



# AIR TORQUE

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T.D.S. n° U00096E

Issued : 06/11  
 Page 1/2

## DOUBLE ACTING and SPRING RETURN 4thG Upgrade Series Actuators 90° Rotation with PNEUMO-HYDRAULIC SPEED CONTROL

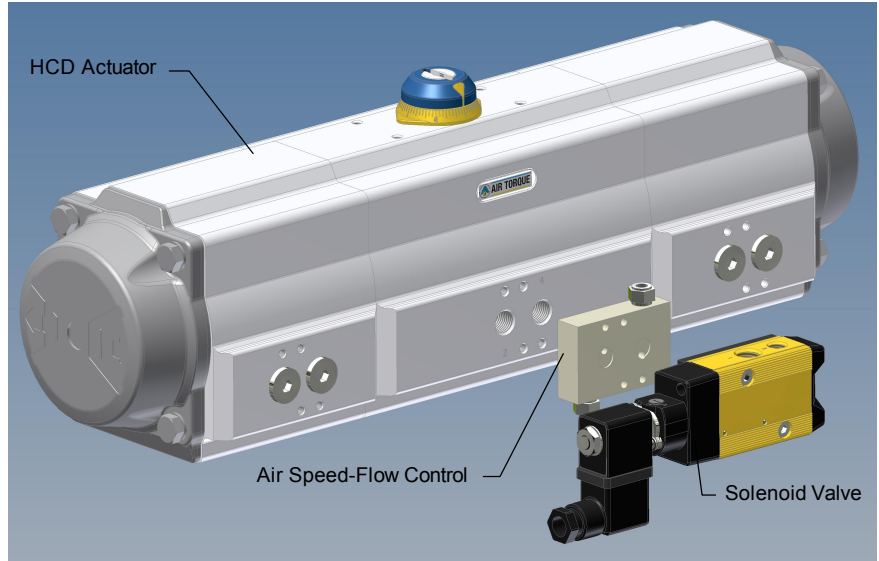
**Adjustable operating time for 90° stroke**

Air supply 5,5 bar (80 Psi)

ACTUATOR MODEL	Min. approx. (sec) **	Max. (sec) **
HCD AT101U S/D	2,5	> 20
HCD AT201U S/D	3	> 20
HCD AT251U S/D	3,5	> 20
HCD AT301U S/D	4	> 20
HCD AT401U S/D	6	> 20
HCD AT501U S/D	8	> 30
HCD AT601U S/D	11	> 30
HCD AT701U S/D	15	> 30

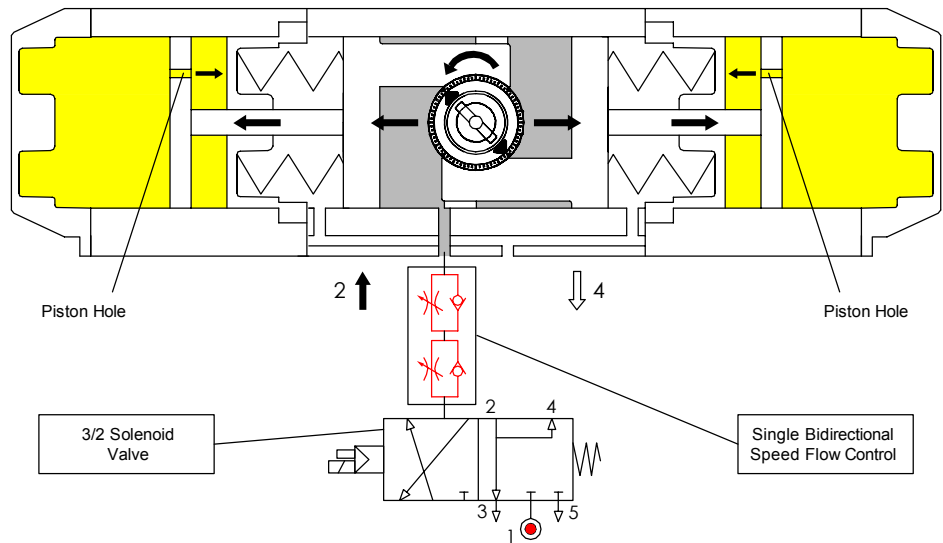
\*\* Actuator operating time without resistance load.

