

Three-position solenoid safety gas valves in aluminum housing (BH series)

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THREE-POSITION SOLENOID SAFETY GAS VALVE with one gas flow regulator (BH series, coupling connection)

All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100 % of the gas flow rate - both A-type and B-type solenoids are energized;
- b) 10 - 60% of the gas flow rate - A-type solenoid only is energized; required gas flow rate can be setup with the help of manual gas flow regulator which is

installed on B-type solenoid’s magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase gas flow rate accordingly.



Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption (heated up state):

- at the time of valve opening: 25 W
- energy saving mode: 12,5 W

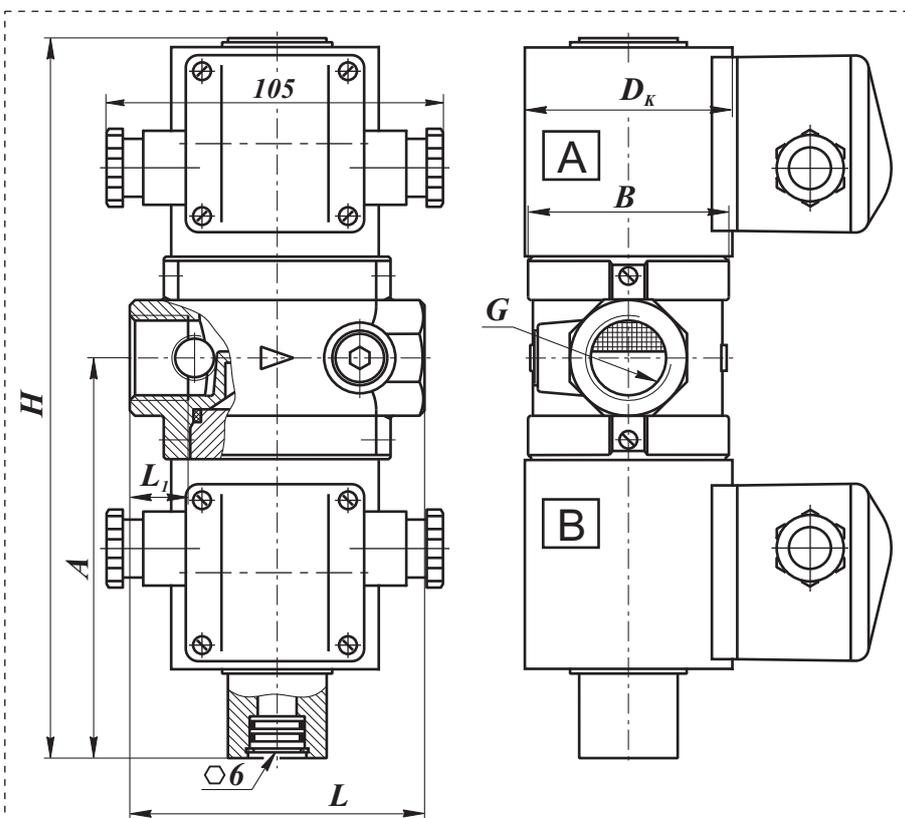


Fig. 5-1. Three-position solenoid valves DN 20, 25 mm, coupling connection, with one gas flow regulator

Consumption current at the time of valve opening, mA, max:

- for the 220-230 V version: 150 mA
- for the 110 V version: 300 mA
- for the 24 V version: 1300 mA

Climatic version:

- 30...+40 °C;
- 45...+40 °C;
- 60...+40 °C.

Degree of protection:

- General industrial version - IP65;
- Explosion proof version - IP67.

Service term switchings, min: 1 000 000

Housing material: aluminum alloys

Mounting position: any, except, when the solenoid is placed lower then valve’s longitudinal axis

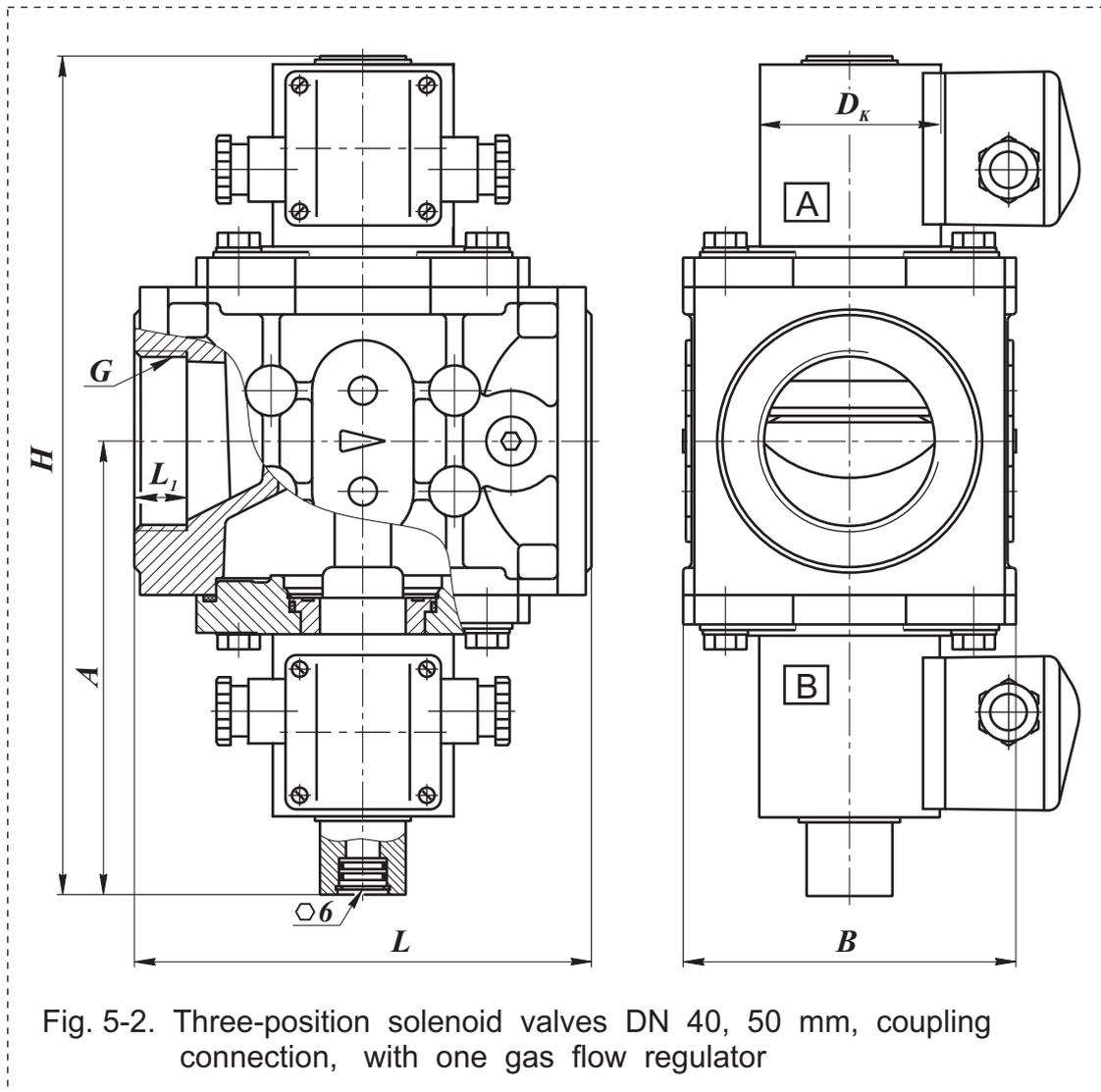


Fig. 5-2. Three-position solenoid valves DN 40, 50 mm, coupling connection, with one gas flow regulator

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}	Fig.
				L	L ₁	B	D _k	H	A			
BH ^{3/4} B-0,2	20	0...0,2	3/4	91	18	63	65 (80)*	224	125	3,5 (5,9)*	8,0	5-1
BH ^{3/4} B-1		0...1										
BH1B-0,2	25	0...0,2	1	105	21	72		231	128	3,7 (6,1)*	11,0	
BH1B-1		0...1										
BH1 ^{1/2} B-0,2	40	0...0,2	1 1/2	162	19	108		307	170	6,4 (8,8)*	10,4	5-2
BH2B-0,2	50											

In case of ordering explosion proof version of the valve (2ExmIIT4), letter “E” should be added to the name/identification code of the valve. Example: BH^{3/4}B-0,2E.

* For explosion proof version

** Regulator in open position

Valves in aluminum housing

THREE-POSITION SOLENOID SAFETY GAS VALVE with one gas flow regulator and position indicator (BH series, coupling connection)

All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

a) 100 % of the gas flow rate - both A-type and B-type solenoids are energized;

b) 10 - 60 % of the gas flow rate - A-type solenoid only is energized; required gas flow rate can be setup with the help of manual gas flow regulator which is

installed on B-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase gas flow rate accordingly.



Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption (heated up state): - at the time of valve opening: 25 W
- energy saving mode: 12,5 W

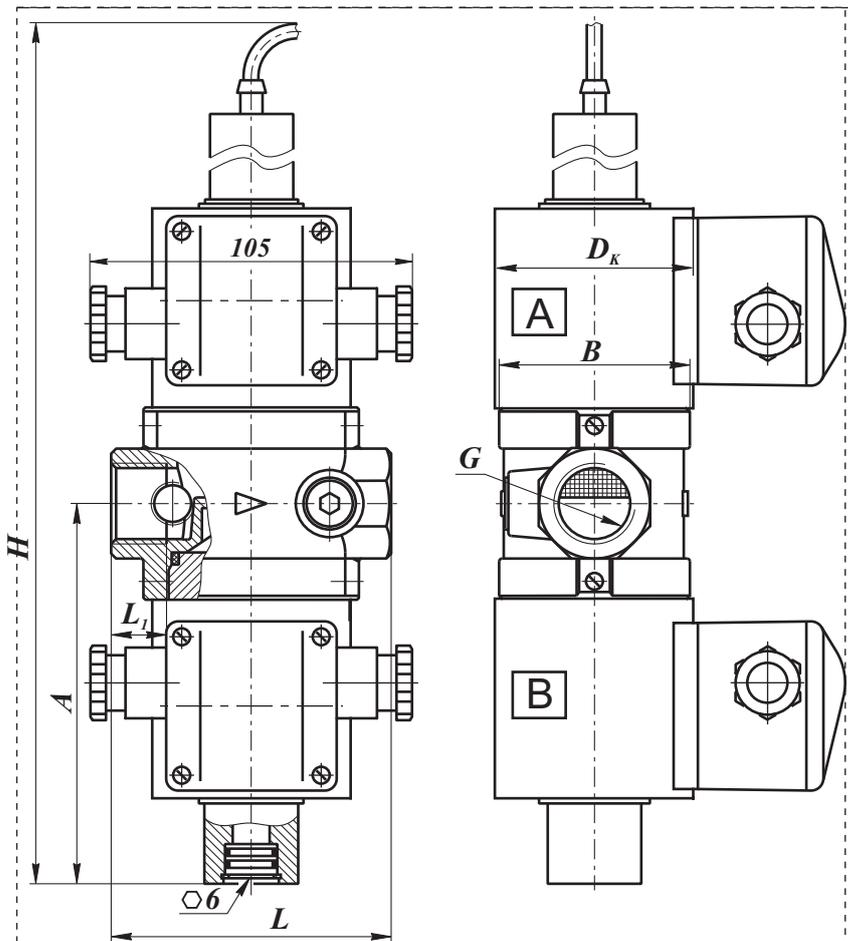


Fig. 5-3. Three-position solenoid valves DN 20, 25 mm, coupling connection, with one gas flow regulator and position indicator

Consumption current at the time of valve opening, mA, max:

for the 220-230 V version: 150 mA

for the 110 V version: 300 mA

for the 24 V version: 1300 mA

Climatic version:

-30...+40 °C;

-45...+40 °C;

-60...+40 °C.

Degree of protection:

General industrial version - IP65;

Explosion proof version - IP67.

Service term switchings, min: 1 000 000

Housing material: aluminum alloys

Position indicator's power source: 10...30 V DC

Position indicator type: inductive type (output key of position indicator opens when the valve is energized), degree of protection - IP68

Mounting position: any, except, when the solenoid is placed lower then valve's longitudinal axis

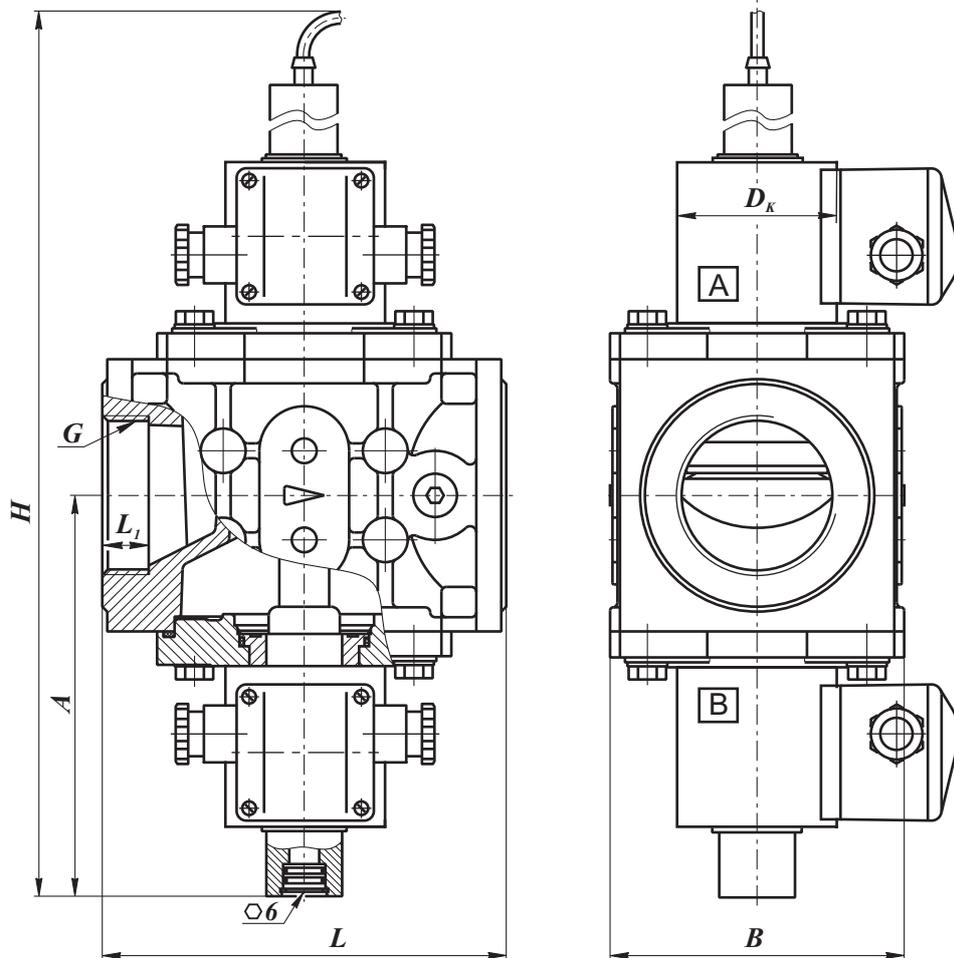


Fig. 5-4. Three-position solenoid valves DN 40, 50 mm, coupling connection with one gas flow regulator and position indicator

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}	Fig.
				L	L ₁	B	D _k	H	A			
BH ^{3/4} B-0,2P	20	0...0,2	3/4	91	18	63	65 (80)*	322	125	3,8 (6,2)*	8,0	5-3
BH ^{3/4} B-1P		0...1										
BH1B-0,2P	25	0...0,2	1	105	21	72		329	128	4,0 (6,4)*	11,0	
BH1B-1P		0...1										
BH1 ^{1/2} B-0,2P	40	0...0,2	1 1/2	162	19	108		407	170	6,7 (9,1)*	10,4	5-4
BH2B-0,2P	50		2									

In case of ordering explosion proof version of the valve (2ExmIIT4), letter “E” should be added to the name/identification code of the valve. Example: BH1B-0,2PE.

* For explosion proof version

** Regulator in open position

**THREE-POSITION SOLENOID SAFETY
GAS VALVE with two gas flow regulators
(BH series, coupling connection)**



All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 40 - 100% of the gas flow rate - both A-type and B-type solenoids are energized;
- b) 10 - 60% of the gas flow rate - A-type solenoid only is energized.

Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption (heated up state):

- at the time of valve opening: 25 W
- energy saving mode: 12,5 W

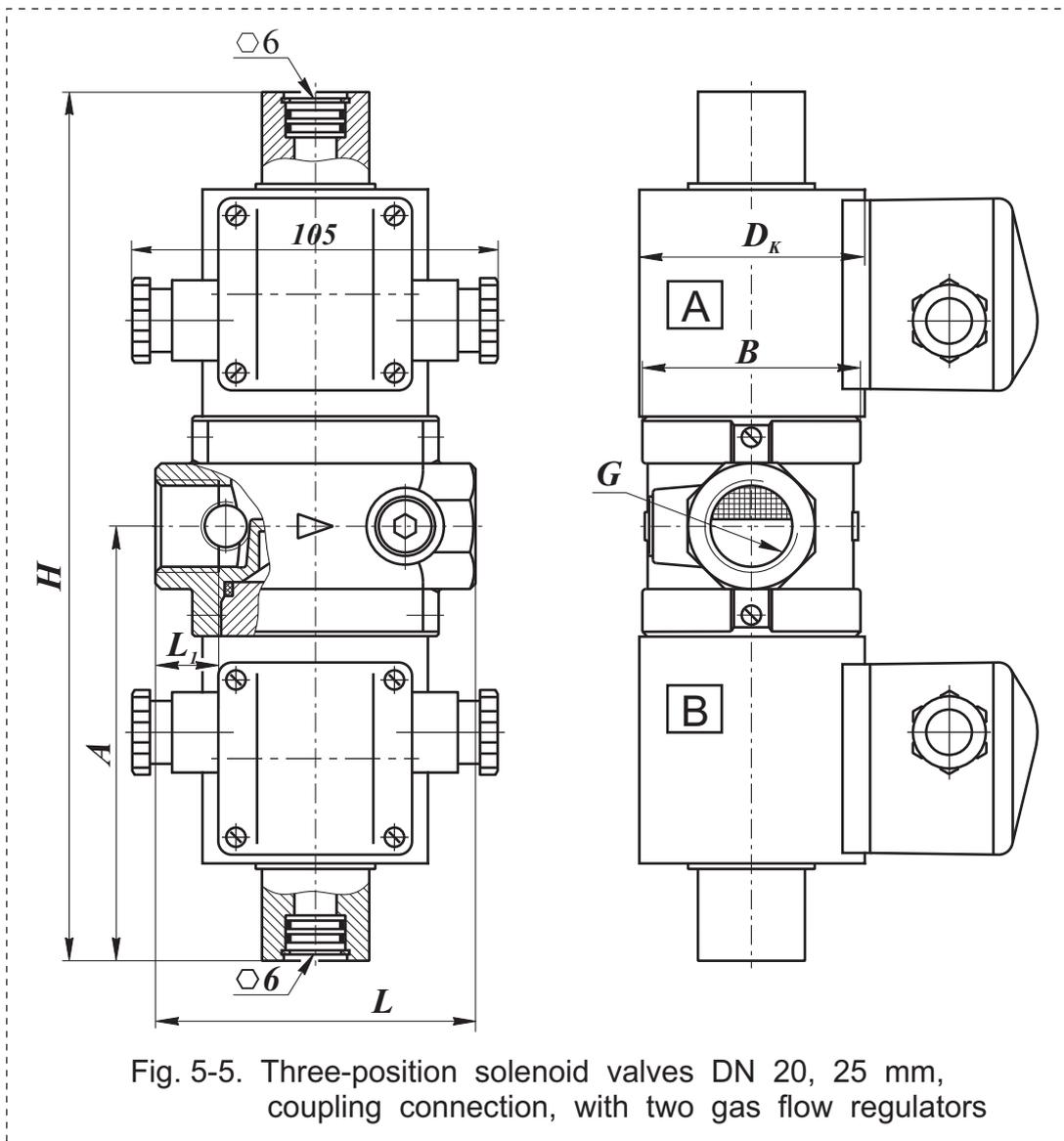


Fig. 5-5. Three-position solenoid valves DN 20, 25 mm, coupling connection, with two gas flow regulators

Climatic version:

-30...+40 °C;
-45...+40 °C;
-60...+40 °C.

