[E0] Ermeto Original Tube clamps



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Tube clamps
series A

## 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 $1 / 8^{\prime \prime}$ to $\mathrm{R} 11 / 2^{\prime \prime}$
- Outer tube diameter for the imperial size series $1 / 4^{\prime \prime}$ to $21 / 2^{\prime \prime}$

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 $-30^{\circ} \mathrm{C}$ up to $+90^{\circ} \mathrm{C}$ colour dark green Polyamide $\quad-40^{\circ} \mathrm{C}$ up to $+120^{\circ} \mathrm{C}$ colour black Rubber $\quad-50^{\circ} \mathrm{C}$ up to $+120^{\circ} \mathrm{C}$ colour black Aluminium up to $+300^{\circ} \mathrm{C}$

All metal parts available also in stainless steel.
Other materials upon request.
Stainless steel qualitities
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:
Tube clamp
Series: $\quad A=$ Light series
B = Twin tube clamp
C = Heavy series
Material: $\quad \mathrm{P}=$ Polypropylene
$\mathrm{N}=$ Polyamide (Nylon)
$\mathrm{V}=$ Rubber ${ }^{1}$ )
$A=$ Aluminium $^{2}$ )
Interior surface:
Standard = grooved

$$
\left.G=\text { smooth }^{3}\right)
$$

Size:
Diameter:
${ }^{1)}$ Rubber only available for series $A$ and $B$, inside smooth and series C grooved design
${ }^{\text {2) }}$ Aluminium only available for series $A$ size 1 to 6 and series $C$ size 1 to 8
${ }^{3}$ ) 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

Tube clamps material properties

## DIN 3015

| Mechanical properties |  | Polypropylene (PP) | Polyamide 6 (PA 6) | Aluminium | Rubber |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Density |  | $0.906 \mathrm{~g} / \mathrm{cm}^{3}$ | $1.12-1.15 \mathrm{~g} / \mathrm{cm}^{3}$ | $2.65 \mathrm{~g} / \mathrm{cm}^{3}$ | $0.98 \mathrm{~g} / \mathrm{cm}^{3}$ |
| Flexural deflection | DIN 53452 | $36 \mathrm{~N} / \mathrm{mm}^{2}$ | 130... $200 \mathrm{~N} / \mathrm{mm}^{2}$ | $70 \mathrm{~N} / \mathrm{mm}^{2}$ | - |
| Impact resistance | DIN 53453 | no break | no break | - |  |
| Compressive strength | DIN 53454 | $90 \mathrm{~N} / \mathrm{mm}^{2}$ | $120 \mathrm{~N} / \mathrm{mm}^{2}$ | HB 500... $600 \mathrm{~N} / \mathrm{mm}^{2}$ | A and B: $64^{\circ}$ shore C: $\quad 73^{\circ}$ shore |
| Modulus of elasticity | DIN 53452 | $1500 \mathrm{~N} / \mathrm{mm}^{2}$ | $3000 \mathrm{~N} / \mathrm{mm}^{2}$ | $70.000 \mathrm{~N} / \mathrm{mm}^{2}$ |  |
| Tensile strength without breakage | DIN 53454 | $25-35 \mathrm{~N} / \mathrm{mm}^{2}$ | $80-90 \mathrm{~N} / \mathrm{mm}^{2}$ | $180 \mathrm{~N} / \mathrm{mm}^{2}$ | A and B: $6.1 \mathrm{~N} / \mathrm{mm}^{2}$ $\mathrm{C}: \quad 8.5 \mathrm{~N} / \mathrm{mm}^{2}$ |


| Thermal properties |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Temp. resistance | $-30 \ldots+90^{\circ} \mathrm{C}$ | $-40 \ldots+120^{\circ} \mathrm{C}$ | $300^{\circ} \mathrm{C}$ | $-50 \ldots+120^{\circ} \mathrm{C}$ |


| Chemical properties |  |  |  |
| :--- | :--- | :--- | :--- |
| Weak acids | limited resistant | limited resistant | resistant |
| Weak alkalis | limited resistant | limited resistant | resistant |
| Alcohol | resistant | resistant | resistant |
| Petrol | limited resistant | resistant | limited resistant |
| Mineral oils | resistant | resistant | resistant |
| Other oils | resistant | resistant | resistant |

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

## Tube clamps assembly instruction



## 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 late scurely fastens the fixing screw and prevents twisting. Clamp on second clamp halve on to the fixing screws etc.

## Tube clamps

## DIN 3015

## Screw tightening torque and axial pipe shearing forces

The indicated screw tightening torque and axial pipe shearing forces refer to the assembly with cover plates and outside hexagon bolts according to DIN 931/933.
The axial pipe shearing force (according to DIN 3015, part 10) is an average value, determined by three tests made with a steel pipe according to DIN 2448 of St .37 , for which static friction is assumed (temperature during tests: $23^{\circ} \mathrm{C}$ ). When loading the clamp with the indicated test force ( F ) in axial pipe direction, the pipe must not slide in the clamp.


Light series (DIN 3015, part 1)

| Size | Fixing screw DIN 931/933 | Polypropylene |  | Polyamide |  | Aluminium |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Screw tightening torque (Mn) | Pipe shearing force F (kN) | Screw tightening torque (Mn) | Pipe shearing force $\mathrm{F}(\mathrm{kN})$ | Screw tightening torque (Mn) | Pipe shearing force F (kN) |
| 0 | M6 | 8 | 0.6 | 10 | 0.6 | - | - |
| 1 | M6 | 8 | 1.1 | 10 | 0.7 | 12 | 4.2 |
| 2 | M6 | 8 | 1.2 | 10 | 0.8 | 12 | 4.3 |
| 3 | M6 | 8 | 1.4 | 10 | 1.6 | 12 | 4.8 |
| 4 | M6 | 8 | 1.5 | 10 | 1.7 | 12 | 5.0 |
| 5 | M6 | 8 | 1.9 | 10 | 2.0 | 12 | 7.3 |
| 6 | M6 | 8 | 2.0 | 10 | 2.5 | 12 | 8.9 |

Heavy series (DIN 3015, part 2)

| Size | Fixing screw DIN 931/933 | Polypropylene |  | Polyamide |  | Aluminium |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Screw tightening torque (Mn) | Pipe shearing force F (kN) | Screw tightening torque (Mn) | Pipe shearing force F (kN) | Screw tightening torque (Mn) | Pipe shearing force F (kN) |
| 1 | M10 | 12 | 1.6 | 20 | 4.2 | 30 | 12.1 |
| 2 | M10 | 12 | 2.9 | 20 | 4.5 | 30 | 15.1 |
| 3 | M10 | 15 | 3.3 | 25 | 5.1 | 35 | 15.5 |
| 4 | M12 | 30 | 8.2 | 40 | 9.3 | 55 | 29.4 |
| 5 | M16 | 45 | 11.0 | 55 | 15.8 | 120 | 34.8 |
| 6 | M20 | 80 | 14.0 | 150 | 21.0 | 220 | 50.0 |
| 7 | M24 | 110 | 28.0 | 200 | 32.0 | 250 | 70.6 |
| 8 | M30 | 180 | 40.0 | 350 | 48.0 | 500 | 84.5 |

