

E3 Gate valve | Combi valves

Overview



Design features

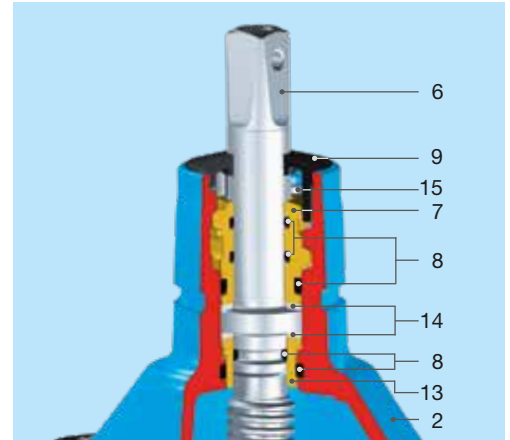
- Resilient seated gate valve according to EN 1171, EN 1074-1 and EN 1074-2 with smooth, straight-through bore
- Double bayonet O-ring carrier is connecting the spindle to the bonnet, allowing a fully encased, uniform epoxy powder coated bonnet for further improved corrosion protection
- Wedge guide made of wear resistant POM material in load optimized design minimizes attrition and ensures lowest torque actuation
- Wedge is flexible and fully linked in vulcanized elastomer to the wedge nut. This snug fit dampens vibration during opening and closing of the wedge
- Wedge nut has a long thread length allowing significantly higher torques than the standard before breaking
- O-rings, lip-seals mounted in the bonnet are replaceable under operating pressure
- Extended edge protection to avoid damages during transport, storage and assembly
- Sliding disks and ball bearing assure low friction performance of the spindle
- 100% suitable for buried installations

Material | Technical features

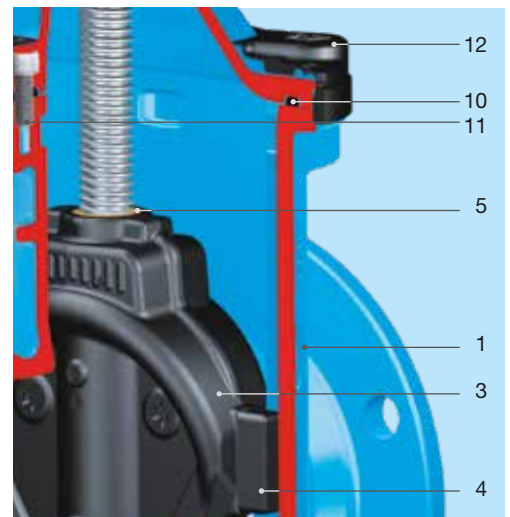
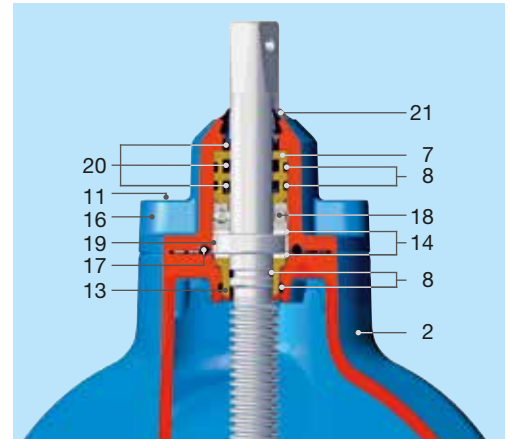
- 1,2 Body (1), bonnet (2), centering flange (16) made of ductile iron, epoxy powder coated inside and out
- 3 Wedge made of ductile iron (DN 50 made of dezincification-resistant brass) with vulcanized elastomer all-over
- 4 Wedge guide made of wear-resistant plastic
- 5 Wedge nut made of dezincification-resistant brass
- 6 Duplex stainless steel spindle with rolled thread and flat-rolled anti-friction surface
- 7 O-ring carrier made of brass, DN 50 — 200 with double bayonet
- 8 O-rings made of elastomer
- 9 Wiper ring made of PE
- 10 Bonnet gasket made of elastomer
- 11 Allen screws made of stainless steel, encased into the body with interlacing gasket and sealing compounds, ensuring full corrosion protection
- 12 Extended edge protection made of PE
- 13 Spindle bearing made of dezincification resistant brass
- 14 Sliding disks made of POM
- 15 Safety screw made of stainless steel
- 17 Centering flange gasket made of elastomer
- 18 Axial ball bearing permanently lubricated
- 19 Centering ring made of POM
- 20 Lip seals made of elastomer
- 21 Wiper ring made of elastomer

