

# Pneumatic Control Valve Type 3241-1 DWA, -7 DWA, -9 DWA Globe Valve Type 3241 DWA

## ANSI version

### Application

Control valve for PSA plants (Pressure Swing Adsorption)  
(German: DWA)

**Valve size** 1/2" to 6"

**Pressure rating** ANSI Class 125 to 300

**Temperatures** -20 to 430 °F (-29 to +220 °C)

**Industry codes** ANSI, ASME and ASTM



Type 3241 Globe Valve with:

- Type 3271 Pneumatic Actuator (Type 3241-1 Control Valve)
- Type 3277 Pneumatic Actuator (Type 3241-1 Control Valve) for integral positioner attachment
- Type 3275 Pneumatic Piston Actuator (Type 3241-9 Control Valve)

Valve body manufactured of:

- Stainless carbon steel in acc. with ASTM specification
- Forged steel or stainless forged steel
- Stainless carbon steel
- Undivided valve bonnet

Valve plug:

- Soft sealing
- Lapped-in metal.

The control valves are designed according to the modular assembly principle and can be equipped with various accessories:

Positioners, solenoid valves and other accessories according to IEC 60534-6-1 and NAMUR recommendation. See Information Sheet T 8350 EN for details.

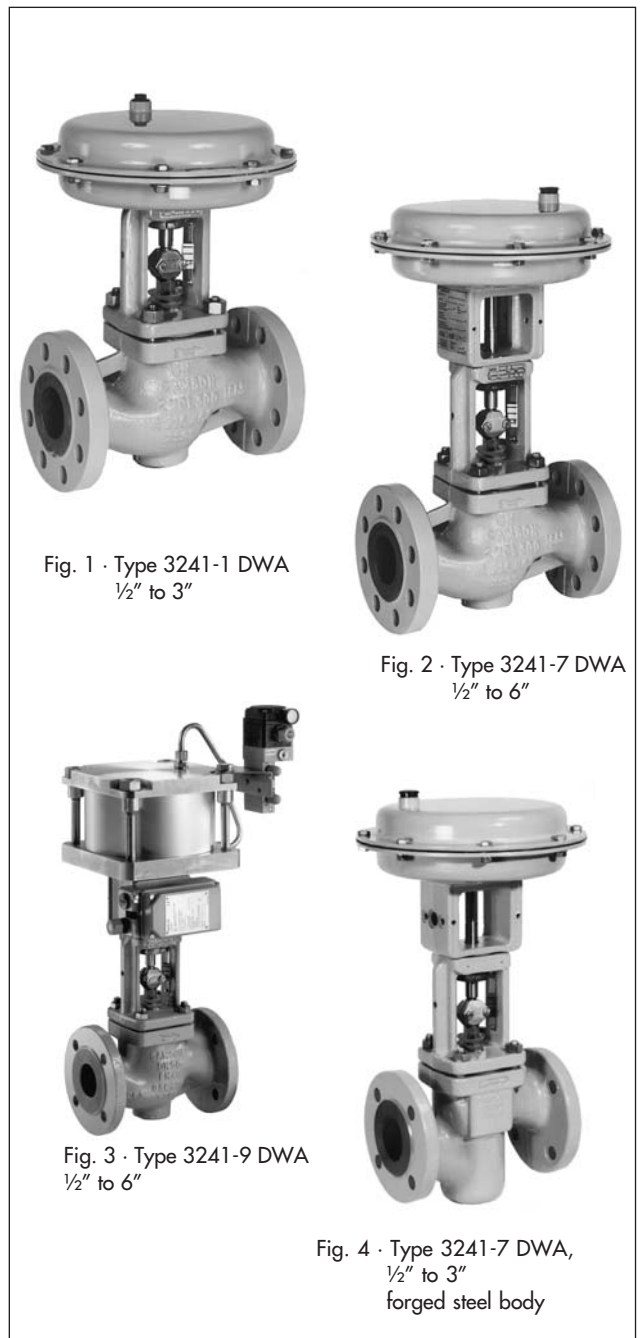
### Versions

**Standard version** for temperatures ranging from -20 °F to 430 °F (-29 °C to +220 °C)

- **Type 3241-1 DWA** (Fig. 1) · 1/2" to 3" with Type 3271 Actuator (see Data Sheet T 8310-1 EN)
- **Type 3241-7 DWA** (Figs. 2 and 4) · 1/2" to 3", valve in forged steel up to 3", with Type 3277 Actuator for integral positioner attachment (see Data Sheet T 8310-1 EN)
- **Type 3241-9 DWA** (Fig. 3) · 1/2" to 6", with Type 3275 Piston Actuator (see T 8314 EN), for integral positioner attachment and/or limit switch (see Data Sheet T 8310-1 EN)

### Other versions with

- **Flow divider** for noise reduction in both directions of flow · See Data Sheet T 8081 EN



### Principle of operation

The process medium flows through the valve in the direction indicated by the arrow. The position of the valve plug determines the cross-sectional area between the seat and plug.

