

FORGED STAINLESS STEEL SERIES (R&P)

Models: SS AT054U ÷ SS AT654

Type: Double Acting and Spring Return



Description

- The Air Torque "S" Series stainless steel actuators is a robust corrosion resistant actuator line specifically engineered for high corrosive environments and for sanitary applications. This line is manufactured by using high quality forged stainless steel housings material in 316 stainless steel grade. Typical fields of applications are:
- chemical process • pulp and paper • pharmaceutical • marine and off shore • sanitary • cosmetics • oil and gas

Product Features

- Mechanism: Rack and Pinion
- Housing base material: 316 stainless steel grade
- Model/Type: 9 different model sizes both in Double Acting and Spring Return
- Torque Range: Output torque up to 2.000 Nm
- Corrosion Protection Levels: 4 different surface finishing + painting coating according to the customers specifications (different combination of materials and coatings for perfect matching with installation environment) up to C5M-H
- Working Temperature: 3 different working temperature executions (from -60°C/-76°F up to +150°C/+302°F); -40°C as standard lower limit of temp execution
- Mounting Interface: Multiple choice of ISO flange and drive shaft connection for each actuator size.
- Fasteners Materials: Fasteners in stainless steel A2/A4.
- Stroke Adjustment Range: -5° / +5° and 85° / 95°
- Supply Media: Compressed dry or lubricated air and inert gasses

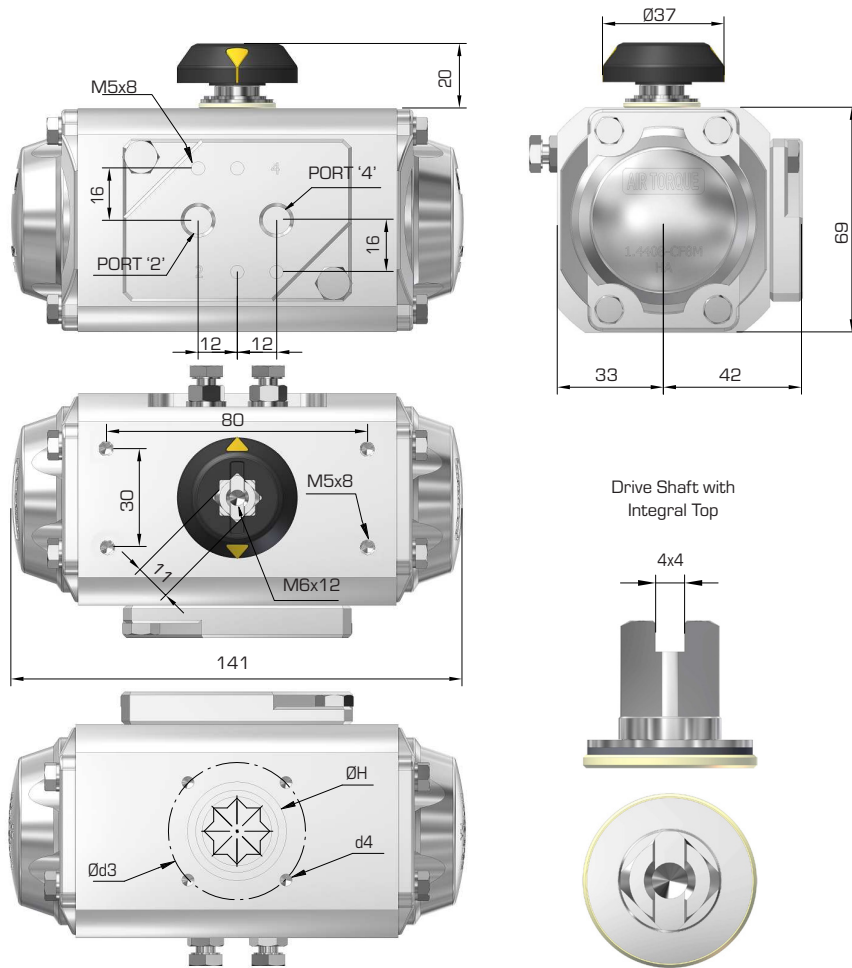
Products approvals/compliance/certificates:

- ATEX 2014/34/EU
- DNV Type Approval
- SIL3
- EU Declaration of conformity
- TR CU 010/2011
- TR CU 012/2011
- IP67 and IP68 - Degree of protection





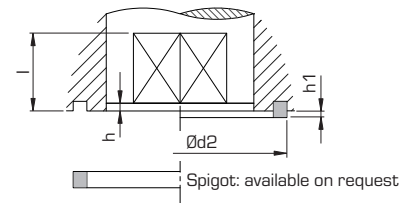
Dimensions in mm



ISO 5211 Interface:

		STD	OPTIONAL
ISO 5211		F04	F03
Ø d2		30	25
Ø d3		42	36
d4		M5x8	M5x8
Ø H		30	25
Ch x l min. (*)	DS	9x11 - 11x12	
h min.		0,5	0,5
h1		1,5	1,5

(*) Other type and sizes of shaft connection available upon request.

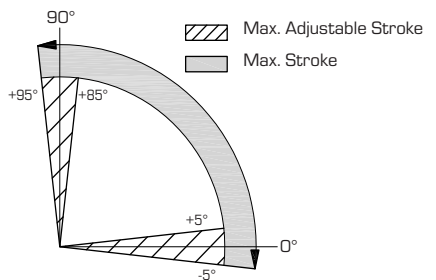


Connection / Attachment:

Pressure connection Port 2 and 4	G1/8" (*)
Ancillary Attachment	AA1

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	8,3		10		11,6		13,3		14		15		16,6		18,3		19,9		23,3		26,6	2,74	

OUTPUT TORQUE FOR SPRING RETURN IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			
S1	5,0	3,0	7	4,7	8	6,3	10,0	8	10,7	8,7	11,7	9,6	13,3	11,3									5,3	3,3	2,79
S2	4	1,9	6,0	3,6	7,7	5,3	9,3	6,9	10,0	7,6	11,0	8,6	12,7	10,2	14,3	11,9							6,4	4,0	
S3			5,3	2,5	7,0	4,2	8,7	5,8	9,4	6,6	10,3	7,5	12,0	9,2	13,7	10,8	15,3	12,5					7,4	4,6	2,81
S4					6,3	3	8,0	5	8,7	5,5	9,7	6,4	11,3	8,1	13,0	9,8	14,7	11,4	18,0	14,7			8,5	5,3	
S5							7,3	3,7	8,1	4,4	9,0	5,4	10,7	7,0	12,3	8,7	14,0	10	17,3	13,7	20,6	17,0	9,6	5,9	2,83
S6											8,4	4,3	10,0	6,0	11,7	7,6	13,3	9,3	16,7	12,6	20,0	16	10,6	6,6	
S7													9,4	4,9	11	6,6	13	8,2	16,0	11,6	19,3	14,9	11,7	7,3	2,85
S8															10,4	6	12,0	7,2	15,3	10,5	18,7	13,8	12,8	7,9	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/6 Turn	50	opening 0,09	closing 0,15	opening 0,20	closing 0,25	opening 0,25	closing 0,30	-40 to +80	-15 to +150	-60 to +80

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).