Degree of protection:

General industrial version - IP65;
Explosion proof version - IP67.

Service term switchings,

min: 1 000 000

Housing material: aluminum alloys

Mounting position: any, except, when the solenoid is placed lower then valve's longitudinal axis

The valve is intended for an automatic regulation of gas flow rate. The valve operates according to the following operation modes:

- 40 - 100 % of the gas flow rate - both A-type and B-type solenoids are energized. Required gas flow rate can be setup with the help of manual gas flow regulator which is installed on A-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

- 10 - 60 % of the gas flow rate - A-type solenoid only is energized. Required gas flow rate can be setup with the help of manual gas flow regulator which is installed on B-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

Consumption current at the time of valve opening, mA, max:

for the 220-230 V version: 150 mA

for the 110 V version: 300 mA

for the 24 V version: 1300 mA

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm							Weight, kg	Resistance factor ζ**
				L	L ₁	L ₂	B	D _K	H	A		
BH ³ / ₄ B-0,2K	20	0...0,2	³ / ₄	117,5	91	18	63	65 (80)*	250	125	3,5 (5,9)*	5,9
BH ³ / ₄ B-1K		0...1										
BH1B-0,2K	25	0...0,2	1	125	105	21	72	65 (80)*	256	128	3,7 (6,1)*	9,0
BH1B-1K		0...1										

In case of ordering explosion proof version of the valve (2ExmIIT4), letter “E” should be added to the name/identification code of the valve. Example: BH³/₄B-0,2KE.

* For explosion proof version

** Regulator in open position



THREE-POSITION SOLENOID SAFETY GAS VALVE with one gas flow regulator (BH series, flange connection)

All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100 % of the gas flow rate - both A-type and B-type solenoids are energized;
- b) 10 - 60 % of the gas flow rate - A-type of the solenoid only is energized.

Switching frequency, 1/h, max:

1000 switching

Solenoid rated power consumption (heated up state):

- at the time of valve opening: 25 W
- energy saving mode: 12,5 W

Consumption current at the time of valve opening, mA, max:

for the 220-230 V version: 150 mA

for the 110 V version: 300 mA

for the 24 V version: 1300 mA

Climatic version:

-30...+40 °C;

-45...+40 °C;

-60...+40 °C.

Degree of protection:

General industrial version - IP65;

Explosion proof version - IP67.

Service term switching, min: 1 000 000

Housing material: aluminum alloys

Mounting position: any, except, when the solenoid is placed lower than valve's longitudinal axis

The valve is intended for an automatic regulation of gas flow rate. The valve operates according to the following operation modes:

- 100 % of gas flow rate - both A-type and B-type solenoids are energized;

- 10 - 60 % of gas flow rate - A-type solenoid only is energized. Required gas flow rate can be seupt with the help of manual gas flow regulator which is installed on the B-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

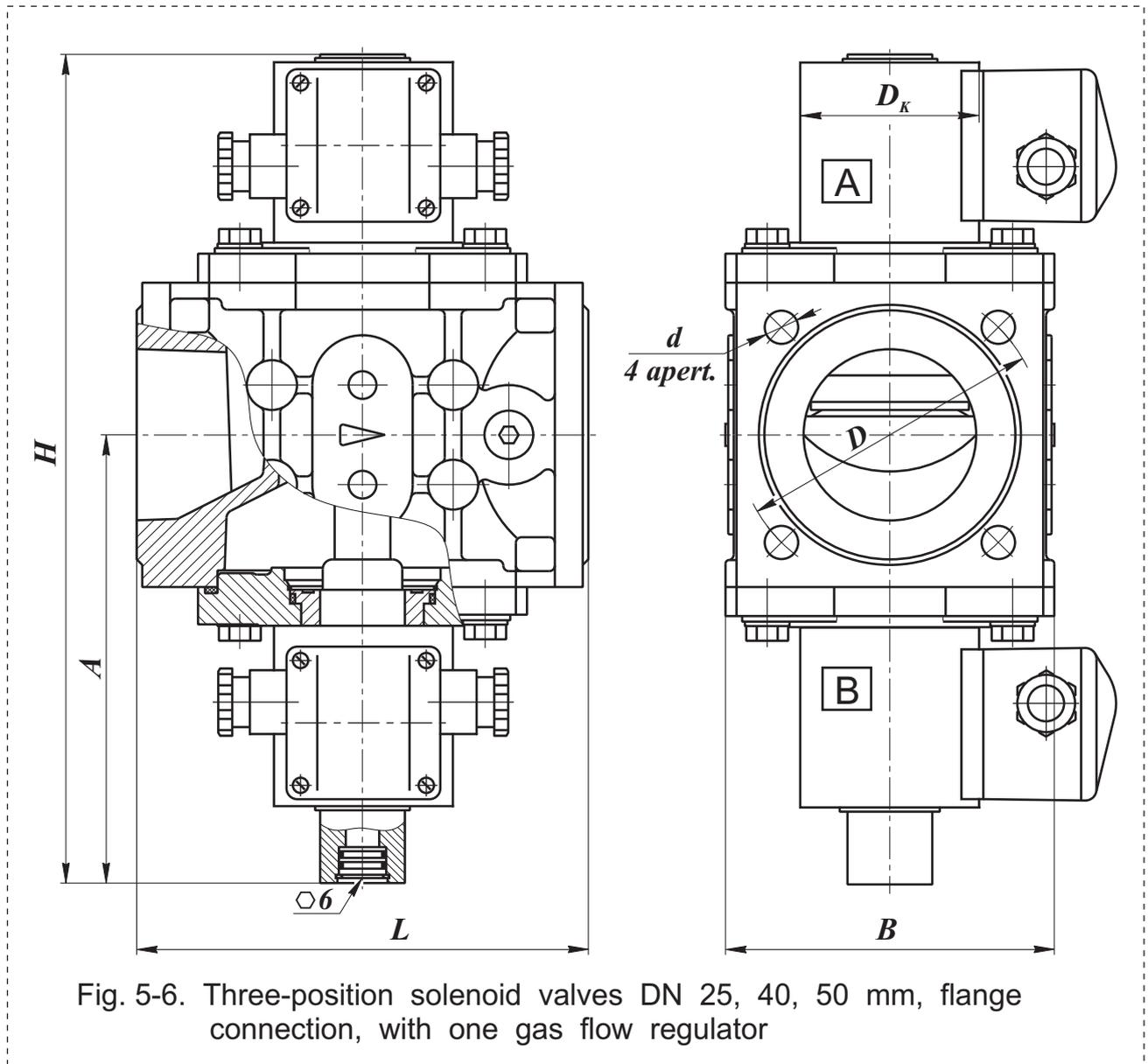


Fig. 5-6. Three-position solenoid valves DN 25, 40, 50 mm, flange connection, with one gas flow regulator

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}	
			L	B	D_K	H	A	D	d			
BH1B-0,2 fl.	25	0...0,2	160	95	65 (80)*	281	153	75	11	4,7 (7,1)*	6,5	
BH1B-1 fl.		0...1										
BH1 $\frac{1}{2}$ B-0,2 fl.	40	0...0,2	162	108		307	170	100		12,5	6,4 (8,8)*	12,5
BH2B-0,2 fl.	50			118				110				

In case of ordering explosion proof version of the valve (2ExmIIT4), letter “E” should be added to the name/identification code of the valve. Example: BH1 $\frac{1}{2}$ B-0,2E fl.

* For explosion proof version

** Regulator in open position



**THREE-POSITION SOLENOID SAFETY
GAS VALVE with one gas flow regulator
and position indicator
(BH series, flange connection)**

All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100 % of gas flow rate - both A-type and B-type solenoids are energized;
- b) 10 - 60 % of gas flow rate - A-type of solenoid only is energized.

Switching frequency, 1/h, max:
1000 switching

Solenoid rated power consumption (heated up state):
- at the time of valve opening: 25 W
- energy saving mode: 12,5 W

Consumption current at the time of valve opening, mA, max:
for the 220-230 V version: 150 mA
for the 110 V version: 300 mA
for the 24 V version: 1300 mA

Climatic version:
-30...+40 °C;
-45...+40 °C;
-60...+40 °C.

Degree of protection:
General industrial version - IP65;
Explosion proof version - IP67.

