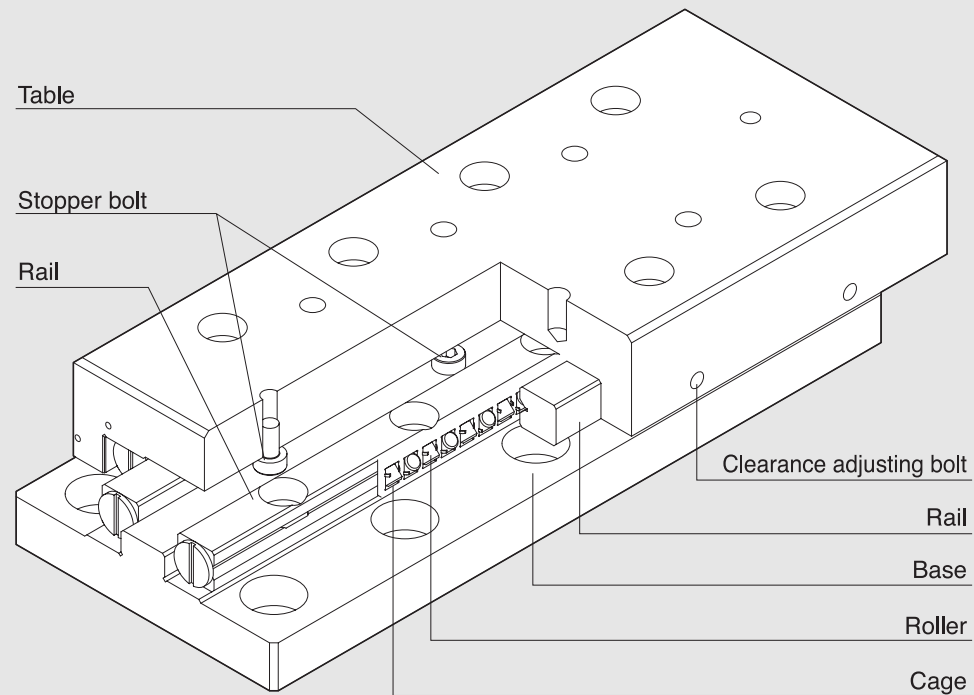


CROSS ROLLER TABLE



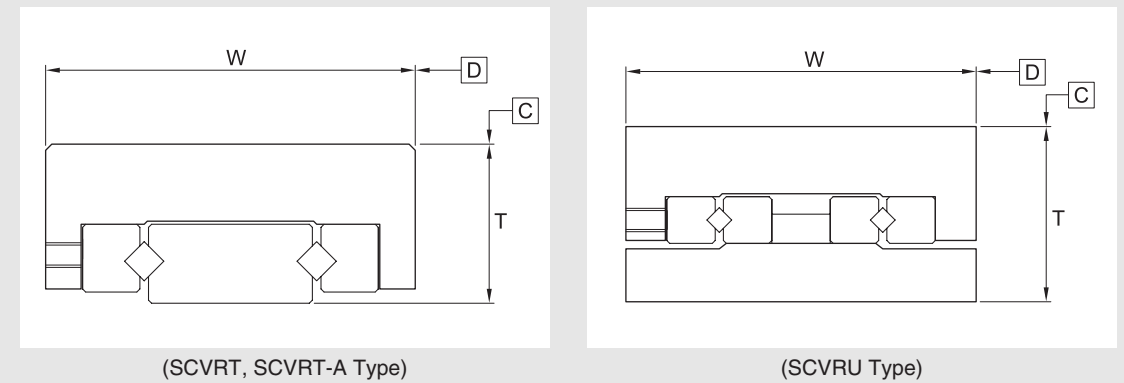
The SBC cross roller table is a precision table assembled with SBC cross guides (SCVR type). Since there is minimal elastic deformation the table achieves high rigidity and stable linear motion. The tables can be used for OA equipment, Automation-assembly machines and Optical measurement devices.

[Cross Roller Table Model Type]

- SCVRT Type : Miniature Type (Base Tapped-hole)
- SCVRT-A Type : Miniature Type (Base Mounting-hole)
- SCVRU Type

Accuracy

The running accuracy of a cross roller table is measured with dial indicators as shown in Figure below. The tolerance of table height C and D are shown in the dimension tables.



