OMNI Mechanical Diaphragm Pumps

OMNI mechanical metering pumps and controllers are the economical standard for a reliable chemical feed pump with virtually no maintenance. For high technology in a simple to understand package an an economical price, add an MPC (metering pump controller) to the OMNI pump to take advantage of complete system integration between metering pump and process. The OMNI offers the following user friendly benefits

- ***Long Life -*** *DC2—DC6 are greased for life, DC7 is oil lubricated.*
- ***Compact and Lightweight -*** Saves space and easy handling.
- ***Controller Ready -*** Add an MPC when automatic pump control is required.
- ***Simple Design -*** Easy to install and operate.
- ***Highly Efficient -*** Quiet and cool, standard fan cooled motor design.
- ***Guided Ball Check Valve Systems,*** to reduce back flow and enhance outstanding priming characteristics.
- ***Premium Standard Wetted Component Materials.***
- ***Few Moving Parts*** and ***Wall Mountable.***
- ***Liquid End Materials–*** PP, PVDF & 316 SS

MPC NO MOTOR OPTION	
Minimal MPC Motor Requirements:	
HP/KW	Defined on order (Pump Dependent)
Voltage	230V nominal
Base Freq	50 or 60Hz (by Mfgr's Motor design)
Type	TEFC
Phases	3 phase
Poles	4 poles, 1500 rpm (50 hz) or 1,800 rpm (60hz) synchronous speed
SF	>=1.05
Turn Dow n	Minimum 3:1 constant torque
Insulation	Class F or better
Inverter Duty	Not Required

Performance & Selection Table

MODEL		DC2A	DC2B	DC2C	DC3B	DC3C	DC4B	DC4C	DC4D	DC5C	DC5D	DC6C	DC6D
Capacity	GPH	7	13.9	24	32.3	55.5	40.6	61.8	78.9[1]	105	138	218.7	272.6[1]
60 hz & MPC	LPH	26.4	52.8	90.8	122	210	154	234	298.8[1]	396	522[1]	828	1032[1]
Capacity	GPH	5.8	11.6	20	26.9	46.2	33.8	51.5	65.8	87.2	115	182.3	227.2
50 hz	LPH	22	44	75.7	102	175	128	195	249	330	435	690	860
Pressure	PSIG	150			75		150			90		45	
(max.)	BAR	10.3			5.1		10.3			6.2		3.1	
SPM @	1725	44	88	150	88	150	117	175	223 [1]	175	223 [1]	175	223 [1]
	1425	37	73	125	73	125	97	145	186	146	186	146	186
HP/kW Required		0.25 / 0.18					0.50 / 0.37						
Connection Size		1/4" (F)NPT			1/2" (F)NPT OR (F)BSPT					1" (F)NPT OR (F)BSPT			

[1]This selection uses a high stroking rate, use with caution.
Must have at least 25 psig discharge pressure and water-like viscosity.

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OMNI DC2 thru DC6 Selection Guide

