



01

Цанги ER



01

Цанги из нержавеющей стали ER



04

Набор цанг ER



05

ER G цанги с четырехгранником



07

Цанги с уплотнением ERC



07

Цанги SK



08

Гидравлические цанги



08

Прямые цанги



09

Цанги SDC



09

Цанги EOC/OZ



10

Цанги R8



10

Цанги 5C



10

Зажимные цанги



11

Ключи



12

Серия гаек



13

Серия тяговых стержней Штривель



19

Угловые фрезерные головки



23

Держатели инструментов VDI тип B



24

Держатели инструментов VDI тип E



26

Датчик усилия вращения шпинделя



27

Токарный осевой держатель инструмента SBH



28

Токарный осевой держатель инструмента SBH



28

Токарный осевой держатель инструмента SBH



29

Блоки BMT



30

Держатели инструмента, для наружной токарной обработки



30

Держатели инструмента, для внутренней токарной обработки



30

Держатели инструмента, для внутренней токарной обработки



31

Осевой приводной цанговый блок BMT



32

Радиальный приводной цанговый блок BMT



33

Цанговые патроны HSK-A-ER



34

Цанговые патроны HSK-F-ER



34

Цанговые патроны HSK-GER



35

Цанговые патроны HSK-A-GER



35

Патрон HSK-A-SLN Weldon



36

Патрон для насадных фрез HSK63A-FMB



37

Силовые патроны HSK-A-C



37

Патроны HSK-A-SDC



38

Патроны HSK-SK



38

Патроны HSK-E-GSK



39

Гидравлические патроны HSK-PHC



40
Термоэластичные патроны HSK-SF



41
Цанговый патрон цилиндрический хвостовик



42
Цанговые патроны BT



43
Комплекты цанговых патронов BT-ER



44
Гидравлические патроны BT



45
Термоэластичные патроны BT



46
Сверлильные патроны BT



46
Высокоскоростные цанговые патроны BT-GSK



47
Патрон для насадных фрез BT-FMB



48
Патроны Weldon BT-SLN



48
Цанговые патроны BT-SDC



49
Резьбовые держатели инструментов BT



50
Силовые патроны BT



51
Наборы силовых патронов с цапгами



51
Оправки торцевых фрез BT-CEM



52
Оправки торцевых фрез BBT-FMB



53
Цанговые патроны нержавеющей стали BBT



54
Патроны нержавеющей стали BBT-SK



55
Цанговые патроны BBT



56
Патроны BBT-SK



57
Патроны BBT-OML
Патроны MT-OML



57
Патроны BBT-OSL



58
Эксцентриковые втулки



58
Втулки OSL



58
Втулки для держателей инструментов



59
Цанговые патроны CAT



60
Оправки торцевых фрез CAT



60
Патроны Weldon CAT



61
Цанговые патроны SK



61
Патроны Weldon SK



62
Оправки торцевых фрез SK



63
Цанговые патроны NT



63
Наборы цанговых патронов NT



64
Цанговые патроны MT Type A-B



64
Наборы цанговых патронов MT Type A-B



65
Цанговые патроны BT-OZ
Цанговые патроны NT-OZ



65
Цанговые патроны MT-OZ
Цанговые патроны R8-OZ



66
Наборы цапг OZ



66
Оправки торцевых фрез R8-FMB



66
Удлинительные адаптеры для фрезерования FMB



67

Высокоскоростные
цанговые патроны ISO
без шпоночного паза



67

Цанговые патроны
BT30 без шпоночного
паза



67

Патроны Weldon NT



68

Оправки торцевых
фрез NT-FMB



68

Оправки торцевых фрез
с проставкой NT-FMB



68

Оправки торцевых
фрез с боковым
замком MT



69

Сканеры кромок
со звуком и лампой



69

3D-искатели кромок



70

Центрирующие
рычажные датчики



70

Машины для
определения кромок



71

Установщики
нуля шкалы по оси
с электрооптической
системой



71

Цанговые патроны
SL-ER



72

Установщики
нуля шкалы по оси



73

Удлинитель Side Lock
ER



73

Съемники материала
для токарного станка



74

Наборы цанговых
блоков 5С



74

Цанговые зажимные
патроны для токарных
станков



75

Торцевые фрезы RAP-75°



75

Торцевые фрезы EMR



76

Торцевые фрезы
под углом 90°



76

Торцевые фрезы
KM-45°



77

Расточные головки F1



77

Фрезы для расточки F1



77

Расточные фрезы
со сменными пластинами



78

Хвостовики черновых
расточных головок F1



79

Сменные двухзарядные
головки для черного
расточивания RBA



80

Наборы для
микро-чистового
расточивания NBJ16



81

Чистовые расточные
головки CBA



82

Держатели вставок CBA



83

Наборы головок NBH2084



87

Хвостовики расточных
головок типа BT-LBK



89-90

Цанги для нарезания
резьбы TC, GT



91

Наборы патронов
для нарезания резьбы
с цангами



91

Быстросменные патроны
для нарезания резьбы BT



91

Боковые фиксирующие
прямые быстросменные
патроны для нарезания резьбы



91

Быстросменные патроны
для нарезания резьбы
конусом Морзе



92

Резьбонарезные
держатели TC-WF



92

Телескопические
держатели для
нарезания резьбы



93

Телескопические держатели
для нарезания резьбы
прямым хвостовиком



93

Цельные универсальные
патроны для нарезания
резьбы серии TC

| | | | | |
|--|---|--|--|--|
| <p>94</p> <p>Втулки для штамповки наружной резьбы</p> | <p>94</p> <p>Реверсивные резьбонарезные патроны</p> | <p>95</p> <p>Быстрозажимные сверлильные патроны</p> | <p>96</p> <p>Встроенные сверлильные патроны</p> | <p>96</p> <p>Встроенные сверлильные патроны</p> |
| <p>97</p> <p>Встроенные сверлильные патроны</p> | <p>97</p> <p>Встроенные сверлильные патроны</p> | <p>98</p> <p>Сверлильные патроны шпоночного типа</p> | <p>98</p> <p>Сверлильные патроны шпоночного типа</p> | <p>99</p> <p>Сверлильные патроны шпоночного типа</p> |
| <p>99</p> <p>Сверлильные патроны шпоночного типа</p> | <p>99</p> <p>Сверлильные патроны шпоночного типа</p> | <p>100</p> <p>Оправки для сверлильных патронов</p> | <p>101</p> <p>Оправки для сверлильных патронов</p> | <p>101</p> <p>Оправки для сверлильных патронов</p> |
| <p>101</p> <p>Оправки для сверлильных патронов</p> | <p>102</p> <p>Оправки для сверлильных патронов</p> | <p>103</p> <p>Съёмники хвостовиков Морзе</p> | <p>104</p> <p>Удлинительные стержни</p> | <p>105</p> <p>Удлинительные стержни</p> |
| <p>106</p> <p>Удлинительные стержни для цанг ER</p> | <p>107</p> <p>Высокоскоростные вращающиеся токарные центры</p> | <p>107</p> <p>Высокоскоростные вращающиеся токарные центры</p> | <p>107</p> <p>Высокоскоростные вращающиеся токарные центры</p> | <p>108</p> <p>Высокоскоростные вращающиеся токарные центры</p> |
| <p>110</p> <p>Твердосплавные токарные центры</p> | <p>110</p> <p>Токарные центры со сменными наконечниками</p> | <p>110</p> <p>Токарные центры со сменными наконечниками</p> | <p>111</p> <p>Токарные центры для деревообрабатывающих станков</p> | <p>111</p> <p>Токарные центры для деревообрабатывающих станков</p> |
| <p>111</p> <p>Токарные центры для деревообрабатывающих станков</p> | <p>112</p> <p>Самоцентрирующиеся трехкулачковые патроны типа K11</p> | <p>113</p> <p>Самоцентрирующиеся трехкулачковые патроны типа K11</p> | <p>114</p> <p>Самоцентрирующиеся трехкулачковые патроны типа K11</p> | <p>115</p> <p>Самоцентрирующиеся четырехкулачковые патроны K12</p> |
| <p>116</p> <p>Четырехкулачковые независимые патроны K72</p> | <p>117</p> <p>Самоцентрирующие патроны с большими сквозными отверстиями серии KLG</p> | <p>117</p> <p>Токарные кулачки</p> | <p>119</p> <p>Гидравлические трехкулачковые патроны</p> | <p>121</p> <p>Гидравлические четырехкулачковые патроны</p> |



123
Стальные зажимные комплекты



125
Оправки для испытания шпинделей



125
Устройства для крепления инструментов



126
Червячные фрезы



126
Комплект цанг и патронов J7316A



126
Комплект цанг и патронов J7316B



127
Слесарные тиски



127
Слесарные тиски



127
Слесарные тиски



127
Слесарные тиски



128
Слесарные тиски



129
Прецизионные тиски



129
Прецизионные тиски



129
Прецизионные тиски



130
Тиски станочные



130
Тиски станочные



130
Тиски станочные



131
Тиски станочные



131
Тиски станочные



131
Тиски станочные



132
Тиски станочные



132
Тиски станочные



132
Тиски станочные



133
Тиски станочные



133
Тиски станочные



133
Тиски станочные



134
Устройства подачи инструмента для фрезерных станков



134
Наборы параллельных блоков



134
Наборы параллельных блоков



135
Наборы параллельных блоков



135
Наборы параллельных блоков



135
Наборы параллельных блоков



136
Прецизионные блоки



137
Круглые патроны с постоянными магнитами



137
Прямоугольные патроны с постоянными магнитами



138
Постоянные магнитные подъемники



138
Электромагнитные подъемники



139
Полууниверсальные разделительные головки

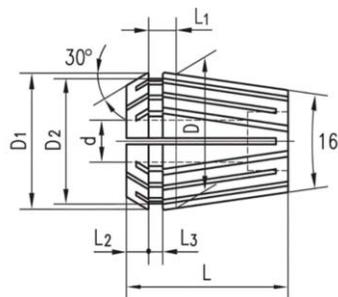


140
Прямые разделительные головки типа F2



141
Универсальные разделительные головки





Material: 65Mn
Material: HRC44-48

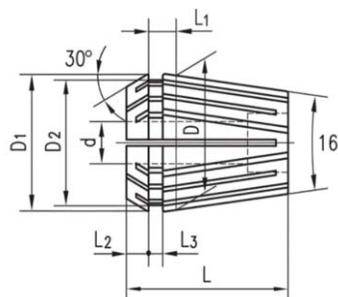
Run Out
I: ≤ 0.003mm II: ≤ 0.005mm III: ≤ 0.008mm IV: ≤ 0.01mm V: ≤ 0.015mm

| Model | dH7 | D | D1 | D2 | L | L1 | L2 | L3 | Collapsible Capacity |
|-------|-------|----|------|------|------|------|-----|-----|----------------------|
| ER8 | 1-5 | 8 | 8.5 | 6.5 | 13.5 | 2.7 | 1.5 | 1.5 | 0.5 |
| ER11 | 1-7 | 11 | 11.5 | 9.5 | 18.0 | 3.8 | 2.5 | 2.0 | 0.5 |
| ER16 | 1-2.5 | 16 | 17 | 13.8 | 27.5 | 6.26 | 4.0 | 2.7 | 0.5 |
| | 3-10 | 16 | 17 | 13.8 | 27.5 | 6.26 | 4.0 | 2.7 | 1.0 |
| ER20 | 1-2.5 | 20 | 21 | 17.4 | 31.5 | 6.36 | 4.8 | 2.8 | 0.5 |
| | 3-13 | 20 | 21 | 17.4 | 31.5 | 6.36 | 4.8 | 2.8 | 1.0 |
| ER25 | 1-2.5 | 25 | 26 | 22.0 | 34.0 | 6.66 | 5.0 | 3.1 | 0.5 |
| | 3-16 | 25 | 26 | 22.0 | 34.0 | 6.66 | 5.0 | 3.1 | 1.0 |
| ER32 | 2-2.5 | 32 | 33 | 29.2 | 40.0 | 7.16 | 5.5 | 3.6 | 0.5 |
| | 3-20 | 32 | 33 | 29.2 | 40.0 | 7.16 | 5.5 | 3.6 | 1.0 |
| ER40 | 3-26 | 40 | 41 | 36.2 | 46.0 | 7.66 | 7.0 | 4.1 | 1.0 |
| ER50 | 6-10 | 50 | 52 | 46.0 | 60.0 | 12.6 | 8.5 | 5.5 | 1.0 |
| | 11-34 | 50 | 52 | 46.0 | 60.0 | 12.6 | 8.5 | 5.5 | 2.0 |

Stainless Steel ER Collets



○ Material: Stainless Steel 4Cr13
○ Hardness: HRC50-55
○ Body Accuracy: <0.008MM



| Model | D | D1 | D2 | L | L1 | L2 | L3 | Clamping Range |
|-------|----|------|------|------|------|-----|-----|----------------|
| ERS8 | 8 | 8.5 | 6.5 | 13.5 | 2.7 | 1.5 | 1.5 | 1-5mm |
| ERS11 | 11 | 11.5 | 9.5 | 18 | 3.8 | 2.5 | 2 | 1-7mm |
| ERS16 | 16 | 17 | 13.8 | 27.5 | 6.26 | 4 | 2.7 | 1-10mm |
| ERS20 | 20 | 21 | 17.4 | 31.5 | 6.36 | 4.8 | 2.8 | 1-13mm |
| ERS25 | 25 | 26 | 22 | 34 | 6.66 | 5 | 3.1 | 1-16mm |
| ERS32 | 32 | 33 | 29.2 | 40 | 7.16 | 5.5 | 3.6 | 1-20mm |
| ERS40 | 40 | 41 | 36.2 | 46 | 7.66 | 7 | 4.1 | 3-26mm |
| ERS50 | 50 | 52 | 46 | 60 | 12.6 | 8.5 | 5.5 | 6-34mm |

| ER8 (1-5mm) | ER11 (1- 7mm) | ER16 (1-10mm) | ER20 (1-13mm) | ER25 (1-16mm) | ER32 (1-20mm) | ER40 (3-26mm) | ER50 (6-34mm) |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 1.0-0.5 | 1.0-0.5 | 1.0-0.5 | 1.0-0.5 | 1.0-0.5 | 1.0-0.5 | 3-2 | 6-5 |
| 1.5-1.0 | 1.5-1.0 | 1.5-1.0 | 1.5-1.0 | 1.5-1.0 | 1.5-1.0 | 4-3 | 7-6 |
| 2.0-1.5 | 2.0-1.5 | 2.0-1.5 | 2.0-1.5 | 2.0-1.5 | 2.0-1.5 | 5-4 | 8-7 |
| 2.5-2.0 | 2.5-2.0 | 2.5-2.0 | 2.5-2.0 | 2.5-2.0 | 2.5-2.0 | 6-5 | 9-8 |
| 3.0-2.5 | 3.0-2.5 | 3-2 | 3-2 | 3-2 | 3-2 | 7-6 | 10-9 |
| 3.5-3.0 | 3.5-3.0 | 4-3 | 4-3 | 4-3 | 4-3 | 8-7 | 11-9 |
| 4.0-3.5 | 4.0-3.5 | 5-4 | 5-4 | 5-4 | 5-4 | 9-8 | 12-10 |
| 4.5-4.0 | 4.5-4.0 | 6-5 | 6-5 | 6-5 | 6-5 | 10-9 | 13-11 |
| 5.0-4.5 | 5.0-4.5 | 7-6 | 7-6 | 7-6 | 7-6 | 11-10 | 14-12 |
| | 5.5-5.0 | 8-7 | 8-7 | 8-7 | 8-7 | 12-11 | 15-13 |
| | 6.0-5.5 | 9-8 | 9-8 | 9-8 | 9-8 | 13-12 | 16-14 |
| | 6.5-6.0 | 10-9 | 10-9 | 10-9 | 10-9 | 14-13 | 17-15 |
| | 7.0-6.5 | | 11-10 | 11-10 | 11-10 | 15-14 | 18-16 |
| | | | 12-11 | 12-11 | 12-11 | 16-15 | 19-17 |
| | | | 13-12 | 13-12 | 13-12 | 17-16 | 20-18 |
| | | | | 14-13 | 14-13 | 18-17 | 21-19 |
| | | | | 15-14 | 15-14 | 19-18 | 22-20 |
| | | | | 16-15 | 16-15 | 20-19 | 23-21 |
| | | | | | 17-16 | 21-20 | 24-22 |
| | | | | | 18-17 | 22-21 | 25-23 |
| | | | | | 19-18 | 23-22 | 26-24 |
| | | | | | 20-19 | 24-23 | 27-25 |
| | | | | | | 25-24 | 28-26 |
| | | | | | | 26-25 | 29-27 |
| | | | | | | | 30-28 |
| | | | | | | | 31-29 |
| | | | | | | | 32-30 |
| | | | | | | | 33-31 |
| | | | | | | | 34-32 |

| Model | Types - metric |
|-------|--|
| ER8 | 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 |
| ER11 | 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 |
| ER16 | 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 7.5 / 8 / 8.5 / 9 / 9.5 / 10 |
| ER20 | 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 7.5 |
| | 8 / 8.5 / 9 / 9.5 / 10 / 10.5 / 11 / 11.5 / 12 / 12.5 / 13 |
| ER25 | 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 7.5 / 8 / 8.5 / 9 / 9.5 |
| | 10 / 10.5 / 11 / 11.5 / 12 / 12.5 / 13 / 13.5 / 14 / 14.5 / 15 / 15.5 / 16 |
| ER32 | 1 / 1.5 / 2 / 2.5 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 |
| | 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 20 |
| ER40 | 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 |
| | 16 / 17 / 18 / 19 / 20 / 21 / 22 / 23 / 24 / 25 / 26 |
| ER50 | 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 20 |
| | 21 / 22 / 23 / 24 / 25 / 26 / 27 / 28 / 29 / 30 / 31 / 32 / 33 / 34 |

| Model | Types - metric |
|-------|---|
| ER8 | 1/32 , 3/64 , 1/16 , 5/64 , 3/32 , 7/64 , 1/8 , 9/64 , 5/32 , 11/64 , 3/16 |
| ER11 | 1/32 , 3/64 , 1/16 , 5/64 , 3/32 , 7/64 , 1/8 , 9/64 , 5/32 , 11/64 , 3/16 , 13/64 , 7/32 , 15/64 , 1/4 , 17/64 |
| ER16 | 1/32 , 3/64 , 1/16 , 5/64 , 3/32 , 7/64 , 1/8 , 9/64 , 5/32 , 11/64 , 3/16 , 13/64 7/32 |
| | 15/64 , 1/4 , 17/64 , 9/32 , 19/64 , 5/16 , 21/64 , 11/32 , 23/64 , 3/8 |
| ER20 | 1/32 , 3/64 , 1/16 , 5/64 , 3/32 , 7/64 , 1/8 , 9/64 , 5/32 , 11/64 , 3/16 , 13/64 7/32 , 15/64 , 1/4 , 17/64 |
| | 9/32 , 19/64 , 5/16 , 21/64 , 11/32 , 23/64 , 3/8 , 25/64 , 13/32 , 27/64 , 7/16 , 29/64 , 15/32 , 31/64 , 1/2 , 33/64 |
| ER25 | 3/64 , 1/16 , 5/64 , 3/32 , 7/64 , 1/8 , 9/64 , 5/32 , 11/64 , 3/16 , 13/64 , 7/32 , 15/64 , 1/4 , 17/64 |
| | 9/32 , 19/64 , 5/16 , 21/64 , 11/32 , 23/64 , 3/8 , 25/64 , 13/32 , 27/64 , 7/16 , 29/64 , 15/32 , |
| | 31/64 , 1/2 , 33/64 , 17/32 , 35/64 9/16 , 37/64 , 19/32 , 39/64 , 5/8 |
| ER32 | 1/16 , 3 , 32 , 1/8 , 5/32 , 3/16 , 7/32 , 1/4 , 9/32 , 5/64 , 11/32 , 3/8 , 13/32 , 7/16 , 15/32 , 1/2 , 17/32 |
| | 9/16 , 19/32 , 5/8 , 21/32 , 11/16 , 23/32 , 3/4 , 23/32 |
| ER40 | 1/8 , 5/32 , 3/16 , 7/32 , 1/4 , 9/32 , 5/16 , 11/32 , 3/8 , 13/32 , 7/16 , 15/32 , 1/2 , 17/32 , 9/16 , 19/32 , 5/8 , 21/32 , 11/16 |
| | 23/32 , 3/4 , 25/32 , 13/16 , 27/32 , 7/8 , 29/32 , 15/16 , 31/32 , 1" |
| ER50 | 1/4 , 9/32 , 5/16 , 11/32 , 3/8 , 13/32 , 7/16 , 15/32 , 1/2 , 17/32 , 9/16 , 19/32 5/8 , 21/32 , 11/16 , 23/32 , 3/4 , 25/32 , 13/16 |
| | 27/32 , 7/8 , 29/32 , 15/16 , 31/32 , 1" , 1-1/32 , 1-1/16 , 1-3/32 , 1-1/8 , 1-5/32 , 1-3/16 , 1-7/32 , 1-1/4 , 1-9/32 , 1-5/16 |



| Model No. | Spec | PCS/SET |
|------------------|--|-----------|
| ER8-9PCS | 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 | 9PCS/SET |
| ER8-6PCS(inch) | 1/32, 1/16, 3/32, 1/8, 5/32, 3/16 | 6PCS/SET |
| ER11-7PCS | 1, 2, 3, 4, 5, 6, 7 | 7PCS/SET |
| ER11-9PCS | 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7 | 9PCS/SET |
| ER11-13PCS | 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7 | 13PCS/SET |
| ER11-8PCS(inch) | 1/32, 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 | 8PCS/SET |
| ER16-10PCS | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 10PCS/SET |
| ER16-8PCS | 3, 4, 5, 6, 7, 8, 9, 10 | 8PCS/SET |
| ER16-12PCS | 1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10 | 12PCS/SET |
| ER16-12PCS(inch) | 1/32, 1/16, 3/32, 1/8, 5/32, 3/16 7/32, 1/4, 9/32, 5/16, 11/32, 3/8 | 12PCS/SET |
| ER16-8PCS(inch) | 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8 | 8PCS/SET |
| ER16-5PCS(inch) | 1/8, 3/16, 1/4, 9/32, 5/16, 3/8 | 5PCS/SET |
| ER20-12PCS | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | 12PCS/SET |
| ER20-13PCS | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | 13PCS/SET |
| ER20-11PCS | 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | 11PCS/SET |
| ER20-14PCS | 1, 1.5, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | 14PCS/SET |
| ER20-16PCS(inch) | 1/32, 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2 | 16PCS/SET |
| ER20-14PCS(inch) | 3/32, 1/8, 5/32, 3/16, 7/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2 | 14PCS/SET |
| ER25-14PCS | 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | 14PCS/SET |
| ER25-15PCS | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | 15PCS/SET |
| ER25-18PCS | 1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | 18PCS/SET |
| ER25-18PCS(inch) | 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/21, 7/32, 9/16, 19/32, 5/8 | 18PCS/SET |
| ER25-9PCS(inch) | 1/8, 3/16, 1/4, 5/16, 7/16, 1/2, 9/16, 3/8 | 9PCS/SET |
| ER32-18PCS | 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 | 18PCS/SET |
| ER32-19PCS | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 | 19PCS/SET |
| ER32-21PCS | 1, 1.5, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 | 21PCS/SET |
| ER32-18PCS(inch) | 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 15/32, 1/2, 9/16, 19/32, 5/8, 11/16, 23/32, 3/4 | 18PCS/SET |
| ER32-12PCS(inch) | 1/8, 5/32, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 | 12PCS/SET |
| ER32-11PCS(inch) | 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/29, 1/16, 5/8, 11/16, 3/4 | 11PCS/SET |
| ER32-21PCS(inch) | 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/21, 7/32, 9/16, 19/32, 5/82, 1/32, 11/16, 23/32, 3/4 | 21PCS/SET |



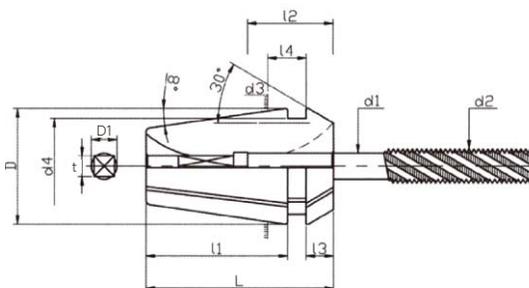
| Model | Spec | PCS/SET |
|------------------|---|-----------|
| ER40-24PCS | 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 | 24PCS/SET |
| ER40-23PCS | 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 | 23PCS/SET |
| ER40-18PCS | 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 | 18PCS/SET |
| ER40-15PCS | 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 25, 26 | 15PCS/SET |
| ER40-8PCS | 4, 6, 8, 10, 12, 16, 20, 25 | 8PCS/SET |
| ER40-23PCS(inch) | 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 15/32, 1/2, 9/16, 19/32, 5/8, 11/16, 23/32, 3/4, 13/16, 27/32, 7/8, 29/32, 1" | 23PCS/SET |
| ER40-18PCS(inch) | 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 15/32, 1/2, 9/16, 19/32, 5/8, 11/16, 3/4, 13/16, 1" | 18PCS/SET |
| ER40-15PCS(inch) | 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1" | 15PCS/SET |
| ER40-14PCS(inch) | 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 1" | 14PCS/SET |
| ER40-8PCS(inch) | 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1" | 8PCS/SET |

We are glad to supply collets with different size and quantities according to your requirement.

ERG Tap Collets



○ Material: 65Mn ○ Hardness: HRC44-48



| Model | D | L | L1 | L3 | Tapping range |
|-------|-------|------|------|-----|---------------|
| ERG16 | 16.17 | 27.5 | 21.2 | 4 | M2-M12 |
| ERG20 | 20.74 | 31.5 | 24.3 | 4.8 | M3-M16 |
| ERG25 | 25.74 | 34 | 26.5 | 5 | M3-M20 |
| ERG32 | 32.74 | 40 | 31.8 | 5.5 | M3-M24 |
| ERG40 | 40.74 | 46 | 35.5 | 7 | M3-M30 |

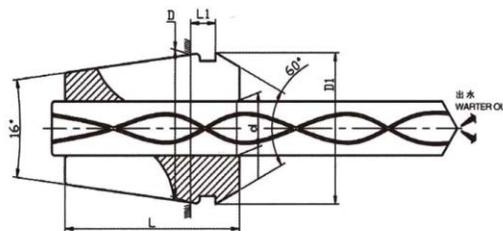
| ISO | D1 | | JIS | D1 | | DIN | D1 | |
|------------------------------------|------|------|-----|-----|-----|---------|-----|-----|
| | | | | | | | | |
| ERG16 Clamping Taps Specifications | | | | | | | | |
| M1-M2 | 2.5 | 2 | M2 | 3 | 2.5 | M1-M1.8 | 2.5 | 2.1 |
| M2.2-M2.5 | 2.8 | 2.24 | | | | M2-M2.5 | 2.8 | 2.1 |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |

| ISO | D1 | | JIS | D1 | | DIN | D1 | |
|-----|---|------|-----|------|-----|-----|-----|-----|
| | ERG20 Clamping Taps Specifications | | | | | | | |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |

| ISO | D1 | | JIS | D1 | | DIN | D1 | |
|-----|---|------|-----|------|-----|-----|-----|-----|
| | ERG25 Clamping Taps Specifications | | | | | | | |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |
| M18 | 14 | 11.2 | M18 | 14 | 11 | M18 | 14 | 11 |
| M20 | 14 | 11.2 | M20 | 15 | 12 | M20 | 16 | 12 |

| ISO | D1 | | JIS | D1 | | DIN | D1 | |
|-----|---|------|-----|------|-----|-----|-----|------|
| | ERG32 Clamping Taps Specifications | | | | | | | |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |
| M18 | 14 | 11.2 | M18 | 14 | 11 | M18 | 14 | 11 |
| M20 | 14 | 11.2 | M20 | 15 | 12 | M20 | 16 | 12 |
| M22 | 16 | 12.5 | M22 | 17 | 13 | M22 | 18 | 14.5 |
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |

| ISO | D1 | | JIS | D1 | | DIN | D1 | |
|-----|---|------|-----|------|-----|-----|-----|------|
| | ERG40 Clamping Taps Specifications | | | | | | | |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |
| M18 | 14 | 11.2 | M18 | 14 | 11 | M18 | 14 | 11 |
| M20 | 14 | 11.2 | M20 | 15 | 12 | M20 | 16 | 12 |
| M22 | 16 | 12.5 | M22 | 17 | 13 | M22 | 18 | 14.5 |
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |
| M27 | 20 | 16 | M27 | 20 | 15 | M27 | 20 | 16 |
| M30 | 20 | 16 | M30 | 23 | 17 | M30 | 22 | 18 |



- Material: 65Mn
- Hardness: HRC44-48
- Accuracy: $\leq 0.008\text{mm}$

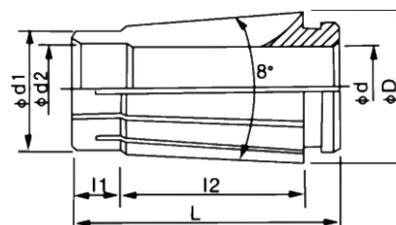
- Differences in the use of grooves to reach around the sealing
- Central water feature only applies to folders to hold the water hole tool
- Can withstand water pressure 7Mpa
- Non-standard holes can be customized.ISO JIS DIN

| Model | Collapsible Capacity | Range | D | D1 | L | L1 |
|-------|----------------------|-------|----|------|------|------|
| ER11C | 3-7 | 0.1 | 11 | 11.5 | 18 | 3.8 |
| ER16C | 3-6 | 0.1 | 16 | 17 | 275 | 6.26 |
| | 6-10 | 0.5 | | | | |
| ER20C | 3-6 | 0.1 | 20 | 21 | 31.5 | 6.36 |
| | 6-13 | 0.5 | | | | |
| ER25C | 3-6 | 0.1 | 25 | 26 | 34 | 6.66 |
| | 6-16 | 0.5 | | | | |
| ER32C | 3-8 | 0.1 | 32 | 33 | 40 | 7.16 |
| | 8-20 | 0.5 | | | | |
| ER40C | 4-10 | 0.1 | 40 | 41 | 46 | 7.66 |
| | 10-26 | 0.5 | | | | |
| ER50C | 12-34 | 0.5 | 50 | 52 | 60 | 12.6 |

SK Collets



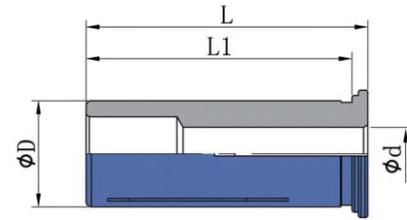
- Material: 65Mn
- Hardness: HRC44-48
- Accuracy: $\leq 0.005\text{mm}$



| Model | Inside Diameter | d | d1 | L | L1 | L2 |
|-------|---|------|------|------|-----|------|
| SK10 | 2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10 | 15.5 | 12 | 30.5 | 5.1 | 21.3 |
| SK16 | 3,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9, 9.5,10,10.5, | 24.5 | 18.8 | 45 | 75 | 32.4 |
| | 11,11.5,12,12.5,13,13.5,14, 14.5,15,15.5,16 | | | | | |
| SK20 | 7.5,8,9.5,10,11.5,12,15.5,16,16.5,17, 17.5 | 29.1 | 22.6 | 54 | 8 | 40.7 |
| | 18,18.5,19,19.5,20 | | | | | |
| SK25 | 7.5,8,9.5,10,11.5,12,15.5,16,16.5,17,17.5,18,18.5,19,19.5 | 35.7 | 28.9 | 57 | 8.4 | 43.1 |
| | 20,20.5,21, 21.5,22,22.5,23,23.5,24,24.5,25 | | | | | |



○ Material: 65Mn
 ○ Hardness: HRC44-48
 ○ Accuracy: $\leq 0.003\text{MM}$



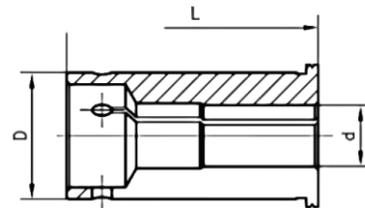
| Model | d | D | L | L1 |
|---------|----|----|----|------|
| HC12-3 | 3 | 12 | 47 | 45 |
| HC12-4 | 4 | | | |
| HC12-5 | 5 | | | |
| HC12-6 | 6 | | | |
| HC12-8 | 8 | | | |
| HC20-3 | 3 | 20 | 20 | 50.5 |
| HC20-4 | 4 | | | |
| HC20-5 | 5 | | | |
| HC20-6 | 6 | | | |
| HC20-7 | 7 | | | |
| HC20-8 | 8 | | | |
| HC20-9 | 9 | | | |
| HC20-10 | 10 | | | |
| HC20-11 | 11 | | | |

| Model | d | D | L | L1 |
|---------|----|----|------|------|
| HC20-12 | 12 | 20 | 20 | 50.5 |
| HC20-13 | 13 | | | |
| HC20-14 | 14 | | | |
| HC20-15 | 15 | | | |
| HC20-16 | 16 | | | |
| HC32-6 | 6 | 32 | 64.5 | 61 |
| HC32-8 | 8 | | | |
| HC32-10 | 10 | | | |
| HC32-12 | 12 | | | |
| HC32-14 | 14 | | | |
| HC32-16 | 16 | | | |
| HC32-18 | 18 | | | |
| HC32-20 | 20 | | | |
| HC32-25 | 25 | | | |

Straight Collets



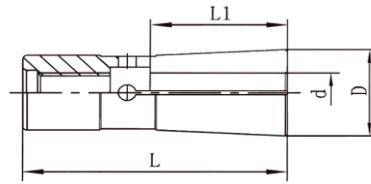
○ Material: 65Mn
 ○ Hardness: HRC44-48
 ○ Accuracy: $\leq 0.008\text{mm}$



| Model | Inside Diameter | D | D2 | L |
|-------|--|----|----|----|
| C20 | 3/4/5/6/7/8/9/10/11/12/13/14/15/16mm | 20 | 25 | 52 |
| C25 | 3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20mm | 25 | 31 | 60 |
| C32 | 3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25mm | 32 | 37 | 73 |
| C42 | 3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/ 27/28/29/30/31/32mm | 42 | 48 | 80 |



- Material: 65Mn
- Hardness: HRC44-48
- Accuracy: $\leq 0.005\text{mm}$



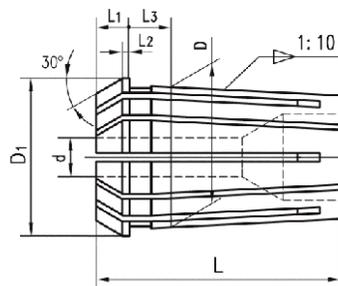
| Model | | d | L | L1 | D |
|-------|-------|-------|----|----|----|
| SDC6 | 3 | 3 | 36 | 14 | 96 |
| | 3,175 | 3,175 | 36 | 14 | 96 |
| | 4 | 4 | 36 | 14 | 96 |
| | 5 | 5 | 36 | 16 | 96 |
| | 6 | 6 | 36 | 16 | 96 |
| SDC8 | 3 | 3 | 45 | 15 | 15 |
| | 4 | 4 | 45 | 16 | 15 |
| | 6 | 6 | 45 | 24 | 15 |
| | 8 | 8 | 45 | 26 | 15 |
| SDC12 | 4 | 4 | 60 | 15 | 22 |
| | 6 | 6 | 60 | 25 | 22 |
| | 8 | 8 | 60 | 30 | 22 |
| | 10 | 10 | 60 | 33 | 22 |
| | 12 | 12 | 60 | 33 | 22 |

EOC/OZ Collets

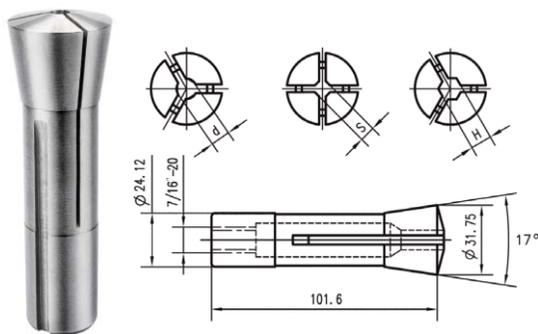


- Material: 65Mn
- Hardness: HRC44-48
- Accuracy: $\leq 0.015\text{mm}$

DIN6388B Taper: 1:10



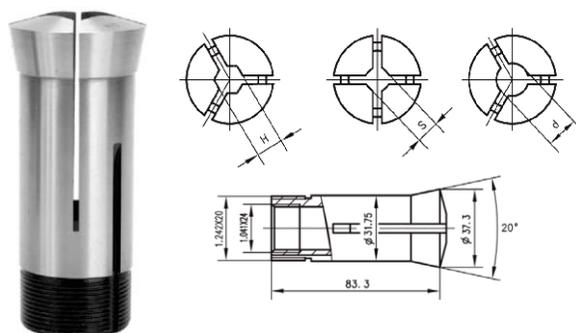
| Model | D | D1 | d | L | L1 | L2 | L3 |
|--------|-------|-------|--------|----|-----|------|-----|
| EOC16B | 22.65 | 25.5 | 2 ~ 16 | 40 | 5.5 | 1.2 | 9.5 |
| EOC20B | 27.4 | 29.8 | 2 ~ 20 | 45 | 6 | 1.35 | 10 |
| EOC25B | 32.9 | 35.05 | 2 ~ 25 | 52 | 6 | 1.4 | 10 |
| EOC32B | 41.3 | 43.7 | 4 ~ 32 | 60 | 6 | 1.45 | 11 |



| Model | Type | Clamping range | | Wt(kg) |
|---------|--------|----------------|------------|--------|
| | | mm | in | |
| R8-01-d | Round | 1 ~ 20 | 1/16 ~ 7/8 | 0.24 |
| R8-02-S | Square | 3 ~ 13 | 1/8 ~ 1/2 | 0.24 |
| R8-03-H | Hex | 3 ~ 16 | 1/8 ~ 5/8 | 0.24 |

1. Material: 65Mn
2. Hardness: clamping part HRC55 ~ 60 elastic part HRC40 ~ 45
3. This unit is applicable to all sorts of milling machines, which spindle taper hole is R8, such as X6325, X5325 etc.

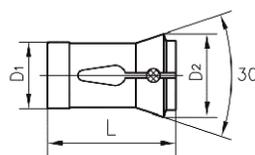
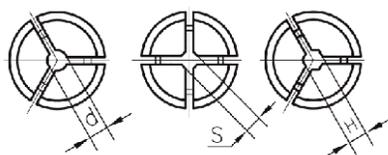
5C Collets



| Model | Type | Clamping range | | Wt(kg) |
|---------|--------|----------------|--------------|--------|
| | | mm | in | |
| 5C-01-d | Round | 1 ~ 28 | 1/32 ~ 1-1/8 | 0.24 |
| 5C-02-S | Square | 3 ~ 19 | 1/8 ~ 3/4 | 0.24 |
| 5C-03-H | Hex | 3 ~ 22 | 1/8 ~ 7/8 | 0.24 |

1. Material: 65Mn
2. Hardness: clamping part HRC55 ~ 60 elastic part HRC40 ~ 45
3. This unit is applicable to all sorts of lathes, which spindle taper hole is 5C, such as automatic lathes, CNC lathes etc.

Clamping Collets



1. Material: 65Mn
2. Hardness: clamping part HRC55 ~ 60 elastic part HRC40 ~ 45
3. This unit is applicable to all sorts of automatic lathes, turret lathes

| Model | D1(mm) | D2(mm) | L(mm) | Hole size(mm) | | | Wt(kg) |
|-------|--------|--------|-------|---------------|--------|-----|--------|
| | | | | Round | Square | Hex | |
| F175 | 175 | 22 | 51 | 13 | 8 | 10 | 0.05 |
| F22 | 22 | 30 | 55 | 16 | 11 | 13 | 0.09 |
| F27 | 27 | 38 | 72.7 | 22 | 15 | 19 | 0.10 |
| F28 | 28 | 38 | 70 | 22 | 15 | 19 | 0.12 |
| F32 | 32 | 45 | 75 | 26 | 18 | 22 | 0.27 |
| F35 | 35 | 48 | 80 | 30 | 21 | 26 | 0.35 |
| F42 | 42 | 55 | 94 | 36 | 25 | 30 | 0.49 |
| F48 | 48 | 60 | 94 | 42 | 29 | 36 | 0.57 |
| F56 | 56 | 68 | 94 | 50 | 35 | 42 | 0.65 |
| F66 | 66 | 84 | 110 | 60 | 42 | 52 | 1.16 |

ER-M Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER8M | ER8M |
| ER11M | ER11M |
| ER16M | ER16M |
| ER20M | ER20M |

ER-A Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER8A | ER8A |
| ER11A | ER11A |
| ER16A | ER16A |
| ER20A | ER20A |

ER Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| WTG-42 | ER25 |
| WTG-52 | ER32 APU13 |
| WTG-63 | ER40 APU16 |
| WTG-85 | ER50 C32 |

ER-UM Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER20UM | ER20UM |
| ER25UM | ER25UM |
| ER32UM | ER32UM |
| ER40UM | ER40UM |
| ER50UM | ER50UM |

ER-UM Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER20UM | ER20UM |
| ER25UM | ER25UM |
| ER32UM | ER32UM |
| ER40UM | ER40UM |
| ER50UM | ER50UM |

ER-O Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER20 O | ER20 O |
| ER25 O | ER25 O |
| ER32 O | ER32 O |
| ER40 O | ER40 O |
| ER50 O | ER50 O |

Pull Stud Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| BT30 | BT30 |
| BT40 | BT40 |
| BT50 | BT50 |

ER-MS Spanners



| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| ER11MS | ER11MS |
| ER16MS | ER16MS |
| ER20MS | ER20MS |

APU Spanners



| Model of Spanners | Type of Drill Chucks |
|-------------------|----------------------|
| APU13-A | APU13-A |
| APU13-B | APU13-B |

Torque Adjustment Wrench



| Model of Spanners | Type of Tapping Collets |
|-------------------|-------------------------|
| GT12 | GT12 |
| GT24 | GT24 |
| GT42 | GT42 |

APU Spanners



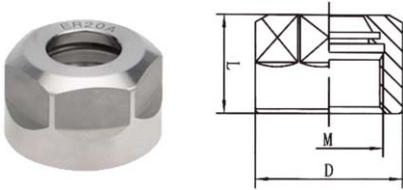
| Model of Spanners | Type of Drill Chucks |
|-------------------|----------------------|
| APU13 | APU13 |
| APU16 | APU16 |

Roller Bearing Wrench



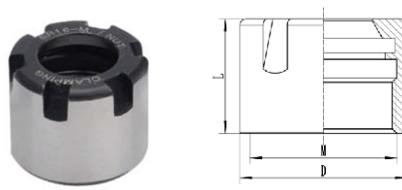
| Model of Spanners | Type of Nuts |
|-------------------|--------------|
| GSK10 | GSK10 |
| GSK13 | GSK13 |
| GSK16 | GSK16 |
| GSK20 | GSK20 |
| GSK25 | GSK25 |
| GSK32 | GSK32 |

ER-A Nuts



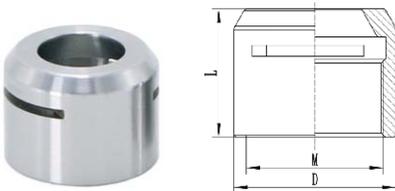
| Model | L | D | M |
|-------|----|----|-----------|
| ER8A | 12 | 12 | M10*0.75 |
| ER11A | 14 | 19 | M14*0.75P |
| ER16A | 19 | 28 | M22*1.5P |
| ER20A | 23 | 27 | M24*1P |
| ER25A | 20 | 42 | M32*1.5P |

ER-M Nuts



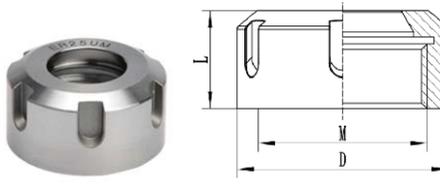
| Model | L | D | M |
|-------|----|----|-----------|
| ER8M | 12 | 12 | M10*0.75 |
| ER11M | 12 | 16 | M13*0.75P |
| ER16M | 18 | 22 | M19*1.0P |
| ER20M | 19 | 28 | M24*1.0P |
| ER25M | 20 | 35 | M30*1.0P |

ER-MS Nuts



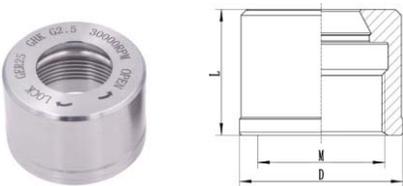
| Model | L | D | M |
|--------|------|----|-----------|
| ER11MS | 11.3 | 16 | M13*0.75P |
| ER16MS | 17 | 22 | M19*1.0P |
| ER20MS | 19 | 28 | M24*1.0P |
| ER25MS | 23 | 35 | M30*1.0P |

ER-UM Nuts



| Model | L | D | M |
|--------|------|----|----------|
| ER25UM | 20 | 42 | M32*1.5P |
| ER32UM | 22.5 | 50 | M40*1.5P |
| ER40UM | 25.5 | 63 | M50*1.5P |
| ER50UM | 35.5 | 78 | M64*2P |

GER Nuts



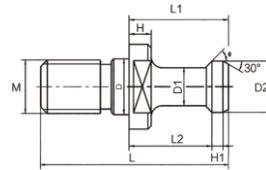
| Model | L | D | M |
|-------|----|----|----------|
| GER16 | 23 | 30 | M19*1.0P |
| GER20 | 25 | 35 | M24*1.0P |
| GER25 | 26 | 40 | M30*1.0P |
| GER32 | 30 | 50 | M40*1.5P |

GSK Nuts



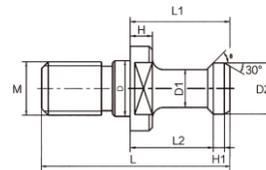
| Model | L | D | M |
|-------|----|----|------------|
| GSK10 | 24 | 27 | M21.5*1.0P |
| GSK16 | 31 | 40 | M32*1.5P |
| GSK20 | 35 | 48 | M40*1.5P |
| GSK25 | 37 | 55 | M45*1.5P |

BT Pull Stud Series



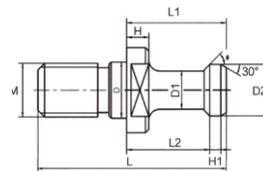
| Model | L | L1 | L2 | D | D1 | D2 | H | H1 | M | θ | | |
|---------|----|----|----|------|----|----|----|-----|-----|-----|-----|-----|
| BT30(θ) | 43 | 23 | 18 | 12.5 | 7 | 11 | 5 | 2.5 | M12 | 45° | 60° | 90° |
| BT40(θ) | 60 | 35 | 28 | 17 | 10 | 15 | 6 | 3 | M16 | 45° | 60° | 90° |
| BT50(θ) | 85 | 45 | 35 | 25 | 17 | 23 | 10 | 5 | M24 | 45° | 60° | 90° |

MAZAK Pull Stud Series



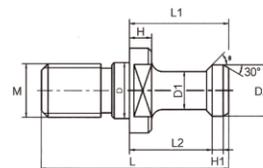
| Model | L | L1 | L2 | D | D1 | D2 | H | H1 | M |
|-------------|-------|-------|-------|----|-------|-------|------|------|-----|
| MAZAK-BT40 | 44.10 | 19.10 | 14.02 | 17 | 12.45 | 18.8 | 3.05 | 1.52 | M16 |
| MAZAK-CAT40 | 41.25 | 16.25 | 11.17 | 17 | 12.45 | 18.8 | 3.05 | 1.52 | M16 |
| MAZAK-BT50 | 65.20 | 25.20 | 17.7 | 25 | 20.83 | 28.96 | 5.05 | 2.54 | M24 |

JT/SK Pull Stud Series



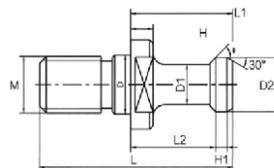
| Model | L | L1 | L2 | D | D1 | D2 | M |
|-------|----|----|----|----|----|----|-----|
| JT30 | 44 | 24 | 19 | 13 | 9 | 13 | M12 |
| JT40 | 54 | 26 | 20 | 17 | 14 | 19 | M16 |
| JT50 | 74 | 34 | 25 | 25 | 21 | 28 | M24 |

CAT Pull Stud Series



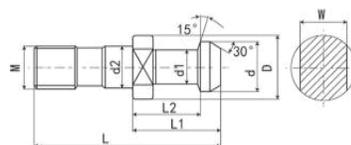
| Model | L | L1 | L2 | D1 | D2 | H | H1 | M |
|-------|-------|-------|-------|-------|-------|------|------|---------|
| CAT30 | 27.94 | 11.68 | 8.13 | 9.78 | 13.21 | 2.54 | 1.01 | 1/2"-13 |
| CAT40 | 38.10 | 16.26 | 11.18 | 12.45 | 18.80 | 3.05 | 1.52 | 5/8"-11 |
| CAT50 | 58.42 | 25.4 | 17.78 | 20.83 | 28.96 | 5.08 | 2.54 | 1"-8 |

Stainless Steel Pull Studs



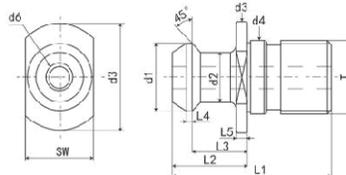
| Model | L | L1 | L2 | D | D1 | D2 | H | H1 | M |
|-------|----|----|----|------|----|----|----|-----|-----|
| BT30 | 43 | 23 | 18 | 12.5 | 7 | 11 | 5 | 2.5 | M12 |
| BT40 | 60 | 35 | 28 | 17 | 10 | 15 | 6 | 3 | M16 |
| BT50 | 85 | 45 | 35 | 25 | 17 | 23 | 10 | 5 | M24 |

Pull Stud Of Carving Machine



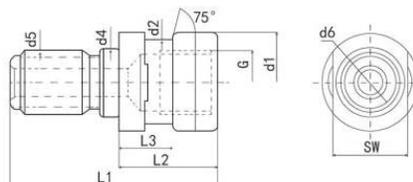
| Model | D | d | d1 | d2 | L | L1 | L2 | W | M |
|-------|------|----|----|-----|----|----|------|----|-----------|
| ISO20 | 11.4 | 9 | 6 | 8.5 | 26 | 12 | 9 | 10 | M8*1.25P |
| ISO25 | 12 | 10 | 7 | 9 | 32 | 16 | 11.6 | 10 | M8*1.25P |
| ISO30 | 17 | 13 | 9 | 13 | 45 | 24 | 19 | 14 | M12*1.75P |

Mazak Mitsui Series Pull Studs



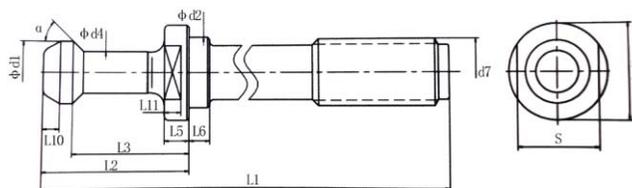
| Model | d1 | d2 | d3 | d4 | d5 | d7 | d8 | L1 | L2 | L3 | L5 | L6 | L9 | S | Weight |
|--------------|-------|----|----|-------|----|-----|----|------|------|-------|----|----|------|----|--------|
| MAZAK-BT40 | 18.8 | 17 | 22 | 12.45 | | M16 | | 4.1 | 191 | 14.02 | 3 | 5 | 1.52 | 19 | 0.051 |
| MAZAK-BT40/W | | | | | 7 | | | | | | | | | | |
| MAZAK-BT50 | 28.96 | 25 | 37 | 20.83 | | M24 | 16 | 65.2 | 25.2 | 1758 | 5 | 8 | 2.54 | 30 | 0.191 |
| MAZAK-BT50/W | | | | | 10 | | | | | | | | | | |

OTT Pull Stud Series



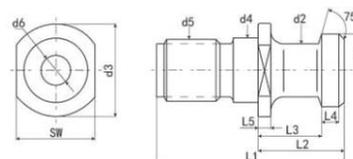
| Model | d1 | d2 | d4 | d5 | d7 | d8 | L1 | L2 | L3 | L5 | L6 | S | Weight |
|-------|------|----|------|----|-----|-----|------|------|------|----|----|----|--------|
| OTT40 | 25 | 17 | 21.1 | 7 | M16 | M16 | 53 | 25.1 | 13.6 | 6 | 5 | 19 | 0.086 |
| OTT50 | 39.6 | 25 | 30.2 | 7 | M24 | M24 | 65.1 | 25.1 | 13.3 | 6 | 8 | 30 | 0.233 |

Morse Taper Tool Holder and Lengthening Pull Stud



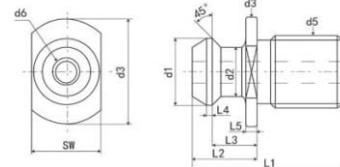
| Model | d1 | d2 | d3 | d4 | d7 | L1 | L2 | L3 | L5 | L6 | L10 | L11 | S | α | (Kg) Weight |
|---------------|----|----|----|----|-----|-----|----|----|----|----|-----|-----|----|-----|-------------|
| BT40-45° -M10 | 15 | 17 | 23 | 10 | M10 | 115 | 35 | 28 | 6 | 5 | 4 | 4 | 19 | 45° | 0.112 |
| BT40-45° -M12 | | | | | M12 | | | | | | | | | | 0.111 |
| BT40-45° -M14 | | | | | M14 | | | | | | | | | | 0.108 |
| BT40-45° -M16 | | | | | M16 | | | | | | | | | | |
| BT40-60° -M12 | | | | | M12 | | | | | | | | | | |
| BT40-60° -M16 | | | | | M16 | | | | | | | | | | |
| BT50-45° -M16 | 23 | 25 | 38 | 17 | M16 | 170 | 45 | 35 | 10 | 8 | 5 | 8 | 30 | 45° | |
| BT50-45° -M20 | | | | | M20 | | | | | | | | | | 0.408 |

ISO 7388/2-1984 International Standard Pull Stud A Type ISO 7388/2-1984



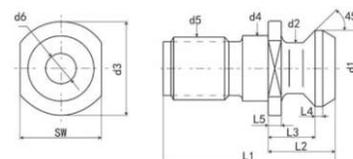
| Model | d1 | d2 | d3 | d4 | d5 | d7 | L1 | L2 | L3 | L5 | L6 | L10 | S | Weight |
|---------|----|-----|----|----|------|-----|----|----|------|-----|----|-----|----|--------|
| LDA20 | 9 | 8.5 | 14 | 6 | | M8 | 26 | 12 | 9 | 2.5 | 3 | 2 | 10 | |
| LDA25 | 10 | 9 | 12 | 7 | | M8 | 32 | 16 | 11.5 | 3.5 | 5 | 2.5 | 10 | |
| LDA30 | 12 | 13 | 16 | 8 | | M12 | 44 | 24 | 19 | 4 | 5 | 2 | 14 | 0.036 |
| LDA30/W | | | | | 4.15 | | | | | | | | | |
| LDA40 | 19 | 17 | 23 | 14 | | M16 | 54 | 26 | 20 | 4 | 7 | 2 | 19 | 0.084 |
| LDA40/W | | | | | 7 | | | | | | | | | |
| LDA45 | 23 | 21 | 30 | 17 | | M20 | 65 | 30 | 23 | 5 | 8 | 2 | 24 | |
| LDA45/W | | | | | 9.5 | | | | | | | | | |
| LDA50 | 28 | 25 | 36 | 21 | | M24 | 74 | 34 | 25 | 5 | 10 | 2 | 30 | 0.261 |
| LDA50W | | | | | 11.5 | | | | | | | | | |
| LDA60 | 40 | 32 | 52 | 30 | | M30 | 90 | 40 | 30 | 6 | 12 | 2 | 46 | |
| LDA60/W | | | | | 14 | | | | | | | | | |

American Standard Pull Stud ANSI/AMSE B550-1994



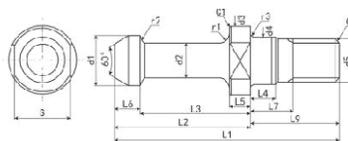
| Model | d1 | d3 | d4 | d5 | d7 | L1 | L2 | L3 | L5 | L9 | S | Weight |
|---------------|-------|-------|-------|-------|--------------|-------|-------|-------|------|------|-------|--------|
| CAT30-45° U | 13.21 | 16.51 | 9.78 | | 0.5"-13UNC | 27.94 | 11.68 | 8.13 | 2.54 | 1.02 | 13.46 | |
| CAT30-45° U/W | | | | 4.75 | | | | | | | | |
| inch | 0.520 | 0.65 | 0.385 | 0.187 | | 1.10 | 0.460 | 0.320 | 0.10 | 0.04 | 0.53 | |
| CAT40-45° U | 18.80 | 23.88 | 12.45 | | 0.625"-11UNC | 38.10 | 16.26 | 11.18 | 3.05 | 1.52 | 19.05 | 0.055 |
| CAT40-45° U/W | | | | 7.14 | | | | | | | | 43 |
| inch | 0.740 | 0.94 | 0.490 | 0.281 | | 1.50 | 0.640 | 0.440 | 0.12 | 0.06 | 0.75 | |
| CAT45-45° U | 23.88 | 30.48 | 15.37 | | 0.75"-10UNC | 45.72 | 20.83 | 14.73 | 4.06 | 2.03 | 25.40 | |
| CAT45-45° U/W | | | | 9.53 | | | | | | | | |
| inch | 0.940 | 1.20 | 0.605 | 0.375 | | 1.80 | 0.820 | 0.580 | 0.16 | 0.08 | 1.00 | |
| CAT50-45° U | 28.96 | 36.58 | 20.83 | | 1"-8UNC | 58.42 | 25.40 | 17.78 | 5.08 | 2.54 | 31.75 | 0.220 |
| CAT50-45° U/W | | | | 11.89 | | | | | | | | 0.170 |
| inch | 1.140 | 1.44 | 0.820 | 0.468 | | 2.30 | 1.000 | 0.700 | 0.20 | 0.10 | 1.25 | |
| CAT60-45° U | 37.08 | 54.36 | 26.54 | | 1.25"-7UNC | 81.28 | 38.10 | 27.43 | 7.62 | 3.56 | 38.10 | |
| CAT60-45° U/W | | | | 12.70 | | | | | | | | |
| inch | 1.460 | 2.14 | 1.045 | 0.500 | | 3.20 | 1.500 | 1.080 | 0.30 | 0.14 | 1.50 | |

ISO 7388/3-2013 International Standard Pull Stud B Type ISO 7388/3-2013



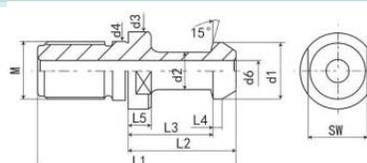
| Model | d1 | d2 | d3 | d4 | d5 | d7 | L1 | L2 | L3 | L5 | L6 | L10 | S | Weight |
|---------|-------|----|------|-------|-------|-----|-------|-------|-------|------|----|------|----|--------|
| LDB30 | 13.35 | 13 | 16.5 | 9.3 | | M12 | 31.8 | 11.8 | 8.15 | 2.75 | 5 | 2.4 | 13 | |
| LDB30/W | | | | | 4.15 | | | | | | | | | |
| LDB40 | 18.95 | 17 | 22.5 | 12.95 | | M16 | 44.4 | 16.4 | 11.15 | 3.25 | 7 | 3.5 | 18 | 0.069 |
| LDB40/W | | | | | 7.35 | | | | | | | | | 0.053 |
| LDB45 | 24.05 | 21 | 30 | 16.3 | | M20 | 55.95 | 20.95 | 14.85 | 4.25 | 8 | 3.85 | 24 | |
| LDB45/W | | | | | 9.25 | | | | | | | | | |
| LDB50 | 29.1 | 25 | 37 | 19.6 | | M24 | 65.55 | 25.55 | 17.95 | 5.25 | 10 | 4.85 | 30 | 0.234 |
| LDB50/W | | | | | 11.55 | | | | | | | | | 0.183 |
| LDB60 | 37.25 | 32 | 50 | 24.95 | | M30 | 88.15 | 38.15 | 27.65 | 7.75 | 12 | 6.75 | 36 | |
| LDB60/W | | | | | 13.85 | | | | | | | | | 0.440 |

SR Pull Stud Series



| Model | L1 | d4 h7 | d5 6g | C2 | r3 | L4 | L7 | d3 0 -0.1 | r1 | L5 0 -0.1 | s 0 -0.2 | C1 |
|-------|-----------------|-----------------|-----------------|-----------------|-----|-----|------------------|------------------|-------|-----------------|----------------|-----|
| S5R | 23.5 | 5.5 | M5 | 0.5 | 0.4 | 3 | 5 | 8 | 1 | 2.5 | 7 | 0.2 |
| S10R | 26.5 | 6.5 | M6 | 0.5 | 0.4 | 3 | 5 | 10 | 1.5 | 3 | 8 | 0.3 |
| S15R | 32 | 8.5 | M8 | 1 | 0.5 | 4 | 6 | 12 | 1.5 | 3.5 | 10 | 0.4 |
| S20R | 34.5 | 8.5 | M8 | 1 | 0.5 | 4 | 6 | 14 | 1.8 | 4 | 10 | 0.5 |
| S25R | 40 | 10.5 | M10 | 1 | 0.5 | 4 | 7 | 15.5 | 2 | 4.5 | 13 | 0.5 |
| Model | d1 0 -0.1 | d2 0 -0.1 | L2 0 -0.1 | L3 0 -0.1 | L6 | r2 | φ | | L3-L5 | L9 | CHUCK | |
| | | | | | | | 1 | 2 | | | | |
| S5R | 5.8 | 4 | 13.5 | 10.5 | 1.4 | 0.3 | +0.5 0 15° | +0.5° 0 0° | 8 | 10 | S5T | |
| S10R | 7 | 5 | 15.5 | 12 | 1.6 | 0.3 | | | 9 | 11 | S10T | |
| S15R | 8.3 | 6 | 18 | 14 | 1.9 | 0.4 | | | 10.5 | 14 | S15T | |
| S20R | 9.5 | 7 | 20.5 | 16 | 2.1 | 0.4 | | | 12 | 14 | S20T | |
| S25R | 10.8 | 8 | 23 | 18 | 2.3 | 0.5 | | | 13.5 | 17 | S25T | |

