# **SERIES 'D' MAGNETIC COUPLED PUMPS**

P-504S



# SEAL-LESS AND "LEAK-PROOF" FOR TOTAL SOLUTION CONTAINMENT

Reliable, trouble-free pumping for:

WASTE TREATMENT / FUME SCRUBBING CHEMICALS / PHOTOGRAPHIC ACIDS / PLATING

- Flows to 53 U.S. GPM or 58 FT. TDH @ 60 Hz (167 LPM or 12m @ 50 Hz)
- Non-metallic solution contact

Polypropylene and Ryton **PVDF** 

316 stainless steel (See chemical Resistance Chart)

- Centrifugal quiet, vibration-free
- Rugged construction

Designed for continuous duty Horizontal or vertical discharge

Severe duty motor

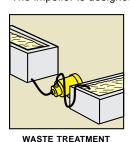
All motors carry 1.15 service factor at 50 and 60 Hz Single phase motors have automatic thermal overload protection

SERIES 'D' Magnetic Coupled Pumps are seal-less, providing for maintenance-free and "leak-proof" operation. The magnetic coupling acts as a clutch to provide overload protection. The broad range of construction materials allows for a variety of applications and service with most corrosive solutions.

The impeller magnet assembly floats in the radial magnetic field set up by the motor driven external drive magnet. The impeller is designed to deliver the maximum flow

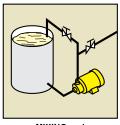
and pressure utilizing the available strength of the synchronized magnets.

The standard diameter impeller is suitable for water-like liquids to 1.1 specific gravity. Liquids having a higher specific gravity can be pumped if the overall diameter of the impeller is reduced, the outlet flow is restricted, or the restrictions from a filter or other head loss is sufficient to keep the impeller magnet in synchronization.

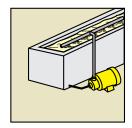




FILTRATION



MIXING and TRANSFER PUMPING



RECIRCULATION



# SERIES 'D' PUMP Specifications

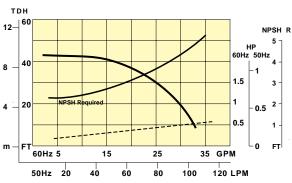
Pump materials of construction are as specified, all of which include a fluoride resistant ceramic spindle and thrust washer. Casing 'O' ring is Viton® and external fasteners are stainless steel. Standard impeller is designed to pump solutions having a specific gravity up to 1.1. (See flow curves.) For solutions having a higher specific gravity, up to 1.8 maximum, a trimmed impeller is required. Flow rate and TDH will be proportionately reduced.

Refer to impeller trim chart, specify impeller diameter and add Price Code No. 48-0200.

Motors are chemical service rated continuous duty, TEFC or explosion proof, painted two-part epoxy gray paint. An eight foot (2.4m) three-wire cord and plug are supplied on all TEFC single phase motors. Three phase and explosion-proof motors are supplied without cord or plug.

# SERIES 'D' 1 X 3/4 - CAPACITIES TO 33 U. S. GPM OR 43 FT.TDH @ 60 HZ (104 LPM OR 9.1M @ 50 HZ)





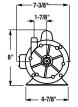
MODEL		IMPELLER BUSHING <sup>3</sup>		MAX.	<b>TEMP</b> ∘F (∘C)	INLET PRESSURE
	OAGINO	DUSHING			MAX.	PSI (BAR)
MRGR <sup>1</sup> MKGC <sup>2</sup>	Ryton PVDF	Polypro PVDF	Ryton Carbon		150 <i>(65)</i> 220 <i>(104)</i>	50 (3.5)

<sup>&</sup>lt;sup>1</sup> Glass filled casing, liner, and impeller <sup>2</sup> Carbon fiber filled PVDF

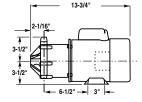
#### IMPELLER TRIM CHART

SPECIFIC	1.0 to	1.1 to	1.3 to	1.5 to	1.7 to	1.9 to
GRAVITY	1.1	1.3	1.5	1.7	1.9	2.0
IMPELLER DIAMETER 60 Hz	3-1/2 std.	3-1/4	3-1/8	3.0	2-7/8	2-3/4
50 Hz	88.9 mm (3-1/2 in) std.			82.5mm (	3-1/4 in.)	

