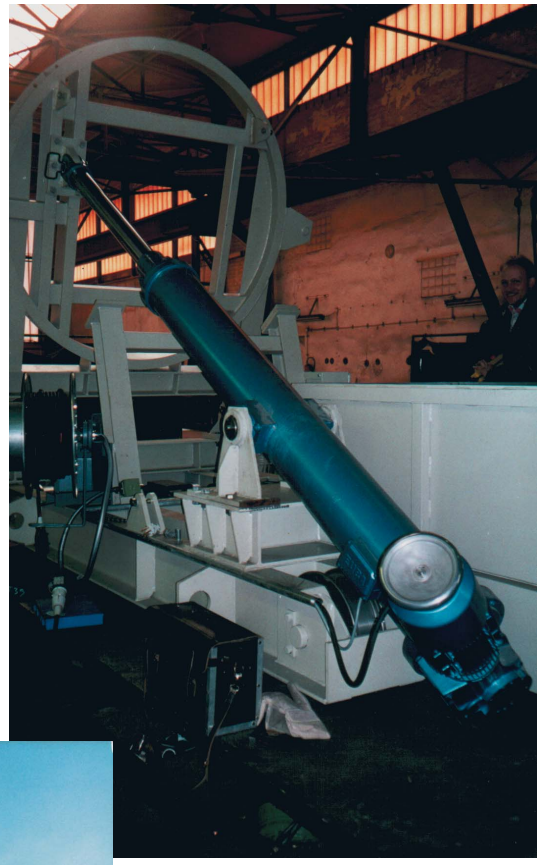
Here we are at home.

EUBA

electric actuators

Bunker flap control in steel plant



Transfer mechanism

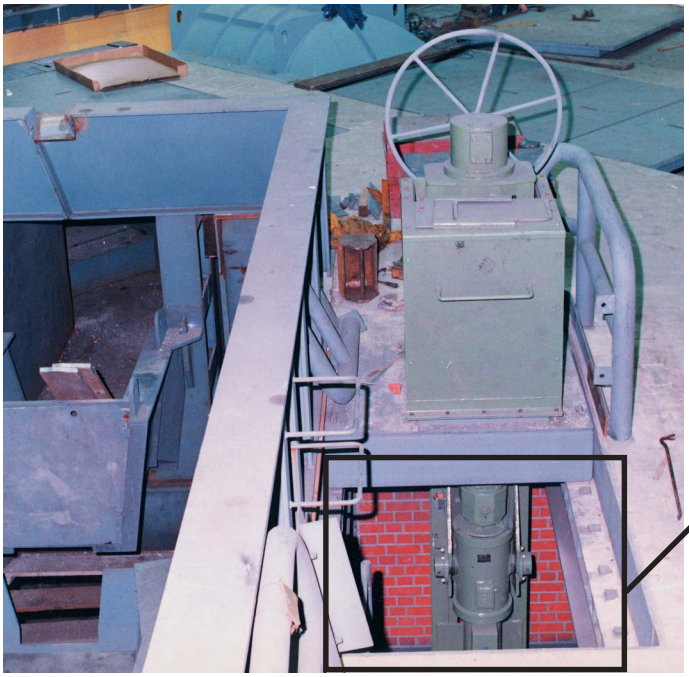
Clarification plant
Actuator for rake control

Loading mechanism
Lignite power plant

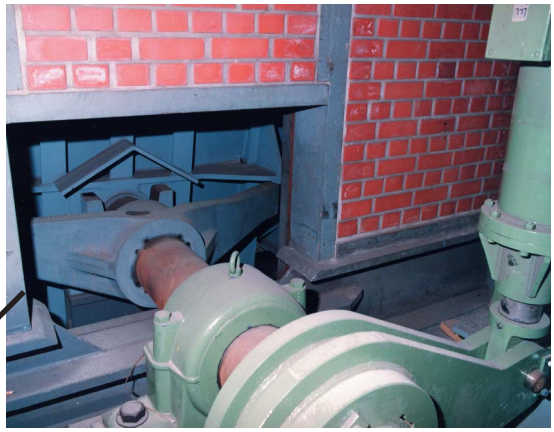
Flap actuator

Breeches chute actuator

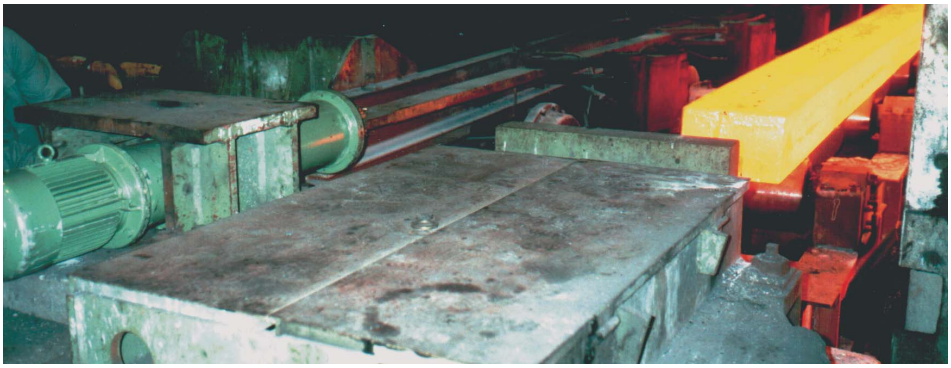
Belt scrapers
for silos



Throughlike edging guide
for pig iron



Governor level



Actuator for slabbing
alignment

Antriebstechnik
Eller GmbH
Ruhrau 44
D-45279 Essen

P.O. Box 14 32 07
D-45262 Essen
Telephone +49/201/8 53 11 -0
Telefax +49/201/8 53 11 -25
E-Mail info@euba.de
Internet www.euba.de

ISO 9001:2008

Zertifikat-Nr. AJAEU/13/13046

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Our supplies and services are based on our terms of business.
Amendments of technical data as well as of measurements and weight, specified in this catalogue, are reserved.

General Description

EUBA - Over 40 years of Know-How in research and sale of electric actuators.

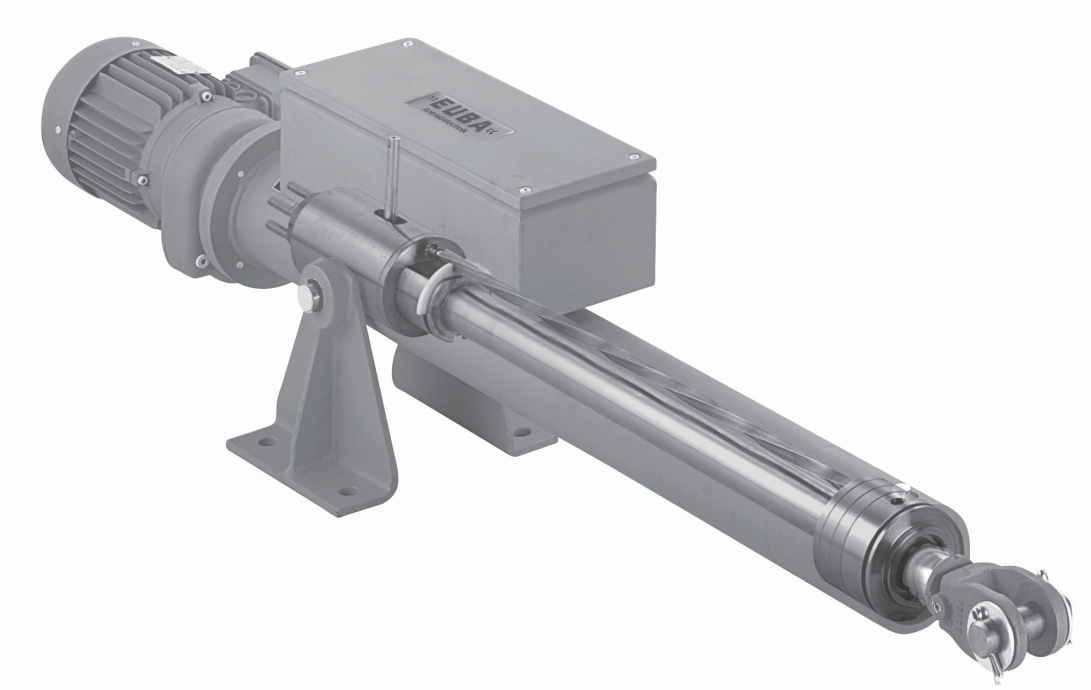
Custom-made solutions are our strength.
We offer actuators from minimum of 50 daN up to mega actuators with forces up to 200.000 daN. A qualified team of engineers advises you in case of actuating problems in situ.

Innovative research and permanent quality control during manufacturing establishes standards. For your safety naturally no actuator leaves the factory until extensive examination.

From the very first beginning of your project you will be supported by qualified employees.

- Our engineering department also deals with special customer requests and offers solutions.
- Since over 40 years we manufacture our actuators with constant quality.
- Fast and professional assemblies will be done by our construction team.
- We also take on the planning and installation of the complete control engineering.

Profit by our Know-How, worldwide.

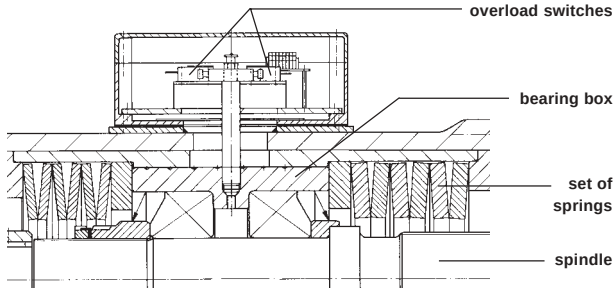


The actuators force can amount to 200.000 daN, with a stroke up to 7.000 mm and a variable velocity. Normally our actuators are manufactured with a hard chromium plated pushrod (special requests such as a ceramic plated pushrod can be considered). Commercial motor-gear combinations (A.C., D.C., et al.), which are connected to the actuator by a DIN IEC flange, are used. Rotary actuators, which are able to do complete revolutions, can also be flanged.

The base conception of this actuator is approved in heavy industry (steel plants, power plants, cement plants, et al.).
The actuator is made of a steel welded construction, sufficient dimensioned and equipped with the umpteen times proved EUBA overload switches.

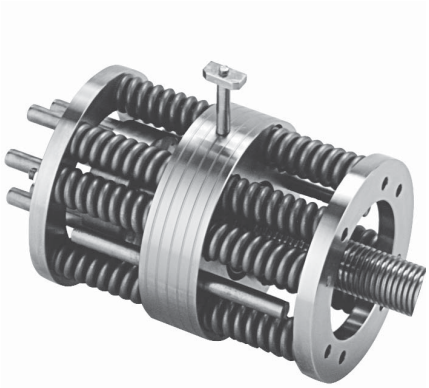
The advantages of the overload switches are:

- protection of the actuators
- absorption of axial impacts
- pressure forces can be adjusted
- wear-free attachment of motor and actuator (no slipping clutch).



Due to the variability of the spring characteristics, as well as the travel of the spring system, the overload switch is able to absorb huge axial impacts.

There is an optimal protection of the spindle against heavy loads, because the overload switch is integrated in the actuator itself.



Overload switch unit

In case of an overload of the requested push and pull forces, a shut-down of the actuator is guaranteed by overload switches.

A demolition respectively an overload of the mechanical devices is excluded from the beginning.

Due to external switch boxes the overload switches are easy accessible.

