

**CLASS
800**

RP&C FORGED STEEL CHECK VALVES

C90D

NPT ENDS SIZES ¼" THRU 2"

C91D

SOCKET WELD ENDS

- ASTM A182 Gr. F5
- WORKING PRESSURE (NON-SHOCK)
 - 600 PSIG @ 975° F. Steam-Oil
 - 800 PSIG @ 930° F. Steam-Oil
 - 2000 PSIG @ -20° To 100° F.

K90D

NPT ENDS SIZES ¼" THRU 2"

K91D

SOCKET WELD ENDS

- ASTM A182 Gr. F22 Cl. 3
- WORKING PRESSURE (NON-SHOCK)
 - 600 PSIG @ 1615° F. Steam-Oil
 - 800 PSIG @ 1355° F. Steam-Oil
 - 2000 PSIG @ -20° To 100° F.

HORIZONTAL SERVICE ONLY

- PISTON CHECK VALVE
- STANDARD PORT
- BOLTED COVER
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API

API 598 API 602

ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

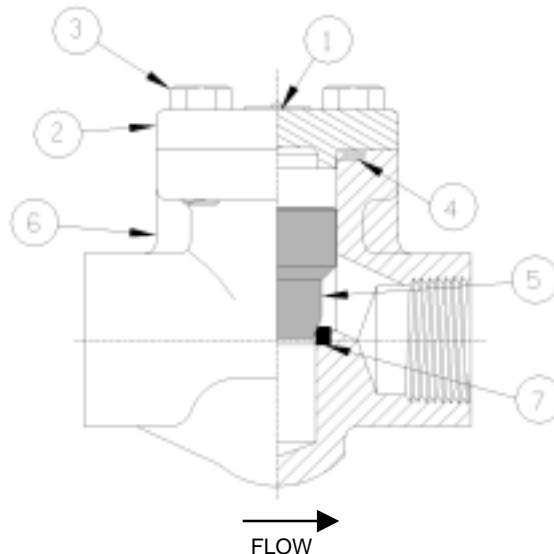
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION
D TRIM (13 Cr/HF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel	A182	Grade F5
2	Cover	Forged Steel	A182	Grade F22 Cl. 3
3	Cover Bolts	Alloy Steel	A193	Grade B16
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	420 Stainless Steel	A582	Heat Treated
6	Body	Forged Steel	A182	Grade F5
6	Body	Forged Steel	A182	Grade F22 Cl. 3
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top (Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3	2-3/16	9/32	.555	.375	3-1/4	.8
3/8	3	2-3/16	5/16	.690	.375	3-1/4	.9
1/2	3	2-3/16	3/8	.855	.375	3-1/4	1.0
3/4	3-1/2	2-7/16	½	1.065	.500	3-3/4	2.7
1	4-3/8	2-13/16	¾	1.330	.500	5-1/2	6.4
1-1/4	6	3-11/16	1	1.675	.500	11	14.0
1-1/2	6	3-11/16	1-1/4	1.915	.500	11	18.0
2	7	4-5/16	1-1/2	2.406	.625	14-1/2	24.0

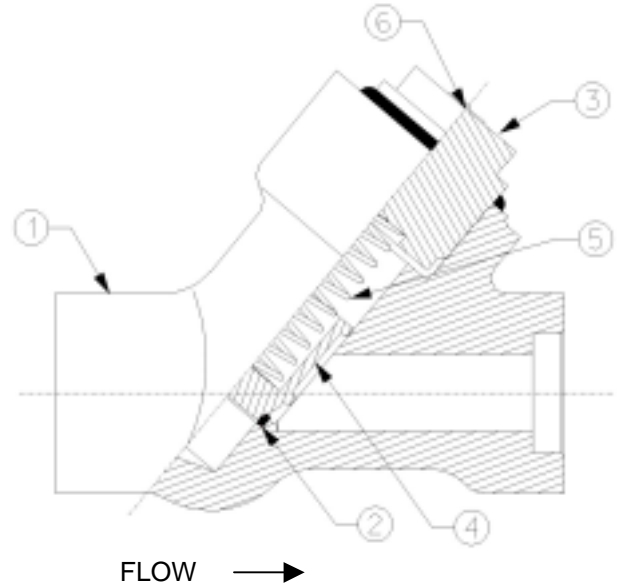
RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
1690**

- F1300E** SIZES 1/4" THRU 1-1/2" NPT
- F1310E** SIZES 1/4" THRU 2" SOCKET WELD
- F1320E** SIZES 1/4" THRU 2" BUTT WELD

- **SPRING LOADED PISTON CHECK VALVES**
- **HORIZONTAL OR VERTICAL SERVICE**
- **FORGED STEEL ASTM A105**
- **SEAL WELDED COVER**
- **REFER TO CHART ON PAGE 2Y FOR PRESSURE/TEMP. RATINGS**
(NOT RECOMMENDED FOR PROLONGED USE ABOVE 800 F°)
- **CONFORMS TO THE APPLICABLE PARTS OF THE FOLLOWING ASME/ANSI SPECIFICATIONS:**
 B16.34
 B31.3
 B1.20.1 SCREWED ENDS
 B16.11 SOCKET WELD ENDS
 B16.25 BUTT WELD ENDS



MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	ASTM SPEC.	REMARKS
1	Body	Forged Steel	A105	
2	Seat Ring	Cobalt-Chromium Super Alloy		CoCr-A
3	Cover	Forged Steel	A105	
4	Disc	Cobalt-Chromium Super Alloy		CoCr-A
5	Spring	Stainless Steel		Type 302
6	Nameplate	Aluminum		

DIMENSIONAL SPECIFICATIONS

NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.

Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	4-1/2	3-1/8	5-16	.555	.375	3-3/4	2.0
3/8	4-1/2	3-1/8	3/8	.690	.375	3-3/4	2.5
1/2	4-1/2	3-1/8	7/16	.855	.375	3-3/4	3.5
3/4	4-1/2	3-1/8	9/16	1.065	.500	3-3/4	5.6
1	5-7/16	3-3/4	13/16	1.330	.500	6-1/2	12.7
1-1/4	8-1/4	5-5/16	1-1/8	1.675	.500	15-1/2	26.0
1-1/2	8-1/4	5-5/16	1-1/4	1.915	.500	15-1/2	35.0
2	9-1/2	6-5/16	1-9/16	2.406	.625	24	46.0

