

Slide gate shut-off valve - pneumatically actuated Series SG03/SG04



Type SG03



Type SG04

Design type	Slide gate shut-off valve pneumatically actuated with position indicator, NC, Sandwich mounting version
Overall length	according to EN558-1R20
Connection	Type SG03 Flanges DN15...DN150, according to EN1092-1 Form B, PN 10-40 Type SG04 Flanges DN15...DN125, according to EN1092-1 Form B, PN 10-40
Materials	Housing Galvanized steel or rather Stainless steel 1.4408, PTFE packing with carbon filled, Actuating rod stainless steel 1.4571, Actuator Chrome-plated brass Ø50...80 and Anodized aluminium Ø125, Actuator springs Stainless steel 1.4310 Ø50...80 and Spring steel wire C Ø125
Sliding pair	Stainless steel/special carbon: Sealing washer fixed Stainless steel 1.4571 coated and Sealing washer movable Special carbon Stainless steel/SFC: Sealing washer fixed Stainless steel 1.4571 coated and Sealing washer movable SFC STN2: Sealing washer fixed and Sealing washer movable STN2
Leakage rate (% of Kvs)	Stainless steel/special carbon < 0,0001 Stainless steel/SFC < 0,0005 STN2 < 0,001
Mounting type	Installation in rigid piping system
Mounting position	any
Application range	gaseous and liquid media, that do not attack the materials used
Medium temperature	Housing Galvanized steel: SG03 -10...350°C, SG04 -10...230°C Housing Stainless steel 1.4408: SG03 -60...350°C (SFC -60...300°C), SG04 -20...230°C
Ambient temperature	-15...60°C
Operating pressure	see tables
Control medium	Compressed air and neutral gases (Liquids on request)<
Control pressure	max. 10bar

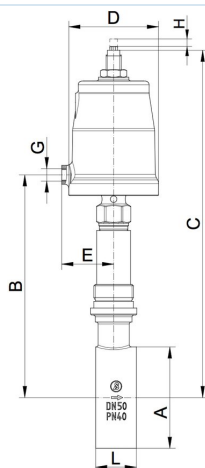


Type code

		SG 03 - 50 - W WC 50 - 01									
Type	long Design type	03									
	short design	04									
Connection	DN15	15									
	DN20	20									
	DN25	25									
	DN32	32									
	DN40	40									
	DN50	50									
	DN65	65									
	DN80	80									
	DN100	100									
	DN125	125									
	DN150	150									
Housing material	Steel galvanized					U					
	Stainless steel 1.4408					W					
Sliding pair	Stainless steel/special carbon						WC				
	Stainless steel/SFC						WF				
	STN2						WN				
Actuator	Actuator 50						50				
	Actuator 80						80				
	Actuator 125						125				
Special version	described in the item text								01,02,03....		
	Kvs values reduced to										
	Characteristic curve linear/equal percentage										
	Function spring opens NO										
	electrical position indicator with cable gland										
	electrical position indicator with connector										
	Control head ASI bus										
	Manual actuation										
	Stroke limitation										
	Pilot valve 230VAC										
	Pilot valve 24VDC										
	2 Inductive limit switch M12x1 10 ... 30 VDC PNP										
	2 Limit switch inductive M12x1 10 ... 55 VDC PNP/NPN										



