

SADDLES

For steel, ductile iron, PE and PVC pipes



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SADDLES

For steel, ductile iron, PE and PVC pipes



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Application examples



UNIVERSAL PIPE SADDLE

For steel, ductile iron and asbestos cement pipes



Design features

- Compact saddle body
- Favorable angle of contact
- Flexible padded wrap around strap for easy installation
- Optimum force transfer of the strap screw connection through strap and cylinder disks as bolt contact area
- The saddle seal is moulded to fit the pipe diameter and is prefixed in the saddle body
- All internal threads are fitted with a corrosion protection ring to prevent corrosion and incrustations
- Version for potential equalization ("grounding") on request
- No. 3500 / 3510 for drilling without pressure

Material | Technical features

- Saddle body** made of ductile iron, epoxy powder-coated
- Saddle seal** made of elastomer
- Nuts** free lying, (Molybdenum-coated)
No. 3500 / 3530: made of stainless steel spherical bearings
No. 3510: on stainless steel cylinder disk
screws M 16 - stainless steel
- Strap** made of passivated stainless steel, strength 1,5 with insulating elastomer **rubber padding**
- Corrosion protection ring** made of elastomer

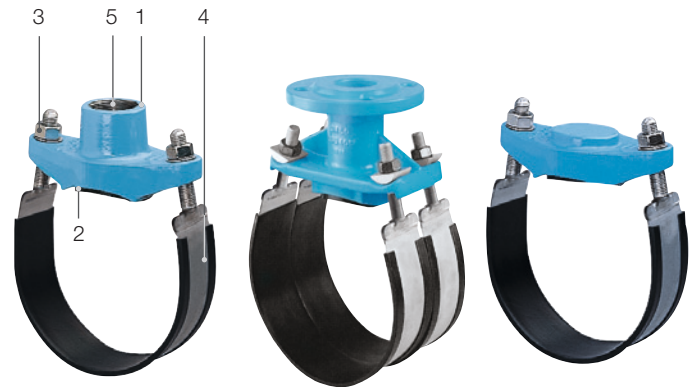
Suitable accessories

Drilling machine: No. 5800, No 5805, No 5807

No. 3500 Pipe saddle / internal thread

No. 3510 Pipe saddle / flange

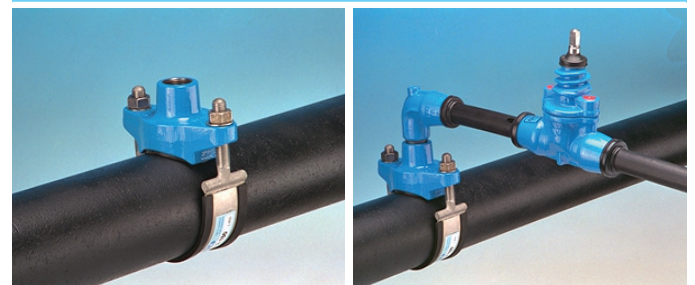
No. 3530 Saddle without drilled connection hole



Order no.	Internal thread DN	MOP (PN)	Dimensions/DN														
			50	65	80	100	125	150	200	250	300	350	400	450	500	600	
3500	1"	16															
	1¼"																
	1½"																
	2"																
	2½"																
3"																	
3510	40																
	50																
	80																
	100																
3530	150																

Please specify pipe material on order

Application examples



UNIVERSAL PIPE SADDLE

For steel, ductile iron and asbestos cement pipes

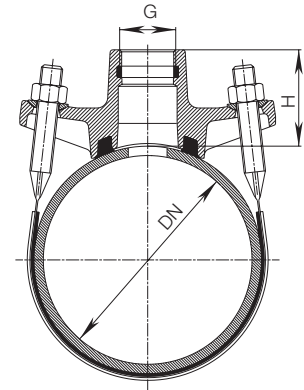


Thread outlet G		Dimension/DN													
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
1"	Weight	2,30	2,20	2,40	2,50	3,30	3,40	3,90	4,60	4,70					
	H	64	64	61	61	78	78	86	89	89					
1¼"	Weight	2,30	2,20	2,40	2,50	3,40	3,50	4,10	4,60	4,70					
	H	64	64	61	61	78	78	86	89	89					
1½"	Weight			2,40	2,50	3,60	3,60	4,20	4,80	4,90					
	H			57	57	78	78	86	89	89					
2"	Weight			2,45	2,50	3,80	3,90	4,40	5,00	5,10	7,30	7,60	8,00	8,20	8,80
	H			57	57	78	78	86	89	89	74*	74*	74*	74*	74*
2½"	Weight							5,70							
	H							56*							
3"	Weight						5,40		5,90						
	H						54*		56*						

*Version with double strap

No. 3500 saddle clamp

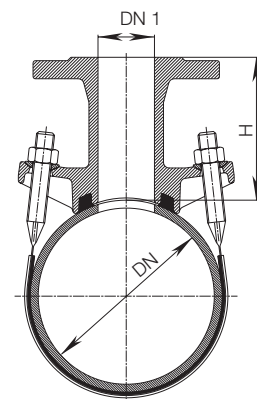
With internal threaded outlet ISO 228, in conjunction with shut-off adapter No. 3720 for under pressure drilling



Flange outlet DN 1		Dimension/DN												
		80	100	125	150	200	250	300	350	400	450	500	600	
40	Weight		6,60	6,80	6,90	7,70								
	H		114	126	126	145								
50	Weight	6,60	6,60	6,80	6,90	7,70	7,90	8,00						
	H	114	114	126	126	145	153	153						
80	Weight				9,50	10,30	11,50	11,80	14,50	14,90	15,70	16,50	17,30	
	H				135	150	147	147	146	146	146	146	146	
100	Weight				11,10	11,80	12,50	12,70	15,80	16,00	16,90	17,60	18,30	
	H				140	155	158	158	165	165	165	165	165	
150	Weight									24,00	29,40	30,50	31,90	
	H									186	186	186	186	

No. 3510 saddle clamp

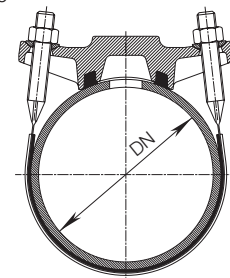
With flanged outlet - EN 1092-2; all models have a double strap, flange drilling to EN 1092-2 | PN 16, larger DN on request



Dimension/DN	65	80	100	125	150	200	250	300	350	600
Weight	2,60	2,70	2,90	3,50	3,60	4,30	4,80	4,90	6,50	10,00