### Fail-safe position

Depending on the arrangement of the compression springs in the Type 3271 or Type 3277 Pneumatic Actuator (see Data Sheet T 8310-1 EN for details), the control valve has two different fail-safe positions effective upon air supply failure:

#### "Actuator stem extends" (FA)

The valve is closed upon air supply failure.

#### "Actuator stem retracts" (FE)

The valve is opened upon air supply failure.

The double-acting Type 3275 Piston Actuator does not have a fail-safe action (see T 8314 EN).

### Notes on the differential pressure tables

The differential pressure tables have been prepared under the following conditions:

- The maximum permissible supply pressure is 4 bar for valves in sizes 1/2" to 2" and actuators with an effective diaphragm area of 700 cm<sup>2</sup>
- Process medium in flow-to-open direction
- Version with PTFE packing
- The leakage rates specified in Table 1 are not exceeded with the maximum differential pressures specified
- The differential pressure specified can be limited by the Pressure-Temperature Diagram.

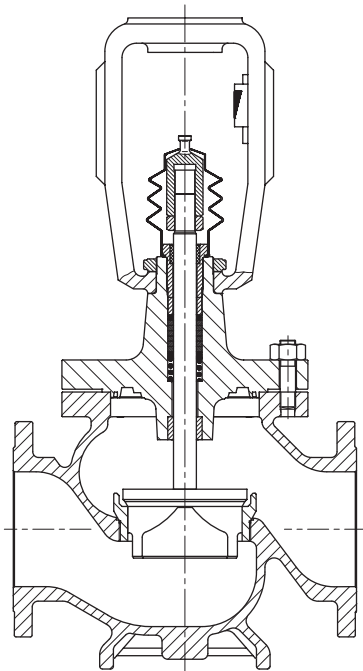


Fig. 5 · Type 3241 DWA Valve, 1/2" to 6"

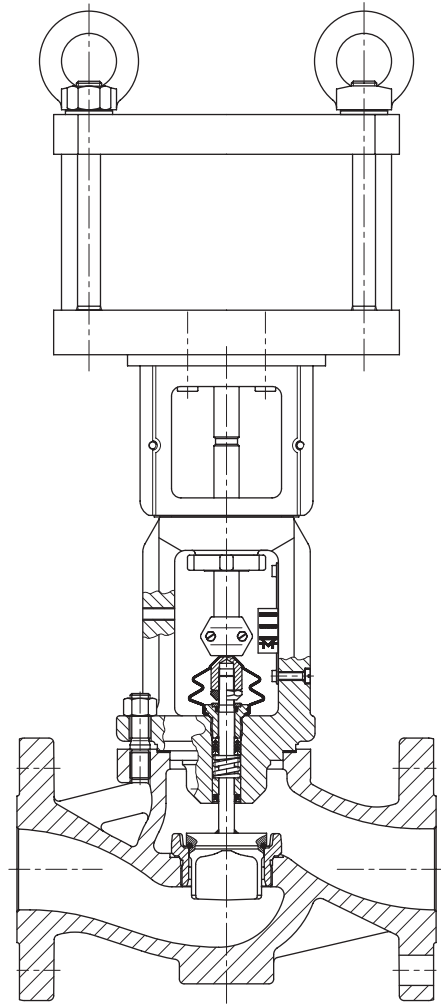


Fig. 6 · Type 3241-9 DWA Control Valve, 1/2" to 3" with Type 3275 Pneumatic Piston Actuator

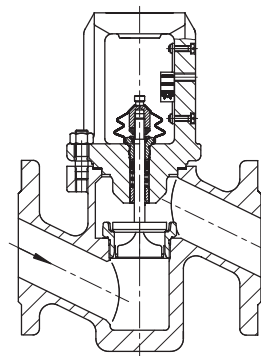


Fig. 7 · Type 3241 DWA Valve in forged steel, 1/2" to 3"

