LAKOS
Separators and Filtration Solutions

Worksheet

Specifying LAKOS PPS Series Pump Protection Separators

Each model in the LAKOS Pump Protection Series is engineered for a *specific flow range* and with concern for certain restrictions. It is therefore essential to use accurate application data.

This worksheet must be filled out completely, signed where indicated and returned to LAKOS *before any order can be shipped.* Contact your LAKOS representative if you require assistance.

Required Data

Maximum flow rate of pump: _____

Minimum flow rate of pump: _____

Minimum inside diameter (I.D.) of well: _____

Depth of well: _____

Depth of pump setting: _____

Pump water level: _____

Submergence: _____
(To obtain: subtract pumping water level from depth of pump setting.)

If sizing a submersible pump, the following data is also required:

Maximum diameter of pump: _____

Maximum diameter of motor: _____

Overall length of pump and motor: _____

Pump's riser size (N.P.T.): _____

Identify Flow Range & Minimum Well I.D. Requirements

Use Chart A on reverse to select a model according to your pump's actual flow rate. If two or more models are applicable, select the model with the lowest maximum flow rate. Note also the minimum required well I.D. If your well is not large enough, either select another available model which accommodates your flow rate and well I.D. or consult factory for assistance. ***Circle the appropriate model on this worksheet.***

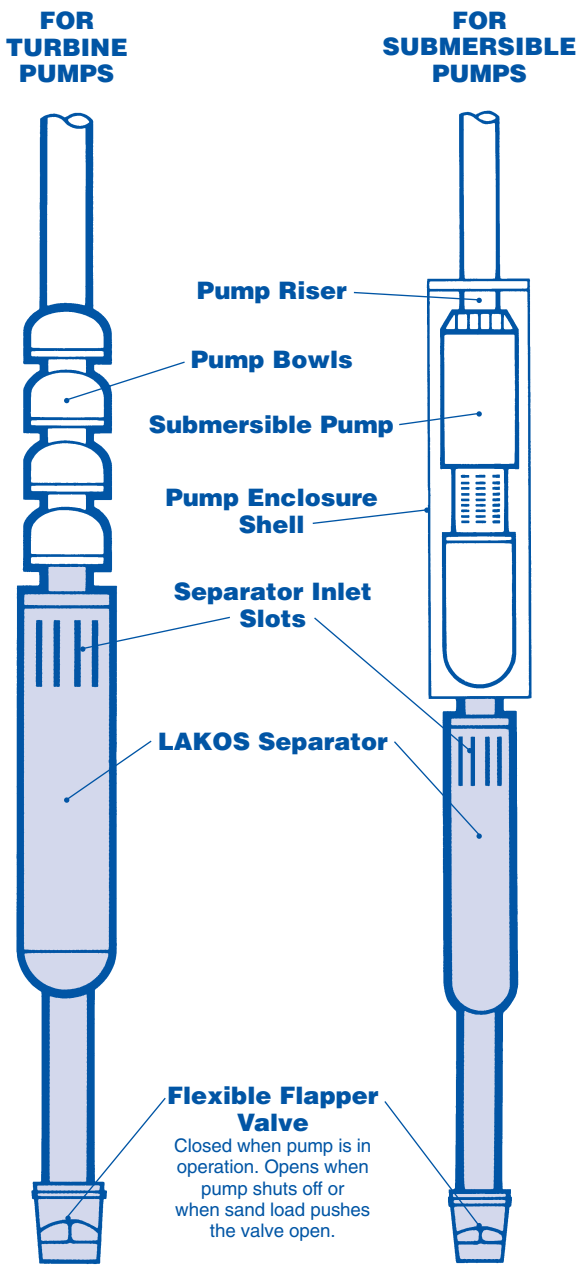
Determine Pump Enclosure Shell Size
(Submersible Pumps Only)

Your submersible pump must fit into this shell. Using Chart B, locate your pump's maximum flow rate (in U.S. gpm) along the horizontal scale and the maximum diameter of your pump or motor (whichever is larger) along the vertical scale. Find the intersecting point of these two values. The "range" it lies within dictates the required pump shell size (indicated in circle). NOTE: If the intersecting point is directly on the line between two "ranges," you must select the larger shell size. ***Circle the appropriate shell size on this worksheet.***

Use Chart C to determine if your well I.D. is large enough to accommodate the required pump enclosure shell. If not, consult your LAKOS representative for other options.

Important

- Note required minimum submergence of separator (below pumping water level) on Chart A.
- Maximum particle concentration: 1,000 ppm
- Maximum particle size: 1/4-inch (6.3 mm)
- Head loss: Typically 9-14 feet (2.7-4.3 m)
- Minimum depth of well below separator: 30 feet (9.2 m)



PLEASE SIGN HERE

The "Required Data" provided on this worksheet is true and accurate for purposes of sizing a LAKOS Pump Protection Sand Separator in a water well application. I understand any errors or subsequent changes in this data may substantially affect performance and may void any warranty, either implied or expressed.

_____
Signature

_____
Company

_____
Telephone No.

CHART A

The following data applies *only* to the basic separator. Since the pump enclosure shell for submersible separators is predicated on the actual pump's dimensions, standard specifications cannot be published.

