



VAL-SIF-139

MicroKing Valve to "XM" Valve
Cross-Reference

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MicroKing Cross-Reference Guide to "XM" Valve Series



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INLINE VALVES

This cross reference is a guide only. Replacement Valve Information should be reviewed by customer prior to installation.

VALVE DESCRIPTIONS

Mounting

All suggested replacement valves are 1/8" NPT ported valves.

XM Inline Valves mounting holes do not match MicroKing mounting holes.

XM Inline Valves will not mount on MicroKing IEM Manifolds without a transitions kit.

Electrical

XM DIN valves do not have the same Electrical DIN Pattern as MicroKing Valves. XM DIN pin spacing is 9.4mm. MicroKing pin space is 8mm. Replacement electrical connectors will have to be provided for electrical interchange.

Operating Pressure

4-Way XM valves can be used in Positive or Vacuum Operating Pressure applications. 3-Way XM Valves **must be designated** for Positive or Vacuum Operation Pressure when crossing MicroKing Valves to XM Valves. All Cross References to XM Valves for 3-Way MicroKing Valves listed are for Positive Operating Pressure Systems.

MicroKing Valve	MicroKing Description	XM Valve	Main Differences Besides Dimensions
MKE0NB542A	4-Way, Flush Non-Locking Override, DIN, 24/60 HZ, 22/50 HZ	XM40NB542A + PESC10	Different DIN Connector
MKE0NB545A	4-Way, Flush Non-Locking Override, DIN, 12VDC	XM40NB545A + PESC10	Different DIN Connector
MKE0NB547A	4-Way, Flush Non-Locking Override, DIN, 12VDC, Mobile Voltage	XM40NB545A + PESC10	Different DIN Connector
MKE0NB548A	4-Way, Flush Non-Locking Override, DIN, 24VDC, Mobile Voltage	XM40NB549A + PESC10	Different DIN Connector
MKE0NB549A	4-Way, Flush Non-Locking Override, DIN, 24VDC	XM40NB549A + PESC10	Different DIN Connector
MKE0NB549F0A	4-Way, Flush Non-Locking Override, DIN, 24VDC, Flow Controls	XM40NB549F0A + PESC10	Different DIN Connector
MKE0NB55302A	4-Way, Flush Non-Locking Override, DIN, 120/60 HZ, (110)/50 HZ	XM40NB55302A + PESC10	Different DIN Connector MicroKing coils rotated 180°
MKE0NB553A	4-Way, Flush Non-Locking Override, DIN, 120/60 HZ, (110)/50 HZ	XM40NB553A + PESC10	Different DIN Connector
MKE0NB553F0A	4-Way, Flush Non-Locking Override, DIN, 120/60 HZ, (110)/50 HZ, Flow Controls	XM40NB553F0A + PESC10	Different DIN Connector
MKE0NB557A	4-Way, Flush Non-Locking Override, DIN, 240/60 HZ, (220)/50 HZ	XM40NB557A + PESC10	Different DIN Connector
MKE0NBG42A	4-Way, Flush Non-Locking Override, Grommet, 24/60 HZ, 22/50 HZ	XM40NBG42A	
MKE0NBG45A	4-Way, Flush Non-Locking Override, Grommet, 12VDC	XM40NBG45A	
MKE0NBG47A	4-Way, Flush Non-Locking Override, Grommet, 12VDC, Mobile Voltage	XM40NBG45A	
MKE0NBG4902A	4-Way, Flush Non-Locking Override, Grommet, 24VDC	XM40NBG4902A	MicroKing coils rotated 180°
MKE0NBG49A	4-Way, Flush Non-Locking Override, Grommet, 24VDC	XM40NBG49A	
MKE0NBG53A	4-Way, Flush Non-Locking Override, Grommet, 120/60 HZ, (110)/50 HZ	XM40NBG53A	
MKE0NBG57A	4-Way, Flush Non-Locking Override, Grommet, 240/60 HZ, (220)/50 HZ	XM40NBG57A	
MKE0NBH45A	4-Way, Flush Non-Locking Override, Conduit, 12VDC	XM30NBG45A	
MKE0NBH49A	4-Way, Flush Non-Locking Override, Conduit, 24VDC	XM40NBH49A	
MKE0NBH53A	4-Way, Flush Non-Locking Override, Conduit, 120/60 HZ, (110)/50 HZ	XM40NBH53A	
MKE3NBG49A	4-Way, Flush Non-Locking Override, Grommet, 24VDC	XM40NBG49A	Different Port Connection
MKEFNBG45A	4-Way, Flush Non-Locking Override, Grommet, 12VDC	XM40NBG45A	Different Port Connection
MKH0NA547A	3-Way, No Override, DIN, 12VDC, Mobile Voltage	XM30NA549A + PESC10	Different DIN Connector
MKH0NA548A	3-Way, No Override, DIN, 24VDC, Mobile Voltage	XM30NA5 49A + PESC10	Different DIN Connector
MKH0NAG45A	3-Way, No Override, Grommet, 12VDC	XM30NAG45A	
MKH0NAG47A	3-Way, No Override, Grommet, 12VDC, Mobile Voltage	XM30NAG45A	
MKH0NAG48A	3-Way, No Override, Grommet, 24VDC, Mobile Voltage	XM30NAG49A	
MKH0NAH49V2A	3-Way, No Override, Conduit, 24VDC, Viton	XM30NAH49V2A	
MKH0NB54202A	3-Way, Flush Non-Locking Override, DIN, 24/60 HZ, 22/50 HZ	XM30NB542A + PESC10	Different DIN Connector MicroKing coils rotated 180°
MKH0NB542A	3-Way, Flush Non-Locking Override, DIN, 24/60 HZ, 22/50 HZ	XM30NB542A + PESC10	Different DIN Connector
MKH0NB54502A	3-Way, Flush Non-Locking Override, DIN, 12VDC	XM30NB545A + PESC10	Different DIN Connector MicroKing coils rotated 180°
MKH0NB545A	3-Way, Flush Non-Locking Override, DIN, 12VDC	XM30NB545A + PESC10	Different DIN Connector
MKH0NB547A	3-Way, Flush Non-Locking Override, DIN, 12VDC, Mobile Voltage	XM30NB545A + PESC10	Different DIN Connector
MKH0NB54802A	3-Way, Flush Non-Locking Override, DIN, 24VDC, Mobile Voltage	XM30NB549A + PESC10	Different DIN Connector MicroKing coils rotated 180°
MKH0NB548A	3-Way, Flush Non-Locking Override, DIN, 24VDC, Mobile Voltage	XM30NB549A + PESC10	Different DIN Connector
MKH0NB54902A	3-Way, Flush Non-Locking Override, DIN, 24VDC	XM35NB549A + PESC10	Different DIN Connector MicroKing coils rotated 180°

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INLINE VALVES

This cross reference is a guide only. Replacement Valve Information should be reviewed by customer prior to installation.

VALVE DESCRIPTIONS

Mounting

All suggested replacement valves are 1/8" NPT ported valves.

XM Inline Valves mounting holes do not match MicroKing mounting holes.

XM Inline Valves will not mount on MicroKing IEM Manifolds without a transitions kit.

Electrical

XM DIN valves do not have the same Electrical DIN Pattern as MicroKing Valves. XM DIN pin spacing is 9.4mm. MicroKing pin space is 8mm. Replacement electrical connectors will have to be provided for electrical interchange.

Operating Pressure

4-Way XM valves can be used in Positive or Vacuum Operating Pressure applications. 3-Way XM Valves **must be designed** for Positive or Vacuum Operation Pressure when crossing MicroKing Valves to XM Valves. All Cross References to XM Valves for 3-Way MicroKing Valves listed are for Positive Operating Pressure Systems.

MicroKing Valve	MicroKing Description	XM Valve	Main Differences Besides Dimensions
MKH0NB549A.....	3-Way, Flush Non-Locking Override, DIN, 24VDC,	XM30NB549A + PESC10	Different DIN Connector
MKH0NB55302A	3-Way, Flush Non-Locking Override, DIN, 120/60 HZ,(110)/50 HZ	XM30NB553A + PESC10	Different DIN Connector MicroKing coils rotated 180°
MKH0NB553A.....	3-Way, Flush Non-Locking Override, DIN, 120/60 HZ,(110)/50 HZ	XM30NB553A + PESC10	Different DIN Connector
MKH0NB557A.....	3-Way, Flush Non-Locking Override, DIN, 240/60 HZ,(220)/50 HZ.....	XM30NB557A + PESC10.....	Different DIN Connector
MKH0NBG42A.....	3-Way, Flush Non-Locking Override, Grommet, 24/60 HZ,22/50 HZ	XM30NBG42A	
MKH0NBG4502A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC.....	XM30NBG45A	MicroKing coils rotated 180°.
MKH0NBG45A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC.....	XM30NBG45A	
MKH0NBG4702A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC, Mobile Voltage	XM30NBG47A.....	MicroKing coils rotated 180°.
MKH0NBG47A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC, Mobile Voltage	XM30NBG45A	
MKH0NBG4802A.....	3-Way, Flush Non-Locking Override, Grommet, 24VDC, Mobile Voltage	XM30NBH49A.....	MicroKing coils rotated 180°.
MKH0NBG48A.....	3-Way, Flush Non-Locking Override, Grommet, 24VDC, Mobile Voltage	XM30NBG49A	
MKH0NBG4902A.....	3-Way, Flush Non-Locking Override, Grommet, 24VDC	XM30NBG49A	MicroKing coils rotated 180°.
MKH0NBG49A.....	3-Way, Flush Non-Locking Override, Grommet, 24VDC	XM30NBG49A	
MKH0NBG5302A.....	3-Way, Flush Non-Locking Override, Grommet, 120/60 HZ,(110)/50 HZ	XM30NBG53A	MicroKing coils rotated 180°.
MKH0NBG53A.....	3-Way, Flush Non-Locking Override, Grommet, 120/60 HZ,(110)/50 HZ	XM30NBG53A	
MKH0NBG57A.....	3-Way, Flush Non-Locking Override, Grommet, 240/60 HZ,(220)/50 HZ.....	XM30NBG57A.....	
MKH0NBH45A.....	3-Way, Flush Non-Locking Override, Conduit, 12VDC	XM30NBH45A.....	
MKH0NBH4902A.....	3-Way, Flush Non-Locking Override, Conduit, 24VDC	XM30NBH49A.....	MicroKing coils rotated 180°.
MKH0NBH49A.....	3-Way, Flush Non-Locking Override, Conduit, 24VDC	XM30NBH49A.....	
MKH0NBH53A.....	3-Way, Flush Non-Locking Override, Conduit, 120/60 HZ,(110)/50 HZ.....	XM30NBH53A.....	
MKH0NC542A.....	3-Way, Flush Locking Override, DIN, 24/60 HZ,22/50 HZ	XM30NBC542A + PESC10.....	Different DIN Connector
MKH0NC553A.....	3-Way, Flush Locking Override, DIN, 120/60 HZ,(110)/50 HZ.....	XM30NBC553A + PESC10.....	Different DIN Connector
MKH0NCG42A.....	3-Way, Flush Locking Override, Grommet, 24/60 HZ,22/50 HZ	XM30NBCG42A.....	
MKH0NCG49A.....	3-Way, Flush Locking Override, Grommet, 24VDC.....	XM30NCG49A	
MKH0NCG53A.....	3-Way, Flush Locking Override, Grommet, 120/60 HZ,(110)/50 HZ.....	XM30NCG53A	
MKH0NCG57A.....	3-Way, Flush Locking Override, Grommet, 240/60 HZ,(220)/50 HZ.....	XM30NCG57A	
MKH0NCH53A.....	3-Way, Flush Locking Override, Conduit, 120/60 HZ,(110)/50 HZ.....	XM30NBCH53A.....	
MKH5NB548A.....	3-Way, Flush Non-Locking Override, DIN, 24VDC, Mobile Voltage	XM35NB549A + PESC10.....	Different DIN Connector
MKH5NB549A.....	3-Way, Flush Non-Locking Override, DIN, 24VDC	XM35NB549A + PESC10.....	Different DIN Connector
MKH5NB553A.....	3-Way, Flush Non-Locking Override, DIN, 120/60 HZ,(110)/50 HZ	XM35NB553A + PESC10	Different DIN Connector
MKH5NBG45A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC.....	XM35NBG45A	
MKH5NBG49A.....	3-Way, Flush Non-Locking Override, Grommet, 24VDC	XM35NBG49A	
MKH5NBG53A.....	3-Way, Flush Non-Locking Override, Grommet, 120/60 HZ,(110)/50 HZ	XM35NBG53A	
MKH5NC557A.....	3-Way, Flush Locking Override, DIN, 240/60 HZ,(220)/50 HZ.....	XM35NC557A + PESC10.....	Different DIN Connector
MKH5NBG45A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC.....	XM30NBG45A	MicroKing M5 ported.....
MKH5NBG53A.....	3-Way, Flush Non-Locking Override, Grommet, 120/60 HZ,(110)/50 HZ	XM30NBG53A	MicroKing 1/4" Tube - Port 1, 2, 3 Inline
MKH5NBG45A.....	3-Way, Flush Non-Locking Override, Grommet, 12VDC.....	XM30NBG45A	MicroKing 1/4" Tube - Port 2; 1/8" NPT - Port 1, 3

SUBBASE VALVES

This cross reference is a guide only. Replacement Valve Information should be reviewed by customer prior to installation.

VALVE DESCRIPTIONS**Mounting**

All suggested replacement valves are subbase mount valves. XM Subbase Valves will not directly mount to existing MicroKing Manifolds.

XM Subbase Valves require a manifold transition kit to mount to existing MicroKing IEM Manifolds.

XM Subbase Valves with Conduit Connection will only mount to a single station MicroKing Manifold.

Electrical

XM DIN valves do not have the same Electrical DIN Pattern as Microking Valves. XM DIN pin spacing is 9.4mm. MicroKing pin space is 8mm. Replacement electrical connectors will have to be provided for electrical interchange.

Operating Pressure

4-Way XM valves can be used in Positive or Vacuum Operating Pressure applications. 3-Way XM Valves **must be designated** for Positive or Vacuum Operation Pressure when crossing MicroKing Valves to XM Valves.

All Cross References to XM Valves for 3-Way MicroKing Valves listed are for Positive Operating Pressure Systems.

MicroKing Valve	MicroKing Description	XM Valve	Main Differences Besides Dimensions
MKEVNB547A	4-Way, Flush Non-Locking Override, DIN, 12VDC, Mobile Voltage	XM4VNB545A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNB549F0A	4-Way, DIN, 24VDC, Flow Controls	XM4VNB549F0A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNB553F0A	4-Way, DIN, 120/60 HZ, (110)/50 HZ, Flow Controls	XM4VNB553F0A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNB549A	4-Way, DIN, 24VDC	XM4VNB549A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNB549A	4-Way, DIN, 24VDC	XM4VNB549A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNB553A	4-Way, DIN, 120/60 HZ, (110)/50 HZ	XM4VNB553A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNB553A	3-Way, DIN, 120/60 HZ, (110)/50 HZ	XM3VNB553A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNBG49A	4-Way, Grommet, 24VDC	XM4VNBG49A	Must use transition kit for mounting to existing manifolds.
MKEVNBG53A	4-Way, Grommet, 120/60 HZ, (110)/50 HZ	XM4VNBG53A	Must use transition kit for mounting to existing manifolds.
MKWVNBG49A	3-Way, Grommet, 24VDC	XM3VNBG49A	Must use transition kit for mounting to existing manifolds.
MKWVNB542A	3-Way, DIN, 24/60 HZ, 22/50 HZ	XM3VNB542A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNBG42A	3-Way, Grommet, 24/60 HZ, 22/50 HZ	XM3VNBG42A	Must use transition kit for mounting to existing manifolds.
MKWVNBG42A	3-Way, Grommet, 24/60 HZ, 22/50 HZ	XM3VNBG42A	Must use transition kit for mounting to existing manifolds.
MKWVNBG45A	3-Way, Grommet, 12VDC	XM3VNBG45A	Must use transition kit for mounting to existing manifolds.
MKWVNB55302A	3-Way, DIN, 120/60 HZ, (110)/50 HZ	XM3VNB553A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNB54902A	3-Way, DIN, 24VDC	XM3VNB549A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNBG42A	4-Way, Grommet, 24/60 HZ, 22/50 HZ	XM4VNBG42A	Must use transition kit for mounting to existing manifolds.
MKEVNBH49A	4-Way, Conduit, 24VDC	XM4VNBH49A	Conduit Electrical will cause interference.
MKEVNB545A	4-Way, DIN, 12VDC	XM4VNB545A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKEVNBG45A	4-Way, Grommet, 12VDC	XM4VNBG45A	Must use transition kit for mounting to existing manifolds.
MKEVNB542A	4-Way, DIN, 24/60 HZ, 22/50 HZ	XM4VNB542A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNB545A	3-Way, DIN, 12VDC	XM3VNB545A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKWVNBG53A	3-Way, Grommet, 120/60 HZ, (110)/50 HZ	XM3VNBG53A	Must use transition kit for mounting to existing manifolds.
MKVNB542A	3-Way, DIN, 24/60 HZ, 22/50 HZ	XM3VNB542A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVNB548A	3-Way, DIN, 24VDC, Mobile Voltage	XM3VNB549A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.

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SUBBASE VALVES

This cross reference is a guide only. Replacement Valve Information should be reviewed by customer prior to installation.

VALVE DESCRIPTIONS

Mounting

All suggested replacement valves are subbase mount valves. XM Subbase Valves will not directly mount to existing MicroKing Manifolds.
 XM Subbase Valves require a manifold transition kit to mount to existing MicroKing IEM Manifolds.
 XM Subbase Valves with Conduit Connection will only mount to a single station MicroKing Manifold.

Electrical

XM DIN valves do not have the same Electrical DIN Pattern as Microking Valves. XM DIN pin spacing is 9.4mm. MicroKing pin space is 8mm. Replacement electrical connectors will have to be provided for electrical interchange.