Service term switching, min: 1 000 000

Housing material: aluminum alloys

Mounting position: any, except, when the solenoid is placed lower then valve’s longitudinal axis

Position indicator’s power source:
10...30 V DC

Position indicator type: inductive type (output key of position indicator opens when the valve is energized), degree of protection - IP68

The valve is intended for an automatic regulation of gas flow rate. The valve operates according to the following operation modes:

- 100 % of gas flow rate - both A-type and B-type solenoids are energized;
- 10 - 60 % of gas flow rate - A-type solenoid only is energized. Required gas flow rate can be setup with the help of manual gas flow regulator which is installed on the B-type solenoid’s magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

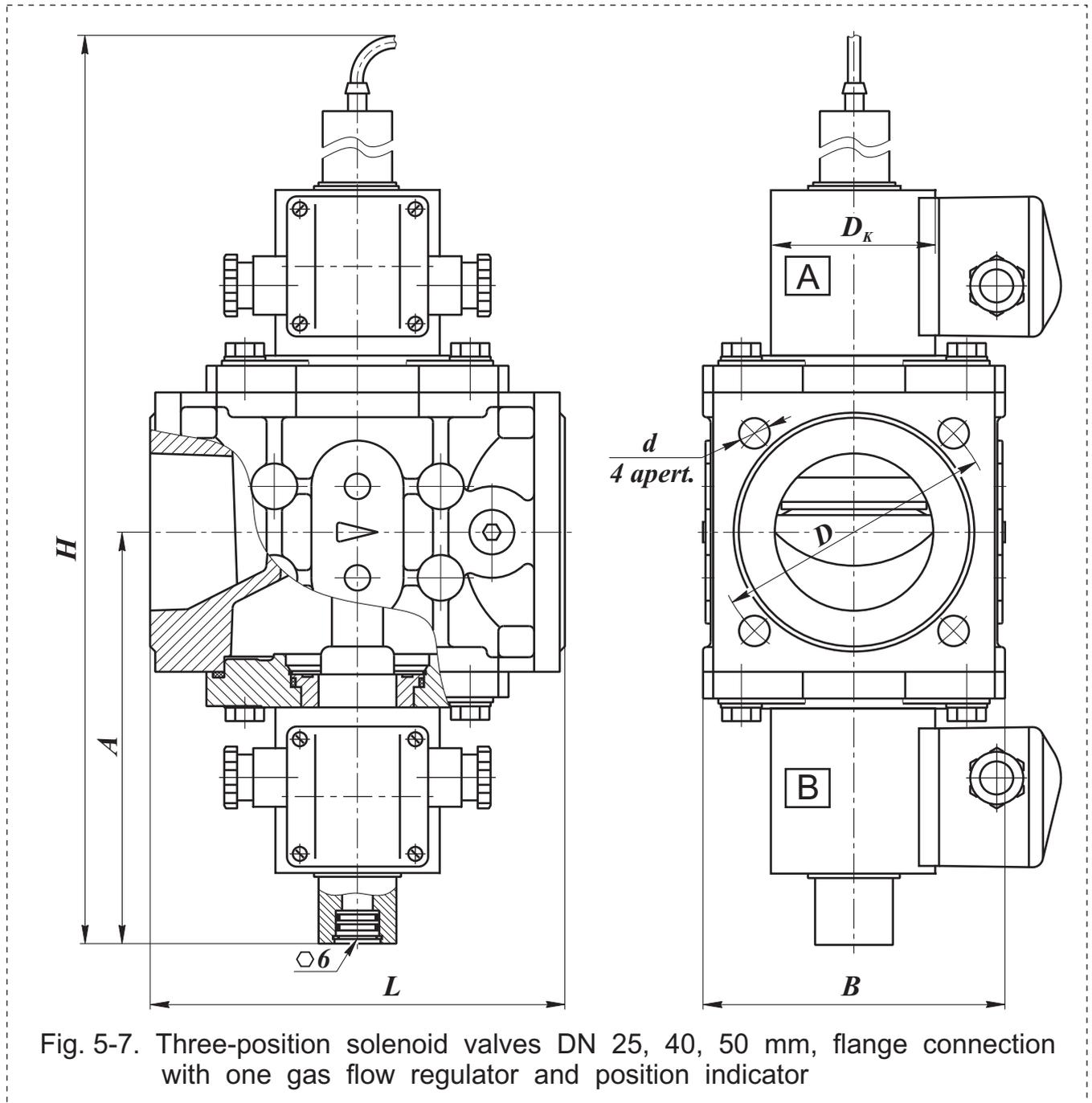


Fig. 5-7. Three-position solenoid valves DN 25, 40, 50 mm, flange connection with one gas flow regulator and position indicator

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}
			L	B	D_k	H	A	D	d		
BH1B-0,2P fl.	25	0...0,2	160	95	65 (80)*	378	153	75	11	5,0 (7,4)*	6,5
BH1B-1P fl.		0...1									
BH1 $\frac{1}{2}$ B-0,2P fl.	40	0...0,2	162	108	407	170	100	12,5	7,5 (9,9)*	13,2	
BH2B-0,2P fl.	50			118			110				

In case of ordering explosion proof version of the valve (2ExmIIT4), letter "E" should be added to the name/identification code of the valve. Example: BH1 $\frac{1}{2}$ B-0,2PE fl.

* For explosion proof version

** Regulator in open position

**THREE-POSITION SOLENOID SAFETY
GAS VALVE with two gas flow regulators
(BH series, flange connection, DN 25 mm)**

All valves of this type operate according to the following three-position-operation-mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100 % of gas flow rate - both A-type and B-type solenoids are energized;
- b) 10 - 60% of gas flow rate - A-type solenoid only is energized.

Switching frequency, 1/h, max: 1000 switching

Solenoid rated power consumption (heated up state):

- at the time of valve opening: 25 W
- energy saving mode: 12,5 W

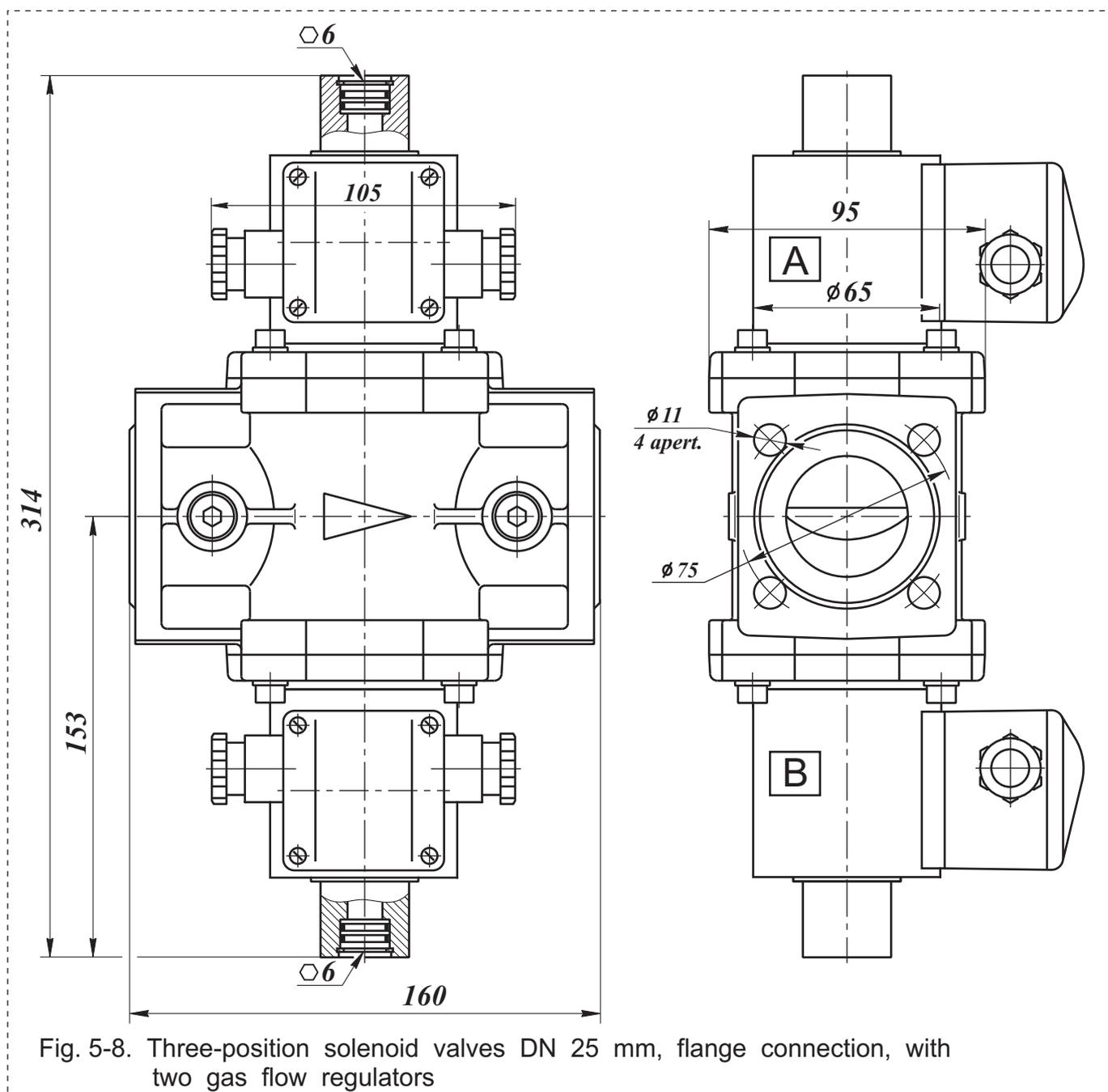


Fig. 5-8. Three-position solenoid valves DN 25 mm, flange connection, with two gas flow regulators

Climatic version:

-30...+40 °C;
 -45...+40 °C;
 -60...+40 °C.

Degree of protection:

General industrial version - IP65;
 Explosion proof version - IP67.

