

Flow adjusting cocks GEHV, GEH, LEH

TECHNICAL INFORMATION



- Precise adjustment of gas and air flow rates
- Various setting options using hand wheel or tools
- GEHV: accurate adjustment thanks to reduction of rotary movement

1 Application

GEHV



The flow adjusting cock GEHV is used for flow rate adjustment in laboratories and test systems, and wherever flow rates have to be frequently readjusted.

GEH 8 to 25



Thanks to flow adjusting cocks GEH 8 to 25, the gas flow rate upstream of gas burners can be adjusted. It can be used up to a maximum inlet pressure of 1 bar.

GEH 32 to 50



Thanks to flow adjusting cocks GEH 32 to 50, the gas flow rate upstream of gas burners can be adjusted up to a maximum inlet pressure of 5 bar.

LEH

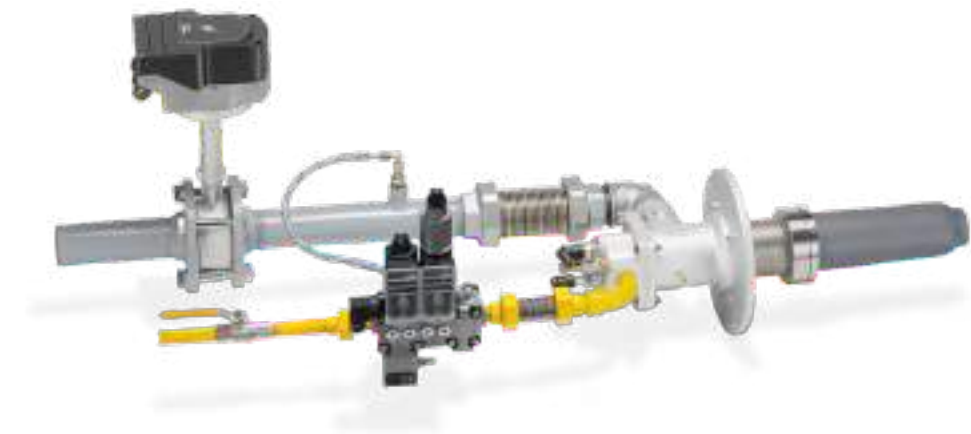


Thanks to flow adjusting cock LEH, the air flow rate upstream of gas burners can be adjusted. Optionally, the hand wheel can be replaced with the safety cap shown to protect against unintentional maladjustment.

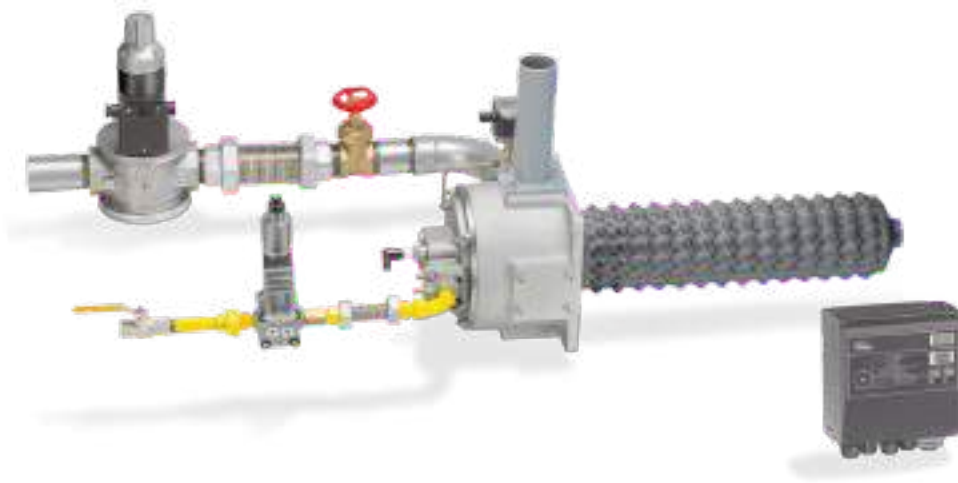
1.1 Application examples



GEHV in a laboratory



Gas adjusting cock GEH in a burner line



Air adjusting cock LEH in a burner line

2 Certification

Certificates – see www.docuthek.com

EU certified



- 2014/68/EU, Pressure Equipment Directive

Eurasian Customs Union



The products GEHV, GEH, LEH meet the technical specifications of the Eurasian Customs Union.

