

VAL-SIF-108-2

# M200 Valves

**Discontinued Product** 

**Replacement Valve & Repair Kits** 

Effective:July, 2000Supersedes:October, 1999





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The M200 solenoid actuated and manually actuated valves, bases, and miscellaneous parts will be discontinued effective September 31<sup>st</sup>, 1999. If your customer was planning to use the M200 valve in an OEM application Parker Pneumatic suggests that you convert them to either:

- The B3 series for solenoid actuated valves.
- The Directair 4 series for manually actuated valves.

The flow rate of the B3 valve is comparable to the M200 valve and is suitable as a "functional replacement valve" in the majority of M200 solenoid actuated applications. The flow capability of the Directair 4 is also comparable to the M200 valve and should be suitable for most manually actuated valve applications. For existing applications where the M200 bases are plumbed in we are offering an interface plate that will adapt the Parker Pneumatic B3 subbase series valve to those M200 bases. This adapter plate was designed for the B3 valve only and will not work with the Directair 4 series valves. The Directair 4 cannot be mounted to the M200 base.

Also in this catalog you can find suggested cross over valves for existing M200 model numbers as well as several M200 solenoid repair kits, body service kits, and individual parts that will be available until December 31, 2002. If necessary, you can call the Parker Pneumatic Customer Service Department for additional information.



FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application including consequences of any failure, and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

# Offer of Sale

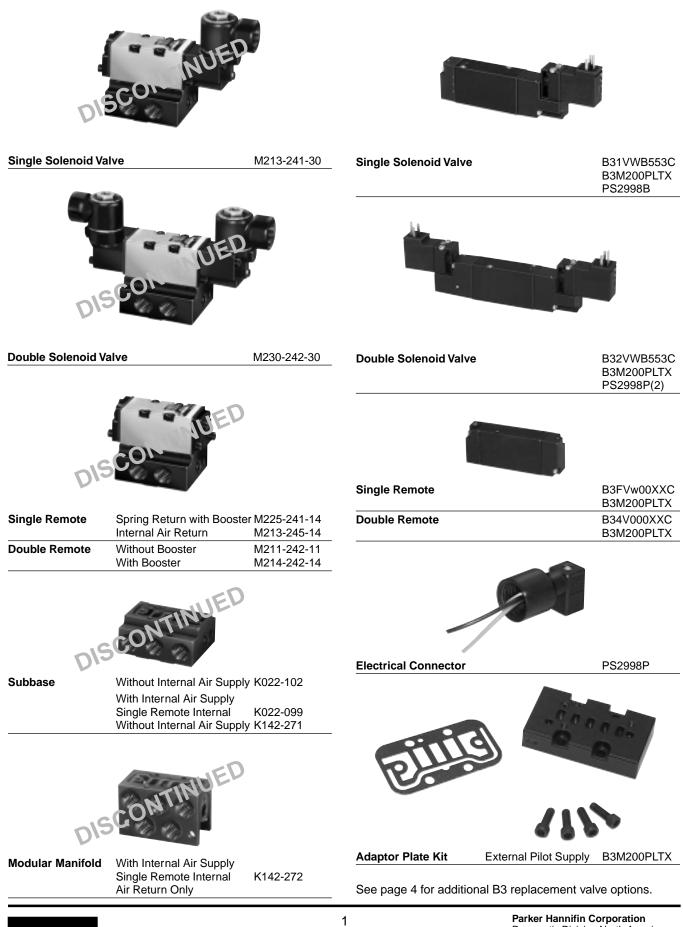
The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated on the separate page of this document entitled "Offer of Sale".

