IronHorse® MTG DC Gearmotors

Series MTG Gearmotors – 1/19 to 1/5hp

Model Overview

IronHorse DC gearmotors are manufactured in the U.S.A. by a leading motor supplier with over 75 years experience delivering high-quality motors and gearmotors to the demanding U.S. market. MTG series provides a variety of parallel shaft and right angle shaft gearmotors in voltage ranges from 12 - 180 VDC. Our supplier does 100% dynamic testing of the gearmotors before shipment.

IronHorse DC gearmotors are designed for use on unfiltered SCR (Thyristor) type rectified AC input. They may also be used with PWM (pulse width modulated) type DC adjustable speed drives, and in across-the-line applications.

Applications

- Conveyors
- Turntables
- Pick and place
- Indexers
- Small machinery
- Where reduced speed and/or increased torque are required

General Features

- Available in 12, 24, and 90 VDC
- Available from 1/19 to 1/5hp
- Available with parallel or right-angle gear shafts

Gearmotor Features

- TENV enclosure
- IP40 environmental rating
- Class F insulation
- SCR rated
- Externally-replaceable brushes
- Double-shielded bearings
- Dynamically-balanced armature
- Electrically-reversible
- 18-inch leads, or junction box with 8-inch Leads
- Replacement components are available
- Orientation restrictions vary depending on model. See illustrations for details
- Not intended for DC power generation
- UL recognized (E365956), CSA certified (259724), RoHS

IronHorse® MTG DC Gearmotors

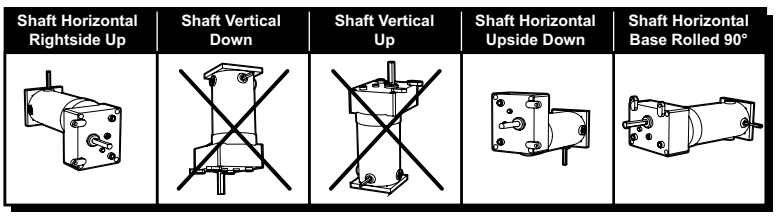
MTGP Parallel Shaft Gearmotors – 1/17 to 1/15hp

MTGP-P06-1J008

Gearmotor Specifications – MTGP Series Parallel Shaft Gearmotors														
Part Number	***Price***	***Voltage (VDC)***	***Motor HP***	***Speed (rpm)***	***Gear Ratio***	***F/L Torque (in·lb)***	***F/L Current (A) ****	***Shaft Dia (in)***	***Overhung Load (lb)***	***Axial/ Thrust Load (lb)***	***Replacement Brushes***	***Weight (lb)***	***Gearbox Features***	***Drawing Link***
MTGP-P06-1L008	$287.00	90	1/17	8.4	386:1	50	0.19	5/16	50	None (not suitable for applications with axial/ thrust loading)	***MTPM-BRUSH-7***	4	• Grease lubrication ** • Sleeve bearings • 18-inch wiring leads • Face mounted	PDF
MTGP-P06-1L012	$288.00			12	269:1	50	0.23							PDF
MTGP-P06-1L037	$288.00			37	83:1	45	0.40							PDF
MTGP-P06-1L055	$268.00			55	55:1	45	0.54							PDF
MTGP-P06-1L114	$282.00			114	26:1	26	0.61							PDF
MTGP-P06-1J008	$268.00	12	1/16	7.9	386:1	50	1.39				***MTPM-BRUSH-5***			PDF
MTGP-P06-1J024	$288.00			24	120:1	50	2.41							PDF
MTGP-P06-1J034	$293.00			34	83:1	45	2.86							PDF
MTGP-P06-1J050	$268.00			50	55:1	45	3.88							PDF
MTGP-P06-1J097	$269.00			97	26:1	36	5.68							PDF

*** Current must be limited so that it does not exceed 125% of the gearmotor rated current. ** Permanently lubricated.**
Replacement parts are available, as shown in "Replacement Parts for MTGP and MTGR DC Gearmotors" subsection.

