Auto-Flo™ II Automatic Dispense Valve with Vision Sensor

Customer Product Manual

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For parts and technical support, call the Industrial Coating Systems Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

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Contact Us
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Change Record

Revision	Date	Change
01	11/20	Initial Release
02	08/19	Added cartridge kits.
03	08/19	Added new dispense valve part numbers to part lists.
04	10/20	Added 125 mm dispense valve information/updated vision sensor mounting kits.
06	08/23	Revise kit detail, page 36.
07	05/24	Inclusion of UKCA for manual.

Safety

Introduction

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 persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Nordson 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 Nordson 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 Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

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 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.
- While operating manual spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Safety Data Sheets (SDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- Make sure the spray area is adequately ventilated. 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.

High-Pressure Fluids

High-pressure fluids, unless they are safely contained, are extremely hazardous. Always relieve fluid pressure before adjusting or servicing high pressure equipment. A jet of high-pressure fluid can cut like a knife and cause serious bodily injury, amputation, or death. Fluids penetrating the skin can also cause toxic poisoning.

If you suffer a fluid injection injury, seek medical care immediately. If possible, provide a copy of the SDS for the injected fluid to the health care provider.

The National Spray Equipment Manufacturers Association has created a wallet card that you should carry when you are operating high-pressure spray equipment. These cards are supplied with your equipment. The following is the text of this card:

WARNING: Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- Go to an emergency room immediately.
- Tell the doctor that you suspect an injection injury.
- Show them this card
- Tell them what kind of material you were spraying

MEDICAL ALERT — AIRLESS SPRAY WOUNDS: NOTE TO PHYSICIAN

Injection in the skin is a serious traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream.

Consultation with a plastic surgeon or a reconstructive hand surgeon may be advisable.

The seriousness of the wound depends on where the injury is on the body, whether the substance hit something on its way in and deflected causing more damage, and many other variables including skin microflora residing in the paint or gun which are blasted into the wound. If the injected paint contains acrylic latex and titanium dioxide that damage the tissue's resistance to infection, bacterial growth will flourish. The treatment that doctors recommend for an injection injury to the hand includes immediate decompression of the closed vascular compartments of the hand to release the underlying tissue distended by the injected paint, judicious wound debridement, and immediate antibiotic treatment.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment. Use only grounded air and fluid hoses. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one megohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored. Do not heat materials to temperatures above those recommended by the manufacturer. Make sure heat monitoring and limiting devices are working properly.
- Provide adequate ventilation to prevent dangerous concentrations of volatile particles or vapors. Refer to local codes or your material SDS for guidance.
- Do not disconnect live electrical circuits when 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.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- 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 Nordson representative for parts information and advice.

Halogenated Hydrocarbon Solvent Hazards

Do not use halogenated hydrocarbon solvents in a pressurized system that contains aluminum components. Under pressure, these solvents can react with aluminum and explode, causing injury, death, or property damage. Halogenated hydrocarbon solvents contain one or more of the following elements:

Element	Symbol	Prefix
Fluorine	F	“Fluoro-”
Chlorine	Cl	“Chloro-”
Bromine	Br	“Bromo-”
Iodine	I	“Iodo-”

Check your material SDS or contact your material supplier for more information. If you must use halogenated hydrocarbon solvents, contact your Nordson representative for information about compatible Nordson components.

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 system electrical power. Close hydraulic and pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the system.

Disposal

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

Water Requirements for Temperature Conditioning

The temperature conditioning section is constructed of the following materials. Always refer to this list if different water, corrosion inhibitors or biocides other than those listed in the following sections are used.

Black Iron Pipe	Stainless Steel	Nylon
Brass	PVC Plastic	Copper
Buna Rubber	Aluminum	Polyurethane
Steel	Viton®	PTFE

Water Types

Refer to Table 1. To minimize the introduction of contaminants that may degrade system components, review these guidelines before selecting the type of water to use.

NOTE: Water types are listed in order of preference.

Corrosion Levels

To maintain proper performance, minimum levels of corrosion to aluminum and copper must be maintained. To maintain safe operation keep the corrosion levels of

- aluminum at or below 3 mil/year (0.003 in./yr).
- copper at or below 1 mil/year (0.001 in./yr).

When adding water to the system, corrosion inhibitor must be added. CorrShield MD405 corrosion inhibitor is shipped with temperature conditioned systems. This is a Molybdate based corrosion inhibitor that contains an Azole additive to protect copper and is used in the concentration of 1.5 ounces per gallon of water to maintain a concentration of 250−350 ppm.

The Ford Tox number for CorrShield MD 405 is 149163.

The GM FID number for CorrShield MD 405 is 225484.

Refer to the Parts section to order CorrShield MD 405.

Biocide Water Treatment

Do not use the following Biocides:

- oxidizers, such as chlorine, bromine, hydrogen peroxide, iodine, ozone, etc.
- cationic, or positively charged biocides.

Biocides for use with CorrShield MD405 are BetzDearborn Spectrus NX114. The recommended concentration of Spectrus NX114 is 150-PPM which is 0.017 oz./gal (0.5 ml/gal).

The Ford Tox Number for Spectrus NX114 is 148270.

Table 1 Water Types

Water	Description
1. Distilled	No minerals and chemicals Lacks the nutrients necessary to support biological growth and the minerals that wear away at system components Neutral nature reduces interaction with additives used to protect the system **NOTE:** Distilled water is the best choice for use in the temperature conditioning section.
2. Well	Contains an abundance of minerals that can support plant and animal life Contains minerals like calcium and iron that are abrasive; accelerates wear and tear on components **NOTE:** If well water is the only option available, it must be softened to reduce the mineral content.
3. City	Contains chlorine that can degrade all metals including stainless steel Hard on most non metals Usually contains an abundance of minerals that are capable of supporting plant and animal life; accelerates wear on components
4. Weld (Tower)	Often heavily treated both for bacterial suppression and to make it more compatible with the welding and cooling tower processes Treatment process usually involves some aggressive chemicals that can degrade metals, plastics and other materials Usually contains an abundance of metals and other contaminants picked up from the welding and cooling tower processes that can interfere with the components of the temperature control system
5. DI	**CAUTION:** Do not use DI water in this system. DI water draws free electrons from metal to normalize ion levels. This process causes degradation of metals.

Description

See Figure 1.

The Auto-Flo™ II automatic dispense valve with Vision sensor is used in a variety of applications to dispense adhesives, sealants, and other materials. The sensor allows for real time bead evaluation and can alert the operator to a misapplied bead. The dispense valve comes in four different lengths to accommodate a variety of sensor focal lengths. Made of aluminum, the valve is lightweight and versatile.

Refer to the Specifications section on page 9 for more information.

NOTE: Throughout the remainder of this manual, the Auto-Flo II automatic dispense valve with Vision sensor is referred to as the dispense valve.

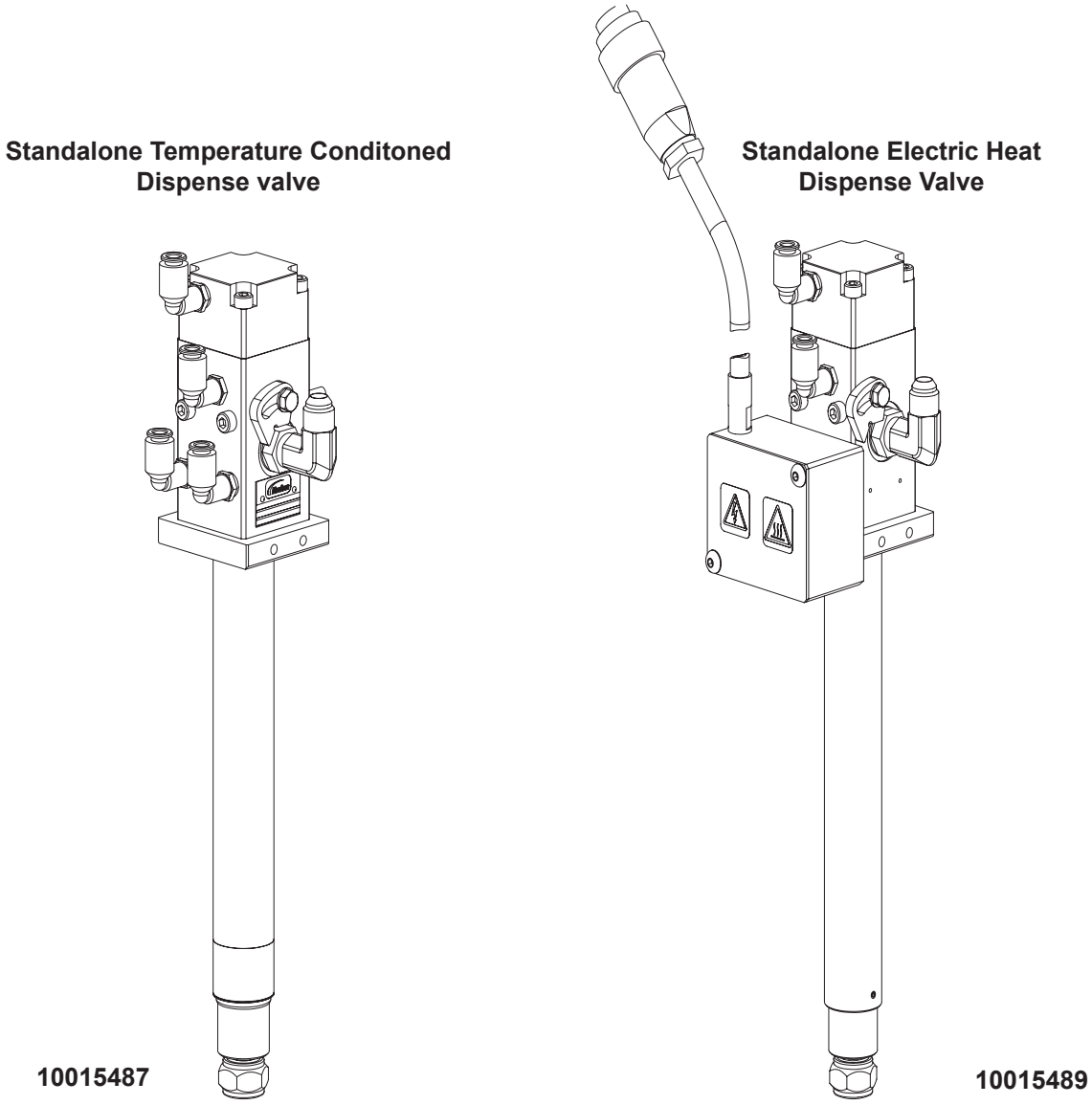


Figure 1 Standard Temperature Conditioned and Electric Heat Dispense Valves

Theory of Operation

See Figure 2. When air is supplied to the air open inlet (2), the piston is pushed upward, pulling the piston stem (3) off the seat (4). Material flows into the material inlet (5) and out of the nozzle.

When air is shut off from the air open inlet (2) and supplied to the air close inlet (1), air pressure combined with the spring on top of the piston forces the piston stem back into the seat and stops material dispensing.

The dispense valve can be electrically heated or temperature conditioned using a temperature control unit (TCU). Electrically heated valves heat the valve using resistant cartridge style heaters. The TCU maintains coating material at the desired application temperature by monitoring the temperature conditioned water that flows through the water ports in the valve body.

NOTE: Refer to Water Requirements for Temperature Conditioning on page 5 for information on the types of water to use with the dispense valve.

