



Hydraulic valve actuators

HyRAV[®] series

4,425 – 2,210,000 lbs-in.

Product description

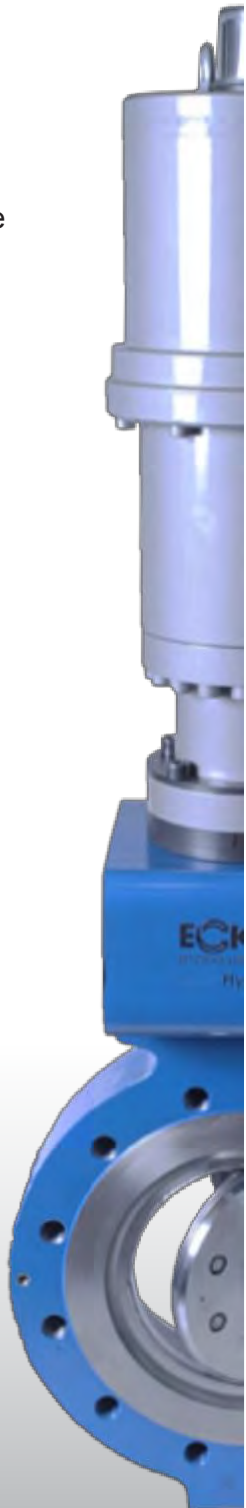
HyRAV[®] - more powerful, compact, safer and tailored perfectly to your demands

The hydraulic valve actuators HyRAV of Eckart, form a full series of double-acting actuators or spring return actuators according to the principle of helical gears. The compact and concentric design of the valve has proven to be excellent in practice and provides the customer with space savings as well as reliability. Moreover, the HyRAV series can be applied in the most severe conditions,

i.e. from high vibrations to severe environmental locations, and further, provides a powerful, safe solution for automation of valves. Additionally, the series is easily adapted to all types of valves, which is a result of the generous design of the hollow shaft and adaptable flange types.

Advantages at a glance:

- 12 drive sizes with torques up to 2,210,000 lbs-in. at 3,000 psi
- Small dimensions, slim and compact style
- Smallest footprint to torque ratio
- By concentric design are no radial forces transmitted to the valve
- Optimum cushioning protects the valve and actuator
- Easy installation and adjustment to each valve
- Maintenance free, no lubrication required
- Suitable for on/off, control and failsafe operation
- High repeat accuracy and very simple control of the flow rates
- Extremely rapid closing possible (eg. 90° in 0,2 sec.)
- Robust against extreme environmental conditions
- Durable against vibrations



Technical data

Technical data (standard – others on request)	
Valve actuator type	helical gear – double acting or single acting (spring return)
max. allowable operating pressure	210 bar / 3,000 psi
min. operating pressure required	5 to 10 bar / 70 to 145 psi
Angle of rotation	Quarter turn / 90°
Positioning accuracy	< 0,5° of full scale
Medium	recommended: mineral oil of group HLP/DIN 51524
Ambient temperature	-25° to +70°C / -13° to +158°F
Protection class	IP65
Valve attachment flange	EN ISO 5211
Lifetime	double acting: > 100.000 operations single acting (fail safe): dependent on the desired spring package
Duty rating	S1 – 100%
Operating time range OPEN/CLOSE	0,5 sec. to 200 sec.
max. time range Fail Safe OPEN/CLOSE	till 0,2 sec. (dependend on the valve actuator size)
Certificates/approvals	ATEX, SIL2, further in processing/planning
Materials	Steel, GGG
Seals	PU / NBR

Applications	
Power	Power plants (coal, gas, oil, nuclear) Hydroelectric power plants Geothermal power plants Solar thermal power plants Biogas power plants
Oil & gas	Exploration, offshore Refineries Pipelines Tank farms
Water	Steel hydraulics construction Water treatment plants Sewage treatment plants Drinking water distribution
Industrial & special solutions	Shipbuilding & submarines Chemical / pharmaceutical industry Food industry Air conditioning Steel mills

HyRAV Type	Valve attachment flange EN ISO 5211		Valve attachment flange EN ISO 5211	Hollow shaft with feather keys [mm]	Hollow shaft with square [mm]	weight double acting [lbs]
	Standard	Torque [lbs-in] *				
AS000	F10	4,425	F 07 – F 10 – F 12	max. Ø 28 H9	max. ◇ 22 H11	31
AS001	F12	8,850	F 10 – F 12 – F 14	max. Ø 36 H9	max. ◇ 27 H11	55
AS002	F14	17,700	F 12 – F 14 – F 16	max. Ø 48 H9	max. ◇ 36 H11	84
AS004	F16	35,400	F 14 – F 16 – F 25	max. Ø 60 H9	max. ◇ 46 H11	121
AS008	F25	70,900	F 16 – F 25 – F 30	max. Ø 72 H9	max. ◇ 55 H11	231
AS016	F30	141,600	F 25 – F 30 – F 35	max. Ø 98 H9	max. ◇ 75 H11	407
AS032	F35	283,200	F 30 – F 35 – F 40	max. Ø 130 H9	max. ◇ 115 H11	836
AS063	F40	557,500	F 35 – F 40 – F 48	max. Ø 160 H9	max. ◇ 130 H11	1,144
AS100	F48	885,000	F 40 – F 48	max. Ø 200 H9	max. ◇ 165 H11	1,694
AS125	F48	1,110,000	F 40 – F 48	max. Ø 220 H9	max. ◇ 180 H11	2,068
AS185	F60	1,640,000	F 48 – F 60	max. Ø 250 H9	max. ◇ 200 H11	2,750
AS250	F60	2,210,000	F 48 – F 60	max. Ø 280 H9	max. ◇ 220 H11	3,476

* Torques are variable and can be adapted to the customer needs.

Your Partner for hydraulic valve actuators

The Company

Eckart is an innovative and dynamic mechanical engineering company, providing solutions for limited rotatory movements and combined rotary-linear movements. As one of the leading manufacturers worldwide, Eckart develops, designs and manufactures valve actuators, rotary actuators, rotary-linear combinations, linear cylinders and special equipment. With more than 40 years of experience, the name Eckart stands for innovation, reliability and success.

As a family operated company the foundations of our work are a solid commercial activity and partnership cooperation. With competent staff and partners we create customized solutions that help to make business of all sizes and industries to streamline their processes and products and to establish themselves as successful in the market.

Optimum results are not a matter of luck.

We have a clear concept: products giving the highest benefit. Eckart uses the latest technologies and extremely high standard of performance. Our products are known for their precision, high availability, robustness, capacity of resistance to wear, economic efficiency and high flexibility. Due to the modular design we are in the position to solve customer specific technical problems individually and rationally. From product development, manufacturing, to final product testing Eckart has an integrated production and quality system that is optimized continually.

Worldwide.

Eckart maintains close relationships with leading companies around the world. To a specialist in customer-oriented solutions, a company needs strong partners. Our recipe for success is „Eckart competence network“, which means we provide quality alliances, which transfer our product potential optimal to our customer needs. Thus, our customers are always advised by „domestic“ partners, who know the exact requirements of each market.

ECKART[®]
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