

Right Angle Seat Valve 7050



1/2" up to 2"

Pneumatically operated right angle seat valve for the control of neutral and aggressive liquids, steam and gases, alternative to angle seat

- Right angle space serving design
- For temperatures from -148°F up to +428°F
- Working pressure up to 580 psi
- Versatile actuator options
- ANSI class VI shut off

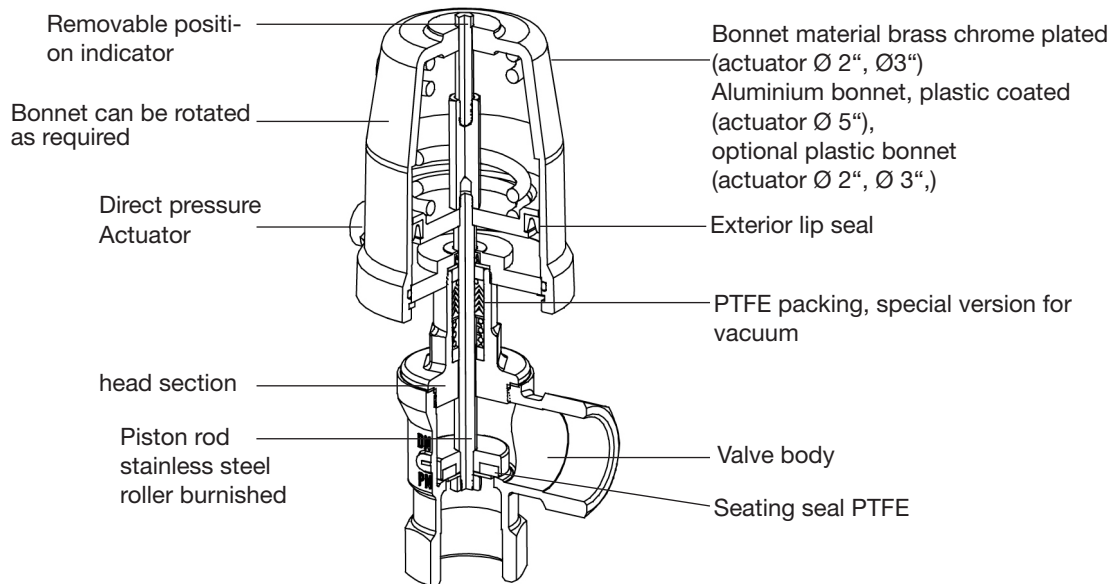


Technical Information

Nominal sizes	1/2" up to 2"
Body material	CF8M
Connection:	
Pipe thread acc. ISO 228-1	1/2" - 2"
NPT thread	1/2" - 2"
Nominal pressure	580 psi
Max. fluid temperature*:	
with metal bonnet	-22°F up to +338°F, opt.-148°F up to +428°F
with plastic bonnet	-22°F up to +275°F
with diaphragm actuator	-22°F up to +392°F, opt. -22°F up to + 428°F
Ambient temperature*	+5°F up to +140°F (special versions from -40°F up to +212°F)
Viscosity of media	maximum 600cSt, 80°E (600 mm ² /s)
Vakuum	maximum 0.0295 mercury (Hg)
Working pressure	See tables and diagrams, limitation for dangerous gases acc. Pressure equipment directive 2014/68/EU (category I): PS (psi) x DN (inch) / 1.75 < 1000
Working pressure for packing underneath	maximum 175 psi
Leakage acc. EN 12266-1	leakage class A

Options

- e. g.:
- limit switches
 - inductive proximity switch
 - electrical switches
 - pneumatic switches
 - pilot valves
 - manual override
 - oil and grease free version



