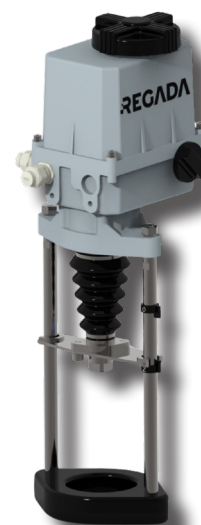


STANDARD

ST 0

STANDARD EQUIPMENT:

- Voltage 230 V AC
- Terminal board connection
- Controls variants
 - 1 thrust switch + 1 position switch
 - 2 thrust switches
- Mechanical connection - pillars
- Mechanical position indicator
- Manual control
- Protection code IP 54



Specification table ST 0

Order code

490. X - X X X X X / X X

Climate resistance	Ambient temperature	Corrosivity category ¹⁰⁾	Enclosure	
Mierna	-25°C...+55°C	C3	IP 54	0
	-25°C...+55°C	C3	IP 67	1
	-25°C...+55°C	C3	IP 68 ¹¹⁾	5
Tropická vlhká + ČOV	-25°C...+55°C	C4	IP 67	2
Tropická suchá a suchá	-25°C...+55°C	C3	IP 67	6
Morská	-25°C...+55°C	C4	IP 67	7

Electric connection	Voltage of electric motor ²³⁾		Wiring diagram	
To terminal board	230 V AC	50 Hz	Z20	0
	220 V AC	50 Hz		L
	24 V AC	50 Hz		3
	120 V AC	60 Hz		T
	110 V AC	60 Hz		B

Next page

Order code

490. X - X X X X X / X X

Switching-off thrust	Max. load torque ³²⁾		Max. load torque ³³⁾		Operating time		
					50 Hz	60 Hz	
4 500 N	ON - OFF duty	4 000 N	Modulating duty	3 200 N	5 mm/min	6 mm/min	A
					10 mm/min	12 mm/min	N
3 800 N		3 200 N		2 500 N	5 mm/min	6 mm/min	B
					10 mm/min	12 mm/min	E
2 900 N		2 500 N		2 000 N	5 mm/min	6 mm/min	0
					16 mm/min	19 mm/min	P
1 900 N		1 600 N		1 280 N	5 mm/min	6 mm/min	C
					10 mm/min	12 mm/min	F
					16 mm/min	19 mm/min	Q
					20 mm/min	24 mm/min	H
1 440 N		1 250 N		1 000 N	5 mm/min	6 mm/min	1
					10 mm/min	12 mm/min	4
950 N		800 N		640 N	5 mm/min	6 mm/min	D
					10 mm/min	12 mm/min	G
					16 mm/min	19 mm/min	R
					20 mm/min	24 mm/min	J
					40 mm/min	48 mm/min	K
725 N		630 N		500 N	5 mm/min	6 mm/min	2
					10 mm/min	12 mm/min	5
					16 mm/min	19 mm/min	7
					40 mm/min	48 mm/min	L
360 N		320 N		250 N	5 mm/min	6 mm/min	3
					10 mm/min	12 mm/min	6
					16 mm/min	19 mm/min	8
					40 mm/min	48 mm/min	M

Switching	Pracovní zdvih		
	Max. without transmitter ⁴¹⁾	With transmitter	
Single-thrust Wiring diagram Z20	16mm	8 mm	A
		10 mm	B
		12.5 mm	C
		16 mm	D
	25mm	20 mm	E
		25 mm	F
	28mm	28 mm	G
	40 mm ⁴⁷⁾	-	H
Double-thrust Wiring diagram Z20	16 mm	8 mm	N
		10 mm	P
		12.5 mm	Q
		16 mm	R
	25mm	20 mm	S
		25 mm	T
	28mm	28 mm	J
	40 mm ⁴⁷⁾	-	V

Next page

Order code

490. X - X X X X X / X X

Transmitter		Connection	Output	Wiring Diagram	
Without transmitter		-	-	-	A
Potentiometer	Single	-	1 x 100 Ω	Z5c	B
			1 x 1000 Ω		E
			1 x 2 000 Ω		F
	Double	-	2 x 100 Ω	Z6c	K
			2 x 1000 Ω		N
			2 x 2 000 Ω		P
Electronic position transmitter	Passive	2-wire	4 - 20 mA	Z10g	S
		3-wire	0 - 20 mA	Z257j	T
			4 - 20 mA		V
			0 - 5 mA		Y
	Active	2-wire	4 - 20 mA	Z269r	Q
		3-wire	0 - 20 mA	Z260h	U
			4 - 20 mA		W
			0 - 5 mA		Z
	Passive	3-wire	0 - 10 V	Z257k	D
	Active		0 - 10 V	Z260k	R
Current CPT	Passive	2-wire	4 - 20 mA	Z10g	I
	Active	2-wire	4 - 20 mA	Z269r	J
Current DCPT 3M	Passive	2-wire	4 - 20 mA	Z10g	2
	Active		4 - 20 mA	Z269r	3