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Pneumatic





Parker Hannifin Corporation Pneumatic Division North America Richland, Michigan





#### **Button Operated**

Push with Spring Return	M207-241-03	
Pull with Spring Return	M203-241-05	
2-Position Manual Return	ı	M203-241-12
2-Position Detent		M203-241-20
3-Position Detent	All Ports Blocked Cyl. Open To Exhaust Cyl/ Open To Inlet	M203-246-21 M203-247-21 M203-248-21
Push with Air Return	Without Booster With Booster	M211-241-03 M214-241-03



Level Operated		
Push with Spring Return	M204-241-05	
Pull with Spring Return	M207-241-04	
2-Position Manual Retur	'n	M204-241-12
2-Position Detent		M204-241-20
3-Position Detent	All Ports Blocked Cyl. Open To Exhaust Cyl/ Open To Inlet	M204-246-21 M204-247-21 M204-248-21
Push with Air Return	Without Booster With Booster	M211-241-04 M214-241-04



#### Button Operated

Push with Spring Return	520413000	
Pull with Spring Return		N/A
2-Position Manual Return	520433000	
2-Position Detent	520433000	
3-Position Detent	All Ports Blocked Cyl. Open To Exhaust Cyl/ Open To Inlet	N/A N/A N/A
Push with Air Return	Without Booster With Booster	520453000 520453000



#### Lever Operated

Loron operatea						
Push with Spring Return	520813000					
Pull with Spring Return	Pull with Spring Return N/A					
2-Position Manual Return 5208330						
2-Position Detent	520833000					
3-Position Detent	All Ports Blocked Cyl. Open To Exhaust Cyl/ Open To Inlet	521833000 529833000 522833000				
Push with Air Return	Without Booster With Booster	N/A N/A				



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**Cam Operated** 

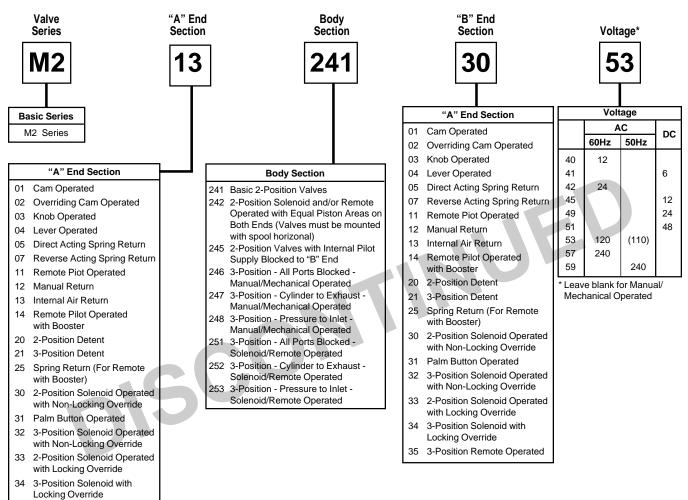
520213000

#### Note:

The Directair 4 Series valves Will Not directly mount and Cannot be adapted to mount on the M200 bases. When ordering a Directair Series valve to functionally replace an M200 Series valve, you can order either mounting option 1, Direct Pipe Ported (inline, body ported) or option 3, Subbase Mounted (valve with base). The recommended Directair 4 crossover numbers above and on page #3 include the subbase.

See page 5 for additional Directair 4 replacement valve options.

# M200 Valves Discontinued Product



#### 35 3-Position Remote Operated

# Sample M200 to B3 Series Crossover Model Numbers

M200 Series	*B3	Series
M21124211	B34V000XXC	B3M200PLTX
M2132413040	B31VWB540C	B3M200PLTX
M2132413045	B31VWB545C	B3M200PLTX
M2132413049	B31VWB549C	B3M200PLTX
M2132413053	B31VWB553C	B3M200PLTX
M2132413057	B31VWB557C	B3M200PLTX
M2132413059	B31VWB557C	B3M200PLTX
M2132413353	B31VWC553C	B3M200PLTX
M2302423040	B32VWB540C	B3M200PLTX
M2302423049	B32VWB549C	B3M200PLTX
M2302423053	B32VWB553C	B3M200PLTX
M2322513253	B35VWB553C	B3M200PLTX
M2332423353	B32VWC553C	B3M200PLTX

