

Control Valve 8021

with integrated positioner

GS 3 series, 1/2" up to 10"



Pneumatic control valve for the control of neutral and aggressive fluids with integrated positioner

- Space saving wafer type construction
- Lowest possible weight
- Quiet operation
- Fast response time
- Control of high differential pressures with small actuators
- Greatly reduced energy consumption rates due to short strokes and low actuating forces on the throttle element
- High Kvs-values



Technical Information

Design	ANSI flange wafer (self-aligning) for flanges acc. ASME B16.5 RF or DIN EN 1092-1 Form B		
Nominal Sizes	1/2" - 10"		
Nominal pressure acc. EN 1033	580 psi (fits also to 145-365psi)	1/2" - 6"	
	1450 psi	1/2" - 3"	
	235 psi	8" - 10"	
Nominal pressure acc. ANSI	ANSI 150	1/2" - 10"	
	ANSI 300	1/2" - 6"	
	ANSI 600	1/2" - 3"	
Nominal pressure acc. JIS for flanges with raised face	10K	1/2" - 2"	
	20K	1/2" - 1 1/2"	
Fluid Temperature	Versions from -76°F up to +662°F		
Ambient temperature*	-22°F up to +212°F		
Rangeability / Characteristic analog positioner digital positioner	30 : 1 40 : 1 linear / 80 : 1 equal percentage		
Leakage % of Kvs IEC 60534-4 EN 12266-1	Disc pair Carbon-stainless steel	Disc pair SFC	Disc pair STN 2
	IV-S1	< 0,0005	< 0,001
	D	IV-S1	IV
	E	E	E
Packing leakage	tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440		

* Please consider the limitation of use of the positioner!

Fluid temperature

Rating	PN40	PN 16	PN 100	ANSI 150	ANSI 300	ANSI 600
Body material cpl. stainless steel						
Tmin [°F]	-76	-76	-76	-20	-20	-20
Tmax [°F]	662	662	662	662	662	662
Body material cpl. carbon steel						
Tmin [°F]	-76	-76	14	-4	-4	14
Tmax [°F]	572	572	572	572	572	572
Body material carbon steel with stainless steel body cover						
Tmin [°F]	-76	-76	14	-4	-4	-4
Tmax [°F]	662	662	662	662	662	662

Positioner

For technical information of our positioners please refer to the corresponding data sheets.

Materials

Valve Body*	Stainless steel 316 Ti /318 or 316L / CF8M	Carbon steel ASTM A572-50, A216	
Bodycover*	Stainless steel 316 Ti or 316 L		
Diaphragm Casing	Aluminium, KTL-coated		
Actuator Springs	Stainless steel 301		
Packing	Carbon-filled PTFE (spring SST 301)		
Valve Stem	Stainless steel 316 Ti, roller burnished		
Fixed disc	Stainless steel 316 Ti, Stellite		
Sliding disc	special carbon material	SFC-disc (max. +572°C)	STN2-disc

* Further Materials such as Hastelloy, Duplex, Monel, Titan, Inconel, Incoloy, 1.4539 etc. on request

Control Valve 8021-GS3
with integrated digital positioner, Type 8049
(also on-off valves and valves with other side-mounted positioner)



Admissible differential pressures
(For temperatures of up to 250°F with PN-rating
up to 100°F with ANSI-rating)

For temperatures of 250°F (PN) or 100°F (ANSI) and above:
obey application limits!

Disc pair: carbon - stainless steel coated / SFC - stainless steel coated

Actuator Size	20 in ²		40 in ²		80 in ²	
	65	80	44,0	58,0	44,0	65,0
Supply Pressure (psi)	maximum pressure psi		maximum pressure psi		maximum pressure psi	
Size	1480,5	1480,5	1480,5	1480,5	-	-
1/2"	1480,5	1480,5	1480,5	1480,5	-	-
3/4"	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*	-	-
1"	1276	1480,5	1480,5	1480,5	-	-
1 1/4"	972	1204	1276 (1480)*	1276 (1480)*	-	-
1 1/2"	638	783	1088	1320	1480,5	1480,5
2"	537	653	914	1102	1160	1160
2 1/2"	334	421	580	696	696	696
3"	218	232	363	450	479	479
4"	145	160	247	305	334	334
5"	102	116	189	218	232	232
6"	51	65	102	131	218	232
8"	39,2	49,3	66,7	81,2	137,8	152,3
10"	Code 3 (Standard)	Code 4	Code 3 (Standard)	Code 4	Code 6 (Standard)	Code 8
Spring Configuration						

