



DISCO CHECK VALVES

SERIES

930 | 931 | 932 | 932-HD | 936

AWS
APPARATEBAU

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GENERAL DESCRIPTION

DISCO CHECK VALVES



Description and intended purpose

AWS disco check valves are suitable for universal use in piping systems for the transport of liquid and gaseous substances as well as in plants or environments in which particularly high demands are placed on the material. They can be installed directly between flanges (PN 6 - PN 160 or Class 150 - Class 900).

AWS disco check valves are maintenance-free.

Function

AWS disco check valves require a low opening pressure. The resulting opening force pushes the disc against a spring and, if necessary, also the weight force of the disc (depending on the installation position), so that the medium can flow. If the inlet pressure drops or if the backpressure exceeds the inlet pressure, the valve closes and seals against the medium by means of the soft seat or the metal seat.

WHY CHOOSE AWS

DISCO CHECK VALVES?

IN BRIEF:

Many years of experience in the production of check valves

In-house assembly department with maximum flexibility and expertise

Advice and technical design via in-house design and engineering team

High availability ensuring short delivery times of standard articles

QUALITY AND TESTING AT AWS:

Own test benches for pressure and leak tests in accordance with EN 12266-1, API 598 and other common standards

Experience and routine in the preparation of works and acceptance test certificates in accordance with DIN EN 10204 (2.2, 3.1 or 3.2 certificate)

Regular auditing of processes and quality mechanisms by TÜV Süd, discerning customers and other external bodies

In-house spectral analyses for metallic materials

Additional quality assurance measures (external and internal), for example corrosion testing, dye penetrant testing, X-ray testing, preparation of QCPs, etc.

OVERVIEW MATRIX

DISCO CHECK VALVES

DESCRIPTION

		930	931		932		932-HD	936
NOMINAL SIZES		DN 15–DN 100	DN 15–DN 100	DN 125–DN 200	DN 15–DN 100	DN 125–DN 300	DN 15–DN 100	DN 15–DN 100
FLANGE CONNECTION *1		PN 6 *2/ PN 10/PN 16/ PN 25/PN 40 Class 150 *2	PN 6/PN 10/PN 16 Class 150		PN 6 / PN 10 / PN 16 / PN 25 / PN 40 Class 150/ Class 300	PN 10 / PN 16 / PN 25 / PN 40 Class 150/ Class 300 *2	PN 63/ PN 100 / PN 160 Class 600/ Class 900	PN 10
PRESSURE		max. 40 bar	max. 16 bar		max. 50 bar		max. 160 bar	max. 10 bar
TEMPERATURE RANGES		-20 °C to +300 °C	-10 °C to +200 °C	-20 °C to +300 °C	-196 °C to +400 °C*3		-200 °C to +450 °C*3	-20 °C to +120 °C
MATERIALS AVAILABLE *4	Stainless steel	x	–	–	x	x	x	–
	Brass	–	x	–	–	–	–	–
	Alu bronze	–	–	–	x	–	–	–
	Carbon steel	–	–	–	x	x	–	–
	Superduplex	–	–	–	x	x	x	–
	Ductile iron	–	–	x	–	–	–	–
	PVC	–	–	–	–	–	–	x
	PP	–	–	–	–	–	–	x
	PVDF	–	–	–	–	–	–	x
SEALS AVAILABLE		Metal, NBR, EPDM, FKM, PTFE	Metal, NBR, EPDM, FKM		Metal, NBR, EPDM, FKM, PTFE		Metal, NBR, EPDM, FKM, PTFE	NBR, EPDM, FKM, PTFE
DIFFERENT OPENING PRES- SURES AS SPECIAL OPTION		–	–		x		x	x

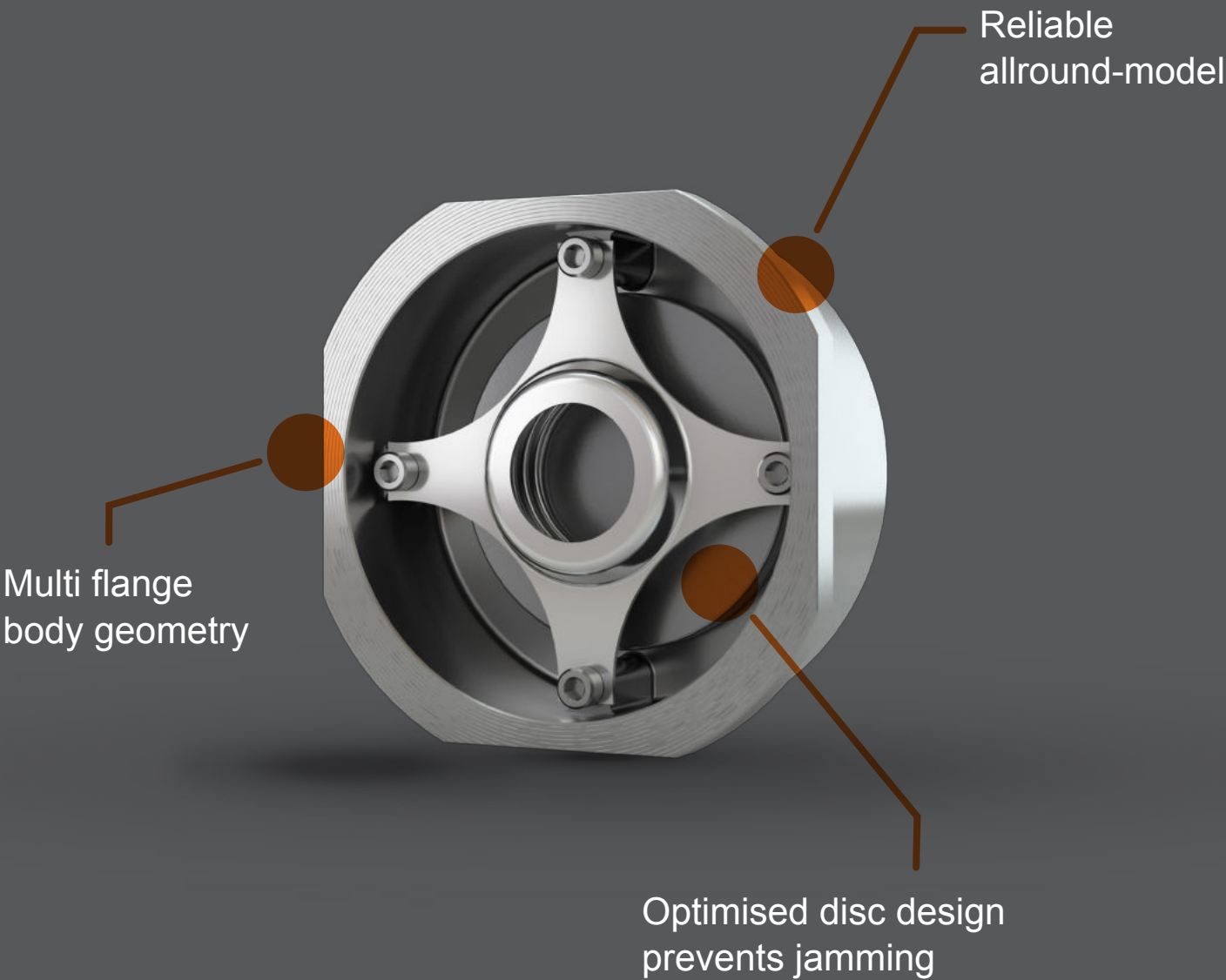
*1 other flange connections on request *2 not for at all nominal sizes *3 higher or lower temperatures on request *4 other materials on request

... AND BECAUSE WE KNOW

WHAT MATTERS IN YOUR INDUSTRY!

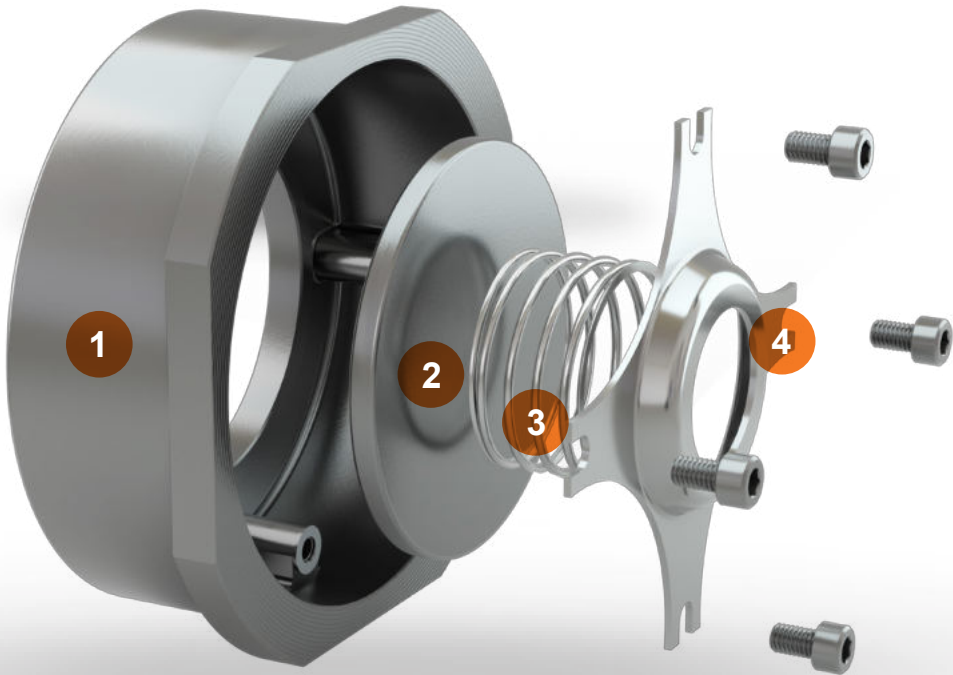


TECHNICAL DATA
DISCO CHECK VALVE | SERIES 930



Nominal sizes
DN 15 - DN 100
Flange connection
PN 6 - PN 40 | Class 150
FTF (face-to-face) dimensions
DIN EN 558, Series 49
Temperature range
-20 °C to +300 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 930



- 1. Body
- 2. Disc
- 3. Spring
- 4. Spring cross

Design	Body	Disc	Spring cross	Spring	Pressure range*1
1	1.4408	1.4408 *2	1.4436	1.4436	0 to max. 40 bar

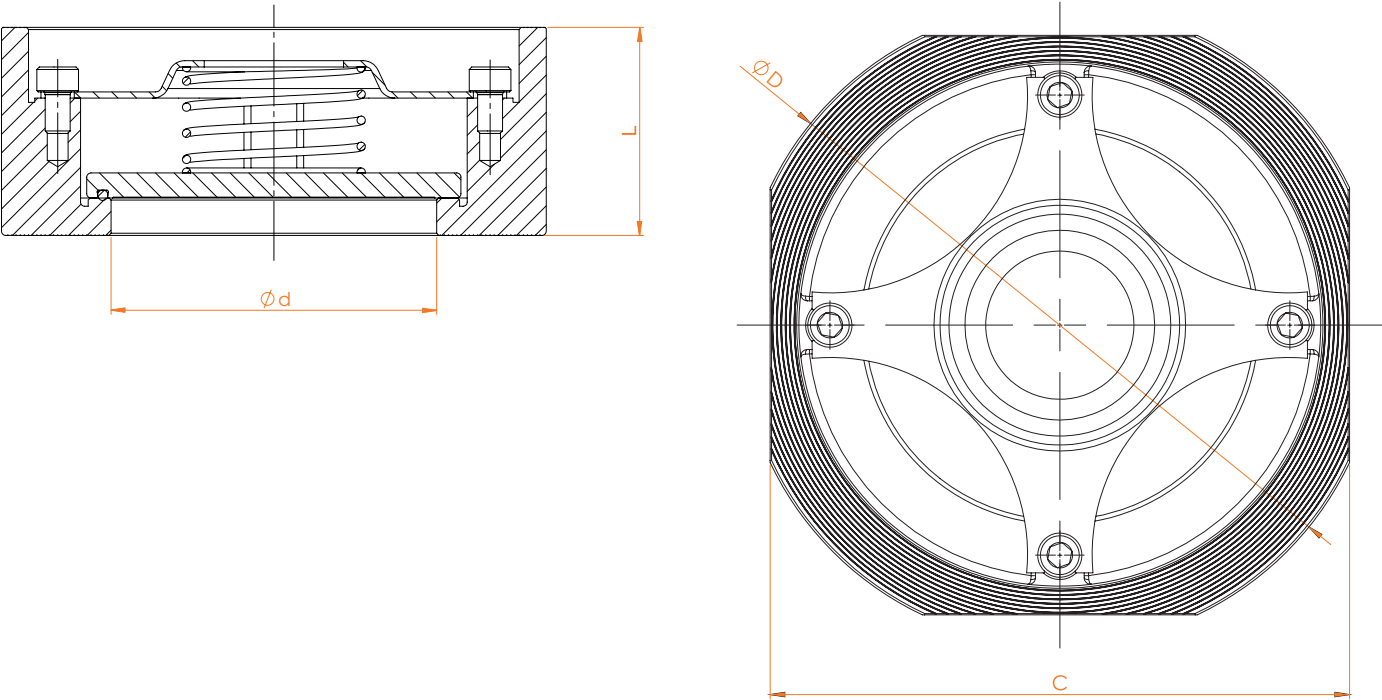
*1 max. allowable pressure is dependent on the temperature
*2 soft sealing valve with disc made of 1.4571

Nominal size	Suitable flanges					
	PN 6	PN 10	PN 16	PN 25	PN 40	ANSI 150
DN 15	-	x	x	x	x	-
DN 20	x	x	x	x	x	-
DN 25	x	x	x	x	x	-
DN 32	-	x	x	x	x	-
DN 40	x	x	x	x	x	-
DN 50	x	x	x	x	x	x
DN 65	x	x	x	x	x	-
DN 80	x	x	x	x	x	x
DN 100	x	x	x	x	x	x

Seal	Temperature	Leakage rate*3
Metal seated	-20 °C to +300 °C	≥G
NBR	-20 °C to +100 °C	A
EPDM	-20 °C to +150 °C	A
FKM	-15 °C to +200 °C	A
PTFE	-20 °C to +250 °C	A

