

SPEC SHEET	1101-001
Section	1101
Effective	April 2003
Replaces	June 2001

# ABaque SERIES

## PERISTALTIC HOSE PUMP

### Pump With Confidence

The Blackmer Abaque Series pump can handle your toughest pumping needs – from abrasive and aggressive fluids to sheer sensitive and viscous materials.

### Seal Free

Seal free design eliminates leaks and contamination. Fluids are contained within the hose. The hose is the primary maintenance component.

### Reliable

The Blackmer Abaque Series pump is self-priming to 29.5 ft. (9 meters) manometric lift. This pump is able to run dry continuously without detrimental effects. The pump is capable of running in forward or reverse.

### Durable

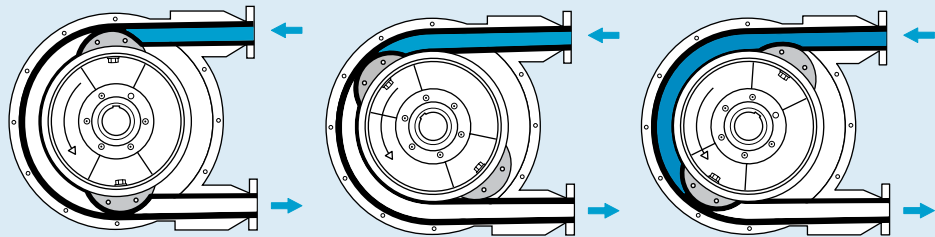
Ductile iron and steel construction allow higher discharge pressures to 217.5 psi. (15 bar). Its solid construction and advanced design also reduce maintenance and repairs.



# Abaque Series Peristaltic Hose Pump

## Principle Operation

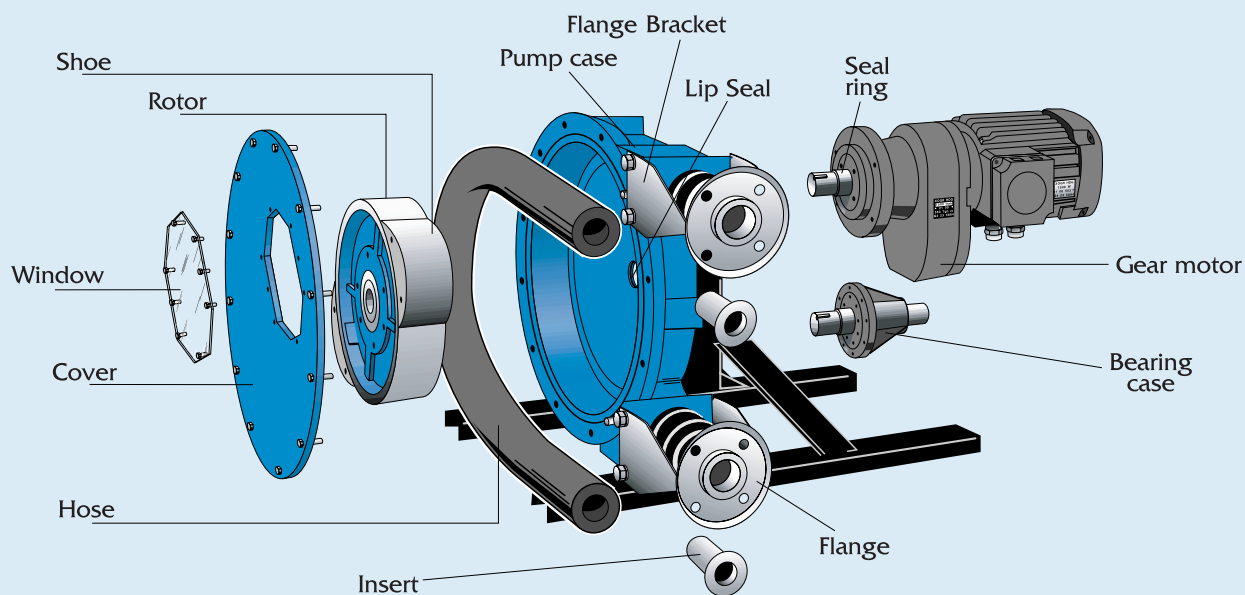
Pumping action is achieved by compression of a circular loop of elastomeric hose with two diametrically opposed rotating shoes. This rotational motion forces the fluid in the hose to move ahead of each shoe. When each shoe reaches the end of the loop, the reinforced tube immediately returns to its original shape, thereby ensuring suction and priming. The pump housing is partially filled with lubricant, aiding smooth running of the shoes on the hose. The inside of the hose and hose inserts are the only pieces of equipment in contact with pumped fluids, allowing aggressive and contaminated fluids to be pumped.



