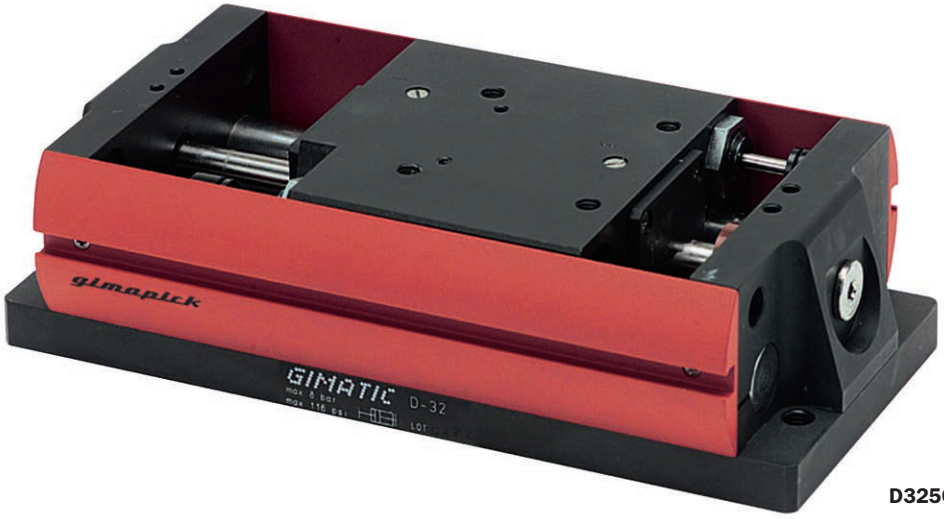
Pneumatic slides (series D32)

- *Modular with other elements of the Gimapick system.*
- *Bore 32mm.*
- *Stroke 50mm and 100mm.*
- *No backlash.*
- *High stiffness.*
- *Hydraulic shock-absorbers.*
- *Optional magnetic sensors.*

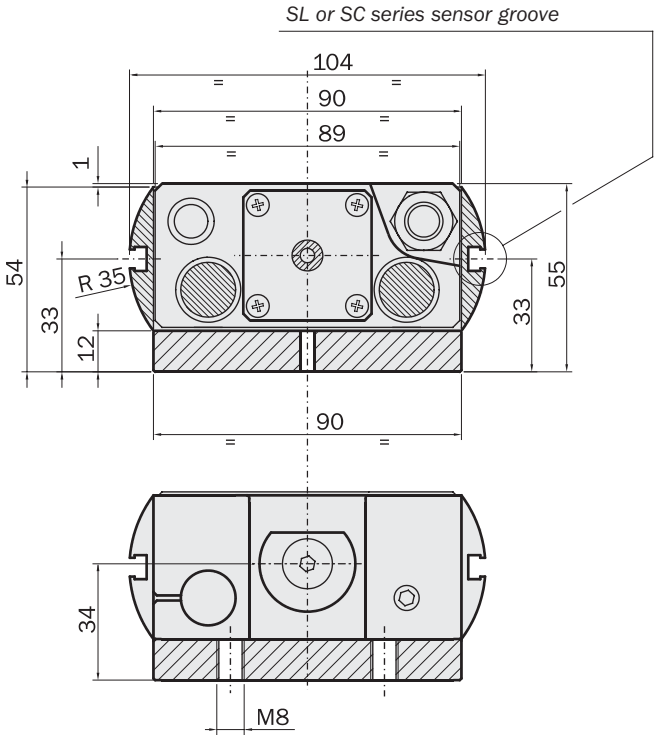


D3250

	D3250		D32100	
Medium	*Filtered, lubricated / non lubricated compressed air*			
Operating pressure range	2 ÷ 8 bar			
Operating temperature range	5° ÷ 60°C.			
Maximum stroke	0 ÷ 50 mm		50 ÷ 100 mm	
Maximum opening adjustment	25 mm			
Maximum closing adjustment	25 mm			
Thrust and return force	133 N (2 bar)	266 N (4 bar)	400 N (6 bar)	533 N (8 bar)
Repetition accuracy	0.02 mm			
Cycle air consumption	89 cm^3		163 cm^3	
Weight	2.3 kg		3.3 kg	

