

MADDEN PUMP

MF & MH SERIES METERING PUMPS EXPLODED WETTED END ASSEMBLIES



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MADDEN Pump

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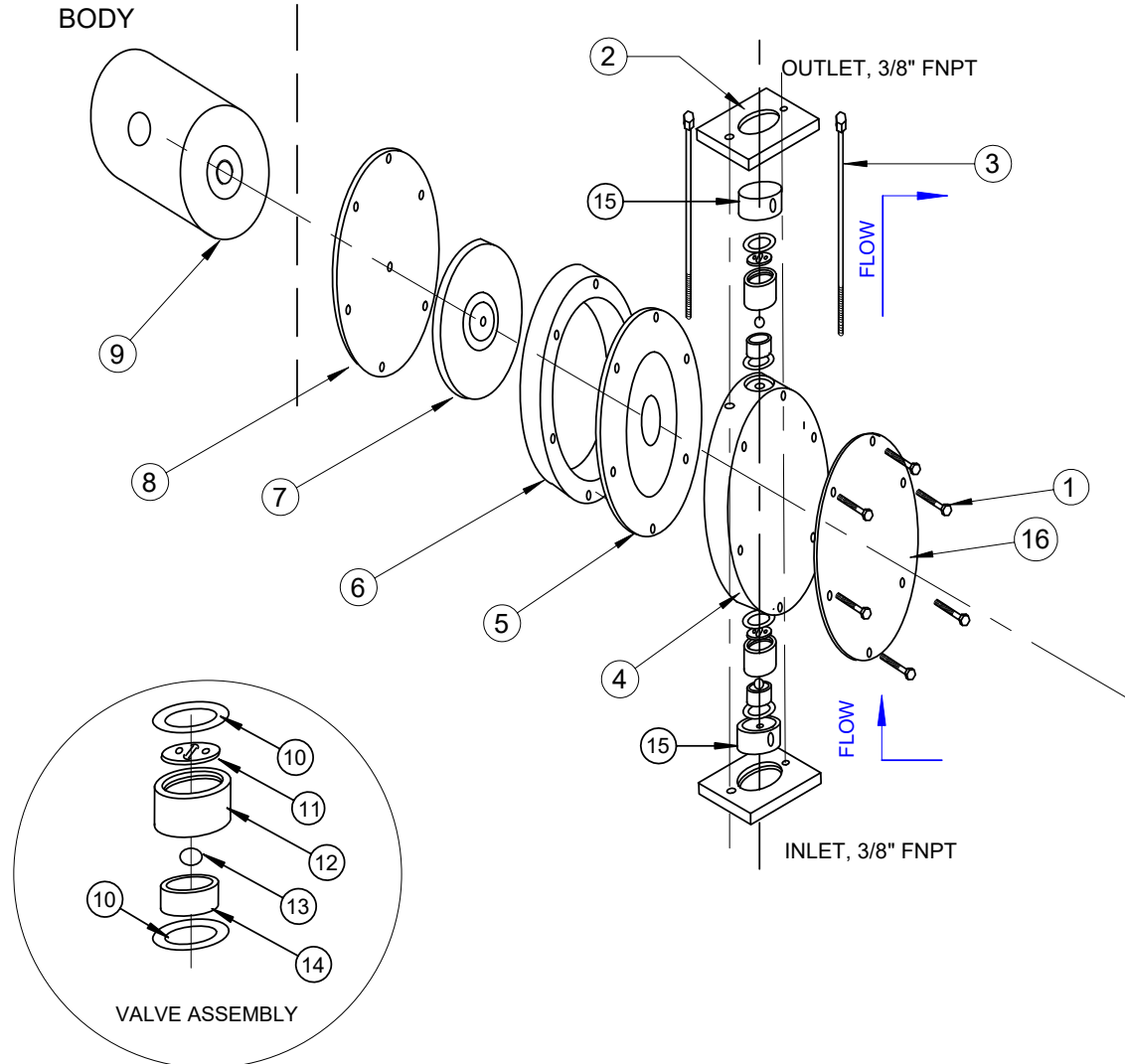
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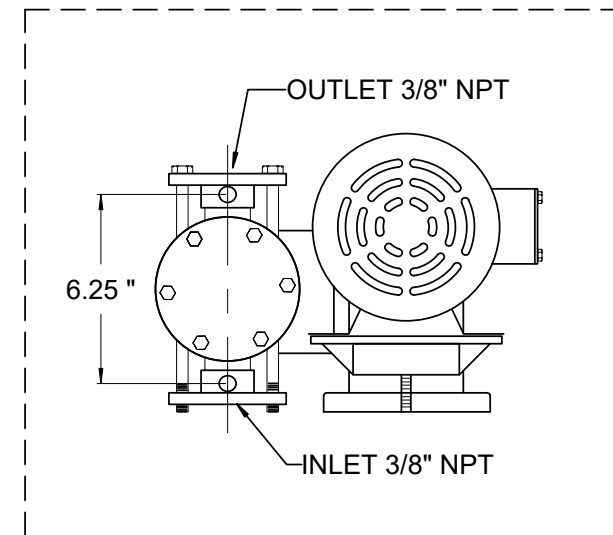
MF SERIES PUMP WETTED END, EXPLODED ASSEMBLY VIEW, PLASTIC STANDARD