DC_ _ _ _ _ _ - _ _ _ _

MODELS:	**2A**	= PVDF - 7.0 GPH (26.4 LPH)@60Hz & MPC or 5.8 GPH (22.0 LPH)@50Hz
	2A	= 316SS - 7.0 GPH (26.4 LPH)@60Hz & MPC or 5.8 GPH (22.0 LPH)@50Hz
	2B	= PVDF - 13.9 GPH (52.8 LPH)@60Hz & MPC or 11.6 GPH (44.0 LPH)@50Hz
	2B	= 316SS - 13.9 GPH (52.8 LPH)@60Hz & MPC or 11.6 GPH (44.0 LPH)@50Hz
	2C	= PVDF - 24.0 GPH (90.8 LPH)@60Hz & MPC or 20 GPH (75.7 LPH)@50Hz
	2C	= 316SS - 24.0 GPH (90.8 LPH)@60Hz & MPC or 20 GPH (75.7 LPH)@50Hz
	3B	= PVDF - 32.3 GPH (122.4 LPH)@60Hz & MPC or 26.9 GPH (102.0 LPH)@50Hz
	3B	= 316SS - 32.3 GPH (122.4 LPH)@60Hz & MPC or 26.9 GPH (102.0 LPH)@50Hz
	3C	= PVDF - 55.5 GPH (210 LPH)@60Hz & MPC or 46.2 GPH (175.0 LPH)@50Hz
	3C	= 316SS - 55.5 GPH (210 LPH)@60Hz & MPC or 46.2 GPH (175.0 LPH)@50Hz
	4B	= PVDF - 40.6 GPH (153.6 LPH)@60Hz & MPC or 33.8 GPH (128.0 LPH)@50Hz
	4B	= 316SS - 40.6 GPH (153.6 LPH)@60Hz & MPC or 33.8 GPH (128.0 LPH)@50Hz
	4C	= PVDF - 61.8 GPH (234 LPH)@60Hz & MPC or 51.5 GPH (195.0 LPH)@50Hz
	4C	= 316SS - 61.8 GPH (234 LPH)@60Hz & MPC or 51.5 GPH (195.0 LPH)@50Hz
	4D	= PVDF - 78.9[1] GPH (298.8[1] LPH)@60Hz & MPC or 65.8 GPH (249.0 LPH)@50Hz
	4D	= 316SS - 78.9[1] GPH (298.8[1] LPH)@60Hz & MPC or 65.8 GPH (249.0 LPH)@50Hz
	5C	= PP - 104.6 GPH (396 LPH)@60Hz & MPC or 87.2 GPH (330.0 LPH)@50Hz
	5C	= PVDF - 104.6 GPH (396 LPH)@60Hz & MPC or 87.2 GPH (330.0 LPH)@50Hz
	5C	= 316SS - 104.6 GPH (396 LPH)@60Hz & MPC or 87.2 GPH (330.0 LPH)@50Hz
	5D	= PP - 137.9[1] GPH (522[1] LPH)@60Hz & MPC or 114.9 GPH (435.0 LPH)@50Hz
	5D	= PVDF - 137.9[1] GPH (522[1] LPH)@60Hz & MPC or 114.9 GPH (435.0 LPH)@50Hz
	5D	= 316SS - 137.9[1] GPH (522[1] LPH)@60Hz & MPC or 114.9 GPH (435.0 LPH)@50Hz
	6C	= PP - 218.7 GPH (828 LPH)@60Hz & MPC or 182.3 GPH (690.0 LPH)@50Hz
	6C	= PVDF[2] - 218.7 GPH (828 LPH)@60Hz & MPC or 182.3 GPH (690.0 LPH)@50Hz
	6C	= 316SS - 218.7 GPH (828 LPH)@60Hz & MPC or 182.3 GPH (690.0 LPH)@50Hz
	6D	= PP - 272.6[1] GPH (1032[1] LPH)@60Hz & MPC or 227.2 GPH (860.0 LPH)@50Hz
	6D	= PVDF[2] - 272.6[1] GPH (1032[1] LPH)@60Hz & MPC or 227.2 GPH (860.0 LPH)@50Hz
	6D	= 316SS - 272.6[1] GPH (1032[1] LPH)@60Hz & MPC or 227.2 GPH (860.0 LPH)@50Hz

[1]Caution: This pump has a high stroke rate & needs at least 25 psig back pressure and water-like viscosity.

[2]These pumps are subject to export restrictions

MOTOR:	**1**	= IEC 71 B14 Frame, 1PH 115/230V, 0.37kW (1/2HP), TEFC, Motor [50/60hz]*
	2	= 56C Frame, 1PH 115/230V, 0.37kW (1/2HP), TEFC, MOTOR (60hz)
	3	= IEC 71 B14 Frame, 3PH 220/380V (&460V), 0.37kW (1/2HP), TEFC, Motor [50/60hz]*
	4	= 56C Frame, 3PH 220/380V (&460V), 0.37kW (1/2HP), TEFC, MOTOR (60hz)
	5	= MPC with 56C frame motor - price included in MPC price
	6	= MPC NO MOTOR with 56C frame [Always @ 60 hz!] (price subtracted from MPC)
	7	= MPC with 71 frame motor - price included in MPC price
	8	= MPC NO MOTOR with 71 frame [Always @ 60 hz!] (price subtracted from MPC)
	X	= NO MOTOR - 56C frame
	Y	= NO MOTOR - IEC 71 B14 frame

*** In the Americas, lead time is 8 weeks for any pump with these motors.**

WET END MATERIALS:	**P**	= PP Liqud End - PTFE Diaphragm and PTFE O-rings - Ceramic Ball Valves *
	F	= PVDF Liqud End - PTFE Diaphragm and PTFE O-rings - Ceramic Ball Valve
	A	= 316SS Liquid End - PTFE Diaphragm and PTFE O-rings - 316SS Ball Valves

*** Model DC5 have PVC reagent heads with PP valves.**

CONNECTION TYPE	**P**	= NPT
	B	= Din ISO 228/1 (BSPT) (Not available on DC2 pumps)

Optional MPC Controller

CONTROL:	BLANK	= No MPC Controller
	M	= MPC Controller

CONTROLLER INPUT VOLTAGE	BLANK	= NO MPC CONTROLLER
	1	= 110-115V 50/60Hz ETL (UL & CSA) - Single Phase Only
	2	= 220-230V 50/60Hz CE & ETL (UL & CSA) - Single Phase Only

Contact factory for additional motor options. MPC output is 60Hz even if the input voltage is 50Hz - Select pump based on 60Hz performance.

