

## Incremental-Encoder IOV58:2 2...70000 Imp

Ref.: K-IOV58:2-INC-1

26.10.2014

0101010582

### Advantages

- \_ Flexible programming
- \_ High resolution system
- \_ Imp./Rev. 1-step from 2...x
- \_ Modular mechanical design
- \_ Modular product line
- \_ Programmable output stages
- \_ Wide range power supply



### General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	4.5/32 VDC
Nominal current, typically	
- Specific value	50 mA
- Condition	unloaded
Signal form	Square
Incremental signals, square	
- Channels	K1+ K1- K2+ K2-
- Phase position, electrically	90 °
Zero pulse	
- Channel (Channels)	K0+ K0-
- Number of revolutions	1x
Impulses, square wave	>= 2...<= 70000
Output stages	
- Programmable	TTL or HTL
Output driver, TTL	
- Output level	RS-422, 5 VDC
- Load current	<= 50 mA
Output driver, HTL	
- Output level	Supply voltage - 1.5 V
- Load current	<= 30 mA
- Minimum voltage of the supply	> 8 VDC

Subject to change.

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## General Data continuation

Speed, electrically [1/min]	1.5E+7 / Pulses per revolution
Parameter/Function, changeable	Number of pulses
	0-Pulse K0: Pulse length
	0-Pulse K0: Number of pulses
	Phase position: K0/K1/K2
	Preset parameter
	Counting direction
	Output stage (TTL/HTL)
Type of parametrization	programmable
Programming - Tool	TR-Soft: TRWinProg
External inputs	
- F/R	Count direction
- Preset	electronic adjustment
- Logic level	"0" < +2V, "1" = Supply
External outputs	
- Error output	Speed
- Output level	<= 40 VDC, <= 50 mA
- Output stages	Open Collector
- Equipment	Option
Maximum Speed, mechanically	<= 12000 1/min
Shaft load, axial/radial	<= 50 N, <= 100 N
Bearing life time	>= 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	6000 1/min
- Operating temperature	60 °C
Point of origin, shaft load	Mounting flange + 10 mm
Shaft type	
- Shaft diameter [mm]	6
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	12
- Shaft diameter [mm]	14
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8
Angular acceleration	<= 10E+4 rad/s <sup>2</sup>
Moment of inertia, typically	2.5E-6 kg m <sup>2</sup>
Start-up torque, 20 °C	0.5 Ncm
Mass, typically	0.3...0.5 kg

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## Environmental conditions

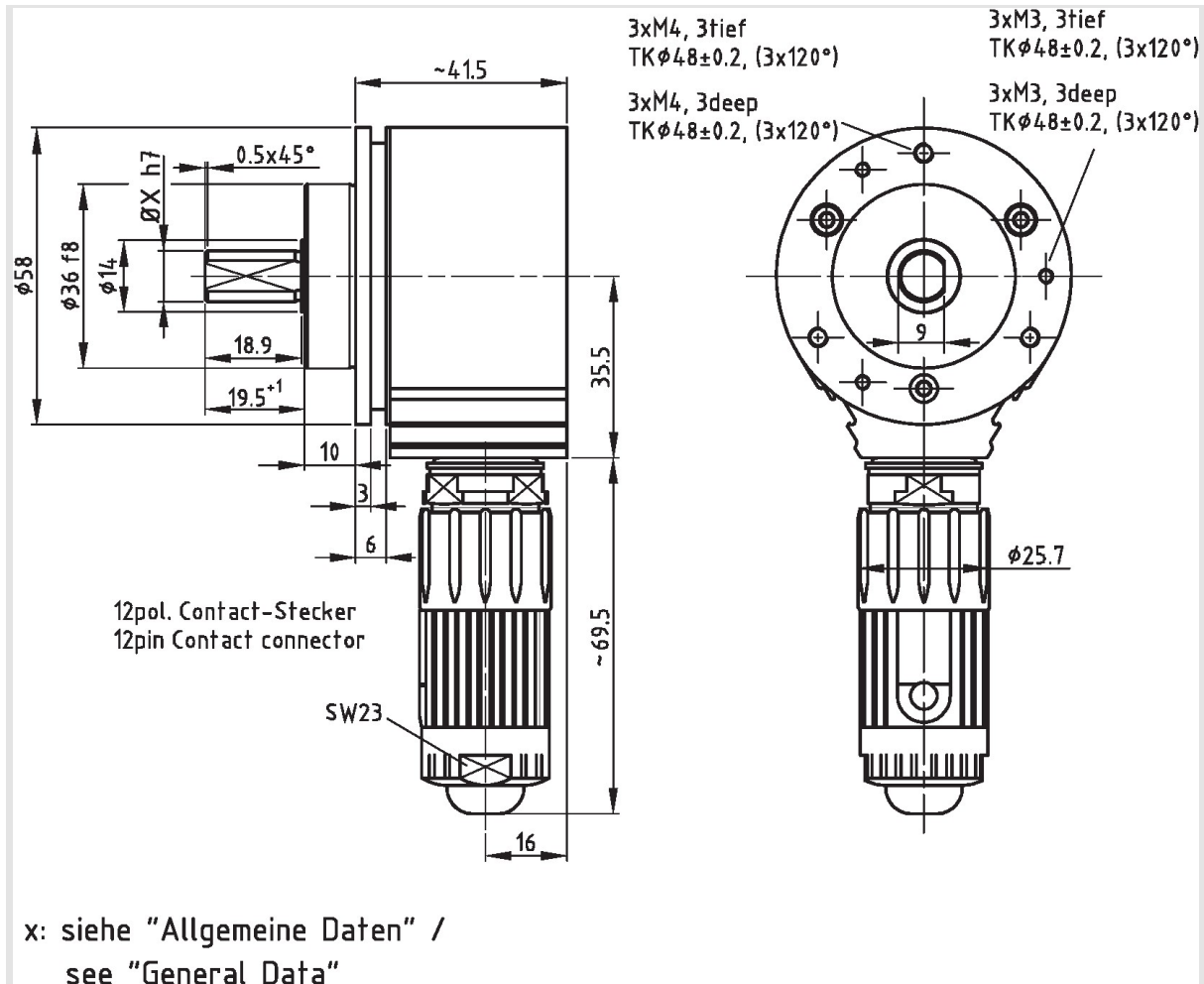
Vibration	
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
- Optional	-40...+100 °C;
Storage temperature, dry	-30...+80 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65 shaft side
- Standard	IP67 housing side

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## Dimensional drawing



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