

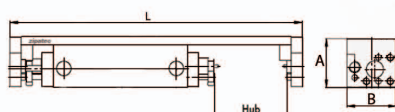
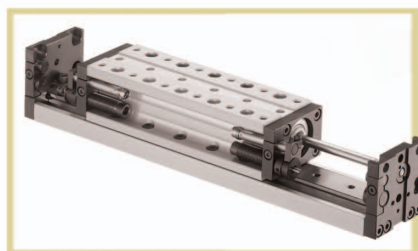
zipatec Montagetechnik

A detailed close-up photograph of a precision mechanical assembly. A blue laser line is projected across the scene, highlighting the intricate components. The assembly includes a cylindrical part with a central hole, a smaller circular component, and a larger rectangular block with a circular feature. The background is a textured, light-colored surface, possibly a metal plate or a wall, with some white residue or paint. The overall lighting is dramatic, with strong highlights and deep shadows, emphasizing the metallic textures and the precision of the components.

precision for high quality

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Linear modules



Advantages

- 100% play free due to pre-loaded crossed roller guides
- Very high stiffness, even for longer strokes
- Quick and easy stroke adjustment
- All assembly surfaces are CNC machined
- Customer specific strokes also available on request
- All guide elements are screw fastened to hardened steel
- Complete handling solutions including valves and control units
- Design and planning support

Linear module LM35

Technical data	
Stroke	13...100 mm
Operating pressure	3...7 bar
Piston diameter	12 mm
Rod diameter	4 mm
Loading capacity	max. 450 N
Cylinder force at 6 bar	Prestroke 68 N Return stroke 51 N

Type	Order No.	Stroke [mm]	Weight [kg]	L	A	B
LM35-H013	041.000	13	0.54	153	36	35
LM35-H025	041.001	25	0.54	153	36	35
LM35-H038	041.002	38	0.68	203	36	35
LM35-H050	041.003	50	0.68	203	36	35
LM35-H063	041.004	63	0.82	253	36	35
LM35-H075	041.005	75	0.82	253	36	35
LM35-H088	049.245	88	0.96	303	36	35
LM35-H100	049.246	100	0.96	303	36	35

Linear module LM49

Technical data	
Stroke	13...175 mm
Operating pressure	3...7 bar
Piston diameter	16 mm
Rod diameter	6 mm
Loading capacity	max. 2100 N
Cylinder force at 6 bar	Prestroke 115 N Return stroke 100 N

Type	Order No.	Stroke [mm]	Weight [kg]	L	A	B
LM49-H013	049.013	13	1.12	170	49	49
LM49-H025	049.025	25	1.12	170	49	49
LM49-H038	049.038	38	1.33	220	49	49
LM49-H050	049.050	50	1.33	220	49	49
LM49-H063	049.063	63	1.55	270	49	49
LM49-H075	049.075	75	1.55	270	49	49
LM49-H088	049.088	88	1.78	320	49	49
LM49-H100	049.100	100	1.78	320	49	49
LM49-H113	049.113	113	2.00	370	49	49
LM49-H125	049.125	125	2.00	370	49	49
LM49-H150	049.150	150	2.45	470	49	49
LM49-H175	049.175	175	2.45	470	49	49

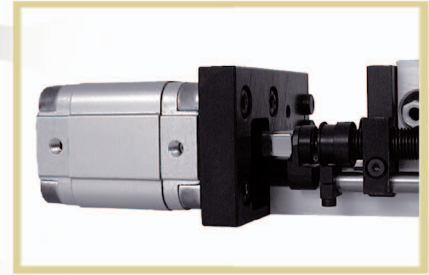
Linear module LM70

Technical data	
Stroke	25...300 mm
Operating pressure	3...7 bar
Piston diameter	32 mm
Rod diameter	12 mm
Loading capacity	max. 6000 N
Cylinder force at 6 bar	Prestroke 470 N Return stroke 404 N

Type	Order No.	Stroke [mm]	Weight [kg]	L	A	B
LM70-H025	070.025	25	3.45	248	70	70
LM70-H050	070.050	50	3.45	248	70	70
LM70-H075	070.075	75	4.40	348	70	70
LM70-H100	070.100	100	4.40	348	70	70
LM70-H125	070.125	125	5.35	448	70	70
LM70-H150	070.150	150	5.35	448	70	70
LM70-H175	070.175	175	6.30	548	70	70
LM70-H200	070.200	200	6.30	548	70	70
LM70-H250	070.250	250	8.20	748	70	70
LM70-H275	070.275	275	8.20	748	70	70
LM70-H300	070.300	300	8.20	748	70	70

