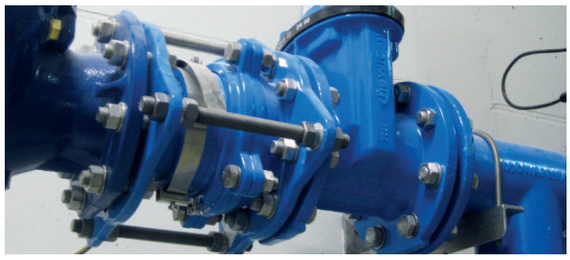
Fittings

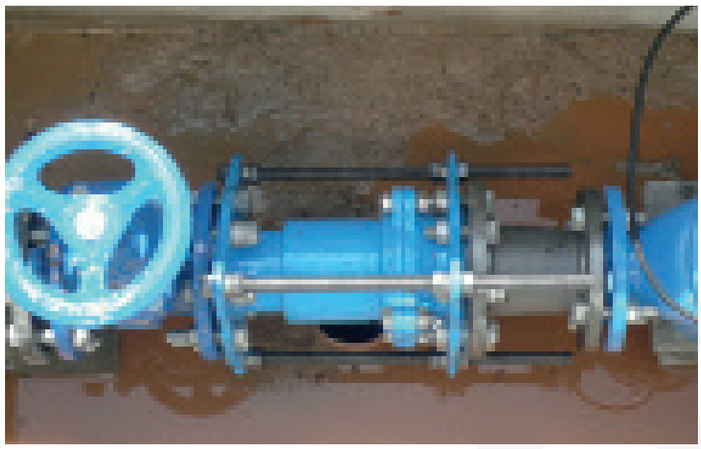
Fittings

Accessories

Technical information

Application examples





Fittings

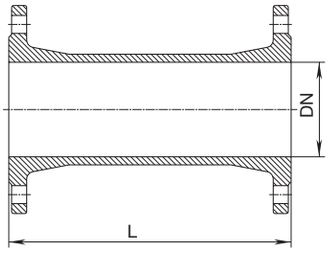
Design features

- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

Double flanged pipe

FF-piece

No. 8500



DN	L	Weight	
50	200	6,5	
	400	10,0	
65	200	8,0	
	400	13,0	
80	100	7,6	
	150	8,5	
	200	9,2	
	300	10,8	
	400	12,4	
	500	14,1	
	600	15,7	
	800	19,0	
	1000	22,0	
100	100	8,6	
	150	9,8	
	200	10,7	
	300	12,7	
	400	14,8	
	600	18,8	
	800	23,0	
	1000	27,0	
125	200	13,3	
	600	24,0	
	1000	34,5	
150	150	20,0	
	200	16,5	
	300	19,7	
	400	23,0	
	600	29,5	
	800	36,0	
	1000	42,5	
200*	200	20,0	
	600	41,5	
	800	50,5	
	1000	60,0	
250	200	22,1	
	300	38,0	
	400*	44,0	
	500*	50,5	
	600	56,3	
	800	68,5	
	1000	81,0	
300	300	49,5	
	400*	57,0	
	500	65,0	
	600	73,0	
	800	88,5	
	1000	104,0	

* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

Fittings

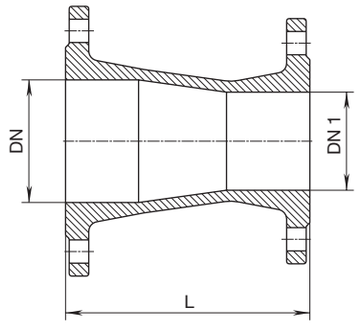
Double flanged taper

FFR piece

No. 8550

Design features

- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10



DN	DN 1	L	Weight	
65	50	200	9,0	
80	50	200	7,4	
	65	200	8,2	
100	50	200	8,1	
	65	200	8,8	
	80	200	9,5	
125	65	200	19,0	
	80	200	10,7	
	100	200	11,4	
150	80	200	12,2	
	100	200	16,7	
	125	200	14,1	
200*	100	300	18,6	
	125	300	20,0	
	150	300	22,0	
250	100	300	22,0	
	150	300	27,0	
	200*	300	30,5	
250+	125	300	41,0	
300	100	300	35,0	
	150*	300	37,0	
	200*	300	35,5	
	250*	300	41,0	
350	300	300	64,0	
400	350*	300	81,0	
500	300	600	110,0	
	400	600	129,0	

* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

+ Only PN 16 available

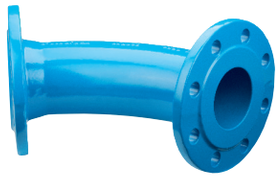
Double flanged elbows 45°

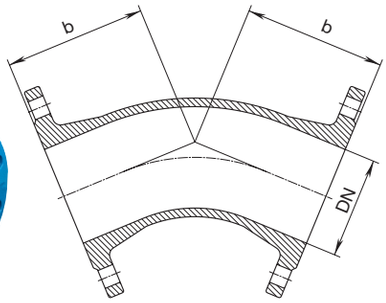
45° FFK piece

No. 8540

Design features

- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10





DN	b	Weight	
50	150	9,0	
65	165	12,0	
80	130	9,5	
100	140	11,5	
125	150	14,6	
150	160	18,7	
200*	180	27,5	
250	350	80,0	
300	400	112,0	

* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

Fittings

Double flanged elbows 90°

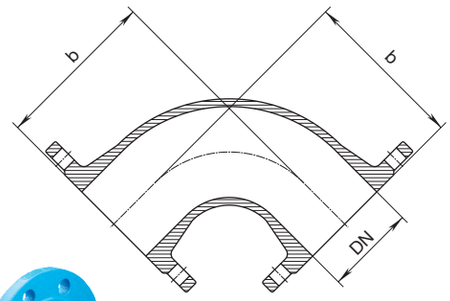
90° Q piece

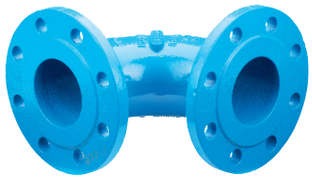
No. 8530

Design features

- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

DN	b	Weight	
50	150	9,3	
65	165	9,7	
80	165	10,5	
100	180	12,9	
125	200	16,5	
150	220	20,5	
200*	260	31,0	
250*	350	50,0	
300	400	70,0	





* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

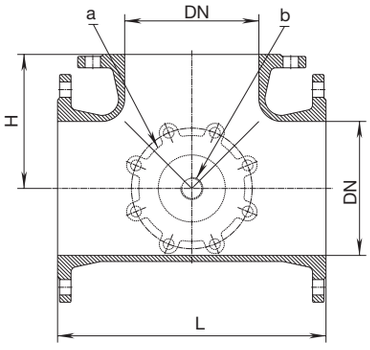
All flanged short tee

No. 8740

Design features

- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10
- On request: No. 8741 with vertical outlet DN 100 (surcharge)

DN	L	H	Weight	
200*	400	200	47,0	
250*	460	230	66,0	
300*	520	260	86,0	



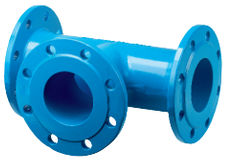
* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

