P/N: 10055** **P/N: 10054** **P/N: 10052**	**NOTE:** To reduce downtime it is advisable to always reserve spare parts such as PN 10061, PN 10056 and PN 10054, to be installed while cleaning or checking the other set. Remove the pump and check if the wear blocks show signs of wear or sintering. If necessary, clean these components with an ultrasonic cleaning device.

Diagnostics

DANGER: The following operations must be carried out by qualified personnel only. Follow and observe the safety instructions in this manual and in all other manuals used.

NOTE: These troubleshooting procedures cover most of the inconveniences that can be encountered. If you can not solve the problem with the information provided below, contact your local VERNE TECHHNOLOGY representative.

Problem	Possible cause	Corrective action
1. Reduced powder output (the pinch valves open and close)	*Block the powder tube to the destination*	Check if the tube has locks. Purge the pump.
	Transport air set too high	Decrease the transport air pressure
	Transport air set too low	Increase the air pressure
	Pinch valve has defects	Replace the pinch valves
	Clogging of fluidization tubes	Replace the fluidization tubes
	EV3 valve transport air not working	Switch off the NEA 415 and disconnect the pump housing from the spacer to the wall. Switch on NEA 415 and check if the corresponding holes on the spacer show alternating positive and negative air pressure. If there is no pressure, replace the valve. If the valve works, but no positive or negative air pressure is heard, check R2 - R3 functionality
	EV4 valve transport air not working	Switch off the NEA 415 and disconnect the pump housing from the spacer to the wall. Switch on NEA 415 and check if the corresponding holes on the spacer show alternating positive and negative air pressure. If there is no pressure, replace the valve. If the valve works, but no positive or negative air pressure is heard, check R2 - R3 functionality
	Pressure regulator R2 Not respect the pressure set by the PLC	Switch off the NEA 415 and disconnect the air hose connected to the R2 outlet. Connect a pressure gauge to the R2 output. Switch on the NEA 415 and check if the pressure corresponds to the one set by the PLC. If the regulator does not work or does not respect the set pressure, replace the R2 regulator.
	Pressure regulator R3 Not respect the pressure set by the PLC	Switch off the NEA 415 and disconnect the air hose connected to the R3 outlet. Connect a pressure gauge to the R3 output. Switch on the NEA 415 and check if the pressure corresponds to the one set by the PLC. If the regulator does not work or does not respect the set pressure, replace the R3 regulator.

Problem	Possible cause	Corrective action
2. Reduced powder output (the pinch valves do not open and close)	*Defective pinch valve*	Replace defective pinch valves and filter discs
	Defective anti-return valve	Replace the non-return valves
	EV2 valve - pinch valves. Not working	Switch off the NEA 415 and disconnect the pump housing from the spacer to the wall. Switch on NEA 415 and check alternating positive air pressure spacing from the corresponding holes. If there is no pressure, replace the valve. If the valve works but there is no air pressure from the spacer holes, check R1 and V1 functionality
	EV1 valve - ON / OFF manifold power supply	Switch off the NEA 415 and disconnect the air hose connected to the inlet R2. Turn on the pump and check if compressed air comes out of the fitting. If the valve does not work, replace Valve V1.
	Pressure regulator R1 Not respect the set pressure	Switch off the NEA 415 and disconnect the air hose connected to the R1 output. Connect a pressure gauge to the R2 output. Switch on the NEA 415 and check if the pressure corresponds to 2.5 bar. If the regulator does not work or does not respect the set pressure, replace the R1 regulator.
	Check component functionality: R2 - R3 - V3 - V4 According to the procedure on page 07	
3. Reduced powder inlet (loss of suction from the dust source)	*Blockage in the powder tube from the power source*	Check if the tube has locks. Purge the pump
	Loss of vacuum from vacuum generators	Check if the vacuum generators are contaminated. Check the exhaust silencers. If the exhaust silencers are clogged, replace them.
	O Rings damaged in the dust powder	Check all o-rings in the dust path. Replace damaged or worn o-rings.
	Clogged fluidization tubes	Replace the fluidization tubes.
4. Pinch valves fail quickly, with cracks around the flange	*The powder is charged into the pump and is earthed via the pinch valves*	Install kit P / N 10050 black pinch valves - NON-CONDUCTIVE.

Repair

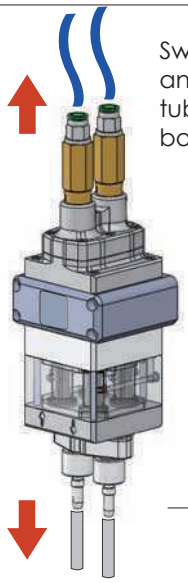
DANGER: The following operations must be carried out by qualified personnel only. Follow the safety instructions in this manual and in all other manuals used.

DANGER: Turn off and depressurize the system before performing the following procedures. Failure to depressurize the system can cause bodily injury.

Fluidization tube replacement

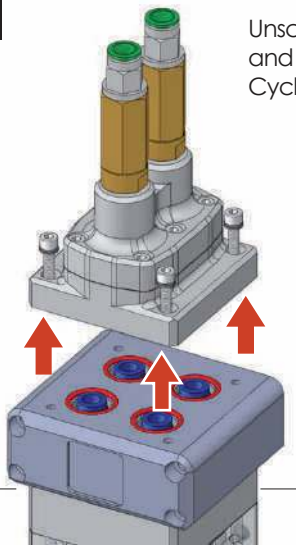
NOTE: Four o-rings are included in the fluidizing tube kit. Replace the o-rings if they are worn out. It is not necessary to replace the o-rings each time the fluidization tubes are replaced.

