

Lifting units pneumatic

with rail guide



Material:

Housing high-strength aluminium.
Stop system steel.

Version:

Housing anodised.
Stop system hardened and black oxidised.

Sample order:

nIm 20050-4010

Note:

Maintenance-free pneumatic lifting units, compact construction with cross roller guides. Control by 4/2 or 5/2 directional valve. Pneumatic drive, 4-8 bar, constant, filtered (10 µm), dried, oiled or unoiled. Compressed air connection M5.

Modules of the same size can be combined with one another without adapter plates via the precise centring system by means of centring rings 20240.

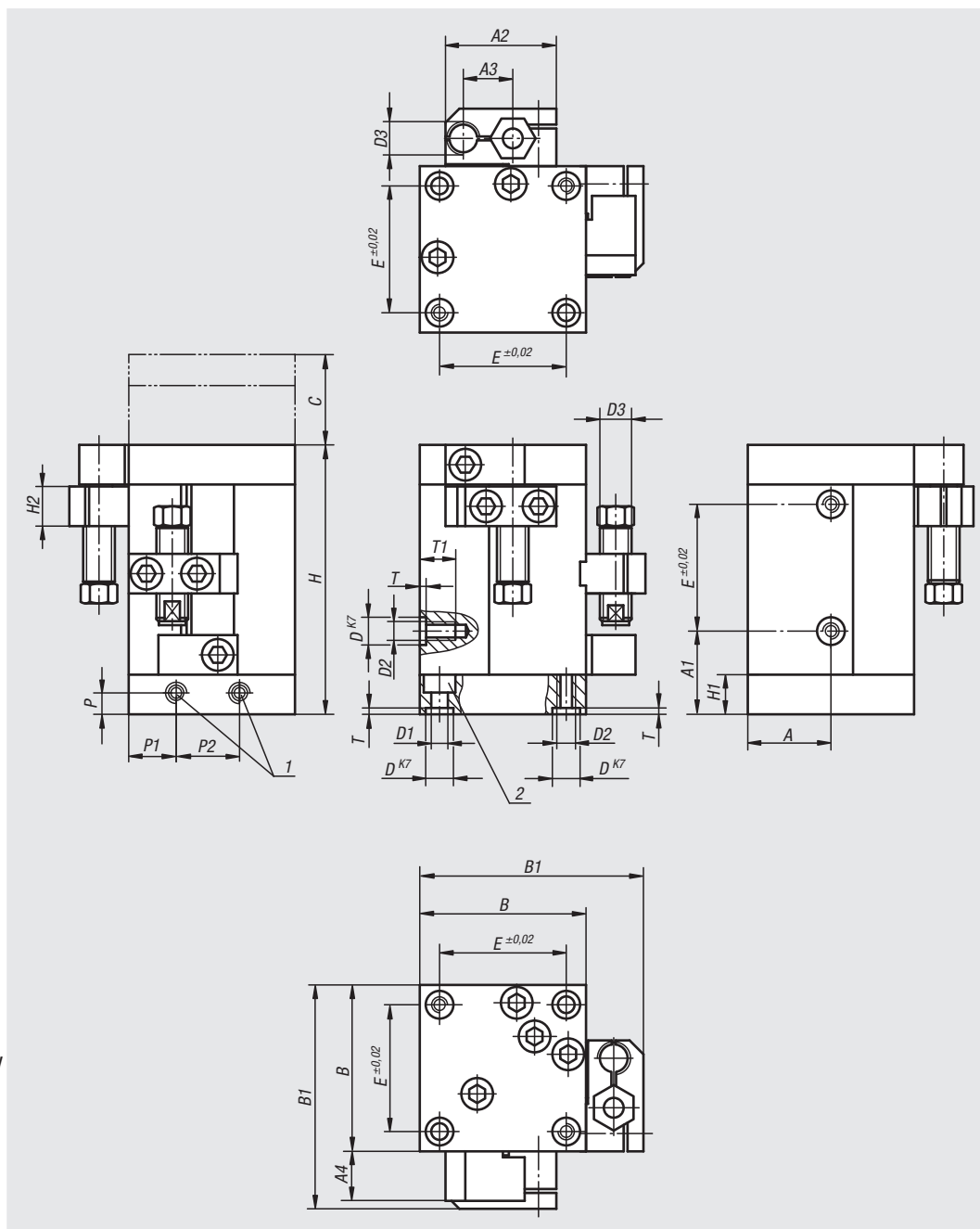
Repeat accuracy ± 0.01 mm.

