

# Datasheet

## Pneumatic actuators

# Si-503 EN

Edition: 2012-01

Type A - DA

**Double acting actuator**

Type A - SC

**Single acting actuator (spring to close)**

Type A - SO

**Single acting actuator (spring to open)**

- **Compact design**
- **Patented backlash-free torque transmission**
- **Low friction seals**
- **Optimized torque curve**
- **Standardised connections between valve and accessories**

SOMAS actuators are designed for optimal function in control and on/off applications. The type A pneumatic actuators are specifically made to fit the SOMAS range of valves. They can also be used with most 90° rotary valves. The A-DA actuator is double acting and the A-SC and A-SO actuators are single acting spring return for fail safe operation. SOMAS offer a patented backlash-free transmission friction coupling (valid for  $D \leq 50$ ) to optimize control performance and eliminate backlash. The actuators are designed to fit valves and accessories with the ISO 5211 and VDI/VDE 3845.

SOMAS actuators have a torque curve corresponding to the torque demand for ball segment, butterfly, and ball valves. Low-friction seals allow for a low starting torque. Single- or dual- cylinder units are used depending on the required torque and air supply pressure.

Single acting actuators are optimised according to compact dimensions. The springs are supplied in a cartridge to reduce the risk of injury and to simplify maintenance.

Adjustable travel stops are provided for both open and closed positions.





### Mounting

The standard actuator mounting is perpendicular to the pipeline as shown in position A (see Fig.1).

Position B, C or D is available on request (specify when ordering).

Always specify mounting position when ordering.

The actuator is mounted in position A if the position is not stated.

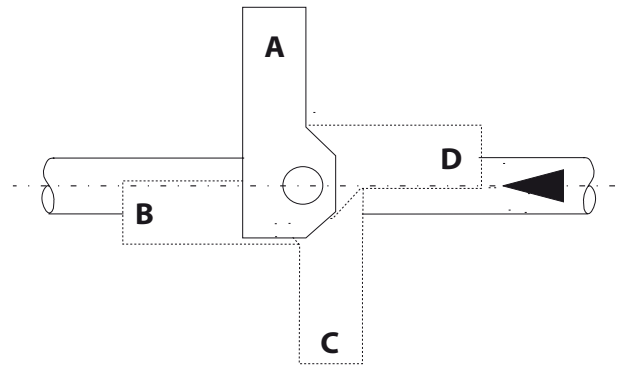


Fig.1 Mounting

### Torque

The linear motion from the piston is converted into a rotary motion via a linkage mechanism. The curve shows the output torque from the actuator as a function of the actuator shaft angle (see Fig.2).

Maximum torque is achieved in the closed position which corresponds to the demand of ball segment valves, ball valves and metal seated butterfly valves.

For butterfly valves, the dynamic torque can be high in case of high differential pressure across the valve. This increased torque demand is normally covered by the actuator selection tables.

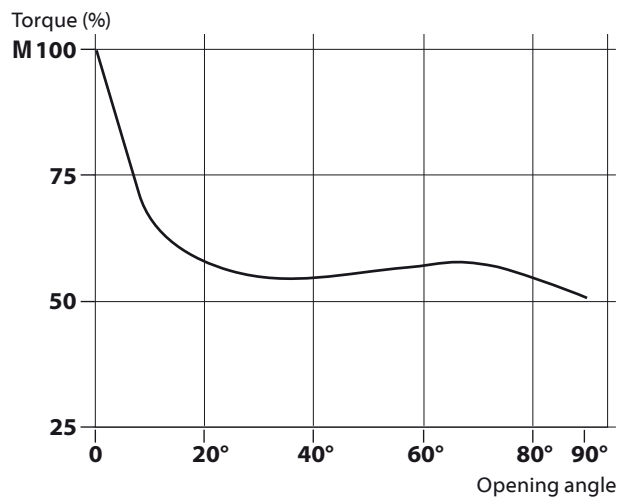


Fig.2 Double acting actuator type A

The highest specified value for each size, in the tables below, is the upper limit of permitted transfer torque.

