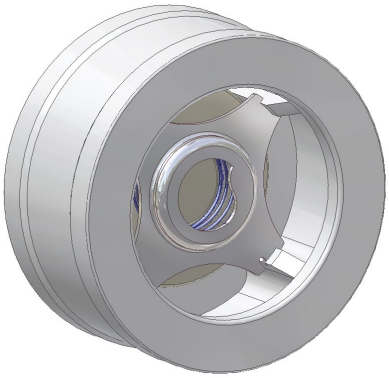
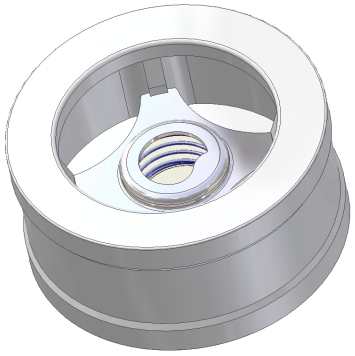
Non Return Valve Type DSF
DN015 - 100



Designation	Material
Body	see table
Valve plate	see table
Spring cap	see pricelist
Spring	see pricelist
Soft sealing	see table

Technical specifications
Placement between flange according to DIN EN 1092-1, PN10-160 and ANSI B16.5 CL. 150-900lbs
Nominal pressure depending on model
Overall lengths according to DIN EN 558, basic range 52 (K5)
Tightness according to DIN EN 12266-1, Leakage Rate D (Sealing M, T) and Leakage Rate A (Sealing E, P, V)
Operational limits according to DIN EN 1092-1
Identification according to DIN EN 19



Utilisation
For liquids, gases and steams in all process technology.

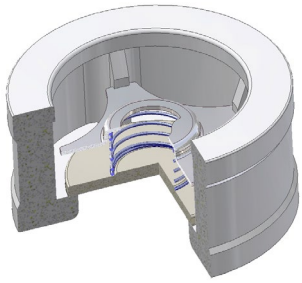
Constructional Features
Centrering through body-outside-diameter
On both sides large flange connection faces
Guiding of valve plate by body ribs

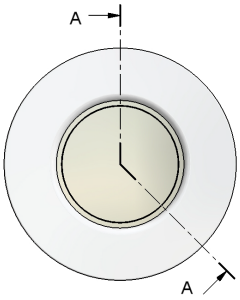
Special Types
Hastelloy C4 springs (up to 300°C) and Nimonic (up to 400°C).
Special springs for different opening pressures

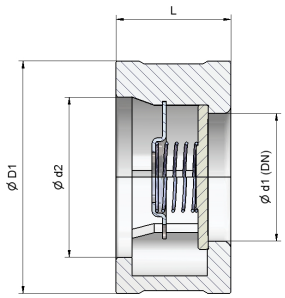
Designation: **DSF- 6 4 6 4 - M - 1 0 0**

DSF- ❑❑ - ❑❑ - ❑ - ❑❑❑ → DN015 - 100

Body			**Valve plate**			**Soft sealing**		
Material	Nr.	Code	Material	Nr.	Code	Material	Temperatur*	Code
Austenit	1.4404	64	Austenit	1.4404	64	Metal-seated	-200 bis 500°C	M
Austenit Mo-free	1.4301	65	Austenit Mo-free	1.4301	65	EPDM	-50 bis 130°C	E
Uranus	1.4539	68	Uranus	1.4539	68	NBR	-30 bis 120°C	P
Titanium	3.7035	90	Titanium	3.7035	90	VITON	-20 bis 200°C	V
Hastelloy B	2.4600	94	Hastelloy B	2.4600	94	PTFE	-200 bis 200°C	T
Hastelloy C	2.4819	95	Hastelloy C	2.4819	95	Material, pressure and medium dependent		









DN (mm)	**015**	**020**	**025**	**032**	**040**	**050**	**065**	**080**	**100**
DN (zoll)	½"	3/4"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"
L	25	31.5	35.5	40	45	56	63	71	80
Ø D1,PN10/16	51	61	71	82	92	107	127	142	162
Ø D1,PN25/40	51	61	71	82	92	107	127	142	170
Ø D1,PN63	61	72	82	88	103	113	138	148	170
Ø D1,PN160	61	72	82	88	103	119	144	154	180
Ø D1,ANSI150	44	53	63	73	82	101	120	133	170
Ø D1,ANSI300	50	63	69	79	92	107	127	142	177
Ø D1,ANSI400	50	63	69	79	92	107	127	142	170
Ø D1,ANSI600	50	63	69	79	92	107	127	142	190
Weight (PN10)	0.1	0.35	0.55	0.75	1.1	2	3	4.5	5.5

Opening pressures (mbar)

DN (mm)	**015**	**020**	**025**	**032**	**040**	**050**	**065**	**080**	**100**
DN (zoll)	½"	3/4"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"
p_o ↑	24	23	23	23	24	24	25	27	27
p_o →	20	20	20	20	20	20	20	20	20
p_o ↓	16	17	17	17	16	16	15	13	13
p_o ↑ w/o spring	4	3	3	3	4	4	5	7	7
p_o → w/o spring	Not suitable for this flow direction								
p_o ↓ w/o spring	Not suitable for this flow direction								

Pressure drop diagram

Pressure drop diagram for water at 20°C with opened valve and horizontal flow.
To calculate the pressure drop of the medium, the equivalent water flow volume has to be calculated.

$$\dot{V}w = \dot{v}\sqrt{\frac{\rho}{1000}}$$

$\dot{V}w$ = Equivalent water flow volume in m3/h
ρ = Density of the medium (in use) kg/m3
$\dot{v}$ = Flow volume of the medium (in use) in m3/h

