



HYDRAULIC ROTARY ACTUATOR



hktm

Good Engineering
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What is the Hydraulic Rotary Actuator ?

Thanks to the high torque it produces, **Hydraulic Rotary Actuator** rotates the loads for desired angles that are connected to the actuator according to the shape and force value in a suitable construction.

By converting hydraulic energy gained by pressurized oil into mechanical, linear movement of piston drives gear system in the actuator which performs rotational movement.

Why Should You Choose Rotary Actuator?

Hydraulic Rotary Actuators can be helpful in applications where high power and rotational movement are required as well as to prevent the mechanical problems in machines due to the long strokes required to ensure the movement of the hydraulic cylinder.

Thanks to the internal structure and mobility of Hydraulic Rotary Actuators they need less flow and less installed power than cylinders. With this it can be perfect solution for your needs.



What are the areas of application?

Hydraulic Rotary Actuator can be used in applications where high torque and angular movement is required;

- Military Armored Vehicles
- **Ship Covers**
- Solar Panels
- **Valves**
- Mobile Crane Booms
- **All Waste Trucks**
- In Door Passages
- **Mining Machineries**
- Special machines with angular motion and space problem



HSR | Light Series Hydraulic Rotary Actuator

If you need medium tork and your have light working conditions, you can use Light Series Rotary Actuator.

Max. Drive Torque : 500 Nm – 4407 Nm

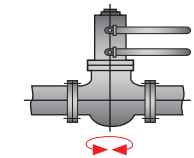
Mounting: Foot

Industries Served:

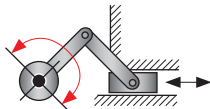
- Special Design Machines
- Cover Opening & Closing
- Manipulator Applications
- Truck-Mounted Platforms



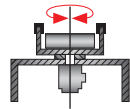
- Medium Torque
- **High Carrying Capacity**
- Compact Design



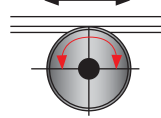
Valves, flaps, ball-valves, armatures etc.



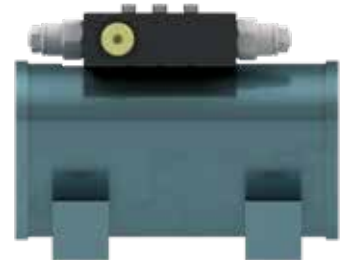
Crank-mechanism



Swivelling table



Linear transport



HSR

1	Torque Nm (@207 bar)	Model Code
	509	5
	927	9
	1695	16
	2825	28
	4407	44

2	Mounting Type	Mounting Code
	Foot	A

3	Angle	Angle Code
	Standard Angle	90° 180° 220°

For other angle options, please contact us

4	Connection	Connection Code
	Front Bolted	C1
	Front & Rear Bolted	C2

5	Counter Balance	Counter Balance Code
	With Block*	Y
	Without Block	N

* The C1 model is only available for HSR-5, HSR-9 and HSR-16 models.

HSR | Light Series Hydraulic Rotary Actuator

NO	ORDER NUMBER	TORQUE Nm	MOUNTING TYPE	ANGLE (°)	CONNECTION	COUNTER BALANCE VALVE BLOCK
1	HSR-005-A-090-C1-N	509	Foot	90	C1	Without
2	HSR-005-A-180-C1-N	509	Foot	180	C1	Without
3	HSR-005-A-220-C1-N	509	Foot	220	C1	Without
4	HSR-009-A-090-C1-N	927	Foot	90	C1	Without
5	HSR-009-A-180-C1-N	927	Foot	180	C1	Without
6	HSR-009-A-220-C1-N	927	Foot	220	C1	Without
7	HSR-016-A-090-C1-N	1695	Foot	90	C1	Without
8	HSR-016-A-180-C1-N	1695	Foot	180	C1	Without
9	HSR-016-A-220-C1-N	1695	Foot	220	C1	Without
10	HSR-028-A-090-C2-N	2825	Foot	90	C2	Without
11	HSR-028-A-180-C2-N	2825	Foot	180	C2	Without
12	HSR-028-A-220-C2-N	2825	Foot	220	C2	Without
13	HSR-044-A-090-C2-N	4407	Foot	90	C2	Without
14	HSR-044-A-180-C2-N	4407	Foot	180	C2	Without
15	HSR-044-A-270-C2-N	4407	Foot	220	C2	Without

* For non-standart angles and special design for your projects you can contact with us

* Indicated torque values are valid at 207 bar.

