

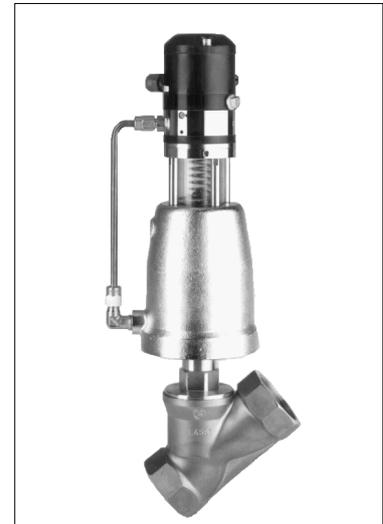
Angle Seat Control Valve with integrated positioner DN 8 up to DN 50, PN40

7020

SCHUBERT & SALZER
**CONTROL
SYSTEMS**

Pneumatically operated control valves for neutral through to highly aggressive media.

- Integrated positioner
- Compact design
- All parts contacting the fluid made from stainless steel
- Temperatures up to 200°C, working pressure up to 40 bar



**Type 7020
with i/p-positioner
Type 8047**

Control valve with integrated microprocessor-positioner for the control of neutral through to aggressive media in process engineering, chemical industry and for plant equipment.

- Space saving design and low weight
- No steady- state air consumption
- Operation independent of mounting position and supply pressure variations
- Not sensitive to vibration
- Instrument grade air not essential
- Software configurable flow characteristics
- Protection Class IP65