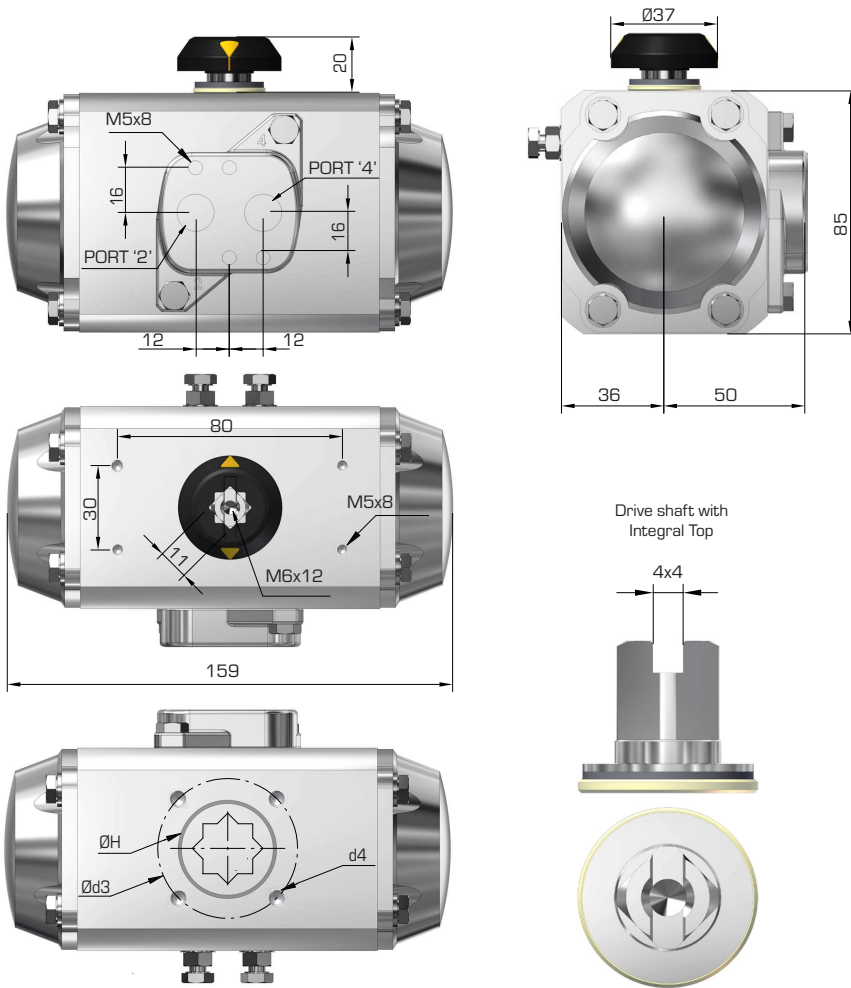
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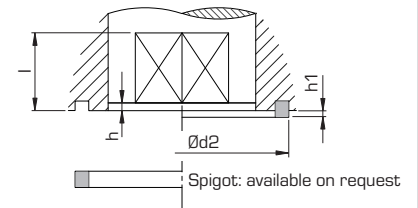
Dimensions in mm



ISO 5211 Interface:

		STD
ISO 5211		F05
Ø d2		30
Ø d3		50
d4		M6x9
Ø H		35
Ch x l min. (*)	DS	11x12 - 14x16
h min.		0,5
h1		2

(*) Other type and sizes of shaft connection available upon request.

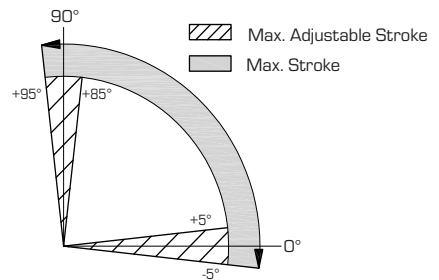


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" (*)
Ancillary Attachment	AA1

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	14,7		17,6		20,5		23,5		24,6		26,4		29,3		32		35,2		41		46,9		3,75

OUTPUT TORQUE FOR SPRING RETURN IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°		90°		0°		90°		0°		90°		0°		90°		0°		90°		90°	0°			
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End					Start
S 05	9,1	6,2	12	9,2	15	12,1	17,9	15	19,1	16,2	20,8	17,9	23,8	20,9									8,4	5,5	3,84
S 06	8	4,5	10,9	7,5	13,9	10,4	16,8	13,3	18	14,5	19,7	16,3	22,7	19,2	25,6	22,1							10,1	6,7	
S 07			9,8	5,8	12,8	8,7	15,7	11,6	16,9	12,8	18,6	14,6	21,5	17,5	24,5	20,4	27,4	23,4					11,8	7,8	3,87
S 08					11,6	7	14,6	10	15,7	11,1	17,5	12,9	20,4	15,8	23,4	18,7	26,3	21,7	32,2	27,5			13,5	8,9	
S 09							13,5	8,3	14,6	9,4	16,4	11,2	19,3	14,1	22,3	17,1	25,2	20	31,1	25,9	36,9	31,7	15,2	10	3,9
S 10											15,3	9,5	18,2	12,4	21,1	15,4	24,1	18,3	29,9	24,2	35,8	30	16,9	11,1	
S 11													17,1	10,8	20	13,7	23	16,6	28,8	22,5	34,7	28,3	18,6	12,2	3,93
S 12															18,9	12	21,9	14,9	27,7	20,8	33,6	26,7	20,2	13,3	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)		
					D		S		ST	HT	LLT2
					opening	closing	opening	closing			
8 bar	0° - 90°	For 1° adj. need 1/6 Turn	63	opening: 0,16 closing: 0,26	opening: 0,25 closing: 0,30	opening: 0,30 closing: 0,35	-40 to +80	-15 to +150	-60 to +80		