**Table 1 · Technical data for Type 3241 DWA Valve**

<b>Valve size</b>	in	½" ... 6"	½", 1", 1½", 2", 3"	½" ... 6"	½", 1", 1½", 2", 3"
ASTM material		A 216 WCC	A 105	A 351 CF8M	A 182 F316
Type of end connections		Flange		Flange	
Flange type		RF 1)		RF 1)	
Pressure rating ANSI Class		150/300	300	150/300	300
Seat/plug sealing		Soft sealing or lapped-in metal			
Characteristic		Equal percentage or linear			
Rangeability		50 : 1 for ½" ... 2" · 30 : 1 for 2½" ... 6"			
<b>Temperature ranges °C (°F) · Permissible operating pressures as per Pressure-Temperature diagram (see Information Sheet T 8000-2 EN)</b>					
Valve		-29 ... 220 °C (-20 ... 430 °F)			
<b>Leakage rates according to DIN EN 1349</b>					
Valve plug	Soft sealing	VI			
	Lapped-in metal	IV-S2 · 4" (DN 100) and larger: IV-S1			

1) Other versions available on request

**Table 2 · Materials**

<b>Standard version</b>				
<b>Valve body 1)</b>	Carbon steel A 216 WCC	Forged steel A 105	Stainless carbon steel A 351 CF8M	Stainless forged steel A 182 F316
Valve bonnet	A 105		A 182 F 316	
Seat and plug	1.4006		1.4571	
	Sealing ring with soft sealing: PTFE with glass fiber			
Guide bushing	1.4104		1.4571	
Stuffing box packing	V-ring packing PTFE with carbon · Spring 1.4310 · Stem protective ring			
Body gasket	Metal			

1) Refer to Pressure-Temperature diagram, other materials available on request.

**Table 3 · Valve flow coefficients  $C_V$  and  $K_{VS}$**

**Table 3a · Overview** (with flow divider St I ( $C_V$  I,  $K_{VS}$  I))

$C_V$	2	3	5	7.5	12	20	30	47	70	75	95	120	190	300
$K_{VS}$	1.6	2.5	4.0	6.3	10	16	25	40	60	63	80	100	160	260
$C_V$ I	1.7	2.6	4.2	–	10.5	17	26	36	62	67	85	105	170	275
$K_{VS}$ I	1.45	2.2	3.6	–	9	14.5	22	31	54	57	72	90	144	234
Seat Ø D	in	0.47"		0.945"		1.22"	1.5"	1.9"	2.48"		3.15"		3.94"	5.12"
	mm	12		24		31	38	48	63		80		100	130
Travel	in	0.59"								1.18"	0.59"	1.18"		1.18"
	mm	15								30	15	30		30

**Table 3b · Versions without flow divider**

$C_V$	2	3	5	7.5	12	20	30	47	70	75	95	120	190	300
$K_{VS}$	1.6	2.5	4.0	6.3	10	16	25	40	60	63	80	100	160	260
Valve size in/mm														
1/2"	15	•	•	•										
3/4"	20		•	•	•									
1"	25			•	•	•								
1 1/2"	40				•	•	•							
2"	50					•	•	•						
2 1/2"	65						•	•	•					
3"	80							•	•		•			
4"	100									•		•	•	
6"	150											•	•	•

**Table 3c · Versions with flow divider St I ( $C_V$  I/ $K_{VS}$  I)**

$C_V$ I	1.7	2.6	4.2	7	10.5	17	26	42	62	67	85	105	170	275
$K_{VS}$ I	1.45	2.2	3.6	5.7	9	14.5	22	37	54	57	72	90	144	234
Valve size in/mm														
1/2"	15	•	•	•										
3/4"	20	•	•	•										
1"	25	•	•	•										
1 1/2"	40				•	•	•							
2"	50					•	•	•						
2 1/2"	65						•	•	•					
3"	80							•	•		•			
4"	100									•		•	•	
6"	150											•	•	•

Terms for control valve sizing according to (DIN) IEC 60 534, Parts 2-1 and 2-2:  $F_L = 0.95$ ,  $x_T = 0.75$

Conversion of flow coefficients:  $C_V$  (US gallons/min.) =  $K_V$  (m<sup>3</sup>/h)/0.865

**Table 4 · Differential pressure tables for Type 3271 and Type 3277 Actuators with Type 3241 DWA Valve**

**Permissible differential pressures  $\Delta p$  for unbalanced plug with lapped-in metal sealing when  $p_2 = 0$**

- Specifications in shaded columns apply to standard application cases, i.e. operation with rated travel
- Differential pressures specified in white columns apply to maximum pretensioned springs
- Values in parentheses are valid for mid-travel position.

Read the notes on the differential pressure tables.

