

RE series rotary actuators

SPRING RETURN | SR6/6 | 90 DEGREE ROTATION

Alpha Pompe / Alphair RE aluminium rack-and-pinion actuators for quarter-turn valve automation. Compressed air drives one stroke; the springs drive the return when the powered chamber is exhausted.



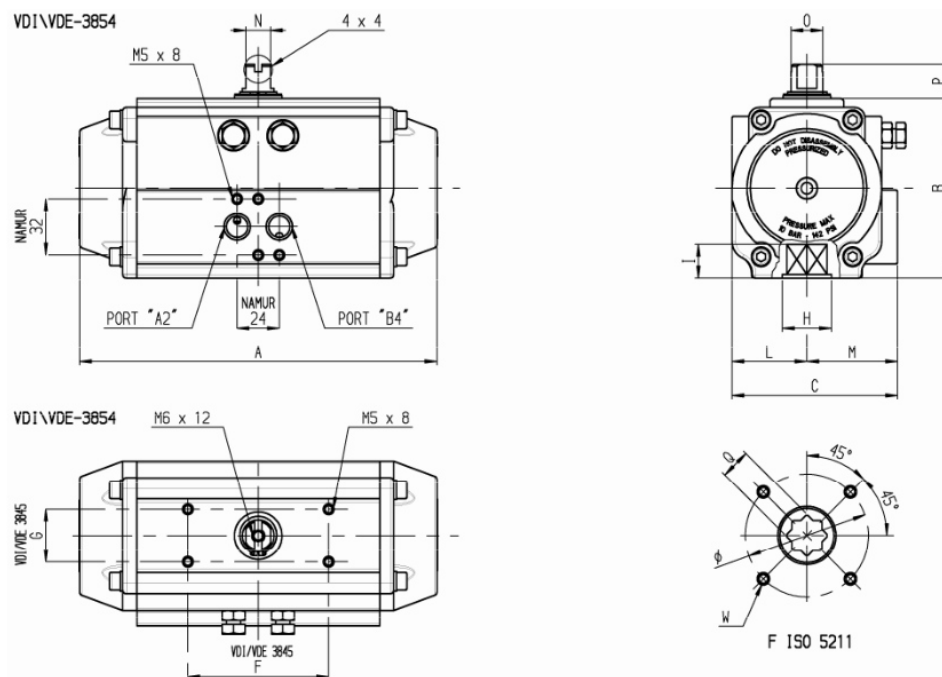
Representative RE series actuator from the ATS product listing. Exterior proportions vary by size.

Specification	RE single acting SR6/6
ATS size range	RE051, RE064, RE076, RE086 and RE101
Spring configuration	SR6/6: six cartridges per piston side, twelve total
Rotation / adjustment	90 degrees; external adjustment +/-5 degrees at both ends
Supply rating	8 bar continuous; 10 bar maximum
Standard temperature	-20 to +80 degrees C, NBR seals
Air supply	Filtered compressed air, dry or lubricated
Valve mounting	ISO 5211; fitted option must match the valve/adaptor
Accessory / solenoid interfaces	NAMUR VDI/VDE 3845
Body / covers	Hard-anodised extruded aluminium / powder-coated aluminium
Shaft / fasteners	Nickel-plated carbon steel shaft / stainless steel fasteners

Check the published product variation, fitted drive and flange before selecting the valve or accessories. RE101 is included in the dimensional and torque tables. Special seals, shaft and coating versions require separate confirmation.

Dimensions and interfaces

Bare actuator, 90-degree series. Manufacturer reference drawing and millimetre values. The fitted shaft and mounting option must be verified.



Reference	RE051	RE064	RE076	RE086	RE101
A - 90 degrees	138	155	203	239	261
B	69	86	102	112	127
C	75	86	94	104	120
L	33.5	38	42.5	49	55
M	41.5	48	51.5	55	65
N	8	8	14	14	14
O	12	12	18	18	18
P	20	20	20	20	20
NAMUR F x G	50 x 25	80 x 30	80 x 30	80 x 30	80 x 30
Port nominal	1/8 inch	1/4 inch	1/4 inch	1/4 inch	1/4 inch

Ports are offered as GAS/BSP and NPT versions; confirm the thread form of the supplied unit. The stock variation flange label and actual actuator must agree. The existing RE051DA F05/F05 label needs checking.

Torque at operating pressure

Confirmed ATS stock configuration: SR6/6. Air torque varies with supply pressure. Spring torque varies through the return stroke, independently of air pressure.

