

KOSO

KGP5000

KOSO SMART VALVE POSITIONER

Newly launched smart valve positioner
based on proven technology to develop control valves



Cost effective positioner for supporting IoT solutions

- ★ User friendly operating system
- ★ Stable control on positioning valve
- ★ Advanced valve diagnostics

***The Most Cost Effective,
Creative Valve Solutions***

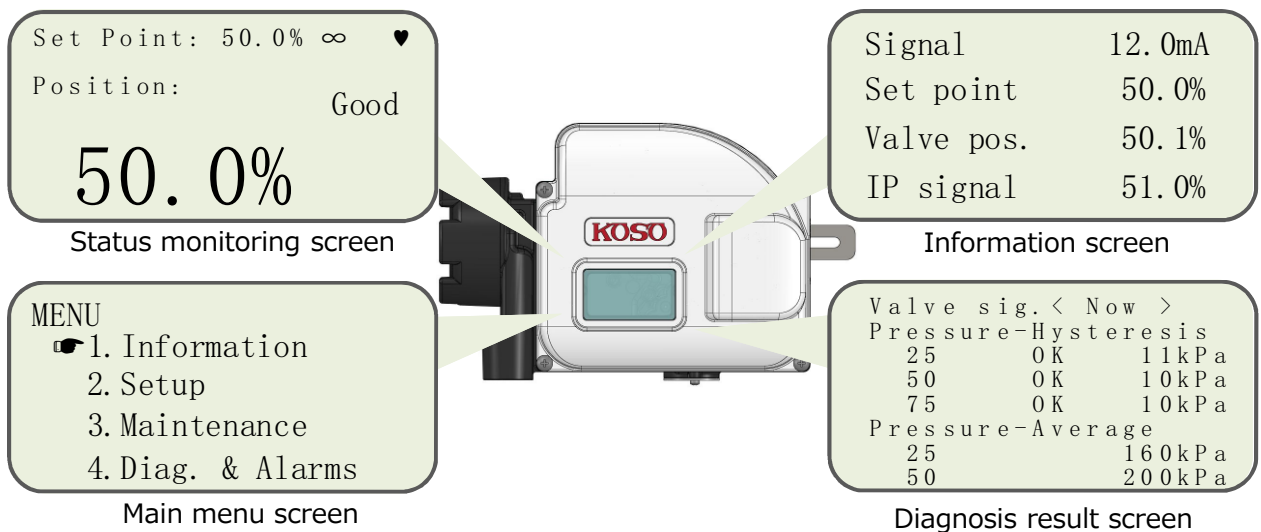
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FEATURES

Large-screen LCD & easy configuration by 'Full autotune'

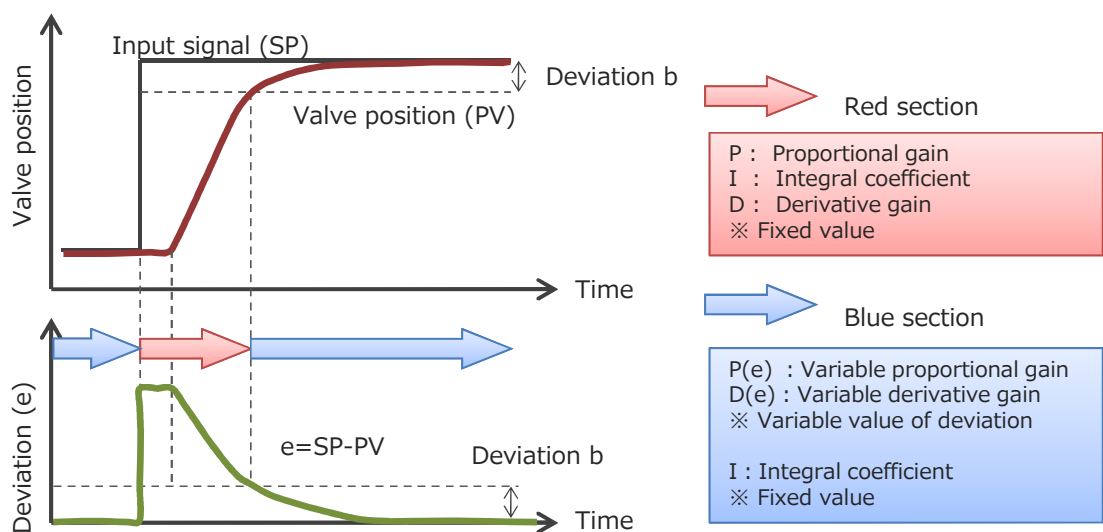
- ★ Local user interface with large graphic LCD by itself enables performing all the operations such as setup, adjustment, status monitoring, execution of diagnostics, etc.



- ★ The function of 'full autotune' can set automatically zero & span point, and select optimal PID control parameters by automatic tuning.