VISUAL NOTES: THIS SHOWS A PLASTIC SOLUTION HEAD WITH STANDARD 3/8" FNPT, HORIZONTAL INLET AND OUTLET. SEE OUR OTHER (2) EXPLODED ASSEMBLY DRAWINGS FOR A S.S. SOLUTION HEAD, SPRING LOADED VALVE ASSEMBLY OPTION, AND FOR 3/4" FNPT VERTICAL CONNECTIONS.

INSIDE PUMP BODY



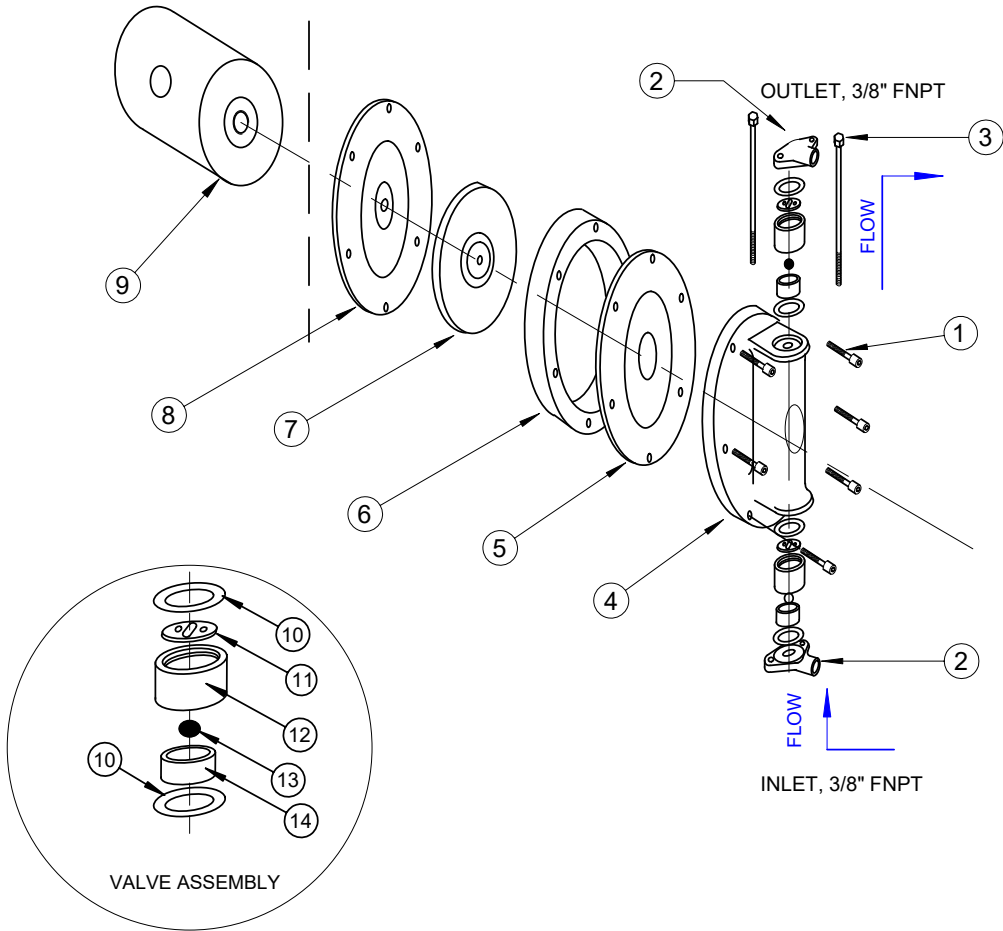
ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	MP122 (NO DDB) - OR - MP133 (DDB)	MF SERIES PLASTIC SOLUTION HEAD SCREWS NO DDB: HH 3/8"-16 x 2.75"; STAINLESS STEEL WITH DDB SET UP: HH 3/8"-16 x 3.75"; STAINLESS STEEL
2	2	MP124 & MP125	VALVE FLANGE CONNECTORS AND INLET AND OUTLET CAPS: MP124, TOP VALVE ASSEMBLY FLANGE, BOLT HOLES UNTHREADED MP125, BOTTOM VALVE ASSEMBLY FLANGE, BOLT HOLES THREADED
3	1	MP068_	VALVE ASSEMBLY FLANGE CONNECTOR SCREWS: MP068B = 7", METAL SOLUTION HEAD, (MP100 VLV BODY) MP068C = 8", PLASTIC SOLUTION HEAD, (MP100 VLV BODY)
4	1	MP120_	SOLUTION HEAD, "A" = PTFE; "B" = PVC; "C" = POLYPROPYLENE
5	1	MP059_	PRIMARY DIAPHRAGM, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON; "E" = TEFLON FACED NEOPRENE; "F" = TEFLON FACED VITON; "G" = EPDM
6	1	MP140B	SPACER, DDB DOUBLE DIAPHRAGM, PVC, INCLUDES A 1/4" FNPT HOLE FOR OPTIONAL LEAK DETECTING SWITCH
7	1	MP141	SECONDARY PISTON / CONNECTOR, FOR DDB SET UPS
8	1	MP134_	BACKUP DIAPHRAGM, NON-ACTUATING, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON; "G" = EPDM
9	1	MP038 - OR - MP136	MF SERIES PRIMARY PISTON NO DDB, SINGLE DIAPHRAGM = MP038, 5/16" THREAD WITH DDB = MP136, 9/16" THREAD
10	4	MP104_	GASKET, VALVE, "A" = BUNA; "B" = TEFLON
11	2	MP103	VALVE CUSHION USED ON STANDARD ASSEMBLIES
12	2	MP100_	VALVE BODY: "A" = 304SS; "B" = OBSOLETE; "C" = PVC; "D" = POLYPROPYLENE; "E" = KYNAR
13	2	MP102_	VALVE BALL: "A" = 316SS; "B" = CERAMIC; "C" = HASTELLOY C; "D" = TEFLON.
14	2	MP101_	VALVE SEAT: "A, B, C, D" = OBSOLETE, RUBBER INJECTING VENDOR OUT OF BUSINESS; "E" = TEFLON; "F" = 316SS ALTERNATIVE: P/N MP115 = 316SS (CLOVER STYLE)
15	2	MP1232_	INLET/OUTLET, PLASTIC SOLUTION HEADS, 3/8" FNPT: "A" = PVC; "B" = KYNAR; "C" = POLYPROPYLENE.
16	1	MP121	FACE FLANGE FOR PLASTIC SOLUTION HEAD PROTECTION AGAINST SOLUTION HEAD BOLTS.



