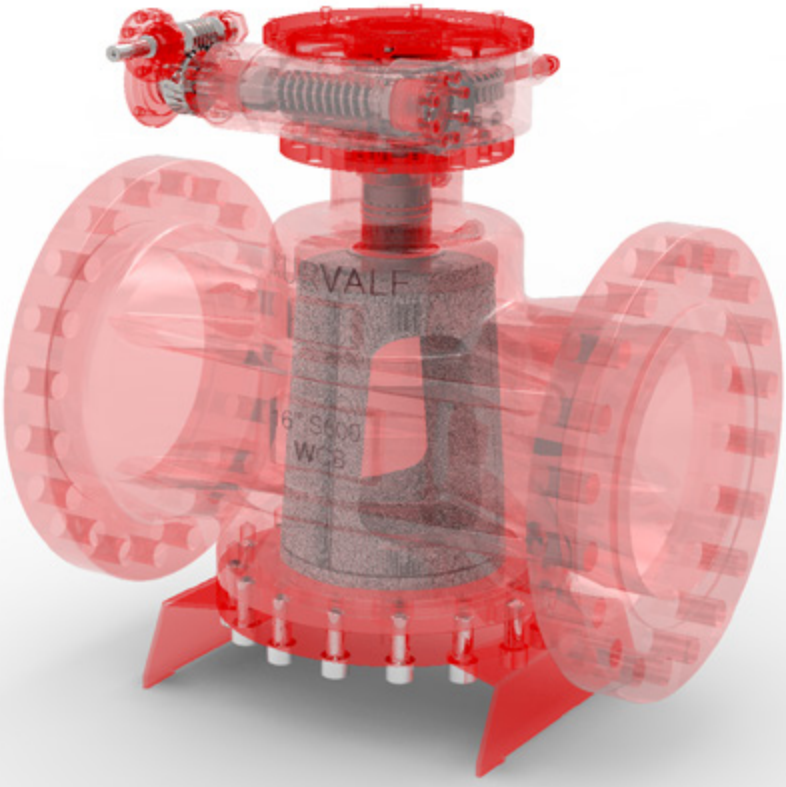
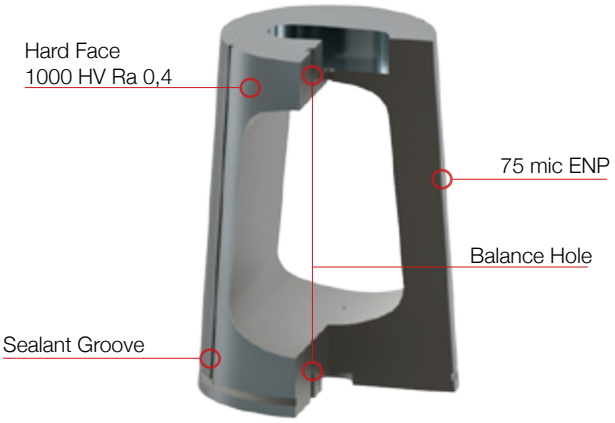
KURVALF
Pipeline Valves

Plug Valve

Lubrication

Type

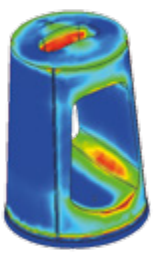


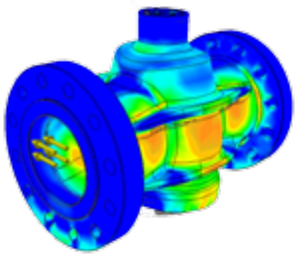


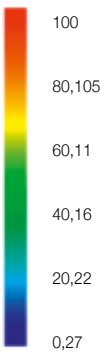
Plug valves are considered as sipmle and economical quarter-turn valve that applications like ball valves.They are used in a wide array of equipment, usually in natural gas lines as a device to control gas flow within the pipes, Plug valves are also used in vacuum devices, as part of the controls in removing pressure from a given amount of space like by-pass application at pipelines. At Kurvalf you can order lubricated plug valves from 2” to 36” with following basic features.

FEM ANALYSIS

All valve designs, have been asset stress analysis to ensure pressure contained parts performance before manufacturing process.







