

H Series ISO Valve (with Universal Manifold)



Bulletin 0600-B95

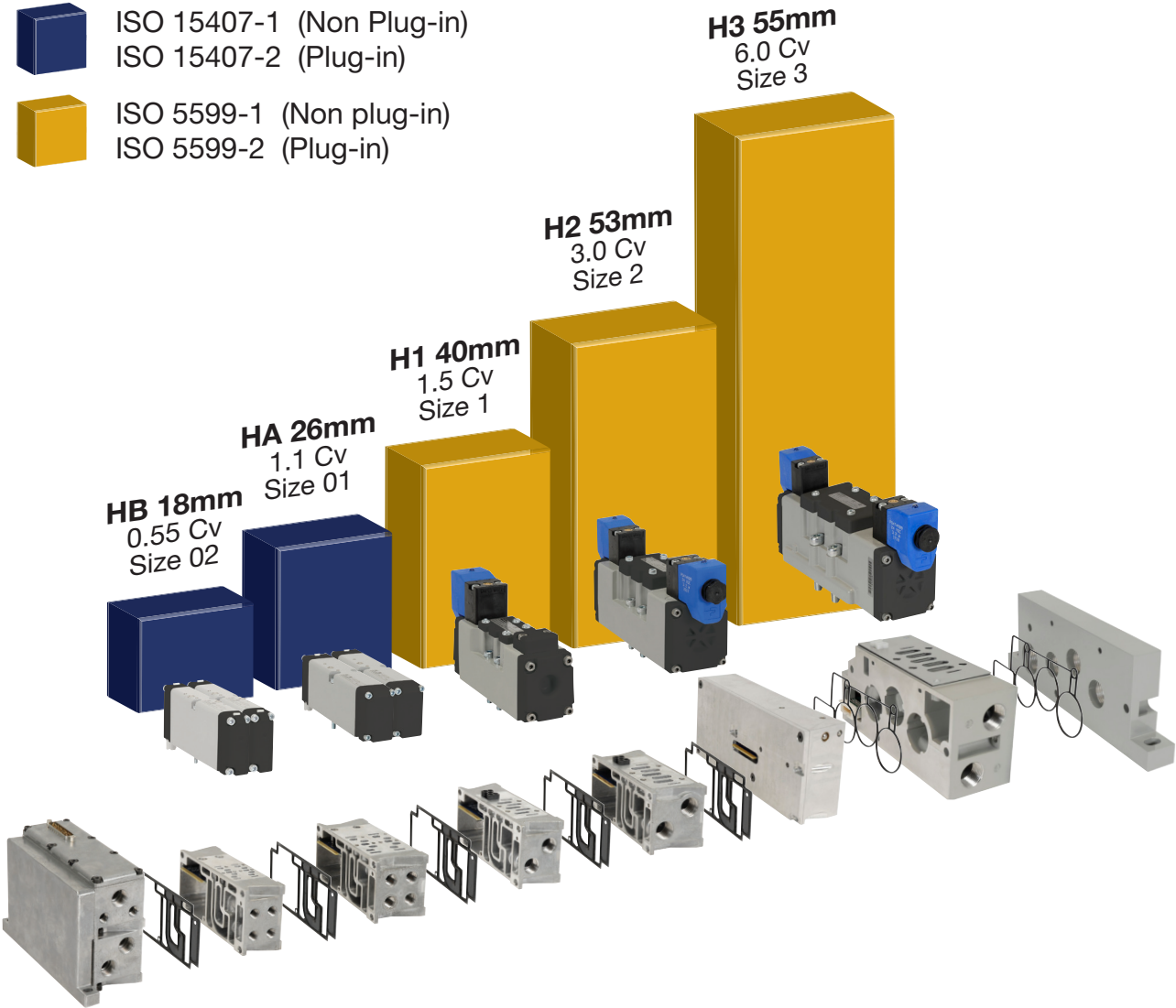


ENGINEERING YOUR SUCCESS.

H Series ISO Valve

Right Sizing

-  ISO 15407-1 (Non Plug-in)
ISO 15407-2 (Plug-in)
-  ISO 5599-1 (Non plug-in)
ISO 5599-2 (Plug-in)



H Series Valve

The next evolution of the H Series ISO global valve family has arrived and has expanded to meet the needs of the market today and beyond. The H Series product is a range of robust general service valves for multi-purpose applications adhering to International Standards Organization (ISO) 15407 and 5599 for easy interchangeability. The new design is enhanced in functionality, weight reduced and designed to make it easy to size and install.

