

## TYPE ISO - STANDARD

Plugvalve with ISO-Flange

DN 15 - 500 / PN 10 - 40

NPS ½" - 20" / class 150 - 300

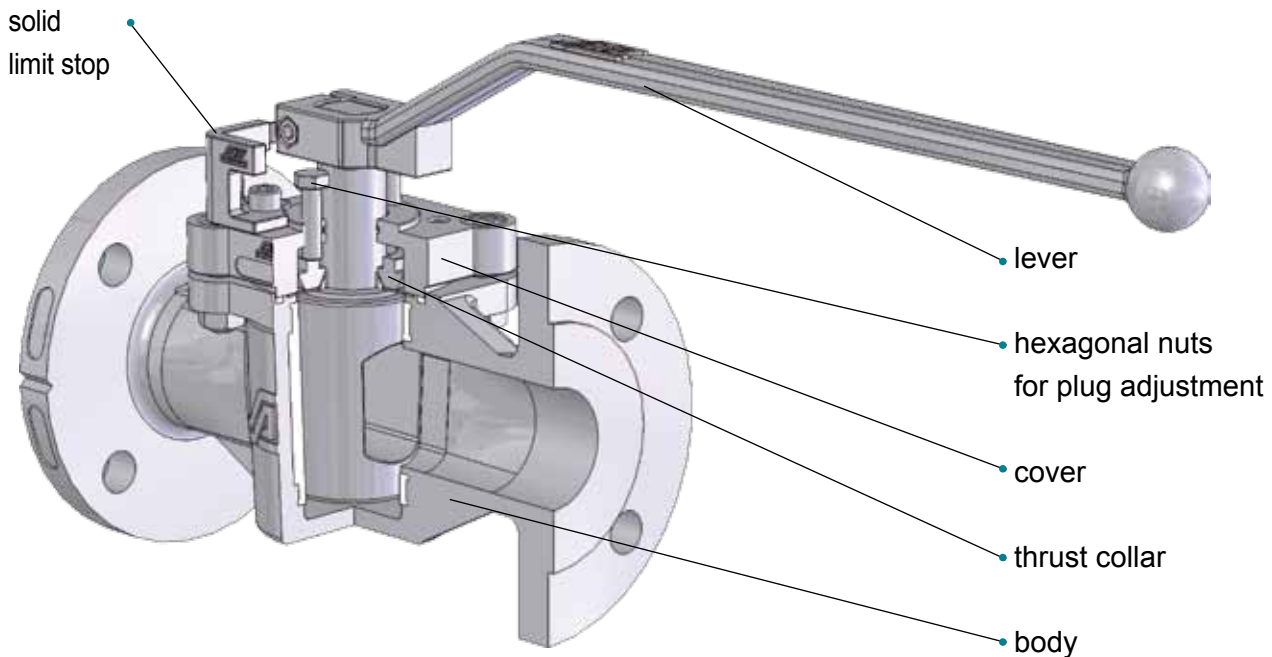


1.1

- free of cavities
- maintenance free - self lubricating
- mounting-flange for actuators acc. to DIN ISO 5211
- easy accessible adjustment of the plug
- vacuum tight
- TA - Luft 2002 approval
- Firesafe - Design API 607 / ISO 10497 (outside)
- DVGW - approval

# TYPE ISO - STANDARD

## Design characteristics



The **ISO-STANDARD** Type plug valve is the consequent development of our **STANDARD** type.

The main advantages are:

- strong mounting flange for actuators acc. DIN ISO 5211
- patented full cardanic dihedron coupling
- improved shaft and cover sealing including V-diaphragm, delta thrust collar and PTFE cover sealing ring.
- safety spindle packing to prevent fugitive emission of aggressive and toxic media.