Von Mises stress. Unit: MPa

PLUG VALVE

Where to use

- On/Off Shore Oil and Gas Production
- Subsea Oil and Gas Production
- Oil and Gas Storage
- Oil and Gas Transportation
- Oil and Gas Gathering Systems
- Gas Re-injection Plants
- Gas Treatment Plants
- LPG and LNG Production
- LPG and LNG Storage
- LPG and LNG Transportation
- Petrochemical Industry
- Metering Systems
- Refining Industry

Production Range

Raised Face Undeground

Welding End Undeground

Raised Face Aboveground

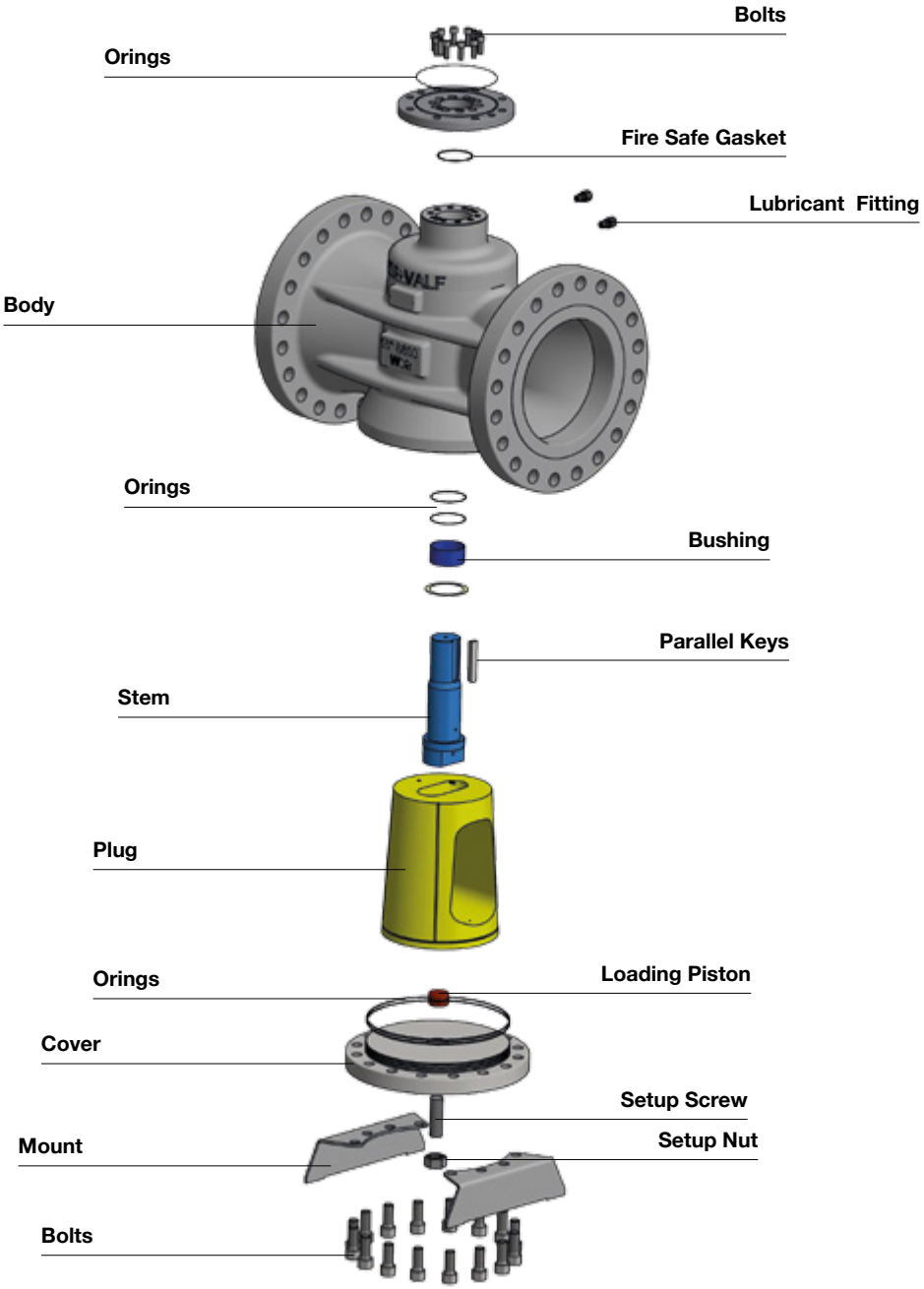
FEATURES

Valve Sizes :	2" - 36"
Operation :	Lever / Gear / Actuator
Pressure Class :	ANSI 150 / 300 / 600 / 900
End Connections :	BW, RF

STANDARDS

Valves Desing Standart :	API 6D, ISO 14313, API 599
Face To Face Std :	API 6D
End Connection :	ANSI B16.5 / ANSI B.16.25
Testing :	API 6D / API 598
Fire safe testing :	API 607 / ISO 10497 / API 6FA
Certificate Acc to :	10204 3.1 - 3.2

