

### Features

- Ideal for use in extremely harsh and corrosive environments, such as those found on offshore and near-shore oil platforms
- Broad operating temperature range of -60°C to 80°C allows for use in extreme environmental conditions
- High-flow design results in faster process response time
- Requires zero main pressure to operate when using the externally piloted version
- Compatible with speed control, allowing users to control flow to prevent abrupt opening/closing of actuator

### Construction

Valve Parts in Contact with Fluids	
Body	316L Stainless Steel
O-rings   Disc	Low Temperature NBR
Dynamic O-ring	Low Temperature FKM
U-Cup Seal	FVMQ
Core and Plugnut	430F Stainless Steel
Sleeve	304L Stainless Steel
Piston	316L Stainless Steel
Spring	17-7 Stainless Steel
Poppets   Stem   Disc Retainer	303 Stainless Steel
Screws	316 Stainless Steel
Core Guide (10.1 & 11.6W)	POM
Core Tube (10.1 & 11.6W)	305 Stainless Steel
Shading Coil (10.1 & 11.6W)	Silver

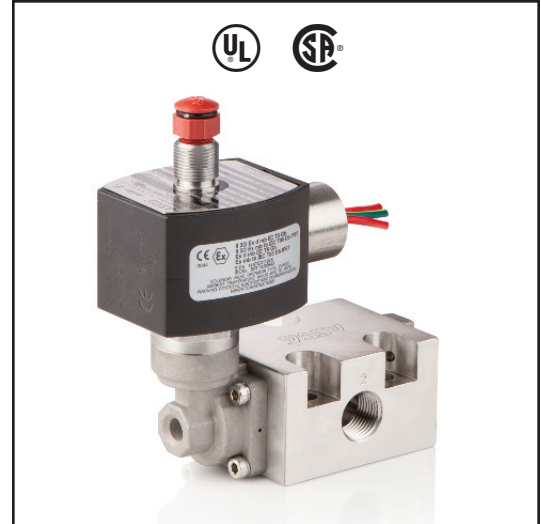
### Electrical

Coil Options	Insulation Class	Wattage	T Code	Spare Coil Part Number
Intrinsically Safe	H	0.48 W	T6	298006
Ultra Low Power	F	0.55 W	T6	274714
High Ambient Low Power	H	0.70 W	T5	274914
Surge Suppression	F	0.75 W	T6	276007
Standard Low Power	F	1.4 W	T6	274714
Surge Suppression	F	1.7 W	T6	276007
High Ambient Low Power	F	1.8 W	T5	274714
Standard AC	F	10.1 W	T4	274614
Standard DC	F	11.6 W	T4	274714

**IMPORTANT:** Supervisory & leakage current above the drop out current listed will cause improper operation. Consult your local ASCO sales office for additional assistance.

Description	Wattage	Voltage (DC)	Pull In (mA)	Drop Out (mA)	Coil Resistance at 68F(20 C) (Ohms)
Standard Ultra Low Power	0.55 W	12	34.0	3.63	255
		24	17.0	1.80	1025
		48	8.5	0.91	4080
High Ambient Ultra Low Power	0.70 W	12	37.0	3.97	206
		24	19.0	1.98	830
		48	9.7	1.03	3185
Surge Suppression Ultra Low Power	0.75 W	12	41.0	4.41	165
		24	19.0	1.98	830
		48	9.7	1.03	3185
Standard Low Power	1.4 W	12	83.5	13.90	102
		24	42.0	7.00	410
		48	21.4	3.60	1640
High Ambient Low Power	1.8 W	12	94.3	15.70	80
		24	47.9	8.00	320
		48	24.0	4.00	1260
Surge Suppression Standard Power ①	1.7 W	12	94.3	15.70	80
		24	47.9	8.00	320
		48	22.7	3.80	1470

Note: ① Surge suppression contains diode bridge.



### Nominal Ambient Temp. Ranges

Wattage	Min °F (°C)	Max °F (°C)
<b>AC</b>		
10.1	-76 (-60)	125 (52)
<b>DC</b>		
0.48	-40 (-40)	149 (65)
0.55	-76 (-60)	149 (65)
0.70		176 (80)
0.75		149 (65)
1.4		140 (60)
1.7		140 (60)
1.8	165 (74)	
11.6	131 (55)	

### Entity Parameters

#### Intrinsically Safe - 0.48 W:

$V_{max} = 32 \text{ VDC}$        $C_i = 0 \text{ nF}$   
 $I_{max} = 500 \text{ mA}$        $L_i = 0 \text{ H}$   
 $P_i = 1.5 \text{ W}$

### Solenoid Enclosures

**Standard:** Explosionproof and Watertight, Types 1, 2, 3, 3S, 4, 4X, 6, and 6P.

Refer to Engineering Section for fluid and temperature compatibility.

