

### Features

- Quick close actuator– 2, 4 or 8 second cycle times
- Full Port 316 stainless steel ball valve
- RTFE (reinforced Teflon) ball seats
- Triple PTFE/Viton live loaded stem seals, adjustable
- Highly visual dome style valve position indicator
- Rugged aluminum Type 4X weatherproof enclosure
- Heavy duty motors with overload protection
- Anti-condensation heater, thermostatically controlled
- Manual override with end of travel mechanical stops
- Two auxiliary limit switches included
- Actuator CSA listed per UL429 and CSA C22.2

### Applications

On-off control of water, air, oil and other media compatible with the materials of construction. Suitable for vacuum service up to 29"Hg. Actuator designed for 70% duty cycle.

### Operation

Electric actuated valve uses power-to-open and power-to-close, stays in the last known position with loss of power. On receipt of a continuous voltage signal, the motor runs and via a rugged all metal gear system rotates the ball 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position. Wire directly to terminal strip via supplied cable connector, or use optional 1/2" NPT adapter.

### Construction

<b>Valve Body</b>	316 stainless steel ASTM A351 CF8M
<b>Ball/Stem</b>	316 stainless steel
<b>Ball Seats</b>	RTFE (reinforced Teflon)
<b>Stem Seals</b>	PTFE/ Viton
<b>Anti-static Device</b>	Ball to Stem (1/4" - 4") + Stem to Body (1-1/2" - 4")
<b>Gear Drive</b>	Heavy duty alloy steel and aluminium bronze
<b>Actuator Enclosure</b>	Aluminum, polyester powder painted, Type 4X, IP67
<b>Visual Valve Position Indicator</b>	Clear polycarbonate cover, red/yellow open-closed
<b>Fasteners</b>	Stainless Steel
<b>Auxiliary Limit Switches</b>	2 x SPDT 3A@125/250VAC, 30VDC resistive load



### Description

Electric actuated 2-piece stainless steel full port ball valves are investment cast with unrestricted flow and minimum pressure loss. Adjustable live loaded stem seal packing helps compensate for wear, pressure and/or temperature fluctuations, extending the cycle life of the valve. Rugged corrosion resistant electric actuator includes a manual override, valve position confirmation switches, thermostatically controlled anti-condensation heater, and over-torque protection.

### Approvals

#### Actuators

- CSA listed:
  - UL429
  - CSA C22.2 No. 139
  - Type 4X weatherproof enclosure
- CE conformance: EN 60204-1:2006
  - ISO5211 mounting
  - IP67 weatherproof enclosure



#### Valves

- Design: API 608
- Testing: API 598
- Threaded Connection: ASME B1.20.1 (NPT)/ ISO 228-1/ BS21
- Pressure/Temperature Rating: ASME B16.34
- Marking: MSS SP-25
- CE conformance: PED 2014/68/UE

### Construction Features

Auxiliary Limit Switches(2)  
for confirming valve position

Heavy duty integral motor  
design significantly reduces  
physical size of actuator

Rugged polyester powder  
coated aluminum corrosion  
resistant Type 4X weather-  
proof enclosure.

Triple PTFE/Viton live loaded  
stem seal design, adjustable

316SS Ball and Stem, RTFE  
ball seats



Anti-Condensation Heater

Terminal Box, wire directly to  
terminal strip via included  
cable connector or optional  
1/2" NPT conduit adapters.