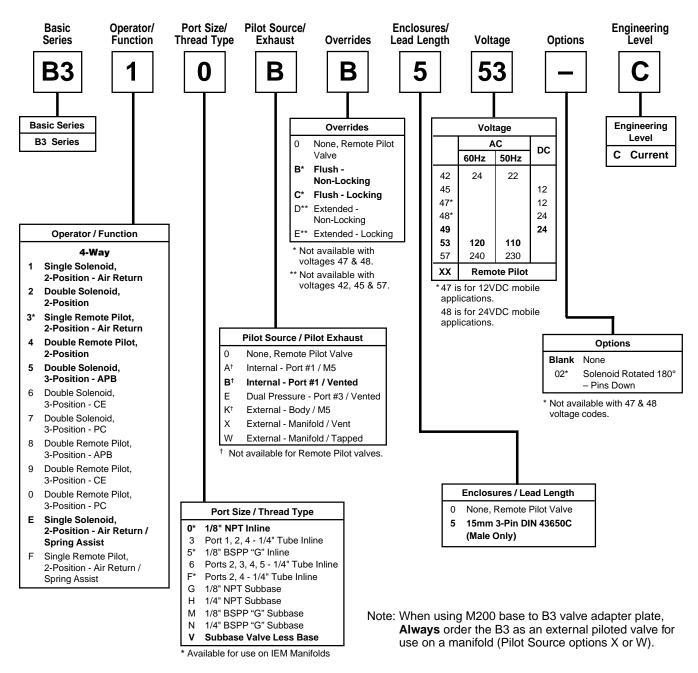
Note: Sample crossover numbers are for use with M200 bases.

# Sample M200 to Directair 4 Series Crossover Model Numbers

M200 Series	<b>Directair 4 Series</b>
M20124105	520213000
M21424102	520253000
M20324105	520413000
M20324112	520433000
M20324120	520433000
M21124103	520453000
M22524114	520513000
M21424211	520553000
M21424214	520553000
M20424105	520813000
M20424112	520833000
M20424120	520833000
M21124104	520853000
M21424104	520853000
M20424621	521833000
M20424721	529833000



# **BOLD OPTIONS ARE STANDARD**



#### See Catalog 0600P-4/USA for B3 dimensional data and additional base mounting options.

The **B3 Single Solenoid** valve assembled with the 15mm-1/2" conduit electrical connector and mounted on the M200 base with the adapter plate is approximately 1.13" (29mm) greater in height and approximately 1.38" (35mm) greater in over all length compared to the M200 valve / base assembly.

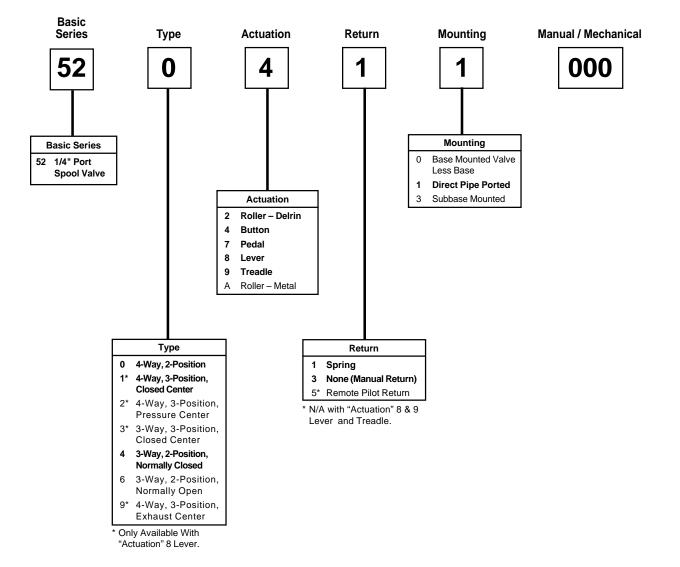
The **B3 Double Solenoid** valve assembled with the 15mm-1/2" conduit electrical connectors and mounted on the M200 base with the adapter plate is approximately 1.13" (29mm) greater in height and approximately 2.75" (70mm) greater in over all length compared to the M200 valve / base assembly.

The **B3 Remote Pilot** valve assembly mounted on the M200 base with the adapter plate is approximately 0.25" greater in height and equal in length as compared to the M200 valve / base assembly.