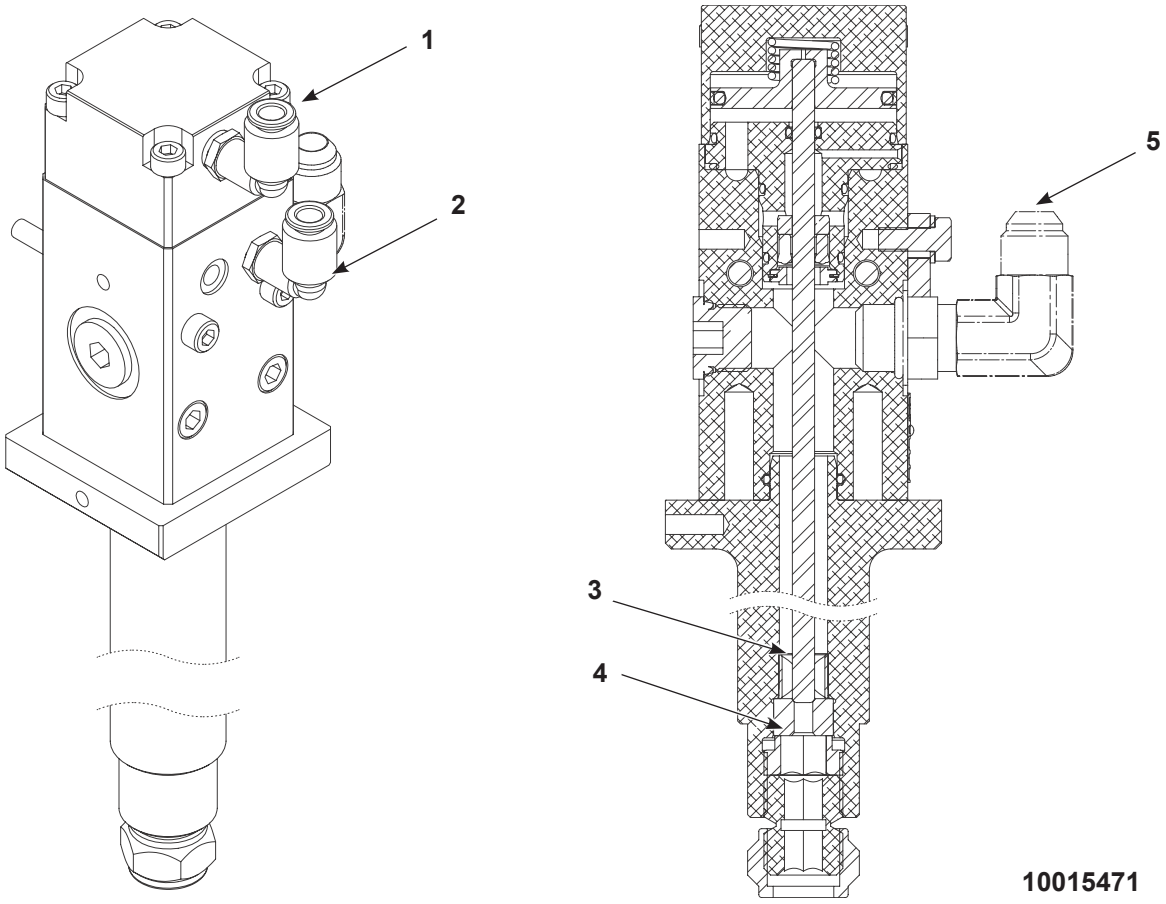


Figure 2 Standard Manifold Mount Dispense Valve

Specifications

General

Approximate weight	**60 mm:** 1.75 lb (0.79 kg) **98 mm:** 2 lb (0.91 kg) **150 mm:** 2.25 lb (1.02 kg) **200 mm:** 2.5 lb (1.13 kg)
Maximum static fluid pressure rating	5000 psi (345 bar)
Actuating air pressure	60-120 psi (4-8 bar)

Dimensions

See Figure 3.

Size	D1	D2
60 mm	19.51 cm (7.68 in.)	7.92 cm (3.12 in.)
98 mm	23.80 cm (9.37 in.)	12.22 cm (4.81 in.)
150 mm	29.01 cm (11.42 in.)	17.48 cm (6.88 in.)
200 mm	34.24 cm (13.48 in.)	22.66 cm (8.92 in.)

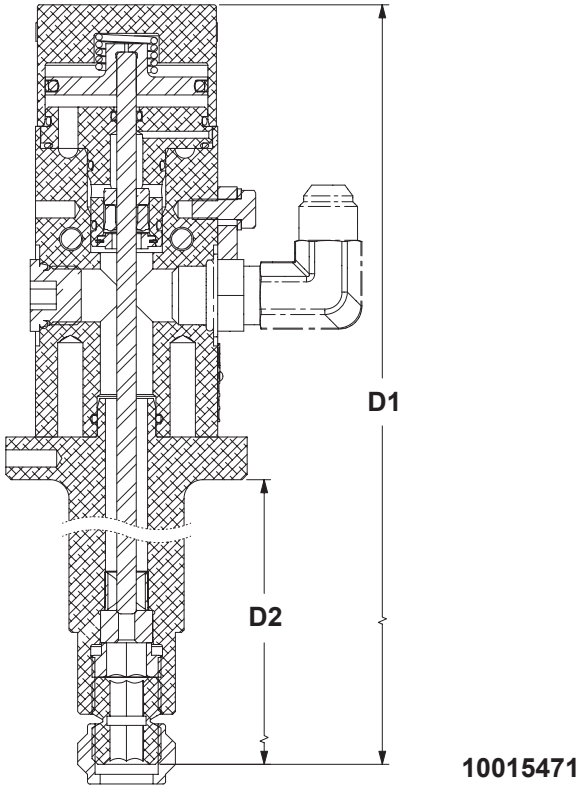


Figure 3 Approximate Dimensions

Standalone Dispense Valve

See Figure 4 for standalone dispense valve mounting specifications.

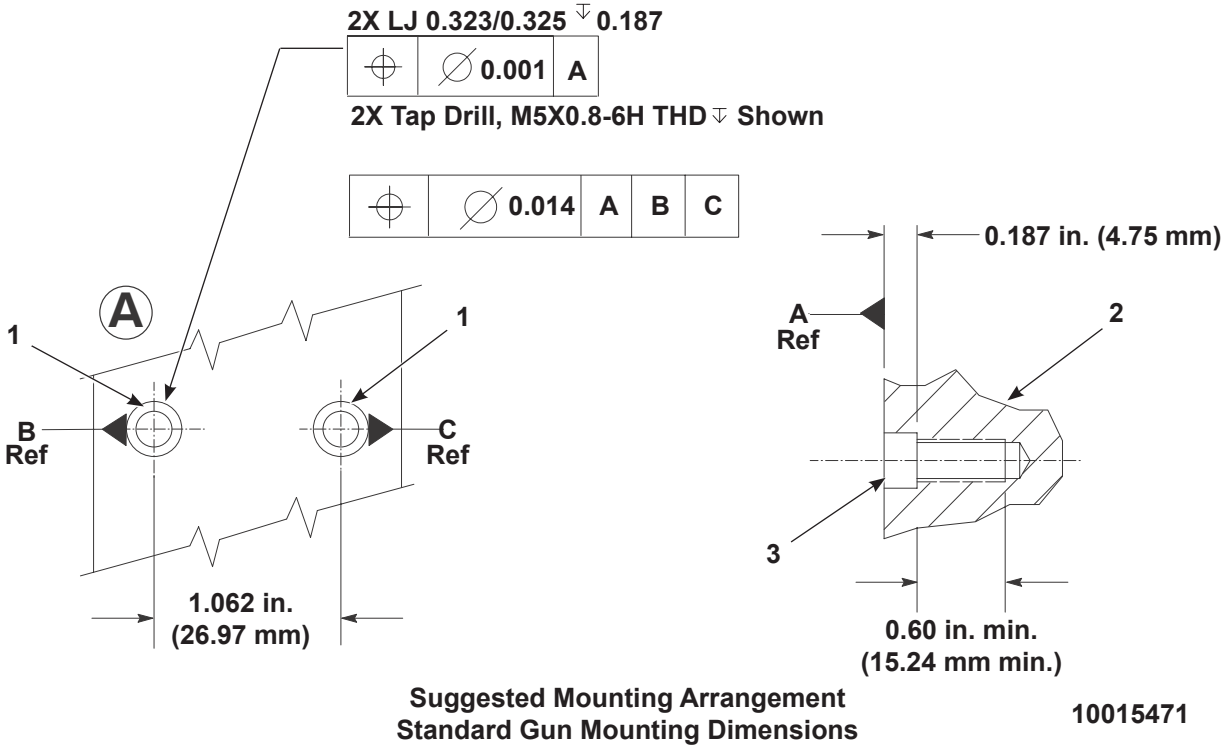


Figure 4 Standalone Mounting Specifications

1. Mounting plate holes
2. Dispense valve body
3. Hollow dowel pin

Manifold Mount Dispense Valve

See Figure 5 for manifold mount dispense valve mounting specifications. In addition to drilling mounting holes (3), drill holes for the material inlet (1).

The specifications for the material inlet (1) follow:

- Drill 0.230 − 0.240 in. diameter x the required depth
- Counterbore: drill 0.375 − 0.379 in. diameter x 0.050 − 0.052 in. deep

Two holes for temperature conditioning fittings (2) are located below the mounting holes. If the manifold mount dispensing valve needs to be temperature conditioned, drill the mounting surface holes as follows:

- Drill two holes 0.250 in. diameter for water
- Counter bore: drill 0.437 − 0.441 in. diameter x 0.050 − 0.052 in. deep

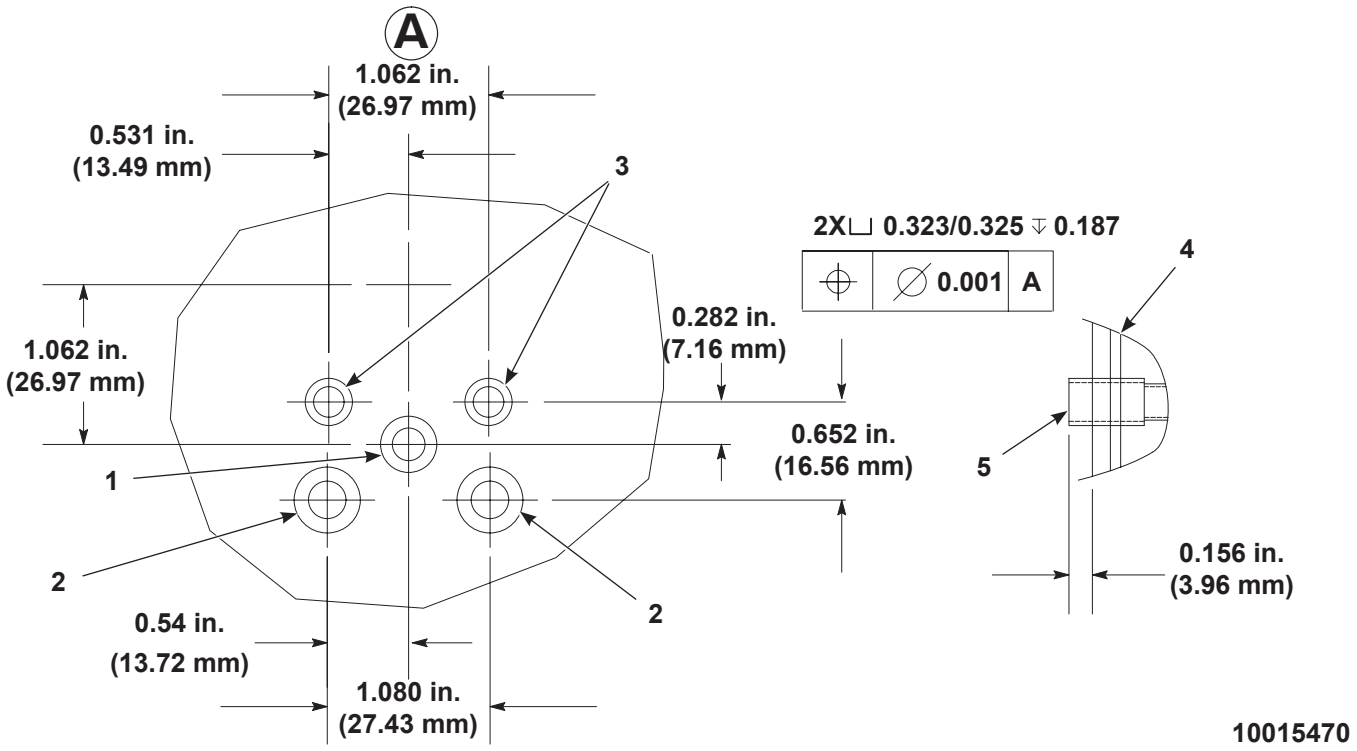


Figure 5 Manifold Mount Dimensions

1. Material inlet
2. Temperature conditioning fitting (if applicable)
3. Mounting surface hole
4. Dispensing valve body
5. Hollow dowel pin

Installation

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

NOTE:

- The following procedures are only for a typical installation. Refer to the applicable system documentation that shipped with the system for specific installation data
- The dispense valve can be mounted to fixed, mobile, and robotic fixtures. Mounting configurations may vary. Consult a local Nordson representative for specific application data.

