

鋼材細穴加工用 for Steels

マイクロドリル "NEO-PRO" ロング刃

Micro Drill "NEO-PRO" Series, Long Flute Length

FCSコーティング

ADRL-SV

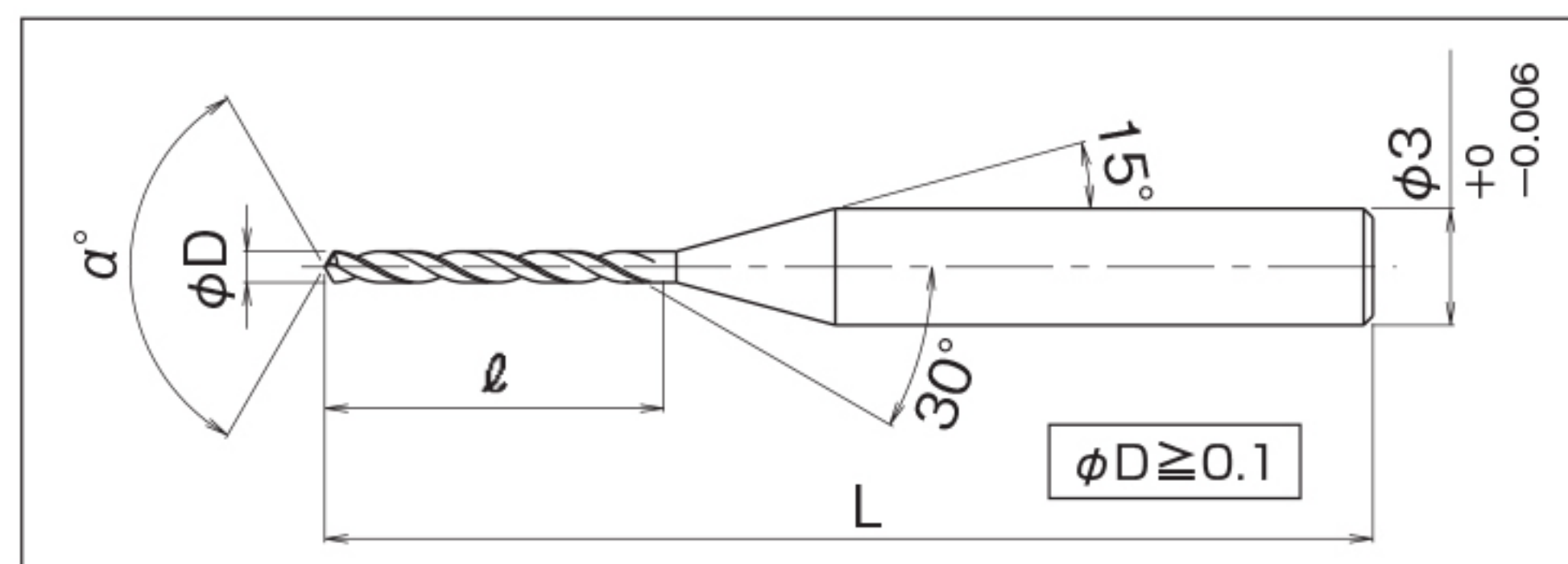


■ 鋼材細穴加工用に開発された安定した長寿命加工を実現するシリーズです。

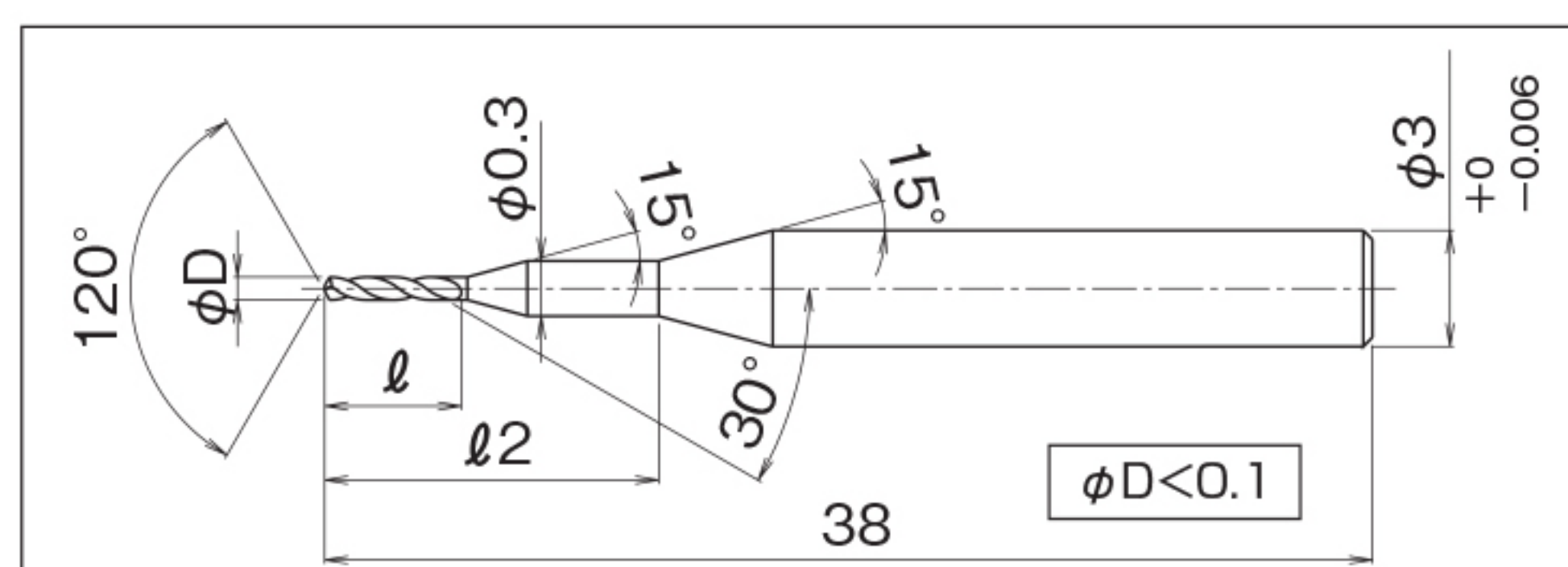
Stable long-lived machining can be achieved for precision small hole drilling of steels.

■ 軟鋼材から高硬度鋼 (HRC50) まで幅広い対応が可能なコーティングドリルです。

Wide drilling application is available from mild steel to hardened steel(HRC50)



$\phi D < 1.6: \alpha = 120^\circ$ $\phi D \ge 1.6: \alpha = 135^\circ$



$\ell 2 = 2.0$ $\phi D = \phi 0.02 \sim \phi 0.04$ $\ell 2 = 3.0$ $\phi D = \phi 0.05 \sim \phi 0.09$

刃径公差: $+0 \sim -0.005$
 ϕD Tolerance



単位 Unit : mm

| 型番 CODE NUMBER | 径 ϕD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------------|--------------|---------|-----------|---------|
| ADRL-SV-0003 | 0.03 | 0.6 | 38 | 3 | |