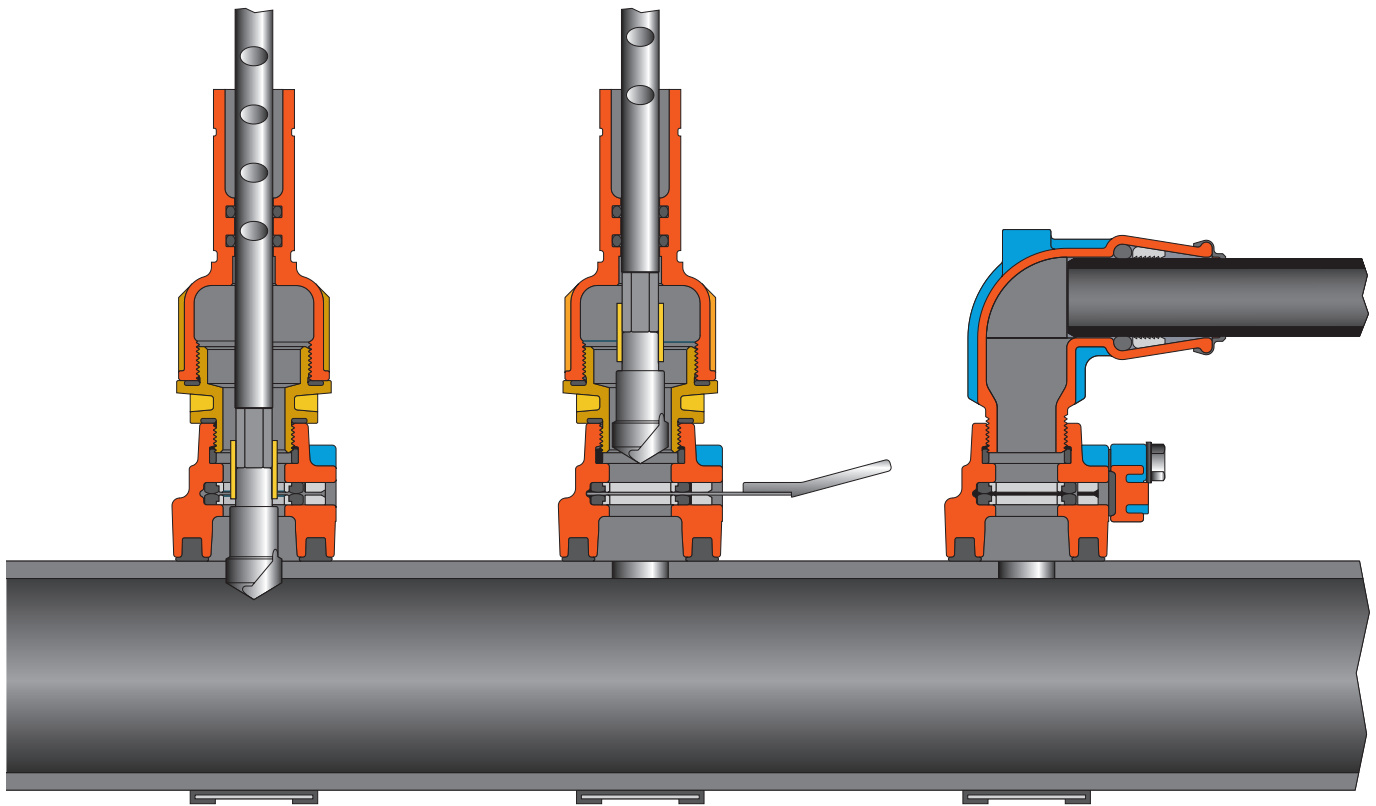
No. 3530 pipe saddle without drilled hole

Suitable for covering drill holes up to max. Ø40



SADDLES

Drilling instructions under pressure



1 Drilling:

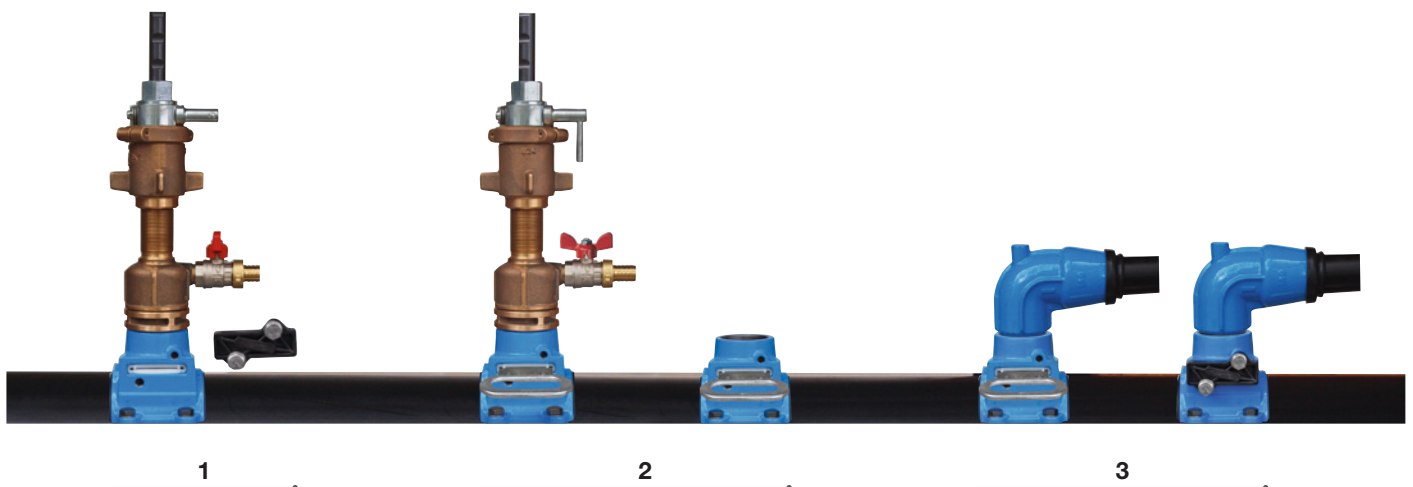
Drill the pipe with a drilling machine No. 5800, No. 5805 (Hawle drilling machine see "Tools") - retract the drill

2 Shut-off:

Lubricate No. 3443 the saddle blade (No. 8401) - shut-off

3 Connection:

Connect the pipe - remove saddle blade - cover must be replaced



1

2

3

UNIVERSAL SHUT-OFF SADDLE

For steel, ductile iron and asbestos cement pipes



Design features

- For under pressure drilling
- Can be pressure tested from both directions
- Solid body
- Flexible padded wrap around strap for easy installation
- Favorable angle of contact
- Optimum force transfer of the strap screw connection through strap and cylinder disks as bolt contact area
- The saddle seal is moulded to fit the pipe diameter and is prefixed in the saddle body
- All internal threads are fitted with a corrosion protection ring to prevent corrosion and incrustations

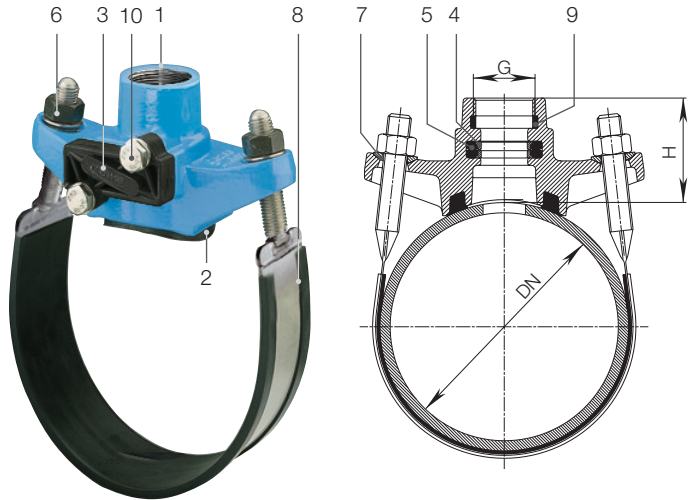
Material | Technical features

- Saddle body** made of ductile iron, epoxy powder-coated
- Saddle seal** and **seal** for intermediate shut-off made of elastomer
- Cover** made of POM, fiber glass reinforced (with rubber seal)
- O-ring carrier** made of POM
- Nuts** made of stainless steel (Molybdenum-coated)
- Ball disc** made of stainless steel
- Strap** of passivated stainless steel, strength 1,5 with insulating elastomer **rubber padding**
- Corrosion protection ring** made of elastomer
- Hexagonal screws** and **washers** made of stainless steel
 - Drilling instructions (see page I 3/1)

Suitable accessories

- Drilling machine:** No. 5800, No. 5805
Saddle blade No. 8401

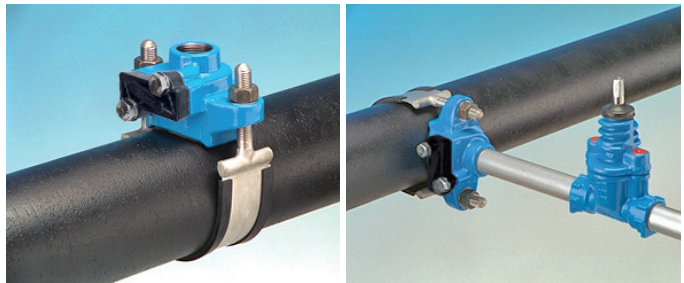
No. 3800



Order No.	Internal thread ISO 228	MOP (PN)	Dimension/DN													
			50	65	80	100	125	150	200	250	300	350	400	450	500	600
3800	1"	16														
	1 1/4"															
	1 1/2"															
	2"															