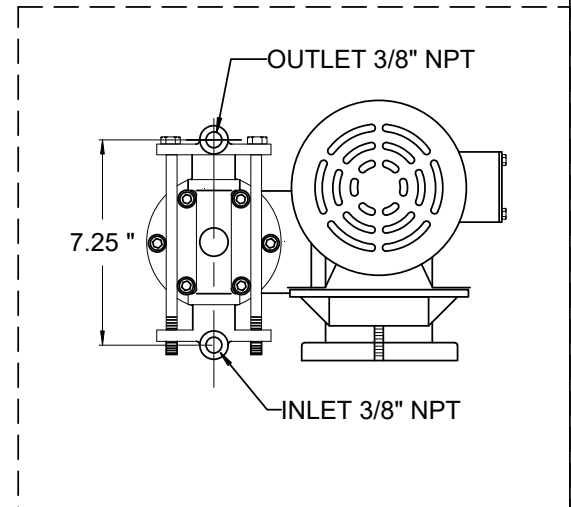
MF SERIES PUMP WETTED END, EXPLODED ASSEMBLY VIEW, SS STANDARD

VISUAL NOTES: THIS SHOWS A 316 STAINLESS STEEL SOLUTION HEAD WITH STANDARD 3/8" FNPT, HORIZONTAL INLET AND OUTLET. SEE OUR OTHER (2) EXPLODED ASSEMBLY DRAWINGS FOR A PLASTIC SOLUTION HEAD, SPRING LOADED VALVE ASSEMBLY OPTION, AND FOR 3/4" FNPT VERTICAL CONNECTIONS.