Mounting Orientation Guidelines



IronHorse® DC Gearmotors

MTGP Parallel Shaft Gearmotors – 1/17 to 1/5hp

MTGP-P20-1J026

Gearmotor Specifications – MTGP Series Parallel Shaft Gearmotors

Part Number	Price	Voltage (VDC)	Motor HP	Speed (rpm)	Gear Ratio	F/L Torque (in·lb)	F/L Current (A) *	Shaft Dia (in)	Overhung Load (lb)	Axial/ Thrust Load (lb)	Replacement Brushes	Weight (lb)	Gearbox Features	Drawing Link
MTGP-P14-1L026	$471.00	90	1/7	26	69:1	280	1.58	5/8	150	200	MTPM-BRUSH-6	11.4	• Oil lubrication ** • Needle bearings • Junction box with 8-inch wiring leads • Face mounted or foot mounted • Designed to AGMA standards	PDF
MTGP-P14-1L039	$471.00			39	46:1	189	1.59							PDF
MTGP-P14-1L061	$457.00			61	30:1	130	1.59							PDF
MTGP-P14-1L091	$457.00			91	20:1	86	1.58							PDF
MTGP-P14-1L165	$457.00			165	11:1	47	1.57							PDF
MTGP-P20-1J026	$483.00	12	1/5	26	69:1	280	12.60				MTPM-BRUSH-4			PDF
MTGP-P20-1J037	$483.00			37	46:1	245	15.80							PDF
MTGP-P20-1J056	$473.00			56	30:1	168	15.70							PDF
MTGP-P20-1J084	$473.00			84	20:1	112	15.70							PDF
MTGP-P20-1J154	$443.00			154	11:1	61	15.60				MTPM-BRUSH-6			PDF
MTGP-P20-1K018	$473.00	24	1/5	18	110:1	280	4.41				MTPM-BRUSH-4			PDF
MTGP-P20-1K036	$473.00			36	46:1	245	7.89							PDF
MTGP-P20-1K084	$467.00			84	20:1	112	7.87							PDF
MTGP-P20-1K153	$467.00			153	11:1	61	7.81							PDF

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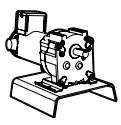
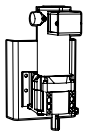
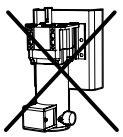
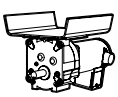
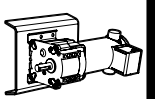
Mounting Orientation Guidelines

Shaft Horizontal Rightside Up	Shaft Vertical Down	Shaft Vertical Up	Shaft Horizontal Upside Down	Shaft Horizontal Base Rolled 90°
				

IronHorse® MTG DC Gearmotors

MTGR Right Angle Gearmotors – 1/19 to 1/15hp

MTGR-P07-1J036

Gearmotor Specifications – MTGR Series Right-Angle Shaft Gearmotors														
Part Number	***Price***	***Voltage (VDC)***	***Motor HP***	***Speed (rpm)***	***Gear Ratio***	***F/L Torque (in·lb)***	***F/L Current (A) ****	***Shaft***	***Overhung Load (lb)***	***Axial/ Thrust Load (lb)***	***Replacement Brush***	***Weight (lb)***	***Gearbox Features***	***Drawing Link***
MTGR-P05-1L038	$467.00	90	1/19	38	50:1	42	0.68	dual shaft 0.5in diameter	200	150	***MTPM-BRUSH-6***	8.3	• Grease lubrication ** • Ball bearings • Junction box with 8-inch wiring leads • Face or Foot mounted • Single worm	PDF
MTGR-P05-1L053	$467.00			53	36:1	33	0.68							PDF
MTGR-P05-1L093	$467.00			93	20.5:1	23	0.68							PDF
MTGR-P05-1L132	$467.00			132	14.5:1	17	0.67							PDF
MTGR-P05-1L197	$467.00			197	9.75:1	12	0.68							PDF
MTGR-P07-1J036	$437.00	12	1/15	36	50:1	50	5.69				***MTPM-BRUSH-4***			PDF
MTGR-P07-1J084	$437.00			84	20.5:1	34	6.78							PDF
MTGR-P07-1J177	$438.00			177	9.75:1	18	6.78							PDF

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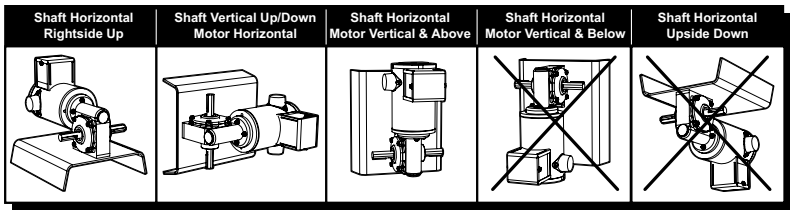
**** Permanently lubricated.**
***** Not intended for DC power generation.**
Replacement parts are available, as shown in "Replacement Parts for MTGP and MTGR DC Gearmotors" subsection.

