

NO.PG-SM20160801

PRODUCT GUIDE  
**SM series**

**シェルセルポンプ**

Self-Priming Slurry Pump

**自吸式渣漿泵**

Made in JAPAN



株式会社 **みつわポンプ製作所**

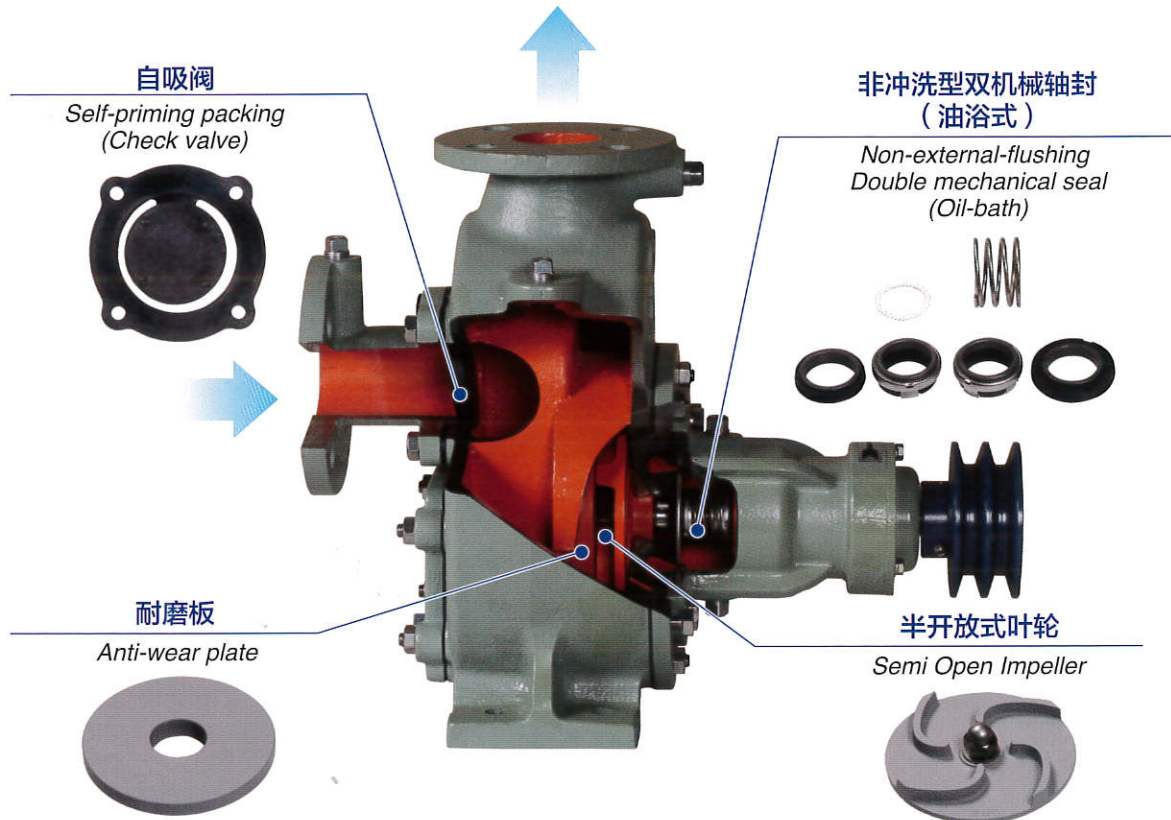
**MITSUWA PUMP CO., LTD.**

Since 1956



## 自吸式渣浆泵 Self-Priming Slurry Pump

Mitsuwa 的标准机型 ( FC200、HiCr、SCS 三种材质可供选择 )  
用于工业废水处理设备产生的活性污泥、混凝污泥、石灰乳的经典款泵  
Mitsuwa's standard model with a choice of FC200, HiCr, or SCS materials  
The pump of choice for activated sludge, coagulated sludge, and slaked lime slurry  
from industrial wastewater treatment facilities



### 型号 Model code

**2**    **SM**    **-LB**

**A**

**B**

**C**

#### **A** 出水口径 Pump Bore

1.5 ... 1.5 inch(40A)  
2 ... 2 inch(50A)  
2.5 ... 2.5 inch(65A)  
3 ... 3 inch(80A)  
4 ... 4 inch(100A)  
6 ... 6 inch(150A)

#### **B** 泵系列 ( 材质 ) Pump Series (Material)

SM ... 接液部分材质 FC200  
Wetted parts material FC200  
SMC ... 接液部分材质 FC200/HiCr  
Wetted parts material FC200/HiCr  
SM(S) ... 接液部分材质 FC200/SCS  
Wetted parts material FC200/SCS  
SMS ... 接液部分材质 SCS  
Wetted parts material SCS

#### **C** 驱动方式 Driven

空白 ... 直结式 (4P 电机)  
Blank Direct-Coupling (4P Motor)  
-H ... 直结式 (2P 电机)  
Direct-Coupling (2P Motor)  
-LB ... 皮带驱动式 (转速 ~ 2300min<sup>-1</sup>)  
V-belt (Speed ~ 2300min<sup>-1</sup>)  
-MB ... 皮带驱动式 (转速 2300min<sup>-1</sup> ~ )  
V-belt (Speed 2300min<sup>-1</sup> ~ )

#### 【注意】NOTE

型号中不注明详细规格和特殊规格。  
重复订购、咨询部件报价和订购部件时，请务必确认好生产编号。

Detailed specifications and special specifications are not reflected in the model code.

For repeat orders and estimates or orders of parts, have the Serial Number ready when you contact us.

