



MFSC 5000M-6000M(G4)

使用手册

版权说明

“ ”

引 语

MFSC

MFSC 5000M-6000M G4

公司简介

2004

<http://www.maxphotonics.com>



:
: <http://www.maxphotonics.com>
: 400-900-9588
: +86-755-36869371
: info@maxphotonics.com

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MFSC-	4
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1-	5
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4-	7
5-	11
	12
1-	12
2-	12
3-	12
4-	13
5-	13
6-	14
7-	14
	15
1-	15
2-	16
3-	16
4-QBH	17
5-	18

6-	19
		21
1-	21
2-	22
		23
1-	.....	23
2-	.....	23
3-	.....	23
4-	.....	24
5-	.....	25
6-	.....	26
7-	.....	30
		31
1-	.....	31
2-	.....	32
		35
1-	.....	35
2-	.....	35
		36
1-	.....	36
2-	.....	36

第一章 MFSC- 系列激光器 特性说明






MFSC
MFSC
>30%
MFSC

1060nm 1100 nm

Class 4

第二章 安全信息

1 -

MFSC
12KW

1060nm 1100 nm

1

2-

2

LaserVision USA Kentek Corporation Rochwell Laser Industries

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EN IEC 61000-6-4:2019

CISPR 16-2-1

CISPR 16-2-3

EN IEC 61000-6-2:2019

EN 61000-4-2:2009
EN 61000-4-3:2020
EN 61000-4-4:2012
EN 61000-4-5:2014+A1:2017
EN 61000-4-6:2014
EN 61000-4-11:2020

EN 60825-1:2014+A11:2021
CDRH 21 CFR 1040.10

EN 60204-1:2018

		MFSC	Class 4	EN
60825-1	8			

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MFSC

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11

12

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4

440VAC

5

6

360-

360-440VAC

5

1

2

3

5-

Laser Institute of America(LIA)

13501 Ingenuity Drive, Suite 128

Orlando,Florida 32826

Phone:407 380 1553,Fax: 407 380 5588

Toll Free:1 800 34 LASER

American National Standards Institute

ANSI Z136.1, American National Standard for the Safe Use of Lasers

(Available through LIA)

International Electro-technical Commission

IEC 60825-1, Edition 1.2

Center for Devices and Radiological Health

21 CFR 1040.10 - Performance Standards for Light-Emitting Products

US Department of Labor - OSHA

Publication 8-1.7 - Guidelines for Laser Safety and Hazard Assessment.

Laser Safety Equipment

Laurin Publishing

Laser safety equipment and Buyer's Guides

第三章 产品描述

1-

MFSC

1

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4

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1

2

2-

6.3-6.6

2-

6

6.3-6.6

3-

M - F - S - C - XXX - XX	
1 - 2 - 3 - 4 - 5 - 6	
1	M Maxphotonics
2	F Fiber Laser
3	S Single Mode
4	C ContinueWave
5	XXXX XXXX W
6	

4-

5-



MAIN SWITCH	360-440VAC
OFF ON	
EMERGENCY	
START	
ALARM	
ACTIVE	
POWER	

6-



CTRL	
ETHERNET	
AC380V	360-440VAC
WATER OUT	1
WATER IN	1

7-

1

QBH

“

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G4.3 QBH



G5 QBH



第四章 详细规格

1-

1						
2						
3	MFSC-5000M			5000		W
	MFSC-6000M			6000		W
4			10		100	%
5		100%	1070	1080	1090	nm
6	3dB	100%		4	7	nm
7		100% >1h		±1	±2	%
8		100% >24h		±3	±5	%
9	BPP	100% 100um QBH	3.0		3.8	mm x mrad
10		10% 90%		150	200	μs
11		90% 10%		150	200	μs
12		100%			5	KHz
13		100%	200			μW
14				20		m
15		100 150/200				μm
16			200			mm
17		QBH LOC				

2-

1			360	400	440	VAC
2	MFSC-5000M	100%			17	KW
	MFSC-6000M	100%			20	KW
3			10		40	
4			10		85	%
5						
6			-10		60	
7		400*900*550 W*D*H				mm
8	G4.0-4.7	MFSC-5000M	150±5			kg
		MFSC-6000M	155±5			
	G4.8	MFSC-5000M	142±5			
		MFSC-6000M	147±5			

3-

1			
2		24	20
3		≥ 4	
4	MFSC-5000M	40	
	MFSC-6000M	50	
5	MFSC-5000M	12	
	MFSC-6000M	14	

40

22

;