## Applications

- Chemical process industry
- Food industry
- Industrial and municipal water treatment
- Paints and coatings
- Ceramics
- Mining
- Filter press equipment

## Construction



### Blackmer Abaque Series pump construction:

Pump Case:	Ductile iron
Rotor:	Ductile iron
Shoes:	Aluminium or cast iron
Cover:	Steel and Plexiglas
Flange and brackets:	Stainless steel - ANSI or DIN
Hoses:	Natural rubber, Buna (NBR) or EPDM
Hoses inserts:	Stainless steel (std.), PPH or PVDF



## Hoses

The following hoses are available for use in the Abaque Series pump:

- **Natural rubber:** Highly resilient with excellent abrasion resistance and strength. Generally resistant to diluted acids and alcohols.
- **Buna (NBR):** Highly wear resistant to oily products.
- **EPDM:** High chemical resistance, especially with concentrated acids, alcohols and ketones.

## Options

The Abaque Series pump is available in 14 different models, ranging from flow rates of .07 to 290 gpm (15 to 66000 L/h). Choose close-coupled or bare shaft models.

Also available:

- Leak detector
- Vacuum assist
- Non-metallic inserts (PPH, PVDF)



Close-coupled A40



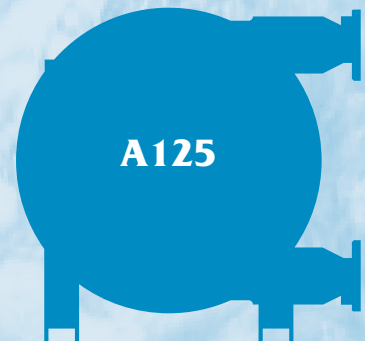
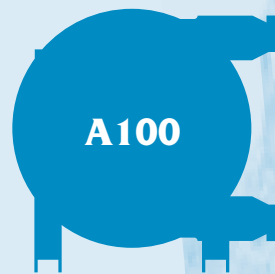
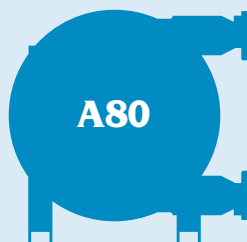
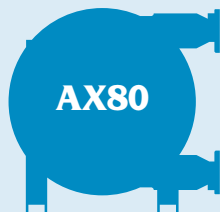
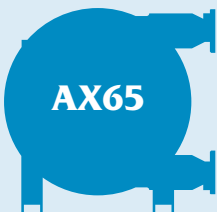
Long-Coupled AS125

