

## NORMAFIX® RS/RSGU/RLGU

### Pipe retaining clips in accordance with DIN 3016

NORMAFIX® RS/RSGU pipe retaining clips are suitable for all kinds of fastening and retaining applications: pipes, cables, cable harnesses, cable protection pipes, hoses and other lines.

#### 1 Form-fit, adjustable band

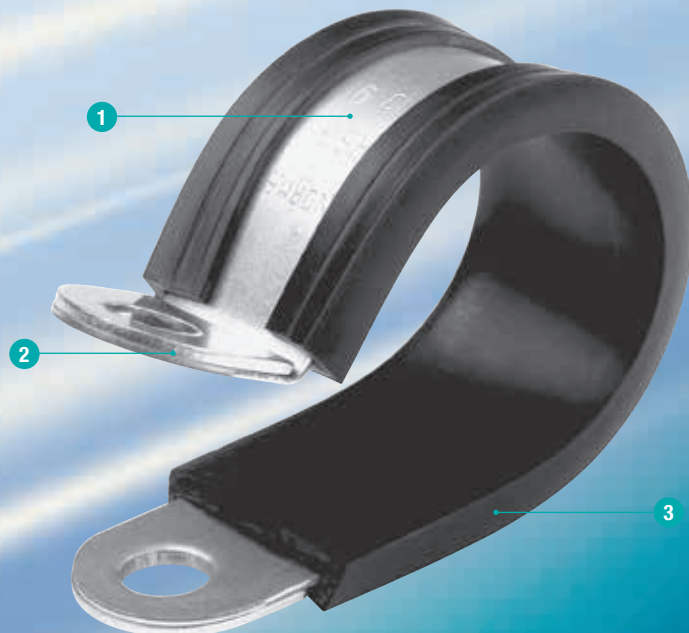
- makes installation easier and ensures secure fastening

#### 2 Reinforced band ends

- strengthen the band; prevent retaining sections from tearing or becoming loose during exposure to extremely high mechanical loads

#### 3 Can be supplied with rubber profile as an option

- protection against vibrations and creeping water
- sound-absorbing
- improved form closure between clip and clamping fixture
- dumping
- protection against contact corrosion



### Advantages at a glance

- Easy installation and secure fastening
- Reinforced band ends for extremely high mechanical loads
- Rubber profile protects against vibrations and creeping water, is sound-absorbent and protects against contact corrosion
- Prepositioning on the tube (RSGUV) makes assembly significantly easier
- No single parts for the customer

### Applications

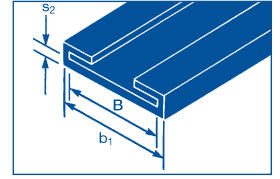
- Machine building
- White goods
- Chemical industry
- Irrigation systems
- Ship manufacturing
- Food and beverage industry
- Railway industry
- Agricultural machines
- Building machines
- Engine manufacturing
- Pump and filter
- Mining industry

# NORMAFIX® RS/RSGU/RLGU

## Rubber profile

### Material properties of EPDM rubber profile

Material properties		EPDM rubber profile
Tensile strength [N/mm <sup>2</sup> ]		Min. 8
Elongation at break [%]		350
Shore hardness A		70 ± 5
Temperature [°C]		-40 to +120
Resistance to:	Weather/Ozone	Very good
	Ageing/UV	Very good
	Fuel storage	Not suitable
	Storage in oils and greases	Not suitable
	Alcohols	Good
	Acids	Good
	Alkalis	Good



B = band width of clip  
 b<sub>1</sub> = width in mm  
 s<sub>2</sub> = material thickness in mm

Silicone rubber profile also available on request.

## Versions

The standard version is NORMAFIX® RS/RSGU (**type 1**). A round version (NORMAFIX® RS/RSGU **type 0**) and an open version (NORMAFIX® RS/RSGU **type 2**) are also available.