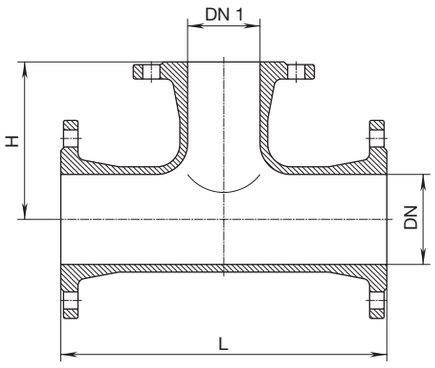
Fittings

All flanged tee

T-piece

No. 8510





Design features

- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

DN	DN 1	L	H	Weight	
50	50	300	150	12,5	
65	50	330	157	15,5	
	65		165	16,5	
80	50	330	160	14,0	
	65		165	14,7	
	80		165	16,0	
100	50	360	170	17,6	
	65		170	17,4	
	80		175	18,6	
	100		180	19,4	
125	50	400	185	30,0	
	65		195	31,0	
	80		190	23,0	
	100		195	24,0	
	125		200	25,5	
150	50	440	200	39,0	
	65		207	39,0	
	80		205	29,0	
	100		210	30,0	
	125		215	31,0	
	150		220	33,8	
200*	80	520	235	42,5	
	100		240	43,0	
	125		245	44,0	
	150		250	46,5	
	200		260	50,0	
250	80*	700	270	71,0	
	100*		275	75,0	
	125		280	93,0	
	150*		300	81,0	
	200*		325	76,5	
	250*		350	83,0	
300	80*	800	290	92,0	
	100		300	94,0	
	150*		325	101,0	
	200		350	102,0	
	300*		400	114,0	
300⁺	250	800	400	120,0	
400	200	900	350	162,0	
	250		350	170,0	
500	150*	1000	400	245,0	
	500		500	278,0	

* Also available drilled to EN 1092-2 | PN 16 (Please specify on order)

⁺ Only PN 16 available

Fittings

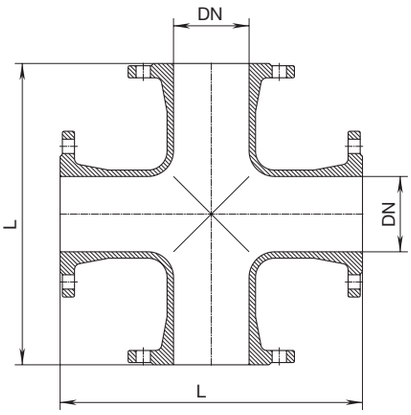
All flanged crosses

TT-piece

No. 8520

Design features

- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10



DN	L	Weight	
80	330	27,0	
100	360	34,0	
150	440	46,0	
200*	520	59,7	
250*	700	135,0	
300*	800	186,0	

* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

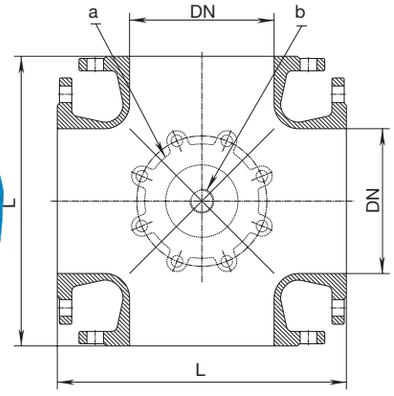
All flanged short cross

TT-piece

No. 8750

Design features

- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10
- On request: No. 8751 with vertical connection DN 100 (additional price)



DN	L	Weight	
200*	400	60,0	
250*	460	91,0	
500	830	333,0	

* Also available drilled to EN 1092-2 | PN 16
(Please specify on order)

