ENGLISH

VERNE
TECHNOLOGY

Customer Product
Manual Part P/N 10001

Release 03/2023

Transfer pump High-density powder

NEA430

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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.

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 430 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.

Action in the Event of a Malfunction

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

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures
- Identify the reason for the malfunction and correct it before restarting the equipment.

Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Description

See Figure 1

The NEA 430 (High-Density powder, Low-Volume air) powder pump transports large amounts of powder from one location to another.
The pump design and the small diameter suction and delivery tubing used with the pump allow it to be purged quickly and thoroughly.
The pump is more efficient than traditional venturi-style pumps in that very little of the air that is used to operate the pump is mixed into the powder stream. Only the air that is used to move the powder out of the pump and into the delivery tubing enters the powder stream.

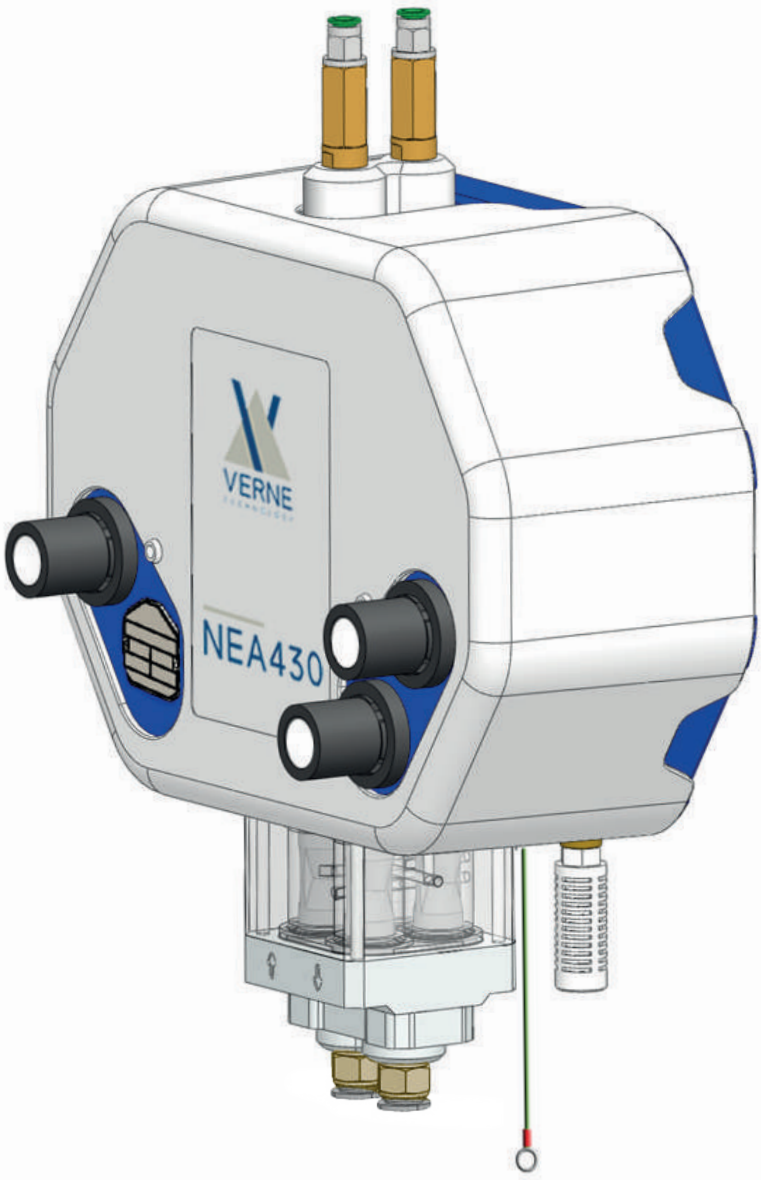


Figure 1
High density pump NEA430

High capacity pump components NEA 430

See figure 2.

n° Item	Description	Function
Air control components		
1	PV3: management valve right tubes	Seek alternate cycles the positive and negative compressed air to the fluidizing tubes.
2	PV4: management valve left tubes	Seek alternate cycles the positive and negative compressed air to the fluidizing tubes.
3	PV2: management valve PINCH VALVES	Seek alternate cycles the compressed air between the valves and the sleeve.
4	PV1: management valve cycle NEA PUMP	Seek alternate cycles the compressed air in the activation cycle valve.
5	Regulator and pressure gauge (SUPPLY)	Adjust the closing pressure Max 0.48 Mpa (4.8 bar)
6	Regulator and pressure gauge (TRANSPORT)	Adjust the transport of the product pressure. Usually set to from 0.07 to 0.1 Mpa (0.7-1.0 bar).
7	Regulator and pressure gauge (PINCH VALVES)	Adjust the closing pressure of the sleeve valves to 0:24 to 0:27 Mpa (2.4-2.7 bar).
8	Silencers	It allows silent operating an air outlet of the pump.
9	VACUUM GENERATORS	Relying on the venturi principle, it generates air negative pressure needed to attract the dust in the fluidization tubes.
10	Timer 1	Check the operating sequences of the following components: valve activation cycle control, valve control fluid tubes. Right. and valve control sleeve valves.
11	Timer 2	Check the operating sequences of the following components: valve activation cycle control, valve control fluid tubes. Right. and valve control sleeve valves.
12	Timer 3	Check the operating sequences of the fluid control valve tubes. Left.
13	Timer 4	Check the operating sequences of the fluid control valve tubes. Left.

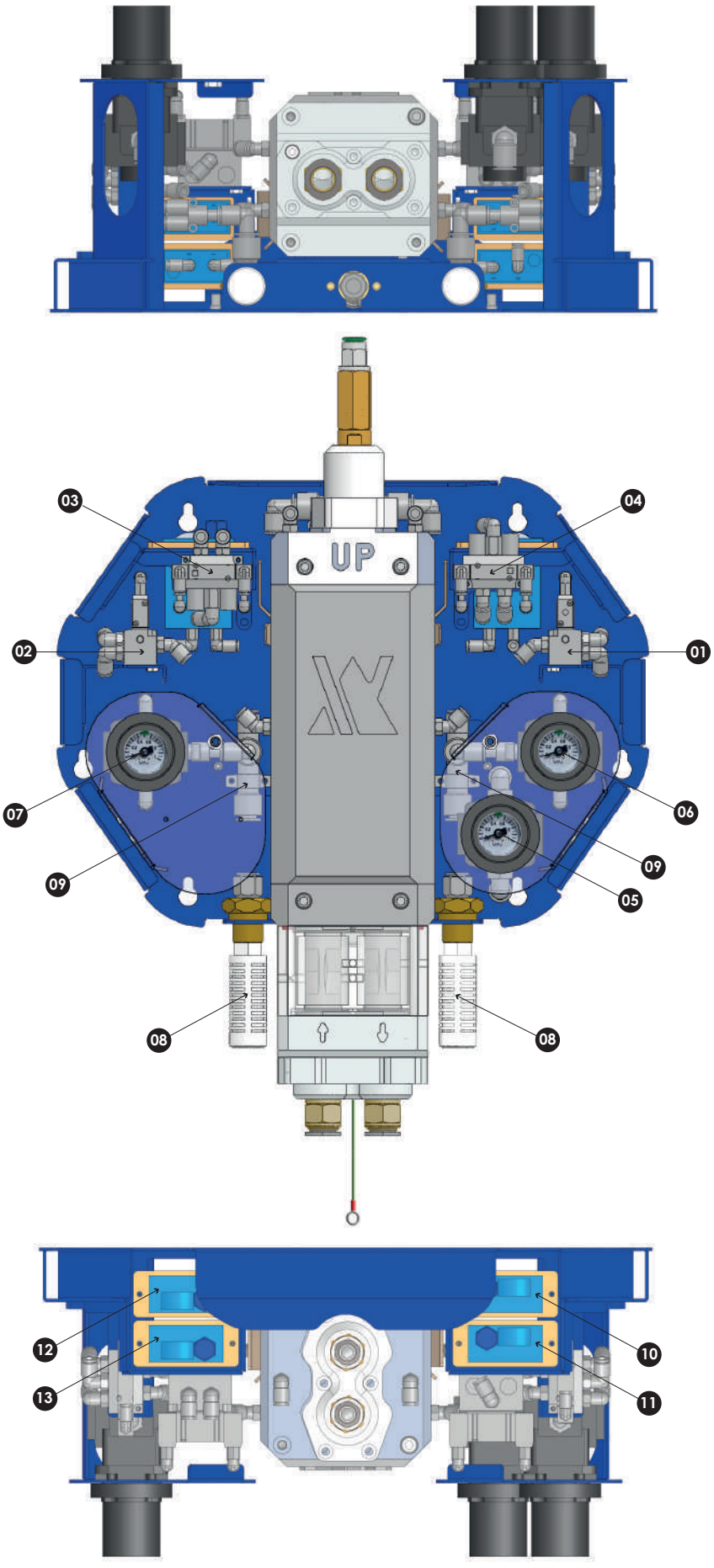


Figure 2
Pump Components
(Internal, cover removal)

Principle of operation

Pumping

The pump NEA 430 is composed of four tanks that alternate in a continuous cycle 4-stroke collection and transport of the powder.