*3 acc. to EN 12266-1

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 930

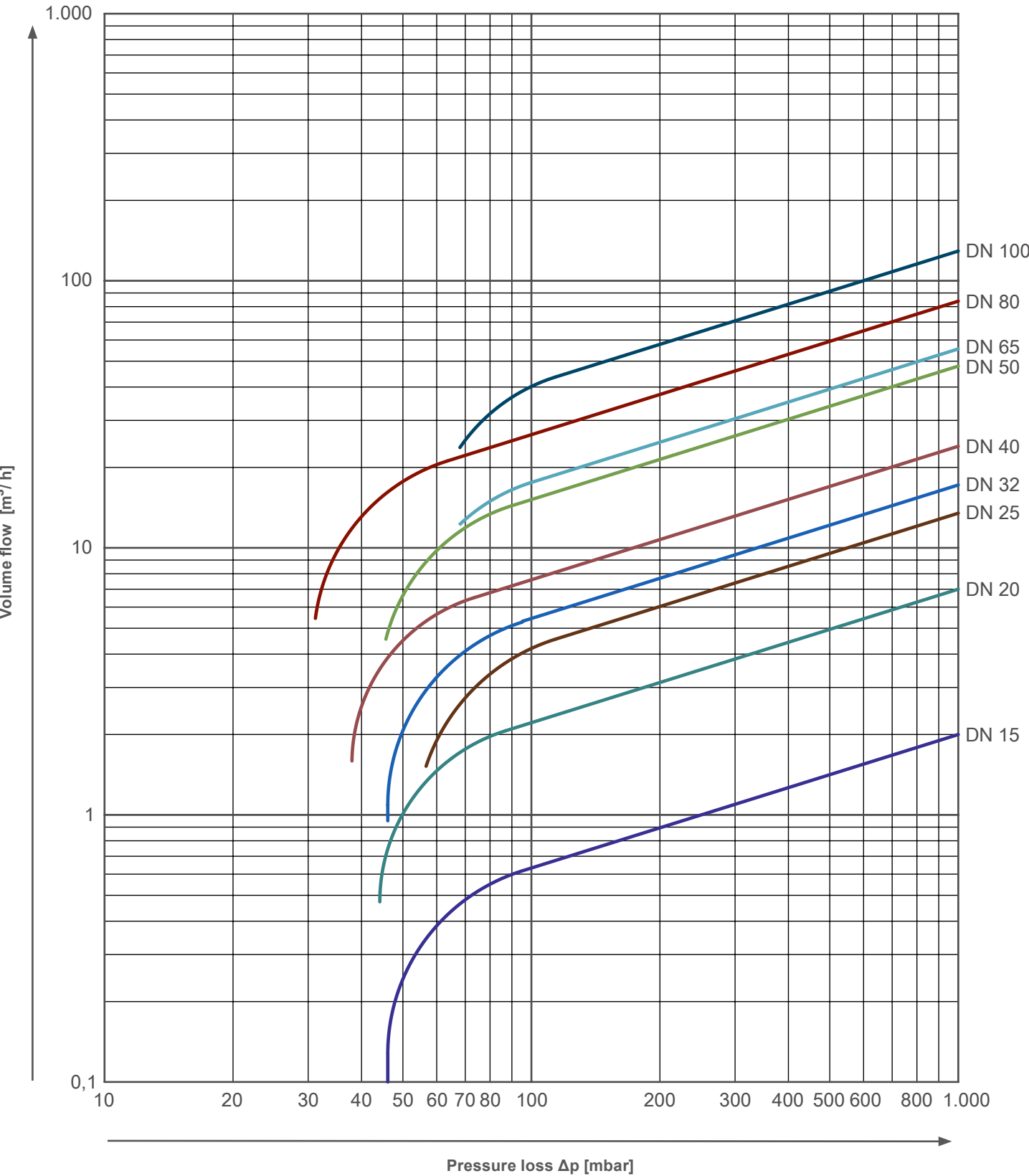


Nominal size	Ø D	Ø d	C	L	Kv value [m³/h]	Opening pressure [mbar]			w/o spring ↑	Weight [kg]
						↔	↑	↓		
DN 15	53	15	43	16	2	~ 47	~ 51	~ 43	~ 4	0.10
DN 20	63	20	53	19	7	~ 44	~ 48	~ 40	~ 4	0.16
DN 25	73	25	63	22	13	~ 57	~ 61	~ 53	~ 4	0.28
DN 32	84	30	75	28	17	~ 47	~ 52	~ 42	~ 5	0.52
DN 40	94	38	86	31.5	23	~ 38	~ 43	~ 33	~ 5	0.70
DN 50	107	47	95	40	48	~ 45	~ 52	~ 38	~7	1.10
DN 65	126	62	115	46	55	~ 50	~ 55	~ 45	~ 5	1.58
DN 80	145	77	131	50	83	~ 31	~ 38	~ 24	~7	1.78
DN 100	164	96	150	60	127	~ 55	~ 65	~ 45	~ 10	3.30

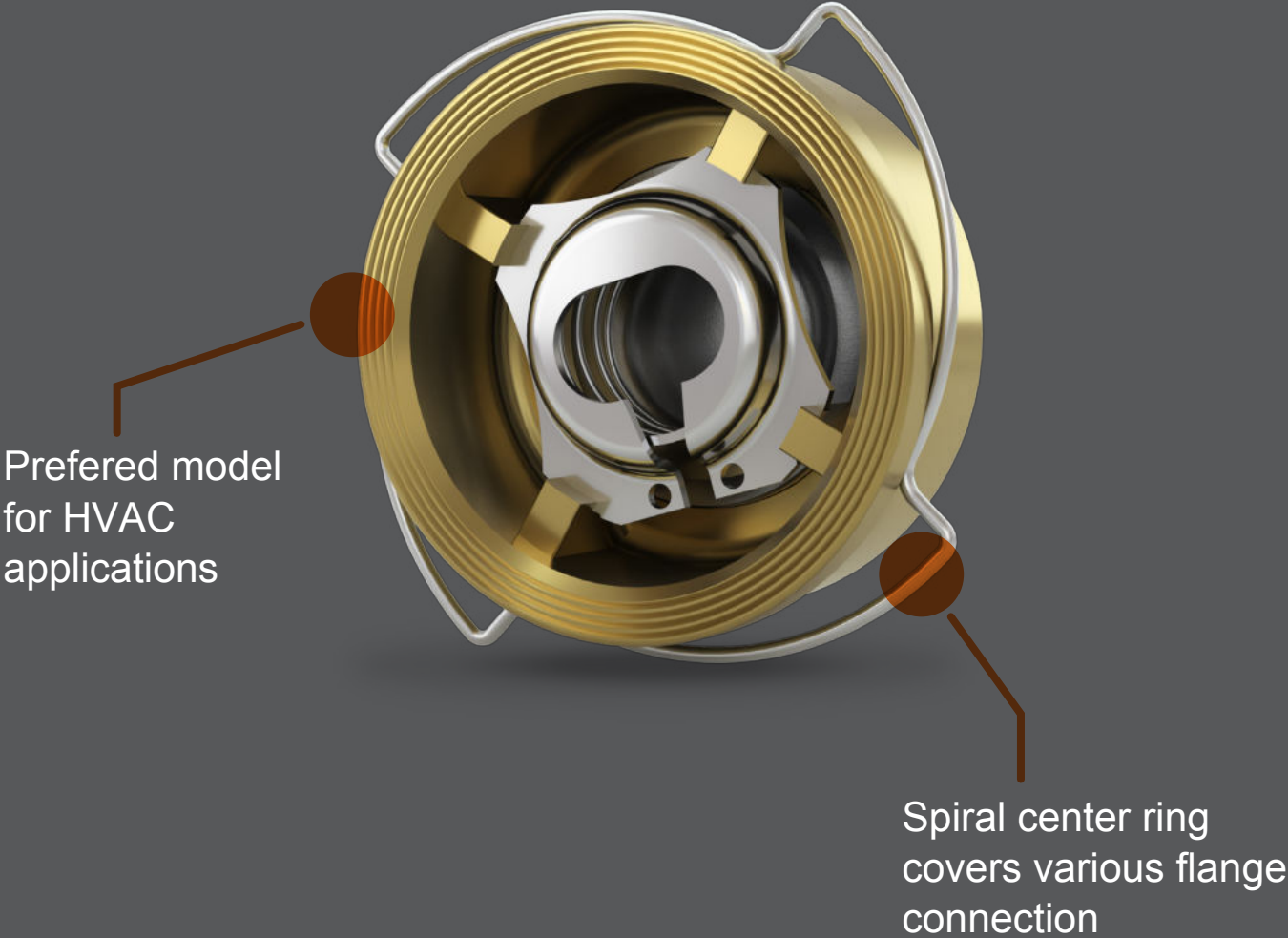
TECHNICAL DATA
DISCO CHECK VALVE | SERIES 930

Pressure-Loss Diagram Type 930

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.

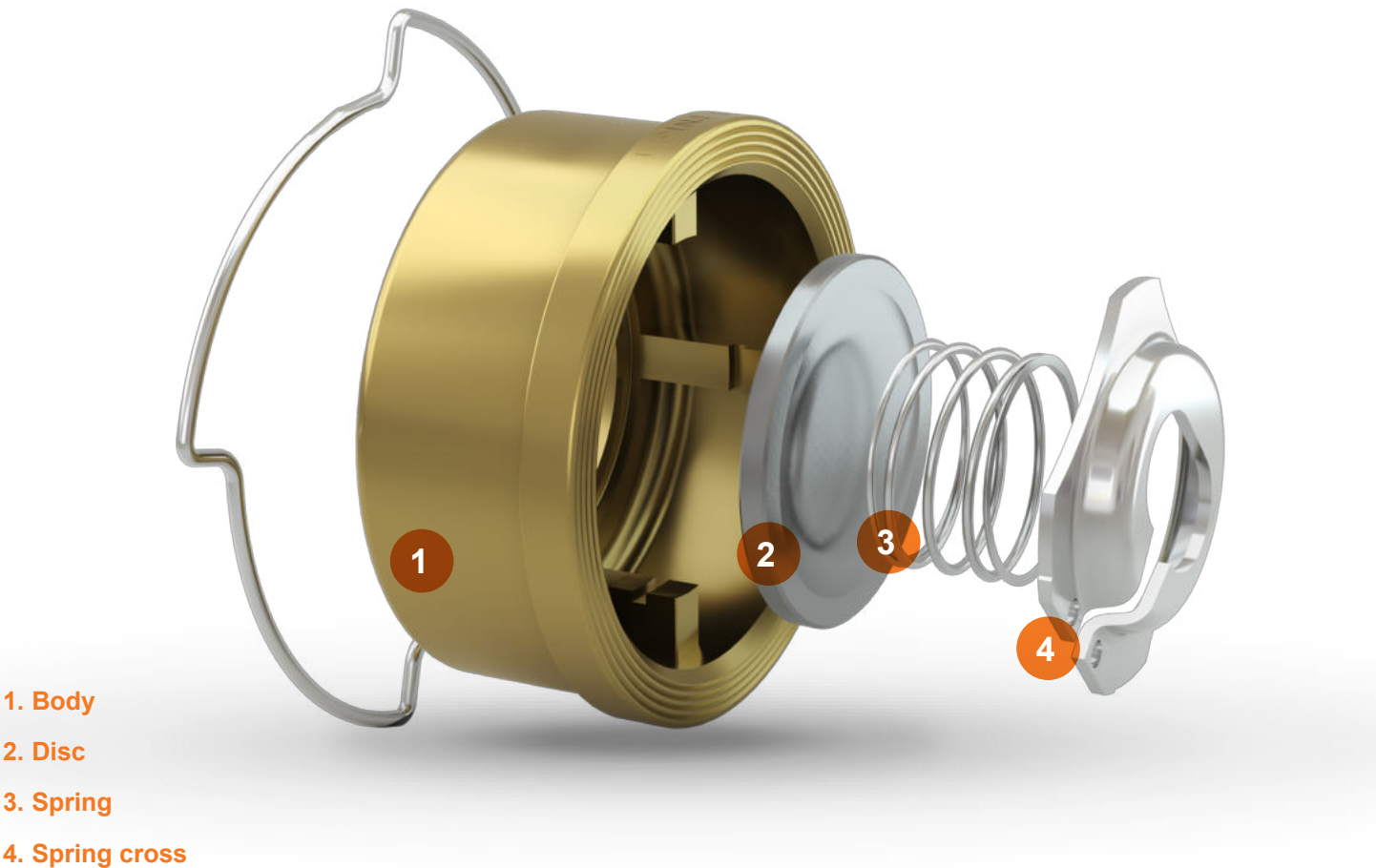


TECHNICAL DATA
DISCO CHECK VALVE | SERIES 931



Nominal sizes
DN 15 - DN 100
Flange connection
PN 6 - PN 16 | Class 150
FTF (face-to-face) dimensions
DIN EN 558, Series 49
Temperature range
-10 °C to +250 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 931



Design	Body	Disc	Spring cross	Spring	Pressure range*1
3	CW617N (2.0402)	1.4301	1.4301	1.4401	0 to max. 16 bar

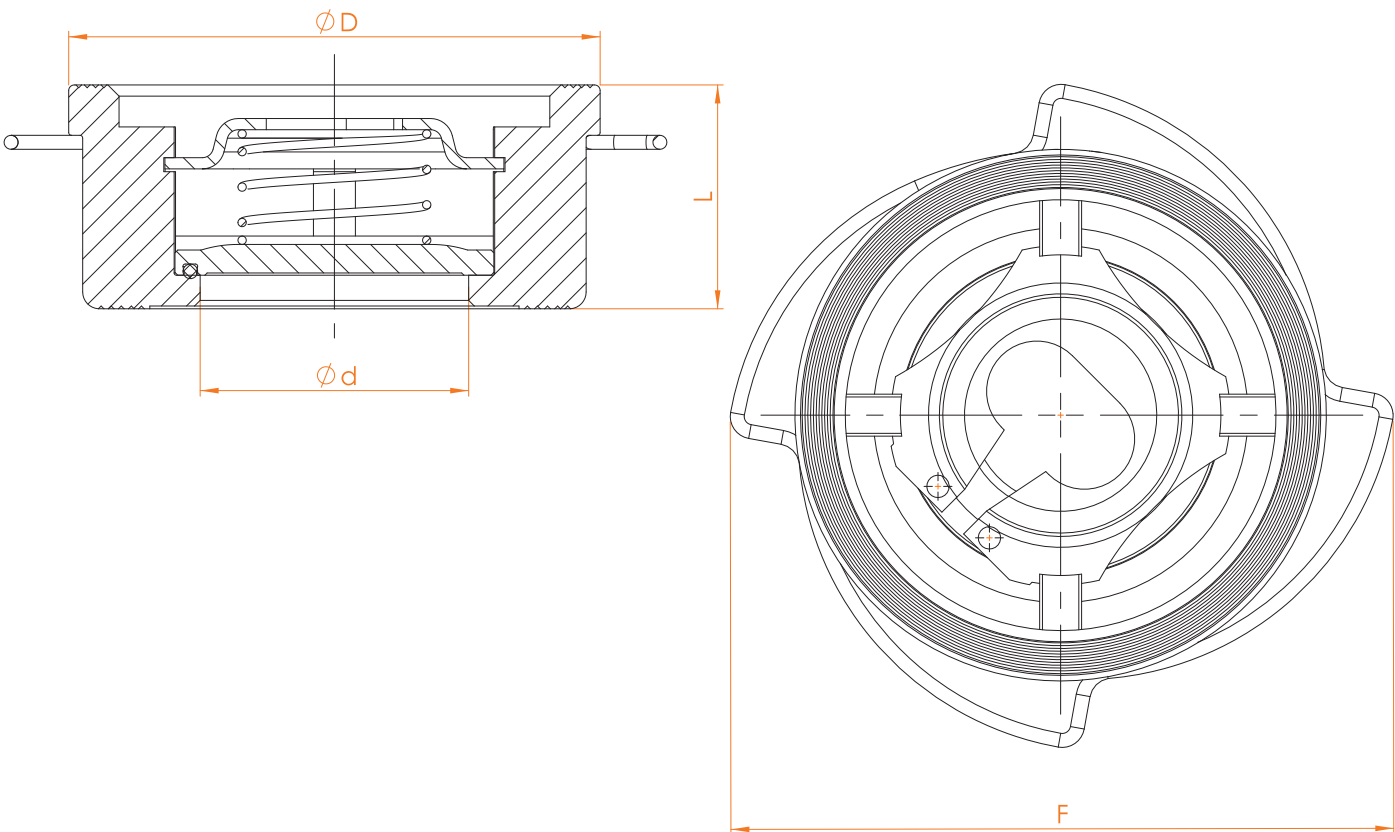
*1 max. allowable pressure is dependent on the temperature

