



- PREMIUM QUALITY
- UNSURPASSED SERVICE
- EXCEPTIONAL DELIVERY



**FOR COMPRESSED AIR
OR GAS SERVICE**

**PUT AAA VALVES ON YOUR
TOUGHEST JOBS**

27th Edition

AAA PRODUCTS INTERNATIONAL • DALLAS, TEXAS U.S.A.

<http://www.aaaproducts.com> e-mail: info@aaaproducts.com



Find out for yourself why AAA valves are the best in the world!

We, at AAA Products International, are committed to provide our customers with superior products of premium quality.

Along with a full line of standard products, we offer over 200 special customer specific products to fit their unique applications. We promise unsurpassed customer service, exceptional delivery and competitive prices.

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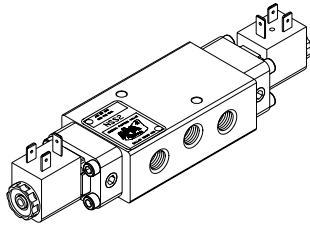
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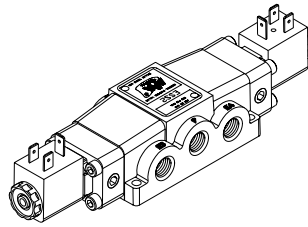
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See Bulletin A-266 for the location of your authorized AAA distributor.

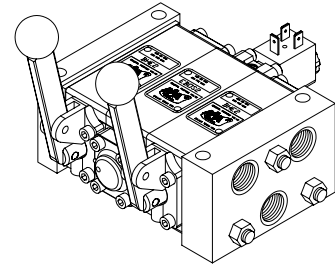
The AAA line . . . of Compressed Air Valves



A 1/4" NAMUR.
See page 17.



B 1/4" and 3/8" Sizes.
See pages 6 to 16.



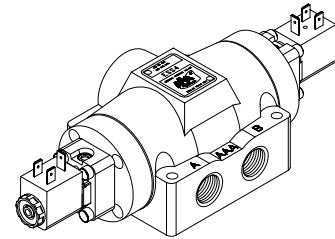
C Stack valves, 1/4" and 3/8" sizes. See pages 18 to 23.

AAA Products International offers one of the most versatile lines of directional control air valves in the industry, with a wide range of sizes and types. AAA distributors are located in most of the larger cities in the U.S.A. and Canada, and carry a stock of the more popular valve models. See AAA Products Bulletin A-266 for your local distributor.

AAA (pronounced Triple A) valves are precision manufactured to close tolerances on computerized numerically controlled machines from highest quality materials.

AAA valves are different; they have many features and advantages not found in other valves, and these features are explained on page 4.

AAA valves are tough; they are simply and ruggedly built to stand up under severe operating conditions. We invite you to try them on your toughest jobs. We know you will be pleased.



D 1/2" size.
See pages 24 to 30.

A 1/4" NPTF NAMUR direct mount. Single solenoid and double solenoid models.

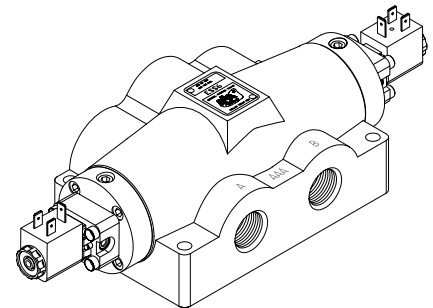
B 1/4" and 3/8" NPTF side ported or subplate mounted. Single solenoid, double solenoid, manual lever, palm button, piston operated, pilot operated, differential pilot, pedal, treadle, and cam operators. Also see page 16 for 316 stainless steel models.

C Stack valves, 1/4" or 3/8" NPTF. Sections available: single solenoid, double solenoid, manual lever, palm button, cam actuated, pilot operated, and differential pilot.

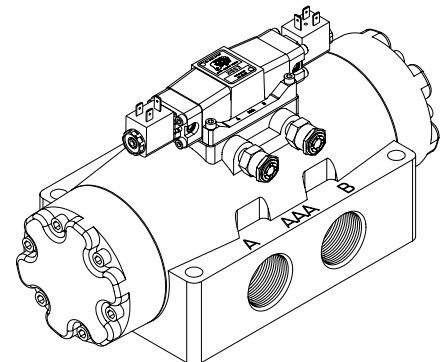
D 1/2" NPTF, side ported or subplate mounted. Actuators include single solenoid, double solenoid, manual lever, pilot operated, differential pilot, pedal, treadle, piston, and cam roller.