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

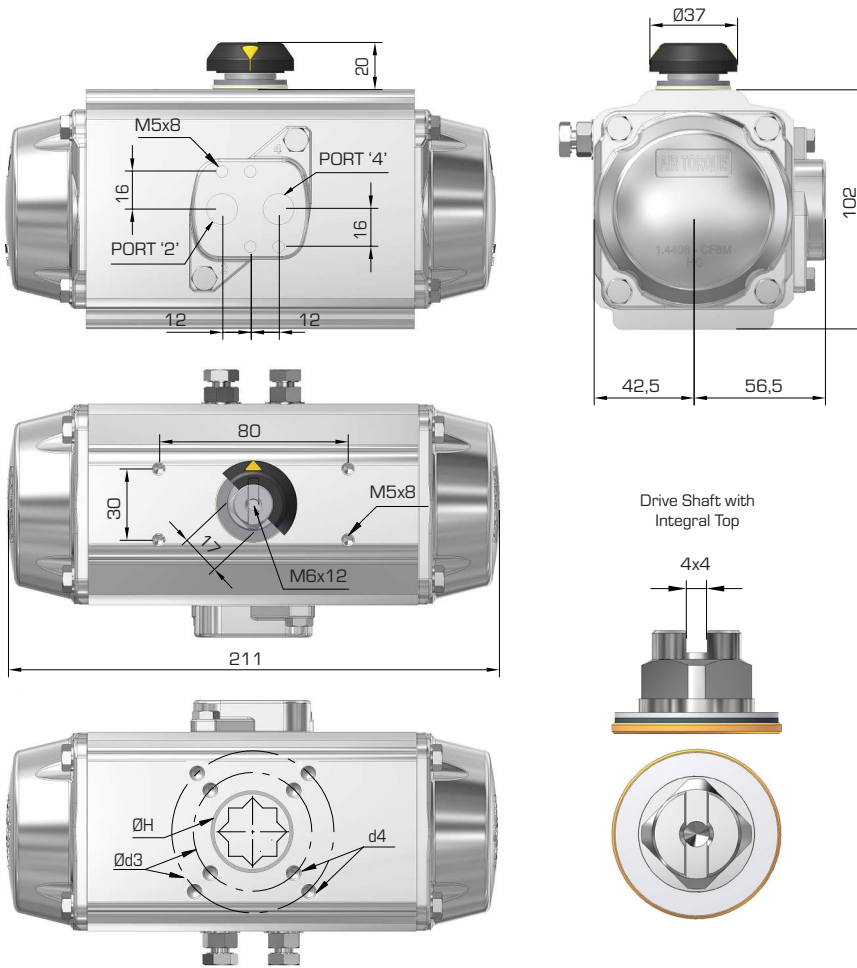
(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).



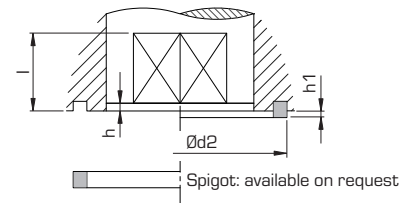
Dimensions in mm



ISO 5211 Interface:

		STD	
		F05 + F07	
ISO 5211			
Ø d2		35	NA
Ø d3		50	70
d4		M6x9	M8x12
Ø H		35	
Ch x l min. [*]	DS	14x16 - 17x19	
h min.		0,5	0,5
h1		2	NA

[*] Other type and sizes of shaft connection available upon request.

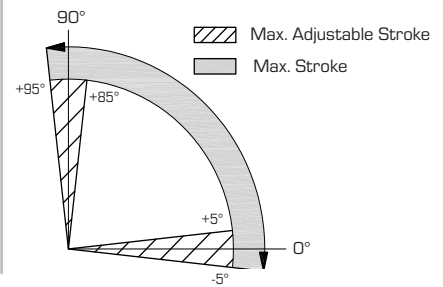


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" [*]
Ancillary Attachment	AA1

[*] NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	29,1		34,9		40,7		46,5		48,9		52,4		58,2		64		69,8		81,4		93,1		6,04

OUTPUT TORQUE FOR SPRING RETURN IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			
S 05	18	11,8	23,8	17,6	29,7	23,4	35,5	29,2	37,8	31,6	41,3	35	47,1	40,9									17,3	11,1	6,23
S 06	15,8	8,3	21,6	14,1	27,5	19,9	33,3	25,8	35,6	28,1	39,1	31,6	44,9	37,4	50,7	43,2							21	13,3	
S 07			19,4	10,7	25,2	16,5	31,1	22,3	33,4	24,6	36,9	28,1	42,7	33,9	48,5	39,8	54,3	45,6					24,2	15,5	6,3
S 08					23	13	28,8	18,8	31,2	21,2	34,7	24,7	40,5	30,5	46,3	36,3	52,1	42,1	63,7	53,7			27,7	17,7	
S 09							26,6	15,4	29	17,7	32,5	21,2	38,3	27	44,1	32,8	49,9	38,6	61,5	50,3	73,2	61,9	31	19,9	6,37
S 10											30,2	17,7	36,1	23,6	41,9	29,4	47,7	35,2	59,3	46,8	71	58,5	34,6	22,1	
S 11													33,8	20,1	39,7	25,9	45,5	31,7	57,1	43,4	68,7	55	38,1	24,3	6,43
S 12															37,5	22,4	43,3	28,3	54,9	39,9	66,5	51,5	41,5	26,5	

[**] Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/6 Turn	75	opening 0,31	closing 0,49	opening 0,30	closing 0,35	opening 0,40	closing 0,50	-40 to +80	-15 to +150	-60 to +80