Standard

*: figures in brackets for bodys made of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

Disc pair: STN2

Actuator size	20 in ²		40 in ²		80 in ²	
	65	80	44	58	44	65
Supply Pressure (psi)	maximum pressure psi		maximum pressure psi		maximum pressure psi	
Size	1480	1480	1480,5	1480,5	-	-
1/2"	1175	1480	1480,5	1480,5	-	-
3/4"	870	1088	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*
1"	653	812	1117	1349	1480,5	1480,5
1 1/4"	450	551	769	928	1044	1044
1 1/2"	261	319	450	551	928	1117
2"	218	261	377	450	769	899
2 1/2"	131	145	218	276	464	522
3"	65	87	131	160	276	334
4"	44	51	87	94	189	232
5"	29	36	58	65	131	160
6"	-	-	-	-	-	-
8"	Code 3 (Standard)	Code 4	Code 3 (Standard)	Code 4	Code 6 (Standard)	Code 8
Spring Configuration						

Standard

*: figures in brackets for bodys made of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

Motor Valve 8021-GS3



with integrated p/p and i/p - positioner, Type 8047

Admissible differential pressures

(For temperatures of up to 250°F with PN-rating
up to 100°F with ANSI-rating)

For temperatures of 250°F (PN) or 100°F (ANSI) and above:
obey application limits!

Disc pair: carbon - stainless steel coated / SFC - stainless steel coated

Actuator size (cm ²)	20 in ²				40 in ²				80 in ²			
	22 to 44		26 to 55		17 to 32		22 to 39		17 to 32		22 to 39	
Supply Pressure (psi)	58		73		44		58		44		65	
	maximum pressure psi				maximum pressure psi				maximum pressure psi			
Size	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off
1/2"	1480	1480	1480	1480	1480	1480	1480	1480	-	-	-	-
3/4"	1117	1117	1392	1392	1480	1480	1480	1480	-	-	-	-
1"	827	827	1030	1030	1276 (1421)*	1276 (1421)*	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*
1 1/4"	609	609	754	841	1059	1059	1276	1276	1480	1480	1480	1480
1 1/2"	421	421	522	638	711	711	870	870	1276 (1480)*	1276 (1480)*	1276 (1480)*	1276 (1480)*
2"	247	276	305	421	421	421	508	580	870	870	1044	1044
2 1/2"	203	232	247	348	348	348	421	493	711	711	856	856
3"	116	145	145	218	203	203	247	319	421	421	508	638
4"	73	87	87	145	131	131	145	203	261	261	319	406
5"	44	58	58	87	87	87	102	131	174	174	203	276
6"	29	44	44	73	58	58	73	102	131	131	145	203
8"	22	26	26	38	36	36	44	58	73	73	87	116
10"	13	16	16	26	22	22	28	36	46	46	55	75
Spring Configuration	Code 3 (Standard)		Code 4		Code 3 (Standard)		Code 4		Code 3 (Standard)		Code 4	

Standard

*: figures in brackets for bodys made of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