Japan JIS B6399 Pull Studs



| Model | d1 | d2 | d3 | d4 | d5 | d7 | L1 | L2 | L3 | L5 | L6 | L9 | L11 | S | Weight |
|-------|----|------|------|----|-----|-----|----|------|------|----|----|----|-----|----|--------|
| 30P | 12 | 12.5 | 16.5 | 8 | 4 | M12 | 43 | 23.4 | 18.4 | 5 | 4 | 3 | 3.5 | 13 | |
| 30P/W | | | | | | | | | | | | | | | |
| 35P | 15 | 12.5 | 20 | 11 | 5 | M12 | 44 | 24 | 19 | 5 | 4 | 3 | 3.5 | 17 | |
| 35P/W | | | | | | | | | | | | | | | |
| 40P | 19 | 17 | 23 | 14 | 7 | M16 | 54 | 29 | 23 | 7 | 5 | 3 | 5 | 19 | 0.087 |
| 40P/W | | | | | | | | | | | | | | | 0.071 |
| 45P | 23 | 21 | 31 | 17 | 8.5 | M20 | 60 | 30 | 23 | 7 | 6 | 4 | 5 | 24 | |
| 45P/W | | | | | | | | | | | | | | | |
| 50P | 28 | 25 | 38 | 21 | 10 | M24 | 74 | 34 | 25 | 7 | 8 | 5 | 5 | 30 | 0.224 |
| 50P/W | | | | | | | | | | | | | | | |
| 60P | 36 | 31 | 48 | 27 | 12 | M30 | 98 | 48 | 36 | 11 | 10 | 7 | 8 | 41 | 0.509 |
| 60P/W | | | | | | | | | | | | | | | |

CAT-BT Blended Standard Pull Studs CAT-BT



American Standard Screw Thread Pull Stud

| Model | d1 | d3 | d4 | d5 | d7 | L1 | L2 | L3 | L5 | L10 | L11 | S | α | Weight | | | | | | | | | | |
|---------------|----|----|----|-----|--------------|-------|-------|-------|----|-----|-----|----|-----|--------|---------|-------|------|------|----|---|---|----|-----|--|
| CAT40-45° U | 15 | 23 | 10 | | 0.625"-11UNC | 57 | 32.15 | 25.15 | 6 | 4 | 4 | 19 | 45° | 0.069 | | | | | | | | | | |
| CAT40-45° U/W | | | | 4 | | | | | | | | | | 0.064 | | | | | | | | | | |
| CAT40-60° U | | | | | | | | | | | | | | | 1"-8UNC | 78.22 | 45.2 | 35.2 | 10 | 5 | 8 | 30 | 60° | |
| CAT40-60° U/W | | | | 4 | | | | | | | | | | | | | | | | | | | | |
| CAT40-90° U | | | | | | | | | | | | | | | | | | | | | | | 90° | |
| CAT40-90° U/W | | | | 4 | | | | | | | | | | | | | | | | | | | | |
| CAT50-45° U | 23 | 38 | 17 | | 1"-8UNC | 78.22 | 45.2 | 35.2 | 10 | 5 | 8 | 30 | 45° | 0.286 | | | | | | | | | | |
| CAT50-45° U/W | | | | 8.5 | | | | | | | | | | 0.230 | | | | | | | | | | |
| CAT50-60° U | | | | | | | | | | | | | | | 90° | | | | | | | | | |
| CAT50-60° U/W | | | | 8.5 | | | | | | | | | | | | | | | | | | | | |
| CAT50-90° U | | | | | | | | | | | | | | | | | | | | | | | | |
| CAT50-90° U/W | | | | 8.5 | | | | | | | | | | | | | | | | | | | | |

Metric Srew Thread Pull Stud

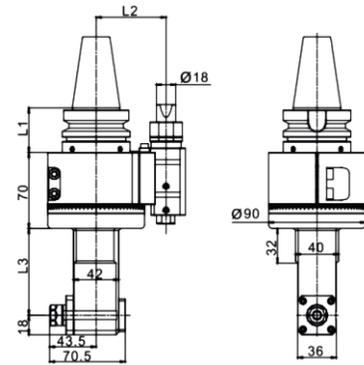
| Model | d1 | d2 | d3 | d4 | d5 | d6 | L1 | L2 | L3 | SW | α | Weight | | |
|--------------|------|-------|-------|-------|-----|-------|------|-------|------|-------|------|--------|-----|--|
| CAT40*45° | 15 | 10 | 23 | 17 | M16 | | 57 | 32 | 25 | 19 | 45° | 0.07 | | |
| CAT40*45° /W | | | | | | 4 | | | | | | 0.06 | | |
| CAT40*60° | | | | | | | | | | | | | 90° | |
| CAT40*60° /W | | | | | | 4 | | | | | 0.06 | | | |
| CAT40*90° | | | | | | | | | | | | | | |
| CAT40*90° /W | | | | | | 4 | | | | | 0.06 | | | |
| inch | 0.59 | 0.394 | 0.905 | 0.512 | | 0.157 | 2.25 | 1.266 | 0.99 | 0.748 | | | | |

AG90-ER11



: BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
| SK30/40/50 | CAT30/40/50 | BT30/40/50 |
| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



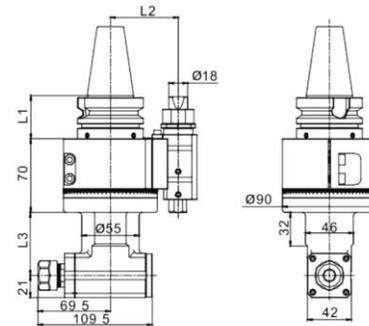
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER11-80 | ER11 | 41/48 | 65/80 | 80 | 1KW | 4500RPM | 6Nm | 1:1 |
| AG90-ER11-140 | ER11 | 41/48 | 65/80 | 140 | 1KW | 4500RPM | 6Nm | 1:1 |
| AG90-ER11-200 | ER11 | 41/48 | 65/80 | 200 | 1KW | 4500RPM | 6Nm | 1:1 |

AG90-ER16



BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
| SK30/40/50 | CAT30/40/50 | BT30/40/50 |
| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



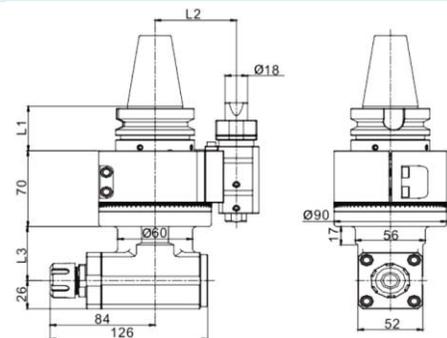
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER16-60 | ER16 | 41/48 | 65/80 | 60 | 1.5KW | 4500RPM | 12Nm | 1:1 |
| AG90-ER16-120 | ER16 | 41/48 | 65/80 | 120 | 1.5KW | 4500RPM | 12Nm | 1:1 |
| AG90-ER16-180 | ER16 | 41/48 | 65/80 | 180 | 1.5KW | 4500RPM | 12Nm | 1:1 |

AG90-ER20



BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
| SK30/40/50 | CAT30/40/50 | BT30/40/50 |
| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



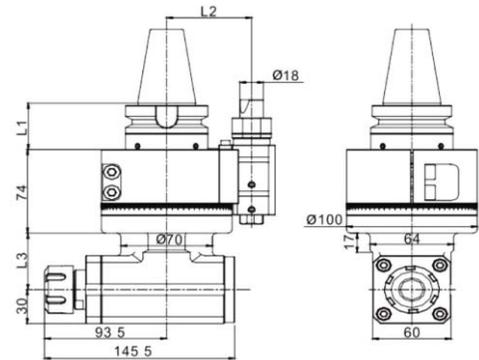
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER20-50 | ER20 | 41/48 | 65/80 | 50 | 2KW | 4000RPM | 16Nm | 1:1 |
| AG90-ER20-110 | FR20 | 41/48 | 65/80 | 110 | 2KW | 4000RPM | 16Nm | 1:1 |
| AG90-ER20-170 | ER20 | 41/48 | 65/80 | 170 | 2KW | 4000RPM | 16Nm | 1:1 |

AG90-ER25



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
| SK30/40/50 | CAT30/40/50 | BT30/40/50 |
| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



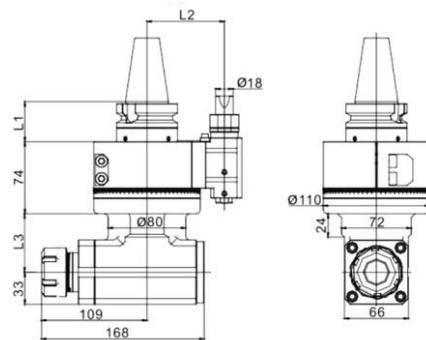
| Model | Output | L1 | L2 | L3 | power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER25-50 | ER25 | 41/48 | 65/80 | 50 | 3KW | 4000RPM | 32Nm | 1:1 |
| AG90-ER25-110 | ER25 | 41/48 | 65/80 | 110 | 3KW | 4000RPM | 32Nm | 1:1 |
| AG90-ER25-170 | ER25 | 41/48 | 65/80 | 170 | 3KW | 4000RPM | 32Nm | 1:1 |

AG90-ER32



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



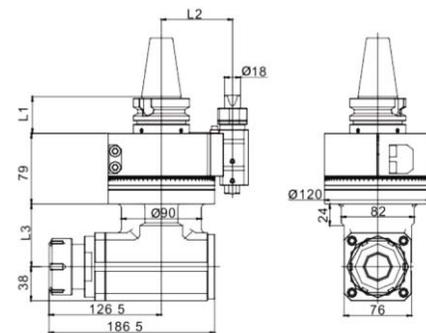
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|--------|-----|-------|---------------|----------------|-----------------|
| AG90-ER32-60 | ER32 | 41/48 | 80/110 | 60 | 4KW | 3500RPM | 40Nm | 1:1 |
| AG90-ER32-130 | ER32 | 41/48 | 80/110 | 130 | 4KW | 3500RPM | 40Nm | 1:1 |
| AG90-ER32-200 | ER32 | ER32 | 80/110 | 200 | 4KW | 3500RPM | 40Nm | 1:1 |

AG90-ER40



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



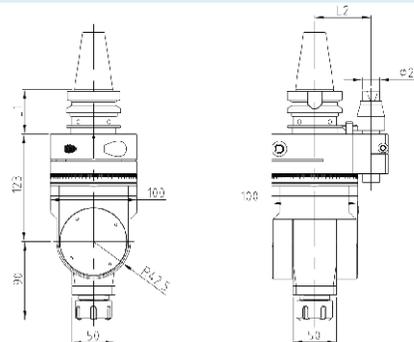
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torqua | Reduction ratio |
|---------------|--------|-------|--------|-----|-------|---------------|----------------|-----------------|
| AG90-ER40-70 | ER32 | 41/48 | 80/110 | 70 | 6KW | 3000RPM | 75Nm | 1:1 |
| AG90-ER40-150 | ER32 | 41/48 | 80/110 | 150 | 6KW | 3000RPM | 75Nm | 1:1 |
| AG90-ER40-230 | ER32 | 41/48 | 80/110 | 230 | 6KW | 3000RPM | 75Nm | 1:1 |

AGMU-ER25



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



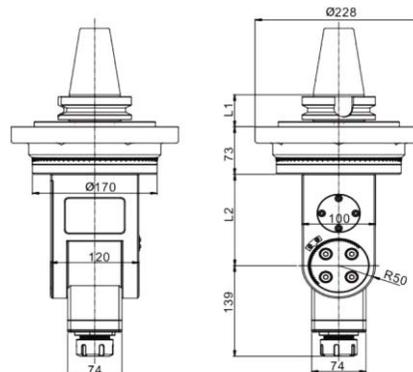
| Model | Output | L1 | L2 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|-----------|--------|-------|-------|-------|---------------|----------------|-----------------|
| AGMU-ER25 | ER25 | 51/58 | 65/80 | 3Kw | 3500RPM | 32Nm | 1:1 |

AGU-ER32



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



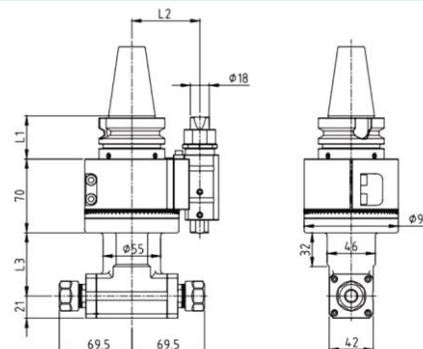
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|--------------|--------|-------|-----|-----|-------|---------------|----------------|-----------------|
| AGU-ER32-140 | ER32 | 42/49 | 140 | 60 | 4Kw | 3500RPM | 45Nm | 1:1 |
| AGU-ER32-220 | ER32 | 42/49 | 220 | 130 | 4Kw | 3500RPM | 45Nm | 1:1 |
| AGU-ER32-300 | ER32 | 42/49 | 300 | 200 | 4Kw | 3500RPM | 45Nm | 1:1 |

AG90-ER16*2



BT, NT, CAT, DAT, HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



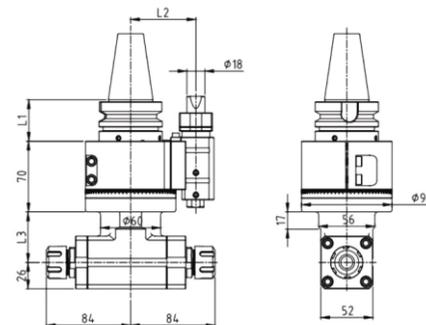
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|-----------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER16x2-60 | ER16 | 41/48 | 65/80 | 60 | 1.5Kw | 4500RPM | 12Nm | 1:1 |
| AG90-ER16x2-120 | ER16 | 41/48 | 65/80 | 120 | 1.5Kw | 4500RPM | 12Nm | 1:1 |
| AG90-ER16x2-180 | ER16 | 41/48 | 65/80 | 180 | 1.5Kw | 4500RPM | 12Nm | 1:1 |

AG90-ER20*2



BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



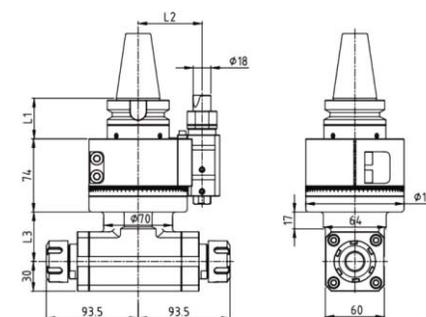
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|-----------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER20x2-50 | ER20 | 41/48 | 65/80 | 50 | 2Kw | 4500RPM | 18Nm | 1:1 |
| AG90-ER20x2-110 | ER20 | 41/48 | 65/80 | 110 | 2Kw | 4500RPM | 18Nm | 1:1 |
| AG90-ER20x2-170 | ER20 | 41/48 | 65/80 | 170 | 2Kw | 4500RPM | 18Nm | 1:1 |

AG90-ER25*2



BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



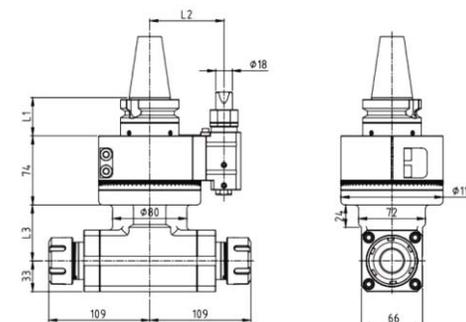
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|-----------------|--------|-------|-------|-----|-------|---------------|----------------|-----------------|
| AG90-ER25x2-50 | ER25 | 41/48 | 65/80 | 50 | 3Kw | 4500RPM | 32Nm | 1:1 |
| AG90-ER25x2-120 | ER25 | 41/48 | 65/80 | 120 | 3Kw | 4500RPM | 32Nm | 1:1 |
| AG90-ER25x2-170 | ER25 | 41/48 | 65/80 | 170 | 3Kw | 4500RPM | 32Nm | 1:1 |

AG90-ER32*2



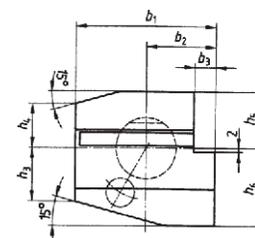
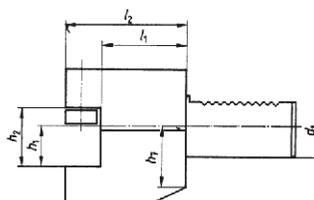
BT、NT、CAT、DAT、HSK

| | | |
|-------------|-------------|--------------|
| | | |
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| | | |
| KM63/80/100 | ISO30/40/50 | HSK63/80/100 |



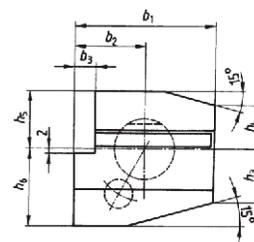
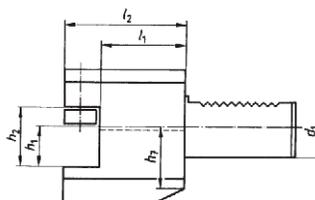
| Model | Output | L1 | L2 | L3 | Power | Maximum Speed | Maximum torque | Reduction ratio |
|-----------------|--------|-------|----|-----|-------|---------------|----------------|-----------------|
| AG90-ER32x2-60 | ER32 | 41/48 | 80 | 60 | 4Kw | 3500RPM | 45Nm | 1:1 |
| AG90-ER32x2-130 | ER32 | 41/48 | 80 | 130 | 4Kw | 3500RPM | 45Nm | 1:1 |
| AG90-ER32x2-200 | ER32 | 41/48 | 80 | 200 | 4Kw | 3500RPM | 45Nm | 1:1 |

Radial outer diameter right-hand fixed Tool Holders (B1 type)



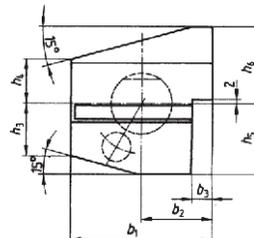
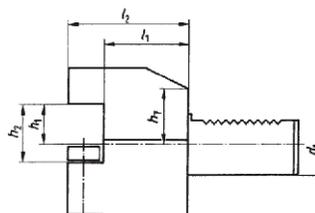
| Model | d1 | b1 | b2 | b3 | h1 | h2 | h3 | h4 | h5 | h6 | h7 | l1 | l2 |
|-------------|----|-----|------|------|----|----|----|------|------|------|----|----|----|
| B1-20X16X30 | 20 | 55 | 30 | 7 | 16 | 22 | 19 | 19 | 25 | 30 | 23 | 16 | 30 |
| B1-30X20X40 | 30 | 70 | 35 | 10 | 20 | 29 | 26 | 22 | 28 | 38 | 30 | 22 | 40 |
| B1-40X25X44 | 40 | 85 | 42.5 | 12.5 | 25 | 34 | 35 | 30 | 32.5 | 48 | — | 22 | 44 |
| B1-50X32X55 | 50 | 100 | 50 | 16 | 32 | 41 | 42 | 35 | 35 | 60 | — | 30 | 55 |
| B1-60X32X60 | 60 | 125 | 62.5 | 16 | 32 | 41 | 46 | 42.5 | 42.5 | 62.5 | — | 30 | 60 |

Radial outer diameter left-hand fixed Tool Holders (B2 type)



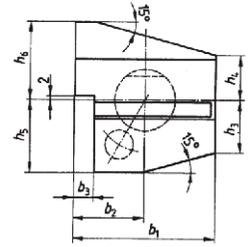
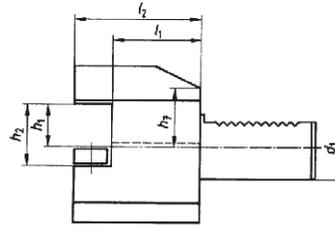
| Model | d1 | b1 | b2 | b3 | h1 | h2 | h3 | h4 | h5 | h6 | h7 | l1 | l2 |
|-------------|----|-----|------|------|----|----|----|------|------|------|----|----|----|
| B2-20X16X30 | 20 | 55 | 30 | 7 | 16 | 22 | 19 | 19 | 25 | 30 | 23 | 16 | 30 |
| B2-30X20X40 | 30 | 70 | 35 | 10 | 20 | 29 | 26 | 22 | 28 | 38 | 30 | 22 | 40 |
| B2-40X25X44 | 40 | 85 | 42.5 | 12.5 | 25 | 34 | 35 | 30 | 32.5 | 48 | — | 22 | 44 |
| B2-50X32X55 | 50 | 100 | 50 | 16 | 32 | 41 | 42 | 35 | 35 | 60 | — | 30 | 55 |
| B2-60X32X60 | 60 | 125 | 62.5 | 16 | 32 | 41 | 46 | 42.5 | 42.5 | 62.5 | — | 30 | 60 |

Radial outer diameter right-hand fixed Tool Holders (B3 type)



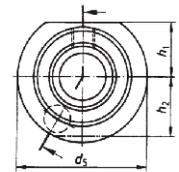
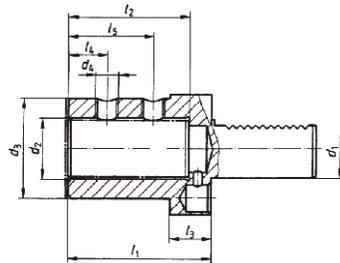
| Model | d1 | b1 | b2 | b3 | h1 | h2 | h3 | h4 | h5 | h6 | h7 | l1 | l2 |
|-------------|----|-----|------|------|----|----|----|------|------|------|----|----|----|
| B3-20X16X30 | 20 | 55 | 30 | 7 | 16 | 22 | 19 | 19 | 25 | 30 | 23 | 16 | 30 |
| B3-30X20X40 | 30 | 70 | 35 | 10 | 20 | 29 | 26 | 22 | 35 | 38 | 28 | 22 | 40 |
| B3-40X25X44 | 40 | 85 | 42.5 | 12.5 | 25 | 34 | 35 | 30 | 42.5 | 48 | — | 22 | 44 |
| B3-50X32X55 | 50 | 100 | 50 | 16 | 32 | 41 | 42 | 35 | 50 | 60 | — | 30 | 55 |
| B3-60X32X60 | 60 | 125 | 62.5 | 16 | 32 | 41 | 46 | 42.5 | 62.5 | 62.5 | — | 30 | 60 |

Radial outer diameter left-hand fixed Tool Holders (B4 type)



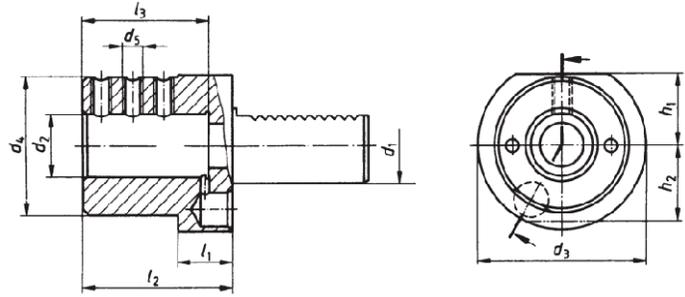
| Model | d1 | b1 | b2 | b3 | h1 | h2 | h3 | h4 | h5 | h6 | h7 | l1 | l2 |
|-------------|----|-----|------|------|----|----|----|------|------|------|----|----|----|
| B4-20X16X30 | 20 | 55 | 30 | 7 | 16 | 22 | 19 | 19 | 25 | 30 | 23 | 16 | 30 |
| B4-30X20X40 | 30 | 70 | 35 | 10 | 20 | 29 | 26 | 22 | 35 | 38 | 28 | 22 | 40 |
| B4-40X25X44 | 40 | 85 | 42.5 | 12.5 | 25 | 34 | 35 | 30 | 42.5 | 48 | — | 22 | 44 |
| B4-50X32X55 | 50 | 100 | 50 | 16 | 32 | 41 | 42 | 35 | 50 | 60 | — | 30 | 55 |
| B4-60X32X60 | 60 | 125 | 62.5 | 16 | 32 | 41 | 46 | 42.5 | 62.5 | 62.5 | — | 30 | 60 |

Internal diameter U Drill fixed Tool Holders (E1 type)



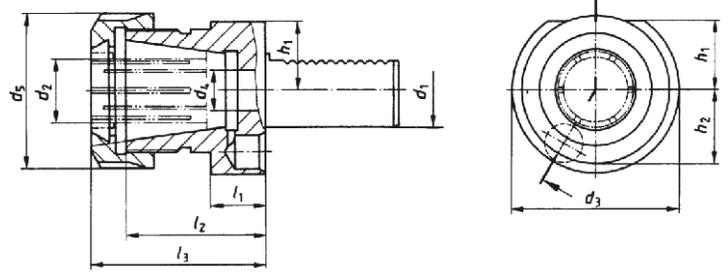
| Model | d1 | d2 | d3 | d4 | d5 | h1 | h2 | l1 | l2 | l3 | l4 | l5 |
|----------|----|----|----|-------|-----|------|----|-----|----|----|----|----|
| E1-20X16 | 20 | 16 | 36 | M10x1 | 50 | — | 23 | 67 | 54 | 18 | 15 | 35 |
| E1-20X20 | 20 | 20 | 40 | M10x1 | 50 | — | 23 | 67 | 54 | 18 | 15 | 35 |
| E1-20X25 | 20 | 25 | 45 | M12x1 | 50 | — | 23 | 71 | 59 | 18 | 17 | 40 |
| E1-30X16 | 30 | 16 | 36 | M10x1 | 68 | 28 | 30 | 67 | 54 | 22 | 15 | 35 |
| E1-30X20 | 30 | 20 | 40 | M10x1 | 68 | 28 | 30 | 67 | 54 | 22 | 15 | 35 |
| E1-30X25 | 30 | 25 | 45 | M12x1 | 68 | 28 | 30 | 71 | 59 | 22 | 17 | 40 |
| E1-30X32 | 30 | 32 | 52 | M12x1 | 68 | 28 | 30 | 75 | 63 | 22 | 20 | 44 |
| E1-40X16 | 40 | 16 | 36 | M10x1 | 83 | 32.5 | — | 67 | 54 | 22 | 15 | 35 |
| E1-40X20 | 40 | 20 | 40 | M10x1 | 83 | 32.5 | — | 67 | 54 | 22 | 15 | 35 |
| E1-40X25 | 40 | 25 | 45 | M12x1 | 83 | 32.5 | — | 75 | 59 | 22 | 17 | 40 |
| E1-40X32 | 40 | 32 | 52 | M12x1 | 83 | 32.5 | — | 75 | 63 | 22 | 20 | 44 |
| E1-40X40 | 40 | 40 | 65 | M16x1 | 83 | 32.5 | — | 90 | 73 | 22 | 22 | 50 |
| E1-50X20 | 50 | 20 | 40 | M10x1 | 98 | 35 | — | 67 | 54 | 30 | 15 | 35 |
| E1-50X25 | 50 | 25 | 45 | M12x1 | 98 | 35 | — | 80 | 59 | 30 | 17 | 40 |
| E1-50X32 | 50 | 32 | 52 | M12x1 | 98 | 35 | — | 80 | 63 | 30 | 20 | 44 |
| E1-50X40 | 50 | 40 | 65 | M16x1 | 98 | 35 | — | 90 | 73 | 30 | 22 | 50 |
| E1-50X50 | 50 | 50 | 75 | M16x1 | 98 | 35 | — | 100 | 83 | 30 | 24 | 60 |
| E1-60X20 | 60 | 20 | 40 | M10x1 | 123 | 42.5 | — | 80 | 54 | 30 | 15 | 35 |
| E1-60X25 | 60 | 25 | 45 | M12x1 | 123 | 42.5 | — | 80 | 59 | 30 | 17 | 40 |
| E1-60X32 | 60 | 32 | 52 | M12x1 | 123 | 42.5 | — | 80 | 63 | 30 | 20 | 44 |
| E1-60X40 | 60 | 40 | 65 | M16x1 | 123 | 42.5 | — | 90 | 73 | 30 | 22 | 50 |
| E1-60X50 | 60 | 50 | 75 | M16x1 | 123 | 42.5 | — | 100 | 83 | 30 | 24 | 60 |

Inner hole side lock fixed Tool Holders (E2 type)



| Model | d1 | d2 | d3 | d4 | d5 | h1 | h2 | l1 | l2 | l3 |
|----------|----|----|----|----|-----|------|----|----|-----|----|
| E2-16X8 | 16 | 8 | 40 | 32 | M6 | 18 | 18 | 13 | 44 | 34 |
| E2-16X10 | 16 | 10 | 40 | 32 | M6 | 18 | 18 | 13 | 44 | 34 |
| E2-16X12 | 16 | 12 | 40 | 40 | M8 | 18 | 18 | 13 | 44 | 34 |
| E2-16X16 | 16 | 16 | 40 | 40 | M8 | 18 | 18 | 13 | 44 | 34 |
| E2-20X8 | 20 | 8 | 50 | 40 | M6 | — | 23 | 18 | 50 | 41 |
| E2-20X10 | 20 | 10 | 50 | 40 | M6 | — | 23 | 18 | 50 | 41 |
| E2-20X12 | 20 | 12 | 50 | 40 | M8 | — | 23 | 18 | 50 | 41 |
| E2-20X16 | 20 | 16 | 50 | 40 | M8 | — | 23 | 18 | 50 | 41 |
| E2-20X20 | 20 | 20 | 50 | 50 | M8 | — | 23 | 18 | 50 | 41 |
| E2-20X25 | 20 | 25 | 50 | 50 | M8 | — | 23 | 18 | 60 | 51 |
| E2-30X10 | 30 | 10 | 68 | 55 | M6 | 28 | 30 | 22 | 60 | 51 |
| E2-30X12 | 30 | 12 | 68 | 55 | M8 | 28 | 30 | 22 | 60 | 51 |
| E2-30X16 | 30 | 16 | 68 | 55 | M8 | 28 | 30 | 22 | 60 | 51 |
| E2-30X20 | 30 | 20 | 68 | 55 | M8 | 28 | 30 | 22 | 60 | 51 |
| E2-30X25 | 30 | 25 | 68 | 55 | M8 | 28 | 30 | 22 | 60 | 51 |
| E2-30X32 | 30 | 32 | 68 | 68 | M8 | 28 | 30 | 22 | 75 | 61 |
| E2-40X12 | 40 | 12 | 83 | 55 | M8 | 32.5 | — | 22 | 75 | 61 |
| E2-40X16 | 40 | 16 | 83 | 55 | M10 | 32.5 | — | 22 | 75 | 61 |
| E2-40X20 | 40 | 20 | 83 | 55 | M10 | 32.5 | — | 22 | 75 | 61 |
| E2-40X25 | 40 | 25 | 83 | 55 | M10 | 32.5 | — | 22 | 75 | 61 |
| E2-40X32 | 40 | 32 | 83 | 83 | M10 | 32.5 | — | 22 | 75 | 61 |
| E2-40X40 | 40 | 40 | 83 | 83 | M10 | 32.5 | — | 22 | 90 | 76 |
| E2-50X12 | 50 | 12 | 98 | 68 | M10 | 35 | — | 30 | 90 | 76 |
| E2-50X16 | 50 | 16 | 98 | 68 | M10 | 35 | — | 30 | 90 | 76 |
| E2-50X20 | 50 | 20 | 98 | 68 | M12 | 35 | — | 30 | 90 | 76 |
| E2-50X25 | 50 | 25 | 98 | 68 | M12 | 35 | — | 30 | 90 | 76 |
| E2-50X32 | 50 | 32 | 98 | 68 | M12 | 35 | — | 30 | 90 | 76 |
| E2-50X40 | 50 | 40 | 98 | 98 | M12 | 35 | — | 30 | 90 | 76 |
| E2-50X50 | 50 | 50 | 98 | 98 | M12 | 35 | — | 30 | 100 | 86 |

Inner hole ER Collet Type Fixed Tool Holders (E4 Type)



| Model | d1 | ER Collet | d2 | d3 | d4 | d5 | h1 | h2 | l1 | l2 | l3 |
|----------|----|-----------|--------|-----|------|----|------|----|----|------|----|
| E4-16X20 | 16 | ER20 | 1 ~ 13 | 40 | 6.7 | 35 | 18 | 18 | 13 | 32 | 44 |
| E4-20X25 | 20 | ER25 | 2 ~ 16 | 50 | 9 | 42 | — | 23 | 18 | 38 | 50 |
| E4-20X32 | 20 | ER32 | 3 ~ 20 | 50 | 9 | 50 | — | 23 | 18 | 49.5 | 62 |
| E4-30X25 | 30 | ER25 | 2 ~ 16 | 68 | 16.5 | 42 | 28 | 30 | 22 | 45 | 57 |
| E4-30X40 | 30 | ER40 | 3 ~ 26 | 68 | 16.5 | 63 | 28 | 30 | 22 | 56 | 70 |
| E4-40X32 | 40 | ER32 | 3 ~ 20 | 83 | 20.5 | 50 | 32.5 | — | 22 | 49.5 | 62 |
| E4-40X40 | 40 | ER40 | 3 ~ 26 | 83 | 20.5 | 63 | 32.5 | — | 22 | 61 | 75 |
| E4-50X40 | 50 | ER40 | 3 ~ 26 | 98 | 25.5 | 63 | 35 | — | 30 | 61 | 75 |
| E4-60X40 | 60 | ER40 | 3 ~ 26 | 123 | 28.5 | 63 | 42.5 | — | 30 | 61 | 75 |

Spindle Force Gauge



Mechanical hydraulic design
Pressure design: 1Kg/m²=10Kg=100N

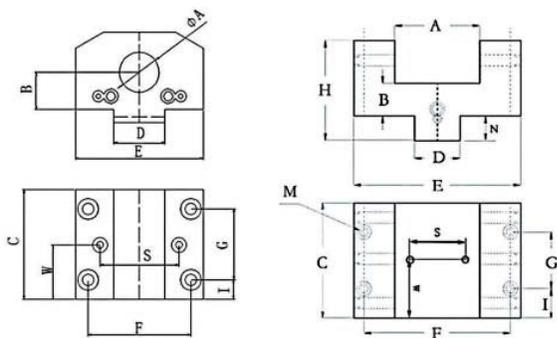
The spindle tension meter is an instrument used to measure the tension of the tie rod. The tension of the tie rod is very important to evaluate the quality of the machine. It is a simple and convenient hydraulic testing instrument for the stability of the equipment spindle to detect whether the tension of the spindle is

| Model | Measuring range | Reference tension range | Weight (KG) |
|-------|-------------------------|-------------------------|-------------|
| BT30 | 0-50kg/cm ² | 200-500 | 4.3 |
| BT40 | 0-150kg/cm ² | 500-1000 | 4.5 |
| BT50 | 0-350kg/cm ² | 1500-2200 | 6.8 |



| Model | H | D | L |
|-----------------------------|----|----|-----|
| SBHA20-32-140L(Tight-hold) | 20 | 32 | 140 |
| SBHA25-20-100L(Tight-hold) | 25 | 20 | 100 |
| SBHA25-25-100L(Tight-hold) | 25 | 25 | 100 |
| SBHA25-32-140L(Tight-hold) | 25 | 32 | 140 |
| SBHA25-40-120L(Tight-hold) | 25 | 40 | 120 |
| SBHA25-40-160L(Tight-hold) | 25 | 40 | 160 |
| SBHA25-50-140L(Tight-hold) | 25 | 50 | 140 |
| SBHA25-50-200L(Tight-hold) | 25 | 50 | 200 |
| SBHA25-60-200L(Tight-hold) | 25 | 60 | 200 |
| SBHA32-20-80L(Tight-hold) | 32 | 20 | 80 |
| SBHA32-25-120L(Tight-hold) | 32 | 25 | 120 |
| SBHA32-32-150L(Tight-hold) | 32 | 32 | 150 |
| SBHA32-40-120L(Tight-hold) | 32 | 40 | 120 |
| SBHA32-40-160L(Tight-hold) | 32 | 40 | 160 |
| SBHA32-50-140L(Tight-hold) | 32 | 50 | 140 |
| SBHA32-50-200L(Tight-hold) | 32 | 50 | 200 |
| SBHA32-60-180L(Tight-hold) | 32 | 60 | 180 |
| SBHA40-40-160L(Tight-hold) | 40 | 40 | 160 |
| SBHA40-50-210L(Tight-hold) | 40 | 50 | 210 |
| SBHA40-60-180L(Tight-hold) | 40 | 60 | 180 |
| SBHA40-60-200L(Tight-hold) | 40 | 60 | 200 |

Suitable for tungsten steel damping tool bar



Boring tool holder: U drill, taper shank twist drill, extension rod, milling cutter rod, inner hole cutter rod, straight shank cutter, lathe guide sleeve, etc.
End face cutter block: square cutter bar, etc.



F70*G40*D20*A32



F72*G45*D20*A40



F80*G60*D20*A40



F58*G32*D16*A32



F68*G42*D30*A32



F71*G43*D25*开 50



F72*G45*D16*开 50



F72*G60*D30*开 50

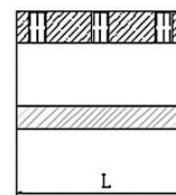
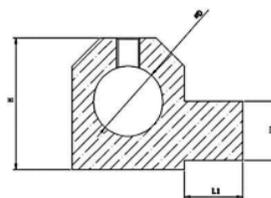


F88*G56*D40*A32



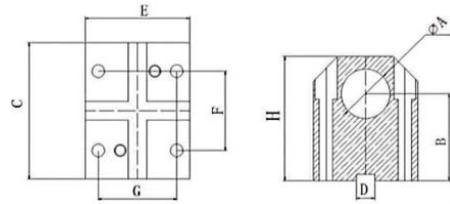
F76*G35*D25凹*A32

Lathe Auxiliary Holders

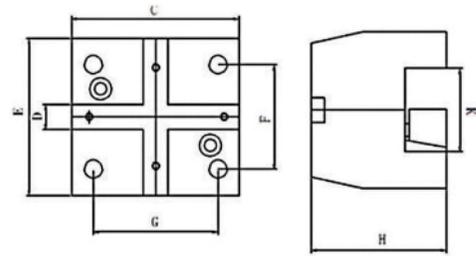


| Model | HT | L1 | D | H | L |
|-----------|----|----|----|----|----|
| SBHA12-20 | 12 | 15 | 20 | 35 | 65 |
| SBHA16-16 | 16 | 20 | 16 | 44 | 65 |
| SBHA16-20 | 16 | 20 | 20 | 44 | 65 |
| SBHA16-25 | 16 | 20 | 25 | 44 | 65 |
| SBHA20-16 | 20 | 20 | 16 | 47 | 65 |
| SBHA20-20 | 20 | 20 | 20 | 47 | 65 |
| SBHA20-25 | 20 | 20 | 25 | 47 | 65 |
| SBHA20-32 | 20 | 20 | 32 | 57 | 80 |
| SBHA20-40 | 20 | 20 | 40 | 65 | 90 |
| SBHA25-16 | 25 | 25 | 16 | 53 | 70 |
| SBHA25-20 | 25 | 25 | 20 | 53 | 70 |
| SBHA25-25 | 25 | 25 | 25 | 53 | 70 |

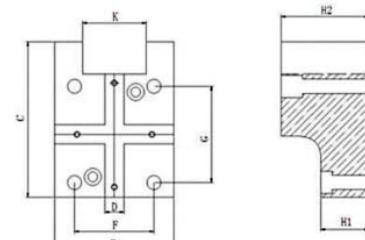
| Model | HT | L1 | D | H | L |
|---------------|----|----|----|----|-----|
| SBHA25-32 | 25 | 25 | 32 | 60 | 80 |
| SBHA25-40 | 25 | 25 | 40 | 67 | 90 |
| SBHA25-50-120 | 25 | 32 | 50 | 83 | 120 |
| SBHA32-20 | 32 | 32 | 20 | 67 | 90 |
| SBHA32-25 | 32 | 32 | 25 | 67 | 90 |
| SBHA32-32 | 32 | 32 | 32 | 66 | 90 |
| SBHA32-40 | 32 | 32 | 40 | 75 | 100 |
| SBHA32-40-125 | 32 | 32 | 40 | 75 | 125 |
| SBHA32-50-120 | 32 | 32 | 50 | 83 | 120 |
| SBHA40-40 | 40 | 40 | 40 | 90 | 130 |
| SBHA40-50 | 40 | 40 | 50 | 93 | 130 |
| SBHA40-60 | 40 | 40 | 60 | 95 | 180 |



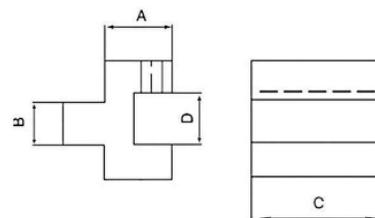
| Model | A | B | C | D | E | F | G | H |
|-------|----|----|-----|----|----|----|----|-----|
| BMT40 | 25 | 60 | 92 | 12 | 63 | 50 | 60 | 63 |
| BMT45 | 32 | 65 | 95 | 15 | 75 | 58 | 58 | 91 |
| BMT55 | 40 | 70 | 110 | 15 | 85 | 64 | 64 | 100 |
| BMT65 | 40 | 72 | 126 | 18 | 95 | 73 | 70 | 116 |



| Model | C | D | E | F | G | H | K |
|-------|-----|----|----|----|----|----|----|
| BMT40 | 81 | 12 | 75 | 50 | 60 | 65 | 40 |
| BMT45 | 90 | 15 | 75 | 58 | 58 | 80 | 40 |
| BMT55 | 100 | 15 | 85 | 64 | 64 | 80 | 50 |
| BMT65 | 100 | 18 | 96 | 73 | 70 | 82 | 50 |

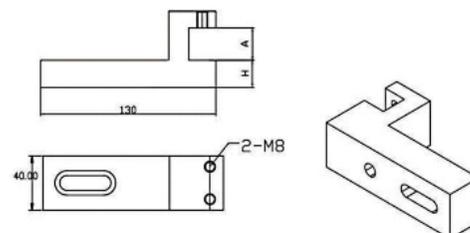


| Model | C | D | E | F | G | K |
|-------|-----|----|----|----|----|----|
| BMT40 | 97 | 12 | 75 | 50 | 60 | 40 |
| BMT45 | 105 | 15 | 75 | 58 | 58 | 40 |
| BMT55 | 126 | 15 | 85 | 64 | 64 | 50 |
| BMT65 | 131 | 18 | 97 | 73 | 70 | 50 |



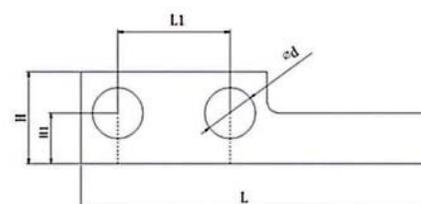
| Model | A | B | C | D |
|-------|----|----|-----|----|
| 20-25 | 35 | 20 | 85 | 25 |
| 25-32 | 45 | 25 | 85 | 30 |
| 32-40 | 62 | 32 | 100 | 50 |

L- Type Row Knife Hole Holders



Select model according to centerheight and opening size, support non-standard

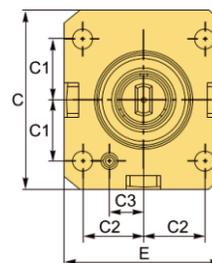
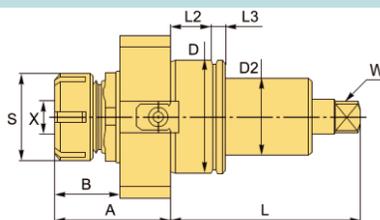
Double Station Auxiliary Tool Rest



| Model | H1 | d | L1 | H | L |
|---------|----|----|----|----|-----|
| C20-H20 | 20 | 20 | 50 | 40 | 150 |
| C25-H20 | 20 | 25 | 55 | 45 | 171 |
| C20-H25 | 25 | 20 | 55 | 45 | 171 |
| C25-H25 | 25 | 25 | 55 | 45 | 171 |

It is used to install two tools in one tool position of lathe tool rest, reducing tool change, saving time and labor and higher efficiency. If you need a three-station knife rest, we can also make it to order.

BMT45-ADZ45-25, internal and external coolant supply



| | | | |
|-------------------|-----------------------|--------------|--------------|
| BMT type | BMT45 | Weight, kg | 2 |
| Cooling type | Internal and external | Positioning | Axial |
| Tool setting size | ER25/ER25S | Tab size (W) | 6*13 (BMT45) |
| Tool holder type | Powered | Collets: | ER25, ER25S |
| Holder series: | BMT-ADZ | C | 85 mm |
| C1 | 29 mm | C2 | 29 mm |
| C3 | 16.5 mm | X | 1-16 mm |
| D | 45 mm | A | 58 mm |
| B | 30 mm | E | 75 mm |
| L | 84 mm | L2 | 40 mm |
| L3 | 5 mm | S | 42 mm |

BMT45-ADZ45-25, internal and external coolant supply

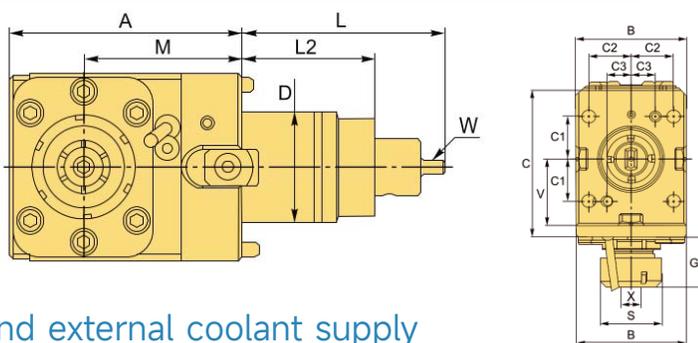
| | | | |
|-------------------|-----------------------|--------------|--------------|
| BMT type | BMT55 | Weight, kg | 3 |
| Cooling type | Internal and external | Positioning | Axial |
| Tool setting size | ER25/ER25S | Tab size (W) | 8*28 (BMT55) |
| Tool holder type | Powered | Collets: | ER25, ER25S |
| Holder series: | BMT-ADZ | C | 92 mm |
| C1 | 32 mm | C2 | 32 mm |
| C3 | 14 mm | X | 1-16 mm |
| D | 55 mm | D2 | 40 mm |
| A | 59 mm | B | 31.8 mm |
| E | 86 mm | L | 104 mm |
| L2 | 23.5 mm | L3 | 6.5 mm |
| S | 42 mm | | |

BMT65-ADZ65-32, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|---------------|
| BMT type | BMT65 | Weight, kg | 4.5 |
| Cooling type | Internal and external | Positioning | Axial |
| Tool setting size | ER32/ER32S | Tab size (W) | 10*27 (BMT65) |
| Tool holder type | Powered | Collets: | ER32, ER32S |
| Holder series: | BMT-ADZ | C | 108 mm |
| C1 | 37.5 mm | C2 | 36.5 mm |
| C3 | 9 mm | X | 2-20 mm |
| D | 65 mm | D2 | 45 mm |
| A | 70 mm | B | 33 mm |
| E | 98 mm | L | 112 mm |
| L2 | 9 mm | L3 | 23 mm |
| S | 50 mm | | |

BMT45-ADN45-25-65, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|--------------|
| BMT type | BMT45 | Weight, kg | 6 |
| Cooling type | Internal and external | Positioning | Radial |
| Tool setting size | ER25/ER25S | Tab size (W) | 6*13 (BMT45) |
| Tool holder type | Powered | Collets: | ER25, ER25S |
| Holder series: | BMT-AND | C | 102 mm |
| C1 | 29 mm | C2 | 29 mm |
| C3 | 16.5 mm | G | 30 mm |
| X | 1-16 mm | D | 45 mm |
| A | 95 mm | B | 75 mm |
| L | 84 mm | L2 | 55 mm |
| M | 65 | S | 42 mm |
| V | 45 mm | | |



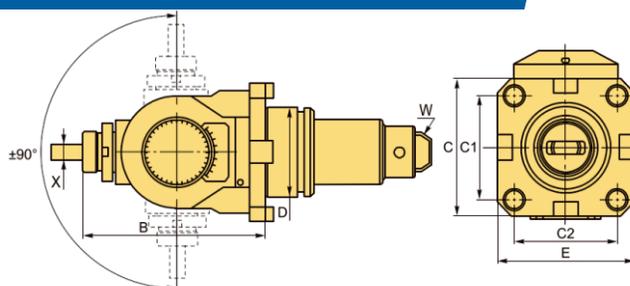
BMT55-ADN55-25-60, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|--------------|
| BMT type | BMT45 | Weight, kg | 6.5 |
| Cooling type | Internal and external | Positioning | Radial |
| Tool setting size | ER25/ER25S | Tab size (W) | 8*28 (BMT55) |
| Tool holder type | Powered | Collets: | ER25, ER25S |
| Holder series: | BMT-AND | C | 102 mm |
| C1 | 29 mm | C2 | 32 mm |
| C3 | 16.5 mm | G | 30 mm |
| X | 1-16 mm | D | 55 mm |
| A | 95 mm | B | 85 mm |
| L | 84 mm | L2 | 75 mm |
| M | 65 | S | 42 mm |
| V | 45 mm | | |

BMT65-ADN65-32-72, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|---------------|
| BMT type | BMT65 | Weight, kg | 9 |
| Cooling type | Internal and external | Positioning | Radial |
| Tool setting size | ER32/ER32S | Tab size (W) | 10*27 (BMT65) |
| Tool holder type | Powered | Collets: | ER32, ER32S |
| Holder series: | BMT-AND | C | 119.5 mm |
| C1 | 35 mm | C2 | 36.5 mm |
| C3 | 17 mm | G | 32 mm |
| X | 2-20 mm | D | 65 mm |
| A | 110 mm | B | 94 mm |
| L | 112 mm | L2 | 50 mm |
| M | 72 | S | 50 mm |
| V | 55 mm | | |

BMTadjustable powered tool holder ($\pm 90^\circ$)

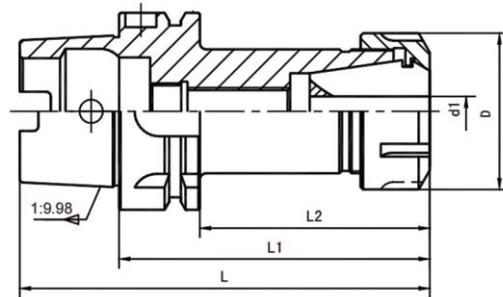


BMT45-ADC-ER20, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|-----------------------------------|
| BMT type | BMT45 | Weight, kg | 4.2 |
| Cooling type | Internal and external | Positioning | Universal (with adjustable angle) |
| Tool setting size | Er20 | Tab size (W) | 6*13 (BMT45) |
| Tool holder type | Powered | Collets: | ER20 |
| Holder series: | BMT-ADC | C | 75 mm |
| C1 | 58 mm | C2 | 58 mm |
| X | 1-13 mm | D | 45 mm |
| B | 119.5 mm | E | 80 mm |

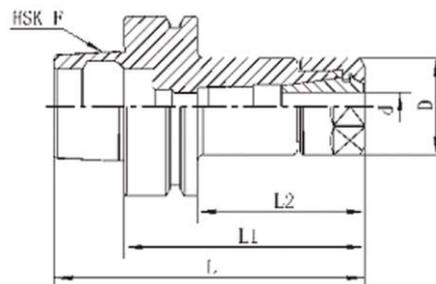
BMT55-ADC-ER20, internal and external coolant supply

| | | | |
|-------------------|-----------------------|--------------|-----------------------------------|
| BMT type | BMT55 | Weight, kg | 4.5 |
| Cooling type | Internal and external | Positioning | Universal (with adjustable angle) |
| Tool setting size | Er20 | Tab size (W) | 8*28 (BMT55) |
| Tool holder type | Powered | Collets: | ER20 |
| Holder series: | BMT-ADC | C | 85 mm |
| C1 | 64 mm | C2 | 64 mm |
| X | 1-13 mm | D | 55 mm |
| B | 119.5 mm | E | 85 mm |



- A collet and replacement of cutting tools, screw nut and body must be clean, and add grease, Otherwise it will cause damage to the thread
- The device must be placed when the collet nut, and then into the tool, then the lock body
- The placement tool collet hole, clamping collet must exceed effective length, to avoid improper locking dama

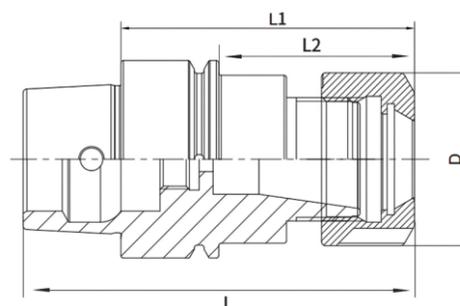
| Model | | L | L1 | L2 | D | d1 |
|---------|----------|-----|-----|-----|----|--------|
| HSK63A | ER16-80 | 107 | 80 | 49 | 28 | 1 ~ 10 |
| | ER16-100 | 132 | 100 | 74 | 28 | 1 ~ 10 |
| | ER16-130 | 162 | 130 | 104 | 28 | 1 ~ 10 |
| | ER16-160 | 192 | 160 | 134 | 28 | 1 ~ 10 |
| | ER20-80 | 107 | 80 | 49 | 34 | 1 ~ 13 |
| | ER20-100 | 132 | 100 | 74 | 34 | 1 ~ 13 |
| | ER20-130 | 162 | 130 | 104 | 34 | 1 ~ 13 |
| | ER20-160 | 192 | 160 | 134 | 34 | 1 ~ 13 |
| | ER25-80 | 107 | 80 | 49 | 42 | 3 ~ 16 |
| | ER25-100 | 132 | 100 | 74 | 42 | 3 ~ 16 |
| | ER25-130 | 162 | 130 | 104 | 42 | 3 ~ 16 |
| | ER25-160 | 192 | 160 | 134 | 42 | 3 ~ 16 |
| | ER32-80 | 107 | 80 | 49 | 50 | 3 ~ 20 |
| | ER32-100 | 132 | 100 | 74 | 50 | 3 ~ 20 |
| | ER32-130 | 162 | 130 | 104 | 50 | 3 ~ 20 |
| | ER32-160 | 192 | 160 | 134 | 50 | 3 ~ 20 |
| | ER40-120 | 152 | 120 | 94 | 63 | 3 ~ 26 |
| | ER40-160 | 192 | 160 | 134 | 63 | 3 ~ 26 |
| HSK100A | ER16-100 | 150 | 100 | 71 | 28 | 1 ~ 10 |
| | ER16-160 | 210 | 160 | 131 | 28 | 1 ~ 10 |
| | ER20-100 | 150 | 100 | 71 | 34 | 1 ~ 13 |
| | ER20-160 | 210 | 160 | 131 | 34 | 1 ~ 13 |
| | ER25-100 | 150 | 100 | 71 | 42 | 3 ~ 16 |
| | ER25-160 | 210 | 160 | 131 | 42 | 3 ~ 16 |
| | ER32-100 | 150 | 100 | 71 | 50 | 3 ~ 20 |
| | ER32-160 | 210 | 160 | 131 | 50 | 3 ~ 20 |
| | ER40-100 | 150 | 100 | 71 | 63 | 3 ~ 26 |
| | ER40-160 | 210 | 160 | 131 | 63 | 3 ~ 26 |



- A collet and replacement of cutting tools, screw nut and body must be clean, and add grease, otherwise it will cause damage to the thread
- The device must be placed when the collet nut, and then into the tool, then the lock body
- The placement tool collet hole, clamping collet must exceed effective length, to avoid improper locking damage

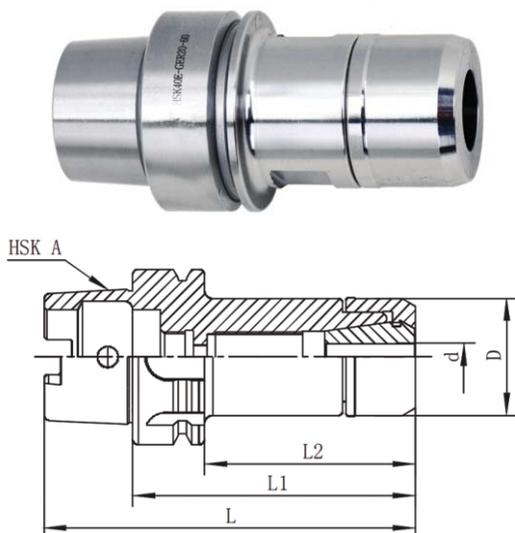
| Model | L | L1 | L2 | D | d | |
|--------|----------|-----|-----|----|----|--------|
| HSK63F | ER16-75 | 100 | 75 | 49 | 28 | 1 ~ 10 |
| | ER16-100 | 125 | 100 | 74 | 28 | 1 ~ 10 |
| | ER20-75 | 100 | 75 | 49 | 34 | 1 ~ 13 |
| | ER20-100 | 125 | 100 | 74 | 34 | 1 ~ 13 |
| | ER25-75 | 100 | 75 | 49 | 42 | 3 ~ 16 |
| | ER25-100 | 125 | 100 | 74 | 42 | 3 ~ 16 |
| | ER32-80 | 105 | 80 | 54 | 50 | 3 ~ 20 |
| | ER32-100 | 125 | 100 | 74 | 50 | 3 ~ 20 |
| | ER40-80 | 105 | 80 | 54 | 63 | 3 ~ 26 |
| | ER40-100 | 125 | 100 | 74 | 63 | 3 ~ 26 |

HSK-GER Stainless Steel Tool Holders



- A collet and replacement of cutting tools, screw nut and body must be clean, and add grease, otherwise it will cause damage to the thread
- The device must be placed when the collet nut, and then into the tool, then the lock body
- The placement tool collet hole, clamping collet must exceed effective length, to avoid improper locking damage

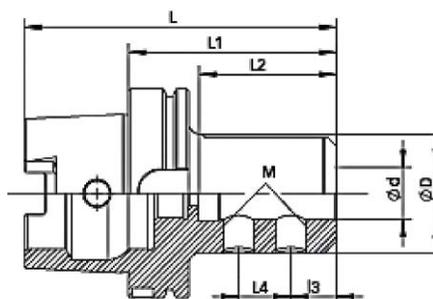
| Model | L | L1 | L2 | D | Clamping Range | |
|--------|-------|----|----|----|----------------|------|
| HSK32E | GER16 | 66 | 50 | 30 | 275 | 1-10 |
| | GER20 | 66 | 50 | 30 | 30.5 | 1-13 |
| HSK40E | GER16 | 85 | 65 | 45 | 275 | 1-10 |
| | GER20 | 85 | 65 | 45 | 30.5 | 1-13 |
| | GER25 | 90 | 70 | 50 | 30.5 | 1-16 |
| HSK50E | GER16 | 95 | 70 | 44 | 275 | 1-10 |
| | GER20 | 95 | 70 | 44 | 30.5 | 1-13 |
| | GER25 | 95 | 70 | 44 | 35.5 | 3-16 |



- Into the collet and replacement of cutting tools, must clean up the thread of nut and ontology, and add grease, otherwise it will cause damage to the screw thread
- Full circle - no eccentric nut design, low noise, small wind resistance, suitable for high speed

| Model | L | L1 | L2 | D | d | |
|-----------|-----------|-----|-----|------|--------|--------|
| HSK 63A | GER16-75 | 102 | 75 | 49 | 275 | 1 ~ 10 |
| | GER16-100 | 132 | 100 | 74 | 275 | 1 ~ 10 |
| | GER16-130 | 162 | 130 | 104 | 275 | 1 ~ 10 |
| | GER16-160 | 192 | 160 | 134 | 275 | 1 ~ 10 |
| | GER20-75 | 102 | 75 | 49 | 30.5 | 1 ~ 13 |
| | GER20-100 | 132 | 100 | 74 | 30.5 | 1 ~ 13 |
| | GER20-130 | 162 | 130 | 104 | 30.5 | 1 ~ 13 |
| | GER20-160 | 192 | 160 | 134 | 30.5 | 1 ~ 13 |
| | GER25-75 | 102 | 75 | 49 | 35.5 | 3 ~ 16 |
| | GER25-100 | 132 | 100 | 74 | 35.5 | 3 ~ 16 |
| | GER25-130 | 162 | 130 | 104 | 35.5 | 3 ~ 16 |
| | GER25-160 | 192 | 160 | 134 | 35.5 | 3 ~ 16 |
| | GER32-75 | 102 | 75 | 49 | 48.5 | 3 ~ 20 |
| | GER32-100 | 132 | 100 | 74 | 48.5 | 3 ~ 20 |
| GER32-130 | 162 | 130 | 104 | 48.5 | 3 ~ 20 | |
| GER32-160 | 192 | 160 | 134 | 48.5 | 3 ~ 20 | |
| HSK 32E | GER16-50 | 66 | 50 | 30 | 275 | 1 ~ 10 |
| | GER20-50 | 66 | 50 | 30 | 30.5 | 1 ~ 13 |
| HSK 40E | GER16-65 | 85 | 65 | 45 | 275 | 1 ~ 10 |
| | GER20-65 | 85 | 65 | 45 | 30.5 | 1 ~ 13 |
| | GER25-70 | 90 | 70 | 50 | 35.5 | 3 ~ 16 |
| HSK 50E | GER16-70 | 95 | 70 | 44 | 275 | 1 ~ 10 |
| | GER20-70 | 95 | 70 | 44 | 30.5 | 1 ~ 13 |
| | GER25-70 | 95 | 70 | 44 | 35.5 | 3 ~ 16 |

HSK-A-SLN Tool Holders

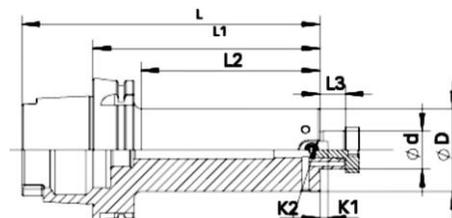


- The clamping hole tolerance H5
- With less than 20 mm a locking screw, with a diameter of 25 mm above two locking screw

| Model | L | L1 | L2 | L3 | L4 | d | D | M | |
|---------|-----------|-----|-----|-----|----|----|----|----|-----|
| HSK A63 | SLN6-65 | 97 | 65 | 36 | 18 | - | 6 | 25 | M6 |
| | SLN8-65 | 97 | 65 | 36 | 18 | - | 8 | 28 | M8 |
| | SLN10-65 | 97 | 65 | 36 | 20 | - | 10 | 35 | M10 |
| | SLN12-80 | 112 | 80 | 51 | 22 | - | 12 | 42 | M12 |
| | SLN14-80 | 112 | 80 | 51 | 20 | 20 | 14 | 44 | M12 |
| | SLN14-100 | 132 | 100 | 71 | 20 | 20 | 14 | 44 | M12 |
| | SLN16-80 | 112 | 80 | 52 | 20 | 20 | 16 | 48 | M12 |
| | SLN16-100 | 132 | 100 | 72 | 20 | 20 | 16 | 48 | M12 |
| | SLN18-80 | 112 | 80 | 54 | 20 | 20 | 18 | 50 | M12 |
| | SLN18-100 | 132 | 100 | 74 | 20 | 20 | 18 | 50 | M12 |
| | SLN20-80 | 112 | 80 | 54 | 20 | 25 | 20 | 52 | M16 |
| | SLN20-100 | 132 | 100 | 74 | 20 | 25 | 20 | 52 | M16 |
| | SLN25-110 | 142 | 110 | 84 | 22 | 25 | 25 | 57 | M16 |
| | SLN25-160 | 192 | 160 | 134 | 22 | 25 | 25 | 57 | M16 |
| | SLN32-110 | 142 | 110 | 84 | 22 | 25 | 32 | 63 | M16 |
| | SLN32-160 | 192 | 160 | 134 | 22 | 25 | 32 | 63 | M16 |
| | SLN40-125 | 157 | 125 | 99 | 25 | 32 | 40 | 72 | M16 |

