



E-PUB-04-0004 Version 43, 2016-06-03

## Do you have these issues?

- Poor level control or Spillage
- Bending or breaking of shafts
- Excessive wear

- Misalignment of valve and actuator shaft
- Bouncing or vibration of valves, poor coupling.
- Maintenance problems

Then eDART internal valves will benefit you. eDART's iDart valve is well suited to very deep (>2 m) tanks. The valve needs the simple steps of bolting down the mounting plate and seat, then adjusting the positioner to calibrate. The valve does not require additional internal guide plates as the guiding and stability is done on the plug head.

#### **Features**

- Modulating Control or On/Off applications
- Fully customisable design
- Suitable for tanks in excess of 2-meters deep. For shallower tanks we recommend the TriDart valve as an alternative.
- Anti-Rotation device.
- Stroke indication.

## **Standard Sizes**

• 80 mm to 600 mm

Please enquire about customisation to suit your needs and plant layout.

#### **Material of Construction**

- Plug and seat polyurethane
- Body rubber lined mild steel

#### **Options**

- Supplied with or without an actuator
- Bias Spring Fail Closed, Fail Fixed or Double Acting Actuator Options
- Smart (HART, Profibus), Electro-Pneumatic (4-20mA),
  Pneumatic (20-100kPa) Positioner
- Safety Guards enclosing feedback mechanism
- Please ask for modifications to suit your needs and plant layout

## **Applications**

- Large flotation machines
- Deep distribution boxes: Integral head guiding
- Splitter boxes
- Distribution boxes
- Conditioner tanks





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# **Technical Data**

Size	CV <sub>max</sub>
100	176
150	429
200	840
250	1,400
300	1,830
350	2,650
400	3,320
450	4,310
500	5,060
600	6,950

## **Benefits**

Large Actuators	Engineered Feedback	Flexible Coupling
The actuators are sized to provide stiff modulating capability, sufficient stroke and good resolution to improve control and stability.	The mechanical linkages are designed to provide accurate linear response and may be replaced with an internal electrical transducer within the actuator when size demands.	Angular misalignment between the valve shaft and actuator stem is removed by this special universal joint to protect the actuator.
Seat Cage	Plug	Seat
The replaceable cage guides the plug head where it matters and does away with troubles of slurry filled and sticky shafts guide blocks	The conical plug has a linear flow characteristic while the concave plug shape is quick opening: the linear flow characteristic is better for the control system. The eDART cone shape is a good tradeoff between control complexity, flow characteristic and cost.	The bolt down seat is fitted to a stand-off stub piece which has two advantages: protection from sanding, and; easy of replacement.