Dimensions (mm)

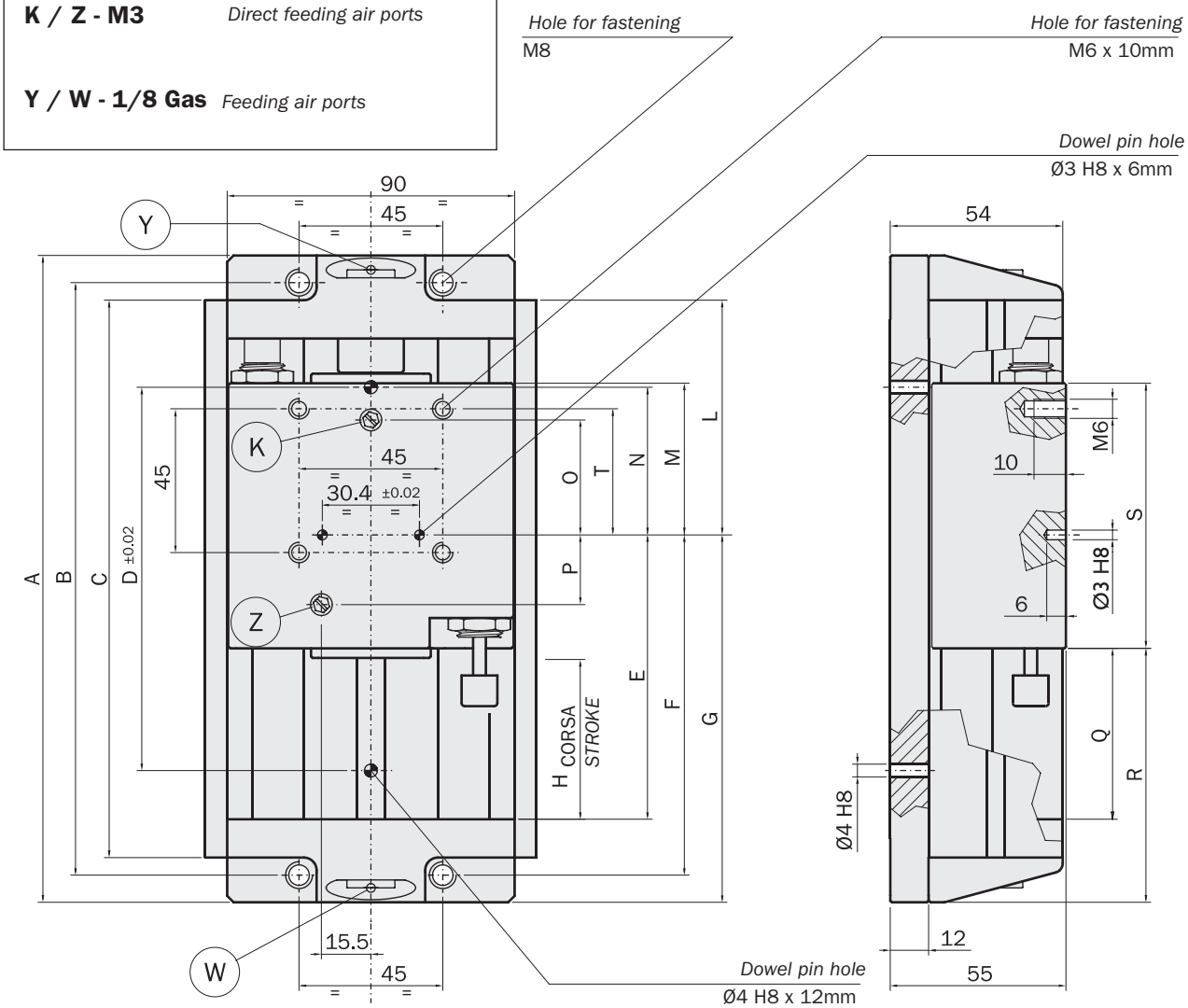
FIRST ANGLE PROJECTION



	D3250	D32100
A	202.5	302.5
B	185.5	285.5
C	174.5	274.5
D	120	120
E	89	189.5
F	106.5	207
G	115	215.5
H	50	100
L	73.5	73
M	47.5	47
N	46.25	45.75
O	36	34.5
P	21.8	20.5
Q	53.5	103.5
R	79.5	129.5
S	83	133
T	39.5	39.5

