

# Type HDS / HDS-GL

## High-Pressure plug valve

- High-pressure design
- from DN50 / PN160 with trunnion mounted plug

DN 15 - 600 / PN 63 - 160  
NPS ½ - 24 / Class 600 - 900

Range of application:  
-60 < T < 230/280°C  
vacuum-capable

### Design characteristics

- easy accessible adjustment of the plug and safety stem packing
- low emission rate according TA-Luft & EPA 21
- Fire-Safe design acc. to API 607 / ISO 10497
- mounting-flange for actuators acc. to ISO 5211

### Options

- higher pressure rating
- heating jacket
- flushing device
- FDA compliant
- painting
- oil and grease-free assembling

Type HDS-GL  
PEEK bearing

## Type overview

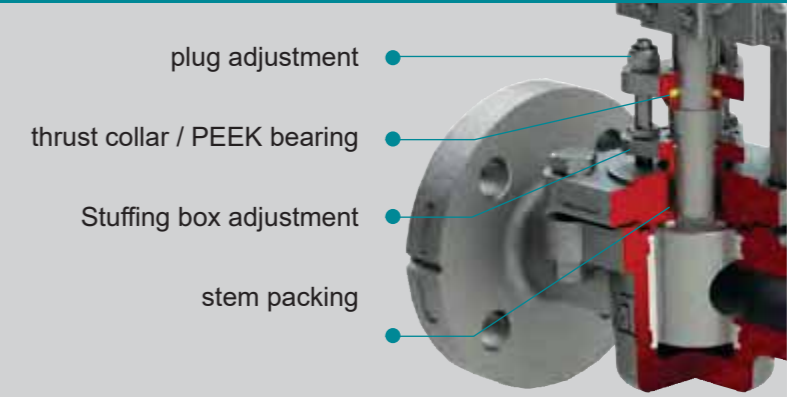
### Type HDS / HDS-EXTRA

#### Type HDS

- DN 15 - 100 / NPS ½ - 4
- PN 63 - 100 / Class 600

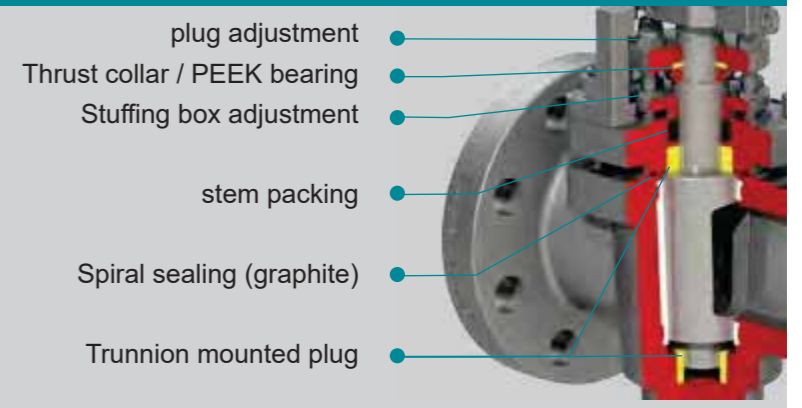
#### Type HDS-EXTRA

- DN 15 - 150, PN 63 - 100
- sealing system FSN / CASN
- without PEEK bearing

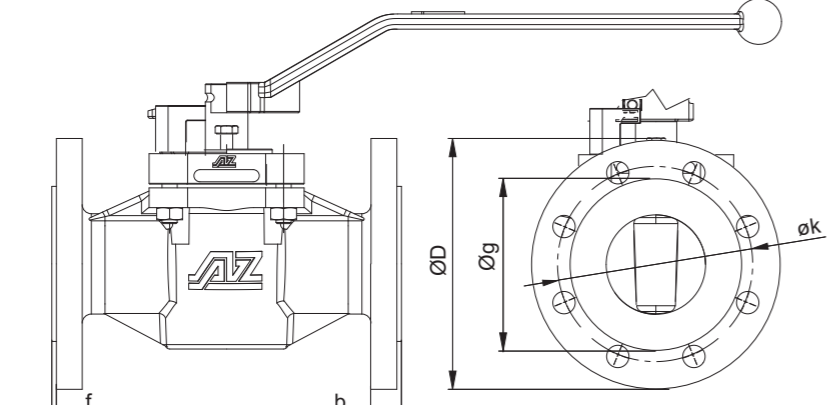


### Type HDS-GL

- DN 100S - 600 / NPS 4S - 24
- PN 63 - 100 / Class 600
- DN 15 - 150 / NPS ½ - 4
- PN 160 / Class 900
- Sealing system FSN / CASN
- PEEK bearing ≥ DN 50 / NPS 2



