



Application

Control valve for hygienic applications in the food and beverage as well as pharmaceutical industries

Valve size	DN 6 to 150	• NPS ¼ to 6
Maximum pressure	63 bar	• 914 psi
Medium temperature	-10 to 150 °C	• 14 to 300 °F



Type 3347 Angle Valve with

- Type 3271 Pneumatic Actuator
- Type 3277 Pneumatic Actuator for integral positioner attachment
- Type 3379 Pneumatic Piston Actuator
- Type 3372 Pneumatic Actuator (► T 8097-1)

Special features

- Valve body free of dead space made of stainless steel
- Wetted sealing materials comply with FDA regulations and EC 1935/2004
- Metal or soft-seated valve plug
- Easily detachable clamp connection between body and bonnet
- Suitable for cleaning-in-place (CIP) and sterilization-in-place (SIP)
- Internal surface finish (peak-to-valley height) $Ra \leq 0.8 \mu m$
- Compliance with 3-A regulations with modified Type 3277 Pneumatic Actuator and approved valve accessories (see also Table 1.3)

The valves can be equipped with different accessories, directly attached positioners or positioners, solenoid valves and limit switches for attachment according to IEC 60534-6 ¹⁾ and NAMUR recommendation (► T 8350).

The Type 3347/3379 Control Valve used in combination with the Type 3724 Positioner form a compact automated unit.

Versions

- Angle valves with **welding ends, threaded couplings, clamp connections or flanges**
- **Cast body or bar stock body**
- **Three plug stem seal systems: PTFE** (for most standard applications), **PEEK and anti-crystallizing seal** (metal centering ring with O-ring and chrome-plated plug stem). See Fig. 11)

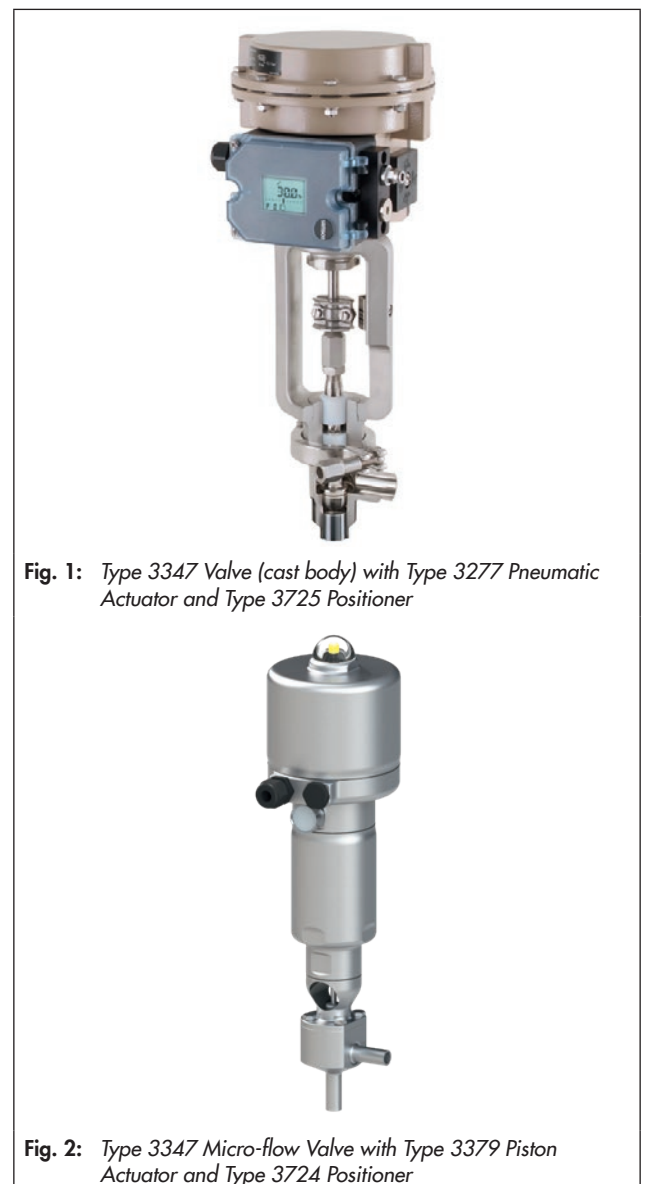


Fig. 1: Type 3347 Valve (cast body) with Type 3277 Pneumatic Actuator and Type 3725 Positioner

Fig. 2: Type 3347 Micro-flow Valve with Type 3379 Piston Actuator and Type 3724 Positioner

¹⁾ Accessories required. See associated actuator documentation.

Further versions

- **Polished valve body** (internal and/or external surfaces)
- **V-port plug** instead of a parabolic plug for better plug guidance
- **Steam barrier** for strict cleaning requirements (not compliant with EHEDG regulations). See Fig. 10.
- Other **body materials** on request, e.g. **1.4435**
- **High-pressure version** available
- **Heating jacket** · Details on request
- **Stellite®-faced seat**
- 160 °C (optional version without lubricants)

Principle of operation (Fig. 3 to Fig. 11)

The process medium flows through the valve in the direction indicated by the arrow in the flow-to-open direction.

Fig. 3 shows the PTFE-guided version. A body and stem PTFE seal is used to seal the plug stem in the body. Fig. 5 shows the PEEK-guided version. The plug stem is additionally guided and sealed by a bushing. Fig. 10 shows the version with steam barrier. The steam barrier is used to sterilize the plug stem with steam or a sterile fluid.

The valve bonnet is fixed to the body by a clamp connection to allow the entire bonnet to be easily detached from the body. The valve bonnet can optionally be bolted onto the body using four bolts for versions with pressures above 16 bar.

Mounting orientation

We recommend installing the control valve in the upright position with the actuator on top. Other mounting positions are also possible but do not allow the pipeline to fully drain.

Fail-safe position

Depending on how the compression springs are arranged in the pneumatic actuator, the valve has two fail-safe positions that become effective when the supply air fails:

- **Actuator stem extends (fail-close):** the valve closes when the supply air fails.
- **Actuator stem retracts (fail-open):** the valve opens when the supply air fails.

Legend for Fig. 3 to Fig. 10

1	Valve bonnet with yoke
2	Plug with plug stem
3	Plug stem seal
4	Body
5	Travel indicator scale
8	Actuator (not shown)
8.1	Actuator stem
8.4	Stem connector
9	Stem connector nut
10	Lock nut
13	Spring
17	Washer
21	V-ring packing
23	Seal
24	Guide bushing/wiper ring
25	Centering ring
26	Seal
29	Nipple
34	Clamps

