



Versatility in design and application

**NORMAFIX®**  
Retaining Products

## NORMAFIX® – Retaining Products

The NORMAFIX® range comprises a wide variety of products for the attachment and retaining of pipes, cables, cable harnesses and hoses to walls, ceilings as well as car bodies.



# Versatility

# NORMAFIX® – Retaining Products

## NORMAFIX® RS/RSGU/RLGU Pipe retaining clips to DIN 3016

NORMAFIX® RS/RSGU pipe retaining clips are the ideal retaining elements for pipes, cables, cable harnesses, cable protection pipes, hoses and other applications.

### Short description of technical features

Type 1



- 1** Form fitting and adjustable band  
= ease of assembly  
= safe attachment

- 2** Reinforced band ends  
= prevent the clip from tearing or loosening in cases where there is a high mechanical load

- 3** Optionally supplied with EPDM profile  
= vibration damping & protection against seepage water  
= sound insulation  
= clip fits tight on object

### Materials

W1	W2	W3	W4	W5
X		X*	X*	X

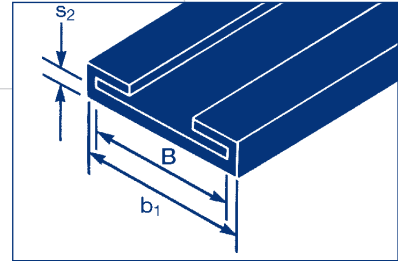
\* on request

# NORMAFIX® – Retaining Products

## EPDM profile

### Material properties of EPDM profile

Material properties	EPDM profile
Tensile strength [N/mm <sup>2</sup> ]	min. 8
Elongation at break [%]	350
Shore hardness A	70 ± 5
Temperature [°C]	-40 up to +120
Resistance against:	
Weather/ozone	Very good
Ageing and light	Very good
Petrol	Unstable
Oil and grease	Unstable
Alcohols	Good
Acids	Good
Alkalis	Good



B = Band width of clamp  
 b<sub>1</sub> = Width in mm  
 s<sub>2</sub> = Material thickness in mm

Silicone profile on demand.

## Clip types



The standard version NORMAFIX® RS/RSGU clips (**Type 1**) are also available in a round shape (NORMAFIX® RS/RSGU **Type 0**) or open shaped (NORMAFIX® RS/RSGU **Type 2**).



In addition to the designs already mentioned we offer the NORMAFIX® RC clip. This special design, a variation of the standard RS/RSGU Type 1, is provided with an integrated mounting fastener. When the clip ends are compressed the fastener locks into place and locks the clip. Thus the NORMAFIX® RC can be easily preassembled on the pipe.

Diameters and band widths will be furnished on request.



Recently a new type, the NORMAFIX® RLGU, was added to our NORMAFIX® range. It is also a variation of the standard Type 1, but without reinforced band ends and therefore suitable for use in applications submitted to only slight mechanical loads as, for example, the fastening of cables.

NORMAFIX® RLGU are only available in band width 12 mm.  
 For the complete programme please refer to the table of sizes.

All NORMAFIX® pipe retaining clips are available with a special sound damping rubber profile as optional equipment.

# NORMAFIX® – Retaining Products

## Screw

The clips are furnished without screws and nuts.

We recommend:

For NORMAFIX® RSGU band width 12 mm – Screw M 5

For NORMAFIX® RSGU band width 15 mm – Screw M 6

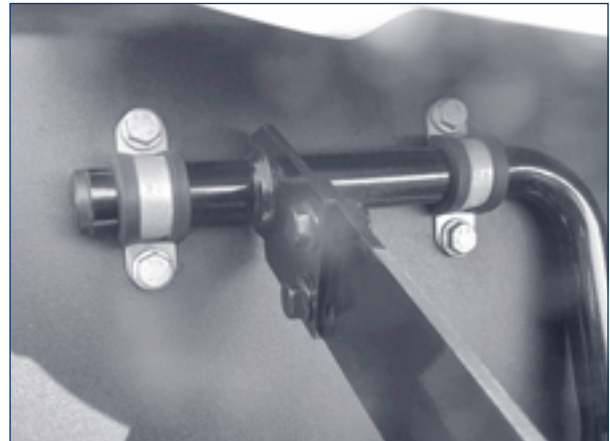
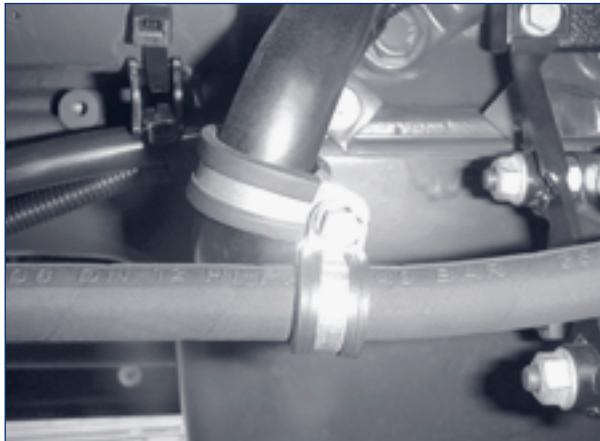
For NORMAFIX® RSGU band width 20 mm – Screw M 8

For NORMAFIX® RLGU band width 12 mm – Screw M 6



## Applications in the automotive industry

- Any kind of fixing and retaining



# NORMAFIX® – Retaining Products

## Survey of sizes, band widths & materials NORMAFIX® RSGU/RS

Band width (mm)	Description	Clamping Range		Packaging IC	W1	W5
		in mm	in Inches			
12	RSGU 1.6/12	6	1/4	500	X	X
12	RSGU 1.8/12	8	5/16	500	X	X
12	RSGU 1.10/12	10	3/8	500	X	X
12	RSGU 1.12/12	12	1/2	500	X	X
12	RSGU 1.13/12	13	1/2	500	X	X
12	RSGU 1.14/12	14	9/16	500	X	X
12	RSGU 1.15/12	15	5/8	500	X	X
12	RSGU 1.16/12	16	5/8	500	X	X
12	RSGU 1.18/12	18	3/4	500	X	X
12	RSGU 1.19/12	19	3/4	500	X	X
12	RSGU 1.20/12	20	13/16	500	X	X
12	RSGU 1.21/12	21	13/16	500	X	X
12	RSGU 1.22/12	22	7/8	500	X	X
15	RSGU 1.6/15	6	1/4	500	X	X
15	RSGU 1.8/15	8	5/16	500	X	X
15	RSGU 1.10/15	10	3/8	500	X	X
15	RSGU 1.12/15	12	1/2	500	X	X
15	RSGU 1.13/15	13	1/2	500	X	X
15	RSGU 1.14/15	14	9/16	500	X	X
15	RSGU 1.15/15	15	5/8	500	X	X
15	RSGU 1.16/15	16	5/8	500	X	X
15	RSGU 1.18/15	18	3/4	500	X	X
15	RSGU 1.19/15	19	3/4	500	X	X
15	RSGU 1.20/15	20	13/16	500	X	X
15	RSGU 1.21/15	21	13/16	500	X	X
15	RSGU 1.22/15	22	7/8	500	X	X
15	RSGU 1.23/15	23	7/8	500	X	X
15	RSGU 1.25/15	25	1	500	X	X
15	RSGU 1.26/15	26	11/16	500	X	X
15	RSGU 1.28/15	28	11/8	500	X	X
15	RSGU 1.30/15	30	13/16	500	X	X
15	RSGU 1.32/15	32	11/4	500	X	X
15	RSGU 1.34/15	34	15/16	500	X	X
15	RSGU 1.35/15	35	13/8	500	X	X