Precautions

[Cross Roller Table Model Type]

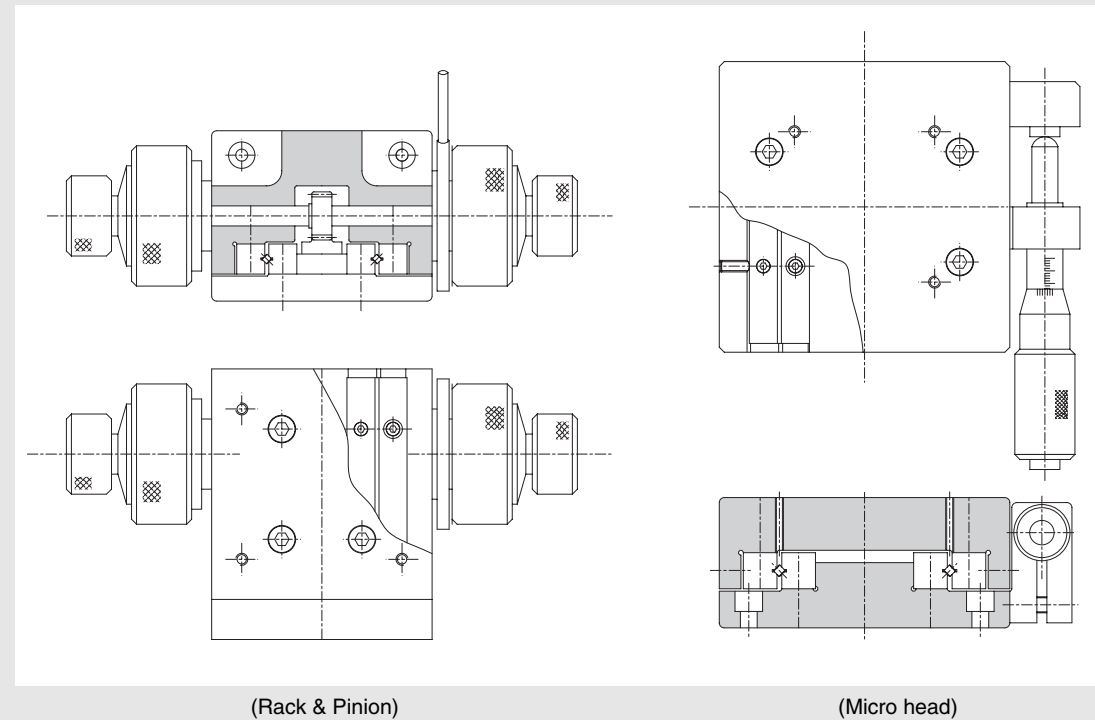
When machining additional features into the Table and the Base of the Cross Roller Table, please observe the precautions below.

- 1 Prevent cutting chips and foreign substance from entering the Cross Roller Guide.
- 2 Design the mounting holes as blind holes, not penetrating (thru) holes. For additional machining, please contact SBC Linear.
- 4 The preload of the Cross Roller Table is fixed to the proper level. Please do not adjust the preload adjustment bolts.

[Cage Creep]

When the Roller Cage moves accurately but may be drift (cage creep) due to vibrations, inertia or impact. Please mount an external stop for the table to control the travel.

[Example]



(Rack & Pinion)

(Micro head)

Ordering Example

[SCVRT Miniature Type (Base Tapped-hole)]

SCVRT 2035 - T - R
[1] [2] [3]

- [1] Model No. : SCVRT(Base Tapped-hole)
- [2] Additional processing : No Symbol (Standard), T (Additional processing)
- [3] Surface Treatment : No symbol (Standard), R (Surface Treatment)

[SCVRT-A Miniature Type (Base Mounting-hole)]

SCVRT 2035A - T - R
[1] [2] [3]

- [1] Model No. : SCVRT-A (Base Mounting-hole)
- [2] Additional processing : No Symbol (Standard), T (Additional processing)
- [3] Surface Treatment : No symbol (Standard), R (Surface Treatment)

[SCVRU]

SCVRU 2035 - T - R
[1] [2] [3]

- [1] Model No. : SCVRU
- [2] Additional processing : No Symbol (Standard), T (Additional processing)
- [3] Surface Treatment : No symbol (Standard), R (Surface Treatment)

