

Smartronic iQ
Your Intelligent partner

TRANSITION TO THE NEXT LEVEL



Smarter Technology,
Smarter future:
Intelligence at work

SALIENT FEATURES

Technology



- Flapper nozzle – Better dynamic control, Proven technology

Communication



- HART 7
- FDI package/DD – Positioner control and diagnosis
 - Online diagnostics
 - Namur alarms and event monitoring
 - Vibrational diagnostics
 - Counter diagnostics
 - Advanced controls and parameterization through HART FDI package.

Patents



- Vibration sensor
 - Tool for Valve health diagnosis,
 - Valve and process induced vibration monitoring
- USB port for diagnostic data download

User-centric



- Single touch/ auto calibration
- Graphical LCD – Full text display, no abbreviations
- Two Digital outs –NAMUR and 24V digital outputs
- Split range, valve characteristics modification, tight shut off/open
- Metallic Housing (Case: Aluminium diecast) as standard for better ruggedness & handling
- High resolution and accurate non-contact feedback sensor
 - Higher stroke measurement made easy
 - Gearless, frictionless, no wear and tear

Field upgrades



- Analog Position Transmitter as default
- Rotary and Linear actuator compatible
- Compatible with Single and double acting actuators
- Separate Pressure Sensor PCB

PERFORMANCE FIGURES

SENSITIVITY
0.3% FS

HYSTERESIS
0.5% FS

REPEATABILITY
0.5% FS

DEADBAND
0.3% FS

LINEARITY
0.5% FS

GENERAL SPECIFICATIONS



Linear Motion Range:
up to 300 MM



Rotary Motion Range:
Up to 359 Deg



Emission and Immunity
as per EN IEC 61000



Humidity - 5 to 95%
RH at 40°C



- Air consumption :
<1NL/Min (estimated).
- Air Output rate:
>200NL/Min (estimated) @
6bar supply pressure.



- Air connection: ¼ NPT
- Conduit entry: G ½ or ½ NPT or
M20x1.5P



Protection: IP66

OTHER SPECIFICATIONS

OPERATING TEMPERATURE

-40°C ~ +80°C

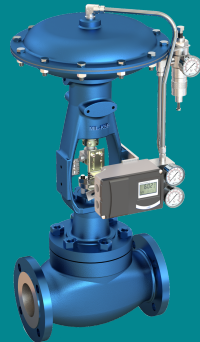
SUPPLY PRESSURE

1.4 bar - 7 bar (20 psi - 100 psi)

EFFORTLESS CONTROL FOR YOUR EVERY ENDEAVOUR.

MODEL DECODIFICATION

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|---|-----------|---|---|---|---|---|------|
| 7500 | - | - | - | - | - | - | - | - |
| 1. Diagnostics | | | | | | | | |
| Enhanced | E | | | | W | | | |
| Premium | P | | | | I | | | |
| | | | | | X | | | |
| 2. Communication | | | | | | | | |
| Non-HART | N | | | | | 1 | | |
| HART | H | | | | | 2 | | |
| FF | F | | | | | | | |
| 3. Action | | | | | | | | |
| Single Acting | | | S | | | | 1 | |
| Double Acting | | | D | | | | 2 | |
| 4. Case | | | | | | | | |
| | | Aluminium | | A | | | | 1 |
| | | SS | | S | | | | 2 |
| | | | | | | | | M 20 |
| 5. Ingress Protection/ Hazardous Area | | | | | | | | |
| IP66(default) | | | | | | | | |
| Intrinsic Safe | | | | | | | | |
| Exd IIC | | | | | | | | |
| 6. Position Feedback | | | | | | | | |
| Without | | | | | | | | |
| With 4-20 mA feedback | | | | | | | | |
| 7. Fail Action | | | | | | | | |
| Fail Safe | | | | | | | | |
| Fail Freeze | | | | | | | | |
| 8. Conduit Entry | | | | | | | | |
| 1/2" NPT | | | | | | | | |
| M 20 | | | | | | | | |



Discover the evolution of fluid technology with KSB. Our legacy in pumps and valves since 1871 is a testament to enduring excellence, now augmented by a strategic foray into digitalization. Uncover the power of innovation at KSB with SMARTRONIC IQ, a smart positioner for control valves, as we chart a course of relentless advancement in new age technology.