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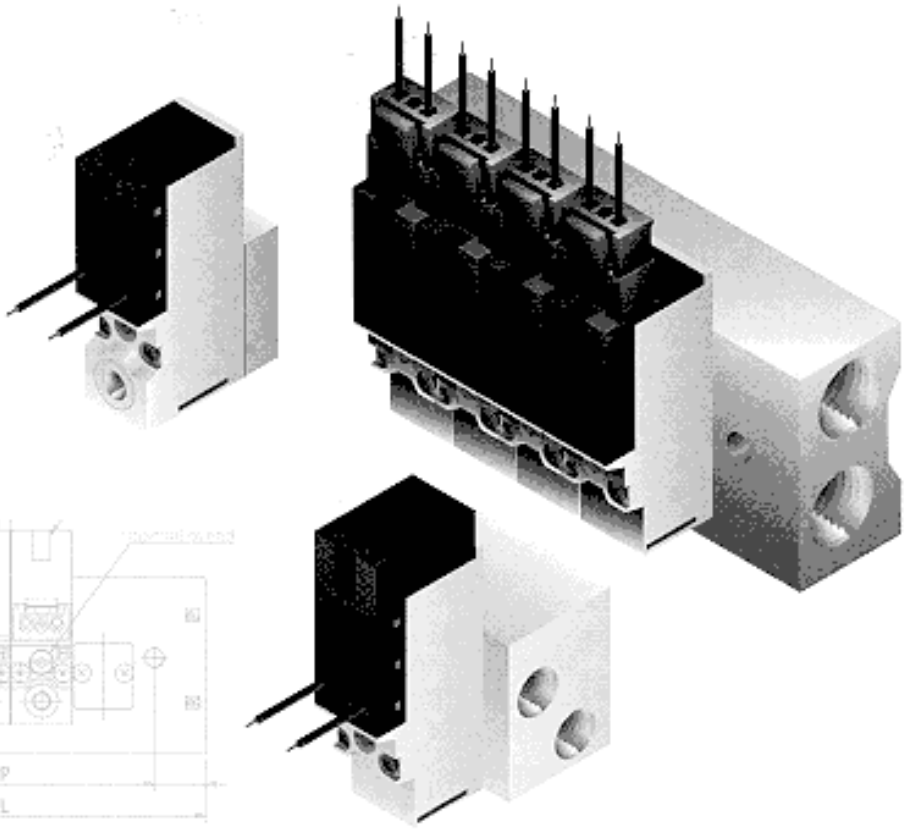
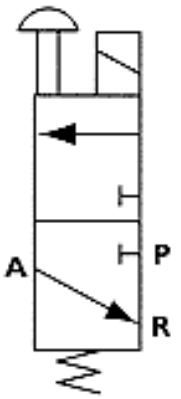
CATALOG HG010

HUMPHREY HG010 SERIES PNEUMATIC CONTROL VALVES

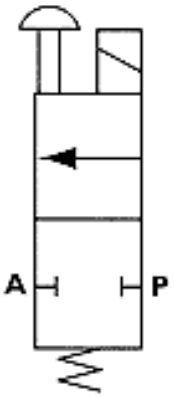


- 10 mm package size
- Use as pilot valve or instrumentation valve
- Continuous duty rated
- Two wattage options: 0.5w and 1 watt
- Two Cv Ranges: 0.005 and 0.01
- AC and DC voltages
- Low watt option - 0.5 watt
- Normally Closed operation
- 2 or 3 way

N.C. THREE WAY



N.C. TWO WAY



FEATURES

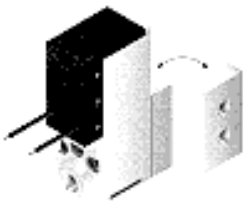
The new HG010 series valves are a smaller, lighter, and a more efficient form of micro solenoid valves.

- Two Cv ranges: (P to A/A to R): 0.005/0.01, 0.01/0.02
- Direct Acting Solenoid
- LEDs are standard (can be viewed from many angles)
- Non-locking and locking override combination
- Wattage levels: 0.5, 1.0
- Reverse voltage protection
- Plug-in connector

INLINE VALVES

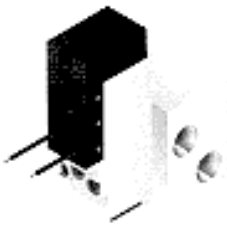
The HG010 (inline type) valve is pre-assembled to an input port block for direct piping single valve functions.

