

# BUTZ -- Tube clamps





### Tube clamps

#### **DIN 3015**

#### **Programme:**

#### Tube clamps series A (according to DIN 3015 Part 1)

Available in seven standard sizes for normal mechanical requirements.

- Outer tube diameter for the metric series 6 to 57 mm
- Outer tube diameter for the inch-size series R 1/8" to R 11/2"
- Outer tube diameter for the imperial size series  $^1/_4$ " to  $2^1/_2$ " The clamp body is available in a round/closed version. Welding plates, rail-supports, cover plates and construction types.

#### Tube clamps series B (according to DIN 3015 Part 3)

Available as a twin tube clamp in five standard sizes for normal mechanical requirements.

Outer tube diameter 6 to 42 mm.

The clamp body is available in a square/open design. Welding plates, rail-supports, cover plates and construction types.

Clamp halves with different diameters are only possible when used together.

#### Tube clamps series C (according to DIN 3015 Part 2)

Specially designed for high mechanical requirements, and available in eight standard sizes.

Outer tube diameter 6 to 220 mm.

The clamp body is available in a square/closed design. Welding plates, rail-supports, cover plates and construction types.

#### Design:

According to DIN 3015:

Both upper and lower clamp-halves are identical. Webs inside the bore of the clamps provide an impact and vibration deadening effect, and absorb the forces towards the direction of the tube axis.

When using hoses and cables, we recommand the use of clamp halves with a smooth bore.

#### Clamp material:

Polypropylene	-30°C up to	+ 90°C	colour dark green
Polyamide	-40°C up to	+ 120° C	colour black
Rubber	-50°C up to	+ 120° C	colour black
Aluminium	un to	+ 300° C	

All metal parts available also in stainless steel.

Other materials upon request.

Stainless steel qualities

Stainless steel 1.4401/1.4571 (AISI 316/316 TI), resistent against rust and acid.

#### **Accessories material:**

Steel. Screws as well as cover plates of series A and B are galvanized.

Rail-supports are also available with zinc plated surface.

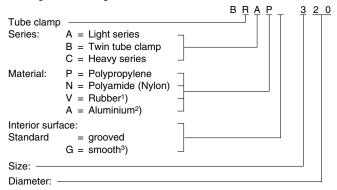
#### Resistance to stress:

The remarkable features of Tube Clamps are their considerable re-set capability, high tensile strength, as well as their very high output strength and excellent resistance to cold. The choice of design and clamp material depends on the specific demands of the mechanical and thermal requirements.

#### Order code:

The order code for clamp halves as well as the reference No. for complete tube clamps incorporates the serial indication, material description and interior surface.

#### **Example of description:**



- <sup>1)</sup> Rubber only available for series A and B, inside smooth and series C grooved design
- 2) Aluminium only available for series A size 1 to 6 and series C size 1 to 8
- <sup>3)</sup> Smooth interior surface in series C only to size 4 Aluminium clamps only available in a grooved design Inside smooth series A only size 1 to 6

#### Registration:

On request



limited resistant

resistant resistant

### Tube clamps material properties

#### **DIN 3015**

Petrol

Mineral oils

Other oils

Machanical proportion

Mechanical properties		Polypropylene (PP)	Polyamide 6 (PA 6)	Aluminium	Rubber
Density		0.906 g/cm <sup>3</sup>	1.12-1.15g/cm <sup>3</sup>	2.65 g/cm <sup>3</sup>	0.98 g/cm <sup>3</sup>
Flexural deflection	DIN 53452	36 N/mm <sup>2</sup>	130200 N/mm <sup>2</sup>	70 N/mm <sup>2</sup>	-
Impact resistance	DIN 53453	no break	no break	_	
Compressive strength	DIN 53454	90 N/mm <sup>2</sup>	120 N/mm <sup>2</sup>	HB 500600 N/mm <sup>2</sup>	A and B: 64° shore C: 73° shore
Modulus of elasticity	DIN 53452	1500 N/mm <sup>2</sup>	3000 N/mm <sup>2</sup>	70.000 N/mm <sup>2</sup>	
Tensile strength					A and B: 6.1 N/mm <sup>2</sup>
without breakage	DIN 53454	25-35 N/mm <sup>2</sup>	80-90 N/mm <sup>2</sup>	180 N/mm <sup>2</sup>	C: 8.5 N/mm <sup>2</sup>
Thermal properties					
Temp. resistance		−30 + 90°C	–40 + 120°C	300°C	−50 +120°C
Chemical properties					
Weak acids		limited resistant	limited resistant		resistant
Weak acids Weak alkalis		limited resistant limited resistant	limited resistant limited resistant		resistant resistant

resistant

resistant

resistant

limited resistant

resistant

resistant

Polymenylana (PD) Polymida 6 (PA 6) Alyminium

The outlined particulars are approximate values and are only shown for reference, which are not binding, and with regard to possible protection of third parties. They do not exempt you from your own examination of suitability of the products delivered by us. Therefore, these values can only be used in a limited way for guidance only.

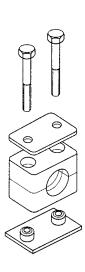
The application of the products is carried out outside of our control and, therefore, is exclusively subject to your own area of responsibility. Any claim however would be limited for all damages to the value of the goods supplied by us and in use by you.

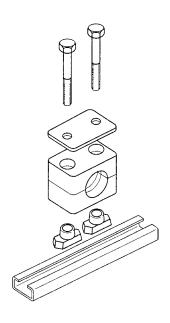
It goes without saying, that we guarantee the perfect quality of our products according to our general sales and delivery conditions.

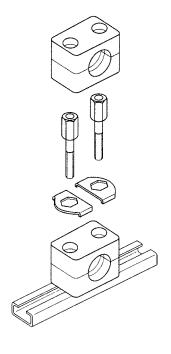


### Tube clamps assembly instruction

**DIN 3015** 







#### Assembly:

#### Assembly on to metal welding plates

Place welding plates on a base appropriate for the load. Make sure that the clamps are properly aligned. Clamp lower clamp halve onto welding plate, insert tube, place upper clamp halve onto lower halve and fasten with the screws. Attention must be paid to the bias (after completed assembly, clamp halves may not be in contact)! Do not weld with fitted plastic clamp!

Extended welding plates may be screw-fastened to the base.

#### Assembly on support rails

Support rails are available in four different heights and come in pieces of 1 m or 2 m length, as required.

Weld on support rail or screw-fasten with fastening angle bracket. Insert support rail nuts in rail and turn until stoppage. For heavy duty construction series, nuts are simply pushed in. Clamp lower clamp half on support rail nuts, insert tube, place upper clamp halve onto lower halve and fasten with the screws. Before fastening the screws the clamp may still be positioned. Attention must be paid to the bias (after completed assembly, the clamp halves may not be in contact)!

#### Construction assembly

Clamps allow the assembly of multiple clamps of the same construction size and of different tube diameters one above the other. The construction assembly is carried out with special fixing screws that are secured against twisting by applying a locking plate. Clamp lower clamp halve on welding plate or support rail respectively, insert tube, place upper clamp halve on lower halve and fasten with fixing screws. The fixing screw juts out from the upper clamp halve. The application of a locking plate securely fastens the fixing screw and prevents twisting. Clamp on second clamp halve on to the fixing screws etc.



