



HBM series rotary actuator is mainly designed for all kinds of aerial work platform. Customized product solutions according to customer requirements for different equipment can also be realized.



Platform control

Arm control

Customization service

According to customer and application requirements, the HBM series rotary actuators can be customized with special material and optimized structure to deal with various even harsh operating conditions. Meanwhile according to the installation positions, tripod and horseshoe mounting frames in different forms can also be customized.



Product testing

Two dedicated endurance test benches are available in Hengli for various life time test requirements from customer side. During Hengli internal rotary actuator endurance test according to the Hengli standard "Q/HL 1011316-2020", the HBM series rotary actuator fully meets all the requirements, no obvious failure or wear is found during appearance inspection and disassembly test after 60,000 times of durability test.



HENGLI HYDRAULIC

As a benchmarking company of Chinese high-end hydraulic transmission industry, Hengli Hydraulic is always devoting to the innovation and development in the following four areas: production design, manufacturing process, quality improvement and management improvement. We, Hengli Hydraulic, is making effort to realize the intelligent manufacture at the same time the high-efficiency and energy saving of the hydraulic components and try to reshape the "Made in China" image through technology innovation. Meanwhile we are committed to creating a new pattern of the world's hydraulics industry and contribute to global technological innovation.

Hengli Hydraulic is dedicated to designing and developing hydraulic transmission products and solutions that meet the real needs of local customers for the global market based on the diverse market demands, in particular the field of mobile machinery and tunnel engineering. We, Hengli Hydraulic, take advantage of our years of application experience to provide the customer the most optimized solutions, thus establish strong partnerships with our customers and maintain a sustainable development in a competitive market.

What we provide

- Hydraulic Cylinder
- Hydraulic Piston Pump & Motor
- Hydraulic Control Valve for Mobile Machinery
- Industrial Valve
- Hydraulic Pump Unit and System
- High performance Hydraulic Test Bench
- High-precision Casting
- Pneumatic Components and integrated System
- Cold-drawn Seamless Steel Pipe
- Surface Coating-Thermal Spray Treatment

For more detailed information, please visit our website at www.henglicn.com

We are looking forward to working with you!

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HENGLI HYDRAULIC

HBM Series Rotary Actuator

- Low friction coefficient
- Long service life
- High output torque
- Customization service

HBM Series Rotary Actuator



Innovative independent design Independent intellectual property rights obtained

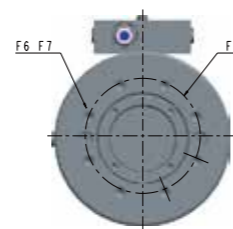
The HBM series rotary actuator is independently designed and developed for articulated aerial working platform for arm and platform control. According to customer installation and performance requirement, customized design can be realized accordingly to ensure suitable and flexible operation. Design based on metric unit, unique seal and structure allows a low friction coefficient and high output torque. In addition, the FEA analysis and endurance test contribute to the product stability and reliability. Compared to similar products on the market, the HBM series rotary actuator provides a 10% to 20% higher output torque and requires a 50% lower cracking pressure under same product size, allowing a stable operation with higher efficiency and better cracking pressure, which ultimately guarantees a safe, reliable and efficient working of the aerial working platform.



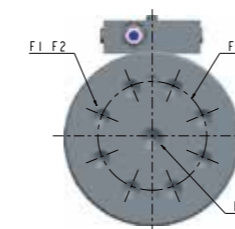
Size and specification

Size	80	95	120	140	160
D1(Cover diameter)	103	118	144	168	192
D2(Barrel diameter)	101	116	142	166	190
L1(Rotary actuator total length)	188	216	248	298	337
F1(Output shaft thread)	M10 depth 15	M10 depth 15	M12 depth 18	M20 depth 28	M20 depth 28
F2(Output shaft thread)	6	8	8	8	10
F3(Output shaft thread ptch diameter)	54	65	85	102	121
F4(Output shaft through hole)	21	25	25	/	/
F5(Output shaft screw hole)	/	/	/	M24 depth 25	M30 depth 50
F6(Cover side screw size)	/	/	/	M12 depth 18	M16 depth 24
F7(Cover side screw quantity)	/	/	/	8	10
F8(Cover side thread pitchdiameter)	/	/	/	108	121

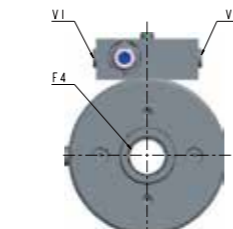
Size and specification	80	95	120	140	160
Maximum output torque (Nm)	626	1034	2074	3337	5063
Maximum moment capacity straddle mounting (Nm)	2540	4520	10170	22600	31640
Maximum moment capacity cantilever mounting (Nm)	1360	2490	5420	11300	15820
Radial force (kg)	1380	2130	4190	5580	9520
Axial force (kg)	500	680	1000	1400	1770
Rotation (°)	180	180	180	180	180
Displacement (cc)	155	256	513	827	1253



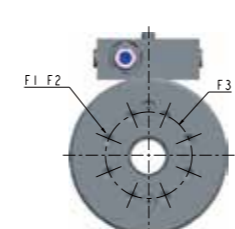
HBM140/160 cover side



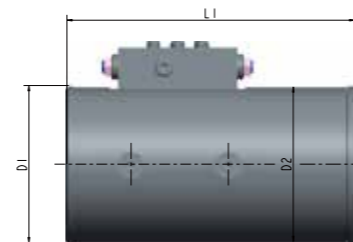
HBM140/160 output shaft



HBM80/95/120 cover side



HBM80/95/120 output shaft



Ordering code

HBM_ 95 / 180

Rotation
Size
Series code

Note:
the ordering code above refers only the basic specification and rotary angle. Valve, bushings and other accessories can be customized according to corresponding requirements.

Features Product Advantage



Low friction coefficient

The key component of the HBM series rotary actuator - the spiral spline for rotation and torque transmission, features in excellent precision, balanced stress distribution and stable transmission. Together with the low-friction axial bearings and a unique sealing system design, the HBM series rotary actuator has a low friction coefficient during transmission process.

High output torque

Through continuous innovative research and validations, the HBM series rotary actuator is designed in compact structure to make full use of the limit internal space and transmit high output torque via fluid pressure. Compared to similar products on the market, the HBM series rotary actuator provides a 10% to 20% higher output torque under same product size.

Long service life

In Hengli, comprehensive analysis and calculation on each size of the HBM rotary actuator are implemented in assist of FEA software during design process. Besides, product optimization is continuously carried out to ensure that each size of the product can meet the long service life requirements.

Except for normal factory test, two dedicated rotary actuator endurance test benches are available for tests according to customer and application requirements, ensuring excellent durability and long service life.

