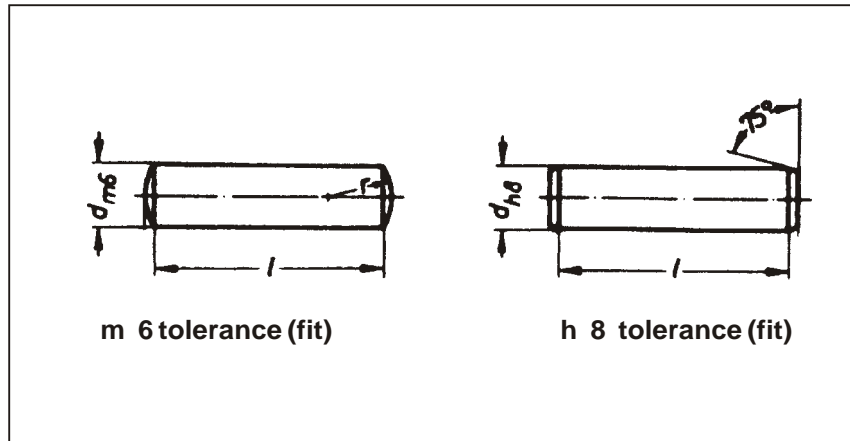


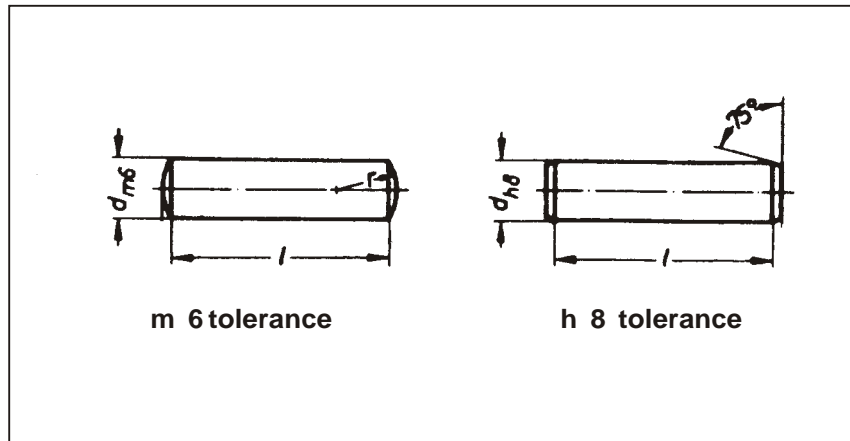
Dowel Pins, Unhardened DIN 7 ISO 2338



Material: AISI 12L13

| Diameter | | | | | | | | | | | | | | | | |
|----------|------|--------|------|--------|------|------|------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| μ0.8 | μ1 | μ1.5 | μ2 | μ2.5 | μ3 | μ4 | μ5 | μ6 | μ8 | μ10 | μ12 | μ14 | μ16 | μ20 | μ25 | μ30 |
| 0.8×4 | 1×4 | 1.5×4 | 2×4 | 2.5×4 | 3×4 | | | | | | | | | | | |
| 0.8×6 | 1×6 | 1.5×6 | 2×6 | 2.5×6 | 3×6 | 4×6 | 5×6 | 6×6 | | | | | | | | |
| 0.8×8 | 1×8 | 1.5×8 | 2×8 | 2.5×8 | 3×8 | 4×8 | 5×8 | 6×8 | | | | | | | | |
| 0.8×10 | 1×10 | 1.5×10 | 2×10 | 2.5×10 | 3×10 | 4×10 | 5×10 | 6×10 | 8×10 | 10×10 | | | | | | |
| 0.8×12 | 1×12 | 1.5×12 | 2×12 | 2.5×12 | 3×12 | 4×12 | 5×12 | 6×12 | 8×12 | 10×12 | 12×12 | | | | | |
| 0.8×14 | 1×14 | 1.5×14 | 2×14 | 2.5×14 | 3×14 | 4×14 | 5×14 | 6×14 | 8×14 | 10×14 | 12×14 | | | | | |
| 0.8×16 | 1×16 | 1.5×16 | 2×16 | 2.5×16 | 3×16 | 4×16 | 5×16 | 6×16 | 8×16 | 10×16 | 12×16 | | | | | |
| 0.8×18 | 1×18 | 1.5×18 | 2×18 | 2.5×18 | 3×18 | 4×18 | 5×18 | 6×18 | 8×18 | 10×18 | 12×18 | | | | | |
| 0.8×20 | 1×20 | 1.5×20 | 2×20 | 2.5×20 | 3×20 | 4×20 | 5×20 | 6×20 | 8×20 | 10×20 | 12×20 | 14×20 | 16×20 | 20×20 | | |
| | | 1.5×22 | 2×22 | 2.5×22 | 3×22 | 4×22 | 5×22 | 6×22 | 8×22 | 10×22 | 12×22 | 14×22 | 16×22 | 20×22 | | |
| | | 1.5×24 | 2×24 | 2.5×24 | 3×24 | 4×24 | 5×24 | 6×24 | 8×24 | 10×24 | 12×24 | 14×24 | 16×24 | 20×24 | | |
| | | 1.5×26 | 2×26 | 2.5×26 | 3×26 | 4×26 | 5×26 | 6×26 | 8×26 | 10×26 | 12×26 | 14×26 | 16×26 | 20×26 | | |
| | | 1.5×28 | 2×28 | 2.5×28 | 3×28 | 4×28 | 5×28 | 6×28 | 8×28 | 10×28 | 12×28 | 14×28 | 16×28 | 20×28 | | |
| | | 1.5×30 | 2×30 | 2.5×30 | 3×30 | 4×30 | 5×30 | 6×30 | 8×30 | 10×30 | 12×30 | 14×30 | 16×30 | 20×30 | | |
| | | 1.5×32 | 2×32 | 2.5×32 | 3×32 | 4×32 | 5×32 | 6×32 | 8×32 | 10×32 | 12×32 | 14×32 | 16×32 | 20×32 | 25×32 | 30×32 |
| | | | | 2.5×36 | 3×36 | 4×36 | 5×36 | 6×36 | 8×36 | 10×36 | 12×36 | 14×36 | 16×36 | 20×36 | 25×36 | 30×36 |
| | | | | 2.5×40 | 3×40 | 4×40 | 5×40 | 6×40 | 8×40 | 10×40 | 12×40 | 14×40 | 16×40 | 20×40 | 25×40 | 30×40 |
| | | | | | 3×45 | 4×45 | 5×45 | 6×45 | 8×45 | 10×45 | 12×45 | 14×45 | 16×45 | 20×45 | 25×45 | 30×45 |
| | | | | | 3×50 | 4×50 | 5×50 | 6×50 | 8×50 | 10×50 | 12×50 | 14×50 | 16×50 | 20×50 | 25×50 | 30×50 |
| | | | | | 3×55 | 4×55 | 5×55 | 6×55 | 8×55 | 10×55 | 12×55 | 14×55 | 16×55 | 20×55 | 25×55 | 30×55 |
| | | | | | 3×60 | 4×60 | 5×60 | 6×60 | 8×60 | 10×60 | 12×60 | 14×60 | 16×60 | 20×60 | 25×60 | 30×60 |
| | | | | | | | | 6×70 | 8×70 | 10×70 | 12×70 | 14×70 | 16×70 | 20×70 | 25×70 | 30×70 |
| | | | | | | | | 6×80 | 8×80 | 10×80 | 12×80 | 14×80 | 16×80 | 20×80 | 25×80 | 30×80 |
| | | | | | | | | 6×90 | 8×90 | 10×90 | 12×90 | 14×90 | 16×90 | 20×90 | 25×90 | 30×90 |
| | | | | | | | | 6×100 | 8×100 | 10×100 | 12×100 | 14×100 | 16×100 | 20×100 | 25×100 | 30×100 |
| | | | | | | | | | 8×110 | 10×110 | 12×110 | 14×110 | 16×110 | 20×110 | 25×110 | 30×110 |
| | | | | | | | | | | | | | | 25×120 | 30×120 | |
| | | | | | | | | | | | | | | | 25×140 | 30×140 |
| | | | | | | | | | | | | | | | 25×150 | 30×150 |

