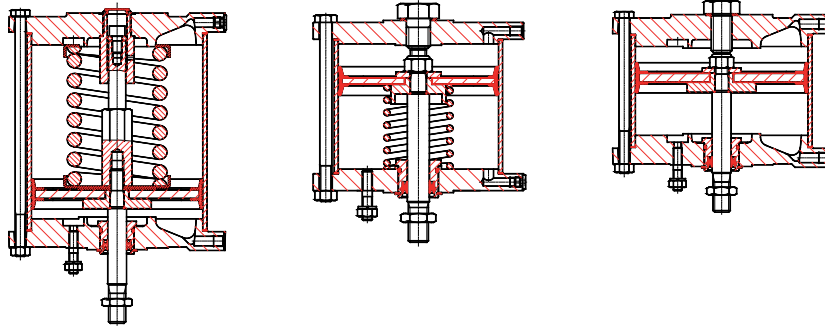




**maintenance-free
pneumatic
piston actuator**

**type LAP-SF
type LAP-ÖF
type LAP-AZ**

Fields of application

Pneumatic piston actuators MAT-P are designed for valves with a linear stem movement.

(Globe valves, Diaphragm valves, Gate valves)

They are suitable for

- chemical and industrial process engineering
- general industries
- power plants
- food and beverage industries
- domestic applications

Operating data

- max. closing force: 80000 N
- service pressure: air pressure (max. +80°C/10 bar*)
- max. service pressure: refer to chart on page 2
- temperature range from -10°C up to +80°C

Design

- double sealed piston with metal plate inlet
- mechanical stroke limitation
- free of asbestos
- flanges according to DIN ISO 5210 / DIN 3358
- piston $\varnothing$ 80 up to $\varnothing$ 300 F 10
- piston $\varnothing$ 250 up to $\varnothing$ 300 F 14

Remark

Closing forces, connection parts and dimensions refer to technical type leaflet.

Function

Standard

- | | |
|------------------------------|-------------|
| - fail safe - spring closing | type LAP-SF |
| - fail safe - spring opening | type LAP-ÖF |
| - pneumatic double acting | type LAP-AZ |

Variants

- type LAP with emergency handwheel
- type LAP with double piston
- continuous stem (travel limitation in closed position)

Accessoires

limit switches, solenoid valves (3/2-way or 5/2-way), silencer and positioner

On all inquiries / orders please specify

Actuator

- 1 - type
- 2 - service pressure P_{st}
- 3 - accessoires
- 4 - type series booklet-number

Valve

- 5 - type
- 6 - PN
- 7 - DN
- 8 - working pressure
- 9 - differential pressure
- 10 - working temperature
- 11 - medium
- 12 - pipe connection
- 13 - variants
- 14 - certificate

Operating conditions

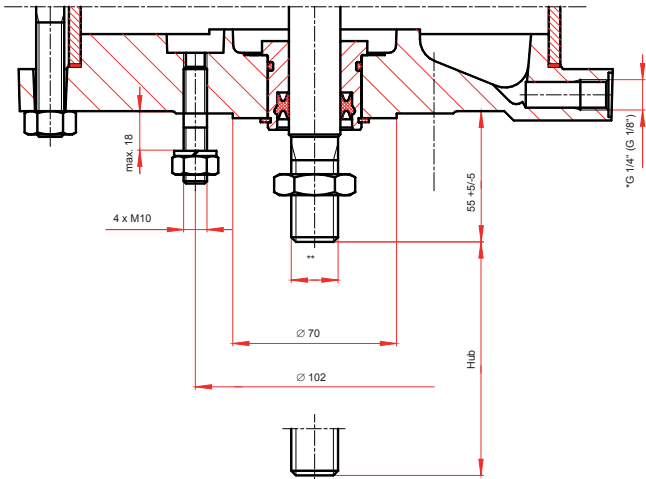
maximum admissible working pressure

piston diameter d K mm	actuator flange acc. to DIN ISO 5210 DIN 3358	max. admissible service air pressure P _{st. zul.} bar
80 up to 250	F 10	10
250	F 14	10
300	F 10	7
300	F 14	10

General informations

Actuators are suitable to use medium „air“ as well none aggressive gases. The service medium should be free from hard particles and condensed water (important when danger of frost). A little oil will have favourable effect on function.