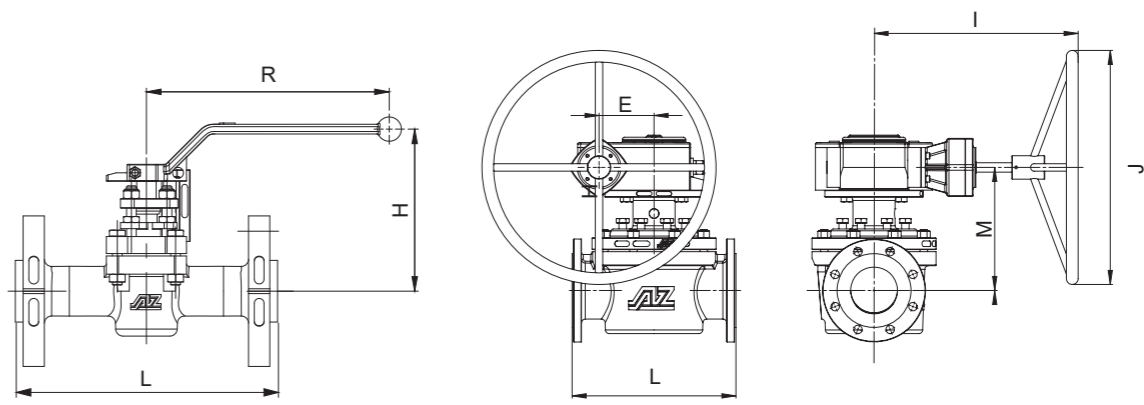
# Flange bore acc. EN / ASME



EN 1092-1										ASME B16.5														
DN	PN	øD [mm]	flange bore [mm]	øg [mm]	b [mm]	f [mm]	NPS	Class	øD [mm]	flange bore [mm]	øg [mm]	b [mm]	f [mm]	NPS	Class	øD [mm]	flange bore [mm]	øg [mm]	b [mm]	f [mm]				
15E	63	105	75	4	14	45	20	2	½	600	95	66,7	4	15,7	34,9	21,3	7	900	120	82,6	4	22,3	29,3	7
25E	63	140	100	4	18	68	24	2	1	600	125	88,9	4	19,1	50,8	24,5	7	900	150	101,6	4	25,4	35,6	7
40	63	170	125	4	22	88	26	3	1½	600	155	114,3	4	22,4	73	29,3	7	900	180	123,8	4	28,4	38,8	7
50	63	180	135	4	22	102	26	3	2	600	165	127	8	19,1	92,1	32,4	7	900	215	165,1	8	25,4	45,1	7
80	63	215	170	8	22	138	28	3	3	600	210	168,3	8	22,4	127	38,8	7	900	240	190,5	8	25,4	45,1	7
100	63	250	200	8	26	162	30	3	4	600	275	215,9	8	25,4	157,2	45,1	7	900	290	235,0	8	31,7	51,5	7
100S	63	250	200	8	26	162	30	3	4S	600	275	215,9	8	25,4	157,2	45,1	7	900	290	235,0	8	31,7	51,5	7
125	63	295	240	8	33	188	30	3	6	600	355	292,1	12	28,4	215,9	54,7	7	900	420	349,2	12	31,8	62,6	7
150	63	345	280	8	33	218	36	3	10	600	510	431,8	16	35,1	323,8	70,5	7	12	560	489,0	20	35,1	73,7	7
200	63	415	345	12	36	285	42	3	14	600	605	527,0	20	38,1	412,8	76,9	7	16	685	603,2	20	41,1	83,2	7
250	63	470	400	12	36	345	46	3	18	600	745	654,0	20	44,5	533,4	89,6	7	20	815	723,9	24	44,5	95,9	7
300	63	530	460	16	36	410	52	4	24	600	940	838,2	24	50,8	692,2	108,6	7							
350	63	600	525	16	36	465	56	4																
400	63	670	585	16	42	535	60	4																
500	63	800	705	20	56	*	*	4																

# Type HDS

## PN 63 - 100 / Class 600, Fire-Safe sealing FSN

	DN	PN	L [mm]	R [mm]	H [mm]	SW [mm]	torque* [Nm]	weight [kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]
	EN 558	15E	63-100	210	200	125	11	45	5,6	12
25E		63-100	230	200	135	11	90	10,1	25	29
40		63-100	200	320	135	14	100	13,5	85	98
50		63-100	230	420	195	19	180	25,0	126	146
80		63-100	310/356	600	210	22	280	45,6	275	317
100		63/100	350/432	600	210	22	380	56,0	197	228
ASME B 16.10	NPS	Class	L [mm]	R [mm]	H [mm]	SW [mm]	torque* [Nm]	weight [kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]
	½E	600	165	200	125	11	45	4,2	13	16
	1	600	216	200	135	11	45	10,0	26	31
	1½	600	241	320	135	14	100	15,5	79	92
	2	600	292	420	195	19	180	24,6	139	161
	3	600	356	600	210	22	280	46,8	228	264
	4	600	432	600	210	22	380	71,0	198	229

