



### Advantages/Benefits

- ▶ Fast and convenient programming with control unit Type 1077-2
- ▶ 8 functions
- ▶ Time range 0,2 s - 9999 h
- ▶ 3 reset functions
- ▶ Mains voltage and switching status displayed via LEDs
- ▶ Protection against unauthorised changes of times and functions
- ▶ Low installation and wiring costs
- ▶ Flexible installation and cable outlet

### Design/Function

The timer unit Type 1078-2 can be fitted to all valves with the cable plug to DIN 43 650. This standard, developed by Bürkert, is used internationally.

The timer unit is micro-processor operated. The device is mainly used in applications where times and functions are frequently changed or where highly precise response times are required.

The timer can easily be programmed or re-programmed in situ via the control unit Type 1077-2.

The required switching functions and response times can simply be adjusted by means of two function keys.

If other 1078-2 timer units are to be programmed at the same time with the same data, the unit can simply be re-inserted, and the data transmitted via a keystroke. The timer units have now been programmed with specific times and are protected against unauthorised changes.

When fitted the control unit provides a continuous readout of the function and response times programmed.

### Applications

- Repeated valve timing control
- Irrigation systems
- Condensate drain of compressors and pipeline systems
- Repeated timing control of unsupervised processes
- Cost-effective alternative to relays or PLC's for repeated valve operation

**bürkert**  
*Easy* Fluid Control Systems

### Technical Data

Operating voltages	12 - 24 V/DC 24 - 48 V/ 50-60 Hz and DC 110 - 230 V/ 50-60 Hz ± 10 %	<b>Time Setting</b>	
		Time range	0.2 s to 9999 h, continuously
Power consumption	max. 1.5 W	Tolerance	1 %
Switching load	Imax. = 0.5 A at supply voltage 110 - 230 V/ 50-60 Hz (2 A) Imax. = 1.5 A at supply voltage 24 - 48 V/ 50-60 Hz (7,5 A) (max. pulse operation 20 ms) Imax. = 2 A at supply voltage 12 - 24 V/=	Resolution of digital time setting	10 ms at time range 199 s 1 s at time range 199 min 1 min at time range 99 h 1 h at time range 9999 h
		Integrated reset function Adjustment	The functions and switching times are programmed with the control unit Type1077-2, which is fitted onto timer unit when the cover has been removed.
<b>Note</b>	Terminal voltage and current type must always be compatible with the solenoid valve		
Cable outlet	4x 90°positioning	<b>Delivery Status</b>	
Poles	2-pole and earth	When delivered, the timer unit Type 1078-2 <b>does not include</b> the control unit Type 1077-2	
Outlet	connector pin standard to DIN 43 650	The timers can be pre-set if required.	
Contact	spade terminals (DIN 46 247/ 48)	AC voltage timers should always be isolated from the mains to change the function or time settings.	
Connection	3-pole terminal strip, integrated in the unit, wire diameter max. 1.5 mm <sup>2</sup> , PG-cable gland ø 6 to 7 mm		
Rating	IP 65 air gaps and leakage paths to VDE 0100		
Body material	polyamide		
Mounting	cheesehead screw M 3 x 45 mm		
Dimensions	32 x 90 x 41,5 mm		
Weight	approx. 50 g		
Operating temperature	-10 to +60 °C		
Display	LED-connected power supply LED-connected load		

The LED display is not visible when the control unit Type 1077-2 is fitted.

**Functions**

**Operating Voltages**

ON  
OFF



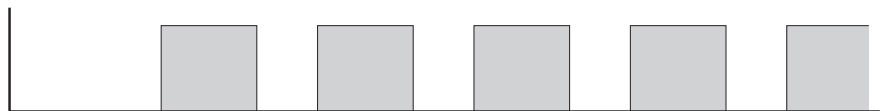
**Signal:**

**Cycler:** starting with "ON"  
The connected valve is switched  $t_{on}$  and  $t_{off}$  periodically according to the set times  $t_{on}$  and  $t_{off}$ . The "cycler function" begins with  $t_{on}$ .



**Inverted cycler:**

The circuit function of the cycler is reversed i.e. "Inverted cycler" begins with  $t_{off}$ .