Mounting Orientation Guidelines



IronHorse® DC Gearmotors

MTGR Right Angle Gearmotors – 1/7 to 1/5hp

MTGR-P20-1K023

Gearmotor Specifications – MTGR Series Right-Angle Shaft Gearmotors

Part Number	Price	Voltage (VDC)	Motor HP	Speed (rpm)	Gear Ratio	F/L Torque (in·lb)	F/L Current (A) *	Shaft	Overhung Load (lb)	Axial/ Thrust Load (lb)	Replacement Brush	Weight (lb)	Gearbox Features	Drawing Link
MTGR-P14-1L022	$500.00	90	1/7	22	82:1	280	1.41	single shaft 0.625 in diameter	150	200	MTPM-BRUSH-6	14.4	• Double shielded ball bearings • Junction box with 8-inch wiring leads • Foot mounted • Bevel gears • 80 – 90% efficient • Can be backdriven ***	PDF
MTGR-P14-1L040	$502.00			40	44:1	185	1.64							PDF
MTGR-P14-1L064	$538.00			64	28:1	116	1.65							PDF
MTGR-P14-1L077	$524.00			77	23:1	97	1.65							PDF
MTGR-P14-1L178	$500.00			178	10:1	44	1.64							PDF
MTGR-P20-1K023	$512.00	24	1/5	23	82:1	280	5.64				MTPM-BRUSH-4			PDF
MTGR-P20-1K039	$506.00			39	44:1	263	8.74							PDF
MTGR-P20-1K075	$512.00			75	23:1	137	8.72							PDF
MTGR-P20-1K174	$512.00			174	10:1	63	8.75							PDF

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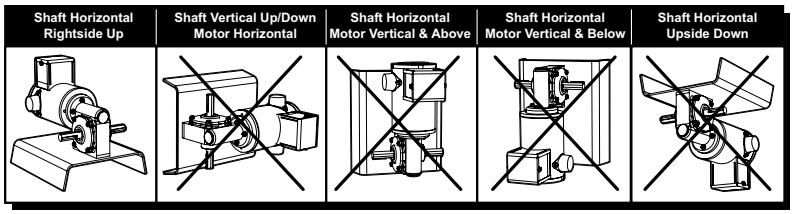
***** Not intended for DC power generation.**
Replacement parts are available, as shown in "Replacement Parts for MTGP and MTGR DC Gearmotors" subsection.

Mounting Orientation Guidelines



IronHorse® DC Gearmotor Replacement Parts

Replacement Parts for Small Frame DC Motors and DC Gearmotors

Brush replacement kits are for use in any Ironhorse DC gearmotors and small frame DC motors. Reference motor technical pages for brush cross reference. The appropriate brushes are also listed as recommended items on the webstore item page for each motor.

Replacement Parts for Small Frame DC Motors and DC Gearmotors *		
Part Number	***Price***	***Description***
MTPM-BRUSH-4	$44.00	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/4 hp and 1/5 hp 12 VDC or 24 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
MTPM-BRUSH-5	$34.00	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/6 hp or smaller 12 VDC or 24 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
MTPM-BRUSH-6	$38.00	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/7 hp and 1/8 hp 90 VDC or 180 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
MTPM-BRUSH-7	$31.00	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/10 hp or smaller 90 VDC or 180 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
MTGA-KIT-1	$58.00	IronHorse DC motor spare parts kit, for use with IronHorse 1/4 hp and smaller MTPM, MTGR and MTGP series DC motors and gearmotors, includes (2) metal brush cap covers, (1) terminal box, (1) 1/8in shaft key and (1) 3/16in shaft key.

MTPM-BRUSH-4

MTGA-KIT-1