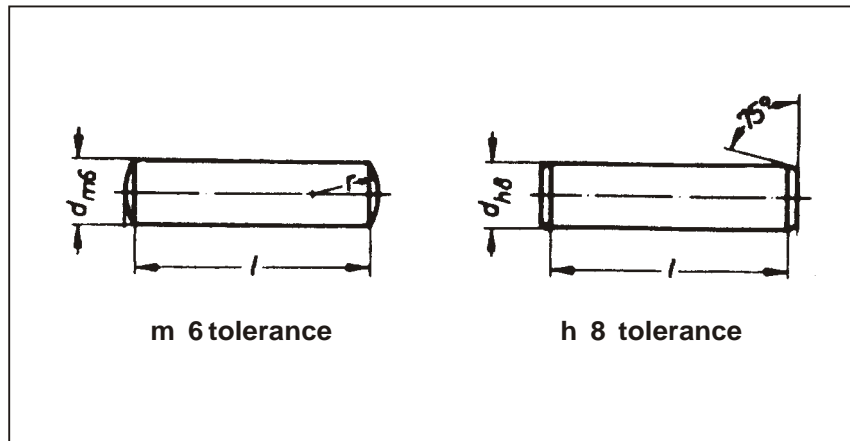
Dowel Pins, Unhardened DIN 7 ISO 2338



Material: Stainless Steel AISI 316

| Diameter | | | | | | | | | | |
|----------|--------|------|--------|------|------|------|------|------|--------|--------|
| 1μ1 | 1μ1.5 | 1μ2 | 1μ2.5 | 1μ3 | 1μ4 | 1μ5 | 1μ6 | 1μ8 | 1μ10 | 1μ12 |
| 1×3 | 1.5×3 | | | | | | | | | |
| 1×4 | 1.5×4 | 2×4 | 2.5×4 | 3×4 | | | | | | |
| 1×5 | 1.5×5 | 2×5 | 2.5×5 | 3×5 | 4×5 | | | | | |
| 1×6 | 1.5×6 | 2×6 | 2.5×6 | 3×6 | 4×6 | 5×6 | | | | |
| 1×8 | 1.5×8 | 2×8 | 2.5×8 | 3×8 | 4×8 | 5×8 | 6×8 | | | |
| 1×10 | 1.5×10 | 2×10 | 2.5×10 | 3×10 | 4×10 | 5×10 | 6×10 | 8×10 | | |
| 1×12 | 1.5×12 | 2×12 | 2.5×12 | 3×12 | 4×12 | 5×12 | 6×12 | 8×12 | 10×12 | |
| | 1.5×14 | 2×14 | 2.5×14 | 3×14 | 4×14 | 5×14 | 6×14 | 8×14 | 10×14 | 12×14 |
| | 1.5×16 | 2×16 | 2.5×16 | 3×16 | 4×16 | 5×16 | 6×16 | 8×16 | 10×16 | 12×16 |
| | | | 2.5×18 | 3×18 | 4×18 | 5×18 | 6×18 | 8×18 | 10×18 | 12×18 |
| | | | 2.5×20 | 3×20 | 4×20 | 5×20 | 6×20 | 8×20 | 10×20 | 12×20 |
| | | | 2.5×24 | 3×24 | 4×24 | 5×24 | 6×24 | 8×24 | 10×24 | 12×24 |
| | | | | 3×28 | 4×28 | 5×28 | 6×28 | 8×28 | 10×28 | 12×28 |
| | | | | 3×30 | 4×30 | 5×30 | 6×30 | 8×30 | 10×30 | 12×30 |
| | | | | 3×32 | 4×32 | 5×32 | 6×32 | 8×32 | 10×32 | 12×32 |
| | | | | | 4×36 | 5×36 | 6×36 | 8×36 | 10×36 | 12×36 |
| | | | | | 4×40 | 5×40 | 6×40 | 8×40 | 10×40 | 12×40 |
| | | | | | | 5×45 | 6×45 | 8×45 | 10×45 | 12×45 |
| | | | | | | 5×50 | 6×50 | 8×50 | 10×50 | 12×50 |
| | | | | | | | 6×55 | 8×55 | 10×55 | 12×55 |
| | | | | | | | 6×60 | 8×60 | 10×60 | 12×60 |
| | | | | | | | | 8×70 | 10×70 | 12×70 |
| | | | | | | | | 8×80 | 10×80 | 12×80 |
| | | | | | | | | | 10×90 | 12×90 |
| | | | | | | | | | 10×100 | 12×100 |

Dowel Pins, Unhardened DIN 7 ISO 2338

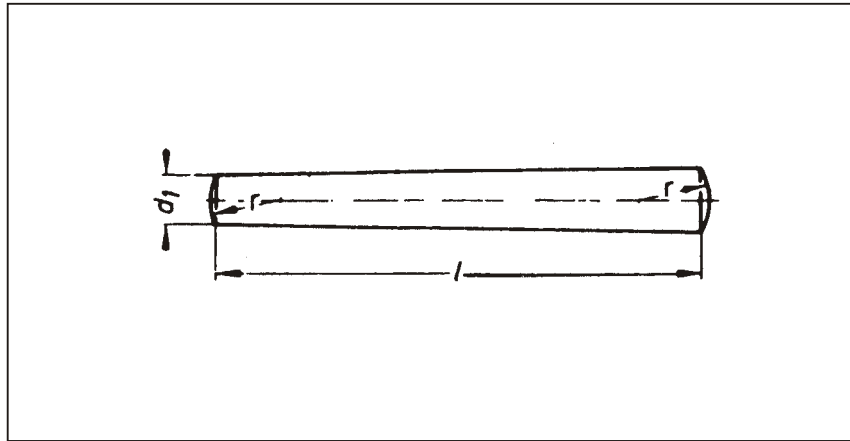


Material: Stainless Steel AISI 303

| Diameter | | | | | | | | | | | | |
|----------|------|--------|------|--------|------|------|------|------|--------|--------|-------|-------|
| ⌀0.8 | ⌀1 | ⌀1.5 | ⌀2 | ⌀2.5 | ⌀3 | ⌀4 | ⌀5 | ⌀6 | ⌀8 | ⌀10 | ⌀12 | |
| 0.8×3 | 1×3 | 1.5×3 | 2×4 | 2.5×4 | 3×4 | | | | | | | |
| 0.8×4 | 1×4 | 1.5×4 | 2×5 | 2.5×5 | 3×5 | | | | | | | |
| 0.8×5 | 1×5 | 1.5×5 | | | | 4×5 | 5×5 | | | | | |
| 0.8×6 | 1×6 | 1.5×6 | 2×6 | 2.5×6 | 3×6 | 4×6 | 5×6 | 6×6 | | | | |
| 0.8×8 | 1×8 | 1.5×8 | 2×8 | 2.5×8 | 3×8 | 4×8 | 5×8 | 6×8 | 8×8 | | | |
| 0.8×10 | 1×10 | 1.5×10 | 2×10 | 2.5×10 | 3×10 | 4×10 | 5×10 | 6×10 | 8×10 | 10×10 | | |
| 0.8×12 | 1×12 | 1.5×12 | 2×12 | 2.5×12 | 3×12 | 4×12 | 5×12 | 6×12 | 8×12 | 10×12 | 12×12 | |
| | | 1.5×14 | 2×14 | 2.5×14 | 3×14 | 4×14 | 5×14 | 6×14 | 8×14 | 10×14 | 12×14 | |
| | | 1.5×16 | 2×16 | 2.5×16 | 3×16 | 4×16 | 5×16 | 6×16 | 8×16 | 10×16 | 12×16 | |
| | | | 2×18 | 2.5×18 | 3×18 | 4×18 | 5×18 | 6×18 | 8×18 | 10×18 | 12×18 | |
| | | | 2×20 | 2.5×20 | 3×20 | 4×20 | 5×20 | 6×20 | 8×20 | 10×20 | 12×20 | |
| | | | 2×24 | 2.5×24 | 3×24 | 4×24 | 5×24 | 6×24 | 8×24 | 10×24 | 12×24 | |
| | | | | | 3×28 | 4×28 | 5×28 | 6×28 | 8×28 | 10×28 | 12×28 | |
| | | | | | | 4×30 | 5×30 | 6×30 | 8×30 | 10×30 | 12×30 | |
| | | | | | | 4×32 | 5×32 | 6×32 | 8×32 | 10×32 | 12×32 | |
| | | | | | | | 4×36 | 5×36 | 6×36 | 8×36 | 10×36 | 12×36 |
| | | | | | | | 4×40 | 5×40 | 6×40 | 8×40 | 10×40 | 12×40 |
| | | | | | | | 4×45 | 5×45 | 6×45 | 8×45 | 10×45 | 12×45 |
| | | | | | | | 4×50 | 5×50 | 6×50 | 8×50 | 10×50 | 12×50 |
| | | | | | | | | 5×55 | 6×55 | 8×55 | 10×55 | 12×55 |
| | | | | | | | | 5×60 | 6×60 | 8×60 | 10×60 | 12×60 |
| | | | | | | | | 8×70 | 10×70 | 12×70 | | |
| | | | | | | | | 8×80 | 10×80 | 12×80 | | |
| | | | | | | | | | 10×90 | 12×90 | | |
| | | | | | | | | | 10×100 | 12×100 | | |