Please specify pipe material on order

Application examples



Order No.	Internal thread ISO 228 G		Dimension/DN													
			50	65	80	100	125	150	200	250	300	350	400	450	500	600
3800	1"	Weight	2,10	2,10	2,10	2,70	3,10	3,20	4,00	4,60	4,70	7,00			8,00	8,60
		H	67	68	69	69	70	70	80	82	82	78			78	78
	1 1/4"	Weight	2,10	2,10	2,70	2,70	2,75	3,30	4,10	4,70	4,70				8,00	
		H	70	71	72	72	73	73	80	82	82				78	
	1 1/2"	Weight			3,00	3,00	3,60	3,70	4,30	4,90	4,90	7,00	7,40		8,10	9,00
		H			73	73	74	74	80	82	82	78	78		78	78
	2"	Weight			3,10	3,10	3,00	3,80	4,60	5,30	5,40	7,70	8,00	8,30	8,60	9,00
		H			78	78	78	78	81	83	83	78	78	78	78	78

STRAP

For Hawle pipe saddles for steel, cast iron and asbestos cement pipes



Design features

No. 3111

- Including ball discs and nuts
- Max. tightening torque 100 Nm
- Made of stainless steel, passivated
- Rubber cover made of elastomer



Dimension DN	Suitable for pipe type			Markings					
	Steel	Cast iron	AZ	Ø-Diameter range of strap	Control dimension „L”	DN	Pipe type		
*50				60 - 70	344	50	ST	G	AZ
*65				70 - 82	374	65	ST	G	AZ
*80				89 - 108	410	80	ST	G	AZ
*100				102 - 130	455	100	ST	G	AZ
*125				132 - 158	520	125	ST	G	AZ
*150				159 - 185	595	150	ST	G	AZ
175				185 - 210	685	175	ST	G	
200				210 - 235	760	200	ST	G	
*200				219 - 244	785	200		G	AZ
*250				264 - 288	905	250	ST	G	
250				288 - 310	975	250			AZ
*300				316 - 340	1055	300	ST	G	
300				335 - 360	1130	300			AZ
*350				355 - 380	1155	350	ST	G	
350				390 - 410	1250	350			AZ
400				406 - 429	1300	400	ST		
*400				415 - 440	1325	400	ST	G	
400				450 - 475	1425	400			AZ
*450				467 - 485	1480	400	ST	G	
450				496 - 520	1570	450			AZ
*500				518 - 535	1630	450	ST	G	
500				578 - 600	1810	500			AZ
*600				620 - 640	1945	600	ST	G	
600				680 - 700	2120	600			AZ

* When ordering without reference to the pipe type or without information on the external Ø, the saddle clamps will be delivered with a strap for this labelled Ø range

UNIVERSAL-H SHUT-OFF SADDLE

For steel, ductile iron and asbestos cement pipes



Design features

- For under pressure drilling
- Can be pressure tested from both directions
- Solid body
- Flexible padded wrap around strap for easy installation
- Favorable angle of contact
- Optimal force transition via bolt nut and holding piece
- The saddle seal is moulded to fit the pipe diameter
- All internal threads are fitted with a corrosion protection ring to prevent corrosion and incrustations

Material | Technical features

- Saddle body** made of ductile iron, epoxy powder-coated
- Saddle seal** and **seal** for intermediate shut-off made of elastomer
- Cover** made of POM, fiber glass reinforced (with rubber seal)
- O-ring carrier** made of POM
- Nuts** and **washers** made of stainless steel (Molybdenum-coated)
- Strap** of passivated stainless steel, strength 1,5 with insulating elastomer **rubber padding**
- Holding piece** made of glasfibre-reinforced PA
- Corrosion protection ring** made of elastomer
- Hexagonal screws** and **washers** made of stainless steel
 - Drilling instructions (see page I 3/1)

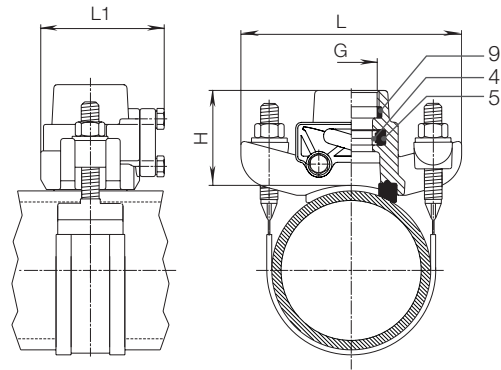
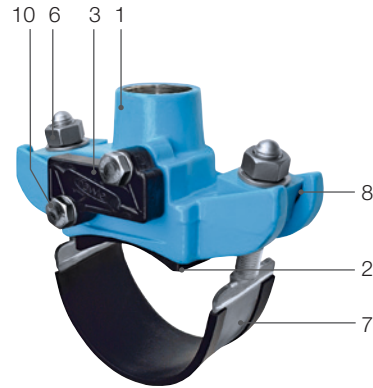
Suitable accessories

- Drilling machine:** No. 5800, No. 5805
Saddle blade No. 8401
Strap: No. 3110 (see page L 4/2)

Universal-H shut-off saddle

No. 3811 Complete

No. 3811G Without strap and saddle seal



Order-No.	MOP (PN)	Internal thread ISO 228 G	Dimension/DN										
			65	80	100	125	150	200	250	300	400	500	
3811	16	1"											
		1½"											
3811G		1"	DN 65 - DN 500										
		1½"	DN 65 - DN 500										

DN	ISO 228	H	L	L1	Weight
65-500	1"	84	200	112	2,60
	1½"				2,80

When ordering, please state DN, pipe Ø and pipe type; weight without strap | strap see page I 3/5

STRAP

For universal-H shut-off saddles

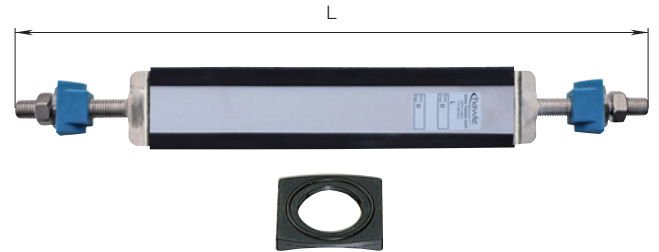


Design features

- Includes holding pieces, washers, nuts
- Max. tightening torque 100 Nm
- Made of passivated stainless steel
- DN 65 to 500
- For all ZAK saddles, ZAK-Hawlinger and universal-H shut-off saddles