## Performance Data

Flowrates		10 tr/mn 10 rpm	20 tr/mn 20 rpm	30 tr/mn 30 rpm	40 tr/mn 40 rpm	50 tr/mn 50 rpm	60 tr/mn 60 rpm	70 tr/mn 70 rpm	80 tr/mn 80 rpm	90 tr/mn 90 rpm	100 tr/mn 100 rpm	110 tr/mn 110 rpm	120 tr/mn 120 rpm	130 tr/mn 130 rpm	140 tr/mn 140 rpm	Discharge Pressure
A10	M 3/hr gpm	0.015 0.07	0.030 0.13	0.045 0.20	0.060 0.26	0.075 0.33	0.090 0.40	0.105 0.46	0.120 0.53	0.135 0.59						116 PSI 8.0 Bar
A15	M 3/hr gpm	0.050 0.22	0.100 0.44	0.150 0.66	0.200 0.88	0.250 1.10	0.300 1.32	0.350 1.54	0.400 1.76	0.450 1.98						116 PSI 8.0 Bar
A20	M 3/hr gpm	0.08 0.37	0.17 0.73	0.25 1.10	0.33 1.47	0.42 1.83	0.50 2.20	0.58 2.57	0.67 2.93	0.75 3.30						116 PSI 8.0 Bar
A25	M 3/hr gpm	0.17 0.73	0.33 1.47	0.50 2.20	0.67 2.93	0.83 3.67	1.00 4.40	1.17 5.13	1.33 5.87	1.50 6.60	1.67 7.33	1.83 8.07	2.00 8.80	2.17 9.53	2.33 10.27	217 PSI 15.0 Bar
A32	M 3/hr gpm	0.38 1.65	0.75 3.30	1.13 4.95	1.50 6.60	1.88 8.25	2.25 9.90	2.63 11.6	3.00 13.2	3.38 14.9	3.75 16.5	4.13 18.2	4.50 19.8	4.88 21.5	5.25 23.1	217 PSI 15.0 Bar
A40	M 3/hr gpm	0.52 2.3	1.03 4.5	1.55 6.8	2.07 9.1	2.58 11.4	3.10 13.6	3.62 15.9	4.13 18.2	4.65 20.5	5.17 22.7	5.68 25.0	6.20 27.3	6.72 29.6	7.23 31.8	217 PSI 15.0 Bar
AX40	M 3/hr gpm	0.8 3.5	1.6 7.0	2.4 10.6	3.2 14.1	4.0 17.6	4.8 21.1	5.6 24.6	6.4 28.2	7.2 31.7	8.0 35.2	8.8 38.7	9.6 42.2			217 PSI 15.0 Bar
A50	M 3/hr gpm	1.7 7.5	3.4 15.0	5.1 22.4	6.8 29.9	8.5 37.4	10.2 44.9	11.9 52.4	13.6 59.8	15.3 67.3						217 PSI 15.0 Bar
A65	M 3/hr gpm	2.03 8.9	4.05 17.8	6.08 26.7	8.10 35.6	10.13 44.6	12.15 53.5	14.18 62.4	16.20 71.3	18.23 80.2						217 PSI 15.0 Bar
AX65	M 3/hr gpm	4.0 17.6	8.0 35.2	12.0 52.8	16.0 70.4	20.0 88.0	24.0 105.6									217 PSI 15.0 Bar
AX80	M 3/hr gpm	5 23.5	10.7 46.9	16.0 70.4	21.3 93.8	26.7 117.3	32.0 140.7									217 PSI 15.0 Bar
A80	M 3/hr gpm	6.5 29	13.0 57	19.5 86	26.0 114	32.5 143	39.0 172									217 PSI 15.0 Bar
A100	M 3/hr gpm	12 53	24 106	36 158	48 211											217 PSI 15.0 Bar
A125	M 3/hr gpm	22 97	44 194	66 290												217 PSI 15.0 Bar

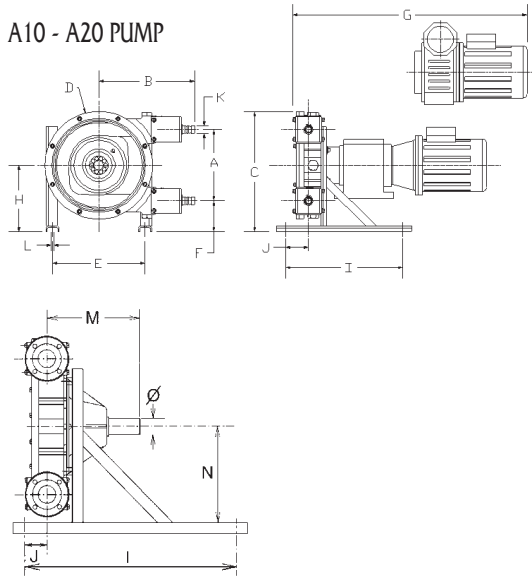
Legend: Constant Duty at Maximum Pressure | Intermittent Duty at Maximum Pressure

\* Flow rates may vary depending upon application.



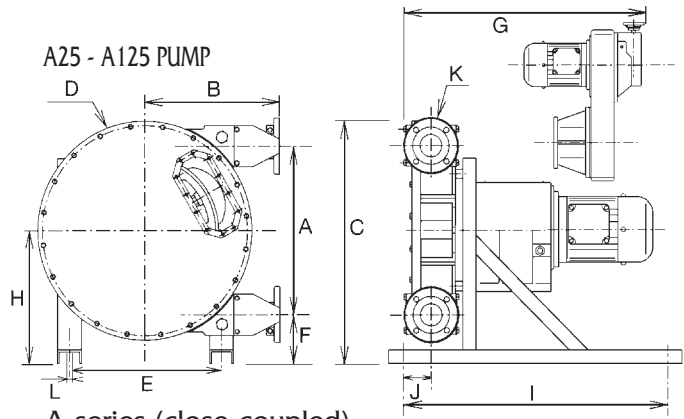
# ABAQUE PERISTALTIC HOSE PUMP

A10 - A20 PUMP



AS Series (bare shaft)