K / Z - M3 *Direct feeding air ports*

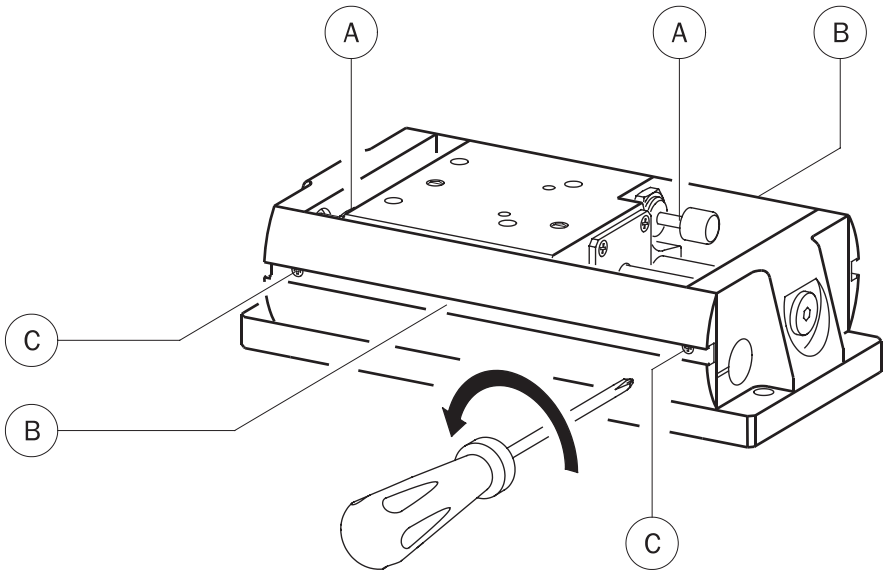
Y / W - 1/8 Gas *Feeding air ports*

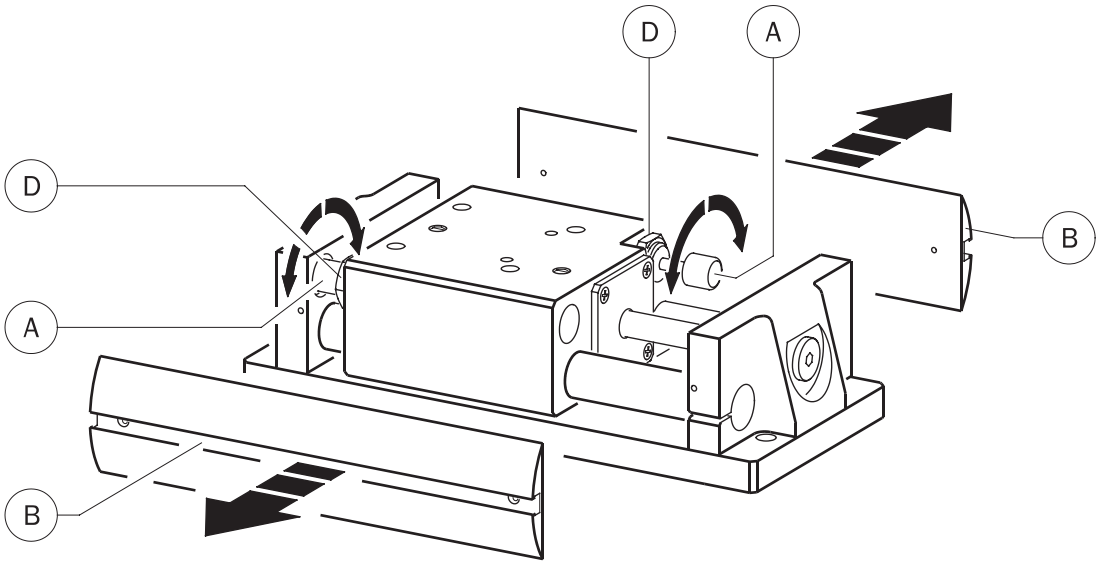


LINEAR ACTUATORS

Stroke adjustment

The slide stroke can be adjusted on both directions, by changing the position of the two hydraulic shock-absorbers (A), which also function as mechanical stops.
To access the adjustment area, remove the seal profiles (B) by unscrewing the screws (C).
To change the position of the shock-absorber you must loosen the nut (D), then adjust the shock-absorber (A) by a screwdriver and tighten the nut again.