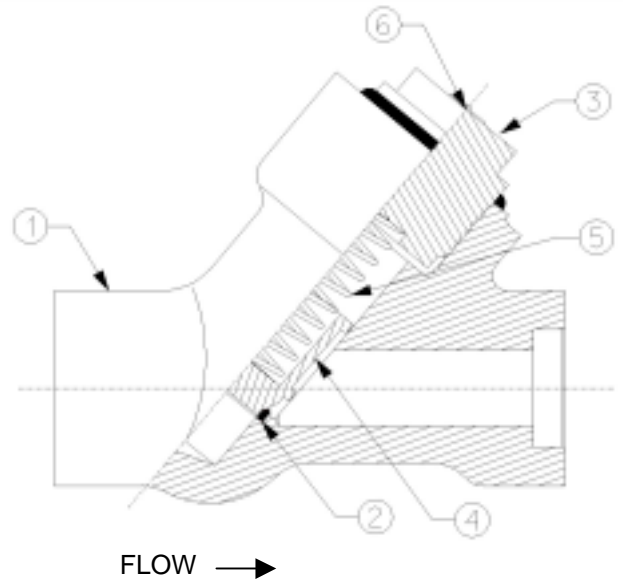
RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
2690***

- F1350E** SIZES 1/4" THRU 1-1/2" NPT (CLASS 2500)*
- F1360E** SIZES 1/4" THRU 2" SOCKET WELD
- F1370E** SIZES 1/4" THRU 2" BUTT WELD

- **SPRING LOADED PISTON CHECK VALVES**
- **HORIZONTAL OR VERTICAL SERVICE**
- **FORGED STEEL ASTM A105**
- **SEAL WELDED COVER**
- **REFER TO CHART ON PAGE 2Y FOR PRESSURE/TEMP. RATINGS (NOT RECOMMENDED FOR PROLONGED USE ABOVE 800 F°)**
- **CONFORMS TO THE APPLICABLE PARTS OF THE FOLLOWING ASME/ANSI SPECIFICATIONS:**
 B16.34
 B31.3
 B1.20.1 SCREWED ENDS
 B16.11 SOCKET WELD ENDS
 B16.25 BUTT WELD ENDS



MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	ASTM SPEC.	REMARKS
1	Body	Forged Steel	A105	
2	Seat Ring	Cobalt-Chromium Super Alloy		CoCr-A
3	Cover	Forged Steel	A105	
4	Disc	Cobalt-Chromium Super Alloy		CoCr-A
5	Spring	Stainless Steel		Type 302
6	Nameplate	Aluminum		

ASME B16.34 DOES NOT ALLOW FOR THREADED ENDS ABOVE CLASS 2500

DIMENSIONAL SPECIFICATIONS

NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.

Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	4-1/2	3-1/8	5-16	.555	.375	3-3/4	2.0
3/8	4-1/2	3-1/8	3/8	.690	.375	3-3/4	2.5
1/2	4-1/2	3-1/8	7/16	.855	.375	3-3/4	3.5
3/4	4-1/2	3-1/8	9/16	1.065	.500	3-3/4	5.6
1	5-7/16	3-3/4	13/16	1.330	.500	6-1/2	12.7
1-1/4	8-1/4	5-5/16	1-1/8	1.675	.500	15-1/2	26.0
1-1/2	8-1/4	5-5/16	1-1/4	1.915	.500	15-1/2	35.0
2	9-1/2	6-5/16	1-9/16	2.406	.625	24	46.0

RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

FLANGED

F190D CLASS 150 FLANGED

F390D CLASS 300 FLANGED

F690D CLASS 600 FLANGED

- SIZES 1/2" THRU 2"

FOR HORIZONTAL SERVICE ONLY

- FORGED STEEL
- ASTM A105N, LOW CARBON (.25 MAX.), NORMALIZED
- STANDARD PORT
- BOLTED COVER
- WORKING PRESSURE (NON-SHOCK)

CLASS 150

150 PSIG @ 576° F. Steam-Oil
285 PSIG @ -20° To 100° F.

CLASS 300

300 PSIG @ 839° F. Steam-Oil
740 PSIG @ -20° To 100° F.

CLASS 600

600 PSIG @ 576° F. Steam-Oil
1480 PSIG @ -20° To 100° F.

- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API

API 598 API 602

ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

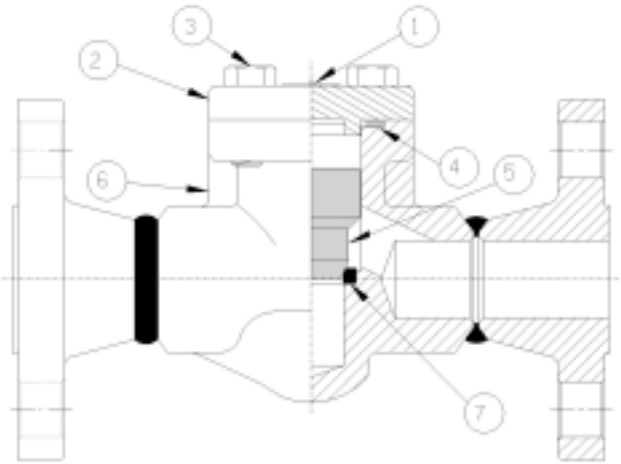
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel, Normalized	A105N	Low Carbon
3	Cover Bolts	Alloy Steel	A193	Grade B7
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	420 Stainless Steel	A582	Heat Treated
6	Body	Forged Steel, Normalized	A105N	Low Carbon
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



FLOW →

DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.					
Size	Face To Face			Center to Top(Open)	Port Dia.	Approximate Weight			Typical Cv Factors
	150	300	600			150	300	600	
1/2	4-1/4	6	6-1/2	6-3/8	3/8	6	7-1/4	7-3/4	1.0
3/4	4-5/8	7	7-1/2	6-5/8	1/2	6-3/4	9-3/4	10-3/4	2.7
1	5	8	8-1/2	8-1/4	3/4	10	11	12	6.4
1 1/2	6-1/2	9	9-1/2	9-1/4	1-1/4	17	22	25	18.0
2	8	10-1/2	11-1/2	11	1-1/2	26	32	34	24.0

RP&C VALVE

FLANGED

RP&C FORGED STEEL CHECK VALVES

F191D CLASS 150 FLANGED
F391D CLASS 300 FLANGED
F691D CLASS 600 FLANGED

SIZES 1/4" THRU 2"

FOR HORIZONTAL SERVICE ONLY

- FORGED STEEL
- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- STANDARD PORT
- OS&Y – STOP/CHECK VALVE

CLASS 150
 150 PSIG @ 576° F. Steam-Oil
 285 PSIG @ -20° To 100° F.

CLASS 300
 300 PSIG @ 839° F. Steam-Oil
 740 PSIG @ -20° To 100° F.

CLASS 600
 600 PSIG @ 576° F. Steam-Oil
 1480 PSIG @ -20° To 100° F.

- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
 API 598 API 602
 ASME/ANSI
 B1.20.1 B16.11 B16.34 B31.1 B31.3

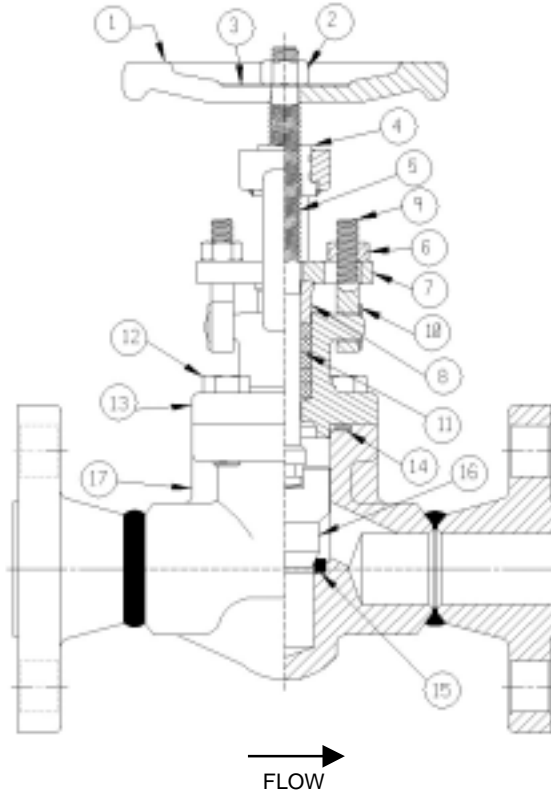
- MATERIALS OF CONSTRUCTION

No.	Part	Material	ASTM Spec.	Remarks
1	Handwheel	Malleable Iron	A47	Gr. 32510
2	Handwheel Nut	Steel	A108	
3	Nameplate	Aluminum		
4	Operating Nut	Stainless Steel	A276	Type 410
5	Stem	Stainless Steel	A276	Type 410
6	Gland Nuts	303 Stainless Steel	A194	Grade 8F
7	Gland Flange	Carbon Steel	A108	Grade 1018
8	Gland	Carbon Steel	B484	Gr. 1, Cl. C, Type 1
9	Eyebolt	410 Stainless Steel		Hardened & Tempered
10	Eyebolt Washer	Carbon Steel		Grade 1018
11a	* Packing	Graphite		Grafoil® (241 or equal)
11b	* Wiper Rings	Braided Graphite		1630GF or equal
12	Bonnet Bolts	Alloy Steel	A193	Grade B7
13	Bonnet	Forged Steel, Normalized	A105N	Low Carbon
14	* Gasket	316 SS/Grafoil®		Spiral Wound
15	Seat	Cobalt-Chromium Super Alloy		CoCr-A
16	Disc	420 Stainless Steel	A582	Heat Treated
17	Body	Forged Steel, Normalized	A105N	Low Carbon

Operating Nut and Stem thread Lubricated

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS					NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.					
Size	Handwheel Dia.	Face To Face			Center to Top(Open)	Port Dia.	Approximate Weight			Typical Cv Factors
		150	300	600			150	300	600	
1/2	3-7/8	4-1/4	6	6-1/2	6-3/8	3/8	6-3/4	7	8	1.0
3/4	3-7/8	4-5/8	7	7-1/2	6-5/8	1/2	7-1/2	10	11	2.7
1	5-1/2	5	8	8-1/2	8-1/4	3/4	11	14	15	6.4
1 1/2	5-1/2	6-1/2	9	9-1/2	9-1/4	1-1/4	19	24-1/2	26	18.0
2	6-1/2	8	10-1/2	11-1/2	11	1-1/2	30	38	40	24.0

RP&C VALVE

RP&C VALVES – CLASS 1500

**CLASS
1500**

F594E NPT ENDS

F595E SOCKET WELD ENDS
SIZES 1/2" THRU 2"

- PISTON CHECK VALVE
 - ASTM A105N LOW CARBON (.25 MAX.), NORMALIZED
 - STANDARD PORT
 - OS&Y – BOLTED BONNET
 - WORKING PRESSURE (NON-SHOCK)
 - 860 PSIG @ 900° F. Steam-Oil
 - 1340 PSIG @ 850° F. Steam-Oil
 - 3705 PSIG @ -20° To 100° F.
 - CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:
 - API
 - API 591 API 598 API 602
 - ASME/ANSI
 - B1.20.1 B16.11 B16.34 B31.1 B31.3
- NOTE: Valve can be furnished to meet NACE SPEC. MR0175.



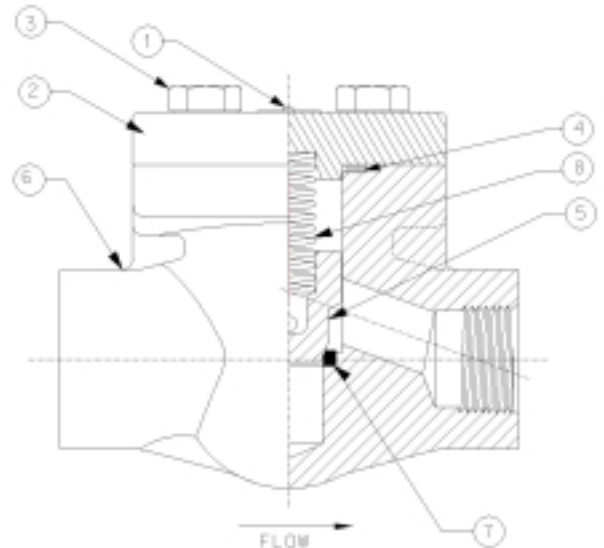
- MATERIALS OF CONSTRUCTION
E TRIM (13 Cr/FHF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cap	Forged Steel, Normalized	A015N	Low Carbon
3	Cap Bolts	Alloy Steel	A193	Grade B7
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	Cobalt-Chromium Super Alloy		CoCr-A
6	Body	Forged Steel, Normalized	A105N	Low Carbon
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A
8	Spring	Stainless Steel		Type 302

Operating Nut and Stem thread Lubricated

*** Recommended Spare Parts**

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/2	4	2-7/8	25/64	.855	.375	5-1/2	1.3
3/4	4	2-7/8	1/2	1.065	.500	6-1/4	1.8
1	5-1/2	3-5/16	3/4	1.330	.500	10	7.0
1-1/2	6-1/2	4-7/16	1-3/16	1.915	.500	18-1/2	18.1
2	7	6-1/4	1-15/32	2.406	.625	29-3/4	23

RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
800**

F90D NPT ENDS SIZES ¼" THRU 2"

F91D SOCKET WELD ENDS

- FORGED STEEL
- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- WORKING PRESSURE (NON-SHOCK)
 - 460 PSIG @ 900° F. Steam-Oil
 - 715 PSIG @ 850° F. Steam-Oil
 - 1975 PSIG @ -20° To 100° F.

