



The Basic Series for Greater Flexibility in Standard Applications

HeiTronX Basic - Compact

Meet the innovative and cost-effective addition to the HMD NG modular system with a servo controller with CANopen® or EtherCAT®, which maintains the same compact installation space as the underlying series. This means that all low-voltage motors (HMD06-011/019/026) that can be configured using our motor configurator can also be equipped with this controller.

This provides full functionality for singleturn applications with the same installation space. In addition, the motors are equipped with the Safe Torque Off (STO) safety function as a standard. A holding brake and various gearboxes with direct motor mounting from our modular system, are also available as options. Daisy chaining is, of course, also possible with this series.



HeiTronX Basic - Max

The HTB Max is an extension of the Compact controller. This is evident in through its significant increase in performance and multiturn capability. Up to twice the output power is achieved due to optimal thermal integration into the BS end cap or NDE cap with heat sink. The controllers are available with CANopen® or EtherCAT® interfaces and, like all HTB versions, feature additional options such as brakes, gearboxes, and radial shaft seals from our HeiMotion series.



HeiTronX Basic - Flex

The HTB Flex is the most advanced model in the HTB controller family based on our HMD06/HMD08 NG motors. It leaves almost nothing to be desired for. In addition to the significantly higher nominal output power, all additional expansion options of our modular system are also available here. The HTB Flex can also be equipped with a LED that is visible from all radial sides. This enables you to maintain an overview even in complex systems. The variety of connector options allows for highly flexible mounting.



HTBo4 / HTBo6 - COMPACT

Motor Type

Type	Rated speed	Rated torque at 40°C ambient temp.	Peak torque	Size L [mm]	
	n_n [rpm]	M_n [Nm]	M_{max} [Nm]	without brake	with brake

HTBo4 - 24 V_{DC}

HTB04-004	3,000	0.34	0.9	127	163
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HTBo4 - 48 V_{DC}

HTB04-004	6,000	0.34	0.9	127	163
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HTBo6 - 24 V_{DC}

HTB06-011	3,000	0.4	2.5	110	149
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HTBo6 - 48 V_{DC}

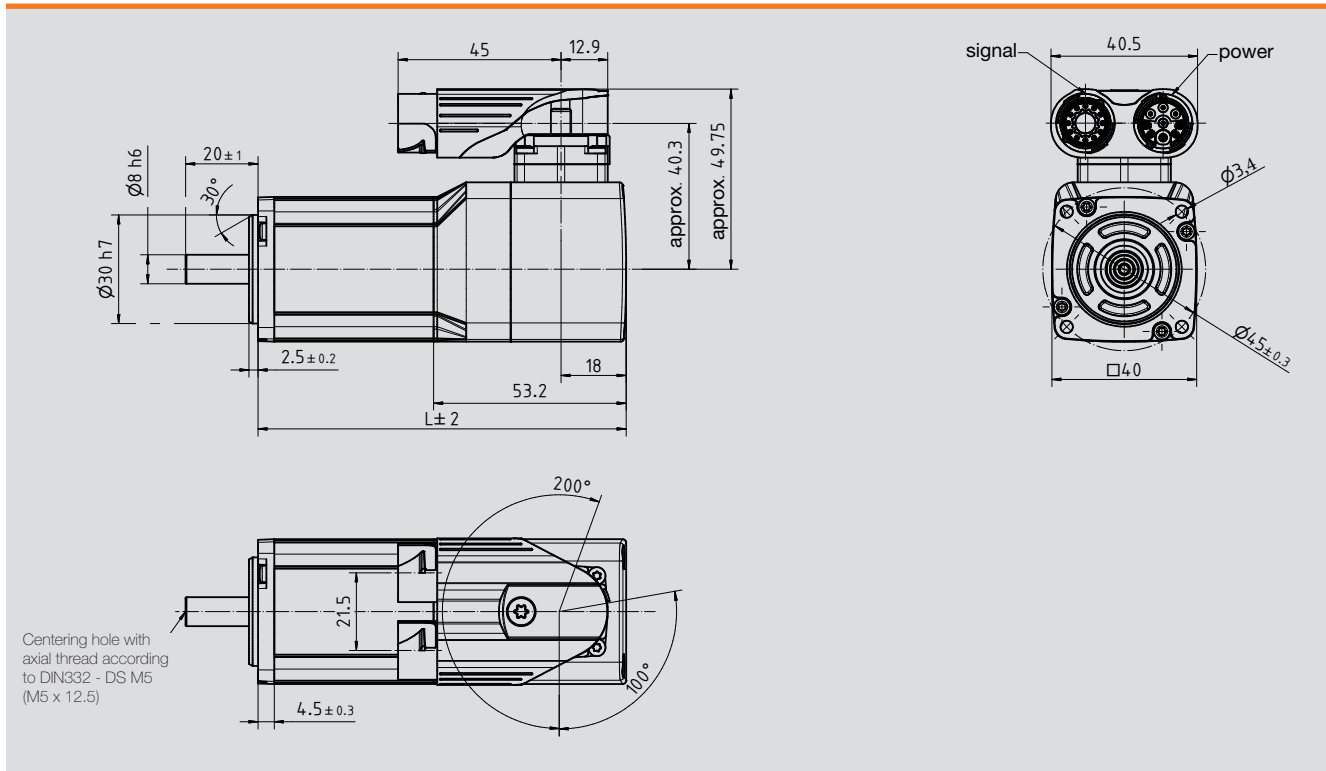
HTB06-011	6,000	0.4	2.5	110	149
HTB06-011	3,000	0.8	2.5	110	149
HTB06-019	3,000	1.2	4.8	135	174
HTB06-026	3,000	1.4	6.5	165	204

