



National Vacuum Equipment, Inc.



NVE VALVES PRODUCT CATALOG

Challenger Series
VACUUM PUMPS & BLOWERS

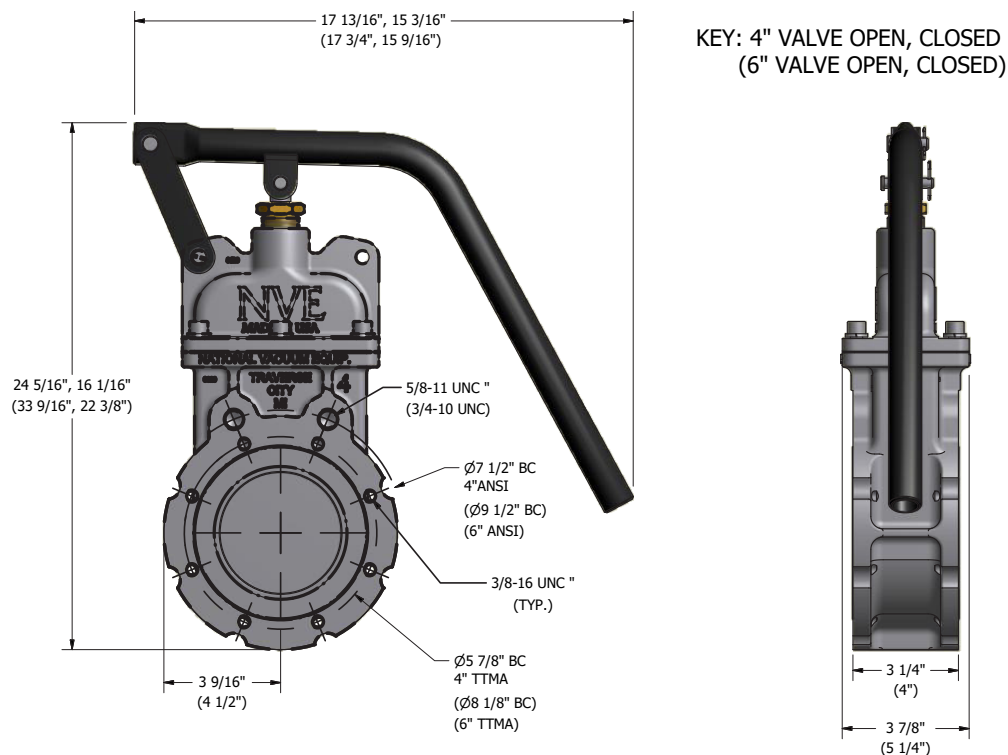


Designed. Built. Supported in The USA.

800-253-5500 | www.natvac.com

Features

- Steel or Stainless Steel Body; Stainless Steel Stem, Seat, Gate and Guide are Standard;
- Viton Seals Standard; Viton O-Ring Seal on Seat; Other O-Ring Materials Available;
- Completely Re-buildable and Self-Cleaning; accepts TTMA and ANSI Flanges
- MAWP 100 PSI; Burst Pressure greater than 400 PSI



NVE Single Gate Valves | Product List

DESCRIPTION	PART NUMBER	WEIGHT
NVE 4" VALVE CS	180-4C	31 lbs
NVE 4" VALVE SS	180-4S	31 lbs
NVE 6" VALVE CS	180-6C	62 lbs
NVE 6" VALVE SS	180-6S	62 lbs

NVE Single Gate Valves | Repair Kits

DESCRIPTION	PART NUMBER	WEIGHT
NVE REPAIR KIT 4" VALVE	190-000-4	6 lbs
NVE REPAIR KIT 6" VALVE	190-000-6	14 lbs
NVE SEAL KIT 4" VALVE	190-000-4SEAL	.25 lbs
NVE SEAL KIT 6" VALVE	190-000-6SEAL	.35 lbs



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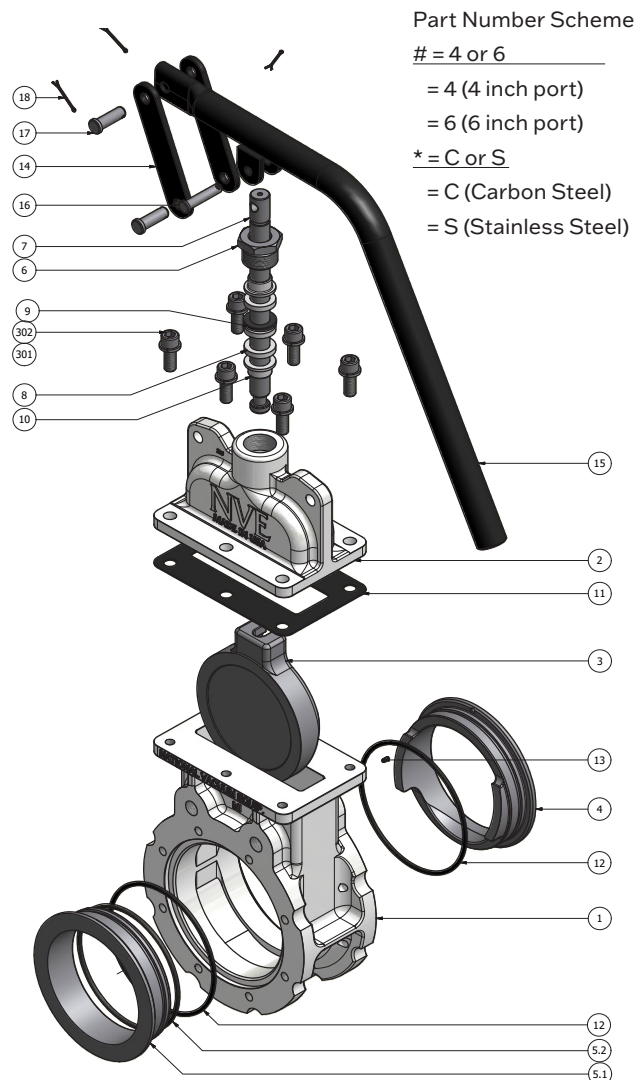
NVE Single Gate Valves | Manual Actuation - Closing

When ordering replacement parts please specify whether the valve is 4" or 6" and if it is Carbon or Stainless Steel.

NVE Single Gate Valves | Replacement Parts

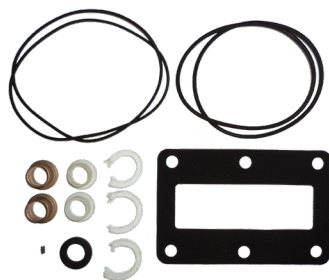
ITEM	DESCRIPTION	PART NUMBER
1	Valve Body	190-002-#
2	Valve Bonnet	190-004-#
3	Valve Gate	190-006-#
4	Valve Guide	190-010-#
5	Valve Seat	190-012-#
5.1	Seat Valve 4" NVE SS	190-012-#
5.2	2-242 Viton O-Ring	190-040-#
6	NVE Packing Nut Valve Brass	190-014-4
	NVE Packing SS Nut Valve SS	190-014-4S
7	Valve Stem	190-016-#
8	NVE Packing VALVE Teflon	190-018-4S
9	Washer Valve Viton	190-020-4
10	Bushing Valve Bronze	190-022-4
	Bushing Valve Teflon STOCK	190-022-4S
11	Valve Bonnet Gasket	190-038-#
12	Valve Guide O-Ring	190-042-#
13	valve Roll Pin SS	190-044-4
14	Valve Handle Bars 4	190-046-#
15	valve handle 4	190-048-#
16	clevis pin 5/16x1-1/2 Zinc	190-050-4
17	clevis pin 3/8x1-1/8 zinc	190-052-4
18	cotter pin 1/8x1 18-8 SS	190-086-4
301	LOCK WASHER, 3/8" SS	
302	SHCS - 3/8" - 16 UNC X 1" SS	

NOTE: Item numbers 300 and above are listed for reference only and may be sourced locally.