LF90D NPT ENDS SIZES ¼" THRU 2"

LF91D SOCKET WELD ENDS

- ASTM A350 Gr. LF2 (for low temperature service)
- WORKING PRESSURE (NON-SHOCK)
 - 1100 PSIG @ 800° F. Steam-Oil
 - 1975 PSIG @ -50° To 100° F.
 - 800° F. IS MAX OPERATING TEMP. FOR LF2

HORIZONTAL SERVICE ONLY

- PISTON CHECK VALVE
- STANDARD PORT
- BOLTED COVER
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
API 598 API 602
ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

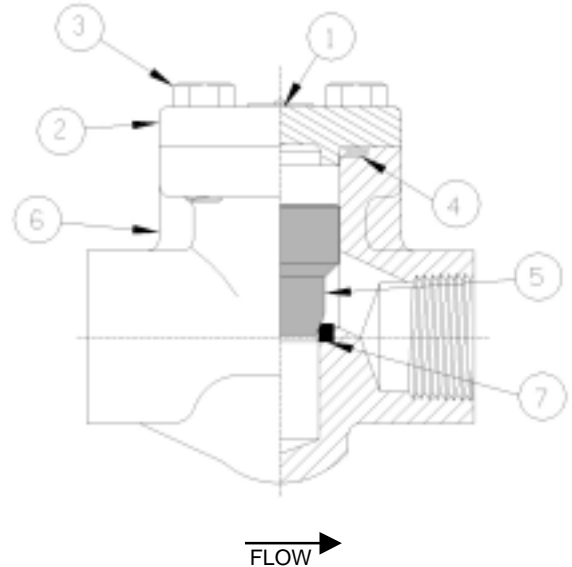
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION
D TRIM (13 Cr/HF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel, Normalized	A105N	Low Carbon
2	Cover	Forged Steel	A350	Grade LF2
3	Cover Bolts	Alloy Steel	A193	Grade B7/ Grade B8M Cl.2
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	420 Stainless Steel	A582	Heat Treated
6	Body	Forged Steel, Normalized	A105N	Low Carbon
6	Body	Forged Steel	A350	Grade LF2
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top (Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3	2-3/16	9/32	.555	.375	3-1/4	.8
3/8	3	2-3/16	5/16	.690	.375	3-1/4	.9
1/2	3	2-3/16	3/8	.855	.375	3-1/4	1.0
3/4	3-1/2	2-7/16	½	1.065	.500	3-3/4	2.7
1	4-3/8	2-13/16	¾	1.330	.500	5-1/2	6.4
1-1/4	6	3-11/16	1	1.675	.500	11	14.0
1-1/2	6	3-11/16	1-1/4	1.915	.500	11	18.0
2	7	4-5/16	1-1/2	2.406	.625	14-1/2	24.0

RP&C VALVE

**CLASS
800**

RP&C FORGED STEEL CHECK VALVES

F92D
F93D

NPT ENDS SIZES ¼" THRU 2"
SOCKET WELD ENDS

HORIZONTAL SERVICE ONLY

- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- WORKING PRESSURE (NON-SHOCK)
460 PSIG @ 900° F. Steam-Oil
715 PSIG @ 850° F. Steam-Oil
1975 PSIG @ -20° To 100° F.

- STOP/CHECK VALVE
- STANDARD PORT
- OS&Y – BOLTED BONNET
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
API 598 API 602
ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

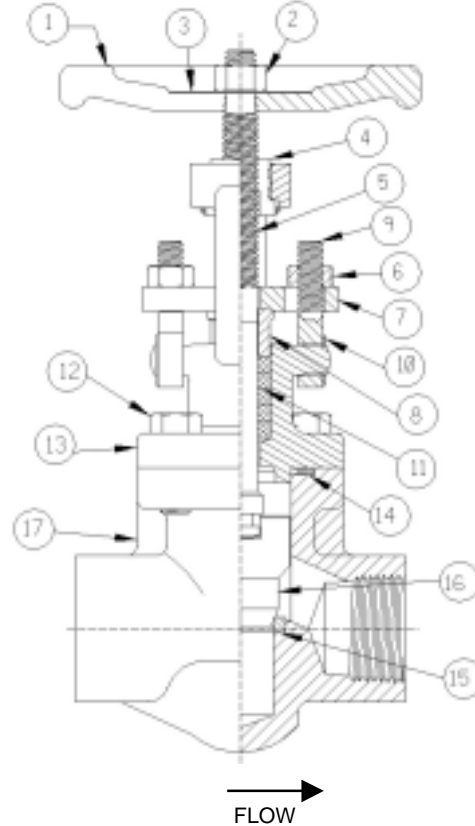
- MATERIALS OF CONSTRUCTION
D TRIM (13 Cr/HF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Handwheel	Malleable Iron	A47	Gr. 32510
2	Handwheel Nut	Steel	A108	
3	Nameplate	Aluminum		
4	Operating Nut	Stainless Steel	A276	Type 410
5	Stem	Stainless Steel	A276	Type 410
6	Gland Nuts	303 Stainless Steel	A194	Grade 8F
7	Gland Flange	Carbon Steel	A108	Grade 1018
8	Gland	Carbon Steel	B484	Gr. 1, Cl. C, Type 1
9	Eyebolt	410 Stainless Steel		Hardened & Tempered
10	Eyebolt Washer	Carbon Steel		Grade 1018
11a	* Packing	Graphite		Grafoil® (241 or equal)
11b	* Wiper Rings	Braided Graphite		1630GF or equal
12	Bonnet Bolts	Alloy Steel	A193	Grade B7
13	Bonnet	Forged Steel, Normalized	A105N	Low Carbon
14	* Gasket	316 SS/Grafoil®		Spiral Wound
15	Seat	Cobalt-Chromium Super Alloy		CoCr-A
16	Disc	420 Stainless Steel	A582	Heat Treated
17	Body	Forged Steel, Normalized	A105N	Low Carbon

Operating Nut and Stem thread Lubricated

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.				
Size	Handwheel Dia.	End To End	Center to Top(Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3-7/8	3	6-3/8	9/32	.555	.375	4	1.1
3/8	3-7/8	3	6-3/8	5/16	.690	.375	4	1.6
1/2	3-7/8	3	6-3/8	3/8	.855	.375	4	2.1
3/4	3-7/8	3-1/2	6-5/8	½	1.065	.500	4-1/2	3.1
1	5-1/2	4-3/8	8-1/4	¾	1.330	.500	7	7.0
1-1/4	5-1/2	6	9-1/4	1	1.675	.500	14	15.4
1-1/2	5-1/2	6	9-1/4	1-1/4	1.915	.500	13-1/2	18.1
2	6-1/2	7	11	1-1/2	2.406	.625	19	25.2

RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
800**

F94D NPT ENDS SIZES ¼" THRU 2"

F95D SOCKET WELD ENDS

- FORGED STEEL
- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- WORKING PRESSURE (NON-SHOCK)
 - 460 PSIG @ 900° F. Steam-Oil
 - 715 PSIG @ 850° F. Steam-Oil
 - 1975 PSIG @ -20° To 100° F.