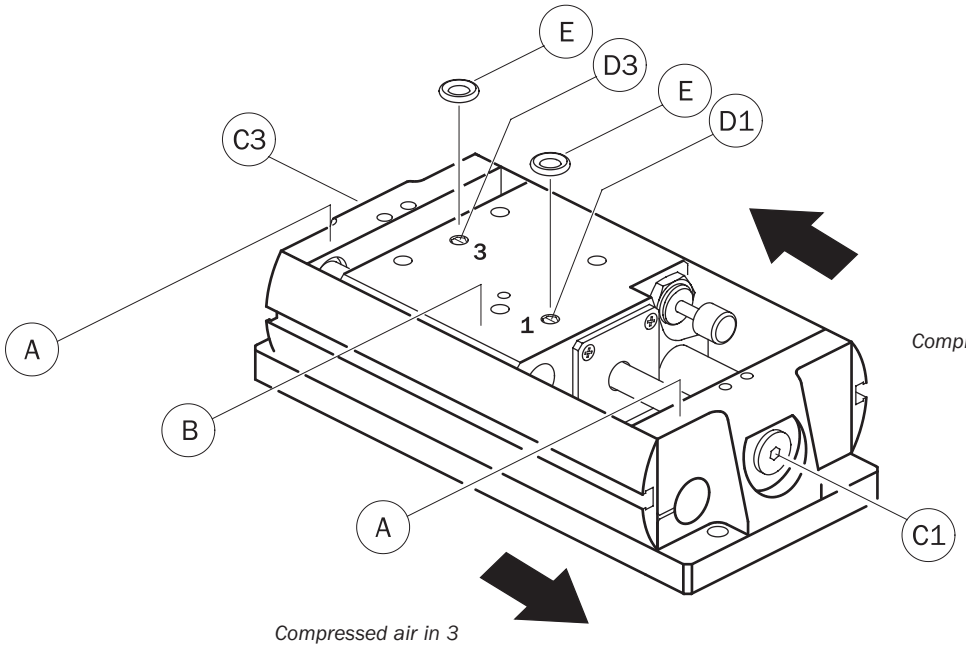




Compressed air feeding

The air feeding of the slide D32 can be achieved:

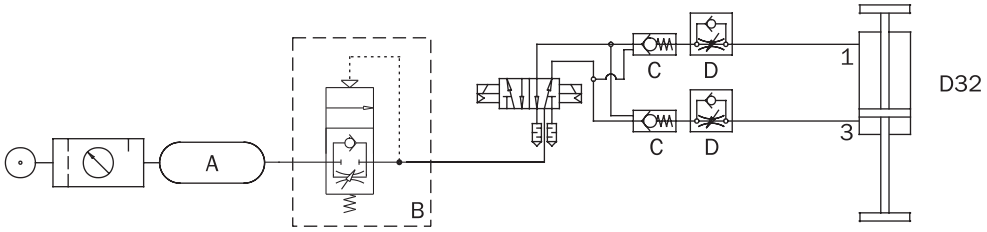
- *from the supports (A), after removing the plugs (C), using G1/8 fittings and hoses;*
- *from the housing (B), if a direct feeding from a Gimapick component is needed, after removing the M3 plugs (D), using the supplied o-ring gaskets (E) (GUAR-060). Fittings and hoses are not necessary in this case.*



Pneumatic circuit

Possible problems on a compressed air circuit:
1- Pressure variation.
2- Pressurizing.
3- Sudden pressure black-out.
4- Excessive speed.