With the use of different sets of springs it is possible to adjust the overload switch to several push and pull forces and thus to specific demands.

EUBA actuators can be equipped with auxiliary attachments,

such as:

- Separat way limit switches
- Adjustable way limit switches for the whole stroke
- Overload switches
- Electronic position repeating devices 4 – 20 mA (continous)
- Bus-compatible position controller (Profibus)
- Frequency transformers
- Synchronization control for 2 or more actuators
- Synchronous speed control for 2 or more actuators

Attachment- and Auxiliary Supplement

baseplate

threaded bold
(external thread)

‹e end

shackle
toggle joint

angle joint with
clamping head

limit switch
1- or 2- polar

way limit switch

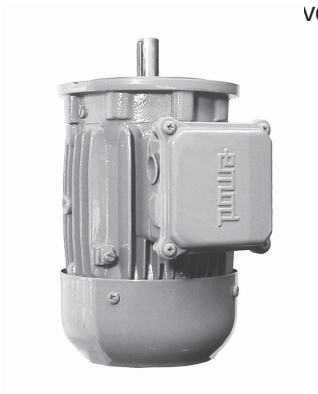
potentiometer

cardan joint

electronic position
transmitter

bracket
for pivot

switch box
incl.
verload unit



brake motor

norm motor

gear motor

handwheel
with or without electrical shutdown

Technical Explanation

Calculations:

1. Determination of push-pull forces

For the calculations of push-pull forces for **EUBA**-actuators you have to consider the acceleration factors as specified in the chart below. This leads to the following calculation models:

a) Horizontal movement b) Vertical movement

$$F_B = m \cdot a = \frac{G}{g} \cdot a \qquad \underline{F = F_B + F_R + G}$$

$$F_R = \mu \cdot G$$

$$\underline{F = F_B + F_R}$$

F_B = acceleration force [N]
m = body weight [kg]
a = acceleration [m/s²]
G = load [N]
g = gravitational force [m/s²]
F_R = frictional force [N]
μ = coefficient of friction
F = neccessary force of EUBA-actuator [N]

2. Acceleration factors

According to the specific velocity you have to use the following acceleration factors as an average value:

v [mm/s]	25	45	75	90	120	150	175	180
a [m/s²]	1	2	3	4	5	6	7	8

3. Operating frequency

The operating frequency (s/min) of the EUBA-actuators depend on the maximum switching operations of the commercial motors and its electrical self-heating.

Based on years of experience, the maximum operating frequency of the EUBA-actuators meets half of the maximum no-load switchings of the motor per minute.

Hence we may infer the following average values :

P [kW]	0,09	0,12	0,18	0,25	0,37	0,55	0,75
s [1/min]	35	35	30	25	25	20	20

P [kW]	1,1	1,5	2,2	3	4	5,5	7,5
s [1/min]	18	15	15	10	8	6	6

Above given data is meant for n=1500 min^{-1} and a maximum ambient temperature of t=40° C.

The operating frequency depends on stroke and velocity also.

Attention:

A motor-switch over from a left-handed into a right-handed rotation or vice versa is not allowed without a shutdown of the motor itself.

For special environmental and aggressive conditions EUBA-actuators can be sandblasted according to SA 2,5 and can be varnished with a coating thickness up to 240 µm.

For the case the actuators are used in explosion hazardous plants, an application of way limit- and overload switches as well as three phased motors are required according to ATEX-norm.

Protection class IP-55 is the standard of all EUBA-actuators, but they are available up to protection class IP-65 on request.

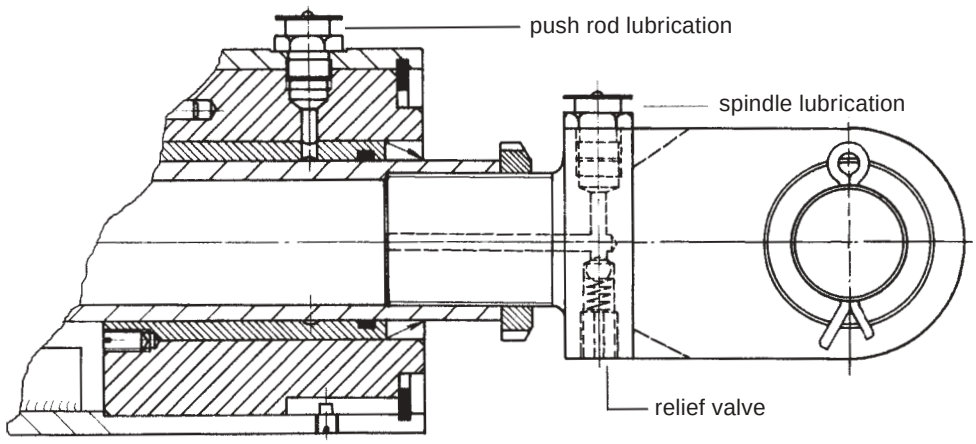
For an operation of the actuator during power failure we recommend a handwheel. For these actuators, the motor shaft protudes at the end. It is possible to equip the motor shaft with a handwheel.

If demanded an electrical shutdown of the motor can be ensued when the handwheel is attached. The vacant second motor shaft is covered with a protection rod during normal operation all the time.

Depending on the requirements EUBA-actuators are equipped with different lubricants. The specifications of the used lubricants can be found in the operation and maintenance manual.

Usually the actuators are filled with Li-EP 2 grease.

The maintenance of the EUBA-actuators is limited to regular relubrication of the spindle nut-system. An excess pressure protection impedes an over-lubrication of the actuator.



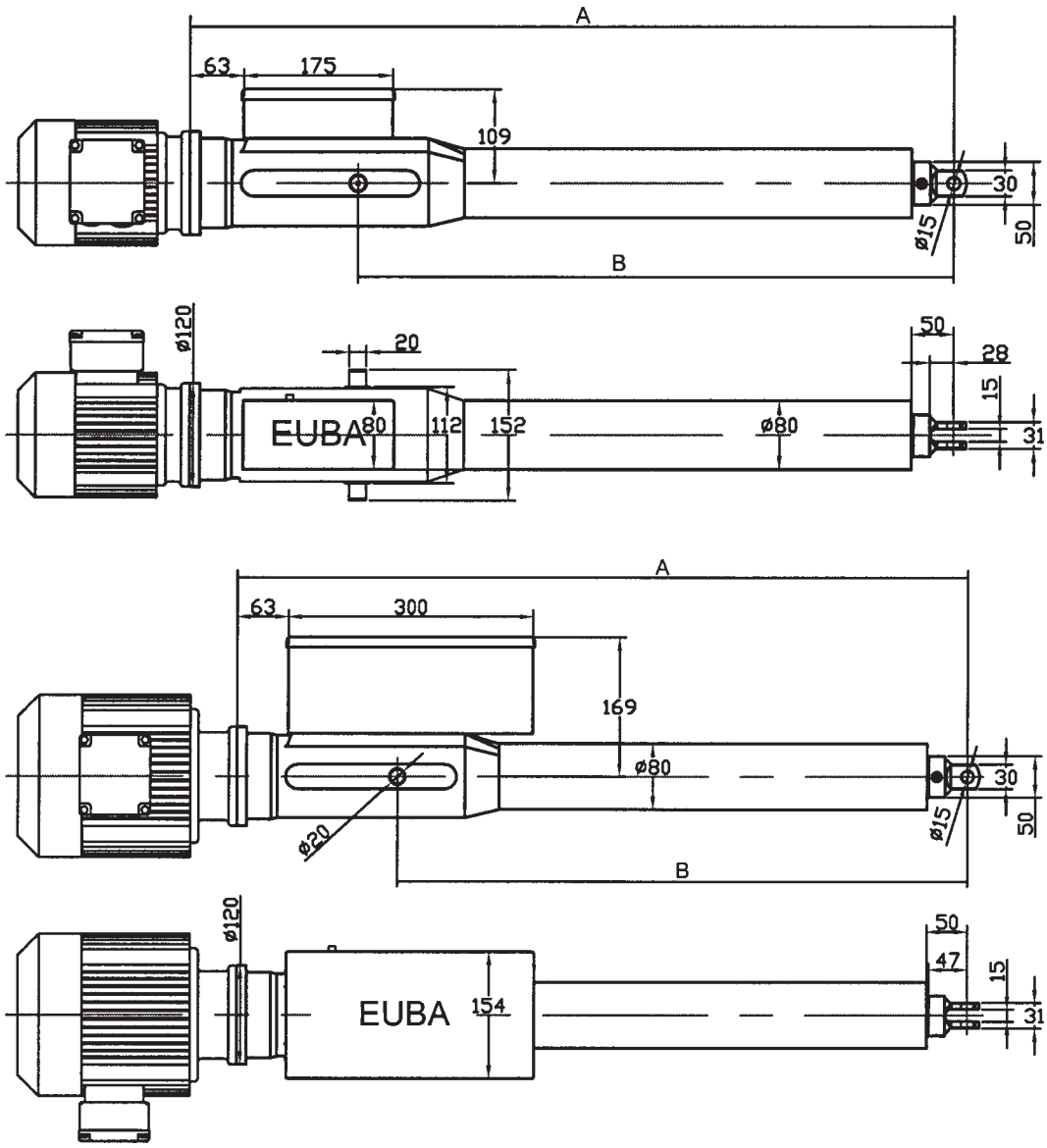
Survey of Products Standard Design

EUBA-Typ	max. force F up to	max. velocity v up to	max. stroke up to	page
A 4	500 daN	90 mm/s	600 mm	10
B 4	2.500 daN	180 mm/s	1.250 mm	13
C 4	4.500 daN	120 mm/s	2.500 mm	16
D 4	15.000 daN	60 mm/s	4.000 mm	19
E 4	50.000 daN	30 mm/s	4.000 mm	30
F 4*	200.000 daN	10 mm/s	4.000 mm	30

* on request

For the determination of forces, please consider calculations on page 7!

Type A4:



Mounting dimension actuator in mm (weight: 25-35 kg)													
stroke	0	50	100	150	200	250	300	350	400	450	500	550	600
A-size	397	447	497	547	597	647	697	747	797	847	897	947	997
B-size	206	256	306	356	406	456	506	576	626	676	726	776	826

Actuator dimensions can vary, especially the motor dimensions due to different brands.

B-size changeable (+/- 100 mm)
Motor dimensions depending on motor type and supplier

Power chart:

P in kW in accordance with DIN IEC							
v in mm/s		5	25	45	63	70	94
F in daN	100	0,09	0,12	0,18	0,18	0,25	0,37
	200	0,09	0,18	0,37	0,37	0,55	0,55
	300	0,09	0,25	0,55	0,55	0,75	1,10
	400	0,09	0,37	0,55	0,75	1,10	1,10
	500	0,12	0,37	0,75	1,10	1,10	1,50

Forces in between min. and max. can be realised continously.