Double series (DIN 3015, part 3)

|  |  | Polypropylene |  | Polyamide |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Size | Fixing screw <br> DIN 931/933 | Screw tightening <br> torque $(\mathrm{Mn})$ | Pipe shearing <br> force $F(\mathrm{kN})$ | Screw tightening <br> torque $(\mathrm{Mn})$ | Pipe shearing <br> force $F(\mathrm{kN})$ |
| 1 | M6 | 5 | 0.9 | 5 | 0.9 |
| 2 | M8 | 12 | 2.1 | 12 | 2.2 |
| 3 | M8 | 12 | 1.9 | 12 | 2.0 |
| 4 | M8 | 12 | 2.7 | 12 | 2.9 |
| 5 | M8 | 8 | 1.7 | 8 | 2.5 |

## Tube clamps

DIN 3015

## Recommended clamp pitch



The clamp pitches corresponding to respective outside pipe diameters are standard for static loads.

| Outside pipe diameter $(\mathrm{mm})$ | Clamp pitch $\mathrm{A}(\mathrm{m})$ |
| :---: | :---: |
| $6.0-12.7$ | 1.0 |
| $12.7-22.0$ | 1.2 |
| $22.0-32.0$ | 1.5 |
| $32.0-38.0$ | 2.0 |
| $38.0-57.0$ | 2.7 |
| $57.0-75.0$ | 3.0 |
| $75.0-76.1$ | 3.5 |
| $76.1-88.9$ | 3.7 |
| $88.9-102.0$ | 4.0 |
| $102.0-114.0$ | 4.5 |
| $114.0-168.0$ | 5.0 |
| $168.0-219.0$ | 6.0 |

## Pipe bend assembly



Pipe bends must be fixed with pipe clamps immediately in front of and behind the bend.

Tube clamps series A (Light construction series) - Components
DIN 3015, part 1

Order code for clamp halves:
Polypropylene- RAP
Inside smooth - RAPG
Polyamide 6 - RAN
Inside smooth - RANG
Rubber - RAVG
Aluminium - RAA ${ }^{\mathbf{1}}$ )
(Please exchange as required standard abbreviation RAP in column for "clamp halves")


Continuation see next page ...

Tube clamps series A (Light construction series) - Components (Continued)
DIN 3015, part 1

Order code for clamp halves:
Polypropylene- RAP
Inside smooth - RAPG
Polyamide 6 - RAN
Inside smooth - RANG
Rubber - RAVG
Aluminium - RAA ${ }^{\mathbf{1}}$ )
(Please exchange as required standard abbreviation RAP in column for "clamp halves")

| clamp size | Tube O.D. mm | Tube NB | Tube O.D. | 1 part 2 clamp halves |  | welding plate, short |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | RAP... <br> Order code | dimensions: $b \quad c \quad d \quad e$ | APK A... <br> Order code | dim |  |
| 7 | 57.2 | G 2 | $21 / 4$ | RAP757.2X | 12193.69446 .8 | APKA7X | 94 | 122 |
|  | 60.3 |  |  | RAP760.3X |  |  |  |  |
|  | 63,5 |  | $21 / 2$ | RAP763.5X |  |  |  |  |
|  | 70.0 |  | $23 / 4$ | RAP770X |  |  |  |  |
|  | 73.0 |  |  | RAP773X |  |  |  |  |
|  | 76.1 | G 2 1/2 | 3 | RAP776.1X |  |  |  |  |
|  | 88.9 | G 3 |  | RAP888.9X | 147117.612058 .8 | APKA8X | 120 | 148 |
| 8 | 101.8 |  | 4 | RAP8101.8X |  |  |  |  |

When assemblying solid rubber clamps, covering plates, hexagon screws and locking washers must be used. All metal parts available in stainless steel.
${ }^{1}$ ) Aluminium only sizes 1 to 6 .

Tube clamps series A (Light construction series) - Components
DIN 3015, part 1


Metal parts also available in stainless steel.

## Tube clamps series A (Light construction series) - Components

DIN 3015, part 1


Metal parts also available in stainless steel.

Tube clamps series A (Light construction series) - Components
DIN 3015, part 1

|  |  |  | DIN 84 |  | DIN 931/933 |  |  | DIN912 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| clamp size | DP A... <br> Order code | plate dimensions: b d | SL A... <br> Order code | ead dimensions: $d \times L$ | hexagon SSL A... <br> Order code | head dimensions: $d \times L$ | sock <br> IS A... <br> Order code | head dimensions: $d \times L$ |
| 0 | DPAOX | - - | SLAOX | M 06×20 | SSLAOX | M 06×30 | ISAOX | M 06×20 |
| 1 | DPA1X | 3420 | SLA1X | M $06 \times 20$ | SSLAOX | M 06×30 | ISAOX | M 06×20 |
| 2 | DPA2X | $40 \quad 26$ | SLA2X | M $06 \times 25$ | SSLA2/SSB1X | M 06×35 | ISA2X | M $06 \times 25$ |
| 3 | DPA3X | $48 \quad 33$ | SLA3X | M $06 \times 30$ | SSLA3X | M 06×40 | ISA3X | M 06×30 |
| 4 | DPA4X | $57 \quad 40$ | SLA4X | M 06×35 | SSLA4X | M 06×45 | ISA4X | M 06×35 |
| 5 | DPA5X | $70 \quad 52$ | SLA5X | M $06 \times 50$ | SSLA5X | M 06×60 | ISA5X | M 06×50 |
| 6 | DPA6X | 8666 | SLA6X | M 06×60 | SSLA6X | M 06×70 | ISA6X | M 06×60 |
| 7 | DPA7X | $120 \quad 94$ |  |  | SSLA7X | M 06×100 |  |  |
| 8 | DPA8X | 146120 |  |  | SSLA8X | M 06×125 |  |  |

All metal parts available in stainless steel.

## Tube clamps series A (Light construction series) - Components

DIN 3015, part 1

${ }^{1}$ ) The use of stacking bolts necessitates the use of locking plates in the construction assembly.
${ }^{2}$ ) When assembling solid rubber clamps, cover plates, hexagon screws and locking washers must be used. Metal parts also available in stainless steel.

