

Characteristics:

Zero Pressure Drop Gas Shut-Off Valve for Smart Meters

Specifications:

ATEX classification:	II 3G EX ic IIA T3
Resistance to gas and vapour:	EN 1359: 2007
Electrical safety:	EN 60079-0: 2006, EN 60079-11: 2007
Operating temperature:	-25°C ... +55°C
Storage temperature:	-25°C ... +70°C
Life time:	≤ 20 years / ≤ 4000 cycles
Climate class:	"wide-spread" , DIN IEC 60721-2-1:1992
Thermal class:	130 (B) , DIN EN 60085: 2005
RoHS:	2002/95/EC
Weight:	125 g
Installation:	Inlet or outlet side
Type:	GMC - Compact gas shut-off valve GMS - Compact gas shut-off valve with sensor GMI - Compact gas shut-off valve with sensor and integrated electronic



Performance Data:

General

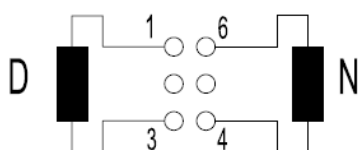
Operating pressure:	30 mbar
Maximum pressure:	500 mbar
External leakage (20°C):	< 1l at 75 mbar, < 5l at maximum pressure
Internal leakage (20°C):	< 50 ml at 10 mbar
Flow rate:	≤ 10 m³ / h (for G4 and G6 meters)
Pressure drop:	< 0,1 mbar at 10 m³ / h, 100 mbar
Closing speed:	< 11 sec. at 50 Hz

Electrical

Nominal voltage:	2,8 V ... 3,6 V
Winding resistance:	34 Ohm ±10% per phase
Inductance:	41,7 mH ±10% per phase at 1000 Hz sine wave, 1 V
Energy consumption:	≤ 4 Ws at nominal voltage (closing cycle)

Circuit diagram:

bipolar



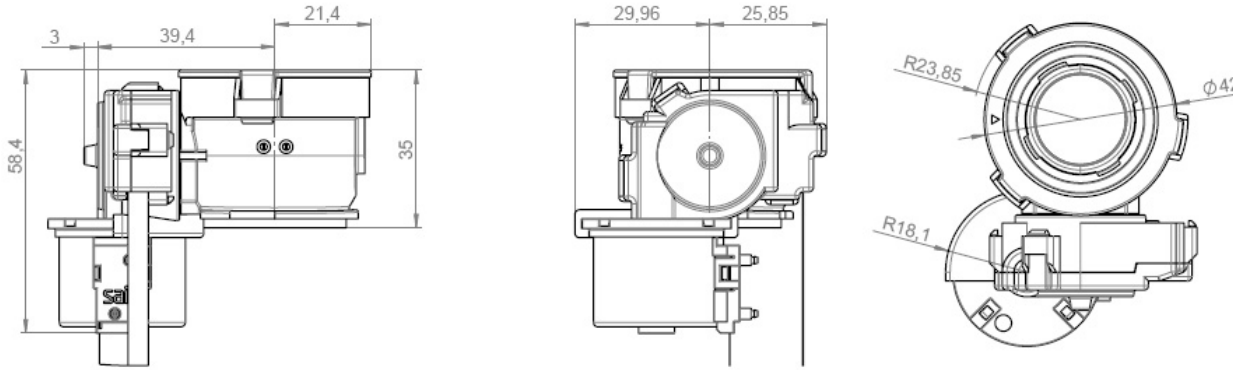
step

	I	II	III	IV
1	+	+	-	-
3	-	-	+	+
4	-	+	+	-
6	+	-	-	+

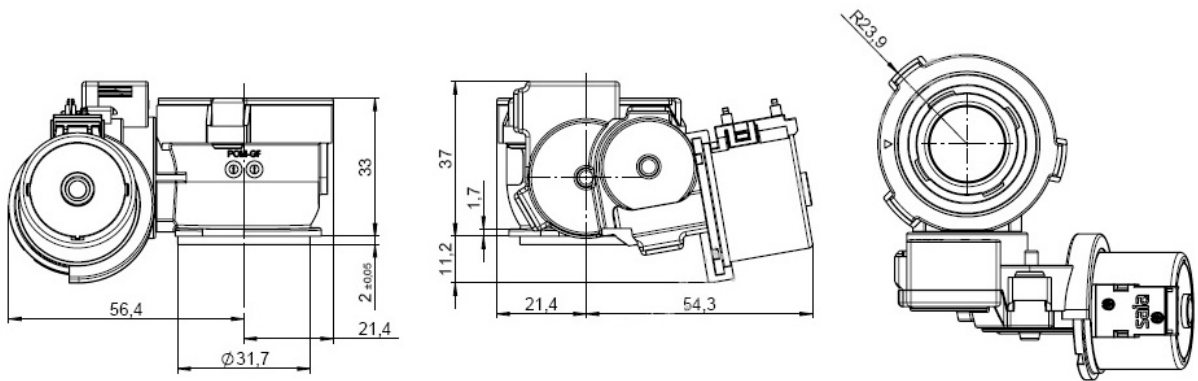
connector

→ open valve
← close valve

Saia GM with gear ratio $i = 40$



Saia GM with gear ratio $i = 106$



Adapter Interface