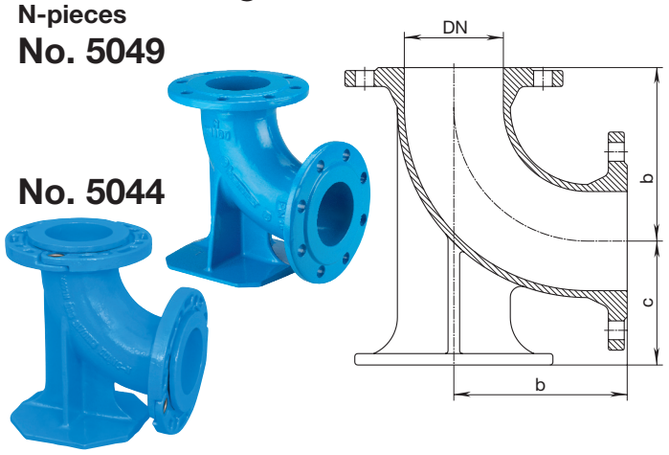
Fittings

Double flanged duck foot bend 90°

N-pieces

No. 5049

No. 5044



DN 80 and DN 100 also available with loose flange No. 5044

Design features

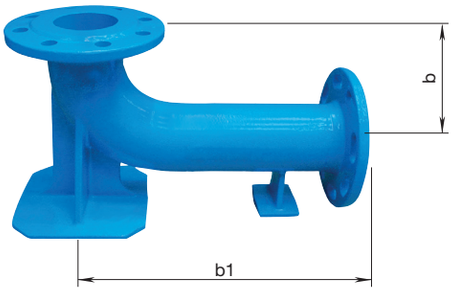
- According to EN 545
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

DN	b	c	Weight	
50	150	95	8,4	
80	165	110	13,4	
100	180	125	16,8	
150	220	160	29,5	
200	260	190	46,0	

Double flanged duck foot bend long

N-pieces

No. 5049L



Design features

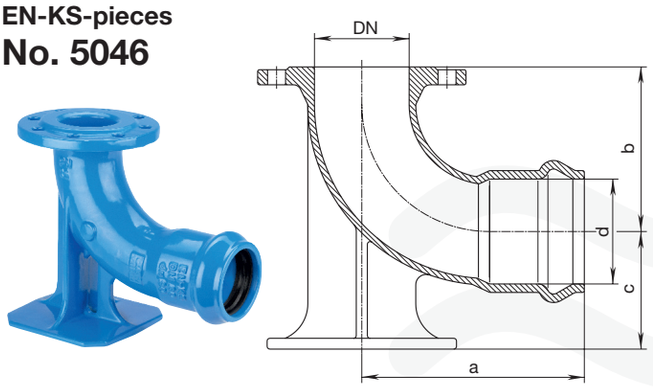
- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

DN	b	Length (b1)	c	Weight	
80	165	365	110	17,8	

Flanged duck foot bend with PVC socket 90°

EN-KS-pieces

No. 5046



Design features

- Working pressure MOP (PN) 16
- Made of ductile iron, epoxy powder coated
- Flange size according to EN 1092-2 | PN 16
- Standard drilling to EN 1092-2 | PN 10

DN	a	b	c	d	Weight	
80	260	165	110	90	16,5	
100	280	180	125	110	19,5	

Fittings

Order No.	DN	Thread	Length	Weight	
8580	80	1¼"	60	3,8	
	100		60	4,9	
	150		60	8,0	

Wafer tee piece
No. 8580

- With one threaded outlet ISO 228
- MOP (PN) 16, made of grey ductile iron, epoxy powder coated

Order No.	DN	Thread	Length	Weight	
8590	100	1¼"	60	4,36	
	125		60	6,3	
	150		60	7,8	
	250		60	19,2	

Wafer tee piece
No. 8590

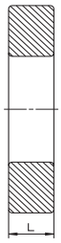
- With two threaded outlets ISO 228
- MOP (PN) 16, made of grey ductile iron, epoxy powder coated

Order No.	DN	Thread	Length	Weight	
8591	100	ZAK 46	70	3,35	
	150		70	5,28	
	200		70	6,75	
	250		70	9,9	
	300		70	12,0	
	400		70	16,6	

Wafer tee piece ZAK
No. 8591

- With two ZAK 46 outlets
- MOP (PN) 16, made of ductile iron, epoxy powder coated

Order No.	DN	
8615	50	
	65	
	80	
	100	
	125	
	150	
	200	



Spacer ring
No. 8615

- For length equalisation between flanges
- Steel, epoxy powder coated
- Give face-to-face length "L" on order

Order No.	DN	Weight	
8730	50	1,5	
	65	1,7	
	80	0,35	
	100	2,0	
	125	0,5	
	150	0,6	
	200	0,9	
	250	1,26	
	300	1,8	

Angle piece adjustable 0° — 8°
No. 8730

- Made of steel with vulcanised elastomer
- No flat gasket needed

DN	MOP (PN)	Width	
		Min.	Max.
50	10 — 40	11	22
65		11	25
80		11	30
100	10 — 16	11	32
125		11	35
150		11	39
200		12	46
250	10	12	52
300		14	55