Manual Override with  
protective cover

Self-locking all metal gear  
drive, no additional brake  
required

Direct mount ISO5211  
flange, no brackets required

Full Port 316 stainless steel  
ball valve



Visual Valve  
Position Indicator

### Pressure-Temperature\*

**Pressure Rating:** 1000 PSI (69 Bar) (1/4"-2")  
800 PSI (55 Bar) (2-1/2"-4") CWP non-shock  
Vacuum 29inHg

**Ball Valve Temperature Rating:** -4 to 392° F (-20 to 200° C)

**Actuator Temperature Rating:** -13 to 131° F (-25 to 55° C)

\*See P/T chart

**Specifications: On-Off Valves (English units)**

Stock Number	Pipe Size (NPT)	Orifice Size (inch)	Cv Flow Factor	Pressure Max. (PSI)*	Cycle Time /90° (seconds)	Voltage	Current (amps)	Electrical Drawing	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED STAINLESS BALL VALVES, QUICK CLOSE version</b>									
565202E	1/4	0.5	6.9	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565203E	3/8	0.5	6.9	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565204E	1/2	0.6	9.7	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565206E	3/4	0.8	18.4	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565208E	1	1.0	55.4	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565210E	1-1/4	1.3	89.7	1000	2	110 VAC, 50/60Hz	0.8	B	A561825
565212E	1-1/2	1.5	144.2	1000	4	110 VAC, 50/60Hz	0.8	B	A561850
565216E	2	2.0	226.0	1000	4	110 VAC, 50/60Hz	0.8	B	A561850
565220E	2-1/2	2.6	289.0	800	8	110 VAC, 50/60Hz	1.2	B	A561870
565224E	3	3.1	454.0	800	8	110 VAC, 50/60Hz	1.2	B	A561870
565232E	4	3.9	710.0	800	8	110 VAC, 50/60Hz	1.2	B	A561870
<b>24 VDC ELECTRIC ACTUATED STAINLESS BALL VALVES, QUICK CLOSE version</b>									
565244E	1/4	0.5	6.9	1000	4	DC24	6.0	G	A561851
565245E	3/8	0.5	6.9	1000	4	DC24	6.0	G	A561851
565246E	1/2	0.6	9.7	1000	4	DC24	6.0	G	A561851
565247E	3/4	0.8	18.4	1000	4	DC24	6.0	G	A561851
565249E	1	1.0	55.4	1000	4	DC24	6.0	G	A561851
565250E	1-1/4	1.3	89.7	1000	4	DC24	6.0	G	A561851
565251E	1-1/2	1.5	144.2	1000	4	DC24	6.0	G	A561851
565252E	2	2.0	226.0	1000	4	DC24	6.0	G	A561851
565241E	2-1/2	2.6	289.0	800	8	DC24	6.0	G	A561871
565242E	3	3.1	454.0	800	8	DC24	6.0	G	A561871
565243E	4	3.9	710.0	800	8	DC24	6.0	G	A561871

\* Pressure @ 100° F (see P/T chart for maximum pressure at higher temperatures)

**Specifications: On-Off Valves (Metric units)**

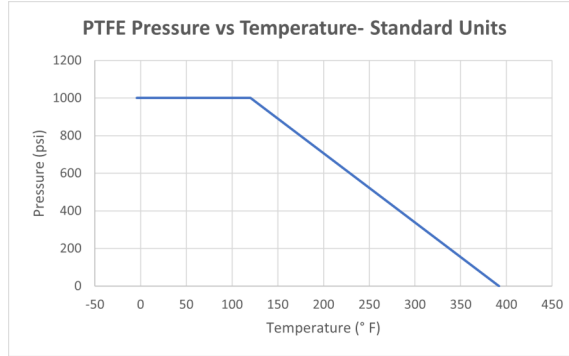
Stock Number	Pipe Size (NPT)	Orifice Size (mm)	Kv Flow Factor	Pressure Max. (Bar)*	Cycle Time /90° (seconds)	Voltage	Current (amps)	Electrical Drawing	Quick Close Accessory
<b>120 VAC ELECTRIC ACTUATED STAINLESS BALL VALVES, QUICK CLOSE version</b>									
565202E	1/4	11.5	5.9	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565203E	3/8	12.5	5.9	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565204E	1/2	15.0	8.4	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565206E	3/4	20.0	15.9	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565208E	1	25.0	47.9	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565210E	1-1/4	32.0	77.6	69	2	110 VAC, 50/60Hz	0.8	B	A561825
565212E	1-1/2	38.0	124.7	69	4	110 VAC, 50/60Hz	0.8	B	A561850
565216E	2	50.0	195.5	69	4	110 VAC, 50/60Hz	0.8	B	A561850
565220E	2-1/2	65.0	250.0	55	8	110 VAC, 50/60Hz	1.2	B	A561870
565224E	3	80.0	392.7	55	8	110 VAC, 50/60Hz	1.2	B	A561870
565232E	4	100.0	614.2	55	8	110 VAC, 50/60Hz	1.2	B	A561870
<b>24 VDC ELECTRIC ACTUATED STAINLESS BALL VALVES, QUICK CLOSE version</b>									
565244E	1/4	11.5	5.9	69	4	DC24	6.0	G	A561851
565245E	3/8	12.5	5.9	69	4	DC24	6.0	G	A561851
565246E	1/2	15.0	8.4	69	4	DC24	6.0	G	A561851
565247E	3/4	20.0	15.9	69	4	DC24	6.0	G	A561851
565249E	1	25.0	47.9	69	4	DC24	6.0	G	A561851
565250E	1-1/4	32.0	77.6	69	4	DC24	6.0	G	A561851
565251E	1-1/2	38.0	124.7	69	4	DC24	6.0	G	A561851
565252E	2	50.0	195.5	69	4	DC24	6.0	G	A561851
565241E	2-1/2	65.0	250.0	55	8	DC24	6.0	G	A561871
565242E	3	80.0	392.7	55	8	DC24	6.0	G	A561871
565243E	4	100.0	614.2	55	8	DC24	6.0	G	A561871

