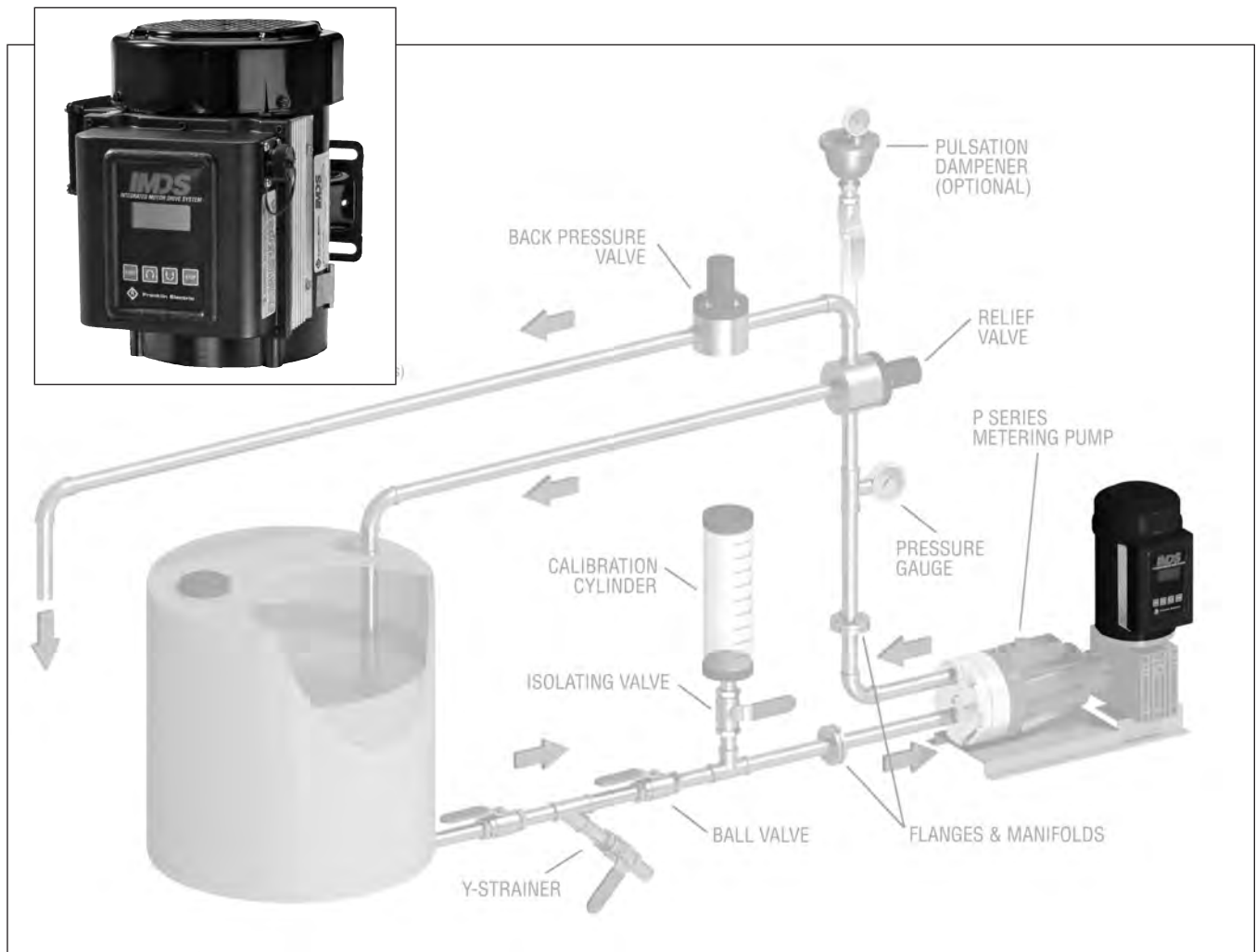


Hydra·Cell[®]

METERING SOLUTIONS™

Selection Guide for P Series Pump Accessories & Options



Motors & Controllers

Motors provide the rotary action that operates the gear reducer on a pump. A motor for a specific P Series pump model is selected based on the horsepower (HP), revolutions-per-minute (RPM) and turndown ratio required for the application (performance criteria) in GPH or LPH.

Controllers regulate the motor speed and strokes-per-minute, providing a flow that is proportional to the motor speed. P Series pumps use variable frequency drive (VFD) controllers that are selected based on the motor HP and whether single-phase or three-phase voltage input is required.