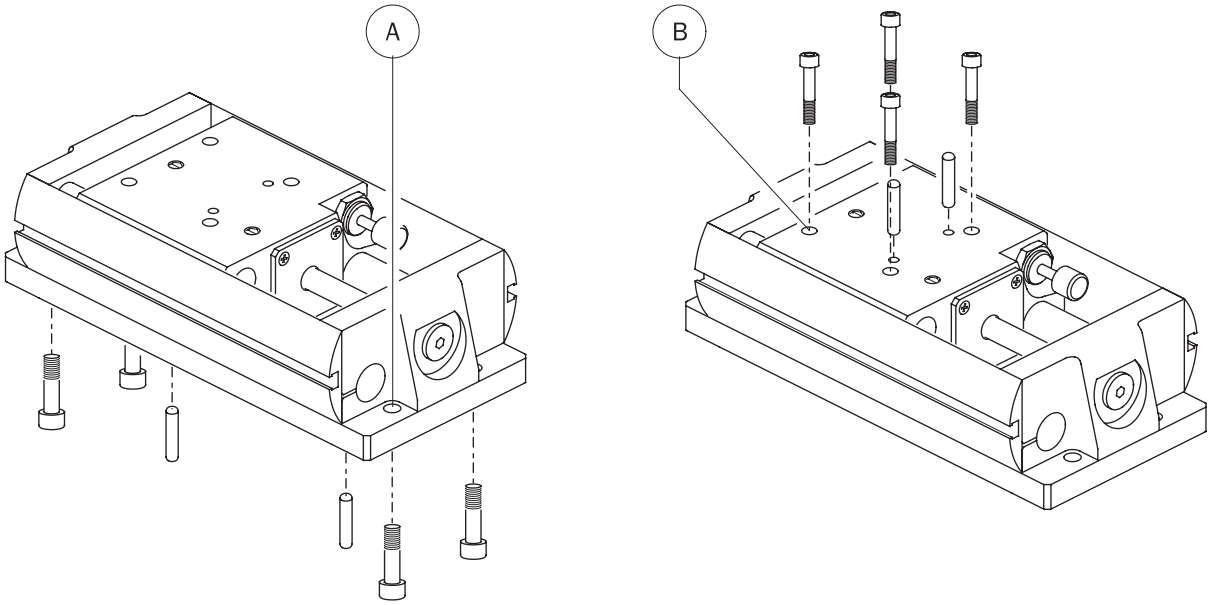
Possible solutions:
1- Compressed air storage (A).
2- Start-up valve (B).
3- Safety valve (C).
4- Flow controller (D).