Standalone Dispense Valve

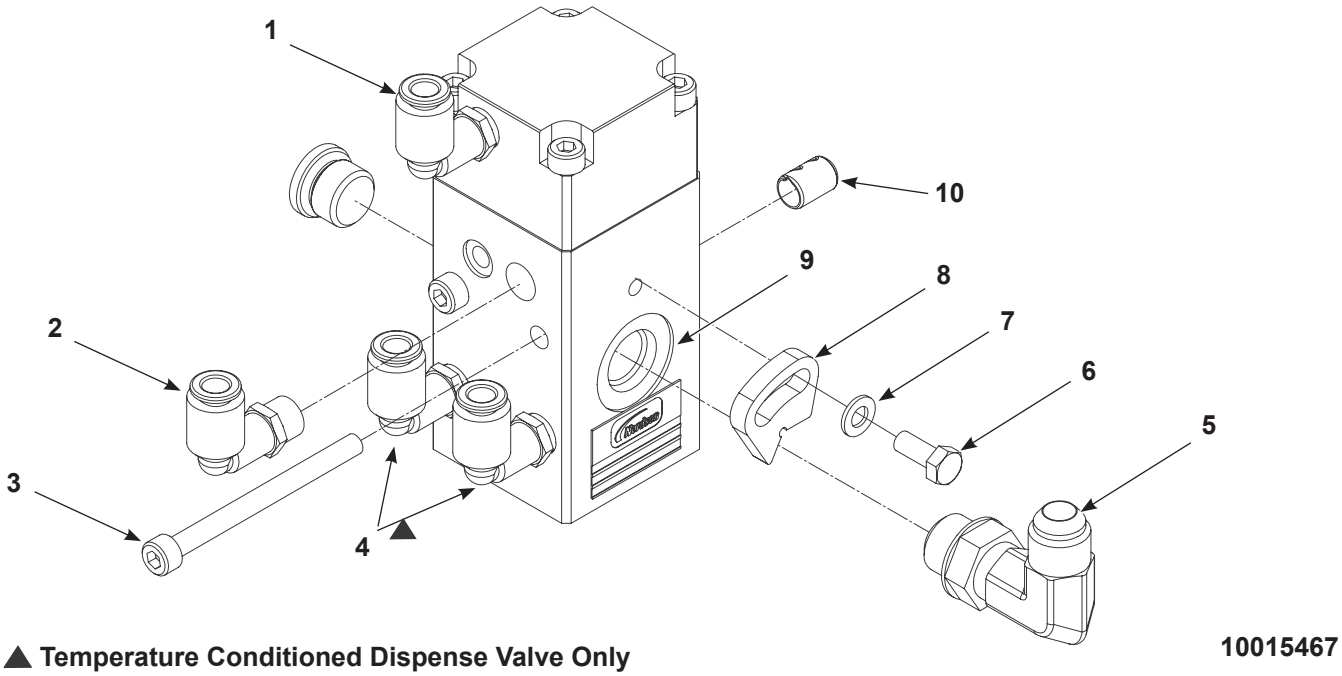
See Figure 6.

1. Insert the dowel pins (10) into the dispense valve.
2. Install the dispense valve to the applicable fixture using the socket screws (3). Tighten the screws to 60 in.-lb (6.7 N•m).
3. Remove the cap screw (6), washer (7), and swivel lock (8) from the dispense valve.
4. Install the applicable fluid fitting (5) into the fluid inlet port (9) and tighten securely
5. Install the swivel lock (8) to the fluid fitting (5) using the washer (7) and cap screw (6). Tighten the screw securely.

NOTE: Supply air must be oil free and between 60-120 psi (4-8 bar).

Connect the open and close air lines to the fittings (1, 2).

6. **Temperature conditioned dispense valves:** Perform the following:
   a. Install ⅛ NPT tube fittings into the temperature conditioning ports (4).
   b. Connect the lines from the TCU to the tube fittings



▲ **Temperature Conditioned Dispense Valve Only**

Figure 6 Typical Standalone Installation (Temperature Conditioned Dispense Valve Shown)

1. Air close port
2. Air open port
3. Socket screw
4. Temperature conditioning ports
5. Fluid fitting (application specific)
6. Cap screw
7. Washer
8. Swivel lock
9. Fluid inlet port
10. Dowel pin

Manifold Mount Dispense Valve

Refer to the Manifold Mount Specifications on page 11 for mounting specifications if necessary.

See Figure 7.

1. Lubricate the O-rings (4, 5) with Mobil SHCM 100 grease and install them into the mating surface.
2. Install the dispense valve to the manifold using the socket screws (3). Tighten the socket screws to 60 in.-lb (6.7 N•m).

NOTE: Supply air must be oil free and between 60-120 psi (4-8 bar).

3. Connect the open and close air lines to the fittings (2, 1).

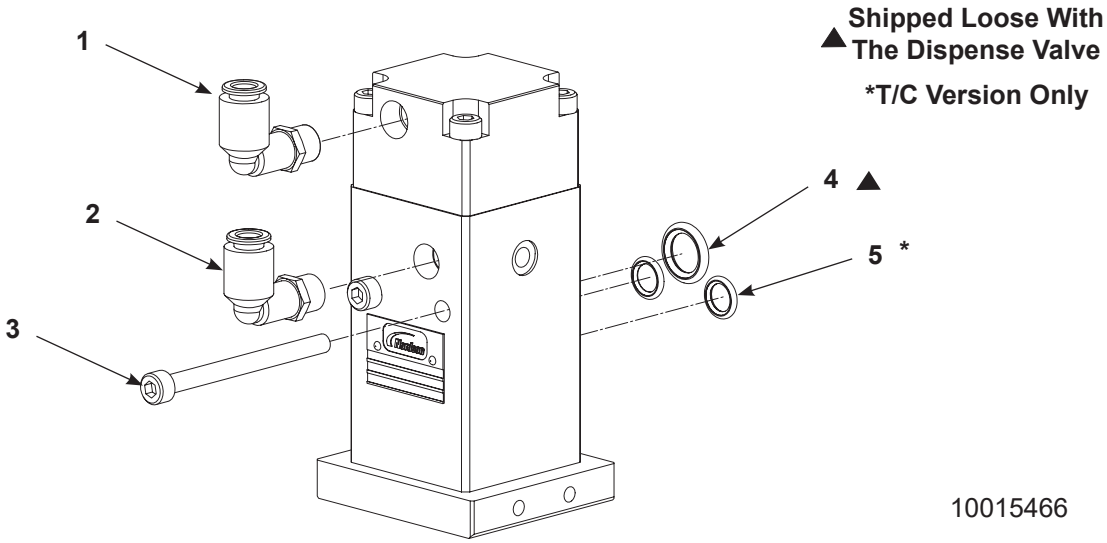


Figure 7 Manifold Mount Dispense Valve (Temperature Conditioned Dispense Valve Shown

1. Air close port
2. Air open port
3. Socket screw
4. O-ring
5. O-ring

Select a Nozzle

Nozzle selection depends on the type of material being dispensed, the desired bead size, and the production rate requirements.

CAUTION: Lubricate the dispense valve threads with a lubricant that is compatible with the dispense material to prevent the nozzle nut from becoming glued to them. If the threads are not lubricated, damage may occur to the valve body when removing the nozzle nut.

See Figure 8.

1. Lubricate the threads on the adapter (1) with a lubricant that is compatible with the dispense material.
2. Install the nozzle using the nozzle nut (2). Tighten the nozzle nut securely.

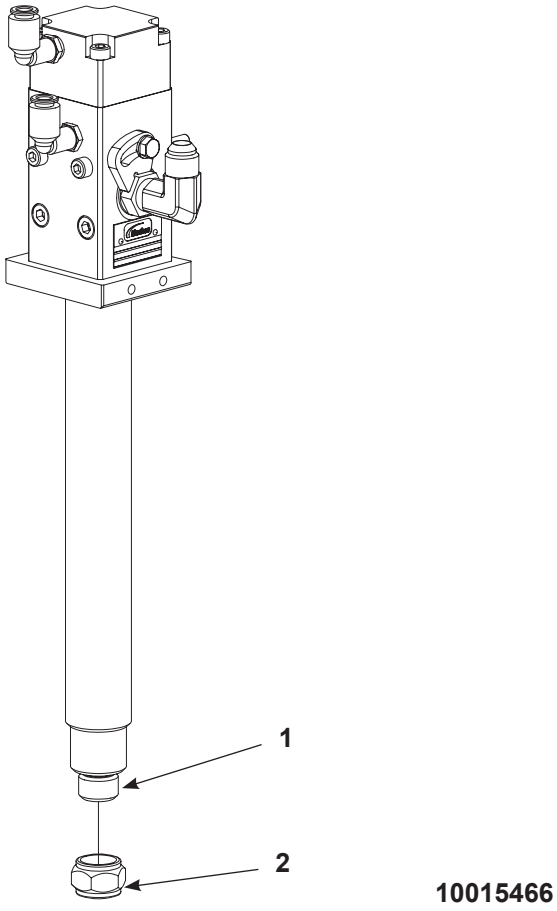


Figure 8 Nozzle Installation

Operation

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

Personnel performing the following procedures must know how to safely operate the application system.

Operation is dependent upon the system application requirements and the material delivery system. Refer to the applicable system documentation that shipped with the system for detailed operating procedures.

Purge the Dispense Valve

NOTE: Perform the following procedure prior to putting a new dispense valve in to service for the first time.

1. Place a material waste container under the nozzle.
2. Purge the dispense valve until material flows freely from the nozzle.

How to Clear a Blocked Nozzle

1. Shut off air pressure to the material unloader.
2. Bleed off residual pressure through the in line pressure relief valve in the material supply line.
3. Shut off and lock out all power to the dispense system.
4. See Figure 8. Carefully remove the nozzle nut (3) and nozzle from the dispense valve. Clean the nozzle and dispense valve threads (1) with a compatible solvent.

CAUTION: Lubricate the dispense valve threads with a lubricant that is compatible with the dispense material to prevent the nozzle nut from becoming glued to them. If the threads are not lubricated, damage may occur to the valve body when removing the nozzle nut.

5. Lubricate the dispense valve threads (1) with a compatible lubricant.

Install the nozzle using the nozzle nut (3). Tighten the nozzle nut securely.

Maintenance

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

System or material pressurized. Relieve pressure. Failure to observe this warning may result in serious injury or death.

NOTE: The frequencies listed are only guidelines. It may be necessary to adjust frequencies due to the facility environment, process parameters, material being applied, or experience. Always perform preventive maintenance procedures according to the facility maintenance schedule.

Frequency	Task
Daily	Check the nozzle for wear. Replace if necessary.
Periodically	Check the air lines and the material supply hose for leaks or damage. Replace lines and hoses if necessary. Make sure the dispense valve is mounted securely. Clean the filter in the air supply line.