Operating Pressure

4-Way XM valves can be used in Positive or Vacuum Operating Pressure applications. 3-Way XM Valves **must be designated** for Positive or Vacuum Operation Pressure when crossing MicroKing Valves to XM Valves.
 All Cross References to XM Valves for 3-Way MicroKing Valves listed are for Positive Operating Pressure Systems.

MicroKing Valve	MicroKing Description	XM Valve	Main Differences Besides Dimensions
MKVVB549A	3-Way, DIN, 24VDC	XM3VNB549A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVB553A	3-Way, DIN, 120/60 HZ, (110)/50 HZ	XM3VNB553A	Must use transition kit for mounting to existing manifolds.
MKVVBG49A	3-Way, Grommet, 24VDC	XM3VNBG49A	Must use transition kit for mounting to existing manifolds.
MKVVBG53A	3-Way, Grommet, 120/60 HZ, (110)/50 HZ	XM3VNBG53A	Must use transition kit for mounting to existing manifolds.
MKVVB545A	3-Way, DIN, 12VDC	XM3VNB545A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVBG48A	3-Way, Grommet, 24VDC, Mobile Voltage	XM3VNBG49A	Must use transition kit for mounting to existing manifolds.
MKVVB557A	3-Way, DIN, 240/60 HZ, (220)/50 HZ	XM3VNB557A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVBG57A	3-Way, Grommet, 240/60 HZ, (220)/50 HZ	XM3VNBG57A	Must use transition kit for mounting to existing manifolds.
MKVVBG47A	3-Way, Grommet, 12VDC, Mobile Voltage	XM3VNBG45A	Must use transition kit for mounting to existing manifolds.
MKVVNAG45A	3-Way, Grommet, 12VDC	XM3VNAG45A	Must use transition kit for mounting to existing manifolds.
MKVVNCG42A	3-Way, Grommet, 24/60 HZ, 22/50 HZ	XM3VNCG42A	Must use transition kit for mounting to existing manifolds.
MKVVNAG47A	3-Way, Grommet, 12VDC, Mobile Voltage	XM3VNAG45A	Must use transition kit for mounting to existing manifolds.
MKVVNC553A	3-Way, DIN, 120/60 HZ, (110)/50 HZ	XM3VNC553A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVNCG53A	3-Way, Grommet, 120/60 HZ, (110)/50 HZ	XM3VNCG53A	Must use transition kit for mounting to existing manifolds.
MKVVBG5302A	3-Way, Grommet, 120/60 HZ, (110)/50 HZ	XM3VNBG53A	Must use transition kit for mounting to existing manifolds.
MKVVBG4902A	3-Way, Grommet, 24VDC	XM3VNBG49A	Must use transition kit for mounting to existing manifolds.
MKVVB55302A	3-Way, DIN, 120/60 HZ, (110)/50 HZ	XM3VNB553A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVB54502A	3-Way, DIN, 12VDC	XM3VNB545A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.
MKVVBG45A	3-Way, Grommet, 12VDC	XM3VNBG45A	Must use transition kit for mounting to existing manifolds.
MKVVBG42A	3-Way, Grommet, 24/60 HZ, 22/50 HZ	XM3VNBG42A	Must use transition kit for mounting to existing manifolds.
MKVVB54902A	3-Way, DIN, 24VDC	XM3VNB549 A + PESC10	Different DIN Connector Must use transition kit for mounting to existing manifolds.

IEM VALVE MANIFOLDS

IEM manifolds are one piece bar manifolds.

Suggested XM Manifolds have same mounting dimensions.

Only XM Valves will mount to XM IEM Valve Manifolds

AA before any MicroKing part number indicates a manifold assembly. Consult XM Catalog 0661 for new manifold assemblies.

MicroKing Part Number	Description	XM Part Number
PSMKNXG10NP	10 Station, BSPP Manifold	PSMXNXG10NP
PSMKNXN02NP	2 Station, NPT Manifold	PSMXNXN02NP
PSMKNXN03NP	3 Station, NPT Manifold	PSMXNXN03NP
PSMKNXN04NP	4 Station, NPT Manifold	PSMXNXN04NP
PSMKNXN05NP	5 Station, NPT Manifold	PSMXNXN05NP
PSMKNXN06NP	6 Station, NPT Manifold	PSMXNXN06NP
PSMKNXN07NP	7 Station, NPT Manifold	PSMXNXN07NP
PSMKNXN08NP	8 Station, NPT Manifold	PSMXNXN08NP
PSMKNXN09NP	9 Station, NPT Manifold	PSMXNXN09NP
PSMKNXN10NP	10 Station, NPT Manifold	PSMXNXN10NP
PSMKNXN11NP	11 Station, NPT Manifold	PSMXNXN11NP
PSMKNXN12NP	12 Station, NPT Manifold	PSMXNXN12NP
PSMKNXN13NP	13 Station, NPT Manifold	PSMXNXN13NP
PSMKNXN14NP	14 Station, NPT Manifold	PSMXNXN14NP
PSMKNXN15NP	15 Station, NPT Manifold	PSMXNXN15NP
PSMKNXN16NP	16 Station, NPT Manifold	PSMXNXN16NP
PSMKNXN20NP	20 Station, NPT Manifold	PSMXNXN20NP

SUBBASE BAR MANIFOLDS

Microking Subbase Bar Manifolds are one piece bar manifolds. Replacement XM Subbase Manifolds are not dimensionally equivalent.

XM Subbase Manifolds consist of one End Plate kit and depending on the number of valve stations, a subbase kit for each valve.

Only XM Valves will mount to XM Subbase Manifolds

Only 1/8 threaded ports are available on XM Subbase Manifolds. Insert Tube Fittings (Presto) are not available.

Bottom Port Subbase manifolds are not available.

AA before any MicroKing part number indicates a manifold assembly. Consult XM Catalog 0661 for new manifold assemblies.

MicroKing Valve	Description	Qty	XM Part Numbers		
			End Plate Kit	End Port Subbase Kit	
PSJKN0G02NP	2 Station, 4-Way End Ported Manifold, M5, BSPP.....	1	PSXM31011P	2	PSXM540CP
PSJKN0N03NP	3 Station, 4-Way End Ported Manifold, M5, NPT	1	PSXM31010P	3	PSXM530CP
PSJKN0N04NP	4 Station, 4-Way End Ported Manifold, M5, NPT	1	PSXM31010P	4	PSXM530CP
PSJKN0N05NP	5 Station, 4-Way End Ported Manifold, M5, NPT	1	PSXM31010P	5	PSXM530CP
PSJKN1N02NP	2 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	2	PSXM530CP
PSJKN1N02RP	2 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	2	PSXM530CP
PSJKN1N03NP	3 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	3	PSXM530CP
PSJKN1N03RP	3 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	3	PSXM530CP
PSJKN1N04NP	4 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	4	PSXM530CP
PSJKN1N04RP	4 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	4	PSXM530CP
PSJKN1N05NP	5 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	5	PSXM530CP
PSJKN1N05RP	5 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	5	PSXM530CP
PSJKN1N06NP	6 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	6	PSXM530CP
PSJKN1N06RP	6 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	6	PSXM530CP
PSJKN1N10NP	10 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	10	PSXM530CP
PSJKN1N16NP	16 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	16	PSXM530CP
PSJKN1N20NP	20 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	20	PSXM530CP
PSJKNBN02NP	2 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	2	PSXM530CP
PSJKNBN03RP	3 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	3	PSXM530CP
PSJKNBN04NP	4 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	4	PSXM530CP
PSJKNBN06NP	6 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	6	PSXM530CP
PSJKNBN06RP	6 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	6	PSXM530CP
PSJKNBN07NP	7 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	7	PSXM530CP
PSJKNBN08NP	8 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	8	PSXM530CP
PSJKNBN10NP	10 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	10	PSXM530CP
PSJKNBN12NP	12 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	12	PSXM530CP
PSJKNBN20NP	20 Station, 4-Way End Ported Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	20	PSXM530CP
PSKKN1N04NP	4 Station, 4-Way Bottom Ported Manifold, 1/8, NPT	1	PSXM31010P	4	PSXM530CP
PSLKN1N04VP	4 Station, 4-Way End Ported Manifold, 1/8, NPT	1	PSXM31010P	4	PSXM530CP
PSEKN1N02NP	2 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	2	PSXM530CP
PSEKN1N04NP	4 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	4	PSXM530CP
PSEKN1N05NP	5 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	5	PSXM530CP
PSEKN1N06NP	6 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	6	PSXM530CP
PSEKN1N07NP	7 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	7	PSXM530CP
PSEKN1N08NP	8 Station, 3-Way Bottom / End Port Manifold, 1/8, NPT	1	PSXM31010P	8	PSXM530CP
PSEKNBN04NP	4 Station, 3-Way Bottom / End Port Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	4	PSXM530CP
PSEKNBN05NP	5 Station, 3-Way Bottom / End Port Manifold, 1/4 OD Presto, NPT	1	PSXM31010P	5	PSXM530CP
PSFKN0N03RP	3 Station, 3-Way Bottom Port Manifold, M5, NPT	1	PSXM31010P	3	PSXM530CP
PSFKN0N04NP	4 Station, 3-Way Bottom Port Manifold, M5, NPT	1	PSXM31010P	4	PSXM530CP
PSFKN1G02NP	2 Station, 3-Way Bottom Port Manifold, 1/8, BSPP	1	PSXM31011P	2	PSXM540CP
PSFKN1G02RP	2 Station, 3-Way Bottom Port Manifold, 1/8, BSPP	1	PSXM31011P	2	PSXM540CP
PSFKN1G04NP	4 Station, 3-Way Bottom Port Manifold, 1/8, BSPP	1	PSXM31011P	4	PSXM540CP
PSFKN1N02NP	2 Station, 3-Way Bottom Port Manifold, 1/8, NPT	1	PSXM31010P	2	PSXM530CP
PSFKN1N02RP	2 Station, 3-Way Bottom Port Manifold, 1/8, NPT	1	PSXM31010P	2	PSXM530CP

SUBBASE BAR MANIFOLDS

Microking Subbase Bar Manifolds are one piece bar manifolds. Replacement XM Subbase Manifolds are not dimensionally equivalent.

XM Subbase Manifolds consist of one End Plate kit and depending on the number of valve stations, a subbase kit for each valve.

Only XM Valves will mount to XM Subbase Manifolds

Only 1/8 threaded ports are available on XM Subbase Manifolds. Insert Tube Fittings (Presto) are not available.

Bottom Port Subbase manifolds are not available.

AA before any MicroKing part number indicates a manifold assembly. Consult XM Catalog 0661 for new manifold assemblies.

MicroKing Valve	Description	XM Part Numbers			
		Qty	End Plate Kit	Qty	End Port Subbase Kit
PSFKN1N03NP	3 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	3	PSXM530CP.....
PSFKN1N03RP	3 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	3	PSXM530CP.....
PSFKN1N04NP	4 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	4	PSXM530CP.....
PSFKN1N04RP	4 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	4	PSXM530CP.....
PSFKN1N05NP	5 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	5	PSXM530CP.....
PSFKN1N05RP	5 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	5	PSXM530CP.....
PSFKN1N06NP	6 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	6	PSXM530CP.....
PSFKN1N06RP	6 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	6	PSXM530CP.....
PSFKN1N07NP	7 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	7	PSXM530CP.....
PSFKN1N07RP	7 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	7	PSXM530CP.....
PSFKN1N08NP	8 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	8	PSXM530CP.....
PSFKN1N09NP	9 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	9	PSXM530CP.....
PSFKN1N10NP	10 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	10	PSXM530CP.....
PSFKN1N10RP	10 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	10	PSXM530CP.....
PSFKN1N11NP	11 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	11	PSXM530CP.....
PSFKN1N12NP	12 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	12	PSXM530CP.....
PSFKN1N14NP	14 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	14	PSXM530CP.....
PSFKN1N15NP	15 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	15	PSXM530CP.....
PSFKN1N16NP	16 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	16	PSXM530CP.....
PSFKN1N17NP	17 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	17	PSXM530CP.....
PSFKN1N20NP	20 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	20	PSXM530CP.....
PSFKN1N25NP	25 Station, 3-Way Bottom Port Manifold, 1/8, NPT.....	1	PSXM31010P.....	25	PSXM530CP.....
PSFKNBN02NP	2 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	2	PSXM530CP.....
PSFKNBN02RP	2 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	2	PSXM530CP.....
PSFKNBN03NP	3 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	3	PSXM530CP.....
PSFKNBN03RP	3 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	3	PSXM530CP.....
PSFKNBN04NP	4 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	4	PSXM530CP.....
PSFKNBN05NP	5 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	5	PSXM530CP.....
PSFKNBN06NP	6 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	6	PSXM530CP.....
PSFKNBN07NP	7 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	7	PSXM530CP.....
PSFKNBN08NP	8 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	8	PSXM530CP.....
PSFKNBN09NP	9 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	9	PSXM530CP.....
PSFKNBN10NP	10 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	10	PSXM530CP.....
PSFKNBN12NP	12 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	12	PSXM530CP.....
PSFKNBN12RP	12 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	12	PSXM530CP.....
PSFKNBN13NP	13 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	13	PSXM530CP.....
PSFKNBN14NP	14 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	14	PSXM530CP.....
PSFKNBN16NP	16 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	16	PSXM530CP.....
PSFKNBN18NP	18 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	18	PSXM530CP.....
PSFKNBN20NP	20 Station, 3-Way Bottom Port Manifold, 1/4 OD Presto, NPT.....	1	PSXM31010P.....	20	PSXM530CP.....
PSFKNGN02NP	2 Station, 3-Way Bottom Port Manifold, 6mm OD Presto, NPT.....	1	PSXM31010P.....	2	PSXM530CP.....

MicroKing

Flow Characteristics

- MK 3-Way: .19 Cv
- MK 4-Way: .18 Cv

Operating Pressure

- Vacuum to 120 PSIG

Ports

- 1/8" NPT
- M5
- 1/4 Inch Tube

Mounting

- Inline – Universal Function
 - NC, NO
 - Selector, Diverter
- IEM Bar Manifold
- Subbase Valve
 - NC, NO, Selector
- 3-Port Subbase Aluminum Bar Manifold
- 4-Port Subbase Aluminum Bar Manifold

Solenoids

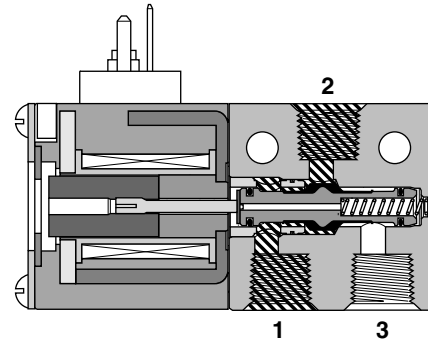
- Continuous Duty Rated
 - 24" Grommet, 15mm 3-Pin DIN 43650C, 1/2" Conduit
 - 12VDC to 240VAC

Balanced Poppet

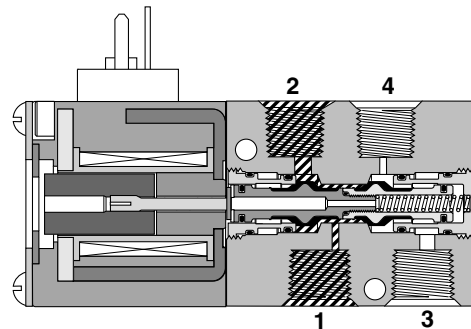
- Buna-N
- Fluorocarbon

Certification / Approval

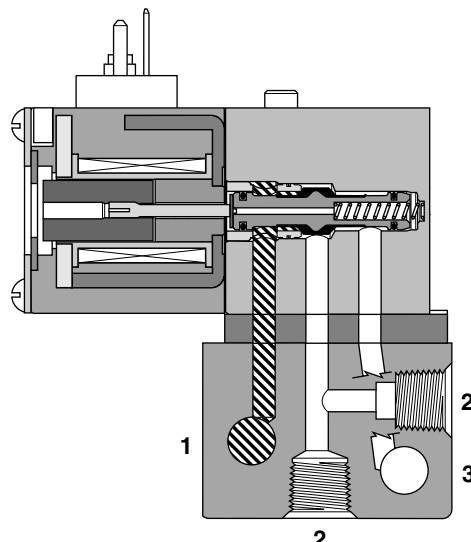
- Approved to be CSA and CE marked



3-Way Inline Valve
 Shown Energized



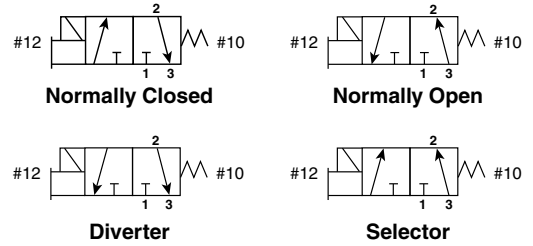
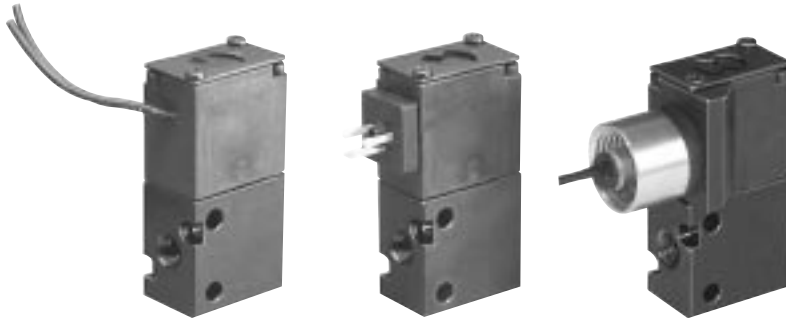
4-Way Inline Valve
 Shown De-Energized



Subbase Valve on 3-Ported Subbase Bar Manifold
 Shown De-Energized



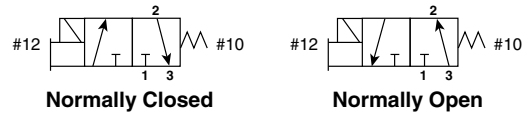
3-Way Universal Inline



24" Grommet	3-Pin 15mm DIN 43650C	1/2" Conduit / 24" Leads	Voltage	Port Size
MKH0NBG45A	MKH0NB545A	MKH0NBH45A	12VDC	1/8" NPT
MKH0NBG49A	MKH0NB549A	MKH0NBH49A	24VDC	
MKH0NBG53A	MKH0NB553A	MKH0NBH53A	120VAC	
MKHFNBG45A	MKHFNB545A	MKHFNBH45A	12VDC	1/4" Tube Port #2
MKHFNBG49A	MKHFNB549A	MKHFNBH49A	24VDC	1/8" NPT
MKHFNBG53A	MKHFNB553A	MKHFNBH53A	120VAC	Port #1 & #3

Note: All units with non-locking flush override.