3 Function

3.1 GEHV, GEH

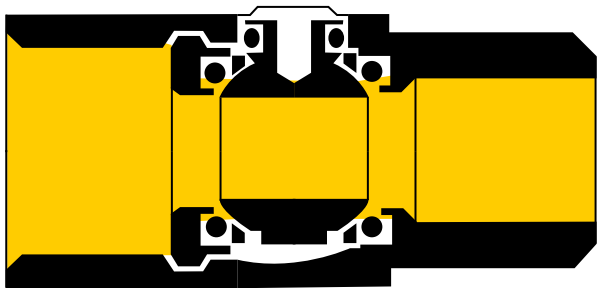
Flow adjusting cock GEHV is used for adjusting gas and air flow rates.

A pierced ball acts as a shut-off device ensuring full closing within an angle of rotation of 90°.

GEHV

The flow rate can be adjusted using a hand wheel with an adjusting scale and a position indicator. If the hand wheel is turned through 360°, the ball is turned 90°. This reduction of the ball rotation allows for accurate adjustment of the flow rate.

GEH



The ball in GEH is turned 90° using an Allen key, screwdriver or spanner.

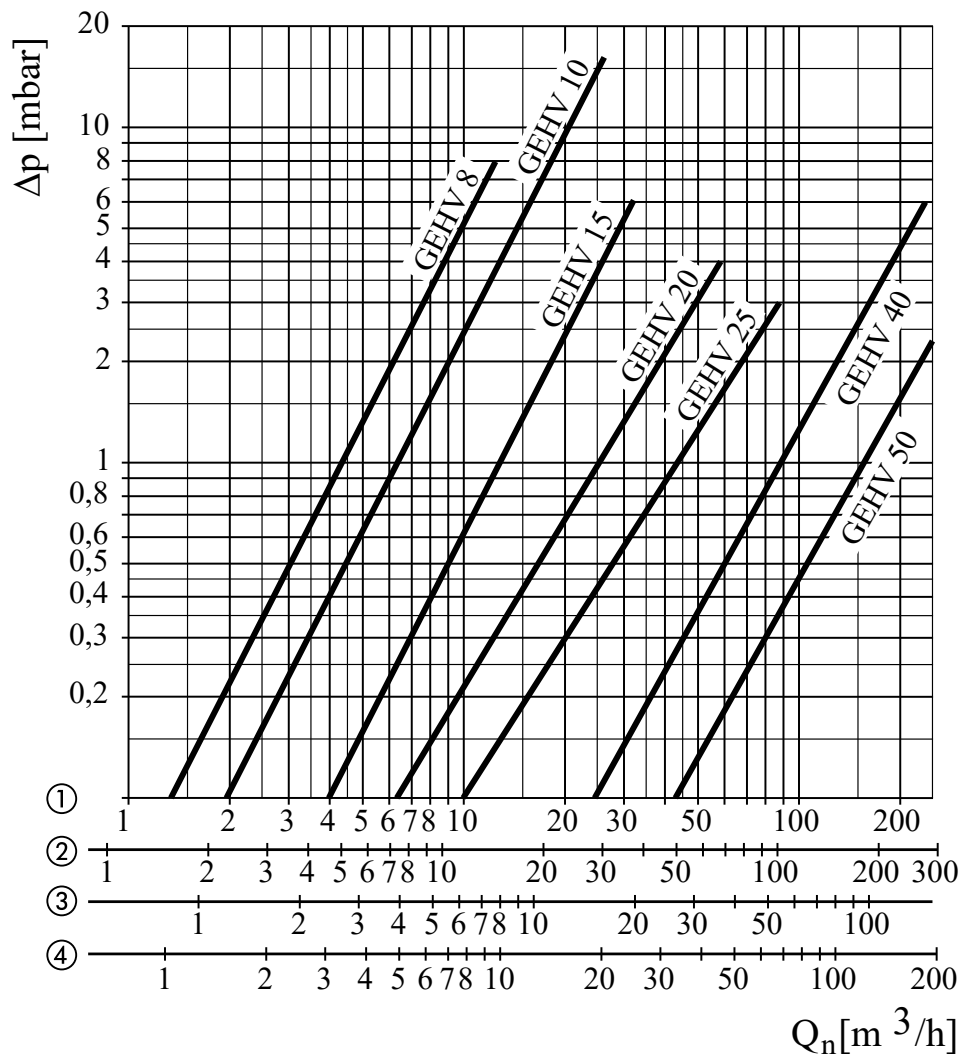
3.2 LEH

Flow adjusting cock LEH is used for adjusting the air flow rate. Shut-off is provided by a gate stop valve which is exactly positioned using a hand wheel, thereby releasing the required flow volume.

The hand wheel can be replaced with the safety cap enclosed to prevent unintentional rotation.