## Tube clamps series A(light construction series)-complete range

Polypropylene - BRAP Inside smooth - BRAP Arrows BBSLA BBSLA BBSLA BBSLA BBSLA BBAPA					2 clamp halves, weld plate <b>short</b> , slot head bolts and bushes	2 clamp halves, weld plate <b>short</b> , socket head bolts and bushes	2 clamp halves, weld plate <b>short</b> , cover plate hex. head bolts
Polypropylene - BRAP Inside smooth - BRAPG   Polypropylene - BRAP   BRAP					<u></u>	<u></u>	
Polyproplene   BRAP							
Aluminium - BRAA	Inside smooth – B Polyamide 6 – B Inside smooth – B	RAPG RAN RANG					BUPA
Clamp size   Tube O.D. mm	Aluminium – B	RAA					
			ode")		ВАРКА	BAPKA	BAPKA
01) 8.0	clamp size		Tube NB	Tube O.D.			
01) 8.0 9.5 3/6 BRAP1-008. BRAP2-008 BRAP2-008 BRAP3-009.5 BRAP3-106.4 BRAP3-106.4 BRAP3-106.4 BRAP3-106.4 BRAP3-108.5 BRAP3-109.5 BRAP3-1				1/.			
9.5   3/6   BRAP1-010   BRAP2-001.5   BRAP2-010   BRAP3-010   12.0   6.0   BRAP1-012   BRAP2-012   BRAP3-012   6.0   BRAP1-106   BRAP2-106   BRAP3-010   6.4   1/4   BRAP1-106   BRAP2-106   BRAP3-106   8   BRAP1-108   BRAP2-106   BRAP3-108   9.5   9.5   9/6   BRAP1-108   BRAP2-108   BRAP3-108   10.0   G 1/6   BRAP1-109   BRAP2-108   BRAP3-108   12.0   BRAP1-110   BRAP2-110   BRAP3-109.5   12.0   BRAP1-110   BRAP2-112   BRAP3-110   12.0   BRAP1-112   BRAP3-112   BRAP3-112   12.7   13.5   G 1/4   BRAP1-121.7   BRAP2-112   BRAP3-112   12.7   BRAP1-212.7   BRAP2-212.7   BRAP3-212.7   13.5   G 1/4   BRAP1-213.5   BRAP2-213.5   BRAP3-213.5   14.0   BRAP1-214   BRAP2-214   BRAP3-215   16.0   G 3/6   BRAP1-215   BRAP2-216   BRAP3-216   16.0   G 3/6   BRAP1-216   BRAP2-216   BRAP3-216   17.2   G 3/6   BRAP1-218   BRAP2-218   BRAP3-217.2   18.0   BRAP1-218   BRAP2-218   BRAP3-218   19.0   3/4   BRAP1-218   BRAP2-218   BRAP3-218   19.0   BRAP1-319   BRAP2-218   BRAP3-218   19.0   BRAP1-320   BRAP2-320   BRAP3-320   19.0   BRAP1-321   BRAP3-321   BRAP3-321   22.0   BRAP1-322   BRAP2-323   BRAP3-321   22.0   BRAP1-323   BRAP3-321   BRAP3-321   22.0   BRAP1-323   BRAP3-323   BRAP3-325   22.0   BRAP1-323   BRAP3-323   BRAP3-325   23.0   BRAP1-323   BRAP2-323   BRAP3-325   24.0   BRAP1-323   BRAP2-323   BRAP3-325   25.0   1 BRAP1-323   BRAP2-323   BRAP3-325   26.9   G 3/4   BRAP1-630   BRAP2-428   BRAP3-325   27.0   BRAP1-428   BRAP2-430   BRAP3-323   28.0   BRAP1-430   BRAP2-430   BRAP3-430   29.0   BRAP1-630   BRAP2-631   BRAP3-630   20.0   BRAP1-631   BRAP2-634   BRAP3-635   20.0   BRAP1-632   BRAP2-644   BRAP3-645   20.0   BRAP1-645   BRAP2-645   BRAP3-650   20.0   BRAP1-650   BRAP2-648   BRAP3-650   20.0   BRAP1-650   BRAP2-665   BRAP3-650   20.0   BRAP1-650   BRAP2-665   BRAP3-650   20.0   BRAP1-650   BRAP2-655   BRAP3-650   20.0   BRAP1-650   BRAP2-655   BRAP3-650   20.0   BRAP1-650   BRAP2-655   BRAP3-650   20.0   BRAP1-655   BRAP3-655   BRAP3-650   20.0   BRAP1-655   BRAP3-655   BRAP3-650   20.0   BRAP1-655   BRAP3-655	01)						
12.0   BRAP1-012   BRAP2-012   BRAP3-012	- ,			3/8			
6.0 6.4 7/4 BRAP1-106 BRAP2-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-106 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-108 BRAP3-109.5 BRAP3-110 BRAP3-110 BRAP3-111 BRAP3-112 BRAP3-114 BRAP3-115 BRAP3-116 BRAP3-118 BR			G 1/8				
1   8.0   9.5	-						
1 8.0 9.5 3/6 BRAP1-108 BRAP2-108 BRAP2-108 BRAP2-109.5 BRAP2-110 BRAP2-110 BRAP2-110 BRAP2-110 BRAP2-110 BRAP2-1110 BRAP2-1110 BRAP2-1112 BRAP2-112 BRAP2-112 BRAP2-112 BRAP2-112 BRAP2-112.7 BRAP2-112.7 BRAP2-112.7 BRAP2-112.7 BRAP2-113.5 BRAP2-113.5 BRAP2-113.5 BRAP2-113.5 BRAP2-113.5 BRAP2-113.5 BRAP2-213.5 BRAP2-213.5 BRAP2-213.5 BRAP2-214 BRAP3-214 BRAP3-214 BRAP3-214 BRAP3-215 BRAP2-116 BRAP2-216 BRAP3-216 BRAP2-116 BRAP2-216 BRAP3-216 BRAP2-118.0 BRAP1-121 BRAP2-217.2 BRAP2-217.2 BRAP3-218 BRAP2-218 BRAP2-218 BRAP3-218 BRAP2-218 BRAP3-218 BRAP2-218 BRAP3-218 BRAP3-218 BRAP3-219 BRAP3-319 BRAP3-319 BRAP3-319 BRAP3-319 BRAP3-320 BRAP3-320 BRAP3-320 BRAP3-321 BRAP3-323 BRAP3-325 BRAP3-326 BRAP3				1/4			
10.0   G 1/8   BRAP1-110   BRAP2-110   BRAP3-110   BRAP3-110   BRAP1-110   BRAP3-112   BRAP3-115   BRAP3-213.5   BRAP3-214   BRAP3-214   BRAP3-214   BRAP3-214   BRAP3-215   BRAP3-215   BRAP3-215   BRAP3-216   BRAP3-216   BRAP3-216   BRAP3-216   BRAP3-216   BRAP3-216   BRAP3-218   BRAP3-219   BRAP3-320   BRAP3-322   BRAP3-322   BRAP3-322   BRAP3-323   BRAP1-323   BRAP2-322   BRAP3-323   BRAP1-323   BRAP2-323   BRAP3-323   BRAP3-323   BRAP1-323   BRAP2-323   BRAP3-323   BRAP3-325   BRAP3-325   BRAP3-325   BRAP3-325   BRAP3-326   BRAP3-336   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-533   BRAP3-534   BRAP3-536   BRAP3-536   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-644   BRAP3-644   BRAP3-644   BRAP3-644   BRAP3-644   BRAP3-644   BRAP3-644   BRAP3-648   BRAP3-648   BRAP3-648   BRAP3-648   BRAP3-648   BRAP3-648   BRAP3-650	1						
12.0							
12.7			G 1/8				
13.5				1/			
14.0			G 1/4	//2			-
2			G 74				
17.2	2						
18.0   BRAP1-218   BRAP2-218   BRAP3-218     19.0   3/4   BRAP1-319   BRAP2-319   BRAP3-319     20.0   BRAP1-320   BRAP2-320   BRAP3-320     3   21,3   G1/2   BRAP1-321,3   BRAP2-321,3   BRAP3-321,3     22.0   BRAP1-322   BRAP2-322   BRAP3-321,3     23.0   BRAP1-325   BRAP2-323   BRAP3-322     25.0   1   BRAP1-325   BRAP2-323   BRAP3-325     26.9   G 3/4   BRAP1-325   BRAP2-325   BRAP3-325     4   28.0   BRAP1-426.9   BRAP2-426.9   BRAP3-426.9     4   28.0   BRAP1-428   BRAP2-428   BRAP3-426.9     4   28.0   BRAP1-430   BRAP2-430   BRAP3-430     32.0   11/4   BRAP1-532   BRAP2-532   BRAP3-430     33.7   G 1   BRAP1-532   BRAP2-532   BRAP3-532     33.7   G 1   BRAP1-532   BRAP2-533.7   BRAP3-535     38.0   11/2   BRAP1-535   BRAP2-535   BRAP3-535     38.0   11/2   BRAP1-536   BRAP2-538   BRAP3-538     40.0   G 11/4   BRAP1-540   BRAP2-540   BRAP3-540     44.5   45.0   BRAP1-540   BRAP2-540   BRAP3-540     44.5   BRAP1-644   BRAP1-644.5   BRAP2-645   BRAP3-645     48.0   G 11/2   BRAP1-645   BRAP2-644.5   BRAP3-645     48.0   G 11/2   BRAP1-645   BRAP2-648   BRAP3-645     48.0   G 11/2   BRAP1-665   BRAP2-650   BRAP3-650     50.8   2   BRAP1-650   BRAP2-650   BRAP3-650     50.8   52.0   BRAP1-655   BRAP2-655   BRAP3-655     55.0   BRAP1-665   BRAP2-655   BRAP3-655     50.0   BRAP1-665   BRAP2-655   BRAP3-655     50.0   BRAP1-665   BRAP2-655   BRAP3-655     50.0   BRAP1-665   BRAP2-655   BRAP3-655     50.0   BRAP1-655   BRAP3-655   BRAP3-655     50.0   BRAP1-655   BRAP3-655   BRAP3-655     50.0   BRAP1-655   BRAP3-655   BRAP3-655     50.0   BRAP1-655   BRAP3-655   BRAP3-				5/8			
