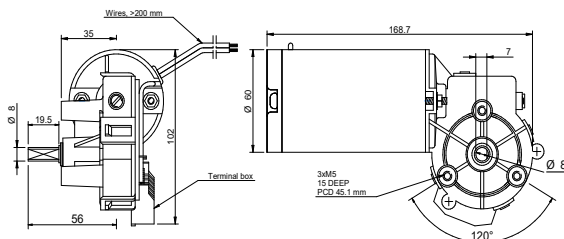


## DRAWING (mm)



## PHOTO



## MODEL NO. DESIGNATION

WRD6093 - VOLTAGE - GEAR RATIO - FEATURE

Example: WRD6093-12-55-ME

ME = Magnetic encoder  
OE = Optical encoder  
B = Brake

## ACCESSORIES



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

Gear ratio		55:1
Nominal speed	rpm	51
Nominal torque	Nm	2.9
Peak torque	Nm	5.9
Nominal power	W	15
Gearbox efficiency	%	67
Weight	kg	1.1

## OTHER GEAR MOTOR DATA

Service life	h	3000
Performance tolerances	%	± 15
Operating temperature	°C	-10 to 60
IP rating <sup>1</sup>		IP40   IP51
Manufacturing standard		ISO 9001
CE label   UL label		No   No

## BRUSHED DC MOTOR DATA

Nominal voltage	V	12
Nominal current	A	2.8
Nominal speed	rpm	2800
Nominal torque	Ncm	7.8
Nominal power	W	23
No load current	A	0.8
No load speed	rpm	3300
Start/stall current	A	15
Start/stall torque	Ncm	37
Motor commutation		Carbon brush
Motor rotor		Iron
Motor cable		AWG14
Motor cable length	mm	200
Weight	kg	0.7

## NOTES

1. IP51 without encoder, IP40 with encoder.

## GEARBOX DATA

Gearbox type	Worm gearbox
Gear angle	Left
Material gear	Plastic ●
Bearing type	Sleeve bearing
Shaft material	Hardened stainless steel ●

## BRAKE DATA

Type	Brake activation unenergized	
Voltage	V	12   24
Power	W	7
Static friction torque	Nm	0.5
Cable length	mm	250
Diameter	mm	50
Length	mm	29.6
Weight	kg	0.35

## ENCODER OPTIONS

	MAGNETIC	OPTICAL
Pulses per revolution	18x2	1000
Channels	2	2
Phase shift	90 ± (1/8)T	90
Encoder rear cover material	Plastic	-
Size	mm	Width 47   Length 37   Depth 62.5
Harness cable		AWG28
Harness length	mm	420
Connection	OR Vcc   GRN GND   YLW SIG A   BLU SIG B	RED +5 VDC   RED+WT 0 VDC   BLU A+   BLU+WT A-   BLK B+   BLK+WT B-
Supply voltage	V	Min. 5   Max. 20
Supply current	mA	< 80
Output wave		Line driver
Open collector output	Requires external output resistors	-
Frequency response	kHz	Max. 25
Weight	g	100