Seal	Temperature	Leakage rate*2
Metal seated	-10 °C to +250 °C	≥G
NBR	-10 °C to +90 °C	A
EPDM	-10 °C to +120 °C	A
FKM	-10 °C to +200 °C	A

*2 acc. to EN 12266-1

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 931



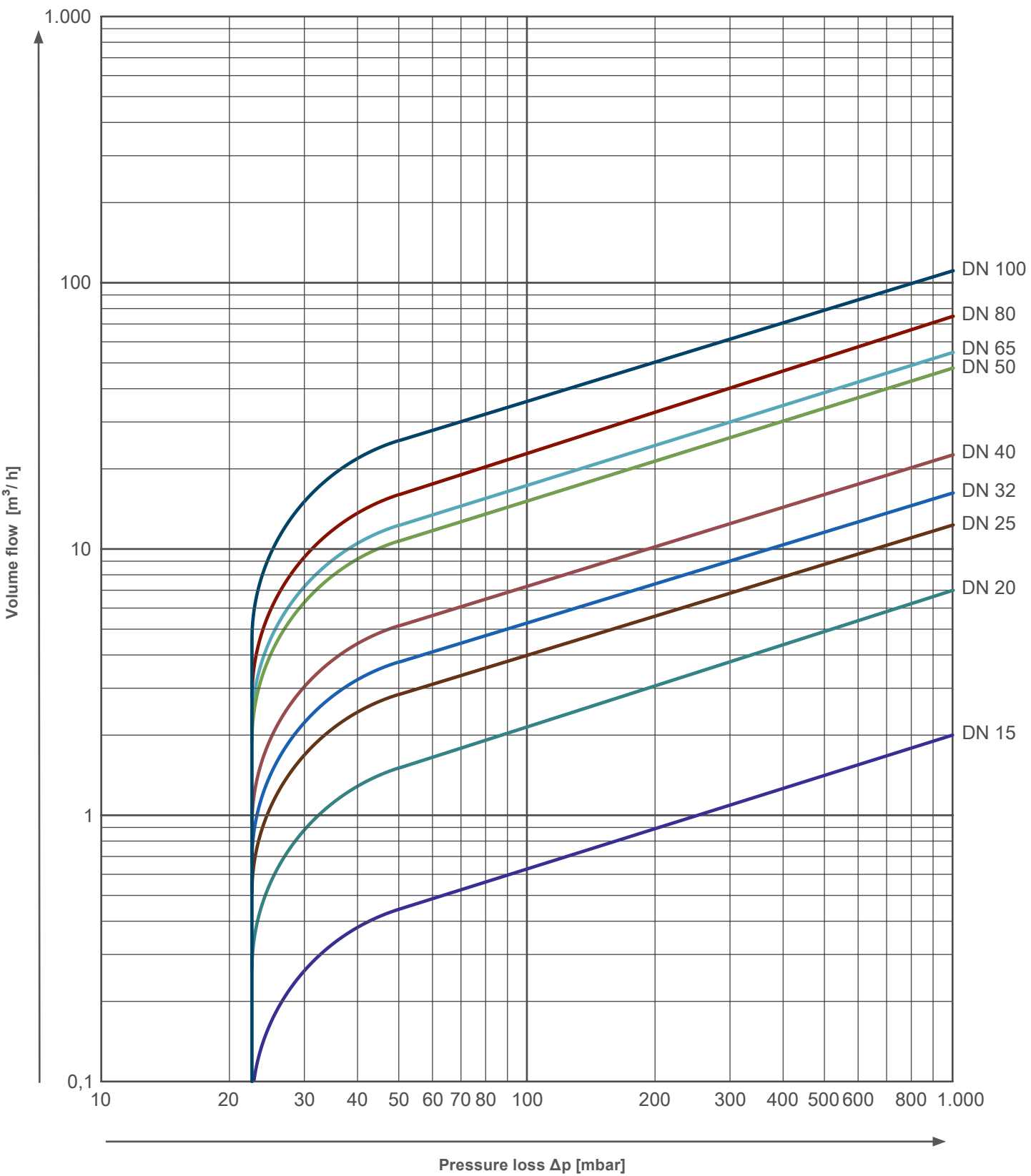
Nominal size	Ø D	Ø d	F	L	Kv value [m³/h]	Opening pressure [mbar]			w/o spring	Weight [kg]
						↔	↑	↓		
DN 15	40	15	65	16	2	~ 21	~ 24	~ 18	~ 3	0.09
DN 20	47	20	76	19	7	~ 21	~ 24	~ 18	~ 3	0.13
DN 25	56	25	86	22	13	~ 21	~ 24	~ 18	~ 3	0.20
DN 32	72	31.5	92	28	17	~ 21	~ 24	~ 18	~ 3	0.46
DN 40	82	39	107	31,5	23	~ 21	~ 25	~ 17	~ 4	0.62
DN 50	95	48	123	40	48	~ 21	~ 25	~ 17	~ 4	0.78
DN 65	115	64	148	46	55	~ 21	~ 26	~ 16	~ 5	1.4
DN 80	132	74	158	50	75	~ 21	~ 27	~ 15	~ 6	2.1
DN 100	152	89	186	60	115	~ 21	~ 28	~ 14	~ 7	3.0

TECHNICAL DATA

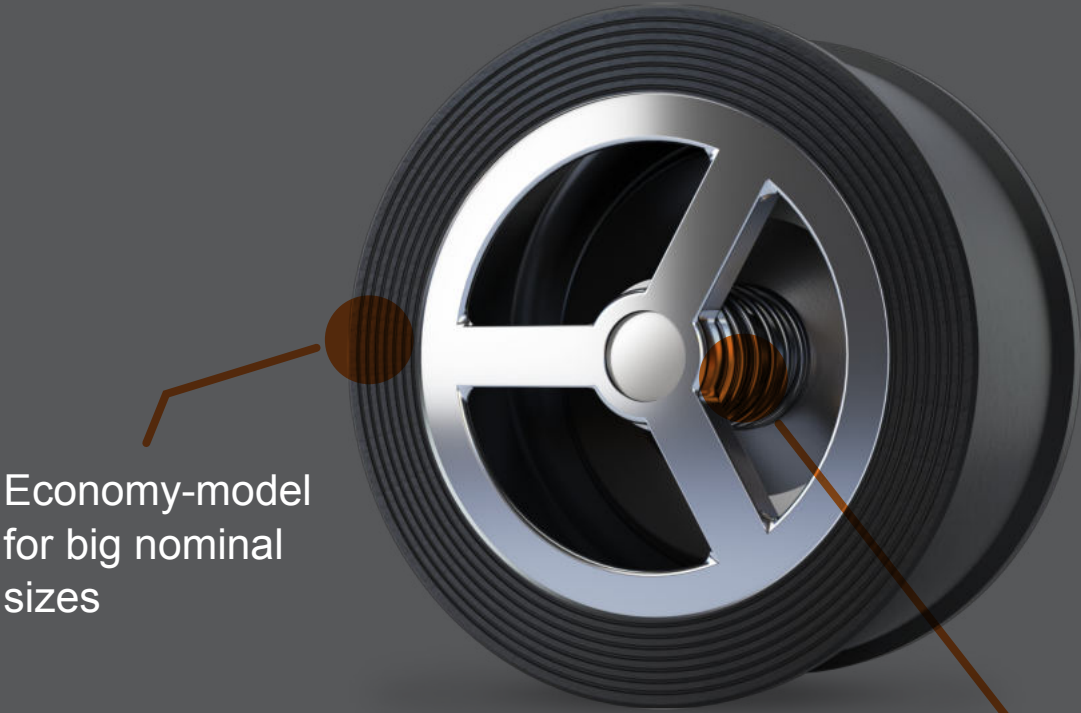
DISCO CHECK VALVE | SERIES 931

Pressure-Loss Diagram Typ 931

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.



TECHNICAL DATA
DISCO CHECK VALVE | SERIES 931



Economy-model
for big nominal
sizes

High operational
reliability by guided disc



Nominal sizes
DN 125 - DN 200
Flange connection
PN 6 - PN 16 | Class 150
FTF (face-to-face) dimension
DIN EN 558, Series 49
Temperature range
-20 °C to +200 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 931



- 1. Body
- 2. Disc
- 3. Spring
- 4. Spring cross

Design	Body	Disc	Spring cross	Spring	Pressure range*1
9	EN-GJS-400-18-LT (GGG40.3)	EN-GJS-400-18-LT (GGG40.3)	1.4408	1.4571	0 to max. 16 bar
9.1	EN-GJS-400-18-LT (GGG40.3)	1.4308	1.4408	1.4571	0 to max. 16 bar

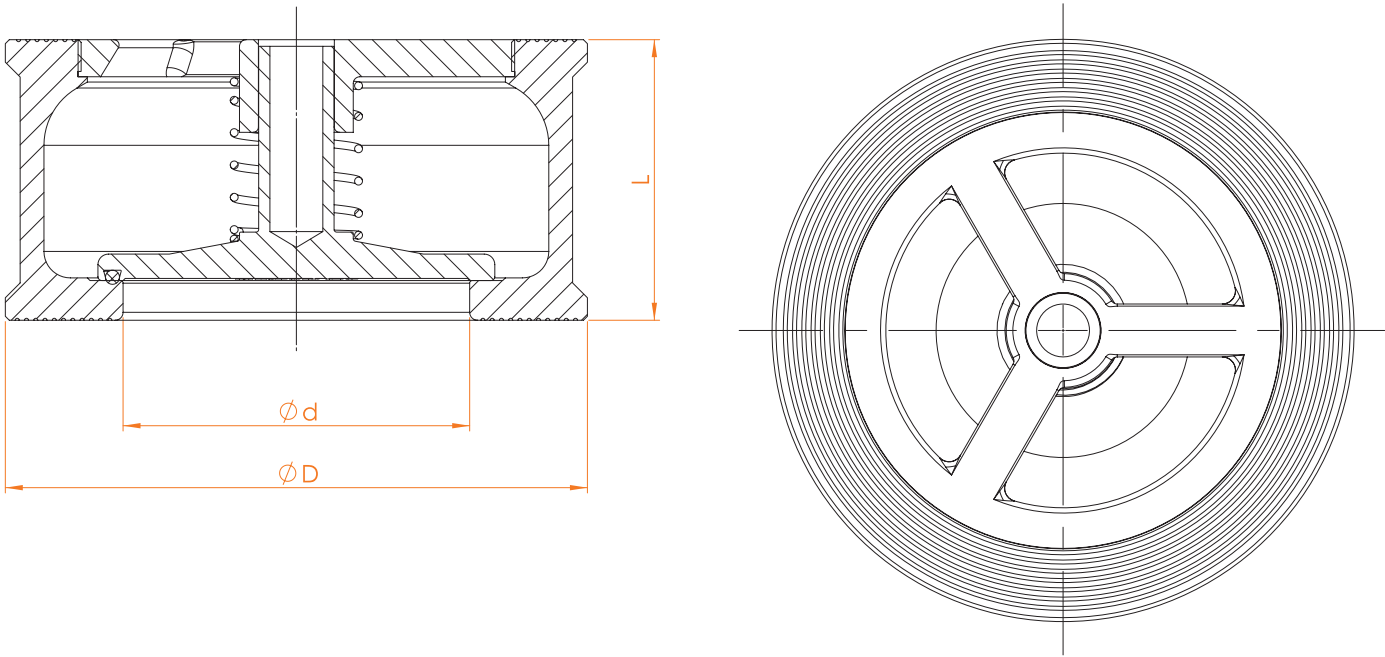
*1 max. allowable pressure is dependent on the temperature

Seal	Temperature	Leakage rate*2
Metal seated	-20 °C to +200 °C	G
NBR	-20 °C to +100 °C	A
EPDM	-20 °C to +150 °C	A
FKM	-15 °C to +200 °C	A

*2 acc. to EN 12266-1

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 931



Nominal size	Ø D			Ø d	L	Kv value [m³/h]	Opening pressure [mbar]			w/o spring ↑	Weight*3 [kg]
	PN 6	PN 10 / 16	150 lbs				↔	↑	↓		
DN 125	183	194	194	112	90	222	~ 30	~ 39	~ 21	~ 9	7.2
DN 150	208	220	220	131	106	288	~ 30	~ 41	~ 19	~ 11	10.8
DN 200	263	275	275	175	140	530	~ 30	~ 42	~ 18	~ 12	18.9

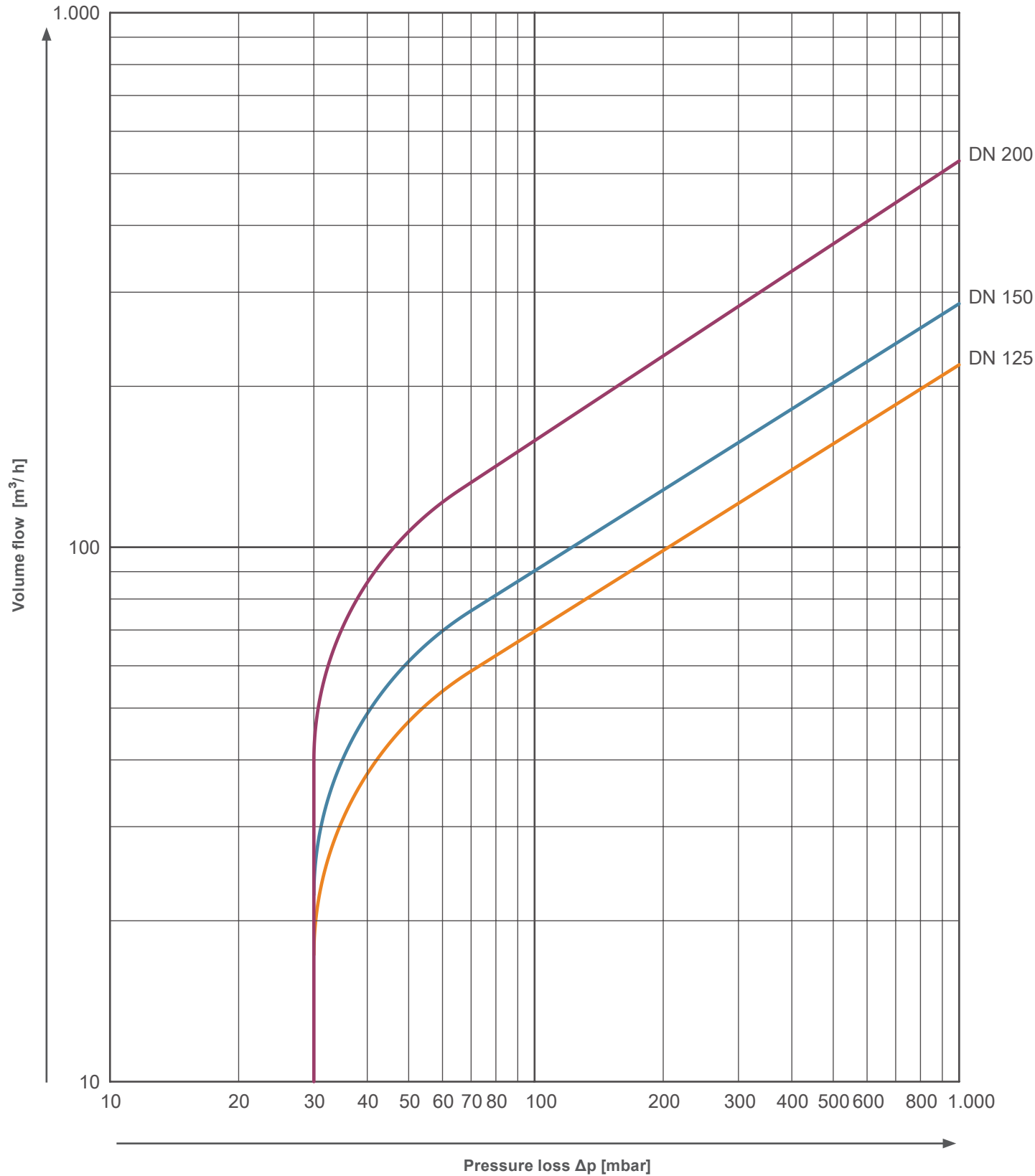
*3 weight may vary slightly, depending on the design