19.0			G 3/8				-
Second				3/.			
3 21.3 G1/2 BRAP1-321.3 BRAP2-321.3 BRAP3-321.3 BRAP3-322 BRAP3-322 BRAP3-322 BRAP3-322 BRAP3-322 BRAP3-323 BRAP3-323 BRAP3-323 BRAP3-325 BRAP3-426.9 BRAP1-426.9 BRAP1-426.9 BRAP2-426.9 BRAP3-426.9 BRAP3-428 BRAP1-430 BRAP2-430 BRAP3-428 BRAP3-428 BRAP3-430 BRAP3-430 BRAP3-430 BRAP3-430 BRAP3-430 BRAP3-430 BRAP3-430 BRAP3-532 BRAP3-532 BRAP3-532 BRAP3-535 BRAP3-536 BRAP1-540 BRAP2-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-644.5 BRAP1-645 BRAP3-644.5 BRAP3-644.5 BRAP3-644.5 BRAP3-645 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-655 BRAP3-655 BRAP3-655 BRAP3-655 BRAP3-655 BRAP3-655				9/4	l .		
23.0   25.0   1   BRAP1-323   BRAP2-323   BRAP3-323   BRAP3-325   BRAP3-426.9   BRAP1-428   BRAP2-428   BRAP3-428   BRAP3-428   BRAP3-428   BRAP3-428   BRAP3-430   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-540   BRAP1-540   BRAP1-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-542   BRAP3-542   BRAP3-645   BRAP3-644.5   BRAP3-644.5   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-650   BRAP	3		G1/2				
25.0		22.0			BRAP1-322	BRAP2-322	BRAP3-322
4       26.9       G 3/4       BRAP1-426.9       BRAP2-426.9       BRAP2-426.9       BRAP3-426.9         30.0       BRAP1-428       BRAP2-428       BRAP2-428       BRAP3-428       BRAP3-428         32.0       32.0       11/4       BRAP1-532       BRAP2-532       BRAP3-532       BRAP3-532         33.7       G 1       BRAP1-533.7       BRAP2-533.7       BRAP3-533.7       BRAP3-533.7       BRAP3-535.5         38.0       11/2       BRAP1-538       BRAP2-538       BRAP3-538       BRAP3-538         40.0       G 11/4       BRAP1-540       BRAP2-540       BRAP3-540       BRAP3-540         BRAP1-540       BRAP2-542       BRAP3-540       BRAP3-540       BRAP3-540       BRAP3-540       BRAP3-640       BRAP3-644       BRAP3-644       BRAP3-644       BRAP3-644       BRAP3-644       BRAP3-644.5       BRAP3-644.5       BRAP3-644.5       BRAP3-645       BRAP3-645       BRAP3-645       BRAP3-645       BRAP3-645       BRAP3-648       BRAP3-648       BRAP3-650       BRAP3-650       BRAP3-650       BRAP3-650       BRAP3-650       BRAP3-650       BRAP3-652       BRAP3-652       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655       BRAP3-655					1		
BRAP1-428   BRAP2-428   BRAP3-428   BRAP3-428   BRAP3-430   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-532   BRAP3-533.7   BRAP3-533.7   BRAP3-533.7   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-535   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-538   BRAP3-540   BRAP1-540   BRAP2-540   BRAP3-540   BRAP3-540   BRAP3-540   BRAP3-542   BRAP3-542   BRAP3-542   BRAP3-644.5   BRAP3-644.5   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-645   BRAP3-648   BRAP3-648   BRAP3-648   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-650   BRAP3-655   BRAP3-655   BRAP3-655   BRAP3-655			C 2/	1			
30.0   BRAP1-430   BRAP2-430   BRAP3-430     32.0   32.0   33.7   G 1   BRAP1-532   BRAP2-532   BRAP3-532     5   35.0   BRAP1-535   BRAP2-535   BRAP3-535     6   36   36   36   36     7   4.5   45.0   48.0   G 11/2     8   48.0   G 11/2   BRAP1-644     6   50.0   50.8   52.0     5   50.0   BRAP1-655   BRAP2-655     6   50.0   BRAP1-655   BRAP2-655     7   4   4   4     8   4   4     8   8   4     8   8   4     8   8   4     8   8     8   8     8   8     8   8	Λ		G 3/4				
32.0 33.7 G 1 BRAP1-532 BRAP2-532 BRAP2-533.7 BRAP3-533.7 BRAP3-533.7 BRAP3-535 BRAP3-535 BRAP3-535 BRAP3-535 BRAP3-535 BRAP3-535 BRAP3-535 BRAP3-538 BRAP3-538 BRAP1-540 BRAP1-540 BRAP1-540 BRAP2-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-542 BRAP3-542 BRAP3-644.5 BRAP3-644.5 BRAP3-644.5 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-648 BRAP3-650 BRAP3-655 BRAP3-655	7				1		
33.7       G 1       BRAP1-533.7 BRAP1-535       BRAP2-533.7 BRAP2-535       BRAP3-533.7 BRAP3-535         38.0 40.0 42.0       G 11/2       BRAP1-538 BRAP1-540       BRAP2-538 BRAP1-540       BRAP2-540 BRAP2-542       BRAP3-540 BRAP3-540         44.5 45.0 45.0 48.0       G 11/2       BRAP1-644.5 BRAP1-645       BRAP2-644.5 BRAP1-645       BRAP2-645 BRAP2-648       BRAP3-648 BRAP2-650         6       50.0 50.8 52.0       BRAP1-650.8 BRAP1-650       BRAP2-650.8 BRAP2-650       BRAP3-650         BRAP1-652 BRAP1-655       BRAP2-655       BRAP3-655	-			11/4			
38.0 40.0 BRAP1-538 BRAP2-538 BRAP3-538 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-540 BRAP3-542 BRAP3-542 BRAP3-542 BRAP3-642 BRAP3-642 BRAP3-642 BRAP3-642 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-648 BRAP3-648 BRAP3-650 BRAP3-655 BRAP3-655 BRAP3-655		33.7	G 1				
40.0 42.0 G 11/4 BRAP1-540 BRAP2-540 BRAP3-540 BRAP3-542  44.5 45.0 BRAP1-645 BRAP2-645 BRAP3-645  48.0 G 11/2 BRAP1-648 BRAP2-648 BRAP3-648  6 50.0 BRAP1-650 BRAP2-650 BRAP3-650  50.8 2 BRAP1-650 BRAP2-650 BRAP3-650  8 BRAP1-650 BRAP2-650 BRAP3-650  8 BRAP1-650 BRAP2-650 BRAP3-650  8 BRAP1-650 BRAP2-650 BRAP3-650  8 BRAP3-650 BRAP3-650  8 BRAP3-655 BRAP3-655	5						
42.0         G 11/4         BRAP1-542         BRAP2-542         BRAP3-542           44.5         44.5         BRAP1-644.5         BRAP2-644.5         BRAP3-644.5           45.0         BRAP1-645         BRAP2-645         BRAP3-645           48.0         G 11/2         BRAP1-648         BRAP2-648         BRAP3-648           6         50.0         BRAP1-650         BRAP2-650         BRAP3-650           50.8         2         BRAP1-650.8         BRAP2-650.8         BRAP3-650.8           52.0         BRAP1-652         BRAP2-652         BRAP3-652           55.0         BRAP1-655         BRAP2-655         BRAP3-655				11/2			
44.5 45.0 48.0 G 11/2 BRAP1-645 BRAP1-645 BRAP2-645 BRAP2-645 BRAP2-645 BRAP3-645 BRAP3-645 BRAP3-645 BRAP3-648 BRAP1-650 BRAP2-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-655 BRAP3-655 BRAP3-655			G 11/4				
45.0 48.0 G 11/2 BRAP1-645 BRAP2-645 BRAP2-648 BRAP2-648 BRAP2-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-650 BRAP3-652 BRAP3-655 BRAP3-655 BRAP3-655			S 1/7	13/4			
6 50.0 BRAP1-650 BRAP2-650 BRAP3-650 BRAP3-650 BRAP3-650.8 BRAP1-650.8 BRAP1-650.8 BRAP2-650.8 BRAP3-652 BRAP3-652 BRAP3-655 BRAP3-655				', '			
50.8 2 BRAP1-650.8 BRAP2-650.8 BRAP3-650.8 52.0 BRAP1-652 BRAP2-655 BRAP3-655 BRAP3-655		48.0	G 11/2			BRAP2-648	
52.0 BRAP1-652 BRAP2-652 BRAP3-652 55.0 BRAP1-655 BRAP2-655 BRAP3-655	6						
55.0 BRAP1-655 BRAP2-655 BRAP3-655				2			
				21/4			