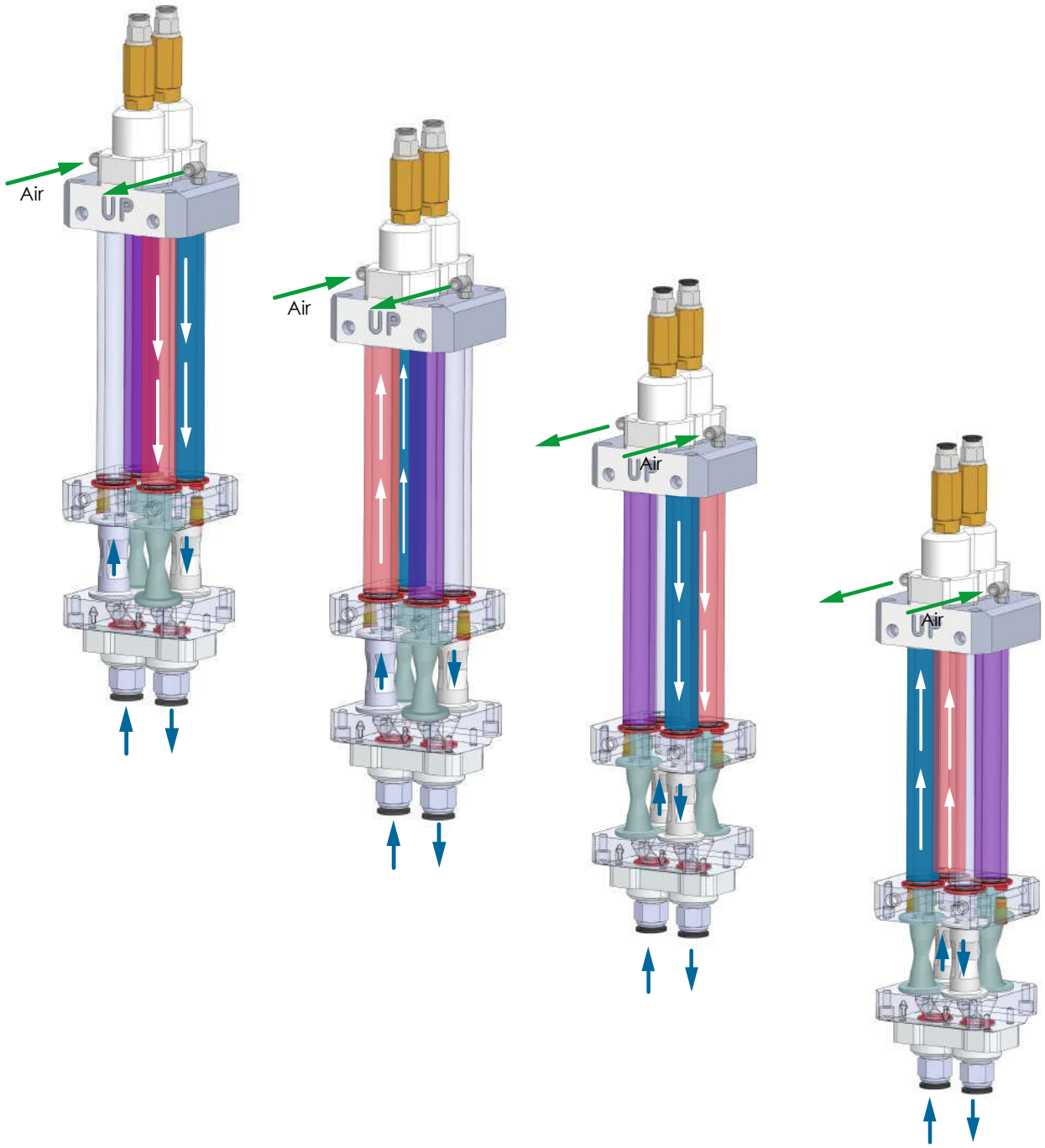


Figure 3
Operating principle - Pumping

Cleaning

The purge process depends on the type of integration of the pump in the line of powder coating system.

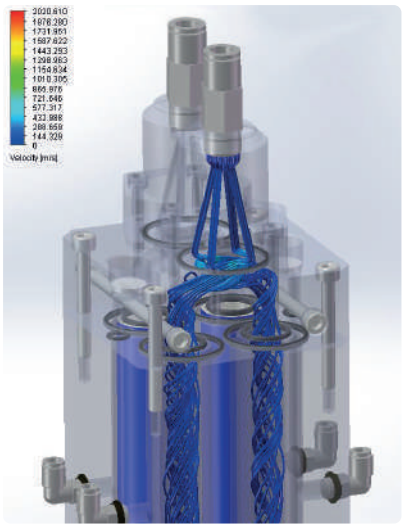
Pre-cleaning:
before starting the "cleaning" frequency, check the valves functionality. Carry out 3 pressure impulses keeping the pump off.

Initial cleaning:
keeping in operation the pump, start the cleaning cycle by entering different air pressure pulses in the cyclonic valves.

Final cleaning:
Turn off the pump and repeat the cleaning cycle.

NOTE: During the purging time the air pressure line runs through the fluidizing tubes, the sleeve valves and out of the pickup-transport lines.
If the purge air is supplied by a central alimentazioneo from a stem delivery system, it is usually pulsed. The pulses are typically active for 500 millisecondie inactive for a few seconds.

If the bleeding is started manually by pressing the purge button on a station manual pump, the bleed air is not pulsed. The purge button is pressed repeatedly to supply air pulse.



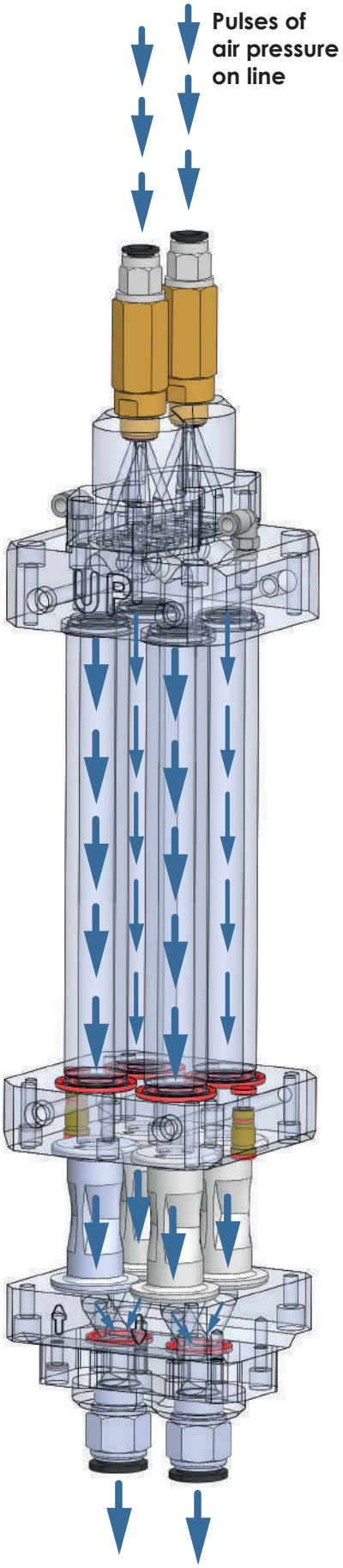
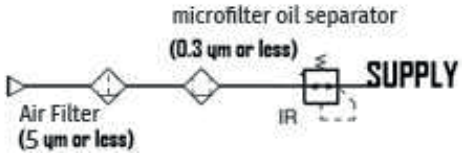


Figure 4
Operating principle - cleaning

Technical data

Flow rate (max)	UP TO: 4 kg/min.
General Supply pressure (min.)	0.6 Mpa (6 bar)
General Supply pressure (max.)	0.8 Mpa (8 bar)
Regulator supply - working pressure	0.48 Mpa (4,8 bar)
Regulator Pinch valve - working pressure	0.24 - 0.27 Mpa (2,4 -2,75 bar)
Purge air	pressure MAX 0.7 Mpa (7 bar)
Regulator Transport - working pressure	0.07 - 0.1 Mpa (0,7-0,1 bar)
Total air consumption	330l /min
Filtered compressed air with the following properties Permissible humidity: 95% non-condensing Operating ambient temperature from +15 to +40	
Intake tube	POLYETHYLENE : D. INT. 12 mm (LONG MAX 3.5 m) ANTISTATIC : D. INT. 12 mm (LONG MAX 3.5 m) BEST RESULT OBTAINABLE USING THE SHORTEST POSSIBLE HOSE
Transporte tube	POLYETHYLENE : D. INT. 12 mm (LONG MAX 30 m) ANTISTATIC : D. INT. 12 mm (LONG MAX 30 m) BEST RESULT OBTAINABLE USING THE SHORTEST POSSIBLE HOSE
Weight/dimensions	Kg 14.5 - See figure 5

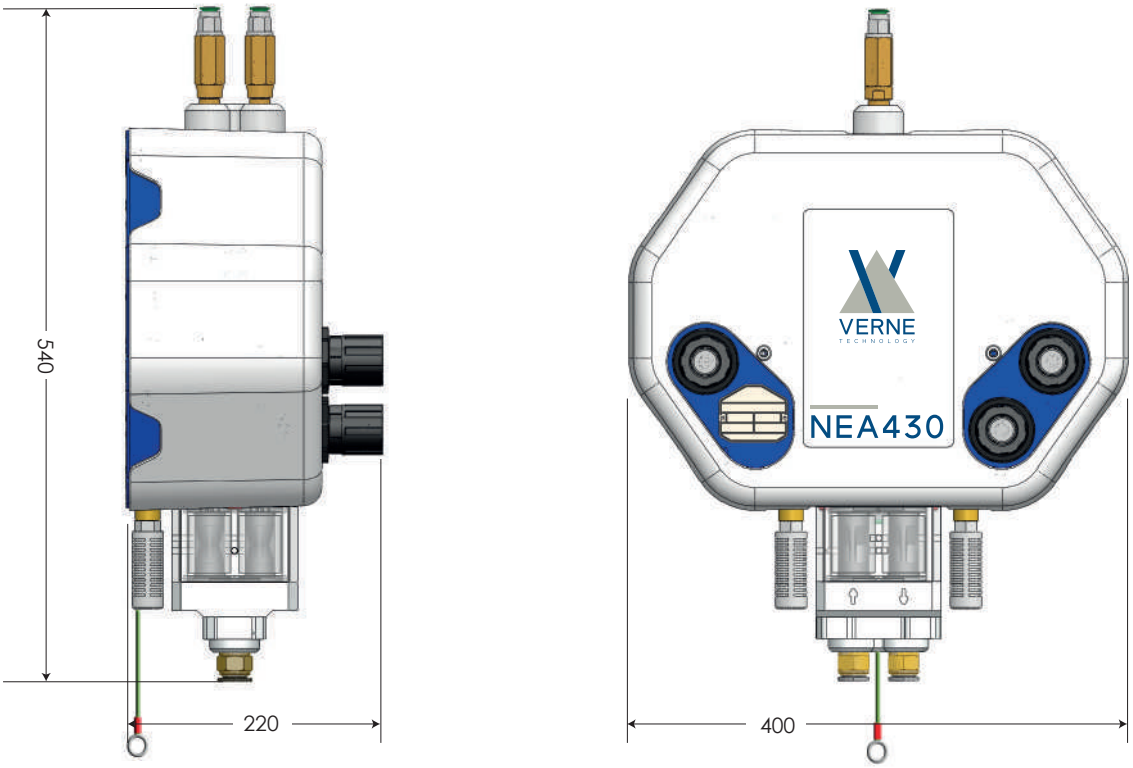
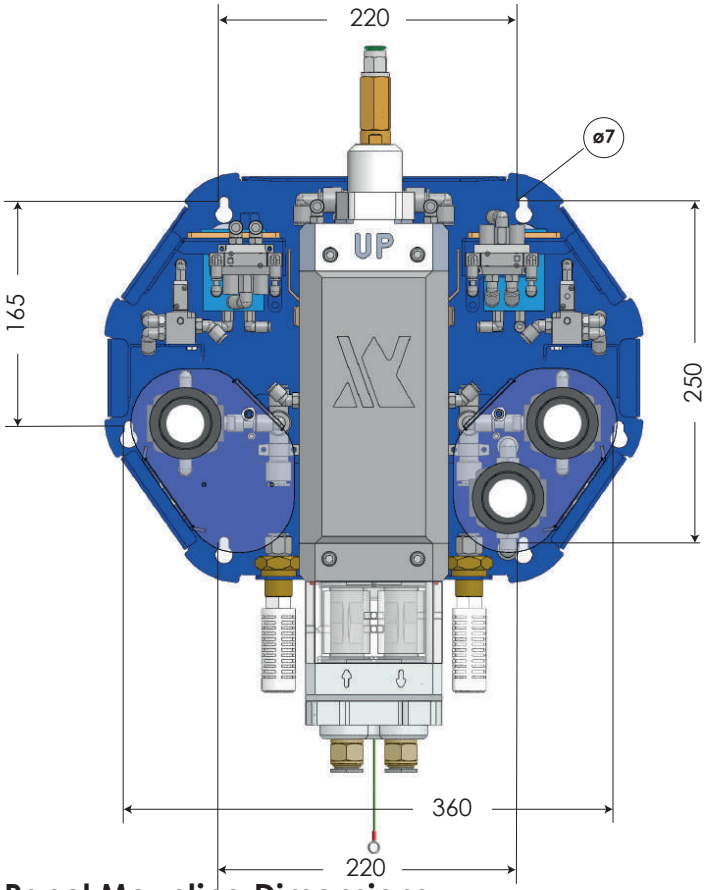


Figure 5 Pump dimensions

Installation

WARNING: The pump must be securely connected to a true earth ground. Failure to ground the pump could result in a fire or explosion.