TECHNICAL DATA

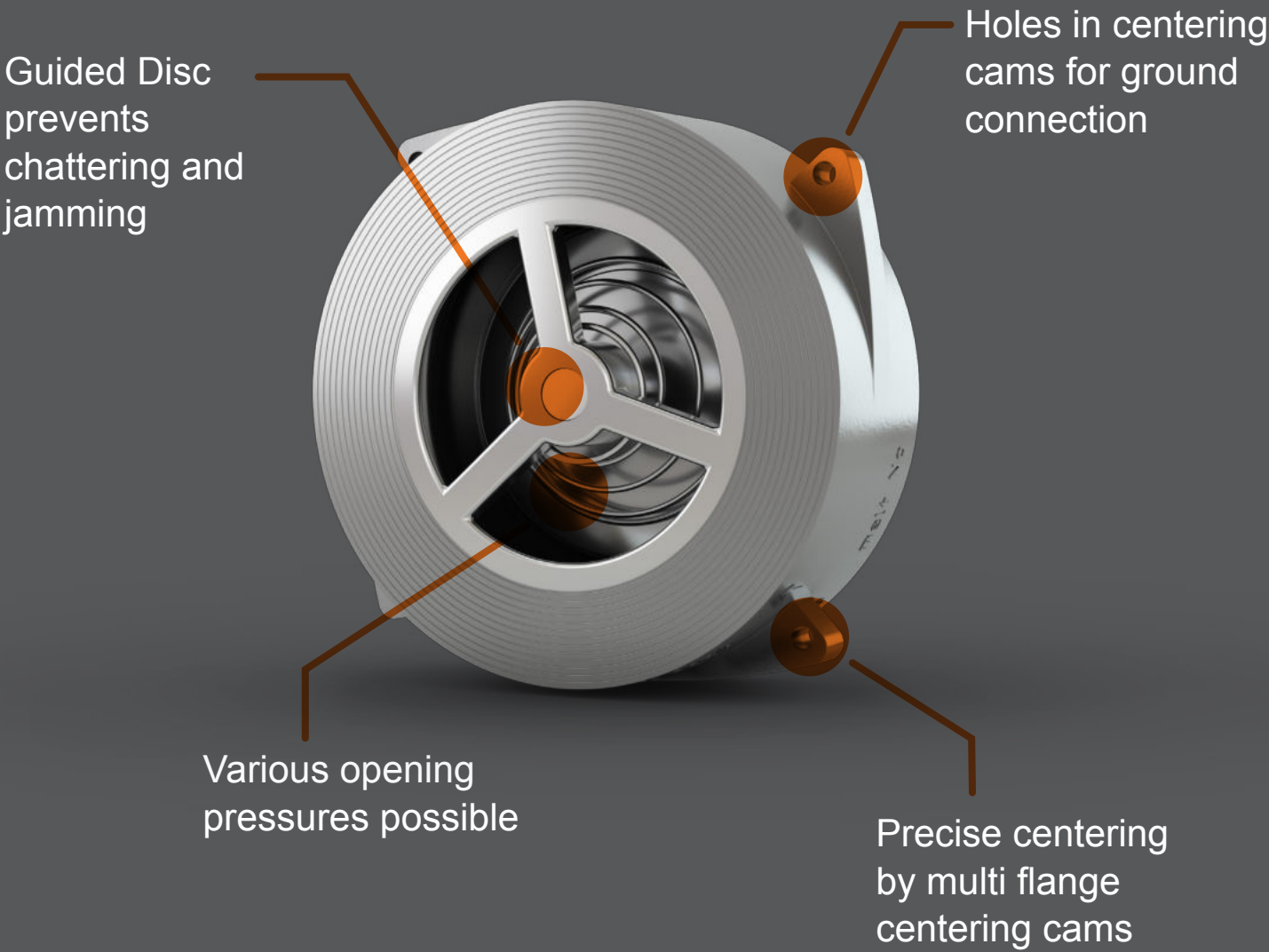
DISCO CHECK VALVE | SERIES 931

Pressure-Loss Diagram Type 931

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.



TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932



Nominal sizes
DN 15 - DN 100
Flange connection
PN 6 - PN 40 | Class 150 - 300
FTF (face-to-face) dimensions
DIN EN 558, Series 49
Temperature range
-196 °C to +400 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932



- 1. Body
- 2. Disc
- 3. Spring
- 4. Spring cross

Design	Body	Disc	Spring cross	Spring	Pressure range*1
1	1.4408	1.4408	1.4408	1.4571	0 to max. 50 bar
4	CC333G (2.0975)	CC333G (2.0975)	CC333G (2.0975)	Hastelloy C4 (2.4610)	0 to max. 50 bar
4.1	CC333G (2.0975)	1.4408	1.4408	1.4571	0 to max. 50 bar
5	1.0619, zinc plated	1.4408	1.4408	1.4571	0 to max. 40 bar
6	1.4469 (Superduplex)	1.4469 (Superduplex)	1.4469 (Superduplex)	Hastelloy C4 (2.4610)	0 to max. 50 bar
6.1	1.4469 (Superduplex)	1.4408	1.4408	1.4571	0 to max. 50 bar

*1 max. allowable pressure is dependent on size and temperature

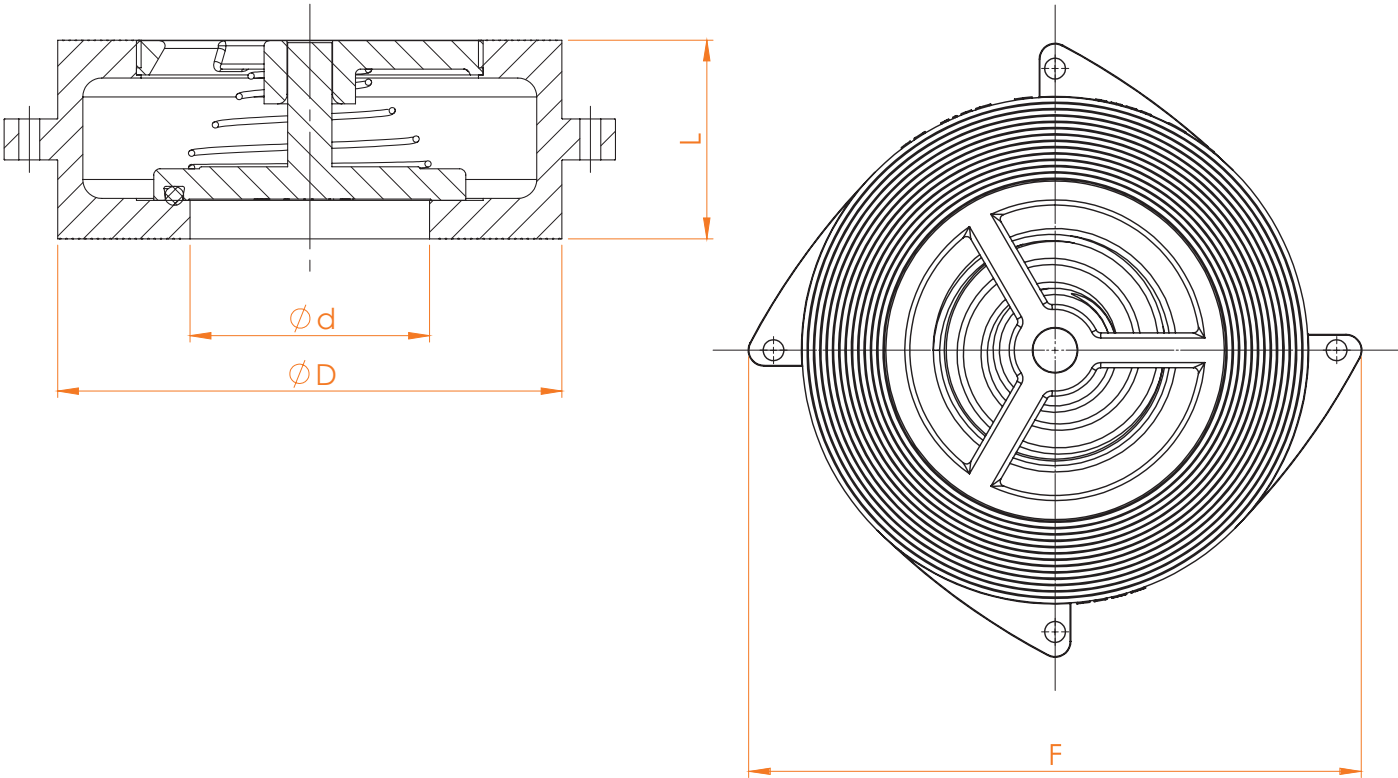
Seal	Design	Temperature	Leakage rate*2
Metal seated	1	-196 °C to +400 °C*3	G
	4 / 4.1	-10 °C to +350 °C*3	
	5	-10 °C to +400 °C*3	
	6 / 6.1	-10 °C to +250 °C	
NBR*4	—	-30 °C to +100 °C	A
EPDM*4	—	-65 °C to +150 °C	A
FKM*4	—	-30 °C to +230 °C	A
PTFE*4	—	-196 °C to +250 °C	A

*2 acc. to EN 12266-1
*3 temperatures above 300 °C require spring material Hastelloy C4 (low temperature limit for design 1: -100 °C)
*4 for some designs, the temperature range is additionally limited by the temperature range of the metallic parts (see temperature range for metal seated)

Seals comply with the following approvals / conformities:
NBR: DIN EN 549, BAM, REACH, RoHS etc.
EPDM: KTW UBA, DVGW W 270, WRAS, NSF, FDA, BfR XXI Kat. 4, ADI-free, 3A, USP Cl. 6, BAM, REACH, RohS etc.
FKM: DIN EN 549, ADI-frei, REACH, RoHS etc.
PTFE: KTW UBA, DVGW W 270, WRAS, FDA, BfR, ADI-free, EU 10/2011, 3A, USP Cl. 6, REACH, RoHS etc.

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 932



Nominal size	Ø D	Ø d	F	L	Kv value [m³/h]	Opening pressure* ⁵ [mbar]			w/o spring	Weight* ⁶ [kg]
						↔	↑	↓		
DN 15	43	15	57	16	4	~ 20	~ 24	~ 16	~ 4	0.12
DN 20	53	19	72	19	7	~ 20	~ 25	~ 15	~ 5	0.20
DN 25	63	25	79	22	10	~ 20	~ 25	~ 15	~ 5	0.32
DN 32	75	32	92	28	17	~ 20	~ 26	~ 14	~ 6	0.52
DN 40	80	38	97	31.5	24	~ 20	~ 27	~ 13	~ 7	0.62
DN 50	95	47	113	40	37	~ 20	~ 28	~ 12	~ 8	1.1
DN 65	115	63	137	46	61	~ 20	~ 29	~ 11	~ 9	1.7
DN 80	131	77	154	50	74	~ 20	~ 30	~ 10	~ 10	2.5
DN 100	150	97,5	186	60	115	~ 20	~ 33	~ 7	~ 13	4.0

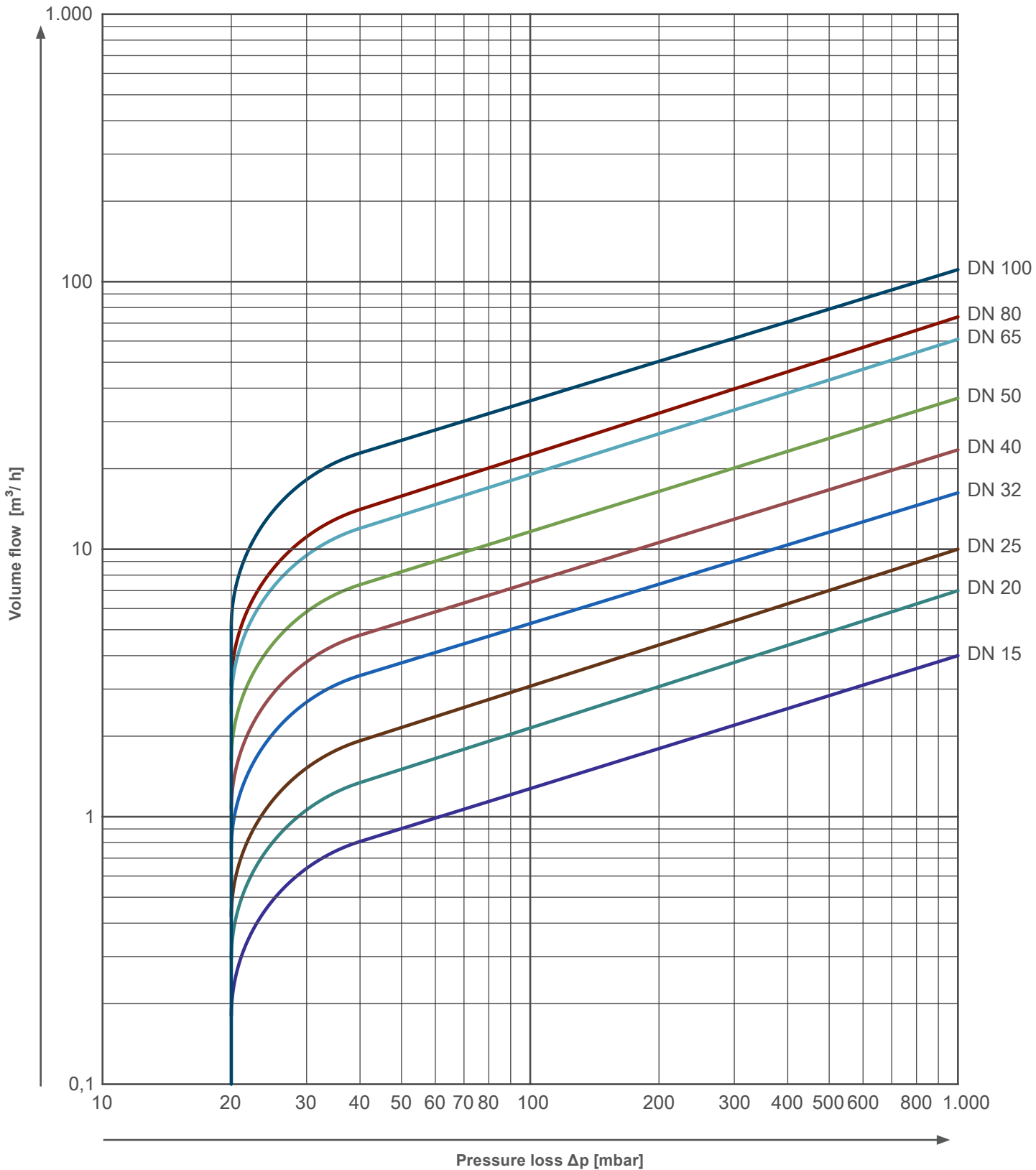
*⁵ other opening pressures on request (for high opening pressures the Kv value may be reduced if disc springs must be used)
*⁶ weight may vary slightly, depending on the design