**Type 7020
with digital positioner
Type 8048**

Technical Information

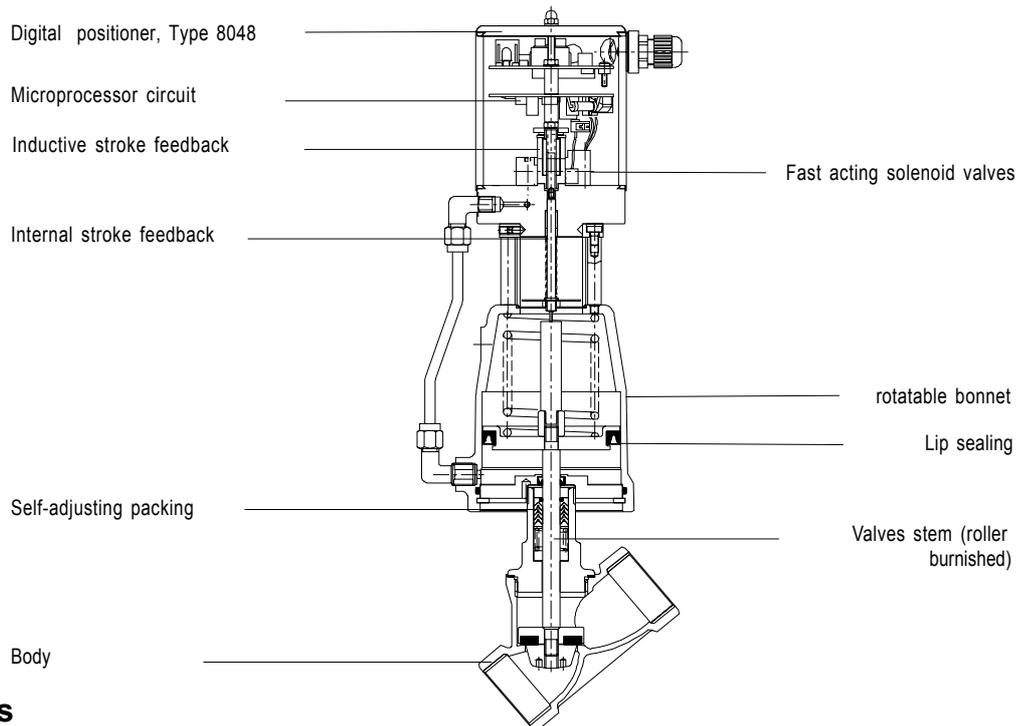
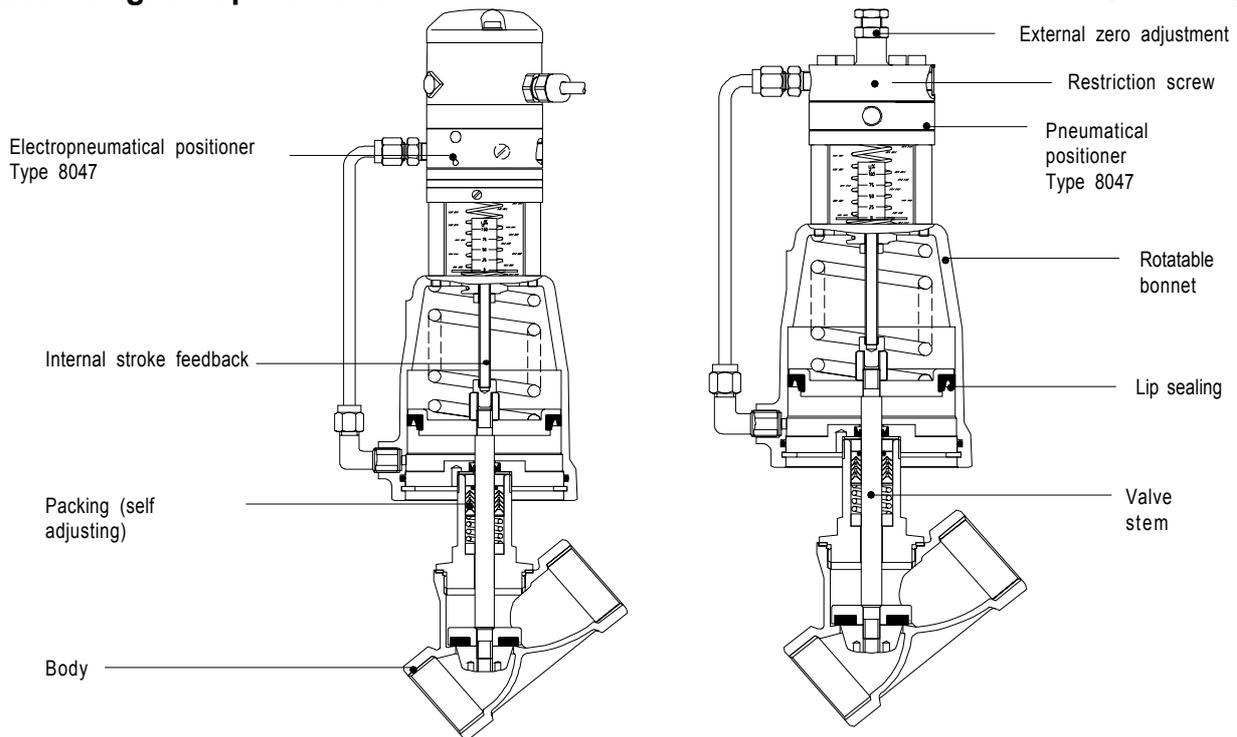
Body material	Stainless steel 1.4408
Nominal sizes	DN 8 up to DN50
Connections	
Pipe thread acc. DIN 2999	DN 8 up to DN50
NPT thread	DN 8 up to DN50
Welding ends	DN15 up to DN50
Nominal pressure	PN40
Fluid temperature	-30°C up to + 200°C

Options:

e.g.:

- Optical position indicator
- External I/P-converter
Type 8045
- Ex-electropneumatic positioner
( II 2 G EEx ib IIC T6)

Angle Seat Control Valve 7020 with integrated positioner



Materials

Body	Stainless steel 1.4408
Seating seal	PTFE
Bonnet	Brass chrome plated (actuator Ø 50 mm, 80 mm) Aluminium (actuator Ø 125 mm)
Actuator springs	Stainless steel 1.4310 (actuator Ø 50 mm, 80 mm) Spring steel wire C, zinc coated (actuator Ø 125 mm)
Packing	PTFE (carbon filled), spring 1.4310
Valve stem	Stainless steel 1.4571, roller burnished
Positioner body	Brass, chrome plated (p/p-version) Brass/aluminium (i/p-version)
Position indicator	PA Trogamid (clear)

