

# Short Stroke Cylinders

Bores from 12 to 100 mm

Single acting



| Standard executions |        |      |
|---------------------|--------|------|
| Version             | Symbol | Type |
| Non magnetic        |        | BS   |
| Magnetic            |        | BSM  |



On request, they can be supplied according Directive 94/9/EC - **ATEX**  
**CE** **II 2 GDc T5**



| Options                     |                            | Suffix     |
|-----------------------------|----------------------------|------------|
| Rear spring                 | with bore from 12 to 63 mm | <b>T</b>   |
| Seals FKM                   | max 150 °C                 | <b>V</b>   |
| Special versions on request |                            | <b>/ S</b> |

The options can be combined (when this is possible)

Series of short stroke cylinders with extruded aluminium profile barrel and fixing holes directly made on it.  
 In the magnetic type the sensor can be fixed in the groove for sensor mounting by the bracket not included in the kit.  
 The magnetic version is provided with elastic dampers set on the heads.

For the magnetic reed switches type ASV see from page 1.110.1.

For the bracket type AS108 see page 1.120.1

For mounting accessories see from page 1.20.20.

For the rod with male thread see nipple page 1.20.20.

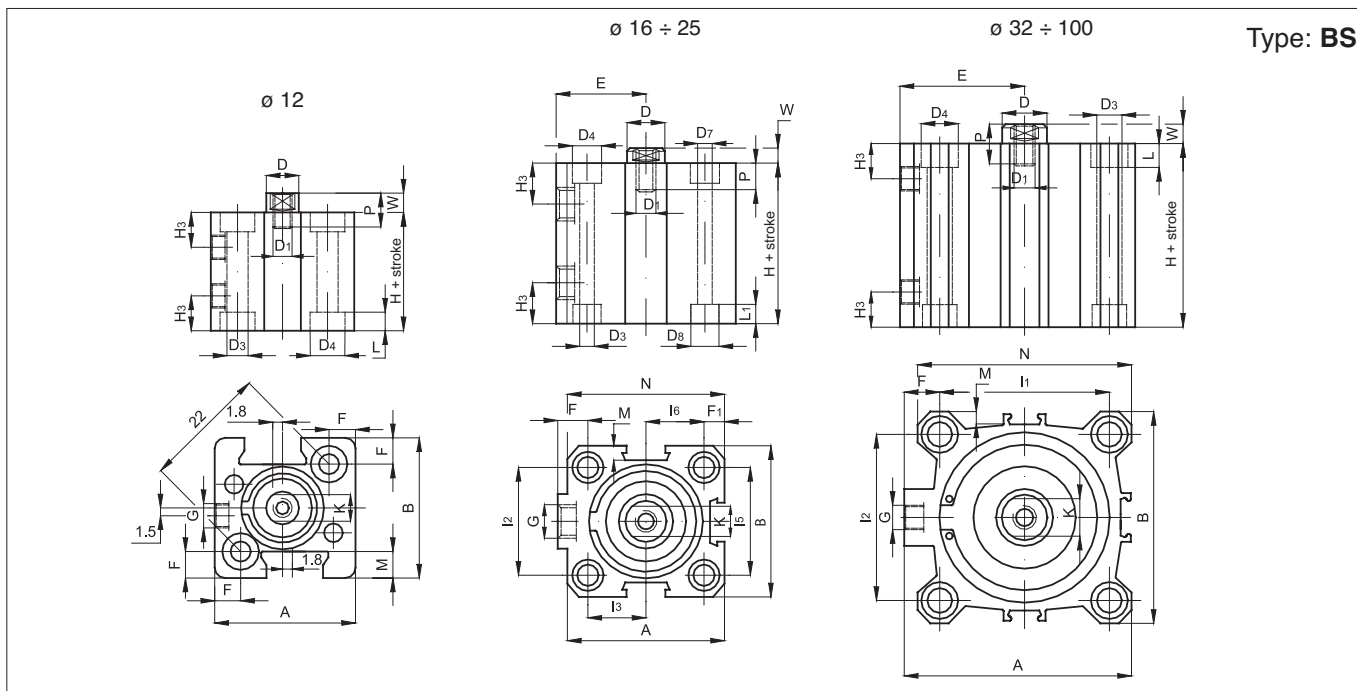
For rod accessories see from page 1.85.1.

How to order: 50 / 50 BSMT

|      |   |        |      |        |
|------|---|--------|------|--------|
| 50   | / | 50     | BSM  | T      |
| Bore | / | Stroke | Type | Option |

| Technical data    |                                                                                                                                                                                                                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fluid             | Compressed filtered air with or without lubrication                                                                                                                                                                                                                                                      |
| Pressure range    | 2 ÷ 10 bar                                                                                                                                                                                                                                                                                               |
| Temperature range | -20 °C ÷ + 80°C                                                                                                                                                                                                                                                                                          |
| Materials         | Heads: from 12 to 25 mm.: Brass<br>from 32 to 100 mm.: Aluminium<br>Barrel: Anodised aluminium<br>Rod: Stainless steel AISI 303<br>Seals: NBR<br>Piston: Non magnetic: from 12 to 32 mm: Delrin<br>from 40 to 100 mm: Aluminium<br>from 12 to 63 mm: Delrin<br>from 80 to 100 mm: Aluminium<br>Magnetic: |

