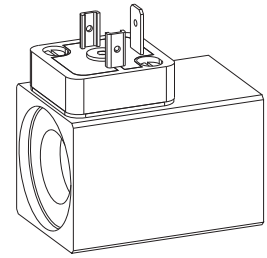


**Solenoid coil M.S35/19x50
to VDE 0580
Protection class IP65/IP67**

DESCRIPTION

The slip-on solenoid coil M.S35/19x53 is available with different types of electric connections. The AC voltage type incorporates a rectifier. The available AC voltages are listed in the type code section. The construction corresponds to standard VDE 0580. The steel housing is zinc-/nickel-coated as standard.

FUNCTION

In combination with the corresponding armature tube the function of an on-off solenoid or proportional solenoid will be obtained.

TYPE CODE

| | | | | | | | | | | | |
|----------------------------------|--|---------------------------------------|--|--------------------------|-------------|--------------------------------------|--------------------------|--------------------------|--------------------------|-----------|--------------------------|
| Metal housing, square | | M | | <input type="checkbox"/> | S35/19x50 - | <input type="checkbox"/> | <input type="checkbox"/> | - | <input type="checkbox"/> | # | <input type="checkbox"/> |
| Connection execution | | Connector socket EN175301-803/ISO4400 | | <input type="checkbox"/> | D | Flying leads | | <input type="checkbox"/> | L | (only DC) | |
| | | Connector socket AMP Junior-Timer | | <input type="checkbox"/> | J | (only DC) Cable | | <input type="checkbox"/> | K | | |
| | | Connector Deutsch DT04-2P | | <input type="checkbox"/> | G | (only DC) Bayonet connector VG 95234 | | <input type="checkbox"/> | B | | |
| | | | | <input type="checkbox"/> | | Screw clamp | | <input type="checkbox"/> | X | (only DC) | |
| Coil execution | | | | | | | | | | | |
| Internal coil diameter 19 mm | | | | | | | | | | | |
| Coil length 50 mm | | | | | | | | | | | |
| Voltage | | Direct current | | <input type="checkbox"/> | G | Alternating current | | <input type="checkbox"/> | R | | |
| Nominal voltage | | 12 VDC | | <input type="checkbox"/> | 12 | 115 VAC | | <input type="checkbox"/> | 115 | | |
| | | 24 VDC | | <input type="checkbox"/> | 24 | 230 VAC | | <input type="checkbox"/> | 230 | | |
| Standard | | <input type="checkbox"/> | | | | | | | | | |
| Special cable execution | | <input type="checkbox"/> | | | | | | | | | |
| With pressure compensation | | <input type="checkbox"/> | | | | | | | | | |
| Special screw clamp | | <input type="checkbox"/> | | | | | | | | | |
| Screw clamp and electric wiring | | <input type="checkbox"/> | | | | | | | | | |
| Design-Index (Subject to change) | | <input type="checkbox"/> | | | | | | | | | |

SPECIFICATIONS

| | | | | | |
|-----------------------|---|--|--|--|--|
| Coil winding | min. H (180 °C) | | | | |
| insulation class | | | | | |
| Protection class | depending on the connector version IP65 or IP67 according to EN 60 529 (if correctly mounted) | | | | |
| Relative duty factor | 100 % DF / 5 min | | | | |
| Ambient temperature | when mounted on armature tube and valve | | | | |
| Nominal voltage range | See temperature curve on page 4 | | | | |
| | 10–250 VDC | | | | |
| | 24–250 VAC | | | | |
| Corrosion protection | Salt spray test in accordance with EN ISO 9227 > = 1000 hours | | | | |

| | | 12 VDC | 24 VDC | 115 VAC | 230 VAC |
|------------------------------|-------------------------|--------|--------|---------|---------|
| Nominal power (W) | (Switching function) | 26 | 26 | 26 | 26 |
| Limiting power (W) | (Proportional function) | 16 | 16 | – | – |
| Limiting current (50 °C) (A) | (Proportional function) | 1,36 | 0,68 | – | – |
| Nominal resistance (Ω) | | 5,6 | 22 | 410 | 1650 |
| Number of windings (–) | | 718 | 1400 | 6100 | 11850 |
| Weight of solenoid coil (kg) | | 0,32 | 0,32 | 0,32 | 0,32 |

