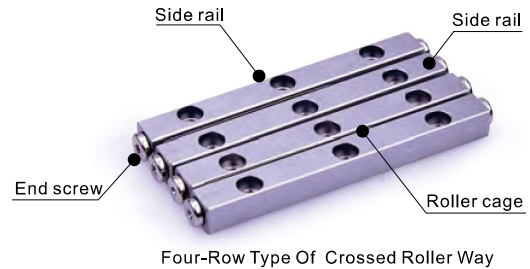
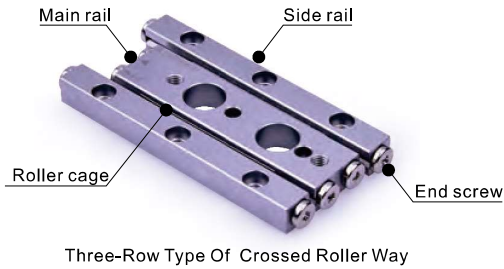




# LGC Series Crossed Roller Way

## Product Introduction

Crossed Roller provides high rigidity and high accuracy linear movement with non-recirculating rollers design. By cross-arrangement of rollers, it will hugely reduce friction meanwhile provide high rigidity for rollers to bear heavy loads. Crossed roller is mainly used in high precision machine and measurement equipment such as circuit board printer, optical measurement instrument, X-ray equipment or base for multiple kinds of instruments.



## Order Information

LGC 3 A 200 R25 - H

- ①
- ②
- ③
- ④
- ⑤
- ⑥



① Model Code	LGC : Crossed Roller Way
② Roller Diameter	1 : $\Phi$ 1.5mm 2 : $\Phi$ 2.0mm 3 : $\Phi$ 3.0mm 4 : $\Phi$ 4.0mm 6 : $\Phi$ 6.0mm
③ Type [Note]	A: Three-row type [Note] B: Four-row type
④ Rail dimension	200: rail length 200X100: main rail length is 200mm/side rail length is 100mm [Reference to spec. table for detail]
⑤ The number of rollers in each roller cage	R25: 25 rollers ..... [Reference to spec. table for detail]
⑥ Accuracy	H : High P : Precision

[Note] LGC6: only for type B.



# Crossed Roller Way

## LGC Series

### Cross Reference Table for Maximun Stroke & Roller numbers

LGC1 Max. Stroke (mm)	Numbers of rollers in one roller cage								
	R6	R7	R8	R9	R10	R11	R13	R16	R19
20	12	7	-	-	-	-	-	-	-
30	-	-	22	17	12	7	-	-	-
40	-	-	-	-	-	27	17	-	-
50	-	-	-	-	-	-	37	22	7
60	-	-	-	-	-	-	-	42	27
70	-	-	-	-	-	-	-	-	47
80	-	-	-	-	-	-	-	-	67

The standard quantity of rollers

Alternative options of the quantity of rollers

LGC2 Max. Stroke (mm)	Numbers of rollers in one roller cage														
	R6	R7	R8	R9	R10	R11	R13	R16	R19	R22	R25	R28	R32	R36	
30	16	8	-	-	-	-	-	-	-	-	-	-	-	-	
45	-	-	30	22	14	-	-	-	-	-	-	-	-	-	
60	-	-	-	-	-	36	20	-	-	-	-	-	-	-	
75	-	-	-	-	-	-	50	26	-	-	-	-	-	-	
90	-	-	-	-	-	-	-	56	32	-	-	-	-	-	
105	-	-	-	-	-	-	-	-	62	38	-	-	-	-	
120	-	-	-	-	-	-	-	-	-	68	44	-	-	-	
135	-	-	-	-	-	-	-	-	-	98	74	50	-	-	
150	-	-	-	-	-	-	-	-	-	-	104	80	48	-	
165	-	-	-	-	-	-	-	-	-	-	-	110	78	45	
180	-	-	-	-	-	-	-	-	-	-	-	-	140	108	76

