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.

HTB04 / HTB06 - COMPACT

Motor Type

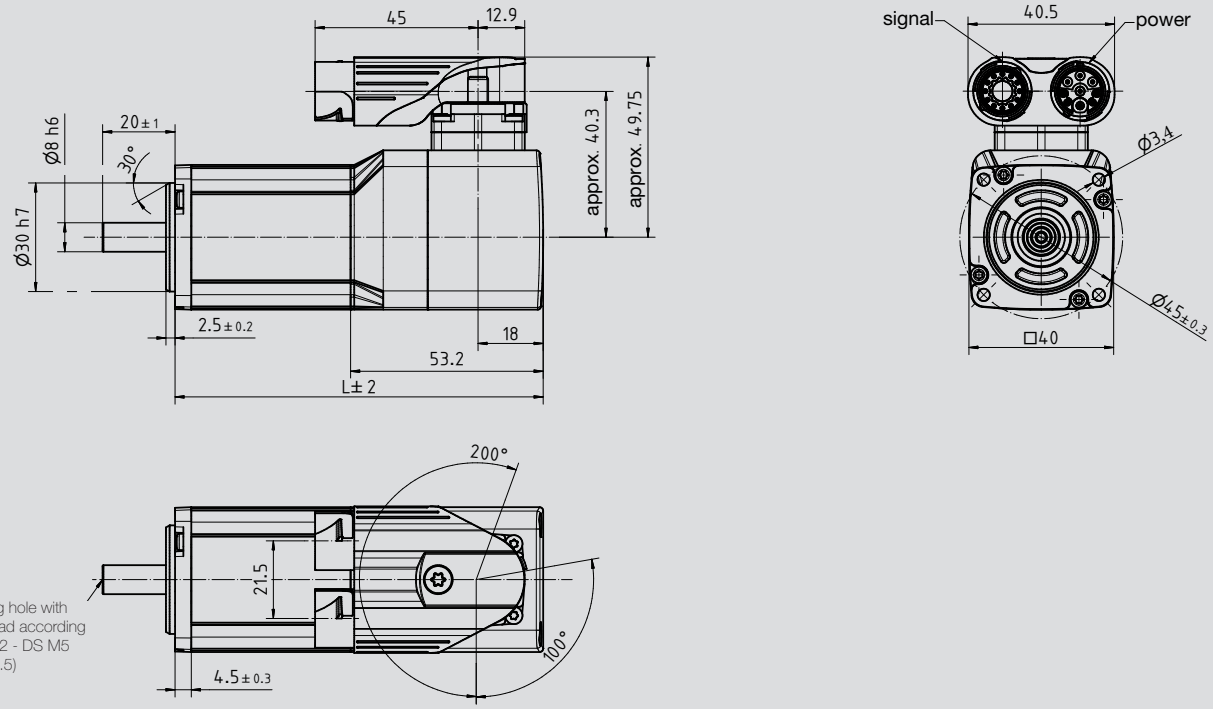
Type	Rated speed	Rated torque at 40°C ambient temp.	Peak torque	Size L [mm]	
	n_n [rpm]	M_n [Nm]	M_{max} [Nm]	without brake	with brake
HTB04 - 24 V_{DC}					
HTB04-004	3,000	0.34	0.9	127	163
HTB04 - 48 V_{DC}					
HTB04-004	6,000	0.34	0.9	127	163
HTB06 - 24 V_{DC}					
HTB06-011	3,000	0.4	2.5	110	149
HTB06 - 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