Closing torque M100 (Nm) at air supply 5,5 bar				Closing torque M100 (Nm) at air supply 4 bar				Cylinder volume (litre)			
Type	DA	SC (Spring to close)	SO (Spring to open)	Type	DA	SC (Spring to close)	SO (Spring to open)	Type	DA	SC (Spring to close)	SO (Spring to open)
A11	84			A11	61			A11	0.22		
A13	140	55	55	A13	102	45	45	A13	0.38	0.38	0.38
A21	196			A21	142			A21	0.42		
A22	413			A22	300			A22	0.8		
A23	441	150	150	A23	370	150	150	A23	1.12	1.1	1.1
A24		300	300	A24	528	300	300	A24	1.5	2.2	2.2
A31	761			A31	553			A31	1.74		
A32	1609			A32	1170			A32	3.2		
A33		600	600	A33	1500	600	600	A33	4.7	4.7	4.7
A34		1200	1200	A34	2100	1200	1200	A34	6.2	9.2	9.2
A41	2914			A41	2118			A41	6.5		
A42	6117			A42	4447			A42	12		
A43		2000	2000	A43	5750	2000	2000	A43	17.5	17.5	17.5
A44		4000	4000	A44	8000	4000	4000	A44	23	33.7	33.7
A51	9552			A51	6945			A51	22.1		
A52	19925			A52	14485			A52	40.6		



## Actuator selection table for ball segment and butterfly valves (air supply min. 5.5 bar)

### Double acting actuator type DA

Actuator Type	KVT/KVX PN 10-25 DN	KVT/KVX PN 50 DN	KVT/KVX PN 100 DN	KVTW/KVXW PN 10-25 DN	KVTF/KVXF PN 10-25 DN	KVTF/KVXF PN 50 DN	VSS PN 10-25 DN	VSS PN 50 DN	MTV <sup>1</sup> PN 10-25 DN
A11-DA	25/2-40	25/2-40				25/2-40			
A13-DA	50	50	25/5-40			50	80		80
A21-DA		65	50	80-100	80-100		100	80	100
A22-DA		80-100	80	150	125	80-100	125-200	100-150	125-200
A23-DA			100				250		250
A31-DA		150		200-250	150-200	150	300	200-250	300
A32-DA	300	200	150		250	200	350-400	300	350-400
A41-DA	350-400	250			300-350	250	450-600	350-400	500
A42-DA	450-500	300			400-500		700-800	500	
A51-DA	600-700						900-1200	600	
A52-DA									

<sup>1</sup> Valid also for MTVL and MTVF

The information will also be found in the data sheet for the actual valve type.

### Single acting actuator type SC/SO

Actuator Type	KVT/KVX PN 10-25 DN	KVT/KVX PN 50 DN	KVT/KVX PN 100 DN	KVTW/KVXW PN 10-25 DN	KVTF/KVXF PN 25 DN	KVTF/KVXF PN 50 DN	VSS PN 10-25 DN	VSS PN 50 DN	MTV <sup>1</sup> PN 10-25 DN
A13-SC/SO	25/2-50	25/2-50				25/2-50			
A23-SC/SO	65	65	25/5-50	80-100	80-100		80		80
A24-SC/SO			80	150	125	80-100	100-200	80-100	100-200
A33-SC/SO			100	200-250	150-200	150	250-300	150-200	250-300
A34-SC/SO	300		150		250	200	350	250-300	350
A43-SC	350	250			300-350	250	400-450	350-400	400
A43-SO	350					250	400-450	350-400	400
A44-SC	400-450	300			400		500-600	500	500
A44-SO	400-450	300			400		500-700	500	500

<sup>1</sup> Valid also for MTVL and MTVF

The information will also be found in the data sheet for the actual valve type.

SC = Spring to close

SO = Spring to open

## Accessories

To achieve certain functions, the actuators can be fitted with different types of accessories; such as positioners, solenoid valves and limit switches.

SOMAS offer many alternative solutions including mechanical micro switches and different types of solid state proximity switches.

Solenoid valves for on/off applications can be mounted directly to the actuator. Limit switches for indicating closed and/or open position are only available for outside mounting.

See data sheet Si-805EN and Si-811EN below section 4 in the SOMAS product catalogue for codes for positioners.

## Design options

In addition to the standard design the actuators are available in different optional designs according to the information below.