INSIDE PUMP BODY



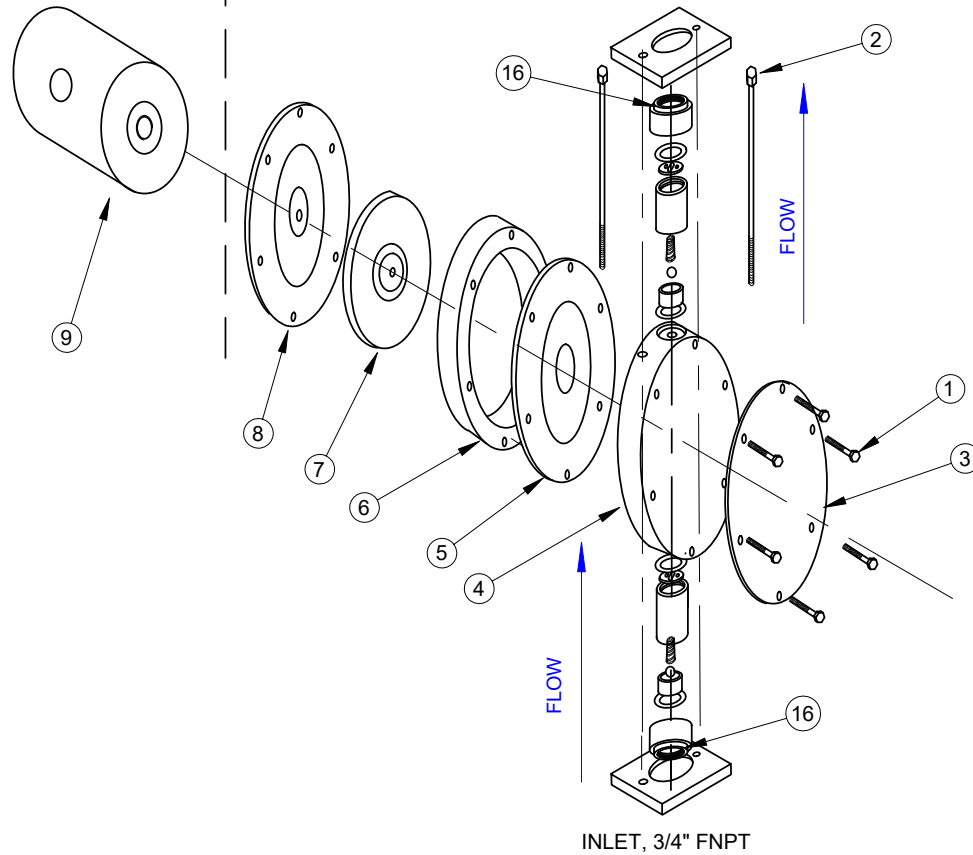
ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	MP065 (NO DDB) - OR - MP165 (DDB)	MF SERIES 316 SS SOLUTION HEAD SCREWS NO DDB: HH 3/8"-16 x 1", STAINLESS STEEL WITH DDB SET UP: HH 3/8"-16 x 2", STAINLESS STEEL
2	2	MP0662B & MP0672B	VALVE FLANGE CONNECTORS AND INLET AND OUTLET CAPS: MP0662B, OUTLET, 3/8" FNPT MP0672B, INLET, 3/8" FNPT
3	1	MP068_	VALVE ASSEMBLY FLANGE CONNECTOR SCREWS: MP068B = 7", METAL SOLUTION HEAD, (MP100 VLV BODY) MP068C = 8", PLASTIC SOLUTION HEAD, (MP100 VLV BODY)
4	1	MP064B	SOLUTION HEAD, 316 STAINLESS STEEL
5	1	MP059_	PRIMARY DIAPHRAGM, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON; "E" = TEFLON FACED NEOPRENE; "F" = TEFLON FACED VITON; "G" = EPDM
6	1	MP140B	SPACER, DDB DOUBLE DIAPHRAGM, PVC, INCLUDES A 1/4" FNPT HOLE FOR OPTIONAL LEAK DETECTING SWITCH
7	1	MP141	SECONDARY PISTON / CONNECTOR, FOR DDB SET UPS
8	1	MP134_	BACKUP DIAPHRAGM, NON-ACTUATING, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON; "G" = EPDM
9	1	MP038 - OR - MP136	MF SERIES PRIMARY PISTON NO DDB, SINGLE DIAPHRAGM = MP038, 5/16" THREAD WITH DDB = MP136, 9/16" THREAD
10	4	MP104_	GASKET, VALVE, "A" = BUNA; "B" = TEFLON
11	2	MP103	VALVE CUSHION USED ON STANDARD ASSEMBLIES
12	2	MP100_	VALVE BODY: "A" = 304SS; "B" = OBSOLETE; "C" = PVC; "D" = POLYPROPYLENE; "E" = KYNAR
13	2	MP102_	VALVE BALL: "A" = 316SS; "B" = CERAMIC; "C" = HASTELLOY C; "D" = TEFLON.
14	2	MP101_	VALVE SEAT: "A, B, C, D" = OBSOLETE, RUBBER INJECTING VENDOR OUT OF BUSINESS; "E" = TEFLON; "F" = 316SS ALTERNATIVE: P/N MP115 = 316SS (CLOVER STYLE)



MF SERIES PUMPS WITH M-200 SPRING LOADED VALVES FOR VISCOUS FLUIDS (UP TO 750 CPS)