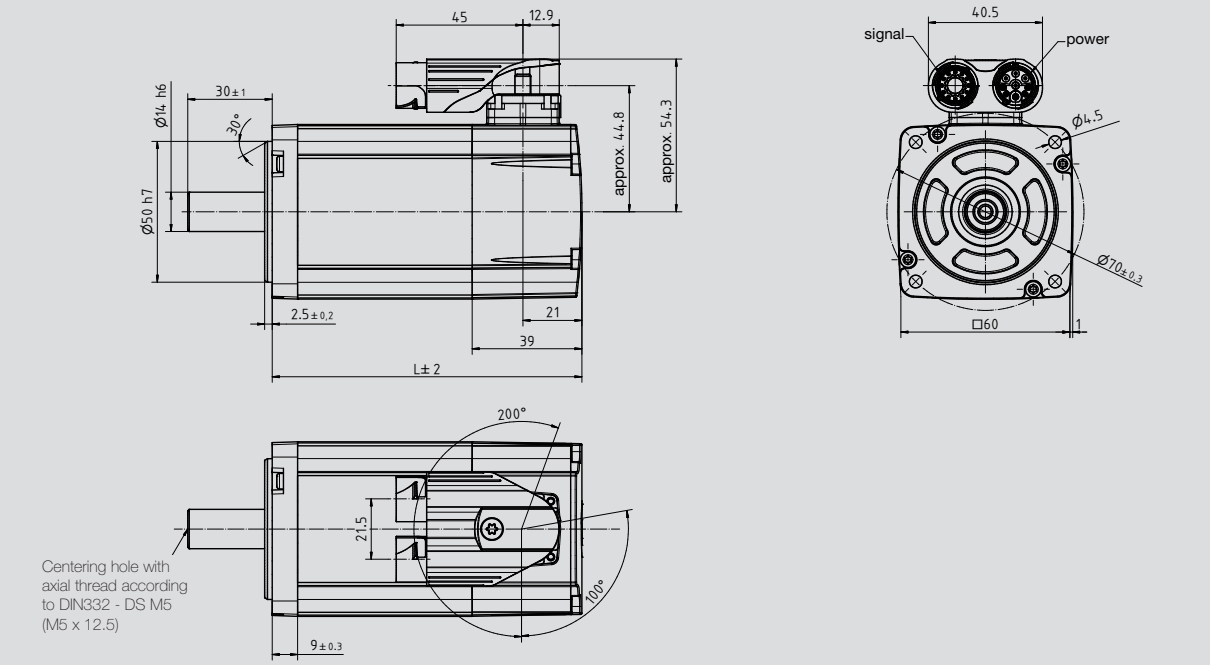
		HTB04 - Compact	HTB06 - Compact
Power supply	Rated voltage	5 - 60 V_{DC}	5 - 60 V_{DC}
	Max. rated current	6 A_{DC} / 17 A_{DC} (peak)[1)]	15 A_{DC} / 40 A_{DC} (peak)[1)]
Logic supply	Voltage	9 - 30 V_{DC}	9 - 30 V_{DC}
Protection type		IP65 (AS-side IP21)	IP65 (AS-side IP21)
Interfaces		CANopen®	CANopen® / 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		Singleturn	Singleturn
Safety function		STO	STO