- E = ATEX design
- H = High temperature design
- HM = Hand operated
- LC = Locking device (closed position)
- V = Larger air connections
- X = Special design
- B = Bronze bushing in lever
- R = Reinforced

Standard actuators will be delivered if there are no option codes stated when ordering.



## Actuator selection table for ball segment and butterfly valves (air supply min. 4 bar)

Double acting actuator type DA									
Actuator Type	KVT/KVX PN 10-25 DN	KVT/KVX PN 50 DN	KVT/KVX PN 100 DN	KVTW/KVXW PN 10-25 DN	KVTF/KVXF PN 10-25 DN	KVTF/KVXF PN 50 DN	VSS PN 10-25 DN	VSS PN 50 DN	MTV <sup>1</sup> PN 10-25 DN
A11-DA	25/2-40	25/2-40			25/2-40	25/2-40			
A13-DA	50	50	25/5-25		50	50			
A21-DA			40				80		80
A22-DA	65	65	50	80-100	80-100	80	100-200	80-100	100-200
A23-DA			80	150	125			150	
A24-DA				200		100			
A31-DA			100		150		250	200	250
A32-DA			150	250	200-250	150	300-350	250-300	300-350
A33-DA	300					200	400		400
A34-DA							450		
A41-DA					300	250		350-400	
A42-DA	350-450	250-300			350-400		500-750	500	500
A43-DA	500				500		800		
A44-DA									
A51-DA	600						900	600	
A52-DA	700						1000-1200		

<sup>1</sup> Valid also for MTVL and MTVF

The information will also be found in the data sheet for the actual valve type.

Single acting actuator type SC/SO									
Actuator Type	KVT/KVX PN 10-25 DN	KVT/KVX PN 50 DN	KVT/KVX PN 100 DN	KVTW/KVXW PN 10-25 DN	KVTF/KVXF PN 25 DN	KVTF/KVXF PN 50 DN	VSS PN 10-25 DN	VSS PN 50 DN	MTV <sup>1</sup> PN 10-25 DN
A13-SC/SO	25/2-40	25/2-40				25/2-40			
A23-SC/SO	50-65	50-65	25/5-50	80-100	80-100	50	80-100		80
A24-SC/SO			80	150	125	80-100	125-200	80-100	100-200
A33-SC/SO			100	200-250	150-200	150	250-300	150-200	250-300
A34-SC/SO	300		150		250	200	350	250-300	350
A43-SC/SO	350	250			300-350	250	400-450	350-400	400
A44-SC	400-450	300			400		500-600	500	500
A44-SO	400-450	300			400		500-600	500	500

<sup>1</sup> Valid also for MTVL and MTVF

The information will also be found in the data sheet for the actual valve type.

SC = Spring to close

SO = Spring to open

### Designation for low air supply (4 bar)

The following actuators will have an additional code (L) as the return spring is not the same as in the actuators for 5.5 bar.

#### SC (Spring closes)

A13-SCL.

#### SO (Spring opens)

A13-SOL, A23-SOL, A24-SOL, A33-SOL, A34-SOL, A43-SOL, A44-SOL.

The code for low air supply design has to be specified when ordering.



## Actuator selection table for ball valves type SKV (air supply min. 5.5 bar)

Double acting actuator type DA							Double acting actuator type DA						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		10	20	30	40	50			10	20	30	40	50
25	15	A11-DA	A11-DA	A11-DA	A11-DA	A11-DA	25	15	A11-DA	A11-DA	A11-DA	A11-DA	A13-DA
40	15	A11-DA	A11-DA	A11-DA	A11-DA	A13-DA	40	15	A11-DA	A11-DA	A11-DA	A13-DA	A13-DA
50	20	A11-DA	A11-DA	A13-DA	A13-DA	A21-DA	50	20	A13-DA	A13-DA	A13-DA	A21-DA	A21-DA