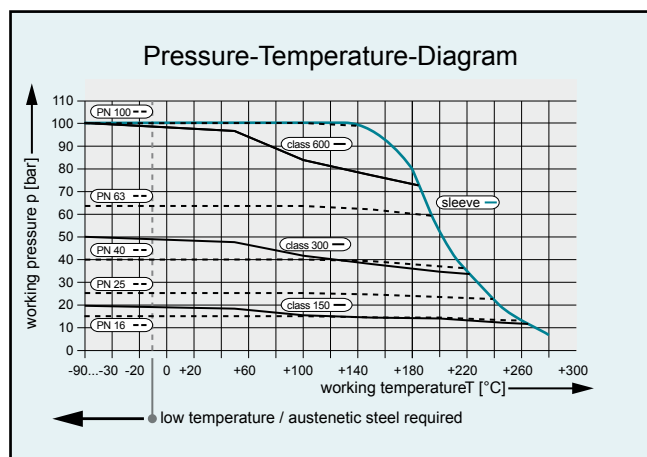
## Materials

### Standard body materials

- Ductile Iron EN-GJS-400-18 / (GGG 40.3) ASTM A395
- Carbon Steel 1.0619 (GS-C 25) / ASTM A216 WCB
- Stainless Steel 1.4408 / ASTM A351 CF8M

### Special body materials

- Hastelloy B / C
- Inconel
- Monel
- Nickel
- Zirconium
- Titanium
- Tantalum



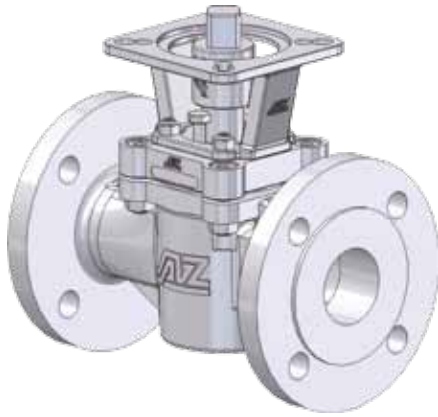
operating temperature  $< -30^{\circ}\text{C}$  and  $> 220^{\circ}\text{C}$  need to be approved by AZ confirming their operating conditions.

Other materials on request.

**On enquiry / order:** please state material for body and plug.

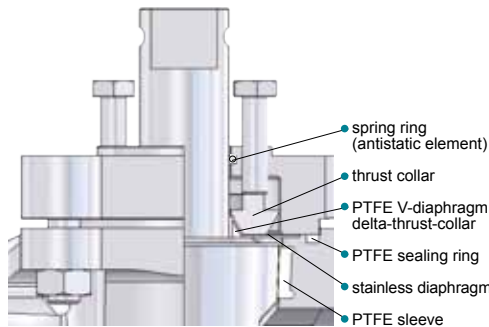
# TYPE ISO - STANDARD

Flexible sealing selection through modular design



## ISO STD

Standard sealing for all major applications



- primary sealing: PTFE sleeve
- secondary sealing: PTFE V-diaphragm with delta thrust collar

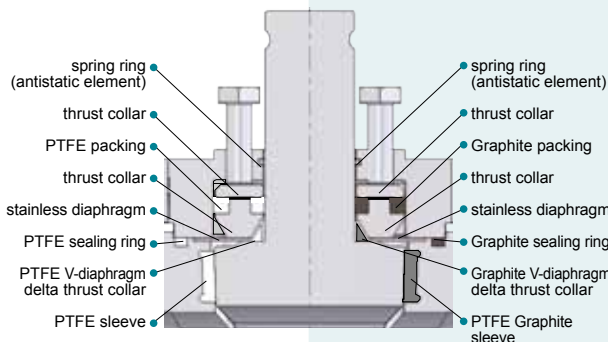
temperature range up 230°C



## ISO-CA

## ISO-FS

Chemistry sealing to prevent fugitive emission of aggressive and toxic media

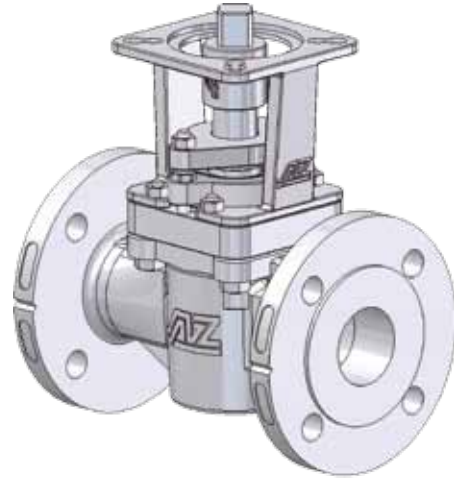


- primary sealing: PTFE sleeve
- secondary sealing: PTFE V-diaphragm with delta thrust collar
- tertiary sealing: spindle packing