\* inclusive 100% safety factor for actuator

# Type HDS-EXTRA

## PN 63 - 100, Fire-Safe sealing FSN

	DN	PN	L [mm]	R [mm]	H [mm]	gear box				SW [mm]	torque* [Nm]	weight [kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]	
						E	I	J	M	Type					
EN 1092-1 / 558	15E	63-100	210	200	102,2						11	45	5,6	12	14
	20E	63-100	230	200	102,2							90		30	35
	25E	63-100	230	320	119							80		53	62
	32E	63-100	260	420	137							140		95	110
	40E	63-100	260	420	145							240		173	200
	50E	63-100	300	585	150							350		282	327
	65E	63	290			68,8	265	400	243	Q 800-S		500		569	658
	80E	63	310			68,8	365	400	248	Q 800-S		600		947	1095
	100E	63	430			137,5	365	600	270	Q6500-S		2000		1319	1525
	150E	63	550			13705	365	600	315	Q6500-S		4000		3155	3647

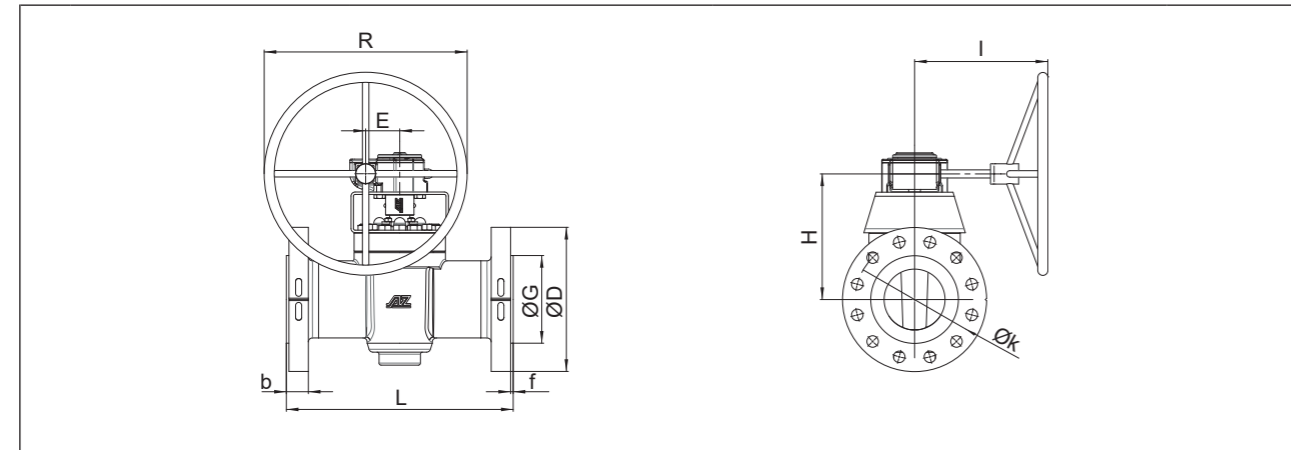
\* inclusive 100% safety factor for actuator

Order example: F-2-HDS-DN50-PN100-1.4408-1.4408

F = Flange, 2 = two-way, HDS= high-pressure, plug valve, DN50 = size, PN100 = rating, 1.4408 = body material, 1.4408 = plug material