**Switch-on impulse**

Once energized, the connected valve is operated for the preset time ( $t_{on}$ ). Then the valve switches off until it is energized again.



**Switch-on delay**

Once energized, the connected valve is operated for the preset time ( $t_{on}$ ). Then the valve switches off until it is energized again.



**Cycler with adjustable switch-on impulse:**

Cycler function with adjustable initial timed impulse.



**Time delay cycler:**

Cycler function with adjustable initial time delay.



**Time delay pulser:**

An adjustable time delay initiates the switch-on impulse program.

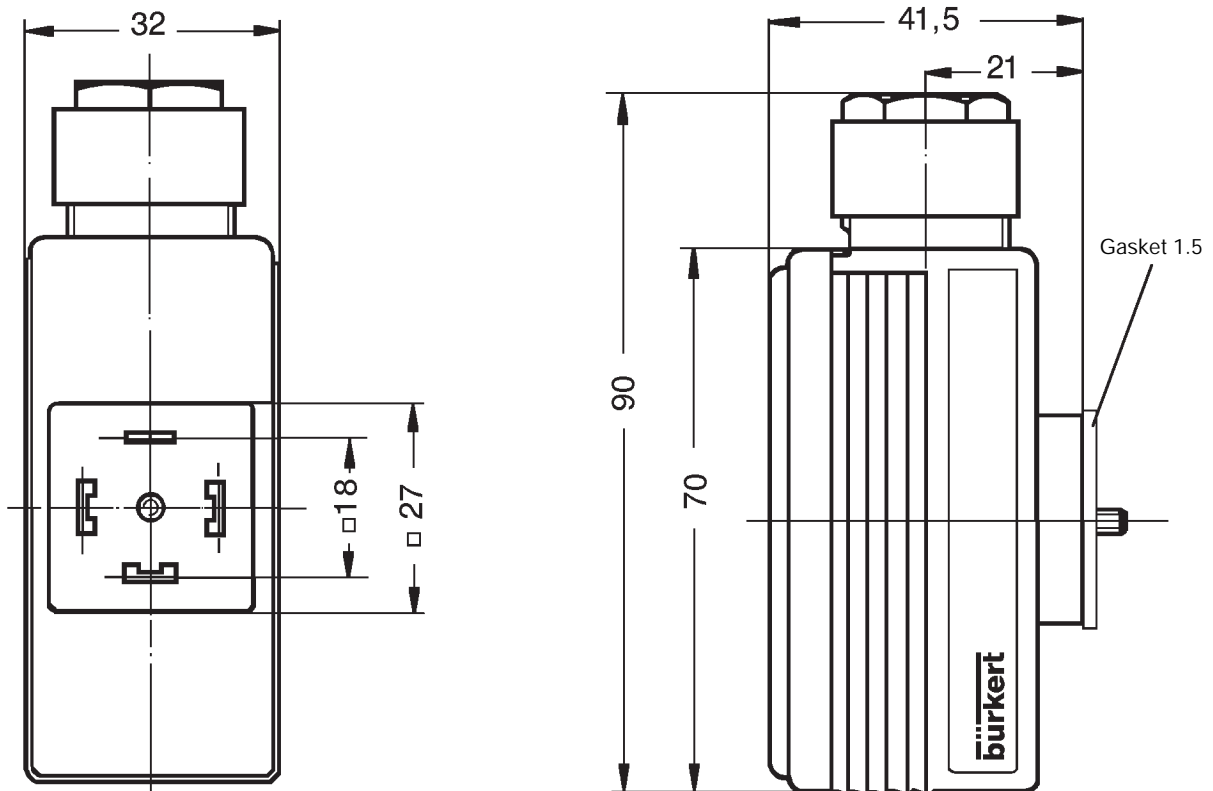


**Time delay and inverted pulser:**

The circuit function of the delayed pulser is inverted.



Dimensions in mm



Ordering Chart (Other Versions on Request)

Voltage			Order-No.
AC	110 - 230 V/	50-60 Hz	060 630 Q
DC, AC	24 - 48 V/	50-60 Hz/ =	060 629 K
DC	12 - 24 V/	=	060 648 W