Accessories:

See table for shock absorbers, proximity switches and plug connectors.

Drawing reference:

- 1) compressed air connections
- 2) counterbore for socket head screw ISO 4762-M4



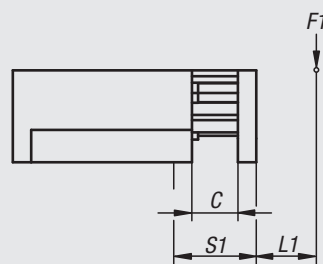
Order No.	Size	C (travel)	A	A1	A2	A3	A4	B	B1	D	D1	D2	D3	E	H	H1	H2	P	P1	P2	T	T1
20050-4010	4	10	21	21	27,5	12	12,5	42	57	7	4,2	M4	M8x1	32	68	10	10	5	12	16	1,6	6
20050-4025	4	25	21	39	27,5	12	12,5	42	57	7	4,2	M4	M8x1	32	86	10	10	5	12	16	1,6	6
20050-6025	6	25	30	38	38	17,5	14	60	78	10	6,4	M6	M14x1	48	104	12	12	6	16	18	2,1	9
20050-6050	6	50	30	63	38	17,5	14	60	78	10	6,4	M6	M14x1	48	129	12	12	6	16	18	2,1	9

Order No.	Size	Piston force at 6 bar (N)	Retraction force at 6 bars (N)	Cylinder Ø	Air consumption per cycle at 6 bar (ccm)	Suitable shock absorber	Suitable proximity switch	Suitable plug connector
20050-4010	4	80	55	16	3,7	26300-0810008	83000-020X5000	-
20050-4025	4	80	55	16	9,3	26300-0810008	83000-020X5000	-
20050-6025	6	185	175	25	23,8	26310-1410012	83000-15-020	80150-010X2000
20050-6050	6	185	175	25	47,7	26310-1410012	83000-15-020	80150-010X2000

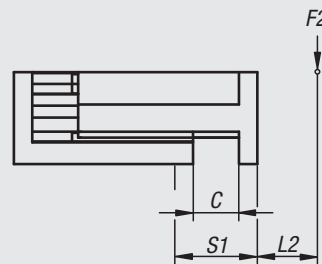
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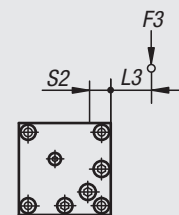
Load data



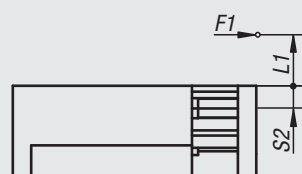
$$M1 = (S1 + L1) \times F1$$



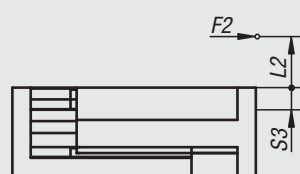
$$M2 = (S1 + L2) \times F2$$



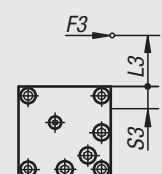
$$M3 = (S2 + L3) \times F3$$



$$M1 = (S2 + L1) \times F1$$



$$M2 = (S3 + L2) \times F2$$



$$M3 = (S3 + L3) \times F3$$

$$\frac{M1_{eff}}{M1_{zul}} + \frac{M2_{eff}}{M2_{zul}} + \frac{M3_{eff}}{M3_{zul}} \leq 1$$

Calculation of lifespan:

$$L = \left(\frac{M_{zul}}{M_{eff}} \right)^3 \times 10^5$$

- L = lifespan (m)
- M_{zul} = permissible torque (Nm)
- M_{eff} = calculated torque (Nm)



Order No.	Size	M1 Nm	M2 Nm	M3 Nm	S1	S2	S3	Dynamic load rating N	Static load rating N
20050-4010	4	12,5	12,5	13,5	19 + C/2 (travel)	10	16,5	1435	1435
20050-4025	4	15	15	18	26 + C/2 (travel)	10	16,5	1640	1640
20050-6025	6	33	33	56	33 + C/2 (travel)	11	17	2600	2600
20050-6050	6	33	33	56	45 + C/2 (travel)	11	17	2600	2600

20000
21000
22000
23000
24000
26000
27000
28000
29000
31000
32000
33000