



ACTUATORS

Edition. 21.5

PNEUMATIC



■ **ULTRA COMPACT SCOTCH-YOKE
PNEUMATIC ACTUATORS DA**



■ **ULTRA COMPACT SCOTCH-YOKE
PNEUMATIC ACTUATORS SR**

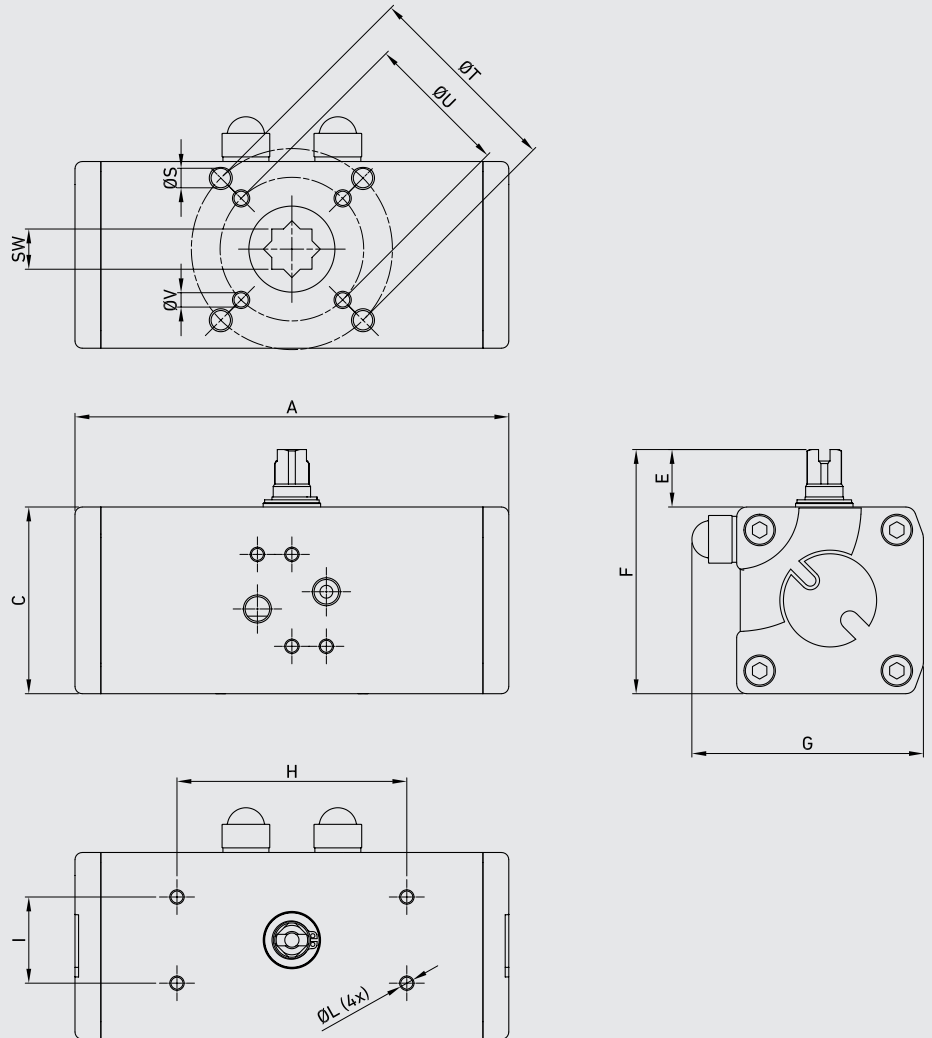


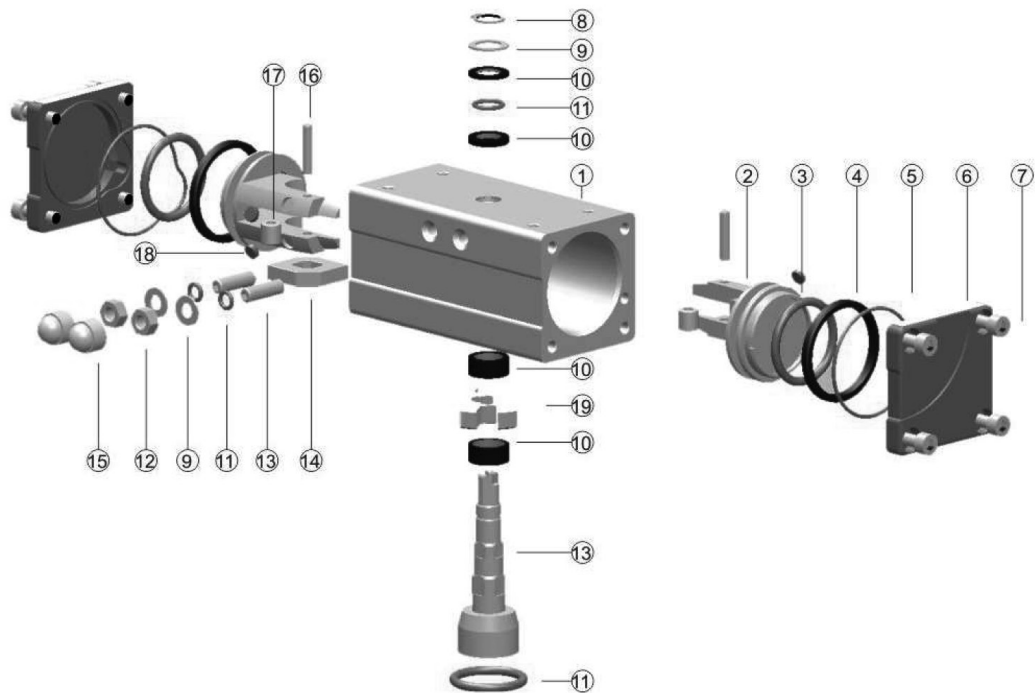
**ULTRA COMPACT
SCOTCH-YOKE
PNEUMATIC
ACTUATORS DA**

- Port "A" Air to open (anti clockwise)
- Port "B" Air to close (clockwise)
- Air supply: 6 bar; maximum 8 bar
- Drive Medium = Air (Dry or lubricated); not corrosive Gas; light hydraulic oil
- Temperature = -50° to 160°C or -58 to 320° F
- Standard indicator position

- ATEX certification

HIGH CYCLICITY



ULTRA COMPACT SCOTCH-YOKE ACTUATORS


REF NO	DESCRIPTION	QTY	MATERIAL STD UNIT	COMMENTS
1	Cylinder Body	1	Aluminium	
2	Piston	2	Aluminium	
3	O-ring piston	2	Buna Nitrile	Alt. VITON/Silikone
4	Glide band piston	2	PTFE Carbon	
5	Sealing end caps	2	Buna Nitrile	Alt. VITON/Silikone
6	End caps epoxy	2	Aluminium	
7	Screw end caps	8	DIN921 1.4301	Alt. AISI 304-A2
8	Retaining ring	1	DIN471 1.4301	Alt. AISI 304-A2