## 特点 Features

## ■ 可根据输送液体选择材质。

*Appropriate material for the fluid to be transported can be chosen.*

- 客户可根据输送液体选择接液部分的材质。【FC200·SCS·HiCr】

*Customers can choose material to suit the fluid it comes in contact with. (FC200, SCS, HiCr)*

## ■ 具有优异的自吸性能，可用于多种用途

*A variety of uses made possible by industry-leading self-priming ability*

- 可用于正压运转、自吸运转等各种情况。

*Able to be used in various situations, such as draw-in operation and self-priming operation.*

- 抽吸运转时，无需使用自吸桶、底阀等辅助设备。

*Auxiliary equipment, such as a self-priming tank or foot valve used in sucking operations, is not needed.*

- 双涡形结构提供气液分离功能，也有利于将气体混入于液体。

*The double volute configuration allows gas to be separated during pumping, and for effective gas-liquid two phase pumping.*



## ■ 标准采用非冲洗型双机械轴封（油浴式）

*Non-external-flushing double mechanical seal (oil-bath) is standard*

- 在泵的关键部位，即轴封部采用双机械轴封，避免轴封部发生液体泄漏。

*Leakage of fluid is prevented by using a double-mechanical seal for the gland, the principal component of the pump.*

- 轴封部无需冲洗，可降低操作成本，并避免多余废液的产生。

*Flushing of the shaft seal is unnecessary, leading to a reduction in running costs and excess waste liquid not being generated.*

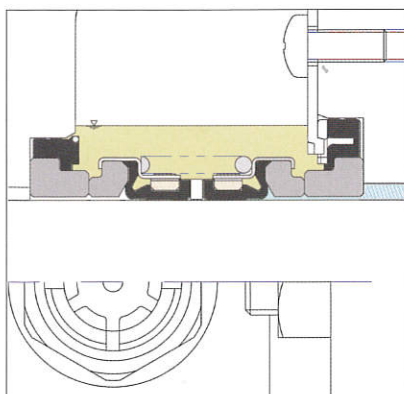
※液体温度较高（60℃以上）、渣浆粒子过小（10μm以下）时，需要进行外部冲洗。

请另行咨询制造商。

※If the liquid is hot (60°C or greater) or the slurry particles are very small (10 μm or less), external flushing is required. Please confirm with MITSUWA PUMP.

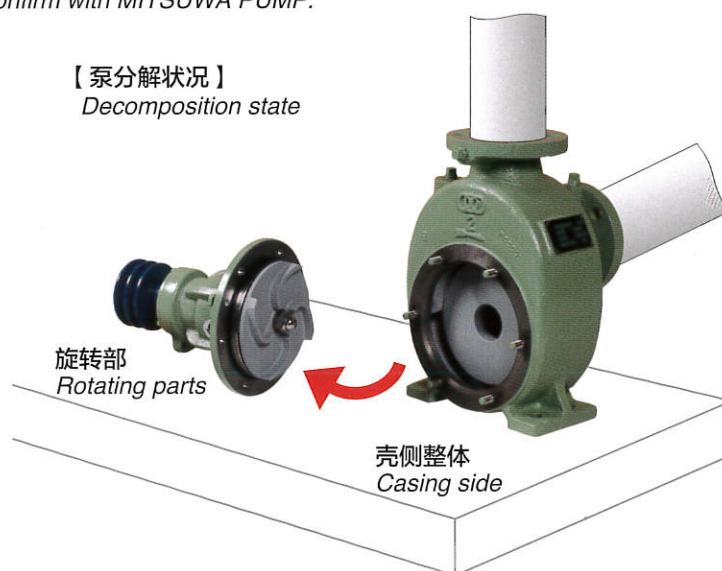
【双机械轴封剖面图】

*Part of mechanical seal*



【泵分解状况】

*Decomposition state*



## ■ 通过背拉式（Back·Pull·Out）设计，提高维护便利性

*Back-pull-out style makes maintenance easy*

- 无需拆卸配管即可更换旋转部（机械密封、叶轮等）的部件。

*Rotating parts (such as the mechanical, impeller) can be replaced without removing the piping.*

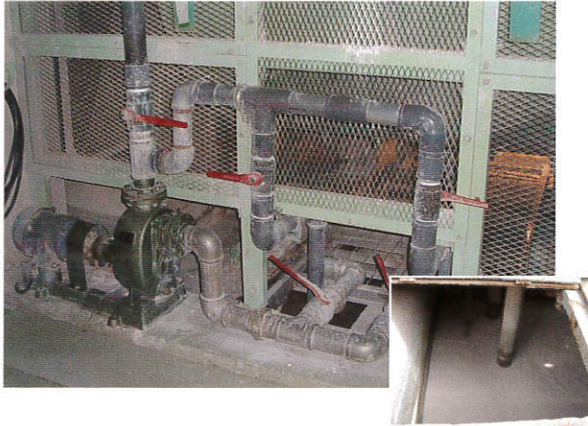


## 主要用途 Major Applications

- 输送及循环各种渣浆液体（消石灰、陶瓷、铁氧化物等）  
*Transport and circulation of various slurries (slaked lime, ceramic, ferrite, etc.)*
- 工业废水处理设备的原水输送、活性污泥运回、混凝污泥抽取等  
*Transport of raw water, return of activated sludge, drawing out of coagulated sludge, etc., at factory wastewater treatment facilities*
- 家庭污水、工程污水、洗涤污水、深井污水等所有与污水相关的状况  
*Various wastewater related applications including gray water, wastewater from processing, detergent drainage, and pit drainage*

### 用于输送窑业原料

*Transport of ceramic raw material*



### 用于工厂污水处理设备 / 输送原水

*Factory wastewater treatment facilities/transport of raw water*



### 用于工厂污水处理设备 / 输送活性污泥

*Factory wastewater treatment facilities/transport of activated sludge*



### 无机化学工厂（消石灰 30%）

*Inorganic chemical factories (30% slaked lime slurry)*



### 用于制铁所 / 输送深井污水

*Steel mills / transport of pit wastewater*



### 用于原材料工厂 / 输送深井污水（玻璃粉浆料）

*Material factory / transport of pit wastewater (Glass fines slurry)*





## 标准规格 Standard Specification

泵结构 Pump Structure		自吸式渣浆泵 Self-priming slurry pump		驱动方式 Driven		V型皮带、直结 V-Belt · Direct-Coupling		
法兰规格 Flange rating		符合 JIS10K Equivalent JIS10K		随附件 Accessory		底座、安全护盖 (法兰式联轴器) (V型皮带轮、V型皮带) Base · Safety cover (Flange-coupling) (V-pulley · V-belt)		
结构 Construction	叶轮 Impeller	半开放式 Semi Open				电 源 Power supply	相 Phase	三相 Three phase
	轴封 Gland	双机械轴封 Double mechanical Seal		电压 Volt	200V级 / 400V级 200V / 380V / 400V			
	轴封水 Seal water	油浴式 (无需冲洗) Oil-bath		设置地点 Installation location		室外 / 室内 Outdoor / Indoor		
轴承 Bearing	滚珠轴承 (润滑脂密封 ZZ型) ※6SMZ2型为滚珠轴承 (油浴) Ball bearing (ZZ type) ※6SMZ2=Ball bearing (oil-bath)							