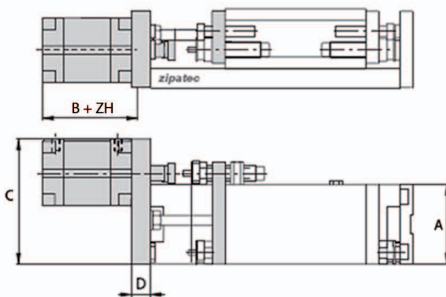
Optional intermediate stop ZA

Due to the application of intermediate stops, it is possible to limit the stroke. The position of the intermediate strokes can be reached from both directions. From the intermediate position it is then possible to continue movement in both directions without repeating the stroke. The intermediate stops can be mounted on either the piston (ZAK), rod (ZAS) or both (ZAB).

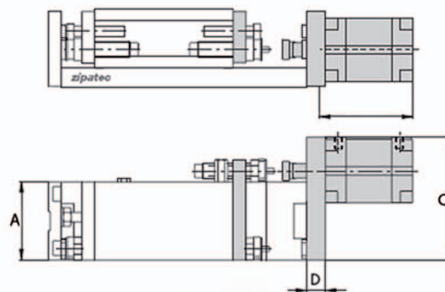


- Integration of proximity sensor and shock absorber to monitor the intermediate position
- Repeatability $\pm 0.05\text{mm}$
- 2 possible intermediate positions (1 per side)
- Intermediate stroke adjustment $\pm 1.5\text{mm}$
- Simple retrofitting or exchanging of intermediate stops

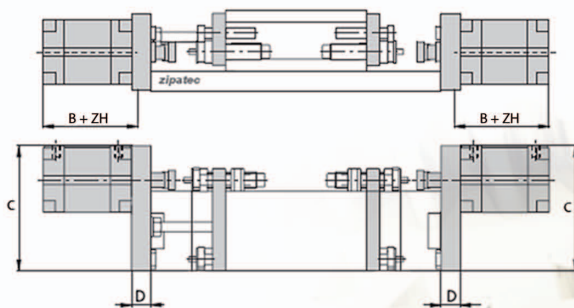
Intermediate stop ZAS



Intermediate stop ZAK



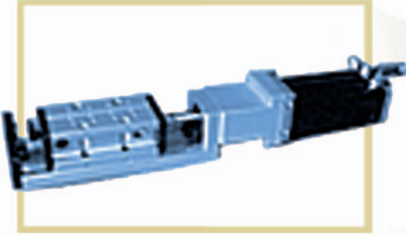
Intermediate stop ZAB



Type	Order No.	A	B	C	D	Air connection	Holding force at 6 bar [N]
ZAK35, Piston side for LM35	041.006	35	45	54.5	12	M5	109
ZAK35, Rod side for LM35	041.007	35	45	54.5	12	M5	109
ZAK35, Both sides for LM35	041.008	35	45	54.5	12	M5	109
ZAK49, Piston side for LM49	049.910	49	46.5	77	12	M5	265
ZAK49, Rod side for LM49	049.911	49	46.5	77	12	M5	265
ZAK49, Both sides for LM49	049.913	49	46.5	77	12	M5	265
ZAK70, Piston side for LM70	070.910	70	53.5	114	15	G1/8	1060
ZAK70, Rod side for LM70	070.911	70	53.5	114	15	G1/8	1060
ZAK70, Both sides for LM70	070.913	70	53.5	114	15	G1/8	1060

Note: Proximity sensor, shock absorber, stop screws and cylinder switch / cable box for monitoring the position of the intermediate stroke cylinder piston are sold separately. Order example: LM49-H050-HXXX (XXX = Intermediate stroke length ZH)

NC Linear module



The NC Linear module with servo or step motor is characterised by:

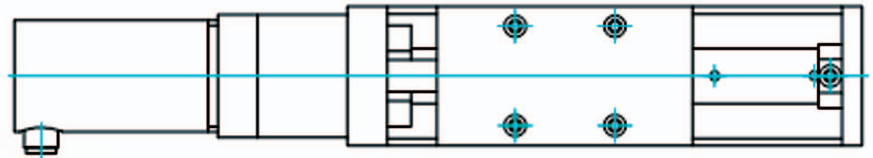
- Recirculating balls screws with a pitch accuracy of 0.05mm to 300mm
- Directional change play of the recirculating ball screws is less than 0.05mm
- Spindles are provided with a wiper

The module is characterised by smaller construction dimensions for larger strokes, greater precision, greater efficiency and a maintenance free design.