### PORT SIZES - 1" F x 3/4" M (NPT)



CLASS I GROUP D



#### TO ORDER, use Price Code Number

	w	/TEFC MOTO	R	
MODEL NUMBER	ADD TO MOD. NO.	PRICE	SHIPPING WEIGHT	
	(HP)	CODE NO.	Lbs (kg)	
1 x 3/4 MRGR	0.5	44-4101	20 (14)	
1 x 3/4 MKGC	-C.5	44-4105	30 (14)	
1 x 3/4 MRGR	-D.5	44-4101C	27 (12)	
1 x 3/4 MKGC	-0.5	44-4105C	21 (12)	

W/EXP. MOT	CLASS II	CLASS II GROUP F & G		
ADDTO		SHIPPING		
MOD. NO.	PRICE	WEIG HT		
(HP)	CODE NO.	Lbs (kg)		
-E.75	44-4301A <sup>4</sup>	37 (17)		
L.75	44-4302A <sup>4</sup>	37 (17)		
-F.75	44-4301C	34 (15)		
-F.75	44-4302C	34 (13)		

MOTOR VOLTAGE			
115/190-230/1/50-60			
190-230/380-415-460/3/50-60			

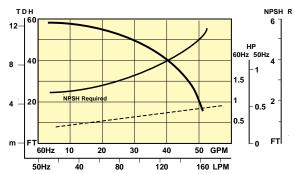
<sup>&</sup>lt;sup>3</sup> Ryton bushings are a blend of Ryton, PTFE, and carbon

<sup>&</sup>lt;sup>4</sup> 60 Hz only



# SERIES 'D' 1-1/2 X 1 - CAPACITIES TO 53 U. S. GPM OR 58 FT.TDH @ 60 HZ (167 LPM OR 12M @ 50 HZ)





# M

#### **CONSTRUCTION MATERIALS**

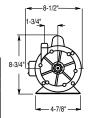
MODEL	SUCTION	IMPELLER	BUSHING <sup>3</sup>	LINER	MAX.TEMP	MAX. INLET PRESSURE
	CASING				∘F (°C)	PSI (BAR)
MPGR <sup>1</sup>	Polypro	Polypro	Ryton	Ryton	150 <i>(65)</i>	50 (3.5)
MSGR	316 SS	316 SS	Ryton	316 SS	250 (121)	200 (13.8)
MKGC <sup>2</sup>	PVDF	PVDF	CARBON	PVDF	220 (104)	75 <i>(5.2)</i>

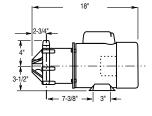
<sup>&</sup>lt;sup>1</sup> Glass filled casing, impeller and liner

### **IMPELLER TRIM CHART**

SPECIFIC GRAVITY	1.0 to 1.1	1.1 to 1.3	1.3 to 1.5	1.5 to 1.7	1.7 to 1.9 °F (°C)	1.9 to 2.0 PSI (BAR)
IMPELLER DIAMETER 60 Hz	3-3/4 std	3-5/8   3-1/9   3-3/8				3-1/8
50 Hz	95.2mm (3-3/4 in) std.			88.9 mm	(3-1/2 in.)	

PORT SIZES - 1-1/2" F x 1" M (NPT)





### TO ORDER, use Price Code Number

	w/TEFC MOTOR			
MODEL NUMBER	ADD TO MOD. NO.	PRICE	SHIPPING WEIGHT	
	(HP)	CODE NO.	Lbs (kg)	
1-1/2 x 1 MPGR	-C.75	44-0581	42 (19)	
1-1/2 x 1 MSGR		44-0441	49 (22)	
1-1/2 x 1 MKGC		44-0585	42 (19)	
1-1/2 x 1 MPGR		44-0581C	32 (15)	
1-1/2 x 1 MSGR	-D.75	44-0441C	39 (18)	
1-1/2 x 1 MKGC		44-0585C	32 (15)	

w/EXP. MOT	OR CLASSII	GROUP F & G	
ADD TO MOD. NO.	PRICE	SHIPPING WEIGHT	
(HP)	CODE NO.	Lbs (kg)	
	44-0571A <sup>4</sup>	49 (22)	
-E.75	44-0691A <sup>4</sup>	56 (25)	
	44-4304A <sup>4</sup>	49 (22)	
	44-0571C	39 (18)	
-F.75	44-0691C	46 (21)	
	44-4304C	39 (18)	

MOTOR VOLTAGE
115/190-230/1/50-60
190-230/380-415-460/3/50-60

OPTIONAL		EXAMPLE	ADD TO PRICE CODE NO.
Chemic (PTFE & mica) bushing <sup>5</sup> Carbon bushing Stainless steel liner Stainless steel spindle & thrust washer	change R to K in Model No. change R to C in Model No. add S to Model No. change G to S in Model No.	MPG <u>C</u> MP <u>S</u> GR	- K - L - M - N

<sup>&</sup>lt;sup>5</sup> This is a replacement for bushings formerly referred to as Chemloy

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<sup>&</sup>lt;sup>2</sup> Carbon fiber filled PVDF

<sup>&</sup>lt;sup>3</sup> Ryton bushings are a blend of Ryton, PTFE, and carbon

<sup>4 60</sup> Hz only