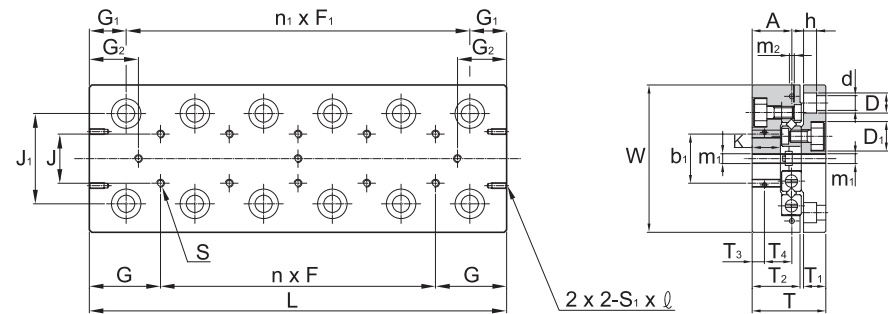
※ When ordering surface treatment, please include the symbol of the surface treatment.

- ① Standard , Black Chrome coating (Raydent treatment) , Fluorocarbon resin coating, Hard Chrome plating
- ② Contact SBC for special surface treatments.

Cross Roller Guide

Cross Roller Table SCVRU Type

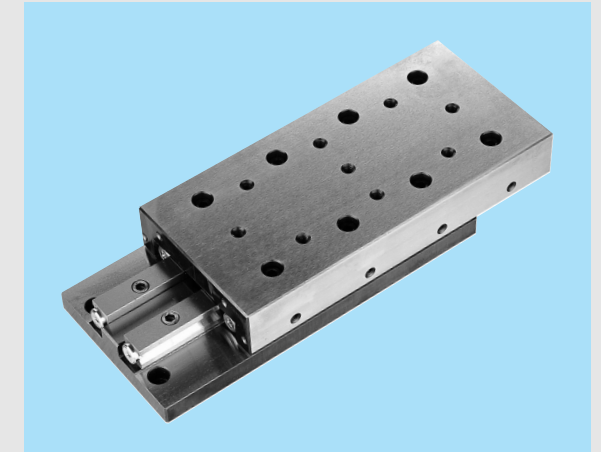
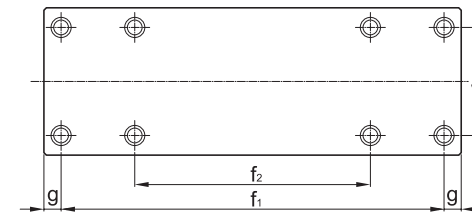
SCVRU1 Type



Model No.	Max Stroke	Major Dimensions				Top Dimensions												
		W -0.2 -0.4	T ±0.1	L	Mass [kg]	J	nxF	G	S	J1	n1xF1	G1	G2	b1	T3	S1xℓ	T2	T1
SCVRU 1025	12			25	0.08		-					2.5						
SCVRU 1035	18			35	0.11		1x10					4.5						
SCVRU 1045	25			45	0.15		2x10					6						
SCVRU 1055	32	30	17	55	0.18	10	3x10	12.5	M2	18.4	3x10	7.5	7.5	12	2.5	M2x4	11	5.5
SCVRU 1065	40			65	0.21		4x10				4x10		8.5					
SCVRU 1075	45			75	0.24		5x10				5x10		11					
SCVRU 1085	50			85	0.27		6x10				6x10		13.5					

Cross Roller Guide

Cross Roller Table SCVRU Type

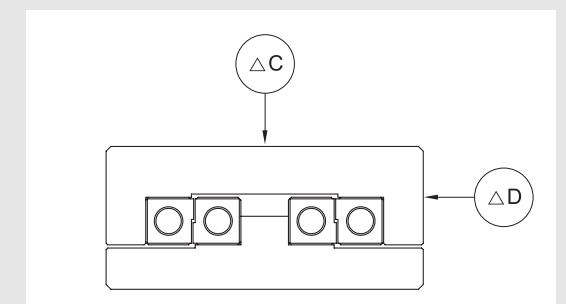
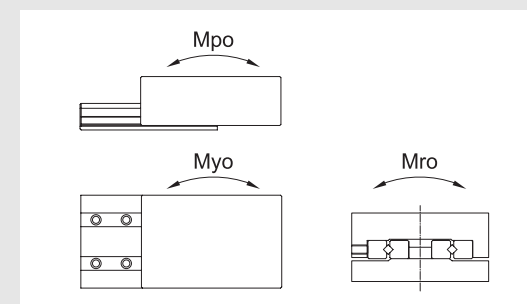


