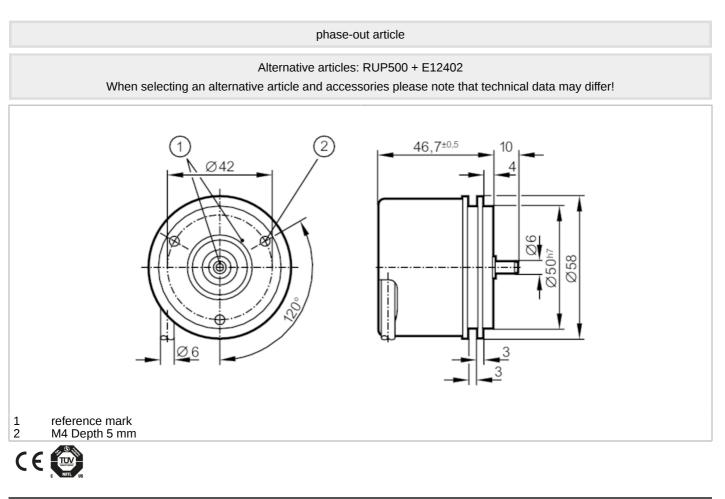
RU1036

Incremental encoder with solid shaft

RU-2500-105/L2





Product characteristics		
Resolution		2500 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	6
Application		
Function principle		incremental
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	150
Outputs		
Electrical design		TTL
Max. current load per output	[mA]	20
Switching frequency	[kHz]	300
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		2500 resolution
Operating conditions		
Ambient temperature	[°C]	-40100
Note on ambient temperature		for firmly laid cable: -40 °C