Mechanical connection	Connecting height	Thread of stem ⁶²⁾	Dimensional drawing	
Direct/ flange ISO 5210	45 mm	M12x1.25-20	P-1180	A
Pillars	66 mm	M8x1-22 M10x1-22 M10x1.5-22 M12x1.25-22 M12-22 M14-22 M5-22 1/2-13 UN 3/8-16 UN 5/16-18 UN Without bore	P-1181/A	B
	92.5 mm		P-1181/B	G
	85 mm		P-1185/A	U
	110 mm		P-1185/B	V
	57 mm		P-1309	Z
	70 mm		P-1309/A	7
Flange	110 mm		P-1182/A	L
	103 mm		P-1182/B	K
	110 mm		P-1182/D ⁴⁷⁾	p
	112 mm		P-1183	M
	102 mm		P-1184	S
	50 mm		P-1307	W
	62 mm		P-1375/A	Y
	66 mm		P-1375/B	C
	53 mm		P-1385/A	0
	86 mm		P-1385/C	1
	59 mm		P-1385/B	2
	94 mm		P-1182/E	3
	124 mm		P-1182/F ⁴⁷⁾	4
	59 mm		P-2076	5
Flange and 4 pillars	103 mm		P-1467/A	R
	110 mm		P-1467/B	T
	66 mm		P-1469	D

	Additional equipment	Wiring diagram		
A	2 additional position switches	Z21a	0	0
H	Gold coated contacts of microswitches, details after consulting with producer	-	4	0

Notes:

10) Climate resistance according to ISO 9223/ EN ISO 12944-2

11) IP 68-10 m / 48 hours. Dimensional drawings on request.

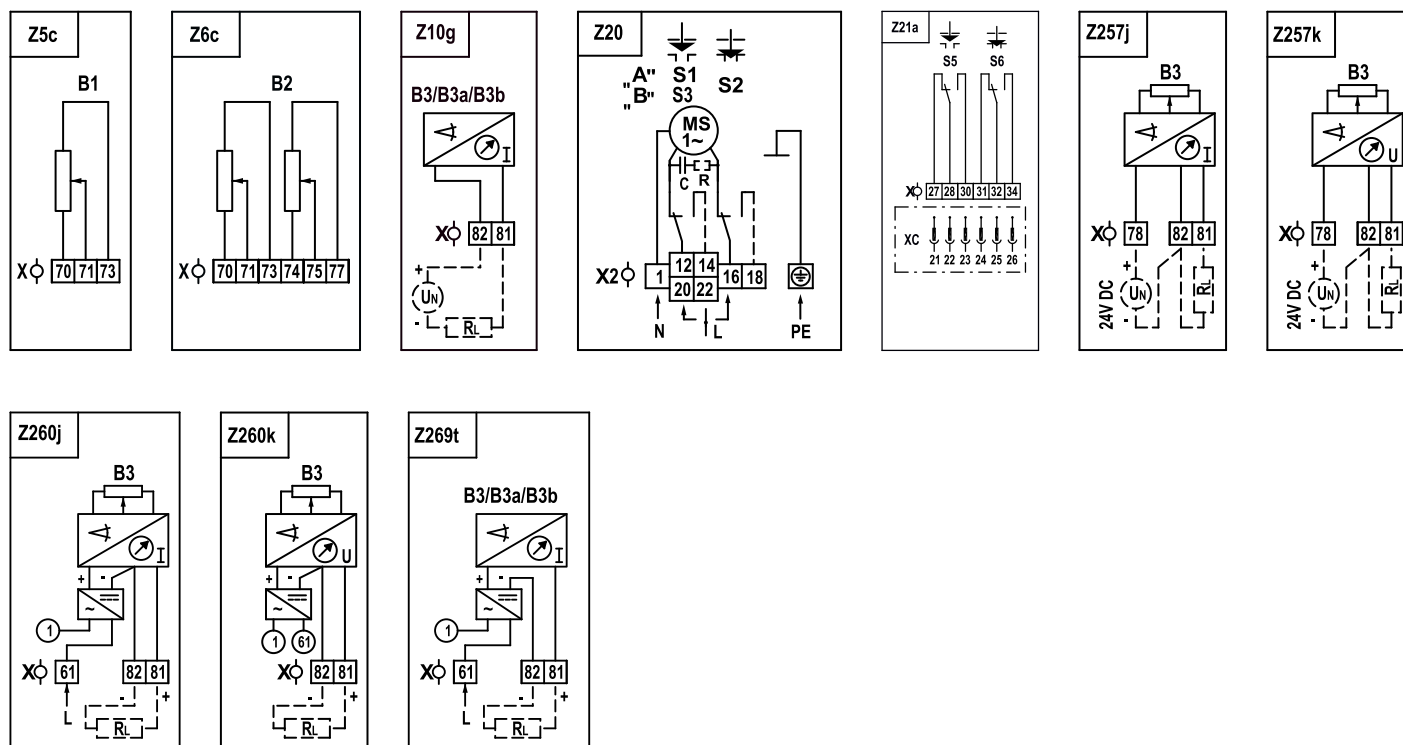
32) Duty cycle S2-1 0min, or S4-25%, 6-90 cycles per hour.

