



# 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

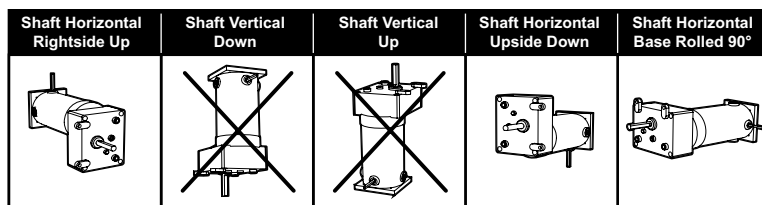


**MTGP-P06-1J008**

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		
<a href="#">MTGP-P06-1L008</a>	\$271.47	90	1/17	8.4	386:1	50	0.19	5/16	50	None (not suitable for applications with axial/ thrust loading)	<a href="#">MTPM-BRUSH-7</a>	4	<ul style="list-style-type: none"><li>• Grease lubrication **</li><li>• Sleeve bearings</li><li>• 18-inch wiring leads</li><li>• Face mounted</li></ul>	<a href="#">PDF</a>		
<a href="#">MTGP-P06-1L012</a>	\$272.55			12	269:1	50	0.23							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1L037</a>	\$272.55			37	83:1	45	0.40							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1L055</a>	\$253.23			55	55:1	45	0.54							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1L114</a>	\$267.18			114	26:1	26	0.61							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1J008</a>	\$253.23	12	1/16	7.9	386:1	50	1.39				<a href="#">MTPM-BRUSH-5</a>			<a href="#">PDF</a>		
<a href="#">MTGP-P06-1J024</a>	\$272.55			24	120:1	50	2.41							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1J034</a>	\$276.84			34	83:1	45	2.86							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1J050</a>	\$253.23			50	55:1	45	3.88							<a href="#">PDF</a>		
<a href="#">MTGP-P06-1J097</a>	\$254.31			97	26:1	36	5.68							<a href="#">PDF</a>		

\* 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

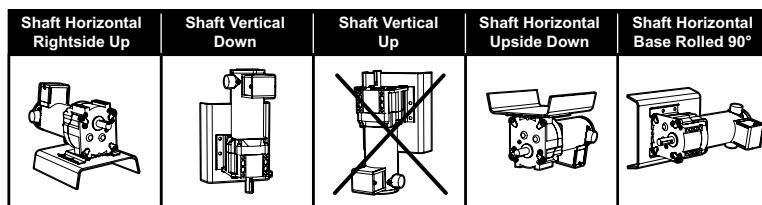


**MTGP-P20-1J026**

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											
<a href="#">MTGP-P14-1L026</a>	\$445.30	90	1/7	26	69:1	280	1.58	5/8	150	200	<a href="#">MTPM-BRUSH-6</a>	11.4	• Oil lubrication **  • Needle bearings • Junction box with 8-inch wiring leads • Face mounted or foot mounted • Designed to AGMA standards	<a href="#">PDF</a>											
<a href="#">MTGP-P14-1L039</a>	\$445.30			39	46:1	189	1.59							<a href="#">PDF</a>											
<a href="#">MTGP-P14-1L061</a>	\$432.42			61	30:1	130	1.59							<a href="#">PDF</a>											
<a href="#">MTGP-P14-1L091</a>	\$432.42			91	20:1	86	1.58							<a href="#">PDF</a>											
<a href="#">MTGP-P14-1L165</a>	\$432.42			165	11:1	47	1.57							<a href="#">PDF</a>											
<a href="#">MTGP-P20-1J026</a>	\$457.10	12	1/5	26	69:1	280	12.60				5/8			150	200	<a href="#">MTPM-BRUSH-4</a>	11.4	• Face mounted or foot mounted • Designed to AGMA standards	<a href="#">PDF</a>						
<a href="#">MTGP-P20-1J037</a>	\$457.10			37	46:1	245	15.80												<a href="#">PDF</a>						
<a href="#">MTGP-P20-1J056</a>	\$447.45			56	30:1	168	15.70												<a href="#">PDF</a>						
<a href="#">MTGP-P20-1J084</a>	\$447.45			84	20:1	112	15.70												<a href="#">PDF</a>						
<a href="#">MTGP-P20-1J154</a>	\$419.55			154	11:1	61	15.60												<a href="#">PDF</a>						
<a href="#">MTGP-P20-1K018</a>	\$447.45	24	1/5	18	110:1	280	4.41									5/8			150	200	<a href="#">MTPM-BRUSH-6</a>	11.4	• Face mounted or foot mounted • Designed to AGMA standards	<a href="#">PDF</a>	
<a href="#">MTGP-P20-1K036</a>	\$447.45			36	46:1	245	7.89																	<a href="#">MTPM-BRUSH-4</a>	<a href="#">PDF</a>
<a href="#">MTGP-P20-1K084</a>	\$442.08			84	20:1	112	7.87																		<a href="#">PDF</a>
<a href="#">MTGP-P20-1K153</a>	\$442.08			153	11:1	61	7.81																		<a href="#">PDF</a>