1



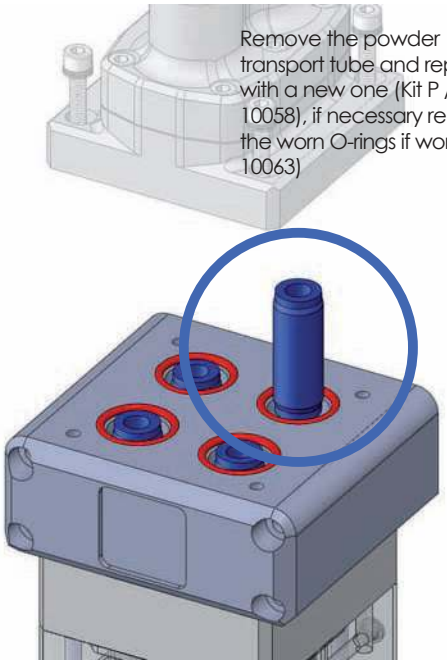
Switch off the pump and disconnect the tubes at the top and bottom

2



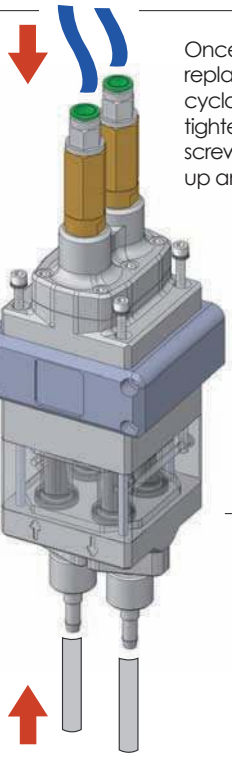
Unscrew the 4 fixing screws and remove the Body Cyclone valve assembly

3



Remove the powder transport tube and replace it with a new one (Kit P / N 10058), if necessary replace the worn O-rings if worn (P / N 10063)

4



Once the tubes have been replaced, replace the Body cyclone valve assembly, tighten with the 4 clamping screws and reinsert the tubes up and down.

Disassembling pump

To reduce downtime keep a backup pump to use when the pump is repaired.
See Pump parts on page 18 for ordering information.

DANGER: Turn off and depressurize the system before performing the following procedures.
Failure to depressurize the system can cause bodily injury

NOTE: Label all dust and air pipes before disconnecting them from the pump.

1. See Figure 9. Remove the bleed air lines from the top of the pump.

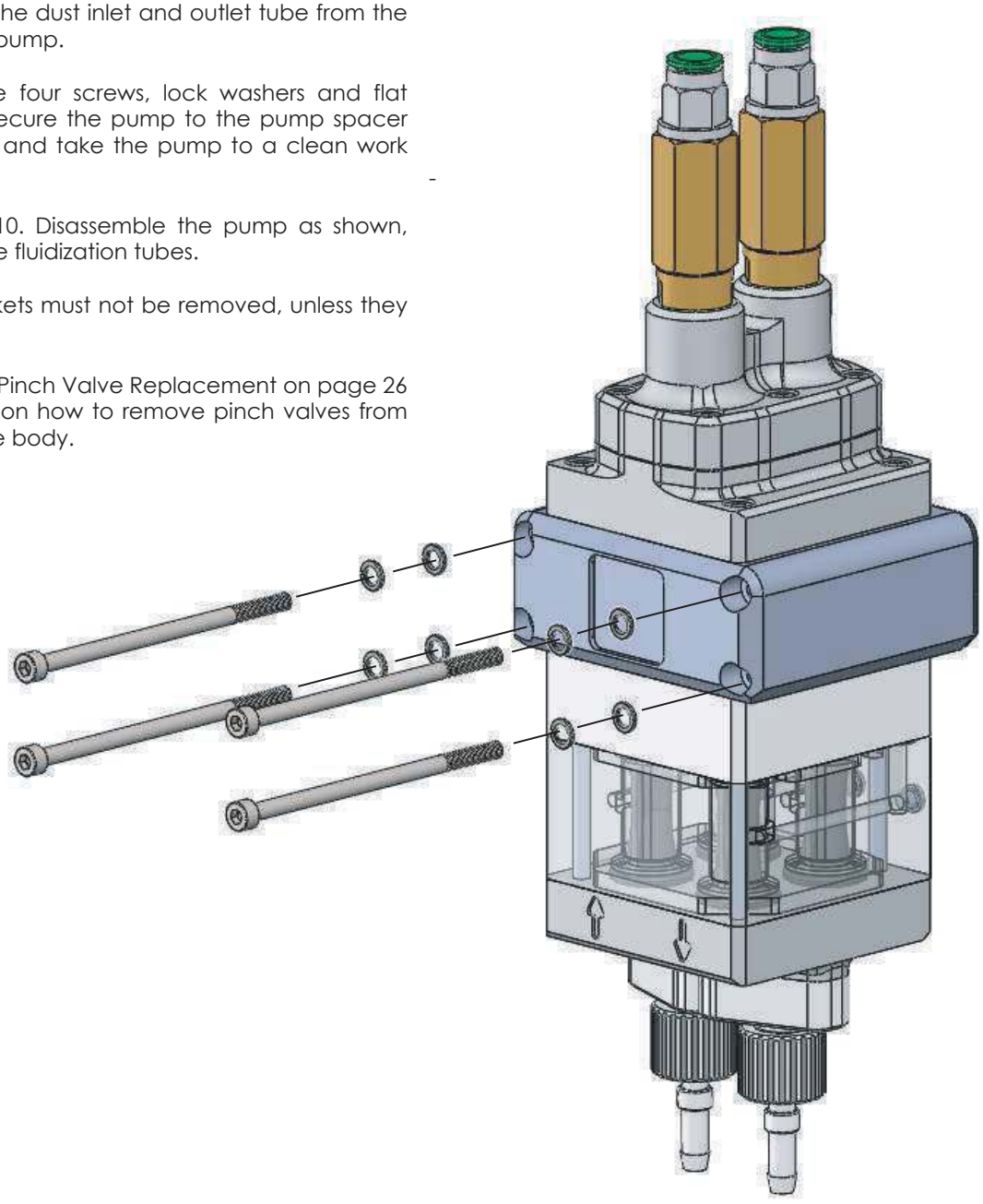
2. Disconnect the dust inlet and outlet tube from the bottom of the pump.

3. Remove the four screws, lock washers and flat washers that secure the pump to the pump spacer (see page 25) and take the pump to a clean work surface.