材 质 Material		SM series	SMC series	SM(S) series	SMS series
	壳体 Casing	FC200	FC200	FC200	SCS14
	叶轮 Impeller	FC200	HiCr	SCS14	SCS14
	耐磨板 Anti-wear plate	FC200	HiCr	SCS14	SCS14
	主轴 Shaft	S45C	S45C	SUS316	SUS316
	衬垫 Packing	NBR	NBR	NBR	NBR
	机械轴封 Mechanical Seal	SiC×SiC / NBR	SiC×SiC / NBR	SiC×SiC / NBR	SiC×SiC / NBR

※口径为 80mm、100mm 的不锈钢规格产品需订购，请另行咨询。

※80 mm and 100 mm diameter stainless steel is a made on order product so please contact us for further information.

## 设计数据 Design data

泵 规 格 Pump specification		SM series	SMC series	SM(S) series	SMS series
	出水口径 Pump Bore	mm	40 · 50 · 65 · 80 · 100 · 150		40 · 50 · 65
	流量 Capacity	m <sup>3</sup> / min	0.03~3.5		0.03~0.55
	全扬程 Total Head	mH	~35		~35
	功率 Power	kW	0.75~18.5 (1~25HP)		0.75~7.5 (1~10HP)

最 大 抽 吸 扬 程 (m) Max.Suction Head(m)		液体温度 Liquid temperature				
		0°C	20°C	40°C	60°C	80°C
	1.5SM type	-4m	-4m	-4m	-2m	±0m
	2SM type					
	2.5SM type	-5m	-5m	-4m	-2m	±0m
	3SM type					
4SM type						
6SMZ2 type						

※抽吸配管全长为 MAX 8m。

※The maximum total length of suction piping is 8m.

	1.5SM type	2SM type	2.5SM type	3SM type	4SM type	6SMZ2 type
最大通过颗粒直径 Max.passing particle dia.	φ5 mm	φ8 mm	φ8 mm	φ11 mm	φ11 mm	φ14 mm

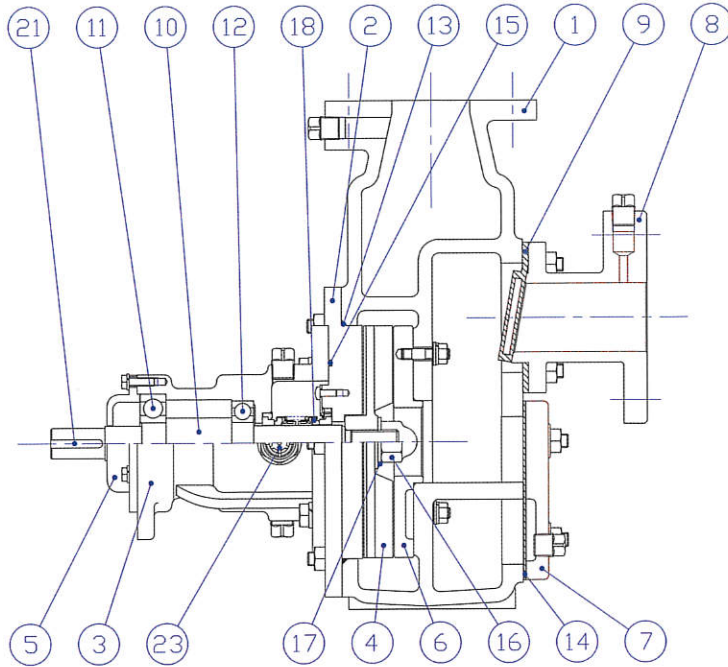
※关于“OOSM-H”，请另行确认。

※Please contact us for information regarding SM-H models.

输 送 液 体 对 应 范 围 Transported liquid coverage	污泥浓度 Slurry concentration	≤ 30w%				
	活性污泥浓度 MLSS Mixed liquor suspended solids	≤ 30,000mg/ℓ				
	粘性 Viscosity	≤ 300mPa·s				
	液体温度 liquid temperature	≤ 60°C		(抽吸运转 Suction operation)		
	≤ 80°C		(正压运转 Draw-in operation)			



## 结构 / 部件列表 Structural drawing/Parts list



### 【注意】 NOTE

上图为“2SM”型的结构图。

产品因机型会存在些微不同，详情请咨询制造商。

The drawing above is of the configuration of the 2SM type.  
Configurations vary slightly from model to model so contact  
MITSUWA PUMP for further details.