Tube clamps series A (Light construction series) - Complete range


[^0]Tube clamps series A (Light construction series) - Complete range


[^1]Tube clamps series A (Light construction series) - Complete range

Polypropylene- RAP
Inside smooth - RAPG
Polyamide 6 - RAN
Inside smooth - RANG
Rubber - RAVG*
Aluminium

- RAA
(As required please exchange standard abbreviation RAP in column for "Order code")

| clamp size | Tube O.D. mm | Tube NB | Tube O.D. | Order code | Order code | Order code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01) | $\begin{array}{r} 6.0 \\ 6.4 \\ 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \end{array}$ | G 1/8 | $\begin{gathered} 1 / 4 \\ 5 / 16 \\ 3 / 8 \end{gathered}$ | RAP9-006 <br> RAP9-006.4 <br> RAP9-008 <br> RAP9-009.5 <br> RAP9-010 <br> RAP9-012 | $\begin{aligned} & \hline \text { RAP10-006 } \\ & \text { RAP10-006.4 } \\ & \text { RAP10-008 } \\ & \text { RAP10-009.5 } \\ & \text { RAP10-010 } \\ & \text { RAP10-012 } \\ & \hline \end{aligned}$ | RAP12-006 <br> RAP12-006.4 <br> RAP12-008 <br> RAP12-009.5 <br> RAP12-010 <br> RAP12-012 |
| 1 | $\begin{array}{r} 6.0 \\ 6.4 \\ 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \end{array}$ | G 1/8 | $\begin{gathered} 1 / 4 \\ 5 / 16 \\ 3 / 8 \end{gathered}$ | RAP9-106 <br> RAP9-106.4 <br> RAP9-108 <br> RAP9-109.5 <br> RAP9-110 <br> RAP9-112 | RAP10-106 RAP10-106.4 RAP10-108 RAP10-109.5 RAP10-110 RAP10-112 | RAP12-106 <br> RAP12-106.4 <br> RAP12-108 <br> RAP12-109.5 <br> RAP12-110 <br> RAP12-112 |
| 2 | $\begin{aligned} & \hline 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \\ & 17.2 \\ & 18.0 \\ & \hline \end{aligned}$ | G 1/4 G 3/8 | $1 / 2$ $5 / 8$ | RAP9-212.7 <br> RAP9-213.5 <br> RAP9-214 <br> RAP9-215 <br> RAP9-216 <br> RAP9-217.2 <br> RAP9-218 | RAP10-212.7 <br> RAP10-213.5 <br> RAP10-214 <br> RAP10-215 <br> RAP10-216 <br> RAP10-217.2 <br> RAP10-218 | RAP12-212.7 <br> RAP12-213.5 <br> RAP12-214 <br> RAP12-215 <br> RAP12-216 <br> RAP12-217.2 <br> RAP12-218 |
| 3 | $\begin{aligned} & 19.0 \\ & 20.0 \\ & 21.3 \\ & 22.0 \\ & 23.0 \\ & 25.0 \end{aligned}$ | G 1/2 | $3 / 4$ <br> 1 | RAP9-319 <br> RAP9-320 <br> RAP9-321.3 <br> RAP9-322 <br> RAP9-323 <br> RAP9-325 | RAP10-319 <br> RAP10-320 <br> RAP10-321.3 <br> RAP10-322 <br> RAP10-323 <br> RAP10-325 | RAP12-319 <br> RAP12-320 <br> RAP12-321.3 <br> RAP12-322 <br> RAP12-323 <br> RAP12-325 |
| 4 | $\begin{aligned} & 26.9 \\ & 28.0 \\ & 30.0 \end{aligned}$ | G 3/4 |  | RAP9-426.9 <br> RAP9-428 <br> RAP9-430 | RAP10-426.9 RAP10-428 RAP10-430 | RAP12-426.9 RAP12-428 RAP12-430 |
| 5 | $\begin{aligned} & 32.0 \\ & 33.7 \\ & 35.0 \\ & 38.0 \\ & 40.0 \\ & 42.0 \end{aligned}$ | $\begin{gathered} \text { G } 1 \\ \text { G } 1 \text { 1/4 } \end{gathered}$ | $\begin{aligned} & 11 / 4 \\ & 11 / 2 \end{aligned}$ | RAP9-532 <br> RAP9-533.7 <br> RAP9-535 <br> RAP9-538 <br> RAP9-540 <br> RAP9-542 | RAP10-532 <br> RAP10-533.7 <br> RAP10-535 <br> RAP10-538 <br> RAP10-540 <br> RAP10-542 | RAP12-532 <br> RAP12-533.7 <br> RAP12-535 <br> RAP12-538 <br> RAP12-540 <br> RAP12-542 |
| 6 | $\begin{aligned} & 44.5 \\ & 45.0 \\ & 48.0 \\ & 50.0 \\ & 50.8 \\ & 52.0 \\ & 55.0 \\ & 57.0 \end{aligned}$ | G 1 1/2 | $13 / 4$ <br> 2 $2 \text { 1/4 }$ | RAP9-644.5 <br> RAP9-645 <br> RAP9-648 <br> RAP9-650 <br> RAP9-650.8 <br> RAP9-652 <br> RAP9-655 <br> RAP9-657 | RAP10-644.5 <br> RAP10-645 <br> RAP10-648 <br> RAP10-650 <br> RAP10-650.8 <br> RAP10-652 <br> RAP10-655 <br> RAP10-657 | RAP12-644.5 <br> RAP12-645 <br> RAP12-648 <br> RAP12-650 <br> RAP12-650.8 <br> RAP12-652 <br> RAP12-655 <br> RAP12-657 |

Delivery in unassembled individual components.
${ }^{1}$ ) 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-Complete range


[^2]Tube clamps series A-Complete range


Delivery in unassembled individual components.
${ }^{1}$ ) 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 B (Twin-tube clamps) - Components

DIN 3015, part 3

Order code for clamp halves:
Polypropylene- RBP
Inside smooth - RBPG
Polyamide 6 - RBN
Rubber - RBVG
(Please exchange standard abbreviation RBP in column for "clamp halves" as required.)

| clamp size | Tube O.D. mm | Tube NB | Tube O.D. | 1 part 2 clamp halves ${ }^{1}$ ) |  | weld plate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | RBP... <br> Order code | dimensions: <br> b c d e | APB... <br> Order code | dimensions: <br> $\mathrm{g} \quad \mathrm{m}$ |
| 1 | $\begin{array}{r} 6.0 \\ 6.4 \\ 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \end{array}$ | G 1/8 | $\begin{gathered} 1 / 4 \\ 5 / 16 \\ 3 / 8 \end{gathered}$ | RBP106X <br> RBP106.4X <br> RBP108X <br> RBP109.5X <br> RBP110X <br> RBP112X | $36 \quad 27 \quad 2013.5$ | APB1X | 37 M6 <br> Thickness: <br> 3 mm |
| 2 | $\begin{aligned} & \hline 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \\ & 17.2 \\ & 18.0 \end{aligned}$ | G $1 / 4$ G 3/8 | $1 / 2$ $5 / 8$ | RBP212.7X <br> RBP213.5X <br> RBP214X <br> RBP215X <br> RBP216X <br> RBP217.2X <br> RBP218X | $53 \quad 26 \quad 2913$ | APB2X | Thickness: $5 \mathrm{~mm}$ |
| 3 | $\begin{aligned} & 19.0 \\ & 20.0 \\ & 21.3 \\ & 22.0 \\ & 25.0 \end{aligned}$ | G 1/2 | $3 / 4$ $1$ | RBP319X RBP320X RBP321.3X RBP322X RBP325X | $67 \quad 37 \quad 3618.5$ | APB3X | $\quad 70 \quad \mathrm{M} 8$ Thickness: 5 mm |
| 4 | $\begin{aligned} & 26.9 \\ & 28.0 \\ & 30.0 \end{aligned}$ | G 3/4 |  | RBP426.9X <br> RBP428X <br> RBP430X | 82424521 | APB4X | $\quad 85 \quad$ M8 Thickness: 5 mm |
| 5 | $\begin{aligned} & 32.0 \\ & 33.7 \\ & 35.0 \\ & 38.0 \\ & 42.0 \end{aligned}$ | $\begin{gathered} \text { G } 1 \\ \text { G } 11 / 4 \end{gathered}$ | $\begin{aligned} & 11 / 4 \\ & 11 / 2 \end{aligned}$ | RBP532X <br> RBP533.7X <br> RBP535X <br> RBP538X <br> RBP542X | 106545627 | APB5X | M8 <br> Thickness: 5 mm |