Model	Air position	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar
RE051	0 degrees	-	-	8.2	11.6	14.9	18.3
RE051	90 degrees	-	-	5.1	8.5	11.8	15.2
RE064	0 degrees	-	-	15.5	21.4	27.3	33.2
RE064	90 degrees	-	-	8.2	14.1	20.1	26
RE076	0 degrees	-	-	30.3	42.1	53.9	65.6
RE076	90 degrees	-	-	16.7	28.5	40.3	52
RE086	0 degrees	-	-	50.4	67.7	84.9	102.1
RE086	90 degrees	-	-	18.5	35.7	52.9	70.1
RE101	0 degrees	-	-	72.7	100.2	127.6	155.1
RE101	90 degrees	-	-	37.1	64.6	92	119.5

Model	Spring at 90 degrees	Spring at 0 degrees	Minimum @ 6 bar, both strokes
RE051	11.6	8.5	8.5
RE064	21.4	14.1	14.1
RE076	42.1	28.5	28.5
RE086	67.7	35.7	35.7
RE101	100.2	64.6	64.6

A dash means the manufacturer does not list a torque for that pressure/configuration. Do not interpolate an operating approval. For conservative initial sizing, use the lower air-stroke endpoint and lower spring-return endpoint; both must exceed the required factored valve torque.

Select against actual valve breakaway/running/seating torque at the process pressure, fluid, temperature and duty. Valve nominal size alone is not enough. The fail-open/fail-closed position depends on assembly orientation and must be specified and checked.

Mounting and valve selection

Model	Manufacturer standard flange	Other catalogue options	Female drive Q x I options
RE051	F04	F03/F05	9 x 10; 11 x 13
RE064	F05/F07	F03/F05/F07 or F04	9 x 10; 11 x 13; 14 x 16
RE076	F05/F07	None listed	11 x 13; 14 x 16; 17 x 20
RE086	F05/F07	None listed	14 x 16; 17 x 20
RE101	F07/F10	F05/F07/F10	14 x 16; 17 x 20; 22 x 25

Flange option	Bolt circle / fixing	H reference
F03/F05	36 (M5 x 8) / 50 (M6 x 9)	25
F05/F07	50 (M6 x 9) / 70 (M8 x 12)	35; RE086 uses 40
F07/F10	70 (M8 x 12) / 102 (M10 x 15)	55

These are catalogue interface options. Q x I pairs describe manufacturer drive choices; do not assume all are fitted to one stocked unit. Match the actual flange, centring, shaft size, engagement and adaptor before assembly.

ATS ball-valve guide - initial reference only

Ball valve size	Catalogue SR guide
1/2 inch	RE051
3/4 inch	RE051 / RE064
1 inch	RE064 / RE076
1 1/4 inch	RE076 / RE086
1 1/2 inch	RE076 / RE086
2 inch	RE086
3 inch	RE086

The guide retains the earlier ATS reference pairings, not a verified size for a particular process pressure or spring setup. RE101 is chosen by required torque and verified drive/flange fit; a new valve-size equivalence has not been invented. See the ATS ball valve with actuator mounting product.

Source: supplied Alpha Pompe / Alphair RE September 2016 technical catalogue, pages 2-4; ATS rotary/ball-valve guide and confirmed SR6/6 configuration. Ratings apply to standard execution; confirm the supplied variant for special duties.

ATS mounting and accessory options

The selected actuator page shows live product options, pricing and availability. These accessory families are listed in the ATS rotary category; fit must be confirmed for the particular actuator and valve.

Accessory	ATS product codes / options	Selection check
Ball valve with actuator mounting	BVA: 1/2 to 3 inch	Required torque, listed flange, valve stem and drive fit
Square drive adaptor	RQ0911-A, RQ0914-A, RQ1114-A, RQ1117-A, RQ1417-A	Match fitted actuator female square to valve male square
Oval drive adaptor	RQDD1408-A, RQDD1710	Confirm the full oval / flat-shaft geometry
Position indicator	CAM100A	Confirm shaft interface and indication arrangement
Positioner bracket	BKF05/03, BKF07/05	Confirm bracket height and interface dimensions
Switch box	KN030	Confirm switch type, electrical ratings and mounting

Square-adaptor size references

SKU	Actuator square	Valve square
RQ0911-A	11 mm	9 mm
RQ0914-A	14 mm	9 mm
RQ1114-A	14 mm	11 mm
RQ1117-A	17 mm	11 mm
RQ1417-A	17 mm	14 mm

A shared F flange or a catalogue shaft option does not establish a complete assembly match. The catalogue lists alternative drive sizes; measure or confirm the drive fitted to your specific actuator. The ready-made product uses real WooCommerce options rather than a custom stroke field.

Source: ATS rotary product category and accessory product listings, checked 14 October 2026. Accessory availability and pricing are live website values and are not fixed by this catalogue.