



EHK9901H series

Dual-Output Redundant Type

Sensing method optical

Shaft insulation shaft insulation reach to 2.5KV

Housing size Ø99.5mm

Hollow shaft Ø12、Ø16mm、axis of cone Ø17mm (1:10)

Max. resolution 2048PPR

Supply voltage 5VDC, 9-30VDC

Protection IP66

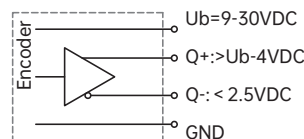
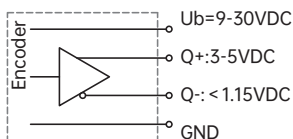
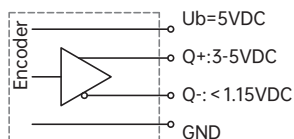
Connection: Plug, M23, 12-pin, cw; Plug, M23, 12-pin, ccw

Direct Cable Out; Terminal block

Mechanical characteristics

Shaft diameter	Ø12、Ø16mm、axis of cone Ø17mm (1:10)
Protection	IP66
Speed	6000RPM
Shaft loading	Max. 500N Axial; Max. 1200N Radial
Shock resistance	IEC 60068-2-27, ≤400g, 3.5ms
Vibration resistance	IEC 60068-2-6, ≤20g, 55-2000Hz
Bearing life	10 ⁹ turns
Rotor moment of inertia	≈55×10 ⁻⁶ kgm ²
Starting torque	≤6N.cm
Shaft material	Stainless Steel
Body material	Aluminum Alloy
Housing material	Aluminum Alloy
Working temperature	-40°C...+85°C
Storage temperature	-40°C...+85°C
Weight	≈1.5kg

Electrical characteristics



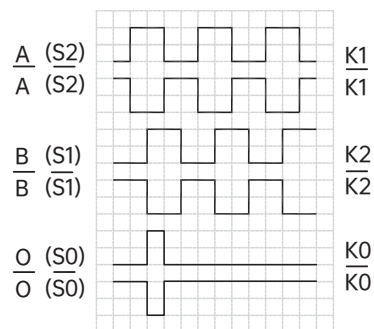
Output circuit	TTL	RS422	HCHTL
Pulse rate	Max. 2048P/R	Max. 2048P/R	Max. 2048P/R
Supply voltage	5VDC	9-30VDC	9-30VDC
Signal level high	3-5V	3-5V	>+Ub-4V
Signal level low	<1.15V	<1.15V	<2.5V
Current Draw at No Load	Max. 80mA	Max. 80mA	Max. 125mA
Max. load current	±50mA	±300mA	±300mA
Max. Output Frequency	400KHz	400KHz	400KHz
Max. cable length	50m	350m	350m
Rise/Fall time Tr	Max. 1μs	Max. 1μs	Max. 1μs
Interface protection	Surge / Reverse polarity / Short-circuit / ESD		

Terminal assignment

Signal		+Ub	0V	A	$\bar{A}$	B	$\bar{B}$	O	$\bar{O}$	Shell
Colour		BN	WH	GN	PK	YE	BU	GY	RD	Shield
Connection terminal		1	2	7	8	5	6	3	4	
Model: 9223 Plug, M23, 12-pin CW		12	10	5	6	8	1	3	4	PH ¹⁾
Model: 9223-2 Plug, M23, 12-pin CCW		12	10	5	6	8	1	3	4	PH ¹⁾

Note:¹⁾ PH= connected to housing

Output signal



From the direction of the shaft end,
the motor rotates clockwise to output the waveform diagram. A leads B.

Note: The phase relationship between the O road signal and the A and B road signals is not specified.