 <sup>1)</sup> Contrary to the illustration size 0 clamps are secured by only one screw.
 \* Only with cover plate, hexagon screws and locking washers.



### Tube clamps series A(light construction series)-complete range

2 clamp halves, weld/

2 clamp halves, weld/

2 clamp halves, weld/

screw plate, slot head screw plate, socket screw plate, cover plabolts and bushes head bolts and bushes te and hex. head bolts BSSLA... BSLA... BISA ... 0 **BDPA** Polypropylene- BRAP  $\stackrel{\frown}{\sim}$ Inside smooth - BRAPG Polyamide 6 - BRAN BR AP... BRAP... BRAP... Inside smooth - BRANG - BRAVG\* Rubber (OC - BRAA Aluminium (As required please exchange standard BAPLA **BAPLA** BAPLA... abbreviation RAP in column for "Order code") clamp size Tube O.D. mm Tube NB Tube O.D. Order code Order code Order code BRAP4-006 BRAP5-006 BRAP6-006 6.0 BRAP4-006.4 BRAP5-006.4 BRAP6-006.4 6.4 1/4 BRAP5-008  $0^{1}$ BRAP4-008 BRAP6-008 8.0 5/16 3/8 BRAP4-009.5 BRAP5-009.5 BRAP6-009.5 9.5 10.0 G 1/8 BRAP4-010 BRAP5-010 BRAP6-010 BRAP4-012 BRAP5-012 BRAP6-012 12.0 BRAP4-106 BRAP5-106 BRAP6-106 6.0 BRAP4-106.4 6.4 1/4 BRAP5-106.4 BRAP6-106.4 1 8.0 5/16 BRAP4-108 **BRAP5-108** BRAP6-108 BRAP6-109.5 9.5 3/8 BRAP4-109.5 BRAP5-109.5 BRAP4-110 BRAP5-110 BRAP6-110 G 1/8 10.0 12.0 BRAP4-112 BRAP5-112 BRAP6-112 BRAP6-212.7 BRAP4-212.7 BRAP5-212.7 12.7 1/2 13.5 G 1/4 BRAP4-213.5 BRAP5-213.5 BRAP6-213.5 BRAP4-214 BRAP5-214 BRAP6-214 14.0 BRAP4-215 BRAP5-215 BRAP6-215 2 15.0 **BRAP4-216** BRAP5-216 BRAP6-216 16.0 5/8 17.2 G 3/8 BRAP4-217.2 BRAP5-217.2 BRAP6-217.2 **BRAP4-218 BRAP5-218** BRAP6-218 18.0 19.0 3/4 BRAP4-319 BRAP5-319 BRAP6-319 BRAP4-320 20.0 BRAP5-320 BRAP6-320 BRAP4-321.3 3 G 1/2 BRAP5-321.3 BRAP6-321.3 21.3 BRAP4-322 22.0 BRAP5-322 BRAP6-322 23.0 BRAP4-323 BRAP5-323 BRAP6-323 BRAP5-325 BRAP6-325 **BRAP4-325** 25.0 BRAP4-426.9 BRAP6-426.9 26.9 G 3/4 BRAP5-426.9 BRAP4-428 BRAP6-428 4 **BRAP5-428** 28.0 BRAP4-430 BRAP6-430 30.0 BRAP5-430 BRAP4-532 BRAP5-532 BRAP6-532 32.0 11/4 33.7 G 1 BRAP4-533.7 BRAP5-533.7 BRAP6-533.7 35.0 BRAP4-535 BRAP5-535 BRAP6-535 5 BRAP4-538 BRAP5-538 BRAP6-538 38.0 11/2 BRAP4-540 BRAP5-540 40.0 BRAP6-540 42.0 G 11/4 BRAP4-542 BRAP5-542 BRAP6-542 13/4 BRAP4-644.5 BRAP5-644.5 BRAP6-644.5 44.5 45.0 BRAP4-645 BRAP5-645 BRAP6-645 **BRAP4-648** 48.0 G 11/2 BRAP5-648 BRAP6-648 **BRAP4-650** BRAP5-650 BRAP6-650 6 50.0 50.8 2 BRAP4-650.8 BRAP5-650.8 BRAP6-650.8 52.0 BRAP4-652 BRAP5-652 BRAP6-652 BRAP4-655 BRAP5-655 BRAP6-655 55.0 **BRAP4-657** BRAP5-657 **BRAP6-657** 57.0 21/4

<sup>1)</sup> Contrary to the illustration size 0 clamps are secured by only one screw.

<sup>\*</sup> Only with cover plate, hexagon screws and locking washers.