No.	部件名称 Parts Name	数量 Q'ty
1	壳体 Casing	1
2	泵盖 Casing cover	1
3	轴承箱 Bearing case	1
4	叶轮 Impeller	1
5	轴承箱盖 Bearing case cover	1
6	耐磨板 Anti-wear plate	1
7	排水孔盖 Drain cover	1
8	阀体 Valve case	1
9	自吸阀 Self-priming packing	1
10	主轴 Shaft	1
11	滚珠轴承 Ball Bearing	1
12	滚珠轴承 Ball Bearing	1
13	O型圈 O-ring	1
14	排水孔盖衬垫 Drain cover packing	1
15	O型圈 O-ring	1
16	叶轮螺母 Impeller retention nut	1
17	垫圈 Round washer	1
18	双机械轴封 Double mechanical seal	1
21	键 Key	1
23	油镜 Oil gauge	1

## 外观 Appearance

- 横型卧式 (皮带驱动)  
Horizontal (Belt driven)

Model: 2SM-LB



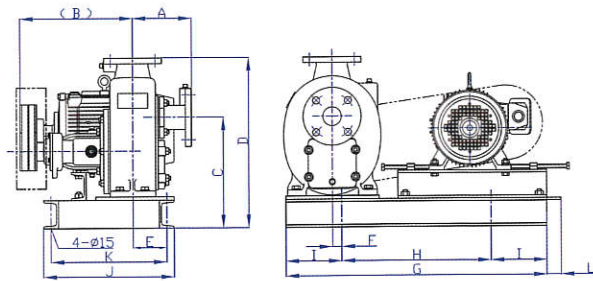
- 直结式 (联轴器驱动)  
Direct (Coupling driven)

Model: 2SM

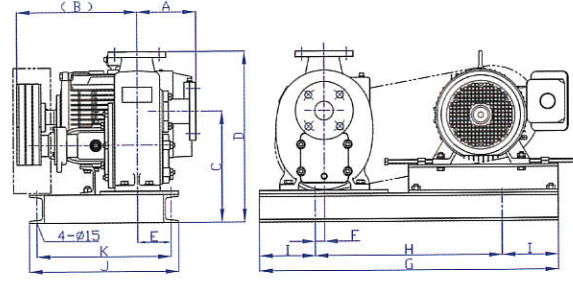


## 外形尺寸 Out of Views

### ●横型卧式（皮带驱动） Horizontal(Belt driven)



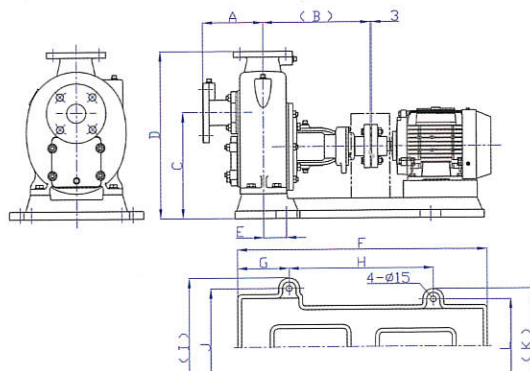
【图1】Dwg1



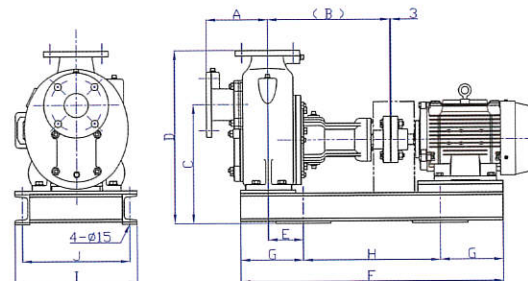
【图2】Dwg2

口径 Bore (mm)	型号 Model	功率 Motor Capacity		图号 Dwg	尺寸 (mm) Measurements(mm)												估算重量 About Weight (kg)
		(kW)	(P)		A	B	C	D	E	F	G	H	I	J	K	L	
40	1.5SM-LB	1.5	4	1	121	284	305	397	85	25	700	400	150	350	310	38	107
	1.5SM-MB	2.2	4														121
50	2SM-LB	2.2	4	1	158	302	296	455	90	25	700	400	150	350	310	38	139
	2SM-MB	5.5	4	2		322											800
65	2.5SM-LB	3.7	4	1	169.5	301	314	459	90	25	700	400	150	350	310	38	151
	2.5SM-MB	7.5	4	2		321											800
80	3SM-LB	5.5	4	2	171.5	389	399	554	90	25	800	500	150	400	360	-	209
	3SM-MB	11	4				424	579									100
100	4SM-LB	7.5	4	2	250	417	435	611	105	25	900	600	150	500	450	-	273
	4SM-LB	15	4														250
150	6SMZ2-LB	11	4	2	240	492	587	834	120	25	1000	600	200	550	475	-	451
	6SMZ2-LB	18.5	4														240

### ●直结式（联轴器驱动） Direct(Coupling Driven)



【图3】Dwg3



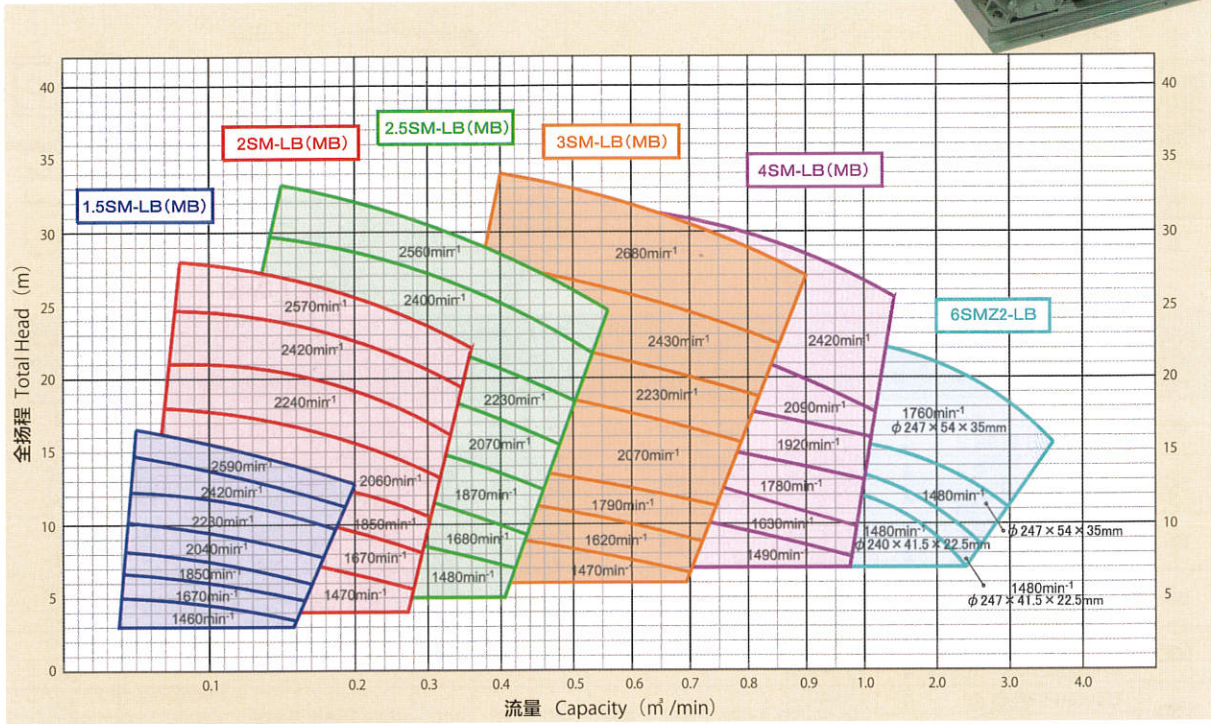
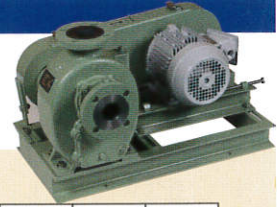
【图4】Dwg4