Service term switching,

min: 1 000 000

Housing material: aluminum alloys

Mounting position: any, except, when the solenoid is placed lower then valve's longitudinal axis

The valve is intended for an automatic regulation of the gas flow rate. The valve operates according to the following operation modes:

- 40 - 100 % of gas flow rate - both A-type and B-type solenoids are energized. Required gas flow rate can be setup with the help of manual gas flow regulator which is installed on the A-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

- 10 - 60 % of gas flow rate - A-type solenoid only is energized. Required gas flow rate can be setup with the help of manual gas flow regulator which is installed on B-type solenoid's magnetic system. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

Consumption current at the time of valve opening, mA, max:

for the 220-230 V version: 150 mA
for the 110 V version: 300 mA
for the 24 V version: 1300 mA

Additional characteristics

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Weight, kg	Resistance factor ζ**
BH1B-0,2K fl.	25	0...0,2	5,0 (7,4)*	6,5
BH1B-1K fl.		0...1		

In case of ordering explosion proof version of the valve (2ExmIIT4), letter “E” should be added to the name/identification code of the valve. Example: BH1B-0,2KE fl.

* For explosion proof version
 ** Regulator in open position

THREE-POSITION SOLENOID SAFETY GAS VALVE with one gas flow regulator (BH series)



Three-position solenoid safety gas valve operates according to the following three-position operation mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100 % of gas flow rate - A-type solenoid only is energized;
 - b) 10 - 60 % of gas flow rate - B-type solenoid only is energized;
- required gas flow volume passing through “by-pass” valve can be setup with the help of manual gas flow regulator which is installed in the bottom part of the “by-pass” valve’s housing. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

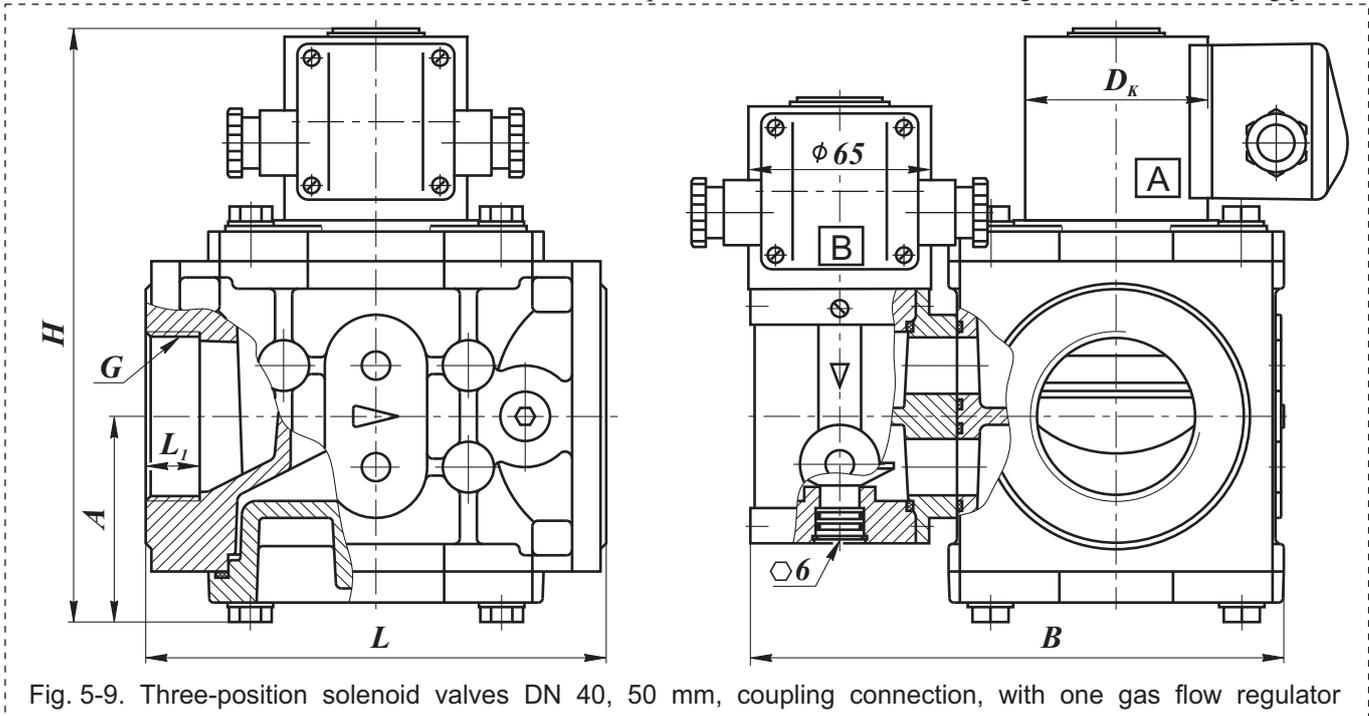


Fig. 5-9. Three-position solenoid valves DN 40, 50 mm, coupling connection, with one gas flow regulator

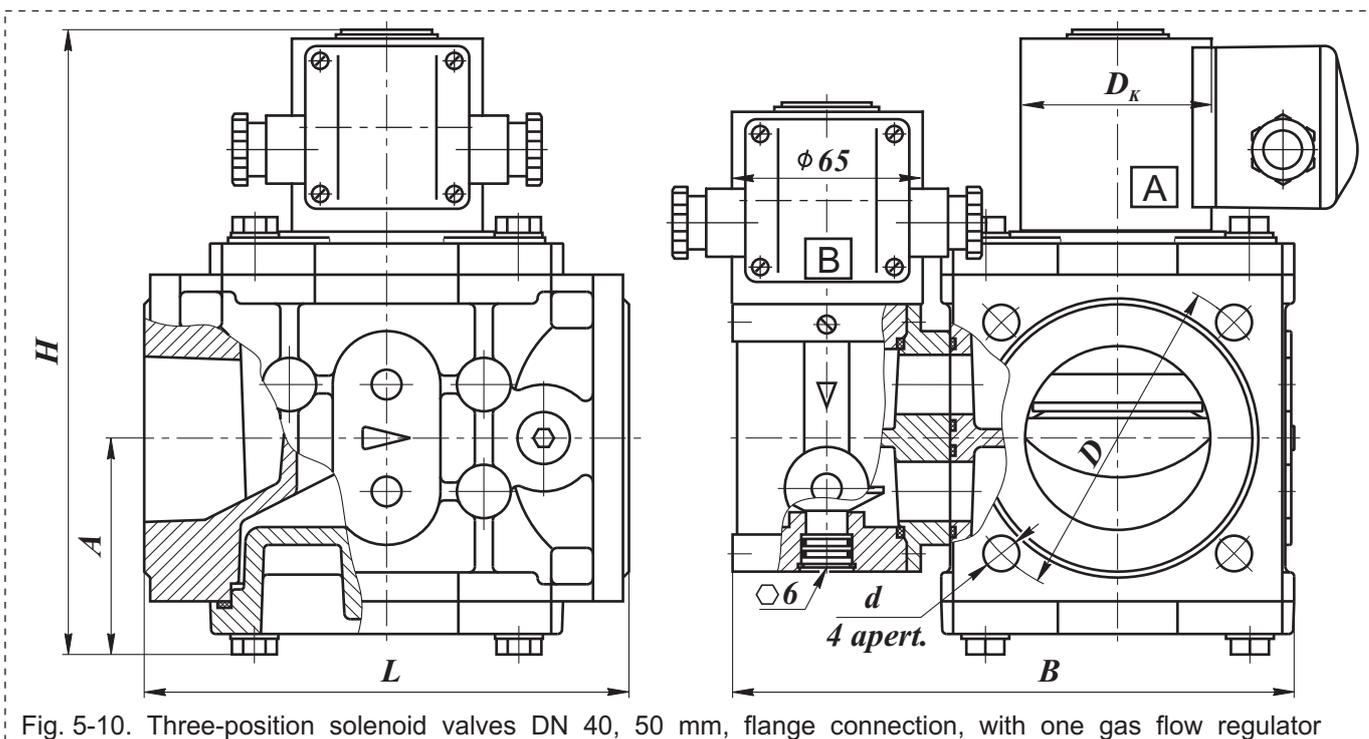


Fig. 5-10. Three-position solenoid valves DN 40, 50 mm, flange connection, with one gas flow regulator

Overall dimensions and connection sizes of the valves with one gas flow regulator coupling connection (fig. 5-9)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}
				L	L ₁	B	D _к	H	A		
BH1 ¹ / ₂ B-1	40	0...1	1 ¹ / ₂	162	19	185	65	210	75	6,4 (8,8)*	10,4
BH1 ¹ / ₂ B-3		0...3				190	65 (80)*			7,6 (9,1)*	
BH2B-1	50	0...1	2			195	65	212	77	6,9 (9,3)*	12,6
BH2B-3		0...3				200	65 (80)*			8,1 (9,6)*	

Overall dimensions and connection sizes of the valves with one gas flow regulator flange connection (fig. 5-10)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}
			L	B	D _к	H	A	D	d		
BH1 ¹ / ₂ B-1 fl.	40	0...1	162	185	65	210	75	100	12,5	6,4 (8,8)*	9,1
BH1 ¹ / ₂ B-3 fl.		0...3		190	65 (80)*					7,6 (9,1)*	
BH2B-1 fl.	50	0...1		195	65	212	77	110		6,9 (9,3)*	11,6
BH2B-3 fl.		0...3		200	65 (80)*					8,1 (9,6)*	

Housing material: aluminum alloys

Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption for one coil (heated up state, max):

- for valves BH1¹/₂B-1, BH1¹/₂B-1 fl., BH2B-1, BH2B-1 fl. - 25 W;
- for valves BH1¹/₂B-3, BH1¹/₂B-3 fl., BH2B-3, BH2B-3 fl. - 35 W.