Fig. 3: Type 3347 Valve, cast body, PTFE-guided version

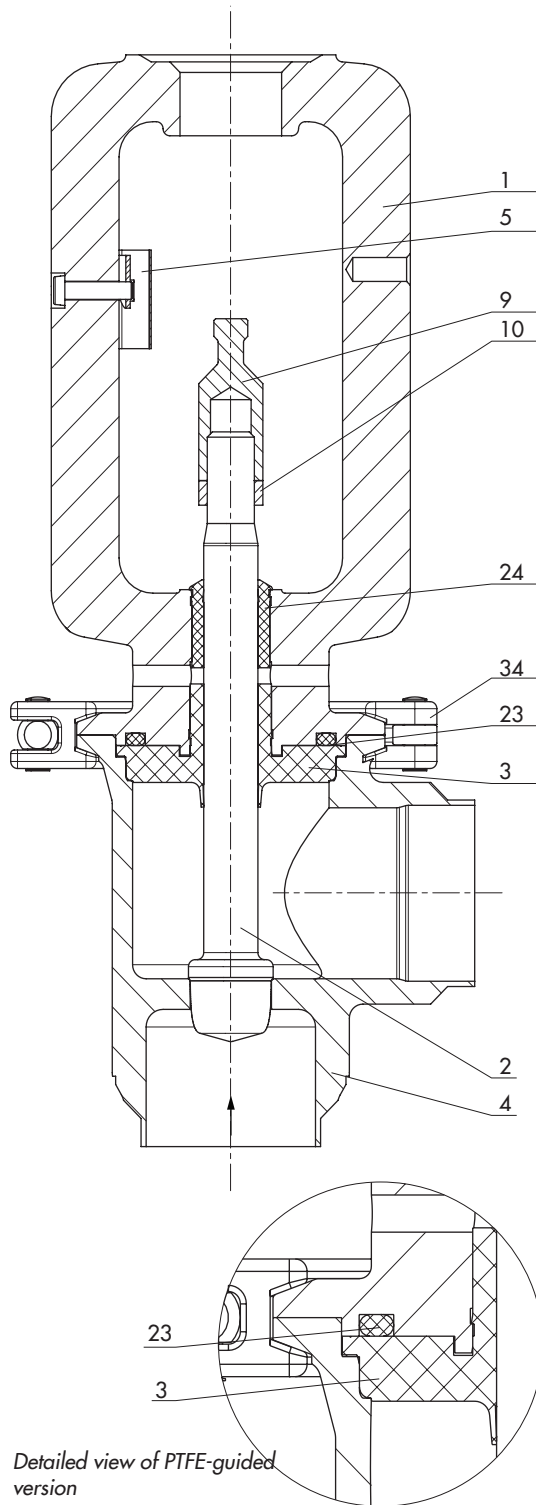


Fig. 4: Detailed view of PTFE-guided version

Fig. 5: Type 3347 Valve, cast body, PEEK-guided version

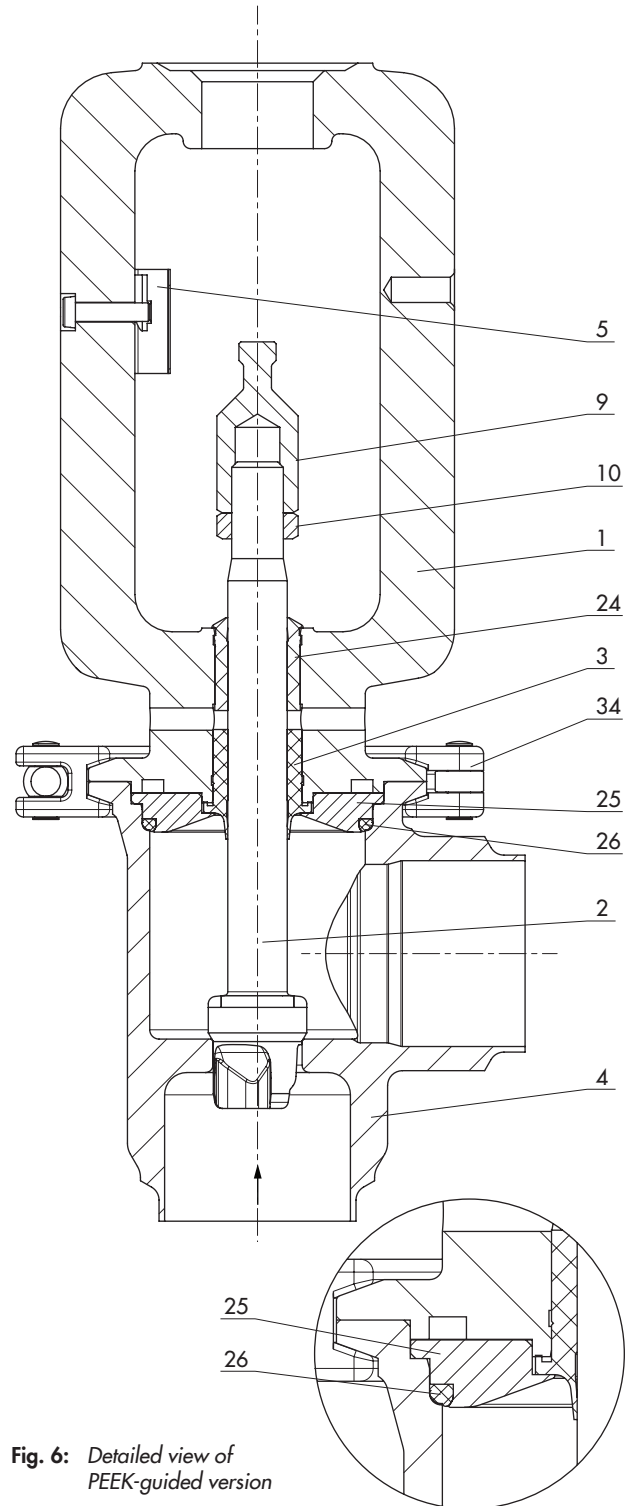


Fig. 6: Detailed view of PEEK-guided version

Fig. 7: Type 3347 Valve, bar stock body, anti-crystallizing seal system

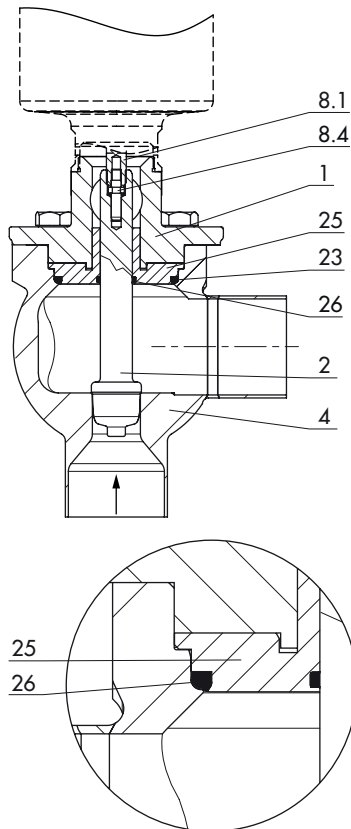


Fig. 8: Detailed view of anti-crystallizing seal system

Fig. 9: Type 3347 Valve, micro-flow valve version, PTFE-guided version

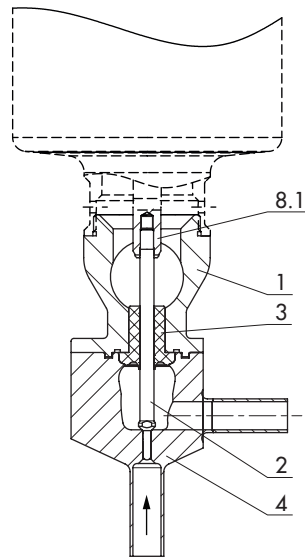
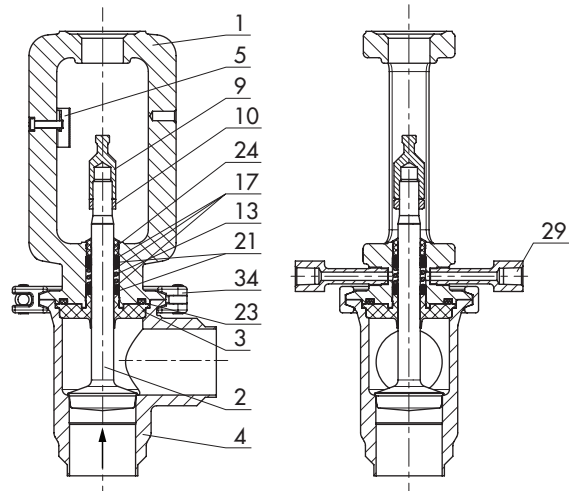


Fig. 10: Type 3347 Valve for combination with Type 3271 Actuator, cast body with steam barrier