Angle Seat Control Valve 7020

with integrated positioner

Positioner

	Digital positioner Type 8048	i/p-positioner Type 8047	p/p-positioner Type 8047
Input signal range	0/4 - 20 mA, 0/2 - 10 V	0/4 - 20 mA, 0/2 - 10 V	0,2 - 1 bar
Supply voltage, electrical	24 V DC, maximum 10 W	none	none
Supply air pressure	max. 6 bar	max. 6 bar	max. 6 bar
Hysteresis	< 0,5 %	< 1 %	< 1 %
Rangeability	30 : 1	25 : 1	25 : 1
Characteristics	linear, equal percentage, user-defined, process optimized*	Characteristics of function unit	Characteristics of function unit
Adjustment (Stroke, zero point)	self-adapting	mechanical	mechanical
Ambient temperature	-20°C up to +75°C	-20°C up to +60°C	-20°C up to +80°C
Protection class acc. DIN 40050	IP65	IP 54	IP 54
Ex-proof (Optional)	-	 II 2 G EEx ib IIC T6 up to 45°C  II 2 G EEx ib IIC T5 up to 60°C	-

*Produces a linear process flow characteristic for optimal control. After entering a few process data points (e.g. upstream and downstream pressures) the optimised flow characteristic is calculated by the positioner configuration software and stored in the positioner memory.

Digital Positioner Type 8049

Version	4-wire	2-wire	AS-I
Set point signal	0/4 - 20 mA	4 - 20 mA	Single Slave, Slave Profil S - 7.3.4
Burden voltage	1,2 V	14 V	-
Supply energy, electrical	24 VDC	none	supply with AS-I
Adaption to range and zero	self-learning		
Configuration	with PC-Software		
Air delivery*	50 NI/min.	according the version	50 NI/min.
System air consumption	none		
Ambient temperature limits	-20 up to +75°C	-10 up to +75°C	-20 up to +75°C
Supply connection	G 1/8"		
Class of protection acc. DIN 40050	IP 65		
Accessories	Analogue feedback module RM-1 2 wire design, feedback signal 4 - 20 mA		