\* 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® 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		
<a href="#">MTGR-P05-1L038</a>	\$442.08	90	1/19	38	50:1	42	0.68	dual shaft 0.5in diameter	200	150	<a href="#">MTPM-BRUSH-6</a>	8.3	• Grease lubrication **  • Ball bearings • Junction box with 8-inch wiring leads  • Face or Foot mounted • Single worm	<a href="#">PDF</a>		
<a href="#">MTGR-P05-1L053</a>	\$442.08			53	36:1	33	0.68							<a href="#">PDF</a>		
<a href="#">MTGR-P05-1L093</a>	\$442.08			93	20.5:1	23	0.68							<a href="#">PDF</a>		
<a href="#">MTGR-P05-1L132</a>	\$442.08			132	14.5:1	17	0.67							<a href="#">PDF</a>		
<a href="#">MTGR-P05-1L197</a>	\$442.08			197	9.75:1	12	0.68							<a href="#">PDF</a>		
<a href="#">MTGR-P07-1J036</a>	\$413.11	12	1/15	36	50:1	50	5.69				<a href="#">MTPM-BRUSH-4</a>			<a href="#">PDF</a>		
<a href="#">MTGR-P07-1J084</a>	\$413.11			84	20.5:1	34	6.78							<a href="#">PDF</a>		
<a href="#">MTGR-P07-1J177</a>	\$414.18			177	9.75:1	18	6.78							<a href="#">PDF</a>		

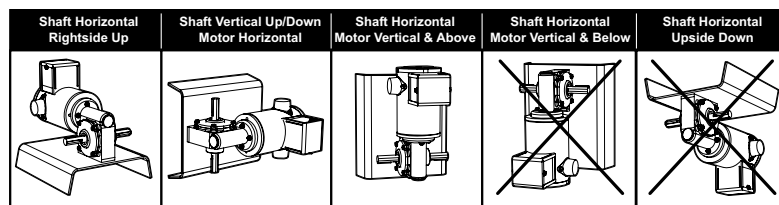
\* Current must be limited so that it does not exceed 125% of the gearmotor rated current.

\*\* 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		
<a href="#">MTGR-P14-1L022</a>	\$473.20	90	1/7	22	82:1	280	1.41	single shaft 0.625 in diameter	150	200	<a href="#">MTPM-BRUSH-6</a>	14.4	<ul style="list-style-type: none"><li>• Double shielded ball bearings</li><li>• Junction box with 8-inch wiring leads</li><li>• Foot mounted</li><li>• Bevel gears</li><li>• 80 – 90% efficient</li><li>• Can be backdriven</li></ul> ****	<a href="#">PDF</a>		
<a href="#">MTGR-P14-1L040</a>	\$475.34			40	44:1	185	1.64							<a href="#">PDF</a>		
<a href="#">MTGR-P14-1L064</a>	\$508.61			64	28:1	116	1.65							<a href="#">PDF</a>		
<a href="#">MTGR-P14-1L077</a>	\$495.73			77	23:1	97	1.65							<a href="#">PDF</a>		
<a href="#">MTGR-P14-1L178</a>	\$473.20			178	10:1	44	1.64							<a href="#">PDF</a>		
<a href="#">MTGR-P20-1K023</a>	\$483.93	24	1/5	23	82:1	280	5.64				<a href="#">MTPM-BRUSH-4</a>			<a href="#">PDF</a>		
<a href="#">MTGR-P20-1K039</a>	\$478.56			39	44:1	263	8.74							<a href="#">PDF</a>		
<a href="#">MTGR-P20-1K075</a>	\$483.93			75	23:1	137	8.72							<a href="#">PDF</a>		
<a href="#">MTGR-P20-1K174</a>	\$483.93			174	10:1	63	8.75							<a href="#">PDF</a>		

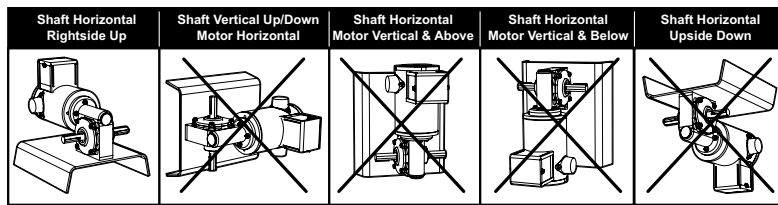
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## Mounting Orientation Guidelines





# 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
<b><u>MTPM-BRUSH-4</u></b>	\$42.00	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/4hp and 1/5hp 12 VDC or 24 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
<b><u>MTPM-BRUSH-5</u></b>	\$32.19	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/6hp or smaller 12 VDC or 24 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
<b><u>MTPM-BRUSH-6</u></b>	\$35.50	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/7hp and 1/8hp 90 VDC or 180 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
<b><u>MTPM-BRUSH-7</u></b>	\$28.98	IronHorse DC motor brushes, replacement. Package of 2. For use with IronHorse 1/10hp or smaller 90 VDC or 180 VDC MTPM, MTGR, MTGP and VP1 series permanent magnet DC motors and gearmotors. (2) brush caps included.
<b><u>MTGA-KIT-1</u></b>	\$55.00	IronHorse DC motor spare parts kit, for use with IronHorse 1/4hp 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**