

# Pneumatic actuators type AD and ADHW

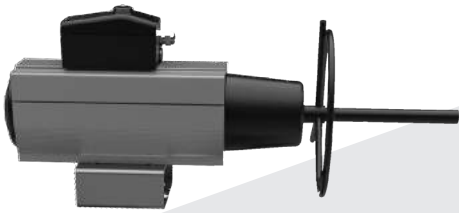
Double acting. For 2 & 3-way valves type G/L/M/S 2FM-T & G/L/M/S 3FM-T

0-6.5.13-B

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AD



ADHW (with hand wheel)

## TECHNICAL DATA

### Materials:

- Body	Aluminium, anodized
- Piston	Aluminium alloy
- End Caps	Aluminium, anodized
- Shaft	Steel, AISI 304 (A2)
- O-rings	NBR (rubber)
- Springs	Pre-compressed

Cartridges, epoxy painted

Actuat. flange ISO 5211

Air supply Dry or lubricated filtered compressed air, non aggressive gases

Temperature -20 °C to +80 °C

Feeding pressure 3-7 bar continuous

Rotation range 90° ± 5°

Hand wheel (option) Hand wheel (HW) integrated in the end cap of the actuator is optional

## APPLICATIONS

The AD actuators are made according to the Scotch Yoke principle, which is characteristic for its high torque when required - at the beginning and end of each operation. This increases safety and reduces the energy consumption.

## QUALITY

The actuators are made under strict quality control and comply with all international standard requirements. The AD actuators are CE-marked according to PED and ATEX. Simple, robust design and easy assembly according to ISO 5211.

## FEATURES

- Increased torque where required. The Scotch Yoke actuator gives approx. 50% higher starting and closing torque (0°) compared to the rack and pinion actuator
- Compact measures. Approx. 30% smaller than rack and pinion actuators
- Low air consumption. Approx. 30% less than rack and pinion actuators
- Low maintenance, long life
- Good regulating features. No play in force transmission and low friction because the transmission passes over bearings
- Favourable force transmission, gives favourable action in the regulation area. This provides lower turning speed when approaching the end positions
- The actuators have low weight and small external dimensions for their torque output
- If air supply is lost the actuator will remain in its last position

## RECOMMENDED ACTUATOR TYPES FOR G2/G3FM-TR and G2/G3FM-TL VALVES

DN	ADHW for valve with inlet pressure P1≤5bar	ADHW for valve with inlet pressure P1≤10bar	ADHW for valve with inlet pressure P1≤16bar	ADHW for valve with inlet pressure P1≤25bar
65	65	100	100	100
80	100	100	100	100
100	100	100	100	125
125	100	100	125	125
150	125	125	125	-
200	125	140	160	-
250	140	160	210	-
300	160	210	210	-
350	210	250	-	-
400	210	250	-	-
450	250	250	-	-
500	250	300	-	-
550	250	300	-	-
600	300	300	-	-
800	300	-	-	-

