

# *Kämmer Actuators Series 1*

## *Pneumatic Actuators*



# Actuator Series 1

## Description

Linear actuators for control valves.

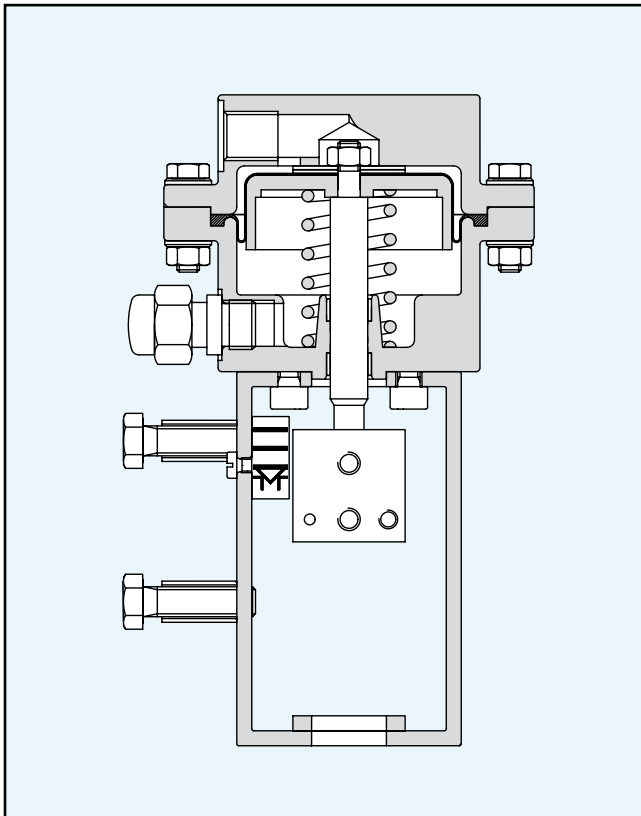
- Aluminium body
- Up to 4.5 bar supply
- Multi-spring design

Kammer actuators are powerful, compact units designed for high stroking thrusts. By chromalizing and using epoxy resin coated aluminium the actuators have far reaching resistance to corrosion. Accessories such as positioners, limit switches or solenoid valves etc. can be fitted according to NAMUR. Compact versions with enclosed accessories are also available.

