

MINIATURE MANIFOLDS

NFPA/ ISO STANDARDS - PARALLEL CIRCUIT

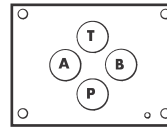


NFPA SIZE: D03

SPECIFICATIONS



MDO#M-4S-6AB-6PT



Mounting Surface:
General Pattern

Model Number MD03M-*S-6AB-6PT

Mounting Surface NFPA T3.5.1.MR1-F1984-03
ISO ISO 4401-03

Nominal Flow Rates 5 gpm (19 lpm)

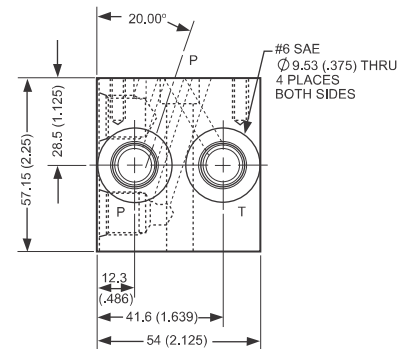
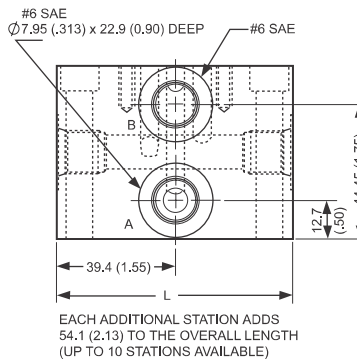
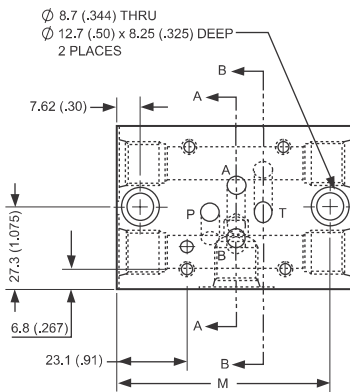
Material Nickel Plated Steel

Maximum Pressure 3000 psi (210 bar)

Recommended Fluids Petroleum Based Fluids- ISO VG32-68, Phosphate Ester, Most Vegetable Oils, Water Based Fluids to 40% Water

Dimensional Data

Units: mm/ (Inch)



EACH ADDITIONAL STATION ADDS 54.1 (2.13) TO THE OVERALL LENGTH (UP TO 10 STATIONS AVAILABLE)

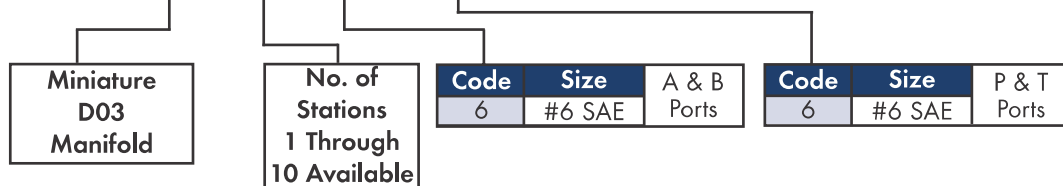
Model	No. of Stations	L	M	A & B Ports	P & T Ports
MD03M-1S-6AB-6PT	1	78.0 (3.07)	70.4 (2.77)		
MD03M-2S-6AB-6PT	2	132.1 (5.20)	124.5 (4.90)		
MD03M-3S-6AB-6PT	3	186.2 (7.33)	178.6 (7.03)		
MD03M-4S-6AB-6PT	4	240.3 (9.46)	232.7 (9.16)		
MD03M-5S-6AB-6PT	5	294.4 (11.59)	286.8 (11.29)	#6 SAE, (9/16-18)	#6 SAE, (9/16-18)
MD03M-6S-6AB-6PT	6	348.5 (13.72)	340.9 (13.42)		
MD03M-7S-6AB-6PT	7	402.6 (15.85)	395.0 (15.55)		
MD03M-8S-6AB-6PT	8	456.7 (17.98)	449.1 (17.68)		
MD03M-9S-6AB-6PT	9	510.8 (20.11)	503.2 (19.81)		
MD03M-10S-6AB-6PT	10	564.9 (22.24)	557.3 (21.94)		

ORDERING INFORMATION



MINIATURE MANIFOLD PART NUMBERING SYSTEM:

MD03M - 1 S - 6AB - 6PT



MANIFOLDS

INDUSTRY STANDARD - PARALLEL CIRCUIT



NFPA SIZE: DO3 & DO5

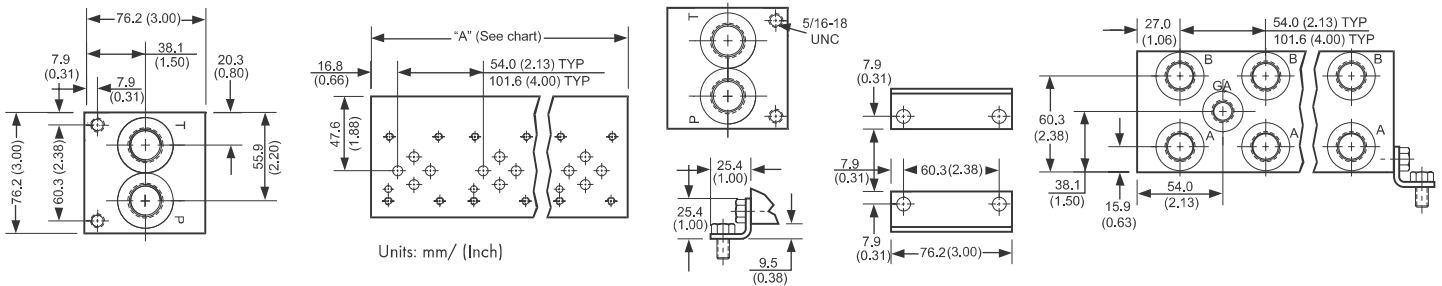
FEATURES



Industry Standard DO3 & DO5
1 & 3 Station Manifolds

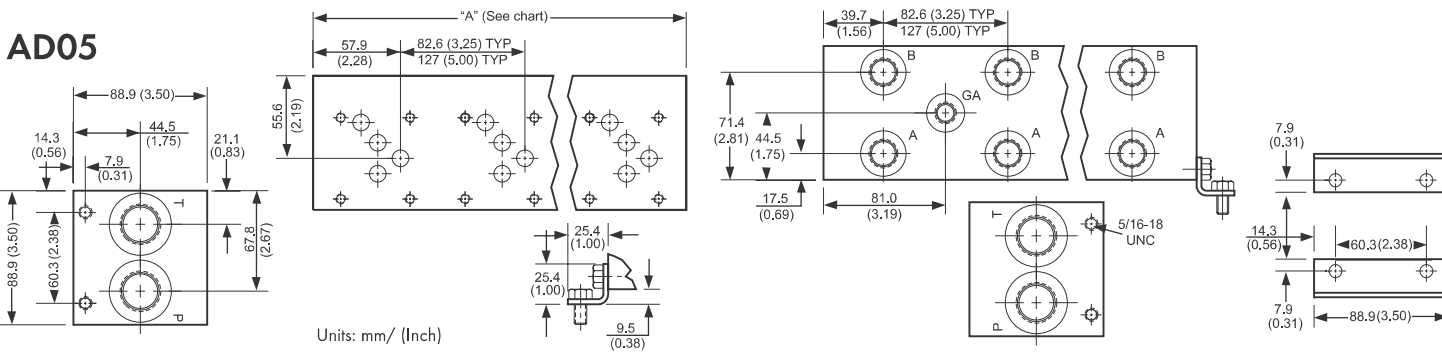
AD03

Dimensional Data



No. of Stations	01	02	03	04	05	06	07	08
"A" Length	54 (2.13)	108 (4.25)	162.1 (6.38)	215.9 (8.50)	270 (10.63)	323.9 (12.75)	378 (14.88)	431.8 (17.0)
Approx. Weight kg (lb)	1 (3)	2 (4)	3 (6)	4 (8)	4 (9)	5 (11)	5 (12)	6 (14)

AD05



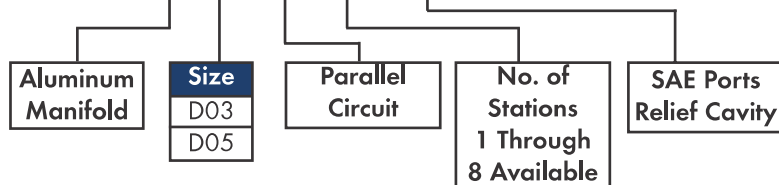
No. of Stations	01	02	03	04	05	06	07	08
"A" Length	82.6 (3.25)	165.1 (6.50)	247.7 (9.75)	330.2 (13.00)	412.8 (16.25)	495.3 (19.50)	577.9 (22.75)	660.4 (26.0)
Approx. Weight kg (lb)	2 (4)	4 (8)	5 (11)	7 (14)	8 (17)	10 (21)	11 (24)	12 (27)