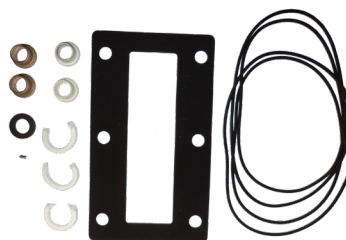


4 and 6 NVE Single Gate Valve Parts Diagram

NVE Valve Seal Kits



NVE Valve Seal Kit 4



NVE Valve Seal Kit 6

NVE Valve Seal Kits | Parts List

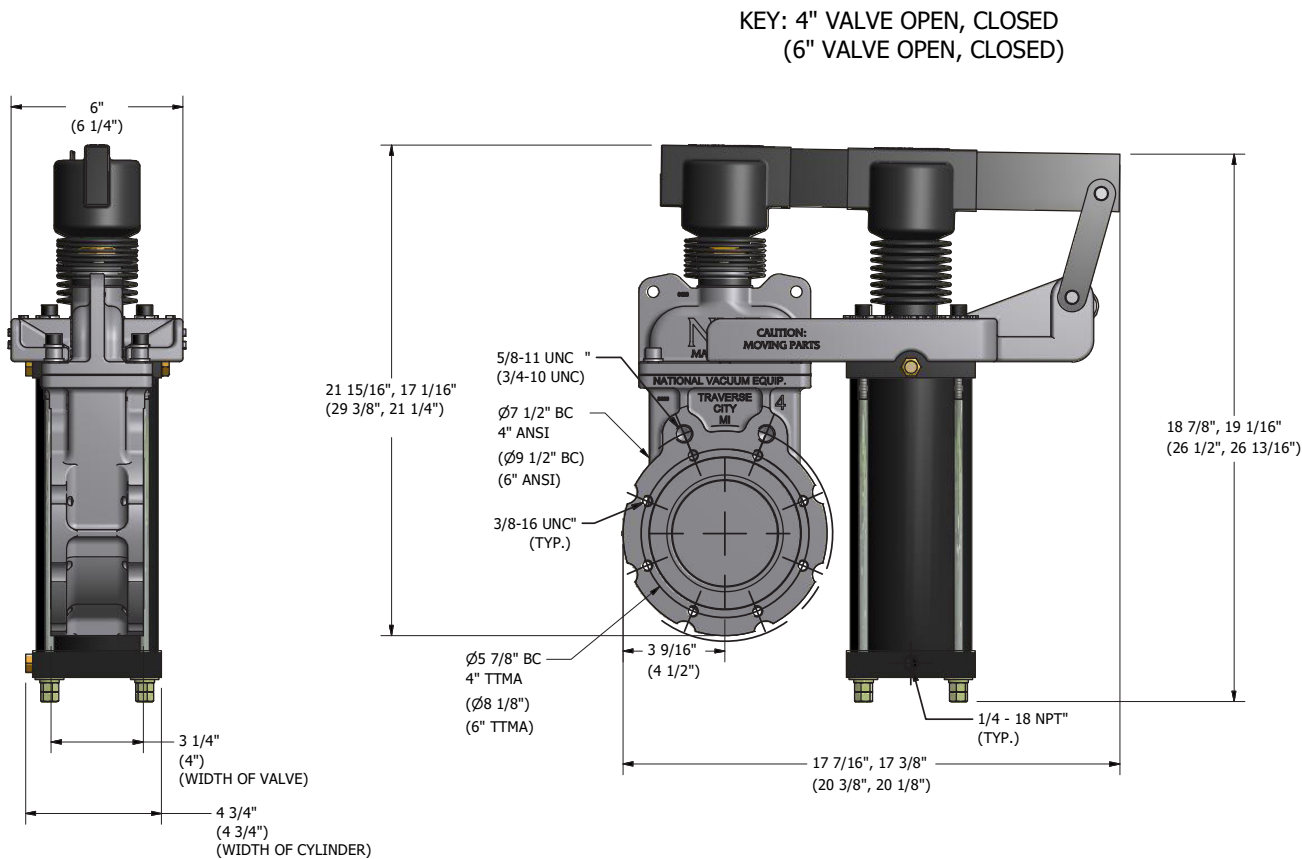
DESCRIPTION	PART NUMBER	WEIGHT
NVE SEAL KIT 4" VALVE	190-000-4SEAL	0.25 lbs
NVE SEAL KIT 6" VALVE	190-000-6SEAL	0.35 lbs

Features

- Steel or Stainless Steel Body; Stainless Steel Stem, Seat, Gate and Guide are Standard;
- Viton Seals Standard; Viton O-Ring Seal on Seat; Other O-Ring Materials Available;
- Completely Rebuildable and Self-Cleaning; accepts TTMA and ANSI Flanges.
- MAWP 100 PSI; Burst Pressure greater than 400 PSI. Dual Gate version available for applications requiring horizontal mounting or with high contents of solids.

Actuator

- Actuator Assembly features Stainless Steel Bracket and Fasteners; Powder Coat Painted Parts;
- Self-Lubricating Cylinder; Replaceable Seals; and a Million-Cycle Spring.
- Maximum Cylinder Operating Pressure 150 PSI.



NVE Piston Gate Valve with Spring Close Pneumatic Cylinder | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
NVE 4" - CS - PNEUMATIC / SC	180-4C1	65 lbs
NVE 4" - SS - PNEUMATIC / SC	180-4S1	65 lbs
NVE 6" - CS - PNEUMATIC / SC	180-6C1	107 lbs
NVE 6" - SS - PNEUMATIC / SC	180-6S1	107 lbs

NVE Valves with Actuators | Pneumatic Spring Closed

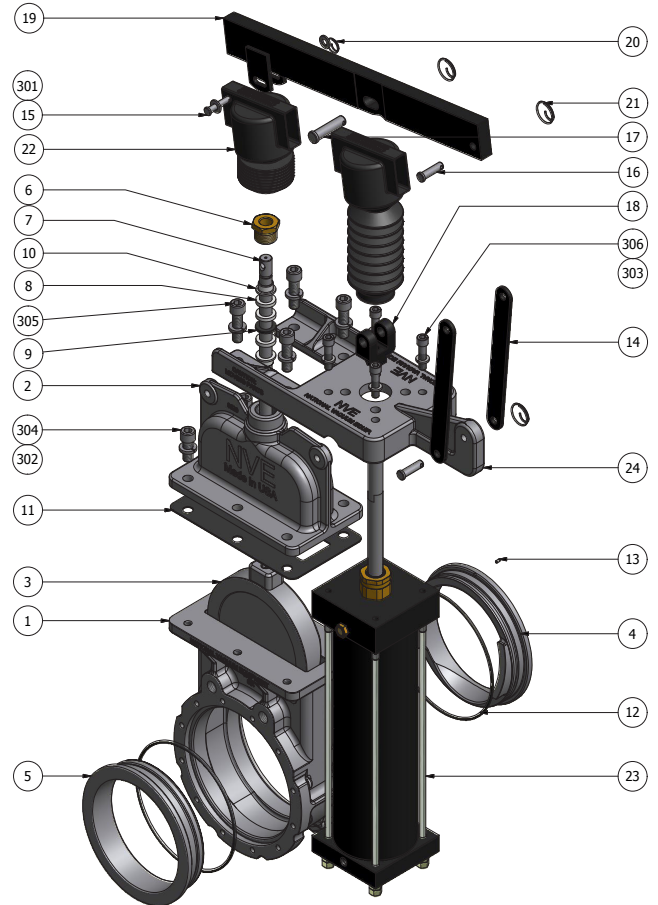


Part Number Scheme

# = 4 or 6	* = C or S	* = C or S
= 4 (4 inch port)	= C (Carbon Steel)	= C (Carbon Steel)
= 6 (6 inch port)	= S (Stainless Steel)	= S (Stainless Steel)

NVE Valves with Actuators | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER
1	BODY VALVE NVE CARBON	190-002-#
2	BONNET VALVE NVE CARBON	190-004-#
3	GATE VALVE NVE SS	190-006-#
4	GUIDE VALVE NVE SS	190-010-#
5	SEAT VALVE/O-RING NVE SS	190-012-#
6	NVE PACKING NUT VALVE BRASS NVE PACKING NUT VALVE STAINLESS	190-014-4 190-014-4S
7	STEM VALVE 316L	190-016-#
8	NVE PACKING VALVE TEFLON	190-018-4S
9	WASHER VALVE VITON	190-020-4
10	BUSHING VALVE TEFLON STOCK	190-022-4S
11	BONNET GASKET VALVE NVE	190-038-#
12	O-RING VALVE GUIDE 2-157 VITON	190-042-#
13	ROLL PIN VALVE SS	190-044-4
14	HANDLE BARS VALVE NVE CYLINDER ARM BAR	190-046-4 190-048-6PNU
15	CLEVIS PIN 5/16" X 1-1/2" ZINC	190-050-4
16	CLEVIS PIN 3/8" X 1 3/8" ZINC	190-056-4
17	CLEVIS PIN 1/2" X 2" ZINC PLATE	190-058-4
18	CLEVIS CYLINDER ROD	190-060-4
19	CYLINDER ARM NVE PAINTED	190-062-#
20	CIRCLE COTTER 3/4" OD 302 SS	190-082-4
21	CIRCLE COTTER 1-1/8" OD 302 SS	190-084-4
22	BOOT 4" & 6" ACTUATED VALVES	190-090-4
23	CYLINDER ASSY PNEUMATIC SPRING CLOSED	190-116-#PNU
24	BRKT VALVE CYLINDER NVE	804-122-#



NVE Valves with Actuators | Replacement Parts Fasteners 4"

ITEM	DESCRIPTION	PART NUMBER
301	FLAT WASHER, SAE	FW - 5/16 SAE
302	LOCKWASHER, SS	LW 3/8 SS
303	SHCS - 3/8-16 UNC X 1	SHCS - 3/8-16 UNC X 1
304	SHCS - 3/8-16 UNC X 1.75	SHCS - 3/8-16 UNC X 1.75

NVE Valves with Actuators | Replacement Parts Fasteners 6"

ITEM	DESCRIPTION	PART NUMBER
301	FLAT WASHER, SAE	FW - 5/16 SAE
302	LOCKWASHER, SS	LW 1/2 SS
303	SHCS - 1/2-13 UNC X 1.25	SHCS - 1/2-13 UNC X 1.25
304	SHCS - 1/2-13 UNC X 1.75	SHCS - 1/2-13 UNC X 1.75

NVE Valves with Actuators | Pneumatic Spring Closed

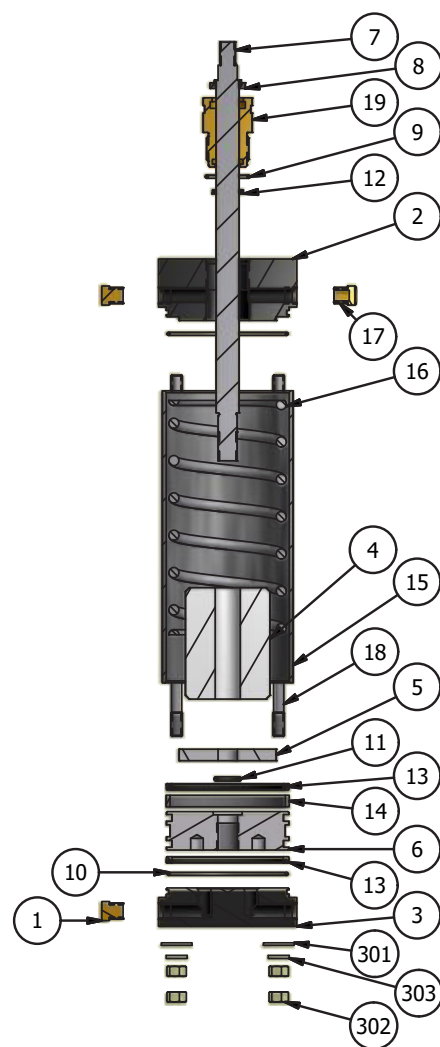
Challenger Series

NVE Valves with Actuators Pneumatic Spring Closed | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
CYLINDER Assembly - 4" Pneumatic Spring Closed	190-116-4PNU	15 lbs
CYLINDER Assembly - 6" Pneumatic Spring Closed	190-116-6PNU	21 lbs
NVE Cylinder Repair Kit 4" BORE	190-000-CYLKIT	.15 lbs