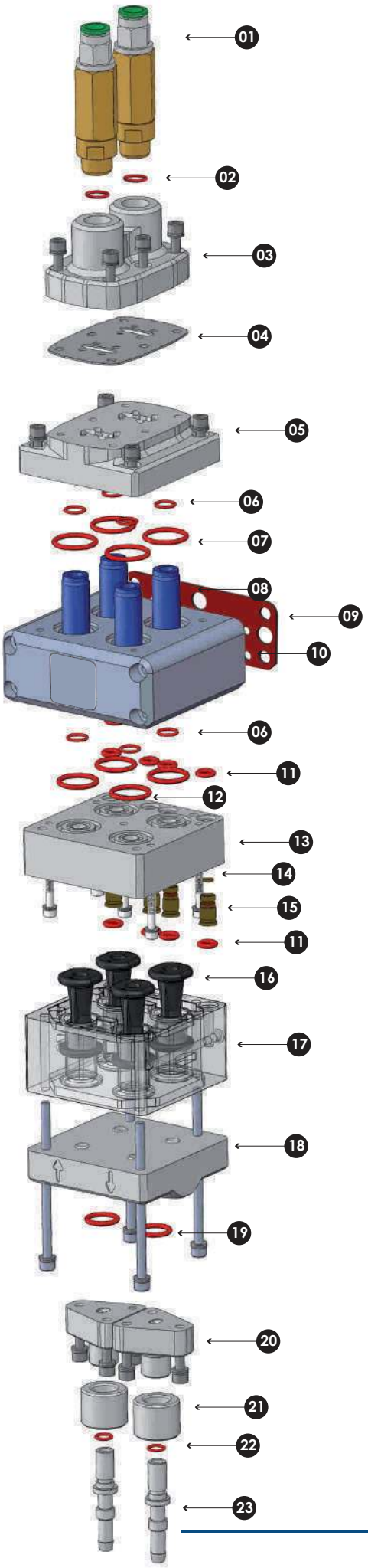
4. See Figure 10. Disassemble the pump as shown, starting with the fluidization tubes.

The glued gaskets must not be removed, unless they are damaged.

NOTE: Refer to Pinch Valve Replacement on page 26 for instructions on how to remove pinch valves from the pinch valve body.



PN 10046-_ _ Body pump NEA 415



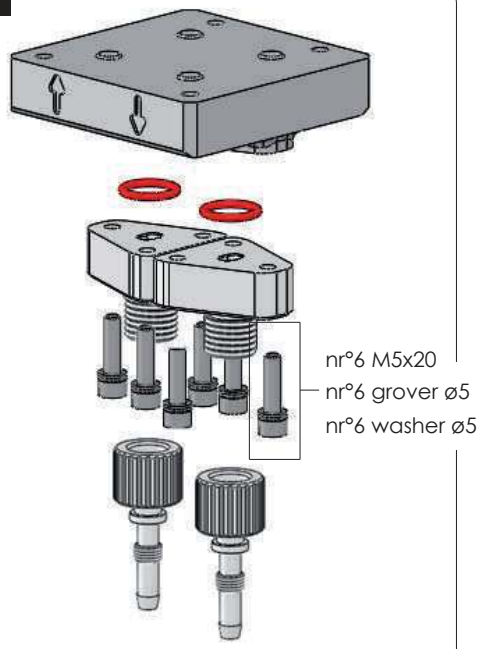
1. Valve G 3/8"- 10 SPECIAL
2. O-Ring Silicone 9 x 1.5
3. Body ciclone valve NORTH
4. Gasket cyclone valve N/S
5. Body ciclone valve SUTH
6. O-Ring Silicone 10x1.5
7. O-Ring Silicone 20x2.5
8. Tubes Fluid
9. Gasket Body Tubes Fluid
10. Body Tubes Fluid
11. O-Ring Silicone 6 x 2.5
12. O-Ring Silicone 18 x 2.5
13. Body Intermediate
14. Filter Brass
15. Compass Filter Brass
16. Pinch Valves
17. Body Pinch Valves
18. Body IN-OUT SUTH
19. O-Ring Silicone 14 x 2.5
20. Body IN-OUT NORTH
21. Body IN-OUT NORTH closing
22. O-Ring Silicone 7 x 1.5
23. Nozzle In & Out

Pump group

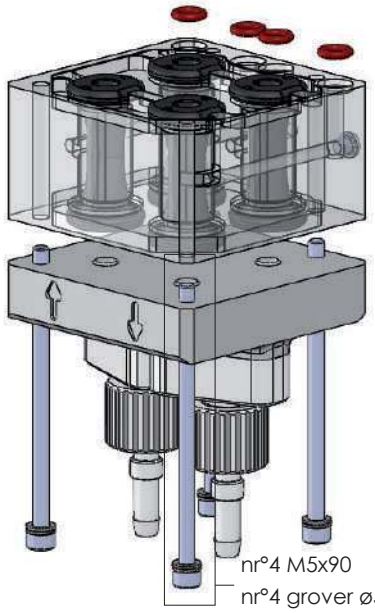
To reduce downtime keep a backup pump to use when the pump is repaired.
See Pump PN on page 18 for information on how and what to order.

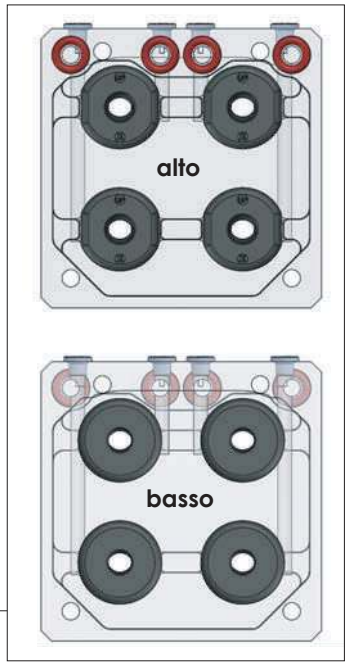
CAUTION: Follow the assembly sequence and specifications shown.
If the assembly instructions are not followed carefully, the pump may be damaged.

