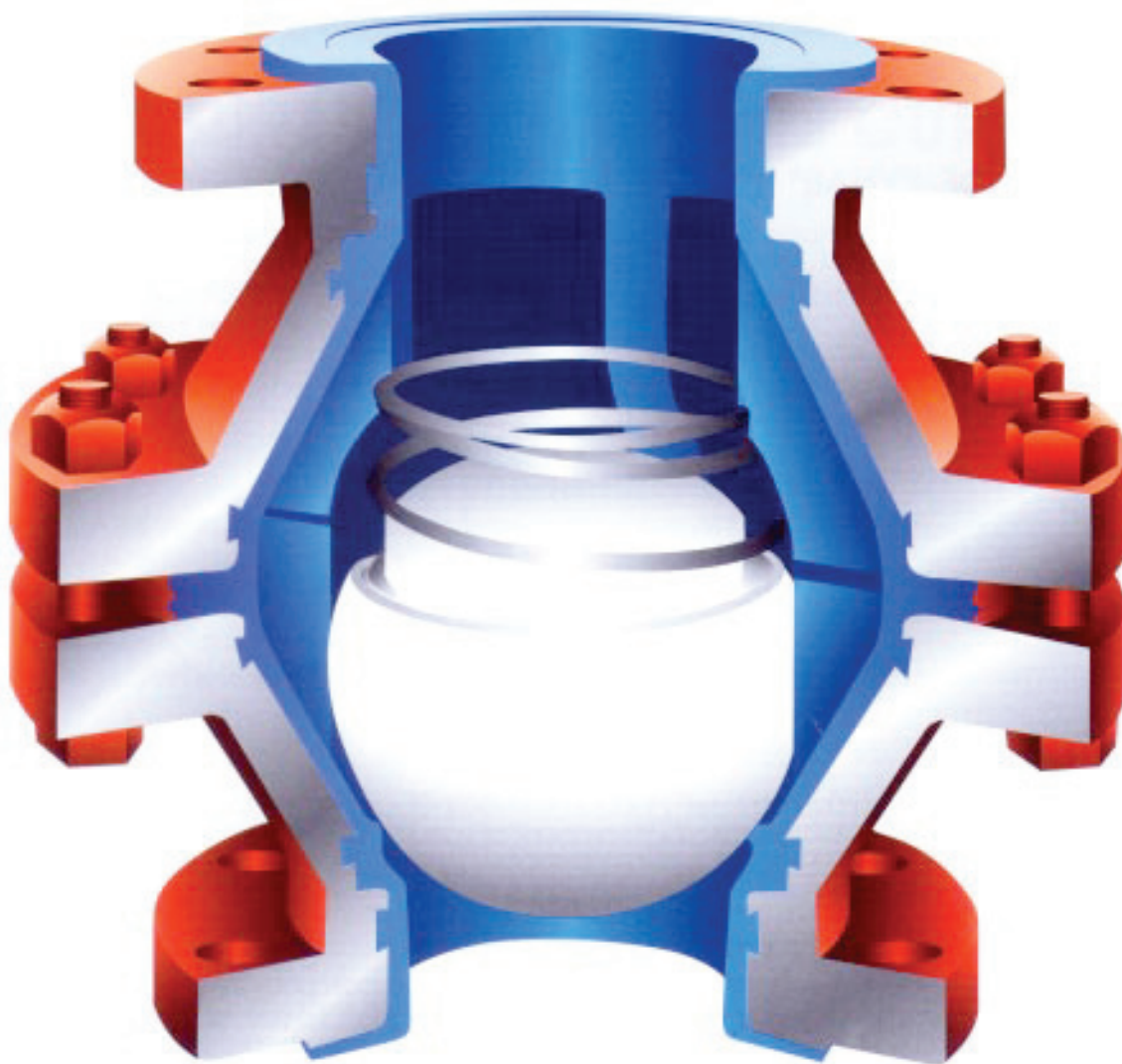

ChemValve[®]

**MODEL 880S-300
SPRING ASSISTED
LINED BALL CHECK VALVE**



CHOICE OF LINERS

Model 880S spring assisted ball check valve liner selection is dependent upon the application

Model 880S spring assisted ball check valves can be supplied with Polypropylene, PVDF-Kynar®, PFA or GRPFA. These are all melt processible resins which are injection molded into the valve body.