33) Duty cycle S4-25%, 90-1200 cycles per hour.

41) The version without any transmitter can have its stroke adjusted from 0 up to maximum stroke (16 mm, 25 mm, 40 mm).

47) Valid only for version without transmitter and mechanical connection P-1182/D, F.

62) Thread in the coupling must be specified in the order bywords.

**Electric connection:**

to terminal board with 12 terminals, wire cross section 1.5 mm², via 3 cable glands M16x1.5 for cable diameter 6 to 10.5 mm.

Notes:

1. Wiring connection is limited by max. number of 12 terminals.
2. The version of EA with additional position switches (S5, S6) and with a led-out potentiometer (B1) does not have the switch's contacts drawn in a dotted line (the wiring diagram Z20) led-out to the terminals 14 and 18, or 22 and 18.
3. The version of EA with supply voltage of 24V AC does not require connecting of an earthing cable PE.
4. Different wirings of actuators than shown in the catalogue are possible after agreement with producer.

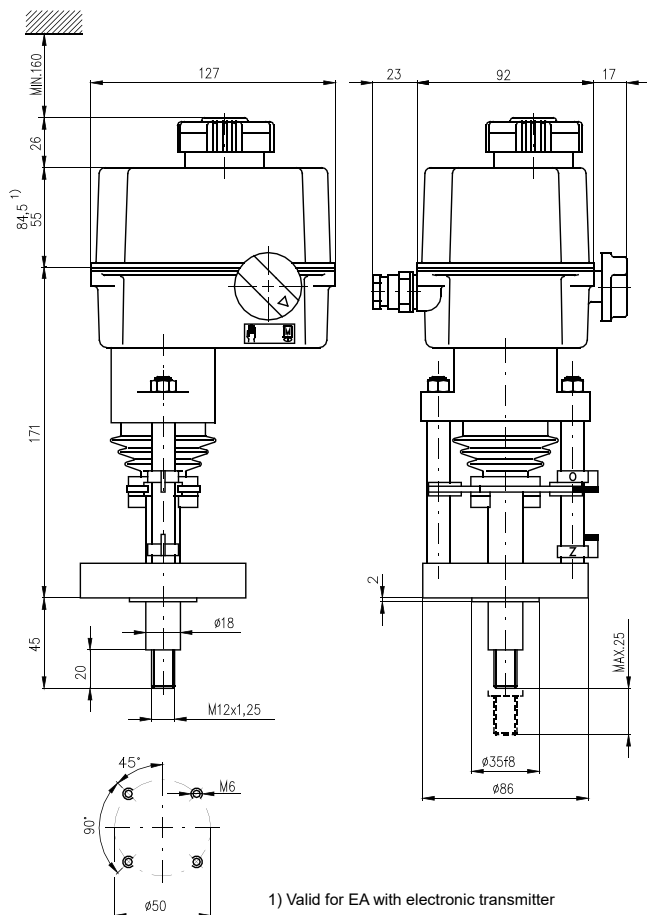
Legend:

Z5c.....connection of single potentiometer
 Z6c.....connection of double potentiometer
 Z10g.....connection of CPT or electronic position transmitter
 - 2 - wire, passive
 Z20.....connection of electric motor: "A" - with 2 thrust switches S1, S2;
 "B" - with 1 thrust switch S2 and 1 position switch S3
 Z21a.....connection of additional position switches
 Z257j.....connection of electronic position transmitter - 3 - wire, passive
 Z257k.....connection of electronic position transmitter - 3 - wire, passive
 Z260j.....connection of electronic position transmitter - 3 - wire, active
 Z260k.....connection of electronic position transmitter - 3 - wire, active
 Z269t.....connection of CPT or electronic position transmitter
 - 2 wire - active

