HEARKEN®

# Welcome to HEARKEN --- Actuators and Controls





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BROCHURE

WECHAT

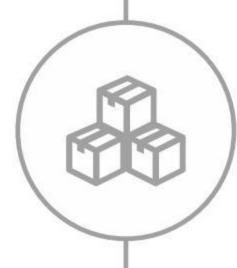
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## The Trusted, Passionate and focused Partner in Valve Automation

At HEARKEN FLOW,The founding principle of Hearkenflow is simple: to Listen our customers needs first, to develop the innovative valve actuators solutions, to meet the unique needs of our customers, Along the way, To help our customers to solve the problems in Valve Automation. We are growing our brand in Pneumatic and Electric Actuators, Accessories...



Experienced team



Largeinventory



Convenient consultation













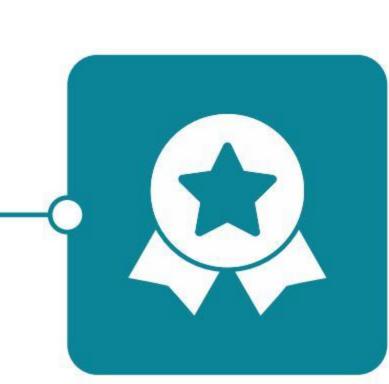
#### WHY WE ARE DIFFERENT

We offer a complete valve automation solution by the applications experience and customization capabilites, with an experienced support team to guide you in selection, installation, and project support.In addition we maintain an extensive supply of product inventory on hand so that we can quickly fulfill orders and reduce wait times. Our sales and support staff are readily available and accessible so that customers get the answers they need quickly.