Liner selection should be based on the corrosion resistance of the plastic resin to the flowing media at service temperature and pressure. Please consult a corrosion chart for compatibility. Remember, there is no need to use a PFA lined valve when polypropylene will perform just as well.

PPL POLYPROPYLENE

Polypropylene is a thermoplastic resin exhibiting an excellent balance of corrosion resistance and economy. When injection molded into a Model 880S spring assisted ball check valve, it provides an excellent low cost product for many applications, as well as HCl applications, in the water and waste water treatment industry. The suitability of polypropylene is highly dependent on service temperature. Polypropylene is especially good in ambient temperature applications. This liner has been tested in 37% HCl and approved. The maximum temperature rating of the Model 880S polypropylene lined spring assisted ball check valve is 225 degrees F.

PVDF PVDF-KYNAR® (Poly-vinylidene fluoride)

PVDF is a strong hard fluorocarbon resin which is thermally stable, non-toxic and has excellent chemical resistance. PVDF is especially well suited to weak corrosives and slurry service applications found in bleach-plants of pulp and paper mills. PVDF is the material of choice for chlorine and other halogen containing chemicals. The suitability of PVDF in a given corrosive service is highly dependent on temperature. In some cases, PVDF can be substituted for a PFA lining. In abrasive applications, PVDF will work better than PFA, due to its resistance to erosion, provided it is chemically compatible with the service. The maximum temperature rating of the Model 880S PVDF lined spring assisted ball check valve is 275 degrees F.

PFA (Perfluoroalkoxy)

PFA is a higher temperature resin with the same outstanding chemical inertness as PTFE. Due to its chemical composition, PFA retains a high amount of mechanical strength at elevated temperatures. The maximum temperature rating of the Model 880S PFA lined spring assisted ball check valve is 400 degrees F.

GRPFA Glass-Reinforced PFA

Glass reinforced PFA is a liner material which combines the corrosion resistance of PFA at elevated temperatures with the abrasion resistance quality of PVDF. GRPFA is unsurpassed in high temperature slurry applications where virgin PFA or PTFE lined valves cannot withstand erosion. The maximum temperature rating of the Model 880S GPPFA lined spring assisted ball check valve is 400 degrees F.

ENGINEERING DATA

MODEL 880S MATERIALS	
PART	MATERIAL
Body	Steel
Ball	Solid PTFE
Spring	Hastalloy C-276**
Bolt/n	B7 Alloy Steel

* All steel is ASTM-A576-GR-1018 or ASTM-A36

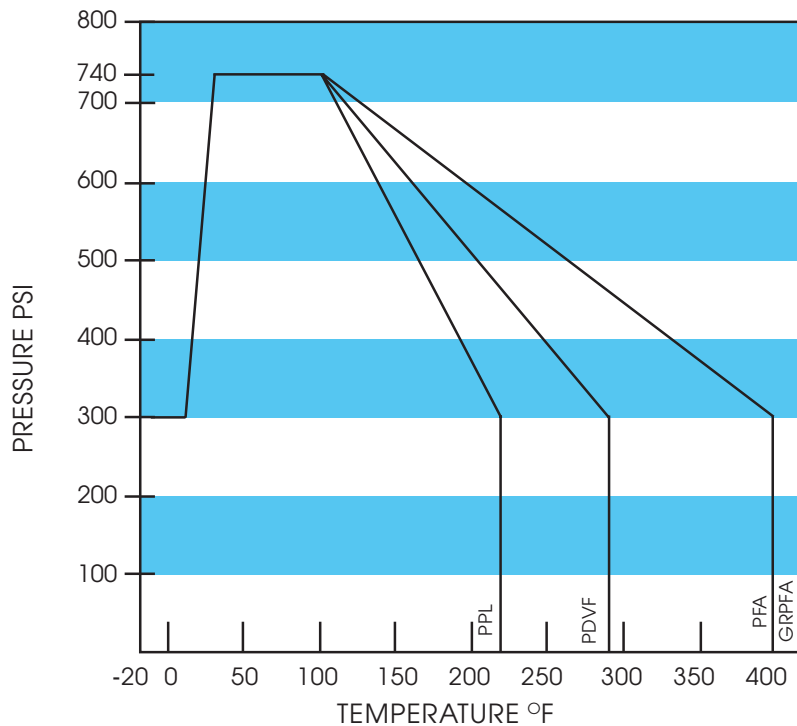
** Other high alloy spring materials and an FEP encapsulation of the spring is also available.