Double acting actuator type DA							Double acting actuator type DA						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		5	10	15	20	25			5	10	15	20	25
80	25	A21-DA	A21-DA	A22-DA	A22-DA	A22-DA	80	25	A22-DA	A22-DA	A22-DA	A22-DA	A22-DA
100	30	A22-DA	A22-DA	A22-DA	A23-DA	A31-DA	100	30	A22-DA	A23-DA	A31-DA	A31-DA	A32-DA
125	35	A31-DA	A31-DA	A31-DA	A31-DA	A32-DA	125	35	A31-DA	A31-DA	A32-DA	A32-DA	A32-DA
150	40	A31-DA	A31-DA	A32-DA	A32-DA	A32-DA	150	40	A32-DA	A32-DA	A41-DA	A41-DA	A41-DA
200	50	A32-DA	A32-DA	A41-DA	A41-DA	A42-DA	200	50	A32-DA	A41-DA	A42-DA	A42-DA	A42-DA
250	70	A41-DA	A41-DA	A42-DA	A42-DA	A42-DA	250	70	A42-DA	A42-DA	A51-DA	A51-DA	A52-DA
300	80	A41-DA	A42-DA	A42-DA	A51-DA	A51-DA	300	80	A42-DA	A51-DA	A52-DA	A52-DA	A52-DA
350	90	A51-DA	A51-DA	A51-DA	A51-DA	A52-DA	350	90	A51-DA	A52-DA	A52-DA	A52-DA	A52-DA <sup>1</sup>
400	100	A51-DA	A51-DA	A51-DA	A52-DA	A52-DA	400	100	A51-DA	A52-DA	A52-DA	-	-

<sup>1</sup> Air supply = 6 bar

The information will also be found in the data sheet for the actual valve type.

Single acting actuator type SC/SO							Single acting actuator type SC/SO						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		10	20	30	40	50			10	20	30	40	50
25	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	25	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO
40	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	A23-SC/SO	40	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A23-SC/SO	A23-SC/SO
50	20	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	50	20	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO

Single acting actuator type SC/SO							Single acting actuator type SC/SO						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		5	10	15	20	25			5	10	15	20	25
80	25	A23-SC/SO	A23-SC/SO	A23-SC/SO	A24-SC/SO	A24-SC/SO	80	25	A24-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO
100	30	A23-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO	A33-SC/SO	100	30	A24-SC/SO	A33-SC/SO	A33-SC/SO	A33-SC/SO	A34-SC/SO
125	35	A33-SC/SO	A33-SC/SO	A33-SC/SO	A33-SC/SO	A34-SC/SO	125	35	A33-SC/SO	A34-SC/SO	A34-SC/SO	A34-SC/SO	A34-SC/SO
150	40	A33-SC/SO	A33-SC/SO	A34-SC/SO	A34-SC/SO	A34-SC/SO	150	40	A34-SC/SO	A34-SC/SO	A43-SC/SO	A43-SC/SO	A43-SC/SO
200	50	A34-SC/SO	A34-SC/SO	A43-SC/SO	A43-SC/SO	A43-SC/SO	200	50	A34-SC/SO	A43-SC/SO	A44-SC/SO	A44-SC/SO	A44-SC/SO
250	70	A43-SC/SO	A43-SC/SO	A44-SC/SO	A44-SC/SO	A44-SC/SO	250	70	A44-SC/SO	A44-SC/SO	-	-	-
300	80	A43-SC/SO	A44-SC/SO	A44-SC/SO	-	-	300	80	A44-SC/SO	-	-	-	-

The information will also be found in the data sheet for the actual valve type.

SC = Spring to close

SO = Spring to open



## Actuator selection table for ball valves type SKV (air supply min. 4 bar)

Double acting actuator type DA							Double acting actuator type DA						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		10	20	30	40	50			10	20	30	40	50
25	15	A11-DA	A11-DA	A11-DA	A11-DA	A11-DA	25	15	A11-DA	A11-DA	A11-DA	A13-DA	A13-DA
40	15	A11-DA	A11-DA	A11-DA	A13-DA	A13-DA	40	15	A11-DA	A11-DA	A13-DA	A13-DA	A13-DA
50	20	A21-DA	A21-DA	A21-DA	A21-DA	A22-DA	50	20	A21-DA	A21-DA	A21-DA	A22-DA	A22-DA

