

D-15/17 Series

Up to 15 gpm (57 l/min)



Hydra-Cell[®]
SIMPLY BUILT TO LAST

D-15/17 Series Performance

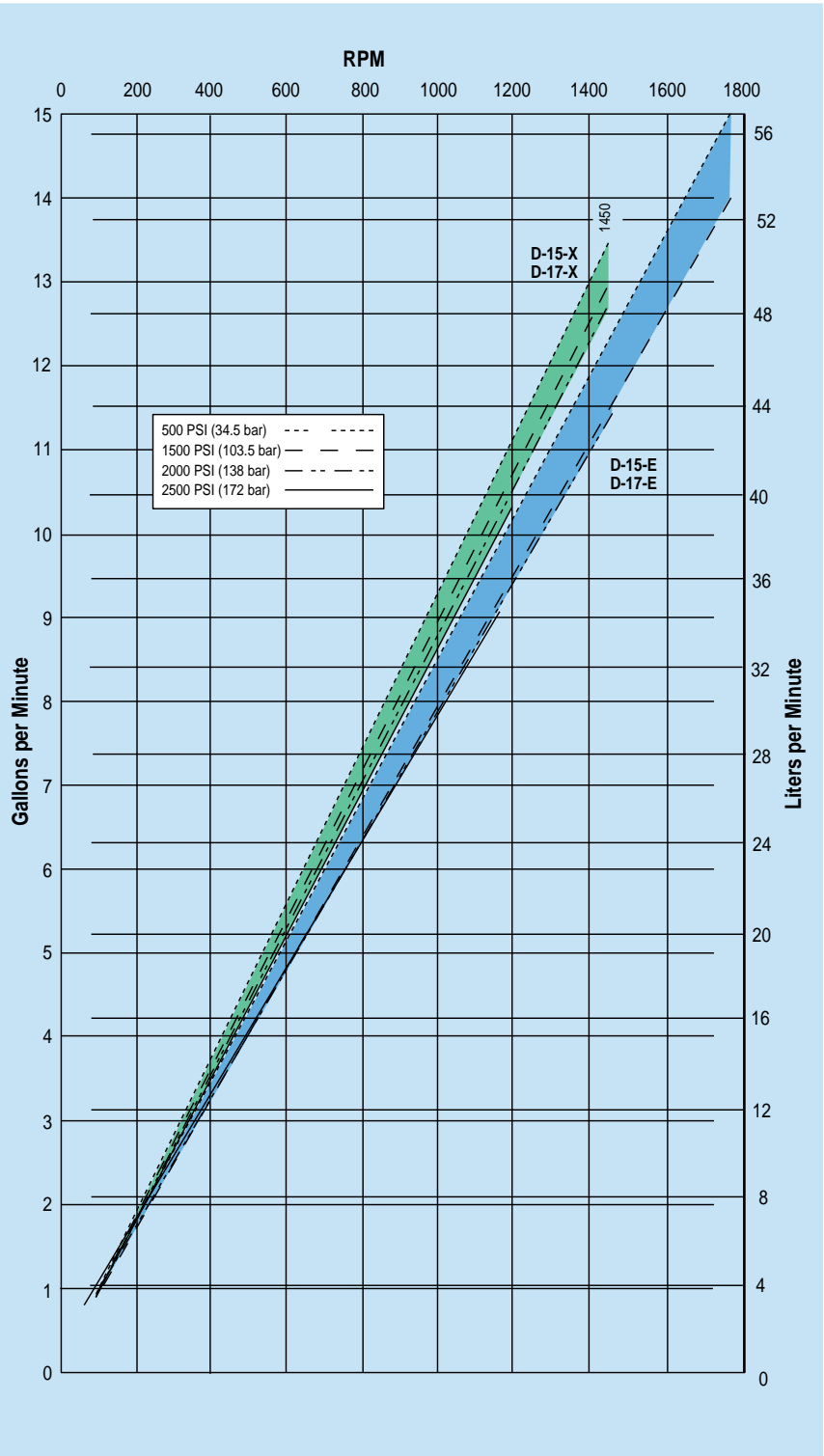
flow

model	max flow		max input rpm
	gpm	l/min	
D-15-X/D-17-X	13.4	50.7	1450
D-15-E/D-17-E	15.1	57.1	1750

pressure

Maximum Inlet Pressure:
500 psi (34.5 bar)

Pressure Variable To:
2500 psi (172 bar)



