

GAV 54F  
Shown: DN 100

Maintenance-free bellows-sealed stop valve with safety stuffing box

**GAV 54F**  
**PN 16, DN 15 – DN 300**

**Description**

Straight-through bellows-sealed stop valve with flanges to EN 1092-2. The valve is designed for shutting off and throttling neutral gases, vapours and liquids in all sectors of industry.

The stop valve GAV 54F is particularly suitable for steam, water condensate, oil and air.

- Throttling plug, standard for sizes 15 to 100
- Maintenance free
- Stainless steel bellows seal
- Safety stuffing box
- Locking device for handwheel
- Non-rising handwheel
- Non-rotation lock for stem and indicating device
- External stem thread
- Stem with rolled thread
- Lift stop

**Function**

Straight-through bellows-sealed stop valve with flanges to EN 1092-2, body made from grey cast iron grade JL1040, plug with raised face made from chromium steel grade 1.4021, seat ring made from stainless steel.

Single-piece stem with external rolled thread

The stop valve is equipped with a stainless steel bellows seal and a safety stuffing box made from pure graphite.

The cover gasket is made from pure graphite with stainless steel insert. Stop valves from DN 15 to DN 100 are fitted with a throttling plug as standard, from DN 125 with a flat plug.

**Pressure /Temperature Ratings & End Connections**

GAV 54F, flange PN 16, EN 1092-2							
P <sub>S</sub> (max. admissible pressure)	[bar]g	16	16	14.4	12.8	11.2	9.6
T <sub>S</sub> (max. admissible temperature)	[°C]	20	120	150	200	250	300
P <sub>S</sub> (max. admissible pressure)	[psi]g	232	232	208	185	162	139
T <sub>S</sub> (max. admissible temperature)	[°F]	68	248	302	392	482	572
ΔP (admissible differential pressure)	[bar]	16					
	[psi]	232					

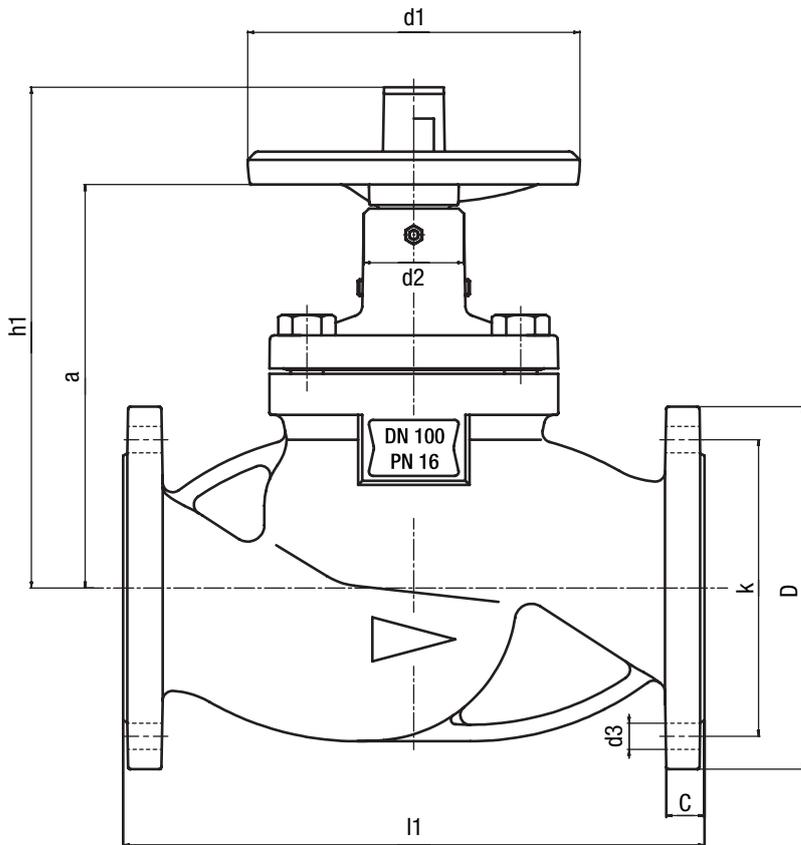
If the following differential pressures are exceeded, a pressure balance plug is required.

	DN	200	250	300
ΔP (admissible differential pressure)	[bar]	12	9	6
	[psi]	174	130	87

The pressure balance plug only takes effect when pressures builds up above the valve plug. As a consequence, the flow through the valves is reversed. Note that the embossed flow direction arrow is reversed.