Double acting actuator type DA							Double acting actuator type DA						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		5	10	15	20	25			5	10	15	20	25
80	25	A21-DA	A22-DA	A22-DA	A22-DA	A22-DA	80	25	A22-DA	A22-DA	A23-DA	A24-DA	A24-DA
100	30	A22-DA	A22-DA	A23-DA	A23-DA	A31-DA	100	30	A23-DA	A24-DA	A24-DA	A32-DA	A33-DA
125	35	A31-DA	A31-DA	A31-DA	A32-DA	A32-DA	125	35	A31-DA	A32-DA	A32-DA	A33-DA	A33-DA
150	40	A31-DA	A32-DA	A32-DA	A33-DA	A41-DA	150	40	A32-DA	A33-DA	A41-DA	A42-DA	A43-DA
200	50	A32-DA	A33-DA	A41-DA	A42-DA	A42-DA	200	50	A41-DA	A42-DA	A42-DA	A44-DA	A44-DA
250	70	A41-DA	A42-DA	A42-DA	A43-DA	A43-DA	250	70	A42-DA	A43-DA	A51-DA	A52-DA	-
300	80	A42-DA	A42-DA	A43-DA	A44-DA	A52-DA	300	80	A43-DA	A44-DA	A52-DA	A52-DA	-
350	90	A51-DA	A51-DA	A51-DA	A52-DA	A52-DA	350	90	A52-DA	A52-DA	-	-	-
400	100	A51-DA	A52-DA	A52-DA	A52-DA	-	400	100	A52-DA	-	-	-	-

<sup>1</sup> Air supply = 6 bar

The information will also be found in the data sheet for the actual valve type.

Single acting actuator type SC/SO							Single acting actuator type SC/SO						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		10	20	30	40	50			10	20	30	40	50
25	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	25	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A13-SC/SO	A23-SC/SO
40	15	A13-SC/SO	A13-SC/SO	A13-SC/SO	A23-SC/SO	A23-SC/SO	40	15	A13-SC/SO	A13-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO
50	20	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	50	20	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO	A23-SC/SO

Single acting actuator type SC/SO							Single acting actuator type SC/SO						
Valve DN	Shaft dia. (mm)	Actuator for ball valve with PTFE 53 seats at $\Delta p$ (bar)					Valve DN	Shaft dia. (mm)	Actuator for ball valve with HiCo seats at $\Delta p$ (bar)				
		5	10	15	20	25			5	10	15	20	25
80	25	A23-SC/SO	A23-SC/SO	A23-SC/SO	A24-SC/SO	A24-SC/SO	80	25	A24-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO
100	30	A23-SC/SO	A24-SC/SO	A24-SC/SO	A24-SC/SO	A33-SC/SO	100	30	A24-SC/SO	A33-SC/SO	A33-SC/SO	A33-SC/SO	A34-SC/SO
125	35	A33-SC/SO	A33-SC/SO	A33-SC/SO	A33-SC/SO	A34-SC/SO	125	35	A33-SC/SO	A33-SC/SO	A34-SC/SO	A34-SC/SO	A34-SC/SO
150	40	A33-SC/SO	A33-SC/SO	A34-SC/SO	A34-SC/SO	A34-SC/SO	150	40	A34-SC/SO	A34-SC/SO	A43-SC/SO	A43-SC/SO	A43-SC/SO
200	50	A34-SC/SO	A34-SC/SO	A43-SC/SO	A43-SC/SO	A43-SC	200	50	A34-SC/SO	A43-SC/SO	A44-SC/SO	A44-SC/SO	-
200	50					A44-SO	250	70	A44-SC/SO	A44-SC/SO	-	-	-
250	70	A43-SC/SO	A43-SC/SO	A44-SC/SO	A44-SC/SO	A44-SC/SO	300	80	A44-SO	-	-	-	-
300	80	A43-SC/SO	A44-SC/SO	A44-SC	-	-							

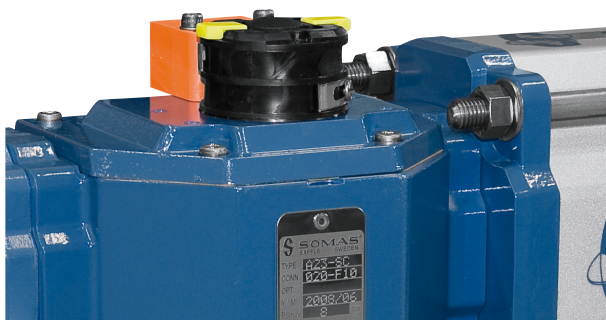
The information will also be found in the data sheet for the actual valve type.