D-15/17 Series Specifications

Maximum Capacity*

	@ Max RPM	psi	(bar)	gpm	l/min
D-15/17-X	1450	500	(34.5)	13.4	50.7
	1450	1500	(103.5)	13.0	49.2
	1450	2000	(138)	12.7	48.0
	1150	2500	(172)	10.3	38.9
D-15/17-E	1750	500	(34.5)	15.1	57.1
	1750	1500	(103.5)	14.1	53.4
	1450	2000	(138)	11.5	43.5
	1150	2500	(172)	9.4	35.6

Delivery*

	psi	(bar)	revs/gal	revs/liter
D-15/17-X	500	(34.5)	109	28.8
	1500	(103.5)	112	29.6
	2000	(138)	114	30.2
	2500	(172)	117	30.9
D-15/17-E	500	(34.5)	116	30.6
	1500	(103.5)	124	32.8
	2000	(138)	126	33.3
	2500	(172)	128	33.7

Max Inlet Pressure 500 psi (34.5 bar)

Pressure Variable to 1500 psi (103.5 bar) @ 1750 rpm (D-15-E and D-17-E only)
2000 psi (138 bar) @ 1450 rpm;
2500 psi (172 bar) @ 1150 rpm

Max Temperature 250°F (121°C) – Consult factory for correct component selection for temperatures above 160°F (71°C)

Inlet Port 1-1/4 inch NPT female

Discharge Port 3/4 inch NPT female

Shaft Diameter 1-1/8 inch (28.58 mm)

Shaft Rotation Bi-directional

Bearings Taper roller bearings

Oil Capacity 2.2 U.S. quart (2.08 liters) see page 100 for oil selection and specification.

Weight 145 lbs (66 kg)

*Pump flow rate performance is based on randomly selected pumps with water at 70°F (21°C)

Calculating Required Horsepower

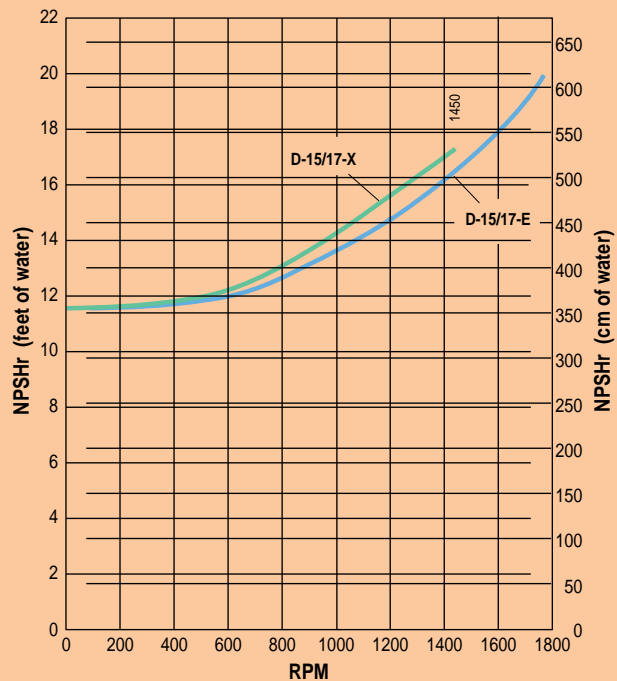
$$\frac{80 \times \text{rpm}}{63,000} + \frac{\text{gpm} \times \text{psi}}{1,460 - \left(\frac{\text{psi} - 500}{20}\right)} = \text{electric motor HP}$$

Calculating Pulley Size

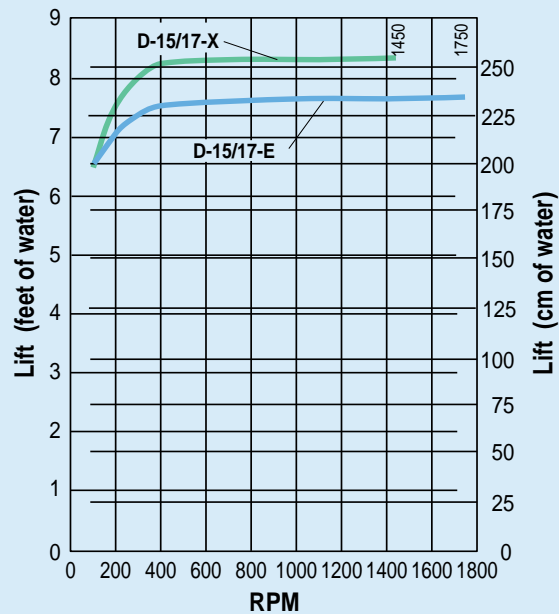
$$\frac{\text{motor pulley OD}}{\text{pump rpm}} = \frac{\text{pump pulley OD}}{\text{motor rpm}}$$

For installation guidelines and other pump selection design considerations, refer to Hydra-Cell catalog pages 107-111.