Pneumatic Spring Cylinder | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	PLUG BRASS HEX HEAD 0.25 NPT	120-059	0.05 lbs
2	CYLINDER HEAD, ROD END	190-064-4PNU	2.2 lbs
3	CYLINDER HEAD, CAP END	190-066-4PNU	2.15 lbs
4	STOP TUBE UHMW SLEEVE 4"	190-068-4PNU	0.66 lbs
	STOP TUBE UHMW SLEEVE 6"	190-068-6PNU	1.3 lbs
5	STOP TUBE ALU BASE 4"	190-070-4PNU	0.27 lbs
	STOP TUBE ALU BASE 6"	190-070-6PNU	0.27 lbs
6	PISTON, 4 BORE DUAL SEAL CYL.	190-074	1.3 lbs
7	PISTON ROD 4 2-WAY	190-078-6	1.6 lbs
	PISTON ROD 6 HYD SPRING CLOSE	190-080-6	2.6 lbs
8	WIPER, .750, ROD 90 DURO	190-092-4	0.01 lbs
9	O-RING, 2-121 NITRILE 70 DURO	190-094-4	0.01 lbs
10	O-RING, 2-154 NITRILE 70 DURO	190-098-4	0.01 lbs
11	O-RING, 2-208 NITRILE 70 DURO	190-100-4	0.01 lbs
12	SEAL, .750 ROD U-CUP DURO	190-102-4	0.01 lbs
13	SEAL, 4.00 BORE 3/16 U-CUP	190-110-4	0.01 lbs
14	WEAR RING, 4.00 OD X .375	190-114-4	0.01 lbs
15	CYLINDER TUBE, 2.5 X 5.938 LONG	190-120	0.79 lbs
	CYLINDER TUBE, 6" HD SC AIR	190-120-6	1.60 lbs
16	SPRING, 11.48 F.L., 4 TUBE SC CYLINDER	190-126	2.05 lbs
	SPRING GUIDE, 6" TOP MOUNT	190-124-6	0.14 lbs
	SPRING, 17.75	190-126-6	5.50 lbs
17	CYLINDER VENT 1/4-18 NPT MALE	190-128-4	0.05 lbs
18	CYLINDER TIE ROD, 3/8" X 11.75" LONG	190-130	0.35 lbs
	CYLINDER TIE ROD, 3/8" X 15.312" LONG	190-130-6	0.40 lbs
19	NVE PACKING NUT, CYLINDER BRASS	190-132-4	0.70 lbs
301	FLAT WASHER - 3/8"	SEE DESC	---
302	HEX NUT - 3/8"	SEE DESC	---
303	LOCK WASHER - 3/8"	SEE DESC	---



NVE Valves with Actuators | Hydraulic Spring Closed

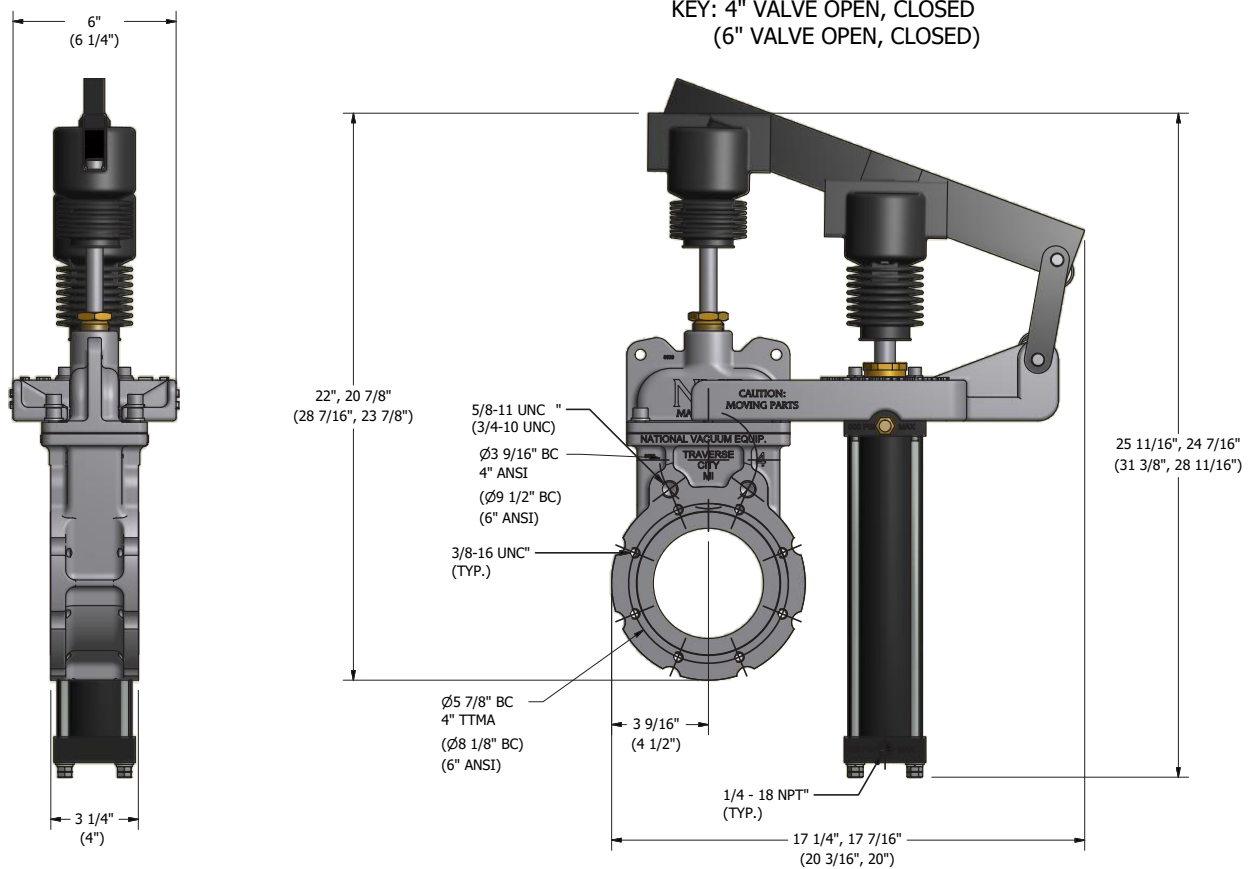


Features

- Steel or Stainless Steel Body; Stainless Steel Stem, Seat, Gate and Guide are Standard.
- Viton Seals Standard; Viton O-Ring Seal on Seat; Other O-Ring Materials Available.
- Completely Re-buildable and Self-Cleaning; accepts TTMA and ANSI Flanges.
- MAWP 100 PSI; Burst Pressure greater than 400 PSI.

Actuator

- Assembly features Stainless Steel Bracket and Fasteners; Powder Coat Painted Parts.
- Replaceable Seals; and a Million-Cycle Spring. Maximum Cylinder Operating Pressure 500 PSI.



NVE Piston Gate Valve with Spring Close Hydraulic Cylinder | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
NVE 4" - CS 2.5 SPRING HS	180-4C2	64 lbs
NVE 4" - SS 2.5 SPRING HS	180-4S2	63 lbs
NVE 6" - CS 2.5 SPRING HS	180-6C2	98 lbs
NVE 6" - SS 2.5 SPRING HS	180-6S2	98 lbs

NVE Valves with Actuators | Hydraulic Spring Closed

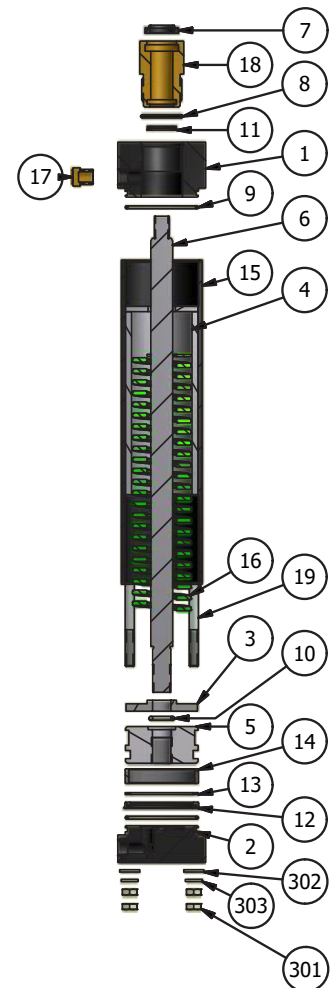
Challenger Series

NVE Valves with Actuators Hydraulic Spring Closed | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
CYLINDER ASSY - 2.5 HYDRAULIC SPRING CLOSED, 4"	190-116-4HYD	14.50 lbs
CYLINDER ASSY - 2.5 HYDRAULIC SPRING CLOSED, 6"	190-116-6HYD	13.50 lbs
NVE CYLINDER REPAIR KIT FOR 2.5" BORE CYLINDER	190-000-4CYLKIT	.10 lbs