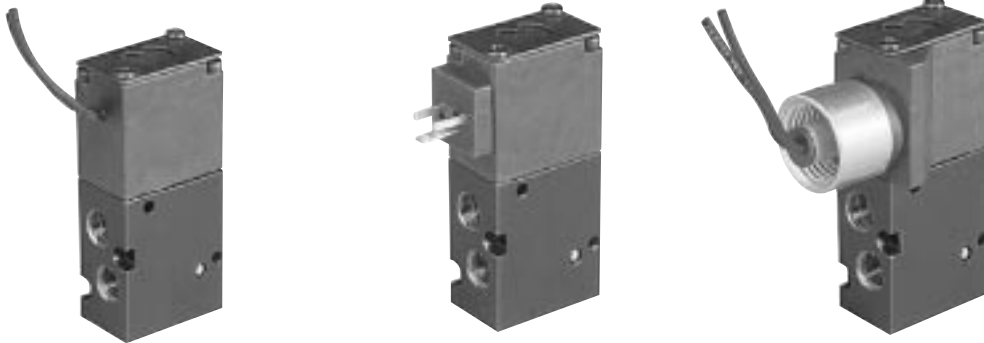
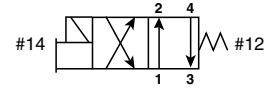
3-Way Subbase Mount



24" Grommet	3-Pin 15mm DIN 43650C	Voltage	Function
MKVVBG45A	MKVVB545A	12VDC	Normally Closed
MKVVBG49A	MKVVB549A	24VDC	
MKVVBG53A	MKVVB553A	120VAC	
MKWVBG45A	MKWVB545A	12VDC	Normally Open
MKWVBG49A	MKWVB549A	24VDC	
MKWVBG53A	MKWVB553A	120VAC	

Note: All units with non-locking flush override. Valve includes mounting bolts & appropriate NC or NO selector gasket.
 Subbase valves must be used on PSEK & PSFK Bar Manifolds.

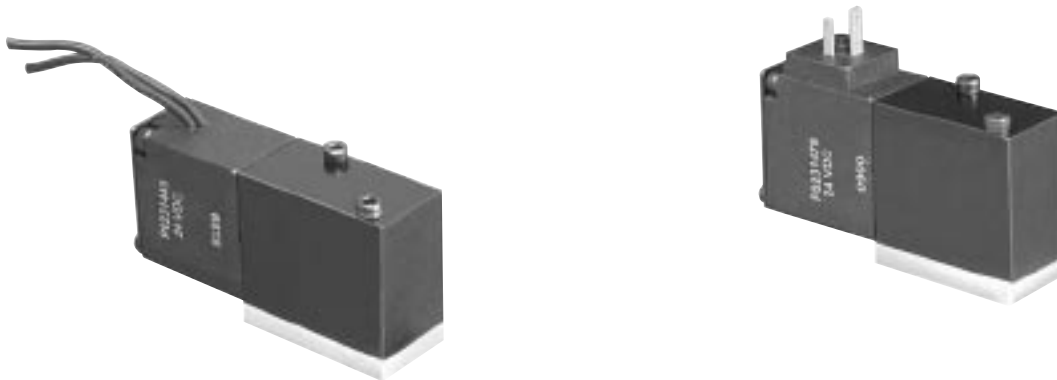
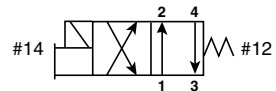
4-Way Inline



24" Grommet	3-Pin 15mm DIN 43650C	1/2" Conduit / 24" Leads	Voltage	Port Size
MKE0NBG45A	MKE0NB545A	MKE0NBH45A	12VDC	1/8" NPT
MKE0NBG49A	MKE0NB549A	MKE0NBH49A	24VDC	
MKE0NBG53A	MKE0NB553A	MKE0NBH53A	120VAC	
MKEFNBG45A	MKEFNB545A	MKEFNBH45A	12VDC	1/4" Tube Port #2 & #4
MKEFNBG49A	MKEFNB549A	MKEFNBH49A	24VDC	1/8" NPT
MKEFNBG53A	MKEFNB553A	MKEFNBH53A	120VAC	Port #1 & #3

Note: All units with non-locking flush override.

4-Way Subbase Mount

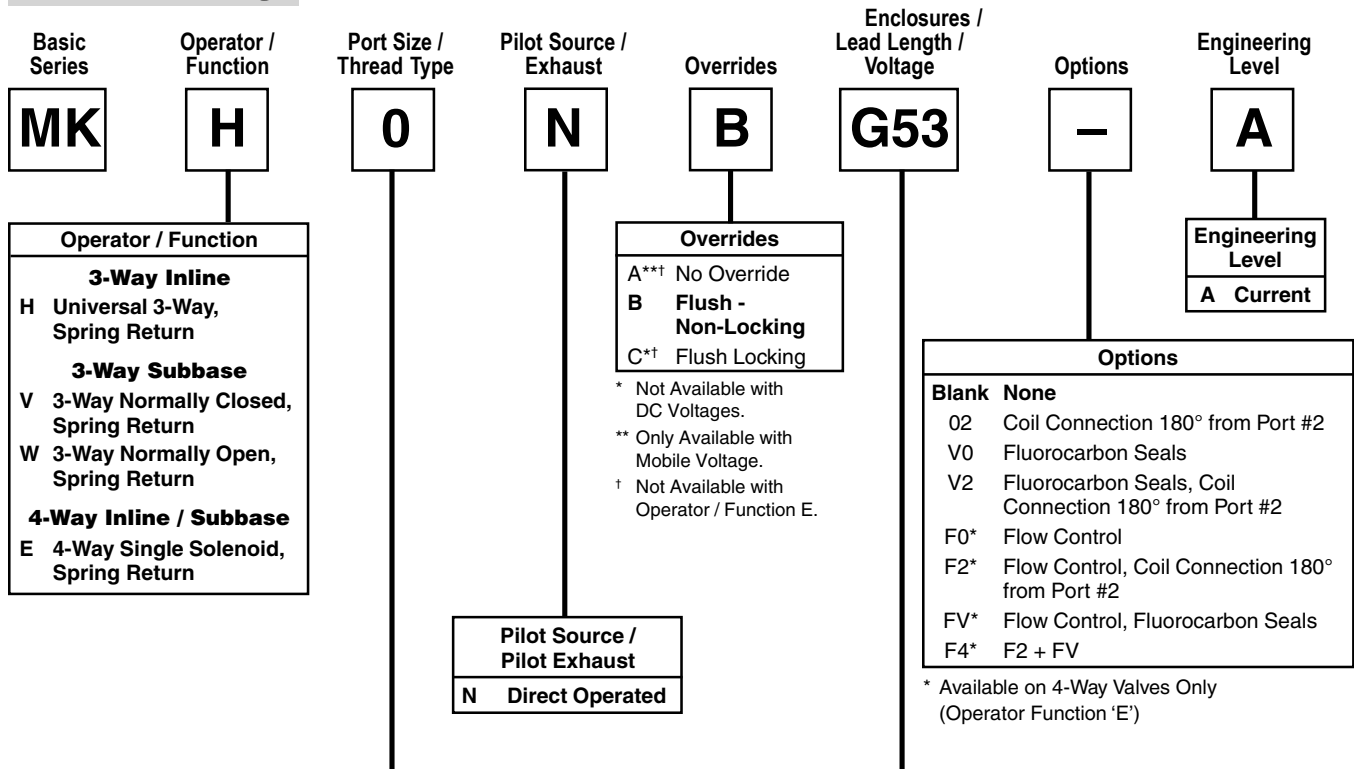


24" Grommet	3-Pin 15mm DIN 43650C	Voltage
MKEVNBG45A	MKEVNB545A	12VDC
MKEVNBG49A	MKEVNB549A	24VDC
MKEVNBG53A	MKEVNB553A	120VAC

Note: All units with non-locking flush override. Valve includes mounting bolts and gasket. Subbase valves must be used on PSEK & PSFK Bar Manifolds.

MicroKing

BOLD OPTIONS ARE STANDARD



Port Size / Thread Type	
3-Way	
0*	1/8" NPT Inline
3	1/4" Tube - Port 1 & 2; 1/8" NPT - Port 3 Inline
6	1/4" Tube - Port 2 & 3; 1/8" NPT - Port 1 Inline
C*	M5 Inline
D	1/4" Tube - Port 1, 2 & 3 Inline
F*	1/4" Tube - Port 2; 1/8" NPT - Port 1 & 3 Inline
V†	Subbase Valve Less Base
4-Way	
0*	1/8" NPT Inline
3	1/4" Tube - Port 1, 2 & 4; 1/8" NPT - Port 3 Inline
C*	M5 Inline
F*	1/4" Tube - Port 2 & 4; 1/8" NPT - Port 1 & 3 Inline
V†	Subbase Valve Less Base

* Available on IEM Manifold.
 † Not Available with Conduit Enclosures.

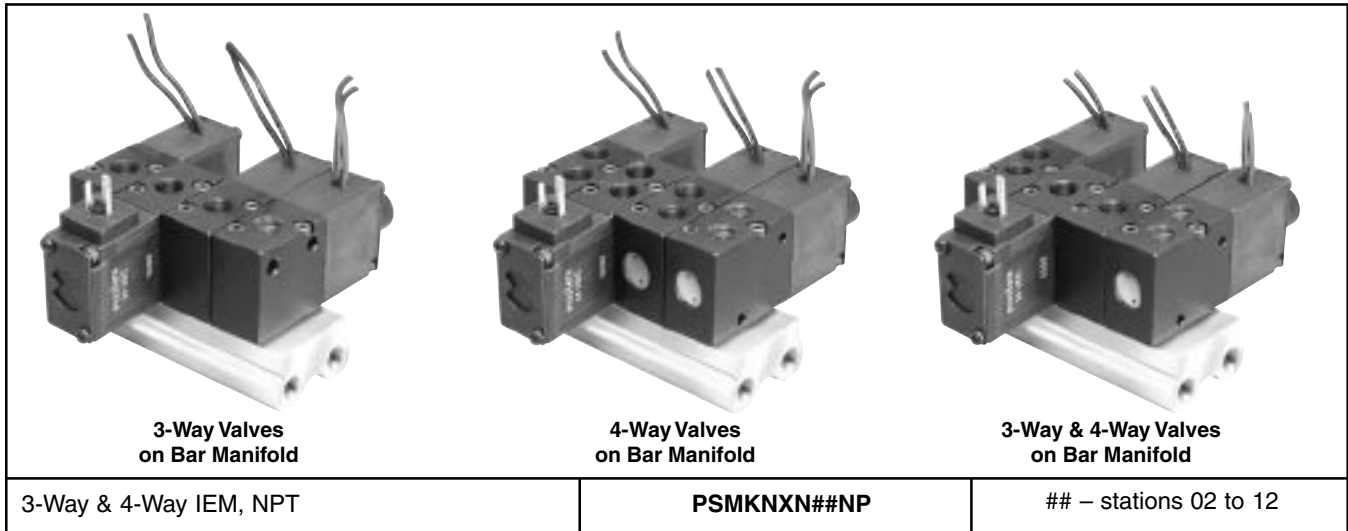
Enclosures / Lead Length	Voltage	
	AC	
	60Hz	50Hz
542 15mm 3-Pin DIN 43650C	24	22
545 15mm 3-Pin DIN 43650C		12
547* 15mm 3-Pin DIN 43650C		12
548* 15mm 3-Pin DIN 43650C		24
549 15mm 3-Pin DIN 43650C		24
553 15mm 3-Pin DIN 43650C	120	110
557 15mm 3-Pin DIN 43650C	240	220
G42 Grommet / Flying Leads 24"	24	22
G45 Grommet / Flying Leads 24"		12
G47* Grommet / Flying Leads 24"		12
G48* Grommet / Flying Leads 24"		24
G49 Grommet / Flying Leads 24"		24
G53 Grommet / Flying Leads 24"	120	110
G57 Grommet / Flying Leads 24"	240	220
H45† 1/2" Conduit / Flying Leads 24"		12
H49† 1/2" Conduit / Flying Leads 24"		24
H53† 1/2" Conduit / Flying Leads 24"	120	110

* Mobile Voltage
 † Will not mount on IEM manifolds.

Note: Overrides
 No Override option is recommended in applications which require an increased resistance to moisture. This option also includes a special gasket.

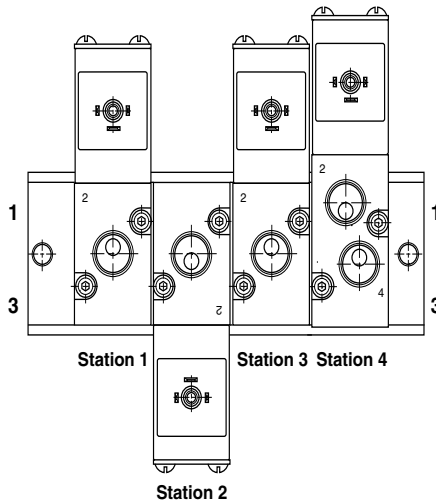
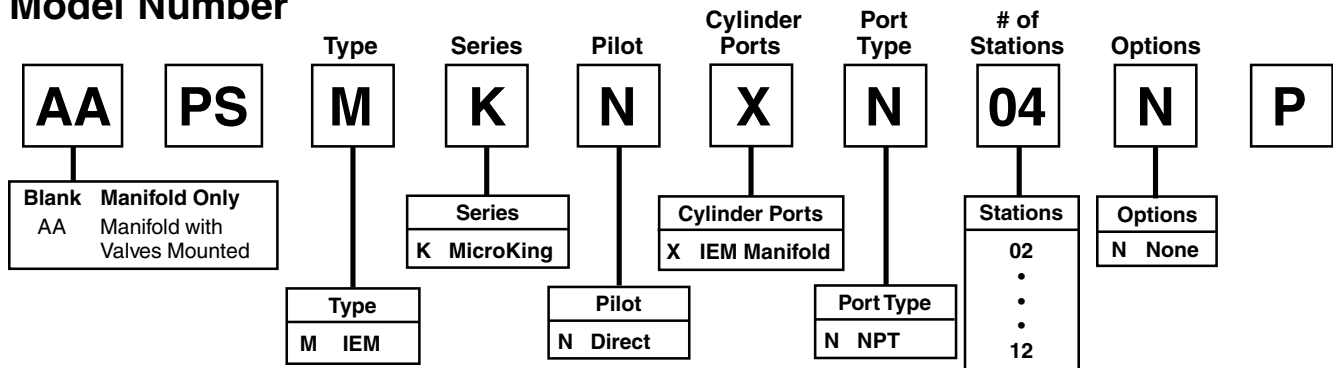
Subbase valves with option '02' or 'V2' will not mount on Subbase Manifolds with the Regulator Option.
 Locking Override Option (Option "C") not available with Regulator Gauges.
 Inline valves with option '02', 'V2', 'F2' or 'F4' will not mount on IEM Manifolds with Sandwich Regulators when the valve is configured for Normally Closed function.





- IEM Bar Manifold allows for mounting of 3-Way & 4-Way Inline MicroKing Valves. For 4-Way valves, inlet should always be at Port 1.
- Standard Manifold allows mounting of Normally Closed and Normally Open 3-Way Valves simultaneously by rotating valve mounting as shown in picture.
- Manifolds available in all station lengths 2 thru 12.
- Manifold Kit includes o-rings and bolts.
- Ports 1 & 3 are always 1/8" Pipe.

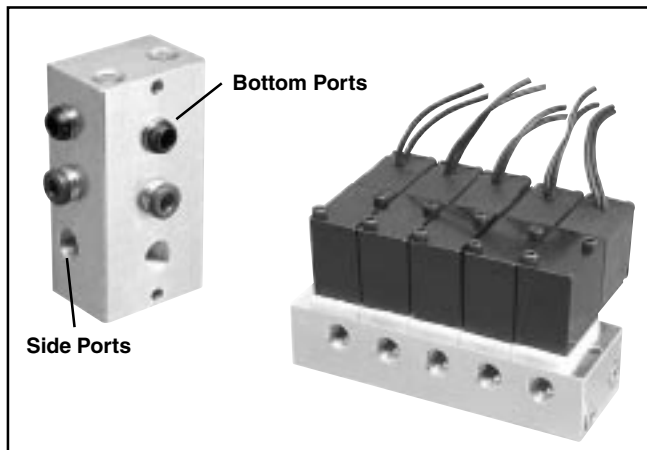
Model Number



How to Order an Add-A-Fold Assembly

Item	Qty	Part Number
001	1	AAPSMKNXN04NP
002	3	MKH0NB549A - Station 1, 3 - Normally Closed - Station 2 - Normally Open
003	2	PS2130166P* - Station 1, 2
004	1	MKE0NB549A - Station 4

* Regulator Gauges included but not assembled.
 When ordering Add-A-Folds, list valves left to right when looking at the Port #3 side of the manifold.
 Valve Function NC or NO and Regulator / Blank Plate location must be specified.



