

# EMX-C

Segment sleeve mandrel  
Power operated

## Segment sleeve mandrel $\varnothing$ 25 - 121 mm

- Size 1 - 5
- Large expansibility



### Application/customer benefits

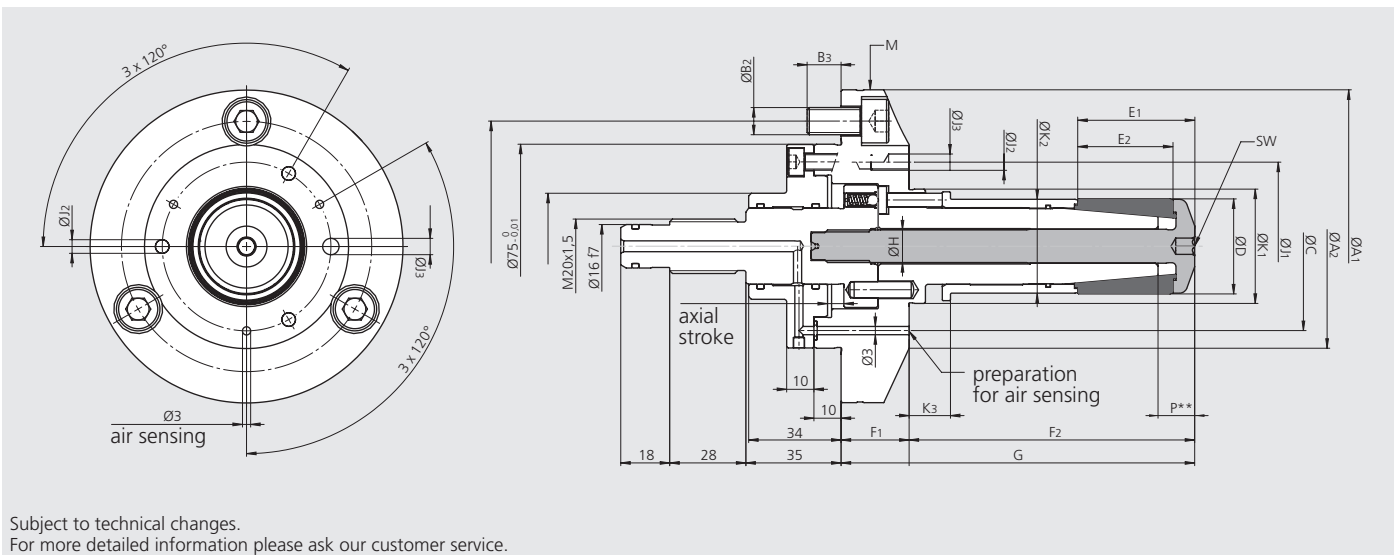
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping sleeve quick change for short setup times
- Preparation for air sensing

### Technical details

- Large expansibility 1 - 1.2 mm depending on the size (-0.3 » +0.7 / -0.3 » +0.9 from nom.  $\varnothing$ )
- Case hardened and vulcanized segment sleeves
- Power operated / manual lubrication
- Rigid design with flange mounting

### Standard equipment

Basic mandrel with draw bolt for power operation + actuating screw;  
Mounting bolts



Subject to technical changes.  
For more detailed information please ask our customer service.

