



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

# 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





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## Specifications

**\*Part numbers shown as general purpose, 120vAC, with EPDM seals. See Part Number Selection for more options.\***

Pipe Size (NPT)	Orifice Size (in)	Flow Factor (Cv)	Operating Pressure Differential (PSI)					Part Number*		Power Consumption		Drawing #
			Min.	Max. (Air/ Gas)		Max. (Water)		DIN Coil	Lead Wire Coil			
				AC	DC	AC	DC			AC	DC	
Normally Closed (Closed when de-energized)												
1/2"	3/4	4.3	0	140	90	140	90	T201YH02CPD2	T201GH02CPD2	10W	10W	1
	3/4	4.3	4	200	150	150	100	T211YH02CPD2	T211GH02CPD2	8W	10W	1
	3/4	4.3	5	150	80	150	80	TP31YH02CPD2	TP31GH02CPD2	6.5vA	8W	2
3/4"	3/4	6.7	0	140	90	140	90	T201YH02CPE2	T201GH02CPE2	10W	10W	1
	3/4	6.7	4	200	150	150	100	T211YH02CPE2	T211GH02CPE2	8W	10W	1
	3/4	6.7	5	150	80	150	80	TP31YH02CPE2	TP31GH02CPE2	6.5vA	8W	2
Normally Open (Open when de-energized)												
1/2"	3/4	4.3	0	200	125	200	125	T202YH02CPD2	T202GH02CPD2	11W	10W	3
	3/4	4.3	4	200	140	200	125	T212YH02CPD2	T212GH02CPD2	11W	10W	3
3/4"	3/4	6.7	0	200	125	200	125	T202YH02CPE2	T202GH02CPE2	11W	10W	3
	3/4	6.7	4	200	140	150	140	T212YH02CPE2	T212GH02CPE2	11W	10W	3

## Part Number Selection

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

① Normally open variation not available for TP3 series

② G Housing for T20 & T21 Series has ½" Conduit Hub with 24" Leads, TP3 Series has 18" Leads

③ See Engineering Guide for additional voltages, variations, and options



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## NSF Certified Valve Specifications

*Part numbers shown as NSF Certified, 120vAC, with EPDM seals. See Part Number Selection for more options.*												
Pipe Size (NPT)	Orifice Size (in)	Flow Factor (Cv)	Operating Pressure Differential (PSI)					Part Number*		Power Consumption		Drawing #
			Min.	Max. (Air/ Gas)		Max. (Water)		DIN Coil	Lead Wire Coil			
				AC	DC	AC	DC			AC	DC	
Normally Closed (Closed when de-energized)												
1/2"	3/4	4.3	0	-	-	140	90	NT201YH02CPD2	NT201GH02CPD2	10W	10W	1
	3/4	4.3	4	-	-	150	100	NT211YH02CPD2	NT211GH02CPD2	8W	10W	1
	3/4	4.3	5	-	-	150	80	NTP31YH02CPD2	NTP31GH02CPD2	6.5vA	8W	2
3/4"	3/4	6.7	0	-	-	140	90	NT201YH02CPE2	NT201GH02CPE2	10W	10W	1
	3/4	6.7	4	-	-	150	100	NT211YH02CPE2	NT211GH02CPE2	8W	10W	1
	3/4	6.7	5	-	-	150	80	NTP31YH02CPE2	NTP31GH02CPE2	6.5vA	8W	2
Normally Open (Open when de-energized)												
1/2"	3/4	4.3	0	-	-	200	125	NT202YH02CPD2	NT202GH02CPD2	11W	10W	3
	3/4	4.3	4	-	-	200	125	NT212YH02CPD2	NT212GH02CPD2	11W	10W	3
3/4"	3/4	6.7	0	-	-	200	125	NT202YH02CPE2	NT202GH02CPE2	11W	10W	3
	3/4	6.7	4	-	-	150	140	NT212YH02CPE2	NT212GH02CPE2	11W	10W	3

## NSF Certified Part Number Selection

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

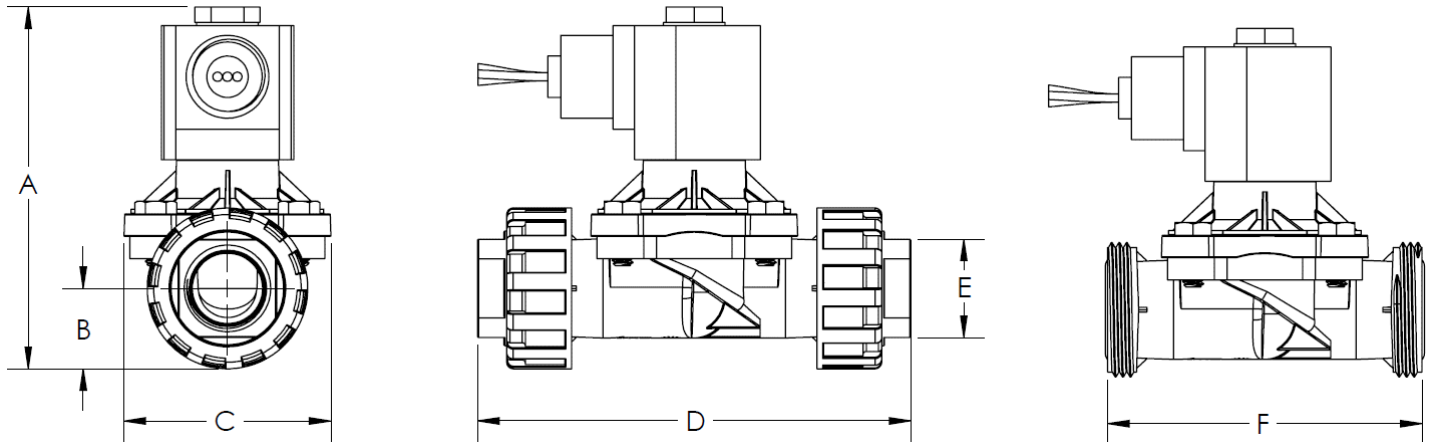
① Normally open variation not available for TP3 series