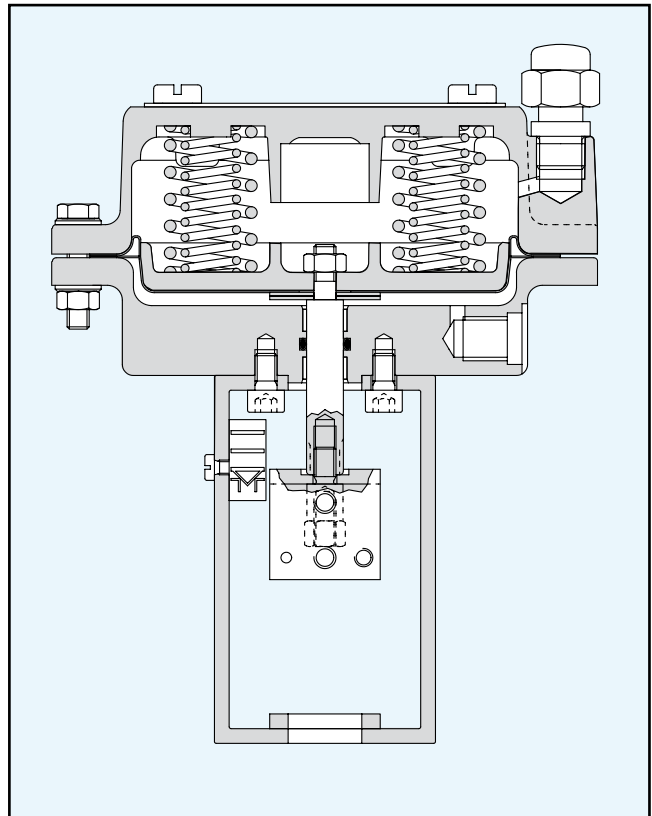
### Definition of action

Air-to-open: without air supply the actuator stem extends

Air-to-close: without air supply the actuator stem retracts



**Actuator P0**



**Actuator P1**

# Actuator Series 1

## Technical Data

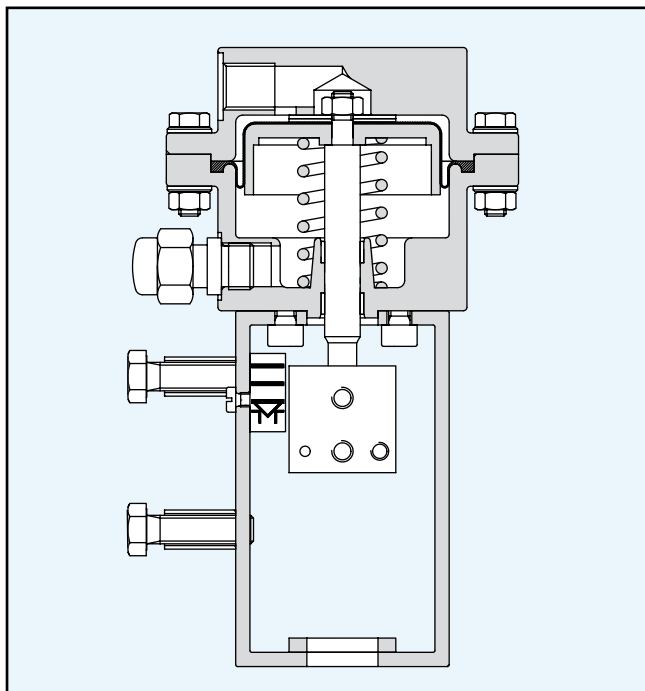
Actuator		P0	P1
<b>Diaphragm area</b>	cm <sup>2</sup>	26	80
<b>Thrust max.</b>	daN	60 <sup>1</sup> / 78 <sup>2</sup>	160 <sup>1</sup> / 170 <sup>2</sup>
<b>Stroke</b>	mm	10	10
<b>Actuator action</b>		air to open / air to close	
<b>Supply pressure</b>	bar	4.5	
<b>Air connection</b>	(Standard)	1/4" NPT	
<b>Allowable ambient temp.</b>		-40 to +80 °C (-40 to +176 °F)	
<b>Spring range</b>		See table page 5	
<b>Mounting position</b>	(supply)	Optional (vertical preferred)	
<b>Operating medium</b>		Instrument air <sup>3</sup> (dry and oil free)	
<b>Actuator cases</b>		Stainless steel	
<b>Diaphragm</b>		Eco / polyamide	
<b>Springs</b>		Stainless steel	
<b>Actuator stem</b>		Stainless steel	
<b>Screws, nuts</b>		Stainless steel	
<b>Other parts</b>		Stainless steel/Aluminium/Plastic	

<sup>1</sup> Air-to-Open    <sup>2</sup> Air-to-Close    <sup>3</sup> Other operating mediums on request.