| SMW-AUTOBLOK Type  | EMX-C-1                  | EMX-C-2 | EMX-C-3   | EMX-C-4   | EMX-C-5   |
|--------------------|--------------------------|---------|-----------|-----------|-----------|
| <b>Id. No.</b>     | 9410000                  | 9420000 | 9430000   | 9440000   | 9450000   |
| <b>A1</b>          | 115                      | 115     | 115       | 135       | 165       |
| <b>A2</b>          | 75                       | 75      | 115       | 135       | 165       |
| <b>B1</b>          | 92                       | 92      | 92        | 112       | 140       |
| <b>B2</b>          | 3 x M10                  | 3 x M10 | 3 x M10   | 3 x M10   | 3 x M12   |
| <b>B3</b>          | 12.5                     | 12.5    | 15.6      | 15.6      | 16        |
| <b>C</b>           | 3 x 120° $\varnothing$ 3 | 62      | 75        | 95        | 120       |
| <b>D</b>           | Clamping range           | 25 - 37 | 35 - 53   | 49 - 70   | 66 - 95   |
| <b>E1</b>          |                          | 37      | 43        | 55        | 64        |
| <b>E2</b>          | Clamping length          | 30      | 35        | 45        | 50        |
| <b>F1</b>          |                          | 25      | 25        | 25        | 32        |
| <b>F2</b>          |                          | 94      | 105       | 131.5     | 150.7     |
| <b>G</b>           |                          | 119     | 130       | 156.5     | 175.7     |
| <b>H</b>           |                          | M8 x 1  | M12 x 1.5 | M14 x 1.5 | M16 x 1.5 |
| <b>J1</b>          |                          | 62      | 62        | 100       | 115       |
| <b>J2</b>          | 3 x 120°                 | M6      | M6        | M6        | M8        |
| <b>J3</b>          | H7                       | 6       | 6         | 6         | 8         |
| <b>K1</b>          | f8                       | 35      | 42        | 54        | 73        |
| <b>K2</b>          | f8                       | 24.5    | 34.5      | 48.5      | 64.5      |
| <b>K3</b>          |                          | 16.2    | 15.2      | 16.5      | 17        |
| <b>M transport</b> | 3 x 120°                 | -       | -         | -         | M8        |
| <b>P**</b>         |                          | 12.5    | 13.5      | 15.5      | 19.5      |
| <b>WS (hex)</b>    |                          | WS5     | WS6       | WS10      | WS12      |
|                    |                          |         |           | WS12      | WS14      |

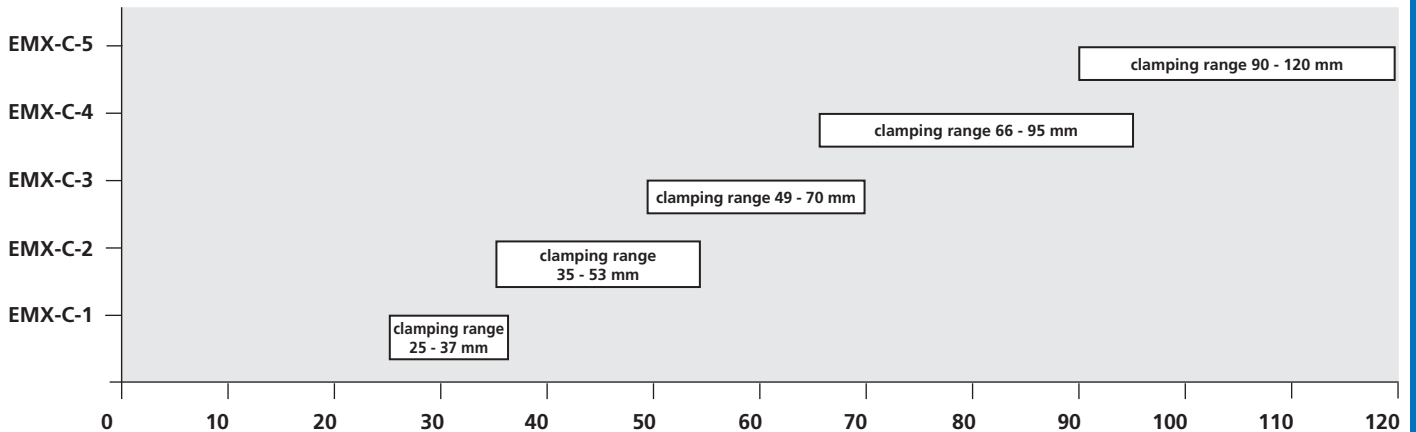
### Technical data

| SMW-AUTOBLOK Type                      | EMX-C-1  | EMX-C-2  | EMX-C-3  | EMX-C-4   | EMX-C-5   |
|--|----------|----------|----------|-----------|-----------|
| <b>Id. No.</b>                         | 9410000  | 9420000  | 9430000  | 9440000   | 9450000   |
| <b>Axial stroke</b>                    | 6.0      | 6.0      | 6.0      | 6.0       | 6.0       |
| <b>Expansibility in dia.</b>           | 1.0      | 1.0      | 1.2      | 1.2       | 1.2       |
| <b>Max. actuating force in kN</b>      | 8        | 12       | 15       | 25        | 30        |
| <b>Max. transmittable torque in Nm</b> | 36       | 74       | 120      | 281       | 467       |
| <b>Weight in kg</b>                    | 2.9      | 3.2      | 4.3      | 6.6       | 13.3      |
| <b>Rec. clamping cylinders</b>         | SIN-S 70 | SIN-S 85 | SIN-S 85 | SIN-S 100 | SIN-S 125 |

All measurements in unclamped position = Right end position.