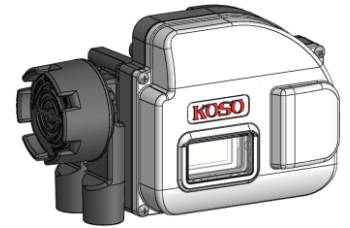
Stable valve control using advanced control algorithm

- ★ Advanced PID control selects suitable parameters according to deviation size, direction.



- ★ Preset values of PID parameters are provided suitable for linear or rotary actuators.

The Most Cost Effective, Creative Valve Solutions

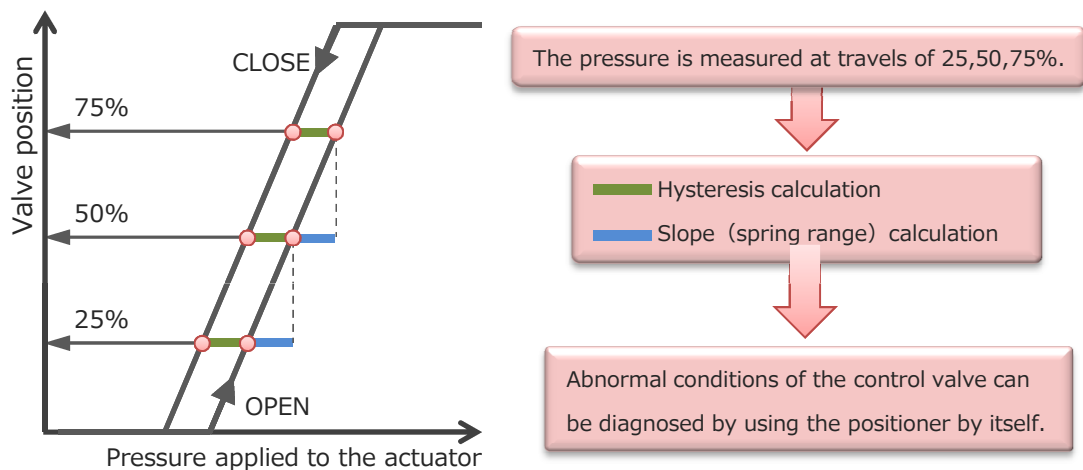


Diagnostics and alarm functions for maintenance cost reduction

- ★ Online valve diagnostics enables the exchange from breakdown maintenance to preventive maintenance through status monitoring.

Total stroke	Exposure time to high temperature	Control time of low travel
Number of times a direction is reversed	Exposure time to low temperature	Partial stroke test

- ★ Offline diagnostics checks control valve condition through pressure sensors. The concept of valve diagnostics using simplified valve signatures



All-in-one design for inventory-related troublesome reduction

- ★ Latest digital communication "HART7" compliant
- ★ Built-in position transmitter function
- ★ Applicable to both single and double acting actuator only through the switching between single and double mode on pilot relay

Attachment to several kinds and types of actuators



Linear actuator



Rotary actuator



KOSO 5300LA series

NEW!

SPECIFICATIONS

Input signal	4~20mADC	Compliance voltage 13VDC@20mA Split range available	
Transfer characteristics	Linear / EQ / QO / User custom setup (19 points)		
Position transmitter output	4~20mADC	Power supply 17~31VDC Alarm output ※ according to NAMUR043	
Attachment	Linear / Rotary / actuators according to IEC60534-6 · VDI/VDE3845		
Travel range	Linear Rotary	12~100mm ※ Strokes above 100mm with special kits 40~100°	
Action	Single / Double ※ Pilot relay are available on direct acting only		
Supply pressure	140~800kPa		
Enclosure	Housing Protection code Pneumatic connection Electrical connection Mounting threads Explosion protection	Aluminum die-casting with baked acrylic painting IP66 (Common structure) Rc1/4 or 1/4NPT G1/2, 1/2NPT or M20x1.5 4xM8, Φ50-4xM6 Exd IIC T6	
Weight	3.0kg (without pressure gauge block) , 3.3kg (with pressure gauge block)		
Operating temperature range	Non-explosion type Explosion type LCD	-40~80°C According to each explosion standard -20~70°C	
Operating humidity range	5~95%R.H. (non-condensed)		
Air consumption	Single acting type Double acting type	5N ℓ /min or less@140kPa, 6N ℓ /min or less@300kPa 12N ℓ /min or less@400kPa, 16N ℓ /min or less@550kPa	
Maximum output capacity	165N ℓ /min@140kPa, 370N ℓ /min@400kPa		
Accuracy		Position control	Position transmitter output
	Linearity	±1.2%F.S.	±1.0%F.S.
	Hysteresis	0.7%F.S.	0.5%F.S.
	Resolution/Dead band	0.1%F.S or less	-

CONTACT INFORMATION

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