Right Angle Seat Valve 7050



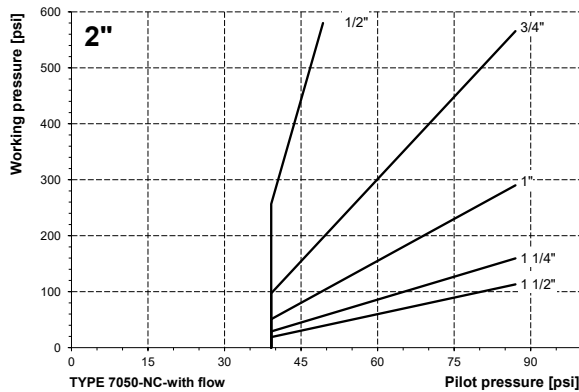
standard design

Spring closes NC (closing with flow)

Normally closed angle seat valves, closing with the flow. Operates better with gases, with liquids water hammer is possible.

For HT-version with actuator Ø 50 mm the pilot pressure has to be increased by 0.9 bar.

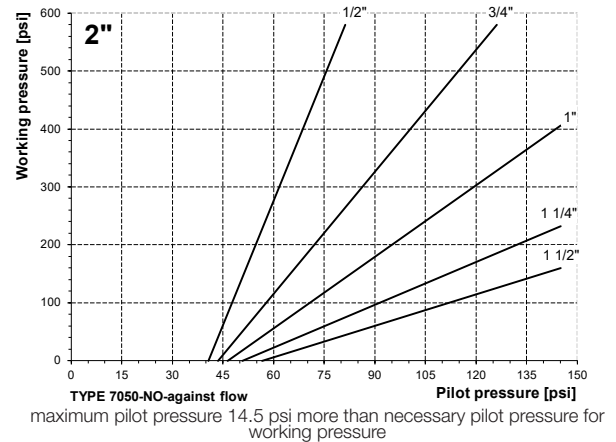
Actuator diameter 2"



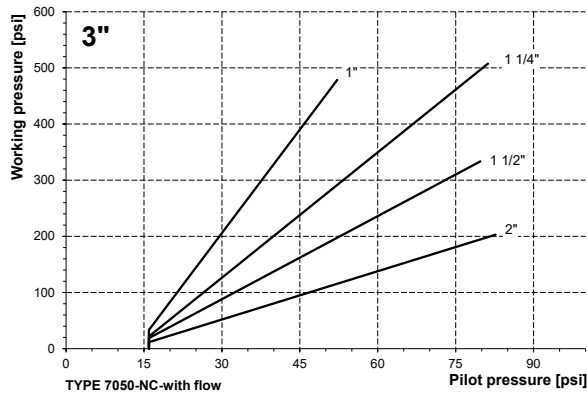
Spring opens NO (closing against flow)

Normally open angle seat valves, closing against the flow.

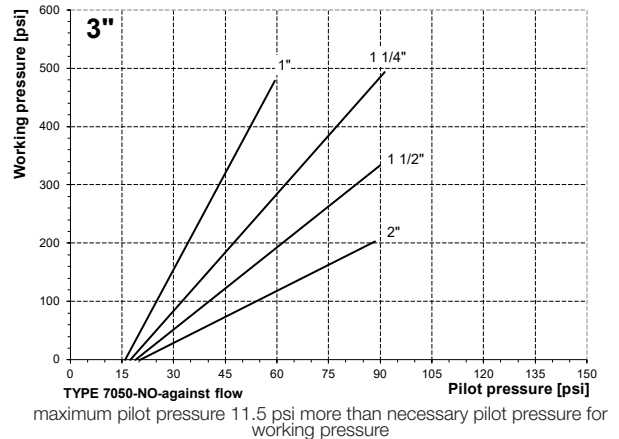
Actuator diameter 2"