Taper Pins, Unhardened

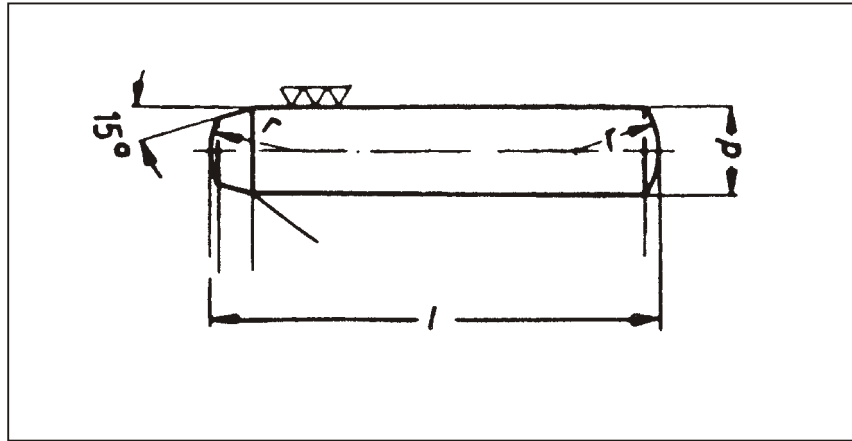
DIN 1 B ISO 2339



Material: AISI 12L13

| Diameter | | | | | | | | | | | | |
|-----------|---------|-----------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| $\mu 1.5$ | $\mu 2$ | $\mu 2.5$ | $\mu 3$ | $\mu 4$ | $\mu 5$ | $\mu 6$ | $\mu 8$ | $\mu 10$ | $\mu 12$ | $\mu 14$ | $\mu 16$ | $\mu 20$ |
| 1.5×6 | 2×6 | 2.5×6 | 3×6 | 4×6 | | | | | | | | |
| 1.5×8 | 2×8 | 2.5×8 | 3×8 | 4×8 | | | | | | | | |
| 1.5×10 | 2×10 | 2.5×10 | 3×10 | 4×10 | 5×10 | 6×10 | | | | | | |
| 1.5×12 | 2×12 | 2.5×12 | 3×12 | 4×12 | 5×12 | 6×12 | | | | | | |
| 1.5×14 | 2×14 | 2.5×14 | 3×14 | 4×14 | 5×14 | 6×14 | | | | | | |
| 1.5×16 | 2×16 | 2.5×16 | 3×16 | 4×16 | 5×16 | 6×16 | | | | | | |
| 1.5×18 | 2×18 | 2.5×18 | 3×18 | 4×18 | 5×18 | 6×18 | | | | | | |
| 1.5×20 | 2×20 | 2.5×20 | 3×20 | 4×20 | 5×20 | 6×20 | 8×20 | | | | | |
| 1.5×22 | 2×22 | 2.5×22 | 3×22 | 4×22 | 5×22 | 6×22 | 8×22 | | | | | |
| 1.5×24 | 2×24 | 2.5×24 | 3×24 | 4×24 | 5×24 | 6×24 | 8×24 | | | | | |
| 1.5×26 | 2×26 | 2.5×26 | 3×26 | 4×26 | 5×26 | 6×26 | 8×26 | | | | | |
| 1.5×28 | 2×28 | 2.5×28 | 3×28 | 4×28 | 5×28 | 6×28 | 8×28 | 10×28 | | | | |
| 1.5×30 | 2×30 | 2.5×30 | 3×30 | 4×30 | 5×30 | 6×30 | 8×30 | 10×30 | 12×30 | | | |
| | 2×32 | 2.5×32 | 3×32 | 4×32 | 5×32 | 6×32 | 8×32 | 10×32 | 12×32 | | | |
| | 3×36 | 2.5×36 | 3×36 | 4×36 | 5×36 | 6×36 | 8×36 | 10×36 | 12×36 | 14×36 | 16×36 | |
| | 2×40 | 2.5×40 | 3×40 | 4×40 | 5×40 | 6×40 | 8×40 | 10×40 | 12×40 | 14×40 | 16×40 | 20×40 |
| | 2×45 | 2.5×45 | 3×45 | 4×45 | 5×45 | 6×45 | 8×45 | 10×45 | 12×45 | 14×45 | 16×45 | 20×45 |
| | 2×50 | 2.5×50 | 3×50 | 4×50 | 5×50 | 6×50 | 8×50 | 10×50 | 12×50 | 14×50 | 16×50 | 20×50 |
| | | | 3×55 | 4×55 | 5×55 | 6×55 | 8×55 | 10×55 | 12×55 | 14×55 | 16×55 | 20×55 |
| | | | 3×60 | 4×60 | 5×60 | 6×60 | 8×60 | 10×60 | 12×60 | 14×60 | 16×60 | 20×60 |
| | | | 3×65 | 4×65 | 5×65 | 6×65 | 8×65 | 10×65 | 12×65 | 14×65 | 16×65 | 20×65 |
| | | | 3×70 | 4×70 | 5×70 | 6×70 | 8×70 | 10×70 | 12×70 | 14×70 | 16×70 | 20×70 |
| | | | 3×80 | 4×80 | 5×80 | 6×80 | 8×80 | 10×80 | 12×80 | 14×80 | 16×80 | 20×80 |
| | | | 3×90 | 4×90 | 5×90 | 6×90 | 8×90 | 10×90 | 12×90 | 14×90 | 16×90 | 20×90 |
| | | | 3×100 | 4×100 | 5×100 | 6×100 | 8×100 | 10×100 | 12×100 | 14×100 | 16×100 | 20×100 |
| | | | | | | 6×110 | 8×110 | 10×110 | 12×110 | 14×110 | 16×110 | 20×110 |
| | | | | | | 6×120 | 8×120 | 10×120 | 12×120 | 14×120 | 16×120 | 20×120 |
| | | | | | | | | | | 14×130 | 16×130 | 20×130 |
| | | | | | | | | | | 14×140 | 16×140 | 20×140 |
| | | | | | | | | | | 14×150 | 16×150 | 20×150 |

Dowel Pins, Hardened DIN 6325 ISO 8734



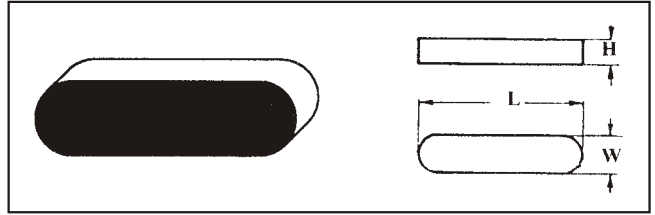
Material: C45

Hardness: HRC 60 ± 2

| Diameter | | | | | | | | | | | | | |
|----------|--------|------|--------|------|------|------|------|-------|-------|--------|--------|--------|--------|
| 1/μ1 | 1/μ1.5 | 1/μ2 | 1/μ2.5 | 1/μ3 | 1/μ4 | 1/μ5 | 1/μ6 | 1/μ8 | 1/μ10 | 1/μ12 | 1/μ14 | 1/μ16 | 1/μ20 |
| 1×4 | | | | | | | | | | | | | |
| 1×5 | 1.5×5 | | | | | | | | | | | | |
| 1×6 | 1.5×6 | 2×6 | 2.5×6 | 3×6 | 4×6 | | | | | | | | |
| 1×8 | 1.5×8 | 2×8 | 2.5×8 | 3×8 | 4×8 | 5×8 | | | | | | | |
| 1×10 | 1.5×10 | 2×10 | 2.5×10 | 3×10 | 4×10 | 5×10 | 6×10 | | | | | | |
| 1×12 | 1.5×12 | 2×12 | 2.5×12 | 3×12 | 4×12 | 5×12 | 6×12 | | | | | | |
| | 1.5×14 | 2×14 | 2.5×14 | 3×14 | 4×14 | 5×14 | 6×14 | 8×14 | | | | | |
| | 1.5×16 | 2×16 | 2.5×16 | 3×16 | 4×16 | 5×16 | 6×16 | 8×16 | | | | | |
| | 1.5×18 | 2×18 | 2.5×18 | 3×18 | 4×18 | 5×18 | 6×18 | 8×18 | | | | | |
| | 1.5×20 | 2×20 | 2.5×20 | 3×20 | 4×20 | 5×20 | 6×20 | 8×20 | 10×20 | 12×20 | | | |
| | 1.5×22 | 2×22 | 2.5×22 | 3×22 | 4×22 | 5×22 | 6×22 | 8×22 | 10×22 | 12×22 | | | |
| | 1.5×24 | 2×24 | 2.5×24 | 3×24 | 4×24 | 5×24 | 6×24 | 8×24 | 10×24 | 12×24 | 14×24 | 16×24 | |
| | 1.5×26 | 2×26 | 2.5×26 | 3×26 | 4×26 | 5×26 | 6×26 | 8×26 | 10×26 | 12×26 | 14×26 | 16×26 | |
| | 1.5×28 | 2×28 | 2.5×28 | 3×28 | 4×28 | 5×28 | 6×28 | 8×28 | 10×28 | 12×28 | 14×28 | 16×28 | |
| | 1.5×30 | 2×30 | 2.5×30 | 3×30 | 4×30 | 5×30 | 6×30 | 8×30 | 10×30 | 12×30 | 14×30 | 16×30 | |
| | | 2×32 | 2.5×32 | 3×32 | 4×32 | 5×32 | 6×32 | 8×32 | 10×32 | 12×32 | 14×32 | 16×32 | |
| | | 2×36 | 2.5×36 | 3×36 | 4×36 | 5×36 | 6×36 | 8×36 | 10×36 | 12×36 | 14×36 | 16×36 | |
| | | 2×40 | 2.5×40 | 3×40 | 4×40 | 5×40 | 6×40 | 8×40 | 10×40 | 12×40 | 14×40 | 16×40 | 20×40 |
| | | | 2.5×45 | 3×45 | 4×45 | 5×45 | 6×45 | 8×45 | 10×45 | 12×45 | 14×45 | 16×45 | 20×45 |
| | | | 2.5×50 | 3×50 | 4×50 | 5×50 | 6×50 | 8×50 | 10×50 | 12×50 | 14×50 | 16×50 | 20×50 |
| | | | | 3×55 | 4×55 | 5×55 | 6×55 | 8×55 | 10×55 | 12×55 | 14×55 | 16×55 | 20×55 |
| | | | | 3×60 | 4×60 | 5×60 | 6×60 | 8×60 | 10×60 | 12×60 | 14×60 | 16×60 | 20×60 |
| | | | | | | | 6×70 | 8×70 | 10×70 | 12×70 | 14×70 | 16×70 | 20×70 |
| | | | | | | | 6×80 | 8×80 | 10×80 | 12×80 | 14×80 | 16×80 | 20×80 |
| | | | | | | | | 6×90 | 8×90 | 10×90 | 12×90 | 14×90 | 16×90 |
| | | | | | | | | 6×100 | 8×100 | 10×100 | 12×100 | 14×100 | 16×100 |
| | | | | | | | | | 8×110 | 10×110 | 12×110 | 14×110 | 16×110 |
| | | | | | | | | | | 8×120 | 10×120 | 12×120 | 14×120 |
| | | | | | | | | | | | 16×120 | 20×120 | |

