

## **H-Series 25mm Pneumatic Cylinders**

### 25mm Bore, Double Acting with Magnet



Part No. H25M005MD-M

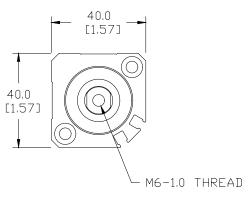
25mm B	25mm Bore H-Series Cylinders - Double Acting w/ Magnet							
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (lbs)	Price		
<u>H25M005MD-M</u>	5	42.5 [1.67]	37.5 [1.48]		0.4	\$55.00		
<u>H25M010MD-M</u>	10	47.5 [1.87]	42.5 [1.67]		0.4	\$66.00		
<u>H25M015MD-M</u>	15	52.5 [2.07]	47.5 [1.87]		0.4	\$68.00		
H25M020MD-M	20	57.5 [2.26]	52.5 [2.07]		0.4	\$69.00		
<u>H25M025MD-M</u>	25	62.5 [2.46]	57.5 [2.26]	M5x0.8	0.5	\$70.00		
H25M030MD-M	30	67.5 [2.66]	62.5 [2.46]	O.UXCIVI	0.5	\$71.00		
<u>H25M040MD-M</u>	40	77.5 [3.05]	72.5 [2.85]		0.6	\$75.00		
H25M050MD-M	50	87.5 [3.44]	82.5 [3.25]		0.7	\$77.00		
<u>H25M075MD-M</u>	75	112.5 [4.43]	107.5 [4.23]		0.9	\$78.00		
<u>H25M100MD-M</u>	100	137.5 [5.41]	132.5 [5.22]		1.1	\$99.00		

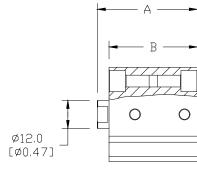
Mounting Accessories				
Rod Clevis	HRC-25M			
Rod Male Adapter	<u>HMA-25M</u>			
Female Rear Clevis	HFC-25M			

Note: For full details see Accessories at the end of the section.

### **Dimensions**

mm [inches]



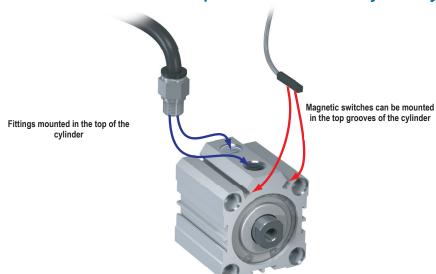


See our website www.AutomationDirect.com for complete Engineering drawings.



### **H-Series Pneumatic Cylinders**

### **NITRA Pneumatic Compact Extruded Body Air Cylinders**





Click on the thumbnail or go to https://www.automationdirect.com/VID-PN-0052 for a short video on pneumatic cylinder selection and purchasing.

The NITRA Pneumatics H-Series compact extruded body cylinders includes bore sizes from 12mm to 100mm and stroke lengths from 5mm to 100mm to meet a broad range of limited space applications. These high quality cylinders are constructed with hard anodized extruded aluminum bodies and end caps. Cylinder switch

mounting slots are built in to the bodies. All sizes include a magnet in the piston and a chrome plated steel piston rod. Interchangeable with other common brands, these cylinders are factory

lubricated for optimum performance and long, reliable life.

#### **Features**

- Ten bore sizes
- Eight stroke lengths
- · Interchangeable with other popular brands
- Work with 4mm square T-slot cylinder switches
- Nitrile / Buna-N O-rings







Click the icon or scan the QR code to be taken to <a href="https://www.automationdirect.com/pneumatics/cylinders/cylinder\_sizing">https://www.automationdirect.com/pneumatics/cylinder\_sizing</a> for additional information regarding cylincer sizing & force.