## Tube clamps series A(light construction series)-complete range

				2 clamp halves, rail nuts, slot head bolts and bushes	2 clamp halves, rail nuts, socket head bolts and bushes	2 clamp halves, rail nuts, cover plate and hex. head bolts
				BSLA	BISA	BSSLA
Polypropylene – B Inside smooth – B Polyamide 6 – B Inside smooth – B	RAPG RAN					BDPA
	RAVG* RAA			BRAP	BRAP	BRAP
(As required please		ode")		втма	втма	втма
clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code	Order code
	6.0			BRAP9-006	BRAP10-006	BRAP12-006
01)	6.4 8.0		1/ <sub>4</sub> 5/ <sub>16</sub>	BRAP9-006.4 BRAP9-008	BRAP10-006.4 BRAP10-008	BRAP12-006.4 BRAP12-008
0.)	9.5		3/8	BRAP9-009.5	BRAP10-009.5	BRAP12-009.5
	10.0	G 1/8		BRAP9-010	BRAP10-010	BRAP12-010
	12.0			BRAP9-012	BRAP10-012	BRAP12-012
	6.0 6.4		1/4	BRAP9-106 BRAP9-106.4	BRAP10-106 BRAP10-106.4	BRAP12-106 BRAP12-106.4
1	8.0		5/16	BRAP9-108	BRAP10-108	BRAP12-108
	9.5		3/8	BRAP9-109.5	BRAP10-109.5	BRAP12-109.5
	10.0	G 1/8		BRAP9-110	BRAP10-110	BRAP12-110
	12.0 12.7		1/2	BRAP9-112 BRAP9-212.7	BRAP10-112 BRAP10-212.7	BRAP12-112 BRAP12-212.7
	13.5	G 1/4	72	BRAP9-213.5	BRAP10-213.5	BRAP12-213.5
	14.0	G. 7.		BRAP9-214	BRAP10-214	BRAP12-214
2	15.0		-,	BRAP9-215	BRAP10-215	BRAP12-215
	16.0 17.2	G <sup>3</sup> /8	5/8	BRAP9-216 BRAP9-217.2	BRAP10-216 BRAP10-217.2	BRAP12-216 BRAP12-217.2
	18.0	G 9/8		BRAP9-218	BRAP10-217.2 BRAP10-218	BRAP12-217.2
	19.0		3/4	BRAP9-319	BRAP10-319	BRAP12-319
	20.0			BRAP9-320	BRAP10-320	BRAP12-320
3	21.3	G 1/2		BRAP9-321.3	BRAP10-321.3	BRAP12-321.3
	22.0 23.0			BRAP9-322 BRAP9-323	BRAP10-322 BRAP10-323	BRAP12-322 BRAP12-323
	25.0		1	BRAP9-325	BRAP10-325	BRAP12-325
	26.9	G <sup>3</sup> / <sub>4</sub>		BRAP9-426.9	BRAP10-426.9	BRAP12-426.9
4	28.0			BRAP9-428	BRAP10-428	BRAP12-428
	30.0		441	BRAP9-430	BRAP10-430	BRAP12-430
	32.0 33.7	G 1	11/4	BRAP9-532 BRAP9-533.7	BRAP10-532 BRAP10-533.7	BRAP12-532 BRAP12-533.7
5	35.0	G I		BRAP9-535	BRAP10-535.7	BRAP12-535
	38.0		<b>1</b> 1/ <sub>2</sub>	BRAP9-538	BRAP10-538	BRAP12-538
	40.0	0.44		BRAP9-540	BRAP10-540	BRAP12-540
	42.0	G 11/4	42/.	BRAP9-542 BRAP9-644.5	BRAP10-542	BRAP12-542
	44.5 45.0		13/4	BRAP9-644.5 BRAP9-645	BRAP10-644.5 BRAP10-645	BRAP12-644.5 BRAP12-645
	48.0	G 11/2		BRAP9-648	BRAP10-648	BRAP12-648
6	50.0			BRAP9-650	BRAP10-650	BRAP12-650
	50.8		2	BRAP9-650.8	BRAP10-650.8	BRAP12-650.8
	52.0			BRAP9-652	BRAP10-652	BRAP12-652
	55.0 57.0		21/4	BRAP9-655 BRAP9-657	BRAP10-655 BRAP10-657	BRAP12-655 BRAP12-657
	U. 07.10		- / -	2.2.0 007	2.2 10 007	2.32 007

 <sup>1)</sup> Contrary to the illustration size 0 clamps are secured by only one screw.
 \* Only with cover plate, hexagon screws and locking washers.



Polypropylene - BRAP Inside smooth – **BRAPG**Polyamide 6 – **BRAN** Inside smooth - BRANG - BRAVG\* - BRAA Rubber Aluminium

(As required please exchange standard abbreviation RAP in column for "Order code") 2 clamp halves, slot heads and bushes 2 clamp halves, socket head bolts and bushes BSLA... BISA... BRAP... BR AP...

		1	1		
clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	6.0			BRAP13-006	BRAP14-006
	6.4		1/4	BRAP13-006.4	BRAP14-006.4
O¹)	8.0		<sup>5</sup> / <sub>16</sub>	BRAP13-008	BRAP14-008
	9.5		3/8	BRAP13-009.5	BRAP14-009.5
	10.0	G 1/8		BRAP13-010	BRAP14-010
	12.0			BRAP13-012	BRAP14-012
	6.0			BRAP13-106	BRAP14-106
	6.4		1/4	BRAP13-106.4	BRAP14-106.4
1	8.0		<sup>5</sup> / <sub>16</sub>	BRAP13-108	BRAP14-108
	9.5		3/8	BRAP13-109.5	BRAP14-109.5
	10.0	G 1/8		BRAP13-110	BRAP14-110
	12.0			BRAP13-112	BRAP14-112
	12.7		1/2	BRAP13-212.7	BRAP14-212.7
	13.5	G 1/4		BRAP13-213.5	BRAP14-213.5
	14.0			BRAP13-214	BRAP14-214
2	15.0			BRAP13-215	BRAP14-215
	16.0		5/8	BRAP13-216	BRAP14-216
	17.2	G <sup>3</sup> / <sub>8</sub>		BRAP13-217.2	BRAP14-217.2
	18.0			BRAP13-218	BRAP14-218
	19.0		3/4	BRAP13-319	BRAP14-319
	20.0			BRAP13-320	BRAP14-320
3	21.3	G 1/2		BRAP13-321.3	BRAP14-321.3
	22.0			BRAP13-322	BRAP14-322
	23.0			BRAP13-323	BRAP14-323
	25.0		1	BRAP13-325	BRAP14-325
	26.9	G 3/4		BRAP13-426.9	BRAP14-426.9
4	28.0			BRAP13-428	BRAP14-428
	30.0			BRAP13-430	BRAP14-430
	32.0		11/4	BRAP13-532	BRAP14-532
	33.7	G 1		BRAP13-533.7	BRAP14-533.7
5	35.0			BRAP13-535	BRAP14-535
	38.0		<b>1</b> 1/ <sub>2</sub>	BRAP13-538	BRAP14-538
	40.0			BRAP13-540	BRAP14-540
	42.0	G 11/4		BRAP13-542	BRAP14-542
	44.5		13/4	BRAP13-644.5	BRAP14-644.5
	45.0			BRAP13-645	BRAP14-645
	48.0	G 11/2		BRAP13-648	BRAP14-648
6	50.0			BRAP13-650	BRAP14-650
	50.8		2	BRAP13-650.8	BRAP14-650.8
	52.0			BRAP13-652	BRAP14-652
	55.0			BRAP13-655	BRAP14-655
	57.0		21/4	BRAP13-657	BRAP14-657

 <sup>1)</sup> Contrary to the illustration size 0 clamps are secured by only one screw.
 \* Only with cover plate, hexagon screws and locking washers.



Polypropylene - BRAP Inside smooth - BRAPG Polyamide 6 - BRAN Inside smooth - BRANG - BRAVG\* - BRAA Rubber Aluminium

(As required please exchange standard abbreviation RAP in column for "Order code") 2 clamp halves, cover plate and hex. head bolts 2 clamp halves, stacking bolts and locking plate BS BA... BSSLA... BASA... BDPA... BRAP ... BR AP...

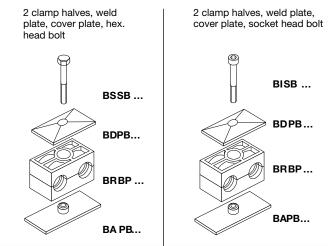
clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	6.0			BRAP16-006	BRAP18-006
	6.4		1/4	BRAP16-006.4	BRAP18-006.4
O 1)	8.0		5/16	BRAP16-008	BRAP18-008
- /	9.5		3/8	BRAP16-009.5	BRAP18-009.5
	10.0	G1/8		BRAP16-010	BRAP18-010
	12.0			BRAP16-012	BRAP18-012
	6.0			BRAP16-106	BRAP18-106
	6.4		1/4	BRAP16-106.4	BRAP18-106.4
1	8.0		5/16	BRAP16-108	BRAP18-108
	9.5		3/8	BRAP16-109.5	BRAP18-109.5
	10.0	G 1/8		BRAP16-110	BRAP18-110
	12.0			BRAP16-112	BRAP18-112
	12.7		1/2	BRAP16-212.7	BRAP18-212.7
	13.5	G 1/4		BRAP16-213.5	BRAP18-213.5
	14.0			BRAP16-214	BRAP18-214
2	15.0			BRAP16-215	BRAP18-215
	16.0		5/8	BRAP16-216	BRAP18-216
	17.2	G 3/8		BRAP16-217.2	BRAP18-217.2
	18.0			BRAP16-218	BRAP18-218
	19.0		3/4	BRAP16-319	BRAP18-319
	20.0			BRAP16-320	BRAP18-320
3	21.3	G 1/2		BRAP16-321.3	BRAP18-321.3
	22.0			BRAP16-322	BRAP18-322
	23.0			BRAP16-323	BRAP18-323
	25.0		1	BRAP16-325	BRAP18-325
,	26.9	G 3/4		BRAP16-426.9	BRAP18-426.9
4	28.0			BRAP16-428	BRAP18-428
	30.0			BRAP16-430	BRAP18-430
	32.0		11/4	BRAP16-532	BRAP18-532
	33.7	G 1		BRAP16-533.7	BRAP18-533.7
5	35.0			BRAP16-535	BRAP18-535
	38.0		11/2	BRAP16-538	BRAP18-538
	40.0			BRAP16-540	BRAP18-540
	42.0	G 11/4		BRAP16-542	BRAP18-542
	44.5		13/4	BRAP16-644.5	BRAP18-644.5
	45.0			BRAP16-645	BRAP18-645
	48.0	G 11/2		BRAP16-648	BRAP18-648
6	50.0			BRAP16-650	BRAP18-650
	50.8		2	BRAP16-650.8	BRAP18-650.8
	52.0			BRAP16-652	BRAP18-652
	55.0			BRAP16-655	BRAP18-655
	57.0		21/4	BRAP16-657	BRAP18-657