Hydraulic Cylinder | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	CYLINDER HEAD, ROD END	190-064-4	1.2 lbs
2	CYLINDER HEAD, CAP END	190-066-4	0.90 lbs
3	STOP TUBE LOWER 4" & 6"	190-068-4	0.3 lbs
4	STOP TUBE TOP 4"	190-068-4T	2.78 lbs
	STOP TUBE TOP 6"	190-068-6T	0.6 lbs
5	PISTON, 2.5 BORE	190-072-4	0.45 lbs
6	PISTON ROD, 4"	190-080-4	1.95 lbs
	PISTON ROD, 6"	190-080-6	2.60 lbs
7	WIPER, .750, ROD 90 DURO	190-092-4	0.01 lbs
8	O-RING, 2-121 NITRILE 70 DURO	190-094-4	0.01 lbs
9	O-RING, 2-241 NITRILE 70 DURO	190-096-4	0.01 lbs
10	O-RING, 2-208 NITRILE 70 DURO	190-100-4	0.01 lbs
11	SEAL, .750 ROD U-CUP DURO	190-102-4	0.01 lbs
12	SEAL, 2.50 BORE U-CAP 80 DURO	190-106-4	0.01 lbs
13	SEAL, 2.50 B-U SCARF CUT 15-2	190-108-4	0.01 lbs
14	WEAR RING, 2.50 OD X .50	190-112-4	0.5 lbs
15	CYLINDER TUBE, 2.5 X 13.063 LONG	190-116-6HA	0.7 lbs
	CYLINDER TUBE, 2.5 X 11.063 LONG	190-118-6	0.80 lbs
16	SPRING DIE 2 OD X 1 ID X 12	190-126-3	5 lbs
	SPRING DIE 2 OD X 1 ID X 10	190-126-4	5 lbs
17	CYLINDER VENT 1/4-18 NPT MALE	190-128-4	0.05 lbs
18	NVE PACKING NUT, CYLINDER BRASS	190-132-4	0.70 lbs
19	CYLINDER TIE ROD 5/16 X 13.125	190-134-4	0.3 lbs
	CYLINDER TIE ROD 5/16 X 15.312	190-134-4TM	0.3 lbs
301	HEX NUT - 5/16	SEE DESC	---
302	FLAT WASHER - 5/16	SEE DESC	---
303	LOCK WASHER - 5/16	SEE DESC	---



NVE Valves with Actuators | Pneumatic Spring Closed

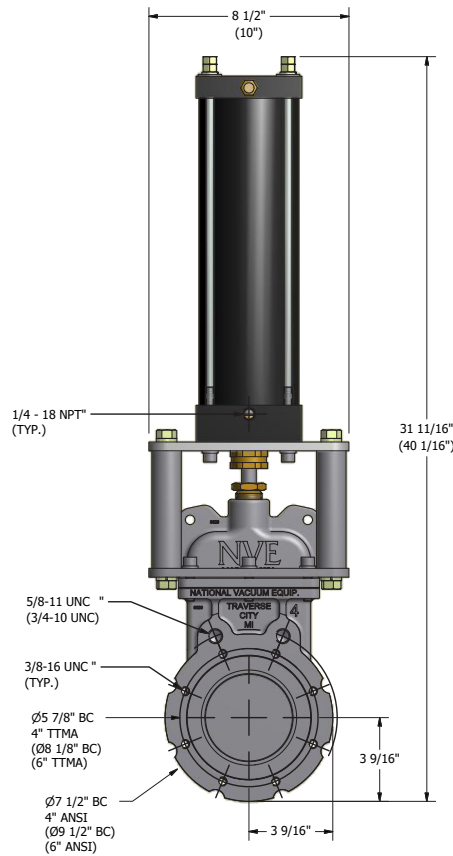


Features

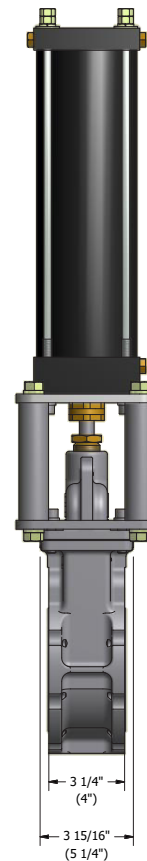
- Steel or Stainless Steel Body; Stainless Steel Stem, Seat, Gate and Guide are Standard;
- Viton Seals Standard; Viton O-Ring Seal on Seat; Other O-Ring Materials Available;
- Completely Re-buildable and Self-Cleaning; accepts TTMA and ANSI Flanges.
- MAWP 100 PSI; Burst Pressure greater than 400 PSI.

Actuator

- Assembly features Stainless Steel Bracket and Fasteners; Powder Coat Painted Parts;
- Self-Lubricating Cylinder; Replaceable Seals; and a Million-Cycle Spring.
- Maximum Cylinder Operating Pressure 150 PSI.



KEY: 4" VALVE DIMENSIONS
(6" VALVE) DIMENSIONS



NVE Top Mount Piston Gate Valve with Spring Close Pneumatic Cylinder | Parts List

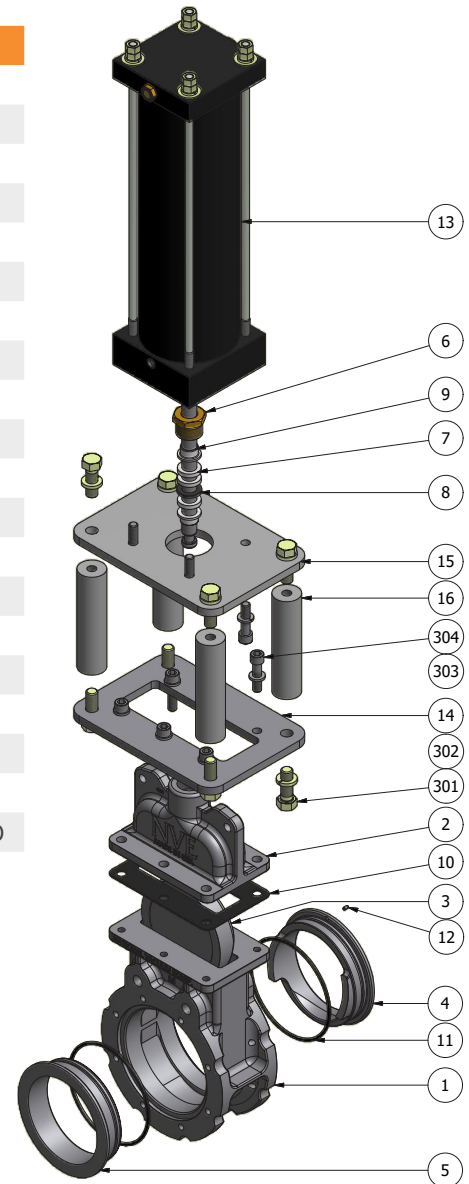
DESCRIPTION	PART NUMBER	WEIGHT
NVE 4" - CS TOP MOUNT SC	180-4CTM	66 lbs
NVE 4" - SS ASSEMBLY TOP MOUNT SC	180-4STM	66 lbs
NVE 6" - CS TOP MOUNT SC	180-6CTM	96 lbs
NVE 6" - SS TOP MOUNT SC	180-6STM	95 lbs

NVE 4" Top Mount Piston Gate Valve with Spring Close Pneumatic Cylinder

Challenger Series

NVE 4" Top Mount Piston Gate Valve with Spring Close Pneumatic Cylinder | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER
1	BODY VALVE 4" NVE CARBON	190-002-4C
2	BONNET VALVE 4" NVE CARBON	190-004-4C
3	GATE VALVE 4" NVE SS	190-006-4
4	GUIDE VALVE 4" NVE SS	190-010-4
5	SEAT VALVE/O-RING 4" NVE SS	190-012-4
6	NVE PACKING NUT VALVE BRASS	190-014-4
7	NVE PACKING VALVE TEFLON	190-018-4S
8	WASHER VALVE VITON	190-020-4
9	BUSHING VALVE TEFLON STOCK	190-022-4S
10	BONNET GASKET VALVE 4" NVE	190-038-4
11	O-RING 4" VALVE GUIDE 2-157 VITON	190-042-4
12	ROLL PIN VALVE SS	190-044-4
13	CYLINDER ASSY 4" NVE TOP MOUNT	190-116-4TM
14	4" TM BRACKET BONNET PLATE	190-122-4TM-1-REV c
15	4" TM BRACKET CYLINDER PLATE	190-122-4TM-2
16	4" TM BRKT TAPPED STANDOFF	190-122-4TM-3
301	HEX HEAD CAP SCREW - 1/2-13 UNC X 1.50	HHCS - 1/2-13 X 1.50
302	LOCK WASHER, 1/2	LW - 1/2
303	LOCK WASHER, 3/8" SS	LW - 3/8 SS
304	SHCS - 3/8-16 UNC X 1.50	SHCS - 3/8-16 UNC X 1.50