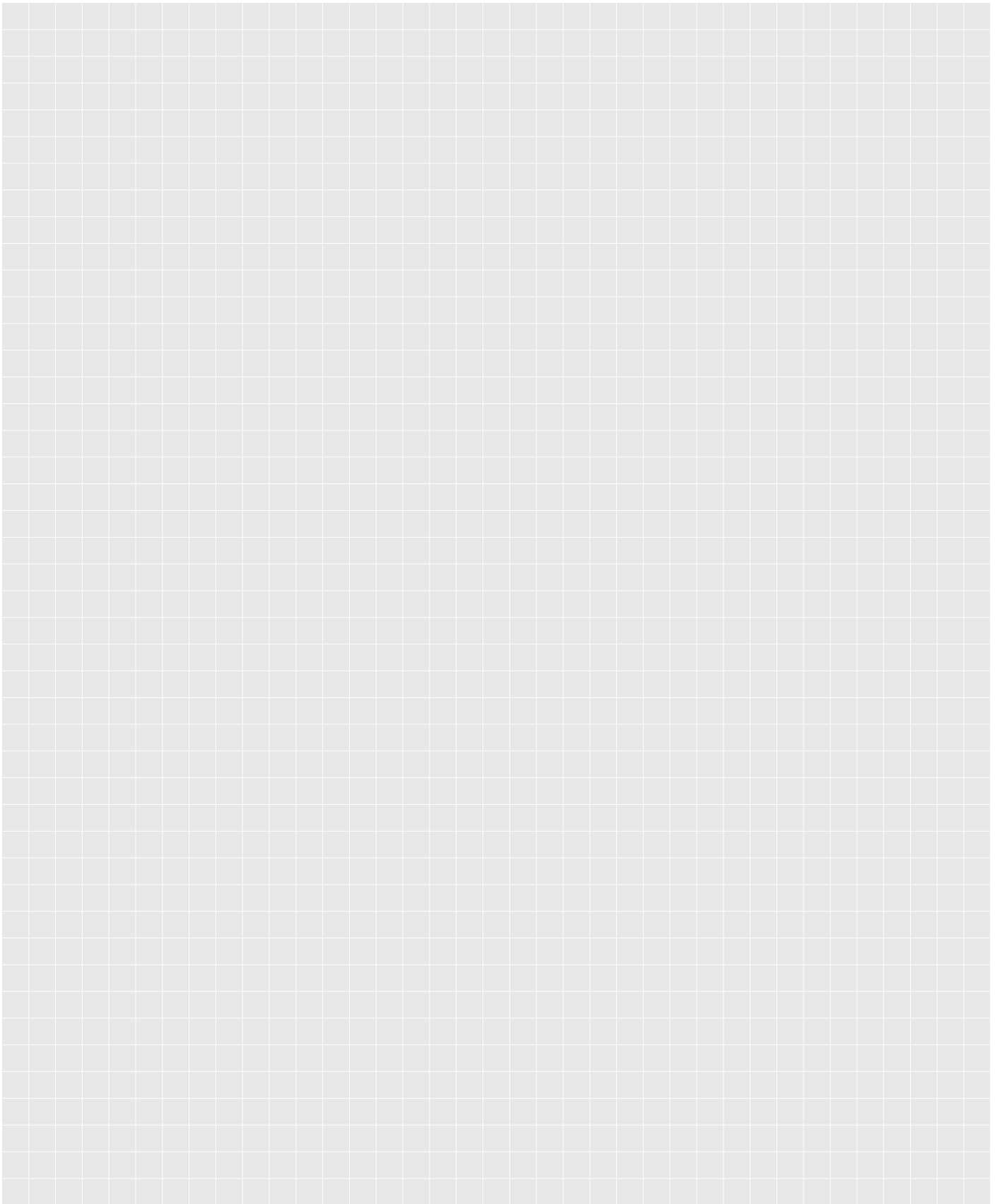
Strap with saddle seal

No. 3110



When ordering, please state DN, pipe Ø and pipe type

Pipe Ø	Control dimension „L”	e.g.: for main pipe - DN			Weight
		Steel	Cast iron	AC	
75 - 83	365	65	65		0,73
88 - 97	395	80			0,76
93 - 102	410		80	80	0,76
98 - 105	415			80	0,78
106 - 117	440	100		80	0,80
112 - 122	455	100	100		0,82
123 - 137	485			100	0,85
129 - 139	490	125			0,86
139 - 149	520	125	125		0,88
147 - 160	540	150		125	0,90
156 - 165	560	150		125	0,92
166 - 177	595	150	150		0,95
175 - 185	610			150	0,97
185 - 197	645			150	1,00
200 - 215	685	200			1,03
211 - 223	720	200	200		1,05
216 - 227	735	200	200		1,07
224 - 236	760			200	1,11
235 - 244	785			200	1,13
251 - 263	840			200	1,19
260 - 275	865	250	250		1,20
268 - 280	880	250	250		1,21
273 - 285	905			250	1,25
287 - 298	945			250	1,28
305 - 315	995			250	1,33
323 - 330	1055	300	300		1,39
331 - 343	1075			300	1,41
344 - 356	1110	350		300	1,44
365 - 376	1175	350			1,50
374 - 381	1205		350		1,53
405 - 415	1300			350	1,62
411 - 420	1320	400			1,64
420 - 432	1345		400		1,66
450 - 460	1445			400	1,68
461 - 466	1475			400	1,78
493 - 503	1570			400	1,87
501 - 510	1600	500		450	1,91
541 - 549	1705			450	2,00
556 - 564	1750			500	2,30



HAKU SADDLE

For PE and PVC pipes



Design features

- For **PE pipes** according to EN 12201 and DIN 8074 and **PVC pipes** according to EN ISO 1452-2
- The HAKU seal is in full contact with the entire diameter of the PE or PVC pipe and is glued onto the saddle for ease of assembly
- Several concentric seals with increasing diameter surround the outlet, relieving pressure exerted upon the drill hole and protects it from deformation
- The protective layer on PE pipes should be removed prior to mounting the saddle
- No. 5250 for drilling without pressure

Material | Technical features

- 1 **Saddle body** made of ductile iron, epoxy powder coated
- 2 **Seals** made of elastomer
- 3 **Bolts** (Molybdenum-coated) and **washers** made of stainless steel
- 4 **Corrosion protection ring** made of elastomer

Suitable accessories

Drilling machine: No. 5800, No. 5805

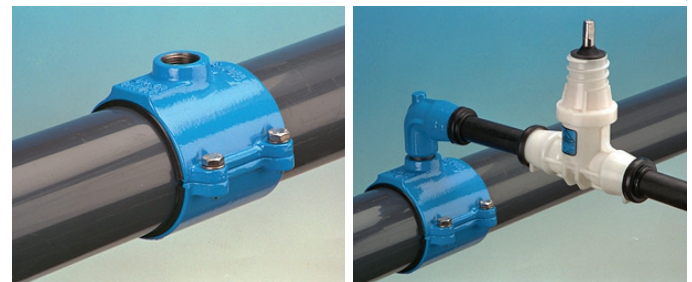
No. 5250



Order No.	Pipe Ø	MOP (PN)	Internal thread outlet ISO 228			
			1"	1¼"	1½"	2"
5250	40	16				
	50					
	63					
	75					
	90					
	110					
	125					
	140					
	160					
	180					
	200					
	225					
	250					
	280					
	280*					
	315					
	315*					
	355*					
400*						
450*						
500*						
630*						