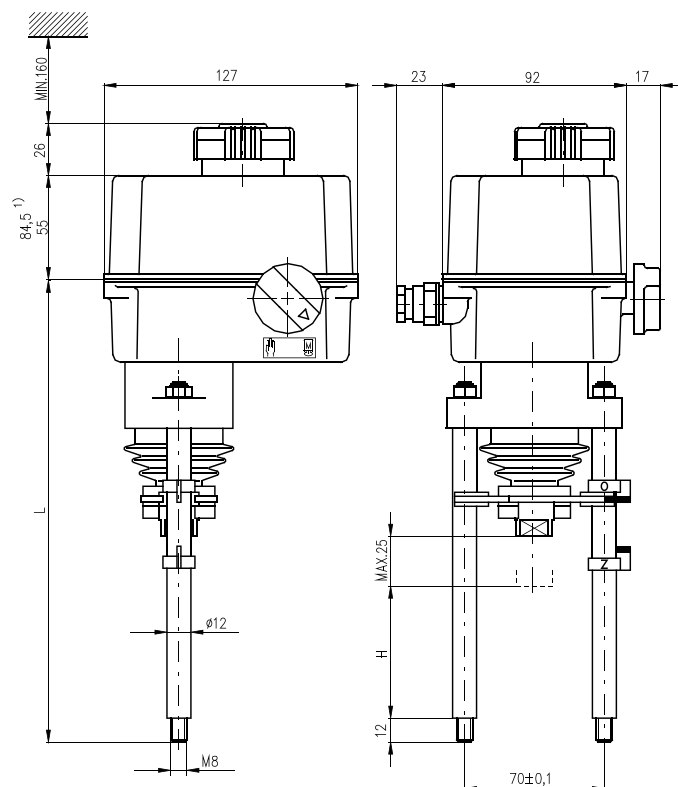
Legend:

B1.....single potentiometer
 B2.....double potentiometer
 B3.....CPT or electronic position transmitter
 B3a.....capacitive current transmitter (CPT)
 B3b.....DCPT current transmitt
 S1.....torque switch „open“
 S2.....torque switch „closed“
 S3.....position switch „open“
 S4.....position switch „closed“
 S5.....additional position switch „open“
 S6.....additional position switch „closed“
 M.....electric motor
 C.....capacitor
 E1.....space heater
 F1.....motor thermal protection
 F2.....thermal switch of the space heater
 F3.....reversing board fuse
 X.....terminal board
 X2.....reversing board terminal board
 X5.....local control terminal board
 R.....reducing resistor
 RL.....loading resistor
 I.....output current signal
 RM2.....24 V reversing board
 UN.....transmitter power supply voltage
 Y.....motor brake
 OPEN/STOP/CLOSE.....local control buttons
 REMOTE/OFF/LOCAL.....local control selection button

Dimensional drawing ST 0

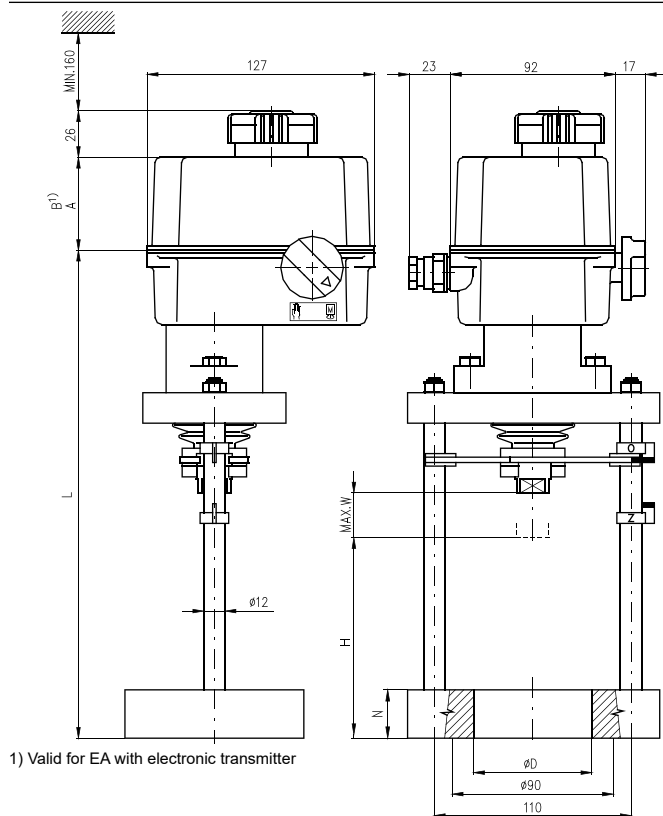


P-1180



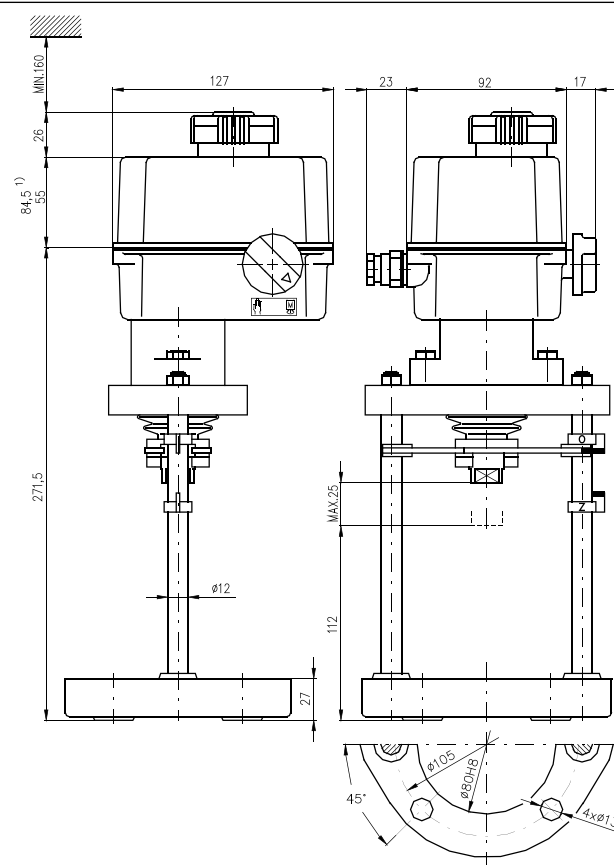
P-1181/B	92,5	264
P-1181/A	66	237,5
Version	L	M