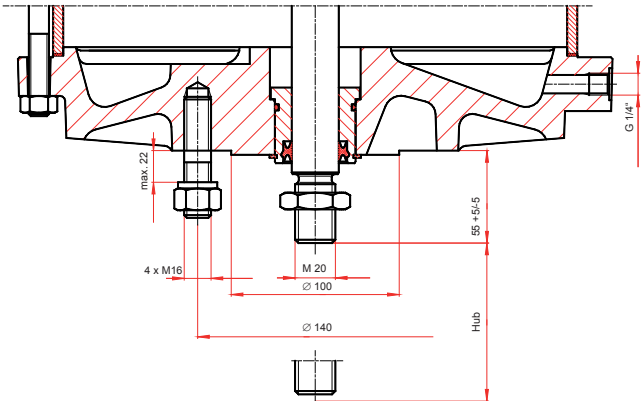
Flange connection F10



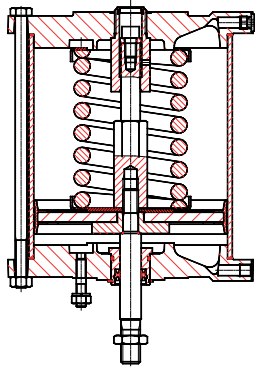
* G 1/8" piston Ø 80/125/160
G 1/4" piston Ø 200/250/300