RU1036

Incremental encoder with solid shaft



RU-2500-105/L2

Protection IP 64; (on the housing: IP 67; on the shaft: IP 64) Tests/approvals 200 g Shock resistance 30 g Vibration resistance 30 g MTTF [years] Dimensions [mm] Veight [G] Materials aluminium Makerials solid shaft Shaft deaign 10 Makerials	induit relative all	humidity [%]	98
Shock resistance 200 g Vibration resistance 30 g MTTF [years] Mechanical data Weight [g] Weight [g] Mechanical data Weight [g] Methanical data Weight [g] Materials atuminum Materials atuminum Max. starting torque [Nm] Reference temperature [°C] torque Solid shaft Shaft design solid shaft Shaft dameter [mm] Ax. shaft load axial (at the [N] 10 Shaft design 20 Fixing flange synchro-flange Electrical connection 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red O index inverted black Ovdex inverted black Ovdex inverted grey B pink B inverted red O index inverted screen housing	Protection		IP 64; (on the housing: IP 67; on the shaft: IP 64)
Vibration resistance 30 g MTTF [years] Mechanical data Weight [a] Dimensions [mm] Ø 483.4 Dimensions [mm] Materials aluminium Materials aluminium Max. staring torque [Nm] Max. staring torque [Vmin] Reference temperature [°C] torque [°C] Shaft design 20 Shaft design solid shaft Shaft data 10 Max. start load axial (at the [N] 10 Shaft diange synchro-flange Electrical connection synchro-flange Greene A inverted synchro-flange preven A index inverted green A index inverted green A index inverted preven B pink pink B inverted reference V(Un) index inverted green A inverted index inverted pink B inverted <td>Tests / approva</td> <td>als</td> <td></td>	Tests / approva	als	
MTTF [years] 190 Mechanical data Image: Second	Shock resistance	e	200 g
Weight [g] 483.4 Dimensions [mm] Ø 58 / L = 46.7 Materials aluminium Max. revolution, mechanical [U/min] 16000 Max. starting torque [Nm] 1 Reference temperature [°C] 20 Shatt design solid shaft Shatt design Shatt design solid shaft Shatt design Shatt dameter [mm] 6 Shatt dameter [mm] 10 Max. shaft load axial (at the [N] 10 10 Shatt end) 10 20 Fixing flange synchro-flange Synchro-flange Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Down brown A green A inverted ref 0 index Diadex inverted Diadex black 0 index inverted Diadex Diadex	Vibration resista	ance	
Weight [g] 483.4 Dimensions [mm] Ø 58 / L = 46.7 Materials atuminium Max. revolution, mechanical [U/min] 16000 Max. staring torque [Mm] 1 Reference temperature [°C] 20 Shaft design solid shaft 5 Shaft design solid shaft 6 Shaft dameter [mm] 10 Max. shaft load axial (at the [N] shaft end) 10 20 Fixing flange synchro-flange synchro-flange Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown prev B inverted green red 0 index black 0 index inverted black 0 index inverted black 0 index inverted black 0 index inverted green 0 index black 0 index inverted green output black 0 index inverted green output black 0 index invert	MTTF	[years]	190
Dimensions [mmi] Ø 58 / L = 46.7 Materials aluminium Max. revolution, mechanical [U/min] 16000 Max. starting torque [Nmi] 1 Reference temperature [°C] 20 Shaft design solid shaft 5 Shaft design solid shaft 6 Shaft dameter [mm] 6 Shaft data daial (at the [N] 10 10 Max. shaft load axial (at the [N] 10 20 Fixing flange synchro-flange Synchro-flange Electrical connection 20 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially 20 brown A green A inverted grey B pink B inverted ed 0 index index inverted black black 0 index inverted black black black black 0 index inverted streen black black black black failure inverted streen failure inverted failure inverted bla	Mechanical da	ta	
Materials aluminium Max. revolution, mechanical [U/min] 16000 Max. starting torque [Nm] Reference temperature [°C] corque Solid shaft Shaft design Solid shaft Shaft design 6 Shaft diameter [mm] Shaft design Solid shaft Shaft design 10 Max. shaft load axial (at the [N] shaft end) 10 Shaft end) 20 Fixing flange synchro-flange Electrical connection Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green green A inverted green A inverted black 0 index inverted black 0 index inverted black 0 index inverted black fallure inverted screen	Weight	[g]	483.4
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Max. starting torque [Nm] 1 Reference temperature [°C] 20 Shaft design solid shaft Shaft design 6 Shaft design 6 Shaft design 10 Max. shaft load axial (at the [N] shaft end) 10 Max. shaft load radial (at the [N] shaft end) 20 Fixing flange synchro-flange Electrical connection 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green green A inverted greey grey B pink the green of index inverted blue black 0 index inverted screen housing	Materials		aluminium
Reference temperature [°C] 20 Shaft design solid shaft Shaft design 6 Shaft diameter [mm] Shaft diameterial steel (1.4104) Max. shaft load axial (at the [N] shaft end) 10 Max. shaft load radial (at the [N] shaft end) 20 Fixing flange synchro-flange Etectrical connection 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted greey B pink B inverted red 0 index inverted blue L + sensor white White W vsnowr A green L+ (Up) white inverted screen Ulac failure inverted screen Ilac failure inverted screen Ulac failure inverted screen Screen housing </td <td>Max. revolution</td> <td>, mechanical [U/min]</td> <td>16000</td>	Max. revolution	, mechanical [U/min]	16000