P-1181



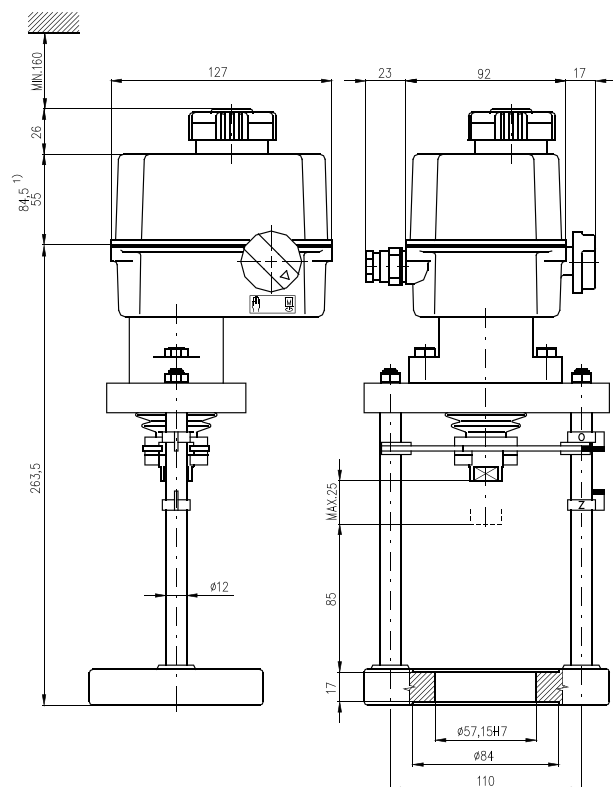
P-1182/E	94	28	258,5	84,5	84,5	18	58,1
P-1182/D	110	40	301,5	84,5	84,5		
P-1182/B	103	25	264,5	55	84,5	25	65,15H7
P-1182/A	110	25	271,5	55	84,5		
Version	L	Z	M	A	B	N	ØD