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

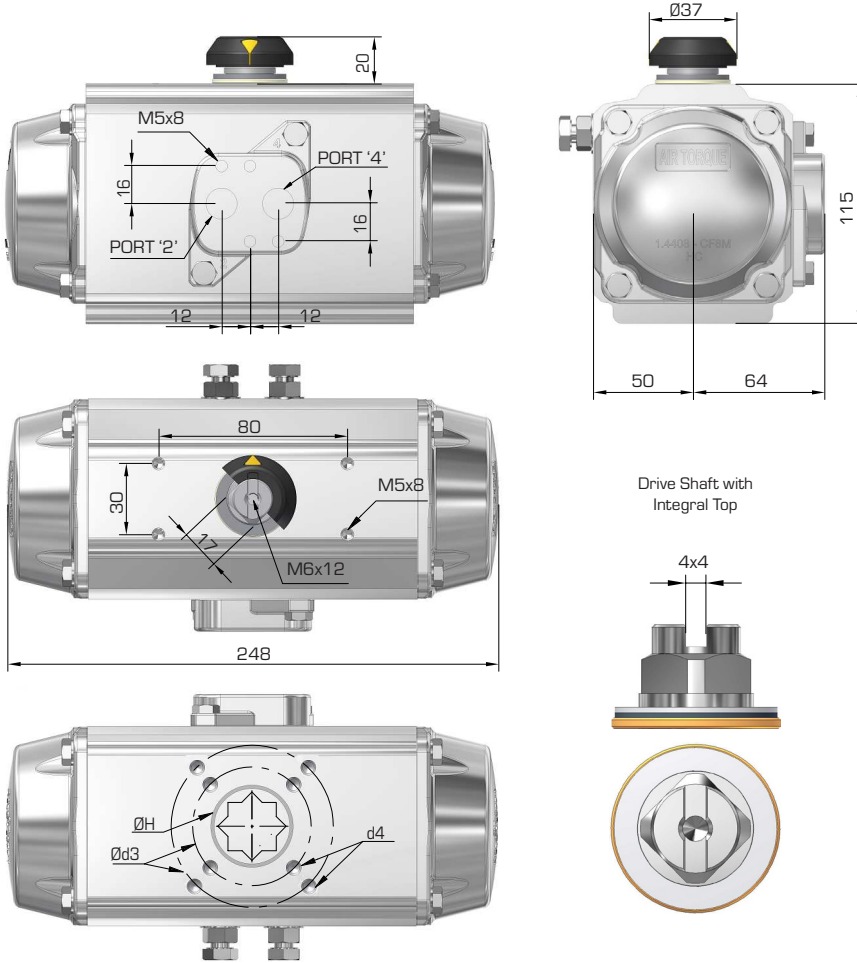
(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).



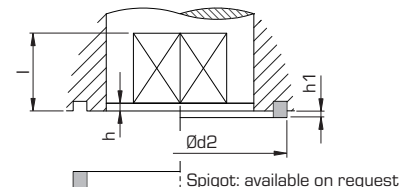
Dimensions in mm



ISO 5211 Interface:

		STD	
		F05 + F07	
ISO 5211			
Ø d2		40	NA
Ø d3		50	70
d4		M6x9	M8x12
Ø H		40	
Ch X I min. [*]	DS	17x19 - 22x24	
h min.		1,5	1,5
h1		1,5	NA

(*) Other type and sizes of shaft connection available upon request.

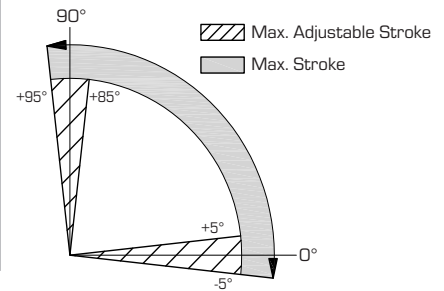


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" (*)
Ancillary Attachment	AA1

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	45,8		54,9		64,1		73,2		76,9		82,4		91,5		101		110		128		146	8,76	

OUTPUT TORQUE FOR SPRING RETURN IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°					
S 05	27,4	16,9	36,6	26	45,7	35,2	54,9	44,3	58,5	48	64	53,5	73,2	62,6									28,9	18,3	9,05		
S 06	23,8	11,1	32,9	20,3	42,1	29,4	51,2	38,6	54,9	42,2	60,4	47,7	69,5	56,9	78,7	66								34,7		22	
S 07			29,2	14,5	38,4	23,6	47,5	32,8	51,2	36,4	56,7	41,9	65,8	51,1	75	60,2	84,2	69,4							40,4	25,7	9,15
S 08					34,7	17,9	43,9	27	47,5	30,7	53	36,2	62,2	45,3	71,3	54,5	80,5	63,6	98,8	81,9					46,2	29,3	
S 09							40,2	21,2	43,9	24,9	49,4	30,4	58,5	39,5	67,7	49	76,8	57,8	95,1	76,1	113	94,5	52	33	9,25		
S 10											45,7	24,6	54,8	33,8	64	42,9	73,1	52,1	91,5	70,4	110	88,7	57,8	36,7			
S 11													51,2	28	60,3	37,1	69,5	46,3	87,8	64,6	106	82,9	63,5	40,3	9,35		
S 12															56,7	31,4	65,8	40,5	84,1	58,8	102	77,1	69,3	44			

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/5 Turn	88	opening 0,51	closing 0,78	opening 0,40	closing 0,50	opening 0,50	closing 0,60	-40 to +80	-15 to +150	-60 to +80

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant, please contact AIR TORQUE for detailed information.

Operating Medium:

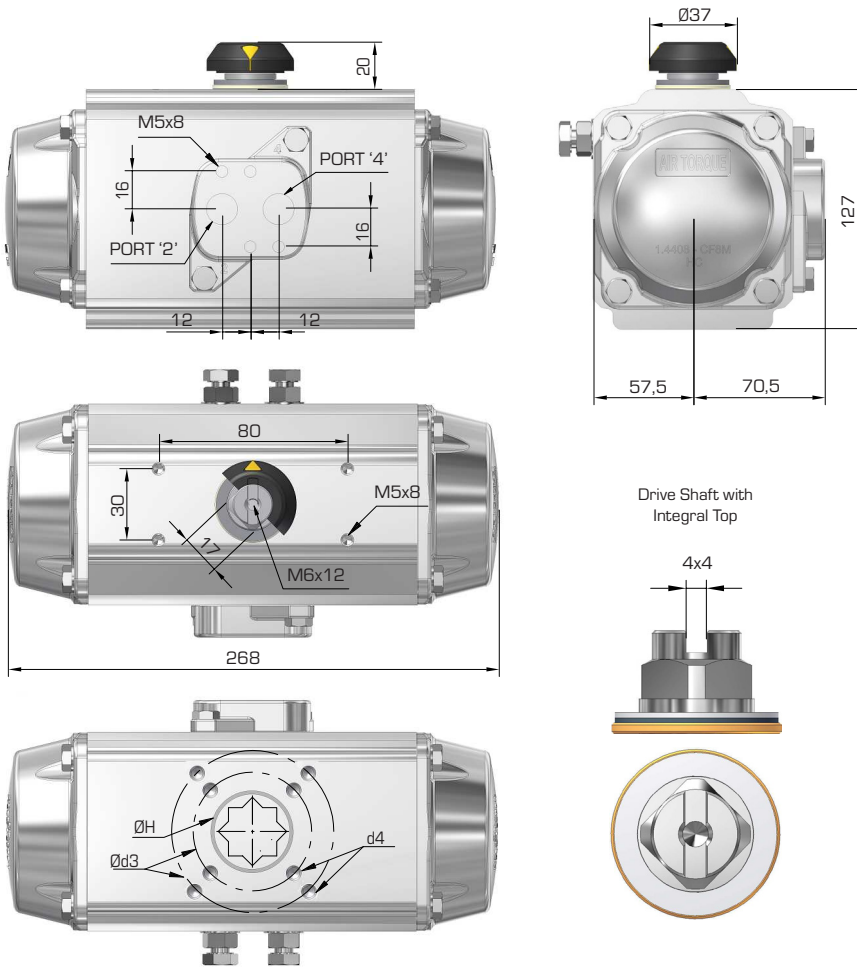
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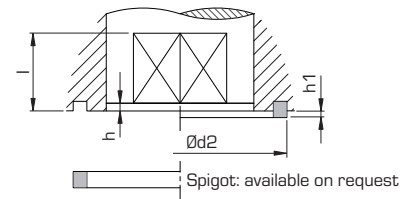
Dimensions in mm



ISO 5211 Interface:

		STD		
ISO 5211		F05 + F07 + F10		
Ø d2		NA		
Ø d3		50	70	102
d4		M6x9	M8x12	M10x16
Ø H		NA		
Ch x I min. [*]	DS	17x19 - 22x24		
h min.		1,5	1,5	1,5
h1		NA		

(*) Other type and sizes of shaft connection available upon request.

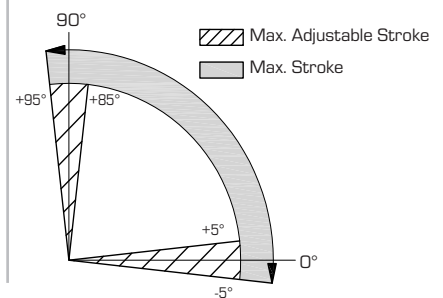


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" (*)
Ancillary Attachment	AA1

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°		
D	66,5	79,8	93,1	106	112	120	133	146	160	186	213													12,34

OUTPUT TORQUE FOR SPRING RETURN IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			
S 05	41,1	27,1	54,4	40,4	67,7	53,7	81	67	86,3	72,3	94,3	80,3	108	93,6									39,4	25,3	12,75
S 06	36,1	19,2	49,4	32,5	62,7	45,8	76	59,1	81,3	64,4	89,3	72,4	103	85,7	116	99							47,3	30,4	
S 07			44,3	24,6	57,6	37,9	70,9	51,2	76,2	56,5	84,2	64,5	97	77,8	111	91,1	124	104					55,1	35,5	12,9
S 08					52,5	30	65,8	43,3	71,1	48,7	79,1	56,6	92,4	69,9	106	83,2	119,0	96,5	146	123			63	40,5	
S 09							60,8	35,5	66,1	40,8	74,0	48,8	87,3	62,1	101	75,3	113,9	88,6	141	115	167	142	70,9	45,6	13,05
S 10											69	40,9	82,3	54,2	95,6	67,5	109	80,8	135	107	162	134	78,8	50,7	
S 11													77,2	46,3	90,5	59,6	104	72,9	130	99	157	126	86,7	55,7	13,2
S 12															85,4	51,7	99	65	125	92	152	118	94,5	60,8	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/5 Turn	100	opening	closing	opening	closing	opening	closing	-40 to +80	-15 to +150	-60 to +80
				0,71	1,11	0,50	0,60	0,70	0,90			

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).

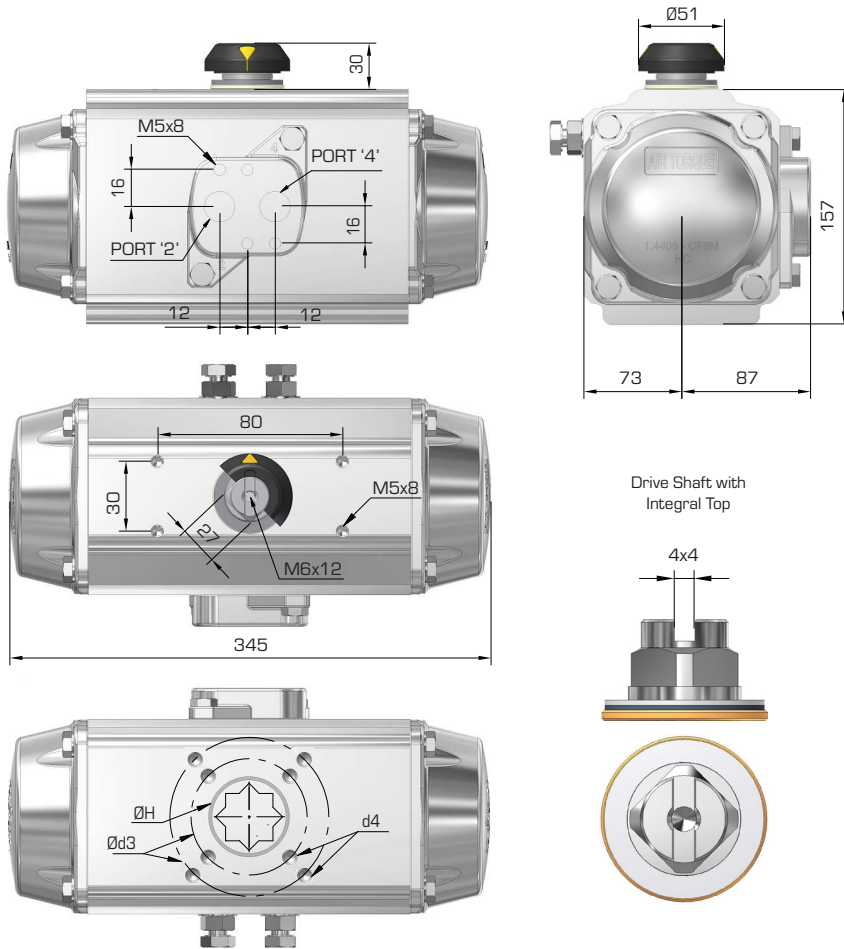
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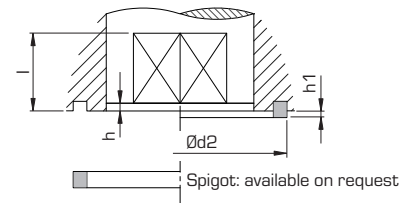
Dimensions in mm