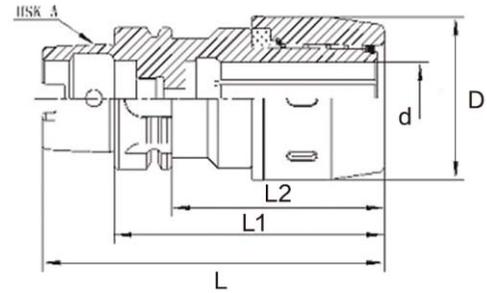
| Model | L | L1 | L2 | L3 | L4 | d | D | M | |
|-----------|-----------|-----|-----|-----|----|----|----|-----|-----|
| HSK A100 | SLN16-100 | 150 | 100 | 66 | 20 | 20 | 16 | 48 | M12 |
| | SLN16-160 | 210 | 160 | 126 | 20 | 20 | 16 | 48 | M12 |
| | SLN18-100 | 150 | 100 | 66 | 20 | 20 | 18 | 50 | M12 |
| | SLN18-160 | 210 | 160 | 126 | 20 | 20 | 18 | 50 | M12 |
| | SLN20-100 | 150 | 100 | 66 | 20 | 25 | 20 | 52 | M16 |
| | SLN20-160 | 210 | 160 | 126 | 20 | 25 | 20 | 52 | M16 |
| | SLN25-100 | 150 | 100 | 66 | 22 | 25 | 25 | 57 | M16 |
| | SLN25-160 | 210 | 160 | 126 | 22 | 25 | 25 | 57 | M16 |
| | SLN32-100 | 150 | 100 | 66 | 22 | 25 | 32 | 63 | M16 |
| | SLN32-160 | 210 | 160 | 126 | 22 | 25 | 32 | 63 | M16 |
| | SLN40-115 | 165 | 115 | 82 | 25 | 32 | 40 | 72 | M16 |
| | SLN40-160 | 210 | 160 | 127 | 25 | 32 | 40 | 72 | M16 |
| | SLN50-120 | 170 | 120 | 91 | 30 | 35 | 50 | 90 | M20 |
| SLN50-160 | 210 | 160 | 131 | 30 | 35 | 50 | 90 | M20 | |

HSK-A-FMB Tool Holders



○ The face milling cutter with parts (d) shaft tolerance h6

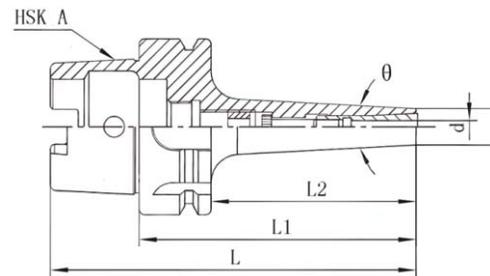
| Model | L | L1 | L2 | L3 | d | D | K1 | K2 |
|---------|----------------|-----|-----|-----|----|----|-----|----|
| HSK63A | FMB16C-50 | 99 | 50 | 21 | 16 | 38 | 3.8 | 8 |
| | FMB16C-100 | 149 | 100 | 71 | 16 | 38 | 3.8 | 8 |
| | FMB22C-50 | 100 | 50 | 22 | 18 | 48 | 4.8 | 10 |
| | FMB22C-100 | 150 | 100 | 72 | 18 | 48 | 4.8 | 10 |
| | FMB22C-160 | 210 | 160 | 132 | 18 | 48 | 4.8 | 10 |
| | FMB22C-200 | 250 | 200 | 172 | 18 | 48 | 4.8 | 10 |
| | FMB27C-60 | 112 | 60 | 34 | 20 | 60 | 5.8 | 12 |
| | FMB27C-100 | 152 | 100 | 74 | 20 | 60 | 5.8 | 12 |
| | FMB32C-60 | 114 | 60 | 34 | 22 | 70 | 6.8 | 14 |
| | FMB32C-100 | 154 | 100 | 74 | 22 | 70 | 6.8 | 14 |
| | FMB40C-60 | 117 | 60 | 34 | 25 | 80 | 8.3 | 16 |
| | FMB40C-100 | 157 | 100 | 74 | 25 | 80 | 8.3 | 16 |
| HSK100A | FMB16C-100 | 167 | 100 | 66 | 17 | 38 | 3.8 | 8 |
| | FMB16C-160 | 227 | 160 | 126 | 17 | 38 | 3.8 | 8 |
| | FMB22C-60-D48 | 110 | 60 | 26 | 18 | 48 | 4.8 | 10 |
| | FMB22C-100-D48 | 150 | 100 | 66 | 18 | 48 | 4.8 | 10 |
| | FMB22C-160-D48 | 210 | 160 | 126 | 18 | 48 | 4.8 | 10 |
| | FMB22C-200-D48 | 250 | 200 | 166 | 18 | 48 | 4.8 | 10 |
| | FMB22C-160-D60 | 210 | 160 | 126 | 18 | 60 | 4.8 | 10 |
| | FMB22C-200-D60 | 250 | 200 | 166 | 18 | 60 | 4.8 | 10 |
| | FMB27C-100 | 170 | 100 | 66 | 20 | 60 | 5.8 | 12 |
| | FMB27C-160 | 230 | 160 | 126 | 20 | 60 | 5.8 | 12 |
| | FMB32C-100 | 172 | 100 | 66 | 22 | 70 | 6.8 | 14 |
| | FMB32C-160 | 232 | 160 | 126 | 22 | 70 | 6.8 | 14 |
| | FMB40C-100 | 175 | 100 | 66 | 25 | 80 | 8.3 | 16 |
| | FMB40C-160 | 235 | 160 | 126 | 25 | 80 | 8.3 | 16 |



- Handle clamping hole 6 to prevent sliding groove design increases the blessing
- The appearance of nut uniformity, reduce wind resistance, suitable for high speed

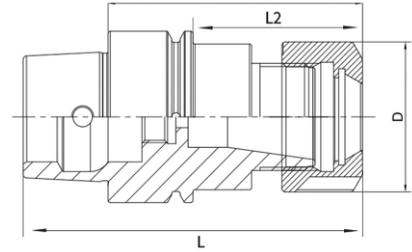
| Model | | L | L1 | L2 | D | d |
|---------|---------|-----|-----|-----|----|------|
| HSK63A | C32-120 | 152 | 120 | 94 | 73 | 6-32 |
| | C32-150 | 182 | 150 | 124 | 73 | 6-32 |
| HSK100A | C32-120 | 170 | 120 | 91 | 73 | 6-32 |
| | C32-165 | 215 | 165 | 136 | 73 | 6-32 |

HSK-A-SDC Back Pull Tool Holders



- Collet nut design no pull, strong stability and high rigidity
- The recommended torque wrench, do not exceed the recommended value of 30%, high torque, the deformation may lead

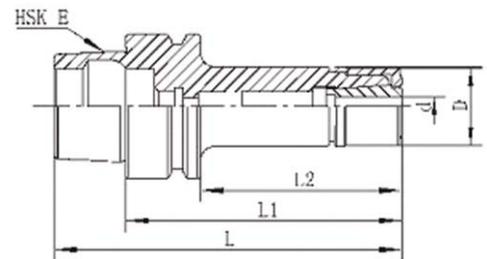
| Model | | L | L1 | L2 | θ | D | d | |
|---------|-----------|-----|-----|-----|----------|----|--------|------|
| HSK63A | SDC6-95 | 127 | 95 | 69 | 6° | 14 | 3 ~ 6 | 5Nm |
| | SDC6-120 | 152 | 120 | 94 | 6° | 14 | 3 ~ 6 | 5Nm |
| | SDC6-150 | 182 | 150 | 124 | 6° | 14 | 3 ~ 6 | 5Nm |
| | SDC8-100 | 132 | 100 | 74 | 6° | 22 | 3 ~ 8 | 7Nm |
| | SDC8-120 | 152 | 120 | 94 | 6° | 22 | 3 ~ 8 | 7Nm |
| | SDC8-150 | 182 | 150 | 124 | 6° | 22 | 3 ~ 8 | 7Nm |
| HSK100A | SDC12-120 | 152 | 120 | 94 | — | 34 | 3 ~ 12 | 12Nm |
| | SDC6-110 | 160 | 110 | 81 | 6° | 14 | 3 ~ 6 | 5Nm |
| | SDC6-150 | 200 | 150 | 121 | 6° | 14 | 3 ~ 6 | 5Nm |
| | SDC8-120 | 170 | 120 | 91 | 6° | 22 | 3 ~ 8 | 7Nm |
| | SDC8-150 | 200 | 150 | 121 | 6° | 22 | 3 ~ 8 | 7Nm |
| | SDC12-120 | 170 | 120 | 91 | — | 34 | 3 ~ 12 | 12Nm |



○ Material: Stainless Steel ○ Speed: ≤ 40000RPM

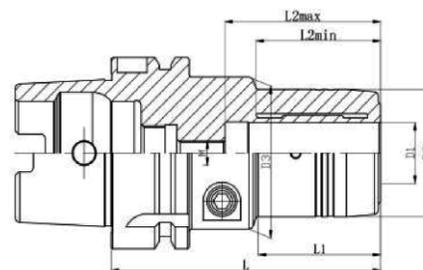
| Model | | L | L1 | L2 | D | Clamping Range |
|--------|------|-----|-----|----|------|----------------|
| HSK32E | SK06 | 66 | 50 | 30 | 195 | 2-6 |
| | SK10 | 66 | 50 | 30 | 275 | 3-10 |
| HSK40E | SK06 | 85 | 65 | 35 | 195 | 2-6 |
| | SK10 | 85 | 65 | 35 | 275 | 3-10 |
| | SK16 | 120 | 100 | 80 | 275 | 3-10 |
| HSK50E | SK06 | 95 | 70 | 44 | 195 | 2-6 |
| | SK10 | 95 | 70 | 44 | 275 | 3-10 |
| | SK16 | 95 | 70 | 44 | 40.5 | 3-16 |

HSK-E-GSK Tool Holders



○ Into the collet and replacement of cutting tools, must clean up the thread of nut and ontology, and add grease otherwise it will cause damage to the screw thread
 ○ Full circle - no eccentric nut design, low noise, small wind resistance, suitable for high speedvv

| Model | | L | L1 | L2 | D | d |
|--------|-----------|-----|-----|----|------|--------|
| HSK32E | GSK06-50 | 66 | 50 | 30 | 195. | 2~6 |
| | GSK10-50 | 66 | 50 | 30 | 275 | 3 ~ 10 |
| HSK40E | GSK06-65 | 85 | 65 | 35 | 195 | 2-6 |
| | GSK10-65 | 85 | 65 | 35 | 275 | 3 ~ 10 |
| | GSK10-100 | 120 | 100 | 80 | 275 | 3 ~ 10 |
| HSK50E | GSK06-70 | 95 | 70 | 44 | 195 | 2-6 |
| | GSK10-70 | 95 | 70 | 44 | 275 | 3 ~ 10 |
| | GSK16-70 | 95 | 70 | 44 | 40.5 | 3~16 |

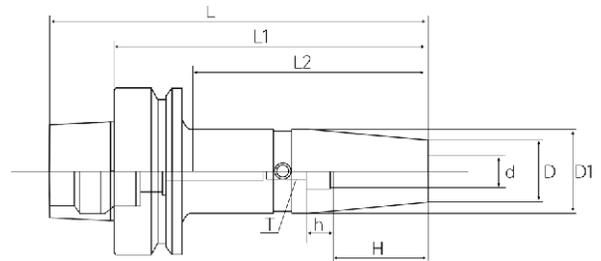


○ Material : 20CrMnTi ○ Speed: ≤ 20000RPM ○ Accuracy: 0.003mm

| Model | D1 | D2 | D3 | L | L1 | L2min | L2max | M |
|-------------------|----|----|----|-----|------|-------|-------|----|
| HSK40E-PHC06-70L | 6 | 28 | 34 | 70 | 33 | 26 | 39 | M5 |
| HSK40E-PHC08-70L | 8 | 30 | 34 | 70 | 33 | 28 | 39 | M5 |
| HSK40E-PHC10-75L | 10 | 32 | 34 | 75 | 39 | 34 | 45 | M5 |
| HSK40E-PHC12-80L | 12 | 34 | 34 | 80 | - | - | - | M5 |
| HSK50E-PHC06-70L | 6 | 30 | 42 | 70 | 25.5 | 26 | 38 | M5 |
| HSK50E-PHC08-70L | 8 | 32 | 42 | 70 | 26 | 28 | 38 | M6 |
| HSK50E-PHC10-80L | 10 | 34 | 42 | 80 | 32 | 34 | 45 | M8 |
| HSK50E-PHC12-85L | 12 | 36 | 42 | 85 | 40 | 37 | 50 | M8 |
| HSK50E-PHC16-90L | 16 | 40 | 42 | 90 | 43 | 41 | 51 | M8 |
| HSK50E-PHC20-90L | 20 | 42 | 42 | 90 | 64 | 41 | 52 | M8 |
| HSK63A-PHC06-80L | 6 | 32 | 48 | 80 | 32 | 29 | 46 | M5 |
| HSK63A-PHC06-125L | 6 | 32 | 48 | 125 | 38.5 | 28 | 44.5 | M5 |
| HSK63A-PHC08-80L | 8 | 34 | 50 | 80 | 32 | 29 | 46 | M6 |
| HSK63A-PHC08-125L | 8 | 32 | 48 | 125 | 38.5 | 28 | 44.5 | M6 |
| HSK63A-PHC10-80L | 10 | 36 | 50 | 80 | 32 | 31 | 50 | M8 |
| HSK63A-PHC10-125L | 10 | 36 | 50 | 125 | 40 | 37 | 51 | M8 |
| HSK63A-PHC12-80L | 12 | 38 | 50 | 80 | 32 | 32 | 50 | M8 |
| HSK63A-PHC12-125L | 12 | 38 | 50 | 125 | 41 | 37 | 51 | M8 |
| HSK63A-PHC14-80L | 14 | 40 | 50 | 80 | 40 | 38 | 50 | M8 |
| HSK63A-PHC16-90L | 16 | 42 | 50 | 90 | 41 | 40 | 51 | M8 |
| HSK63A-PHC16-125L | 16 | 42 | 50 | 125 | 43 | 40 | 52 | M8 |
| HSK63A-PHC18-90L | 18 | 42 | 50 | 90 | 41 | 40 | 51 | M8 |
| HSK63A-PHC20-90L | 20 | 42 | 50 | 90 | 41 | 40 | 52.5 | M8 |

| | | | | | | | | |
|---------------------|----|----|----|-----|------|----|------|-----|
| HSK63A-PHC20-125L | 20 | 44 | 50 | 125 | 45 | 40 | 52.5 | M8 |
| HSK63A-PHC-25-110L | 25 | 53 | 63 | 110 | 55.5 | 45 | 61 | M8 |
| HSK63A-PHC-32-110L | 32 | 63 | 63 | 110 | - | 55 | 65 | M8 |
| HSK100A-PHC-20-105L | 20 | 46 | 60 | 105 | 45 | 39 | 53 | M12 |
| HSK100A-PHC-25-110L | 25 | 53 | 63 | 110 | 55 | 40 | 53 | M12 |
| HSK100A-PHC-32-110L | 32 | 62 | 75 | 110 | 55 | 44 | 53 | M12 |

HSK-SF Shrink Tool Holders

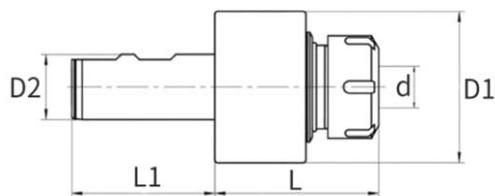


○ Material : H13 ○ Speed: ≥ 25000RPM ○ Accuracy: ≤ 0.003mm



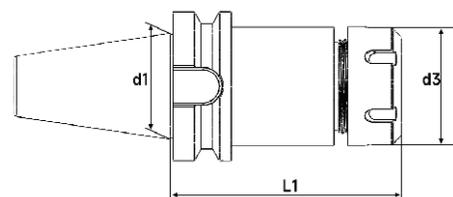
Split type also available .

| Model | L1 | L2 | L3 | D | D1 | H | h | T | d Clamping Range |
|------------------|-----|-----|-----|----|----|----|----|-----|---------------------|
| HSK63A-SF04-130 | 162 | 130 | 98 | 10 | 16 | 12 | / | / | 4 |
| HSK63A-SF06-130 | 162 | 130 | 101 | 21 | 27 | 26 | 10 | M5 | 6 |
| HSK63A-SF06-160 | 192 | 160 | 131 | 21 | 27 | 26 | 10 | M5 | 6 |
| HSK63A-SF08-160 | 192 | 160 | 131 | 21 | 27 | 26 | 10 | M6 | 8 |
| HSK63A-SF10-160 | 192 | 160 | 131 | 24 | 32 | 32 | 10 | M6 | 10 |
| HSK63A-SF12-160 | 192 | 160 | 131 | 24 | 32 | 37 | 10 | M6 | 12 |
| HSK63A-SF16-160 | 192 | 160 | 131 | 27 | 34 | 40 | 10 | M8 | 16 |
| HSK63A-SF16-200 | 232 | 200 | 171 | 27 | 34 | 40 | 10 | M8 | 16 |
| HSK100A-SF06-160 | 210 | 160 | 117 | 21 | 27 | 26 | 10 | M5 | 6 |
| HSK100A-SF08-160 | 210 | 160 | 117 | 21 | 27 | 26 | 10 | M6 | 8 |
| HSK100A-SF10-160 | 210 | 160 | 121 | 24 | 32 | 32 | 10 | M6 | 10 |
| HSK100A-SF12-160 | 210 | 160 | 121 | 24 | 32 | 37 | 10 | M6 | 12 |
| HSK100A-SF16-160 | 210 | 160 | 126 | 27 | 34 | 40 | 10 | M8 | 16 |
| HSK100A-SF20-160 | 210 | 160 | 126 | 33 | 42 | 42 | 10 | M8 | 20 |
| HSK100A-SF25-160 | 210 | 160 | 126 | 44 | 53 | 48 | 10 | M16 | 25 |
| HSK100A-SF32-160 | 210 | 160 | 126 | 44 | 53 | 48 | 10 | M16 | 32 |



○ Material : Imported alloy steel ○ Floating range : 0.8mm ○ Accuracy: ≤ 0.002mm

| Model | D1 | D2 | L | L1 | Collets | Clamping |
|--------------------|----|----|----|----|---------|----------|
| C16-FDER11A-50-D30 | 30 | 16 | 50 | 50 | ER11 | 1-7mm |
| C20-FDER11A-50-D30 | 30 | 20 | 50 | 50 | ER11 | |
| C16-FDER11M-50-D30 | 30 | 16 | 50 | 50 | ER11 | |
| C20-FDER11M-50-D30 | 30 | 20 | 50 | 50 | ER11 | |
| C16-FDER16A-65-D39 | 39 | 16 | 65 | 50 | ER16 | 1-10mm |
| C20-FDER16A-65-D39 | 39 | 20 | 65 | 50 | ER16 | |
| C25-FDER16A-65-D39 | 39 | 25 | 65 | 55 | ER16 | |
| C16-FDER16M-65-D39 | 39 | 16 | 65 | 50 | ER16 | |
| C20-FDER16M-65-D39 | 39 | 20 | 65 | 55 | ER20 | |
| C25-FDER16M-65-D39 | 39 | 25 | 65 | 50 | ER20 | |
| C20-FDER20A-60-D45 | 45 | 20 | 65 | 50 | ER20 | 1-13mm |
| C25-FDER20A-60-D45 | 45 | 25 | 65 | 55 | ER20 | |
| C20-FDER20M-60-D45 | 45 | 20 | 65 | 50 | ER20 | |
| C25-FDER20M-60-D45 | 45 | 25 | 65 | 55 | ER20 | |
| C20-FDER20A-75-D56 | 56 | 20 | 75 | 50 | ER20 | |
| C25-FDER20A-75-D56 | 56 | 20 | 75 | 55 | ER20 | |
| C20-FDER20M-75-D56 | 56 | 25 | 75 | 50 | ER20 | |
| C25-FDER20M-75-D56 | 56 | 20 | 75 | 55 | ER20 | |
| C20-FDER25-75-D56 | 56 | 20 | 75 | 50 | ER25 | 1-16mm |
| C25-FDER25-75-D56 | 56 | 25 | 75 | 55 | ER25 | |
| C20-FDER32-75-D56 | 58 | 20 | 75 | 50 | ER32 | 1-20mm |
| C25-FDER32-75-D56 | 58 | 25 | 75 | 55 | ER32 | |

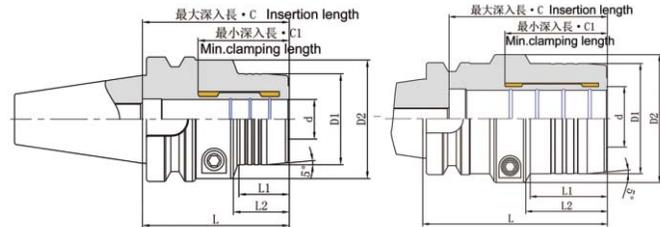


○ Standard : MAS403 ○ Material: 20CrMnTi ○ Speed: ≥ 12000 rpm ○ Accuracy: ≤ 0.003 mm

| Model | L1 | d3 | d1 |
|-----------------|-----|----|-------|
| BT30-ER11A-70 | 70 | 19 | 31.75 |
| BT30-ER16A-70 | 70 | 28 | 31.75 |
| BT30-ER20A-70 | 70 | 34 | 31.75 |
| BT30-ER25UM-70 | 70 | 42 | 31.75 |
| BT30-ER32UM-100 | 100 | 50 | 31.75 |
| BT40-ER11A-100 | 100 | 19 | 44.45 |
| BT40-ER16A-100 | 100 | 28 | 44.45 |
| BT40-ER20A-100 | 100 | 34 | 44.45 |
| BT40-ER25UM-100 | 100 | 42 | 44.45 |
| BT40-ER32UM-70 | 70 | 50 | 44.45 |
| BT40-ER32UM-100 | 100 | 50 | 44.45 |
| BT40-ER32UM-150 | 150 | 50 | 44.45 |
| BT40-ER40UM-80 | 80 | 63 | 44.45 |
| BT40-ER40UM-100 | 100 | 63 | 44.45 |
| BT50-ER16A-100 | 100 | 28 | 69.85 |
| BT50-ER16A-150 | 150 | 28 | 69.85 |
| BT50-ER20A-150 | 150 | 34 | 69.85 |
| BT50-ER25UM-150 | 150 | 42 | 69.85 |
| BT50-ER32UM-100 | 100 | 50 | 69.85 |
| BT50-ER32UM-150 | 150 | 50 | 69.85 |
| BT50-ER40UM-100 | 100 | 63 | 69.85 |
| BT50-ER40UM-150 | 150 | 63 | 69.85 |

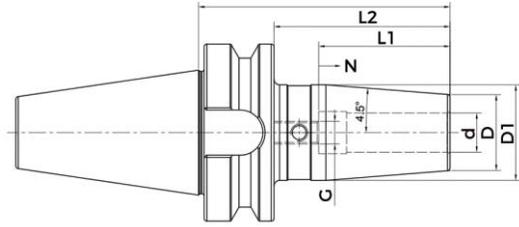


| Model | Qty.&Sizes | Bar Thread |
|----------------|---------------|------------|
| BT30-ER16-70L | 8PCS(3-10mm) | M12-1.75P |
| BT30-ER32-70L | 6PCS(6-20mm) | M12-1.75P |
| | 11PCS(4-20mm) | |
| | 18PCS(3-20mm) | |
| BT40-ER32-70L | 6PCS(6-20mm) | M16-2.0P |
| | 11PCS(4-20mm) | |
| | 18PCS(3-20mm) | |
| BT40-ER40-80L | 7PCS(6-25mm) | M16-2.0P |
| | 15PCS(4-26mm) | |
| | 23PCS(4-26mm) | |
| BT40-ER16-100L | 8PCS(3-10mm) | M16-2.0P |
| BT40-ER20-100L | 11PCS(3-13mm) | |
| BT40-ER32-100L | 6PCS(6-20mm) | M16-2.0P |
| | 11PCS(4-20mm) | |
| | 18PCS(3-20mm) | |
| BT40-ER40-100L | 7PCS(6-25mm) | M16-2.0P |
| | 15PCS(4-26mm) | |
| | 23PCS(4-26mm) | |
| BT50-ER40-100L | 6PCS(6-20mm) | M24-3.0P |
| | 11PCS(4-20mm) | |
| | 18PCS(3-20mm) | |
| BT50-ER40-100L | 7PCS(6-25mm) | M24-3.0P |
| | 15PCS(4-26mm) | |
| | 23PCS(4-26mm) | |
| BT50-ER32-150 | 6PCS(6-20mm) | M24-3.0P |
| | 11PCS(4-20mm) | |
| | PCS(183-20mm) | |
| BT50-ER40-150L | 7PCS(6-25mm) | M24-3.0P |
| | 15PCS(4-26mm) | |
| | 23PCS(4-26mm) | |



○ Material : 20CrMnTi ○ Speed: ≤ 20000RPM ○ Accuracy: 0.003mm

| Model | Fig. | φd | φD1 | φ D2 | L | L1 | L2 | Insection Length C1 | Insection Length C |
|----------------|------|----|-----|------|-----|----|------|---------------------|--------------------|
| BT40-PHC06-75 | 1 | 6 | 28 | 46 | 75 | 30 | 34.5 | 29 | 46 |
| BT40-PHC06-90 | 1 | 6 | 28 | 46 | 90 | 29 | 44 | 29 | 46 |
| BT40-PHC08-75 | 1 | 8 | 30 | 48 | 75 | 30 | 34.5 | 30 | 46 |
| BT40-PHC08-90 | 1 | 8 | 30 | 48 | 90 | 29 | 44 | 30 | 46 |
| BT40-PHC10-75 | 1 | 10 | 36 | 52 | 75 | 26 | 30 | 38 | 57 |
| BT40-PHC10-90 | 1 | 10 | 36 | 52 | 90 | 40 | 44 | 38 | 57 |
| BT40-PHC12-75 | 1 | 12 | 38 | 54 | 75 | 26 | 30 | 38 | 57 |
| BT40-PHC12-90 | 1 | 12 | 38 | 54 | 90 | 40 | 44 | 38 | 57 |
| BT40-PHC14-75 | 1 | 14 | 40 | 56 | 75 | 28 | 32 | 42 | 57 |
| BT40-PHC16-75 | 1 | 16 | 42 | 58 | 75 | 26 | 30 | 46 | 75 |
| BT40-PHC16-90 | 1 | 16 | 42 | 58 | 90 | 40 | 44 | 46 | 75 |
| BT40-PHC20-75 | 1 | 20 | 46 | 60 | 75 | 26 | 30 | 46 | 75 |
| BT40-PHC20-90 | 1 | 20 | 46 | 60 | 90 | 40 | 44 | 46 | 75 |
| BT40-PHC25-105 | 1 | 25 | 52 | 62 | 105 | 55 | 58 | 46 | 80 |
| BT40-PHC32-105 | 2 | 32 | 62 | 7D | 105 | 44 | 47 | 58 | 90 |
| BT50-PHC10-105 | 1 | 10 | 36 | 52 | 105 | 26 | 29 | 36 | 57 |
| BT50-PHC12-105 | 1 | 12 | 38 | 54 | 105 | 26 | 29 | 38 | 57 |
| BT50-PHC16-105 | 1 | 16 | 42 | 58 | 105 | 26 | 29 | 46 | 75 |
| BT50-PHC20-105 | 1 | 20 | 46 | 60 | 105 | 26 | 29 | 46 | 75 |
| BT50-PHC25-120 | 1 | 25 | 52 | 62 | 120 | 56 | 58 | 50 | 80 |
| BT50-PHC32-120 | 1 | 32 | 62 | 72 | 120 | 43 | 47 | 60 | 90 |

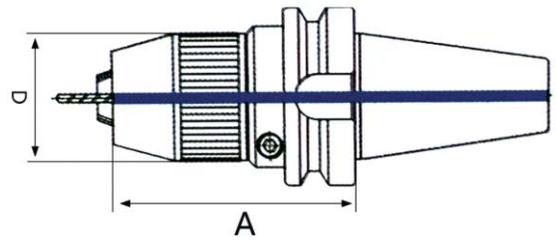


- Hardness: \geq HRC52
- Clamping Accuracy: $<$ 0.005mm
- Speed: \leq 25000RPM



Split type also available .

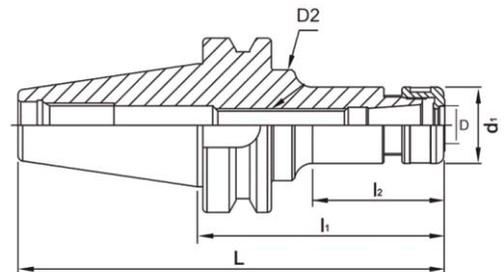
| Size | d | D | D1 | L | L2 | L7 | N | G |
|--------------|----|----|----|-----|----|----|----|-------|
| BT30-SF03-80 | 3 | 15 | 20 | 80 | 58 | | | |
| BT30-SF04-80 | 4 | 15 | 20 | 80 | 58 | | | |
| BT30-SF05-80 | 5 | 15 | 20 | 80 | 58 | | | |
| BT30-SF06-80 | 6 | 21 | 27 | 80 | 58 | 36 | 10 | M5 |
| BT30-SF08-80 | 8 | 21 | 27 | 80 | 58 | 36 | 10 | M6 |
| BT30-SF10-80 | 10 | 24 | 32 | 80 | 58 | 42 | 10 | M8x1 |
| BT30-SF12-80 | 12 | 24 | 32 | 80 | 58 | 47 | 10 | M10x1 |
| BT30-SF14-80 | 14 | 27 | 34 | 80 | 58 | 47 | 10 | M10x1 |
| BT30-SF16-80 | 16 | 27 | 34 | 80 | 58 | 50 | 10 | M12x1 |
| BT30-SF18-80 | 18 | 33 | 42 | 80 | 58 | 50 | 10 | M12x |
| BT30-SF20-80 | 20 | 33 | 42 | 80 | 58 | 52 | 10 | M16x1 |
| BT40-SF03-80 | 3 | 15 | 20 | 80 | 53 | | | |
| BT40-SF04-80 | 4 | 15 | 20 | 80 | 53 | | | |
| BT40-SF05-80 | 5 | 15 | 20 | 80 | 53 | | | |
| BT40-SF06-80 | 6 | 21 | 27 | 90 | 63 | 36 | | M5 |
| BT40-SF08-80 | 8 | 21 | 27 | 90 | 63 | 36 | | M6 |
| BT40-SF10-80 | 10 | 24 | 32 | 90 | 63 | 42 | 10 | M8x1 |
| BT40-SF12-80 | 12 | 24 | 32 | 90 | 63 | 47 | 10 | M10x1 |
| BT40-SF14-80 | 14 | 27 | 34 | 90 | 63 | 47 | 10 | M10x1 |
| BT40-SF16-80 | 16 | 27 | 34 | 90 | 63 | 50 | 10 | M12x1 |
| BT40-SF18-80 | 18 | 33 | 42 | 90 | 63 | 50 | 10 | M12x1 |
| BT40-SF20-80 | 20 | 33 | 42 | 90 | 63 | 52 | 10 | M16x1 |
| BT40-SF25-80 | 25 | 44 | 53 | 100 | 73 | 58 | 10 | M16x1 |
| BT40-SF32-80 | 32 | 44 | 53 | 100 | 73 | 62 | 10 | M16x1 |



○ This product contains internal cooling.

| Model | Capacity mm | A(mm) | D(mm) |
|-------|-------------|-------|-------|
| BT30 | 1-13 | 82 | 45 |
| BT40 | 1-13 | 89 | 45 |
| BT40 | 1-16 | 95 | 50 |
| BT50 | 1-16 | 116 | 50 |

BT-GSK High Speed Collet Chucks

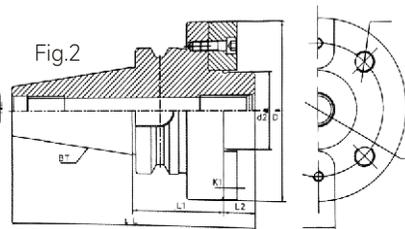
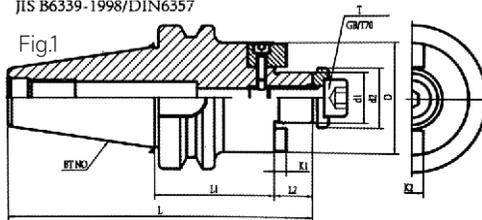


Material : 20CrMnTi Accuracy : $\leq 0.003\text{mm}$ Speed : $\leq 30000\text{RPM}$

| Model | Clamping | L | L1 | D1 | Collets |
|--------------|----------|----|----|------|---------|
| BT30-SK10-60 | 3-10 | 60 | 33 | 29 | SK10 |
| BT30-SK10-90 | | 90 | 63 | | |
| BT30-SK16-60 | 3-16 | 60 | 33 | 40.5 | SK16 |
| BT30-SK16-90 | | 90 | 63 | | |
| BT40-SK10-60 | 3-10 | 60 | 33 | 29 | SK10 |
| BT40-SK10-90 | | 90 | 63 | | |
| BT40-SK16-60 | 3-16 | 60 | 33 | 40.5 | SK16 |
| BT40-SK16-90 | | 90 | 63 | | |

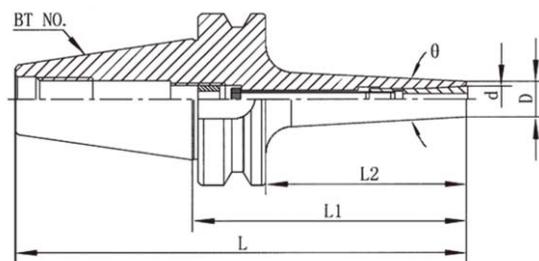


JIS B6339-1998/DIN6357



Material: 20CrMnTi Speed : ≤ 12000RPM

| Model | | Type | d1 | d2 | D3 | D3 | D | L1 | L2 | K1 |
|---------------|-----------|-------|----|-------|------|-----|-----|------|------|----|
| BT30 | FMB22-45 | Fig.1 | 22 | 26 | - | 45 | 45 | 16.5 | 4.8 | 10 |
| | FMB22-60 | | | | | | 60 | | | |
| | FMB27-45 | Fig.1 | 27 | 33 | - | 54 | 45 | 18.5 | 5.8 | 12 |
| | FMB27-60 | | | | | | 60 | | | |
| | FMB32-60 | Fig.1 | 32 | 41 | - | 58 | 60 | 22 | 6.8 | 14 |
| BT40 | FMB22-45 | Fig.1 | 22 | 26 | - | 48 | 45 | 16.5 | 4.8 | 10 |
| | FMB22-60 | | | | | | 60 | | | |
| | FMB22-100 | | | | | | 100 | | | |
| | FMB22-150 | | | | | | 150 | | | |
| | FMB27-45 | Fig.1 | 27 | 33 | - | 60 | 45 | 18.5 | 5.8 | 12 |
| | FMB27-60 | | | | | | 60 | | | |
| | FMB27-100 | | | | | | 100 | | | |
| | FMB27-150 | | | | | | 150 | | | |
| | FMB27-200 | | | | | | 200 | | | |
| | FMB32-60 | Fig.1 | 32 | 41 | - | 62 | 60 | 22 | 6.8 | 14 |
| | FMB32-100 | | | | | | 100 | | | |
| | FMB32-150 | | | | | | 150 | | | |
| | FMB32-200 | | | | | | 200 | | | |
| | FMB40-60 | Fig.1 | 40 | 48 | - | 80 | 60 | 25 | 8 | 16 |
| | FMB40-100 | | | | | | 100 | | | |
| FMB40-150 | 150 | | | | | | | | | |
| FMB40-200 | 200 | | | | | | | | | |
| FMC40-60 | Fig.2 | - | - | 66.7 | 98 | 60 | | | | |
| BT50 | FMB22-60 | Fig.1 | 22 | 26 | - | 48 | 60 | 16.5 | 4.8 | 10 |
| | FMB22-100 | | | | | | 100 | | | |
| | FMB22-150 | | | | | | 150 | | | |
| | FMB22-200 | | | | | | 200 | | | |
| | FMB27-60 | Fig.1 | 27 | 33 | - | 60 | 60 | 18.5 | 5.8 | 12 |
| | FMB27-100 | | | | | | 100 | | | |
| | FMB27-150 | | | | | | 150 | | | |
| | FMB27-200 | | | | | | 200 | | | |
| | FMB32-60 | Fig.1 | 32 | 41 | - | 73 | 60 | 22 | 6.8 | 14 |
| | FMB32-100 | | | | | | 100 | | | |
| | FMB32-150 | | | | | | 150 | | | |
| | FMB32-200 | | | | | | 200 | | | |
| | FMB40-60 | Fig.1 | 40 | 48 | - | 80 | 60 | 25 | 8 | 16 |
| | FMB40-100 | | | | | | 100 | | | |
| | FMB40-150 | | | | | | 150 | | | |
| | FMB40-200 | | | | | | 200 | | | |
| | FMC40-60 | Fig.2 | - | - | 66.7 | 98 | 60 | | | |
| FMC60.140-75 | Fig.2 | 60 | | 101.6 | 140 | 75 | 25 | 12.5 | 25.4 | |
| FMC60.140-100 | | | | | | 100 | | | | |
| FMC60.129-75 | Fig.2 | 60 | | 101.6 | 129 | 75 | 25 | 12.5 | 25.4 | |
| FMC60.129-100 | | | | | | 100 | | | | |



Material : 20CrMnTi Accuracy : $\leq 0.003\text{mm}$ Speed : $\leq 25000\text{RPM}$

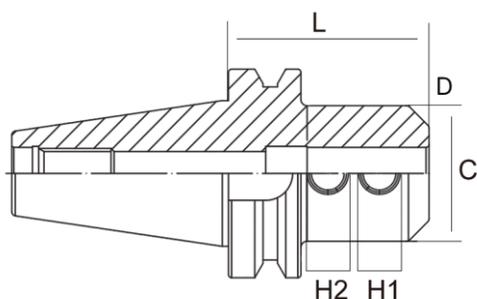
- Collet nut design - no pull, strong stability and high rigidity
- The recommended torque wrench, do not exceed the recommended value of 30%, high torque, the deformation may lead

| | Model | L | L1 | L2 | θ | D | d |
|------|-----------|-------|-----|-----|----------|----|------|
| BT30 | SDC06-60 | 108.4 | 60 | 38 | 6° | 14 | 3-6 |
| | SDC06-90 | 138.4 | 90 | 68 | 6° | 14 | 3-6 |
| | SDC08-60 | 108.4 | 60 | 38 | 6° | 22 | 3-8 |
| | SDC08-90 | 138.4 | 90 | 68 | 6° | 22 | 3-8 |
| | SDC12-80 | 128.4 | 80 | 58 | — | 34 | 3-12 |
| BT40 | SDC06-90 | 165.4 | 100 | 73 | 6° | 14 | 3-6 |
| | SDC06-150 | 215.4 | 150 | 123 | 6° | 14 | 3-6 |
| | SDC08-90 | 165.4 | 100 | 73 | 6° | 22 | 3-8 |
| | SDC08-150 | 215.4 | 150 | 123 | 6° | 22 | 3-8 |
| | SDC12-90 | 165.4 | 100 | 73 | — | 34 | 3-12 |
| | SDC12-150 | 215.4 | 150 | 123 | — | 34 | 3-12 |
| BT50 | SDC06-100 | 201.8 | 100 | 62 | 6° | 14 | 3-6 |
| | SDC06-150 | 251.8 | 150 | 112 | 6° | 14 | 3-6 |
| | SDC08-100 | 201.8 | 100 | 62 | 6° | 22 | 3-8 |
| | SDC08-150 | 251.8 | 150 | 112 | 6° | 22 | 3-8 |
| | SDC12-100 | 201.8 | 100 | 62 | — | 34 | 3-12 |
| | SDC12-150 | 251.8 | 150 | 112 | — | 34 | 3-12 |

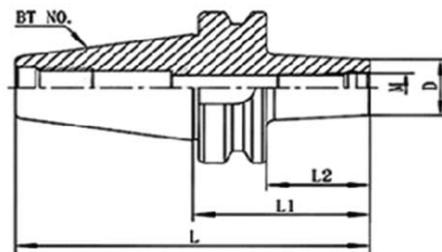
BT-SLN Side Lock End Mill Arbors



Material: 20CrMnTi Speed : $\leq 12000\text{RPM}$

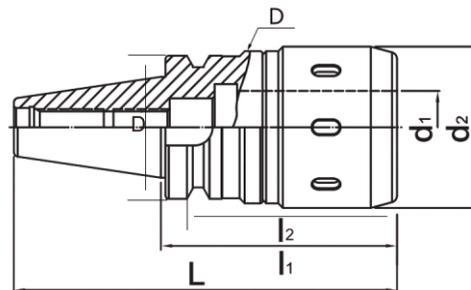


| Model | L | C | H1 | H2 |
|----------------|-----|----|----|----|
| BT30-SLN20-70 | 70 | 52 | 25 | — |
| BT40-SLN20-70 | 70 | 52 | 25 | — |
| BT40-SLN25-90 | 90 | 65 | 24 | 25 |
| BT40-SLN32-100 | 100 | 72 | 24 | 28 |
| BT50-SLN25-100 | 100 | 65 | 24 | 25 |
| BT50-SLN32-105 | 105 | 72 | 24 | 28 |
| BT50-SLN40-110 | 110 | 90 | 30 | 32 |



G2.5 25000-30000RPM 20CrMnTi ≤ 0.005mm

| Model | | L | L1 | L2 | D | M |
|-------|---------|-------|-----|-----|----|-----------|
| BT30 | M6-45 | 93.4 | 60 | 38 | 13 | M6*1.0P |
| | M8-45 | 93.4 | 60 | 38 | 15 | M8*1.25P |
| | M10-45 | 93.4 | 60 | 38 | 19 | M10*1.5P |
| | M12-60 | 108.4 | 75 | 53 | 24 | M12*1.75P |
| | M16-45 | 93.4 | 60 | 38 | 29 | M16*2.0P |
| BT40 | M6-60 | 125.4 | 60 | 33 | 13 | M6*1.0P |
| | M6-100 | 165.4 | 100 | 73 | 13 | M6*1.0P |
| | M6-150 | 215.4 | 150 | 123 | 13 | M6*1.0P |
| | M8-60 | 125.4 | 60 | 33 | 15 | M8*1.25P |
| | M8-100 | 165.4 | 100 | 73 | 15 | M8*1.25P |
| | M8-150 | 215.4 | 150 | 123 | 15 | M8*1.25P |
| | M10-60 | 125.4 | 60 | 33 | 19 | M10*1.5P |
| | M10-100 | 165.4 | 100 | 73 | 19 | M10*1.5P |
| | M10-150 | 215.4 | 150 | 123 | 19 | M10*1.5P |
| | M12-60 | 125.4 | 60 | 33 | 24 | M12*1.75P |
| | M12-100 | 165.4 | 100 | 73 | 24 | M12*1.75P |
| | M12-150 | 215.4 | 150 | 123 | 24 | M12*1.75P |
| | M16-60 | 125.4 | 60 | 33 | 29 | M16*2.0P |
| | M16-100 | 165.4 | 100 | 73 | 29 | M16*2.0P |
| | M16-150 | 215.4 | 150 | 123 | 29 | M16*2.0P |



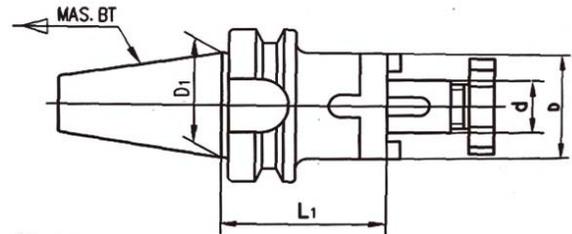
HRC58-60 Material : 20CrMnTi Accuracy: ≤ 0.08mm

| Model | L | L1 | L2 | D | d1 | d2 |
|--------------|-------|-----|----|-----|----|----|
| BT30-C20-90 | 138.4 | 90 | 70 | 46 | 20 | 55 |
| BT30-C25-100 | 128.4 | 100 | | | 25 | 58 |
| BT30-C32-105 | 148.4 | 105 | | | 32 | 68 |
| BT40-C20-90 | 155.4 | 90 | 70 | 63 | 20 | 55 |
| BT40-C25-100 | 160.4 | 100 | | | 25 | 58 |
| BT40-C25-130 | 195.4 | 130 | | | 32 | 68 |
| BT40-C32-105 | 170.4 | 105 | 75 | 100 | 20 | 55 |
| BT40-C25-135 | 200.4 | 135 | | | 25 | 58 |
| BT50-C20-110 | 165.4 | 110 | | | 32 | 68 |
| BT50-C20-165 | 215.4 | 165 | 70 | 100 | 20 | 55 |
| BT50-C25-110 | 170.4 | 110 | | | 25 | 58 |
| BT50-C25-165 | 200.4 | 165 | | | 32 | 68 |
| BT50-C32-110 | 206.4 | 110 | 75 | 100 | 20 | 55 |
| BT50-C32-135 | 236.8 | 135 | | | 25 | 58 |
| BT50-C32-165 | 266.8 | 165 | | | 32 | 68 |
| BT50-C32-200 | 265.4 | 100 | | | 42 | 84 |
| BT50-C32-250 | 315.4 | 100 | | | 42 | 84 |
| BT50-C32-300 | 365.4 | 100 | 90 | 100 | 20 | 55 |
| BT50-C42-110 | 211.8 | 110 | | | 25 | 58 |
| BT50-C42-135 | 236.8 | 135 | | | 32 | 68 |
| BT50-C42-165 | 266.8 | 165 | 42 | 84 | | |



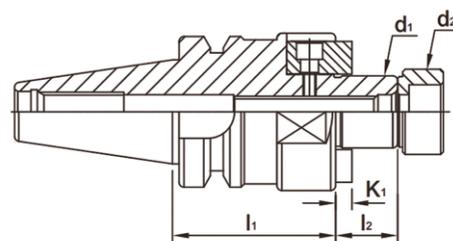
| Model | Tool Holders | Collets | Back Bar Thread | Wt. |
|---------------|--------------------|--------------------|-----------------|---------|
| MT4-C32-8PCS | MT4-C32-75L | C32 | M16x2.0P | 2.5 |
| MT5-C32-8PCS | MT5-C32-75L | C32 | M24x3.0P | 3.5 |
| MT5-C42-8PCS | MT5-C42-110L | C42 | | 5.0 |
| R8-C20-8PCS | R8-C20-85L | C20 | M12x1.75P | 2.5 |
| NT30-C20-8PCS | NT30-C20-65L | C20 | M12x1.75P | 3.0 |
| NT40-C20-8PCS | NT40-C20--70L | C20 | M16x2.0P | 3.5 |
| NT40-C32-8PCS | NT40-C32-95L | C32 | | 4.0 |
| NT50-C32-8PCS | NT50-C32-100L | C32 | M24x3.0P | 4.5 |
| NT50-C42-8PCS | NT50-C42-110L | C42 | | 6.0 |
| BT30-C20-8PCS | BT30-C20-85L | C20 | M12x1.75P | 2.5 |
| BT30-C25-8PCS | BT30-C25-85L | C25 | | 3.0 |
| BT40-C20-8PCS | BT40-C20-90L/120L | C20 | M16x2.0p | 2.0/2.5 |
| BT40-C25-8PCS | BT40-C25-95L/130L | C25 | | 2.5/3.0 |
| BT40-C32-8PCS | BT40-C32-105L/135L | C32 | M24x3.0p | 3.0/3.5 |
| BT50-C32-8PCS | BT50-C32-110L/150L | C32 | | 5.2/7.0 |
| | | BT50-C32-110L/135L | C32 | 6.5/7.5 |

BT-CEM Combine Shell End Mill Arbors

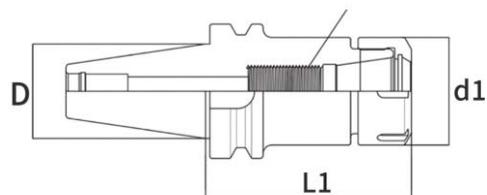


Material: 20CrMnTi Speed : ≥ 12000 RPM

| Model | L1 | D | D1 | d |
|---------------|----|----|-------|----|
| BT30-CEM16-50 | 50 | 32 | 31.75 | 16 |
| BT30-CEM22-50 | 50 | 40 | | 22 |
| BT30-CEM27-55 | 55 | 48 | | 27 |
| BT40-CEM16-55 | 55 | 32 | 44.45 | 16 |
| BT40-CEM22-55 | 55 | 40 | | 22 |
| BT40-CEM27-55 | 55 | 48 | | 27 |
| BT40-CEM32-60 | 60 | 58 | | 32 |
| BT40-CEM40-60 | 60 | 70 | 69.85 | 40 |
| BT50-CEM16-70 | 70 | 32 | | 16 |
| BT50-CEM22-70 | 70 | 40 | | 22 |
| BT50-CEM27-70 | 70 | 48 | | 27 |
| BT50-CEM32-70 | 70 | 58 | | 32 |
| BT50-CEM40-70 | 70 | 70 | 40 | |

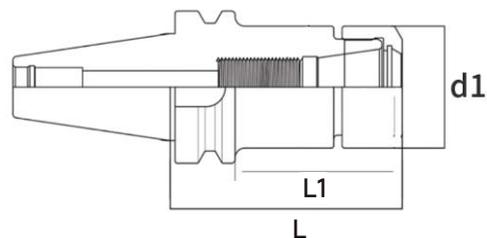


| Model | l1 | l2 | D | d1 | d2 | k1 | k2 |
|-----------------|-----|----|----|----|------|-----|----|
| BBT30-FMB22-45 | 45 | 19 | 48 | 22 | 26 | 4.8 | 10 |
| BBT30-FMB22-60 | 60 | | | | | | |
| BBT30-FMB27-45 | 45 | 20 | 60 | 27 | 31.5 | 5.8 | 12 |
| BBT30-FMB27-45 | 60 | | | | | | |
| BBT30-FMB32-45 | 45 | 22 | 78 | 32 | 41 | 6.8 | 14 |
| BBT40-FMB22-45 | 45 | 19 | 48 | 22 | 26 | 4.8 | 10 |
| BBT40-FMB22-60 | 60 | | | | | | |
| BBT40-FMB22-100 | 100 | | | | | | |
| BBT40-FMB22-150 | 150 | | | | | | |
| BBT40-FMB22-200 | 200 | | | | | | |
| BBT40-FMB27-45 | 45 | 20 | 60 | 27 | 31.5 | 5.8 | 12 |
| BBT40-FMB27-60 | 60 | | | | | | |
| BBT40-FMB27-90 | 90 | | | | | | |
| BBT40-FMB27-105 | 105 | | | | | | |
| BBT40-FMB32-45 | 45 | 22 | 78 | 32 | 41 | 6.8 | 14 |
| BBT40-FMB32-60 | 60 | | | | | | |
| BBT40-FMB40-60 | 60 | | | | | | |
| BBT50-FMB22-60 | 60 | 19 | 48 | 22 | 26 | 4.8 | 10 |
| BBT50-FMB22-100 | 100 | | | | | | |
| BBT50-FMB22-150 | 150 | | | | | | |
| BBT50-FMB22-200 | 200 | | | | | | |
| BBT50-FMB22-250 | 250 | | | | | | |
| BBT50-FMB22-300 | 300 | | | | | | |
| BBT50-FMB22-350 | 350 | | | | | | |
| BBT50-FMB22-400 | 400 | | | | | | |
| BBT50-FMB27-60 | 60 | 20 | 60 | 27 | 31.5 | 5.8 | 12 |
| BBT50-FMB27-100 | 100 | | | | | | |
| BBT50-FMB27-150 | 150 | | | | | | |
| BBT50-FMB27-200 | 200 | | | | | | |
| BBT50-FMB27-250 | 250 | | | | | | |
| BBT50-FMB32-60 | 60 | 22 | 78 | 32 | 41 | 6.8 | 14 |
| BBT50-FMB32-100 | 100 | | | | | | |
| BBT50-FMB40-60 | 60 | 25 | 89 | 40 | 48 | 8.3 | 16 |
| BBT50-FMB40-100 | 100 | | | | | | |
| BBT50-FMB40-105 | 105 | | | | | | |



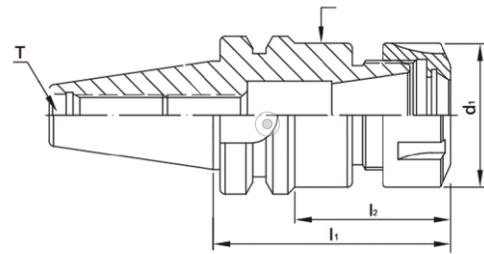
○ Material : 4Cr13 ○ Speed: ≤ 25000RPM ○ Accuracy: 0.002mm

| Mode | L1 | d1 | D | H | Clamping Range |
|----------------|-----|----|-------|------|----------------|
| BBT40-ER11-70 | 70 | 19 | 44.45 | 30 | 1-7 |
| BBT40-ER11-100 | 100 | 19 | | 30 | 1-7 |
| BBT40-ER16-70 | 70 | 28 | | 50 | 1-10 |
| BBT40-ER16-100 | 100 | 28 | | 50 | 1-10 |
| BBT40-ER16-125 | 125 | 28 | | 50 | 1-10 |
| BBT40-ER16-150 | 150 | 28 | | 50 | 1-10 |
| BBT40-ER20-70 | 70 | 34 | | 70 | 1-13 |
| BBT40-ER20-100 | 100 | 34 | | 70 | 1-13 |
| BBT40-ER20-125 | 125 | 34 | | 70 | 1-13 |
| BBT40-ER20-150 | 150 | 34 | | 70 | 1-13 |
| BBT40-ER25-70 | 70 | 42 | | 90 | 1-16 |
| BBT40-ER25-100 | 100 | 42 | | 90 | 1-16 |
| BBT40-ER25-125 | 125 | 42 | | 90 | 1-16 |
| BBT40-ER25-150 | 150 | 42 | | 90 | 1-16 |
| BBT40-ER32-70 | 70 | 50 | | 90 | 1-20 |
| BBT40-ER32-100 | 100 | 50 | | 100 | 1-20 |
| BBT40-ER32-125 | 125 | 50 | | 100 | 1-20 |
| BBT40-ER32-150 | 150 | 50 | | 100 | 1-20 |
| BBT40-ER40-80 | 80 | 63 | | 90 | 3-26 |
| BBT40-ER40-100 | 100 | 63 | | 100 | 3-26 |
| BBT40-ER40-125 | 125 | 63 | 100 | 3-26 | |
| BBT40-ER40-150 | 150 | 63 | 100 | 3-26 | |



○ Material : 4Cr13 ○ Speed: ≤ 30000RPM ○ Accuracy: 0.002mm

| Model | | Clamping Range | d1 | L | L1 |
|----------|-----------|----------------|-----|-----|----|
| BT/BBT30 | GSK06-60 | 2-6 | 195 | 60 | 38 |
| | GSK06-90 | | | 90 | 68 |
| | GSK06-120 | | | 120 | 98 |
| | GSK10-60 | 2-10 | 275 | 60 | 38 |
| | GSK10-90 | | | 90 | 68 |
| | GSK10-120 | | | 120 | 98 |
| | GSK16-60 | 3-16 | 40 | 60 | 38 |
| | GSK16-90 | | | 90 | 68 |
| | GSK16-120 | | | 120 | 98 |
| BT/BBT40 | GSK06-60 | 2-6 | 195 | 60 | 43 |
| | GSK06-90 | | | 90 | 63 |
| | GSK06-120 | | | 120 | 93 |
| | GSK10-60 | 2-10 | 275 | 60 | 43 |
| | GSK10-90 | | | 90 | 63 |
| | GSK10-120 | | | 120 | 93 |
| | GSK16-60 | 3-16 | 40 | 60 | 43 |
| | GSK16-90 | | | 90 | 63 |
| | GSK16-120 | | | 120 | 93 |

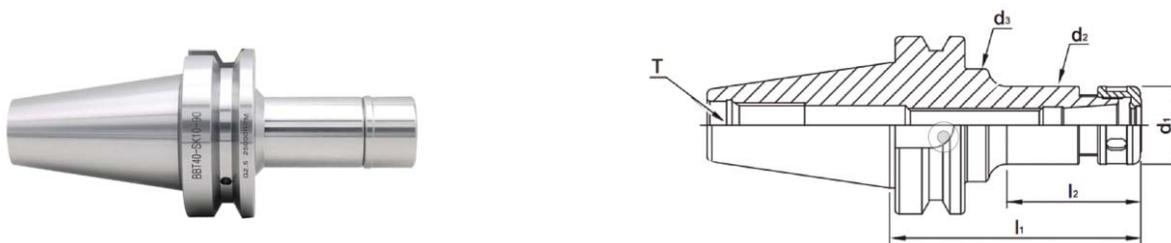


Material: 20CrMnTi Speed : $\leq 0.003\text{mm}$ Accuracy : G2.5 25000RPM

| Model | 11 | 2 | d1 | d2 | d3 | T |
|----------------|-----|-----|----|----|----|-----------|
| BBT30-ER16-50 | 50 | 27 | 28 | 16 | 28 | M12*1.75P |
| BBT30-ER16-60 | 60 | 35 | | | | |
| BBT30-ER16-70 | 70 | 40 | | | | |
| BBT30-ER16-100 | 100 | 70 | | | | |
| BBT30-ER16-120 | 120 | 93 | | | | |
| BBT30-ER20-50 | 50 | 28 | 34 | 20 | 34 | |
| BBT30-ER20-70 | 70 | 45 | | | | |
| BBT30-ER20-100 | 100 | 75 | | | | |
| BBT30-ER20-135 | 135 | 110 | | | | |
| BBT30-ER25-70 | 70 | 46 | 42 | 25 | 42 | |
| BBT30-ER25-135 | 135 | 111 | | | | |
| BBT30-ER32-70 | 70 | 48 | 50 | 32 | 50 | |
| BBT30-ER32-100 | 100 | 78 | | | | |
| BBT30-ER40-80 | 80 | 58 | 63 | 40 | 63 | |
| BBT40-ER16-70 | 70 | 40 | 28 | 16 | 28 | |
| BBT40-ER16-100 | 100 | 63 | | | | |
| BBT40-ER16-125 | 125 | 88 | | | | |
| BBT40-ER16-150 | 150 | 103 | | | | |
| BBT40-ER16-180 | 180 | 143 | | | | |
| BBT40-ER20-70 | 70 | 40 | 34 | 20 | 34 | |
| BBT40-ER20-100 | 100 | 63 | | | | |
| BBT40-ER20-135 | 135 | 98 | | | | |
| BBT40-ER20-150 | 150 | 113 | | | | |
| BBT40-ER25-70 | 70 | 40 | 42 | 25 | 42 | |
| BBT40-ER25-100 | 100 | 70 | | | | |
| BBT40-ER25-125 | 125 | 95 | | | | |
| BBT40-ER25-150 | 150 | 115 | | | | |
| BBT40-ER32-70 | 70 | 40 | 50 | 32 | 50 | |
| BBT40-ER32-100 | 100 | 70 | | | | |
| BBT40-ER32-150 | 150 | 118 | | | | |

| | | | | | | |
|----------------|-----|-----|----|----|----|----------|
| BBT40-ER40-80 | 80 | 53 | 63 | 40 | 63 | M16*2.0P |
| BBT40-ER40-100 | 100 | 73 | | | | |
| BBT40-ER40-120 | 120 | 93 | | | | |
| BBT40-ER40-150 | 150 | 123 | | | | |

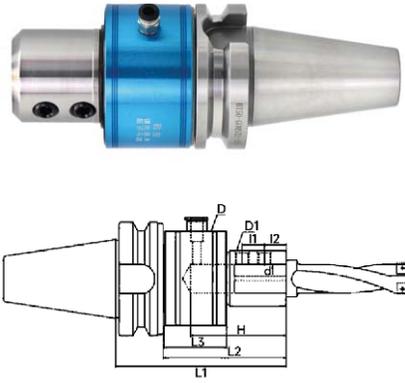
BBT-SK Tool Holders



HRC58-60 Material: 20CrMnTi Accuracy : $\leq 0.005\text{mm}$ Speed : G2.5 25000RPM

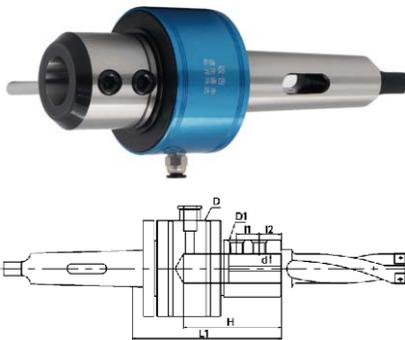
In high-speed machining, increase the stability of the tool holder. Reduce the poor accuracy of the tool holder during high-speed cutting. The increase in contact diameter helps to increase the extension. Improved tool stability can increase tool life and ensure repeated positioning accuracy after tool change.

| Model | 11 | 12 | Clamping Range | d1 | d2 | d3 | T |
|----------------|-----|--------|------------------------|------|------|----|-----------|
| BBT30-SK10-45 | 45 | 14.5 | $\varphi 3-\varphi 10$ | 30 | 276 | | M12*1.75P |
| BBT30-SK10-60 | 60 | 25 | | | | | |
| BBT30-SK10-90 | 90 | 55 | | | | | |
| BBT30-SK16-60 | 60 | 277 | $\varphi 3-\varphi 16$ | 40 | 40 | | M12*1.75P |
| BBT30-SK16-90 | 90 | 577 | | | | | |
| BBT30-SK20-60 | 60 | 37 | $\varphi 3-\varphi 20$ | 48.5 | 48.5 | | M12*1.75P |
| BBT30-SK20-90 | 90 | 67 | | | | | |
| BBT40-SK10-60 | 60 | 22 | $\varphi 3-\varphi 10$ | 30 | 276 | 40 | M16*2.0P |
| BBT40-SK10-90 | 90 | 37721 | | | | | |
| BBT40-SK10-120 | 120 | 68.499 | | | | | |
| BBT40-SK16-60 | 60 | 23.2 | $\varphi 3-\varphi 16$ | 40 | 40 | | M16*2.0P |
| BBT40-SK16-90 | 90 | 48.7 | | | | | |
| BBT40-SK16-120 | 120 | 78.876 | | | | | |
| BBT40-SK20-60 | 60 | 32 | $\varphi 3-\varphi 20$ | 48.5 | 48.5 | | M16*2.0P |
| BBT40-SK20-90 | 90 | 60 | | | | | |
| BBT40-SK20-120 | 120 | 90 | | | | | |



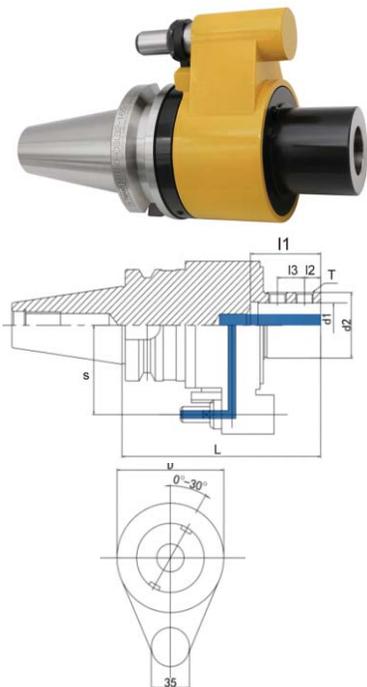
| Model | L1 | L2 | L3 | H | 11 | 12 | D | D1 | d | Weight |
|----------------|-----|-------|----|----|----|------|-----|-------|-----|--------|
| BT40-OML20-140 | 140 | 96.7 | 57 | 78 | 20 | 20 | φ83 | φ49.5 | 20 | 3.74 |
| BT40-OML25-155 | 155 | 111.7 | | 93 | | | | | 25 | 3.81 |
| BT40-OML32-155 | | 112 | 59 | | | | 32 | 4.10 | | |
| BT50-OML20-140 | 140 | 97 | 57 | 78 | | | 20 | 20 | φ83 | φ49.5 |
| BT50-OML25-155 | 155 | 112 | | 93 | 25 | 7.39 | | | | |
| BT50-OML32-155 | | 112.7 | 59 | | 32 | 8.10 | | | | |
| BT50-OML40-160 | 160 | 117.7 | 59 | 95 | 40 | 7.90 | | | | |

MT Side Lock Oil Hole Holders

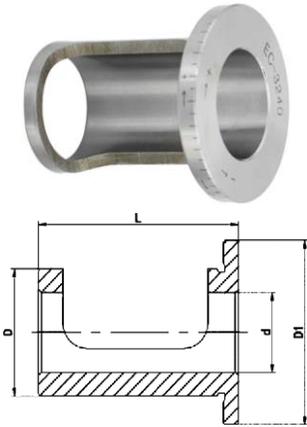


| Model | L1 | l1 | 12 | H | D | D1 | d | Weight |
|---------------|-----|----|-----|-----|-------|-------|-------|--------|
| MT4-OML20-115 | 115 | 20 | 20 | 78 | φ83 | φ49.5 | 20 | 3.56 |
| MT4-OML25-130 | 130 | | | 93 | | | 25 | 3.62 |
| MT4-OML32-135 | 135 | | | φ89 | φ54.5 | 32 | 4.38 | |
| MT5-OML20-115 | 115 | 20 | | 20 | 78 | φ83 | φ49.5 | 20 |
| MT5-OML25-130 | 130 | | 93 | | 25 | | | 4.50 |
| MT5-OML32-135 | 135 | | φ89 | | φ54.5 | 32 | 5.01 | |
| MT5-OML40-140 | 140 | 20 | 95 | | φ98 | φ59.5 | 40 | 5.11 |
| MT6-OML20-120 | 120 | 20 | 20 | 78 | φ83 | φ49.5 | 20 | 7.13 |
| MT6-OML25-130 | 130 | | | 93 | | | 25 | 7.22 |
| MT6-OML32-135 | 135 | | | φ89 | φ54.5 | 32 | 7.85 | |
| MT6-OML40-140 | 140 | 20 | | 95 | φ98 | φ54.5 | 40 | 7.98 |

BT/OSL Oil Hole Tool Holders

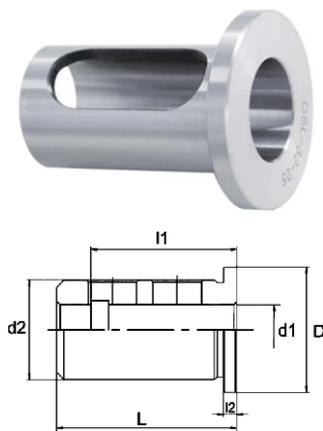


| Model | L | l1 | 12 | l3 | D | d1 | d2 | S | T | Weight |
|----------------|-----|----|----|----|-----------|----------|------|----------|-----------|--------|
| BT40-OSL16-150 | 150 | 48 | 25 | - | 82 | 16 | 49.5 | 65 | M12-1.75P | 3.10 |
| BT40-OSL20-150 | | 50 | | | | 20 | | | | 3.50 |
| BT40-OSL25-165 | 165 | 56 | 15 | 20 | | 25 | | | | 3.50 |
| BT40-OSL32-165 | | 60 | | | | 32 | | | | 7.80 |
| BT50-OSL16-165 | | 48 | 25 | - | 16 | M14-2.0P | 7.00 | | | |
| BT50-OSL20-165 | 50 | 20 | | | M12-1.75P | 7.50 | | | | |
| BT50-OSL25-165 | 56 | 15 | 20 | 98 | 25 | 59 | 80 | M16-2.0P | 7.50 | |
| BT50-OSL32-165 | 60 | | | | 32 | | | | 9.05 | |
| BT50-OSL40-165 | 62 | 25 | 40 | | M14-2.0P | 8.50 | | | | |



| Model | L | d | D1 | D | Weight |
|---------|----|----|----|----|--------|
| EC20-25 | 48 | 20 | 41 | 25 | 0.19 |
| EC25-32 | 60 | 25 | 49 | 32 | 0.21 |
| EC32-40 | 65 | 32 | 58 | 40 | 0.23 |
| EC40-50 | 76 | 40 | 68 | 50 | 0.24 |

OSL Sleeves



| Model | L | I1 | I2 | D | d1 | d2 | Weight |
|-----------|----|----|-----|----|----|------|--------|
| OSL-20-16 | 54 | 48 | 5.5 | 30 | 16 | 20 | 0.07 |
| OSL-25-16 | 60 | 56 | | 35 | 20 | 25 | 0.19 |
| OSL-25-20 | | 48 | | 42 | 20 | | 0.15 |
| OSL-32-16 | 64 | 56 | | 42 | 25 | 32 | 0.35 |
| OSL-32-20 | | 48 | 50 | 20 | 40 | 0.32 | |
| OSL-32-25 | | 60 | 50 | 25 | 40 | 0.22 | |
| OSL-40-16 | 74 | 60 | 50 | 16 | 40 | 0.57 | |
| OSL-40-20 | | 48 | | 20 | | 0.54 | |
| OSL-40-25 | | 56 | | 25 | | 0.45 | |
| OSL-40-32 | | 60 | | 32 | | 0.30 | |

Tool Holder Sleeves



Function: Suitable to hold cylindrical shank tools on turret at CNC lathe.

