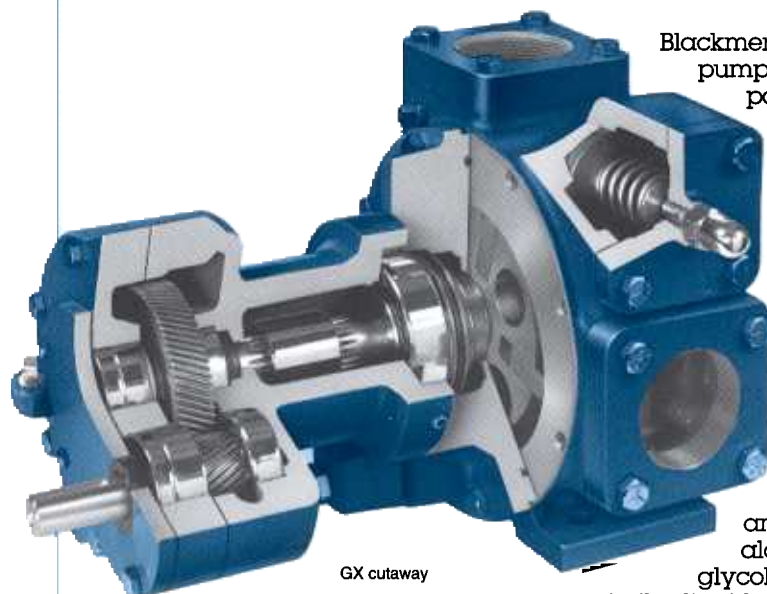


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GX AND X SERIES GENERAL DUTY PUMPS

SPEC SHEET 101/3

Section	100
Effective	October 1995
Replaces	November 1991



GX cutaway

Blackmer GX and X type pumps have long been popular for handling a wide range of non-corrosive, non-abrasive industrial liquids and petroleum products. Typical applications include fuel oils, lube oils, jet fuels, gasoline, edible oils and a variety of solvents and thinners such as esters, ketones, naphthas, ethers, amines, aromatics, alcohols, terpenes, glycols and many other similar liquids. The high suction lift capabilities of these pumps makes them especially suitable for pumping from underground tanks, bulk plant service, and aircraft refueling.

Utilizing Blackmer's unique sliding-vane design, these positive displacement rotary pumps offer the best combined characteristics of sustained high level performance, energy efficiency, trouble-free operation and low maintenance cost.

Models are available in 2, 2.5, 3 and 4-inch flanged port sizes with capacities from 30 to 520 U.S. gpm (114-1855 lpm). Cast iron construction is standard on all models. The X4 model is also available in ductile iron construction as an option. All models have external ball bearings isolated from the pumpage by mechanical seals.

The GX type pumps feature an integral head-mounted gear reduction drive with oil lubricated, hardened helical gears that provide quiet, trouble-free operation. Gear shafts are supported at both ends by ball bearings for smooth operation and long life.

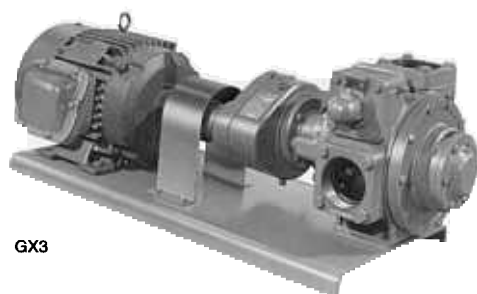
A splined shaft simplifies alignment of the pump and reducer, and the reducer can be rotated on the pump head to accommodate a variety of motor sizes without shimming. The integral pump and reducer design makes the GX pump models the first choice for economy and compactness.

The X type pumps are used in installations where other reduction drives are desirable, such as the helical gear reducer drive unit shown. Assembled pump units are available from the factory for all models.