torque 20 Shaft design solid shaft Shaft design 6 Shaft material 6 Max, shaft load axial (at the [N] shaft end) 10 Max, shaft load radial (at the [N] shaft end) 20 Fixing flange synchro-flange Electrical connection 20 Cable: 2 m, PUR; Maximum cable lenth: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted black 0 index inverted black 0 index inverted black 0 index inverted screen housing	Max. starting to	rque [Nm]	1
Shaft design solid shaft Shaft diameter [mmi] Shaft material 6 Max. shaft load axial (at the [N] shaft end) 10 Max. shaft load radial (at the [N] shaft end) 20 Fixing flange 5 Electrical connection 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted grey B black 0 index black 0 index inverted screen housing		perature [°C]	20
Shaft material steel (1.4104) Max. shaft load axial (at the [N] shaft end) 10 Max. shaft load radial (at the [N] shaft end) 20 Max. shaft load radial (at the [N] shaft end) 20 Fixing flange synchro-flange Electrical connection 20 Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L + sensor white OV sensor brown/green L + (Up) white/green OV (Un) Illac failure inverted screen housing	Shaft design		solid shaft
Max. shaft load axial (at the [N] shaft end) 10 Max. shaft load radial (at the [N] shaft end) 20 Shaft end) 20 Fixing flange synchro-flange Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L + sensor white OV sensor brown/green L+ (Up) white/green OV (Un) llac failure inverted screen housing Diagrams and graphs	Shaft diameter	[mm]	6
shaft end) IU Max. shaft load radial (at the [N] shaft end) 20 Fixing flange synchro-flange Electrical connection Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially Electrical connection green A netred green B inverted Netred volume O index Hold with the provemon set to the provemo	Shaft material		steel (1.4104)
shaft end) 20 Fixing flange synchro-flange Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L + sensor white OV sensor brown/green L + (Up) white/green OV (Un) illac failure inverted screen housing Pulse diagram		axial (at the [N]	10
Electrical connection Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L + sensor white OV sensor brown/green L + (Up) white/green OV (Un) liac failure inverted screen housing		radial (at the [N]	20
Cable: 2 m, PUR; Maximum cable length: 100 m; radial, can also be used axially brown A green A inverted grey B pink B inverted red O index black O index inverted blue L+ sensor white OV sensor brown/green L+ (Up) white/green OV (Un) lilac failure inverted screen housing Diagrams and graphs Pulse diagram	Fixing flange		synchro-flange
brown A green A inverted grey B pink B inverted red 0 index black 0 index inverted blue L+ sensor white 0V sensor brown/green L+ (Up) white/green 0V (Un) lilac failure inverted screen housing Diagrams and graps Pulse diagram	Electrical conn	ection	
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grey B pink B inverted red O index black O index inverted blue L+ sensor white OV sensor brown/green L+ (Up) white/green OV (Un) lilac failure inverted screen housing Diagrams and graphs Pulse diagram		.,	
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red 0 index black 0 index inverted blue L+ sensor white 0V sensor brown/green L+ (Up) white/green 0V (Un) lilac failure inverted screen housing		А	
black 0 index inverted blue L+ sensor white 0V sensor brown/green L+ (Up) white/green 0V (Un) lilac failure inverted screen housing Pulse diagram	green grey	A A inverted B	
blue L+ sensor white OV sensor brown/green L+ (Up) white/green OV (Un) ilac failure inverted screen housing	green grey pink	A A inverted B B inverted	
white 0V sensor brown/green L+ (Up) white/green 0V (Un) ilac failure inverted screen housing Diagrams and graphs Pulse diagram	green grey pink red	A A inverted B B inverted 0 index	
brown/green L+ (Up) white/green 0V (Un) lilac failure inverted screen housing Diagrams and gram Pulse diagram	green grey pink red black	A A inverted B B inverted 0 index 0 index inverted	
white/green 0V (Un) lilac failure inverted screen housing Diagrams and grams Pulse diagram	green grey pink red black blue	A A inverted B B inverted 0 index 0 index inverted L+ sensor	
Lilac failure inverted screen housing Diagrams and graphs Pulse diagram	green grey pink red black blue white	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor	
screen housing Diagrams and graphs Pulse diagram Image: streen with the streen withe streen withe streen withe streen with	green grey pink red black blue white brown/green	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up)	
Diagrams and graphs Pulse diagram	green grey pink red black blue white brown/green white/green	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up) 0V (Un)	
Pulse diagram	green grey pink red black blue white brown/green white/green lilac	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up) 0V (Un) failure inverted	
	green grey pink red black blue white brown/green white/green lilac screen	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up) 0V (Un) failure inverted housing	
direction of rotation clockwise (looking at the shaft)	green grey pink red black blue white brown/green white/green lilac screen Diagrams and	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up) 0V (Un) failure inverted housing	
	green grey pink red black blue white brown/green white/green lilac screen Diagrams and	A A inverted B B inverted 0 index 0 index inverted L+ sensor 0V sensor L+ (Up) 0V (Un) failure inverted housing	