* Supplied as saddle piece with strap

Application examples



HAKU SADDLE

For PE and PVC pipes

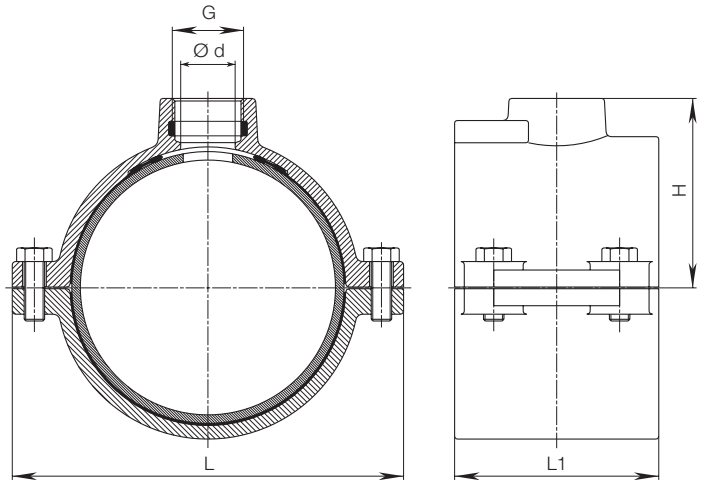


Ø Pipe	G ISO 228	Ø d	H	L	L 1	Weight
40	1"	27	42	98	70	0,95
50	1"	27	56	110	80	1,20
63	1"	27	57	124	100	1,80
	1¼"	33	62			2,00
	1½"	40+	62			1,90
75	2"	40+	68	135	110	2,10
	1"	27	63			2,15
	1¼"	33	68			2,25
90	1½"	40	68	150	110	2,20
	2"	50	73			2,30
	1"	27	71			2,60
110	1¼"	33	75	170	120	2,70
	1½"	40	75			2,60
	2"	50	80			2,70
125	1"	27	81	192	120	3,60
	1¼"	33	85			3,60
	1½"	40	85			3,80
140	2"	50	90	208	120	3,60
	1"	27	87			3,70
	1¼"	33	93			3,70
160	1½"	40	93	230	120	4,15
	2"	50	98			4,10
	1"	27	96			4,40
180	1¼"	33	100	262	120	4,30
	1½"	40	100			4,60
	2"	50	106			4,50
200	1"	27	106	282	120	5,90
	1¼"	33	111			6,10
	1½"	40	111			6,30
225	2"	50	116	310	120	6,20
	1"	27	125			8,00
	1¼"	33	125			8,00
250	1½"	40	127	347	180	8,10
	2"	50	127			8,10
	1"	27	132			8,10
280	1¼"	33	132	408	180	7,80
	1½"	40	137			8,30
	2"	50	137			8,10
315	1"	27	143	408	180	9,10
	1¼"	33	145			9,40
	1½"	40	145			9,70
355	2"	50	150	270	120	9,60
	1"	27	156			11,00
	1¼"	33	156			11,30
400	1½"	40	163	270	120	11,50
	2"	50	163			12,00
	1"	27	176			3,80
450	1¼"	38	176	235	120	3,60
	1½"	44	176			3,60
	2"	50	176			3,30
500	2"	51	178	255	120	14,20
	1¼"	38	196			3,80
	1½"	44	196			3,75
630	2"	51	196	255	120	3,55
	2"	50	220			3,50
	1½"	40	243			4,90
400	2"	50	243	235	120	4,90
	1½"	40	268			4,60
450	2"	50	268	255	120	4,60
	1½"	40	292			4,90
500	2"	50	292	255	120	4,90
	2"	50	342			9,50

No. 5250

Pipe Ø40-315

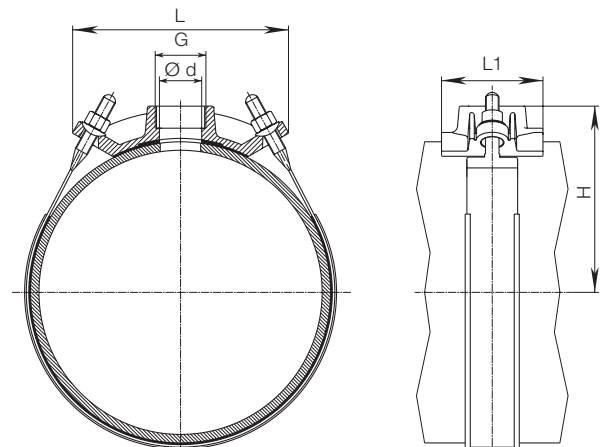
With internal threaded outlet ISO 228, in conjunction with shut-off adapter No. 3720 for under pressure drilling



+ Drilling max. 35

*Pipe Ø280-630 (supplied as saddle piece with strap)
Suitable only for SDR 11 PE pipes or stronger SDR class

With internal threaded outlet ISO 228, in conjunction with shut-off adapter No. 3720 for under pressure drilling



HAKU PIPE SADDLE

With flanged outlet for PE and PVC pipes



Design features

- For **PE pipes** according to EN 12201 and DIN 8074 (**SDR 7,4 and SDR 11**) for **PVC pipes** according to EN ISO 1452-2 (**SDR 13,5 and SDR 21**)
- Solid construction of ductile iron epoxy powder coated
- No deformation of the pipe
- The drilled hole is sealed by an O-ring inserted in the upper part of saddle
- The rubber linings are bonded to the lower part of saddle - this ensures positive positioning of saddle (only for d 110 to 315)
- For holes from d 355 to 630 pipes, special drilling machine is available from Hawle
- Flange sized and drilled according to EN 1092-2 | PN 16 other standards on request
- For PE pipes with protective layer, this must be removed prior to mounting the saddle

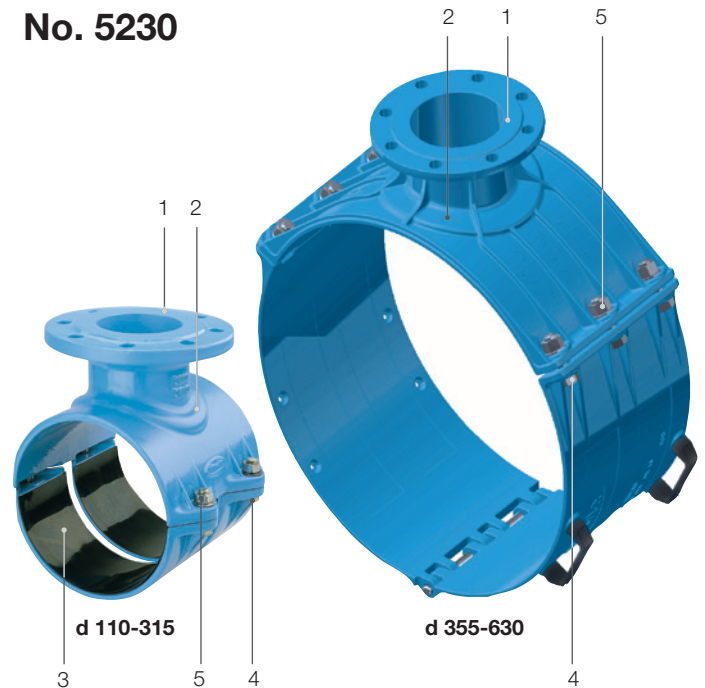
Material | Technical features

- 1 **Saddle body and segments** made of ductile iron, epoxy powder coated
- 2 **O-ring seal in the bonnet** made of elastomer
- 3 **Rubber in the lower part** of the saddle made of elastomer
- 4 **Bolts and washers** made of stainless steel
- 5 **Nuts** (Molybdenum-coated) made of stainless steel

Suitable accessories

Drilling machine for flange outlet DN 80-100: No. 5807

No. 5230



Order No.	Flange DN	MOP (PN)	Ø Pipe													
			110	140	160	180	200	225	250	280	315	355	450	500	630	
5230	80	16														
	100															
	150															

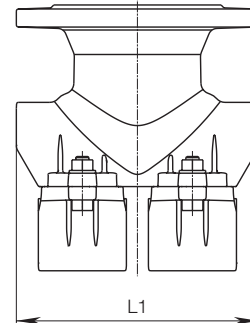
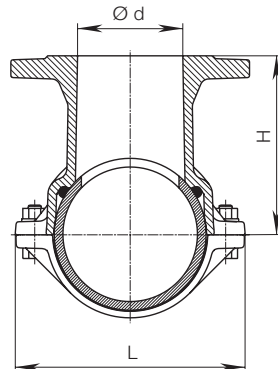
HAKU PIPE SADDLE