9	Shim ring	1	DIN988 1.4301	Alt. AISI 304-A2
10	Glide and distance rings	4	PTFE Carbon	
11	O-rings	2	Buna Nitrile	Alt. VITON/Silikone
12	Hexagon nuts	2	DIN934 1.4301	Alt. AISI 304-A2
13	Hexagon socket set screws	2	ISO4026 1.4301	Alt. AISI 304-A2
14	Travel stop disc	1	C10	
15	Protective cap for nut	2	LLD-PE	
16	Parallel pin	2	DIN6325 Steel	
17	Press fit bushes	2	DIN179 Steel	
18	Glide support piston	2	PTFE Carbon	
19	Crank	1	C10	

TORQUES (NM) ACTUATOR DOUBLE ACTING

		AIR SUPPLY						
MODEL	Mpa	0,3	0,4	0,5	0,56	0,6	0,7	0,8
JDA 13	PSI	43,5	58	72,5	81,2	87	101,5	116
	Nm	6,4	8,5	10,6	11,9	12,8	14,9	17
	lbf-ft	4,72	6,27	7,82	8,78	9,44	10,99	12,54
JDA 35	Nm	17,8	23,7	29,7	33,2	35,6	41,6	47,5
	lbf-ft	13,13	17,48	21,91	24,49	26,26	30,68	35,03
JDA 75	Nm	38	50,7	63,4	71	76,1	88,8	101,5
	lbf-ft	28,03	37,39	46,76	52,37	56,13	65,50	74,86
JDA 135	Nm	67,7	90,3	112,9	126,5	135,5	158,1	180,7
	lbf-ft	49,93	66,60	83,27	93,30	99,94	116,61	133,28
JDA 520	Nm	259,4	345,9	432,4	484,2	518,8	605,3	691,8
	lbf-ft	191,32	255,12	318,92	357,13	382,65	446,45	510,24