If height is a factor, the B3 valve can be ordered with the solenoid **rotated 180 degrees** using "02" under "Options". In this case, the height of the valve assembly mounted on the M200 base and adapter plate with the 15mm-1/2" conduit connectors is approximately 0.13" (3mm) less than the M200 valve / base assembly. The over all length remains the same as stated above.



# **BOLD OPTIONS ARE STANDARD**



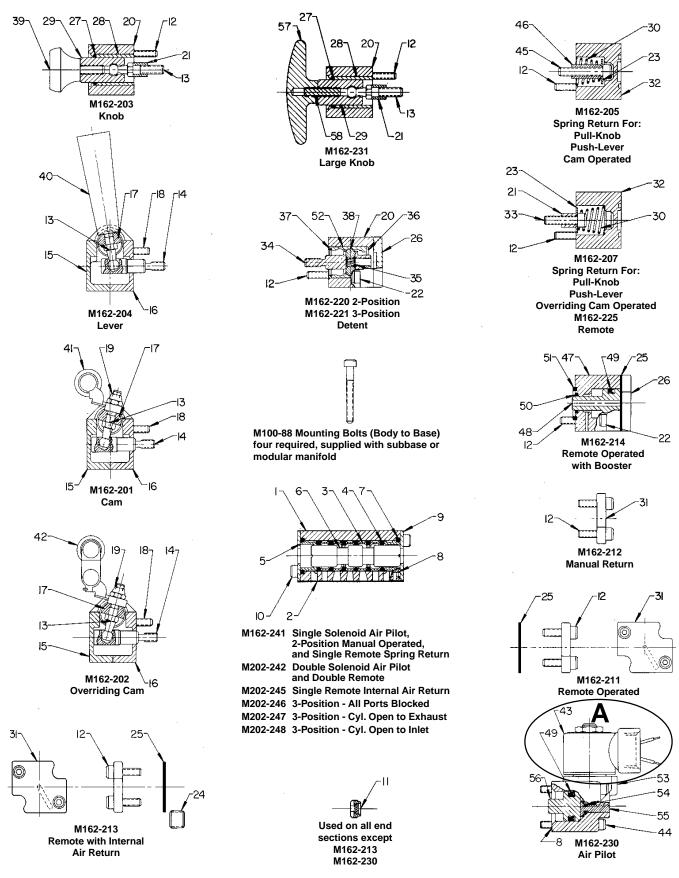
See Catalog 0600P-4/USA for Directair 4 dimensional data and subbase options.

Note:

The Directair 4 Series valves Will Not directly mount and <u>Cannot</u> be adapted to mount on the M200 bases. When ordering a Directair Series valve to functionally replace an M200 Series valve, you can order either mounting option 1, Direct Pipe Ported (inline, body ported) or option 3, Subbase Mounted (valve with base).



### ALL M162, M202, M100 KITS DISCONTINUED - USE AVAILABLE PARTS FROM NEXT PAGE.



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### SHADED ITEMS ARE OBSOLETE

SHADED		JB30LLTL
ITEM NO.	PART #	DESCRIPTION
1	K053-168	Body
2	K183-069	Gasket
3	K453-015	Spacer
4	H232-75	O-Ring
5	K453-016	End Spacer
	K493-022	Stem All Ports Blocked
6	K493-024	Stem
6	K493-025	Ports Open to Exh. Stem
	K493-020	Ports Open to In.
		All Others
7	H142-40	Tetraseal
8	H249-71	O-Ring
9	K323-71	Retainer Plate
10	H194-15	Cap Screw
11	K402-001	Breather Plug Ass'y
12	H100-07	Cap Screw
13	K503-003	Ball Stud
14	K563-037	Ball Cavity Extension
15	K203-057	Housing (Front Half)
16	K203-056	Housing (Back Half)
17	K653-001	Swivel
18	H100-88	Cap Screw
19	H063-96	Self-Locking Nut
20	K203-055	Housing
21	K453-013	Spacer
	K453-021	Spacer for Booster Piston Only
22	H194-15	Cap Screw
23	H178-51	Washer
24	H074-04	1/8" Pipe Plug
25	K183-070	Gasket
26	K123-048	End Cover
20	H208-50	Scraper Ring
28	K443-012	Sleeve
20	K563-038	Universal Adaptor
30	K473-033	Spring
30	K123-047	End Cover
31	K123-047 K203-053	Housing
32		-
	H100-23	Cap Screw
34	K493-027	Detent Stem
35	K473-036	Spring
36	H198-03	Wave Washer
37	H090-94	Retainer Ring
38	H002-19	7/32" Ball
39	H050-21	Knob
40	H052-02	Lever
41	K052-006	Cam Arm Ass'y
42	K052-007	Over-Riding Cam Ass'y
43	H172-90	Pilot Valve
44	H100-09	Screw
45	H100-26	Cap Screw