 <sup>1)</sup> Contrary to the illustration size 0 clamps are secured by only one screw.
 \* Only with cover plate, hexagon screws and locking washers.



Polypropylene – BRBP Inside smooth – BRBPG Polyamide 6 – BRBN Rubber – BRBVG\*

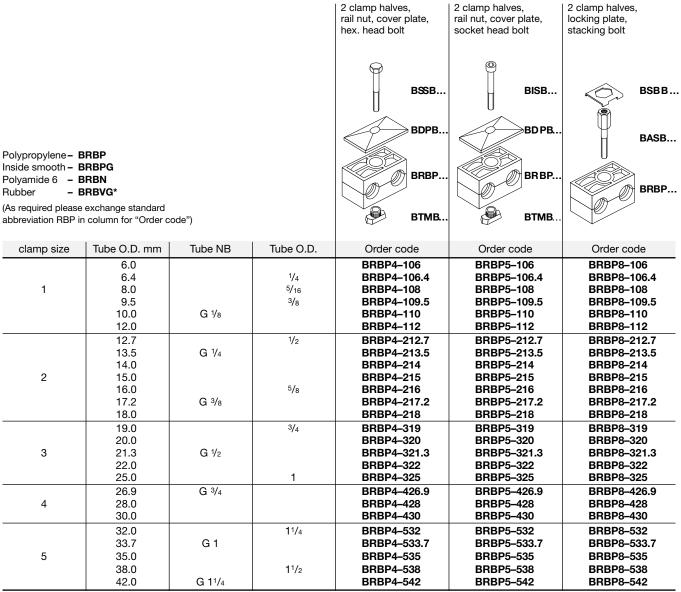
(As required please exchange standard abbreviation RBP in column for "Order code")



clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	6.0			BRBP1-106	BRBP3-106
	6.4		1/4	BRBP1-106.4	BRBP3-106.4
1	8.0		5/16	BRBP1-108	BRBP3-108
	9.5		3/8	BRBP1-109.5	BRBP3-109.5
	10.0	G1/8		BRBP1-110	BRBP3-110
	12.0			BRBP1-112	BRBP3-112
•	12.7		1/2	BRBP1-212.7	BRBP3-212.7
	13.5	G1/4		BRBP1-213.5	BRBP3-213.5
	14.0			BRBP1-214	BRBP3-214
2	15.0			BRBP1-215	BRBP3-215
	16.0		5/8	BRBP1-216	BRBP3-216
	17.2	G3/8		BRBP1-217.2	BRBP3-217.2
	18.0			BRBP1-218	BRBP3-218
	19.0		3/4	BRBP1-319	BRBP3-319
	20.0			BRBP1-320	BRBP3-320
3	21.3	G1/2		BRBP1-321.3	BRBP3-321.3
	22.0			BRBP1-322	BRBP3-322
	25.0		1	BRBP1-325	BRBP3-325
	26.9	G3/4		BRBP1-426.9	BRBP3-426.9
4	28.0			BRBP1-428	BRBP3-428
	30.0			BRBP1-430	BRBP3-430
	32.0		11/4	BRBP1-532	BRBP3-532
	33.7	G1		BRBP1-533.7	BRBP3-533.7
5	35.0	_		BRBP1-535	BRBP3-535
-	38.0		<b>1</b> <sup>1</sup> / <sub>2</sub>	BRBP1-538	BRBP3-538
	42.0	G11/4	. 72	BRBP1-542	BRBP3-542

<sup>\*</sup>Only with cover plate, hexagon screws and locking washers.





2 clamp halves.

2 clamp halves.

<sup>\*</sup>Only with cover plate, hexagon screws and locking washers.



Polypropylene - BRCP Inside smooth - BRCPG ¹) Polyamide 6 - BRCN Rubber - BRCVR\* Aluminium - BRCA

(As required please exchange standard abbreviation RCP in column for "Order code")

2 clamp halves, weld plate, cover plate, hex. head bolt

BS SC...

BDPC...

BRCP...

BAPC...

2 clamp halves, weld plate, cover plate, socket head bolt

BISC...

BRCP...

BAPC...

clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	6.0			BRCP1-106	BRCP2-106
	8.0		5/16	BRCP1-108	BRCP2-108
	10.0	G 1/8	,	BRCP1-110	BRCP2-110
	12.0			BRCP1-112	BRCP2-112
	12.7		1/2	BRCP1-112.7	BRCP2-112.7
1	13.5	G 1/4		BRCP1-113.5	BRCP2-113.5
	14.0			BRCP1-114	BRCP2-114
	15.0			BRCP1-115	BRCP2-115
	16.0		5/8	BRCP1-116	BRCP2-116
	17.2	G 3/8		BRCP1-117.2	BRCP2-117.2
	18.0			BRCP1-118	BRCP2-118
	19.0		3/4	BRCP1-219	BRCP2-219
	20.0			BRCP1-220	BRCP2-220
	21.3	G 1/2		BRCP1-221.3	BRCP2-221.3
	22.0			BRCP1-222	BRCP2-222
2	23.0			BRCP1-223	BRCP2-223
	25.0		1	BRCP1-225	BRCP2-225
	26.9	G <sup>3</sup> / <sub>4</sub>		BRCP1-226.9	BRCP2-226.9
	28.0			BRCP1-228	BRCP2-228
	30.0			BRCP1-230	BRCP2-230
	30.0			BRCP1-330	BRCP2-330
	32.0		<b>1</b> 1/4	BRCP1-332	BRCP2-332
	33.7	G 1		BRCP1-333.7	BRCP2-333.7
3	35.0			BRCP1-335	BRCP2-335
	38.0		11/2	BRCP1-338	BRCP2-338
	40.0	<b>_</b>		BRCP1-340	BRCP2-340
	42.0	G 11/4		BRCP1-342	BRCP2-342
	38.0		<b>1</b> 1/2	BRCP1-438	BRCP2-438
	40.0			BRCP1-440	BRCP2-440
	42.0	G 1 <sup>1</sup> / <sub>4</sub>		BRCP1-442	BRCP2-442
	45.0			BRCP1-445	BRCP2-445
	48.3	G 1 <sup>1</sup> / <sub>2</sub>		BRCP1-448.3	BRCP2-448.3
	50.0			BRCP1-450	BRCP2-450
4	51.0		2	BRCP1-451	BRCP2-451
	52.0			BRCP1-452	BRCP2-452
	55.0			BRCP1-455	BRCP2-455
	57.0		21/4	BRCP1-457	BRCP2-457
	60.3	G 2		BRCP1-460.3	BRCP2-460.3
	63.0		21/2	BRCP1-463	BRCP2-463
	65.0			BRCP1-465	BRCP2-465
	70.0			BRCP1-470	BRCP2-470

Continuation see next page ...