Technical Description

Pressure Class: ANSI CI 300
(DIN Std. Optional)
Size Range: 1" to 6" (25mm-150mm)
End Connection: Raised face flanged
Liner Material: PPL, PVDF, FEP, PFA, GRPFA
Liner Thickness: Minimum .125"
 Rated for Full Vacuum
External Protection: Waterbased Acrylic
 Urethane
 Other Coatings
 Available

Size	CV VALUE
1	38
1.5	86
2	190
3	309
4	380
6	594

PRESSURE - TEMPERATURE CURVES

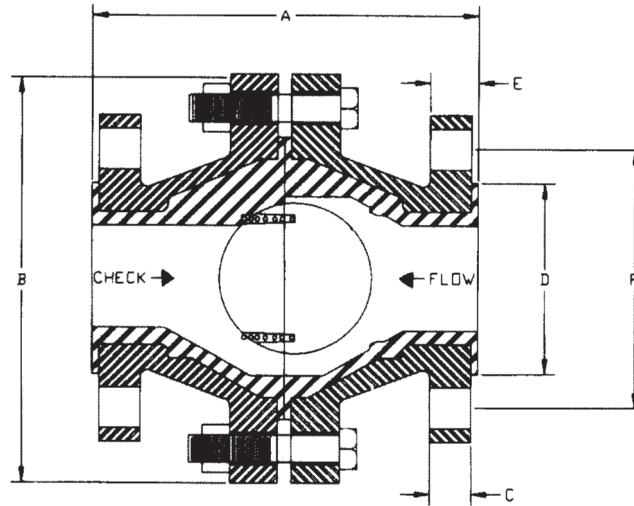


MAX SERVICE TEMPERATURE	
PPL	225°F (107°C)
PVDF	275°F (135°C)
PFA	400°F (204°C)
GRPFA	400°F (204°C)

INSTALLATION RECOMMENDATIONS

1. This valve can be installed in any orientation within the piping system - vertical or horizontal and flow up or flow down.
2. For applications where the check valve is installed for use on the downstream side of a centrifugal pump, it is recommended that there is a minimum of five pipe diameters of straight pipe run before the inlet to the check valve.
3. For applications in lines that are for mixing, we recommend that the complete service condition be reviewed by the factory.

MODEL 880S-300 SPRING ASSISTED LINED BALL CHECK VALVE



PARTS NUMBER	Nominal valve size	A	B	C Approx.	D	E Approx.	F			Approximate Weight	
							Number of Holes	Bolt Hole Diameter	Bolt Circle Diameter	VALVE	BALL
880S-300	1"	6.00"	5.5"	0.70"	2.25"	0.89"	4	0.75"	3.50"	Approx. 20	.17
880S-300	1.5"	8.50"	6.5"	0.88"	2.88"	1.05"	4	0.88"	4.50"	Approx. 30	.44
880S-300	2"	8.80"	7.5"	0.95"	3.63"	1.13"	4	0.75"	5.00"	Approx. 60	.87
880S-300	3"	10.00"	10.00"	1.25"	5.00"	1.32"	4	0.875"	6.63"	Approx. 80	2.44
880S-300	4"	11.75"	11.75"	1.24"	6.19"	1.50"	8	0.875"	7.875"	Approx. 110	5.84
880S-300	6"	16.63"	17.38"	1.44"	8.50"	1.75"	12	0.875"	10.63"	Approx. 250	18.9

Tolerances: A and B = $\pm 0.125"$ - All Others = 0.063

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