Specifications

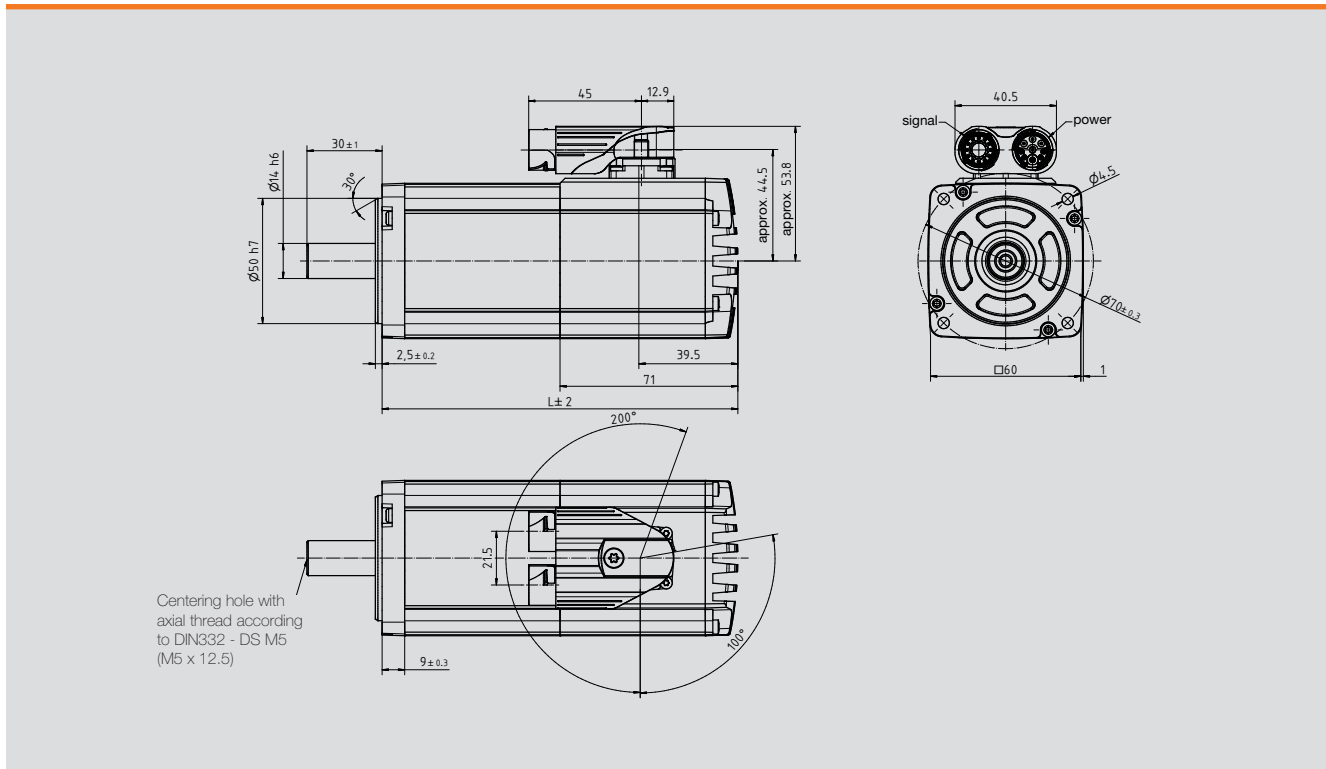
		HTBo4 - Compact	HTBo6 - Compact
Power supply	Rated voltage	5 - 60 V _{DC}	5 - 60 V _{DC}
	Max. rated current	6 A _{DC} / 17 A _{DC} (peak) ¹⁾	15 A _{DC} / 40 A _{DC} (peak) ¹⁾
Logic supply	Voltage	9 - 30 V _{DC}	9 - 30 V _{DC}
Protection type		IP65 (AS-side IP21)	IP65 (AS-side IP21)
Interfaces		CANopen®	CANopen® / EtherCAT®
Configuration software		mcTools / mPLC	mcTools / mPLC
Inputs		4x digital input 1x analog input	4x digital input 1x analog input
Outputs		1x digital output	1x digital output
Brake control		integrated	integrated
Holding brake		optional	optional
Connectors		I-Tec, Y-Tec	I-Tec, Y-Tec
Encoder system		Singletum	Singletum
Safety function		STO	STO