[1)] At 48 V_{DC}

Dimensional Drawing HTB04 - COMPACT - I-Tec / Y-Tec*



Dimensional Drawing HTB06 - COMPACT - I-Tec / Y-Tec*



* see page 11

HTB06 - MAX

Motor Type

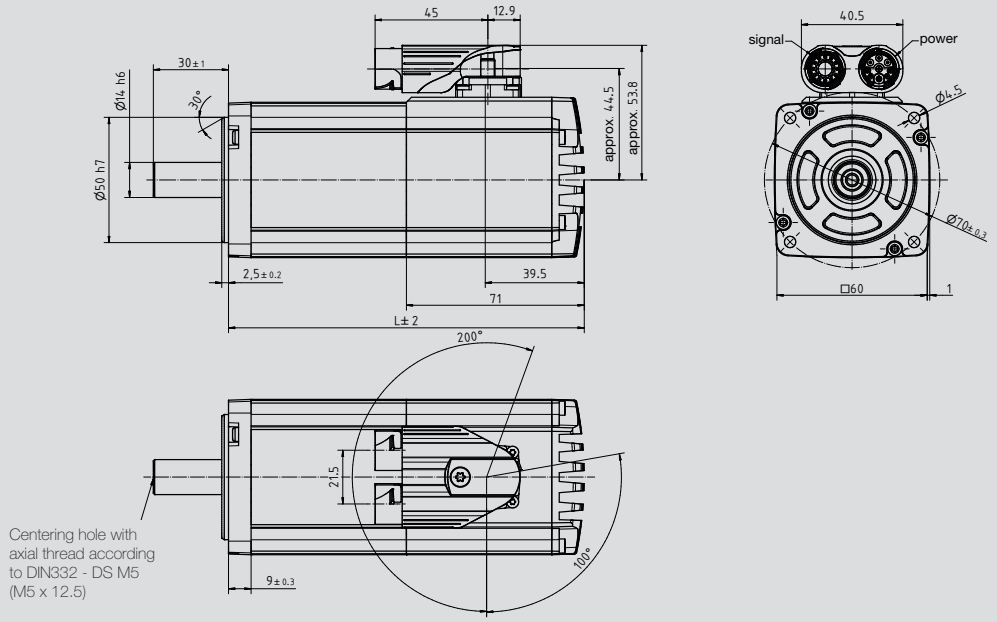
Type	Rated speed n_n [rpm]	Rated torque at 40°C ambient temp. M_n [Nm]	Peak torque M_{max} [Nm]	Size L [mm] Singleturn without brake	Multiturn without brake	Singleturn with brake	Multiturn with brake
HTB06 - 24 V_{DC}							
HTB06-011	3,000	0.6	2.5	134	147	174	187
HTB06 - 48 V_{DC}							
HTB06-011	6,000	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}

Dimensional Drawing HTB06 HTB - MAX - I-Tec / Y-Tec*



* see page 11

HTB06 - FLEX

Motor Type

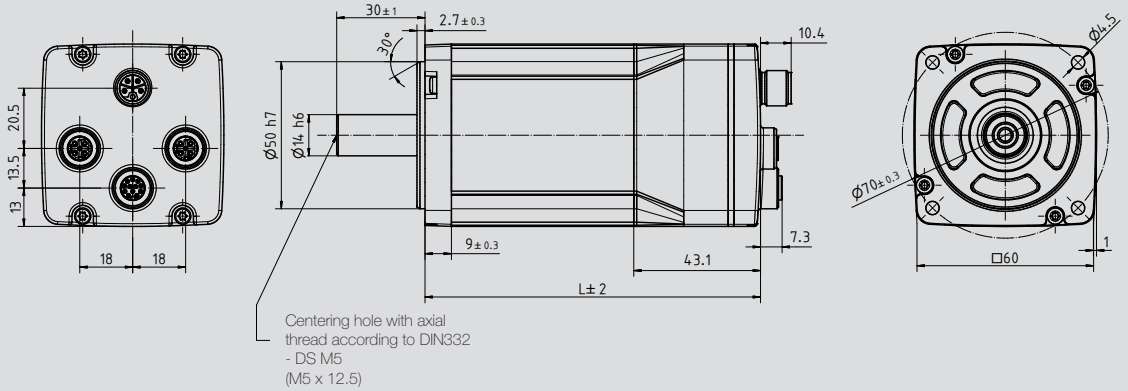
Type	Rated speed n_n [rpm]	Rated torque at 40°C ambient temp. M_n [Nm]	Peak torque M_{max} [Nm]	Size L [mm] Metric without brake	Metric with brake	I-/Y-Tec without brake	I-/Y-Tec with brake
HTB06 - 24 V_{DC}							
HTB06-011	3,000	0.5	2.5	125	164	118	157
HTB06 - 48 V_{DC}							
HTB06-011	6,000	0.5	2.5	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