Net Positive Suction Head (NPSHr)



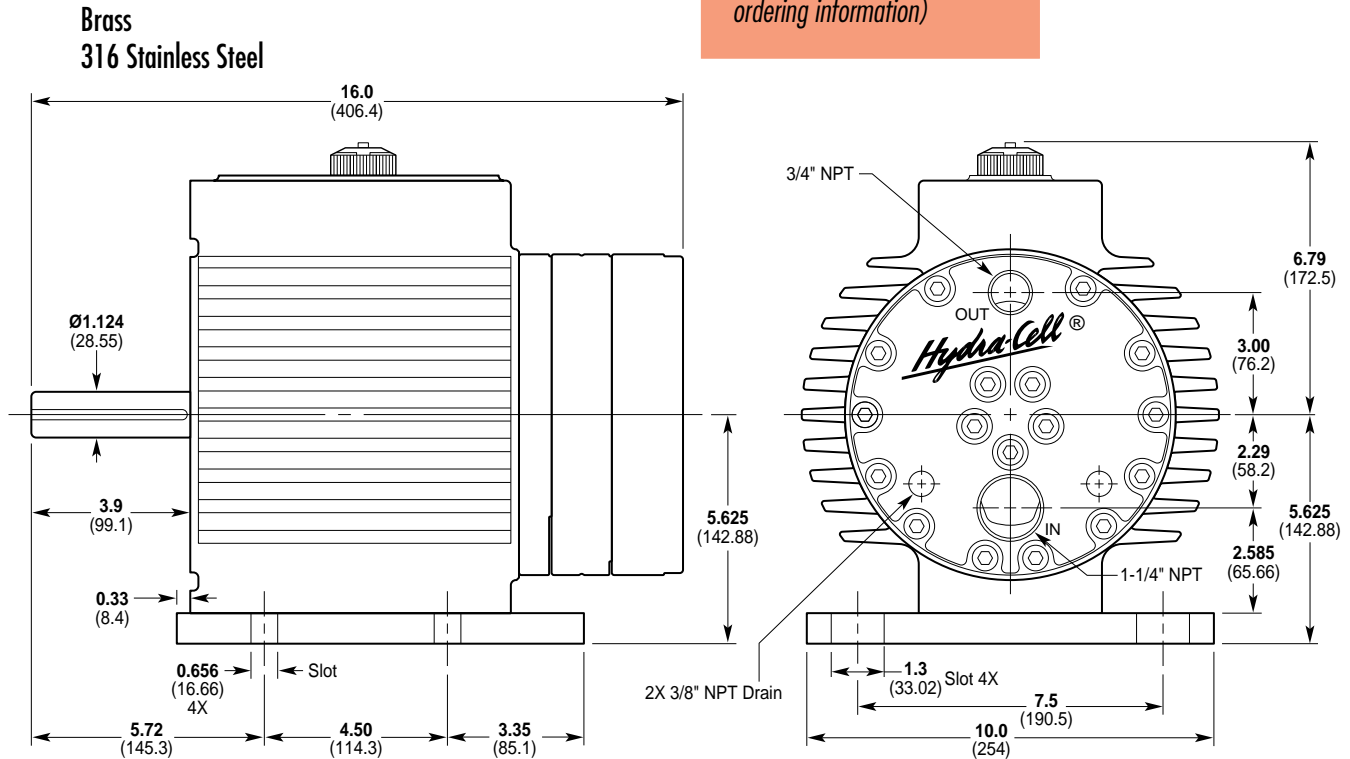
Dry Lift



D-15/17 Series Dimensions

D-15 Models Horizontal Mount

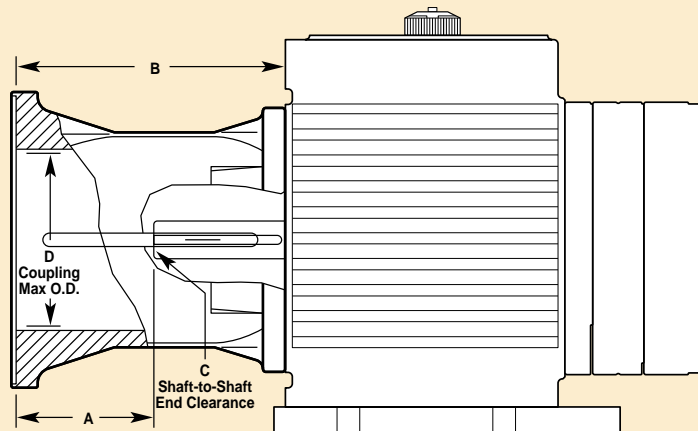
D-15 Pump/Motor Adapter flange ordered separately (see below for part number ordering information)