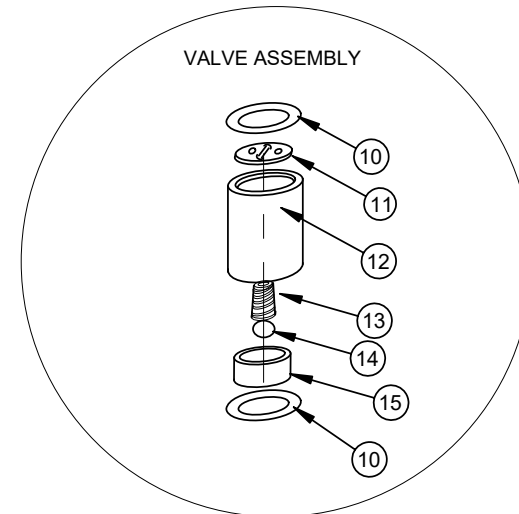
TWO IMPORTANT VISUAL NOTES: THIS SHOWS A PLASTIC SOLUTION HEAD WITH VERTICAL 3/4" FNPT INLET AND OUTLET CAPS. STANDARD 3/8" FNPT HORIZONTAL CONNECTIONS CAN ALSO BE USED, BUT 3/4" VERTICAL IS RECOMMENDED AS SPRING LOADED ASSEMBLIES MUST BE MANUALLY PRIMED TO START. FOR THE SAME SET UP IN 316SS, ITEM 16 IS NOT REQUIRED AS THE VALVE FLANGES ARE ALSO INTEGRAL INLET/OUTLET CONNECTIONS (3/4" FNPT, VERTICAL)

