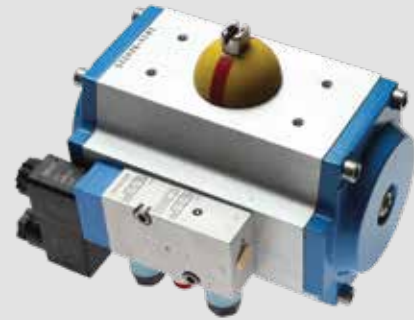


Pneumatic drive: REV Series



The REV Series is the new modern line of pneumatic cylinders with an attractive price level without making concessions on quality. Available in various models with a wide range of options, such as feedback.

The REV pneumatic air-controlled actuators are perfect for the automation of industrial valves, such as butterfly valves and ball valves. REV actuators have a torque from 5 to max. 8,000 Nm, the required control pressure is from 6 to 10 bar.

The drives are available in both double-acting and single-acting versions. The available tilt angle is 90°. On a single-acting version (SA), the integral spring package ensures that the pneumatic drive (and hence the valve) automatically returns to the rest position (open or closed) when the control pressure is relieved. The running time of the actuator can be set by means of the plastic throttle valve in the Namur 5.2 valve. The actuator can be adjusted +/- in both the open and closed position. The double-acting version (DA) is air-controlled in both directions.

The REV Series is supplied on the FIP plastic or cast iron butterfly valve (ReValve) or ball valve, incl. complete assembly with flange set and is further characterised by an ISO-standardised connection pattern with a Namur control valve.

CHARACTERISTICS

- ✓ Double and single-acting version with 24 VAC or 24 VDC actuator
- ✓ Simple operation by comparison with an electric drive
- ✓ For installation on a plastic or stainless steel butterfly valve or VDL ball valve
- ✓ Constant torque
- ✓ Fast opening and closing
- ✓ For use in both indoor and outdoor applications
- ✓ Optional limit switches
- ✓ Outstanding price/quality ratio

TECHNICAL DATA (ACTUATOR)

Actuator housing	: anodised aluminium ASTM 6063, UNI 10681
Actuator end caps	: aluminium UNI EN1706, EN AC-46100, epoxy-coated
Plungers	: aluminium UNI 5076
Gear shaft	: nickel-plated steel AISI SAE 11L37 - ASTM B 656, optionally stainless steel
Bearing	: engineering polymer
Packings	: EPDM, optionally FPM (Viton) or silicone
Temperature range	: standard from -50°C to +70°C (NBR)
Control pressure	: 6 to 10 bar compressed air (conditioned)
Option	: mini monitor for feedback : limit switches (open and closed)

APPLICATION

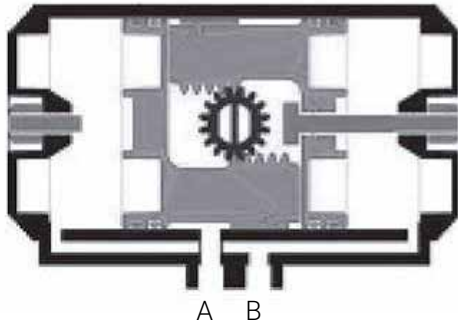
Pneumatic drives are used on butterfly valves or ball valves in automated processes such as ebb and flood and drip irrigation installations



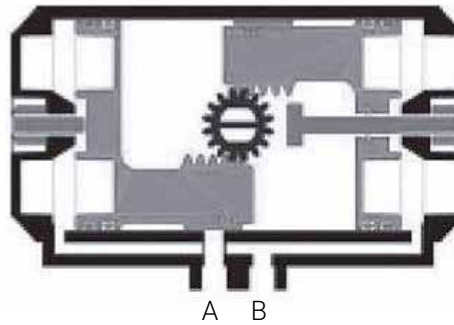
WORKING PRINCIPLE

Anti-clockwise rotation is obtained by connecting the air pressure to port 'A', the two plungers are forced outwards so that the spindle rotates in clockwise direction. During this movement, air is blown out from the outermost chambers through port 'B'. Clockwise rotation is obtained in the opposite order, i.e. by connecting the air pressure to port 'B'.