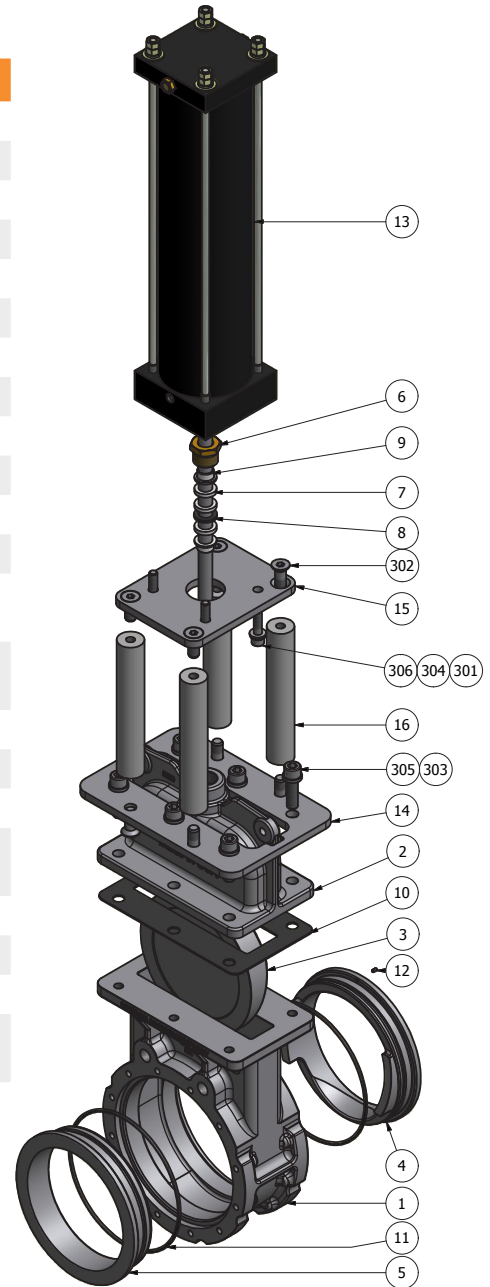


NVE 6" Top Mount Piston Gate Valve with Spring Close Pneumatic Cylinder



NVE 6" Top Mount Piston Gate Valve with Spring Close Pneumatic Cylinder | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER
1	BODY VALVE 6" NVE CARBON	190-002-6C
2	BONNET VALVE 6" NVE CARBON	190-004-6C
3	GATE VALVE 6" NVE 316 SS	190-006-6
4	GUIDE VALVE 6" NVE SS	190-010-6
5	SEAT VALVE/O-RING 6" NVE SS	190-012-6
6	NVE PACKING NUT VALVE BRASS	190-014-4
7	NVE PACKING VALVE TEFLON	190-018-4S
8	WASHER VALVE VITON	190-020-4
9	BUSHING VALVE TEFLON STOCK	190-022-4S
10	BONNET GASKET VALVE 6" NVE	190-038-6
11	O-RING 6" VALVE GUIDE	190-042-6
12	ROLL PIN VALVE SS	190-044-4
13	CYLINDER ASSY TOP MOUNT SPRING CLOSED 6"	190-116-6TM
14	CYLINDER BRKT 6" TOP MOUNT (BOTTOM)	190-122-6TM-1
15	CYLINDER BRKT 6" TOP MOUNT (TOP)	190-122-6TM-2
16	6" TM BRKT TAPPED STANDOFF	190-122-6TM-3
301	FLAT WASHER, 3/8" SS FLAT	FW - 3/8 SS
302	HEXAGON HEAD COUNTERSUNK CAP SCREW - 1/2-13 UNC X 1.25	HHCCS-1/2-13 UNC X 1.25
303	LOCK WASHER, 1/2 SS	LW - 1_2 SS
304	LOCK WASHER, 3/8" SS	LW - 3/8 SS
305	HEX SOCKET HEAD CAP SCREW	SHCS - 1/2-13 UNC X 1.75
306	SHCS - 3/8-16 UNC X 1.50	SHCS - 3/8-16 UNC X 1.50



NVE Valves with Actuators | Pneumatic Spring Closed

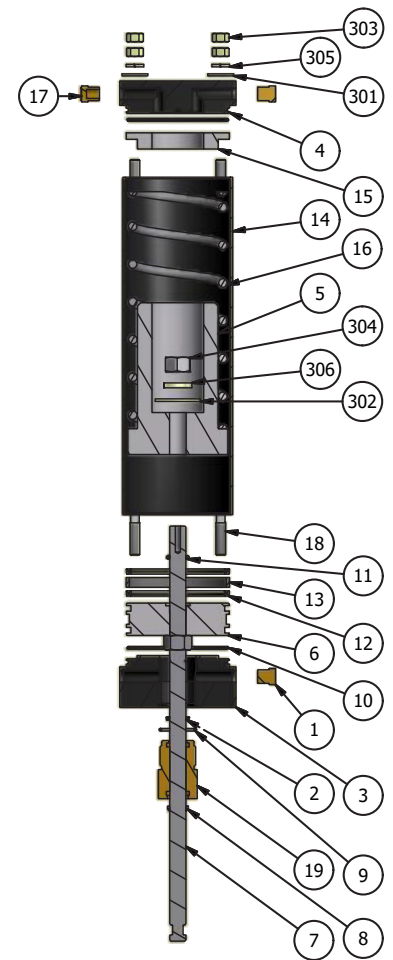
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NVE Valves with Actuators Pneumatic Spring Closed Cylinder Assemblies | Parts List

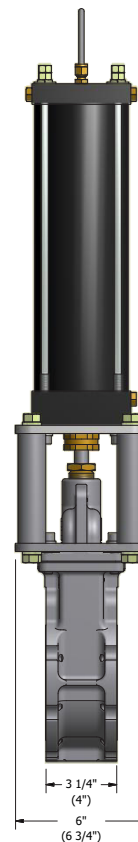
DESCRIPTION	PART NUMBER	WEIGHT
CYLINDER ASSEMBLY - 4" TOP MOUNT SPRING CLOSED	190-116-4TM	19 lbs
CYLINDER ASSEMBLY - 6" TOP MOUNT SPRING CLOSED	190-116-6TM	21 lbs
NVE CYLINDER REPAIR KIT 4" BORE	190-000-CYLKIT	.15 lbs

Spring Closed Cylinder | Replacement Part

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	PLUG BRASS HEX HEAD 0.25 NPT	120-059	0.05 lbs
2	SEAL .625 ROD U-CUP DURO	180-102-6TM	0.01 lbs
3	CYLINDER HEAD, ROD END	190-064-4PNU	2.1 lbs
4	CYLINDER HEAD, CAP END	190-066-4PNU	2.15 lbs
5	STOP TUBE 4" NVE TOP MOUNT	190-068-4TM	3.75 lbs
	STOP TUBE 6" NVE TOP MOUNT	190-068-6TM	2.08
6	PISTON, 4" BORE DUAL SEAL CYL.	190-074	1.30 lbs
7	PISTON ROD, 4" TOP MOUNT	190-080-4TM	1.5 lbs
	PISTON ROD, 6" TOP MOUNT AIR/PR	190-080-6TM	1.55 lbs
8	WIPER, .625, ROD 90 DURO	190-092-6TM	0.01 lbs
9	O-RING, 2-121 NITRILE 70 DURO	190-094-4	0.01 lbs
10	O-RING, 2-154 NITRILE 70 DURO	190-098-4	0.01 lbs
11	O-RING, 2-208 NITRILE 70 DURO	190-100-4	0.01 lbs
12	SEAL, 4.00 BORE 3/16 U-CUP	190-110-4	0.01 lbs
13	WEAR RING, 4.00 OD X .375	190-114-4	0.01 lbs
14	CYLINDER TUBE, 6" HD SC AIR	190-120-6	1.60 lbs
	CYLINDER TUBE MOUNT 6" NVE	190-120-6TM	1.90 lbs
15	SPRING GUIDE, 4" TOP MOUNT	190-124-4	0.4 lbs
	SPRING GUIDE, 6" TOP MOUNT	190-124-6	0.14 lbs
16	SPRING, 11.48 F.L., 4" TUBE SC CYLINDER	190-126	2.05 lbs
	SPRING, 17.75	190-126-6	5.50 lbs
17	CYLINDER VENT 1/4-18 NPT MALE	190-128-4	0.05 lbs
18	CYLINDER TIE ROD, 3/8 X 15.312 LONG	190-130-6	0.40 lbs
	CYLINDER TIE ROD, 3/8 X 19	190-130-6TM	0.47 lbs
19	NVE PACKING NUT, VALVE BRASS	190-132-6TM	0.75 lbs
301	FLAT WASHER - 3/8"	SEE DESC	---
302	FLAT WASHER - 5/8"	SEE DESC	---
303	HEX NUT - 3/8" UNC	SEE DESC	---
304	HEX NUT - 5/8" UNF	SEE DESC	---
305	LOCK WASHER - 3/8"	SEE DESC	---
306	LOCK WASHER - 5/8"	SEE DESC	---



MADE IN THE USA



DESCRIPTION	PART NUMBER	WEIGHT
NVE 4" - CARBON ASSEMBLY - TOP MOUNT WITH INDICATOR	180-4CTMI	66 lbs
NVE 4" - STAINLESS STEEL ASSEMBLY - TOP MOUNT WITH INDICATOR	180-4STMI	65 lbs
NVE 6" - CARBON ASSEMBLY - TOP MOUNT WITH INDICATOR	180-6CTMI	94 lbs
NVE 6" - STAINLESS STEEL ASSEMBLY - TOP MOUNT WITH INDICATOR	180-6STMI	93 lbs

NVE Valves with Actuators | Pneumatic Spring Closed with Indicator

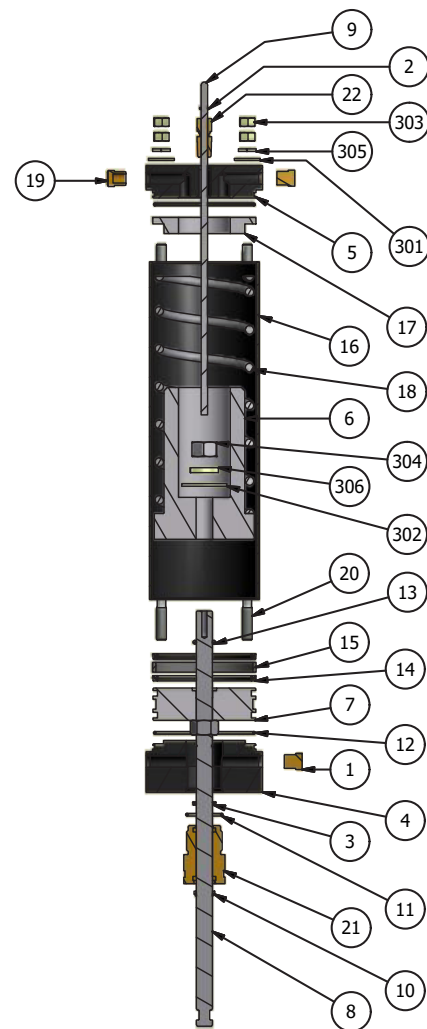
Challenger Series

NVE Valves with Actuators - Pneumatic Spring Closed Cylinder Assemblies | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
CYLINDER ASSEMBLY - 4" TOP MOUNT WITH INDICATOR	190-116-4TMI	19 lbs
CYLINDER ASSEMBLY - 6" TOP MOUNT WITH INDICATOR	190-116-6TMI	21 lbs
NVE CYLINDER REPAIR KIT 4" BORE	190-000-CYLKIT	.15 lbs