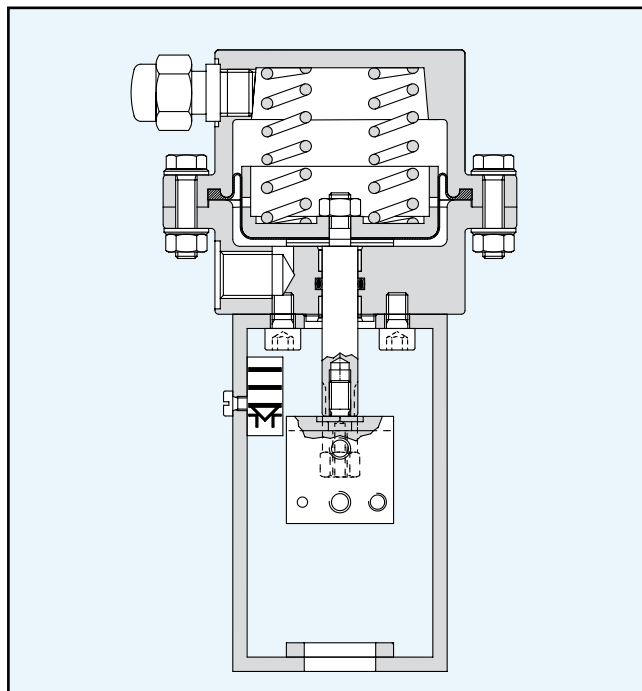
# Actuator Series 1

## Designs

### Actuator P0

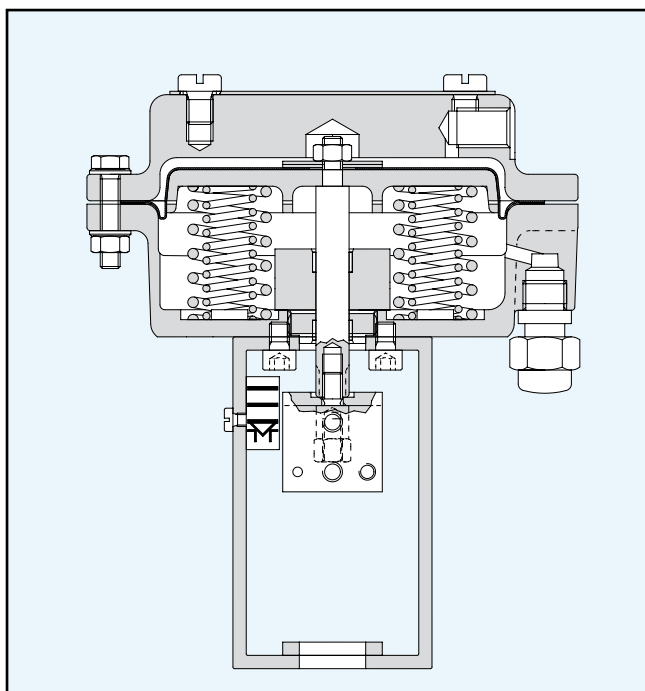


Actuator: Air-to-Close

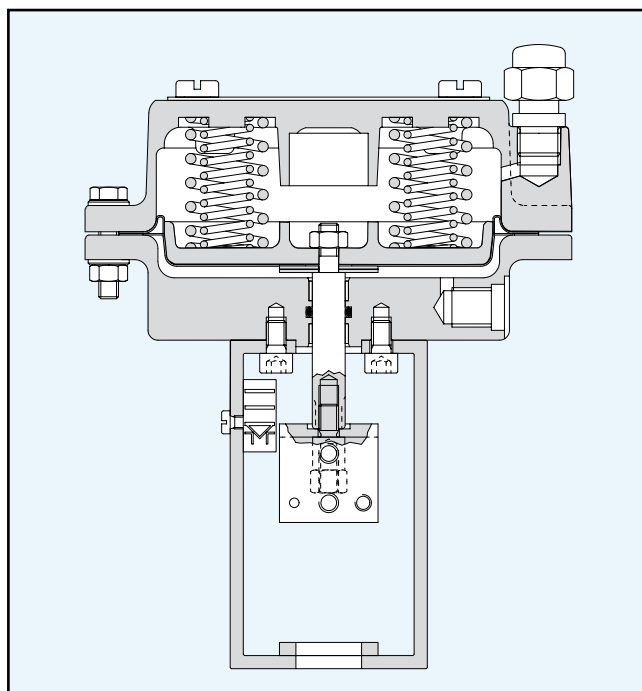


Actuator: Air-to-Open

### Actuator P1



Actuator: Air-to-Close



Actuator: Air-to-Open

## Actuator Series 1

Actuator thrust in relationship to spring set and supply pressure

### Actuator P0

Air-to-open / Spring set to close

Spring set no.	2512	2513	2514
Spring range	1.35 - 2.3	1.8 - 3.0	2.3 - 3.8
Number of springs	3	4	5
Supply min. bar	2.5	3.2	4.0
Thrust (spring) [daN]	35	47	60

Air to close /Spring set to open

Spring set no.	2518			
Spring range	0.38 - 1.0			
Spring thrust [daN]	10			
Number of springs	1			
Supply min. bar	2.5	3.0	3.5	4.0
Thrust (air) [daN]	39	52	65	78

### Actuator P1

Air to close /Spring set to open

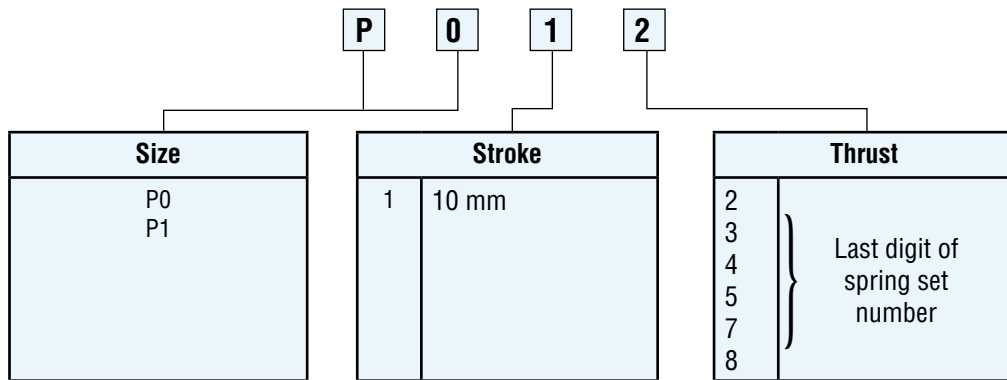
Spring set no.	714	715	717
Spring range	1.0 - 2.2	1.5 - 2.7	2.0 - 3.8
Supply min. bar	2.5	3.2	4.0
Thrust (spring) [daN]	80	120	160