| Bore (mm) | Standard strokes (mm)         | Max stroke (mm) | Thrust force at 6 bar (N) | Traction force of the spring (N) |
|-----------|-------------------------------|-----------------|---------------------------|----------------------------------|
| 12        | 5, 10                         | 10              | 55                        | 5                                |
| 16        | 5, 10, 15, 20, 25             | 25              | 105                       | 6                                |
| 20        |                               |                 | 170                       | 6                                |
| 25        |                               |                 | 255                       | 13                               |
| 32        |                               |                 | 435                       | 18                               |
| 40        | 5, 10, 15, 20, 25, 30, 40, 50 | 50              | 715                       | 20                               |
| 50        |                               |                 | 1050                      | 40                               |
| 63        |                               |                 | 1700                      | 49                               |
| 80        |                               |                 | 2850                      | 76                               |
| 100       |                               |                 | 4400                      | 131                              |



| mm<br>ø | A    | B   | D<br>ø | D <sub>1</sub> | D <sub>3</sub><br>ø | D <sub>4</sub><br>ø | D <sub>7</sub><br>ø | D <sub>8</sub><br>ø | E    | F    | F <sub>1</sub> | G    | H <sub>3</sub> | I <sub>1</sub> | I <sub>2</sub> | I <sub>3</sub> | I <sub>5</sub> | I <sub>6</sub> | K  | L   | L <sub>1</sub> | M   | N    | P  | W   | H*   | S*   |
|---------|------|-----|--------|----------------|---------------------|---------------------|---------------------|---------------------|------|------|----------------|------|----------------|----------------|----------------|----------------|----------------|----------------|----|-----|----------------|-----|------|----|-----|------|------|
| 12      | 25   | 25  | 6      | M3             | 3,7                 | 5,6                 | -                   | -                   | -    | 4,7  | -              | M5   | 5,5            | -              | -              | -              | -              | -              | 5  | 3,5 | -              | 4,7 | -    | 6  | 3,5 | 17   | 27   |
| 16      | 34   | 30  | 8      | M4             | 4,7                 | 7,5                 | 3,7                 | 5,6                 | 19   | 7    | 5              | M5   | 8              | -              | 18             | 12             | 20             | 10             | 6  | 4,6 | 3,5            | 4   | 32   | 8  | 4,5 | 27   | 32   |
| 20      | 40   | 36  | 10     | M5             | 5,8                 | 9                   | 5,8                 | 9                   | 22   | 7    | 5,2            | M5   | 8              | -              | 20             | 15             | 25,5           | 12,7           | 8  | 5,7 | 5,7            | 5,7 | 38,5 | 10 | 5   | 27   | 32   |
| 25      | 44,5 | 40  | 10     | M5             | 5,8                 | 9                   | 5,8                 | 9                   | 24,5 | 9    | 6              | 1/8" | 10,5           | -              | 26             | 15,5           | 28             | 14             | 8  | 5,7 | 5,7            | 4,5 | 42   | 10 | 5,5 | 28,5 | 38,5 |
| 32      | 51   | 46  | 12     | M6             | 5,8                 | 9                   | -                   | -                   | 27   | 9    | -              | 1/8" | 11,5           | 36             | 32             | -              | -              | -              | 10 | 5,7 | -              | 4   | 48   | 12 | 6   | 29,5 | 39,5 |
| 40      | 58   | 55  | 12     | M6             | 5,8                 | 9                   | -                   | -                   | 30,5 | 9,5  | -              | 1/8" | 11             | 42             | 42             | -              | -              | -              | 10 | 5,7 | -              | 4   | 55   | 12 | 6   | 29,5 | 39,5 |
| 50      | 70   | 65  | 16     | M8             | 6,8                 | 11                  | -                   | -                   | 37,5 | 12,5 | -              | 1/8" | 11,5           | 50             | 50             | -              | -              | -              | 13 | 6,8 | -              | 4   | 65   | 12 | 7,5 | 34,5 | 39,5 |
| 63      | 86   | 80  | 16     | M8             | 9                   | 14                  | -                   | -                   | 46   | 15   | -              | 1/8" | 11             | 62             | 62             | -              | -              | -              | 13 | 8,8 | -              | 5   | 80   | 14 | 7   | 37   | 42   |
| 80      | 105  | 100 | 20     | M10            | 9                   | 14                  | -                   | -                   | 55   | 14   | -              | 1/4" | 14             | 82             | 82             | -              | -              | -              | 17 | 9   | -              | 6   | 100  | 15 | 8   | 46   | 46   |
| 100     | 131  | 124 | 25     | M12            | 11                  | 17,2                | -                   | -                   | 69   | 17,5 | -              | 1/4" | 16             | 103            | 103            | -              | -              | -              | 22 | 11  | -              | 7,5 | 124  | 20 | 10  | 56   | 56   |

\*Over 30 mm stroke add 10 mm to above dimensions.