Spring Closed Cylinder | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	PLUG BRASS HEX HEAD 0.25 NPT	120-059	0.05 lbs
2	O-RING, 2-010 VITON	120-064-019	0.01 lbs
3	SEAL .625 ROD U-CUP DURO	180-102-6TM	0.01 lbs
4	CYLINDER HEAD, ROD END	190-064-4PNU	2.2 lbs
5	CYLINDER HEAD, CAP END	190-066-4PNU-1	2.15 lbs
6	STOP TUBE 4" NVE TOP MOUNT	190-068-4TM	3.75 lbs
	STOP TUBE 6" NVE TOP MOUNT	190-068-6TM	2.1 lbs
7	PISTON, 4" BORE DUAL SEAL CYL.	190-074	1.30 lbs
8	PISTON ROD, 4" TOP MOUNT	190-080-4TM	1.4 lbs
	PISTON ROD, 6" TOP MOUNT AIR/PR	190-080-6TM	1.55 lbs
9	INDICATING ROD 4" TM VALVE	190-081-4TM	0.18 lbs
	INDICATING ROD 6" TM VALVE	190-081-6TM	0.24 lbs
10	WIPER, .625, ROD 90 DURO	190-092-6TM	0.01 lbs
11	O-RING, 2-121 NITRILE 70 DURO	190-094-4	0.01 lbs
12	O-RING, 2-154 NITRILE 70 DURO	190-098-4	0.01 lbs
13	O-RING, 2-208 NITRILE 70 DURO	190-100-4	0.01 lbs
14	SEAL, 4.00 BORE 3/16 U-CUP	190-110-4	0.01 lbs
15	WEAR RING, 4.00 OD X .375	190-114-4	0.01 lbs
16	CYLINDER TUBE, 6" HD SC AIR	190-120-6	1.60 lbs
	CYLINDER TUBE MOUNT 6 NVE	190-120-6TM	1.90 lbs
17	SPRING GUIDE, 4" TOP MOUNT	190-124-4	0.4 lbs
	SPRING GUIDE, 6" TOP MOUNT	190-124-6	0.14 lbs
18	SPRING, 11.48 F.L., 4 TUBE SC CYLINDER	190-126	2.05 lbs
	SPRING, 17.75	190-126-6	5.50 lbs
19	CYLINDER VENT 1/4-18 NPT MALE	190-128-4	0.05 lbs
20	CYLINDER TIE ROD, 3/8 X 15.312 LONG	190-130-6	0.40 lbs
	CYLINDER TIE ROD, 3/8 X 19	190-130-6TM	0.47
21	NVE PACKING NUT, VALVE BRASS	190-132-6TM	0.75 lbs
22	FITTING, 1/4 TUBE X 1/4 MNPT BRASS THROUGH BORE	320-408--013	0.10 lbs
301	FLAT WASHER - 3/8"	SEE DESC	---
302	FLAT WASHER - 5/8"	SEE DESC	---
303	HEX NUT - 3/8" UNC	SEE DESC	---
304	HEX NUT - 5/8" UNF	SEE DESC	---
305	LOCK WASHER - 3/8"	SEE DESC	---
306	LOCK WASHER - 5/8"	SEE DESC	---



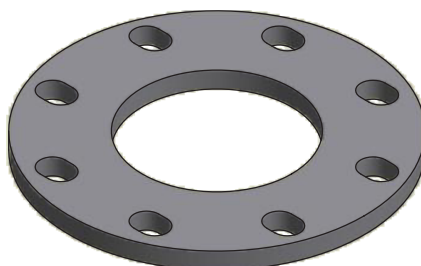
NVE Valve Flanges | ANSI

Valve Flanges

The NPV piston gate valves are machined to receive either the TTMA or ANSI flanges. The TTMA flange bolts to the face of the valve. The ANSI flange bolts together outside the valve face effectively sandwiching the valve. We offer various combinations of flanges and connectors as well as flange to flange adapters. We can customize a flange arrangement to your needs.

NVE Valve Flanges 3" and 4" ANSI | Parts List

FLANGE BOLT PATTERN	CONNECTION	MATERIAL	PART NUMBER	WEIGHT
ANSI FLANGE 4"	RADIAL SLOTS	CARBON	402-400-RSC	5.65 lbs
ANSI FLANGE 4"	WELD SS	STAINLESS	402-400-WS	6.20 lbs

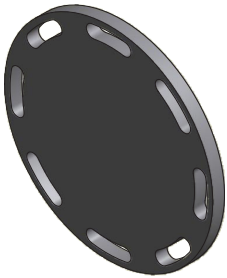


NVE Valve Flanges 6" ANSI | Parts List

FLANGE BOLT PATTERN	CONNECTION	MATERIAL	PART NUMBER	WEIGHT
ANSI FLANGE 6"	MALE NPT 6"	CARBON	402-600-6NPT	10.25 lbs
ANSI FLANGE 6"	WELD 6"	STAINLESS	402-600-WS	6.3 lbs
ANSI FLANGE 6"	WELD 6"	CARBON	402-600-WF	5 lbs

Valve Flanges

The NPV piston gate valves are machined to receive either the TTMA or ANSI flanges. The TTMA flange bolts to the face of the valve. The ANSI flange bolts together outside the valve face effectively sandwiching the valve. We offer various combinations of flanges and connectors as well as flange to flange adapters. We can customize a flange arrangement to your needs.



NVE Valve Flanges 3" and 4" TTMA | Parts List

FLANGE BOLT PATTERN	CONNECTION	MATERIAL	PART NUMBER	WEIGHT
TTMA FLANGE 4"	SLOTTED BLANK	CARBON	404-400-000	3.05 lbs
TTMA FLANGE 4" MALE NPT	TOE 304 SS	STAINLESS	404-400-1S	4 lbs
TTMA FLANGE 4"	MALE 4" NPT	CARBON	404-400-4NPT	4.00 lbs
TTMA FLANGE 4"	WELD	STAINLESS	404-400-WS	3.16 lbs



NVE Valve Flanges 6" TTMA | Parts List

FLANGE BOLT PATTERN	CONNECTION	MATERIAL	PART NUMBER	WEIGHT
TTMA FLANGE 6"	MALE PIPE 6	CARBON	404-600-6NPT	2.75 lbs
TTMA FLANGE 6"	WELD	CARBON	404-600-WF	2.60 lbs
TTMA FLANGE 6"	WELD	316 SS	404-600-WS	3.00 lbs



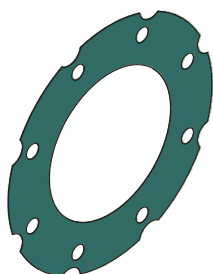
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NVE Valve Gaskets



NVE Valve 4" Gaskets | Parts List

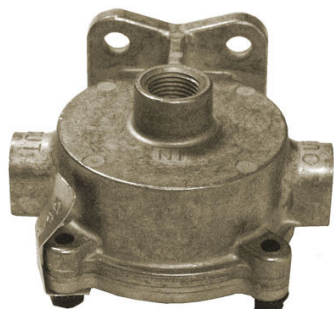
DESCRIPTION	PART NUMBER	WEIGHT
GASKET, TTMA 4" BUNA - 1/8 THICK	404-400-GB	0.15 lbs
GASKET, 4" FLANGE .093 CORK	404-400-GC	0.05 lbs
GASKET, TTMA 4" FIBER	404-400-GF	0.10 lbs
GASKET, TTMA 4" TEFLON	404-400-GT	0.05 lbs



NVE Valve 6" Gaskets | Parts List

DESCRIPTION	PART NUMBER	WEIGHT
GASKET, TTMA 6" BUNA - 1/8 THICK	404-600-GB	0.20 lbs
GASKET, TTMA 6" CORK	404-600-GC	0.05 lbs
GASKET, TTMA 6" FIBER	404-600-GF	0.10 lbs
GASKET, TTMA 6" TEFLON	404-600-GT	0.10 lbs