Pump/Motor Adapter Kit

Pump/Motor Adapter Kits are designed to fit several NEMA/IEC frame sizes. Kits are ordered separately for all D-15 and all D-17 models.

Each kit includes the adapter flange and all necessary mounting hardware (excluding coupler).



Adapter Kit Motor Size	Kit Part Number	A	B	C	D
NEMA 182TC/184TC	A04-041-1200	4.1 (104.1)	8.0 (203.2)	1.71 (43.4)	4.75 (120.7)
NEMA 213TC/215TC	A04-041-1200	4.1 (104.1)	8.0 (203.2)	0.96 (24.4)	4.75 (120.7)
NEMA 254TC/256TC	A04-041-1200	4.1 (104.1)	8.0 (203.2)	0.33 (8.4)	4.75 (120.7)
NEMA 284TC/286TC	A04-041-1202	4.5 (114.3)	8.4 (213.4)	0.14 (3.6)	4.75 (120.7)
IEC 132 (B5 Flange)	A04-041-1201	4.1 (104.1)	8.0 (203.2)	1.09 (27.7)	4.75 (120.7)
IEC 160 (B14 Face)	A04-041-1203	4.3 (109.2)	8.2 (208.3)	0.15 (3.8)	4.75 (120.7)
IEC 160/180 (B5 Flange)	A04-041-1205	4.3 (109.2)	8.2 (208.3)	0.15 (3.8)	4.75 (120.7)

D-15/17 Series How To Order

Ordering Information

A complete D-15 or D-17 Series Model Number contains 12 digits of customer-specified design options: for example D15XABTHFECG.

1	2	3	4	5	6	7	8	9	10	11	12
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Digit	Order Code	Description
1-3		Pump Configuration*
	D15	Horizontal shaft-driven
	D17	Vertical shaft-driven
*Pump/motor adapters ordered separately. See page 63 for part number ordering information.		
4		Hydraulic End Cam
	X	Max 13 gpm (49 lpm) @ 1450 rpm
	E	Max 15 gpm (56 lpm) @ 1750 rpm
5		Pump Head Version
	A	Version A Pump Head
6		Pump Head Material
	B	Brass
	S	316 Stainless Steel
7		Diaphragm & O-ring Material
	G	Viton®-XT
	T	Buna-N-XS
8		Valve Seat Material
	D	Tungsten Carbide
	H	17-4 PH Stainless Steel
	N	Nitronic 50
9		Valve Material
	D	Tungsten Carbide
	F	17-4 PH Stainless Steel – Machined
	N	Nitronic 50
10		Valve Springs
	E	Elgiloy®
	T	Hastelloy® C
11		Valve Spring Retainers
	C	Celcon
	H	17-7 PH Stainless Steel
	M	Kynar®
	P	Polypropylene
	Y	Nylon (Zytel)
12		Hydra-Oil
	A	10W30 standard duty oil
	B	40-wt for continuous duty (use with 316 SST or Hastelloy® pump head (standard))
	E	30-wt food-contact oil
	F	40-wt high-temp food-contact oil
	G	5W30 cold-temp severe duty oil

Replacement Hydraulic End Assembly

Complete D-15/17 Hydraulic End Assemblies are available as replacement items. The Hydraulic End contains all drive end components from the drive shaft up to and including the diaphragms. All Hydraulic Ends are factory tested and shipped with oil. To order a Replacement Hydraulic End, specify the desired Cam (Digit 4), the Diaphragm and O-ring Material (Digit 7), and the Hydra-Oil (Digit 12).

Part Number*

D15 4* **XX** 7* **XXXX** 12*

D17 4* **XX** 7* **XXXX** 12*

* Order Code Digits 4, 7 and 12 must be filled in when ordering.

Options, Accessories and Custom Designs

- Valves, page 84
- Couplings, page 95
- Hose Connectors, page 99
- Hydra-Oil, page 100
- Oil Cooler and Filtering System, page 102
- Oil Reservoir, page 104
- Tool Kits, page 105