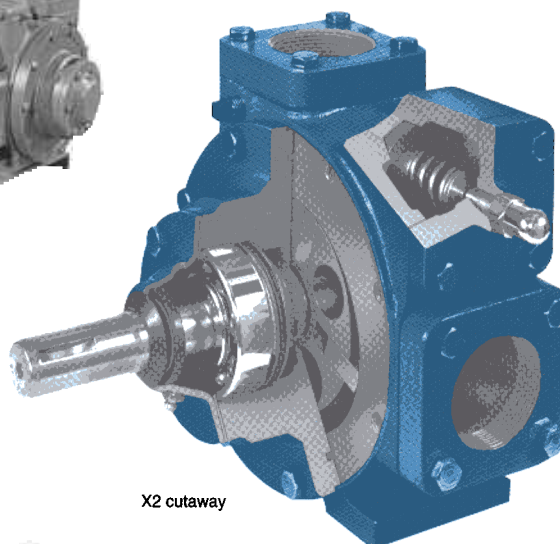
Technical Assistance

In some applications, selecting the right pump may require more detailed information than can be presented here. Your Blackmer representative can help you find the correct equipment to ensure the best performance possible for your specific application.

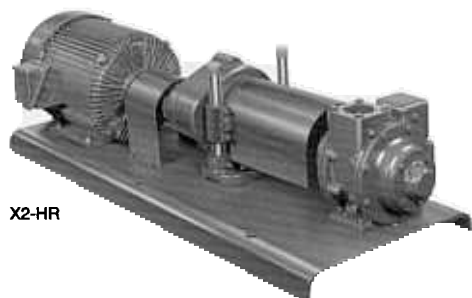
If you have a unique fluid handling problem, please call your Blackmer representative listed under "Pumps" in the Yellow Pages, or contact Blackmer's Fluid Processing and Transfer Pump group at our main office listed on the backside of this Spec Sheet.



GX3



X2 cutaway



X2-HR

PUMP PERFORMANCE DATA*

PUMP MODEL	GX2, X2				GX2.5, X2.5				GX3, X3				GX4, X4				
RATED PUMP SPEED (RPM)	640	520	420	350	640	520	420	350	640	520	420	350	500	400	300	230	190
U.S. GPM	70	55	44	36	121	96	76	63	270	220	177	146	507	404	299	225	190
LPM	264	210	165	135	461	363	288	237	1023	835	671	544	1919	1532	1135	855	695
HP	3.2	2.6	2.0	1.7	4.7	3.7	2.9	2.4	11.2	8.5	6.5	5.2	20.8	15.9	11.5	8.6	7.0

*Approximate capacities and horsepower (HP) are based on a 100 SSU (22 cP) fluid at a 50 psi (345 kPa) differential pressure.

Centipoise (cP) = Centistokes (cSt) at fluid specific gravity of 1.0.

Refer to Characteristic Curves for capacities and horsepower at other pressures and viscosities.

MAXIMUM OPERATING LIMITS

PUMP MODEL	MAXIMUM PUMP SPEED			MINIMUM PUMP SPEED			MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM WORKING PRESSURE	MAXIMUM OPERATING TEMPERATURE
	SPEED	FLOW ²	VISCOSITY ³	SPEED	FLOW ²	VISCOSITY ³			
	RPM	GPM (LPM)	SSU (cP) ⁴	RPM	GPM (LPM)	SSU (cP) ⁴			
GX2 ¹	780	87 (329)	100 (22)	190	20 (76)	20,000 (4,250)	125 (862)	175 (1207)	300 (149)
X2	780	87 (329)	100 (22)	68	7 (26)	75,000 (15,750)	125 (862)	175 (1207)	300 (149)
GX2.5 ¹	780	155 (587)	100 (22)	190	33 (125)	20,000 (4,250)	125 (862)	175 (1207)	300 (149)
X2.5	780	155 (587)	100 (22)	68	12 (45)	75,000 (15,750)	125 (862)	175 (1207)	300 (149)
GX3 ¹	640	270 (1022)	100 (22)	125	46 (174)	20,000 (4,250)	125 (862)	175 (1207)	300 (149)
X3	640	270 (1022)	100 (22)	68	28 (106)	75,000 (15,750)	125 (862)	175 (1207)	300 (149)
GX4 ¹	520	528 (1999)	100 (22)	100	90 (341)	20,000 (4,250)	125 (862)	175 (1207)	300 (149)
X4	520	528 (1999)	100 (22)	68	66 (250)	50,000 (10,500)	125 (862)	175 (1207)	300 (149)

¹ GX pump models are limited by gear reducer capability (pressure/rpm/viscosity dependent).