SC = Spring to close

SO = Spring to open

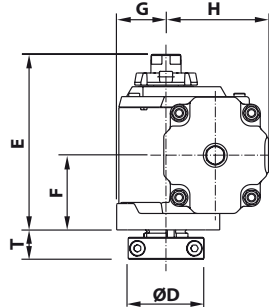
See the information at page 4 for codes for actuators for the low air supply design.

## Accessories

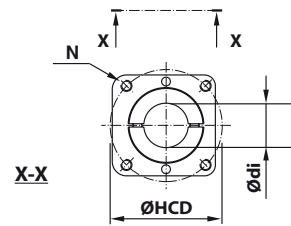




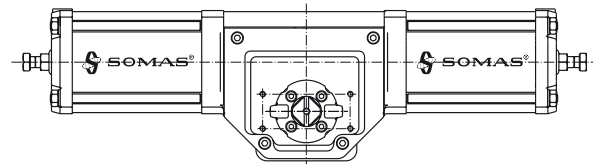
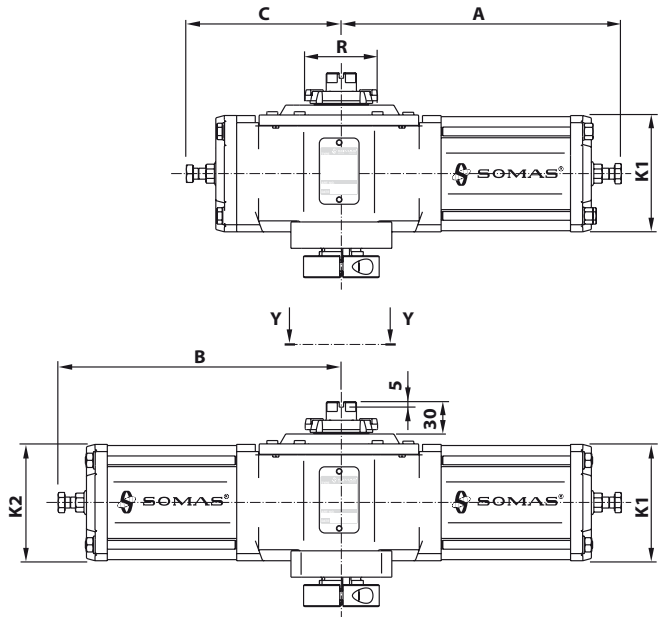
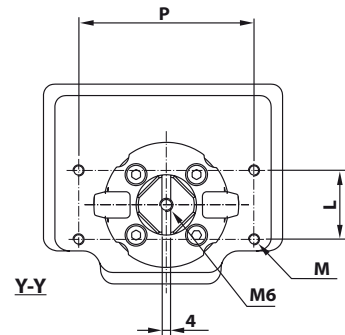
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ØD is valid  
only for Ødi  
15-50



