

## Frequency Divider 1MHz

**FT1**

Characteristics:

- Division ratios from 1:2 up to 1:20
- Input frequency up to 1MHz
- Output 24VDC/100mA
- Short-circuit proof
- Status signal in front panel
- Push-pull output, electrical isolated
- Supply 24VDC
- Mountable on 35mm cap rail TS35
- Clear terminal labeling
- Narrow design
- Shape 17,5mm, super low
- PB - Power-Bus compatible
- High reliability, 5 years warranty



Description:

The frequency dividers FT1 have been developed for dividing frequencies up to 1MHz. With a 10-step rotary switch the division ratios can be set from 1:2 up to 1:20. The pulse duty factor is 1:1. For larger division ratios, several units of the series FT1 can be switched in series. A LED at the output displays the status. The 24VDC-output is up to 100mA loadable. This short-circuit proof push-pull output makes it possible to transmit signals over long wire distances.

Application:

Supply of incremental coder signals in PLC

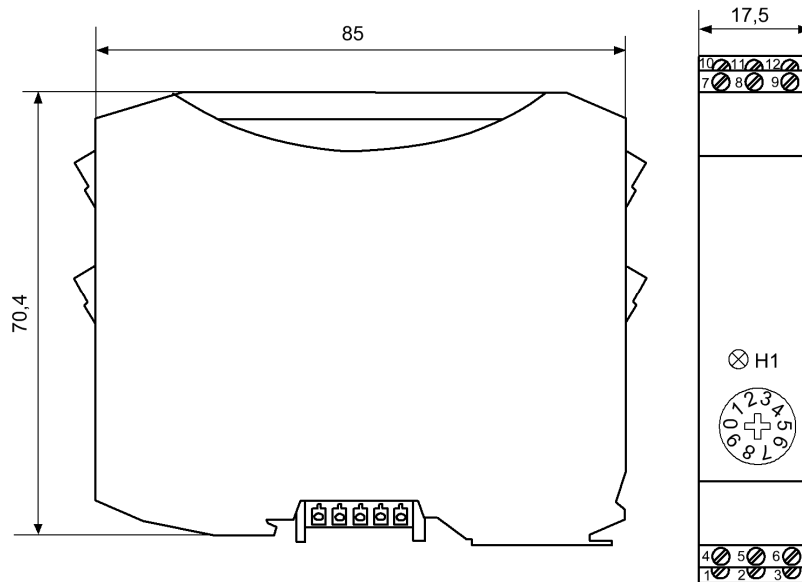
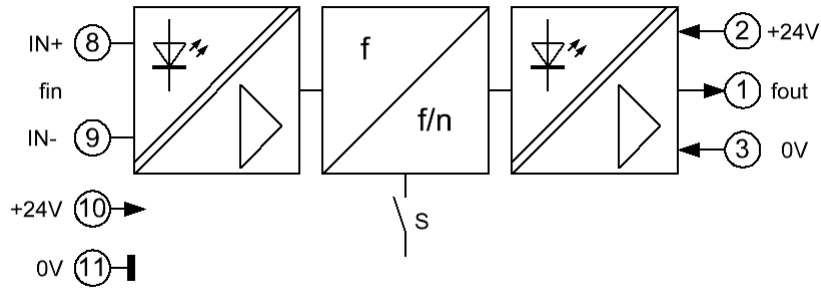
Order-No.:

Input:

FT1-1	24VDC
FT1-2	5VDC
FT1-3	15VDC

Note:

**These modules are NOT specified for dividing 90° pulses !!!**



## Technical Data

### Supply:

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Supply voltage	:	19, 2...30VDC
Current consumption	:	<1VA + load current max. 100mA
Output	:	Ub = 15...30VDC

### Inputs:

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	:	FT1-1	19, 2...30VDC,	4...9mA
	:	FT1-2	3, 75...6,25VDC,	4...9mA
	:	FT1-3	10, 5...18, 75	4...9mA
Input frequency	:	Max. 1MHz		

### Outputs:

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U output	:	Ub - 1,5V
I output	:	100mA, short circuit proof
Duty factor	:	1 : 1
Division ratios	:	1:2 / 1:4 / 1:6 / 1:8 / 1:10 / 1:12 / 1:14 / 1:16 / 1:18 / 1:20
Switch position	:	0 1 2 3 4 5 6 7 8 9

### General data:

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Operating temperature	:	0...50°C
Storage temperature	:	-25...+85°C, condensation before putting into operation is not allowed
MTBF	:	900 years Mean Time Between Failures – according to EN 61709(SN29500). Requirements: Stationary operation in clean rooms, average ambient temperature 40 ° C, permanent operation without forced ventilation, continuous operation
CE conformity	:	EN 61326-1, EN 61000-4-2/3*/4/5/6*, EN 61000-6-4 * during measurements small deviations are possible

### Body:

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Dimension	:	See drawing, 17,5mm adjoin body, 17,5x70,4x90,5mm (with terminals)
Material	:	PA / V0
Protection category	:	IP20
Connection	:	M3-screw-type terminal 0, 14 - 2,5mm <sup>2</sup> , flexible or inflexible
Fixing	:	Snap-on mounting for norm rail TS35
Weight	:	62g
Mounting position	:	As you like

#### Note on safety:

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Disconnect the power supply before attempting to open the unit.

During the operation of this module it is possible that parts of the module, even there is extra-low voltage, (for example shunt measurement) are under dangerous voltage! Therefore a non-observance of this caution may cause damage of property or physical injury.

Only trained qualified personnel should install or operate the unit. Before installation the qualified personnel should read the documentation and should familiarize themselves with the unit.

If there is visible damage to the body of the unit it should be immediately replaced and not put into operation.



Please ensure that there is a sufficient prevention against electrostatic discharge during installation of the unit.

#### Installation Information:

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Pay attention and make sure the unit is far away from mounted sources that may disturb the device such as magnetic coils, transformers, frequency converters etc.

#### Wiring advice:

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Use only shielded cables. The shield is to be connected extensively to ground. Do not mix power- and signal-wires/cables in the same cable tray.

#### Limited warranty:

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The LEG Industrie-Elektronik GmbH warranted that the product does not have any material or processing defects in a period of 5 years after date of delivery.

It is up to the choice of LEG to repair or to exchange an inoperative unit.

Subsequent damages or any claim for indemnification above the functionality of the unit are excluded.

This limited warranty is only valid if ...

1. the product was installed and put into operation according to the LEG operation documentation;
2. the technical configuration of the power supply was abided;
3. the product was not used for unintended purposes;
4. there were no unauthorized modifications or manipulations, misuse or repairs without previous agreement from LEG .

Our Terms of Trade are based on the "General Conditions for the supply of products and services of the Electrical and Electronics Industry" including the "Complementary Clause: Extended Reservation of Property" of the ZVEI e.V. (German Association of Electrical Manufacturers).

#### Miscellaneous:

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We expressly reserve the right, without previous notice, to correct errors contained in any data of this information brochure, and to make alterations to the program and technical modifications.