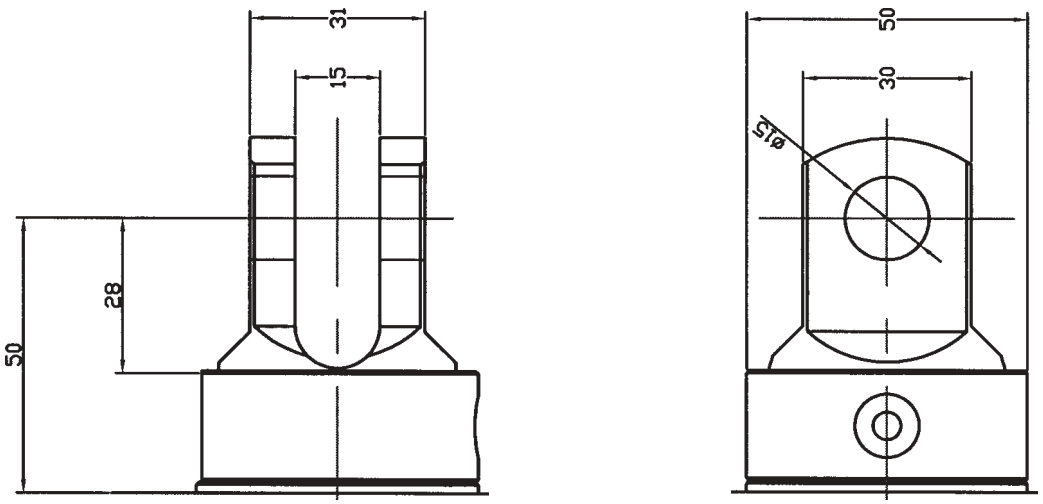
Standard design:
- Pivot
- Clevis

Special design:
- Brackets
- Foot mounting
- Cardan joint
- Special fixing
- Shackle toggle joint
- Angle ball
- High temperature range up to +80°C
- Low temperature range down to -40°C
- Protection class up to IP-65

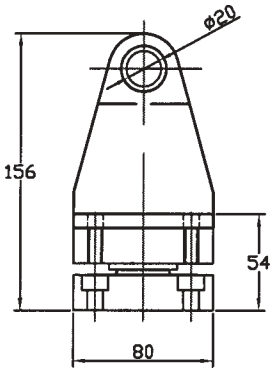
Actuator:
- Steel, with overload switches
- Acme screw threat spindle
- Spindle bearing system (overload protection unit), on both sides supported by spring piles
- Chrome plated push rod with internal torsion protection and scraper
- Temperature range from -10°C to +40°C

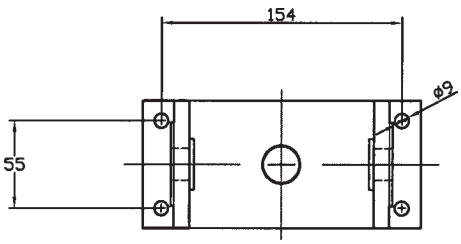
Motor: Attachment of DIN IEC flange- and gear motors (manufacturer independent)

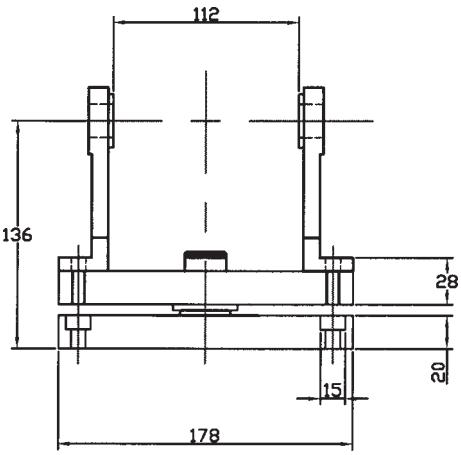
Clevis:



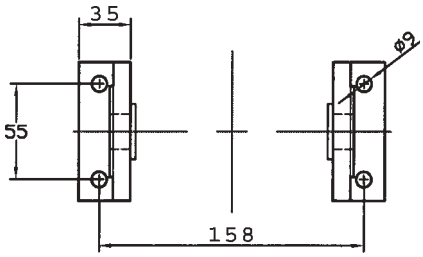
Cardan joint:

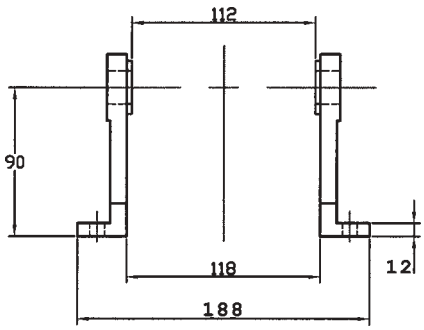


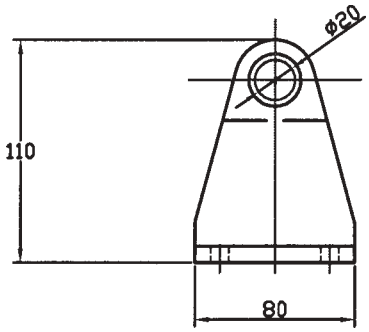




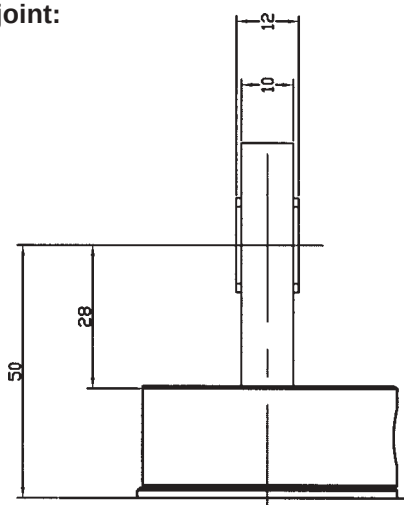
Brackets for pivot:

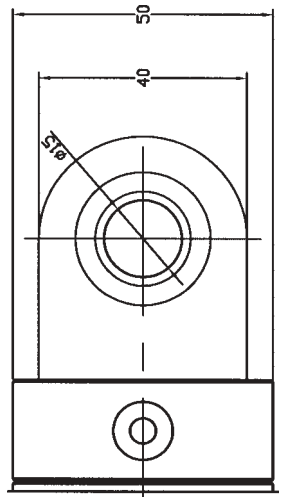






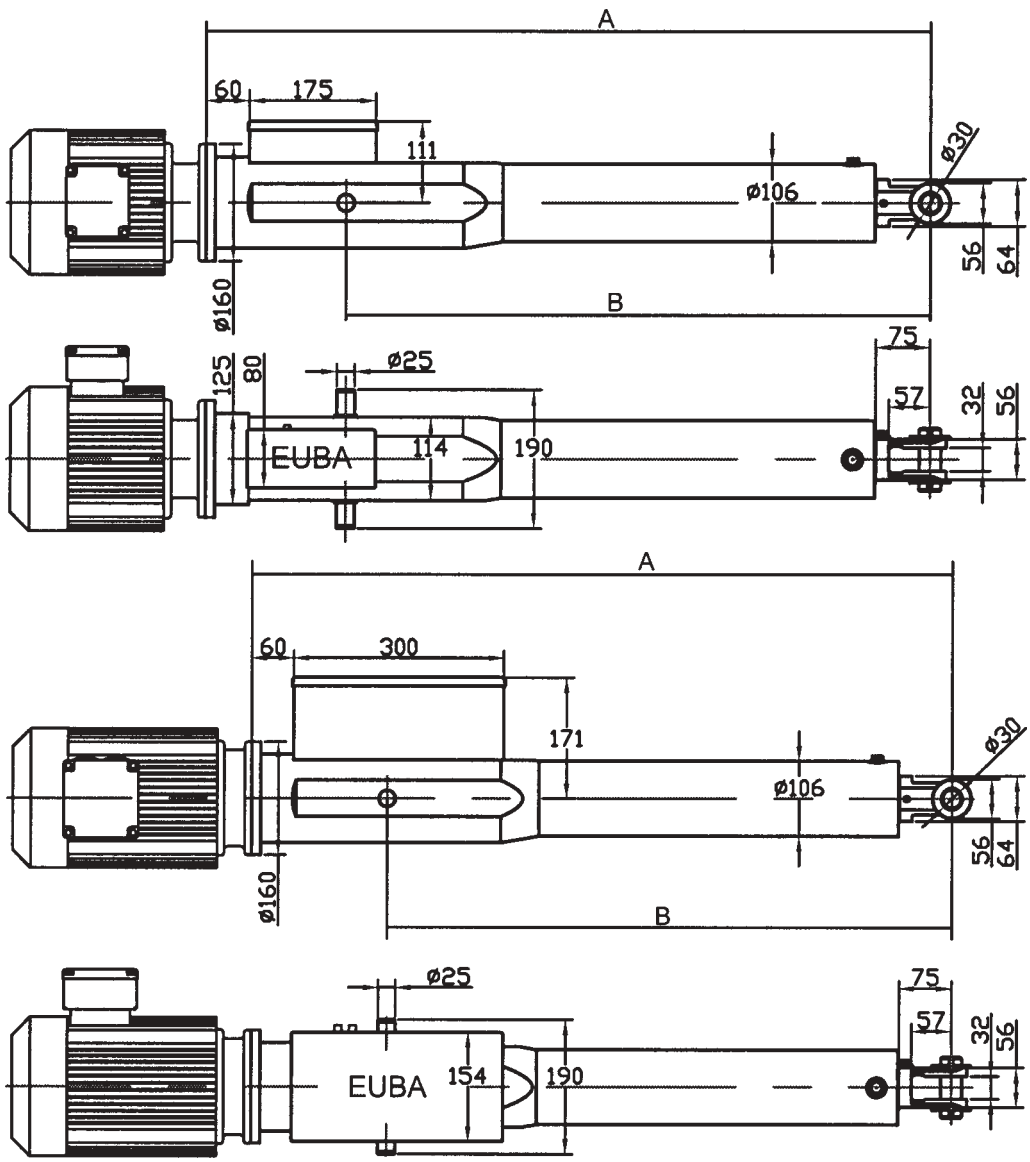
Shackle toggle joint:





Please use Fax request sheet on page 29 for a detailed technical layout.
Minor changes in dimensions are possible due to production tolerances.

Type B4:



Mounting dimension actuator in mm (weight: 60-80 kg)													
stroke	0	50	100	150	200	250	300	350	400	450	500	550	600
A-size	502	552	602	652	702	752	802	852	902	952	1002	1052	1102
B-size	308	358	408	458	508	558	608	658	708	758	808	858	908
stroke	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
A-size	1152	1202	1252	1302	1352	1402	1452	1502	1552	1602	1652	1702	1752
B-size	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558

Actuator dimensions can vary, especially the motor dimensions due to different brands.

B-size changeable (+/- 100 mm)

Motor dimensions depending on motor type and supplier

Power chart:

P in kW in accordance with DIN IEC								
v in mm/s		5	25	40	63	80	94	118
F in daN	500	0,09	0,37	0,75	1,10	1,50	1,50	2,20
	750	0,12	0,55	1,10	1,50	2,20	2,20	3,00
	1000	0,18	0,75	1,50	2,20	-	3,00	4,00
	1500	0,25	1,10	2,20	-	-	-	-
	2000	0,37	1,50	3,00	-	-	-	-
	2500	0,37	2,20	3,00	-	-	-	-

Forces in between min. and max. can be realised continously.