Consumption current at the time of valve opening:

- coil 25 W:
 - for the 220-230 V version: 150 mA
 - for the 110 V version: 300 mA
 - for the 24 V version: 1300 mA
- coil 35 W:
 - for the 220-230 V version: 190 mA
 - for the 110 V version: 380 mA
 - for the 24 V version: 1700 mA

Degree of protection:

General industrial version - IP65;
Explosion proof version - IP67.

Climatic version:

- 30...+40 °C;
- 45...+40 °C;
- 60...+40 °C.

Service term, switchings, min:

1 000 000

Mounting position: any, except, when solenoid is placed lower than valve's longitudinal axis.

* For explosion proof version

** At the point when regulator is completely open

In case of ordering explosion proof version of the valve (2ExmIIT4), letter "E" should be added to the name/identification code of the valve. Example: BH2B-1E fl.

THREE-POSITION SOLENOID SAFETY GAS VALVE with one gas flow regulator and position indicators (BH series)



Three-position solenoid safety gas valve operates according to the following three-position operation mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

- a) 100% of gas flow rate - A-type solenoid only is energized;
 - b) 10 - 60 % of gas flow rate - B-type solenoid only is energized;
- required gas flow volume passing through the “by-pass” valve can be seupt with the help of manual gas flow regulator which is installed in the bottom part of the “by-pass” valve’s housing. By turning the screw in “-” or “+” directions it is possible to decrease/increase gas flow rate accordingly.

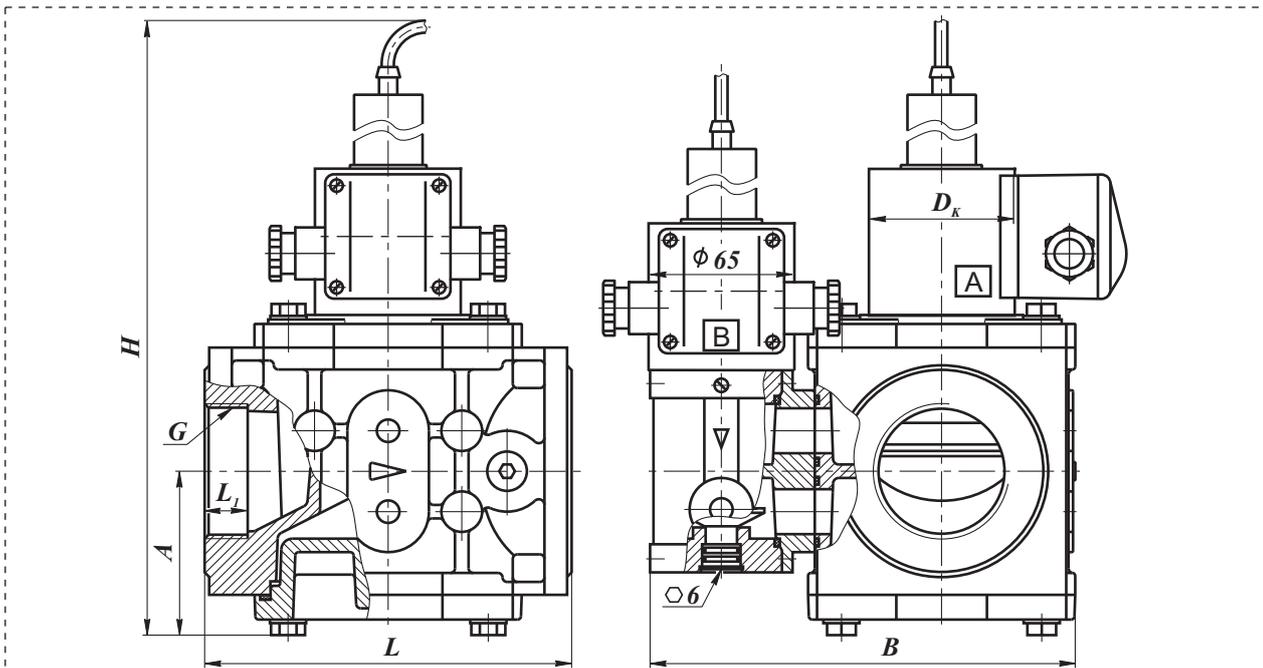


Fig. 5-11. Three-position solenoid valves DN 40, 50 mm, coupling connection, with one gas flow regulator and position indicators

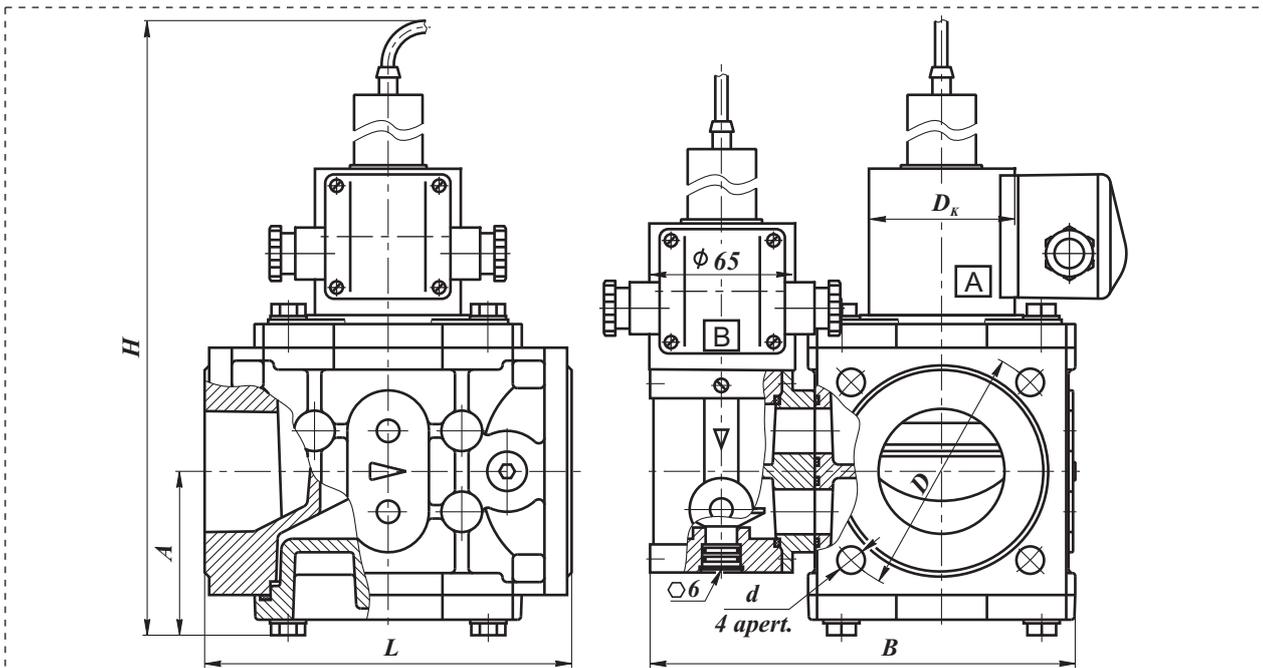


Fig. 5-12. Three-position solenoid valves DN 40, 50 mm, flange connection, with one gas flow regulator and position indicators

Overall dimensions and connection sizes of the valves with one gas flow regulator and position indicators coupling connection (fig. 5-11)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}
				L	L ₁	B	D _к	H	A		
BH1 ¹ / ₂ B-1P	40	0...1	1 ¹ / ₂	162	19	185	65	308	75	7,1 (9,5)*	10,4
BH1 ¹ / ₂ B-3P		0...3				190	65 (80)*			8,3 (9,8)*	
BH2B-1P	50	0...1	2			195	65	310	77	7,6 (10,0)*	
BH2B-3P		0...3				200	65 (80)*			8,8 (10,3)*	

Overall dimensions and connection sizes of the valves with one gas flow regulator and position indicators flange connection (fig. 5-12)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}
			L	B	D _к	H	A	D	d		
BH1 ¹ / ₂ B-1P fl.	40	0...1	162	185	65	308	75	100	12,5	7,1 (9,5)*	9,1
BH1 ¹ / ₂ B-3P fl.		0...3		190	65 (80)*					8,3 (9,8)*	
BH2B-1P fl.	50	0...1		195	65	310	77	110		7,6 (10,0)*	
BH2B-3P fl.		0...3		200	65 (80)*					8,8 (10,3)*	

Housing material: aluminum alloys

Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption for one coil (heated up state, max):

- for valves BH1¹/₂B-1P, BH1¹/₂B-1P fl., BH2B-1P, BH2B-1P fl. - 25 W;
- for valves BH1¹/₂B-3P, BH1¹/₂B-3P fl., BH2B-3P, BH2B-3P fl. - 35 W.

Consumption current at the time of valve opening:

- coil 25 W:
 - for the 220-230 V version: 150 mA
 - for the 110 V version: 300 mA
 - for the 24 V version: 1300 mA
- coil 35 W:
 - for the 220-230 V version: 190 mA
 - for the 110 V version: 380 mA
 - for the 24 V version: 1700 mA

Degree of protection:

- General industrial version - IP65;
- Explosion proof version - IP67.

Climatic version:

- 30...+40 °C;
- 45...+40 °C;
- 60...+40 °C.

Service term, switchings, min: 1 000 000

Power source of position indicator: 10...30 V, DC

Protection degree of position indicator: IP68

Type of position indicator:

inductive type (output key opens when the valve is energized)

Mounting position: any, except, when solenoid is placed lower than valve's longitudinal axis.