| ADRL-SV-0004 | 0.04 | 0.8 | 38 | 3 | |
| ADRL-SV-0005 | 0.05 | 1.1 | 38 | 3 | |
| ADRL-SV-0006 | 0.06 | 1.2 | 38 | 3 | |
| ADRL-SV-0007 | 0.07 | 1.4 | 38 | 3 | |
| ADRL-SV-0008 | 0.08 | 1.6 | 38 | 3 | |
| ADRL-SV-0009 | 0.09 | 1.8 | 38 | 3 | |
| ADRL-SV-0010 | 0.1 | 2.5 | 38 | 3 | |
| ADRL-SV-0011 | 0.11 | 2.5 | 38 | 3 | |
| ADRL-SV-0012 | 0.12 | 3 | 38 | 3 | |
| ADRL-SV-0013 | 0.13 | 3 | 38 | 3 | |
| ADRL-SV-0014 | 0.14 | 3 | 38 | 3 | |
| ADRL-SV-0015 | 0.15 | 4 | 38 | 3 | |
| ADRL-SV-0016 | 0.16 | 4 | 38 | 3 | |
| ADRL-SV-0017 | 0.17 | 4.5 | 38 | 3 | |
| ADRL-SV-0018 | 0.18 | 4.5 | 38 | 3 | |
| ADRL-SV-0019 | 0.19 | 4.5 | 38 | 3 | |
| ADRL-SV-0020 | 0.2 | 6 | 38 | 3 | |
| ADRL-SV-0021 | 0.21 | 6 | 38 | 3 | |
| ADRL-SV-0022 | 0.22 | 6 | 38 | 3 | |
| ADRL-SV-0023 | 0.23 | 6 | 38 | 3 | |
| ADRL-SV-0024 | 0.24 | 6 | 38 | 3 | |

