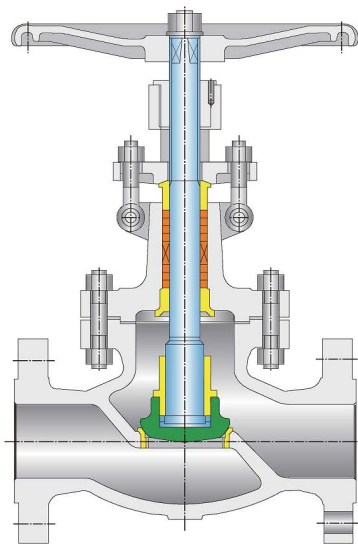


# RKSfluid<sup>®</sup>

Proven Technology-Superior Features  
Legendary Value

**GRIZZLY Series Globe Valve**

NPS $\frac{1}{2}$ -NPS12 (DN15-DN300)



## Design standard

Design standard	Cast steel globe valve: BS 1873, ASME B 16.34; Stainless steel globe valve: API 602, GB/T 12235, BS5160, BS1873
Flange standard	ASME B16.5, GB/T 9113, BS4504
Butt weld end	ASME B 16.25, GB/T 12224
Socket weld	ASME B16.11
Face to face	ASME B16.10, GB/T 12221
Test standard	GB/T 13927, API 598

## Cover Flange Gasket

Class 150 and Class 300 – Flexible wound stainless steel and graphite gasket.

Class 600 – Flexible wound stainless steel and graphite gasket. Ring joint gasket optional.

Class 900 – Ring joint gasket.

Class 1500 and Class 2500 – Pressurized seal gasket.

## Operation

Handwheel and gear operators are standard. Chainwheel and Electric actuation is available per customer request.

## Body and Bonnet Connection

Class 150 thru Class 900 – Bolted bonnet (studs and nuts).

Class 1500-2500 – Pressurized seal design.

## Seat

Carbon Steel Bodies: Typically forged steel with hard alloy overlay per customer specification. Renewable threaded seat is standard for NPS\_10 valves (welded seat optional).

Welded seat is standard for NPS\_12 valves.

Stainless Steel Bodies: Integral seat is standard, with or without hard facing per customer specification. Threaded or welded seats are an available option.

## Stem Nut

Standard ASTM A439 D2. Copper alloy optional. On larger diameter valves, roller bearings are added opposite the stem nut to minimize opening and closing torque.

## Pressure Classes

Size	Pressure
½"-12" ( DN15-DN300 )	CLASS 150
½"-12" ( DN15-DN300 )	CLASS 300
2"-8" ( DN50-DN200 )	CLASS 600
2"-6" ( DN50-DN150 )	CLASS 900

## Stem Packing

Molded flexible graphite is standard. PTFE or other materials per request. Precisely machined stem finish (Ra3.2 m) and diameter insures compactness (Ra 0.8 m) and reliable packing seal of the stem area.

## Globe Valve Features

Bolted Bonnet, Outside Screw and Yoke; Rising stem; Metallic seating surfaces.

## Live Loaded Packing Design

Live loaded packing system with Belleville springs enhances the durability, reliability, and performance of the stem packing sealing.

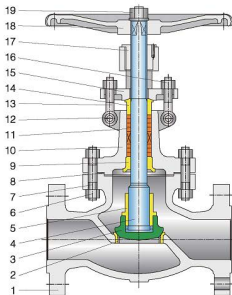
## Back Seated Plug Design

All of globe valves include a back seated design. Carbon steel valves are fitted with a renewable back seat. In Stainless steel valves the back seat is machined directly into the bonnet or machined after welding. When the valve is in the fully open position the back seat is very reliable, but under API 600 it is not advisable to change or add valve packing while the valve is under pressure.

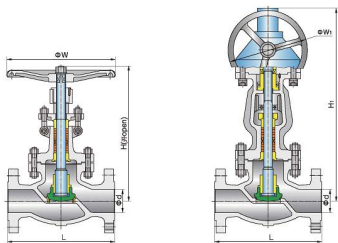
## Stem Design

Valve stem is integrally forged. Minimum stem diameters are per standard industry specification.