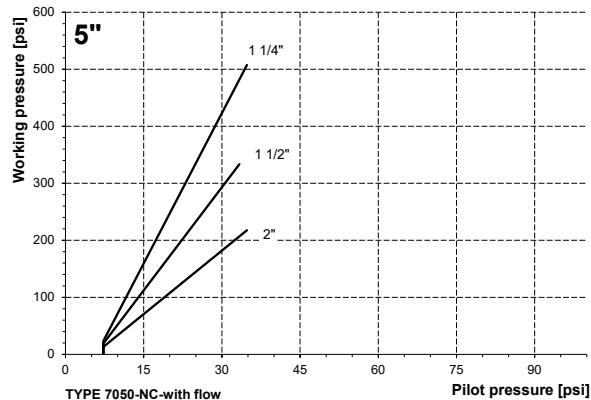
Actuator diameter 3"



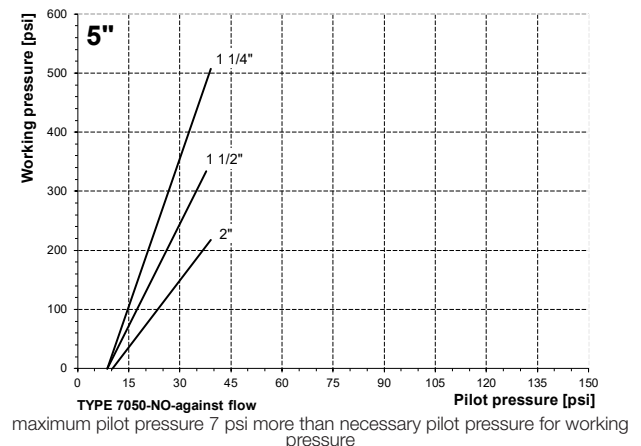
Actuator diameter 3"



Actuator diameter 5"



Actuator diameter 5"



Right Angle Seat Valve 7050

standard design

NC (closing against flow)

Nominal size in inches	max. working pressure (differential pressure)		pilot pressure [psi]	Actuator diameter (inches)	Number of springs
	[psi]	[psi]			
1/2"	5,1	220	50 - 145	2"	1
1/2"		390	65 - 145	2"	2
3/4"	5,1	75	50 - 145	2"	1
3/4"	6,5	145	65 - 145	2"	2
3/4"	8,3	230	83 - 145	2"	3
1"	5,1	35	50 - 145	2"	1
1"	6,5	80	65 - 145	2"	2
1"	8,3	130	83 - 145	2"	3
1"	5,1	290	50 - 145	3"	1
1 1/4"	6,5	45	65 - 145	2"	2
1 1/4"	8,3	75	83 - 145	2"	3
1 1/4"	5,1	160	50 - 145	3"	1
1 1/4"	6,4	230	64 - 145	3"	2
1 1/4"	8,1	305	80 - 145	3"	3
1 1/4"	1,9	145	19 - 145	5"	1