[^3]
## Tube clamps series B (Twin-tube clamps) - Components

DIN 3015, part 3


## Tube clamps series B (Twin-tube clamps) - Components

DIN 3015, part 3


[^4]
## Tube clamps series B (Twin-tube clamps) - Components

DIN 3015, part 3

${ }^{1}$ ) The use of stacking screws necessitates the use of locking plates in the construction assembly!
${ }^{2}$ ) When assemblying solid rubber clamps, covering plates, hexagon screws and locking washers must be used.
Metal parts also available in stainless steel.

Tube clamps series B - Complete range

Polypropylene- RBP
Inside smooth - RBPG
Polyamide 6 - RBN
Rubber - RBVG*
(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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{array}{r} 6.0 \\ 6.4 \\ 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \end{array}$ | G 1/8 | $\begin{gathered} 1 / 4 \\ 5 / 16 \\ 3 / 8 \end{gathered}$ | RBP1-106 <br> RBP1-106.4 <br> RBP1-108 <br> RBP1-109.5 <br> RBP1-110 <br> RBP1-112 | RBP3-106 <br> RBP3-106.4 <br> RBP3-108 <br> RBP3-109.5 <br> RBP3-110 <br> RBP3-112 |
| 2 | $\begin{aligned} & \hline 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \\ & 17.2 \\ & 18.0 \\ & \hline \end{aligned}$ | G 1/4 G 3/8 | $1 / 2$ $5 / 8$ | RBP1-212.7 <br> RBP1-213.5 <br> RBP1-214 <br> RBP1-215 <br> RBP1-216 <br> RBP1-217.2 <br> RBP1-218 | RBP3-212.7 <br> RBP3-213.5 <br> RBP3-214 <br> RBP3-215 <br> RBP3-216 <br> RBP3-217.2 <br> RBP3-218 |
| 3 | $\begin{aligned} & 19.0 \\ & 20.0 \\ & 21.3 \\ & 22.0 \\ & 25.0 \end{aligned}$ | G 1/2 | $3 / 4$ $1$ | RBP1-319 <br> RBP1-320 <br> RBP1-321.3 <br> RBP1-322 <br> RBP1-325 | RBP3-319 <br> RBP3-320 <br> RBP3-321.3 <br> RBP3-322 <br> RBP3-325 |
| 4 | $\begin{aligned} & 26.9 \\ & 28.0 \\ & 30.0 \end{aligned}$ | G 3/4 |  | $\begin{aligned} & \text { RBP1-426.9 } \\ & \text { RBP1-428 } \\ & \text { RBP1-430 } \end{aligned}$ | $\begin{aligned} & \text { RBP3-426.9 } \\ & \text { RBP3-428 } \\ & \text { RBP3-430 } \end{aligned}$ |
| 5 | $\begin{aligned} & 32.0 \\ & 33.7 \\ & 35.0 \\ & 38.0 \\ & 42.0 \end{aligned}$ | $\begin{gathered} \text { G } 1 \\ \text { G } 1 \text { 1/4 } \end{gathered}$ | $\begin{aligned} & 11 / 4 \\ & 11 / 2 \end{aligned}$ | RBP1-532 <br> RBP1-533.7 <br> RBP1-535 <br> RBP1-538 <br> RBP1-542 | RBP3-532 <br> RBP3-533.7 <br> RBP3-535 <br> RBP3-538 <br> RBP3-542 |

Delivery in unassembled individual components.
*Only with cover plate, hexagon screws and locking washers.

## Tube clamps series B - Complete range

Polypropylene- RBP
Inside smooth - RBPG
Polyamide 6 - RBN
Rubber - RBVG*
(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 | Order code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{array}{r} 6.0 \\ 6.4 \\ 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \end{array}$ | G 1/8 | $\begin{gathered} 1 / 4 \\ 5 / 16 \\ 3 / 8 \end{gathered}$ | RBP4-106 <br> RBP4-106.4 <br> RBP4-108 <br> RBP4-109.5 <br> RBP4-110 <br> RBP4-112 | RBP5-106 <br> RBP5-106.4 <br> RBP5-108 <br> RBP5-109.5 <br> RBP5-110 <br> RBP5-112 | RBP8-106 <br> RBP8-106.4 <br> RBP8-108 <br> RBP8-109.5 <br> RBP8-110 <br> RBP8-112 |
| 2 | $\begin{aligned} & 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \\ & 17.2 \\ & 18.0 \end{aligned}$ | G 1/4 G 3/8 | $1 / 2$ $5 / 8$ | RBP4-212.7 <br> RBP4-213.5 <br> RBP4-214 <br> RBP4-215 <br> RBP4-216 <br> RBP4-217.2 <br> RBP4-218 | RBP5-212.7 <br> RBP5-213.5 <br> RBP5-214 <br> RBP5-215 <br> RBP5-216 <br> RBP5-217.2 <br> RBP5-218 | RBP8-212.7 <br> RBP8-213.5 <br> RBP8-214 <br> RBP8-215 <br> RBP8-216 <br> RBP8-217.2 <br> RBP8-218 |
| 3 | $\begin{aligned} & 19.0 \\ & 20.0 \\ & 21.3 \\ & 22.0 \\ & 25.0 \end{aligned}$ | G 1/2 | $3 / 4$ $1$ | $\begin{aligned} & \text { RBP4-319 } \\ & \text { RBP4-320 } \\ & \text { RBP4-321.3 } \\ & \text { RBP4-322 } \\ & \text { RBP4-325 } \end{aligned}$ | RBP5-319 <br> RBP5-320 <br> RBP5-321.3 <br> RBP5-322 <br> RBP5-325 | RBP8-319 <br> RBP8-320 <br> RBP8-321.3 <br> RBP8-322 <br> RBP8-325 |
| 4 | $\begin{aligned} & 26.9 \\ & 28.0 \\ & 30.0 \end{aligned}$ | G 3/4 |  | $\begin{aligned} & \text { RBP4-426.9 } \\ & \text { RBP4-428 } \\ & \text { RBP4-430 } \end{aligned}$ | $\begin{aligned} & \text { RBP5-426.9 } \\ & \text { RBP5-428 } \\ & \text { RBP5-430 } \end{aligned}$ | $\begin{aligned} & \text { RBP8-426.9 } \\ & \text { RBP8-428 } \\ & \text { RBP8-430 } \end{aligned}$ |
| 5 | $\begin{aligned} & 32.0 \\ & 33.7 \\ & 35.0 \\ & 38.0 \\ & 42.0 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { G } 1 \\ \text { G } 1 \text { 1/4 } \end{gathered}$ | $\begin{aligned} & 11 / 4 \\ & 11 / 2 \end{aligned}$ | RBP4-532 <br> RBP4-533.7 <br> RBP4-535 <br> RBP4-538 <br> RBP4-542 | RBP5-532 <br> RBP5-533.7 <br> RBP5-535 <br> RBP5-538 <br> RBP5-542 | RBP8-532 <br> RBP8-533.7 <br> RBP8-535 <br> RBP8-538 <br> RBP8-542 |

Delivery in unassembled individual components.
*Only with cover plate, hexagon screws and locking washers.