** M 12 piston Ø 80/125
M 20 piston Ø 160 bis 300

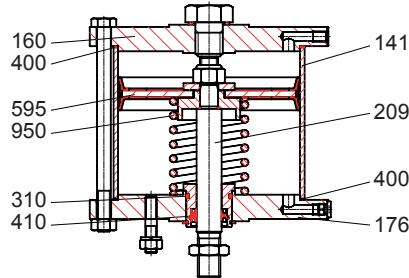
Flange connection F 14



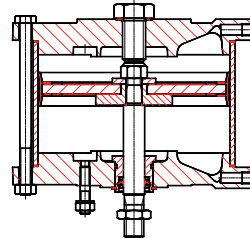
type LAP-SF



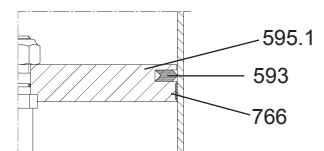
type LAP-ÖF



type LAP-AZ

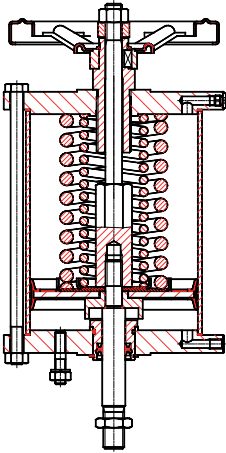
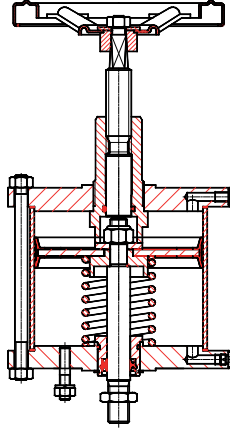
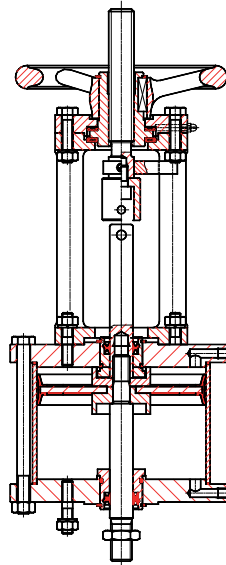
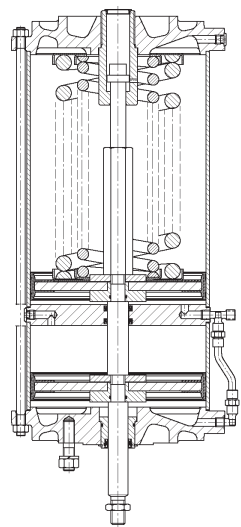
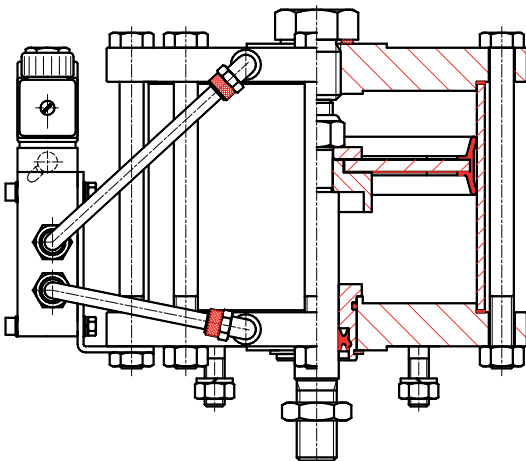
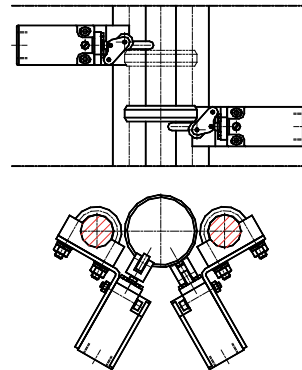
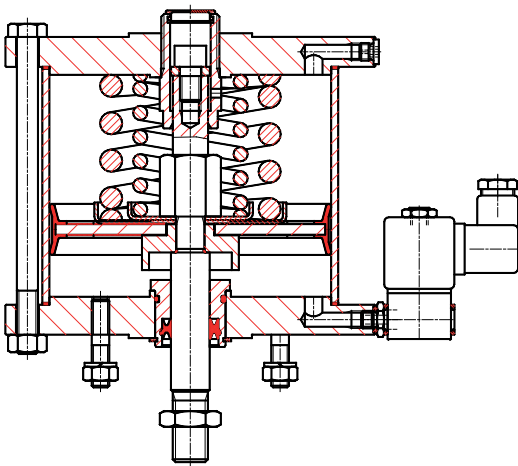
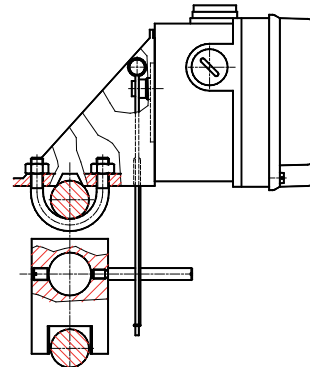


Ø 300



Item no.	Designation	Material	Piston Ø dK	
141	cylinder	Cu alloy	CuZn 37-2.0121	Ø 80 - Ø 300
160	piston cover	Al alloy casted	G-AlSi 7 Mg-3.2371	Ø 80 - Ø 300
176	bottom plate	Al alloy casted	G-AlSi 7 Mg-3.2371	
209	piston rod	stainless steel	X12CrMoS 17-1.4104	
310*	bush	plastic	POM	
410*	set of gaskets	plastic	L 96-SFR/NRB	
400*	gasket	plastic	AFM 30	Ø 80 - Ø 300
593*	piston ring	perbunan	NBR	Ø 300
595*	piston	steel/perbunan	St/NBR	Ø 80 - Ø 250
595.1	piston	Al alloy casted	G-AlSi 7 Mg-3.2371	Ø 300
950	spring	spring steel		Ø 80 - Ø 300
766	guiding ring	PTFE		Ø 300