* Standart delivery date is 9-12 weeks but it can be veriable for product types and quantity.

ASR | Heavy Series Hydraulic Rotary Actuator



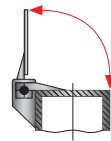
If you work at hard conditions and you need much more torque than HSR type, you can use this model.

Max. Drive Torque : 1.921 Nm – 24.295 Nm
Mounting: Foot & Flange

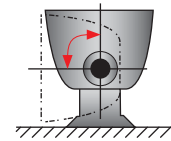
- High Torque
- High Carrying Capacity
- Compact Design

Industries Served:

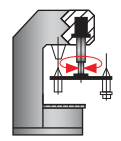
- Mobile Applications
- **Truck Loading Ramps**
- Vinch Crane Booms



Lid operation



Container tipping



Machine tool setter

ASR

1	Torque Nm (@207 bar)	Model Code
	1921	19
	2825	28
	4746	47
	7345	73
	10735	100
	14125	140
	18645	180
	24295	240

2	Mounting Type	Mounting Code
	Foot	A
	Flange	F

3	Angle	Angle Code
	Standard Angle-1	180°
	Standard Angle-2	360°
For other angle options, please contact us		

4	Connection Type	Connection Code
	Front & Rear Bolted	C2

5	Counter Balance	Counter Balance Code
	With Block*	Y
	Without Block	N

ASR | Heavy Series Hydraulic Rotary Actuator

NO	ORDER NUMBER	TORQUE Nm	MOUNTING TYPE	ANGLE (°)	CONNECTION	COUNTER BALANCE VALVE BLOCK
1	ASR-019-A-090-C2-N	1921	Foot	90	C2	Without
2	ASR-019-A-180-C2-N	1921	Foot	180	C2	Without
3	ASR-019-A-270-C2-N	1921	Foot	270	C2	Without
4	ASR-019-A-360-C2-N	1921	Foot	360	C2	Without
5	ASR-028-A-090-C2-N	2825	Foot	90	C2	Without
6	ASR-028-A-180-C2-N	2825	Foot	180	C2	Without
7	ASR-028-A-270-C2-N	2825	Foot	270	C2	Without
8	ASR-028-A-360-C2-N	2825	Foot	360	C2	Without
9	ASR-047-A-090-C2-N	4746	Foot	90	C2	Without
10	ASR-047-A-180-C2-N	4746	Foot	180	C2	Without
11	ASR-047-A-270-C2-N	4746	Foot	270	C2	Without
12	ASR-047-A-360-C2-N	4746	Foot	360	C2	Without
13	ASR-073-A-090-C2-N	7345	Foot	90	C2	Without
14	ASR-073-A-180-C2-N	7345	Foot	180	C2	Without
15	ASR-073-A-270-C2-N	7345	Foot	270	C2	Without
16	ASR-073-A-360-C2-N	7345	Foot	360	C2	Without
17	ASR-100-A-090-C2-N	10735	Foot	90	C2	Without
18	ASR-100-A-180-C2-N	10735	Foot	180	C2	Without
19	ASR-100-A-270-C2-N	10735	Foot	270	C2	Without
20	ASR-100-A-360-C2-N	10735	Foot	360	C2	Without
21	ASR-140-A-090-C2-N	14125	Foot	90	C2	Without
22	ASR-140-A-180-C2-N	14125	Foot	180	C2	Without
23	ASR-140-A-270-C2-N	14125	Foot	270	C2	Without
24	ASR-140-A-360-C2-N	14125	Foot	360	C2	Without
25	ASR-180-A-090-C2-N	18645	Foot	90	C2	Without
26	ASR-180-A-180-C2-N	18645	Foot	180	C2	Without
27	ASR-180-A-270-C2-N	18645	Foot	270	C2	Without
28	ASR-180-A-360-C2-N	18645	Foot	360	C2	Without
29	ASR-240-A-090-C2-N	24295	Foot	90	C2	Without
30	ASR-240-A-180-C2-N	24295	Foot	180	C2	Without
31	ASR-240-A-270-C2-N	24295	Foot	270	C2	Without
32	ASR-240-A-360-C2-N	24295	Foot	360	C2	Without

* Standart delivery date is 9-12 weeks but it can be variable for product types and quantity.