PTFE-guided version

PEEK-guided version

Anti-crystallizing seal system

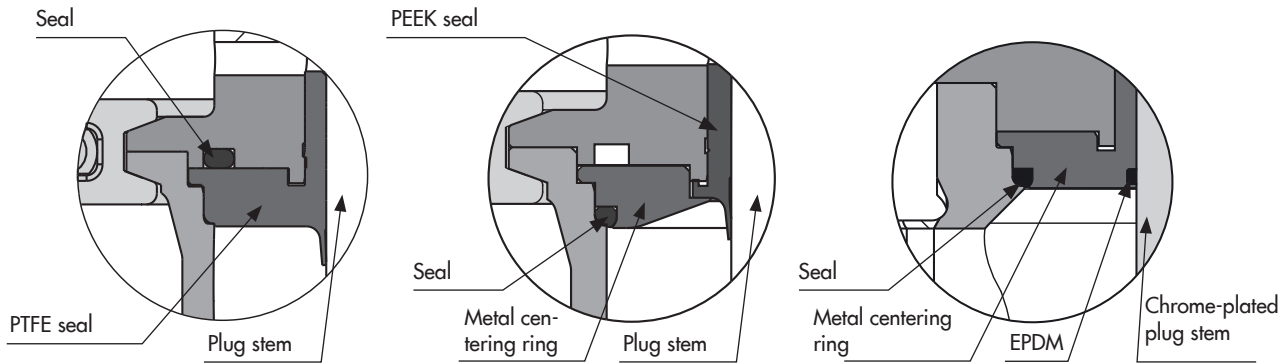



Fig. 11: Overview of seal systems in detailed view

Table 1: Technical data

Table 1.1: Type 3347 Valve

Body version ¹⁾		Micro-flow valve	Casting	Bar stock		
Valve size		DN 6 to 25 (NPS ¼ to 1)	DN 25 to 100 (NPS 1 to 4) ³⁾	DN 15 to 150 (NPS ½ to 6)		
Body/bonnet connection		Bolted bonnet	Clamped	Clamped	Bolted bonnet	
Maximum pressure See Table 1.3 for restrictions		16 bar (230 psi)	16 bar (230 psi)	16 bar (230 psi)	63 bar (914 psi) ⁴⁾	
Seat-plug seal		Metal seal · Soft seal				
Characteristic		Equal percentage or linear				
Rangeability		See Table 3.1 and Table 3.2				
Permissible medium temperature See Table 1.3 for restrictions		-10 to 150 °C (14 to 300 °F)				
Leakage class acc. to IEC 60534-4 or ANSI/FCI 70-2		Metal seal	IV			
		Soft seal	-	VI		
Surface quality		External	Glass bead blasted			
			Ra ≤ 0.6 µm · Polished			
		Internal	Ra ≤ 0.8 µm · Fine machine finish			
			Ra ≤ 0.6 µm · Polished			
			Ra ≤ 0.4 µm · Satin finish			
		Ra ≤ 0.4 µm · Mirror finish				
Versions with 3-A certification	Valve size DN/NPS	-	25 to 100 /1 to 4	15 to 125/½ to 4		
	K _{VS} /C _V		0.4 to 200/0.5 to 190	0.4 to 200/0.5 to 190		
	Connection		Refer to Table 1.3 All listed connections (except for SMS 1146) comply with 3-A regulations.			
	Body material		1.4404/316L · 1.4435/316L Generally AISI 300 (except for 301, 302, 303)	1.4404/316L · 1.4435/316L Generally AISI 300 (except for 301, 302, 303)		
	Internal surface finish		Ra ≤ 0.8 µm			
	Seat-plug seal		Metal seal · Soft seal			
	Plug stem guide		PTFE, PEEK and anti-crystallizing seal system			
	Other		Actuator and valve accessories mounted to meet 3-A regulation requirements.			
	Comments		Seals compliant with 3-A regulations must be used on site by the end user.			
	Version with EHEDG certification (Type EL Class I)		Valve size DN/NPS	-	25 to 100 /1 to 4	32 to 100/1¼ to 4
K _{VS} /C _V		0.4 to 160/0.5 to 190	0.4 to 160/2 to 190			
Connection		Refer to Table 1.3				
Body material		1.4409/CF3M	1.4404/316L · 1.4435/316L			
Internal surface finish		Ra ≤ 0.8 µm				
Seat-plug seal		Metal seal				
Plug stem guide		PTFE				
Leakage detection		Yes				
Comments		Seals compliant with EHEDG requirements must be used on site by the end user.				
Other certification	CFR Title 21 FDA Regulation (EC) No. 1935/2004 Regulation (EU) No. 10/2011 Regulation (EC) No. 2023/2006 USP-VI 121 °C ADI free					
Conformity ²⁾						

¹⁾ Suitable for Group 2 fluids according to European Pressure Equipment Directive 2014/68/EU

²⁾ CE compliance only for versions in DN 32 with 40 bar (NPS 1¼ with 580 psi) and higher; Article 3, Paragraph 3 of PED applies to all other versions

³⁾ DN 15 on request

⁴⁾ Maximum pressure depends on the valve end connections

Table 1.2: Type 3379 Actuator

Piston diameter	mm	63				90							
Effective area	cm²	31				63							
Rated travel	mm	15				15							
Perm. ambient temperature	°C (°F)	-10 to 60 (14 to 140)											
Max. supply pressure	bar (psi)	7 (102)											
Fail-safe position		Stem extends (FA)		Stem retracts (FE)		Stem extends (FA)		Stem extends (FA)		Stem retracts (FE)		Stem retracts (FE)	
Signal pressure	bar (psi)	4 (58)		6 (87)		6 (87)		4.5 (65)		6 (87)		4 (58)	
Bench range	bar (psi)	2.3 to 3.7 (33.4 to 53.7)		2.3 to 3.7 (33.4 to 53.7)		3.3 to 5.6 (47.9 to 81.2)		2.5 to 4.0 (36.3 to 58)		1.0 to 1.9 (14.5 to 27.6)		1.0 to 1.9 (14.5 to 27.6)	
Rated travel	mm	1.5	7.5	1.5	7.5	1.5	7.5	1.5	7.5	1.5	7.5	1.5	7.5
Thrust	N	720				2090		1590		2580		1320	

Type 3271 and Type 3277 Pneumatic Actuators ▶ T 8310-1
Table 1.3: End connections, maximum pressures and EHEDG conformity

The gasket used determines the maximum permissible medium temperature.

Connection	Standard	Valve sizes DN/OD/NPS	Versions up to 16 bar (230 psi)		Versions up to the maximum operating pressure with bolted bonnet ⁴⁾		EHEDG compliance	
			0 to 20 °C (32 to 68 °F)	150 °C (300 °F)	0 to 20 °C (32 to 68 °F)	150 °C (300 °F)		
Welding ends	DIN 11866	Series A	DN 6 to 150	16 bar	13 bar	40 bar	34 bar	•
		Series B ²⁾	OD 10.2 to 168.3	16 bar	13 bar	40 bar	34 bar	
		Series C ³⁾	NPS ¼ to 6	230 psi	174 psi	580 psi	438 psi	
	DIN 11850	Series 2	DN 6 to 150	16 bar	13 bar	40 bar	34 bar	
		ISO 2037/SMS 3008	OD 10.2 to 168.3	16 bar	13 bar	40 bar	34 bar	
		JIS G 3447	DN 25 to 100	16 bar	13 bar	40 bar	34 bar	
JIS G 3459	DN 6 to 150	16 bar	13 bar	40 bar	34 bar			
Clamp connections	DIN 11864-3 form A ¹⁾	Series A	DN 10 to 100	16 bar	13 bar	–	–	•
			DN 16 to 40	–	–	40 bar	34 bar	•
		Series B	OD 13.5 to 88.9	16 bar	13 bar	–	–	•
			OD 13.5 to 33.7	–	–	40 bar	34 bar	•
	Series C	NPS ½ to 4	230 psi	174 psi	–	–	•	
		NPS ½ to 1½	–	–	580 psi	493 psi	•	
	DIN 32676	Series A	DN 6 to 150	16 bar	10 bar	–	–	• ⁷⁾
			DN 6 to 40	–	–	25 bar	21 bar	• ⁷⁾
		Series B	DN 10.2 to 168.3	16 bar	10 bar	–	–	• ⁷⁾
			DN 10.2 to 42.4	–	–	25 bar	21 bar	• ⁷⁾
	Series C	NPS ¼ to 6	230 psi	145 psi	–	–	• ⁷⁾	
		NPS ¼ to 1½	–	–	360 psi	270 psi	• ⁷⁾	
	ISO 2852	Series A	DN 10 to 150	16 bar	10 bar	–	–	• ⁷⁾
			DN 10 to 40	–	–	25 bar	21 bar	• ⁷⁾
	ASME BPE ⁵⁾	Series C	NPS ¼ to 4	230 psi	116 psi	–	–	–
			NPS ¼ to 2½	–	165 psi	360 psi	165 psi	–
	BS 4825 Part 3 ¹⁾	Series C	NPS 1 to 6	230 psi	130 psi	–	–	• ⁷⁾
			NPS 1 to 1½	–	–	360 psi	270 psi	• ⁷⁾
OSS for pipes acc. to JIS G 3447 ¹⁾	Series C	DN 25 to 100	16 bar	9 bar	–	–	–	
		DN 25 to 40	–	–	25 bar	21 bar	–	
OSS for pipes acc. to JIS G 3459 ¹⁾	Series C	DN 25 to 100	16 bar	9 bar	–	–	–	
		DN 25 to 40	–	–	25 bar	21 bar	–	

Connection	Standard	Valve sizes DN/OD/NPS	Versions up to 16 bar (230 psi)		Versions up to the maximum operating pressure with bolted bonnet ⁴⁾		EHEDG compliance	
			Max. operating pressure in bar or psi at a medium temperature of					
			0 to 20 °C (32 to 68 °F)	150 °C (300 °F)	0 to 20 °C (32 to 68 °F)	150 °C (300 °F)		
Threaded couplings	DIN 11864-1 form A ¹⁾	Series A	DN 10 to 100	16 bar	13 bar	–	–	•
			DN 10 to 40	–	–	40 bar	34 bar	•
		Series B	OD 13.5 to 88.9	16 bar	13 bar	–	–	•
			OD 13.5 to 33.7	–	–	40 bar	34 bar	•
		Series C	NPS ½ to 4	230 psi	174 psi	–	–	•
			NPS ½ to 1½	–	–	580 psi	493 psi	•
	DIN 11851 ⁶⁾	DN 10 to 150	16 bar	13 bar	–	–	• ⁷⁾	
		DN 10 to 40	–	–	40 bar	34 bar	• ⁷⁾	
SMS 1146	DN 25 to 100	6 bar	5.5 bar	–	–	–		
Flanges with smooth raised face, however with R _a ≤0.8	Series A	DN 10 to 150	16 bar	9 bar	–	–	•	
		DN 10 to 40	–	–	25 bar	21 bar	•	
	Series B	OD 13.5 to 114.3	16 bar	9 bar	–	–	•	
		OD 13.5 to 33.7	–	–	25 bar	21 bar	•	
	Series C	NPS ½ to 4	230 psi	175 psi	–	–	•	
		NPS ½ to 1½	–	–	580 psi	493 psi	•	

¹⁾ Max. medium temperature ≤140 °C (284 °F)

²⁾ The same applies to ISO 1127

³⁾ The same applies to ASME BPE

⁴⁾ Only after consulting SAMSON. Valves with bolted bonnets must be used for operating pressures >16 bar (>230 psi).

⁵⁾ p_{max} at 121 °C (249 °F)

⁶⁾ Compliance with 3-A regulations provided the groove bottom has a radius R 0.4^{+0.1}₀ (if necessary) and gaskets that meet 3-A requirements are used on site by the end user.

⁷⁾ Gaskets compliant with EHEDG requirements must be used on site by the end user.

