



# ARBORS AND ADAPTORS

|                           |               |
|---------------------------|---------------|
| Center drill holder       | <b>F02-03</b> |
| Antivibratory adaptors    | <b>F04-08</b> |
| Mill adaptors             | <b>F09-11</b> |
| Cylindrical modular shank | <b>F12-13</b> |



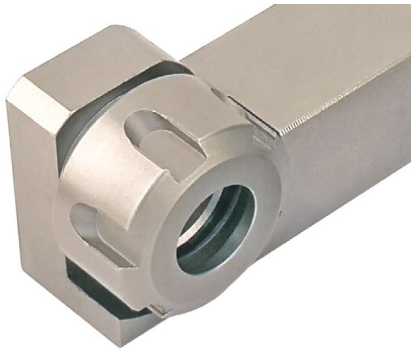


# Square Shank Center Drill Holder

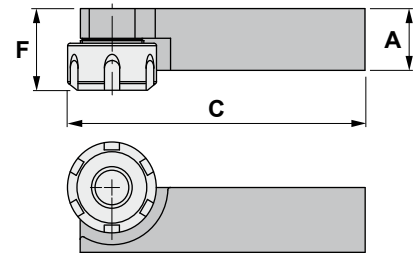
The Center Drill Holder's additional benefits:

- 1 - Is not limited to combined center/spotting drills alone, counter sinks, drills, and boring bars may be used.
- 2 - Frees up drill chucks and collet holders on your tool turret.
- 3 - Allows you to utilize unused turning tool pockets on your turret.
- 4 - Increases tooling arrangement flexibility.
- 5 - Can be used on manual and CNC tool room lathes.



**Characteristics:**

Square shank toolholder that will allow you to get into the narrow space between the end of the part and the tail stock of your CNC lathe.



## ER20

| Reference   |  | A     | C   | F     |  |
|-------------|-----------------------------------------------------------------------------------|-------|-----|-------|-------------------------------------------------------------------------------------|
| ER20-0.750L | ER20                                                                              | 0.750 | 4.5 | 1.125 | 1.255                                                                               |
| ER20-0.750R | ER20                                                                              | 0.750 | 4.5 | 1.125 | 1.255                                                                               |
| ER20-1.000L | ER20                                                                              | 1.000 | 6.0 | 1.125 | 1.690                                                                               |
| ER20-1.000R | ER20                                                                              | 1.000 | 6.0 | 1.125 | 1.690                                                                               |

| Reference   |  |
|-------------|------------------------------------------------------------------------------------|
| ER20-0.750L | 45320                                                                              |
| ER20-0.750R | 45320                                                                              |
| ER20-1.000L | 45320                                                                              |
| ER20-1.000R | 45320                                                                              |



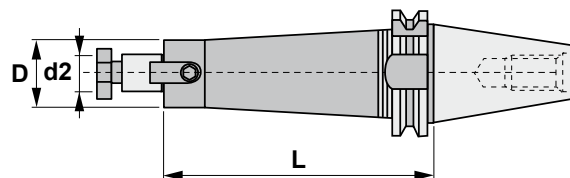
## SET ER20

| Reference       |  | CAP     | n° | Ø                                          |
|-----------------|-------------------------------------------------------------------------------------|---------|----|--------------------------------------------|
| SET-ER20-0.750L | ER20                                                                                | 1/8-1/2 | 7  | 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2 |
| SET-ER20-0.750R | ER20                                                                                | 1/8-1/2 | 7  | 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2 |
| SET-ER20-1.000L | ER20                                                                                | 1/8-1/2 | 7  | 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2 |
| SET-ER20-1.000R | ER20                                                                                | 1/8-1/2 | 7  | 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2 |



Characteristics:  
Antivibratory shell mill adaptor.  
Conical.