HORIZONTAL SERVICE ONLY

- SPRING LOADED PISTON CHECK VALVE
- STANDARD PORT
- BOLTED COVER
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
API 598 API 602
ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

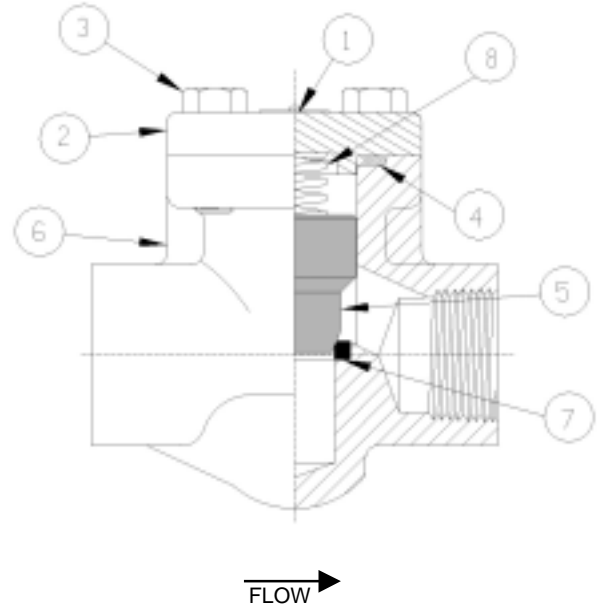
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION
D TRIM (13 Cr/HF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel, Normalized	A105N	Low Carbon
3	Cover Bolts	Alloy Steel	A193	Grade B7
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	420 Stainless Steel	A582	Heat Treated
6	Body	Forged Steel, Normalized	A105N	Low Carbon
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A
8	Spring	Stainless Steel		Type 302

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3	2-3/16	9/32	.555	.375	3-1/4	.8
3/8	3	2-3/16	5/16	.690	.375	3-1/4	.9
1/2	3	2-3/16	3/8	.855	.375	3-1/4	1.0
3/4	3-1/2	2-7/16	½	1.065	.500	3-3/4	2.7
1	4-3/8	2-13/16	¾	1.330	.500	5-1/2	6.4
1-1/4	6	3-11/16	1	1.675	.500	11	14.0
1-1/2	6	3-11/16	1-1/4	1.915	.500	11	18.0
2	7	4-5/16	1-1/2	2.406	.625	14-1/2	24.0

RP&C VALVE

**CLASS
800**

RP&C FORGED STEEL CHECK VALVES

F96D NPT ENDS SIZES 1/4" THRU 2"
F97D SOCKET WELD ENDS

- FORGED STEEL
- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- WORKING PRESSURE (NON-SHOCK)
 - 460 PSIG @ 900° F. Steam-Oil
 - 715 PSIG @ 850° F. Steam-Oil
 - 1975 PSIG @ -20° To 100° F.

VERTICAL AND HORIZONTAL SERVICE

- SPRING LOADED BALL CHECK VALVE
- STANDARD PORT
- BOLTED COVER
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
 API 598 API 602
 ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

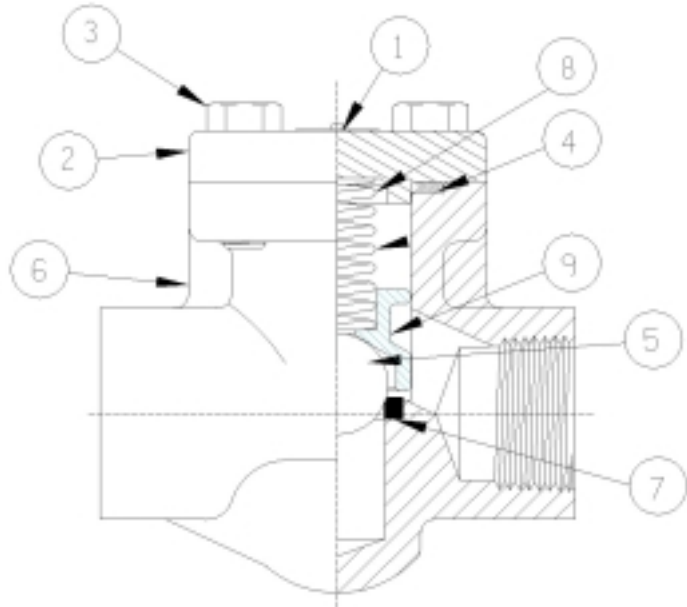
MATERIALS OF CONSTRUCTION

D TRIM (13Cr/HF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel, Normalized	A105N	Low Carbon
3	Cover Bolts	Alloy Steel	A193	Grade B7
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Ball	Alloy Steel	A276	Grade 440
6	Body	Forged Steel, Normalized	A105N	Low Carbon
7	Seat	Cobalt-Chromium Super Alloy		CoCr-A
8	Spring	Stainless Steel		Type 302
9	Ball Guide	416 Stainless Steel	A582	Type 416

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3	2-3/16	9/32	.555	.375	3-1/4	.8
3/8	3	2-3/16	5/16	.690	.375	3-1/4	.9
1/2	3	2-3/16	3/8	.855	.375	3-1/4	1.0
3/4	3-1/2	2-7/16	1/2	1.065	.500	3-3/4	2.7
1	4-3/8	2-13/16	3/4	1.330	.500	5-1/2	6.4
1-1/4	6	3-11/16	1	1.675	.500	11	14.0
1-1/2	6	3-11/16	1-1/4	1.915	.500	11	18.0
2	7	4-5/16	1-1/2	2.406	.625	14-1/2	24.0

RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
800**

F98A NPT ENDS SIZES ¼" THRU 2"

F99A SOCKET WELD ENDS

- SWING CHECK VALVE
- ASTM A105, LOW CARBON (.25 MAX.), NORMALIZED
- WORKING PRESSURE (NON-SHOCK)
 - 460 PSIG @ 900° F. Steam-Oil
 - 715 PSIG @ 850° F. Steam-Oil
 - 1975 PSIG @ -20° To 100° F.

