



MultiEdge T90 PR08 and MultiFace P45 PR08
BUY 10 INSERTS PER POCKET
GET 1 BODY FREE of equal or lesser value

Order via your local distributor and reference **promo code: INDEX24**.
Promotion valid from 02-01-2024 thru 06-30-2024.



Process safety by tangential mounting of the inserts

Depth of cut up to 10 mm (0.394 in)



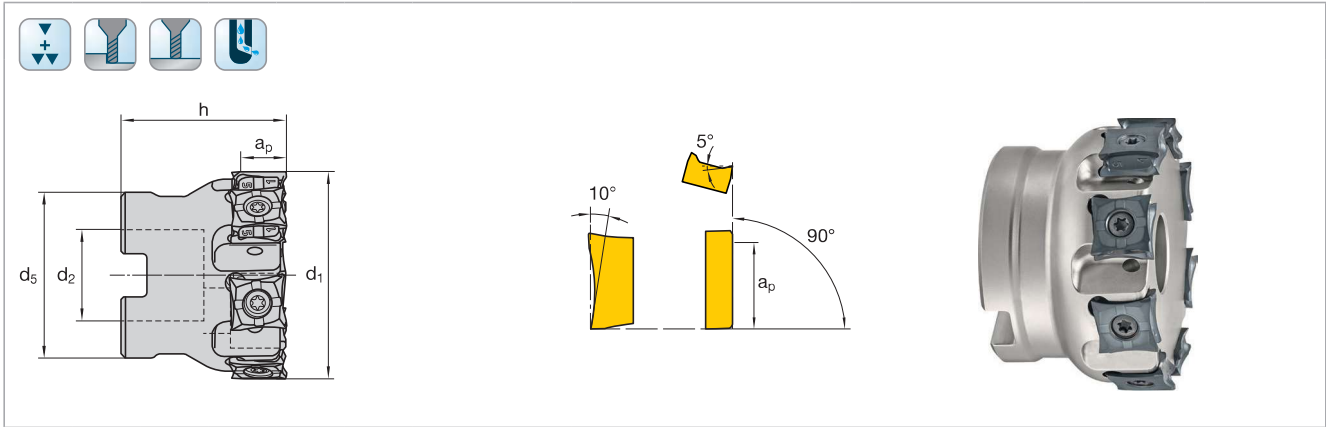
Cost savings through cycle time reduction

Press-to-size-insert with 8 effective cutting edges

The MultiEdge T90 PRO8 is as modular milling systems with tangential inserts. It is designed for roughing and semi finishing operations in steel and cast iron.

The program covers cutter bodies in the diameter range from 2 to 3 in and indexable inserts with cutting depths up to 10 mm (0.394 in) for the machining of steel (ISO P materials), cast iron (ISO K materials), and stainless steel (ISO M materials).

MultiEdge T90 PRO8
Shoulder milling cutter – arbor type



| Cat.-No. | | | | | | | FMP90T X | | | | |
|----------------|------|----------------|----------------|----------------|----|-----------|---------------------|---------------|---------|----------------|--|
| d ₁ | h | d ₂ | d ₅ | a _p | z | Ident No. | LMT-Code | | | | |
| 2 | 1.57 | 0.75 | 1.57 | 0.394 | 5 | 7327318 | FMP90T X12.200AA-I | XNMU 120508ER | 1045126 | 1048335 T15 | |
| 2 | 1.57 | 0.75 | 1.57 | 0.394 | 6 | 7327324 | FMP90T X12.200AA-IF | | | | |
| 3 | 1.97 | 1 | 2.36 | 0.394 | 8 | 7327320 | FMP90T X12.300AB-I | | | | |
| 3 | 1.97 | 1 | 2.36 | 0.394 | 10 | 7327326 | FMP90T X12.300AB-IF | | | | |