# NORMAFIX® – Retaining Products

## Survey of sizes, band widths & materials NORMAFIX® RSGU

Band width (mm)	Description	Clamping Range		Packaging IC	W1	W5
		in mm	in Inches			
20	RSGU 1.10/20	10	3/8	500	X	X
20	RSGU 1.12/20	12	1/2	500	X	X
20	RSGU 1.13/20	13	1/2	500	X	X
20	RSGU 1.14/20	14	9/16	500	X	X
20	RSGU 1.15/20	15	5/8	500	X	X
20	RSGU 1.16/20	16	5/8	500	X	X
20	RSGU 1.18/20	18	3/4	500	X	X
20	RSGU 1.19/20	19	3/4	500	X	X
20	RSGU 1.20/20	20	13/16	500	X	X
20	RSGU 1.22/20	22	7/8	500	X	X
20	RSGU 1.23/20	23	7/8	500	X	X
20	RSGU 1.24/20	24	15/16	250	X	X
20	RSGU 1.25/20	25	1	250	X	X
20	RSGU 1.28/20	28	1 1/8	250	X	X
20	RSGU 1.30/20	30	13/16	250	X	X
20	RSGU 1.32/20	32	1 1/4	250	X	X
20	RSGU 1.34/20	34	15/16	250	X	X
20	RSGU 1.35/20	35	1 3/8	250	X	X
20	RSGU 1.36/20	36	17/16	250	X	X
20	RSGU 1.38/20	38	1 1/2	250	X	X
20	RSGU 1.40/20	40	19/16	250	X	X

### Enquiries/ordering:

When making enquiries or placing orders please state as follows:

	1. Type	2. Clamping Range (pipe outside diameter)	3. Band width	4. Material
Example	RSGU 1.	6/	12	W1

# NORMAFIX® – Retaining Products

## Survey of sizes, band widths & materials NORMAFIX® RLGU

Band width (mm)	Description	Clamping Range		Packaging IC	W1
		in mm	in Inches		
12	RLGU 1.5/12	5	3/16	–	X
12	RLGU 1.6/12	6	1/4	–	X
12	RLGU 1.7/12	7	5/16	500	X
12	RLGU 1.8/12	8	5/16	–	X
12	RLGU 1.9/12	9	3/8	–	X
12	RLGU 1.10/12	10	3/8	–	X
12	RLGU 1.11/12	11	7/16	–	X
12	RLGU 1.12/12	12	1/2	500	X
12	RLGU 1.13/12	13	1/2	–	X
12	RLGU 1.14/12	14	9/16	500	X
12	RLGU 1.15/12	15	5/8	–	X
12	RLGU 1.16/12	16	5/8	500	X
12	RLGU 1.17/12	17	11/16	500	X
12	RLGU 1.18/12	18	3/4	–	X
12	RLGU 1.19/12	19	3/4	500	X
12	RLGU 1.20/12	20	13/16	–	X
12	RLGU 1.21/12	21	13/16	–	X
12	RLGU 1.22/12	22	7/8	–	X
12	RLGU 1.23/12	23	7/8	500	X
12	RLGU 1.24/12	24	15/16	500	X
12	RLGU 1.25/12	25	1	–	X
12	RLGU 1.26/12	26	1 1/16	500	X
12	RLGU 1.27/12	27	1 1/16	500	X
12	RLGU 1.28/12	28	1 1/8	500	X
12	RLGU 1.29/12	29	1 1/8	–	X
12	RLGU 1.30/12	30	1 3/16	–	X
12	RLGU 1.31/12	31	1 1/4	500	X
12	RLGU 1.32/12	32	1 1/4	–	X
12	RLGU 1.33/12	33	1 5/16	500	X
12	RLGU 1.34/12	34	1 5/16	–	X
12	RLGU 1.35/12	35	1 3/8	–	X
12	RLGU 1.36/12	36	1 7/16	–	X
12	RLGU 1.37/12	37	1 7/16	–	X
12	RLGU 1.38/12	38	1 1/2	–	X
12	RLGU 1.39/12	39	1 9/16	500	X
12	RLGU 1.40/12	40	1 9/16	–	X
12	RLGU 1.41/12	41	1 5/8	–	X
12	RLGU 1.42/12	42	1 5/8	–	X
12	RLGU 1.43/12	43	1 11/16	–	X
12	RLGU 1.44/12	44	1 3/4	–	X
12	RLGU 1.45/12	45	1 3/4	–	X

# NORMAFIX® – Retaining Products

## NORMAFIX® RS 0.

Pipe retaining clip type 0, without rubber sleeve

Band width (mm)	Min. Ø <sup>1)</sup>	d	h1 <sup>2)</sup> (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	4.7 + $\frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{0}{2}$	6.0	... Ø 14 = 0.6 from Ø 15 = 0.8	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{0}{2}$	8.5	... Ø 25 = 0.8 from Ø 26 = 1.0	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{0}{2}$	10.0	... Ø 49 = 1.0 from Ø 50 = 1.25	1.0	1.0