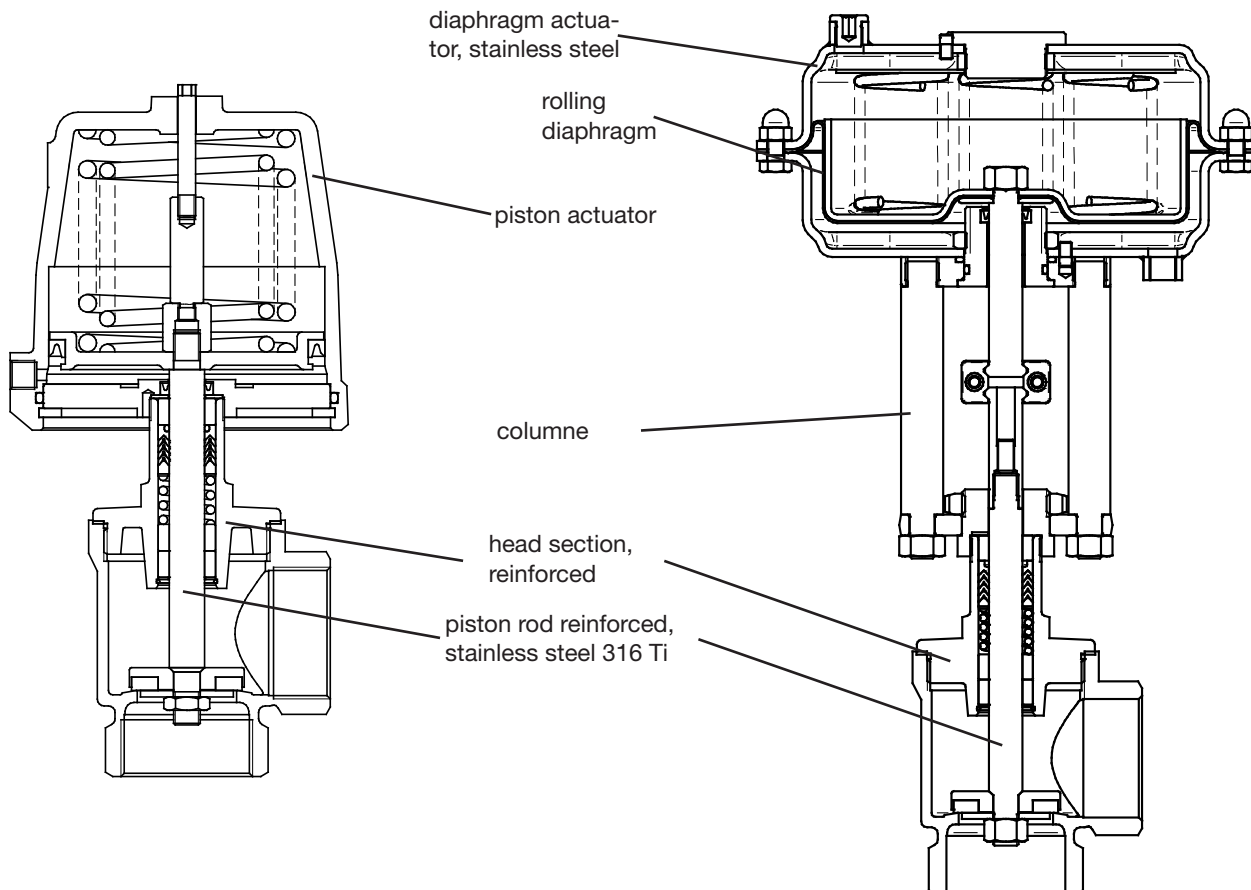
Nominal size in inches	max. working pressure (differential pressure)		pilot pressure [psi]	Actuator diameter (inches)	Number of springs
	[psi]	[psi]			
1 1/4"	320	320	32 - 145	5"	2
1 1/2"	30	30	65 - 145	2"	2
1 1/2"	50	50	83 - 145	2"	3
1 1/2"	100	100	50 - 145	3"	1
1 1/2"	140	140	64 - 145	3"	2
1 1/2"	175	175	80 - 145	3"	3
1 1/2"	90	90	19 - 145	5"	1
1 1/2"	205	205	32 - 145	5"	2
1 1/2"	290	290	45 - 145	5"	3
2"	60	60	50 - 145	3"	1
2"	85	85	64 - 145	3"	2
2"	110	110	80 - 145	3"	3
2"	125	125	32 - 145	5"	2
2"	175	175	45 - 145	5"	3

=Standard (2 springs)

Right Angle Seat Valve 7050, reinforced design

stainless steel 1 1/2" and 2"

580 psi



Right Angle Seat Valve 7050

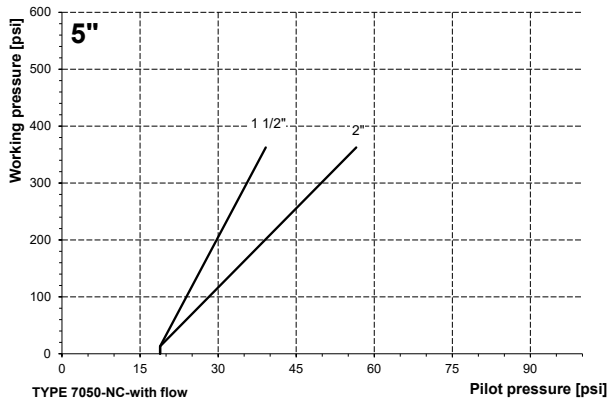


reinforced design

Spring closes NC (closing with flow)

Normally closed angle seat valves, closing with the flow. Operates better with gases, with liquids water hammer is possible. For HT-version with actuator Ø 50 mm the pilot pressure has to be increased by 0.9 bar.