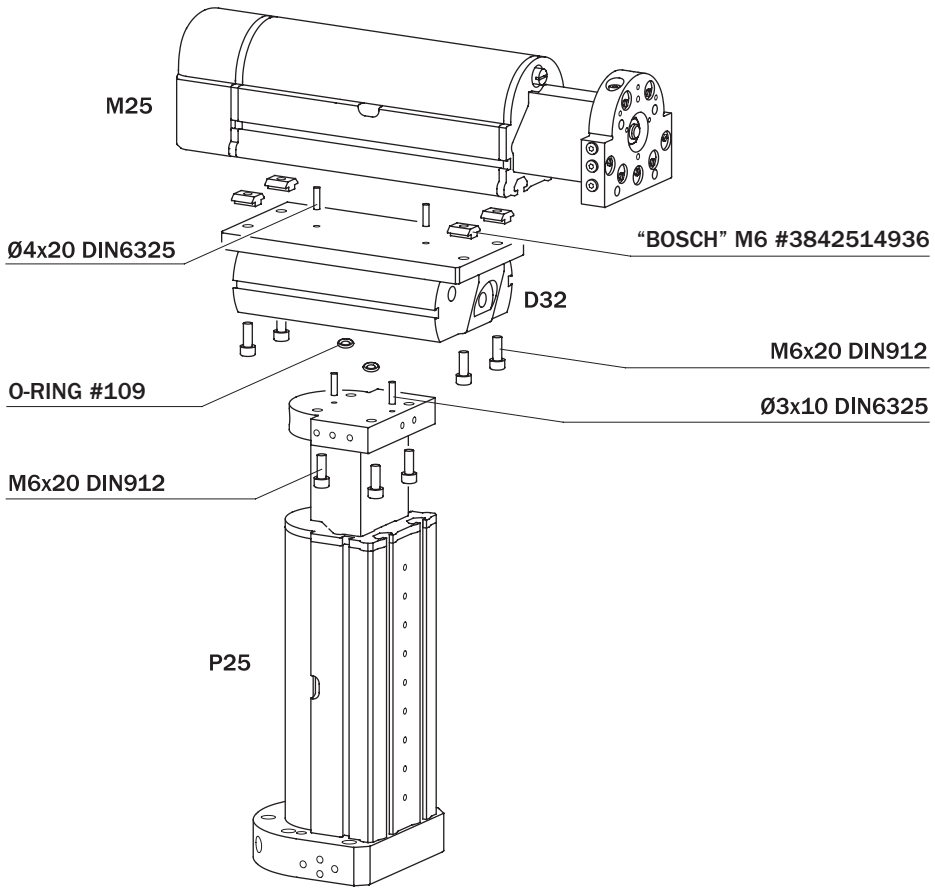
Fastening

The slide can be used:

- *with fixed base plate and moving housing, using the 4 threaded holes M8 (A) and the 2 dowel pin holes Ø4 H8.*
- *with fixed housing and moving base plate, using the 4 threaded holes M6 (B) and the 2 dowel pin holes Ø3 H8.*

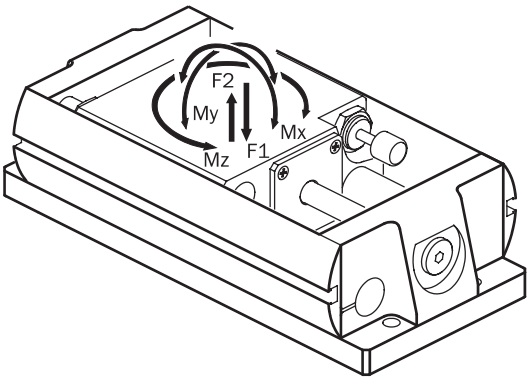


Application example



Safety loads

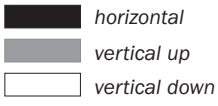
Check the table here below, excessive load can damage the linear slide. The value of load is valid with fixed plate and fixed body as well.
F1 is the max permitted compressive force.
F2 is the max permitted tractive force.
Mx, My and Mz are the max permitted moments.
m is the maximum trasportable mass.

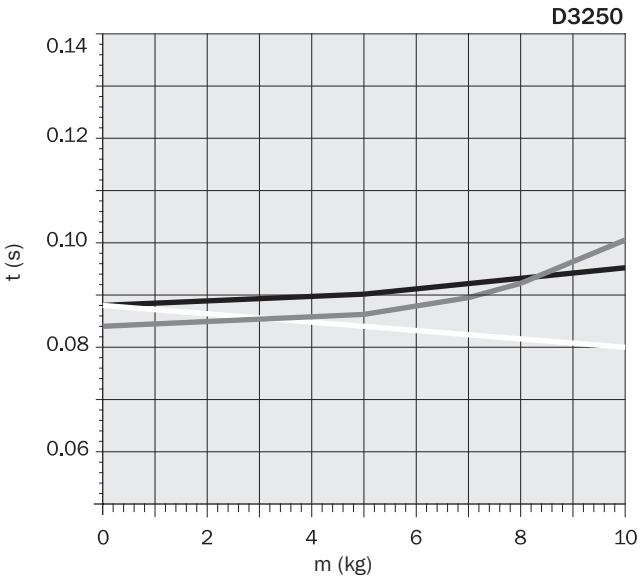


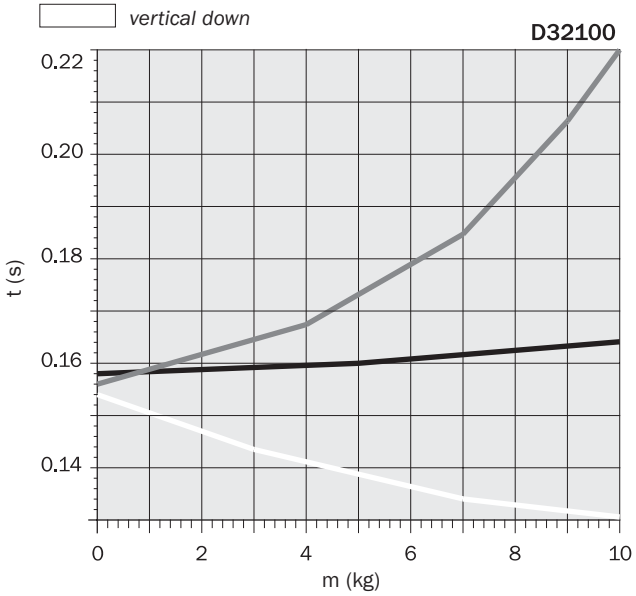
	D3250	D32100
F1	160 N	180 N
F2	100 N	120 N
Mx	60 Nm	80 Nm
My	60 Nm	80 Nm
Mz	60 Nm	80 Nm
m	12 kg	12 kg