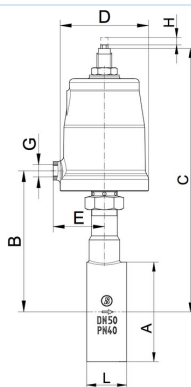
Dimensions SG03



Nominal size DN [mm]	Actuator Ø	A	B	C	D	E	G	L	Stroke	Weight [approx. kg]
15	50	53	205	302	62	35	1/8"	33	6	2,8
15	80	53	209	340	96	55	1/4"	33	6	5
15	125	53	211	358	146	80	1/4"	33	6	6,4
20	50	62	210	307	62	35	1/8"	33	6	2,9
20	80	62	214	345	96	55	1/4"	33	6	5,1
20	125	62	216	363	146	80	1/4"	33	6	6,5
25	50	72	215	312	62	35	1/8"	33	6	3
25	80	72	219	350	96	55	1/4"	33	6	5,2
25	125	72	222	369	146	80	1/4"	33	6	6,6
32	50	82	219	316	62	35	1/8"	33	6	3,1
32	80	82	223	354	96	55	1/4"	33	6	5,3
32	125	82	226	373	146	80	1/4"	33	6	6,7
40	50	92	224	321	62	35	1/8"	33	6	3,2
40	80	92	228	359	96	55	1/4"	33	6	5,4
40	125	92	231	378	146	80	1/4"	33	6	6,8
50	50	108	234	333	62	35	1/8"	43	8	4,3
50	80	108	238	371	96	55	1/4"	43	8	6,5
50	125	108	241	390	146	80	1/4"	43	8	7,9
65	50	127	244	343	62	35	1/8"	46	8	4,8
65	80	127	248	381	96	55	1/4"	46	8	7
65	125	127	250	399	146	80	1/4"	46	8	8,4
80	50	142	252	351	62	35	1/8"	46	8	5,5
80	80	142	256	389	96	55	1/4"	46	8	7,7
80	125	142	258	407	146	80	1/4"	46	8	9,1
100	50	164	264	363	62	35	1/8"	52	8,5	6,7
100	80	164	268	401	96	55	1/4"	52	8,5	8,9
100	125	164	270	419	146	80	1/4"	52	8,5	10
125	50	194	277	376	62	35	1/8"	56	8,5	8,5
125	80	194	281	414	96	55	1/4"	56	8,5	11
125	125	194	283	432	146	80	1/4"	56	8,5	12
150	50	219	292	391	62	35	1/8"	56	8,5	11
150	80	219	296	429	96	55	1/4"	56	8,5	13
150	125	219	298	447	146	80	1/4"	56	8,5	14



Dimensions SG04



Nominal size DN [mm]	Actuator Ø	A	Steel housing		Stainless steel housing		D	E	G	L	Stroke	Weight [approx. kg]
			B	C	B	C						
15	50	53	109	206	132	229	62	35	1/8"	33	6	2,1
15	80	53	112	243	135	266	96	55	1/4"	33	6	4,3
15	125	53	115	262	138	285	146	80	1/4"	33	6	5,7
20	50	62	114	211	137	234	62	35	1/8"	33	6	2,2
20	80	62	117	248	140	271	96	55	1/4"	33	6	4,4
20	125	62	120	267	143	290	146	80	1/4"	33	6	5,8
25	50	72	119	216	142	239	62	35	1/8"	33	6	2,3
25	80	72	122	253	145	276	96	55	1/4"	33	6	4,5
25	125	72	125	272	148	295	146	80	1/4"	33	6	5,9
32	50	82	123	220	145	242	62	35	1/8"	33	6	2,4
32	80	82	126	257	148	279	96	55	1/4"	33	6	4,5
32	125	82	129	276	151	298	146	80	1/4"	33	6	5,9
40	50	92	128	225	150	247	62	35	1/8"	33	6	2,5
40	80	92	131	262	153	284	96	55	1/4"	33	6	4,7
40	125	92	134	281	156	303	146	80	1/4"	33	6	6,1
50	50	108	151	250	151	250	62	35	1/8"	43	8	3,6
50	80	108	154	287	154	287	96	55	1/4"	43	8	5,8
50	125	108	157	306	157	306	146	80	1/4"	43	8	7,2
65	50	127	160	259	160	259	62	35	1/8"	46	8	4,1
65	80	127	163	296	163	296	96	55	1/4"	46	8	6,3
65	125	127	166	315	166	315	146	80	1/4"	46	8	7,7
80	50	142	168	267	168	267	62	35	1/8"	46	8	4,8
80	80	142	171	304	171	304	96	55	1/4"	46	8	7
80	125	142	174	332	174	323	146	80	1/4"	46	8	8,4
100	50	164	181	280	181	280	62	35	1/8"	52	8,5	6
100	80	164	184	317	184	317	96	55	1/4"	52	8,5	8,2
100	125	164	187	336	187	336	146	80	1/4"	52	8,5	9,6
125	50	194	193	292	193	292	62	35	1/8"	56	8,5	7,8
125	80	194	196	329	196	329	96	55	1/4"	56	8,5	10
125	125	194	199	348	200	349	146	80	1/4"	56	8,5	11