口径 Bore (mm)	型号 Model	功率 Motor Capacity		图号 Dwg	尺寸 (mm) Measurements(mm)												估算重量 About Weight (kg)
		(kW)	(P)		A	B	C	D	E	F	G	H	I	J	K	L	
40	1.5SM	0.75	4	3	121	264	269	361	67	520	105	310	330	290	250	210	74
	1.5SM-H	1.5	2				285	377	62	650	135	375	360	305	300	245	89.5
50	2SM	1.5	4	3	158	279	276	435	60	650	135	375	360	305	300	245	101
	2SM-H	3.7	2			284	286	445	90	705	170	400	350	295	350	295	132
65	2.5SM	2.2	4	3	169.5	283	304	449	88	740	170	400	350	295	350	295	128
	2.5SM-H	5.5	2			4	288	326	471	55	750	150		450	310	-	-
80	3SM	3.7	4	4	171.5	362	430	585	65	900	200	500	320	270	-	-	189
	3SM-H	7.5	2														171.5
100	4SM	5.5	4	4	250	390	441	617	90	900	200	500	320	270	-	-	236
	4SM	7.5	4														250
150	6SMZ2	7.5	4	4	240	486	599	846	100	1100	200	700	500	440	-	-	402
	6SMZ2	15	4														240



## 选定表 Selection Chart

### ● 横型卧式 (皮带驱动) 50Hz Horizontal (Belt driven) 50Hz



口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity		Spec. ①		Spec. ②	
			(kW)	(P)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
40	1.5SM-LB	1460	1.5	4	0.06	4.5	0.12	4
	1.5SM-LB	1670	1.5	4	0.06	6.5	0.12	5.5
	1.5SM-LB	1850	1.5	4	0.06	8	0.12	7
	1.5SM-LB	2040	1.5	4	0.06	10	0.12	9
	1.5SM-LB	2230	2.2	4	0.08	12	0.16	10.5
	1.5SM-MB	2420	2.2	4	0.08	14	0.16	12
	1.5SM-MB	2590	3.7	4	0.08	16	0.16	14
50	2SM-LB	1470	1.5	4	0.15	7.5	0.25	6
	2SM-LB	1670	2.2	4	0.15	10.5	0.25	8.5
	2SM-LB	1850	2.2	4	0.15	13	0.25	11.5
	2SM-LB	2060	3.7	4	0.2	15.5	0.3	13.5
	2SM-LB	2240	3.7	4	0.2	19	0.3	17
	2SM-MB	2420	3.7	4	0.2	22.5	0.3	20.5
	2SM-MB	2570	5.5	4	0.2	25.5	0.3	23.5
65	2.5SM-LB	1480	2.2	4	0.3	8.5	0.4	7
	2.5SM-LB	1680	3.7	4	0.3	11.5	0.4	10
	2.5SM-LB	1870	3.7	4	0.3	15	0.4	13.5
	2.5SM-LB	2070	5.5	4	0.3	19	0.4	17
	2.5SM-LB	2230	5.5	4	0.3	22.5	0.4	20.5
	2.5SM-MB	2400	7.5	4	0.35	26	0.5	22.5
	2.5SM-MB	2560	7.5	4	0.35	29	0.5	26

口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity		Spec. ①		Spec. ②	
			(kW)	(P)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
80	3SM-LB	1470	3.7	4	0.4	9	0.6	7.5
	3SM-LB	1620	3.7	4	0.4	11.5	0.6	10
	3SM-LB	1790	5.5	4	0.4	14	0.6	12.5
	3SM-LB	2070	7.5	4	0.4	19.5	0.7	16.5
	3SM-LB	2230	11	4	0.4	23	0.7	20
	3SM-MB	2430	11	4	0.4	27.5	0.7	24.5
	3SM-MB	2680	15	4	0.4	34	0.7	30.5
100	4SM-LB	1490	5.5	4	0.6	10.5	0.8	9.5
	4SM-LB	1630	5.5	4	0.6	13.5	0.8	12
	4SM-LB	1780	7.5	4	0.7	15.5	1.0	13
	4SM-LB	1920	11	4	0.7	18.5	1.0	16
	4SM-LB	2090	11	4	0.8	21.5	1.2	17.5
	4SM-MB	2420	15	4	0.8	30	1.2	25.5
	150	6SMZ2-LB	1480	7.5	4	1.2	11.5	2.4
φ240×41.5×22.5mm								
6SMZ2-LB		1480	11	4	1.2	13	2.4	9.5
φ247×41.5×22.5mm								
6SMZ2-LB		1480	15	4	2.0	14	3.0	11
φ247×54×35mm								
6SMZ2-LB	1760	18.5	4	2.0	21	3.0	18	
φ247×54×35mm								

※ 选定表中为清水时的数据。根据液体比重、粘性等，功率和性能可能不同。

※ 选定表中为搭载功率为IE3级的电机时的数据。

※ 型号下方的数字 (φ○○○×○○×○○mm) 表示叶轮尺寸。

※ The selection chart contains the data for pure water. Power and performance may vary according to the specific gravity and viscosity of the liquid.

