



M200 Valves

Discontinued Product Replacement Valve & Repair Kits

Effective: April, 2008 Supersedes: July, 2000



Schrader Bellows®

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Offer of Sale	

The M200 solenoid actuated and manually actuated valves, bases, and miscellaneous parts will be discontinued effective September 31st, 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.

/ WARNING

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.

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Solenoid Pilot Operated Valves





M213-241-30



Double Solenoid Valve

M230-242-30



Single Remote	, ,	
	Internal Air Return	M213-245-14
Double Remote	Without Booster	M211-242-11
	With Booster	M214-242-14



Subbase

Without Internal Air Supply K022-102
With Internal Air Supply

Single Remote Internal K022-099 Without Internal Air Supply K142-271



Modular Manifold

With Internal Air Supply Single Remote Internal Air Return Only

K142-272



Single Solenoid Valve

B31VXB553C B3M200PLTX PS2998P



Double Solenoid Valve

B32VXB553C B3M200PLTX PS2998P(2)



 Single Remote
 B3FVX00XXC

 B3M200PLTX

 Double Remote
 B34V000XXC

 B3M200PLTX



Electrical Connector

PS2998P



Adaptor Plate Kit

External Pilot Supply B3M200PLTX

See page 4 for additional B3 replacement valve options.



Manual Operated Valves



p	~	
Push with Spring Return		M207-241-03
Pull with Spring Return		M203-241-05
2-Position Manual Return	١	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



Button Operated

Push with Spring Return		520413000
Pull with Spring Return		N/A
2-Position Manual Return	1	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

	_	
Push with Spring Return		M204-241-05
Pull with Spring Return		M207-241-04
2-Position Manual Return	1	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



Push with Spring Return		520813000
Pull with Spring Return		N/A
2-Position Manual Return	1	520833000
2-Position Detent		520833000
	All Ports Blocked	521833000
3-Position Detent	Cyl. Open To Exhaust	529833000
	Cyl/ Open To Inlet	522833000
Duch with Air Deturn	Without Booster	N/A
Push with Air Return	With Booster	N/A



M207-241-05



Cam Operated

520213000



K022-102

ONTINUE

K142-271

Note:

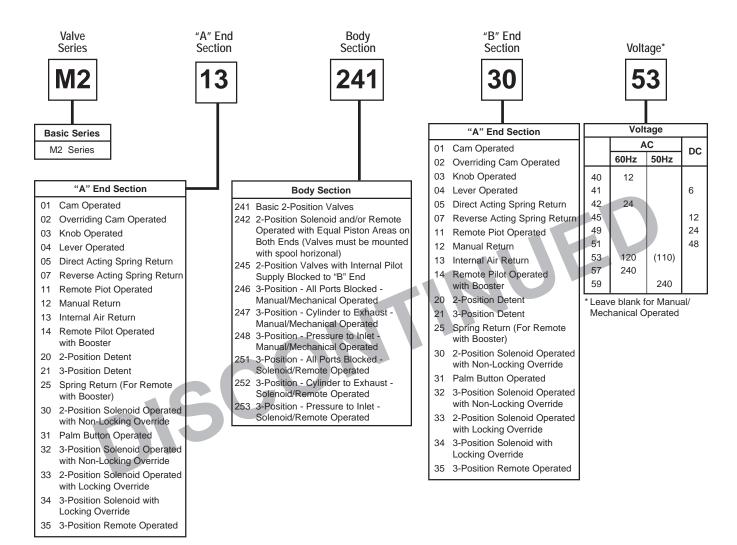
The Directair 4 Series valves Will Not directly mount and Cannot be adapted to mount on the M200 bases. When ordering a Directair Series valve to functionally replace an M200 Series valve, you can order either mounting option 1, Direct Pipe Ported (inline, body ported) or option 3, Subbase Mounted (valve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