EXTENDED REMOTE CABLE:	BLANK	= NO MPC CONTROLLER
	X	= PUMP MOUNTED KEYPAD with standard 1.5m (4.5 feet) of cable
	C	= EXTENDED REMOTE CABLE, KEYPAD MOUNTED OFF THE PUMP *

NOTE: * The MPC remote can be located up to 1000 feet (305m) away from the pump. Order extra cable by adding the line item part number NP530147-000 per foot to the order. Will be shipped loose as a line item for field installation. Example: If 62 ft of cable is needed, order 62 pieces of NP530147-000. MPC - PANEL MOUNT: The MPC remote is already a NEMA 4X (IP56) rated enclsoure. Instead of integrating this into a control panel, we suggest mounting the remote ""as is"" on the outside of a panel or next to a panel on the wall. The bracket for wall or panel mounting is the same bracket that comes as standard on the pump. There is no chassis mount available.

LANGUAGE (MPC will be shipped in language chosen)	BLANK	= NO MPC CONTROLLER
	E	= English
	F	= French
	S	= Spanish
	G	= German

OMNI Mechanical Diaphragm Pumps

OMNI DC7 Series Selection Guide

DC7_ _ _ _

MODELS	**7C** = PP - 412 GPH (1560 LPH)@60Hz & MPC or 343.4 GPH (1300 LPH)@50Hz **7C** = PVDF[2] - 412 GPH (1560 LPH)@60Hz & MPC or 343.4 GPH (1300 LPH)@50Hz **7D** = PP - 507[1] GPH (1920[1] LPH)@60Hz & MPC or 423 GPH (1600 LPH)@50Hz **7D** = PVDF[2] - 507[1] GPH (1920[1] LPH)@60Hz & MPC or 423 GPH (1600 LPH)@50Hz **Duplex Models** **7J** = PP - 824 GPH (3120 LPH)@60Hz & MPC or 687 GPH (2600 LPH)@50Hz **7J** = PVDF[2] - 824 GPH (3120 LPH)@60Hz & MPC or 687 GPH (2600 LPH)@50Hz **7K** = PP - 1014[1] GPH (3840[1] LPH)@60Hz & MPC or 845 GPH (3200 LPH)@50Hz **7K** = PVDF[2] - 1014[1] GPH (3840[1] LPH)@60Hz & MPC or 845 GPH (3200 LPH)@50Hz

[1]Caution: This pump has a high stroke rate & needs at least 25 psig back pressure and water-like viscosity.

[2]These pumps are subject to export restrictions.

MOTORS	**1** = 90 IEC FRAME **2** = 100 IEC FRAME **3** = 56C FRAME **4** = 145TC FRAME
WET END MATERIALS:	**P** = PP Liqud End - PTFE Diaphragm and PTFE O-rings - Ceramic Ball Valves **F** = PVDF Liqud End - PTFE Diaphragm and PTFE O-rings - Ceramic Ball Valve
	X = No Motor Purchased (Pump will come with Main Assy and Motor Frame Kit **M** = Motor Purchased (as line Item) (Pump will come completely assembled)

OMNI DC7 Series Selection Guide

EP C B _

MODELS	**EP** = MPC VECTOR
ENCLOSURE	**C** = NEMA 4X (IP56)
RATINGS	**B** = 2 HP (1.5kW) 208-240 VAC, 1 Phase, 50/60 Hz
LANGUAGE	**X** = English **A** = German **B** = French **C** = Spanish

A completed model number should look like "EPCBX"

Motor Selection

Part Number	Power (hp / kW)	Volts	Phase	Hz	RPM	Frame	Enclosur
MD496	1.5 / 1.1	208-230 / 460	3	60	1725	NEMA 56C	TEFC
W773127-001 **	2 / 1.5 (DC7 Duplex)			60		NEMA 145TC	
NP500622-000	1.5 / 1.1			60	1140	NEMA 56C	
NP500619-000	1.5 / 1.1	220 / 380	3	50/60	1425 / 1725	IEC 90	TEFC
NP500624-000 **	2 / 1.5 (DC7 Duplex)						
NP500621-000	1.5 / 1.1				940 / 1140		

