

## FEATURES

- 12VDC Supply Voltage
- Sintered bronze bearings
- Spur gear head
- All ratios with 4mm output shaft RE280, RE280/1 and RE280/5 motors available
- Maximum 2° no load backlash

## RS PRO, 12 V dc, 10 Ncm, Brushed DC Geared Motor, Output Speed 82 rpm

RS Stock No.: 413-0622



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

This miniature gearbox is of steel and brass construction with brass gears and is mounted on a 1mm thickness steel bracket. It incorporates high quality three pole motor with sleeved bearings. The design and construction of the unit make it suitable for a host of model and light industrial applications

## General Specifications

<b>DC Motor Type</b>	Brushed
<b>Output Speed (No Load)</b>	82 rpm
<b>Gearhead Type</b>	Spur
<b>Application</b>	Power tools, Water pumps, Camera Systems, Adjusting devices, Robotics, Fans

## Electrical Specifications

<b>Power Rating</b>	1.31W
<b>Supply Voltage</b>	12V dc
<b>Current Rating (No Load)</b>	190mA
<b>Maximum Output Torque</b>	1000 g.cm
<b>Rated Tolerance Torque</b>	1.0 kgf-cm Max
<b>Max momentary Tolerance Torque</b>	3.0 kgf-cm
<b>Efficiency</b>	65%

Reduction Table RPM Supply Voltage	6V	12V	18V	24V
<b>Speed</b>	41rpm	82rpm	123rpm	164rpm

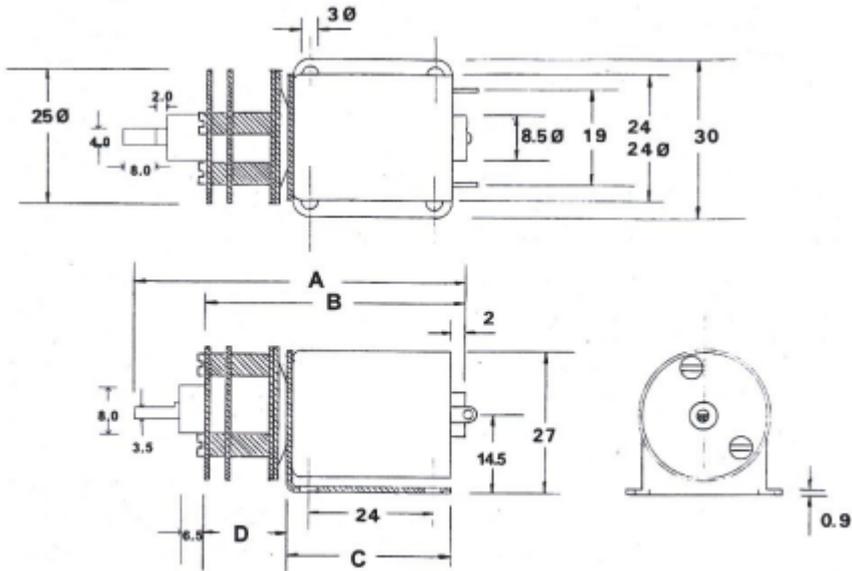
### Mechanical Specifications

Shaft Diameter	4mm
Core Construction	Iron Core
Length	51mm
Width	27mm
Reduction Ratio	1/100
Weight	75g

Gearbox Housing Material	Metal
Backlash at No-Load	< 2°
Bearing at Output	Sleeve bearings
Radial Load (10mm from flange)	< 0.3kgf
Shaft Axial Load	< 0.2kgf
Shaft Press Fit Force Max.	< 2kgf
Radial Play of Shaft	< 0.05mm
Thrust Play of Shaft	< 0.3mm

### Approvals

Compliance/Certifications	2011/65/EU and 2015/863
Standards Met	ANSI/ESD S20.20:2014 and BS EN 61340-5-1:2007



Operating relative humidity 20% ~ 85%  
Operating temperature range -10°C ~ +60°C

Reduction Table RPM SUPPLY VOLTAGE	6v	12v	18v	24v
413-0622	41	82	123	164

Ratio	A	B	C	D
100:1	67.5mm	51.3mm	33.5mm	17.8mm