Model	Minimum Well I.D. in./mm	Flow Range U.S. gpm m^3/hr	Outside Diameter in./mm	Length with Riser & Flapper Valve in./mm	Riser Size N.P.T.	Weight lbs./kg	Required Minimum Submergence feet/meters
PPS-100-D	6 153	100-175 23-40	5⅝ 143	88⅜ 2245	2½-inch	93 42	30 9.2
PPS-125-E	7 178	125-250 28-57	5 9/16 141	106 2692	3-inch	142 64	30 9.2
PPS-150-F	8 204	150-325 34-74	6⅝ 168	120¼ 3054	4-inch	220 100	30 9.2
PPS-325-GSA	9¾ 248	325-520 74-118	8⅝ 219	124 3150	6-inch	191 87	60 18.4
PPS-520-GGA	9¾ 248	520-710 118-161	8⅝ 219	130 3302	6-inch	213 97	60 18.4
PPS-325-G	10¾ 273	325-650 74-148	8⅝ 219	132½ 3366	6-inch	267 121	30 9.2
PPS-600-HSA	12 305	600-910 136-207	10⅝ 270	141½ 3594	8-inch	281 128	60 18.4
PPS-880-HHA	12 305	880-1375 200-312	10⅝ 270	145¾ 3702	8-inch	315 143	60 18.4
PPS-550-H	13¼ 337	550-1110 125-252	10¾ 273	147 3734	8-inch	390 177	30 9.2
PPS-1290-ISA	13¼ 337	1290-1700 293-386	10¾ 273	150½ 3823	8-inch	393 178	60 18.4
PPS-825-I	15¼ 388	825-1450 187-329	12¾ 324	154 3912	8-inch	454 206	30 9.2
PPS-1460-JSA	15¼ 388	1460-2040 332-463	12¾ 324	158 4013	10-inch	492 223	60 18.4
PPS-1010-J	17¼ 438	1010-1800 229-409	14 356	163 4140	10-inch	526 239	30 9.2
PPS-1780-KSA	17¼ 438	1780-2420 404-550	14 356	170 4318	10-inch	575 261	60 18.4
PPS-1640-K	19¼ 489	1640-2560 372-581	16 406	185 4699	10-inch	703 319	30 9.2
PPS-2520-KKA	19¼ 489	2520-3180 572-722	16 406	204 5182	12-inch	754 342	60 18.4

CHART B

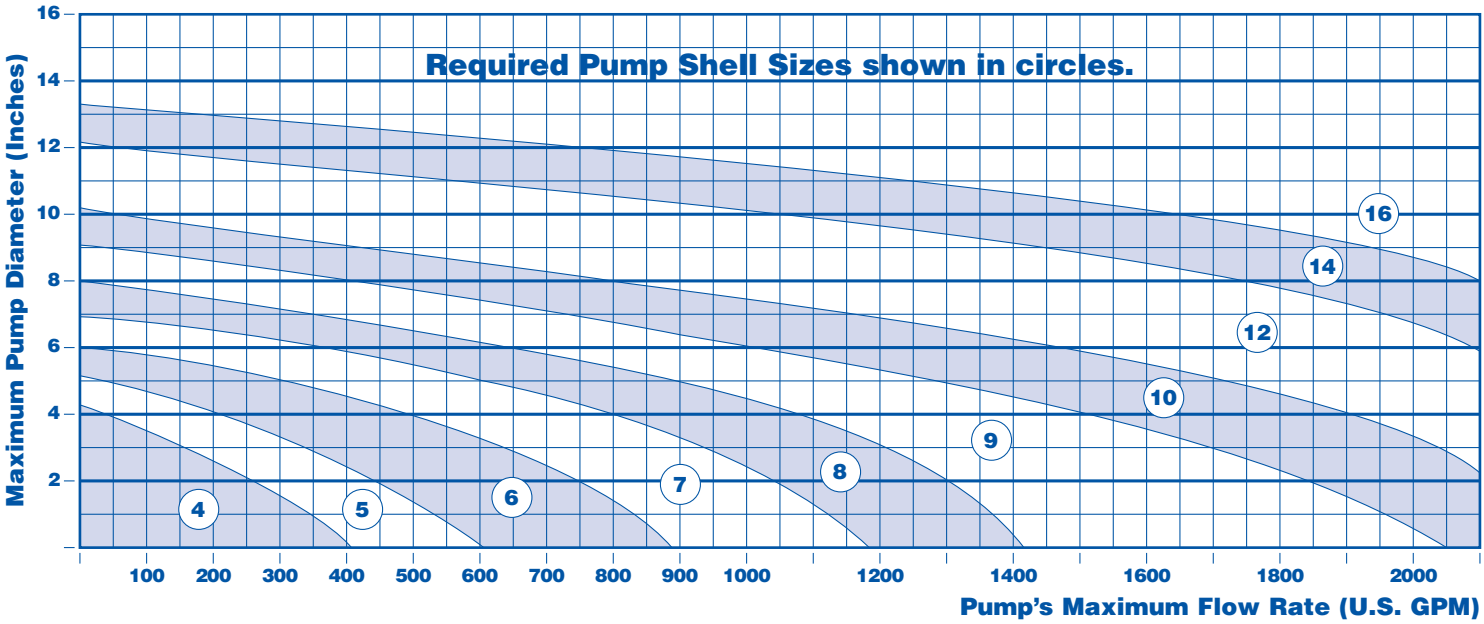


CHART C

Pump Enclosure Shell Size	4	5	6	7	8	9	10	12	14	16
Minimum Well I.D. (inches)	5½	6½	7¾	8¾	10	11	12	14	16	18

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