In addition to the types mentioned above, a special NORMAFIX® RV range is also available. This range of pipe retaining clips is a variation on the standard RS/RSGU model (type 1) and features a mounting fastener. When the two clip ends are pressed together, the mounting fastener locks into place automatically and holds the clip closed (pre-installation on pipe systems). See RSGUV 1 picture on the right.



We will be happy to provide information about available diameters and band widths on request.

The NORMAFIX® RLGU is directly based on the standard type 1 model, but does not have reinforced band ends and is suitable for use wherever pipe retaining clips are exposed to only slight mechanical loads (e.g. in the case of cable fastening). The NORMAFIX® RLGU range can only be supplied with a band width of 12 mm.



Please refer to the table of sizes in this document for information on the full range. If required, all NORMAFIX® pipe retaining clips can also be fitted with a special sound damping rubber profile.

Other sizes available on request.

# NORMAFIX® RS/RSGU/RLGU

## Bolt

The scope of delivery does not include bolts or nuts.

We recommend:

For NORMAFIX® RSGU with 12mm band width: M5 bolt

For NORMAFIX® RSGU with 15mm band width: M6 bolt

For NORMAFIX® RSGU with 20mm band width: M8 bolt

For NORMAFIX® RLGU with 12mm band width: M6 bolt



## Ordering information

When submitting requests and orders, please specify the data in the following way

	1. Type	2. Clamping diameter (outer pipe diameter)	3. Band width	4. Material
Example	<b>RSGU 1.</b>	<b>6/</b>	<b>12</b>	<b>W1</b>

## Materials

W1	W2	W3	W4	W5
x		x	x	x

Special surfaces 2B Zinc Nickel on request.

## Sizes, band widths & materials

NORMAFIX® RSGU/RS							
Band width	Designation	Clamping ranges		W1	W3	W4	W5
		in mm	in inches				
12	RSGU 1.6/12	6	1/4	X	X	X	X
	RSGU 1.8/12	8	5/16	X	X	X	X
	RSGU 1.10/12	10	3/8	X	X	X	X
	RSGU 1.12/12	12	1/2	X	X	X	X
	RSGU 1.13/12	13	1/2	X	X	X	X
	RSGU 1.14/12	14	9/16	X	X	X	X
	RSGU 1.15/12	15	5/8	X	X	X	X
	RSGU 1.16/12	16	5/8	X	X	X	X
	RSGU 1.18/12	18	3/4	X	X	X	X
	RSGU 1.19/12	19	3/4	X	X	X	X
	RSGU 1.20/12	20	1 3/16	X	X	X	X
	RSGU 1.21/12	21	1 3/16	X	X	X	X
	RSGU 1.22/12	22	7/8	X	X	X	X
15	RSGU 1.6/15	6	1/4	X	X	X	X
	RSGU 1.8/15	8	5/16	X	X	X	X
	RSGU 1.10/15	10	3/8	X	X	X	X
	RSGU 1.12/15	12	1/2	X	X	X	X
	RSGU 1.13/15	13	1/2	X	X	X	X
	RSGU 1.14/15	14	9/16	X	X	X	X
	RSGU 1.15/15	15	5/8	X	X	X	X
	RSGU 1.16/15	16	5/8	X	X	X	X
	RSGU 1.18/15	18	3/4	X	X	X	X
	RSGU 1.19/15	19	3/4	X	X	X	X
	RSGU 1.20/15	20	1 3/16	X	X	X	X
	RSGU 1.21/15	21	1 3/16	X	X	X	X
	RSGU 1.22/15	22	7/8	X	X	X	X
	RSGU 1.23/15	23	7/8	X	X	X	X
	RSGU 1.25/15	25	1	X	X	X	X
	RSGU 1.26/15	26	1 1/16	X	X	X	X
	RSGU 1.28/15	28	1 1/8	X	X	X	X
	RSGU 1.30/15	30	1 3/16	X	X	X	X
	RSGU 1.32/15	32	1 1/4	X	X	X	X
	RSGU 1.34/15	34	1 5/16	X	X	X	X
RSGU 1.35/15	35	1 3/8	X	X	X	X	