 $\Delta p \leq 0.5 \text{ bar}$

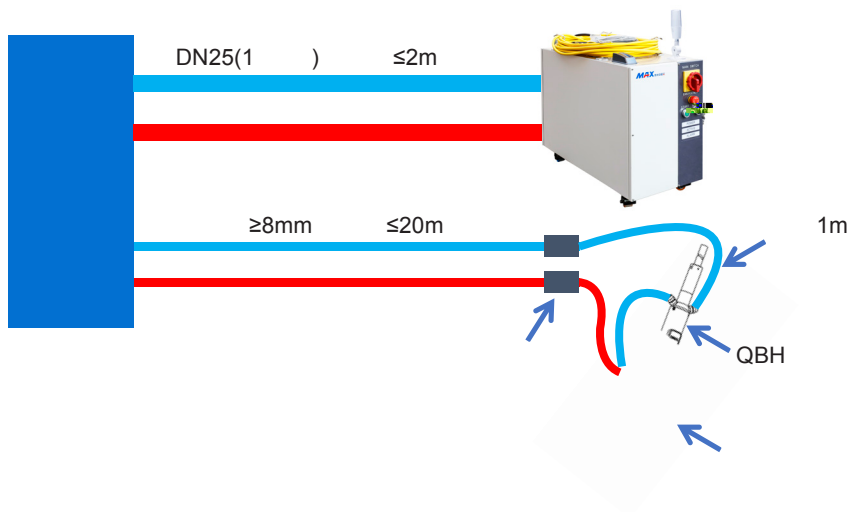
;

0

4-QBH

		L/min	bar	
	* = 6* 4	2	3	28-30

$\geq 8\text{mm}$ $\leq 20\text{m}$;
 QBH $\Phi 6$ $\leq 1\text{m}$;
 QBH ;
 $\Delta p \leq 1.5\text{bar}$



