



6MK *impact*[™]

SUBMERSIBLE 6" SEWAGE PUMP - DUAL SEAL WITH SEAL SENSOR PROBE



Bell & Gossett

a xylem brand

FEATURES

Impeller: Cast iron, non-clog style, dynamically balanced with pump out vanes for mechanical seal protection.

K model designation for non-clog impeller

Casing: Cast iron 6" ANSI 150# flange self-cleaning design for non-clogging.

Efficient air-filled motor

Stand: Optional stand for mounting without slide rail configuration. Part number: 7482200

Dual Mechanical Seals:

For Standard Pumps:

Tungsten Carbide vs. Ceramic seal faces standard on outer seals. Carbon vs. Ceramic seal faces standard on inner seals. All elastomers shall be nitrile.

For All Explosion Proof:

Tungsten Carbide vs. Tungsten Carbide seal faces standard on outer and inner seals. Elastomer seals shall be viton.

Seal Sensor / High Temperature Probe: Located in motor housing. If pumpage should begin to leak past both seals it indicates to pump control panel a fault has occurred. Requires MiniCAS device in the control panel.

Capable of running dry without damage to components.

Designed for continuous operation, when fully submerged.

Explosion-proof available as option. FM approved.

Shaft: Corrosion resistant, 400 series stainless steel. Taper lock and impeller bolt on all models to guard against component damage on accidental reverse rotation.

Fasteners: 300 series stainless steel.

Grease for life bearings

**APPLICATIONS**

Specifically designed for the following uses:

- Sewage systems
- Dewatering/Effluent
- Water transfer
- Light industrial
- Commercial applications

Anywhere waste or drainage must be disposed of quickly, quietly and efficiently.

SPECIFICATIONS**Pump:**

- Maximum soft solid size: 3"
- Capacities: up to 2000 GPM
- Total heads: up to 80' TDH
- Discharge size: 6" Flange

Motor:

- Maximum ambient temperature: 104° F (40° C) continuous duty
- Rated for continuous duty when fully submerged
- Insulation: Class H

- 60 Hertz
- Single row ball bearings
- 400 Series stainless steel taper lock shaft
- Requires overload protection in panel (not included)
- Includes high temperature sensor for winding protection

AIR-FILLED MOTOR

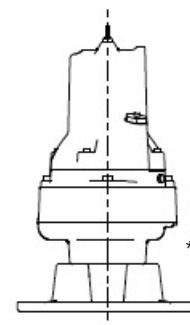
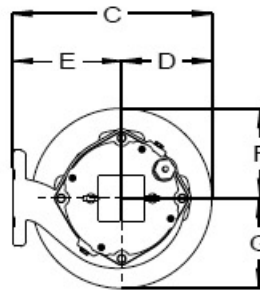
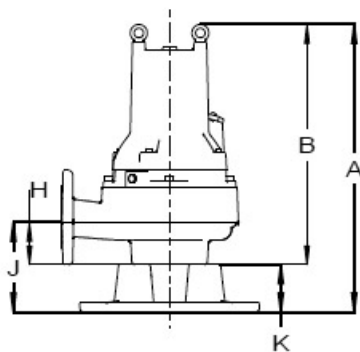
- Efficient heat dissipation
- Run dry capability
- Class H insulation
- Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits and can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction for precision positioning of parts and to carry thrust loads.
- High temperature winding protection
- Cord: Severe duty rated, oil and water resistant. 30 foot standard.
- O-ring: Assures positive sealing against contaminants and oil leakage.

6MK - 1750 RPM MODEL AND MOTOR INFORMATION

Model No.	HP	Volts	Phase/Hz	Rated Current (Amps)	RPM	Imp. Dia. In (mm)	Insulation Class	Resistance (Ohms)	Start Current (LR Amps)	Rated Motor kVA [Code]	Rated Motor Eff. (%)	Rated Power Factor (cos phi)	Starting Torque (NM)	Max. Torque (NM)	Pump Weight (lbs.)	Cable Size with water detector and thermostats
6MK2024AD	20.0	460	3 / 60	26.0	1750	"A" - 9.33" (237 mm)	H	0.87	148	5.9 [G]	87.8	0.83	115	205	400	10AWG / 3-2-1-GC
6MK2025AD	(14.9Kw)	575		21.0				2.13	116	5.7 [G]	87.4	0.83		200		
6MK1724BD	16.8	460	3 / 60	23.5		"B" - 8.86" (225 mm)		0.87	148	5.9 [G]	87.8	0.83		205		
6MK1725BD	(12.5Kw)	575		19.0				2.13	116	5.7 [G]	87.4	0.83		200		
6MK1424CD	13.9	460	3 / 60	21.0		"C" - 8.39" (213 mm)		0.87	148	5.9 [G]	87.8	0.83		205		
6MK1425CD	(10.4Kw)	575		17.0				2.13	116	5.7 [G]	87.4	0.83		200		
6MK1224DD	10.3	460	3 / 60	18.0		"D" - 7.76" (197 mm)		0.87	148	5.9 [G]	87.8	0.83		205		
6MK1225DD	(7.7Kw)	575		14.5				2.13	116	5.7 [G]	87.4	0.83		200		