| 型番 CODE NUMBER | 径 ϕD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------------|--------------|---------|-----------|---------|
| ADRL-SV-0025 | 0.25 | 7 | 38 | 3 | |
| ADRL-SV-0026 | 0.26 | 7 | 38 | 3 | |
| ADRL-SV-0027 | 0.27 | 7 | 38 | 3 | |
| ADRL-SV-0028 | 0.28 | 7 | 38 | 3 | |
| ADRL-SV-0029 | 0.29 | 7 | 38 | 3 | |
| ADRL-SV-0030 | 0.3 | 9 | 45 | 3 | |
| ADRL-SV-0031 | 0.31 | 9 | 45 | 3 | |
| ADRL-SV-0032 | 0.32 | 9 | 45 | 3 | |
| ADRL-SV-0033 | 0.33 | 9 | 45 | 3 | |
| ADRL-SV-0034 | 0.34 | 9 | 45 | 3 | |
| ADRL-SV-0035 | 0.35 | 10 | 45 | 3 | |
| ADRL-SV-0036 | 0.36 | 10 | 45 | 3 | |
| ADRL-SV-0037 | 0.37 | 10 | 45 | 3 | |
| ADRL-SV-0038 | 0.38 | 10 | 45 | 3 | |
| ADRL-SV-0039 | 0.39 | 10 | 45 | 3 | |
| ADRL-SV-0040 | 0.4 | 12 | 45 | 3 | |
| ADRL-SV-0041 | 0.41 | 12 | 45 | 3 | |
| ADRL-SV-0042 | 0.42 | 12 | 45 | 3 | |
| ADRL-SV-0043 | 0.43 | 12 | 45 | 3 | |
| ADRL-SV-0044 | 0.44 | 12 | 45 | 3 | |
| ADRL-SV-0045 | 0.45 | 12 | 45 | 3 | |
| ADRL-SV-0046 | 0.46 | 12 | 45 | 3 | |

単位 Unit : mm

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0047 | 0.47 | 12 | 45 | 3 | |
| ADRL-SV-0048 | 0.48 | 12 | 45 | 3 | |
| ADRL-SV-0049 | 0.49 | 12 | 45 | 3 | |
| ADRL-SV-0050 | 0.5 | 12 | 45 | 3 | |
| ADRL-SV-0051 | 0.51 | 12 | 45 | 3 | |
| ADRL-SV-0052 | 0.52 | 12 | 45 | 3 | |
| ADRL-SV-0053 | 0.53 | 12 | 45 | 3 | |
| ADRL-SV-0054 | 0.54 | 12 | 45 | 3 | |
| ADRL-SV-0055 | 0.55 | 12 | 45 | 3 | |
| ADRL-SV-0056 | 0.56 | 12 | 45 | 3 | |
| ADRL-SV-0057 | 0.57 | 12 | 45 | 3 | |
| ADRL-SV-0058 | 0.58 | 12 | 45 | 3 | |
| ADRL-SV-0059 | 0.59 | 12 | 45 | 3 | |
| ADRL-SV-0060 | 0.6 | 15 | 45 | 3 | |
| ADRL-SV-0061 | 0.61 | 15 | 45 | 3 | |
| ADRL-SV-0062 | 0.62 | 15 | 45 | 3 | |
| ADRL-SV-0063 | 0.63 | 15 | 45 | 3 | |
| ADRL-SV-0064 | 0.64 | 15 | 45 | 3 | |
| ADRL-SV-0065 | 0.65 | 15 | 45 | 3 | |
| ADRL-SV-0066 | 0.66 | 15 | 45 | 3 | |
| ADRL-SV-0067 | 0.67 | 15 | 45 | 3 | |
| ADRL-SV-0068 | 0.68 | 15 | 45 | 3 | |
| ADRL-SV-0069 | 0.69 | 15 | 45 | 3 | |
| ADRL-SV-0070 | 0.7 | 15 | 45 | 3 | |
| ADRL-SV-0071 | 0.71 | 15 | 45 | 3 | |
| ADRL-SV-0072 | 0.72 | 15 | 45 | 3 | |
| ADRL-SV-0073 | 0.73 | 15 | 45 | 3 | |
| ADRL-SV-0074 | 0.74 | 15 | 45 | 3 | |
| ADRL-SV-0075 | 0.75 | 15 | 45 | 3 | |
| ADRL-SV-0076 | 0.76 | 15 | 45 | 3 | |
| ADRL-SV-0077 | 0.77 | 15 | 45 | 3 | |
| ADRL-SV-0078 | 0.78 | 15 | 45 | 3 | |
| ADRL-SV-0079 | 0.79 | 15 | 45 | 3 | |
| ADRL-SV-0080 | 0.8 | 15 | 45 | 3 | |
| ADRL-SV-0081 | 0.81 | 15 | 45 | 3 | |
| ADRL-SV-0082 | 0.82 | 15 | 45 | 3 | |
| ADRL-SV-0083 | 0.83 | 15 | 45 | 3 | |
| ADRL-SV-0084 | 0.84 | 15 | 45 | 3 | |
| ADRL-SV-0085 | 0.85 | 15 | 45 | 3 | |
| ADRL-SV-0086 | 0.86 | 15 | 45 | 3 | |
| ADRL-SV-0087 | 0.87 | 15 | 45 | 3 | |
| ADRL-SV-0088 | 0.88 | 15 | 45 | 3 | |
| ADRL-SV-0089 | 0.89 | 15 | 45 | 3 | |
| ADRL-SV-0090 | 0.9 | 15 | 45 | 3 | |