	DADT #	DECODIDITION
ITEM NO.	PART #	DESCRIPTION
46	K453-014	Spacer
47	K203-054	Housing
48	K313-041	Piston
49	H145-36	Seal
50	H249-72	O-Ring
51	H142-11	Tetraseal
52	K443-013	Detent Sleeve 2 Position
	K443-014	Sleeve 3 Position
53	K112-077	Housing
54	H134-43	O-Ring
55	K343-084	Plunger
56	K313-050	Piston
57	H050-27	Knob
58	K503-003	Stud
	M162-203	Knob
	M162-231	Large Knob
	M162-205	Spring Return for Pull Knob
	M162-204	Lever
	M162-220	Detent 2 Position
	M162-221	Detent 3 Position
	M162-207	Spring Return for Pull Knob
	M162-225	Remote
	M162-201	CAM
	H100-88	Mounting Bolts
	M162-214	Remote Operated with Booster
	M162-202	Overriding CAM
	M162-212	Manual Return
	M162-211	Remote Operated
	M162-213	Remote with Internal Air Return
	M162-230	Air Pilot
	M202-241	Single Solenoid Air Pilot
	M202-242	Double Solenoid Air Pilot
	M202-245	Remote Internal Air Return
	M202-246	Position-All Ports Blocked
	M202-247	Position-Cyl. Open to Exhaust
	M202-248	Position-Cyl. Open to Inlet
	K352-120	Basic Seal Kit
	K352-12145	Seal Kit
	K352-12149	Solenid Kit
	K352-12153	Solenoid Kit
	K352-12245	Solenoid Kit
	K352-12249	Solenoid Kit
	K352-12253	Solenoid Kit
	K352-123	Solenoid Pilot Seal Kit Only
	K34030024	Special Spool
	K47030013	Return Spring
	410008112	12VAC Solenoid Kit
	410008113	24VAC Solenoid Kit
(See page 6)	410008115	120VAC Solenoid Kit
page 0)	410008116	240VAC Solenoid Kit
	410008122	12VDC Solenoid Kit
	410008123	24VDC Solenoid Kit

Parker Pneumatic

# M200 Operating Pressure

#### Solenoid Operated

Medium				External Pilot Supply				al Pilot Ipply
	Main \	/olvo	PSIG		0-150		35-150	
A	IVIAIII	aive	bar		0-10.3		2.4	-10.3
Air	Pile	<b>.</b> +	PSIG	75% of M	ain Valve (35	5 min.)	35	-150
	PII	JL	bar	75% of Ma	ain Valve (2.4	4 min.)	2.4	-10.3
	Main \	/alve		Within	1" Hg of per	fect		Do
Vacuum	Pile	<b>.</b> +	PSIG		35-150		1	lot
	FIII	Л	bar		2.4-10.3		ι	Jse
Remo	te Pil	ot O	perate	ed				
Medium			n Valve ssure	Double Remote	Double Remote w/Booster Cylinder	Ext. Pilot Booster Cyl. w/Spring Return		Single Remote Int.Air Return
	PSIG	C	)-75	25	20	40	)	
	bar	0	-5.2	1.7	1.4	2.	8	75%
Air	PSIG	75	-125	30	25	42		of Main
	bar	5.2-8.6		2.1	1.7	2.9		Valve
	PSIG	125-175		35	28	44	4	
	bar	8.6-12.1		2,4	1.9	3.	0	
Vacuum	PSIG	Within 1" Hg		25	20	40		Do Not
vaouum	bar	of F	Perfect	1.7	1.4	2.	8	Use

