

Process Automation

IMI STI

CRP-3/M

Compact Positioner



Breakthrough engineering for a better world



CRP-3/M

Compact Positioner

IMI STI's model CRP-3/M is an analog positioner available in pneumatic and electro-pneumatic versions. The positioner has a heavy duty design making it suitable for use in very harsh conditions. It is used as the control part of the pneumatic valve set in oil and gas, refining, chemical, power, metal production and other fields with automated systems. The pneumatic versions accepts a 3-15 psi (0.2-1 bar) signal and the electro-pneumatic version a 4-20 mA signal. The positioner is based on the balanced-forces principle with air distribution to the actuator chambers carried out by an internal spool.

This positioner is designed for use on linear (minimum stroke 8mm) or rotary actuators using different feedback systems (e.g. lever or motion converter). The CRP-3/M is a double acting positioner but it can be used as single acting.

The positioner is equipped with a different linear CAM (angle up to 270°) for use on actuators with different stroke lengths.

The CAM operating angles and range adjustments are printed on the positioner. Special CAM profiles are available on request.



Product features and benefits

Compact design.

Metallic case.

Heavy duty design.

High reliability.

Available with lever or with bare shaft, standard or Namur.

Split range signal.

Special characterisation/range.

Available with a full stainless steel spool valve.

Suitable for:

Standard, sandstorm, copper free ambient condition.

Single and double acting actuators..

Low and high ambient temperature.

Technical specifications

Housing materials

Rynite

Cover polycarbonate

Operating pressure P min = 2.5 bar P max = 7 bar

Design pressure = 10 bar

Static air consumption 0.4 Nm³/h (0.25 SCFM) at 400kPa (60 psi)

Static air consumption (I/P converter)

+0.09 Nm³/h (0.06 SCFM)

Feeding connection ND 1/4"

Output connection ND 1/4"

Pilot signal connection

1/4" NPTF

Electrical connection for I/P

version

ND 1/2" NPTF

Enclosure degree of protection

IP65

CV max low flow ND 1/4" Inlet = 0.12 ND 1/4" Outlet = 0.12

Operating temperature 20°C / +70°C

-40°C / +85°C available on request

Signal 3-15 psi 4-20 mA Sensitivity 0.15% of signal range

Linearity

1% of the stroke with linear cam

Hysteresis 0.5% of full stroke

Weights

 $CRP-3/M \ ND \ 1/4" = 1.4 \ kg$ $CRP-3/M-EP \ ND \ 1/4" = 1.9 \ kg$

Optional Accessories

Intrinsically safe EElectropneumatic version available.

Customized cam.

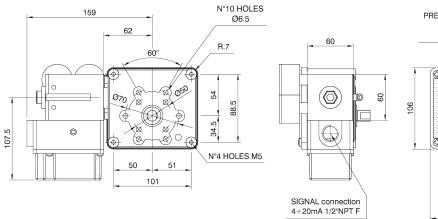
Pressure gauges.

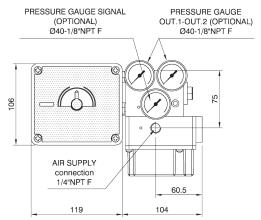
VDI/VDE 3845 EN 15714-3 connections (NAMUR).

CRP-3/M Pneumatic Version.



Dimensional drawing





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07071.02/24en