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0091 | 0.91 | 15 | 45 | 3 | |
| ADRL-SV-0092 | 0.92 | 15 | 45 | 3 | |
| ADRL-SV-0093 | 0.93 | 15 | 45 | 3 | |
| ADRL-SV-0094 | 0.94 | 15 | 45 | 3 | |
| ADRL-SV-0095 | 0.95 | 15 | 45 | 3 | |
| ADRL-SV-0096 | 0.96 | 15 | 45 | 3 | |
| ADRL-SV-0097 | 0.97 | 15 | 45 | 3 | |
| ADRL-SV-0098 | 0.98 | 15 | 45 | 3 | |
| ADRL-SV-0099 | 0.99 | 15 | 45 | 3 | |
| ADRL-SV-0100 | 1 | 20 | 50 | 3 | |
| ADRL-SV-0101 | 1.01 | 20 | 50 | 3 | |
| ADRL-SV-0102 | 1.02 | 20 | 50 | 3 | |
| ADRL-SV-0103 | 1.03 | 20 | 50 | 3 | |
| ADRL-SV-0104 | 1.04 | 20 | 50 | 3 | |
| ADRL-SV-0105 | 1.05 | 20 | 50 | 3 | |
| ADRL-SV-0106 | 1.06 | 20 | 50 | 3 | |
| ADRL-SV-0107 | 1.07 | 20 | 50 | 3 | |
| ADRL-SV-0108 | 1.08 | 20 | 50 | 3 | |
| ADRL-SV-0109 | 1.09 | 20 | 50 | 3 | |
| ADRL-SV-0110 | 1.1 | 20 | 50 | 3 | |
| ADRL-SV-0111 | 1.11 | 20 | 50 | 3 | |
| ADRL-SV-0112 | 1.12 | 20 | 50 | 3 | |
| ADRL-SV-0113 | 1.13 | 20 | 50 | 3 | |
| ADRL-SV-0114 | 1.14 | 20 | 50 | 3 | |
| ADRL-SV-0115 | 1.15 | 20 | 50 | 3 | |
| ADRL-SV-0116 | 1.16 | 20 | 50 | 3 | |
| ADRL-SV-0117 | 1.17 | 20 | 50 | 3 | |
| ADRL-SV-0118 | 1.18 | 20 | 50 | 3 | |
| ADRL-SV-0119 | 1.19 | 20 | 50 | 3 | |
| ADRL-SV-0120 | 1.2 | 20 | 50 | 3 | |
| ADRL-SV-0121 | 1.21 | 20 | 50 | 3 | |
| ADRL-SV-0122 | 1.22 | 20 | 50 | 3 | |
| ADRL-SV-0123 | 1.23 | 20 | 50 | 3 | |
| ADRL-SV-0124 | 1.24 | 20 | 50 | 3 | |
| ADRL-SV-0125 | 1.25 | 20 | 50 | 3 | |
| ADRL-SV-0126 | 1.26 | 20 | 50 | 3 | |
| ADRL-SV-0127 | 1.27 | 20 | 50 | 3 | |
| ADRL-SV-0128 | 1.28 | 20 | 50 | 3 | |
| ADRL-SV-0129 | 1.29 | 20 | 50 | 3 | |
| ADRL-SV-0130 | 1.3 | 25 | 60 | 3 | |
| ADRL-SV-0131 | 1.31 | 25 | 60 | 3 | |
| ADRL-SV-0132 | 1.32 | 25 | 60 | 3 | |
| ADRL-SV-0133 | 1.33 | 25 | 60 | 3 | |
| ADRL-SV-0134 | 1.34 | 25 | 60 | 3 | |

超マイクロ
Micro Drill

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切削条件 Cutting Condition P.156