DN 50 — 200

Spindle bearing with sliding disks



DN 250 — 400 Spindle bearing with ball bearing and additional sliding disks



DN 500 — 600 in preparation -
currently available - see page A 11/3

E3 Hawle-Combiflex

DN 150, PN 10 | PN 16



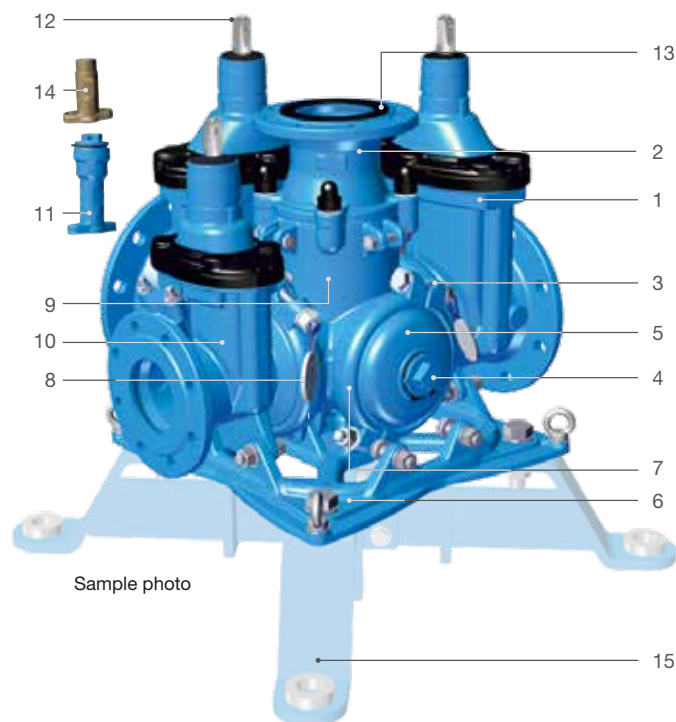
Design features

- Modular Combi-valve system enables flexible assembly arrangements
- Standardized compact construction regardless of valve configuration
- Suitable for cleaning with a cleaning pig
- Comprehensive range of interchangeable ZAK connections possible in every module
- Unique design facilitates easy, rapid exchange of any module
- Duplex stainless steel spindle

Material | technical features

- 1 Resilient seated E3 valve according to EN 1074-1 and 1074-2
- 3 Molybdenum coated, A4 type clamping ring bolts
- 4/11 ZAK-46 (4) or ZAK-34 (11) socket for corrosion-free connection of sensors or ZAK Service valve
- 2/5/7/ 9/10 Hawle Combiflex vertical outlet (2) optionally DN 80 or DN 100 end cap (5), clamping ring (7), middle section DN 150 (9), E3 body (10) reduced in DN 80, DN 100, DN 125; DN 150; or expanded to DN 200: ductile iron, epoxy powder coated
- 6 HAWLE-COMBIFLEX mounting frame: ductile iron, epoxy powder coated, with ring bolts for fastening hoists and integrated rings for floor connections
- 8 Quality inspection seal
- 12 Operating cap made of aluminum, including covering cap with direction indicator
- 13 Vertical outlet with affixed flat elastomer gasket
- 14 Outlet ET 1", optional (not installed)
- 15 Anchoring system, optional

No. 4420E3



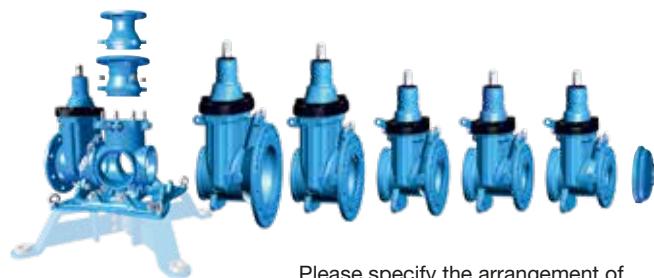
Sample photo

Suitable accessories

Suitable accessories: see page A 2/2

Handwheel:		No. 7800
Extension spindles:	rigid	No. 9000E2/E3
	telescopic	No. 9500E2/E3
Surface boxes:	rigid	No. 1750
	telescopic	No. 2050, No. 2051K
Operating cap:		No. 2156, No. 2157
Extension spindle:		No. 7820, No. 7825
Bolts:		No. 8810, No. 8830, No. 8840
Ground-distance sets:		No. 8644
Flat gasket:		No. 3390, No. 3470
Operating cap:		No. 2157
ET 1" outlet:		No. 6979
ZAK 34 outlet:		No. 6979
ZAK 34 plug:		No. 6980
Blanking cap:		No. 8570E2/E3

Individual combination options see page A 9/3



Please specify the arrangement of the valves in a clockwise direction!