Velocity of the slide

On the graph t is the translation time related to the mass m and to the direction of the movement:

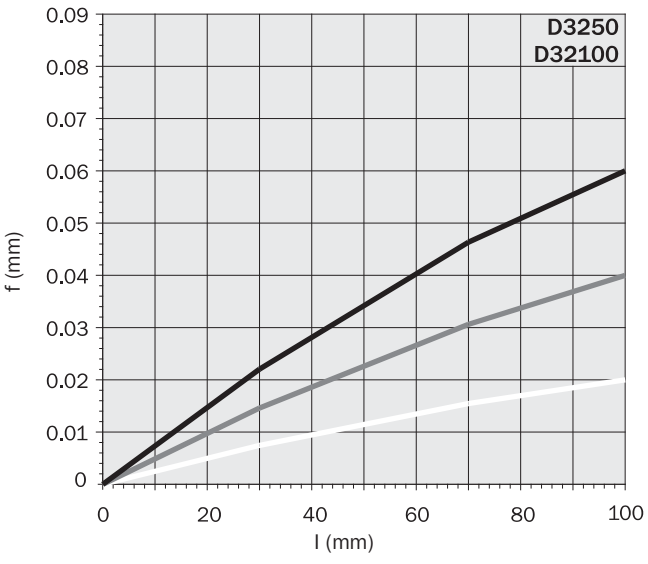


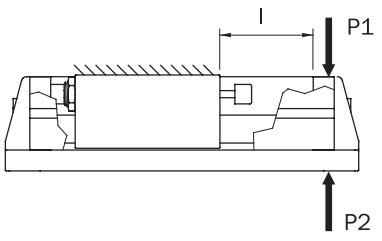




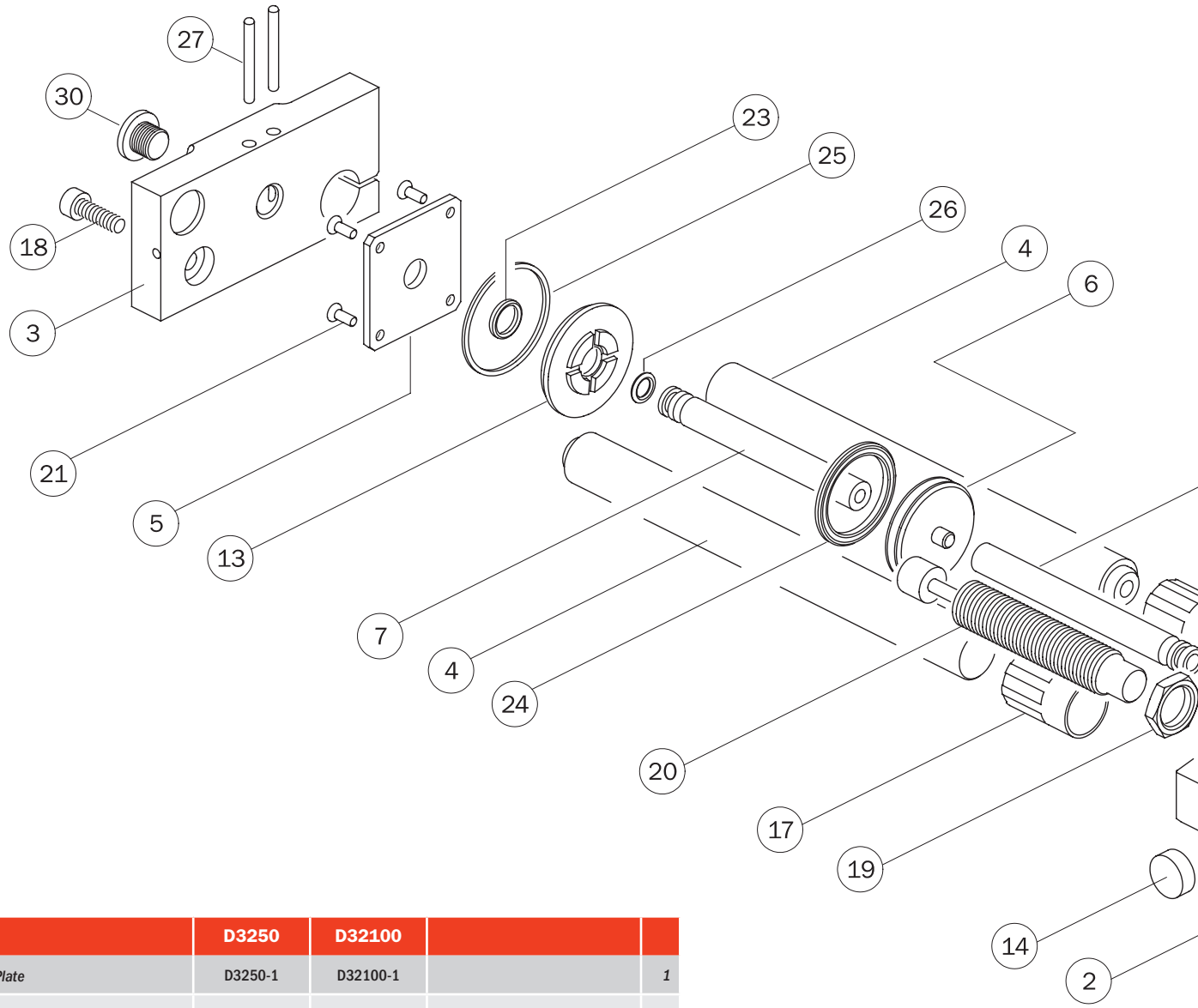
Deflection of the slide

On the graph f is the deflection of the slide under force P1 or P2 as a function of stroke l.





Part list



		D3250	D32100		
1	*Plate*	D3250-1	D32100-1		*1*
2	*Slide Housing*	D3250-2	D32100-2		*2*
3	*Guide rod support*	D3250-3			*3*
4	*Guide rod*	D3250-4	D32100-4		*4*
5	*Cover*	D3250-5			*5*
6	*Piston*	D3250-6			*6*
7	*Piston rod*	D3250-7	D32100-7		*7*
8	*Seal profile*	D3250-8	D32100-8		*8*
9	*Guide rod support*	D3250-9			*9*
10	*Piston rod*	D3250-10	D32100-10		*10*
11	*Spacer*	D3250-11			*11*