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0135 | 1.35 | 25 | 60 | 3 | |
| ADRL-SV-0136 | 1.36 | 25 | 60 | 3 | |
| ADRL-SV-0137 | 1.37 | 25 | 60 | 3 | |
| ADRL-SV-0138 | 1.38 | 25 | 60 | 3 | |
| ADRL-SV-0139 | 1.39 | 25 | 60 | 3 | |
| ADRL-SV-0140 | 1.4 | 25 | 60 | 3 | |
| ADRL-SV-0141 | 1.41 | 25 | 60 | 3 | |
| ADRL-SV-0142 | 1.42 | 25 | 60 | 3 | |
| ADRL-SV-0143 | 1.43 | 25 | 60 | 3 | |
| ADRL-SV-0144 | 1.44 | 25 | 60 | 3 | |
| ADRL-SV-0145 | 1.45 | 25 | 60 | 3 | |
| ADRL-SV-0146 | 1.46 | 25 | 60 | 3 | |
| ADRL-SV-0147 | 1.47 | 25 | 60 | 3 | |
| ADRL-SV-0148 | 1.48 | 25 | 60 | 3 | |
| ADRL-SV-0149 | 1.49 | 25 | 60 | 3 | |
| ADRL-SV-0150 | 1.5 | 25 | 60 | 3 | |
| ADRL-SV-0151 | 1.51 | 25 | 60 | 3 | |
| ADRL-SV-0152 | 1.52 | 25 | 60 | 3 | |
| ADRL-SV-0153 | 1.53 | 25 | 60 | 3 | |
| ADRL-SV-0154 | 1.54 | 25 | 60 | 3 | |
| ADRL-SV-0155 | 1.55 | 25 | 60 | 3 | |
| ADRL-SV-0156 | 1.56 | 25 | 60 | 3 | |
| ADRL-SV-0157 | 1.57 | 25 | 60 | 3 | |
| ADRL-SV-0158 | 1.58 | 25 | 60 | 3 | |
| ADRL-SV-0159 | 1.59 | 25 | 60 | 3 | |
| ADRL-SV-0160 | 1.6 | 32 | 60 | 3 | |
| ADRL-SV-0161 | 1.61 | 32 | 60 | 3 | |
| ADRL-SV-0162 | 1.62 | 32 | 60 | 3 | |
| ADRL-SV-0163 | 1.63 | 32 | 60 | 3 | |
| ADRL-SV-0164 | 1.64 | 32 | 60 | 3 | |
| ADRL-SV-0165 | 1.65 | 32 | 60 | 3 | |
| ADRL-SV-0166 | 1.66 | 32 | 60 | 3 | |
| ADRL-SV-0167 | 1.67 | 32 | 60 | 3 | |
| ADRL-SV-0168 | 1.68 | 32 | 60 | 3 | |
| ADRL-SV-0169 | 1.69 | 32 | 60 | 3 | |
| ADRL-SV-0170 | 1.7 | 32 | 60 | 3 | |
| ADRL-SV-0171 | 1.71 | 32 | 60 | 3 | |
| ADRL-SV-0172 | 1.72 | 32 | 60 | 3 | |
| ADRL-SV-0173 | 1.73 | 32 | 60 | 3 | |
| ADRL-SV-0174 | 1.74 | 32 | 60 | 3 | |
| ADRL-SV-0175 | 1.75 | 32 | 60 | 3 | |
| ADRL-SV-0176 | 1.76 | 32 | 60 | 3 | |
| ADRL-SV-0177 | 1.77 | 32 | 60 | 3 | |
| ADRL-SV-0178 | 1.78 | 32 | 60 | 3 | |