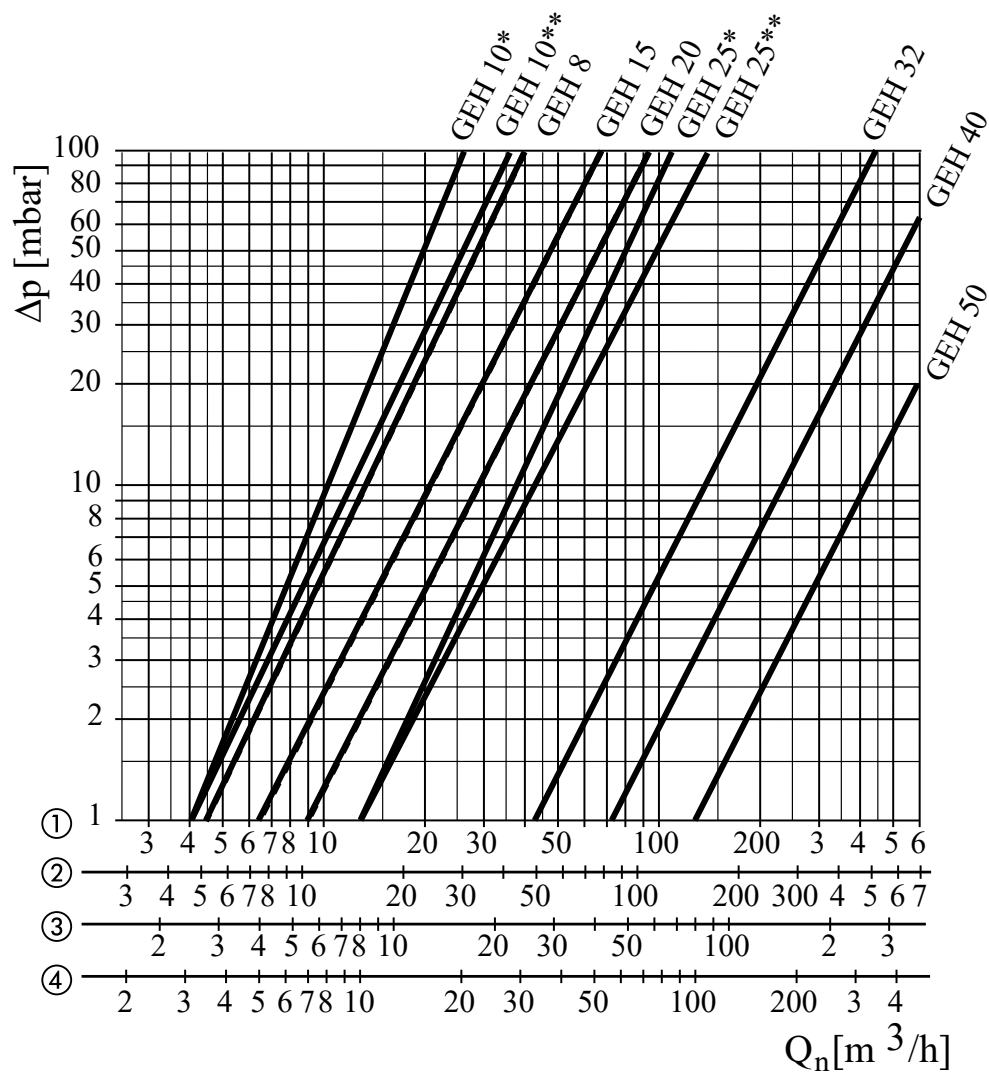
4 Flow rate

4.1 GEHV

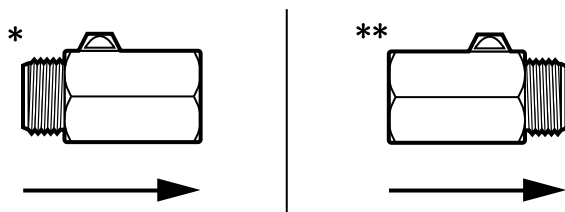


- 1 = natural gas ($\rho = 0.80 \text{ kg/m}^3$)
- 2 = town gas ($\rho = 0.58 \text{ kg/m}^3$)
- 3 = propane ($\rho = 2.01 \text{ kg/m}^3$)
- 4 = air ($\rho = 1.29 \text{ kg/m}^3$)