Modular Manifold

Discontinued Product



Sample M200 to B3 Series	Crossover N	/lodel
Numbers		
M200 Sorios	*D2 C	orios

Sample M200 to Directair 4 Series Crossover Model Numbers

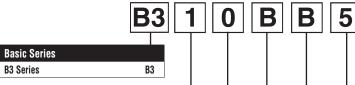
M200 Series	*B3 \$	Series	M200 Series	Directair 4 Series
M21124211	B34V000XXC	B3M200PLTX	M20124105	520213000
M2132413040	B31VXB540C	B3M200PLTX	M21424102	520253000
M2132413045	B31VXB545C	B3M200PLTX	M20324105	520413000
M2132413049	B31VXB549C	B3M200PLTX	M20324112	520433000
M2132413053	B31VXB553C	B3M200PLTX	M20324120	520433000
M2132413057	B31VXB557C	B3M200PLTX	M21124103	520453000
M2132413059	B31VXB557C	B3M200PLTX	M22524114	520513000
M2132413353	B31VXC553C	B3M200PLTX	M21424211	520553000
M2302423040	B32VXB540C	B3M200PLTX	M21424214	520553000
M2302423049	B32VXB549C	B3M200PLTX	M20424105	520813000
M2302423053	B32VXB553C	B3M200PLTX	M20424112	520833000
M2322513253	B35VXB553C	B3M200PLTX	M20424120	520833000
M2332423353	B32VXC553C	B3M200PLTX	M21124104	520853000
			M21424104	520853000
Note: Sample crosso	over numbers are for use	e with	M20424621	521833000
M200 bases.			M20424721	529833000



Replacement Product

B3 Series

BOLD OPTIONS ARE MOST POPULAR.



Oneveter Function	
Operator Function	
3-Way	
Single Solenoid, 2-Position NC - Air Return	G
Single Solenoid, 2-Position NO - Air Return	Н
Double Solenoid, 2-Position	J
Single Remote Pilot, 2-Position NC - Air Return	K
Single Remote Pilot, 2-Position NO - Air Return	L
Double Remote Pilot, 2-Position	M
Single Solenoid, 2-Position NC - Air Return / Spring Assist	V
Single Solenoid, 2-Position NO - Air Return / Spring Assist	W
Single Remote Pilot, 2-Position NC - Air Return / Spring Assist	Χ
Single Remote Pilot, 2-Position NO - Air Return / Spring Assist	Υ
4-Way	
Single Solenoid, 2-Position NC - Air Return	1
Double Solenoid, 2-Position	2
Single Remote Pilot, 2-Position - Air Return	3
Double Remote Pilot, 2-Position	4
Double Solenoid, 3-Position - APB	5
Double Solenoid, 3-Position - CE	6
Double Solenoid, 3-Position - PC	7
Double Remote Pilot, 3-Position - APB	8
Double Remote Pilot, 3-Position - CE	9
Double Remote Pilot, 3-Position - PC	0
Single Solenoid, 2-Position - Air Return / Spring Assist	Е
Single Remote Pilot, 2-Position - Air Return / Spring Assist	F

Port Size / Thread Type	
3-Way	
1/8" NPT Inline	0*
1/8" BSPP "G" Inline	5*
Dual 3-Way & 4-Way	
1/8" NPT Inline	0*
1/8" BSPP "G" Inline	5*
1/4" NPT Subbase	H‡
1/8" NPT Face Mount	T**
Subbase Valve Less Base	V‡

- * Available for use on IEM Manifolds.
- ** 4-Way only.
- ‡ Subbase valves available for 4-Way valves only.

Pilot Source 'X'

External-Manifold / Vented

INLINE & SUBBASE Valves -

Only used IF an IEM or 5-Ported Subbase Aluminum Bar Manifold <u>requires</u> a common external pilot signal thru the manifold for low pressure / vacuum applications OR when used with Sandwich Regulators.