**CAT**



## A14.160

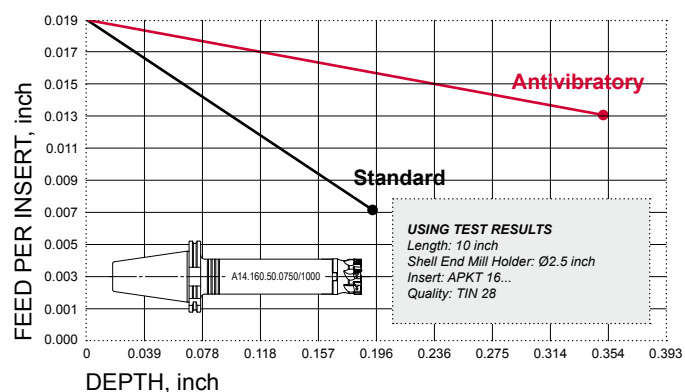
| Reference              | CAT | D     | d2    | L   | lbs    |
|------------------------|-----|-------|-------|-----|--------|
| A14.160.50.0750/1000-C | 50  | 1.750 | 0.750 | 10" | 14.440 |
| A14.160.50.0750/1200-C | 50  | 1.750 | 0.750 | 12" | 16.270 |
| A14.160.50.0750/1600-C | 50  | 1.750 | 0.750 | 16" | 22.985 |
| A14.160.50.0750/2000-C | 50  | 1.750 | 0.750 | 20" | 25.420 |

| Reference              |  |  |  |
|------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| A14.160.50.0750/1000-C | 10107                                                                               | 90.16.0750                                                                           | 11103                                                                                 |
| A14.160.50.0750/1200-C | 10107                                                                               | 90.16.0750                                                                           | 11103                                                                                 |
| A14.160.50.0750/1600-C | 10107                                                                               | 90.16.0750                                                                           | 11103                                                                                 |
| A14.160.50.0750/2000-C | 10107                                                                               | 90.16.0750                                                                           | 11103                                                                                 |

### SPECIAL FOR MOULD AND DIE MAKERS

Vibration reduced up to 60% compared to any other conventional shell mill adaptor, as they are manufactured with materials and mechanisms having antivibration properties.

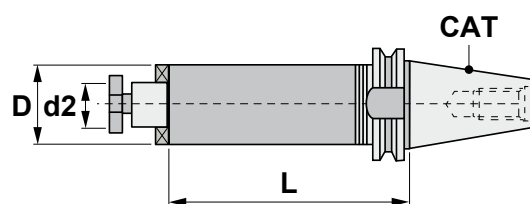
### COMPARISON WHEN USING AN ANTIVIBRATORY TOOLHOLDER





Characteristics:  
Antivibratory shell mill adaptor.  
Cylindrical.