Fittings
Flap valve, PN 10 | PN 16

Design features

- Flange connection according to EN 1092-2, drilled according to EN 1092-2 | PN 10 standard; EN 1092-2 | PN 16 DN 200 — DN 600 please specify on order
- Double hinged for improved sealing performance
- Gasket on the cover for noise reduction and durability of the coating

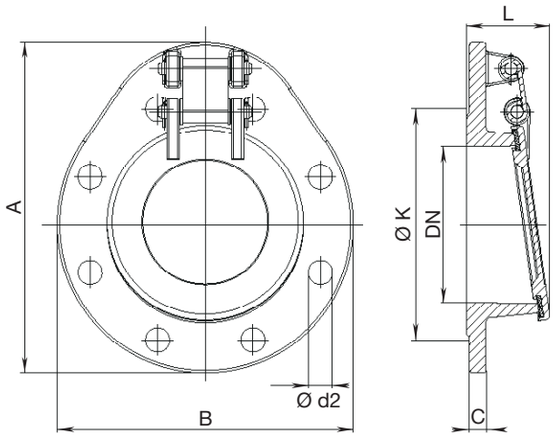
Material | Technical features

- **Body and cover** made of ductile iron, epoxy powder coated
- **All connections** made of stainless steel
- **Seal** made of elastomer
- **External joint** prevents any obstruction thanks to t he free outflow

No. 9930

DN 50 — 150

DN 200 — 600



Ill.: symbol

DN	MOP (PN)	A	B	L	ØK	C	Bolts		Weight	
							Qty	Ød2		
50	10/16	177,5	165	56	125	19	8	19	3,05	
65		197,5	185	56	145	19	8	19	3,67	
80		245,0	200	68	160	19	8	19	5,17	
100		267,5	220	73	180	19	8	19	5,88	
125		295,0	250	78	210	19	8	19	7,81	
150		317,5	285	80	240	19,0	8	23	9,2	
200	10	406	340	130	295	20,0	8	23	23,0	
	16				295		12	23		
250	10	462	405	138	350	22,0	12	23	30,0	
	16				355		12	28		
300	10	518	455	142	400	24,5	12	23	37,0	
	16				410		12	28		
400	10	658	580	177	515	24,5	16	28	68,0	
	16				525		16	31		
500	10	793	715	207	620	26,5	20	28	112,0	
	16				650		20	34		
600	10	918	840	217	725	30,0	20	31	160,0	
	16				770		20	37		