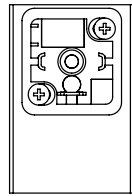
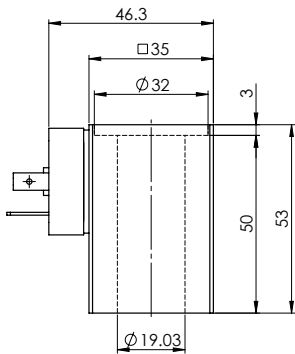
SAFE OPERATION


Caution: To avoid overheating the coil may only be energised when mounted on an armature tube and valve.

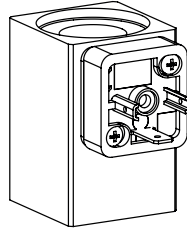

NOTE!

The effective heat emissions depends on the installation conditions (heat emission surface, air circulation, etc.), these influence the described area of application.

TYPE LISTE/DIMENSIONS/GENERAL SPECIFICATIONS

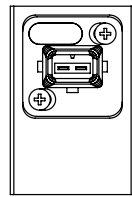
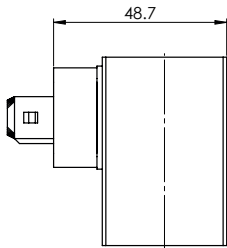


Valve side

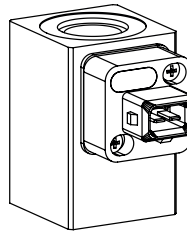


Execution: M **D** S35/19x50-...

- 3 pole 2 P+E
 - DC- and AC-execution available
 - Connector socket plastic
 - Protection class IP65
- With corresponding mating connector (not included in delivery) and professional assembly

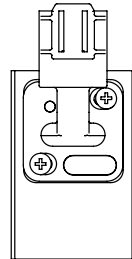
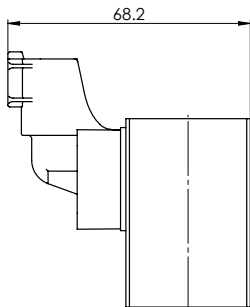


Valve side

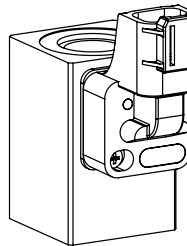


Execution: M **J** S35/19x50-...

- 2 pole 2P
 - DC-execution available
 - only for $U_N \leq 75$ VDC
 - Connector socket plastic
 - Protection class IP65
- With corresponding mating connector (not included in delivery) and professional assembly

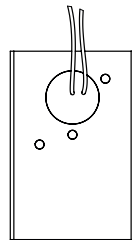
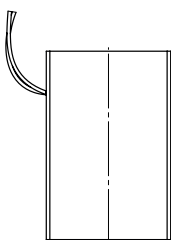


Valve side

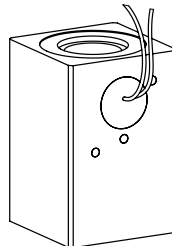


Execution: M **G** S35/19x50

- 2 pole 2P
 - DC-execution available
 - only for $U_N \leq 75$ VDC
 - Protection class IP 67 and 69 K
- With corresponding mating connector (not included in delivery) and professional assembly

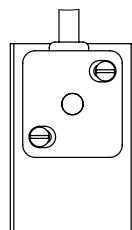
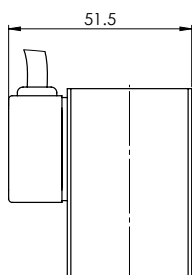


Valve side

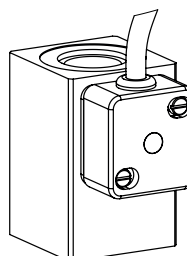


Execution: M **L** S35/19x50-...