H-Series Cylinder Specifications										
Bore Size (mm)	12	16	20	25	32	40	50	63	80	100
Action		Double acting								
Fluid		Air (clean/dry)								
Temperature Range					-4 to 176°F (	(-20 to 80°C)				
Pressure Range				1	4 to 145 psi (	0.96 to 9.9 ba	ar)			
Proof Pressure		215psi (14.8 bar)								
Lubrication		Not required								
Cushion Type		Bumper - Polyurethane (ø12 - ø25); Buna-N (ø32 - ø100)								
Speed Range		30 to 500 mm/s								
Stroke Tolerance		+1.0 / -0 mm								
Port Size		M5x0.8 1/8-NPT 1/4-NPT 3/8-NPT						NPT		
Extend Force @ 87psi (lbs.)	15	27	42	66	108	169	264	420	678	1059
Retract Force @ 87psi (lbs.)	11	20	32	51	81	142	222	378	611	950
Sensor Switch Compatibility	CPS9H Series Switches									



# H-Series Pneumatic Cylinder Accessories

	H-Series Pneumatic Cylinder Accessories			
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
HRC-12M	NITRAcylinder rod clevis, plated steel, M5 x 0.8 thread. For use with 12 mm H-series cylinders. Male adapter and hex nut included.	1	0.1	\$14.00
HRC-16M	NITRAcylinder rod clevis, plated steel, M6 x 1.0 thread. For use with 16 mm H-series cylinders. Male adapter and hex nut included.	1	0.1	\$15.00
HRC-20M	NITRAcylinderrodclevis, plated steel, M8x1.25thread. For use with 20 mm H-series cylinders. Male adapter and hex nut included.	1	0.1	\$15.50
HRC-25M	NITRAcylinderrodclevis, plated steel, M10X1.25thread. For use with 25 mm H-series cylinders. Male adapter and hex nut included.	1	0.2	\$16.00
<u>HRC-32M</u>	NITRA cylinder rod clevis, cast iron, M14 x 1.5 thread. For use with 32 mm H-series cylinders. Male adapter and hex nut included.	1	0.3	\$19.50
<u>HRC-40M</u>	NITRA cylinder rod clevis, cast iron, M14 x 1.5 thread. For use with 40 mm H-series cylinders. Male adapter and hex nut included.	1	0.3	\$19.50
<u>HRC-50M</u>	NITRA cylinder rod clevis, cast iron, M18 x 1.5 thread. For use with 50 mm H-series cylinders. Male adapter and hex nut included.	1	0.6	\$25.00
HRC-63M	NITRAcylinder rod clevis, cast iron, M18 x 1.5 thread. For use with 63 mm H-series cylinders. Male adapter and hex nut included.	1	0.6	\$25.50
<u>HRC-80M</u>	NITRA cylinder rod clevis, cast iron, M22 X 1.5 thread. For use with 80 mm H-series cylinders. Male adapter and hex nut included.	1	1.5	\$32.50
<u>HRC-100M</u>	NITRAcylinderrod clevis, cast iron, M26 x 1.5 thread. For use with 100 mm H-series cylinders. Male adapter and hex nut included.	1	2.0	\$38.00
<u>HMA-12M</u>	NITRA cylinder male adapter, stainless steel, M5 x 0.8 thread. For use with 12 mm H-series cylinders. Hex nut included.	1	0.1	\$8.75
<u>HMA-16M</u>	NITRA cylinder male adapter, stainless steel, M6 x 1.0 thread. For use with 16 mm H-series cylinders. Hex nut included.	1	0.1	\$8.75
<u>HMA-20M</u>	NITRA cylinder male adapter, stainless steel, M8 x 1.25 thread. For use with 20 mm H-series cylinders. Hex nut included.	1	0.1	\$9.25
<u>HMA-25M</u>	NITRA cylinder male adapter, stainless steel, M10 X 1.25 thread. For use with 25 mm H-series cylinders. Hex nut included.	1	0.1	\$9.50
<u>HMA-32M</u>	NITRA cylinder male adapter, stainless steel, M14 x 1.5 thread. For use with 32 mm H-series cylinders. Hex nut included.	1	0.1	\$10.50
<u>HMA-40M</u>	NITRA cylinder male adapter, stainless steel, M14 x 1.5 thread. For use with 40 mm H-series cylinders. Hex nut included.	1	0.1	\$10.50
<u>HMA-50M</u>	NITRA cylinder male adapter, stainless steel, M18 x 1.5 thread. For use with 50 mm H-series cylinders. Hex nut included.	1	0.2	\$12.00
<u>HMA-63M</u>	NITRA cylinder male adapter, stainless steel, M18 x 1.5 thread. For use with 63 mm H-series cylinders. Hex nut included.	1	0.2	\$12.00
<u>HMA-80M</u>	NITRA cylinder male adapter, stainless steel, M22 x 1.5 thread. For use with 80 mm H-series cylinders. Hex nut included.	I	0.4	\$14.50
<u>HMA-100M</u>	NITRA cylinder male adapter, stainless steel, M26 x 1.5 thread. For use with 100 mm H-series cylinders. Hex nut included.  NITRA cylinder rear clevis bracket, aluminum. For use with 12 mm H-series cylinders.	1	0.5	\$17.00
<u>HFC-12M</u>	Mounting hardware and pivot pin included.	1	0.1	\$14.00
<u>HFC-16M</u>	NITRA cylinder rear clevis bracket, aluminum. For use with 16 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.1	\$14.50
<u>HFC-20M</u>	NITRA cylinder rear clevis bracket, aluminum. For use with 20 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.2	\$16.00
<u>HFC-25M</u>	NITRA cylinder rear clevis bracket, aluminum. For use with 25 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.2	\$19.00
HFC-32M	NITRA cylinder rear clevis bracket, cast iron. For use with 32 mm H-series cylinders.  Mounting hardware and pivot pin included.	1	0.4	\$22.50
<u>HFC-40M</u>	NITRA cylinder rear clevis bracket, cast iron. For use with 40 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.4	\$22.50
<u>HFC-50M</u>	NITRA cylinder rear clevis bracket, cast iron. For use with 50 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.8	\$31.00
<u>HFC-63M</u>	NITRA cylinder rear clevis bracket, cast iron. For use with 63 mm H-series cylinders. Mounting hardware and pivot pin included.	1	1.3	\$31.00
<u>HFC-80M</u>	NITRA cylinder rear clevis bracket, cast iron. For use with 80 mm H-series cylinders.  Mounting hardware and pivot pin included.	1	2.3	\$41.50
HFC-100M	NITRA cylinder rear clevis bracket, cast iron. For use with 100 mm H-series cylinders.  Mounting hardware and pivot pin included.	1	3.8	\$46.50