temperature range up 250°C



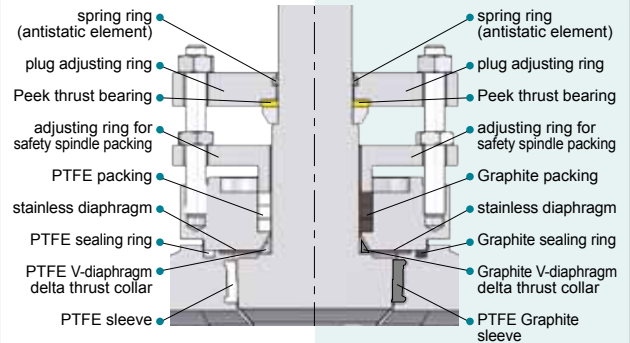
temperature range up 300°C  
Fire-Safe Design (API 607)



## ISO-CASN

## ISO-FSN

Safety sealing for fluctuating temperatures



- primary sealing: PTFE sleeve
- secondary sealing: PTFE V-diaphragm with delta thrust collar
- tertiary sealing: triple safety spindle packing

temperature range up 250°C



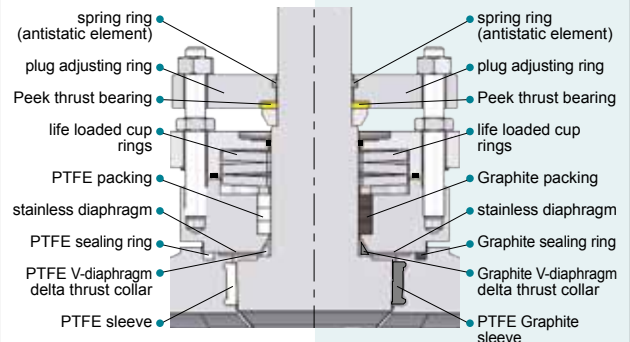
temperature range up 300°C  
Fire-Safe Design (API 607)



## ISO-CASN-SL

## ISO-FSN-SL

Life loaded safety sealing for fluctuating temperatures



- primary sealing: PTFE-sleeve
- secondary sealing: PTFE V-diaphragm with delta-thrust-collar
- tertiary sealing: life loaded triple safety spindle packing

