

# Welch<sup>®</sup> Rugged Belt-Drive Vacuum Pumps

Ask us about building a sub-assembly utilizing one of the following or similar pumps.

## DuoSeal<sup>®</sup> Vacuum Pumps



**1400**



**1397/1374**



**1405/1402**



**1376**

**Long Service Life Due To Low Pump RPM  
In Demanding Applications Such As:**

- Freeze Drying
- Concentrating
- Vacuum Manifold/Schlenk Line
- Degassing
- Vacuum Distillations
- Vacuum Drying

# Welch<sup>®</sup> Rugged Belt-Drive Vacuum Pumps

Ask us about building a sub-assembly utilizing one of the following or similar pumps.

## DuoSeal Vacuum Pump Specifications

Welch Model	1400	1405	1402	1376	1397	1374
CFM, (Lmin)	0.9 (25)	3.2 (90)	5.6 (160)	10.6 (300)	17.7 (500)	23 (650)
Ultimate Pressure	$1 \times 10^{-4}$ (0.00013)	$1 \times 10^{-4}$ (0.00013)	$1 \times 10^{-4}$ (0.00013)	$1 \times 10^{-4}$ (0.00013)	$1 \times 10^{-4}$ (0.00013)	$1 \times 10^{-4}$ (0.00013)
Gas Ballast	Yes	Yes	Yes	Yes	Yes	Yes
Pump RPM	580	525	525	525	400	510
Motor Horsepower (watts)	1/3 (250)	1/2 (370)	1/2 (370)	1 (750)	1 (750)	1-1/2 (1120)
Oil Capacity, qt. (liters)	0.62 (0.59)	2.25 (2.1)	2.25 (2.1)	2.5 (2.4)	1.25 (1.2)	1.25 (1.2)
Tubing Needed, I.D. inches	7/16 (11)	7/16 (11)	13/16 (21)	13/16 (21)	1-5/8 (41)	1-5/8 (41)
Intake, Nipple Thread	3/4-20	1-20	1-20	1-20	1.75-20	1.75-20
Exhaust, Thread	3/4-20	1-20	1-20	1-20	1.75-20	1.75-20
Weight, lbs (kg)	58 (26)	112 (51)	112 (51)	156 (71)	205 (93)	220 (100)
Overall Dimensions						
L inches (cm)	17.8 (45.1)	20 (51)	20 (51)	20 (51)	26 (66)	26 (66)
W inches (cm)	9 (22.9)	12 (30.5)	12 (30.5)	14.1 (35.9)	13.7 (34.8)	13.7 (34.8)
H Inches (cm)	12.6 (32.1)	15 (38.1)	15 (38.1)	15.4 (39)	18.8 (47.6)	18.8 (47.6)
Ship Weight, lbs (kg)	70 (31.8)	132 (60)	132 (60)	180 (81.8)	213 (96.8)	215 (97.7)
Shipping Carton Dimensions L x W x H inches	20.5 x 13.8 x 14.5	22.5 x 15.5 x 19.5	22.5 x 15.5 x 19.5	22 x 18 x 19	27.3 x 18 x 22	27.3 x 18 x 22
(cm)	(52.1 x 35.1 x 36.8)	(57.3 x 39.4 x 49.5)	(57.2 x 39.4 x 49.5)	(55.9 x 45.7 x 48.3)	(69.3 x 45.7 x 55.9)	(69.3 x 45.7 x 55.9)

# Welch<sup>®</sup> Rugged Belt-Drive Vacuum Pumps

Ask us about building a sub-assembly utilizing one of the following or similar pumps.