#### M200 Operating Pressure Manual Operated

		Main Valve			Min. Return Pressure				
Valve		Pressure	•	Remot Retu		Remo Booste			
	PSIG	bar	Vacuum	PSIG	bar	PSIG	bar		
Knob Operated Spring Return	0-150	0-10.3	Within 1" HG of perfect			_	—		
Knob Operated Manual Return Detent	0-150	0-10.3	Within 1" HG of perfect	_	_	_	—		
Knob Operated Air Return	0-75 75-125 125-150	0-5.2 5.2-8.6 8.6-10.3		25 30 35	1.7 2.1 2.4	20 25 1.9	1.4 1.7 28		
			Within 1" HG of perfect	25	1.7	20	1.4		
Lever Operated Spring Return	0-150	0-10.3	Within 1" HG of perfect						
Lever Operated Manual Return Detent	0-150	0-10.3	Within 1" HG of perfect						
Lever Operated Air Return	0-75 75-125 125-150	0-5.2 5.2-8.6 8.6-10.3		25 30 35	1.7 2.1 2.4	20 25 1.9	1.4 1.7 28		
			Within 1" HG of perfect	25	1.7	20	1.4		
Cam Operated Spring Return	0-150	0-10.3	Within 1" HG of perfect						

# M200 Flow Rating (Cv)

			Cv Fle	ow Rating	
Valve Mounting Type Style		In	let	Exhaust	
	0.9.0	Port A Port B		Port A	Port B
2-Position	Subbase	0.81	0.81	0.84	0.80
2-10311011	Manifold	0.81	0.81	0.75	0.78
3-Position	Subbase	0.76	0.79	0.73	0.73
5-1051001	Manifold	0.74	0.73	0.66	0.69

#### B3 Operating Pressure Maximum: 145 PSIG (1000 kPa) Minimum: (See Chart)

Operator/ Function	Internal Pilot	MIN PSIG (kPa)	
1	Single Solenoid - Air Return		
2	Double Solenoid	20(138)	
3	Single Remote Pilot - Air Return		
4	Double Remote Pilot	Vacuum	
5, 6, 7	Double Solenoid - APB, CE, PC	30 (207)	
8, 9, 0	Double Remote Pilot - APB, CE, PC	Vacuum	
E	Single Solenoid - Air Return /Spring Assist	25(244)	
F	Single Remote Pilot - Air Return /Spring Assist	35(241)	
	External Pilot **		
All	"B" Series	Vacuum	

\*\* External Pilot Pressure / Remote Pilot Signal 35-145 PSIG (241-1000 kPa).

# B3 Flow Rating (Cv)

Size	Port Size	Mounting Style	2-Position	3-Position
В3	1/8" Ports	Inline	.75	.60
	1/4" Tube	Inline	.45	.45
	1/8" Ports	Subbase	.65	.45
	1/4" Ports	Subbase	.65	.50

# **Directair 4 Operating Pressure**

#### **Manual Operated**

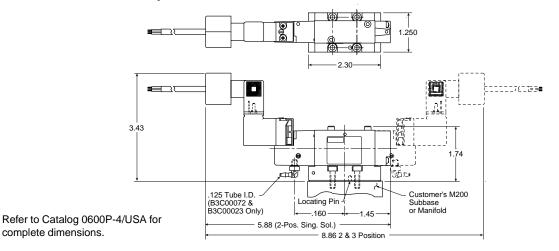
	-	_		Min. Return Pressure	
Valve	PSIG	Bar	Vacuum	PSIG	Bar
Knob Operated Spring Return	0-150	0-10.3	Within 1" HG of Perfect		_
Knob Operated Manual Return	0-150	0-10.3	Within 1" HG of Perfect		—
Knob Operated	0-150	0-10.3		30	2.1
Knob Operated Air Return			Within 1" HG of Perfect	30	2.1
Lever Operated Spring Return	0-150	0-10.3	Within 1" HG of Perfect	_	—
Lever Operated Manual Return	0-150	0-10.3	Within 1" HG of Perfect		—
Air Operated	0-150	0-10.3		30	2.1
Air Operated Air Return			Within 1" HG of Perfect	30	2.1
Cam Operated Spring Return	0-150	0-10.3	Within 1" HG of Perfect	_	_