(Unit : mm)

End Dimensions						Base Dimensions mounting-hole position				No. of Rollers	Basic load rating [kN]		Static permissible moment [N.m]			Accuracy [μm]			
K	d	D	h	D1	m1	A	m2	J2	f1	f2	g	Z	C	Co	Mpo	Myo	Mro	ΔC	ΔD
									18	-		5	0.28	0.27	0.75	0.46	1.24		
									28	-		7	0.38	0.41	1.23	0.85	1.85		4
									38	-		10	0.56	0.69	2.18	1.67	3.09		
6.5	2.55	4.1	2.5	4.1	M2	9	M2	22	48	28	3.5	12	0.65	0.82	2.97	2.35	3.71	2	
									58	38		14	0.73	0.96	3.87	3.17	4.33		5
									68	48		18	0.87	1.27	6.05	5.16	5.74		
									78	58		20	0.94	1.37	7.32	6.34	6.18		

* Static permissible moment

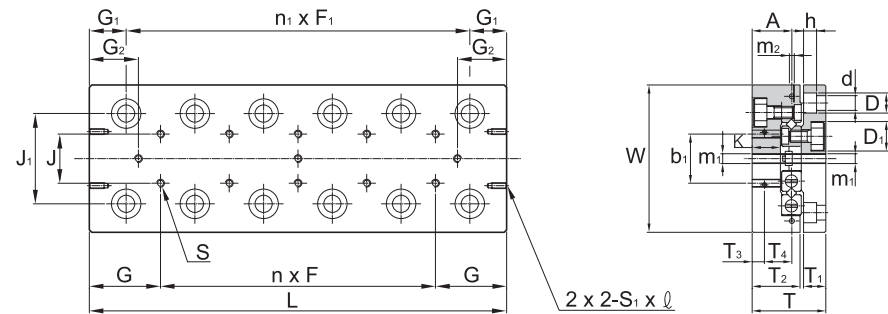
* Accuracy



Cross Roller Guide

Cross Roller Table SCVRU Type

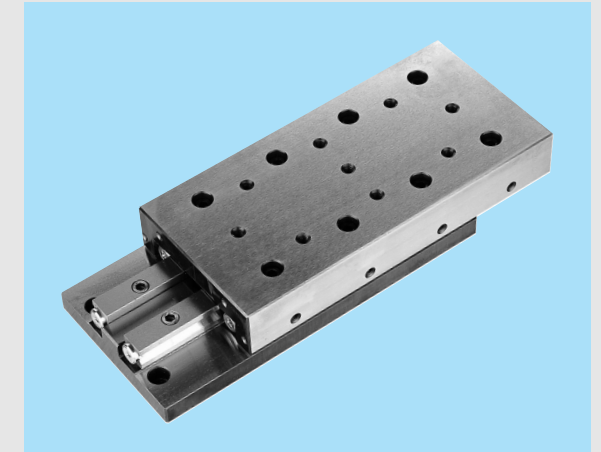
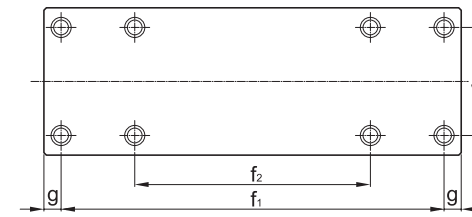
SCVRU2 Type



Model No.	Max Stroke	Major Dimensions				Top Dimensions												
		W -0.2 -0.4	T ±0.1	L	Mass [kg]	J	nxF	G	S	J1	n1xF1	G1	G2	b1	T3	S1xℓ	T2	T1
SCVRU 2035	18			35	0.2		-				1x15		3					
SCVRU 2050	30			50	0.26		1x15				2x15		4.5					
SCVRU 2065	40			65	0.34		2x15				3x15		7					
SCVRU 2080	50	40	21	80	0.42	15	3x15	17.5	M3	25	4x15	10	9.5	16	3.4	M2x4	14	6.5
SCVRU 2095	60			95	0.5		4x15				5x15		12					
SCVRU 2110	70			110	0.58		5x15				6x15		14.5					
SCVRU 2125	80			125	0.66		6x15				7x15		17					

