

Solutions for General Purpose Washdown Applications

Our VR series planetary products have revolutionized the precision servo gearbox market and we've continued to innovate. We've expanded our wash down options to include additional features in a wider breadth of series and frame sizes. These features can handle wipe-down and light-to-medium wash down requirements in different areas of the manufacturing floor, from primary processing to secondary packaging. Common configurations are stocked and assembled in North America for high flexibility and quick turnaround at the most cost-effective price point in the market. Our modular adapter system allows for simple, streamlined mounting to any standard or white epoxy painted servo motor. For axes with space constraints, we offer several of these features in a right-angle configuration, utilizing planetary, worm, hypoid or bevel gearing technology.

VR Series at a glance

- VRL, VRB, VRS, VRT Series
- Ratios 3:1 – 100:1
- Stainless Steel Output Shaft & Fasteners
- White Epoxy, Steel-it or Nickel-Plated Housings
- IP65 Ingress Protection Rating
- NSF H1 Food Grade Grease
- Robust internal construction with helical gears and fully captured planet carrier
- Cost-effective, readily available products for light to medium duty applications
- Mix and match options for a tailor-made solution
- Select options available in right angle planetary, worm, hypoid or bevel form factors

Design Features & Benefits

Input and output seals provide IP65 protection against low pressure water jets from any direction, as well as condensation and water spray

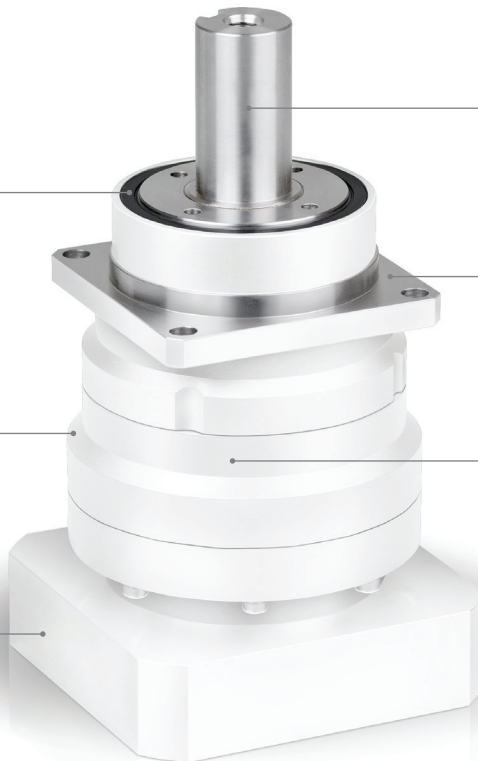
White epoxy or Steel-it paint applied to non-machined housing surfaces for improved longevity in wipe down or wash down applications. Ideal match for white epoxy painted servo motors.

Aluminum motor adapter plates are fully sealed on both sides and can be painted to match gearbox and motor. Stainless steel plugs and fasteners

400 Grade Stainless steel output shaft and key for perfect blend of corrosion resistance and tensile strength

Nickel-plated output housings and mounting flanges provide a paint-free solution with no chance of peeling or flaking

NSF H1 high performance 100% synthetic food grade lubrication allows incidental contact with food and can be used in processing areas. Allows flexible mounting in any orientation



Specifications and Materials

Product Series ¹	VRL, VRB, VRS, VRT
Available Frame Size Range	042 - 155
Reduction Ratios	3, 4, 5, 7, 10, 15, 16, 20, 25, 28, 30, 35, 40, 50, 70, 100
Nominal Output Torque Range	6 Nm - 590 Nm
Maximum Acceleration Torque Range	14 Nm - 840 Nm
Emergency Stop Torque Range	30 Nm - 1250 Nm
Output Bearing Style	Ball, Tapered Roller
Maximum Radial Load Range	710 N - 19,000 N
Maximum Axial Load Range	640 N - 14,000 N
Standard Backlash Range	≤3 - ≤5 arc-min
Efficiency Range	90-95%
Service Life	20,000 Hours
Ambient Temperature	0°C to 40°C
Permitted Housing Temperature	90°C
IP Rating	Standard IP54, Optional IP65
Seal Material	Standard NBR, Optional FKM
Lubrication	Standard Grease, Optional NSF H1 Food Grade Grease
Output Shaft Material	Standard Carbon Steel, Optional 400 Grade Stainless Steel
Housing Surface Finish ²	Standard Silver Paint, Optional White Epoxy Paint, Steel-it Paint, Nickel Plating
Input Bore Diameters ³	8mm, 14mm, 19mm, 28mm, 38mm, 48mm

*1) Also available in various right angle configurations. Contact us for assistance
*2) Nickel plated output housing not available for VRS and VRT
*3) Bushing sleeves are used to accommodate your motor shaft diameter within these sizes

Ordering Codes

VRB

—

090C

—

7

—

K

—

3

—

19HB16

—

XV

Series

Size

Ratio

Output Shaft Style

Backlash

Motor Mounting Code

Washdown and Food Grade Options

Code	Description of Features
C	IP 65 Protection Only
W	Standard Grease. Food Grade White Epoxy
S	Standard Grease, Steel-It™ Paint
J	Standard Grease, Nickel Plated Output Housing
F	Food Grade Grease, Standard Paint
X	Food Grade Grease, Food Grade White Epoxy
G	Food Grade Grease, Steel-It™ Paint
K	Food Grade Grease, Nickel Plated Output Housing
V	Stainless Steel Shaft & Fasteners, IP65 Protection

* First letter represents grease and coating combination. Second letter represents shaft material & ingress protection. Select “C” for IP65 protection only.