* For explosion proof version

** At the point when regulator is completely open

In case of ordering explosion proof version of the valve (2ExmIIT4), letter "E" should be added to the name/identification code of the valve. Example: BH2B-3PE

**THREE-POSITION SOLENOID SAFETY
GAS VALVE with two gas flow regulators
(BH series)**



Three-position solenoid safety gas valve operates according to the following three-position operation mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

a) 40 - 100 % of gas flow rate - A-type solenoid only is energized; required gas flow rate value can be setup with the help of manual gas flow regulator which is positioned in the bottom part of main valve. By turning the screw in “-” or “+” directions it is possible to decrease/increase gas flow rate accordingly;

b) 10 - 40 % of gas flow rate - B-type solenoid only is energized; required gas flow volume passing through the “by-pass” valve can be setup with the help of manual gas flow regulator which is installed in the bottom part of the “by-pass” valve’s housing. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

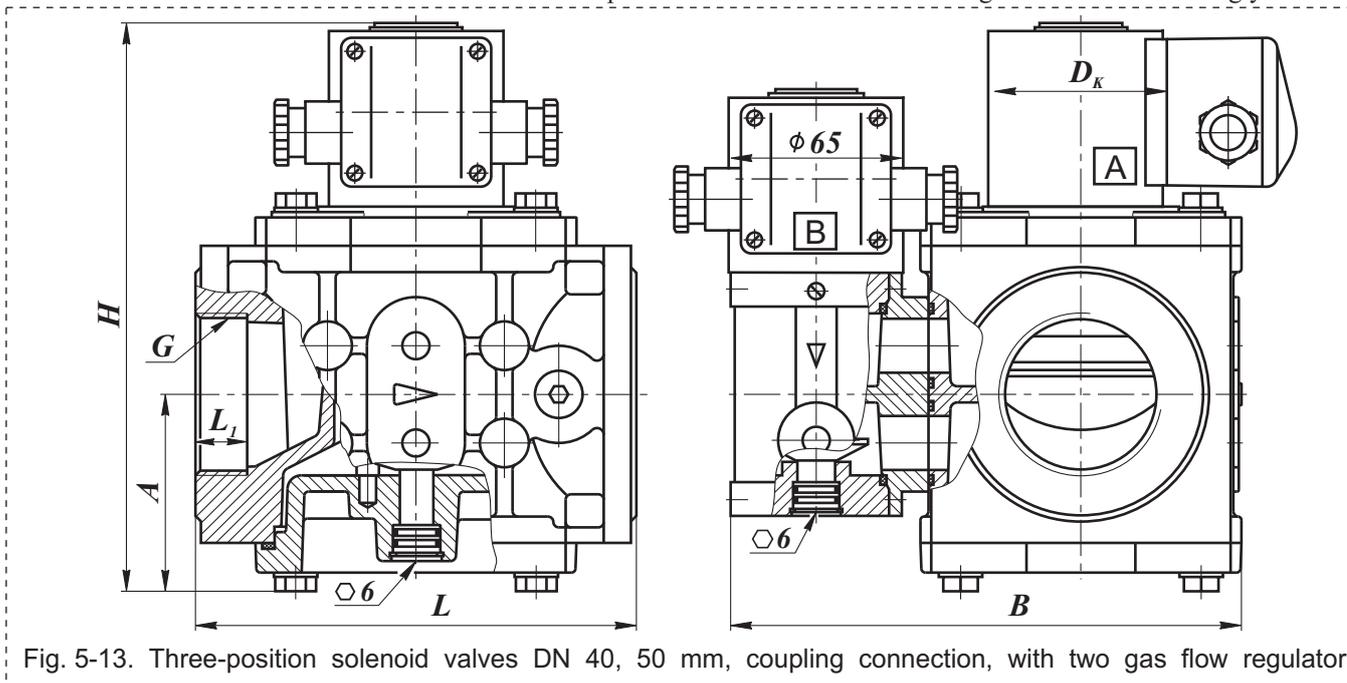


Fig. 5-13. Three-position solenoid valves DN 40, 50 mm, coupling connection, with two gas flow regulator

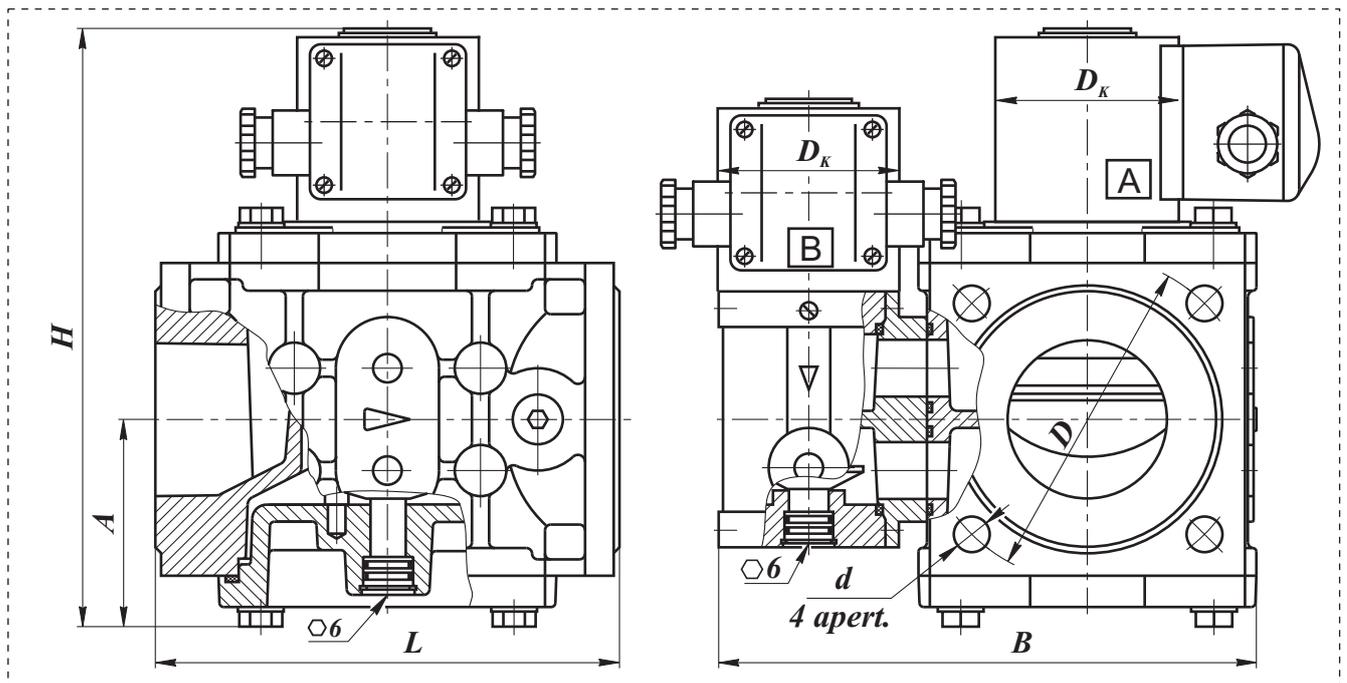


Fig. 5-14. Three-position solenoid valves DN 40, 50 mm, flange connection, with one gas flow regulator

Overall dimensions and connection sizes of the valves with two gas flow regulators coupling connection (fig. 5-13)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}
				L	L ₁	B	D _к	H	A		
BH1 $\frac{1}{2}$ B-1K	40	0...1	1 $\frac{1}{2}$	162	19	185	65	210	75	6,4 (8,8)*	10,4
BH1 $\frac{1}{2}$ B-3K		0...3				190	65 (80)*			7,6 (9,1)*	
BH2B-1K	50	0...1	2			195	65	212	77	6,9 (9,3)*	
BH2B-3K		0...3				200	65 (80)*			8,1 (9,6)*	

Overall dimensions and connection sizes of the valves with two gas flow regulators flange connection (fig. 5-14)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}
			L	B	D _к	H	A	D	d		
BH1 $\frac{1}{2}$ B-1K fl.	40	0...1	162	185	65	210	75	100	12,5	6,4 (8,8)*	9,1
BH1 $\frac{1}{2}$ B-3K fl.		0...3		190	65 (80)*					7,6 (9,1)*	
BH2B-1K fl.	50	0...1		195	65	212	77	110		6,9 (9,3)*	
BH2B-3K fl.		0...3		200	65 (80)*					8,1 (9,6)*	

Housing material: aluminum alloys

Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption for one coil (heated up state, max):

- for valves BH1 $\frac{1}{2}$ B-1K, BH1 $\frac{1}{2}$ B-1K fl., BH2B-1K, BH2B-1K fl. - 25 W;
- for valves BH1 $\frac{1}{2}$ B-3K, BH1 $\frac{1}{2}$ B-3K fl., BH2B-3K, BH2B-3K fl. - 35 W.

Consumption current at the time of valve opening:

- coil 25 W:
 - for the 220-230 V version: 150 mA
 - for the 110 V version: 300 mA
 - for the 24 V version: 1300 mA
- coil 35 W:
 - for the 220-230 V version: 190 mA
 - for the 110 V version: 380 mA
 - for the 24 V version: 1700 mA

Degree of protection:

General industrial version - IP65;
Explosion proof version - IP67.

Climatic version:

-30...+40 °C;
-45...+40 °C;
-60...+40 °C.

Service term, switchings, min:

1 000 000

Mounting position: any, except, when solenoid is placed lower then valve's longitudinal axis.

* For explosion proof version

** At the point when regulator is completely open

In case of ordering explosion proof version of the valve (2ExmIIT4), letter "E" should be added to the name/identification code of the valve. Example: BH1 $\frac{1}{2}$ B-1KE fl.

THREE-POSITION SOLENOID SAFETY GAS VALVE
with two gas flow regulators and position indicators (BH series)



Three-position solenoid safety gas valve operates according to the following three-position operation mode: “max. flow rate”, “closed”, “intermediate flow rate”.

