

True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size

Applications

Water treatment (ozone, UV, reverse osmosis, sterilizers), drinking water, car wash, food & beverage (bottling, craft beverages, produce mister, cleaning), clean-in-place (CIP), commercial buildings, hospitals, medical facilities, and agricultural.

Features

- Allows for compact piping arrangements
- Easy removal for cleaning and servicing in the field
- Wrench flats on fittings help protect valve from damage during install/removal
- NSF approved options
- UL recognized, CSA, and CE options
- Great for OEMs looking to reduce plumbing complexity and footprint

Construction

| Wetted Components | | | | | | |
|---------------------|----------------------------|--|--|--|--|--|
| Body | Nylon-6 + 30% Glass Fill | | | | | |
| End Fittings | 300 Series Stainless Steel | | | | | |
| Operator Tube | 300 Series Stainless Steel | | | | | |
| Plunger & Tube Head | 400 Series Stainless Steel | | | | | |
| Springs | 300 Series Stainless Steel | | | | | |
| Shading Ring | Copper (Std.), Silver | | | | | |
| Seals | EPDM or FKM | | | | | |

Coil Housing

T20 & T21 Series (See Drawing #1 and #3)

- •½" NPT Conduit Hub with 24" Lead Wires (NEMA 4/4X, IP65)
- •DIN 18mm Form A (NEMA 4/4X, IP65)
- Junction Box (Single or Dual Knockouts)

TP3 Series (See Drawing #2)

- •18" Lead Wires (IP65)
- •DIN 11mm Form B (IP65)
- *All Coils Rated for 100% Duty Cycle
- *See Engineering Guide for Additional Coil Housings and Dimensions



Ambient Temperature (Nominal)

•32°F to 125°F (0°C to 52°C)

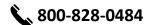
Maximum Fluid Temperature

•180°F (82°C)

Approvals

- UL Recognized (T20 & T21 Series)
- cURus (TP3 Series)
- CSA Certified (T20 & T21 Series)
- *Add suffix "E" to part number for CSA Certification
- CE Certified
- NSF 61-G: Drinking Water System Components (includes Lead Free requirements)
- NSF 372: Drinking Water System
 Components (Lead Content Certification)
 *Add prefix "N" to part number for NSF
 Certification











2-Way • Normally Closed & Normally Open • Pilot Operated

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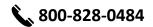
Specifications

| *Part | *Part numbers shown as general purpose, 120vAC, with EPDM seals. See Part Number Selection for more options.* | | | | | | | | | | | | |
|-----------------------|---|------------|---------|--------------------------------------|-----|--------------------|--------------|--------------|----------------|----------------------|-----|--------------|--|
| | Orifice Size (in) | el. | Opera | perating Pressure Differential (PSI) | | | | Part No | ımber* | D | | | |
| Pipe Size (NPT) | | e Factor | Min. | Min. (Air/ | | ax. Ma Gas) (Wa | | DIN Coil | Lead Wire Coil | Power Consumption | | Drawing # | |
| | () | (00) | | AC | DC | AC | DC | | | AC | DC | | |
| Normally | Normally Closed (Closed when de-energized) | | | | | | | | | | | | |
| | 3/4 | 4.3 | 0 | 140 | 90 | 140 | 90 | T201YF02CPD2 | T201GF02CPD2 | 10W | 10W | 1 | |
| 1/2" | 3/4 | 4.3 | 4 | 200 | 150 | 150 | 100 | T211YF02CPD2 | T211GF02CPD2 | 8W | 10W | 1 | |
| | 3/4 | 4.3 | 5 | 150 | 80 | 150 | 80 | TP31YN02CPD2 | TP31GN02CPD2 | 6.5vA | 8W | 2 | |
| | 3/4 | 6.7 | 0 | 140 | 90 | 140 | 90 | T201YF02CPE2 | T201GF02CPE2 | 10W | 10W | 1 | |
| 3/4" | 3/4 | 6.7 | 4 | 200 | 150 | 150 | 100 | T211YF02CPE2 | T211GF02CPE2 | 8W | 10W | 1 | |
| , | | | 80 | 150 | 80 | TP31YN02CPE2 | TP31GN02CPE2 | 6.5vA | 8W | 2 | | | |
| Normally | Open (Op | en when de | -energi | zed) | | | | | | | | | |
| 1/2" | 3/4 | 4.3 | 0 | 200 | 125 | 200 | 125 | T202YF02CPD2 | T202GF02CPD2 | 11W | 10W | 3 | |
| 1/2 | 3/4 | 4.3 | 4 | 200 | 140 | 200 | 125 | T212YF02CPD2 | T212GF02CPD2 | 11W | 10W | 3 | |
| 3/4" | 3/4 | 6.7 | 0 | 200 | 125 | 200 | 125 | T202YF02CPE2 | T202GF02CPE2 | 11W | 10W | 3 | |
| 3/4 | 3/4 | 6.7 | 4 | 200 | 140 | 150 | 140 | T212YF02CPE2 | T212GF02CPE2 | 11W | 10W | 3 | |

