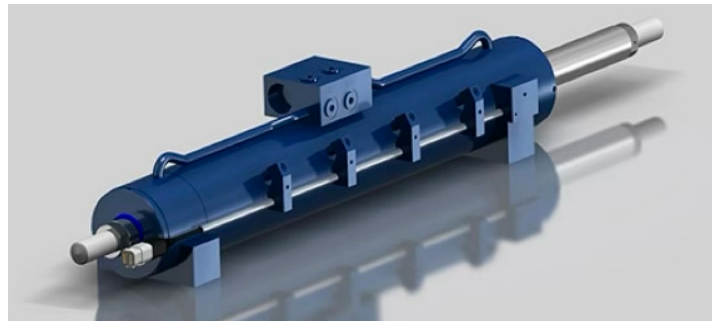


POSITION SENSING HYDRAULIC CYLINDERS



The Texas Hydraulics Position Sensing Hydraulic Cylinders deliver precision, control, and efficiency in demanding environments with advanced contactless sensing that provides real-time analog or digital feedback for accurate, reliable actuator control.

Core Features:

- **Integrated Position Sensing:** Built-in, contactless sensors (*Magnetostrictive / Hall Effect*) provide continuous, real-time position data.
- **Flexible Output Options:** Choose from analog (*0.5–4.5Vdc, 0–10Vdc, 4–20mA*), PWM, digital (*CANopen, SAE J1939*)
- **Easy System Integration:** Compatible with standard connection types (*M12, Deutsch, flying lead cables*) for integration into existing control architectures.
- **Custom Configurations:** Available in internal or external mounting, multiple stroke lengths, and connector types to meet specific requirements.
- **Robust Environmental Protection:** Rated up to IP69K with M12 connector attached, also intrinsically safe ATEX / IEC Ex options.

Optional Features:

- Expanded digital and CANbus output capabilities
- Variable voltage or current outputs
- Multiple connector and wiring configurations, including intrinsically safe ATEX / IEC Ex types
- M12 connector compatibility for easy system integration

Key Advantages:

- **Enhanced Precision & Control:** Real-time position feedback enables precise displacement feedback for optimized motion control, enhancing process reproducibility and productivity.
- **Exceptional Durability:** Constructed from corrosion resistant materials to withstand harsh environments, extreme temperatures, and continuous heavy-duty usage.
- **Versatile Integration:** Seamlessly integrated into robotic, construction, agricultural, and industrial material handling systems.
- **Increased Efficiency:** Minimizes downtime, streamlines operations, and extends equipment lifespan.
- **Improved Safety:** Immediate feedback helps prevent unsafe conditions and equipment misuse.
- **Cost-Effective:** Reduces manual adjustments and maintenance costs, boosting overall system uptime and efficiency.



Ideal Applications



Construction	– Enables load moment indication, accurate position & velocity monitoring
Mining	– Ensures real-time feedback and durability improving productivity and reliability
Forestry	– Delivers precision and ruggedness required for harsh forestry environments
Material Handling	– Improves accuracy in logistics, loading, and inventory management
Robotics	– Provides fine motion control for robotic arms and automation platforms

Technical Specifications

Parameter	Specification
Stroke Length	2" – 120" (50 mm – 3,000 mm)
Electromagnetic Immunity (EMC)	Up to 200 V/m
Output Accuracy	±0.04% of Full Scale
Resolution	±0.30 mm
Input Power	12 / 24 VDC (8-32 VDC); Optional 5 VDC Available
Output Types	Analog Voltage, Current, PWM; Digital CANopen, SAE J1939
Sensor Types	Magnetostrictive / Hall Effect
Ingress Protection	IP67, IP68, (IP69K with M12 Connector Attached); ATEX, IEC Ex
Maximum Operating Pressure	5,500 psi (380 bar)
Minimum Cylinder Diameters	Rod 1" (25 mm); Bore 2.25" (60 mm)

Ordering & Support

Ready to integrate advanced hydraulic control into your system?
Contact us for customized solutions and expert technical support.

- **Email:** inquiry@texashyd.com
- **Website:** www.texashydraulics.com