MultiEdge T90 PRO8
Indexable inserts

| N = Number of cutting edges | ISO-Code | Cutting materials | | | | | | | | | | For cutter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|-------------------|------|-----|----------------|------|-------------------|-----------|-----------|-----------|-----------|------------|-----------|--------------------|--------------------|-----------|-----------|-----------|--------|---------|--------|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| | | l | d | s | d ₁ | r | Ident No. | Ident No. | Ident No. | Ident No. | Ident No. | | Ident No. | Ident No. | Ident No. | Ident No. | Ident No. | Ident No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N = 8 | XNMU 120608 ER | .472 | .472 | .25 | .173 | .031 | LCP40M 7163384 | LCPM40M | LCPK30M | LCP25M | LCPK10M | LCM45M | LCM44M | LCKP30M 7281866 | LCKP10M 7163385 | LCK20M | LCK10M | LCN10M | LWN10M | LCHP15M | LCH50M | FMP90T X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ■ = First choice □ = Alternative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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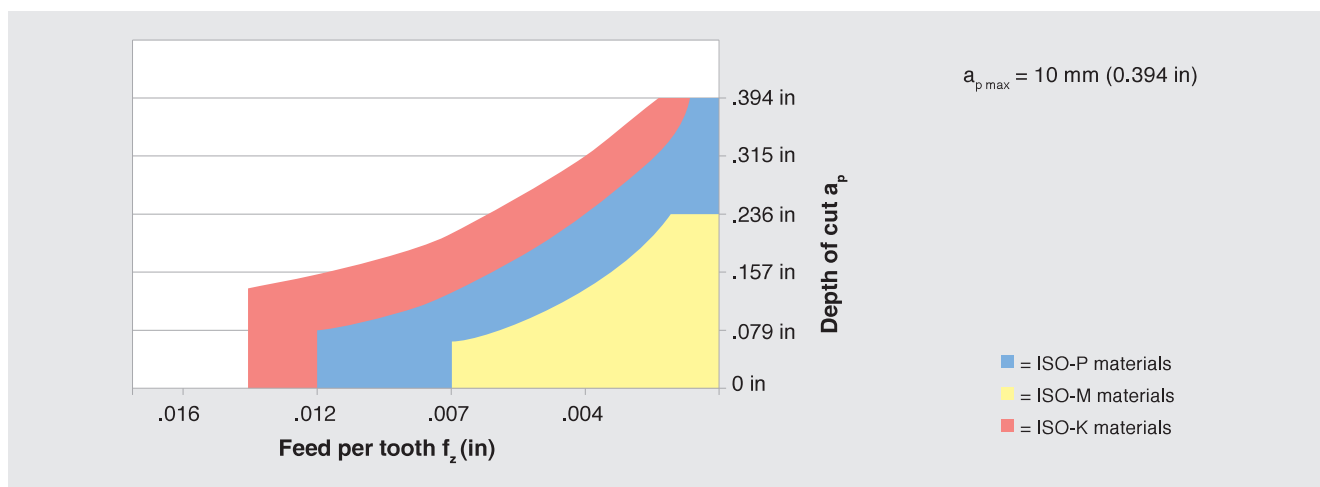
MultiEdge T90 PRO8

Cutting data recommendations

| | Material | Hardness | Carbide grade |
|---|---------------------------------------|----------------------------|------------------|
| P | Plain carbon steel | <32 Rc <32 Rc <32 Rc | LCP40M LCPK30M |
| | Free cutting steel | <32 Rc <32 Rc | |
| | Plain carbon steel | <32 Rc | |
| | Heat-treatment steel, medium strength | <32 Rc | LCP40M LCPK30M |
| | Cast steel | <32 Rc | LCP40M LCPK30M |
| | Case hardening steel | <32 Rc | LCP40M LCPK30M |
| | Heat-treatment steel, high strength | 30 - 44 Rc | LCP40M LCPK30M |
| | Nitriding steel, heat treated | 30 - 44 Rc | LCP40M LCPK30M |
| | Tool steel | 30 - 44 Rc | |
| M | Stainless steel, austenitic | <32 Rc | LCM45M |
| | Stainless steel, martensitic | <32 Rc | |
| K | Cast iron with flake graphite | <32 Rc | LCPK30M |
| | Alloyed cast iron | <32 Rc | LCPK30M |
| | Graphite cast iron | <32 Rc | LCPK30M |
| | Malleable cast iron | <32 Rc | LCPK30M |

The cutting data indicated are starting values and must be adjusted to the prevailing conditions.

