# **Electro-hydraulic actuators**

Established in 1969, Dabeb Engineering specialises in the design and manufacture of electro-hydraulic actuators. By utilising hydraulic oil as an operating medium, the DEA range of actuators provide a versatile and efficient means of transferring power from an electric motor to a linear motion.

### **How it works**

The electric motor is close coupled to a gear pump which in turn is connected to a hydraulic control block.

This block has two pressure relief valves and two flow screws which are adjustable and independent of each other, thus allowing flexibility in terms of thrust and speed settings.

The control block pipework connects to a hydraulic cylinder. With the exception of the electric motor all the above items are encased in steel tube which acts as the oil reservoir.

The unit is completely sealed from the outside by a series of 'O'rings which prevents the ingress of contamination.

### **Additional information**

With well over 40 years in the field, the DEA range of actuators has become a unique, universally accepted and versatile electro-hydraulic product. Throughout this period, these machines have been distributed worldwide with great success and have operated in some of the world's harshest environments.

Industrial sectors covered include coal and gold mining, steelworks, nuclear and fossil fired power stations, waterworks, sewerage works, off shore and the marine industry.

# Advantages

- Self-contained, no hydraulic pipework to install
- Completely sealed
- Adjustable range of thrust and speed
- No filtration required
- No solenoids
- Ultra-low maintenance
- Compact
- Very easy to install and commission



## **Key product features**

- Completely self-contained external pipework, power packs and compressors not required
- Thrusts and Speeds fully adjustable for each direction of travel
- Smooth vibration free operation
- The units are weatherproof and can include various options e.g. explosion proof, various mountings, manual operation, accumulator failsafe
- Actuator Thrust ranges 250 to 80,000 kgf
- Actuator Speed ranges of 2 to 500mm/sec

## Main features

- Thrust range 25kgf to 80.000kgf
- Speed range 1- 500mm/sec
- Stroke length 1- 5000mm
- Temperature range –30 deg °C +70 °C
- Various mounting arrangements trunnion (standard) flange foot, end pin as per customer specification
- All static seals are standard 'O'rings
- All parts are replaceable

## **Optional features**

- Mounting brackets
- Manual operation limit switches
- Pressure switches
- Feedback units
- Positional control amplifiers
- Position indication
- Anti-condensation heaters
- Fluid heaters
- Fluid coolers
- Cushioning
- Shock relief
- Viton seals
- Emergency failsafe Pressure gauge indication
- Special finishes



Failsafe

