



BR 31a · Quarter-turn actuator with hydraulic damping Version HCD DAP / HCD SRP



Applications

Single-acting or double-acting piston actuators for butterfly valves, ball valves and other final control elements with rotary closure members. Particularly suitable for high process requirements in chemical plants:

- **Opening angle 90°**
- **Temperatures -20°C to +80°C**



Attachments

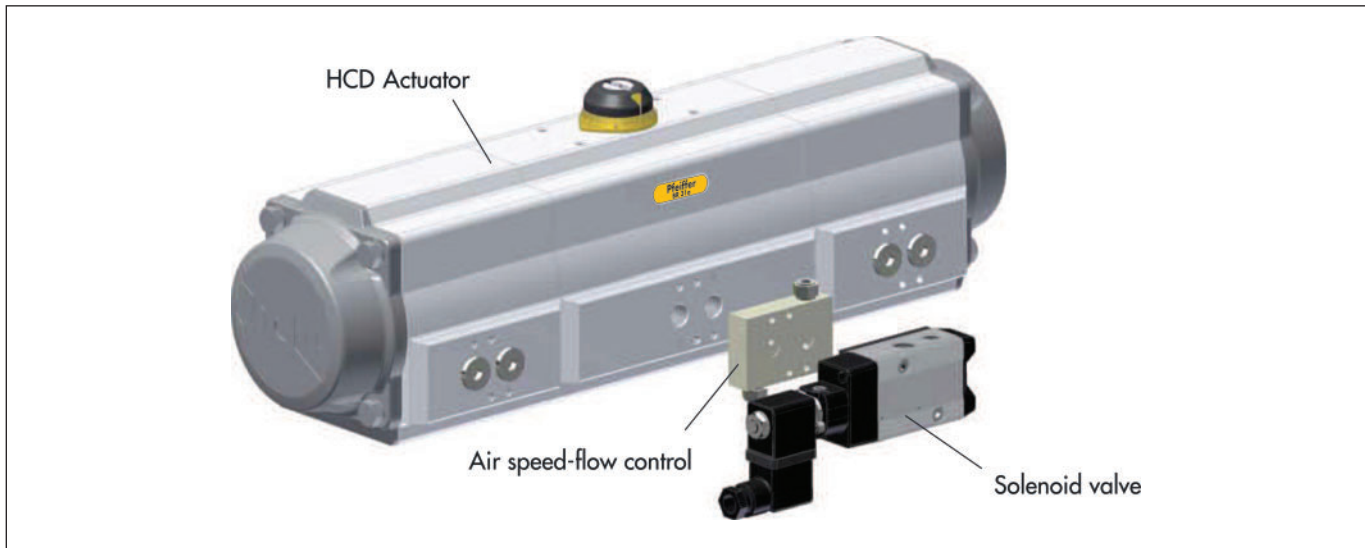


Fig. 1: Quarter-turn actuator with hydraulic damping

Circuit scheme

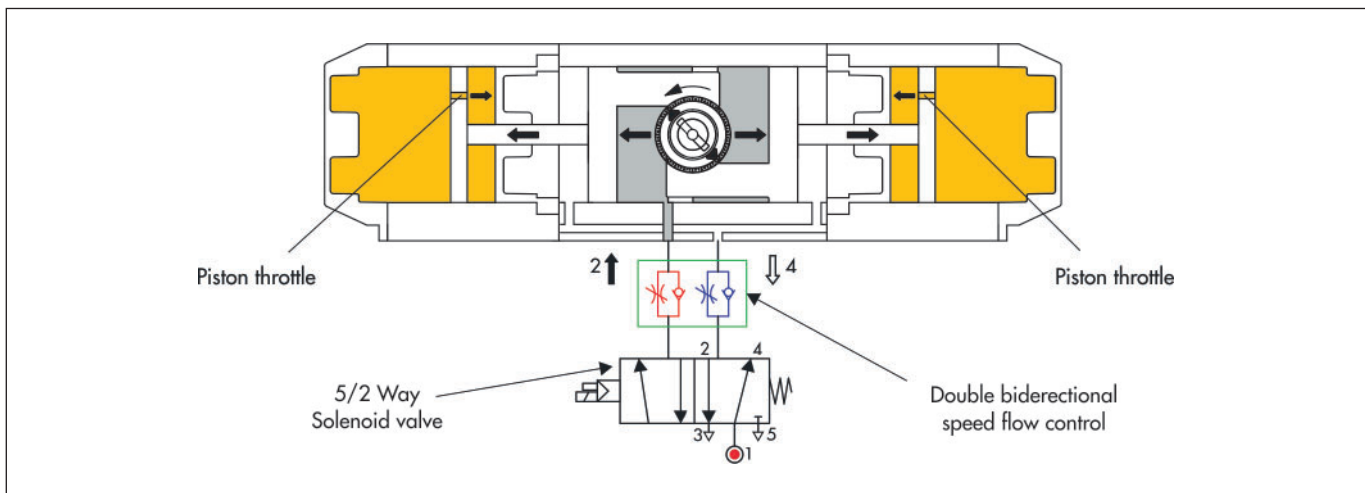


Fig. 2: Circuit scheme Type DAP

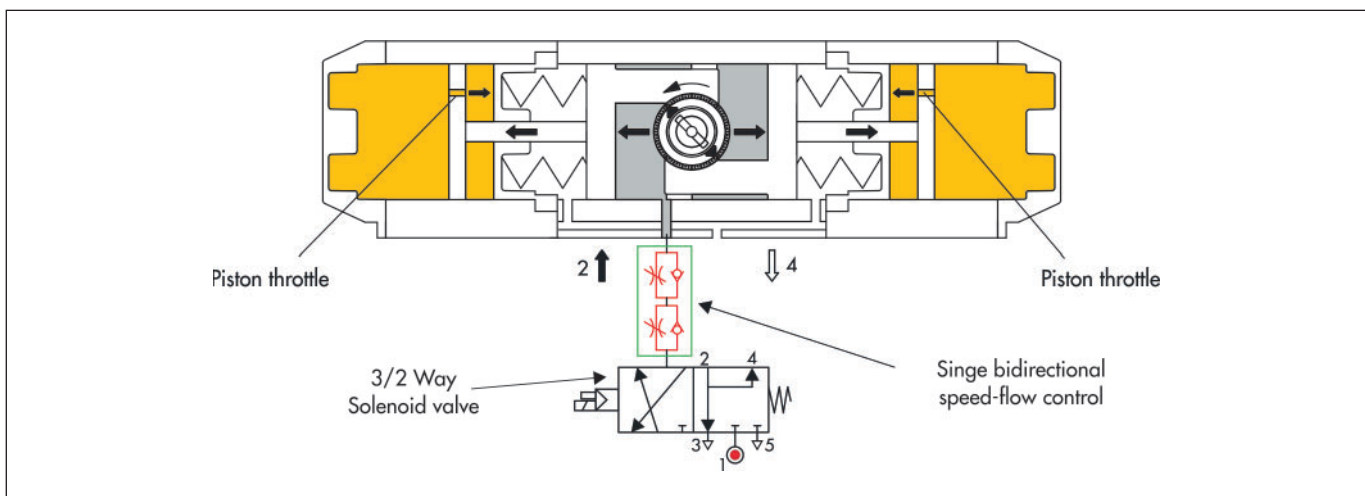


Fig. 3: Circuit scheme Type SRP

Adjustable operating time for 90° stroke

The operating times depended on:

- Air supply pressure
- Valve torque
- Adjustment on the speed flow control

Table 1: Operating times

Actuator Type	Air supply 5.5 bar (80 Psi)	
	min. approx. seconds ¹⁾	max. approx. seconds ¹⁾
HCD DAP/SRP 30	2.5	60
HCD DAP/SRP 60	3	75
HCD DAP/SRP 100	3.5	90
HCD DAP/SRP 150	4	100
HCD DAP/SRP 300	6	>100
HCD DAP/SRP 600	8	>100
HCD DAP/SRP 1200	11	>100
HCD DAP/SRP 3000	15	>100

¹⁾ Actuator operating time without resistance load

Flow Capacity Required

- **For Type HCD DAP/SRP 30 ... 300**
0 to 300 NL/min. at 5.5 bar (80 psi)
- **For Type HCD DAP/SRP 600 ... 3000**
0 to 1500 NL/min. at 5.5 bar (80 psi)

Spezifikation

- Max. supply pressure: 6,5 bar (95 psi)
- Operating pressure: 2,5 - 6,5 bar
- Hydraulic fluid: biodegradable
- Other dimensions: see data sheet of standard actuator
- Operating media: see manual instruction
- Temperature: -20°C to +80°C



NOTICE:

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



Info:

Solenoid valve and speed flow control are not a part of the actuator.