Parts and Material



No.	Name	Materials				
		WCB Trim 1	WCB Trim 5	WCB Trim 8	CF8/304	CF8M/316
1	Body	ASTMA216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTMA351 CF8	ASTMA351 CF8M
2	Seat ring	A105+13Cr	A105+ STL	A105+ STL	ASTMA351 CF8	ASTM A351 CF8M
3	Disc	ASTM A216 WCB+13Cr	ASTM A216 WCB+STL	ASTM A216 WCB+ 13Cr	ASTMA351 CF8	ASTM A351 CF8M
4	Stem	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
5	Disc nut	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTMA351 CF8	ASTMA351 CF8M
6	Bonnet nut	ASTMA194 2H	ASTMA194 2H	ASTMA194 2H	ASTMA194 8	ASTM A194 8M
7	Bonnet bolt	ASTMA193 B7	ASTM A193 B7	ASTMA193 B7	ASTM A193 B8	ASTM A193 B8M
8	Gasket	304+Graphite	304+Graphite	304+Graphite	304+Graphite	316+Graphite
9	Back seat bushing	ASTMA182 F6a	ASTMA182 F6a	ASTMA182 F6a	ASTMA182 CF8	ASTMA182 CF8M
10	Bonnet	ASTMA216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTMA351 CF8	ASTMA351 CF8M
11	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
12	Eyebolt pin	ASTMA36	ASTMA36	ASTMA36	304	316
13	Gland eyebolt	ASTMA193 B7	ASTMA193 B7	ASTMA193 B7	ASTMA193 B8	ASTMA193 B8M
14	Gland	ASTMA182 F6a	ASTMA182 F6a	ASTMA182 F6a	ASTMA182 CF8	ASTMA182 CF8M
15	Gland flange	ASTMA216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTMA351 CF8	ASTMA351 CF8M
16	Eyebolt nut	ASTMA194 2H	ASTMA194 2H	ASTMA194 2H	ASTMA194 8	ASTMA194 8M
17	Stem nut	ASTMA439 D2	ASTMA439 D2	ASTMA439 D2	ASTMA439 D2	ASTMA439 D2
18	Hand wheel	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
19	Hand wheel nut	Carbon steel	Carbon steel	Carbon steel	Carbon steel	Carbon steel


**CLASS 150 NPS½-NPS12 (PN20 DN15-DN300) Dimensions (mm)**

SIZE	L			d	H	H1	W	W1
	RF	RTJ	BW					
DN15	108	119	108	13	182	-	100	-
DN20	117	130	117	19	193	-	100	-
DN25	127	140	127	25	217	-	100	-
DN32	140	152	140	32	235	-	135	-
DN40	165	178	165	38	258	-	135	-
DN50	203	216	203	51	330	-	200	-
DN65	216	229	216	64	360	-	250	-
DN80	241	254	241	76	390	-	280	-
DN100	292	305	292	102	445	-	300	-
DN125	356	369	356	127	480	-	350	-
DN150	406	419	406	152	520	556	350	310
DN200	495	508	495	203	600	658	400	310
DN250	622	635	622	254	773	805	450	460
DN300	698	711	698	305	880	955	500	460

Drawings are for reference only. RKSfluid reserves the right to change product dimensions without notice.

## CLASS 300 NPS½–NPS12 (PN50 DN15–DN300) Dimensions (mm)

SIZE	L			d	H	H1	W	W1
	RF	RTJ	BW					
DN15	152	164	152	13	185	-	100	-
DN20	178	191	178	19	195	-	100	-
DN25	203	216	203	25	220	-	135	-
DN32	216	229	216	32	240	-	135	-
DN40	229	241	229	38	260	-	160	-
DN50	267	283	267	51	385	-	200	-
DN65	292	308	292	64	420	-	200	-
DN80	318	333	318	76	440	-	280	-
DN100	356	371	356	102	515	-	350	-
DN125	400	416	400	127	580	-	350	-
DN150	444	460	444	152	660	690	400	195
DN200	559	575	559	203	900	950	550	327
DN250	622	638	622	254	950	990	600	452
DN300	711	727	711	305	1030	1080	700	725

## CLASS 600 NPS2–NPS8 (PN100 DN50–DN200) Dimensions (mm)

SIZE	L			d	H	H1	W	W1
	RF	RTJ	BW					
DN50	292	295	292	51	360	-	250	-
DN65	330	333	330	64	410	-	280	-
DN80	356	359	356	76	465	-	300	-
DN100	432	435	432	102	545	575	400	310
DN125	508	511	508	127	625	660	500	310
DN150	559	562	559	152	785	820	550	460
DN200	660	664	660	200	930	960	650	460

## CLASS 900 NPS2–NPS6 (PN150 DN50–DN150) Dimensions (mm)

SIZE	L			d	H	H1	W	W1
	RF	RTJ	BW					
DN50	368	371	368	47	480	-	350	-
DN65	419	422	419	57	520	-	350	-
DN80	381	384	381	73	564	630	400	310
DN100	457	460	457	98	685	720	450	310
DN125	559	562	559	121	780	840	550	460
DN150	610	613	610	146	950	1015	650	460

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