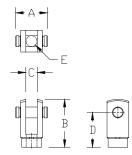
# H-Series Pneumatic Cylinder Accessories

#### **Rod Clevis**





Dimensions
mm [inches]



Part no. HRC-20M

Part no. HRC-32M

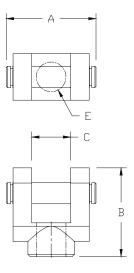


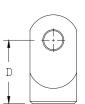
HRC-12M - HRC-25M



Note: Comes with Pivot Pin installed. Includes Rod Male Adapter (see below)

R	Rod Clevis Dimension Table						
Part #	Α	В	С	D	E		
<u>HRC-12M</u>	14.6 [0.57]	22.0 [0.87]	5.3 [0.21]	16.0 [0.63]	M5x0.8		
HRC-16M	16.8 [0.66]	28.0 [1.10]	6.6 [0.26]	21.0 [0.83]	M6x1.0		
HRC-20M	21.0 [0.83]	34.0 [1.34]	8.3 [0.33]	25.0 [0.98]	M8x1.25		
HRC-25M	26.4 [1.04]	41.0 [1.61]	10.3 [0.41]	30.0 [1.18]	M10x1.5		
<u>HRC-32M</u>	42.4 [1.67]	42.0 [1.65]	18.4 [0.72]	30.0 [1.18]	M14x1.5		
HRC-40M	42.4 [1.67]	42.0 [1.65]	18.4 [0.72]	30.0 [1.18]	M14x1.5		
HRC-50M	50.4 [1.98]	56.0 [2.20]	22.4 [0.88]	40.0 [1.57]	M18x1.5		
HRC-63M	50.4 [1.98]	56.0 [2.20]	22.4 [0.88]	40.0 [1.57]	M18x1.5		
HRC-80M	63.6 [2.50]	71.0 [2.80]	28.4 [1.12]	50.0 [1.97]	M22x1.5		
HRC-100M	72.6 [2.86]	79.0 [3.11]	32.4 [1.28]	55.0 [2.17]	M26x1.5		