Disc pair: STN2

Actuator Size	20 in ²				40 in ²				80 in ²			
	22 to 44		26 to 55		17 to 32		22 to 39		17 to 32		22 to 39	
Supply Pressure (psi)	58		73		44		58		44		65	
	maximum pressure psi				maximum pressure psi				maximum pressure psi			
Size	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off	Control	On-Off
1/2"	798	798	986	1015	1378	1378	1480	1480	1480	1480	1480	1480
3/4"	537	537	667	769	928	928	1131	1131	1480	1480	1480	1480
1"	363	377	450	580	624	624	769	798	1276 (1290)*	1276 (1290)*	1276 (1480)*	1276 (1480)*
1 1/4"	247	276	319	435	435	435	522	580	899	899	1088	1160
1 1/2"	160	189	203	290	276	276	348	392	580	580	696	841
2"	87	116	116	174	160	160	189	247	334	334	392	508
2 1/2"	73	87	87	145	131	131	160	203	261	261	319	406
3"	44	58	51	87	73	73	87	116	160	160	189	247
4"	22	29	29	44	44	44	58	73	87	87	116	145
5"	-	-	22	29	29	29	36	51	58	58	73	102
6"	-	-	15	22	22	22	26	36	44	44	51	73
8"	-	-	-	-	-	-	-	-	-	-	-	-
Spring Configuration	Code 3 (Standard)		Code 4		Code 3 (Standard)		Code 4		Code 6 (Standard)		Code 8	

Standard

*: figures in brackets for bodys made of carbon steel

	Pressure limits ANSI and DIN in psi					
	ANSI150	ANSI 300	ANSI 600	PN16	PN40	PN100
P max. carbon steel	284	741	1480	232	580	1450
P max. stainless steel	276	719	1440			

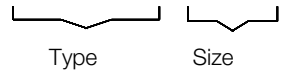
Control Valve 8021-GS3



with integrated positioner

Ordering Number System

8	0	2	1	/						V	G					M								Z				S
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Symbol: "V": Valve
"R": Repair kit (sealings)

1 - 5 : Please quote all 5 sections.
6 - 12: Quote only if required.

1. Function	2. Body design	3. Body material	4. Safety function	5. Actuator	6. Special version	7. Springs	8. Stem sealing
G	GS-control valve with pneumatic actuator (type 8021)	E GS3-flangeless design acc. ANSI 150 F GS3-flangeless design acc. ANSI 300 K GS3-flangeless design acc. ANSI 600 G GS3-flangeless design acc. DIN PN10-PN40 H GS3-flangeless design acc. DIN PN100	0 carbon steel 1.0570/1.0619 1 stainless steel 1.4571/1.4581 or 1.4404/1.4408 4 body carbon steel 1.0619, body cover made of stainless steel	0 spring closes 1 spring opens	3 diaphragm actuator 125 cm ² 4 diaphragm actuator 250 cm ² 5 diaphragm actuator 500 cm ²	M To state, if further sections are quoted A groove and groove acc. DIN EN1092-1 C groove and tongue acc. DIN EN1092-1 E 2x lowered face acc. DIN EN1092-1 H lowered and raised face acc. DIN EN1092-1	- PTFE packing self-adjusting (Standard) 1 additional stainless steel bellows 1.4571 (max. 33 bar)

9. Sliding disc	10. Fixed disc	11. Kvs-Values	12. Flow characteristic	13. Accessories	14. Positioners	15. Signalling equipment	16. Further versions
- Carbon material 9 STN2 S SFC	- stainless steel 1.4571 1 STN2 (only in combination with pos. "9" STN2)	- 100 % (Stand.) A red. auf 63 % 1 red. auf 40 % B red. auf 25 % 2 red. auf 16 % C red. auf 10 % 3 red. auf 6,3 % 4 red. auf 2,5 % 5 red. auf 1 % 6 red. auf 20 % 7 red. auf 12 % 8 red. auf 2 % 9 red. auf 0,4 %	- linear 1 equal-%	Z To state if further sections are quoted	- without 1 p/p positioner Type 8047 3 i/p positioner Type 8047 6 i/p positioner Type 8047 Eex ib IIC T6 + plug connection M12x1 8 i/p positioner with plug connec. M12x1 C dig. positioner, type 8049, 4-wire R dig. positioner, type 8049, 2-wire T dig. positioner, type 8049, AS-i version W dig. positioner, type 8049, 2-wire, ex-version	- without 0 2 limit switches M12x1 DC 10-30V PNP	S Quote for further special versions

Ordering Example: 8021/080VGE106M-----Z8
 GS3-Control Valve Type 8021 with pneumatic actuator, 3", flangeless design design acc. ANSI 150, stainless steel 316 Ti, spring to close, actuator diaphragm 20 in², standard springs, PTFE-V-shaped sealing, function unit carbon-stainless steel 316 Ti coated, flow characteristic linear, i/p-positioner

Application limitations for GS3 valves in stainless steel

These pressure must not be exceeded for GS-valves from the GS3-series made of stainless steel, even though the actuator power might allow it.