**CAT**



## A14.160

| Reference            | CAT | D     | d2    | L   |  |  |  |  |
|----------------------|-----|-------|-------|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| A14.160.40.0750/0600 | 40  | 1.900 | 0.750 | 6"  | 10107                                                                               | 86207                                                                               | 11103                                                                               | 5.225                                                                               |
| A14.160.40.0750/0800 | 40  | 1.900 | 0.750 | 8"  | 10107                                                                               | 86207                                                                               | 11103                                                                               | 6.770                                                                               |
| A14.160.40.0750/1000 | 40  | 1.900 | 0.750 | 10" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 9.215                                                                               |
| A14.160.40.0750/1200 | 40  | 1.900 | 0.750 | 12" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 10.780                                                                              |
| A14.160.40.1000/0600 | 40  | 2.400 | 1.000 | 6"  | 10110                                                                               | 86210                                                                               | 11004                                                                               | 6.285                                                                               |
| A14.160.40.1000/0800 | 40  | 2.400 | 1.000 | 8"  | 10110                                                                               | 86210                                                                               | 11004                                                                               | 8.000                                                                               |
| A14.160.40.1000/1000 | 40  | 2.400 | 1.000 | 10" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 9.790                                                                               |
| A14.160.40.1000/1200 | 40  | 2.400 | 1.000 | 12" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 11.795                                                                              |
| A14.160.50.0750/0600 | 50  | 1.900 | 0.750 | 6"  | 10107                                                                               | 86207                                                                               | 11103                                                                               | 13.230                                                                              |
| A14.160.50.0750/0800 | 50  | 1.900 | 0.750 | 8"  | 10107                                                                               | 86207                                                                               | 11103                                                                               | 13.890                                                                              |
| A14.160.50.0750/1000 | 50  | 1.900 | 0.750 | 10" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 14.330                                                                              |
| A14.160.50.0750/1200 | 50  | 1.900 | 0.750 | 12" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 15.435                                                                              |
| A14.160.50.0750/1600 | 50  | 1.900 | 0.750 | 16" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 16.040                                                                              |
| A14.160.50.0750/2000 | 50  | 1.900 | 0.750 | 20" | 10107                                                                               | 86207                                                                               | 11103                                                                               | 18.675                                                                              |
| A14.160.50.1000/0600 | 50  | 2.400 | 1.000 | 6"  | 10110                                                                               | 86210                                                                               | 11004                                                                               | 13.890                                                                              |
| A14.160.50.1000/0800 | 50  | 2.400 | 1.000 | 8"  | 10110                                                                               | 86210                                                                               | 11004                                                                               | 15.095                                                                              |
| A14.160.50.1000/1000 | 50  | 2.400 | 1.000 | 10" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 15.720                                                                              |
| A14.160.50.1000/1200 | 50  | 2.400 | 1.000 | 12" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 15.720                                                                              |
| A14.160.50.1000/1600 | 50  | 2.400 | 1.000 | 16" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 15.875                                                                              |
| A14.160.50.1000/2000 | 50  | 2.400 | 1.000 | 20" | 10110                                                                               | 86210                                                                               | 11004                                                                               | 17.945                                                                              |
| A14.160.50.1250/0600 | 50  | 2.900 | 1.250 | 6"  | 10112                                                                               | 86212                                                                               | 11105                                                                               | 15.875                                                                              |
| A14.160.50.1250/0800 | 50  | 2.900 | 1.250 | 8"  | 10112                                                                               | 86212                                                                               | 11105                                                                               | 16.660                                                                              |
| A14.160.50.1250/1200 | 50  | 2.900 | 1.250 | 12" | 10112                                                                               | 86212                                                                               | 11105                                                                               | 23.320                                                                              |
| A14.160.50.1250/1600 | 50  | 2.900 | 1.250 | 16" | 10112                                                                               | 86212                                                                               | 11105                                                                               | 28.830                                                                              |
| A14.160.50.1250/2000 | 50  | 2.900 | 1.250 | 20" | 10112                                                                               | 86212                                                                               | 11105                                                                               | 35.445                                                                              |

**Characteristics:**

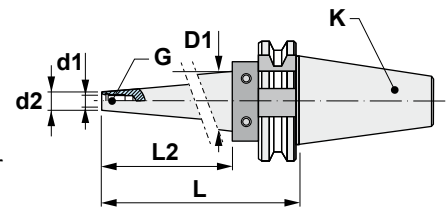
Antivibratory end mill adaptors.

For frontal end mill support screwed shanks.

Manufactured with materials and

mechanisms having antivibration properties.

Standard and extra long lengths, suitable for moulding and special manufactures.