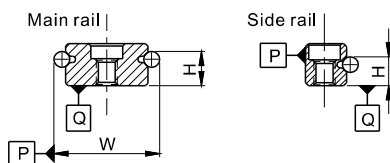
LGC3 Max. Stroke (mm)	Numbers of rollers in one roller cage														
	R7	R8	R9	R10	R11	R13	R16	R19	R22	R25	R28	R32	R36	R40	
50	34	24	14	-	-	-	-	-	-	-	-	-	-	-	
75	-	-	-	54	44	24	-	-	-	-	-	-	-	-	
100	-	-	-	-	-	74	44	-	-	-	-	-	-	-	
125	-	-	-	-	-	-	94	64	-	-	-	-	-	-	
150	-	-	-	-	-	-	-	114	84	54	-	-	-	-	
175	-	-	-	-	-	-	-	-	134	104	74	-	-	-	
200	-	-	-	-	-	-	-	-	-	154	124	84	-	-	
225	-	-	-	-	-	-	-	-	-	-	174	134	94	-	
250	-	-	-	-	-	-	-	-	-	-	-	184	144	104	
275	-	-	-	-	-	-	-	-	-	-	-	-	234	194	154
300	-	-	-	-	-	-	-	-	-	-	-	-	-	244	204

LGC4 Max. Stroke (mm)	Numbers of rollers in one roller cage														
	R8	R9	R10	R11	R13	R16	R19	R22	R25	R28	R32	R36	R40	R45	
80	54	40	26	-	-	-	-	-	-	-	-	-	-	-	
120	-	-	-	92	64	-	-	-	-	-	-	-	-	-	
160	-	-	-	-	-	102	60	-	-	-	-	-	-	-	
200	-	-	-	-	-	-	140	98	56	-	-	-	-	-	
240	-	-	-	-	-	-	-	178	136	94	-	-	-	-	
280	-	-	-	-	-	-	-	-	216	174	118	-	-	-	
320	-	-	-	-	-	-	-	-	-	254	198	142	86	-	
360	-	-	-	-	-	-	-	-	-	-	278	222	166	96	
400	-	-	-	-	-	-	-	-	-	-	-	358	302	246	176
440	-	-	-	-	-	-	-	-	-	-	-	-	382	326	256
480	-	-	-	-	-	-	-	-	-	-	-	-	-	406	336

LGC6 Max. Stroke (mm)	Numbers of rollers in one roller cage													
	R8	R9	R11	R13	R16	R19	R22	R25	R28	R32	R36	R40	R45	
100	62	44	-	-	-	-	-	-	-	-	-	-	-	
150	-	-	108	72	-	-	-	-	-	-	-	-	-	
200	-	-	-	-	118	64	-	-	-	-	-	-	-	
250	-	-	-	-	-	164	110	56	-	-	-	-	-	
300	-	-	-	-	-	-	210	156	102	-	-	-	-	
350	-	-	-	-	-	-	-	256	202	130	-	-	-	
400	-	-	-	-	-	-	-	-	302	230	158	-	-	
450	-	-	-	-	-	-	-	-	-	330	258	186	-	
500	-	-	-	-	-	-	-	-	-	-	358	286	196	
550	-	-	-	-	-	-	-	-	-	-	-	458	386	296
600	-	-	-	-	-	-	-	-	-	-	-	-	486	396

## Accuracy

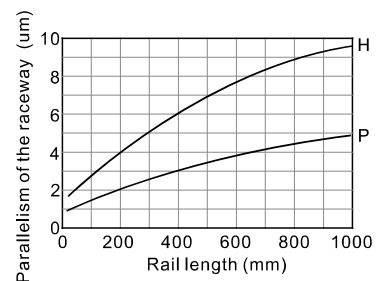
### Accuracy



Unit : mm

Item	High(H)	Precision(P)
Tolerance of height H	±0.02	±0.01
Variation of height H	0.01	0.005
Tolerance of width W	±0.02	±0.01