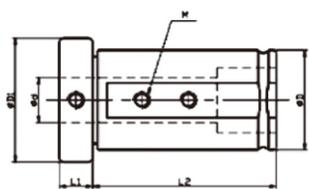


FIG1

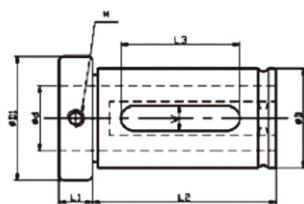
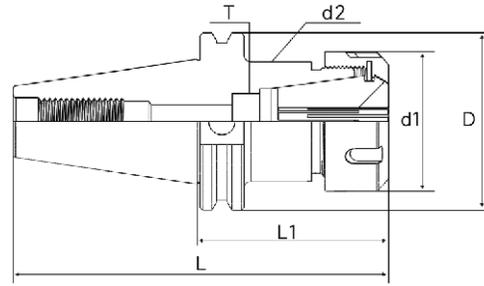


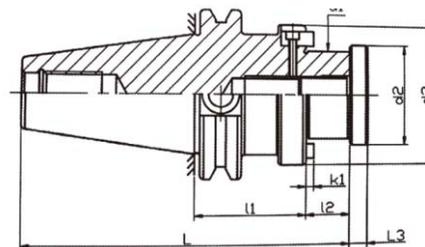
FIG2

| Model | Specification |
|-------|--|
| D40 | $\varphi 6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32$ |
| | MT1/2/3/4 |
| D32 | $\varphi 4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25$ |
| | MT1/2/3/4 |
| D25 | $\varphi 4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20$ |
| | MT1/2/3 |
| D20 | $\varphi 4/5/6/7/8/9/10/11/12/13/14/15/16$ |
| D16 | $\varphi 4/5/6/7/8/9/10/11/12$ |



ANSI B5.50 Material: 20CrMnTi Accuracy : $\leq 0.005\text{mm}$ Speed : $\geq 12000\text{rpm}$

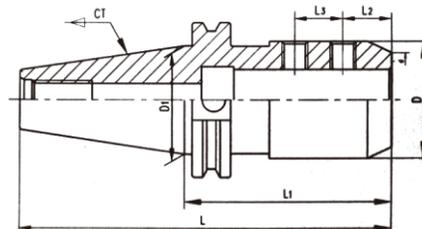
| Model | L | L1 | D | d1 | d2 | Thread | KGS |
|------------------|--------|-------|--------|--------|-------|---------|------|
| CAT40-ER16-2.76" | 5.447" | 2.76" | 2.5" | 1.102" | 1.75" | 5/8"-11 | 1.05 |
| CAT40-ER16-4" | 6.687" | 4" | | 1.35 | | | |
| CAT40-ER16-6" | 8.687" | 6" | | 1.65 | | | |
| CAT40-ER20-2.76" | 5.447" | 2.76" | | 1.25 | | | |
| CAT40-ER20-4" | 6.687" | 4" | | 1.65 | | | |
| CAT40-ER25-2.76" | 5.447" | 2.76" | | 1.35 | | | |
| CAT40-ER25-4" | 6.687" | 4" | | 1.70 | | | |
| CAT40-ER25-6" | 8.687" | 6" | | 2.25 | | | |
| CAT40-ER32-2.76" | 5.447" | 2.76" | | 1.25 | | | |
| CAT40-ER32-4" | 6.687" | 4" | | 1.75 | | | |
| CAT40-ER32-5" | 8.687" | 6" | | 2.15 | | | |
| CAT40-ER40-3.15" | 5.837" | 3.15" | | 1.80 | | | |
| CAT40-ER40-4" | 6.687" | 4" | | 2.05 | | | |
| CAT40-ER40-6" | 8.687" | 6" | | 3.30 | | | |
| CAT40-ER50-4" | 6.687" | 4" | | 2.65 | | | |
| CAT50-ER16-4" | 8" | 4" | 3.875" | 1.102" | 2.75" | 1"-8 | 4.10 |
| CAT50-ER16-6" | 10" | 6" | | 4.28 | | | |
| CAT50-ER20-4" | 8" | 4" | | 4.20 | | | |
| CAT50-ER20-6" | 10" | 6" | | 4.45 | | | |
| CAT50-ER25-4" | 8" | 4" | | 4.15 | | | |
| CAT50-ER25-6" | 10" | 6" | | 4.50 | | | |
| CAT50-ER32-4" | 8" | 4" | | 4.70 | | | |
| CAT50-ER32-6" | 10" | 6" | | 4.60 | | | |
| CAT50-ER40-4" | 8" | 4" | | 4.25 | | | |
| CAT50-ER40-6" | 10" | 6" | | 4.80 | | | |
| CAT50-ER50-4" | 8" | 4" | | 4.85 | | | |



ANSI B5.50 Material: 20CrMnTi Accuracy : $\leq 0.005\text{mm}$ Speed : $\geq 12000\text{rpm}$

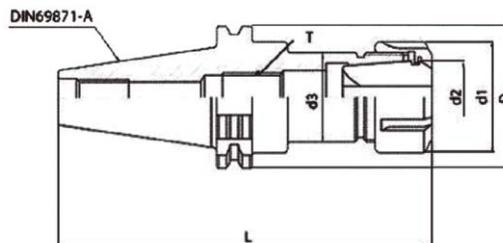
| Model | L | L2 | d1 | d3 |
|-------------------|-------|------|-------|----|
| CAT40-FMB1"-1.75" | 1.75" | 175 | 1" | 60 |
| CAT40-FMB1.25"-2" | 2" | 175 | 1.25" | 70 |
| CAT40-FMB1.5"-2" | 2" | 23.8 | 1.5" | 85 |
| CAT50-FMB1.25"-4" | 4" | 175 | 1.25" | 70 |
| CAT50-FMB1.25"-6" | 6" | 175 | 1.25" | 70 |
| CAT50-FMB1.5"-4" | 4" | 23.8 | 1.5" | 85 |
| CAT50-FMB1.5"-6" | 6" | 23.8 | 1.5" | 85 |
| CAT50-FMB2"-2" | 2" | 24 | 2" | 95 |
| CAT50-FMB2"-4" | 4" | 24 | 2" | 95 |
| CAT50-FMB2"-6" | 6" | 24 | 2" | 95 |

CAT Side Lock End Mill Arbors



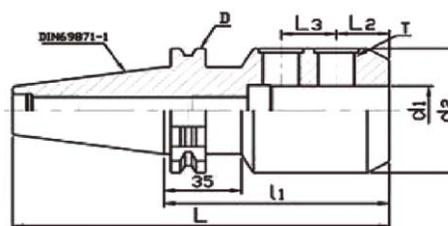
ANSI B5.50

| Model | L1 | D | d | l2 | l3 |
|---------------------|------|--------|--------|------|--------|
| CAT40-SL0.4"-2" | 2" | 1.4" | 0.4" | 0.8" | |
| CAT40-SL0.475"-2" | 2" | 1.675" | 0.475" | 9" | |
| CAT40-SL0.65"-2.5" | 2.5" | 1.925" | 0.65" | 1" | |
| CAT40-SL0.8"-2.5" | 2.5" | 2.075" | 0.8" | 1" | |
| CAT40-SL1"-4" | 4" | 2.625" | 1" | 1" | 1" |
| CAT40-SL1.25"-4" | 4" | 2.85" | 1.25" | 1" | 1.125" |
| CAT50-SL0.475"-2.5" | 2.5" | 1.675" | 0.475" | 9" | |
| CAT50-SL0.65"-2.5" | 2.5" | 1.925" | 0.65" | 1" | |
| CAT50-SL0.8"-2.5" | 2.5" | 2.075" | 0.8" | 1" | |
| CAT50-SL1"-3.2" | 3.2" | 2.625" | 1" | 1" | 1" |
| CAT50-SL1.25"-4" | 4" | 2.85" | 1.25" | 1" | 1.125" |
| CAT50-SL1.6"-4.8" | 4.8" | 3.6" | 1.6" | 1.2" | 1.275" |
| CAT50-SL2"-5.2" | 5.2" | 4" | 2" | 1.4" | 1.4" |

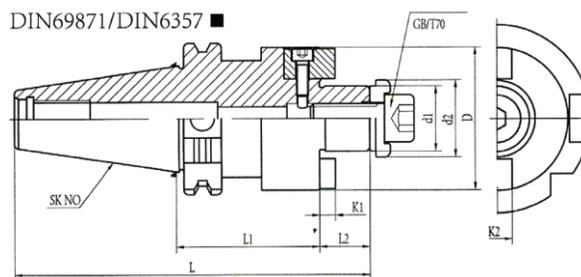


| Model | L | L1 | D | d1 | d2 | KGS | Model | L | L1 | D | d1 | d2 | KGS |
|---------------|-------|-----|-------|----|----|------|---------------|--------|-----|------|----|----|------|
| SK30-ER11-100 | 148.4 | 80 | 50 | 19 | 11 | 0.6 | SK50-ER16-160 | 261.75 | 160 | 97.5 | 28 | 16 | 4.5 |
| SK30-ER16-100 | 148.4 | 100 | | 28 | 16 | 0.7 | SK50-ER20-100 | 201.75 | 100 | | 34 | 20 | 3.4 |
| SK30-ER20-100 | 148.4 | 100 | | 34 | 20 | 0.75 | SK50-ER20-160 | 261.75 | 160 | | 34 | 20 | 3.8 |
| SK40-ER11-80 | 148.4 | 80 | 63.55 | 19 | 11 | 1.05 | SK50-ER25-70 | 171.75 | 70 | | 42 | 25 | 3.4 |
| SK40-ER16-70 | 138.4 | 70 | | 28 | 16 | 1.3 | SK50-ER25-100 | 201.75 | 100 | | 42 | 25 | 4.15 |
| SK40-ER16-100 | 168.4 | 100 | | 28 | 16 | 1.4 | SK50-ER25-150 | 251.75 | 150 | | 42 | 25 | 4.5 |
| SK40-ER20-100 | 168.4 | 100 | | 34 | 20 | 1.5 | SK50-ER32-120 | 221.75 | 120 | | 50 | 32 | 4.6 |
| SK40-ER25-100 | 168.4 | 100 | | 42 | 25 | 1.85 | SK50-ER32-160 | 261.75 | 160 | | 50 | 32 | 4.75 |
| SK40-ER25-150 | 218.4 | 150 | | 42 | 25 | 2.25 | SK50-ER40-80 | 181.75 | 80 | | 63 | 40 | 3.65 |
| SK40-ER32-70 | 138.4 | 70 | | 50 | 32 | 1.6 | SK50-ER40-120 | 221.75 | 120 | | 63 | 40 | 4.8 |
| SK40-ER32-100 | 168.4 | 100 | | 50 | 32 | 2 | SK50-ER40-160 | 261.75 | 160 | | 63 | 40 | 5.2 |
| SK40-ER40-70 | 138.4 | 70 | | 63 | 40 | 1.5 | SK50-ER50-120 | 221.75 | 120 | | 78 | 50 | 5.45 |
| SK40-ER40-100 | 168.4 | 100 | | 50 | 32 | 2 | SK50-ER50-160 | 261.75 | 160 | | 78 | 50 | 5.55 |
| SK50-ER16-100 | 201.4 | 100 | | 28 | 16 | 3.2 | | | | | | | |

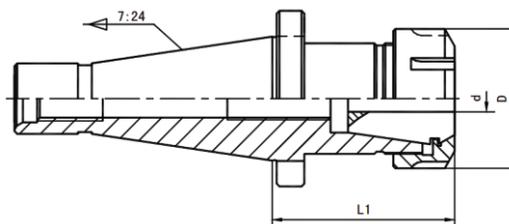
SK Side Lock End Mill Arbors



| Model | L | I2 | I2 | L2 | d2 | KGS |
|----------------|--------|-----|----|------|----|------|
| SK30-SLN12-50 | 978 | 50 | 42 | 22.5 | 42 | 0.9 |
| SK30-SLN16-63 | 978 | 63 | 48 | 24 | 48 | 1.10 |
| SK40-SLN16-63 | 131.4 | 63 | 48 | 24 | 48 | 1.4 |
| SK40-SLN20-63 | 131.4 | 63 | 52 | 25 | 52 | 1.3 |
| SK40-SLN25-100 | 168.4 | 100 | 65 | 24 | 65 | 2.4 |
| SK40-SLN32-100 | 168.4 | 100 | 72 | 24 | 72 | 2.7 |
| SK50-SLN20-100 | 164.75 | 63 | 52 | 25 | 52 | 3.5 |
| SK50-SLN25-100 | 181.75 | 80 | 65 | 24 | 65 | 4.2 |
| SK50-SLN32-100 | 201.75 | 100 | 72 | 24 | 72 | 5.0 |
| SK50-SLN40-100 | 201.75 | 100 | 90 | 30 | 90 | 5.6 |



| Model | | d1 | d2 | D | L | L1 | L2 | K1 | K2 | T |
|-----------|-----------|----|----|----|--------|-----|------|-----|----|--------|
| SK30 | FMB22-45 | 22 | 26 | 45 | 109.3 | 45 | 16.5 | 4.8 | 10 | M10×30 |
| | FMB22-60 | | | | 124.3 | 60 | | | | |
| | FMB27-45 | 27 | 33 | 54 | 111.3 | 45 | 18.5 | 5.8 | 12 | M12×30 |
| | FMB27-60 | | | | 126.3 | 60 | | | | |
| | FMB32-60 | 32 | 41 | 58 | 130.3 | 60 | 22 | 6.8 | 14 | M16×35 |
| SK40 | FMB22-45 | 22 | 26 | 48 | 129.9 | 45 | 16.5 | 4.8 | 10 | M10×30 |
| | FMB22-60 | | | | 144.9 | 60 | | | | |
| | FMB22-100 | | | | 184.9 | 100 | | | | |
| | FMB22-150 | | | | 234.9 | 150 | | | | |
| | FMB27-45 | 27 | 33 | 60 | 131.9 | 45 | 18.5 | 5.8 | 12 | M12×30 |
| | FMB27-60 | | | | 146.9 | 60 | | | | |
| | FMB27-100 | | | | 186.9 | 100 | | | | |
| | FMB27-150 | | | | 236.9 | 150 | | | | |
| | FMB27-200 | | | | 286.9 | 200 | | | | |
| | FMB32-60 | 32 | 41 | 62 | 150.4 | 60 | 22 | 6.8 | 14 | M16×35 |
| | FMB32-100 | | | | 190.4 | 100 | | | | |
| | FMB32-150 | | | | 240.4 | 150 | | | | |
| | FMB32-200 | | | | 290.4 | 200 | | | | |
| | FMB40-60 | 40 | 48 | 80 | 153.4 | 60 | 25 | 8 | 16 | M16×35 |
| | FMB40-100 | | | | 193.4 | 100 | | | | |
| | FMB40-150 | | | | 243.4 | 150 | | | | |
| FMB40-200 | 293.4 | | | | 200 | | | | | |
| SK50 | FMB22-60 | 22 | 26 | 48 | 178.25 | 60 | 16.5 | 4.8 | 10 | M10×30 |
| | FMB22-100 | | | | 218.25 | 100 | | | | |
| | FMB22-150 | | | | 268.25 | 150 | | | | |
| | FMB22-200 | | | | 318.25 | 200 | | | | |
| | FMB27-60 | 27 | 33 | 60 | 180.25 | 60 | 18.5 | 5.8 | 12 | M12×30 |
| | FMB27-100 | | | | 220.25 | 100 | | | | |
| | FMB27-150 | | | | 270.25 | 150 | | | | |
| | FMB27-200 | | | | 320.25 | 200 | | | | |
| | FMB32-60 | 32 | 41 | 73 | 183.75 | 60 | 22 | 6.8 | 14 | M16×35 |
| | FMB32-100 | | | | 223.75 | 100 | | | | |
| | FMB32-150 | | | | 273.75 | 150 | | | | |
| | FMB32-200 | | | | 333.75 | 200 | | | | |
| | FMB40-60 | 40 | 48 | 80 | 186.75 | 60 | 25 | 8 | 16 | M16×35 |
| | FMB40-100 | | | | 226.75 | 100 | | | | |
| FMB40-150 | 276.75 | | | | 150 | | | | | |
| FMB40-200 | 326.75 | | | | 200 | | | | | |



DIN2080

| Model | 7:24 NO. | d | D | L1 |
|-----------|----------|--------|----|----|
| NT30-ER11 | 30 | 1 ~ 7 | 19 | 50 |
| NT30-ER16 | 30 | 1 ~ 10 | 28 | 63 |
| NT30-ER20 | 30 | 1 ~ 13 | 34 | 63 |
| NT30-ER25 | 30 | 1 ~ 16 | 42 | 63 |
| NT30-ER32 | 30 | 2 ~ 20 | 50 | 63 |
| NT30-ER40 | 30 | 3 ~ 26 | 63 | 75 |
| NT40-ER16 | 40 | 1 ~ 10 | 28 | 63 |
| NT40-ER20 | 40 | 1 ~ 13 | 34 | 60 |
| NT40-ER25 | 40 | 1 ~ 16 | 42 | 60 |

| Model | 7:24 NO. | d | D | L1 |
|-----------|----------|--------|----|-----|
| NT40-ER32 | 40 | 2 ~ 20 | 50 | 70 |
| NT40-ER40 | 40 | 3 ~ 26 | 63 | 60 |
| NT40-ER50 | 40 | 6 ~ 34 | 78 | 100 |
| NT50-ER16 | 50 | 1 ~ 10 | 28 | 63 |
| NT50-ER20 | 50 | 1 ~ 13 | 34 | 60 |
| NT50-ER25 | 50 | 1 ~ 16 | 42 | 60 |
| NT50-ER32 | 50 | 2 ~ 20 | 50 | 70 |
| NT50-ER40 | 50 | 3 ~ 26 | 63 | 70 |
| NT50-ER50 | 50 | 6 ~ 34 | 78 | 90 |

NT-ER Collets Chuck Sets



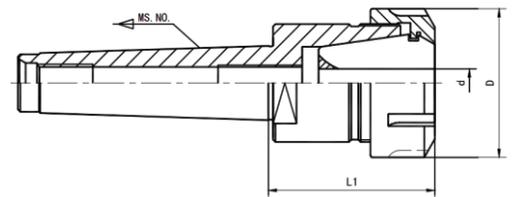
| Model | Qty. & Clamping | Thread | Wt. |
|-----------|-----------------|-----------|-----|
| NT30-ER25 | 7PCS(2-16mm) | M12x1.75P | 2.4 |
| | 15PCS(4-16mm) | | 2.8 |
| NT30-ER32 | 6PCS(6-20mm) | M12x1.75P | 2.8 |
| | 11PCS(4-20mm) | | 3.2 |
| NT30-ER40 | 18PCS(3-20mm) | M12x1.75P | 4.2 |
| | 7PCS(6-25mm) | | 4.6 |
| NT30-ER40 | 15PCS(4-26mm) | M12x1.75P | 6.0 |
| | 23PCS(4-26mm) | | 7.3 |
| NT40-ER25 | 7PCS(3-16mm) | M16x2.0P | 3.0 |
| | 15PCS(3-16mm) | | 3.3 |

| Model | Qty. & Clamping | Thread | Wt. |
|-----------|-----------------|----------|-----|
| NT40-ER32 | 6PCS(6-20mm) | M16x2.0P | 3.4 |
| | 11PCS(4-20mm) | | 3.8 |
| NT40-ER40 | 18PCS(3-20mm) | M16x2.0P | 4.8 |
| | 7PCS(6-25mm) | | 5.2 |
| NT40-ER40 | 15PCS(4-26mm) | M16x2.0P | 6.9 |
| | 23PCS(4-26mm) | | 8.2 |
| NT50-ER32 | 6PCS(6-20mm) | M24x3.0P | 5.3 |
| | 11PCS(4-20mm) | | 5.5 |
| NT50-ER40 | 18PCS(3-20mm) | M24x3.0P | 6.5 |
| | 7PCS(6-25mm) | | 7.0 |
| NT50-ER40 | 15PCS(4-26mm) | M24x3.0P | 8.5 |
| | 23PCS(4-26mm) | | 9.8 |



Type B

Type A



| Model | MS.NO. | d | D | L1 |
|----------|--------|--------|----|------|
| MT2-ER11 | MS2 | 1 ~ 7 | 19 | 35.3 |
| MT2-ER16 | MS2 | 1 ~ 10 | 28 | 44.3 |
| MT2-ER20 | MS2 | 1 ~ 13 | 34 | 53.3 |
| MT2-ER25 | MS2 | 1 ~ 16 | 42 | 57.7 |
| MT3-ER16 | MS3 | 1 ~ 10 | 28 | 49.3 |
| MT3-ER20 | MS3 | 1 ~ 13 | 34 | 56.2 |
| MT3-ER25 | MS3 | 1 ~ 16 | 42 | 55.7 |
| MT3-ER32 | MS3 | 2 ~ 20 | 50 | 65.7 |

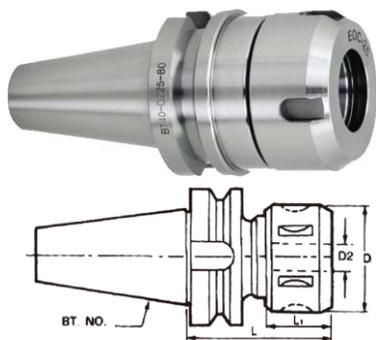
| Model | MS.NO. | d | D | L1 |
|----------|--------|--------|----|------|
| MT3-ER40 | MS3 | 3 ~ 26 | 63 | 71.7 |
| MT4-ER16 | MS4 | 1 ~ 10 | 28 | 46.5 |
| MT4-ER20 | MS4 | 1 ~ 13 | 34 | 51.7 |
| MT4-ER25 | MS4 | 1 ~ 16 | 42 | 46.7 |
| MT4-ER32 | MS4 | 2 ~ 20 | 50 | 74.2 |
| MT4-ER40 | MS4 | 3 ~ 26 | 63 | 69.7 |
| MT5-ER40 | MS5 | 3 ~ 26 | 63 | 69.2 |
| MT5-ER50 | MS5 | 6 ~ 34 | 78 | 85 |

NT-ER Collets Chuck Sets



| Model | Qty. & Clamping | Thread | Wt. |
|----------|-----------------|-----------|-----|
| MT2-ER16 | 8PCS(3-10mm) | M10x1.5P | 1.0 |
| MT2-ER20 | 11PCS(3-13mm) | | 1.2 |
| MT2-ER25 | 7PCS(6-16mm) | | 1.3 |
| | 15PCS(2-16mm) | | 2.4 |
| MT3-ER16 | 8PCS(3-10mm) | M12x1.75P | 1.1 |
| MT3-ER20 | 11PCS(3-13mm) | | 1.3 |
| MT3-ER25 | 7PCS(4-16mm) | | 2.1 |
| | 15PCS(2-16mm) | | 2.5 |
| MT3-ER32 | 6PCS(6-20mm) | | 2.7 |
| | 11PCS(4-20mm) | | 3.0 |
| | 18PCS(3-20mm) | | 4.1 |

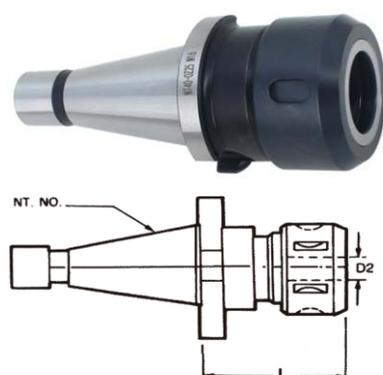
| Model | Qty. & Clamping | Thread | Wt. |
|----------|-----------------|-----------|----------|
| MT3-ER40 | 7PCS(6-25mm) | M12x1.75P | 4.5 |
| | 15PCS(4-26mm) | | 6.0 |
| | 23PCS(4-26mm) | | 7.2 |
| MT4-ER32 | 6PCS(6-20mm) | M16x2.0P | 2.9 |
| | 11PCS(4-20mm) | | 3.2 |
| | 18PCS(3-20mm) | | 4.3 |
| MT4-ER40 | 7PCS(6-25mm) | | 4.6 |
| | 15PCS(4-26mm) | | 6.1 |
| | 23PCS(4-26mm) | | 7.3 |
| MT5-ER40 | 7PCS(6-25mm) | | M20x2.5P |
| | 15PCS(4-26mm) | 6.9 | |
| | 23PCS(4-26mm) | 8.2 | |



MAS403 Material: 20CrMnTi Speed : ≥ 12000 RPM

| Model | D2 | L | D | L1 | Collets | Thread |
|---------------|------|-----|----|----|---------|----------|
| BT40-OZ25-80 | 3-25 | 80 | 60 | 30 | OZ25 | M16x2.0P |
| BT40-OZ25-120 | 3-25 | 120 | 60 | 30 | OZ25 | |
| BT40-OZ32-80 | 6-32 | 80 | 72 | 33 | OZ32 | |
| BT40-OZ32-150 | 6-32 | 150 | 72 | 33 | OZ32 | M24x3.0P |
| BT50-OZ25-90 | 3-25 | 90 | 60 | 30 | OZ25 | |
| BT50-OZ25-130 | 3-25 | 130 | 60 | 30 | OZ25 | |
| BT50-OZ32-105 | 6-32 | 105 | 72 | 33 | OZ32 | |
| BT50-OZ32-150 | 6-32 | 150 | 72 | 33 | OZ32 | |

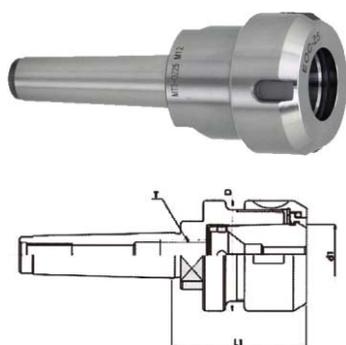
NT-OZ Collets Chucks



DN2080 Material: 20CrMnTi Speed : ≥ 12000 RPM

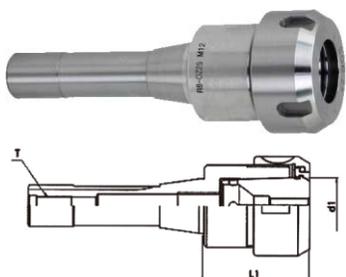
| Model | D2 | L | Collets | Thread |
|-----------|------|-----|---------|-----------|
| NT30-OZ25 | 3-25 | 70 | OZ25 | M12x1.75P |
| NT30-OZ32 | 6-32 | 100 | OZ32 | |
| NT40-OZ25 | 3-25 | 70 | OZ25 | M16x2.0P |
| NT40-OZ32 | 6-32 | 70 | OZ32 | |
| NT50-OZ25 | 3-25 | 80 | OZ25 | M24x3.0P |
| NT50-OZ32 | 6-32 | 80 | OZ32 | |

MT-OZ Collets Chucks



| Model | D2 | L1 | Collets | Thread |
|----------|------|----|---------|-----------|
| MT3-OZ25 | 3-25 | 60 | OZ25 | M12x1.75P |
| MT4-OZ25 | 3-25 | 60 | OZ25 | M16x2.0P |
| MT5-OZ25 | 3-25 | 75 | OZ25 | M24x3.0P |
| MT5-OZ32 | 6-32 | 75 | OZ32 | |

R8-OZ Collets Chucks

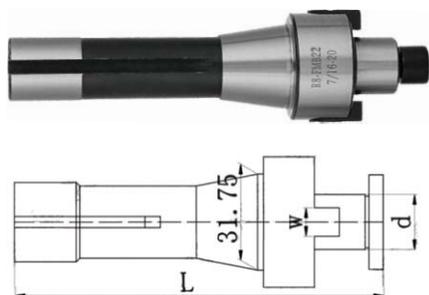


| Model | D2 | L1 | Collets | Thread |
|---------|------|----|---------|-------------------------|
| R8-OZ25 | 3-25 | 60 | OZ25 | 7/16-20UNF M12x1.75P |



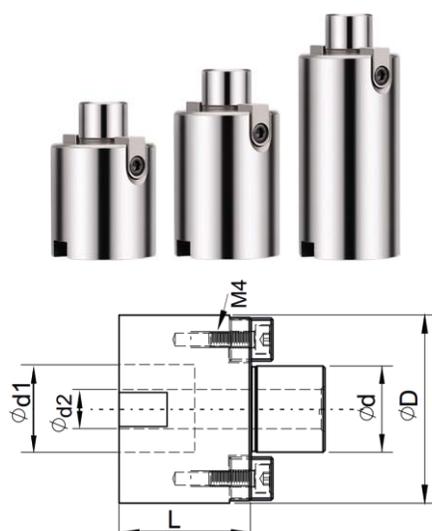
| | | | |
|------------------|-------|--------|---|
| OZ25 (EOCA25) | 7PCS | Metric | 6; 8; 10; 12; 16; 20; 25mm |
| | | Inch | 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" |
| | 15PCS | Metric | 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 14; 16; 18; 20; 25mm |
| | | Inch | 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1" |
| OZ32 (EOCA32) | 8PCS | Metric | 3; 8; 10; 12; 16; 20; 25; 32mm |
| | | Inch | 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1", 1-1/4" |
| | 15PCS | Metric | 6; 7; 8; 9; 10; 11; 12; 13; 16; 18; 20; 25; 30; 32mm |
| | | Inch | 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/8", 1-1/4" |

R8-FMB Milling Tool Holders

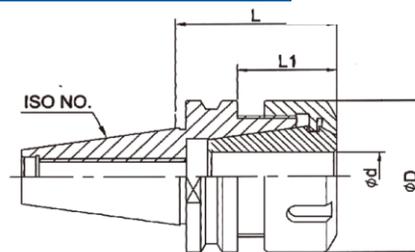


| Model | d | W | L | Thread | Hole | Face Mill Size |
|----------|----|----|-----|-------------------|------|----------------|
| R8-FMB22 | 22 | 10 | 155 | M12 7/16-20UNF | 22 | 50/63 |
| R8-FMB27 | 27 | 12 | 160 | | 27 | 80 |
| R8-FMB32 | 32 | 14 | 160 | | 32 | 100 |
| R8-FMB40 | 40 | 16 | 170 | | 40 | 125/160 |

FMB Milling Extension Adaptors



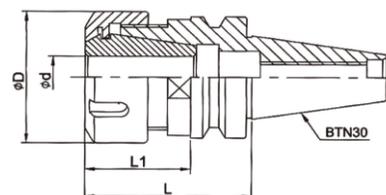
| Model | d | d1 | d2 | L | D |
|----------------|----|----|------|-----|----|
| C48-FMB22-50L | 22 | 22 | 105 | 50 | 48 |
| C58-FMB22-50L | 22 | 22 | 105 | 50 | 58 |
| C58-FMB22-100L | 22 | 22 | 105 | 100 | 58 |
| C58-FMB27-50L | 27 | 27 | 125 | 50 | 58 |
| C58-FMB27-100L | 27 | 27 | 125 | 100 | 58 |
| C64-FMB32-50L | 32 | 32 | 145 | 50 | 64 |
| C64-FMB32-100L | 32 | 32 | 145 | 100 | 64 |
| C69-FMB40-50L | 40 | 40 | 16.5 | 50 | 69 |
| C69-FMB40-100L | 40 | 40 | 16.5 | 100 | 69 |



Accuracy : $\leq 0.005\text{MM}$ Material: 20CrMnTi Speed : $\leq 30000\text{RPM}$

| Model | Capacity | D | L | L1 |
|-----------------|----------|----|----|------|
| ISO20-ER16MS-35 | 1-10 | 22 | 35 | 26 |
| ISO25-ER20MS-35 | 1-13 | 28 | 35 | 26.2 |
| ISO30-ER32UM-50 | 3-20 | 50 | 50 | 30.9 |

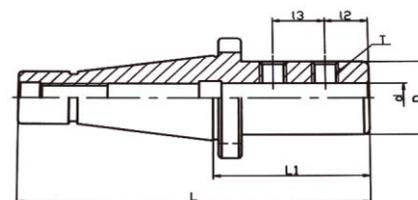
NBT30 Collet Chucks Without Keyway



Accuracy : $\leq 0.005\text{MM}$ Material: 20CrMnTi Speed : $\leq 30000\text{RPM}$

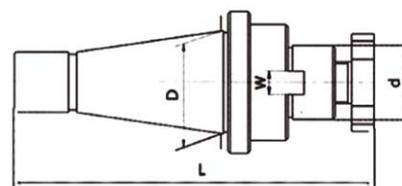
| Mode | Capacity | D | L | L1 |
|---------------|----------|----|----|----|
| NBT30-ER16-70 | 1-10 | 28 | 60 | 38 |
| NBT30-ER20-70 | 1-13 | 34 | | 38 |
| NBT30-ER25-70 | 1-16 | 42 | | 38 |
| NBT30-ER32-70 | 3-20 | 50 | | 38 |

NT Side Lock End Mill Arbors



DIN2080

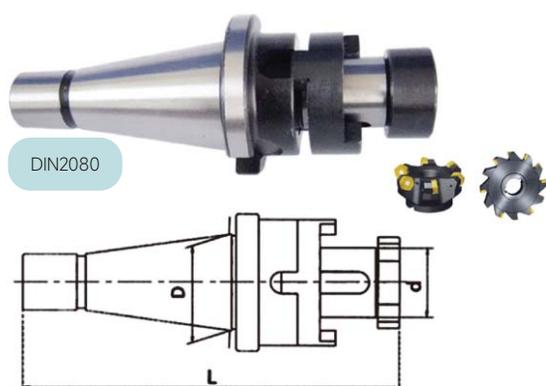
| Model | L1 | D | d | I2 | I3 |
|---------------|-----|----|----|----|----|
| NT30-SL20-63 | 63 | 52 | 20 | 25 | — |
| NT30-SL25-80 | 82 | 65 | 25 | 24 | 25 |
| NT40-SL20-63 | 63 | 52 | 20 | 25 | - |
| NT40-SL25-80 | 80 | 65 | 25 | 24 | 25 |
| NT40-SL32-80 | 80 | 72 | 32 | 24 | 28 |
| NT50-SL25-80 | 80 | 65 | 25 | 24 | 25 |
| NT50-SL32-80 | 80 | 72 | 32 | 24 | 28 |
| NT50-SL40-100 | 100 | 90 | 40 | 30 | 32 |
| NT50-SL42-100 | 100 | 90 | 42 | 30 | 32 |



DIN2080

| Model | D | d | W | L |
|------------|-------|----|----|-----|
| NT30-FMB22 | 31.75 | 22 | 10 | 129 |
| NT30-FMB27 | | 27 | 12 | 134 |
| NT40-FMB22 | 44.45 | 22 | 10 | 156 |
| NT40-FMB27 | | 27 | 12 | 159 |
| NT40-FMB32 | | 32 | 14 | 178 |
| NT50-FMB22 | 69.85 | 22 | 10 | 208 |
| NT50-FMB27 | | 27 | 12 | 211 |
| NT50-FMB32 | | 32 | 14 | 215 |
| NT50-FMB40 | | 40 | 16 | 219 |

NT Combine Shell End Mill Arbors



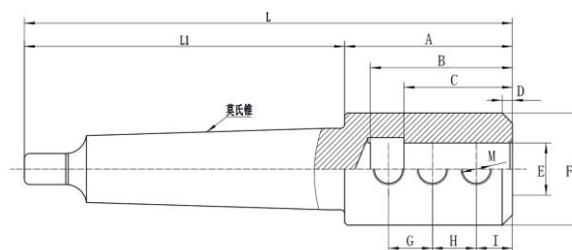
DIN2080

| Model | Shank | d | L | Wt. |
|---------|-------|----|-----|-------|
| NT30-13 | ISO30 | 13 | 120 | 0.608 |
| NT30-16 | ISO30 | 16 | 131 | 0.746 |
| NT30-22 | ISO30 | 22 | 132 | 1.038 |
| NT30-27 | ISO30 | 27 | 135 | 1.474 |
| NT30-32 | ISO30 | 32 | 151 | 2.101 |
| NT40-16 | ISO40 | 16 | 168 | 1.3 |
| NT40-22 | ISO40 | 22 | 171 | 2.042 |
| NT40-27 | ISO40 | 27 | 174 | 2.69 |
| NT40-32 | ISO40 | 32 | 178 | 2.679 |

MT Side Lock End Mill Arbors



DIN228



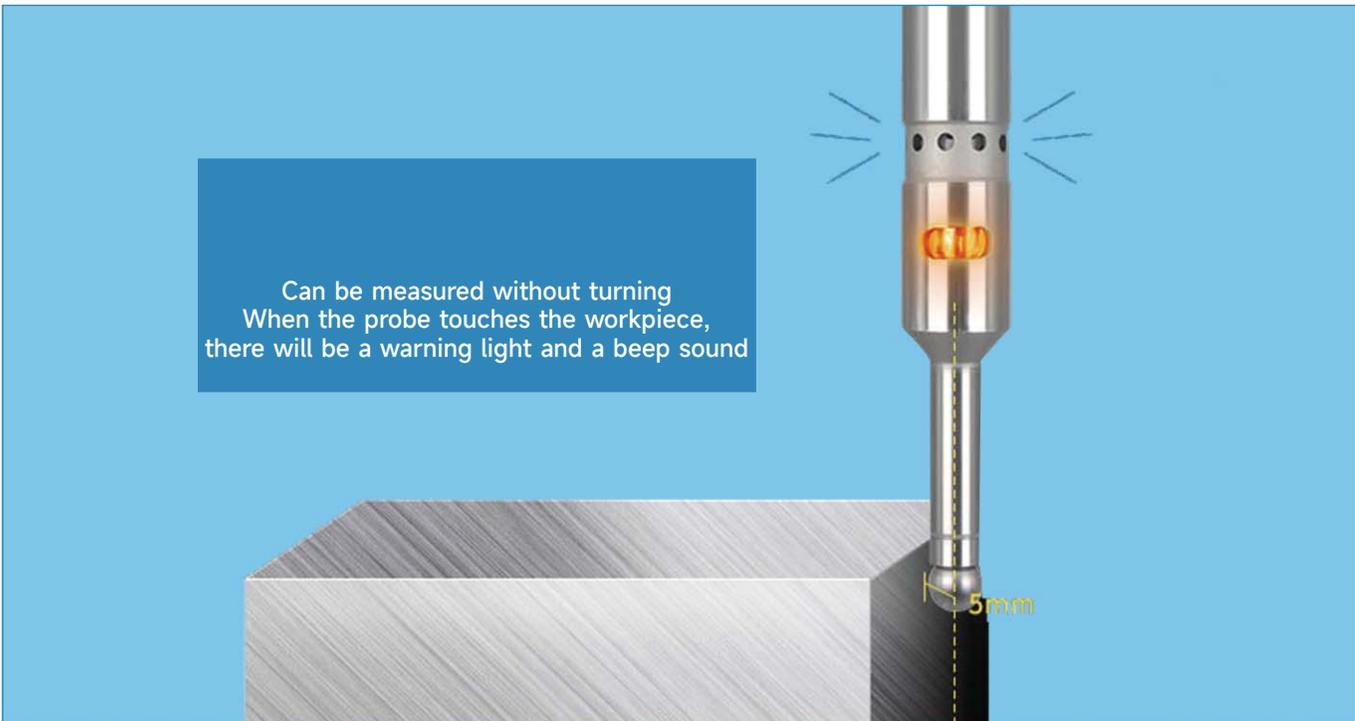
| Model | L1 | L | A | B | C | D | E | F | G | H | I | M |
|------------|-----|-----|----|----|----|-------|-----|-----|----|----|--------|-------|
| MTA3-SLN20 | 99 | 164 | 65 | 55 | 42 | 4x45° | φ20 | φ43 | 17 | 17 | 14 | 3-M12 |
| MTA3-SLN25 | 99 | 174 | 75 | 60 | 44 | 5x45° | φ25 | φ48 | 19 | 19 | 13.999 | 3-M12 |
| MTA3-SLN32 | 99 | 182 | 83 | 73 | 59 | 5x45° | φ32 | φ58 | 23 | 23 | 20 | 3-M14 |
| MTA3-SLN40 | 99 | 194 | 95 | 85 | 68 | 5x45° | φ40 | φ63 | 28 | 28 | 20 | 3-M16 |
| MTA4-SLN20 | 124 | 189 | 65 | 55 | 42 | 4x45° | φ20 | φ43 | 17 | 17 | 14 | 3-M12 |
| MTA4-SLN25 | 124 | 199 | 75 | 60 | 44 | 5x45° | φ25 | φ48 | 19 | 19 | 13.999 | 3-M12 |
| MTA4-SLN32 | 124 | 207 | 83 | 73 | 59 | 5x45° | φ32 | φ58 | 23 | 23 | 20 | 3-M14 |
| MTA4-SLN40 | 124 | 219 | 95 | 85 | 68 | 5x45° | φ40 | φ63 | 28 | 28 | 20 | 3-M16 |
| MTA5-SLN20 | 156 | 221 | 65 | 55 | 42 | 4x45° | φ20 | φ43 | 17 | 17 | 14 | 3-M12 |
| MTA5-SLN25 | 156 | 231 | 75 | 60 | 44 | 5x45° | φ25 | φ48 | 19 | 19 | 13.999 | 3-M12 |
| MTA5-SLN32 | 156 | 239 | 83 | 73 | 59 | 5x45° | φ32 | φ58 | 23 | 23 | 20 | 3-M14 |
| MTA5-SLN40 | 156 | 251 | 95 | 85 | 68 | 5x45° | φ40 | φ63 | 28 | 28 | 20 | 3-M16 |



| Model | D | L | d | wt. |
|-------|----|-----|----|------|
| ES-20 | 20 | 160 | 10 | 0.28 |

Function:
It's mainly used to for marking sure the center position of the work-piece precisely in the CNC machining.

How to use the photoelectric centring rod



Can be measured without turning
When the probe touches the workpiece,
there will be a warning light and a beep sound

Make the spindle of the machine tool stop and control the probe to approach the working surface slowly. When the probe is in contact with the working surface, the LED indicator lights up At the same time, a prompt sound is issued, and the distance between the machine tool spindle and the working plane is 5mm

3D Edge Finders



| Stroke | Accuracy | Probe length | Probe diameter | Probe material |
|------------------|----------|--------------|----------------|--|
| XY±10mm Z 6mm | 0.01mm | 50mm | 4.0mm | Ruby (more wear-resistant than steel probes) |



| Mode | Grad.(mm) | Accuracy (mm) | Range(mm) | Straight probe length (mm) | Bend probe length (mm) | Center tip length (mm) | Clamping handle diameter (mm) | Measuring head diameter (mm) | |
|----------|-----------|---------------|-----------|----------------------------|------------------------|------------------------|-------------------------------|------------------------------|--------------------|
| 1803-101 | 0.01 | 0.02 | 0-3 | 45,100,154 | 46,100,154 | 52.5 | 10 | 3 | |
| Model | Grad.(mm) | | Range(mm) | | Accuracy(mm) | | Depth(mm) | Probe diameter | Fixed pin diameter |
| 1804-101 | 0.003 | 0.01 | 0-10 | 0-6 | 0.008 | | 30 | 5φ4 | φ20 |

Machinery Edge Finders



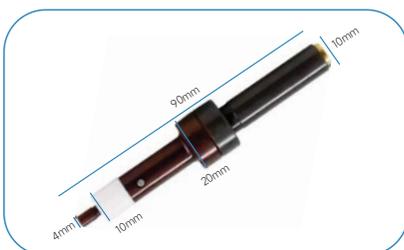
Ordinary magnetic



Yellow Titanium non-magnetic



Purple titanium non-magnetic



Ceramic 430



Ceramic straight body

Suitable speed: 400-600RPM

Application scenario:
Traditional milling machine Comprehensive processing machinery

Z-Axis Scale Zero Setters with Magnetic



Diameter : 62mm
Measurement : 44mm
Height : 50mm

1. Set the tool length on CNC, milling machine, and lathe
2. Measurement height: $50.00 \pm 0.01\text{mm}$
3. Large measurement surface, easy to operate
4. Low spring force can prevent small milling cutters or drill bits from breaking
5. Simply set using a ground parallel plate

Z-Axis Scale Zero Setters with Electro-optical



Diameter : 54mm
Measurement : 14mm
Height : 49mm

1. Height 50mm
2. Magnetic base
3. Red light comes on when touched
4. Accuracy: 0.005mm
5. Can be adsorbed for horizontal and vertical use
6. Weight: 0.5kgs

Digital Z-Axis Scale Zero Setters



Diameter : 55mm
Measurement : 25mm
Height : 49mm

1. Precision 0.001mm
2. Large panel digital illuminated display
3. IP65 grade waterproof
4. Automatic power outage without operation for 5 minutes
5. Return to "0" position light prompt
6. Height tolerance value: $\pm 0.05\text{mm}$

Z-axis Scale Zero Setters with Megnetic meter (height 100mm)

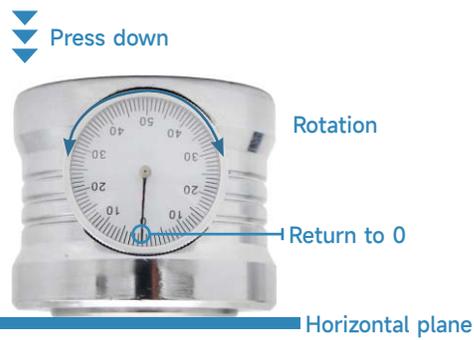


Diameter : 62mm
 Measurement : 44mm
 Height : 100mm

- 1、 Mechanical dial design, large measuring surface, and easy to operate
- 2、 Low spring force can prevent small milling cutters and drill bits from breaking
- 3、 Height tolerance value: $\pm 0.01\text{mm}$ can be adsorbed on a horizontal surface for use
- 4、 Precision measurement value: 0.01mm
- 5、 Weight: 1.82KG
- 6、 Height 100mm , belonging to the elevated type



Rotate the dial to turn zero to the top



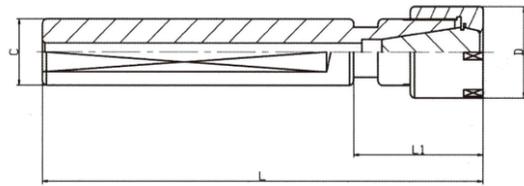
The measuring end faces downward and is pressed down to make it parallel to the horizontal plane.



Rotate the dial indicator pointer to zero and start calibration



Put the Z-axis setter on the workpiece, and the tool contacts the measuring surface. Slowly feed the tool so that the pointer is at "0". The distance between the tool and the upper tool is equal, and the height difference distance between the tool and the workpiece is 50mm



Material: 42CrMo
 Hardness: HRC52
 Hole=Concentricity: 0.005mm

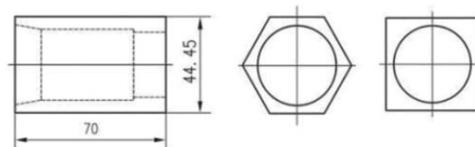
| Model | L | L1 | C | D |
|------------------|------|------|-----------|----|
| SL20-ER11-80 | 76.6 | 16.6 | 20 | 16 |
| SL20-ER16-80 | 86.6 | 26.6 | 20 | 22 |
| SL20-ER20-80 | 97 | 32 | 20 | 28 |
| SL25-ER16-80 | 97 | 32 | 25 | 22 |
| SL25-ER20-80 | 97 | 32 | 25 | 28 |
| SL25-ER25-80 | 97 | 32 | 25 | 42 |
| SL25-ER25-100 | 108 | 38 | 25 | 50 |
| SL32-ER16-80 | 97 | 32 | 32 | 22 |
| SL32-ER20-80 | 102 | 32 | 32 | 28 |
| SL32-ER25-80 | 102 | 32 | 32 | 42 |
| SL32-ER32-80 | 108 | 38 | 32 | 50 |
| SL32-ER40-80 | 120 | 50 | 32 | 63 |
| SL40-ER32-80 | 108 | 38 | 40 | 50 |
| SL40-ER40-80 | 128 | 53 | 40 | 63 |
| SL45-ER32-120 | 178 | 120 | 45 | 50 |
| SL45-ER40-120 | 180 | 120 | 45 | 63 |
| SL1-1/4"-ER25-60 | 97 | 60 | 1-1/4" I | 42 |
| SL1-1/4"-ER32-60 | 103 | 60 | 1-1/4" I | 50 |
| SL1-1/4"-ER40-60 | 120 | 60 | 1-1/4" I | 63 |
| SL1-1/2"-ER32-80 | 118 | 80 | 1-1/2" II | 50 |
| SL1-1/2"-ER40-75 | 135 | 75 | 1-1/2" II | 63 |

Lathe Material Pullers



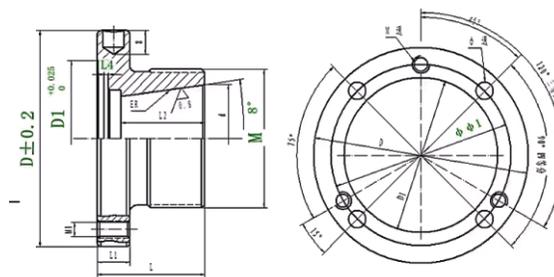
Fast pulling material, fastening without slipping

| Mode | (Shank) | (Blessing range) |
|------|-----------------|------------------|
| 16 | (round handle) | 2.50mm |
| 20 | | 2.50mm |
| 25 | | 2.50mm |
| 32 | | 2-50mm |
| 16 | (square handle) | 2.50mm |
| 20 | | 2.50mm |
| 25 | | 2.50mm |

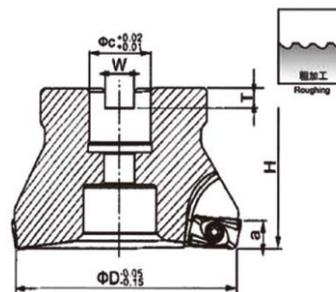


| Main Technical Parameter | Outer size(in) |
|----------------------------------|-------------------------|
| Square for 5C collets | 1-3/4×1-3/4×2-3/4 |
| Hex for 5C collets | 1-3/4×1-3/4×1-3/4×2-3/4 |
| Quick acting lever collet closer | 1-11/16×4 |
| Wt(kg) | 1.41kg |

ER Chucks for Lathe Machines

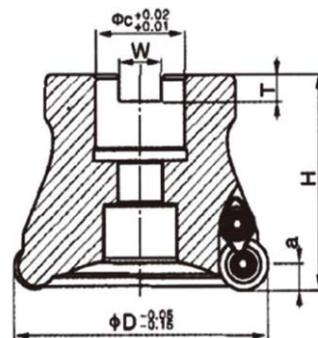


| Model | D | D1 | φ1 Fixing screw center distance | M1 Three equal parts | φ Four equal parts | L | L1 | L3 Total height after clamping | L4 Stop depth | M Nut | Nut outer diameter |
|----------|-----|-----|---------------------------------------|-------------------------------|-----------------------------|----|----|--------------------------------------|------------------|----------|-----------------------|
| ER16-45 | 45 | 22 | 35 | | 5 | 30 | 10 | 40 | 4 | M22*1.5 | 28 |
| ER20-45 | 45 | 22 | 35 | | 5 | 30 | 10 | 40 | 4 | M25*1.5 | 34 |
| ER25-80 | 80 | 55 | 66 | M6 | 6.5 | 40 | 12 | 55 | 6 | M32*1.5 | 42 |
| ER32-80 | 80 | 55 | 66 | M6 | 6.5 | 40 | 12 | 55 | 6 | M40*1.5 | 50 |
| ER32-100 | 100 | 72 | 84 | M8 | 8.5 | 40 | 12 | 55 | 6 | M40*1.5 | 50 |
| ER32-125 | 125 | 95 | 108 | M8 | 8.5 | 40 | 12 | 55 | 6 | M40*1.5 | 50 |
| ER40-80 | 80 | 55 | 66 | M6 | 6.5 | 40 | 12 | 55 | 6 | M50*1.5 | 63 |
| ER40-100 | 100 | 72 | 84 | M8 | 8.5 | 40 | 12 | 55 | 6 | M50*1.5 | 63 |
| ER40-125 | 125 | 95 | 108 | M8 | 8.5 | 40 | 12 | 55 | 6 | M50*1.5 | 63 |
| ER40-130 | 130 | 100 | 115 | M8 | 8.5 | 40 | 12 | 55 | 6 | M50*1.5 | 63 |
| ER50-100 | 100 | 72 | 84 | M8 | 8.5 | 50 | 18 | 78 | 6 | M64*2 | 78 |
| ER50-125 | 125 | 95 | 108 | M8 | 8.5 | 50 | 18 | 78 | 6 | M64*2 | 78 |
| ER50-130 | 130 | 100 | 115 | M8 | 8.5 | 50 | 18 | 78 | 6 | M64*2 | 78 |
| ER50-160 | 160 | 130 | 142 | M8 | 8.5 | 50 | 18 | 78 | 6 | M64*2 | 78 |

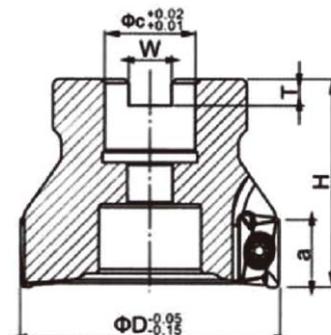


| Model | Size(mm) | | | | | | Circular Cushin | Applicable Inserts | Clamp Screw | Wrench |
|-------------------|----------|----|----|------|-----|---|-----------------|--------------------|-------------|--------|
| | D | C | H | W | T | a | | | | |
| RAP400R-50-22-4T | 40 | 16 | 45 | 8.5 | 5 | 8 | | APMT 1604 PDER | M4×10 | T15 |
| RAP400R-63-22-4T | 63 | 22 | 50 | 10.4 | 6.3 | 8 | | | | |
| RAP400R-80-27-5T | 80 | 27 | 50 | 12.4 | 7 | 8 | | | | |
| RAP400R-100-32-6T | 100 | 32 | 50 | 14.4 | 8 | 8 | FMB-32-SHIM | | | |
| RAP400R-125-40-6T | 125 | 40 | 63 | 16.4 | 9 | 8 | FMB-40-SHIM | | | |
| RAP400R-160-40-6T | 160 | 40 | 63 | 16.4 | 9 | 8 | FMB-40-SHIM | | | |
| RAP400R-200-60-9T | 200 | 60 | 63 | 25.7 | 14 | 8 | | | | |

EMR Round Dowel Face Mills

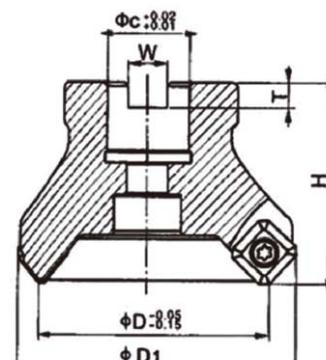


| Model | Size(mm) | | | | | | Circular Cushin | Applicable Inserts | Clamp piece | Clamp | Wrench |
|------------------|----------|----|----|------|-----|---|-----------------|-------------------------------------|-------------|-------|--------|
| | D | C | H | W | T | a | | | | | |
| EMR-5R-50-22-4T | 50 | 22 | 50 | 10.4 | 6.3 | 5 | | PRMW 1003 MO PRMW 10T3 MOE | A-5R | M4×10 | T15 |
| EMR-5R-63-22-4T | 63 | 22 | 50 | 10.4 | 6.3 | 5 | | | | | |
| EMR-5R-80-27-6T | 80 | 27 | 50 | 12.4 | 7 | 5 | FMB-32-SHIM | | | | |
| EMR-5R-100-32-6T | 100 | 32 | 50 | 14.4 | 8 | 5 | | PRMW 1204 MO | A-6R | M4×10 | T15 |
| EMR-6R-50-22-4T | 50 | 22 | 50 | 10.4 | 6.3 | 6 | | | | | |
| EMR-6R-63-22-4T | 63 | 22 | 50 | 10.4 | 6.3 | 6 | | | | | |
| EMR-6R-80-27-6T | 80 | 27 | 50 | 12.4 | 7 | 6 | | | | | |
| EMR-6R-100-32-6T | 100 | 32 | 50 | 14.4 | 8 | 6 | FMB-32-SHIM | PRMW 1204 MO | A-6R | M4×10 | T15 |
| EMR-6R-125-40-6T | 125 | 40 | 63 | 16.4 | 9 | 6 | FMB-40-SHIM | | | | |