Standard design:
- Pivot
- Clevis

Special design:
- Brackets
- Foot mounting
- Cardan joint
- Special fixing
- Shackle toggle joint
- Angle ball
- High temperature range up to +80°C
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Actuator:
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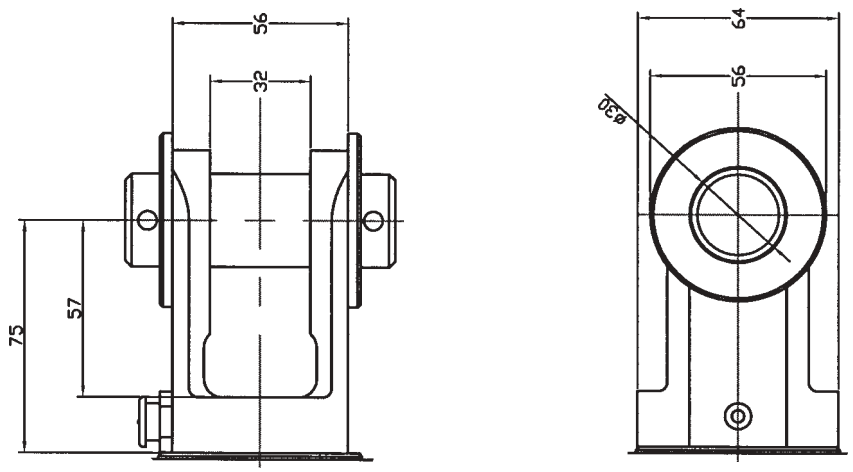
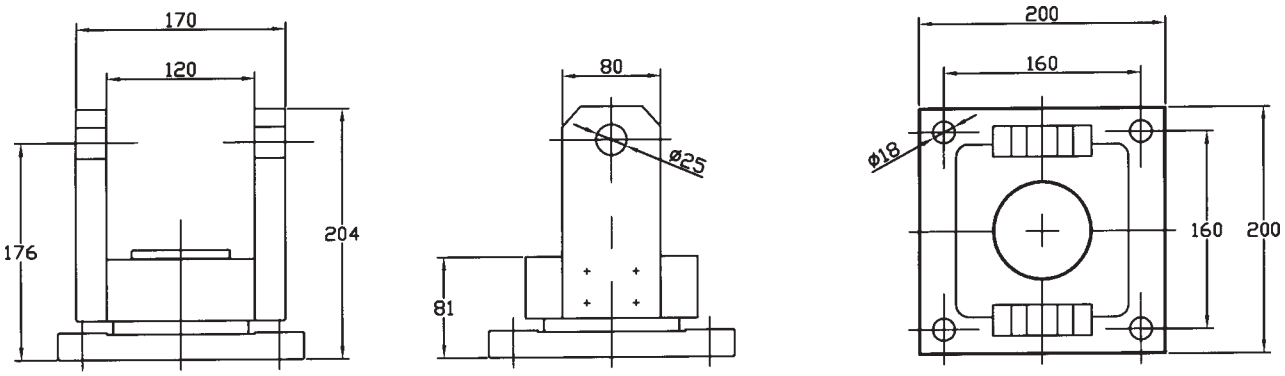
- Chrome plated push rod with internal torsion protection and scraper
- Temperature range from -10°C to +40°C

Motor: Attachment of DIN IEC flange- and gear motors (manufacturer independent)

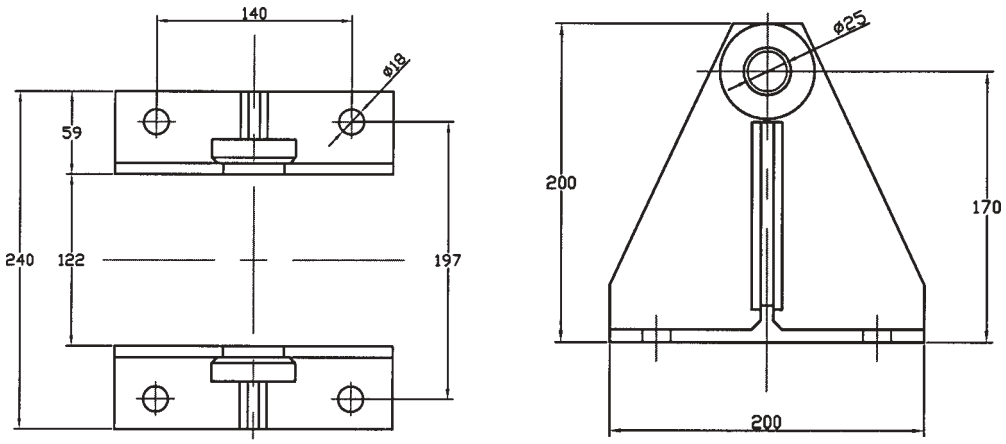
Clevis:



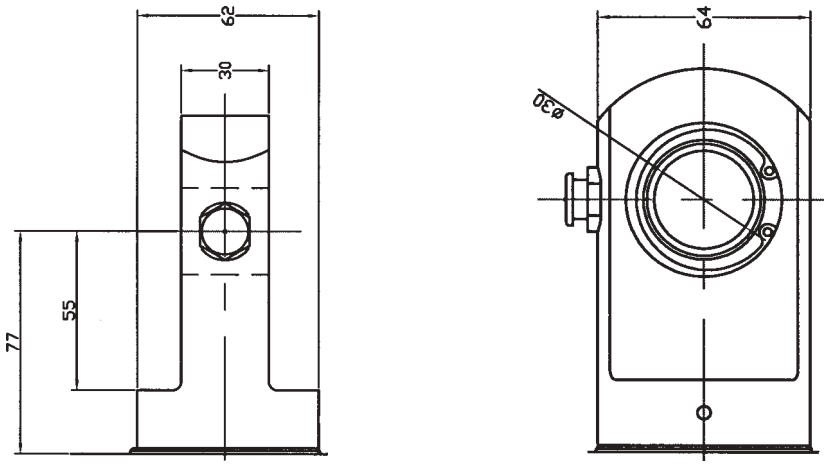
Cardan joint:



Brackets for pivot:



Shackle toggle joint:



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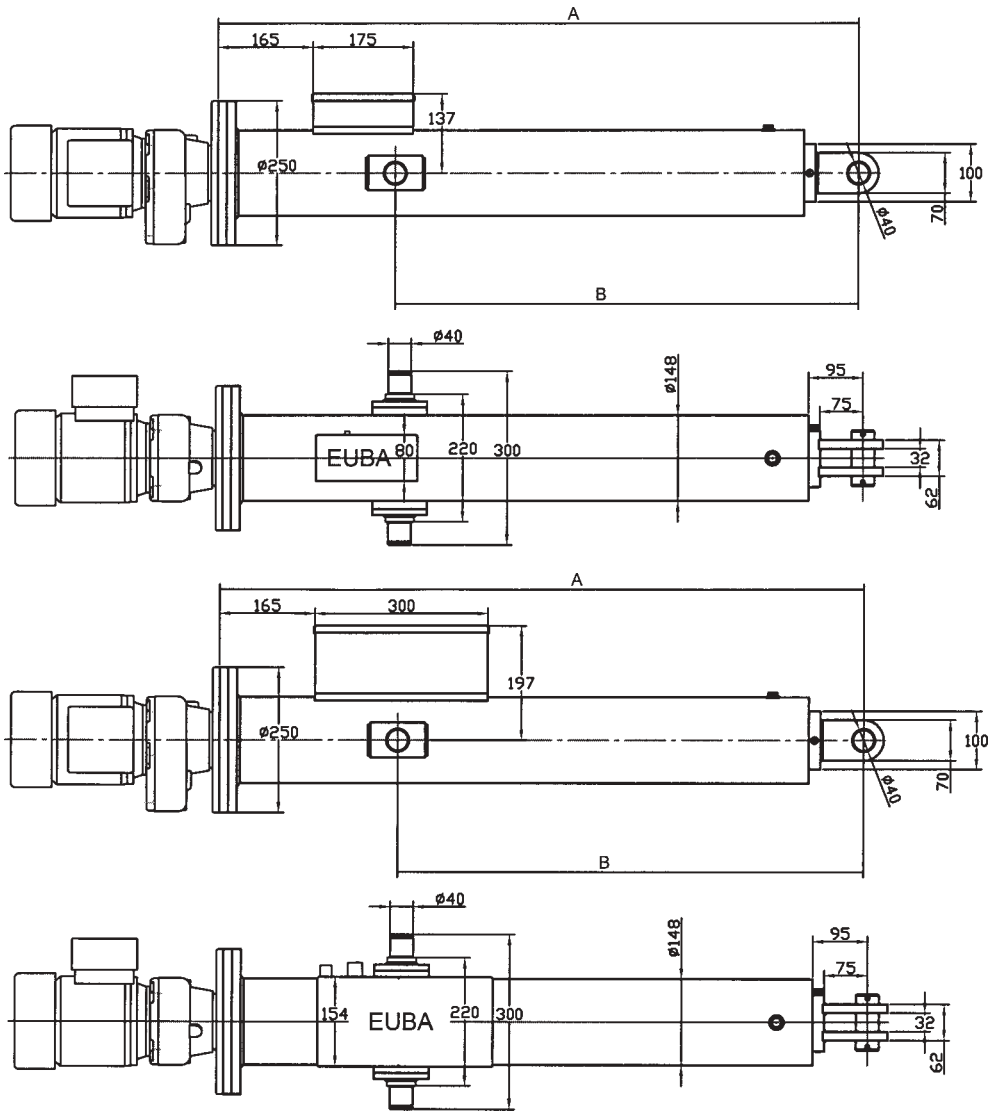
Type C4:



Mounting dimension actuator in mm (weight: 120-250 kg)																
stroke	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
A-size	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
B-size	180	230	280	330	380	430	500	550	600	650	700	750	800	850	900	950
stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	
A-size	1418	1468	1518	1568	1618	1668	1718	1768	1818	1868	1918	1968	2018	2068	2118	
B-size	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	

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B-size changeable (+/- 100 mm)

Motor dimensions depending on motor type and supplier

Power chart:

P in kW in accordance with DIN IEC								
v in mm/s		5	15	25	35	45	111	166
F in daN	1500	0,25	0,75	1,10	2,20	2,20	5,50	7,50
	2000	0,37	1,10	1,50	2,20	3,00	-	-
	2500	0,55	1,50	2,20	3,00	4,00	-	-
	3000	0,55	1,50	3,00	4,00	4,00	-	-
	4000	0,75	2,20	3,00	5,50	5,50	-	-
	5000	0,75	3,00	4,00	5,50	7,50	-	-

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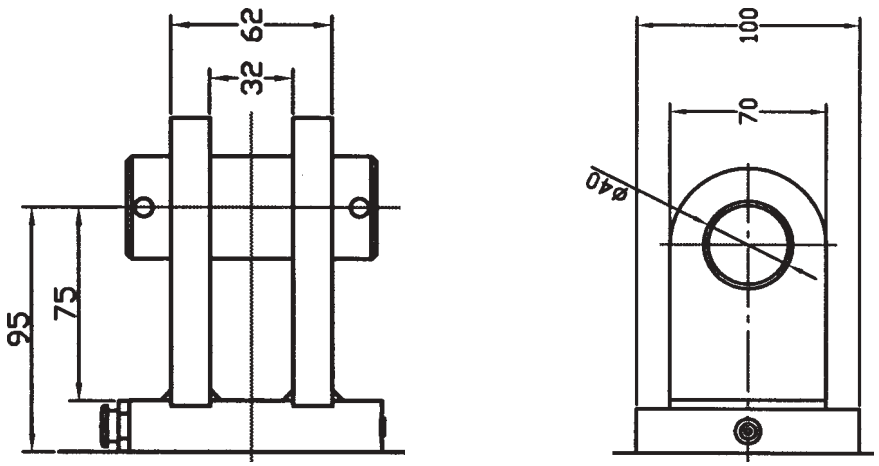
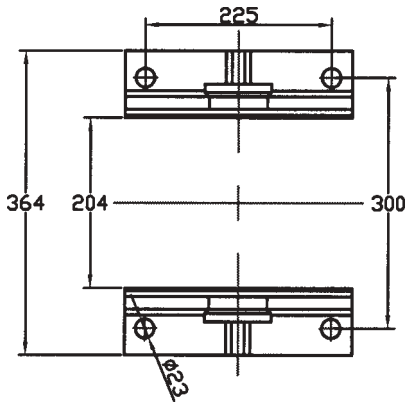
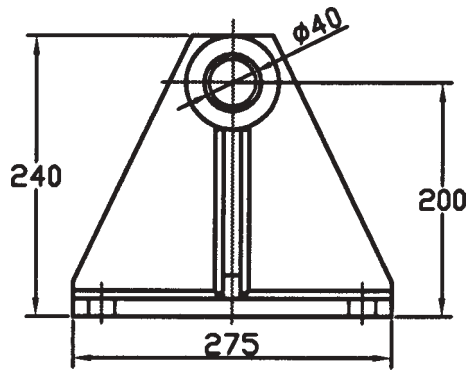
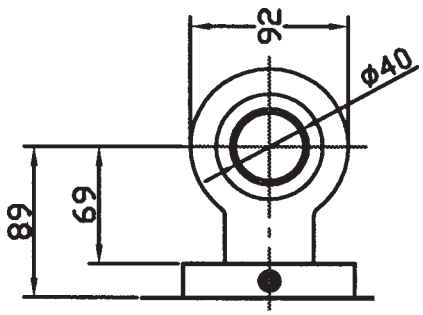