Air Dump Valve



Air Dump Valve | Parts List

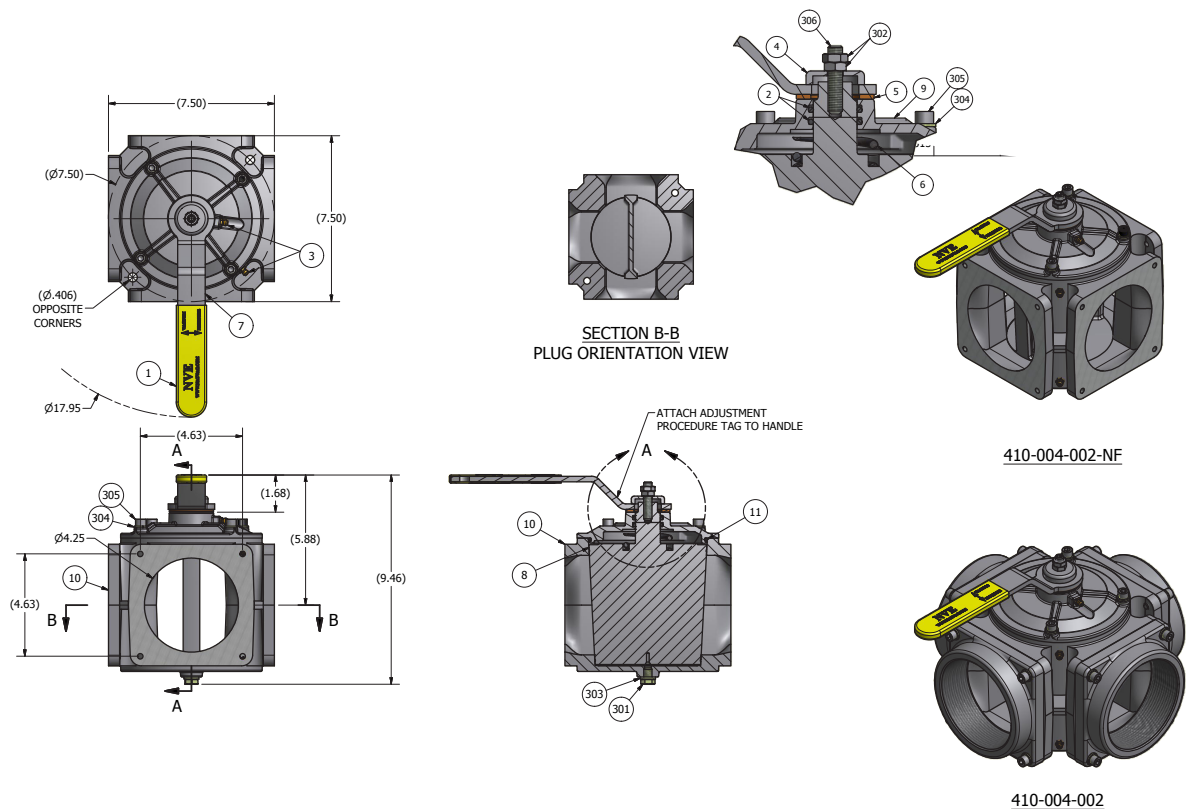
DESCRIPTION	PART NUMBER	WEIGHT
DUMP VALVE QUICK RELEASE WITH 3/8" PORTS	190-000-3	5 lbs

4-Way Valves | Complete Assemblies

DESCRIPTION	PART NUMBER	WEIGHT
VALVE, 4" 4-WAY ASSEMBLY	410-004-002	57.8 lbs
VALVE, 4" 4-WAY ASSEMBLY, NO FLANGES	410-004-002-NF	35.3 lbs



4" Valve | Parts Diagram



NVE 4-Way Valve | 4" Valve

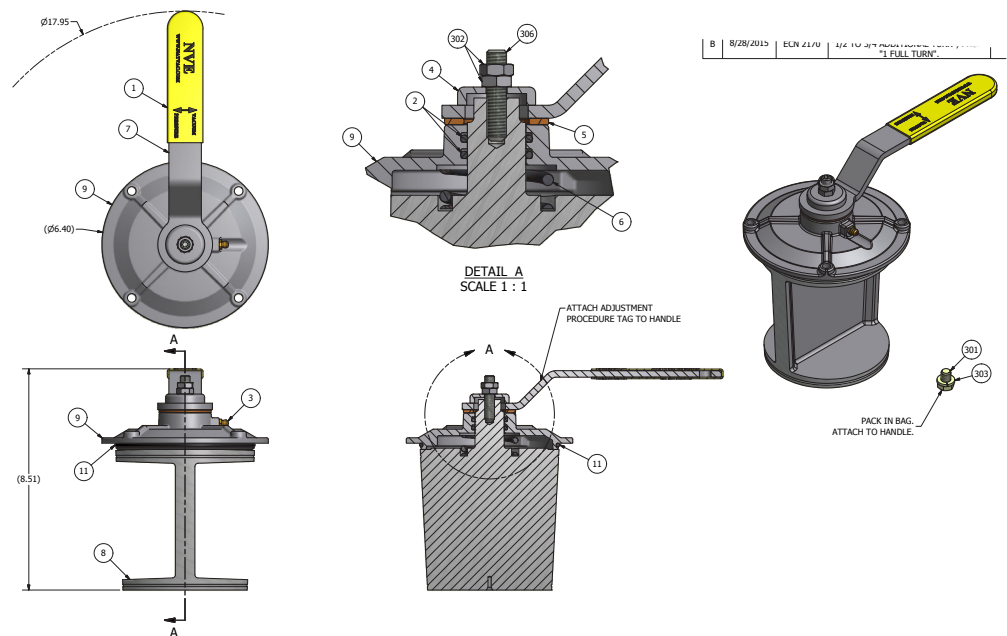


4" Valve | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	GRIP, 1/4" HANDLE W/LOGO	120-060-002	0.05 lbs
2	O-RING, 2-216 VITON	120-064-017	0.05 lbs
3	GREASE FITTING, 1/4-28 UNF	190-014-359	0.01 lbs
4	WASHER, CUP 4-WAY VALVE	412-020-003	0.10 lbs
5	BEARING THRUST BRONZE 1.25" ID 2 OD	412-020-004	0.05 lbs
6	SPRING 4-WAY FILTER VALVE	120-045	0.15 lbs
7	HANDLE, 4-WAY TOP ADJ	412-060-004	0.90 lbs
8	PLUG, VALVE, 4" 4-WAY, MACHINED	412-062-004-2	7.15 lbs
9	TOWER, VALVE, 4" 4-WAY, MACHINED	412-065-004-2	3.00 lbs
10	HOUSING, VALVE, 4" 4-WAY, MACHINED	412-067-004-2	24.1 lbs
11	O-RING, 2-251 VITON	412-102-251	0.01 lbs
301	HEX HEAD CAP SCREW - 3/8-16 UNC X 0.50	HHCS-3/8-16 UNC X 0.50	---
302	HEX NUTS (INCH SERIES) HEX JAM NUT	HEX JAM NUT - 3/8-16	---
303	LOCK WASHER, 3/8"	LW 3/8-16	---
304	LOCK WASHER, 5/16"	LW 5/16	---
305	SHCS-5/16" UNC X 1.25"	SHCS-5/16-18 UNC X 1.25	---
306	SET SCREW-3/8-16 UNC X 1.75" CUP PT PLATED	SS-3/8-16 UNC X 1.75	---

NOTE: Item numbers 300 and above are listed for reference only and may be sourced locally.

4 Valve Plug Repair Kit | Parts Diagram



4-Way, 4 Valve Plug Repair Kit

DESCRIPTION	PART NUMBER	WEIGHT
VALVE 4" 4-WAY PLUG KIT	410-004-002-KIT	11.75 lbs
VALVE 4" 4-WAY PLUG KIT (4310 Enclosed)	410-004-004-KIT	11.75 lbs

4 Valve | Plug Repair Kit Parts

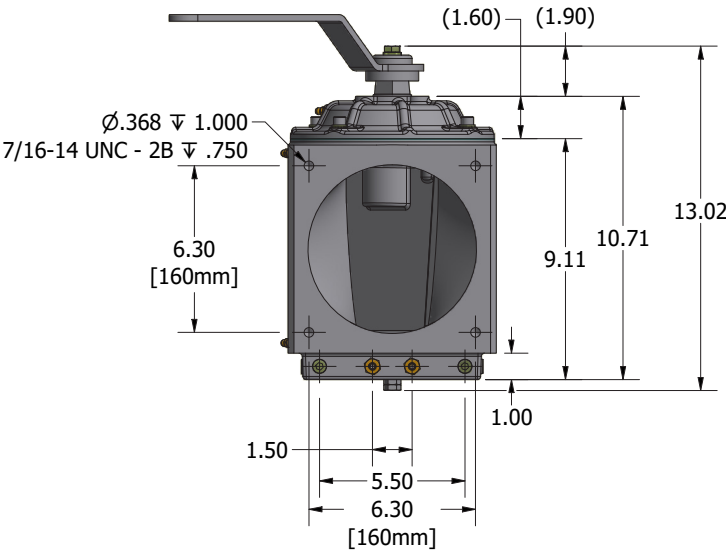
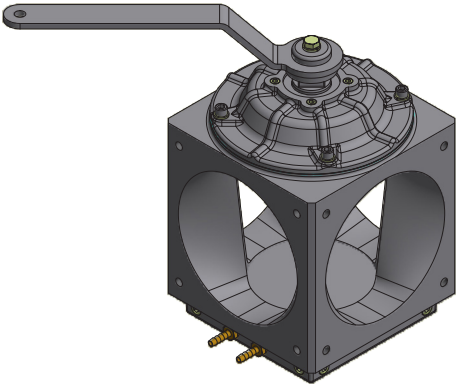
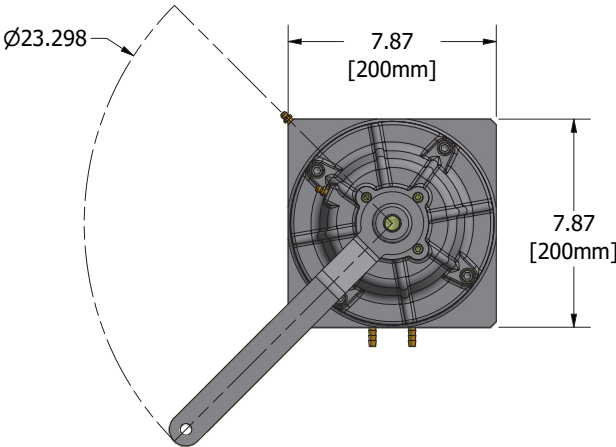
ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	GRIP 1/4, HANDLE W/LOGO	120-060-002	0.05 lbs
2	O-RING, 2-216 VITON	120-064-017	0.05 lbs
3	GREASE FITTING, 1/4-28 UNF	190-014-359	0.01 lbs
4	WASHER, CUP 4-WAY VALVE	412-020-003	0.1 lbs
5	BEARING, THRUST BRONZE 1.25 ID 2 OD	412-020-004	0.05 lbs
6	SPRING 4-WAY FILTER VALVE	120-045	0.15 lbs
7	HANDLE, 4-WAY TOP ADJ HANDLE, 4-WAY, 4310 ENCLOSED	412-060-004 412-060-009	0.9 lbs
8	PLUG, VALVE, 4 4-WAY, MACHINED	412-062-004-2	7.15 lbs
9	TOWER, VALVE, 4 4-WAY, MACHINED	412-065-004-2	3 lbs
11	O-RING, 2-251, VITON	412-102-251	0.01 lbs
301	HEX HEAD CAP SCREW - 3/8-16 UNC X 0.50	HHCS-3/8-16 UNC X 0.50	---
302	HEX NUTS (INCH SERIES) HEX JAM NUT	HEX JAM NUT - 3/8-16	---
303	LOCK WASHER, 3/8	LW 3/8-16	---
306	SET SCREW-3/8-16 UNC X 1.75 CUP PT PLATED	SS-3/8-16 UNC X 1.75"	---