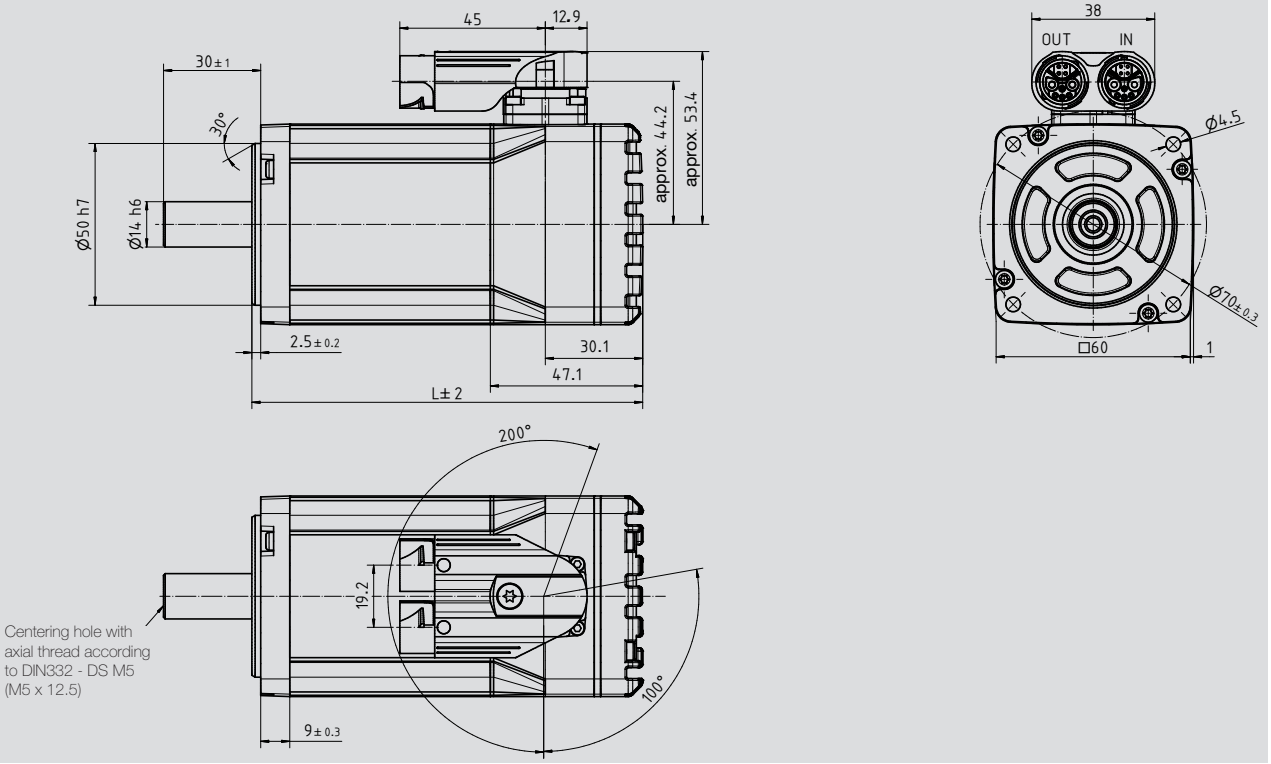
Power supply	Rated voltage	5 - 60 V_{DC}
	Max. rated current	15 A_{DC} / 40 A_{DC} (peak)[1]
Logic supply	Voltage	9 - 30 V_{DC}
Protection type		IP65 (AS-side IP21)
Interfaces		CANopen® / EtherCAT®
Configuration software		HeiTools
Inputs		4x digital input 1x analog input
Outputs		1x digital output
Brake 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