## NORMAFIX® RSGU 0.

Pipe retaining clip type 0, with rubber sleeve

Band width (mm)	Min. Ø <sup>1)</sup>	h1 <sup>2)</sup> (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	5.7 + $\frac{0}{2}$	12.5	1.0	•	–
12	4	8.0 + $\frac{0}{2}$	15.0	1.2	•	•
15	5	11.2 + $\frac{0}{2}$	18.5	1.5	•	•
20	10	14.5 + $\frac{0}{2}$	25.0	2.0	•	•
25	15	17.5 + $\frac{0}{2}$	31.0	3.0	•	•



## NORMAFIX® RS 1.

Pipe retaining clip type 1, without rubber sleeve

Band width (mm)	Min. Ø <sup>1)</sup>	d	h1 <sup>2)</sup> (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	4.7 + $\frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{0}{2}$	6.0	... Ø 14 = 0.6 from Ø 15 = 0.8	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{0}{2}$	8.5	... Ø 25 = 0.8 from Ø 26 = 1.0	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{0}{2}$	10.0	... Ø 49 = 1.0 from Ø 50 = 1.25	1.0	1.0



## NORMAFIX® RSGU 1.

Pipe retaining clip type 1, with rubber sleeve

Band width (mm)	Min. Ø <sup>1)</sup>	h1 <sup>2)</sup> (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	5.7 + $\frac{0}{2}$	12.5	1.0	•	–
12*	6	8.0 + $\frac{0}{2}$	15.0	1.2	•	•
15*	6	11.2 + $\frac{0}{2}$	18.5	1.5	•	•
20*	10	14.5 + $\frac{0}{2}$	25.0	2.0	•	•
25	15	17.5 + $\frac{0}{2}$	31.0	3.0	•	•



\* Standard range



# NORMAFIX® – Retaining Products

## NORMAFIX® RS 2.

Pipe retaining clips type 2, without rubber sleeve

Band width (mm)	Min. $\varnothing^1$	d	$h1^{2)}$ (mm) ≈	l	s		
					W1	W3	W5
9	5	4.3 (M4)	$4.7 + \frac{0}{2}$	3.8	0.4	0.4	0.4
12	5	5.3 (M5)	$6.8 + \frac{0}{2}$	5.0	0.5	0.5	0.5
15	8	6.4 (M6)	$9.7 + \frac{0}{2}$	6.0	... $\varnothing 14 = 0.6$ from $\varnothing 15 = 0.8$	0.6	0.6
20	15	8.4 (M8)	$12.5 + \frac{0}{2}$	8.5	... $\varnothing 25 = 0.8$ from $\varnothing 26 = 1.0$	0.8	0.8
25	20	10.5 (M10)	$14.5 + \frac{0}{2}$	10.0	... $\varnothing 49 = 1.0$ from $\varnothing 50 = 1.25$	1.0	1.0



## NORMAFIX® RSGU 2.

Pipe retaining clip type 2, with rubber sleeve

Band width (mm)	Min. $\varnothing^1$	$h1^{2)}$ (mm) ≈	Rubber Sleeve			
			b1	s2	EPDM	Silicone
9	4	$5.7 + \frac{0}{2}$	12.5	1.0	•	–
12	4	$8.0 + \frac{0}{2}$	15.0	1.2	•	•
15	5	$11.2 + \frac{0}{2}$	18.5	1.5	•	•
20	10	$14.5 + \frac{0}{2}$	25.0	2.0	•	•
25	15	$17.5 + \frac{0}{2}$	31.0	3.0	•	•



## NORMAFIX® RLGU

Pipe retaining clip type 1, with rubber sleeve

Band width (mm)	Min. $\varnothing^1$	d	$h1^{2)}$ (mm) ≈	l	Rubber Sleeve			s W1
					b1	s2	EPDM	
12	4	6.4 (M6)	$11.2 + \frac{0}{2}$	6	15	1.2	•	... $\varnothing 11 = 0.6$ from $\varnothing 12 = 0.8$



1) The increments are in steps of 1 mm.

b1 = Width in mm

2) Tool

s2 = Material thickness in mm (see page 89)

Bolts and nuts are not included in the delivery.



Abbreviations used in the table entries