

Grooving System

GY Series

New Inserts

GU Breaker
VP10RT
VP20RT

GM Breaker
NX2525

Grooving Revolution

Innovative clamping system ensures reliable grooving.

■ New GU breaker gives excellent chip control for mild steel grooving applications.

■ NX2525 cermet grade with GM chipbreaker for good surface finishes in carbon and alloy steel applications.

INSERTS

| Applications | Geometry | Order Number | Stock | | | | Seat Size | Dimensions (mm) | | | | |
|----------------------------|---|-----------------------------|--------|--------|--------|--------|-----------|-----------------|-----------|-----|-----------|-------|
| | | | Coated | | Cermet | | | W3 | | Re | ar (Max.) | L2 |
| | | | VP10RT | VP20RT | MY5015 | NX2525 | | Grooving Width | Tolerance | | | |
| For Grooving / Cutting off | GU Breaker (For Mild steel) | NEW GY2M0400G030N-GU | ● | ● | | | G | 4.00 | ±0.04 | 0.3 | 24.2 | 25.65 |
| | | NEW 0475H040N-GU | ● | ● | | | H | 4.75 | ±0.04 | 0.4 | 24.2 | 25.65 |
| | | NEW 0500H040N-GU | ● | ● | | | H | 5.00 | ±0.04 | 0.4 | 24.2 | 25.65 |
| | | NEW 0600J040N-GU | ● | ● | | | J | 6.00 | ±0.04 | 0.4 | 24.2 | 25.65 |
| | | NEW 0635J040N-GU | ● | ● | | | J | 6.35 | ±0.04 | 0.4 | 24.2 | 25.65 |
| | GM Breaker (Medium feeds) | GY2M0200D020N-GM | ● | ● | ● | ● | D | 2.00 | ±0.03 | 0.2 | 19.4 | 20.70 |
| | | 0239E020N-GM | ● | ● | ● | ● | E | 2.39 | ±0.03 | 0.2 | 19.4 | 20.70 |
| | | 0250E020N-GM | ● | ● | ● | ● | E | 2.50 | ±0.03 | 0.2 | 19.4 | 20.70 |
| | | 0300F030N-GM | ● | ● | ● | ● | F | 3.00 | ±0.03 | 0.3 | 19.4 | 20.70 |
| | | 0318F030N-GM | ● | ● | ● | ● | F | 3.18 | ±0.03 | 0.3 | 19.4 | 20.70 |
| | | 0400G030N-GM | ● | ● | ● | ● | G | 4.00 | ±0.04 | 0.3 | 24.4 | 25.65 |
| | | 0475H040N-GM | ● | ● | ● | ● | H | 4.75 | ±0.04 | 0.4 | 24.3 | 25.65 |
| | | 0500H040N-GM | ● | ● | ● | ● | H | 5.00 | ±0.04 | 0.4 | 24.3 | 25.65 |
| | | 0600J040N-GM | ● | ● | ● | ● | J | 6.00 | ±0.04 | 0.4 | 24.3 | 25.65 |
| | | 0635J040N-GM | ● | ● | ● | ● | J | 6.35 | ±0.04 | 0.4 | 24.3 | 25.65 |

● : Inventory maintained. (10 inserts in one case)

Recommended Cutting Speed [External Grooving]

| Work Material | Hardness | Grade | Cutting Speed (m/min) | | | | | |
|-----------------------------|-----------|--------|-----------------------|-----|-----|-----|-----|-----|
| | | | 50 | 100 | 150 | 200 | 250 | 300 |
| P Mild Steel | ≤160HB | VP20RT | | 100 | | 220 | | |
| | | VP10RT | | 110 | | 230 | | |
| | | MY5015 | | | 140 | | | 300 |
| | | NX2525 | | 90 | | 210 | | |
| Carbon Steel Alloy Steel | 160–280HB | VP20RT | | 80 | | 180 | | |
| | | VP10RT | | 90 | | 190 | | |
| | | MY5015 | | | 110 | | 250 | |
| | | NX2525 | | 70 | | 170 | | |
| | 280HB≤ | VP20RT | | 60 | | 140 | | |
| | | VP10RT | | 70 | | 150 | | |
| | | MY5015 | | | 90 | | 210 | |
| | | NX2525 | | 55 | | 135 | | |

(Note 1) VP20RT is the first recommended grade for materials other than hardened steel.

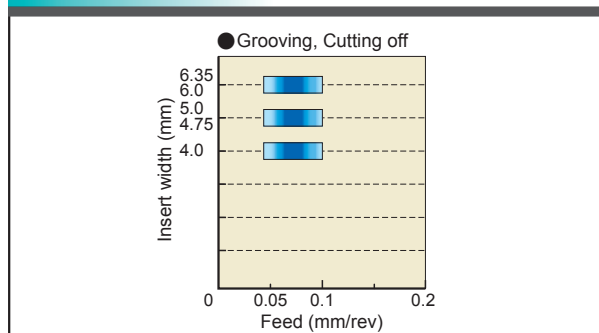
(Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

Recommended Feed Rate [External Grooving]

*Below are the recommended cutting conditions when using the modular holder GYHR/L2525M00-M25R/L with the modular blade GYM25○A-○.

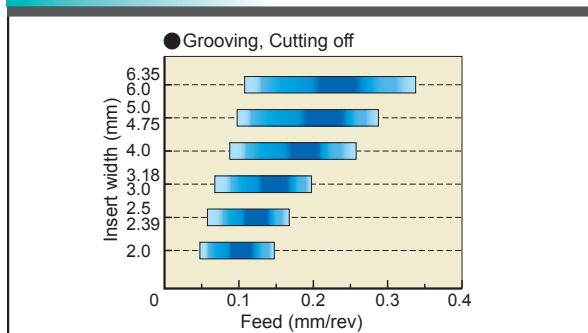
GU Breaker

■ : 1st recommended area



GM Breaker

■ : 1st recommended area



* For the recommended internal and face grooving cutting conditions, please refer to the brochure B140G.

For Your Safety

●Don't handle inserts and chips without gloves. ●Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage. ●Please use safety covers and wear safety glasses. ●When using compounded cutting oils, please take fire precautions. ●When attaching inserts or spare parts, please use only the correct wrench or spanner. ●When using rotating tools, please make a trial run to check run-out, vibration and abnormal sounds etc.

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(Tools specifications subject to change without notice.)