**Table 4a · Valve with fail-safe position "Actuator stem extends" · Pressures in bar**

Bench range (bar) for actuator with		240 cm <sup>2</sup>	0.2...1.0	0.3...1.1	0.4...2.0 (1.2...2.0)	0.6...2.2	0.6...3.0 <sup>1)</sup> (1.8...3.0)	0.9...3.3	–	–
		120 cm <sup>2</sup> 350 cm <sup>2</sup> 700 cm <sup>2</sup>		0.4...1.2		0.8...2.4		1.2...3.6	1.4...2.3 (1.85...2.3)	2.1...3.3 (2.7...3.3)
Required supply pressure (bar)			1.2	1.4	2.2	2.6	3.2	3.8	2.5	3.5
Valve size	Cv	Actuator cm <sup>2</sup>	$\Delta p$ when $p_2 = 0$ bar							
1/2" to 1"	2	120	–	–	28	–	–	–	50	–
	3	240	28	47	50	50	50	50	–	–
	5	350	45	50	50	50	50	–	50	–
3/4" to 1 1/2"	7.5	120	–	–	–	–	–	–	30	46
		240	–	–	14.8	24	24	39	–	–
	12	350	–	–	24	38	38	50	50	50
		700	–	–	(50)	–	–	–	–	–
1 1/2" and 2"	20	240	–	–	–	14	14	23	–	–
		350	–	13.5	13.5	30	22	47	50	50
		700	–	–	(50)	–	(50)	–	–	–
1 1/2" to 2 1/2"	30	350	–	–	–	20	14	31	37	50
		700	–	–	(50)	–	(50)	–	–	–
2" to 3"	47	350	–	–	–	12	8.5	19	23	35
		700	–	–	(50)	–	(50)	–	–	–
2 1/2" and 3"	70	700	–	–	(23)	–	(35)	–	(36)	(50)
3"	95	700	–	–	1.4	–	(21)	–	(22)	(33)

<sup>1)</sup> Not for actuator 120 cm<sup>2</sup> (18.6 in<sup>2</sup>)

**Table 4b · Valve with fail-safe position "Actuator stem extends" · Pressures in psi**

Bench range (psi) for actuator with		240 cm <sup>2</sup>	3...15	4...17	6...30 (18...30)	9...32	9...44 <sup>1)</sup> (26...44)	13...48	-	-
		120 cm <sup>2</sup> 350 cm <sup>2</sup> 700 cm <sup>2</sup>		6...18		12...35		18...52	20...34 (26...34)	30...40 (39...50)
Required supply pressure (psi)			18	21	33	38	47	55	38	55
Valve size	Cv	Actuator cm <sup>2</sup>	Δp when p <sub>2</sub> = 0 psi							
1½" to 1"	2	120	-	-	405	-	-	-	725	-
	3	240	406	680	725	725	725	725	-	-
	5	350	650	725	725	725	725	-	725	-
¾" to 1½"	7.5	120	-	-	80	-	-	-	435	667
		240	-	-	215	350	350	565	-	-
	12	350	-	-	350	550	550	725	725	725
		700	-	-	(725)	-	-	-	-	-
1½" and 2"	20	240	-	-	-	200	200	335	-	-
		350	-	195	195	435	320	680	725	725
		700	-	-	(725)	-	(725)	-	-	-
1½" to 3"	30	350	-	-	-	290	200	450	535	725
		700	-	-	(725)	-	(725)	-	-	-
2" to 2½"	47	350	-	-	-	175	123	275	330	507
		700	-	-	(725)	-	(725)	-	-	-
2½" and 3"	70	700	-	-	(333)	-	(507)	-	(520)	(725)
3"	95	700	-	-	20	-	(305)	-	(320)	(475)

1) Not for actuator 120 cm<sup>2</sup> (18.6 in<sup>2</sup>)

**Tables 4c and 4d · Valve with fail-safe position "Actuator stem retracts" · Pressures in bar and psi**

Valve CLOSED when the required supply pressure is applied.

