

Special AKM servo motors for 24 and 48VDC applications

Kollmorgen’s high performance servo motors AKM are still one of the best standard servo motor series on the market. However the electromagnetic design was originally not developed to support the applications with 24 and 48 VDC DC link voltages. In order to cover the market demand for such kind of applications Engineering prepared technical solution with follow data.

Table 1. Rated data.

	AKM11S-ANYNR	AKM21S-ANBNR	AKM12E-ANYNR	AKM22S-ANBNR	AKM31S-ANCNR
Voltage	24 VDC		48 VDC		
Mo, Nm	0,18	0,43	0,30	0,88	0,81
Mmax, Nm	0,30	0,90	0,59	2,0	3,0
Io, A	3,75	7,13	2,73	5,41	6,0
N rated, rpm	2000	2000	2500	2000	2500
N max, rpm	4500	3500	4000	3000	3000
R cold, Ohm	1,91	0,79	3,90	1,46	0,63
L, mH	1,18	0,76	2,68	2,57	1,0

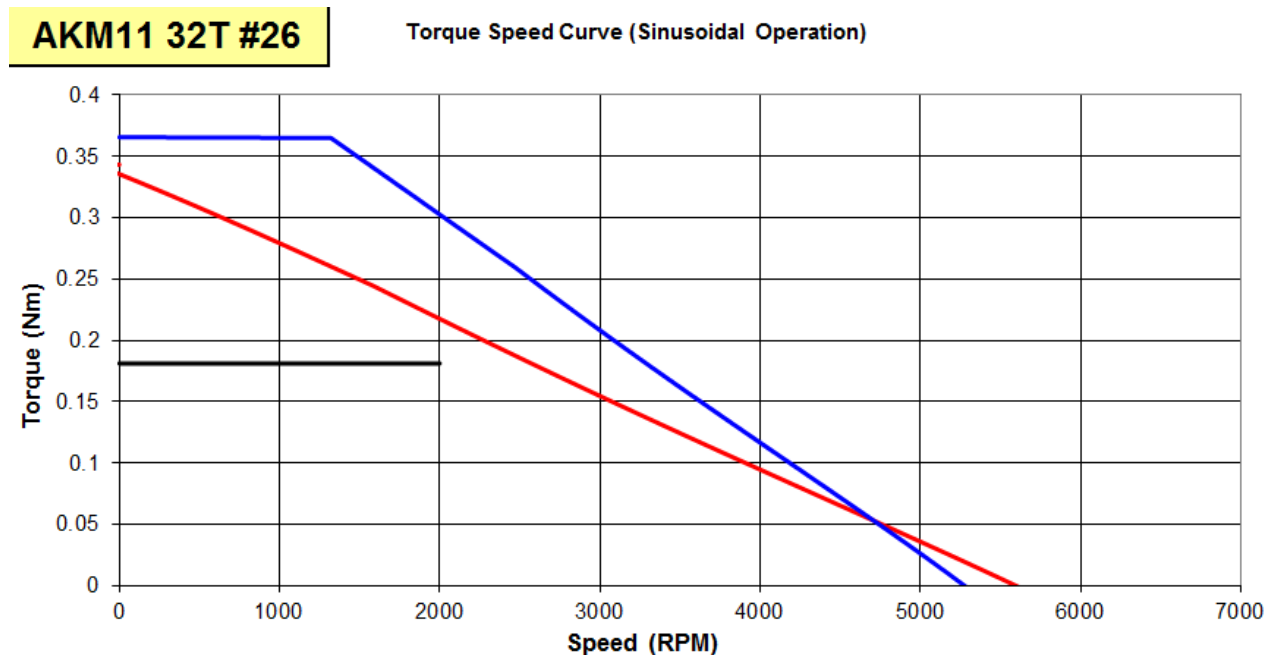


Figure 1. Torque-speed curve AKM11S-ANYNR 24 VDC

AKM21 26T #22

Torque Speed Curve (Sinusoidal Operation)