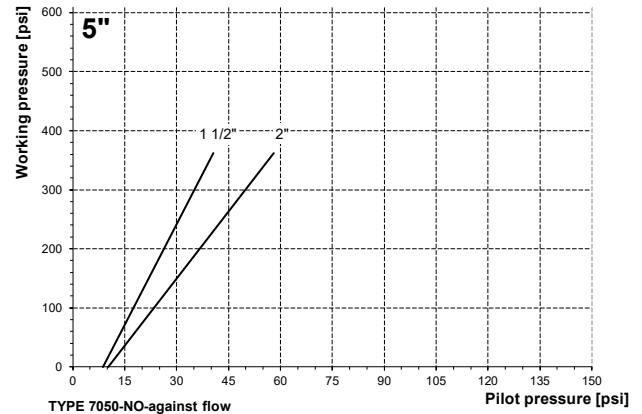
Actuator diameter 5" - a strong spring



Spring opens NO (closing against flow)

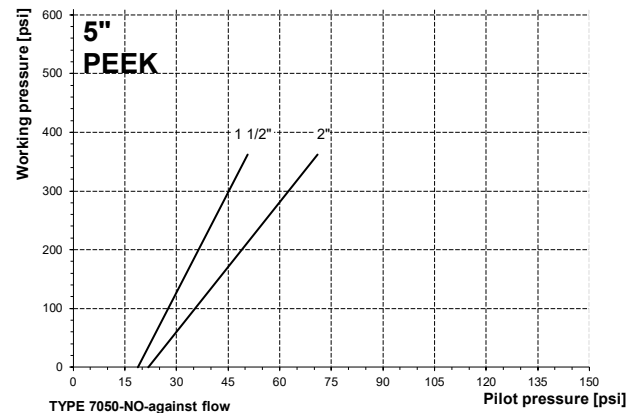
Normally open angle seat valves, closing against the flow.

Actuator diameter 5"



maximum pilot pressure 7 psi more than necessary pilot pressure for working pressure

Actuator diameter 5" - PEEK seating seal



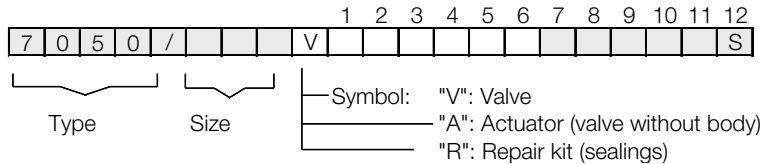
maximum pilot pressure 7 psi more than necessary pilot pressure for working pressure

NC (closing against flow)

Nominal size	Working pressure max. (differential pressure) psi	Pilot pressure psi	Piston Ø inch	Springs
1 1/2"	290	45 - 145	3"	3
1 1/2"	365	40 - 90	10"	8
2"	175	45 - 145	3"	3
2"	220	30 - 90	10"	6
2"	275	40 - 90	10"	8
2"	350	55 - 90	10"	12
Standard				

higher pressures on request

Ordering Number System



1 - 6 : Please quote all 6 sections.
 7 - 12: Quote only if required.