1

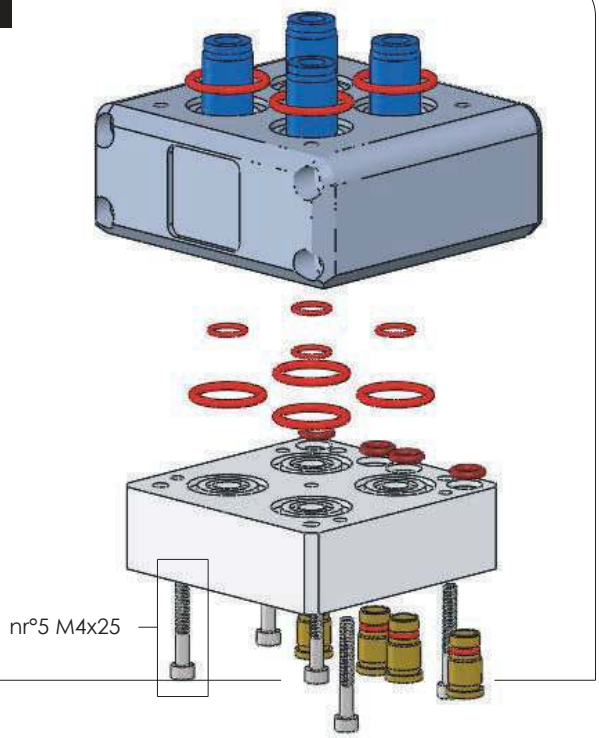


2

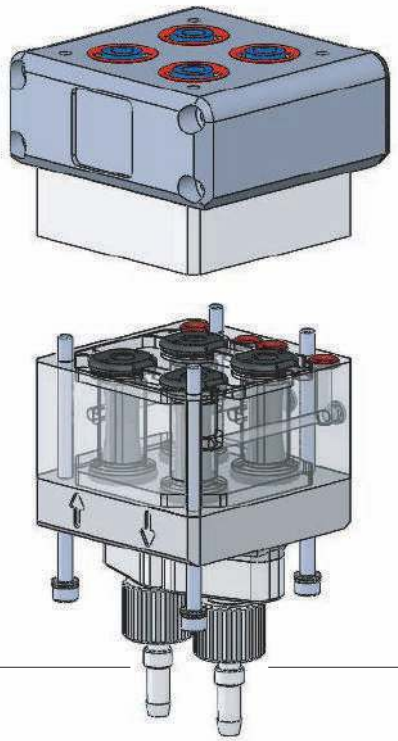




3



4



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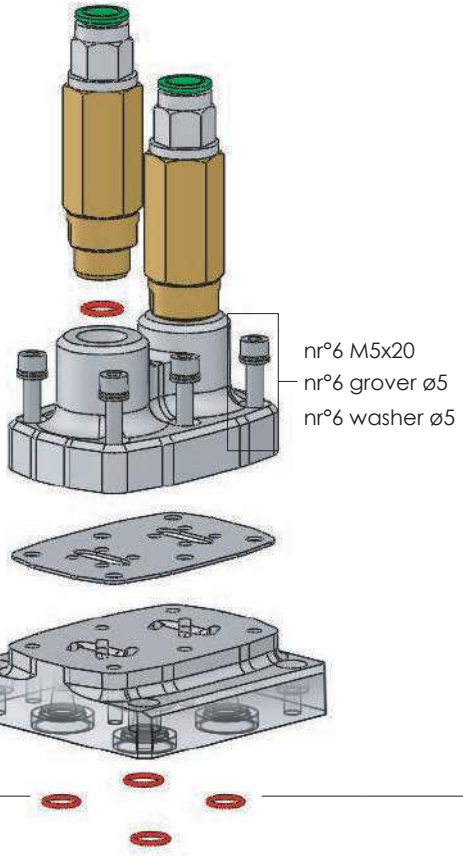
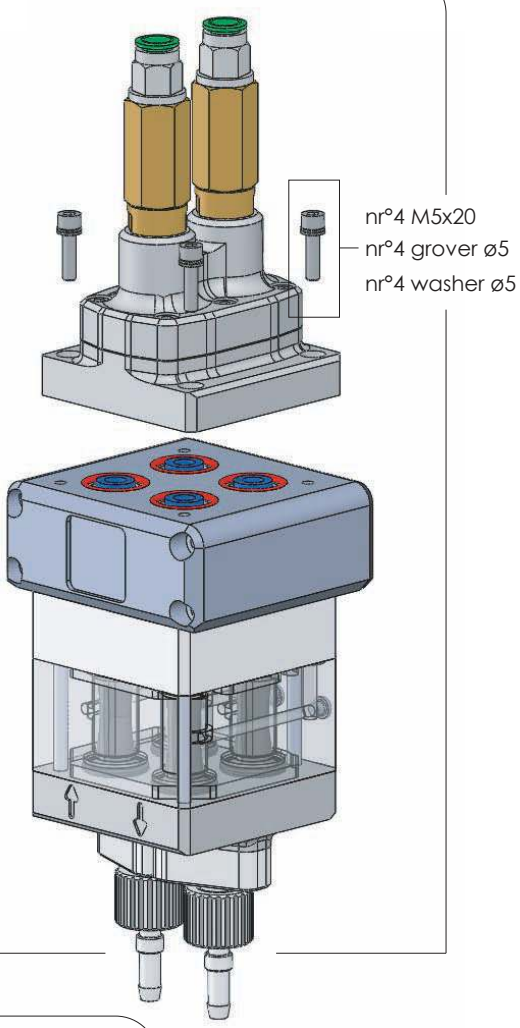
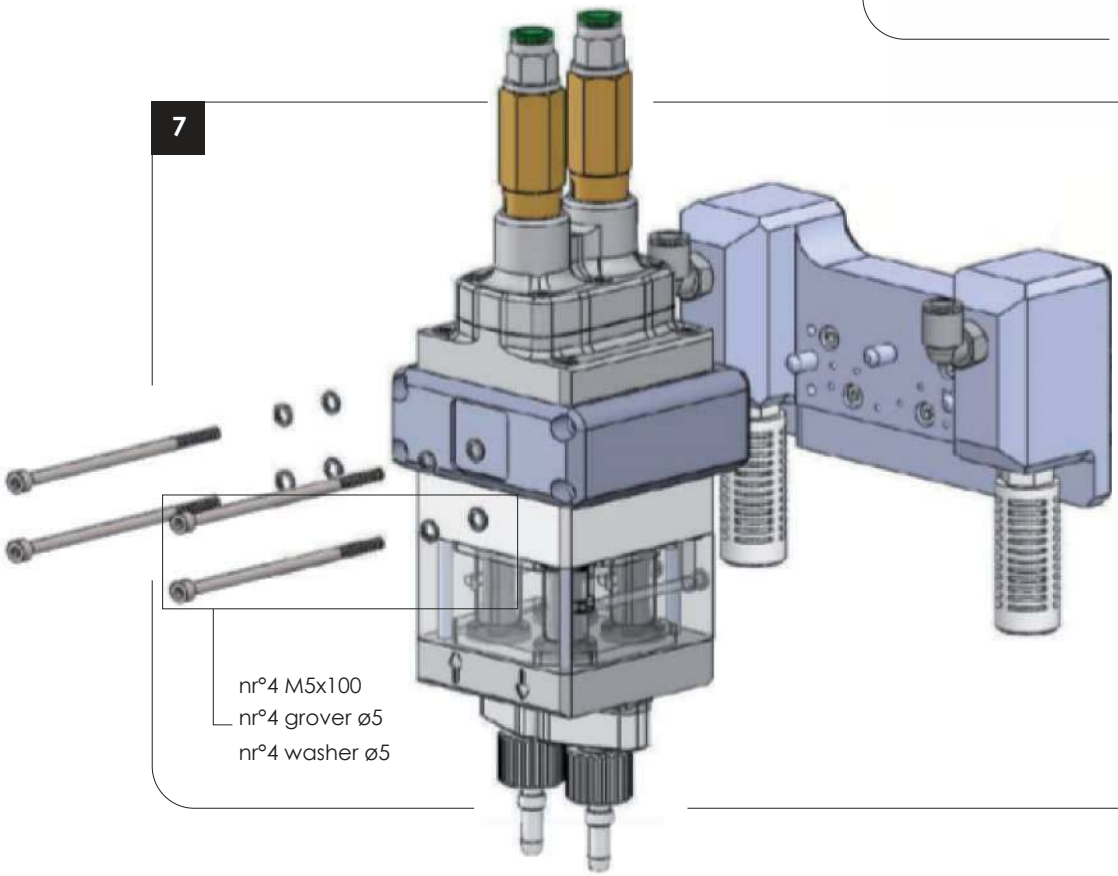