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0179 | 1.79 | 32 | 60 | 3 | |
| ADRL-SV-0180 | 1.8 | 32 | 60 | 3 | |
| ADRL-SV-0181 | 1.81 | 32 | 60 | 3 | |
| ADRL-SV-0182 | 1.82 | 32 | 60 | 3 | |
| ADRL-SV-0183 | 1.83 | 32 | 60 | 3 | |
| ADRL-SV-0184 | 1.84 | 32 | 60 | 3 | |
| ADRL-SV-0185 | 1.85 | 32 | 60 | 3 | |
| ADRL-SV-0186 | 1.86 | 32 | 60 | 3 | |
| ADRL-SV-0187 | 1.87 | 32 | 60 | 3 | |
| ADRL-SV-0188 | 1.88 | 32 | 60 | 3 | |
| ADRL-SV-0189 | 1.89 | 32 | 60 | 3 | |
| ADRL-SV-0190 | 1.9 | 32 | 60 | 3 | |
| ADRL-SV-0191 | 1.91 | 32 | 60 | 3 | |
| ADRL-SV-0192 | 1.92 | 32 | 60 | 3 | |
| ADRL-SV-0193 | 1.93 | 32 | 60 | 3 | |
| ADRL-SV-0194 | 1.94 | 32 | 60 | 3 | |
| ADRL-SV-0195 | 1.95 | 32 | 60 | 3 | |
| ADRL-SV-0196 | 1.96 | 32 | 60 | 3 | |
| ADRL-SV-0197 | 1.97 | 32 | 60 | 3 | |
| ADRL-SV-0198 | 1.98 | 32 | 60 | 3 | |
| ADRL-SV-0199 | 1.99 | 32 | 60 | 3 | |
| ADRL-SV-0200 | 2 | 32 | 60 | 3 | |
| ADRL-SV-0201 | 2.01 | 32 | 60 | 3 | |
| ADRL-SV-0202 | 2.02 | 32 | 60 | 3 | |
| ADRL-SV-0203 | 2.03 | 32 | 60 | 3 | |
| ADRL-SV-0204 | 2.04 | 32 | 60 | 3 | |
| ADRL-SV-0205 | 2.05 | 32 | 60 | 3 | |
| ADRL-SV-0206 | 2.06 | 32 | 60 | 3 | |
| ADRL-SV-0207 | 2.07 | 32 | 60 | 3 | |
| ADRL-SV-0208 | 2.08 | 32 | 60 | 3 | |
| ADRL-SV-0209 | 2.09 | 32 | 60 | 3 | |
| ADRL-SV-0210 | 2.1 | 32 | 60 | 3 | |
| ADRL-SV-0211 | 2.11 | 32 | 60 | 3 | |
| ADRL-SV-0212 | 2.12 | 32 | 60 | 3 | |
| ADRL-SV-0213 | 2.13 | 32 | 60 | 3 | |
| ADRL-SV-0214 | 2.14 | 32 | 60 | 3 | |
| ADRL-SV-0215 | 2.15 | 32 | 60 | 3 | |
| ADRL-SV-0216 | 2.16 | 32 | 60 | 3 | |
| ADRL-SV-0217 | 2.17 | 32 | 60 | 3 | |
| ADRL-SV-0218 | 2.18 | 32 | 60 | 3 | |
| ADRL-SV-0219 | 2.19 | 32 | 60 | 3 | |
| ADRL-SV-0220 | 2.2 | 32 | 60 | 3 | |
| ADRL-SV-0221 | 2.21 | 32 | 60 | 3 | |
| ADRL-SV-0222 | 2.22 | 32 | 60 | 3 | |

単位 Unit : mm

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0223 | 2.23 | 32 | 60 | 3 | |
| ADRL-SV-0224 | 2.24 | 32 | 60 | 3 | |
| ADRL-SV-0225 | 2.25 | 32 | 60 | 3 | |
| ADRL-SV-0226 | 2.26 | 32 | 60 | 3 | |
| ADRL-SV-0227 | 2.27 | 32 | 60 | 3 | |
| ADRL-SV-0228 | 2.28 | 32 | 60 | 3 | |
| ADRL-SV-0229 | 2.29 | 32 | 60 | 3 | |
| ADRL-SV-0230 | 2.3 | 32 | 60 | 3 | |
| ADRL-SV-0231 | 2.31 | 32 | 60 | 3 | |
| ADRL-SV-0232 | 2.32 | 32 | 60 | 3 | |
| ADRL-SV-0233 | 2.33 | 32 | 60 | 3 | |
| ADRL-SV-0234 | 2.34 | 32 | 60 | 3 | |
| ADRL-SV-0235 | 2.35 | 32 | 60 | 3 | |
| ADRL-SV-0236 | 2.36 | 32 | 60 | 3 | |
| ADRL-SV-0237 | 2.37 | 32 | 60 | 3 | |
| ADRL-SV-0238 | 2.38 | 32 | 60 | 3 | |
| ADRL-SV-0239 | 2.39 | 32 | 60 | 3 | |
| ADRL-SV-0240 | 2.4 | 32 | 60 | 3 | |
| ADRL-SV-0241 | 2.41 | 32 | 60 | 3 | |
| ADRL-SV-0242 | 2.42 | 32 | 60 | 3 | |
| ADRL-SV-0243 | 2.43 | 32 | 60 | 3 | |
| ADRL-SV-0244 | 2.44 | 32 | 60 | 3 | |
| ADRL-SV-0245 | 2.45 | 32 | 60 | 3 | |
| ADRL-SV-0246 | 2.46 | 32 | 60 | 3 | |
| ADRL-SV-0247 | 2.47 | 32 | 60 | 3 | |
| ADRL-SV-0248 | 2.48 | 32 | 60 | 3 | |
| ADRL-SV-0249 | 2.49 | 32 | 60 | 3 | |
| ADRL-SV-0250 | 2.5 | 32 | 60 | 3 | |
| ADRL-SV-0251 | 2.51 | 32 | 60 | 3 | |
| ADRL-SV-0252 | 2.52 | 32 | 60 | 3 | |
| ADRL-SV-0253 | 2.53 | 32 | 60 | 3 | |
| ADRL-SV-0254 | 2.54 | 32 | 60 | 3 | |
| ADRL-SV-0255 | 2.55 | 32 | 60 | 3 | |
| ADRL-SV-0256 | 2.56 | 32 | 60 | 3 | |
| ADRL-SV-0257 | 2.57 | 32 | 60 | 3 | |
| ADRL-SV-0258 | 2.58 | 32 | 60 | 3 | |
| ADRL-SV-0259 | 2.59 | 32 | 60 | 3 | |
| ADRL-SV-0260 | 2.6 | 32 | 60 | 3 | |
| ADRL-SV-0261 | 2.61 | 32 | 60 | 3 | |
| ADRL-SV-0262 | 2.62 | 32 | 60 | 3 | |
| ADRL-SV-0263 | 2.63 | 32 | 60 | 3 | |
| ADRL-SV-0264 | 2.64 | 32 | 60 | 3 | |
| ADRL-SV-0265 | 2.65 | 32 | 60 | 3 | |
| ADRL-SV-0266 | 2.66 | 32 | 60 | 3 | |