E 3/4" and 1" NPTF, side ported or subplate mounted. Actuators include: single solenoid, double solenoid, manual lever, pilot operated, piston operated, differential pilot, and cam roller.

F 1-1/2" NPTF threaded body and 1-1/2" and 2" subplate mounted. Actuators include single solenoid, double solenoid, manual lever, differential pilot, pilot operated, and remote pilot operated.



E 3/4" and 1" sizes.
See pages 31 to 35.

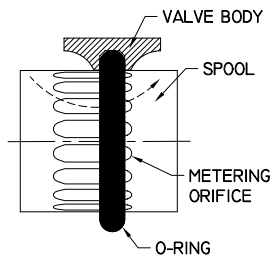


F 1-1/2" and 2" sizes.
See pages 36 to 40.



IMPORTANT FEATURES OF AAA VALVES

**A MINIMUM OF PARTS ★ SIMPLICITY OF OPERATION ★ ANYONE CAN UNDERSTAND
STANDARD LEAKTIGHT O-RING SEALS ARE AVAILABLE WORLD-WIDE**

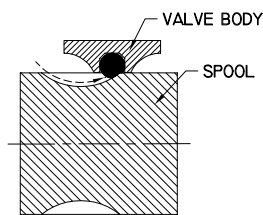
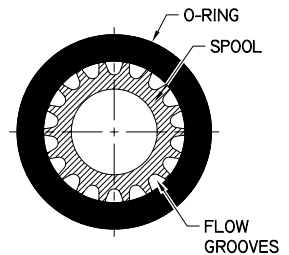


GOOD METERING NON-SHOCK REVERSAL

Whether you use manual, electric, or pilot-operated valves, the tapered flow grooves give a smooth reversal of air flow, eliminating shock on lines and components.

LARGE DIAMETER SPOOL FOR HIGH FLOW

Competitive 1/2" valves have 5/8" or 3/4" diameter spool. AAA spools are 1-1/8", allowing room for seal retaining lands between the flow grooves without sacrificing flow.

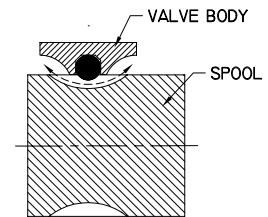


NO BITE! NO PINCH! NO WASHOUT OF O-RINGS! SIMPLE AND EFFICIENT!

A long angle on the flow grooves lifts the O-ring out of the groove as the spool shifts. No seal failure even at twice rated pressure.

AAA VALVES ARE SELF- CLEANING BY FLOW PRESSURE EITHER WAY!

AAA valves can be used with pressure or vacuum on any port because there are no cups, flanges, or one direction seals.



OPERATIONAL ADVANTAGES OF AAA VALVES

1. Valves will not pinch, unseat, or blow out the seals at high pressure or at any other operating condition.
2. Manually operated valves can be throttled to a finer degree than most spool-type valves because of the taper on each end of the grooves.
3. Vacuum to full pressure can be applied to any or all ports at the same time. Exhaust ports can be used as pressure ports for 5-way service.
4. Valves are 4-way, dual exhaust construction, and work equally well as 2-way, 3-way, or 5-way valves.
5. Every port is isolated from all other ports with O-rings, giving leaktight operation.
6. Cylinder speed can be controlled in both directions with needle valves screwed into exhaust ports.
7. AAA spool valve design permits operation under conditions of contamination that would lock up the spool on a metal-to-metal spool and body design.
8. Solenoid coils draw only about 2.7 watts on D-C and about 3.7 VA on A-C. All popular voltages are available. Consult factory for additional voltages.
9. Both coils of solenoid valves can be energized at the same time without damage to valve or solenoid coils.
10. Molded coils are standard and are available for all popular A-C and D-C voltages. Coils of a different voltage can be quickly and easily installed in the field.
11. O-ring seal life is extremely long because of unique flow characteristics. A 1/2" solenoid model, operated over 70 million cycles without an O-ring change.
12. Solenoid valves are available with intrinsically safe, explosion proof, DIN connector or Mold-Over operators.
13. Solenoid valves are available with CSA approval and solenoid operators are available with UL approval.
14. 3-position valves are normally supplied with closed center spools. Other spool types are available. Spool assembly can be changed in the field.