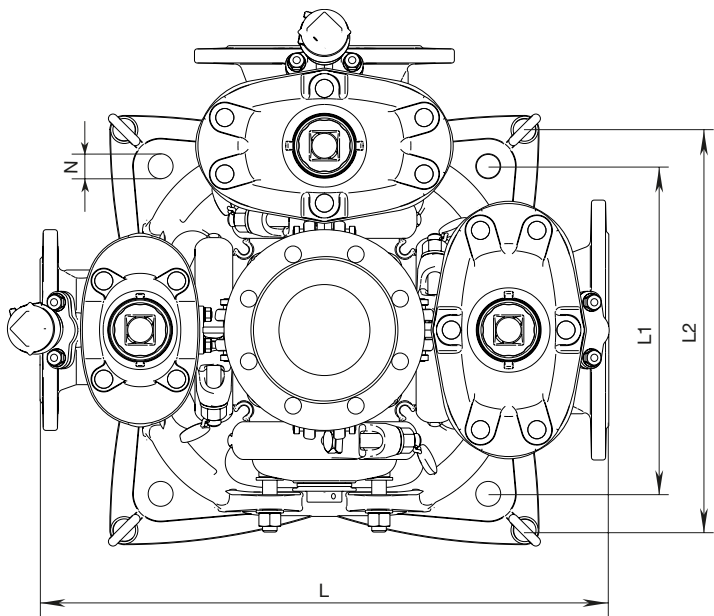
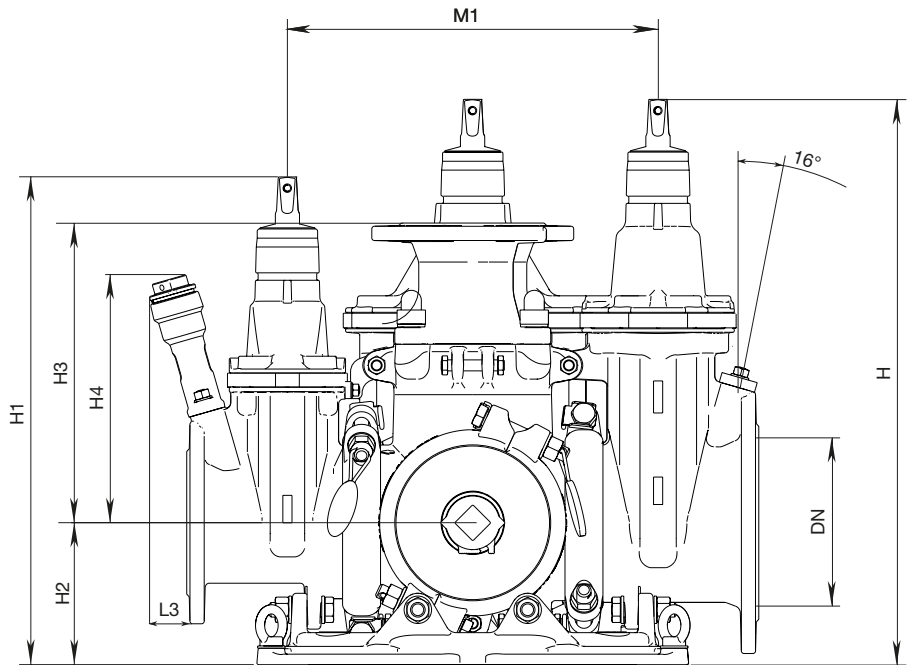
Order no.	Version	MOP (PN)	Dimensions / DN	Possible reduction / DN	Possible vertical outlet / DN	Weight min. — max.
4420E3	Individually configurable	10/16	150	80	80/100	57 — 212
				100		
				125		
				150		
				200		

Flange sized and drilled in accordance with EN 1092-2 standard PN 10. Please specify PN 16 when ordering. Standard version inclusive operating caps (remove in case of actuation by extension spindle or handwheel!) Please use the HAWLE-COMBIFLEX order form. It can be found on our homepage.