Larger dimensions on request

Hawle-Vario

The innovative flexible fitting, PN 10 | PN 16

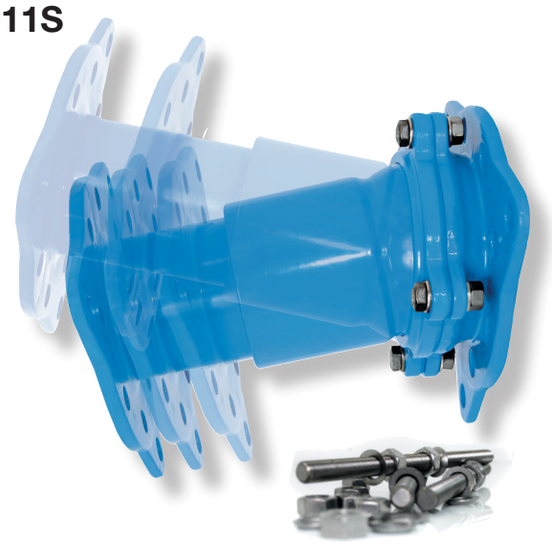
Design features

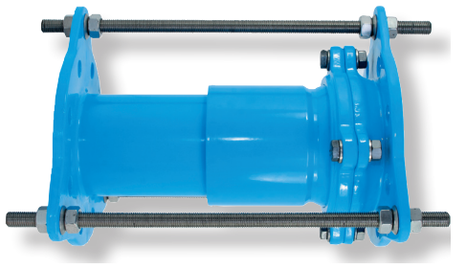
- Hawle Vario is a flanged, telescopic fitting with integrated ball-and socket joint, permitting bending to all sides up to an angular deflection of 10 degrees
- Flange size according to EN 1092-2 | PN 16, drilled according to EN 1092-2 | PN 10 standard; EN 1092-2 | PN 16 DN 200 please specify on order - other standards on request
- Hawle Vario will be fixed in the installed position by means of a tension lock assembly
- Combines the function of an FF-piece, an adjustable elbow piece and a fitting and extension piece
- HHawle Vario saves time and has numerous application possibilities

Material | Technical features

- **Body** made of ductile iron, epoxy powder coated
- **Locking ring, bolts, nuts** and **washers** made of stainless steel
- **Tension lock** made of stainless steel
- **O-rings** made of elastomer

No. 8010S
No. 8011S





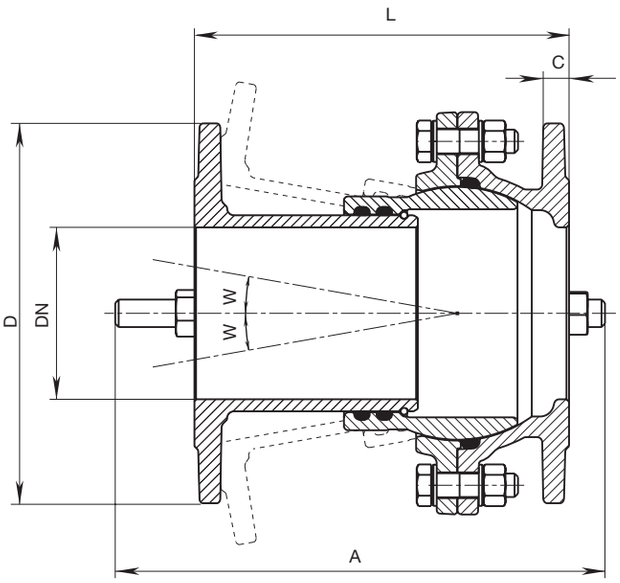
Order No.	Set-version	MOP (PN)	Dimensions/DN				
			50	80	100	150	200
8010S	short	16					
8011S	long						

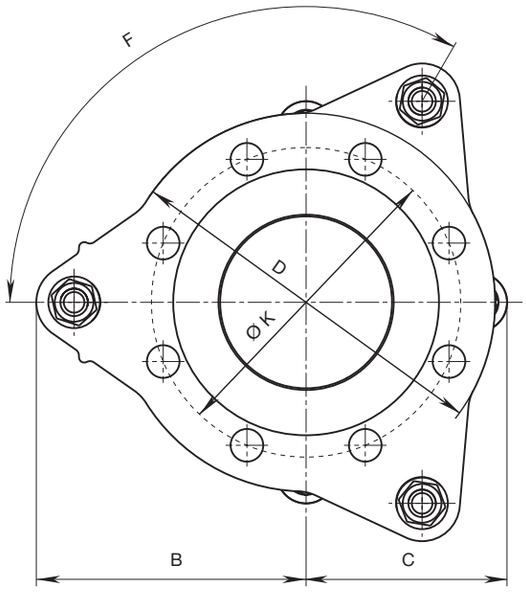
Application example

Hawle-Vario

The innovative flexible fitting, PN 10 | PN 16

No. 8010S Short version, with tension lock
No. 8011S Long version, with tension lock





DN	MOP (PN)	Version	Adjustment range L	A	B	C	D	F	C	ØK	Angle W	Weight
50	16	short	150 — 207	285	130	87	165	3 x 120°	16	125	0 — 10°	8,9
		long	207 — 323	415								11,8
80		short	150 — 214	285	147	107	200	3 x 120°	16	160	0 — 10°	14,3
		long	214 — 344	415								16,85
100		short	150 — 216	285	157	117	220	3 x 120°	16	180	0 — 10°	16,2
		long	216 — 350	415								18,9
150		short	175 — 250	330	190	190	285	4 x 90°	18	240	0 — 10°	27,0
		long	250 — 408	480								29,3
200	10/16	short	195 — 290	360	229	229	340	4 x 90°	20	297	0 — 8°	44,8
		long	282 — 450	530								52,2