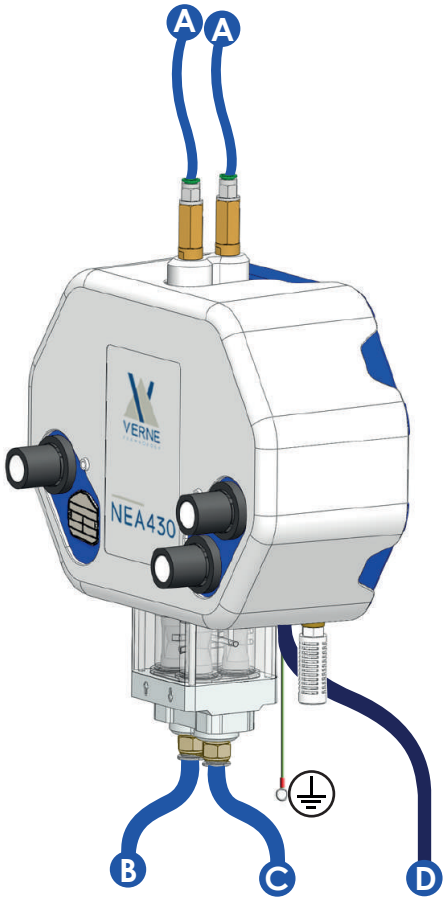
NOTE: The pump is normally mounted on a panel that includes an operating air regulator, and a manual pushbutton and piloted-operated air valve for manual purging. The panel may also include an auxiliary regulator for fluidizing the powder source.



Panel Mounting Dimensions

Use the supplied M6 screws, washers, and nuts to mount the pump.

NOTE: Included are 6 mounting holes and 1 set of ø7 fasteners. Use the six mounting holes that best match your mounting surface.



Tubing Connections

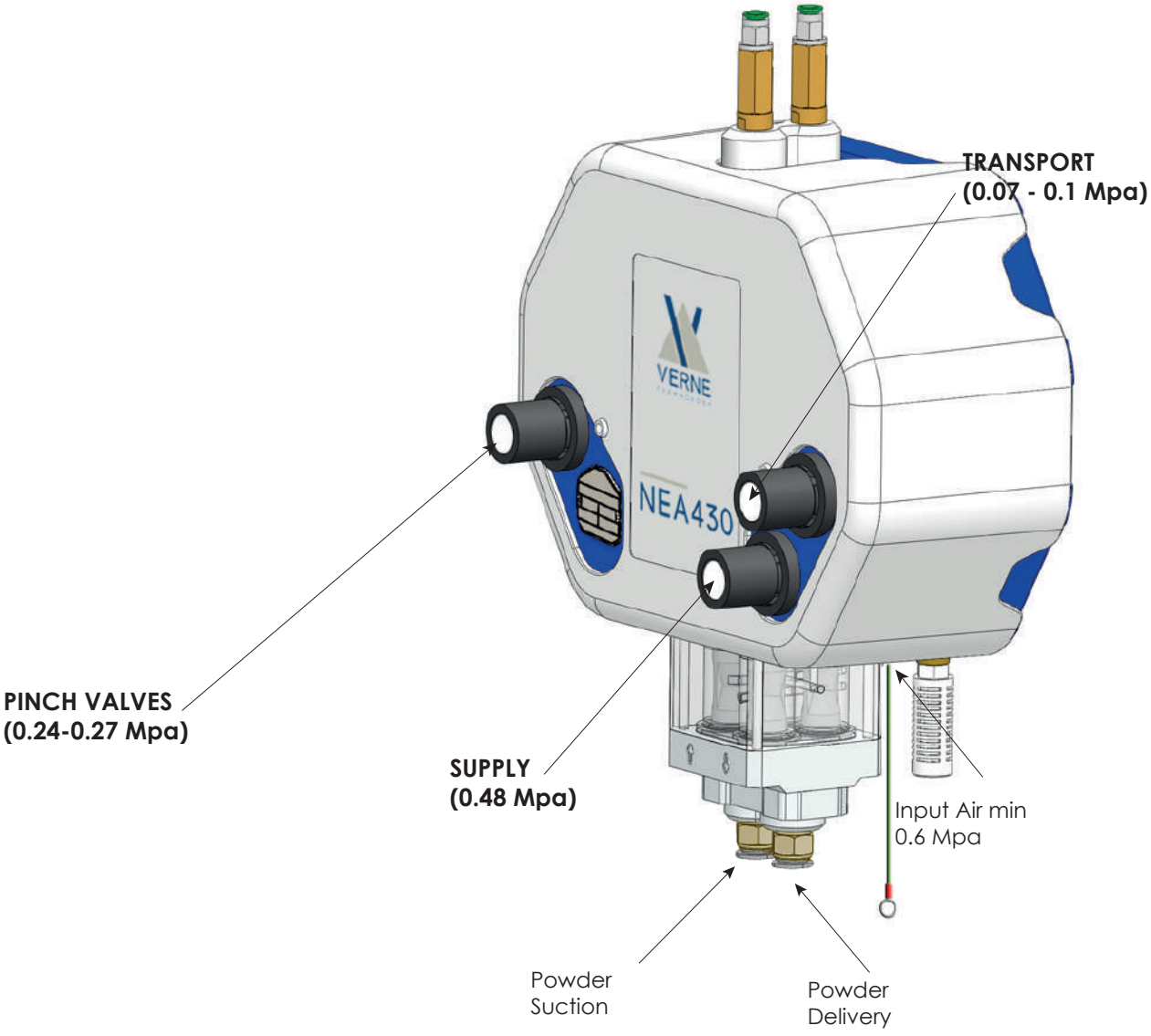
NOTE: For best results, keep the powder suction and delivery tubing as short as possible.

CONNECTION	TYPE	FUNCTION
A	10 mm blue polyurethane tubing	From customer-supplied purge air source 7 bar (0.7 Mpa) max.
B	POLYETHYLENE : ø INT.12 X 16 mm (LONG MAX 3.5m) ANTISTATIC : ø INT.12 mm (LONG MAX 3.5m)	From powder source
C	POLYETHYLENE : ø INT.12 X 16 mm (LONG MAX 30m) ANTISTATIC : ø INT.12 mm (LONG MAX 30m)	To powder destination
D	10 mm blue polyurethane tubing	From input air source min. 6 bar (0.6 Mpa).
⏚	Pump ground wire	To earth ground

Operation

See figure 8.

- To start the pump turn on the air supply operation (min 0.6 Mpa (6 bar)). Set the regulator SUPPLY at 0.48 Mpa (4.8 bar).
- Set the regulator TRANSPORT at 0.07 - 0.1 Mpa (0.7-1 bar).
- Set the regulator PINCH VALVES at 0.24 - 0.27 Mpa (2.4 - 2.7 bar).
- To stop the pump, turn off the operating air supply.

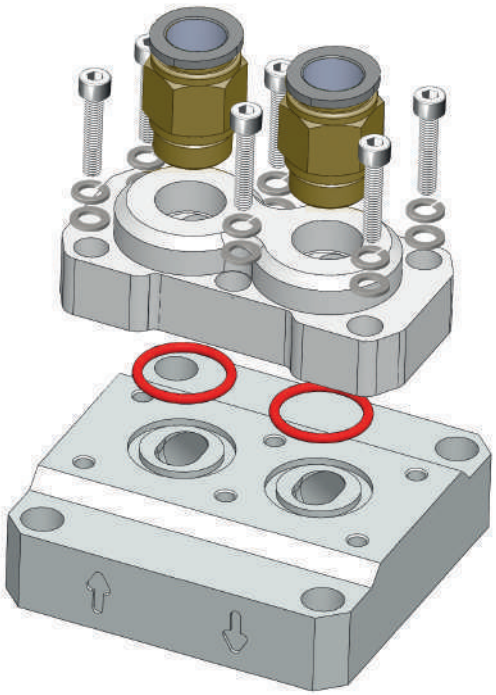
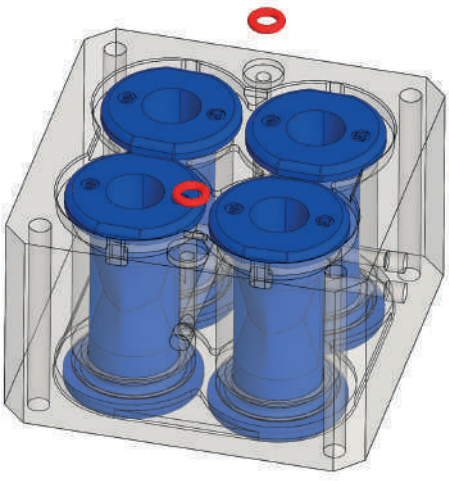


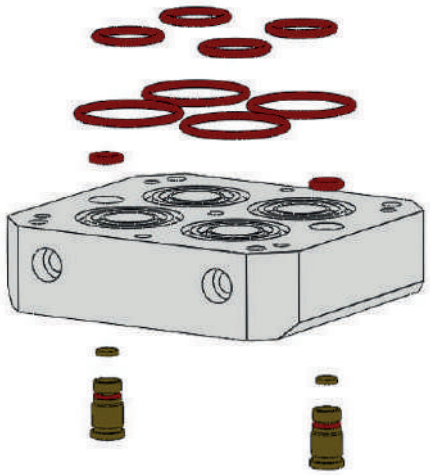
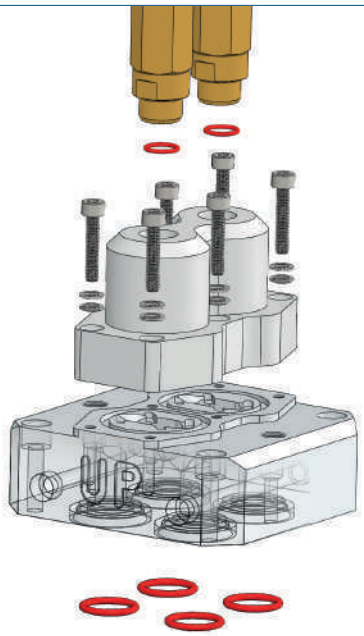
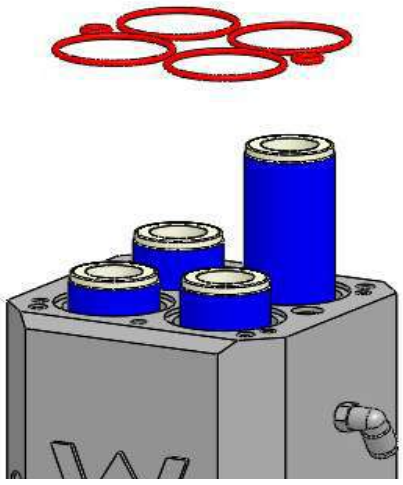
Maintenance

Perform these maintenance procedures to keep your pump operating at peak efficiency.