E3 Hawle-Combiflex

DN 150, PN 10 | PN 16

No. 4420E3

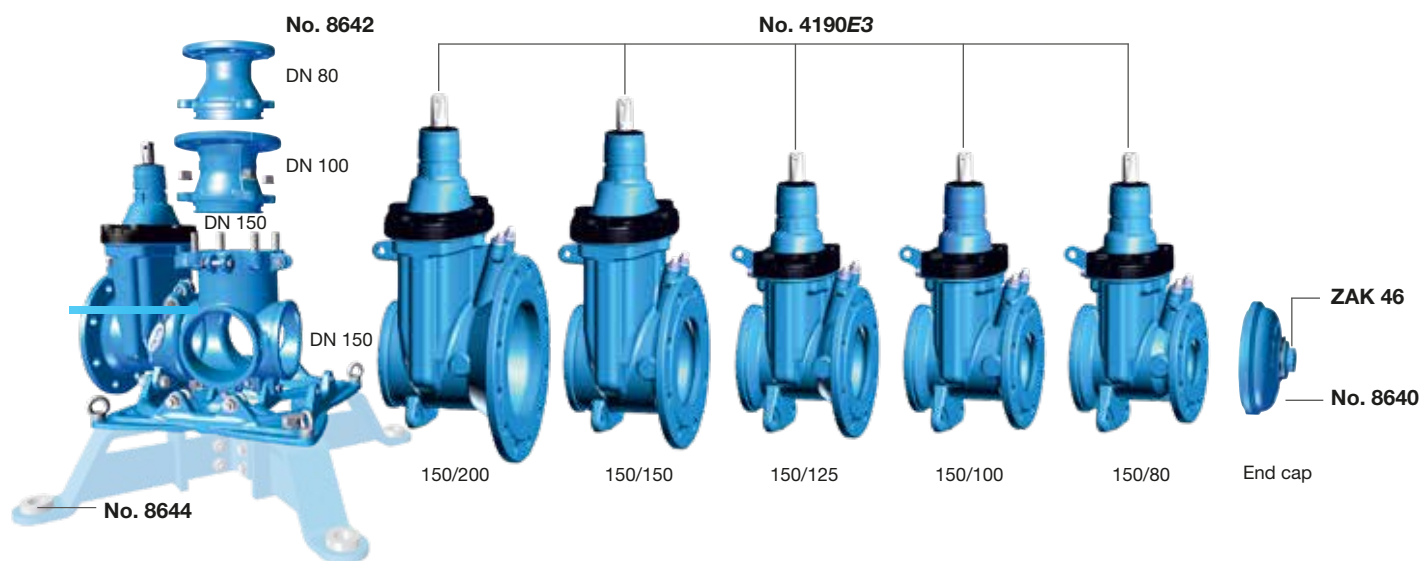


DN	E3 Hawle-Combiflex												
	MOP (PN)	DN	L*	L1	L2	L3	H	H1	H2	H3	H4	M1*	Ø N
150	10/16	80	625	360	440	37	609	518	155	328	262	405	27,4
		100				40					271		
		125				38					284		
		150	660 (1xDN 200)			40					298		
		200*	695 (2xDN 200)			24					335		

*The external dimensions (L, M1) remain the same with reducing valves!
* height compensation due to flange necessary
#Transport dimensions = L

E3 Hawle-Combiflex

Individual parts DN 150



No. 4190E3

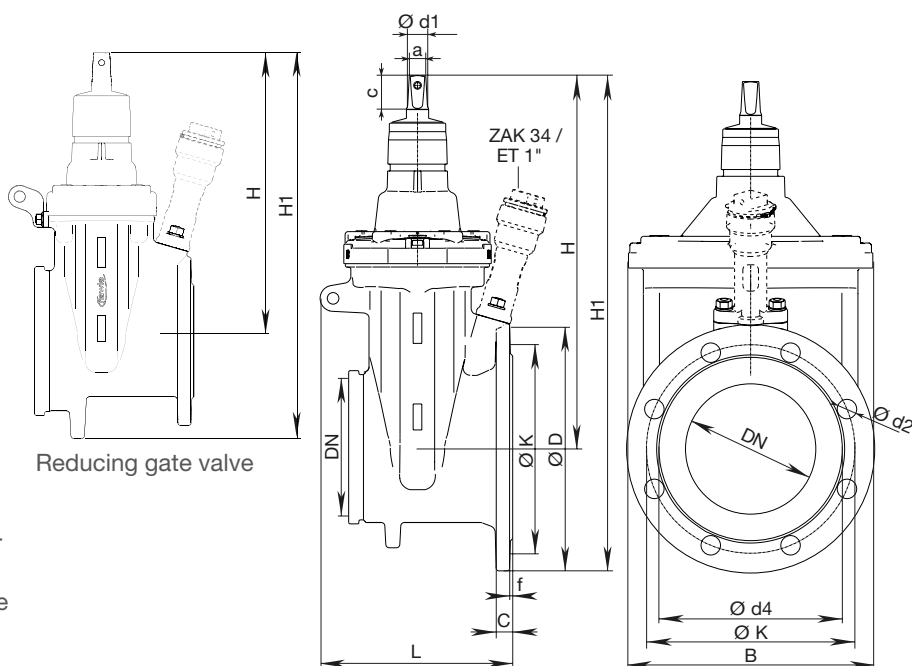


Optional
Operating cap
Order-No. 2156
Order-No. 2157

Optional
Outlet ET 1"
Order-No. 6979

Optional
ZAK 34 outlet
Order-No. 6979
ZAK-plug
Order-No. 6980

- Incl. bolt fastener for the middle section
- Fits through manhole openings



DN	Hawle-Combiflex E3 gate valve																			
	Flange							Bolts			Spindle			Valve						
	DN	MOP (PN)	Ø D*	C	Ø K	Ø d4	f	Qty.	Thread	Ø d2	a	c	Ø d1	Wedge DN	Service outlet	H	H1*	L*	B*	~ Max. weight
150	80	10 16	200	19	160	133	3	8	M16	19	19,3	34,9	25	100	ZAK 34 ET 1"	343	453	258	213	21,8
	100	10 16	220	19	180	153		8	M16	19			25	100		343	453	261	213	22,5
	125	10 16	250	19	210	183		8	M16	19			25	100		343	468	259	213	23,7
	150	10 16	285	19	240	209		8	M20	23			28	150		433	576	262	283	34,7
	200	10 16	340	20	295	264		8 12	M20	23			28	150		433	603	281	283	40,0

