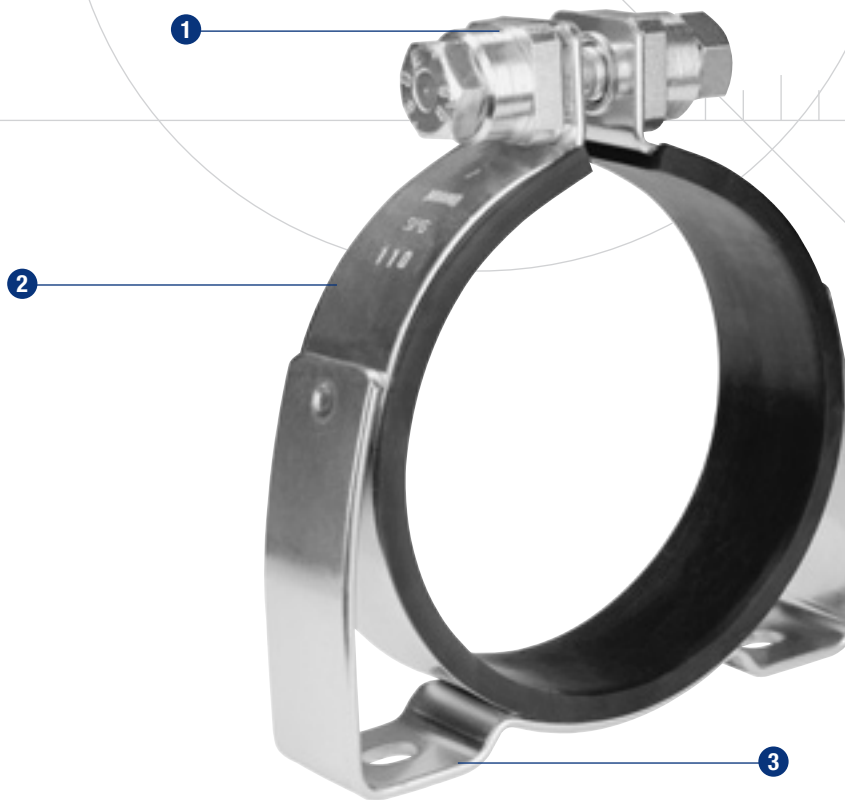


NORMAFIX® – Retaining Products

NORMAFIX® HMK Retaining clamps with brackets

HMK retaining clamps with brackets are used to attach containers or pipes to ceilings and walls. They are also used in mechanical engineering and plant construction.

Short description of technical features



1 Robust closure design
= safe retention

2 Robust clamp band with rounded edges
= no risk of injury or hose damage

3 Stable bracket
= safe retention

Materials

W1	W2	W3	W4	W5
x			x*	x*

* on request

NORMAFIX® – Retaining Products

Clamp Types



NORMAFIX® HMK Heavy-Duty design

For HMK heavy-duty clamps the ends of the brackets are folded back and spot welded onto the clamp band. Thanks to this design the clamps are suitable for fastening heavy-weight containers and pipes and they are able to withstand high mechanical loads. The **heavy-duty** clamps are available in single-part or two-part design and in 30 mm band width. All clamps in this range are equipped with a rubber profile.



NORMAFIX® HMK Standard design

HMK standard clamps with “open” bracket are suitable for use in applications where relatively light-weight pipes and containers need to be retained and which involve low mechanical loads. Standard design retaining clamps with brackets are available as single-part or two-part design. The clamp band is either 15, 20 or 25 mm wide. If vibrations need to be absorbed, an additional rubber profile can be supplied which is also suitable for use as gasket against creeping water.



NORMAFIX® K

NORMAFIX® K are pre-fabricated steel brackets that are suitable to convert any NORMACLAMP® standard clamp (A, GBS, HD, SP or TORRO®) into a retaining clamp with bracket: Just open the clamp, then push the clamp band through the slot of the bracket – that's it. NORMAFIX® K brackets are made from W1 steel and are also available in K1 geometry.

NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials NORMAFIX® HMK (heavy-duty design)

NORMAFIX® HMK retaining clamps with brackets, heavy-duty design, are exclusively available in band width 30 mm equipped with rubber profile (EPDM).

Diameter (mm)	h~*	L±1*	Single-part	Two-part	W1
80	48	82	181 6011 080	–	X
85	51	90	181 6011 085	–	X
89	53	82	181 6011 089	–	X
92	51	90	181 6011 092	–	X
95	56	90	181 6011 095	–	X
98	58	90	181 6011 098	–	X
100	58	90	181 6011 100	–	X
102	60	90	181 6011 102	–	X
108	62	100	181 6011 108	181 6025 108	X
110	63	100	181 6011 110	181 6025 110	X
112	64	100	181 6011 112	181 6025 112	X
113	65	100	181 6011 113	–	X
114	66	100	181 6011 114	181 6025 114	X
115	66	100	181 6011 115	181 6025 115	X
117	67	100	181 6011 117	181 6025 117	X
120	69	100	181 6011 120	181 6025 120	X
121	69	100	181 6011 121	181 6025 121	X
124	71	100	181 6011 124	181 6025 124	X
128	73	136	181 6011 128	181 6025 128	X
130	73	136	181 6011 130	181 6025 130	X
133	75	136	181 6011 133	181 6025 133	X
135	76	136	181 6011 135	181 6025 135	X
136	77	136	181 6011 136	181 6025 136	X
139	78	136	181 6011 139	–	X
140	79	136	181 6011 140	181 6025 140	X
145	81	136	181 6011 145	181 6025 145	X
146	82	136	181 6011 146	181 6025 146	X
150	83	136	181 6011 150	181 6025 150	X
152	85	148	181 6011 152	181 6025 152	X
154	85	148	181 6011 154	181 6025 154	X
160	89	148	181 6011 160	181 6025 160	X
163	90	148	181 6011 163	181 6025 163	X
165	91	148	181 6011 165	181 6025 165	X
167	92	148	181 6011 167	181 6025 167	X
169	93	148	181 6011 169	181 6025 169	X
170	94	148	181 6011 170	181 6025 170	X
172	95	148	181 6011 172	181 6025 172	X

* Refer to diagram on page 110

NORMAFIX® – Retaining Products

Diameter (mm)	h~*	L±1*	Single-part	Two-part	W1
176	96	148	181 6011 176	181 6025 176	X
178	97	148	181 6011 178	181 6025 178	X
179	98	152	181 6011 179	181 6025 179	X
180	99	148	181 6011 180	181 6025 180	X
182	100	148	181 6011 182	181 6025 182	X
184	101	148	181 6011 184	181 6025 184	X
186	102	148	181 6011 186	181 6025 186	X
191	104	148	181 6011 191	181 6025 191	X
193	105	148	181 6011 193	181 6025 193	X
194	106	148	181 6011 194	181 6025 194	X
200	108	212	181 6011 200	181 6025 200	X
204	110	212	181 6011 204	181 6025 204	X
206	111	212	181 6011 206	181 6025 206	X
208	113	212	181 6011 208	181 6025 208	X
210	114	212	181 6011 210	181 6025 210	X
215	115	216	181 6011 215	181 6025 215	X
218	117	216	181 6011 218	181 6025 218	X
220	118	216	181 6011 220	181 6025 220	X
222	119	216	181 6011 222	181 6025 222	X
223	120	216	181 6011 223	181 6025 223	X
224	120	216	181 6011 224	181 6025 224	X
226	121	216	181 6011 226	181 6025 226	X
228	122	216	181 6011 228	181 6025 228	X
229	123	216	181 6011 229	181 6025 229	X
230	123	216	181 6011 230	181 6025 230	X
232	124	216	181 6011 232	181 6025 232	X
235	126	216	181 6011 235	181 6025 235	X
240	128	216	181 6011 240	181 6025 240	X
242	130	248	181 6011 242	181 6025 242	X
246	132	248	181 6011 246	181 6025 246	X
247	132	248	181 6011 247	181 6025 247	X
250	133	248	181 6011 250	181 6025 250	X
252	134	248	181 6011 252	181 6025 252	X
253	135	248	181 6011 253	–	X
254	135	248	181 6011 254	181 6025 254	X
256	137	248	181 6011 256	181 6025 256	X
265	141	248	181 6011 265	181 6025 265	X
267	142	248	181 6011 267	181 6025 267	X
273	145	248	181 6011 273	181 6025 273	X
276	146	248	181 6011 276	181 6025 276	X
280	148	248	181 6011 280	181 6025 280	X
289	153	280	181 6011 289	181 6025 289	X
292	154	280	181 6011 292	181 6025 292	X
298	157	280	181 6011 298	181 6025 298	X
300	158	280	181 6011 300	181 6025 300	X