Metric Shaft Keys DIN 6885A

METRIC SHAFT KEYS DIN 6885A



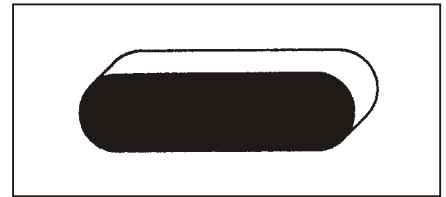
| W x H x L | | | | | | | | | |
|-----------|---------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| 2x2x6 | 8x5x18 | 6x6x30 | 8x5x40 | 8x7x56 | 18x11x65 | 28x16x80 | 8x7x100 | 36x20x120 | 20x12x140 |
| 3x3x6 | 8x7x18 | 8x5x30 | 8x7x40 | 10x6x56 | 20x8x65 | 20x8x65 | 10x6x100 | 40x14x120 | 22x9x140 |
| 4x4x6 | 10x6x18 | 8x7x30 | 10x6x40 | 10x8x56 | 20x12x65 | 8x5x85 | 10x8x100 | 40x22x120 | 22x14x140 |
| | 10x8x18 | 10x6x30 | 10x8x40 | 12x6x56 | 22x9x65 | 8x7x85 | 12x6x100 | 45x16x120 | 25x9x140 |
| 2x2x8 | | 10x8x30 | 12x6x40 | 12x8x56 | 22x14x65 | 10x6x85 | 12x8x100 | 45x25x120 | 25x14x140 |
| 3x3x8 | 2x2x20 | 12x6x30 | 12x8x40 | 14x6x56 | 25x9x65 | 10x8x85 | 14x6x100 | | 28x10x140 |
| 4x4x8 | 3x3x20 | 12x8x30 | 14x6x40 | 14x9x56 | 25x14x65 | 12x6x85 | 14x9x100 | 8x7x125 | 28x16x140 |
| | 4x4x20 | 14x6x30 | 14x9x40 | 16x7x56 | | 12x8x85 | 16x7x100 | 10x8x125 | 32x11x140 |
| 2x2x10 | 5x3x20 | 14x9x30 | 16x7x40 | 16x10x56 | 6x4x70 | 14x6x85 | 16x10x100 | 12x6x125 | 32x18x140 |
| 3x3x10 | 5x5x20 | 16x7x30 | 16x10x40 | 18x7x56 | 6x6x70 | 14x9x85 | 18x7x100 | 12x8x125 | 36x12x140 |
| 4x4x10 | 6x4x20 | 16x10x30 | | 18x11x56 | 8x5x70 | 16x7x85 | 18x11x100 | 14x6x125 | 36x20x140 |
| 5x3x10 | 6x6x20 | | 4x4x45 | 20x8x56 | 8x7x70 | 16x10x85 | 20x8x100 | 20x8x125 | 40x14x140 |
| 5x5x10 | 8x5x20 | | 5x3x45 | 20x12x56 | 10x6x70 | 18x7x85 | 20x12x100 | 16x7x125 | 40x22x140 |
| 6x4x10 | 8x7x20 | 2x2x32 | 5x5x45 | | 10x8x70 | 18x11x85 | 22x9x100 | 16x10x125 | 45x16x140 |
| 6x6x10 | 10x6x20 | 4x4x32 | 6x4x45 | 5x3x60 | 12x6x70 | 20x12x85 | 22x14x100 | 18x7x125 | 45x25x140 |
| 8x5x10 | 10x8x20 | 5x3x32 | 6x6x45 | 5x5x60 | 12x8x70 | 22x9x85 | 25x9x100 | 18x11x125 | |
| 8x7x10 | 12x6x20 | 5x5x32 | 8x5x45 | 6x4x60 | 14x6x70 | 22x14x85 | 25x14x100 | 25x14x125 | 8x7x150 |
| | 12x8x20 | 6x4x32 | 8x7x45 | 6x6x60 | 14x9x70 | 25x9x85 | 28x10x100 | 20x12x125 | 10x8x150 |
| 2x2x12 | | 6x6x32 | 10x6x45 | 8x5x60 | 16x7x70 | 25x14x85 | 28x16x100 | 22x9x125 | 12x8x150 |
| 3x3x12 | 2x2x22 | 8x5x32 | 10x8x45 | 8x7x60 | 16x10x70 | 28x10x85 | 32x11x100 | 22x14x125 | 14x9x150 |
| 4x4x12 | 3x3x22 | 8x7x32 | 12x6x45 | 10x6x60 | 18x7x70 | 28x16x85 | 32x18x100 | 25x9x125 | 16x7x150 |
| 5x3x12 | 4x4x22 | 10x6x32 | 12x8x45 | 10x8x60 | 18x11x70 | 32x11x85 | 36x12x100 | 25x14x125 | 16x10x150 |
| 5x5x12 | 5x3x22 | 10x8x32 | 14x6x45 | 12x6x60 | 20x8x70 | 32x18x85 | 36x20x100 | 28x10x125 | 18x7x150 |
| 6x4x12 | 5x5x22 | 12x6x32 | 14x9x45 | 12x8x60 | 20x12x70 | | | 28x16x125 | 18x11x150 |
| 6x6x12 | 6x4x22 | 12x8x32 | 16x7x45 | 14x6x60 | 22x9x70 | 8x5x90 | 8x7x110 | 32x11x125 | 20x8x150 |
| 8x5x12 | 6x6x22 | 14x6x32 | 16x10x45 | 14x9x60 | 22x14x70 | 8x7x90 | 10x6x110 | 32x18x125 | 20x12x150 |
| 8x7x12 | 8x5x22 | 14x9x32 | 18x7x45 | 16x7x60 | 25x9x70 | 10x6x90 | 10x8x110 | 36x12x125 | 22x9x150 |
| | 8x7x22 | 16x7x32 | 18x11x45 | 16x10x60 | 25x14x70 | 10x8x90 | 12x6x110 | 36x20x125 | 22x14x150 |
| 2x2x14 | 10x6x22 | 16x10x32 | | 18x7x60 | | 12x6x90 | 12x8x110 | 40x14x125 | 25x9x150 |
| 3x3x14 | 10x8x22 | | 4x4x50 | 18x11x60 | 6x4x75 | 12x8x90 | 14x6x110 | 40x22x125 | 25x14x150 |
| 4x4x14 | 12x6x22 | 2x2x35 | 5x3x50 | 20x8x60 | 6x6x75 | 14x6x90 | 14x9x110 | 45x16x125 | 28x10x150 |
| 5x3x14 | 12x8x22 | 3x3x35 | 5x5x50 | 20x12x60 | 8x5x75 | 14x9x90 | 16x7x110 | 45x25x125 | 28x16x150 |
| 5x5x14 | | 4x4x35 | 6x4x50 | 22x9x60 | 8x7x75 | 16x7x90 | 16x10x110 | | 32x11x150 |
| 6x4x14 | 2x2x25 | 5x3x35 | 6x6x50 | 22x14x60 | 10x6x75 | 16x10x90 | 18x7x110 | 8x7x130 | 32x18x150 |
| 6x6x14 | 3x3x25 | 5x5x35 | 8x5x50 | | 10x8x75 | 18x7x90 | 18x11x110 | 10x8x130 | 36x12x150 |
| 8x5x14 | 4x4x25 | 6x4x35 | 8x7x50 | 5x3x63 | 12x6x75 | 18x11x90 | 20x8x110 | 12x6x130 | 36x20x150 |
| 8x7x14 | 5x3x25 | 6x6x35 | 10x6x50 | 5x5x63 | 12x8x75 | 20x8x90 | 20x12x110 | 12x8x130 | 40x14x150 |
| 10x6x14 | 5x5x25 | 8x5x35 | 10x8x50 | 6x4x63 | 14x6x75 | 20x12x90 | 22x9x110 | 14x6x130 | 40x22x150 |
| 10x8x14 | 6x4x25 | 8x7x35 | 12x6x50 | 6x6x63 | 14x9x75 | 22x9x90 | 22x14x110 | 14x9x130 | 45x16x150 |
| | 6x6x25 | 10x6x35 | 12x8x50 | 8x5x63 | 16x7x75 | 22x14x90 | 25x9x110 | 16x7x130 | 45x25x150 |
| 2x2x15 | 8x5x25 | 10x8x35 | 14x6x50 | 8x7x63 | 16x10x75 | 25x9x90 | 25x14x110 | 16x10x130 | |
| 3x3x15 | 8x7x25 | 12x6x35 | 14x9x50 | 10x6x63 | 18x7x75 | 25x14x90 | 28x10x110 | 18x7x130 | 8x7x160 |
| 4x4x15 | 10x6x25 | 12x8x35 | 16x7x50 | 10x8x63 | 18x11x75 | 28x10x90 | 28x16x110 | 18x11x130 | 10x8x160 |
| 5x3x15 | 10x8x25 | 14x6x35 | 16x10x50 | 12x6x63 | 20x8x75 | 28x16x90 | 32x11x110 | 20x8x130 | 12x8x160 |
| 5x4x15 | 12x6x25 | 14x9x35 | 18x7x50 | 12x8x63 | 20x12x75 | 32x11x90 | 32x18x110 | 20x12x130 | 14x9x160 |
| 6x4x15 | 12x8x25 | 16x7x35 | 18x11x50 | 14x6x63 | 22x9x75 | 32x18x90 | 36x12x110 | 22x9x130 | 16x7x160 |
| 6x6x15 | 14x6x25 | 16x10x35 | | 14x9x63 | 22x14x75 | | 36x20x110 | 22x14x130 | 16x10x160 |
| 8x5x15 | 14x9x25 | | 5x3x55 | 16x7x63 | 25x9x75 | 8x7x95 | 40x14x110 | 25x9x130 | 18x7x160 |
| 8x7x15 | | 2x2x36 | 5x4x55 | 16x10x63 | 25x14x75 | 10x6x95 | 40x22x110 | 25x14x130 | 18x11x160 |
| 10x6x15 | 2x2x28 | 3x3x36 | 6x4x55 | 18x7x63 | 28x10x75 | 10x8x95 | | 28x10x130 | 20x8x160 |
| 10x8x15 | 3x3x28 | 4x4x36 | 6x6x55 | 18x11x63 | 28x16x75 | 12x6x95 | 8x7x120 | 28x16x130 | 20x12x160 |
| | 4x4x28 | 5x3x36 | 8x5x55 | 20x8x63 | | 12x8x95 | 10x8x120 | 32x11x130 | 22x9x160 |
| 2x2x16 | 5x3x28 | 5x4x36 | 8x7x55 | 20x12x63 | 8x5x80 | 14x6x95 | 12x6x120 | 32x18x130 | 22x14x160 |
| 3x3x16 | 5x5x28 | 6x4x36 | 10x6x55 | 22x9x63 | 8x7x80 | 14x9x95 | 12x8x120 | 36x12x130 | 25x9x160 |
| 4x4x16 | 6x4x28 | 6x6x36 | 10x8x55 | 22x14x63 | 10x6x80 | 16x7x95 | 14x6x120 | 36x20x130 | 25x14x160 |
| 5x3x16 | 6x6x28 | 8x5x36 | 12x6x55 | | 10x8x80 | 16x10x95 | 14x9x120 | 40x14x130 | 28x10x160 |
| 5x5x16 | 8x5x28 | 8x7x36 | 12x8x55 | 5x3x65 | 12x6x80 | 18x7x95 | 16x7x120 | 40x22x130 | 28x16x160 |
| 6x4x16 | 8x7x28 | 10x6x36 | 14x6x55 | 5x5x65 | 12x8x80 | 18x11x95 | 16x10x120 | 45x16x130 | 32x11x160 |
| 6x6x16 | 10x6x28 | 10x8x36 | 14x9x55 | 6x4x65 | 14x6x80 | 20x8x95 | 18x7x120 | 45x25x130 | 32x18x160 |
| 8x5x16 | 10x8x28 | 12x6x36 | 16x7x55 | 6x6x65 | 14x9x80 | 20x12x95 | 18x11x120 | | 36x12x160 |
| 8x7x16 | 12x6x28 | 12x8x36 | 16x10x55 | 8x5x65 | 16x7x80 | 22x9x95 | 20x8x120 | 8x7x140 | 36x20x160 |
| 10x6x16 | 12x8x28 | 14x6x36 | 18x7x55 | 8x7x65 | 16x10x80 | 22x14x95 | 20x12x120 | 10x8x140 | 40x14x160 |
| 10x8x16 | 14x6x28 | 14x9x36 | 18x11x55 | 10x6x65 | 18x7x80 | 25x9x95 | 22x9x120 | 12x6x140 | 40x22x160 |
| | 14x9x28 | 16x7x36 | 20x8x55 | 10x8x65 | 18x11x80 | 25x14x95 | 22x14x120 | 12x8x140 | 45x16x160 |
| 2x2x18 | | 16x10x36 | 20x12x55 | 12x6x65 | 28x8x80 | 28x10x95 | 25x9x120 | 14x6x140 | 45x25x160 |
| 3x3x18 | 2x2x30 | | | 12x8x65 | 20x12x80 | 28x16x95 | 25x14x120 | 14x9x140 | |
| 4x4x18 | 3x3x30 | 4x4x40 | 5x3x56 | 14x6x65 | 22x9x80 | 32x11x95 | 28x10x120 | 16x7x140 | 16x7x170 |
| 5x3x18 | 4x4x30 | 4x4x40 | 5x5x56 | 14x9x65 | 22x14x80 | 32x18x95 | 28x16x120 | 16x10x140 | 16x10x170 |
| 5x4x18 | 5x3x30 | 5x5x40 | 6x4x56 | 16x7x65 | 25x9x80 | 36x12x95 | 32x11x120 | 18x7x140 | 18x7x170 |
| 6x4x18 | 5x5x30 | 6x4x40 | 6x6x56 | 16x10x65 | 25x14x80 | 36x20x95 | 32x18x120 | 18x11x140 | 18x11x170 |
| 6x6x18 | 6x4x30 | 6x6x40 | 8x5x56 | 18x7x65 | 28x10x80 | | 36x12x120 | 20x8x140 | 20x8x170 |