MAXIMUM OPERATING TIME PER SECOND (0.55 MPAG / 80 PSIG)

Actuator Size	JDA13	JDA35	JDA75	JDA135	JDA520
DA open	<1	<1	<1	<1	<1
DA close	<1	<1	<1	<1	<1
SR open	<1	<1	<1	<1	<1
SR close	<1	<1	<1	<1	<1

AIR CONSUMPTION PER STROKE

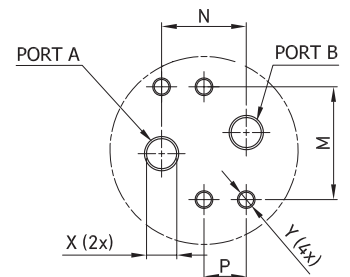
Actuator Size	JDA13	JDA35	JDA75	JDA135	JDA520
Port 'A' to open (liters)	0,03	0,14	0,28	0,55	1,75
Port 'B' to close (liters)	0,03	0,14	0,28	0,55	1,75
Port 'A' to open (cubic inch)	1,8	8,5	17,1	33,6	106,8
Port 'B' to close (cubic inch)	1,8	8,5	17,1	33,6	106,8

DA ACTUATORS (DOUBLE ACTING)

TYPE	ISO5211	A	C	E	F	G	M	N	ØS	T	ØV	U	X	Y	SW	H	I	L	WEIGHT	ITEM CODE		
JDA13	F03	mm	76	45	20	65	55	32	24	M5	36	-	-	G1/8	M5X8	9	50	25	M5x6	kg	0,29	FATAAJDA013AA0H
		inch	2,99	1,77	0,79	2,56	2,17	1,26	0,94		1,42	0,35	1,97			0,98	0,35	1,97		0,98	0,35	
JDA35	F03/F05	mm	122	52	20	72	65	32	24	M6	50	M5	36	G1/8	M5X8	11	80	30	M5x6	kg	0,75	FATAAJDA035AA0H
		inch	4,80	2,05	0,79	2,83	2,56	1,26	0,94		1,97	1,42	1,42			0,43	3,15	1,18		0,43	3,15	
JDA75	F05/F07	mm	151	65	20	85	81	32	24	M8	70	M6	50	G1/8	M5X8	14	80	30	M5x6	kg	1,32	FATAAJDA075AA0H
		inch	5,94	2,56	0,79	3,35	3,19	1,26	0,94		2,76	1,97	1,97			0,55	3,15	1,18		0,55	3,15	
JDA135	F05/F07	mm	198	80	20	100	96	32	24	M8	70	M6	50	G1/8	M5X8	17	80	30	M5x6	kg	2,5	FATAAJDA135AA0H
		inch	7,80	3,15	0,79	3,94	3,78	1,26	0,94		2,76	1,97	1,97			0,67	3,15	1,18		0,67	3,15	
JDA520	F07/F10	mm	270	110	20	130	130,5	32	24	M10	102	M8	70	G1/8	M5X8	22	80	30	M5x6	kg	6,25	FATAAJDA520AA0H
		inch	10,63	4,33	0,79	5,12	5,14	1,26	0,94		4,02	2,76	2,76			0,87	3,15	1,18		0,87	3,15	

TORQUES (NM) ACTUATOR DOUBLE ACTING

TYPE	AIR SUPPLY		Nm	lbf-ft
	MPa	Psi		
JDA13	0,6	87	12,8	9,44
JDA35	0,6	87	35,6	26,26
JDA75	0,6	87	76,1	56,13
JDA135	0,6	87	135,5	99,94
JDA520	0,6	87	518,8	382,65