* For non-standart angles and special design for your projects you can contact with us.

* Indicated torque values are valid at 207 bar.

ESR | Industrial Series Hydraulic Rotary Actuator

Industrial Version Hydraulic Rotary Actuator's connection type is so similar to electrical motor. But workinh style is completely different than electrical motor. You can use it when you need high torque like heavy door, pipe bending machines etc.



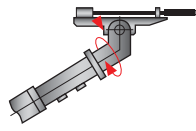
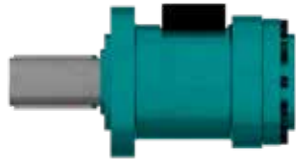
Max. Drive Torque : 200 Nm – 7100 Nm

Mounting: Flange

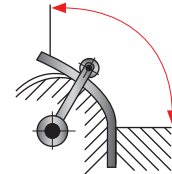
Industries Served:

- Crank Mechanisms
- Rotary Tables
- Heavy Doors
- Bending Machines
- Mixers
- Wood Working Machines

- High Torque
- High Carrying Capacity
- Compact Design



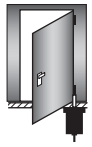
Drilling appliances, mining gear, tunnel drilling machines



Bending machine, for tubes and plates



Mixers



Doors

ESR

1	Torque Nm (@207 bar)	Model Code
	200	2
	340	3
	650	6
	1300	13
	2500	25
	5107	51
	7100	71
	*	

2	Mounting Type	Mounting Code
	Foot	A
	Flange	F

3	Angle Type	Angle Type
	Standard Angle-1	180°
	Standard Angle-2	360°
For other angle options, please contact us		

5	Counter Balance	Code
	With Block	Y
	Without Block	N

6	Shaft Type	Code
	Key Shaft	K
	Splined Shaft	S

4	Connecti on Type	Connection Code
	Front & Rear Bolted	C2

NO	ORDER NUMBER	TORQUE Nm	MOUNTING TYPE	ANGLE (°)	CONNECTION	COUNTER BALANCE VALVE BLOCK	SHAFT TYPE
1	ESR-002-F-180-C2-N-K	200	Flange	180	C2	Without	Key Shaft
2	ESR-002-F-360-C2-N-K	200	Flange	360	C2	Without	Key Shaft
3	ESR-003-F-180-C2-N-K	340	Flange	180	C2	Without	Key Shaft
4	ESR-003-F-360-C2-N-K	340	Flange	360	C2	Without	Key Shaft
5	ESR-006-F-180-C2-N-K	650	Flange	180	C2	Without	Key Shaft
6	ESR-006-F-360-C2-N-K	650	Flange	360	C2	Without	Key Shaft
7	ESR-013-F-180-C2-N-K	1300	Flange	180	C2	Without	Key Shaft
8	ESR-013-F-360-C2-N-K	1300	Flange	360	C2	Without	Key Shaft
9	ESR-025-F-180-C2-N-K	2500	Flange	180	C2	Without	Key Shaft
10	ESR-025-F-360-C2-N-K	2500	Flange	360	C2	Without	Key Shaft
11	ESR-051-F-180-C2-N-K	5107	Flange	180	C2	Without	Key Shaft
12	ESR-051-F-360-C2-N-K	5107	Flange	360	C2	Without	Key Shaft
13	ESR-071-F-180-C2-N-K	7100	Flange	180	C2	Without	Key Shaft
14	ESR-071-F-360-C2-N-K	7100	Flange	360	C2	Without	Key Shaft

* For non-standart angles and special design for your projects you can contact with us.

* Indicated torque values are valid at 207 bar.

* Standart delivery date is 9-12 weeks but it can be veriable for product types and quantity.



Double Series Rotary Actuators are specially designed for on-board use and are widely used as garbage trucks.