HTB08 - FLEX

Motor Type

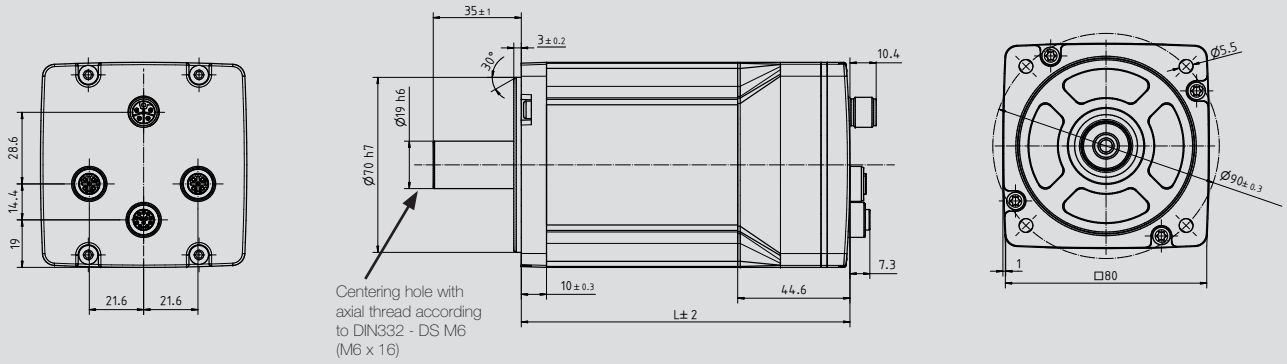
Type	Rated speed	Rated torque at 40°C ambient temp.	Peak torque	Size L [mm]			
	n_n [rpm]	M_n [Nm]	M_{max} [Nm]	Metric without brake	Metric with brake	I-/Y-Tec without brake	I-/Y-Tec with brake
HTB08 - 48 V_{DC}							
HTB08-024	3,000	1.6	6.0	141	190	135	183
HTB08-032	3,000	1.8	6.5	156	205	150	198

Specifications

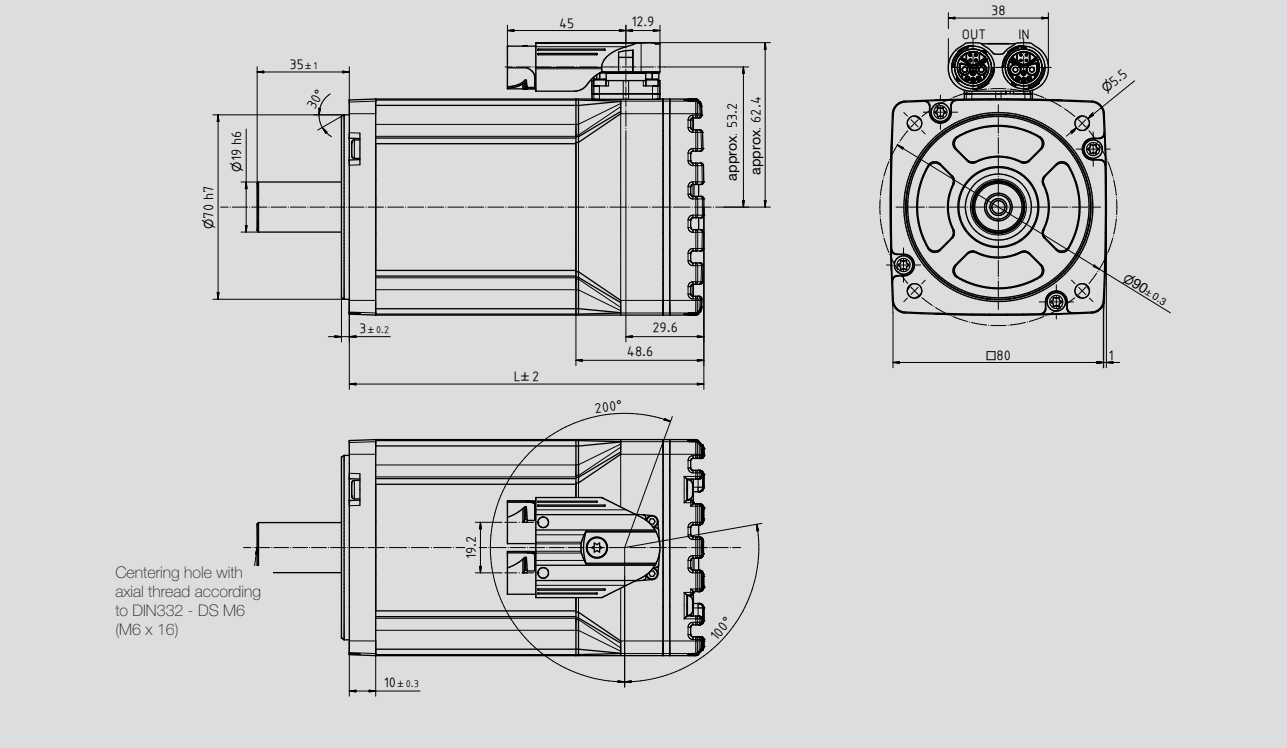
Power supply	Rated voltage	5 - 60 V_{DC}
	Max. rated current	15 A_{DC} / 60 A_{DC} (peak)[1]
Logic supply	Voltage	9 - 30 V_{DC}
Protection type		IP65 (AS-side IP21)
Interfaces		CANopen® / EtherCAT®
Configuration software		HeiTools
Inputs		4x digital input 1x analog input
Outputs		1x digital output
Brake 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*