ISO 5211 Interface:

		STD	
		F07 + F10	
ISO 5211			
Ø d2		55	NA
Ø d3		70	102
d4		M8x12	M10x15
Ø H		55	
Ch x l min. (*)	DS	22x24 - 27x29	
h min.		1,5	1,5
h1		2	NA

(*) Other type and sizes of shaft connection available upon request.

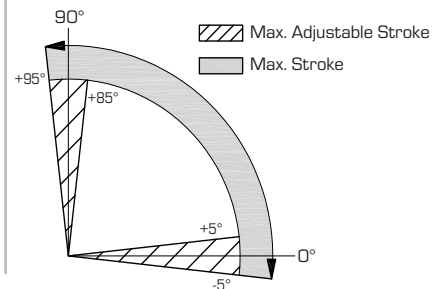


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" (*)
Ancillary Attachment	AA2

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	138	166	194	222	233	249	277	305	332	388	443											22,6	

OUTPUT TORQUE FOR SPRING RETURN IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke 90° 0°	APPROX. WEIGHT (Kg)	
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End			
S 05	86	56,1	114	83,8	141	111	169	139	180	150	197	167	224	195									82,4	52,5	23,5
S 06	75,5	39,6	103	67,3	131	95,0	159	123	170	134	186	150	214	178	242	206							98,9	63	
S 07			92,7	50,8	120	78,5	148	106	159	117	176	134	203	162	231	189	259	217					115	73,5	23,8
S 08					110	62	138	89,7	149	101	165	117	193	145	221	173	248	201	304	256			132	84	
S 09							127	73,3	138	84,3	155	101	182	129	210	156	238	184	293	239	349	295	148	94,5	24,1
S 10											144	84,5	172	112	200	140	227	168	283	223	338	278	165	105	
S 11													161	95,7	189	123	217	151	272	206	328	262	181	116	24,4
S 12															179	107	206	135	262	190	317	245	198	126	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/4 Turn	125	opening 1,54	closing 2,34	opening 0,90	closing 1,10	opening 1,20	closing 1,40	-40 to +80	-15 to +150	-60 to +80

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).

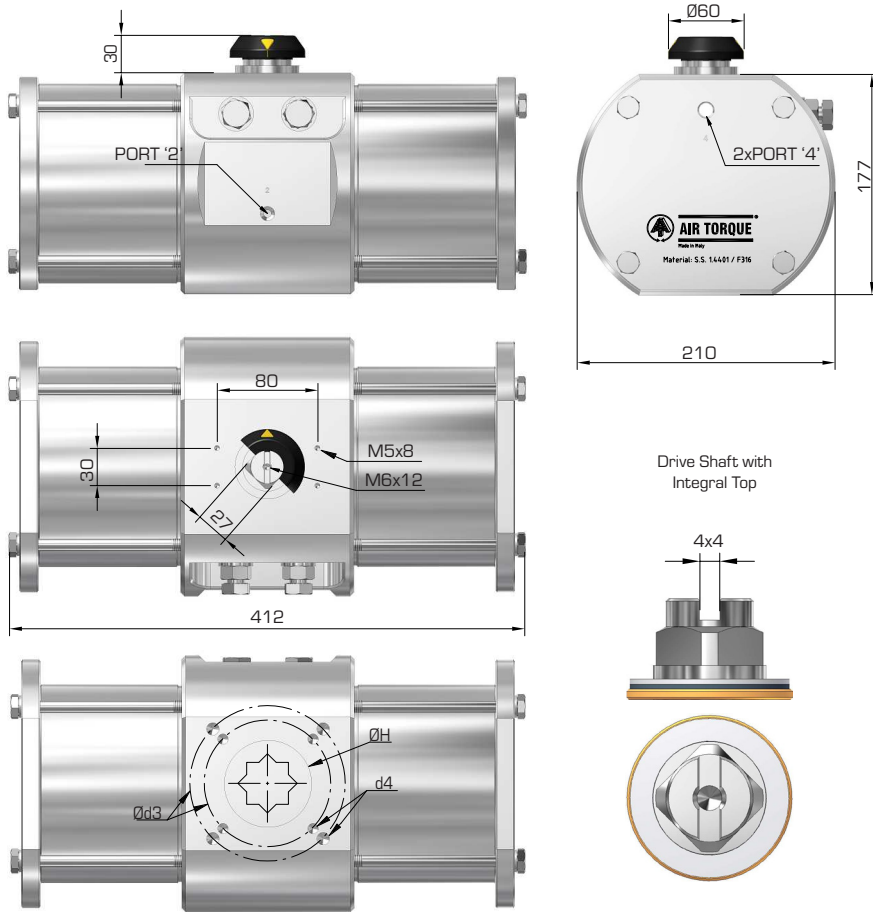
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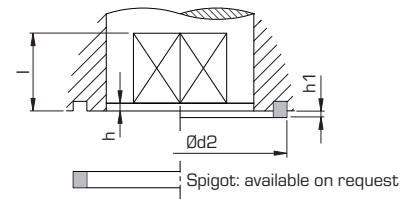
Dimensions in mm



ISO 5211 Interface:

ISO 5211		STD	
		F10 + F12	
Ø d2		70	NA
Ø d3		102	125
d4		M10x15	M12x18
Ø H		70	
Ch x l min. [*]	DS	27x29	
h min.		1,5	1,5
h1		3	NA

(*) Other type and sizes of shaft connection available upon request.