Polypropylene- BRCP Inside smooth - BRCPG1) Polyamide 6 - BRCN
Rubber - BRCVR\* Rubber - BRCA Aluminium

(As required please exchange standard abbreviation RCP in column for "Order code")

2 clamp halves, weld plate, cover plate, hex. head bolt 2 clamp halves, weld plate, cover plate, socket head bolt BSSC... BISC... BDPC... BDPC... BRCP... BRCP... BAPC... BAPC...

clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	70.0			BRCP1-570	BRCP2-570
	73.0			BRCP1-573	BRCP2-573
	75.0			BRCP1-575	BRCP2-575
5	76.1	G 21/2	3	BRCP1-576.1	BRCP2-576.1
	80.0			BRCP1-580	BRCP2-580
	82.5		31/4	BRCP1-582.5	BRCP2-582.5
	88.9	G 3	31/2	BRCP1-588.9	BRCP2-588.9
	90.0			BRCP1-590	BRCP2-590
•	90.0			BRCP1-690	BRCP2-690
	97.0			BRCP1-697	BRCP2-697
	100.0			BRCP1-6100	BRCP2-6100
6	101.6	G 31/2	4	BRCP1-6101.6	BRCP2-6101.6
	108.0		41/4	BRCP1-6108	BRCP2-6108
	114.3	G 4	41/2	BRCP1-6114.3	BRCP2-6114.3
	127.0		5	BRCP1-6127	BRCP2-6127
	127.0		5	BRCP1-7127	BRCP2-7127
	133.0		51/4	BRCP1-7133	BRCP2-7133
	140.0	G 5	51/2	BRCP1-7140	BRCP2-7140
7	150.0			BRCP1-7150	BRCP2-7150
	152.4	G 51/2	6	BRCP1-7152.4	BRCP2-7152.4
	159.0		61/4	BRCP1-7159	BRCP2-7159
	165.1	G 6	61/2	BRCP1-7165.1	BRCP2-7165.1
	168.3		6 <sup>5</sup> /8	BRCP1-7168.3	BRCP2-7168.3
	168.3		65/8	BRCP1-8168.3	BRCP2-8168.3
	177.8		7	BRCP1-8177.8	BRCP2-8177.8
8	193.7		75/8	BRCP1-8193.7	BRCP2-8193.7
	203.0			BRCP1-8203	BRCP2-8203
	219.1	G 8	<b>8</b> <sup>5</sup> / <sub>8</sub>	BRCP1-8219.1	BRCP2-8219.1
	220.0			BRCP1-8220	BRCP2-8220

<sup>1)</sup> Only sizes 1–4
\* Only with cover plate, hexagon screws and locking washers (only sizes 1–4).



Polypropylene - BRCP
Inside smooth - BRCPG¹)
Polyamide 6 - BRCN
Rubber - BRCVR\*
Aluminium - BRCA

(As required please exchange standard abbreviation RCP in column for "Order code")

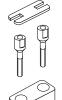
2 clamp halves, rail nuts, cover plate, hex. head bolts		2 clamp halves, rail nuts, cover plate, socket head bolts	2 clamp halves, locking plate, stacking bolts	
	BSSC	® BISC	Popo	
	BDPC	BDPC	BSPC	
	BRCP	BRCP		
	втмс	втмс	BRCP	

clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code	Order code
·	6.0			BRCP3-106	BRCP4-106	BRCP5-106
	8.0		<sup>5</sup> / <sub>16</sub>	BRCP3-108	BRCP4-108	BRCP5-108
	10.0	G 1/8		BRCP3-110	BRCP4-110	BRCP5-110
	12.0			BRCP3-112	BRCP4-112	BRCP5-112
	12.7		1/2	BRCP3-112.7	BRCP4-112.7	BRCP5-112.7
1	13.5	G 1/4		BRCP3-113.5	BRCP4-113.5	BRCP5-113.5
	14.0			BRCP3-114	BRCP4-114	BRCP5-114
	15.0			BRCP3-115	BRCP4-115	BRCP5-115
	16.0		5/8	BRCP3-116	BRCP4-116	BRCP5-116
	17.2	G 3/8		BRCP3-117.2	BRCP4-117.2	BRCP5-117.2
	18.0			BRCP3-118	BRCP4-118	BRCP5-118
	19.0		3/4	BRCP3-219	BRCP4-219	BBRCP5-219
	20.0			BRCP3-220	BRCP4-220	BRCP5-220
	21.3	G 1/2		BRCP3-221.3	BRCP4-221.3	BRCP5-221.3
•	22.0			BRCP3-222	BRCP4-222	BRCP5-222
2	23.0		_	BRCP3-223	BRCP4-223	BRCP5-223
	25.0	0.2/	1	BRCP3-225	BRCP4-225	BRCP5-225
	26.9 28.0	G <sup>3</sup> / <sub>4</sub>		BRCP3-226.9	BRCP4-226.9	BRCP5-226.9
	30.0			BRCP3-228 BRCP3-230	BRCP4-228 BRCP4-230	BRCP5-228 BRCP5-230
				BRCP3-230	BRCP4-230	BRCP5-330
	30.0 32.0		11/4	BRCP3-330 BRCP3-332	BRCP4-330 BRCP4-332	BRCP5-330 BRCP5-332
	33.7	G 1	1 74	BRCP3-333.7	BRCP4-333.7	BRCP5-333.7
3	35.0	GI		BRCP3-335.7	BRCP4-335	BRCP5-335.7
3	38.0		11/2	BRCP3-338	BRCP4-338	BRCP5-338
	40.0		172	BRCP3-340	BRCP4-340	BRCP5-340
	42.0	G 11/4		BRCP3-342	BRCP4-342	BRCP5-342
-	38.0	<b>G</b> . , .	11/2	BRCP3-438	BRCP4-438	BRCP5-438
	40.0		1 /2	BRCP3-440	BRCP4-440	BRCP5-440
	42.0	G 1 <sup>1</sup> / <sub>4</sub>		BRCP3-442	BRCP4-442	BRCP5-442
	45.0	G 1 /4		BRCP3-445	BRCP4-445	BRCP5-445
	48.3	G 1 <sup>1</sup> / <sub>2</sub>		BRCP3-448.3	BRCP4-448.3	BRCP5-448.3
	50.0	G 1 /2		BRCP3-450	BRCP4-450	BRCP5-450
4	51.0		2	BRCP3-451	BRCP4-451	BRCP5-451
7	52.0		_	BRCP3-452	BRCP4-452	BRCP5-452
	55.0			BRCP3-455	BRCP4-455	BRCP5-455
	57.0		21/4	BRCP3-457	BRCP4-457	BRCP5-457
	60.3	G 2		BRCP3-460.3	BRCP4-460.3	BRCP5-460.3
	63.0	<b>4</b> 2	21/2	BRCP3-463	BRCP4-463	BRCP5-463
	65.0		<b>L</b> / 2	BRCP3-465	BRCP4-465	BRCP5-465
	70.0			BRCP3-470	BRCP4-470	BRCP5-470
	70.0			DITOF 0-470	DINOF 4-410	DITOF 3-470

Continuation see next page ...



2 clamp halves, locking plate, stacking bolts



BSPC...

BASC...

BRCP...

Polypropylene - BRCP Inside smooth - BRCPG¹) Polyamide 6 - BRCN
Rubber - BRCVR\*
Aluminium - BRCA

(As required please exchange standard abbreviation RCP in column for "Order code")

clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code
	70.0			BRCP5-570
	73.0			BRCP5-573
	75.0			BRCP5-575
5	76.1	G 21/2	3	BRCP5-576.1
	80.0			BRCP5-580
	82.5		3 1/4	BRCP5-582.5
	88.9	G 3	31/2	BRCP5-588.9
	90.0			BRCP5-590
	90.0			BRCP5-690
	97.0			BRCP5-697
	100.0			BRCP5-6100
6	101.6	G 31/2	4	BRCP5-6101.6
	108.0		41/4	BRCP5-6108
	114.3	G 4	41/2	BRCP5-6114.3
	127.0		5	BRCP5-6127
	127.0		5	BRCP5-7127
	133.0		51/4	BRCP5-7133
	140.0	G 5	51/2	BRCP5-7140
7	150.0			BRCP5-7150
	152.4	G 51/2	6	BRCP5-7152.4
	159.0		6 1/4	BRCP5-7159
	165.1	G 6	6 1/2	BRCP5-7165.1
	168.3		65/8	BRCP5-7168.3
	168.3		65/8	BRCP5-8168.3
	177.8		7	BRCP5-8177.8
8	193.7		75/8	BRCP5-8193.7
	203.0			BRCP5-8203
	219.1	G 8	85/8	BRCP5-8219.1
	220.0			BRCP5-8220

<sup>1)</sup> Only sizes 1–4

\* Only with cover plate, hexagon screws and locking washers (only sizes 1–4).