Every HG010 valve can be piped as a Normally Closed Three-Way or a Normally Closed Two-Way (see ANSI symbols above).



SUBBASE VALVES

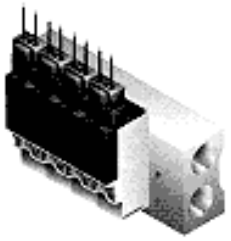
Ordering the HGA010 (manifold type) valve with a single station subbase provides manifold benefits in single valve applications. All piping is located in the subbase.



MANIFOLD MOUNT - HGA010 TYPE VALVES

Mounting HGA010 (manifold type) valves to the A Type Manifolds provides reduced installation and maintenance costs in multiple valve applications. All piping ports are located in the manifold.

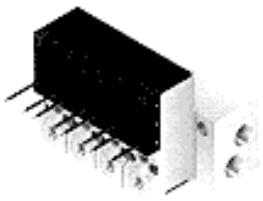
Manifold lengths are available in two through twenty stations and can be ordered with either 10-32 delivery ports or M3x0.5 delivery ports.



MANIFOLD MOUNT - HG010 TYPE VALVES

Mounting HG010 (inline type) valves to the F- Type Manifolds provides a lower cost manifold with reduced installation costs and a plumbing alternative in multiple valve applications. Supply and exhaust ports are located in the manifold and delivery ports are on the valves.

Manifold lengths are available in two through twenty stations.



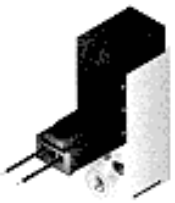
ELECTRICAL OPTIONS

There are three electrical connection options:

- PS-type (two wire), 300 mm or 3000 mm lead length.
- PL-type (two wire), 300 mm or 3000 mm lead length.
- Grommet type, 300 mm lead length

All three have LED: Standard.