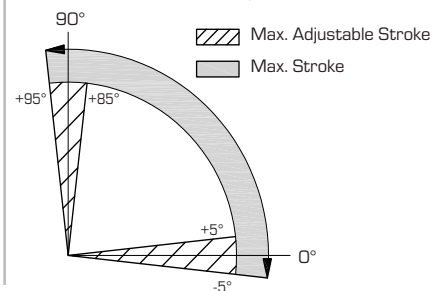


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" [*]
Ancillary Attachment	AA2

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	217		261		304		348		365		391		435		478		522		609		696	34,6	

OUTPUT TORQUE FOR SPRING RETURN IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			90°
S 05	135	89	179	132	222	176	265	219	283	236	309	262	352	306									129	82,4	36,1
S 06	119	63	162	106	206	149,7	249	193	266	211	293	237	336	280	379	324							155	99	
S 07			146	80	189	124	233	167	250	185	276	211	320	254	363	298	406	341					180	115	36,6
S 08					173	98	216	142	233	159	260	185	303	229	347	272	390	316	477	403			206	132	
S 09							200	116	217	133	243	159	287	203	330	246	374	290	460	377	547	464	232	148	37,1
S 10											227	134	270	177	314	221	357	264	444	351	531	438	258	165	
S 11													254	151	297	195	341	238	428	325	515	412	283	181	37,6
S 12															281	169	324	213	411	299	498	386	309	198	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/4 Turn	145	opening	closing	opening	closing	opening	closing	-40 to +80	-15 to +150	-60 to +80
				2,41	3,78	1,2	1,4	1,5	1,8			

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

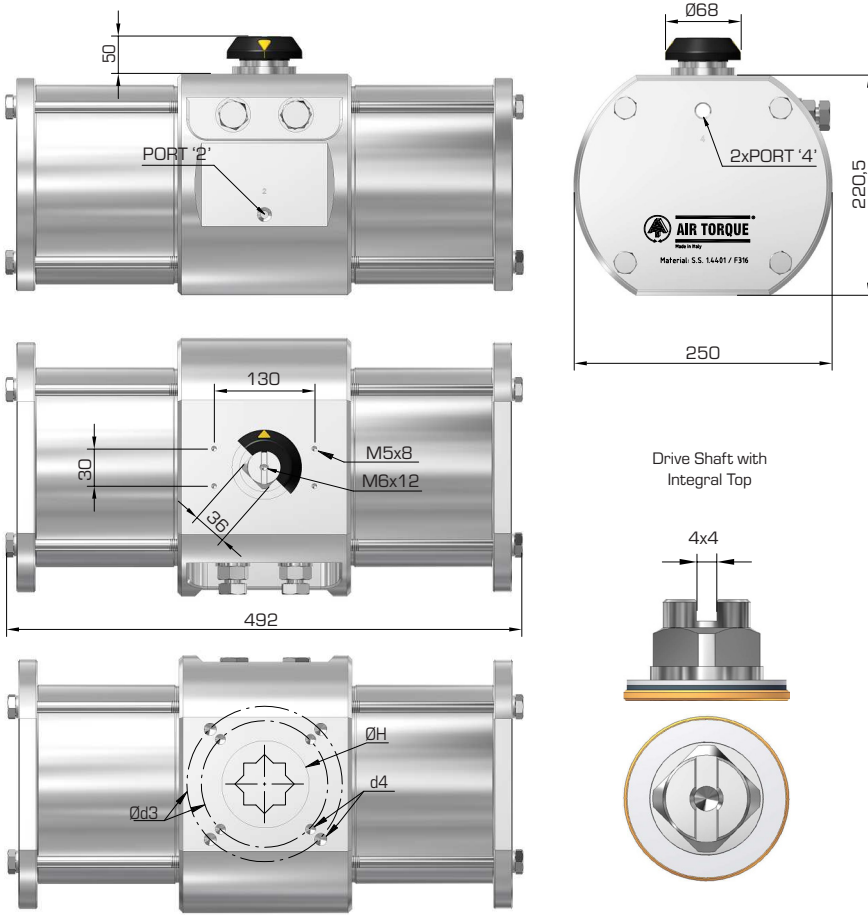
(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).



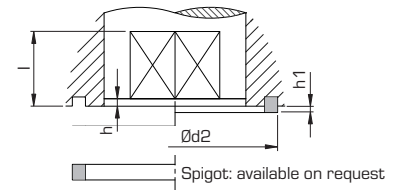
Dimensions in mm



ISO 5211 Interface:

		STD	OPTIONAL	
ISO 5211		F14	F10+F12	
Ø d2		100	NA	85
Ø d3		140	102	125
d4		M16x24	M10x15	M12x18
Ø H		100	70	
Ch x l min. [*]	DS	27x29 - 36x39		
h min.		2	2	2
h1		3	NA	1,5

(*) Other type and sizes of shaft connection available upon request.

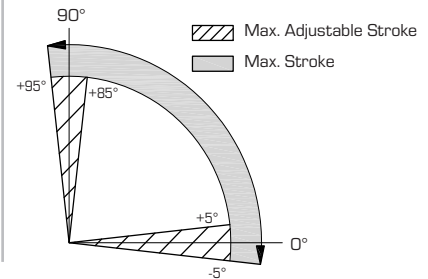


Connection / Attachment:

Pressure connection Port 2 and 4	G1/4" [*]
Ancillary Attachment	AA4

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	383		459		536		613		643		689		766		842		919		1072		1225		58

OUTPUT TORQUE FOR SPRING RETURN IN Nm (**)

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			
S 05	225	146	301	223	378	299	455	376	485	406	531	452	608	529									237	158	61
S 06	193	99	270	175	346	252	423	329	454	359	500	405	576	482	653	558							284	190	
S 07			238	128	315	205	391	281	422	312	468	358	544	434	621	511	698	587					332	221	62
S 08					283	157	360	234	390	264	436	310	513	387	589	464	666	540	819	693			379	253	
S 09							328	186	359	217	405	263	481	340	558	416	634	493	788	646	941	799	426	285	63,2
S 10											373	216	450	292	526	369	603	445	756	599	909	752	474	316	
S 11													418	245	495	321	571	398	724	551	877	704	521	348	64,2
S 12															463	274	540	351	693	504	846	657	568	379	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/4 Turn	180	opening	closing	opening	closing	opening	closing	-40 to +80	-15 to +150	-60 to +80
				4,26	6,89	2,0	2,2	2,4	2,8			

