## Cush－A－Nator Cushioned Clamps


－Temp．range：$-50^{\circ}$ to $275^{\circ} \mathrm{F}$（Standard）
－Temp．range：$-65^{\circ}$ to $340^{\circ} \mathrm{F}$（High Temp．）
Rugged steel clamps have a durable thermoplastic rubber cushion that resists high heat and provides long life against vibration fatigue．Cushion is self－ aligning and has a built－in squeeze control to help provide evenly distributed pressure around the pipe or tube for a secure fit．Clamps include hardware and come with a standard or high temp．elastomer cushion．Meet MSS SP－58 and MSS SP－69（Type 58）．

| Tube Size | Pipe Size | L | W | H | Plated <br> Steel Item No． | $\begin{aligned} & 304 \\ & \text { Stainless } \\ & \text { Steel } \\ & \text { Item } \\ & \text { No. } \\ & \hline \end{aligned}$ | 316 <br> Stainless Steel Item No． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standard |  |  |  |  |  |  |  |
| － | $1 / 2$ in |  | 1.31 in | 1.82 in | 33KF73 | 33KG10 | 33KG46 |
| － | $3 / 4$ in |  | 1.57 in | 2.08 in | 33KF74 | 33KG11 | 33KG47 |
| － | 1 in |  | 1.76 in | 2.34 in | 33KF75 | 33KG12 | 33KG48 |
| － | $11 / 2$ in |  | 2.32 in | 2.86 in | 33KF76 | 33KG13 | 33KG49 |
| － | 2 in |  | 2.82 in | 3.67 in | 33KF77 | 33KG14 | 33KG50 |
| － | 3 in |  | 3.95 in | 4.79 in | 33KF79 | 33KG16 | 33KG52 |
| 1／4 in | － |  | 0.62 in | 0.98 in | 33KF46 | 33KF82 | 33KG19 |
| $3 / 8$ in | － |  | 0.82 in | 1.13 in | 33KF47 | 33KF83 | 33KG20 |
| $1 / 2$ in | － |  | 0.94 in | 1.34 in | 33KF48 | 33KF84 | 33KG21 |
| $5 / 8$ in | － |  | 1.06 in | 1.54 in | 33KF49 | 33KF85 | 33KG22 |
| $3 / 4$ in | － |  | 1.2 in | 1.68 in | 33KF50 | 33KF86 | 33KG23 |
| 7／8 in | － |  | 1.31 in | 1.82 in | 33KF51 | 33KF87 | 33KG24 |
| 1 in | － |  | 1.44 in | 1.95 in | 33KF52 | 33KF88 | 33KG25 |
| $11 / 8$ in | － |  | 1.57 in | 2.08 in | 33KF53 | 33KF89 | 33KG26 |
| $11 / 4$ in | － |  | 1.7 in | 2.21 in | 33KF54 | 33KF90 | 33KG27 |
| $13 / 8$ in | － | 1.62 in | 1.82 in | 2.34 in | 33KF55 | 33KF91 | 33KG28 |
| $11 / 2 \mathrm{in}$ | － | 1.62 in | 1.95 in | 2.47 in | 33KF56 | 33KF92 | 33KG29 |
| $15 / 8$ in | － |  | 2.07 in | 2.6 in | 33KF57 | 33KF93 | 33KG30 |
| $13 / 4$ in | － |  | 2.2 in | 2.73 in | 33KF65 | 33KF94 | 33KG31 |
| $17 / 8$ in | － |  | 2.32 in | 2.86 in | 33KF66 | 33KF95 | 33KG32 |
| $21 / 8$ in | － |  | 2.57 in | 3.23 in | 33KF58 | 33KF97 | 33KG34 |
| $21 / 4$ in | － |  | 2.82 in | 3.67 in | 33KF59 | 33KF98 | 33KG35 |
| $23 / 8$ in | － |  | 2.82 in | 3.67 in | 33KF60 | 33KF99 | 33KG36 |
| $25 / 8$ in | － |  | 3.07 in | 3.92 in | 33KF61 | 33KG02 | 33KG38 |
| 2 in | － |  | 2.45 in | 3.04 in | 33KF67 | 33KF96 | 33KG33 |
| $21 / 2$ in | － |  | 2.94 in | 3.79 in | 33KF68 | 33KG01 | 33KG37 |
| $27 / 8$ in | － |  | 3.32 in | 4.17 in | 33KF69 | 33KG03 | 33KG39 |
| 3 in | － |  | 3.57 in | 4.42 in | 33KF62 | 33KG04 | 33KG40 |
| $31 / 8$ in | － |  | 3.57 in | 4.42 in | 33KF63 | 33KG05 | 33KG41 |
| $31 / 2$ in | － |  | 3.95 in | 4.79 in | 33KF70 | 33KG06 | 33KG42 |
| $41 / 8$ in | － |  | 4.57 in | 5.54 in | 33KF64 | 33KG08 | 33KG44 |
| 4 in | － |  | 4.45 in | 5.11 in | 33KF71 | 33KG07 | 33KG43 |
| High Temp． |  |  |  |  |  |  |  |
| － | $11 / 2 \mathrm{in}$ | 1.62 in | 2.32 in | 2.86 in | 33KG85 | 33KH23 | 33KH58 |
| 1／4 in | － |  | 0.62 in | 0.98 in | 33KG55 | 33KG91 | 33 KH 28 |
| $3 / 8$ in | － |  | 0.82 in | 1.13 in | 33KG56 | 33KG92 | 33KH29 |
| $1 / 2$ in | － |  | 0.94 in | 1.34 in | 33KG57 | 33KG93 | 33 KH 30 |
| $5 / 8$ in | － |  | 1.06 in | 1.54 in | 33KG58 | 33KG94 | 33 KH 31 |
| $3 / 4$ in | － |  | 1.2 in | 1.68 in | 33KG59 | 33KG95 | 33KH32 |
| $7 / 8$ in | － |  | 1.31 in | 1.82 in | 33KG60 | 33KG96 | 33 KH 33 |
| 1 in | － |  | 1.44 in | 1.95 in | 33KG61 | 33KG97 | 33KH34 |
| $11 / 8$ in | － |  | 1.57 in | 2.08 in | 33KG62 | 33KG98 | 33KH35 |
| $11 / 4$ in | － |  | 1.7 in | 2.21 in | 33KG63 | 33KG99 | 33 KH 36 |
| $13 / 8$ in | － |  | 1.82 in | 2.34 in | 33KG64 | 33KH01 | 33 KH 37 |
| $11 / 2$ in | － |  | 1.95 in | 2.47 in | 33KG65 | 33KH02 | 33 KH 38 |
| $15 / 8$ in | － |  | 2.07 in | 2.6 in | 33KG66 | 33KH03 | 33KH39 |
| 2 in | － |  | 2.45 in | 3.04 in | 33KG69 | 33KH06 | 33 KH 42 |
| $21 / 8$ in | － |  | 2.57 in | 3.23 in | 33KG70 | $33 \mathrm{KH07}$ | 33 KH 43 |
| $25 / 8$ in | － |  | 3.07 in | 3.92 in | 33KG74 | 33KH11 | 33KH47 |
| $31 / 8$ in | － |  | 3.57 in | 4.42 in | 33KG77 | 33KH14 | $33 \mathrm{KH50}$ |
| 4 in | － |  | 4.45 in | 5.11 in | 33KG79 | 33KH16 | 33 KH 52 |