\* Pressure @ 70° C (see P/T chart for higher temperatures)

## Pressure/Temperature Chart:

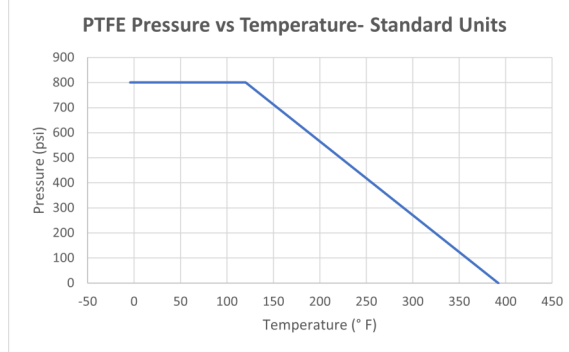
### Pressure/Temp. Chart - 1000 PSI (69 Bar)

P/T Chart (PSI/°F)				
PSI	1000	1000	100	0
°F	-4	50	330	392



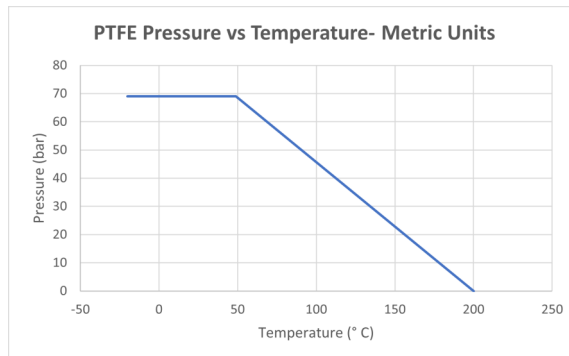
### Pressure/Temp. Chart - 800 PSI (55 Bar)

P/T Chart (PSI/°F)				
PSI	800	800	100	0
°F	-4	50	330	392



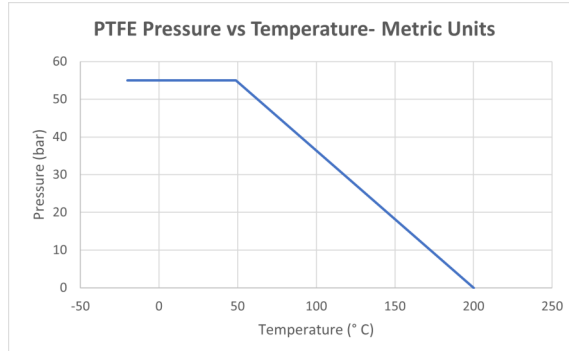
### Pressure/Temp. Chart - 69 Bar (1000 PSI)