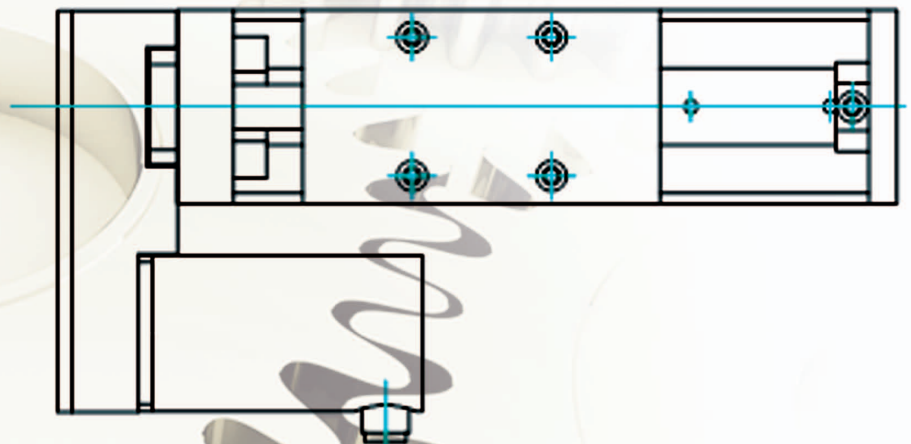
Options:

- Simple attachment to cross tables or XYZ-devices
- Spindles with greater accuracy
- Attachment of servomotors with CAN or Profibus
- Attachment of 2/3 phase step motors
- Modules designed complete with positioning controls for the individual application

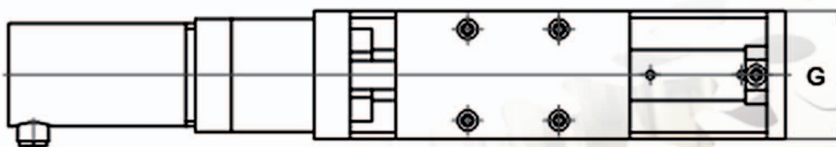
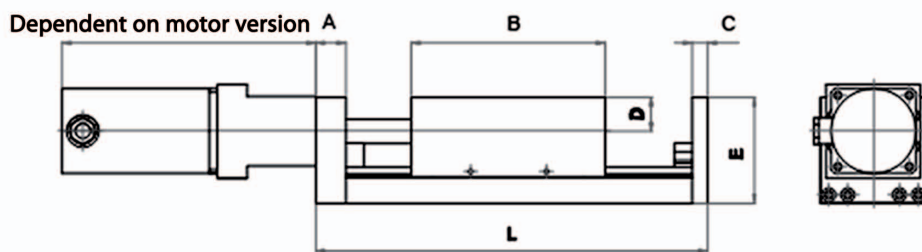
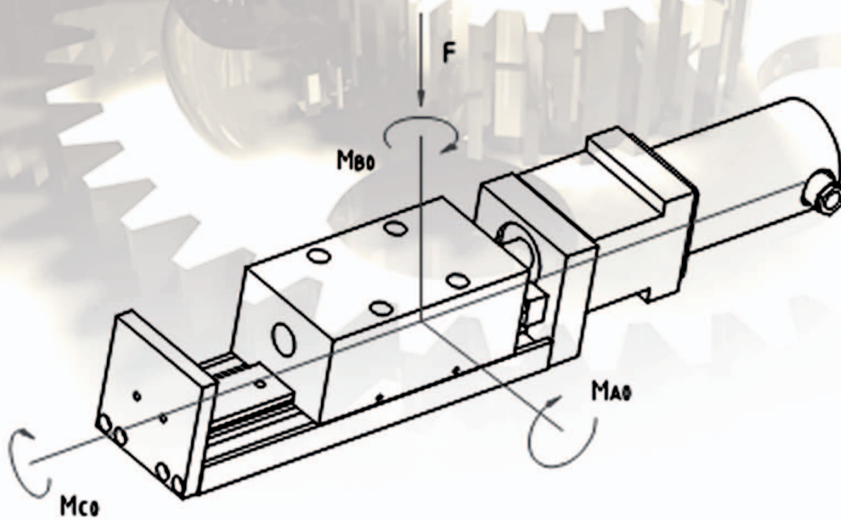
Motor mounted direct to flange