A25 - A125 PUMP



A series (close-coupled)

DIMENSIONS (inches)

PUMP	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G* (in)	H (in)	I (in)	J (in)	K** (in)	L (in)	M (in)	N (in)	DIA. (in)	WEIGHT*** (lb)
A10	4.53	7.72	8.46	7.48	6.61	2.46	23.82	4.72	12.20	2.52	0.63	0.35	5.79	4.13	-	33
A15	7.56	10.20	12.80	11.42	9.80	3.31	25.59	7.09	12.20	2.22	0.79	0.35	7.15	6.50	-	57
A20	7.56	10.20	12.80	11.42	9.80	3.31	25.59	7.09	12.20	2.22	0.98	0.35	7.15	6.50	-	57
A25	10.31	12.19	16.34	14.96	8.66	3.70	32.87	8.86	22.44	3.78	1	0.59	8.09	7.68	-	123
A32	12.99	15.00	20.63	18.74	12.40	4.76	40.16	11.26	25.98	5.08	1.25	0.59	10.73	10.08	-	225
A40	12.99	15.00	20.63	18.74	12.40	4.76	40.16	11.26	25.98	5.08	1.5	0.59	10.73	10.08	-	225
AX40	16.93	16.36	24.25	22.91	13.39	4.33	34.06	12.80	37.40	3.54	1.5	0.59	10.02	11.02	-	287
A50	21.81	17.85	31.57	28.35	20.04	6.50	41.73	17.40	37.40	6.10	2	0.75	12.48	15.63	-	538
A65	21.81	17.91	31.57	28.35	20.04	6.50	41.73	17.40	37.40	6.10	2.5	0.75	12.48	15.63	-	538
AX65	29.37	22.91	39.53	37.24	22.83	6.22	49.21	20.91	43.31	4.72	2.5	0.75	15.75	18.94	-	1034
AX80	29.37	22.91	39.53	37.24	22.83	6.22	49.21	20.91	43.31	4.72	3	0.75	15.75	18.94	-	1008
A80	34.49	28.76	49.41	43.70	27.17	10.31	56.50	27.56	51.18	8.09	3	1.10	17.76	25.20	-	1742
A100	40.94	32.17	59.25	53.94	32.28	11.81	59.06	32.28	74.80	11.61	4	1.10	22.52	29.92	-	2123
AS125	50.39	37.80	66.34	61.81	39.37	10.24	****	35.43	68.90	12.52	5	1.10	26.57	32.68	-	3265

DIMENSIONS (millimeters)

PUMP	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G* (mm)	H (mm)	I (mm)	J (mm)	K** (mm)	L (mm)	M (mm)	N (mm)	DIA. (mm)	WEIGHT*** (kg)
A10	115	196	215	190	168	62.5	605	120	310	64	16	9	147	105	18	15
A15	192	259	325	290	249	84	650	180	310	56.5	20	9	181.5	165	22	26
A20	192	259	325	290	249	84	650	180	310	56.5	25	9	181.5	165	22	26
A25	262	309.5	415	380	220	94	835	225	570	96	25	15	205.5	195	30	56
A32	330	381	524	476	315	121	1020	286	660	129	32	15	272.5	256	40	102
A40	330	381	524	476	315	121	1020	286	660	129	40	15	272.5	256	40	102
AX40	430	415.5	616	582	340	110	865	325	950	90	40	15	254.5	280	40	130
A50	554	453.5	802	720	509	165	1060	442	950	155	50	19	317	397	50	244
A65	554	455	802	720	509	165	1060	442	950	155	65	19	317	397	50	244
AX65	746	582	1004	946	580	158	1250	531	1100	120	65	19	400	481	70	469
AX80	746	582	1004	946	580	158	1250	531	1100	120	80	19	400	481	70	457
A80	876	730.5	1255	1110	690	262	1435	700	1300	205.5	80	28	451	640	80	790
A100	1040	817	1505	1370	820	300	1500	820	1900	295	100	28	572	760	100	963
AS125	1280	960	1685	1570	1000	260	****	900	1750	318	25	28	675	830	125	1481

\* Gear motor - actual dimensions may vary with final selection

\*\* A25 - AS125 available in ANSI 150 or DIN Flanges; A10-A20 use Hose Barb Connections

\*\*\* Weight is of AS models (for reference only) \*\*\*\* Not currently offered in a close coupled option

ALL INFORMATION IS SUBJECT TO CHANGE

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Printed in USA

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