P/T Chart (BAR/°C)				
Bar	69	69	7	0
°C	-20	10	166	200



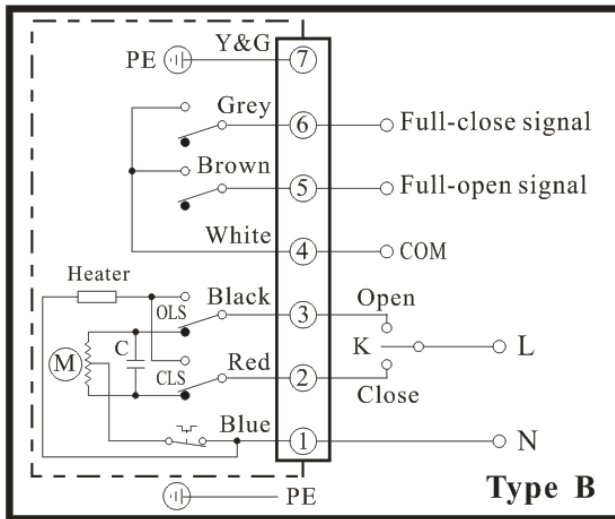
### Pressure/Temp. Chart - 55 Bar (800 PSI)

P/T Chart (BAR/°C)				
Bar	55	55	7	0
°C	-20	10	166	200

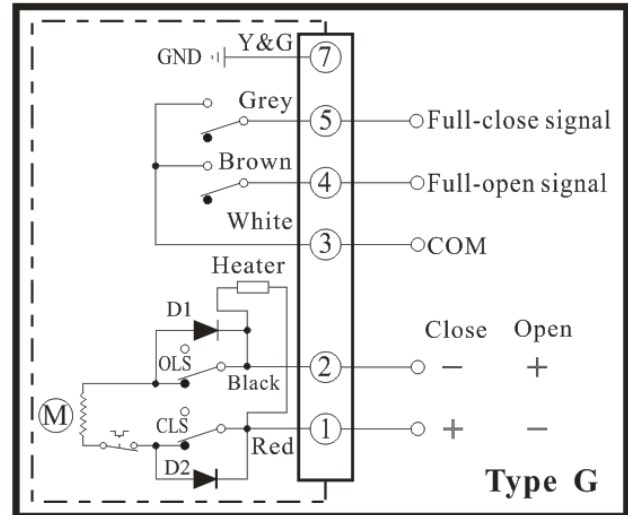


## Electrical Wiring

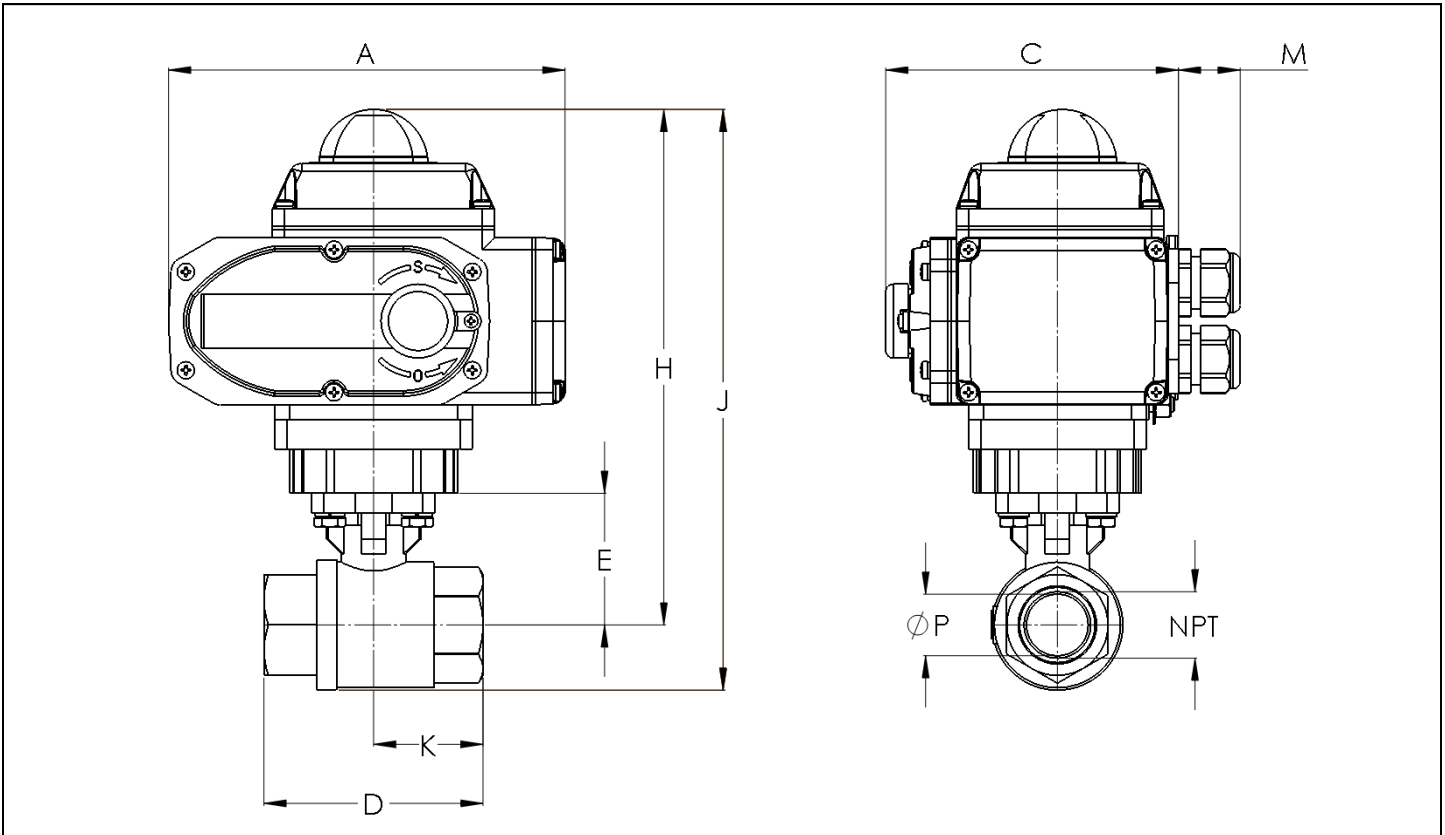
### ON-OFF Valves AC Voltages



### ON-OFF Valves DC Voltages

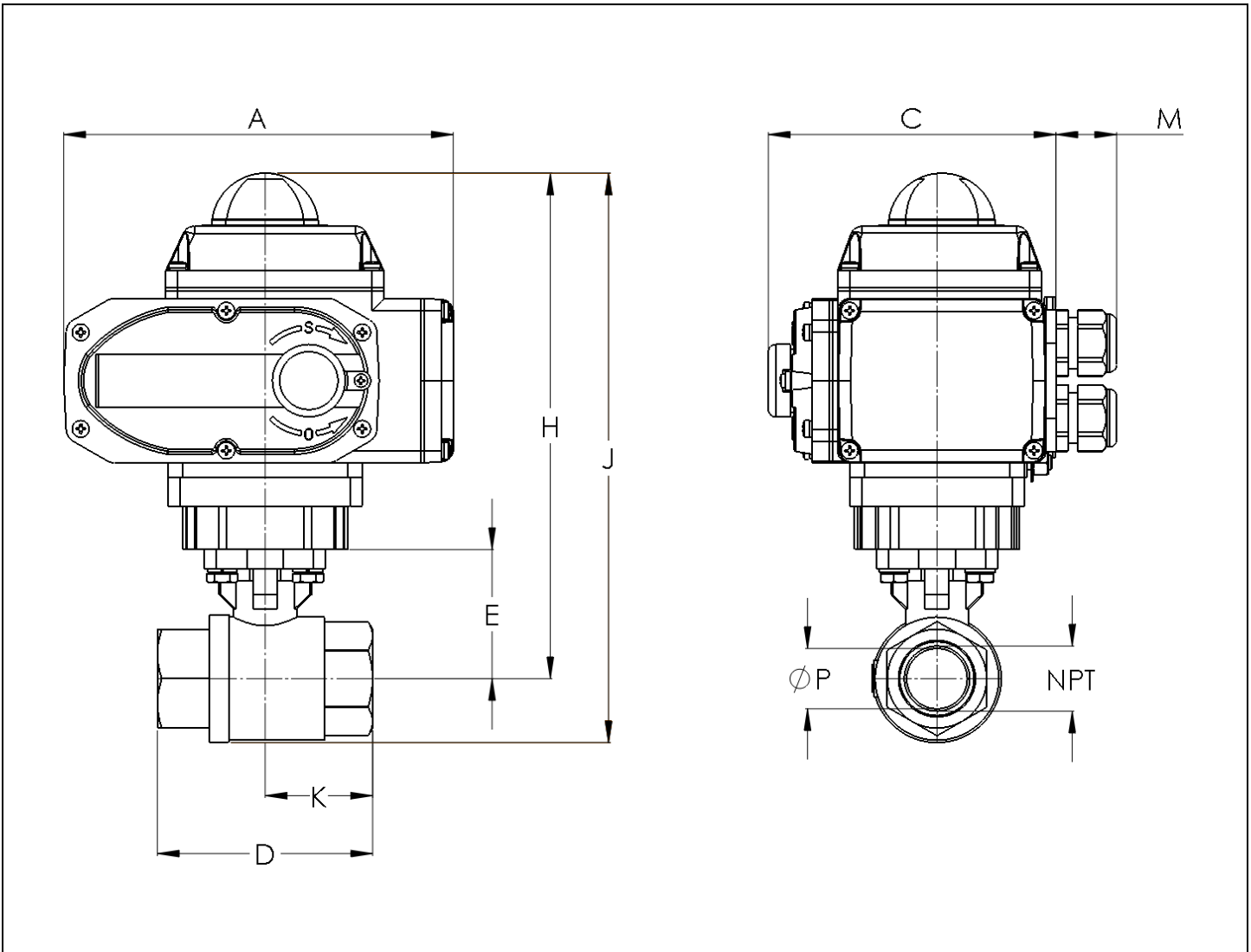


**Dimensions: 1/4"-2"**



Pipe Size (NPT)		A	C	D	E	H	J	K	M	P	Weight (AC/DC)
1/4	inch	7.7	5.0	2.6	1.5	8.6	9.2	1.2	1.0	0.5	10.9 lb
	mm	196.5	126.0	65.3	37.0	218.4	233.7	31.0	25.0	11.5	4.9 kg