Table 2: Materials

Table 2.1: Type 3347 Valve

	Version	Material		
		DIN	ANSI	AFNOR
Body version with lathed seat	Casting	1.4409	CF3M	Z2 CND 17-12
	Bar stock	1.4404/1.4435 ¹⁾	316L ¹⁾	Z2 CND 17-12
	Micro-flow valve (bar stock)	1.4435	316L	Z2 CND 17-12
Bonnet		1.4404 ¹⁾	316L ¹⁾	Z2 CND 17-12
Plug		1.4404 ¹⁾ · Stellite® coating	316L ¹⁾ · Stellite® coating	Z2 CND 17-12 · Stellite® coating

¹⁾ Other materials available on request

Table 2.2: Type 3379 Pneumatic Actuator

Part	Material
Housing and cover	Stainless steel 1.4404/1.4409
Actuator stem	1.4404
Piston	Polyamide, glass fiber reinforced
Dome (visual indicator)	Polycarbonate
Bearing	Polymer
Spring	Spring steel, powder coated
Seals	NBR

– Type 3271 and Type 3277 Pneumatic Actuators
▶ T 8310-1

– Type 3372 Pneumatic Actuator ▶ T 8313

Table 3: K_{VS} coefficients and associated valve sizes

Table 3.1: Standard version

K_{VS}	0.4	0.63	1.0	1.6	2.5	4	6.3	10	16	25	40	60	80	100	160	200
C_V	0.5	0.75	1.2	2	3	5	7.5	12	20	30	47	70	95	120	190	240
Rangeability	50:1		50:1	50:1		25:1 ¹⁾ 50:1		50:1								
Seat Ø	mm	6	6	12		12 24 ¹⁾		24	31	38	48	63	80		100	110
Travel	mm	15											30			
DN	NPS															
15	½	•	•	•	•	•	•									
20	¾	•	•	•	•	•	•									
25	1	•	•	•	•	•	•	•	•							
32	1¼	•	•	•	•	•	•	•	•	•						
40	1½	•	•	•	•	•	•	•	•	•	•					
50	2				•	•	•	•	•	•	•	•				
65	2½							•	•	•	•	•	•			
80	3								•	•	•	•	•	•		
100	4											• ²⁾	• ²⁾	•	•	
125	5													•	•	•

¹⁾ We recommend using a V-port plug in valve sizes DN 40 to 65 for pressures higher than 10 bar as well in valve sizes DN 80 to 125 for pressures higher than 6 bar. A V-port plug is not required for valve sizes smaller than DN 40.

For version with V-port plug

Seat bore	Sb 3 to 6	Sb 12 to 31	Sb 38 to 63	Sb 80 to 110
Parabolic plugs	Standard			
V-port plugs	–	Optional		

²⁾ 30 mm travel

Table 3.2: Micro-flow valve

K_{VS}	0.01	0.016	0.025	0.04	0.063	0.1	0.16	0.25
C_V	0.012	0.02	0.03	0.05	0.075	0.12	0.21	0.3
Rangeability	15:1	20:1	25:1	35:1	45:1	50:1		
Seat Ø	mm	3						
Travel	mm	7.5						
DN	NPS							
6	–	•	•	•	•	•	•	•
8	¼	•	•	•	•	•	•	•
10	⅜	•	•	•	•	•	•	•
15	½	•	•	•	•	•	•	•
20	¾	•	•	•	•	•	•	•
25	1	•	•	•	•	•	•	•

Table 3.3: Actuator matrix

K_{VS}	0.01	0.016	0.025	0.04	0.063	0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4	6.3	10	16	25	40	60	80	100	160	200	
C_V	0.012	0.02	0.03	0.05	0.075	0.12	0.2	0.3	0.5	0.75	1.2	2	3	5	7.5	12	20	30	47	70	95	120	190	240	
Type ... Actuator																									
3379	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3271/ 3277	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3372 ¹⁾	–									•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

¹⁾ Data Sheet ▶ T 8097-1

Table 4: Permissible differential pressures Δp for Type 3347 Angle Valve with Type 3379 Pneumatic Actuator

The maximum permissible pressure and the permissible differential pressures Δp depend on which end connections are used (see Table 1.3).

Table 4.1: Metal seal for leakage class IV

Fail-safe position					Stem extends (FA)			Stem retracts (FE)						
Operating range in bar (psi) with actuator					Actuator size 31 cm ²	2.3 to 3.7 (33.4 to 53.7)	-	-	2.3 to 3.7 (33.4 to 53.7)	2.3 to 3.7 (33.4 to 53.7)	2.3 to 3.7 (33.4 to 53.7)	-	-	-
					Actuator size 63 cm ²	-	2.5 to 4.0 (36.3 to 58)	3.3 to 5.6 (47.9 to 81.2)	-	-	-	1.0 to 1.9 (14.5 to 27.6)	1.0 to 1.9 (14.5 to 27.6)	1.0 to 1.9 (14.5 to 27.6)
Required supply pressure in bar (psi) to open the valve					4 (58)	4.5 (65.3)	6 (87)	-	-	-	-	-	-	
Required supply pressure in bar (psi) to close the valve					-	-	-	4 (58)	5 (72.5)	6 (87)	4 (58)	5 (72.5)	6 (87)	
DN	NPS	K _{vs}	Rated travel	Actuator area in cm ²	Δp when p ₂ = 0 in bar (psi)			Δp when p ₂ = 0 in bar (psi)						
6 to 15	1/8 to 1/2	0.01 to 0.25	7.5	31	40 (580)	-	-	-	40 (580)	-	-	-	-	
15 to 25	1/2 to 1	0.4 to 1.0	15	31	40 (580)	-	-	-	20 (290)	40 (580)	-	-	-	
15 to 50	1/2 to 2	1.6 to 4.0	15	31	30 (435)	-	-	-	10 (145)	30 (435)	-	-	-	
15 to 50	1/2 to 2	1.6 to 4.0	15	63	-	40 (580)	-	-	-	-	40 (580)	-	-	
25 to 50	1 to 2	6.3 to 10	15	63	-	15 (218)	30 (435)	-	-	-	15 (218)	25 (363)	35 (508)	
32 to 50	1 1/4 to 2	16	15	63	-	10 (145)	20 (290)	-	-	-	11 (160)	19 (276)	25 (363)	
40, 50	1 1/2, 2	25	15	63	-	7 (102)	13 (189)	-	-	-	7 (102)	12 (174)	15 (218)	
50	2	40	15	63	-	-	8 (116)	-	-	-	-	7 (102)	9 (131)	

Table 4.2: Soft seal with PEEK for leakage class VI

Fail-safe position					Stem extends (FA)			Stem retracts (FE)						
Operating range in bar (psi) with actuator					31 cm ² actuator area		63 cm ² actuator area		2.3 to 3.7 (33.4 to 53.7)	2.3 to 3.7 (33.4 to 53.7)	2.3 to 3.7 (33.4 to 53.7)	-	-	-
					2.3 to 3.7 (33.4 to 53.7)	-	-	2.5 to 4.0 (36.3 to 58)	3.3 to 5.6 (47.9 to 81.2)	-	-	-	1.0 to 1.9 (14.5 to 27.6)	1.0 to 1.9 (14.5 to 27.6)
Required supply pressure in bar (psi) to open the valve					4 (58)	4.5 (65.3)	6 (87)	-	-	-	-	-	-	
Required supply pressure in bar (psi) to close the valve					-	-	-	4 (58)	5 (72.5)	6 (87)	4 (58)	5 (72.5)	6 (87)	
DN	NPS	K _{VS}	Rated travel	Actuator area in cm ²	Δp when p ₂ = 0 in bar (psi)			Δp when p ₂ = 0 in bar (psi)						
15 to 25	½ to 1	0.4 to 1.0	15	31	40 (580)	-	-	-	20 (290)	40 (580)	-	-	-	
15 to 50	½ to 2	1.6 to 4.0	15	31	15 (218)	-	-	-	-	15 (218)	-	-	-	
15 to 50	½ to 2	1.6 to 4.0	15	63	-	40 (580)	-	-	-	-	40 (580)	-	-	
25 to 50	1 to 2	6.3 to 10	15	63	-	7 (102)	20 (290)	-	-	-	8 (116)	15 (218)	25 (363)	
32 to 50	1¼ to 2	16	15	63	-	-	14 (203)	-	-	-	5 (73)	10 (145)	15 (218)	
40, 50	1½, 2	25	15	63	-	-	7 (102)	-	-	-	-	5 (73)	8 (116)	
50	2	40	15	63	-	-	3 (44)	-	-	-	-	-	4 (58)	

Table 5: Operating ranges and required supply pressures for Type 3347 Angle Valve with metal or soft-seated plug with Type 3271 or Type 3277 Pneumatic Actuator

Table 5.1: Fail-close valve · Valve closed with 0 bar signal pressure

The required supply pressure is 0.2 bar higher than the upper operating range value.