5-

1

1000

2

10 - 40

3

10% - 85%

4

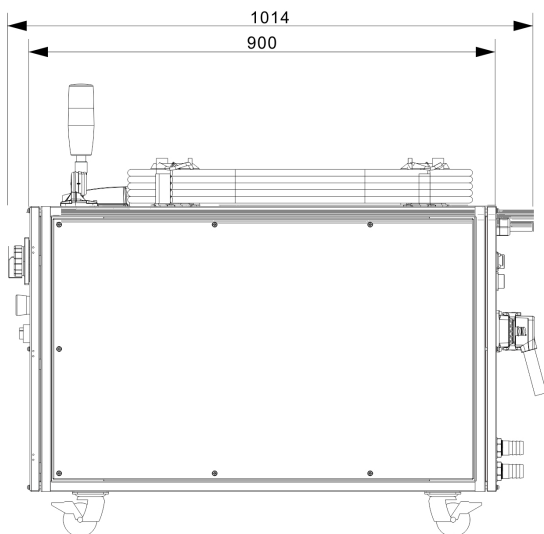
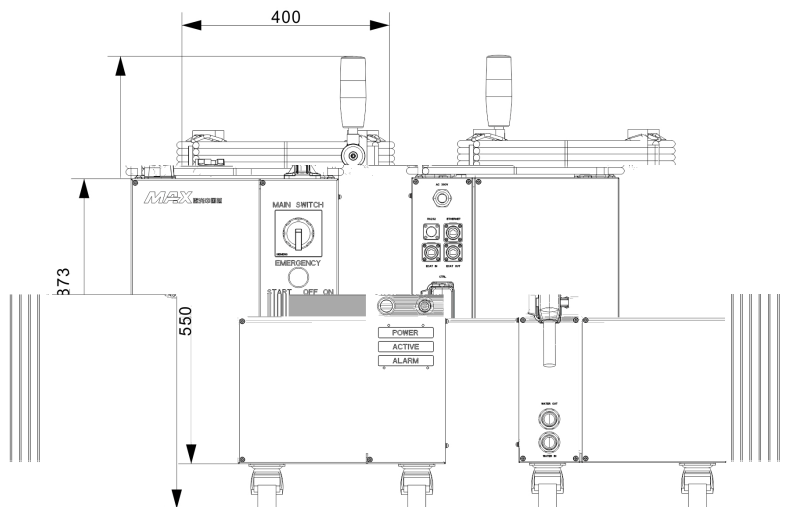
环境温度、相对湿度、露点对照表														
相对湿度%	30	35	40	45	50	55	60	65	70	75	80	85	90	95
环境(°C)	露点 Td (°C)													
10	-7.0	-5.0	-3.0	-1.3	0.0	1.5	2.5	3.6	4.8	5.8	6.7	7.6	8.4	9.2
11	-6.5	-4.0	-2.0	-0.5	1.0	2.5	3.5	4.8	5.8	6.7	7.7	8.6	9.4	10.2
12	-5.0	-3.0	-1.0	0.5	2.0	3.3	4.4	5.5	6.7	7.7	8.7	9.5	10.9	11.2
13	-4.5	-2.0	-0.2	1.4	2.8	4.1	5.3	6.6	7.7	8.7	9.6	10.5	11.4	12.2
14	-3.2	-1.0	0.7	2.2	3.5	5.1	6.4	7.5	8.6	9.6	10.6	11.5	12.4	13.2
15	-2.3	-0.3	1.5	3.1	4.6	6.0	7.3	8.4	9.6	10.6	11.6	12.5	13.4	14.2
16	-1.3	0.5	2.4	4.0	5.6	7.0	8.3	9.5	10.6	11.6	12.6	13.4	14.3	15.2
17	-0.5	1.5	3.2	5.0	6.5	8.0	9.2	10.2	11.5	12.5	13.5	14.5	15.3	16.2
18	0.2	2.3	4.0	5.8	7.4	9.0	10.2	11.3	12.5	13.5	14.5	15.4	16.4	17.2
19	1.0	3.2	5.0	7.2	8.4	9.8	11.0	12.2	13.4	14.5	15.4	16.5	17.3	18.2
20	2.0	4.0	6.0	7.8	9.4	10.7	12.0	13.2	14.4	15.4	16.5	17.4	18.3	19.2
21	2.8	5.0	7.0	8.6	10.2	11.0	12.9	14.2	15.3	16.4	17.4	18.4	19.3	20.2
22	3.5	5.8	7.8	9.5	11.0	12.5	13.8	15.2	16.3	17.3	18.4	19.4	20.3	21.2
23	4.4	6.8	8.7	10.4	12.0	13.5	14.8	16.2	17.3	18.4	19.4	20.4	21.3	22.2
24	5.3	7.7	9.7	11.4	13.0	14.5	15.9	17.0	18.2	19.3	20.4	21.4	22.3	23.1
25	6.2	8.6	10.5	12.3	14.0	15.4	16.8	18.0	19.1	20.3	21.3	22.3	23.2	23.9
26	7.0	9.4	11.4	13.2	14.8	16.3	17.7	19.0	20.1	21.2	22.3	23.3	24.2	25.1
27	8.0	10.3	12.2	14.0	15.8	17.3	18.7	19.9	21.1	22.2	23.2	24.3	25.2	26.1
28	8.8	11.2	13.2	15.0	16.7	18.0	19.6	20.8	22.0	23.0	24.2	25.2	26.2	27.1
29	9.7	12.0	14.0	15.9	17.6	19.2	20.6	21.3	23.0	24.1	25.2	26.2	27.2	28.1
30	10.5	12.9	14.9	16.8	18.5	20.0	21.4	22.8	23.9	25.1	26.2	27.2	28.2	29.1
31	11.4	13.8	15.8	17.6	19.4	21.0	22.4	23.8	24.9	26.0	27.0	28.0	29.0	29.9
32	12.2	14.7	16.7	18.6	20.3	21.9	23.3	24.6	25.8	26.9	27.9	28.9	29.9	30.8
33	13.0	15.6	17.6	19.6	21.3	22.9	24.2	25.6	26.8	28.0	29.0	30.0	31.0	31.9
34	13.9	16.5	18.6	20.5	22.2	23.8	25.2	26.5	27.7	29.0	29.9	30.9	31.9	32.8
35	14.9	17.4	19.5	21.4	23.0	24.6	26.0	27.2	28.5	29.7	30.9	31.9	32.9	33.8
36	15.7	18.1	20.3	22.2	24.0	25.0	26.0	27.0	28.4	29.0	30.9	32.0	33.1	34.1
37	16.6	19.2	21.2	23.2	24.9	26.5	27.9	29.5	30.7	31.8	33.0	34.1	35.2	36.2
38	17.5	19.9	22.0	23.9	25.8	27.4	28.9	30.3	31.5	32.0	33.9	35.1	36.0	37.0
39	18.1	20.8	23.0	24.9	26.6	28.3	29.8	31.2	32.5	33.8	34.9	36.2	37.2	38.2
40	19.2	21.6	23.9	25.8	27.6	29.2	30.7	32.1	33.5	34.7	35.8	36.8	37.8	38.8

≤28

≤50%

6-

mm



第五章 拆装指南

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2

3

"

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4

QBH

>200mm

5

6

1

7

8

2-

1		MFSC-xxxx		1
2				1
3		10m		1
4				2
5	U			1
6				4
7		Φ25.4mm		1
8		26-38		2
9	QBH	6x4mm		1

第六章 使用指南

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“ ”