PS-type



PL-type

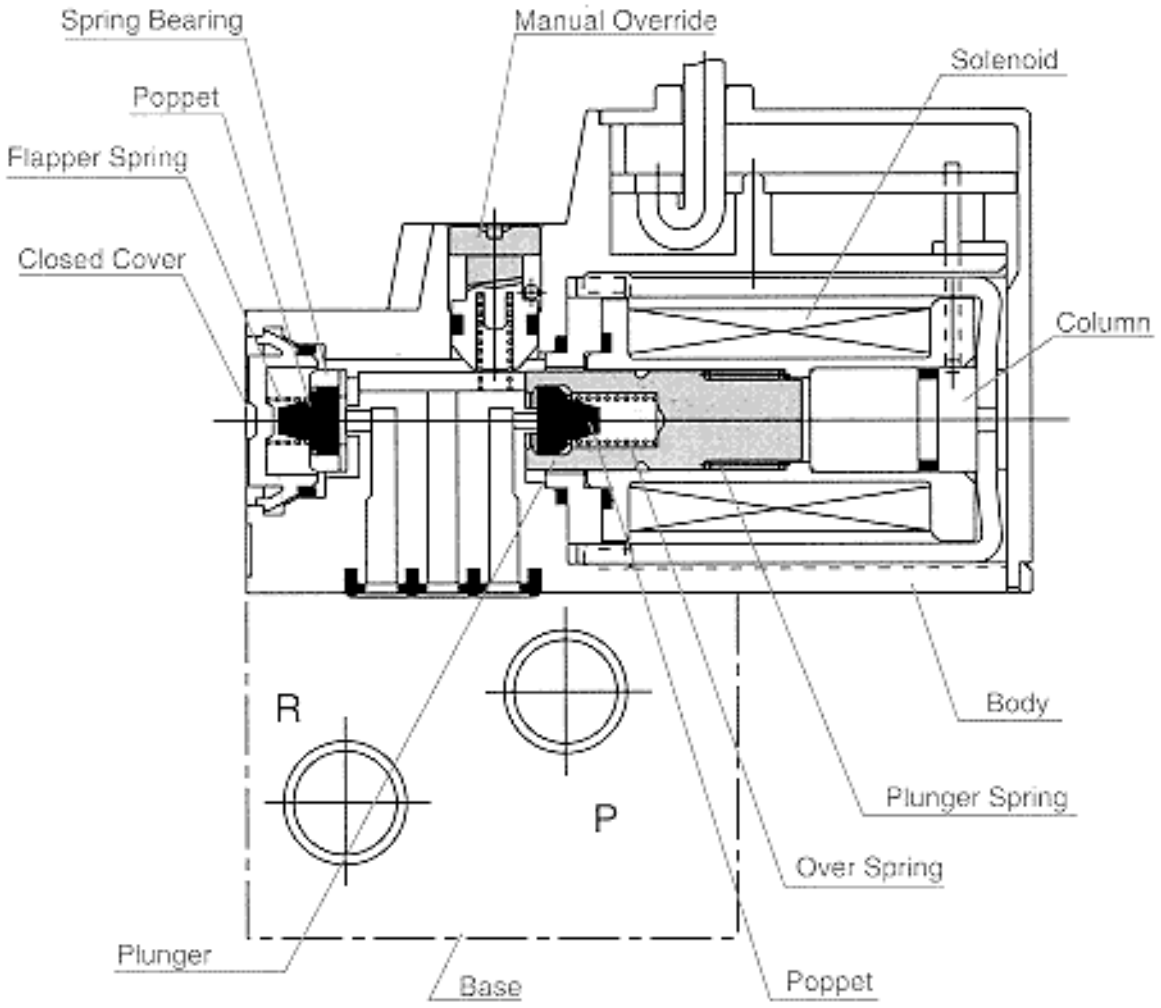
Grommet type

ELECTRICAL SPECIFICATIONS

	HG010E1 HGA010E1	HG010LE1 HGA010LE1
Rated Voltages	5VDC	5VDC
	6VDC	6VDC
	12VDC	12VDC
	24VDC	24VDC
	120VAC	
	240VAC	
Power Consumption W	1	.5
Methods	DC: Flywheel Diode AC: Full Wave Bridge Rectifier	
Surge Suppressor	Flywheel Diode	
Insulation Resistance MΩ	Minimum 100	
Lead Wire Length-in(mm)	11.8 (300), option 118 (3000)	

SPECIFICATIONS

	HG010E1 HGA010E1	HG010LE1 HGA010LE1
Flow (P to A/A to R) - Cv	0.01/0.02	0.005/0.01
Response time AC or DC - ms (On/Off)	4/8	4/10
Valve type	2 position, 2 or 3 way	
Function	Normally closed	
Media	Air, Inert gasses	
Port size	M3 x 0.5 or 10-32	
Lubrication	Not required	
Operating pressure (psi)	0 - 100	
Maximum operating cycles (cycles/sec)	5	
Operating temperature - F° (C°)	40-122 (5 - 50)	
Shock resistance - G	140 (stem 40)	
Mounting directions	Unrestricted	
Filtration	40 micron recommended	
Materials - Valve	Plastic, Buna, Magnetic Stainless Steel	
- Manifold	Anodized Aluminum	