The operating times depend on:  
 - AIR SUPPLY PRESSURE  
 - VALVE TORQUE  
 - ADJUSTMENT OF THE SPEED FLOW CONTROL



### FUNCTION:

### Model HCD AT101U S => HCD AT701U S : Pneumatic / Hydraulic Circuit Scheme



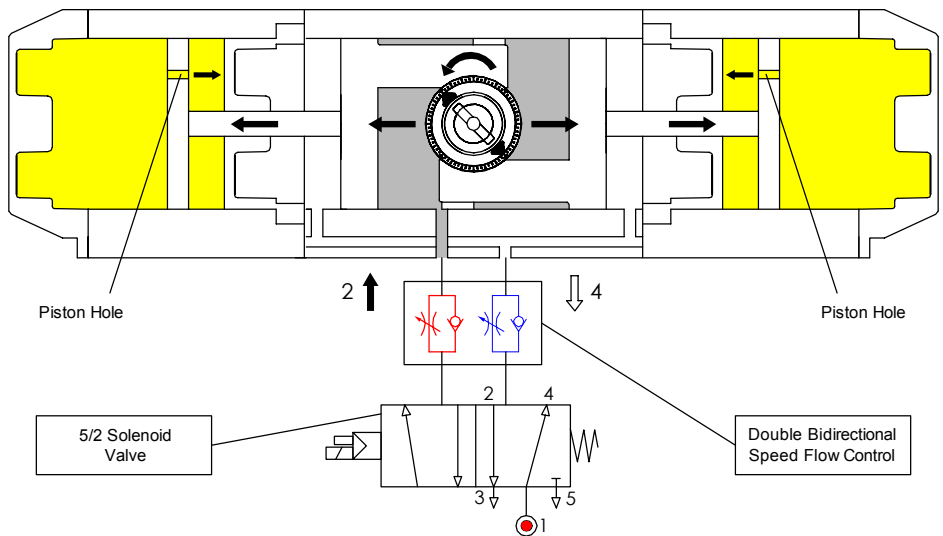
**Flow Capacity Required :**

For Mod. HCD AT101U + HCD AT401U :  
 0 to 300 NI/min min. at 5.5bar - 80Psi

For Mod. HCD AT501U + HCD AT701U :  
 0 to 1500 NI/min min. at 5.5bar - 80Psi

If requested solenoid valves and speed flow control have to be ordered separately.

### Model HCD AT101U D => HCD AT701U D : Pneumatic / Hydraulic Circuit Scheme





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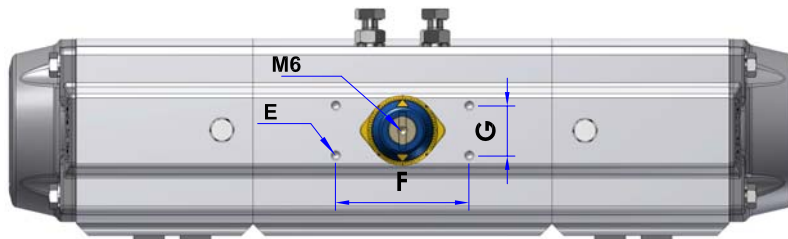
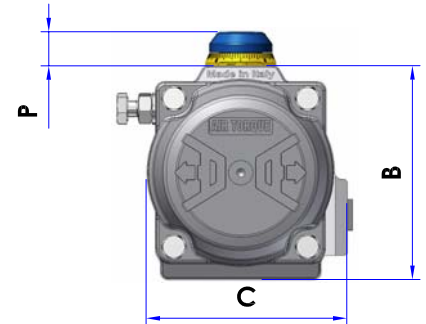
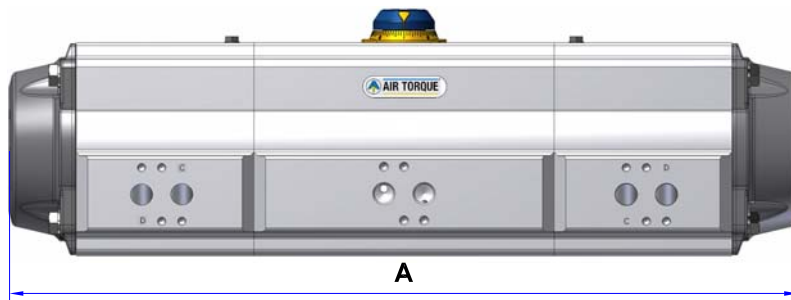
T.D.S. n° **U00096E**