ANSI150

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in stainless steel								max. admissible pressures for GS3-valves in stainless steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2" - 5"	275,0	265,0	235,0	215,0	200,0	175,0	150,0	120,0	275,0	265,0	235,0	215,0	200,0	175,0	150,0	120,0
6"	230,0	230,0	230,0	215,0	200,0	175,0	150,0	120,0	235,0	235,0	235,0	215,0	200,0	170,0	140,0	120,0
8"	230,0	230,0	230,0	215,0	200,0	175,0	150,0	120,0	-	-	-	-	-	-	-	-
10"	150,0	150,0	150,0	145,0	135,0	120,0	105,0	100,0	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

ANSI300

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in stainless steel								max. admissible pressures for GS3-valves in stainless steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2" - 2 1/2"	720,0	695,0	610,0	560,0	520,0	485,0	460,0	440,0	720,0	695,0	610,0	560,0	520,0	485,0	460,0	440,0
3"	695,0	695,0	610,0	560,0	520,0	485,0	460,0	440,0	530,0	530,0	530,0	505,0	480,0	390,0	320,0	275,0
4"	480,0	480,0	480,0	480,0	480,0	480,0	460,0	440,0	480,0	480,0	480,0	460,0	435,0	355,0	290,0	250,0
5"	335,0	335,0	335,0	335,0	335,0	335,0	335,0	335,0	320,0	320,0	320,0	305,0	290,0	235,0	190,0	165,0
6"	230,0	230,0	230,0	230,0	230,0	230,0	230,0	230,0	230,0	230,0	230,0	225,0	210,0	170,0	140,0	120,0

Limitation for SFC-sliding discs: 570°F

ANSI600

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in stainless steel								max. admissible pressures for GS3-valves in stainless steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2" - 3/4"	1440,0	1395,0	1225,0	1115,0	1035,0	970,0	915,0	880,0	1440,0	1395,0	1225,0	1115,0	1035,0	970,0	915,0	880,0
1"	1275,0	1275,0	1225,0	1115,0	1015,0	925,0	830,0	785,0	1275,0	1275,0	1225,0	1115,0	1015,0	925,0	830,0	785,0
1 1/4"	1440,0	1395,0	1225,0	1115,0	1035,0	970,0	915,0	880,0	1440,0	1395,0	1225,0	1115,0	1035,0	970,0	915,0	875,0
1 1/2"	1275,0	1275,0	1225,0	1115,0	1015,0	925,0	830,0	785,0	1050,0	1050,0	1050,0	1000,0	950,0	770,0	630,0	545,0
2"	1440,0	1395,0	1225,0	1115,0	1035,0	970,0	915,0	880,0	1125,0	1125,0	1125,0	1070,0	1020,0	825,0	675,0	585,0
2 1/2"	1160,0	1160,0	1160,0	1115,0	1035,0	970,0	915,0	880,0	905,0	905,0	605,0	865,0	820,0	665,0	545,0	470,0
3"	695,0	695,0	695,0	695,0	695,0	695,0	695,0	645,0	530,0	530,0	530,0	505,0	480,0	390,0	320,0	275,0

Limitation for SFC-sliding discs: 570°F

PN40

Size	Sliding unit: carbon/SFC - stainless steel, coated							Paarung: STN 2					
	maximum pressures for GS3-valves in stainless steel							maximum pressures for GS3-valves in stainless steel					
	210°F	300°F	390°F	480°F	570°F	660°F	210°F	300°F	390°F	480°F	570°F	660°F	
1/2"-1 1/4"	580	580	580	580	580	580	580	580	580	580	580	580	580
1 1/2"	580	580	580	580	580	580	580	580	580	580	580	580	535
2"	580	580	580	580	580	580	580	580	580	580	580	580	580
2 1/2"	580	580	580	580	580	580	580	580	580	580	580	535	465
3"	580	580	580	580	580	580	580	520	495	480	375	320	275
4"	480	480	480	480	480	480	480	465	450	435	350	290	245
5"	335	335	335	335	335	335	335	305	305	275	230	190	160
6"	230	230	230	230	230	230	230	220	220	205	160	130	115
8" (only PN16)	230	230	220	190	175	160	160	-	-	-	-	-	-
10" (only PN16)	145	130	130	115	100	85	85	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