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

NOTA: You may have to perform these procedures more or less frequently, depending on factors such as operator experience and type of powder used.

Frequency	P/N	Procedure
Every four Months or Each Time You Disassemble the Pump	 **P/N 10037**	Remove INLET-OUTLET BODY from the assembly pump and check if you show signs of wear or sintering. If necessary, clean these components with an apparatus for ultrasonic cleaning.
Daily	 **P/N 10005-XX**	Inspect the PINCH VALVES BODY for signs of powder leakage. If you see powder in the pinch valve body or stress cracks in the pinch valves, replace the pinch valves.

Frequency	P/N	Procedure
Every four Months or Each Time You Disassemble the Pump	 **P/N 10006**	Remove the body from the assembly INTERMEDIATE pump and check if you show signs of wear or sintering. If necessary, clean these components with an apparatus for ultrasonic cleaning.
Every four Months or Each Time You Disassemble the Pump	 **P/N 10038**	Remove the body CYCLONE VALVE from the assembly pump and check if you show signs of wear or sintering. If necessary, clean these components with an apparatus for ultrasonic cleaning.
Every four Months or Each Time You Disassemble the Pump	 **P/N 10009**	Remove the fluidizing tubes and check structural conformity. In case of defects or damage, replace the pipes.

Diagnostics

Problem	Possible cause	Corrective action
1. Reduced powder output (The sleeve valves open and close)	*Lock in the tube towards the destination*	Check the hose presents blocks. Clean the pump.
	Air transport set too high	Decrease air pressure transport.
	Air transport set too short	Increasing the air pressure transport.
	Defective sleeve valve	Replace the sleeve valves.
	Fluidization clogged pipes	Replace the fluidizing tubes.
	Valve PV3 transport air not working	Refer to the diagrams of the pipes. Turn off the pump and disconnect the pipes connected to the pump body. Turn on the pump and check if the tubes have alternating pressure positive and negative air. If there is no pressure, replace the valve. If the valve works, but does not feel positive or negative air pressure in the pipes, check if you are blockages in the air lines that entering and exiting the valve.
	Valve PV4 transport air not working	Refer to the diagrams of the pipes. Turn off the pump and disconnect the pipes connected to the pump body. Turn on the pump and check if the tubes have alternating pressure positive and negative air. If there is no pressure, replace the valve. If the valve works, but does not feel positive or negative air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	TIMER T3 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T4 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.

Diagnostics

Problem	Possible cause	Corrective action
2. Reduced powder output (The sleeve valves do not open and close)	*Defective sleeve valve*	Replace the sleeve valves.
	Defective non-return valve	Replace the non-return valves.
	PV2 valve of pressure suction not working	Turn off the pump and disconnect the tubes connected to CYCLONIC VALVE. Turn on the pump and check if the tubes have alternating positive air pressure. If there is no pressure, replace the valve. If the valve works, but You do not feel air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	PV1 valve cycle release Recovery / Transport	Turn off the pump and disconnect the tubes output from the respective fittings. Turn on the pump and check if the tubes have alternating positive air pressure. If there is no pressure, replace the valve. If the valve works, but You do not feel air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	TIMER T1 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T2 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T3 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the outlet (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T4 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.

Diagnostics

Problem	Possible cause	Corrective action
3. Reduced dust Input (Loss of suction from the source of dust)	*Blockage in dust tube from power source*	Check if the tube has blocks. Purge the pump.
	Loss from vacuum generators empty	Check the vacuum generators are contaminated. Check the exhaust silencers. If the exhaust silencers are clogged, replace them.
	O-rings damaged in the path dust	Check all O-rings of the trail dust. Replace O-ring damaged or worn.
	Fluidization clogged pipes	Sostituire i tubi di fluidizzazione.
4. Pinch Valves that quickly spoil, with cracks around the flange	*The powder is tribo-charging in pump and has a grounding through the sleeve valves*	Install kit P / n 10034 valves black sleeve - NON CONDUCTIVE.

Repair

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

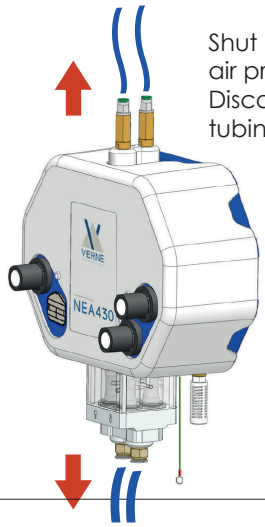
WARNING: Shut off and relieve system air pressure before performing the following tasks. Failure to relieve air pressure may result in personal injury.

Fluidizing Tube Replacement

NOTE: In the fluidization tube kits I am including four O-rings. Replace O-rings if they are worn. It is not necessary to replace the o-ring every time you replace the fluidizing tubes.

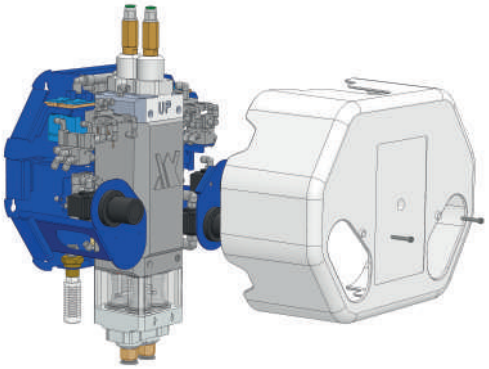
1

Shut off and relieve purge air pressure.
Disconnect the purge air tubing.



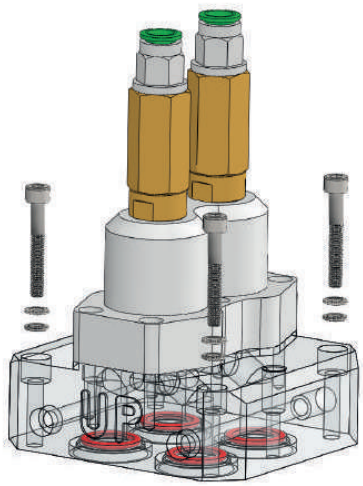
2

Remove the cover, unscrew the 4 anchor screws from the base, disconnect the tubes and remove the body pump.



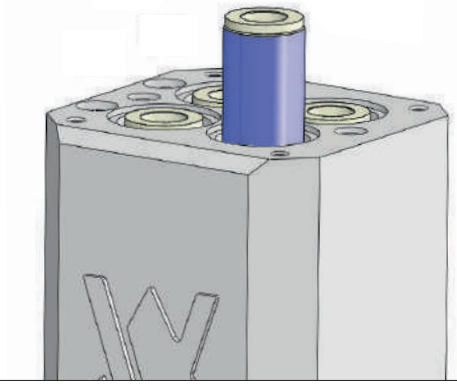
3

Unscrew the 4 screws. Separate the CYCLONE VALVE ASSEMBLED (P / N 10038) by the aluminum body (P / N 10008).



4

Remove the tubes and replace them with new ones, also change the O-rings present in the replacement kit, reassembly.



Pump Disassembly

WARNING: Shut off and relieve system air pressure before performing the following tasks. Failure to relieve air pressure may result in personal injury.

NOTE: Tag all air and powder tubing before disconnecting from the pump.

1. See figure 9. Disconnect the purge air lines from the top of the pump.

2. Disconnect the inlet and outlet powder tubing from the bottom of the pump.

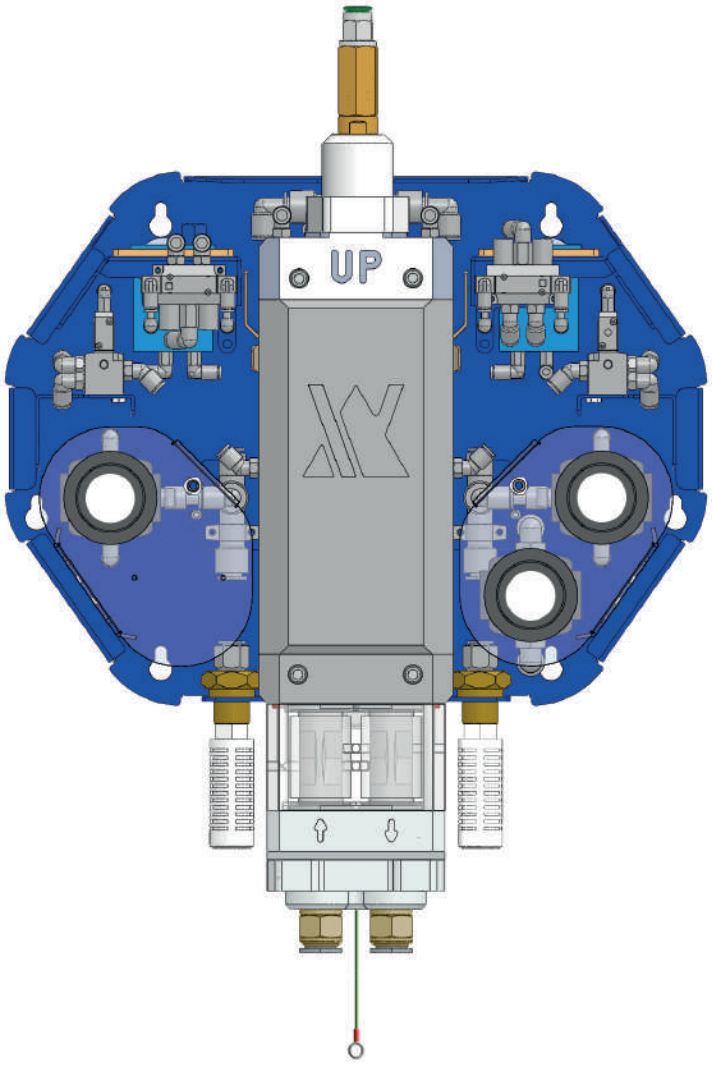
3. Remove the two screws (A) and the cover from the pump.

4. See figure 9. Disconnect one end of each of the air tubes indicated.

5. See figure 10. Remove the four screws (B) securing the pump assembly to the base.

6. See Figure 11. Starting with the fluidizing tubes, disassemble the pump as shown.

NOTA: Refer to Pinch Valve Replacement on page 21 for instructions on pulling the pinch valves out of the pinch valve body.