Motor with belt gear rotated 90°



NC- Linear module



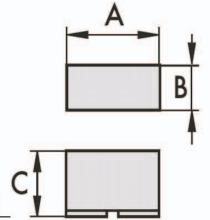
Type	Order No.	A	B	C	D	E	L	G	MA0	MB0	MC0	F
LM35-NC-H025	041.270	15	68	8	13	35	160	35	4	4	4	300
LM35-NC-H050	041.271	15	93	8	13	35	210	35	5	6	6	350
LM35-NC-H075	041.272	15	118	8	13	35	260	35	8	6	6	400
LM35-NC-H100	041.273	15	143	8	13	35	310	35	10	7	7	450
LM49-NC-H025	041.274	15	87	8	16	49	177	49	9	10	10	700
LM49-NC-H050	041.275	15	112	8	16	49	227	49	12	12	12	800
LM49-NC-H075	041.276	15	137	8	16	49	277	49	18	15	15	1000
LM49-NC-H100	041.277	15	162	8	16	49	327	49	22	16	16	1200
LM49-NC-H125	041.278	15	187	8	16	49	377	49	30	19	19	1500
LM49-NC-H175	041.279	15	237	8	16	49	477	49	45	24	24	2100
LM70-NC-H050	041.280	20	128	10	22.5	70	258	70	41	45	45	2000
LM70-NC-H100	041.281	20	178	10	22.5	70	358	70	70	70	65	2500
LM70-NC-H150	041.282	20	228	10	22.5	70	458	70	95	90	90	3000
LM70-NC-H200	041.283	20	278	10	22.5	70	558	70	120	110	110	4000
LM70-NC-H300	041.284	20	378	10	22.5	70	758	70	170	141	141	5000

Gripper Actuators



Short Parallel Stroke Gripper GM 25P -GM 42P

- 2-jaw, parallel stroke
- Uniform clamping force over entire stroke range for opening and closing.
- Internal or external gripping action.

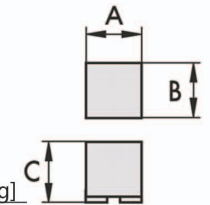


Typ	Hub pro Backe [mm]	F [N]	Overall dimension AxBxC [mm]	Gewicht [kg]
GM25P	2,5	50	41 x 25 x 51.5	0.14
GM31P	3,0	90	49 x 31 x 56.5	0.20
GM36P	5,0	150	63 x 36 x 66	0.34
GM42P	8,0	280	79 x 42 x 82.5	0.62

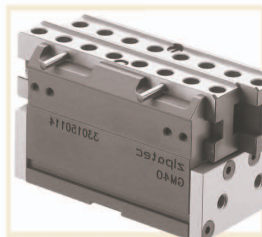


Angled Gripper Actuators GM 25W - GM 42W

- 2-jaw, angled stroke
- Uniform clamping force over entire stroke range for opening and closing.
- Internal or external gripping action.

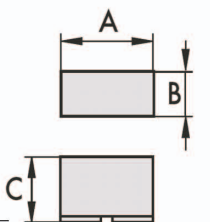


Typ	Hub pro Backe [degree]	F [N]	Overall dimension AxBxC [mm]	Gewicht [kg]
GM25W	16°	0.60	35 x 25 x 61.5	0.14
GM31W	14°	0.90	41 x 31 x 69	0.20
GM36W	16°	1.70	44 x 36 x 80.5	0.30
GM42W	16°	4.00	52 x 42 x 98	0.52

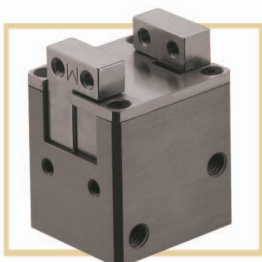


Large Parallel Stroke Gripper GM 40 - GM 52

- 2-jaw, parallel stroke
- Uniform clamping force over entire stroke range for opening and closing.
- Internal or external gripping action.

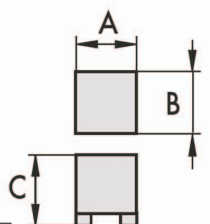


Typ	Hub pro Backe [mm]	F [N]	Overall dimension AxBxC [mm]	Gewicht [kg]
GM40	16	120	94 x 40 x 45	0.48



Parallel Gripper "Mini" RP-5M - RP-10M

- 2-jaw, parallel stroke
- Precision of performance
- Operated by cams



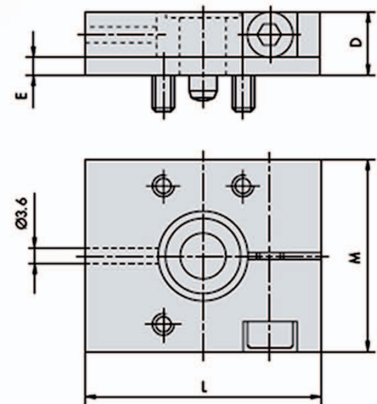
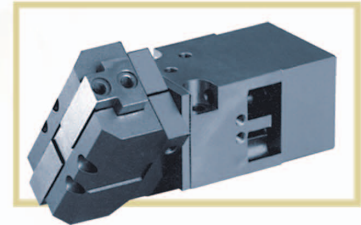
Typ	Hub pro Backe [mm]	F [N]	Overall dimension AxBxC [mm]	Gewicht [kg]
RP-5M	4.1	156	28.6 x 25.4 x 36.5	0.08
RP-10M	6.4	308	38.1 x 31.7 x 37.3	0.13

