Process drive MD xxx (-060, -100, -140, -180)

The MD xxx series is characterized by comprehensive electronic functions and simple gears. The gears available are planetary and worm gears in several overall sizes and reductions.
The drives that can be configured based on these gears can be used as process drives or as auxiliary drives when special requirements must be met with regard to electronics.
This type series is particularly suited for mass production with defined drive configurations.

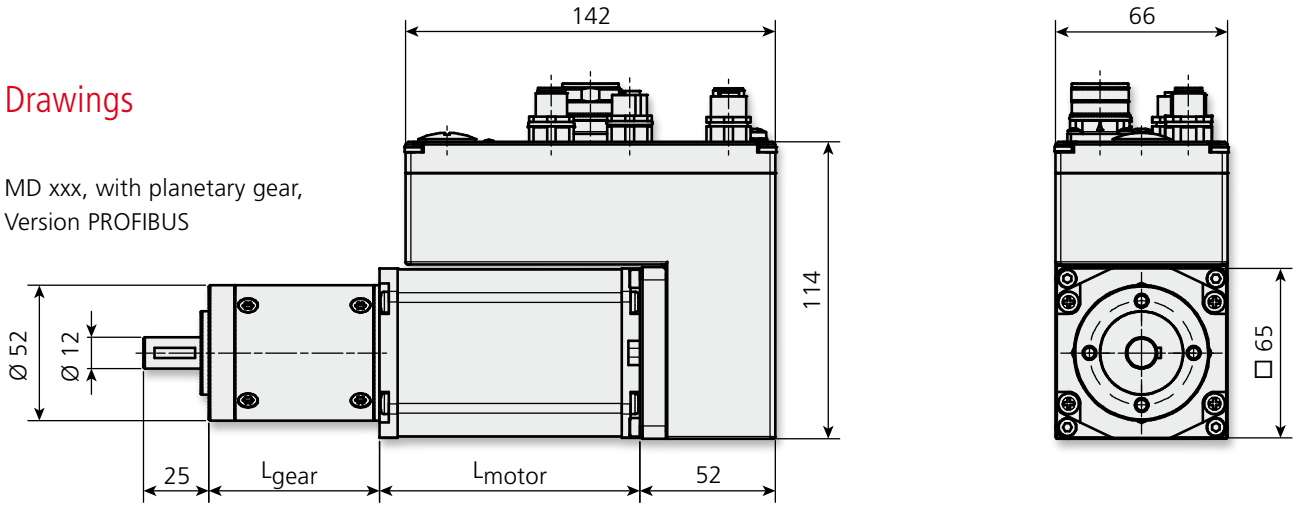
Optimal

_ for easy positioning
_ for cyclic and pulsed positioning
_ for simultaneous use of decentralized I/Os
_ in handling systems
_ in assembly devices
_ in special machines