Tube clamps series C (Heavy series) - Components
DIN 3015, part 2

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{\begin{tabular}{l}
Order code for clamp halves: \\
Polypropylene- RCP \\
Inside smooth - RCPG \({ }^{1}\) ) \\
Polyamide 6 - RCN \({ }^{1}\) ) \\
Rubber - RCVR \\
Aluminium - RCA \\
(Please exchange as required standard abbreviation RCP in column for "clamp halves")
\end{tabular}} \& \multicolumn{6}{|r|}{} \& \multicolumn{6}{|l|}{RCPD (= 2XRCP...)} \\
\hline \begin{tabular}{l}
clamp \\
size
\end{tabular} \& Tube O.D. mm \& Tube NB \& Tube O.D. \& \multicolumn{6}{|l|}{\begin{tabular}{c|cccc} 
1 part \\
\multicolumn{5}{c}{} \\
2 clamp halves \\
RCP... \& \multicolumn{3}{c}{ dimensions: } \\
Order code \& b \& c \& d \& e
\end{tabular}} \& \multicolumn{6}{|c|}{\begin{tabular}{l}
1 part \\
4 clamp halves dimensions: \\
b c
\end{tabular}} \\
\hline 1 \& \[
\begin{array}{r}
\hline 6.0 \\
8.0 \\
10.0 \\
12.0 \\
12.7 \\
13.5 \\
14.0 \\
15.0 \\
16.0 \\
17.2 \\
18.0
\end{array}
\] \& \begin{tabular}{l}
G \(1 / 8\) \\
G \(1 / 4\) \\
G 3/8
\end{tabular} \& \begin{tabular}{l}
\[
5 / 16
\]
1/2 \\
5/8
\end{tabular} \& \begin{tabular}{l}
RCP106X \\
RCP108X \\
RCP110X \\
RCP112X \\
RCP112.7X \\
RCP113.5X \\
RCP114X \\
RCP115X \\
RCP116X \\
RCP117.2X \\
RCP118X
\end{tabular} \& 55 \& 32 \& 33 \& 16 \& 30 \& \begin{tabular}{l}
RCPD106 \\
RCPD108 \\
RCPD110 \\
RCPD112 \\
RCPD112.7 \\
RCPD113.5 \\
RCPD114 \\
RCPD115 \\
RCPD116 \\
RCPD117.2 \\
RCPD118
\end{tabular} \& 55 \& 32 \& 33 \& 16 \& 60 \\
\hline 2 \& \[
\begin{aligned}
\& 19.0 \\
\& 20.0 \\
\& 21.3 \\
\& 22.0 \\
\& 23.0 \\
\& 25.0 \\
\& 26.9 \\
\& 28.0 \\
\& 30.0
\end{aligned}
\] \& \[
\begin{aligned}
\& \text { G 1/2 } \\
\& \text { G 3/4 }
\end{aligned}
\] \& \(3 / 4\)

1 \& \begin{tabular}{l}
RCP219X <br>
RCP220X <br>
RCP221.3X <br>
RCP222X <br>
RCP223X <br>
RCP225X <br>
RCP226.9X <br>
RCP228X <br>
RCP230X

 \& 70 \& 48 \& 45 \& 24 \& 30 \& 

RCPD219 <br>
RCPD220 <br>
RCPD221.3 <br>
RCPD222 <br>
RCPD223 <br>
RCPD225 <br>
RCPD226.9 <br>
RCPD228 <br>
RCPD230
\end{tabular} \& 70 \& 48 \& 45 \& 24 \& 60 <br>

\hline 3 \& 30.0
32.0
33.7
35.0
38.0
39.0
40.0

42.0 \& | G 1 |
| :--- |
| G 1 1/4 | \& \[

$$
\begin{aligned}
& 11 / 4 \\
& 11 / 2
\end{aligned}
$$

\] \& | RCP330X |
| :--- |
| RCP332X |
| RCP333.7X |
| RCP335X |
| RCP338X |
| RCP339X |
| RCP340X |
| RCP342X | \& 85 \& 60 \& 60 \& 30 \& 30 \& RCPD330 RCPD332 RCPD333.7 RCPD335 RCPD338 RCPD339 RCPD340 RCPD342 \& 85 \& 60 \& 60 \& 30 \& 60 <br>

\hline 4 \& 38.0
39.0
40.0
42.0
45.0
46.0
48.3
50.0
51.0
52.0
55.0
56.0
57.0
60.3
63.0
65.0

66.0 \& \begin{tabular}{l}
G 1 1/4 <br>
G 1 1/2 <br>
G 2

 \& 

$$
11 / 2
$$ <br>

2 <br>
2 1/4 <br>
2 1/2

 \& 

RCP438X <br>
RCP439X <br>
RCP440X <br>
RCP442X <br>
RCP445X <br>
RCP446X <br>
RCP448.3X <br>
RCP450X <br>
RCP451X <br>
RCP452X <br>
RCP455X <br>
RCP456X <br>
RCP457X <br>
RCP460.3X <br>
RCP463X <br>
RCP465X <br>
RCP466X

 \& 115 \& 90 \& 90 \& 45 \& 45 \& 

RCPD438 <br>
RCPD439 <br>
RCPD440 <br>
RCPD442 <br>
RCPD445 <br>
RCPD446 <br>
RCPD448.3 <br>
RCPD450 <br>
RCPD451 <br>
RCPD452 <br>
RCPD455 <br>
RCPD456 <br>
RCPD457 <br>
RCPD460.3 <br>
RCPD463 <br>
RCPD465 <br>
RCPD466
\end{tabular} \& 115 \& 90 \& 90 \& 45 \& 90 <br>

\hline
\end{tabular}

[^5]Tube clamps series C (Heavy series) - Components (Continued)
DIN 3015, part 2

