

Compact evaluation unit for speed monitoring

DGK3012-WRKG/IO/US



Product characteristics

Electrical design	PNP/NPN
Output function	normally open / normally closed; (parameterisable)
Sensing range [mm]	12
Communication interface	IO-Link
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 60

Application

Application	simple evaluation of rotating and linear movement with regard to underspeed; blocking
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Electrical data

Nominal voltage DC [V]	10...30
Current consumption [mA]	< 10
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Short-circuit proof	yes
Overload protection	yes

Detection zone

Sensing range [mm]	12
Sensing range adjustable	no
Operating distance [mm]	0...9.72

Measuring/setting range

Setting range [Imp/min]	5...24000
Measuring principle	inductive

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
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Hysteresis	[% of Sr]	10	
Response times			
Start-up delay	[s]	0...30; (In steps of: 100 ms; Default: 15 s)	
Max. damping frequency	[Imp/min]	30000	
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor	
	Function	Device identification	
	Function	Multiple switching signal	
	Function	Process data variable	
	Function	Device diagnosis	
	Function	Teach channel	
Min. process cycle time	[ms]	3.2	
Supported DeviceIDs	Type of operation	DeviceID	
	default	911	
Operating conditions			
Ambient temperature	[°C]	-40...85	
Storage temperature	[°C]	-25...85	
Protection	IP 66; IP 67; IP 68; IP 69K		
Tests / approvals			
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD	
	EN 61000-4-3 HF radiated	10 V/m	
	EN 61000-4-4 Burst	2 kV	
	EN 61000-4-6 HF conducted	10 V	
	EN 55011	class B	
	EN 60947-5-2		
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes	
Vibration resistance	DIN EN 60947-5-2	20 g (10...3000 Hz)	
		50 sweep cycles, 1 octave per minute, in 3 axes	
MTTF	[years]	664	
UL approval	UL approval no.	A008	
Mechanical data			
Weight	[g]	45.9	
Housing	threaded type		
Mounting	non-flush mountable		
Dimensions	[mm]	M18 x 1 / L = 60	
Thread designation	M18 x 1		
Materials	housing: brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated		
Tightening torque	[Nm]	25	

DI5030



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Displays / operating elements

Display	SIO mode	
	output stage supplied with current	4 x LED, yellow
	IO-Link mode	
	target in measuring range	4 x LED, yellow
	target outside measuring range	4 x LED, yellow flashing

Accessories

Items supplied	lock nuts: 2 x M18
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Remarks

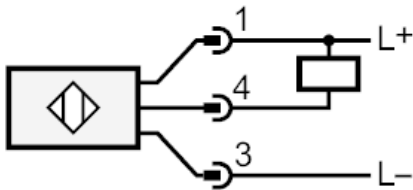
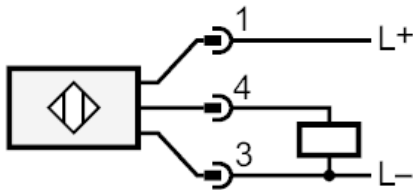
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A



Connection



4: OUT / IO-Link