ORDERING INFORMATION



MANIFOLD PART NUMBERING SYSTEM:

A D05 - P - 03 - 2SC



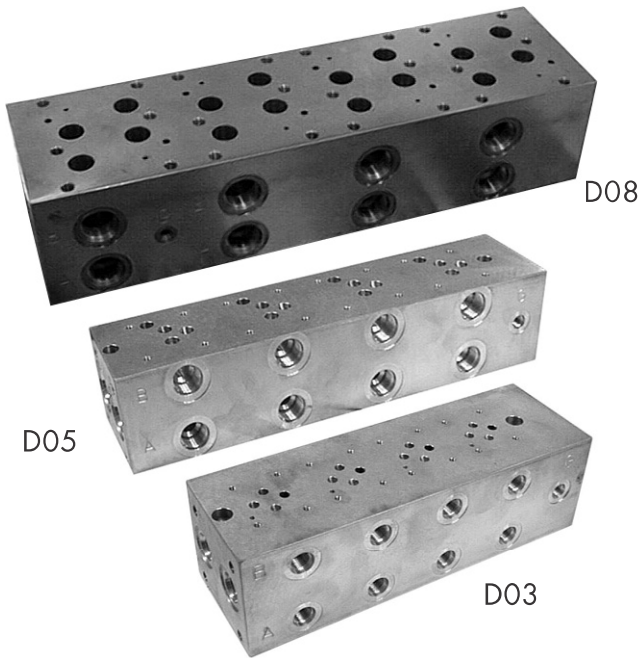
Relief Cavity Not Available for 1 Station. See Hyvaair Standard 1 Station with Relief.

MANIFOLDS

HYVAIR STANDARD - PARALLEL CIRCUIT



NFPA SIZE: D03, D05 & D08



NFA 4 Station Manifolds

FEATURES

- ✓ **Intelligent Design:** Manifolds share same end mounting dimensions allowing manifolds to be joined together.
- ✓ **Space Savings:** Manifold mounted circuits greatly reduce space requirements from in line mounted valves.
- ✓ **Multiple Port Sizes:** Eliminates adapter fittings.