3-Way, Subbase, NPT	PSFKN1N##NP
3-Way, Subbase, 1/4" Tube Port #2	PSFKNBN##NP

– stations 02 to 12

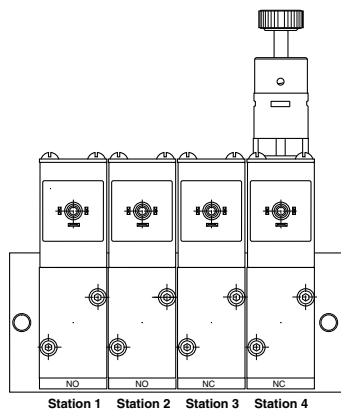
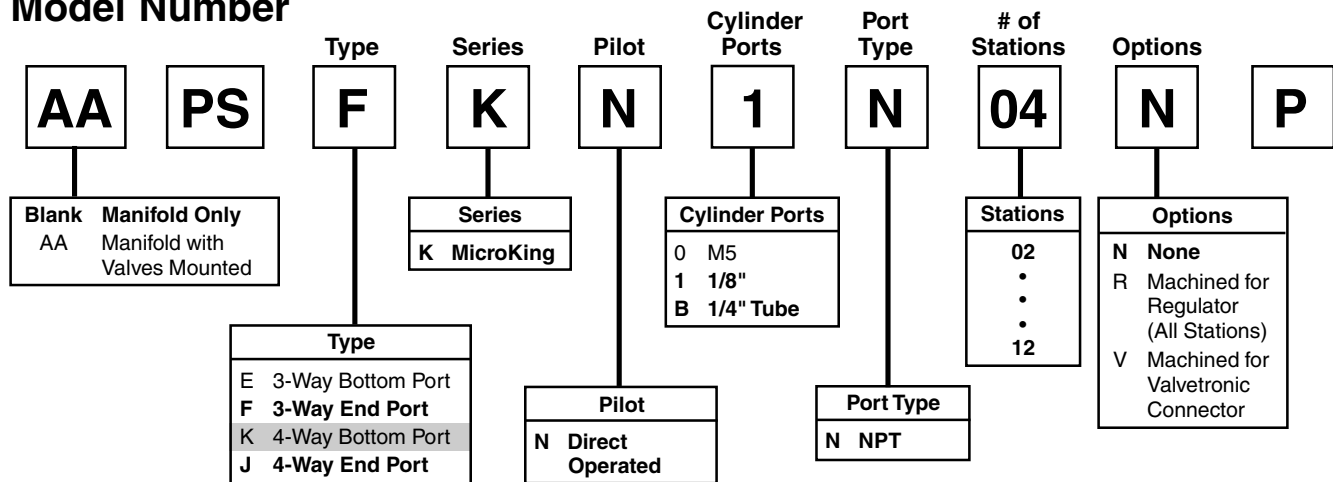


4-Way, Subbase, NPT	PSJKN1N##NP
4-Way, Subbase, 1/4" Tube Port #2 & #4	PSJKNBN##NP

– stations 02 to 12

- 3 & 4-Ported Subbase Bar Manifold uses 3 & 4-Way Subbase mount MicroKing Valves.
- Standard Manifold allows mounting of 3-Way Normally Closed and Normally Open Valves simultaneously by use of selector gaskets.
- Bar Manifold Regulator Option is available with Option Code 'R'.
- 3-Way Valve includes selector plate and mounting bolts.
- 4-Way valve will include sandwich plate and mounting screws.
- Ports 1 & 3 are always 1/8" Pipe.

Model Number



How to Order an Add-A-Fold Assembly

Item	Qty	Part Number
001	1	AAPSFKN1N04RP
002	2	MKWVNB549A - Station 1, 2
003	2	MKVVNB549A - Station 3, 4
004	3	PS2109P - Station 1, 2 & 3
005	1	PS2131166P* - Station 4

* Regulator gauges included but not assembled.

When ordering Add-A-Folds, list valves left to right when looking at the Port 2 side of the manifold.

Regulator / Cover Plate / Blank Plate location must be specified.

IEM Sandwich Regulator

- Pressure regulation for individual valves mounted on IEM Bar Manifold.
- Same Sandwich Regulator used for 3-Way Normally Closed and Normally Open Valves and 4-Way Valves.

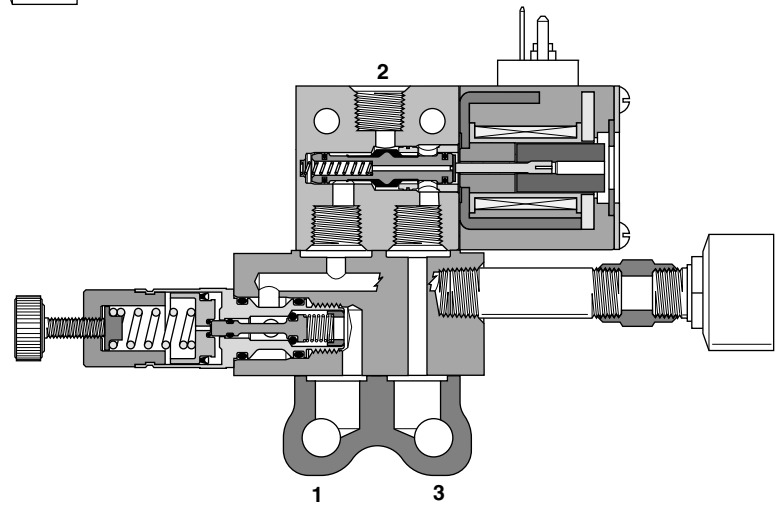
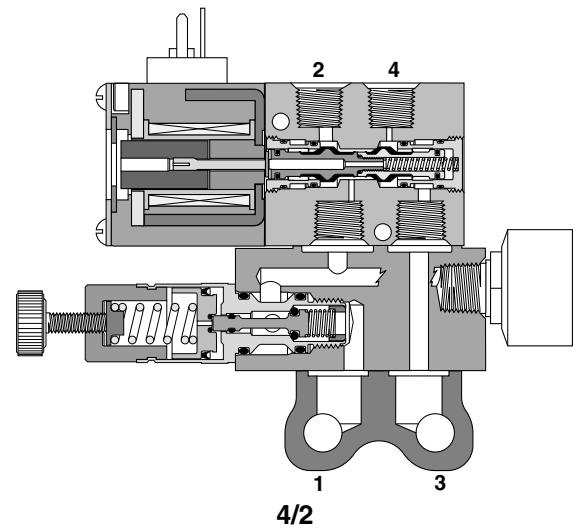
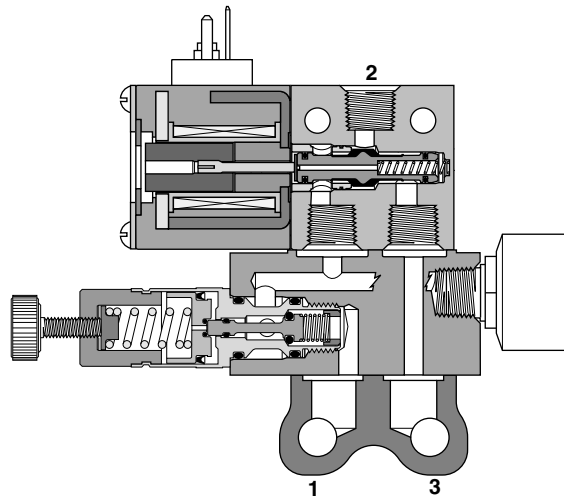
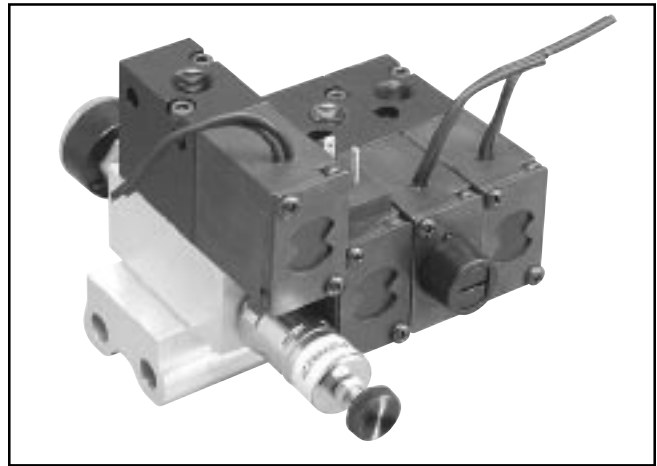
PSI	Common Port with Gauge *	Common Port without Gauge	Cv
60 PSI	PS2130155P	PS2130122P	.11
125 PSI	PS2130166P	PS2130133P	

* Gauge is 160 PSI.

When mounting Regulators side-by-side or with Normally Open valves, gauges must be staggered. Brass adapters are listed at the bottom of the page.

Regulator without gauge includes 1/8" gauge plug.

Regulator with gauge includes 1/8" gauge plug & gauge (unassembled).



Brass Adapters for Gauge –

1/8" to 1/8" Female Coupling 207P-2
 1/8" Male Pipe Nipped 1.5" 215PNL-2-15
 1/8" Male to Female Adapter 222P-2-2

1/8" to 1/8" 45° Female Elbow 2201P-2-2
 1/8" to 1/8" 90° Female Elbow 2200P-2-2

Gauge 3/4" Face (.91" OD) –

0-160 PSI PS3451160P

Subbase Manifold Regulator

- Pressure regulation for individual valves mounted on 3-Port or 4-Port Subbase Bar Manifold.
- Use Manifold with Option Code 'R' – all stations prepared to accept Regulator Kits or Cover Kits.
- Regulator Kits and Cover Kits ordered separately.

PSI	Common Port with Gauge *	Common Port without Gauge	Cv
60 PSI	PS2131155P	PS2131122P	.11
120 PSI	PS2131166P	PS2131133P	

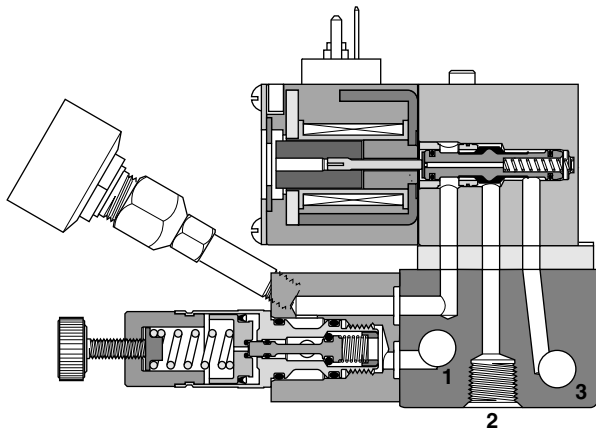
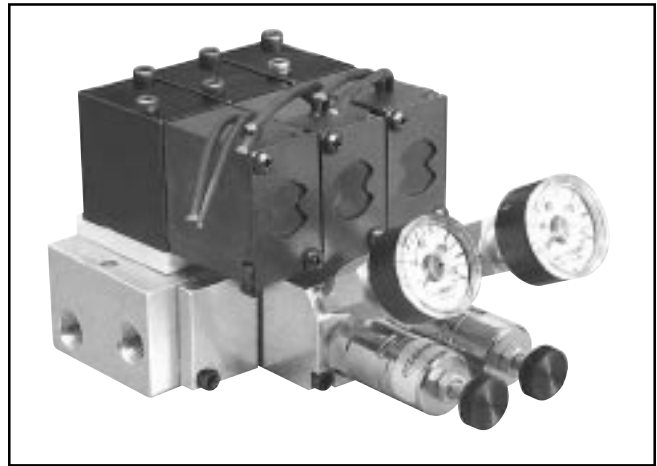
* Gauge is 160 PSI.

When mounting Regulators side-by-side, gauges must be staggered. Brass adapters are listed at the bottom of the page.

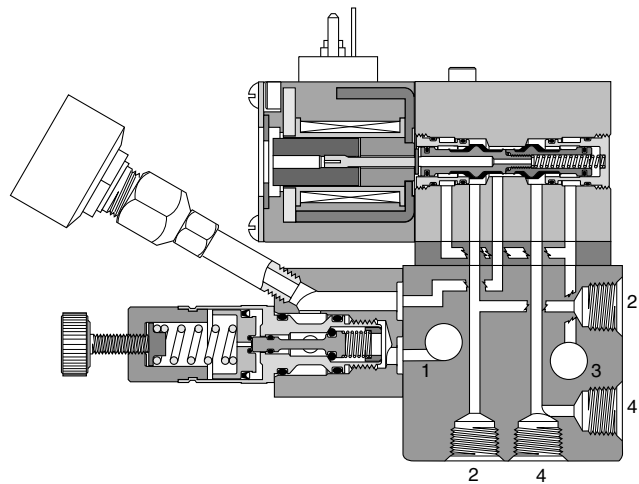
Regulator without gauge includes M5 gauge plug.

Regulator with gauge includes M5 gauge plug, 10-32x1/8" swivel fitting & gauge (unassembled).

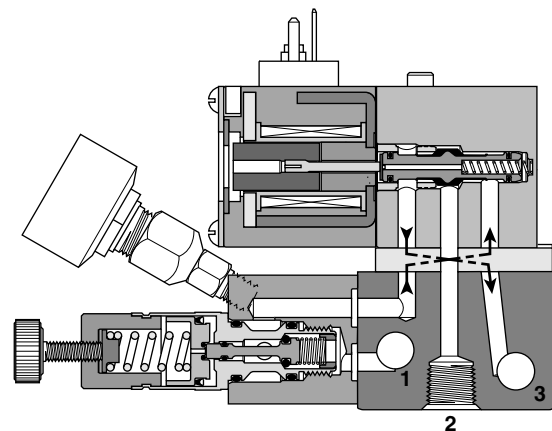
Regulator Cover Plate PS2109P



3/2 Normally Closed



4/2



3/2 Normally Open

Note: Valve with Locking Override Option 'C' not available when Regulator Gauge is used.

Brass Adapters for Gauge –

- #10-32 Male to #10-32 Female Extender (Qty. 10) PS2195P
- #10-32 Male to 1/8" Female Straight Swivel (Qty. 5) PS2196P

Gauge 3/4" Face (.91" OD) –

- 0-160 PSI PS3451160P

Performance Information

Electrical					Flow				
Code	Voltage		Power Consumption (W / VA)	Holding Current (Amps)	Cv Chart - Buna-N (Fluorocarbon)				
	AC				DC	Inline		Subbase	
	60Hz	50Hz				M5	1/8", 1/4" Tube	M5	1/8", 1/4" Tube
42	24	22	—	5.4VA	.228				
45	—	—	12	4.8W	.401	.15 (.11)	.19 (.15)	.11 (.11)	.15 (.15)
47*	—	—	12	4.3W	.402				
48*	—	—	24	4.9W	.204	.15 (.11)	.15 (.15)	.11 (.11)	.15 (.15)
49	—	—	24	4.9W	.203				
53	120	110	—	5.4VA	.045	.15 (.11)	.19 (.15)	.11 (.11)	.15 (.15)
57	240	220	—	6.0VA	.025				

Note: Voltage Tolerance: +10 / -15%

* Mobile voltage applications: +25 / -30%, not available with 4-Way

Cv tested per ANSI / (NFPA) T3.21.3

Response Time

Code	Voltage	0 Cu. In. Test Chamber		12 Cu. In. Test Chamber	
		Fill	Exhaust	Fill	Exhaust
49	24VDC	.025	.018	.335	.374
53	120VAC	.021	.029	.309	.389

Average Fill Time (Seconds): With 100 PSIG supply, time required to fill from 0-90 PSIG and exhaust from 100 PSIG to 10 PSIG is measured from instant of energizing, or de-energizing solenoid. Times shown are average.

Tested per ANSI / (NFPA) T3.21.8.

Operating Pressure

Type	Minimum	Maximum
3 & 4-Way	Vac	120 PSIG

Temperature Rating

Buna-N: 5°F to 120°F (-15°C to 49°C)
 Fluorocarbon: 5°F to 140°F (-15°C to 60°C)

15mm 3-Pin DIN 43650C

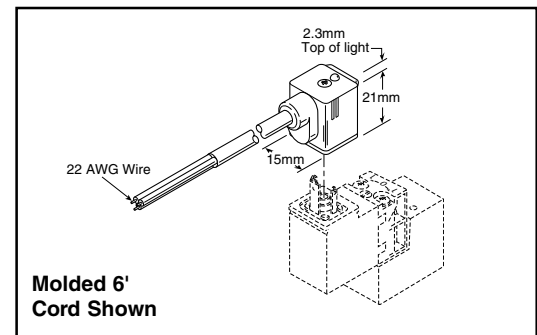
Connector	Connector with 6' (2m) Cord	Description
PS2932BP	PS2932JBP	Unlighted
PS294675BP	PS2946J75BP*	Light – 12VAC or DC
PS294679BP	PS2946J79BP*	Light – 24VAC or DC
PS294683BP	PS2946J83BP*	Light – 110/120VAC
PS294687BP	N/A	Light – 240/230VAC

* LED with surge suppression.

Note: Max ø6.5mm cable size required for connector w/o 6' (2m) cord.

Engineering Data:

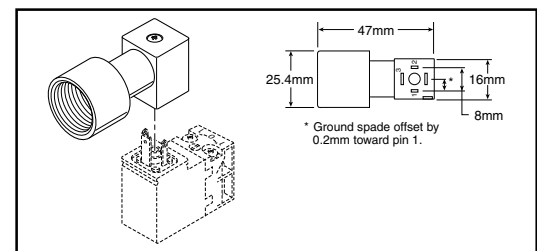
Conductors: 2 Poles Plus Ground
 Cable Range (Connector Only): 4 to 6mm (0.16 to 0.24 Inch)
 Contact Spacing: 8mm



15mm DIN 43650C to 1/2" Conduit

Connector	Description
PS2998P	1/2" NPTF Conduit – Unlighted with 3' (1m) Leads 20 AWG Wire

Note: Rated up to 250VAC or VDC; 6 Amps

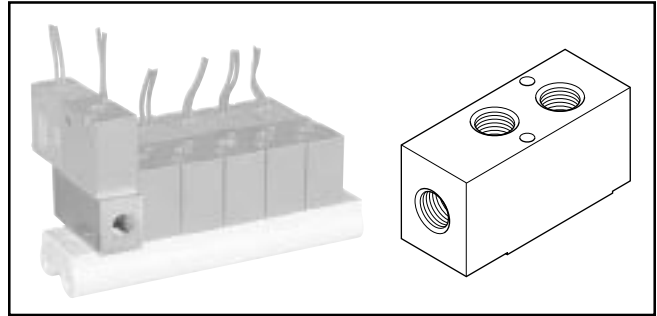


Selector Sandwich

Model Number	Description
PS2144P	Selector Sandwich

Kit Includes: (1) Selector Sandwich, (2) Screws, (4) O- rings, (2) 1/8" pipe plugs.