	02 S	olenoid Rot	ated 180° - P	ins Down
			Voltage §	
	A	C	DC	
	60Hz	50Hz		
42	24	22		
45			12	
49			24	
53	120	110		
57	240	230		
ХХ	Remote Pi 15mm Sol	lot - M5 or \ enoid	lalve Less	

Remote Pilot - 5/32" (4mm) Tube

C

Blank

	Enclosure / Lead Length
0	None, Remote Pilot Valve
5	15mm 3-Pin DIN 43650C (Male Only)
Х	Valve Less 15mm Solenoid

	Overrides [§]
0	None, Remote Pilot Valve
В	Flush - Non-Locking
C	Flush - Locking
D	Extended - Non-Locking
E	Extended - Locking
Χ	Valve Less 15mm Solenoid

	Pilot Source / Pilot Exhaust
0	None, Remote Pilot Valve
B⁺	Internal - Port #1 / Vented
E*	Dual Pressure - Port #3 / Vented
K^{\dagger}	External - Body / Tapped M5
Χ‡	External - Manifold / Vented

- Not available for 3-Way Valves.
- † Not available for Remote Pilot Valves.
- ‡ See Pilot Source Note below.

§ Enclosure '5'
- Override / Voltage
Availability

Engineering Level

Options

None

Current

- S Standard
- O Option

Voltogo	0v€	Override Code				
Voltage Code	Standard					
Coue	В	C	D	Ε		
42	0	0	_	_		
45	0	0	_	-		
49	S	S	0	0		
53	S	S	0	0		
57	0	0	_	_		
Voltage	"0	2" (Opti	on		
Voltage Code	"0 B	2" (Opti D	on E		
	-	_				
Code	В	C				
Code 42	B O O S	C O S				
42 45	B O	0	D - -	E -		

See Catalog 0600P-10/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.

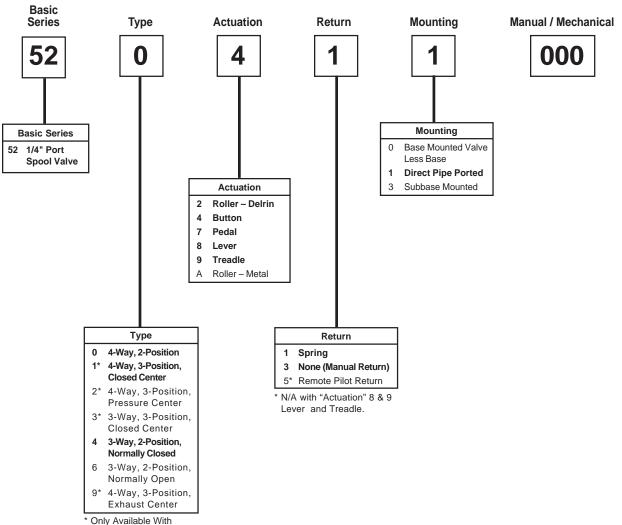
The **B3 Remote Pilot** valve assembly mounted on the M200 base with the adapter plate is approximately 0.25" greater in height and equal in length as compared to the M200 valve / base assembly.

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.



Replacement Product

BOLD OPTIONS ARE STANDARD



[&]quot;Actuation" 8 Lever.

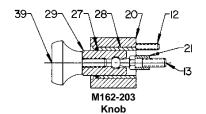
See Catalog 0600P-4/USA for Directair 4 dimensional data and subbase options.

Note:

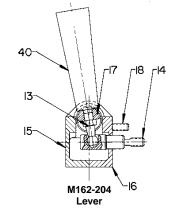
The Directair 4 Series valves Will Not directly mount and <u>Cannot</u> be adapted to mount on the M200 bases. When ordering a Directair Series valve to functionally replace an M200 Series valve, you can order either mounting option 1, Direct Pipe Ported (inline, body ported) or option 3, Subbase Mounted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

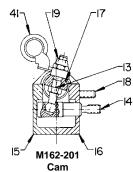


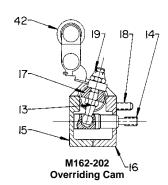
ALL M162, M202, M100 KITS DISCONTINUED - USE AVAILABLE PARTS FROM NEXT PAGE.