NFA 1 Station Manifolds with Relief

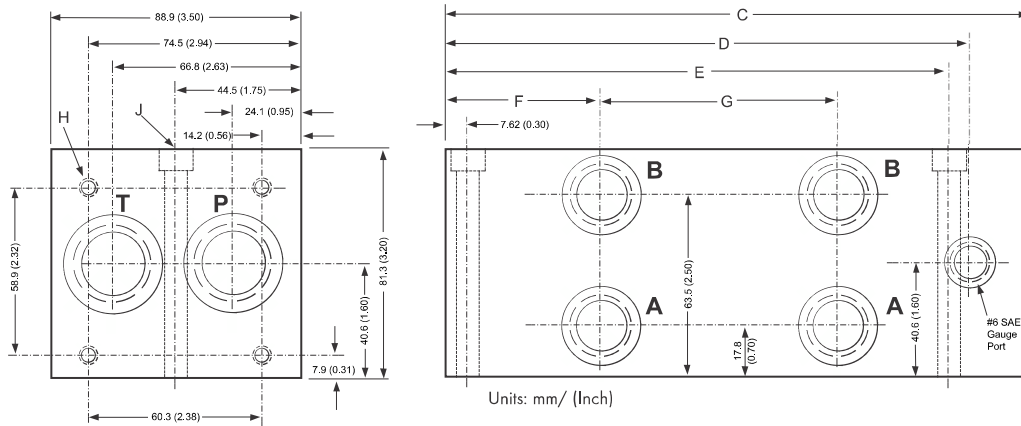
Specifications

Size	D03	D05		D08
Mounting Surfaces: General Patterns				
Model	Std. A&B Ports MD03-*S-6AB-8PT	MD05-*S-8AB-12PT	MD05-*S-10AB-12PT*	MD08-*S-16AB-20PT-S
Number	Big A&B Ports MD03-*S-8AB-10PT	MD05-*S-10AB-12PT	MD05H-*S-16AB-20PT	N/A
Mounting Surface	NFPA T3.5.1.MR1-F1984-03	T3.5.1.MR1-F1984-D05	T3.5.1.MR1-D05	T3.5.1.MR1-D08
	ISO ISO 4401-03	ISO 4401-05	ISO 4401-05	ISO 4401-08
Nominal Flow Rates	5 gpm (19 lpm)	12 gpm (45 lpm)	25 gpm (95 lpm)	50 gpm (190 lpm)
Material	Aluminum or Steel		Aluminum MD05 Steel MD05H	Steel
Maximum Pressure	Aluminum 3000 psi (210 bar) Steel 5000 psi (350 bar)			
Recommended Fluids	Petroleum Based Fluids- ISO VG32-68, Phosphate Ester, Most Vegetable Oils, Water Based Fluids to 40% Water			

*Accomplished by using standard D05 manifold with modification and using high flow tank circuit block for B to T port.