### THE TARGET WE ARE PURSUING





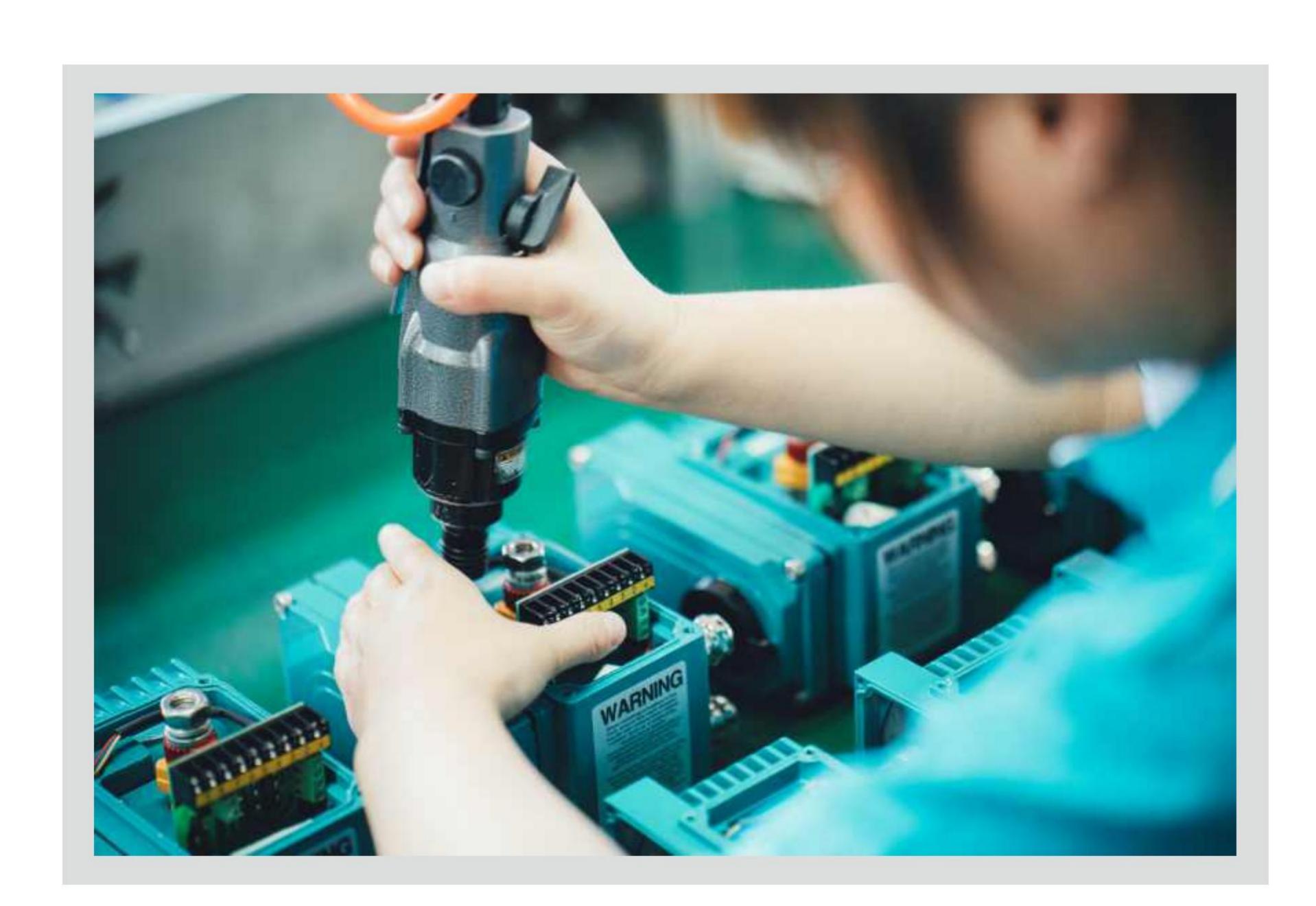


High-quality

low cost

Reliable solution

- To built A strong Reputation in Providing Quality, Cost Effective, Reliable And Robust Performance Solutions for Valve Automation,
- Inclued Pneumatic Actuators, Electrically Actuators, Actuated Valves.



#### COMMITMENT TO QUALITY

At HEARKEN FLOW means performance, All products manufactured by HEARKEN FLOW are warranted against defects in material and workmanship for a period of 18months from the day of startup. Each of our products are tested at the factory. we are confident that our products meet or exceed all applicable standards before they ever leave our facility. We are an ISO 9001-2008 certified company. Our Valve Actuators Has Applied for SIL3 Certificate, ATEX Certificate, CE, Explosion-proof Certificate, IP68 Weather proof etc....



4M series NAMUR solenoid valve, port size ranges from 1/8" to 1/2". Among which 4M310 -08 are international standard and 4M310-08G series are 5/2 way to 3/2 way inter-changable. The spool of 4M series Namur valve, is cutted and one-timemachined from superior aluminum alloy rod , by high precision CNC machine; Valve body use strong aluminum alloy ,ensuring clean and rigid thread. Dynamic and static armature made by Japan-imported hybrid machining center at one time with Germanyimported stainless steel material, ensuring high accuracy and rapid magnetizing and . demagnetizing; Integral coating of coil by thermosetting BMC ,ensuring IP65 protection, low temperature rise, longer service life. Specialized Machining + Assembly + Testing automation production streamlines, ensuring high quality stability and consistency of 4M series NAMUR solenoid valve, supported by special low power technology, low power, low temperature rise, PLC directly connection, long life!



# Supply Chain



- Imported seal
- Imported grease
- Germany stainless steel
- High precision mould
- Strength aluminium

