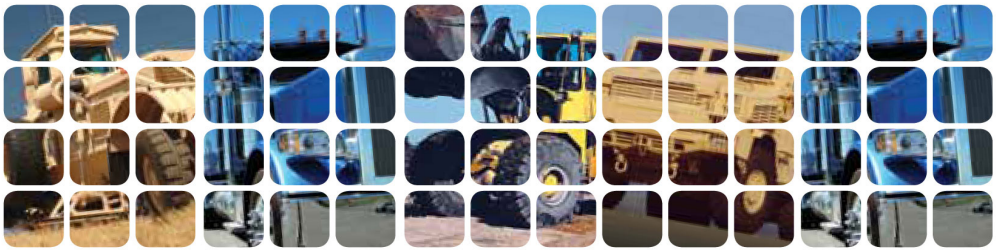


AxleTech International
A GENERAL DYNAMICS COMPANY

Planetary Steer Axles
3000 Series (12.1K lbs / 5.5 t)

OVERVIEW

The AxleTech 3000 series family of planetary steer axles are engineered to meet the increasing demands of the 4x4 high mobility tactical, forestry, airport fire crash rescue, snow blower, municipal truck, and medium specialty type vehicle vocations. This axle has a vocationally dependant axle load ratings from 6,600 lbs.(3 000 Kg) to 11,000 lbs.(5 000 Kg). A wide range of overall axle ratios, load capacities, vehicle mountings, carrier offsets, and brakes for performance characteristics are available to match your specific vehicle installation requirements. The 3000 series steer axle has capability of common wheel mounting with the 3000 series rigid as well as other axles of the 4000/5000 families depending on brake size and hub mounting selected. Standard features, for example, include a choice of 3 planetary rigid hub reductions that provide an overall axle ratio range from 5.1 - 28.0 : 1.0 offering maximum flexibility to meet your desired performance and optimize the vehicle performance.

Maximum steer angles up to 42 degrees are possible depending on brakes fitted in the axle assembly. The 3000 series steer axle has 7 degree inclined king pins, up to 2 degrees of camber, and caster as required to provide improved vehicle handling.

Multiple axle options include many features to permit optimization of this axle family to customize the axle for your specific vocational requirements. Options include : 3 hub mountings (8 studs M20 x 1.5 - 275mm (10.8"), 10 studs M22 x 1.5 - 285mm (11.25") and 10 studs M22 x 1.5 - 335mm (13.19")) and carrier pinion angle up to 6 degrees inclination may be varied to match specific driveline angle requirements for the shorter wheelbase vehicle installations. Wheel mounted brake options available include both air and hydraulic actuation depending on brake size and type selected. Outboard mounted brake drums have been designed to permit easier serviceability without requiring the planetary hub reduction to be disassembled to perform normal brake maintenance. Spring applied air chambers maybe selected on air actuated wedge or disc brakes to provide vehicle parking at wheels. Wheel mounted ABS is also an available option for the on-road vehicle vocational requirements. A central tire inflation option is available for those vehicles demanding increased floatation in the various rugged off-road vocational duty cycles. Carrier differential options include air actuated differential lock and a wide range of input flange sizes and styles. Multiple axle pad mounting styles are available with location flexibility on the high strength fabricated axle housing design utilized by this family of steer axles.

AxleTech International planetary axles are tough, dependable, and thoroughly proven under the most severe conditions.

AxleTech International is the former Rockwell® Off Highway and European Specialty Products Group.

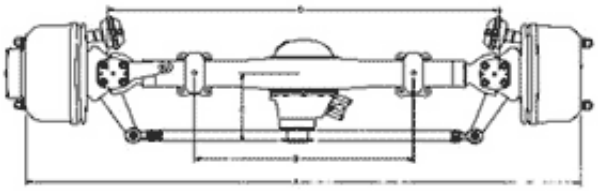
www.axletech.com

SPECIFICATIONS

AXLE CAPACITY(1) Pounds (kg)	AVAILABLE DIFFERENTIALS	AVAILABLE OVERALL RATIOS	C Carrier Standout
Off-Highway Truck 12,100 (5,500)	Standard, or Diff Lock	5.1 - 28.0:1.0	1410 DIN Input Flange 11.7" (2960mm)

A AXLE MOUNTING CENTERS Inches (mm)	B HUB FLANGE TO FLANGE(2) Inches (mm)	TIRE SIZE Inches (mm)	BRAKES Inches (mm)	PLANETARY WHEEL-END RATIO	D KING PIN INTERSECTION Inches (mm)
24.0”(610) 32.3”(820) 29.7" (754) 35.0”(890)	73.0”(1,854) 83.2”(2,113) 80.1" (2,035) 87.5”(2,223)	19.5”(49.5) 20”(508)	15 x 6 RS (381 x 152) 14.6 x 1.18 HDB (370 x 30) 15.9 x 1.18 HDB (405 x 30) DB 22LT ADB (Rotor = 16.2 (430))	3.22:1.0 3.55:1.0 5.6:1.0	48.8”(1,240) 57.6" (1,464) 59.0”(1,499) 63.3”(1,609)

(1) Approval required on all applications.
(2) Varies with brake/tire option.



TYPICAL AXLE WEIGHT LBS (KG) = 1,102 lbs. (500kg)
EXAMPLE:
3321 SFW with 83.2” (2,113mm) Hub Flange to Flange, 15 x 6 (381 x 152) Wedge Brakes = 1,080 lbs. (490 kg)

TYPICAL FAMILY OIL CAPACITY = 10.4-16.6 pints (5-8 liters) for carrier, 2.1-4.2 pints (1-2 liters) for each wheel end
EXAMPLE:
3321 SFW with 83.2” (2,113mm) Hub Flange to Flange is 13.5 pints (6.5 liters) for carrier and 1.7 pints (0.8 liters) for each wheel end.

A) Hub Flange to Flange
B) Axle Mounting Centers
C) Carrier Standout with 1410 DIN Input Flange 11.7” (296.0mm)
D) King Pin Intersection

FEATURES & BENEFITS

FEATURES	BENEFITS
Stopmaster wedge, dry disc, and S-cam brakes options.	Proven stopping capability and dependability.
Outboard mounted brake drums.	Provides easier brake service without planetary wheel end removal.
Wide range of overall axle ratios available.	Match OEM vocational requirements.
Fabricated steel axle housings.	High strength to meet flexible OEM requirements.
Differential options available.	Standard and air actuated DCDL available to meet vocational needs.
Optional wheel hub mountings available.	Provides OEM flexibility in wheel mounting options.
Common mounting with steer axles and other axle families.	Permit single wheel fitment on vehicle.
Central tire inflation optional.	Permits increased off road flotation.
ABS optional.	Improves vehicle on road control when braking.
Potential to incline carrier pinion input up to 6 degrees.	Capability to improve driveline angles in short wheelbase vehicle installations.

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