Recommended feed per tooth with $a_p = 0.66 \times d_1$



| Recommended cutting speed v_c in in/min with $a_e = 0.66 \times d_1$ | |
|--|-----------|
| v_c | |
| | 656-722 |
| | 590-656 |
| | 459-525 |
| | 459-590 |
| | 394-525 |
| | 394-459 |
| | 525 - 722 |
| | 262 - 394 |
| | 656-787 |
| | 525-656 |
| | 459-590 |
| | 525-656 |



525 - 722



262 - 394

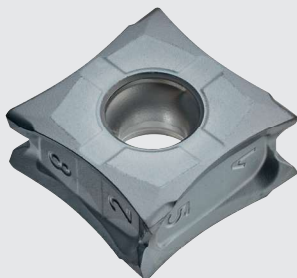


Wet machining, sufficient emulsion volume required

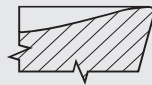


Dry machining, air-blast cooling is advantageous

XNMU



Chip-breakers:



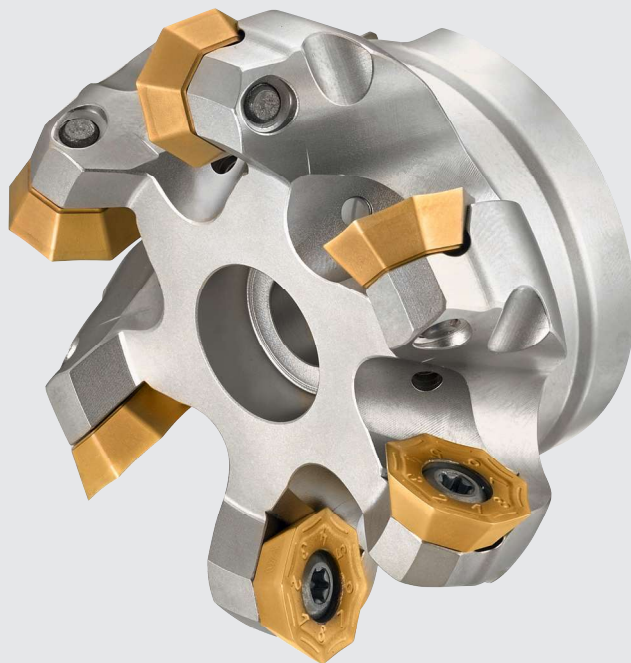
-ER

Features:

- Soft-cutting indexable insert geometry to reduce cutting forces
- Tangential insert with 8 cutting edges for high efficiency
- Depth of cut up to $a_{p \max} = 10 \text{ mm}$ (0.394 in)

15° chipping angle for reduced machining forces

Depth of cut up to 4.0 mm (0.157 in)



