



T-MINI Boring bars

- Minimum bore diameter as small as .197" (5mm)
- Carbide and steel shanks
- Right hand and left hand

T-MINI Inserts

Shapes:

- CCGT
- TBGT
- WBG
- VCMT/VCGT

Sizes:

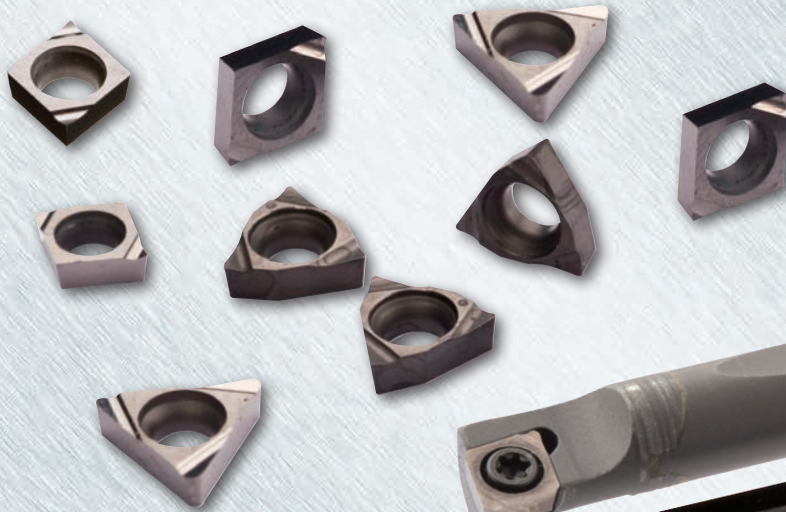
- .138" - .250" (3.50mm - 6.35mm)

Grade:

- CT3000 - Uncoated Cermet
 - TT9020 - PVD coated carbide **NEW!**
- Right hand and left hand styles

T-MINI Sleeves

- Inch: .625" OD
.750" OD **NEW!**
- Metric: 16mm OD



INDEXABLE SYSTEM OF BORING BARS AND INSERTS FOR SMALL COMPONENT MACHINING

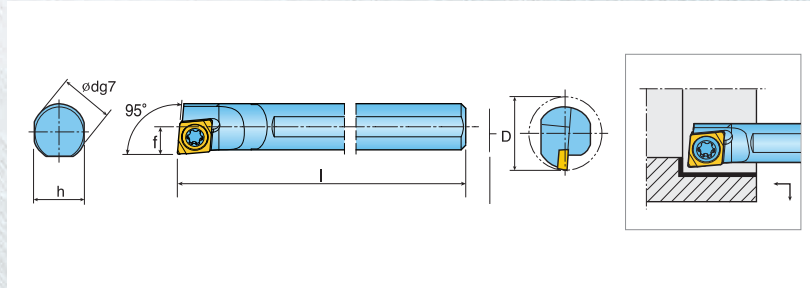
To meet the increasing demand for boring small parts such as machined medical implant devices and micro-sized electronic components, Ingersoll introduces a new line of miniature, indexable boring bars and inserts.




The unique T•MINI boring bar configuration improves chip evacuation and can be applied in boring applications where the minimum bore diameter is as small as .197" (5mm). Optional 16mm and .625" sleeves are available to provide a simple and secure means of holding of the boring bars.

T•MINI inserts feature sharp cutting edges that help lower cutting forces and vibration. This enables precision turning and excellent surface finish capabilities. Inserts are available in ground and pressed versions depending on the shape, and contain a smooth, homogenous surface finish that prevents chipping while extending tool life.



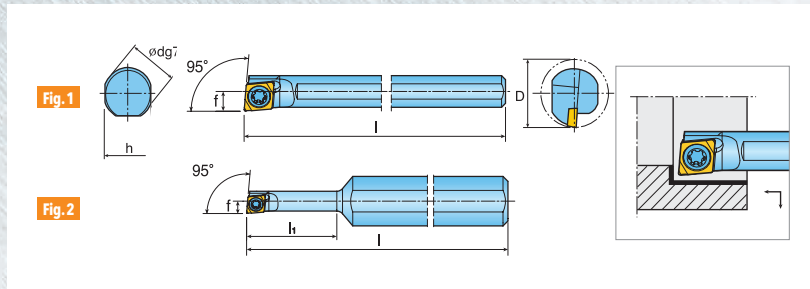
C-SCLCR/L (CARBIDE SHANK)