Ordering information

EHK99											01	H	16	E	2048	W	9-30	R	T1	T2	G /	XXXX			
											①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪				
①Extended No. 01: Dual-Output Redundant Type					②Shaft type H: hollow shaft HZ: axis of cone					③Shaft diameter 12: Ø12mm 16: Ø16mm 17: Ø17 (1: 10)					④Channels B: A B C: A B O D: A $\bar{A}$ B $\bar{B}$ E: A $\bar{A}$ B $\bar{B}$ O $\bar{O}$										
⑤Pulse rate 1024, 2048											⑥Output circuit B: RS422 (TTL Compatible) W: HCHTL					⑦Supply voltage 5: 5VDC 9-30: 9...30VDC					⑧Exit position R: Radial				
⑨Connection type Output A: T1: M20 Radial cable sealing head Φ11-14 T2: M20 Radial cable sealing head Φ8-11 T3: M25 Radial cable sealing head Φ13-18 Figure: Cable length(m) 9223: Plug, M23, 12-pin, CW 9223-2: Plug, M23, 12-pin, CCW											⑩Connection type Output B: T1: M20 Radial cable sealing head Φ11-14 T2: M20 Radial cable sealing head Φ8-11 T3: M25 Radial cable sealing head Φ13-18 Figure: Cable length(m) 9223: Plug, M23, 12-pin, CW 9223-2: Plug, M23, 12-pin, CCW					⑪Special code XXXX									
Note: Printed in bold=standard items																									

Notes: 1, mentioned resolution is in common use, others depend on real situation.

2, pls confirm the model information: model series、axis dimension、output channel、resolution、output form、voltage、outlet、cable length、connect type and special code.

Ordering example : EHK9901H16E2048W9-30RT1G, pls specify the special demand at end

Explanation : EHK9901H series, hollow shaft Ø16mm, output A $\bar{A}$ B $\bar{B}$ O $\bar{O}$, 2048PPR, push-pull differential, 9-30VDC, M20 Radial cable sealing head Ø11-14.

Accessories (sold separately) Note: Further stator coupling can be found in the accessories selection table.