			Table 4c · Pressures in bar			Table 4d · Pressures in psi		
Bench range (bar/psi) for actuator (cm <sup>2</sup> )		120 ... 700	0.2 ... 1.0			3 ... 15		
Required supply pressure (bar/psi)			1.2	2.4	4	18	36	58
Valve size	C <sub>v</sub>	Actuator cm <sup>2</sup>	Δp when p <sub>2</sub> = 0 bar			Δp when p <sub>2</sub> = 0 psi		
1/2" to 1"	2	120	–	50	–	–	725	–
	3	240	28	50	–	410	725	–
	5	350	46	50	–	667	725	–
3/4" to 1 1/2"	7.5	120	–	31	50	10	450	725
		240	–	50	50	–	725	725
	12	350	–	50	50	–	725	725
		700	24	50	–	350	725	–
1 1/2" and 2"	20	120	–	18	40	–	260	580
		240	–	37	50	–	540	725
		350	–	50	50	–	725	725
		700	–	50	–	–	725	–
1 1/2" to 3"	30	120	–	–	28	–	–	410
		240	–	24	50	–	350	725
		350	–	37	50	–	540	725
		700	–	50	50	–	725	725
2" to 2 1/2"	47	240	–	15	34	–	220	490
		350	–	23	50	–	330	725
		700	–	47	50	–	680	725
2 1/2" and 3"	70	240	–	–	20	–	–	290
		350	–	13	29	–	190	420
		700	–	27	50	–	390	725
3"	95	240	–	–	12	–	–	170
		350	–	–	18	–	–	260
		700	–	16	37	–	230	540

**Table 5 · Permissible differential pressures for Type 3275 Piston Actuator with Type 3241 DWA Valve**

**Table 5a · Type 3241-9 DWA Valve with lapped-in metal plug · Pressures in bar**

Valve size in	Flow coefficient C <sub>v</sub>	Actuator cm <sup>2</sup>	Supply pressure [bar]								
			1.4	2	2.5	3	3.5	4	5	6	
¾" to 1½"	7.5 to 12	314	50	–					–	–	–
1½" to 2"	20	314	26.5	47.3	50	–	–	–	–	–	–
		490	50	–	–	–	–	–	–	–	–
1½" to 2"	30	314	14.4	28.2	39.8	50	–	–	–	–	–
		490	32.5	50	–	–	–	–	–	–	–
2"	47	314	6.1	14.8	22.0	29.3	36.5	43.7	50	–	–
		490	17.5	31.0	42.3	50	–	–	–	–	–
		804	37.7	50	–	–	–	–	–	–	–
3"	47	314	6.0	14.7	21.9	29.1	36.4	43.6	50	–	–
		490	17.3	30.9	42.2	50	–	–	–	–	–
		804	39.6	50	–	–	–	–	–	–	–
3"	70	314	1.0	6.0	10.2	14.4	18.6	22.8	31.2	39.6	–
		490	7.5	15.4	22.0	28.5	35.1	41.6	50	–	–
		804	19.3	32.2	42.9	50	–	–	–	–	–
3"	95	314	–	1.9	4.5	7.2	9.8	12.4	17.6	22.8	–
		490	2.9	7.8	11.8	15.9	20.0	24.0	32.2	40.3	–
		804	10.2	18.2	24.9	31.5	38.2	44.9	50	–	–
4"	75	314	1.0	6.0	10.2	14.4	18.6	22.8	31.2	39.6	–
		490	7.5	15.4	22.0	28.5	35.1	41.6	50	–	–
		804	19.3	32.2	42.9	50	–	–	–	–	–
4"	120	314	–	1.9	4.5	7.2	9.8	12.4	17.6	22.8	–
		490	2.9	7.8	11.8	15.9	20.0	24.0	32.2	40.3	–
		804	10.2	18.2	24.9	31.5	38.2	44.9	50	–	–
4" to 6"	190	314	–	–	1.6	3.2	4.9	6.6	9.9	13.2	–
		490	0.5	3.6	6.2	8.8	11.4	14.0	19.2	24.4	–
		804	5.2	10.3	14.6	18.8	23.1	27.4	35.9	44.4	–
6"	300	314	–	–	–	0.7	1.7	2.7	4.7	6.6	–
		490	–	1.0	2.5	4.1	5.6	7.1	10.2	13.3	–
		804	1.9	4.9	7.4	10.0	12.5	15.0	20.1	25.1	–