PN100

Size	Sliding unit: carbon/SFC - stainless steel, coated						Paarung: STN 2					
	maximum pressures for GS3-valves in stainless steel						maximum pressures for GS3-valves in stainless steel					
	210°F	300°F	390°F	480°F	570°F	660°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2"	1450	1450	1450	1350	1220	1145	1450	1450	1450	1350	1220	1145
3/4"	1450	1450	1290	1175	1060	985	1450	1450	1290	1175	1060	985
1"	1275	1175	1015	915	825	785	1275	1175	1015	915	825	785
1 1/4"	1450	1350	1160	1060	945	900	1450	1350	1160	1060	945	870
1 1/2"	1275	1175	1015	915	825	785	1045	1000	945	770	625	535
2"	1450	1450	1450	1450	1450	1365	1115	1060	1015	810	665	580
2 1/2"	1160	1160	1160	1145	1030	970	900	855	810	655	535	465
3"	695	695	695	695	695	640	520	495	480	375	320	275

Limitation for SFC-sliding discs: 570°F

Application limitations for GS3 valves in carbon steel

These pressure must not be exceeded for GS-valves from the GS3-series made of carbon steel, even though the actuator power might allow it.

ANSI150

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in carbon steel								max. admissible pressures for GS3-valves in carbon steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2"-5"	285	280	255	230	200	175	150	120	285	280	255	230	200	175	150	120
6"	230	230	230	230	200	175	150	120	235	235	235	225	200	170	140	115
8"	230	230	230	230	200	175	150	120	-	-	-	-	-	-	-	-
10"	150	150	150	145	135	120	105	87	-	-	-	-	-	-	-	-

Limitation for SFC-sliding discs: 570°F

ANSI300

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in carbon steel								max. admissible pressures for GS3-valves in carbon steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2"-2"	740	725	675	655	635	610	285	580	740	725	675	655	635	610	285	545
2 1/2"	740	725	675	655	635	610	285	580	605	605	605	575	545	485	285	470
3"	695	695	675	655	635	610	285	580	530	530	530	505	480	390	285	275
4"	480	480	480	480	480	480	285	475	480	480	480	460	435	355	285	245
5"	335	335	335	335	335	335	285	330	320	320	320	305	290	235	190	155
6"	230	230	230	230	230	230	230	230	230	230	230	225	210	170	140	115

Limitation for SFC-sliding discs: 570°F

ANSI600

Size	Sliding unit: carbon/SFC - stainless steel, coated								Sliding unit: STN2							
	max. admissible pressures for GS3-valves in carbon steel								max. admissible pressures for GS3-valves in carbon steel							
	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F	100°F	120°F	210°F	300°F	390°F	480°F	570°F	660°F
1/2"-1"	1480	1455	1350	1310	1270	1215	1155	1085	1480	1455	1350	1310	1270	1215	1155	1085
1 1/4"	1480	1455	1350	1310	1270	1215	1155	1085	1480	1455	1350	1310	1270	1215	1010	870
1 1/2"	1450	1450	1350	1310	1270	1215	1155	1085	1050	1050	1050	1000	950	770	630	535
2"	1450	1450	1350	1310	1270	1215	1155	1085	1125	1125	1125	1070	1020	825	675	580
2 1/2"	1160	1160	1160	1160	1160	1160	1155	1085	905	905	905	865	820	665	545	460
3"	695	695	695	695	695	695	695	635	530	530	530	535	480	390	320	275