# Directair 4 Flow Rating (C<sub>V</sub>)

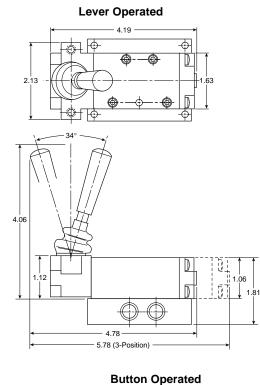
Flow Path	Direct Pipe Ported 1/4" Ports	Subbase Mounted 1/4" Side Ports	
1 → 2	.82	.64	
$1 \rightarrow 4$	.84	.66	
$2 \rightarrow 3$	.84	.63	
$4 \rightarrow 5$	.83	.63	
Avg.	.83	.64	



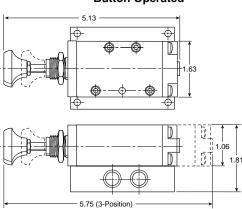
# **Dimensions for B3 Replacement for M200**



# **Dimensions for Directair 4 Replacement for M200**

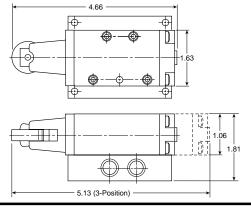


Refer to Catalog 0600P-4/USA for complete dimensions.



Parker Pneumatic

**Roller Operated** 



Parker Hannifin Corporation Pneumatic Division North America Richland, Michigan

M200 Number	Description	Repair Kit & Spool	Replacement Valve Kit	Suggested New System
K14020204	Manifold K142-272 Special for Common External Pilot <b>(EAGLE)</b>	N/A	N/A	Convert to B3 Series
K14020225	M20020104 + K14020204 Manifold <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	Convert to B3 Series
K14020291	7-Station M20020104 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid)	B3C00022	(7) B3EVWB553C + (1) PSJ3B1N07NP + (7) PS2998P
K1402029149	7-Station M2002010449 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122(Solenoid) + K353120 (Seal Kit)	B3C00023	(7) B3EVWB549C + (1) PSJ3B1N07NP + (7) PS2998P
K1402029249	5-Station M2002010449 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122(Solenoid) + K353120 (Seal Kit)	B3C00023	(5) B3EVWB549C + (1) PSJ3B1N05NP + (5) PS2998P
K14020293	Manifold Kit Using K02030025 Special Manifold	N/A	N/A	Convert to B3 Series
K14020294	6-Station M20020104 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(6) B3EVWB553C + (1) PSJ3B1N06NP + (6) PS2998P
K14020337	M20020104 + K022-100 Single Subbase <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(1) B3EVKB553C + (1) PS2934P + (1) PS2998P
K1402033749	M2002010449 + K022-100 Single Subbase <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122(Solenoid) + K353120 (Seal Kit)	B3C00023	(1) B3EVKB549C + (1) PS2934P + (1) PS2998P
K14020409	8-Station M20020104 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(8) B3EVWB553C + (1) PSJ3B1N08NP + (8) PS2998P
K14020410	4-Station M20020104 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(4) B3EVWB553C + (1) PSJ3B1N04NP + (4) PS2998P
K1402041049	4-Station M2002010449 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	B3C00023	(4) B3EVWB549C + (1) PSJ3B1N04NP + (4) PS2998P
K14020338	Single Station M21324130 with Spring Return + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(1) B3EVWB553C + (1) B3M200PLT + (1) PS2998P
K1402041449	9-Station M2002010449 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	B3C00023	(9) B3EVWB549C + (1) PSJ3B1N09NP + (9) PS2998P