**Table 5b · Type 3241-9 DWA Valve with lapped-in metal plug · Pressures in psi**

Valve size in	Flow coefficient C <sub>v</sub>	Actuator cm <sup>2</sup>	Supply pressure [psi]							
			20	30	38	44	55	60	75	90
¾" to 1½"	7.5 to 12	314	725	–	–	–	–	–	–	–
1½" to 2"	20	314	384.0	685.7	725	–	–	–	–	–
		490	725	–	–	–	–	–	–	–
1½" to 2"	30	314	208.7	409.5	576.8	725	–	–	–	–
		490	471.3	725	–	–	–	–	–	–
2"	47	314	88.8	214.7	319.5	424.4	529.3	634.1	725	–
		490	253.4	449.8	613.4	725	–	–	–	–
		804	547.0	725	–	–	–	–	–	–
3"	47	314	88.8	214.7	319.5	424.4	529.3	634.1	725	–
		490	253.4	449.8	613.4	725	–	–	–	–
		804	547.0	725	–	–	–	–	–	–
3"	70	314	15.0	88.1	148.9	209.8	270.7	331.6	453.3	575.1
		490	110.6	224.5	319.5	414.5	509.5	604.5	725	–
		804	281.0	468.0	623.9	725	–	–	–	–
3"	95	314	–	28.9	66.7	104.4	142.2	179.9	255.4	330.9
		490	42.9	113.6	172.5	231.4	290.3	349.2	467.0	584.9
		804	148.6	264.6	361.2	457.9	554.6	651.2	725	–
4"	75	314	15.0	88.1	148.9	209.8	270.7	331.6	453.3	575.1
		490	110.6	224.5	319.5	414.5	509.5	604.5	725	–
		804	281.0	468.0	623.9	725	–	–	–	–
4"	120	314	–	28.9	66.7	104.4	142.2	179.9	255.4	330.9
		490	42.9	113.6	172.5	231.4	290.3	349.2	467.0	584.9
		804	148.6	264.6	361.2	457.9	554.6	651.2	725	–
4" to 6"	190	314	–	–	23.3	47.5	71.7	95.8	144.1	192.5
		490	8.1	53.3	91.0	128.8	166.5	204.2	279.6	355.0
		804	75.8	150.0	211.9	273.7	335.6	397.4	521.2	644.9
6"	300	314	–	–	–	10.9	25.2	39.5	68.1	96.7
		490	–	14.4	36.7	59.0	81.3	103.6	148.3	192.9
		804	27.7	71.6	108.2	144.8	181.4	218.0	291.2	364.4

**Table 6a · Type 3241-9 DWA Valve with soft-sealed plug · Pressures in bar**

Valve size in	Flow coefficient Cv	Actuator cm <sup>2</sup>	Supply pressure [bar]							
			1.4	2	2.5	3	3.5	4	5	6
¾" to 1½"	7.5 to 12	314	50	–	–	–	–	–	–	–
1½" to 2"	20	314	47.8	50	–	–	–	–	–	–
1½" to 2"	30	314	31.8	45.6	50	–	–	–	–	–
		490	50	–	–	–	–	–	–	–
2"	47	314	19.9	28.6	35.8	43.0	50	–	–	–
		490	31.2	44.8	50	–	–	–	–	–
		804	50	–	–	–	–	–	–	–
3"	47	314	19.7	28.4	35.6	42.9	50	–	–	–
		490	31.1	44.6	50	–	–	–	–	–
		804	50	–	–	–	–	–	–	–
3"	70	314	11.4	16.5	20.7	24.9	29.1	33.3	41.6	50
		490	18.0	25.9	32.4	39.0	45.5	50	–	–
		804	29.8	42.7	50	–	–	–	–	–
3"	95	314	7.1	10.2	12.8	15.4	18.0	20.6	25.8	31.0
		490	11.2	16.0	20.1	24.2	28.2	32.3	40.4	48.5
		804	18.4	26.4	33.1	39.8	46.4	50	–	–
4"	75	314	11.4	16.5	20.7	24.9	29.1	33.3	41.6	50
		490	18.0	25.9	32.4	39.0	45.5	50	–	–
		804	29.8	42.7	50	–	–	–	–	–
4"	120	314	7.1	10.2	12.8	15.4	18.0	20.6	25.8	31.0
		490	11.2	16.0	20.1	24.2	28.2	32.3	40.4	48.5
		804	18.4	26.4	33.1	39.8	46.4	50	–	–
4" to 6"	190	314	4.5	6.5	8.2	9.8	11.5	13.2	16.5	19.8
		490	7.1	10.2	12.8	15.4	18.0	20.6	25.8	31.0
		804	11.8	16.9	21.2	25.4	29.7	34.0	42.5	50
6"	300	314	2.7	3.8	4.8	5.8	6.8	7.8	9.8	11.7
		490	4.2	6.1	7.6	9.1	10.7	12.2	15.3	18.4
		804	7.0	10.0	12.5	15.0	17.6	20.1	25.1	30.2