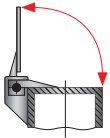
Thanks to the tapered roller bearing, it has high resistance against radial and axial forces.

Max. Drive Torque : 2825 Nm – 6780 Nm
Mounting: Flange

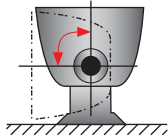
Kullanım Alanları:

- Waste Trucks
- On-Truck Applications

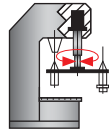
- **High Carrying Capacity**
- **Compact Design**
- **Double Shaft**



Lid operation



Container tipping



Machine tool setter



WSR

1	Torque Nm (@207 bar)	Model Code
	2825	28
	3051	30
	5085	50
	6780	67

2	Mounting Type	Mounting Code
	Foot	A

3	Angle Type	Angle Type
	Standard Angle-1	220°
	Standard Angle-2	200°*
	*2000 angles are only available for the WSR-67 model.	

4	Connection Type	Connection Code
	Front & Rear Bolted	C2

NO	ORDER NUMBER	TORQUE Nm	MOUNTING TYPE	ANGLE (°)	CONNECTION	COUNTER BALANCE VALVE BLOCK	SHAFT TYPE
1	WSR-028-A-220-C2-N-S	2825	Foot	220	C2	Without	Splined Shaft
3	WSR-030-A-220-C2-N-S	3051	Foot	220	C2	Without	Splined Shaft
5	WSR-050-A-220-C2-N-S	5085	Foot	220	C2	Without	Splined Shaft
8	WSR-067-A-200-C2-N-S	6780	Foot	200	C2	Without	Splined Shaft

* For non-standart angles and special design for your projects you can contact with us.

* Indicated torque values are valid at 207 bar.

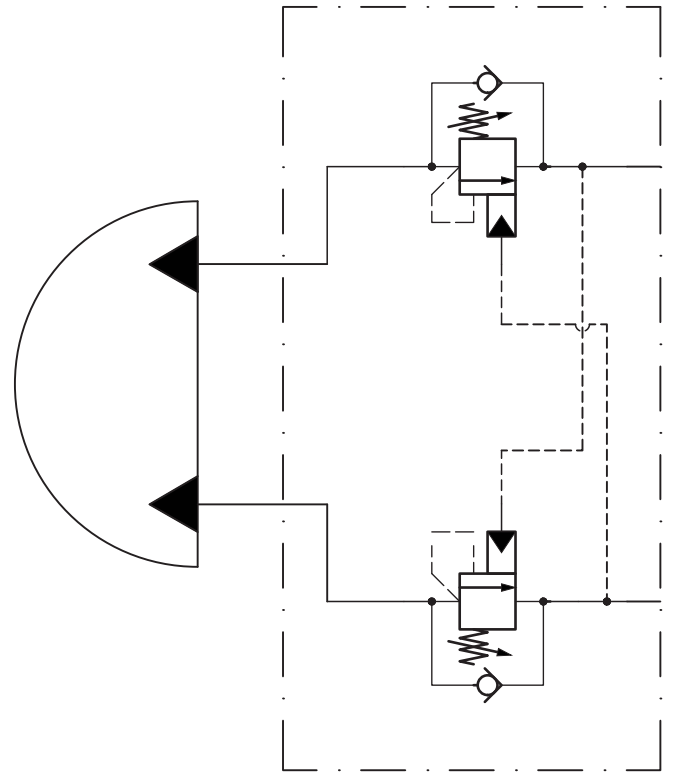
* Standart delivery date is 9-12 weeks but it can be veriable for product types and quantity.

Valve Options

HKTM Rotary Actuators ensure stable movement during angular movements thanks to the Counterbalance Valves installed on it.

In the absence of movement, Counterbalance valves help the system to maintain its current position.

There are also models where the counterbalance block is not mounted on the actuator in order to provide the control through the hydraulic unit.



hktm

İyi Mühendislik
444 4580

Hidropar | Hareket Kontrol Teknolojileri Merkezi A.Ş.

+90 444 4580
+90 262 643 84 14
export@hktm.com.tr

Gebze Plastikçiler OSB. İnönü Mah.
Cumhuriyet Cd. No.: 31 - 41400
Gebze / Kocaeli / TURKEY

