# Fig. 1936F
# DN65-DN150 / PN16
## Electronic Pressure Independent Control valve

## DESCRIPTION

E-PICV uses pressure transducers combined with a high-speed actuator to automatically regulate flow, regardless of pressure fluctuations in the system.

## FEATURES & BENEFITS

- Reduced commissioning time and costs due to the preconfigured actuator settings, via the BMS or Hattersley configurator tool
- Stable head output by maintaining a flow rate regardless of ΔP via pressure sensors
- System optimisation using the indicated flow rate and position feedback via Modbus
- Reduced installation labour and cabling costs due to daisy chaining between Modbus actuators
- Reduced downtime due to error feedback via the BMS
- Optimised system efficiency and user comfort due to fast responding actuator
- Isolation function with Class IV leakage up to 800kPa

## MATERIAL SPECIFICATION

| Description | Material | Specification |
|---|---|---|
| Body | Grey Iron | EN GJL-250 |
| End Cap | Grey Iron | EN GJL-250 |
| Plug | Brass | CB 491K |
| Seat | Grey Iron | EN GJL-250 |
| Stem | Stainless Steel | AISI-303 |

## TECHNICAL SPECIFICATION

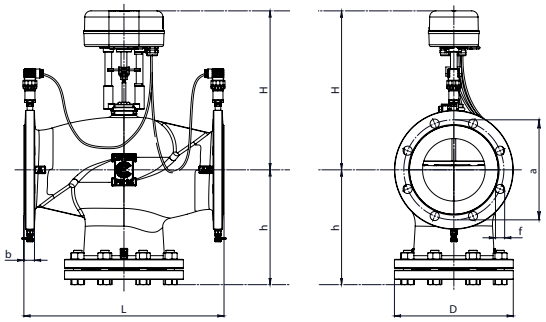
| Charactersitic | | Description |
|---|---|---|
| Fluid temperature | | -10°C - 110°C |
| Storage temperature | | -10°C - 50°C |
| Protection | Actuator | IP54 |
| | Pressure Sensors | IP65 |
| Valve connections | | Flanged PN16 |
| Max close off pressure | | 800kPa |
| Operational ΔP range | | 35kPa – 800kPa |
| Supply voltage | | 24Vac/dc / 230Vac variants available |
| Control signal | | 0-10Vdc, 2-10Vdc, 0-5/2-6Vdc and 4-20mA or 0-100% Modbus control signal |
| Output signal | | 2-10Vdc (0-100%); max load 2mA or 0-100% Modbus signal |
| Pressure sensors | Pressure range | 0 - 16 bar |
| | Temperature range | -15°C - 125°C |
| | Output signal | 0-10 Vdc |
| | Power supply | 16Vdc (supplied from actuator) |
| | Valve connection | 1/8" |

## DIMENSIONS & WEIGHTS

| SIZE (DN) | L (mm) | H (mm) | h (mm) | D (mm) | b (mm) | a (mm) | f (mm) | HOLES | WGT (kg) | Qmin (l/s) | Qmax (l/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65 | 290 | 320 | 175 | 185 | 20 | 145 | 18 | 4 | 18 | 3.3 | 10.3 |
| 80 | 310 | 330 | 186 | 200 | 22 | 160 | 18 | 8 | 28 | 6.9 | 16.4 |
| 100 | 350 | 341 | 206 | 220 | 24 | 180 | 18 | 8 | 32 | 12.5 | 21.4 |
| 125 | 400 | 364 | 255 | 250 | 26 | 210 | 22 | 8 | 45 | 16.9 | 32.8 |
| 150 | 480 | 382 | 275 | 285 | 26 | 240 | 25 | 8 | 60 | 22.2 | 49.2 |

## DIMENSIONAL DRAWINGS

**Front** **Side**




## PRESSURE RATING

PN16

## MEDIUM

Group 2 Liquids

## END CONNECTIONS:

Flanges to BS EN 1092-2 PN16

## SPECIFICATION

The E-PICV shall consist of a two-port characterised control valve with equal percentage control set through the actuator. Shall maintain flow rates, through integral pressure sensors, at differential pressures up to 800kPa. Flow rate adjustable through 0-10V or 0-100% Modbus signal, with feedback of % position, through 0-10V signal, and indicated flow rate based on valve position to be made available. Shall be manufactured from Grey Iron, with Brass plug and Stainless-Steel springs. Shall be rated to PN16 and operate at temperatures to 110°C. As per Hattersley Fig. 1936F.

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