



Range DN: 6 ~ 400



PED 97/23/EC
PED 2014/68/EU



TR TS 10/11,
12/11, 32/11



Range PN: 16 ~ 400



CERTIFICATE
EN 12 569

Operating temperature: -196 °C ~ 550 °C

Connection into piping: Flanged, welded ends, combined execution



DESCRIPTION

V30 valves are controlled shut-off valves. They are designed to stop or allow the flow of the medium by external operation, either manually or via the installed drive. If, upon the customer's request, they are fitted with a regulating cone, they can be used to regulate the flow of the medium. The medium can flow in one direction only. These valves are designed and manufactured to ensure maximum service life and reliability.

MATERIAL SPECIFICATION

V30 valves are made from carbon, alloyed and stainless steels. The material type can be adjusted according to the customer's request to optimally suit the operating conditions.

APPLICATION

V30 valves are mainly suitable for various chemicals and petrochemicals, liquids, gases and steam.

BASIC STANDARDS FOR DESIGN

Basic design

EN 13 709

Pressure-temperature rating

EN 12 516 - 1

Testing

EN 12 266 - 1, 2

Face-to-face dimensions

EN 558, EN 12 982

Dimensions of the welded ends

EN 12 627

Top Flange dimensions

EN ISO 5210

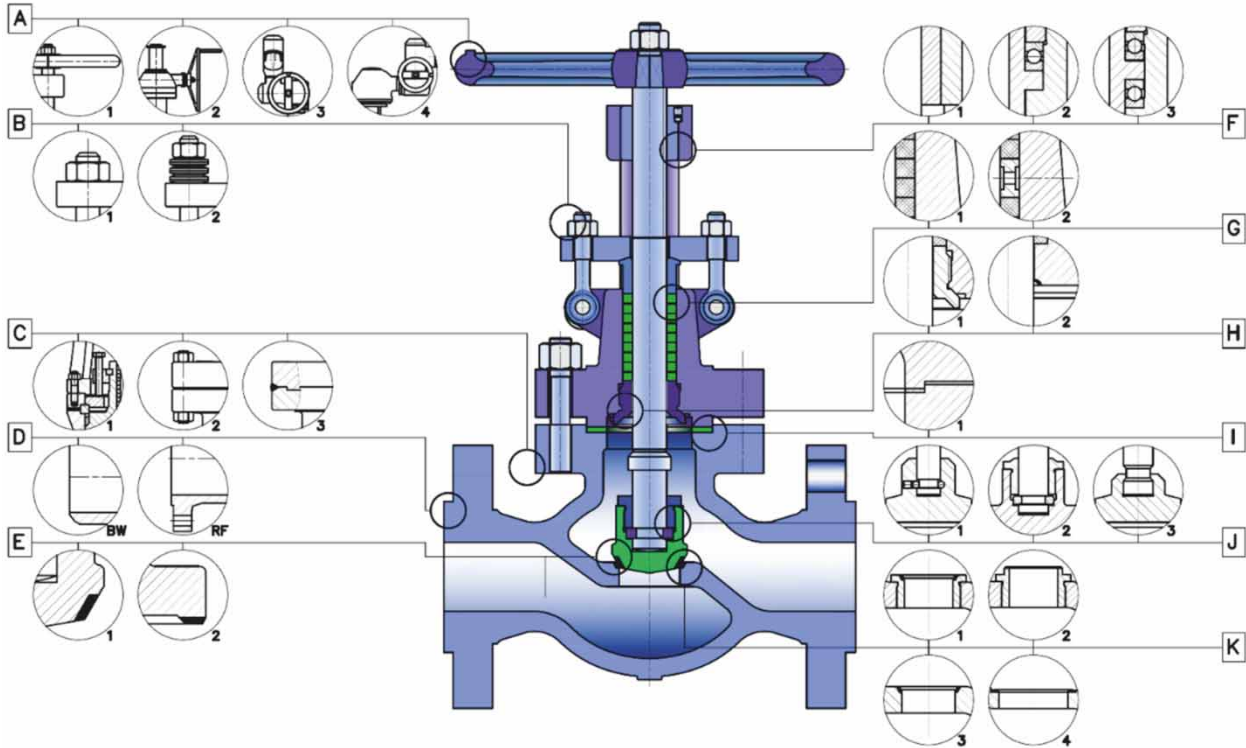
Flange dimensions

EN 1092 - 1

Special

NACE MR-0175

STRUCTURAL DESIGN



A - Control

- handwheel
- handwheel with gear box
- electric actuator
- electric actuator with gear box