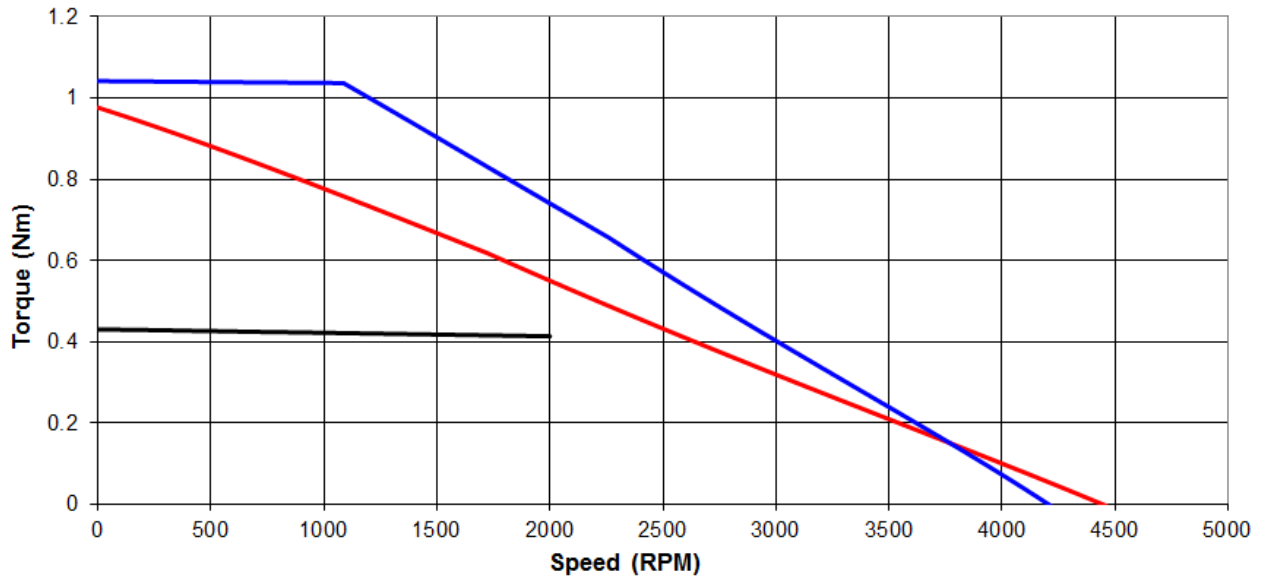


Figure 2. Torque-speed curve AKM21S-ANBNR 24 VDC

AKM12-A [E]

Torque Speed Curve (Sinusoidal Operation)