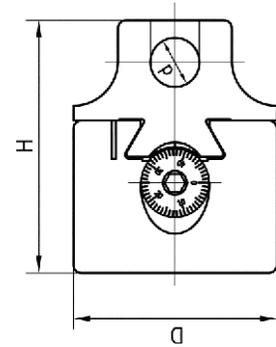


| Model | Size(mm) | | | | | | Circular Cushin | Applicabl Inserts | Clamp Screw | Wrench |
|--------------------|----------|----|----|------|-----|----|-----------------|-------------------|-------------|--------|
| | D | C | H | W | T | a | | | | |
| TAP400R-50-22-4T | 50 | 20 | 50 | 10.4 | 6.3 | 14 | | APMT 1604 PDER | M4×10 | T15 |
| TAP400R-63-22-4T | 63 | 22 | 50 | 10.4 | 6.3 | 14 | | | | |
| TAP400R-80-27-6T | 80 | 27 | 50 | 12.4 | 7 | 14 | | | | |
| TAP400R-100-32-6T | 100 | 32 | 50 | 14.4 | 8 | 14 | FMB-32-SHIM | | | |
| TAP400R-125-40-6T | 125 | 40 | 63 | 14.4 | 8 | 14 | FMB-40-SHIM | | | |
| TAP400R-160-40-9T | 160 | 40 | 63 | 14.4 | 8 | 14 | FMB-40-SHIM | | | |
| TAP400R-200-60-12T | 200 | 60 | 63 | 25.7 | 14 | 14 | | | | |
| TAP400R-250-60-12T | 250 | 60 | 63 | 25.7 | 14 | 14 | | | | |

KM-45° Face Mills



| Model | Size(mm) | | | | | Circular Cushin | Applicabl Inserts | Clamp Screw | Wrench |
|----------------|----------|----|----|------|-----|-----------------|-------------------|-------------------|-------------|
| | D | C | H | W | T | | | | |
| KM12-50-22-4T | 50 | 22 | 50 | 10.4 | 6.3 | | SEKT1204 | A501105D M5×11 | T20F T20 |
| KM12-63-22-4T | 63 | 22 | 50 | 10.4 | 6.3 | | | | |
| KM12-80-27-5T | 80 | 27 | 50 | 12.4 | 7 | | | | |
| KM12-100-32-5T | 100 | 32 | 50 | 14.4 | 8 | FMB-32-SHIM | | | |
| KM12-125-40-6T | 125 | 40 | 63 | 16.4 | 8 | FMB-40-SHIM | | | |
| KM12-160-40-9T | 160 | 40 | 63 | 16.4 | 9 | FMB-40-SHIM | | | |



| Model | D | H | Max Offset | Boring BarDia | Min Graduation | Dia.of Boring |
|---------|-------|------|------------|---------------|----------------|---------------|
| F1-1/2" | 50mm | 63mm | 5/8" | 1/2" | 0.001" | 3/8"-5" |
| F1-3/4" | 75mm | 80mm | 1" | 3/4" | 0.0005" | 1/2"-9" |
| F1-1" | 100mm | 97mm | 1-5/8" | 1" | 0.0005" | 5/8"-12.5" |
| F1-12mm | 50mm | 63mm | 16mm | 12mm | 0.01mm | 10-125mm |
| F1-18mm | 75mm | 80mm | 25mm | 18mm | 0.01mm | 12-225mm |
| F1-25mm | 100mm | 97mm | 41mm | 25mm | 0.01mm | 15-320mm |

F1 Rough Boring Cutters



9PCS for 12mm



12PCS for 18mm



6PCS for 25mm

| Metric | | | Inch | | Qty.of Boring Cutters | Holder Thread |
|---------------------|---------------------|-----------------|---------------------|---------------------|-----------------------|-----------------|
| Dia.of Boring Holes | Dia.of Boring Heads | Boring Capacity | Dia.of Boring Holes | Dia.of Boring Heads | | |
| F1-12mm | 50mm | 10-125mm | F1-2" | 1/2" | 9PCS | 7/8-20 1-1/2-18 |
| F1-18mm | 75mm | 12-225mm | F1-3" | 3/4" | 12PCS | 1-1/2-18 |
| F1-25mm | 100mm | 15-320mm | F1-4" | 1" | 6PCS | 1-1/2-18 |

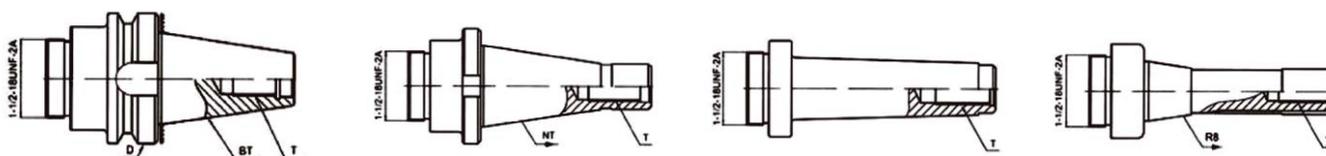
Boring Cutters with Replaceable Inserts



| Model | Length(MM) | Matching Insert | Model | Length(MM) | Matching Insert |
|---------|------------|-----------------|---------|------------|-----------------|
| 2"-6pcs | 70 | CCMT06 | 3"-7pcs | 80 | TCMT09 |
| | 75 | TCMT09 | | 80 | CCMT06 |
| | 80 | CCMT06 | | 90 | CCMT06 |
| | 90 | TCMT11 | | 90 | CCMT09 |
| | 90 | TCMT11 | | 110 | TCMT11 |
| | 105 | TCMT09 | | 115 | TCMT11 |
| | | | | 120 | TCMT11 |

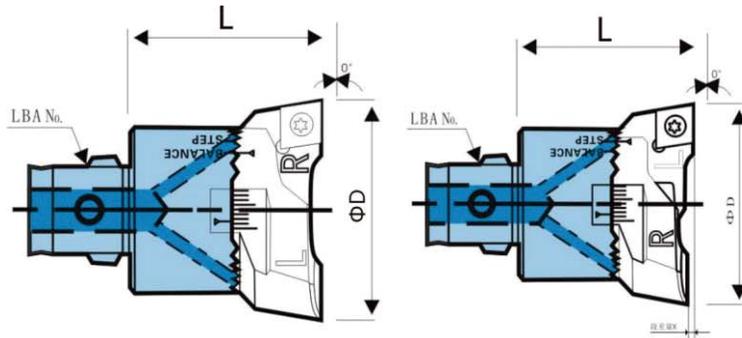


| Model | T | L | Wt. |
|-------|------------|-------|------|
| BT40 | M16-2.0P | 102 | 1.24 |
| BT50 | M24-3.0P | 134 | 3.97 |
| NT30 | M12-1.75P | 102 | 0.6 |
| NT40 | M16-2.0P | 135 | 1.2 |
| NT50 | M24-3.0P | 168 | 3.14 |
| MT2 | M10-1.5P | 108 | 0.4 |
| MT3 | M12-1.75P | 128 | 0.44 |
| MT4 | M16-2.0P | 154 | 0.95 |
| MT5 | M24-3.0P | 185 | 1.7 |
| R8 | M12-1.75 | 132.5 | 0.6 |
| R8 | 7/16-20UNF | 132.5 | 0.6 |

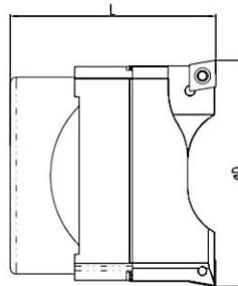


*Please state the detailed size when ordering; e.g.: F1-R8-18mm

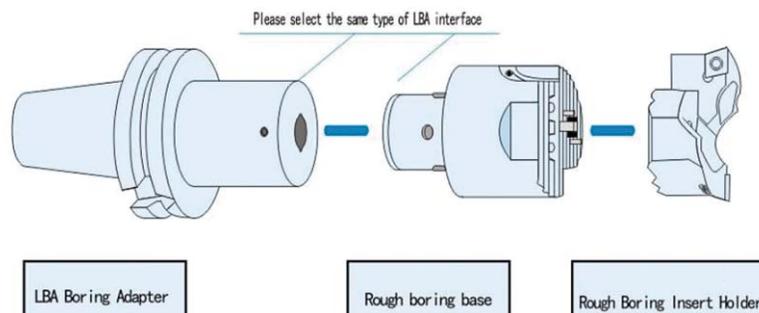


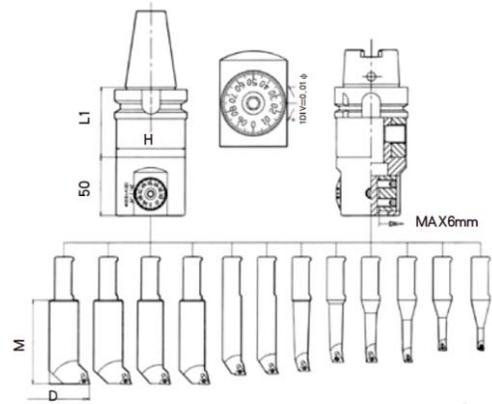


| Specification | LBA No. | Boringrange φD | L | Insert/Screw/Wrench | Weight(kg) |
|---------------|------------|----------------|------|---------------------|------------|
| RBA20-25 | LBK1(11mm) | 20-25mm | 33mm | CCMT06020*/M2.5/T8 | 0.05 |
| RBA25-33 | LBK2(14mm) | 25-33mm | 37mm | | 0.1 |
| RBA32-45 | LBK3(18mm) | 32-45mm | 41mm | | 0.2 |
| RBA40-55 | LBK4(22mm) | 40-55mm | 50mm | CCMT09T30*/M4.0/T15 | 0.4 |
| RBA52-75 | LBK5(28mm) | 52-75mm | 59mm | | 0.8 |
| RBA68-95 | LBK6(36mm) | 68-95mm | 70mm | CCMT12040*/M5.0/T20 | 1.6 |
| RBA90-110 | | 90-110mm | | | 1.7 |



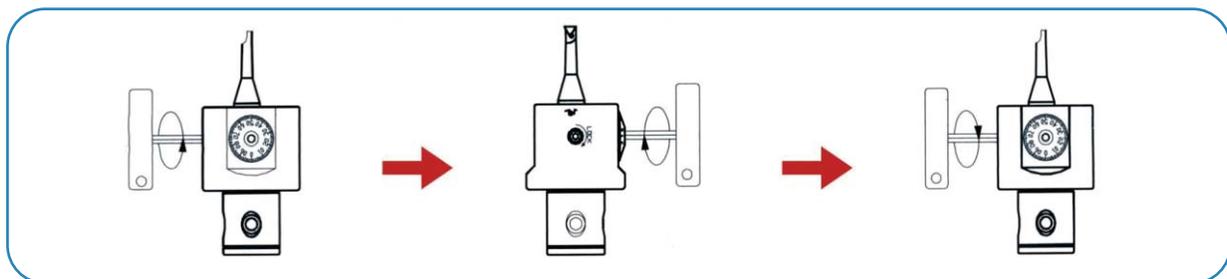
| Specification | Boringadapter | Boringrange φD | L | Insert/Screw/Wrench | Weight(kg) |
|---------------|---------------|----------------|------|---------------------|------------|
| RBA110-160 | BST | 110-160mm | 99mm | CCMT12040*/M5.0/T20 | 3.5 |
| RBA160-204 | | 160-204mm | 99mm | | 3.9 |





| Model | D*d*L(mm) Dimensions | (mm) Fine-Tune The Stroke | (mm) Fine-tuning Accuracy | (mm) Boring template | Adaptable tool holder | Connector diameter | (KG) |
|-------|----------------------|---------------------------|---------------------------|----------------------|-----------------------|--------------------|------|
| NBJ16 | 63*16*50 | 6 | 0.01 | 6-51 | LBK 系列 | 36 | 1.6 |

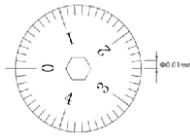
| Nbj16 Fine Boring Tool Set Accessories List | | | | |
|---|-----------------|----------------------------|-------------------------|-----------------|
| Accessory name | Accessory model | Accessories quantity/piece | Compatible Insert model | MM Boring range |
| NBJ16 | NBJ16 | 1 | — | 6-51 |
| LBK | BT40-LBK6-65L | 1 | — | — |
| 1 | SBJ1608-32 | 1 | TBGT0601**L | 8-11 |
| 2 | SBJ1610-40 | 1 | TBGT0601**L | 10-13 |
| 3 | SBJ1612-53 | 1 | TPGH0902**L | 12-15 |
| 4 | SBJ1616-68 | 1 | TPGH0902**L | 16-21 |
| 5 | SBJ1620-83 | 1 | TPGH1103**L | 20-26 |
| 6 | SBJ1625-90 | 1 | TPGH1103**L | 25-31 |
| 7 | SBJ1630-90 | 1 | TPGH1103**L | 30-36 |
| 8 | SBJ1640-90 | 1 | TPGH1103**L | 40-46 |



Loosen lock screw

Turn the adjusting screw to adjust the scale to the desired size (0.01mm)

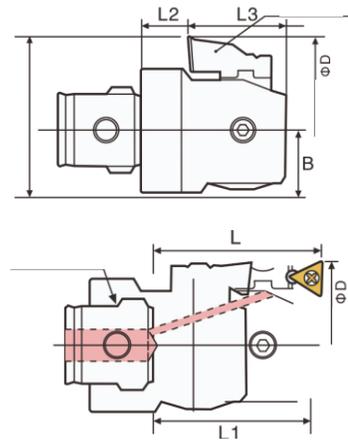
Tighten lock screw



ENH-1

ENH-2

ENH-3



| Specification | Insertholder | | | | | | | LBANo. | Insert/Screw/Wrench | Weight (kg) | |
|---------------|--------------|------------------------------|--------|---------|------------------------------|------|------|--------|---------------------|--------------------|------|
| | | Boringrange φD (mm) | L (mm) | L1 (mm) | Boringrange φD (mm) | L2 | L3 | | | | B |
| CBA20 | ENH1-1 | 20-25 | 30 | 27 | / | 10.5 | 19 | 10 | LBK1 (11mm) | TP*08020*L/M2.0/T6 | 0.05 |
| | ENH1-2 | 25-29 | | | 30-31 | | | | | | |
| | ENH1-3 | 30-34 | | | 30-36 | | | | | | |
| CBA25 | ENH2-1 | 25-33 | 34 | 31 | / | 11.5 | 21 | 12.5 | LBK2 (14mm) | TP*08020*L/M2.0/T6 | 0.15 |
| | ENH2-2 | 32-40 | | | 36-40 | | | | | | |
| | ENH2-3 | 39-47 | | | 39-47 | | | | | | |
| CBA32 | ENH3-1 | 32-43 | 41 | 37 | / | 10 | 25 | 16 | LBK3 (18mm) | TP*08020*L/M2.0/T6 | 0.25 |
| | ENH3-2 | 41-51 | | | 46-51 | | | | | | |
| | ENH3-3 | 50-60 | | | 50-60 | | | | | | |
| CBA40 | ENH4-1 | 41-56 | 50 | 42 | / | 14 | 29 | 20 | LBK4 (22mm) | TC*11020*L/M2.5/T8 | 0.45 |
| | ENH4-2 | 51-67 | | | 53-63 | | | | | | |
| | ENH4-3 | 64-77 | | | 64-79 | | | | | | |
| CBA52 | ENH5-1 | 52-74 | 60 | 56 | 62-70 | 19 | 34 | 25.5 | LBK5 (28mm) | TP*08020*L/M2.0/T6 | 0.9 |
| | ENH5-2 | 64-87 | | | 65-82 | | | | | | |
| | ENH5-3 | 77-100 | | | 78-95 | | | | | | |
| CBA68 | ENH6-1 | 68-103 | 70 | 66 | 80-100 | 22 | 45.2 | 32.5 | LBK6 (36mm) | TC*11020*L/M2.5/T8 | 1.75 |
| | ENH6-2 | 95-128 | | | 94-126 | | | | | | |
| | ENH6-3 | 118-153 | | | 118-150 | | | | | | |
| CBA100 | ENH6-1 | 100-152 | 70 | 66 | 112-153 | 22 | 45.2 | 45.5 | LBK6 (36mm) | TP*08020*L/M2.0/T6 | 2.46 |
| | ENH6-2 | 126-179 | | | 126-179 | | | | | | |
| | ENH6-3 | 151-203 | | | 150-203 | | | | | | |

- Each boring head is equipped with three different insert holders to extend boring ranges.
- The service life of insert will be prolonged with internal cooling design.
- Each division for the adjustment is 0.01mm

Notice: No.1insert hold is included in the price of boring tool, while NO.2 and NO.3 insert holders shall be ordered separately



| Specifcation | Inserts | Boring head | Boring range |
|----------------------|---------|-------------|--------------|
| Insert holder ENH1-1 | TP08020 | CBA20 | 20-26mm |
| Insert holder ENH1-2 | | | 25-31mm |
| Insert holder ENH1-3 | | | 30-36mm |
| Insert holder ENH2-1 | | CBA25 | 25-33mm |
| Insert holder ENH2-2 | | | 32-40mm |
| Insert holder ENH2-3 | | | 39-47mm |
| Insert holder ENH3-1 | | CBA32 | 32-42mm |
| Insert holder ENH3-2 | | | 41-51mm |
| Insert holder ENH3-3 | | | 50-60mm |
| Specifcation | Inserts | Boring head | Boring range |
| Insert holder ENH4-1 | TP08020 | CBA40 | 40-55mm |
| Insert holder ENH4-2 | | | 51-66mm |
| Insert holder ENH4-3 | | | 64-79mm |
| Insert holder ENH5-1 | TC11020 | CBA52 | 52-75mm |
| Insert holder ENH5-2 | | | 70-93mm |
| Insert holder ENH5-3 | | | 89-112mm |
| Insert holder ENH6-1 | | CBA68 | 68-100mm |
| Insert holder ENH6-2 | | | 94-125mm |
| Insert holder ENH6-3 | | | 118-150mm |



Boring Range



| Model | (Mm) Scope | Depth | Clamping Handle Length | Total Length | Adapter Inserts | Screws | Wrench |
|---------------|------------|---------|------------------------|--------------|-----------------|--------|--------|
| SBJ-2008-32 | 8~11 | 32 | 20 | 80 | TBGT0601.L | M2X5 | T6 |
| SBJ-2010-40 | 10~13 | 40 | 20 | 87 | TBGT0601.L | M2X5 | T6 |
| SBJ-2012-53 | 12~17 | 53 | 20 | 98 | TPGT0902.L | M2.5X6 | TB |
| SBJ-2016-68 | 16~21 | 68 | 20 | 110 | TPGT0902.L | M2.5X6 | TB |
| SBJ-2020-83 | 20~130 | 83 | 20 | 123 | TPGT1103.L | M3X7 | T8 |
| SBJ-2025-96 | 25~135 | 96 | 20 | 137 | TPGT1103.L | M3X7 | T8 |
| SBJ-2030-115 | 30~140 | 115 | 20 | 152 | TPGT1103.L | M3X7 | T8 |
| SBJ-20L20-100 | 120~280 | 84+BTL1 | 20 | 100 | TPGT1103.L | M3X7 | T8 |

Operating Instructions

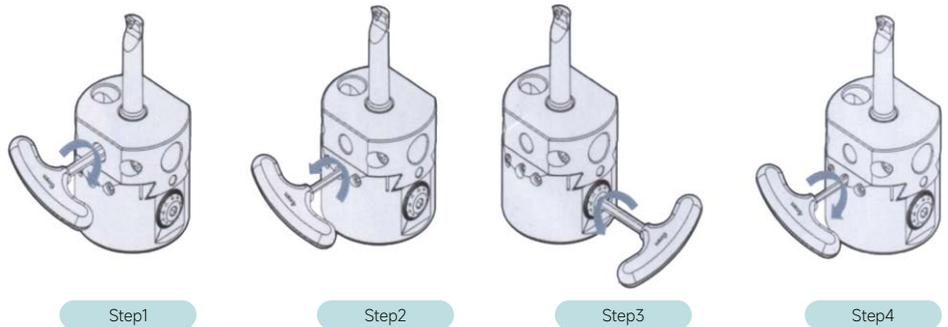
Step1: Hold right boring bar(See figure 6) in right hole(See pic A.B.C . Make sure weldon part of bar is to the position of lok screw and cutting edge of boring bar is to the position of adjusting panel.

Step2: Loosen adjusting screw anti-clockwise .

Step3: Enlarge the boring diameter by adjusting on the adjusting panel(Se figure 2) anti-tlockwise,while adjusting clockwise is to reduce the boring range.

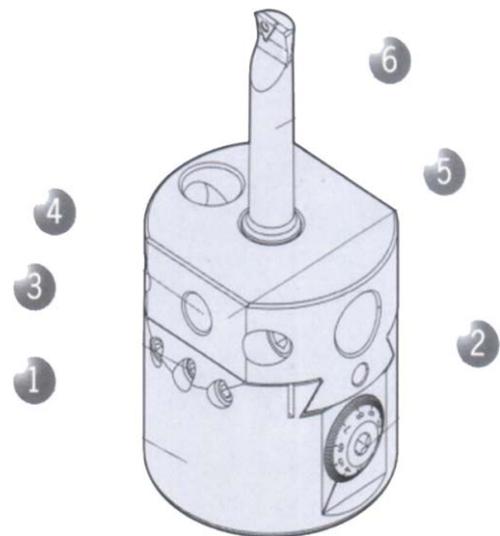
Step4: Adjust till the boring diameter required and lock the adjusting screw properly.

Instruction



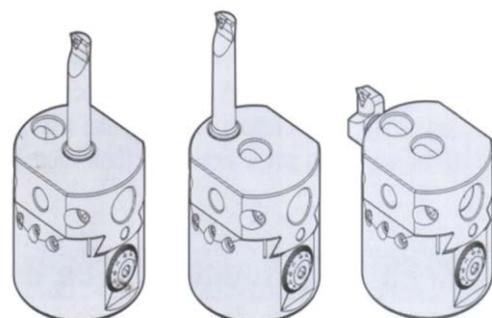
Manuals

- 1 Tool body
- 2 Ad justing Panel
- 3 Ad justing screw
- 4 Locking screw
- 5 Part
- 6 Boring bar



Notices Of The User

- 1.Please use this tool within work range(6-50mm) .
- 2.Please loosen the adjusting screw before ad justing.
- 3.Please fasten the adjusting knob by means of special wrench properly.
- 4.Please stop the adjustmant when it is faced with a strong resistarce,Or it is notable to go on And make sure.
- A If the locking screws is unlocked;
- B.if the adjustment is within the suggested work range;
- C.Over adjustment will bring damage to the tool irreversibly.



Operating Instructions

Checking before adjustment: Make sure right inserts mounted and screw for insert holder fastened properly.

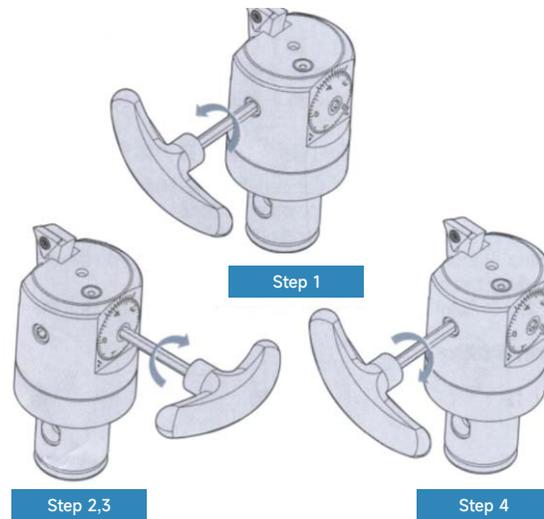
Step 1: Unlock the clamping screw (See figure 1) anti-clockwise.

Step 2: Move the insert holder (See figure 2,3) to the required working diameter according to the reference line marked on the tool and insert holder.

Step 3: Fasten the clamping screws (See figure 4) clockwise.

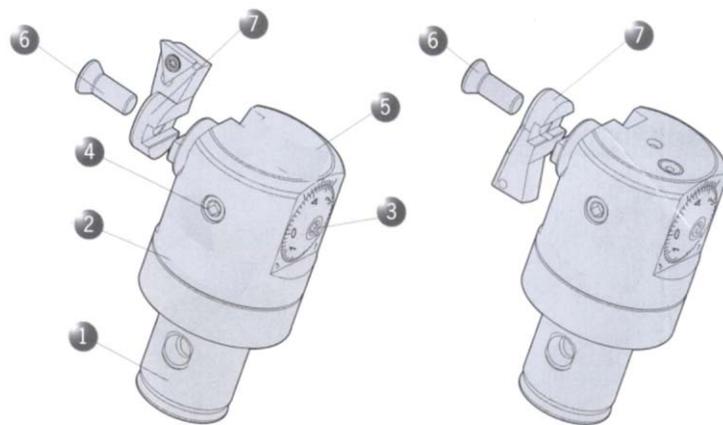
Step 4: Loosen the locking screw (See figure 1) anti-clockwise.

Instruction



Manuals

- 1 Connection part
- 2 Tool body
- 3 Adjusting scales
- 4 Locking screw
- 5 oil-feed hole
- 6 Clamping screw
- 7 Insert holder



Operating Instructions

1. Use this tool within the suggested boring range.

2. Please loosen the adjusting screw before adjusting.

3. Please stop the adjustment when it is faced with a strong resistance. And make sure:

A. If the locking screws are unlocked;

B. If the adjustment is within the suggested work range;

4. The machine spindle shall run anti-clockwise when the function of back boring is adopted.

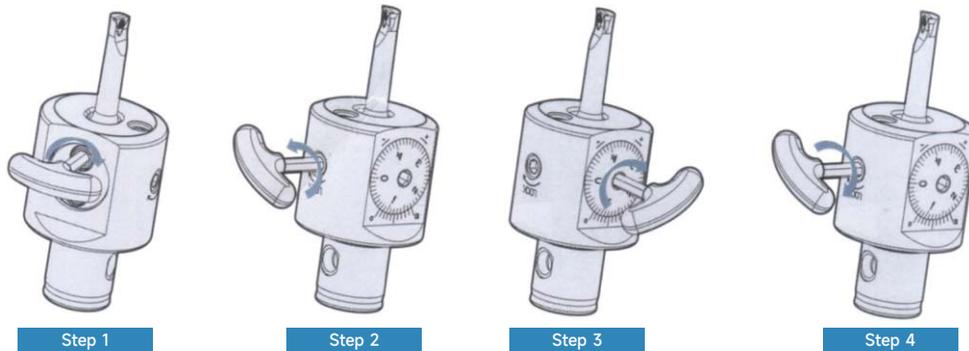
5. Lubrication grease shall be injected through the oil-feed hole properly (till some lubrication grease can be found on the face of adjusting panel).

6. Disassembling of the tool without suggestion is not suggested.

Operating Instructions

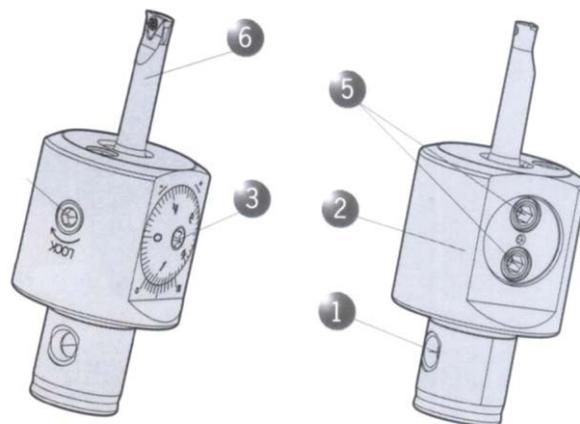
Step1 : Hold right boring bar in right hole. Make sure weldon part of boring bar is to the position of lock screw and cutting edge of boringbar is to the position of adjusting panel. Fasten the locking screw properly.
 Step2: Loosen adjusting screw(see figure 4) anti-clockwise .
 Step3: Enlarge the boring diameter by adjusting on the adjusting panel (See figure 2) anti-clockwise, while adjusting clockwise is to reduce the boring range.
 Step4: Adjust till the boring diameter required and lock the adjusting screw properly.

Instruction



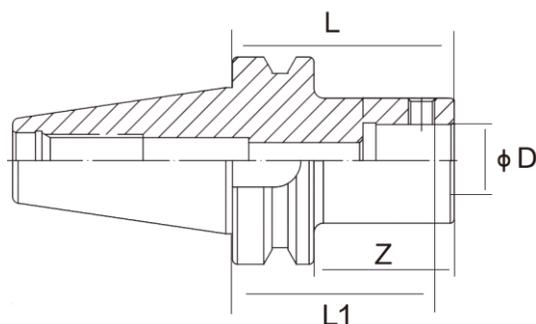
Manuals

- 1 Connection part
- 2 Tool body
- 3 Adjusting scales
- 4 Locking screw
- 5 Mounting screw
- 6 Boring bar



Operating Instructions

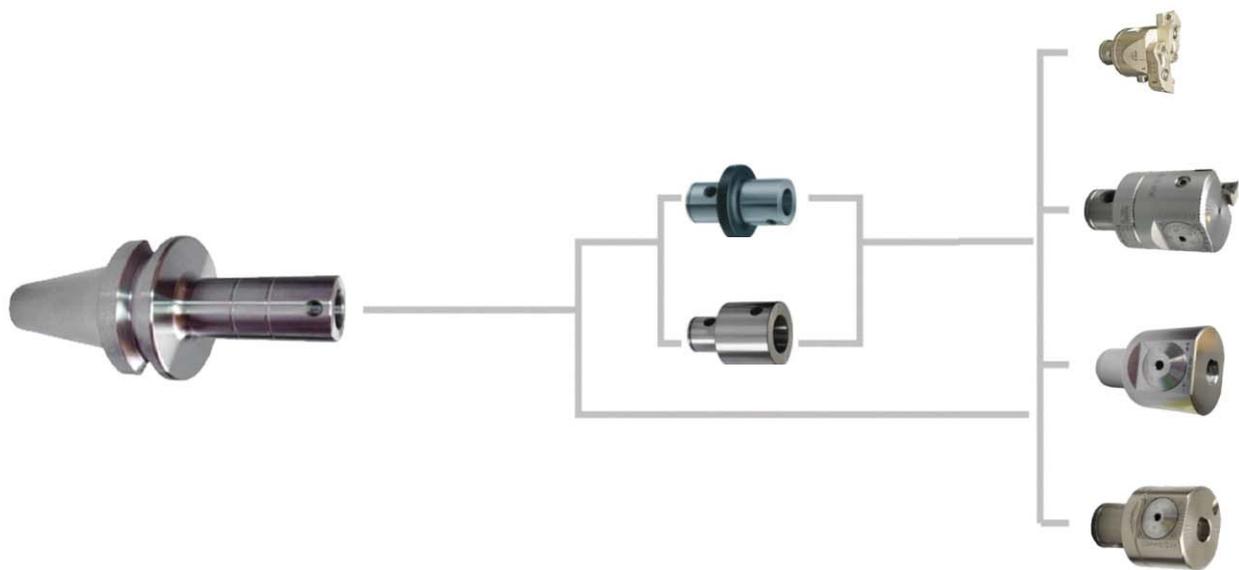
1. Please use this tool within work range (6- 50mm)
2. Please loosen the adjusting screw before adjusting.
3. Please fasten the adjusting knob by means of special wrench properly
4. Please stop the adjustment when it is faced with a strong resistance or is unable to continue adjustment, check immediately the following points:
 - A. If the locking screws is unlocked;
 - B. If the adjustment is within the suggested work range;
 - C. Over adjustment will bring damage to the tool irreversibly.

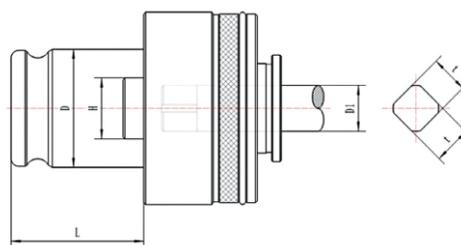


MAS403
20CrMnTi

| Combination | | Height Z | Range φD | Fig. | L | L1 | D1 | Wt. |
|---------------|----------|----------|-------------|------|-----|-----|-----|-----|
| LBK Shanks | CBA Head | | | | | | | |
| BT30-LBK1-70 | CBA20 | 75 | 20-26-36 | 2 | 105 | 70 | 19 | 0.6 |
| BT30-LBK2-80 | CBA25 | 90 | 25-33-47 | | 120 | 80 | 24 | 0.8 |
| BT30-LBK3-80 | CBA32 | | 32 | | | | 1.0 | |
| BT30-LBK4-70 | CBA40 | | 70 | | | 39 | 1.3 | |
| BT30-LBK5-60 | CBA52 | | 52-75-112 | | | 50 | 1.8 | |
| BT30-LBK6-60 | CBA68 | 100 | 68-102-150 | | 130 | 60 | 64 | 3.0 |
| BT40-LBK1-75 | CBA20 | 75 | 20-26-36 | 2 | 110 | 75 | 19 | 1.1 |
| BT40-LBK1-105 | | 105 | | | 140 | 105 | | 1.3 |
| BT40-LBK2-85 | CBA25 | 90 | 25-33-47 | | 125 | 85 | 24 | 1.3 |
| BT40-LBK2-115 | | 120 | | | 155 | 115 | | 1.6 |
| BT40-LBK3-95 | CBA32 | 100 | 32-42-60 | | 135 | 95 | 31 | 1.5 |
| BT40-LBK3-125 | | 130 | | | 165 | 125 | | 1.8 |
| BT40-LBK4-155 | | 160 | | | 195 | 155 | | 2.0 |
| BT40-LBK4-85 | CBA40 | 100 | 40-55-79 | | 135 | 85 | 39 | 1.8 |
| BT40-LBK4-130 | | 145 | | | 180 | 130 | | 2.4 |
| BT40-LBK5-175 | | 190 | | | 225 | 175 | | 2.7 |
| BT40-LBK5-75 | CBA52 | 100 | 52-75-112 | | 135 | 75 | 50 | 2.3 |
| BT40-LBK5-125 | | 150 | | | 185 | 125 | | 3.3 |
| BT40-LBK6-175 | | 200 | | | 235 | 175 | | 4.0 |
| BT40-LBK6-65 | CBA68 | 100 | 68-102-150 | | 135 | 65 | 64 | 3.3 |
| BT40-LBK6-115 | | 150 | | | 185 | 115 | | 4.7 |
| BT40-LBK6-165 | | 200 | | | 235 | 165 | | 5.9 |
| BT40-LBK6-65 | CBA100 | 100 | 100-152-203 | | 135 | 65 | 64 | 4.2 |
| BT40-LBK6-115 | | 150 | | | 185 | 115 | | 5.6 |
| BT40-LBK6-165 | | 200 | | | 235 | 165 | | 6.8 |
| BT40-LBK6-65 | CBA150 | 100 | 150-202 | | 135 | 65 | 64 | 5.5 |
| BT40-LBK6-115 | | 150 | | | 185 | 115 | | 6.9 |
| BT40-LBK6-165 | | 200 | | | 235 | 165 | | 8.1 |

| Combination | | Height Z | Range φD | Fig. | L | L1 | D1 | Wt. |
|---------------|----------|----------|-------------------|------|-----|-------|-------|------|
| LBA Shanks | CBA Head | | | | | | | |
| BT50-LBK1-115 | CBA20 | 75 | 20-26-36 | 1 | 150 | 115 | 31/19 | 4.1 |
| BT50-LBK1-145 | | 105 | | | 180 | 145 | | 4.2 |
| BT50-LBK2-110 | CBA25 | 105 | 25-33-47 | | 150 | 110 | 24 | 4.1 |
| BT50-LBK2-140 | | 135 | | | 180 | 140 | | 4.2 |
| BT50-LBK3-125 | CBA32 | 120 | 32-42-60 | | 165 | 125 | 31 | 4.4 |
| BT50-LBK3-155 | | 150 | | | 195 | 155 | | 4.5 |
| BT50-LBK4-115 | CBA40 | 120 | 40-55-79 | | 165 | 115 | 39 | 4.8 |
| BT50-LBK4-145 | | 150 | | | 195 | 145 | | 4.9 |
| BT50-LBK4-175 | | 180 | | | 225 | 175 | | 5.3 |
| BT50-LBK4-205 | | 210 | | | 225 | 205 | | 5.4 |
| BT50-LBK5-105 | CBA52 | 120 | 52-75-112 | | 165 | 105 | 50 | 5.5 |
| BT50-LBK5-180 | | 195 | | | 240 | 180 | | 6.5 |
| BT50-LBK5-240 | | 25 | | | 300 | 240 | | 7.2 |
| BT50-LBK5-300 | | 255 | | | 360 | 300 | | 8.6 |
| B150-LBK6-95 | CBA68 | 120 | 68-102-150 | | 165 | 95 | 64/50 | 6.5 |
| BT50-LBK6-170 | | 195 | | | 240 | 170 | | 8.3 |
| BT50-LBK6-230 | | 255 | | | 300 | 230 | | 9.6 |
| BT50-LBK6-290 | | 315 | | | 360 | 290 | | 11.0 |
| BT50-LBK6-350 | | 375 | | 420 | 350 | 15.5 | | |
| BT50-LBK6-350 | | 375 | | 420 | 350 | 90/64 | 13.2 | |





| Model | D | H | L | Tapping range |
|--------|----|----|------|---------------|
| TC312 | 19 | 10 | 21.5 | M3-M12 |
| TC820 | 31 | 16 | 35 | M5-M30 |
| TC1433 | 48 | 25 | 55.5 | M24-M42 |

Tc312 Clamping tap specifications

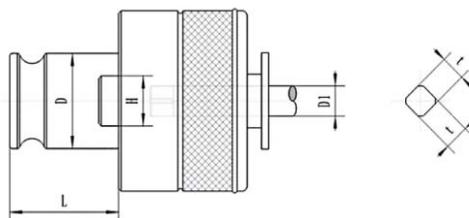
| ISO | Tap size | | JIS | Tap size | | DIN | Tap size | |
|-----|----------|------|-----|----------|-----|-----|----------|-----|
| | D1 | | | D1 | | | D1 | |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |

Tc820 Clamping tap specifications

| | | | | | | | | |
|-----|------|------|-----|------|-----|-----|----|------|
| M4 | 4 | 3.15 | M4 | 5 | 4 | | | |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | | | |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |
| M18 | 14 | 11.2 | M18 | 14 | 11 | M18 | 14 | 11 |
| M20 | 14 | 11.2 | M20 | 15 | 12 | M20 | 16 | 12 |
| M22 | 16 | 12.5 | M22 | 17 | 13 | M22 | 18 | 14.5 |
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |
| M27 | 20 | 16 | M27 | 20 | 15 | M27 | 20 | 16 |
| M30 | 20 | 16 | M30 | 23 | 17 | M30 | 22 | 18 |

Tc1433 Clamping tap specifications

| | | | | | | | | |
|-----|------|------|---------|----|----|-----|----|------|
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |
| M27 | 20 | 16 | M27 | 20 | 15 | M27 | 20 | 16 |
| M30 | 20 | 16 | M30 | 23 | 17 | M30 | 22 | 18 |
| M33 | 22.4 | 18 | M33 | 25 | 19 | M33 | 25 | 20 |
| M36 | 25 | 20 | M34/M35 | 26 | 21 | M36 | 28 | 22 |
| M39 | 28 | 22.4 | M36/M38 | 28 | 21 | M39 | 32 | 24 |
| M42 | 28 | 22.4 | M39/M40 | 30 | 23 | M42 | 32 | 24 |
| | | | M42 | 32 | 26 | | | |



| Model | D | H | L | Tapping range |
|-------|----|----|------|---------------|
| GT12 | 19 | 10 | 21.5 | M1-M16 |
| GT24 | 30 | 12 | 30 | M5-M30 |
| GT42 | 45 | 20 | 48 | M24-M42 |

GT12 Clamping tap specifications

| ISO | Tap size | | JIS | Tap size | | DIN | Tap size | |
|-----------|----------|------|-----|----------|-----|---------|----------|-----|
| | D1 | | | D1 | | | D1 | |
| M1-M2 | 2.5 | 2 | M2 | 3 | 2.5 | M1-M1.8 | 2.5 | 2.1 |
| M2.2-M2.5 | 2.8 | 2.24 | | | | M2-M2.5 | 2.8 | 2.1 |
| M3 | 3.15 | 2.5 | M3 | 4 | 3.2 | M3 | 3.5 | 2.7 |
| M4 | 4 | 3.15 | M4 | 5 | 4 | M4 | 4.5 | 3.4 |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | M5 | 6 | 4.9 |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |

GT24 Clamping tap specifications

| | | | | | | | | |
|-----|------|------|-----|------|-----|-----|----|------|
| M4 | 4 | 3.15 | M4 | 5 | 4 | | | |
| M5 | 5 | 4 | M5 | 5.5 | 4.5 | | | |
| M6 | 6.3 | 5 | M6 | 6 | 4.5 | M6 | 6 | 4.9 |
| M8 | 6.3 | 5 | M8 | 6.2 | 5 | M8 | 8 | 6.2 |
| M10 | 8 | 6.3 | M10 | 7 | 5.5 | M10 | 10 | 8 |
| M12 | 9 | 7 | M12 | 8.5 | 6.5 | M12 | 9 | 7 |
| M14 | 11.2 | 9 | M14 | 10.5 | 8 | M14 | 11 | 9 |
| M16 | 12.5 | 10 | M16 | 12.5 | 10 | M16 | 12 | 9 |
| M18 | 14 | 11.2 | M18 | 14 | 11 | M18 | 14 | 11 |
| M20 | 14 | 11.2 | M20 | 15 | 12 | M20 | 16 | 12 |
| M22 | 16 | 12.5 | M22 | 17 | 13 | M22 | 18 | 14.5 |
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |
| M27 | 20 | 16 | M27 | 20 | 15 | M27 | 20 | 16 |
| M30 | 20 | 16 | M30 | 23 | 17 | M30 | 22 | 18 |

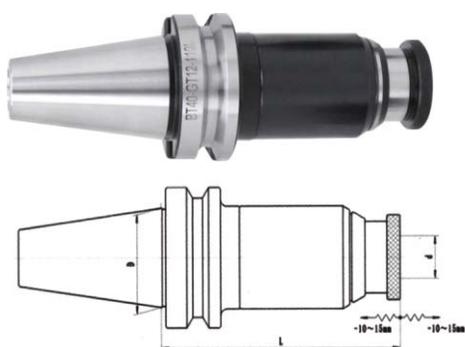
GT42 Clamping tap specifications

| | | | | | | | | |
|-----|------|------|---------|----|----|-----|----|------|
| M24 | 18 | 14 | M24 | 19 | 15 | M24 | 18 | 14.5 |
| M27 | 20 | 16 | M27 | 20 | 15 | M27 | 20 | 16 |
| M30 | 20 | 16 | M30 | 23 | 17 | M30 | 22 | 18 |
| M33 | 22.4 | 18 | M33 | 25 | 19 | M33 | 25 | 20 |
| M36 | 25 | 20 | M34/M35 | 26 | 21 | M36 | 28 | 22 |
| M39 | 28 | 22.4 | M36/M38 | 28 | 21 | M39 | 32 | 24 |
| M42 | 28 | 22.4 | M39/M40 | 30 | 23 | M42 | 32 | 24 |
| | | | M42 | 32 | 26 | | | |



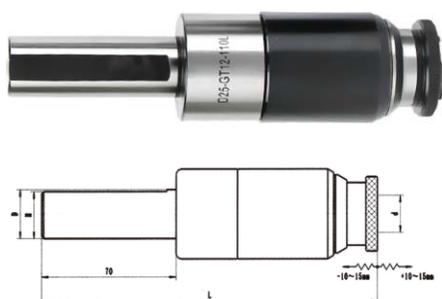
| Model | Sizes of Collets | |
|----------------------|------------------|-----------------------------|
| MT3/4/5-GT12-7PCS | GT12 | M3,M4,M5,M6,M8,M10,M12 |
| NT30/40/50-GT12-7PCS | | |
| BT30/40/50-GT12-7PCS | | |
| MT3/4/5-GT24-7PCS | GT24 | M12,M14,M16,M18,M20,M22,M24 |
| NT30/40/50-GT24-7PCS | | |
| BT40/50-GT24-7PCS | | |
| MT3/4/5-GT42-7PCS | GT42 | M24,M27,M30,M33,M36,M39,M42 |
| NT30/40/50-GT42-7PCS | | |
| BT40/50-GT42-7PCS | | |

BT Quick Change Tapping Chucks



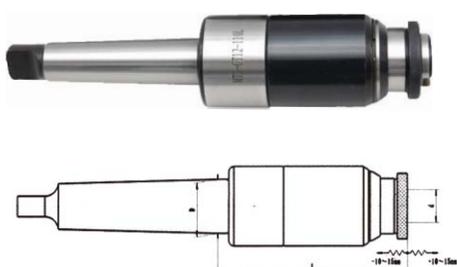
| Model | Capacity | D | d | L | Sizes of Collets |
|------------|----------|--------|-----|-----|------------------|
| BT30-GT12 | M3-M16 | φ31.75 | φ19 | 125 | GT12 TC312 G3 |
| BT40-GT12 | M3-M16 | φ44.45 | φ19 | 110 | GT12 TC312 G3 |
| BT40-GT24 | M5-M30 | φ44.45 | φ30 | 130 | GT24 |
| BT40-TC820 | M5-M24 | φ44.45 | φ31 | 130 | TC820 |
| BT50-GT12 | M3-M16 | φ69.85 | φ19 | 110 | GT12 TC312 |
| BT50-GT24 | M5-M30 | φ69.85 | φ30 | 120 | GT24 G12 |
| BT50-TC820 | M5-M24 | φ69.85 | φ31 | 130 | TC820 |

Side Lock Straight Quick Change Tapping Chucks

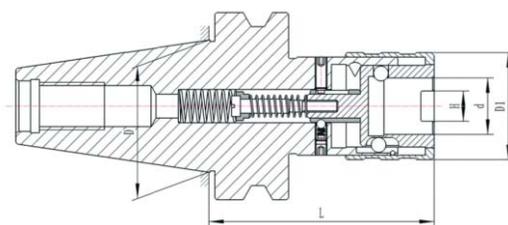


| Model | Capacity | D | H | d | L | Sizes of Collets |
|----------|----------|-----|-----|-----|-----|------------------|
| D20-GT12 | M3-M16 | φ20 | φ19 | φ19 | 175 | GT12 TC312 |
| D25-GT12 | M3-M16 | φ25 | φ24 | φ19 | 175 | GT12 TC312 |
| D32-GT12 | M3-M16 | φ32 | φ41 | φ19 | 175 | GT12 TC312 |
| D25-GT24 | M5-M30 | φ25 | φ24 | φ30 | 190 | GT24 G12 |
| D32-GT24 | M5-M30 | φ32 | φ31 | φ30 | 190 | GT24 G12 |

Morse Taper Quick Change Tapping Chucks

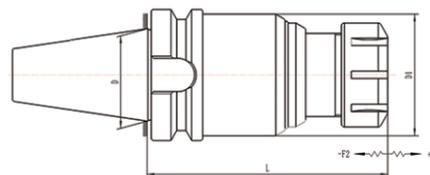


| Model | Capacity | D | d | L | Sizes of Collets |
|----------|----------|---------|-----|-----|------------------|
| MT2-GT12 | M3-M16 | φ17.780 | φ19 | 110 | GT12 TC312 |
| MT3-GT12 | M3-M16 | φ23.825 | φ19 | 110 | GT12 TC312 |
| MT4-GT12 | M3-M16 | φ31.267 | φ19 | 110 | GT12 TC312 |
| MT3-GT24 | M5-M30 | φ23.825 | φ30 | 130 | GT24 |
| MT4-GT24 | M5-M30 | φ31.267 | φ30 | 130 | GT24 |
| MT5-GT24 | M5-M30 | φ44.399 | φ30 | 13 | GT24 |

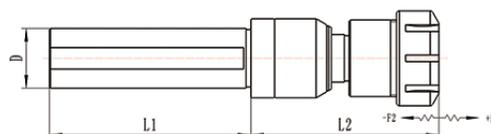


| Model | D | D1 | d | L | H | Tapping range | Telescopic length | |
|----------------|-------|----|----|-----|----|---------------|-------------------|------------|
| | | | | | | | Compression | Elongation |
| BT30-WF12-69L | 31.75 | 36 | 10 | 69 | 10 | M3-M12 | 5 | 5 |
| BT30-WF20-100L | 31.75 | 53 | 31 | 100 | 16 | M5-M30 | 12 | 12 |
| BT40-WF12-75L | 44.45 | 36 | 19 | 75 | 10 | M3-M12 | 5 | 5 |
| BT40-WF20-96L | 44.45 | 53 | 31 | 96 | 16 | M5-M30 | 12 | 12 |
| BT40-WF33-158L | 44.45 | 78 | 48 | 158 | 25 | M24-M42 | 20 | 20 |
| BT50-WF12-90L | 6998 | 36 | 19 | 90 | 10 | M3-M12 | 5 | 5 |
| BT50-WF20-108L | 6998 | 53 | 31 | 108 | 16 | M5-M30 | 12 | 12 |
| BT50-WF33-145L | 6998 | 78 | 48 | 145 | 25 | M24-M42 | 20 | 20 |
| BT50-WF42-145L | 6998 | 78 | 45 | 145 | 20 | M24-M42 | 20 | 20 |

Telescopic Buffer Type Tapping Tool Holders (BT-TER Type)



| Model | D | D1 | L | Sizes of Collets | Tapping range |
|-----------------|-------|----|-----|------------------|---------------|
| BT30-TER16-110L | 31.75 | 46 | 110 | ER16 | M2-M12 |
| BT30-TER20-110L | | | | ER20 | M3-M16 |
| BT30-TER25-110L | | | | ER25 | M3-M20 |
| BT40-TER16-100L | 44.45 | 46 | 100 | ER16 | M2-M12 |
| BT40-TER20-100L | | | | ER20 | M3-M16 |
| BT40-TER25-100L | | | | ER25 | M3-M20 |
| BT40-TER32-115L | | 58 | 115 | ER32 | M3-M24 |
| BT50-TER16-120L | 6985 | 46 | 120 | ER16 | M2-M12 |
| BT50-TER20-120L | | | | ER20 | M3-M16 |
| BT50-TER25-130L | | | | ER25 | M3-M20 |
| BT50-TER32-130L | | 58 | 130 | ER32 | M3-M24 |

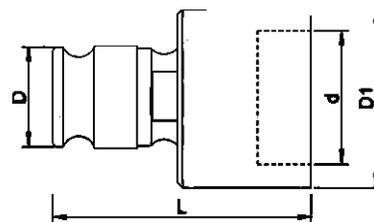


| Model | D | L1 | L2 | Sizes of Collets | Tapping range |
|---------------|----|----|----|------------------|---------------|
| D16-TER16-70L | 16 | 85 | 70 | ER16 | M2-M12 |
| D16-TER20-80L | | | 80 | ER20 | M3-M16 |
| D16-TER25-85L | | | 85 | ER25 | M3-M20 |
| D20-TER16-70L | 20 | 85 | 70 | ER16 | M2-M12 |
| D20-TER20-80L | | | 80 | ER20 | M3-M16 |
| D20-TER25-85L | | | 85 | ER25 | M3-M20 |
| D20-TER32-90L | | | 90 | ER32 | M3-M24 |
| D25-TER16-70L | 25 | 85 | 70 | ER16 | M2-M12 |
| D25-TER20-80L | | | 80 | ER20 | M3-M16 |
| D25-TER25-85L | | | 85 | ER25 | M3-M20 |
| D25-TER32-90L | | | 90 | ER32 | M3-M24 |
| D32-TER16-70L | 32 | 85 | 70 | ER16 | M2-M12 |
| D32-TER20-80L | | | 80 | ER20 | M3-M16 |
| D32-TER25-85L | | | 85 | ER25 | M3-M20 |
| D32-TER32-90L | | | 90 | ER32 | M3-M24 |

TC-series one-piece Multi-purpose Tapping Chucks

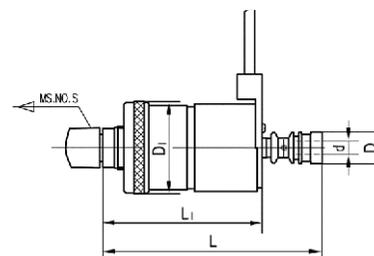


| Model | Capacity | | Support handle diameter range | Connection Taper | D | L |
|----------|----------|-------------|-------------------------------|------------------|----|----|
| TC13-B16 | M2-M13 | 1/8"-1/2" | φ2.5-φ10 | B16 | 48 | 73 |
| TC13-JT6 | M2-M13 | 1/8"-1/2" | φ2.5-φ10 | JT6 | 48 | 73 |
| TC16-B18 | M3-M16 | 1/8"-5/8" | φ3-φ12.5 | B18 | 54 | 85 |
| TC16-JT6 | M3-M16 | 1/8"-5/8" | φ3-φ12.5 | JT6 | 54 | 85 |
| TC20-B18 | M5-M20 | 3/16"-3/4" | φ4.5-φ15 | B18 | 54 | 85 |
| TC20-JT6 | M5-M20 | 3/16"-3/4" | φ4.5-φ15 | JT6 | 54 | 85 |
| TC24-B22 | M12-M24 | 1/2"-15/16" | φ8.5-φ18 | B22 | 60 | 95 |



| Model | D | D1 | L | d | L1 | Maximum tapping depth |
|-----------------|----|----|-----|----|------|-----------------------|
| GT12-M3 ~ M6 | 19 | 28 | 45 | 20 | 3.4 | 45 |
| GT12-M8 | | 33 | 50 | 25 | 8.5 | 50 |
| GT12-M10 | | 38 | 55 | 30 | 10 | 55 |
| GT12-M12 ~ M16 | | 48 | 60 | 38 | 13 | 60 |
| GT12-M16 ~ M20 | | 59 | 81 | 45 | 18.5 | 65 |
| GT24-M3 ~ M6 | 30 | 29 | 55 | 20 | 3.4 | 55 |
| GT24-M8 | | 33 | | 25 | 8.5 | |
| GT24-M10 | | 38 | | 30 | 10 | |
| GT24-M12 ~ M16 | | 48 | 70 | 38 | 13 | 70 |
| GT24-M16 ~ M20 | | 58 | 90 | 45 | 18 | 90 |
| GT24-M22 ~ M24 | | 68 | 120 | 55 | 20 | 72 |
| GT24-M30 | | 80 | 120 | 65 | 25.5 | 70 |
| TC820-M3 ~ M6 | 31 | 28 | 60 | 20 | 3.4 | 60 |
| TC820-M8 | | 33 | | 25 | 8.5 | |
| TC820-M10 | | 38 | | 30 | 10 | |
| TC820-M12 ~ M16 | | 48 | 75 | 38 | 13 | 75 |
| TC820-M16 ~ M20 | | 58 | 95 | 45 | 18 | 95 |
| TC820-M22 ~ M24 | | 68 | 125 | 55 | 20 | 72 |
| TC820-M30 | | 80 | 125 | 65 | 25.5 | 70 |

Reversible Tapping Chucks

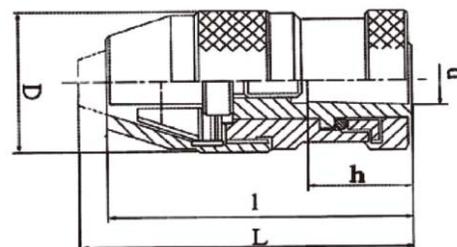


| Model | Tapping range | d | D | D1 | L | L1 | MS.NO.S |
|-------|---------------|---------|----|------|-----|-------|----------------------|
| J467 | M2—M7 | 2.5—6.5 | 23 | 55 | 135 | JU | MS2—JT33 MS3—JT33 |
| J4612 | M5—M12 | 3.5—10 | 28 | 75 | 164 | 114.5 | MS3—M16 MS4—M16 |
| J4620 | M8—M20 | 6.0—14 | 38 | 90.5 | 205 | 135 | MS3—M20 MS4—M20 |

Taper-fitting Keyless Drill Chucks



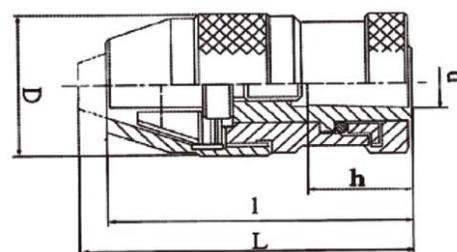
$D \leq 0.06\text{mm}$
 $M \leq 0.12\text{mm}$
 $P \leq 0.20\text{mm}$
 C45S20



| Model | Capacity | Taper | d | h | D | L | l |
|--------|------------|-------|--------|--------|----|-----|-----|
| J0106 | 0.5-6 | B10 | 10.094 | 14.5 | 35 | 67 | 61 |
| J0110 | 1-10 | B12 | 12.065 | 18.5 | 42 | 86 | 78 |
| J0113 | 1-13 | B16 | 15.733 | 24 | 44 | 97 | 88 |
| J0116 | 3-16 | B18 | 17.78 | 32 | 48 | 108 | 98 |
| J0116A | 1-16 | B16 | 15.733 | 24 | 48 | 108 | 98 |
| J0120 | 5-20 | B22 | 21.3 | 30.5 | 53 | 115 | 103 |
| J0206 | 1/6"-1/4" | JT1 | 9.754 | 16.669 | 35 | 67 | 61 |
| J0210 | 1/32"-3/8" | JT2 | 14.199 | 22.225 | 42 | 86 | 78 |
| J0213 | 1/32"-1/2" | JT33 | 15.85 | 25.4 | 44 | 97 | 88 |
| J0216 | 1/8"-5/8" | JT6 | 17.7 | 25.4 | 48 | 102 | 92 |
| J0216 | 1/8"-5/8" | JT3 | 20.599 | 30.956 | 48 | 108 | 98 |
| J0220 | 3/16"-3/4" | JT3 | 20.599 | 30.956 | 53 | 115 | 103 |

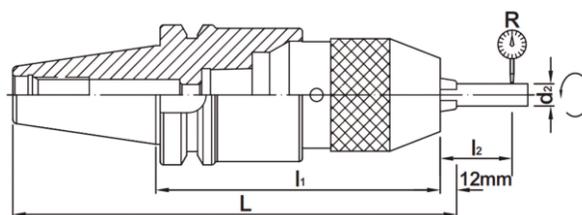


Thread Mounted Keyless Drill Chucks



| Model | Capacity | Thread | h | D | L | l | |
|--------|-------------|--------|------------|----|----|-----|----|
| J0306 | 1/64"-1/4" | 0.5-6 | 3/8"-24UNF | 14 | 35 | 67 | 61 |
| J0308 | 1/64"-5/16" | 0.5-8 | 3/8"-24UNF | 14 | 42 | 86 | 78 |
| J0310A | 1/32"-3/8" | 1-10 | 3/8"-24UNF | 14 | 42 | 86 | 78 |
| J0310B | 1/32"-3/8" | 1-10 | 1/2"-20UNF | 16 | 42 | 86 | 78 |
| J0313A | 1/32"-1/2" | 1-13 | 1/2"-20UNF | 16 | 44 | 90 | 81 |
| J0313B | 1/32"-1/2" | 1-13 | 3/8"-24UNF | 14 | 44 | 90 | 81 |
| J0316A | 1/8"-5/8" | 3-16 | 1/2"-20UNF | 16 | 48 | 102 | 92 |
| J0316C | 1/8"-5/8" | 3-16 | 5/8"-16UNF | 18 | 48 | 102 | 92 |

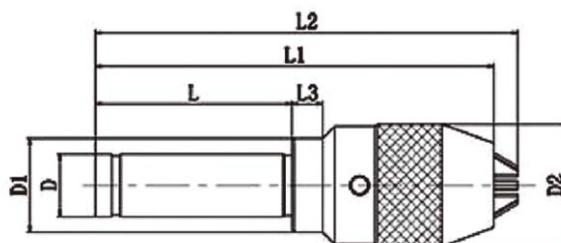
* Please state light or heavy duty as you prefer when ordering.