nr°6 M5x20
nr°6 grover ø5
nr°6 washer ø5

6


nr°4 M5x20
nr°4 grover ø5
nr°4 washer ø5

7


nr°4 M5x100
nr°4 grover ø5
nr°4 washer ø5

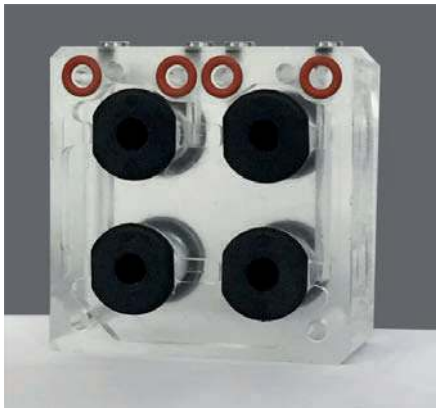
Replacement of the pinch valve

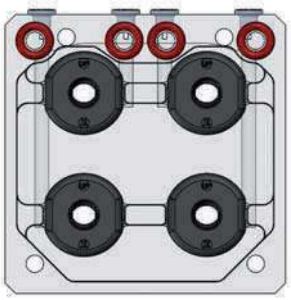
CAUTION: Before putting the pinch valve body in a vice,

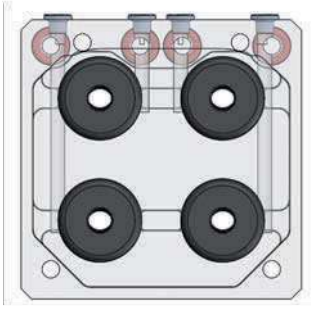
fill the jaws. Tighten the clamp just enough to hold the valve body firmly.
Failure to comply may cause damage to the sleeve valve body.

NOTE: Replace the filter discs (included in the pinch valve kit) when replacing the pinch valves. - Refer to item 7 of the Pump assembly procedure.

Removing the pinch valve







1. Place the pinch valve body in a padded vise.

2. With one hand grasp the lower flange of the pinch valve and pull it away from the valve body.

3. Cut off the flange with the scissors, then pull out the rest of the pinch valve from the upper side of the valve body.

Assembly of the pinch valve

1. Insert the tool into one of the valve chambers, then insert the UP flange (top) of the pinch valve into the lower end of the insertion tool.

Align the pinch valve ribs with the square grooves of the valve chamber.

