

# Agathon Slide Guide Bushing Standard 7040 / 7041

## Novelty – Maintenance-free slide guide bushing, straight

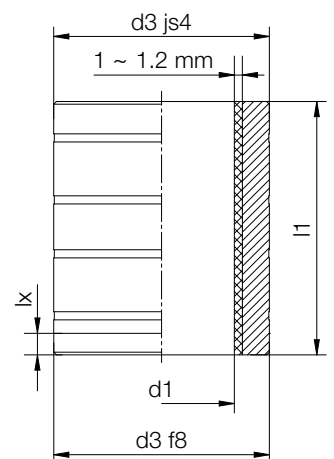
High performance slide bushing for demanding applications



Material of steel jacket 1.0044. Sliding layer made of sintered iron with graphite and MoS<sub>2</sub> (components Cu, C, Fe, Ni, Sn, P)

| Standard 7040 / 7041 |    |           |    |    |    |    |    |    |
|----------------------|----|-----------|----|----|----|----|----|----|
| Diameter             |    | Length l1 |    |    |    |    |    | f8 |
| d1                   | d3 | 15        | 23 | 30 | 37 | 47 | 60 | lx |
| 10                   | 20 | ✓         | ✓  |    |    |    |    | 2  |
| 12                   | 22 |           | ✓  | ✓  |    |    |    | 3  |
| 15/16                | 28 |           | ✓  | ✓  | ✓  |    |    | 3  |
| 19/20                | 32 |           | ✓  | ✓  | ✓  |    |    | 3  |
| 24/25                | 40 |           |    | ✓  |    | ✓  |    | 4  |
| 30/32                | 48 |           |    |    | ✓  | ✓  |    | 4  |
| 40                   | 58 |           |    |    |    |    | ✓  | 4  |

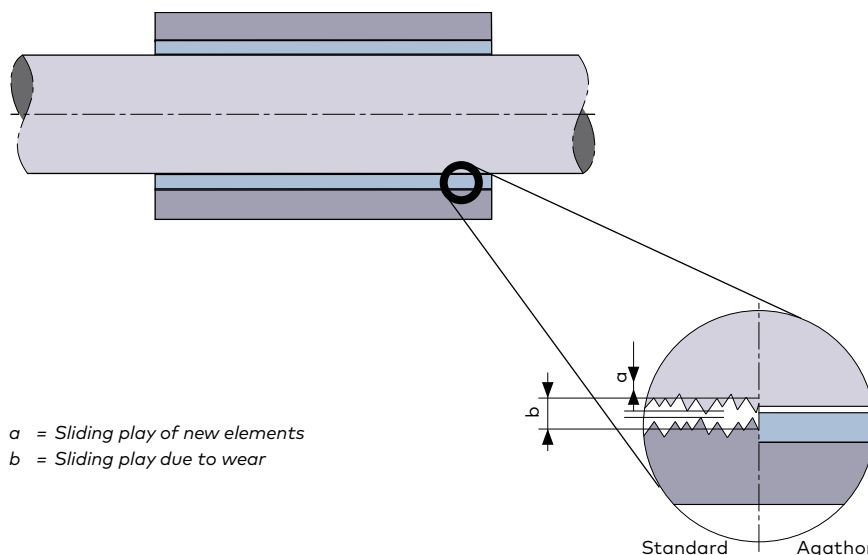
*d1 = Guide diameter  
d3 = Installation diameter for diameter fit js4/H5(H6)  
l1 = Nominal length  
lx = Chamfer f8 as installation aid*



Guide bushings are available in various standard lengths in the diameter range d1=10 to d1=40

See catalog for exact dimensions and preferred sizes

### Larger sliding surface - less N/mm<sup>2</sup>



- More support area / less load N/mm<sup>2</sup>
- Less abrasion
- Less heat generation
- Higher precision over a longer time period
- Lower maintenance costs – higher profit

### Features

- For speeds up to 0.3 (dry) respectively 0.5m/s (lubricated)
- Agathon tolerances
- Steel jacket made of 1.0044 for increased bushing stiffness (also possible made of 1.1730)

### Advantages

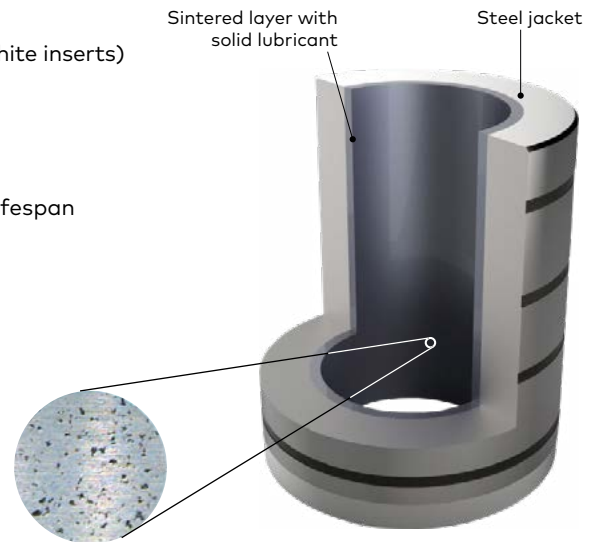
- Long lifespan in combination with Agathon pillars
- Low coefficient of friction, low heat generation
- Applicable in dry condition at temperatures up to 250°C (482°F) and lubricated: 150°C (302°F)
- Uniform load distribution over the entire contact surface (no graphite inserts)

### Benefits

- Direct replacement for sintered bushings (Standard 702x)
- Reduction of maintenance costs through significant increase of lifespan
- Easy replacement

### Applications

- Mold making:  
Main and ejector guides
- Punching tool:  
Locking, die sets, external pillars for very long strokes (transfer tools)
- Machine construction:  
Long strokes, high radial forces, combined movements



### Physical and mechanical characteristics

| Application range |                                 |                              |   |                     | Mechanical characteristics      |          |            |                                 |                                      |
|-------------------|---------------------------------|------------------------------|---|---------------------|---------------------------------|----------|------------|---------------------------------|--------------------------------------|
| Lubrication       | P                               | Sliding speed                | PV value                                      | Working temperature | Specific weight                 | Hardness | Elasticity | Elastic limit                   | Expansion coefficient                |
|                   | $\left[ \frac{N}{mm^2} \right]$ | $\left[ \frac{m}{s} \right]$ | $\left[ \frac{N}{mm^2} * \frac{m}{s} \right]$ | [°C]                | $\left[ \frac{g}{cm^3} \right]$ | [HRB]    | [ % ]      | $\left[ \frac{N}{mm^2} \right]$ | $\left[ x \frac{10^{-5}}{K} \right]$ |
| dry               | 29                              | 0.3                          | 1.65  | -40 to ~+250        | 6.3~7.1                         | ~20      | 17         | 41                              | 1~1.2                                |
| lubricated        | 50                              | 0.5                          | 2.47  | -40 to ~+150        |                                 |          |            |                                 |                                      |

Data based on steel jacket material 1.0044 (St 44-2), hardness approx. 170±15 HRB