Material

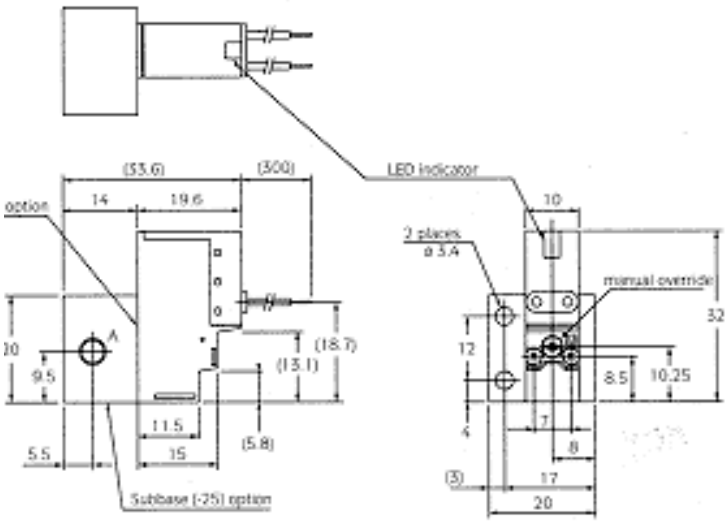
Valve

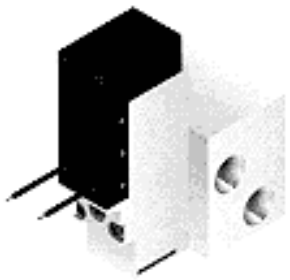
Part name	Part material
Body	Plastic
Poppet	NBR
Plunger	Electro magnet stainless steel
Column	Electro magnet stainless steel
Base	Aluminum alloy (Almite treated)

Manifold

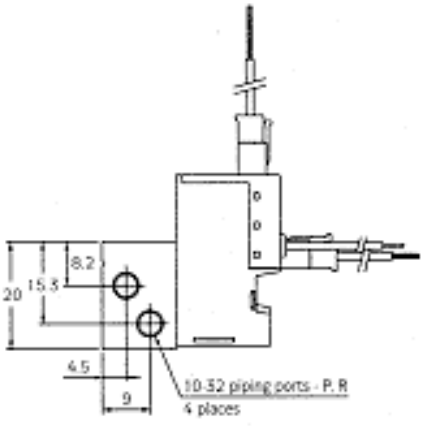
Part name	Part material
Body	Aluminum alloy (Almite treated)
Block off plate	Soft steel (Nickel plated)
Packing	NBR

SUBBASES - mm

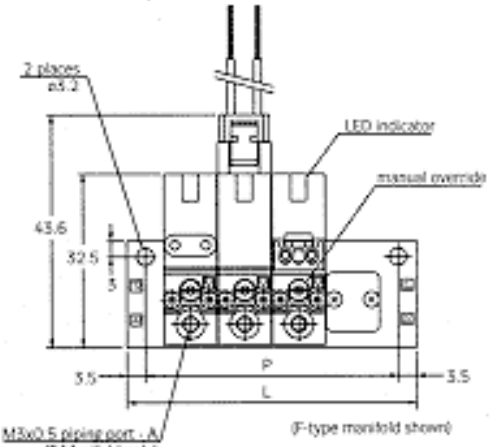




AND A STANDARD FLOW MANIFOLDS - mm

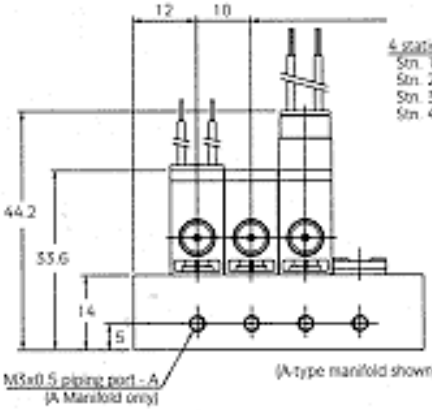


(F type manifold shown)



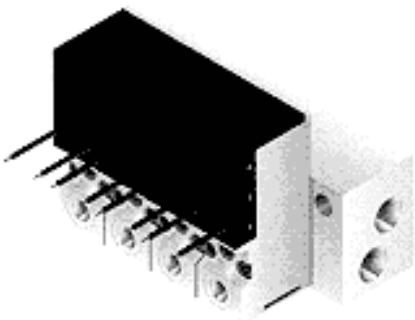
(F-type manifold shown)

Stn.1 Stn.2 Stn.3 Stn.4, etc..