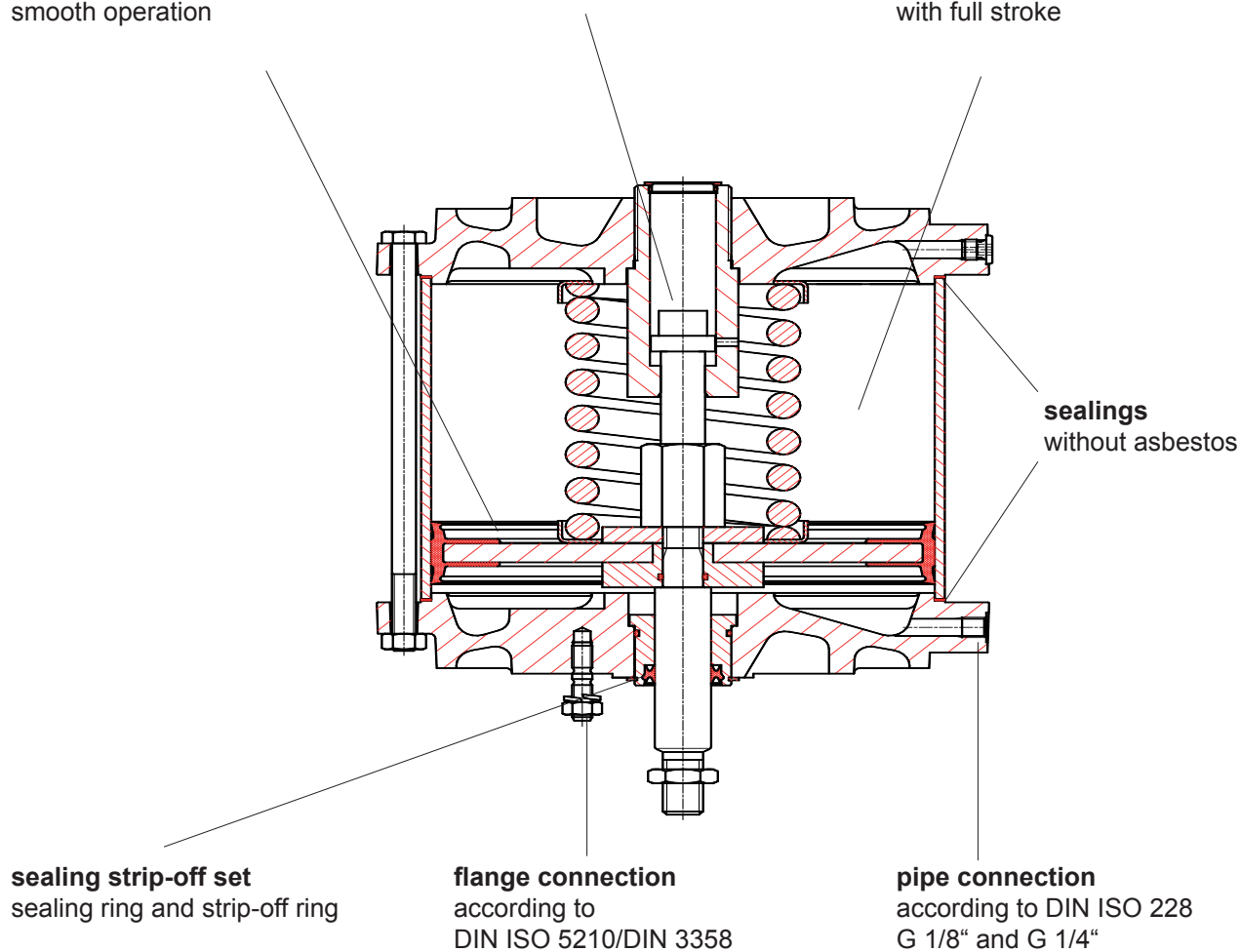
*recommended replacement part (= sealing set complete)

Variants**type LAP-SF**
with emergency
handwheel**type LAP-ÖF**
with emergency
handwheel**type LAP-AZ**
with emergency
handwheel**type LAP-SF**
(double piston)**Accessories****5/2-way solenoid valve****limit switches****3/2-way solenoid valve****positioner**

Piston
(piston up to $\varnothing$ 250 mm)
with metal plate inlet ensures
smooth operation

mechanical stroke limitation
in open direction

variable stroke length operation
to ensure that the actuator
works with low air consumption
with full stroke



This document is not contractual and
may be amended without notice.

9210.1/3-10 / 01.04.2004