* Transport dimensions

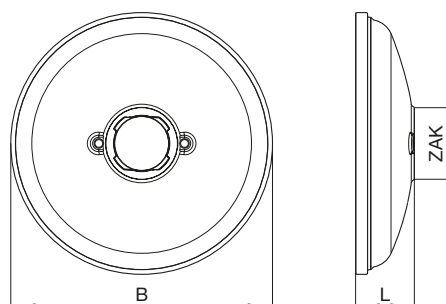
E3 Hawle-Combiflex

Individual parts DN 150

Hawle-Combiflex end cap No. 8640



- ZAK 69 socket

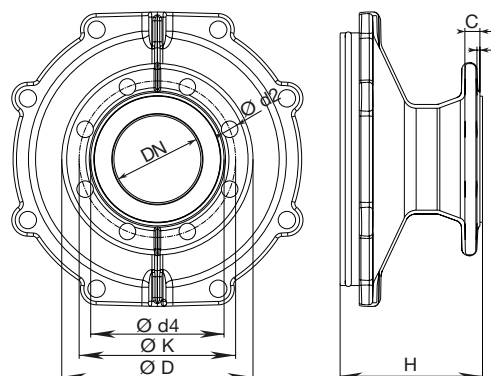


DN	Hawle-Combiflex end cap			
	B	ZAK-socket	L	Weight
150	177	ZAK 46	47	2,5

Hawle-Combiflex vertical outlet No. 8642



- Incl. affixed elastomer flange gasket



DN	Hawle-Combiflex vertical outlet											
	Flange							Bolts			Vertical outlet	
	DN	MOP (PN)	Ø D	C	Ø K	Ø d4	f	Qty.	Thread	Ø d2	H	Weight
150	80	10/16	200	19	160	133	3	8	M16	19	155	7,0
	100	10/16	220	19	180	153	3	8	M16	19	155	8,0

Blanking cap No. 8570E2/E3

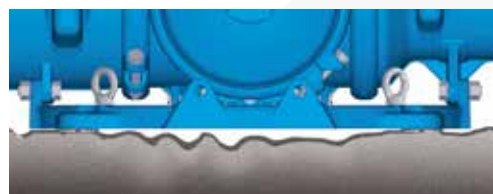


- For combi valves in place of valve bonnet
- Made of ductile iron, epoxy powder coated without screws and hood seal

Order No.	DN	Weight
8570E2/E3	80	1,6
	100	1,9
	125 — 150	3,2
	200	5,0

Hawle-Combiflex ground-distance set No. 8644 (order separately)

Stainless steel



A 9/4

All illustrations, technical data, dimensions (in mm) and weights (all weights specified in kg) are non-binding. Subject to change.

E3 Hawle-Combiflex

DN 250 / DN 300, PN 10 | PN 16



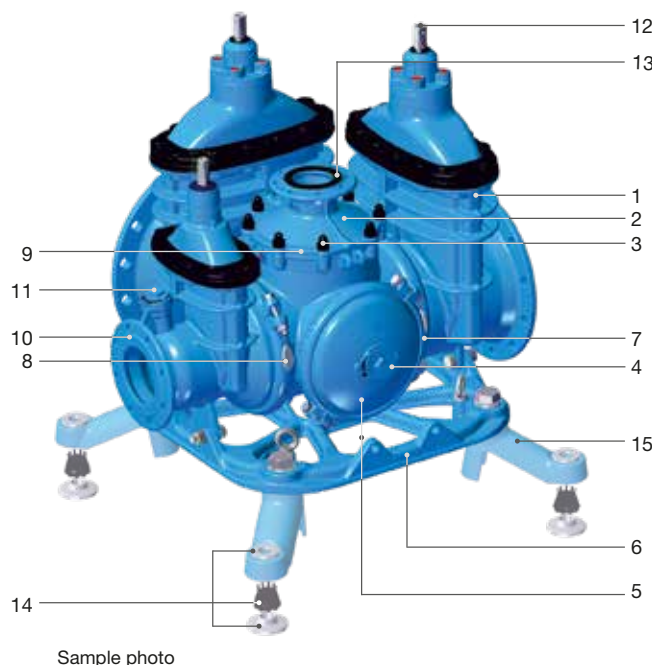
Design features

- Modular Combi-valve system enables flexible assembly arrangements
- Standardized compact construction regardless of valve configuration
- Suitable for cleaning with a cleaning pig
- Comprehensive range of interchangeable ZAK connections possible in every module
- Unique design facilitates easy, rapid exchange of any module
- Duplex stainless steel spindle