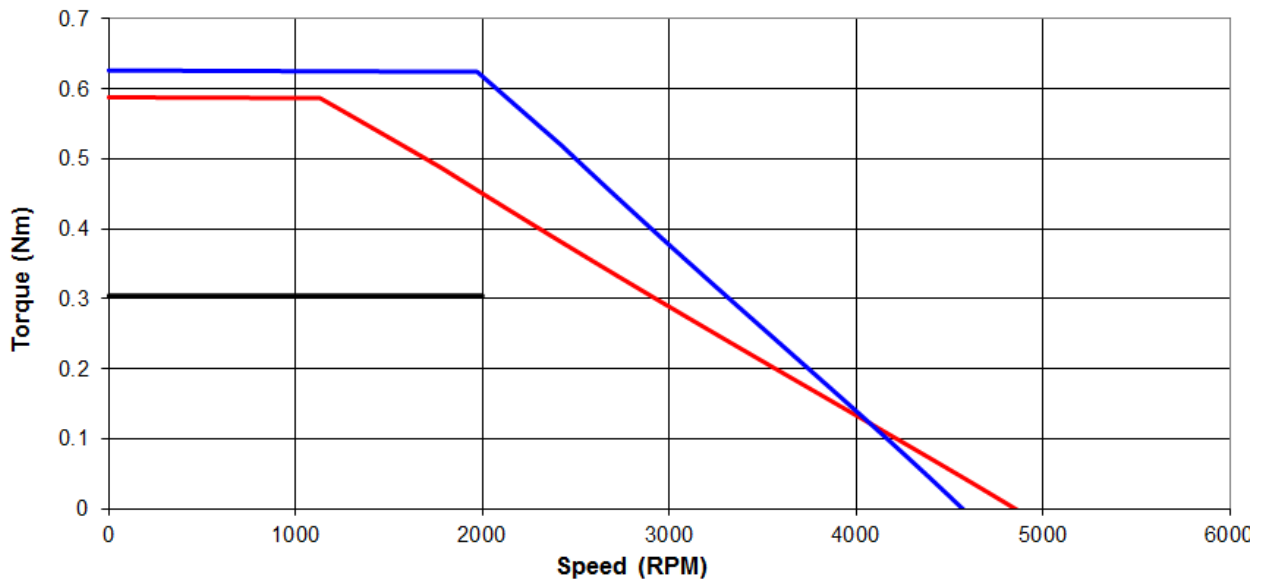


Figure 3. Torque-speed curve AKM12E-ANYNR 48 VDC

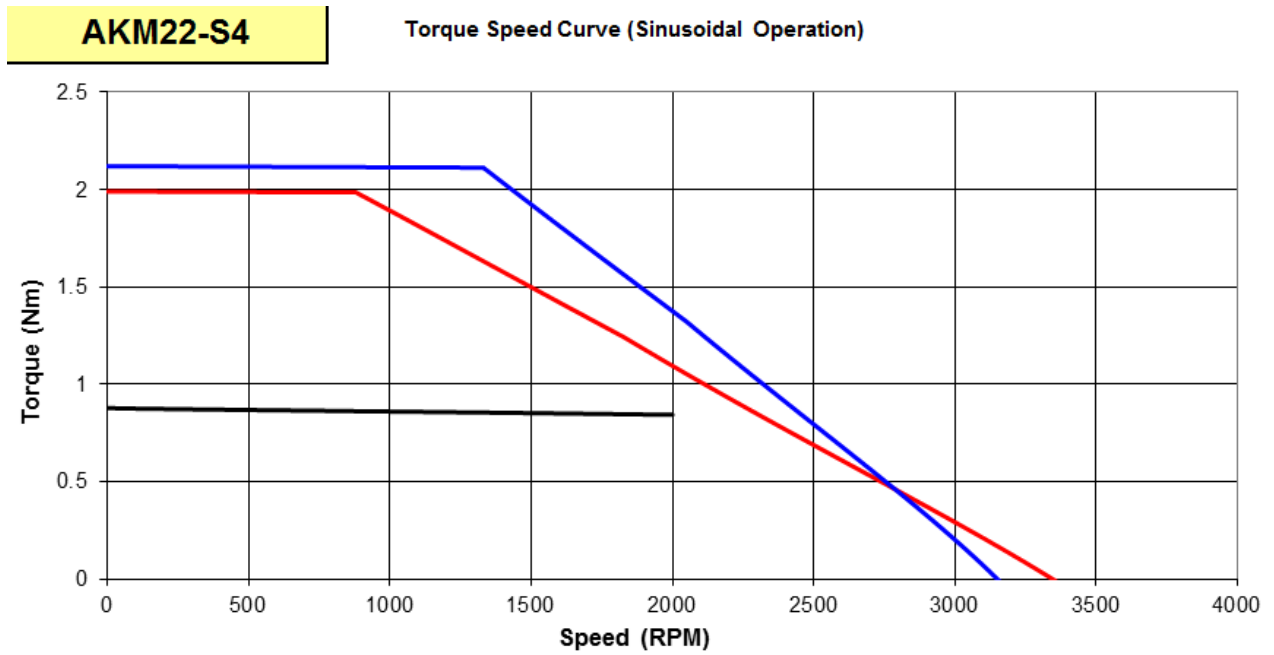


Figure 4. Torque-speed curve AKM22S-ANBNR 48 VDC

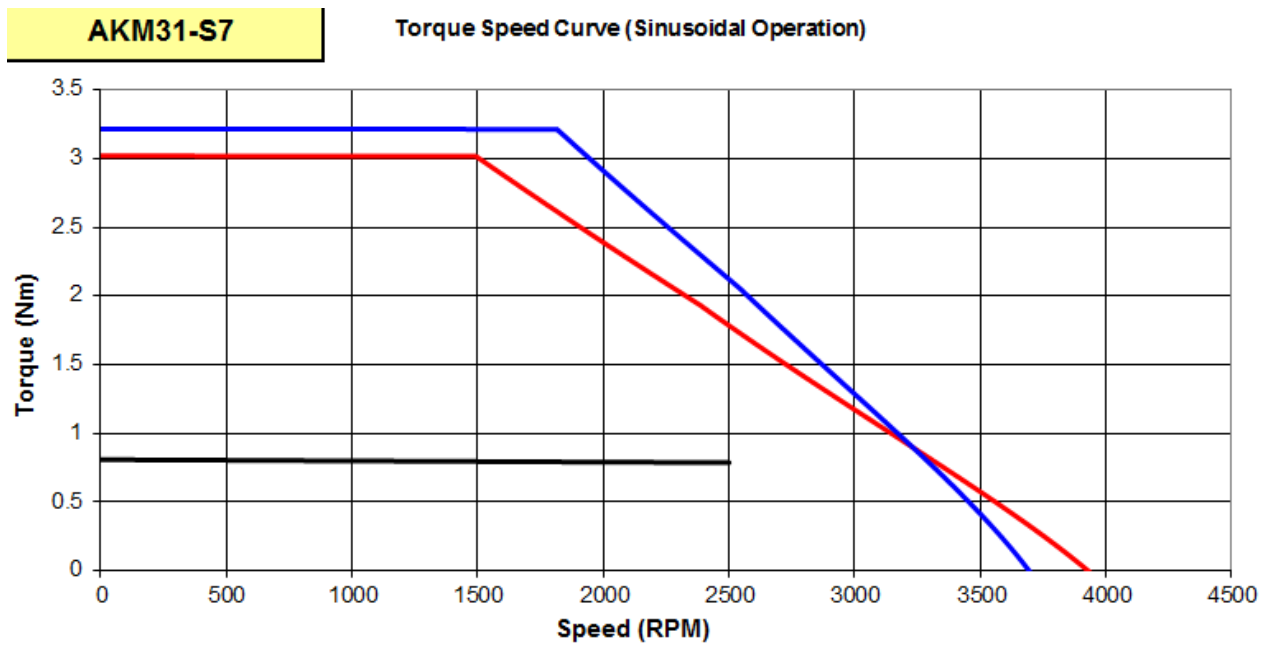


Figure 5. Torque-speed curve AKM31S-ANCNR 48 VDC

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