HORIZONTAL SERVICE ONLY

- STANDARD PORT
- BOLTED COVER
- EXCELLENT Cv VALUES
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
 API 598 API 602
 ASME/ANSI
 B1.20.1 B16.11 B16.34 B31.1 B31.3

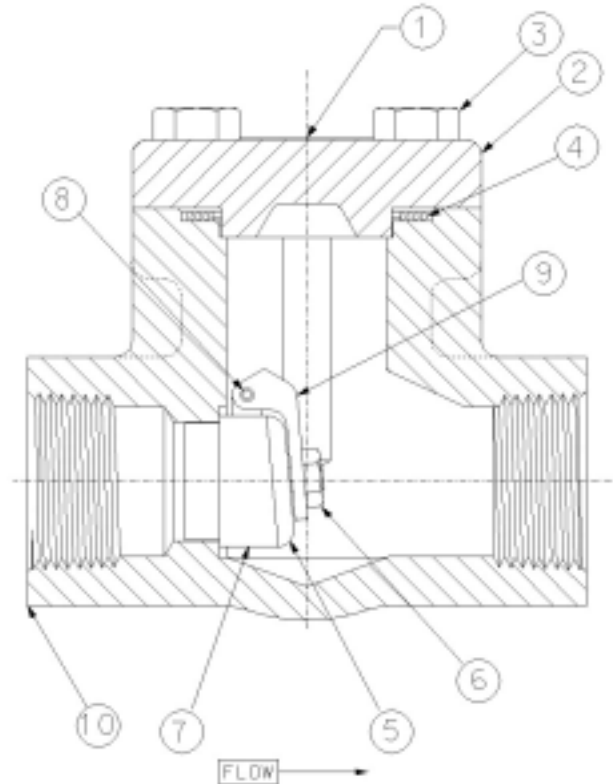
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION
 A TRIM (316 SST) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Steel, Normalized	A105N	Low Carbon
3	Cover Bolts	Alloy Steel	A193	Grade B7M
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	316 Stainless Steel	A276	Type 316
6	Disc Nut	303 Stainless Steel		Grade 8F
7	Seat Ring	316 Stainless Steel	A351	Type CF8M
8	Hinge Pin	316 Stainless Steel		
9	Swing Arm	316 Stainless Steel	A351	Type CF8M
10	Body	Forged Steel, Normalized	A105N	Low Carbon

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/2	3	2-3/16	25/64	.855	.375	3-1/4	5.1
3/4	3-1/2	2-7/16	½	1.065	.500	3-3/4	9.3
1	4-3/8	2-13/16	¾	1.330	.500	5-1/2	24.8
1-1/2	6	3-11/16	1-3/16	1.915	.500	11	70.9
2	7	4-5/16	1-15/32	2.406	.625	14-1/2	91.6

RP&C VALVE

**CLASS
800**

RP&C VALVES – CLASS 1500

FWB594E NPT ENDS

FWB595E SOCKET WELD ENDS
SIZES 1/2" THRU 2"

- PISTON CHECK VALVE
 - ASTM A105N LOW CARBON (.25 MAX.), NORMALIZED
 - STANDARD PORT
 - OS&Y – WELDED BONNET
 - WORKING PRESSURE (NON-SHOCK)
 - 860 PSIG @ 900° F. Steam-Oil
 - 1340 PSIG @ 850° F. Steam-Oil
 - 3705 PSIG @ -20° To 100° F.
 - CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:
 - API
 - API 591 API 598 API 602
 - ASME/ANSI
 - B1.20.1 B16.11 B16.34 B31.1 B31.3
- NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

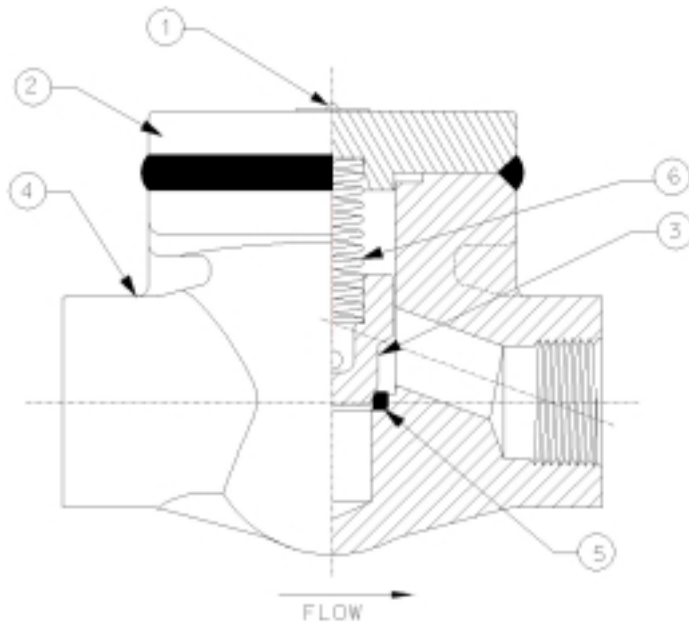
- MATERIALS OF CONSTRUCTION
E TRIM (13 Cr/FHF) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cap	Forged Steel, Normalized	A015N	Low Carbon
3	Disc	Cobalt-Chromium Super Alloy		CoCr-A
4	Body	Forged Steel, Normalized	A105N	Low Carbon
5	Seat	Cobalt-Chromium Super Alloy		CoCr-A
6	Spring	Stainless Steel		Type 302

Operating Nut and Stem thread Lubricated

*** Recommended Spare Parts**

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/2	4	2-7/8	25/64	.855	.375	5-1/2	1.3
3/4	4	2-7/8	1/2	1.065	.500	6-1/4	1.8
1	5-1/2	3-5/16	3/4	1.330	.500	10	7.0
1-1/2	6-1/2	4-7/16	1-3/16	1.915	.500	18-1/2	18.1
2	7	6-1/4	1-15/32	2.406	.625	29-3/4	23.0