PLUG VALVES - PART LIST

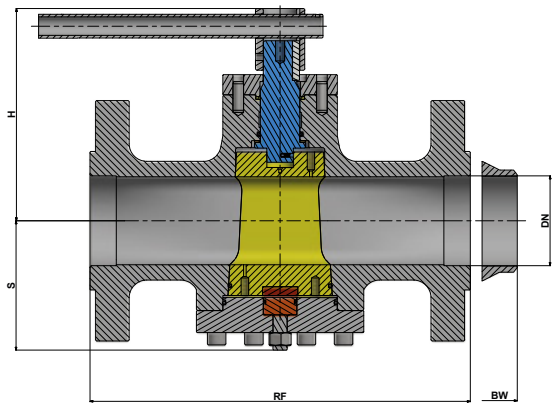


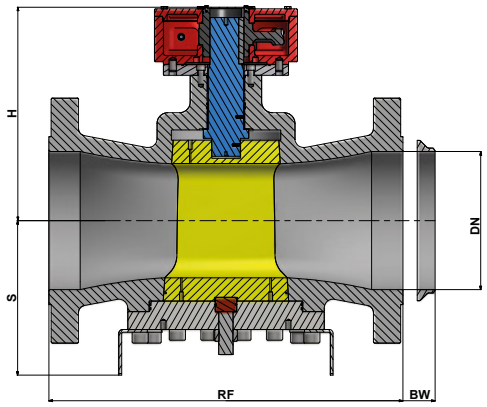
MATERIAL Acc to Temperature

PART NAME	Natural Gas Hydrocarbons	Low Temperature	Sour Service
Plug	Cr 13	Cr13 / A350 LF2	Cr 13 *
Body	A216 WCB	A350 LF2 A352 LCB / LCC	A216 WCB *
Stem	Cr 13	Cr13 or 4140	Cr 13
Cover	ASTM A105	A350 LF2	ASTM A105
Orings	NBR	HNBR	NBR
Bolt & Nuts	ASTM A193 - B7M ASTM A194 - 2HM	ASTM A194 - Gr.7 ASTM A320 - L7	ASTM A193-B7M ASTM A194-2HM

* Chemical and mechanical values of the material are limited.

DIMENSIONS & PRESSURE TEST TABLE





CLASS 150

	Short Pattern		Venturi Pattern				
	RF	BW	RF	BW	DN	H	S
2”	178	267			50	195	104
3”	203	330			76	209	116
4”	229	356			102	241	147
6”	267	457			152	286	189
8”	292	521			203	426	256
10”	330	559			254	471	286
12”	356	635			305	541	316
14”			686	686	336	565	358
16”			762	762	387	638	433
18”			864	864	438	650	450
20”			914	914	489	650	470
24”			1067	1067	590	660	530

Hydrostatic Shell Test		Hydrostatic Seat Test	
Duration	Presure	Duration	Presure
15 sec.	30 bar	15 sec.	22 bar
60 sec.	30 bar	60 sec.	22 bar
60 sec.	30 bar	60 sec.	22 bar
60 sec.	30 bar	60 sec.	22 bar
120 sec.	30 bar	120 sec.	22 bar
120 sec.	30 bar	120 sec.	22 bar
120 sec.	30 bar	120 sec.	22 bar
300 sec.	30 bar	120 sec.	22 bar
300 sec.	30 bar	120 sec.	22 bar
300 sec.	30 bar	120 sec.	22 bar
300 sec.	30 bar	120 sec.	22 bar
300 sec.	30 bar	120 sec.	22 bar

CLASS 300

	Short Pattern		Venturi Pattern				
	RF	BW	RF	BW	DN	H	S
2”	216	267			50	195	104
3”	283	330			76	209	116
4”	305	356			102	241	147
6”	403	457			152	286	189
8”	419	521			203	426	256
10”	457	559			254	471	286
12”	502	635			305	541	316
14”			762	762	336	565	358
16”			838	838	387	638	433
18”			914	914	438	650	450
20”			991	991	489	650	470
22”			1092	1092	530	660	470
24”			1143	1143	590	660	530
26”			1245	1245	635	710	580
30”			1397	1397	737	790	700
32”			1524	1524	781	810	730
36”			1727	1727	876	900	830

Hydrostatic Shell Test		Hydrostatic Seat Test	
Duration	Presure	Duration	Presure
15 sec.	76 bar	15 sec.	57 bar
60 sec.	76 bar	60 sec.	57 bar
60 sec.	76 bar	60 sec.	57 bar
60 sec.	76 bar	60 sec.	57 bar
120 sec.	76 bar	120 sec.	57 bar
120 sec.	76 bar	120 sec.	57 bar
120 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar
300 sec.	76 bar	120 sec.	57 bar