**DIN 69871-A****A11.315**

| Reference                                               | ISO | L2     | D1    | L      | D     | d1    | G   | d2    |  |
|---------------------------------------------------------|-----|--------|-------|--------|-------|-------|-----|-------|-------------------------------------------------------------------------------------|
| A11.315.40.10/200                                       | 40  | 6.496  | 1.378 | 7.875  | 1.968 | 0.413 | M10 | 0.708 | 3.835                                                                               |
| A11.315.40.10/250                                       | 40  | 8.465  | 1.615 | 9.843  | 1.968 | 0.413 | M10 | 0.708 | 4.762                                                                               |
| A11.315.40.10/300                                       | 40  | 10.433 | 1.811 | 11.811 | 1.968 | 0.413 | M10 | 0.708 | 6.065                                                                               |
| A11.315.40.12/200                                       | 40  | 6.496  | 1.496 | 7.875  | 1.968 | 0.492 | M12 | 0.827 | 4.652                                                                               |
| <b>WARNING!! Modular Extensions (Pages F07 to F13).</b> |     |        |       |        |       |       |     |       |                                                                                     |
| A11.315.40.12/300                                       | 40  | 10.433 | 1.929 | 11.811 | 1.968 | 0.492 | M12 | 0.827 | 6.790                                                                               |
| A11.315.40.16/200                                       | 40  | 6.496  | 1.811 | 7.875  | 1.968 | 0.669 | M16 | 1.142 | 5.100                                                                               |
| A11.315.40.16/250                                       | 40  | 8.465  | 1.890 | 9.843  | 1.968 | 0.669 | M16 | 1.142 | 6.040                                                                               |
| A11.315.40.16/300                                       | 40  | 10.433 | 1.969 | 11.811 | 1.968 | 0.669 | M16 | 1.142 | 7.495                                                                               |
| A11.315.50.12/250                                       | 50  | 8.465  | 1.732 | 9.843  | 3.150 | 0.492 | M12 | 0.827 | 10.560                                                                              |
| A11.315.50.12/300                                       | 50  | 10.433 | 1.930 | 11.811 | 3.150 | 0.492 | M12 | 0.827 | 11.290                                                                              |
| A11.315.50.12/400                                       | 50  | 14.370 | 2.362 | 15.748 | 3.150 | 0.492 | M12 | 0.827 | 15.325                                                                              |
| A11.315.50.16/250                                       | 50  | 8.465  | 2.048 | 9.843  | 3.150 | 0.669 | M16 | 1.142 | 12.150                                                                              |
| A11.315.50.16/300                                       | 50  | 10.433 | 2.244 | 11.811 | 3.150 | 0.669 | M16 | 1.142 | 13.540                                                                              |
| A11.315.50.16/400                                       | 50  | 14.370 | 2.677 | 15.748 | 3.150 | 0.669 | M16 | 1.142 | 16.715                                                                              |
| A11.315.50.16/500                                       | 50  | 18.307 | 3.070 | 19.685 | 3.150 | 0.669 | M16 | 1.142 | 25.750                                                                              |

**A11.315IK**

| Reference           | ISO | L2     | D1    | L      | D     | d1    | G   | d2    |  |
|---------------------|-----|--------|-------|--------|-------|-------|-----|-------|---------------------------------------------------------------------------------------|
| A11.315.40.10/200IK | 40  | 6.496  | 1.380 | 7.875  | 1.968 | 0.413 | M10 | 0.708 | 3.835                                                                                 |
| A11.315.40.10/250IK | 40  | 8.465  | 1.615 | 9.843  | 1.968 | 0.413 | M10 | 0.708 | 4.762                                                                                 |
| A11.315.40.12/200IK | 40  | 6.496  | 1.496 | 7.875  | 1.968 | 0.492 | M12 | 0.827 | 4.652                                                                                 |
| A11.315.40.12/250IK | 40  | 8.465  | 1.732 | 9.843  | 1.968 | 0.492 | M12 | 0.827 | 5.315                                                                                 |
| A11.315.40.16/250IK | 40  | 8.465  | 1.890 | 9.843  | 1.968 | 0.669 | M16 | 1.142 | 6.040                                                                                 |
| A11.315.50.12/300IK | 50  | 10.433 | 1.930 | 11.811 | 3.150 | 0.492 | M12 | 0.827 | 11.290                                                                                |
| A11.315.50.16/300IK | 50  | 10.433 | 2.244 | 11.811 | 3.150 | 0.669 | M16 | 1.142 | 13.540                                                                                |

Modular milling cutters.  G22, G26, G41, G47 and G66



**Characteristics:**

Antivibratory end mill adaptors.

HSK DIN 69893-1

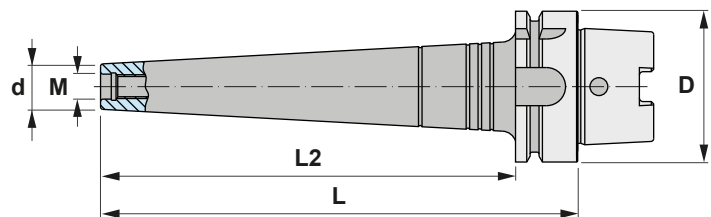
For frontal end mill support screwed shanks.

Manufactured with materials and

mechanisms having antivibration properties.

Standard and extra long lengths, suitable for  
moulding and special manufactures.

With internal coolant.