P-1182



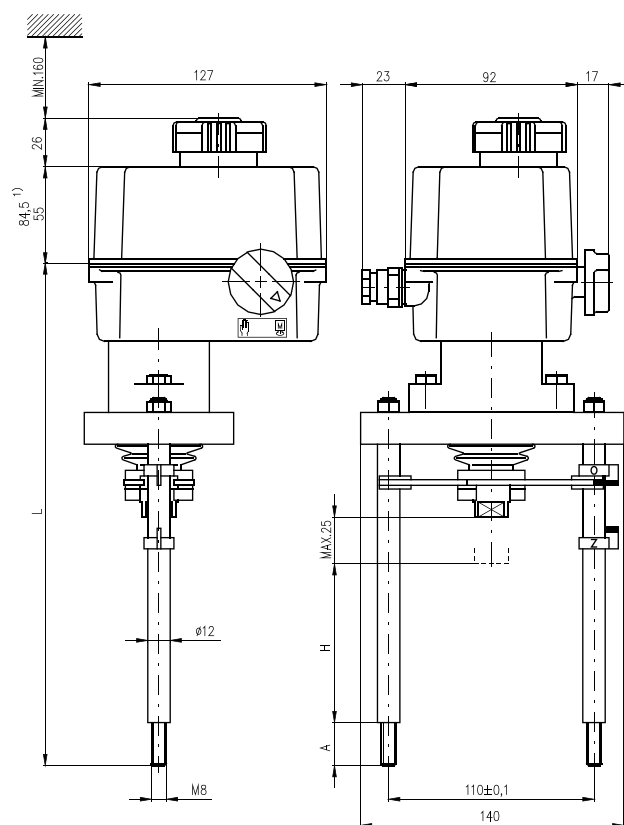
P-1183

Dimensional drawing ST 0



1) Valid for EA with electronic transmitter

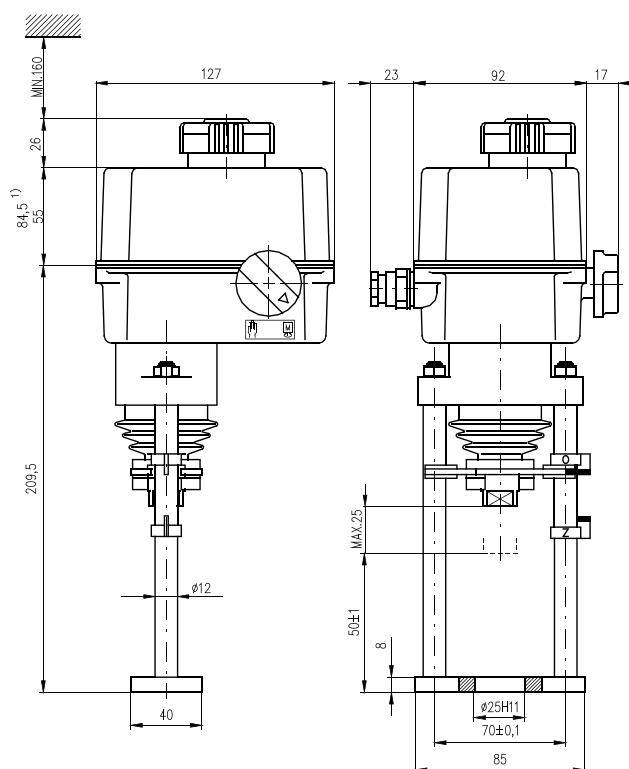
P-1184



1) Valid for EA with electronic transmitter

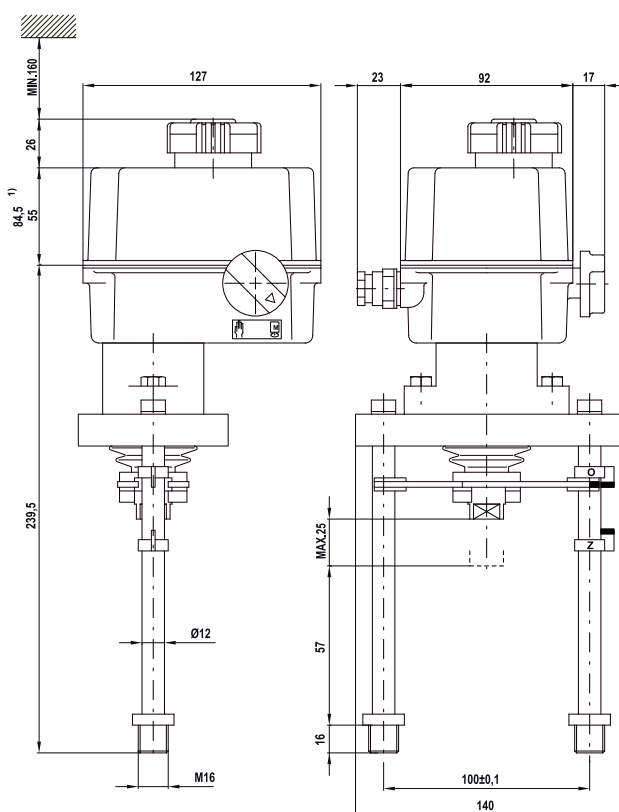
P-1185/B	110	18	287,5
P-1185/A	85	23	267,5
Version	L	A	M