Limitation for SFC-sliding discs: 570°F

PN40

Size	Sliding unit: carbon/SFC - stainless steel, coated							Sliding unit: STN2					
	max. admissible pressures for GS3-valves in carbon steel							max. admissible pressures for GS3-valves in carbon steel					
	210°F	300°F	390°F	480°F	570°F	660°F	210°F	300°F	390°F	480°F	570°F	660°F	
1/2" - 2"	580	580	580	580	580	580	580	580	580	580	580	580	
2 1/2"	580	580	580	580	580	580	580	580	580	580	535	460	
3"	580	580	580	580	580	580	520	495	480	375	320	275	
4"	480	480	480	480	480	475	480	450	435	350	290	245	
5"	335	335	335	335	335	330	320	305	275	230	190	155	
6"	230	230	230	230	230	230	230	220	205	160	130	115	
8" (only 235 psi)	230	230	220	190	175	155	-	-	-	-	-	-	
10" (only 235 psi)	145	130	130	115	100	87	-	-	-	-	-	-	

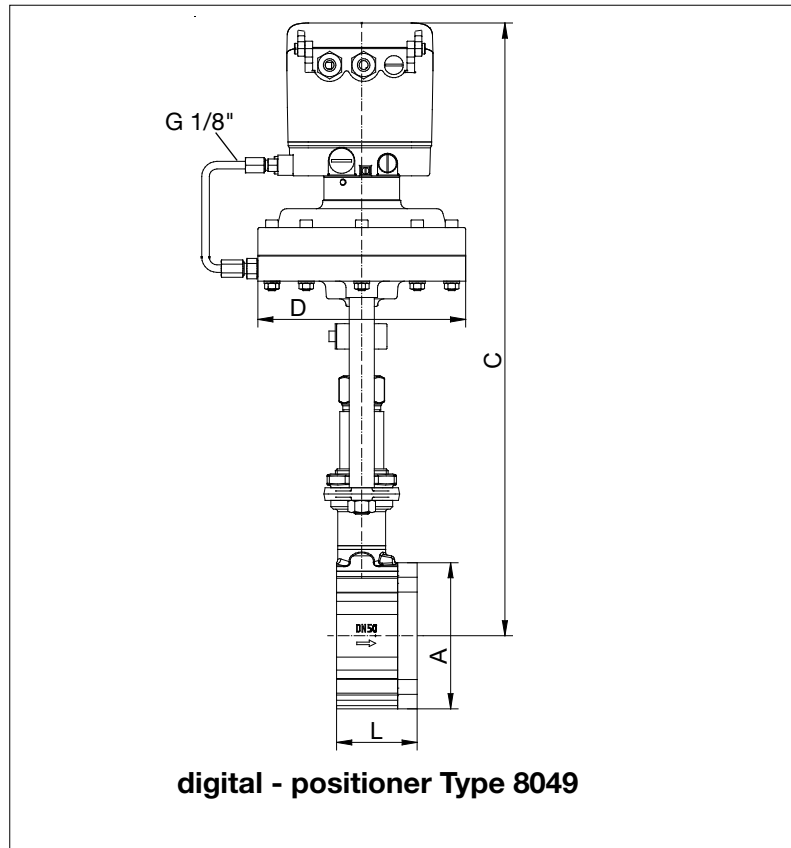
Limitation for SFC-sliding discs: 570°F

PN100

Size	Sliding unit: carbon/SFC - stainless steel, coated							Sliding unit: STN2					
	max. admissible pressures for GS3-valves in carbon steel							max. admissible pressures for GS3-valves in carbon steel					
	210°F	300°F	390°F	480°F	570°F	660°F	210°F	300°F	390°F	480°F	570°F	660°F	
1/2" - 3/4"	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	
1"	1450	1450	1450	1450	1365	1260	1450	1450	1450	1450	1365	1260	
1 1/4"	1450	1450	1450	1450	1450	1435	1450	1450	1450	1220	1000	870	
1 1/2"	1450	1450	1450	1450	1365	1260	1045	1000	945	770	625	535	
2"	1450	1450	1450	1450	1450	1360	1115	1060	1015	810	665	580	
2 1/2"	1160	1160	1160	1160	1160	1100	900	855	810	655	535	460	
3"	695	695	695	695	695	635	520	495	480	375	320	275	

