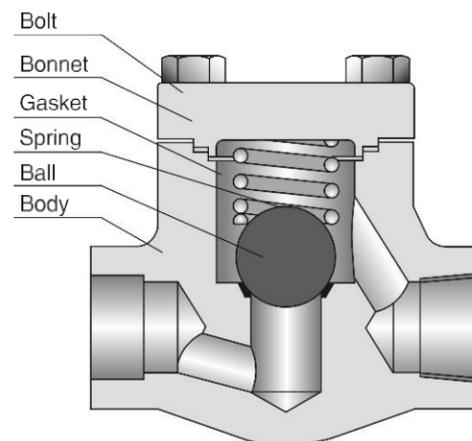
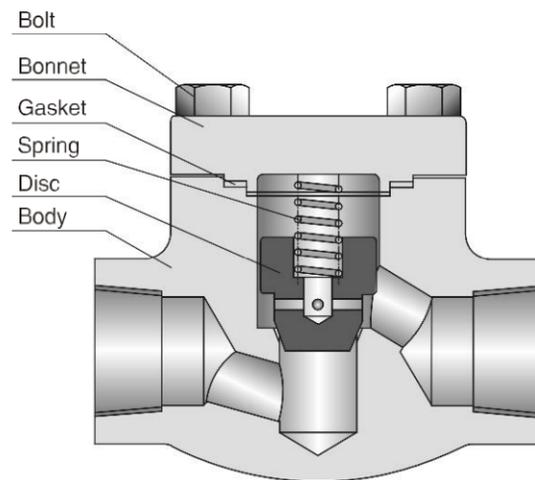
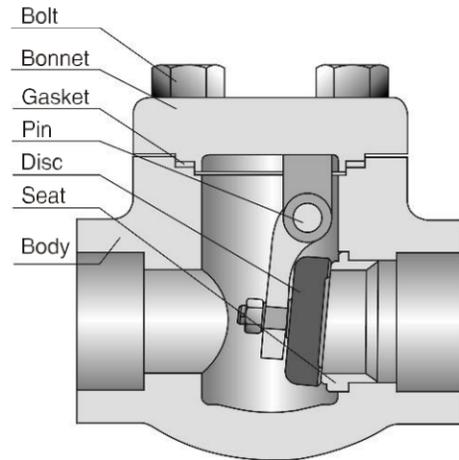


# Forged steel Check valve series



# FORGED STEEL CHECK VALVE

## Design of Forged Steel Check Valve



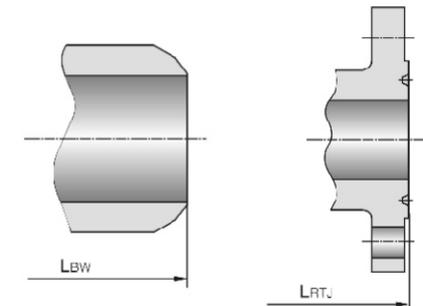
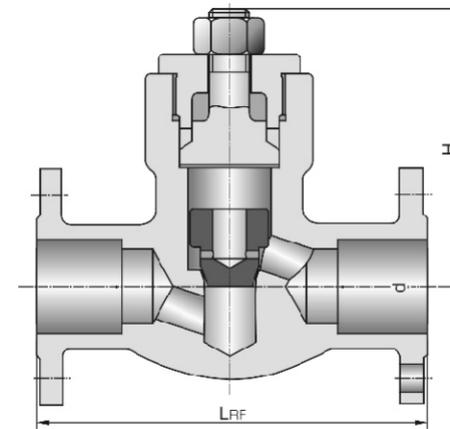
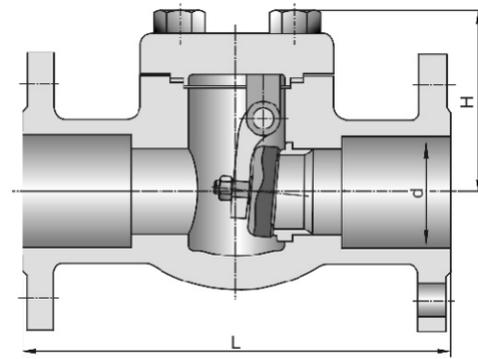
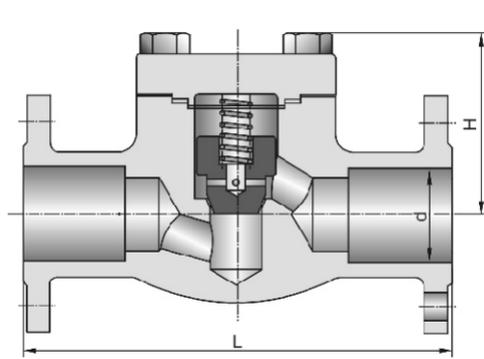
## Material List for Main Parts