temperature range up 250°C



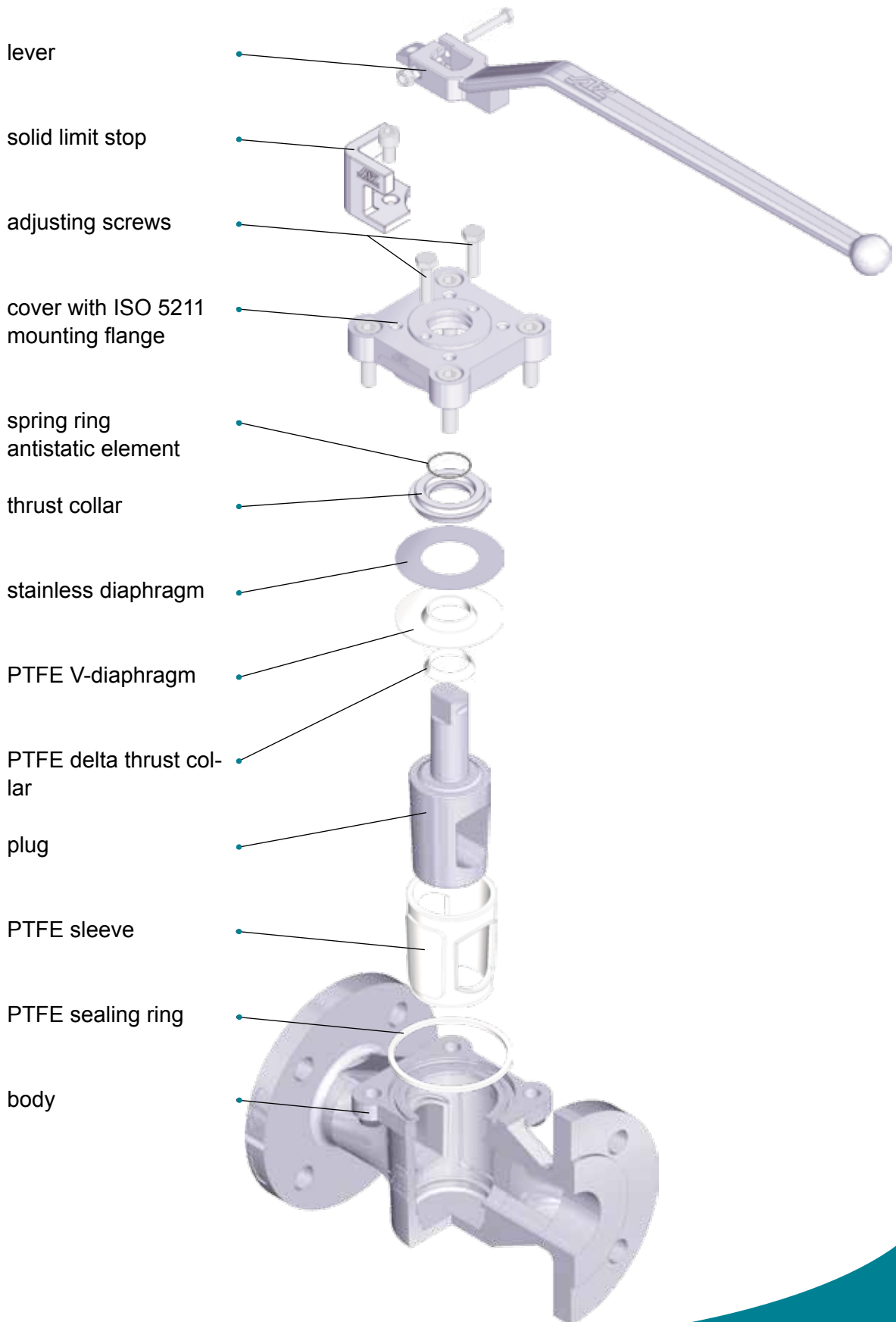
temperature range up 300°C  
Fire-Safe Design (API 607)