RP&C VALVE

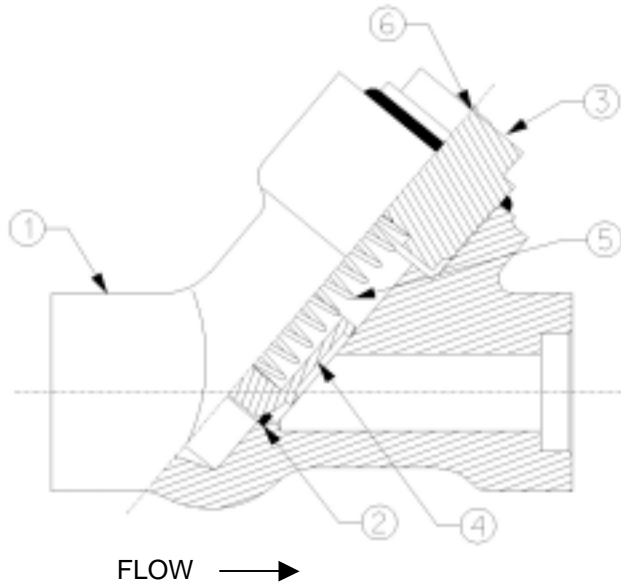
RP&C FORGED STEEL CHECK VALVES

K1300E SIZES 1/4" THRU 1-1/2" NPT

K1310E SIZES 1/4" THRU 2" SOCKET WELD

K1320E SIZES 1/4" THRU 2" BUTT WELD

- **SPRING LOADED PISTON CHECK VALVES**
- **HORIZONTAL OR VERTICAL SERVICE**
- **FORGED STEEL ASTM A182 GRADE F22 Cl. 3**
(2-1/4% Chrome 1% Moly)
- **SEAL WELDED COVER**
- **REFER TO CHART ON PAGE 2Y FOR PRESSURE/TEMP. RATINGS**
(NOT RECOMMENDED FOR PROLONGED USE ABOVE 1100 F°)
- **CONFORMS TO THE APPLICABLE PARTS OF THE FOLLOWING ASME/ANSI SPECIFICATIONS:**
B16.34
B31.3
B1.20.1 SCREWED ENDS
B16.11 SOCKET WELD ENDS
B16.25 BUTT WELD ENDS



MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	ASTM SPEC.	REMARKS
1	Body	Forged Steel	A182	Grade F22 Cl. 3
2	Seat Ring	Cobalt-Chromium Super Alloy		CoCr-A
3	Cover	Forged Steel	A182	Grade F22 Cl. 3
4	Disc	Cobalt-Chromium Super Alloy		CoCr-A
5	Spring	Stainless Steel		Type 302
6	Nameplate	Aluminum		

DIMENSIONAL SPECIFICATIONS

NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.

Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	4-1/2	3-1/8	5-16	.555	.375	3-3/4	2.0
3/8	4-1/2	3-1/8	3/8	.690	.375	3-3/4	2.5
1/2	4-1/2	3-1/8	7/16	.855	.375	3-3/4	3.5
3/4	4-1/2	3-1/8	9/16	1.065	.500	3-3/4	5.6
1	5-7/16	3-3/4	13/16	1.330	.500	6-1/2	12.7
1-1/4	8-1/4	5-5/16	1-1/8	1.675	.500	15-1/2	26.0
1-1/2	8-1/4	5-5/16	1-1/4	1.915	.500	15-1/2	35.0
2	9-1/2	6-5/16	1-9/16	2.406	.625	24	46.0

RP&C VALVE

**CLASS
2500**

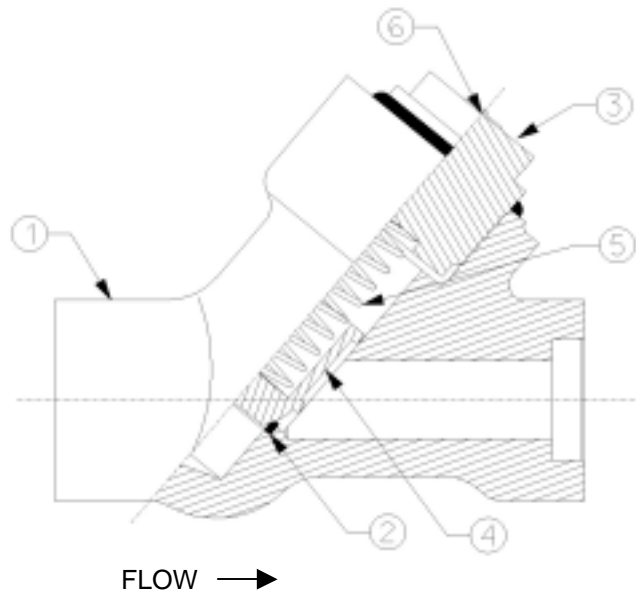
RP&C FORGED STEEL CHECK VALVES

K1350E SIZES 1/4" THRU 1-1/2" NPT (CLASS 2500)*

K1360E SIZES 1/4" THRU 2" SOCKET WELD

K1370E SIZES 1/4" THRU 2" BUTT WELD

- **SPRING LOADED PISTON CHECK VALVES**
- **HORIZONTAL OR VERTICAL SERVICE**
- **FORGED STEEL ASTM A182 GRADE F22 Cl. 3**
(2-1/4% Chrome 1% Moly)
- **SEAL WELDED COVER**
- **REFER TO CHART ON PAGE 2Y FOR PRESSURE/TEMP. RATINGS**
(NOT RECOMMENDED FOR PROLONGED USE ABOVE 1100 F°)
- **CONFORMS TO THE APPLICABLE PARTS OF THE FOLLOWING ASME/ANSI SPECIFICATIONS:**
B16.34
B31.3
B1.20.1 SCREWED ENDS
B16.11 SOCKET WELD ENDS
B16.25 BUTT WELD ENDS



ASME B16.34 DOES NOT ALLOW FOR THREADED ENDS ABOVE CLASS 2500

MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	ASTM SPEC.	REMARKS
1	Body	Forged Steel	A182	Grade F22 Cl. 3
2	Seat Ring	Cobalt-Chromium Super Alloy		CoCr-A
3	Cover	Forged Steel	A182	Grade F22 Cl. 3
4	Disc	Cobalt-Chromium Super Alloy		CoCr-A
5	Spring	Stainless Steel		Type 302
6	Nameplate	Aluminum		

DIMENSIONAL SPECIFICATIONS

NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.

Size	End To End	Center to Top(Open)	Port	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	4-1/2	3-1/8	5-16	.555	.375	3-3/4	2.0
3/8	4-1/2	3-1/8	3/8	.690	.375	3-3/4	2.5
1/2	4-1/2	3-1/8	7/16	.855	.375	3-3/4	3.5
3/4	4-1/2	3-1/8	9/16	1.065	.500	3-3/4	5.6
1	5-7/16	3-3/4	13/16	1.330	.500	6-1/2	12.7
1-1/4	8-1/4	5-5/16	1-1/8	1.675	.500	15-1/2	26.0
1-1/2	8-1/4	5-5/16	1-1/4	1.915	.500	15-1/2	35.0
2	9-1/2	6-5/16	1-9/16	2.406	.625	24	46.0

RP&C VALVE

RP&C FORGED STEEL CHECK VALVES

**CLASS
800**

S90A NPT ENDS SIZES ¼" THRU 2"
S91A SOCKET WELD ENDS

- FORGED STAINLESS STEEL
- WORKING PRESSURE (NON-SHOCK)
 - 600 PSIG @ 1200° F. Steam-Oil
 - 800 PSIG @ 1130° F. Steam-Oil
 - 1920 PSIG @ -20° To 100° F