¹⁾ At 48 V_{DC}

Dimensional Drawing HTBo4 - COMPACT - I-Tec / Y-Tec*



Dimensional Drawing HTBo6 - COMPACT - I-Tec / Y-Tec*



* see page 11

■ HTBo6 - MAX

Motor Type

Type	Rated speed n_n [rpm]	Rated torque at 40°C ambient temp. M_n [Nm]	Peak torque M_{max} [Nm]	Size L [mm]			
				Singleturn without brake	Multiturn without brake	Singleturn with brake	Multiturn with brake

HTBo6 - 24 V_{DC}

HTB06-011	3,000	0.6	2.5	134	147	174	187
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HTBo6 - 48 V_{DC}

HTB06-011	6,000	0.6	2.5	134	147	174	187
HTB06-011	3,000	0.9	2.5	134	147	174	187
HTB06-019	3,000	1.4	4.8	159	172	199	212
HTB06-026	3,000	1.7	6.5	189	202	229	245

Specifications

Power supply	Rated voltage	5 - 60 V _{DC}
	Max. rated current	15 A _{DC} / 40 A _{DC} (peak) ¹⁾
Logic supply	Voltage	9 - 30 V _{DC}
Protection type		IP65 (AS-side IP21)
Interfaces		CANopen® / EtherCAT®
Configuration software		mcTools / mPLC
Inputs		4x digital input 1x analog input
Outputs		1x digital output
Brake control		integrated
Holding brake		optional
Connectors		I-Tec, Y-Tec
Encoder system		Singleturn
Safety function		STO

¹⁾ At 48 V_{DC}

■ HTBo6 - FLEX

Motor Type

Type	Rated speed	Rated torque at 40°C ambient temp.	Peak torque	Size L [mm]			
	n_n [rpm]	M_n [Nm]	M_{max} [Nm]	Metric without brake	Metric with brake	I-/Y-Tec without brake	I-/Y-Tec with brake

HTBo6 - 24 V_{DC}

HTB06-011	3,000	0.5	2.5	125	164	118	157
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HTBo6 - 48 V_{DC}