4.2 GEH

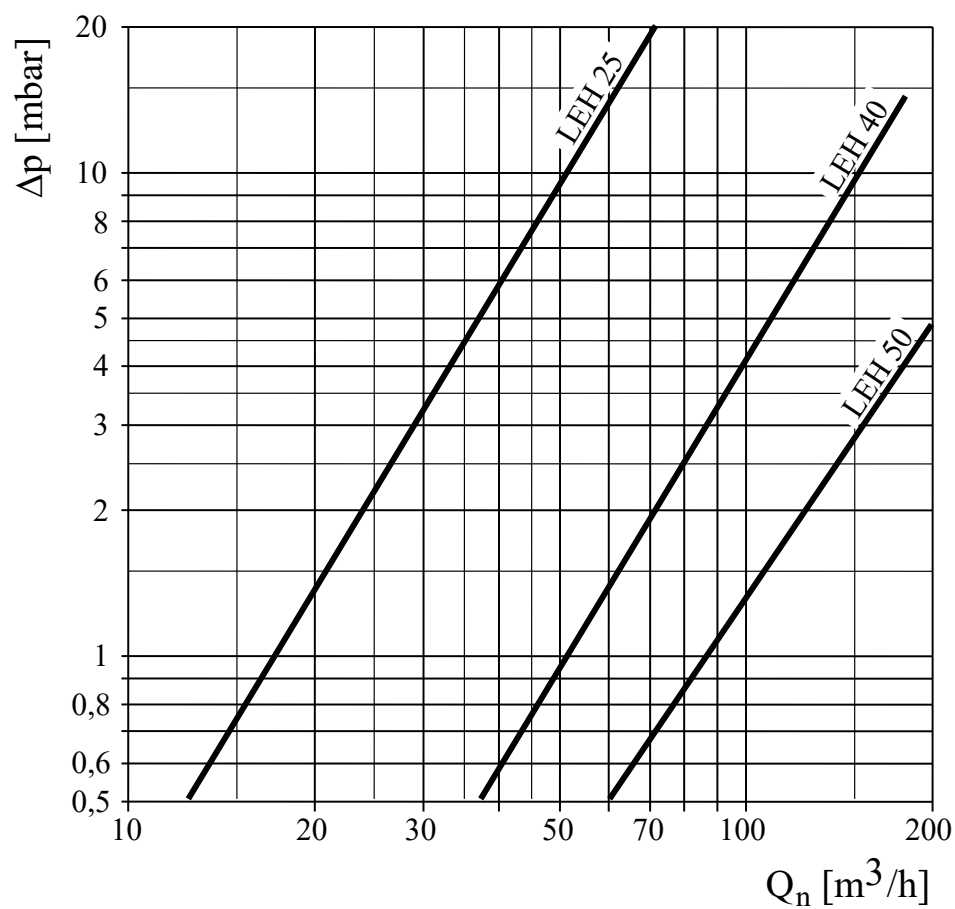


Flow direction



- 1 = natural gas ($\rho = 0.80 \text{ kg/m}^3$)
- 2 = town gas ($\rho = 0.58 \text{ kg/m}^3$)
- 3 = propane ($\rho = 2.01 \text{ kg/m}^3$)
- 4 = air ($\rho = 1.29 \text{ kg/m}^3$)