INSIDE PUMP BODY

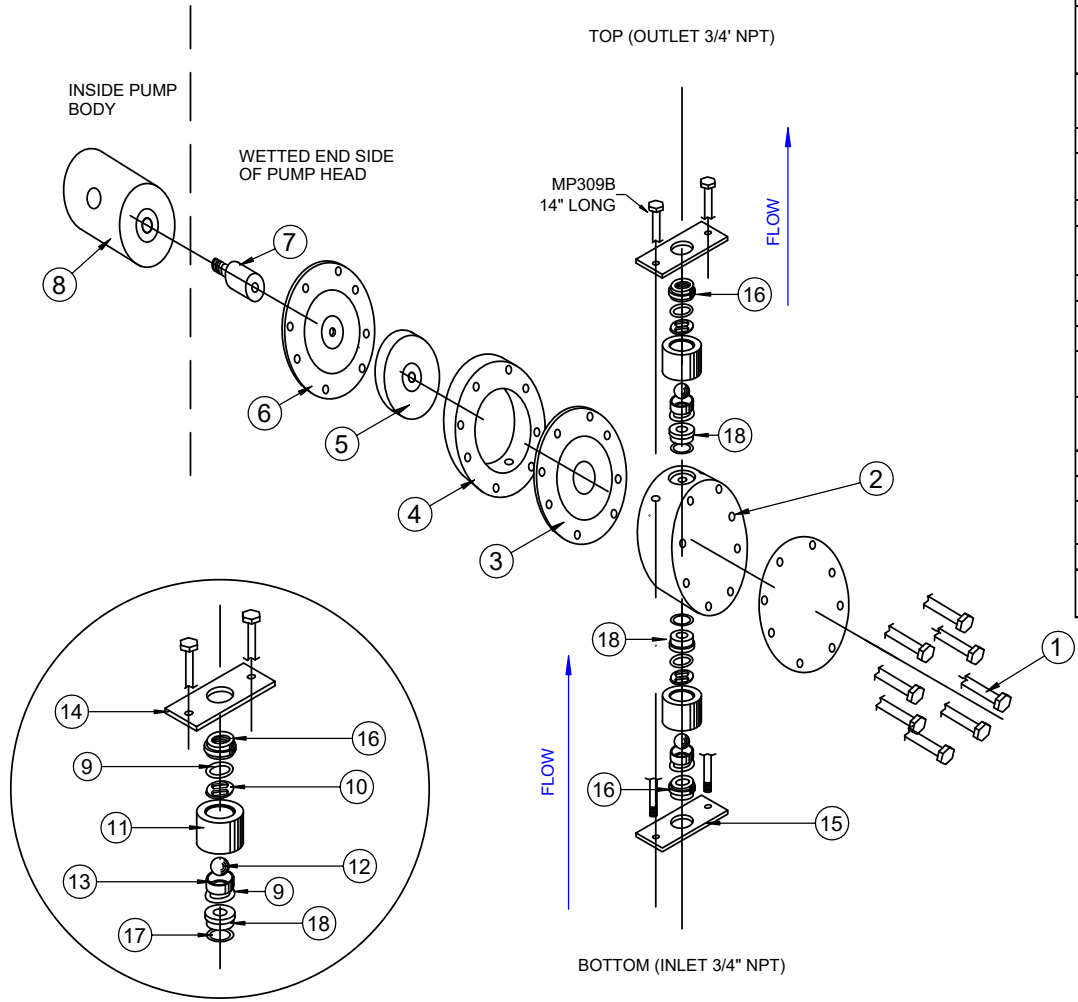


ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	MP122 (NO DDB) - OR - MP133 (DDB)	MF SERIES PLASTIC SOLUTION HEAD SCREWS NO DDB: HH 3/8"-16 x 2.75", STAINLESS STEEL WITH DDB SET UP: HH 3/8"-16 X 3.75", STAINLESS STEEL
2	2	MP126_	VALVE ASSEMBLY, VALVE FLANGE CONNECTOR SCREWS, WITH M200 VALVE SLEEVES (SPRING LOADED), 9", 10", OR 11" NEEDED DEPENDING ON ARRANGEMENT.
3	1	MP121	FACE FLANGE, FOR PLASTIC SOLUTION HEADS, STAINLESS STEEL
4	1	MP120_	SOLUTION HEAD, "A" = PTFE; "B" = PVC; "C" = POLYPROPYLENE
5	1	MP059_	PRIMARY DIAPHRAGM, "A" = NEOPRENE; "B" = <i>OBSELETE</i> ; "C" = HYPALON; "D" = VITON; "E" = TEFLON FACED NEOPRENE; "F" = TEFLON FACED VITON; "G" = EPDM
6	1	MP140B	SPACER, DDB DOUBLE DIAPHRAGM, PVC, INCLUDES A 1/4" FNPT HOLE FOR OPTIONAL LEAK DETECTING SWITCH
7	1	MP141	SECONDARY PISTON / CONNECTOR, FOR DDB SET UPS
8	1	MP134_	BACKUP DIAPHRAGM, NON-ACTUATING, "A" = NEOPRENE; "B" = <i>OBSELETE</i> ; "C" = HYPALON; "D" = VITON; "G" = EPDM
9	1	MP038 - OR - MP136	MF SERIES PRIMARY PISTON NO DDB, SINGLE DIAPHRAGM = MP038, 5/16" THREAD WITH DDB = MP136, 9/16" THREAD
10	4	MP104_	GASKET, VALVE, "A" = BUNA; "B" = TEFLON
11	2	MP203	VALVE CUSHION USED ON M-200 (SPRING LOADED) ASSEMBLIES
12	2	MP200C	VALVE BODY, TYPE M-200 SPRING LOADED ASSEMBLIES
13	2	MP109A	VALVE SPRING, STAINLESS STEEL
14	2	MP102_	VALVE BALL: "A" = 316SS; "B" = CERAMIC; "C" = HASTELLOY C; "D" = TEFLON.
15	2	MP101_	VALVE SEAT: "A, B, C, D" = <i>OBSELETE</i> , RUBBER INJECTING VENDOR <i>OUT OF BUSINESS</i> ; "E" = TEFLON P/N MP115 = 316SS
16	2	MP1233_	INLET/OUTLET, 3/4" FNPT, "A" = PVC; "B" = KYNAR; "C" = PP