### Rail Length and Parallelism of The Raceway

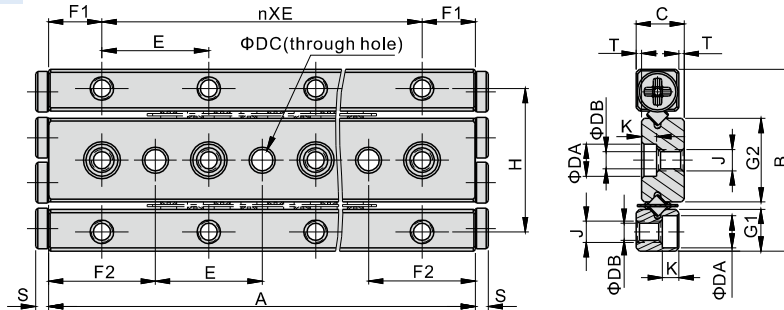


# Crossed Roller Way

## LGC Series

### Specification Table

#### Dimensions of Three-row Type



Model/Item	A	B	C	φDA	φDB	φDC	nXE	F1	F2	G1	G2	H	J	K	S	T
LGC1A20	20	17	4.5	3.0	1.55	2 <sup>+0.03</sup> / <sub>+0.005</sub>	1X10	5	10	3.9	7.8	13.4	M2X0.4	1.5	1.2	0.5
LGC1A30	30						2X10									
LGC1A40	40						3X10									
LGC1A50	50						4X10									
LGC1A60	60						5X10									
LGC1A70	70						6X10									
LGC1A80	80						7X10									
LGC2A30	30						24									
LGC2A45	45	2X15														
LGC2A60	60	3X15														
LGC2A75	75	4X15														
LGC2A90	90	5X15														
LGC2A105	105	6X15														
LGC2A120	120	7X15														
LGC2A135	135	8X15														
LGC2A150	150	9X15														
LGC2A165	165	10X15														
LGC2A180	180	11X15														
LGC3A50	50	36	8.5	6.0	3.4	4 <sup>+0.03</sup> / <sub>+0.005</sub>		1X25	12.5	25	8.3	16.6	29	M4X0.7	3.1	2
LGC3A75	75						2X25									
LGC3A100	100						3X25									
LGC3A125	125						4X25									
LGC3A150	150						5X25									
LGC3A175	175						6X25									
LGC3A200	200						7X25									
LGC3A225	225						8X25									
LGC3A250	250						9X25									
LGC3A275	275						10X25									
LGC3A300	300						11X25									
LGC4A80	80						44	11.5								
LGC4A120	120	2X40														
LGC4A160	160	3X40														
LGC4A200	200	4X40														
LGC4A240	240	5X40														
LGC4A280	280	6X40														
LGC4A320	320	7X40														
LGC4A360	360	8X40														
LGC4A400	400	9X40														
LGC4A440	440	10X40														
LGC4A480	480	11X40														

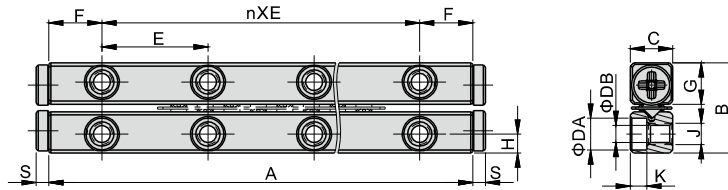
[Note] One set includes one main rail, two side rails, two roller cages, and the corresponding screws for mounting.

