

IDX 70 S with integrated electronics

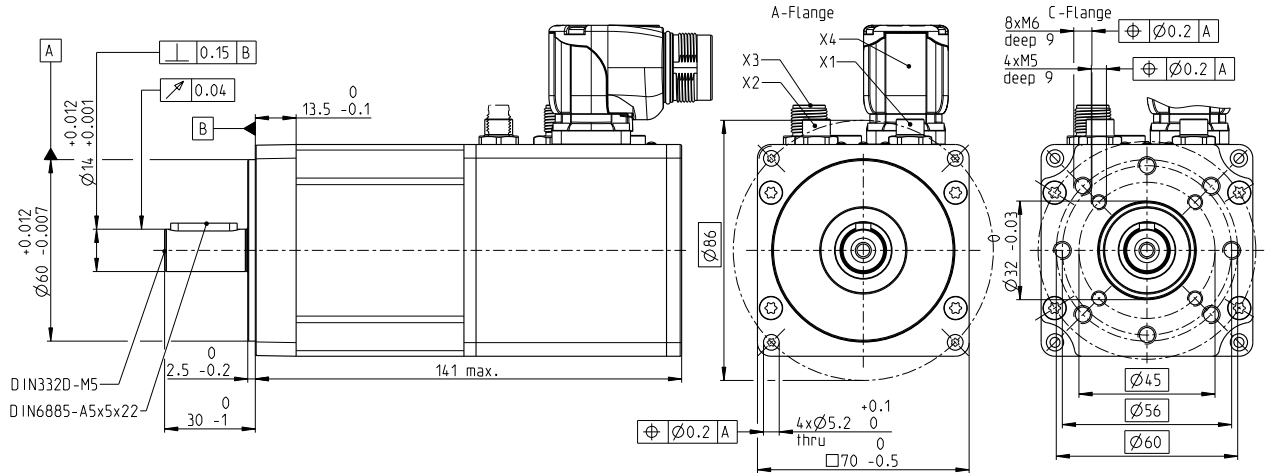
Drive with Positioning/Speed Controller

EtherCAT
CANopen
I/O ↔

NEW



Key Data: 550/641 W, 1530 mNm, 6000 rpm



M 1:2

Drive data (provisional)

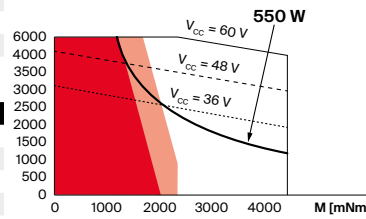
1_ Nominal power supply voltage	V	24	48	60
2_ Nominal speed	rpm	3870	3800	4000
3_ Nominal torque at 25°C	mNm	1069	1339	1530
4_ Nominal torque at 40°C	mNm	928	1163	1329
5_ Nominal supply current at 25°C	A	19.7	12.1	11.6
6_ Nominal supply current at 40°C	A	17.1	10.5	10.1
7_ Maximum speed at nominal voltage	rpm	4100	4100	4280
8_ Maximum permissible drive speed	rpm	6000	5125	4280
9_ Maximum torque (short-time)	mNm	2208	4416	5290
10_ Maximum supply current (short-time)	A	46	46	46
11_ Rotor inertia of the drive	gcm ²	568	568	568
12_ Nominal supply voltage + V _{cc}	V	12..60	12..60	12..60
13_ Mechanical time constant	ms	0.598	0.543	0.569

Thermal data

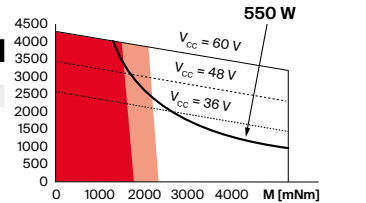
14_ Thermal resistance housing-ambient	K/W	1.76
15_ Thermal resistance winding-housing	K/W	1.07
16_ Thermal time constant winding	s	9.83
17_ Thermal time constant drive	s	1260
18_ Ambient temperature	°C	-30...+85

Operating Range

n [rpm] 48-V-system



n [rpm] 60-V-system



Mechanical data

19_ Axial play	mm	0.22
Preload	N	28
Direction of force		Pull
20_ Radial play		preloaded
21_ Max. axial load (dynamic)	N	22
22_ Max. force for press fits (static)	N	270
23_ Max. radial load [mm from flange]	N	300 [15]

Other specifications

24_ Weight of the drive	g	1800
25_ Typical noise level [rpm]	dBA	55 [3000]
Encoder: Steps per turn		4096

Supply I/O's	M23, male, 6 poles, N-coded
CANopen Input	M12, male, 12 poles, A-coded
CANopen Output	M8, male, 5 poles, B-coded
EtherCAT Input	M8, female, 5 poles, B-coded
EtherCAT Output	M8, female, 4 poles, A-coded
	M8, female, 4 poles, A-coded

- Continuous operation
- Continuous operation with reduced thermal resistance R_{th2} 50%
- Short term operation

Modular System

maxon gear	Sensor integrated	Motor Control integrated
	Accessories	
	571_AB 60 S	

Details on catalog page 40

Configuration

Flange front: A-Flange/C-Flange
Interface with Positioning/Speed Controller: CANopen / EtherCAT
Interface with Speed Controller: I/O
Angle Power Connector: 0° / 90°