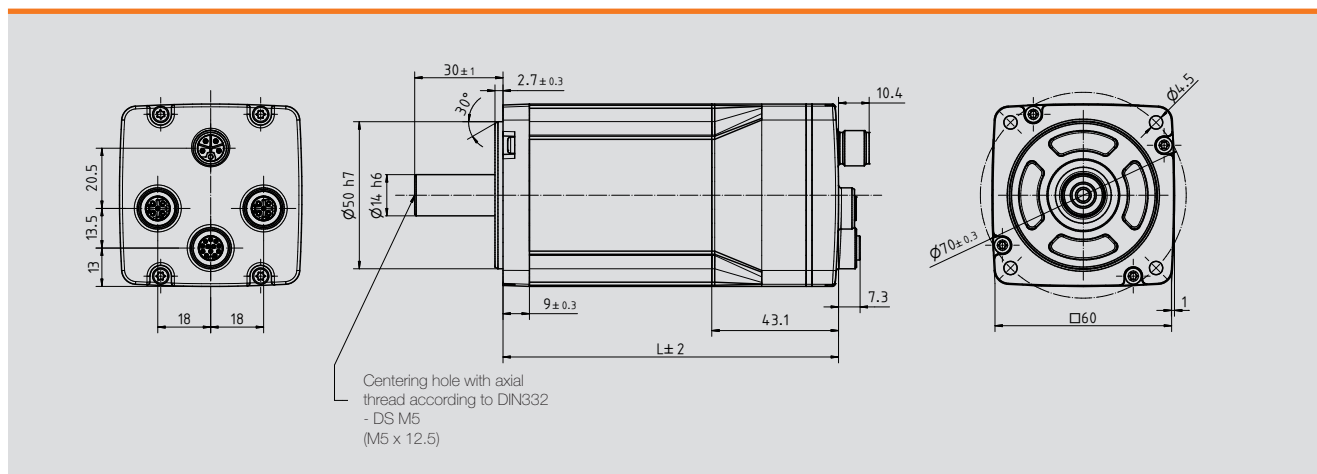
HTB06-011	6,000	0.5	2.5	125	164	118	157
HTB06-011	3,000	0.8	2.5	125	164	118	157
HTB06-019	3,000	1.3	4.8	150	189	143	182
HTB06-026	3,000	1.6	6.5	180	219	173	212

Specifications

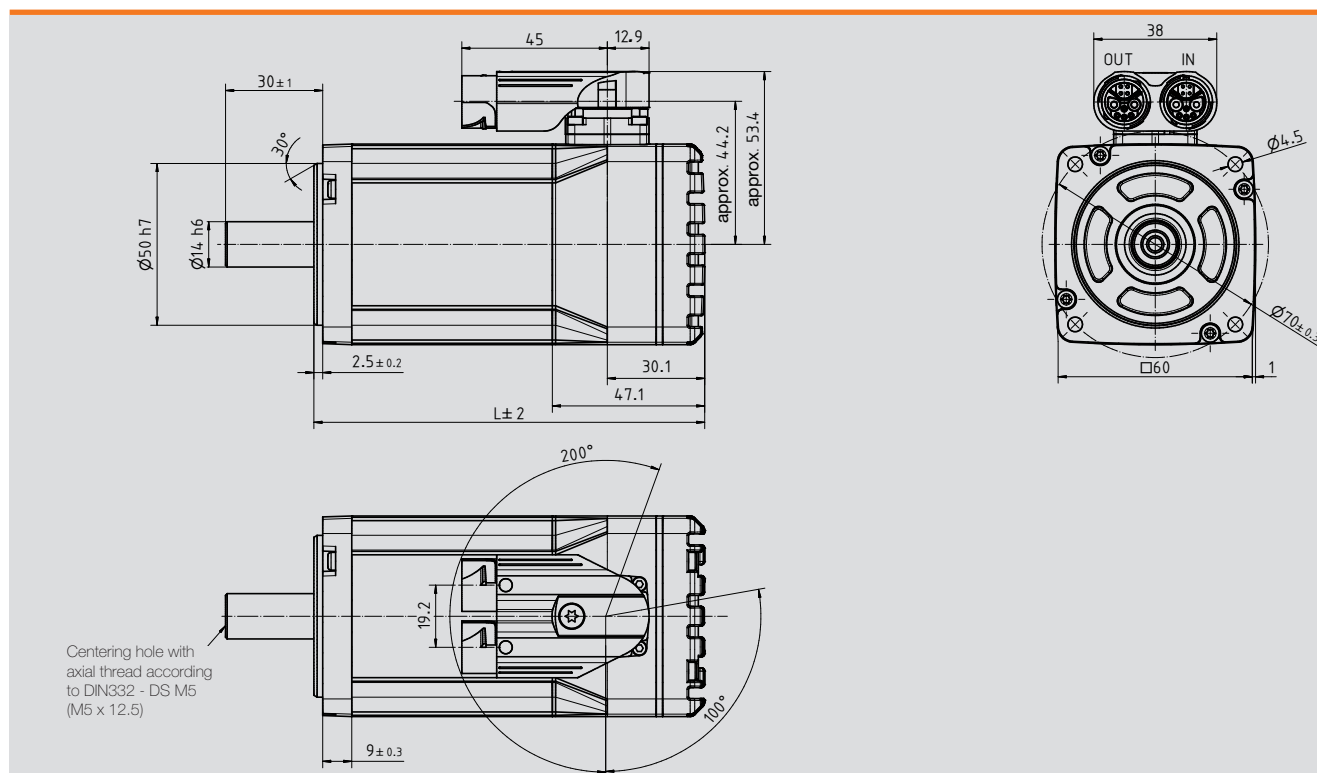
Power supply	Rated voltage	5 - 60 V _{DC}
	Max. rated current	15 A _{DC} / 40 A _{DC} (peak) ¹⁾
Logic supply	Voltage	9 - 30 V _{DC}
Protection type		IP65 (AS-side IP21)
Interfaces		CANopen® / EtherCAT®
Configuration software		mcTools / mPLC
Inputs		4x digital input 1x analog input
Outputs		1x digital output
Brake control		integrated
Holding brake		optional
Connectors		M12, I-Tec, Y-Tec
Encoder system		Singleturn / Multiturn
Safety function		STO

