

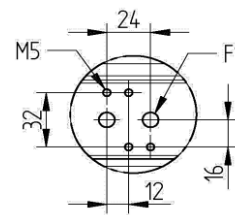
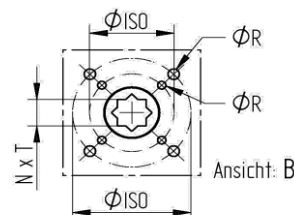
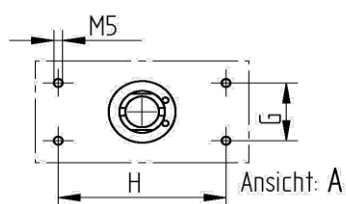
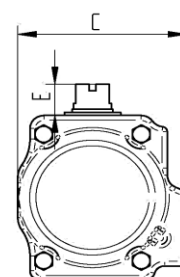
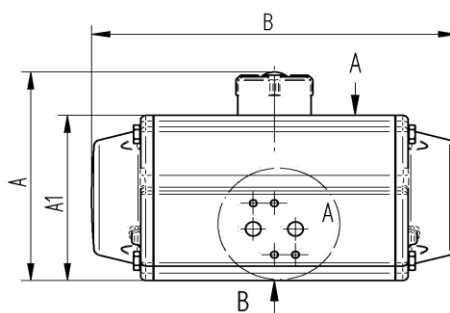
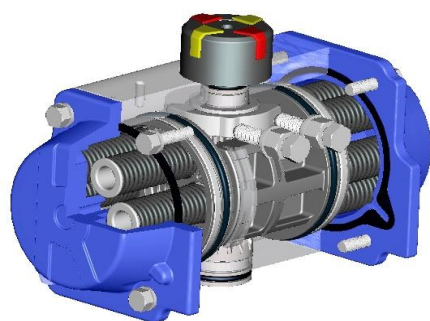
FR- SINGLE ACTING SPRING RETURN

Technical data

Design characteristic: Rack and pinion system
Piston guidance: Self-centering inside of the housing
Body: Extruded aluminum alloy
End caps: Die cast aluminum RAL 5002 blue coated
End caps seals: NBR
Pinion [Drive shaft]: Steel alloy nickel plated
Piston|Rack: Die cast aluminum anodized
Piston|Pinion seals: NBR
Rotation|Stroke: 90° | ±5° from 90° position adjustable
Temperature range: -20°C up to +80°C
FKM-FPM-sealing, up to max. 150°C
Torque max.: See the table below
Number of springs: 12 pieces [6 per side]

Pilot pressure: Designed for 6 bars
Control medium: Filtered and lubricated air [Pneurop/ISO class 4]
Actuator connection: Acc.to DIN EN 5211
Control valve: Acc. to Namur or VDI/VDE 3845
Signalling devices: Acc. to Namur or VDI/VDE 3845

Approval: ATEX acc. to 2014/34/EU



EINZELHEIT A

Article No.	SPRING	Spring	Air	A	A1	B	C	NxT	E	Ø ISO	H	øR	G	F"	Weight
	pcs	↻ 0° Nm	↻ 90° Nm	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[mm]	[Kg]
FR01	2 x 6	8,1	8,3	100	72	142	72	11x12	20	F03 F05	80	M5 M6	30	1/8"	1,16
FR02	2 x 6	13,4	15,0	113	85	162	84	14x16	20	F05 F07	80	M6 M8	30	1/8"	1,60
FR03	2 x 6	26,6	28,4	131	103	208	96	17x19	20	F05 F07	80	M6 M8	30	1/8"	3,22
FR04	2 x 6	44,1	40,6	144	116	246	108	17x19	20	F05 F07	80	M6 M8	30	1/8"	4,30
FR05	2 x 6	60,9	65,1	156	128	266	123	17x22	20	F07 F10	80	M8 M10	30	1/4"	5,92
FR06	2 x 6	126,0	135,0	196	159	347	151	22x24	30	F07 F10	80	M8 M10	30	1/4"	11,25
FR07	2 x 6	269,0	282,0	233	197	475	202	27x29	30	F10 F12	80	M10 M12	30	1/4"	21,80
FR08	2 x 6	510,0	520,0	274	246	570	232	36x38	30	F14	130	M16	30	1/4"	38,40