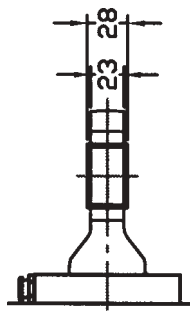
Brackets for pivot:





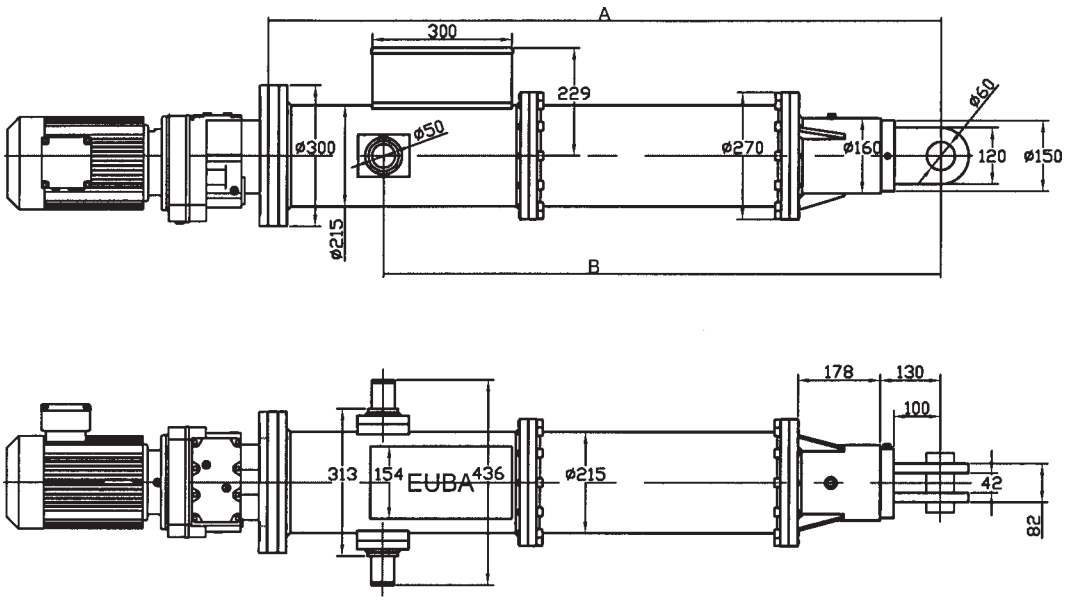
Shackle toggle joint:





Please use Fax request sheet on page 29 for a detailed technical layout.
Minor changes in dimensions are possible due to production tolerances.

Type D4:



Mounting dimension actuator in mm (weight: 150-400 kg)																
stroke	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
A-size	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738
B-size	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449
stroke	800	850	900	950	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
A-size	1788	1838	1888	1938	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	
B-size	1499	1549	1599	1649	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	

Actuator dimensions can vary, especially the motor dimensions due to different brands.

B-size changeable (+/- 100 mm)

Motor dimensions depending on motor type and supplier

Power chart:

P in kW in accordance with DIN IEC								
v in mm/s		5	15	25	35	40	50	60
F in daN	4000	0,75	2,20	4,00	5,50	7,50	7,50	9,20
	6000	1,10	4,00	5,50	7,50	9,20	11,00	15,00
	8000	1,50	5,50	7,50	11,00	15,00	15,00	18,50
	10000	2,20	5,50	9,20	15,00	15,00	18,50	22,00
	12500	2,20	7,50	11,00	18,50	18,50	22,00	30,00
	15000	3,00	9,20	15,00	18,50	22,00	30,00	-

Forces in between min. and max. can be realised continously.

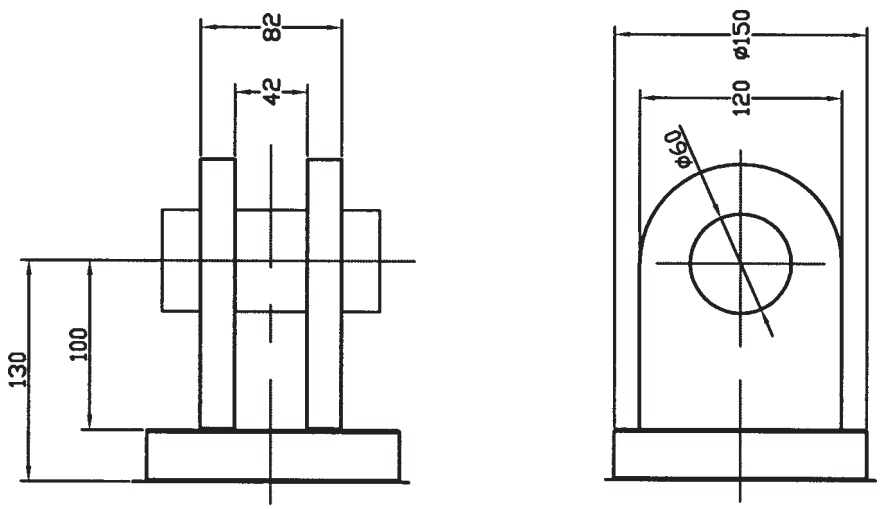
Standard design:
- Pivot
- Clevis

Special design:
- Brackets
- Foot mounting
- Cardan joint
- Special fixing
- Shackle toggle joint
- Angle ball
- High temperature range up to +80°C
- Low temperature range down to -40°C
- Protection class up to IP-65

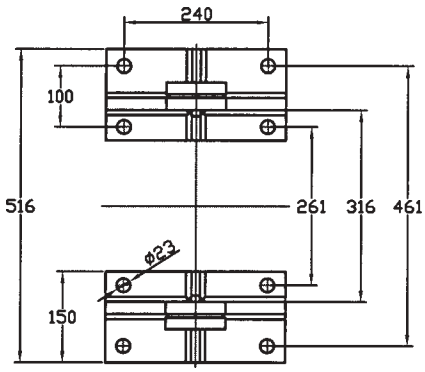
Actuator:
- Steel, with overload switches
- Acme screw threat spindle
- Spindle bearing system (overload protection unit), on both sides supported by spring piles
- Chrome plated push rod with internal torsion protection and scraper
- Temperature range from -10°C to +40°C

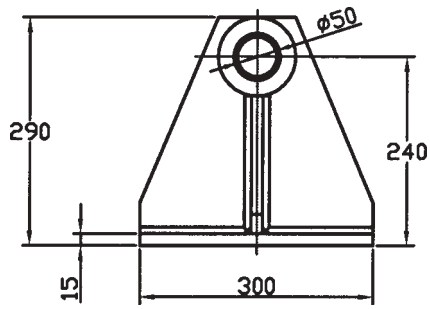
Motor: Attachment of DIN IEC flange- and gear motors (manufacturer independent)

Clevis:

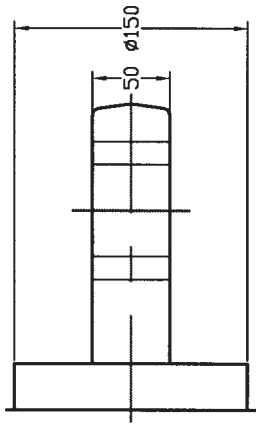


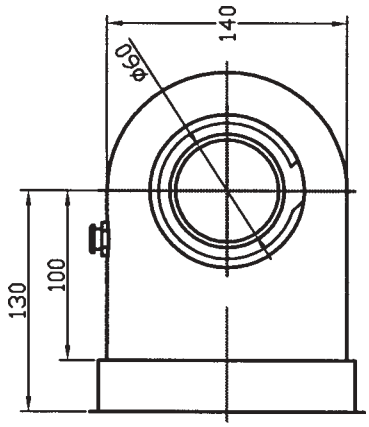
Brackets for pivot:





Shackle toggle joint:

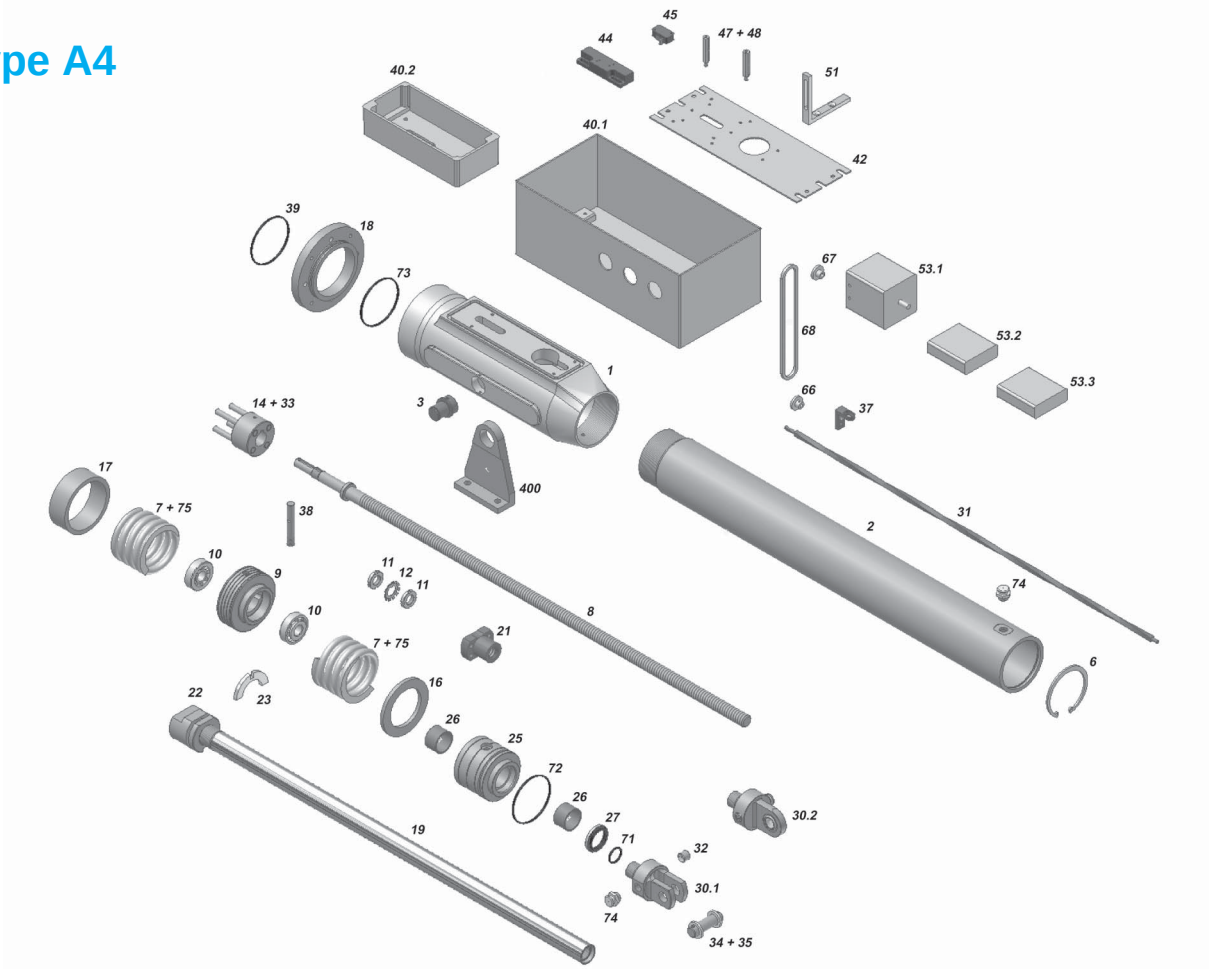




Please use Fax request sheet on page 29 for a detailed technical layout.
Minor changes in dimensions are possible due to production tolerances.