| DESIGNATION | R | L | d | Dimensions (inch) | | | ϕD min |  |  |  |
|---------------------|---|---|------------|-------------------|------|------|--------------|---|---|---|
| | | | | h | l | f | | | | |
| C04G-SCLCR/L 03-D05 | • | • | .157 (4mm) | .148 | 3.54 | .098 | .197 (5mm) | CC□T1.10.9□□ (CC□T 0301□□) | TS 16031I | T 6 |
| C05H-SCLCR/L 03-D06 | • | • | .197 (5mm) | .187 | 3.94 | .098 | .236 (6mm) | CC□T1.41.1□□ (CC□T 0401□□) | TS 20038I/ HG-P | T 6P |
| C06J-SCLCR/L 04-D07 | • | • | .236 (6mm) | .217 | 4.33 | .098 | .276 (7mm) | | | |
| C07K-SCLCR/L 04-D08 | • | • | .276 (7mm) | .256 | 4.92 | .098 | .315 (8mm) | | | |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

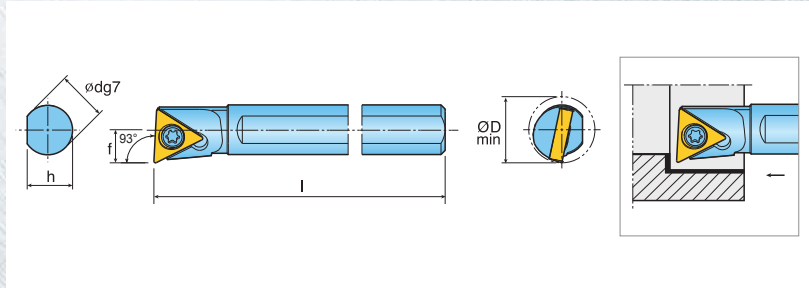
S-SCLCR/L (STEEL SHANK)



| DESIGNATION | R | L | d | Dimensions (inch) | | | ϕD min |  |  |  | SHAPE |
|---------------------|---|---|-------------|-------------------|------|------|--------------|---|---|---|-------|
| | | | | h | l | l1 | | | | | |
| S04F-SCLCR/L 03-D05 | • | • | .157 (4mm) | .148 | 3.15 | .098 | .197 (5mm) | CC□T1.10.9□□ (CC□T 0301□□) | TS 16031I | T 6 | Fig 1 |
| S05G-SCLCR/L 03-D06 | • | • | .197 (5mm) | .187 | 3.54 | .118 | .236 (6mm) | CC□T1.41.1□□ (CC□T 0401□□) | TS 20038I/ HG-P | T 6P | Fig 1 |
| S06H-SCLCR/L 04-D07 | • | • | .236 (6mm) | .217 | 3.94 | .138 | .276 (7mm) | | | | |
| S07J-SCLCR/L 04-D08 | • | • | .276 (7mm) | .256 | 4.33 | .157 | .315 (8mm) | | | | |
| S10H-SCLCR/L 03-D05 | • | • | .394 (10mm) | .354 | 3.94 | .591 | .197 (5mm) | CC□T1.10.9□□ (CC□T 0301□□) | TS 16031I | T 6 | Fig 2 |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

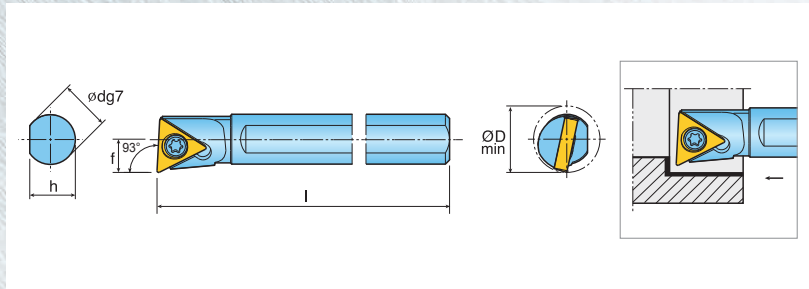
C-STUBR/L (CARBIDE SHANK)



| DESIGNATION | R | L | Dimensions (inch) | | | | | ØD min | Insert | Screw | Wrench |
|---------------------|---|---|-------------------|------|------|------|---------------|-----------------------------|--------------------|-------|--------|
| | | | d | h | l | f | | | | | |
| C06J-STUBR/L 06-D08 | • | • | .236 (6mm) | .217 | 4.33 | .157 | .315 (8mm) | TB□T1.21□□ (TB□T 0601□□) | TS 20043I/ HG-P | T 6P | |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