## Materials

Type	GAV 54F
Designation	DIN / EN
Handwheel DN 15 – DN 150	Aluminium die-cast metal
Handwheel DN 200 – DN 300	JL1030
Stem	1.4021
Body cover	JL1040
Gland packing	Pure graphite
Hexagon-head cap screw	8.8
Gasket	Pure graphite with stainless steel insert
Bellows	1.4541
Valve plug DN 15 – DN 150	1.4021
Valve plug DN 200 – DN 300	1.0402 / 1.4370
Seat ring	Stainless steel
Body	JL1040



## Dimensions (mm)

PN	DN	l1	l2	h1	h2	d1	d2	a	D	k	n x d3	C	Weight approx.
													Straight-through pattern
													kg
16 JL1040	15	130	90	175	150	125	47	137	95	65	4 x 14	14	3.1
	20	150	95	178	153	125	47	140	105	75	4 x 14	16	4.0
	25	160	100	184	151	125	47	146	115	85	4 x 14	16	4.7
	32	180	105	205	170	125	47	161	140	100	4 x 19	18	7.3
	40	200	115	210	172	125	47	166	150	110	4 x 19	18	7.7
	50	230	125	235	198	160	51	190	165	125	4 x 19	20	10.2
	65	290	145	246	198	160	51	201	185	145	4 x 19	20	17.0
	80	310	155	282	226	200	60	223	200	160	8 x 19	22	22.0
	100	350	175	304	244	200	60	245	220	180	8 x 19	24	32.0
	125	400	200	390	316	250	86	310	250	210	8 x 19	26	54.0
	150	480	225	408	320	250	86	328	285	240	8 x 23	26	70.5
	200	600	275	570	468	400	100	440	340	295	12 x 23	30	130.0
	250	730	325	606	480	400	100	476	405	355	12 x 28	32	230.0
	300	850	375	660	510	400	93	530	460	410	12 x 28	32	328.0

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## GAV 54F PN 16, DN 15 – DN 300

### When ordering please state:

Fluid, flowrate, service pressure and temperature.

Standard designation of pipe flanges.

The following test certificates can be issued on request, at extra cost:

In accordance with EN 10204-2.2.

All inspection requirements have to be stated with the order. After supply of the equipment certification cannot be established. Charges and extent of the above mentioned certificates as well as the different tests confirmed therein are listed in our price list "Test and Inspection Charges for Standard Equipment". For other test certificates please consult us.

### Specification Text

GESTRA Straight-through bellows-sealed stop valve, DN 15 to DN 300.

Type: GAV 54F

End connection: Flanged to EN 1092-2

Nominal size: DN ...

Pressure rating: PN 16

Plug type: Throttling plug, from DN 125 flat plug

Certification: In accordance with EN 10204, 2.2.

### PED (Pressure Equipment Directive)

The equipment fulfills the requirements of the Pressure Equipment Directive PED 97/23/EC.

For use with fluids of group 1 and 2.

With CE marking (apart from equipment that is excluded from the scope of the PED as specified in section 3.3).

For more information see Declaration of Conformity.

### ATEX (Atmosphère Explosible)

The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC.

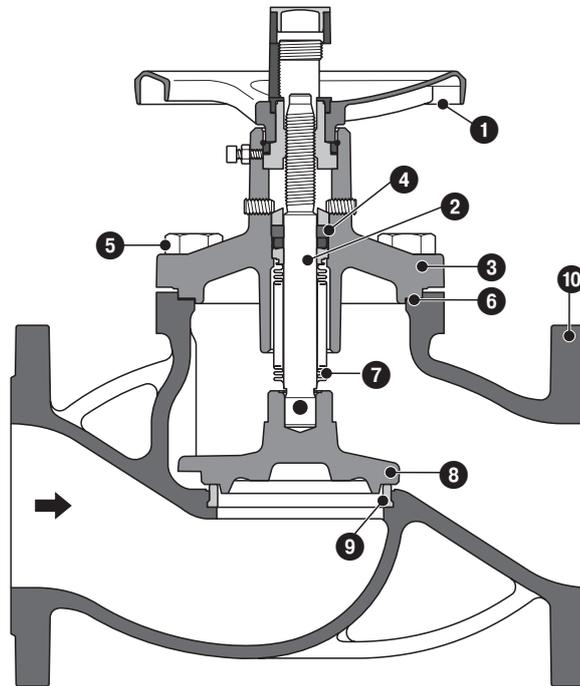
Applicable in Ex zones 1, 2, 21, 22 (1999/92/EC). The equipment does not bear an Ex marking.

Supply in accordance with our general terms of business.

### Flow characteristics

GAV 54F		
Nominal size DN	$\zeta$ value	$K_{VS}$ value [m <sup>3</sup> /h]
15	3.5	4.8
20	3.7	8.3
25	4.4	11.9
32	4.3	19.9
40	5.6	27.1
50	5.3	43.3
65	5.1	75.1
80	4.8	116.7
100	5.4	172.3
125	5.4 (13.0)	270 (171.5)
150	5.2 (19.0)	393 (204.0)
200	5.8 (12.0)	657 (457.0)
250	5.7 (12.0)	1035 (714.0)
300	5.9 (12.0)	1466 (1028.0)

Values indicated in brackets refer to GAV 54 F with throttling plug. The flow velocity related to the DN area should not exceed 4 m/s.



### Key

- |                           |              |
|---------------------------|--------------|
| 1 Handwheel               | 6 Gasket     |
| 2 Stem                    | 7 Bellows    |
| 3 Body cover              | 8 Valve plug |
| 4 Gland packing           | 9 Seat ring  |
| 5 Hexagon-head cap screws | 10 Body      |

### Spare Parts

No spare parts are available for the stop valve GAV 54F up to DN 150.

## GESTRA AG

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