

Assembly Numbers

Gas Electro-mechanical Valves

To determine the Configured Item Number:

Select one choice each from the following five categories

| Configured Item Number | | | | |
|------------------------|---------------|------------|-----------------|---------------------|
| Valve size | Flow capacity | Valve type | Normal position | Area classification |

Valve size

- 075 - 3/4"
- 100 - 1"
- 125 - 1-1/4"
- 150 - 1-1/2"
- 200 - 2"
- 250 - 2-1/2"
- 300 - 3"
- 400 - 4"
- 600 - 6"

Flow capacity

- S - Standard
- C - CP body construction
- H - High capacity

Valve type

- MA - MAXON automatic (motorized)
- MM - MAXON manual valve

Normal position

- 1 - Normally-closed shut-off valve
- 2 - Normally-open vent valve

Area classification

- 1 - General purpose
- 2 - Non-incendive, Class I, Div. 2
- 4 - Valve body only

Configured Item Numbers are designated as follows:

Valve size *space* **Flow capacity** *space* **Valve type, normal position, area classification**

Example:

To order a 3" CP body, automatic valve, normally-closed shut-off valve for general purpose use, make the following selections:

Valve size 300

Flow capacity C

Valve type MA

Normal position 1

Area classification 1

The **Configured Item Number** for this valve is: **300 C MA11**

Segment choices are shown on the following pages

Segment choice detail

NOTE: Some choices may not be available with all sizes and types of valves.

| Segment name | Segment description | Segment choices (DEFAULT is shaded) | Segment choice description |
|-----------------------------------|--|--|--|
| MODEL NUMBER 1 | Determined by Configured item number selection | Calculated | --- |
| MODEL NUMBER 2 | | Calculated | --- |
| SIZE | | Calculated | --- |
| FLOW CAPACITY | | Calculated | --- |
| VALVE TYPE | | Calculated | --- |
| NORMAL POSITION | | Calculated | --- |
| AREA CLASSIFICATION | | Calculated | --- |
| BODY CONNECTION | Type of body connection | A | (A) ANSI threaded |
| | | B | (B) ANSI flanged |
| | | C | (C) ISO threaded |
| | | D | (D) DIN flanged |
| | | E | (E) Socket welded nipple |
| | | F | (F) Socket welded nipple w/ANSI Class 150 flanges |
| BODY SEALS, BUMPER MATERIAL | Material specification for valve body seals and bumper | A | (A) Buna o-rings/Buna bumper |
| | | B | (B) Viton o-rings/Buna bumper |
| | | C | (C) Viton o-rings/Viton bumper |
| | | D | (D) Ethylene propylene o-rings/Ethylene propylene bumper |
| | | E | (E) Omniflex o-rings/Buna bumper |
| | | F | (F) Omniflex o-rings/Viton bumper |
| BODY MATERIAL | Type of valve body material | 1 | (1) Cast iron |
| | | 2 | (2) Carbon steel |
| | | 5 | (5) Stainless steel |
| | | 6 | (6) Low temp carbon steel |
| INTERNAL TRIM PACKAGE | Materials used for valve body internal components | 1 | (1) Trim package 1 |
| | | 2 | (2) Trim package 2 |
| | | 4 | (4) Trim package 2, oxy clean |
| SOLENOID OR CIRCUIT BOARD VOLTAGE | Electrical voltage | A | (A) 120VAC 50 Hz |
| | | B | (B) 120VAC 60 Hz |
| | | C | (C) 230VAC 50 Hz |
| | | D | (D) 230VAC 60 Hz |
| | | E | (E) 208VAC 50 Hz |
| | | F | (F) 24VDC |
| | | G | (G) 120VDC |

Segment choice detail

NOTE: Some choices may not be available with all sizes and types of valves.