TECHNICAL DATA

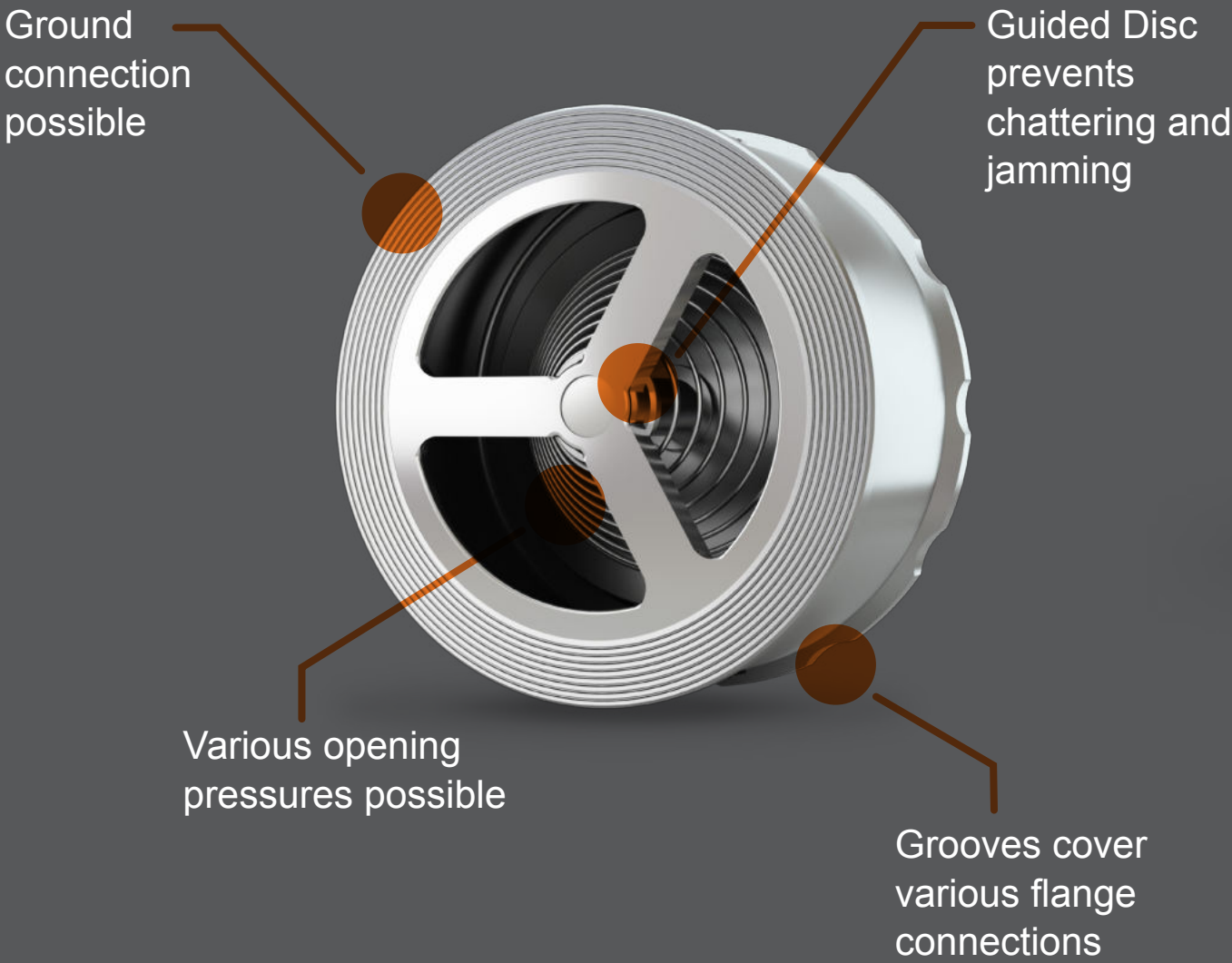
DISCO CHECK VALVE | SERIES 932

Pressure-Loss Diagram 932

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.

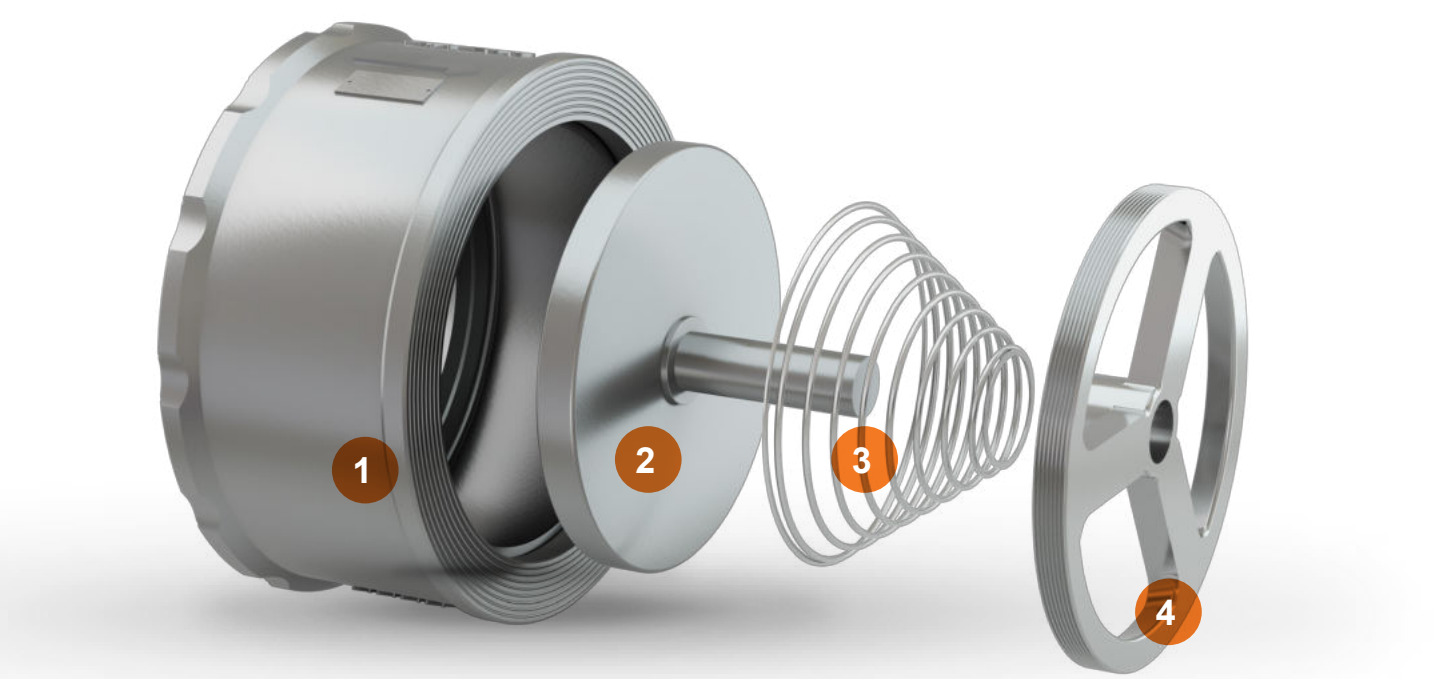


TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932



Nominal sizes
DN 125 - DN 300
Flange connection
PN 10 - PN 40 | Class 150 - 300
FTF (face-to-face) dimensions
DIN EN 558, Series 49 (DN 250 and DN 300 acc. to AWS company standard)
Temperature range
-196 °C to +400 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932



- 1. Body
- 2. Disc
- 3. Spring
- 4. Spring cross

Design	Body	Disc	Spring cross	Spring	Pressure range*1
1	1.4408	1.4408	1.4408	1.4571	0 to max. 50 bar
5	1.0619, zinc plated	1.4408	1.4408	1.4571	0 to max. 50 bar
6	1.4469 (Superduplex)	1.4469 (Superduplex)	1.4469 (Superduplex)	Hastelloy C4 (2.4610)	0 to max. 50 bar
6.1	1.4469 (Superduplex)	1.4408	1.4408	1.4571	0 to max. 50 bar

*1 max. allowable pressure is dependent on size and temperature

Seal	Design	Temperature	Leakage rate*2
Metal seated	1	-196 °C to +400 °C*3	G
	5	-10 °C to +400 °C*3	
	6 / 6.1	-10 °C to +250 °C	
NBR*4	—	-30 °C to +100 °C	A
EPDM*4	—	-65 °C bis +150 °C	A
FKM*4	—	-30 °C to +230 °C	A
PTFE*4	—	-200 °C to +250 °C	A

*2 acc. to EN 12266-1

*3 temperatures above 300 °C require spring material Hastelloy C4 (low temperature limit for design 1: -100 °C)

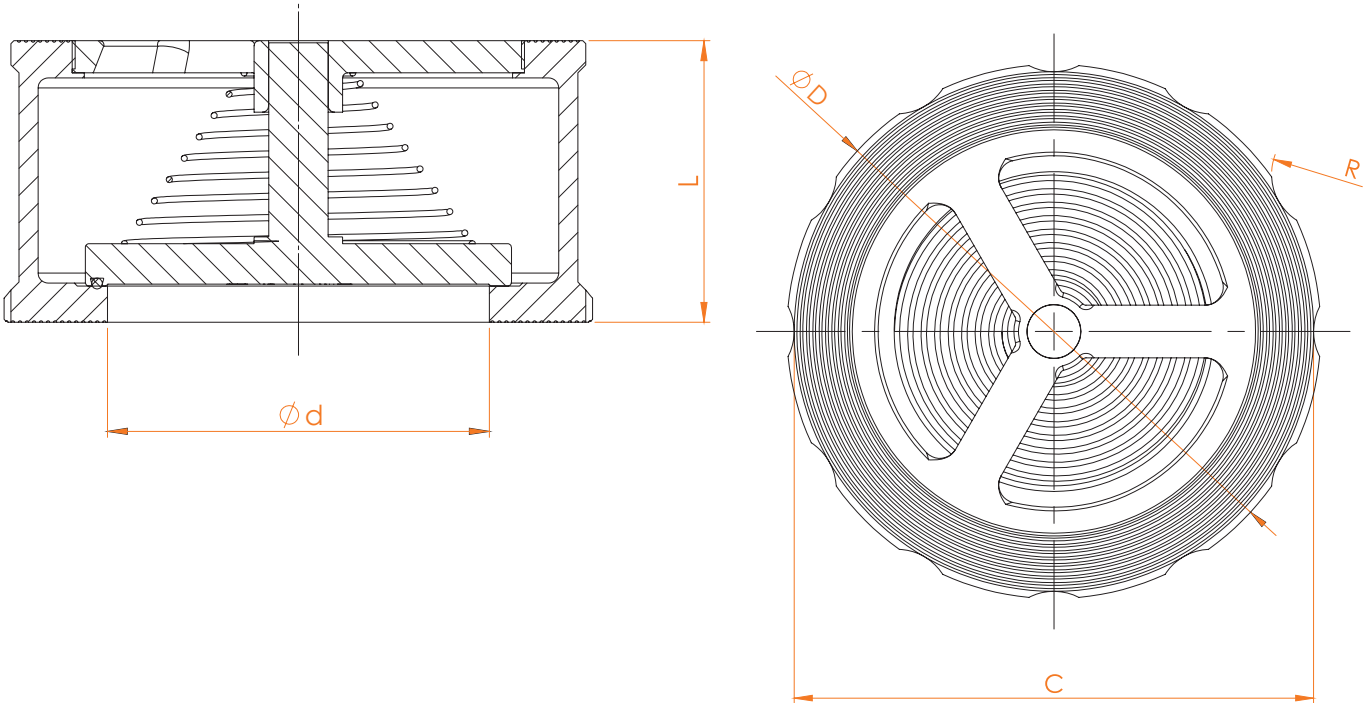
*4 for some designs, the temperature range is additionally limited by the temperature range of the metallic parts (see temperature range for metal seated)

Seals comply with the following approvals / conformities:

NBR: DIN EN 549, BAM, REACH, RoHS etc.
EPDM: KTW UBA, DVGW W 270, WRAS, NSF, FDA, BfR XXI Kat. 4, ADI-free, 3A, USP Cl. 6, BAM, REACH, RohS etc.
FKM: DIN EN 549, ADI-frei, REACH, RoHS etc.
PTFE: KTW UBA, DVGW W 270, WRAS, FDA, BfR, ADI-free, EU 10/2011, 3A, USP Cl. 6, REACH, RoHS etc.

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 932



Nominal size	C	Ø D	Ø D	C	Ø D	R	R	Ø d	L	Kv value	Opening pressure* ⁵ [mbar]			w/o spring	Weight* ⁶
	PN 10/16	PN 10/16	150 lbs	PN 25	PN 40	PN 10/16	PN 25			[m³/h]	↔	↑	↓	↑	[kg]
DN 125	194	194	194	194	194	-	-	118.5	90	201	~ 30	~ 46	~ 14	~ 16	8.4
DN 150	220	220	220	220	220	-	-	141	106	286	~ 30	~ 47	~ 13	~ 17	12.4
DN 200	275	280	280	286	294	11	30	190	140	553	~ 30	~ 51	~ 9	~ 21	23.9
DN 250	331	340	340	344	356	13	33	229	145	643	~ 40	~ 64	~ 16	~ 24	39.2
DN 300	380	386	404	404	421	11	33	280	160	867	~ 40	~ 68	~ 12	~ 38	58.3

*⁵ other opening pressures on request (for high opening pressures the Kv value may be reduced if disc springs must be used)

