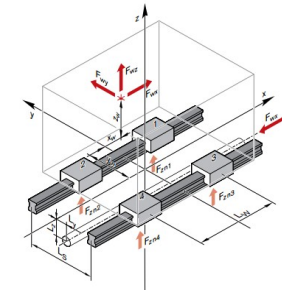


Auslegung Linearführung X-Achse

Ls	476	[mm]	Schienenabstand	238
Lw	85	[mm]	Wagenabstand	130
Ly	0	[mm]	y-Koordinate des Antriebselementes	
Lz	11	[mm]	z-Koordinate des Antriebselementes	
Fs	3200	[N]	statische Tragfähigkeit Gehäuselager WJ200UM-01-20	
Fa	1410	[N]	statische Axialkraft Trapezgewindemutter WSRM-2220TR10x2	

Koordinatensystem nach Skizze:
(KOS nicht wie CNC Fräse)



Quelle: Bosch Rexroth - Handbuch Lineartechnik

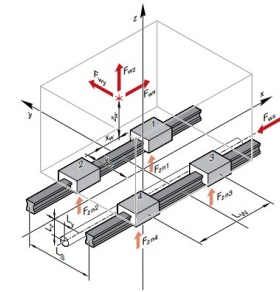
Last	Position			Kraft (statisch)			Masse	Beschleunigung			Kraft (gesamt)		
	x [mm]	y [mm]	z [mm]	x [N]	y [N]	z [N]		x [m/s²]	y [m/s²]	z [m/s²]	x [N]	y [N]	z [N]
B1	0	205	173	1410							1410	0	0
B2	0	205	173		1410						0	1410	0
B3	0	205	173			1410					0	0	1410
B4	0	205	173	1410		1410					1410	0	1410
B5	0	205	173		1410	1410					0	1410	1410
B6	0	205	173	1410	1410	-1410					1410	1410	-1410
B7	0	205	173								0	0	0
B8	0	205	173								0	0	0
B9	540	0	0			800					0	0	800

Ergebnis	Lager 1			Lager 2			Lager 3			Lager 4			Lager 5		
	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]
B1		-1700	-1344		1700	1344		-1700	-1344		1700	1344		-1410	
B2		353	-256		353	-256		353	256		353	256		0	
B3		0	656		0	656		0	49		0	49		0	
B4		-1700	-688		1700	2000		-1700	-1295		1700	1393		-1410	
B5		353	400		353	400		353	305		353	305		0	
B6		-1348	-2256		2053	431		-1348	-1136		2053	1551		-1410	
B7		0	0		0	0		0	0		0	0		0	
B8		0	0		0	0		0	0		0	0		0	
B9		0	2741		0	-2341		0	2741		0	-2341		0	
max	0	1700	2741	0	2053	2341	0	1700	2741	0	2053	2341	1410	0	0

Auslegung Linearführung Y-Achse

Ls	82	[mm]	Schienenabstand	41
Lw	89	[mm]	Wagenabstand	134
Ly	0	[mm]	y-Koordinate des Antriebselementes	
Lz	-5	[mm]	z-Koordinate des Antriebselementes	
Fs	3200	[N]	statische Tragfähigkeit Gehäuselager WJ200UM-01-20	
Fa	1410	[N]	statische Axialkraft Trapezgewindemutter WSRM-2220TR10x2	

Koordinatensystem nach Skizze:
(KOS nicht wie CNC Fräse)



Quelle: Bosch Rexroth - Handbuch Lineartechnik

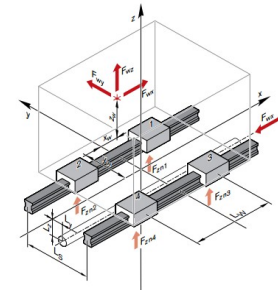
Last	Position			Kraft (statisch)			Masse	Beschleunigung			Kraft (gesamt)		
	x [mm]	y [mm]	z [mm]	x [N]	y [N]	z [N]		x [m/s²]	y [m/s²]	z [m/s²]	x [N]	y [N]	z [N]
B1	0	243	106	1410							1410	0	0
B2	0	243	106		1410						0	1410	0
B3	0	243	106			1410					0	0	1410
B4	0	243	106	1000		1000					1000	0	1000
B5	0	243	106		1000	1000					0	1000	1000
B6	0	243	106	1000	1000	-1000					1000	1000	-1000
B7	0	243	106								0	0	0
B8	0	243	106								0	0	0
B9	0	243	106								0	0	0

Ergebnis	Lager 1			Lager 2			Lager 3			Lager 4			Lager 5		
	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]
B1		-1925	-879		1925	879		-1925	-879		1925	879	-1410		
B2		353	-911		353	-911		353	911		353	911	0		
B3		0	2442		0	2442		0	-1737		0	-1737	0		
B4		-1365	1108		1365	2355		-1365	-1855		1365	-608	-1000		
B5		250	1085		250	1085		250	-585		250	-585	0		
B6		-1115	-3002		1615	-1754		-1115	1254		1615	2502	-1000		
B7		0	0		0	0		0	0		0	0	0		
B8		0	0		0	0		0	0		0	0	0		
B9		0	0		0	0		0	0		0	0	0		
max	0	1925	3002	0	1925	2442	0	1925	1855	0	1925	2502	1410	0	0

Auslegung Linearführung Z-Achse

Ls	82	[mm]	Schienenabstand	41
Lw	65	[mm]	Wagenabstand	110
Ly	0	[mm]	y-Koordinate des Antriebselementes	
Lz	-5	[mm]	z-Koordinate des Antriebselementes	
Fs	3200	[N]	statische Tragfähigkeit Gehäuselager WJ200UM-01-20	
Fa	1410	[N]	statische Axialkraft Trapezgewindemutter WSRM-2220TR10x2	

Koordinatensystem nach Skizze:
(KOS nicht wie CNC Fräse)



Quelle: Bosch Rexroth - Handbuch Lineartechnik

Last	Position			Kraft (statisch)			Masse	Beschleunigung			Kraft (gesamt)		
	x [mm]	y [mm]	z [mm]	x [N]	y [N]	z [N]		x [m/s²]	y [m/s²]	z [m/s²]	x [N]	y [N]	z [N]
B1	250	0	64	1410							1410	0	0
B2	250	0	64		1410						0	1410	0
B3	250	0	64			1410					0	0	1410
B4	250	0	64	1000		1000					1000	0	1000
B5	250	0	64		1000	1000					0	1000	1000
B6	250	0	64	1000	1000	-1000					1000	1000	-1000
B7	250	0	64								0	0	0
B8	250	0	64								0	0	0
B9	250	0	64								0	0	0

Ergebnis	Lager 1			Lager 2			Lager 3			Lager 4			Lager 5		
	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]	x [N]	y [N]	z [N]
B1		0	-748		0	748		0	-748		0	748	-1410		
B2		3064	-550		-2359	-550		3064	550		-2359	550	0		
B3		0	3064		0	-2359		0	3064		0	-2359	0		
B4		0	1642		0	-1142		0	1642		0	-1142	-1000		
B5		2173	1783		-1673	-2063		2173	2563		-1673	-1283	0		
B6		2173	-3094		-1673	1814		2173	-2314		-1673	2594	-1000		
B7		0	0		0	0		0	0		0	0	0		
B8		0	0		0	0		0	0		0	0	0		
B9		0	0		0	0		0	0		0	0	0		
max	0	3064	3094	0	2359	2359	0	3064	3064	0	2359	2594	1410	0	0