MD03 & MD05 Manifold

Dimensional Data



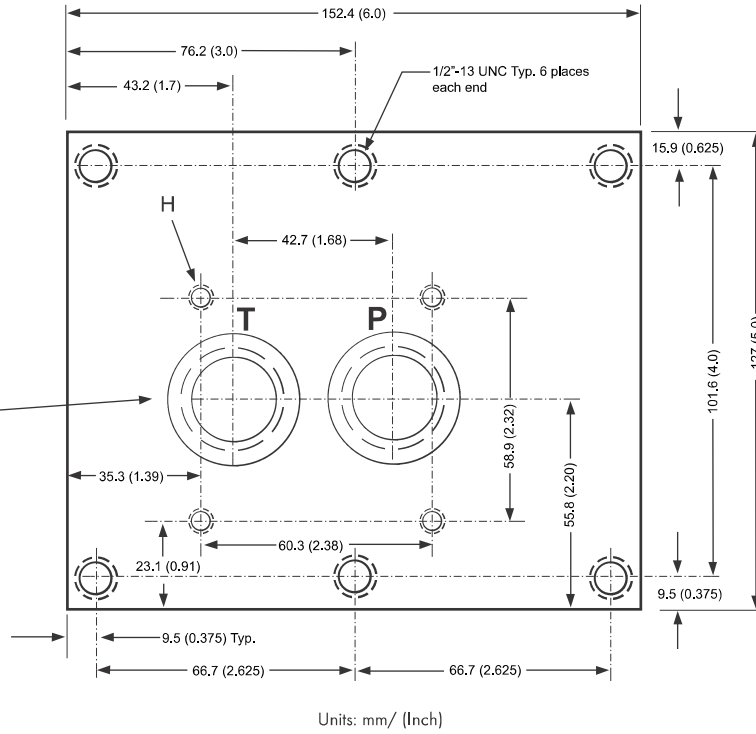
Model	No. of Stations	A & B Ports	P & T Ports	C	D	E	F	G	H	J
MD03-1S-6AB-8PT	1			105 (4.14)	85 (3.34)	64 (2.50)				
MD03-2S-6AB-8PT	2			160 (6.27)	139 (5.47)	118 (4.63)				
MD03-3S-6AB-8PT	3			213 (8.40)	193 (7.60)	172 (6.76)				
MD03-4S-6AB-8PT	4	#6 SAE (9/16-18)	#8SAE (3/4-16)	267 (10.53)	248 (9.73)	226 (8.89)	38.6 (1.52)	54.1 (2.13)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD03-5S-6AB-8PT	5			322 (12.66)	301 (11.86)	280 (11.02)				
MD03-6S-6AB-8PT	6			376 (14.79)	356 (14.00)	334 (13.15)				
MD03-7S-6AB-8PT	7			430 (16.92)	409 (16.12)	388 (15.28)				
MD03-8S-6AB-8PT	8			484 (19.05)	464 (18.25)	442 (17.41)				
MD03-1S-8AB-10PT-C	1			112 (4.41)	85 (3.34)	72 (2.83)				
MD03-1S-8AB-10PT	1			105 (4.14)	85 (3.34)	64 (2.50)				
MD03-2S-8AB-10PT	2			160 (6.27)	139 (5.47)	118 (4.63)				
MD03-3S-8AB-10PT	3			213 (8.40)	193 (7.60)	172 (6.76)				
MD03-4S-8AB-10PT	4	#8SAE (3/4-16)	#10 SAE (7/8-14)	267 (10.53)	248 (9.73)	226 (8.89)	38.6 (1.52)	54.1 (2.13)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD03-5S-8AB-10PT	5			322 (12.66)	301 (11.86)	280 (11.02)				
MD03-6S-8AB-10PT	6			376 (14.79)	356 (14.00)	334 (13.15)				
MD03-7S-8AB-10PT	7			430 (16.92)	409 (16.12)	388 (15.28)				
MD03-8S-8AB-10PT	8			484 (19.05)	464 (18.25)	442 (17.41)				
MD03-1S-8AB-12PT-S	1			105 (4.14)	85 (3.34)	64 (2.50)				
MD03-2S-8AB-12PT-S	2			160 (6.27)	139 (5.47)	118 (4.63)				
MD03-3S-8AB-12PT-S	3			213 (8.40)	193 (7.60)	172 (6.76)				
MD03-4S-8AB-12PT-S	4	#8SAE (3/4-16)	#12 SAE (1-1/16-12)	267 (10.53)	248 (9.73)	226 (8.89)	38.6 (1.52)	54.1 (2.13)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD03-5S-8AB-12PT-S	5			322 (12.66)	301 (11.86)	280 (11.02)				
MD03-6S-8AB-12PT-S	6			376 (14.79)	356 (14.00)	334 (13.15)				
MD03-7S-8AB-12PT-S	7			430 (16.92)	409 (16.12)	388 (15.28)				
MD03-8S-8AB-12PT-S	8			484 (19.05)	464 (18.25)	442 (17.41)				
MD05-1S-8AB-12PT	1			126 (4.95)	103 (4.05)	98 (3.85)				
MD05-2S-8AB-12PT	2			208 (8.20)	185 (7.30)	180 (7.10)				
MD05-3S-8AB-12PT	3			291 (11.45)	268 (10.55)	263 (10.35)				
MD05-4S-8AB-12PT	4	#8SAE (3/4-16)	#12 SAE (1-1/16-12)	373 (14.70)	351 (13.80)	345 (13.60)	54.6 (2.15)	82.6 (3.25)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD05-5S-8AB-12PT	5			456 (17.95)	433 (17.05)	428 (16.85)				
MD05-6S-8AB-12PT	6			538 (21.10)	516 (20.30)	511 (20.10)				
MD05-7S-8AB-12PT	7			621 (24.45)	598 (23.55)	593 (23.35)				
MD05-8S-8AB-12PT	8			704 (27.70)	681 (26.80)	676 (26.60)				
MD05-1S-10AB-12PT-C	1			150 (5.90)	103 (4.05)	91 (3.58)				
MD05-1S-10AB-12PT	1			126 (4.95)	103 (4.05)	98 (3.85)				
MD05-2S-10AB-12PT	2			208 (8.20)	185 (7.30)	180 (7.10)				
MD05-3S-10AB-12PT	3			291 (11.45)	268 (10.55)	263 (10.35)				
MD05-4S-10AB-12PT	4	#10 SAE (7/8-14)	#12 SAE (1-1/16-12)	373 (14.70)	351 (13.80)	345 (13.60)	54.6 (2.15)	82.6 (3.25)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD05-5S-10AB-12PT	5			456 (17.95)	433 (17.05)	428 (16.85)				
MD05-6S-10AB-12PT	6			538 (21.10)	516 (20.30)	511 (20.10)				
MD05-7S-10AB-12PT	7			621 (24.45)	598 (23.55)	593 (23.35)				
MD05-8S-10AB-12PT	8			704 (27.70)	681 (26.80)	676 (26.60)				
MD05-1S-10AB-12PT-S	1			126 (4.95)	103 (4.05)	98 (3.85)				
MD05-2S-10AB-12PT-S	2			208 (8.20)	185 (7.30)	180 (7.10)				
MD05-3S-10AB-12PT-S	3	#10 SAE (7/8-14)	#12 SAE (1-1/16-12)	291 (11.45)	268 (10.55)	263 (10.35)	54.6 (2.15)	82.6 (3.25)	5/16-18 UNC	Accepts 5/16- 18 SHCS X 3.25" Min. Length
MD05-4S-10AB-12PT-S	4			373 (14.70)	351 (13.80)	345 (13.60)				
MD05-5S-10AB-12PT-S	5			456 (17.95)	433 (17.05)	428 (16.85)				
MD05-6S-10AB-12PT-S	6			538 (21.10)	516 (20.30)	511 (20.10)				