Right Sizing

The development of new manifold bases allows you to mix valves from size 02 to size 2 (0.55 to 3 Cv) on one common manifold without utilizing a transition plate or up to size 3 (6.0 Cv) with the use of a transition block. Right sizing means maximizing the valve to your best advantage, reducing the compressed air (energy) used and minimizing the form factor which lowers the total cost of ownership. The new enhanced universal manifold takes H Series product to the next level by providing the flexibility of multiple electrical connectivity options and several pneumatic zoning possibilities.

For more information visit us at www.parker.com/pdn/HSeriesISO

H Series ISO Valve Connectivity

EtherNet/IP[®] DeviceNet[™]

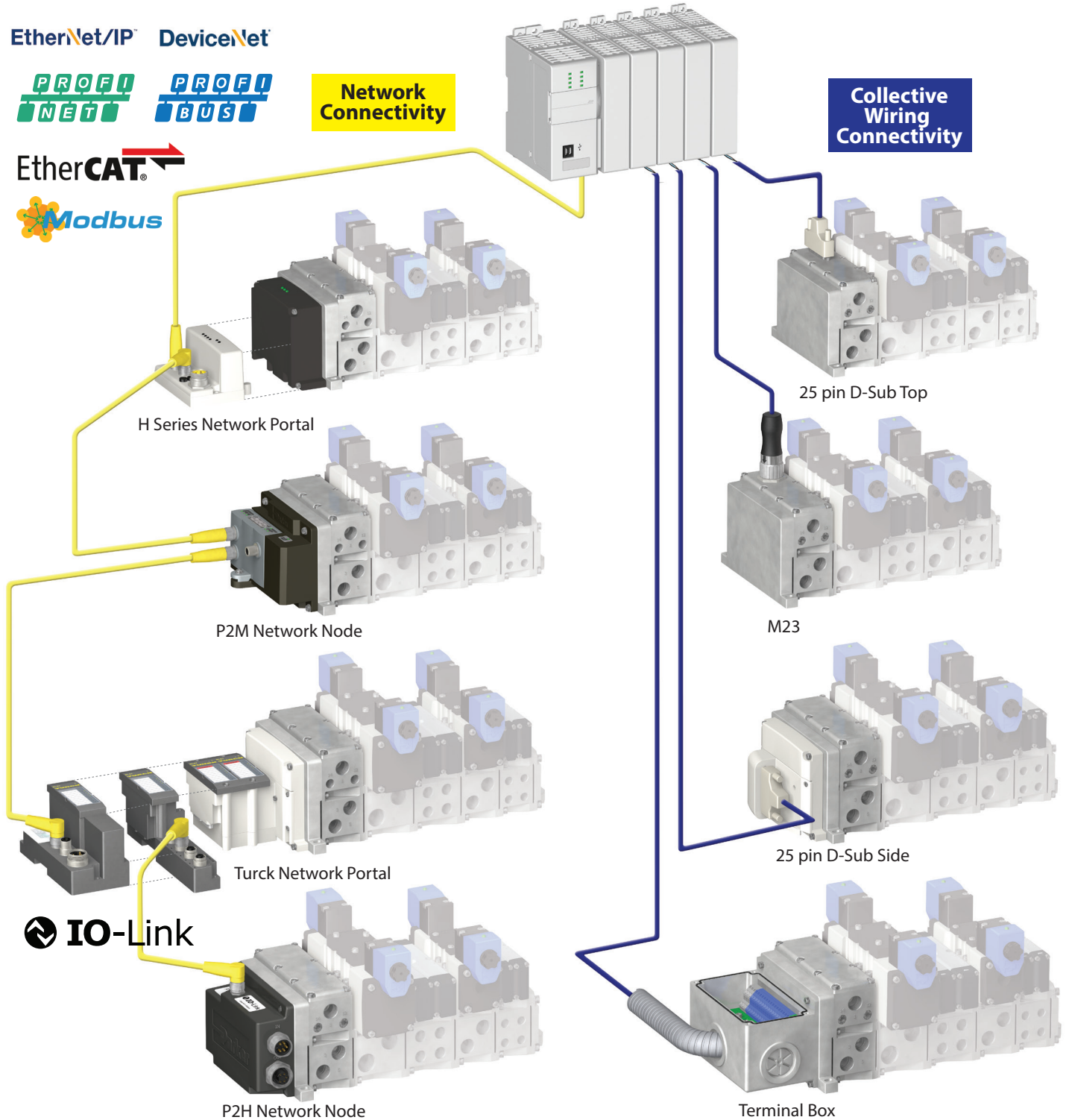
PROFINET[™] PROFI BUS[™]