Troubleshooting

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

These troubleshooting procedures cover only the most common problems. If you cannot solve a problem with the information given here, contact your local Nordson representative for help.

Problem	Possible Cause	Corrective Action
Leaking around nozzle or nozzle nut	Dirty or damaged metal sealing surfaces	Clean the nozzle if dirty. Replace the nozzle if worn.
Leaking through weep hole in valve body	Worn packing cartridge	**Standard Dispense Valve:** Replace the cartridge/seal assembly.
Dispense valve responds slowly	Air piston assembly dry or worn	Lubricate or replace the piston/stem assembly.
	Low air pressure to solenoid	Increase the air pressure to the solenoid.
	Long air supply lines to valve	Mount the solenoid as close as possible to the valve.

Repair

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

System or material pressurized. Relieve pressure. Failure to observe this warning may result in serious injury or death.

Remove the Packing Cartridge

See Figure 9.

1. Remove the screws (1) securing the air cylinder cap (2).
2. Remove the spring (3) from the piston (4).

CAUTION: To prevent damage to the body, use extreme care when prying the packing cartridge out of the body.

3. Use a small screwdriver to pry the packing cartridge (5) out of the valve body (6).
4. Inspect the piston (4) and valve body (6) for wear or damage. Replace parts if necessary.

Install the Packing Cartridge

See Figure 9.

1. Apply Mobil SHC 100 grease to the new packing cartridge (5) and install it into the valve body (6).
2. Insert the piston (4) into the packing cartridge (5).
3. Install the spring (3) onto the top of the piston (4).
4. Apply Loctite® Threadlocker Blue 242® to the threads of the screws (1). Install the air cylinder cap (2) using the screws. Tighten the screws to 54 in.-lb (6 N•m).

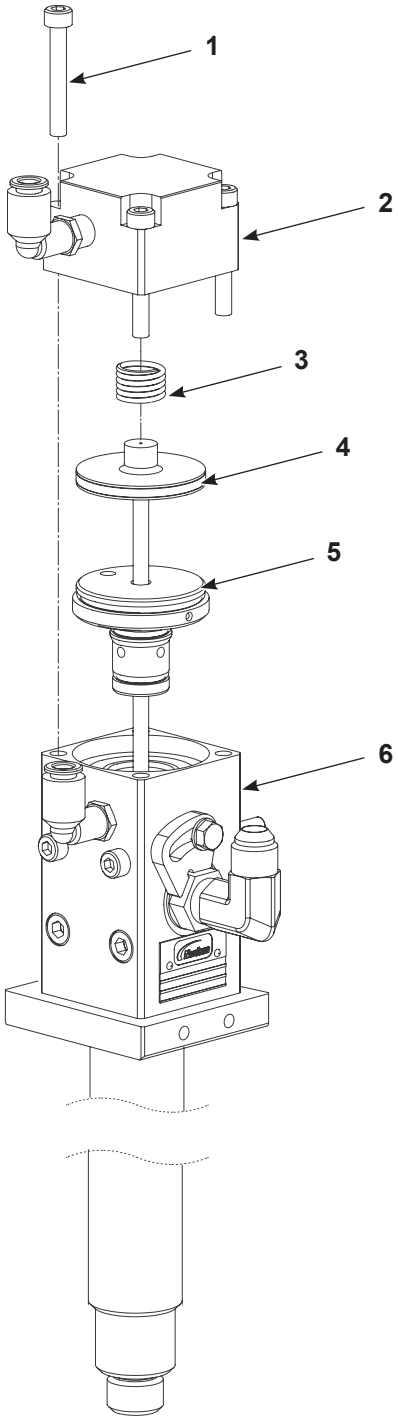


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Figure 9 Replacing a Typical Packing Cartridge

1. Screw
2. Air cylinder cap
3. Spring
4. Piston
5. Packing cartridge
6. Valve body

Parts

Electric Heat Dispense Valves

240 V Standalone Electric Heat Dispense Valves

See Figure 10 and refer to the following parts list.

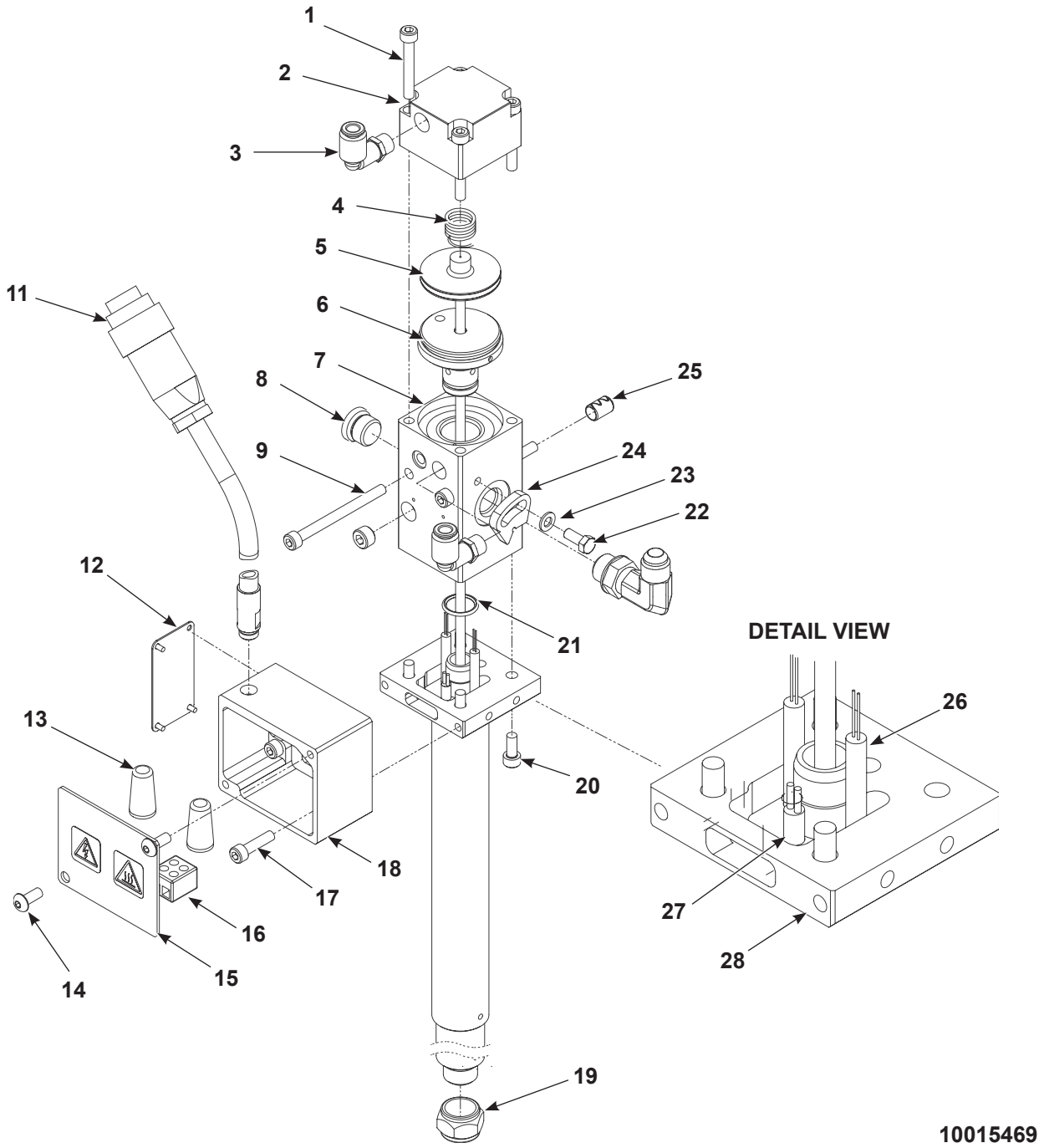

Figure 10 Standalone Electric Heat Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614128	—	—	—	GUN, Auto-Flo, Vision, standalone, 240 V, 60 mm	1	
—	—	1614257	—	—	GUN, Auto-Flo, Vision, standalone, 240 V, 98 mm	1	
—	—	—	1614158	—	GUN, Auto-Flo, Vision, standalone, 240 V, 125/150 mm	1	
—	—	—	—	1614573	GUN, Auto-Flo, Vision, standalone, 240 V, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, standalone, T/C	1	
8	973574	973574	973574	973574	• PLUG, O-ring, straight-thread, 9/16−18	1	
9	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9	2	
10	973402	973402	973402	973402	• PLUG, pipe, socket, flush, ⅛, zinc	2	
11	1060683	1060683	1060683	1060683	• CORD SET, automatic, SDS, 240 V	1	
12	270604	270604	270604	270604	• NAME PLATE, H20 guns	1	
13	939220	939220	939220	939220	• CONNECTOR, wire, set screw	3	
14	UA	UA	UA	UA	• SCREW, button, socket, M5 x 12, zinc	2	
15	------	------	------	------	• COVER, electric box, heat, Auto-Flo, Vision	1	
16	939586	939586	939586	939586	• CONNECTOR, plastic	1	
17	UA	UA	UA	UA	• SCREW, socket, M5 x 16, Class 12.9,	2	
18	------	------	------	------	• BOX, electric, heat, Auto-Flo, Vision	1	
19	152290	152290	152290	152290	• NUT, retaining	1	
20	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9	4	
21	940157	940157	940157	940157	• O-RING, VitonM, black, 0.562 x 0.688	1	
22	UA	UA	UA	UA	• SCREW, hex, cap, M5 x 12, Class 9.9	1	
23	UA	UA	UA	UA	• WASHER, flat, M5, steel, zinc	1	
24	323872	323872	323872	323872	• KEY, lock, swivel, Auto-Flo	1	
25	UA	UA	UA	UA	• PIN, dowel, hollow, 8-mm OD x 14-mm long	2	
26	------	—	—	—	• HEATER, 0.188 D, 1.25 L, 25 W, 120 V	2	
	—	------	—	—	• HEATER, 0.188 D, 3.0 L, 25 W, 120 V	2	
	—	—	------	—	• HEATER, 0.188 D, 5.0 L, 37 W, 120 V	2	
	—	—	—	------	• HEATER, 0.188 D, 7.0 L, 50 W, 120 V	2	
27	939523	939523	939523	939523	• SENSOR, temp, gun	1	
28	1614139	—	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 60 mm	1	
	—	1614268	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 98 mm	1	
	—	—	1614169	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 125/150 mm	1	
	—	—	—	1612889	• ADAPTER, w/ seat, Auto-Flo, 240 V, 200 mm	1	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

120 V Standalone Electric Heat Dispense Valves

See Figure 10 and refer to the following parts list.