Motors & Controllers Selection Process

1. Locate the Maximum Flow at Designated Pressure (GPH or LPH) for your application in the Performance table on the specification sheet of your P Series pump model (P100, P200, etc.).
2. This maximum flow rate corresponds to a color-coded rating of your Required Motor HP.
3. Using the charts on page 3 for either 1800 RPM or 3600 RPM, select the motor by matching the Required Motor HP with the correct turndown ratio of your pump.
(For motor/controller combination, see chart on page 4.)
4. Using the charts on page 4, select the controller by matching the motor HP with the Input (Voltage/Phase) and Output (Voltage/Phase).

Notes:

- 56C motor frames require a gear reducer with a 56C flange (options 005, 007, 010, etc.).
- 143/145TC motor frames require a gear reducer with a 143/145TC flange (options A05, A07, A10, etc.).
- 182/184TC motor frames require a gear reducer with a 182/184TC flange (options B05, B07, B10, etc.).
- 213/215TC motor frames require a gear reducer with a 213/215TC flange (options C05, C07, C10, etc.).
- 254/256TC motor frame requires a gear reducer with a 254/256TC flanges (option D05; available for the P500 only).

Horsepower (HP) Guide for P Series Pumps*

HP	P100	P200	P300	P400	P500	P600
1/4	✓	✓	✓	✓	✓	✓
1/2	✓	✓	✓	✓	✓	✓
3/4	✓	✓	✓	✓	✓	✓
1	N/A	✓	✓	✓	✓	✓
1-1/2	N/A	N/A	✓	✓	✓	✓
2	N/A	N/A	✓	✓	✓	✓
3	N/A	N/A	✓	✓	✓	✓
5	N/A	N/A	N/A	N/A	✓	✓
7-1/2	N/A	N/A	N/A	N/A	✓	✓
10	N/A	N/A	N/A	N/A	✓	✓
15	N/A	N/A	N/A	N/A	✓	N/A

* For 1800 RPM and 3600 RPM

Motors (Three-Phase)

1800 RPM Inverter Duty

HP	Voltage	Turndown Ratio	Frame	Enclosure	Part Number	Weight (lbs.)
1/4	230	1000:1	56C	TENV	M25TE18-3P56C	18
1/2	230/460	1000:1	56C	TENV	M50TE18-3P56C	20
3/4	230/460	20:1	56C	TEFC	M75TE18-3P56C-P	21
1	230/460	20:1	56C	TEFC	M100TE18-3P56C-P	27
1	230/460	1000:1	145TC	TENV	M100TE18-3P145TC-P	27
1-1/2	230/460	2:1	56C	TEFC	M15018-3P56C-P	29
1-1/2	230/460	4:1	145TC	TEFC	M150TE18-R3P145TCA2	56
1-1/2	230/460	10:1	145TC	TEFC	M150TE18-R3P145TCA3	38
1-1/2	230/460	1000:1	145TC	TENV**	M150TN18-R3P145TCA5	48
2	230/460	4:1	56C	TEFC**	M200TE18-R3P56CA2	41
2	230/460	4:1	145TC	TEFC	M200TE18-R3P145TCA2	80
2	230/460	10:1	145TC	TEFC	M200TE18-R3P145TCA3	44
2	230/460	20:1	145TC	TEFC**	M200TE18-R3P145TCA4	51
3	230/460	4:1	182TC	TEFC	M300TE18-R3P182TCA2	84
3	230/460	10:1	182TC	TEFC	M300TE18-R3P182TCA3	125
3	230/460	20:1	182TC	TEFC**	M300TE18-R3P182TCA4	86
5	230/460	4:1	184TC	TEFC	M500TE18-R3P184TCA2	100
5	230/460	10:1	184TC	TEFC	M500TE18-R3P184TCA3	125
5	230/460	20:1	184TC	TEFC**	M500TE18-R3P184TCA4	88
7-1/2	230/460	4:1	213TC	TEFC	M750TE18-R3P213TCA2	151
7-1/2	230/460	10:1	213TC	TEFC	M750TE18-R3P213TCA3	185
7-1/2	230/460	20:1	213TC	TEFC**	M750TE18-R3P213TCA4	98
10	230/460	4:1	215TC	TEFC	M1000TE18-R3P215TCA2	178
10	230/460	10:1	215TC	TEFC	M1000TE18-R3P215TCA3	185
10	230/460	20:1	215TC	TEFC**	M1000TE18-R3P215TCA4	125
15	230/460	4:1	254TC	TEFC	M1500TE18-R3P254TCA2	264
15	230/460	10:1	254TC	TEFC	M1500TE18-R3P254TCA3	310
15	230/460	1000:1	254TC	TENV*	M1500TN18-F3P254TCA5	250