## Ordering Information

Part Number	Description	Unit Price
1374	DUOSEAL Unmounted Pump	\$4,430.00
1374B-01	DUOSEAL, 115V 60Hz 1Ph	\$5,219.00
1374B-10	DUOSEAL Without Motor	\$4,961.00
1374M-01	DUOSEAL, 230/460V 60HZ 3PH	\$5,219.00
1376	DUOSEAL Unmounted Pump	\$2,859.00
1376B-01	DUOSEAL, 115V 60Hz 1Ph	\$3,376.00
1376B-10	DUOSEAL, Mounted without motor	\$3,199.00
1376B-46	DUOSEAL for Refrigeration, 115V 60Hz 1Ph	\$3,365.00
1376C-03	DUOSEAL, 220V 50Hz 1Ph, without CE mark	\$3,502.00
1376C-46	DUOSEAL for Refrigeration, 115V 60Hz 1Ph	\$3,365.00
1376C-03	DUOSEAL, 220V 50Hz 1Ph, without CE mark	\$3,502.00
1376C-46	DUOSEAL for Refrigeration, 230V 50Hz 1Ph	\$3,365.00
1376M-01	DUOSEAL, 230/460V 60HZ 3PH	\$3,477.00
1380	DUOSEAL Unmounted Pump	\$1,937.00
1380B-01	DUOSEAL, 115V 60Hz 1Ph	\$2,380.00
1380B-10	DUOSEAL, Mounted without motor	\$2,260.00
1397	DUOSEAL Unmounted Pump	\$3,876.00
1397-35	DUOSEAL Unmounted Pump with mechanical seal	\$3,785.00
1397B-01	DUOSEAL, 115V 60Hz 1Ph	\$4,440.00
1397B-10	DUOSEAL, Mounted without motor	\$4,166.00
1397B-46	DUOSEAL for Refrigeration, 115V 60Hz 1Ph	\$4,452.00
1397C-03	DUOSEAL, 220V 50Hz 1Ph without CE mark	\$4,511.00
1397C-46	DUOSEAL for Refrigeration, 230V 50Hz 1Ph	\$4,452.00
1397M-01	DUOSEAL, 230V, 60Hz 3Ph	\$4,511.00
1399	DUOSEAL Unmounted Pump	\$1,111.00
1399B-01	DUOSEAL, 115V 60Hz 1Ph	\$1,364.00
1399B-10	DUOSEAL, Mounted without motor	\$1,227.00
1399B-80	DUOSEAL, 115V 60Hz 1Ph with CSA	\$1,365.00
1399C-02	DUOSEAL, 220V 50Hz 1Ph with Schuko Plug	\$1,418.00
1399N-01	DUOSEAL, 115V 60Hz 1Ph with Pump Plate	\$1,864.00

# Welch<sup>®</sup> Rugged Belt-Drive Vacuum Pumps

Ask us about building a sub-assembly utilizing one of the following or similar pumps.

Part Number	Description	Unit Price
1400	DUOSEAL Unmounted Pump	\$1,374.00
1400B-01	DUOSEAL, 115V 60Hz 1Ph	\$2,496.00
1402B-10	DUOSEAL, Mounted without motor	\$2,363.00
1402B-46	DUOSEAL for Refrigeration, 115V 60Hz 1Ph	\$2,661.00
1402B-80	DUOSEAL, 115V, 60Hz 1Ph, CSA	\$2,634.00
1402C-01	DUOSEAL, 230V 60Hz 1Ph	\$2,557.00
1402C-02	DUOSEAL, 220V 50Hz 1Ph with Schuko Plug/CE mark	\$2,607.00
1402C-46	DUOSEAL for Refrigeration, 230V 50Hz 1Ph	\$2,659.00
1402M-01	DUOSEAL, 230/460V 60Hz 3Ph	\$2,795.00
1402N	CHEMSTAR Unmounted Pump	\$2,594.00
1402N-01	CHEMSTAR PUMP MOUNTED, 115V,60HZ,1PH	\$2,906.00
1402N-10	CHEMSTAR Without Motor	\$2,756.00
1402N-50	CHEMSTAR, 220V 50Hz 1Ph with Schuko Plug	\$3,183.00
1402N-53	CHEMSTAR, 100V 50Hz 1Ph	\$2,898.00
1402N-60	CHEMSTAR, MOUNTED PUMP 230V, 60HZ, 1PH	\$2,942.00
1402N-90	CHEMSTAR EXPL.PROOF PUMP 1402N	\$3,395.00
1402W-01	DUOSEAL,PUMP 115/60 1PH EXP PRF MOTOR	\$3,079.00
1405	DUOSEAL Unmounted Pump	\$1,817.00
1405B-01	DUOSEAL,MOUNTED PUMP 115V/60HZ 1PH	\$2,253.00
1405B-10	DUOSEAL, PUMP W/O MOTOR	\$2,127.00
1405B-80	DUOSEAL, MOUNTED PUMP 115V, 60Hz 1Ph, CSA	\$2,318.00
1405C-02	DUOSEAL,MOUNTED PUMP 230V 50Hz 1Ph, with CE mark	\$2,344.00
1405W-01	DUOSEAL, MOUNTED PUMP 115V 60Hz 1Ph, Exp. Proof Mot.	\$2,858.00