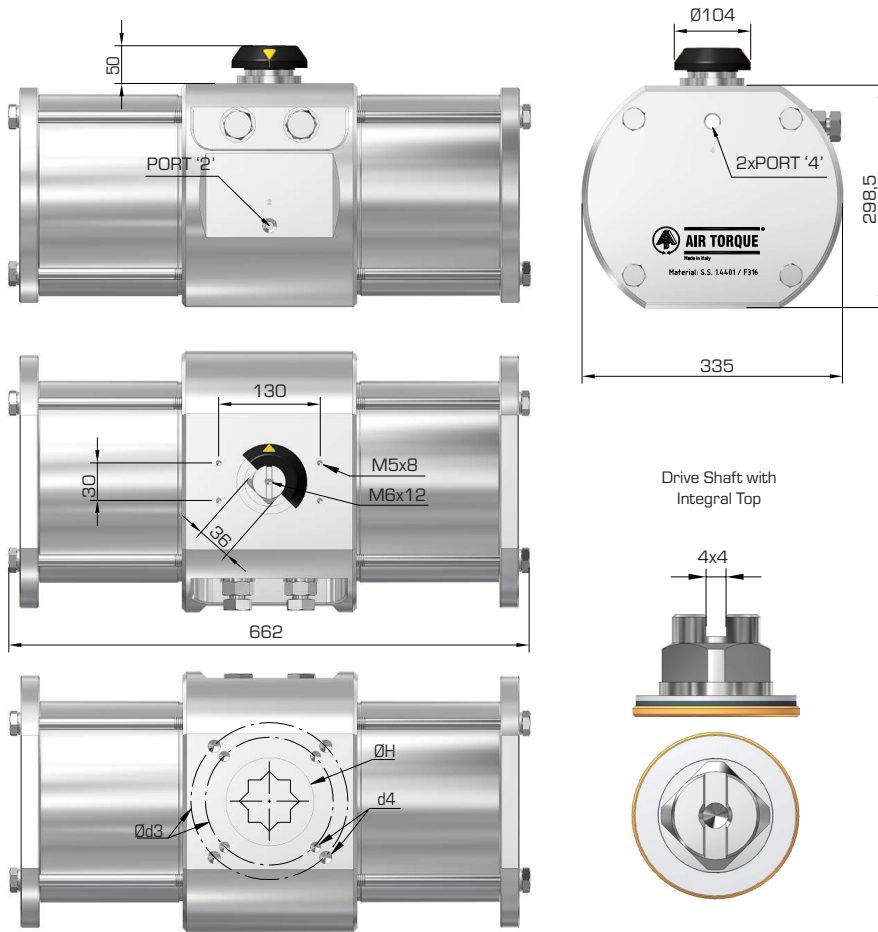
(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).

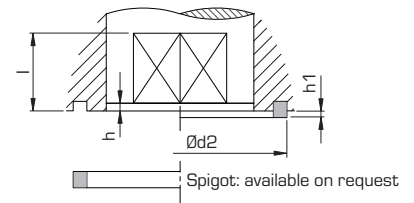
Dimensions in mm



ISO 5211 Interface:

	STD		OPTIONAL
ISO 5211	F12 + F16		F14
Ø d2	NA		100
Ø d3	125	165	140
d4	M12x18	M20x30	M16x24
Ø H	93		100
Ch x l min. [*]	36x39 - 46x49		
h min.	2,5	2,5	2,5
h1	NA	1,5	1,5

(*) Other type and sizes of shaft connection available upon request.

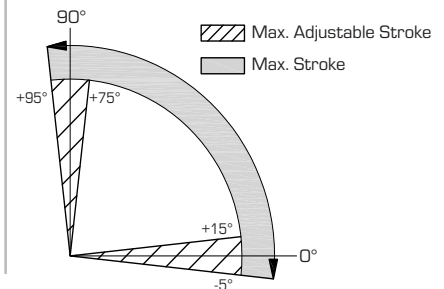


Connection / Attachment:

Pressure connection Port 2 and 4	G3/8" [*]
Ancillary Attachment	AA4

(*) NPT (ANSI B1-20-1) threads available on request

Rotation and stroke adjustment:



OUTPUT TORQUE FOR DOUBLE ACTING IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		APPROX. WEIGHT (Kg)
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
D	893		1072		1251		1430		1501		1608		1787		1966		2144		2502		2859		124,8

OUTPUT TORQUE FOR SPRING RETURN IN Nm ()**

Pressure	2,5 bar		3 bar		3,5 bar		4 bar		4,2 bar		4,5 bar		5 bar		5,5 bar		6 bar		7 bar		8 bar		Spring Stroke	APPROX. WEIGHT (Kg)	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°			
S 05	533	372	712	551	890	730	1069	908	1141	980	1248	1087	1426	1266									521	360	131,5
S 06	461	268	640	447	818	625	997	804	1068	876	1176	983	1354	1162	1533	1340							625	433	
S 07			568	343	746	521	925	700	996	771	1104	879	1282	1057	1461	1236	1640	1415					730	505	133,7
S 08					674	417	853	596	924	667	1032	774	1210	953	1389	1132	1568	1310	1925	1668			834	577	
S 09							781	491	852	563	959	670	1138	849	1317	1028	1495	1206	1853	1564	2210	1921	938	649	136,2
S 10											887	566	1066	745	1245	923	1423	1102	1781	1459	2138	1817	1042	721	
S 11													994	640	1173	819	1351	998	1709	1355	2066	1713	1146	793	138,6
S 12															1101	715	1279	894	1637	1251	1994	1608	1251	865	

(**) Nominal Output Torque

Technical data

Max. Pressure	Rotation (for STD)	Screw Stroke Adjustment	Ø Chamber (mm)	Air volume (L)	Approx. Stroking time (sec.) (A)				Operating temperature range (°C) (B)			
					D		S		ST	HT	LLT2	
8 bar	0° - 90°	For 1° adj. need 1/4 Turn	240	opening	closing	opening	closing	opening	closing	-40 to +80	-15 to +150	-60 to +80
				10	15,2	3,5	4,0	4,1	4,6			

(A) The values refer to specific test conditions; please contact AIR TORQUE for detailed information.

(B) Every temperature range option requires proper components and lubricant. please contact AIR TORQUE for detailed information.

Operating Medium:

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