6MK-X - 1750 RPM MODEL AND MOTOR INFORMATION

Model No.	HP	Volts	Phase/Hz	Rated Current (Amps)	RPM	Imp. Dia. In (mm)	Insulation Class	Resistance (Ohms)	Start Current (LR Amps)	Rated Motor kVA [Code]	Rated Motor Eff. (%)	Rated Power Factor (cos phi)	Starting Torque (NM)	Max. Torque (NM)	Pump Weight (lbs.)	Cable Size with water detector and thermostats	
6MK2024ADX	20	460	3/60	26	1750	"A" 9.33" (237mm)	H	0.872	148	5.9 [G]	87.8	0.83	115	205	400	10AWG / 3-2-1-GC	
6MK2025ADX	(14.9Kw)	575		21				2.13	116	5.8 [G]	87.4	0.83		200			
6MK1724BDX	16.8	460		3/60		23.5		"B" 8.86" (225mm)	0.872	148	5.9 [G]	87.8		0.83			205
6MK1725BDX	(12.5Kw)	575				19			2.13	116	5.8 [G]	87.4		0.83			200
6MK1424CDX	13.9	460		3/60		21		"C" 8.39" (213mm)	0.872	148	5.9 [G]	87.8		0.83			205
6MK1425CDX	(10.4Kw)	575				17			2.13	116	5.8 [G]	87.4		0.83			200
6MK1224DDX	10.3	460		3/60		18		"D" 7.76" (197mm)	0.872	148	5.9 [G]	87.8		0.83			205
6MK1225DDX	(7.7Kw)	575				14.5			2.13	116	5.8 [G]	87.4		0.83			200



* Shown with support kit (sold separately).

DIMENSIONS

Bell & Gossett Model No.	A	B	C	D	E	F	G	H	J	K
6MK	29.49" [749]	25.94" [659]	21.65" [550]	8.66" [220]	12.99" [330]	7.48" [190]	10.20" [259]	5.39" [137]	8.94" [227]	3.94" [100]
6MK - X	38.46" [977]	34.92" [887]	21.65" [550]	8.66" [220]	12.99" [330]	7.48" [190]	10.20" [259]	5.39" [137]	8.94" [227]	3.94" [100]

Stand Optional, Part no. 15K80

APPLICATION DATA

Maximum Working Pressure	75 PSI (5 bar) - Standard
	150 PSI (10 bar) - Explosion Proof
Maximum Submergence	66 feet (20 m)
Minimum Submergence	Fully submerged for continuous operation
Maximum Environmental Temperature	40°C (104°F) continuous operation

CONSTRUCTION DETAILS

Power / Sensor Cable	See charts on page 3
Motor Cover	Gray Cast Iron - ASTM A48 Class 30
Seal / Bearing Housing	Gray Cast Iron - ASTM A48 Class 30
Casing	Gray Cast Iron - ASTM A48 Class 30
Impeller	Cast Iron
Motor Shaft	AISI 400 Series Stainless Steel
Motor Design	Air filled Class H
Motor Overload Protection	Overloads required in the control panel
Motor Seal Fail / High Temp. Detection	Seal fail sensor and high temp. in a motor chamber. Connect to optional relays in control panel.
External Hardware	300 Series Stainless steel
Impeller Type	Non-clog
Oil Capacity - Seal Chamber	71.0 ounces
	74.4 ounces for XP

NOMENCLATURE DESCRIPTION

1st Character - Discharge Size

6 = 6" discharge

2nd and 3rd Characters - Series/Solids Size

MK = Non-clog

4th Character - HP

12 = 10.3 HP

14 = 13.9 HP

17 = 16.8 HP

20 = 20.0 HP

5th Character - Mechanical Seals

2 = 60 Hz/1750 RPM

6th Character - Phase/Voltage

2 = three phase, 200 V

3 = three phase, 230 V

4 = three phase, 460 V

5 = three phase, 575 V

MATERIALS OF CONSTRUCTION

Item No.	Part Name	Material Standard				
		Service	Rotary	Stationary	Elastomers	Metal Parts
1	Impeller					Cast Iron
2	Motor Cover					Cast Iron
3	Shaft					400 Series SS
4	Fasteners					300 Series SS
5	Ball Bearings					Steel
6	Cord					SOW, 30 feet
7	O-Ring					BUNA-N
8	STD	Inner	Carbon / Ceramic		Nitrile	300 Series SS
		Outer	Tungsten Carbide / Ceramic			
	XP	Inner	Tungsten Carbide / Tungsten Carbide		Viton	300 Series SS
		Outer	Tungsten Carbide / Tungsten Carbide			

7th Character - Impeller Diameter

A = 9.33"

B = 8.86"

C = 8.39"

D = 7.76"

8th Character - Cord Length

D = 30' (standard)

J = 100' (optional)

9th Character

X = FM Approved Explosion Proof

E = Epoxy Coat

XE = FM Approved Explosion Proof and Epoxy Coat



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