No.	Part Name	ASTM			
		Carbon Steel		Stainless Steel	Alloy Steel
1	Body	A105	LF2/LF3	A182 F304	A182F11/F22
2	Seat	A182F6a	A182F6a	A182 F304	A182F11/F22
3	Disc/Ball	A182F6a	A182F6a	A182 F304	A182F6a
4	Pin	A276-410	A276-410	A276-304	A276-410
5	Spring	Si.Mn Alloy Steel		Stainless Steel	Cr.V Alloy Steel
6	Gasket	Graphite +304			
7	Bonnet	A105	LF2/LF3	A182 F304	A182 F11/F22
8	Bolt	A193 B7	A320 L7	A193 B8	A193 B16

## Performance Specification

Nominal Pressure		Class						
		150	300	600	800	900	1500	2500
Test Pressure (MPa)	Shell Test	2.93	7.55	10.0	20.1	15.0	37.5	63.0
	High Pressure Seal Test	2.07	5.52	7.31	14.7	11.03	27.5	16.2
	Low Pressure Seal Test	0.6						
Applicable Temperature		≤ 425°C						
Applicable Medium		Water, Oil & Gas						

# FORGED STEEL CHECK VALVE



## Pressure: Class150 ~ 600

- Bolted Bonnet or Welded Bonnet
- Full Port
- Swing or Lift Type
- Flange Ends or Butt-welding Ends

## Technical Specification

Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	ASME B16.10
Flange Ends	ASME B16.5
Butt-welding Ends	ASME B16.25
Inspection & Test	API 598

## Main Dimensions & Weight

Pressure	Size		d(Full Port)	LRF	LBW	H		Weight (kg)	
	mm	in				Lift type	Swing type		
	Class150								15
		20	3/4	18	117	117	78	78	4.4
		25	1	24	127	127	84	84	8.2
		32	1 1/4	29	140	140	103	101	8.9
		40	1 1/2	36.5	165	165	118	120	12.0
		50	2	46.5	203	203	130	133	14.3
Class300		15	1/2	13	152	152	61	61	3.7
		20	3/4	18	178	178	78	78	4.8
		25	1	24	203	203	84	84	8.8
		32	1 1/4	29	216	216	103	101	9.6
		40	1 1/2	36.5	229	229	118	120	13.7
		50	2	46.5	267	267	130	133	17.8
Class600		15	1/2	13	165	165	61	61	4.0
		20	3/4	18	190	190	78	78	5.8
		25	1	24	216	216	84	84	9.5
		32	1 1/4	29	229	229	103	101	10.4
		40	1 1/2	36.5	241	241	118	120	15.6
		50	2	46.5	292	292	130	133	24.5

Note: H means the height when valve is fully opened.