Performance & Selection Table

MODEL		DC7C	DC7D	DC7J	DC7K
Capacity	GPH	412	507[1]	824	1014[1]
60 hz & MPC	LPH	1560	1920[1]	3120	3840[1]
Capacity	GPH	343	423	687	845
50 hz	LPH	1300	1600	2600	3200
Pressure	PSIG	60			
(max.)	BAR	4.1			
SPM @	1725	175	223 [1]	175	223 [1]
	1425	146	186	146	186
HP/kW Required		1.5 / 1.1		2 / 1.5	
Connection Size		1 1/2" (F)NPT, ANSI 1 1/2" & DIN 40 FLANGE			

[1]This selection uses a high stroking rate, use with caution.
Must have at least 25 psig discharge pressure and water-like viscosity.

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OMNI Mechanical Diaphragm Pumps

Common Pump Accessories - Omni & Others

Component	Size	Material	Part No.
Drip Cover, Motor	56C	Steel, Baldor	NP999119
Pressure Relief Valves	1/2"	PVC/TFE	NA100001-PVC
	1/2"	PVDF/TFE	NA100001-PVD
	1/2"	SS/TFE	NA100001-316
	1"	PVC/TFE	NA100002-PVC
	1"	PVDF/TFE	NA100002-PVD
	1"	SS/TFE	NA100002-316
	1.5"	PVC/TFE	NA100003-PVC
	1.5"	PVDF/TFE	NA100003-PVD
Back Pressure Valves	1/2"	PVC/TFE	NA200001-PVC
	1/2"	PVDF/TFE	NA200001-PVD
	1/2"	SS/TFE	NA200001-316
	1"	PVC/TFE	NA200002-PVC
	1"	PVDF/TFE	NA200002-PVD
	1"	SS/TFE	NA200002-316
	1.5"	PVC/TFE	NA200003-PVC
	1.5"	PVDF/TFE	NA200003-PVD
Gauge Isolator w/ 200PSI Gauge	1/4"	CPVC/TFE	NA500001-CPVC
	1/4"	PVDF/TFE	NA500001-PVD
	1/4"	316SS/TFE	NA500001-316
Calibration Column	1/2"	PVC 100mL	NA300001-PVC
	1/2"	PVC 200mL	NA300002-PVC
	3/4"	PVC 500mL	NA300003-PVC
	3/4"	PVC 1000mL	NA300004-PVC
	1"	PVC 2000mL	NA300005-PVC
	1"	PVC 4000mL	NA300006-PVC
	2"	PVC 10,000mL	NA300007-PVC
	2"	PVC 20,000mL	NA300008-PVC
	1/2"	Glass/PVD 100mL	NA300009-PVD
	1/2"	Glass/PVD 200mL	NA300010-PVD
	3/4"	Glass/PVD 500mL	NA300011-PVD
	3/4"	Glass/PVD 1000mL	NA300012-PVD
	1"	Glass/PVD 2000mL	NA300013-PVD
	1"	Glass/PVD 4000mL	NA300014-PVD
	1/2"	Glass/SS 100mL	NA300015-316
	1/2"	Glass/SS 200mL	NA300016-316
	3/4"	Glass/SS 500mL	NA300017-316
	3/4"	Glass/SS 1000mL	NA300018-316
	1"	Glass/SS 2000mL	NA300019-316
	1"	Glass/SS 4000mL	NA300020-316
Y Strainer	1/2"	PVC	40085
	1/2"	CPVC	NA400001-CPVC
	1/2"	PVD	NA400001-PVD
	1"	PVC	NA400002-PVC
	1"	CPVC	NA400002-CPVC
	1"	PVD	NA400002-PVD

OMNI KOPkit Selection Guide

Type Connectio	Wetted Material	Pump	KOPkit Number	List Adder
NPT	PVDF	DC2	NLK020FP	$ 300.80
NPT	PVDF	DC3 or DC4	NLK040FP	$ 451.20
BSPT	PVDF	DC3 or DC4	NLK040FB	$ 451.20
NPT	PVDF	DC5	NLK050FP	$ 630.40
BSPT	PVDF	DC5	NLK050FB	$ 630.40
NPT	PVDF	DC6	NLK060FP	$ 804.50
BSPT	PVDF	DC6	NLK060FB	$ 804.50
NPT	PP	DC5	NLK050PP	$ 516.10
BSPT	PP	DC5	NLK050PB	$ 516.10
NPT	PP	DC6	NLK060PP	$ 679.80
BSPT	PP	DC6	NLK060PB	$ 679.80
N/A	PVDF & PP	DC7	NLK070XX	$ 578.90
NPT	316SS	DC2	NLK020AP	$ 510.90
NPT	316SS	DC3 or DC4	NLK040AP	$ 750.90
BSPT	316SS	DC3 or DC4	NLK040AB	$ 750.90
NPT	316SS	DC5	NLK050AP	$ 904.40
BSPT	316SS	DC5	NLK050AB	$ 810.70
NPT	316SS	DC6	NLK060AP	$ 891.00
BSPT	316SS	DC6	NLK060AB	$ 891.00