# TYPE ISO - STANDARD

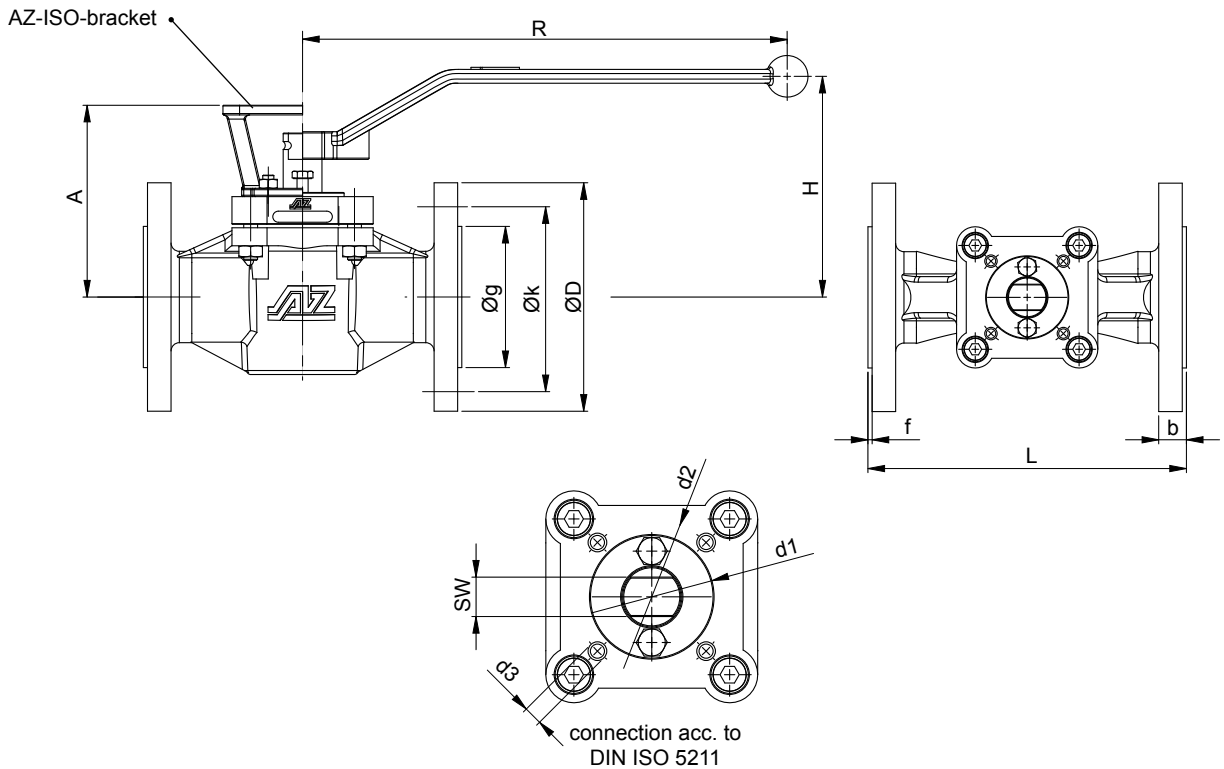
## Design building





# TYPE ISO - STANDARD

Dimensions DN 15 - 100S NPS ½" - 4"S acc. to DIN / ASME



	DN	PN	L	øD	flange bore			øg	b	f	bracket / lever			flange DIN ISO 5211			dihe-dron	torque.* [Nm]	weight [kg]	Kvs-value [m³/h]	Cv-value [US.gal/min]		
					øk	No.	ø				Type	d1	d2	d3									
DIN EN 1092/1 / 558-1	15	10-40	130	95	65	4	14	45	16	2	88	103	200	F05	35	50	M6	11	30	3,8	18	21	
	20	10-40	150	105	75	4	14	58	18	2	88	103	200	F05	35	50	M6	11	30	4,3	20	24	
	25	10-40	160	115	85	4	14	68	18	2	94	109	200	F05	35	50	M6	11	30	4,9	22	25	
	32	10-40	180	140	100	4	18	78	18	2	102	117	320	F07	55	70	M8	14	70	8,6	51	59	
	40	10-40	200	150	110	4	18	88	18	3	109	124	320	F07	55	70	M8	14	80	9,6	85	99	
	50	10-40	230	165	125	4	18	102	20	3	139	159	420	F07	55	70	M8	19	120	13,9	165	191	
	65	10-16 25-40	290	185	145	4	8	18	122	18	3	158	165	600	F10	70	102	M10	22	200	19,3	267	310
	80	10-40	310	200	160	8	18	138	24	3	158	165	600	F10	70	102	M10	22	200	21,4	296	343	
	80S	10-40	310	200	160	8	18	138	24	3	173	180	600	F12	85	125	M12	22	200	24,6	492	571	
	100	10-16 25-40	350	220	180	8	18	158	20	3	158	165	600	F10	70	102	M10	22	200	24,6	302	350	
100S	10-16 25-40	350	220	180	8	18	158	20	3	173	180	600	F12	85	125	M12	22	300	28,9	763	885		
ASME B 16.5 / 16.10	½"	150	108	88,9	60,5	4	15,7	35	11,2	1,6	88	103	200	F05	35	50	M6	11	30	2,7	18	21	
		300	140	95,2	66,5															14,2			3,8
	¾"	150	118	98,2	69,9	4	19	42,9	15,7	1,6	88	103	200	F05	35	50	M6	11	30	3,2	20	24	
		300	152	117,3	82,5															15,7			4,3
	1"	150	127	108	79,2	4	19	50,8	14,2	1,6	94	109	200	F05	35	50	M6	11	30	3,5	22	25	
		300	165	123,9	88,9															17,5			4,9
	1¼"	150	140	117,3	88,9	4	19	63,5	15,7	1,6	102	117	320	F07	55	70	M8	14	70	5,4	51	59	
		300	178	133,3	98,5															19			8,6
	1½"	150	165	127	98,6	4	19	73,1	17,5	1,6	109	124	320	F07	55	70	M8	14	80	7	85	99	
		300	200	155,4	114,3															22,3			9,6
	2"	150	178	152,4	120,7	4	19,1	91,9	19,1	1,6	139	159	420	F07	55	70	M8	19	120	11,8	165	191	
		300	216	165,1	127															19			13,9
	2½"	150	191	177,8	139,7	4	19,1	104,6	22,4	1,6	158	165	600	F10	70	102	M10	22	200	15,5	267	310	
300		241	190,5	149,3	22,3															19,3			
3"	150	203	190,5	152,4	4	19,1	127	23,9	1,6	158	165	600	F10	70	102	M10	22	200	18,2	296	343		
	300	283	209,5	168,1															22,3			21,4	
4"	150	229	228,6	190,5	8	19,1	157,2	23,9	1,6	158	165	600	F10	70	102	M10	22	200	20,3	233	270		
	300	305	254	200,1															22,3			24,6	
4"S	150	229	228,6	190,5	8	19,1	157,2	23,9	1,6	173	180	600	F12	85	125	M12	22	300	24,6	763	885		
	300	305	254	200,1															22,3			28,9	