With flanged outlet for PE and PVC pipes

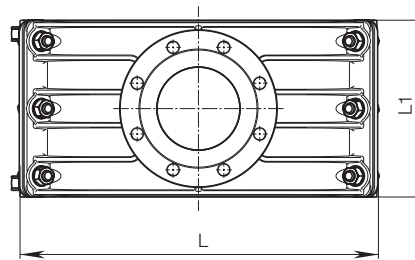
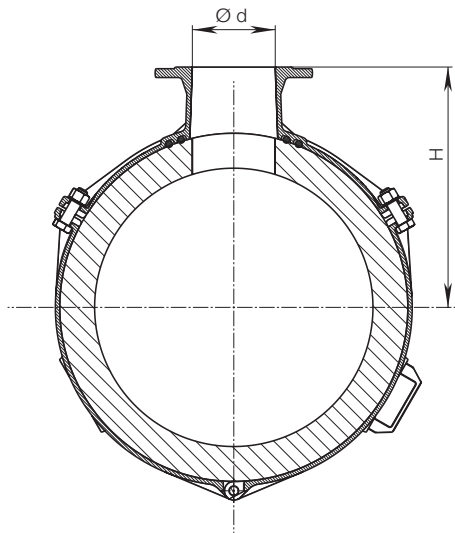


No. 5230 PE pipes EN 12201 DIN 8074 (SDR 7.4 and SDR 11) d 110-630
 PVC pipes EN ISO 1452-2 (SDR 13.5 and SDR 21) d 110-315

d 110-315



d 630



Ø Pipe	Flange DN	Ø d	H	L	L1	Weight
110	80	80	150	182	180	8,3
140	80	80	166	212	220	11,8
	100	100	166	212	220	13,3
160	80	80	176	234	220	10,1
	100	100	176	234	220	11,0
180	80	80	186	254	220	11,2
	100	100	186	254	220	12,2
200	80	80	191	270	220	11,8
	100	100	191	270	220	13,8
225	80	80	206	301	220	14,0
	100	100	206	301	220	16,0
250	80	80	221	347	220	15,3
280	150	150	239	374	285	21,0
315	80	80	255	410	285	20,0
315	150	150	257	409	285	24,5
355	150	150	298	460	320	36,2
450	150	150	345	475	320	42,0
500	150	150	370	520	320	45,2
630	150	150	435	649	320	50,2

HAKU SHUT-OFF SADDLE

For PE and PVC pipes



Design features

- For **PE pipes** according to EN 12201 and DIN 8074 and **PVC pipes** according to EN ISO 1452-2
- For under pressure drilling
- Can be pressure tested from both directions
- The HAKU seal is in full contact with the entire diameter of the PE or PVC pipe and is glued into the saddle for ease of assembly
- In addition several concentric seals with increasing diameter surround the outlet thus relieving the pressure upon the drill hole and protecting it from deformation
- For PE pipes with protective layer, this must be removed prior to mounting the saddle

Material | Technical features

- 1 **Saddle body** made of ductile iron, epoxy powder coated
 - 2 **Seal** made of elastomer
 - 3 **Bolts** (Molybdenum-coated) and **washers** made of stainless steel
 - 4 **Seal cover** made of POM, with rubber seal, glass fiber reinforced
 - 5 **Bolts** and **washers** made of stainless steel
 - 6 **Corrosion protection ring** made of elastomer
- Drilling instructions (see page I 5/2)

ØPipe	G ISO 228	Ød	H	L	L1	Weight
63	¾"	24	84	124	100	2,5
	1"	28	84			2,5
	1¼"	32	87			2,4
75	1"	28	91	135	110	2,8
	1¼"	32	94			2,6
	1½"	43	91			3,3
	2"	43	95			3,0
90	1"	28	100	150	110	3,0
	1¼"	32	103			2,5
	1½"	43	101			3,6
	2"	43	105			3,4
110	1"	28	110	170	120	3,6
	1¼"	32	113			3,6
	1½"	43	113			4,3
160	2"	43	117	230	120	4,0
	1"	28	138			5,5
	1¼"	32	141			5,4
125	1½"	43	140	192	120	5,6
	2"	43	145			5,6
	1"	27	167			4,8
140	1¼"	31	170	208	120	5,5
	1½"	37	180			5,8
	2"	42	183			5,8
200	1"	27	174	282	120	5,4
	1¼"	31	177			5,9
	1½"	37	188			6,2
225	2"	42	191	310	120	6,2
	1"	27	212			7,0
	1¼"	31	219			10,5
250	1½"	31	222	347	180	11,0
	1½"	37	232			11,3
	2"	42	235			12,0
125	2"	43	248	347	180	14,2

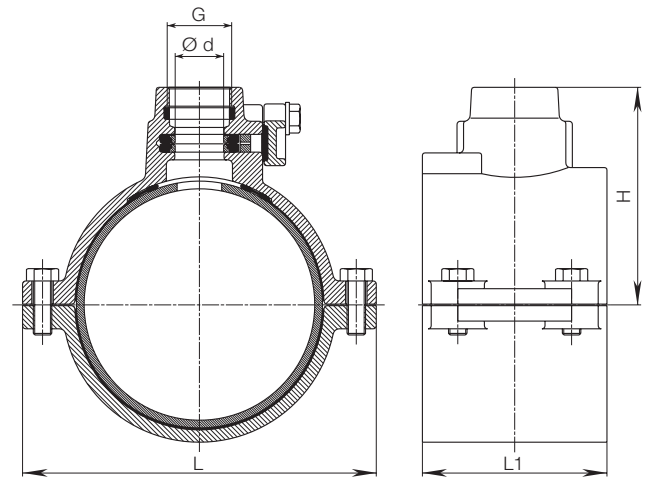
No. 5310



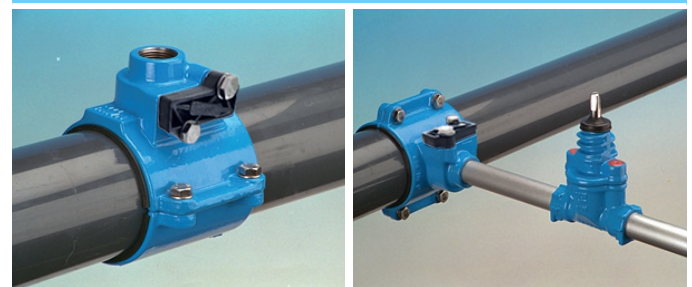
ØPipe	MOP (PN)	Internal thread outlet ISO 228				
		¾"	1"	1¼"	1½"	2"
63	16					
75						
90						
110						
160						

No. 5210 Combined assembly: HAKU saddle No. 5250 with shut-off adapter No. 3720

125	16					
140						
200						
225						
250						



Application examples



SHUT-OFF ADAPTER

For saddle



Design features

- Drilling under pressure with the shut-off system that has been tried and tested for decades
- This shut-off adapter can be used for under pressure drilling with every type of standard saddle
- Note: The external thread is one size larger than the internal threaded outlet, except on the 2" size, this to provide greater strength
- Cover shut-offs with internal thread are fitted with a corrosion protection ring to prevent corrosion and incrustation
- All external threads must be protected according to standard occupational procedure

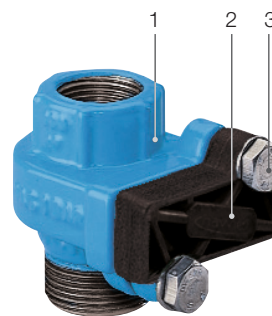
Material | Technical features

- 1 **Body** made of ductile iron, epoxy powder-coated
 - 2 **Seal cover** made of POM, with rubber seal, fibre glass reinforced
 - 3 **Bolts and washers** made of stainless steel
- **Seal** and **corrosion protection ring** made of elastomer
 - Drilling instructions (see page I 3/1)