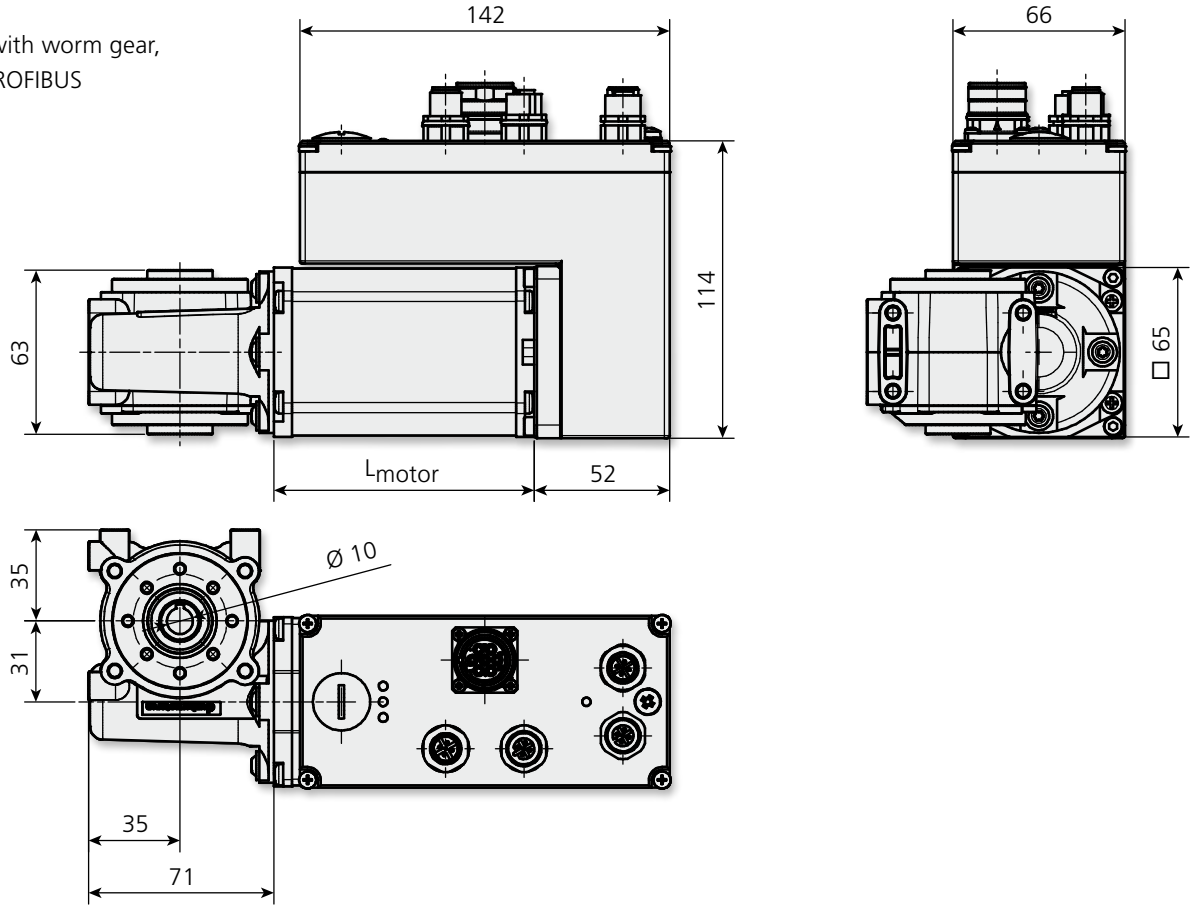
Technical data		MD 060	MD 100	MD 140	MD 180
Nominal voltage	VDC	24	24	42	24
Nominal torque S1	Nm	0.17	0.26	0.40	0.49
Nominal power S1	W	55	84	120	166
Nominal speed S1	min^{-1}	3,080	3,090	2,860	3,240
Nominal current S1	A	4.0	5.6	4.5	9.0
Inertia torque	gcm^2	72	128	172	129
Electric motor _ Technology _ Protection class		EC, electronically commutated motor with neodynium magnet IP 50			
Encoder _ Technology _ Positioning resolution _ Positioning range _ Positioning accuracy		Absolute encoder, multi turn 0.35° / 1,024 steps per revolution 65,536 revolutions ±0.7° / ±2 steps			
Gear _ Type _ Reductions _ Torques S1 (S3)		Planetary gear / worm gear 4.5 … 512/5 … 75, reinforced 3 … 710 / 8 … 80 up to (24/10) Nm, reinforced up to (100/30) Nm			
Interfaces		PROFIBUS® (V0/V1) PROFINET® (IO) CANopen (402) RS-232, logic I/O module, limit switch			
Options		Hand-held operator panel			
Brake chopper		Power 50 W, pulse energy 35 Ws			

Drawings

MD xxx, with planetary gear,
Version PROFIBUS



MD xxx, with worm gear,
Version PROFIBUS



Motor design

Type series	L_{motor}
MD 060	75 mm
MD 100	100 mm
MD 140	125 mm
MD 180	118 mm

PLG 52 gear design

Gear stages	L_{gear}
1	50 mm
2	65,5 mm
3	80,5 mm