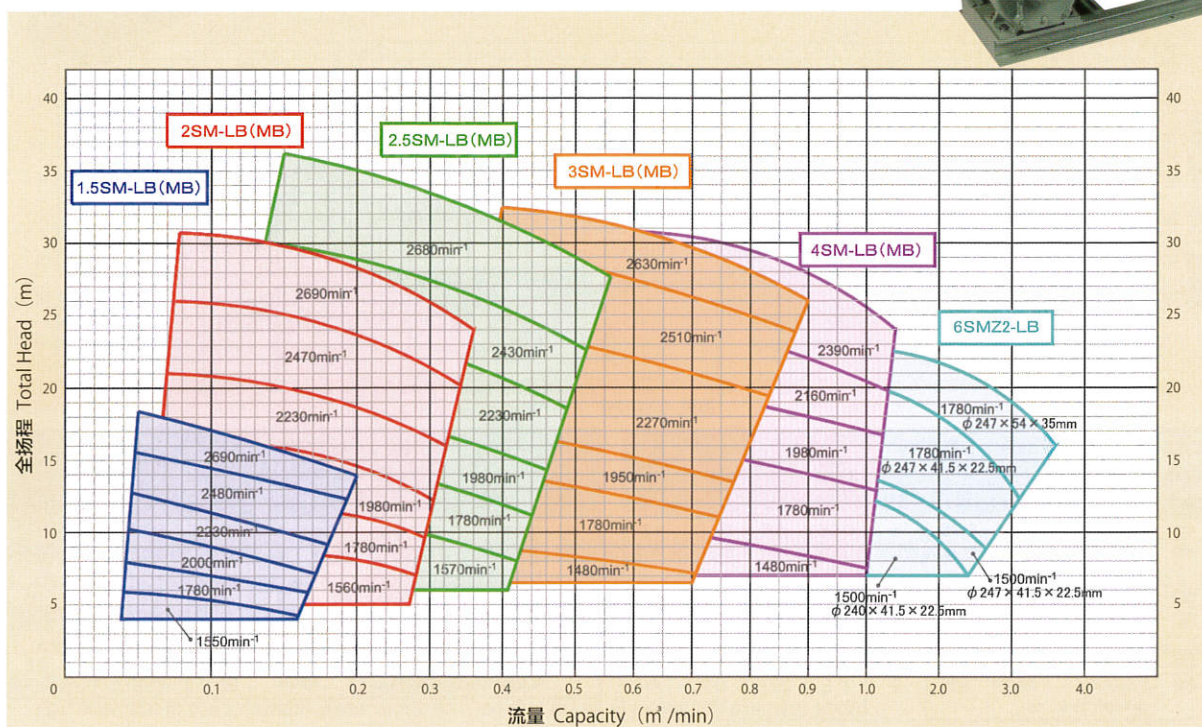
※ The selection chart contains data based on equipment having a motor with class IE3 efficiency.

※ The numbers below the model number (e.g. φ240\*41.5\*22.5mm) indicate the impeller size.



## 选定表 Selection Chart

### ● 横型卧式 (皮带驱动) 60Hz Horizontal (Belt driven) 60Hz



口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity		Spec. ①		Spec. ②	
			(kW)	(P)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
40	1.5SM-LB	1550	1.5	4	0.06	5.5	0.12	5
	1.5SM-LB	1780	1.5	4	0.06	7.5	0.12	6.5
	1.5SM-LB	2000	1.5	4	0.06	9.5	0.12	8.5
	1.5SM-LB	2230	2.2	4	0.08	11.5	0.16	10
	1.5SM-MB	2480	2.2	4	0.08	14.5	0.16	13
	1.5SM-MB	2690	3.7	4	0.08	17.5	0.16	15.5
50	2SM-LB	1560	1.5	4	0.15	8.5	0.25	7.5
	2SM-LB	1780	2.2	4	0.15	12	0.25	10.5
	2SM-LB	1980	2.2	4	0.2	14.5	0.3	12.5
	2SM-LB	2230	3.7	4	0.2	18.5	0.3	16.5
	2SM-MB	2470	3.7	4	0.2	23.5	0.3	21.5
	2SM-MB	2690	5.5	4	0.2	28	0.3	25.5
65	2.5SM-LB	1570	2.2	4	0.25	10.5	0.4	8.5
	2.5SM-LB	1780	3.7	4	0.3	13.5	0.4	12
	2.5SM-LB	1980	3.7	4	0.3	17	0.45	14.5
	2.5SM-LB	2230	5.5	4	0.3	22.5	0.45	19.5
	2.5SM-MB	2430	7.5	4	0.35	26.5	0.5	23
	2.5SM-MB	2680	7.5	4	0.35	32.5	0.5	29

口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity		Spec. ①		Spec. ②	
			(kW)	(P)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
80	3SM-LB	1480	3.7	4	0.4	9	0.6	7.5
	3SM-LB	1780	5.5	4	0.4	14	0.6	12.5
	3SM-LB	1950	7.5	4	0.5	16	0.7	14
	3SM-LB	2270	11	4	0.5	23	0.7	21
	3SM-MB	2510	11	4	0.6	27.5	0.8	25
	3SM-MB	2630	15	4	0.6	30.5	0.8	28
	3SM-MB	2630	15	4	0.6	30.5	0.8	28
100	4SM-LB	1480	5.5	4	0.6	10.5	0.8	9
	4SM-LB	1780	5.5	4	0.7	15.5	1.0	13
	4SM-LB	1980	11	4	0.6	20.5	1.0	17
	4SM-LB	2160	11	4	0.8	23.5	1.2	19.5
	4SM-MB	2390	15	4	0.8	29	1.2	24.5
	4SM-MB	2390	15	4	0.8	29	1.2	24.5
150	6SMZ2-LB	1500	7.5	4	1.2	12	2.4	7
	6SMZ2-LB	1500	11	4	1.2	13.5	2.4	10
	6SMZ2-LB	1780	15	4	2.0	18	3.0	13
	6SMZ2-LB	1780	18.5	4	2.0	21.5	3.0	19
	6SMZ2-LB	1780	18.5	4	2.0	21.5	3.0	19

※ 选定表中为清水时的数据。根据液体比重、粘性等，功率和性能可能不同。

※ 选定表中为搭载功率为 IE3 级的电机时的数据。

※ 型号下方的数字 (φ○○○×○○×○○mm) 表示叶轮尺寸。

※ The selection chart contains the data for pure water. Power and performance may vary according to the specific gravity and viscosity of the liquid.