### Approvals

#### Solenoid Only:

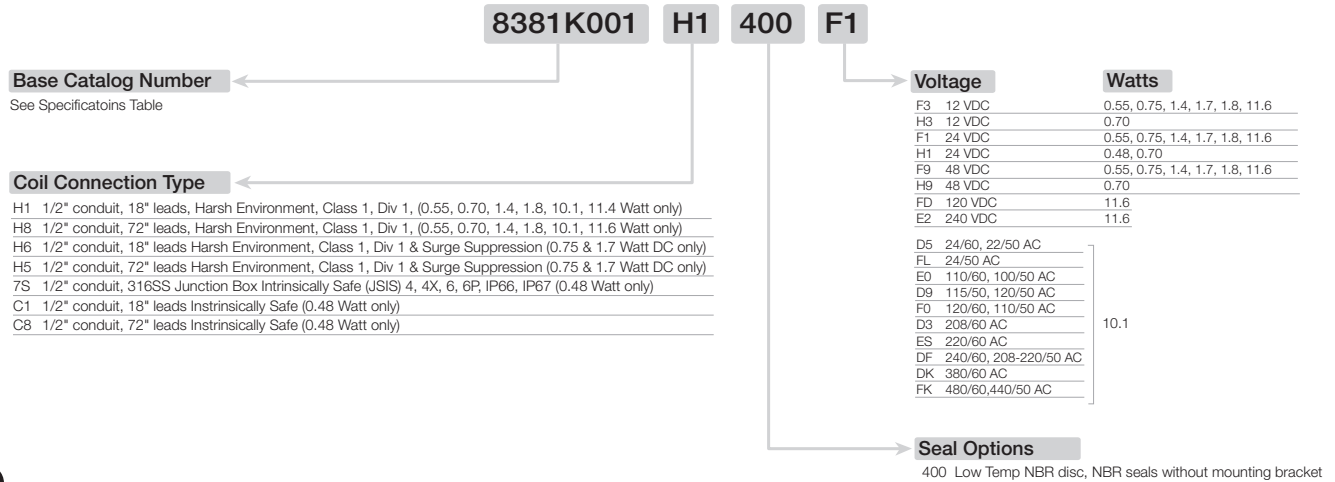
UL and CSA certified for class 1 Div. 1 locations

ATEX, IECEx: Ex d mb

Refer to Engineering Section for details.

SPECIAL SERVICE PILOT

**How to order** (Configurator available at [www.asco.com](http://www.asco.com))



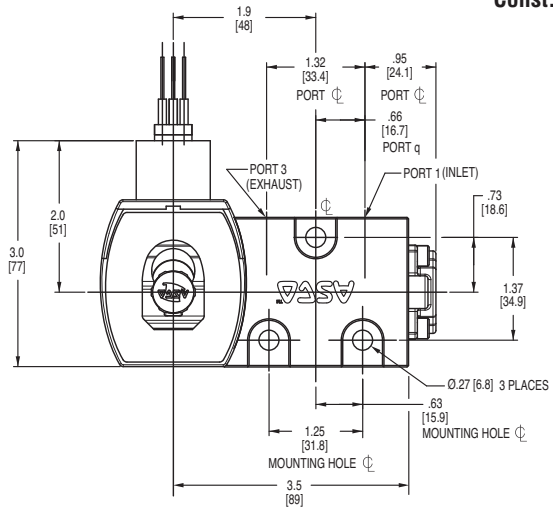
**Specifications English units (Metric)**