Polypropylene – BRCPD
Inside smooth – BRCPDG¹)
Polyamide 6 – BRCND
Rubber – BRCVDR\*

Aluminium

(As required please exchange standard abbreviation BRCP in column for "Order code")

- BRCAD

4 clamp halves, double weld plate, double cover plate, hex. head bolts

BSSC...

BDPDC...

BRCPD...
(=2XRCP...)

BAPDC...

4 clamp halves, double weld plate, double cover plate, socket head bolts

BISC...

BRCPD...
(=2XRCP...)

BAPDC...

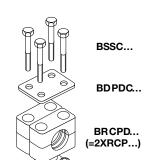
clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code		
	6.0			BRCPD1-106	BRCPD2-106		
	8.0		<sup>5</sup> / <sub>16</sub>	BRCPD1-108	BRCPD2-108		
	10.0	G 1/8		BRCPD1-110	BRCPD2-110		
	12.0			BRCPD1-112	BRCPD2-112		
	12.7		1/2	BRCPD1-112.7	BRCPD2-112.7		
1	13.5	G 1/4		BRCPD1-113.5	BRCPD2-113.5		
	14.0			BRCPD1-114	BRCPD2-114		
	15.0			BRCPD1-115	BRCPD2-115		
	16.0		5/8	BRCPD1-116	BRCPD2-116		
	17.2	G 3/8		BRCPD1-117.2	BRCPD2-117.2		
	18.0			BRCPD1-118	BRCPD2-118		
	19.0		3/4	BRCPD1-219	BRCPD2-219		
	20.0			BRCPD1-220	BRCPD2-220		
	21.3	G 1/2		BRCPD1-221.3	BRCPD2-221.3		
2	22.0			BRCPD1-222	BRCPD2-222		
	23.0		_	BRCPD1-223	BRCPD2-223		
	25.0	0.07	1	BRCPD1-225	BRCPD2-225		
	26.9	G 3/4		BRCPD1-226.9	BRCPD2-226.9		
	28.0			BRCPD1-228	BRCPD2-228		
	30.0			BRCPD1-230	BRCPD2-230		
	30.0			BRCPD1-330	BRCPD2-330		
	32.0		<b>1</b> 1/4	BRCPD1-332	BRCPD2-332		
_	33.7	G 1		BRCPD1-333.7	BRCPD2-333.7		
3	35.0			BRCPD1-335	BRCPD2-335		
	38.0		<b>1</b> ½	BRCPD1-338	BRCPD2-338		
	40.0	0.41/		BRCPD1-340	BRCPD2-340		
	42.0	G 11/4		BRCPD1-342	BRCPD2-342		
	38.0		<b>1</b> 1/2	BRCPD1-438	BRCPD2-438		
	40.0			BRCPD1-440	BRCPD2-440		
	42.0	G 1 <sup>1</sup> / <sub>4</sub>		BRCPD1-442	BRCPD2-442		
	45.0			BRCPD1-445	BRCPD2-445		
	48.3	G 1 <sup>1</sup> / <sub>2</sub>		BRCPD1-448.3	BRCPD2-448.3		
	50.0			BRCPD1-450	BRCPD2-450		
4	51.0		2	BRCPD1-451	BRCPD2-451		
	52.0			BRCPD1-452	BRCPD2-452		
	55.0			BRCPD1-455	BRCPD2-455		
	57.0		21/4	BRCPD1-457	BRCPD2-457		
	60.3	G 2		BRCPD1-460.3	BRCPD2-460.3		
	63.0		21/2	BRCPD1-463	BRCPD2-463		
	65.0			BRCPD1-465	BRCPD2-465		
	70.0			BRCPD1-470	BRCPD2-470		

Continuation see next page ...



4 clamp halves, double weld plate, double cover plate, hex. head bolts

4 clamp halves, double weld plate, double cover plate, socket head bolts



BAPDC...

BISC... BDPDC... BRCPD... (=2XRCP...) BAPDC...

Polypropylene- BRCPD Inside smooth - BRCPDG 1) Polyamide 6 - BRCND - BRCVDR\*
- BRCAD Rubber Aluminium

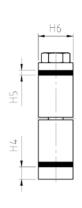
(As required please exchange standard abbreviation RCP in column for "Order code")

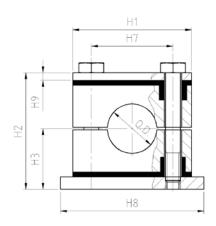
			1		
clamp size	Tube O.D. mm	Tube NB	Tube O.D.	Order code	Order code
	70.0			BRCPD1-570	BRCPD2-570
	73.0			BRCPD1-573	BRCPD2-573
	75.0			BRCPD1-575	BRCPD2-575
5	76.1	G 21/2	3	BRCPD1-576.1	BRCPD2-576.1
	80.0			BRCPD1-580	BRCPD2-580
	82.5		31/4	BRCPD1-582.5	BRCPD2-582.5
	88.9	G 3	31/2	BRCPD1-588.9	BRCPD2-588.9
	90.0			BRCPD1-590	BRCPD2-590
	90.0			BRCPD1-690	BRCPD2-690
	97.0			BRCPD1-697	BRCPD2-697
	100.0			BRCPD1-6100	BRCPD2-6100
6	101.6	G 31/2	4	BRCPD1-6101.6	BRCPD2-6101.6
	108.0		41/4	BRCPD1-6108	BRCPD2-6108
	114.3	G 4	41/2	BRCPD1-6114.3	BRCPD2-6114.3
	127.0		5	BRCPD1-6127	BRCPD2-6127
	127.0		5	BRCPD1-7127	BRCPD2-7127
	133.0		51/4	BRCPD1-7133	BRCPD2-7133
	140.0	G 5	51/2	BRCPD1-7140	BRCPD2-7140
7	150.0			BRCPD1-7150	BRCPD2-7150
	152.4	G 51/2	6	BRCPD1-7152.4	BRCPD2-7152.4
	159.0		61/4	BRCPD1-7159	BRCPD2-7159
	165.1	G 6	61/2	BRCPD1-7165.1	BRCPD2-7165.1
	168.3		65/8	BRCPD1-7168.3	BRCPD2-7168.3
	168.3		6 <sup>5</sup> /8	BRCPD1-8168.3	BRCPD2-8168.3
	177.8		7	BRCPD1-8177.8	BRCPD2-8177.8
8	193.7		75/8	BRCPD1-8193.7	BRCPD2-8193.7
	203.0			BRCPD1-8203	BRCPD2-8203
	219.1	G 8	85/8	BRCPD1-8219.1	BRCPD2-8219.1
	220.0			BRCPD1-8220	BRCPD2-8220

<sup>1)</sup> Only sizes 1–4
\* Only with cover plate, hexagon screws and locking washers (only sizes 1–4).



# Tube clamps series C with absorbing noise insert





Clamp size	Tube O.D.mm	Absorbing plate	Weld plate	Bolt ISO 4014	H1	H2	НЗ	H4	H5	H6	H7	Н8	H9
1	6.0 8.0 9.5 10.0 12.0 12.7 13.5 14.0 15.0 16.0 17.2 18.0	BDPEC1X	BAPCD1X	M10X65	55	69	38	15	7	30	33	70	8
2	19.0 20.0 21.3 22.0 23.0 25.0 26.9 28.0 30.0	BDPEC2X	BAPCD2X	M10X80	70	85	46	15	7	30	45	85	8
3	30.0 32.0 33.7 35.0 38.0 40.0 42.0	BDPEC3X	BAPCD3X	M10X90	85	97	52	15	7	30	60	100	8
4	38.0 40.0 42.0 45.0 48.3 50.0 51.0 52.0 54.0 55.0 57.0 60.3 63.5 65.0 70.0	BDPEC4X	BAPCD4X	M12X130	115	134	72	20	7	45	90	140	10