Spare parts drawing of EUBA-actuators

Type A4



Object	Pc's	Description	Object	Pc's	Description
1	1	Overload housing	31	1	Torsion rod
2	1	Rod housing	32	1	Pressure safety
3	2	Turning pin	34 + 35	1	Yoke end bolt + washer
6	1	Lock ring	37	1	Angle for torsion rod
7	Set	Cup spring	38	1	Switching piece
8	1	Acme thread spindle	39*	1	O-Ring rear flange
9	1	Bearing housing	40.1	1	Switch box complete
10*	2	Tapered roller bearing	40.2	1	Overload switch box complete
11*	2	Shaft nut	42	1	Mounting board
12*	1	Safety sheet	44	2	Micro end switch board
14 + 33	2	Coupling	45*	Set	Micro end switches
16	2	Thrust ring	47+ 48	2	Distance bolt + rail
17	1	Spacer sleeve	51	1	Angle for way limit switch
18	1	Flange	53.1	1	Way limit switch
19	1	Push rod	53.2	1	Potentiometer
21*	1	Acme spindle nut	53.3	1	Electronic position transmitter
22	1	Push rod head	66	1	Roller chain sprocket
23*	1	Torsion rod guide	67	1	Roller chain sprocket
25	1	Push rod guide	68*	1	Roller chain
26*	2	Bushing guide	71*	1	O-Ring joke end
27*	1	Scraper	72*	1	O-Ring bushing guide
30.1	1	Yoke end	73*	1	O-Ring front flange
30.2	1	Shackle toggle joint	74*	2	Flat grease nipple
			75	6	Spacer ring
			400	2	Brackets

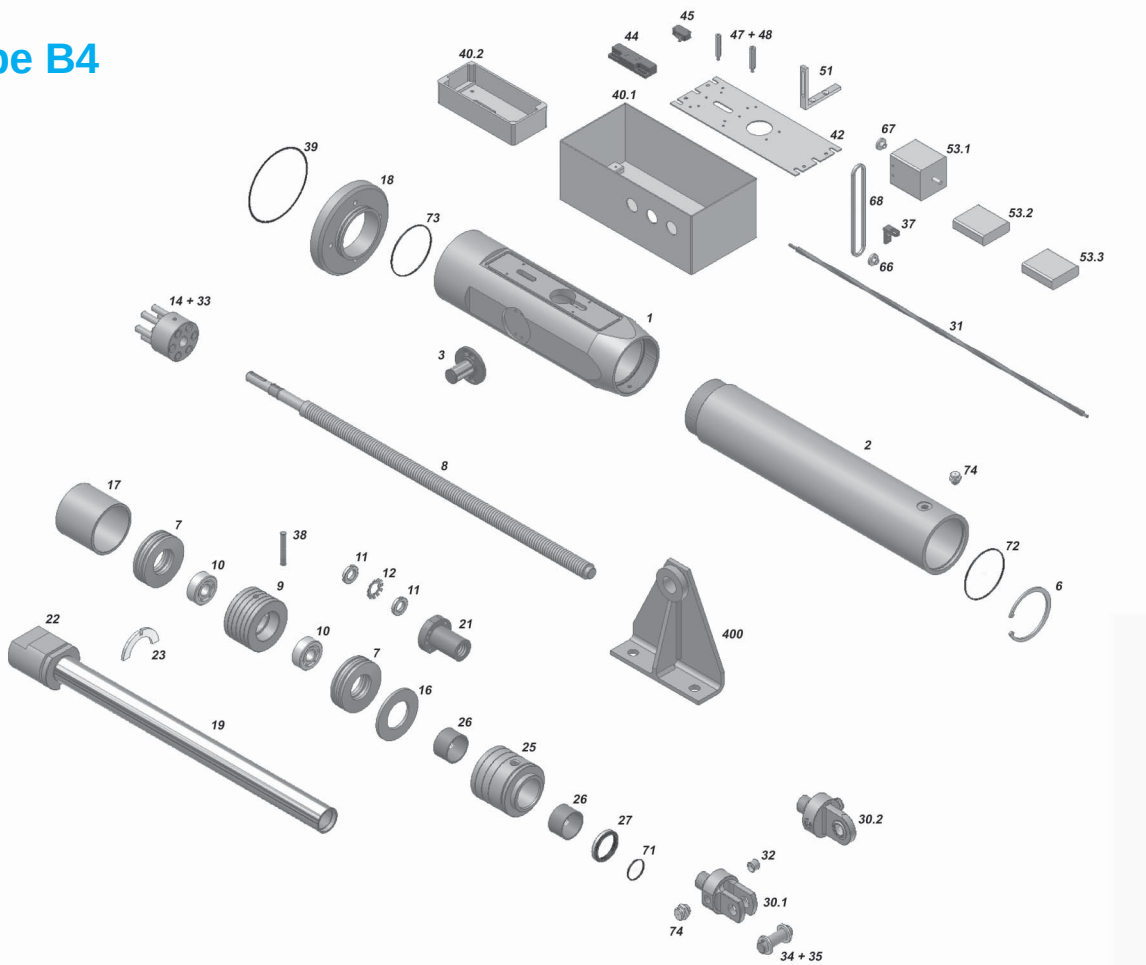
* = wear out parts

Please indicate actuator number as well as the position of the spare part list.

For online spare parts enquiries please go to www.euba.de

Spare parts drawing of EUBA-actuators

Type B4



Object	Pc's	Description	Object	Pc's	Description
1	1	Overload housing	31	1	Torsion rod
2	1	Rod housing	32	1	Pressure safety
3	2	Turning pin	34 + 35	1	Yoke end bolt + washer
6	1	Lock ring	37	1	Angle for torsion rod
7	Set	Cup spring	38	1	Switching piece
8	1	Acme thread spindle	39*	1	O-Ring rear flange
9	1	Bearing housing	40.1	1	WS-Switch box complete
10*	2	Tapered roller bearing	40.2	1	Overload switch box complete (-DE-)
11*	2	Shaft nut	42	1	Mounting board
12*	1	Safety sheet	44	2	Micro end switch board
14 + 33	2	Coupling	45*	Set	Micro end switches
16	2	Thrust ring	47+ 48	2	Distance bolt + rail
17	1	Spacer sleeve	51	1	Angle for way limit switch
18	1	Flange	53.1	1	Way limit switch -WS...-
19	1	Push rod	53.2	1	Potentiometer
21*	1	Acme spindle nut	53.3	1	Electronic position transmitter (4/20 mA)
22	1	Push rod head	66	1	Roller chain sprocket
23*	1	Torsion rod guide	67	1	Roller chain sprocket
25	1	Push rod guide	68*	1	Roller chain
26*	2	Bushing guide	71*	1	O-Ring yoke end
27*	1	Scraper	72*	1	O-Ring bushing guide
30.1	1	Yoke end	73*	1	O-Ring front flange
30.2	1	Shackle toggle joint	74*	2	Flat grease nipple
			400	2	Brackets

* = wear out parts

Please indicate actuator number as well as the position of the spare part list.

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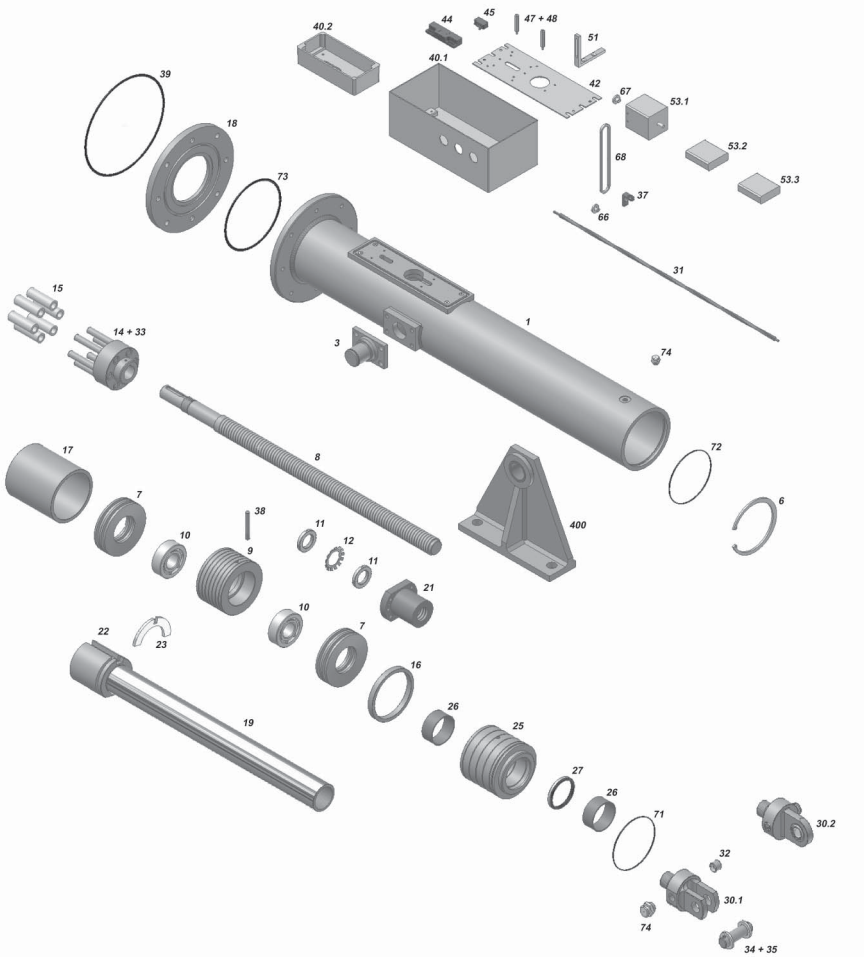
Spare parts drawing of EUBA-actuators

Type C4



Object	Pc's	Description	Object	Pc's	Description
1	1	Housing	31	1	Torsion rod
3	2	Turning pin	32	1	Pressure safety
6	1	Lock ring	34 + 35	1	Yoke end bolt + washer
7	Set	Cup spring	37	1	Angle for torsion rod
8	1	Acme thread spindle	38	1	Switching piece
9	1	Bearing housing	39*	1	O-Ring rear flange
10*	2	Tapered roller bearing	40.1	1	WS-Switch box complete
11*	2	Shaft nut	40.2	1	Overload switch box complete (-DE-)
12*	1	Safety sheet	42	1	Mounting board
14 + 33	2	Coupling	44	2	Micro end switch board
15	Set	Coupling buffer	45*	Set	Micro end switches
16	2	Thrust ring	47+ 48	2	Distance bolt + rail
17	1	Spacer sleeve	51	1	Angle for way limit switch
18	1	Flange	53.1	1	Way limit switch
19	1	Push rod	53.2	1	Potentiometer
21*	1	Acme spindle nut	53.3	1	Electronic position transmitter (4/20 mA)
22	1	Push rod head	66	1	Roller chain sprocket
23*	1	Torsion rod guide	67	1	Roller chain sprocket
25	1	Push rod guide	68*	1	Roller chain
26*	2	Bushing guide	71*	1	O-Ring joke end
27*	1	Scraper	72*	1	O-Ring bushing guide
30.1	1	Yoke end	73*	1	O-Ring front flange
30.2	1	Shackle toggle joint	74*	2	Flat grease nipple
			400	2	Brackets

* = wear out parts

Please indicate actuator number as well as the position of the spare part list.

