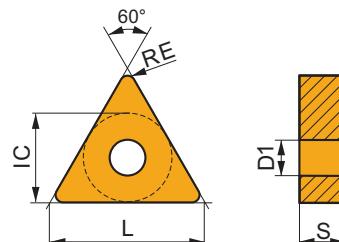




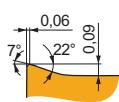
TNMG

 PRAMET

| | IC [mm] | D1 [mm] | L [mm] | S [mm] |
|------|------------|------------|-----------|-----------|
| 1604 | 9.525 | 3.81 | 16.50 | 4.76 |
| 2204 | 12.700 | 5.16 | 22.00 | 4.76 |
| 2706 | 15.875 | 6.35 | 27.50 | 6.35 |
| 3309 | 19.050 | 7.94 | 33.00 | 9.525 |

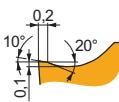


Suitability and starting values for cutting speed (v_c), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



FF geometry with highly positive design for fine-finish machining, and continuous to slightly interrupted cuts.

| | | | | | | | | | | | | | | | |
|------------------------|--------------|-----|-------|------|-----|-------|------|-----|-------|------|-----|---|---|---|---|
| TNMG 160404E-FF | T7325 | 0.4 | █ 200 | 0.12 | 1.0 | █ 155 | 0.11 | 1.0 | — | — | — | — | — | — | — |
| | T8315 | 0.4 | █ 185 | 0.12 | 1.0 | █ 110 | 0.11 | 1.0 | █ 175 | 0.12 | 1.0 | — | — | — | — |
| | T8330 | 0.4 | █ 175 | 0.12 | 1.0 | █ 105 | 0.11 | 1.0 | █ 165 | 0.12 | 1.0 | — | — | — | — |
| | T8430 | 0.4 | █ 210 | 0.12 | 1.0 | █ 115 | 0.11 | 1.0 | █ 175 | 0.12 | 1.0 | — | — | — | — |
| TNMG 160408E-FF | T7325 | 0.8 | █ 225 | 0.15 | 1.0 | █ 175 | 0.14 | 1.0 | — | — | — | — | — | — | — |
| | T8315 | 0.8 | █ 205 | 0.15 | 1.0 | █ 120 | 0.14 | 1.0 | █ 190 | 0.15 | 1.0 | — | — | — | — |



FM geometry with positive design for finish to semi-rough machining, and continuous to slightly interrupted cuts.



| | | | | | | | | | | | | | | | | |
|------------------------|--------------|-----|-------|------|-----|-------|------|-----|-------|------|-----|---|---|------|------|-----|
| TNMG 160412E-FM | T1310 | 0.8 | ■ 270 | 0.20 | 1.7 | ■ 100 | 0.18 | 1.7 | — | — | — | — | — | — | — | — |
| | T7325 | 1.2 | ■ 190 | 0.25 | 1.7 | ■ 145 | 0.23 | 1.7 | — | — | — | — | — | ■ 60 | 0.18 | 1.4 |
| | T8330 | 1.2 | ■ 165 | 0.25 | 1.7 | ■ 95 | 0.23 | 1.7 | ■ 155 | 0.25 | 1.7 | — | — | ■ 40 | 0.18 | 1.4 |
| | T8430 | 1.2 | ■ 185 | 0.25 | 1.7 | ■ 100 | 0.23 | 1.7 | ■ 150 | 0.25 | 1.7 | — | — | ■ 40 | 0.18 | 1.4 |
| | T9310 | 1.2 | ■ 280 | 0.25 | 1.7 | — | — | — | ■ 265 | 0.25 | 1.7 | — | — | — | — | — |
| | T9315 | 1.2 | ■ 255 | 0.25 | 1.7 | — | — | — | ■ 240 | 0.25 | 1.7 | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | | | |
|------------------------|--------------|-----|-------|------|-----|-------|------|-----|-------|------|-----|---|---|---|------|------|-----|---|---|---|
| TNMG 220404E-FM | T9325 | 1.2 | ■ 225 | 0.25 | 1.7 | ■ 135 | 0.23 | 1.7 | ■ 210 | 0.25 | 1.7 | — | — | — | ■ 50 | 0.18 | 1.4 | — | — | — |
| | T8330 | 0.4 | ■ 145 | 0.20 | 1.7 | ■ 85 | 0.18 | 1.7 | ■ 135 | 0.20 | 1.7 | — | — | — | ■ 35 | 0.20 | 1.4 | — | — | — |
| | T8430 | 0.4 | ■ 150 | 0.24 | 1.7 | ■ 80 | 0.22 | 1.7 | ■ 125 | 0.24 | 1.7 | — | — | — | ■ 30 | 0.22 | 1.4 | — | — | — |
| | T9315 | 0.4 | ■ 220 | 0.20 | 1.7 | — | — | — | ■ 205 | 0.20 | 1.7 | — | — | — | — | — | — | — | — | — |
| | T9325 | 0.4 | ■ 200 | 0.20 | 1.7 | ■ 120 | 0.18 | 1.7 | ■ 190 | 0.20 | 1.7 | — | — | — | ■ 45 | 0.20 | 1.4 | — | — | — |



