

**PNEUMATIC & HYDRAULIC  
LINEAR ACTUATORS**

**“ACN & ACH” SERIES**





## "ACN & ACH" SERIES

### Introduction

"ACN" & "ACH" Teco actuators are designed to operate linear valves as globe or gate valves. Executions in double effect or single effect are available for modulating or ON-OFF services. All actuators are designed according Directive 2014/68/EU Pressure Equipment and ISO 9001

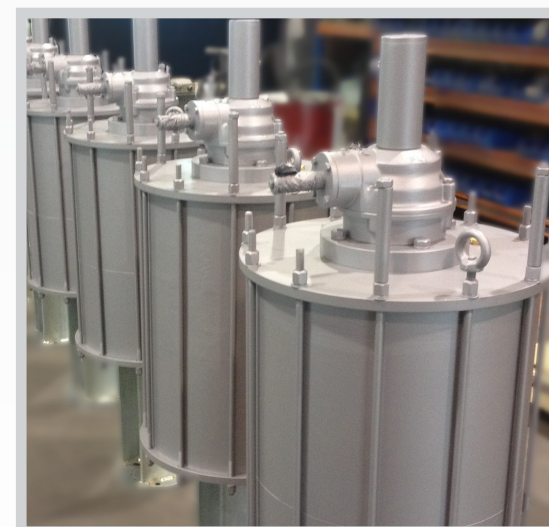
### PNEUMATIC OPERATING RANGE

- Pneumatic operating range between 2 barg (30 psig) and 12 barg (175 psig).
- Standard operating temperature range: -20°C / +100°C.
- Special low temperature execution up to -60°C.
- Actuator thrust up to 1.500.000 N (337.510 lbs).
- Spring thrust up to 375.000 N (84.377 lbs).
- Supply medium: Instrument air, nitrogen, sweet gas.



### HYDRAULIC OPERATING RANGE

- Hydraulic operating range between 20 barg (295 psig) and 320 barg (4740 psig).
- Standard operating temperature range: -20°C / +100°C.
- Special low temperature execution up to -60°C.
- Actuator thrust up to 6.000.000 N (1.350.043 lbs).
- Spring thrust up to 375.000 N (84.377 lbs).
- Supply medium: Hydraulic oil mineral based.





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### KEY FEATURES

- Actuator construction in carbon steel.
- 3.1 Certificate according EN10204 supplied for all pressure containing parts
- TECO actuators are designed and manufactured according to PED (2014/68/EU) Directive
- Cylinder tube internally electro less hard chromium plated (1x30 $\mu$  thickness)
- 17-4 PH actuator shaft, electro less hard chromium plated (1x30 $\mu$  thickness) to reduce surface roughness and provide minimum friction
- C5-M standard painting procedure. RAL according client necessities.





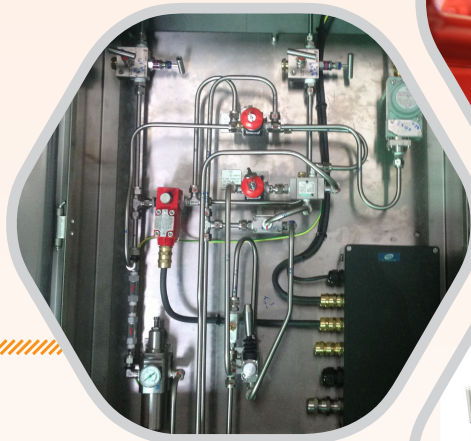
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### Manual Override

Hand wheel operation is available for all Teco actuator's models.

As option, hydraulic manual override can be provided to operate valve.

Hydraulic manual override is directly mounted on actuator and includes hand pump, directional valve, relief and check valve and oil tank.



### Control System

Teco actuator's can be equipped with a huge range of control system according client requirements for ON-OFF or modulating applications. Control system available in control cabinet or stainless steel plates.

### Special Executions

On request, Teco actuators can be manufactured in an extensive range of special executions, as:

1. Completely construction in Stainless steel
2. Antirotation stem device completely integrated in actuator
3. Remote Hydraulic Power Unit for hydraulic actuators available on demand.