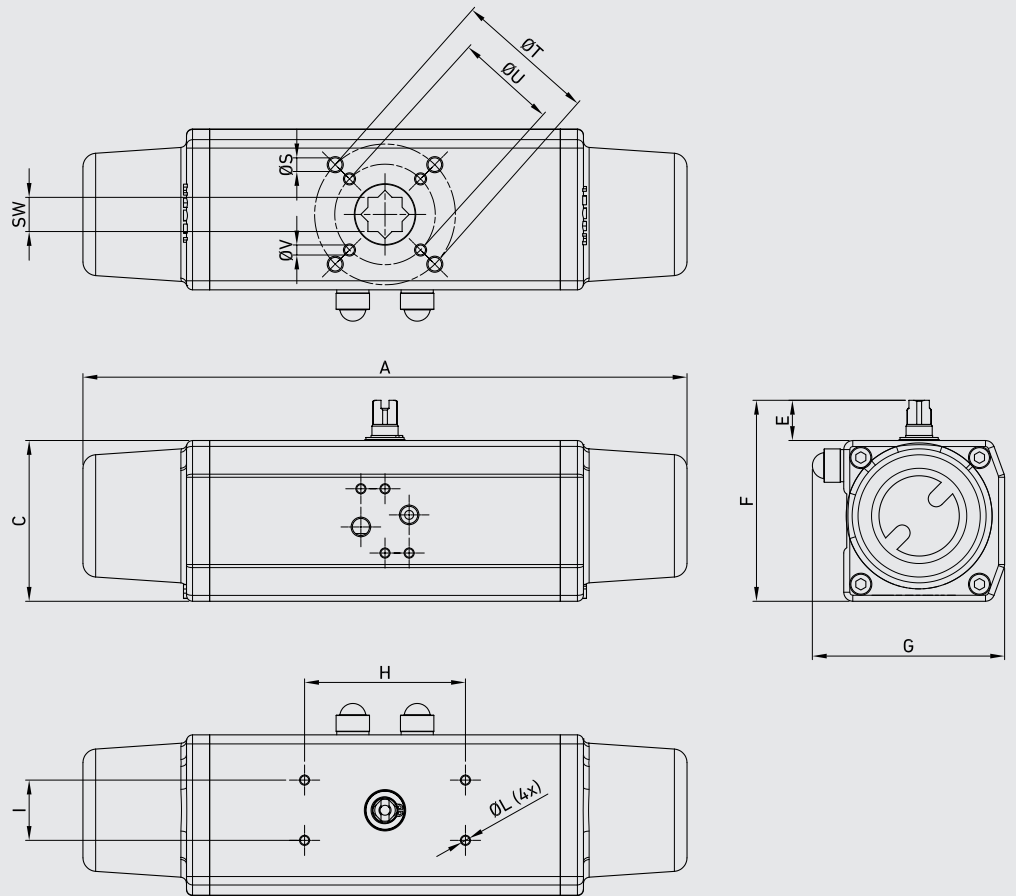




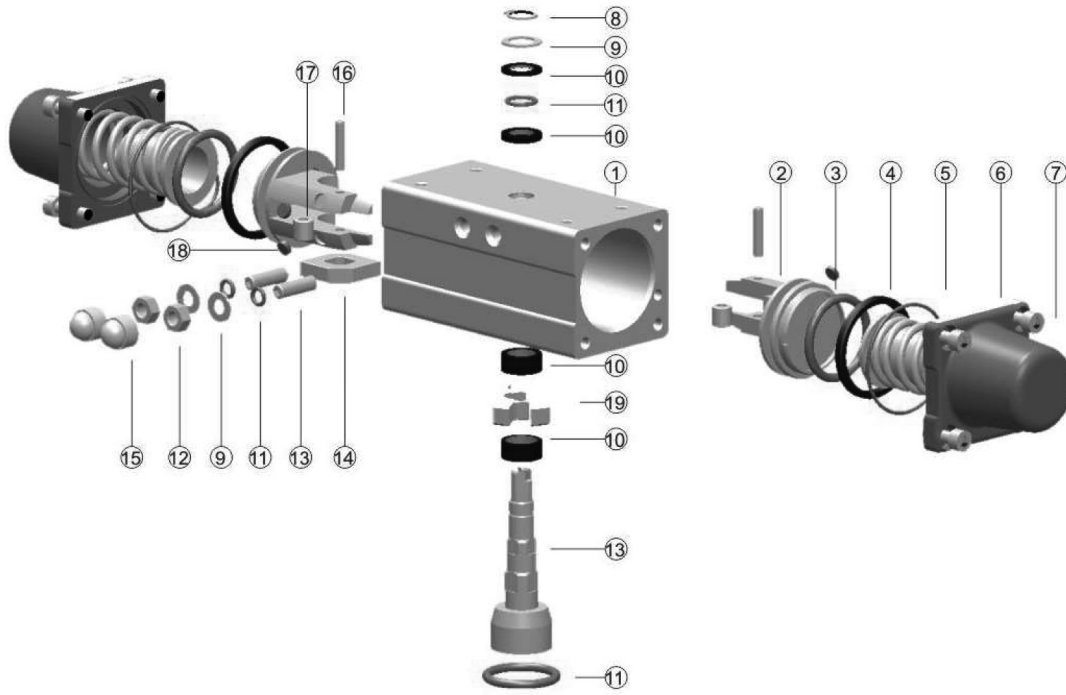
ULTRA COMPACT SCOTCH-YOKE PNEUMATIC ACTUATORS SR

