



**Micron®**  
**True Planetary**  
**Gearheads**  
**Quick**  
**Selection**  
**Guide**





## MICRON® QUICK SELECTION GUIDE

Product Line	UltraTRUE™	ValueTRUE™
Prefix	UT/UTR	VT/VTR
Maximum Backlash (for the product life) <sup>(1)</sup>	[arc/min] 4/5	4/5
Lower Backlash Option	N	N
Price Relationship	1.2 ×	0.7 ×
In-line Frame Sizes / Right Angle Frame Sizes	[mm] 60 - 220 / 60 - 140	60 - 220 / 60 - 140
In-line Ratio Availability / Right Angle Ratio Availability <sup>(2)</sup>	4:1 - 100:1 / 1:1 - 50:1	4:1 - 100:1 / 1:1 - 50:1
Double and Triple Stage Available <sup>(3)</sup>	Y	Y
Torque Capacity Relationship	2.8 ×	2.6 ×
True Planetary Gearing / Helical Crowned Gearing	Y / Y	Y / Y
Expected Noise Level <sup>(11)</sup>	[db] 66	66
Modification Costs	Very Low	Low
Lubricated for Life	Y	Y
Efficiency	[%] 95	95
Dual and Hollow Shafts Available	N	N
Housing Material	Stainless and Aluminum	Stainless and Aluminum
3D CAD Models on Micron Motioneering	Y	Y
One Piece Output Shaft/Carrier / Internal Gear Machined into Housing	Y / Y	Y / Y
Maximum input speed <sup>(6)</sup>	[RPM] 6000	6000
ROHS Compliant <sup>(7)</sup>	Y	Y
REACH Compliant <sup>(7)</sup>	Y	Y
Case Hardened Gears (HRC60)	Y	Y
Gearhead Express <sup>(5)</sup>	Y	Y
Low Temperature Grease Available / Food Grade Grease Available	Y / Y	Y / Y
NSF Certified <sup>(8)</sup>	N	N
RediMount Compliant	Y	Y
Direct Competitor Replacement <sup>(9)</sup>	Y	Y
Standard Output IP Protection Level <sup>(10)</sup>	IP65	IP65

(1) Backlash is measured at the output shaft, with the input fixed, using 2 % of the rated torque in both directions.

(2) Other ratios available, contact customer support for more information.

(3) Double stage now available on AquaTRUE product line, triple stage available on all product lines upon request.

(4) Lower backlash, high precision available (8/9 arc-min).

(5) Geahead express not available in frame sizes larger than 140 mm or dual and hollow shafts.

(6) Speeds greater than 6000 RPM need to be reviewed by application engineering.

(7) Micron products are currently complaint to ROHS 3 and REACH 209 SVHC with updated certifications planned after each change. Please ask for ROHS and REACH compliance documentation at time of order.

## 10 REASONS TO CHOOSE MICRON® GEARHEADS

### 1 RediMount™ – Fast and Error Free Motor Mounting

The unique RediMount system will mount any Micron gearhead to any motor in just three simple steps in less than five minutes!

### 2 Easy Sizing and Selection with Micron Motioneering

Micron Motioneering is the most accurate and user friendly gearhead sizing and design tool on the market. Try it at [www.micronmotioneering.com](http://www.micronmotioneering.com).

### 3 Superior Technology

All Micron gears are case hardened to HRC60 for longer life. Our UltraTRUE and ValueTRUE models have a higher helix angle (15 °) than our competitors resulting in less backlash, smoother and quieter operation and longer life.

### 4 Fast Deliveries

Micron offers 1 – 2 week standard lead times on all standard catalog products. For quicker shipping, use our 24 hour “Gearhead Express” delivery service which is available for all models for just a 10 % premium!

Easy sizing and selection with  
**[www.MicronMotioneering.com](http://www.MicronMotioneering.com)**

24-hour deliveries with  
**Micron Gearhead Express™**



EverTRUE™	DuraTRUE™	NemaTRUE™	XTRUE™	AquaTRUE™
ET	DT/DTR	NT/NTR	XT, XTA	AQT
4/5	8/9	13/15	13/15	13/15
N	N	Y <sup>(4)</sup>	Y <sup>(4)</sup>	Y <sup>(4)</sup>
1.5 ×	1.0 ×	0.5 ×	0.4 ×	1.5 ×
100 - 180	60 - 140 / 60 - 140	60 - 15 (23 - 42) / 60 - 115 (23 - 42)	40 - 160	60 - 160
4:1 - 100:1 / -	3:1 - 100:1 / 1:1 - 500:1	3:1 - 100:1 / 1:1 - 500:1	3:1 - 100:1 / -	3:1 - 100:1 / -
Y	Y	Y	Y	Y
2.8 ×	1.0 ×	0.7 ×	1.1 ×	1.1 ×
Y / N	Y / N	Y / N	Y / N	Y / N
68	68	68	68	68
Low	Very Low	Very Low	Low	Low
Y	Y	Y	Y	Y
95	93	93	93	93
N	Y	N	N	N
Stainless and Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	100 % Stainless
Y	Y	Y	Y	Y
Y / Y	Y / N	Y / N	Y / N	Y / N
6000	6000	6000	6000	6000
Y	Y	Y	Y	Y
Y	Y	Y	Y	Y
Y	Y	Y	Y	Y
Y	Y	Y	Y	N
Y / Y	Y / Y	Y / Y	Y / Y	Y / Y
N	N	N	N	Y
Y	Y	Y	Y	N
Y	Y	Y	Y	Y
IP65	IP54	IP54	IP54	IP69K

(8) The AquaTRUE is certified to NSF/ANSO STD 169.

(9) Micron has dimensional drop in replacements for most competitive gearheads. Please visit [www.micronmotionengineering.com](http://www.micronmotionengineering.com) to use our quick and easy competitive replacement tool.

(10) IP65 and IP67 improved protection levels available for all product lines and RediMounts

(11) Gearhead noise will vary depending on the ratio being used, the input speed and other application characteristics

## 5 Lubricated For Life

Micron gearheads require no maintenance and are grease filled. Unlike oil filled units, they can be mounted in any orientation and will never leak.

## 6 Easy Customization

We welcome modification requests as well as “white paper” custom opportunities. The modular design of our products allows modifications to be easily implemented with small impacts to price and delivery.

## 7 Unmatched Product Breadth

Micron has the largest selection of planetary gearheads in the world with over 3000 size and ratio combinations.

## 8 Unmatched Quality

All Micron gearheads are tested through our state of the art end of line tester, making our outgoing quality best in the market.

## 9 Commitment to New Product Development

Micron was first to launch an all stainless steel, IP69K gearhead for the food and beverage market. The AquaTRUE is designed for the most harsh and corrosive environments.

## 10 Made in the USA

All Micron Gearheads are manufactured in the USA making us able to respond to emergencies quickly reducing down time for our customers.

## Boston Gear Facilities

### North America

#### USA

701 Carrier Drive  
Charlotte, NC 28216 - USA  
704-588-5610

*Enclosed and Open Gearing,  
Electrical and Mechanical  
P.T. Components*

#### Customer Service

1-888-999-9860

#### Application Support

1-800-816-5608



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