Metric Shaft Keys DIN 6885A

Metric Woodruff Keys DIN 6888

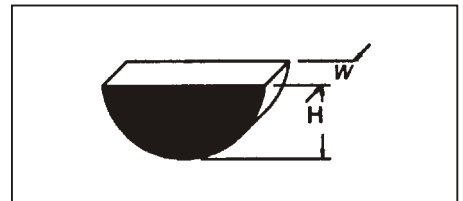
METRIC SHAFT KEYS DIN 6885A

| WxHxL | | | | |
|-----------|-----------|-----------|-----------|-----------|
| 20×18×170 | 25×9×180 | 32×11×200 | 22×14×250 | 28×10×320 |
| 22×9×170 | 25×14×180 | 32×18×200 | 25×9×250 | 28×16×320 |
| 22×14×170 | 28×10×180 | 36×12×200 | 25×14×250 | 32×11×320 |
| 25×9×170 | 28×16×180 | 36×20×200 | 28×10×250 | 32×18×320 |
| 25×14×170 | 32×11×180 | 40×14×200 | 28×16×250 | 36×12×320 |
| 28×10×170 | 32×18×180 | 40×22×200 | 32×11×250 | 36×20×320 |
| 28×16×170 | 36×12×180 | 45×16×200 | 32×18×250 | 40×14×320 |
| 32×11×170 | 36×20×180 | 45×25×200 | 36×12×250 | 40×22×320 |
| 32×18×170 | 40×14×180 | | 36×20×250 | 45×16×320 |
| 36×12×170 | 40×22×180 | 10×8×220 | 40×14×250 | 45×25×320 |
| 36×20×170 | 45×16×180 | 14×9×220 | 40×22×250 | |
| 40×14×170 | 45×25×180 | 22×9×220 | 45×16×250 | 32×11×360 |
| 40×22×170 | | 22×14×220 | 45×25×250 | 32×18×360 |
| 45×16×170 | 8×7×200 | 25×9×220 | | 36×12×360 |
| 45×25×170 | 10×8×200 | 25×14×220 | 25×9×280 | 36×20×360 |
| | 14×9×200 | 28×10×220 | 25×14×280 | 40×14×360 |
| 8×7×180 | 16×10×200 | 28×16×220 | 28×10×280 | 40×22×360 |
| 12×8×180 | 18×7×200 | 32×11×220 | 28×16×280 | 45×16×360 |
| 14×9×180 | 18×11×200 | 32×18×220 | 32×11×280 | 45×25×360 |
| 16×7×180 | 20×8×200 | 36×12×220 | 32×18×280 | |
| 16×10×180 | 20×12×200 | 36×20×220 | 36×12×280 | 36×12×400 |
| 18×7×180 | 22×9×200 | 40×14×220 | 36×20×280 | 36×20×400 |
| 18×11×180 | 22×14×200 | 40×22×220 | 40×14×280 | 40×14×400 |
| 20×8×180 | 25×9×200 | 45×16×220 | 40×22×280 | 40×22×400 |
| 20×12×180 | 25×14×200 | 45×25×220 | 45×16×280 | 45×16×400 |
| 22×9×180 | 28×10×200 | | 45×25×280 | 45×25×400 |
| 22×14×180 | 28×16×200 | 22×9×250 | | |



METRIC WOODRUFF KEYS DIN 6888

| WxHxΦ | | |
|------------|----------|----------|
| 1.5×2.6×7 | 5×6.5×16 | 8×13×32 |
| 2×2.6×7 | 5×7.5×19 | 10×13×32 |
| | 6×7.5×19 | |
| 2×3.7×10 | 5×9×22 | |
| 2.5×3.7×10 | 6×9×22 | |
| 3×3.7×10 | 8×9×22 | |
| 2×5×13 | | |
| 3×5×13 | 5×10×25 | |
| 4×5×13 | 6×10×25 | |
| | 6×11×28 | |
| 3×6.5×16 | 8×11×28 | |
| 4×6.5×16 | 10×11×28 | |