NVE 4-Way Valve | 6" Valve



Features

- Compatible with 160mm flange bolt spacing
- Integrated water jacket for valve heating.
- Easy maintenance grease fittings
- Weld flange available



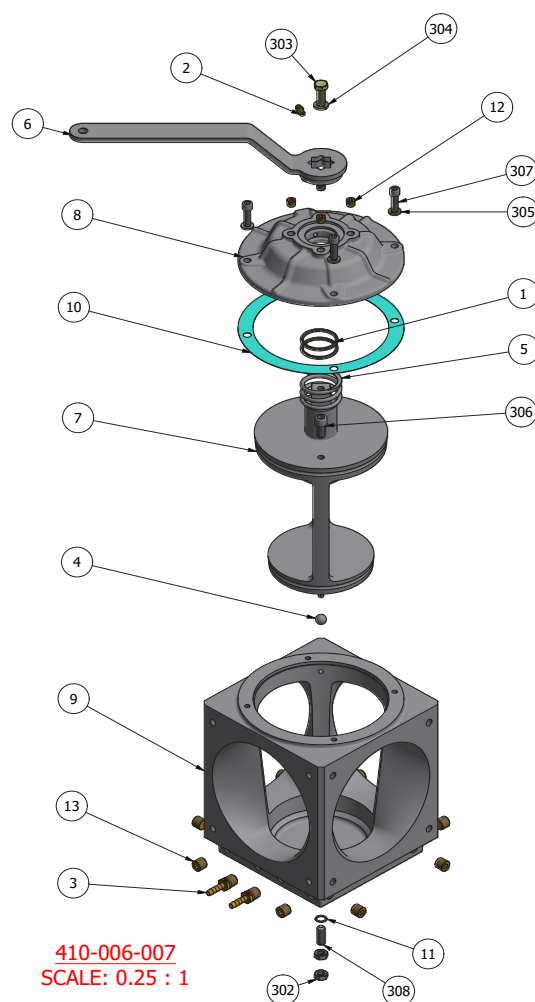
410-006-007
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6" 4-Way Valve | Product List

DESCRIPTION	PART NUMBER	WEIGHT
VALVE 6" 4-WAY HD	410-006-007	72 lbs
WELD FLANGE 4-WAY 6" HD RADIAL SLOT	412-066-002	2.8 lbs

6" 4-Way Valve | Replacement Parts

ITEM	DESCRIPTION	PART NUMBER	WEIGHT
1	PLUG 1/8" NPT SOCKET AS YZ DRYSEAL	872-001	0.01 lbs
2	PLUG 1/4" NPT SOCKET AS YZ DRYSEAL	872-002	0.01 lbs
3	HANDLE, VALVE 4-WAY 3" & 6" (BUY)	120-060Z	3.00 lbs
4	O-RING 2-222 VITON	120-064-022	0.01 lbs
5	GREASE FITTING, 1/4-28 UNF	190-014-359	0.01 lbs
6	HOSE BARB, 1/4NPT STRT X 1/4" NPT	310-LP6	0.05 lbs
7	1/2" BALL BEARING	412-020-008	0.01 lbs
8	SPRING VALVE 4-WAY 6" HD	412-045-001	0.15 lbs
9	PLUG VALVE 4-WAY 6" HD	412-062-007	16.16 lbs
10	TOWER VALVE 4-WAY 6" HD	412-065-007	5.6 lbs
11	HOUSING VALVE 4-WAY 6" HD	412-067-007	47.5 lbs
12	GASKET TOWER 4-WAY VALVE 6" HD	412-068-005	0.01 lbs
301	FW M10 CP SEALING WASHER	862-001	0.01 lbs
302	WASHER, FENDER 3/8" X 1 3/4" X 3/16" THICK, PLATED	FW- 3/8 X 1.75	---
303	HEX HEAD CAP SCREW - 3/8-16 UNC X 1.00"	HHCS-3/8-16 UNC X 1.00	---
304	HEX NUTS (INCH SERIES) HEX JAM NUT	HEX JAM NUT - 3/8-16	---
305	LOCK WASHER , 3/8"	LW - 3/8	---
306	LOCK WASHER, 5/16"	LW - 5/16	---
307	SHCS - 3/8-16 UNC X 0.75"	SHCS - 3/8-16 UNC X 0.75	---
308	SHCS - 5/16-18 UNC X 1"	SHCS - 5/16-18 UNC X 1	---
309	SET SCREW - 3/8-16 UNC X 1.00" CUP PT PLATED	SS - 3/8-16 UNC X 1	---



Notes



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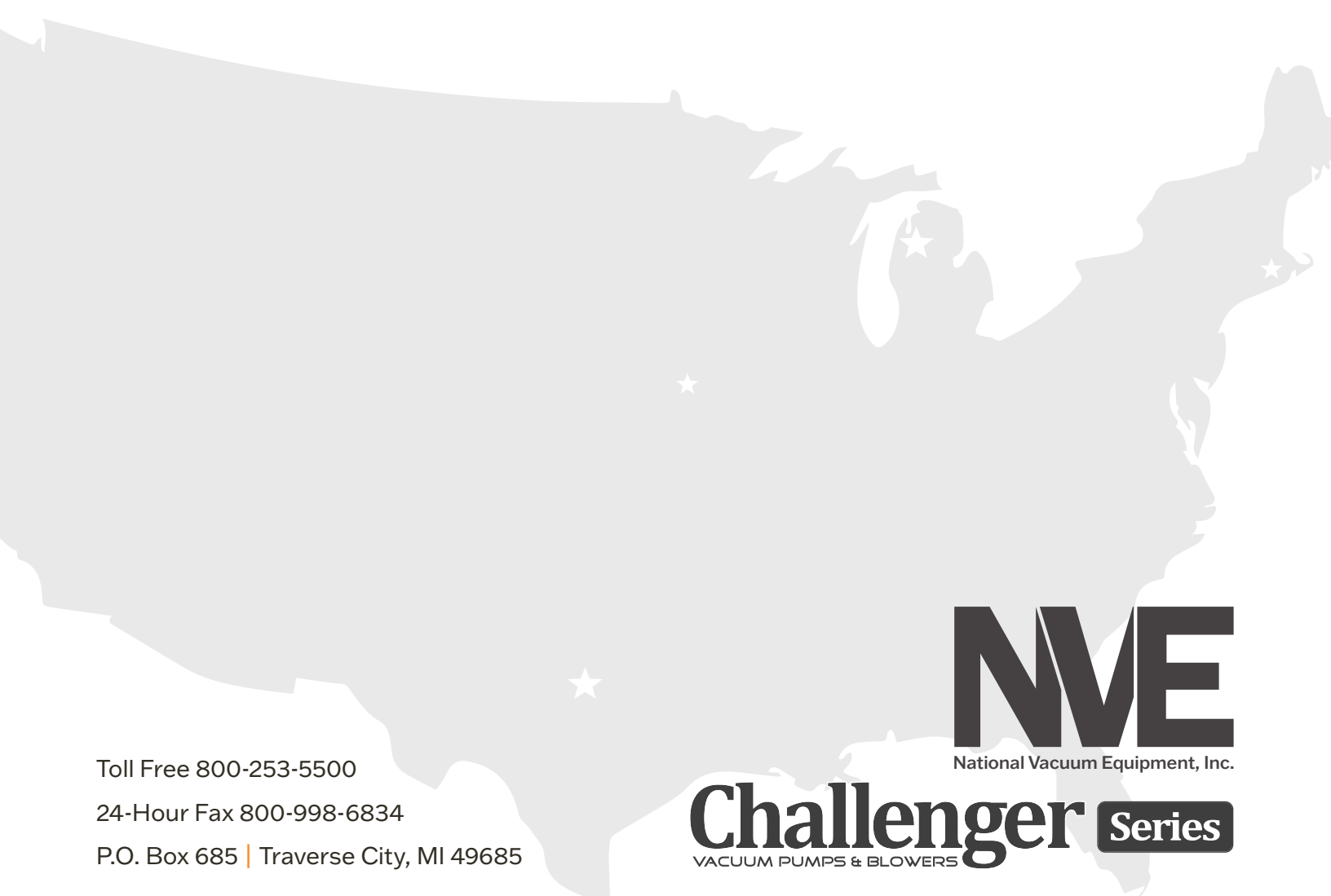
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