12	*Sliding shoe*	D3250-12			*12*
13	*Flange*	D3250-13			*13*
14	*Magnet*	PE-1680-07			*14*
15	*Screw*	2.2x5.5mm DIN 7982			*15*
16	*Grub screw*	M6x5 mm DIN 913 INOX A2			*16*
17	*Bushing*	WLM-1618-26			*17*
18	*Screw*	M5x16 mm DIN 912 INOX A2			*18*
19	*Blocking nut*	DEK196			*19*

		D3250	D32100		
20	*Shock-absorber*	SPM25MC-1B-SP21365B			*20*
21	*Screw*	M3x8 mm DIN 965A INOX A2			*21*
22	*Dowel pin*	Ø4x25 mm DIN 6325			*22*
23	*O-RING gasket*	Ø1.78x8.73 (GUAR-013)			*23*
24	*Gasket*	32x23x3 (GUAR-004)			*24*
25	*O-RING gasket*	Ø1.78x31.47 (GUAR-009)			*25*
26	*O-RING gasket*	Ø1.78x6.07 (GUAR-039)			*26*
27	*Dowel pin*	Ø3x24 mm DIN 6325			*27*
28	*Dowel pin*	Ø5x20 mm DIN 6325			*28*
29	*Screw*	M5x30 mm DIN 912 INOX A2			*29*
30	*Plug*	107-1/8			*30*
31	*Plug*	DT-205			*31*