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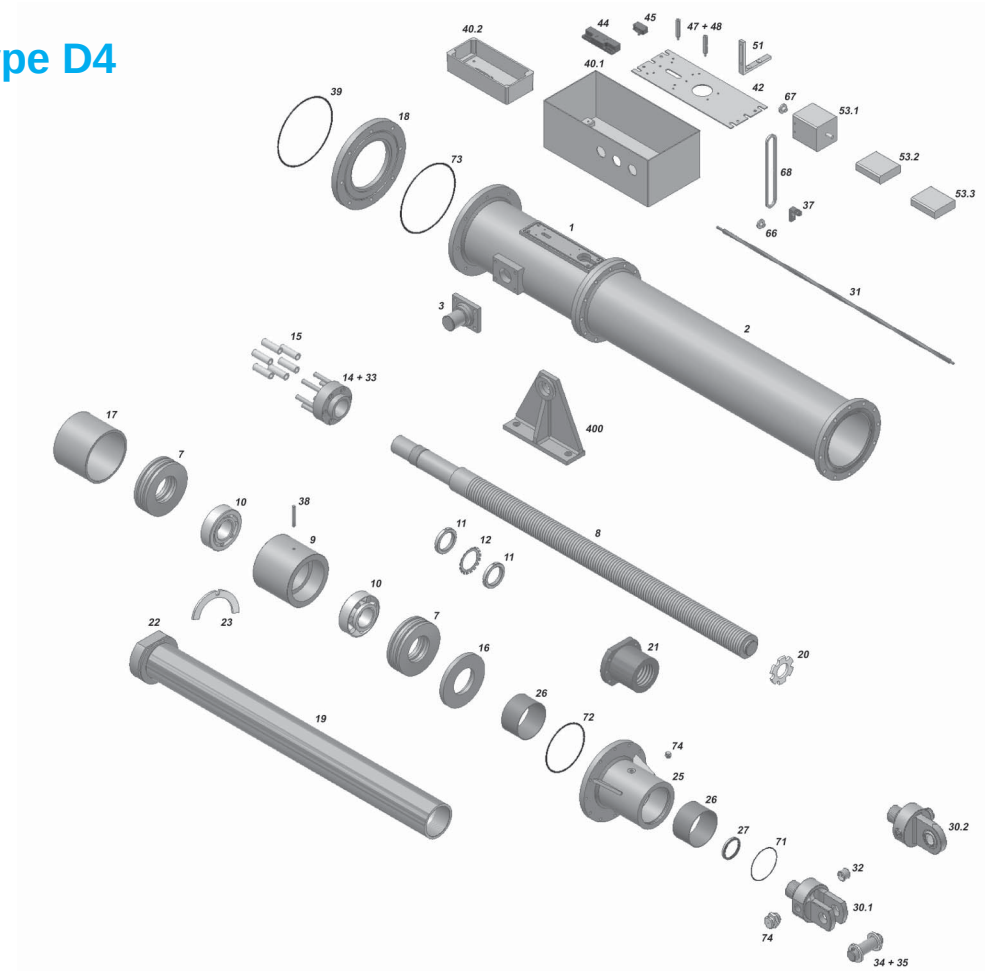
Spare parts drawing of EUBA-actuators

Type D4



Object	Pc's	Description	Object	Pc's	Description
1	1	Housing	31	1	Torsion rod
3	2	Turning pin	32	1	Pressure safety
7	Set	Cup spring	34 + 35	1	Yoke end bolt + washer
8	1	Acme thread spindle	37	1	Angle for torsion rod
9	1	Bearing housing	38	1	Switching piece
10*	2	Tapered roller bearing	39*	1	O-Ring rear flange
11*	2	Shaft nut	40.1	1	Switch box complete
12*	1	Safety sheet	40.2	1	Overload switch box complete
14 + 33	2	Coupling	42	1	Mounting board
15	Set	Coupling buffer	44	2	Micro end switch board
16	2	Thrust ring	45*	Set	Micro end switches
17	1	Spacer sleeve	47+ 48	2	Distance bolt + rail
18	1	Flange	51	1	Angle for way limit switch
19	1	Push rod	53.1	1	Way limit switch
20	1	Acme thread spindle buffer	53.2	1	Potentiometer
21*	1	Acme spindle nut	53.3	1	Electronic position transmitter
22	1	Push rod head	66	1	Roller chain sprocket
23*	1	Torsion rod guide	67	1	Roller chain sprocket
25	1	Push rod guide	68*	1	Roller chain
26*	2	Bushing guide	71*	1	O-Ring joke end
27*	1	Scraper	72*	1	O-Ring bushing guide
30.1	1	Yoke end	73*	1	O-Ring front flange
30.2	1	Shackle toggle joint	74*	2	Flat grease nipple
			400	2	Brackets

* = wear out parts

Please indicate actuator number as well as the position of the spare part list.

For online spare parts enquiries please go to www.euba.de

Special Actuators:

Actuators type W:

These actuators are specially designed for hydro engineering. The prescriptions of the DIN-standards for these actuators are realized by a special assembly.

The range of application of our actuators are docks, flood gates, water works and purification plants (see page 32).

Special designed actuators:

Throughlike edging guide actuators:

It is possible to adjust throughlike edging guides for all kinds with these actuators, e.g. for pig iron or slag. As a result high forces with small velocities can be fabricated also (see center page 2).

Ingot pusher:

Actuators of this kind can be used at industrial furnaces, foundry plants et al., where high forces, strokes and velocity are needed.

Road blocker:

Suitable for driveways, carparks or city entrances. The characteristic of this actuator is an automatic retraction during a power failure. Individual control panels, including key switches or remote controls for police-, fire departments and ambulances, for an automatic opening or closing for driveways can be installed (see page 31 down left).

Gate actuators:

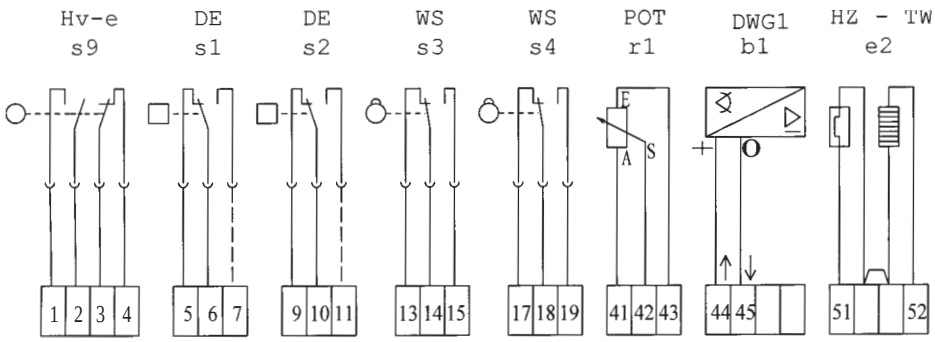
Special designed actuators for opening and closing of heavy gates with long strokes. Strokes of 7 m can be realized with only one motor and two stroke units (see center page 31).

Window actuators:

With only one EUBA-actuator you are able to open and close columns of windows. Greenhouses, hangars, farmhouses or buildings with glass domes can be equiped with thermal sensors for an automatical control of the inside temperature.

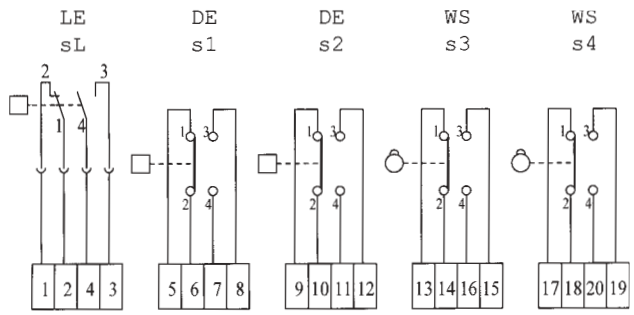
Wiring Diagrams

Switches 1-polar



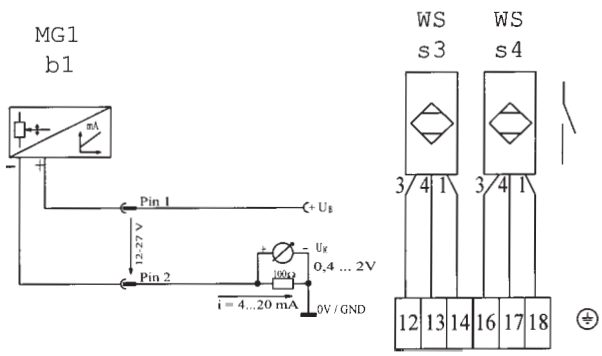
Switches 2-polar

way limit switches
max. up to 6

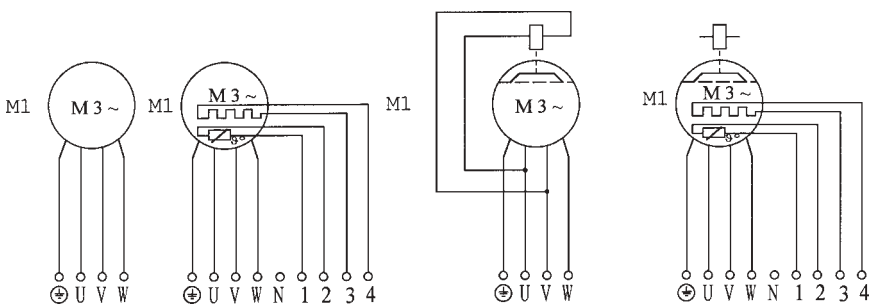


Legend:

HVE	= Hand wheel with electrical switch off
DE	= Overload switch
WS	= Way limit switch
POT	= Potentiometer
DWG	= Electronical position repeater 0-20 mA or 4-20 mA
BL	= Blinker unit
HZ	= Heater
TW	= Thermistor (PTC)
MG	= Transducer



Special design:
- Switches gold-plated
- Initiators for shut-down
- Position repeater 4...20 mA



- standard- and breakmotors of all designs
- gearmotors also

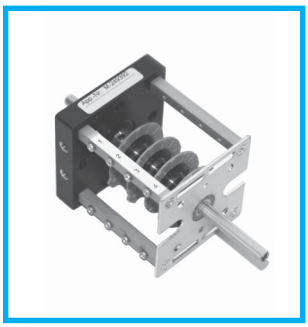
Electronical Supplement

Plug connections

For a fast assembly it is of great advantage to use plug connections of commercial manufactureres.