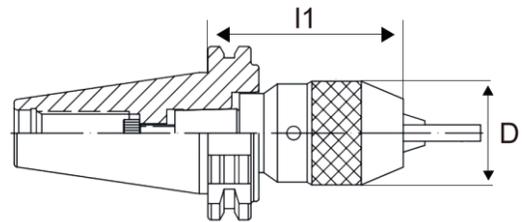
A, B, C three appearance materials are available

| Model | Capacity | D | L | |
|----------------|----------|------|------|-------|
| | | | Min. | Max. |
| BT30-APU08-80 | 1-8 | 36.3 | 75 | 82 |
| BT30-APU13-110 | 1-13 | 51.5 | 94 | 104.5 |
| BT40-APU08-85 | 1-8 | 36.3 | 79 | 86.5 |
| BT40-APU13-110 | 1-13 | 51.5 | 98 | 109 |
| BT40-APU16-110 | 1-16 | 58 | 115 | 130 |
| BT50-APU13-110 | 1-13 | 49 | 98 | 109 |
| BT50-APU16-130 | 1-16 | 54 | 115 | 130 |

Integrated Keyless Drill Chucks with Morse Taper, Straight or R8 Shanks

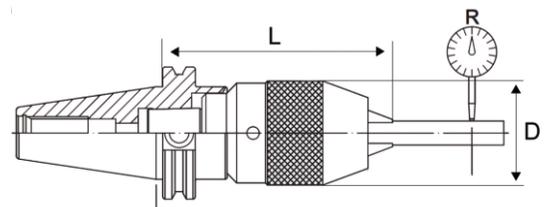


| Model | Capacity | | Dimensions | | | | |
|--------|----------|----------|------------|------|-----|-------|-------|
| | mm | nch | D | D1 | L | L1 | L2 |
| MT3-13 | 1.0-13 | 1/32-1/2 | 23.825 | 51 | 995 | 182.5 | 195 |
| MT3-16 | 1.0-16 | 1/32-5/8 | 23.825 | 57 | 995 | 208 | 2195 |
| MT4-13 | 1.0-13 | 1/32-1/2 | 31.542 | 51 | 125 | 207 | 218.5 |
| MT4-16 | 1.0-16 | 1/32-5/8 | 31.542 | 56.5 | 125 | 219 | 234.5 |
| C20-13 | 1.0-13 | 1/32-1/2 | 20 | 51 | 60 | 143 | 155.5 |
| C20-16 | 1.0-16 | 1/32-5/8 | 20 | 57 | 60 | 153 | 1675 |
| R8-13 | 1.0-13 | 1/32-1/2 | 31.75 | 51 | 102 | 183.5 | 195 |
| R8-16 | 1.0-16 | 1/32-5/8 | 31.75 | 57 | 102 | 195 | 210 |



| Model | l1 | l2 | d1 | d2 | R | Capacity | | KGS |
|----------------|-----|----|----|----|-----|----------|-----------|------|
| | | | | | | mm | inch | |
| SK30-APU08-80 | 80 | 55 | 37 | 6 | 0.4 | 1-8 | 1/24-5/16 | 0.60 |
| SK30-APU13-120 | 120 | 75 | 50 | 13 | | 1-13 | 1/24-1/2 | 1.45 |
| SK30-APU16-120 | 120 | 75 | 57 | 16 | | 3-16 | 1/8-5/8 | 1.78 |
| SK40-APU8-75 | 75 | 55 | 37 | 6 | 0.4 | 1-8 | 1/24-5/16 | 1.32 |
| SK40-APU13-100 | 100 | 75 | 50 | 13 | | 1-13 | 1/24-1/2 | 1.92 |
| SK40-APU16-115 | 115 | 80 | 57 | 16 | | 3-16 | 1/8-5/8 | 2.28 |
| SK50-APU8-75 | 75 | 55 | 37 | 6 | 0.4 | 1-8 | 1/24-5/16 | 3.86 |
| SK50-APU13-100 | 100 | 75 | 50 | 13 | | 1-13 | 1/24-1/2 | 4.40 |
| SK50-APU16-105 | 105 | 80 | 57 | 16 | | 3-16 | 1/8-5/8 | 4.48 |

CAT Integrated Drill Chucks



| Model | Capacity | | D | | L | | | |
|-------------|----------|-------------|------|--------|---------|--------|---------|--------|
| | | | | | Minimum | | Maximum | |
| | (φmm) | (φinch) | (mm) | (inch) | (mm) | (inch) | (mm) | (inch) |
| CAT40-APU08 | 1-8 | 1/32"-5/16" | 36.3 | 1.429" | 65 | 2.559" | 76.5 | 3.011" |
| CAT40-APU13 | 1-13 | 1/32"-1/2" | 51.5 | 2.028" | 88 | 3.464" | 99 | 3.697" |
| CAT40-APU16 | 3-16 | 3/32"-5/8" | 58 | 2.283" | 106 | 4.173" | 120 | 4.724" |
| CAT50-APU08 | 1-8 | 1/32"-5/16" | 36.3 | 1.429" | 70 | 2.755" | 77.5 | 3.051" |
| CAT50-APU13 | 1-13 | 1/32"-1/2" | 51.5 | 2.028" | 89 | 3.503" | 100 | 3.937" |
| CAT50-APU16 | 3-16 | 3/32"-5/8" | 58 | 2.283" | 96 | 3.779" | 110 | 4.330" |

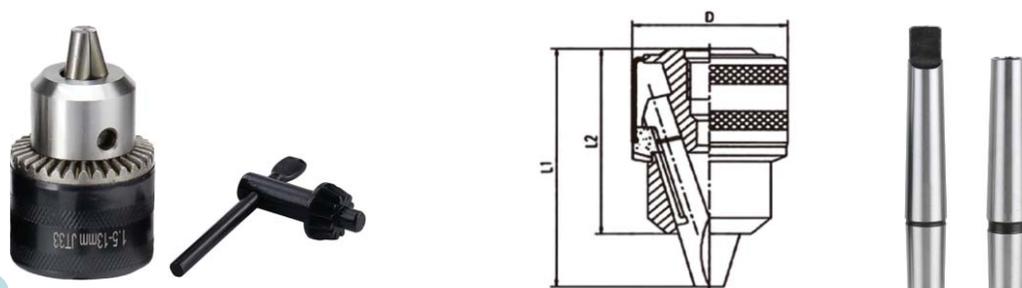
Key-Type Drill Chucks With Taper Fitting (Heavy Duty)



C45S20 ≤ 0.20mm

| Model | Capacity | Mounts | D | L1 | L2 |
|--------|----------|--------|------|------|-----|
| J216 | 0.6-6 | B10 | 30.3 | 50 | 395 |
| J2110 | 1-10 | B12 | 43.4 | 69.7 | 54 |
| J2113 | 1-13 | B16 | 53.2 | 86 | 67 |
| J2116A | 1-16 | B16 | 57 | 93 | 75 |
| J2116 | 3-16 | B18 | 57 | 93 | 75 |
| J2120 | 5-20 | B22 | 65.3 | 110 | 82 |
| J226 | 1/4" | JT1 | 30.3 | 50 | 395 |
| J2210 | 3/8" | JT2 | 43.4 | 69.7 | 54 |
| J2213A | 1/2" | JT6 | 53.2 | 86 | 67 |
| J2213 | 1/2" | JT33 | 53.2 | 86 | 67 |
| J2216 | 5/8" | JT3 | 57 | 93 | 75 |
| J2220 | 3/4" | JT3 | 68 | 120 | 92 |

Key-Type Drill Chucks With Taper Fitting (Light Duty)

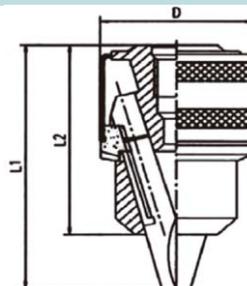


C45S20 ≤ 0.25mm

| Model | Capacity | Mounts | D | L1 | L2 |
|-------|----------|--------|------|------|----|
| J2510 | 1.5-10 | B12 | 34 | 58.5 | 49 |
| J2610 | 3/8" | JT2 | 34 | 58.5 | 49 |
| J2513 | 1.5-13 | B16 | 43.5 | 74 | 60 |
| J2613 | 1/2" | JT6 | 43.5 | 76 | 60 |
| J2516 | 3-16 | B18 | 52 | 86 | 67 |
| J2616 | 5/8" | JT3 | 53.2 | 97 | 78 |

Key-Type Drill Chucks with Thread Mounted

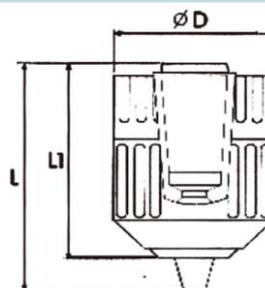
C45S20 ≤ 0.30



| Model | Capacity | Mounts | D | L1 | L2 |
|--------|----------|------------|------|------|----|
| J3506B | 0.6-6 | 3/8"-24UNF | 30.3 | 49 | 40 |
| J3510D | 1.5-10 | M10-1 | 34 | 58.5 | 49 |
| J3510C | 1.5-10 | 3/8"-24UNF | 34 | 58.5 | 49 |
| J3510G | 1.5-10 | 1/2"-20UNF | 34 | 58.5 | 49 |
| J3513D | 1.5-13 | M12-1.25 | 42 | 71.5 | 59 |
| J3513A | 1.5-13 | 1/2"-20UNF | 42 | 71.5 | 59 |
| J3513B | 1.5-13 | 3/8"-24UNF | 42 | 71.5 | 59 |
| J3516A | 3-16 | 1/2"-20UNF | 52 | 86 | 67 |
| J3516A | 3-16 | 5/8"-16UN | 52 | 86 | 67 |

Keyless Hand-tightening Drill Chucks

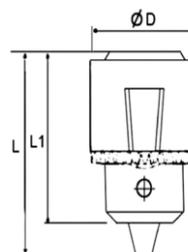
PA6-30G ≤ 0.30



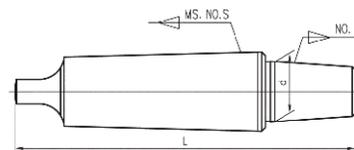
| Model | Capacity | Mounts | D | L1 | L |
|--------|----------|------------|----|------|------|
| J1510A | 0.8-10 | 3/8"-24UNF | 41 | 54.5 | 64 |
| J1510B | 0.8-10 | 12-20UNF | 41 | 54.5 | 64 |
| J1513A | 2-13 | 1/2"-20UNF | 43 | 62 | 74.5 |
| J1513B | 2-13 | 3/8"-24UNF | 43 | 62 | 74.5 |

Stainless Steel Drill Chucks

Material: 3Cr13

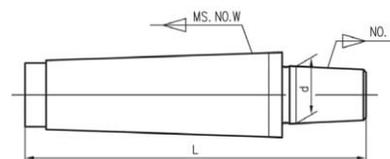


| Capacity | Connecting Hole | D | L | L1 |
|----------|-------------------------------|----|----|----|
| 0.3-4 | JT0 | 20 | 36 | 30 |
| 0.6-6 | JT1;B10 ; 3/8"-24UNF | 28 | 47 | 38 |
| 0.6-8 | JT1;B10 ; 3/8"-24UNF | 30 | 50 | 42 |
| 1.0-10 | JT2;B12 ; 3/8"-24UNF | 34 | 60 | 50 |
| 1.0-13 | JT6 ; JT33 ; B16 ; 1/2"-20UNF | 42 | 70 | 56 |



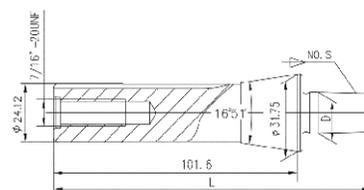
| Model | L | d | Model | L | d |
|---------|-----|--------|----------|-----|--------|
| MT2-B16 | 112 | 15.733 | JT33-MT3 | 127 | 15.85 |
| MT3-B16 | 131 | 15.733 | JT33-MT4 | 152 | 17.17 |
| MT4-B16 | 156 | 15.733 | JT33-MT5 | 184 | 15.85 |
| MT3-B18 | 139 | 17.788 | JT3-MT5 | 190 | 20.599 |
| MT4-B18 | 164 | 17.788 | JT4-MT4 | 169 | 28.55 |
| MT5-B18 | 196 | 17.788 | JT4-MT5 | 201 | 28.55 |

Drill Chuck Arbors with Draw Bar

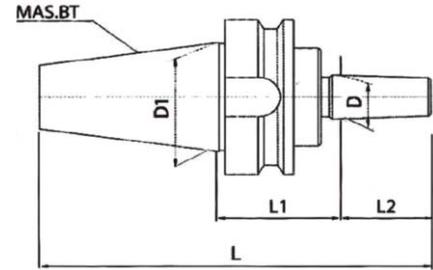


| Model | L | d | Model | L | d |
|---------|-----|--------|----------|-----|--------|
| MT2-B16 | 103 | 15.733 | JT33-MT3 | 114 | 15.85 |
| MT3-B16 | 118 | 15.733 | JT33-MT4 | 137 | 15.850 |
| MT4-B16 | 141 | 15.733 | JT3-MT2 | 103 | 20.599 |
| MT3-B18 | 126 | 17.780 | JT3-MT3 | 120 | 20.599 |
| MT4-B18 | 149 | 17.780 | JT3-MT4 | 143 | 20.599 |
| MT5-B18 | 176 | 17.780 | JT3-MT5 | 170 | 20.599 |

R8 Drill Chuck Arbors

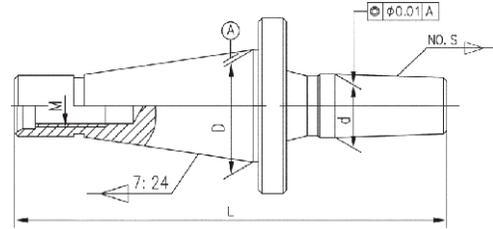


| Model | L | d | Model | L | d |
|---------|-----|--------|--------|-----|--------|
| R8-JT33 | 132 | 15.85 | R8-B12 | 128 | 12.065 |
| R8-JT6 | 132 | 17.17 | R8-B16 | 135 | 15.733 |
| R8-JT3 | 137 | 20.599 | R8-B18 | 143 | 17.78 |



| Model | L2 | L | D | D1 | M |
|--------------|--------|-------|--------|-------|-----|
| BT40-B16-45 | 24 | 134.4 | 15.733 | 44.45 | M16 |
| BT40-B18-45 | 32 | 142.4 | 15.733 | 44.45 | M16 |
| BT40-JT2-45 | 22.225 | 132.6 | 14.199 | 44.45 | M16 |
| BT40-JT3-45 | 30.956 | 141.4 | 20.599 | 44.45 | M16 |
| BT40-JT33-45 | 25.4 | 135.8 | 15.850 | 44.45 | M16 |

NT Drill Chuck Arbors



| Model | D | d | L | M | Wt |
|-----------|-------|--------|-----|-----|-------|
| NT40-JT2 | 44.45 | 14.199 | 141 | M16 | 0.829 |
| NT40-JT33 | 44.45 | 15.85 | 145 | M16 | 0.853 |
| NT40-B12 | 44.45 | 12.065 | 136 | M16 | 0.809 |
| NT40-B16 | 44.45 | 15.733 | 143 | M16 | 0.848 |
| NT40-B18 | 44.45 | 17.78 | 151 | M16 | 0.869 |

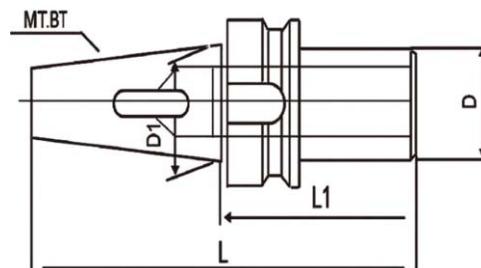
BT-MT Adapt Sleeves



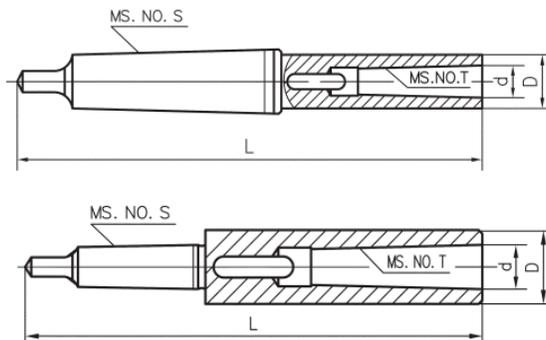
BT-MTA



BT-MTB



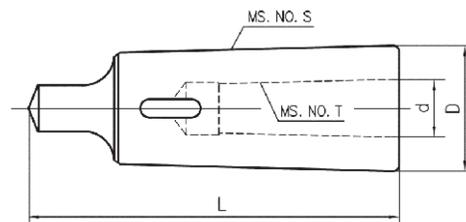
| Model | L | D | D1 |
|-------------|-------|----|-------|
| BT30-MT2-60 | 108.4 | 32 | 31.75 |
| BT30-MT3-80 | 128.4 | 40 | 31.75 |
| BT40-MT2-60 | 125.4 | 32 | 44.45 |
| BT40-MT3-70 | 135.4 | 40 | 44.45 |
| BT40-MT4-90 | 155.4 | 48 | 44.45 |
| BT40-MT4-95 | 180.8 | 48 | 57.5 |
| BT50-MT2-60 | 146.8 | 25 | 69.85 |
| BT50-MT3-75 | 176.8 | 40 | 69.85 |
| BT50-MT4-90 | 196.8 | 48 | 69.85 |



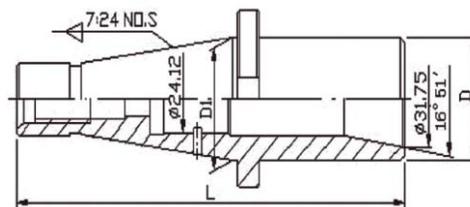
| Model | MS.NO.S | MS.NO.T | D | d | L | Wt(kg) |
|--------|---------|---------|----|--------|-----|--------|
| MT1-1 | 1 | 1 | 20 | 12.065 | 145 | 0.19 |
| MT1-2 | | 2 | 30 | 1778 | 160 | 0.4 |
| MT1-3 | | 3 | 36 | 23.825 | 181 | 0.4 |
| MT2-1 | 2 | 1 | 20 | 12.065 | 160 | 0.29 |
| MT2-2 | | 2 | 30 | 1778 | 175 | 0.5 |
| MT2-3 | | 3 | 36 | 23.825 | 196 | 0.6 |
| MT2-4 | | 4 | 48 | 31.267 | 221 | 1.43 |
| MT3-1 | 3 | 1 | 20 | 12.065 | 175 | 0.41 |
| MT3-2 | | 2 | 30 | 1778 | 194 | 0.62 |
| MT3-3 | | 3 | 36 | 23.825 | 215 | 0.89 |
| MT3-3A | | 3 | 40 | 23.825 | 215 | 1.1 |
| MT3-4 | | 4 | 48 | 31.267 | 240 | 1.55 |
| MT3-5 | | 5 | 63 | 44.399 | 275 | 2.8 |
| MT4-1 | 4 | 1 | 20 | 12.065 | 200 | 0.81 |
| MT4-2 | | 2 | 30 | 1778 | 215 | 1 |
| MT4-3 | | 3 | 36 | 23.825 | 240 | 1.27 |
| MT4-4 | | 4 | 48 | 31.267 | 265 | 1.93 |
| MT4-5 | | 5 | 63 | 44.399 | 300 | 3.18 |
| MT4-6 | | 6 | 85 | 63.348 | 368 | 6.5 |

| Model | MS.NO.S | MS.NO.T | D | d | L | Wt(kg) |
|-------|---------|---------|----|--------|-----|--------|
| MT5-1 | 5 | 1 | 20 | 12.065 | 232 | 1.79 |
| MT5-2 | | 2 | 30 | 1778 | 247 | 2 |
| MT5-3 | | 3 | 36 | 23.825 | 268 | 2.27 |
| MT5-4 | | 4 | 48 | 31.267 | 300 | 2.93 |
| MT5-5 | | 5 | 63 | 44.399 | 335 | 4.18 |
| MT5-6 | | 6 | 85 | 63.348 | 403 | 6.7 |
| MT6-1 | 6 | 1 | 20 | 12.065 | 294 | 4.4 |
| MT6-2 | | 2 | 30 | 1778 | 309 | 4.25 |
| MT6-3 | | 3 | 36 | 23.825 | 330 | 4.52 |
| MT6-4 | | 4 | 48 | 31.267 | 355 | 5.18 |
| MT6-5 | | 5 | 63 | 44.399 | 390 | 6.43 |

MT Drill Sleeves

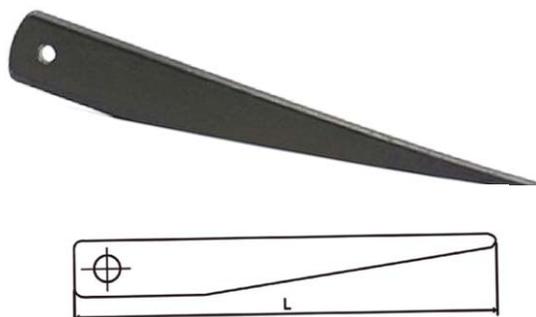


| Model | MT.No.S | MT.No.T | D | d | L | Wt. |
|-------|---------|---------|------|--------|-----|------|
| MT2-1 | 2 | 1 | 18.6 | 12.065 | 90 | 0.10 |
| MT3-1 | 3 | 1 | 24.1 | | 99 | 0.24 |
| MT3-2 | 3 | 2 | 24.7 | 17780 | 108 | 0.12 |
| MT4-1 | 4 | 1 | 31.6 | 12.065 | 124 | 0.60 |
| MT4-2 | 4 | 2 | | 17780 | | 0.50 |
| MT4-3 | 4 | 3 | 32.4 | 23.825 | 132 | 0.38 |
| MT5-1 | 5 | 1 | 44.7 | 12.065 | 156 | 1.59 |
| MT5-2 | 5 | 2 | | 17780 | | |
| MT5-3 | 5 | 3 | | 23.825 | | 1.36 |
| MT5-4 | 5 | 4 | 45.5 | 31.267 | 171 | 0.95 |
| MT6-1 | 6 | 1 | 63.8 | 12.065 | 218 | 3.84 |
| MT6-2 | 6 | 2 | | 17780 | | 3.73 |
| MT6-3 | 6 | 3 | | 23.825 | | 3.85 |
| MT6-4 | 6 | 4 | | 31.267 | | 3.12 |
| MT6-5 | 6 | 5 | | 44.399 | | 1.95 |



| Model | 7:24.No.S | D | d | D | 1L |
|----------|-----------|----|--------|-------|-----|
| NT30-MT2 | NT30 | 32 | 17780 | 31.75 | 118 |
| NT30-MT3 | NT30 | 40 | 23.825 | 31.75 | 138 |
| NT40-MT2 | NT40 | 32 | 17780 | 44.45 | 143 |
| NT40-MT3 | NT40 | 40 | 23.825 | 44.45 | 158 |
| NT40-MT4 | NT40 | 48 | 31.267 | 44.45 | 186 |
| NT50-MT3 | NT50 | 40 | 23.825 | 6985 | 192 |
| NT50-MT4 | NT50 | 48 | 31.267 | 6985 | 197 |
| NT50-MT5 | NT50 | 61 | 44.399 | 6985 | 232 |

Drill Drafts

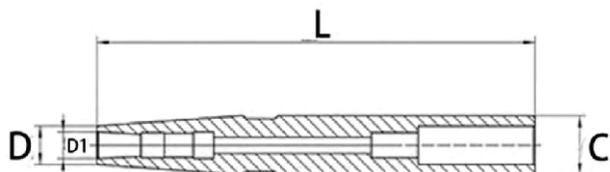


| Mode | MS.NO | L |
|------------|-------|-----|
| DIN317/0 | 0 | 90 |
| DIN317/1-2 | 1-2 | 140 |
| DIN317/3 | 3 | 190 |
| DIN317/4 | 4 | 225 |
| DIN317/5-6 | 5-6 | 265 |

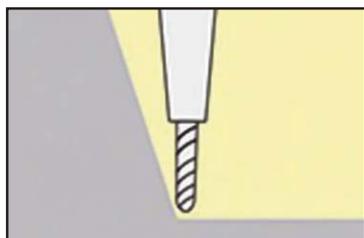
Half Automatic Morse Shank Pullers



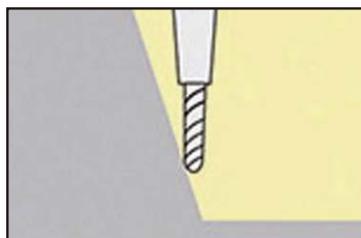
| Model | MS.No | L |
|------------|-------|-----|
| DIN318/1-3 | 1-3 | 317 |
| DIN318/4-6 | 4-6 | 380 |



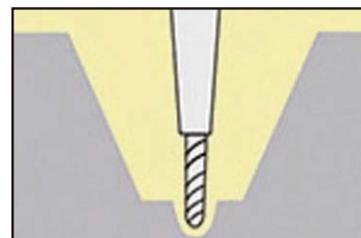
| Model No | Clamping | C | D | D1 | L | Collet |
|---------------|----------|----|----|-----|-------|--------|
| C12-DC06-120 | 2-6 | 12 | 13 | 10 | 120 | CDC06 |
| C12-DC06-150 | | | | | 150 | CDC06 |
| C16-DC06-150 | | 16 | | 14 | 150 | CDC06 |
| C16-DC06-200 | | | | | 200 | CDC06 |
| C20-DC06-150 | | 20 | | 17 | 150 | CDC06 |
| C20-DC06-200 | | | | | 200 | CDC06 |
| C20-DC08-150 | 3-8 | 20 | 16 | 150 | CDC08 | |
| C20-DC08-200 | | | | 200 | CDC08 | |
| C20-DC010-200 | 3-10 | 20 | 10 | 200 | CDC10 | |
| C25-DC08-150 | 3-8 | 25 | 16 | 22 | 150 | CDC08 |
| C25-DC08-200 | | | | | 200 | CDC08 |
| C25-DC12-200 | 3-12 | 25 | 18 | 22 | 200 | CDC12 |
| C25-DC12-250 | | | | | 250 | CDC12 |



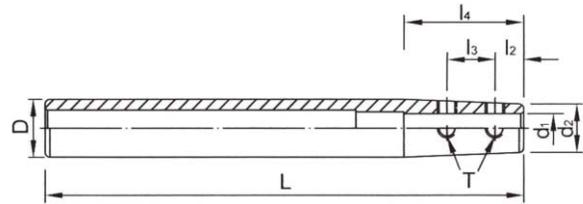
Corner Processing



Vertical wall Processing

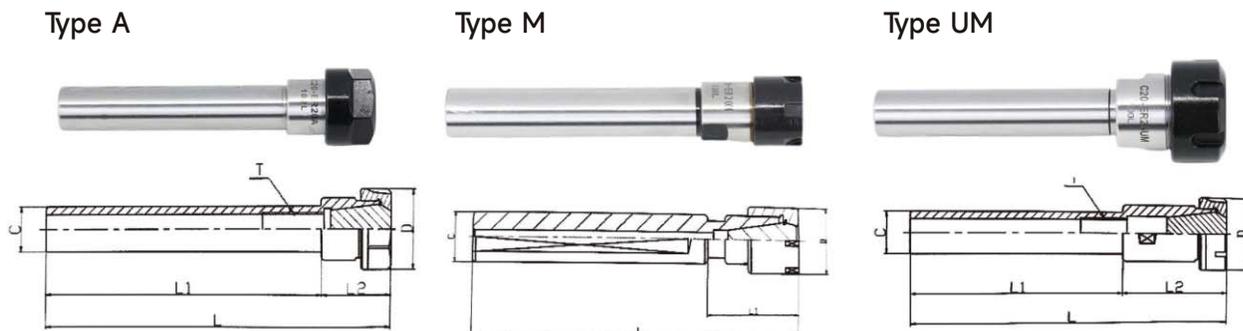


Slot Milling



| Model | L | l2 | l3 | l4 | D | d1 | d2 | T | WEIGHT(KGS) | | | | |
|----------------|-----|----|----|----|----|----|------|---------|-------------|----|---------|---------|------|
| SLD3-C10-150L | 150 | 6 | 10 | 25 | 10 | 3 | 9 | M3x0.5P | 0.10 | | | | |
| SLD4-C10-150L | | | | | | 4 | | | 0.10 | | | | |
| SLD6-C10-150L | | | | | | 6 | — | | 0.10 | | | | |
| SLD4-C12-150L | 100 | | | | 12 | 4 | 9 | | 0.12 | | | | |
| SLD6-C12-100L | | | | | | 6 | 10 | | 0.10 | | | | |
| SLD6-C12-150L | | | | | | 6 | | | 0.12 | | | | |
| SLD4-C16-150L | 150 | | | | 6 | 10 | 25 | | 16 | 4 | 10 | M4x0.7P | 0.15 |
| SLD4-C16-200L | 200 | | | | | | | | | 4 | | | 0.18 |
| SLD6-C16-150L | 150 | | | | | | | | | 6 | 13 | | 0.15 |
| SLD6-C16-200L | 200 | | | | | | | | 6 | 13 | 0.18 | | |
| SLD8-C16-150L | 150 | | | | | | | | 8 | 15 | 0.15 | | |
| SLD8-C16-200L | 200 | | | | | | | | 8 | 15 | 0.18 | | |
| SLD6-C20-150L | 150 | 6 | 10 | 25 | | | | 20 | 6 | 13 | M6x1.0P | | 0.18 |
| SLD8-C20-150L | | | | | | | | | 8 | 15 | | | 0.18 |
| SLD8-C20-200L | | | | | | | | | 200 | 8 | | | 15 |
| SLD10-C20-150L | 150 | | | | | | | 20 | 10 | 17 | | | 0.18 |
| SLD10-C20-200L | 200 | | | | | | | | 10 | 17 | | | 0.20 |
| SLD12-C20-150L | 150 | | | | | | | | 12 | 19 | | | 0.18 |
| SLD12-C20-200L | 200 | | | | 12 | 19 | 0.20 | | | | | | |
| SLD6-C32-150L | 150 | | | | 6 | 10 | 25 | 32 | 6 | 13 | | M6x1.0P | 0.21 |
| SLD8-C32-150L | | | | | | | | | 8 | 15 | | | 0.21 |
| SLD10-C32-150L | | | | | | | | | 10 | 17 | | | 0.22 |
| SLD12-C32-150L | | | | | | | | | 12 | 19 | | | 0.22 |

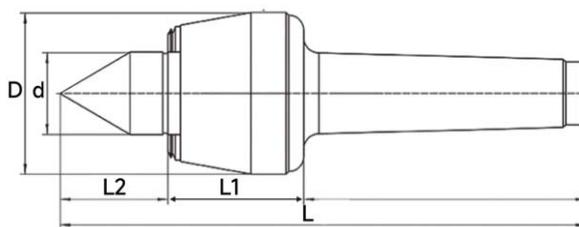
· Each extension rod comes with 4 screws and 1 wrench



| Model | L | L1 | C | D |
|-----------------|-------------|-----|----|-------|
| C10-ER8A/M-100 | 117 | 100 | 10 | 12 |
| C10-ER11A/M-100 | 121.6/116.6 | 100 | 10 | 19/16 |
| C12-ER11A/M-100 | 121.6/116.6 | 100 | 12 | 19/16 |
| C12-ER16A/M-100 | 140/137 | 100 | 12 | 28/22 |
| C16-ER11A/M-100 | 121.6/116.6 | 100 | 16 | 19/16 |
| C16-ER16A/M-100 | 140/137 | 100 | 16 | 28/22 |
| C16-ER16A/M-150 | 190/187 | 150 | 16 | 28/22 |
| C20-ER16A/M-100 | 140/137 | 100 | 20 | 28/22 |
| C20-ER16A/M-150 | 190/187 | 150 | 20 | 28/22 |
| C20-ER20A/M-100 | 140.5/140 | 100 | 20 | 34/28 |
| C20-ER25UM-100 | 151 | 100 | 20 | 42 |
| C20-ER32UM-100 | 51.5 | 100 | 20 | 50 |
| C25-ER20UM-100 | 140.5/140 | 100 | 25 | 34/28 |
| C25-ER25UM-100 | 51 | 100 | 25 | 42 |
| C25-ER32UM-100 | 51.5 | 100 | 25 | 50 |
| C32-ER32UM-100 | 51.5 | 100 | 32 | 50 |
| C32-ER32UM-150 | 51.5 | 150 | 32 | 50 |
| C40-ER32UM-100 | 51.5 | 100 | 40 | 50 |
| C40-ER40UM-100 | 65 | 100 | 40 | 63 |



Any other special sizes as ordered.



GJMT-Series Precision Type

| Model | L | L1 | L2 | D | d |
|---------|-------|------|------|----|----|
| GJMT3-A | 184 | 61.5 | 34.5 | 53 | 25 |
| GJMT3-B | 199 | 61.5 | 49.5 | 53 | 25 |
| GJMT4-A | 206.5 | 55 | 40.5 | 68 | 32 |
| GJMT4-B | 223 | 55 | 57 | 68 | 32 |
| GJMT5-A | 263.5 | 71 | 55 | 83 | 40 |
| GJMT5-B | 279 | 71 | 70.5 | 83 | 40 |

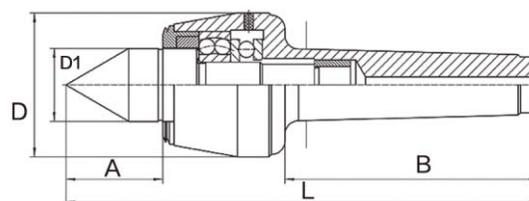
ZGJMT-Series Medium Type

| Model | L | L1 | L2 | D | d |
|----------|-------|----|------|----|----|
| ZGJMT4-A | 218.5 | 67 | 40.5 | 63 | 32 |
| ZGJMT5-A | 272.5 | 80 | 55 | 83 | 40 |
| Model | L | L1 | L2 | D | d |
| ZGJMT4-B | 218.5 | 67 | 40.5 | 63 | 32 |
| ZGJMT5-B | 272.5 | 80 | 55 | 83 | 40 |

GJMT light series accuracy 0.003-0.005 load 400-1500KG speed 3000-5000RPM

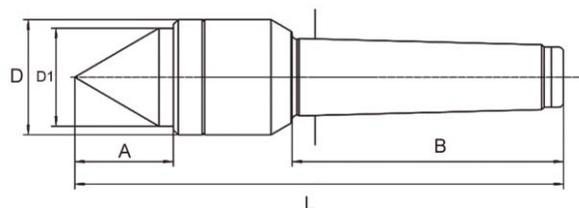
ZGJMT Medium series accuracy 0.005-0.007 load 2000-5000KG speed 3000-4500RPM

High Speed Black Type Live Centers with water-proof

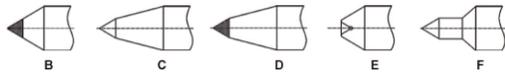
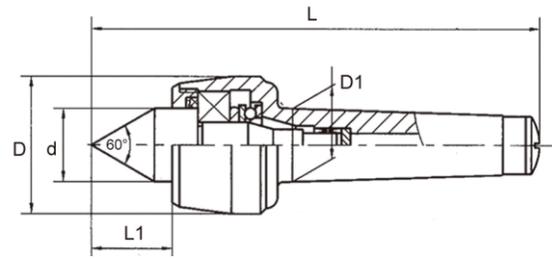


| Mode | A | B | D | D1 | L | Max load | Max Speed | Accuracy |
|------|----|-----|----|----|-----|----------|-----------|----------|
| MT2 | 28 | 65 | 46 | 24 | 140 | 100N | 3500 | 0.01 |
| MT3 | 38 | 81 | 59 | 28 | 170 | 250N | 3000 | 0.015 |
| MT4 | 45 | 102 | 64 | 31 | 198 | 400N | 2500 | 0.015 |
| MT5 | 52 | 130 | 78 | 44 | 245 | 700N | 2000 | 0.02 |

New Type Live Centers For CNC

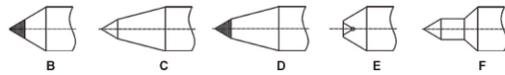
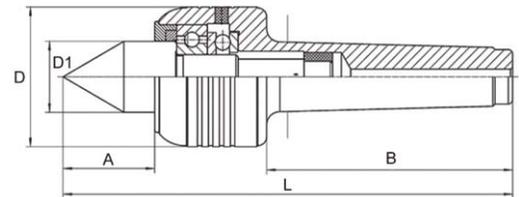


| Model | A | B | C | D | D1 | d | L | Max Speed |
|-------|----|----|-----|----|----|---|-----|-----------|
| MT2A | 28 | 35 | 69 | 32 | 32 | — | 132 | 5000 |
| MT3A | 36 | 44 | 86 | 41 | 41 | — | 166 | 3500 |
| MT4A | 41 | 51 | 108 | 47 | 47 | — | 200 | 3000 |
| MT5A | 54 | 72 | 136 | 65 | 65 | — | 262 | 2000 |



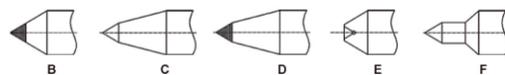
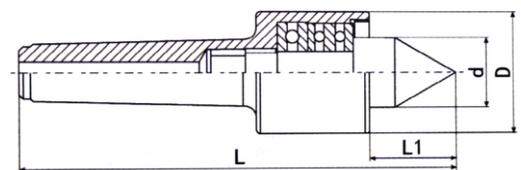
| Model | L | D | L1 | d | D ₁ | Max load | Max Speed | Accuracy |
|-------|-------|----|------|----|----------------|----------|-----------|----------|
| MT2 | 1296 | 45 | 28.6 | 25 | 17780 | 400N | 5000 | 0.006 |
| MT3 | 160.2 | 52 | 32 | 28 | 23.825 | 800N | 4500 | 0.006 |
| MT4 | 191.7 | 60 | 36.5 | 32 | 31.267 | 1250N | 3500 | 0.006 |
| MT5 | 244.5 | 80 | 50.8 | 45 | 44.399 | 1500N | 3000 | 0.006 |

CNC Live Centers

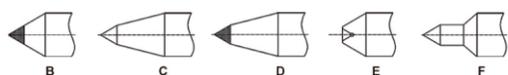
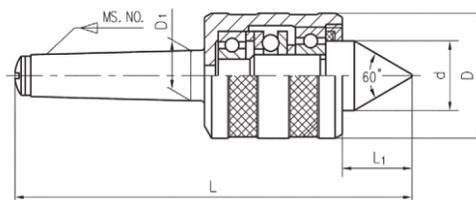


| Model | A | B | D | D ₁ | L | Max load | Max Speed | Accuracy |
|-------|----|-----|----|----------------|-----|----------|-----------|----------|
| MT2 | 28 | 65 | 46 | 24 | 140 | 100N | 3500 | 0.01 |
| MT3 | 38 | 81 | 59 | 28 | 170 | 250N | 3000 | 0.015 |
| MT4 | 45 | 102 | 64 | 31 | 198 | 400N | 2500 | 0.015 |
| MT5 | 52 | 130 | 78 | 44 | 245 | 700N | 2000 | 0.02 |

Heavy Duty Live Centers

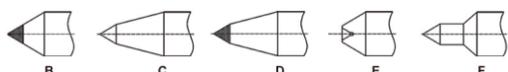
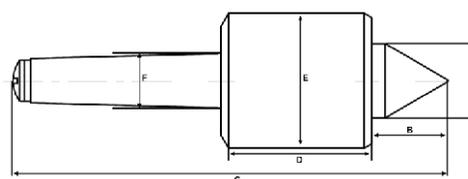


| Model | L | L1 | D | D ₁ | d | Max Radial Load | Max Speed | Accuracy |
|-------|-----|------|-----|----------------|----|-----------------|-----------|----------|
| MT2 | 145 | 35 | 46 | 17780 | 24 | 1500 | 3000 | 0.01 |
| MT3 | 170 | 36 | 53 | 23.825 | 27 | 2000 | 2500 | 0.01 |
| MT4 | 207 | 45 | 60 | 31.267 | 32 | 3200 | 2000 | 0.01 |
| MT5 | 261 | 55 | 78 | 44.399 | 46 | 6300 | 2000 | 0.01 |
| MT6 | 362 | 68.5 | 120 | 63.348 | 63 | 10000 | 1500 | 0.01 |



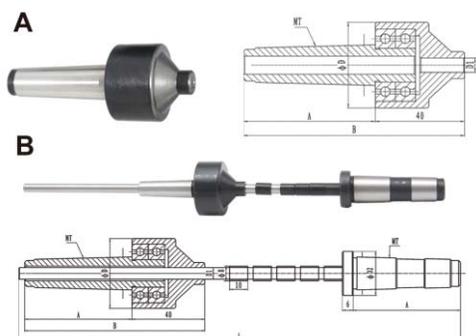
| Model | MS.NO | L | L1 | D | D1 | Wt. |
|-------|-------|-------|------|----|--------|------|
| MT3 | 3 | 170 | 30 | 52 | 23.825 | 0.93 |
| MT4 | 4 | 205.7 | 34.7 | 60 | 31.267 | 1.70 |
| MT5 | 5 | 254 | 45 | 77 | 44.399 | 3.39 |

Heavy Duty Live Centers

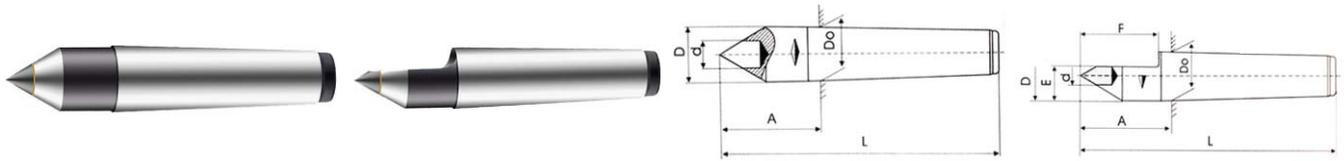


| Model | A | B | C | D | E | F |
|---------|----|----|-----|-----|-----|------|
| MT5-1T | 41 | 53 | 260 | 72 | 89 | 44.4 |
| MT5-3T | 47 | 63 | 278 | 80 | 104 | 44.4 |
| MT5-5T | 65 | 80 | 337 | 110 | 140 | 44.4 |
| MT6-3T | 57 | 70 | 373 | 104 | 120 | 63.3 |
| MT6-5T | 67 | 80 | 390 | 110 | 140 | 63.3 |
| MT6-10T | 71 | 82 | 414 | 133 | 160 | 63.3 |

Pencil Centers



| Model | A | B | D1 | D | | |
|-------|-----|----|-----|-----|----|----|
| MT1 | 40 | 84 | 4.2 | 34 | | |
| | | | 6.2 | | | |
| MT2 | 59 | 99 | 4.2 | 38 | | |
| | | | 6.2 | | | |
| Model | L | A | B | D1 | D | D2 |
| MT1 | 265 | 40 | 84 | 4.2 | 34 | 18 |
| | | | | 6.2 | | |
| MT2 | 285 | 59 | 99 | 4.2 | 38 | 24 |
| | | | | 6.2 | | |

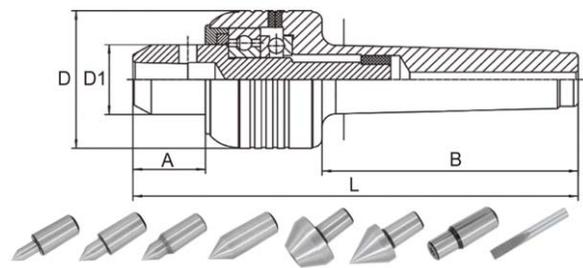


Alloy tip Non-alloy tip optional, Can be produced according to order

| Model | D | L | Wt. |
|-------|--------|-----|-------|
| MT2 | 17.780 | 100 | 0.150 |
| MT3 | 23.825 | 125 | 0.334 |
| Model | D | L | Wt. |
| MT2 | 17.780 | 100 | 0.150 |
| MT3 | 23.825 | 125 | 0.334 |

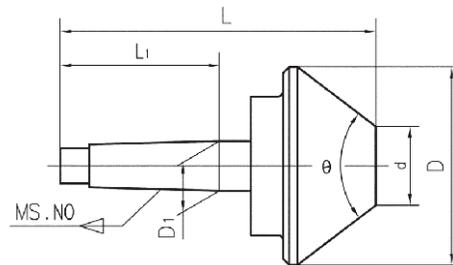
| Model | D | L | Wt. |
|-------|--------|-----|-------|
| MT4 | 31.267 | 160 | 0.746 |
| MT5 | 44.399 | 200 | 1.826 |
| Model | D | L | Wt. |
| MT4 | 31.267 | 160 | 0.746 |
| MT5 | 44.399 | 200 | 1.826 |

CNC Inter-Changable Tips Live Centers



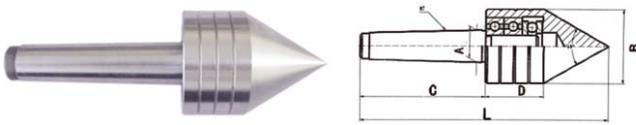
| Model | A | B | D | D1 | L | Max load | Max Speed | Accuracy |
|-------|------|-----|----|----|-----|----------|-----------|----------|
| MT2 | 27 | 65 | 46 | 24 | 140 | 100 | 3500 | 0.01 |
| MT3 | 32 | 81 | 59 | 28 | 170 | 250 | 3000 | 0.015 |
| MT4 | 34.5 | 102 | 64 | 31 | 198 | 400 | 2500 | 0.015 |
| MT5 | 44 | 130 | 78 | 44 | 245 | 700 | 2000 | 0.02 |

Bull Nose Live Centers



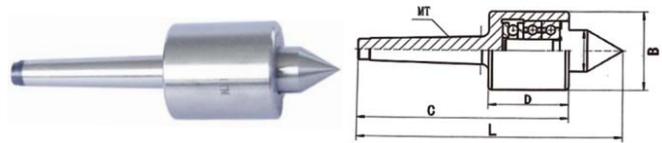
| Mode | MS.NO | L | L1 | D | D1 | d | θ |
|--------------|-------|-----|-------|-----|--------|----|-----|
| MT2×60(60°) | MS2 | 132 | 64 | 60 | 17.780 | 20 | 60° |
| MT2×60(70°) | MS2 | 132 | 64 | 60 | 17.780 | 20 | 70° |
| MT3×80(75°) | MS3 | 152 | 81 | 80 | 23.825 | 19 | 75° |
| MT3×100(60°) | MS3 | 170 | 81 | 100 | 23.825 | 30 | 60° |
| MT3×100(75°) | MS3 | 164 | 81 | 100 | 23.825 | 32 | 75° |
| MT4×160(60°) | MS4 | 232 | 102.5 | 160 | 3.267 | 40 | 60° |
| MT4×160(75°) | MS4 | 225 | 102.5 | 160 | 31.267 | 35 | 75° |
| MT5×200(75°) | MS5 | 252 | 129.5 | 200 | 44.399 | 40 | 75° |
| MT5×250(75°) | MS5 | 281 | 129.5 | 250 | 44.399 | 57 | 75° |
| MT6×200(75°) | MS6 | 320 | 182 | 200 | 63.348 | 40 | 75° |
| MT6×250(75°) | MS6 | 355 | 182 | 250 | 63.348 | 57 | 75° |

A



| Mode | L | A | B | C | D |
|------|-----|--------|----|----|----|
| MT1 | 136 | 12.065 | 42 | 69 | 32 |
| MT2 | 160 | 17788 | 46 | 86 | 34 |

B



| Model | L | A | B | C | D |
|-------|-----|--------|----|----|----|
| MT1 | 146 | 12.065 | 40 | 69 | 43 |
| MT2 | 163 | 17788 | 40 | 86 | 43 |

C



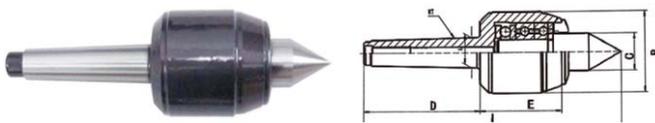
| Model | L | A | B | C | D |
|-------|-----|--------|----|-------|----|
| MT1 | 87 | 12.065 | 22 | 19.05 | 56 |
| MT2 | 100 | 17788 | 28 | 25.4 | 69 |

D



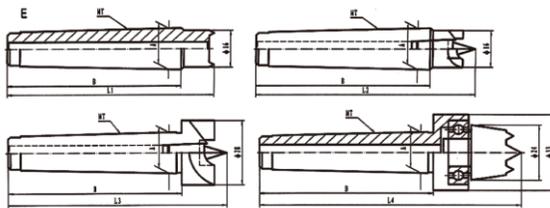
| Model | L | A | B | C | D |
|-------|-----|--------|----|----|----|
| MT1 | 152 | 12.065 | 48 | 22 | 69 |
| MT2 | 173 | 17788 | 58 | 24 | 86 |

E



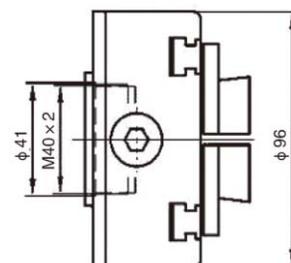
| Model | L | A | B | C | D |
|-------|-----|--------|----|-------|----|
| MT1 | 128 | 12.065 | 34 | 19.05 | 56 |
| MT2 | 141 | 17788 | 34 | 19.05 | 69 |

Live Centers Sets for Wood-working Machines

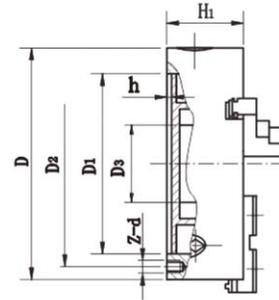
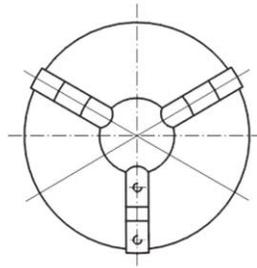


| Model | L1 | L2 | L3 | L4 | A | B |
|-------|----|----|----|-----|--------|----|
| MT1 | 69 | 74 | 74 | 91 | 12.065 | 56 |
| MT2 | 82 | 87 | 87 | 104 | 1778 | 69 |

Wood-working Scroll Chucks



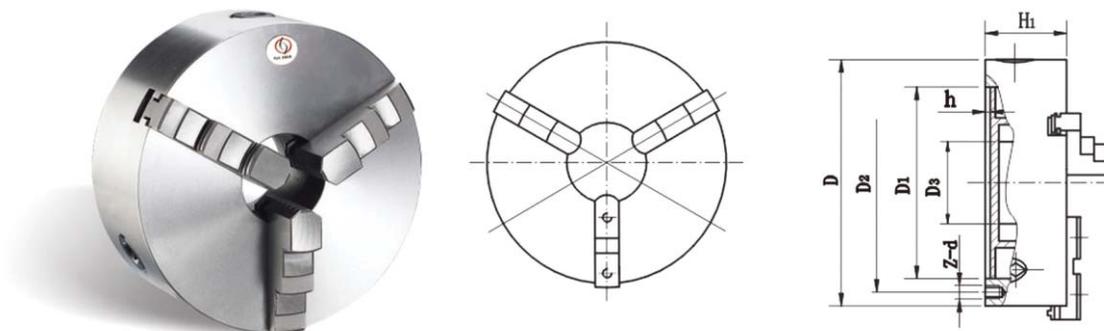
| Model | Clamping | Thread Connection | Wt. |
|-------|----------|---------------------------------|-------|
| 4" | 8-60mm | M33×3.5;M40×2;1"-1/8TPI | 2.3/3 |
| 5" | 20-100mm | M33×3.5;M40×2;1"-10TPI;1"-1/4-8 | 4.2/5 |



Features:

1. Short Cylindrical Center Mounting.
2. Steel body. Suitable for higher rotation speed.
3. The Structure type of jaws include one-piece and two-piece.

| Size(D) | D1 | D2 | D3 | H1 | h | Z-d | Max.input torque(N.m) | Max.Speed(R/min) | Net WT. |
|---------|-------|-----|-----|------|-----|-------|-----------------------|------------------|---------|
| 80 | 55 | 66 | 16 | 50 | 3.5 | 3-M6 | 40 | 4000 | 1.9 |
| 100 | 72 | 84 | 22 | 55 | 3.5 | 3-M8 | 60 | 3500 | 3.2 |
| 125 | 95/92 | 108 | 30 | 58 | 4 | 3-M8 | 100 | 3000 | 5 |
| 130 | 100 | 115 | 30 | 60 | 4 | 3-M8 | 100 | 3000 | 5.6 |
| 160 | 130 | 142 | 45 | 65 | 5 | 3-M8 | 160 | 2500 | 8.8 |
| 165 | 130 | 145 | 45 | 66.5 | 4.5 | 3-M8 | 160 | 2500 | 9.5 |
| 190 | 155 | 172 | 55 | 75 | 5 | 3-M10 | 250 | 2000 | 13.8 |
| 200 | 165 | 180 | 65 | 75 | 5 | 3-M10 | 250 | 2000 | 15.5 |
| 240 | 195 | 215 | 70 | 80 | 5 | 3-M12 | 320 | 1600 | 24 |
| 250 | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 25.7 |
| 250A | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 23.5 |
| 250C | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 23 |
| 315 | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 47 |
| 315A | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 41 |
| 315C | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 40 |
| 320 | 270 | 290 | 100 | 95 | 11 | 3-M16 | 400 | 1200 | 47.5 |
| 320C | 270 | 290 | 100 | 95 | 11 | 3-M16 | 400 | 1200 | 42 |
| 325 | 272 | 296 | 100 | 96 | 11 | 3-M16 | 400 | 1200 | 49 |
| 380A | 325 | 350 | 135 | 98 | 6 | 3-M16 | 500 | 1000 | 62 |
| 400A | 340 | 368 | 130 | 100 | 6 | 3-M16 | 500 | 1000 | 71 |
| 500A | 440 | 465 | 200 | 115 | 7 | 6-M16 | 630 | 800 | 118 |
| 630A | 560 | 595 | 260 | 130 | 8 | 6-M16 | 800 | 600 | 210 |
| 800A* | 710 | 760 | 280 | 150 | 8 | 6-M20 | 1000 | 730 | 386 |
| 1000A* | 910 | 950 | 400 | 165 | 10 | 6-M24 | 1200 | 600 | 592 |



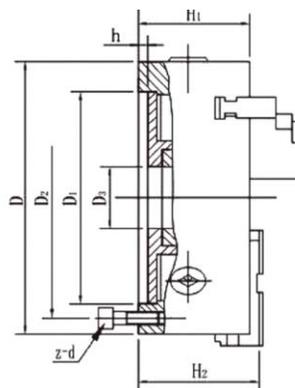
The type three/four jaw self-centering chucks are suitable for the main shaft of four Germany standard, produce according to DIN6350 or DIN55026 standard. It has front lock type as well.

DIN6350

| SPEC./MODEL | D1 | D2 | D3 | H1 | h | Z-d | Nte WT |
|-------------|-----|-----|-----|-----|---|-------|--------|
| 80 | 56 | 67 | 16 | 50 | 4 | 3-M6 | 1.5 |
| 85 | 62 | 72 | 18 | 50 | 4 | 3-M6 | 1.9 |
| 100 | 70 | 83 | 22 | 55 | 3 | 3-M8 | 2.8 |
| 110 | 80 | 95 | 27 | 55 | 3 | 3-M8 | 3.4 |
| 125 | 95 | 108 | 30 | 58 | 4 | 3-M8 | 5 |
| 140 | 105 | 120 | 40 | 58 | 4 | 3-M8 | 6 |
| 160 | 125 | 140 | 45 | 65 | 5 | 3-M10 | 10 |
| 200 | 160 | 176 | 65 | 75 | 5 | 3-M10 | 17.5 |
| 250 | 200 | 224 | 80 | 80 | 5 | 3-M12 | 29 |
| 315 | 260 | 286 | 100 | 90 | 6 | 3-M16 | 50 |
| 400 | 330 | 362 | 130 | 100 | 6 | 3-M16 | 85 |

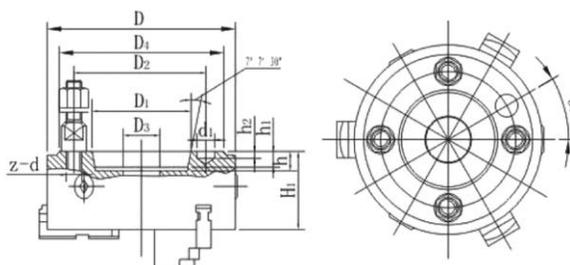
DIN55026

| SPEC./MODEL | D1 | D2 | D3 | H1 | h | Z-d | Nte WT. |
|-------------|-----|-----|-----|-----|---|-------|---------|
| 80 | 63 | 70 | 17 | 45 | 3 | 3×M5 | 1.5 |
| 100 | 80 | 90 | 23 | 52 | 3 | 3×M6 | 2.8 |
| 125 | 100 | 110 | 28 | 58 | 4 | 3×M8 | 5 |
| 160 | 130 | 143 | 48 | 62 | 4 | 3×M10 | 10 |
| 200 | 163 | 180 | 52 | 76 | 5 | 3×M10 | 17.5 |
| 250 | 210 | 226 | 78 | 82 | 5 | 3×M10 | 29 |
| 315 | 265 | 290 | 108 | 100 | 6 | 4×M12 | 50 |
| 400 | 350 | 375 | 144 | 110 | 7 | 6×M12 | 85 |
| 500 | 420 | 458 | 190 | 120 | 8 | 6×M16 | 118 |

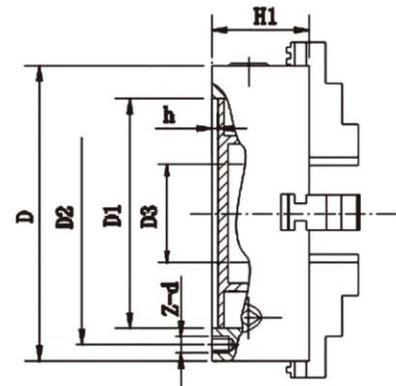
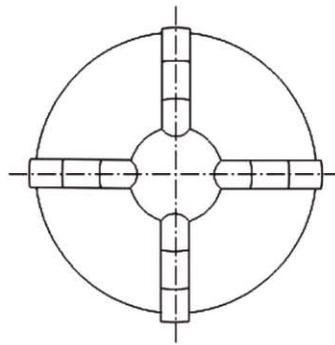


Russian Standardized 3-Jaw Self-Centering Chucks adopt short conical connection according to Standard GOST 2675. The jaws have one-piece and two-piece called A type. A type two-piece jaws are according to ISO 3442 Standard. Soft jaws can be provided according to the clients' requests. High centering accuracy can be achieved after machining.

| Model | D1 | D2 | D3 | H | H1 | H2 | h | Z-d |
|-------------|-----|-----|-----|-------|-----|----|-----|-------|
| 7100-0001TT | 55 | 66 | 16 | 66 | 50 | - | 3.5 | 3-M6 |
| 7100-0002TT | 72 | 86 | 22 | 74.5 | 55 | - | 3.5 | 3-M8 |
| 7100-0003TT | 95 | 108 | 30 | 85 | 58 | - | 4 | 3-M8 |
| 7100-0005TT | 130 | 142 | 40 | 95 | 65 | - | 5 | 3-M8 |
| 7100-0007TT | 165 | 180 | 65 | 109 | 75 | - | 5 | 3-M10 |
| 7100-0009TT | 210 | 226 | 80 | 120 | 80 | - | 5 | 3-M12 |
| 7100-0011TT | 270 | 290 | 100 | 142.5 | 90 | - | 6 | 3-M12 |
| 7100-0015TT | 340 | 368 | 130 | 155.5 | 100 | - | 6 | 3-M16 |
| 7100-0017TT | 440 | 465 | 200 | 176 | 115 | - | 6 | 3-M16 |

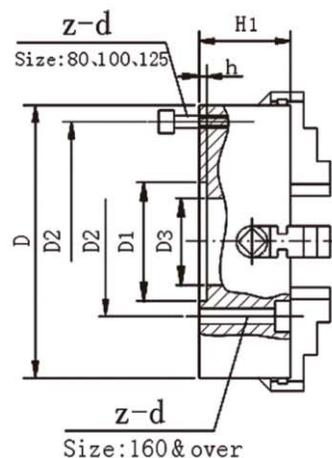
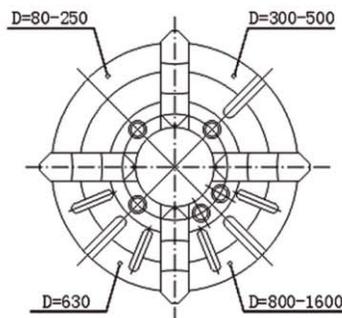


| Model | D | D1 | D2 | D3 | D4 | H1 | h | h1 | h2 | d1 | Z-d |
|-------------|-----|---------|-------|-----|-----|-----|----|----|-----|------|-------|
| 7100-0033TT | 200 | 106.375 | 133.4 | 60 | 170 | 88 | 16 | 13 | 6.5 | 195 | 4-M12 |
| 7100-0035TT | 250 | 106.375 | 133.4 | 70 | 170 | 95 | 16 | 13 | 6.5 | 195 | 4-M12 |
| 7100-0037TT | 250 | 139.719 | 171.4 | 80 | 220 | 95 | 18 | 14 | 8 | 24.2 | 4-M16 |
| 7100-0039TT | 315 | 106.375 | 133.4 | 100 | 170 | 112 | 16 | 13 | 6.5 | 195 | 4-M12 |
| 7100-0041TT | 315 | 139.719 | 171.4 | 100 | 220 | 112 | 18 | 14 | 8 | 24.2 | 4-M16 |
| 7100-0043TT | 400 | 139.719 | 171.4 | 130 | 220 | 122 | 18 | 14 | 8 | 24.2 | 4-M16 |
| 7100-0045TT | 400 | 196.869 | 235 | 130 | 290 | 122 | 20 | 16 | 10 | 294 | 6-M20 |



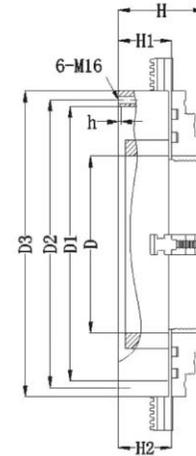
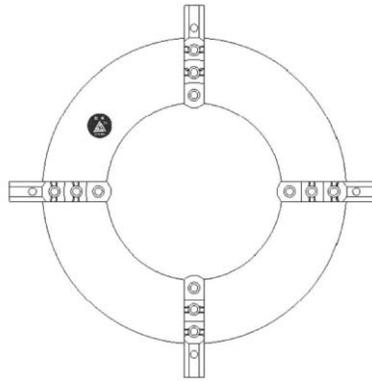
Mode K12 chucks are suitable for using in processing a large quantity of the square workpieces and The eight-edged work-pieces.They are remarkable for their automatic centring and quick clamping.The structure parameters of these chucks are the same as those of K11 series three-jaw self-centring chucks.

| Size(D) | D1 | D2 | D3 | H1 | h | Z-d | Max.input torque (N.m) | Max.Speed (R/min) | Net WT. |
|---------|-----|-----|-----|------|-----|-------|------------------------|-------------------|---------|
| 80 | 55 | 66 | 16 | 50 | 3.5 | 4-M6 | 40 | 4000 | 1.9 |
| 100 | 72 | 84 | 22 | 55 | 3.5 | 4-M8 | 60 | 3500 | 3.2 |
| 125 | 95 | 108 | 30 | 58 | 4 | 4-M8 | 100 | 3000 | 5 |
| 130 | 100 | 115 | 30 | 60 | 4 | 4-M8 | 100 | 3000 | 5.6 |
| 160 | 130 | 142 | 45 | 65 | 5 | 3-M8 | 160 | 2500 | 8.8 |
| 165 | 130 | 145 | 45 | 66.5 | 4.5 | 3-M8 | 160 | 2500 | 9.5 |
| 190 | 155 | 172 | 55 | 75 | 5 | 3-M10 | 250 | 2000 | 13.8 |
| 200 | 165 | 180 | 65 | 75 | 5 | 3-M10 | 250 | 2000 | 15.5 |
| 240 | 195 | 215 | 70 | 80 | 5 | 3-M12 | 320 | 1600 | 24 |
| 250 | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 25.7 |
| 250A | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 23.5 |
| 250C | 206 | 226 | 80 | 80 | 5 | 3-M12 | 320 | 1600 | 23 |
| 315 | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 47 |
| 315A | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 41 |
| 315C | 260 | 285 | 100 | 90 | 6 | 3-M16 | 400 | 1200 | 40 |
| 320 | 270 | 290 | 100 | 95 | 11 | 3-M16 | 400 | 1200 | 47.5 |
| 320C | 270 | 290 | 100 | 95 | 11 | 3-M16 | 400 | 1200 | 42 |
| 325 | 272 | 296 | 100 | 96 | 11 | 3-M16 | 400 | 1200 | 49 |
| 380A | 325 | 350 | 135 | 98 | 6 | 3-M16 | 500 | 1000 | 62 |
| 400A | 340 | 368 | 130 | 100 | 6 | 3-M16 | 500 | 1000 | 71 |
| 500A | 440 | 465 | 200 | 115 | 7 | 6-M16 | 630 | 800 | 118 |
| 630A | 560 | 595 | 260 | 130 | 8 | 6-M16 | 800 | 600 | 210 |
| 800A* | 710 | 760 | 280 | 155 | 8 | 6-M20 | 1000 | 730 | 390 |
| 1000A* | 910 | 950 | 400 | 165 | 10 | 6-M24 | 1200 | 600 | 596 |



Chucks adopt short cylindrical center mounting. They are Independent and adjustable and for machining all kinds of special-shaped workpieces.

| Size(D) | D1 | D2 | D3 | H1 | h | Z-d | Max.input torque (N.m) | Max.Speed (R/min) | Net WT. |
|---------|-------|--------|-------|-----|-----|-------|------------------------|-------------------|---------|
| 50 | 15 | 38 | M14x1 | 39 | 5 | 4-M4 | 10 | 6000 | 0.55 |
| 80 | 55 | 66 | 22 | 42 | 3.5 | 4-M6 | 25 | 4000 | 1.5 |
| 100 | 72 | 84 | 25 | 74 | 3.5 | 4-M8 | 30 | 3500 | 3 |
| 125 | 95/92 | 108 | 30 | 56 | 4.5 | 4-M8 | 50 | 3000 | 5 |
| 160 | 65 | 95 | 45 | 65 | 5 | 4-M10 | 70 | 2500 | 9 |
| 200 | 80/75 | 112/95 | 56 | 75 | 6 | 4-M10 | 100 | 2000 | 15 |
| 250 | 110 | 130 | 75 | 80 | 6 | 4-M12 | 150 | 1600 | 23 |
| 300 | 152 | 130 | 75 | 90 | 6 | 4-M12 | 180 | 1200 | 39 |
| 320 | 140 | 165 | 95 | 90 | 6 | 4-M16 | 200 | 1200 | 40 |
| 350 | 130 | 168 | 95 | 90 | 6 | 4-M16 | 250 | 1200 | 53 |
| 400 | 160 | 185 | 125 | 95 | 8 | 4-M16 | 280 | 1000 | 55 |
| 450 | 180 | 205 | 140 | 100 | 8 | 4-M16 | 300 | 900 | 71 |
| 500 | 200 | 236 | 160 | 106 | 8 | 4-M20 | 350 | 800 | 102 |
| 630 | 220 | 258 | 180 | 115 | 10 | 4-M20 | 400 | 600 | 159 |
| 800 | 250 | 300 | 240 | 135 | 12 | 8-M20 | 500 | 500 | 255 |
| 1000 | 285 | 330.2 | 280 | 152 | 23 | 8-M24 | 600 | 400 | 430 |
| 1250 | 285 | 330.2 | 280 | 156 | 23 | 8-M24 | - | - | 735 |
| 1400 | 285 | 330.2 | 280 | 156 | 23 | 8-M24 | - | - | 860 |
| 1600 | 285 | 330.2 | 280 | 168 | 23 | 8-M24 | - | - | 1250 |



| D | D1 | D2 | D3 | H | H1 | H2 | h | z-d | |
|------|------|------|------|-----|-----|-----|---|-------|----------|
| 300 | 528 | 560 | 590 | 200 | 115 | 121 | 6 | 6-M16 | 50-300 |
| 400 | 628 | 660 | 690 | 200 | 115 | 121 | 6 | 6-M16 | 50-400 |
| 600 | 828 | 860 | 890 | 200 | 115 | 121 | 6 | 6-M16 | 250-600 |
| 800 | 1028 | 1060 | 1090 | 200 | 115 | 121 | 6 | 6-M16 | 450-800 |
| 1000 | 1228 | 1365 | 1400 | 200 | 115 | 121 | 6 | 6-M16 | 650-1000 |
| 1200 | 1428 | 1565 | 1600 | 200 | 115 | 121 | 6 | 6-M16 | 850-1200 |

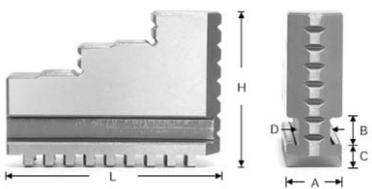
Chuck Jaws

Hydraulic Chuck Jaws

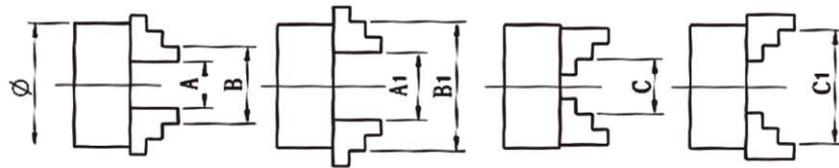


| Model | L | W | H | D | Center distance of screw hole | Tooth pitch | Universal chuck |
|----------------|-----|----|----|----|-------------------------------|-------------|-----------------|
| 4 inch | 495 | 23 | 23 | 10 | 14 | 1.5*60° | 4 (110) |
| 5 inch | 54 | 25 | 30 | 10 | 14 | 1.5*60° | 5 (135) |
| 6 inch | 73 | 31 | 36 | 12 | 20 | 1.5*60° | 6 (169) |
| 8 inch | 95 | 35 | 37 | 14 | 25 | 1.5*60° | 8 (210) |
| 10 inch | 110 | 40 | 42 | 16 | 30 | 1.5*60° | 10 (254) |
| 12 inch hollow | 130 | 50 | 50 | 21 | 30 | 1.5*60° | 12 (304) |
| 12 inch solid | 130 | 50 | 50 | 18 | 30 | 1.5*60° | 12 (304) |
| 15 inch hollow | 165 | 62 | 62 | 22 | 43 | 1.5*60° | 15 (381) |

Three-jaw Chuck Jaws

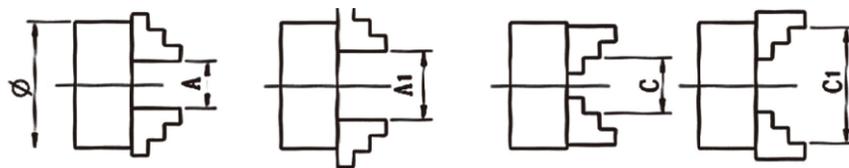


| Model | A | B | C | D | H | L | Mention |
|---------|------|----|-----|------|----|------|---------|
| 80 | 12 | 7 | 5.5 | 5.2 | 33 | 32 | 5 |
| 100 | 15 | 8 | 6.4 | 6.6 | 38 | 42 | 6 |
| 125/130 | 16 | 8 | 6.9 | 7.5 | 45 | 57.3 | 7 |
| 160 | 18.5 | 10 | 9 | 8.4 | 54 | 70 | 7 |
| 200 | 22 | 10 | 10 | 12.3 | 6 | 85 | 9 |
| 250 | 27 | 10 | 12 | 16 | 69 | 105 | 9 |
| 320 | 36 | 13 | 14 | 22 | 88 | 125 | 10 |
| 400 | 36 | 13 | 14 | 23 | 88 | 125 | 11 |

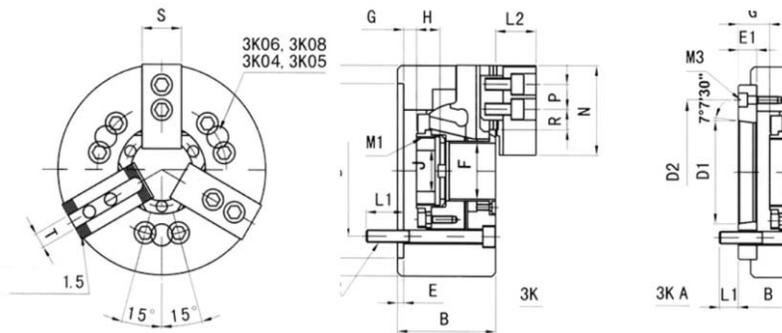


| Size | Internal Jaw | | External Jaw |
|------|----------------|---------------|----------------|
| | Clamping Range | Jamming Range | Clamping Range |
| | A-A1 | B-B1 | C-C1 |
| 80 | 2-22 | 25-70 | 22-63 |
| 100 | 2-30 | 30-90 | 30-80 |
| 125 | 2.5-40 | 38-125 | 38-110 |
| 160 | 3-55 | 50-160 | 55-145 |
| 200 | 4-85 | 65-200 | 65-200 |
| 250 | 6-110 | 80-250 | 90-250 |
| 315 | 10-140 | 95-315 | 100-315 |
| 400 | 15-210 | 120-400 | 120-400 |
| 500 | 25-280 | 150-500 | 150-500 |
| 630 | 50-350 | 170-630 | 170-630 |
| 800 | 150-450 | 300-800 | 300-800 |
| 1000 | 290-600 | 430-1000 | 430-1000 |

Independent Chuck Clamping Range



| Size | Internal Jaw | External Jaw |
|------|----------------|----------------|
| | Clamping Range | Clamping Range |
| | A-A1 | C-C1 |
| 80 | 5-35 | 35-80 |
| 100 | 6-45 | 40-100 |
| 125 | 7-57 | 48-125 |
| 160 | 8-80 | 50-160 |
| 200 | 10-100 | 63-200 |
| 250 | 15-130 | 80-250 |
| 315 | 20-170 | 100-315 |
| 400 | 25-250 | 118-400 |
| 500 | 35-300 | 120-500 |
| 630 | 50-400 | 160-630 |
| 800 | 70-540 | 200-800 |
| 1000 | 100-680 | 250-1000 |
| 1250 | 120-930 | 280-1250 |



Hollow design can be used for long workpiece processing. It boasts sound accuracy for positioning repetition, sound clamp force and suitability for automatic production.