# NORMAFIX® RS/RSGU/RLGU

Sizes,  
band widths  
& materials

NORMAFIX® RSGU							
Band width	Designation	Clamping ranges		W1	W3	W4	W5
		in mm	in inches				
20	RSGU 1.10/20	10	3/8	X	X	X	X
	RSGU 1.12/20	12	1/2	X	X	X	X
	RSGU 1.13/20	13	1/2	X	X	X	X
	RSGU 1.14/20	14	9/16	X	X	X	X
	RSGU 1.15/20	15	5/8	X	X	X	X
	RSGU 1.16/20	16	5/8	X	X	X	X
	RSGU 1.18/20	18	3/4	X	X	X	X
	RSGU 1.19/20	19	3/4	X	X	X	X
	RSGU 1.20/20	20	13/16	X	X	X	X
	RSGU 1.22/20	22	7/8	X	X	X	X
	RSGU 1.23/20	23	7/8	X	X	X	X
	RSGU 1.24/20	24	15/16	X	X	X	X
	RSGU 1.25/20	25	1	X	X	X	X
	RSGU 1.28/20	28	11/8	X	X	X	X
	RSGU 1.30/20	30	13/16	X	X	X	X
	RSGU 1.32/20	32	11/4	X	X	X	X
	RSGU 1.34/20	34	15/16	X	X	X	X
	RSGU 1.35/20	35	13/8	X	X	X	X
	RSGU 1.36/20	36	17/16	X	X	X	X
	RSGU 1.38/20	38	11/2	X	X	X	X
RSGU 1.40/20	40	19/16	X	X	X	X	

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

# NORMAFIX® RS/RSGU/RLGU

## NORMAFIX® RSO

Pipe clip type 0  
Without rubber profile



NORMAFIX® RSO								
Band width	Minimum $\phi^{(1)}$	d	$h1^{(2)}$ ≈	l	s			
					W1	W3	W4	W5
9	5	4.3 (M4)	4.7 + $\frac{\phi}{2}$	3.8	0.4	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{\phi}{2}$	5.0	0.5	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{\phi}{2}$	6.0	... $\phi14 = 0.6$ from $\phi15 = 0.8$	0.6	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{\phi}{2}$	8.5	... $\phi25 = 0.8$ from $\phi26 = 1.0$	0.8	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{\phi}{2}$	10.0	... $\phi49 = 1.0$ from $\phi50 = 1.25$	1.0	1.0	1.0

## NORMAFIX® RSGU0

Pipe clip type 0  
With rubber profile



NORMAFIX® RSGU0							
Band width	Minimum $\phi^{(1)}$	Rubber profile					
		$h1^{(2)}$ ≈	b1	s2	EPDM	Silicone	
9	4	5.7 + $\frac{\phi}{2}$	12.5	1.0	•	–	
12	4	8.0 + $\frac{\phi}{2}$	15.0	1.2	•	•	
15	5	11.2 + $\frac{\phi}{2}$	18.5	1.5	•	•	
20	10	14.5 + $\frac{\phi}{2}$	25.0	2.0	•	•	
25	15	17.5 + $\frac{\phi}{2}$	31.0	3.0	•	•	

## NORMAFIX® RS1

Pipe clip type 1  
Without rubber profile



NORMAFIX® RS1								
Band width	Minimum $\phi^{(1)}$	d	$h1^{(2)}$ ≈	l	s			
					W1	W3	W4	W5
9	5	4.3 (M4)	4.7 + $\frac{\phi}{2}$	3.8	0.4	0.4	0.4	0.4
12	5	5.3 (M5)	6.8 + $\frac{\phi}{2}$	5.0	0.5	0.5	0.5	0.5
15	8	6.4 (M6)	9.7 + $\frac{\phi}{2}$	6.0	... $\phi14 = 0.6$ from $\phi15 = 0.8$	0.6	0.6	0.6
20	15	8.4 (M8)	12.5 + $\frac{\phi}{2}$	8.5	... $\phi25 = 0.8$ from $\phi26 = 1.0$	0.8	0.8	0.8
25	20	10.5 (M10)	14.5 + $\frac{\phi}{2}$	10.0	... $\phi49 = 1.0$ from $\phi50 = 1.25$	1.0	1.0	1.0