Limitation for SFC-sliding discs: 570°F

Dimensions and Weights



Size	Ø A	C*	Ø D for actuator			L	Stroke	Weight (lbs) for actuator		
			20 in ²	40 in ²	80 in ²			20 in ²	40 in ²	80 in ²
1/2"	2.52	18.11	6.5	8.74	8.74	2.2	0.24	16.5	21.3	29.5
3/4"	2.83	18.31	6.5	8.74	8.74	2.2	0.24	17	21.8	30
1"	3.23	18.5	6.5	8.74	8.74	2.2	0.24	17.9	22.7	30.9
1 1/4"	3.5	18.7	6.5	8.74	8.74	2.2	0.24	18.7	23.5	31.7
1 1/2"	3.9	18.9	6.5	8.74	8.74	2.2	0.24	19.6	24.5	32.6
2"	4.57	19.29	6.5	8.74	8.74	2.52	0.31	23.1	28	36.1
2 1/2"	5.43	19.69	6.5	8.74	8.74	2.68	0.31	27.1	32	40.1
3"	6.02	20.08	6.5	8.74	8.74	2.76	0.31	29.6	34.4	42.5
4"	7.24	20.47	6.5	8.74	8.74	2.95	0.33	37.1	42	50.1
5"	8.35	21.06	6.5	8.74	8.74	3.15	0.33	46.5	51.3	59.5
6"	9.53	21.65	6.5	8.74	8.74	3.15	0.33	54.6	59.4	67.6
8"	11.89	22.83	6.5	8.74	8.74	3.66	0.33	91.7	96.6	104.7
10"	14.17	23.82	6.5	8.74	8.74	3.78	0.33	103.2	108	116.2

* for actuator 80 in² + 1,9 "