4.3 LEH



Air ($\rho = 1.29 \text{ kg/m}^3$)

5 Selection

5.1 ProFi

A web app selecting the correct product is available at www.adlatus.org.

5.2 Selection table

Option	GEHV*	GEH	GEH	LEH
Nominal size DN	8, 10, 15, 20, 25, 40, 50	8, 10, 15 , 20, 25	32, 40, 50	25, 40, 50
Rp internal thread		R	R	R
p_u max.		10	50	40

* For air: inlet pressure $p_{u \text{ max.}} = 25 \text{ bar}$

Order example

GEH 15R10

5.3 Type code

GEHV	Flow adjusting cock for gas and air
GEH	Flow adjusting cock for gas
LEH	Flow adjusting cock for air
8-50	Nominal size
R	Rp internal thread
10	p _u max. 1 bar
40	p _u max. 4 bar
50	p _u max. 5 bar

6 Technical data

6.1 GEHV

Ambient conditions

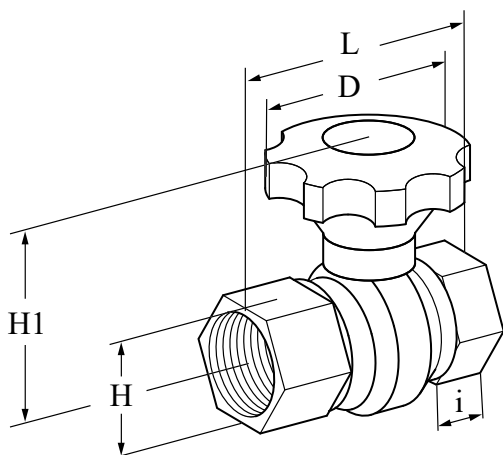
Inlet pressure p_u:
for gas: max. 5 bar,
for air: max. 25 bar.

Ambient temperature:
for gas: -20 to +60°C,
for air: -10 to +90°C.

Mechanical data

Gas type: natural gas, town gas, LPG (gaseous) and air.
Connection: internal thread to DIN 2999.
Housing: CW 617 N (2.0402), nickel-plated.
Ball: CW 617 N (2.0402), hard chromium-plated.
Ball seal: PTFE Teflon
Spindle seal: NBR.
Hand wheel: PA 6 polyamide.

6.1.1 Dimensions



Type	DN	Connection						Weight
			L	H1	Ø H	Ø D	i	[kg]
GEHV 8	8	Rp 1/4	45	60	23	70	10	0.172
GEHV 10	10	Rp 3/8	45	60	23	70	10	0.162
GEHV 15	15	Rp 1/2	63	66	31	70	15	0.28
GEHV 20	20	Rp 3/4	71	68	39	70	16	0.37
GEHV 25	25	Rp 1	83	75	47	70	19	0.56
GEHV 40	40	Rp 1 1/2	104	109	69	112	21	1.45
GEHV 50	50	Rp 2	124	115	85	112	26	2.10

6.2 GEH 8 to 25

Ambient conditions

Inlet pressure pu:
for gas: max. 1 bar,
for air: max. 4 bar.

Ambient temperature:
for gas: -15 to +60°C,
for air: -15 to +120°C.

Mechanical data

Gas type: natural gas, town gas, LPG (gaseous) and air.

Connection: internal/external thread to DIN 2999.

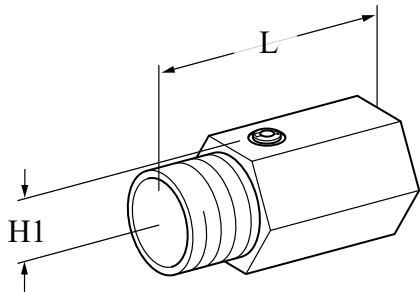
Housing: Ms 58.

