12 Point Long Pattern Combination Wrenches

- ${ }^{15}{ }^{\circ}$ offset for better access in tight spaces . $\quad$ Off-corner loading desigg on box end provides better grip and reduces fastener rounding
- Long pattern beam length for improved reach, everage and torque
- Hard stamped size marking
- Manufactured fom alloy steel for better strength and longer tool life
- Bright, full polish chrome finish easily wipes clean and resists corrosion
- Meets or exceeds ASME specifications

| Cat. No. | SAEM Mertic | Fastener Size | End A Width | End A Thickness | End B Width | End B Thickness | Overall Length | Product Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81650 | SAE | $1 / 4 \mathrm{in}$ | 0.52 in | 0.161 in | 0.449 in | 0.197 in | 5.09 in | 0.07 lb |
| 816510 | SAE | $9 / 32$ in | 0.567 in | 0.169 in | 0.484 in | 0.209 in | 5.44 in | 0.091 b |
| 81652 | SAE | $5 / 6 \mathrm{in}$ | 0.654 in | 0.177 in | 0.533 in | 0.217 in | 5.8 in | 0.0911 |
| 81653 | SAE | 11/32 in | 0.728 in | 0.185 in | 0.583 in | 0.244 in | 6.22 in | 0.111 b |
| 81654 | SAE | $3 / 8$ in | 0.807 in | 0.213 in | 0.634 in | 0.272 in | 6.54 in | 0.13110 |
| 81655 | SAE | 7/16 in | 0.894 in | 0.236 in | 0.685 in | 0.295 in | 7.29 in | 0.18110 |
| 81656 | SAE | $1 / 2 \mathrm{in}$ | 1.051 in | 0.252 in | 0.78 in | 0.335 in | 8.11 in | 0.2416 |
| 81657 | SAE | 9/6 in | 1.138 in | 0.276 in | 0.846 in | 0.366 in | 8.74 in | 0.261 b |
| 81658 | SAE | $5 / 8$ in | 1.291 in | 0.303 in | 0.941 in | 0.413 in | 9.52 in | 0.381 l |
| 81659 | SAE | 11/16 in | 1.382 in | 0.319 in | 1.016 in | 0.433 in | 10.23 in | 0.49 lb |
| 81660 | SAE | $3 / 4$ in | 1.551 in | 0.362 in | 1.098 in | 0.476 in | 10.972 in | 0.5310 |
| 81661 | SAE | 13/16 in | 1.701 in | 0.39 in | 1.201 in | 0.52 in | 11.827 in | 0.73110 |
| 81662 | SAE | $7 / 8$ in | 1.783 in | 0.406 in | 1.264 in | 0.539 in | 12.52 in | 0.821 b |
| 81663 | SAE | 15/16 in | 1.945 in | 0.429 in | 1.327 in | 0.579 in | 13.252 in | 1.0416 |
| 81664 | SAE | 1 in | 2.024 in | 0.445 in | 1.398 in | 0.598 in | 14.035 in | 1.151 lb |
| 81733 | SAE | 1-1/16 in | 2.22 in | 0.469 in | 1.531 in | 0.65 in | 14.75 in | 1.431 b |
| 81734 | SAE | $1-1 / 8$ in | 2.469 in | 0.5 in | 1.685 in | 0.697 in | 16 in | 1.85 b |
| 81815 | SAE | 1-3/16 in | 2.467 in | . 49 in | 1.76 in | . 74 in | 16.22 in | 1.61010 |
| 81735 | SAE | 1-1/4 in | 2.634 in | 0.524 in | 1.811 in | 0.724 in | 16 in | 2.181 b |
| 81749 | SAE | 1-5/16 in | 3.102 in | 0.61 in | 2.185 in | 0.925 in | 18.74 in | 2.2210 |
| 81816 | SAE | 1-3/8 in | 2.81 in | . 53 in | 2.05 in | . 87 in | 19.96 in | 2.87010 |
| 81817 | SAE | 1-7/16 in | 3.031 in | . 626 in | 2.146 in | . 866 in | 21.102 in | 3.34016 |
| 81750 | SAE | 1-1/2in | 3.102 in | 0.61 in | 2.185 in | 0.925 in | 19.72 in | 2.251 b |
| 81736 | Metric | 6 mm | 0.52 in | 0.161 in | 0.449 in | 0.197 in | 5.094 in | 0.0710 |
| 81737 | Metric | 7 mm | 0.567 in | 0.169 in | 0.484 in | 0.209 in | 5.445 in | 0.07 lb |
| 81665 | Metric | 8 mm | 0.654 in | 0.177 in | 0.535 in | 0.217 in | 5.799 in | 0.09110 |
| 81666 | Metric | 9 mm | 0.728 in | 0.185 in | 0.583 in | 0.244 in | 6.22 in | 0.111 b |
| 81667 | Metric | 10 mm | 0.807 in | 0.213 in | 0.634 in | 0.272 in | 6.543 in | 0.131 b |
| 81668 | Metric | 11 mm | 0.894 in | 0.236 in | 0.685 in | 0.295 in | 7.291 in | 0.1811 |
| 81669 | Metric | 12 mm | 0.969 in | 0.244 in | 0.728 in | 0.327 in | 7.736 in | 0.1811 |
| 81670 | Metric | 13 mm | 1.051 in | 0.252 in | 0.78 in | 0.335 in | 8.114 in | 0.301 b |
| 81671 | Metric | 14 mm | 1.138 in | 0.276 in | 0.846 in | 0.366 in | 8.74 in | 0.3210 |
| 81672 | Metric | 15 mm | 1.213 in | 0.291 in | 0.89 in | 0.39 in | 9.134 in | 0.351 b |
| 81673 | Metric | 16 mm | 1.291 in | 0.303 in | 0.941 in | 0.413 in | 9.524 in | 0.4016 |
| 81674 | Metric | 17 mm | 1.382 in | 0.319 in | 1.016 in | 0.433 in | 10.232 in | 0.43110 |
| 81675 | Metric | 18 mm | 1.461 in | 0.339 in | 1.047 in | 0.453 in | 10.602 in | 0.4910 |
| 81676 | Metric | 19 mm | 1.55 | 0.36 in | 1.08 in | 0.472 in | 10.97 in | 0.541 b |
| 81677 | Metric | 20 mm | 1.65 in | 0.381 in | 1.11 in | 0.491 in | 11.4 in | 0.6210 |
| 81678 | Metric | 21 mm | 1.7 in | 0.4 in | 1.14 in | 0.51 in | 11.83 in | 0.681 b |