EtherCAT[™]

Modbus

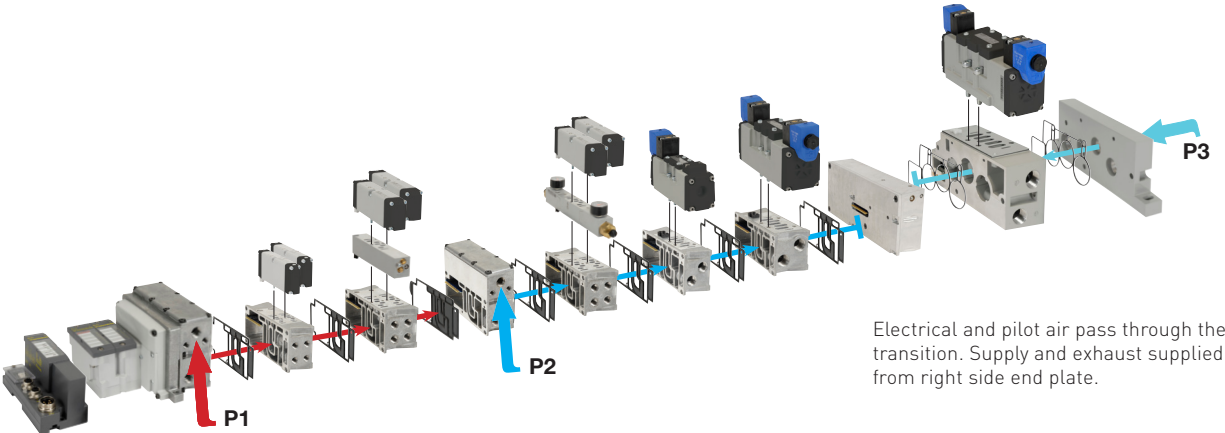
Network
Connectivity

Collective
Wiring
Connectivity



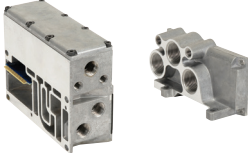
H Series ISO Valve

Features and Benefits



Electrical and pilot air pass through the transition. Supply and exhaust supplied from right side end plate.

Pressure Zoning Multiple Pressure Zones (P1 P2 ... Pn) provide flexibility to meet a variety of applications. Supplying the valves on the manifold with different pressures will allow for variable force output from any attached actuators. In addition, you can control vacuum and remove supply pressure from certain sections while leaving other areas operable. This can be useful in safety applications as well as for maintenance.



Additional Flow can be added throughout the manifold. This can be achieved by using a high flow right hand end plate or additional air supply modules.



Energy Efficient Coils can be selected to reduce power consumption with minimal performance impact, for 24VDC size 1, 2 & 3 valves.



Pilot Pressure Zoning is offered in addition to zoning the supply pressure. The pilot exhaust module (PXM) is available to remove pilot pressure while maintaining supply pressure in the manifold. Removing pilot pressure is a quick way to bring the valve to a safe state in an emergency situation while maintaining pressure at the working ports and coupled with other products can be part of a complete safety solution.



Sandwich Accessories are available such as flow controls and pressure regulators which allow for force and speed control of individual valves in the manifold.



Ease of Assembly and Installation were the primary principles behind the design of this product. Card edge electrical connectors allow for simple assembly and a robust connection without the hassle of bent pins. The manifold bases feature an interlocking design so they go together easily and reliably and the fasteners are guided to help ensure they go in the right way each time. Installation of the assembled product is simplified with the addition of installation brackets that hold the unit in place while you attach the permanent fasteners in both horizontal or vertical mounting.