B – Method of pressing packing seal

- use of compression packing seal with cup springs to provide constant pressure force on the packing is preferred when operating with cyclic pulsations of pressure or at high pressures and temperatures

C – Bonnet design

- self-sealing bonnet is used for high pressure, high temperature and for cases with cyclic pulsations of pressure
- the bonnet is connected to body with bolts
- the bonnet is welded to body

D - Connection to pipeline

- flanged
- welded ends according to the customer's specifications

E – Valve plug design

- flat sealing surface
- conical sealing surface

F – Installation of stem nut

- depending on the drive moment, the following is used:
- stem nut is screwed into bonnet
- combination of bushing and bearing
- installation on two axial thrust bearings

G- Design of packing seal

- standard
- double packing with spacer - used according to operating conditions

H – Design of swing check valve

- threaded bushing in the bonnet
- integral with the bonnet

I–Bonnet sealing

- male/female
- self-sealing bonnet

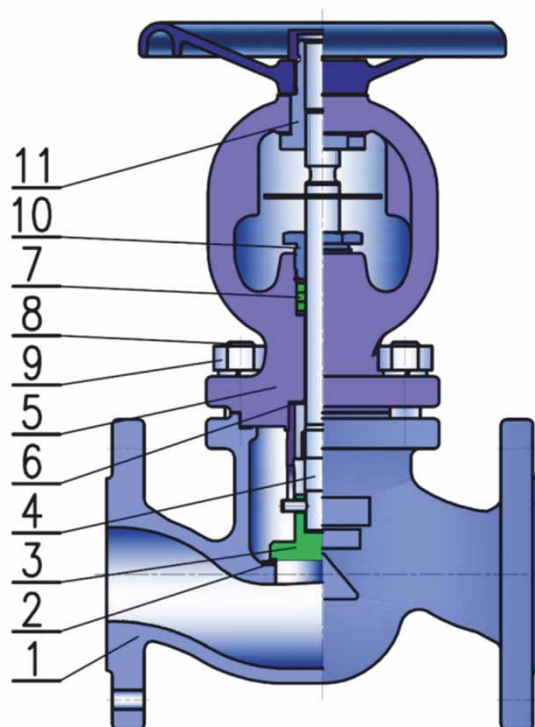
J – Connection of plug with stem

- balls embedded in the spool
- split ring mounted on the stem and threaded sleeve
- screwed into the spool