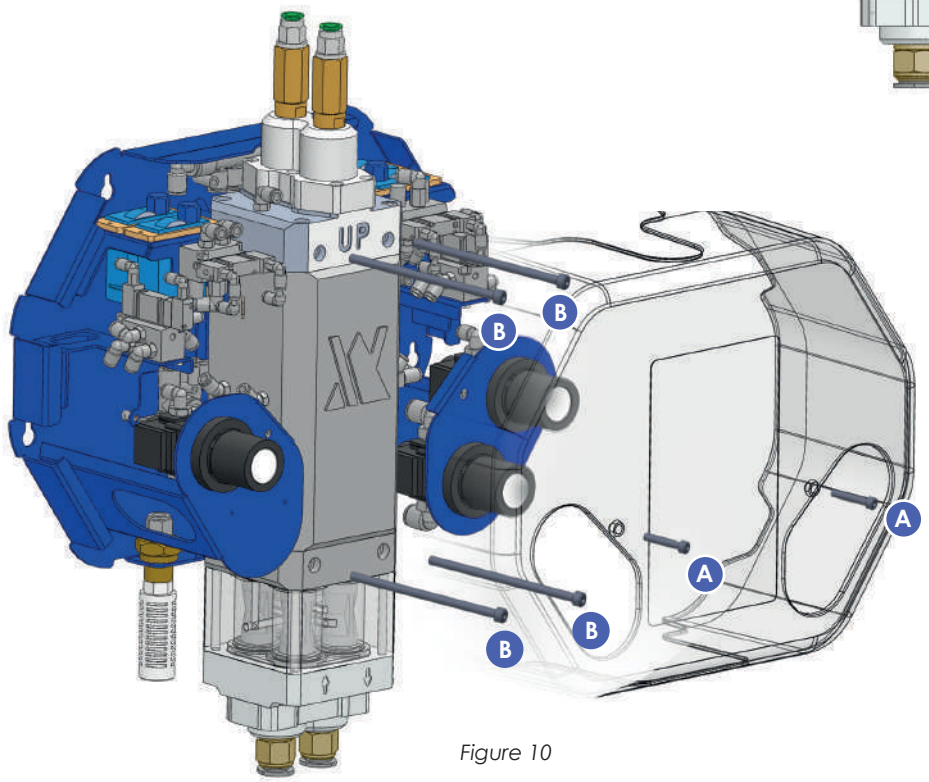


Figure 10

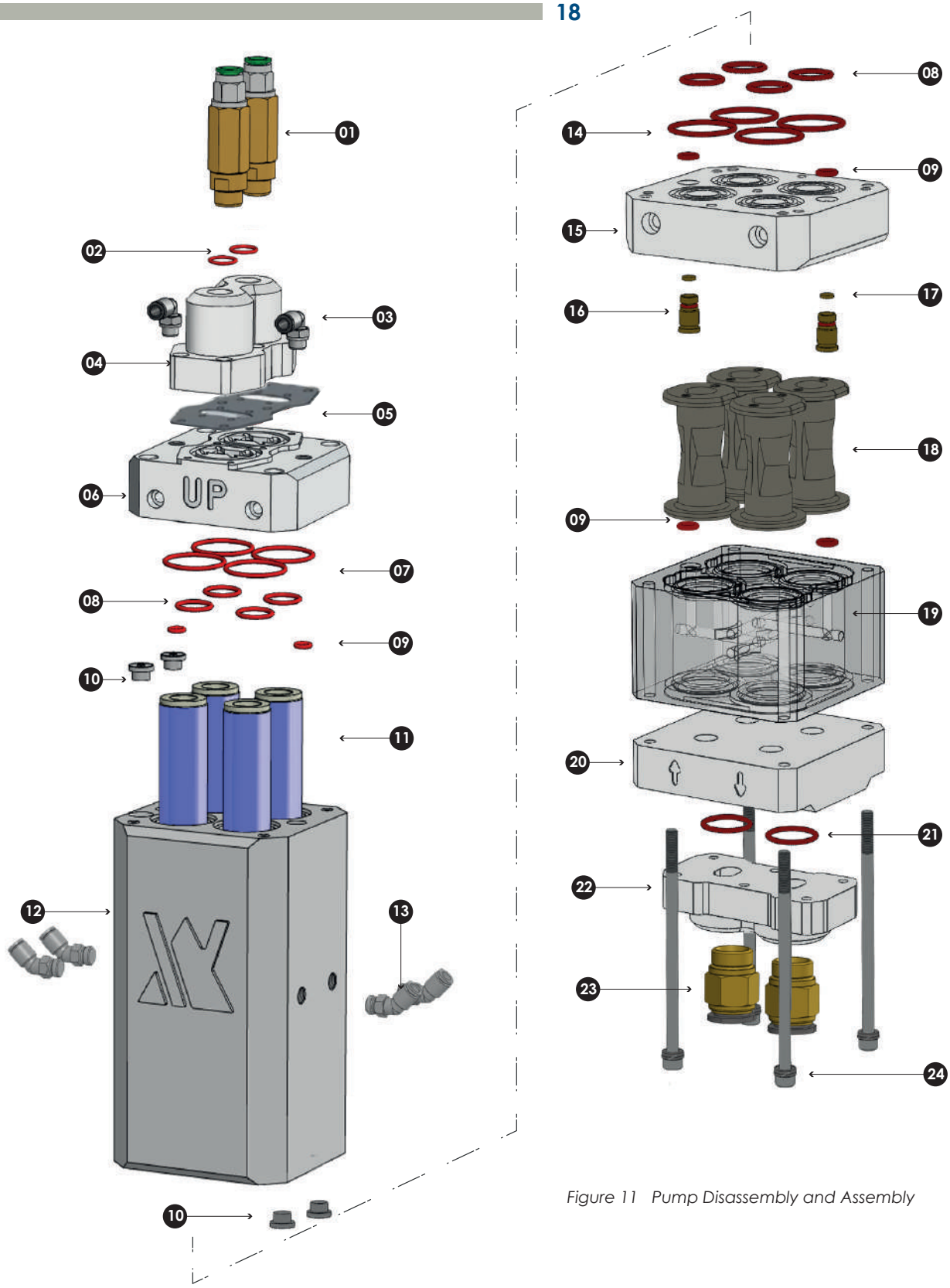


Figure 11 Pump Disassembly and Assembly

1. Valve G3/8"- 10 SPECIAL
2. O-Ring Silicone 2037
3. Elbow G1/8"-6

4-6. Cyclonic valve Body

5. Cyclonic gasket
7. O-Ring Silicone 3131
8. O-Ring Silicone 123
9. O-Ring Silicone 3024
10. Stopper G1/8"
11. Fluidizing Tubes
12. Fluidizing Tubes Body
13. Elbow 45° G1/8"-6
14. O-Ring Silicone 3118
15. Intermediate Body

16 Compass Filter Brass

17. Filter Brass
18. Pinch Valves
19. Pinch Valves Body

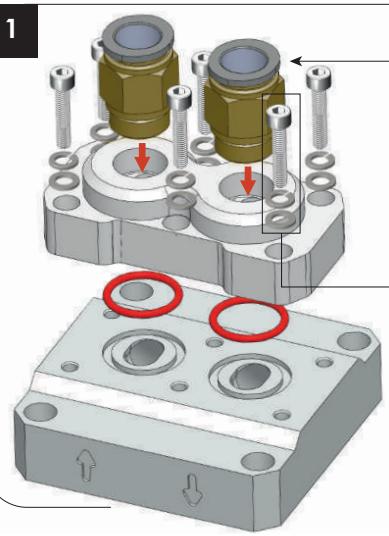
20-22. Inlet - outlet Body

21. O-Ring Silicone130
23. Fittings G1/2"-16 SPECIAL
24. Screw assembly 120mm M6 INOX

Pump Assembly

CAUTION: Follow the assembly order and specifications shown. Pump damage may occur if you do not carefully follow the assembly instructions.

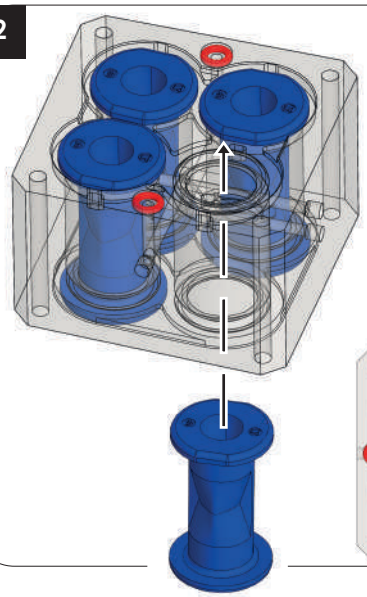
1



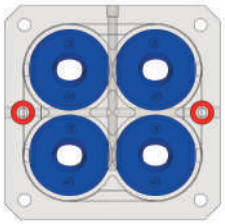
WARNING: Tighten the stop connections to prevent air leakage and product.

nr°6 M5x25
nr°6 grover ø5
nr°6 washer ø5

2



See *Replacing the PINCH VALVE* on page 21 for specific instructions.



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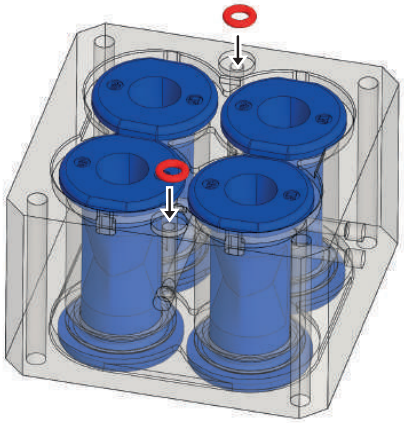

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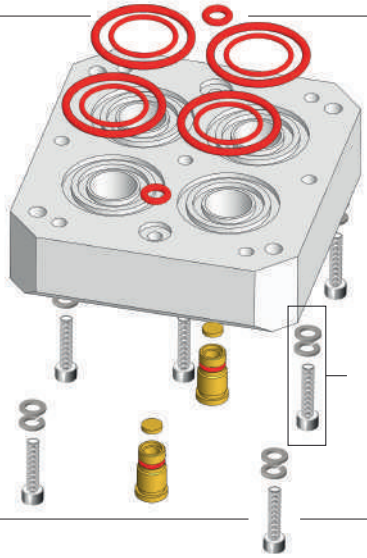
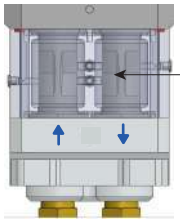


WARNING: Insert before ALL O-RING then tighten the screws 7 M5 on the central aluminum body

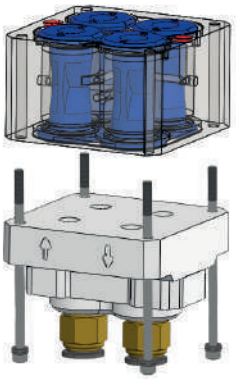
nr°7 M5x35
nr°7 grover ø5
nr°7 washer ø5

5

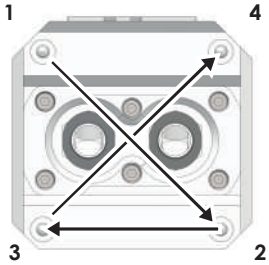
WARNING:
Be careful when mounting pinch bodies!