Dismantling piece
PN 10 | PN 16 | PN 25

Design features

- Double flanged fitting, which allows longitudinal adjustment in flanged pipe systems
- Easy assembly and disassembly of flanged connections
- Continuous threaded bars, therefore, no additional mounting screws necessary
- Length adjustment range: (see table) +/- 25 mm
- Flange in accordance with and drilled to EN 1092-2 | PN 10, PN 16, PN 25 (PN 40 on request)

Material | Technical features

1,2 **Flanges** made of ductile iron, epoxy powder coated
+ made of steel, epoxy powder coated

3 **Retaining flange** made of steel, epoxy powder coated

4 **Sealing ring** made of elastomer

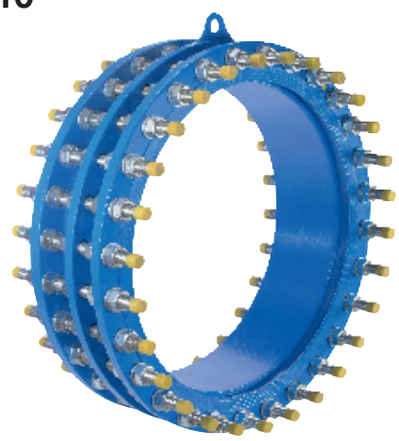
5 **Threaded bar** made of galvanized steel

6 **Bolts** made of galvanized steel

Pressure rating PN 10

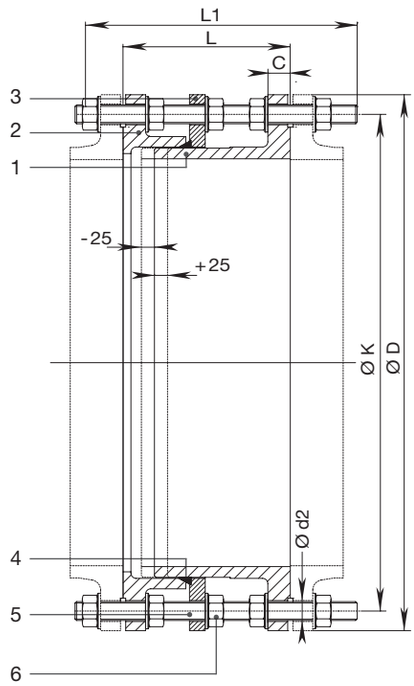
DN	MOP (PN)	L	L1	Ø D	Ø K	C	Bolts Qty.	Bolts Ø d2	Weight
50+	10	180	280	165	125	19,0	4	19	11,0
65+		180	280	185	145	19,0	4	19	13,0
80		200	330	200	160	19,0	8	19	17,0
100		200	330	220	180	19,0	8	19	20,0
125		200	330	250	210	19,0	8	19	24,0
150		200	330	285	240	19,0	8	23	30,0
200		200	330	340	295	20,0	8	23	42,0
250		220	360	405	350	22,0	12	23	62,0
300		220	360	460	400	24,5	12	23	67,0
350		230	360	505	460	24,5	16	23	85,0
400		230	370	565	515	24,5	16	28	105,0
450		250	390	615	565	25,5	20	28	131,0
500		260	390	670	620	26,5	20	28	155,0
600		260	410	780	725	30,0	20	31	225,0
700		260	410	895	840	32,5	24	31	300,0
800		290	460	1015	950	35,0	24	34	361,0
900		290	460	1115	1050	37,5	28	34	400,0
1000		290	500	1230	1160	40,0	28	37	516,0
1100		300	480	1355	1270	53,5	32	37	830,0
1200		320	520	1455	1380	45,0	32	41	895,0
1300		370	630	1585	1490	59,0	32	42	1172,0
1400		360	560	1675	1590	46,0	36	44	1194,0
1500		380	590	1785	1700	47,0	36	44	1560,0
1600		390	600	1915	1820	49,0	40	50	1436,0

