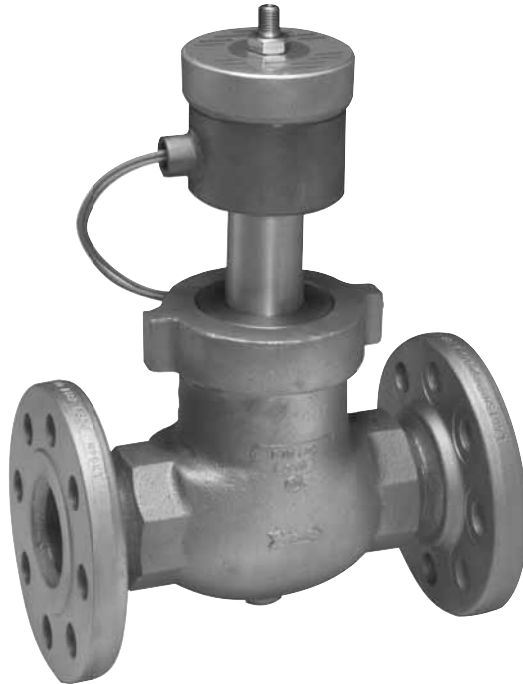


# ATKOMATIC

## 35800 Series

Stainless Steel, Pilot-piston, Pressure 35 to 2000 psig (2.4 to 138 bar)  
High Pressure Valve Configurable for Variety of Fluid Applications



### Features

- Rapid response time: achieved by use of an external pilot source
- Pilot operated valve
- Operation up to 2000 psig (138 bar)
- Stainless steel construction on all wetted parts: 316 for machined parts and CF8M for cast parts.
- Plunger material is 416 stainless that is treated for increased corrosion resistance
- Available in 1/2" through 2" NPT pipe size
- Full ported valves; heavy duty, rugged construction
- Cv from 5.1 to 45
- British BSPT ports available
- Media temperatures from -15° F to +400° F (-26° C to 204° C)
- Optional piston seat materials of Teflon®, PCTFE, Buna N, Viton®, EPR, or 316 stainless steel depending on fluid type and pressure
- Body seal materials of Teflon®, Viton®, Buna N, or EPR
- Piston lip seals are Viton®
- Optional piston seat materials of Teflon®, PCTFE, Buna N, Viton®, EPR or 316 stainless steel depending on fluid type and pressure.
- Removable 316 stainless steel body inserts (stainless steel trim)
- Will handle fluids with viscosity up to 150 SUS
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, cryogenic fluids, and corrosive fluids
- Class H coils are standard
- Coil housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7
- Manual opening and throttling devices are available as options
- Valve position indicator option is available

### Circle Seal Controls

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atkomatic solenoid

# 35800 Series

## Operational Pressures (35 psid minimum pressure differential)

Normally closed and open 1/2"-1", 35820-35840

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS	
AC	DC	AC	DC	AC	DC
2000 / 138 bar	2000 / 138 bar	2000 / 138 bar	2000 / 138 bar	1200 / 83 bar	1200 / 83 bar

Normally closed and open 1 1/4"-2", 35851-35871

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS	
AC	DC	AC	DC	AC	DC
2000 / 138 bar	2000 / 138 bar	2000 / 138 bar	2000 / 138 bar	1200 / 83 bar	1200 / 83 bar

Note: Both the pilot inlet and pilot exhaust ports are 1/4" NPT male and female respectively.

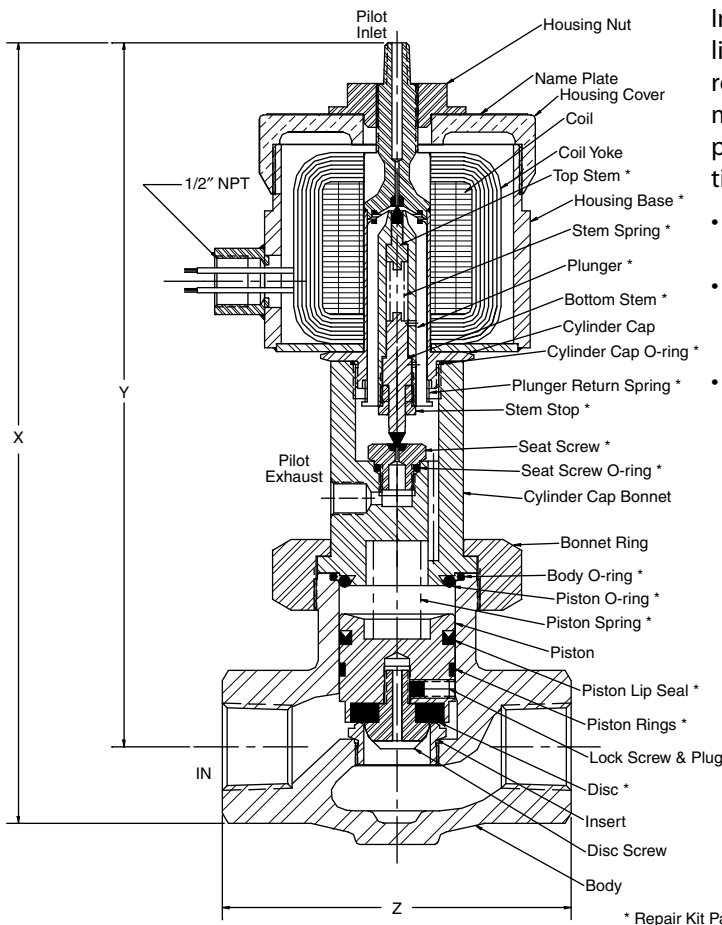
Note: On normally open valves the position of the pilot inlet and exhaust are reversed.