Mounting pattern  
according to  
ISO 5211



VDI/VDE



#### Actuator type A (DA) double acting

Type	A	B	C	Ødi	ØD	E	F	G	H	K1	K2	L	M	N	P	R	T	ØHCD	Air-conn.	Weight
A11-F07	215	-	90	15-20	48	128	50	37	73	84	-	30	M5	M8	80	56	14	70	1/4"	3
A13-F07	250	-	90	15-20	48	128	50	37	83	106	-	30	M5	M8	80	56	14	70	1/4"	5
A21-F10	255	-	140	20-30	69	160	68	45	94	106	-	30	M5	M10	80	66	27	102	1/4"	7,5
A22-F10	255	260	-	20-30	69	160	68	45	94	106	106	30	M5	M10	80	66	27	102	1/4"	9
A23-F10	305	-	140	20-30	69	160	68	45	117	152	-	30	M5	M10	80	66	27	102	1/4"	11
A24-F10	305	310	-	20-30	69	160	68	45	117	152	106	30	M5	M10	80	66	27	102	1/4"	15
A31-F14	380	-	215	30-50	98	225	107,5	69	144	152	-	30	M5	M16	130	66	40	140	1/4"	23
A32-F14	380	395	-	30-50	98	225	107,5	69	144	152	152	30	M5	M16	130	66	40	140	1/4"	29
A33-F14	470	-	215	30-50	98	225	107,5	69	183	228	-	30	M5	M16	130	66	40	140	3/8"	36
A34-F14	470	485	-	30-50	98	225	107,5	69	183	228	152	30	M5	M16	130	66	40	140	1/4"+3/8"	53
A41-F16	550	-	315	40-80	98	309	153	97	211	228	-	50	M6	M20	200	66	40	165	3/8"	70
A42-F16	545	560	-	40-80	98	309	153	97	211	228	228	50	M6	M20	200	66	40	165	3/8"	85
A43-F16	680	-	315	40-80	98	309	153	97	279	354	-	50	M6	M20	200	66	40	165	1/2"	142
A44-F16	680	695	-	40-80	98	309	153	97	279	354	228	50	M6	M20	200	66	40	165	3/8"+1/2"	157
A51-F30	745	-	370	70-100	-	412	198	130	314	354	-	50	M6	M20	200	66	-	298	1/2"	198
A52-F30	745	760	-	70-100	-	412	198	130	314	354	354	50	M6	M20	200	66	-	298	1/2"	234

#### Actuator type A (SC/SO) single acting

Type	A	B	C	Ødi	ØD	E	F	G	H	K1	K2	L	M	N	P	R	T	ØHCD	Air-conn.	Weight
A13-F07	325	-	90	15-20	48	128	50	37	83	106	-	30	M5	M8	80	56	14	70	1/4"	7
A23-F10	415	-	140	20-30	69	160	68	45	117	152	-	30	M5	M10	80	66	27	102	1/4"	15
A24-F10	415	420	-	20-30	69	160	68	45	117	152	152	30	M5	M10	80	66	27	102	1/4"	24,5
A33-F14	660	-	215	30-50	98	225	107,5	69	183	228	-	30	M5	M16	130	66	40	140	3/8"	56
A34-F14	665	680	-	30-50	98	225	107,5	69	183	228	228	30	M5	M16	130	66	40	140	3/8"	84
A43-F16	920	-	315	40-80	98	309	153	97	279	354	-	50	M6	M20	200	66	40	165	1/2"	156
A44-F16	925	935	-	40-80	98	309	153	97	279	354	354	50	M6	M20	200	66	40	165	1/2"	210

Weight = Weight for actuator without mounting kit



## Ordering example

Pneumatic double acting actuator type A 32-DA. Mounting position A.

When ordering actuators separately, please specify also the mounting kit you require for the actual valve type.

## Material specification

<b>Housing, cover, end cover:</b>	Aluminium (Duasolid painted)
<b>Cylinder:</b>	Aluminium (Duasolid painted)
<b>Tie rod:</b>	EN 1.4305
<b>Piston seal:</b>	Carbon filled PTFE + O-ring made of cold-resistant nitrile rubber
<b>Screws/nuts:</b>	Acidproof steel
<b>Connection:</b> (between actuator and accessories)	Plastic tubing (standard) Acidproof steel tubing (option)

## Technical specification

<b>Air supply:</b>	4 - 8 bar
<b>Rotary motion:</b>	Max 95° adjustable travel stops
<b>Ambient temperature:</b>	- 40 to + 90 °C (standard) (+ 120 °C Option O-ring made of Viton)

## Type designation, actuator type A

**A 32 - DA - 050 - F14 - H**

**1 Type of actuator**

**2 Actuator size acc. to the selection table**

**3 Function**

DA = Double acting actuator

SC = Single acting actuator (spring to close)

SO = Single acting actuator (spring to open)

SCL = Single acting actuator (spring to close) low air supply design

SOL = Single acting actuator (spring to open) low air supply design

**4 Shaft diameter**

**5 Mounting pattern for valve attachment (acc. to ISO 5211)**

**6 Option**

E = ATEX design

H = High temperature design

HM = Hand operated

LC = Locking device (closed position)

V = Larger air connections

X = Special design

B = Bronze bushing in lever

R = Reinforced

*SOMAS reserves the right to make improvements without prior notice.*



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