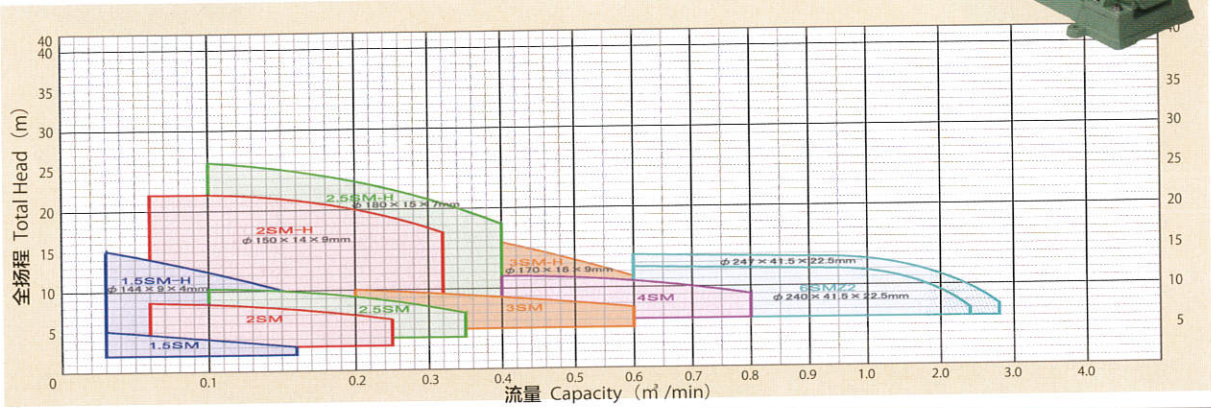
※ The selection chart contains data based on equipment having a motor with class IE3 efficiency.

※ The numbers below the model number (e.g. φ240\*41.5\*22.5mm) indicate the impeller size.



## 选定表 Selection Chart

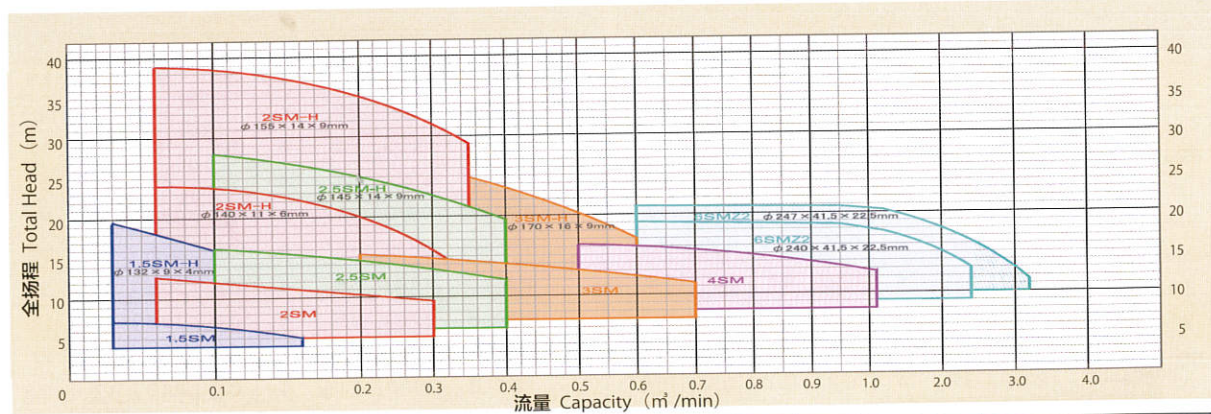
### ●直结式 (联轴器驱动) 50Hz Direct(Coupling Driven) 50Hz



口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity (kW) (P)	Spec. ①		Spec. ②	
				流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
40	1.5SM	1480	0.75	4	0.06	4.5	0.12
40	1.5SM-H φ144×9×4 mm	2970	1.5	2	0.06	14	0.12
50	2SM	1480	1.5	4	0.1	8	0.2
50	2SM-H φ150×14×9 mm	2970	3.7	2	0.1	22	0.2
65	2.5SM	1470	1.5	4	0.2	9	0.3
65	2.5SM-H φ180×15×7 mm	2960	5.5	2	0.2	23.5	0.3

口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity (kW) (P)	Spec. ①		Spec. ②	
				流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
80	3SM	1480	3.7	4	0.4	9	0.5
80	3SM-H φ170×16×9 mm	2980	5.5	2	0.4	15.5	0.5
100	4SM	1490	5.5	4	0.6	10.5	0.7
150	6SMZ2 φ240×41.5×22.5 mm	1480	7.5	4	1.2	11.5	2.4
150	6SMZ2 φ247×41.5×22.5 mm	1480	11	4	1.2	13	2.4

### ●直结式 (联轴器驱动) 60Hz Direct(Coupling Driven) 60Hz



口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity (kW) (P)	Spec. ①		Spec. ②	
				流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
40	1.5SM	1760	0.75	4	0.06	7	0.12
40	1.5SM-H φ132×9×4 mm	3560	2.2	2	0.06	18	0.12
50	2SM	1770	1.5	4	0.1	12	0.2
50	2SM-H φ140×11×6 mm	3570	3.7	2	0.1	23.5	0.2
50	2SM-H φ155×14×9 mm	3560	5.5	2	0.1	38.5	0.2
65	2.5SM	1780	2.2	4	0.2	14.5	0.4
65	2.5SM-H φ145×14×9 mm	3570	5.5	2	0.2	25	0.4