K –Seat design

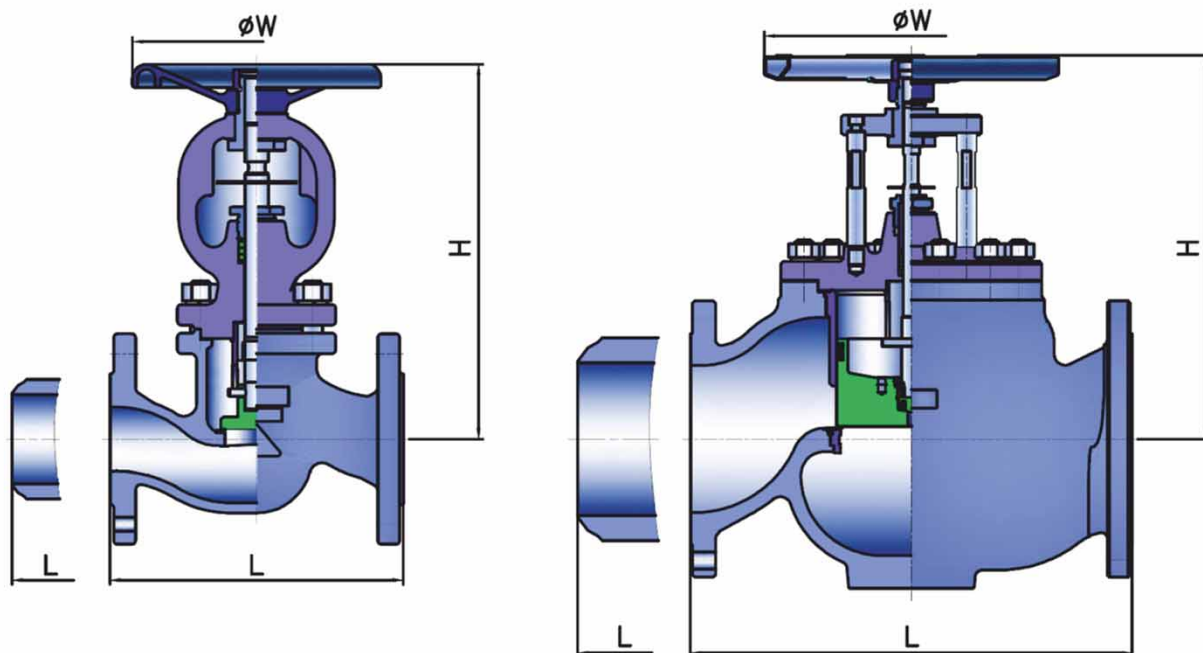
- seat screwed into the body
- seat made by welding on the body
- seat sealing surface is flat or conical depending on fluid pressure

MATERIAL SPECIFICATION - CAST



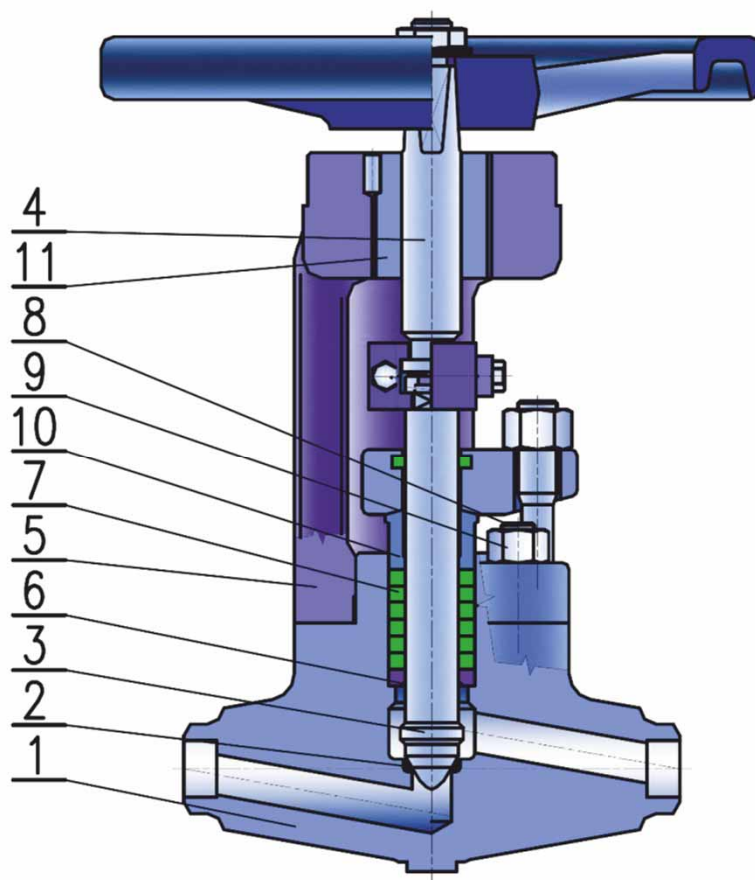
ITEM	NAME	MATERIAL				
1	BODY	GP240GH (1.0619)	42 2643 (GS-42)	42 2942 (1.4410)	42 2745 (GS17CrMo 18 9)	G17CrMo5-5 (1.7357), 13CrMo44(1 .7335)
2	SEAT	Surfacing				
3	PLUG	P265GH, P250GH+sur facing	P265GH, 17 027 + surfacing	42 2942, 17348 + surfacing	42 2745, 17 027+ surfacing	G17CrMo5-5 (1.7357) + surfacing
4	STEM	X20Cr13 (1.4021)	17 027	17 348	15 320	X22CrMoV1 2-1 (1.4923)
5	BONNET	GP240GH (1.0619)	42 2643 (GS-42)	42 2942 (1.4410)	42 2745 (GS17CrMo 18 9)	G17CrMo5-5 (1.7357), 13CrMo44 (1.7335)
6	BACK SEAT	Surfacing				
7	PACKING	Graphite				
8	BOLT	8.8, 21CrMoV5-7 (1.7709)	15 236	1.01	15 236	21CrMoV5-7 (1.7709)
9	NUT	6, 25CrMo4 (1.7218)	6	1.01	15 233	21CrMoV5-7 (1.7709)
10	PACKING BUSH	1.0619	17 027	17 348	17 027	X22CrMoV1 2-1 (1.4923)
11	STEM NUT	Bronze				

