



#### tico 774: Opens up versatile possibilities

The fact that the new tico 774 is suitable for a wide range of applications offers you more freedom in planning. Even more: Due to the 3 presets and the simple programming the tico 774 can easily be adjusted to new requirements or processes.

Typical applications are:

- Time controlling
- Position indication
- Rotation speed controlling
- Batch counting
- Cutting to length

#### tico 774: Simple to handle; easy to program

To use this counter you don't have to be a graduate engineer and you don't need a manual. This is especially important when more than one employee uses the counter. To ensure this the counter comes with an easy readable display (48x48 mm) with large digits (9,3 mm and 7,2 mm) and with only 4 big keys with whom presets, prescaler and separate totalizer are directly addressable. Even the time counter is addressable directly.

The installation is easy and comfortable due to pluggable terminals.



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## Electronic Preset Counter tico 774 with RS-232 interface

One counter and many possibilities!

**HENGSTLER**





# Hengstler tico 774 multifunctional counter

Target values variable and comfortable to control.



### Your values:

- Universally applicable as tachometer, timer shift-counter, batch-counter, ...
- Simplified handling
- various preset adjustments possible (signal 1, trail preset, range or limit value)
- Versatile and easy to program
- Impressive, clearly readable display in 48x48 mm
- Input frequency up to 60 kHz
- Easy installation due to pluggable terminals
- 3 Presets
- RS-232 interface

### tico 774: Enhanced Application Possibilities with RS-232 Interface

The Tico 773 with RS-232 interface offers the possibility to program the counter quickly and easily via your PC. Therefore, our website offers a free, downloadable programming assistant, which not only provides a clear, user-friendly display, but also recognizes and provides a warning when conflicting entries are attempted. The program settings can be printed and/or saved as a file for documentation purposes. The counter programming itself is done via a RS-232 interface cable connection to your PC.

The RS-232 interface allows import and export of numerous values and settings (e.g., count value, presets, subtotals, totalizer, batch counter and more). Also, control commands such as resets can be entered.

Other possibilities include:

- Output monitoring: notification of any changes in the outputs
- Wait for keystroke
- Remote display test: The display is momentarily disconnected from the counter and all display elements are illuminated to verify their functionality.

### Convincing: The data and facts of the tico 774

GENERAL	Display	LCD reflective, 2 lines, counter value/presettings 6-digits; decimal point (up to 4 decimals)
	Digit height	1st line 9.3 mm; 2nd line 7.2 mm
	Supply voltage	12-30 VDC; 24 VAC; 115 VAC; 230 VAC; 100 - 240 VAC; 50/60 Hz
	Sensor supply	only for AC operation: 12-24 VDC (load-dependent), max. 50 mA only for AC operation: switching power supply 24 VDC, max. 50 mA
	Storage of values	NV-memory > 10 years
	Electrical connections	Plug-in screw-type connections / terminals
	Cable cross-section	1...1.5 mm <sup>2</sup> with wire-end sleeves
	Amplitude threshold	< 2 V and > 8 V or < 1 V and > 4 V at TTL-level amplitude max. 40 VDC
	Active edge	programmable, positive for PNP-input, negativ for NPN-input
	Pulse form	any desired form (at max. frequency square 1:1)
	Count frequency	max 60 kHz; damped 30 Hz
	Pulse duration min.	17 ms (30 Hz); 10 µs (50 kHz)
	Prescaler	0,0001 - 99,9999
	Reset	manual reset via keyboard, external reset via static or dynamic programming, automatic reset after reaching Preset 2, via application input (programmable) and programmable Power-On Reset
	Set function	Setting to Preset 0 (independent of reset)
Display and preset range	- 999 999 bis + 999 999	
Alarm signal	Display flashes when preset 0, 1 or 2 are active	
Signal times	0,01 s to 599,99 s or bistable programmable	
Relay (preset 1 and 2)	Change-over contact max.: 250 VAC / 30 VDC / 5 A	
Transistor (preset 0, 1 + 2)	PNP-output 12 - 30 VDC, max. 50 mA for DC supply 12 - 24 VDC, max. 30 mA for AC supply 24 VDC max 50 mA for AC switching power supply	
COUNTER	Counter mode input A,B	Unidirectional; adding or subtracting; directional input; Differential operation, add / sub; Summation (Totalizing) add / add; Phase discriminator single, double or quadruple evaluation
	Control input	Reset; Gate
	Preset modes	Absolute or trail, Range signal /limit values (sign. 1 < P1, sign. 2 > P 2)
Application input/output	Output: Prescaler out, Preset 0-out, Direction-out Input: counter input add / sub, Keylock, Hold, Teach in, Reset, Set, Gate	
BATCHCOUNTER	Mode	Batch counter with Preset or 2nd totalizer with Preset
SHIFT-COUNTER	Counter mode of operation	Differential counting add/sub, totalizing add/add
TACHOMETER	measuring principle	Period (cycle) measurement (1/Tau)
	Time base	1/min or 1/s
	Min. frequency	0,1 Hz = 6 s
	Limit values	2 alarms with programmable startup suppression + 1 additional upper limit value on the application output
	Tachometer mode of operation	Unidirectional add oder sub; directional input Differential add / sub; totalizing add / add; Phase discriminator single, double or quadruple evaluation A / B or (A-B) / A %
Application input/output	Output: Preset 0-out, Direction-out Input: addtl. counter input add / sub, Keylock, Hold, Teach in	