¹⁾ At 48 V_{DC}

Dimensional Drawing HTBo6 - FLEX - Metric*



Dimensional Drawing HTBo6 - FLEX - I-Tec / Y-Tec**



* see page 10

** see page 11

■ HTBo8 - FLEX

Motor Type

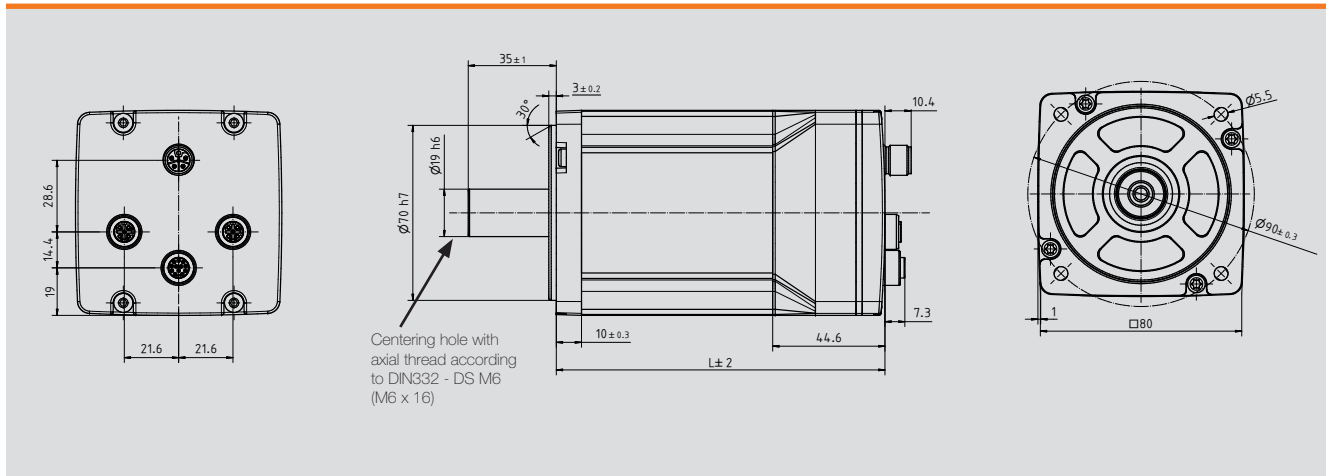
Type	Rated speed n_n [rpm]	Rated torque at 40°C ambient temp. M_n [Nm]	Peak torque M_{max} [Nm]	Size L [mm]			
				Metric without brake	Metric with brake	I-/Y-Tec without brake	I-/Y-Tec with brake
HTBo8 - 48 V _{DC}							
HTB08-024	3,000	1.6	6.0	141	190	135	183
HTB08-032	3,000	1.8	6.5	156	205	150	198