No. 4420E3

Material | technical features

- 1 Resilient seated E3 valve in DN 150 to DN 400 according to EN 1074-1 and 2
- 3 Molybdenum coated, A4 type clamping ring bolts
- 4/11 ZAK-69 (4) or ZAK-46 (11) socket for corrosion-free connection of sensors or ZAK Service valve
- 2/5/7/ Hawle-Combiflex vertical outlet (2) optionally
- 9/10 DN 100 or DN 150 end cap (5), clamping ring (7), 2 types of middle section DN 250 or DN 300 (9), E3 body (10) reduced in DN 150 and DN 200 or expanded to DN 400: ductile iron, epoxy powder coated
- 6 Hawle-Combiflex mounting frame: ductile iron, epoxy powder coated, with ring bolts for fastening hoists and integrated rings for floor connections
- 8 Quality inspection seal
- 12 Operating cap made of aluminum, including covering cap with direction indicator
- 13 Vertical outlet with affixed flat elastomer gasket
- 14 Assembly fittings kit (4 items each: plastic support liner; hot-dip galvanized spacer disk; hot-dip galvanized washer)
- 15 Anchoring system, optional



Individual combination options see page A 9/7



Suitable accessories

Suitable accessories: see page A 2/2

Handwheel:		No. 7800
Extension spindles:	rigid	No. 9000E2/E3
	telescopic	No. 9500E2/E3
Surface boxes:	rigid	No. 1750
	telescopic	No. 2050, No. 2051K
Operating cap:		No. 2156, No. 2157
Extension spindle:		No. 7820, No. 7825
Bolts:		No. 8810, No. 8830, No. 8840
Assembly fittings kit:		No. 8647
Flat gasket:		No. 3390, No. 3470
Blanking cap:		No. 8570E2/E3

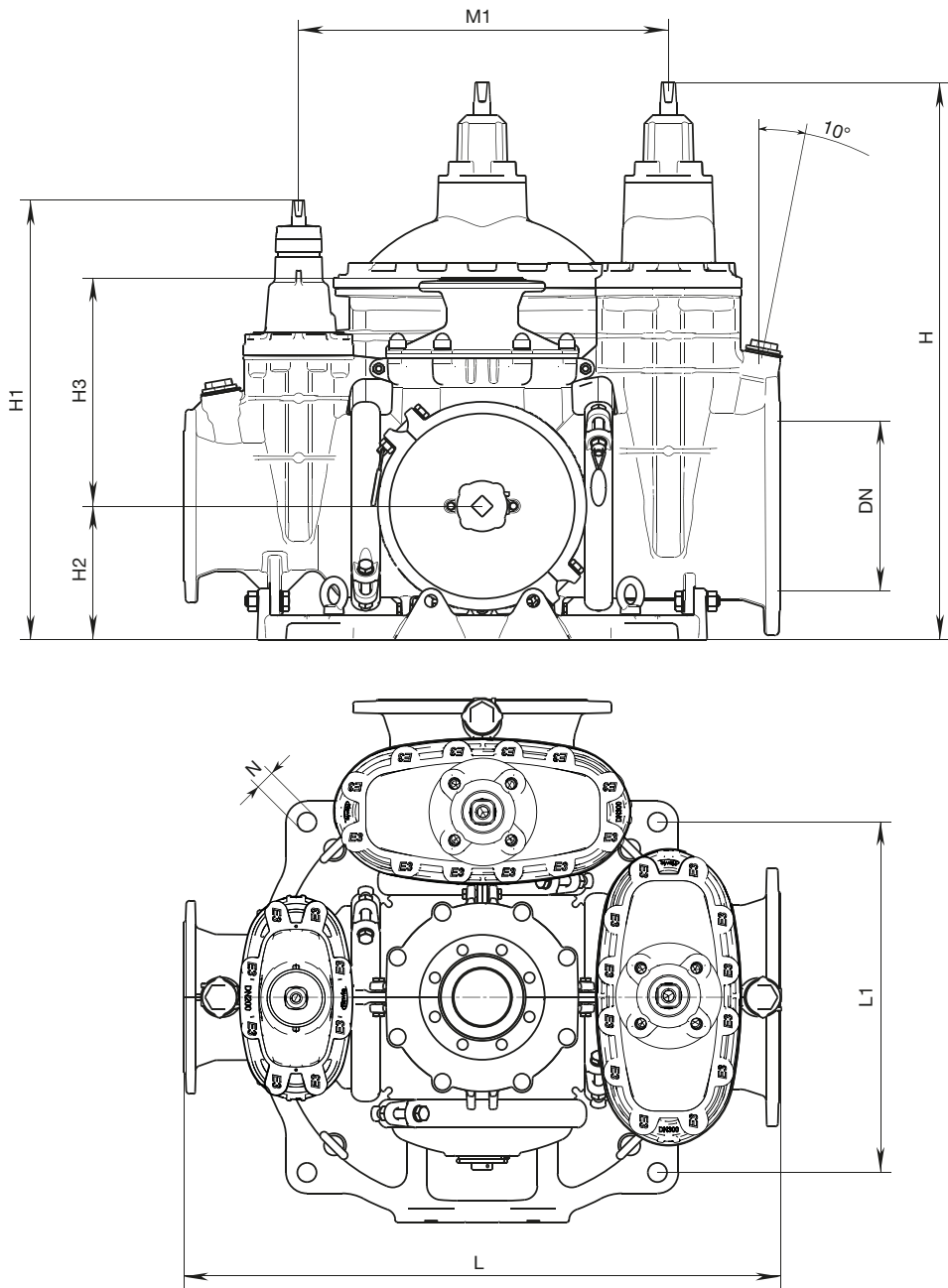
Order no.	Version	MOP (PN)	Dimensions / DN	Possible reduction / DN	Possible vertical outlet / DN	Weight min. - max.
4420E3	Individually configurable	10	250	150	100	265 — 465
		16		200	150	
				250		
		10	300	150	100	330 — 706
		16		200	150	
				250		
				300		
				400		