HRC-32M - HRC-100M

### **Rod Male Adapter**

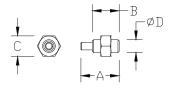


Part no. HMA-32M

Rod Ma	le Adap	ter Dime	ension Ta	able
Part #	А	В	С	D
<u>HMA-12M</u>	15.0 [0.59]	10.5 [0.41]	8.0 [0.31]	M5x0.8
<u>HMA-16M</u>	18.0 [0.71]	12.0 [0.47]	10.0 [0.39]	M6x1.0
<u>HMA-20M</u>	19.5 [0.77]	14.0 [0.55]	12.0 [0.47]	M8x1.25
<u>HMA-25M</u>	26.5 [1.04]	17.5 [0.69]	17.0 [0.67]	M10x1.25
<u>HMA-32M</u>	31.5 [1.24]	21.5 [0.85]	19.0 [0.75]	M14x1.5
<u>HMA-40M</u>	31.5 [1.24]	21.5 [0.85]	19.0 [0.75]	M14x1.5
<u>HMA-50M</u>	36.5 [1.44]	25.5 [1.00]	27.0 [1.06]	M18x1.5
<u>HMA-63M</u>	36.5 [1.44]	25.5 [1.00]	27.0 [1.06]	M18x1.5
<u>HMA-80M</u>	49.5 [1.95]	33.5 [1.32]	32.0 [1.26]	M22x1.5
<u>HMA-100M</u>	51.5 [2.03]	31.5 [1.24]	36.0 [1.42]	M26x1.5

### **Dimensions**

mm [inches]



HMA-12M - HMA-100M

See our website www.AutomationDirect.com for complete Engineering drawings.



# H-Series Pneumatic Cylinder Accessories

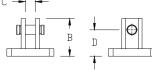
### **Female Rear Clevis**





Dimensions mm [inches]





HFC-12M - HFC-25M

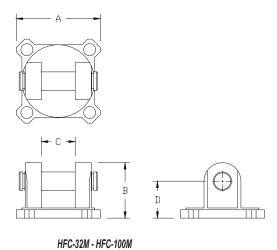
Part no. HFC-20M

Part no. HFC-32M



omes with Pivot Pin installed. Mountlware Included.

Female F	Rear Cle	vis Dime	ension Ta	able
Part #	А	В	С	D
<u>HFC-12M</u>	25.0 [0.98]	20.0 [0.79]	5.3 [0.21]	14.0 [0.55]
<u>HFC-16M</u>	29.0 [1.14]	21.0 [0.83]	6.8 [0.27]	15.0 [0.59]
<u>HFC-20M</u>	36.0 [1.42]	27.0 [1.06]	8.3 [0.33]	18.0 [0.71]
<u>HFC-25M</u>	40.0 [1.57]	30.0 [1.18]	10.3 [0.41]	20.0 [0.79]
<u>HFC-32M</u>	45.5 [1.79]	30.0 [1.18]	18.3 [0.72]	20.0 [0.79]
<u>HFC-40M</u>	53.5 [2.11]	32.0 [1.26]	18.3 [0.72]	22.0 [0.87]
<u>HFC-50M</u>	64.5 [2.54]	42.0 [1.65]	22.3 [0.88]	28.0 [1.10]
<u>HFC-63M</u>	77.5 [3.05]	44.0 [1.73]	22.3 [0.88]	30.0 [1.18]
<u>HFC-80M</u>	98.5 [3.88]	56.0 [2.20]	28.3 [1.11]	38.0 [1.50]
<u>HFC-100M</u>	117.5 [4.63]	67.0 [2.64]	32.3 [1.27]	45.0 [1.77]





## **CPS Series Cylinder Position Switches**

	Position Switch Cross Reference Chart						
NITRA Switch Type	Cylinder Brand (may fit some of these cylinders)	Photo Example	Groove Illustration				
CPS CPSF	NITRA A-Series NITRA D-Series NITRA F-Series		Round Cylinder Adapter & Band (CPSB or CPSS Series)				
CPS9C	DE-STA-CO Robohand SMC Compact Air Bimba Fabco		2.53 Min. +/- 0.1 R 2.13 +/- 0.05				
CPS9D	NITRA L-Series Fabco Numatics Rotomation		1.52				
CPS9E	NITRA L-Series Fabco Numatics Rotomation		1.52 4.82				
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		4.4 5.1 6.5 6.5 6.5 6.5				
СРЅ9Н	NITRA E-Series NITRA H-Series		3.05 TRO2				
СРЅЭМ	Norgren		5.1 +/-0.1 R 3.25				
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation		4.4 T				