② G Housing for T20 & T21 Series has ½" Conduit Hub with 24" Leads, TP3 Series has 18" Leads

③ See Engineering Guide for additional voltages, variations, and options

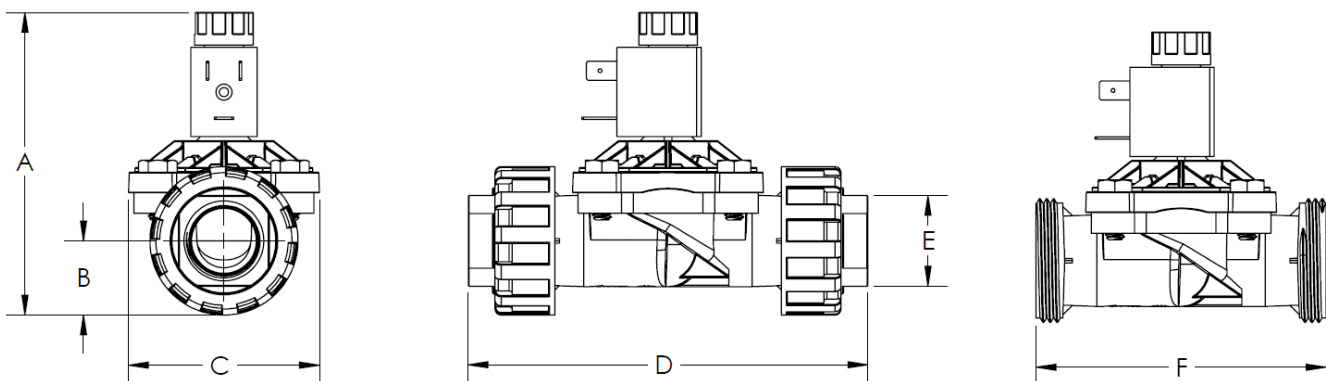
④ Must use EPDM seals with NSF Certified selection ("N" prefix)

**Drawing #1**



Pipe Size	Series	Units	A		B	C	D	E	F
1/2"	T201	in.	4.2		0.8	2.5	4.9	0.938	3.5
		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
3/4"	T201	in.	4.4		1.0	2.5	5.2	1.188	3.8
		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**

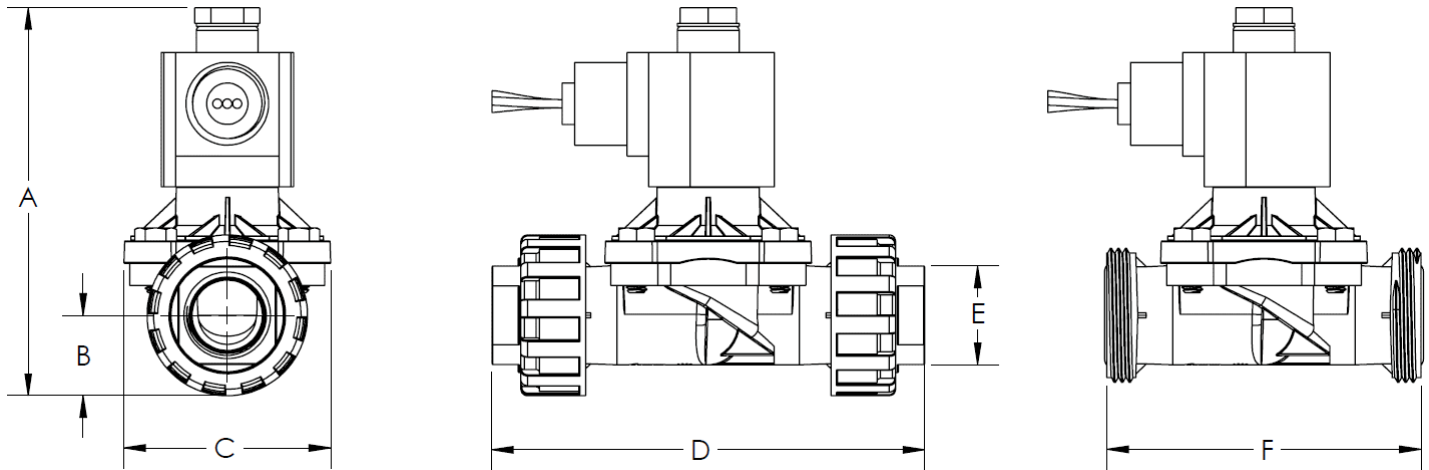


Pipe Size	Series	Units	A	B	C	D	E	F
1/2"	TP3	in.	3.8	0.8	2.5	4.9	0.938	3.5
		mm	96	20	64	124	24	89
3/4"	TP3	in.	4.0	1.0	2.5	5.2	1.188	3.8
		mm	101	25	64	133	30	97

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**Drawing #3**



Pipe Size	Series	Units	A	B	C	D	E	F
1/2"	T202 & T212	in.	4.7	0.8	2.5	4.9	0.938	3.5
		mm	119	20	64	124	24	89
3/4"	T202 & T212	in.	4.7	1.0	2.5	5.2	1.188	3.8
		mm	119	25	64	133	30	97