1.	Body type	2.	Connection	3.	Body materials	4.	Seat materials	5.	Pilot function	6.	Actuator, Ø
7	Right angled seat valve	5	NPT thread	2	Stainless steel	0	PTFE	0	NC (closing with flow)	7	Piston 2" (NPT)
		*	others upon request			1	FKM	1	NO (closing against flow)	8	Piston 3" (NPT)
						2	EPDM	2	NC (closing against flow)	9	Piston 5" (NPT)
						3	NBR	3	Universal, double acting	D	diaphragm 10" (NPT)

7.	Springs	8.	Head section material	9.	Packing	10.	Temperature version	11.	Accessories	12.	Other special versions
-	Standard	-	Standard	-	Standard	-	Standard	-	No accessories	M	Position indicator with cable bushing
1	1 spring			2	Packing underneath (vacuum)	H	High temperature version +395°F	1	Electrical position indicator with one switch	N	Position indicator with plug connection
2	2 springs					V	Viton exterior lip seal	2	As above but with two switches	S	If after inquiries, further special versions are agreed upon insert "S" here!
3	3 springs							3	Manual emergency operation		
T	6 springs (10")							4	Additional manual operation		
W	8 springs (10")							5	Stroke limitation		
Y	12 springs (10")							6	Pilot valve DN 2, 230 V AC		
								7	Pilot valve DN 2, 24 V DC		
								K	Electr. position indicator compact		
								M	Position indicator with two ind. Switch 10 - 36 V DC (PNP)		
								P	Position indicator with one ind. Switch 10 - 36 V DC (PNP)		
								T	Position indicator compact, inductive 10 - 30 V DC (PNP)		

Special versions:

- ...S - - - - - 3 closing cap for position indicator (actuator 2")
- ...S - - - - - 2 closing cap for position indicator (actuator 3", 5")
- ...S - - - - - 1 silicone free
- ...S - - - - - 5 oxygen service

Ordering example:

7050/050V7520282 - - - 5

Right angled seat valve type 7050, size 2", Connection NPT thread , body material stainless steel, seating seal PTFE, NC closing against flow, piston 3" (NPT), two springs, stroke limitation

reinforced design (from 1 1/2"):

Ordering example:

7050/050V75202D- - - - 5S-K

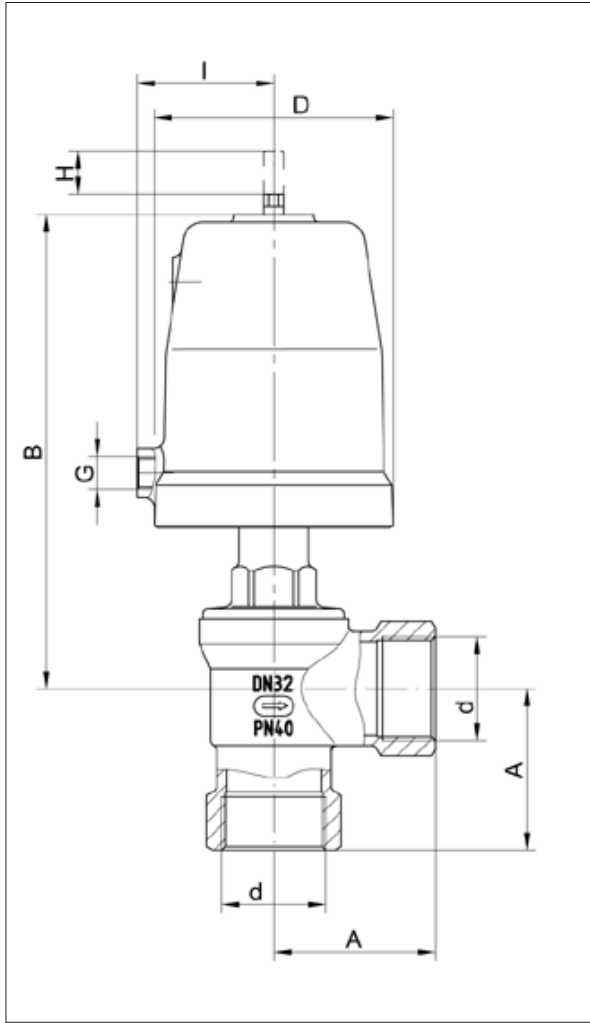
Right angled seat valve type 7050, size 2", Connection NPT thread , body material stainless steel, limitation, seating seal PTFE, NC closing against flow, piston 10" (NPT), three springs, stroke reinforced design