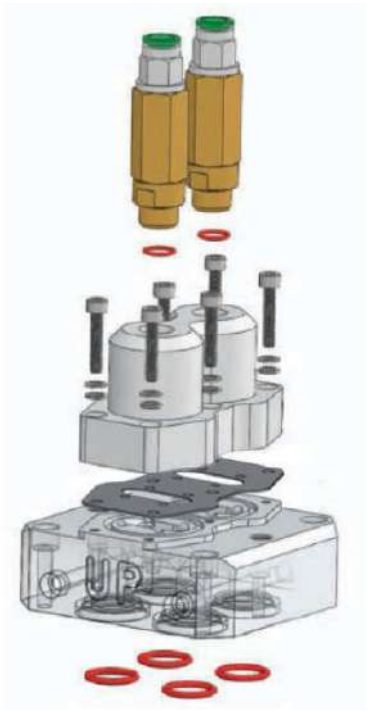
BOTTOM: caps must **BE BEHIND**



Tighten screws two turns at a time to 7–10 in. lb using an alternating pattern.



6



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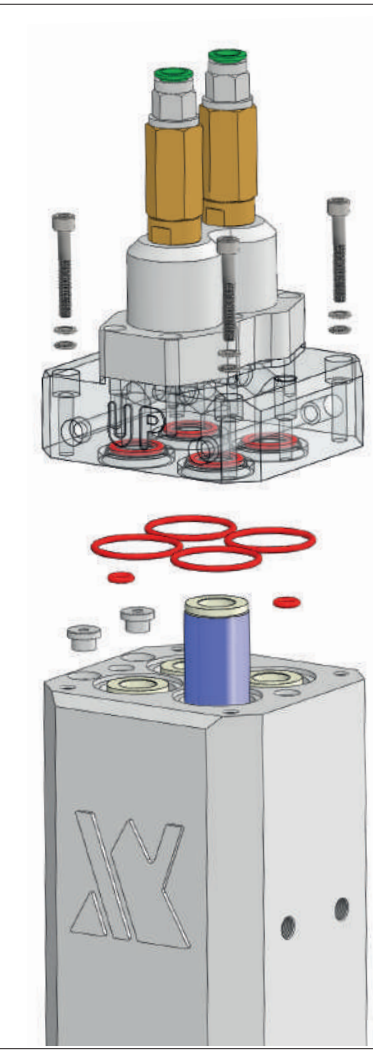

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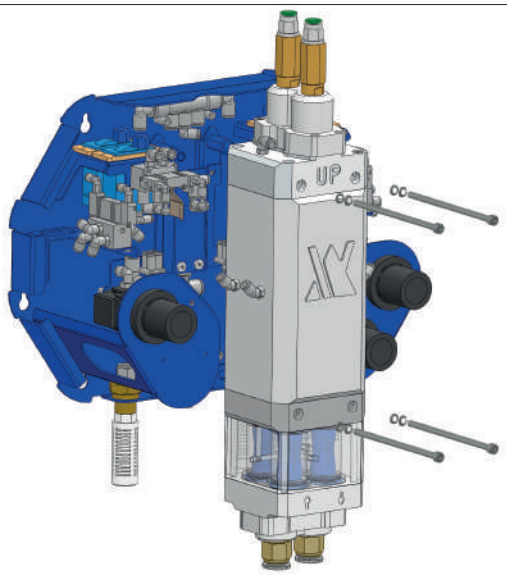

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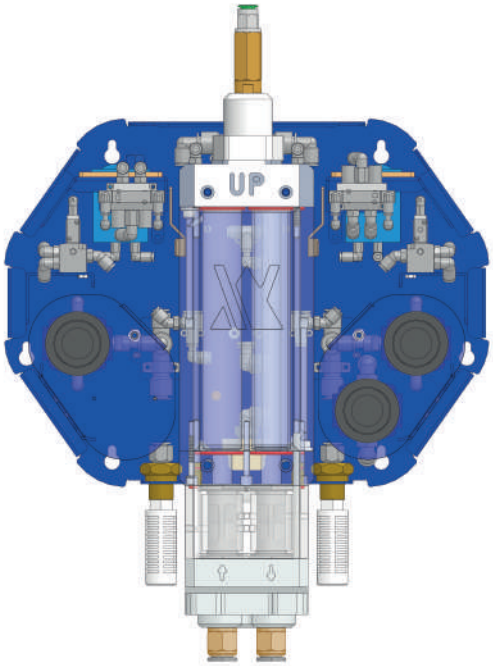

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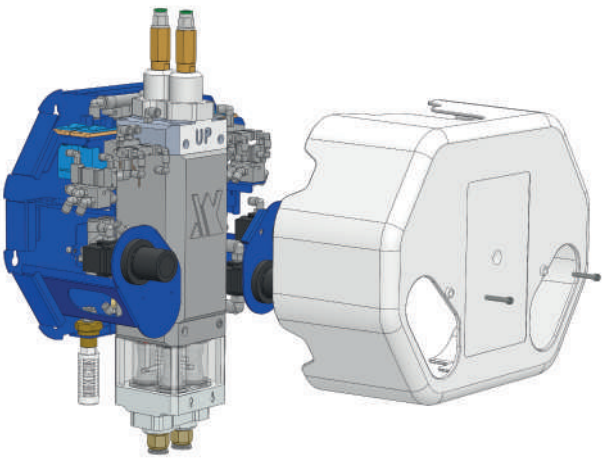


Substitution of the PINCH VALVES

WARNING: Wear eye protection while performing this procedure. The pinch valves will quickly snap back to their normal shape when you pull them out of the pinch valve body.

NOTE: In the upper flanges of the sleeve valves is modeled after the word UP

NOTE: Replace the filter discs (included in the pinch valves kit) when replacing the valves

Pinch Valve Removal

1

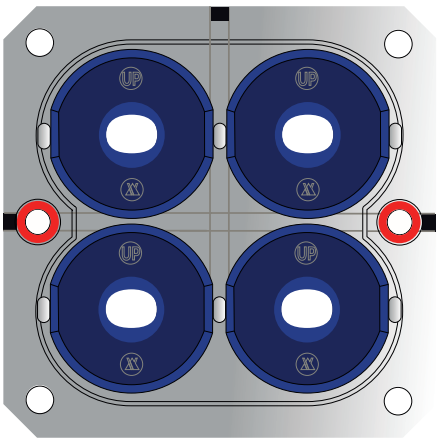
Place the pinch valve body in a padded vise with the bottom end facing you. Grasp and pull the bottom end of the pinch valve with one hand.

2

Use your other hand to pinch the flange on the opposite end of the pinch valve.

3

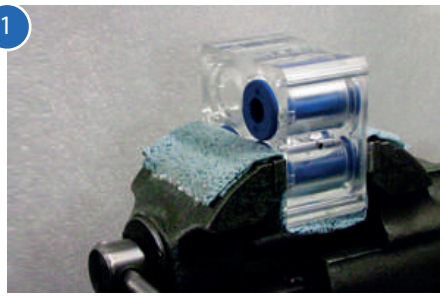
Pull the pinch valve firmly until it comes out of the pinch valve body.



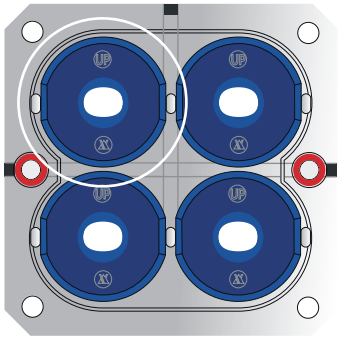
Installing the pinch valves

NOTE: All pinch valves intended for repeated contact with food must be cleaned thoroughly prior to their first use.

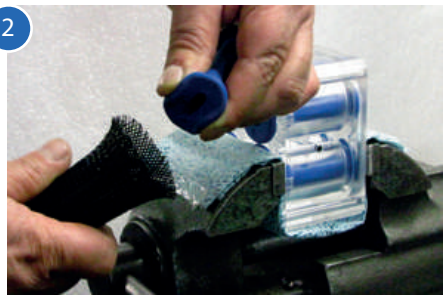
1



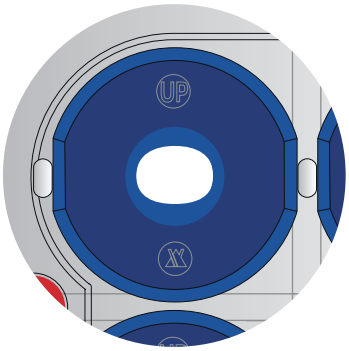
Turn the body of the pinch valves so as to have in front of the upper side.



2



After putting the valve in the tool insertion, flatten the flange on the end of the valve UP.



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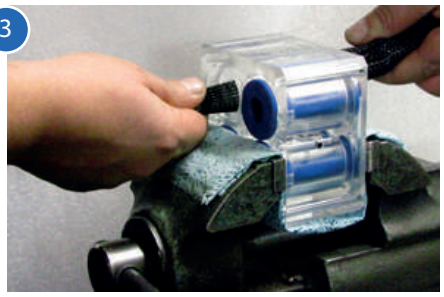


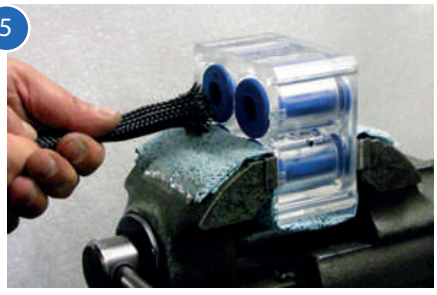
Insert the end of the valve in the tool HIGHER for the insertion of the pinch valves.
Compress the UP end of the flange and introduce the small end into the flattened flange, inside the pinch valves.

NOTES: Observe the straight side of the valve as in the figure or the pinch valves NOT RUN '.