HORIZONTAL SERVICE ONLY

- ASTM A182 TYPE F316/F316L
- STANDARD PORT
- BOLTED COVER
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API
 API 598 API 602
 ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

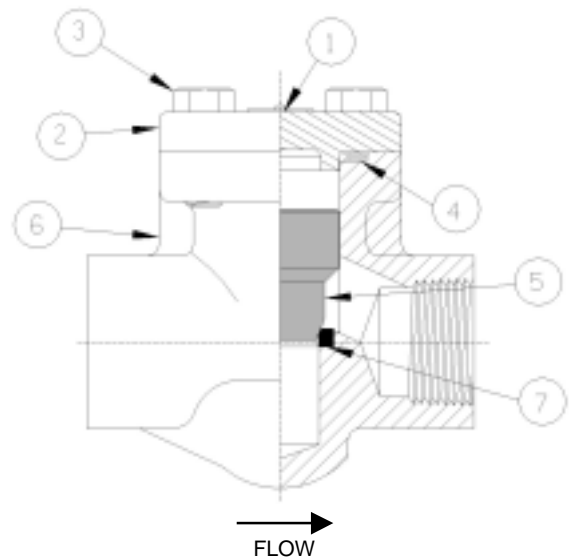
NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

- MATERIALS OF CONSTRUCTION
 A TRIM (316 SST) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	Forged Stainless Steel	A182	Type F316/F316L
3	Cover Bolts	Alloy Steel	A193	Grade B8M Cl. 2
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	316 Stainless Steel	A176	Grade 316
6	Body	Forged Stainless Steel	A182	Type F316/F316L
7	Seat	316 Stainless Steel		Integral

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top (Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/4	3	2-3/16	9/32	.555	.375	3-1/4	.8
3/8	3	2-3/16	5/16	.690	.375	3-1/4	.9
1/2	3	2-3/16	3/8	.855	.375	3-1/4	1.0
3/4	3-1/2	2-7/16	½	1.065	.500	3-3/4	2.7
1	4-3/8	2-13/16	¾	1.330	.500	5-1/2	6.4
1-1/4	6	3-11/16	1	1.675	.500	11	14.0
1-1/2	6	3-11/16	1-1/4	1.915	.500	11	18.0
2	7	4-5/16	1-1/2	2.406	.625	14-1/2	24.0

RP&C VALVE

**CLASS
800**

RP&C FORGED STEEL CHECK VALVES

S98A

NPT ENDS

SIZES 1/4" THRU 2"

S99A

SOCKET WELD ENDS

HORIZONTAL SERVICE ONLY

- STAINLESS STEEL, ASTM A182 Gr. F316/F316L
- WORKING PRESSURE (NON-SHOCK)
600 PSIG @ 1200° F. Steam-Oil
800 PSIG @ 1130° F. Steam-Oil
1920 PSIG @ -20° To 100° F.

- STOP/CHECK VALVE
- STANDARD PORT
- OS&Y – BOLTED BONNET
- CONFORM TO THE APPLICABLE PARTS OF THE FOLLOWING SPECIFICATIONS:

API

API 598 API 602

ASME/ANSI

B1.20.1 B16.11 B16.34 B31.1 B31.3

NOTE: Valve can be furnished to meet NACE SPEC. MR0175.

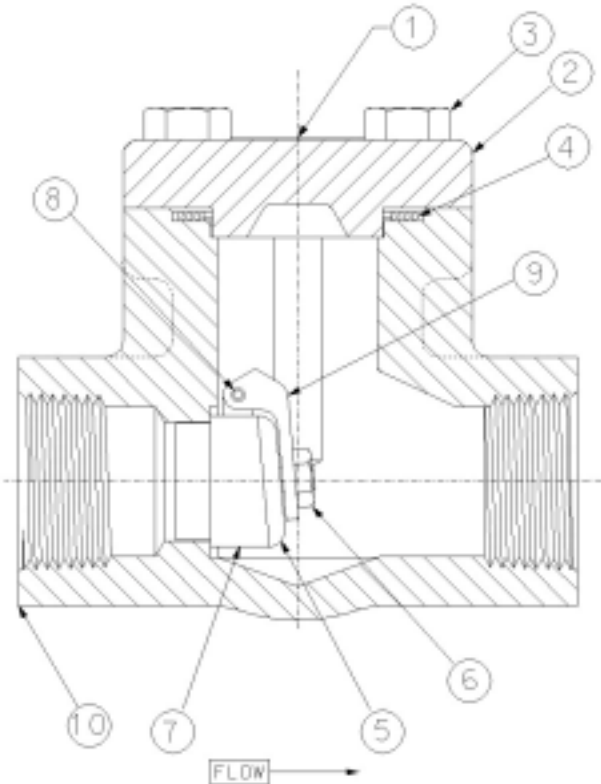
MATERIALS OF CONSTRUCTION

A TRIM (316 SST) STANDARD (See Page 8 for optional trims)

No.	Part	Material	ASTM Spec.	Remarks
1	Nameplate	Aluminum		
2	Cover	316 Stainless Steel	A182	Gr. F316/F316L
3	Cover Bolts	Alloy Steel	A193	Grade B8M Cl. 2
4	* Gasket	316 SS/Grafoil®		Spiral Wound
5	Disc	316 Stainless Steel	A276	Type 316
6	Disc Nut	303 Stainless Steel		Grade 8F
7	Seat Ring	316 Stainless Steel	A351	Type CF8M
8	Hinge Pin	316 Stainless Steel		
9	Swing Arm	316 Stainless Steel	A351	Type CF8M
10	Body	316 Stainless Steel	A182	Gr. F316/F316L

* Recommended Spare Parts

Note: Materials of construction may vary due to availability and Production runs, however parts will still conform to the requirements of API 602.



DIMENSIONAL SPECIFICATIONS				NOTE: Dimensions shown are subject to change. Contact factory for certified prints (exact dimensions) when required.			
Size	End To End	Center to Top(Open)	Port Dia.	Socket Weld Bore	Socket Weld Depth	Approximate Weight	Typical Cv Factors
1/2	3	2-3/16	25/64	.855	.375	3-1/4	5.1
3/4	3-1/2	2-7/16	1/2	1.065	.500	3-3/4	9.3
1	4-3/8	2-13/16	3/4	1.330	.500	5-1/2	24.8
1-1/2	6	3-11/16	1-3/16	1.915	.500	11	70.9
2	7	4-5/16	1-15/32	2.406	.625	14-1/2	91.6

RP&C VALVE