Air-to-open / Spring set to close

Spring set no.	712			713		
Spring range	0.5 - 1.1			1.0 - 1.9		
Spring thrust [daN]	40			80		
Supply min. bar	2.5	3.0	3.5	3.0	3.5	4.0
Thrust (air) [daN]	100	140	180	90	130	170

# Actuator Series 1

Model code

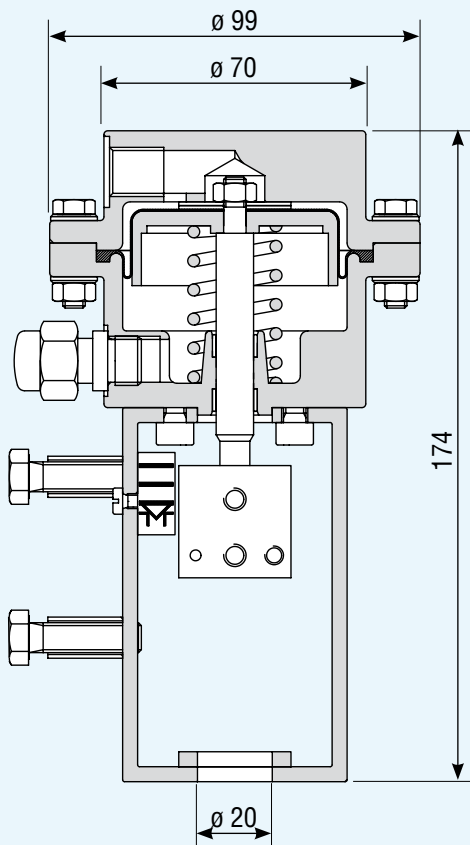


## Weights [kg]

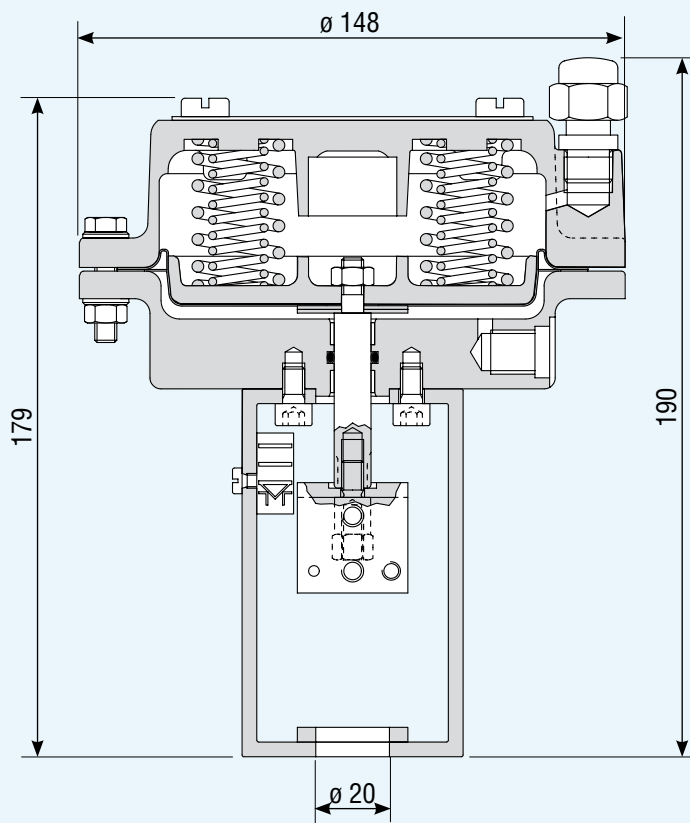
Series	P0	P1
	1	2

# Actuator Series 1

Dimensions [mm]



**Actuator P0**



**Actuator P1**



**Germany**

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