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- Standard indicator position

- ATEX certification



ULTRA COMPACT SCOTCH-YOKE ACTUATORS



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15	Protective cap for nut	2	LLD-PE	
16	Parallel pin	2	DIN6325 Steel	
17	Press fit bushes	2	DIN179 Steel	
18	Glide support piston	2	PTFE Carbon	
19	Crank	1	C10	

TORQUES (NM) ACTUATOR SPRING RETURN

		AIR SUPPLY						
MODEL	Mpa	0,3	0,4	0,5	0,55	0,6	0,7	0,8
	PSI	43,5	58	72,5	79,75	87	101,5	116
JSR 20	Nm	-	-	-	-	21,6	-	-
	lbf-ft	-	-	-	-	15,93	-	-
JSR 42	Nm	-	-	-	-	42	-	-
	lbf-ft	-	-	-	-	30,98	-	-
JSR 84	Nm	-	-	-	-	84	-	-
	lbf-ft	-	-	-	-	61,96	-	-
JSR 240	Nm	-	-	-	-	240	-	-
	lbf-ft	-	-	-	-	177,01	-	-

MAXIMUM OPERATING TIME PER SECOND (0.55 MPAG / 80 PSIG)

Actuator Size	JSR20	JSR42	JSR84	JSR240
DA open	<1	<1	<1	<1
DA close	<1	<1	<1	<1
SR open	<1	<1	<1	<1
SR close	<1	<1	<1	<1

AIR CONSUMPTION PER STROKE

Actuator Size	JSR20	JSR42	JSR84	JSR240
Port 'A' to open (liters)	0,08	0,28	0,32	1
Port 'B' to close (liters)	0,08	0,28	0,32	1
Port 'A' to open (cubic inch)	4,9	17,1	19,5	61,0
Port 'B' to close (cubic inch)	4,9	17,1	19,5	61,0

SR ACTUATORS (SPRING RETURN)

TYPE	ISO5211	A	C	E	F	G	M	N	ØS	T	ØV	U	X	Y	SW	H	I	L	WEIGHT	ITEM CODE		
JSR20	F03/F05	mm	195	52	20	72	63,5	32	24	M6	50	M5	36	G1/8	M5X8	11	50	25	M5x6	kg	0,85	FATAAJSR020AA0H
		inch	7,68	2,05	0,79	2,83	2,50	1,26	0,94		1,97		1,42			0,43	1,97	0,98		14	80	
JSR42	F05/F07	mm	231	65	20	85	82	32	24	M8	70	M6	50	G1/8	M5X8	14	80	30	M5x6	kg	1,325	FATAAJSR042AA0H
		inch	9,09	2,56	0,79	3,35	3,23	1,26	0,94		2,76		1,97			0,55	3,15	1,18		0,67	3,15	
JSR84	F05/F07	mm	300	80	20	100	96	32	24	M8	70	M6	50	G1/8	M5X8	17	80	30	M5x6	kg	3,25	FATAAJSR084AA0H
		inch	11,81	3,15	0,79	3,94	3,78	1,26	0,94		2,76		1,97			0,67	3,15	1,18		0,87	3,15	
JSR240	F07/F10	mm	410	110	20	130	130,5	32	24	M10	102	M8	70	G1/8	M5X8	22	80	30	M5x6	kg	7,15	FATAAJSR240AA0H
		inch	16,14	4,33	0,79	5,12	5,14	1,26	0,94		4,02		2,76			0,87	3,15	1,18		0,87	3,15	

TORQUES (NM) ACTUATOR SPRING RETURN

TYPE	AIR SUPPLY		Nm	lbf-ft
	MPa	0,6		
JSR20	Psi	87	21,6	15,93
	MPa	0,6		
JSR42	Psi	87	42	30,98
	MPa	0,6		
JSR84	Psi	87	84	61,96
	MPa	0,6		
JSR240	Psi	87	240	177,01
	MPa	0,6		