M200 Number	Description	Repair Kit & Spool	Replacement Valve Kit	Suggested New System
K14020419	M20020086 (3-Pos Detent Lever, Center Exhaust - similar to M20424721) + K022102 Subbase	K493024 (Spool) + K352120 (Seal Kit)	N/A	529830000
K14020547	2-Station M20020104 + K14020293 Manifold + Tie Rod <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(2) B3EVWB553C + (1) PSJ3B1N02NP + (2) PS2998P
K1402054749	2-Station M2002010449 + K14020293 Manifold + Tie Rod (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	B3C00023	(2) B3EVWB549C + (1) PSJ3B1N02NP + (2) PS2998P
M20020011	2-Pos Valve Body - Rev. Acting Spring - NO OPERATOR + K142-271 Manifold	K34030024 (SPL Spool) + K47030013 (Spring) + K353120 (Seal Kit)	N/A	(1) B3EVBB553C + (1) B3M200PLT + (1) PS2998P
M20020003	3-Way Dbl Solenoid Valve + K142-271 Manifold	K34030024 (SPL Spool) + K47030013 (Spring) + 410008116 (Solenoid) + K353120 (Seal Kit)	N/A	(1) B32VBB553C + (1) PS2934P + (1) PS2998P
M20020020	M20424125 Lever Valve + K142-271 Manifold (Rev. Act Spring w/ Booster)	K34030024 (SPL Spool) + K47030013 (Spring) + K353120 (Seal Kit)	N/A	520813000 (Directair 4 valve is not reverse acting)
M20020076	Palm Button, 2-Position	K493020 (Spool) + K352120 (Seal Kit)	N/A	N/A
M20020078	3-Way Pin Actuator for Welding Gun	N/A	N/A	N/A
M20020086	Special Lever Valve - 3-Position CE	K34030024 (SPL Spool) + K47030013 (Spring) + K353120 (Seal Kit)	N/A	529833000
M20020090	Special Solenoid Valve 120VAC - Terminals <b>(BRANSON)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(1) B3EVWB553C + (1) B3M200PLTX + (1) PS2998P
M20020093	Cam Operated, 2-Pos Detent	K493020 (Spool) + K352120 (Seal Kit)	N/A	520253000
M20020098	M2132413053 but Spring Return (115VAC/60Hz Special Label)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(1) B3EVWB553C + (1) B3M200PLTX + (1) PS2998P
M20020100	M2132413053 but Spring Return (BRANSON)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) +	B3C00022	(1) B3EVWB553C + (1) B3M200PLTX + (1) PS2998P
M20020104	M2132413053 Single Solenoid / Spring Return, 120 VAC + 6-1/2" Leads w / Termination & DC33 Grease, External Pilot throught Base <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030015 (Spring) + 410008122 (Solenoid) + K352120 (Seal Kit)	B3C00022	(1) B3EVWB553C + (1) B3M200PLTX + (1) PS2998P
M2002010449	M20020104 24VDC <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) +	B3C00023	(1) B3EVWB549C + (1) B3M200PLTX + (1) PS2998P



# M200 Series Valves M200 to B3 Series

M200 Number	Description	Repair Kit & Spool	Replacement Valve Kit	Suggested New System
M20020112	M21324130, External Pilot through Base, Less Coil <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030015 (Spring) + K352120 (Seal Kit)	B3C00022	(1) B3EVBB553C or B3EVWB549C + (1) B3M200PLTX + (1) PS2998P
M20020116	M2002010449 w / Special Spool <b>(EAGLE)</b>	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	B3C00023	(1) B3EVWB549C + (1) B3M200PLTX + (1) PS2998P
M20020117	M2072413049 24VDC, Reverse Acting Spring Return	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	N/A	(1) B3EVBB553C + (1) B3M200PLT + (1) PS2998P

Note: The special B3 valve numbers B3C00022 and B3C00023 include the M200/B3 adapter plate #B3M200PLTX, Gaskets, and the 15mm to 1/2" conduit electrical connector #PS2998P.

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