**Table 6b · Type 3241-9 DWA Valve with soft-sealed plug · Pressures in psi**

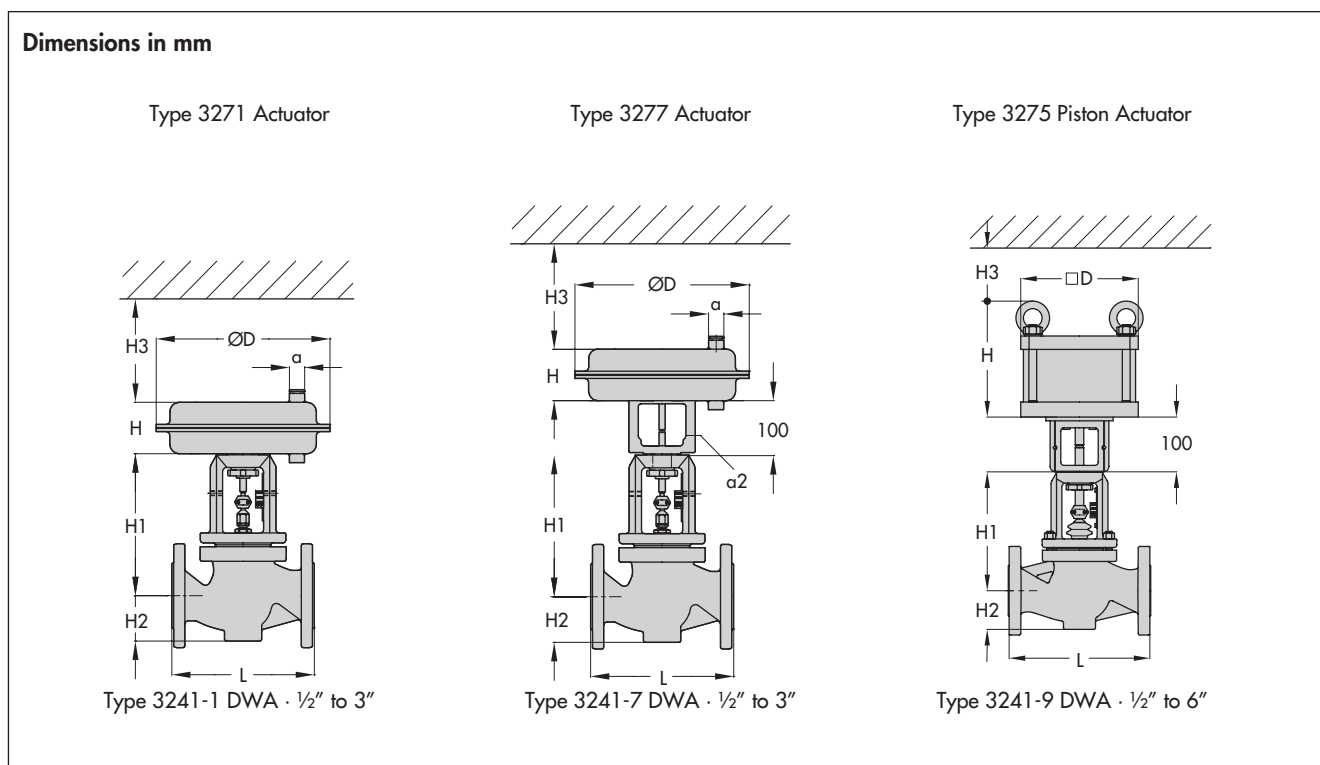
Valve size in	Flow coefficient C <sub>v</sub>	Actuator cm <sup>2</sup>	Supply pressure [psi]							
			20	30	38	44	55	60	75	90
¾" to 1½"	7.5 to 12	314	725	–	–	–	–	–	–	–
1½" to 2"	20	314	692.8	725	–	–	–	–	–	–
1½" to 2"	30	314	460.6	661.4	725	–	–	–	–	–
		490	725	–	–	–	–	–	–	–
2"	47	314	288.2	414.1	518.9	623.8	725	–	–	–
		490	452.8	649.2	725	–	–	–	–	–
		804	725	–	–	–	–	–	–	–
3"	47	314	288.2	414.1	518.9	623.8	725	–	–	–
		490	452.8	649.2	725	–	–	–	–	–
		804	725	–	–	–	–	–	–	–
3"	70	314	167.0	240.0	300.9	361.8	422.6	483.5	605.3	725
		490	262.5	376.5	471.5	566.5	661.5	725	–	–
		804	432.9	620.0	725	–	–	–	–	–
3"	95	314	103.3	148.6	186.3	224.1	261.8	299.6	375.1	450.6
		490	162.5	233.2	292.1	351.0	410.0	468.9	586.7	704.5
		804	268.2	384.2	480.9	577.6	674.2	725	–	–
4"	75	314	167.0	240.0	300.9	361.8	422.6	483.5	605.3	725
		490	262.5	376.5	471.5	566.5	661.5	725	–	–
		804	432.9	620.0	725	–	–	–	–	–
4"	120	314	103.3	148.6	186.3	224.1	261.8	299.6	375.1	450.6
		490	162.5	233.2	292.1	351.0	410.0	468.9	586.7	704.5
		804	268.2	384.2	480.9	577.6	674.2	725	–	–
4" to 6"	190	314	65.9	94.9	119.1	143.2	167.4	191.5	239.9	288.2
		490	103.8	149.1	186.8	224.5	262.2	299.9	375.3	450.7
		804	171.5	245.7	307.6	369.4	431.3	493.2	616.9	725
6"	300	314	38.8	56.0	70.3	84.6	98.9	113.2	141.8	170.4
		490	61.3	88.0	110.3	132.7	155.0	177.3	221.9	266.5
		804	101.3	145.2	181.8	218.4	255.0	291.6	364.9	438.1