Key & Keyway

Tobel No 1 Standard Keyseats

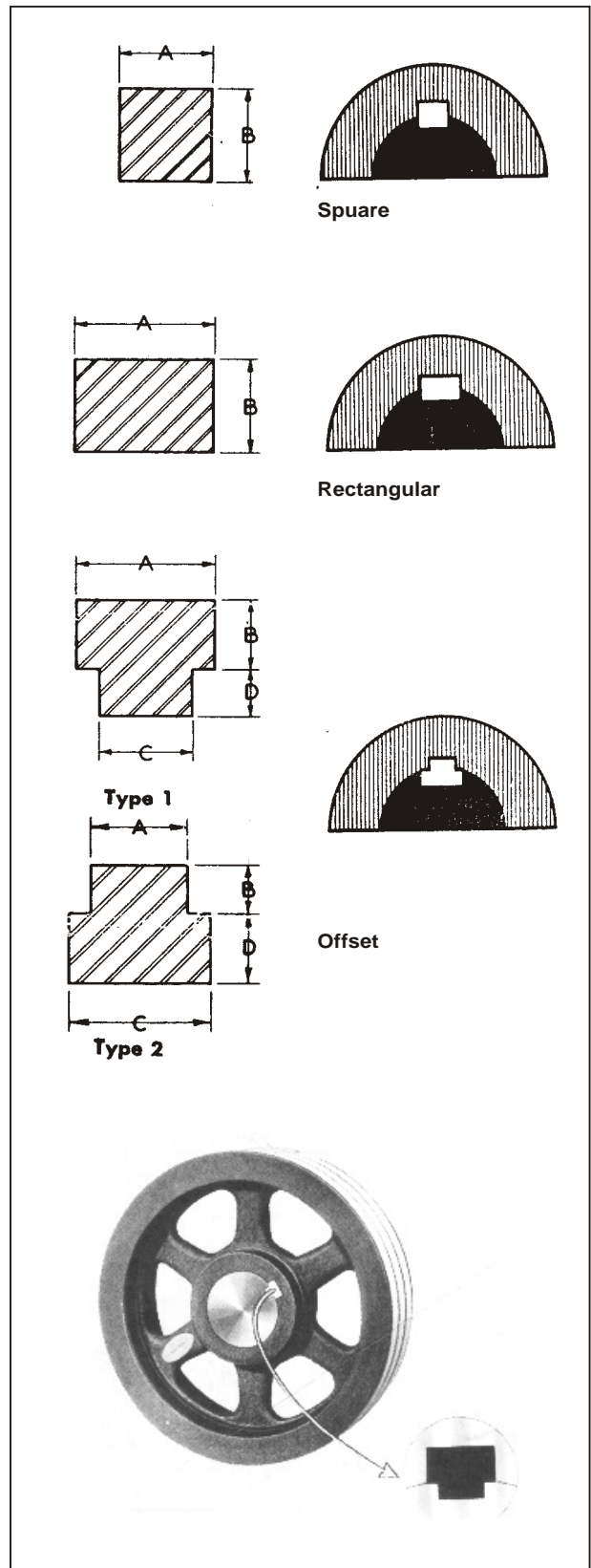
| Old Standard Keyseats | | New Standard Keyseats | |
|-----------------------|-------------|-----------------------|--------------|
| Bore Range | Keyseat | Bore Range | Keyseat |
| 1/2" - 9/16" | 1/8 x 1/16" | 1/2" - 9/16" | 1/8" x 1/16" |
| 5/8 - 7/8 | 3/16 x 3/32 | 5/8 - 7/8 | 3/16 x 3/32 |
| 15/16 - 15/16 | 1/4 x 1/8 | 15/16 - 1 1/4 | 1/4 x 1/8 |
| 1 3/8 - 1 13/16 | 3/8 x 3/16 | 1 5/16 - 1 3/8 | 5/16 x 5/32 |
| 1 7/8 - 2 1/4 | 1/2 x 1/4 | 1 7/16 - 1 3/4 | 3/8 x 3/16 |
| 2 5/16 - 2 13/16 | 5/8 x 5/16 | 1 13/16 - 2 1/4 | 1/2 x 1/4 |
| 2 7/8 - 3 13/16 | 3/4 x 3/8 | 2 5/16 - 2 3/4 | 5/8 x 5/16 |
| 3 7/8 - 4 11/16 | 1 x 1/2 | 2 13/16 - 3 1/4 | 3/4 x 3/8 |
| 4 3/4 - 5 11/16 | 1 1/4 x 5/8 | 3 5/16 - 3 3/4 | 7/8 x 7/16 |
| 5 3/4 - 6 15/16 | 1 1/2 x 3/4 | 3 13/16 - 4 1/2 | 1 x 1/2 |
| 7 - 7 15/16 | 1 3/4 x 7/8 | 4 9/16 - 5 1/2 | 1 1/4 x 5/8 |
| | | 5 9/16 - 6 1/2 | 1 1/2 x 3/4 |
| | | 6 9/16 - 7 1/2 | 1 3/4 x 5/8 |
| | | 7 9/16 - 8 | 2 x 11/16 |

Tobel No 2 Square and Rectangular Keys

| Single Keys | | 24" Lengths | | Dimensions | |
|-------------|--------------|-------------|-------------|------------|--------|
| Port No | *Max. Length | Port No | Weight Lbs. | A | B |
| K-24 | 3 | S-24 | .13 | 1/8" | 1/8" |
| K-25 | 3 | S-25 | .25 | 3/16 | 3/16 |
| K-26 | 5 | R-26 | .31 | 1/4 | 3/16 |
| K-27 | 5 | S-27 | .44 | 1/4 | 1/4 |
| K-99 | 5 | S-99 | .63 | 5/16 | 5/16 |
| K-28 | 5 | R-28 | .75 | 3/8 | 5/16 |
| K-29 | 5 | S-29 | .88 | 3/8 | 3/8 |
| K-41 | 7 | S-41 | 1.0 | 7/16 | 7/16 |
| K-30 | 7 | R-30 | 1.4 | 1/2 | 7/16 |
| K-31 | 7 | S-31 | 1.5 | 1/2 | 1/2 |
| K-39 | 7 | S-39 | 2.0 | 9/16 | 9/16 |
| K-37 | 7 | S-37 | 2.6 | 5/8 | 5/8 |
| K-38 | 9 | S-38 | 3.0 | 1 1/16 | 1 1/16 |
| K-32 | 12 | R-32 | 3.0 | 3/4 | 1/2 |
| K-33 | 12 | R-33 | 3.1 | 3/4 | 5/8 |
| K-34 | 12 | S-34 | 3.6 | 3/4 | 3/4 |
| K-40 | 12 | S-40 | 5.1 | 7/8 | 7/8 |
| K-35 | 12 | R-35 | 4.9 | 1 | 3/4 |
| K-36 | 12 | S-36 | 6.5 | 1 | 1 |

Tobel No 3 Offset Keys

| Single Keys | | 24" Lengths | | Dimensions | | | | |
|-------------|--------------|-------------|-------------|------------|------|-------|--------|-------|
| Port No. | *Max. Length | Port No | Weight Lbs. | Type | A | B | C | D |
| K-1 | 3" | O-1 | .13 | 1 | 3/16 | 3/32" | 1/8" | 1/16" |
| K-2 | 3 | O-2 | .25 | 2 | 3/16 | 3/32 | 1/4 | 3/32 |
| K-3 | 3 | O-3 | .31 | 2 | 3/16 | 3/32 | 1/4 | 1/8 |
| K-4 | 5 | O-4 | .44 | 2 | 1/4 | 1/8 | 5/16 | 1/8 |
| K-5 | 5 | O-5 | .50 | 2 | 1/4 | 1/8 | 3/8 | 1/8 |
| K-6 | 5 | O-6 | .63 | 2 | 1/4 | 1/8 | 3/8 | 3/16 |
| K-7 | 5 | O-7 | .69 | 1 | 3/8 | 3/16 | 5/16 | 1/8 |
| K-51 | 5 | O-51 | .75 | 1 | 3/8 | 3/16 | 5/16 | 5/32 |
| K-8 | 5 | O-8 | .88 | 2 | 3/8 | 3/16 | 7/16 | 5/32 |
| K-9 | 5 | O-9 | .81 | 2 | 3/8 | 3/16 | 1/2 | 3/16 |
| K-10 | 5 | O-10 | 1.3 | 2 | 3/8 | 3/16 | 1/2 | 1/4 |
| K-11 | 7 | O-11 | 1.3 | 1 | 1/2 | 1/4 | 7/16 | 5/32 |
| K-12 | 7 | O-12 | 1.5 | 2 | 1/2 | 1/4 | 9/16 | 3/16 |
| K-13 | 7 | O-13 | 1.5 | 2 | 1/2 | 1/4 | 5/8 | 3/16 |
| K-14 | 7 | O-14 | 2.0 | 2 | 1/2 | 1/4 | 5/8 | 5/16 |
| K-15 | 7 | O-15 | 2.0 | 2 | 1/2 | 1/4 | 1 1/16 | 1 1/4 |
| K-100 | 9 | O-100 | 1.8 | 1 | 5/8 | 5/16 | 3/8 | 3/16 |
| K-16 | 9 | O-16 | 2.4 | 2 | 5/8 | 5/16 | 1 1/16 | 1/4 |
| K-101 | 12 | O-101 | 2.6 | 1 | 3/4 | 3/8 | 1/2 | 1/4 |
| K-17 | 12 | O-17 | 2.6 | 1 | 3/4 | 3/8 | 5/8 | 3/16 |
| K-18 | 12 | O-18 | 3.2 | 1 | 3/4 | 3/8 | 5/8 | 5/16 |
| K-19 | 12 | O-19 | 3.0 | 1 | 3/4 | 3/8 | 1 1/16 | 1/4 |
| K-20 | 12 | O-20 | 3.4 | 2 | 3/4 | 3/8 | 1 3/16 | 9/32 |
| K-21 | 12 | O-21 | 4.4 | 2 | 3/4 | 3/8 | 7/8 | 7/16 |
| K-22 | 12 | O-22 | 3.8 | 2 | 3/4 | 3/8 | 15/16 | 5/16 |
| K-23 | 12 | O-23 | 5.8 | 2 | 3/4 | 3/8 | 1 | 1/2 |
| K-410 | 12 | O-410 | 5.8 | 1 | 1 | 1/2 | 7/8 | 7/16 |