| 型番 CODE NUMBER | 径 φD | 刃長 ℓ | 全長 L | シャンク d | 定価 ¥ |
|-------------------|---------|---------|---------|-----------|---------|
| ADRL-SV-0267 | 2.67 | 32 | 60 | 3 | |
| ADRL-SV-0268 | 2.68 | 32 | 60 | 3 | |
| ADRL-SV-0269 | 2.69 | 32 | 60 | 3 | |
| ADRL-SV-0270 | 2.7 | 40 | 65 | 3 | |
| ADRL-SV-0271 | 2.71 | 40 | 65 | 3 | |
| ADRL-SV-0272 | 2.72 | 40 | 65 | 3 | |
| ADRL-SV-0273 | 2.73 | 40 | 65 | 3 | |
| ADRL-SV-0274 | 2.74 | 40 | 65 | 3 | |
| ADRL-SV-0275 | 2.75 | 40 | 65 | 3 | |
| ADRL-SV-0276 | 2.76 | 40 | 65 | 3 | |
| ADRL-SV-0277 | 2.77 | 40 | 65 | 3 | |
| ADRL-SV-0278 | 2.78 | 40 | 65 | 3 | |
| ADRL-SV-0279 | 2.79 | 40 | 65 | 3 | |
| ADRL-SV-0280 | 2.8 | 40 | 65 | 3 | |
| ADRL-SV-0281 | 2.81 | 40 | 65 | 3 | |
| ADRL-SV-0282 | 2.82 | 40 | 65 | 3 | |
| ADRL-SV-0283 | 2.83 | 40 | 65 | 3 | |
| ADRL-SV-0284 | 2.84 | 40 | 65 | 3 | |
| ADRL-SV-0285 | 2.85 | 40 | 65 | 3 | |
| ADRL-SV-0286 | 2.86 | 40 | 65 | 3 | |
| ADRL-SV-0287 | 2.87 | 40 | 65 | 3 | |
| ADRL-SV-0288 | 2.88 | 40 | 65 | 3 | |
| ADRL-SV-0289 | 2.89 | 40 | 65 | 3 | |
| ADRL-SV-0290 | 2.9 | 40 | 65 | 3 | |
| ADRL-SV-0291 | 2.91 | 40 | 65 | 3 | |
| ADRL-SV-0292 | 2.92 | 40 | 65 | 3 | |
| ADRL-SV-0293 | 2.93 | 40 | 65 | 3 | |
| ADRL-SV-0294 | 2.94 | 40 | 65 | 3 | |
| ADRL-SV-0295 | 2.95 | 40 | 65 | 3 | |
| ADRL-SV-0296 | 2.96 | 40 | 65 | 3 | |
| ADRL-SV-0297 | 2.97 | 40 | 65 | 3 | |
| ADRL-SV-0298 | 2.98 | 40 | 65 | 3 | |
| ADRL-SV-0299 | 2.99 | 40 | 65 | 3 | |
| ADRL-SV-0300 | 3 | 40 | 65 | 3 | |
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ADR-SV/ADRS-SV/ADRSL-SV/ADRL-SV マイクロドリル“NEO-PRO”シリーズ 鋼材細穴加工用 Micro Drill "NEO-PRO"Series