## NORMAFIX® RSGU1

Pipe clip type 1  
With rubber profile



NORMAFIX® RSGU1							
Band width	Minimum $\phi^{(1)}$	Rubber profile					
		$h1^{(2)}$ ≈	b1	s2	EPDM	Silicone	
9	4	5.7 + $\frac{\phi}{2}$	12.5	1.0	•	–	
12	4	8.0 + $\frac{\phi}{2}$	15.0	1.2	•	•	
15	5	11.2 + $\frac{\phi}{2}$	18.5	1.5	•	•	
20	10	14.5 + $\frac{\phi}{2}$	25.0	2.0	•	•	
25	15	17.5 + $\frac{\phi}{2}$	31.0	3.0	•	•	

# NORMAFIX® RS/RSGU/RLGU

## NORMAFIX® RS2

Pipe clip type 2  
Without rubber profile



NORMAFIX® RS2								
Band width	Minimum $\phi^{1)}$	d	$h1^{2)}$ ≈	l	s			
					W1	W3	W4	W5
9	5	4.3 (M4)	$4.7 + \frac{\phi}{2}$	3.8	0.4	0.4	0.4	0.4
12	5	5.3 (M5)	$6.8 + \frac{\phi}{2}$	5.0	0.5	0.5	0.5	0.5
15	8	6.4 (M6)	$9.7 + \frac{\phi}{2}$	6.0	... $\phi14 = 0.6$ from $\phi15 = 0.8$	0.6	0.6	0.6
20	15	8.4 (M8)	$12.5 + \frac{\phi}{2}$	8.5	... $\phi25 = 0.8$ from $\phi26 = 1.0$	0.8	0.8	0.8
25	20	10.5 (M10)	$14.5 + \frac{\phi}{2}$	10.0	... $\phi49 = 1.0$ from $\phi50 = 1.25$	1.0	1.0	1.0

## NORMAFIX® RSGU2

Pipe clip type 2  
With rubber profile



NORMAFIX® RSGU2						
Band width	Minimum $\phi^{1)}$	Rubber profile				
		$h1^{2)}$ ≈	b1	s2	EPDM	Silicone
9	4	$5.7 + \frac{\phi}{2}$	12.5	1.0	•	–
12	4	$8.0 + \frac{\phi}{2}$	15.0	1.2	•	•
15	5	$11.2 + \frac{\phi}{2}$	18.5	1.5	•	•
20	10	$14.5 + \frac{\phi}{2}$	25.0	2.0	•	•
25	15	$17.5 + \frac{\phi}{2}$	31.0	3.0	•	•

## NORMAFIX® RLGU

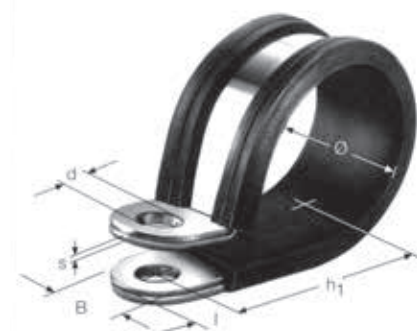
Pipe clip type 1  
With rubber profile



NORMAFIX® RLGU								
Band width	Minimum $\phi^{1)}$	d	$h1^{2)}$ ≈	l	Rubber profile			s
					b1	s2	EPDM	W1
12	4	6.4 (M6)	$11.2 + \frac{\phi}{2}$	6	15	1.2	•	0.4

- 1) The progressive ratio is 1mm.
- 2) Tool dimension

The scope of delivery does not include bolts or nuts.





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