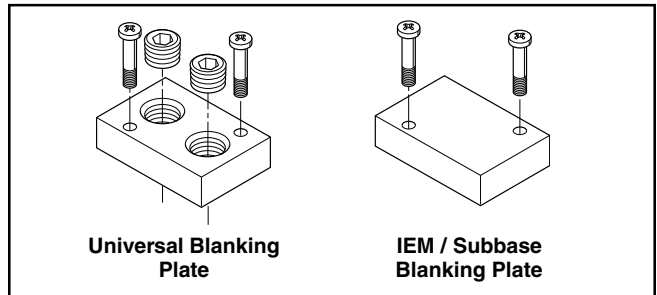
Note: For use with MicroKing 3-Way or 4-Way inline valves. The Selector Sandwich can be used to select a separate supply or separate exhaust for a individual valve which is mounted on an IEM bar manifold.



Blanking Plate

Type	Kit Number			
	IEM Universal		IEM Blank	Subbase Blank
	NPT	BSPP "G"		
3-Way	PS2166P	PS2167P	PS2169P	PS2194P
4-Way	PS2166P	PS2167P	PS2169P	PS219401P

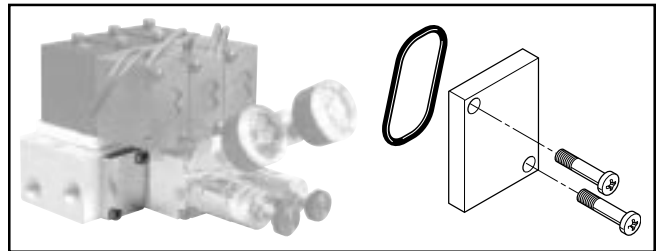
Kit includes: (1) Plate, (2) Screws, Gaskets



Regulator Cover Plate

Type	Kit Number
3-Way / 4-Way	PS2109P

Kit includes: (1) Cover plate, (2) Screws, (1) O-ring



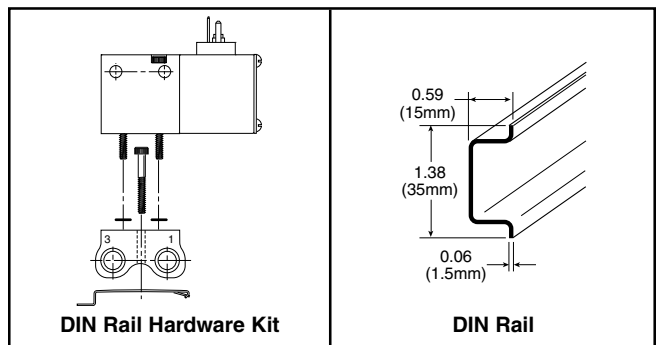
DIN Rail Hardware Kit

Type	IEM Bar	4-Port Subbase Bar
3-Way	PS2190P	PS2190P
4-Way	PS2190P	PS2190P

Kit includes: (2) Screws, (2) Nuts, (2) Clamps

DIN Rail

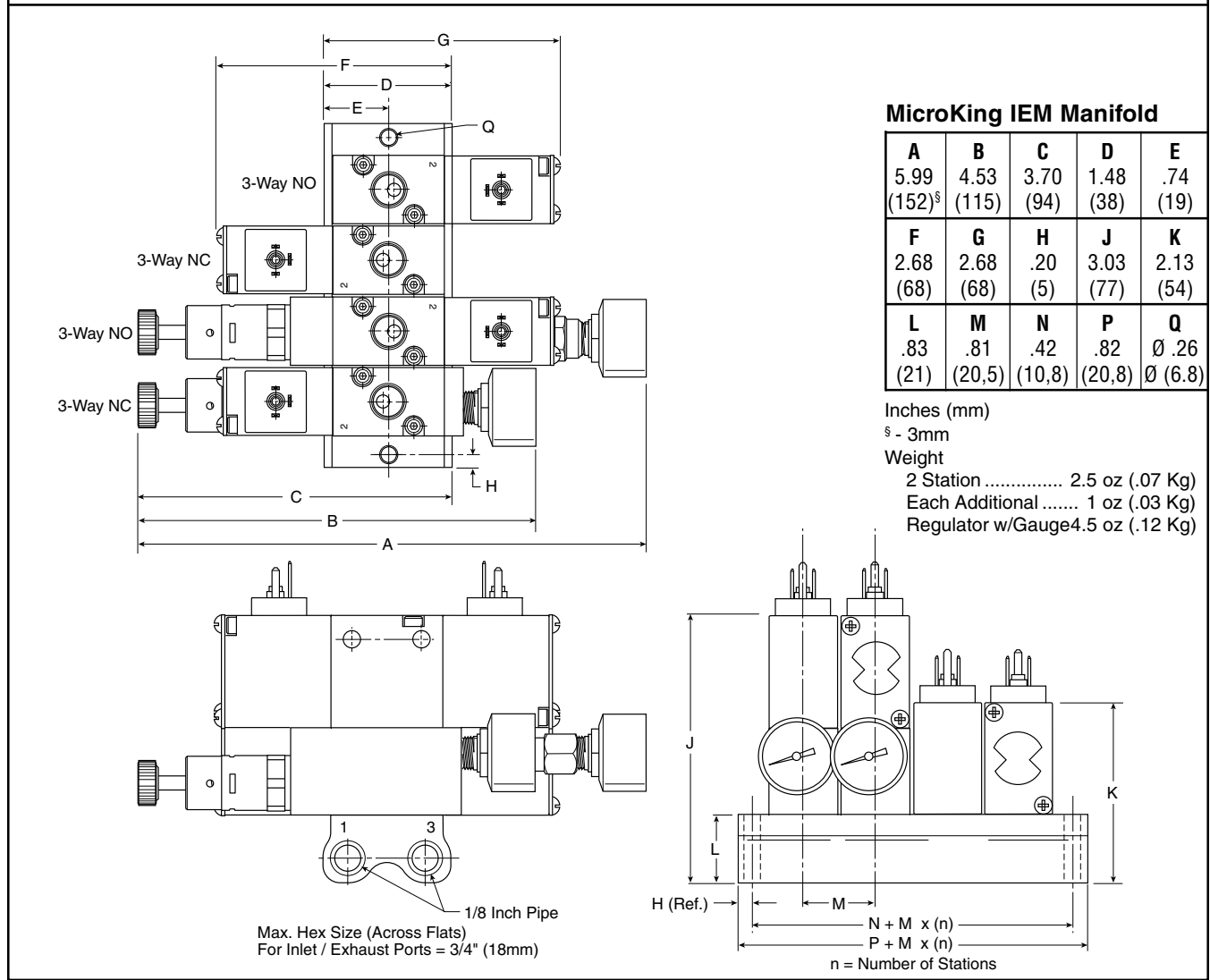
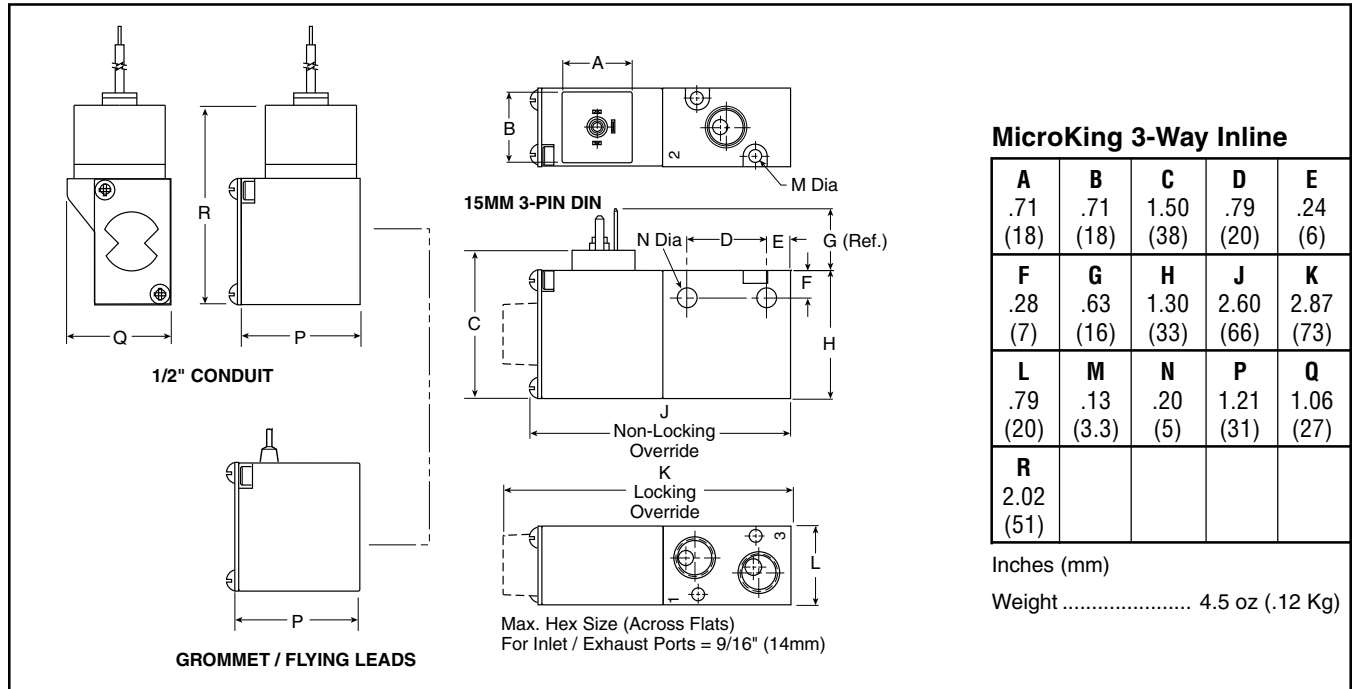
AM1DE200 6 Foot Rail Length



Replacement Kits

PS2184P IEM Valve/Manifold O-ring Kit (10)
 PS2187P IEM Valve/Manifold Bolt Kit (10)
 PS2105P 3-Way Selector Gasket NC

PS2106P 3-Way Selector Gasket NO
 PS2188P Subbase Valve / Manifold Bolt Kit (10)
 PS210501P 4-Way Subbase Valve Sandwich Plate Kit (10)



MicroKing 3-Way Subbase Manifold

A	B	C	D	E
4.33 (110) [†]	2.74 (70) [‡]	1.57 (40) [§]	.79 (20)	.20 (5)
F	G	H	J	K
2.58 (66)	1.10 (28)	.81 (20,5)	.38 (9,7)	.77 (19,7)
L				
∅ .26 ∅ (6.8)				

Inches (mm)

[†] ± 5mm

[‡] ± 3mm

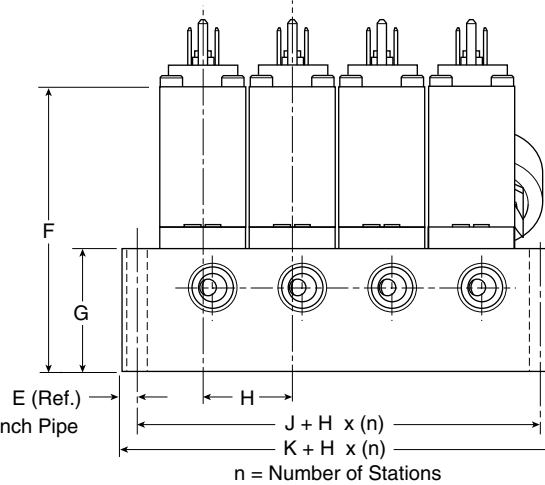
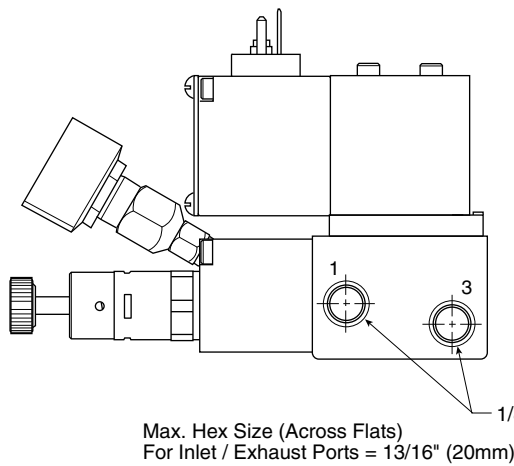
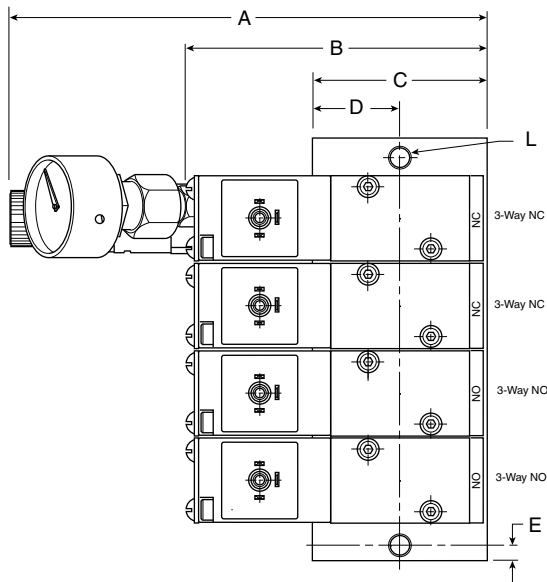
[§] - 3mm

Weight

2 Station 5.0 oz (.14 Kg)

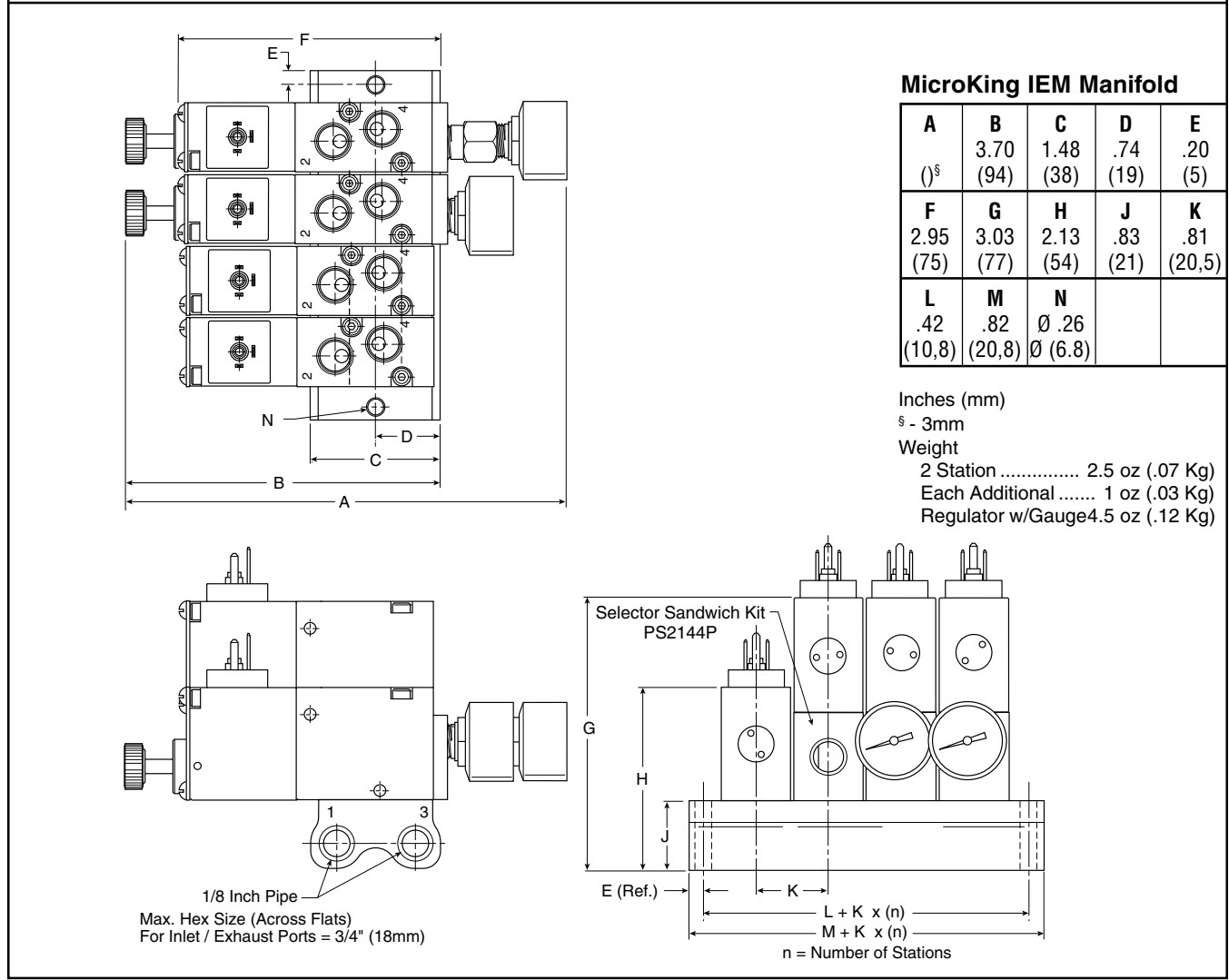
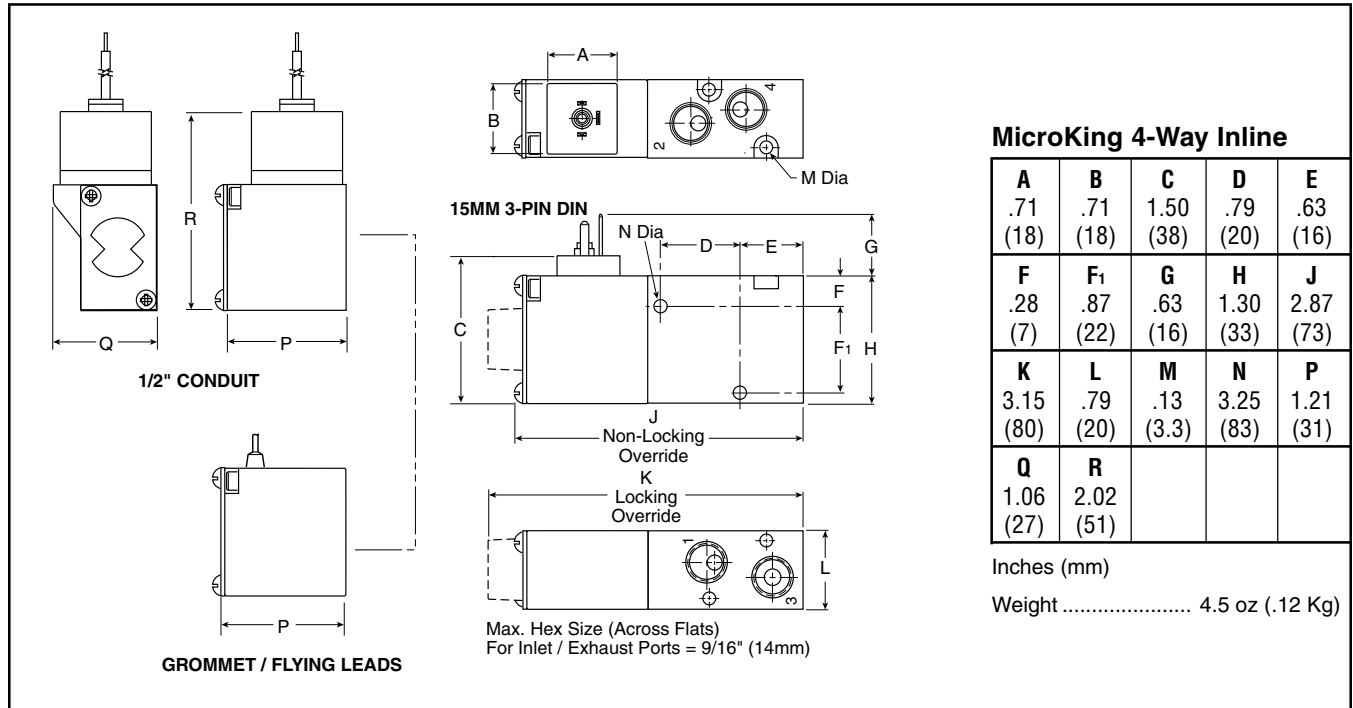
Each Additional 1.8 oz (.05 Kg)