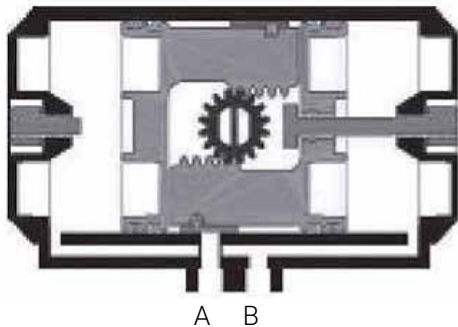
Anti-clockwise rotation - closed position



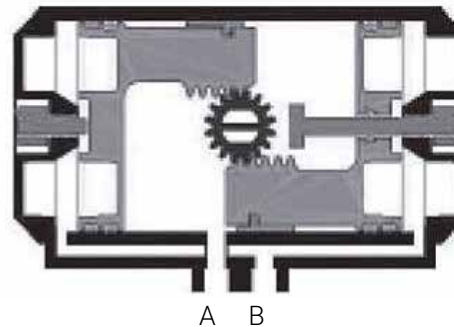
Open position



Clockwise rotation - closed position



Open position



Air consumption and possible dimensions of valves

Model	Air consumption	FE butterfly valve	ReValve	Ball valve	VKD	LKVID	Basic design (to ISO)
	(N.lit)	PVC (mm)	Metal (mm)	PVC (mm)			
GTKB 43	0,18						F03/F05
GTKB 44	0,18			32			F04
GTWB 63	0,4	50 - 90	63 - 90				F05/F07
GTWB 75	0,6	110	110				F05/F07
GTWB 83	0,88	125	125				F05/F07
GTWB 92	1,2	160	160				F05/F07
GTWB 110	1,9	200	200				F07/F10
GTWB 118	2,7	250-315	250-315				F07/F10

The pneumatic drive GTWB52 (02232-703401) is no longer available since mid-2020. This drive is replaceable by the GTWB63 (02232-703402).

Torque (Nm), double-acting drives

Model	Available air pressure (bar)								
	2	3	4	5	6	7	8	9	10
GTKB 43	4,7	7	9,4	11,7	14	16,4	18,7	21	23,4
GTKB 44	4,7	7	9,4	11,7	14	16,4	18,7	21	23,4
GTWB 63	11,6	17,4	23,2	29	34,8	40,6	46,4	52,2	58
GTWB 75	20	30	40	50	60	70	80	90	100
GTWB 83	29	43,5	58	72,5	87	101,5	116	130,5	145
GTWB 92	40	60	80	100	120	140	160	180	200
GTWB 110	58	87	116	145	174	203	232	261	290
GTWB 118	86	129	172	215	258	301	344	387	430

TECHNICAL DATA - FEEDBACK

Type	: ELR. MP 1.2 MS.100 (standard)	: ELR.ER.M2.8030.000
Housing material	: polyamide / polycarbonate with transparent cover	: powder-coated aluminium with polycarbonate cap
Indicator	: visual open and closed position	: visual open and closed position
Feedback	: changeover contact open / closed	: changeover contact open / closed
Max. contact load	: 10 A - 250 VAC : 2.5 A 24 VDC	: 5 A - 125-250 VAC
Cable gland	: gland M20x1.5 (max. 1 gland)	: gland M20x1.5 (max. 2 glands)
Protection class	: IP67	: IP67
Temperature	: -20 - +80°C	: -20 - +85°C
Extra installation height	: 105 mm	: 125 mm



INSTALLATION & MAINTENANCE

- ✓ The pneumatic drives of the REV Series can be installed both parallel and at right angles to the pipe direction.
- ✓ The opening and closing time can be set by means of the throttle valves. Too fast opening and closing of a valve can result in water hammer. Lock nuts prevent the throttle valves from becoming maladjusted.
- ✓ The actuator is lubricated before capacity.
- ✓ Ensure clean and dry air; moisture in the pipework can result in damage to the control valves.
- ✓ Separate stainless steel square adapters are available: 76540-000450 (14x11x16) / 76540-000500 (17x14x17) / 76540-000550 (22x17x22)