Flange sized and drilled in accordance with EN 1092-2 standard PN 10. Please specify PN 16 when ordering. Standard version including operating cap (to be removed during operation using extension spindle or hand wheel!) Please use the HAWLE-COMBIFLEX order form. It can be found on our homepage.

E3 Hawle-Combiflex

DN 250 / DN 300, PN 10 | PN 16

No. 4420E3

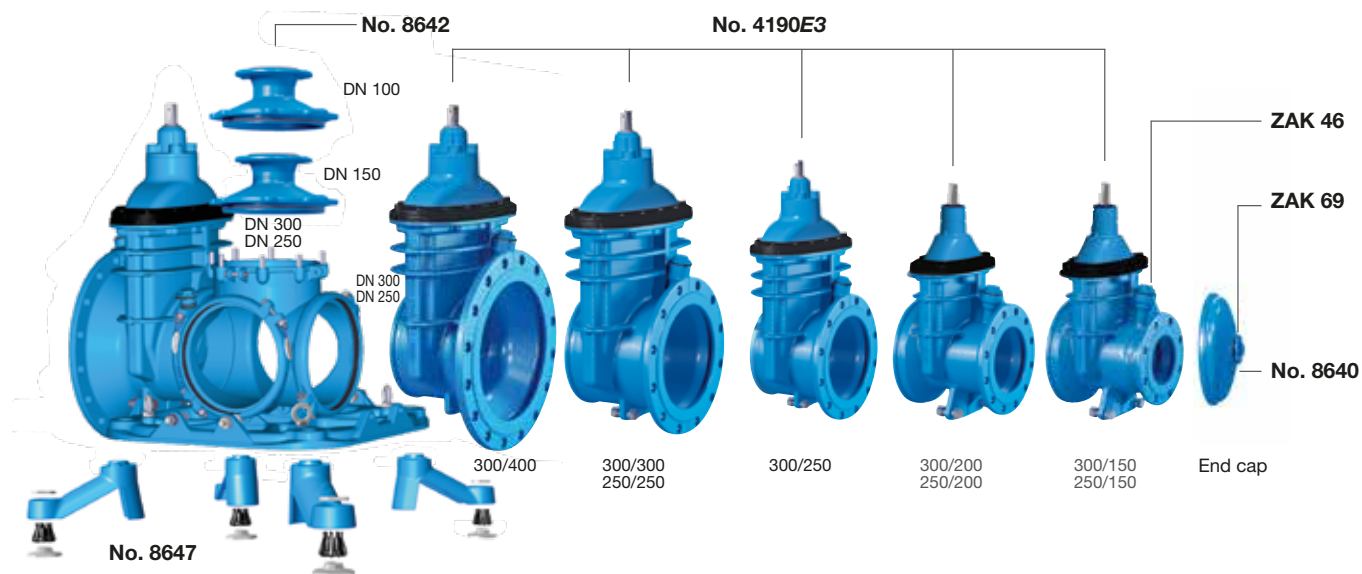


DN	E3 Hawle-Combiflex									
	MOP (PN)	L*	L1	H	H1	H2	H3	DN	M1*	ØN
250	10	960	617	911	755	210	359	150	590	34
	16							200		
								250		
300	10	1050	617	1021	809	235	399	150	646	34
								200		
								250		
	16							300		
								400		

*The external dimensions (L, M1) remain the same with reducing valves!