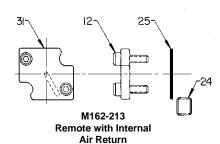


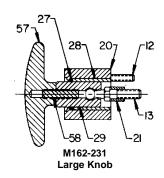
Repair Kits and Parts

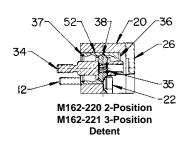






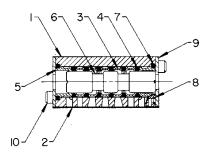








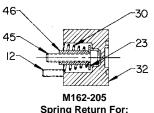
M100-88 Mounting Bolts (Body to Base) four required, supplied with subbase or modular manifold



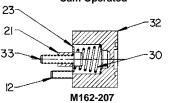
M162-241 Single Solenoid Air Pilot, 2-Position Manual Operated, and Single Remote Spring Return M202-242 Double Solenoid Air Pilot and Double Remote

M202-245 Single Remote Internal Air Return M202-246 3-Position - All Ports Blocked M202-247 3-Position - Cyl. Open to Exhaust M202-248 3-Position - Cyl. Open to Inlet

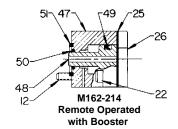


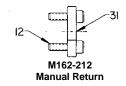


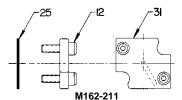
Spring Return For: Pull-Knob Push-Lever Cam Operated



Spring Return For: Pull-Knob Push-Lever Overriding Cam Operated M162-225 Remote







Remote Operated

43 A

56 53 54

54 44

8 M162-230

Air Pilot

SHADED ITEMS ARE OBSOLETE

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		
	11430 022	All Ports Blocked		
	K493-024	Stem		
6		Ports Open to Exh.		
	K493-025	Stem		
		Ports Open to In.		
	K493-020	Stem		
	114.40.40	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		
20	11104.45	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		
27	H208-50	Scraper Ring		
28	K443-012	Sleeve		
29	K563-038	Universal Adaptor		
30	K473-033	Spring		
31	K123-047	End Cover		
32	K203-053	Housing		
33	H100-23	Cap Screw		
34	K493-027	Detent Stem		
35	K473-036	Spring Wayo Washer		
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 K052-007	Cam Arm Ass'y		
		Over-Riding Cam Ass'y		
43	H172-90 H100-09	Pilot Valve		
		Screw		
45	H100-26	Cap Screw		

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
32		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
	M162-202	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
(Sa)	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
	110000120	2.1.20 Colonola Mit



M200 Operating Pressure

Solenoid Operated

Medium			External Pilot Supply	Internal Pilot Supply
	Main Valve	PSIG	0-150	35-150
l I	Iviaiii vaive	bar	0-10.3	2.4-10.3
Air	Dilat	PSIG	75% of Main Valve (35 min.)	35-150
	Pilot	bar	75% of Main Valve (2.4 min.)	2.4-10.3
	Main Valve		Within 1" Hg of perfect	Do
Vacuum	Dilet	PSIG	35-150	Not
	Pilot	bar	2.4-10.3	Use

Remote Pilot Operated

Medium		Main Valve Pressure	Double Remote	Double Remote w/Booster Cylinder	Ext. Pilot Booster Cyl. w/Spring Return	Single Remote Int.Air Return
	PSIG	0-75	25	20	40	
	bar	0-5.2	1.7	1.4	2.8	75%
Air	PSIG	75-125	30	25	42	of Main
All	bar	5.2-8.6	2.1	1.7	2.9	Valve
	PSIG	125-175	35	28	44	
	bar	8.6-12.1	2,4	1.9	3.0	
Vacuum	PSIG	Within 1" Hg	25	20	40	Do Not
vacuuiii	bar	of Perfect	1.7	1.4	2.8	Use

M200 Operating Pressure Manual Operated

Maridai Operated							
		Main Val		Min. Return Pressure			
Valve	Main Valve Pressure			Remote Air Return		Remote w/ Booster Cyl.	
	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
7 III Hotain	_	_	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 Flow Rating					
Valve Type	Mounting Style	Inlet		Exhaust			
.,,,,,	o.j.o	Port A	Port B	Port A	Port B		
2-Position	Subbase	0.81	0.81	0.84	0.80		
	Manifold	0.81	0.81	0.75	0.78		
3-Position	Subbase	0.76	0.79	0.73	0.73		
	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