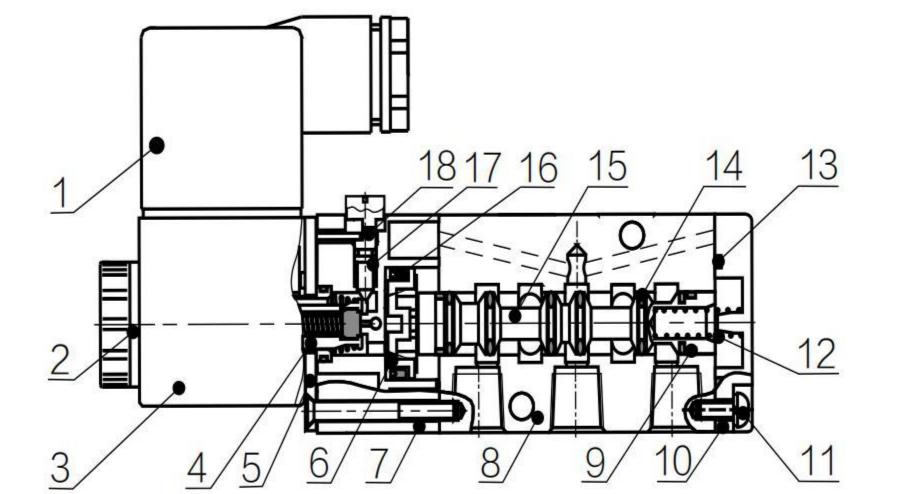
#### Main Product features

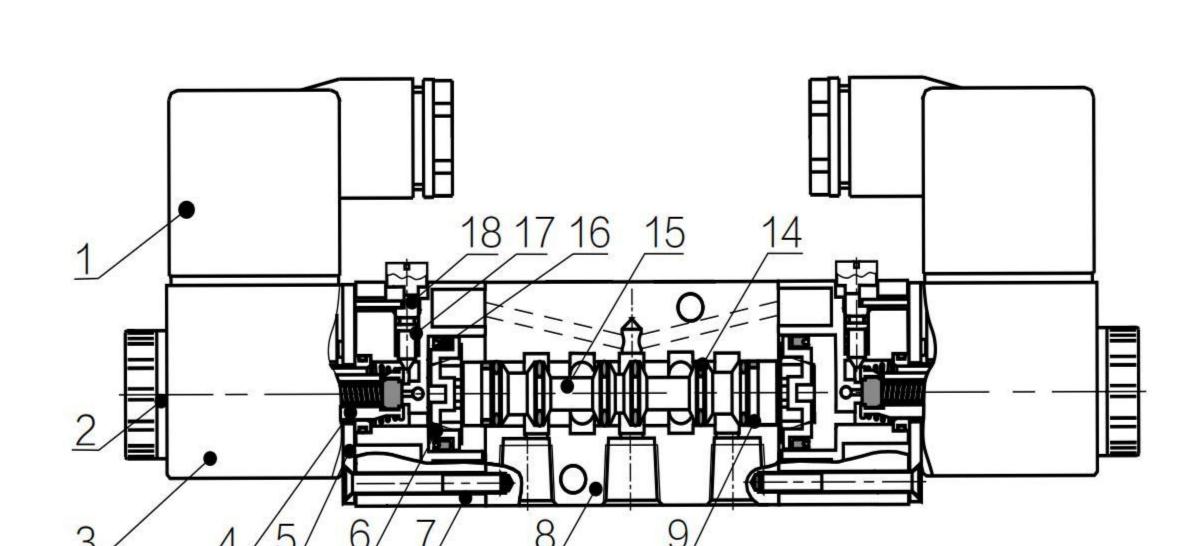


- Dynamic/static armature made of Germany stainless steel material, fast response
- Mould of pilot seat is made by top-level supplier, high precision for plastic parts.
- •Spool one- time-machined from superior aluminum alloy rod, by high precision Japan CNC
- Valve body use 6061-T6 aluminum alloy ,ensuring clean and rigid thread.
- Special mini filter is designed on pilot exhaust port, cleaner inner air
- •Integral coated coil by thermosetting BMC, IP65 protection, low temperature rise, longer life
- Machining + Assembly + Testing automation production streamlines, high stability and consistency
- ●Function various 5/2,3/2,5/3, solenoid control,air control,size ranges 1/8"-1/2"

#### Inner Structure







NO.	Part name	Material				
1	Connector	Engineering plastic				
2	Nut	POM+Carbon steel				
3	Coil	Cu				
4	Pilot units					
5	Plate	Carbon steel				
6	Piston	POM				
7	Pilot seat	Engineering plastic				
8	Valve body	Aluminum alloy				
9	Spool	Aluminum alloy				

NO.	Part name	Material			
10	O-ring	HNBR			
11	Rear cover	Engineering plastic			
12	Filter	Synthetic material			
13	Piston	POM			
14	Spring	Stainless steel			
15	Manual override	Engineering plastic			
16	Back seat	Aluminum alloy			
17	Spring seat	Aluminum alloy			
18	C-type buckle	65Mn			

#### Order Code

<b>4M</b>	

Specification Code

5/2(3) Port Solenoid Valve

Series
1:100 Series

2:200 Series
3:300 Series
4:400 Series

### Coll & Position

10:Single Coil Double Position

10

20:Double Coil Double Position

30C:Double Coil Three - position Closed Type

30E:Double Coil Three - position Closed Type

30P:Double Coil Three - position Closed Type

# Coll & Position

M5:M5×0.8 06:G1/8 08:G1/4 10:G3/8 15:G1/2

# AC220V

Voltage
DC12V
DV24V
AC24V 50/60Hz
AC110V 50/60Hz
AC220V 50/60Hz
AC380V 50/60Hz

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# Technical Parameter and Specifications (On/Off or Modulating Version)

Model	4M110-M5 4M120-M5	4M110-06 4M120-06	4M210-06 4M220-06	4M210-08 4M220-08	4M310-08 4M320-08	4M310-10 4M320-10	4M410-15 4M420-16
Working Media				Air			
Action Mode				Internal Pilot Type			
Position				5/2 Port			
Effective Sectional Area	5.5MM <sup>2</sup> (Cv=0.31)	12.0mm <sup>2</sup> (Cv=0.67)	14.0mm <sup>2</sup> (Cv=0.78)	16.0mm <sup>2</sup> (Cv=0.89)	25.0mm <sup>2</sup> (Cv=1.40)	30.0mm <sup>2</sup> (Cv=1.68)	50.0mm <sup>2</sup> (Cv=2.79)
Port Size	Input=Output=M5×0.8	Input=Ou	tput=G1/8	Input=G1/4, Exhaust port=G1/8	Input=Output=G1/4	Input=G3/8, Exhaust port=G1/4	Input=Output=G1/2
Lubrication				No Need			
Working Pressure				0.15-0.8Mpa			
Proof Pressure				1.0Mpa			
Working Temperature				0~60°C			
Voltage Range							
Power Consumption	AC:2.8VA	C:2.8W			AC:5.5VA DC:4.8W		
Insulation Grade				F Level			
Protection Class				IP65(DIN40050)			
Connecting Type				Plug Type			
Max. Operating Frequency				5 Cycle/Sec			
Min.Excitation Time				Aluminum Alloy			
Material				NBR			

### Dimension in mm