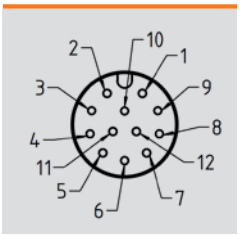
* see page 10-11

Pin Assignment

HTB - FLEX

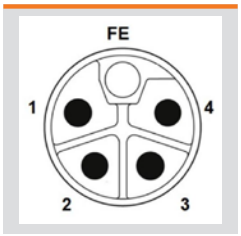
Metric

M12 I/O



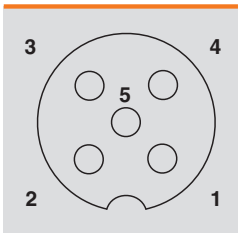
Pin	Function
1	GND
2	AIN_{diff} (-)
3	AIN_{diff} (+)
4	DIN0
5	DIN1
6	DIN2
7	DIN3
8	DOUT
9	-
10	STO - A
11	STO - B
12	GND

M12 Power



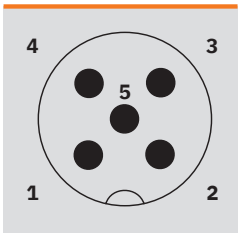
Pin	Function
1	GND
2	GND
3	Power
4	Logic
FE	FE

M12 CANopen® female



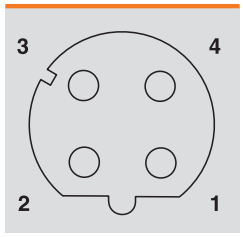
Pin	Function
1	GND
2	-
3	-
4	CAN_{high}
5	CAN_{low}

M12 CANopen® male



Pin	Function
1	GND
2	-
3	-
4	CAN_{high}
5	CAN_{low}

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	-
⏚	FE
1	CAN_{low}
2	CAN_{high}
3	LOGIC
4	GND
5	-

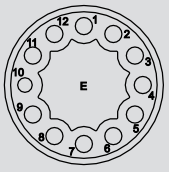
Y-Tec | I/O

Pin	Designation
A	POWER
B	GND
C	-
⏚	FE
1	CAN_{low}
2	CAN_{high}
3	LOGIC
4	GND
5	-

Pin	Designation
1	GND
2	DIN0
3	DIN1
4	GND
5	DOUT
6	AIN_{diff} (+)
7	AIN_{diff} (-)
8	DIN2
9	DIN3
10	STO - A
11	STO - B
12	GND

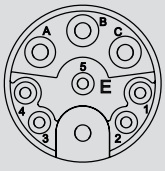
Motor Connector

Y-Tec



12-pole
12 x Ø 1 mm

I-Tec / Y-Tec



9-pole
9 x Ø 1 mm (3+FE+5)

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+	-

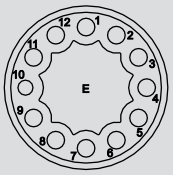
Y-Tec hybrid

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	DIN0
3	DIN1
4	GND
5	DOUT
6	AIN_{diff} (+)
7	AIN_{diff} (-)
8	DIN2
9	DIN3
10	STO - A
11	STO - B
12	GND