2

2. Flatten the round flange of the pinch valve, then insert one end of the flange into the valve chamber.

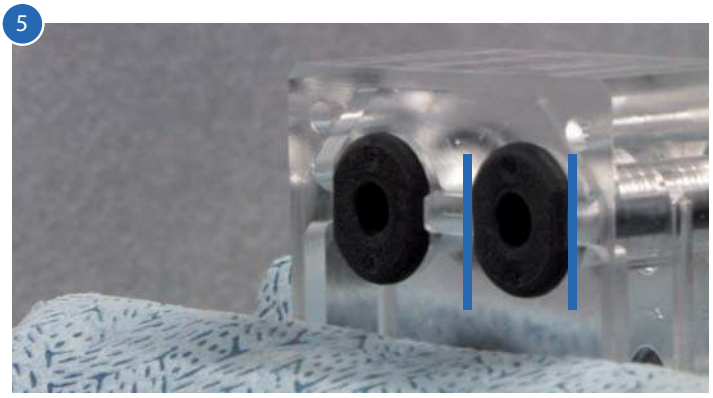
3

3. Pull the insertion tool until the end of the pinch valve is inside the valve body.

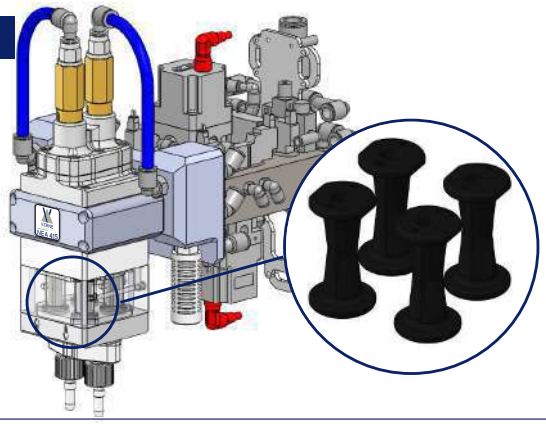
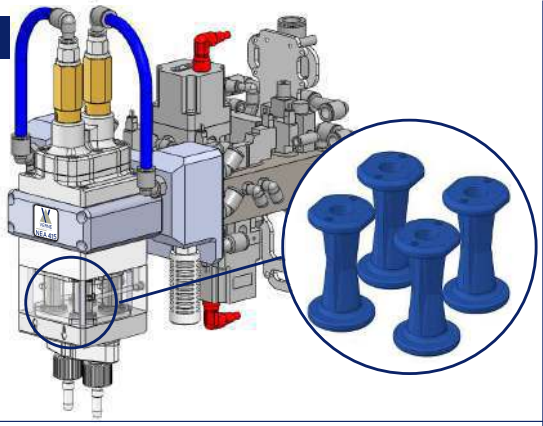
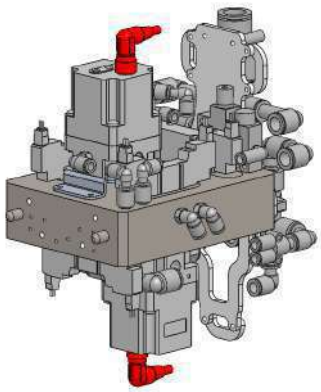
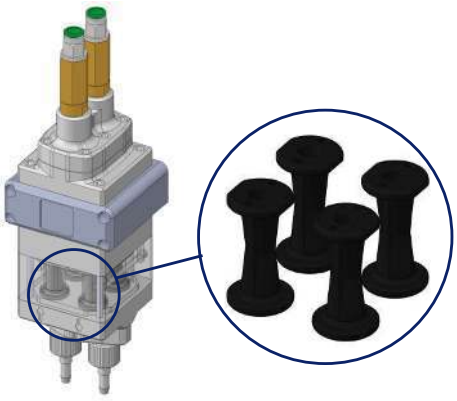
4

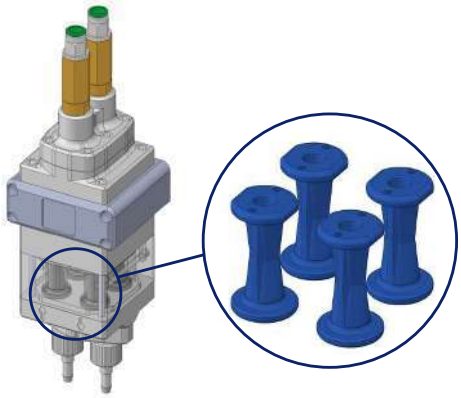
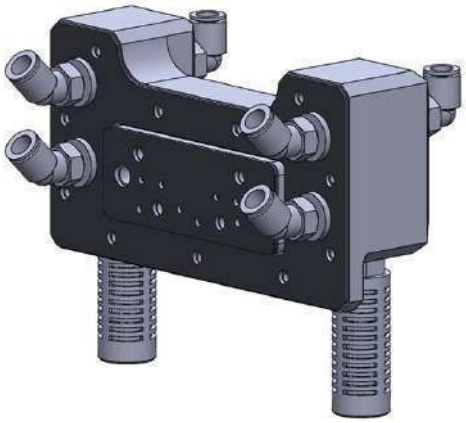
4. Continue pulling the insertion tool until the pinch valve passes through the valve body and the tool becomes free.

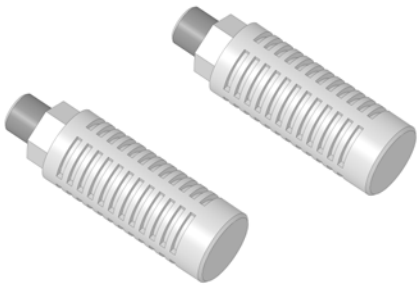
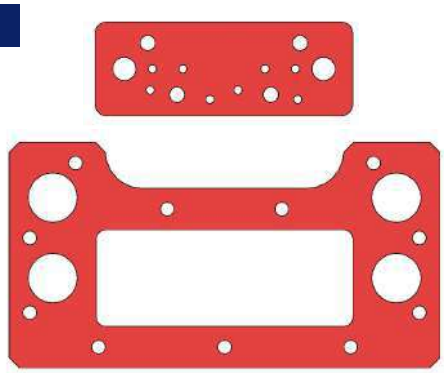
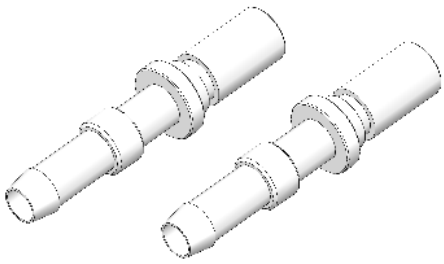
5