\* inclusive 100% safety factor for actuators

**Order Example: F-2-ISO-STANDARD DN50-PN40-1.4408**

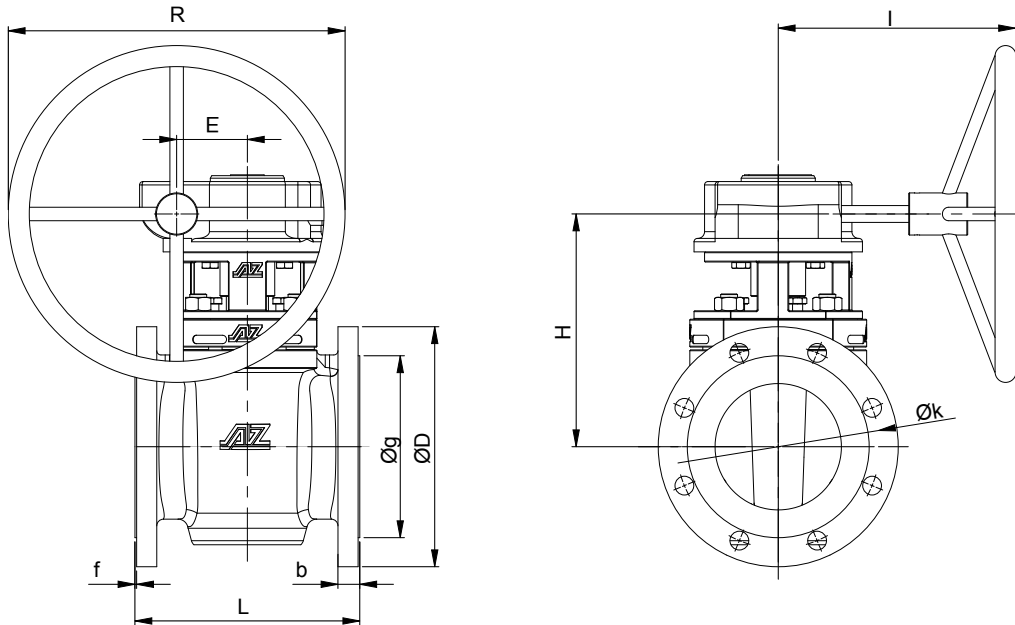
F = flange, 2 = two-way, ISO-STANDARD= Type,