Order code for clamp halves:
Polypropylene- RCP
Inside smooth - RCPG ${ }^{1}$ )
Polyamide 6 - RCN ${ }^{1}$ )
Rubber - RCVR
Aluminium - RCA
(Please exchange as required standard abbreviation RCP in column for "clamp halves")

| clamp <br> size | Tube O.D. mm | Tube NB | Tube O.D. | 1 part 2 clamp halves |  |  |  |  |  | 1 part 4 clamp halves |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 70.0 70.0 73.0 75.0 76.1 80.0 82.5 88.9 90.0 | $\text { G } 2 \text { 1/2 }$ $\text { G } 3$ | $\begin{gathered} 3 \\ 31 / 4 \\ 31 / 2 \end{gathered}$ | RCP470X <br> RCP570X <br> RCP573X <br> RCP575X <br> RCP576.1X <br> RCP580X <br> RCP582.5X <br> RCP588.9X <br> RCP590X | 1521 | 120 | 122 | 60 | 60 | RCPD470 <br> RCPD570 <br> RCPD573 <br> RCPD575 <br> RCPD576.1 <br> RCPD580 <br> RCPD582.5 <br> RCPD588.9 <br> RCPD590 | 152 | 120 | 122 | 60 | 120 |
| 6 | $\begin{array}{r} 90.0 \\ 97.0 \\ 100.0 \\ 101.6 \\ 108.0 \\ 114.3 \\ 127.0 \end{array}$ | G 3 1/2 <br> G 4 | $\begin{gathered} 4 \\ 41 / 4 \\ 41 / 2 \\ 5 \end{gathered}$ | RCP690X <br> RCP697X <br> RCP6100X <br> RCP6101.6X <br> RCP6108X <br> RCP6114.3X <br> RCP6127X | 2051 | 170 | 168 | 85 | 80 | RCPD690 <br> RCPD697 <br> RCPD6100 <br> RCPD6101.6 <br> RCPD6108 <br> RCPD6114.3 <br> RCPD6127 | 205 | 170 | 168 | 85 | 160 |
| 7 | $\begin{aligned} & 127.0 \\ & 133.0 \\ & 140.0 \\ & 150.0 \\ & 152.4 \\ & 159.0 \\ & 165.1 \\ & 168.3 \end{aligned}$ | $\begin{gathered} \text { G } 5 \\ \text { G } 51 / 2 \\ \text { G } 6 \end{gathered}$ | $\begin{gathered} 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 1 / 2 \\ \\ 6 \\ 6 \\ 61 / 4 \\ 6 \\ 6 \\ 6 \end{gathered} 1 / 2$ | RCP7127X <br> RCP7133X <br> RCP7140X <br> RCP7150X <br> RCP7152.4X <br> RCP7159X <br> RCP7165.1X <br> RCP7168.3X | 2502 | 200 | 205 | 100 | 90 | RCPD7127 <br> RCPD7133 <br> RCPD7140 <br> RCPD7150 <br> RCPD7152.4 <br> RCPD7159 <br> RCPD7165.1 <br> RCPD7168.3 | 250 | 200 | 205 | 100 | 180 |
| 8 | $\begin{aligned} & 168.3 \\ & 177.8 \\ & 193.7 \\ & 203.0 \\ & 219.1 \\ & 220.0 \end{aligned}$ | G 8 | $\begin{gathered} 65 / 8 \\ 7 \\ 75 / 8 \\ 85 / 8 \end{gathered}$ | RCP8168.3X <br> RCP8177.8X <br> RCP8193.7X <br> RCP8203X <br> RCP8219.1X <br> RCP8220X | 3202 | 270 | 265 | 135 | 120 | RCPD8168.3 <br> RCPD8177.8 <br> RCPD8193.7 <br> RCPD8203 <br> RCPD8219.1 <br> RCPD8220 | 320 | 270 | 265 | 135 | 240 |
| 9 | $\begin{aligned} & 219.1 \\ & 244.5 \\ & 250.0 \\ & 273.0 \\ & 323.9 \end{aligned}$ | G 8 |  | RCP9219.1X RCP9244.5X RCP9250X RCP9273X RCP9323.9X | 4664 | 410 | 395 | 205 | 160 | RCPD9219.1 <br> RCPD9244.5 <br> RCPD9250 <br> RCPD9273 <br> RCPD9323.9 | 466 | 410 | 395 | 205 | 320 |
| 10 | $\begin{aligned} & 355.6 \\ & 406.4 \end{aligned}$ | $\begin{aligned} & \text { G } 10 \\ & \text { G } 12 \end{aligned}$ |  | $\begin{aligned} & \text { RCP10355.6X } \\ & \text { RCP10406.4X } \end{aligned}$ | 6305 | 530 | 530 | 265 | 180 | RCPD10355.6 RCPD10406.4 | 630 | 530 | 530 | 265 | 360 |

[^6]Tube clamps series C (Heavy series) - Components
DIN 3015, part 2


Metal parts also available in stainless steel.
Complete programme range please refer to page T29.

Tube clamps series C (Heavy series) - Components
DIN 3015, part 2


Metal parts also available in stainless steel.

Tube clamps series C (Heavy series) - Components
DIN 3015, part 2


[^7]
## Tube clamps series C - Complete range

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | 2 clamp halves, weld plate, <br> cover plate, hex. head bolt |

[^8]Tube clamps series C - Complete range (Continued)


## Delivery in unassembled individual components.

${ }^{1}$ ) Only sizes 1-4

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

Tube clamps series C-Complete range


[^9]Tube clamps series C - Complete range (Continued)

Polypropylene- RCP
Inside smooth - RCPG ${ }^{1}$ )
Polyamide 6 - RCN
Rubber - RCVR*
Aluminium - RCA
(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 |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 70.0 73.0 75.0 76.1 80.0 82.5 88.9 90.0 | $\text { G } 2 \text { 1/2 }$ <br> G 3 | $\begin{gathered} 3 \\ 31 / 4 \\ 31 / 2 \end{gathered}$ | RCP5-570 <br> RCP5-573 <br> RCP5-575 <br> RCP5-576.1 <br> RCP5-580 <br> RCP5-582.5 <br> RCP5-588.9 <br> RCP5-590 |
| 6 | $\begin{array}{r} 90.0 \\ 97.0 \\ 100.0 \\ 101.6 \\ 108.0 \\ 114.3 \\ 127.0 \\ \hline \end{array}$ | $\begin{gathered} \text { G } 3 \text { 1/2 } \\ \text { G } 4 \end{gathered}$ | $\begin{gathered} 4 \\ 41 / 4 \\ 41 / 2 \\ 5 \end{gathered}$ | RCP5-690 <br> RCP5-697 <br> RCP5-6100 <br> RCP5-6101.6 <br> RCP5-6108 <br> RCP5-6114.3 <br> RCP5-6127 |
| 7 | $\begin{aligned} & \hline 127.0 \\ & 133.0 \\ & 140.0 \\ & 150.0 \\ & 152.4 \\ & 159.0 \\ & 165.1 \\ & 168.3 \end{aligned}$ | $\begin{gathered} \text { G } 5 \\ \text { G } 51 / 2 \\ \text { G } 6 \end{gathered}$ | 5 $51 / 4$ $51 / 2$ 6 $61 / 4$ $61 / 2$ 6 $5 / 8$ | RCP5-7127 <br> RCP5-7133 <br> RCP5-7140 <br> RCP5-7150 <br> RCP5-7152.4 <br> RCP5-7159 <br> RCP5-7165.1 <br> RCP5-7168.3 |
| 8 | $\begin{aligned} & \hline 168.3 \\ & 177.8 \\ & 193.7 \\ & 203.0 \\ & 219.1 \\ & 220.0 \end{aligned}$ | G 8 | $\begin{gathered} 65 / 8 \\ 7 \\ 75 / 8 \\ \\ 85 / 8 \end{gathered}$ | RCP5-8168.3 <br> RCP5-8177.8 <br> RCP5-8193.7 <br> RCP5-8203 <br> RCP5-8219.1 <br> RCP5-8220 |