AAA MODEL NUMBERING CODE

AAA valves use a simplified model code which calls out the most important characteristics with a minimum of coding. In the example, model ESY3G is a double solenoid valve, 3/8" size, spring centered spool, float center type. Just specify voltage when ordering solenoid valves.

The first three letters in the code (ESY) designate the type of operator on the left and right ends respectively when viewing toward the side with the "A" and "B" ports. The numeral (3) gives valve size in 8ths of an inch. This completes the model code for many valves. If, however, additional features are desired, one or more suffix letters can be added. Additional optional features available on standard valves are described on pages 50 and 51, with the correct suffix to be added to the standard model number.

- B = Prefix for "B" Series Stack Valves
- E = Prefix for Standard Solenoids†
- N = Prefix for NAMUR Series Valves

— E SY 3 G

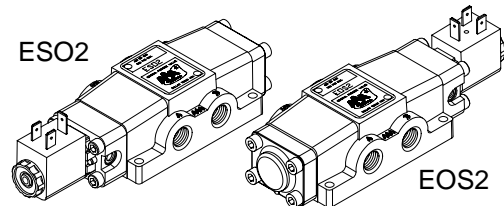
VALVE OPERATORS

POSITION 1 (typically)	POSITION 2 (typically)	SIZE	TYPICAL OPTIONAL FEATURES
C = Cam	Any letter from position 1 or	2 = 1/4"	D = Regenerative Spool Type
D (in 1st Position) = Bleeder	D (in 2nd Position) = Detent	3 = 3/8"	G = Float Center Spool Type
F = Foot Pedal	E = Friction Positioning	4 = 1/2"	P = Subplate Mounting
G* = Direct Pilot	O = Spring Offset	6 = 3/4"	Q = 2-Position Detent
H = Manual Lever	Y = Spring Centering	8 = 1"	X = Explosion Proof Operator
K = Palm Button		12 = 1-1/2"	Z = External Pilot Operation
P = Piston		16 = 2"	
R = Pilot			See Below For Additional Options.
S = Solenoid†			See pages 50 & 51 for Other Options.
T = Treadle			

* **Special prefix for 1-1/2" and 2" air valves to designate valve body only, without a piggy back operator.**

† **Use prefix "E" on solenoid valves when using standard operator configuration shown in catalog. Do not use a prefix on alternate operators shown on page 54. For "B" series stack valve use the prefix "EB" to denote standard solenoid operators and "B" for alternate solenoid operators.**

VALVE ACTUATOR INTERCHANGE. The end actuators on AAA Soft seal valves can be changed from one end to the other, to put the inlet port and cylinder ports on the desired side for convenience in plumbing. On quantity orders, if actuators are desired on opposite ends of the valve from standard assembly as shown in this catalog, just reverse the valve operators in the valve model number when ordering. Example: ESO2 represents standard Assembly; EOS2 has actuators reversed end for end.



Example of Actuator Interchange

OPTIONAL O-RING MATERIALS

Unless otherwise specified all 1/4" and 3/8" soft seal valves come standard with Viton O-Rings, and all 1/2", 3/4", 1", 1-1/2" and 2" soft seal valves come standard with Buna-N O-Rings. If a different material is required, use the follow dash numbers following the basic valve numbering code. In the example, model RY3G-2, will have Silicon O-Rings installed for a high heat application. On valves larger than 1", consult factory on availability of O-Ring materials.

Dash No.	O-Ring Description	Temperature Rating
-1	Neoprene for oxygen, freon	-40 to 225 °F
-2	Silicon	-80 to 400 °F
-3	Viton A for most aromatic gases	-20 to 400 °F, 600 °F for short time
-4	Butyl Rubber	-60 to 200 °F
-5	Teflon	-250 to 450 °F
-7	Urethane 70 Durometer	-65 to 200 °F
-9	Buna-N	-40 to 250 °F

We are constantly researching O-Ring materials to evaluate performance and durability in the AAA valve product line. above is a compilation of the most commonly requested O-Ring materials, and the associated dash number. If you have a particular application that requires an O-Ring material that is not listed, please contact us. Since we utilize standard O-Ring dimensions in our valves, we can respond to the most obscure O-Ring material request.

Note: On solenoid model valves, the solenoid operator plunger seat is Viton. Solenoid operators must be externally piloted when using gases not compatible with Viton. Consult factory for special plunger seat material.