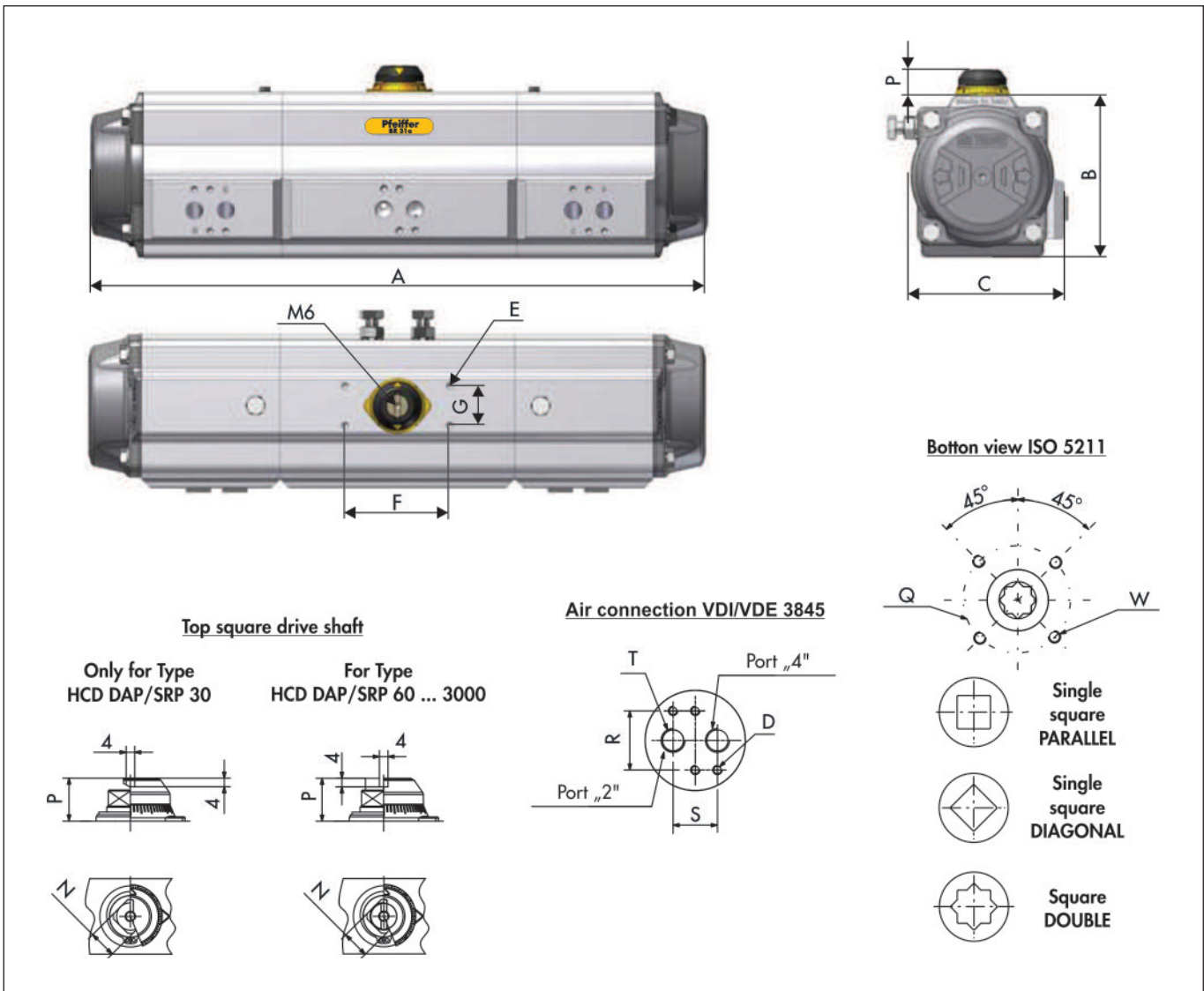


Fig.: Dimensional drawing

Table 2: Dimensions in mm and Weights in kg

Actuator Type HCD DAP/SRP	A	B	C	D	E	F	G	N	P	R	S	Z1	T - ISO 228	ISO-Flange ²⁾	VK	Q	W	ca. Weight in kg	
																		DAP	SRP
30	283.5	85	84.5	M5x8	M5x8	80	30	11	20	32	24	42	1/8"	F07	14	70	M8	3.1	3.2
60	369.5	102	93	M5x8	M5x8	80	30	17	20	32	24	42	1/8"	F07	14	70	M8	5.7	6.1
100	432.5	115	106	M5x8	M5x8	80	30	17	20	32	24	42	1/4"	F07	17	70	M8	6.5	7.5
150	471	127	118.5	M5x8	M5x8	80	30	17	20	32	24	42	1/4"	F10	17	102	M10	11	12
300	614.5	157	146.5	M5x8	M5x8	80	30	27	30	32	24	58	1/4"	F10	22	102	M10	21.5	23
600	760.5	196	181	M5x8	M5x8	80	30	27	30	32	24	67.5	1/4"	F12	27	125	M12	45	49.5
1200	964	245	221.5	M5x8	M5x8	130	30	36	50	32	24	80	1/4"	F14	36	140	M16	75	84
3000	1254	330	330	M6x10	M5x8	130	30	36	50	45	40	115	1/2"	F16	46	165	M20	160	180

²⁾ On request also with double ISO flange