Way limit switches

To indicate your desired position, we use a control system with two or more switches.

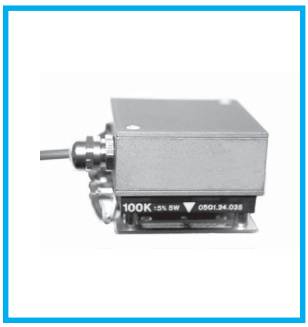


Potentiometer

It is possible to attach potentiometers for easy and profitable way indication.

Electronic position repeating devices

We use electronic position repeating devices 0/4-20 mA as commercial, continous position indicators.



Frequency transformers

Synchronization-, positioning controls and variable speed are possible by using frequency transformers.

Micro switch

Special entire moulded switches ensure an ATEX-application.

Fax Request

EUBA

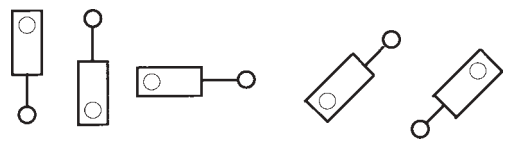
Antriebstechnik
Eller GmbH
Fax: +49 201- 8531125

Company:
Street:
City:
Country:
Phone:
Fax:
Interlocutor:

Regulating power dynamical:

Pull: .....daN
Push: .....daN
Static stress: .....daN

Fitting position:



Stroke: .....mm
Velocity: .....mm/s

Operating frequency: .....s/h
Cyclic duration factor: .....% ED

Type of mounting:

❑ bracket ❑ pivot ❑ clevis and bold
❑ cardan joint ❑ flange ❑ shackle toggle joint+bearing
❑ angle ball+socket joint ❑ special fixing (on request)

Conditions of surroundings:

❑ dusty
❑ humid
❑ tropic
❑ sea surrounding

Installation:

❑ outdoors
❑ rooved over
❑ closed room
..... meter above sea level

Specification:

❑ high rust protection
❑ special coating
❑ bellow

Connection voltage: 1AC .....V .....Hz DC V
3AC ...../.....V .....Hz

Type of protection: IP-.....

Ambient temperature: .....°C to .....°C
Insulation class: .....

Way limit switch:

❑ 2 ❑ 4 ❑ 6 adjustable limit switches
❑ potentiometer .....Ω
❑ precision potentiometer .....Ω
❑ electronic position 0/4 - 20 mA transmitter
❑ special design (on request)

Special design:

❑ PTC thermistor sensor ❑ brake motor ❑ anti-condensation heater
❑ switch box heater ❑ plug connection

Special features

Special actuators

EUBA-elektro-actuators of series E4 and F4 are designed for forces up to 2.000.000 N.
Predominantly these actuators are produced for water engineering, iron and steel work et al.

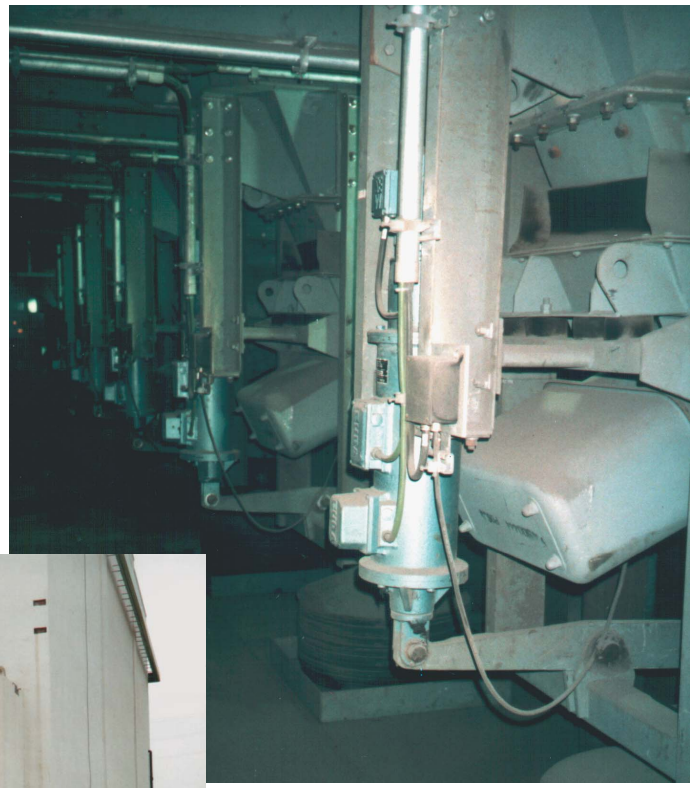
Explosion protection

Our whole series of actuators can be produced for an operation in explosion-proof constructions zone 22, device category III.
For this we will need detailed information about the job site.

Synchronous working

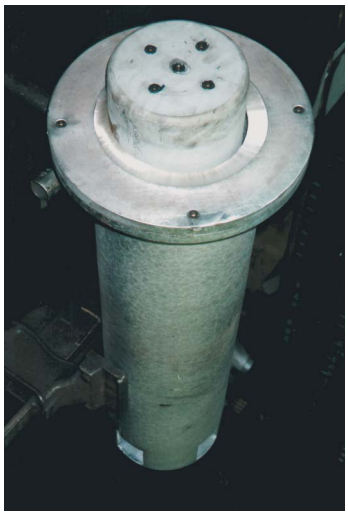
By controlling frequency inverters with the help of incremental-/absolute encoders a synchronous working of two or more actuators is ensured.

Accessory drive
smallest size



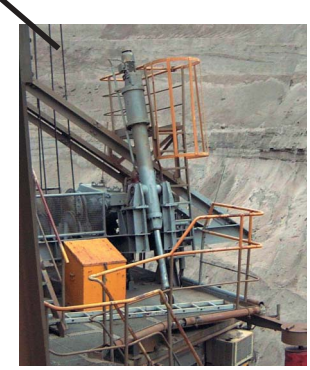
Test weight control for
steel plant

Gate actuator
Force: 10 t, Stroke: 7000 mm



Road blocker

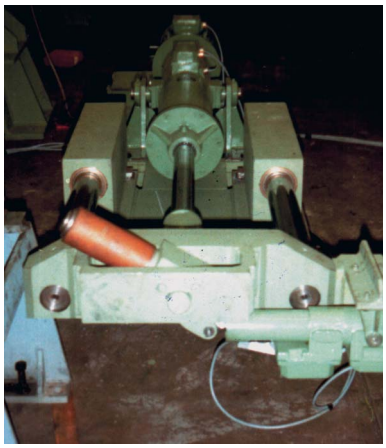
Cab level regulation
open-pit lignite mine



Flood gate actuator

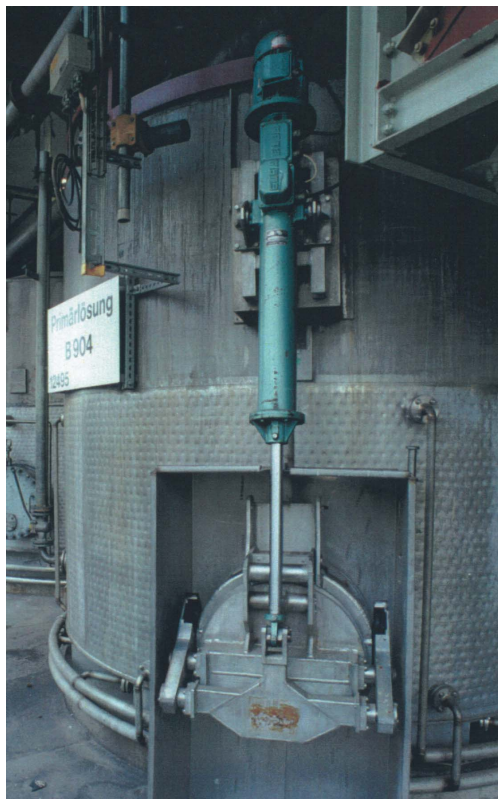
Flood gate
regulation

Silo feeding installation
for belt conveyor system



Transfer mechanism
steel-plant Krivoy-Rok

Damper adjustment



Flood gate actuator

EUBA -
Over 40 years of Know-How in research and sale of electric actuators.

A custom-made solution is our strength.
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EUBA

Antriebstechnik
Eller GmbH
Ruhrau 44
D-45279 Essen-Steele
P.O. Box 14 32 07
D-45262 Essen
Telefon 02 01/ 8 53 11-0
Telefax 02 01/ 8 53 11-25
E-mail info@euba.de
Internet www.euba.de

EUBA
Representations:

Russia:
ELIS-Inter
Krupskoy str., 34
614060 Perm
RUSSIA
Tel.: 007/342 282 55 75
Fax: 007/342 262 38 39
E-mail: elis-inter@perm.ru

South Africa:
DREHMO Africa (Pty) Ltd.
Unit 42 and 43
No. 188, Dr. Vosloo Road
N 12 Industrial Park, Bartlett
SOUTH AFRICA
Tel.: 0027/11 918 3200
Fax: 0027/11 918 3201
E-mail: kil@drehmo.co.za

Italy:
Cuzzi s.r.l.
Via Rancati 6
20127 Milano
ITALY
Tel.: 0039/02 261 37 27
Fax: 0039/02 282 79 69
E-mail: info@cuzzimpianti.com

Netherlands:
Technisch Bureau HECK B.V.
Westrak 80a
1771 ST Wieringerwerf
NETHERLAND
Tel.: 0031/227 60 01 01
Fax: 0031/227 60 03 10
E-mail: heck@heckbv.nl

Venezuela:
BEMEX Industrial Equipment C.A.
Mezanina 1, Oficina 5 Calle Cuchiveros,
Alta Vista Norte, Código Postal 8050
Puerto Ordaz
VENEZUELA
Tel.: 0058/286 962 02 52
Fax: 0058/286 962 60 11
E-mail: pto-ordaz@bemex.com

Belgium:
Kuttner S.A./N.V.
Parc de la Gotte-70
4550 Nandrin
BELGIUM
Tel.: 0032/4 246 07 55
Fax: 0032/4 252 81 74
E-mail: kuttner@kuttner.be

China:
Shenzhen AFA Ind. Dev. Co. Ltd.
1310 A, Zhongshen Huayuan Bldg.
Caitiannan Road
Shenzhen
P.R. CHINA
Tel.: 0086/755 8299 7156
Fax: 0086/755 8299 7159
E-mail: yu.li@afa.com.cn

Spain:
D.-Konsult S.L.
Paseo del Emba jador 90 Bis
28707 San Sebastian de los Reyes
Madrid
SPAIN
Tel.: 0034/91 657 08 56
Fax: 0034/91 657 08 64
E-mail: dkolb@ceramprotec.com

Greek:
H.E.K. Co.
2, Marathonos Avenue and
Karditsis Street
14565 Aghios Stefanos Attiki
GREECE
Tel.: 0030/210 692 94 66
Fax: 0030/210 692 58 04
E-mail: hek-athe@otenet.gr