Valve size		K _{vs}	Actuator area in cm ²	Operating range in bar at Δp (valve closed)			
DN	NPS			5 bar ¹⁾	10 bar	16 bar	
15 20 25	½ ¾ 1	0.4/0.63/1.0	120	0.4 to 2.0	0.4 to 2.0	0.4 to 2.0	
			175v2	0.2 to 1.0	0.2 to 1.0	0.2 to 1.0	
			240	0.2 to 1.0	0.2 to 1.0	0.2 to 1.0	
		1	1.6/4	120	0.4 to 2.0	0.4 to 2.0	1.4 to 2.3
				175v2	0.4 to 1.2	0.4 to 1.2	0.4 to 1.2
				240	0.2 to 1.0	0.2 to 1.0	0.3 to 1.1
25	1	6.3/10	120	1.4 to 2.3	1.4 to 2.3	1.4 to 2.3	
			175v2	0.8 to 2.4	0.8 to 2.4	0.8 to 2.4	
			240	0.3 to 1.1	0.4 to 2.0	0.6 to 2.2	
32 40	1¼ 1½	16	120	1.4 to 2.3	1.4 to 2.3	2.1 to 3.3	
			175v2	0.8 to 2.4	0.8 to 2.4	1.3 to 2.9	
			240	0.4 to 2.0	0.6 to 2.2	0.9 to 3.3	
40	1½	25	120	1.4 to 2.3	2.1 to 3.3	–	
			175v2	0.8 to 2.4	1.3 to 2.9	1.7 to 3.3	
			240	0.6 to 2.2	0.9 to 3.3	–	
			350	0.4 to 1.2	0.8 to 2.4	0.8 to 2.4	
50	2	40	175v2	1.3 to 2.9	1.7 to 3.3	–	
			240	0.9 to 3.3	–	–	
			350	0.8 to 2.4	0.8 to 2.4	1.4 to 2.3	
65	2½	60	350	0.8 to 2.4	1.4 to 2.3	2.1 to 3.3	
80	3	80	350	1.4 to 2.3	2.1 to 3.3	1.6 to 2.4 (700 cm ²)	
			355v2	1.6 to 2.4	2.35 to 2.95	2.95 to 3.65	
100	4	100	700	0.8 to 2.4	1.4 to 2.3	2.1 to 3.3	
		160		1.4 to 2.3	2.1 to 3.3	2.6 to 4.3	
		100	750v2	0.8 to 2.4	1.4 to 2.4	1.4 to 2.4	
		160		0.8 to 2.4	1.4 to 2.4	2.1 to 3.8	
125	5	200	700	1.4 to 2.3	2.1 to 3.3	2.6 to 4.3	
			750v2	1.4 to 2.4	1.65 to 2.65	2.5 to 4.2	

¹⁾ Select a smaller actuator for low signal pressures.

Table 5.2: Operating ranges and required supply pressure for micro-flow valve with "actuator stem extends" fail-safe position

Actuator area in cm ²	Travel in mm	Operating range in bar at Δp (valve closed)		
		5 bar	10 bar	16 bar
120	7.5	0.8 to 1.6	0.8 to 1.6	0.8 to 1.6

Table 5.3: Fail-open valve · Valve closed with the required supply pressure

Valve size		K _{vs}	Actuator area in cm ²	Travel in mm	Operating range	Required supply pressure in bar at Δp		
DN	NPS					5 bar ¹⁾	10 bar	16 bar
6 8 10 15	1/8 1/4 3/8 1/2	0.01 to 0.25	120	7.5	0.8 to 1.6	1.2	1.2	1.2
15 20 25	1/2 3/4 1	0.4/0.63/1.0	120	15	0.4 to 2.0	2.4	2.4	2.4
			175v2		0.2 to 1.0	1.2	1.2	1.2
			240		0.2 to 1.0	1.2	–	1.2
		1.6/4	120	15	0.4 to 2.0	2.4	2.4	3.4
			175v2		0.2 to 1.0	1.4	1.4	1.4
			240		0.2 to 1.0	1.4	1.4	1.4
25	1	6.3/10	120	15	0.4 to 2.0	3.4	3.4	3.4
			175v2		0.2 to 1.0	1.5	1.6	1.8
			240		0.2 to 1.0	1.4	1.4	1.6
32 40	1 1/4 1 1/2	16	120	15	0.4 to 2.0	3.4	3.4	4.1
			175v2		0.2 to 1.0	1.6	1.8	2.1
			240		0.2 to 1.0	1.4	1.6	1.9
40	1 1/2	25	120	15	0.4 to 2.0	3.4	4.1	–
			175v2		0.2 to 1.0	1.8	2.1	2.5
			240		0.2 to 1.0	1.6	1.9	–
			350			1.4	1.8	1.8
50	2	40	175v2	15	0.2 to 1.0	2.0	2.6	3.3
			240		0.2 to 1.0	1.9	–	–
			350			1.8	1.8	2.4
65	2 1/2	60	350	15	0.2 to 1.0	1.8	2.4	3.1
80	3	80	350	15	0.2 to 1.0	2.4	3.1	4
			355v2		0.6 to 1.0	2.1	2.9	3.8
100	4	100	355v2	15	0.2 to 1.0	2.1	2.9	3.8
		160			0.2 to 1.0	2.6	3.8	5.3
		100	700	30	0.2 to 1.0	1.7	2.1	2.5
		160			0.2 to 1.0	2.4	3.1	3.6
		100	750v2	30	0.2 to 1.0	1.6	1.9	2.4
		160			0.2 to 1.0	1.8	2.4	3.1
125	5	200	355v2	30	0.2 to 1.0	2.9	4.4	–
			700		0.2 to 1.0	2.4	3.1	3.6
			750v2		0.2 to 1.0	1.9	2.6	3.5

¹⁾ Select a smaller actuator for low signal pressures.

Table 5.4: Required supply pressure for micro-flow valve with "actuator stem retracts" fail-safe position

Actuator area in cm ²	Travel in mm	Operating range	Required supply pressure in bar at Δp		
			5 bar	10 bar	16 bar
120	7.5	0.8 to 1.6	1.2	1.2	1.2

Table 6: Comparison table: operating ranges and bench ranges for "actuator stem extends" fail-safe position

Type ... Actuator	Actuator area in cm ²	Travel in mm	Operating range in bar (bench range, if different)				
3271/3277	120	7.5	0.8 to 1.6	–	–	–	–
	120	15	0.4 to 2.0	1.4 to 2.3	2.1 to 3.3	–	–
	175v2	15	0.4 to 1.2 (0.2 to 1.0)	0.8 to 2.4 (0.4 to 2.0)	1.7 to 3.3 (1.3 to 2.9)	–	–
	240	15	0.3 to 1.1 (0.2 to 1.0)	0.6 to 2.2 (0.4 to 2.0)	0.9 to 3.3 (0.6 to 3.0)	–	–
	350	15	0.4 to 1.2 (0.2 to 1.0)	0.8 to 2.4 (0.4 to 2.0)	1.4 to 2.3	1.6 to 2.4	2.1 to 3.3
	355v2	15	–	1.6 to 2.4 (0.4 to 2.0)	2.35 to 2.95 (1.4 to 2.6)	2.95 to 3.65 (1.9 to 3.3)	
	700	30	–	0.8 to 2.4 (0.4 to 2.0)	1.4 to 2.3	2.1 to 3.3	2.6 to 4.3
	750v2	30	–	0.8 to 2.4 (0.4 to 2.0)	–	1.65 to 2.65 (1.4 to 2.4)	2.5 to 4.2 (2.1 to 3.8)
3379	31	7.5	–	–	2.3 to 3.7	–	–
	31	15	–	–	2.3 to 3.7	–	–
	63	15	–	–	–	2.5 to 4.0	3.3 to 5.6

Table 7: Dimensions and weights · Dimensions in mm and weights in kg

Table 7.1: Welding ends

Valve	DN OD NPS	DN OD NPS	6	8	10	15	20	25	32	40	50	65	80	100	125	150
			10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	168.3
			–	¼	⅜	½	¾	1	1¼	1½	2	2½	3	4	–	6
DIN 11866, Series A (DIN 11850 Series 2)	DN	L ¹⁾ (cast)	–	–	–	–	–	50 ²⁾	56	67	72	85	98	110	–	On request
		L ¹⁾ (bar stock)	–	–	–	70	70	70	70	70	85	105	105	130	130	
		L (bar stock, micro-flow valve)	50	50	50	50	–	–	–	–	–	–	–	–	–	
		Ød2	8	10	13	19	23	29	35	41	53	70	85	104	129	
		t	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2	
DIN 11866 Series B	OD	L ¹⁾ (cast)	–	–	–	–	–	55	66	70	82	105	110	110	–	On request
		L ¹⁾ (bar stock)	–	–	–	70	70	70	70	70	85	105	105	130	130	
		L (bar stock, micro-flow valve)	50	50	50	50	–	–	–	–	–	–	–	–	–	
		Ød2	10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	
		t	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.6	
DIN 11866 Series C ASME BPE	NPS	L ¹⁾ (cast)	–	–	–	–	–	55	–	70	82	105	110	150	–	On request
		L ¹⁾ (bar stock)	–	–	–	70	70	70	–	70	85	105	105	130	130	
		L (bar stock, micro-flow valve)	40	–	50	50	–	–	–	–	–	–	–	–	–	
		Ød2	6.35	–	9.53	12.7	19.05	25.4	–	38.1	50.8	63.5	76.2	101.6	–	
		t	0.89	–	0.89	1.65	1.65	1.65	–	1.65	1.65	1.65	1.65	2.11	–	
ISO 2037	OD	L ¹⁾ (cast)	–	–	–	–	–	55	66	70	82	105	110	150	–	On request
		L ¹⁾ (bar stock)	–	–	–	–	–	70	70	70	85	105	105	130	130	
		L (bar stock, micro-flow valve)	–	–	50	50	–	–	–	–	–	–	–	–	–	
		Ød2	–	–	12	17.2	21.3	25	33.7	38	51	63.5	76.1	101.6	139.7	
		t	–	–	1	1	1	1.2	1.2	1.2	1.2	1.6	1.6	2	2	
JIS G 3447	NPS	L ¹⁾ (cast)	–	–	–	–	–	55	66	70	82	105	110	150	–	On request
		L ¹⁾ (bar stock)	–	–	–	–	–	70	70	70	85	105	105	130	–	
		L (bar stock, micro-flow valve)	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Ød2	–	–	–	–	–	25.4	31.8	38.1	50.8	63.5	76.3	101.6	–	
		t	–	–	–	–	–	1.2	1.2	1.2	1.5	2	2	2	–	
JIS G 3459	NPS	L ¹⁾ (cast)	–	–	–	–	–	55	66	70	82	105	110	150	–	On request
		L ¹⁾ (bar stock)	–	–	–	70	70	70	70	70	85	105	105	130	130	
		L (bar stock, micro-flow valve)	50	50	50	50	–	–	–	–	–	–	–	–	–	
		Ød2	10.5	13.8	17.3	21.7	27.2	34	42.7	48.6	60.5	76.3	89.1	114.3	139.8	
		t	1	1.2	1.2	1.65	1.65	1.65	1.65	1.65	1.65	2.1	2.1	2.1	2.8	