\*\* Clamping on area P only is not allowed.

### Overview clamping ranges



### Clamping sleeves

#### EMX-C-1\*

| Ø       | 25      | 26      | 27      | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37      |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Id. No. | 9410250 | 9410260 | 9410270 | 9410280 | 9410290 | 9410300 | 9410310 | 9410320 | 9410330 | 9410340 | 9410350 | 9410360 | 9410370 |

#### EMX-C-2\*

| Ø       | 35      | 36      | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      | 45      | 46      | 47      |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Id. No. | 9420350 | 9420360 | 9420370 | 9420380 | 9420390 | 9420400 | 9420410 | 9420420 | 9420430 | 9420440 | 9420450 | 9420460 | 9420470 |
| Ø       | 48      | 49      | 50      | 51      | 52      | 53      |         |         |         |         |         |         |         |
| Id. No. | 9420480 | 9420490 | 9420500 | 9420510 | 9420520 | 9420530 |         |         |         |         |         |         |         |

#### EMX-C-3\*

| Ø       | 49      | 50      | 51      | 52      | 53      | 54      | 55      | 56      | 57      | 58      | 59      | 60      | 61      |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Id. No. | 9430490 | 9430500 | 9430510 | 9430520 | 9430530 | 9430540 | 9430550 | 9430560 | 9430570 | 9430580 | 9430590 | 9430600 | 9430610 |
| Ø       | 62      | 63      | 64      | 65      | 66      | 67      | 68      | 69      | 70      |         |         |         |         |
| Id. No. | 9430620 | 9430630 | 9430640 | 9430650 | 9430660 | 9430670 | 9430680 | 9430690 | 9430700 |         |         |         |         |

#### EMX-C-4\*

| Ø       | 66      | 67      | 68      | 69      | 70      | 71      | 72      | 73      | 74      | 75      | 76      | 77      | 78      |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Id. No. | 9440660 | 9440670 | 9440680 | 9440690 | 9440700 | 9440710 | 9440720 | 9440730 | 9440740 | 9440750 | 9440760 | 9440770 | 9440780 |
| Ø       | 79      | 80      | 81      | 82      | 83      | 84      | 85      | 86      | 87      | 88      | 89      | 90      | 91      |
| Id. No. | 9440790 | 9440800 | 9440810 | 9440820 | 9440830 | 9440840 | 9440850 | 9440860 | 9440870 | 9440880 | 9440890 | 9440900 | 9440910 |
| Ø       | 92      | 93      | 94      | 95      |         |         |         |         |         |         |         |         |         |
| Id. No. | 9440920 | 9440930 | 9440940 | 9440950 |         |         |         |         |         |         |         |         |         |

#### EMX-C-5\*

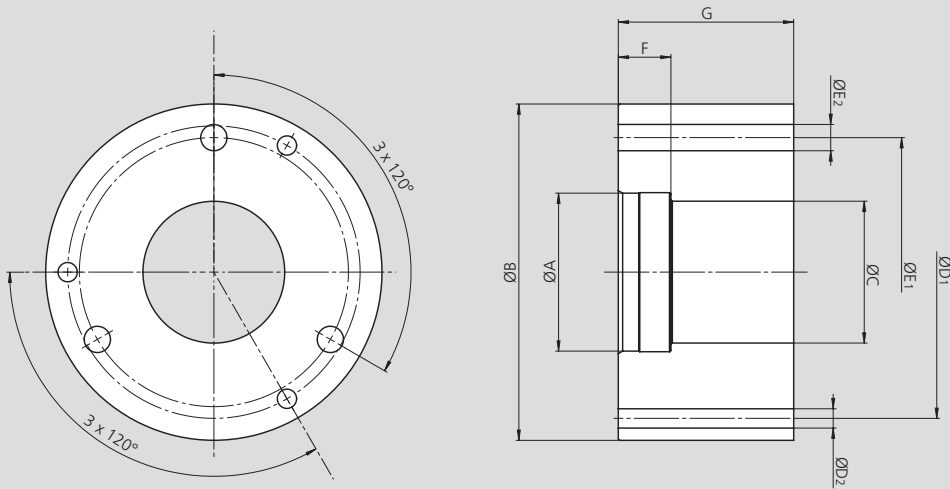
| Ø       | 90      | 91      | 92      | 93      | 94      | 95      | 96      | 97      | 98      | 99      | 100     | 101     | 102     |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Id. No. | 9450900 | 9450910 | 9450920 | 9450930 | 9450940 | 9450950 | 9450960 | 9450970 | 9450980 | 9450990 | 9451000 | 9451010 | 9451020 |
| Ø       | 103     | 104     | 105     | 106     | 107     | 108     | 109     | 110     | 111     | 112     | 113     | 114     | 115     |
| Id. No. | 9451030 | 9451040 | 9451050 | 9451060 | 9451070 | 9451080 | 9451090 | 9451100 | 9451110 | 9451120 | 9451130 | 9451140 | 9451150 |
| Ø       | 116     | 117     | 118     | 119     | 120     |         |         |         |         |         |         |         |         |
| Id. No. | 9451160 | 9451170 | 9451180 | 9451190 | 9451200 |         |         |         |         |         |         |         |         |