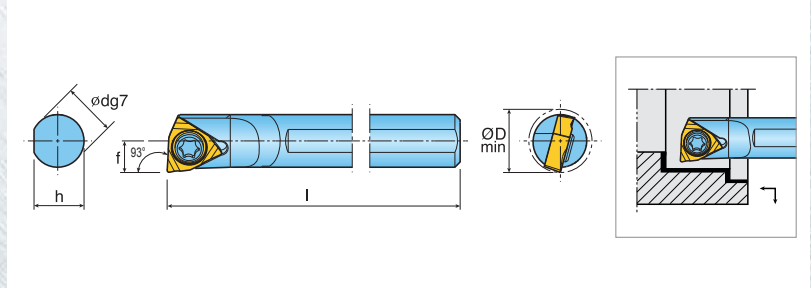
S-STUBR/L (STEEL SHANK)



| DESIGNATION | R | L | Dimensions (inch) | | | | | ØD min | Insert | Screw | Wrench |
|---------------------|---|---|-------------------|------|------|------|---------------|-----------------------------|--------------------|-------|--------|
| | | | d | h | l | f | | | | | |
| S06H-STUBR/L 06-D08 | • | • | .236 (6mm) | .217 | 3.94 | .157 | .315 (8mm) | TB□T1.21□□ (TB□T 0601□□) | TS 20043I/ HG-P | T 6P | |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

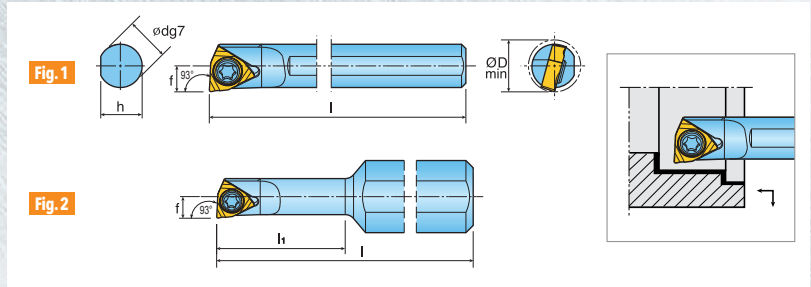
C-SWUBR/L (CARBIDE SHANK)



| DESIGNATION | R | L | d | Dimensions (inch) | | | | ØD min | Insert | Screw | Wrench |
|---------------------|---|---|------------|-------------------|------|------|------------|-----------------------------|--------------------|-----------|------------|
| | | | | h | l | f | | | | | |
| C05H-SWUBR/L 06-D06 | • | • | .197 (5mm) | .187 | 3.94 | .118 | .236 (6mm) | WB□T1.21□□ (WB□T 0601□□) | TS 200381/ HG-P | T 6P | |
| C06J-SWUBR/L 06-D07 | • | • | .236 (6mm) | .217 | 4.33 | .138 | .276 (7mm) | | | | |
| C07K-SWUBR/L 06-D08 | • | • | .276 (7mm) | .256 | 4.92 | .157 | .315 (8mm) | | | | |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

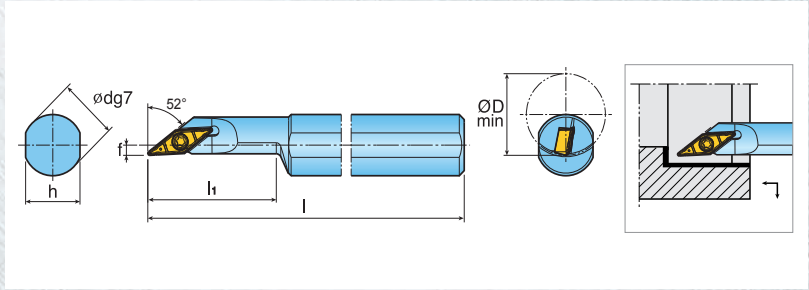
S-SWUBR/L (STEEL SHANK)






| DESIGNATION | R | L | d | Dimensions (inch) | | | | ØD min | Insert | Screw | Wrench | SHAPE |
|---------------------|---|---|-------------|-------------------|------|------|------|------------|-----------------------------|--------------------|------------|-------|
| | | | | h | l | l1 | f | | | | | |
| S05G-SWUBR/L 06-D06 | • | • | .197 (5mm) | .187 | 3.54 | - | .118 | .236 (6mm) | WB□T1.21□□ (WB□T 0601□□) | TS 200381/ HG-P | T 6P | Fig 1 |
| S06H-SWUBR/L 06-D07 | • | • | .236 (6mm) | .217 | 4.33 | - | .138 | .276 (7mm) | | | | |
| S07J-SWUBR/L 06-D08 | • | • | .276 (7mm) | .256 | 4.33 | - | .157 | .315 (8mm) | | | | Fig 2 |
| S10H-SWUBR/L 06-D06 | • | • | .394 (10mm) | .354 | 3.94 | .709 | .118 | .236 (6mm) | | | | |