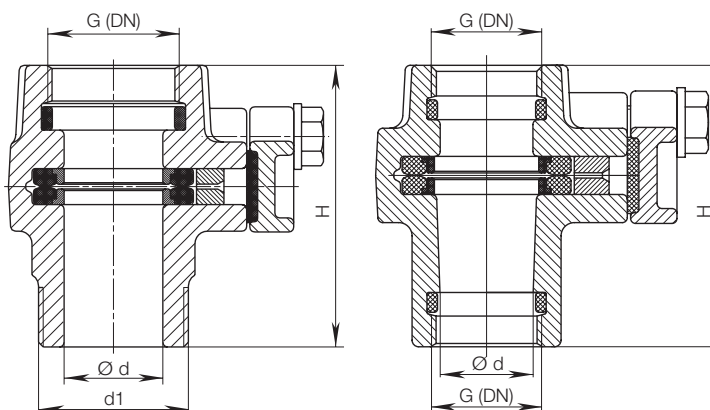
Suitable accessories

Drilling machine: No. 5800, No. 5805
Saddle blade No. 8401

No. 3720



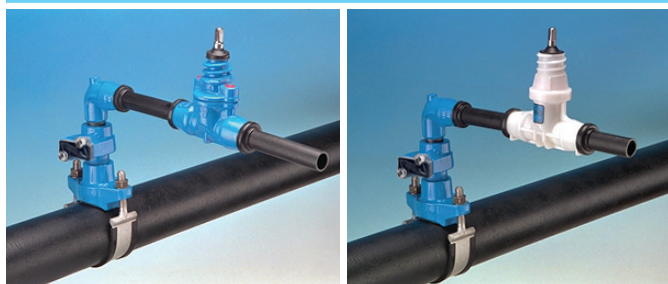
Order No.	MOP (PN)	Internal thread ISO 228	External thread EN 10221-1	Internal thread ISO 228
3720	16	1"	1¼"	
		1"		1"
		1¼"	1¼"	
		1¼"	1½"	
		1½"	2"	
		2"	2"	



* Both ends internal thread ISO 228

G (DN) ISO 228	d1 EN 10226-1	H	Ø d	Weight
1"	1¼"	85	27	1,1
1**		85	27	1,1
1¼"	1¼"	90	27	1,4
1¼"	1½"	90	31	1,3
1½"	2"	95	37	1,7
2"	2"	100	42	1,8

Application examples



PIPE REPAIR CLAMP

For steel, ductile iron, asbestos cement and PVC-pipes



Design features

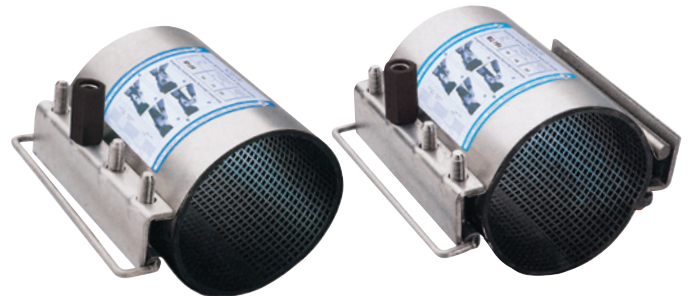
- The clamp with the self-centering lug system
- Fully encompassing gasket seals complete gaps and other pipe damage
- The bolts (3) are welded to the bolt bar (4). Squeezing the handle makes for easy assembly onto the pipe. The nuts are fed directly to the bolts from a special nut dispenser (8). This eases the positioning of the lugs and bolts and avoids handling of loose parts.
- Special version such as larger diameters and other lengths on request
- **No. 0750** tested with new pipes in delivery condition
 \varnothing 54 - \varnothing 190 PN 16
 \varnothing 190 - \varnothing 430 PN 10
- **No. 0751** tested with new pipes in delivery condition
 \varnothing 87 - \varnothing 186 PN 16
 \varnothing 208 - \varnothing 430 PN 10
 \varnothing 425 - \varnothing 471 PN 6

No. 0750 "single lug"

Pipe diameter 54-430, length 150-380

No. 0751 "double lug"

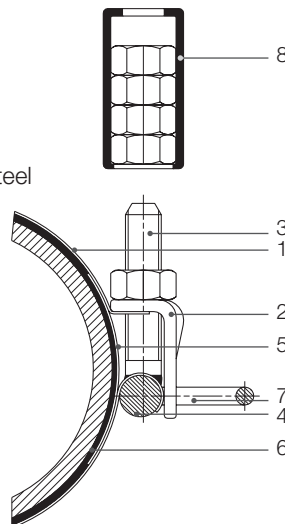
Pipe diameter 87-471, length 200-380



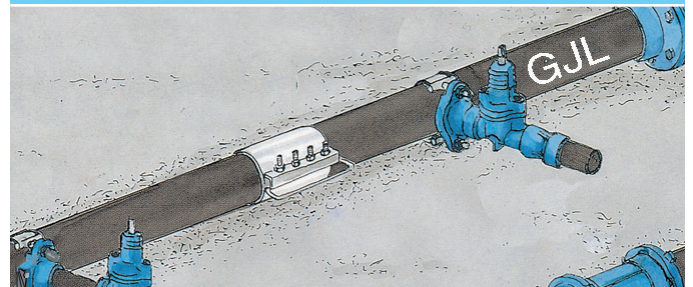
Quick assembly with H-Nut dispenser which prevents loss of nuts into the dirty trench.

Material | Technical features

- 1 **Band** made of stainless steel
- 2 **Lug** made of stainless steel
- 3 **Bolts** made of stainless steel
- 4 **Bolt-bar** made of stainless steel
- 5 **Bridging plate** made of stainless steel
- 6 **Gasket** made of elastomer
- 7 **Handle** made of stainless steel
- 8 **Nut dispenser** made of elastomer (from 3 bolts)



Application examples



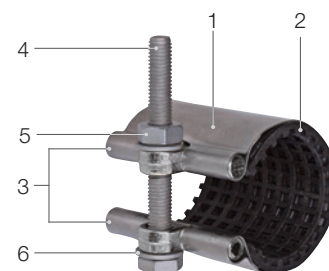
Design features

- For steel, ductile iron and AC pipes
- For pipe diameters from 21 - 64, length 76

Material | Technical features

- 1 **Band** made of stainless steel
- 2 **Gasket** made of elastomer
- 3 **Lug** bridge of galvanised iron
- 4 **Bolts** galvanised
- 5 **Nuts** galvanised
- 6 **Washers** made of stainless steel

No. 0501 "single lug"



PIPE REPAIR CLAMP

For steel, cast iron, AC and PVC pipes



No. 0750 single lug

Type	ØPipe	Length	Suitable for pipe DN						PVC	Weight	
			Steel	Cast iron	AC-PN 10		AC-PN 16				ext. Ø
					raw	turned	raw	turned			
K 54	54-58	150	50						1,1		
M 54		200							1,5		
K 58	58-64	150	50					63	1,1		
M 58		200							1,5		
K 63	63-68	150		50				63	1,2		
M 63		200							1,6		
K 68	68-76	150			50	50			1,2		
M 68		200							1,7		
K 75	75-83	150	65	60	60	60		75	1,3		
M 75		200							1,7		
K 82	82-91	150	80	65				90	1,3		
M 82		200							1,8		
K 95	95-104	150		80	80	80	80		1,4		
M 95		200							1,9		
K 104	104-112	150	100			80	80	110	1,5		
M 104		200							2,0		
K 112	112-121	150	100	100		100			1,5		
M 112		200							2,1		
K 115	115-125	150		100	100			125	1,5		
M 115		200							2,1		
K 120	120-130	150			100	100		100	1,7		
M 120		200							2,2		
K 131	131-141	200	125			100		140	3,2		
M 131		250							4,0		
K 140	140-150	200		125		125			3,2		
M 140		250							4,0		
L 140		315							5,2		
K 151	151-161	200			125			125	3,4		
M 151		250	150					160	4,3		
L 151		315							5,4		
K 166	166-178	200		150		150			3,5		
M 166		250	150						4,4		
L 166		315							5,5		
K 178	178-190	200			150	150		180	3,6		
M 178		250							4,5		
L 178		315							5,7		
K 190	190-202	200				150	150	200	3,9		
M 190		250							4,7		
L 190		315							5,8		
K 200	200-212	250							5,0		
M 200		315	200						6,2		
L 200		380							7,5		
K 215	215-227	250							5,0		
M 215		315	200	200				225	6,3		
L 215		380							7,6		
K 233	233-246	250			200	200			5,2		
M 233		315							6,3		
L 233		380							7,8		
M 250	250-262	315				200	200	250	6,8		
L 250		380							8,1		
K 269	269-281	250							5,6		
M 269		315	250	250				280	7,1		
L 269		380							8,5		
M 285	285-297	315			250	250			7,5		
L 285		380							9,0		
K 306	306-318	250				250	250	315	6,0		
M 306		315							7,8		
L 306		380							9,2		
K 315	315-327	250							6,2		
M 315		315	300	300				315	7,8		
L 315		380							9,5		
K 345	345-357	250							6,7		
M 345		315	350		300	300		355	8,3		
L 345		380							10,0		
M 366	366-379	315	350	350		300	300		8,7		
L 366		380							10,5		
K 400	400-412	250			350	350		400	7,4		
M 400		315	400						9,2		
L 400		380							10,9		
K 418	418-430	250							7,6		
M 418		315	400	400					9,7		
L 418		380							11,8		