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Page 2/2

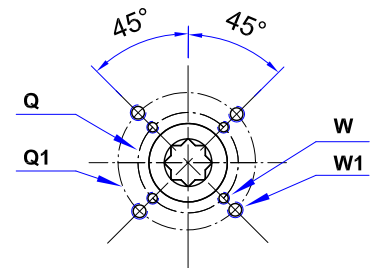
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### DIMENSIONS AND TECHNICAL DATA



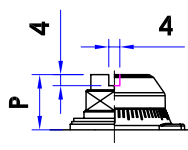
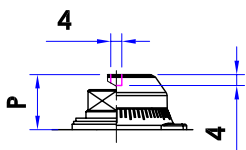
TOP SQUARE DRIVE SHAFT

BOTTOM VIEW ISO 5211

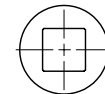
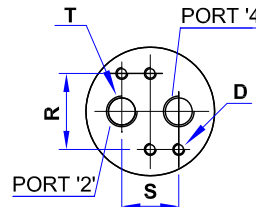


ONLY FOR MODEL HCD AT101U

FOR MODEL HCD AT201U + HCD AT701U



AIR CONNECTION VDI/VDE 3845



PARALLEL SINGLE SQUARE



DIAGONAL SINGLE SQUARE



DOUBLE SQUARE

### DIMENSIONS IN mm

**ACTUATOR MODEL	A	B	C	D	E	F	G	N	P	R	S	Z1	T - ISO 228	ISO Flange*	Q	Q1	W	W1	Approx. Weight (Kg)	
																			D	S12
HCD AT101U D/S	283,5	85	84,5	M5x8	M5x8	80	30	11	20	32	24	42	1/8"	F05 + F07	50	70	M6	M8	3,1	3,2
HCD AT201U D/S	369,5	102	93	M5x8	M5x8	80	30	17	20	32	24	42	1/8"	F05 + F07	50	70	M6	M8	5,7	6,1
HCD AT251U D/S	432,5	115	106	M5x8	M5x8	80	30	17	20	32	24	42	1/4"	F05 + F07	50	70	M6	M8	6,5	7,5
HCD AT301U D/S	471	127	118,5	M5x8	M5x8	80	30	17	20	32	24	42	1/4"	F07 + F10	70	102	M8	M10	11	12
HCD AT401U D/S	614,5	157	146,5	M5x8	M5x8	80	30	27	30	32	24	58	1/4"	F07 + F10	70	102	M8	M10	21,5	23
HCD AT501U D/S	760,5	196	181	M5x8	M5x8	80	30	27	30	32	24	67,5	1/4"	F10 + F12	102	125	M10	M12	45	49,5
HCD AT601U D/S	964	245	221,5	M5x8	M5x8	130	30	36	50	32	24	80	1/4"	F14	140	/	M16	/	75	84
HCD AT701U D/S	1254	330	330	M6x10	M5x8	130	30	36	50	45	40	115	1/2"	F16	165	/	M20	/	160	180

\* Notes : Other connections available.

\*\* Further models to be defined when placing the order

### Specifications

Max supply pressure: 6,5 bar ( 95 Psi )

Operating Pressure: 2.5 + 6.5 bar.

Hydraulic Fluid: Biodegradable liquid containing Glythermin®P44

For other Dimensions: See data sheet of standard actuator.

Operating media: refer to AIR TORQUE manual instruction.

Temperature: -20°C + +80°C Max.

**IMPORTANT NOTE :** For a correct operation of this actuator we suggest a torque sizing based on a safety factor of at least 30%.