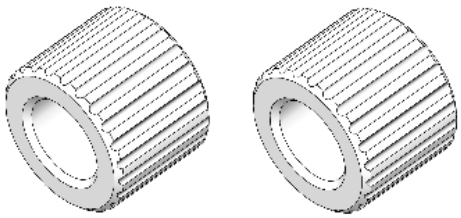
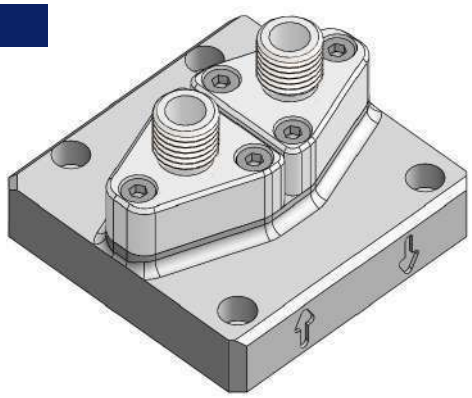
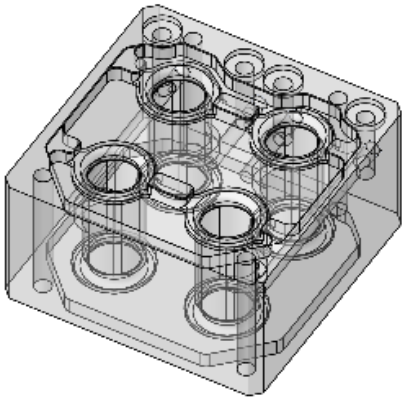
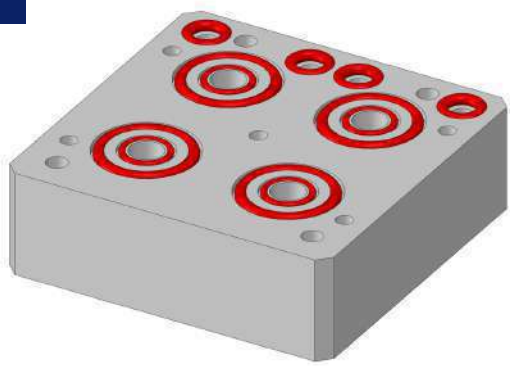


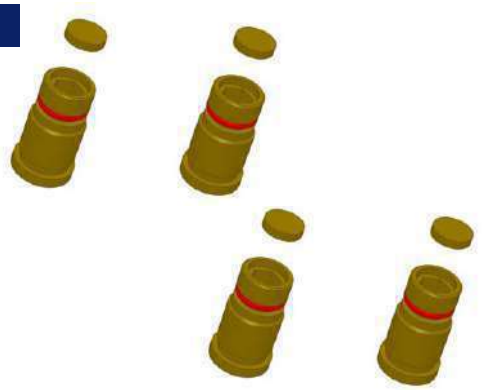
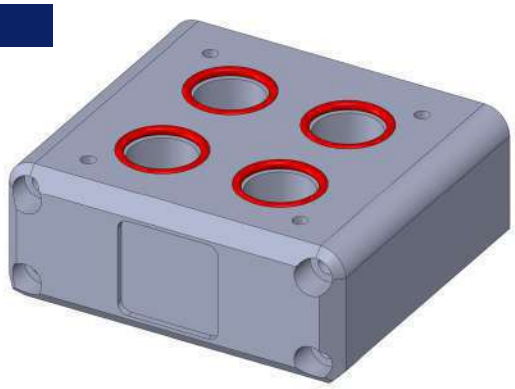
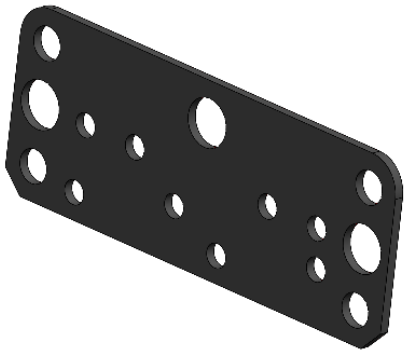
5. Pull off the lower flange of the pinch valve to check the alignment of the valve ribs with the square grooves in the valve body.
If necessary, pull and turn the pinch valve to align the ribs with the grooves.

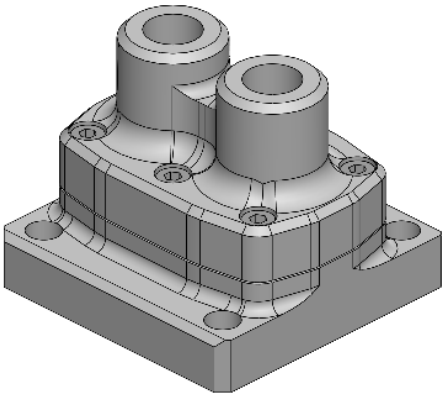
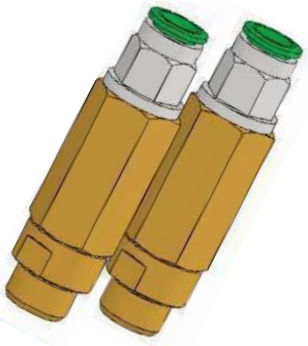
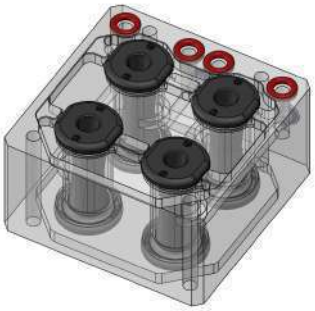
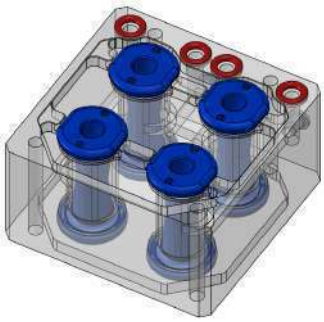
ITEM P/N:		Pcs	Description
10045-50		1	NEA 415 - WITH P/N 10050
10045-51		1	NEA 415 - WITH P/N 10051
10043		1	MANIFOLD ASSEMBLY NEA 415
10046-50		1	BODY PUMP NEA 415 - WITH P/N 10050