Cross Roller Guide

Cross Roller Table SCVRU Type

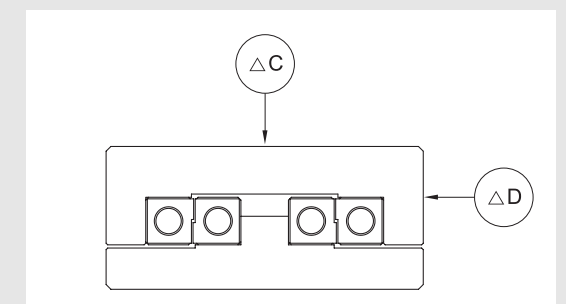
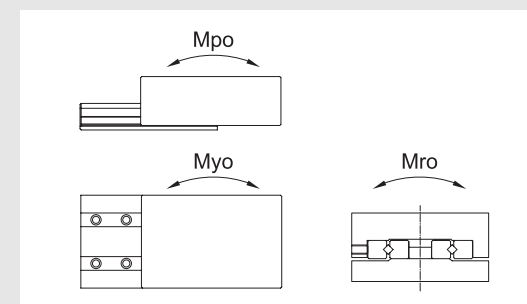


(Unit : mm)

End Dimensions						Base Dimensions mounting-hole position				No. of Rollers	Basic load rating [kN]		Static permissible moment [N.m]			Accuracy [μm]				
K	d	D	h	D1	m1	A	m2	J2	f1	f2	g	Z	C	Co	Mpo	Myo	Mro	ΔC	ΔD	
									25	-		5	0.51	0.51	2.29	1.4	3.06			
									40	-		7	0.69	0.76	3.76	2.6	4.59		4	
									55	-		9	0.85	0.98	5.62	4.17	5.89			
7.5	3.5	6	3.5	6	M3	11	M3	30	70	40		5	12	1.18	1.57	9.1	7.22	9.42	2	5
									85	55			14	1.27	1.76	11.8	9.7	10.5		
									100	70			17	1.47	2.06	16.7	14.1	12.3		
									115	85			19	1.57	2.25	20.4	17.5	13.5	3	6

* Static permissible moment

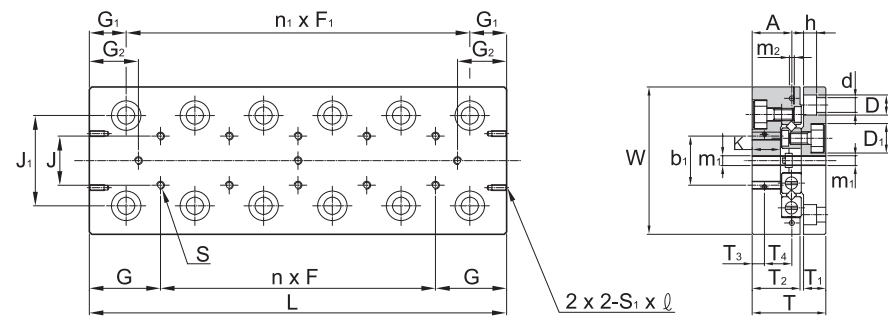
* Accuracy



Cross Roller Guide

Cross Roller Table SCVRU Type

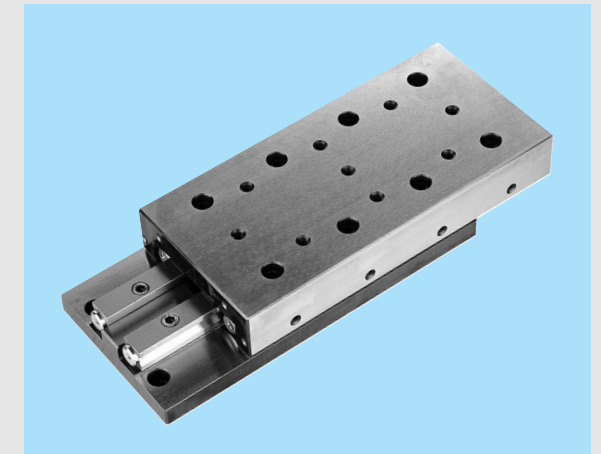
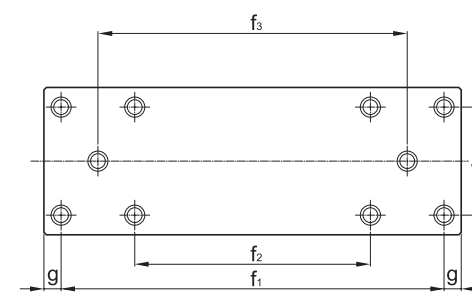
SCVRU3 Type