Item	Part	Part	Part	Description	Qty	Note
—	1617820	—	—	GUN, Auto-Flo, Vision, standalone, 120 V, 60 mm	1	
—	—	1617822	—	GUN, Auto-Flo, Vision, standalone, 120 V, 98 mm	1	
—	—	—	1617824	GUN, Auto-Flo, Vision, standalone, 120 V, 150 mm	1	
1	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9	4	
2	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	• PISTON, stem, Auto-Flo, Vision, 150 mm	1	
	—	—	—	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	• BODY, gun, Auto-Flo, Vision, standalone, T/C	1	
8	973574	973574	973574	• PLUG, O-ring, straight-thread, 9/16−18	1	
9	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9	2	
10	973402	973402	973402	• PLUG, pipe, socket, flush, ⅛, zinc	2	
11	1606153	1606153	1606153	• CORD SET, armored, with square plug, 120 V	1	
12	270604	270604	270604	• NAME PLATE, H20 guns	1	
13	939220	939220	939220	• CONNECTOR, wire, set screw	3	
14	UA	UA	UA	• SCREW, button, socket, M5 x 12, zinc, Class 10.9	2	
15	------	------	------	• COVER, electric box, heat, Auto-Flo, Vision	1	
16	939586	939586	939586	• CONNECTOR, plastic	1	
17	UA	UA	UA	• SCREW, socket, M5 x 16, Class 12.9	2	
18	------	------	------	• BOX, electric, heat, Auto-Flo, Vision	1	
19	152290	152290	152290	• NUT, retaining	1	
20	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9	4	
21	940157	940157	940157	• O-RING, VitonM, black, 0.562 x 0.688	1	
22	UA	UA	UA	• SCREW, hex, cap, M5 x 12, Class 9.9	1	
23	UA	UA	UA	• WASHER, flat, M5, steel, zinc	1	
24	323872	323872	323872	• KEY, lock, swivel, Auto-Flo	1	
25	UA	UA	UA	• PIN, dowel, hollow, 8-mm OD x 14-mm long	2	
26	------	—	—	• HEATER, 0.188 D, 1.25 L, 25 W, 120 V	2	
	—	------	—	• HEATER, 0.188 D, 3.0 L, 25 W, 120 V	2	
	—	—	------	• HEATER, 0.188 D, 5.0 L, 37 W, 120 V	2	
	—	—	—	• HEATER, 0.188 D, 7.0 L, 50 W, 120 V	2	
27	939523	939523	939523	• SENSOR, temp, gun	1	
28	1614139	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 60 mm	1	
	—	1614268	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 98 mm	1	
	—	—	1614169	• ADAPTER, w/ seat, Auto-Flo, 240 V, 150 mm	1	
	—	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 200 mm	1	

NOTE A: See Cartridge Kits on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

240 V Manifold Mount Electric Heat Dispense Valves

See Figure 11 and refer to the following parts list.

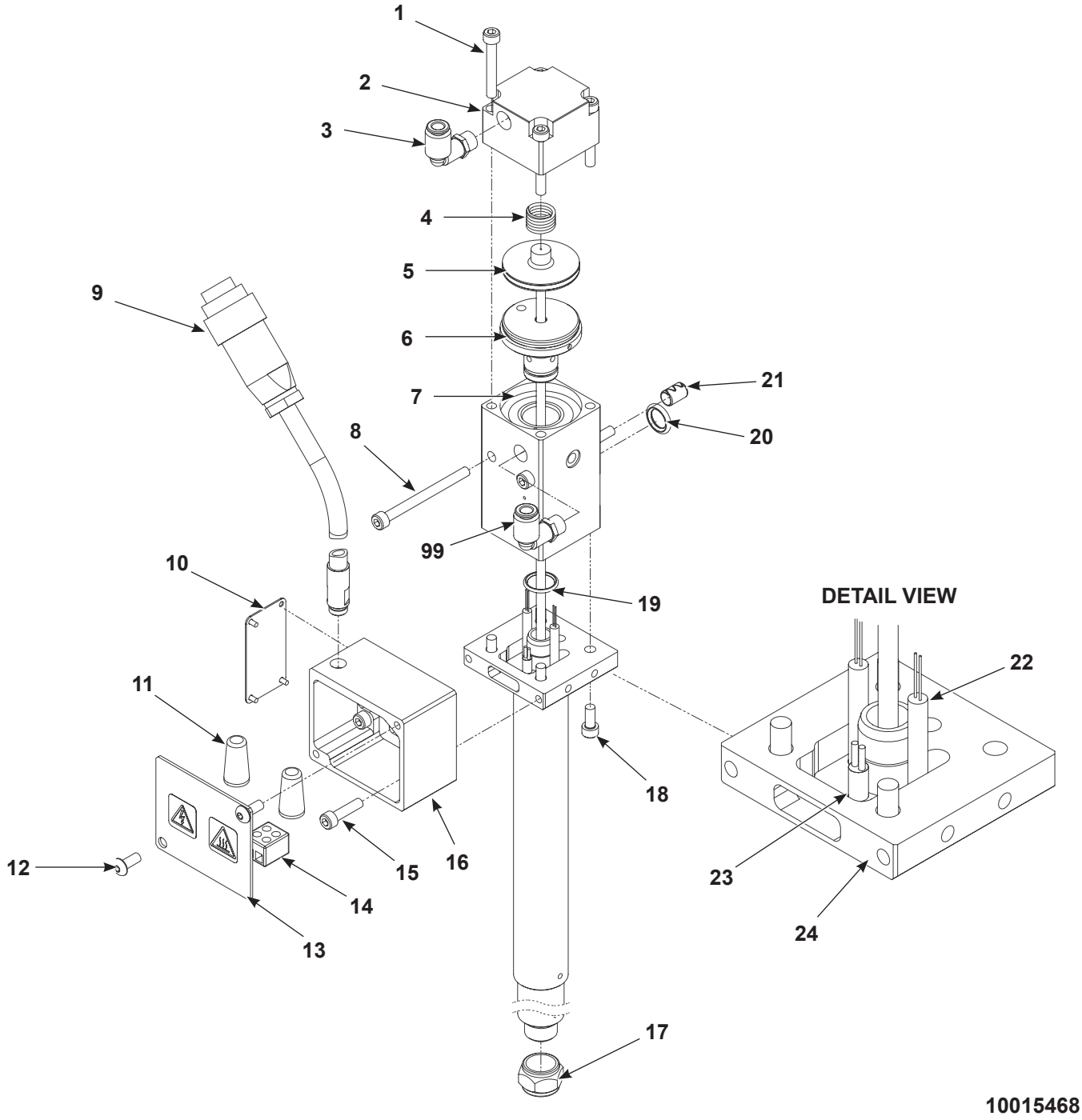

Figure 11 Manifold Mount Electric Heat Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614127	—	—	—	GUN, Auto-Flo, Vision, manifold, 240 V, 60 mm	1	
—	—	1614256	—	—	GUN, Auto-Flo, Vision, manifold, 240 V, 98 mm	1	
—	—	—	1614157	—	GUN, Auto-Flo, Vision, manifold, 240 V, 125/150 mm	1	
—	—	—	—	1614574	GUN, Auto-Flo, Vision, manifold, 240 V, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, manifold, T/C	1	
8	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
9	1060683	1060683	1060683	1060683	• CORD SET, automatic, SDS, 240 V	1	
10	270604	270604	270604	270604	• NAME PLATE, H20 guns	1	
11	939220	939220	939220	939220	• CONNECTOR, wire, set screw	3	
12	UA	UA	UA	UA	• SCREW, button, socket, M5 x 12, zinc, Class 10.9, per ISO 4762	2	
13	------	------	------	------	• COVER, electric box, heat, Auto-Flo, Vision	1	
14	939586	939586	939586	939586	• CONNECTOR, plastic	1	
15	UA	UA	UA	UA	• SCREW, socket, M5 x 16, Class 12.9, per ISO 4762	2	
16	------	------	------	------	• BOX, electric, heat, Auto-Flo, Vision	1	
17	152290	152290	152290	152290	• NUT, retaining	1	
18	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
19	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
20	941112	941112	941112	941112	• O-RING, Viton, 0.438 x 0.625 x 0.094	1	
21	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	
22	------	—	—	—	• HEATER, 0.188 D, 1.25 L, 25 W, 120 V	2	
	—	------	—	—	• HEATER, 0.188 D, 3.0 L, 25 W, 120 V	2	
	—	—	------	—	• HEATER, 0.188 D, 5.0 L, 37 W, 120 V	2	
	—	—	—	------	• HEATER, 0.188 D, 7.0 L, 50 W, 120 V	2	
23	939523	939523	939523	939523	• SENSOR, temp, gun	1	
24	1614139	—	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 60 mm	1	
	—	1614268	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 98 mm	1	
	—	—	1614169	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 125/150 mm	1	
	—	—	—	1612889	• ADAPTER, w/ seat, Auto-Flo, 240 V, 200 mm	1	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Item	Part	Part	Part	Part	Description	Qty	Note
—	1617821	—	—	—	GUN, Auto-Flo, Vision, manifold, 120 V, 60 mm	1	
—	—	1617823	—	—	GUN, Auto-Flo, Vision, manifold, 120 V, 98 mm	1	
—	—	—	1617825	—	GUN, Auto-Flo, Vision, manifold, 120 V, 150 mm	1	
—	—	—	—	1617827	GUN, Auto-Flo, Vision, manifold, 120 V, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, manifold, T/C	1	
8	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
9	1606153	1060683	1060683	1060683	• CORD SET, armored with square plug, 120 V	1	
10	270604	270604	270604	270604	• NAME PLATE, H20 guns	1	
11	939220	939220	939220	939220	• CONNECTOR, wire, set screw	3	
12	UA	UA	UA	UA	• SCREW, button, socket, M5 x 12, zinc, Class 10.9, per ISO 4762	2	
13	------	------	------	------	• COVER, electric box, heat, Auto-Flo, Vision	1	
14	939586	939586	939586	939586	• CONNECTOR, plastic	1	
15	UA	UA	UA	UA	• SCREW, socket, M5 x 16, Class 12.9, per ISO 4762	2	
16	------	------	------	------	• BOX, electric, heat, Auto-Flo, Vision	1	
17	152290	152290	152290	152290	• NUT, retaining	1	
18	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
19	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
20	941112	941112	941112	941112	• O-RING, Viton, 0.438 x 0.625 x 0.094	1	
21	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	
22	------	—	—	—	• HEATER, 0.188 D, 1.25 L, 25 W, 120 V	2	
	—	------	—	—	• HEATER, 0.188 D, 3.0 L, 25 W, 120 V	2	
	—	—	------	—	• HEATER, 0.188 D, 5.0 L, 37 W, 120 V	2	
	—	—	—	------	• HEATER, 0.188 D, 7.0 L, 50 W, 120 V	2	
23	939523	939523	939523	939523	• SENSOR, temp, gun	1	
24	1614139	—	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 60 mm	1	
	—	1614268	—	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 98 mm	1	
	—	—	1614169	—	• ADAPTER, w/ seat, Auto-Flo, 240 V, 150 mm	1	
	—	—	—	1612889	• ADAPTER, w/ seat, Auto-Flo, 240 V, 200 mm	1	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

120 V Manifold Rear Mount Electric Heat Dispense Valves

See Figure 12 and refer to the following parts list.