Dimensional Data

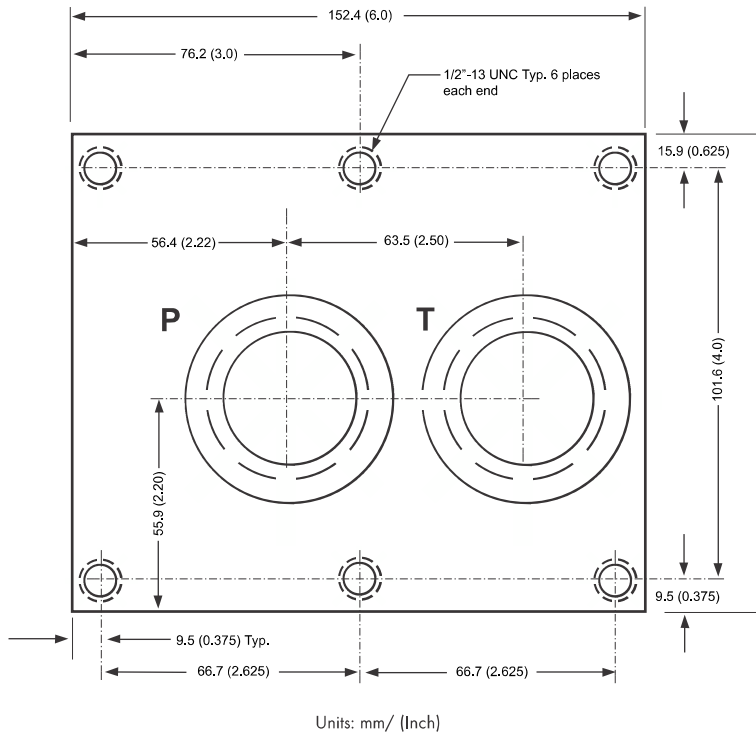
MD08 Manifold
Left End View
(#12 SAE P & T Ports)

D03 or D05 Manifold
Interface End.

See Manifold
Accessories (page):
D03/D05 Adder Block



MD08 Manifold
Right End View
(#20 SAE P & T Ports)



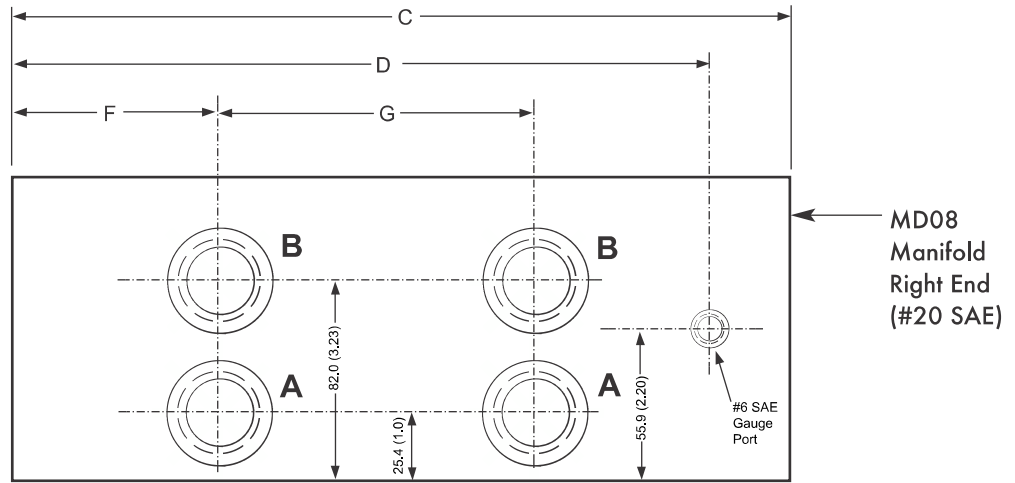
MANIFOLDS

HYVAIR STANDARD - PARALLEL CIRCUIT



NFPA SIZE: D08

Note: Use the D08 Dimensions for D05H manifolds where #16 SAE ports are required. (Only the valve mounting pattern changes)



Units: mm/ (Inch)