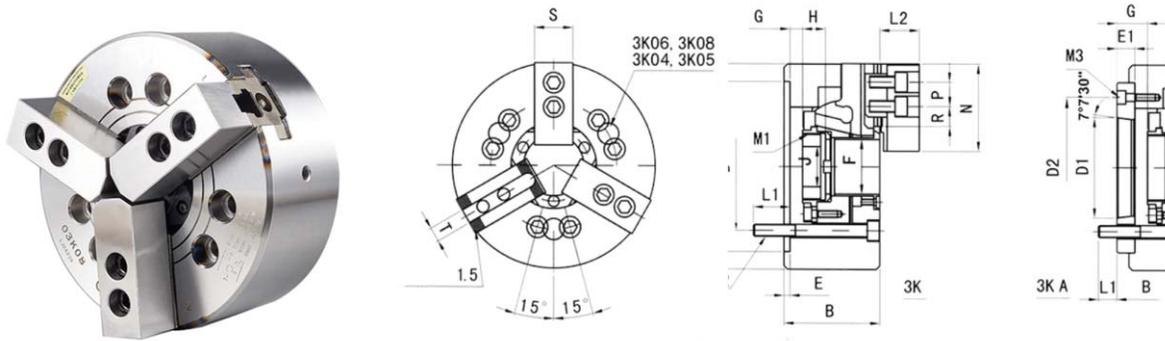
Performance Parameters

| Specification | | A | B | | C(H6) | D | D1 | D2 | E | E1 | F | G | | | | H | J |
|---------------|----|-----|-----|-----|-------|-------|--------|-------|---|----|----|------|------|-------|------|------|----|
| | | | | | | | | | | | | max | min | | | | |
| 3K-04 | | 110 | 59 | | 85 | 70.6 | | | 4 | | 26 | 3.5 | -6.5 | | 175 | 12 | |
| 3K-05 | A4 | 135 | 60 | 71 | 110 | 82.6 | 63.51 | 96 | 4 | 15 | 33 | 1 | 16 | -9 | 6 | 20 | |
| 3K-06 | A5 | 169 | 81 | 91 | 140 | 104.8 | 82.56 | 116 | | 23 | 45 | 11 | 26 | -1 | 14 | 19 | 20 |
| 3K-08 | A5 | 210 | 91 | 109 | 170 | 133.4 | 106.38 | 140.8 | 5 | 17 | 52 | 14.5 | 37.5 | -1.5 | 21.5 | 20.5 | 30 |
| | A6 | | | 103 | | | | 150 | | | | | 31.5 | | 15.5 | | |
| 3K-10 | A6 | 254 | 100 | 120 | 220 | 171.4 | 139.72 | 133.4 | 5 | 18 | 75 | 8.5 | 33.5 | -10.5 | 14.5 | 25 | 45 |
| | A8 | | | 113 | | | | 190 | | | | | 26.5 | | 7.5 | | |
| 3K-12 | A8 | 304 | 120 | 137 | 220 | 171.4 | 139.72 | 190 | 5 | 22 | 92 | 23 | 45 | 0 | 22 | 32 | |

| specification | | L1 | | L2 | M1 | M2 | M3 | N | P | R | | S | T |
|---------------|----|----|----|----|---------|-------|-------|----|----|------|------|----|----|
| | | | | | | | | | | max | min | | |
| 3K-04 | | 16 | | 24 | M32*1.5 | 3-M10 | | 52 | 14 | 11.3 | 6.8 | 25 | 10 |
| 3K-05 | A4 | 15 | 15 | 31 | M40*1.5 | | | 62 | | 19.8 | 7.8 | | |
| 3K-06 | A5 | 16 | 16 | 37 | M55*2 | 3-M10 | 3-M6 | 73 | 20 | 22.8 | 9.3 | 31 | 12 |
| 3K-08 | A5 | 20 | 17 | 38 | M60*2 | 3-M12 | 6-M10 | 95 | 25 | 29.8 | 14.8 | 35 | 14 |
| | A6 | | 18 | | | | 3-M6 | | | | | | |
| 3K-10 | A6 | 22 | 24 | 43 | M85*2 | 6-M16 | 6-M12 | 30 | 30 | 33.8 | 14.3 | 40 | 16 |
| | A8 | | | | | | 3-M8 | | | | | | |
| 3K-12 | A8 | 38 | 30 | 52 | M100*2 | 6-M16 | 6-M10 | | 30 | 21.2 | 15.9 | 50 | 18 |

Performance Parameters

| Specification | mm Wedge core travel | mm Jaw stroke t (Diameter) | KN(kgf) Permitted push-pull force | KN(kgf) Max.gripping force KN(kgf) | r/min Limited rotating speed (r/min) | mm Clamping range | Inertia Kg.m ² | k g Net weight | Recommended oil cylinde | MPa(kgf) Max.application pressure |
|---------------|----------------------|----------------------------|-----------------------------------|------------------------------------|--------------------------------------|-------------------|---------------------------|----------------|-------------------------|-----------------------------------|
| 3K-04 | 10 | 5.4 | 13.7(1400) | 28.4(2900) | 8000 | 1-110 | 0.01 | 4 | KY-428 | 2.3(23) |
| 3K-05 | | | A4 | 17(1750) | 35.8(3650) | 7000 | 12-135 | 0.02 | 6.7 75 | KY-536 |
| 3K-06 | A5 | 5.5 | 21.5(2200) | 56.8(5800) | 6000 | 15-168 | 0.06 | 11.9 13.7 | KY-646 | 2.8(28) |
| 3K-08 | 16 | 7.4 | 34.3(3500) | 85.8(8750) | 5000 | 13-210 | 0.18 | 22.5 | TK-852 | 2.8(28) |
| | | | | | | | | | | |
| 3K-10 | 17 | 8.8 | 42.6(4380) | 110.7(11300) | 4200 | 31-254 | 0.33 | 34.5 | KY-1075 | 2.7(27) |
| | | | | | | | | | | |
| 3K-12 | A8 | 10.6 | 54(5510) | 140.4(14326) | 3200 | 35-304 | 0.42 | 58.5 | P2091 | 2.6(27) |



It boasts sound accuracy for positioning repetition, sound clamp force and suitability for automatic production.

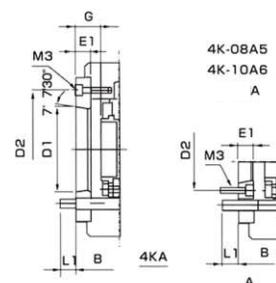
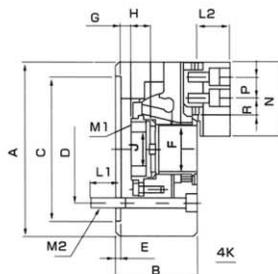
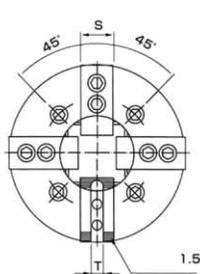
Performance Parameters

| Specification | A | B | C (H6) | D | D1 | D2 | E | E1 | F | G | | H | J | | |
|---------------|-----|-----|--------|-----|-----|-------|--------|-------|----|-------|------|------|------|----|----|
| | | | | | | | | | | max | min | | | | |
| 3S-04 | 110 | 52 | 60 | 80 | — | — | 6 | — | — | 18 | 3 | 25 | 26 | | |
| 3S-15 | 135 | 55 | 80 | 100 | — | — | 7 | — | — | 9 | -6 | 35 | 28 | | |
| 3S-16 | A5 | 165 | 74 | 84 | 140 | 104.8 | 5 | 15 | 21 | 101.5 | 86.5 | 81.5 | 66.6 | 36 | 34 |
| 3S-08 | A5 | 210 | 85 | 103 | 170 | 133.4 | | 23 | 25 | 127 | 104 | 106 | 83 | | 38 |
| | A6 | | | 97 | | | | 150 | | | 110 | | 89 | | |
| 3S-10 | A6 | 254 | 89 | 109 | 220 | 171.4 | 106.38 | 133.4 | 34 | 158 | 133 | 108 | 45 | | |
| | A8 | | | 102 | | | 139.72 | 190 | | 18 | 140 | 115 | | | |
| 3S-12 | A6 | 304 | 106 | 125 | 220 | 171.4 | 106.38 | 133.4 | 34 | 163 | 138 | 133 | 108 | 36 | 50 |
| | A8 | | | 118 | | | 139.72 | 190 | | | 18 | | 145 | | |

| Specification | L1 | L2 | M1 | M2 | M3 | N | P | R | | S | T | | |
|---------------|----|----|----------|------|---------|-------|-------|------|-----|------|------|----|-------|
| | | | | | | | | max | min | | | | |
| 3S-04 | 12 | F | M10*1.5 | 3-M8 | | 52 | 14 | 11.3 | 8.3 | 25 | 10 | | |
| 3S-15 | 14 | 32 | M12*1.75 | | | 62 | | 13.5 | 6 | | | | |
| 3S-16 | A5 | 14 | 14 | 39 | M16*2 | 3-M10 | 3-M6 | 73 | 20 | 18 | 75 | 1 | 12 |
| 3S-08 | A5 | 20 | 17 | 41 | M20*2.5 | 3-M12 | 6-M10 | 95 | 25 | 22.3 | 11.8 | 35 | 14 |
| | A6 | | 18 | | | | 3-M6 | | | | | | |
| 3S-10 | A6 | 18 | 25 | 46 | M20*2.5 | 6-M16 | 6-M12 | 110 | 30 | 30.8 | 11.3 | 40 | 16 |
| | A8 | | | | | | 3-M8 | | | | | | |
| 3S-12 | A6 | 18 | 18 | 51 | M20*2.5 | 6-M16 | 6-M12 | 130 | 30 | 48.8 | 12.3 | 50 | 18/21 |
| | A8 | | 25 | | | | 3-M8 | | | | | | |

Performance Parameters

| Specification | mm Wedge core travel | mm Jaw stroke t (Diameter) | KN(kgf) Permitted push-pull force | KN(kgf) Max.gripping force KN(kgf) | r/min Limited rotating speed(/min) | mm Clamping range | Inertia Kg.m ² | kg Net weight | Recommended oil cylinde | MPa(kgf) Max.application pressure | |
|---------------|----------------------|----------------------------|-----------------------------------|------------------------------------|------------------------------------|-------------------|---------------------------|---------------|-------------------------|-----------------------------------|---------|
| 3S-04 | 15 | 6.4 | 8.1(830) | 22.5(2300) | 6000 | 5-110 | 0.01 | 4.1 | SY-80 | 2.2(22) | |
| 3S-15 | | | | 25(2550) | 5500 | 14-135 | 0.02 | 6.2 | SY-80/SQ-130 | | |
| 3S-16 | A5 | 20 | 8.5 | 179(1830) | 52.4(5350) | 5250 | 0.05 | 13 | 14 | SY-100 | 3.0(30) |
| 3S-08 | A5 | 21 | 8.8 | 25(2550) | 74.5(7600) | 4750 | 0.14 | 24 | 28 | SY-125 | 2.6(26) |
| | A6 | | | | | | | | 27 | | |
| 3S-10 | A6 | 25 | 8.8 | 28.9(2950) | 107.8(11000) | 4000 | 0.30 | 35 | 42 | SY-125 SQ-170B | 3.0(30) |
| | A8 | | | | | | | | 40 | | |
| 3S-12 | A6 | 30 | 10.5 | 41(4180) | 155.8(15900) | 3360 | 0.73 | 59 | 65 | SY-150 | 3.0(30) |
| | A8 | | | | | | | | 63 | | |



The Product, solid and durable, can operate smoothly at high speed. It boasts sound accuracy for positioning repetition, sound clamp force and suitability for automatic production. It is especially suitable for clamping atypical work pieces. The through-hole type is designed to process long work pieces.

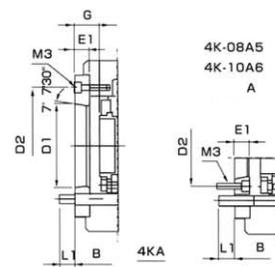
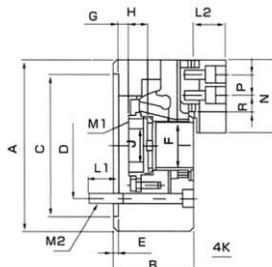
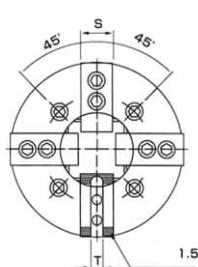
Performance Parameters

| Specification | A | B | | C (H6) | D | D1 | D2 | E | E1 | F | G | | H | J | | |
|---------------|----|-----|-----|--------|-----|-------|-------|----|-------|------|------|-------|------|------|------|------|
| | | | | | | | | | | | max | min | | | | |
| 4K-06 | A5 | 169 | 81 | 91 | 140 | 104.8 | 116 | 5 | 15 | 45 | 11 | 26 | -1 | 14 | 19 | 20 |
| 4K-08 | A5 | 210 | 91 | 109 | 170 | 133.4 | | | 104.8 | 23 | 52 | 14.5 | 37.5 | -1.5 | 21.5 | 20.5 |
| | A6 | | | 103 | | | 150 | 17 | 31.5 | 15.5 | | | | | | |
| 4K-10 | A6 | 254 | 100 | 120 | 220 | 171.4 | 133.4 | 25 | 75 | 8.5 | 33.5 | -10.5 | 14.5 | 25 | 45 | |
| | A8 | | | 113 | | | 190 | 18 | | | 26.5 | | 7.5 | | | |

| Specification | L1 | L2 | M1 | M2 | M3 | N | P | R | | S | T | | |
|---------------|----|----|----|----|-------|-------|-------|-----|-----|------|------|----|----|
| | | | | | | | | max | min | | | | |
| 4K-06 | A5 | 16 | 16 | 37 | M55*2 | 6-M10 | 3-M6 | 73 | 20 | 22.8 | 9.3 | 31 | 12 |
| 4K-08 | A5 | 20 | 17 | 38 | M80*2 | 4-M12 | 6-M10 | 95 | 25 | 29.8 | 14.8 | 35 | 14 |
| | A6 | | 18 | | | | 3-M6 | | | | | | |
| 4K-10 | A6 | 22 | 18 | 43 | M82*2 | 4-M16 | 6-M12 | 110 | 30 | 33.8 | 14.3 | 40 | 16 |
| | A8 | | 24 | | | | 3-M8 | | | | | | |

Performance Parameters

| Specification | mm Wedge core travel | mm Jaw stroke t (Diameter) | KN(kgf) Permitted push-pull force | KN(kgf) Max.gripping force KN(kgf) | r/min Limited rotating speed (c/min) | mm Clamping range | Inertia Kg.m ² | kg Net weight | | Recommended oil cylinde | MPa(kgf) Max. application pressure | |
|---------------|----------------------|----------------------------|-----------------------------------|------------------------------------|--------------------------------------|-------------------|---------------------------|---------------|------|-------------------------|------------------------------------|---------|
| | | | | | | | | | | | | |
| 4K-06 | A5 | 12 | 5.5 | 21.5(2200) | 56.8(5800) | 6000 | 15-168 | 0.06 | 11.9 | 13.7 | KY-646 | 2.8(28) |
| 4K-08 | A5 | 16 | 7.4 | 34.3(3500) | 85.8(8750) | 5000 | 13-210 | 0.18 | 0.18 | 25.4 | TK-852 | 2.8(28) |
| | A6 | | | | | | | | | 23.6 | | |
| 4K-10 | A6 | 19 | 8.8 | 42.6(4380) | 110.7(11300) | 4200 | 31-254 | 0.33 | 0.33 | 41.5 | KY-1075 | 2.7(27) |
| | A8 | | | | | | | | | 40 | | |



The Product, solid and durable, can operate smoothly at high speed. It boasts sound accuracy for positioning repetition, sound clamp force and suitability for automatic production. It is especially suitable for clamping atypical work pieces.

Performance Parameters

| Specification | A | B | C (H6) | D | D1 | D2 | E | E1 | F | G | | | | H | J | |
|---------------|----|-----|--------|--------|-----|-------|-----|----|-----|-------|------|------|------|----|----|----|
| | | | | | | | | | | max | | min | | | | |
| 4S-06 | A5 | 169 | 74 | 84 | 140 | 104.8 | 5 | 15 | 21 | 101.5 | 86.5 | 81.5 | 66.6 | 36 | 34 | |
| 4S-08 | A5 | 210 | 85 | 103 | 170 | 133.4 | | 23 | 25 | 127 | 104 | 110 | 106 | | 83 | 38 |
| | A6 | | 97 | 106.38 | | 150 | | 89 | | | | | | | | |
| 4S-10 | A6 | 254 | 89 | 109 | 220 | 171.4 | 25 | 34 | 158 | 133 | 140 | 133 | 108 | 45 | | |
| | A8 | | 102 | 139.72 | | 190 | 115 | | | | | | | | | |

| Specification | L1 | L2 | M1 | M2 | M3 | N | P | R | | S | T | | |
|---------------|----|----|----|----|---------|-------|-------|-----|-----|------|------|----|----|
| | | | | | | | | max | min | | | | |
| 4S-06 | A5 | 14 | 16 | 39 | M16*2 | 4-M10 | 3-M6 | 73 | 20 | 18 | 75 | 31 | 12 |
| 4S-08 | A5 | 20 | 17 | 41 | M20*2.5 | 4-M12 | 6-M10 | 95 | 25 | 22.3 | 11.8 | 35 | 14 |
| | A6 | | 18 | | | | 3-M6 | | | | | | |
| 4S-10 | A6 | 18 | 18 | 46 | | 4-M16 | 6-M12 | 110 | 30 | 30.8 | 11.3 | 40 | 16 |
| | A8 | | | | 24 | | 3-M8 | | | | | | |

Performance Parameters

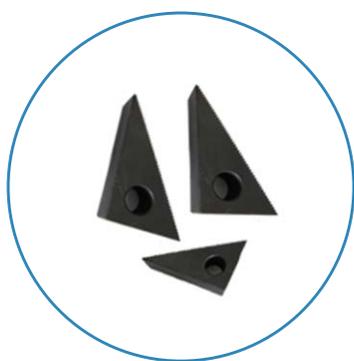
| Specification | mm Wedge core trave | mm Jaw stroke t (Diameter) | KN(kgt) Permitted push-pull force | KN(kgt) Max.gripping force KN(kgf) | r/min Limited rotating speed(c/min) | mm Clamping range | Inertia Kg.m ² | kg Net weight | | Recommended oil cylinde | MPa(kgt) Max. application pressure | |
|---------------|---------------------|----------------------------|-----------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------------|---------------|----|-------------------------|------------------------------------|---------|
| | | | | | | | | | | | | |
| 4S-06 | A5 | 20 | 92 | 179(1830) | 52.4(5350) | 5250 | 14-165 | 0.05 | 13 | 14 | SY-100 | 3.0(30) |
| 4S-08 | A5 | 21 | 97 | 25(2550) | 74.5(7600) | 4750 | 17-210 | 0.14 | 24 | 28 | SY-125 | 2.6(26) |
| | A6 | | | | | | | | | 27 | | |
| 4S-10 | A6 | 25 | 8.8 | 28.9(2950) | 1078(11000) | 4000 | 22-254 | 0.3 | 35 | 42 | SQ-170B | 3.0(30) |
| | A8 | | | | | | | | | 40 | | 0.6(6) |



Type A



Type B



Step Blocks 12Pcs



Step Clamps 6Pcs



T-Nuts 6Pcs



Flange Nuts 6Pcs



Studs 24Pcs



Coupling Nuts 4Pcs

Material: S45C;

Hardness: HRC20±;

Heat treated steel black oxide finish.

The set contains 58Pcs;



M18-M24

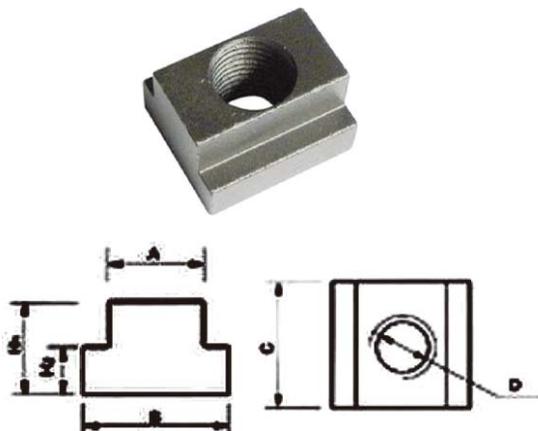
| Model | Taiwan Code | Table Slot | Stud Sizes | G.W. | GB |
|-------|-------------|------------|------------|------|--------|
| M8 | CK-08 | 10 | 8-1.25P | 7 | |
| M10 | CK-10 | 12 | 10-1.25P | 9 | 3/8-16 |
| M12 | CK-12 | 14 | 12-1.75P | 10 | 1/2-12 |
| M14 | CK-14 | 16 | 14-2.0P | 11 | |
| M16 | CK-16 | 18 | 16-2.0P | 13 | 5/8-11 |
| M18 | CK-18 | 20 | 18-2.5P | 25 | |
| M20 | CK-20 | 22 | 20-2.5P | 26 | 3/4-10 |
| M24 | CK-24 | 28 | 24-3.0P | 38 | |

Mounting Kits For Wood-working Machines



| Metric | Taiwan Code | Table Slot | Stud Size | Wt. |
|--------|-------------|------------|-----------|------|
| M8 | CK-08 | 10 | 8-1.25P | 6.1 |
| M10 | CK-10 | 12 | 10-1.25P | 7.09 |
| M12 | CK-12 | 14 | 12-1.25P | 8.6 |

T-Nuts



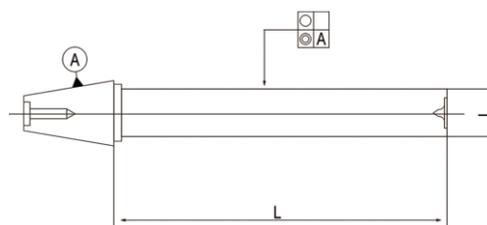
| D | A | B | C | H1 | H2 |
|-----|----|----|----|----|------|
| M8 | 10 | 15 | 15 | 12 | 6 |
| M10 | 12 | 18 | 20 | 14 | 7 |
| M12 | 14 | 22 | 25 | 16 | 8 |
| M14 | 16 | 25 | 25 | 16 | 10 |
| M16 | 18 | 29 | 30 | 19 | 10.5 |
| M18 | 20 | 34 | 34 | 28 | 14 |
| M20 | 22 | 34 | 34 | 28 | 14 |
| M22 | 24 | 40 | 40 | 28 | 15 |
| M24 | 28 | 44 | 44 | 36 | 18 |



BT



HSK



| Model | D | L | Cylindricity | Concentricity |
|--------------|----|-----|--------------|---------------|
| BT30-D32-250 | 32 | 250 | 0.002 | 0.003 |
| BT40-D40-300 | 40 | 300 | 0.002 | 0.003 |
| BT50-D40-300 | 40 | 300 | 0.002 | 0.003 |
| BT50-D40-350 | 40 | 350 | 0.002 | 0.003 |

| Model | D | L | Cylindricity | Concentricity |
|-------------------|----|-----|--------------|---------------|
| HSK32A/E-D25-200 | 25 | 200 | 0.002 | 0.003 |
| HSK40A/E-D30-200 | 30 | 200 | 0.002 | 0.003 |
| HSK50A/E-D30-250 | 30 | 250 | 0.002 | 0.003 |
| HSK63A/E-D40-300 | 40 | 300 | 0.002 | 0.003 |
| HSK100A/E-D50-300 | 50 | 300 | 0.002 | 0.003 |

Tool Holder Devices

BT Series Harden Locking Devices



| Model | Applicable holders |
|---------|--------------------|
| ZZ-BT30 | MAS403-BT30 |
| ZZ-BT40 | MAS403-BT40 |
| ZZ-BT50 | MAS403-BT50 |

Locking Devices With Bearings



| Model | Applicable holders |
|-----------|--------------------|
| BD-HSK32 | HSK32A/32E |
| BD-HSK40 | HSK40A/40E |
| BD-HSK50 | HSK50A/50E |
| BD-HSK63 | HSK63A/F |
| BD-HSK100 | HSK100 |

BT Series Aluminum Harden Locking Devices



| Model | Applicable holders |
|-------|--------------------|
| BT30 | MAS403-BT30 |
| BT40 | MAS403-BT40 |

Tool Holder Tightening Fixture

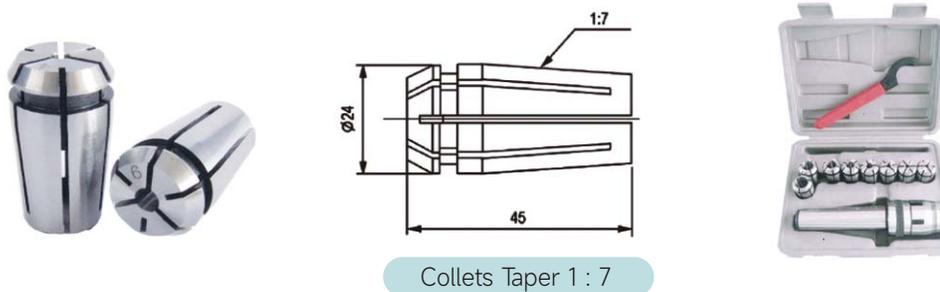


| Applicable holders |
|--------------------|
| MAS403-BT30 |
| MAS403-BT40 |
| MAS403-BT50 |



| Grain type | Wheel(mm) | Size(mm) |
|----------------|------------|---|
| Straight grain | 19 | 0.5-0.6-0.8-1.0-1.2-1.6-2.0mm |
| | 28 | 0.3-0.4-0.5-0.6-0.8-1.0-1.2-1.5-1.6-1.8-2.0-2.2-2.5-3.0mm |
| Net grain | 19 | 0.5-0.6-0.8-1.0-1.2-1.6-2.0mm |
| | 26 | 0.3-0.4-0.5-0.6-0.8-1.0-1.2-1.5-1.6-1.8-2.0-2.2-2.5-3.0mm |

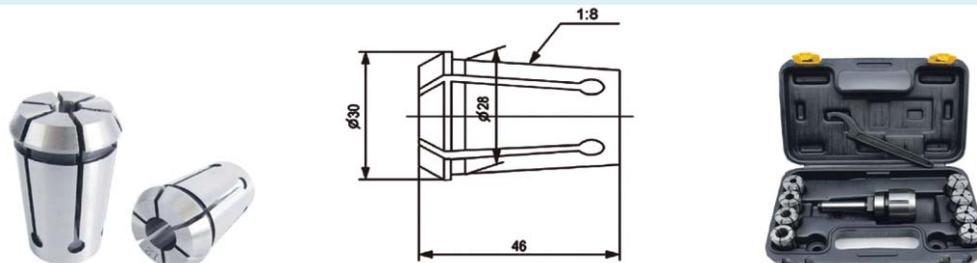
J7316A Collets & Chuck Set



Collets Taper 1 : 7

| Model | Hole Sizes | | PCS/Set | Shank Sizes | Wt. |
|-------------|---------------------|-------|---------|-------------|-------|
| | mm | Inch | | | |
| J7316A/NT30 | 4,5,6,8,10,12,14,16 | 1" | 8 | NT30 | 3.373 |
| J7316A/NT40 | | 3/16" | | NT40 | 3.708 |
| J7316A/MT2 | | 1/4" | | MT2 | 3.52 |
| J7316A/MT3 | | 5/16" | | MT3 | 3.752 |
| J7316A/MT4 | | 3/8" | | MT4 | 4.646 |
| | | 1/2" | | | |
| | | 9/16" | | | |
| | | 5/8" | | | |

J7316B Collets & Chuck Sets



| Model | Hole Sizes | | PCS/Set | Shank Sizes | Wt. |
|---------------|------------|-------|---------|-------------|-------|
| | mm | Inch | | | |
| J7316B/MT2 | 4 | 1/8" | 8 | MT2 | 3.52 |
| J7316B/MT3 | 5 | 3/16" | | MT3 | 3.752 |
| J7316B/MT4 | 6 | 1/4" | | MT4 | 4.646 |
| J7316B/NT30 | 8 | 5/16" | | NT30 | 3.373 |
| J7316B/NT40 | 10 | 3/8" | | NT40 | 3.708 |
| J7316B/1" | 12 | 1/2" | | 1" | 3.80 |
| J7316B/1-1/4" | 14 | 9/16" | | 1-1/4" | 4.506 |
| J7316B/R8 | 16 | 5/8" | | R8 | 3.58 |

83 Type Heavy Duty Bench Vises With Anvil Swivel Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8303 | 3" | 75 | 4 | 28/26 |
| 8304 | 4" | 100 | 2 | 23/22 |
| 8305 | 5" | 125 | 1 | 20/19 |
| 8306 | 6" | 150 | 1 | 30/29 |
| 8308 | 8" | 200 | 1 | 44/42 |
| 8310 | 10" | 250 | 1 | 70/62 |
| 8312 | 12" | 300 | 1 | 75/69 |

83 Type Heavy Duty Bench Vises With Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8323 | 3" | 75 | 4 | 22/20 |
| 8324 | 4" | 100 | 2 | 22/20 |
| 8325 | 5" | 125 | 1 | 18/17 |
| 8326 | 6" | 150 | 1 | 28/26 |
| 8328 | 8" | 200 | 1 | 42/40 |

83 Type Heavy Duty Bench Vises Without Anvil Swivel Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8353 | 3" | 75 | 4 | 24/22 |
| 8354 | 4" | 100 | 2 | 22/20 |
| 8355 | 5" | 125 | 1 | 18/17 |
| 8356 | 6" | 150 | 1 | 28/26 |
| 8358 | 8" | 200 | 1 | 42/40 |

83 Type Heavy Duty Bench Vises Without Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8363 | 3" | 75 | 4 | 24/22 |
| 8364 | 4" | 100 | 2 | 22/20 |
| 8365 | 5" | 125 | 1 | 18/17 |
| 8366 | 6" | 150 | 1 | 28/26 |
| 8368 | 8" | 200 | 1 | 42/40 |

89 Type Light Duty Bench Vises With Anvil Swiveak Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8903 | 3" | 75 | 4 | 20/18 |
| 8904 | 4" | 100 | 4 | 30/28 |
| 8905 | 5" | 125 | 2 | 28/26 |
| 8906 | 6" | 150 | 1 | 21/20 |
| 8908 | 8" | 200 | 1 | 31/30 |
| 8910 | 10" | 250 | 1 | 46/44 |

89 Type Light Duty Bench Vises With Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8924 | 4" | 100 | 4 | 30/28 |
| 8925 | 5" | 125 | 2 | 28/26 |
| 8926 | 6" | 150 | 1 | 21/20 |
| 8928 | 8" | 200 | 1 | 31/30 |

89 Type Light Duty Bench Vises With Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8954 | 4" | 100 | 4 | 30/28 |
| 8955 | 5" | 125 | 2 | 28/26 |
| 8956 | 6" | 150 | 1 | 21/20 |
| 8958 | 8" | 200 | 1 | 31/30 |

89 Type Light Duty Bench Vises Without Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 8964 | 4" | 100 | 4 | 22/20 |
| 8965 | 5" | 125 | 2 | 22/20 |
| 8966 | 6" | 150 | 1 | 18/17 |
| 8968 | 8" | 200 | 1 | 26/25 |

96 Type Super Light Duty Bench Vises With Anvil Swivel Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 9604 | 4" | 100 | 4 | 22/20 |
| 9605 | 5" | 125 | 2 | 17/15 |
| 9606 | 6" | 150 | 1 | 12/11 |
| 9608 | 8" | 200 | 1 | 24/22 |

96 Type Super Light Duty Bench Vises With Anvil Stationary Base



| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 9624 | 4" | 100 | 4 | 22/20 |
| 9625 | 5" | 125 | 2 | 17/15 |
| 9626 | 6" | 150 | 1 | 12/11 |
| 9628 | 8" | 200 | 1 | 24/22 |

93 American Type Bench Vises With Anvil Swivel Base



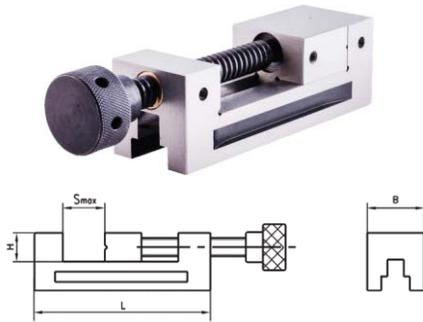
| Model | Size | Width of jaw | QTY/Case | G.W./N.W. |
|-------|------|--------------|----------|-----------|
| 9303 | 3.5" | 875 | 6 | 30/27 |
| 9304 | 4" | 100 | 4 | 21.5/19 |

95 American Type Bench Vises With Anvil Swivel Base



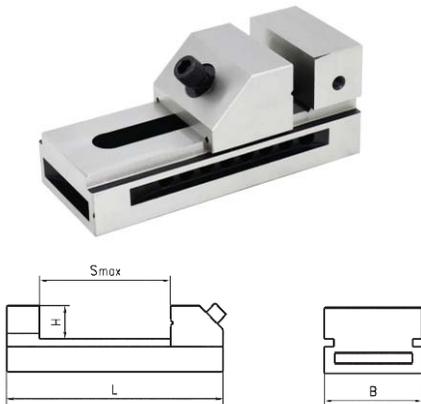
| Model | Size | Width of jaw | Max. Opening | QTY/Case | G.W./N.W. |
|-------|------|--------------|--------------|----------|-----------|
| 9504 | 4" | 100 | 127 | 2 | 28/26 |
| 9505 | 5" | 125 | 152 | 2 | 19/18 |
| 9506 | 6" | 150 | 178 | 1 | 29/27 |

QGG Preciisiin Tool Vices



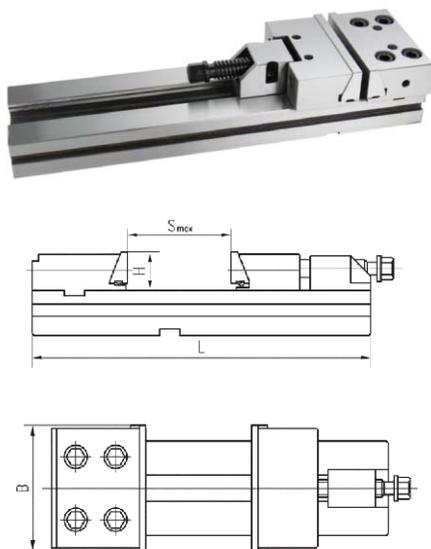
| Model | B | H | Smax | L | Wt(kg) |
|---------|-----|----|------|-----|--------|
| QGG50 | 50 | 25 | 65 | 155 | 3 |
| QGG60 | 60 | 25 | 55 | 110 | 2.4 |
| QGG63 | 63 | 32 | 85 | 190 | 3.8 |
| QGG73 | 73 | 35 | 100 | 210 | 5 |
| QGG80 | 80 | 40 | 100 | 220 | 6.5 |
| QGG88 | 88 | 40 | 125 | 250 | 11 |
| QGG100 | 100 | 45 | 125 | 260 | 13 |
| QGG125 | 125 | 50 | 160 | 300 | 19.5 |
| QGG125A | 125 | 50 | 210 | 350 | 23 |
| QGG150 | 150 | 50 | 175 | 315 | 23.8 |

QKG Precision Tool Vices



| Model | B | H | Smax | L | Wt(kg) |
|--------|-----|------|------|------|--------|
| QKG25 | 26 | 91.5 | 22 | 65.4 | 0.5 |
| QKG50 | 50 | 25 | 65 | 140 | 2 |
| QKG63 | 63 | 32 | 85 | 175 | 3 |
| QKG73 | 73 | 35 | 100 | 190 | 4.1 |
| QKG80 | 80 | 40 | 100 | 200 | 5.5 |
| QKG88 | 88 | 40 | 125 | 235 | 7.3 |
| QKG100 | 100 | 45 | 125 | 245 | 10 |
| QKG125 | 125 | 50 | 160 | 285 | 18 |
| QKG150 | 150 | 50 | 200 | 330 | 21.5 |

GT Precision Moldular Vices



| Model | B | H | Smax | L | (Kg)Clamping force |
|--------|-----|----|------|------|--------------------|
| GT100 | 100 | 30 | 100 | 270 | 3000 |
| GT125 | 125 | 40 | 150 | 345 | 3000 |
| GT150A | 150 | 50 | 200 | 420 | 5000 |
| GT150B | 150 | 50 | 300 | 520 | 5000 |
| GT150C | 150 | 50 | 400 | 620 | 5000 |
| GT175A | 175 | 60 | 200 | 455 | 6000 |
| GT175B | 175 | 60 | 300 | 555 | 6000 |
| GT175C | 175 | 60 | 400 | 655 | 6000 |
| GT175D | 175 | 60 | 500 | 755 | 6000 |
| GT175E | 175 | 60 | 600 | 855 | 6000 |
| GT200A | 200 | 65 | 200 | 495 | 10000 |
| GT200B | 200 | 65 | 300 | 595 | 10000 |
| GT200C | 200 | 65 | 400 | 695 | 10000 |
| GT200D | 200 | 65 | 500 | 795 | 10000 |
| GT200E | 200 | 65 | 600 | 895 | 10000 |
| GT300A | 300 | 80 | 200 | 535 | 12000 |
| GT300B | 300 | 80 | 300 | 635 | 12000 |
| GT300C | 300 | 80 | 400 | 735 | 12000 |
| GT300D | 300 | 80 | 500 | 835 | 12000 |
| GT300E | 300 | 80 | 600 | 935 | 12000 |
| GT300F | 300 | 80 | 700 | 1035 | 12000 |
| GT300G | 300 | 80 | 800 | 1135 | 12000 |



Performance and characterist:

- 1. It is made of high-quality cast iron
- 2. Parallelism 0.025mm/100mm,squareness 0.025mm
- 3. The vice body can be indexed through 90 degrees in vertical direction along large arcshaped guideway of swivel disc which can be indexed through 360degrees in horizontal direction on the base
- 4. It is widely used on machine tool in making some kinds of slots,holes and faces

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|---------|--------------|---------------|-------------|---------|
| QHK100 | 100 | 41 | 80 | 18\17 |
| QHK125 | 125 | 45 | 95 | 28\27 |
| QHK125L | 125 | 45 | 140 | 31\29 |
| QHK160 | 160 | 50 | 125 | 40\39 |

QW Universal Machine Vices



Performance and characterist:

- 1. It is made of high-quality cast iron
- 2. Parallelism 0.025mm/100mm,squareness 0.025mm
- 3. Attained fitting with a stop in three way,by using such sircling delinable structure asvice body,two way body and sliding base
- 4. It is used on machining and EDM complex parts

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|-------|--------------|---------------|-------------|---------|
| QW100 | 105 | 40 | 105 | 26/25 |
| QW125 | 125 | 44 | 125 | 27/26 |

Q93 Double-action Angle Tight Vices



Performance and characterist:

- 1. It is made of spheroidal cast iron
- 2. The hardness of working surface is HRC50 ~ 60
- 3. The vice with angle locked vice can prevent workpieces rising during operation
- 4. It is possessed of two clamping positions.two workpieces of same size or of different size can be clamped whith it the vice is also able to clamp two same workpieces which are clamped in different positions and processed in different surfaces

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|--------|--------------|---------------|-------------|---------|
| Q93100 | 100 | 35 | 76 | 15/14 |
| Q93160 | 160 | 50 | 100 | 37/36 |



Performance and character

- It is made of ductile cast iron(HT200)
- The accuracy of vice is parallelism at 0.025mm/100mm and squareness at 0.025.
- It is widely used on milling and drilling machine for making some kinds of slots, holes and faces

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|-------|--------------|---------------|-------------|---------|
| QH80 | 80 | 32 | 63 | 30\28 |
| QH100 | 100 | 35 | 80 | 45\44 |
| QH125 | 125 | 40 | 100 | 18\17 |
| QH160 | 160 | 52 | 125 | 34\33 |
| QH200 | 200 | 63 | 160 | 45\44 |

QB Planning Machine Vices(QB=Q13)



Performance and character

- It is made of ductile cast iron(HT200)
- The accuracy of vice is parallelism at 0.025mm/100mm and squareness at 0.025
- The vice can be used with single or settled side by side on the machine Worktable
- It is widely used on machining center and other precision machine

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|-------|--------------|---------------|-------------|---------|
| QB135 | 135 | 36 | 170 | 17\16 |
| QB160 | 160 | 51 | 180 | 27\26 |
| QB200 | 200 | 64 | 220 | 38\37 |
| QB250 | 250 | 64 | 280 | 56\54 |
| QB320 | 320 | 81 | 360 | 81\79 |

Qm16 Accu-lock Machine Vices



Performance and character

- It is made of ductile cast iron(HT200)
- The accuracy of vice is parallelism at 0.025mm/100mm and squareness at 0.025.
- The vice can be used with single or settled side by side on the machine Worktable.
- It is widely used on machining center and other precision machine.

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|---------|--------------|---------------|-------------|---------|
| QM16100 | 100 | 32 | 100 | 17\16 |
| QM16125 | 125 | 40 | 125 | 21\20 |
| QM16160 | 160 | 45 | 150 | 36\35 |
| QM16200 | 200 | 50 | 190 | 58\56 |



Performance and character

- It is made of ductile cast iron(HT200)
- The accuracy of vice is parallelism at 0.025mm/100mm and squareness at 0.025
- The vice can be used with single or settled side by side on the machine Worktable
- It is widely used on machining center and other precision machine

| Model | Width of Jaw | Height of Jaw | Max.Opening | GW./NW. |
|----------|--------------|---------------|-------------|---------|
| QM16100N | 100 | 32 | 100 | 113/12 |
| QM16160N | 160 | 45 | 160 | 29/28 |

Q52 Hydraulic Power Machine Vices

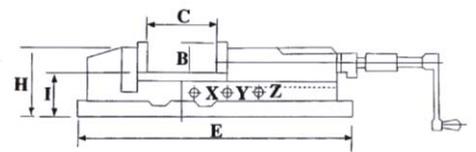
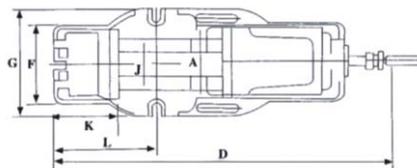


Performance and character

- 1.It is made of ductile cast iron(HT200)
- 2.The accuracy of vice is parallelism at 0.025mm/100mm and squareness at 0.025

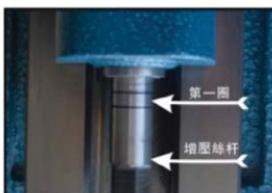
| Model | Width of jaw(mm) | Height of jaw(mm) | Max.opening(mm) | G.W./N.W.(kg) | Packing volume (cm) | Packing shape |
|--------|------------------|-------------------|-----------------|---------------|---------------------|---------------|
| Q52400 | 400 | 85 | 430 | 430 | 83x48x30 | 纸箱 carton |
| Q52320 | 320 | 81 | 345 | 105/103 | 71x37x26 | 纸箱 carton |
| Q52150 | 152 | 52 | 320 | 44/42 | 66x26x17 | 纸箱 carton |

Built-in Hydraulic Vises



| Model | A | B | C | D | E | F | G | H | I | J | K | L | Weight | Power | |
|-------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|-------|-------------|
| HP-5 | 125 | 46 | 220 | 670 | 540 | 165 | 185 | 118 | 72 | 97 | 117 | 185 | 33KG | 3500 | 655x190x225 |
| HP-6 | 150 | 51 | 300 | 800 | 620 | 200 | 240 | 133 | 82 | 116 | 125 | 247 | 50KG | 4500 | 760x190x215 |
| HP-8 | 200 | 62 | 300 | 900 | 700 | 240 | 280 | 162 | 100 | 160 | 160 | 266 | 70KG | 6500 | 820x230x220 |

- Purpose: Built-in hydraulic vise is suitable for general milling machine, CNC vertical integrated machining center, maximum opening can clamp 300mm
- Features: As long as you shoot with your hand, you will have a ton of clamping force after two turns.



In order to increase the service life of the vise, please advance the pressurized screw to the first lap or properly pressurize



Remember the three small holes ABC, open each time increase by 100mm, aim at the inner tooth seat Otherwise you will get stuck



It is not easy to be clamped, such as the thin heart tube easily Flat, pressurized screw into the first circle or suitable When pressurized



It is not easy to be clamped. For example, the aluminum sheet is easy to flatten. The area to be clamped should be a little more. Supported



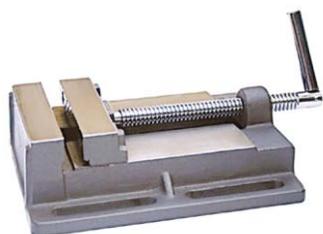
| Model | Width of Jaw | Max.Opening | G.W./N.W. |
|--------|--------------|-------------|--------------|
| Q1975 | 75 | 50 | 23/21(10PCS) |
| Q19100 | 100 | 75 | 36/34(10PCS) |
| Q19125 | 125 | 100 | 25/23(5PCS) |
| Q19150 | 150 | 125 | 32/30(5PCS) |
| Q19200 | 200 | 175 | 24/23(2PCS) |

Q19E Gulid-Screw Leading-in Drilling Vices



| Model | Width of Jaw | Max.Opening | G.W./N.W. |
|---------|--------------|-------------|--------------|
| Q1985E | 85 | 60 | 22/21(10PCS) |
| Q19100E | 100 | 75 | 35/33(10PCS) |
| Q19120E | 120 | 100 | 24/22(5PCS) |
| Q19150E | 150 | 125 | 32/30(5PCS) |

Q19A American Type Drilling Machine Vices



| Model | Width of Jaw | Max.Opening | G.W./N.W. |
|-----------|--------------|-------------|--------------|
| Q192-1/2A | 67 | 70 | 21/19(10PCS) |
| Q193A | 78 | 78 | 24/22(10PCS) |
| Q194A | 100 | 110 | 33/32(10PCS) |
| Q195A | 125 | 128 | 22/21(5PCS) |
| Q196A | 150 | 150 | 22/21(5PCS) |

SY Arbor Presses



| Model | Width of Jaw | KN | Max.Opening | G.W./N.W. |
|-------|--------------|------|-------------|-----------|
| 0.5T | 5 | 500 | 100 | 30/28 |
| 1T | 10 | 1000 | 125 | 28/26 |
| 2T | 20 | 2000 | 150 | 21/20 |
| 3T | 30 | 3000 | 200 | 31/30 |
| 5T | 50 | 5000 | 430 | 176/154 |



| parameter name | parameter |
|---------------------|--------------|
| Model: | AC-500 |
| main motor power: | 90W |
| Speed range: | 0-190 |
| Maximum speed: | 190RPM |
| Maximum torque: | 380 |
| Power requirements: | AC11V |
| Applicable Model: | |
| Project includes: | X Y Z AL-500 |

Pb150 Parallel Blocks



1.Hardeness: HRC55 ~ 62 2.Accuracy: 0.01mm 3.Parallelism: 0.005mm

| Model | L×W×H | Pcs |
|---------|--|------|
| PB150-1 | 150×10×14(16,18,20,22,24,26,28,30,32,35,40,45,50) | 14×2 |
| PB150-2 | 150×8×14 (16,18,20,22,24,26,28,30,32,35,40,45,50) | 14×2 |
| PB150-3 | 80×4×14 (16,18,20,22,24,26,28,30,32,35,40,45,50) | 14×2 |
| PB150-4 | 200×10×14 (16,18,20,22,24,26,28,30,32,35,40,45,50) | 14×2 |

PB151 Parallel Blocks



1.Hardeness: HRC55 ~ 62 2.Accuracy: 0.01mm 3.Parallelism: 0.005mm

| Model | L×W×H | Pcs |
|---------|------------------------------------|-----|
| PB151-1 | 100×4×10(14,18,22,26,30,34,38,42) | 9×2 |
| PB151-2 | 160×4×10(14,18,22,26,30,34,38,42) | 9×2 |
| PB151-3 | 150×8.5×14(16,20,24,30,32,40,44) | 9×2 |
| PB151-4 | 150×10×14(16,20,24,30,32,36,40,44) | 9×2 |



1.Hardeness: HRC55 ~ 62 2.Accuracy: 0.01mm 3.Parallelism: 0.005mm

| Model | LxWxH | Pcs |
|---------|---------------------------|------|
| PB153-1 | 125×8×11(16,21,26,31,36) | 24×2 |
| | 125×10×13(18,23,28,33,38) | |
| | 125×12×15(20,25,30,35,40) | |
| | 125×14×17(22,27,32,37,42) | |
| PB153-2 | 150×8×11(16,21,26,31,36) | 24×2 |
| | 150×10×13(18,23,28,33,38) | |
| | 150×12×15(20,25,30,35,40) | |
| | 150×14×17(22,27,32,37,42) | |

Pb154 Parallel Blocks



1.Hardeness: HRC55 ~ 62 2.Accuracy: 0.01mm 3.Parallelism: 0.005mm

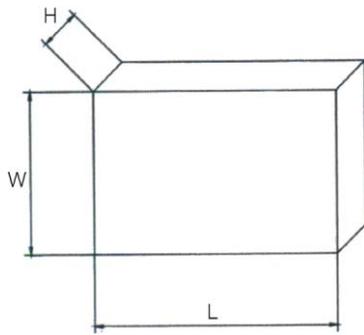
| Model | LxWxH | Pcs |
|---------|--|------|
| PB154-1 | 150×8×16 (18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50) | 18×2 |
| PB154-2 | 150×8×17 (19,21,23,25,27,29,31,33,35,37,39,41,43,45,47,49,51) | 18×2 |

PB155 Parallel Blocks



1.Hardeness: HRC55 ~ 62 2.Accuracy: 0.01mm 3.Parallelism: 0.005mm

| Model | LxWxH | Pcs |
|---------|---|------|
| PB155-1 | 120×10×14(16,18,20,22,24,26,28,32,35,40) | 12×2 |
| PB155-2 | 150×10×14(16,18,20,22,24,26,28,30,32,35,40) | 12×2 |



1×2×3"BLOCKS



Precision Ground Hardened
Five 3/8"-16 tapped holes are provided operation
Hardness: HRC55-62

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|-------------|------------|-------------------|------|
| ZT01-01 | 1×2×3" | 0.0003"/1" | ±0.0002" | 23 |
| ZT01-02 | | 0.0001"/1" | +0.0003" | |

1×2×3"BLOCKS



Precision Ground Hardened
Hardness: HRC55-62

| Model | Size (H×W×L) | Squareness | Tolerance of size | Hole |
|---------|--------------|------------|-------------------|------|
| ZT01-03 | 1×2×3" | 0.0003"/1" | ±0.0002" | |
| ZT01-04 | | | | |
| ZT01-05 | | 0.0001"/1" | +0.0003" | |
| ZT01-06 | | | | |

1×2×3"BLOCKS



Precision Ground Hardened
Five 5/16"-18 tapped holes are provided for clamping operation.
Hardness: HRC55-62.

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|-------------|------------|-------------------|------|
| ZT01-07 | 1×2×3" | 0.0003"/1" | ±0.0002" | 11 |
| ZT01-08 | | | | |

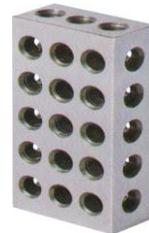
2×3×4"BLOCKS



Precision Ground Hardened
Hardness: HRC55-62.

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|-------------|------------|-------------------|------|
| ZT01-09 | 2×3×4" | - | ±0.0003" | 23 |
| ZT01-10 | | 0.0003"/1" | | |

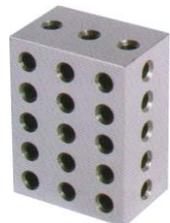
2×4×6"BLOCKS



Precision Ground Hardened
Hardness: HRC55-62.

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|-------------|------------|-------------------|------|
| ZT01-11 | 2×4×6" | 0.0003"/1" | ±0.0005" | 23 |

4×6×8"BLOCKS



Precision Ground Hardened
Hardness: HRC55-62.

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|-------------|------------|-------------------|------|
| ZT01-12 | 4×6×8" | | ±0.0005" | 23 |

Metric Blocks



Hardness: HRC55-62

| Model | Size(H×W×L) | Squareness | Tolerance of size | Hole |
|---------|--------------|------------|-------------------|---------|
| ZT01-13 | 25×50×75mm | 0.005mm | ±0.005mm | 23 |
| ZT01-14 | 25×50×75mm | | ±0.005mm | 23, M10 |
| ZT01-15 | 25×50×100mm | | ±0.005mm | 23 |
| ZT01-16 | 50×100×150mm | | ±0.0125mm | 23 |



○ Features and use scope: Circular dense pole permanent magnetic chuck is on surface grinder, sparks machine, engraving machine, wire cutting machine, grinding machine, bench marking processing, magnetic sucker interval flne, uniform distribution of magnetic force, processing thin workpieces, the effect is obvious.

| Model | Model | (mm) | | (mm) Pole distance | (N/cm2) |
|-------|----------|------|------|----------------------|---------|
| | | φ | High | | |
| 4" | XM51 100 | 100 | 55 | 2(0.5+1.5) | ≥ 80 |
| 5" | XM51 125 | 125 | 55 | 2(0.5+1.5) | ≥ 80 |
| 6" | XM51 150 | 150 | 55 | 2(0.5+1.5) | ≥ 80 |
| 8" | XM51 200 | 200 | 55 | 2(0.5+1.5) | ≥ 80 |
| 10" | XM51 250 | 250 | 60 | 2(0.5+1.5) | ≥ 100 |
| 12" | XM51 300 | 300 | 60 | 2(0.5+1.5) | ≥ 100 |
| 14" | XM51 350 | 350 | 60 | 2(0.5+1.5) | ≥ 100 |
| 16" | XM51 400 | 400 | 60 | 2(0.5+1.5) | ≥ 100 |

Xm91 Rectangular Permanent Magnetic Chucks



○ Scope of use: the breakdown of permanent magnetic chuck mainly in a variety of surface grinding machine, engraving machine, wire cutting, EDM as positioning the workpiece machining.

| Model | Model | (mm) | | | (mm) pole distance | (N/cm2) |
|---------|--------------|------|-------|------|----------------------|---------|
| | | Long | Width | High | | |
| 4"×7" | Xm91 100×175 | 175 | 100 | 45 | 2(0.5+1.5) | ≥ 100 |
| 5"×10" | XM91 125×250 | 250 | 125 | 45 | 2(0.5+1.5) | ≥ 100 |
| 6"×6" | XM91 150×150 | 150 | 150 | 45 | 2(0.5+1.5) | ≥ 100 |
| 6"×12" | XM91 150×300 | 300 | 150 | 45 | 2(0.5+1.5) | ≥ 100 |
| 6"×14" | XM91 150×350 | 350 | 150 | 45 | 2(0.5+1.5) | ≥ 100 |
| 6"×16" | XM91 150×400 | 400 | 150 | 45 | 2(0.5+1.5) | ≥ 100 |
| 6"×18" | XM91 150×450 | 450 | 150 | 45 | 2(0.5+1.5) | ≥ 100 |
| 8"×16" | XM91 200×400 | 400 | 200 | 45 | 2(0.5+1.5) | ≥ 100 |
| 8"×18" | XM91 200×450 | 450 | 200 | 45 | 2(0.5+1.5) | ≥ 100 |
| 8"×20" | XM91 200×500 | 500 | 200 | 45 | 2(0.5+1.5) | ≥ 100 |
| 8"×22" | XM91 200×560 | 560 | 200 | 50 | 2(0.5+1.5) | ≥ 100 |
| 10"×20" | XM91 250×500 | 500 | 250 | 50 | 2(0.5+1.5) | ≥ 100 |
| 12"×20" | XM91 300×500 | 500 | 300 | 50 | 2(0.5+1.5) | ≥ 100 |
| 12"×24" | XM91 300×600 | 600 | 300 | 50 | 2(0.5+1.5) | ≥ 100 |



○ Permanent magnetic lifters use new type and high-performance magnetic material. It is characterized by its smaller and lighter weight, powerful lifting effort and few of residual magnetism. Easy and safe to operate, without electricity in operation, long period effort. They have been used widely to lift and transport the steel and iron.