Specifications

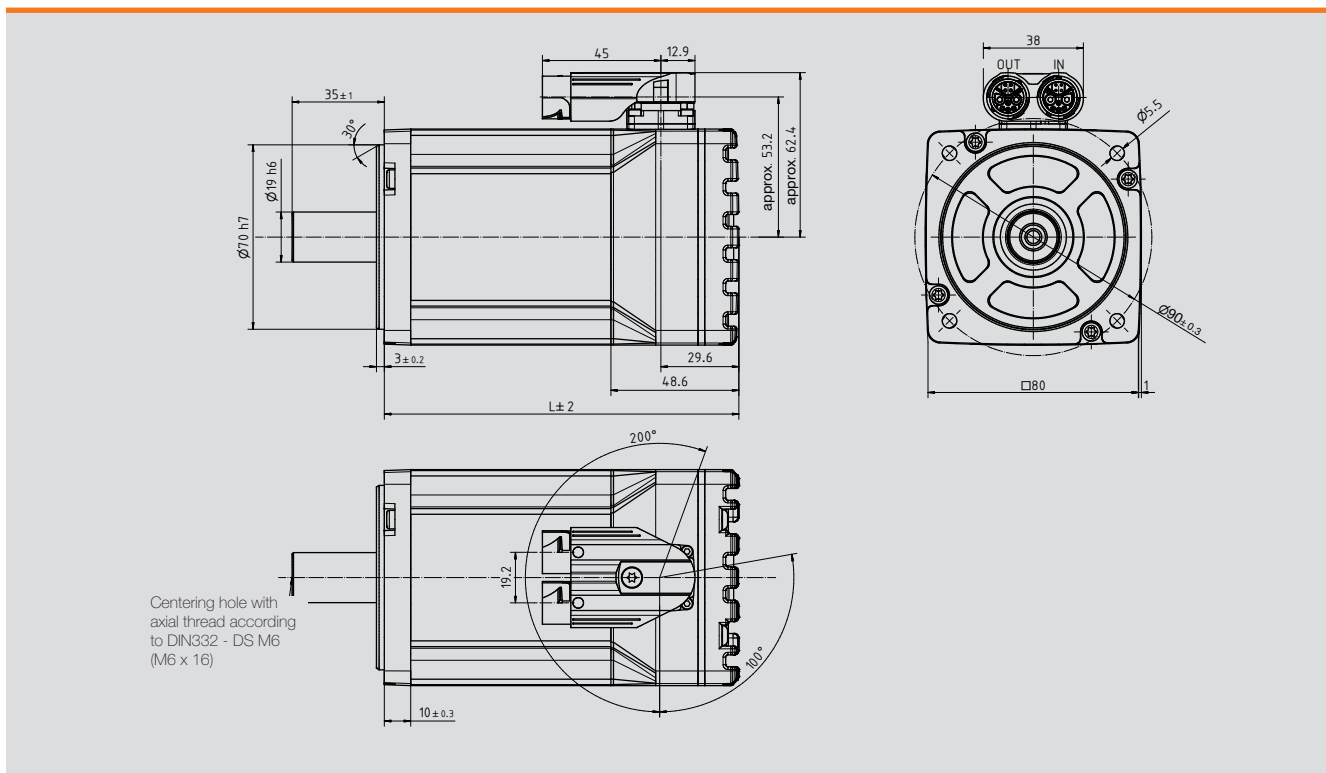
Power supply	Rated voltage	5 - 60 V _{DC}
	Max. rated current	15 A _{DC} / 60 A _{DC} (peak) ¹⁾
Logic supply	Voltage	9 - 30 V _{DC}
Protection type		IP65 (AS-side IP21)
Interfaces		CANopen® / EtherCAT®
Configuration software		mcTools / mPLC
Inputs		4x digital input 1x analog input
Outputs		1x digital output
Brake control		integrated
Holding brake		optional
Connectors		M12, I-Tec, Y-Tec
Encoder system		Singleturn / Multiturn
Safety function		STO

¹⁾ At 48 V_{DC}

Dimensional Drawing HTBo8 - FLEX - Metric*



Dimensional Drawing HTBo8 - FLEX - I-Tec / Y-Tec*



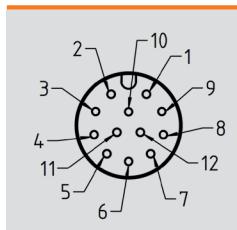
* see page 10-11

Pin Assignment

HTB - FLEX

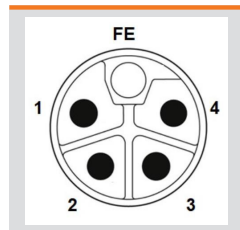
Metric

M12 I/O



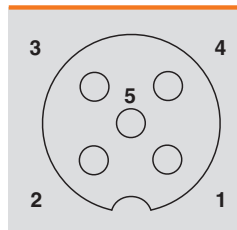
Pin	Function
1	GND
2	AIN-
3	AIN+
4	DIN0
5	DIN1
6	DIN2
7	DIN3
8	DOUT
9	-
10	STO-A
11	STO-B
12	GND