| Segment name | Segment description | Segment choices (DEFAULT is shaded) | Segment choice description |
|---|---|--|----------------------------|
| MOTOR VOLTAGE OR HANDLE SIDE PLATE OPTIONS | Motor voltage - actuator (Automatic valves) | A | (A) 115VAC 50 Hz |
| | | B | (B) 115VAC 60 Hz |
| | | C | (C) 230VAC 50 Hz |
| | | D | (D) 230VAC 60 Hz |
| | | E | (E) 24VDC |
| | Handle side plate options - actuator (Manual valves) | A | (A) Standard handle |
| | | B | (B) Tandem main |
| | | C | (C) Tandem blocking |
| | | D | (D) Tandem overhead |
| | | E | (E) Wheel and chain |
| MOTOR TIMING | Opening time desired (automatic valves ONLY) | * | * - N/A for manual valves |
| | | 1 | (1) 2.5 second |
| | | 2 | (2) 6 second |
| | | 3 | (3) 12 second |
| SWITCHES | Switch options - automatic valves | 0 | (0) VOS1/NONE |
| | | 1 | (1) VOS1/VCS1 |
| | | 2 | (2) VOS2/VCS2 |
| | | 3 | (3) VOS2/VCS1 |
| | Switch options - manual valves | 4 | (4) VOS1HC/VCS1HC |
| | | 0 | (0) NONE |
| | | 1 | (1) VOS1/VCS1 |
| | | 2 | (2) VOS2/VCS2 |
| ENCLOSURE RATING | Rating of actuator enclosure | 3 | (3) VOS2/VCS1 |
| | | A | (A) NEMA 4 |
| | | B | (B) NEMA 4X |
| SECONDARY LANGUAGE | Second language for valve labeling | 0 | (0) English |

Segment choice detail

NOTE: Some choices may not be available with all sizes and types of valves.

| Segment name | Segment description | Segment choices (DEFAULT is shaded) | Segment choice description |
|-------------------------------|-------------------------|--|-----------------------------------|
| FUEL | Type of fuel to be used | AIR | Air |
| | | AMM | Ammonia |
| | | BUT | Butane gas |
| | | COKE | Coke oven gas |
| | | DEL | Delco combusted |
| | | DIG | Digester gas |
| | | ENDO | Endothermic AGA 302 |
| | | EXO | Exothermic |
| | | HYD | Hydrogen gas |
| | | LAND | Landfill gas |
| | | MFGD | Manufactured gas |
| | | NAT | Natural gas |
| | | NIT | Nitrogen gas |
| | | OXYH | Oxygen (up to 200 psig, <200 fps) |
| | | OXYL | Oxygen (up to 30 psig, <200 fps) |
| | | OXYX | Oxygen (up to 255 psig, <175 fps) |
| | | PROP | Propane gas |
| REF | Refinery gas | | |
| SOUR | Sour natural gas | | |
| TOWN | Town gas | | |
| TOP ASSEMBLY POSITION | Actuator position | AW | Away |
| | | L | Left |
| | | R | Right |
| | | TO | Toward |
| TAGGING | Type of tagging | ALW | Aluminum (wire-on) |
| | | NONE | No tagging |
| | | SSP | Stainless steel (permanent) |
| | | SSW | Stainless steel (wire-on) |
| SOLENOID CURRENT/POWER RATING | No choices available | Calculated | --- |
| MOTOR CURRENT | No choices available | Calculated | --- |
| AGENCY SANCTIONS | No choices available | Calculated | --- |

Switches

| General purpose valves: MA11, MA21, MM11, MM21 | | | | | | | | |
|--|------------------|-----------------|-----------------|------------------|-----------------|------------------|-------|------------------|
| Switch option | 075 S - 100 S | 125 S | 150 S | 200 S - 300 S | 250 C | 300 C - 400 C | 600 S | 400 H - 600 H |
| (0) VOS1/NONE or VCS1/NONE | 19599 | 19599 | 19599 | 19599 | 24470 | 24470 | 24470 | 25377 |
| (1) VOS1/VCS1 | 57325 | 57337 | 57349 | 57252 | 57323 | 57371 | 57371 | 25377, 25595 |
| (2) VOS2/VCS2 | 57328 | 57340 | 57352 | 57255 | 57330 | 57374 | 57374 | 25846, 27252 |
| (3) VOS2/VCS1 or VCS2/VOS1 | 57327 | 57339 | 57351 | 57254 | 57329 | 57373 | 57373 | 25846, 25595 |
| (4) VOS1HC/VCS1HC | 26460, 26454 | 26460, 26454 | 26460, 26454 | 26460, 26454 | 26461, 26456 | 26461, 26456 | | |