ITEM P/N:		Pcs	Description
10046-51		1	BODY PUMP NEA 415 - WITH P/N 10051
10050		8	PINCH VALVE BLACK NO CONDUCTION - NEA 415 ***INCLUDED:*** 8pcs O-Ring Silicone 6x2.5 8pcs Filter brass Sinterized 2pcs Sheath's mounting
10051		8	PINCH VALVE BLU FOOD & PHARMA - NEA 415 ***INCLUDED:*** 8pcs O-Ring Silicone 6x2.5 8pcs Filter brass Sinterized 2pcs Sheath's mounting
10065		1	SPACER ASSEMBLY - NEA 415 ***INCLUDED:*** PN 10066 PN 10021 OTHER

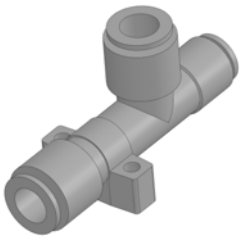
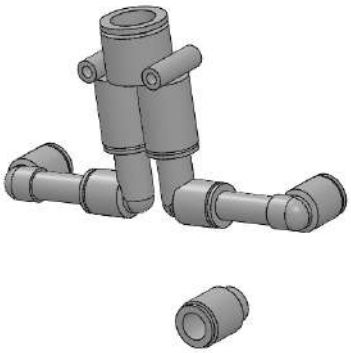
ITEM P/N:		Pcs	Description
10021		2	MUFFLER NEA 230 | 430 | 415
10066		5	SPACER GASKET KIT -NEA 415 ***INCLUDED:*** 5pcs SPACER GASKET
10052		4	TERMINAL IN-OUT - NEA 415 ***INCLUDED:*** 4 pcs O-Ring Silicone 7X1.5
SMC	 Constructor Code: SY100-30-4A-30	7	SOLENOID VALVE CABLE CONNECTOR FOR: - EV1 - EV2 - EV3 - EV4
SMC	 Constructor Code: P398020-501-3	2	ELETTRONIC PRESSURE REGULATOR CABLE CONNECTOR FOR: - R2 - R3

ITEM P/N:		Pcs	Description
10053		4	TERMINAL CONNECTOR IN-OUT NEA 415
10054		1	BODY IN-OUT - NEA 415
10055		1	BODY PINCH VALVE - NEA 415 ***INCLUDED:*** 4pcs O-Ring Silicone 6x2.5 4pcs Filter brass Sinterized
10056		1	BODY INTERMEDIATE - NEA 415 ***INCLUDED:*** 4pcs O-Ring Silicone 10X1.5 4pcs O-Ring Silicone 18X2.5 4pcs O-Ring Silicone 6X2.5 4pcs COMPASS FILTER BRASS P/N 10057

ITEM P/N:		Pcs	Description
10057		4	COMPASS FILTER BRASS - NEA 415 ***INCLUDED:*** 4 pcs in sinterized brass for COMPASS 4 pcs O-Ring 6x1.5
10058		1	BODY TUBES FLUID - NEA 415 ***INCLUDED:*** 4pcs O-Ring Silicone 20x2.5 1pcs Body fluid gasket mounted
10059		5	BODY TUBES FLUID GASKET - NEA 415 ***INCLUDED:*** 5 x 1 pcs
10060		8	TUBES FLUID - NEA 415 ***INCLUDED:*** 16pcs O-Ring Silicone 10X1.5

ITEM P/N:		Pcs	Description
10061		1	BODY CYCLONE VALVE - NEA 415 ***INCLUDED:*** 1 pcs GASKET CYCLONE VALVE 4 pcs O-Ring 10x1.5 4 pcs O-Ring 20x2.5 2 pcs O-Ring Silicone 13 x 1.5
10023		2	VALVE G3/8"-10 SPECIAL ***INCLUDED:*** 2 pcs O-Ring Silicone 13 x 1.5
10063		All	CICLONE GASKET + KIT O-RING SILICONE - NEA 415
10064-50		1	BODY PINCH VALVES WITH P/N 10050 NEA 415 ***INCLUDED:*** 4pcs O-Ring Silicone 6x2.5
10064-50		1	BODY PINCH VALVES WITH P/N 10051 NEA 415 ***INCLUDED:*** 4pcs O-Ring Silicone 6x2.5

ITEM P/N:		Pcs	Description
10067		1	**R1**: PINCH VALVE REGULATOR - NEA 415
10068		1	**EV1**: ON/OFF SOLENOID VALVE - NEA 415
10069		1	**EV2**: PINCH VALVE SOLENOID VALVES - NEA 415
10070		1	**EV3**: RIGHT TUBES SOLENOID VALVE - NEA 415
10071		1	**EV4**: LEFT TUBES SOLENOID VALVE - NEA 415
10072		1	**R2**: TRANSPORT REGULATOR - NEA 415

ITEM P/N:		Pcs	Description
10073		1	**R3**: RECOVERY REGULATOR - NEA 415
10023		2	VACUUM GENERATOR -NEA 230 | 430 | 415
10062		1	KIT FITTINGS | PURGE -NEA 415 ***INCLUDED:*** All fittings

DECLARATION OF CONFORMITY

Model: NEA 415 low pressure dense phase transport system

Principle:

The installation and commissioning of NEA 415 PN 10045 -__ and subgroups PN 10043, PN 10065 and PN10046 -__ must be carried out in compliance with the international and national regulations of the country of use.

NEA 415 PN 10045 -__ and subgroups PN 10043, PN 10065 and PN 10046 -__, must be considered as components, since according to the machine directive it is neither a machine nor an appliance ready for use.

It is therefore up to the end user to ensure the conformity of his machine in the applicable regulations.

Verne Technology srl declines all responsibility for damage to persons, animals or objects due to the use of NEA 415 PN 10045 -__ and subgroups PN 10043, PN 10065 and PN 10046 -__, not foreseen or that do not comply with the international and national standards of the country of use.

The Products and materials presented in this manual are susceptible at any time of evolution or modification.

Note: The year of manufacture of the appliance appears in the serial number.
"PL00171" indicates that the appliance was manufactured in 2017, the final "1" indicates the lot of the year.

Date: 01 Dicembre 2017

Verne Technology S.r.l.
CEO
Carlo Perillo

VERNE
TECHNOLOGY