Application limits - maximum permissible inlet pressures in bar*

Nominal size DN [mm]	Stainless steel/special carbon - Stainless steel/SFC						STN2					
	100°C	150°C	200°C	250°C	300°C	350°C	100°C	150°C	200°C	250°C	300°C	350°C
15 - 25	40	36	31	28	26	24	40	36	31	28	26	24
32	40	36	31	28	26	24	40	36	31	28	25	22
40	40	36	31	28	26	24	27	26	24	19,5	16	14
50	40	36	31	28	26	24	40	36	31	28	26	24
65	40	36	31	28	26	24	38	36	31	28	23	19,5
80	40	36	31	28	26	24	22	21	20	16	13	11,5
100	25	24	22	19	16	14,5	13,5	12,5	12	9,8	8,1	7,0
125	16,5	15,5	15	12,5	10,5	9,5	8,9	8,4	8,0	6,5	5,3	4,6
150	16	16	16	16	13	11,5	11	10,5	9,8	7,9	6,5	5,6

*SFC max. +300°C, Type SG04 (short design): max. +230°C



Permissible differential pressures in bar (for temperatures up to 120°C)*

Nominal size DN [mm]	Actuator Ø	Stainless steel/special carbon - Stainless steel/SFC		STN2	
		max. Operating pressure	Required control pressure	max. Operating pressure	Required control pressure
15	50	33	3,8	23	3,8
20		28	3,8	18	4
25		24	3,8	13	4,4
32		19	3,9	10	4,7
40		15	4,2	6,5	4,9
50		9	4,8	4	5,4
65		8	5	3	5,4
80		5	5,3	2	5,5
100		3	5,5	1	5,6
125		2	5,6	-	-
150		1,5	5,6	-	-
15	80	40	3,1	40	3,1
20		40	3,1	40	3,3
25		40	3,1	36	3,7
32		40	3,2	27	4
40		40	3,6	18	4,3
50		26	4,1	11	4,6
65		22	4,3	9	4,7
80		14	4,5	5	4,8
100		9	4,7	3	4,9
125		6	4,8	2	4,9
150		4	4,9	1,5	5
15	125	40	1,8	40	1,8
20		40	1,8	40	1,9
25		40	1,8	40	2,1
32		40	1,8	39	2,3
40		40	2,1	27	2,5
50		38	2,4	16	2,7
65		32	2,5	13	2,7
80		20	2,6	8	2,8
100		13	2,7	5	2,8
125		8,5	2,8	3	2,8
150		6,5	2,8	2	2,8

*At temperatures above 120°C observe application limits



Kvs values

Nominal size DN [mm]	Characteristic curve	Kvs value [m³/h]												
		100%	63%	40%	25%	20%	16%	12%	10%	6,3%	2,5%	2%	1%	0,4%
15	linear	4	2,6	1,7	1,4	-	0,71	0,49	0,44	0,26	0,14	0,08	0,04	0,018
	equal percentage	1,7	-	1,1	-	0,35	-	-	-	0,1	-	-	-	-
20	linear	6,4	-	-	-	-	1	-	-	-	-	0,13	-	-
	equal percentage	3	-	1,5	-	-	-	-	-	-	-	-	-	-
25	linear	11	6,4	4	-	-	1,6	-	0,93	0,62	0,26	-	0,14	0,04
	equal percentage	5	-	2,4	-	1,1	-	-	-	0,35	-	-	-	-
32	linear	16	10	-	-	-	-	-	-	-	-	-	-	-
	equal percentage	8	4,7	-	-	-	-	-	-	-	-	-	-	-
40	linear	26	16	11	7	-	-	-	-	-	-	-	-	-
	equal percentage	11	8,5	-	2,75	-	-	-	-	-	-	-	-	-
50	linear	45	28	20	12	10	-	-	-	-	-	-	-	-
	equal percentage	19	12	-	-	-	3	-	-	-	-	-	-	-
65	linear	52	35	-	15	-	-	-	-	-	-	-	-	-
	equal percentage	30	-	-	8	-	-	-	-	-	-	-	-	-
80	linear	92	58	40	-	-	-	-	-	-	-	-	-	-
	equal percentage	48	35	-	-	-	-	-	-	-	-	-	-	-
100	linear	154	95	62	-	-	-	-	-	-	-	-	-	-
	equal percentage	77	48	-	-	-	-	-	-	-	-	-	-	-
125	linear	237	-	95	-	-	-	-	-	-	-	-	-	-
	equal percentage	116	-	-	-	-	-	-	-	-	-	-	-	-
150	linear	338	212	-	-	-	-	-	-	-	-	-	-	-
	equal percentage	147	90	-	-	-	-	-	-	-	-	-	-	-

Illustrations non-binding

Design, dimensional and material changes reserved

Armatures / Special armatures / Sliding gate control valves / Sliding gate-shut off valve Series SG03/SG04