# Crossed Roller Way

## LGC Series

### Specification Table

#### Dimensions of Four-row Type



Model\Item	A	B	C	φDA	φDB	nXE	F	G	H	J	K	S
LGC1B20	20	8.5	4	3.0	1.55	1X10	5	3.9	1.8	M2X0.4	1.5	1.2
LGC1B30	30					2X10						
LGC1B40	40					3X10						
LGC1B50	50					4X10						
LGC1B60	60					5X10						
LGC1B70	70					6X10						
LGC1B80	80					7X10						
LGC2B30	30	12	6	4.4	2.5	1X15	7.5	5.5	2.5	M3X0.5	2.1	1.5
LGC2B45	45					2X15						
LGC2B60	60					3X15						
LGC2B75	75					4X15						
LGC2B90	90					5X15						
LGC2B105	105					6X15						
LGC2B120	120					7X15						
LGC2B135	135					8X15						
LGC2B150	150					9X15						
LGC2B165	165					10X15						
LGC2B180	180					11X15						
LGC3B50	50	18	8	6.0	3.4	1X25	12.5	8.3	3.5	M4X0.7	3.1	2
LGC3B75	75					2X25						
LGC3B100	100					3X25						
LGC3B125	125					4X25						
LGC3B150	150					5X25						
LGC3B175	175					6X25						
LGC3B200	200					7X25						
LGC3B225	225					8X25						
LGC3B250	250					9X25						
LGC3B275	275					10X25						
LGC3B300	300					11X25						
LGC4B80	80	22	11	7.5	4.3	1X40	20	10	4.5	M5X0.8	4.1	2
LGC4B120	120					2X40						
LGC4B160	160					3X40						
LGC4B200	200					4X40						
LGC4B240	240					5X40						
LGC4B280	280					6X40						
LGC4B320	320					7X40						
LGC4B360	360					8X40						
LGC4B400	400					9X40						
LGC4B440	440					10X40						
LGC4B480	480					11X40						
LGC6B100	100	31	15	9	5.3	1X50	25	14.7	6	M6X1.0	5.2	3
LGC6B150	150					2X50						
LGC6B200	200					3X50						
LGC6B250	250					4X50						
LGC6B300	300					5X50						
LGC6B350	350					6X50						
LGC6B400	400					7X50						
LGC6B450	450					8X50						
LGC6B500	500					9X50						
LGC6B550	550					10X50						
LGC6B600	600					11X50						

[Note] One set includes four side rails, two roller cages, and the corresponding screws for mounting.

# Crossed Roller Way

## LGC Series

### Roller Cage Order Information

#### LGC 3 R25

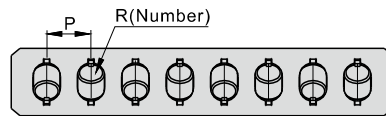
① ② ③



① Model Code	LGC : Crossed Roller Way
② Roller Diameter	1 : $\Phi$ 1.5mm 2 : $\Phi$ 2.0mm 3 : $\Phi$ 3.0mm 4 : $\Phi$ 4.0mm 6 : $\Phi$ 6.0mm
③ The number of rollers	R25:25 rollers .... [Reference to spec. table for detail]

### Specification Table

#### Informations of Roller Cage



Model\Item	P	R	Basic Dynamic Load Rating (C <sub>d</sub> )	Basic Static Load Rating (C <sub>s</sub> )	Allowable Load (F <sub>0</sub> )	Model\Item	P	R	Basic Dynamic Load Rating (C <sub>d</sub> )	Basic Static Load Rating (C <sub>s</sub> )	Allowable Load (F <sub>0</sub> )
LGC1R6		6	125N per roller	120N per roller	39N per roller	LGC4R8		8	1230N per roller	1170N per roller	390N per roller
LGC1R7		7				LGC4R9		9			
LGC1R8		8				LGC4R10		10			
LGC1R9		9				LGC4R11		11			
LGC1R10	2.5	10				LGC4R13		13			
LGC1R11		11				LGC4R16		16			
LGC1R13		13				LGC4R19		19			
LGC1R16		16				LGC4R22	7	22			
LGC1R19		19				LGC4R25		25			
LGC2R6		6				292N per roller	290N per roller	97N per roller			
LGC2R7		7	LGC4R32		32						
LGC2R8		8	LGC4R36		36						
LGC2R9		9	LGC4R40		40						
LGC2R10		10	LGC4R45		45						
LGC2R11		11	LGC6R8		8						
LGC2R13		13	LGC6R9		9						
LGC2R16	4	16	LGC6R11		11						
LGC2R19		19	LGC6R13		13						
LGC2R22		22	LGC6R16		16						
LGC2R25		25	LGC6R19		19						
LGC2R28		28	LGC6R22	9	22						
LGC2R32		32	LGC6R25		25						
LGC2R36		36	LGC6R28		28						
LGC3R7		7	640N per roller	610N per roller	203N per roller	LGC6R32		32			
LGC3R8		8				LGC6R36		36			
LGC3R9		9				LGC6R40		40			
LGC3R10		10				LGC6R45		45			
LGC3R11		11									
LGC3R13		13									
LGC3R16		16									
LGC3R19	5	19									
LGC3R22		22									
LGC3R25		25									
LGC3R28		28									
LGC3R32		32									
LGC3R36		36									
LGC3R40		40									