**Table 7 · Dimensions for standard versions of Type 3241-1 DWA, Type 3241-7 DWA and Type 3241-9 DWA**

Valve		in	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"
		mm	15	20	25	40	50	65	80	100	150
Length L	Cl 125 RF and 150 RF	in	7.25	7.25	7.25	8.75	10.0	10.87	11.75	13.87	17.75
		mm	184	184	184	222	254	276	298	352	451
	Cl 300 RF	in	7.50	7.62	7.75	9.25	10.50	11.50	12.50	14.50	18.62
		mm	191	194	197	235	267	292	318	368	473
H1	≤ 700 cm <sup>2</sup> + Type 3275	in	8.66				10.24			13.78	15.34
		mm	220				260			350	390
H2 (approx.)		in	1.77			2.84		3.86		4.45	6.89
		mm	45			72		98		113	175
H2 Forged steel version (approx.)		in	2.1	–	2.75	3.6	3.85	–	5.05	–	–
		mm	53	–	70	92	98	–	128	–	–

Actuator		Type 3271/3277			Type 3275		
Effective area	cm <sup>2</sup>	120	350	700	314	490	804
	in <sup>2</sup>	18.6	54.25	108.5	48.6	75.95	124.6
Diaphragm Ø D	in	6.6	11.02	15.35	8.66	10.63	13.78
	mm	168	280	390	220	270	350
H	in	2.72	3.35	5.27	7.91	8.66	8.79
	mm	69	85	134	201	220	223
H3 <sup>1)</sup>	in	4.33		7.48	4.33		7.48
	mm	110		190	110		190
Thread		M30 x 1.5			M30 x 1.5		
α (w. Type 3271/3275 Actuator)		G 1/8 (1/8 NPT)	G 3/8 (3/8 NPT)		G 3/8	G 1/2	
α2 (w. Type 3277 Actuator)		–	G 3/8 (3/8 NPT)		–		

1) Minimum clearance to remove actuator



**Table 8 · Weights for Type 3241-1 DWA, Type 3241-7 DWA and Type 3241-9 DWA Control Valves**

Valve	Size	in	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"
		mm	15	20	25	40	50	65	80	100	150
Weight without actuator	lbs	11	13	15	26	33	53	66	92	264	
	kg	5	6	7	12	15	24	30	42	120	

Actuator		Type 3271			Type 3277			Type 3275		
Effective area	cm <sup>2</sup>	120	350	700	120	350	700	314	490	804
	in <sup>2</sup>	18.6	54.25	108.5	18.6	54.25	108.5	48.6	75.95	124.5
Weight, approx.	lbs	6.6	18	48.5	7.7	26.5	57.5	22	37.5	46.5
	kg	3	8	22	3.5	12	26	10	17	21

**Ordering text**

Globe valve	Type 3241 DWA
Valve size	..."
ANSI Class	...
Body material	Acc. to Table 2
Type of end connections	Flanges (RF or FF) or NPT thread
Seat and plug	Soft sealing or lapped-in metal
Characteristic	Equal percentage or linear
Pneumatic actuator	Type 3271, Type 3277 or Type 3275
Fail-safe position	Valve CLOSED or OPEN
Process medium	Density in lb/cu.ft or kg/m <sup>3</sup> and temperature in °F or °C
Flow rate	in lbs/h or kg/h or cu.ft/min or m <sup>3</sup> /h in standard or operating conditions
Pressure	p <sub>1</sub> and p <sub>2</sub> in bar or psi (absolute pressure) with minimum, normal and maximum flow rate
Accessories	Positioner and/or limit switch

Specifications subject to change without notice.



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