## Delivery in unassembled individual components.

${ }^{1}$ ) Only sizes 1-4

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


## Tube clamps series C - Complete range



[^10]Tube clamps series C - Complete range (Continued)


## Delivery in unassembled individual components.

${ }^{1}$ ) Only sizes 1-4

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

Tube clamps

Tube clamps series 0

## Order code for tube clamps:

Polypropylene ROP*
Polyamide RON*
*Supplement with size and tube $\varnothing$ mm. (e.g. ROP 106X)

Packing standard 200 pieces.


Areas of Application:

- pneumatics
- automotive technology
- machine tool industry
- lubrication
- naval technologie
also suitable for cables and hoses.

| $\begin{aligned} & \text { Clamp- } \\ & \text { size } \end{aligned}$ | O.D. mm | Tube Ø D1 <br> Tube NB | Inch | Order code <br> Polypropylene ROP | Order code Polyamide RON | L1 | L2 | L3 | B | H | Ø D2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & 6.0 \\ & 6.4 \\ & 8.0 \end{aligned}$ |  | 1/4 | ROP 106X ROP 106.4X ROP 108X | RON 106X RON 106.4X RON 108X | 22 | 9 | 7 | 14.5 | 13.5 | 6.5 |
| 2 | $\begin{array}{r} 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \\ 12.7 \end{array}$ | 1/8 | $3 / 8$ $1 / 2$ | ROP 208X <br> ROP 209.5X <br> ROP 210X <br> ROP 212X <br> ROP 212.7X | RON 208X <br> RON 209.5X <br> RON 210X <br> RON 212X <br> RON 212.7X | 27 | 11 | 7 | 14.5 | 18.5 | 6.5 |
| 3 | $\begin{aligned} & \hline 10.0 \\ & 12.0 \\ & 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \end{aligned}$ | $1 / 8$ $1 / 4$ | $1 / 2$ $5 / 8$ | ROP 310X <br> ROP 312X <br> ROP 312.7X <br> ROP 313.5X <br> ROP 314X <br> ROP 315X <br> ROP 316X | RON 310X <br> RON 312X <br> RON 312.7X <br> RON 313.5X <br> RON 314X <br> RON 315X <br> ROP 316X | 33 | 15 | 7 | 14.5 | 23.5 | 6.5 |
| 4 | 14.0 15.0 16.0 17.2 18.0 19.0 20.0 21.3 22.0 | $3 / 8$ $1 / 2$ | $5 / 8$ $3 / 4$ | ROP 414X <br> ROP 415X <br> ROP 416X <br> ROP 417.2X <br> ROP 418X <br> ROP 419X <br> ROP 420X <br> ROP 421.3X <br> ROP 422X | RON 414X RON 415X RON 416X RON 417.2X RON 418X RON 419X RON 420X RON 421.3X RON 422X | 40 | 19 | 6 | 14.5 | 30.5 | 6.5 |

## Double-Tube clamps series $\mathbf{O}$

## Order code for tube clamps:

Polypropylen ROPD*
Polyamid ROND*
*Supplement with size and tube $\varnothing \mathrm{mm}$.
(e.g. ROPD 106X)
*Different diameter on request

## Order code for cover plate:

 DPO**Supplement with size.
Material: Galvanized steel
Stainless steel upon request
Areas of Application:

- pneumatics
- automotive technology
- machine tool industry
- lubrication
- naval technologie
also suitable for cables and hoses.


| Clampsize | O.D. mm | abe Ø D1/D Tube NB | Inch | Order code <br> Polypropylene ROPD | Order code Cover plate DPO | L1 | L2 | B | H | Ø D3 | L4 | B2 | Ø D4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & 6.0 \\ & 6.4 \\ & 8.0 \end{aligned}$ |  | 1/4 | ROPD 106X ROPD 106.4X ROPD 108X | DP01X DP01X DPO1X | 32 | 18 | 14.5 | 13.5 | 6.5 | 29.0 | 16.3 | 6.5 |
| 2 | $\begin{array}{r} 8.0 \\ 9.5 \\ 10.0 \\ 12.0 \\ 12.7 \end{array}$ | 1/8 | $3 / 8$ $1 / 2$ | ROPD 208X <br> ROPD 209.5X <br> ROPD 210X <br> ROPD 212X <br> ROPD 212.7X | DPO2X <br> DPO2X <br> DPO2X <br> DPO2X <br> DPO2X | 41 | 22 | 14.5 | 18.5 | 6.5 | 40.0 | 16.3 | 6.5 |
| 3 | $\begin{aligned} & \hline 10.0 \\ & 12.0 \\ & 12.7 \\ & 13.5 \\ & 14.0 \\ & 15.0 \\ & 16.0 \end{aligned}$ | $\begin{aligned} & 1 / 8 \\ & 1 / 4 \end{aligned}$ | $1 / 2$ $5 / 8$ | ROPD 310X <br> ROPD 312X <br> ROPD 312.7X <br> ROPD 313.5X <br> ROPD 314X <br> ROPD 315X <br> ROPD 316X | DPO3X <br> DPO3X <br> DPO3X <br> DPO3X <br> DPO3X <br> DPO3X <br> DPO3X | 54 | 30 | 14.5 | 23.5 | 6.5 | 50.5 | 16.5 | 6.5 |
| 4 | 14.0 15.0 16.0 17.2 18.0 19.0 20.0 21.3 22.0 | $3 / 8$ $1 / 2$ | $5 / 8$ $3 / 4$ | ROPD 414X ROPD 415X ROPD 416X ROPD 417.2X ROPD 418X ROPD 419X ROPD 420X ROPD 421.3X ROPD 422X | $\begin{aligned} & \hline \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \\ & \text { DPO4X } \end{aligned}$ | 69 | 38 | 14.5 | 30.5 | 6.5 | 63.0 | 16.5 | 6.5 |

## Hydraulic steel-clamps

Hydraulic steel-clamps

## Order code

HSRS-*
W1: steel coating ZN

* please add. $\varnothing \mathrm{D}$

HSRS hydraulic steel-clamps are mainly used in the field of building machinery.

The support-block is welded to the machine body or another component either in upend or flat position. The tube-clamp is screwed on.