Option

Rotary Adapter GMD

Rotation of the gripper head GM25P – GM42P or GM25W – GM42W
In relation to the drive unit GMA or the flange of the rotary actuator

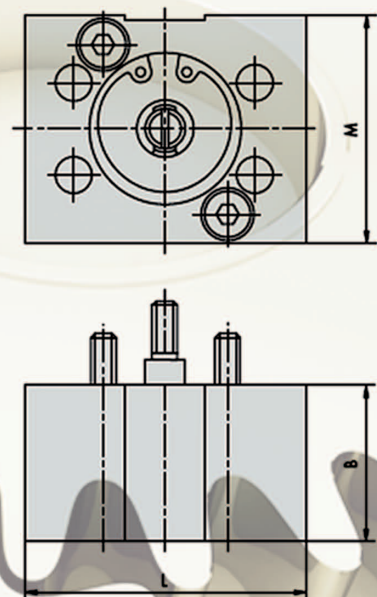
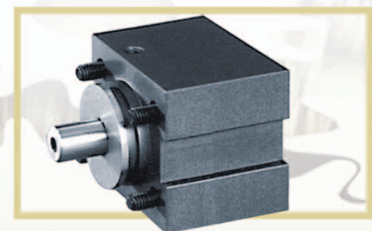
Type	Order No.	for	D	E	L	M
GMD25	041.079	GM25P/W	10	2.8	35	25
GMD31	041.080	GM31P/W	10	2.8	41	31
GMD36	041.081	GM36P/W	12	3.3	44	36
GMD42	041.082	GM42P/W	12	3.3	52	42



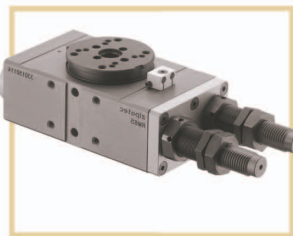
Grip force safety device GKS

This option as short Parallel Stroke Gripper GM25P – GM42P and Angled Gripper Actuators GM25W – GM42W grip force safety device by spring assembly in case of power failure. No additional control of grip force safety device necessary. The grip force safety device as an option, as clamping or expanding available.

Type	Order No.	for	B	L	M
GKS25	041.083	GM25P/W	20	34	24
GKS31	041.084	GM31P/W	20	40	30
GKS36	041.085	GM36P/W	24	43	30
GKS42	041.086	GM42P/W	34.5	51	41



Rotary Actuators

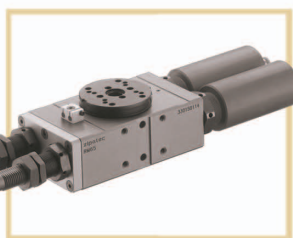


Rotary Actuators RM 35 - RM 65

Typ	Order No.	Rotations and angle [degree]	Torque [Nm]	L x B x H [mm]	Weight [kg]
RM35	041.089	0...190°	0.38	76 x 43 x 35	0.36
RM45	041.090	0...190°	0.76	91 x 52 x 38	0.58
RM65	041.091	0...190°	1.90	117 x 85 x 48	1.16

Due to their modular desing and central passageway, these elements can be used to construct gripper/indexing actuators without co-rotating power cables. For interrogation of the end positions, standardised interrogation sets can be fitted.

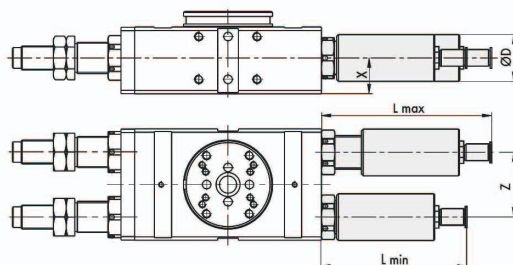
- Rack and pinion drive
- Steplessly adjustable rotation angle
- Integral shock absorbers
- Adjustable damping characteristics
- Completely free from backlash at end position



RM option Intermediate position

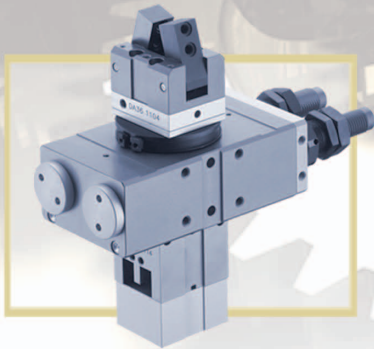
- Intermediate position steplessly adjustable over entire swivel range
- Continued movement possible in either direction without repeat stroke
- Intermediate position in either direction with hydraulic damping
- Shock absorber reference curve adjustable by adapting storke
- Intermediate position can be confirmed by proximity switsch