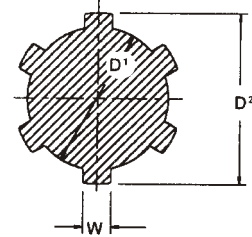


Splines To DIN 5463

SPLINE SHAFT

MATERIAL:C45

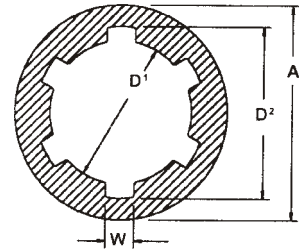
| PART NO. | PROFILE | SPLINES | ΦD^2 | ΦD^1 | W | kg/m |
|----------|----------|---------|------------|------------|-----|-------|
| KS 11 | KN 11×14 | 6 | 14 | 11 | 3 | 0.95 |
| KS 13 | KN 13×16 | 6 | 16 | 13 | 3.5 | 1.29 |
| KS 16 | KN 16×20 | 6 | 20 | 16 | 4 | 1.91 |
| KS 18 | KN 18×22 | 6 | 22 | 18 | 5 | 2.45 |
| KS 21 | KN 21×25 | 6 | 25 | 21 | 5 | 3.24 |
| KS 23 | KN 23×28 | 6 | 28 | 23 | 6 | 3.96 |
| KS 26 | KN 26×32 | 6 | 32 | 26 | 6 | 5.01 |
| KS 28 | KN 28×34 | 6 | 34 | 28 | 7 | 5.82 |
| KS 32 | KN 32×38 | 8 | 38 | 32 | 6 | 7.43 |
| KS 36 | KN 36×42 | 8 | 42 | 36 | 7 | 9.30 |
| KS 42 | KN 42×48 | 8 | 48 | 42 | 8 | 12.34 |
| KS 46 | KN 46×54 | 8 | 54 | 46 | 9 | 15.30 |



SPLINE SLEEVE

MATERIAL:C45

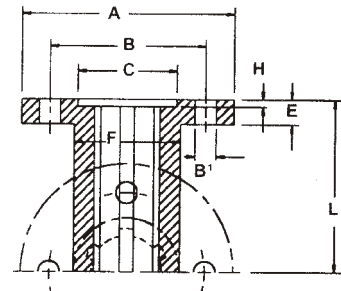
| PART NO | PROFILE | SPLINES | ΦD^2 | ΦD^1 | W | ΦA | LENGTH |
|-------------|----------|---------|------------|------------|-----|----------|--------|
| KV 11×14×20 | KN 11×14 | 6 | 14 | 11 | 3 | 20 | 40 |
| KV 11×14×30 | KN 11×14 | 6 | 14 | 11 | 3 | 30 | 40 |
| KV 13×16×28 | KN 13×16 | 6 | 16 | 13 | 3.5 | 28 | 45 |
| KV 13×16×35 | KN 13×16 | 6 | 16 | 13 | 3.5 | 35 | 40 |
| KV 16×20×32 | KN 16×20 | 6 | 20 | 16 | 4 | 32 | 45 |
| KV 16×20×40 | KN 16×20 | 6 | 20 | 16 | 4 | 40 | 40 |
| KV 18×22×42 | KN 18×22 | 6 | 22 | 18 | 5 | 42 | 40 |
| KV 21×25×38 | KN 21×25 | 6 | 25 | 21 | 5 | 38 | 60 |
| KV 21×25×40 | KN 21×25 | 6 | 25 | 21 | 5 | 40 | 55 |
| KV 21×25×45 | KN 21×25 | 6 | 25 | 21 | 5 | 45 | 40 |
| KV 23×28×50 | KN 23×28 | 6 | 28 | 23 | 6 | 50 | 60 |
| KV 26×32×52 | KN 26×32 | 6 | 32 | 26 | 6 | 52 | 60 |
| KV 26×32×60 | KN 26×32 | 6 | 32 | 26 | 6 | 60 | 60 |
| KV 28×34×70 | KN 28×34 | 6 | 34 | 28 | 7 | 70 | 60 |
| KV 32×38×60 | KN 32×38 | 8 | 38 | 32 | 6 | 60 | 60 |
| KV 32×38×75 | KN 32×38 | 8 | 38 | 32 | 6 | 75 | 60 |
| KV 36×42×80 | KN 36×42 | 8 | 42 | 36 | 7 | 80 | 60 |
| KV 42×48×65 | KN 42×48 | 8 | 48 | 42 | 8 | 65 | 70 |
| KV 42×48×80 | KN 42×48 | 8 | 48 | 42 | 8 | 80 | 70 |
| KV 42×48×90 | KN 42×48 | 8 | 48 | 42 | 8 | 90 | 60 |
| KV 46×54×90 | KN 46×54 | 8 | 54 | 46 | 9 | 90 | 60 |



SPLINE BUSHING. TYPE B

MATERIAL:C45

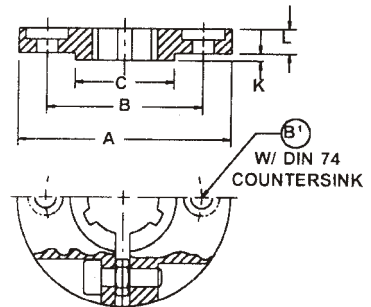
| PART NO. | PROFLE | ΦA | ΦB | ΦB^1 | ΦC^{h7} | ΦF^{h8} | E | H | L |
|----------|----------|----------|----------|------------|---------------|---------------|----|-----|----|
| KB 11 | KN 11×14 | 42 | 28 | 4.3 | 20 | 20 | 8 | 3 | 35 |
| KB 13 | KN 13×16 | 50 | 36 | 4.3 | 22 | 25 | 8 | 3 | 40 |
| KB 16 | KN 16×20 | 52 | 38 | 5.3 | 25 | 28 | 10 | 3 | 40 |
| KB 21 | KN 21×25 | 62 | 48 | 6.4 | 35 | 34 | 10 | 3.5 | 50 |
| KB 26 | KN 26×32 | 70 | 56 | 6.4 | 40 | 42 | 10 | 3.5 | 60 |
| KB 32 | KN 32×38 | 80 | 65 | 8.5 | 50 | 50 | 12 | 3.5 | 60 |
| KB 42 | KN 42×48 | 95 | 75 | 10.5 | 60 | 60 | 16 | 4 | 80 |



SPLINE SPLIT COLLAR

MATERIAL:C45

| PART NO. | PROFLE | ΦA | ΦB | ΦB^1 | ΦC^{h7} | L | K |
|----------|----------|----------|----------|------------|---------------|----|---|
| KC 11 | KN 11×14 | 42 | 28 | 4.3 | 20 | 12 | 2 |
| KC 13 | KN 13×16 | 50 | 36 | 4.3 | 22 | 12 | 2 |
| KC 16 | KN 16×20 | 52 | 38 | 5.3 | 25 | 14 | 2 |
| KC 21 | KN 21×25 | 62 | 48 | 6.4 | 35 | 14 | 3 |
| KC 26 | KN 26×32 | 70 | 56 | 6.4 | 40 | 15 | 3 |
| KC 32 | KN 32×38 | 80 | 65 | 8.5 | 50 | 18 | 3 |
| KC 42 | KN 42×48 | 95 | 75 | 10.5 | 60 | 22 | 3 |

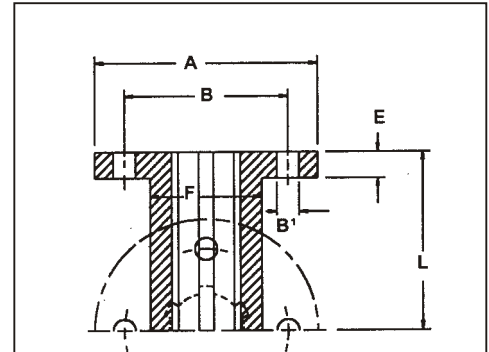


Splines To DIN 5463

SPLINE BUSHING, TYPE F

MATERIAL: C45

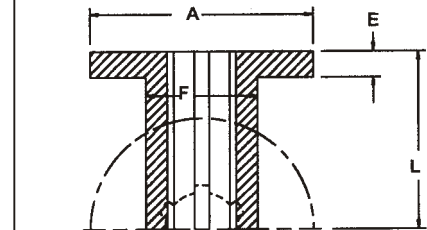
| PART NO. | PROFILE | ΦA | ΦB | ΦB^1 | E | ΦF^{h7} | L |
|----------|----------|----------|----------|------------|----|---------------|----|
| KF 11 | KN 11×14 | 41 | 30 | 4.3 | 8 | 22 | 30 |
| KF 13 | KN 13×16 | 43 | 32 | 4.3 | 8 | 24 | 30 |
| KF 16 | KN 16×20 | 52 | 38 | 5.3 | 9 | 28 | 40 |
| KF 18 | KN 18×22 | 60 | 46 | 5.3 | 9 | 32 | 50 |
| KF 21 | KN 21×25 | 62 | 48 | 6.4 | 10 | 34 | 50 |
| KF 23 | KN 23×28 | 68 | 54 | 6.4 | 10 | 40 | 60 |
| KF 26 | KN 26×32 | 70 | 56 | 6.4 | 10 | 42 | 60 |
| KF 28 | KN 28×34 | 78 | 63 | 8.4 | 12 | 48 | 70 |
| KF 32 | KN 32×38 | 80 | 65 | 8.4 | 12 | 50 | 70 |
| KF 36 | KN 36×42 | 93 | 73 | 8.4 | 14 | 58 | 80 |
| KF 42 | KN 42×48 | 95 | 75 | 10.5 | 16 | 60 | 80 |
| KF 46 | KN 46×54 | 99 | 80 | 10.5 | 16 | 65 | 80 |