² Flow is nominal at 50 psi (345 kPa) differential pressure.

³ Viscosity listed is maximum. Blackmer GX and X pump models are also well suited for viscosities less than 31 SSU (1 cP).

⁴ Centipoise (cP) = Centistokes (cSt) at fluid specific gravity of 1.0.

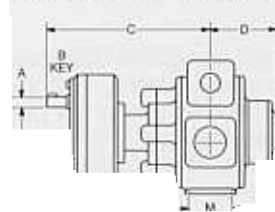
Note: Optional materials of construction may be required to meet specific application requirements — refer to Blackmer Material Specification Sheet 101/95-96.

PIPE COMPANION FLANGES

PUMP MODEL	STANDARD	OPTIONAL
GX2 X2	2" NPT	2" Blackmer Weld
		2" ANSI**
		50 MM DIN**
GX2.5 X2.5	2.5" NPT	2.5" Blackmer Weld
		3" ANSI**
		80 MM DIN**
GX3 X3	3" NPT	3" Blackmer Weld
		3" ANSI**
		80 MM DIN**
GX4 X4	4" NPT	4" Blackmer Weld
		4" ANSI**
		100 MM DIN**

**Din and ANSI compatible flanges are Raised Flat Faced.

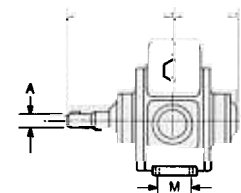
PUMP DIMENSIONS



GX Pump Models



GX and X Pump Models



X Pump Models

PUMP MODEL		A	B	C	D	E	F	G	H	J	K	L	M	N	APPROX. WT. WITH STD. FLANGES
GX2	IN	3/4	3/16	11 9/16	5 3/8	8 11/16	3 1/2	4	1 1/2	9 3/4	4	4 1/8	1 5/8	5	110 lbs.
	MM	19	5	294	137	221	89	102	38	248	102	105	41	127	50 kgs.
GX2.5	IN	3/4	3/16	12 3/16	6	9 5/8	3 3/4	4 5/16	1 3/4	10 11/16	4	5 1/16	3	5 1/2	130 lbs.
	MM	19	5	313	152	244	95	110	44	271	102	129	76	140	59 kgs.
GX3	IN	1	1/4	14 1/2	6 1/2	12 3/16	4 5/8	5	2 1/2	13 3/8	5 3/8	5 1/4	2 1/2	6	230 lbs.
	MM	25	6	368	165	310	117	127	64	340	137	133	64	152	104 kgs.
GX4	IN	1 1/8	1/4	18 5/8	8 1/8	15 1/2	5	7 3/8	2 1/2	16 7/8	6 3/8	8	4 1/2	8	430 lbs.
	MM	29	6	473	206	394	127	187	64	429	162	203	114	203	195 kgs.

PUMP MODEL		A	B	C	D	E	F	G	H	J	K	L	M	N	APPROX. WT. WITH STD. FLANGES
X2	IN	1 1/8	1/4	8	5 3/8	8 11/16	3 1/2	4	1 1/2	9 3/4	4	4 1/8	1 5/8	5	70 lbs.
	MM	29	6	203	137	221	89	102	38	248	102	105	41	127	32 kgs.
X2.5	IN	1 1/8	1/4	8 3/4	6	9 5/8	3 3/4	4 5/16	1 3/4	10 11/16	4	5 1/16	3	5 1/2	93 lbs.
	MM	29	6	222	152	244	95	110	44	271	102	129	76	140	42 kgs.
X3	IN	1 1/8	1/4	9 5/8	6 1/2	12 3/16	4 5/8	5	2 1/2	13 3/8	5 3/8	5 1/4	2 1/2	6	152 lbs.
	MM	29	6	244	165	310	117	127	64	340	137	133	64	152	69 kgs.
X4	IN	1 1/2	3/8	11	8 1/8	15 1/2	5	7 3/8	2 1/2	16 7/8	6 3/8	8	4 1/2	8	275 lbs.
	MM	38	10	280	206	394	127	187	64	429	162	203	114	203	125 kgs.



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