Typ	Order No.	Ø D	L _{min}	L _{max}	X	Z
RZ35	041.092	20.8	72	83	15.6	21.2
RZ45	041.093	25	77.5	91	17.5	27
RZ65	041.094	35	92	111	21	38



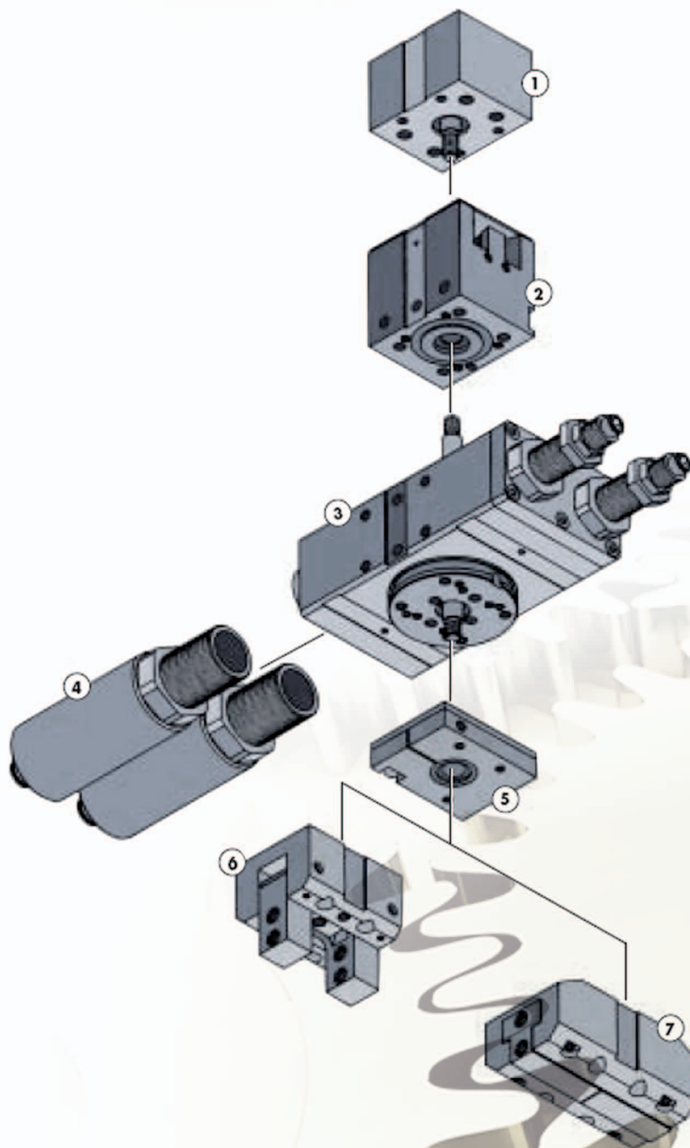
Gripper-Indexing Actuators

P25 R35 – P42 R65



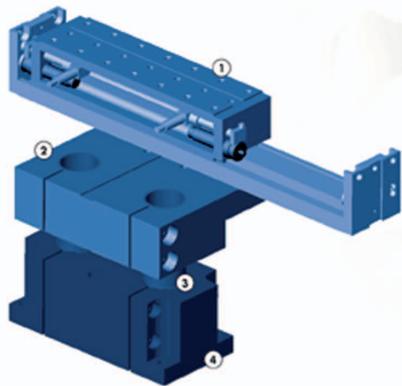
Based on a modular design, advantages of the functional separation of these gripper actuators into drive unit and gripper set become fully apparent when they are combined to form gripper-indexing actuators. The drive unit for the end position can be mounted on the underside of the rotary actuator eliminating the need for co-rotating electrical and pneumatic supply lines.