P-1185



1) Valid for EA with electronic transmitter

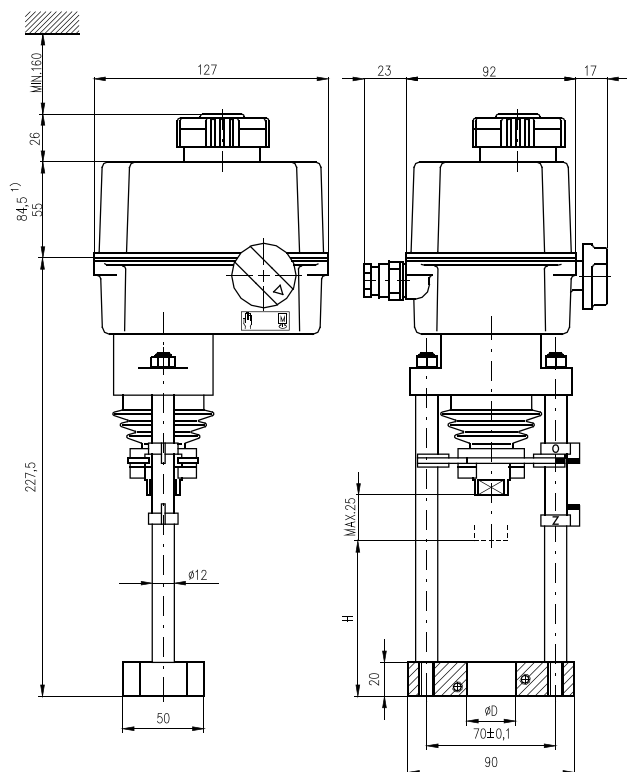
P-1307



1) Valid for EA with electronic transmitter

P-1309

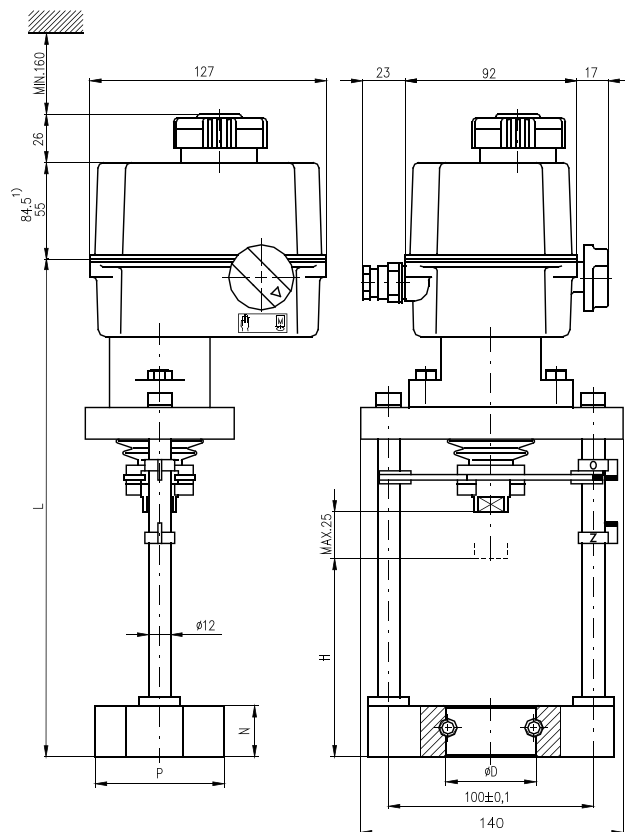
Dimensional drawing ST 0



1) Valid for EA with electronic transmitter

P-1185/B	66	$\phi 40H9$
P-1185/A	62	$\phi 32H9$
Version	L	ϕD

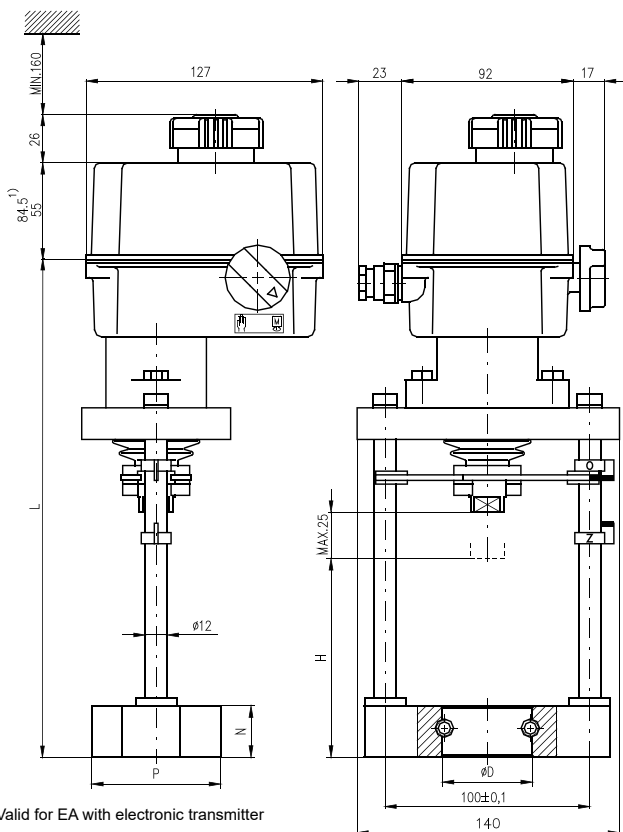
P-1375



1) Valid for EA with electronic transmitter