## Pressure: Class900 ~ 2500

- Pressure Sealed Bonnet
- Full Port
- Lift Type
- Flange Ends/Butt-welding Ends

## Technical Specification

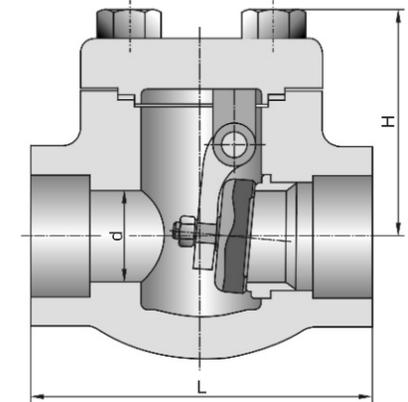
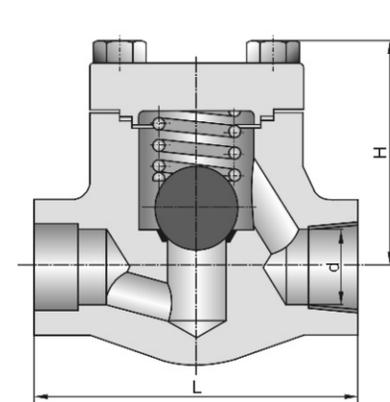
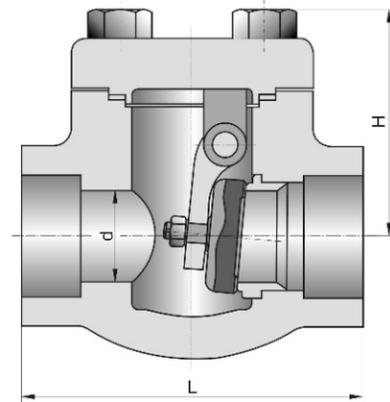
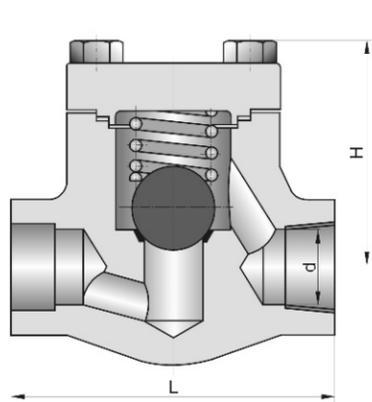
Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	ASME B16.10
Flange Ends	ASME B16.5
Butt-welding Ends	ASME B16.25
Inspection & Test	API 598

## Main Dimensions & Weight

Pressure	Size		d(Full Port)	Dimension (mm)				H	Weight(kg)
	mm	in		LRF	LBW	LRTJ	Class900-2500		
	Class900								15
		20	3/4	18	229	229	229	117.5	11.9
		25	1	24	254	254	254	117.5	13.9
		32	1 1/4	29	279	279	279	149	26.9
		40	1 1/2	36.5	305	305	305	149	25.1
		50	2	46.5	368	368	371.2	195	32.0
Class1500		15	1/2	13	216	216	216	117.5	10.5
		20	3/4	18	229	229	229	117.5	11.9
		25	1	24	254	254	254	117.5	13.9
		32	1 1/4	29	279	279	279	149	26.9
		40	1 1/2	36.5	305	305	305	149	25.1
		50	2	46.5	368	368	371.2	195	32.0
Class2500		15	1/2	13	264	264	264	125	12.6
		20	3/4	18	273	273	273	125	14.9
		25	1	24	308	308	308	125	16.5
		32	1 1/4	29	349	349	352.2	166	28.0
		40	1 1/2	36.5	384	384	387.2	166	27.6
		50	2	46.5	451	451	454.2	210	34.5

Note: H means the height when valve is fully opened.

# FORGED STEEL CHECK VALVE



## Pressure: Class150 ~ 600 & Class800

- Bolted Bonnet or Welded Bonnet
- Full Port or Reduced Port
- Swing or Lift Type
- Threaded Ends or SW Ends

## Technical Specification

Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	Manufacturer Standard
Socket-welded Ends	ASME B16.11
Threaded Ends	ASME B1.20.1
Inspection & Test	API 598

## Pressure: Class900 ~ 1500

- Bolted Bonnet or Welded Bonnet
- Full Port
- Swing or Lift Type
- Threaded Ends or SW Ends

## Technical Specification

Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	Manufacturer Standard
Socket-welded Ends	ASME B16.11
Threaded Ends	ASME B1.20.1
Inspection & Test	API 598