* With Feet ** With Removable Feet

3600 RPM Inverter Duty

HP	Voltage	Turndown Ratio	Frame	Enclosure	Part Number	Weight (lbs.)
1	230/460	2:1	56C	TEFC	M100TE36-3P56C	24
1-1/2	230/460	4:1	56C	TEFC	M150TE36-3P56C	25
2	230/460	10:1	56C	TEFC	M200TE36-3P56C	29
2	230/460	4:1	145TC	TEFC	M200TE36R-3P145TCA2	56
3	230/460	2:1	56C	TEFC	M300TE36-3P56C	39
3	230/460	10:1	145TC	TEFC	M300TE36R-3P145TCA3	40
3	230/460	4:1	182TC	TEFC	M300TE36R-3P182TCA2	84
5	230/460	4:1	184TC	TEFC	M500TE36R-3P184TCA2	100
5	230/460	10:1	184TC	TEFC	M500TE36R-3P184TCA3	81
7-1/2	230/460	4:1	213TC	TEFC	M750TE36R-3P213TCA2	151
7-1/2	230/460	10:1	213TC	TEFC	M750TE36R-3P213TCA3	114
10	230/460	4:1	215TC	TEFC	M1000TE36R-3P215TCA2	178
10	230/460	10:1	215TC	TEFC	M1000TE36R-3P215TCA3	128
15	230/460	4:1	254TC	TEFC	M1500TN118F-3P254TCA5	264

Motor/Controller Combination*

(IP-55; Single-Phase)

2400 RPM

HP	Voltage	Turndown Ratio	Enclosure	Part Number	Weight (lbs.)
1/3	115/230	8:1	TEFC	MC33TE24-1P56C	24
1/2	115/230	8:1	TEFC	MC50TE24-1P56C	25
3/4	115/230	8:1	TEFC	MC75TE24-1P56C	29
1	115/230	8:1	TEFC	MC100TE24-1P56C	39

* With Feet

Controllers (NEMA 1)

Single-Phase

HP	Type	Input	Output	Part Number	Weight (lbs.)
		Voltage / Phase	Voltage / Phase		
1	Micro AC Inverter*	115 volt / 1-phase	230 volt / 3-phase	C100IP-1P3P-115	2.0
1/2	Sensorless Vector	230 volt / 1-phase	230 volt / 3-phase	C50N1-1P3P-230	2.2
1	Sensorless Vector	230 volt / 1-phase	230 volt / 3-phase	C100N1-1P3P-230	2.2
2	Sensorless Vector	230 volt / 1-phase	230 volt / 3-phase	C200N1-1P3P-230	4.4
3	Sensorless Vector	230 volt / 1-phase	230 volt / 3-phase	C300N1-1P3P-230	4.4

* IP-20

Three-Phase

HP	Type	Input	Output	Part Number	Weight (lbs.)
		Voltage / Phase	Voltage / Phase		
1/2	Sensorless Vector	230 volt / 3-phase	230 volt / 3-phase	C50N1-3P3P-230	2.2
1	Sensorless Vector	230 volt / 3-phase	230 volt / 3-phase	C100N1-3P3P-230	2.2
2	Sensorless Vector	230 volt / 3-phase	230 volt / 3-phase	C200N1-3P3P-230	4.4
3	Sensorless Vector	230 volt / 3-phase	230 volt / 3-phase	C300N1-3P3P-230	4.4
1	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C100N1-3P3P-460	2.2
2	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C200N1-3P3P-460	2.2
3	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C300N1-3P3P-460	4.4
5	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C500N1-3P3P-460	4.4
7-1/2	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C750N1-3P3P-460	14.0
10	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C1000N1-3P3P-460	14.0
15	Sensorless Vector	460 volt / 3-phase	460 volt / 3-phase	C1500N1-3P3P-460	14.0



1204 Chestnut Avenue
Minneapolis, MN 55403 USA
Tel: (612) 332-5681 • FAX: (612) 332-6937
Toll Free FAX (USA only) (800) 332-6812
Email: sales@wannereng.com
www.hydra-cell.com



Units 8 & 9 Fleet Business Park
Sandy Lane, Church Crookham,
Hampshire GU52 8BF England
Tel: +44 (0) 1252 816847
FAX Tel: +44 (0) 1252 629242
Email: sales@wannerint.com
www.wannerint.com



Flat A, 21 F
Chatham Commercial Building
399 Chatham Road North
Hung Hom, Kowloon, Hong Kong
Tel: (852) 3428-6534
FAX: (852) 3188-9145
Email: sales@wannerpumps.com