\* The expanding sleeves have a loading clearance of 0.3 mm in dia.

### Clamping screws

| Type    | Id. No. |
|---------|---------|
| EMX-C-1 | 9412000 |
| EMX-C-2 | 9422000 |
| EMX-C-3 | 9432000 |
| EMX-C-4 | 9442000 |
| EMX-C-5 | 9452000 |

### Workstop blanks soft for EMX-C

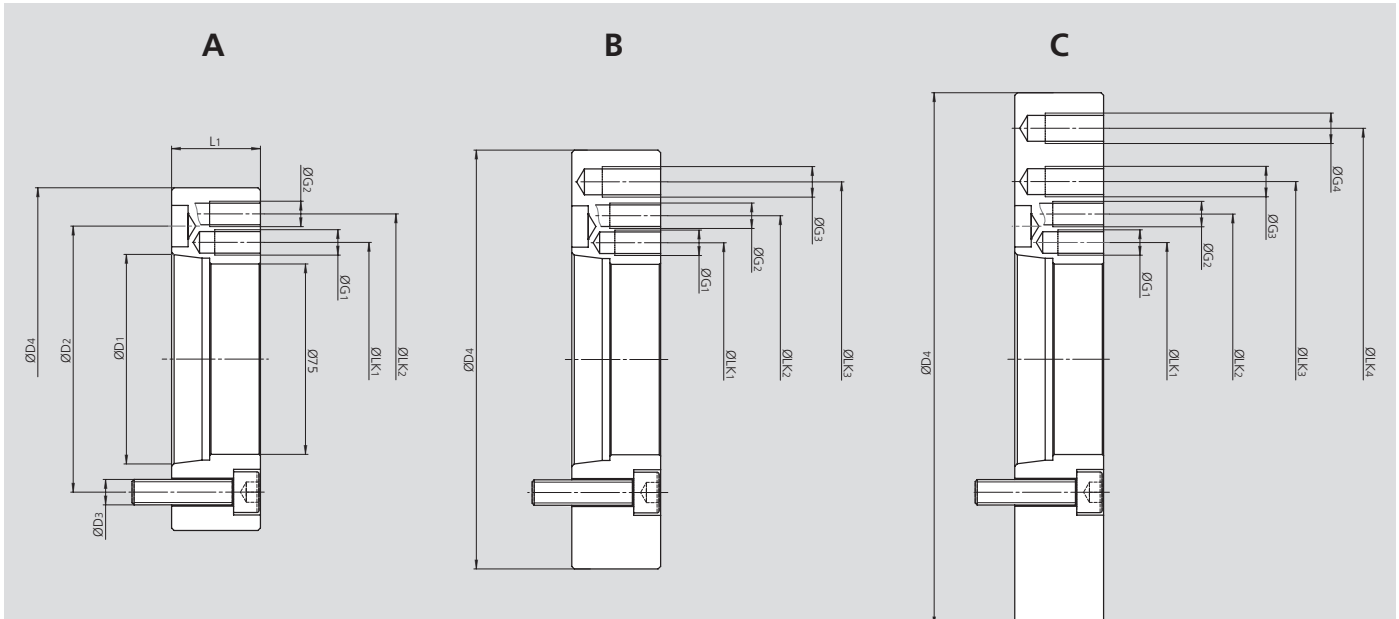


| Mandrel size | EMX-C-1 |         | EMX-C-2 |         | EMX-C-3 |         | EMX-C-4 |         | EMX-C-5 |         |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|              | short   | long    | short   | long    | short   | long    | short   | long    | short   | long    |
| Id. No.      | 9413000 | 9413001 | 9423000 | 9423001 | 9433000 | 9433001 | 9443000 | 9443001 | 9453000 | 9453001 |
| ØA           | 35      | 35      | 42      | 42      | 54      | 54      | 73      | 73      | 96      | 96      |
| ØB           | 75      | 75      | 75      | 75      | 115     | 115     | 135     | 135     | 165     | 165     |
| ØC           | 24.5    | 24.5    | 34.5    | 34.5    | 48.5    | 48.5    | 64.5    | 64.5    | 89.5    | 89.5    |
| ØD1          | 62      | 62      | 62      | 62      | 100     | 100     | 115     | 115     | 140     | 140     |
| ØD2          | 6.6     | 6.6     | 6.6     | 6.6     | 6.6     | 6.6     | 9       | 9       | 9       | 9       |
| ØE1          | -       | -       | -       | -       | 92      | 92      | 112     | 112     | 140     | 140     |
| ØE2          | -       | -       | -       | -       | 9       | 9       | 9       | 9       | 12      | 12      |
| F            | 17.2    | 17.2    | 16.2    | 16.2    | 17.5    | 17.5    | 18      | 18      | 23      | 23      |
| G            | 40      | 75      | 45      | 85      | 60      | 110     | 70      | 125     | 85      | 160     |

# Adapters

- EMX-P, EMX-F/FP, EMX-C have cylindrical mounting
- Adapters for DIN 55026 / ISO-A 702-1 spindle noses

ISO-A for sleeve expanding mandrels



Subject to technical changes.  
For more detailed information please ask our customer service.

## Technical data

| Adapter flange Id. No. | mm | Spindle nose ISO | D1      | D2    | D3      | D4  | L1 | LK1 | G1      | LK2 | G2      | LK3 | G3      | LK4 | G4      |