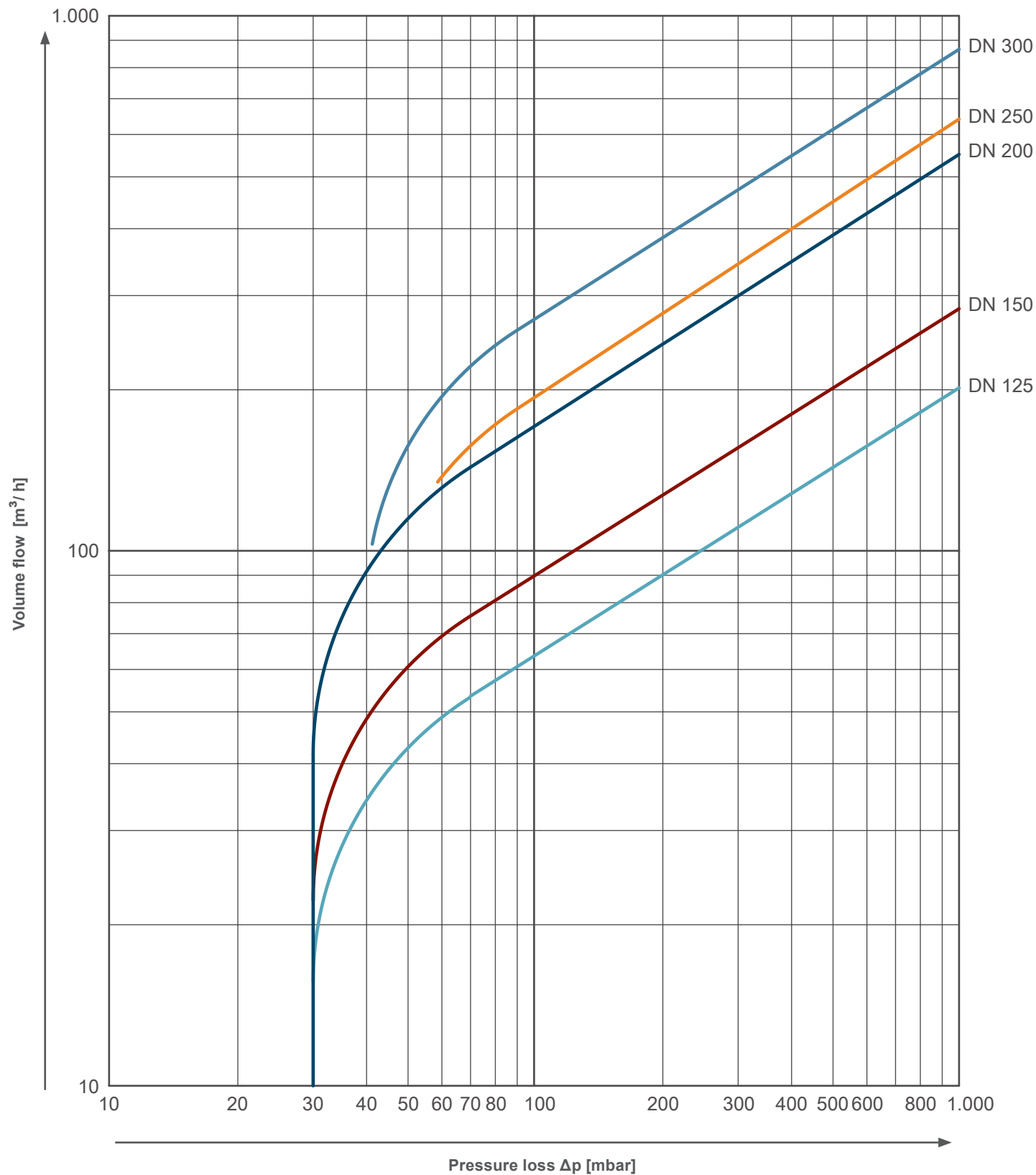
*⁶ weight may vary slightly, depending on the design

TECHNICAL DATA

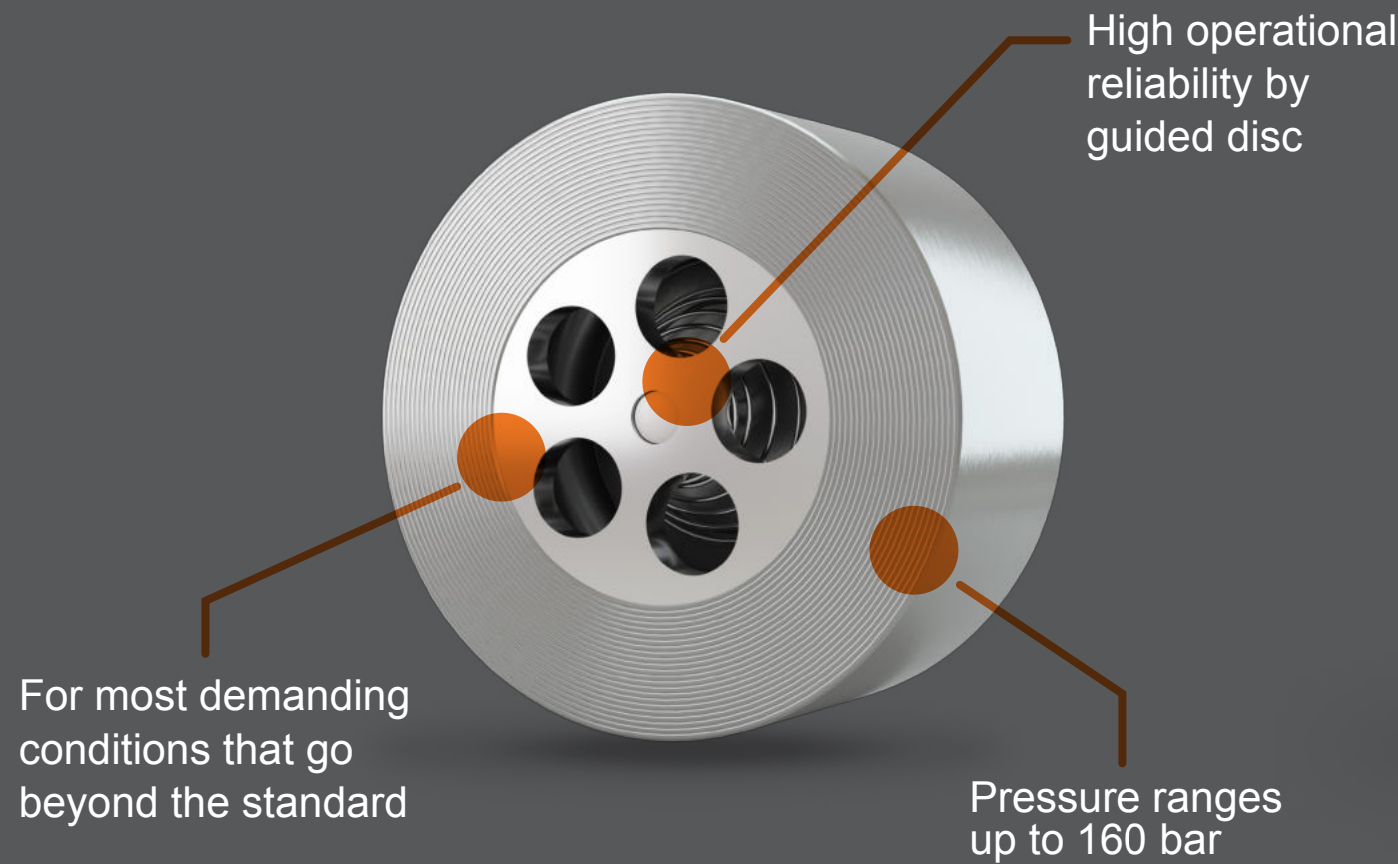
DISCO CHECK VALVE | SERIES 932

Pressure-Loss Diagram Type 932

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.

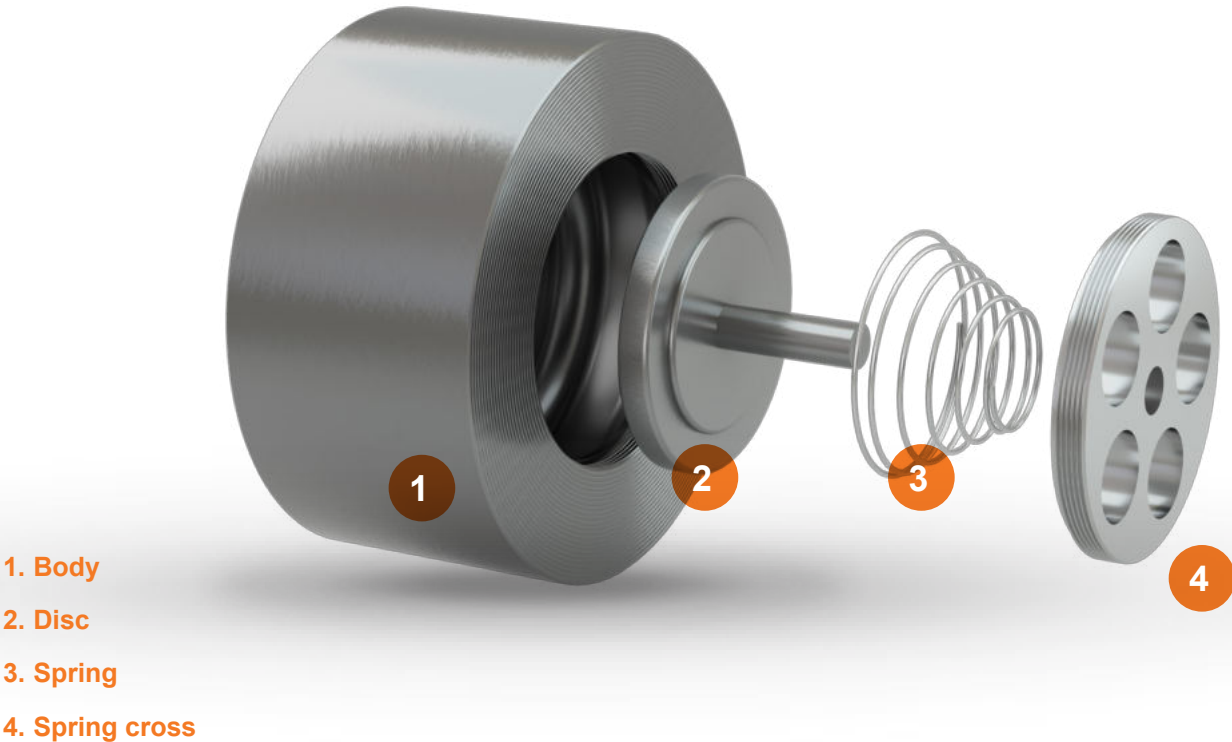


TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932-HD



Nominal sizes
DN 15 - DN 100
Flange connection
PN 63 - 160 | Class 600 - 900
FTF (face-to-face) dimensions
DIN EN 558, Series 52
Temperature range
-200 °C to +450 °C

TECHNICAL DATA
DISCO CHECK VALVE | SERIES 932-HD



Design	Body	Disc	Spring cross	Spring	Pressure range*1
1	1.4404	1.4404	1.4404	1.4571	0 to max. 160 bar
6	1.4410 (Superduplex)	1.4410 (Superduplex)	1.4410 (Superduplex)	Hastelloy C4 (2.4610)	0 to max. 160 bar

*1 max. allowable pressure is dependent on the temperature

Seal	Design	Temperature	Leakage rate*2
Metal seated	1	-200 °C to +450 °C*3	G
NBR*4	6	-10 °C to +250 °C	A
EPDM*4	—	-30 °C to +100 °C	A
FKM*4	—	-65 °C bis +150 °C	A
PTFE*4	—	-30 °C to +230 °C	A
PTFE*4	—	-200 °C to +250 °C	A

*2 acc. to EN 12266-1

*3 temperatures above 300 °C require spring material Hastelloy C4 (low temperature limit for design 1: -100 °C)

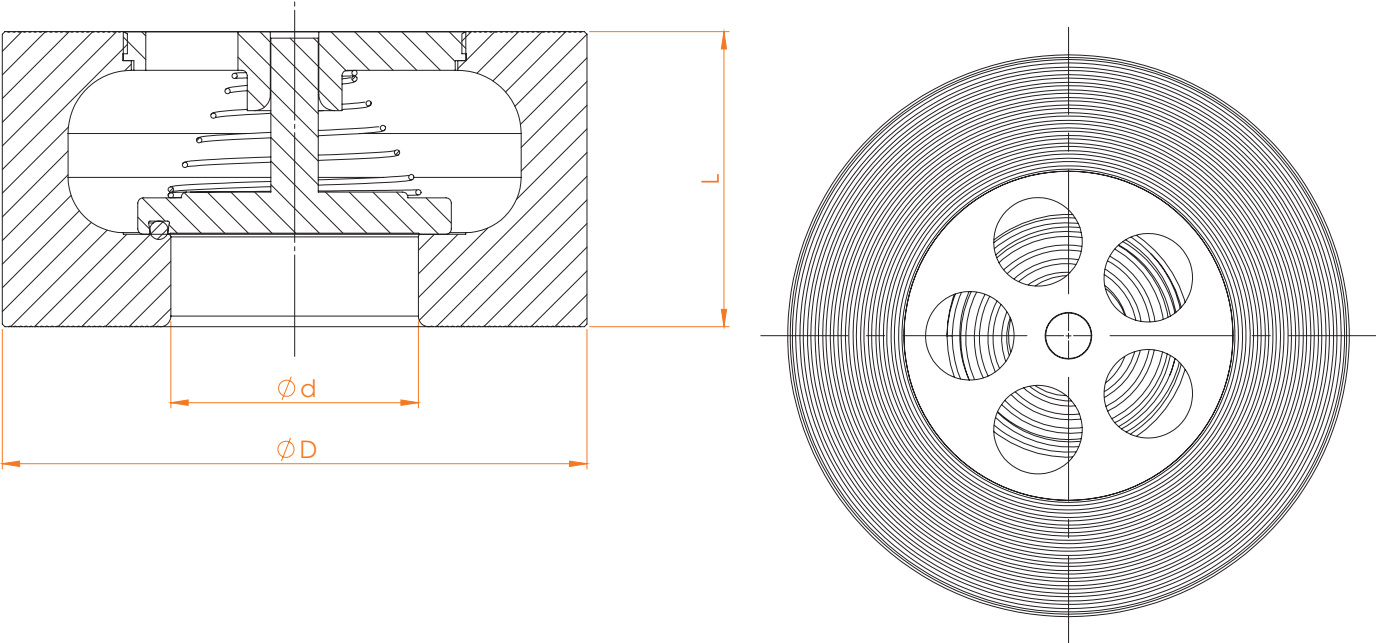
*4 low temperature limit for design 6: -10 °C

Seals comply with the following approvals / conformities:

NBR: DIN EN 549, BAM, REACH, RoHS etc.
EPDM: KTW UBA, DVGW W 270, WRAS, NSF, FDA, BfR XXI Kat. 4, ADI-free, 3A, USP Cl. 6, BAM, REACH, RohS etc.
FKM: DIN EN 549, ADI-frei, REACH, RoHS etc.
PTFE: KTW UBA, DVGW W 270, WRAS, FDA, BfR, ADI-free, EU 10/2011, 3A, USP Cl. 6, REACH, RoHS etc.

