



The art of power and perfection

COMPACT ACTUATORS

SK SERIES

PDS-SK AC Rev. 0



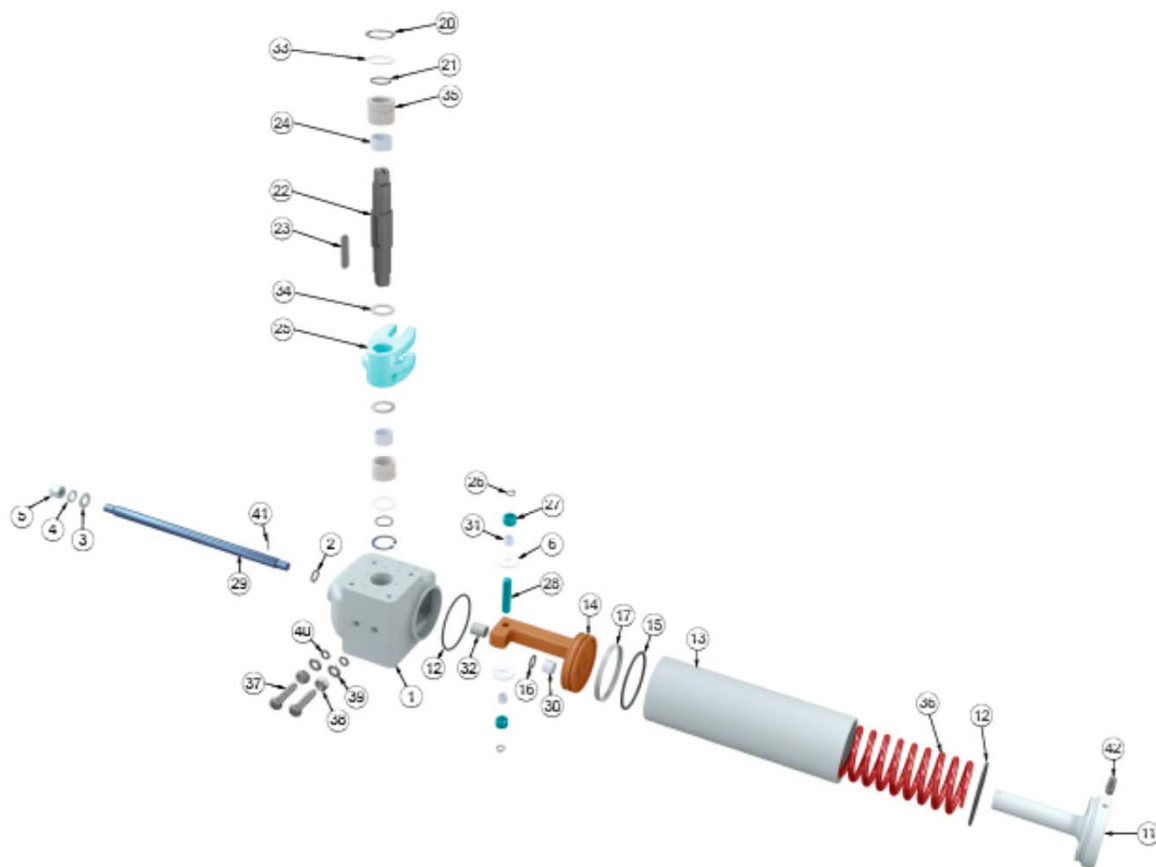
ATEX Ex II 2 G D

Quality Management:



PNEUMATIC ACTUATORS · SY01K series

Parts & materials



ITEM	PART	MATERIAL	ITEM	PART	MATERIAL
1	BODY	LCC / WCB	25	YOKE	LCC / A216 WCB
2	O-RING	NITRILE	26	RETAINING RING DIN-471	F141 + NICKEL PLATED
3	WASHER DIN-125	AISI-304	27	BEARING	AISI-304
4	WASHER NORD-LOCK	INOX	28	Piston SHAFT	AISI-431
5	CAP NUT DIN-1587	A2-70	29	TENSION BAR	C-45 (F-1140) - Cr
6	SOFT PINION WASHER	PP 6.6	30	LUBRICATED BEARING	S/F
11	END CAP	A216 WCB / LF2	31	LUBRICATED BEARING	S/F
12	O-RING	NITRILE	32	LUBRICATED BEARING	S/F
13	CYLINDER	E-355	33	O-RING	NITRILE
14	PISTON	A216 WCB / LCC	34	SOFT PINION WASHER	PP 6.6
15	QUAD-RING SEAL	NBR	35	SHAFT BEARING	AISI-304
16	QUAD-RING SEAL	NBR	36	SPRING	DIN 17223-C-13
17	SLYD RING	PTFE - Br	37	SET SCREW	A2-70
20	RETAINING RING DIN-472	F141 + NICKEL PLATED	38	NUT DIN-934	A2-70
21	O-RING	NITRILE	39	WASHER DIN-125	AISI-304
22	SHAFT	AISI-431	40	O-RING	NITRILE
23	KEY DIN-6885-A	F-1140	41	SPRING PIN DIN-1481	A2
24	LUBRICATED BEARING	S/F	42	POROUS BRONZE SILENCER G 1/4" BSP	Br



PNEUMATIC ACTUATORS · SY01K series

Torques values

DOUBLE ACTING ACTUATOR “DA” TORQUE OUTPUT IN Nm

	3 Bar			4 Bar			5 Bar			6 Bar			7 Bar			8 Bar		
	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	End
SY01K10DA	168	106	167	224	141	222	281	177	277	337	212	333	392	247	389	449	283	444
SY01K12DA	341	213	338	455	284	451	568	355	563	682	426	677	796	497	789	909	568	902
SY01K15DA	640	407	659	853	542	878	1067	678	1098	1280	814	1317	1493	949	1536	1706	1085	1756

SPRING RETURN ACTUATOR “SR4” TORQUE OUTPUT IN Nm

	4 Bar			5 Bar			6 Bar			7 Bar			8 Bar			SPRING RETURN (4 Bar)		
	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	Start	End Cl.	Running	Start Cl.
SY01K10SR4	166	69	75	226	103	134	285	136	193	344	170	251	404	203	310	70	65	159
SY01K12SR4	343	136	137	463	203	256	583	271	375	703	338	49	823	406	613	137	134	339
SY01K15SR4	623	253	279	848	382	511	1074	511	743	1299	639	975	1524	769	1207	277	262	647