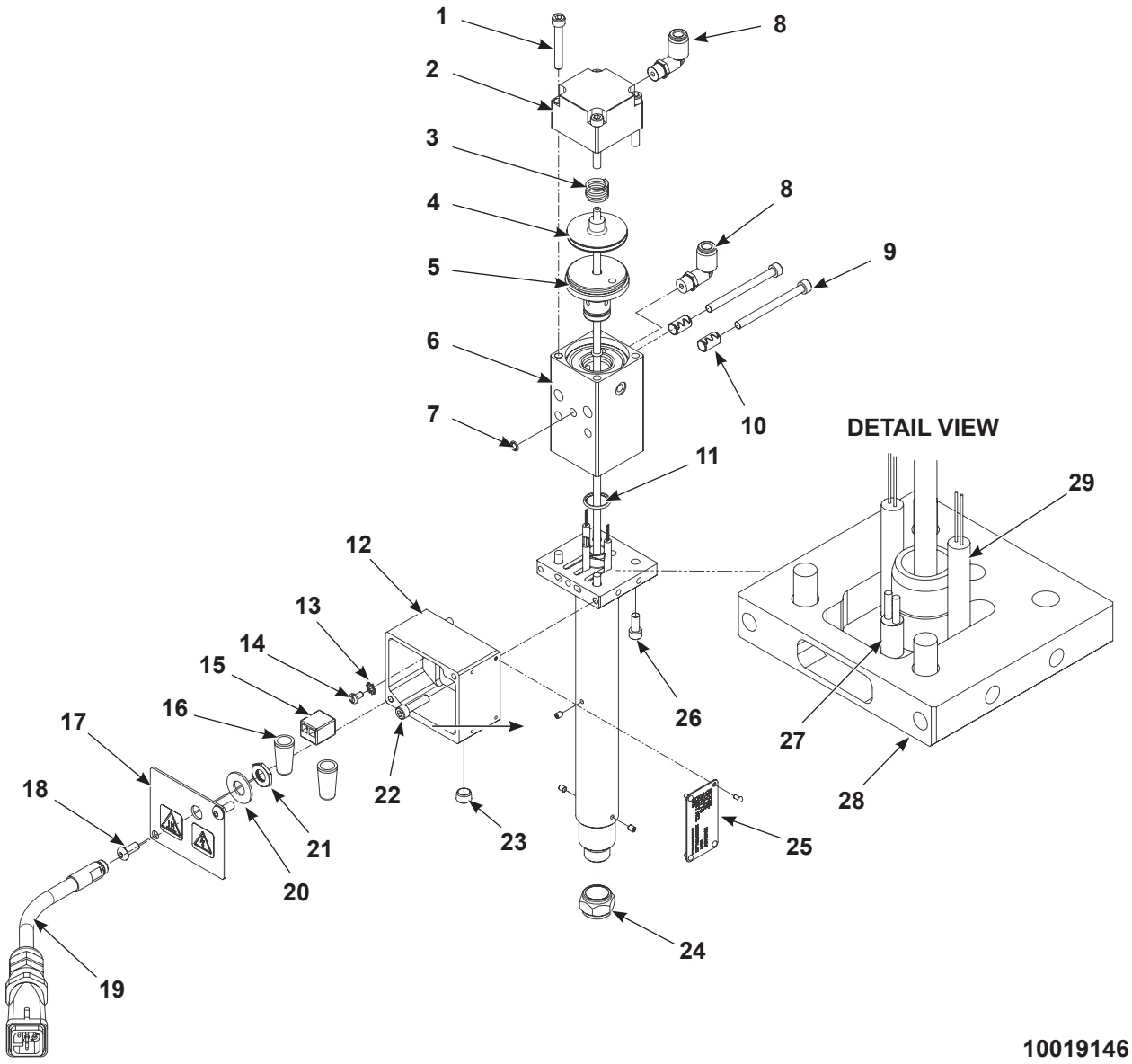

Figure 12 Manifold Mount Electric Heat Dispense Valve

Item	Part	Description	Qty	Note
—	1617926	GUN, Auto-Flo, Vision, manifold, rear mount, 120 V, 200 mm	1	
1	UA	• SCREW, socket, M5 x 35, blue, Class 12.9, per ISO 4762	4	
2	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	237947	• SPRING, compression	1	
4	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
5	------	• CARTRIDGE, grease	1	A
6	------	• BODY, gun, Auto-Flo, Vision, manifold, T/C	1	
7	941112	• O-RING, Viton, 0.438 x 0.625 x 0.094	1	
8	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
9	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
10	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	
11	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
12	------	• BOX, electric, heat, Auto-Flo, Vision	1	
13	983524	• WASHER, lock, E, external, #6, steel, zinc	1	
14	981011	• SCREW, fillister, 6−32 X 0.250, slotted ,zinc	1	
15	939586	• CONNECTOR, plastic, 2-station	1	
16	939220	• CONNECTOR, wire, set screw	3	
17	------	• COVER, electric box, heat, Auto-Flo, Vision, front mount	1	
18	UA	• SCREW, button, socket, M5 x 12, zinc, Class 10.9, per ISO 4762	2	
19	1060683	• CORD SET, armored with square plug, 120 V	1	
20	983161	• Washer, lock, E, external, 3/8, steel, zinc	1	
21	984155	• Nut, panel, mounting	1	
22	UA	• SCREW, socket, M5 x 16, Class 12.9, per ISO 4762	2	
23	973402	• Plug, pipe, socket, flush, 1/8, zinc	1	
24	152290	• NUT, retaining	1	
25	270604	• NAME PLATE, H200 guns	1	
26	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
27	939523	• SENSOR, temp, gun	1	
28	1612889	• ADAPTER, with seat, Auto-Flo, Vision, 240 V, 200 mm	1	
29	------	• HEATER, 0.188 D, 7.0 L, 50 W, 120 V	2	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Ambient Dispense Valves

Standalone Ambient Dispense Valves

See Figure 13 and refer to the following parts list.

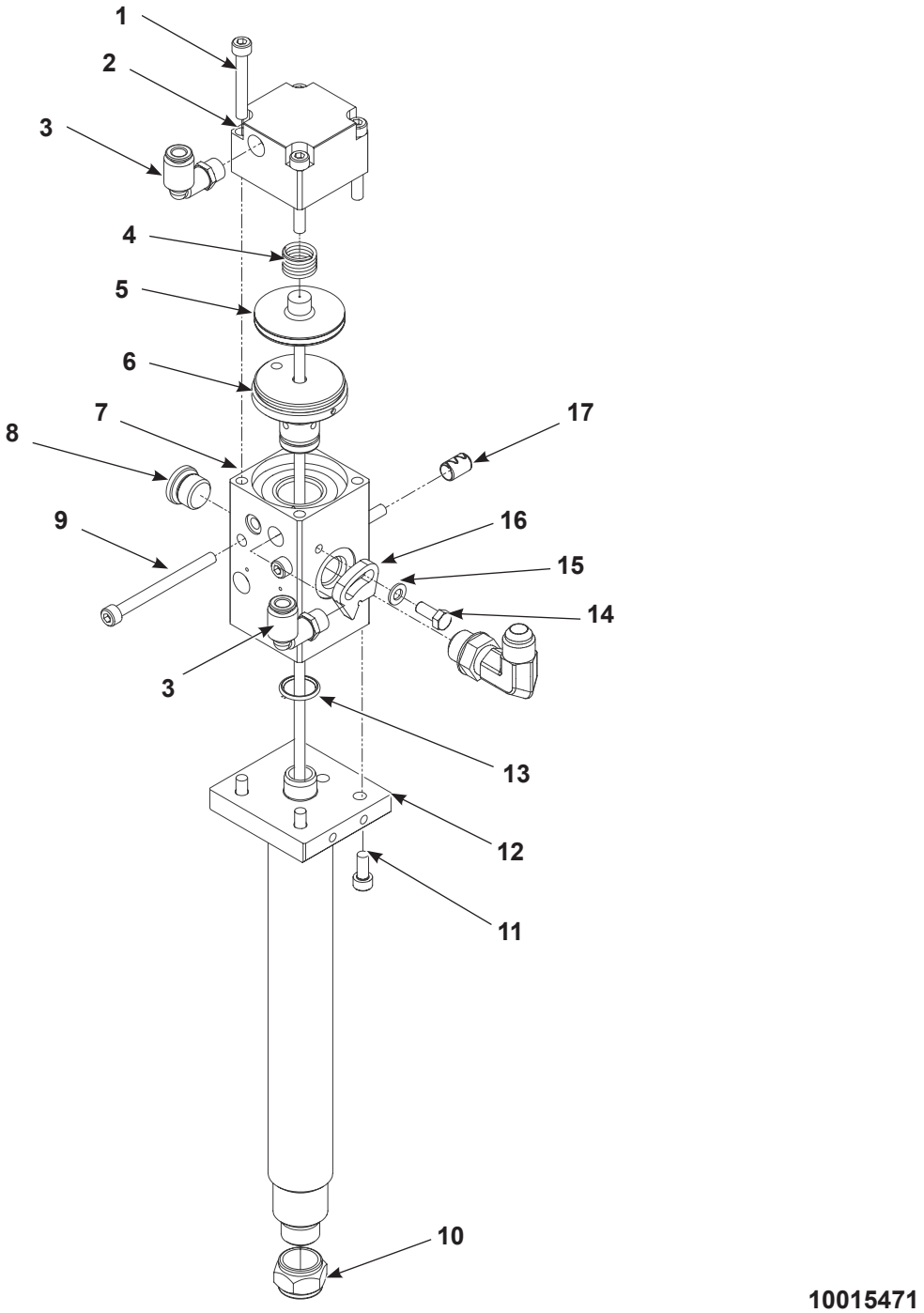

Figure 13 Standalone Ambient Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614132	—	—	—	GUN, Auto-Flo, Vision, standalone, ambient, 60 mm	1	
—	—	1614261	—	—	GUN, Auto-Flo, Vision, standalone, ambient, 98 mm	1	
—	—	—	1614162	—	GUN, Auto-Flo, Vision, standalone, ambient, 125/150 mm	1	
—	—	—	—	1612865	GUN, Auto-Flo, Vision, standalone, ambient, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, standalone, T/C	1	
8	973574	973574	973574	973574	• PLUG, O-ring, straight-thread, 9/16−18	1	
9	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
10	152290	152290	152290	152290	• NUT, retaining	1	
11	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
12	1614141	—	—	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 60 mm	1	
	—	1614270	—	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 98 mm	1	
	—	—	1614171	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 125/150 mm	1	
	—	—	—	1614156	• ADAPTER, w/ seat, Auto-Flo, ambient, 200 mm	1	
13	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
14	UA	UA	UA	UA	• SCREW, hex, cap, M5 x 12, Class 8.8, per ISO 4014	1	
15	UA	UA	UA	UA	• WASHER, flat, M, reg, M5, steel, zinc, per ISO 7089	1	
16	323872	323872	323872	323872	• KEY, lock, swivel, Auto-Flo	1	
17	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Manifold Mount Ambient Dispense Valves

See Figure 14 and refer to the following parts list.