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2-

63A

“ ”

3-

CTRL



5000M-6000M(G4) 24P

CTRL				
15	PWM_MODE+		+	20 VDC V 28 VDC I 15mA
4	PWM_MODE-		-	
16	ENABLE+		+	20 VDC V 28 VDC I 15mA
3	ENABLE-		-	
12	PEAK POWER(0-10V)+	0-10V	+	1-10VDC 1V 10% 10V 100%
5	PEAK POWER(0-10V)-	0-10V	-	
6	CONTROL+		+	± ON, ± OFF
7	CONTROL-		-	
18	ERROR2		2	ON- V OFF- I 30VDC, 100mA
23	ERROR1		1	
1	LASER_RDY_OUT+		+	
2	LASER_RDY_OUT-		-	
8	EX LOCK+		+	±
19	EX LOCK-		-	
21	EMG_OFF_OUTSIDE+		+	20 VDC V 28 VDC I 15mA
14	EMG_OFF_OUTSIDE-		-	
17	EX_RED_CONTROL+		+	
24	EX_RED_CONTROL-		-	

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(MAIN SWITCH) ON

6

"ON"

7

START

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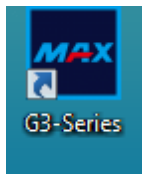
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3

3

" G3-Series"



4

RS232

EtherNet

5

" G3-Series"



6

RS232

COM

COM

COM

" "

7

EtherNet

IP2

IP

192.168.0.178

" "

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U

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1	PD		
2			
3			
4			"0-10V"DA
5	QBH	QBH	QBH QBH
6			
7			RS232/Ethernet RS232/Ethernet

第七章 光纤连接器检查和清洁指南

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“OFF”

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QBH

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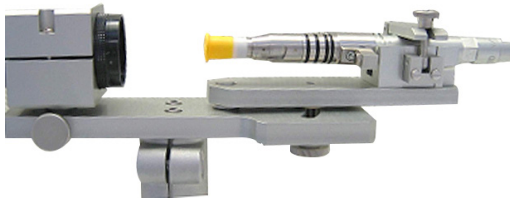
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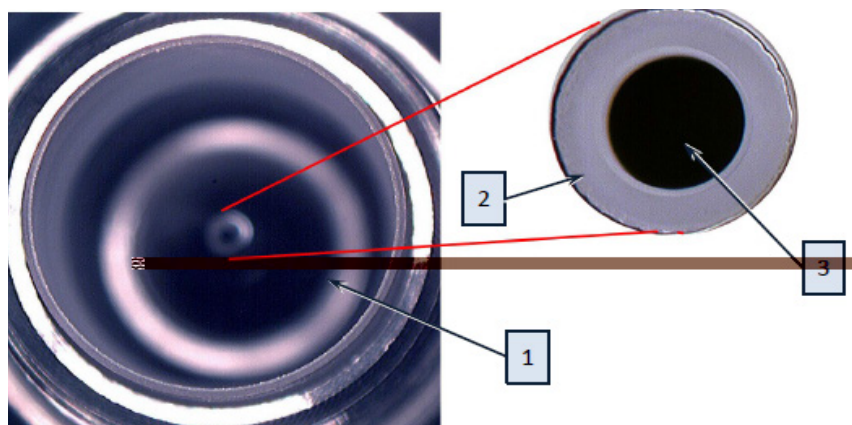
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7-2



7-3

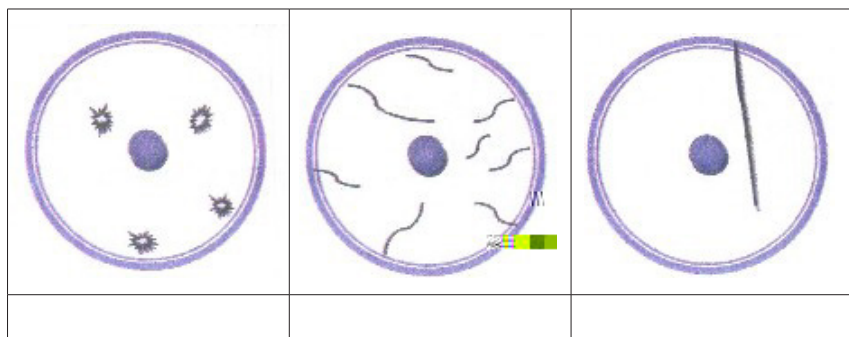


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7-4



7-5

第八章 服务与维修

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400-900-9588

第九章 保修声明

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