P-1385/C	86	60	249,5
P-1385/B	59	38	228,5
P-1385/A	53	44	216,5
Version	L	ϕD	M

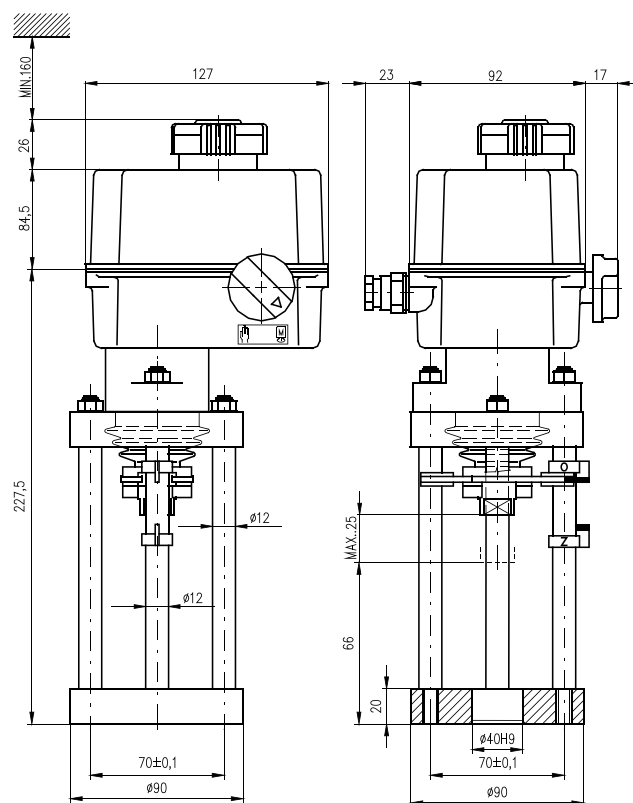
P-1385



1) Valid for EA with electronic transmitter

P-1467/B	110	25	271,5	55	84,5
P-1467/A	102	25	264,5	55	84,5
Version	L	Z	M	A	B

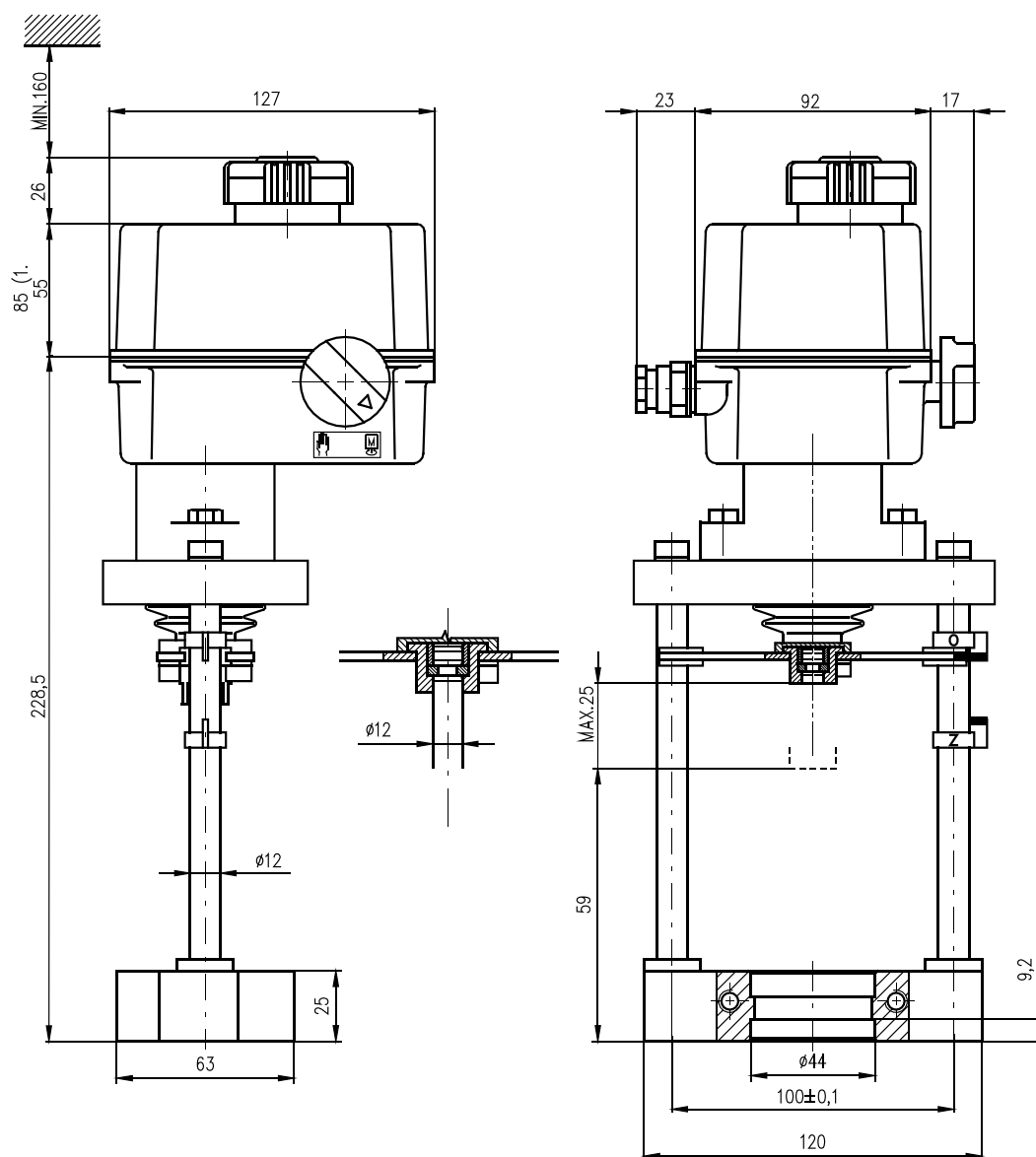
P-1467



P-1469

Dimensional drawing ST 0

Mechanical connection to control valve RV 113M
D=12; for DN= 15-80; stroke= 20 mm



P-2076