150 PSI Pulsation Dampeners - Chargeable

Volume	Body	Bladder	Connection	Part Number
10 cubic inches	POLY	EPDM	3/8" FNPT	W777614-PPN
		CSPE	3/8" FNPT	W777614-PPH
		TFE	3/8" FNPT	W777614-PPT
		Viton	3/8" FNPT	W777614-PPV
	PVC	CSPE	1/2" FNPT	L9908300-HYP
		TFE	1/2" FNPT	L9908300-TFE
		Viton	1/2" FNPT	L9908300-VIT
	PVDF	CSPE	1/2" FNPT	L9908400-HYP
		TFE	1/2" FNPT	L9908400-TFE
		Viton	1/2" FNPT	L9908400-VIT
	316 SS	EPDM	3/8" FNPT	W777614-PVN
		CSPE	3/8" FNPT	W777614-PVH
		TFE	3/8" FNPT	W777614-PVT
		Viton	3/8" FNPT	W777614-PVV
85 cubic inches	POLY	EPDM	3/4" FNPT	W777611-16N
		CSPE	3/4" FNPT	W777611-16H
		TFE	3/4" FNPT	W777611-16T
		Viton	3/4" FNPT	W777611-16V
	PVDF	EPDM	3/4" FNPT	W777616-PPN
		CSPE	3/4" FNPT	W777616-PPH
		TFE	3/4" FNPT	W777616-PPT
		Viton	3/4" FNPT	W777616-PPV
	316 SS	EPDM	3/4" FNPT	W777616-PVN
		CSPE	3/4" FNPT	W777616-PVH
		TFE	3/4" FNPT	W777616-PVT
		Viton	3/4" FNPT	W777616-PVV
370 cubic inches	POLY	EPDM	3/4" FNPT	W777613-16N
		CSPE	3/4" FNPT	W777613-16H
		TFE	3/4" FNPT	W777613-16T
		Viton	3/4" FNPT	W777613-16V
	PVDF	EPDM	2" FNPT	W777618-PPN
		CSPE	2" FNPT	W777618-PPH
		TFE	2" FNPT	W777618-PPT
		Viton	2" FNPT	W777618-PPV
	316 SS	EPDM	2" FNPT	W777618-PVN
		CSPE	2" FNPT	W777618-PVH
		TFE	2" FNPT	W777618-PVT
		Viton	2" FNPT	W777618-PVV
36 cubic inches	POLY	EPDM	2" FNPT	W777631-16N
		CSPE	2" FNPT	W777631-16H
		TFE	2" FNPT	W777631-16T
		Viton	2" FNPT	W777631-16V
	PVDF	EPDM	3/4" FNPT	W777615-PPN
		CSPE	3/4" FNPT	W777615-PPH
		TFE	3/4" FNPT	W777615-PPT
		Viton	3/4" FNPT	W777615-PPV
	316 SS	EPDM	3/4" FNPT	W777615-PVN
		CSPE	3/4" FNPT	W777615-PVH
		TFE	3/4" FNPT	W777615-PVT
		Viton	3/4" FNPT	W777615-PVV
175 cubic inches	POLY	EPDM	3/4" FNPT	W777612-16N
		CSPE	3/4" FNPT	W777612-16H
		TFE	3/4" FNPT	W777612-16T
		Viton	3/4" FNPT	W777612-16V
	PVDF	EPDM	2" FNPT	W777617-PPN
		CSPE	2" FNPT	W777617-PPH
		TFE	2" FNPT	W777617-PPT
		Viton	2" FNPT	W777617-PPV
	316 SS	EPDM	2" FNPT	W777617-PVN
		CSPE	2" FNPT	W777617-PVH
		TFE	2" FNPT	W777617-PVT
		Viton	2" FNPT	W777617-PVV
		EPDM	2" FNPT	W777630-16N
		CSPE	2" FNPT	W777630-16H
		TFE	2" FNPT	W777630-16T
		Viton	2" FNPT	W777630-16V

Specifica 150 PSI Maximum Pressure