|------------------------|----|------------------|---------|-------|---------|-----|----|-----|---------|-----|---------|-----|---------|-----|---------|
| 9000051                | mm | A5               | 82.563  | 104.8 | 3 x M10 | 135 | 35 | 92  | 3 x M10 | 112 | 3 x M10 | -   | -       | -   | -       |
| 9000052                | mm | A5               | 82.563  | 104.8 | 3 x M10 | 165 | 35 | 92  | 3 x M10 | 112 | 3 x M10 | 140 | 3 x M12 | -   | -       |
| 9000053                | mm | A5               | 82.563  | 104.8 | 3 x M10 | 210 | 35 | 92  | 3 x M10 | 112 | 3 x M10 | 140 | 3 x M12 | 182 | 3 x M12 |
| 9000061                | mm | A6               | 106.375 | 133.4 | 3 x M12 | 165 | 36 | 92  | 3 x M10 | 112 | 3 x M10 | 140 | 3 x M12 | -   | -       |
| 9000062                | mm | A6               | 106.375 | 133.4 | 3 x M12 | 210 | 36 | 92  | 3 x M10 | 112 | 3 x M10 | 140 | 3 x M12 | 182 | 3 x M12 |
| 9000081                | mm | A8               | 139.719 | 171.4 | 3 x M16 | 210 | 45 | 92  | 3 x M10 | 112 | 3 x M10 | 140 | 3 x M12 | 182 | 3 x M12 |

| Appropriate adapter flanges | Spindle nose ISO | EMX-P                     | EMX-F/FP    | EMX-C     | Type |
|-----------------------------|------------------|---------------------------|-------------|-----------|------|
| 9000051                     | A5               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4     | 1-2-3-4   | A    |
| 9000052                     | A5               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4-5   | 1-2-3-4-5 | B    |
| 9000053                     | A5               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4-5-6 | 1-2-3-4-5 | C    |
| 9000061                     | A6               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4-5   | 1-2-3-4-5 | B    |
| 9000062                     | A6               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4-5-6 | 1-2-3-4-5 | C    |
| 9000081                     | A8               | 0-1-2-3-4-5-6-7-8-9-10-11 | 1-2-3-4-5-6 | 1-2-3-4-5 | C    |