„K“ reinforced design

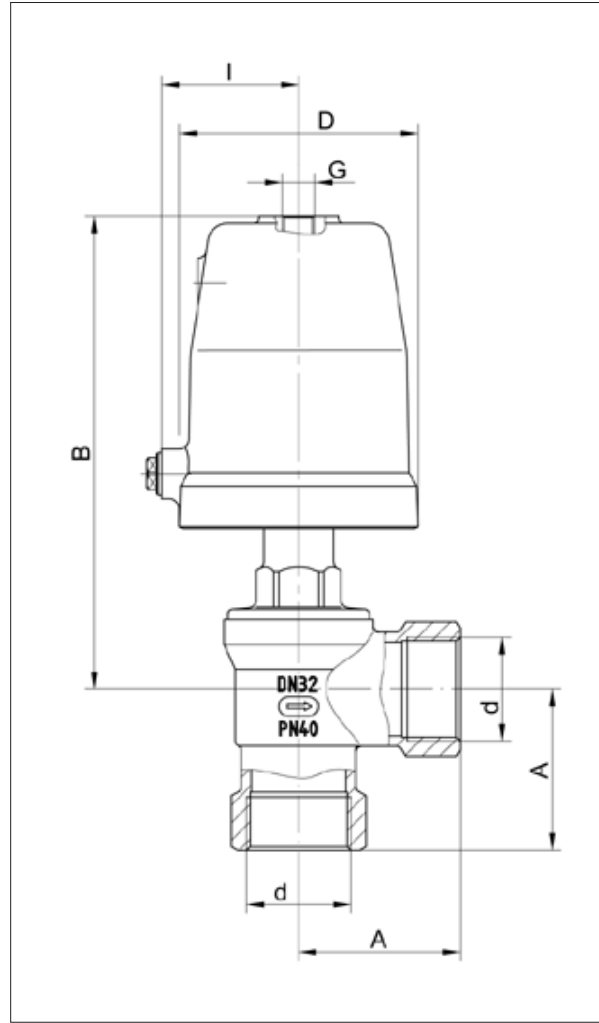
Right Angle Seat Valve 7050

standard design

Dimensions and Weights



normally closed



normally open

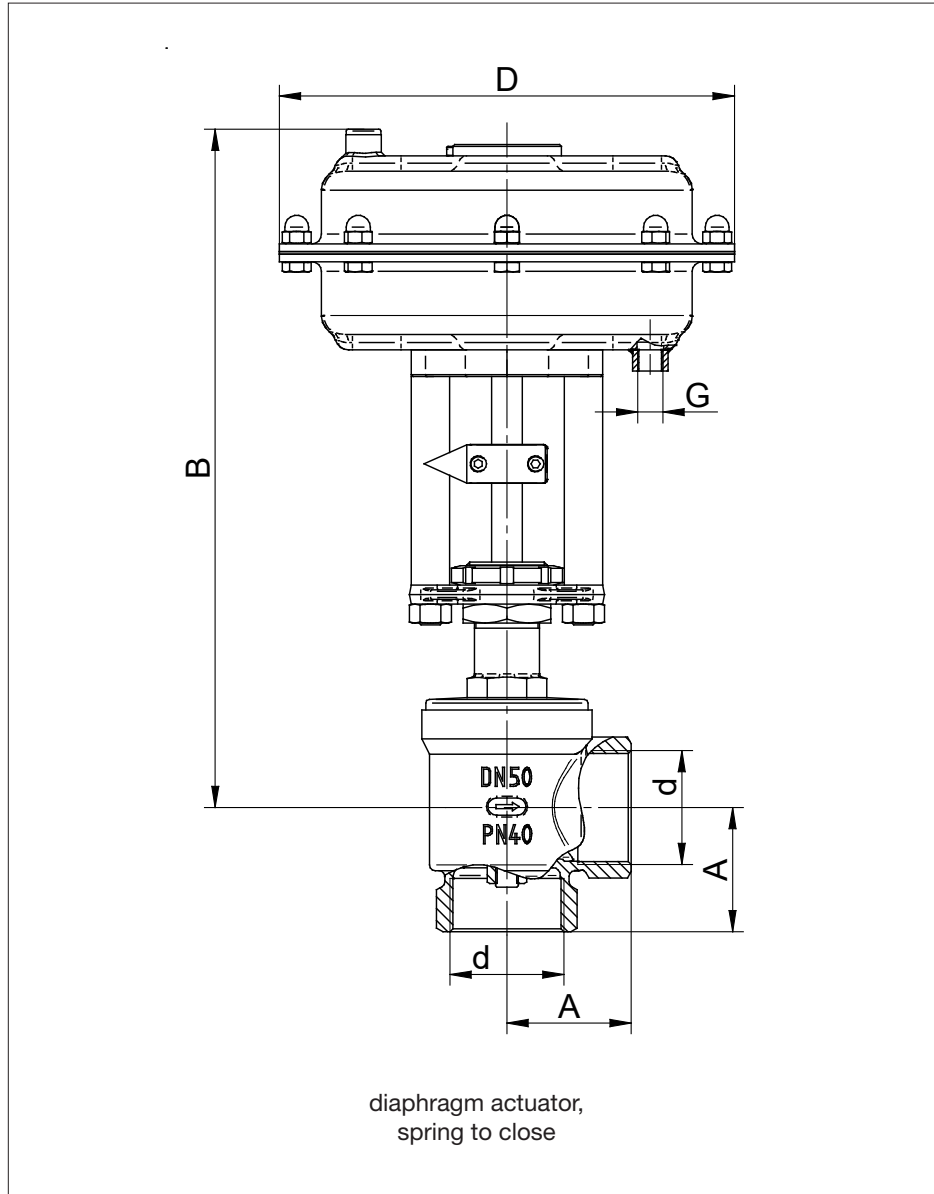
Size	Actuator	A	B	D	d	G	Stroke	I	Cv-value
1/2"	2"	1,6	5,45	2,45	1/2"	1/8"	0,45	1,35	5,9
3/4"	2"	1,6	5,5	2,45	3/4"	1/8"	0,6	1,35	13,3
1"	2"	1,6	5,55	2,45	1"	1/8"	0,6	1,35	23,2
1"	3"	1,6	7,05	3,85	1"	1/4"	0,8	2,15	23,2
1 1/4"	2"	2,55	6,05	2,45	1 1/4"	1/8"	0,6	1,35	29
1 1/4"	3"	2,55	7,6	3,85	1 1/4"	1/4"	0,9	2,15	34,8
1 1/4"	2"	2,55	8,5	5,65	1 1/4"	1/4"	0,9	2,15	34,8
1 1/2"	1"	2,55	6,3	2,45	1 1/2"	1/8"	0,6	1,35	46,4
1 1/2"	3"	2,55	7,85	3,85	1 1/2"	1/4"	1,1	2,15	52,2
1 1/2"	5"	2,55	8,8	5,65	1 1/2"	1/4"	1,1	2,15	52,2
2"	2"	2,55	8,5	3,85	2"	1/4"	1,2	2,15	75,4
2"	5"	2,55	9,45	5,65	2"	1/4"	1,2	2,15	75,4

Dimension in inch

Right Angle Seat Valve 7050

reinforced design

Dimensions and Weights



Size	Actuator	A	B	D	d	G	Stroke	Cv-value	Weight [lbs]
1 1/2"	10"	2.56	13.66	9.37	1 1/2"	G1/4"	0.94	48.7	27.5
2"	10"	2.56	13.98	9.37	2"	G1/4"	0.94	56.8	29.5

Dimension in inch