口径 Bore (mm)	型号 Model	转速 Speed (min <sup>-1</sup> )	参考功率 Motor Capacity (kW) (P)	Spec. ①		Spec. ②	
				流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)	流量 Capacity (m <sup>3</sup> /min)	全扬程 Total Head (m)
80	3SM	1780	3.7	4	0.4	14	0.7
80	3SM-H φ170×16×9 mm	3560	7.5	2	0.4	23.5	0.6
100	4SM	1780	5.5	4	0.7	15.5	1.0
150	6SMZ2 φ240×41.5×22.5 mm	1780	11	4	1.2	17.5	2.0
150	6SMZ2 φ247×41.5×22.5 mm	1780	15	4	2.0	18	3.0

※选定表中为清水时的数据。根据液体比重、粘性等，功率和性能可能不同。

※选定表中为满载率为IE3级的电机时的数据。

※型号下方的数字 ( φ○○○×○○×○○mm ) 表示叶轮尺寸。

※ The selection chart contains the data for pure water. Power and performance may vary according to the specific gravity and viscosity of the liquid.

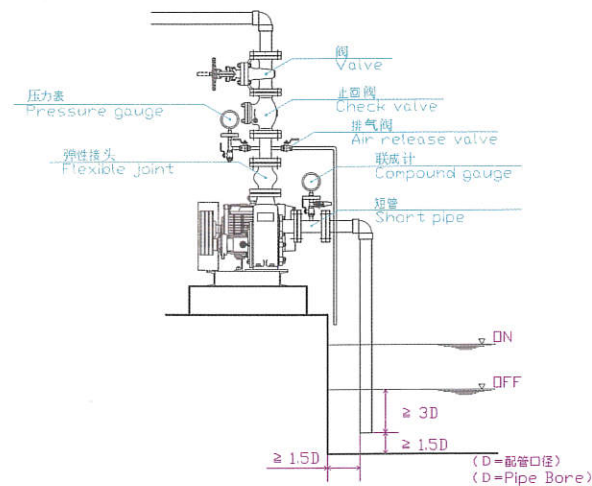
※ The selection chart contains data based on equipment having a motor with class IE3 efficiency.

※ The numbers below the model name (e.g. φ240\*41.5\*22.5mm) indicate the impeller size.

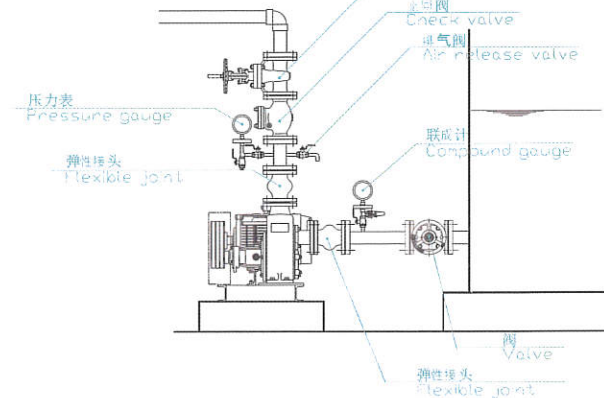


## 安装示例 Example of excution

### 【抽吸运转】Suction operation



### 【正压运转】Draw-in operation



## 抽吸配管 Suction piping

- 请针对配管设置支撑装置（支撑），以避免因配管自身的重量或紧固时产生的歪斜对泵造成影响。  
Use supports for the pipes so that strain is not placed on the pump by the weight or tightness of the pipes.
- 请仔细安装配管接头，以防止空气进入。  
Attach pipe fittings carefully and be sure not to allow any air to enter.
- 请充分注意最低水位...等等，避免配管端空气吸入。  
Pay attention to the minimum water level, etc., so that no air is taken into the pipe ends.

### 【抽吸运转】Suction operation

- 为防止空气滞留，请将配管设置在泵的**上坡方向**（1/100以上）。  
To prevent air entrapment, arrange the pipes on an upward slope (1/100 or greater) in the direction of the pump.
- 原则上，配管口径需与泵的口径一致。  
As a rule, use pipes with the same bore as the pump.
- 原则上请需单独配管。当主管线上并列设置多个泵时，注意将处于停止状态的泵的阀全部关闭，以避免停止中的泵产生负压、背压。  
As a rule, the pipes should be single piping. When multiple pumps are placed in parallel on a header pipe, be sure to completely close the valves of stopped pumps so that there is no negative pressure or back pressure on the pumps.
- 无需底阀。需要时请安装过滤器。  
A foot valve is unnecessary. Attach a strainer only as needed.

### 【正压运转】Draw-in operation

- 为防止空气滞留，请将配管设置在泵的**下坡方向**（1/100以上）。  
To prevent air entrapment, arrange the pipes on an downward slope (1/100 or greater) in the direction of the pump.
- 原则上，配管口径需大于泵的出水口径或至少与泵的口径一致。  
As a rule, use pipes with the same or more bore as the pump.
- 需要时请安装过滤器。  
Attach a strainer as needed.

## 排出配管 Delivery piping

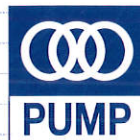
- 请针对配管设置支撑装置（支撑），以避免因配管自身的重量或紧固时产生的歪斜对泵造成影响。  
Use supports for the pipes so that strain is not placed on the pump by the weight or tightness of the pipes.
- 可能发生水锤（水击）时，请采取安装缓闭止回阀或旁道（by-pass）止回阀等措施。  
If there is a possibility of water hammer, take measures such as installing a gradually closing check valve or a bypass check valve.

## 备注 Note

- 可能发生冻结时，请采取防冻措施。  
Where there is a possibility of freezing, take measures to prevent freezing.
- 输送液体可能凝固、沉淀时，请设置冲洗管路（冲洗压力 0.3MPa 以下）。  
Where there is a possibility of the transported liquid coagulating or precipitating, install a washing line (washing pressure 0.3 MPa or less).



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PRODUCT GUIDE  
**SM series**



代理店 Agency

製造元 Maker



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