DN50 = size, PN40 = rating,

1.4408 = body material

# TYPE ISO - STANDARD

Dimensions DN 125 - 500 NPS 5" - 20" acc. to DIN / ASME



DN	PN	L	øD	flange bore			øg	b	f	gear (Pro-Gear)					flange DIN ISO 5211			dihe-dron	torque.* [Nm]	weight [kg]	Kvs-value [m³/h]	Cv-value [US.gal/min]	
				øk	No.	ø				Typ	Typ	d1	d2	d3									
DIN EN 10921 / 568-1	125	10-16	325	250	210	8	18	22	3	84	400	277	290	Q1500-S	F16	130	165	M20	27	900	65	852	988
		25-40		270	220		26																
	150	10-16	350	285	240	8	22	22	3	84	400	277	290	Q1500-S	F16	130	165	M20	27	900	70	912	1058
		25-40		300	250		26																
	200	10-16	400	340	295	8/12	22	24	3	96,5	600	320	350	Q2000-S	F16	130	165	M20	36	1200	125	1583	1836
		25 40		360 375	310 320		12																
	250	10 16	450	395 405	350 355	12	22 26	26	3	137,5	600	372	465	Q6500-S	F16	130	165	M20	36	1500	160	1949	2261
		25 40		425 450	370 385		12																
	300	10 16	500	445 460	400 410	12	22 26	26	4	137,5	600	392	465	Q6500-S	F16	130	165	M20	36	2600	170	3314	3844
		25 40		485 515	430 450		16																
	350	10 16	550	505 520	460 470	12	22 26	26	4	137,5	600	460	465	Q6500-S	F25	200	254	M16	46	5500	210	4473	5189
		25 40		555 580	490 510		16																
	400	10 16	600	565 580	515 525	16	26 30	26	4	137,5	600	460	465	Q6500-S	F25	200	254	M16	46	5500	305	6245	7244
		25 40		620 660	550 585		16																
	450	10 16	650	615 640	565 585	20	26 30	28	4	180	600	485	520	Q12000-S	F30	230	298	M20	55	6400	**	**	**
		25 40		670 685	600 615		20																
500	10 16	700	670 715	620 650	20	26 33	28	4	180	600	510	520	Q12000-S	F30	230	298	M20	55	7500	**	**	**	
	25 40		730 755	660 670		20																	36 42
ASME B 16.5 / 16.10	5"	150	254	255	215,9	8	22,4	185,7	2	84	400	277	290	Q1500-S	F16	130	165	M20	27	900	**	852	988
		300	325	280	235		22,4																
	6"	150	267	280	241,3	8	22,4	215,9	2	84	400	277	290	Q1500-S	F16	130	165	M20	27	900	60	912	1058
		300	403	320	269,9		12																
	8"	150	292,1	345	298,5	8	22,4	269,9	2	96,5	600	320	350	Q2000-S	F16	130	165	M20	36	1200	94	1583	1836
		300	419,1	380	330,2		12																
	10"	150	330,2	405	362	12	25,4	302	2	137,5	600	372	465	Q6500-S	F16	130	165	M20	36	1500	127	1949	2261
		300	457	445	387,4		16																
	12"	150	355,6	485	431,8	12	25,4	381	2	137,5	600	392	465	Q6500-S	F16	130	165	M20	36	2600	153	3314	3844
		300	502	520	450,8		16																
	14"	150	550	535	476,3	12	28,4	412,8	2	137,5	600	460	465	Q6500-S	F25	200	254	M16	46	5500	180	4473	5189
		300	585	514,4	20		31,7																
	16"	150	600	595	539,8	16	28,4	469,9	2	137,5	600	460	465	Q6500-S	F25	200	254	M16	46	5500	246	6245	7244
		300	650	571,5	20		35																
	18"	150	432	636	577,9	16	31,8	533,4	2	180	600	485	520	Q12000-S	F30	230	298	M20	55	6400	**	**	**
		300	710	628,6	24		35																
20"	150	457	700	635	20	31,8	584,2	2	180	600	510	520	Q12000-S	F30	230	298	M20	55	7500	**	**	**	
	300	775	685,8	24		35																	64

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

Order Example: F-2-ISO-STANDARD DN250-PN40-1.4408

F = flange, 2 = two-way, ISO-STANDARD= Type  
 DN250 = size, PN40 = rating,  
 1.4408 = body material



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