SPLINE BUSHING, BLANK

MATERIAL: C45

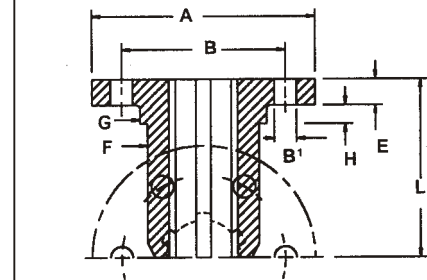
| PART NO. | PROFILE | ΦA | ΦB | ΦB^1 | E | ΦF^{h7} | L |
|----------|----------|----------|----------|------------|----|---------------|----|
| KG 11 | KN 11×14 | 41 | | | 8 | 22 | 30 |
| KG 13 | KN 13×16 | 43 | | | 8 | 24 | 30 |
| KG 16 | KN 16×20 | 52 | | | 9 | 28 | 40 |
| KG 18 | KN 18×22 | 60 | | | 9 | 32 | 50 |
| KG 21 | KN 21×25 | 62 | | | 10 | 34 | 50 |
| KG 23 | KN 23×28 | 68 | | | 10 | 40 | 60 |
| KG 26 | KN 26×32 | 70 | | | 10 | 42 | 60 |
| KG 28 | KN 28×34 | 78 | | | 12 | 48 | 70 |
| KG 32 | KN 32×38 | 80 | | | 12 | 50 | 70 |
| KG 36 | KN 36×42 | 93 | | | 14 | 58 | 80 |
| KG 42 | KN 42×48 | 95 | | | 16 | 60 | 80 |
| KG 46 | KN 46×54 | 99 | | | 16 | 65 | 80 |



BRONZE SPLINE BUSHING

MATERIAL: PHOSPHOR-BRONZE

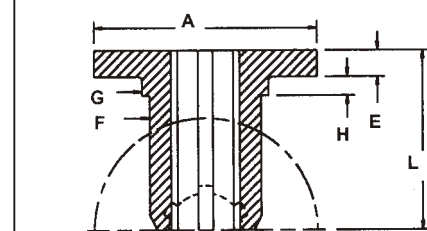
| PART NO. | PROFILE | ΦA | ΦB | ΦB^1 | E | ΦF^{h7} | ΦG^{h7} | H | L |
|----------|----------|----------|----------|------------|----|---------------|---------------|----|----|
| KF 11B | KN 11×14 | 43 | 32 | 4.3 | 10 | 23.8 | 24 | 6 | 35 |
| KF 13B | KN 13×16 | 43 | 32 | 4.3 | 10 | 23.8 | 24 | 8 | 35 |
| KF 16B | KN 16×20 | 48 | 38 | 5.3 | 12 | 27.8 | 28 | 8 | 45 |
| KF 18B | KN 18×22 | 55 | 45 | 6.4 | 12 | 31.8 | 32 | 10 | 45 |
| KF 21B | KN 21×25 | 55 | 45 | 6.4 | 12 | 31.8 | 32 | 10 | 45 |
| KF 23B | KN 23×28 | 62 | 50 | 6.4 | 14 | 37.8 | 38 | 10 | 50 |
| KF 26B | KN 26×32 | 62 | 50 | 6.4 | 14 | 37.8 | 38 | 10 | 50 |
| KF 28B | KN 28×34 | 75 | 62 | 8.4 | 15 | 47.8 | 48 | 11 | 60 |
| KF 32B | KN 32×38 | 75 | 62 | 8.4 | 15 | 47.8 | 48 | 11 | 60 |
| KF 36B | KN 36×42 | 95 | 78 | 8.4 | 16 | 62.8 | 63 | 12 | 80 |
| KF 42B | KN 42×48 | 95 | 78 | 8.4 | 16 | 62.8 | 63 | 12 | 80 |
| KF 46B | KN 46×54 | 100 | 90 | 10.5 | 18 | 71.8 | 72 | 12 | 80 |



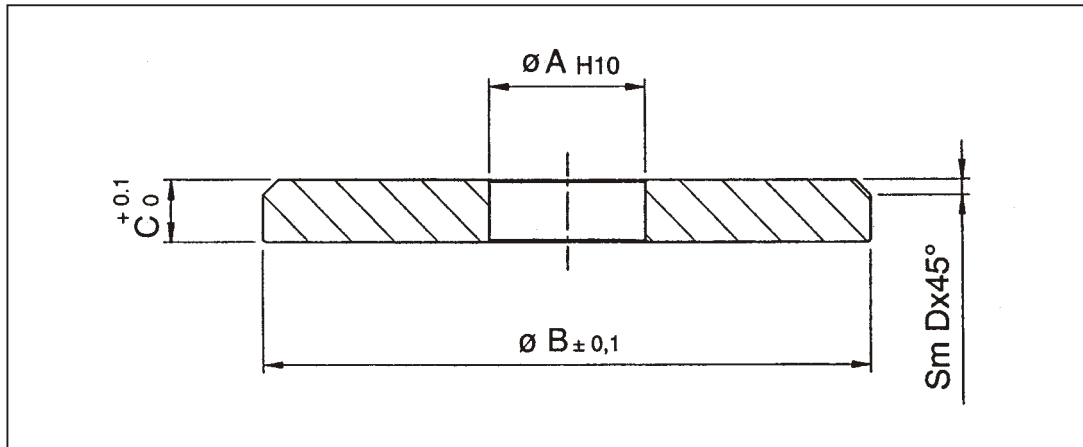
BRONZE SPLINE BUSHING, BLANK

MATERIAL: PHOSPHOR-BRONZE

| PART NO. | PROFILE | ΦA | ΦB | ΦB^1 | E | ΦF^{h7} | ΦG^{h7} | H | L |
|----------|----------|----------|----------|------------|----|---------------|---------------|----|----|
| KG 11B | KN 11×14 | 43 | | | 10 | 23.8 | 24 | 6 | 35 |
| KG 13B | KN 13×16 | 43 | | | 10 | 23.8 | 24 | 8 | 35 |
| KG 16B | KN 16×20 | 48 | | | 12 | 27.8 | 28 | 8 | 45 |
| KG 18B | KN 18×22 | 55 | | | 12 | 31.8 | 32 | 10 | 45 |
| KG 21B | KN 21×25 | 55 | | | 12 | 31.8 | 32 | 10 | 45 |
| KG 23B | KN 23×28 | 62 | | | 14 | 37.8 | 38 | 10 | 50 |
| KG 26B | KN 26×32 | 62 | | | 14 | 37.8 | 38 | 10 | 50 |
| KG 28B | KN 28×34 | 75 | | | 15 | 47.8 | 48 | 11 | 60 |
| KG 32B | KN 32×38 | 75 | | | 15 | 47.8 | 48 | 11 | 60 |
| KG 36B | KN 36×42 | 95 | | | 16 | 62.8 | 63 | 12 | 80 |
| KG 42B | KN 42×48 | 95 | | | 16 | 62.8 | 63 | 12 | 80 |
| KG 46B | KN 46×54 | 110 | | | 18 | 71.8 | 72 | 12 | 80 |



Thick Turned Washers In Compliance



MATERIAL:C45

| Type | A | B | C | D |
|---------------|------|----|---|-----|
| C-RGS 3 - 10 | 3.2 | 10 | 2 | 0.5 |
| C-RGS 4 - 10 | 4.2 | 10 | 2 | 0.5 |
| C-RGS 4 - 15 | 4.2 | 15 | 3 | 0.5 |
| C-RGS 5 - 15 | 5.2 | 15 | 3 | 0.5 |
| C-RGS 5 - 20 | 5.2 | 20 | 3 | 0.5 |
| C-RGS 5 - 25 | 5.2 | 25 | 4 | 1 |
| C-RGS 5 - 30 | 5.2 | 30 | 4 | 1 |
| C-RGS 6 - 15 | 6.2 | 15 | 3 | 0.5 |
| C-RGS 6 - 20 | 6.2 | 20 | 3 | 0.5 |
| C-RGS 6 - 25 | 6.2 | 25 | 4 | 1 |
| C-RGS 6 - 30 | 6.2 | 30 | 4 | 1 |
| C-RGS 6 - 35 | 6.2 | 35 | 5 | 1 |
| C-RGS 6 - 40 | 6.5 | 40 | 5 | 1 |
| C-RGS 8 - 20 | 8.5 | 20 | 4 | 0.5 |
| C-RGS 8 - 25 | 8.5 | 25 | 4 | 1 |
| C-RGS 8 - 30 | 8.5 | 30 | 4 | 1 |
| C-RGS 8 - 35 | 8.5 | 35 | 5 | 1 |
| C-RGS 8 - 40 | 8.5 | 40 | 5 | 1 |
| C-RGS 8 - 45 | 8.5 | 45 | 5 | 2 |
| C-RGS 8 - 50 | 8.5 | 50 | 6 | 2 |
| C-RGS 10 - 25 | 10.5 | 25 | 4 | 1 |
| C-RGS 10 - 35 | 10.5 | 35 | 5 | 1 |
| C-RGS 10 - 40 | 10.5 | 40 | 5 | 1 |
| C-RGS 10 - 45 | 10.5 | 45 | 5 | 2 |
| C-RGS 10 - 50 | 10.5 | 50 | 6 | 2 |
| C-RGS 12 - 50 | 12.5 | 50 | 6 | 2 |