Bi stable integrated cartridge valve, DN 7 urinal applications

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A.u.K. Müller

Solenoid valves Control valves Special valves and systems

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Characteristics

- servo-controlled
- pre tested functional unit
- Iong term performance capability
- internal triple pollution protection
- compact design
- optimized Cv-value for DN 7
- optimized water hammer characteristic by low noise emission according to EN 60730
- easy to assemble and service
- standard connection
- cylindrical design
- Iow power consumption
- any fitting position

Applications

automatic sanitary urinals

- suitable for spray and jet water
- high operating safety through the use of high quality materials and 100% final testing of the products
- optoelectronic IR sensor with micro controller for contactless operating of cartdirdge valve
- encapsulated electronic, protection type IP 65
- electronic completely wired to cartridge valve
- low bias current for elongated battery lifetime
- enforced flush after 24 hours without any detection
- start up with default settings on power on. Plug on battery is all what is needed

Series 050-U07-061 / -091



Description

2/2-way solenoid cartridge servo controlled valve of DN 7 in bi stable version with integrated sensor and electronics, to be used particularly in electronically controlled urinals.

The designs compact outline enables trouble free integration of the unit into the urinals.

A LED flashes each time, to signal that the detection area had been entered or left.

Start up using default settings on power on. Plug on battery is all what is needed.

Within the first 30 minutes after power on, a sleep mode may be activated, to enable an elongated storing period of the battery equipped urinals by reducing bias current.

Individual settings may be achieved by an optional IR-remote control. (detection range, on- off, follow-up time)

The screw in type simplifies assembly, service and check.

typical performance curve

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E3007

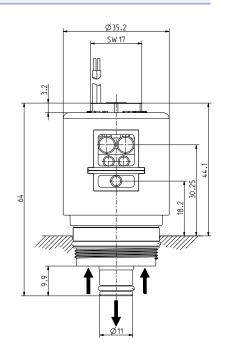
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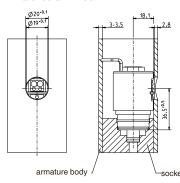


protection windows

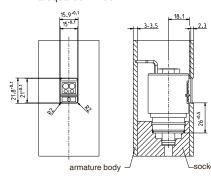




installation within armature using a circular window



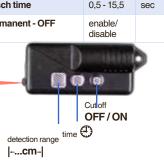
installation within armature using
a squared window



Valve body	PEI		
Plunger guide	stainless steel		
Plunger	stainless steel		
Membrane and sealings	EPDM NBR (on request) VMQ (on request)		
Coil	1.0338 "pot"-bracket		
Filter	stainless steel (in inlet)		
Top cover	POM		

Materials

Options								
standard cable lenght			IR - remote controll available					
with leads and connector	100	mm	detection range	120 - 800	mm			
with leads	120	mm	flusch time	0,5 - 15,5	sec			
connector	on request		permanent - OFF	enable/ disable				



Tec	hnical I	Data		
Туре	2/2-way-cartridge valve			
Construction	screw in, servo controlled			
Function	bi stabil, pulse controlled			
Connection	thread M28 x 1			
fitting position	any			
Media	cold and heated potable water and physically and chemically similar media			
T-Medium	5 - 70	°C.		
T-Ambient	5 - 60	°C		
DN	7	mm		
p-operating	0,5 - 8,0	bar		
Cv-value	20 (18 max.	I/min I/min Silencer patented EP 0 999 392))		
Pressure surge	according to	EN 60730		
Coil type	MS.033			
Nominal voltage	6 9	V DC V DC		
	special voltages on request			
Operating voltage		OC open/close OC open/close		
Signal of low voltage levels	< 5,0 V LED flashing < 4,7 V LED persistent signal, valve will be closed permanent < 7,5 V LED flashing < 7,0 V LED persistent signal, valve will be closed permanent			
Battery voltage detection	automatic			
Grade of noise	Il in test housing			
Lifetime of valve	min. 280.000 cycles / 5 a			
Lifetime of battery	6 V Lithium (min. 1.300 mAh) approx. 4 years 9 V Alkaline (min. 600 mAh) approx. 2,7 years for 150 actuations / day			
Duty cycle	100%			
Nominal power	0,5 - 1,2 W			
Protection type	IP 65	higher IP classes on request		
Insulation class	F	according to EN 60730		
Protection class	III	according to EN 60730		
IR detection range	automatically on Power ON			
Default settings				
Detection range	650	mm (± 25%) w/o IR-window		
Min. length of stay	7,5	sek (± 25 sec%)		
Flushing time	5,5	sec (± 1 sec)		
Enforced flush	every 24	h w/o detection		
Follow up time	< 2,5	sec (depends on		

operating pressure)