Insulated torque arm
Model: 8561A 6/L=X



Torque arm
Model: 8561 6/L=X



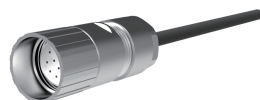
Mounting bracket
Model: 8166



Mounting bracket
Model: 8166A



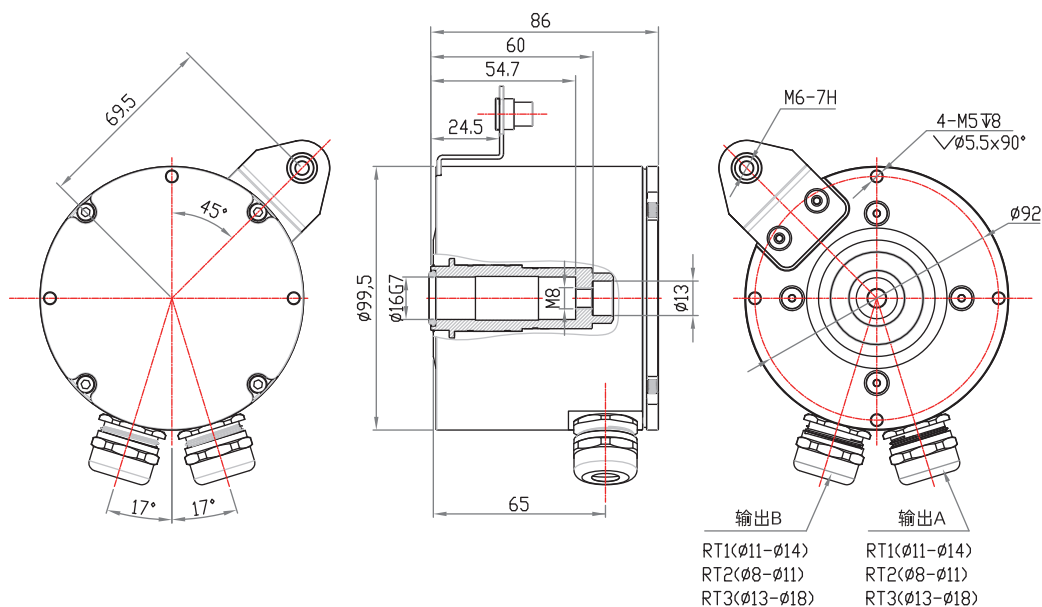
Mounting bracket
Model: 8166B



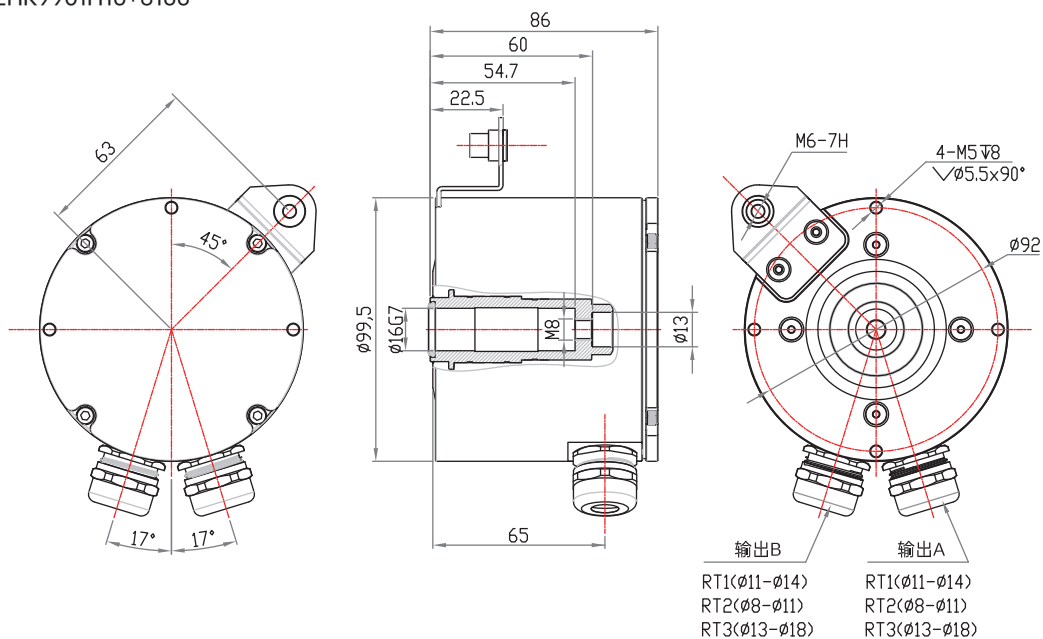
Connectors and cables
Model: 9223B/X-22.006
Plug A: Plug, M23, 12-pin, cw, straight
Plug B: Bare wire end, × meter cable, PVC, shielded wire 1×2×0.5mm²+3×2×0.25mm²,
Ø9.7±0.2mm