• Marked: Standard items
L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

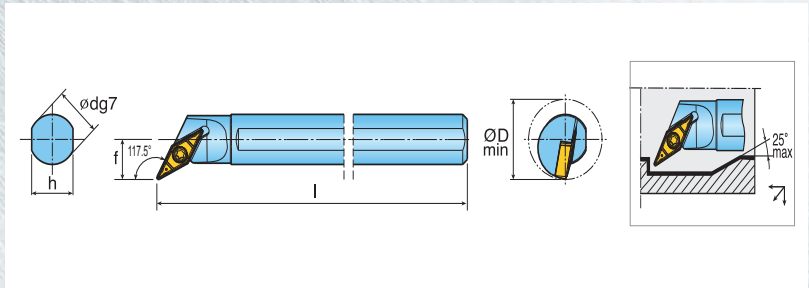
S-SVJCR/L (STEEL SHANK)






| DESIGNATION | R | L | d | Dimensions (inch) | | | | | ϕD_{min} |  Insert |  Screw |  Wrench |
|---------------------|---|---|-------------|-------------------|------|----------------|------|-------------|-------------------------------|---|--|---|
| | | | | h | l | l ₁ | f | | | | | |
| S12M-SVJCR/L 08-D16 | • | • | .472 (12mm) | .433 | 5.91 | 1.02 | .079 | .630 (16mm) | VC□T1.51.5□□ (VC□T 0802□□) | TS 20038I/ HG-P | T 6P | |
| S16Q-SVJCR/L 08-D20 | • | • | .630 (16mm) | .591 | 7.09 | 1.42 | .079 | .787 (20mm) | | | | |

• Marked: Standard items

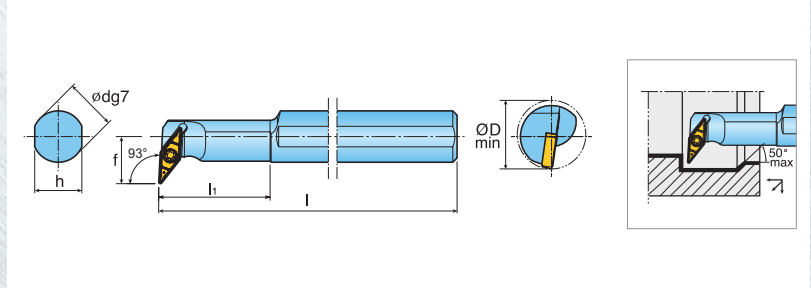
S-SVPCR/L (STEEL SHANK)



| DESIGNATION | R | L | d | Dimensions (inch) | | | | | ϕD_{min} |  Insert |  Screw |  Wrench |
|---------------------|---|---|-------------|-------------------|------|------|-------------|-------------------------------|--------------------|---|--|---|
| | | | | h | l | f | | | | | | |
| S10K-SVPCR/L 08-D16 | • | • | .394 (10mm) | .354 | 4.92 | .236 | .630 (16mm) | VC□T1.51.5□□ (VC□T 0802□□) | TS 20038I/ HG-P | T 6P | | |
| S12M-SVPCR/L 11-D20 | • | • | .472 (12mm) | .433 | 5.91 | .394 | .787 (20mm) | VC□T 22□□ (VC□T 1103□□) | SO 25065I | T 7 | | |