## 家

Smith－Blair．

## Ductile－Iron Couplings

－Temp．range：$-20^{\circ}$ to $180^{\circ} \mathrm{F}$ Join pipe with no special prepa－ ration required．Allow limited pipe expansion and contraction；also dampen vibration．Meet ASTM A307，ASTM A536，NSF 61，and ASTM A53C．


## Hanging and Duct Straps

Hanging Straps—Have alternating $3 / 16^{\prime \prime}$ nail holes and $1 / 4{ }^{\prime \prime}$ bolt holes for multiple mounting options．

Duct Strapping—Use for hanging duct－


4NCD7 work in HVAC applications．


## Pipe Straps

## ELECTRO－GALVANIZED STEEL，

 1－HOLE／2－HOLERecommended for supporting horizontal runs of piping from the face of a structural member． Fastening hole in strap may be above or below pipe．


GALVANIZED STEEL，2－HOLE
Use to secure CPVC pipe in a horizontal posi－ tion on the bottom of structural wood beams， or on steel with hanger tab in the upward position．Can also be used as a guide to limit movement of a vertical CPVC pipe with tab in
 the vertical position．

## HEAVY－DUTY AND COPPER，2－HOLE

Help secure tubing to walls，studs，etc．and help form a rigid system． $1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ straps are 10 ga．； $21 / 2^{\prime \prime}$ to $4^{\prime \prime}$ straps are 3 ga ．Zinc－plated finish is more corro－ sion resistant than plain steel； 304 stainless provides better corrosion resistance than zinc－plated．Copper straps sold 5 per pack，all others sold each．


## AWWA Pipe Couplings

－Max．pressure： 250 psi
－Temp．range：$-20^{\circ}$ to $180^{\circ} \mathrm{F}$
－Nitrile gasket
－Vacuum rating：28＂Hg
Can join pipes with up to $1.65^{\prime \prime}$ of pipe differential using a single flange and gasket．Couplings are heavy cast ductile iron and epoxy coated to resist corrosion． $5 / 8$＂bolts． Meet AWWA C219，ANSI A21．11，
NSF 61，ASTM A－536，ASTM 633－78．


No．of Fitting

| Pipe Size－Pipe Fitting | Bolts | Length | No |
| :---: | :---: | :---: | :---: |
| $1^{51 / 64 ~ t o ~} 2^{17 / 64}$ in | 2 | 4 in | 5 ENH 2 |
| $2^{21 / 64}$ in to $2^{27 / 32}$ in | 2 | 4 in | 5ENH3 |
| $2^{53 / 64}$ in to $3^{11 / 32}$ in | 2 | 4 in | 5ENH4 |
| $3^{29 / 64}$ in to $4^{13 / 64}$ in | 4 | 5 in | 5ENH5 |
| $4^{29 / 64}$ in to $5^{19 / 32}$ in | 4 | $51 / 2$ in | 5ENH6 |
| $6{ }^{17 / 32}$ in to $7^{41 / 64}$ in | 4 | 6 in | 5ENH7 |
| $8^{17 / 32}$ in to $9^{27 / 32}$ in | 4 | 6 in | 5ENH8 |
| $10^{41 / 64}$ in to $12^{13 / 64}$ in | 8 | $71 / 2$ in | 5ENH9 |