* 6 bar supply air

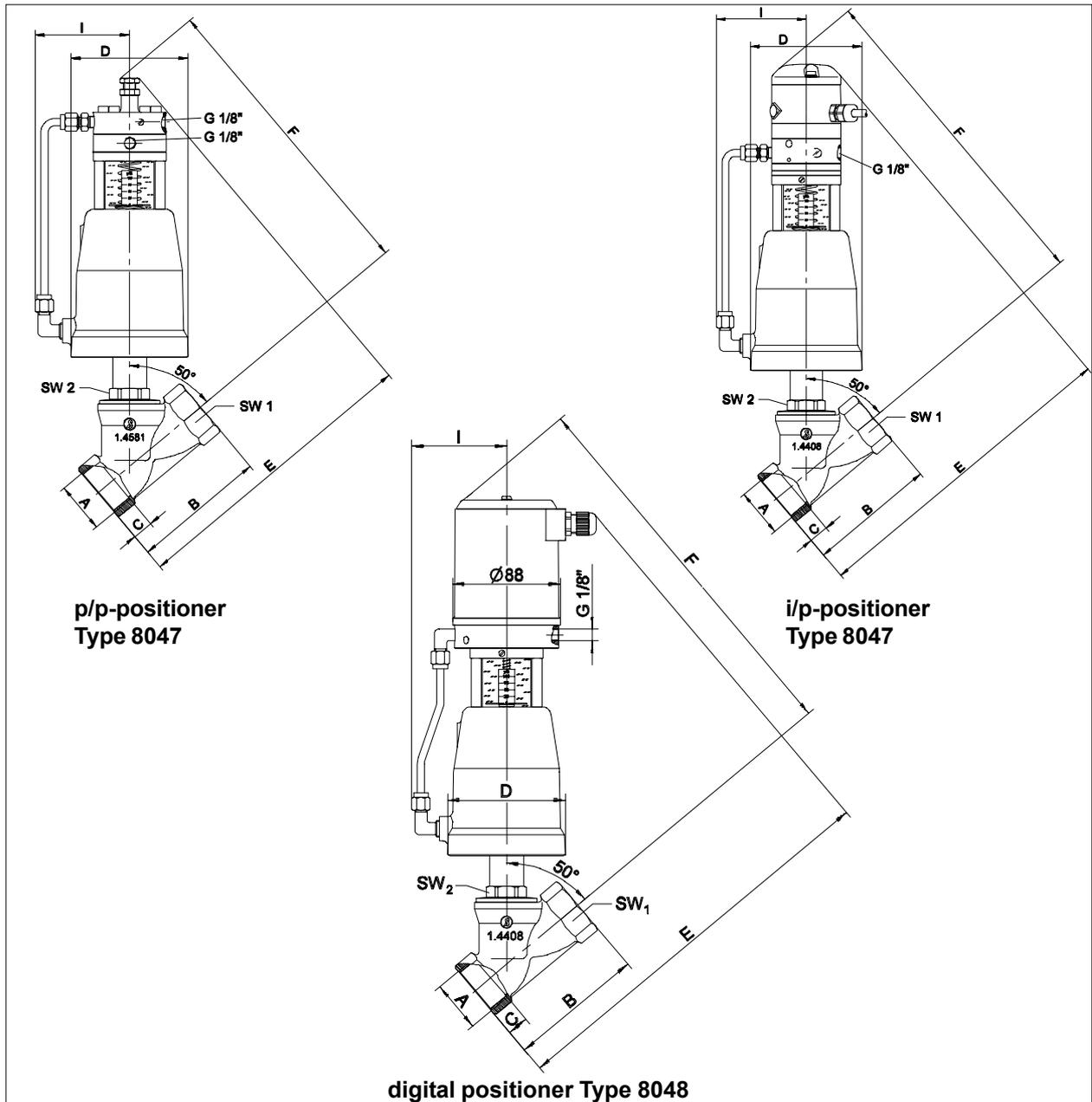
Kvs-Values

DN	Linear							Equal percentage						
	8	15	20	25	32	40	50	8	15	20	25	32	40	50
100%	0,6	3,8	8,8	14	20	27	41	0,6	3	6	10	16	25	-
40%	0,24	1,5	3,5	5,8	8	11	-	-	1,2	2,4	4	6	10	-
25%	0,15	0,93	2,2	3,6	-	-	-	-	0,8	1,5	2,6	-	-	-
15%	-	-	-	-	-	-	-	-	0,46	-	-	-	-	-
10%	-	0,4	-	-	-	-	-	-	-	-	-	-	-	-
7,5%	-	-	-	-	-	-	-	-	0,23	-	-	-	-	-