• Marked: Standard items

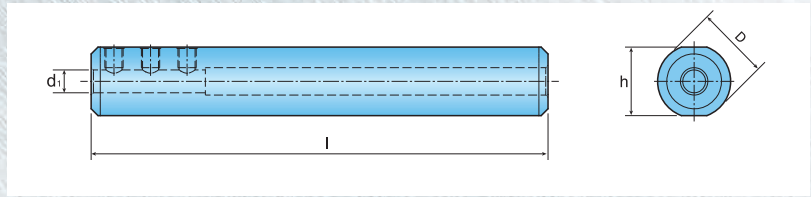
S-SVUCR/L (STEEL SHANK)



| DESIGNATION | R | L | Dimensions (inch) | | | | | | Insert | Screw | Wrench |
|---------------------|---|---|-------------------|------|------|------|------|-------------|-------------------------------|----------------|--------|
| | | | d | h | l | l1 | f | ØD min | | | |
| S12M-SVUCR/L 08-D16 | • | • | .472 (12mm) | .433 | 5.91 | 1.02 | .433 | .630 (16mm) | VC□T1.51.5□□ (VC□T 0802□□) | TS 20038I/HG-P | T 6P |
| S16Q-SVUCR/L 11-D20 | • | • | .630 (16mm) | .591 | 7.09 | 1.26 | .610 | .787 (20mm) | VC□T 22□□ | SO 25065I | T 7 |
| S20R-SVUCR/L 11-D25 | • | • | .787 (20mm) | .709 | 7.87 | 1.57 | .689 | .984 (25mm) | (VC□T 1103□□) | | |

• Marked: Standard items

TSL (SLEEVE)

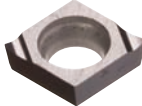
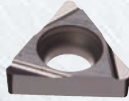
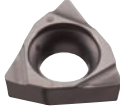




| DESIGNATION | STOCK | Dimensions | | | | Screw | Wrench | | | | |
|-------------|------------------|------------|--------------|-------|-------|-----------------|--------|-----------------|------|-----------------|--------|
| | | d1 | h | l | D | | | | | | |
| Metric | TSL 16-04 | • | .157 (4mm) | 15 | 100 | SS M4 x 0.7 x 4 | L-W2 | | | | |
| | TSL 16-05 | • | .197 (5mm) | 15 | 100 | | | | | | |
| | TSL 16-06 | • | .236 (6mm) | 15 | 100 | | | | | | |
| | TSL 16-07 | • | .276 (7mm) | 15 | 100 | | | | | | |
| Inch | TSL15.88-04-MINI | • | .157" (4mm) | .591" | 3.94" | SS M4 x 0.7 x 4 | L-W2 | | | | |
| | TSL15.88-05-MINI | • | .197" (5mm) | .591" | 3.94" | | | | | | |
| | TSL15.88-06-MINI | • | .236" (6mm) | .591" | 3.94" | | | | | | |
| | TSL15.88-07-MINI | • | .276" (7mm) | .591" | 3.94" | | | | | | |
| | TSL19.05-04-MINI | • | .157" (4mm) | .669" | 3.94" | | | SS M4 x 0.7 x 4 | L-W2 | | |
| | TSL19.05-05-MINI | • | .197" (5mm) | .669" | 3.94" | | | | | | |
| | TSL19.05-06-MINI | • | .236" (6mm) | .669" | 3.94" | | | | | | |
| | TSL19.05-07-MINI | • | .276" (7mm) | .669" | 3.94" | | | | | | |
| | TSL19.05-10-MINI | • | .394" (10mm) | .669" | 3.94" | | | | | SS M3 x 0.5 x 3 | L-W1.5 |
| | TSL19.05-12-MINI | • | .472" (12mm) | .669" | 3.94" | | | | | | |

• Marked: Standard items

INSERTS

- P Carbon Steel C: 0.45%
- M Austenitic Stainless Steel
- K High Tensile Cast Iron
- N Aluminum
- S Inconel
- H Hardened Steel