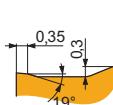
Suitability and starting values for cutting speed (v_c), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| CN | DN | KN | LN | RN | SN | TN | VN | WN |
|----|----|----|----|----|----|----|----|----|
|----|----|----|----|----|----|----|----|----|



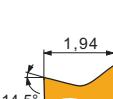
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

| Product | RE [mm] | P | | | M | | | K | | | N | | | S | | | H | | |
|---------|------------|---------------|---------------|------------|---------------|---------------|------------|---------------|---------------|------------|---------------|---------------|------------|---------------|---------------|------------|---------------|---------------|------------|
| | | vc [m/min] | f [mm/rev] | ap [mm] |



RM geometry for semi-rough to rough machining, and continuous to interrupted cuts.

| | | | | | | | | | | | | | | | | | | | |
|-----------------|-------|-----|-----|------|------|-----|------|------|-----|------|------|-----|------|-----|-----|------|-----|-----|------|
| TNMG 160412E-RM | T5305 | 1.2 | 255 | 0.40 | 3.0 | - | - | - | 240 | 0.40 | 3.0 | - | - | - | - | - | - | - | |
| | T5315 | 1.2 | 225 | 0.40 | 3.0 | - | - | - | 210 | 0.40 | 3.0 | - | - | - | - | - | - | - | |
| | T7325 | 1.2 | 165 | 0.40 | 3.0 | 125 | 0.36 | 3.0 | - | - | - | - | - | - | - | - | - | - | |
| | T7335 | 1.2 | 155 | 0.40 | 3.0 | 120 | 0.36 | 3.0 | - | - | - | - | - | - | - | - | - | - | |
| | T8330 | 1.2 | 145 | 0.40 | 3.0 | 85 | 0.36 | 3.0 | 135 | 0.40 | 3.0 | - | - | - | - | - | - | - | |
| | T8430 | 1.2 | 150 | 0.40 | 3.0 | 80 | 0.36 | 3.0 | 125 | 0.40 | 3.0 | 125 | 0.40 | 3.0 | 125 | 0.40 | 3.0 | 125 | 0.40 |
| | T9315 | 1.2 | 205 | 0.40 | 3.0 | - | - | - | 190 | 0.40 | 3.0 | - | - | - | - | - | - | - | |
| | T9325 | 1.2 | 185 | 0.40 | 3.0 | 110 | 0.36 | 3.0 | 175 | 0.40 | 3.0 | - | - | - | - | - | - | - | |
| | T9335 | 1.2 | 160 | 0.40 | 3.0 | 95 | 0.36 | 3.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 220408E-RM | T5305 | 0.8 | 235 | 0.40 | 4.0 | - | - | - | 220 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T5315 | 0.8 | 210 | 0.40 | 4.0 | - | - | - | 195 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T7325 | 0.8 | 150 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T7335 | 0.8 | 140 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9310 | 0.8 | 200 | 0.40 | 4.0 | - | - | - | 190 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9315 | 0.8 | 190 | 0.40 | 4.0 | - | - | - | 180 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9325 | 0.8 | 170 | 0.40 | 4.0 | 100 | 0.36 | 4.0 | 160 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9335 | 0.8 | 145 | 0.40 | 4.0 | 85 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 220412E-RM | T5305 | 1.2 | 245 | 0.40 | 4.0 | - | - | - | 230 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T5315 | 1.2 | 220 | 0.40 | 4.0 | - | - | - | 205 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T7325 | 1.2 | 160 | 0.40 | 4.0 | 120 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T7335 | 1.2 | 150 | 0.40 | 4.0 | 115 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9315 | 1.2 | 200 | 0.40 | 4.0 | - | - | - | 190 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9325 | 1.2 | 180 | 0.40 | 4.0 | 105 | 0.36 | 4.0 | 170 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9335 | 1.2 | 155 | 0.40 | 4.0 | 90 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 220416E-RM | T7325 | 1.6 | 165 | 0.40 | 4.0 | 125 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9315 | 1.6 | 210 | 0.40 | 4.0 | - | - | - | 195 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| | T9325 | 1.6 | 185 | 0.40 | 4.0 | 110 | 0.36 | 4.0 | 175 | 0.40 | 4.0 | - | - | - | - | - | - | - | |
| TNMG 270612E-RM | T7325 | 1.6 | 160 | 0.40 | 4.0 | 95 | 0.36 | 4.0 | - | - | - | - | - | - | - | - | - | - | |
| | T7325 | 1.2 | 110 | 0.40 | 6.0 | 85 | 0.36 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9325 | 1.2 | 120 | 0.40 | 6.0 | 70 | 0.36 | 6.0 | 110 | 0.40 | 6.0 | - | - | - | - | - | - | - | |
| TNMG 270616E-RM | T7325 | 1.6 | 115 | 0.40 | 6.0 | 85 | 0.36 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9226 | 1.6 | 115 | 0.40 | 6.0 | 65 | 0.36 | 6.0 | 105 | 0.40 | 6.0 | - | - | - | - | - | - | - | |
| | T9315 | 1.6 | 135 | 0.40 | 6.0 | - | - | - | 125 | 0.40 | 6.0 | - | - | - | - | - | - | - | |
| | T9325 | 1.6 | 125 | 0.40 | 6.0 | 75 | 0.36 | 6.0 | 115 | 0.40 | 6.0 | - | - | - | - | - | - | - | |
| | T9335 | 1.6 | 100 | 0.40 | 6.0 | 60 | 0.36 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 270624E-RM | T7325 | 2.4 | 115 | 0.50 | 6.0 | 85 | 0.45 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| | T9325 | 2.4 | 120 | 0.50 | 6.0 | 70 | 0.45 | 6.0 | 110 | 0.50 | 6.0 | - | - | - | - | - | - | - | |
| | T9335 | 2.4 | 95 | 0.50 | 6.0 | 55 | 0.45 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 270632E-RM | T9335 | 3.2 | 90 | 0.60 | 6.0 | 50 | 0.54 | 6.0 | - | - | - | - | - | - | - | - | - | - | |
| TNMG 330924E-RM | T9226 | 2.4 | 100 | 0.50 | 10.0 | 60 | 0.45 | 10.0 | 95 | 0.50 | 10.0 | - | - | - | - | - | - | - | |
| | T9335 | 2.4 | 90 | 0.50 | 10.0 | 50 | 0.45 | 10.0 | - | - | - | - | - | - | - | - | - | - | |