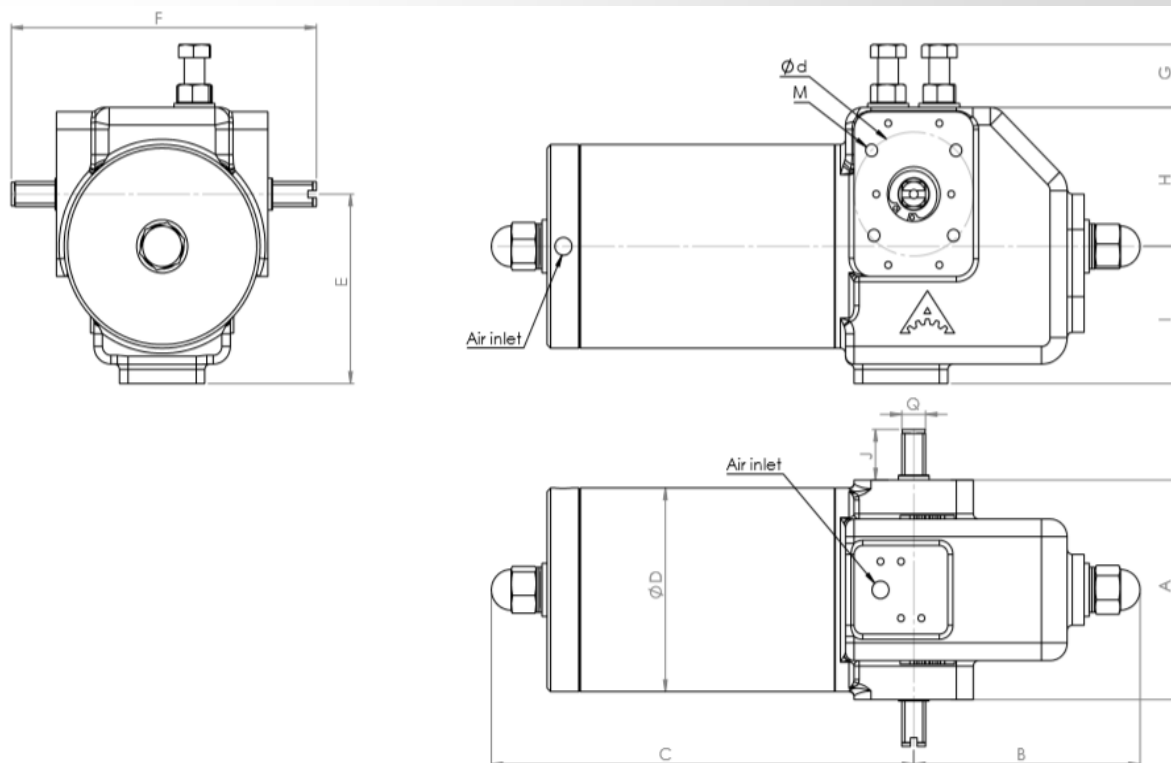
SPRING RETURN ACTUATOR “SR6” TORQUE OUTPUT IN Nm

	5 Bar			6 Bar			7 Bar			8 Bar			SPRING RETURN (6 Bar)		
	Start	Running	End	Start	Running	End	Start	Running	End	Start	Running	Start	End Cl.	Running	Start Cl.
SY01K10SR6	168	69	75	227	103	142	287	137	192	346	170	251	128	98	218
SY01K12SR6	346	139	143	466	206	263	586	274	382	706	341	501	254	199	451
SY01K15SR6	662	257	258	887	387	490	1112	516	722	1338	644	954	463	386	900



Pneumatic actuators, SY01K series

Dimensions, general characteristics



	A	B	C	Ø D	E	F	G	H	I	Ø d	M	Q	J	AIR INLET
SY01K10 DA	120	135	250	115	179	107	33	78,5	77,5	70	M8	14	29,5	G1/4"
SY01K10 SR			305											
SY01K12 DA	160	164	346	130	220	128,25	33	107	86	125	M12	22	30	G1/4"
SY01K12 SR			492											
SY01K15 DA	176	191	395	165	235,5	161	45	141	109	125	M12	27	29,75	G1/4"
SY01K15 SR			561											

GENERAL CHARACTERISTICS

DESIGN STANDARDS	Serie SY01KxxDA Serie SY01KxxSR	Actuator Actuator	Double Spring	Acting Return
Mounting of solenoid valves	NAMUR Std.			
Mounting of devices	NAMUR VDI	NAMUR VDE 3845 Std.		
Coupling according	ISO 5211	DIN 3337		
Marking	Ex II 2 G D c LCIE 05 AR 022	According to EN 15714-3		

TESTS AND CERTIFICATES

Quality assurance	ISO 9001	Safety Integral level 3 (SIL3)		
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Max. Pressure	Max. Pressure	Rotation	Screw stroke Adjustment	Operating Temperature (°C)		
				STD (standard)	HT (high temp.)	LT (low temp.)
SY01K10 xx				NBR "O" Ring	FPM "O" Ring	Silicone "O" Ring
SY01K12 xx	8 bar	90° ±5°	For 1° Turn Need ¼			
SY01K15 xx				-30° to +100°	-20° to +120°	-40° to +80°



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