Part Number Selection

| (blank) | T20 | 1 | G | F | 02 | С | Р | D | 2 | (blank) |
|-------------|--------|-----------------|-----------------|-------------------|----------------------|----------------|----------|-------------------|-----------------|---------------------|
| Optional | True | Operating | Housing | Coil | Voltage ⑤ | Seal | Body | Pipe | Number | Optional |
| Prefix | Union | Mode2 | | Class 4 | | Material | Material | Connection | of | Suffix |
| | Series | | | | | | | | Unions | |
| (blank): | T20 | 1 : 2WNC | G : Lead | F (T20/21) | 02 :110v/50Hz | C: EPDM | P: Nylon | D : ½" NPT | 0 : No | (blank): |
| General | T21 | 2 : 2WNO | Wires ③ | N (TP3) | 120v/60Hz | V : FKM | | E: ¾" NPT | Unions | No Option |
| Purpose | TP3 | | Y: DIN | | 04 :220v/50Hz | | | | 2 : Both | E: CSA Cert. |
| N: NSF | | | | | 240v/60Hz | | | | Unions | K : Mounting |
| Certified 1 | | | | | 24 : 24v/50- | | | | | Bracket |
| | | | | | 60Hz | | | | | P: Nickel |
| | | | | | 15 : 12vDC | | | | | Plating |
| | | | | | 16 : 24vDC | | | | | |

- ①Must use EPDM seals with NSF Certified selection ("N" prefix)
- ②Normally open variation not available for TP3 series
- ③G Housing for T20 &T21 Series has ½" Conduit Hub with 24" Leads, TP3 Series has 18" Leads
- 4 F class coils used with T20 & T21 series; N class coils used with TP3 series
- ⑤See Engineering Guide for additional voltages, variations, and options



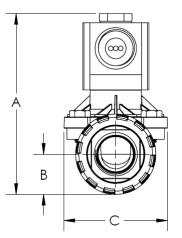


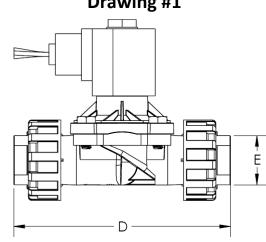


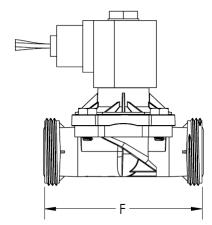
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Drawing #1

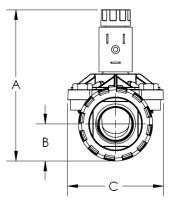


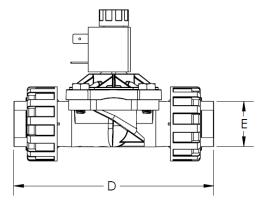


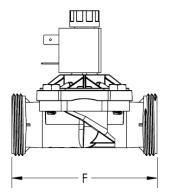


| Pipe Size | Series | Units | | В | С | D | E | F | |
|-----------|--------|-------|----------|----------|-----|-----|-------|-------|-----|
| 1 /2" | T201 | in. | 4 | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 | |
| 1/2" T201 | | mm | 106 | | 20 | 64 | 124 | 24 | 89 |
| 1/2" | T211 | in. | 3.9 (AC) | 4.2 (DC) | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 |
| | | mm | 100 | 106 | 20 | 64 | 124 | 24 | 89 |
| 2/4" | T201 | in. | 4 | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 | |
| 3/4" | | mm | 111 | | 25 | 64 | 133 | 30 | 97 |
| 3/4" | T211 | in. | 4.1 (AC) | 4.4 (DC) | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| | | mm | 104 | 111 | 25 | 64 | 133 | 30 | 97 |

Drawing #2







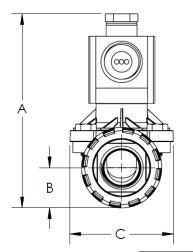
| Pipe Size | Series | Units | Α | В | С | D | E | F |
|-----------|--------|-------|-----|-----|-----|-----|-------|-----|
| 1/2" | TP3 | in. | 3.8 | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 |
| | | mm | 96 | 20 | 64 | 124 | 24 | 89 |
| 3/4" | TP3 | in. | 4.0 | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| | | mm | 101 | 25 | 64 | 133 | 30 | 97 |

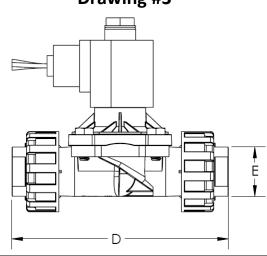


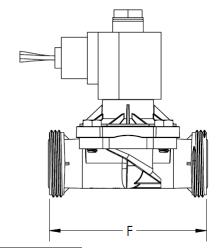
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Drawing #3







| Pipe Size | Series | Units | Α | В | С | D | Е | F |
|-----------|--------|-------|-----|-----|-----|-----|-------|-----|
| 1 /2" | T202 & | in. | 4.7 | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 |
| 1/2" | T212 | mm | 119 | 20 | 64 | 124 | 24 | 89 |
| 2/4" | T202 & | in. | 4.7 | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| 3/4" | T212 | mm | 119 | 25 | 64 | 133 | 30 | 97 |