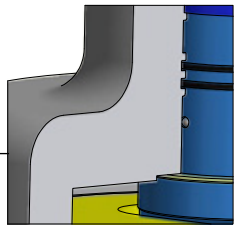
CLASS 600

	Short Pattern		Venturi Pattern				
	RF	BW	RF	BW	DN	H	S
2”	292	267			50	195	104
3”	356	330			76	209	116
4”	432	356			102	241	147
6”	559	457			152	286	189
8”	660	521			203	426	256
10”	787	559			254	471	286
12”			838	838	305	541	316
14”			889	889	336	565	358
16”			991	991	387	638	433
18”			1092	1092	438	650	450
20”			1194	1194	489	650	470
22”			1295	1295	530	660	470
24”			1397	1397	590	660	530
26”			1448	1448	635	710	580
30”			1651	1651	737	790	700
32”			1778	1778	781	810	730
36”			2083	2083	876	900	830

Hydrostatic Shell Test		Hydrostatic Seat Test	
Duration	Presure	Duration	Presure
15 sec.	153 bar	15 sec.	113 bar
60 sec.	153 bar	60 sec.	113 bar
60 sec.	153 bar	60 sec.	113 bar
60 sec.	153 bar	60 sec.	113 bar
120 sec.	153 bar	120 sec.	113 bar
120 sec.	153 bar	120 sec.	113 bar
120 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar
300 sec.	153 bar	120 sec.	113 bar

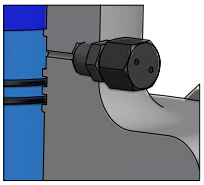
Gearbox is used for 4” and above dimensions.

DESIGN FEATURES



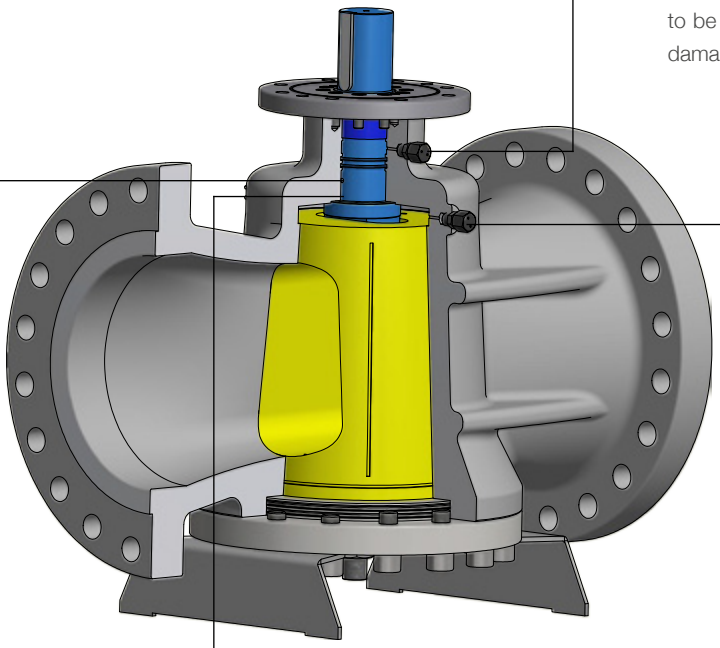
ANTISTATIC DEVICE

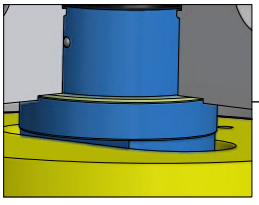
Spring plus graphite type antistatic device are applied between the plug, stem, gland flange and body, to keep the electical continuity between all the metalic components, and ensure the resistance lower then the most severe service requirement.



STEM SEAL

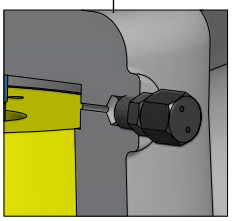
For high pressure or large size valves, double o-rings located in the upper stem area are used to ensure positive sealing. And upon request, additional stem seal injection fittings are provided to be utilized in the case of emergencies, o-ring damage, or if stem leakage occurs.





BLOW-OUT PROOF STEM

This design ensures the valve stem cannot blown out of the body in the event of the gland being removed while the valve is under pressure. To prevent stem blow out from body, the stem has a shoulder in the lower part and so constructs that it may not blow out upwards.



PLUG INJECTION

In the event of damage to the valve seat, sealant can be injected to temporarily seal the valve until maintenance can be performed. It provides high integrity shutoff. On request, secondary seat sealant injection fittings are installed.

KURVALF Pipeline Valves

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