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 932-HD



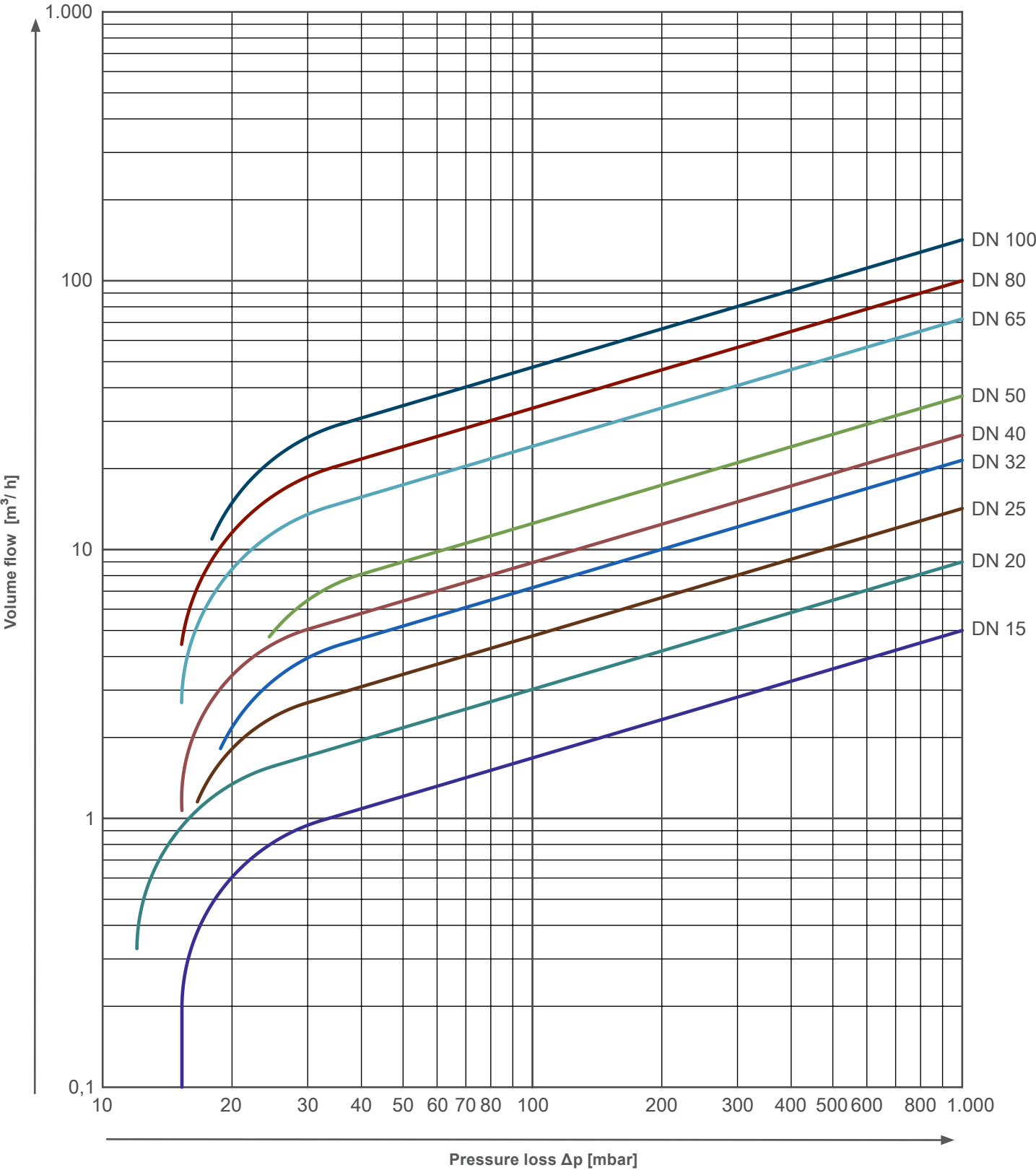
Nominal size	Ø D	Ø d	L	Kv value [m³/h]	Opening pressure*5 [mbar]			w/o spring [kg]	Weight*6 [kg]
					↔	↑	↓		
DN 15	54	15	25	5	~ 16	~ 23	~ 9	~ 7	0.4
DN 20	68	19	31.5	9	~ 12	~ 19	~ 5	~ 7	0.7
DN 25	74	25	35.5	14	~ 15	~ 23	~ 7	~ 8	0.9
DN 32	83	32	40	21	~ 18	~ 27	~ 9	~ 9	1.2
DN 40	95	38	45	27	~ 16	~ 24	~ 8	~ 8	1.7
DN 50	110	47	56	37	~ 19	~ 29	~ 9	~ 10	2.8
DN 65	130	63	63	71	~ 16	~ 31	-	~ 15	3.9
DN 80	149	77	71	100	~ 16	~ 32	-	~ 16	5.6
DN 100	176	97.5	80	143	~ 17	~ 36	-	~ 18	11.6

*5 other opening pressures on request (for high opening pressures the Kv value may be reduced if disc-springs must be used)
*6 weight may vary slightly, depending on the design

TECHNICAL DATA

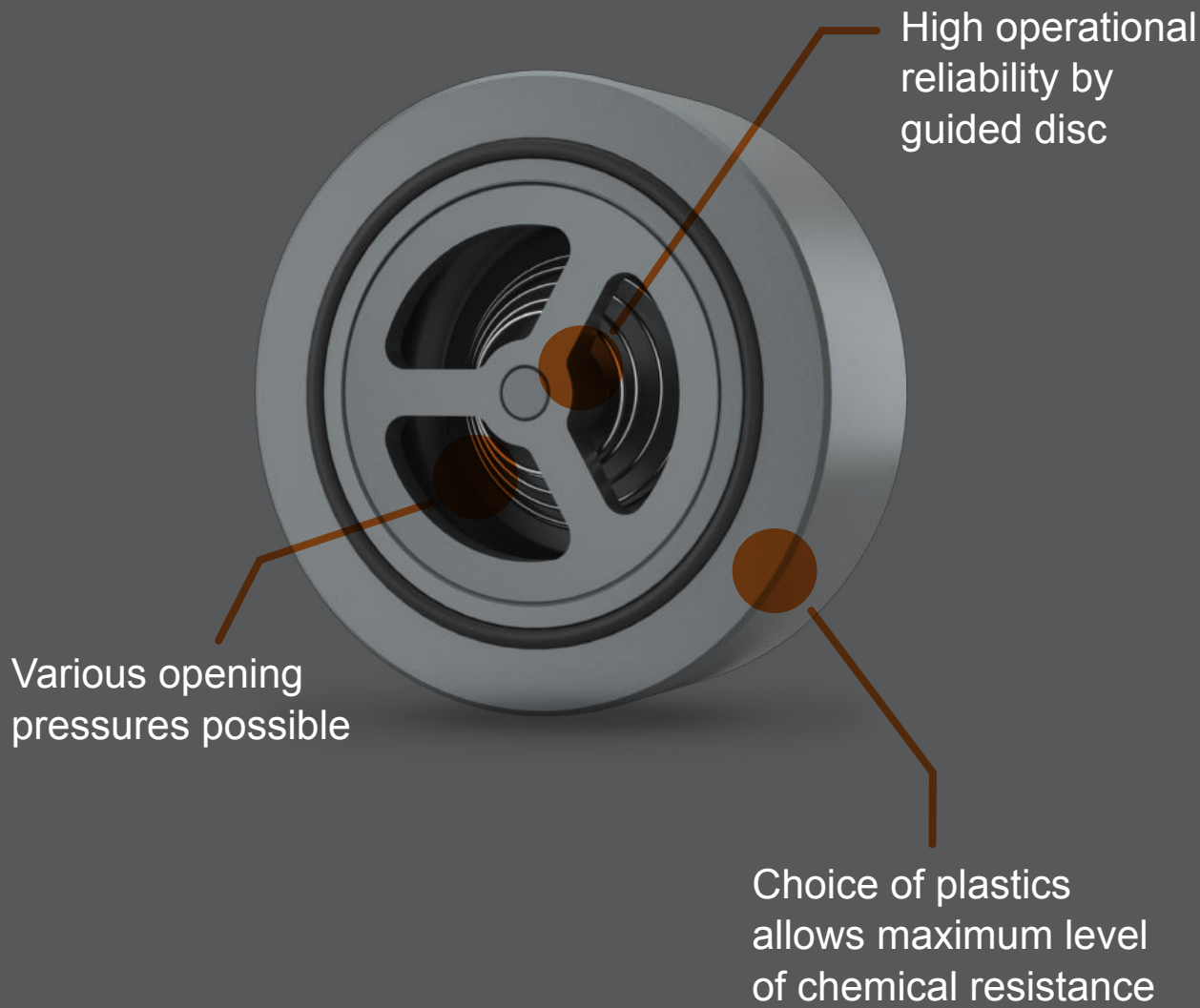
DISCO CHECK VALVE | SERIES 932-HD

Pressure-Loss Diagram Type 932-HD
The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.



TECHNICAL DATA

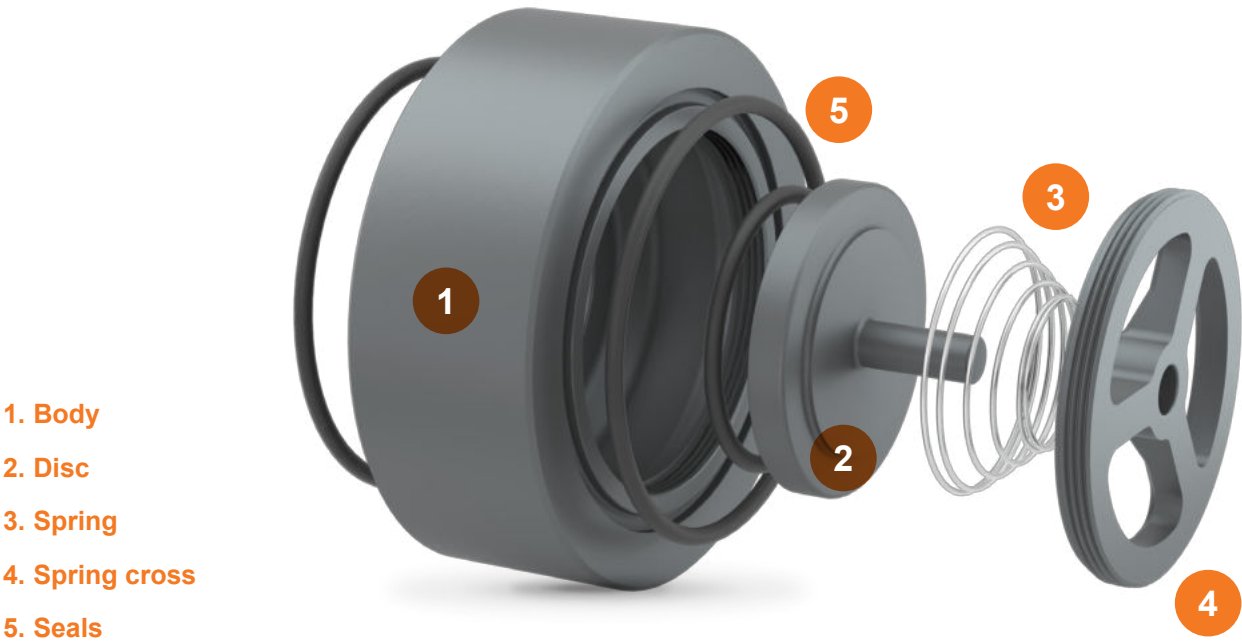
DISCO CHECK VALVE | SERIES 936



Nominal sizes
 DN 15 - DN 100 **Flange connection** PN 10
FTF (face-to-face) dimensions
 DIN EN 558, Series 49
Temperature range
 -20 °C to +120 °C

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 936



Design	Body	Disc	Spring cross	Spring*1	Pressure range*2	
					0 to max. 10 bar	0 to max. 6 bar
4	PVC-U	PVC-U	PVC-U	1.4571, 2.4640	DN 15 - 100	-
5	PP-H	PP-H	PP-H	1.4571, 2.4640	DN 15 - 50	DN 65 - 100
8	PVDF	PVDF	PVDF	1.4571, 2.4640	DN 15 - 100	-

*1 for the choice of the appropriate spring material, the chemical resistance against the media has to be regarded

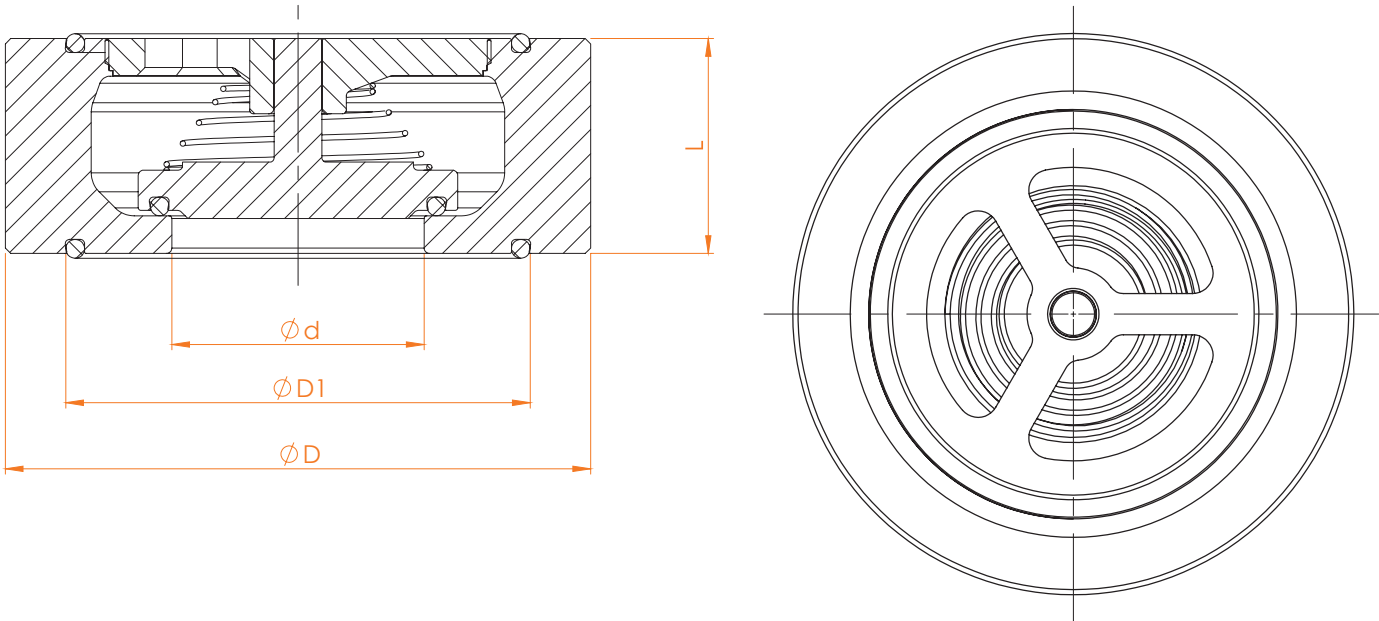
*2 max. allowable pressure is dependent on the temperature

Seal	Temperature			Leakage rate*3
	PVC-U	PP	PVDF	
NBR	0 °C to +60 °C	0 °C to +90 °C	-20 °C to +90 °C	A
EPDM			-20 °C to +120 °C	A
FKM			-15 °C to +120 °C	A
PTFE			-20 °C to +120 °C	A

*3 acc. to EN 12266-1

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 936



Nominal size	Ø D	Ø d	Ø D1	L	Kv value	Opening pressure*4 [mbar]			Weight*5 [kg]
						[m³/h]	↔	↑ ↓	
DN 15	54	15	32	16	4		~ 15	~ 16 ~ 14	0.04
DN 20	64	19,5	38	19	7		~ 14	~ 15 ~ 13	0.07
DN 25	74	25	47	22	11		~ 12	~ 13 ~ 11	0.11
DN 32	85	32	59	28	19		~ 11	~ 12 ~ 10	0.17
DN 40	95	38	70	31.5	24		~ 11	~ 13 ~ 9	0.22
DN 50	109	47	86	40	38		~ 15	~ 16 ~ 14	0.36
DN 65	129	63	105	46	64		~ 12	~ 13 ~ 11	0.53
DN 80	144	77	119	50	85		~ 12	~ 14 ~ 10	0.68
DN 100	164	95	145	145	134		~ 12	~ 14 ~ 10	0.95

*4 higher opening pressures on request
*5 weight refers to valve made of PVC-U and may vary, depending on the design