TIME COUNTER	Time base	Programmable in sec, min, h or hh.mm.ss
	Resolution	1; 0,1; 0,01; 0,001; 0,0001
	Function	Single-pulse or cumulative measurement
	Measuring principle	Pulse-width or cycle duration measurement Start Inp. A + Stop Inp. B; Start/Stop key
	Application input/output	Output: Preset 0-out Input: addtl. Run, Stop, Reset, Set, Keylock, Hold, Teach in
ENVIROMENTAL CONDITIONS/ SAFETY RULES	General design	EN 61 010 / IEC 61010-1
	Protection class	II; EN 61010-1 /IEC 61010-1
	Pollution degree	V 2, EN 50178
	EMC-immunity	EN 61326-1 industrial environment**
	EMC-emission	EN 61326-1 Class B**
	Ambient temperature	0°... 50°C EN 60 068-2-1/2
	Storage temperature	- 20°... + 65°C EN 60 068-2-1/2
	Clima	40°C / 93% rel.hum. Class 4K4H, EN 60 068-2-78 25 - 50°C / 93% rel.hum. , cyclic, EN 60 068-2-38
	Protection class	IP 65 front side; EN 60529 / IP 20 terminals
	Vibration resistance	10 m/s <sup>2</sup> (10 ... 150 Hz); EN 60 068-2-6
Shock resistance	100 m/s <sup>2</sup> (18 ms); EN 60 068-2-27	
Chemical resistance	Front foil acc. to DIN 42 115-2	
Approvals	UL, CSA File Nr.: E 338 588	
RoHS	compliant	
MECHANICAL DATA	Dimensions	48 mm x 48 mm x 118 mm, installation depth 110 mm; DIN 43700
	Installation	Front panel installation with tenter (frame), front panel thickness max. 11 mm
	Front panel cut out	45 mm x 45 mm +0,3 mm

\*\* For cable length > 30 m, for connection to a DC-supply-network and input level TTL an additional protection circuit is necessary.

### ORDER INFORMATION

Anzeige	Vorwahl	12 - 30 VDC	100-240 VAC
LCD reflektiv	1	0 774 101	0 774 141
LCD reflektiv	2	0 774 102	0 774 142
LCD transflektiv	1	0 774 201	0 774 241
LCD transflektiv	2	0 774 202	0 774 242
LCD transmissiv weiß	1	0 774 301	0 774 341
LCD transmissiv weiß	2	0 774 302	0 774 342
LCD transmissiv rot	1	0 774 401	0 774 441
LCD transmissiv rot	2	0 774 402	0 774 442
LCD transmissiv grün	1	0 774 501	0 774 541
LCD transmissiv grün	2	0 774 502	0 774 542

### ACCESSORIES

Cable, RS 232 / 3m	1 774 001
Cable, RS 232 / 5m	1 774 002
Cable, RS 232 / 10m	1 774 003
Cable, RS 232 / 15m	1 774 004

All tico 0 77X XXX are equipped with an application input.