- Absolute modular Gripper-Indexing Actuators
- Co-rotating energy cables
- Internal or external gripping
- Grip force safety device in case of pressure loss
- For interrogation of up to 4 gripper jaw
- Stepless rotation angle



1. Grip force safety GKS
2. Drive units GMA
3. Rotary Actuator RM
4. Intermediate Positions RZ
5. Rotary Adapter GMD
6. Angled - Gripping head
7. Parallel - Gripping head

Mounting accessories

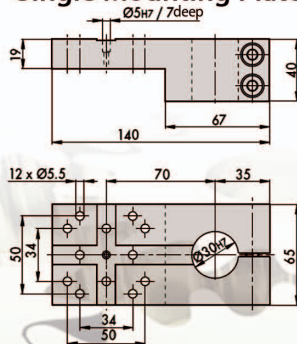


1. Linear Actuator LM
2. Double Mounting Plate ALZ
3. Stand column STS
4. Double Base DFS

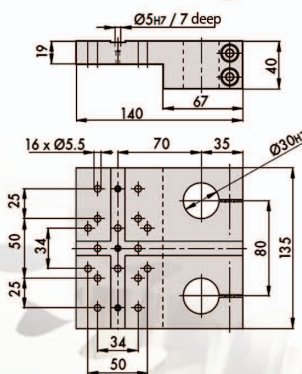
The mounting accessories consist of two type series. System 30 with a column diameter of 30mm for assembly of Linear Actuators LM35 and LM49. System 50 with a column diameter of 50mm for assembly of Linear Actuators LM70. In addition to our standard program, we offer tailor made solutions which are developed in cooperation with our customers.