¹⁾ Dimensions are not standardized

²⁾ L according to DIN 11852

Table 7.2: Clamp connections

Face-to-face dimensions of special versions on request

Valve	DN OD NPS	DN OD NPS	6	8	10	15	20	25	32	40	50	65	80	100	125	150
			10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	168.3
			-	¼	⅜	½	¾	1	1¼	1½	2	2½	3	4	-	6
DIN 11864-3 form A, Series A	DN	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	60.3	70	88.9	88.9	95.3	114.3	-	
		L3 (bar stock, micro-flow valve)	-	-	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	-	-	34	34	50.5	50.5	50.5	64	77.5	91	106	130	-	
		Ød1	-	-	10	16	20	26	32	38	50	66	81	100	-	
DIN 11864-3 form A, Series B	OD	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	-	On request	
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	60.3	70	88.9	88.9	95.3	-		
		L3 (bar stock, micro-flow valve)	-	-	50	50	-	-	-	-	-	-	-	-		
		ØC3	-	-	34	34	50.5	50.5	64	64	91	106	119	-		
		Ød1	-	-	10.3	18.1	23.7	29.7	38.4	44.3	56.3	72.1	84.3	-		
DIN 11864-3 form A, Series C	NPS	L3 (cast)	-	-	-	-	-	60.3	-	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	-	70	88.9	88.9	95.3	114.3	-	
		L3 (bar stock, micro-flow valve)	-	-	-	50	-	-	-	-	-	-	-	-	-	
		ØC3	-	-	-	34	34	50.5	-	64	77.5	91	106	130	-	
		Ød1	-	-	-	9.4	15.75	22.1	-	34.8	47.5	60.2	72.9	97.38	-	
DIN 32676, Series A	DN	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	60.3	70	88.9	88.9	95.3	114.3	130	
		L3 (bar stock, micro-flow valve)	50	50	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	25	25	34	34	34	50.5	50.5	50.5	64	91	106	119	155	
		Ød1	6	8	10	16	20	26	32	38	50	66	81	100	125	
DIN 32676 Series B	OD	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	60.3	60.3	60.3	60.3	60.3	70	88.9	88.9	95.3	114.3	130	
		L3 (bar stock, micro-flow valve)	50	50	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	25	25	25	50.5	50.5	50.5	64	64	77.5	91	106	130	155	
		Ød1	7.0	10.3	14.0	18.1	23.7	29.7	38.4	44.3	56.3	72.1	84.3	109.7	134.5	
DIN 32676 Series C	NPS	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	-	70	88.9	88.9	95.3	114.3	-	
		L3 (bar stock, micro-flow valve)	35	-	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	25	-	25	25	25	50.5	-	50.5	64	77.5	91	119	-	
		Ød1	4.57	-	7.75	9.4	15.75	22.1	-	34.8	47.5	60.2	72.9	97.38	-	
ISO 2852	DN	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	60.3	70	88.9	88.9	95.3	114.3	130	
		L3 (bar stock, micro-flow valve)	-	-	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	-	-	34	34	34	50.5	50.5	50.5	64	77.5	91	119	155	
		Ød1	-	-	10	15.2	19.3	22.6	31.3	35.6	48.6	60.3	72.9	97.6	135.7	
ASME BPE	NPS	L3 (cast)	-	-	-	-	-	60.3	-	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	60.3	60.3	60.3	-	70	88.9	88.9	95.3	114.3	-	
		L3 (bar stock, micro-flow valve)	35	-	50	50	-	-	-	-	-	-	-	-	-	
		ØC3	25	-	25	25	25	50.5	-	50.5	64	77.5	91	119	-	
		Ød1	4.57	-	7.75	9.4	15.75	22.1	-	34.8	47.5	60.2	72.9	97.38	-	
BS 4825 Part 3	NPS	L3 (cast)	-	-	-	-	-	60.3	-	70	88.9	88.9	95.3	114.3	-	On request
		L3 (bar stock)	-	-	-	-	-	60.3	-	70	88.9	88.9	95.3	114.3	130	
		ØC3	-	-	-	-	-	50.5	-	50.5	64	77.5	91	119	155	
		Ød1	-	-	-	-	-	22.2	-	34.9	47.6	60.3	73	97.6	135.7	

Valve	DN OD NPS	DN OD NPS	6	8	10	15	20	25	32	40	50	65	80	100	125	150
			10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	168.3
			-	¼	⅜	½	¾	1	1¼	1½	2	2½	3	4	-	6
OSS for pipes acc. to JIS G 3447	OD NPS	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	-	-	On request
		L3 (bar stock)	-	-	-	-	-	60.3	60.3	70	88.9	88.9	95.3	-	-	
		ØC3	-	-	-	-	-	50.5	50.5	50.5	64	77.5	91	119	-	
		Ød1 (OD)	-	-	-	-	-	30.7	39.4	45.3	57.2	72.1	84.9	110.1	-	
		Ød1 (NPS)	-	-	-	-	-	23	29.4	35.7	47.8	59.5	72.3	97.6	-	
OSS for pipes acc. to JIS G 3459	NPS	L3 (cast)	-	-	-	-	-	60.3	66	70	88.9	88.9	95.3	-	-	On request
		L3 (bar stock)	-	-	-	-	-	60.3	60.3	70	88.9	88.9	95.3	-	-	
		ØC3	-	-	-	-	-	50.5	50.5	50.5	64	77.5	91	119	-	
		Ød1	-	-	-	-	-	30.7	39.4	45.3	57.2	72.1	84.9	110.1	-	

Table 7.3: Threaded couplings

Face-to-face dimensions of special versions on request

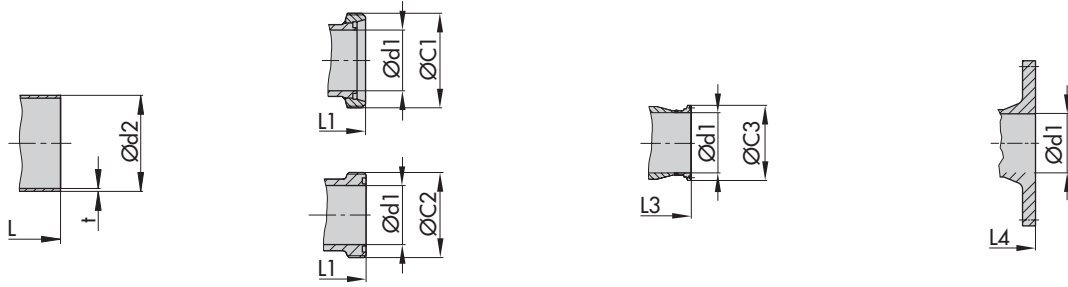
Valve	DN OD NPS	DN OD NPS	6	8	10	15	20	25	32	40	50	65	80	100	125	150
			10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	168.3
			-	¼	⅜	½	¾	1	1¼	1½	2	2½	3	4	-	6
DIN 11864-1 form A, Series A and DIN 11887 Series 1	DN	L1 (cast)	-	-	-	-	-	64	70	80	85	100	115	130	-	On request
		L1 (bar stock)	-	-	-	64	64	64	70	80	85	100	115	130	-	
		L1 (bar stock, micro-flow valve)	-	-	50	50	-	-	-	-	-	-	-	-	-	
		ØC1	-	-	RD 28x⅝	RD 34x⅝	RD 44x⅝	RD 52x⅝	RD 58x⅝	RD 65x⅝	RD 78x⅝	RD 95x⅝	RD 110x¼	RD 130x¼	-	
		Ød1	-	-	10	16	20	26	32	38	50	66	81	100	-	
DIN 11864-1 form A, Series B	OD	L1 (cast)	-	-	-	-	-	64	70	80	85	100	115	130	-	On request
		L1 (bar stock)	-	-	-	64	64	64	70	80	85	100	115	130	-	
		L1 (bar stock, micro-flow valve)	-	-	-	50	-	-	-	-	-	-	-	-	-	
		ØC2	-	-	-	RD 44x⅝	RD 52x⅝	RD 58x⅝	RD 65x⅝	RD 78x⅝	RD 95x⅝	RD 110x¼	RD 130x¼	-	-	
		Ød1	-	-	-	18.1	23.7	29.7	38.4	44.3	56.3	72.1	84.3	-	-	
DIN 11864-1 form A, Series C	NPS	L1 (cast)	-	-	-	-	-	64	-	80	85	100	115	130	-	On request
		L1 (bar stock)	-	-	-	-	-	64	-	80	85	100	115	130	-	
		ØC3	-	-	-	-	-	RD 52x⅝	-	RD 65x⅝	RD 78x⅝	RD 95x⅝	RD 110x¼	RD 130x¼	-	
		Ød1	-	-	-	-	-	22.1	-	34.8	47.5	60.2	72.9	97.38	-	
ISO 2853 (IDF)	DN	L1 (cast)	-	-	-	-	-	55	66	70	82	105	110	150	-	On request
		L1 (bar stock)	-	-	-	-	-	64	70	80	85	100	115	130	-	
		ØC2	-	-	-	-	-	37.1x⅝	45.9x⅝	50.6x⅝	64.1x⅝	77.6x⅝	91.1x⅝	-	-	
		Ød1	-	-	-	-	-	22.6	31.3	35.6	48.6	60.3	72.9	-	-	
SMS 1146	DN	L1 (cast)	-	-	-	-	-	55	66	70	82	105	110	150	-	On request
		L1 (bar stock)	-	-	-	-	-	55	66	70	82	105	110	150	-	
		ØC2	-	-	-	-	-	RD 40x⅝	RD 48x⅝	RD 60x⅝	RD 70x⅝	RD 85x⅝	RD 98x⅝	RD 125x¼	-	
		Ød1	-	-	-	-	-	22.6	29.6	35.6	48.6	60.3	72.9	100	-	