Dimensions

EHK9901H16+8166A

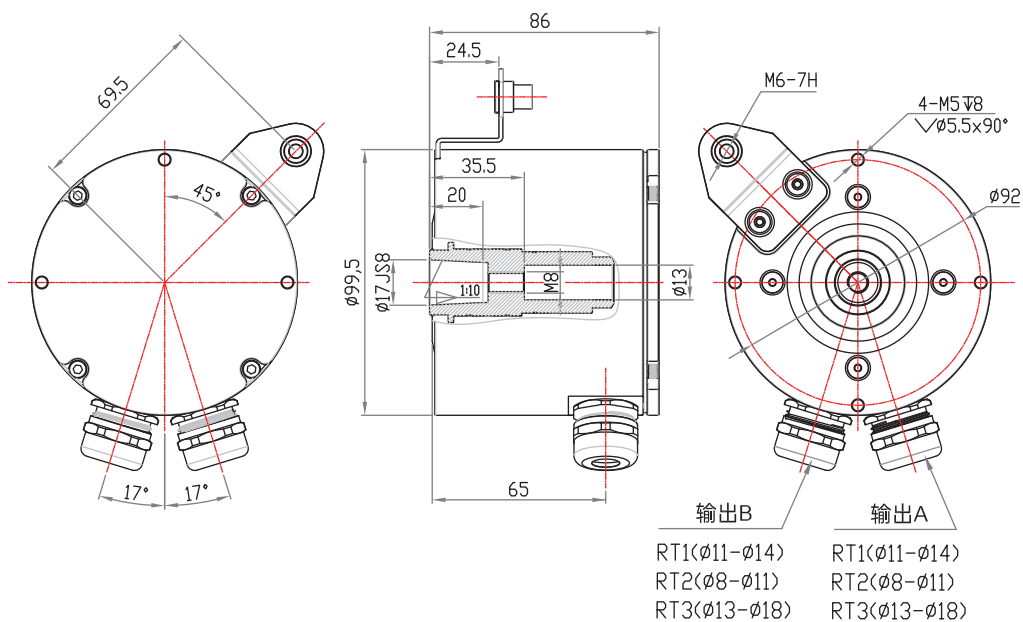


EHK9901H16+8166

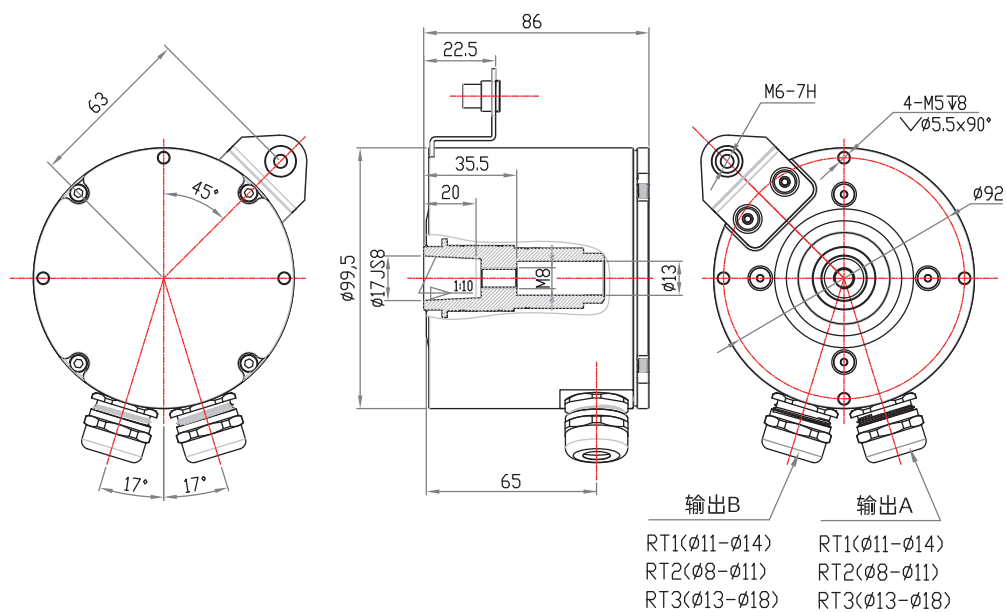


Dimensions

EHK9901HZ17+8166A