## A16.315IK

| Reference            | HSK | L      | d     | M   | L2     | D     |  lbs |
|----------------------|-----|--------|-------|-----|--------|-------|-----------------------------------------------------------------------------------------|
| A16.315.063.10/200IK | 63  | 7.875  | 0.709 | M10 | 6.850  | 2.480 | 2.845                                                                                   |
| A16.315.063.10/250IK | 63  | 9.843  | 0.709 | M10 | 8.819  | 2.480 | 3.310                                                                                   |
| A16.315.063.12/200IK | 63  | 7.875  | 0.827 | M12 | 6.850  | 2.480 | 2.955                                                                                   |
| A16.315.063.12/250IK | 63  | 9.843  | 0.827 | M12 | 8.819  | 2.480 | 3.420                                                                                   |
| A16.315.063.16/250IK | 63  | 9.843  | 1.142 | M16 | 8.819  | 2.480 | 4.695                                                                                   |
| A16.315.100.12/300IK | 100 | 11.811 | 0.827 | M12 | 10.670 | 3.937 | 7.895                                                                                   |
| A16.315.100.16/300IK | 100 | 11.811 | 1.142 | M16 | 10.670 | 3.937 | 9.700                                                                                   |

Modular milling cutters.  G22, G26, G41, G47 and G66



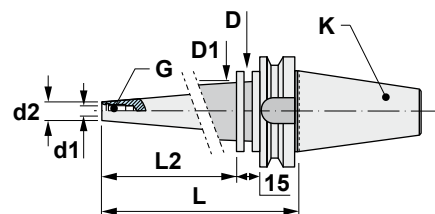
**Characteristics:**

Antivibratory end mill adaptors.

JIS B 6339-BT

For frontal end mill support screwed shanks.

Manufactured with materials and mechanisms having antivibration properties. Standard and extra long lengths, suitable for moulding and special manufactures.



## A20.315

| Reference         | BT | L2     | D1    | L      | D     | d1    | G   | d2    |  |
|-------------------|----|--------|-------|--------|-------|-------|-----|-------|-------------------------------------------------------------------------------------|
| A20.315.40.10/200 | 40 | 6.220  | 1.378 | 7.874  | 1.968 | 0.413 | M10 | 0.709 | 4.345                                                                               |
| A20.315.40.10/250 | 40 | 8.189  | 1.575 | 9.842  | 1.968 | 0.413 | M10 | 0.709 | 4.985                                                                               |
| A20.315.40.10/300 | 40 | 10.157 | 1.771 | 11.811 | 1.968 | 0.413 | M10 | 0.709 | 6.220                                                                               |
| A20.315.40.12/200 | 40 | 6.220  | 1.496 | 7.874  | 1.968 | 0.492 | M12 | 0.827 | 4.410                                                                               |
| A20.315.40.12/250 | 40 | 8.189  | 1.692 | 9.842  | 1.968 | 0.492 | M12 | 0.827 | 5.490                                                                               |
| A20.315.40.12/300 | 40 | 10.157 | 1.732 | 11.811 | 1.968 | 0.492 | M12 | 0.827 | 6.900                                                                               |
| A20.315.40.16/200 | 40 | 6.220  | 1.692 | 7.874  | 1.968 | 0.669 | M16 | 1.142 | 5.490                                                                               |
| A20.315.40.16/250 | 40 | 8.189  | 1.732 | 9.842  | 1.968 | 0.669 | M16 | 1.142 | 6.195                                                                               |
| A20.315.40.16/300 | 40 | 10.157 | 1.850 | 11.811 | 1.968 | 0.669 | M16 | 1.142 | 7.605                                                                               |
| A20.315.50.12/250 | 50 | 7.755  | 1.653 | 9.842  | 3.150 | 0.492 | M12 | 0.827 | 11.575                                                                              |
| A20.315.50.12/300 | 50 | 9.724  | 1.850 | 11.811 | 3.150 | 0.492 | M12 | 0.827 | 13.030                                                                              |
| A20.315.50.12/400 | 50 | 13.661 | 2.244 | 15.748 | 3.150 | 0.492 | M12 | 0.827 | 16.715                                                                              |
| A20.315.50.16/300 | 50 | 9.724  | 2.165 | 11.811 | 3.150 | 0.669 | M16 | 1.142 | 14.990                                                                              |
| A20.315.50.16/400 | 50 | 13.661 | 2.559 | 15.748 | 3.150 | 0.669 | M16 | 1.142 | 19.845                                                                              |
| A20.315.50.16/500 | 50 | 17.598 | 2.992 | 19.685 | 3.150 | 0.669 | M16 | 1.142 | 26.455                                                                              |