Ball: Ms 58.

Ball seal: O-ring, nitrile.

Spindle seal: O-ring, nitrile.

6.2.1 Dimensions



Type	DN	Connection	Dimensions [mm]		Weight [kg]
			L	H1	
GEH 8R10	8	Rp/R /	48	22	0.07
GEH 10R10	10	Rp/R /	45	22	0.07
GEH 15R10	15	Rp/R /	55	26	0.10
GEH 20R10	20	Rp/R /	63	37	0.20
GEH 25R10	25	Rp/R 1	72	44	0.36

6.3 GEH 32 to 50

Ambient conditions

Inlet pressure p_u :
for gas: max. 5 bar,
for air: max. 16 bar.

Ambient temperature:
for gas: -20 to +60°C,
for air: -20 to +120°C.

Mechanical data

Gas type: natural gas, town gas, LPG (gaseous) and air.
Connection: internal/external thread to DIN 2999.

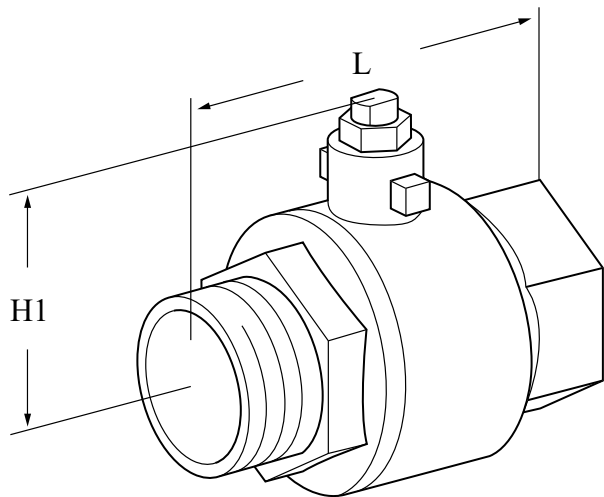
Housing: Ms 58, nickel-plated.

Ball: Ms 58, chromium-plated.

Ball seal: PTFE.

Spindle seal: O-rings, Viton.

6.3.1 Dimensions



Type	DN	Connection	Dimensions [mm]		Weight [kg]
			L	H1	
GEH 32R50	32	Rp/R 1 /	106	61	0.90
GEH 40R50	40	Rp/R 1 /	113	67	1.10
GEH 50R50	50	Rp/R 2	133	75	1.80

6.4 LEH

Ambient conditions

Inlet pressure pu: max. 4 bar.

Ambient temperature: 0 to +120°C.

Mechanical data

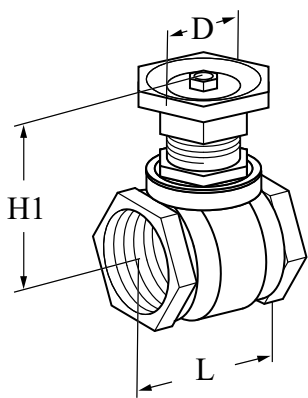
Gas type: air.

Connection: internal thread to DIN 2999.

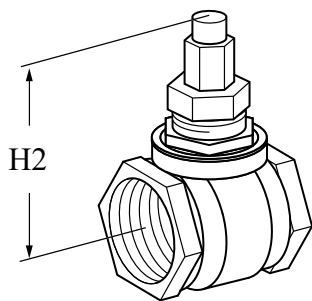
Housing: pressed brass.

Seal: gland.

6.4.1 Dimensions



LEH with hand wheel



LEH with safety cap

Type	DN	Connection	Dimensions [mm]				Weight [kg]
			L	H1	H2	Ø D	
LEH 25R40	25	Rp 1	43	80	90	50	0.30
LEH 40R40	40	Rp 1 1/2	54	107	117	60	0.60
LEH 50R40	50	Rp 2	58	134	144	70	1.00