M12 Power



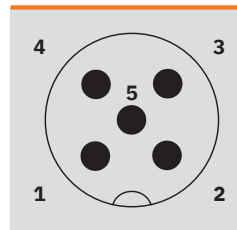
Pin	Function
1	GND
2	GND
3	Power
4	Logic
FE	FE

M12 CANopen® female



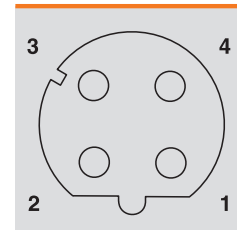
Pin	Function
1	GND
2	-
3	-
4	CAN-H
5	CAN-L

M12 CANopen® male



Pin	Function
1	GND
2	-
3	-
4	CAN-H
5	CAN-L

M12 EtherCAT®



Pin	Function
1	TX+
2	RX+
3	RX-
4	TX-

HTB - COMPACT / MAX FLEX

I-Tec

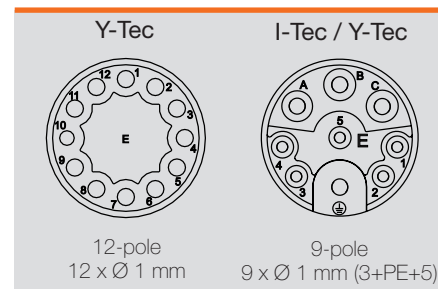
Pin	Designation
A	POWER
B	GND
C	Logic
⊕	FE
1	CAN_L
2	CAN_H
3	STO A
4	STO B
5	GND

Y-Tec | I/O

Pin	Designation
A	POWER
B	GND
C	Logic
⊕	FE
1	CAN_L
2	CAN_H
3	-
4	-
5	-

Pin	Designation
1	GND
2	DIN 0
3	DIN 1
4	GND
5	Dout
6	AIN +
7	AIN -
8	DIN 2
9	DIN 3
10	STO A
11	STO B
12	GND

Motor Connector



HTB - COMPACT / MAX FLEX

I-Tec hybrid

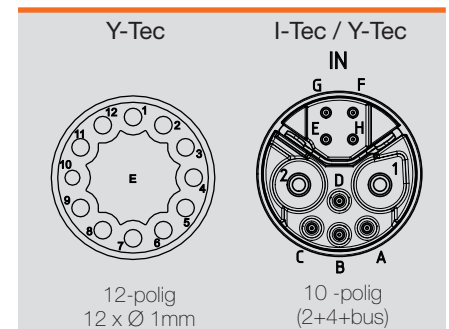
Pin	Designation	
1	GND	
2	Power	
A	GND	
B	Logic	
C	-	
D	FE	
E	TX+	CAN_H
F	RX-	CAN_L
G	TX-	-
H	RX+	-

Y-Tec hybrid

Pin	Designation	
1	GND	
2	Power	
A	GND	
B	Logic	
C	-	
D	FE	
E	TX+	CAN_H
F	RX-	CAN_L
G	TX-	-
H	RX+	-

Pin	Designation
1	GND
2	DIN 0
3	DIN 1
4	GND
5	Dout
6	AIN +
7	AIN -
8	DIN 2
9	DIN 3
10	STO A
11	STO B
12	GND