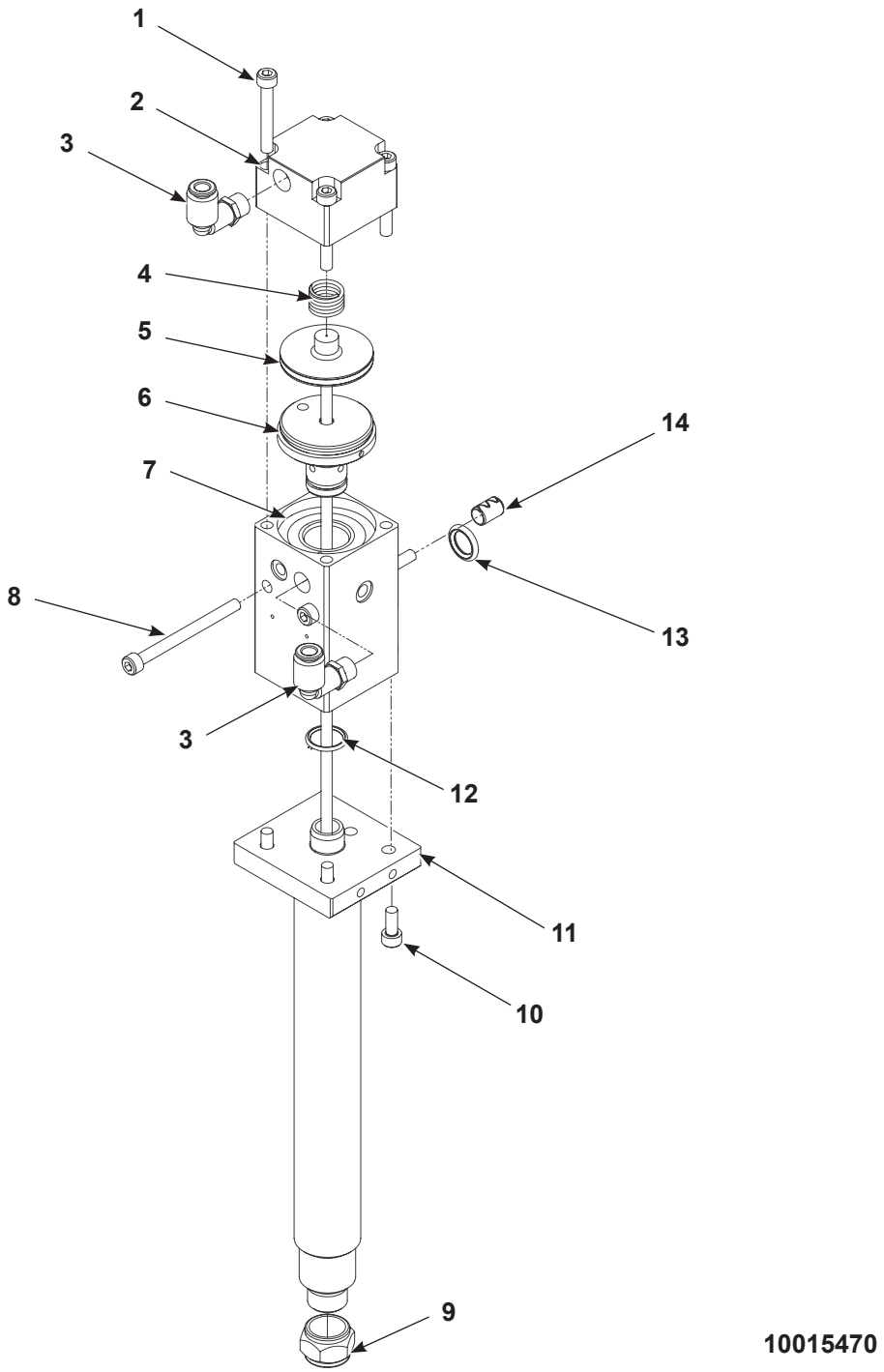

Figure 14 Manifold Mount Ambient Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614131	—	—	—	GUN, Auto-Flo, Vision, manifold, ambient, 60 mm	1	
—	—	1614260	—	—	GUN, Auto-Flo, Vision, manifold, ambient, 98 mm	1	
—	—	—	1614161	—	GUN, Auto-Flo, Vision, manifold, ambient, 125/150 mm	1	
—	—	—	—	1612864	GUN, Auto-Flo, Vision, manifold, ambient, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, manifold, T/C	1	
8	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
9	152290	152290	152290	152290	• NUT, retaining	1	
10	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
11	1614141	—	—	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 240 V, 60 mm	1	
	—	1614270	—	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 240 V, 98 mm	1	
	—	—	1614171	—	• ADAPTER, w/ seat, Auto-Flo, ambient, 240 V, 125/150 mm	1	
	—	—	—	1614156	• ADAPTER, w/ seat, Auto-Flo, ambient, 240 V, 200 mm	1	
12	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
13	941112	941112	941112	941112	• O-RING, Viton, 0.438 x 0.625 x 0.094	1	
14	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Temperature Conditioned Dispense Valves

Standalone Temperature Conditioned Dispense Valves

See Figure 15 and refer to the following parts list.

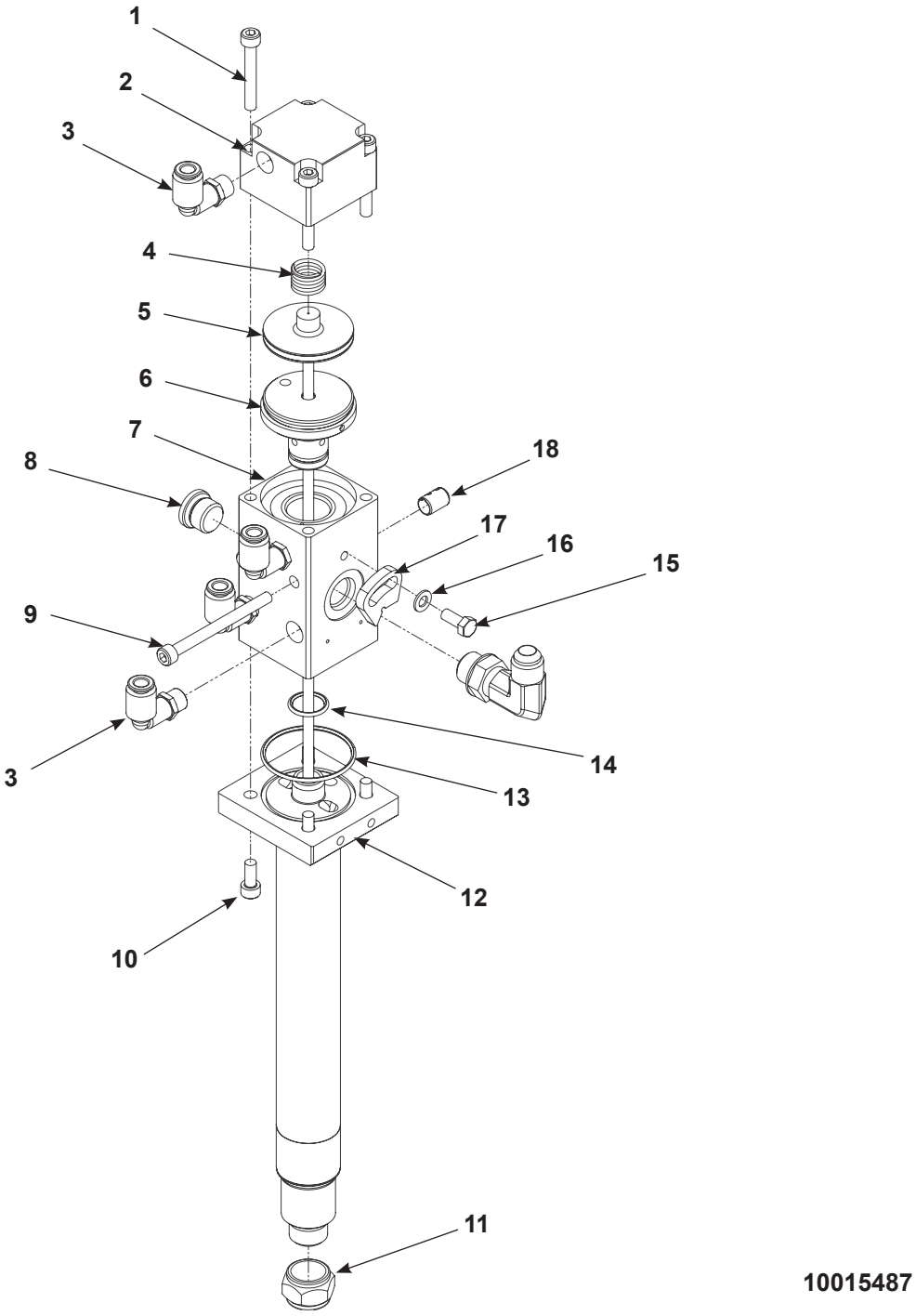

Figure 15 Standalone Temperature Conditioned Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614130	—	—	—	GUN, Auto-Flo, Vision, standalone, T/C, 60 mm	1	
—	—	1614259	—	—	GUN, Auto-Flo, Vision, standalone, T/C, 98 mm	1	
—	—	—	1614160	—	GUN, Auto-Flo, Vision, standalone, T/C, 125/150 mm	1	
—	—	—	—	1613490	GUN, Auto-Flo, Vision, standalone, T/C, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	4	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, standalone, T/C	1	
8	973574	973574	973574	973574	• PLUG, O-ring, straight-thread, 9/16−18	1	
9	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
10	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
11	152290	152290	152290	152290	• NUT, retaining	1	
12	1614140	—	—	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 60 mm	1	
	—	1614269	—	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 98 mm	1	
	—	—	1614170	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 125/150 mm	1	
	—	—	—	1613492	• ADAPTER, w/ seat, Auto-Flo, T/C, 200 mm	1	
13	940293	940293	940293	940293	• O-RING, Viton, 1.500 x 1.625 x 0.063	1	
14	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
15	UA	UA	UA	UA	• SCREW, hex, cap, M5 x 12, Class 8.8, per ISO 4014	1	
16	UA	UA	UA	UA	• WASHER, flat, M, reg, M5, steel, zinc, per ISO 7089	1	
17	323872	323872	323872	323872	• KEY, lock, swivel, Auto-Flo	1	
18	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Manifold Mount Temperature Conditioned Dispense Valves

See Figure 16 and refer to the following parts list.