H Series ISO Valve

Technical Specifications

General Specifications

Valve Function	2 position, 3 position, dual 3/2 position, double or single solenoid
Port Sizes (working)	1/8, 1/4, 3/8, 1/2, 3/4
Port Type	NPT or BSPP
Flow Rate	0.55 - 6.0 Cv
Pressure Range	Vac to 145 PSIG (Vac to 10 bar)
Minimum Operating Pressure	Pilot pressure minimum varies with valve type/size from 25-50 PSIG
Temperature Range	5 to 120 °F (-15 to 49 °C)
Media	Inert Gases

Electrical / Connectivity

Input Supply Voltage	24VDC to 120VAC
Electrical Connection (Collective wiring)	
Plug-in	25-Pin, M23, Terminal Strip
Non Plug-in	M12, Mini, DIN
Network Protocol	I0-Link, PROFINET, EtherNet/IP, EtherCAT, Powerlink, Modbus TCP, PROFIBUS, DeviceNet, CANopen, InterBus-S, AS-i
Certificates	cCSAus, CE and IP65 (consult catalog)
Power Consumption	
Sizes 02 & 01	1W (24VDC) / 2VA (120VAC)
Sizes 1, 2 & 3	3.2W (24VDC) / 4.5VA (120VAC)
Energy Efficient Coils	1.3W (24VDC)

Application Guide

Cylinder to valve: The chart below contains recommendations for selecting air valve products based on cylinder sizes, actuation speed and 80 PSI (5.5 bar) with a 5 PSI (0.35 bar) pressure drop. The values within the chart show the corresponding Cv values.

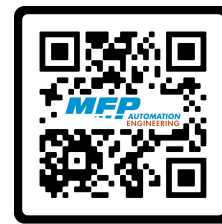
Cylinder Bore Size - inches (mm)

	1-1/4" (32 mm)	1-1/2" (40 mm)	2.00" (50 mm)	2-1/2" (63 mm)	3-1/4" (80 mm)	4.00" (100 mm)	5.00" (125 mm)	6.00" (150 mm)
1.96 (50)	0.03	0.04	0.06	0.10	0.17	0.26	0.41	0.59
3.93 (100)	0.05	0.08	0.13	0.21	0.35	0.53	0.82	1.19
5.90 (150)	0.08	0.12	0.20	0.31	0.52	0.79	1.24	1.78
7.87 (200)	0.10	0.16	0.26	0.41	0.69	1.05	1.64	2.37
9.84 (250)	0.13	0.20	0.33	0.52	0.87	1.32	2.06	2.97
11.81 (300)	0.16	0.25	0.40	0.62	1.05	1.58	2.47	3.56
13.77 (350)	0.18	0.29	0.46	0.72	1.22	1.85	2.88	4.15
15.74 (400)	0.21	0.33	0.53	0.82	1.39	2.11	3.30	4.75
17.71 (450)	0.24	0.37	0.59	0.93	1.57	2.37	3.71	5.34
19.68 (500)	0.26	0.41	0.66	1.03	1.74	2.64	4.12	5.94
	HB		HA		H1	H2	H3	



H Series ISO Valve

2 easy ways to order H Universal



1 Online Configuration

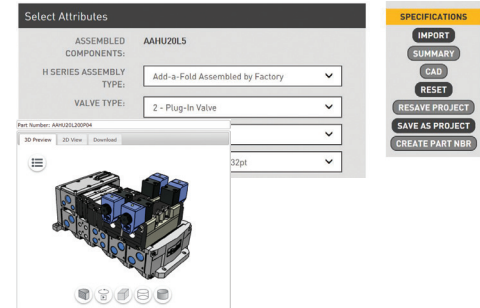
Navigate to the landing page

www.parker.com/pdn/HSeriesISO

Customize your manifold assembly

Create and save a unique assembled part number

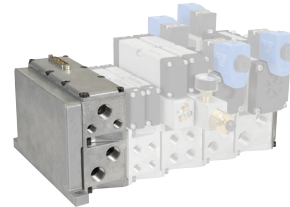
Generate a CAD model



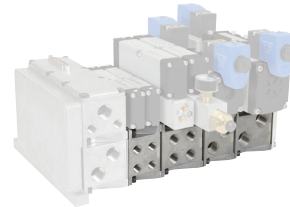
OR

2 Order Components

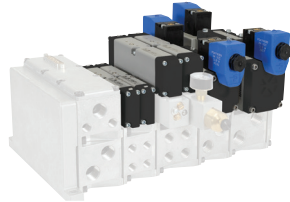
- A Select Endplate Kit**
Includes Left and Right Hand Endplate



- B Select Valve Manifold Segments**
Manifold (size HB, HA, H1 or H2)
Air Supply Module



- C Select Valve Stations**
Valves (size HB, HA, H1 or H2)
Blanking Plate



- D Select Sandwich Accessories**
Sandwich Regulators
Sandwich Flow Control
Pilot Exhaust



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