

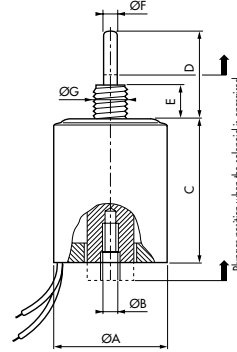
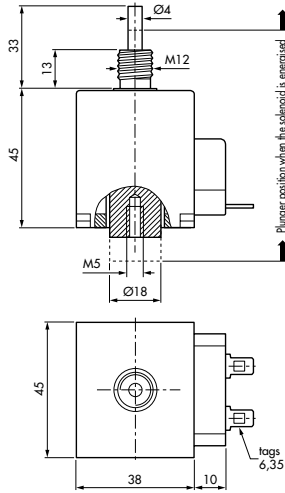


8.15

8.10

8.13

8.19



Shown in energised position

For a more detailed drawing please request the specifications sheet of the product

|          | 8.10 | 8.13 | 8.19 |
|----------|------|------|------|
| <b>A</b> | Ø30  | Ø38  | Ø45  |
| <b>B</b> | M5   | M6   | M6   |
| <b>C</b> | 36   | 47   | 70   |
| <b>D</b> | 27   | 33   | 37,5 |
| <b>E</b> | 12   | 13   | 17,5 |
| <b>F</b> | Ø4   | Ø4   | Ø6   |
| <b>G</b> | M10  | M12  | M14  |

| Part number                             | Z.8.15.AB.83 |      |      | 8.10.BA.83 |      |      | 8.13.BA.83 |      |      | 8.19.AB.83 |      |      |
|---|--------------|------|------|------------|------|------|------------|------|------|------------|------|------|
| <b>Nominal stroke</b>                   | 15 mm        |      |      | 10 mm      |      |      | 14 mm      |      |      | 16 mm      |      |      |
| <b>Absorbed power (W)</b>               | 16           | 58,5 | 275  | 8,5        | 26   | 110  | 12         | 40   | 200  | 18         | 65   | 310  |
| <b>Force at beginning of stroke (N)</b> | 4            | 12   | 37   | 0,75       | 4    | 13,5 | 2          | 10   | 29   | 6          | 20   | 55   |
| <b>Force at end of stroke (N)</b>       | 13           | 45   | 100  | 2,5        | 9    | 19   | 4          | 18   | 50   | 22         | 52   | 102  |
| <b>Duty cycle</b>                       | 100 %        | 25 % | 5 %  | 100 %      | 25 % | 5 %  | 100 %      | 25 % | 5 %  | 100 %      | 25 % | 5 %  |
| <b>Total length of cycle</b>            | 2 mn         |      | 2 mn | 2 mn       |      | 2 mn | 2 mn       |      | 2 mn | 2 mn       |      | 2 mn |
| <b>Standard voltage</b>                 | 24 Vdc       |      |      | 24 Vdc     |      |      | 24 Vdc     |      |      | 24 Vdc     |      |      |
| <b>Type</b>                             | Push Pull    |      |      | Push Pull  |      |      | Push Pull  |      |      | Push Pull  |      |      |
| <b>Incorporating return spring</b>      | yes          |      |      | yes        |      |      | yes        |      |      | yes        |      |      |
| <b>Plunger retainer</b>                 | no           |      |      | no         |      |      | no         |      |      | no         |      |      |
| <b>Total weight</b>                     | 400 g        |      |      | 200 g      |      |      | 300 g      |      |      | 600 g      |      |      |
| <b>Plunger weight</b>                   | 60 g         |      |      | 30 g       |      |      | 60 g       |      |      | 100 g      |      |      |
| <b>Protection rating</b>                | IP00         |      |      | IP40       |      |      | IP40       |      |      | IP40       |      |      |

**Possible variants (please call us to define the part numbers)**  
*Detailed technical specification sheets available on request*

|   | Without spring<br>Pull             |  | Without spring<br>Pull |    | Without spring<br>Pull |     | Without spring<br>Pull |     |
|---|------------------------------------|--|------------------------|----|------------------------|-----|------------------------|-----|
| <b>Stroke (mm)</b>                      | 5                                  |  | 2                      | 5  | 3                      | 7   | 4                      | 7   |
| <b>Duty cycle 100%</b>                  | 1                                  |  | 2,5                    | 3  | 2                      | 6   | 5                      | 6   |
| <b>Force at beginning of stroke (N)</b> | 9                                  |  | 40                     | 14 | 100                    | 22  | 200                    | 35  |
| <b>Force at end of stroke (N)</b>       | 55                                 |  | 25                     | 21 | 53                     | 48  | 93                     | 80  |
| <b>Force at end of stroke (N)</b>       | 300                                |  | 125                    | 50 | 210                    | 100 | 250                    | 115 |
| <b>Supply voltage</b>                   | 12 Vdc to 220 Vdc<br>24 to 230 Vca |  | 12 Vdc to 220 Vdc      |    | 12 Vdc to 220 Vdc      |     | 12 Vdc to 220 Vdc      |     |
| <b>Connection</b>                       |                                    |  |                        |    |                        |     |                        |     |

**Important: for all orders, please specify: part number-voltage-duty cycle.**