

Arm drive

Motor: DCX35L GB KL 36V

Gearhead: GPX42 156:1

Encoder: ENX16 EASY 1024IMP

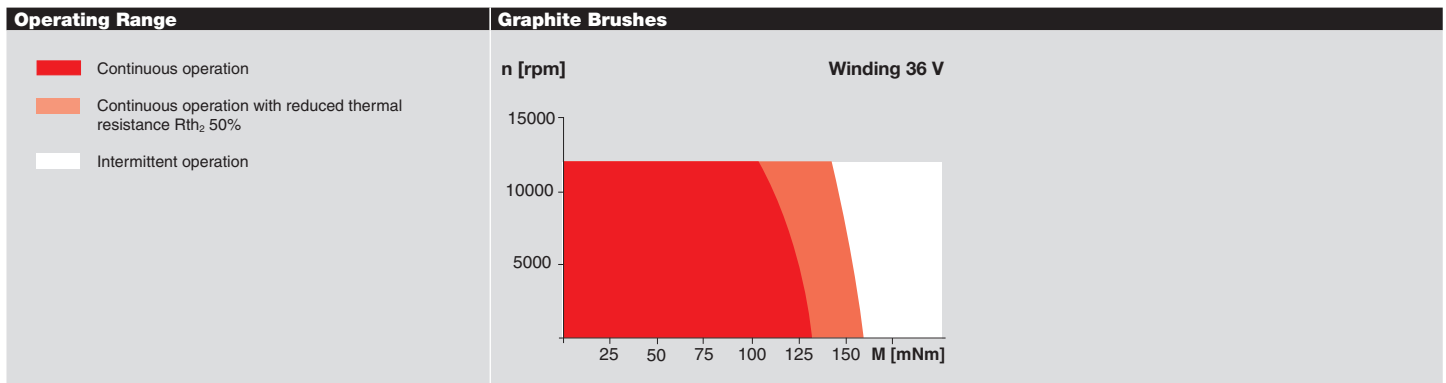
Configure and order your drive online.
dcx.maxonmotor.com

DCX 35 L brushed DC motor Ø35 mm

Configurable



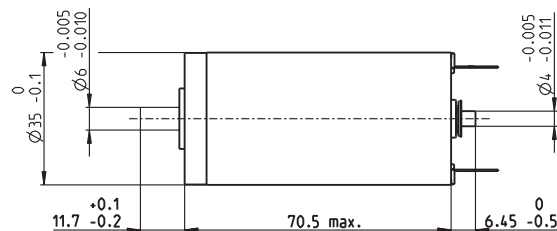
Key Data		Graphite Brushes	
Typical Speed/torque gradient	rpm/mNm	3.8	
Max. nominal torque	mNm	138	
Max. permissible speed	rpm	12300	
Max. continuous output power/assigned power rating	W	120/80	
Max. efficiency	%	90	
Ambient temperature	°C	-40 ... +100	
Mech. time constant	ms	3.91	
Therm. time constant winding	s	43.9	
Rotor inertia	gcm ²	98.6	
Max. axial load (dynamic)	N	Ball bearings: 7	
Max. radial load, 5 mm from flange	N	Ball bearings: 65.3	
Typical noise level	dBA	48	
Weight	g	385	



Specifications	Graphite Brushes						
	V	12	18	24	36	48	60
Nominal voltage	V	12	18	24	36	48	60
No load speed	rpm	8130	7200	7720	7940	6670	7690
No load current	mA	320	177	146	101	58.6	57.5
Nominal current	A	6.00	5.32	4.26	3.07	2.08	1.84
Torque constant	mNm/A	13.7	23.4	29.3	42.9	68.3	74.1
Speed constant	rpm/V	699	408	326	223	140	129
Terminal resistance	Ω	0.079	0.212	0.346	0.716	1.76	2.16
Terminal inductance	mH	0.026	0.077	0.121	0.260	0.658	0.776

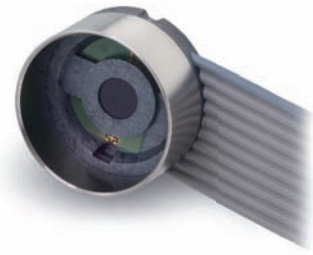
Configuration	dcx.maxonmotor.com
Bearing	Ball bearings preloaded
Commutation	Graphite brushes
Flange front/back	Standard flange/configurable flange/no flange
Shaft front/back	Length/diameter/flat face
Electric connection	Terminals or cable/alignment of connection/cable length/connector type

maxon Modular System	Page	Dimensions Standard Configuration	M 1:2
maxon gear			
GPX 42	71		
maxon sensor			
ENX 10 QUAD	74		
ENX 16 EASY	75		
ENC 2RMHF	323		
ENC 30 HEDL 5540	330		
maxon motor control			
ESCON 50/5	343		
ESCON Module 50/5	343		
ESCON 70/10	343		
EPOS2 24/5	351		
EPOS2 50/5	351		
EPOS2 70/10	351		
EPOS2 P 24/5	354		
EPOS3 70/10 EtherCAT	357		
MAXPOS 50/5	360	Shortest configuration possible: 66.9 mm	



ENX 16 Encoder Ø16 mm

Configurable

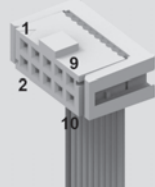


Key Data	EASY
Number of channels	3
Max. counts per turn	1024
Encoder length L max.	mm 8.5
Ambient temperature	°C -40 ... +100
Weight	g 7

Selection criteria	EASY
Speed and rotation direction detection	■
Speed and position control	■
Compact and robust design	■
High resolution	■
Cost effective	■

■ suitable ▲ suitable to a limited extent ● not suitable

Specifications	EASY
Supply voltage V _{cc}	V 5 ±0.5
Max. operating frequency	kHz 500
Max. Speed	rpm 30000
Connector	10-pin 2.54 mm multipoint connector (IEC/EN 60603-1-DIN41651) Pin 1: Do not connect! Pin 2: V _{cc} Pin 3: GND Pin 4: Do not connect! Pin 5: Channel \bar{A} Pin 6: Channel A Pin 7: Channel \bar{B} Pin 8: Channel B Pin 9: Channel \bar{I} Pin 10: Channel I



Configuration	EASY
Counts per turn ²	1 ... 128, 256, 512, 1024
Cable length	mm 50, 100, 150, 200, 300, 500, 1000
Alignment of cable outlet in relation to motor (pitch)	° 15

maxon Modular System	Page	Dimensions Standard Configuration	M 3:4	Notes
maxon DC motor				
DCX 22 S	61			¹ Applying voltage to these pins can destroy the encoder. ² maxon controllers require a resolution of at least 16 pulses.
DCX 22 L	62			
DCX 35 L	64			