Regulator w/Gauge 3.5 oz (.1 Kg)



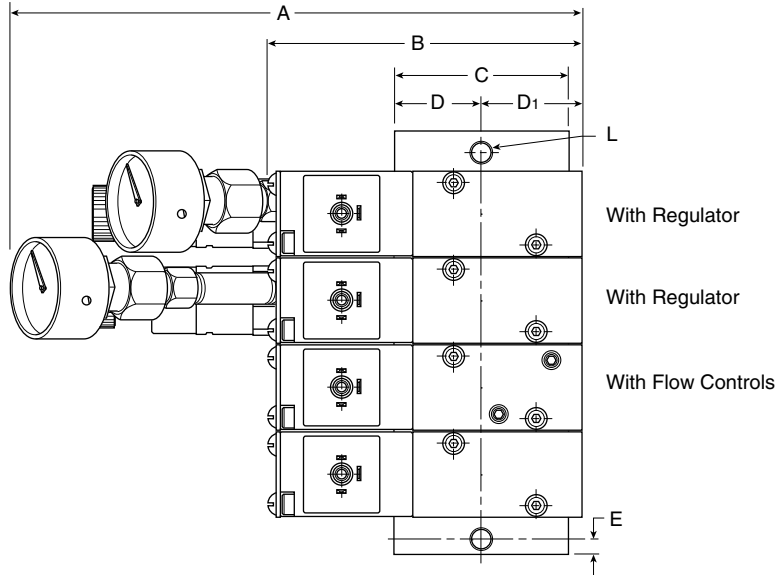
Note: Valve options '02' & 'V2' - Solenoid Rotated 180° - NOT available with regulator option.

Locking Override Option (Option "C") not available with Regulator Gauges.



MicroKing 4-Way Subbase Manifold

A	B	C	D	D ₁
4.53 (115) [†]	2.87 (73) [‡]	1.77 (45) [§]	.83 (21)	.79 (20)
E	F	G	H	J
.19 (5)	3.07 (78)	1.57 (40)	.84 (21)	.51 (13)
K	L	M		
.91 (23)	∅ .28 ∅ (7)	.23 (6)		



Inches (mm)

[†] ± 5mm

[‡] ± 3mm

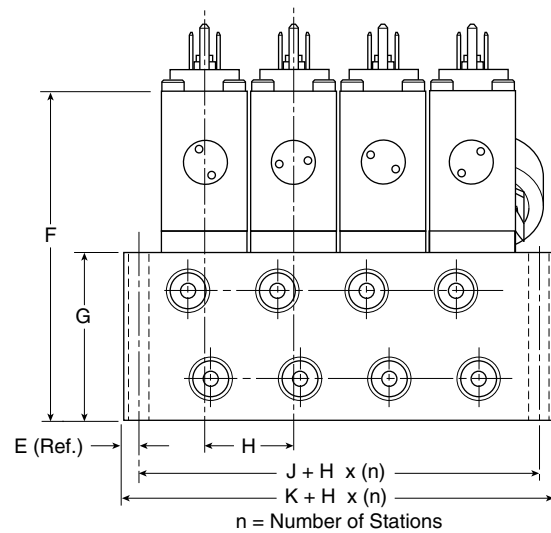
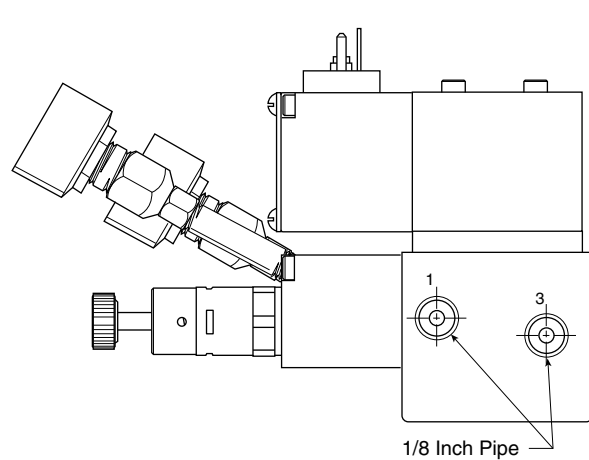
[§] - 3mm

Weight

2 Station 11.7 oz (.33 Kg)

Each Additional 4 oz (.12 Kg)

Regulator w/Gauge 3.5 oz (.1 Kg)



Note: Valve options '02' & 'V2' - Solenoid Rotated 180° - NOT available with regulator option.

Locking Override Option (Option "C") not available with Regulator Gauges.

Flow Characteristics

- 3-Way: .15 Cv
- 4-Way: .15 Cv

3-Way Operating Pressure

- 0 to 125 PSIG
- 0 to -14.7 PSIG

4-Way Operating Pressure

- -14.7 to 125 PSIG

Ports

- 1/8" NPT

Mounting

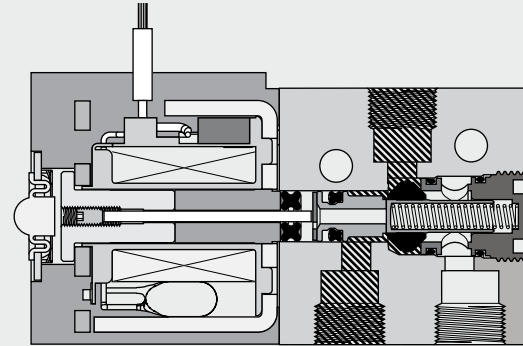
- Inline
- IEM Bar Manifold
- Subbase Valve Manifold

Solenoids

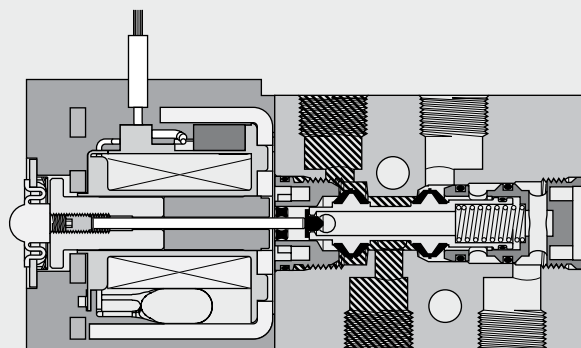
- Continuous Duty Rated
- 24" Grommet
- 15mm 3-Pin (9.4 mm Pin Spacing)
- 1/2" Conduit
- 12VDC to 240VAC

Balanced Poppet

- 3-Way N.O. & N.C.
- Diverter
- Selector
- Vacuum Option



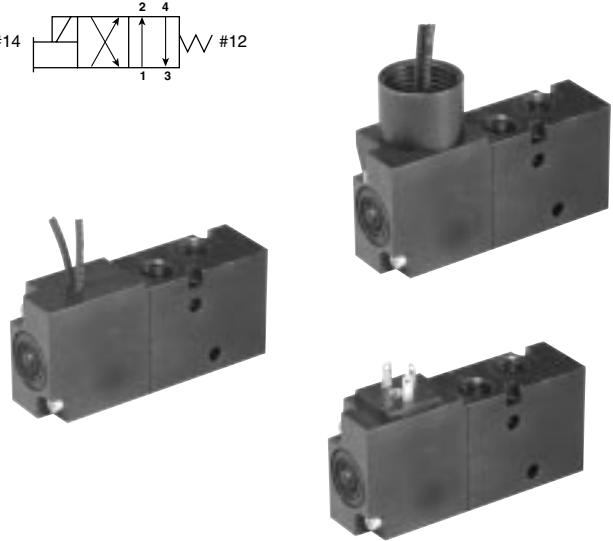
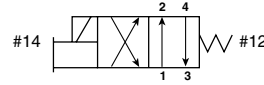
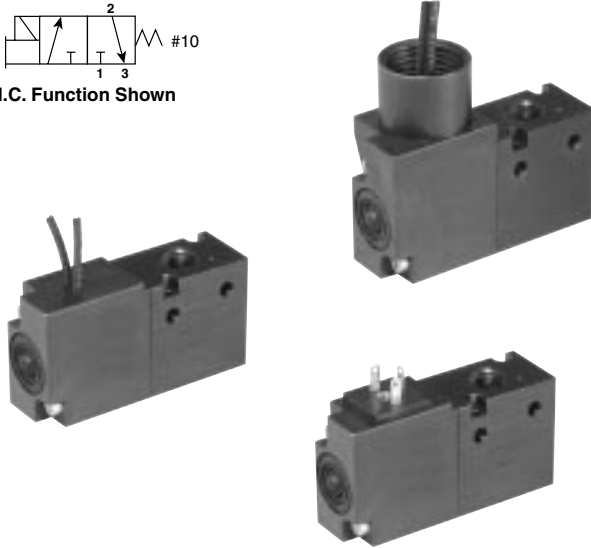
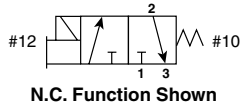
3-Way Inline Valve
Shown Energized



4-Way Inline Valve
Shown De-Energized



Inline Valves



3-Way

24" Grommet	3-Pin 15mm DIN 9.4mm	1/2" Conduit / 24" Leads	Voltage
XM30NBG49A	XM30NB549A	XM30NBH49A	24VDC
XM30NBG53A	XM30NB553A	XM30NBH53A	120VAC

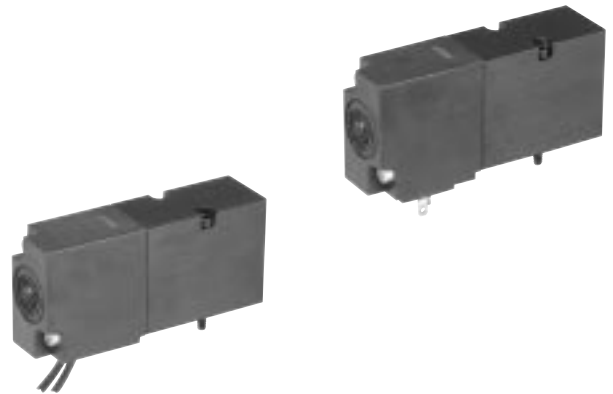
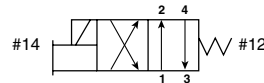
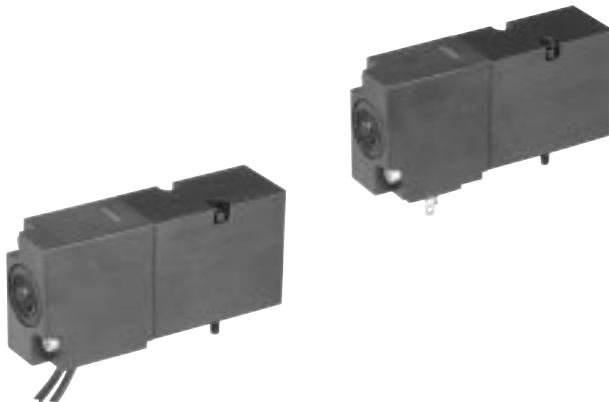
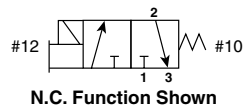
Note: All units with non-locking flush override.
 Can be used as N.O / N.C. / Diverter / Selector function.

4-Way

24" Grommet	3-Pin 15mm DIN 9.4mm	1/2" Conduit / 24" Leads	Voltage
XM40NBG49A	XM40NB549A	XM40NBH49A	24VDC
XM40NBG53A	XM40NB553A	XM40NBH53A	120VAC

Note: All units with non-locking flush override.

Subbase Mount



3-Way

24" Grommet	3-Pin 15mm DIN 9.4mm	Voltage
XM3VNBG49A	XM3VNB549A	24VDC
XM3VNBG53A	XM3VNB553A	120VAC

Note: All units with non-locking flush override.
 Can be used as N.O / N.C. / Diverter / Selector function.

4-Way

24" Grommet	3-Pin 15mm DIN 9.4mm	Voltage
XM4VNBG49A	XM4VNB549A	24VDC
XM4VNBG53A	XM4VNB553A	120VAC

Note: All units with non-locking flush override.

BOLD OPTIONS ARE STANDARD

XM 4 0 N B G49 — A

Operator / Function	
3-Way, Direct Operated, Single Solenoid, Spring Return	3
4-Way, Direct Operated, Single Solenoid, Spring Return	4

Engineering Level	
A	Current

Port Size / Thread Type	
1/8" NPT Inline	0*
Subbase Valve Less Base	V

* Available on IEM manifolds.

Options	
Blank	None
FO*	Flow Control

* 4-Way Valves Only.

Pilot Source / Exhaust	
Direct Operated / Standard Pressure	N*
Direct Operated / Vacuum Service	V**

* 3-Way Valve Positive Pressure,
 4-Way Valve Vacuum or Positive Pressure
 ** 3-Way Valve Vacuum Pressure.

Overrides	
Flush - Non-Locking	B

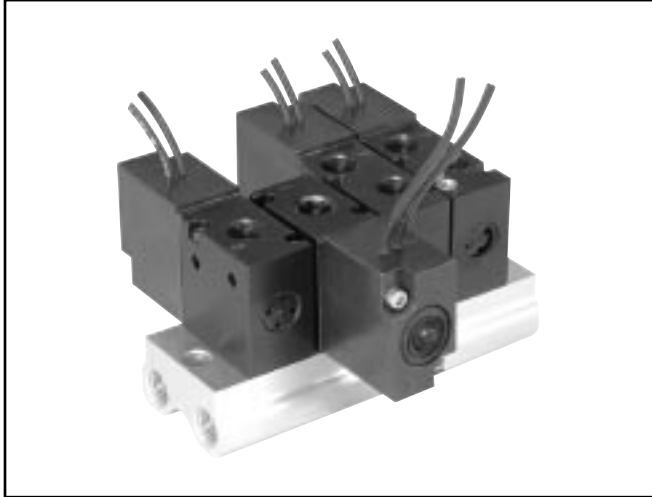
Enclosures / Lead Length				
		Voltage		
		AC		DC
		60Hz	50Hz	
542	15mm 3-Pin DIN 9.4mm	24	22	
545*	15mm 3-Pin DIN 9.4mm			12
549*	15mm 3-Pin DIN 9.4mm			24
553	15mm 3-Pin DIN 9.4mm	120	110	
G42	Grommet / Flying Leads 24"	24	22	
G45*	Grommet / Flying Leads 24"			12
G49*	Grommet / Flying Leads 24"			24
G53	Grommet / Flying Leads 24"	120	110	
G57	Grommet / Flying Leads 24"	240	220	
H42†	1/2" Conduit / Flying Leads 24"	24	22	
H45*†	1/2" Conduit / Flying Leads 24"			12
H49*†	1/2" Conduit / Flying Leads 24"			24
H53†	1/2" Conduit / Flying Leads 24"	120	110	

* Mobile Voltage Rated.
 † Inline Version Only.

Notes:
Inline Valves
 Conduit Inline valves cannot be mounted to IEM or Subbase Manifolds.



IEM Bar Manifold Assembly

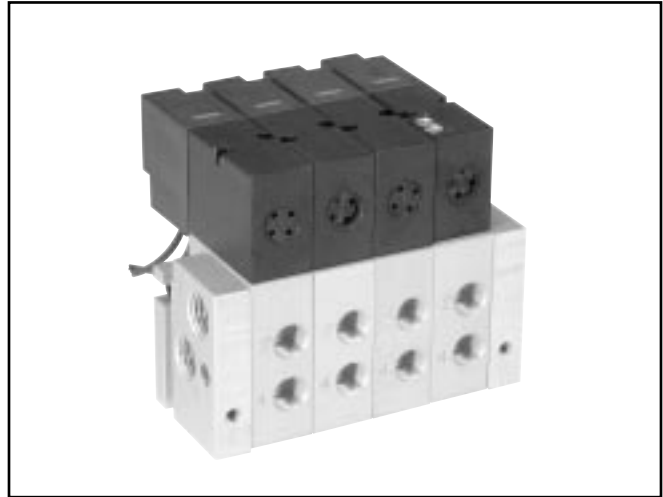


IEM Bar Manifold

Allows for mounting of 3-Way and 4-Way Inline valves on the same manifold. 3-Way Valves can be mounted on the same manifold to provide a Normally Closed or Normally Open function by rotating the valves 180°. 4-Way valves can be mounted with or without Flow Controls.