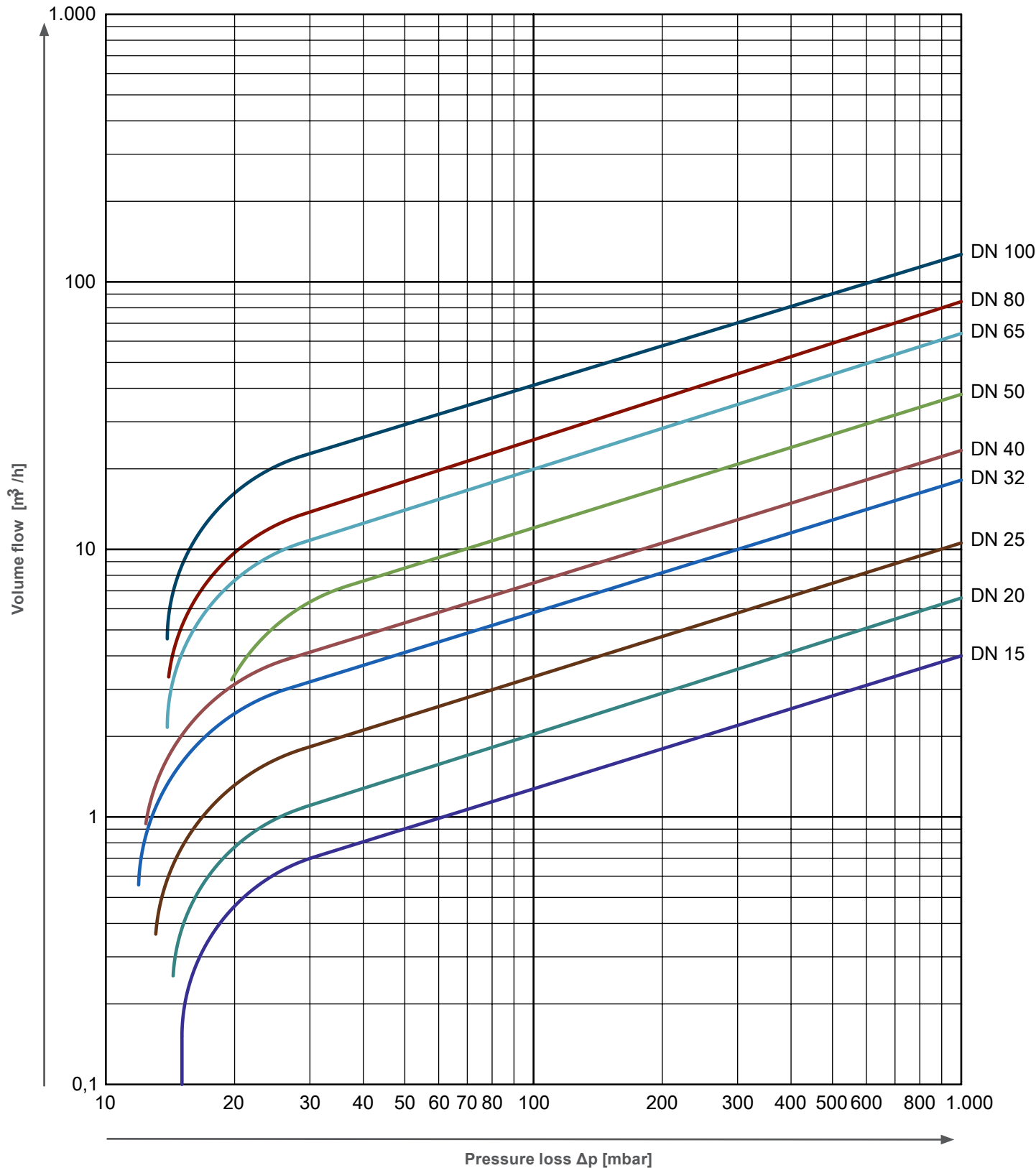
Restriction concerning fluids: For operating valves from DN 32 on with the following fluids, only those in Group 2 according to the Pressure Equipment Directive may be used: gases, liquefied gases, gases dissolved under pressure, vapours and also those liquids whose vapour pressure at the maximum allowable temperature is greater than 0.5 bar above normal atmospheric pressure (1.013 bar).

TECHNICAL DATA

DISCO CHECK VALVE | SERIES 936

Pressure-Loss Diagram Type 936

The diagram values are valid for water at a temperature of 20 °C and for valves with face-to-face dimensions in accordance with DIN EN 558, suitable for flanges in accordance with PN 10 - PN 40. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.



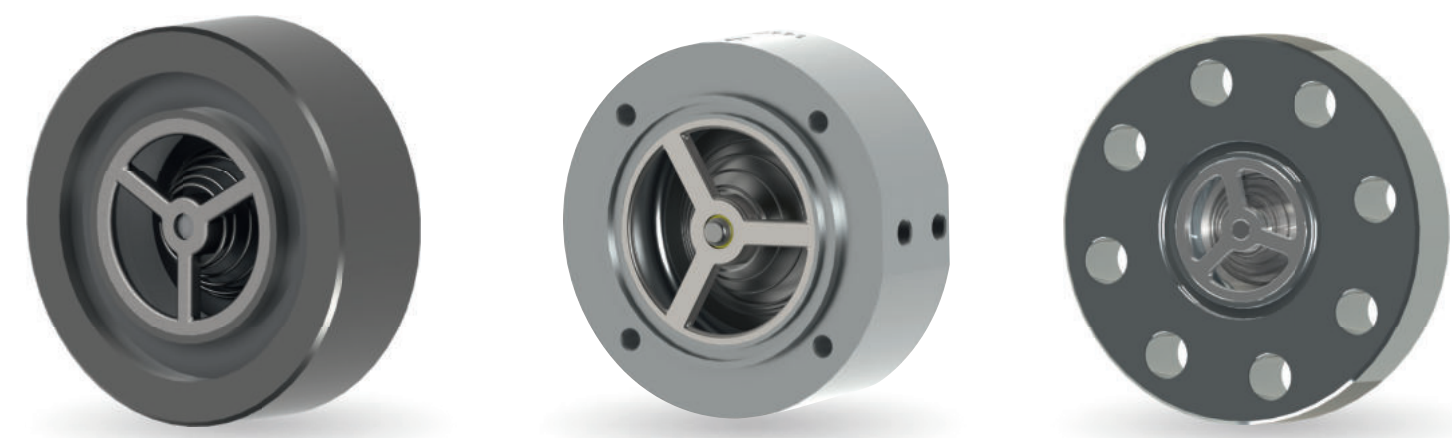
SPECIAL OPTIONS

DISCO CHECK VALVES

With many years of experience and our understanding of the demands of the market and the constantly rising expectations of our customers, we always strive to develop and implement solutions that go well beyond the standard. Here are just a few examples of special designs that we have created either in-house, based on our standard models, or with the help of our long-standing pool of partners. Here we adhere to the criteria of technical and economic feasibility combined with a healthy dose of pragmatism.



Various special bodies

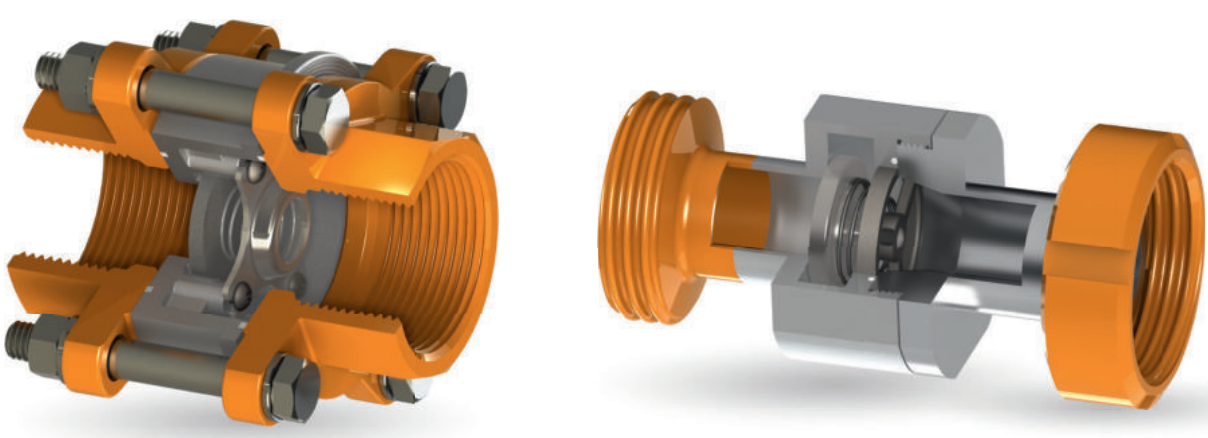


With various forms of flange sealing surfaces acc. to diverse standards

With thread holes

With lug type body

With mounted connecting pieces for thread connections



Other special options:

- Special opening pressure (type 932, 932-HD, 936)
- Cleaned free of oil and grease
- Cleaned free of silicone
- Cleaned free of PWIS

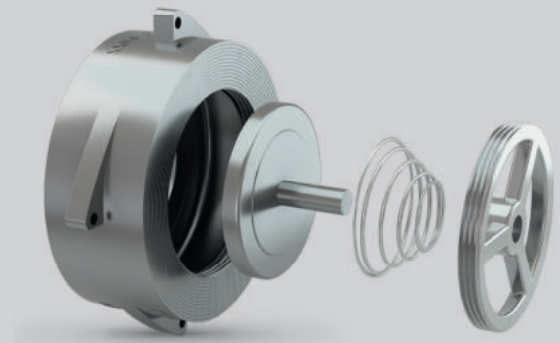
- Seals with additional approvals which go beyond the standard
- Metal seated with reduced leakage rate acc. to DIN EN 12266-1 (type 932, 932-HD)

- Seal glued in for vacuum applications
- Other materials on request
- Other flange dimensions on request
- Other special options on request



With attached ground cable

TYPE CODE
DISCO CHECK VALVES

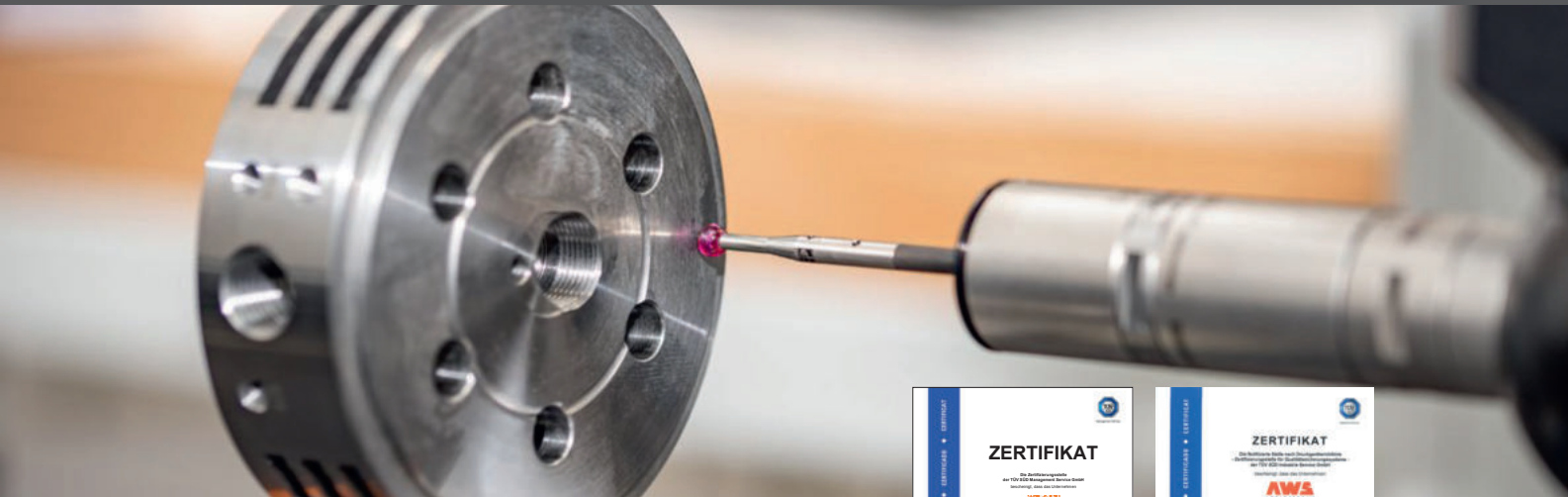


Order example	Disco-RSV 932/100/1/M/F1
Type of valve	Disco-Rückschlagventil
Type	932
Nominal Size	DN 100
Body / Disc / Spring cross	1.4408
Seal	Metal seated
Spring	1.4571 (F1)

	DN		Material				
Type	Nominal size	Design	Body	Disc	Spring cross	Spring	Seal
930	15 - 100	1	1.4408	1.4408	1.4436	1.4436 (F5)	
931	15 - 100	3	CW617N (2.0402)	1.4301	1.4301	1.4401 (F1)	
	125 - 200	9	EN-GJS-400-18-LT	EN-GJS-400-18-LT	1.4408	1.4571 (F1)	
		9.1	EN-GJS-400-18-LT	1.4308	1.4408	1.4571 (F1)	
932	15 - 100	1	1.4408	1.4408	1.4408	1.4571 (F1)*1	Metal seated (M)
		4	CC333G (2.0975)	CC333G (2.0975)	CC333G (2.0975)	Hastelloy C4 (F2)	
		4.1	CC333G (2.0975)	1.4408	1.4408	1.4571 (F1)*1	NBR (N)
		5	1.0619, galvanized	1.4408	1.4408	1.4571 (F1)*1	EPDM (E)
		6	1.4469 (Superduplex)	1.4469 (Superduplex)	1.4469 (Superduplex)	Hastelloy C4 (F2)	
		6.1	1.4469 (Superduplex)	1.4408	1.4408	1.4571 (F1)	FKM (F)
	125 - 300	1	1.4408	1.4408	1.4408	1.4571 (F1)*1	PTFE (Teflon) (T)*3
		5	1.0619, zinc plated	1.4408	1.4408	1.4571 (F1)*1	
		6	1.4469 (Superduplex)	1.4469 (Superduplex)	1.4469 (Superduplex)	Hastelloy C4 (F2)	
		6.1	1.4469 (Superduplex)	1.4408	1.4408	1.4571 (F1)	
932-HD	15 - 100	1	1.4404	1.4404	1.4404	1.4571 (F1)*1	
		6	1.4410	1.4410	1.4410	Hastelloy C4 (F2)	
936	15 - 100	4	PVC-U	PVC-U	PVC-U	1.4571 (F1), Hastelloy C4 (F2)*2	NBR (N)
		5	PP	PP	PP	1.4571 (F1), Hastelloy C4 (F2)*2	EPDM (E)
		8	PVDF	PVDF	PVDF	1.4571 (F1), Hastelloy C4 (F2)*2	FKM (F) PTFE (Teflon) (T)

*1 metal seated valves require spring material Hastelloy C4 for temperatures above 300 °C
*2 for the choice of the appropriate spring material, the chemical resistance against the media has to be regarded
*3 available for type 930, 932 & 932-HD

QUALITY
AT AWS



Certified
Our more than 40-year company history is characterised by our constant striving for the highest quality. As a modern and future-oriented group of companies, we have further optimised our flexible response to changing market conditions and customer requirements by introducing and applying a comprehensive quality management system.

For many years now, we have been certified in accordance with ISO 9001 and – in the field of valves – also in accordance with the Pressure Equipment Directive 2014/68/EU. Systematic quality checks are conducted throughout the entire process chain, from the receipt of the goods to the delivery of the products. Not least during the final inspection, state-of-the-art measuring methods (including 3D measuring machines and surface measuring devices for roughness, waviness and profile measurement) as well as pressure, tightness and vacuum tests both ensure and document that the required quality has been achieved.

AWS PRODUCT OVERVIEW

EVERYTHING FROM A SINGLE SOURCE!



AWS Apparatebau has a wide and advanced product range. With many decades of experience as a manufacturer of check valves and in the field of valve technology, we are able to provide you with solutions for a variety of applications.

Industries that rely on our products include:

- Building technology
- Shipbuilding
- Chemistry and refining
- Water, waste water, water treatment, desalination
- Food and beverage industry
- Vacuum technology
- Aviation industry





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