| Non-incendive valves: MA12, MA22, MM12, MM22 | | | | | | | |
|--|------------------|--------------|--------------|------------------|--------------|------------------|--------------|
| Switch option | 075 S - 100 S | 125 S | 150 S | 200 S - 300 S | 250 C | 300 C - 400 C | 600 S |
| (0) VOS1/NONE or VCS1/NONE | 50116092-001 | 50116092-001 | 50116092-001 | 50116102-001 | 50116106-001 | 50116106-001 | N/A |
| (1) VOS1/VCS1 or VCS1/VOS1 | 50116093-001 | 50116096-001 | 50116099-001 | 50116103-001 | 50116107-001 | 50116110-001 | 50116114-001 |
| (2) VOS2/VCS2 or VCS2/VOS2 | 50116094-001 | 50116097-001 | 50116100-001 | 50116104-001 | 50116108-001 | 50116111-001 | N/A |
| (3) VOS2/VCS1 or VCS2/VOS1 | 50116095-001 | 50116098-001 | 50116101-001 | 50116105-001 | 50116109-001 | 50116112-001 | N/A |

Solenoids

| General purpose valves: MA11, MA21, MM11, MM21 | | | | |
|--|---------------|---------------|-----------------|------------|
| Voltage | 075 S - 150 S | 200 S - 300 S | 250 CP - 400 CP | 600 S MM11 |
| 24VDC | 39543 | 1040580 | 1040581 | |
| 120VDC | 43665 | 1051047 | 1059437 | |
| 115v50 | 37742 | 37748 | 37754 | 37754 |
| 115v60 | 17555 | 22055 | 23243 | 23243 |
| 208v50 | 37744 | 37750 | 37755 | 37755 |
| 230v50 | 37745 | 37751 | 37756 | 37756 |
| 230v60 | 21026 | 22056 | 23244 | 23244 |

| Non-incendive valves: MA12, MA22, MM12, MM22 | | | | |
|--|---------------|---------------|-----------------|------------|
| Voltage | 075 S - 150 S | 200 S - 300 S | 250 CP - 400 CP | 600 S MM12 |
| 24VDC | 1040851 | 1040580 | 1040581 | |
| 120VDC | 1051048 | 1051047 | 1059437 | |
| 115v50 | 47120 | 47121 | 47122 | 47122 |
| 115v60 | 47120 | 47121 | 47122 | 47122 |
| 230v50 | 47123 | 47124 | 47125 | 47125 |
| 230v60 | 47123 | 47124 | 47125 | 47125 |

Motor operators

| Motor operators | | | | |
|-----------------------|------------------|--|--------------------------|--------------------------------------|
| Timing | Voltage | General purpose valves (MA11, MA21) | | Non-incendive valves (MA12, MA22) |
| | | 075 S - 400 C | 400 H MA11 600 H MA11 | 075 S - 400 C |
| 2.5 second timing [1] | 115VAC 50/60 Hz | 41635 | | 37465 |
| | 230VAC 50/60 Hz | 41647 | | 43747 |
| 6 second timing | 115VAC 50/60 Hz | 41637 | | 37466 |
| | 230VAC 50/60 Hz | 41649 | | 43748 |
| | 24VDC (unlisted) | 36648 | | |
| 12 second timing | 115VAC 50/60 Hz | | 32093 | |
| | 230VAC 50/60 Hz | | 32094 | |

[1] 2.5 second timing is not available for CP body constructions

Top assembly components

| Top assembly components | | | |
|-----------------------------|-----------------|----------------|----------------|
| Component | | 400 H MA11 | 600 H MA11 |
| Replacement top assembly | 115VAC 50/60 Hz | 400 H MA11 ACT | 600 H MA11 ACT |
| | 230VAC 50/60 Hz | | |
| Replacement circuit board | | 25354 | |
| Replacement clutch assembly | | 1094960 | |

Wheel & chain accessory options

| Wheel & chain accessory | | | | | | |
|---|--------------|--|---------------|-------------------------|--------------------------------------|-------|
| Wheel & chain options | | Normally-closed valves (MM11, MM12) | | | Normally-open valves (MM21, MM22) | |
| | | 075 S - 150 S | 200 S - 300 S | 250 C - 400 C, 600 S | 075 S - 150 S | 200 S |
| Overhead wheel & chain assembly | Single valve | WCSMALL | WCINT | WCCP | WCSMALL | WCINT |
| | Tandem valve | TOSMALL | TOLARGE | TOLARGE | | |
| Tandem overhead valve linkage assembly | | 57978 | 57984 [1] | 57986 [1] | | |
| Extra chain for above (1 foot increments) | | 00035 [2] | | | | |

[1] Position TO (towards) or AW (away) must be specified on order

[2] Overall chain length not to exceed 25 feet; standard length on CP body constructions and 6" valve sizes is 7 feet; all other valves standard length is 5 feet