| INSERT | ANSI DESIGNATION | ISO DESIGNATION | Dimensions (inches) | | | | Grade | CT3000 | PV3010 | TT8115 | TT8125 | TT9225 | TT5080 | TT9020 |
|---|-------------------|--------------------|---------------------|-------------|--------------|-------------|-------|--------|--------|--------|--------|--------|--------|--------|
| | | | I.C. | Rad | Feed (ipr) | DOC | | | | | | | | |
|  CCGT 03, 04 | CCGT 0301003 R-FF | CCGT 1.10.9XR-FF | 0.138 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | CCGT0301003 L-FF | CCGT 1.10.9XL-FF | 0.138 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | CCGT 030101 R-FF | CCGT 1.10.9XR-FF | 0.138 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 030101 L-FF | CCGT 1.10.9XL-FF | 0.138 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 030102 R-FF | CCGT 1.10.90.5R-FF | 0.138 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 030102 L-FF | CCGT 1.10.90.5L-FF | 0.138 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 030104 R-FF | CCGT 1.10.91R-FF | 0.138 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 030104 L-FF | CCGT 1.10.91L-FF | 0.138 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 0401003 R-FF | CCGT 1.41.1XR-FF | 0.169 | 0.001 | .001 - .004 | .002 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 0401003 L-FF | CCGT 1.41.1XL-FF | 0.169 | 0.001 | .001 - .004 | .002 - .016 | ●●●● | | | | | | | ●●●● |
| | CCGT 040101 R-FF | CCGT 1.41.10R-FF | 0.169 | 0.004 | .001 - .005 | .004 - .020 | ●●●● | | | | | | | ●●●● |
| | CCGT 040101 L-FF | CCGT 1.41.10L-FF | 0.169 | 0.004 | .001 - .005 | .004 - .020 | ●●●● | | | | | | | ●●●● |
| | CCGT 040102 R-FF | CCGT 1.41.10.5R-FF | 0.169 | 0.008 | .001 - .005 | .004 - .020 | ●●●● | | | | | | | ●●●● |
| | CCGT 040102 L-FF | CCGT 1.41.10.5L-FF | 0.169 | 0.008 | .001 - .005 | .004 - .020 | ●●●● | | | | | | | ●●●● |
| CCGT 040104 R-FF | CCGT 1.41.11R-FF | 0.169 | 0.016 | .002 - .008 | .004 - .020 | ●●●● | | | | | | | ●●●● | |
| CCGT 040104 L-FF | CCGT 1.41.11L-FF | 0.169 | 0.016 | .002 - .008 | .004 - .020 | ●●●● | | | | | | | ●●●● | |
|  TBGT 06 | TBGT 0601003 R-FF | TBGT 1.21XR-FF | 0.156 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | TBGT 0601003 L-FF | TBGT 1.21XL-FF | 0.156 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | TBGT 060101 R-FF | TBGT 1.210R-FF | 0.156 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | TBGT 060101 L-FF | TBGT 1.210L-FF | 0.156 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | TBGT 060102 R-FF | TBGT 1.210.5R-FF | 0.156 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | TBGT 060102 L-FF | TBGT 1.210.5L-FF | 0.156 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | TBGT 060104 R-FF | TBGT 1.211R-FF | 0.156 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| TBGT 060104 L-FF | TBGT 1.211L-FF | 0.156 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● | |
|  WBGT 06 | WBGT 0601003 R-FF | WBGT 1.21XR-FF | 0.156 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | WBGT 0601003 L-FF | WBGT 1.21XL-FF | 0.156 | 0.001 | .001 - .004 | .002 - .012 | ●●●● | | | | | | | ●●●● |
| | WBGT 060101 R-FF | WBGT 1.210R-FF | 0.156 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | WBGT 060101 L-FF | WBGT 1.210L-FF | 0.156 | 0.004 | .001 - .005 | .003 - .016 | ●●●● | | | | | | | ●●●● |
| | WBGT 060102 R-FF | WBGT 1.210.5R-FF | 0.156 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | WBGT 060102 L-FF | WBGT 1.210.5L-FF | 0.156 | 0.008 | .001 - .006 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| | WBGT 060104 R-FF | WBGT 1.211R-FF | 0.156 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● |
| WBGT 060104 L-FF | WBGT 1.211L-FF | 0.156 | 0.016 | .002 - .008 | .004 - .016 | ●●●● | | | | | | | ●●●● | |
|  VCGT 11 | VCGT 110301 SA | VCGT 220 SA | 0.250 | 0.004 | .0005 - .008 | .004 - .060 | | | | | | | ●● | ●● |
| | VCGT 110302 SA | VCGT 220.5 SA | 0.250 | 0.008 | .0008 - .008 | .008 - .060 | | | | | | | ●● | ●● |
| | VCGT 110304 SA | VCGT 221 SA | 0.250 | 0.016 | .002 - .008 | .008 - .060 | | | | | | | ●● | ●● |
|  VCMT 08,11 | VCMT 080202 PC | VCMT 1.51.51 PC | 0.187 | 0.008 | .001 - .006 | .008 - .060 | ●●●● | | | ●● | ●● | ●● | | |
| | VCMT 080204 PC | VCMT 1.51.51 PC | 0.187 | 0.016 | .002 - .008 | .008 - .060 | ●●●● | ●● | | ●● | ●● | ●● | | |
| | VCMT 110304 PC | VCMT 221 PC | 0.250 | 0.016 | .002 - .008 | .004 - .067 | ●●●● | | | ●● | ●● | ●● | | |