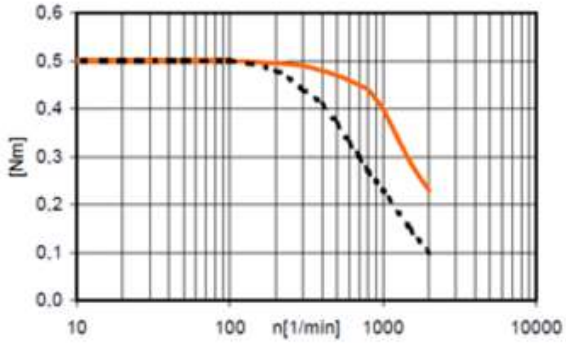
drylin® step motor NEMA17

igus® stepper motors complement drylin® linear axes well. They distinguish themselves by their cost-efficiency, precision and simple control. They work reliably under varied environmental conditions (depending on the selected protection class IP). Due to the standardized power connection the igus® step motors can be connected to the most popular motor controls.

Characteristics



dashed: 24 V DC
orange: 48 V DC
characteristic based on quarter step mode

part no

MOT -								MOT = motor
	AN -							AN = design
		S -						S = stepper motor
			060 -					060 = 60 V DC
				005 -				005 = 0,5 Nm Holding torque
					042 -			042 = flange dimension 42 mm
						M -		M = metric plug L = stranded wire (optional)
							A -	A = without C = incremental encoder D = incremental encoder and brake
							AAAA	AAAA = standard AAAC = encoder AAAD = encoder and brake

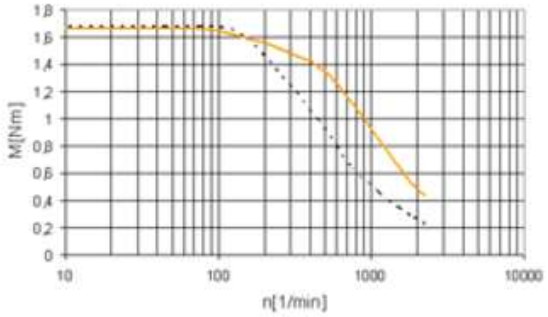
Technical data

Distance over hubs		42mm (NEMA17)
Motor		
Maximum voltage	[VDC]	60
Nominal voltage	[VDC]	24-48
Nominal current	[A]	1.8
Holding torque	[Nm]	0.5
Detent torque	[Nm]	0.022
Step angle	°	1.8
Resistance / phase	[Ω]	1.75±10%
Inductance / phase	[mH]	3.30±20%
Moment of inertia / rotor	[kgcm^2]	0.08
Max load axial	[N]	7
Max load radial	[N]	20
Encoder		
Operating voltage	[VDC]	5
Impulse / turn	[1/min]	500
Zero impulse / index		Yes
Line-driver		RS422 protocol
brake		
Operating voltage	[VDC]	24±10%
Wattage	[W]	8
Holding torque	[Nm]	0.4
Moment of inertia	[kgcm^2]	0.01
Weight		
Product weight	[kg]	0.32
With encoder	[kg]	0.34
With encoder and brake	[kg]	0.58
Operating data		
Ambient temperature	[°C]	-10...+50
Max temperature rise	[°C]	80
insulation class		B
humidity (not condensing)	%	85
protection class engine case		IP65 (shaft seal IP52)
CE		EMV guideline

drylin® step motor NEMA23

igus® stepper motors complement drylin® linear axes well. They distinguish themselves by their cost-efficiency, precision and simple control. They work reliably under varied environmental conditions (depending on the selected protection class IP). Due to the standardized power connection the igus® step motors can be connected to the most popular motor controls.

Characteristics



dashed: 24 V DC
orange: 48 V DC
characteristic based on quarter step mode

part no

MOT -							MOT = motor
	AN -						AN = design
		S -					S = stepper motor
			060 -				060 = 60 V DC
				020 -			020 = 2 Nm Holding torque
					056 -		056 = flange dimension 56 mm
						M -	M = metric plug L = stranded wire (optional)
						A -	A = without C = incremental encoder D = incremental encoder and brake
						AAAA	AAAA = standard AAAC = encoder AAAD = encoder and brake

technical data

Distance over hubs		56mm (NEMA23)
Motor		
Maximum voltage	[VDC]	60
Nominal voltage	[VDC]	24-48
Nominal current	[A]	4.2
Holding torque	[Nm]	2
Detent torque	[Nm]	0.068
Step angle	°	1.8
Resistance / phase	[Ω]	0.5±10%
Inductance / phase	[mH]	1.90±20%
Moment of inertia / rotor	[kgcm^2]	0.48
Max load axial	[N]	15
Max load radial	[N]	52
Encoder		
operating voltage	[VDC]	5
Impulse / turn	[1/min]	500
Zero impulse / index		Yes
Line-driver		RS422 protocol
Brake		
Operating voltage	[VDC]	24±10%
Wattage	[W]	10
Holding torque	[Nm]	1
Moment of inertia	[kgcm^2]	0.02
Weight		
Product weight	[kg]	1.12
With encoder	[kg]	1.14
With encoder and brake	[kg]	1.36
Operating data		
Ambient temperature	[°C]	-10...+50
Max temperature rise	[°C]	80
Insulation class		B
Humidity (not condensing)	%	85
Protection class engine case		IP65 (shaft seal IP52)
CE		EMV guideline