No. 0751 double lug

Type	ØPipe	Length	Suitable for pipe DN						PVC	Weight	
			Steel	Cast iron	AC-PN 10		AC-PN 16				ext. Ø
					raw	turned	raw	turned			
M 87	87-102	200	80	80	80	80			90	2,7	
M 106	106-124	200	100	100	100	100	80		110	2,8	
M 114	114-132	200	125	100	100	100		100	125	2,9	
K 132	132-152	200	125	125	125	125	100		140	4,9	
M 132		250								6,2	
K 142	142-162	200	150	125	125	125	125	125	160	5,0	
M 142		250								6,4	
K 160	160-180	200								5,3	
M 160		250	150	150		150			160	6,5	
L 160		315								8,1	
K 166	166-186	200								5,3	
M 166		250	150	150	150	150				6,7	
L 166		315								8,3	
K 208	208-230	250								7,2	
M 208		315	200	200					225	8,8	
L 208		380								10,7	
K 220	220-242	250								7,3	
M 220		315			200				225	9,0	
L 220		380								11,1	
K 236	236-258	250								7,5	
M 236		315			200	200	200	200	250	9,4	
L 236		380								11,1	
K 271	271-293	250								7,8	
M 271		315	250	250	250	250			280	9,9	
L 271		380								11,8	
M 306	306-328	315	300	300			250	250	315	10,0	
L 306		380								12,0	
K 330	330-352	250				300				8,9	
L 330		380								13,1	
M 346	346-368	380	350		300	300			355	13,3	
L 346		450								16,5	
M 369	369-392	315		350			300	300		11,2	
L 369		380								13,8	
M 406	406-430	315	400	400	350					11,7	
L 406		380								14,5	
M 448	448-471	315			400	400			450	15,1	

No. 0501 for steel, ductile iron and AC pipes

Type	ØPipe	Length	Weight
D 21	21-25	70	0,25
D 26	26-30	70	0,26
D 33	33-37	70	0,27
D 42	42-45	70	0,28
D 48	48-54	70	0,29
D 60	60-64	70	0,31

PIPE REPAIR CLAMP

For ductile iron pipes



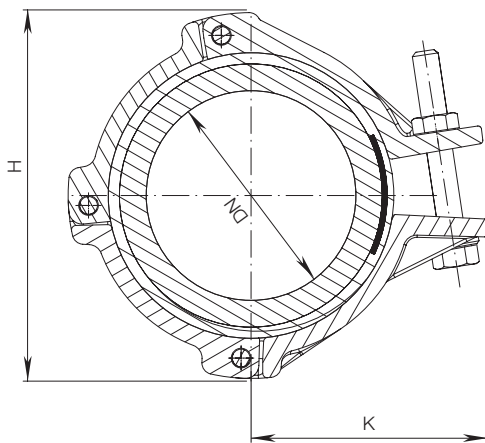
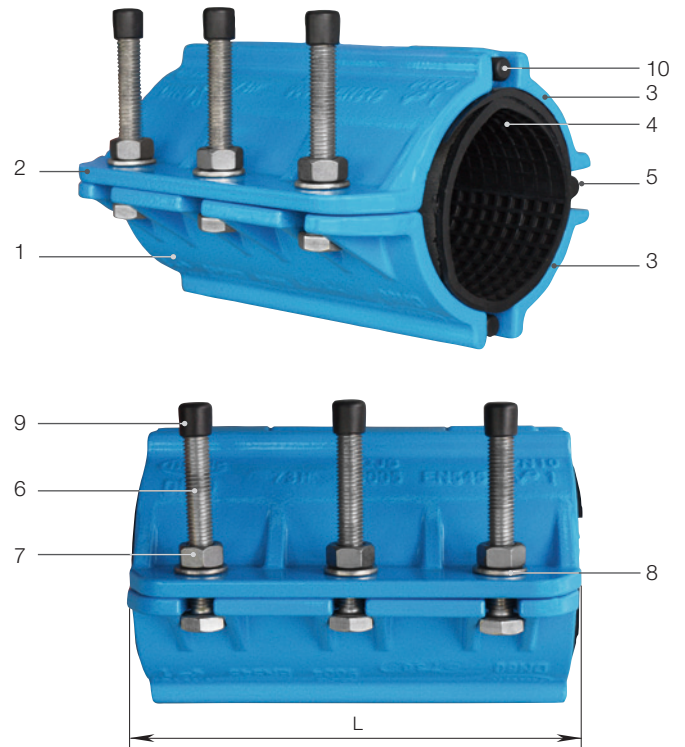
Design features

- For a permanent repair of a cast line, not thrust-proof
- Fully encompassing elastomer gasket seals transverse cracks and other damage to cast iron pipes
- Epoxy powder coated inside and outside

Material | Technical features

- 1-3 **Segments TOL** made of ductile iron, epoxy powder coated
- 4 **Sleeve gasket** made of elastomer
- 5 **Hinge rods** made of stainless steel
- 6 **Bolts** made of stainless steel with teflon coating
- 7 **Nuts** made of stainless steel
- 8 **Washers** made of stainless steel
- 9 **End cap** made of plastic - for thread M12
- 10 **End cap** made of plastic - for stud end Ø8

No. 0760 "TOL"



Order No.	MOP (PN)	Face to-face length L	Version	DN		
				80	100	150
0760	10	200	single lug			
0761			double lug			

DN	L	H	K	Tolerance range	Max. tightening torque / Nm	Max. tightening torque for transverse crack / Nm	Weight
80	200	144	97	95 - 102	40	70	6,2
100		164	107	115 - 122	40	70	6,7
150		242	145	167 - 175	60	95	14,1

PIPE REPAIR CLAMP

For ductile iron pipes



Assembly

No. 0760 "TOL"

- The segment design permits an easy and quick installation
- The pipe must be cleaned in advance and any insulating layers have to be removed
- Distance from the defective point to saddle edge min. 60 mm
gap width of the pipe to be joined - max. 5 mm
- In case of completely broken pipe ensure that the pipe is not subjected to tensile stress before connecting
- Before assembly, loosen the screws to the maximum, whereby the nut is not removed from the screw
- When installing the clamp, care shall be taken that the end of the gasket (1) that is closer to the pressure sheet (3) is located between the pipe (4) and the other end of the gasket (2). The rubber ends shall sufficiently overlap to ensure the sealing effect
- We recommend positioning the clamp in such a way that the bolt heads are well accessible so they can be tightened properly. The nuts are fixed in the locating slots of the opposite segment
- The bolts shall be tightened evenly (in alternating order)
- Max. tightening torque - see table page I 6/3
- The clamp can be used for one installation process. It's not intended for reuse
- After installation, please perform a leakage test while the trench is still open. The maximum operating pressure has to be complied with as a function of the medium and pipe outside diameter (see "Intended use")