# Type HDS-GL

PN 63 - 100 / Class 600, Fire-Safe sealing FSN

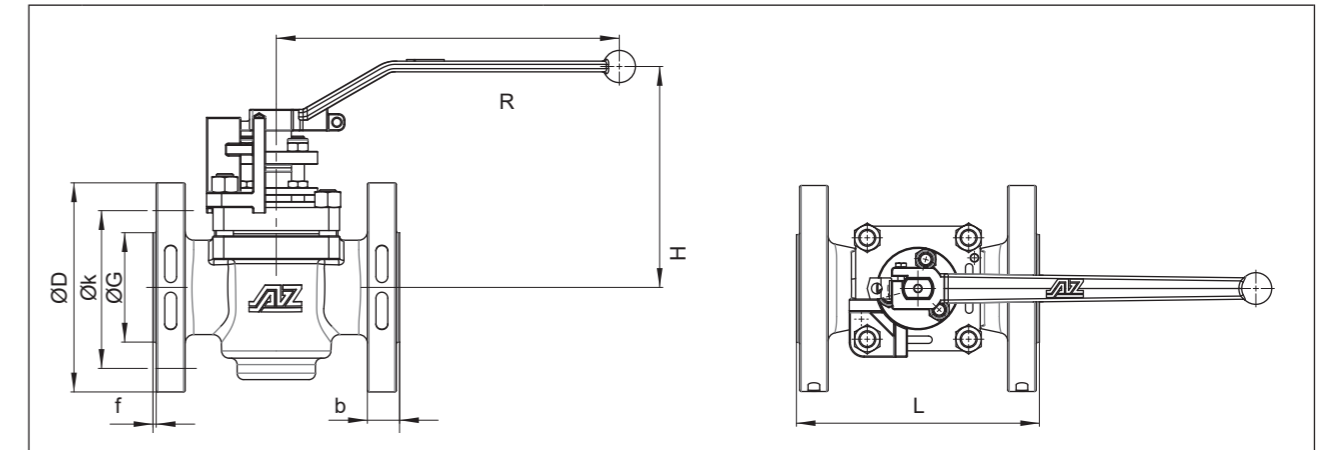


EN 558	DN	PN	L [mm]	gearbox (Pro-Gear)			I	Type	torque* [Nm]	weight [Kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]
				E	R	H						
EN 558	100S	63 100	350	69	300	270	275	Q800-S	600	**	**	**
	125	63 100	400	84	400	297	290	Q1500-S	1170	**	865	1000
	150	63 100	350 550	84	400	297	290	Q1500-S	1170	**	875	1011
	200	63 100	400 600	96,5	600	340	350	Q3000-S	1560	**	1770	2047
	250	63 100	450 730	137,5	600	395	465	Q6500-S	1950	**	1949	2261
	300	63 100	500 850	137,5	600	415	465	Q6500-S	3380	**	2618	3027
	350	63 100	** 980	137,5	600	485	465	Q6500-S	7150	**	5070	5861
	400	63 100	** 1100	137,5	600	500	465	Q6500-S	7150	**	4694	5426
	500	63 100	** 1250	180	600	545	520	Q12000-S	8320	**	10260	11862
	ASME B 16.10	NPS	Class	L [mm]	gearbox (Pro-Gear)			I	Type	torque* [Nm]	weight [Kg]	K <sub>vs</sub> [m³/h]
				E	R	H						
4S"		600	462	69	300	270	275	Q800-S	600	**	**	**
5"		600	508	84	400	297	290	Q1500-S	1170	**	**	**
6"		600	559	84	400	297	290	Q1500-S	1170	**	775	896
8"		600	660	96,5	600	340	350	Q3000-S	1560	**	1978	2286
10"		600	787	137,5	600	395	465	Q6500-S	1950	**	2382	2754
12"		600	838	137,5	600	415	465	Q6500-S	3380	**	1925	2225
14"		600	889	137,5	600	485	465	Q6500-S	7150	**	2394	2768
16"		600	991	137,5	600	500	465	Q6500-S	7150	**	4818	5339
18"	600	1092	180	600	520	520	Q12000-S	8320	**	12427	14367	
20"	600	1194	180	600	545	520	Q12000-S	9750	**	11841	13689	

\* Including 100% safety factor for actuators  
\*\* on request

# Type HDS-GL

PN 160 / Class 900, Fire-Safe sealing FSN



EN 558	DN	PN	L [mm]	R [mm]	H [mm]	SW [mm]	torque* [Nm]	weight [Kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]
	EN 558	15E	160	210	200	125	11	55	5,6	12
25E		160	230	200	135	11	100	10,1	25	29
40		160	200	320	135	14	120	13,5	85	98
50		160	230/300	420	195	17	200	26,3	126	146
80		160	282	600	210	22	300	47,9	275	317
100		160	305	600	210	22	430	58,8	197	228
ASME B 16.10	NPS	Class	L [mm]	R [mm]	H [mm]	SW [mm]	torque* [Nm]	weight [Kg]	K <sub>vs</sub> [m³/h]	C <sub>v</sub> [US.gal/min]
	½"E	900	216	200	125	11	55	4,2	13	16
	1"	900	254	200	135	11	55	10,0	26	31
	1½"	900	305	320	135	14	120	15,5	79	92
	2"	900	368	420	195	17	200	25,8	139	161
	3"	900	381	600	210	22	300	49,1	228	264
4"	900	457	600	210	22	430	74,6	198	229	

Counter-bearing from DN50 / NPS2"  
\* Including 100% safety factor for actuators  
\*\* on request  
Other sizes on request

Order example: F-2-HDS-GL-DN250-PN100-1.4408-1.4408

F = Flange, 2 = two-way, HDS= High Pressure Plug valve, DN250 = nominal width, PN100 = nominal pressure, 1.4408 = body material, 1.4408 = plug material

Order example: F-2-HDS-GL-DN80-PN160-1.4408-1.4408

F = Flange, 2 = two-way, HDS-GL= high-pressure, plug valve, DN80 = nominal size, PN160 = Nominal pressure, 1.4408 = body material, 1.4408 = plug material