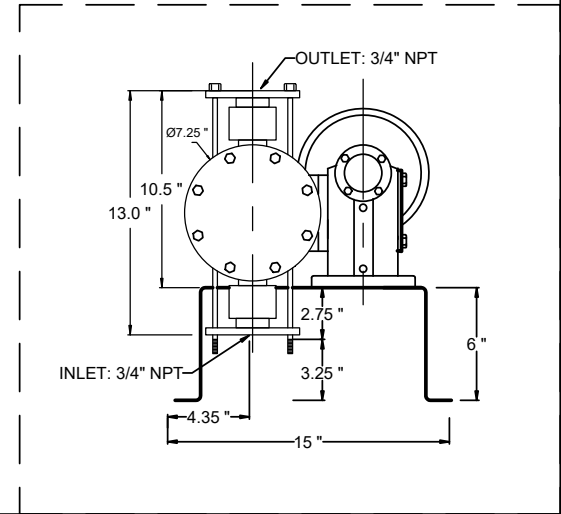
VALVE ASSEMBLY



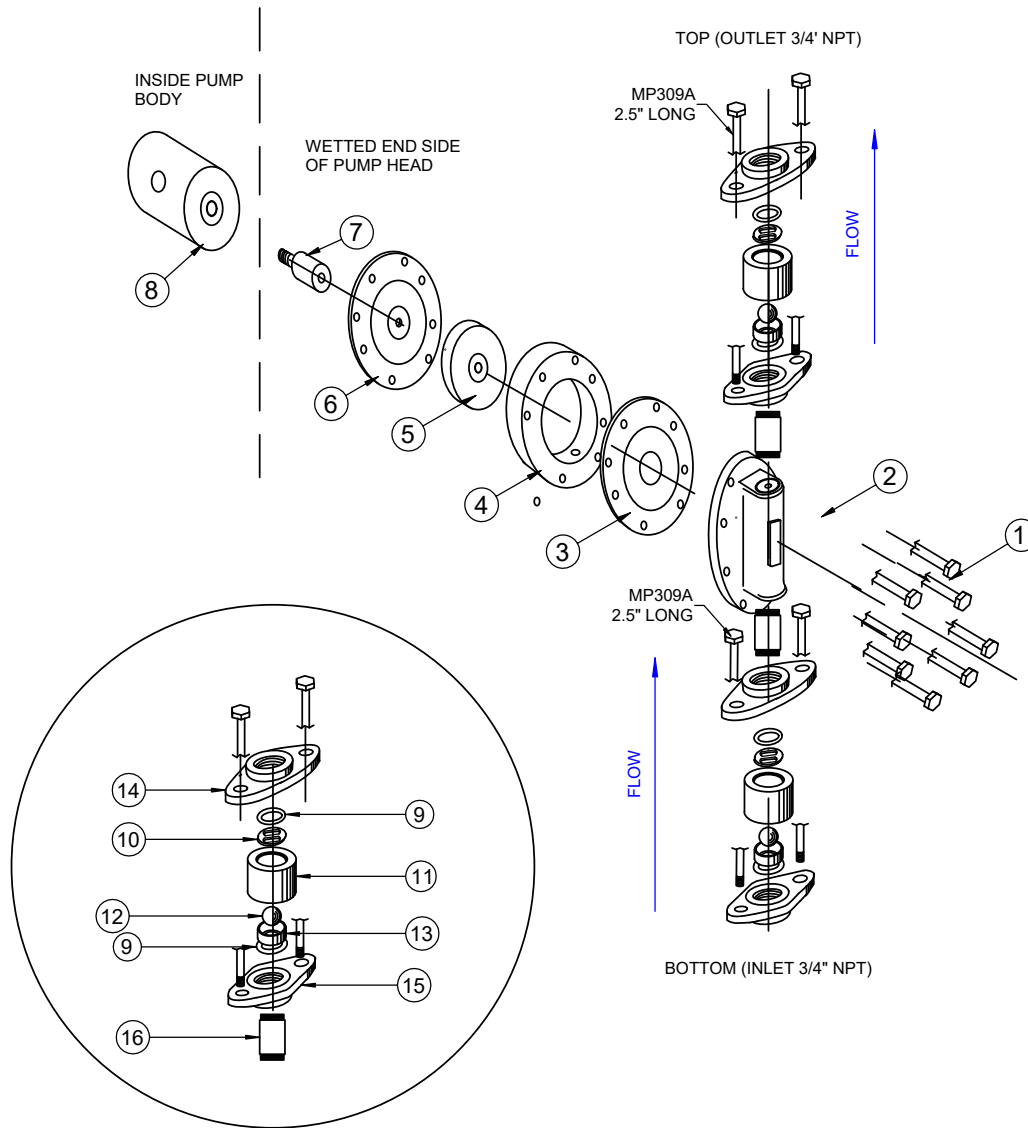
MH SERIES PUMP WETTED END, EXPLODED ASSEMBLY VIEW, PLASTIC SOLUTION HEAD



ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	MP315_	SOLUTION HEAD SCREW, "A" = 1.5" FOR METAL HEAD WITH NO DDB; "B" = 3.5" FOR PLASTIC HEAD WITH NO DDB OR METAL HEAD WITH DDB; AND "C" = 5" FOR PLASTIC HEAD WITH DDB (DDB = DOUBLE DIAPHRAGM SET UP).
2	1	MP314_	SOLUTION HEAD, "A" = OBSOLETE; "B" = 316SS; "C" = OBSOLETE; "D" = PVC; "E" = PTFE NOTE: FOR PLASTIC WETTED ENDS, MP316 SOLUTION HEAD FLANGE IS REQUIRED (KEEPS BOLTS FROM DIGGING INTO PLASTIC)
3	1	MP300_	PRIMARY DIAPHRAGM, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON; "E" = TEFLON FACED NEOPRENE; "F" = TEFLON FACED VITON
4	1	MP362B	SPACER, DDB DOUBLE DIAPHRAGM, PVC, INCLUDES A 1/4" FNPT HOLE FOR OPTIONAL LEAK DETECTING SWITCH
5	1	MP317B	SECONDARY PISTON / CONNECTOR, FOR DDB SET UPS
6	1	MP360_	BACKUP DIAPHRAGM, NON-ACTUATING, "A" = NEOPRENE; "B" = OBSOLETE; "C" = HYPALON; "D" = VITON
7	1	MP318	PISTON EXTENSION FOR DDB SET UP
8	1	MP136	MH SERIES PRIMARY PISTON (9/16"-12 THREAD - ALSO USED AS MF SERIES PRIMARY PISTON FOR DDB SET UPS)
9	4	MP307	GASKET, VALVE, TEFLON, FOR VALVE BODY
10	2	MP305	VALVE CUSHION, TEFLON
11	2	MP303_	VALVE BODY: "A" = 316 SS; "B" = PVC; "C" = KYNAR
12	2	MP304_	VALVE BALL: "A" = 316 SS; "B" = HASTELLOY C; "C" = CARPENTER 20; "D" = VITON; "E" = TEFLON
13	2	MP306_	VALVE SEAT: "NO LETTER" = RHULON GLASS FILLED TEFLON (STND); "B" = 304 STAINLESS STEEL; "E" = VIRGIN TEFON
14	2	MP320	VALVE FLANGE, TOP
15	2	MP321	VALVE FLANGE, BOTTOM
16	2	MP302_	VALVE CONNECTOR, INLET/OUTLET, 3/4" FNPT: "B" = PVC; "C" = TEFLON
17	2	MP104B	GASKET, VALVE, TEFLON, FOR BUSHING