IEM Bar Manifold Assemblies consist of valves and an IEM Manifold. Valves and IEM Manifold can be ordered separately.

Subbase Manifold Assembly



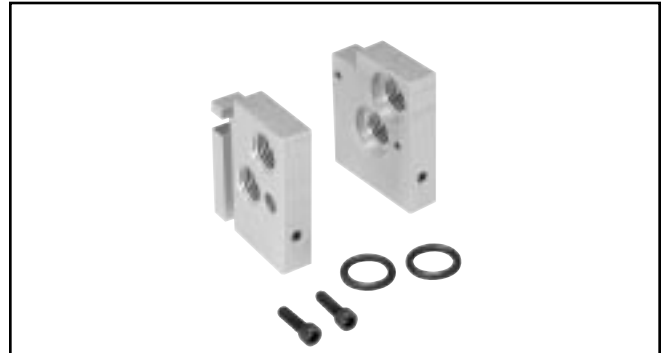
Subbase Manifold

Allows for mounting of 3-Way and 4-Way Subbase Valves on the same manifold. 3-Way Valves can be mounted on the same manifold to provide a Normally Closed or Normally Open function through the use of port isolation kits. 4-Way valves can be mounted with or without Flow Controls.

Subbase Manifold Assemblies consist of Valves, End Plate Kit and Manifold Subbase Kits. Valves, End Plate Kit and Manifold Subbase Kits can be ordered separately.



IEM Bar Manifold (NPT) **PSMXNXN##NP**
– stations 02 to 12

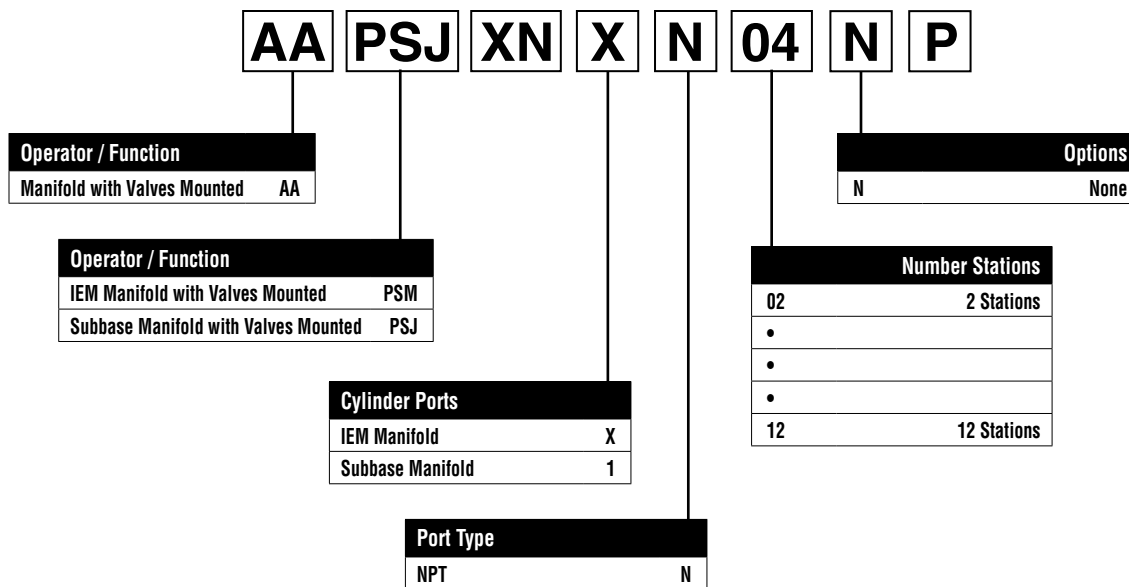


End Plate Kit (NPT) **PSXM31010P**



Manifold Subbase Kit (NPT) **PSXM530CP**

How to Order Manifold Assemblies



IEM Bar Manifold Assembly

First line item describes IEM Assembly. Subsequent line items listed identify each station in the Manifold starting with Station Number 1.

Subbase Manifold Assembly

First line item describes Subbase Assembly. Subsequent line items listed identify each station in the Manifold starting with Station Number 1.

Manifold Assembly Ordering Example

Item	Qty	Part Number
001	1	AAPSMXNXN04NP
002	2	XM30NBG49A - Station 1, 2 - Normally Closed
003	1	XM40NBG49A - Station 3
004	1	XM40NBG49F0A - Station 4

Notes: When ordering Add-A-Folds, list valves left to right when looking at the Port 1/3 side of the manifold. All 3-Way valves will be assembled as 3-Way N.C. valves.

Subbase Manifold Ordering Example

Item	Qty	Part Number
001	1	AAPSJXN1N04NP
002	2	XM3VNBG49A - Station 1, 2 - Normally Closed
003	1	XM4VNBG49A - Station 3
004	1	XM4VNBG49F0A - Station 4

Notes: When ordering Add-A-Folds, list valves left to right when looking at the Port 2/4 side of the manifold. All 3-Way valves will be assembled as 3-Way N.C. valves. Isolator Discs are required for N.O. functions

Component Ordering Example

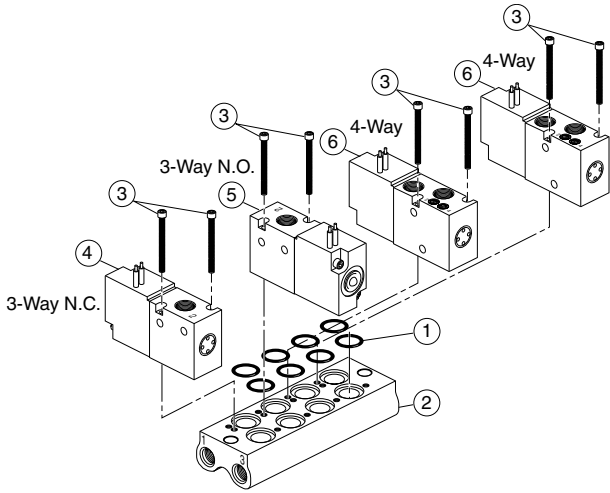
Item	Qty	Part Number
001	1	PSMXNXN04NP (IEM Kit)
002	2	XM30NBG49A (Valve)
003	1	XM40NBG49A (Valve)
004	1	XM40NBG49F0A (Valve)

Component Ordering Example

Item	Qty	Part Number
001	1	PSXM31010P (End Plate Kit)
002	4	PSXM530CP (Subbase Kit)
003	2	XM3VNBG49A (Valve)
004	1	XM4VNBG49A (Valve)
005	1	XM4VNBG49F0A (Valve)

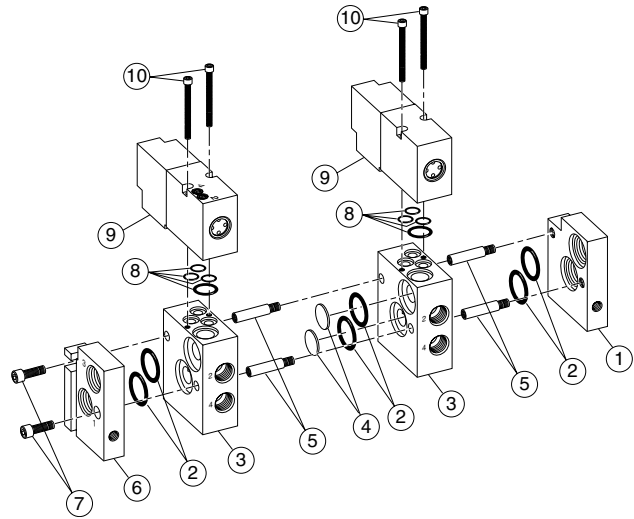
Inline Valve on IEM Bar Manifold Assembly

IEM Bar Manifold Assembly's are assembled by adding Inline Valves to an IEM Bar Manifold. O-rings are installed at each valve station in the counterbore on the top of the manifold. Valves are installed with 2 mounting screws. For 3-Way N.C. valve operation, line up the solenoid end of the Valve with Port 1 on the Manifold. For 3-Way N.O. operation, line up the solenoid end of the valve with Port 3 on the manifold. For 4-Way valve operation, line up the Solenoid end of the valve with Port 1 on the manifold. If manifolds are factory assembled, all 3-Way valves are N.C. To convert from N.C. to N.O. operation, remove valve from the base and place valve 180° from the original position with the solenoid end lined up with the 3-Port on the manifold.



Subbase Valve and Manifold Assembly

Subbase Manifold Assembly's are assembled by adding tie rods and manifold bases to the end plate kit of the subbase end plate kit as shown below. Valves are added to each subbase per manifold design. 4-Way and 3-Way valves are mounted with Solenoids Coils facing away from subbase delivery ports 2 and 4. For 3-Way N.O. Functions, valves must be isolated from the other 3-Way N.C. and 4-Way valves on the manifold. This is achieved by placing port isolator discs in between the subbase of the first 3-Way N.O. Valve and the subbase of the last 3-Way N.C. or 4-Way valve in the Subbase Manifold. Inlet pressure is connected to Port 3 of the manifold for the 3-Way N.O. valves. Inlet pressure is connected to the Port 1 of the manifold for the 3-Way N.C. and 4-Way valves. Separate Inlet Pressure Ports and Exhaust Ports are required for N.O. and N.C. 3-way function valves.



Performance Information

Code	Electrical				Holding Current (Amps)	Flow		Seals
	Voltage		Power Consumption (W / VA)	Cv Chart				
	AC	DC		3-Way		4-Way		
	60Hz	50Hz						
42	24	22	—	4.8VA	.200	.15	.15	Buna N
45*	—	—	12	4.5W	.375	.15	.15	
49*	—	—	24	4.5W	.188	.15	.15	
53	120	110	—	4.32VA	.036	.15	.15	
57	240	220	—	4.32VA	.018	.15	.15	
Note: Voltage Tolerance: +10 / -15%						Cv tested per ANSI / (NFPA) T3.21.3		

* Mobile Voltage, +25/-30%

Response Time

Code	Voltage	0 Cu. In. Test Chamber		12 Cu. In. Test Chamber	
		Fill	Exhaust	Fill	Exhaust
49	24VDC	.011	.007	.240	.384
53	120VAC	.011	.020	.240	.384

Average Fill Time (Seconds): With 100 PSIG supply, time required to fill from 0-90 PSIG and exhaust from 100 PSIG to 10 PSIG is measured from instant of energizing, or de-energizing solenoid. Times shown are average. Tested per ANSI / (NFPA) T3.21.8.

Operating Pressure

Function / Pilot Source	Minimum	Maximum
3-Way, N	0 PSIG	125 PSIG
3-Way, V	Vacuum	25 PSIG
4-Way, N	Vacuum	125 PSIG

Temperature Rating

32°F to 125°F (0°C to 50°C)



Blanking Plate



Kit Number	
IEM Universal NPT	Subbase Blank
PSXM2194P	PSXM8310P

IEM Universal Kit includes: (1) Plate, (2) Screws, (2) Gaskets
Subbase Kit includes: (1) Plate, (2) Screws, (4) Gaskets

IEM Valve / Manifold O-ring Kit



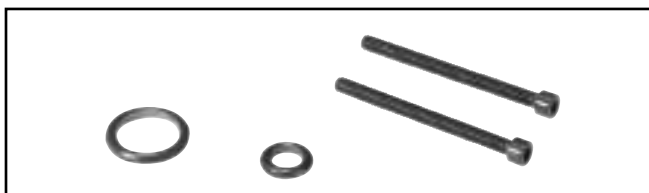
Part Number	Description
PSXM2186P	IEM Valve / Manifold O-ring Kit

Mounting Bracket - Inline Valve



Part Number	Description
PSXM8288P	Mounting Bracket

Subbase Valve / Manifold Bolt Kit



Part Number	Description
PSXM8100P	Subbase Valve / Manifold Bolt Kit

Isolator Plugs - Subbase Manifold

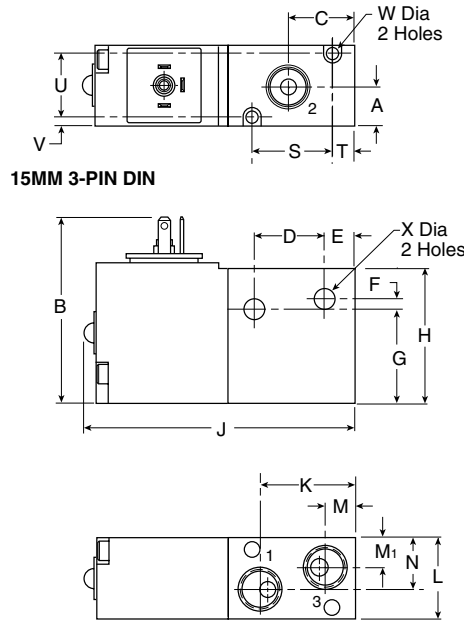
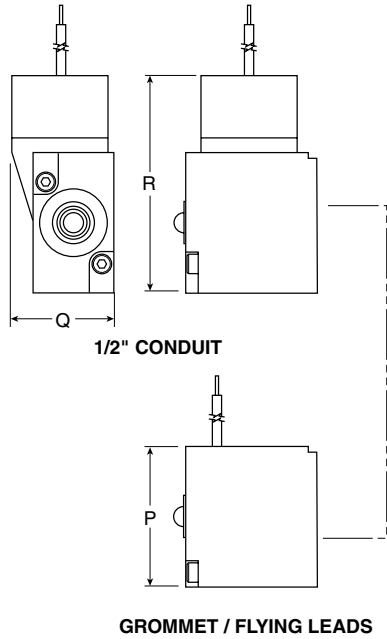


Part Number	Description
PSXM40900P	Isolation Plugs

Plug-in Electrical Connectors - 9.4mm



Indication	Voltage	Unwired Plug	Plug with 6' Lead
None	N/A	PESC10	PESC12
LED & Suppression	12/24V	PESC2020B	PESC2220B
	120VAC	PESC2001F	PESC2201F



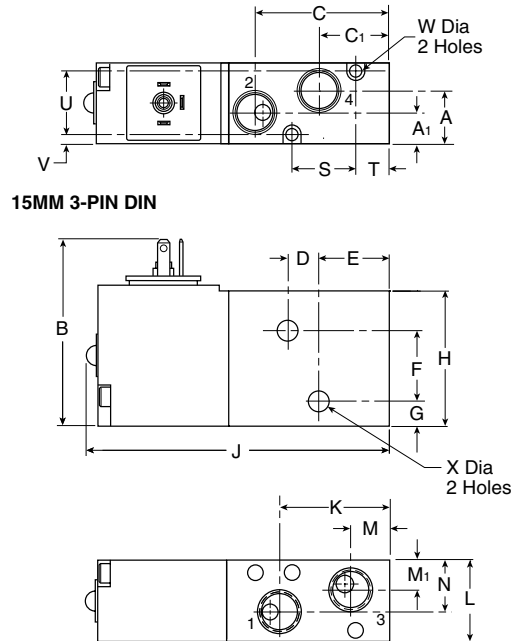
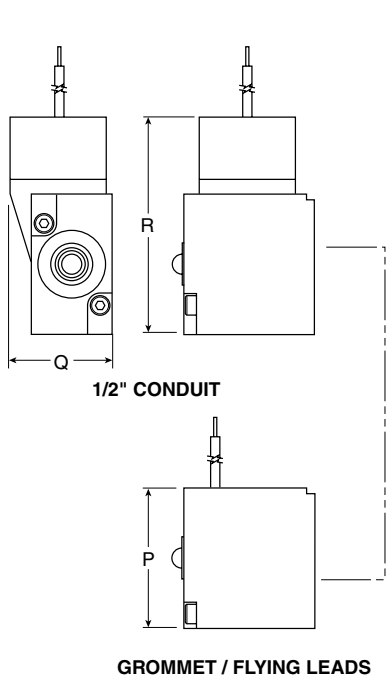
XM 3-Way Inline

A .38 (10)	B 1.69 (43)	C .62 (16)	D .66 (17)	E .28 (7.0)
F .10 (2.5)	G .87 (22)	H 1.25 (32)	J 2.50 (64)	K .87 (22)
L .75 (19)	M .28 (7.0)	M₁ .28 (7.0)	N .48 (12)	P 1.32 (34)
Q .98 (24.9)	R 2.10 (53)	S .75 (19)	T .21 (5.4)	U .59 (15)
V .08 (2.0)	W .11 (2.9)	X .16 (4.0)		

Inches (mm)

Valve Weight

- Grommet..... 4 oz (.11 Kg)
- DIN 4 oz (.11 Kg)
- Conduit 5 oz (.14 Kg)



XM 4-Way Inline

A .48 (12)	A₁ .28 (6.9)	B 1.69 (43)	C 1.23 (31)	C₁ .64 (16)
D .24 (6.5)	E .68 (17)	F .65 (16.5)	G .22 (5.6)	H 1.25 (32)
J 2.80 (71)	K 1.01 (26)	L .75 (19)	M .36 (9.1)	M₁ .28 (7.1)
N .48 (12)	P 1.32 (34)	Q .98 (25)	R 2.10 (53)	S .59 (15)
T .32 (8.0)	U .59 (15)	V .08 (2.0)	W .11 (2.9)	X .16 (4.0)

Inches (mm)