Model No.	Max Stroke	Major Dimensions		Top Dimensions															
		W ±0.1	T ±0.1	L	Mass [kg]	J	nxF	G	S	J1	n1xF1	G1	G2	b1	T3	S1xℓ	T2	T1	
SCVRU 3055	30			55	0.57		-				1x25		5.5						
SCVRU 3080	45			80	0.80		1x25				2x25		10.5						
SCVRU 3105	60			105	1.03		2x25				3x25		15.5						
SCVRU 3130	75	60	28	130	1.26	25	3x25	27.5	M4	39	4x25	15	20.5	40	5.5	M3x6	18.5	9	
SCVRU 3155	90			155	1.49		4x25				5x25		25.5						
SCVRU 3180	105			180	1.72		5x25				6x25		30.5						
SCVRU 3205	130			205	1.95		6x25				7x25		30.5						

Cross Roller Guide

Cross Roller Table SCVRU Type

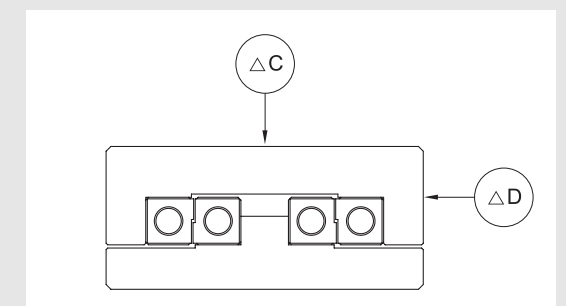
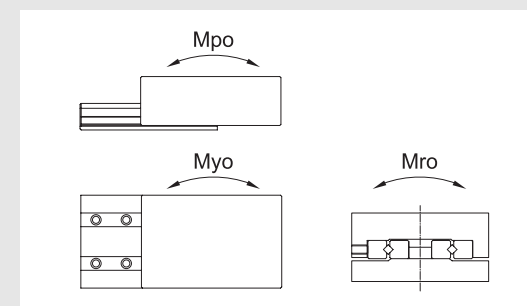


(Unit : mm)

End Dimensions						Base Dimensions mounting-hole position				No. of Rollers	Basic load rating [kN]			Static permissible moment [N.m]			Accuracy [μm]			
K	d	D	h	D1	m1	A	m2	J2	f1		f2	f3	g	Z	C	Co	Mpo	Myo	Mro	ΔC
									3	-	-		6	C	1.67	9.85	6.54	15.5		
									60	-	-		10	1.47	2.75	22.2	17	25.6	2	5
									85	-	-		13	2.06	3.33	34.8	28.1	31.1		
10	4.5	7.5	5	7.5	M4	14.5	M4	40	110	-	-	10	17	2.35	4.41	55.8	47.1	41.2		6
									135	-	85		20	2.94	5.49	74.7	64.6	51.2	3	
									160	-	110		24	3.53	6.57	104	92.3	61.3		
									185	85	135		26	4.02	7.16	120	107	66.8		7

