

SIL encoders

The company Heidrive, specialist for servo drives, is further expanding its modular servo system by motors with safely mounted encoders. Examples for these applications can be found in the fields of suspended loads of cranes, rotating applications, machine tools, packaging technology and of filling machineries.

The motors with safely installed encoders represent a drive system according to EN 61800-5-2. By means of the safe mounting the Safety Integrity Level of Category 3 (SIL 2/PLd) can be reached with the probability of a dangerous random hardware failure between 10^{-6} and 10^{-7} .

The motors are available with Hiperface encoders SKx36S as single and multiturn encoders with 128 Sin/Cos periods per rotation as well as with Hiperface DSL encoders EKx36-2 also as single and multiturn encoders with a resolution of 18 bit per rotation. Furthermore, the HMP motors with safely installed encoders can be equipped with resolvers.



Resolver





SKS / SKM36S



EKS / EKM36-2



Safety parameters

	SKS / SKM36S 	EKS / EKM36-2 
Safety Integrity Level	SIL2 (EN 61800-5-2 / EN 62061 / IEC 61508)	
Category	3 (EN ISO 13849-1)	
Test rate	Not necessary	1 h
Max. requirement rate	Continuous (Analog signals)	200 μ s
Performance Level	PL d (EN ISO 13849-1)	PL d (EN ISO 13849-1)
PFH _D (Probability of Dangerous Failure per Hour)	1.3×10^{-8}	4×10^{-8}
T _M (mission time)	20 years (EN ISO 13849)	20 years (EN ISO 13849)
MTTF _D (Mean Time To dangerous Failure)	874 years (EN ISO 13849)	500 years (EN ISO 13849)

All other values you can find in our servo motor catalog.

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Product key

HMP08-028-320-30-B0HBMW23W

Options

Resolver (safely mounted)	XXRAPXXXX
SKS 36S (safely mounted)	XXHBSXXXX
SKM 36S (safely mounted)	XXHBMXXXX
EKS 36-2 (safely mounted)	XXDBSXXXX
EKM 36-2 (safely mounted)	XXDBMXXXX

For the detailed composition of our product key in terms of the motor please refer to our servo motor catalog.

Possible combinations

The servo motors of Heidrive can be combined with the following encoders:

	Resolver	SKS36S / SKM36S	EKS / EKM36-2
HMP04	X		
HMP06	X	X	X
HMP08	X	X	X
HMP10	X	X	X
HMP13	X	X	X



HMP04

HMP06

HMP08

HMP10

HMP13

Technical data subject to change! Last changes 01/2016