4

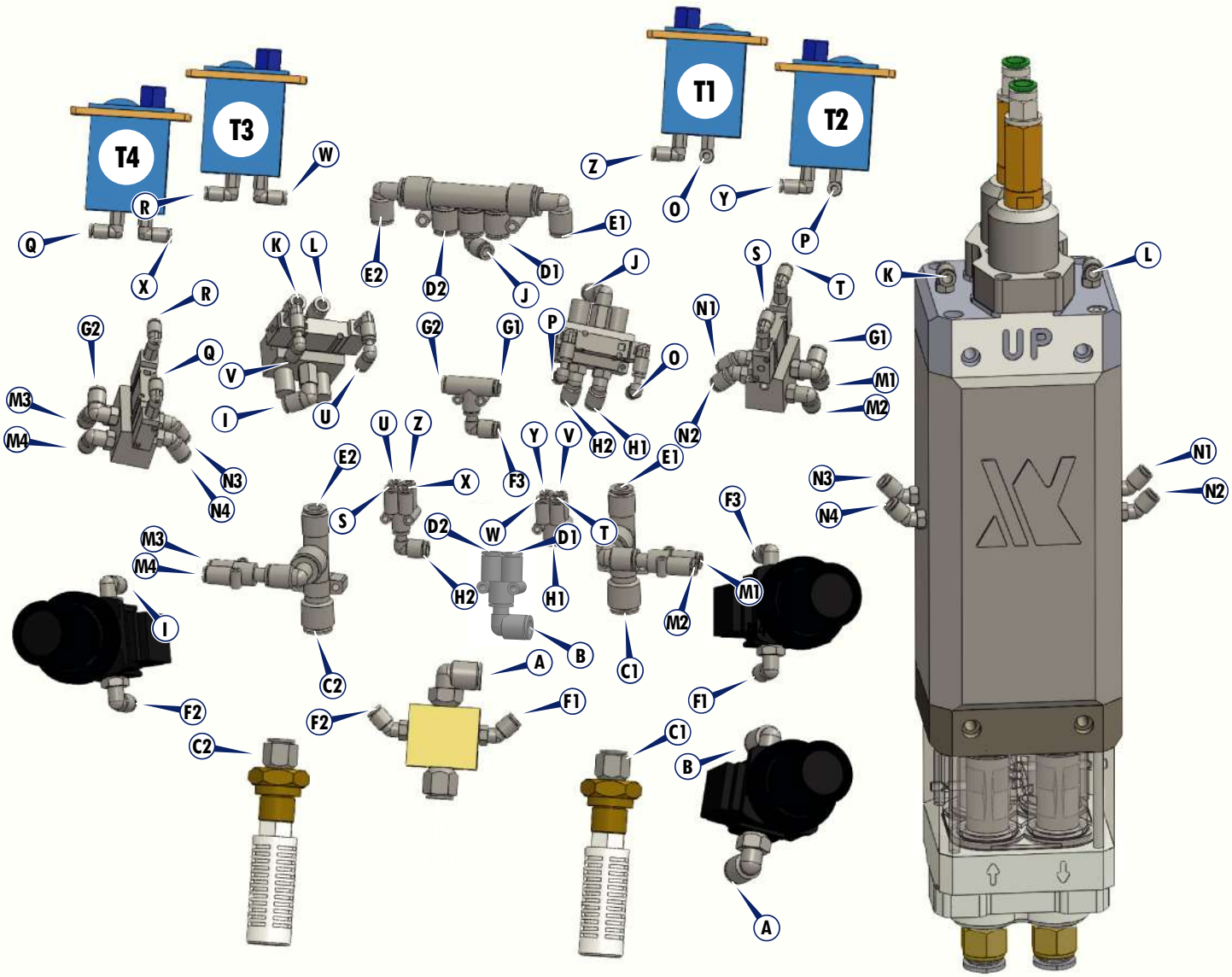
While it compresses the UP end of the flange, pull the tool itself.

5



Pull the insertion tool through the valve body, until the end of the valve UP and the insertion tool out of the upper side of the body of the pinch valves.

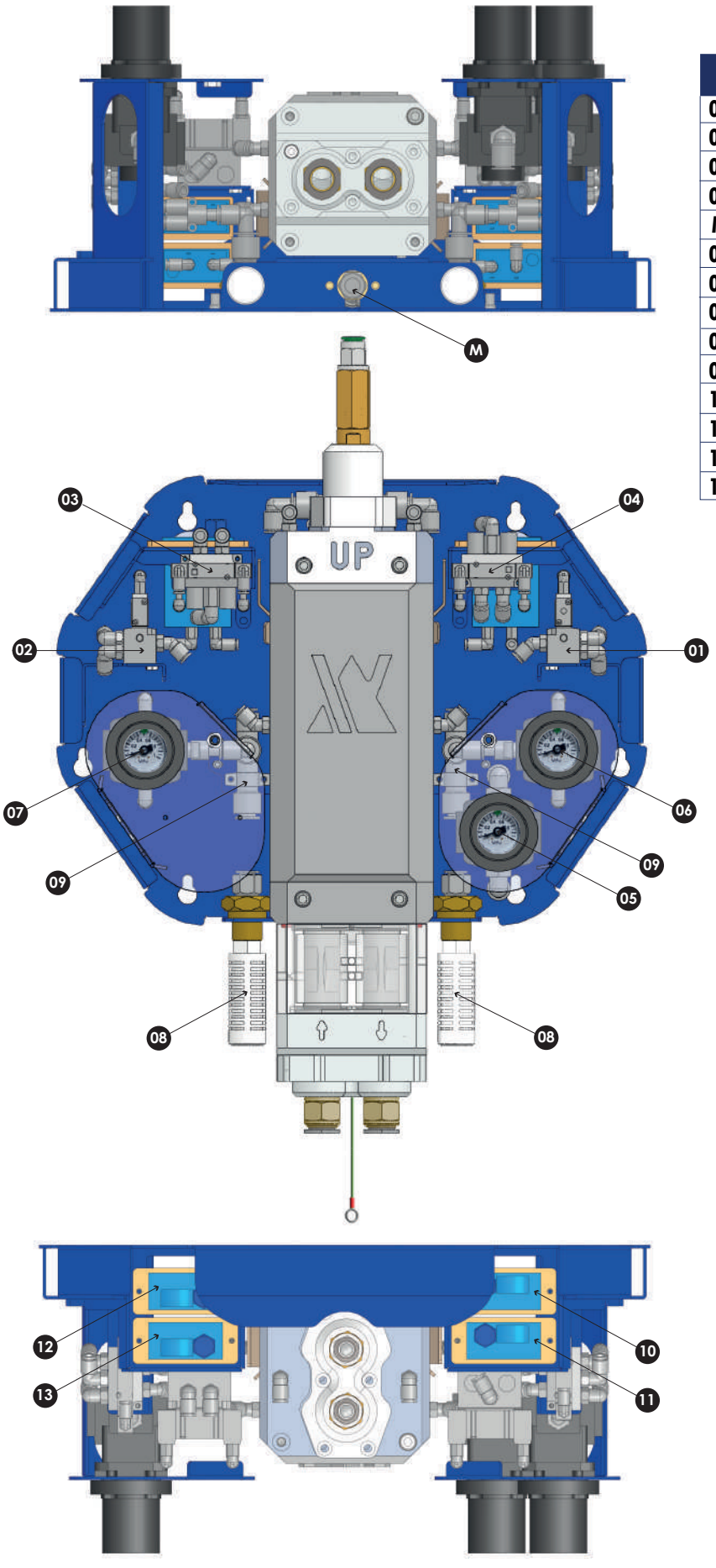
Diagrams of the tubes



	D.E/I	color	lenght mm
A-A	10x8 mm	blue	150
B-B	10x8 mm	blue	140
C1-C1	10x8 mm	blue	67
C2-C2	10x8 mm	blue	67
D1-D1	8x6 mm	l.blue	145
D2-D2	8x6 mm	l.blue	145
E1-E1	8x6 mm	l.blue	155
E2-E2	8x6 mm	l.blue	155
F1-F1	6x4 mm	clear	185
F2-F2	6x4 mm	clear	185
F3-F3	6x4 mm	clear	185
G1-G1	6x4 mm	clear	205
G2-G2	6x4 mm	clear	205
I-I	6x4 mm	clear	200
H1-H1	6x4 mm	clear	230

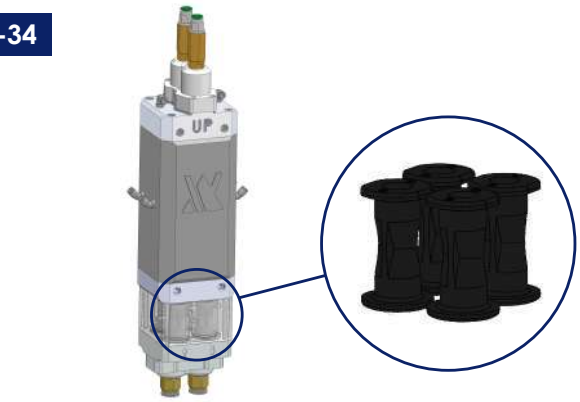
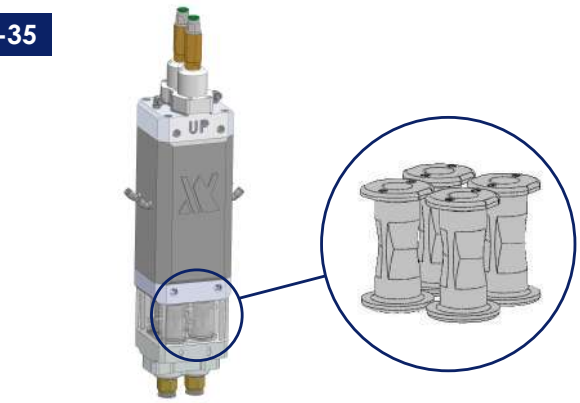
	D.E/I	color	lenght mm
H2-H2	6x4 mm	clear	230
J-J	6x4 mm	clear	150
K-K	6x4 mm	clear	110
L-L	6x4 mm	clear	185
M1-M1	6x4 mm	clear	98
M2-M2	6x4 mm	clear	98
M3-M3	6x4 mm	clear	98
M4-M4	6x4 mm	clear	98
N1-N1	6x4 mm	clear	80
N2-N2	6x4 mm	clear	80
N3-N3	6x4 mm	clear	80
N4-N4	6x4 mm	clear	80

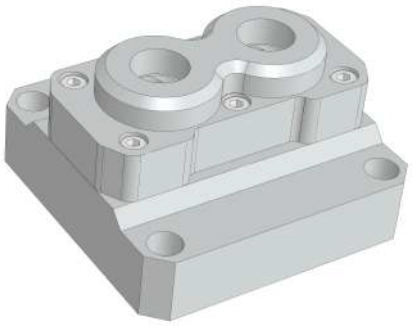
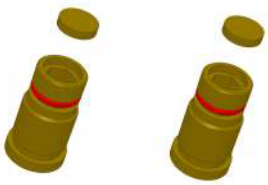
	D.E/I	color	lenght mm
O-O	4x1.5 mm	clear	165
P-P	4x1.5 mm	clear	165
Q-Q	4x1.5 mm	clear	130
R-R	4x1.5 mm	clear	130
S-S	4x1.5 mm	clear	300
T-T	4x1.5 mm	clear	300
U-U	4x1.5 mm	clear	300
V-V	4x1.5 mm	clear	300
W-W	4x1.5 mm	clear	165
X-X	4x1.5 mm	clear	165
Y-Y	4x1.5 mm	clear	165
Z-Z	4x1.5 mm	clear	165