Model	No. of Stations	C	D	A & B Ports	P & T Ports	F	G	H
MD08-1S-16AB-20PT-S	1	160.0 (6.3)	115.6 (4.55)	#16 SAE, (1-5/8"-12)	Inlet Side #20 SAE, (1-5/8"-12) Outlet Side #12 SAE (1-1/16"-12)	55.9 (2.2)	133.4 (5.25)	5/16-18 UNC
MD08-2S-16AB-20PT-S	2	293.4 (11.55)	249 (9.80)					
MD08-3S-16AB-20PT-S	3	426.7 (16.8)	382.3 (15.05)					
MD08-4S-16AB-20PT-S	4	560.1 (22.05)	515.6 (20.3)					

ORDERING INFORMATION



MANIFOLD PART NUMBERING SYSTEM:

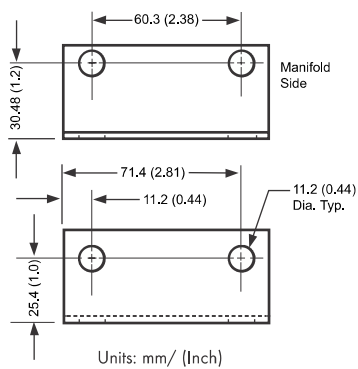
M D05 - 1 S - 10AB - 12PT - C

Manifold	Size	No. of Stations 1 Through 8 Available (4 max. for D08)	Code	Size	A & B Ports	Code	Size	P & T Ports	Code	Description
	D03		6	#6 SAE	A & B Ports	8	#8 SAE	P & T Ports	omit	Aluminum
	D05		8	#8 SAE		10	#10 SAE		S	Steel
	D05H		10	#10 SAE		12	#12 SAE		C	With Relief Cavity (D03/ D05 1 Station Only)
	D08		12	#12 SAE		20	#20 SAE			
			16	#16 SAE						

Dimensional Data

Foot Bracket Mounting Kit Model# FD0305 (for both D03 & D05 manifolds)

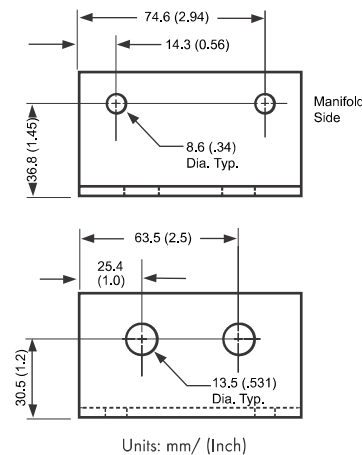
Material: 1-1/2" x 0.12" Angle x 3.25" Long



Qty. (2) brackets per kit.
Kit also contains (8) 5/16-18 UNC x 0.75" Long
Hex Mounting Bolts with Lockwashers

D03/D05- Heavy Style Model: FD0305-HD

Material: 2" x 0.25" Angle x 3.5" Long
YA58842



Cover Plates and Tapping Blocks - Aluminum

Size D03 - all 2" x 2" unless noted		Description/ (thickness)
Cover Plate (2" x 1.69")	D03-CP	Thin Style (0.63")
Cover Plate	D03-TCP	Thick Style (1.57")
Tapping Block	D03-TB	No Holes (1.57")
A&B Port Tapping Block	D03-TB-AB-6FS	#6 SAE Ports (1.57")
P&T Port Tapping Block	D03-TB-PT-6FS	#6 SAE Ports (1.57")
A,B,P,&T Port Tapping Block	D03-TB-ABPT-6FS	#6 SAE Ports (1.57")
Size D05 - all 3" x 3" unless noted		Description/ (thickness)
Cover Plate (2.5" x 2.75")	D05-CP	Thin Style (0.75")
Cover Plate	D05-TCP	Thick Style (2.17")
Tapping Block	D05-TB	No Holes (2.17")
A&B Port Tapping Block	D05-TB-AB-8FS	#8 SAE Ports (2.17")
P&T Port Tapping Block	D05-TB-PT-8FS	#8 SAE Ports (2.17")
A,B,P,&T Port Tapping Block	D05-TB-ABPT-8FS	#8 SAE Ports (2.17")