DIMENSIONS - CAST



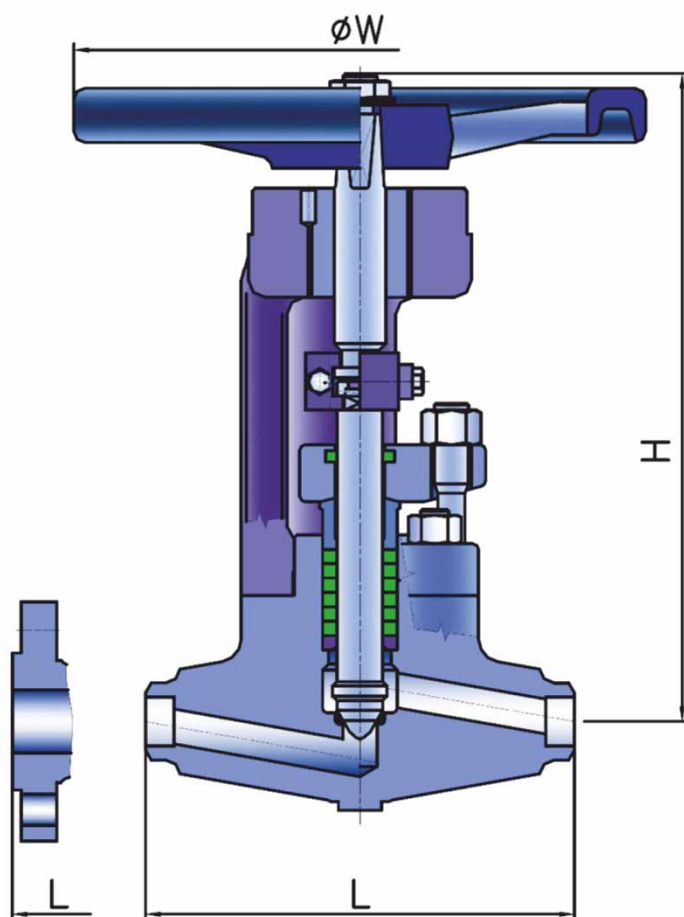
DN	PN 16,25,40				PN 63				PN 100				PN 160			
	L	ØW	H	Mass (kg)	L	ØW	H	Mass (kg)	L	ØW	H	Mass (kg)	L	ØW	H	Mass (kg)
6	130	120	189	2,2	-	-	-	-	-	-	-	-	-	-	-	-
10	130	120	189	2,5	-	-	-	-	-	-	-	-	-	-	-	-
15	130	120	189	4,3	-	-	-	-	-	-	-	-	-	-	-	-
20	150	120	189	5,1	-	-	-	-	-	-	-	-	-	-	-	-
25	160	120	189	5,8	-	-	-	-	-	-	-	-	-	-	-	-
32	180	160	220	9,5	-	-	-	-	-	-	-	-	-	-	-	-
40	200	160	220	9,8	-	-	-	-	-	-	-	-	-	-	-	-
50	230	195	220	17,5	300	250	220	32	300	250	360	34	300	250	340	35
65	290	195	295	20,5	340	315	295	45	340	315	408	49	340	315	408	50
80	310	280	368	34	380	400	368	57	380	400	459	63	380	400	459	64
100	350	280	368	44	430	400	368	83	430	400	484	94	430	400	484	95
125	400	350	523	77	500	500	523	110	500	500	538	123	500	500	538	125
150	480	350	523	110	550	500	523	170	550	500	580	181	550	500	580	183
200	600	350	605	240	650	500	605	240	650	500	705	258	650	600	705	270
250	730	350	663	410	-	-	-	-	-	-	-	-	-	-	-	-
300	850	350	713	610	-	-	-	-	-	-	-	-	-	-	-	-
400	1100	350	855	1240	-	-	-	-	-	-	-	-	-	-	-	-