Modular milling cutters.  G22, G26, G41, G47 and G66

122006 90°

123006 90°

16\_906

55\_506

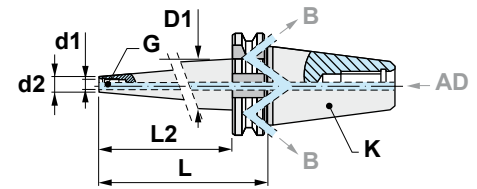
87\_06





Characteristics:  
Mill adaptors.  
For frontal end mill support  
screwed shanks.

**DIN 69871-A**



## 13.315

| Reference        | DIN | L     | d1    | G   | d2    | L2    | D1    |  lbs |
|------------------|-----|-------|-------|-----|-------|-------|-------|-----------------------------------------------------------------------------------------|
| 13.315.40.10/045 | 40  | 1.772 | 0.413 | M10 | 0.708 | 0.984 | 0.787 | 2.005                                                                                   |
| 13.315.40.10/070 | 40  | 2.755 | 0.413 | M10 | 0.708 | 1.968 | 0.905 | 2.115                                                                                   |
| 13.315.40.10/120 | 40  | 4.724 | 0.413 | M10 | 0.708 | 3.937 | 1.141 | 2.535                                                                                   |
| 13.315.40.12/045 | 40  | 1.772 | 0.492 | M12 | 0.826 | 0.984 | 0.944 | 2.030                                                                                   |
| 13.315.40.12/070 | 40  | 2.755 | 0.492 | M12 | 0.826 | 1.968 | 1.023 | 2.160                                                                                   |
| 13.315.40.12/120 | 40  | 4.724 | 0.492 | M12 | 0.826 | 3.937 | 1.259 | 2.780                                                                                   |
| 13.315.40.16/045 | 40  | 1.772 | 0.669 | M16 | 1.141 | 0.984 | 1.259 | 2.050                                                                                   |
| 13.315.40.16/070 | 40  | 2.755 | 0.669 | M16 | 1.141 | 1.968 | 1.377 | 2.295                                                                                   |
| 13.315.40.16/120 | 40  | 4.724 | 0.669 | M16 | 1.141 | 3.937 | 1.574 | 3.375                                                                                   |
| 13.315.50.12/070 | 50  | 2.755 | 0.492 | M12 | 0.826 | 1.968 | 1.023 | 6.195                                                                                   |
| 13.315.50.12/120 | 50  | 4.724 | 0.492 | M12 | 0.826 | 3.937 | 1.259 | 6.860                                                                                   |
| 13.315.50.12/170 | 50  | 6.693 | 0.492 | M12 | 0.826 | 5.905 | 1.456 | 7.605                                                                                   |
| 13.315.50.16/070 | 50  | 2.755 | 0.669 | M16 | 1.141 | 1.968 | 1.377 | 6.415                                                                                   |
| 13.315.50.16/120 | 50  | 4.724 | 0.669 | M16 | 1.141 | 3.937 | 1.574 | 7.430                                                                                   |
| 13.315.50.16/170 | 50  | 6.693 | 0.669 | M16 | 1.141 | 5.905 | 1.771 | 8.620                                                                                   |

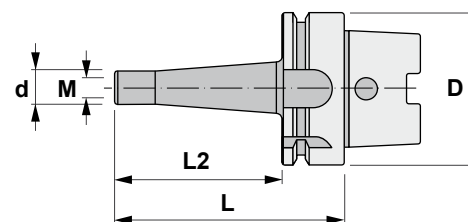
  
**F**

Modular milling cutters.  G22, G26, G41, G47 and G66





Characteristics:  
Milling cutter arbors for screw-on  
type milling cutters.  
DIN 69893-1 / HSK Form A.