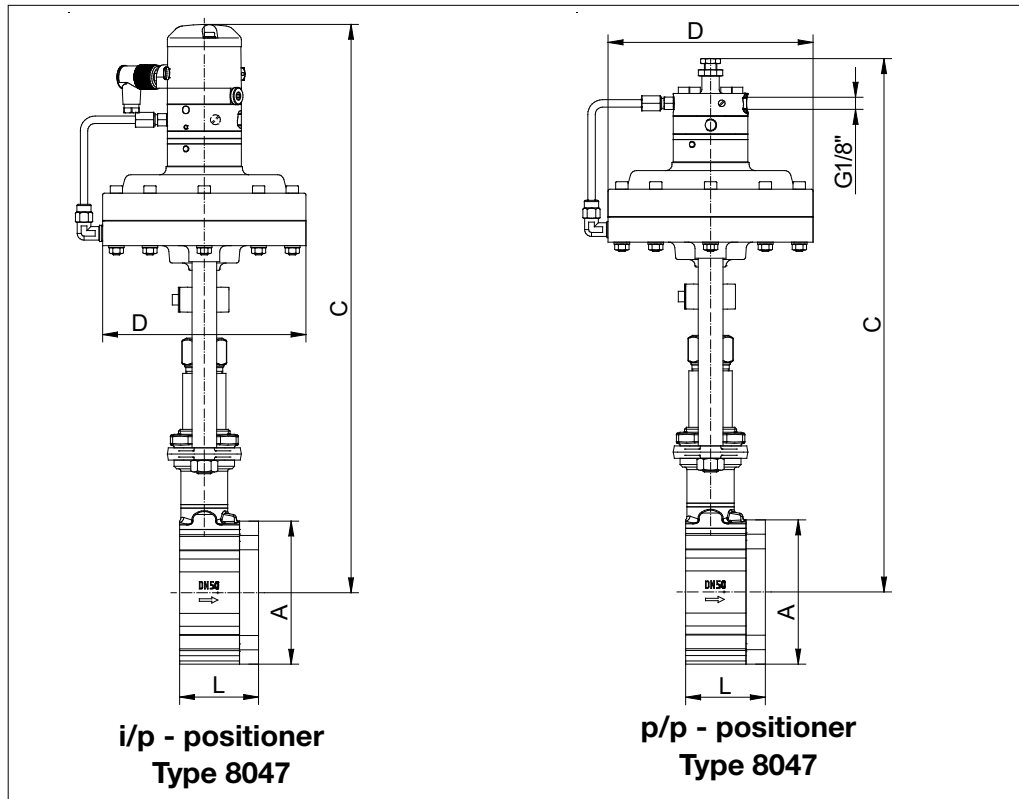
Dimensions in inch

Control Valve 8021-GS3



with integrated i/p and p/p - positioner, Type 8047

Dimensions and Weights



Size	Ø A	C1*	C2*	Ø D for actuator			L	Stroke	Weight (lbs) for actuator		
				20 in ²	40 in ²	80 in ²			20 in ²	40 in ²	80 in ²
1/2"	2.52	16.93	15.75	6.5	8.74	8.74	2.2	0.24	16.5	21.3	29.5
3/4"	2.83	17.13	15.94	6.5	8.74	8.74	2.2	0.24	17	21.8	30
1"	3.23	17.32	16.14	6.5	8.74	8.74	2.2	0.24	17.9	22.7	30.9
1 1/4"	3.5	17.52	16.34	6.5	8.74	8.74	2.2	0.24	18.7	23.5	31.7
1 1/2"	3.9	17.72	16.54	6.5	8.74	8.74	2.2	0.24	19.6	24.5	32.6
2"	4.57	18.11	16.93	6.5	8.74	8.74	2.52	0.31	23.1	28	36.1
2 1/2"	5.43	18.5	17.32	6.5	8.74	8.74	2.68	0.31	27.1	32	40.1
3"	6.02	18.9	17.72	6.5	8.74	8.74	2.76	0.31	29.6	34.4	42.5
4"	7.24	19.29	18.11	6.5	8.74	8.74	2.95	0.33	37.1	42	50.1
5"	8.35	19.88	18.7	6.5	8.74	8.74	3.15	0.33	46.5	51.3	59.5
6"	9.53	20.47	19.29	6.5	8.74	8.74	3.15	0.33	54.6	59.4	67.6
8"	11.89	21.65	20.47	6.5	8.74	8.74	3.66	0.33	91.7	96.6	104.7
10"	14.17	22.64	21.46	6.5	8.74	8.74	3.78	0.35	103.2	109.8	116.2

Dimensions in inch

Control Valve 8020-GS3



Flow Coefficients - Cv-values

Ordering code		-	A	1	B	6	2	7	C	3	4	8	5	9
Size	Charact.	100 %	63 %	40 %	25 %	20%	16 %	12 %	10 %	6,3 %	2,5 %	2 %	1 %	0,4%
1/2"	(mod.) linear	4.6	3	2	1.6	-	0.82	0.57	0.51	0.3	0.16	0.09	0.05	-
	eq. perc.	2	-	1.3	-	-	-	-	-	0.12	-	-	-	-
3/4"	(mod.) lin.	7.4	-	-	-	-	1.16	-	-	-	-	0.15	-	-
	eq. perc.	3.5	-	-	-	-	-	-	-	-	-	-	-	-
1"	(mod.) linear	13	7.4	4.6	-	-	1.9	-	1.08	0.72	0.3	-	0.16	0.05
	eq. perc.	5.8	-	2.8	-	1.3	-	-	-	-	-	-	-	-
1 1/4"	(mod.) linear	19	12	-	-	-								
	eq. perc.	9.3	-	-	-	-								
1 1/2"	(mod.) lin.	30	19	13	8.1	-								
	eq. perc.	13	9.9	-	3.2	-								
2"	(mod.) linear	52	32	23	14	12								
	eq. perc.	22	14	-	-	-								
2 1/2"	(mod.) linear	60	41	-	17									
	eq. perc.	35	-	-	9.3									
3"	(mod.) linear	107	67	46										
	eq.perc.	56	41	-										
4"	(mod.) linear	179	110	72										
	eq.perc.	89	56	-										
5"	(mod.) linear	275	-	110										
	eq.perc.	135	-	-										
6"	(mod.) linear	392	246	-										
	eq.perc.	171	104	-										
8"	(mod.) linear	650	408	-										
	eq.perc.	-	-	-										