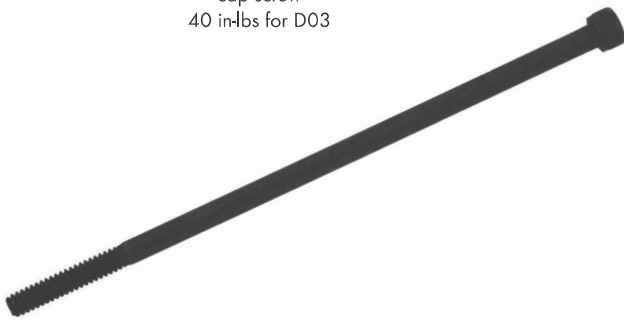
MANIFOLD ACCESSORIES

BOLT KITS

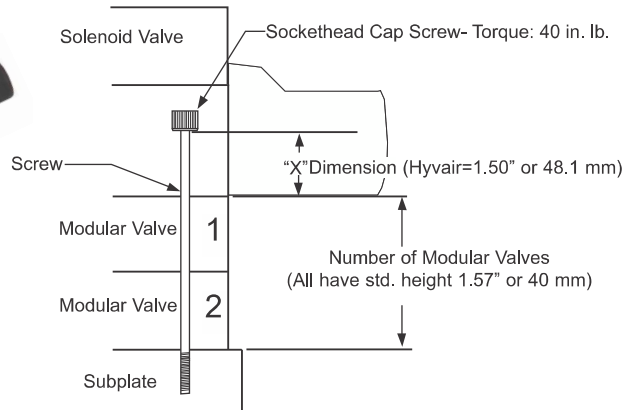


NFPA SIZE: D03, D05 & D08

Torque sockethead cap screw
40 in-lbs for D03



D03 Size



Solenoid Valve	"X" Dimension
Hyvair	1.50"
Vickers/40	1.56"
Parker	1.50"
Double A (Vickers)	1.56"
Continental	0.625"
Racine	0.87"
Rexroth	1.26"



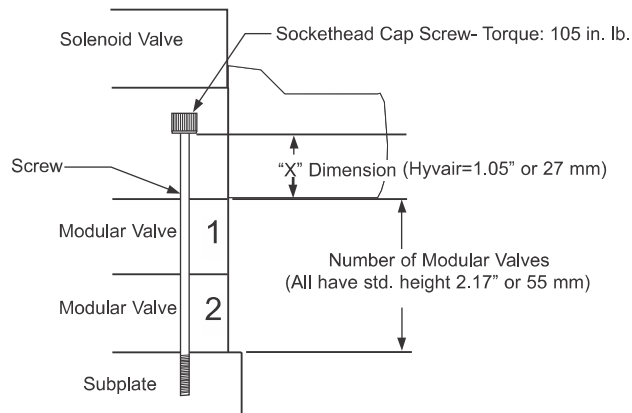
The "X" Dimension was accurate as of the publication of this catalog. Verify in the applicable manufacturers literature.

Bolt Kit Ordering Information:

Part Number	Valving
BD03-H0	Solenoid valve- no modular valves use qty. (4) 10-24 SHCS X 1.75" (no lockwashers)
BD03-H1	Solenoid valve w/1 modular valve use qty. (4) 10-24 SHCS X 3.50" (with lockwashers)
BD03-H2	Solenoid valve w/2 modular valves (5.0" Long)
BD03-H3	Solenoid valve w/3 modular valves (6.6" Long)
BD03-H4	Solenoid valve w/4 modular valves (8.2" Long)
BD03-H5	Solenoid valve w/5 modular valves (9.7" Long)

D05 Size

Torque sockethead cap screw
105 in-lbs for D05



Solenoid Valve	"X" Dimension
Hyvair	1.05"
Vickers/40	1.05"
Parker	1.91"
Double A (Vickers)	1.05"
Continental	1.31"
Racine	1.38"
Rexroth	1.18"



The "X" Dimension was accurate as of the publication of this catalog. Verify in the applicable manufacturers literature.

Bolt Kit Ordering Information:

Part Number	Valving
BD05-H0	Solenoid valve- no modular valves use qty. (4) 1/4-20 SHCS X 1.5" (with lockwashers)
BD05-H1	Solenoid valve w/1 modular valve (3.6" Long)
BD05-H2	Solenoid valve w/2 modular valves (5.8" Long)
BD05-H3	Solenoid valve w/3 modular valves (8.0" Long)
BD05-H4	Solenoid valve w/4 modular valves (10.2" Long)
BD05-H5	Solenoid valve w/5 modular valves (12.4" Long)

Torque sockethead cap screw
550 in-lbs for D08

D08 Size

Use only sockethead cap screws (1/2-13 thread) x effective bolt length- Qty (6) required/ valve.
We recommend 0.75" projection minimum into subplate and torque of 500-600 in-lbs. Hyvair "X" dimension= 1.25" (32mm).
Add 3.35" (85mm) for each additional Hyvair D08 modular valve.