MATERIAL SPECIFICATION - FORGED



ITEM	NAME	MATERIAL						
1	BODY	P 250 GH, C22.8, (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	11CrMo9-10	14MoV6-3 (1.7715)	X10CrMoVNb9-1 (1.4903)	X6CrNiMoTi17-12-2 (1,4571)
2	SEAT	Surfacing						
3	PLUG	X20Cr13 + surfacing	X22CrMoV12-1(1.7379) + surfacing					X6CrNiMoTi17-12-2 + surfacing
4	STEM	X20Cr13	X22CrMoV12-1 (1.7379)					X6CrNiMoTi17-12-2
5	BONNET	X22CrMoV12-1 (1.4923)						GX5CrNiMo19-11-2
6	BACK SEAT	Surfacing						
7	PACKING	Graphite						
8	BOLT	21CrMoV5-7						A2-70
9	NUT	25CrMo4 (1.7218))						A2
10	PACKING BUSH	X20Cr13	X22CrMoV12-1 (1.7379)					X6CrNiMoTi17-12-2
11	STEM NUT	C 45 (1.0503)						Bronze

DIMENSIONS - FORGED



DN	PN 63, 100, 160, 250					PN 250, 320, 400				
	L		$\varnothing W$	H	Mass (kg)	L		$\varnothing W$	H	Mass (kg)
	RF	BW				RF	BW			
10	230	150	200	225	10	230	150	200	225	10
15	230	150	200	225	10,9	230	150	200	225	10,9
20	260	160	250	240	14	260	160	250	240	14
25	260	160	250	240	14,5	260	250	250	240	14,5
32	390	250	250	320	27	390	250	355	320	27
40	390	250	250	320	29	390	250	355	320	32
50	390	250	250	320	31	390	250	355	320	36

TYPE DESIGNATION

V30 AC/DE M₁ PN/S

A BODY DESIGN

- 1 Direct

E CONTROL

- 1 Hand wheel
- 2 Gearbox + hand wheel
- 3 Electric actuators
- 4 Gearbox + electric actuators
- 5 Pneumatic actuators
- 9 Without control

S SPECIAL EXECUTION

- As Antistatic
- R With regulating plug

C CONNECTION INTO PIPE

- 1 Flanged
- 2 Welded
- 8 Combined

M₁ BODY MATERIAL

- 0 Stainless steel
- 2 Cast alloy steel
- 3 Forged alloy steel
- 4 Forged carbon steel
- 5 Cast carbon steel
- LT Carbon steel for low temperatures

D FLANGE FACING

FLANGES BY EN 1092 - 1

- A Flat face
- B Raised face
- C Tongue face
- D Groove face
- E Spigot
- F Recess
- G O - ring recess
- H O - ring groove