Pipe Size (in)	Flow Factor Cv (Kv m <sup>3</sup> /h)		Pilot Pressure psi (bar)		Operating Pressure Differential psi (bar)		Base Catalog Number	Const. Ref.	Max. Fluid Temp °F (°C)	Watt Rating		
	Port 1-2	Port 2-3	Min.	Max.	Min.	Max.				AC	DC	
<b>Normally Closed, Single Solenoid/Spring Return - Internally Piloted</b>												
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	150 (10)	8381K001	1	131 (55) ①	10.1	11.6	
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	150 (10)	8381K311	1	140 (60)	-	1.4/1.7	
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	150 (10)	8381K321	1	165 (74)	-	1.8	
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	130 (9)	8381K331	1	149 (65)	-	0.55/0.75	
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	130 (9)	8381K341	1	176 (80)	-	0.70	
1/4	2.3 (2.0)	2.1 (1.8)	-	-	25 (1.7)	130 (9)	8381K361	1	149 (65)	-	0.48	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	150 (10)	8381K003	1	131 (55) ①	10.1	11.6	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	150 (10)	8381K313	1	140 (60)	-	1.4/1.7	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	150 (10)	8381K323	1	165 (74)	-	1.8	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	130 (9)	8381K333	1	149 (65)	-	0.55/0.75	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	130 (9)	8381K343	1	176 (80)	-	0.70	
3/8	2.7 (2.3)	2.4 (2.1)	-	-	25 (1.7)	130 (9)	8381K363	1	149 (65)	-	0.48	
<b>Normally Closed, Single Solenoid/Spring Return - Externally Piloted</b>												
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	150 (10)	0	200 (14)	8381K002	1	131 (55) ①	10.1	11.6	
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	150 (10)	0	200 (14)	8381K312	1	140 (60)	-	1.4/1.7	
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	150 (10)	0	200 (14)	8381K322	1	165 (74)	-	1.8	
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	130 (9)	0	200 (14)	8381K332	1	149 (65)	-	0.55/0.75	
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	130 (9)	0	200 (14)	8381K342	1	176 (80)	-	0.70	
1/4	2.3 (2.0)	2.1 (1.8)	25 (1.7)	130 (10)	0	200 (14)	8381K362	1	149 (65)	-	0.48	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	150 (10)	0	200 (14)	8381K004	1	131 (55) ①	10.1	11.6	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	150 (10)	0	200 (14)	8381K314	1	140 (60)	-	1.4/1.7	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	150 (10)	0	200 (14)	8381K324	1	165 (74)	-	1.8	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	130 (9)	0	200 (14)	8381K334	1	149 (65)	-	0.55/0.75	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	130 (9)	0	200 (14)	8381K344	1	176 (80)	-	0.70	
3/8	2.7 (2.3)	2.4 (2.1)	25 (1.7)	130 (9)	0	200 (14)	8381K364	1	149 (65)	-	0.48	

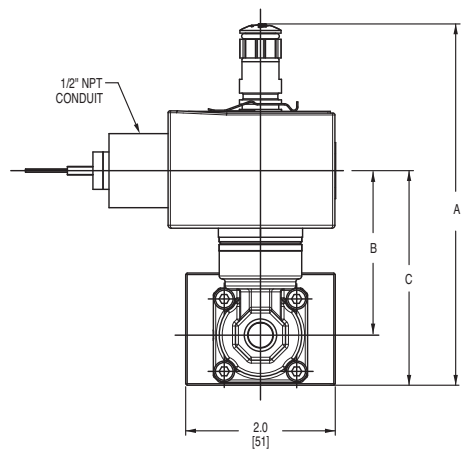
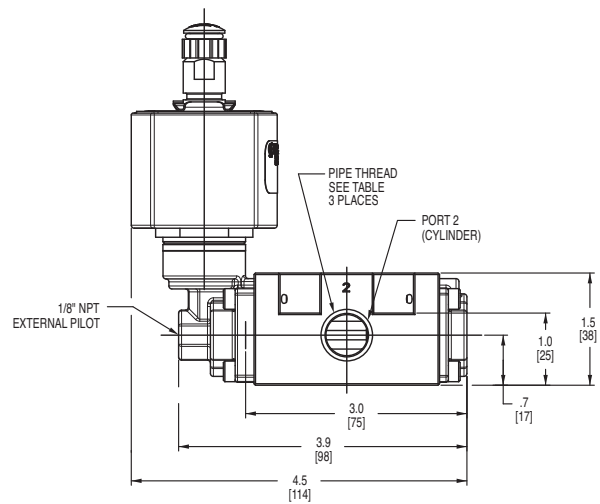
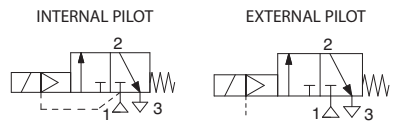
Note: ① 125°F (52°C) for 10.1W AC

## Dimensions English units (Metric)

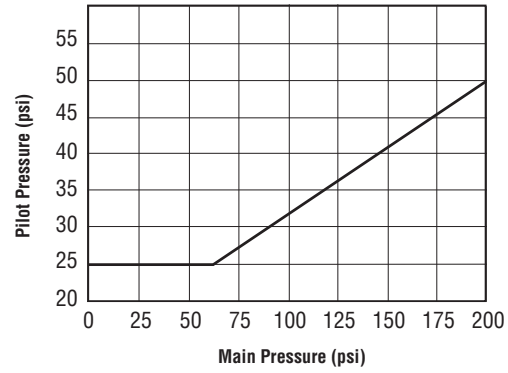
Const. Ref. 1



Dimension	Standard Power AC/DC		Low Power (1.4, 1.7, 1.8 W)		Low Power (0.48, 0.55, 0.70, 0.75 W)	
	inch	mm	inch	mm	inch	mm
<b>A</b>	4.3	110	4.8	123	4.8	123
<b>B</b>	2.17	55	2.32	59	2.20	56
<b>C</b>	2.8	72	3.0	76	2.9	73



Min Pilot Pressure (for Externally Piloted versions only)



SPECIAL SERVICE PILOT

**3/2  
SERIES  
381**



**SPECIAL SERVICE  
PILOT**