## 16.315

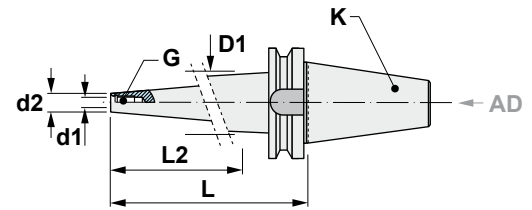
| Reference         | HSK | L     | d     | M  | L2    | D     |  |
|-------------------|-----|-------|-------|----|-------|-------|-------------------------------------------------------------------------------------|
| 16.315.063.10/050 | 63  | 2.992 | 0.708 | 10 | 1.968 | 2.480 | 1.675                                                                               |
| 16.315.063.10/100 | 63  | 4.960 | 0.708 | 10 | 3.937 | 2.480 | 2.250                                                                               |
| 16.315.063.12/050 | 63  | 2.992 | 0.826 | 12 | 1.968 | 2.480 | 1.720                                                                               |
| 16.315.063.12/100 | 63  | 4.960 | 0.826 | 12 | 3.937 | 2.480 | 2.360                                                                               |
| 16.315.063.16/050 | 63  | 2.992 | 1.141 | 16 | 1.968 | 2.480 | 1.985                                                                               |
| 16.315.063.16/100 | 63  | 4.960 | 1.141 | 16 | 3.937 | 2.480 | 2.670                                                                               |
| 16.315.100.10/100 | 100 | 5.078 | 0.708 | 10 | 3.937 | 3.937 | 5.140                                                                               |
| 16.315.100.10/150 | 100 | 7.047 | 0.708 | 10 | 5.905 | 3.937 | 5.535                                                                               |
| 16.315.100.12/100 | 100 | 5.078 | 0.826 | 12 | 3.937 | 3.937 | 5.205                                                                               |
| 16.315.100.12/150 | 100 | 7.047 | 0.826 | 12 | 5.905 | 3.937 | 5.645                                                                               |
| 16.315.100.16/100 | 100 | 5.078 | 1.141 | 16 | 3.937 | 3.937 | 5.380                                                                               |
| 16.315.100.16/150 | 100 | 7.047 | 1.141 | 16 | 5.905 | 3.937 | 5.975                                                                               |

Modular milling cutters.  G22, G26, G41, G47 and G66





Characteristics:  
 Mill adaptors.  
 JIS B 6339-BT  
 For frontal end mill support  
 screwed shanks.  
 Similar to DIN 69871 - Form AD+B



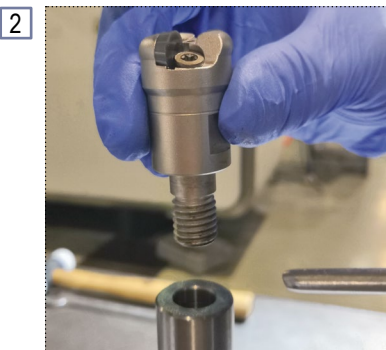
## 23.315

| Reference        | BT | L     | d1    | G   | d2    | L2    | D1    |  lbs |
|------------------|----|-------|-------|-----|-------|-------|-------|-----------------------------------------------------------------------------------------|
| 23.315.40.10/055 | 40 | 2.165 | 0.413 | M10 | 0.708 | 0.984 | 0.787 | 2.295                                                                                   |
| 23.315.40.10/080 | 40 | 3.150 | 0.413 | M10 | 0.708 | 1.968 | 0.905 | 2.450                                                                                   |
| 23.315.40.10/130 | 40 | 5.118 | 0.413 | M10 | 0.708 | 3.937 | 1.141 | 2.980                                                                                   |
| 23.315.40.12/055 | 40 | 2.165 | 0.492 | M12 | 0.826 | 0.984 | 0.944 | 2.425                                                                                   |
| 23.315.40.12/080 | 40 | 3.150 | 0.492 | M12 | 0.826 | 1.968 | 1.023 | 2.515                                                                                   |
| 23.315.40.12/130 | 40 | 5.118 | 0.492 | M12 | 0.826 | 3.937 | 1.259 | 3.155                                                                                   |
| 23.315.40.16/055 | 40 | 2.165 | 0.669 | M16 | 1.141 | 0.984 | 1.259 | 2.425                                                                                   |
| 23.315.40.16/080 | 40 | 3.150 | 0.669 | M16 | 1.141 | 1.968 | 1.377 | 2.645                                                                                   |
| 23.315.40.16/130 | 40 | 5.118 | 0.669 | M16 | 1.141 | 3.937 | 1.574 | 3.770                                                                                   |
| 23.315.50.12/090 | 50 | 3.543 | 0.492 | M12 | 0.826 | 1.968 | 1.023 | 9.040                                                                                   |
| 23.315.50.12/140 | 50 | 5.511 | 0.492 | M12 | 0.826 | 3.937 | 1.259 | 9.150                                                                                   |
| 23.315.50.12/190 | 50 | 7.480 | 0.492 | M12 | 0.826 | 5.905 | 1.456 | 9.880                                                                                   |
| 23.315.50.16/090 | 50 | 3.543 | 0.669 | M16 | 1.141 | 1.968 | 1.377 | 8.710                                                                                   |
| 23.315.50.16/140 | 50 | 5.511 | 0.669 | M16 | 1.141 | 3.937 | 1.574 | 9.615                                                                                   |
| 23.315.50.16/190 | 50 | 7.480 | 0.669 | M16 | 1.141 | 5.905 | 1.771 | 10.915                                                                                  |