(A-type manifold shown)

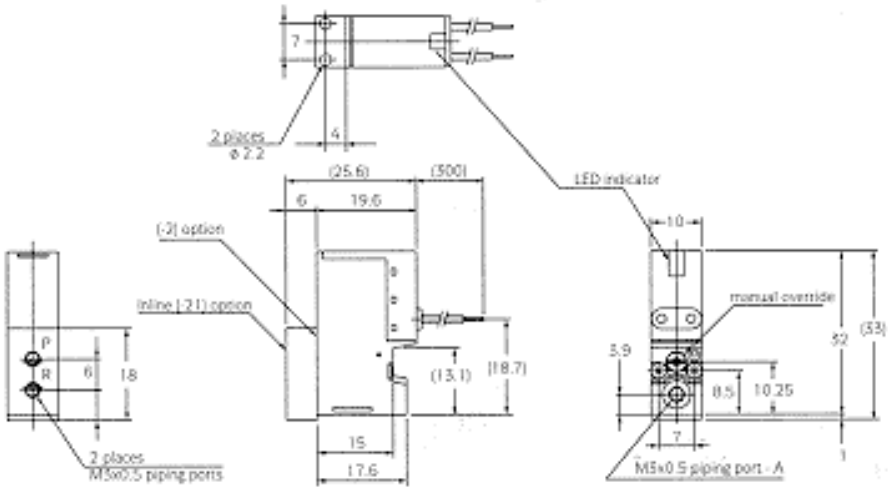
4 station manifold ass'y shown
Stn. 1: HQA0310E1
Stn. 2: HQA0310E1-PS
Stn. 3: HQA0310E1-PL
Stn. 4: HQ010-BP

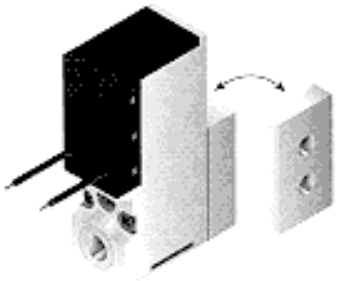


Manifold stations	2	3	4	5	6	7	8	9	10	11
P	27.2	37.4	47.6	57.8	68	78.2	88.4	98.6	108.8	119
L	34.2	44.4	54.6	64.8	75	85.2	95.4	105.6	115.8	126

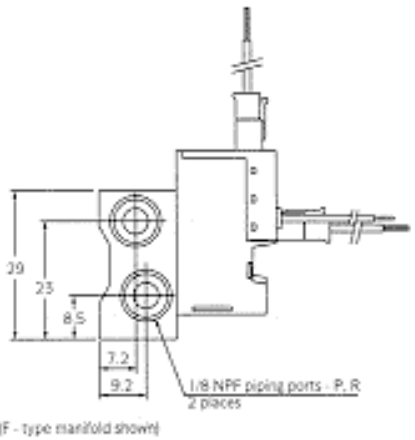
	12	13	14	15	16	17	18	19	20
P	129.2	139.4	149.6	159.8	170	180.2	190.4	200.6	210.8
L	136.2	146.4	156.6	166.8	177	187.2	197.4	207.6	217.8

