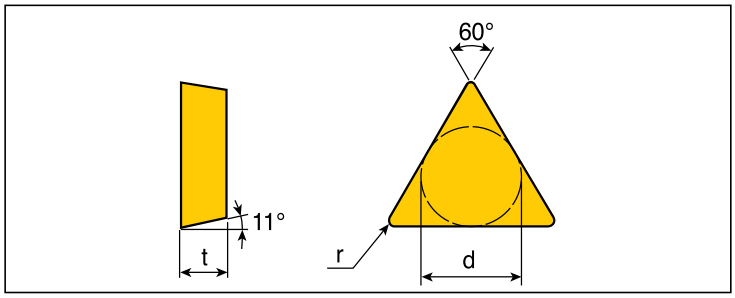
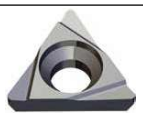
# TPGN TPGT TPGX TPMR

## Positive 11° Clearance Triangular Inserts




| Size | Dimension (mm) | | |
|---|---|---|---|
| | d | t | r |
| **09** | 5.56 | 2.38 | 0.2-0.8 |
| **11** | 6.35 | 3.18 | 0.2-0.8 |
| **16** | 9.52 | 3.18-4.76 | 0.2-1.2 |
| **22** | 12.7 | 4.76 | 0.4-3.0 |
| **27** | 15.88 | 6.35 | 0.8 |

| Insert | Designation | | feed (mm/rev) | ap (mm) | Cermet | | CVD Coated | | | | | | | | | | | PVD Coated | | | Uncoated | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PV3010 | CT3000 | TT7005 | TT7015 | TT7310 | TT8115 | TT8125 | TT8135 | TT9215 | TT9225 | TT9235 | TT5100 | TT7100 | TT5080 | TT8020 | TT9020 | P20 | P30 | K10 | K20 |
|  For Finishing | **TPGN** | **090204** | 0.07-0.20 | 0.5-3.0 | | | | | | | | | | | | | | | | | | | ● | |
| | | **110304** | 0.07-0.20 | 0.7-3.0 | | ● | | | | | | | | | | | | | | | ● | | ● | |
| | | **110308** | 0.10-0.25 | 1.0-3.0 | | | | | | ● | | | | | | | | | | | | | ● | |
| | | **160302** | 0.05-0.18 | 1.0-5.0 | | | | | | | | | | | | | | | | | | | | |
| | | **160304** | 0.07-0.20 | 1.0-5.0 | | ● | | | | ● | | | | | | | | | | | ● | | ● | |
| | | **160308** | 0.10-0.25 | 1.0-5.0 | | ● | | ● | | ● | ● | | | | | | | | | | ● | | ● | |
| | | **160312** | 0.15-0.30 | 1.0-5.0 | | | | | | | | | | | | | | | | | | | | |
| | | **220404** | 0.07-0.20 | 1.5-7.0 | | | | | | | | | | | | | | | | | ● | | ● | |
| | | **220408** | 0.10-0.25 | 1.5-7.0 | | | | | | | ● | | | | | | | | | | | | ● | |
| | | **220412** | 0.15-0.30 | 1.5-7.0 | | | | | | | | | | | | | | | | | ● | | | |
| | | **220416** | 0.20-0.35 | 1.5-7.0 | | | | | | | | | | | | | | | | | | | | |
| | | **220425** | 0.25-0.40 | 1.5-7.0 | | | | | | | | | | | | | | | | | | | | |
| | | **220430** | 0.30-0.45 | 1.5-7.0 | | | | | | | | | | | | | | | | | | ● | | |
| | | **270608** | 0.15-0.25 | 3.0-8.0 | | | | | | ● | | | | | | | | | | | | | | |
| Right Hand Shown For Finishing | **TPGT** | **090204 L-C** | 0.05-0.20 | 0.3-1.5 | | ● | | | | | | | | | | | | | | | | | | |
| | | **110304 L-C** | 0.05-0.20 | 0.5-2.0 | | ● | | | | | | | | | | | | | | | | | ● | |
| | | **110304 R-C** | 0.05-0.20 | 0.5-2.0 | | ● | | | | | | | | | | | | | | | | | | |
| | | **110308 L-C** | 0.07-0.25 | 0.5-2.0 | | ● | | | | | | | | | | | | | | | | | | |
| | | **160404 L-C** | 0.05-0.20 | 0.7-3.0 | | ● | | | | | | | | | | | | | | | | | | |
| | | **160404 R-C** | 0.05-0.20 | 0.7-3.0 | | ● | | | | | | | | | | | | | | | | | | |
|  Left Hand Shown For Finishing | **TPGX** | **090202 L** | 0.05-0.15 | 0.4-1.5 | | ● | | | | | | | | | | | | | | | | | | |
| | | **090204 L** | 0.08-0.20 | 0.6-1.5 | | ● | | | | | | | | | | | | | | | | | ● | |
| | | **110302 L** | 0.08-0.20 | 0.5-1.5 | | ● | | | | | | | | | | | | | | | | | | |
| | | **110302 R** | 0.08-0.20 | 0.5-1.5 | | | | | | | | | | | | | | | | | | | | |
| | | **110304 L** | 0.08-0.20 | 0.6-2.0 | | ● | | | | | | | | | | | | | | | | | ● | |
| | | **110304 R** | 0.08-0.20 | 0.6-2.0 | | ● | | | | | | | | | | | | | | | | | | |
| OLD For Medium | **TPMR** | **090204** | 0.10-0.25 | 0.5-2.0 | | | | | | | ● | | | | | | | | | | | | | |
| | | **090208** | 0.13-0.30 | 0.7-2.0 | | | | | | | ● | | | | | | | | | | | | | |
| | | **110304** ✓ | 0.10-0.25 | 0.7-3.0 | | ● | | | | ● | ● | | | | | ● | | | ● | | | | | |
| | | **110308** | 0.13-0.30 | 1.0-3.0 | | ● | | | | ● | ● | | | | | ● | | | | | | | | |
| | | **160304** ✓ | 0.10-0.25 | 1.0-5.0 | | ● | | ● | ○ | ● | ● | | | | | ● | | ● | ● | | | | | |
| | | **160308** | 0.13-0.30 | 1.0-5.0 | | ● | ● | | | ● | ● | | | | | ● | | ● | ● | | | | | |
| | | **160312** | 0.15-0.35 | 1.0-5.0 | | | | | | | | | | | | | | | | | | | | |
| | | **220404** ✓ | 0.10-0.25 | 1.0-7.0 | | | | | | | ● | | | | | ● | | | | | | | | |
| | | **220408** ✓ | 0.13-0.30 | 1.5-7.0 | | | ● | | | | ● | | | | | ● | | | | | | | | |
| | | **220412** ✓ | 0.15-0.35 | 1.5-7.0 | | | | | | | | | | | | | | | | | | | | |

●: Standard Items ○: Semi Standard Items ✓ Marked: Old type chip breaker

A39, A40, A122, A142, A143