Angle Seat Control Valve 7020

with integrated positioner

Dimensions and Weights



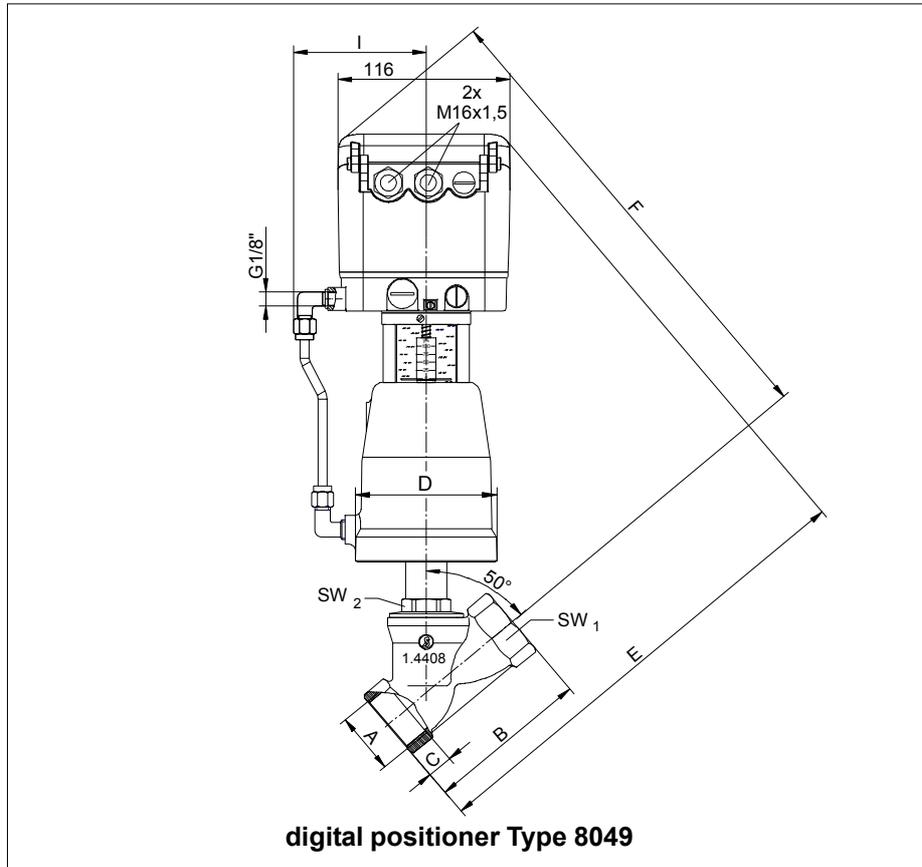
DN	Actuator	A Rp/NPT	B	C	D	E Positioner			F Positioner			I	SW1	SW2	Weight (kg)		
						p/p	i/p	digital	p/p	i/p	digital				p/p	i/p	digital
8	50	1/4"	60	12	62	-	-	280	-	-	275	62	20	30	-	-	2,3
8	80	1/4"	60	12	96	220	250	300	230	260	295	80	20	30	3,7	4,0	4,1
15	80	1/2"	65	15	96	220	250	300	230	260	295	80	25	30	3,7	4,0	4,1
20	80	3/4"	75	16,3	96	225	255	305	235	265	295	80	31	30	3,8	4,1	4,2
25	80	1"	90	19,1	96	235	265	315	240	270	300	80	39	30	4,0	4,3	4,4
32	80	1 1/4"	110	21,4	96	250	280	330	255	285	315	80	48	30	4,3	4,6	4,7
32	125	1 1/4"	110	21,4	146	265	295	360	275	305	345	105	48	30	6,9	7,2	7,3
40	80	1 1/2"	120	21,4	96	255	285	335	260	290	320	80	55	30	4,6	4,9	5
40	125	1 1/2"	120	21,4	146	270	300	365	280	310	350	105	55	30	7,2	7,5	7,6
50	80	2"	150	21	96	275	305	350	270	300	330	80	68	32	5,3	5,5	5,6
50	125	2"	150	25,7	146	285	315	380	285	315	360	105	68	32	7,8	8,1	8,1

Dimensions in mm

Angle Seat Control Valve 7020

with integrated positioner

Dimensions and Weights



DN	Actuator	A Rp/NPT	B	C	D	E	F	Hub	I	SW1	SW2	Kvs- value	Weight
15	80	1/2"	65	12	96	309	301	7	80	25	30	3,5	4,4
20	80	3/4"	75	13	96	314	306	12	80	31	30	8	4,5
25	80	1"	90	15	96	324	311	16	80	39	30	16	4,7
32	80	1 1/4"	110	17	96	339	326	20	80	48	30	24	5,0
32	125	1 1/4"	110	17	146	369	356	20	105	48	30	24	7,6
40	80	1 1/2"	120	19	96	344	331	23	80	55	30	35	5,3
40	125	1 1/2"	120	19	146	374	361	23	105	55	30	35	7,9
50	80	2"	150	21	96	359	341	29	80	68	32	55	5,9
50	125	2"	150	21	146	389	371	29	105	68	32	55	8,5

Dimensions in mm