System 30

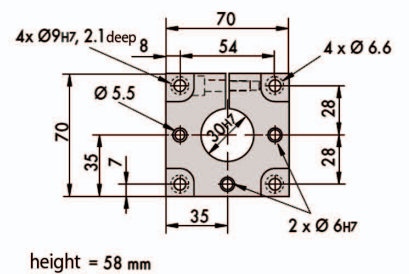
Single Mounting Plate ALE-30



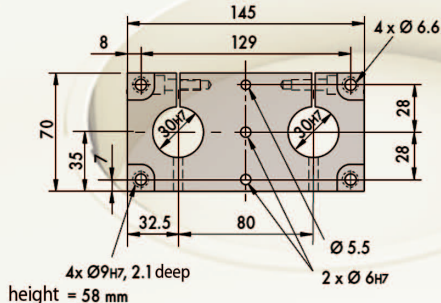
Double mounting Plate ALZ 30



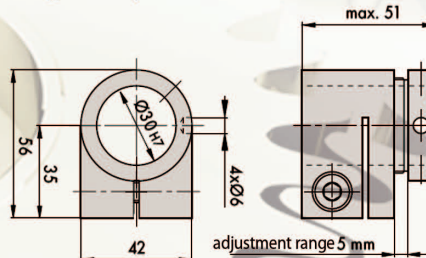
Single base SF-30



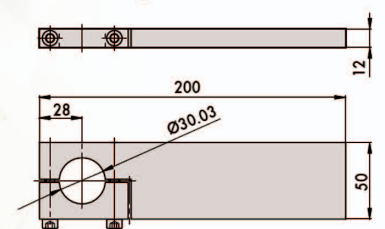
Double Base DSF-30



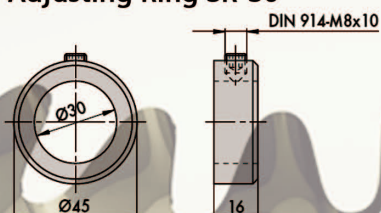
Height Adjustment HOE-30



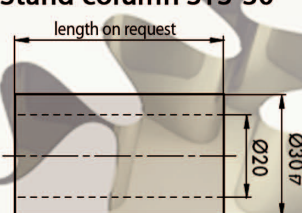
Mounting Plate MP-30



Adjusting Ring SR-30



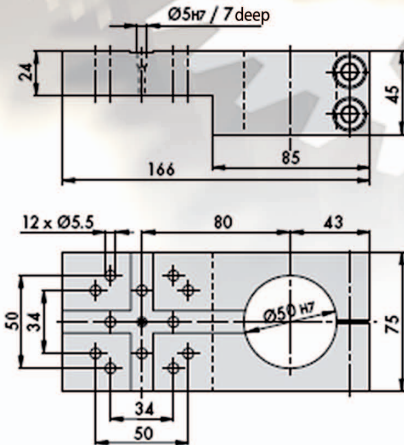
Stand column STS-30



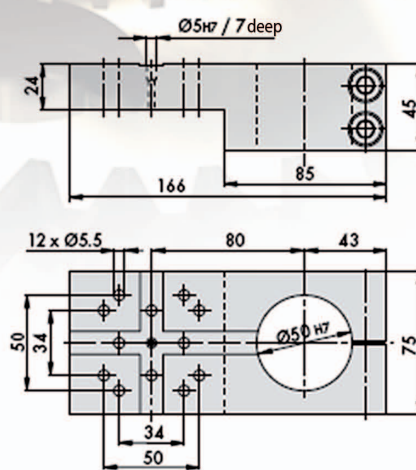
Mounting accessories

System 50

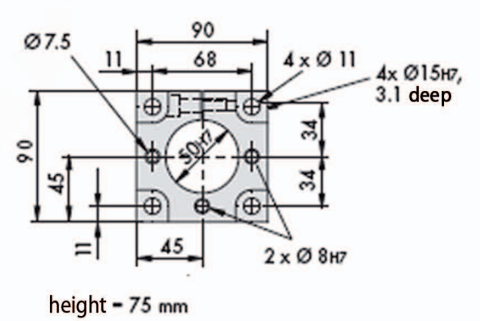
Single Mounting Plate ALE-50



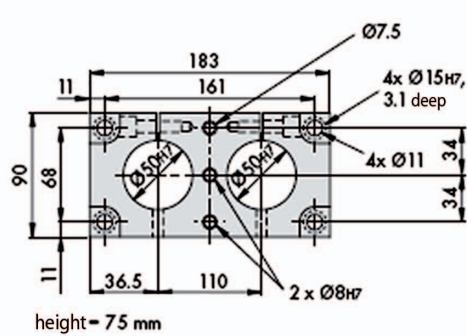
Double mounting Plate ALZ 50



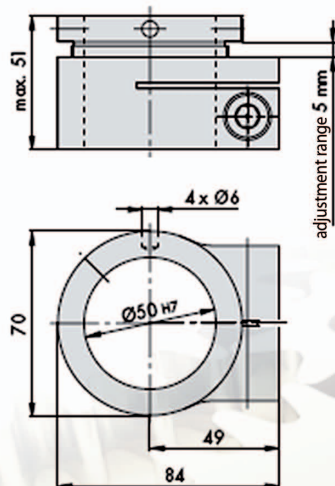
Single base SF-50



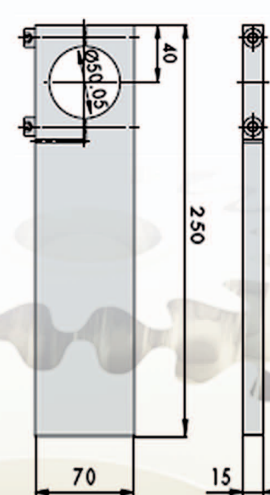
Double Base DSF-50



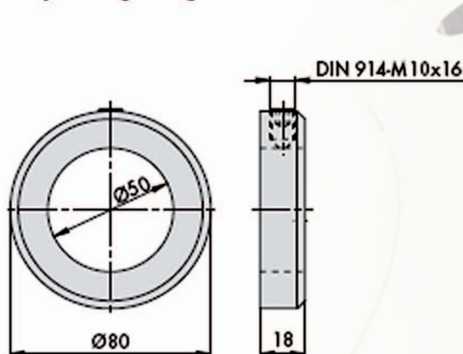
Height Adjustment HOE-50



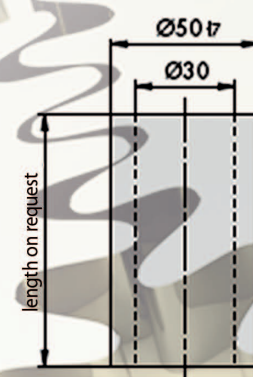
Mounting Plate MP-50

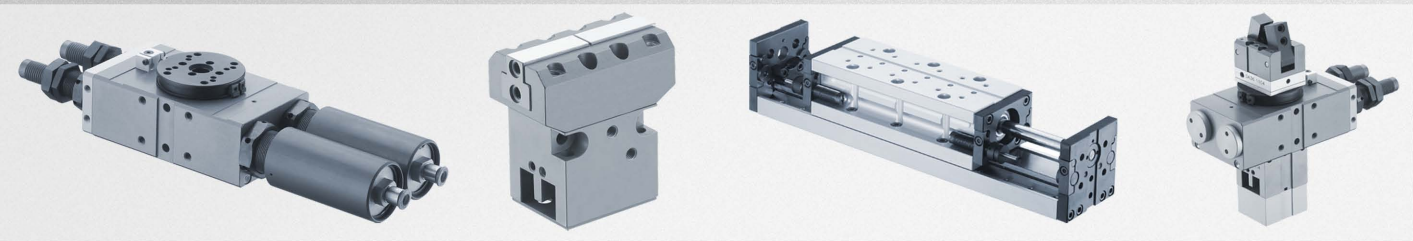


Adjusting Ring SR-50



Stand column STS-50





zipatec Montagetechnik GmbH & Co. KG
Kleewiesenweg 5
D-90562 Kalchreuth / Germany
phone +49 911 - 5192920
fax +49 911 - 5192936
email info@zipatec.de
internet www.zipatec.de

precision for high quality