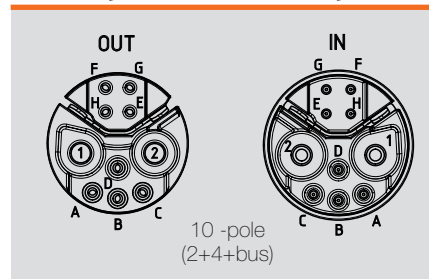
Motor Connector



Y-Tec Daisy Chain

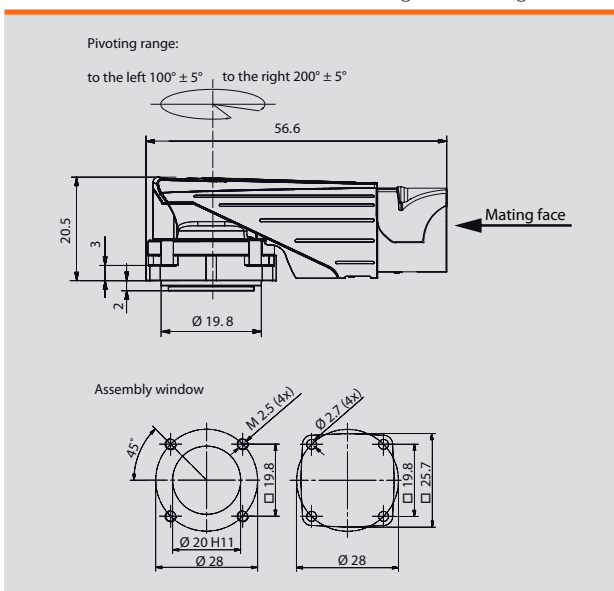
Pin	Designation	
1	GND	GND
2	Power	Power
A	GND	GND
B	Logic	Logic
C	-	-
D	FE	FE
E	TX+	CAN_H
F	RX-	CAN_L
G	TX-	-
H	RX+	-

Output

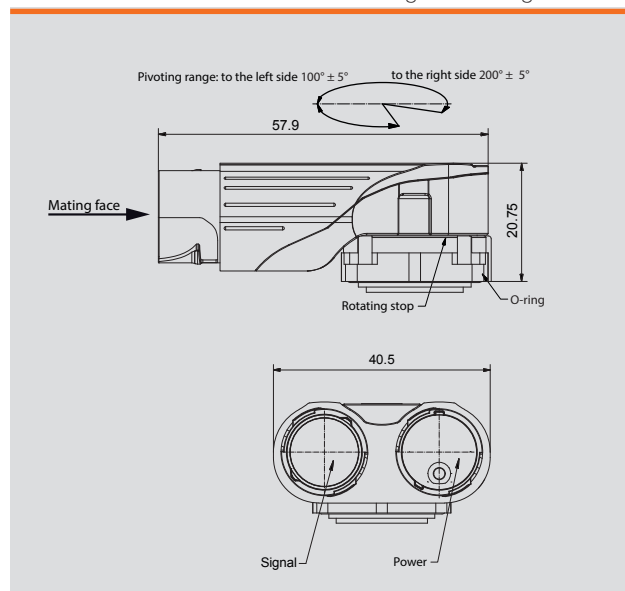


Input

Motor Connector rotatable angle mounting box I-Tec



Motor Connector rotatable angle mounting box Y-Tec



Order Code

HTB06-019-048-30-BPESMXXXW			
Frame/Flange Size 40 mm → 04 60 mm → 06 80 mm → 08		Options without brake 0XXXXXXXXX with brake 24 V _{pc} BXXXXXXXXX without feather key X0XXXXXXXXX with feather key XPXXXXXXXXX	
Coil Size HMP04 → 004 HMD06 → 011 HMD06 → 019 HMD06 → 026 HMD08 → 024 HMD08 → 032		CANopen® XXCXXXXXXXXX EtherCAT® XXEXXXXXXXXX no Safety XXX0XXXXXXXXX STO XXXSXXXXXXXXX Singleturn Encoder XXXXSXXXXXXXXX Multiturn Encoder XXXXMXXXXXXXXX	
DC Link Voltage 24 V → 024 48 V → 048		Compact XXXXXCXXX Max Power XXXXXMXXX Flex XXXXFXXX	
Rated Speed 3,000 rpm → 30 5,500 rpm → 55 6,000 rpm → 60		I-Tec XXXXXXI1X I-Tec, hybrid XXXXXXI2X Y-Tec XXXXXXY1X Y-Tec, hybrid XXXXXXY2X Y-Tec, daisy chain XXXXXXY3X	
		Flex, M12 XXXXXFM1X Flex, M12, IO XXXXXFM2X	
		without radial shaft seal XXXXXXXXX0 with radial shaft seal XXXXXXXXXW	

Can be combined with HMD gearboxes, see www.heidrive.com.

Specifications subject to change! Last changes 11/2025

Heidrive GmbH

Starenstraße 23
D-93309 Kelheim

Tel. +49 9441/707-0
Fax +49 9441/707-259

info@heidrive.de
www.heidrive.com