Dismantling piece
No. 9810



Order No.	MOP (PN)	Dimensions/DN 50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600*
9810	10	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	16	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	25				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■				

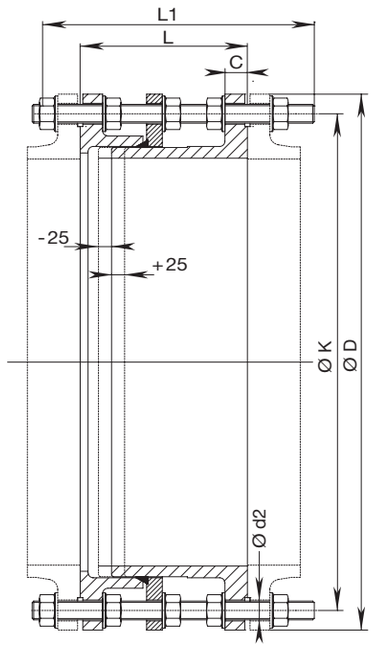
*Larger dimensions or pressure rating of PN 40 on request



Dismantling piece
PN 10 | PN 16 | PN 25

No. 9810
Pressure rating PN 16

DN	MOP (PN)	L	L1	Ø D	Ø K	C	Bolts Qty.	Bolts Ø d2	Weight
50	16	180	280	165	125	19,0	4	19	11,0
65		180	280	185	145	19,0	4	19	13,0
80		200	330	200	160	19,0	8	19	17,0
100		200	330	220	180	19,0	8	19	20,0
125		200	330	250	210	19,0	8	19	24,0
150		200	330	285	240	19,0	8	23	30,0
200		200	330	340	295	20,0	12	23	45,0
250		230	370	405	355	22,0	12	28	66,0
300		250	410	460	410	24,5	12	28	84,0
350		260	410	520	470	26,5	16	28	107,0
400		270	430	580	525	28,0	16	31	142,0
450		270	430	640	585	30,0	20	31	177,0
500		280	440	715	650	31,5	20	34	200,0
600		300	500	840	770	36,0	20	37	305,0
700		300	500	910	840	39,5	24	37	321,0
800		320	520	1025	950	43,0	24	41	469,0
900		320	520	1125	1050	46,5	28	41	535,0
1000		340	560	1255	1170	50,0	28	44	698,0
1100		340	560	1355	1270	53,5	32	44	830,0
1200		360	600	1485	1390	57,0	32	50	1070,0
1300		370	630	1585	1490	59,0	32	50	1172,0
1400		380	630	1685	1590	60,0	36	50	1270,0
1500		380	610	1820	1710	62,5	36	57	1560,0
1600		400	700	1930	1820	65,0	40	57	1705,0



No. 9810
Pressure rating PN 25

DN	MOP (PN)	L	L1	Ø D	Ø K	C	Bolts Qty.	Bolts Ø d2	Weight
100	25	220	340	235	190	19,0	8	23	32,0
125		220	370	270	220	19,0	8	28	43,0
150		230	370	300	250	20,0	8	28	52,0
200		230	370	360	310	22,0	12	28	76,0
250		250	410	425	370	24,5	12	31	108,0
300		250	410	485	430	27,5	16	31	129,0
350		270	480	555	490	30,0	16	34	196,0
400		280	500	620	550	32,0	16	37	212,0
450		280	480	670	600	34,5	20	37	281,0
500		300	500	730	660	36,5	20	37	290,0
600		320	520	845	770	42,0	20	41	389,0
700		340	530	960	875	46,5	24	44	505,0
800		360	600	1085	990	51,0	24	50	690,0
900		380	600	1185	1090	55,5	28	50	920,0
1000		400	650	1320	1210	60,0	28	57	1257,0
1200		450	720	1530	1420	69,0	32	57	1870,0