Valve Weight

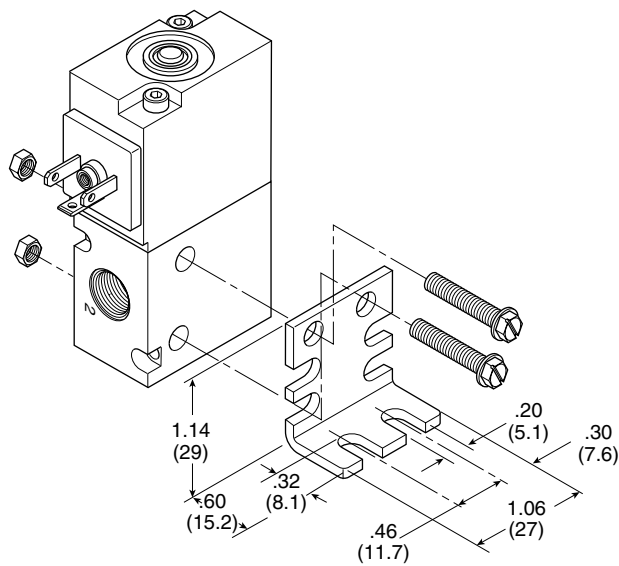
- Grommet..... 4.3 oz (.12 Kg)
- DIN 4.3 oz (.12 Kg)
- Conduit 5.3 oz (.15 Kg)

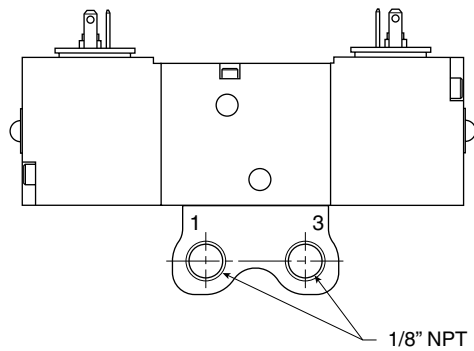
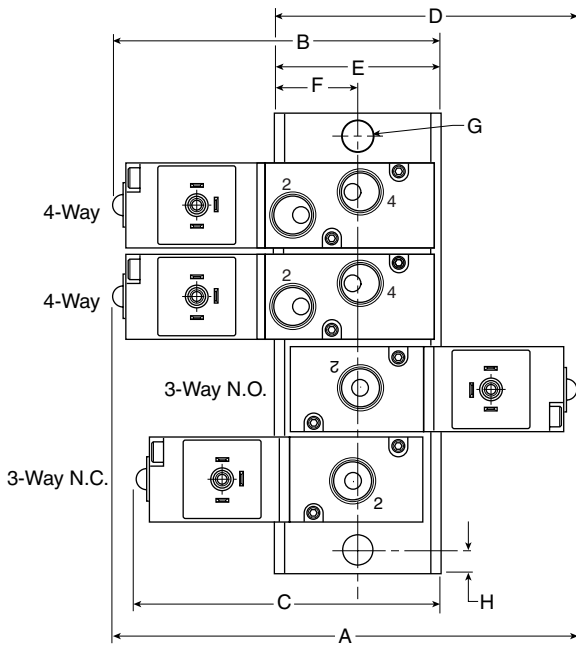
**XM 4-Way Inline
with Flow Controls**

A	A ₁	B	C	C ₁
.48 (12)	.28 (6.9)	1.69 (43)	1.23 (31)	.64 (16)
D	E	F	G	H
.24 (6.5)	.68 (17)	.65 (16.5)	.22 (5.6)	1.25 (32)
J	K	L	M	M ₁
2.80 (71)	1.01 (26)	.75 (19)	.36 (9.1)	.28 (7.1)
N	P	Q	R	S
.48 (12)	1.32 (34)	.98 (25)	2.10 (53)	.59 (15)
T	U	V	W	X
.32 (8.0)	.59 (15)	.08 (2.0)	.11 (2.9)	.16 (4.0)

Inches (mm)
Valve Weight
Grommet..... 4.3 oz (.12 Kg)
DIN 4.3 oz (.12 Kg)
Conduit..... 5.3 oz (.15 Kg)

Mounting Bracket Dimensions





XM IEM Manifold

A	B	C	D	E
4.04 (103)	2.86 (73)	2.67 (68)	2.67 (68)	1.47 (37)
F	G	H	J	L
.74 (19)	Ø .28 Ø (7.0)	.20 (5.0)	2.11 (54)	.79 (20)
M	N	P	Q	
.80 (20.5)	.48 (12)	.88 (22)	.44 (11)	

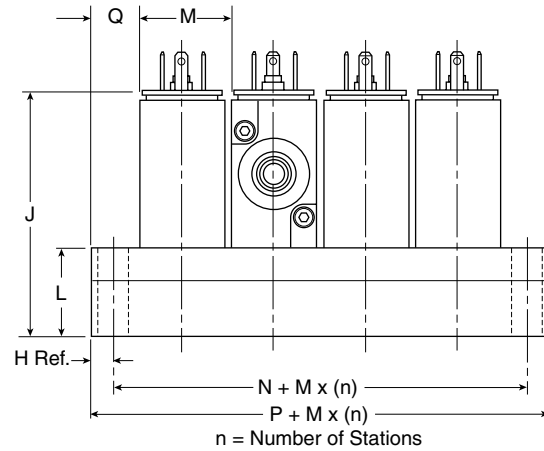
Inches (mm)

Manifold Weight

2 Station 2.5 oz (.07 Kg)
 Each Additional 1 oz (.03 Kg)

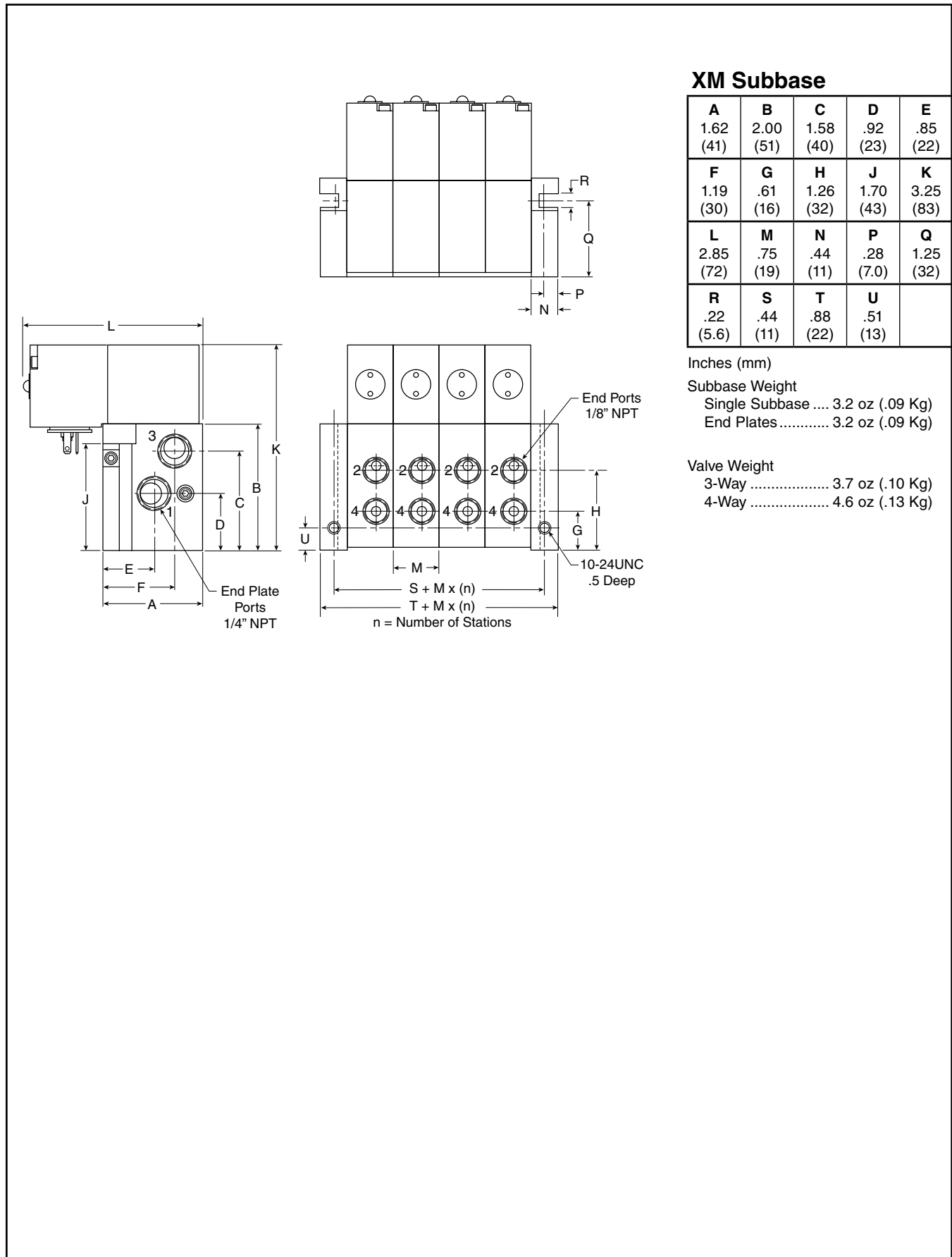
Valve Weight

3-Way 4 oz (.11 Kg)
 4-Way 4.3 oz (.12 Kg)



Dimensions

Subbase



XM Subbase

A 1.62 (41)	B 2.00 (51)	C 1.58 (40)	D .92 (23)	E .85 (22)
F 1.19 (30)	G .61 (16)	H 1.26 (32)	J 1.70 (43)	K 3.25 (83)
L 2.85 (72)	M .75 (19)	N .44 (11)	P .28 (7.0)	Q 1.25 (32)
R .22 (5.6)	S .44 (11)	T .88 (22)	U .51 (13)	

Inches (mm)

Subbase Weight

Single Subbase 3.2 oz (.09 Kg)

End Plates 3.2 oz (.09 Kg)

Valve Weight

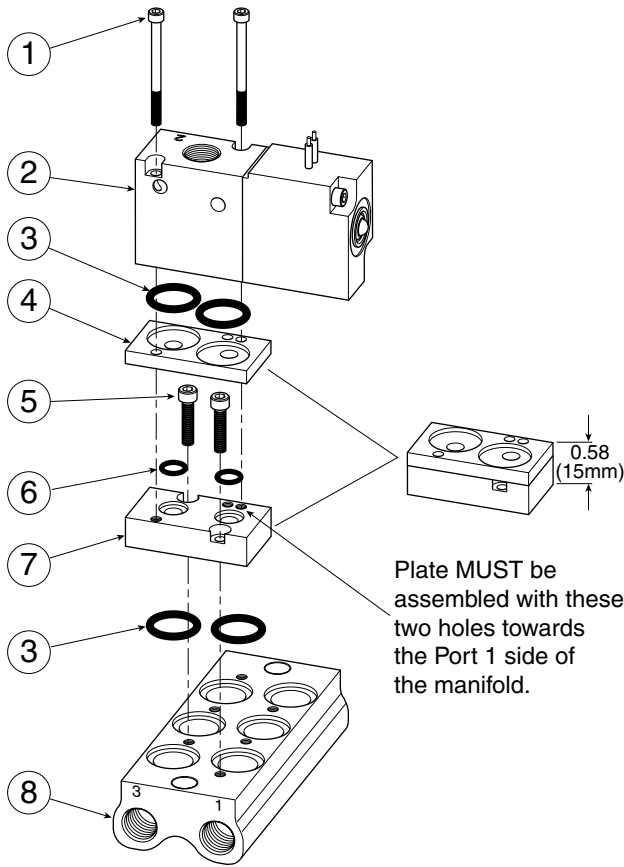
3-Way 3.7 oz (.10 Kg)

4-Way 4.6 oz (.13 Kg)

PSXM2190P

Transition Plate Kit

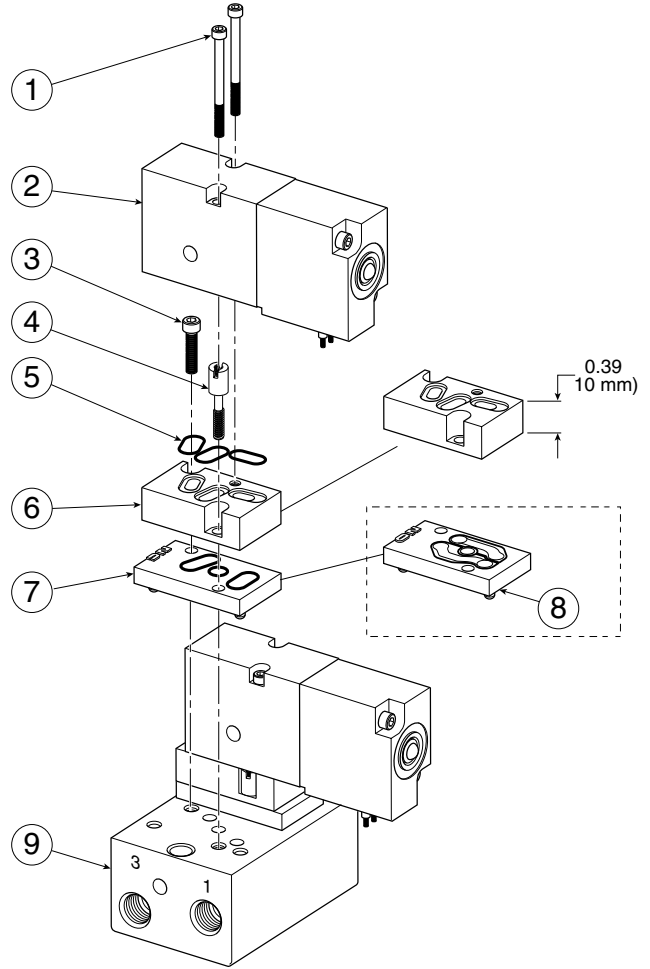
3-Way & 4-Way XM Valves to MicroKing IE Manifold



PSXM2191P

Transition Plate Kit

3-Way Subbase XM Valves to MicroKing 3-Way Subbase

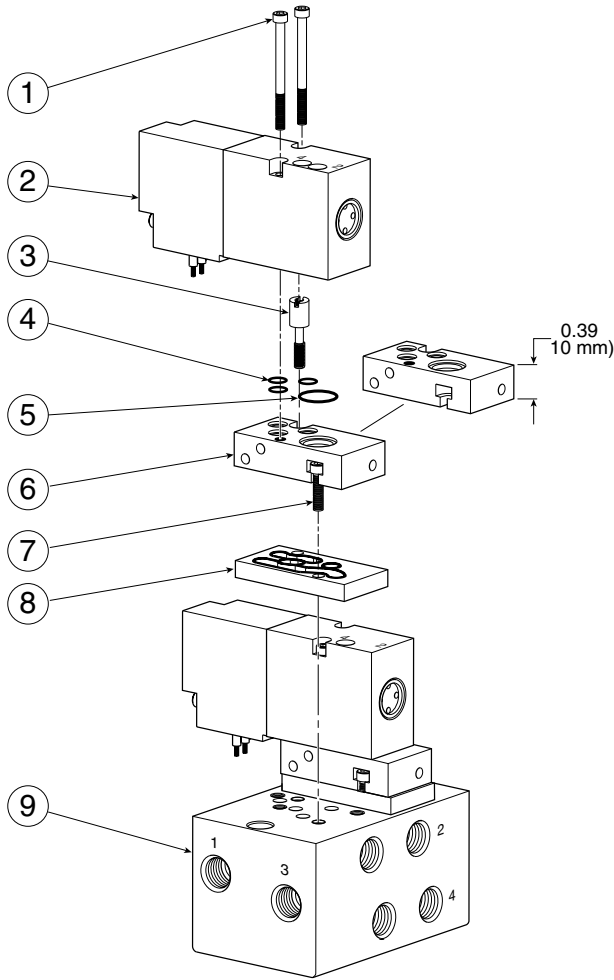


Item	Description	Quantity	Torque Required
1	Special Valve to Base Mounting Screws, #3-48 x 1-1/2 Long	2	6 to 10 In.Lb. (.7 to 1.1 Nm)
2	XM 3/2 or 4/2 Valve	Not Included in this Kit	
3	O-rings, Transition Plate & Manifold	4	
4	Transition Plate, Top	1	
5	Mounting Screws, Bottom Transition Plate to Base, M3 x 12mm	2	6 to 10 In. Lb. (.7 to 1.1 Nm)
6	O-rings, Transition Plate	2	
7	Transition Plate, Bottom	1	
8	MicroKing IEM	Not Included in this Kit	

Item	Description	Quantity	Torque Required
1	Standard Valve to Base Mounting Screws, #3-48 x 1-1/4 Long	Not Included in this Kit	6 to 10 In.Lb. (.7 to 1.1 Nm)
2	XM 3/2 Subbase Valve	Not Included in this Kit	
3	Socket Head Cap Screw M3 x 14mm Long	1	6 to 10 In.Lb. (.7 to 1.1 Nm)
4	Special Male / Female Stud	1	6 to 10 In. Lb. (.7 to 1.1 Nm)
5	O-rings, Transition Plate	3	
6	Transition Plate	1	
7	MicroKing Selector Plate NC (Use if replacing NC Valve)	1	
8	MicroKing Selector Plate NO (Use if replacing NO Valve)	1	
9	MicroKing 3-Way Subbase	Not Included in this Kit	

**PSXM2192P
Transition Plate Kit**

4-Way XM Subbase Valves to MicroKing 4-Way Subbase



Item	Description	Quantity	Torque Required
1	Standard Valve to Base Mounting Screws, #3-48 x 1-1/4 Long	Not Included in this Kit	6 to 10 In.Lb. (.7 to 1.1 Nm)
2	XM 4/2 Subbase Valve	Not Included in this Kit	
3	Special Male / Female Stud	1	6 to 10 In. Lb. (.7 to 1.1 Nm)
4	O-rings, Transition Plate to Valve, Small	3	
5	O-rings, Transition Plate to Valve, Large	1	
6	Transition Plate	1	
7	Standard Mounting Screws, M3 x 14mm Long	1	6 to 10 In. Lb. (.7 to 1.1 Nm)
8	MicroKing 4-Way Selector Plate	1	
9	MicroKing 3-Way Subbase	Not Included in this Kit	

Notes

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2. Payment: Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

4. Warranty: Seller warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of 18 months from date of shipment from Parker Hannifin Corporation. THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED.

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5. Limitation of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.

6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitations, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed,

Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer, or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets (hereinafter "Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgements resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.



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