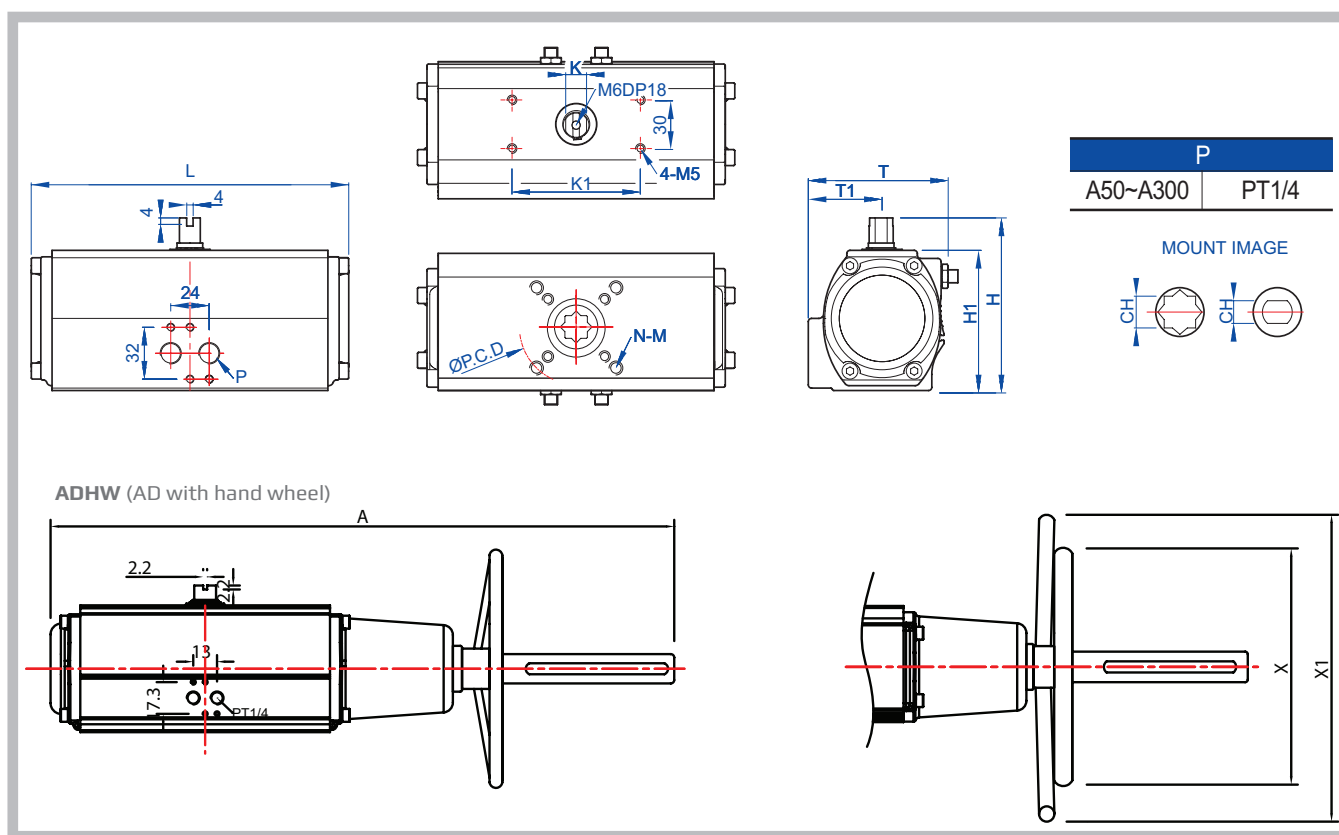
Subject to change without notice.

Other relevant data sheets for AD actuators:

- 2-way valves
- 3-way valves
- Positioners
- Filter regulators
- Controller
- Sensor PT100
- Pneumatic controller S80

- G2FM-T 0.2.5.05.01
- G3FM-T 0.2.6.02, 0.2.6.03
- 0.6.6.01, 0.6.6.02
- 0.6.8.01
- ER2000 0.4.6.01
- 0.4.7.01
- 0.6.7.01

**DIMENSION SKETCH**



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Type	K1	ISO	P.C.D (Ø)	N-G	K	L	A*	X*/X1*	T	T1	H	H1	CH	DTH	Weight kg
AD65	80	F07	70	4-M8	13	198	456	202	85	46	107	87	14*14	17	2.7
AD100	80	F07/F10	70/102	4-M8/M10	22	311	659	200/332	129	61.5	148	128	22*22	26	7.5
AD125	80	F07/F10	70/102	4-M8/M10	22	390	761	200/332	151	71.5	174	154	22*22	26	11.6
AD140	80	F10/F12	102/125	4-M10/M12	24	431	820	300/440	164	77	192	172	27*27	30	18.9
													22*22	26	
AD160	80	F14	140	4-M16	32	506	948	300/440	188	89	216	196	36*36	30	26.3
		F10/F12	102/125	4-M10/M12									27*27		
AD210	130	F16	165	4-M20	36	605	1137	300/584	231	115	284	254	46*46	60	47.2
AD250	130	F16	165	4-M20	36	755	1208	300/584	301	152	335	305	46*46	60	67.8
AD300	130	F16/F25	165/254	4-M40/8-M16	36	900	1444	300/584	360	170	408	378	55*55	60	167

\* HW option