* Static permissible moment

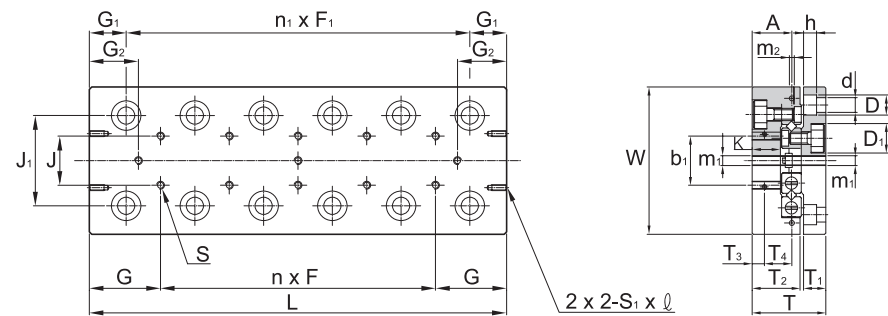
* Accuracy



Cross Roller Guide

Cross Roller Table SCVRU Type

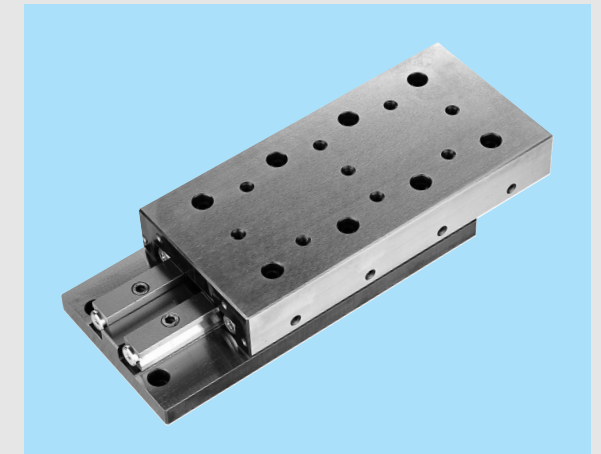
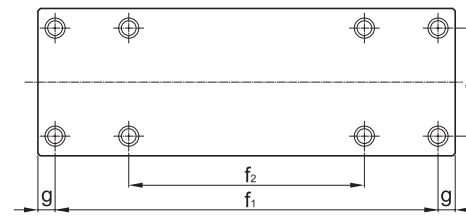
SCVRU4 Type



Model No.	Max Stroke	Major Dimensions				Top Dimensions															
		W ± 0.1	T ± 0.1	L	Mass [kg]	J	$n \times F$	G	S	J1	$n_1 \times F_1$	G1	G2	b1	b2	T3	T4	$S_1 \times \varnothing$	T2	T1	
SCVRU 4085	50	80	35	85	1.5	40	-	42.5	M5	53	1x40	22.5	10.5	55	6.5	M3x6	24	10.5			
SCVRU 4125	75			125	2.3		1x40				18										
SCVRU 4165	105			165	3.1		2x40				23										
SCVRU 4205	135			205	3.8		3x40				30.5										
SCVRU 4245	155			245	4.6		4x40				38										
SCVRU 4285	185			285	5.3		5x40				43										

Cross Roller Guide

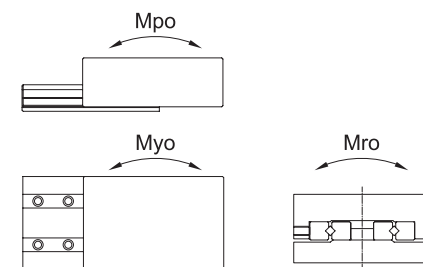
Cross Roller Table SCVRU Type



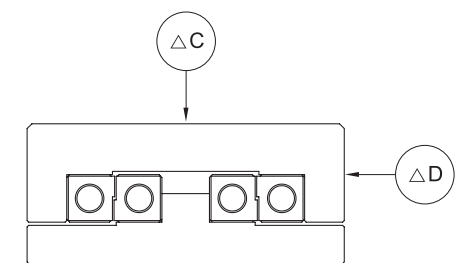
(Unit : mm)

End Dimensions						Base Dimensions mounting-hole position				No. of Rollers	Basic load rating [kN]		Static permissible moment [N.m]			Accuracy [μm]				
K	d	D	h	D1	m1	A	m2	J2	f1		f2	g	C	Co	Mpo	Myo	Mro	ΔC	ΔD	
12.5	5.5	9.5	6	9.5	M4	18.5	M4	60	65	-	10	22.5	7	3.53	4.8	48.7	33.7	64	2	5
									80	-	11		5.2	8.04	101	79.1	107	3	7	
									120	-	14		6.77	11.3	153	125	150			
									160	80	18		8.14	14.5	239	204	193			
									200	120	22		9.42	17.7	344	302	235			
									240	160	26		10.7	20.9	468	418	278			