Modular milling cutters.  G22, G26, G41, G47 and G66

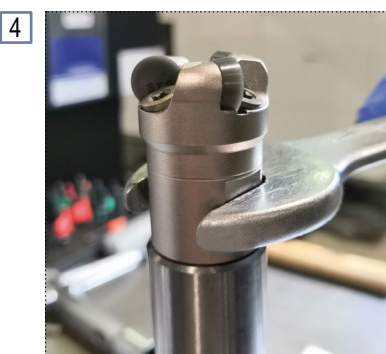


## Instruction Manual



### Step 1 2 : Clean

Please be sure to remove dirt and debris on all adjoining surfaces before assembling. (air preferred).



### Step 3 4 : Assembly

Mount the modular head onto the shank by hand until it fits then use the supplied wrench to tighten.



### Step 5 6 : Final Check

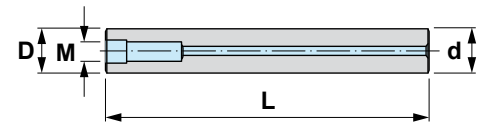
Re-check that there is no gap.

| Thread M   | Clamping Torque (Nm) |
|------------|----------------------|
| <b>M6</b>  | 6.5                  |
| <b>M8</b>  | 10.0                 |
| <b>M10</b> | 12.0                 |
| <b>M12</b> | 15.0                 |
| <b>M16</b> | 20.0                 |

**i** Please tighten the screw with designated torque, too much torque will damage the screw.



Characteristics:  
Steel cylindric shanks for modular milling heads.  
HD= Antivibration shank.



## 06.0 <sup>0</sup>/<sub>1</sub>/<sub>2</sub>



| Reference       | d     | L     | M   | D     |  lbs |
|-----------------|-------|-------|-----|-------|-----------------------------------------------------------------------------------------|
| 06.0750.00.10   | 0.750 | 5.000 | M10 | 0.709 | 0.660                                                                                   |
| 06.1000.00.12   | 1.000 | 5.000 | M12 | 0.827 | 0.990                                                                                   |
| 06.0500.00.06HD | 0.500 | 5.000 | M6  | 0.394 | 0.506                                                                                   |
| 06.0625.00.08HD | 0.625 | 5.000 | M8  | 0.551 | 0.891                                                                                   |
| 06.0500.01.06HD | 0.500 | 6.000 | M6  | 0.394 | 0.583                                                                                   |
| 06.0625.01.08HD | 0.625 | 6.000 | M8  | 0.551 | 1.034                                                                                   |
| 06.0750.01.10HD | 0.750 | 6.000 | M10 | 0.709 | 1.661                                                                                   |
| 06.1000.01.12HD | 1.000 | 6.000 | M12 | 0.827 | 2.431                                                                                   |
| 06.0750.02.10HD | 0.750 | 8.000 | M10 | 0.709 | 2.211                                                                                   |
| 06.1000.02.12HD | 1.000 | 8.000 | M12 | 0.827 | 3.212                                                                                   |

  
**F**

Modular milling cutters.  G22, G26, G41, G47 and G66