* Refer to diagram on page 110

NORMAFIX® – Retaining Products

Diameter (mm)	h~*	L±1*	Single-part	Two-part	W1
304	160	280	181 6011 304	181 6025 304	X
306	161	280	181 6011 306	181 6025 306	X
308	162	280	181 6011 308	181 6025 308	X
315	166	280	181 6011 315	181 6025 315	X
320	168	280	181 6011 320	181 6025 320	X
329	173	280	181 6011 329	181 6025 329	X
333	175	280	181 6011 333	181 6025 333	X
350	183	345	181 6011 350	181 6025 350	X
360	188	345	181 6011 360	181 6025 360	X
379	198	360	181 6011 379	181 6025 379	X
386	201	360	181 6011 386	181 6025 386	X
400	208	384		181 6025 400	X
406	211	384		181 6025 406	X
419	217	384		181 6025 419	X
423	220	384		181 6025 423	X
428	222	384		181 6025 428	X
450	233	446		181 6025 450	X
494	256	384		181 6025 494	X
500	258	446		181 6025 500	X
515	266	446		181 6025 515	X
600	308	600		181 6025 600	X

* Refer to diagram on page 110

NORMAFIX® HMK retaining clamps (heavy-duty design) will be supplied in W4 material on request:

	Single-part	Two-part
Part number:	181 6242 ...	181 6236 ...

Enquiries/ordering:

When making enquiries or placing an order please state as follows:

	1. Type	2. Parts	3. Diameter	4. Band Width	5. Screw	6. Material
Example	SPGU	6011	100/	30	SK	W1

NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials NORMAFIX® HMK (Standard Design)

Band Width (mm)	Min. ø (mm)	Screws			D* (mm)	Rubber Profile		Product Group	s*	
		Sz	Sk	Measurement		Silicone	EPDM		W1	W5
15	25	•	–	M 6 x 30	6.5	•	•	141 6	0.8	0.6
20	30	•	–	M 8 x 40	8.5	•	•	151 6	1.0 1.5	0.8
25	50	–	•	M 10 x 45	11	•	•	161 6	1.5	1.0

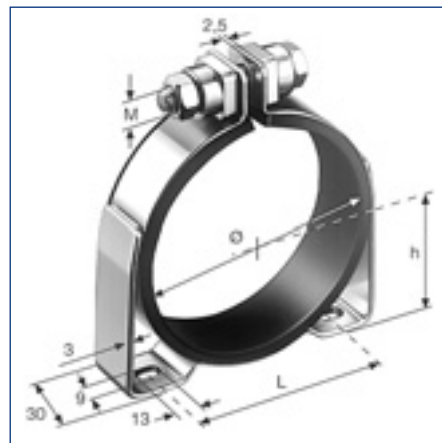
* Refer to diagram below

Enquiries/ordering:

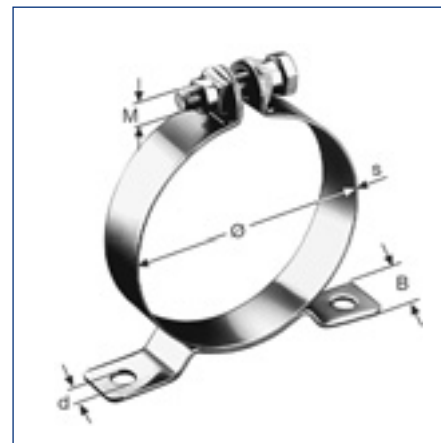
When making enquiries or placing an order please state as follows:

	1. Type	2. Order code	3. Outside ø of the object to be clamped	4. Band Width	5. Screw	6. Material	7. Parts
Example	SP/SPGU	6000.	80/	15	Sz	W1	Two-part

Dimensions HMK



NORMAFIX® HMK
Heavy-Duty Design



NORMAFIX® HMK
Standard Design

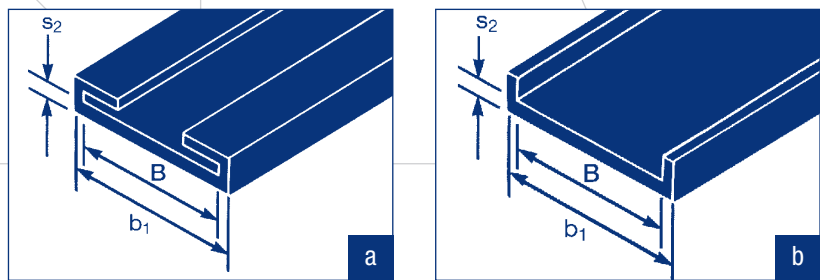
NORMAFIX® – Retaining Products

Rubber profile

Depending on the profile type (a or b) the rubber profiles are available either in Silicone or EPDM material.

B = Band width of the clamp
 b_1 = Width in mm
 s_2 = Material thickness in mm

All rubber profiles are fitted at our manufacturing plant. The clamps are delivered ready for use. Please indicate in your enquiry/order which profile type you would like.



B	$b_1 \approx$	s_2
15	18.5	1.5
20	25	2.0
25	31	3.0
30	36	3.0

Material Properties of Different Rubber Types

Properties	Silicone	EPDM
Tensile strength [N/mm ²]	8.5	min. 8
Breaking elongation [%]	420	350
Shore hardness A	70 ± 5	70 ± 5
Temperature [°C]	-60° to +170°	-40° to +120°
Resistance:		
Weather & ozone	Good	Very good
Ageing & sun cracks	Very good	Very good
Petrol	Average	Not resistant
Oil & greases	Good	Not resistant
Alcohols	Good	Good
Acids	Average	Good
Alkalis	Average	Good

NORMAFIX® – Retaining Products

Survey of sizes, band widths & materials NORMAFIX® K

Size	Clamping Range (mm)	a*	A*	B*	S*	d*	E*	h*	L*	t*
0	40–62	21	120	85	62	9	40	13	8	3
1	63–80									
2	81–110									
3	101–118	26	156	100	82	9	50	15	18	3
4	119–136									
5	137–163									
6	163–180									
7	181–207	26	236	152	132	9	60	24	32	3
8	208–234									
9	235–259	31.5	300	214	190	11	60	34	32	4
10	261–298									
11	300–337									
12	339–389	31.5	400	320	290	11	60	48	32	4
13	391–441									
14	443–493									

* Refer to diagram below

Enquiries/ordering:

When making enquiries or placing an order please state as follows:

	1. Type	2. Clamping Range
Example	NORMAFIX® K 1	40–62

NORMAFIX® K brackets are suitable for use in combination with the following NORMA® standard clamps:

- NORMACLAMP® TORRO®
(Band width 12 mm)
- NORMACLAMP® A
(Band width 14 mm)
- NORMACLAMP® HD
(Band width 16 mm)
- NORMACLAMP® S
(Band widths 15, 20, 25, 30 mm)
- NORMACLAMP® GBS
(Band widths 18, 20, 25, 30 mm)