* Static permissible moment



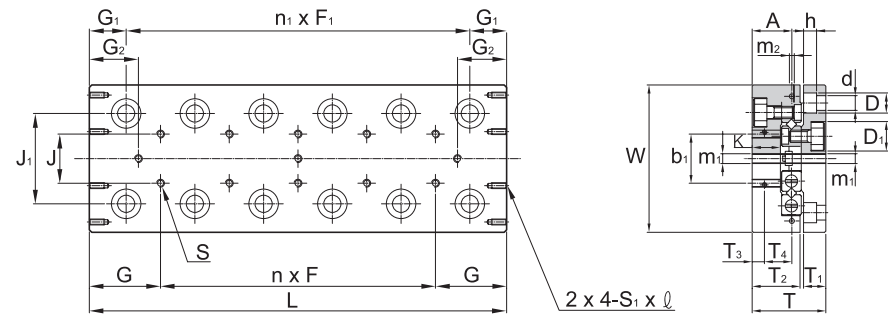
* Accuracy



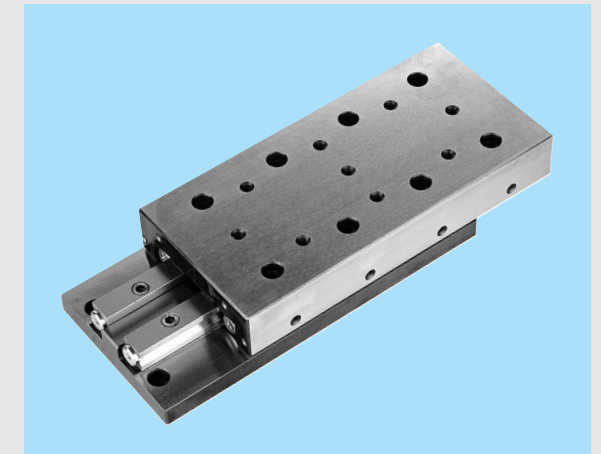
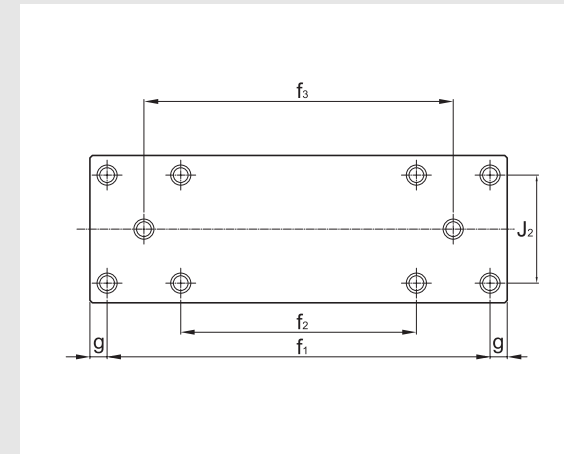
Cross Roller Guide

Cross Roller Table SCVRU Type

SCVRU6 Type



Model No.	Max Stroke	Major Dimensions				Top Dimensions															
		W ± 0.1	T ± 0.1	L	Mass [kg]	J	$n \times F$	G	S	J1	$n_1 \times F_1$	G1	G2	b1	b2	T3	T4	$S_1 \times \varnothing$	T2	T1	
SCVRU 6110	60			11	3.2		-				1x50		16								
SCVRU 6160	95			160	4.6		1x50				2x50		23.5								
SCVRU 6210	130			210	6		2x50				3x50		31								
SCVRU 6260	165	100	45	260	7.4	50	3x50	55	M6	63	4x50	30	38.5	60	92	8	15	M4x8	31	13	
SCVRU 6310	200			310	8.7		4x50				5x50		46								
SCVRU 6360	235			360	10.1		5x50				6x50		53.5								
SCVRU 6410	265			410	11.5		6x50				7x50		63.5								



(Unit : mm)

End Dimensions										Base Dimensions mounting-hole position					No. of Rollers	Basic load rating [kN]			Static permissible moment [N.m]			Accuracy [μ m]	
K	d	D	h	D1	m1	A	m2	J2	f1	f2	f3	g	Z	C		Co	Mpo	Myo	Mro	ΔC	ΔD		
									90	-	-		9	7.45	10.6	121	80.5	158	3	6			
									140	-	-		9	9.31	14.1	231	171	211					
									190	-	90		13	12.5	21.1	428	345	317					
15	7	11	7	11	M5	23.5	M5	60	240	-	140		16	15.6	28.2	616	516	423	4	8			
									290	-	190		19	17.1	31.8	838	720	476					
									340	140	240		22	19.8	38.8	1090	958	582					
									390	190	290		26	22.5	45.9	1480	1320	688					

* Static permissible moment

* Accuracy