Table 7.4: Flanges

Face-to-face dimensions of special versions on request

Valve	DN OD NPS	DN	6	8	10	15	20	25	32	40	50	65	80	100	125	150
		OD	10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3	139.7	168.3
		NPS	-	¼	⅜	½	¾	1	1¼	1½	2	2½	3	4	-	6
DIN 11864-2 form A, Series A	DN	L4 (cast)	-	-	-	-	-	100	105	115	125	145	155	175	-	On request
		L4 (bar stock)	-	-	-	90	95	100	105	115	125	145	155	175	200	
		L4 (bar stock, micro-flow valve)	-	-	90	90	-	-	-	-	-	-	-	-	-	
		Ød1	-	-	10	16	20	26	32	38	50	66	81	100	125	
DIN 11864-2 form A, Series B	OD	L4 (cast)	-	-	-	-	-	100	105	115	125	145	155	175	-	On request
		L4 (bar stock)	-	-	-	90	95	100	115	115	125	145	155	175	-	
		L4 (bar stock, micro-flow valve)	-	90	90	90	-	-	-	-	-	-	-	-	-	
		Ød1	-	10.3	14.0	18.1	23.7	29.7	38.4	44.3	56.3	72.1	84.3	109.7	-	
DIN 11864-2 form A, Series C	NPS	L4 (cast)	-	-	-	-	-	100	-	115	125	145	155	175	-	On request
		L4 (bar stock)	-	-	-	90	95	100	-	115	125	145	155	175	-	
		L4 (bar stock, micro-flow valve)	-	-	-	90	-	-	-	-	-	-	-	-	-	
		Ød1	-	-	-	9.4	15.75	22.1	-	34.8	47.5	-	-	-	-	

Dimensional drawings of end connections

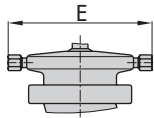


Welding end

Threaded couplings according to DIN 11887 (11851) or IDF (top) and threaded couplings according to SMS standard (bottom)

Clamp connections according to ISO 2852

Flange connection according to DIN EN 1092-1



Steam barrier, $G \frac{1}{4}$ connections (not for version compliant with EHEDG regulations)

Table 8: Dimensions and weights for valves with Type 3271 and Type 3277 Pneumatic Actuators

Table 8.1: Dimensions depending on the actuator size

Actuator area	cm ²	120	175v2	240	350	355v2	700	750v2
Diaphragm $\varnothing D$	mm	168	215	240	280	280	390	394
H ¹⁾	mm	69	78	62	82	121	199	236
H3 ²⁾	mm	110	110	110	110	110	190	190
H5	Type 3277	mm	88	101	101	101	101	101
Thread	Type 3271	M30x1.5						
	Type 3277	M30x1.5						
α	Type 3271	$G \frac{1}{8}$ ($\frac{1}{8}$ NPT)	$G \frac{1}{4}$ ($\frac{1}{4}$ NPT)	$G \frac{1}{4}$ ($\frac{1}{4}$ NPT)	$G \frac{3}{8}$ ($\frac{3}{8}$ NPT)	$G \frac{3}{8}$ ($\frac{3}{8}$ NPT)	$G \frac{3}{8}$ ($\frac{3}{8}$ NPT)	$G \frac{3}{8}$ ($\frac{3}{8}$ NPT)
$\alpha 2$	Type 3277	–	$G \frac{3}{8}$	$G \frac{3}{8}$	$G \frac{3}{8}$	$G \frac{3}{8}$	$G \frac{3}{8}$	$G \frac{3}{8}$

1) Height with welded-on lifting eyelet or height of eyebolt according to DIN 580. Height of the swivel hoist may differ. Actuators up to 355v2 cm² without lifting eyelet

2) Minimum clearance required to remove the actuator

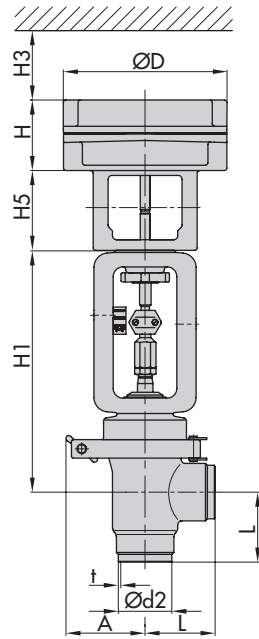
Table 8.2: General dimensions and weights

Valve	DN	6	8	10	15	20	25	32	40	50	65	80	100	125
	NPS	–	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	5
Common dimensions														
A	Cast	–	–	–	–	–	70	80	80	90	100	110	130	–
	Bar stock	–	–	–	80	80	80	80	80	90	110	110	130	130
Height H1		–	–	–	234	231	227	229	234	240	266	274	306	314
E (steam barrier)	Cast	–	–	–	–	–	162	164	164	164	192	203	178	–
	Bar stock	–	–	–	164	164	164	164	164	164	187	187	212	212
Valve weight in kg (approx.)														
With welding ends, threaded couplings, clamp connections for	Cast	–	–	–	–	–	5	5.5	6	7	11	14	19	–
	Bar stock	–	–	–	7	7	7	7.5	8	10	19	19	27	33
With flanges for body version	Cast	–	–	–	–	–	7.5	9	10	12	17	21	29	–
	Bar stock	–	–	–	8.5	9	9.5	11	12	15	25	27	37	46

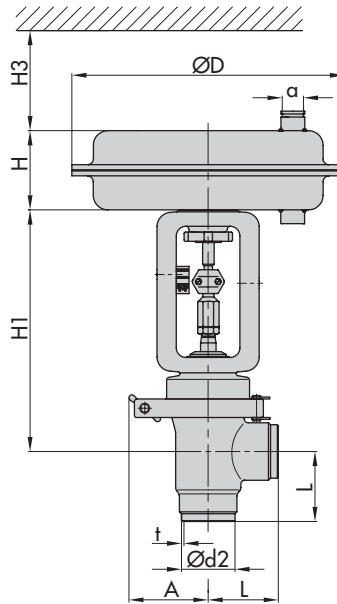
Table 8.3: Weights of Type 3271 and Type 3277 Pneumatic Actuators · With and without handwheel

Actuator	cm ²	120	175v2	240	350	355v2	700	750v2	
Type 3271	Without handwheel	kg	2.5	6	5	8	15	22	36
	With handwheel	kg	-	10	9	13	20	27	41
Type 3277	Without handwheel	kg	3.2	10	9	12	19	26	40
	With handwheel	kg	-	14	13	17	24	31	45

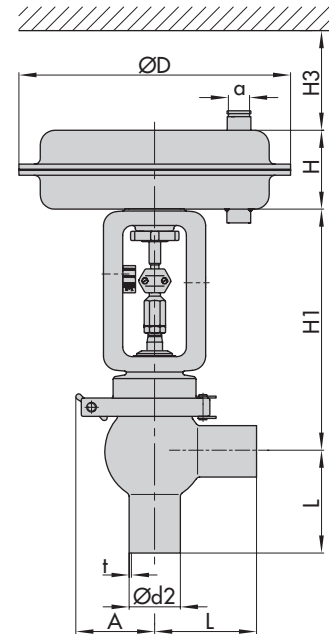
Dimensional drawings of Type 3347 Valve with Type 3271 and Type 3277 Pneumatic Actuators



