

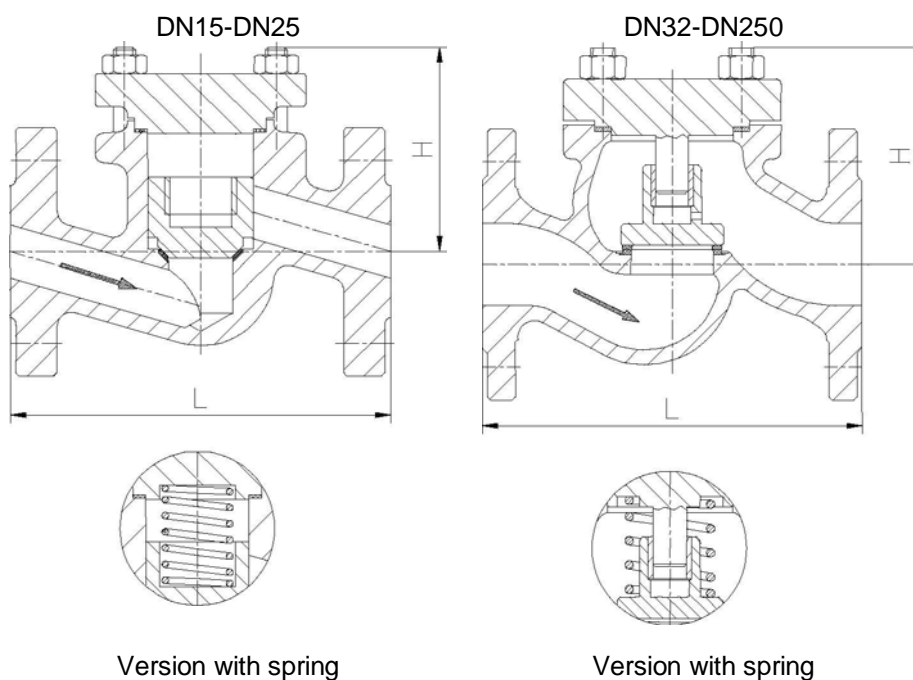
## STRAIGHT PATTERN CHECK VALVES PN 40

### flanged and with butt welded ends

DN15 – DN250

The valves are designed for application in pipeline installations conducting non-aggressive and non-toxic media. They are manufactured in following versions:

- without spring - for general application: type **ZPT1**
- without spring - for naval application: type **ZMT1**
- without spring - for petroleum products: type **ZFT1**
- with spring - for general application: type **ZPS1**
- with spring - for naval application: type **ZMS1**
- with spring - for petroleum products: type **ZFS1**



Maximum permissible operating Temperature TS [°C]							
20	100	150	20 10	250	300	350	400
Maximum permissible operating pressure PS [bar]							
40	35	32	28,5	26	23,4	22	21,2

### Materials

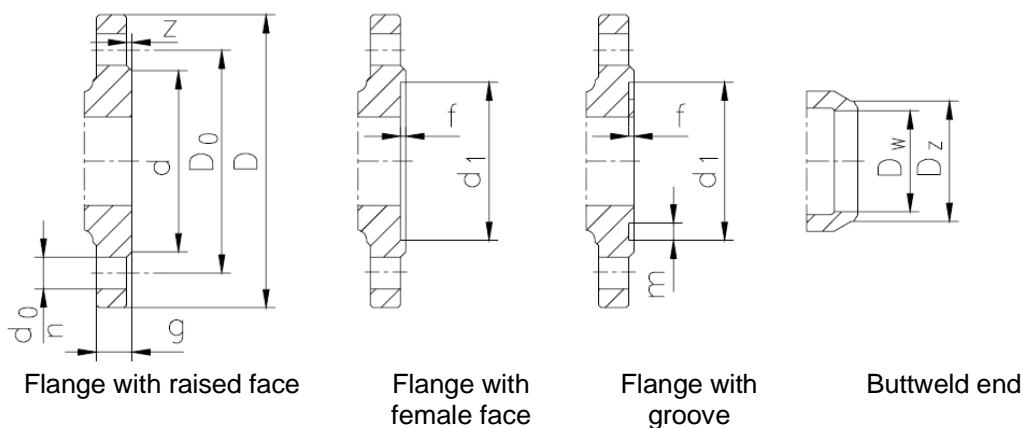
Body:	DN 15 ÷ 25	carbon steel
	DN 32 ÷ 250	carbon cast steel
Bonnet:	DN 15 ÷ 65 and 250	carbon steel
	DN 80 ÷ 200	carbon cast steel
Trim:		stainless steel (min.18%Cr)
Packing:		reinforced graphite

### Dimensions and weights

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
L	130	150	160	480	200	230	290	0 150	150	400	480	600	730
H	75	75	75	105	115	120	170	170	190	215	235	280	320
Weight [kg]	2 0,9*	2,5 1,5*	3 2*	8,8 6,2*	10,5 7,5*	14 10,5*	22,5 16,5*	31 23*	41 30*	54 42*	69 59*	141 121*	332 282*

\*) - relates to valves with butt weld ends

### End Connection



### Dimensions of end Connection

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
D	95	105	185	140	140	165	185	200	235	270	300	375	450
DO	65	75	85	100	190	125	145	160	190	220	250	320	385
do	14	14	14	18	18	18	18	18	22	26	26	30	33
n							8	8	8	8	8	12	12
g	16	18	18	18	18	20	22	24	24	26	28	34	38
d	45	58	68	78	88	102	122	138	162	188	218	285	345
z	2	2	2	2	3	3	3	3	3	3	3	3	3
d1	45	58	68	78	88	102	122	138	162	188	218	285	313
									5	5	5	5	5
m	6	8	8	8	8	8	8	8	11	11	11	11	11
D <sub>w</sub>	15	20	24	31	37,5	49	66	79	98	122	147	203	277
D <sub>z</sub>	21	26	31	39	46	59	78	92	162	136	162	221	259

Flanges PN 40 acc. to PN-EN 1092-1:

- raised face - type B1
- female face - type F
- groove - type D

### Additional information

Product meets requirements of Directive 97/23/WE/PED/.

Acceptance tests: PN-EN 12266-1, leak tightness – class B /valves **ZFT1, ZFS1**/  
leak tightness – class D /other valves /

Face to face dimension: PN-EN 558-1, series 1

Valves can be manufactured with internal parts (stem, disc) made of titanium alloys.

Special versions on request.

We reserve the right to change contents and form of this sheet without notice.