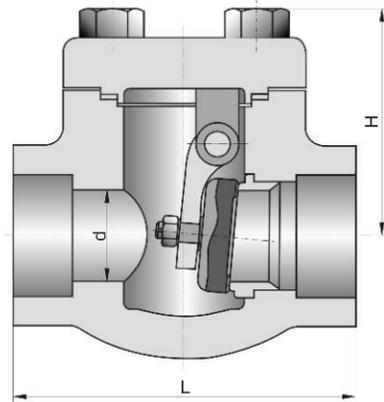
## Main Dimensions & Weight

Pressure	Structure	Size		Dimension (mm)					
		in							
Class800	Class					79	61		
						79	61		
						79	61		
		20				92	61		
		25	20					78	2.3
		32	25		24	24		84	3.9
		40	32		29	29			5.6
		50	40		36.5	36.5			8.9
Class800	Class					79	61		
						79	61		
						79	61		
		20				92	61		
		25	20					78	
		32	25		24	24		84	3.4
		40	32		29	29			4.5
		50	40		36.5	36.5			7.3
						46.5			

## Main Dimensions & Weight

Pressure	Structure	Size		Dimension (mm)					
		in							
Class900	Class					79	61		
						92	61		
		20						78	2.3
		25	20					84	3.9
		32	25		24	24			5.6
		40	32		29	29			8.9
		50	40		36.5	36.5			
								79	61
Class900	Class					79	61		
						92	61		
		20						78	
		25	20					84	3.4
		32	25		24	24			4.5
		40	32		29	29			7.3
		50	40		36.5	36.5			
								79	61

# FORGED STEEL CHECK VALVE



### Pressure: Class800 & Class1500

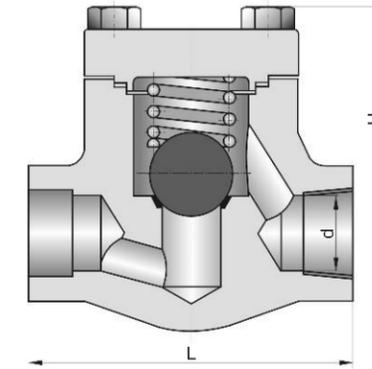
- Bolted Bonnet or Welded Bonnet
- Full Port or Reduced Port
- Swing Type
- Threaded Ends or SW Ends

### Technical Specification

Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	Manufacturer Standard
Socket-welded Ends	ASME B16.11
Threaded Ends	ASME B1.20.1
Inspection & Test	API 598

### Main Dimensions & Weight

Pressure	Structure	Size		Dimension (mm)			
			in				
Class800					79	54.5	
		20			92	54.5	
		25				72	2.3
		32		24		84	5.4
		40		29		94	5.4
		50		36.8			9.0
Class1500	Swing Type	15	1/2	13	92	54.5	1.3
		20	3/4	13	111	72	2.3
		25	1	18	120	81	5.4
		32	1 1/4	24	120	94	9.0
		40	1 1/2	29	157	112	9.0
		50	2	36.8	172	132	13



### Pressure: Class800 & Class1500

- Bolted Bonnet or Welded Bonnet
- Full Port or Reduced Port
- Lift Type
- Threaded Ends or SW Ends

### Technical Specification

Design Standard	API 602
Pressure-Temperature Rating	ASME B16.34
Face-to-face	Manufacturer Standard
Socket-welded Ends	ASME B16.11
Threaded Ends	ASME B1.20.1
Inspection & Test	API 598

### Main Dimensions & Weight

Pressure	Structure	Size		Dimension (mm)			
			in				
Class800					79	54.5	
		20			92	54.5	
		25				72	2.3
		32		24		84	5.4
		40		29		94	5.4
		50		36.8			9.0
Class1500	Lift Type	15	1/2	10	92	54.5	1.3
		20	3/4	13	111	72	2.3
		25	1	17.5	120	81	5.4
		32	1 1/4	23	120	94	9.0
		40	1 1/2	28.5	172	112	9.0
		50	2	35	234	132	13