SF geometry with positive design for fine-finish machining of thin walls and continuous cuts.

| | | | | | | | | | | | | | | | | | | | |
|-----------------|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|----|------|-----|----|------|
| TNMG 160404E-SF | H07 | 0.4 | - | - | - | 75 | 0.14 | 1.3 | 120 | 0.15 | 1.3 | 390 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | - | - |
| | T6310 | 0.4 | 150 | 0.15 | 1.3 | 105 | 0.14 | 1.3 | 120 | 0.15 | 1.3 | 450 | 0.18 | 1.3 | 45 | 0.12 | 1.0 | 30 | 0.15 |
| | T7325 | 0.4 | 170 | 0.17 | 1.3 | 130 | 0.15 | 1.3 | - | - | - | - | - | - | 55 | 0.15 | 1.0 | - | - |
| | T7335 | 0.4 | 165 | 0.17 | 1.3 | 125 | 0.15 | 1.3 | - | - | - | - | - | - | 50 | 0.15 | 1.0 | - | - |
| | T8315 | 0.4 | 160 | 0.15 | 1.3 | 95 | 0.14 | 1.3 | 150 | 0.15 | 1.3 | 480 | 0.18 | 1.3 | 40 | 0.12 | 1.0 | 30 | 0.15 |
| | T8330 | 0.4 | 150 | 0.15 | 1.3 | 90 | 0.14 | 1.3 | 140 | 0.15 | 1.3 | 450 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | 30 | 0.15 |
| | T8430 | 0.4 | 180 | 0.15 | 1.3 | 95 | 0.14 | 1.3 | 145 | 0.15 | 1.3 | 495 | 0.18 | 1.3 | 35 | 0.12 | 1.0 | 30 | 0.15 |
| | T9315 | 0.4 | 245 | 0.15 | 1.3 | - | - | - | 230 | 0.15 | 1.3 | - | - | - | - | - | - | 45 | 0.15 |
| | T9325 | 0.4 | 210 | 0.17 | 1.3 | 125 | 0.15 | 1.3 | 195 | 0.17 | 1.3 | - | - | - | 45 | 0.15 | 1.0 | - | - |