Description:
- 2/2-way valve
- poppet valve with membrane sealing
- servo operated
- female thread ISO228
- duty cycle 100% (VDE0580)
- optional installation position, preferable standing magnet
- close muting
- TÜV-design approved

Application area:
- viscosity 22mm²/s
- media temperature -10°C to +150°C
- ambient temperature -10°C to +60°C
- operating pressure 0,1 upto 10bar
- minimum pressure has to be there as differential pressure
- IP65 (with correct installed connector plug)
  DIN40050 --> DIN EN 60529
- for hot water and steam

Comments:
Only minor solenoid force is required, because a pilot hole uses the pressure difference.

Please note the flow direction (marked with arrow on the body) during installation. Voltage tolerance +10% / -10% at maximum pressure and standard ambient temperature.

Other tensions and coil powers as well as sealings on request. You find these in the catalog under „Spare parts and accessories“. Included in the scope of supply is the connector plug. You find more connector plugs under accessories and spare parts in the catalog. On request a higher protection class than IP65 is possible, with special coils and connector plugs.

Thread ISO 228: The norm describes the thread connection of a parallel male thread with a parallel female thread and is marked with „G“.

You find an overview of the complete material code in the catalog at the beginning of the respective product group.

*Please also pay attention to the differing medium temperature:
- EPDM upto max. 120°C

Options:
- NO: opened in rest position upto nominal size 3mm
- OF: free of oil and grease
- CV: body chemical nickel-plated
- HA: manual override upto nominal size 3mm
- NPT: pipe thread ANSI B 1.20.1
**2/2-WAY SOLENOID VALVE, SERVO OPERATED, FOR STEAM APPLICATIONS**

**GMV8247**

**Errors and changes excepted. Revision: 12/2018-001**

function NC (normally closed valve)

function NO (normally opened valve)

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*Power coil AC: Declared are the power suit and the holding power.

*Kv-Value: The nominal pressure of Kv to VDI / VDE 2173 indicates the water amount in m³ / h, found out at a pressure difference Δp = 1bar and a media temperature from +5°C to 30°C.

**Appointment details:**
1: Basistype: GMV8247
2: Connection size: 02-06
3: Material:
   • 1. body material: A (brass)
   • 2. sealing: H (HNBR)
4: Nominal size in 1/10mm (s. chart)

**Heating and power of solenoid coils**

default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- the self-heating of the magnet coil
- the medium temperature
- the ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +60 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +150 °C.

Operating temperature solenoid (DC) reduces the power consumption. For physical reasons up to approx. 30%.

5: Operation:
- Indication of the coil type: B27
- Indication of the tension:
  0: 230V AC
  1: 24V DC
- Other tensions on request.

6: Options (see „Options“)

Demands on your application conditions that are not listed on the data sheet, can be requested!

The guide book and the maintenance guidelines, particularly the given safety instructions have to be paid attention to before the installation!
Heating and power of solenoid coils

default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- the self-heating of the magnet coil
- the medium temperature
- the ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +35 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +90 °C.

A higher ambient temperature is possible, when lower values are applied for the other influencing parameters. When the max. operation pressure and max. ambient temperature of +50 °C is given the medium temperature is not allowed to be higher than max. +50 °C. In addition to that, deviations from the default design temperature range are possible, e.g. when temperature coils or other constructive measures are used. Please contact the MIT headquarters to discuss the specific application.

More precise specifications and technical data with regard to the operating conditions can be found in the data sheets of the solenoid coils and the solenoid valve regarded. Please observe that the surface temperature of a permanently loaded coil can amount up to +120 °C, solely by the self-heating of the coil. The power consumption of our default solenoid valves was calculated to DIN VDE 05820 for a coil temperature of +20 °C.