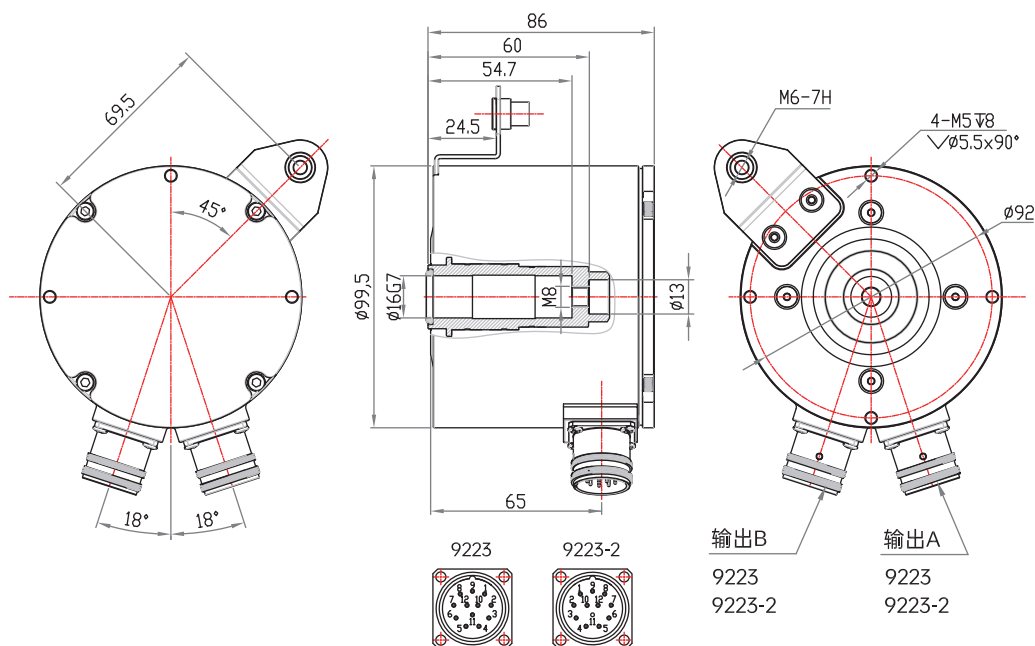


EHK9901HZ17+8166

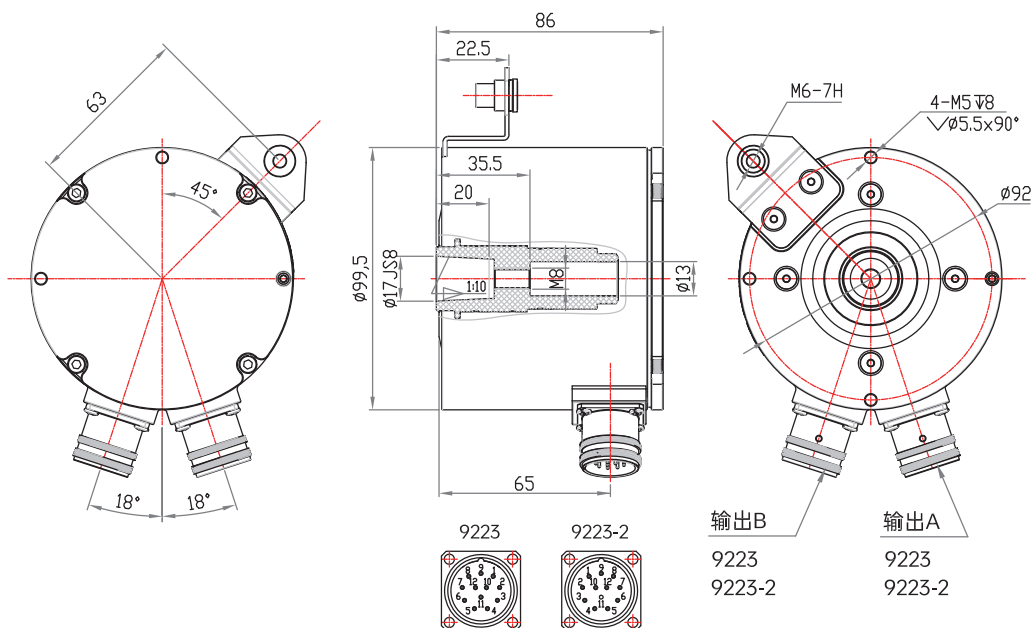


Dimensions

EHK9901H16+9223+8166A



EHK9901HZ17+9223+8166



Dimensions

EHK9901H (Client-side)