# "ACN & ACH" SERIES

## Actuator denomination

AC"X"

"X"E

FA"X"

("X")

"ø" /

"ø" /

"X"

"X"

ACN: Pneumatic Actuator  
ACH: Hydraulic Actuator

SE: Single Effect  
DE: Double effect

FAC: Fail to close  
FAA: Fail to open

Spring configuration

Piston diameter

Shaft diameter

Stroke

MM: With hand wheel operation  
-- : Without hand wheel operation



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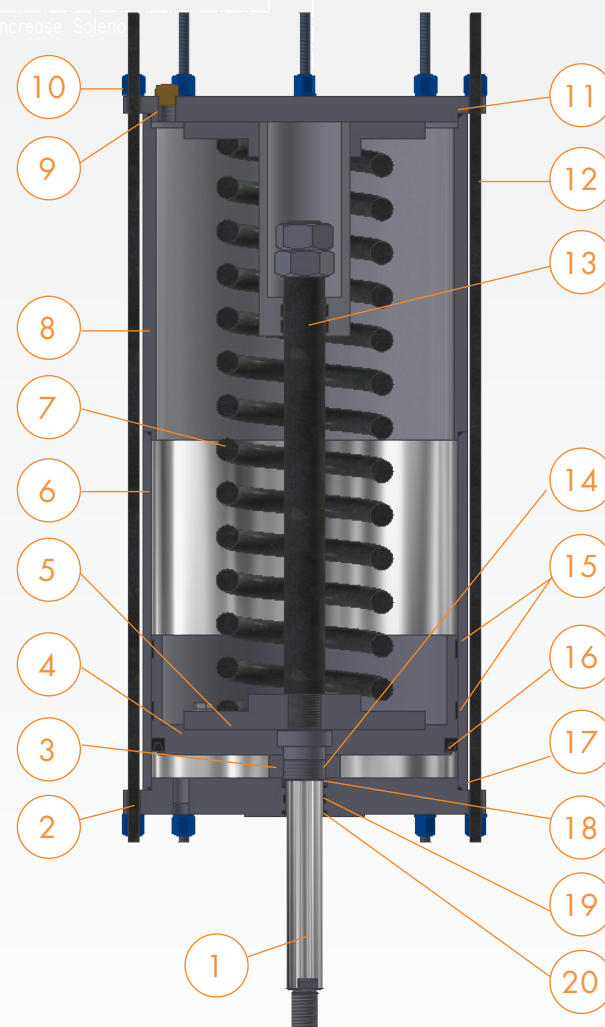
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# "ACN & ACH" SERIES

Pneumatic actuator single effect fail to close



ITEM	DESCRIPTION	MATERIAL
1	Shaft	17-4PH Chromium plated
2	Lower cover	S355J2+N
3	Piston nut	S355J2+N
4	Piston	S355J2+N
5	Spring cartridge	S355J2+N
6	Cylinder tube	S355J2+N Chromium plated
7	Spring	50CrV4
8	Cylinder prolongation	S355J2+N
9	Upper cover	S355J2+N
10	Tie rods nuts	ASTM A194 Gr.4
11	O-Ring	NBR
12	Tie rods	42CrMo4
13	Guide ring	PTFE
14	Piston O-Ring	NBR
15	Piston guide ring	PTFE
16	Piston seal	NBR
17	O-Ring	NBR
18	Shaft seal	NBR
19	Shaft guide ring	PTFE
20	Scraper	NBR



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# "ACN & ACH" SERIES

Pneumatic actuator single effect fail to close

Solenoid

Decrease Solenoid

Increase Solenoid

ITEM	DESCRIPTION	MATERIAL
1	Shaft	17-4PH Chromium plated
2	Lower cover	S355J2+N
3	Cylinder	S355J2+N Chromium plated
4	Tie rod	42CrMo4
5	Piston	S355J2+N
6	Piston nut	S355J2+N
7	Upper cover	S355J2+N
8	Tie rods nuts	ASTM A194 Gr.4
9	Stroke stoper	34CrMo4
10	O-Ring	NBR
11	Piston guide ring	PTFE
12	Piston seal	NBR
13	O-Ring	NBR
14	Shaft guide ring	PTFE
15	Shaft seal	NBR
16	Scraper	NBR