Type 3347-7 Control Valve with welding ends



Type 3347-1 Control Valve with welding ends



Type 3347-1 Control Valve with welding ends

Table 9: Dimensions and weights of valves with Type 3379 Pneumatic Piston Actuator (including Type 3724 Positioner)

Table 9.1: Dimensions and weights depending on the actuator size

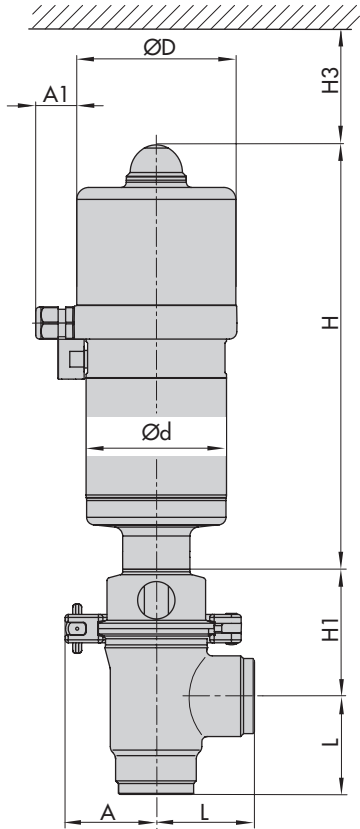
Piston diameter	mm	63	90
Effective area	cm ²	31	63
Height H	mm	285	285
Height H3	mm	200	200
Length A1	mm	30	30
Diameter ØD	mm	108	108
Diameter Ød	mm	69	94
Weight	(approx. kg)	3.7	4.9

Table 9.2: General dimensions and weights

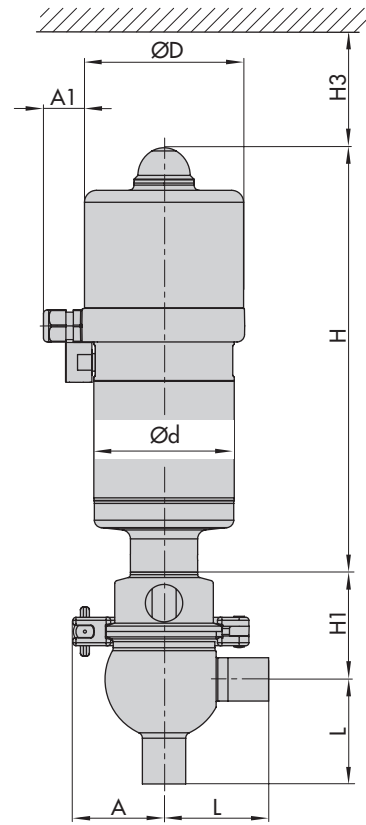
Valve	DN ¹⁾		6	8	10	15	20	25	32	40	50
	OD		10.2	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3
	NPS		-	¼	⅜	½	¾	1	1¼	1½	2
A	Cast	Clamp connection	-					70	80	80	90
	Bar stock	Clamp connection	-			80	80	80	80	80	90
	Bar stock	Flange connection	-			47	47	47	47	47	54
	Bar stock (micro-flow valve)	Flange connection	27				-				
Height H1	Cast	Clamp connection	-					72	69	79	87
	Bar stock	Clamp connection	-			81	78	73	75	80	87
		Flange connection	-			81	78	73	75	80	88
	Bar stock (micro-flow valve)	Flange connection	66	66	64	61	-				
E (steam barrier)	Cast	-					162	164	164	164	
	Bar stock	-			164	164	164	164	164	164	
Valve weight - Body with welding ends											
Weight	Cast	Clamp connection	-					1.5	2.0	2.5	3.7
	Bar stock	Clamp connection	-			3.0	2.9	2.7	3.1	3.2	4.2
		Flange connection	-			2.9	2.8	2.7	3.0	3.1	4.3
	Bar stock (micro-flow valve)	Flange connection	0.9	0.9	0.9	0.9	-				

¹⁾ Values in parentheses according to DIN 11866 Series B and DIN 11864-1 form A, Series B

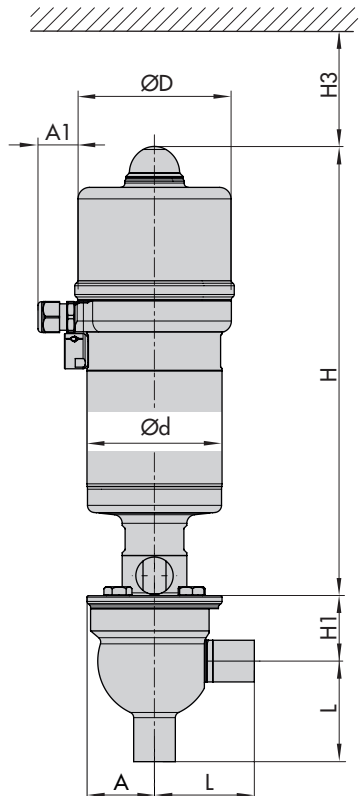
Dimensional drawings of Type 3347 Valve with Type 3379 Pneumatic Piston Actuator (including Type 3724 Positioner)



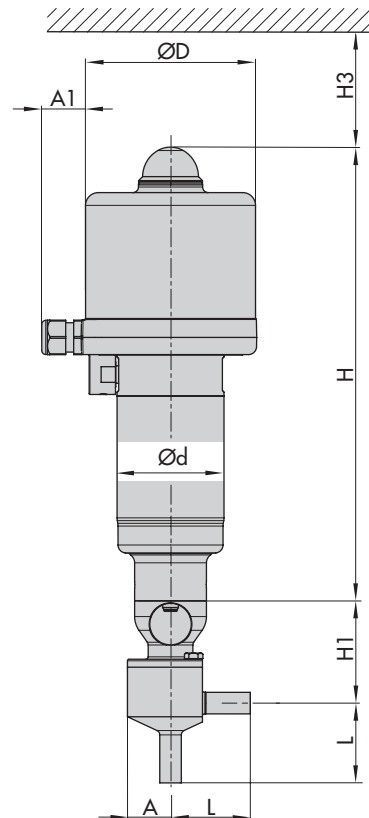
Type 3347/3379/3724 Control Valve with welding ends and bonnet with clamp connections · Version with cast body



Type 3347/3379/3724 Control Valve with welding ends · Version with bar stock body



Type 3347/3379/3724 Control Valve with welding ends and bolted bonnet · Bar stock version

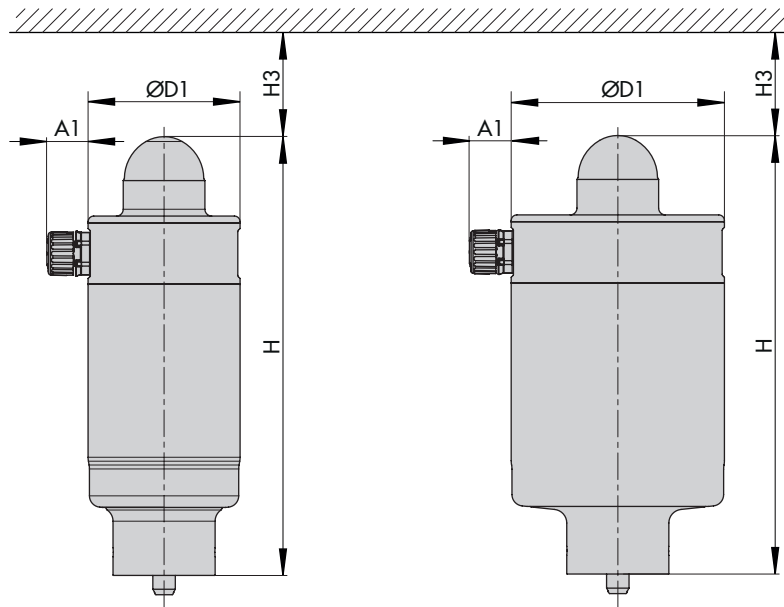


Type 3347/3379/3724 Control Valve with welding ends · Micro-flow valve version

Table 9.3: Dimensions and weights for Type 3379 Pneumatic Actuator without positioner

Piston diameter	mm	63	90
Effective area	cm ²	31	63
Height H	mm	195	
Height H3	mm	150	150
Length A1	mm	20	
Diameter ØD1	mm	69	94
Weight	kg	1.8	3.1

Dimensional drawings of Type 3379 Actuator without positioner



Ordering text

Pneumatic control valve	DN .../NPS .../OD ...	Actuator	Type 3271/3277 (▶ T 8310-1), Type 3372 (▶ T 8313) or Type 3379
Materials according to	DIN/ANSI/AFNOR	Actuator area/effective area	... cm ²
End connections according to Table 1.3	Welding ends Threaded couplings Clamp connections Flanges	Rated signal range	... bar
Flow coefficient	K _{VS} .../C _V ...	Fail-safe position	Fail-close or fail-open
Characteristic	Equal percentage/linear	Additional equipment	Type 3724 Positioner (▶ T 8395) Positioner and/or limit switch (▶ T 8350)
Seat-plug seal	Metal or soft seal		
Steam barrier	With or without (not for version compliant with EHEDG regulations)		
Body surface finish	Polished outsides and/or insides R _a according to Table 1.1		