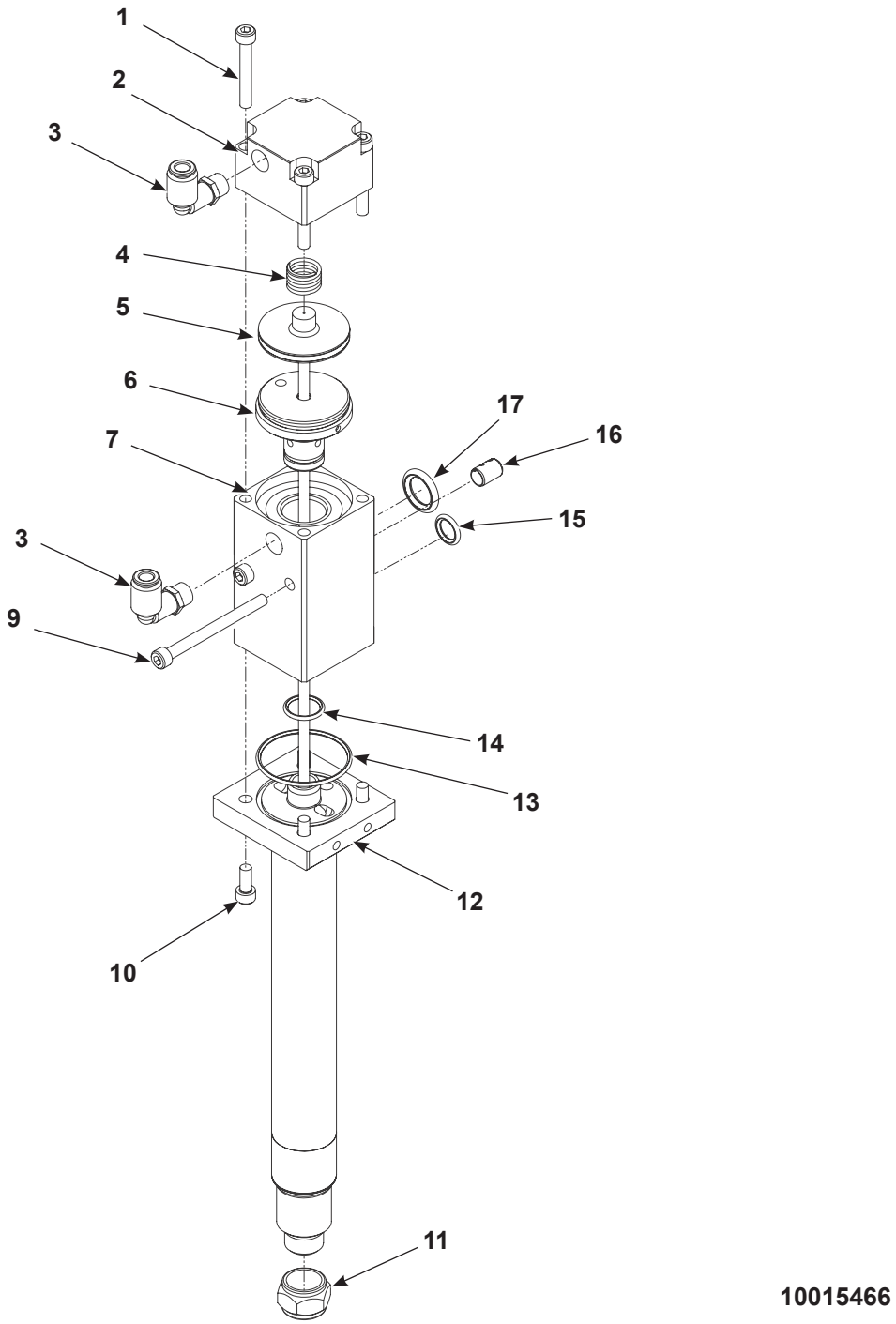

Figure 16 Manifold Mount Temperature Conditioned Dispense Valve

Item	Part	Part	Part	Part	Description	Qty	Note
—	1614129	—	—	—	GUN, Auto-Flo, Vision, manifold, T/C, 60 mm	1	
—	—	1614258	—	—	GUN, Auto-Flo, Vision, manifold, T/C, 98 mm	1	
—	—	—	1614159	—	GUN, Auto-Flo, Vision, manifold, T/C, 125/150 mm	1	
—	—	—	—	1613488	GUN, Auto-Flo, Vision, manifold, T/C, 200 mm	1	
1	UA	UA	UA	UA	• SCREW, socket, M5 x 25, Class 12.9, per ISO 4762	4	
2	1086179	1086179	1086179	1086179	• CAP, air, piston, Auto-Flo, ⅛ NPT	1	
3	1613946	1613946	1613946	1613946	• ELBOW, male, ¼ T x ⅛ NPT	2	
4	237947	237947	237947	237947	• SPRING, compression	1	
5	1614144	—	—	—	• PISTON, stem, Auto-Flo, Vision, 60 mm	1	
	—	1607052	—	—	• PISTON, stem, Auto-Flo, Vision, 98 mm	1	
	—	—	1607054	—	• PISTON, stem, Auto-Flo, Vision, 125/150 mm	1	
	—	—	—	1609820	• PISTON, stem, Auto-Flo, Vision, 200 mm	1	
6	------	------	------	------	• CARTRIDGE, grease	1	A
7	------	------	------	------	• BODY, gun, Auto-Flo, Vision, standalone, T/C	1	
9	UA	UA	UA	UA	• SCREW, socket, M5 x 60, Class 12.9, per ISO 4762	2	
10	UA	UA	UA	UA	• SCREW, socket, M5 x 12, Class 12.9, per ISO 4762	4	
11	152290	152290	152290	152290	• NUT, retaining	1	
12	1614140	—	—	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 60 mm	1	
	—	1614269	—	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 98 mm	1	
	—	—	1614170	—	• ADAPTER, w/ seat, Auto-Flo, T/C, 125/150 mm	1	
	—	—	—	1613492	• ADAPTER, w/ seat, Auto-Flo, T/C, 200 mm	1	
13	940293	940293	940293	940293	• O-RING, Viton, 1.500 x 1.625 x 0.063	1	
14	940157	940157	940157	940157	• O-RING, Viton, black, 0.562 x 0.688	1	
15	940111	940111	940111	940111	• O-RING, Viton, 0.301 ID x 0.070 W	2	
16	985244	985244	985244	985244	• PIN, dowel, hollow, 8-mm OD x 12-mm long	2	
17	941112	941112	941112	941112	• O-RING, Viton, 0.438 x 0.625 x 0.094	1	

NOTE A: See *Cartridge Kits* on page 40 for part number and quantity options.

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

Kits

Vision Sensor Mounting Kits

See Figure 17, Figure 18, and Figure 19. Also, refer to the following parts list.

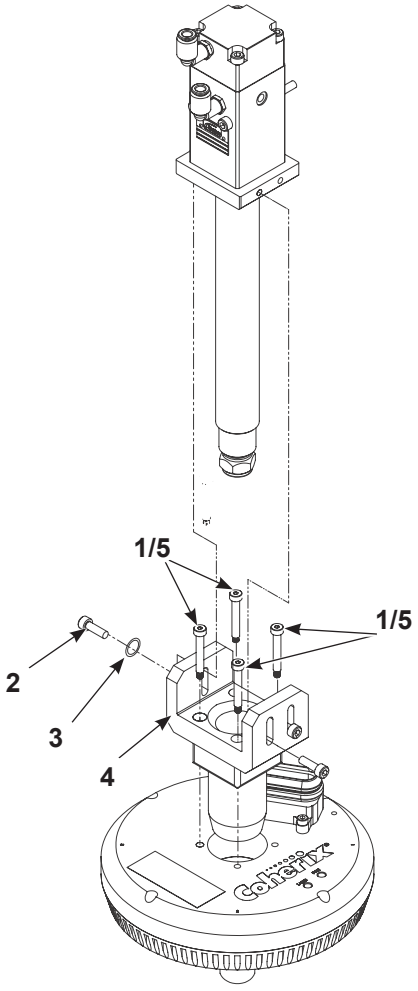

Figure 17 60, 125, and 200 mm Dispense Valve Mounting Kit

Item	Part	Part	Part	Description	Quantity	Notes
—	1614151	—	—	KIT, block, mount, camera, gun, Auto-Flo, 60 mm	1	
—	—	1618664	—	KIT, block, mount, camera, gun, Auto-Flo, 125 mm	1	
—	—	—	1612890	KIT, block, mount, camera, gun, Auto-Flo, 200 mm	1	
1	UA	—	—	• SCREW, socket, M4 x 30, Class 12.9, per ISO 4762	2	A
	—	UA	UA	• SCREW, shoulder, socket, M4 x 30, Class 12.9, per ISO 4762	2	A
2	UA	UA	UA	• SCREW, socket, M5 x 16, zinc, Class 12.9, per ISO 4762	3	
3	UA	UA	UA	• WASHER, flat, narrow, M5, steel, zinc, per ISO 7089	3	
4	------	------	------	• BLOCK, mount, camera, gun, Auto-Flo, 60/200	1	
5	—	UA	—	• CAPSCREW, socket head, M4 x 65, steel, zinc	4	B

NOTE: A. 60 and 200 mm only.

B. 125 mm only

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

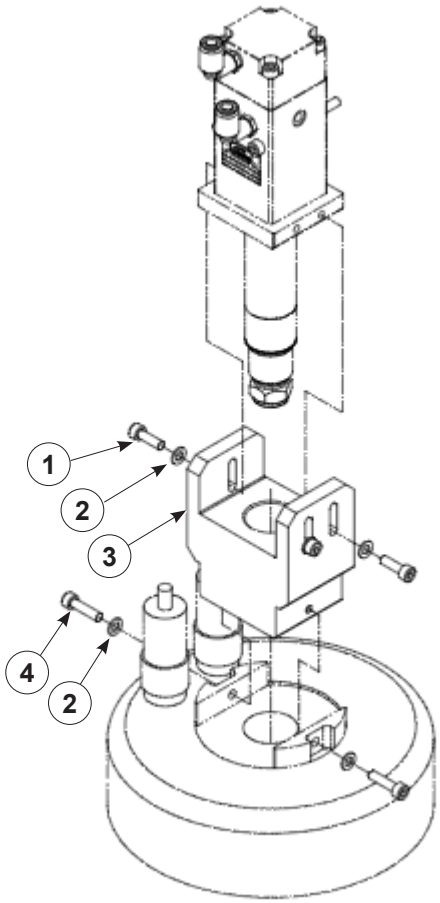

Figure 18 80 mm Dispense Valve Mounting Kit

Item	Part	Description	Quantity	Note
—	1614150	KIT, block, mount, camera, gun, Auto-Flo, 80 mm, extrude/bullet	1	
1	------	• SCREW, socket, M5 x 16, zinc, Class 12.9, per ISO 4762	3	
2	------	• WASHER, flat, narrow, M5, steel, zinc, per ISO 7089	5	
3	------	• BLOCK, mount, camera, gun, Auto-Flo, 60/20080 mm, extrude	1	
4	------	• SCREW, socket, M5 x 20, zinc, Class 12.9, per ISO 4762	2	

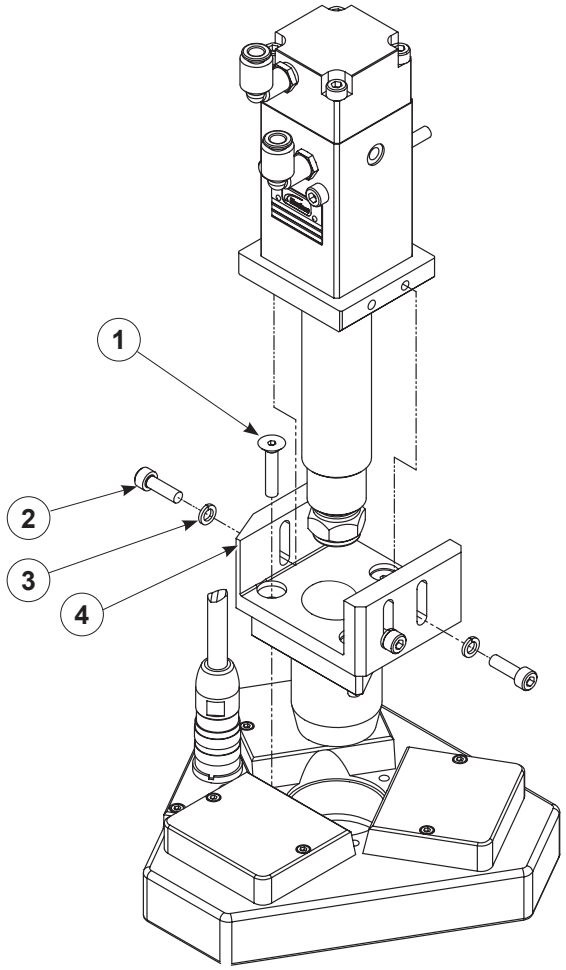

Figure 19 98 and 150 mm Dispense Valve Mounting Kit

Item	Part	Part	Description	Quantity	Note
—	1614465	—	KIT, block, mount, camera, gun, Auto-Flo, 98/150-mm, extrude	1	
—	—	1614466	KIT, block, mount, camera, gun, Auto-Flo, 98/150-mm, bullet	1	
1	------	------	• SCREW, flat, socket, M5 x 25, zinc, Class 10.9, per ISO 4026	3	
2	------	------	• SCREW, socket, M5 x 16, zinc, Class 12.9, per ISO 4762	3	
3	------	------	• WASHER, flat, narrow, M5, steel, zinc, per ISO 7089	3	
4	------	—	• BLOCK, mount, camera, gun, Auto-Flo, extrude	1	
	—	------	• BLOCK, mount, camera, gun, Auto-Flo, bullet	1	

Cartridge Kits

	Qty 1	Qty 10	Qty 25
Cartridge Kits	1099071	1616645	1616646

Accessory

Refer to the following parts list for the DELRIN® tip to be used during robot programming.

Part	Description
1016646	TIP, teach, ¾ in. − 3.0 in., 0.59 flange

Consumables

Part	Description
900464	ADHESIVE, Loctite Threadlocker Blue 242
1001849	GREASE, Mobil SHC 100
1031834	LUBRICANT, TFE, grease
900481	ADHESIVE, pipe/thread/hydraulic sealant
900298	COMPOUND, heat sink
1602618	ADHESIVE, Loctite 222

UK DECLARATION of CONFORMITY

This Declaration is issued under the sole responsibility of the manufacture.

Product: Fluid Control Valve

Models: Auto-Flo II, Auto-Flo II with Vision, Auto-Flo II with Zero Cavity, and CE20

Description: Dispense valves for accurate dispensing of adhesives, sealants, and other materials in various industry applications.

Applicable UK Regulations:

Supply of Machinery (Safety) Regulations 2008

Standards Used for Compliance:
EN12100 (2010)
EN60204 (2018)
EN12266-1:2012
EN12266-2:2012

Principles:

This product has been manufactured according to good engineering practice.
The product specified conforms to the directive and standards described above.

Quality System DNV – ISO9001 Certified

Date: 17 Oct 2023

Jeremy Krone
Supervisor Product Development Engineering
Industrial Coating Systems
Amherst, Ohio, USA

Nordson Authorized Representative in the UK
Contact: Technical Support Engineer
Nordson UK Ltd.; Unit 10 Longstone Road
Heald Green; Manchester, M22 5LB.
England

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EN12266-2:2012

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Quality System DNV – ISO9001 Certified

Date: 17 Oct 2023

Jeremy Krone
Engineering Manager
Industrial Coating Systems
Amherst, Ohio, USA

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