Cutting grades and coatings for a long tool life and high chipping volumes

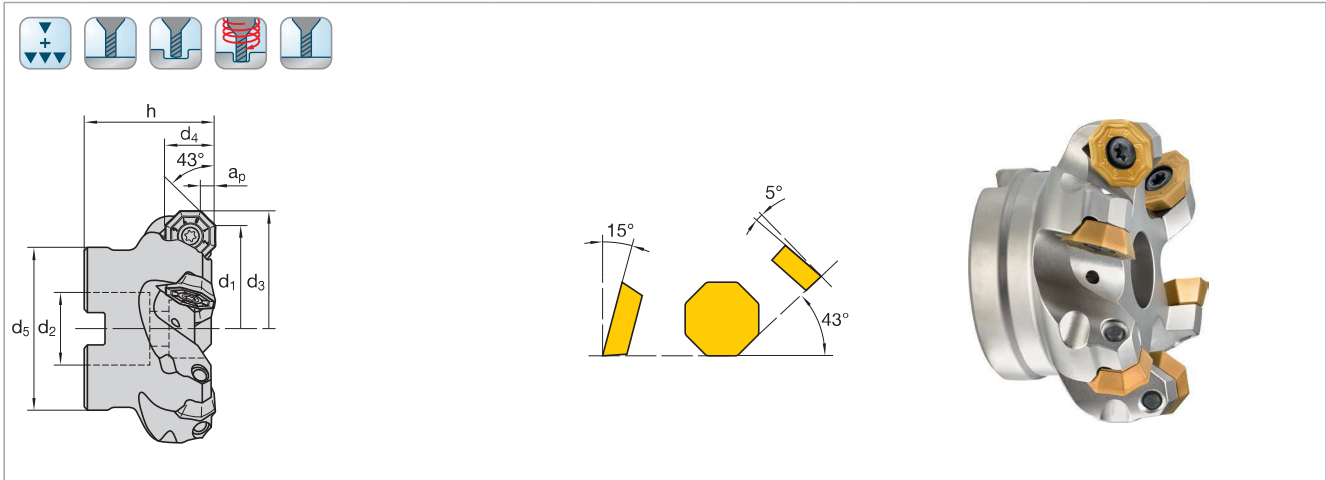
Geometries for the machining of ISO-P, ISO-K, ISO-M and ISO-S




With the MultiFace P45 PRO8, LMT Fette is expanding its product range with a very soft cutting edge milling system for roughing and finishing different materials.

For the machining of different materials there are specially developed geometries and cutting materials.

In the diameter range from 2 to 3 inches, the standard program offers a normal as well as fine pitched version.

MultiFace P45 PRO8
Face milling cutter – arbor type



| Cat.-No. | | | | | | | FMP45 | | | | |
|----------------|------|----------------|----------------|--------------------|---|-----------|--------------------|---|---|---|--|
| d ₁ | h | d ₂ | d ₃ | a _p max | z | Ident No. | LMT-Code |  |  |  | |
| 2 | 1.57 | 0.75 | 1.57 | 0.157 | 4 | 7273660 | FMP45 O06.200AA-I | OEKT 06... | 1045777 | 10488 T20 | |
| 2 | 1.57 | 0.75 | 1.57 | 0.157 | 5 | 7273666 | FMP45 O06.200AA-IF | | | | |
| 3 | 1.97 | 1 | 2.36 | 0.157 | 6 | 7273662 | FMP45 O06.300AB-I | | | | |
| 3 | 1.97 | 1 | 2.36 | 0.157 | 7 | 7273668 | FMP45 O06.300AB-IF | | | | |

Cutting data recommendations starting page 10

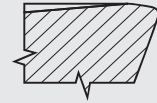


OEKT 0605 AE-SN

Features:

- Very stable geometry
- For challenging applications
- Negative chamfer with edge preparation

Chip-breaker



-SN

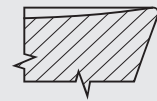


OEKT 0605 AEEN-BM

Features:

- Soft-cutting geometry
- For uncomplicated applications
- Additional 8° chipping angle with edge preparation

Chip-breaker



-BM

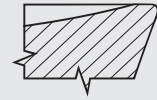


OEKT 0605 AESN-BMS

Features:

- Universal geometry
- For cross-section applications
- Additional 15° chipping angle with edge preparation