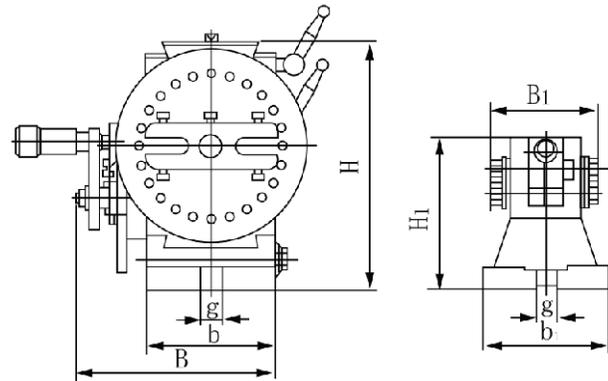
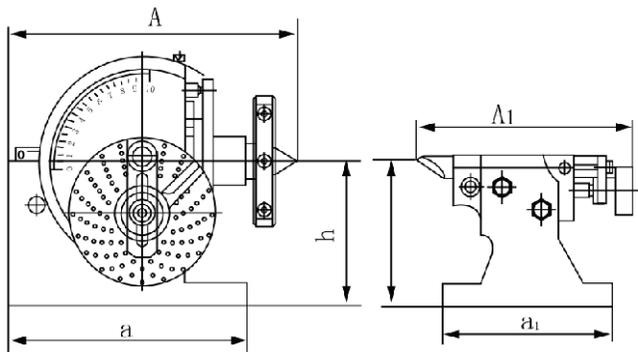
| Model | Capacity | Max Force KGS | Dimensions | | | Weight (kg) |
|--------|----------|---------------|------------|-------|--------|-------------|
| | | | Length | Width | Height | |
| YQ100 | 100 | 300 | 150 | 80 | 160 | 3.2 |
| YQ200 | 200 | 600 | 190 | 110 | 220 | 4.2 |
| YQ300 | 300 | 900 | 230 | 120 | 210 | 10.5 |
| YQ600 | 600 | 1800 | 290 | 145 | 250 | 19.6 |
| YQ1000 | 1000 | 3000 | 410 | 150 | 310 | 34.2 |
| YQ2000 | 2000 | 6000 | 460 | 180 | 350 | 64.5 |
| YQ3000 | 3000 | 9000 | 480 | 210 | 380 | 82 |

Electro Magnetic Lifters



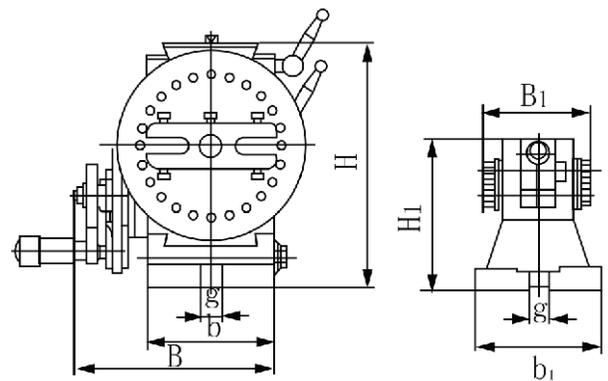
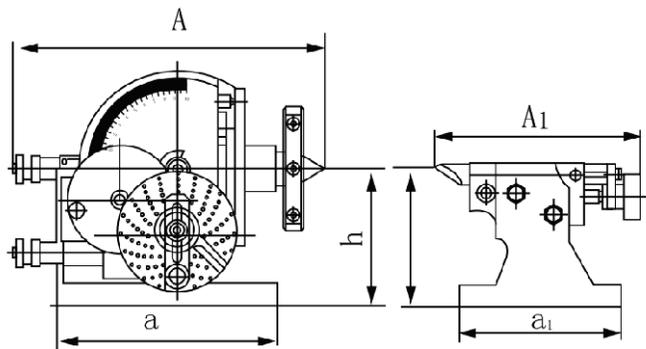
○ Electro Magnetic Lifter used for handling ingots, steel balls, coils and all kinds of scrap iron, strong lifting, remote control operation, use safe and convenient. Increase work efficiency, reduce labor intensity. Widely used in factories, freight yard to do heavy lifting exercise.

| Model | Dimensions | | Power | Weight |
|------------|------------|--------|-------|--------|
| | Diameter | height | | |
| MI W5-70L | 700 | 320 | 3.3 | 490 |
| MI W5-80L | 800 | 320 | 3.96 | 620 |
| MI W5-90L | 900 | 320 | 5.9 | 800 |
| MI W5-110L | 1100 | 320 | 7.7 | 1350 |
| MI W5-120L | 1200 | 320 | 9.02 | 1800 |
| MI W5-130L | 1300 | 320 | 12 | 2010 |
| MI W5-135L | 1350 | 320 | 13.2 | 2580 |
| MI W5-150L | 1500 | 320 | 15.6 | 2830 |
| MI W5-165L | 1650 | 320 | 16.5 | 3450 |
| MI W5-180L | 1800 | 320 | 22.5 | 4230 |
| MI W5-185L | 1850 | 320 | 23.8 | 4550 |
| MI W5-210L | 2100 | 320 | 28.4 | 7000 |
| MI W5-240L | 2400 | 320 | 33.9 | 9000 |



| Model | A | B | H | h | a | b | g | Taper of center | Diameter of Spindle hole | N.W.(kg) |
|-------|-----|------|------|------|------|------|------|-----------------|--------------------------|----------|
| BS-0 | 193 | 140 | 173 | 100 | 166 | 90 | 16 | MT2 | 18 | 23.8 |
| | 759 | 5.51 | 6.81 | 3.93 | 6.53 | 3.54 | 0.63 | B&S NO.7 | | |
| BS-1 | 242 | 168 | 220 | 128 | 206 | 113 | 16 | MT3 | 20 | 35.8 |
| | 952 | 6.61 | 8.66 | 5.04 | 8.11 | 4.45 | 0.63 | B&S NO.9 | | |

| Model | A1 | B1 | H1 | h | a1 | b1 | g1 |
|-------|------|------|------|------|------|------|------|
| BS-0 | 175 | 87 | 107 | 100 | 130 | 92 | 16 |
| | 6.89 | 3.42 | 4.21 | 3.93 | 5.12 | 3.62 | 0.63 |
| BS-1 | 183 | 87 | 137 | 128 | 158 | 110 | 16 |
| | 720 | 3.42 | 5.39 | 5.04 | 6.22 | 4.33 | 0.63 |



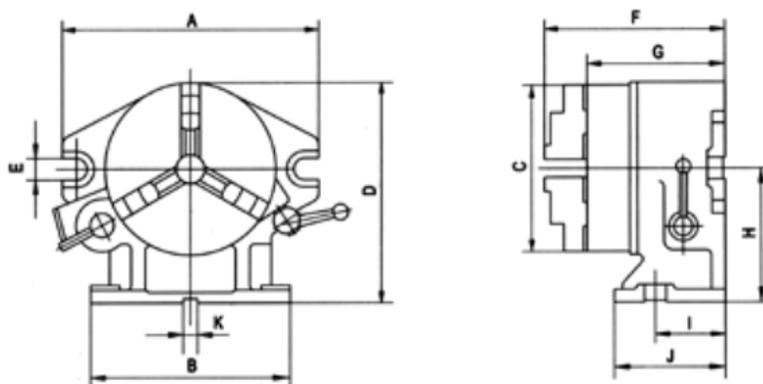
| Model | A | B | H | h | a | b | g | Work hole taper | N.W.(kg) |
|-------|-------|-------|------|------|------|------|------|-----------------|----------|
| BS-2 | 370 | 280 | 236 | 133 | 212 | 134 | 16 | MT4 | 73 |
| | 14.57 | 11.02 | 9.29 | 5.24 | 8.35 | 5.28 | 0.63 | B&S NO.10 | |
| BS-2A | 264 | 210 | 236 | 133 | 212 | 134 | 16 | MT4 | 52 |
| | 10.39 | 8.26 | 9.29 | 5.24 | 8.35 | 5.28 | 0.63 | B&S NO.10 | |

| Model | A1 | B1 | H1 | h | a1 | b1 | g1 |
|----------------|-----|------|------|------|------|------|------|
| BS-2/ BS-2A | 183 | 87 | 156 | 133 | 175 | 122 | 16 |
| | 72 | 3.42 | 6.14 | 5.24 | 6.89 | 4.80 | 0.63 |



| Model | Dividing plates | Number of Holes | | Used of Model |
|-------|-----------------|-------------------|----------------------------|---|
| 3PCS | A | 15,16,17,18,19,20 | | <ul style="list-style-type: none"> ● RT-HV4,HV8 ● RT-6 |
| | B | 21,23,27,29,21,23 | | |
| | C | 37,39,41,43,47,49 | | |
| 2PCS | A | A1 | 26,30,34,38,41,44,47,51,57 | <ul style="list-style-type: none"> ● RT-HV8,HV10,HV12,HV14,HV16 ● RT-8,10,12,14 CS-6",8" |
| | | A2 | 28,32,37,39,43,46,49,53,59 | |
| | B | B1 | 61,67,71,77,81,87,91,97 | |
| | | B2 | 63,69,73,79,83,89,93,99 | |

F2 Type Direct Dividing Heads



Installation sketch and dimensions

| Model | A | B | C | D | E | F | G | H | I | J | K |
|-------|-----|-----|------|--------|----|-------|-------|--------|----|-----|----|
| F2-8 | 310 | 255 | f210 | 255.25 | 18 | 214 | 171.5 | 149.25 | 80 | 150 | 16 |
| F2-6 | 260 | 220 | f167 | 220 | 18 | 197.5 | 155.5 | 130 | 70 | 130 | 16 |

Main specifications

| Specifications | F2-8 | F2-6 |
|---|-----------------|--------|
| Centerheightmm | 149.25 | 130 |
| Centerdiameterofthespindlemm | φ119.774 | φ80 |
| Divisions | 2、3、4、6、8、12、24 | |
| Heightbetweenexternalcenteringdiameterofthespindletothebase(inverticalposition)mm | 96 | 89.5 |
| Locatingdiameterofthespindlemm | f212 | f170 |
| Widthoflocatingkey.mm | 16 | |
| Matchedchuck | K31210A | K31167 |
| 24divisionsindividualerror | 25 " | |
| NetweightKg | 52 | 33 |
| CrossweightKg | 60 | 39 |

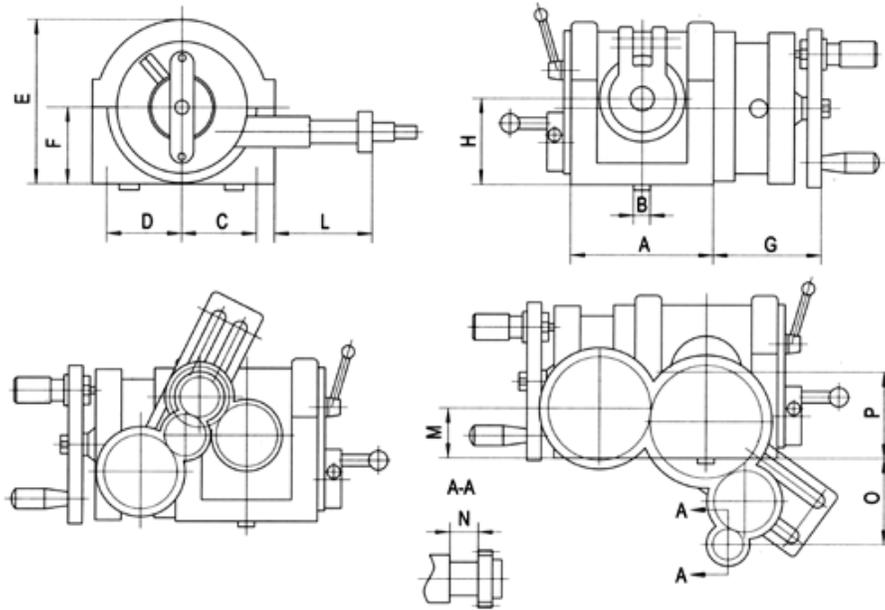
○ Type F2, F2-6 super spacer is designed for using and indexing in both horizontal and vertical position. It is the most optimum in use for milling machines, drilling machines and planer etc. The divisions in 2,3,4,6,8,12,24 are any desired angular indexing can be performed too permitted by using a graduated ring on the spindle and a vernier.



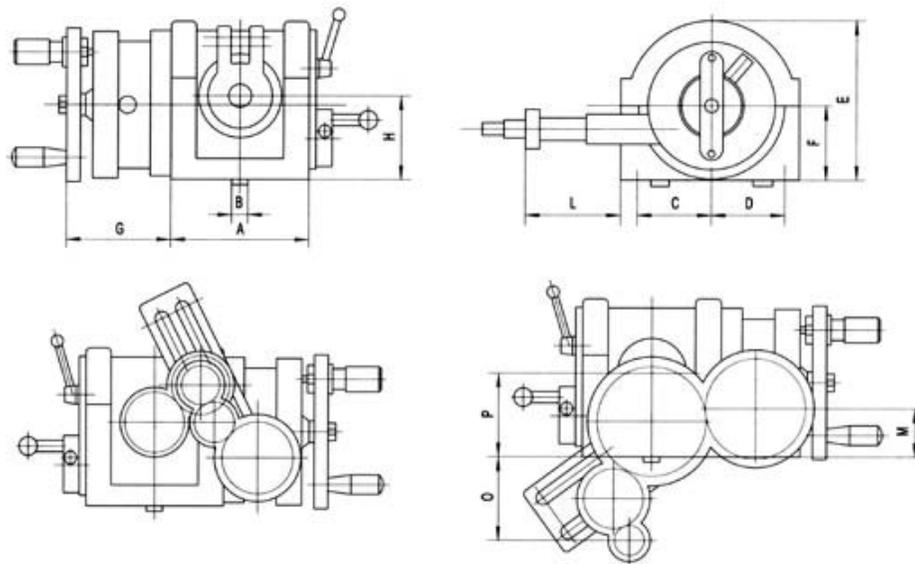
Main specifications

| Specifications | | FW80 | F11100A | F11125A | F11160A | F1120A |
|---|---------------|---|---------|---------|---------|--------|
| Center height mm | | 80 | 100 | 125 | 160 | 200 |
| Swivel angle of spindle from its horizontal position (upward) | | ≤ 90° | ≤ 95° | | | |
| Horizontal position (downward) | | ≤ 6° | ≤ 5° | | | |
| Rotating angle of spindle for one complete revolution of dividing handle | | 9° (540 grad., 1° each) | | | | |
| Min. reading of vernier | | 10 " | | | | |
| Worm gear ratio | | 1:40 | | | | |
| Taper of spindle bore | | MS3 | | MS4 | | |
| Width of locating key mm | | 14 | | 18 | | |
| Diameter of short taper of spindle nose for mounting flange mm | | φ36.541 | φ41.275 | φ53.975 | φ53.975 | |
| Hole number on index plate | 1st plate | 24, 25, 28, 30, 34, 37, 38, 39, 41, 42, 43 | | | | |
| | 2nd plate | 46, 47, 49, 51, 53, 54, 57, 58, 59, 62, 66 | | | | |
| Change Gear | Module | 1.5 | | 2 | | |
| | Teeth numbers | 25, 30, 35, 40, 50, 55, 60, 70, 80, 90, 100 | | | | |
| Individual indexing error of the spindle for one complete revolution of dividing handle | | 60 " | ±45 " | | | |
| Cumulative error at any 1/4 periphery of spindle | | ±1' | | | | |
| Max. bearing Kg | | 80 | 100 | 130 | 130 | 130 |
| Net weight Kg | | 36 | 67 | 101.5 | 113 | 130 |
| Cross weight Kg | | 45 | 79 | 111.5 | 123 | 140 |

F11 Dimensional Sketch

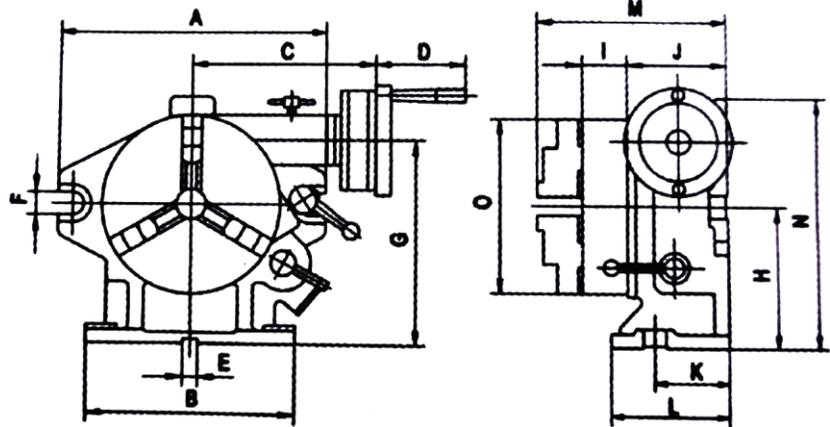


Dimensional Sketch



FW80 Installationsketch and dimensions

| Model | A | B | C | D | E | F | G | H | L | M | N | O | P |
|---------|-----|----|-----|----|-----|-----|-----|-----|-----|------|------|-----|-----|
| FW80 | 139 | 14 | 77 | 73 | 147 | 77 | 78 | 80 | 106 | 43 | 30 | 60 | 80 |
| F11100A | 162 | 14 | 102 | 87 | 186 | 95 | 116 | 100 | 93 | 54.7 | 30 | 100 | 100 |
| F11125A | 209 | 18 | 116 | 98 | 224 | 117 | 120 | 125 | 103 | 68.5 | 34.5 | 100 | 125 |
| F11160A | 209 | 18 | 116 | 98 | 259 | 152 | 120 | 160 | 103 | 68.5 | 34.5 | 100 | 160 |
| F11200A | 209 | 18 | 116 | 98 | 299 | 192 | 120 | 200 | 103 | 68.5 | 34.5 | 100 | 200 |

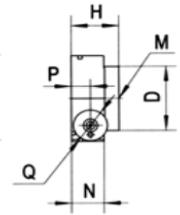
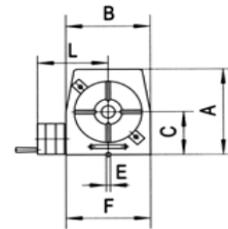
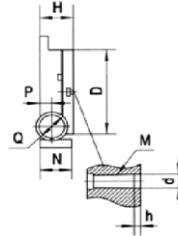
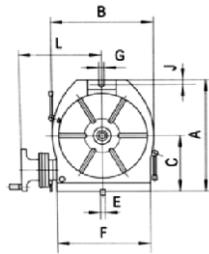


Installation sketch and dimensions

| Model | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|-------|-----|-----|-----|----|----|----|--------|-----|----|-----|----|-----|-----|-----|------|
| F3-8 | 310 | 255 | 200 | 78 | 16 | 18 | 230 | 150 | 75 | 126 | 90 | 155 | 244 | 285 | f210 |
| F3-6 | 250 | 220 | 188 | 78 | 16 | 18 | 198.75 | 130 | 66 | 112 | 80 | 150 | 220 | 235 | f167 |

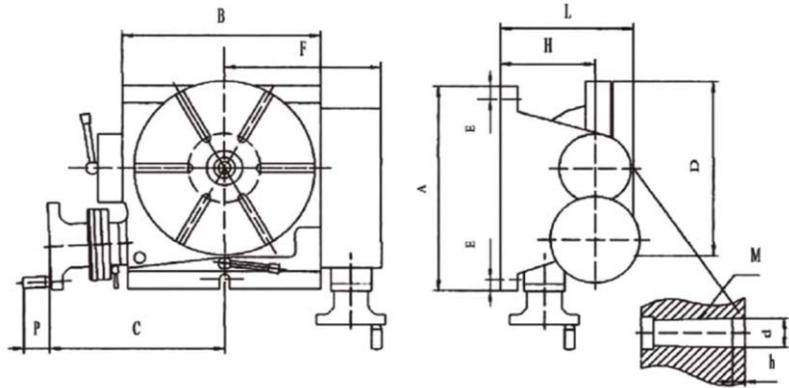
Main specifications

| Specifications | F3-8 | F3-6 |
|--|-------------------|---------------|
| Centerheightmm | 150 | 130 |
| Centerdiameterofthespindlemm | $\varphi 119.774$ | $\varphi 80$ |
| Diameterofthespindleshouldermm | $\varphi 212$ | $\varphi 170$ |
| Divisions | 2、3、4、6、8、12、24 | |
| Graduateddiscofspindle | 360° | |
| Modulesofwormandwormgear | 1.2 | 1.25 |
| Transmissionratioofwormandwormgear | 1:90 | |
| Showeddegreeofworktableperrevolutionofworm | 4° | |
| Minimumvalueofvernier | 10 " | |
| Widthoflocatingkey.mm | 16 | |
| Matchedchuck | K31210A | K31167 |
| 24divisionsindividualerror | 25 " | |
| Wormgeardividingerror | ± 60 " | |
| NetweightKg | (62)77 | (40)50 |
| CrossweightKg | (73)88 | (50)60 |



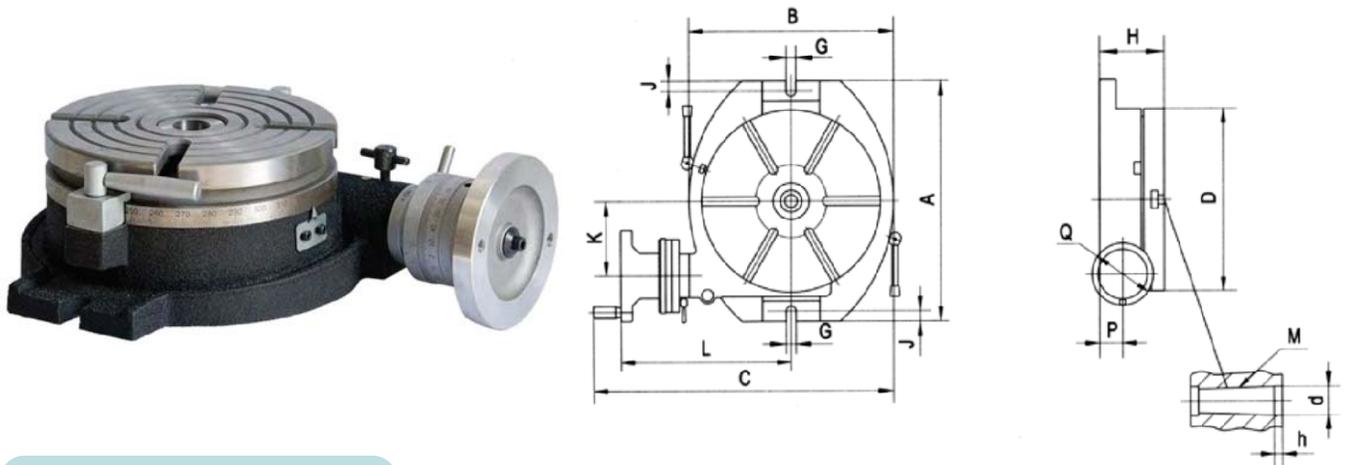
Ht250 Material:HT250

| Specifications | HV-4" | HV-6" | HV-8" | HV-10" | HV-12" | HV-16" |
|-----------------------------------|-------|-------|-------|--------|--------|--------|
| Tablediametermm | φ100 | φ160 | φ200 | φ250 | φ320 | φ400 |
| Morsetaperofthecenterhole | 2# | | 3# | | 4# | |
| Diameterofthecenterholemm | φ20X8 | φ25X6 | φ30X6 | | φ40X10 | |
| HeightofcenterforVerti.mountingmm | 70 | 125 | 150 | 170 | 210 | 260 |
| WidthoftheT-slotmm | 6 | 10 | 12 | | 14 | |
| AdjacentangleoftableT-slot | 90° | | | 60° | | |
| Widthoflocatingkey.mm | 10 | 12 | 14 | | 18 | |
| Moduleofthewormgear | 1 | 1.5 | 1.75 | 2 | 2.5 | 3.5 |
| Transmissionratioofthewormgear | 1: 72 | 1: 90 | | | | |
| Graduationofthetable | 360° | | | | | |
| Readoutofthehandwheel | 2' | 1' | | | | |
| Minimumreadingofthevernier | 10 " | | | | | |
| Indexingaccuracy | 120 " | 80 " | 60 " | | | |
| Max.bearing(withtableHor.)kg | 150 | 100 | 150 | 200 | 250 | 300 |
| Max.bearing(withtableVert.)kg | 75 | 50 | 75 | 100 | 125 | 175 |
| NetweightKg | 7 | 23 | 31.5 | 46 | 77 | 150 |
| GrossweightKg | 11.5 | 15 | 30 | 45 | 73 | 95 |



Ht250 Material:HT250

| Specifications | TSK160 | TSK200 | TSK250 | TSK320 | TSK400 |
|--|----------|--------|--------|--------|--------|
| Diameter of table mm | φ160 | φ200 | φ250 | φ320 | φ400 |
| Morsetaper of the center hole | 2# | 3# | | 4# | |
| Diameter of the center hole mm | φ25X6 | φ30X6 | | φ40X10 | |
| Width of the T-slot mm | 10 | 12 | | 14 | |
| Module of the worm gear | 1.5 | 2 | | 2.5 | 3.5 |
| Width of locating key mm | 12 | 14 | | 18 | |
| Adjacent angle of table T-slot | 90° | | | 60° | |
| Transmission ratio of the worm gear | 1 : 90 | | | | |
| Tilting angle | 0° ~ 90° | | | | |
| Readout of the handwheel | 1' | | | | |
| Minimum reading of the vernier | 10 " | | | | |
| Minimum reading of the tilting vernier | 2' | | | | |
| Indexing accuracy | 80 " | 60 " | | | |
| Max. bearing (with table Hor.) kg | 100 | 150 | 200 | 250 | 300 |
| Max. bearing (with table Vert.) kg | 50 | 75 | 100 | 125 | 150 |
| Cross weight Kg | 44 | 67 | 93 | 150 | 305 |
| Matched Chuck | K11125 | K11160 | K11200 | K11250 | K11325 |



Ht250 Material:HT250

| Specifications | TS160A | TS200A | TS250A | TS320A | TS400A | TS500A | TS630A | TS800A | TS1000A |
|---|----------------------|--------|--------|--------|--------|----------------------|---------|---------|---------|
| Tablediametermm | f160 | f200 | f250 | f320 | f400 | f500 | f630 | f800 | f1000 |
| Morsetaperofthecenterhole | 2# | 3# | 4# | | 5# | | 6# | | |
| WidthoftheT-slotmm | 10 | 12 | 14 | | 16 | | 22 | | |
| AdjacentangleoftableT-slot | 90° | | 60° | | | 45° | | | |
| Widthoflocatingkey.mm | 12 | 14 | 18 | | - | - | - | - | |
| Transmissionratioofthewormgear | 1 : 90 | | | | | 1 : 120 | | | |
| Graduationofthetable | 360° | | | | | | | | |
| Rotatingangleoftablewithone revolutionoftheworm | 4° (1°pergraduation) | | | | | 3° (1°pergraduation) | | | |
| Minimumvalueofvernier | 10 " | | | | | | | | |
| Indexingaccuracy | 80 " | 60 " | | | | | | | |
| Max.workloadkg | 100 | 150 | 200 | 250 | 300 | 550 | 700 | 1250 | 2000 |
| CrossweightKg | 21.5 | 31 | 44.5 | 76 | 145 | 238 | 377 | 855 | 1400 |
| Matched Chuck | K11125 | K11160 | K11200 | K11250 | K11325 | K11400 | K11500A | K11630A | |



- Model OL-Z13 is a portable knife sharpener that can grind 2-blade, 3-blade and 4-blade milling cutters without technology. Optional fixture group can grind 5-blade end mill.
- By adjusting the lifting button wheel, the width and depth of the flute can be controlled to better meet the processing needs of different materials.
- The unique structure can grind the axial wedge angle of the milling cutter, increase the sharpness of the cutting edge of the end face, and reduce the cutting resistance.

Same function, multiple specifications



OL-X3A



OL-X5

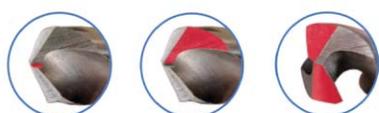


OL-X11

| Model | X3 | X3A | X5 | X11 |
|----------------|------------------|------------------|------------------|------------------|
| Grinding range | φ4-φ14 | φ4-φ20 | φ12-φ30 | φ6-φ30 |
| Power | AC, 220V±10% | AC, 220V±10% | AC, 220V±10% | AC, 220V±10% |
| Motor | 180W/ 4800RPM | 220W/ 4800RPM | 250W/ 4400RPM | 250W/ 4400RPM |
| Dimension | 35x23x24CM | 35x23x24CM | 40x28x31CM | 50x29x30 |
| Weight | 15KG | 16KG | 28KG | 33KG |

○ Note : Standard collet X3 Type: 6 pieces; X3A type; 9 pieces; X5 type; 10 pieces; X11 type: 13 pieces. It is not easy to align below 4MM

Drill Grinding Machines



Portable

- This machine is portable, accurate and durable, equipped with diamond grinding wheel made in Taiwan.
- It can sharpen the tip angle (apex angle), front cutting edge (positive rake angle), chip flute (rear angle), and the size of the center transverse blade can be adjusted at will, easier.
- Z32 is a compound drill grinding machine (left and right double-head grinding work).

○ Note: Standard collet Z13 / D type: 11 pieces; Z20 type: 18 pieces; Z26 type: 13 pieces; Z32 type: 30 pieces. It is not easy to align below 3MM.

| Model | Z13/Z13D | Z20 | Z26 | Z32 |
|----------------|------------------|------------------|------------------|---------------------|
| Grinding range | φ3-φ13(φ14) | φ3-φ20 | φ13-φ26(φ32) | φ3-φ32 |
| Point angle | 90°-140° | 95°-140° | 95°-140° | 95°-140° / 95°-140° |
| Power | AC, 220V±10% | AC, 220V±10% | AC, 220V±10% | AC, 220V±10% |
| Motor | 120W/ 4800RPM | 180W/ 4800RPM | 250W/ 4400RPM | 250W/ 4400RPM |
| Dimension | 36x21x19cm | 43x22x21cm | 43x23x21cm | 42x27x34cm |
| Weight | 9KG | 14KG | 25KG | 29KG |



- Universal cutter sharpener is a necessary equipment for computeregraving cutter and engraving milling machine.
- U3 universal cutter sharpener also has the functions and devices for sharpening drills, turning tools, and ball end mills. The maximum clamping diameter can reach 16.

| Model | U3 |
|-----------------|----------------------|
| Collet diameter | φ 3 - φ 16 |
| Motor | 220V/380V 1/3Hp 50Hz |
| Power | 5300RPM |
| Grinding wheel | φ100x50xφ20 |
| Dimension | 550x450x470mm |
| Weight | 46KGs/48KGs |

○ Note: The factory is equipped with 6mm collet (or 1/4")

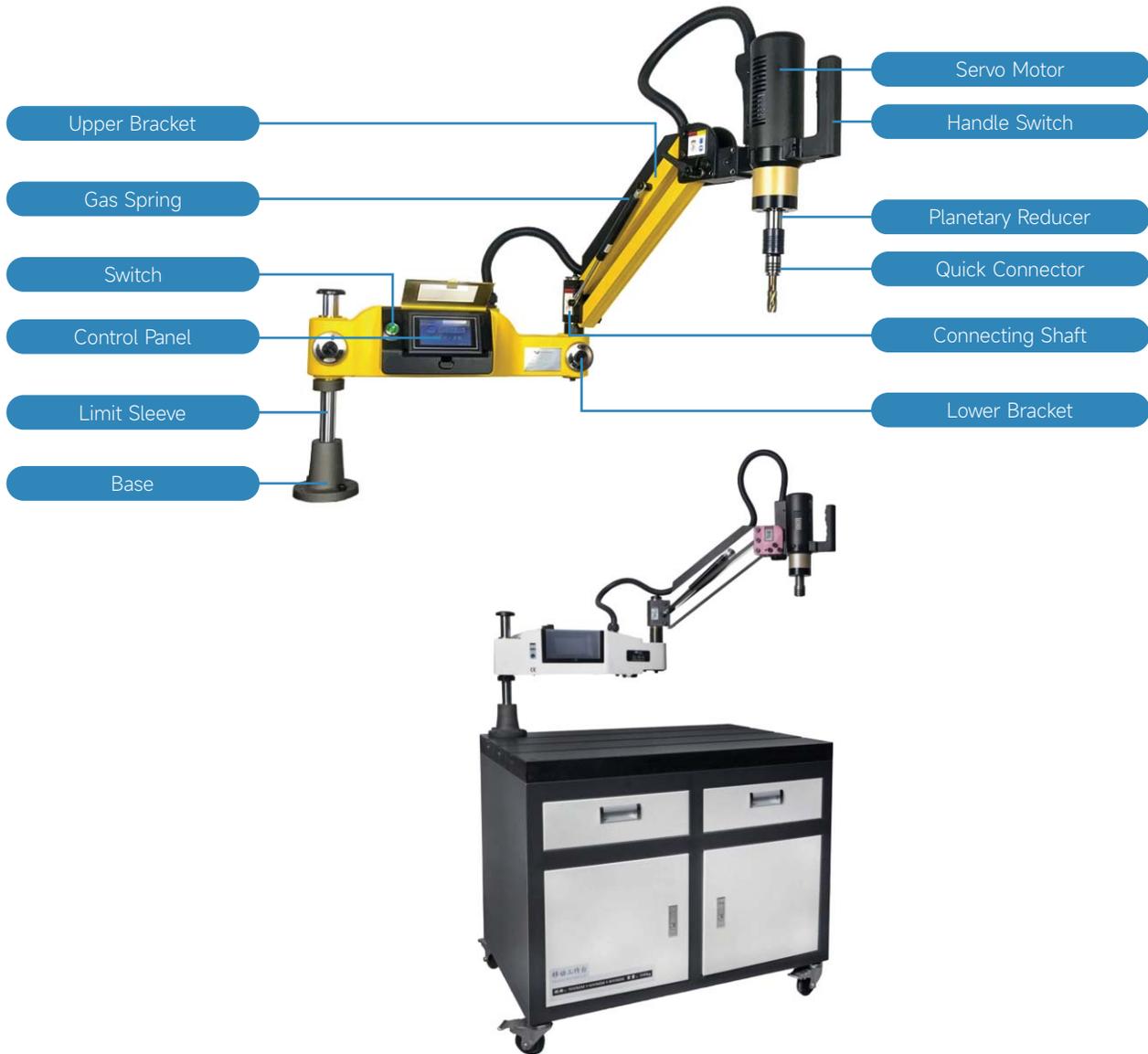
OL-U2 Universal Cutter Grinders



- Universal cutter grinder is a supporting equipment for cnc and other processing equipment.
- It can be used for sharpening sharp cutter, engraving cutter, straight shank milling cutter, drills, turning cutter and other tools
- With the 5C collet, It can hold workpieces with a diameter of 3-28mm, which is convenient and flexible to use .
- Yellow/green two colors available Other colors can be customized

| Model | OL-U2 |
|---|-------------------------|
| Max.clamping diameter | φ3-φ16mm |
| Spindle Speed | 3600RPM |
| Longitudinal travel of tool holder | 140mm |
| Longitudinal travel adjustment of tool holder | 18mm |
| Longitudinal travel of spindle and grinding wheel | 8mm |
| Taper angle range | 0° -180° |
| Negative taper angle range | 0° -10° |
| Relief angle range | 0° -25° |
| Voltage/Power | 220/380V 50/60Hz/0.37Kw |
| Motor speed | 2810mm/min |
| Wheel size | φ100*{50/35}*20mm |
| Gross weight | 52Kg |
| Packing dimensions L×W×H(mm) | 555x450x430mm |

○ Note: Standard collet X3 Type: 6 pieces; X3A type; 9 pieces; X5 type; 10 pieces ; X11 type:13 pieces. It is not easy to align below 4MM



| | |
|----------------|------------------------------------|
| Model | M16E |
| Type | Electric threading machine |
| Voltage | 220V50Hz |
| Power | 600W |
| Tapping range | M3-M16 |
| Connector | GT12-T14 |
| Collets | M3-M16 |
| Quantity | 8 |
| Operation mode | Vertical, vertical and horizontal* |
| Working radius | 1045mm、1545mm* |
| Minimum radius | 330mm |
| Maximum speed | 375rpm |
| Customized | 可定制 Customizable |
| Weight | 30KG |

| | |
|----------------|------------------------------------|
| Model | M30E |
| Type | Electric threading machine |
| Voltage | 220V50Hz |
| Power | 1200W |
| Tapping range | M6-M30 |
| Connector | GT24-T20 |
| Collets | M6-M24 |
| Quantity | 8 |
| Operation mode | Vertical, vertical and horizontal* |
| Working radius | 1180mm、1735mm* |
| Minimum radius | 370mm |
| Maximum speed | 200rpm |
| Customized | Customizable |
| Weight | 53KG |

| | |
|----------------|-------------------------------------|
| Model | M36E |
| Type | Electric threading machine |
| Voltage | 220V50Hz |
| Power | 600W |
| Tapping range | M6-M36 |
| Connector | GT12-T14 |
| Collets | M6-M36 |
| Quantity | 11 |
| Operation mode | Vertical, vertical and horizontal * |
| Working radius | 1180mm、1735mm* |
| Minimum radius | 370mm |
| Maximum speed | 125rpm |
| Customized | Customizable |
| Weight | 56KG |

The functions, components and accessories marked with * in the diagrams or instructions are not included in the standard configuration. If necessary, please select them separately.

Standard Tool Holders



| Model | Model | Specification(mm) | Configuration | Parameter Description |
|--------|-------|-------------------|------------------------------------|-------------------------------------|
| Bt30 | NB30 | 645Lx140Wx165H | Can store 6pcs BT30 tool Holders | Each holder is equipped with 2 feet |
| Bt40 | NB40 | | Can store 5pcs BT40 tool Holders | |
| Bt50 | NB50 | | Can store 4pcs BT50 tool Holders | |
| Model | Model | Specification(mm) | Configuration | |
| HSK63 | NH63 | 645Lx140Wx165H | Can store 6pcs HSK63 tool Holders | Each holder is equipped with 2 feet |
| HSK100 | NH100 | | Can store 4pcs HSK100 tool Holders | |



| Model | CNS-01 | | | | |
|---------------|-----------------|------|------|-------|--------|
| Specification | W1100xD600xH880 | | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 | HSK100 |
| Quantity | 30 | 25 | 20 | 25 | 20 |

| Model | CNS-02 | | | | |
|---------------|-----------------|------|------|-------|--------|
| Specification | W1100xD600xH880 | | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 | HSK100 |
| Quantity | 30 | 25 | 20 | 25 | 20 |



| Model | CNS-03 | | | | |
|---------------|----------------|------|------|-------|--------|
| Specification | W717xD572xH880 | | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 | HSK100 |
| Quantity | 24 | 24 | 20 | 24 | 20 |

| Model | CNS-05 | | | |
|---------------|----------------|------|------|-------|
| Specification | W564xD572xH985 | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 |
| Quantity | 43 | 43 | 26 | 43 |



| | | | | |
|---------------|--------------------|------|------|-------|
| Model | CNS-06 | | | |
| Specification | W564×D572×H860(挂板) | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 |
| Quantity | 22 | 18 | 16 | 18 |



| | | | |
|---------------|----------------|------|------|
| Model | CNS-09 | | |
| Specification | W850×D450×H800 | | |
| Tool model | BT30 | BT40 | BT50 |
| Quantity | 45 | 35 | 25 |



| | | | |
|---------------|----------------|------|------|
| Model | CNS-11 | | |
| Specification | W810×D500×H920 | | |
| Tool model | BT30 | BT40 | BT50 |
| Quantity | 56 | 48 | 40 |



| | | | |
|---------------|----------------|------|------|
| Model | CNS90 | | |
| Specification | W900×D475×H800 | | |
| Tool model | BT30 | BT40 | BT50 |
| Quantity | 45 | 35 | 215 |



| | | | |
|---------------|--------------------|------|------|
| Model | CNS9811 | | |
| Specification | W720×D420×H980+250 | | |
| Tool model | BT30 | BT40 | BT50 |
| Quantity | 31 | 31 | 24 |



| | | | | | |
|---------------|------------------|------|------|-------|--------|
| Model | CNS-07 | | | | |
| Specification | 1000W×650D×1500H | | | | |
| Tool model | BT30 | BT40 | BT50 | HSK63 | HSK100 |
| Quantity | 40 | 35 | 30 | 35 | 30 |



| | | | |
|---|-----------------|-------|-------|
| Model | CNS-08 | | |
| Specification | 870W×500D×1450H | | |
| Tool model | BT-30 | BT-40 | BT-50 |
| Total number of tools that can be installed | 77 | 63 | 49 |

Galvanized magnetic base (silver)



1/2 4"



3/8 3"



1/4 2" single water outlet double water outlet three water outlet



Installation demonstration

The plastic cooling water pipe is equipped with an inner thread connector, and the outer thread water pipe instantly becomes an inner thread. Solved the problem that some machine tool plastic cooling water pipes require internal threads.

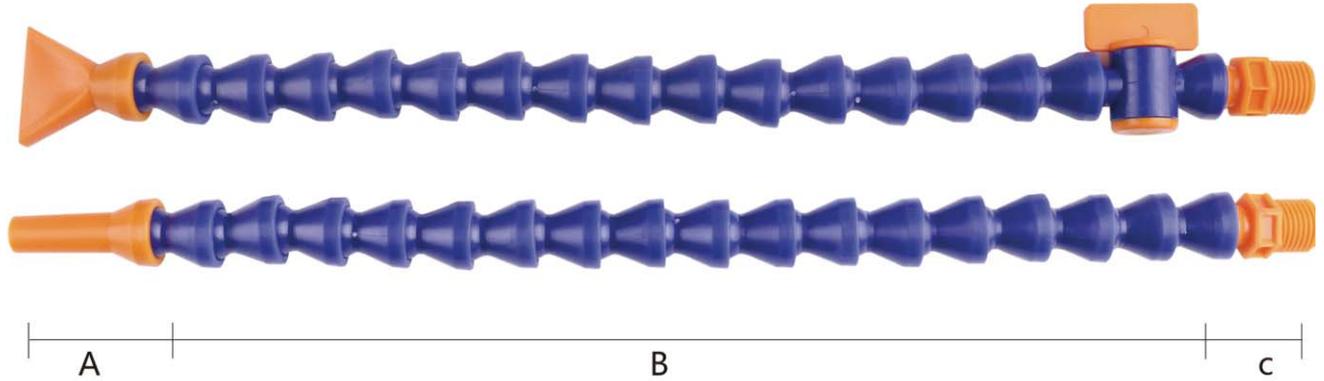


Thin round nozzle

Thick round nozzle

Flat nozzle

Calculation method for combined length of plastic cooling water pipes



| | | | | | | |
|----------------------|---|----------------------------|---|--------------------|---|-------------|
| Nozzle length (A) | + | Pipe section length (B) | + | long thread (C) | = | full length |
|----------------------|---|----------------------------|---|--------------------|---|-------------|

| | | | | | | |
|------|---|-------------------------------|---|------|---|-------------|
| 35mm | + | 15mm (Number of particles) | + | 22mm | = | full length |
|------|---|-------------------------------|---|------|---|-------------|

1/4" plastic cooling water pipe accessories assembly table(Can be assembled with any length of pipe fittings as required)



1/4 regulating valve



1/4 small diameter round nozzle
Inner diameter of water outlet : 4mm
Nozzle height: 35mm



1/4 large diameter round nozzle
Outlet width: 28mm
Nozzle height: 29mm

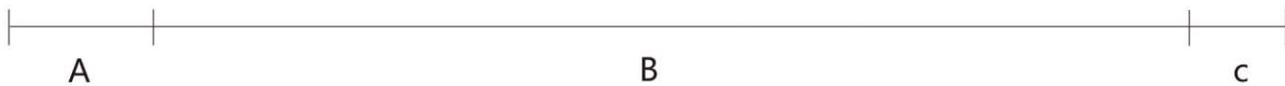


1/4 thread connector
Height:22mm
Thread specification: 1/4 2 "
Thread diameter: about 13mm



1/4 large diameter round nozzle
Inner diameter of water outlet: 7mm
Nozzle height: 35mm

Calculation method for combined length of plastic cooling water pipes



| | | | | | | |
|----------------------|---|----------------------------|---|--------------------|---|-------------|
| Nozzle length (A) | + | Pipe section length (B) | + | long thread (C) | = | full length |
|----------------------|---|----------------------------|---|--------------------|---|-------------|

| | | | | | | |
|------|---|---------------------------------|---|------|---|-------------|
| 37mm | + | 18.5mm (Number of particles) | + | 22mm | = | full length |
|------|---|---------------------------------|---|------|---|-------------|

plastic cooling water pipe accessories assembly table(Can be assembled with any length of pipe fittings as required)



3/8 regulating valve



3/8 small diameter round nozzle
Inner diameter of water outlet: 4mm
Nozzle height: 35mm



3/8 large diameter round nozzle
Outlet width: 34mm
Nozzle height: 36.5mm

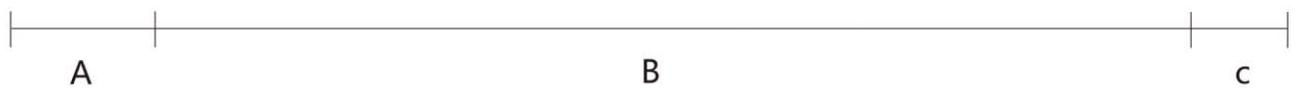


3/8 thread connector
Thread specification: 3/8 3 "
Thread diameter: about 15.6mm



3/8 large diameter round nozzle
Inner diameter of water outlet: 7mm
Nozzle height: 37mm

Calculation method for combined length of plastic cooling water pipes



| | | | | | | |
|----------------------|---|--|---|--------------------|---|-------------|
| Nozzle length (A) | + | Pipe section length (B) | + | long thread (C) | = | full length |
| 276mm | + | 21mm <small>(Number of particles)</small> | + | 22mm | = | full length |

plastic cooling water pipe accessories assembly table(Can be assembled with any length of pipe fittings as required)



1/2 regulating valve



1/2 small diameter round nozzle
Inner diameter of water outlet : 6.5mm
Nozzle height : 42mm

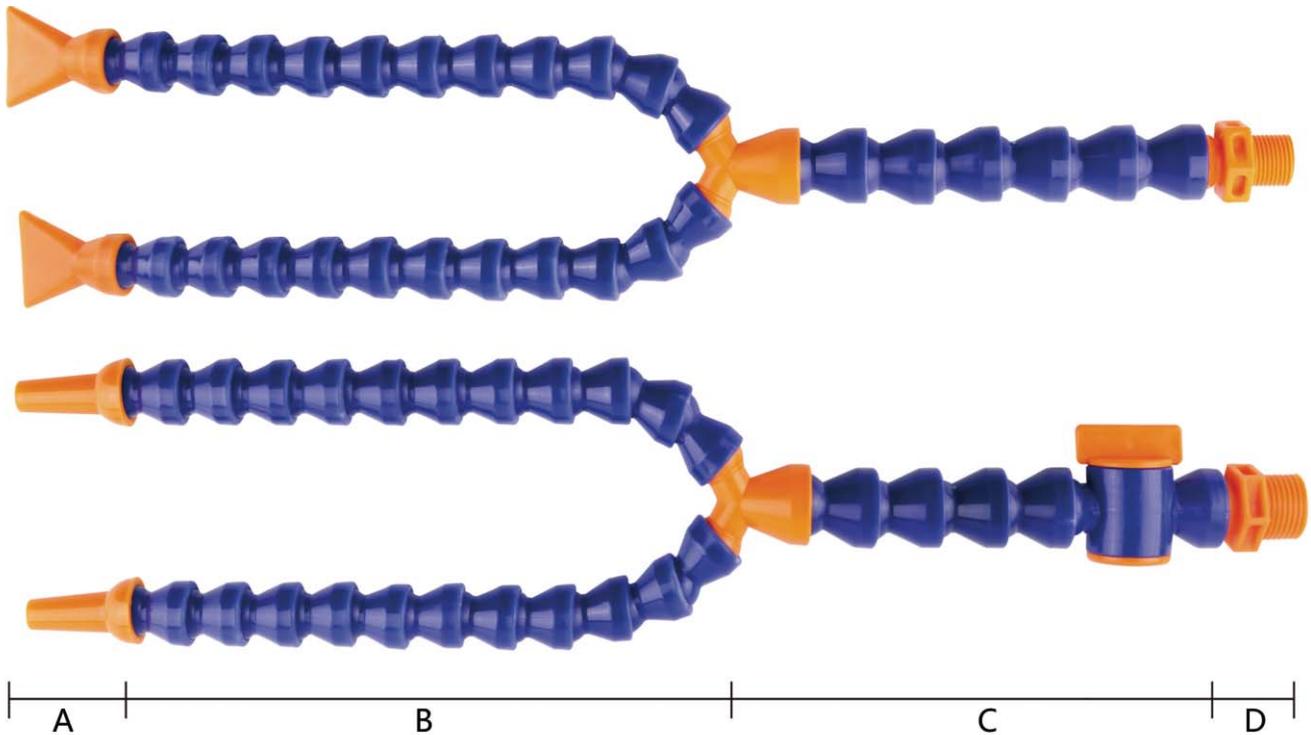


1/2 large diameter round nozzle
Outlet width : 47mm
Nozzle height : 41mm



1/2 large diameter round nozzle
Inner diameter of water outlet : 9mm
Nozzle height : 376mm

Calculation method for combined length of plastic cooling water pipes



Nozzle length (A) + Pipe section length (B) + Double tube length (C) + long thread (D) = full length

24.5mm + 18.5mm (Number of particles) + 21mm + 26mm = full length

plastic cooling water pipe accessories assembly table(Can be assembled with any length of pipe fittings as required)



3/8 Y-shaped split

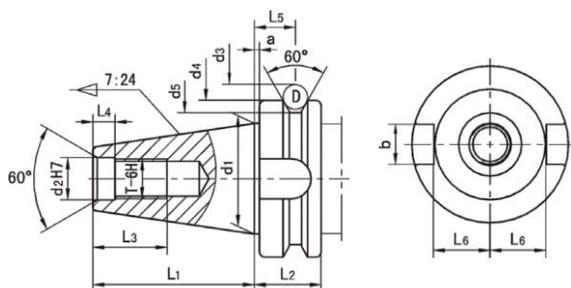


1/2 split special thread



3/8 split special thread

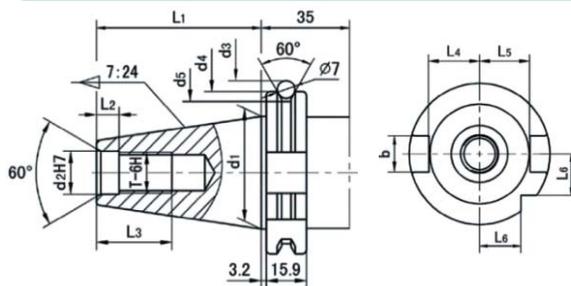
MAS403BT



| Model | L1 | L2 | L3 | L4 | L5 | L6 | d1 | d2 |
|-------|-------|----|----|----|------|------|-------|------|
| BT30 | 48.4 | 22 | 24 | 7 | 13.6 | 16.3 | 31.75 | 12.5 |
| BT40 | 65.4 | 27 | 30 | 9 | 16.6 | 22.6 | 44.45 | 17 |
| BT50 | 101.8 | 38 | 45 | 13 | 23.2 | 35.4 | 69.85 | 25 |

| Model | d3 | d4 | d5 | D | a | b | T |
|-------|--------|-----|----|----|---|------|-----|
| BT30 | 56.144 | 46 | 38 | 8 | 2 | 16.1 | M12 |
| BT40 | 75.679 | 63 | 53 | 10 | 2 | 16.1 | M16 |
| BT50 | 119.02 | 100 | 85 | 15 | 3 | 25.7 | M24 |

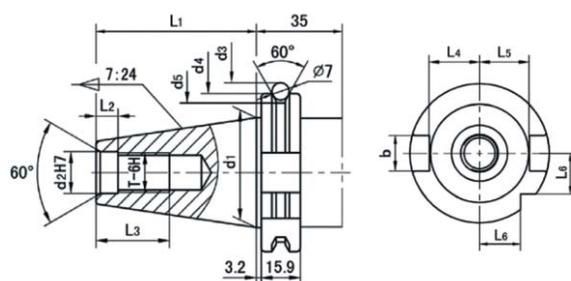
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| Model | L1 | L2 | L3 | L4 | L5 | L6 | d1 |
|-------|-------|------|----|------|------|------|-------|
| SK30 | 478 | 5.5 | 24 | 16.4 | 19 | 15 | 31.75 |
| SK40 | 68.4 | 8.2 | 32 | 22.8 | 25 | 18.5 | 44.45 |
| SK50 | 101.8 | 11.5 | 47 | 35.5 | 37.7 | 30 | 69.85 |

| Model | d2 | d3 | d4 | d5 | b | T |
|-------|----|--------|-------|-------|------|-----|
| SK30 | 13 | 59.3 | 50 | 44.3 | 16.1 | M12 |
| SK40 | 17 | 72.3 | 63.66 | 56.25 | 16.1 | M16 |
| SK50 | 25 | 107.25 | 97.5 | 91.25 | 25.7 | M24 |

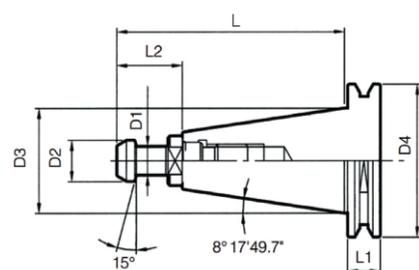
ANSI B5.50 CAT



| Model | L1 | L2 | L3 | L4 | L5 | d1 |
|-------|-------|-------|------|-------|-------|------|
| CAT30 | 1.875 | 0.188 | 1.00 | 0.664 | 0.735 | 1.25 |
| CAT40 | 2.687 | 0.188 | 1.12 | 0.89 | 0.985 | 1.75 |
| CAT50 | 4.000 | 0.250 | 1.75 | 1.39 | 1.485 | 2.75 |

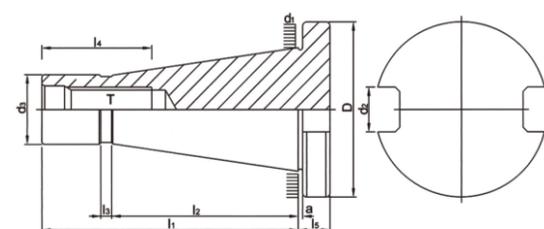
| Model | d2 | d3 | d4 | d5 | b | T |
|-------|-------|-------|-------|-------|-------|---------|
| CAT30 | 0.516 | 2.176 | 1.812 | 1.531 | 0.645 | 1/2"-13 |
| CAT40 | 0.641 | 2.863 | 2.500 | 2.219 | 0.645 | 5/8"-11 |
| CAT50 | 1.031 | 4.238 | 3.875 | 3.594 | 1.020 | 1"-8 |

ISO



| Model | D1 | D2 | D3 | D4 | L1 | L2 | L3 |
|-------|----|----|--------|----|------|----|------|
| ISO20 | 6 | 9 | 22.225 | 33 | 8 | 12 | 45.3 |
| ISO25 | 7 | 10 | 25.4 | 37 | 8 | 16 | 55.7 |
| ISO30 | 9 | 13 | 31.75 | 50 | 15.9 | 24 | 71.8 |

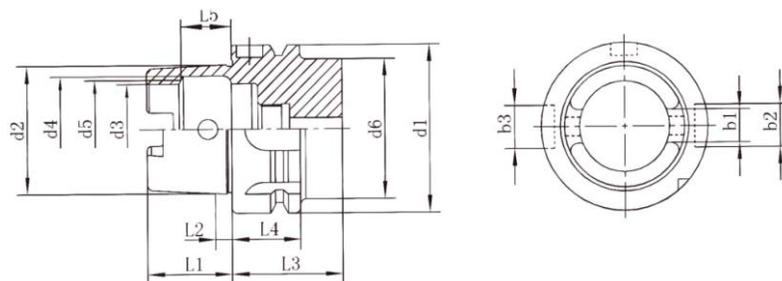
DIN2080 NT



ISO is Equivalent to DIN2080 NT
 XT/GB3837:30 is Equivalent to NT

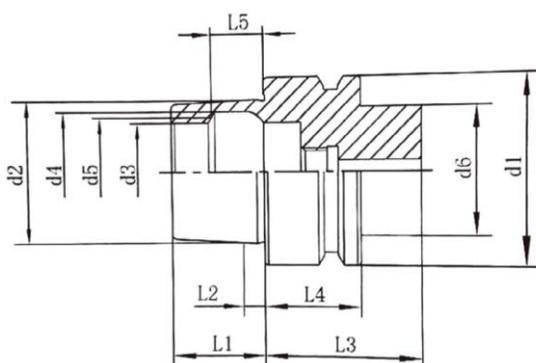
| Model | D | d1 | d2 | d3 | a | l1 | l2 | l3 | l4 | l5 | T |
|-------|------|-------|------|------|-----|-------|-------|----|----|----|---------------------------------|
| NT30 | 49 | 31.75 | 16.1 | 1705 | 1.6 | 68.4 | 48.4 | 3 | 24 | 8 | 1/2"-12W, M12x1.75p, 1/2"-13UNC |
| NT40 | 63 | 44.45 | 16.1 | 2492 | 1.6 | 93.4 | 65.4 | 5 | 32 | 10 | 5/8"-11W, M16x2.0P |
| NT50 | 97.5 | 69.85 | 25.7 | 3919 | 3.2 | 126.8 | 101.8 | 8 | 47 | 12 | 1"-8W, M24x3.0p |

DIN69893 HSK-A



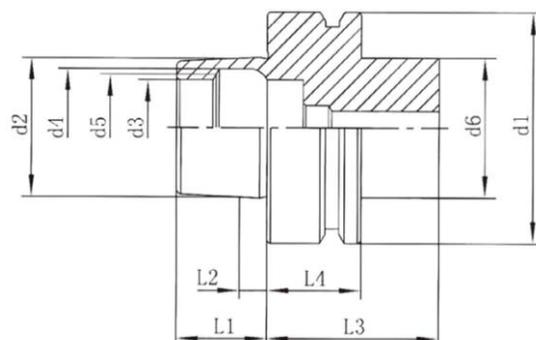
| Model | L1 0 -0.2 | L2 | L3 min | L4 | L5 js10 | d1 h10 | d2 | d3 H10 | d4 H11 | d5 | d6 max | b1 ±0.04 | b2 H10 | b3 H10 |
|---------|-----------------|------|-----------|----|------------|-----------|---------|-----------|-----------|----|-----------|-------------|-----------|-----------|
| HSK32A | 16 | 3.2 | 35 | 20 | 8.92 | 32 | 24.007 | 17 | 20.5 | 19 | 26 | 7.05 | 7 | 9 |
| HSK40A | 20 | 4 | 35 | 20 | 11.42 | 40 | 30.007 | 21 | 25.5 | 23 | 34 | 8.05 | 9 | 11 |
| HSK50A | 25 | 5 | 42 | 26 | 14.12 | 50 | 38.009 | 26 | 32 | 29 | 42 | 10.54 | 12 | 14 |
| HSK63A | 32 | 6.3 | 42 | 26 | 18.13 | 63 | 48.01 | 34 | 40 | 37 | 53 | 12.54 | 16 | 18 |
| HSK80A | 40 | 8 | 42 | 26 | 22.85 | 80 | 60.012 | 42 | 50 | 46 | 68 | 16.04 | 18 | 20 |
| HSK100A | 50 | 10 | 45 | 29 | 28.56 | 100 | 75.013 | 53 | 63 | 58 | 68 | 20.02 | 20 | 22 |
| HSK125A | 63 | 12.5 | 45 | 29 | 36.27 | 125 | 95.016 | 67 | 80 | 73 | 111 | 25.02 | 25 | 28 |
| HSK160A | 80 | 16 | 47 | 30 | 45.98 | 160 | 120.016 | 85 | 85 | 92 | 144 | 30.02 | 32 | 36 |

DIN69893 HSK-E



| Model | L1 0 -0.2 | L2 | L3 min | L4 | L5 js10 | d1 h10 | d2 | d3 H10 | d4 H11 | L | d6 max |
|--------|-----------------|-----|-----------|----|------------|-----------|--------|-----------|-----------|----|-----------|
| HSK32E | 16 | 3.2 | 35 | 20 | 8.92 | 32 | 24.007 | 17 | 20.5 | 19 | 26 |
| HSK40E | 20 | 4 | 35 | 20 | 11.42 | 40 | 30.007 | 21 | 20.5 | 23 | 34 |
| HSK50E | 25 | 5 | 42 | 26 | 14.12 | 50 | 38.009 | 26 | 32 | 29 | 42 |
| HSK63E | 32 | 6.3 | 42 | 26 | 18.13 | 63 | 48.01 | 34 | 40 | 37 | 53 |

DIN63893 HSK-F



| Model | L1 0 -0.2 | L2 | L3 min | L4 | L5 js10 | d1 h10 | d2 | d3 H10 | d4 H11 | d5 | d6 max |
|--------|-----------------|----|-----------|----|------------|-----------|--------|-----------|-----------|----|-----------|
| HSK50F | 20 | 4 | 42 | 26 | 11.42 | 50 | 30.007 | 21 | 25.5 | 23 | 42 |
| HSK63F | 25 | 5 | 42 | 26 | 11.42 | 63 | 38.009 | 26 | 32 | 29 | 53 |

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A series of horizontal dotted lines spanning the width of the page, intended for handwritten text or notes.