| Cat. No. | SAEMertic | Fastener Size | End A Width | End A Thickness | End B Width | End B Thickness | Overall Length | Product Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81679 | Metric | 22 mm | 1.783 in | 0.406 in | 1.264 in | 0.539 in | 12.52 in | 0.6916 |
| 81741 | Metric | 23 mm | 1.87 in | 0.417 in | 1.287 in | 0.559 in | 12.752 in | 0.9911 |
| 81742 | Metric | 24 mm | 1.945 in | 0.429 in | 1.327 in | 0.579 in | 13.252 in | 1.0016 |
| 81751 | Metric | 25 mm | 2.024 in | 0.445 in | 1.398 in | 0.598 in | 14.035 in | 1.1010 |
| 81752 | Metric | 26 mm | 2.138 in | 0.449 in | 1.472 in | 0.622 in | 14.331 in | 1.1216 |
| 81743 | Metric | 27 mm | 2.22 in | 0.469 in | 1.531 in | 0.65 in | 14.752 in | 1.3816 |
| 81753 | Metric | 28 mm | 2.469 in | 0.5 in | 1.685 in | 0.697 in | 16 in | 1.891 b |
| 81809 | Metric | 29 mm | 2.343 in | . 469 in | 1.665 in | . 673 in | 15.394 in | 1.61010 |
| 81744 | Metric | 30 mm | 2.555 in | 0.524 in | 1.685 in | 0.724 in | 17 in | 2.121 b |
| 817450 | Metric | 32 mm | 2.634 in | 0.524 in | 1.811 in | 0.724 in | 17.362 in | 2.131 b |