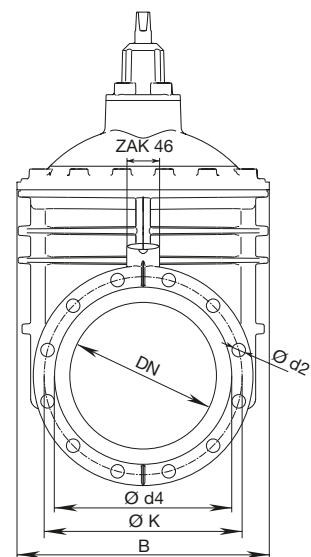
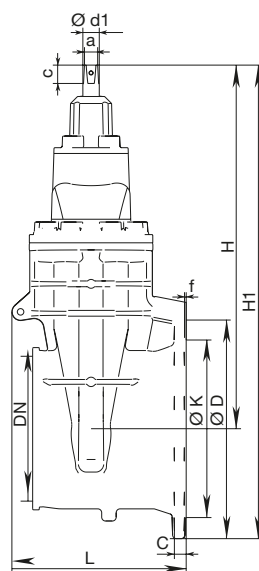
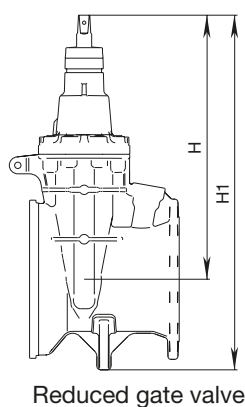
E3 Hawle-Combiflex

Individual parts DN 250 / DN 300



Hawle-Combiflex E3 gate valve

No. 4190E3



DN	Hawle-Combiflex E3 gate valve																	
	Flange					Bolts			Spindle			Valve						
	DN	MOP (PN)	Ø D	C	Ø K	Qty.	Thread	Ø d2	a	c	Ø d1	Wedge DN	Service outlet	H	H1*	L*	B*	Weight
250	150	10 16	285	19	240	8	M20	23	24,3	48	32	200	ZAK 46	541	707	337	356	61,0
	200	10 16	340	20	295	8 12	M20	23	24,3	48	32	200		541	710	337	356	62,0
	250	10 16	400	22	350 355	12	M20 M24	23 28	27,3	48	34	250		649	850	337	438	89,0
300	150	10 16	285	19	240	8	M20	23	24,3	48	32	200		541	734	361	356	65,0
	200	10 16	340	20	295	8 12	M20	23	24,3	48	32	200		541	734	361	356	66,0
	250	10 16	400	22	350 355	12	M20 M24	23 28	27,3	48	34	250		649	850	361	438	93,0
	300	10 16	455	24,5	400 410	12	M20 M24	23 28	27,3	48	34	300		731	960	361	523	132,0
	400+	10 16	580	28	515 525	16	M24 M27	28 31	27,3	48	34	300		731	1030	361	523	146,0

* Transport dimensions

*height adjustment necessary due to flange sheet

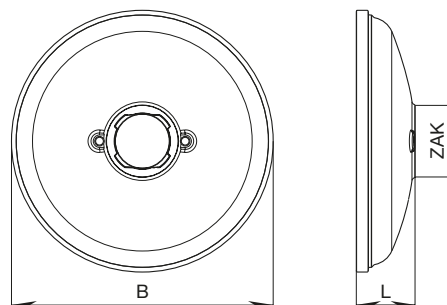
E3 Hawle-Combiflex

Individual parts DN 250 / DN 300

Hawle-Combiflex end cap No. 8640



- ZAK 69 socket

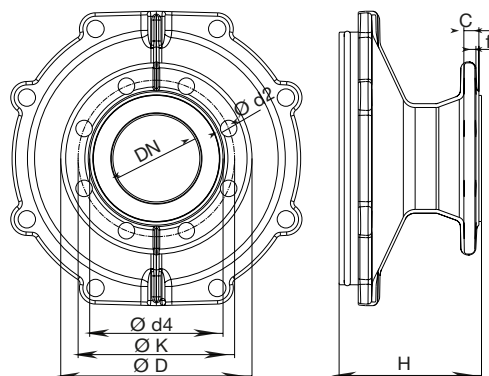


DN	Hawle-Combiflex end cap			
	B	ZAK-socket	L	Weight
250	284	ZAK 69	67	6,0
300	335	ZAK 69	77	7,5

Hawle-Combiflex vertical outlet No. 8642



- Incl. affixed elastomer flange gasket



DN	Hawle-Combiflex vertical outlet											
	Flange							Bolts			Vertical outlet	
	DN MOP (PN)		Ø D	C	Ø K	Ø d4	f	Qty.	Thread	Ø d2	H	Weight
250	100	10/16	220	19	180	153	3	8	M16	19	146	12,0
	150	10/16	285	19	240	209	3	8	M20	23	146	11,0
300	100	10/16	220	19	180	153	3	8	M16	19	160	13,0
	150	10/16	285	19	240	209	3	8	M20	23	160	13,0

Blanking cap No. 8570E2/E3



DN 150 — 200



DN 250 — 300

Order No.	DN	Weight
8570E2/E3	150	3,2
	200	5,0
	250 — 300	5,0

- For combi valves in place of valve bonnet
- Made of ductile iron, epoxy powder coated without screws and hood seal