B3 Flow Rating (Cv)

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

Directair 4 Operating Pressure

Manual Operated

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

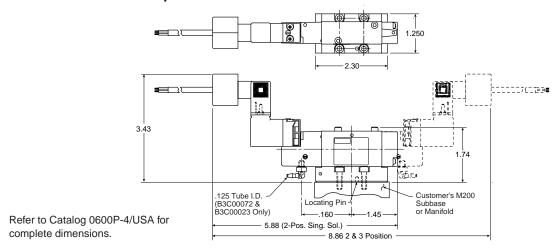
Directair 4 Flow Rating (C_V)

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

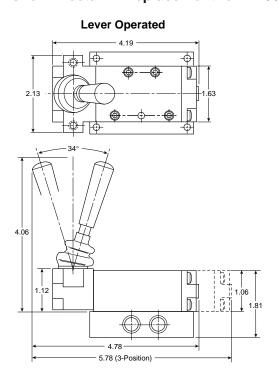


Replacement Kit

Dimensions for B3 Replacement for M200

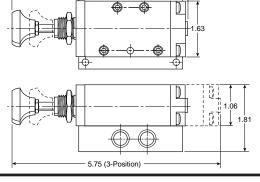


Dimensions for Directair 4 Replacement for M200

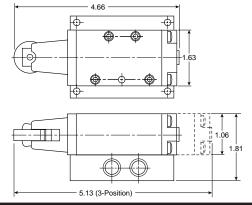


Refer to Catalog 0600P-4/USA for complete dimensions.

Button Operated



Roller Operated



Specials Crossover List

M200 Number	Description	Repair Kit & Spool	Replacement Valve Kit	Suggested New System
K14020204	Manifold K142-272 Special for Common External Pilot (EAGLE)	N/A	N/A	Convert to B3 Series
K14020225	M20020104 + K14020204 Manifold (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	Convert to B3 Series
K14020291	7-Station M20020104 + K14020293 Manifold + Tie Rod (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid)	B3C00022	(7) B3EVWB553C + (1) PSJ3B1N07NP + (7) PS2998P
K1402029149	7-Station M2002010449 + K14020293 Manifold + Tie Rod (EAGLE)	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 (EAGLE)	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 (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(6) B3EVWB553C + (1) PSJ3B1N06NP + (6) PS2998P
K14020337	M20020104 + K022-100 Single Subbase (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008115 (Solenoid) + K353120 (Seal Kit)	B3C00022	(1) B3EVKB553C + (1) PS2934P + (1) PS2998P
K1402033749	M2002010449 + K022-100 Single Subbase (EAGLE)	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 (EAGLE)	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 (EAGLE)	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 (EAGLE)	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 (EAGLE)	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 (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) + K353120 (Seal Kit)	B3C00023	(9) B3EVWB549C + (1) PSJ3B1N09NP + (9) PS2998P



Specials Crossover List

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 (EAGLE)	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 (BRANSON)	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 (EAGLE)	K34030024 (SPL Spool) + K47030015 (Spring) + 410008122 (Solenoid) + K352120 (Seal Kit)	B3C00022	(1) B3EVWB553C + (1) B3M200PLTX + (1) PS2998P
M2002010449	M20020104 24VDC (EAGLE)	K34030024 (SPL Spool) + K47030013 (Spring) + 410008122 (Solenoid) +	B3C00023	(1) B3EVWB549C + (1) B3M200PLTX + (1) PS2998P



Specials Crossover List

M200 Number	Description	Repair Kit & Spool	Replacement Valve Kit	Suggested New System
M20020112	M21324130, External Pilot through Base, Less Coil (EAGLE)	K34030024 (SPL Spool) + K47030015 (Spring) + K352120 (Seal Kit)	B3C00022	(1) B3EVBB553C or B3EVWB549C + (1) B3M200PLTX + (1) PS2998P
M20020116	M2002010449 w / Special Spool (EAGLE)	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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