- 2 pole 2P (2x 0,25 mm²) Radox 155
 - Cable length 500 mm
 - DC-execution available
 - nur für $U_N \leq 75$ VDC
 - Protection class IP65
- With professional assembly

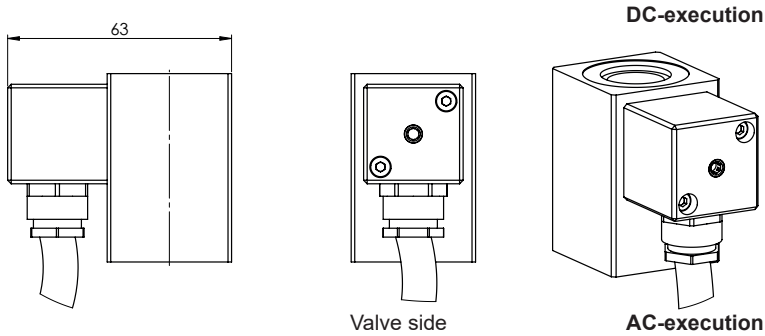


Valve side



Execution: M **K** S35/19x50-...

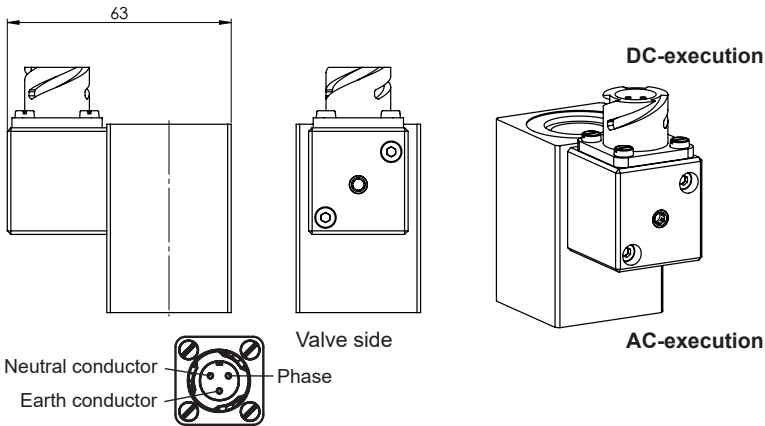
- 3 pole 2P+E 3x 0,75 mm² Thermoplast
 - Cable length 1500 mm
 - Cable diameter 6 mm
 - DC- and AC-execution available
 - Cable housing plastic
 - Protection class IP67
- With professional assembly



Execution: M **K** S35/19x50-... **M28**

- 3 pole 2P+E 2x 1 mm² [E]
(acc. to IEC 332)
- Cable length 1500 mm
- DC- and AC-execution available
- Connector housing steel
- Protection class IP67
With professional assembly

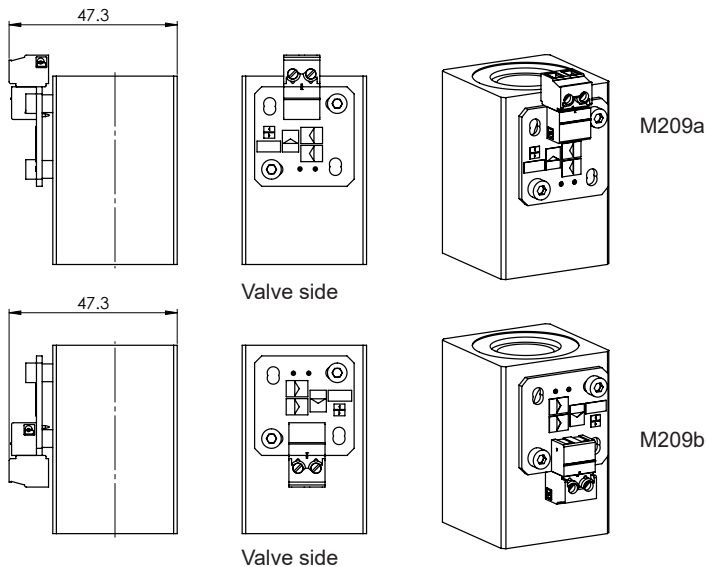
- Plastic rectifier housing, h+10,5 mm



Execution: M **B** S35/19x50-...