3/8	inch	7.7	5.0	2.6	1.5	8.6	9.2	1.2	1.0	0.5	10.9 lb
	mm	196.5	126.0	65.3	37.0	218.4	233.7	31.0	25.0	12.5	4.9 kg
1/2	inch	7.7	5.0	2.6	1.5	8.6	9.2	1.2	1.0	0.6	10.8 lb
	mm	196.5	126.0	65.3	37.0	218.4	233.7	31.0	25.0	15.0	4.9 kg
3/4	inch	7.7	5.0	3.0	1.8	8.9	9.7	1.5	1.0	0.8	11.3 lb
	mm	196.5	126.0	77.3	45.0	226.1	246.4	38.7	25.0	20.0	5.1 kg
1	inch	7.7	5.0	3.5	2.1	9.2	10.2	1.7	1.0	1.0	12.0 lb
	mm	196.5	126.0	88.7	53.5	233.7	259.1	43.8	25.0	25.0	26.4 kg
1-1/4	inch	7.7	5.0	4.0	2.3	9.4	10.7	2.0	1.0	1.3	13.2 lb
	mm	196.5	126.0	102.0	59.0	237.8	271.8	50.7	25.0	32.0	6.0 kg
1-1/2	inch	7.7	5.0	4.3	2.9	10.0	11.5	2.2	1.0	1.5	14.3 lb
	mm	196.5	126.0	109.0	74.8	254.0	292.1	55.0	25.0	38.0	6.5 kg
2	inch	7.7	5.0	4.9	3.3	10.4	12.2	2.4	1.0	2.0	17.0 lb
	mm	196.5	126.0	125.0	83.5	264.2	309.9	61.3	25.0	50.0	7.7 kg

Dimensions: 2-1/2" - 4"



Pipe Size (NPT)		A	C	D	E	H	J	K	M	P	Weight (AC/DC)
2-1/2	inch	10.1	6.4	6.5	4.3	12.8	14.8	6.1	1.0	2.6	35.7 lb
	mm	255.5	161.5	165.0	108.8	325.1	375.9	155.0	25.0	65.0	16.2 kg
3	inch	10.1	6.4	7.5	4.7	13.2	15.8	6.5	1.0	3.1	42.3 lb
	mm	255.5	161.5	189.5	118.3	335.3	401.3	164.5	25.0	80.0	19.2 kg
4	inch	10.1	6.4	9.4	6.1	14.6	17.8	8.5	1.0	3.9	57.5 lb
	mm	255.5	161.5	238.0	153.8	370.8	452.1	217.0	25.0	100.0	26.1 kg