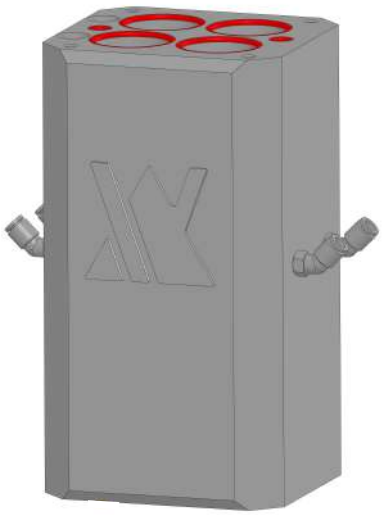
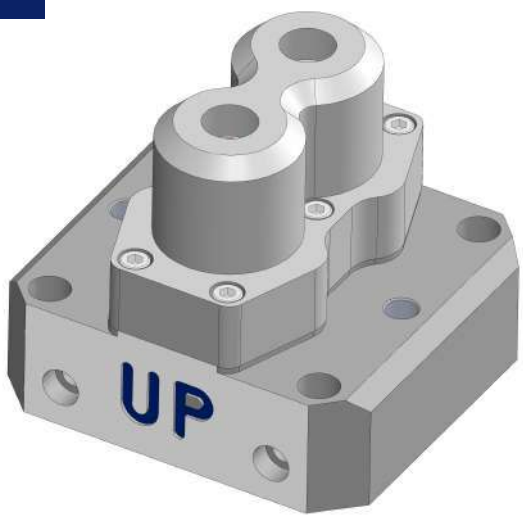


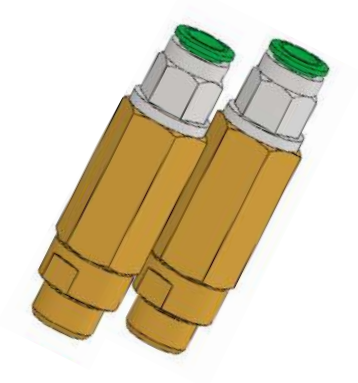
	ACRONYM	Part Number (PN)
01	PV3	10019
02	PV4	10020
03	PV2	10018
04	PV1	10017
M	Manifold NEA 430	10031-430
05	Reg. SUPPLY 1/4" | 1Mpa_10 | 10	10025
06	Reg. TRANSPORT 1/4" | 0,2 Mpa_6 | 6	10027
07	Reg. PINCH VALVES 1/4" | 1 Mpa_6 | 6	10026
08	MUFFLER	10021
09	VACUUM	10023
10	Timer T0.7	10013
11	Timer T0.7	10014
12	Timer T0.35	10015
13	Timer T0.35	10016

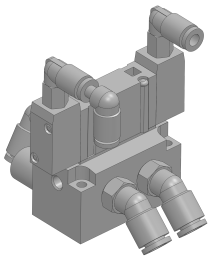
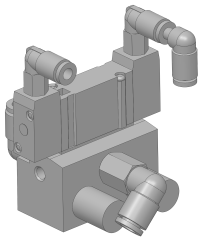
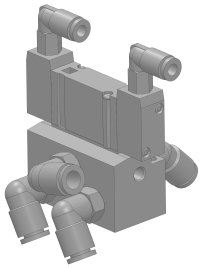
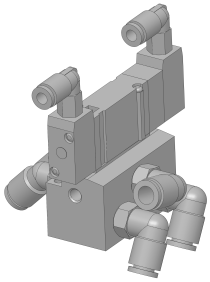
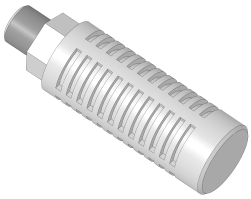
Figure 2
Pump Components
(Internal, cover removal)

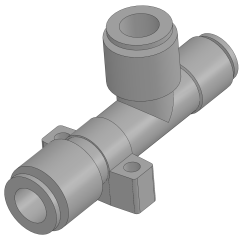
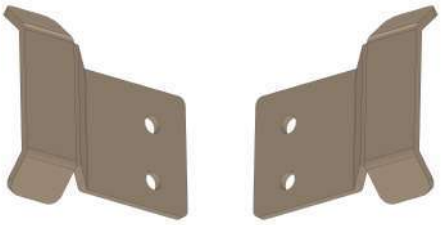
ITEM P/N:		Pcs	Description
10001-34		1	NEA 430 (ASSEMBLED) - WITH P/N 10034
10001-35		1	NEA 430 (ASSEMBLED) - WITH P/N 10035
10002-34		1	PUMP BODY (ASSEMBLED) - NEA 430 WITH P/N 10034
10002-35		1	PUMP BODY (ASSEMBLED) - NEA 430 WITH P/N 10035

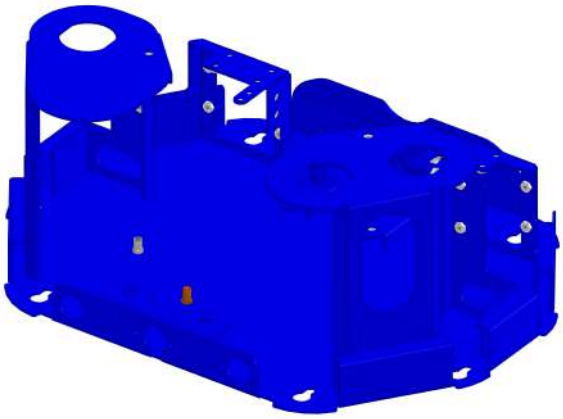
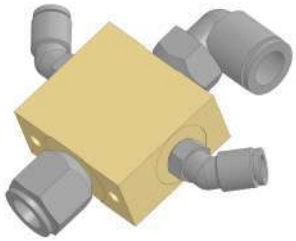
ITEM P/N:		Pcs	Description
10003		2	BRASS FITTINGS G1/2"-16 SPECIAL
10004		1	INLET-OUTLET BODY - NEA 430
10005		1	PINCH VALVES HOUSING BODY - NEA 430 ***INCLUDED:*** 2 pcs O-Ring 3024
10006		1	INTERMEDIATE BODY -NEA 430
10007		2	COMPASS FILTER BRASS - NEA 430 ***INCLUDED:*** 2 pcs in sinterized brass for COMPASS 2 pcs O-Ring 3024 2 pcs O-Ring 6x1,5

ITEM P/N:		Pcs	Description
10008		1	FLUIDIZING TUBES HOUSING BODY NEA 430 ***INCLUDED:*** 2 pcs O-Ring Silicone 3024 4 pcs O-Ring Silicone 3131 All Fittings
10009		4	FLUIDIZING TUBES - NEA 430 ***INCLUDED:*** 8 pcs O-Ring Silicone 123
10010		1	CYCLONIC VALVE BODY - NEA 430

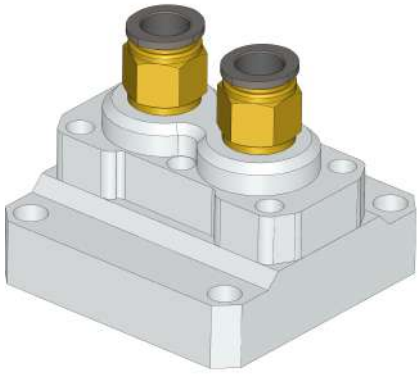
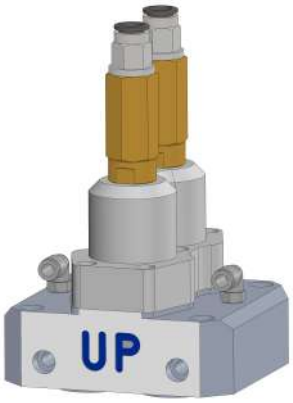
ITEM P/N:		Pcs	Description
10011		2	VALVE G3/8"-10 SPECIAL ***INCLUDED:*** 2 pcs O-Ring Silicone 2037
10013		1	TIMER T1- NEA 430 ***INCLUDED:*** 2 pcs Fittings
10014		1	TIMER T2- NEA 430 ***INCLUDED:*** 2 pcs Fittings
10015		1	TIMER T3- NEA 430 ***INCLUDED:*** 2 pcs Fittings
10016		1	TIMER T4- NEA 430 ***INCLUDED:*** 2 pcs Fittings

ITEM P/N:		Pcs	Description
10017		1	PV1- NEA 430 ***INCLUDED:*** All Fittings
10018		1	PV2- NEA 430 ***INCLUDED:*** All Fittings
10019		1	PV3- NEA 430 ***INCLUDED:*** All Fittings
10020		1	PV4- NEA 430 ***INCLUDED:*** All Fittings
10021		2	MUFFLER - NEA 430

ITEM P/N:		Pcs	Description
10023		2	VACUUM GENERATOR- NEA 430
10025		1	REGULATOR SUPPLY 1/4"- 1 Mpa_10|10 ***INCLUDED:*** All Fittings
10026		1	REGULATOR 1/4" - 1Mpa _6|6 ***INCLUDED:*** All Fittings
10027		1	REGULATOR 1/4" - 0,2 Mpa_6|6 ***INCLUDED:*** All Fittings
10028		2	SPRING - NEA 430 ***INCLUDED:*** Ground wire

ITEM P/N:	Pcs	Description
10029 	1	METAL BASE - NEA 430
10030 	1	COVER - NEA 430
10031-430 	1	MANIFOLD - NEA 430 ***INCLUDED:*** All Fittings
10032 	All	GASKET KIT CYCLONIC + O-RING SILICONE PUMP BODY - NEA 430

ITEM P/N:		Pcs	Description
10034		4	PINCH VALVES BLACK NO CONDUCTION - NEA 430 ***INCLUDED:*** 2pcs O-Ring Silicone 3024 2pcs Filter brass Sinterized 1pcs Sheath's mounting 2 pcs O-Ring 6x1.5
10035		4	PINCH VALVES GREY - FOOD & PHARMA USE - NEA 430 ***INCLUDED:*** 2pcs O-Ring Silicone 3024 2pcs Filter brass Sinterized 1pcs Sheath's mounting 2 pcs O-Ring 6x1.5
10005-34		1	PINCH VALVES HOUSING BODY - NEA 430 - WITH PN 10034 ***INCLUDED:*** 2 pcs O-Ring Silicone 3024 2 pcs Filter
10005-35		1	PINCH VALVES HOUSING BODY - NEA 430 - WITH PN 10035 ***INCLUDED:*** 2 pcs O-Ring Silicone 3024 2 pcs Filter

ITEM P/N:		Pcs	Description
10037		1	INLET-OUTLET BODY - NEA 430 WITH PN 10003
10038		1	CYCLONIC VALVE BODY ASSEMBLED - NEA 430
10039		1	TUBE - POLYETHYLENE CLEAR ø16x12 Mt 50
10040		2	BRASS ADAPTER d.int.12mm
10044		2	INOX FITTINGS G1/2"-16 SPECIAL

High density pump NEA 430

DECLARATION OF CONFORMITY

Model: Dust pump NEA 430, high capacity transfer pump
(High-density powder, low-density air)

Applicable directives:

94/9 / EC (ATEX equipment for use in potentially explosive atmospheres)
98/37 / EEC (Machinery)

Standards used for Compliance:

EN13463-1 EN1127-1
EN12100-1 EN13463-5

Principles:

This product was manufactured in accordance with good engineering practice.
The specified product complies with the directives and standards described above.

Mark flammable atmosphere: Ex II 3 D c T6

Note: The year of equipment manufacture appear in the serial number. "PL20-03"
it means the product was manufactured in 2020, "03" at the end indicate the production lot of the year.

Date: October 21, 2022

Verne Technology S.r.l.
CEO
Carlo Perillo

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