| 被削材 Work Materials | 炭素鋼・合金鋼・工具鋼 Steel | | | | | | ステンレス Stainless Steel | | | |
|--------------------------|---|-------------------------|---|-------------------------|--|-------------------------|---|-------------------------|--|-------------------------|
| | 炭素鋼 Carbon steel SS S50C | | 合金鋼 Alloy Steel SCM SKS | | 調質鋼 Hardened Steel NAK SKD (HRC30~38) | | SUS304等 オーステナイト系 SUS304/316 Austenitic | | マルテンサイト・ フェライト系 SUS420/430 Martensitic & Ferritic | |
| 条件 先端径 | 回転数 Rotation (min ⁻¹) | 送り量 Feed (mm/rev) | 回転数 Rotation (min ⁻¹) | 送り量 Feed (mm/rev) | 回転数 Rotation (min ⁻¹) | 送り量 Feed (mm/rev) | 回転数 Rotation (min ⁻¹) | 送り量 Feed (mm/rev) | 回転数 Rotation (min ⁻¹) | 送り量 Feed (mm/rev) |
| φ0.03~ 0.09 | 10,000→ 20,000 | 0.001 ~ 0.0015 | 10,000→ 20,000 | 0.001 ~ 0.0015 | 10,000→ 20,000 | 0.001 | 10,000→ 15,000 | 0.001 ~ 0.0015 | 10,000→ 20,000 | 0.001 ~ 0.002 |
| φ0.1~ 0.29 | 25,000~ 20,000 | 0.002~ 0.01 | 20,000~ 15,000 | 0.0015~ 0.007 | 17,000~ 13,000 | 0.001~ 0.004 | 15,000 ~ 7,500 | 0.0005~ 0.001 | 20,000~ 13,000 | 0.0005~ 0.001 |
| φ0.3~ 0.49 | 20,000~ 18,000 | 0.01~ 0.02 | 15,000 | 0.007~ 0.01 | 13,000~ 10,000 | 0.003~ 0.005 | 10,000 ~ 8,000 | 0.002 ~ 0.01 | 13,000~ 9,500 | 0.002~ 0.01 |
| φ0.5~ 0.99 | 18,000~ 15,000 | 0.02~ 0.04 | 15,000~ 9,500 | 0.01~ 0.02 | 10,000~ 7,000 | 0.005~ 0.01 | 8,000 ~ 6,000 | 0.015 ~ 0.02 | 9,500~ 7,000 | 0.015~ 0.02 |
| φ1~ 1.99 | 15,000~ 9,500 | 0.03~ 0.06 | 9,500~ 6,000 | 0.02~ 0.05 | 7,000~ 4,000 | 0.01~ 0.03 | 6,000 ~ 4,000 | 0.02 ~ 0.04 | 7,000~ 4,000 | 0.02~ 0.04 |
| φ2.0~ 3.0 | 9,500~ 6,300 | 0.07~ 0.1 | 6,000~ 4,800 | 0.05~ 0.08 | 4,000~ 3,000 | 0.02~ 0.04 | 4,000 ~ 3,700 | 0.03~ 0.05 | 4,000~ 3,000 | 0.03~ 0.05 |

▶ステップ送り量：φ0.03~φ0.4：ドリル径×10%~20% (0.1D~0.2D)

Step Feed φ0.5~φ1.0：ドリル径×20%~30% (0.2D)
φ1.0以上：ドリル径×30%~50% (0.3D~0.5D)

備考

- 1) 細穴、特にφ1.0以下の穴あけ加工の場合には、ガイド穴（センター穴）を施した上で穴加工を行って下さい。
ドリル食い付き時の破損・チッピングを防ぎます。
- 2) チャッキング時のドリル振れ精度は0.003mm以下に抑えて下さい。
- 3) ご使用の機械の最高回転数が上記切削条件に達しない場合は、なるべく安定領域での高い回転数でご使用下さい。
その場合送り量も同じ比率で下げて下さい。
- 4) ドリルφ0.5以下ご使用の場合は、上記切削条件よりもご使用のスピンドル精度が最も安定する回転数を優先させて下さい。

Remarks:

- 1) When drilling smaller hole, especially under φ 1.0mm, the guide hole(positioning by starting drill) is necessary.
It prevents the drill breakage and initial chipping of cutting edge.
- 2) The run out with a drill in a spindle should be minimized to less than 0.003mm.
- 3) When machines can not achieve a recommended rotation speed, please set maximum speed but in stable rotation range and adjust the feed rate.
- 4) For smaller drills under φ0.5, the most stable rotation speed of actually using spindle has higher priority than recommended conditions shown in the table.