Electrical connection of the valve to the power supply system is conducted according to the following scheme:

a) 40 - 100 % of gas flow rate - A-type solenoid only is energized; required gas flow rate can be set up with the help of manual gas flow regulator which is positioned in the bottom part of the main valve. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly;

b) 10 - 40 % of gas flow rate - B-type solenoid only is energized; required gas flow volume passing through the “by-pass” valve can be set up with the help of manual gas flow regulator which is installed in the bottom part of the “by-pass” valve’s housing. By turning the screw in “-” or “+” directions it is possible to decrease/increase the gas flow rate accordingly.

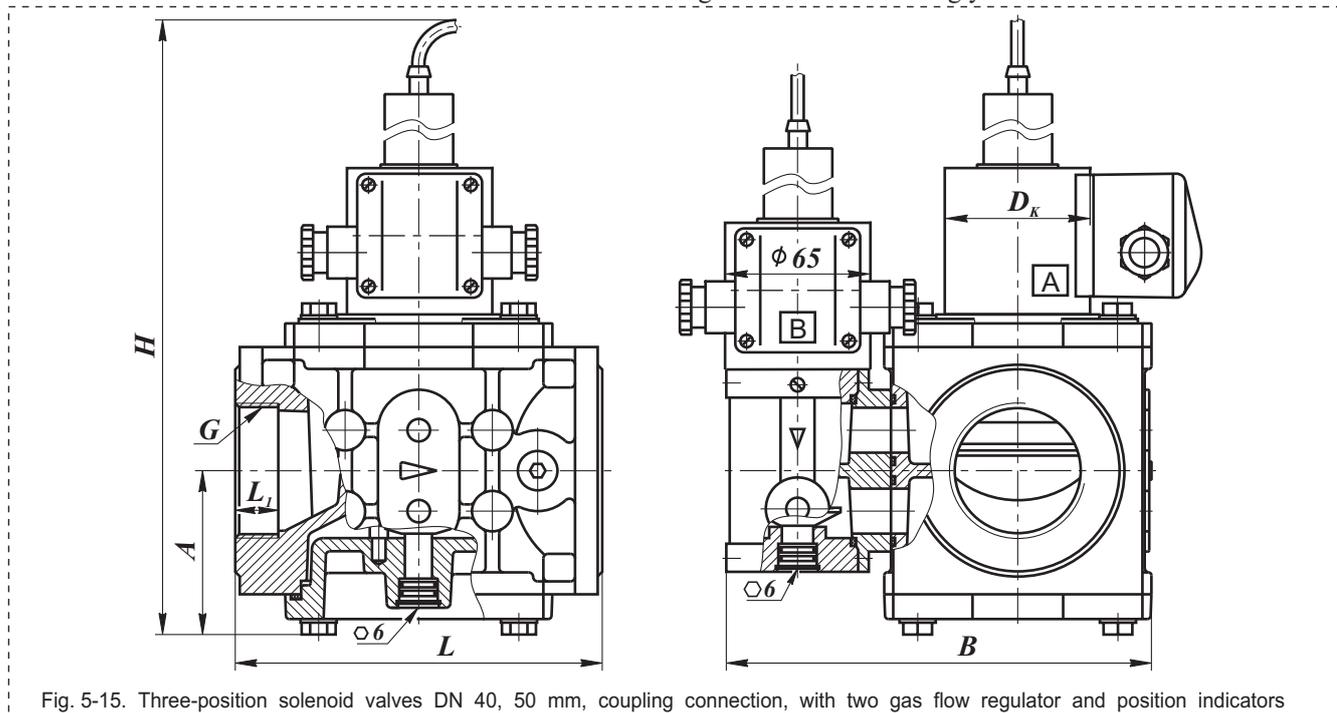


Fig. 5-15. Three-position solenoid valves DN 40, 50 mm, coupling connection, with two gas flow regulator and position indicators

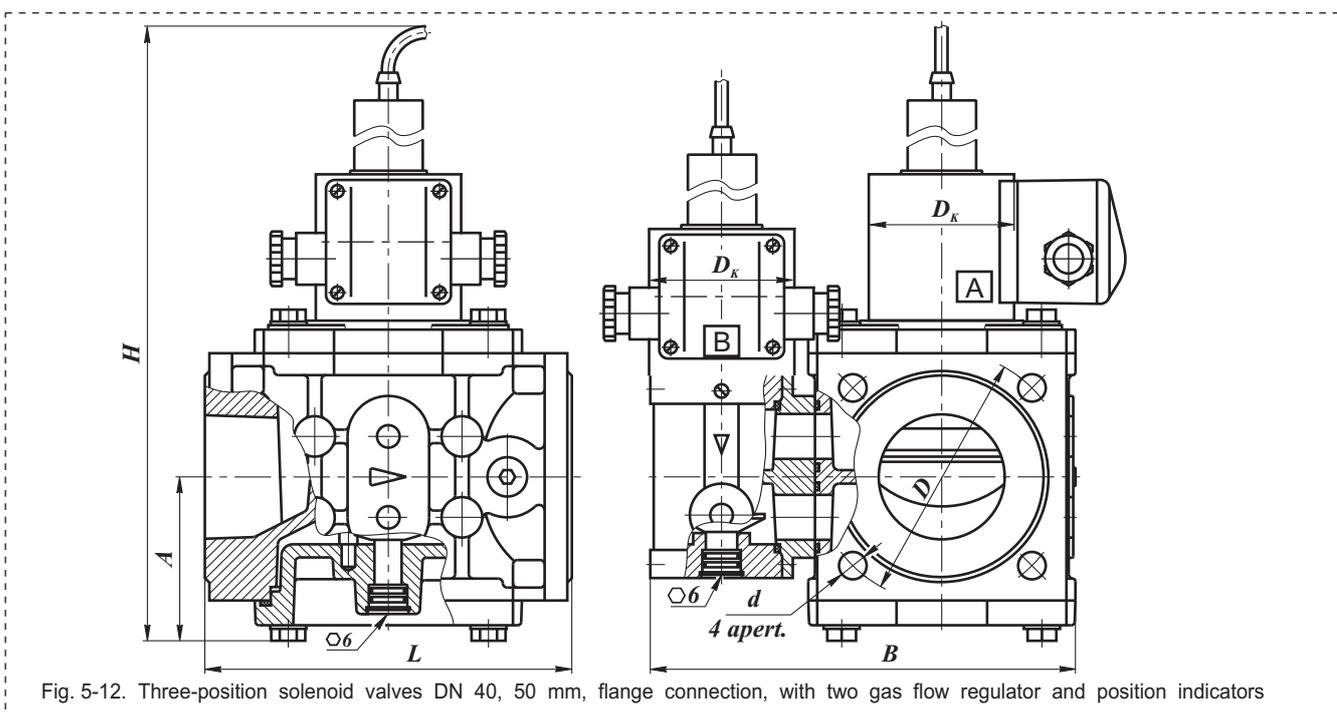


Fig. 5-12. Three-position solenoid valves DN 40, 50 mm, flange connection, with two gas flow regulator and position indicators

Overall dimensions and connection sizes of the valves with two gas flow regulator and position indicators coupling connection (fig. 5-11)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	G, inches	Dimensions, mm						Weight, kg	Resistance factor ζ^{**}
				L	L ₁	B	D _K	H	A		
BH1 $\frac{1}{2}$ B-1KP	40	0...1	1 $\frac{1}{2}$	162	19	185	65	308	75	7,1 (9,5)*	10,4
BH1 $\frac{1}{2}$ B-3KP		0...3				190	65 (80)*			8,3 (9,8)*	
BH2B-1KP	50	0...1	2			195	65	310	77	7,6 (10,0)*	
BH2B-3KP		0...3				200	65 (80)*			8,8 (10,3)*	

Overall dimensions and connection sizes of the valves with two gas flow regulator and position indicators flange connection (fig. 5-12)

Valve's model	Diameter Nominal, mm	Operating pressure range, bar	Dimensions, mm							Weight, kg	Resistance factor ζ^{**}
			L	B	D _K	H	A	D	d		
BH1 $\frac{1}{2}$ B-1KP fl.	40	0...1	162	185	65	308	75	100	12,5	7,1 (9,5)*	9,1
BH1 $\frac{1}{2}$ B-3KP fl.		0...3		190	65 (80)*					8,3 (9,8)*	
BH2B-1KP fl.	50	0...1		195	65	310	77	110		7,6 (10,0)*	
BH2B-3KP fl.		0...3		200	65 (80)*					8,8 (10,3)*	

Housing material: aluminum alloys

Switching frequency, 1/h, max: 1000 switchings

Solenoid rated power consumption for one coil (heated up state, max):

- for valves BH1 $\frac{1}{2}$ B-1KP, BH1 $\frac{1}{2}$ B-1KP fl., BH2B-1KP, BH2B-1KP fl. - 25 W;
- for valves BH1 $\frac{1}{2}$ B-3KP, BH1 $\frac{1}{2}$ B-3KP fl., BH2B-3KP, BH2B-3KP fl. - 35 W.

Consumption current at the time of valve opening:

- coil 25 W:
 - for the 220-230 V version: 150 mA
 - for the 110 V version: 300 mA
 - for the 24 V version: 1300 mA
- coil 35 W:
 - for the 220-230 V version: 190 mA
 - for the 110 V version: 380 mA
 - for the 24 V version: 1700 mA

Degree of protection:

- General industrial version - IP65;
- Explosion proof version - IP67.

Climatic version:

- 30...+40 °C;
- 45...+40 °C;
- 60...+40 °C.

Service term, switchings, min: 1 000 000

Power source of position indicator: 10...30 V, DC

Protection degree of position indicator: IP68

Type of position indicator:

inductive type (output key opens when the valve is energized)

Mounting position: any, except, when solenoid is placed lower than valve's longitudinal axis.

* For explosion proof version

** At the point when regulator is completely open

In case of ordering explosion proof version of the valve (2ExmIIT4), letter "E" should be added to the name/identification code of the valve. Example: BH1 $\frac{1}{2}$ B-3KPE fl.