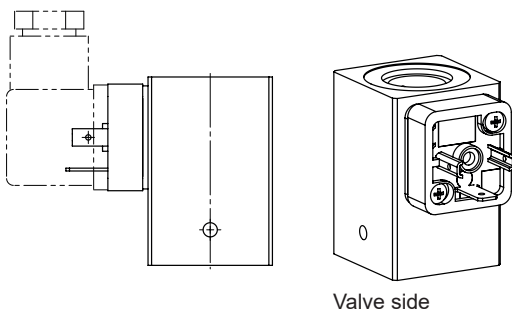
- 3 pole 2P+E
- MiL VG 95234
- DC- and AC-execution available
- Connector housing steel
- Protection class IP67
With corresponding mating connector
(not included in delivery)
and professional assembly

- Plastic rectifier housing, h+10,5 mm



Execution: M **X** S35/19x50-... **M209**

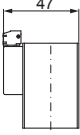
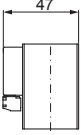
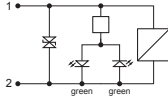
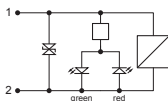
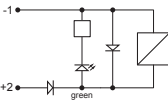
- 2 pole
- DC-version available up to 28 VDC
- Screw clamp plastic
- Printed circuit board protected with
conformal coating



Execution: M . S35/19x50-... **M35**
M . S35/19x50-... **M../35**

- With pressure equalising bore for underwater
applications in oil bath
- Oil tank separated from water by a membrane
- With connection type «D», «L», «X»
- DC-execution available

Attention:
In case of the connection execution «D» only
plugs with the additional designation «Z23»
must be utilised (not included in the scope of
supply of the solenoid)

| Plug alignment | | Electric wiring |
|---|---|---|
|  |  | |
| M222a | M222b |  |
| M222c | M222d |  |
| M222e | M222f |  |

Execution: M S35/19x50-... **M222**

- 2 pole
- DC-version available up to 28 VDC
- Screw clamp plastic
- Plug housing plastic, transparent, removable
- Printed circuit board protected with conformal coating
- Protection type IP40 with plastic hood installed

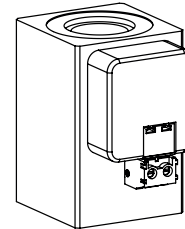
$I_{max} = 1,0 \text{ A at } 130 \text{ }^\circ\text{C}$
 $I_{max} = 1,5 \text{ A at } 120 \text{ }^\circ\text{C}$
 $I_{max} = 2,0 \text{ A at } 110 \text{ }^\circ\text{C}$

PARTS LIST

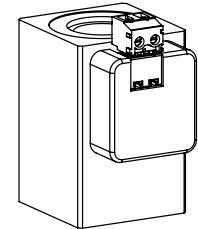
| Position | Article | Description |
|----------|----------|----------------------------------|
| 10 | 219.2802 | Mating connector (M209 und M222) |
| 20 | 088.1116 | Plastic hood (only M222) |

NOTE!
 Technical explanation see data sheet 1.1-400/410/430

M222b/d/f

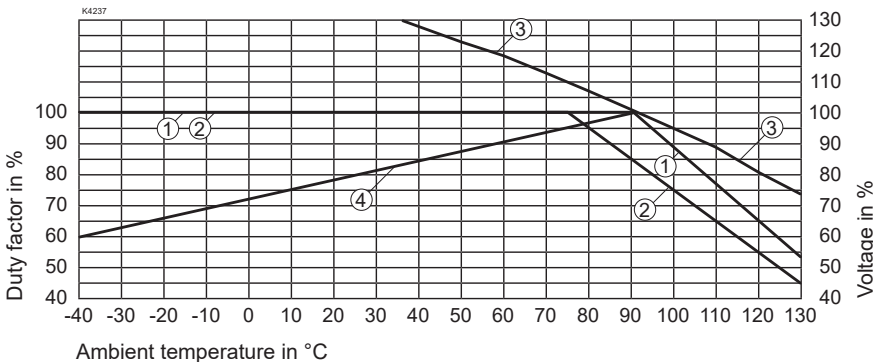


M222a/c/e



Valve side

DUTY FACTOR / TEMPERATURE TEMPERATURE / VOLTAGE



- ① Duty factor at nominal voltage
- ② Duty factor at 110% nominal voltage
- ③ Max. voltage in % for 100% duty factor
- ④ Min. voltage in % for proportional limiting current at 100% duty factor