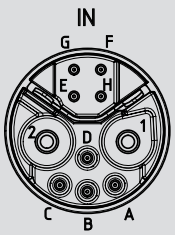
Motor Connector

Y-Tec



12-polig
12 x Ø 1mm

I-Tec / Y-Tec

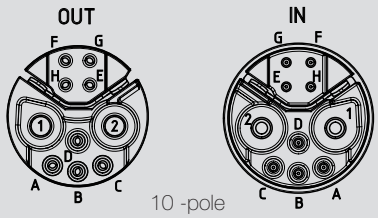


10 -polig
(2+4+bus)

Y-Tec Daisy Chain

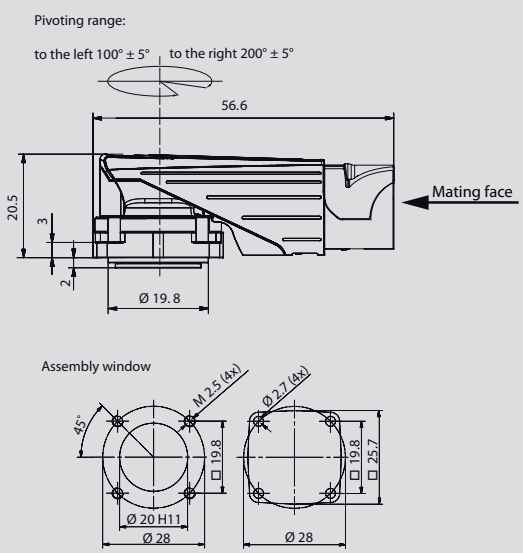
Pin	Designation			
1	GND		GND	
2	Power		Power	
A	GND		GND	
B	Logic		Logic	
C	-		-	
D	FE		FE	
E	TX+	CAN_H	TX+	CAN_H
F	RX-	CAN_L	RX-	CAN_L
G	TX-	-	TX-	-
H	RX+	-	RX+	-

Output Input

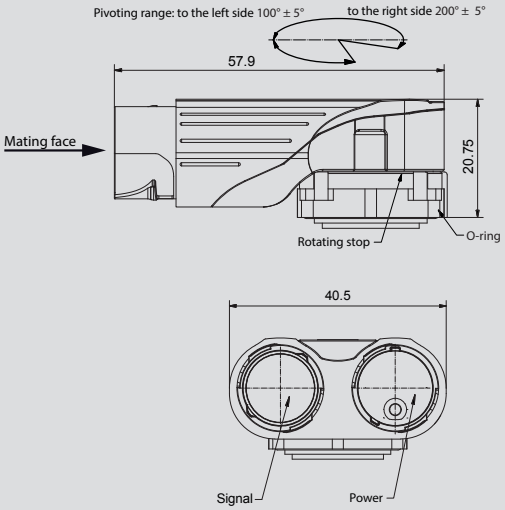


10 -pole
(2+4+bus)

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

Coil Size
HMP04 → 004
HMD06 → 011
HMD06 → 019
HMD06 → 026
HMD08 → 024
HMD08 → 032

DC Link Voltage
24 V → 024
48 V → 048

Rated Speed
3,000 rpm → 30
5,500 rpm → 55
6,000 rpm → 60

Options

without brake	0XXXXXXXX
with brake 24 V_{DC}	BXXXXXXXX
without feather key	X0XXXXXXX
with feather key	XPXXXXXXX
CANopen®	XXCXXXXXX
EtherCAT®	XXEXXXXXX
no Safety	XXX0XXXXX
STO	XXXSXXXXX
Singleturn Encoder	XXXXSXXXX
Multiturn Encoder	XXXXMXXXX
Compact	XXXXXCXXX
Max Power	XXXXXMXXX
Flex	XXXXXFXXX
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	XXXXXXXX0
with radial shaft seal	XXXXXXXXW

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

Specifications subject to change! Last changes 10/2026

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