The robust construction of the clamp has an impact- and vibrationabsorbing effect. The small dimension/height of the clamp allows hydraulic cables to be fitted later on - e. g. for installing additional equipment to building machinery.


T

## Hydraulic steel-clamps

Elastomere Inlay for HSRS

## Order code <br> EE-* <br> * complete outside tube diameter

Hydraulic steel tube clamp HSRS also available with Elastomere inlay

## The advantages:

- complete outside tube diameter
- Safe fastening method even for very sensitive tube and hoses lines
- Only one clamp for different tube diameters


## Material:

Santoprene 64 Shore

- high oil and weathering resistance
- temperature stability between $-40^{\circ} \mathrm{C}$ and $+125^{\circ} \mathrm{C}$

| Order code | Nominal size <br> D2 | mm O.D. <br> D1 |
| :---: | :---: | :---: |
| EE12X | HSRS25 | 12 |
| EE15X |  | 15 |
| EE20X | HSRS30 | 20 |
| EE25X | HSRS35 | 25 |
| EE30X | HSRS42 | 30 |
| EE35X | HSRS50 | 35 |
| EE38X |  | 38 |
|  |  |  |
| EE42X |  | 42 |



## Tube Clamps with Elastomer Inlay

| Light Constr. Series |  |  | Heavy Series |  | Elastomer Inlay |  | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Order codes for clamp-halves: |  |  | Order codes for clamp-halves: |  | * complete with clamp size and outside tube diameter |  | S |
| Polyprop Polyamid | $\begin{aligned} & \text { lene - } \\ & 6 \end{aligned}$ | RAPE RANE | Polypropy <br> Polyamide | $\begin{aligned} & e-R C P E \\ & \text { - RCNE } \end{aligned}$ |  |  |  |
| Clamp size |  | Tube O.D. | Series A |  | Series C |  |  |
|  |  |  | Clamp body | Clamp body with elastomer inlay | Clamp body | Clamp body with elastomer inlay | Elastomer inlay |
| 4 | 2 | 6.0 | RAPE4X | RAPE406X | RCPE2X | RCPE206X | EE206/406X |
|  |  | 8.0 |  | RAPE408X |  | RCPE208X | EE208/408X |
|  |  | 10.0 |  | RAPE410X |  | RCPE210X | EE210/410X |
|  |  | 12.0 |  | RAPE412X |  | RCPE212X | EE212/412X |
|  |  | 12.7 |  | RAPE412.7X |  | RCPE212.7X | EE212.7/412.7X |
|  |  | 14.0 |  | RAPE414X |  | RCPE214X | EE214/414X |
|  |  | 15.0 |  | RAPE415X |  | RCPE215X | EE215/415X |
|  |  | 16.0 |  | RAPE416X |  | RCPE216X | EE216/416X |
|  |  | 17.2 |  | RAPE417.2X |  | RCPE217.2X | EE217.2/417.2X |
|  |  | 18.0 |  | RAPE418X |  | RCPE218X | EE218/418X |
|  |  | 19.0 |  | RAPE419X |  | RCPE219X | EE219/419X |
| 6 | 3 | 20.0 | RAPE6X | RAPE620X | RCPE3X | RCPE320X | EE320/620X |
|  |  | 21.3 |  | RAPE621.3X |  | RCPE321.3X | EE321.3/621.3X |
|  |  | 22.0 |  | RAPE622X |  | RCPE322X | EE322/622X |
|  |  | 23.0 |  | RAPE623X |  | RCPE323X | EE323/623X |
|  |  | 25.0 |  | RAPE625X |  | RCPE325X | EE325/625X |
|  |  | 26.9 |  | RAPE626.9X |  | RCPE326.9X | EE326.9/626.9X |
|  |  | 28.0 |  | RAPE628X |  | RCPE328X | EE328/628X |
|  |  | 30.0 |  | RAPE630X |  | RCPE330X | EE330/630X |
|  |  | 32.0 |  | RAPE632X |  | RCPE332X | EE332/632X |
|  | 4 | 32.0 |  |  | RCPE4X | RCPE432X | EE432X |
|  |  | 33.7 |  |  |  | RCPE433.7X | EE433.7X |
|  |  | 35.0 |  |  |  | RCPE435X | EE435X |
|  |  | 38.0 |  |  |  | RCPE438X | EE438X |
|  |  | 40.0 |  |  |  | RCPE440X | EE440X |
|  |  | 42.0 |  |  |  | RCPE442X | EE442X |
|  |  | 45.5 |  |  |  | RCPE445.5X | EE445.5X |
|  |  | 48.0 |  |  |  | RCPE448X | EE448X |
|  |  | 51.0 |  |  |  | RCPE451X | EE451X |
|  |  | 53.4 |  |  |  | RCPE453.4 | EE453.4X |
|  |  | 56.4 |  |  |  | RCPE456.4X | EE456.4X |

[^11]
## Tube clamps series $\mathbf{2 + 5}$ (Light construction series)

DIN 3015, Part 1, Components
Order codes
for clamp-halves:

| Polypropylen | RAP |
| :--- | :--- |
| inside smooth | RAPG |
| Polyamid 6 | RAN |
| inside smooth | RANG |
| Rubber | RAVG |

Replace standard abbreviation RAP in column "clamp halves" as required.


When assembling solid rubber clamps, cover plates, hexagon screws and locking washers must be used. All metal parts available in stainless steel.

## Tube clamps series 2+5 (Light construction series)

DIN 3015, Part 1, Components

${ }^{1}$ ) When assembling solid rubber clamps, cover plates, hexagon screws and locking washers must be used.


[^0]:    Delivery in unassembled individual components.
    ${ }^{1}$ ) Contrary to the illustration size 0 clamps are secured by only one screw.

    * Only with cover plate, hexagon screws and locking washers.

[^1]:    Delivery in unassembled individual components.
    ${ }^{1}$ ) Contrary to the illustration size 0 clamps are secured by only one screw.

    * Only with cover plate, hexagon screws and locking washers.

[^2]:    Delivery in unassembled individual components.
    ${ }^{1}$ ) Contrary to the illustration size 0 clamps are secured by only one screw.

    * Only with cover plate, hexagon screws and locking washers.

[^3]:    Metal parts also available in stainless steel.
    ${ }^{1}$ ) Twin-tube clamps with different outer tube diameters upon request.

[^4]:    Metal parts also available in stainless steel.

[^5]:    Continuation see next page ..

[^6]:    Metal parts also available in stainless steel.
    ${ }^{1}$ ) Only sizes 1-4

[^7]:    ${ }^{1}$ ) The use of stacking screws necessitates the use of locking plates in the construction assembly!
    ${ }^{2}$ ) When assemblying solid rubber clamps, covering plates, hexagon screws and locking washers must be used.
    Metal parts also available in stainless steel.

[^8]:    Continuation see next page ...

[^9]:    Continuation see next page ...

[^10]:    Continuation see next page ...

[^11]:    Attention! For clamps with elastomer inlay, the relation of diameter and size is not identical with the profile design or smooth design.