## 12 Point Long Pattern Satin Combination Wrenches

 $15^{\circ}$ offset for better access in tight spaces- Off-corner loading design on box end provides better grip and reduces fastener rounding
- Long pattern beam length for improved reach, leverage and torque
- Hard stamped size marking

Manufactured from alloy steel for better strength and longer tool life
Satin finish for corrosion protection and simple cleaning


| Cat. No. | SAEMertric | Fastener Size | End A Width | End A Thickness | End B Width | End B Thickness | Overall Length | Product Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81818 | SAE | 1-5/8 in | 3.402 in | . 673 in | 2.425 in | . 957 in | 24.094 in | 4.31010 |
| 81819 | SAE | 1-11/1/6 in | 3.402 in | 0.673 in | 2.425 in | 0.957 in | 24.094 in | 4.31010 |
| 81820 | SAE | $1-34$ in | 3.689 in | 0.776 in | 2.618 in | 0.976 in | 25.551 in | 5.150 lb |
| 81821 | SAE | 1-13/16 in | 3.689 in | 0.776 in | 2.618 in | 0.976 in | 25.551 in | 5.1501 l |
| 81822 | SAE | 1-7/8 in | 3.9 in | 0.75 in | 2.76 in | 1.06 in | 27.09 in | 8.80016 |
| 81823 | SAE | 2 in | 4.02 in | 0.75 in | 2.87 in | 1.06 in | 27.13 in | 8.3601 lb |
| 81824 | SAE | 2-1/16 in | 4 in | 0.75 in | 2.87 in | 1.06 in | 27.09 in | 7.920 lb |
| 81825 | SAE | $2-1 / 8$ in | 4.409 in | 0.843 in | 3.169 in | 1.126 in | 27.795 in | 8.0501 lb |
| 81826 | SAE | 2-3/16 in | 4.409 in | 0.843 in | 3.169 in | 1.126 in | 27.795 in | 8.0501 lb |
| 81827 | SAE | 2-1/4 in | 4.409 in | 0.843 in | 3.169 in | 1.126 in | 27.795 in | ${ }^{11.5501 ~} \mathrm{lb}$ |
| 81828 | SAE | 2-3/8 in | 4.992 in | 0.937 in | 3.665 in | 1.319 in | 29.843 in | 11.550 lb |
| 81829 | SAE | 2-1/2 in | 4.992 in | 0.937 in | 3.665 in | 1.319 in | 29.843 in | 11.550 lb |
| 81830 | SAE | 2-9/16 in | 5.43 in | 1 in | 4.06 in | 1.48 in | 31.89 in | 21.560 lb |
| 81831 | SAE | 2-5/8 in | 5.43 in | 1 in | 4.02 in | 1.5 in | 31.89 in | 21.12010 |
| 81832 | SAE | 2-344 in | 5.39 in | 1 in | 4.06 in | 1.5 in | 31.89 in | 20.680 lb |
| 81840 | Metric | 36 mm | 2.81 in | . 53 in | 2.01 in | . 85 in | 19.96 in | 2.42016 |
| 81841 | Metric | 41 mm | 3.402 in | 0.673 in | 2.425 in | 0.957 in | 24.094 in | 4.310 lb |
| 81842 | Metric | 46 mm | 3.689 in | 0.776 in | 2.618 in | 0.976 in | 25.551 in | 5.1501 lb |
| 81843 | Metric | 50 mm | 3.9 in | 0.75 in | 2.87 in | 1.06 in | 26.97 in | 7.48016 |
| 81844 | Metric | 55 mm | 4.409 in | 0.843 in | 3.169 in | 1.126 in | 27.795 in | 8.0501 lb |
| 81845 | Metric | 60 mm | 4.992 in | 0.937 in | 3.665 in | 1.319 in | 29.843 in | 11.550 lb |
| 81846 | Metric | 65 mm | 5.47 in | 1 in | 4.06 in | 1.5 in | 31.89 in | 20.2401 lb |
| 81847 | Metric | 70 mm | 5.39 in | 1 in | 4.06 in | 1.5 in | 31.89 in | 19.80010 |