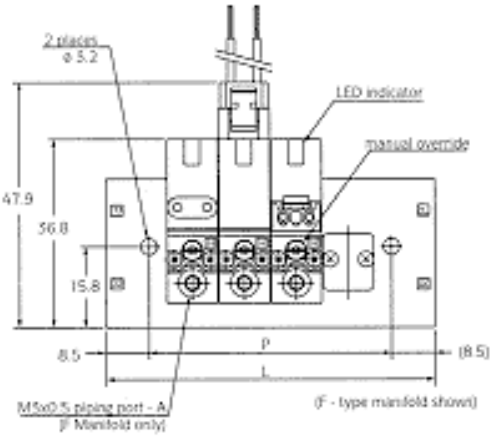
INLINE - mm

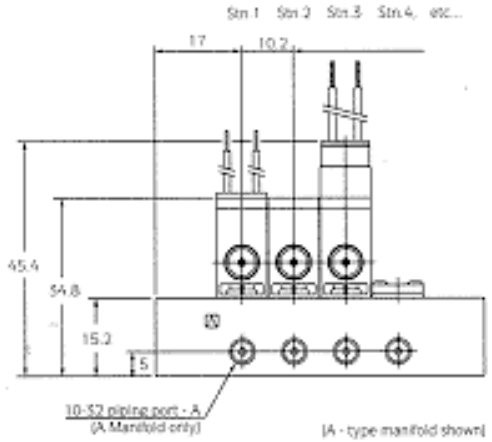


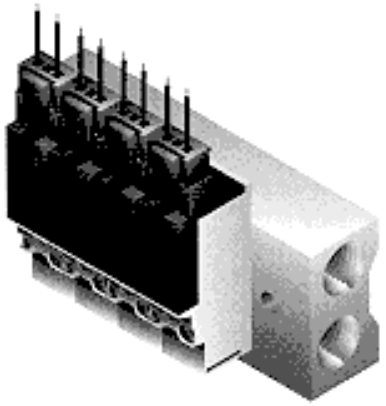


F AND A HIGH FLOW MANIFOLDS - mm









Manifold stations	2	3	4	5	6	7	8	9	10	11
P	27.2	37.4	47.6	57.8	68	78.2	88.4	98.6	108.8	119
L	44.2	54.4	64.6	74.8	85	95.2	105.4	115.6	125.8	136

	12	13	14	15	16	17	18	19	20
P	129.2	139.4	149.6	159.8	170	180.2	190.4	200.6	210.8
L	146.2	156.4	166.6	176.8	187	197.2	207.4	217.6	227.8

ORDER CODE, HG010 VALVES

HG A 010 L E1 -2 -21 -PS -24VDC (order example)

- AVAILABLE VOLTAGES
  5VDC, 6VDC, 12VDC, 24VDC, 120VAC, 240VAC
- ELECTRICAL CONNECTIONS
  No Code Grommet w/LED, 300 mm lead length
  PS Straight-Type Plug-In w/LED, 300 mm lead length*
  PL L-Type Plug-In w/LED, 300 mm lead length*
- BASIC OPTIONS
  No code Basic valve (manifold mount or replacement)
  21 Mounting base for inline valve (HG010 type)
  25 Single subbase for manifold valve (HGA010 type)
- VALVE TYPE OPTIONS
  No code Single solenoid, three way
  2 Single solenoid, two way
- POWER CONSUMPTION OPTIONS
  No code 1.0 watt valve (AC OR DC voltage)
  L 0.5 watt, low flow valve (DC voltage only)
- PORTING OPTIONS
  No code Inline, or F-type manifold valve (with threaded body ports)
  A Subbase, or A-type manifold valve (no threaded body ports)

* For longer lead wire lengths (3000 mm) order PS-3L or PL-3L.

WEIGHT - GRAMS

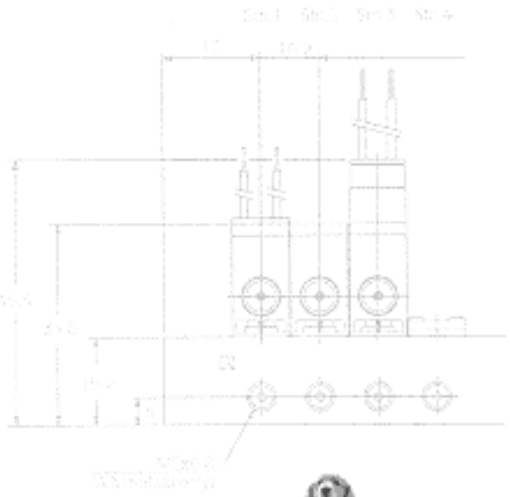
HG010E1	14.6
HG010E1-21	16.8
HGA010E1	14.2
HGA010E1-25	26.2
HG010M ^ F	(7xn) + 9*
HG010MH ^ F	(7.2xn) + 33*
HG010M ^ A	(7xn) + 9*
HG010MH ^ A	(7.2xn) + 33*

*n = number of manifold stations

ORDER CODE, HG010 MANIFOLDS

HG 1OM H 6 A (order example)

- MANIFOLD TYPE
  A Delivery ports in manifold.
  F Delivery ports in valve body.
- NUMBER OF STATIONS
  Choose from 2 thru 20 stations.
  (4, 6, 8, 10, and 12 in stock)
- FLOW
  Blank Standard flow manifold.
  H High flow manifold.
- HG010M Manifold for HG010 Valve Series



ORDER CODE, PARTS

HG010 - 25 (order example)

- PART
  21 Inline input port block
  25 Single station subbase
  GS 1 Valve to manifold gasket
  BP Block off plate

Underlined and bold option codes - delivery from stock

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