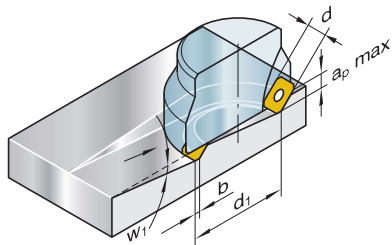
Chip-breaker



-BMS

Technical Hints

| Ramping | | |
|---|-----------------------|--|
| Bevel angle W_1 max. for plunge milling "ramping" | | |
| Tool | FMP45 | |
| Insert | OEKT 0605 | |
| $a_{p \max}$ (in) | .157 | |
| T_{\max} (in) | .118 | |
| d_1 (in) | W_1 max Grad Degree | |
| 2 | 5 | |
| 3 | 2.5 | |



T_{\max} : inner cutting depth

| N = Number of cutting edges | ISO-Code | l | d | s | d ₁ | r | Cutting materials Ident No. | | | | | | | | | | | Cat-No. | | | | | | |
|-----------------------------|-----------------------|------|------|------|----------------|---|--------------------------------|---------|---------|--------|---------|---------|---------|---------|---------|--------|--------|---------|--------|--------|---------|--------|-------|--|
| | | | | | | | LCP40M | LCPM40M | LCPK30M | LCP25M | LCPK10M | LCM45M | LCMS35M | LCKP30M | LCKP10M | LCK20M | LCK10M | | LCN10M | LWN10M | LCHP15M | LCH50M | | |
| N = 8 | OEKT 0605 AESN | .236 | .625 | .219 | .217 | - | 7212188 | | 7212189 | | | 7212190 | | | | | | | | | FMP45 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| N = 8 | OEKT 0605 AEEN-BM | .236 | .625 | .219 | .217 | - | 7212192 | | | | | 7212193 | | | | | | | | | | FMP45 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| N = 8 | OEKT 0605 AESN-BMS | .236 | .625 | .219 | .217 | - | 7212194 | | | | | 7212195 | | | | | | | | | | | FMP45 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

■ = First choice
□ = Alternative

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| ■ | ■ | □ | | | | | | | | | | | | | | | | | | | | | P |
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| | | □ | | | | | | | | | | | | | | | | | | | | | K |
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| | | | | | | | | | | | | | | | | | | | | | | | H |

MultiFace P45 PRO8
Cutting data recommendations

| | Material | Hardness | Carbide Grade |
|---------------------------------------|--|--|----------------------|
| P | Plain carbon steel + free cutting steel | <32 Rc | LCP40M |
| | | <32 Rc | LCPK30M |
| | | <32 Rc | |
| | | <32 Rc | |
| | Heat-treatment steel, medium strength | <32 Rc | LCP40M LCPK30M |
| | Cast steel | <32 Rc | LCP40M |
| | Case hardening steel | <32 Rc | LCP40M |
| | Stainless steel, ferritic, martensitic | <32 Rc | LCP40M LCPK30M |
| | Heat-treatment steel, high strength | 30 - 44 Rc | LCP40M LCPK30M |
| | Nitriding steel, heat treated | 30 - 44 Rc <32 Rc | LCP40M LCPK30M |
| | Tool steel | <35 Rc <36 Rc <35 Rc 30 - 36 Rc 30 - 44 Rc <30 Rc <32 Rc 30 - 44 Rc 35 - 42.5 Rc | LCP40M LCPK30M |
| | M | Stainless steel, austenitic | <32 Rc |
| Stainless steel, martensitic steel | | <32 Rc | LCM45M LCMS35M |
| K | Grey cast iron | <32 Rc | LCKP30M |
| | Alloyed grey cast iron | <32 Rc | LCKP30M |
| | Nodular cast iron | <32 Rc | LCKP30M |
| | Malleable cast iron | <32 Rc | LCKP30M |
| N | Aluminium alloys, short chipping | <32 Rc | LCN10M |
| | Aluminium alloys, long chipping | <32 Rc | LWN10M |
| | Copper alloys, short chipping | <32 Rc | LWN10M LCN10M |
| | Copper alloys, long chipping | <32 Rc | LWN10M LCN10M |
| | Thermoplastics | <32 Rc | LWN10M |
| | Duroplastics | <32 Rc | LWN10M |
| S | Titanium alloys, medium strength | <32 Rc | LCMS35M |
| | Titanium alloys, high strength | 27 - 44 Rc | LCMS35M |
| | Nickel based alloys, medium strength | <32 Rc | LCMS35M |
| | Heat resistant nickel based alloys, high strength | 27 - 44 Rc | LCMS35M |