18	2	MP308_	VALVE BUSHING, CONNECTS VALVE BODY TO PUMP SOLUTION HEAD, "B" = PVC; "C" = KYNAR



MH SERIES PUMP WETTED END, EXPLODED ASSEMBLY VIEW, METAL SOLUTION HEAD



ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	MP315_	SOLUTION HEAD SCREW, "A" = 1.5" FOR METAL HEAD WITH NO DDB; "B" = 3.5" FOR PLASTIC HEAD WITH NO DDB OR METAL HEAD WITH DDB; AND "C" = 5" FOR PLASTIC HEAD WITH DDB (DDB = DOUBLE DIAPHRAGM SET UP).
2	1	MP314_	SOLUTION HEAD, "A" = <i>OBSOLETE</i> ; "B" = 316SS; "C" = <i>OBSOLETE</i> ; "D" = PVC; "E" = PTFE NOTE 1: S.S. WETTED END SHOWN NOTE 2: FOR PLASTIC WETTED ENDS, MP316 SOLUTION HEAD FACE FLANGE IS REQUIRED (KEEPS BOLTS FROM DIGGING INTO PLASTIC)
3	1	MP300_	PRIMARY DIAPHRAGM, "A" = NEOPRENE; "B" = <i>OBSOLETE</i> ; "C" = HYPALON; "D" = VITON; "E" = TEFLON FACED NEOPRENE; "F" = TEFLON FACED VITON
4	1	MP362B	SPACER, DDB DOUBLE DIAPHRAGM, PVC, INCLUDES A 1/4" FNPT HOLE FOR OPTIONAL LEAK DETECTING SWITCH
5	1	MP317B	SECONDARY PISTON / CONNECTOR, FOR DDB SET UPS
6	1	MP360_	BACKUP DIAPHRAGM, NON-ACTUATING, "A" = NEOPRENE; "B" = <i>OBSOLETE</i> ; "C" = HYPALON; "D" = VITON
7	1	MP318	PISTON EXTENSION FOR DDB SET UP
8	1	MP136	MH SERIES PRIMARY PISTON (9/16"-12 THREAD - ALSO USED AS MF SERIES PRIMARY PISTON FOR DDB SET UPS)
9	4	MP307	GASKET, VALVE, TEFLON
10	2	MP305	VALVE CUSHION, TEFLON
11	2	MP303_	VALVE BODY: "A" = 316 SS; "B" = PVC; "C" = KYNAR
12	2	MP304_	VALVE BALL: "A" = 316 SS; "B" = HASTELLOY C; "C" = CARPENTER 20; "D" = VITON; "E" = TEFLON
13	2	MP306_	VALVE SEAT: "NO LETTER" = RHULON GLASS FILLED TEFLON (STND); "B" = 304 STAINLESS STEEL; "E" = VIRGIN TEFLON
14	2	MP0665A	VALVE CAP, OUTSIDE FLANGE, INLET/OUTLET, 316 SS, 3/4" FNPT
15	2	MP0675A	VALVE CAP, INSIDE FLANGE, 3/4" FNPT, 316SS
16	2	MP308A	VALVE CONNECTOR NIPPLE, 316 SS

FRONT VIEW OF MH PUMP FOR REFERENCE