## Dimensions, Shipping Weights, and Cv Flow Factors

### 35800 Series Normally Closed or Normally Open Stainless Steel

CATALOG NUM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
35820	1/2"	3/4"	11 1/16"	10 1/4"	4 5/8"	15	5.1
35830	3/4"	3/4"	11 1/16"	10 1/4"	4 5/8"	15	7.5
35840	1"	1"	12 3/8"	10 1/16"	5 1/4"	21	12.5
35851	1 1/4"	1 1/2"	12 3/16"	10 5/16"	5 7/8"	25	21.0
35861	1 1/2"	1 1/2"	12 3/16"	10 5/16"	5 7/8"	25	21.5
35871	2"	2"	14 7/8"	12 3/8"	7"	34	45.0

Note: Restrictions that apply to other normally open valves do not affect the 35800 Series normally open valves.



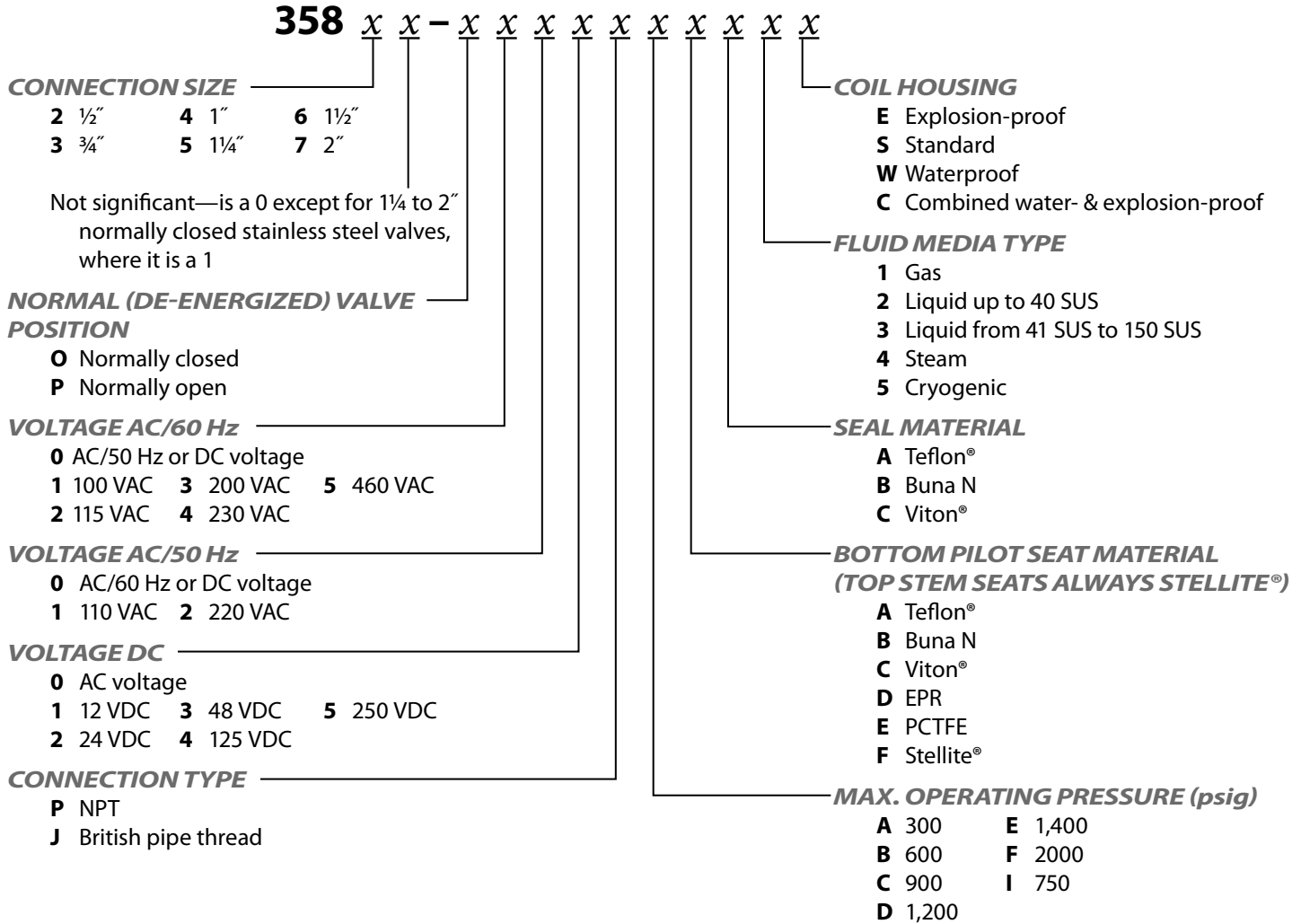
35840 1" valve, shown as a normally closed valve, with a NEMA 7 coil housing, and AC coil.

In most systems, pilot pressure is tapped off the valve's inlet line and pilot exhaust is routed to atmosphere or a low pressure receptacle. Independent sources for pilot pressure are also commonly used and occasionally the valve's outlet pipe is used for pilot exhaust. For valve operation, the following minimum conditions must be met:

- For opening, pilot exhaust pressure must be at least 35 psi less than the valve's inlet pressure.
- For closing, pilot pressure must be at least equal to the valve's inlet pressure and at least 35 psi greater than the valve's outlet pressures.
- The fastest operational speeds are obtained at maximum pressure differentials.

# 35800 Series

## How to Order



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 Teflon® is a registered trademark of DuPont.  
 Stellite® is a registered trademark of Deloro Stellite Company Inc.