| Roughing | | | Finishing | | |
|--------------------|----------------------------|-----------------------------|---------------------|----------------------------|-------------|
| v_c (in/min) | f_z (in/z) | a_p (in) (max .157 in) | v_c (in/min) | f_z (in/z) | a_p (in) |
| 492-820 590-919 | .0078-.0157 .0059-.0118 | .1181-.1575 | 590-984 656-1050 | .0031-.0078 .0031-.0059 | .0079-.0787 |
| 492-820 590-919 | .0078-.0157 .0059-.0118 | .1181-.1575 | 328-820 427-919 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 492-820 | .0078-.0157 | .1181-.1575 | 590-984 | .0031-.0078 | .0079-.0787 |
| 328-656 | .0078-.0157 | .1181-.1575 | 590-984 | .0031-.0059 | .0079-.0787 |
| 328-656 427-722 | .0078-.0157 .0059-.0118 | .1181-.1575 | 492-820 590-984 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 328-656 427-722 | .0078-.0157 .0059-.0118 | .1181-.1575 | 492-820 590-984 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 328-656 427-722 | .0078-.0157 .0059-.0118 | .1181-.1575 | 492-820 590-984 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 328-656 427-722 | .0078-.0157 .0059-.0118 | .1181-.1575 | 492-820 590-984 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 328-656 427-722 | .0059-.0138 .0059-.0118 | .1181-.1575 | 492-820 590-984 | .0031-.0059 .0031-.0039 | .0079-.0787 |
| 262-394 | .0059-.0098 | .0394-.1181 | 262-394 | .0020-.0059 | .0079-.0393 |
| 525-722 | | | 525-787 | | |
| 197-328 | .0078-.0157 | .0394-.1181 | 197-328 | .0020-.0059 | .0079-.0393 |
| 525-722 | | | 525-787 | | |
| 328-787 | .0039-.0138 | .1181-.1575 | 656-853 | .0039-.0078 | .0079-.0787 |
| 328-590 | .0039-.0138 | .1181-.1575 | 525-656 | .0039-.0078 | .0079-.0787 |
| 328-525 | .0039-.0138 | .1181-.1575 | 459-590 | .0039-.0078 | .0079-.0787 |
| 328-656 | .0039-.0138 | .1181-.1575 | 525-722 | .0039-.0078 | .0079-.0787 |
| 1312 | .0118-.0157 | .1181-.1575 | 1312 | .0039-.0078 | .0079-.0787 |
| 1640-3281 | .0118-.0157 | .1181-.1575 | 1640-3281 | .0039-.0078 | .0079-.0787 |
| 492-984 | .0118-.0157 | .1181-.1575 | 656-1148 | .0039-.0078 | .0079-.0787 |
| 820-1640 | .0118-.0157 | .1181-.1575 | 984-1640 | .0039-.0078 | .0079-.0787 |
| 590-984 | .0118-.0157 | .1181-.1575 | 656-1312 | .0039-.0078 | .0079-.0787 |
| 656-820 | .0118-.0157 | .1181-.1575 | 656-820 | .0039-.0078 | .0079-.0787 |
| 131-262 | .0020-.0059 | .0394-.0984 | 131-262 | .0020-.0039 | .0079-.0393 |
| 65-197 | .0020-.0059 | .0197-.0787 | 98-197 | .0020-.0039 | .0079-.0393 |
| 98-262 | .0020-.0059 | .0394-.0984 | 131-262 | .0020-.0039 | .0079-.0393 |
| 98-262 | .0020-.0059 | .0394-.0984 | 131-262 | .0020-.0039 | .0079-.0393 |

