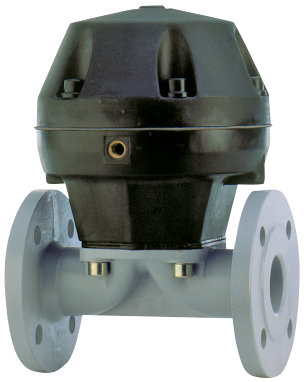
NORGREN®

Incorporating BUSCHJOST®

83380
2/2-way diaphragm valves

- **Port size: DN 15 ... 150, flange connection, Pressure rating PN 16 / 10**
- **Any flow direction and mounting position**
- **Special seal materials are required for use with oil and oleiferous media**
- **International approvals**



CE EAC

Technical features

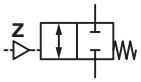
Medium:
Neutral gases and liquid fluids
Pilot Fluid:
Air max. +40°C (+104°F)
Switching function:
Normally closed; closed by spring force, opened by pilot pressure
Operation:
Pressure actuated by external fluid
Mounting position:
Optional

Flow direction:
Optional
Port size:
DN 15, DN 20, DN 25, DN 32, DN 40, DN 50, DN 65, DN 80, DN 100 DN 125, DN 150
Pilot connection:
G1/4
Operating pressure:
See table
Pilot pressure:
5,5 ... 7 bar (80 ... 101,5 psi)

Fluid temperature:
–10 ... +80°C (+14 ...+176°F)
Ambient temperature:
–10 ... +55°C (+14 ... +131°F)

Material:
Process fluid characteristics:
Body: Grey cast iron
Seat seal: EPDM
Pilot fluid characteristics:
Body: Polymer material
Seal: NBR
Internal parts: Coated steel

Technical data – standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Operating pressure *2) (psi)	Weight *3) (kg)	Model *3)
	15	7	0 ... 10	0 ... 145	3,1	8338200.0000.00000
	20	14	0 ... 10	0 ... 145	3,7	8338300.0000.00000
	25	20	0 ... 10	0 ... 145	4,2	8338400.0000.00000
	32	37	0 ... 10	0 ... 145	7,7	8338500.0000.00000
	40	40	0 ... 10	0 ... 145	8,2	8338600.0000.00000
	50	82	0 ... 10	0 ... 145	13,7	8338700.0000.00000
	65	102	0 ... 6	0 ... 145	26	8338800.0000.00000
	80	165	0 ... 8	0 ... 145	30	8338900.0000.00000
	100	241	0 ... 6	0 ... 145	48	8339000.0000.00000
	125	378	0 ... 8	0 ... 145	91	8339100.0000.00000
	150	496	0 ... 6	0 ... 145	104	8339200.0000.00000

*1) Cv-value (US) ≈ kv value x 1,2
*2) For gases and liquid fluids up to 400 mm²/s (cSt)
*3) Without pilot valve

IMI

Option selector

833★★★★.0000.00000

Orifice (mm)	Substitute
15	**82**
20	**83**
25	**84**
32	**85**
40	**86**
50	**87**
65	**88**
80	**89**
100	**90**
125	**91**
150	**92**

Valve options	Substitute
Normally open, DN 15 ... 50 (Pilot pressure 1 ... 5,5 bar (14,5 ... 80 psi)) DN 65 ... 150 (Pilot pressure 6 ... 7 bar (87 ... 101,5 psi))	**01**
Seat seal FPM	**03**
Seat seal PTFE	**06**
Body EN-GSJ-400-18-LT (Spheroidal cast iron), PFA lined, Seals PTFE	**50**
Electrical position indicator a.c. / d.c.	**57**
Electrical position indicator only d.c. max. 30 V	**58**
Electrical position indicator EEx de II C T6	**64**

Notes
for 3/2-way pilot valve 84660 / 84680

Material	Body Aluminium
Pilot fluid temperature	max. +60°C (+140°F)
Pilot pressure	1 ... 10 bar (14,5 ... 145 psi)
Standard voltages	24 V d.c., 24 V a.c., 230 V a.c.

Electrical Data
for 3/2-way pilot valve 84660 / 84680

Design acc. to	DIN VDE 0580
Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65 with mounted socket
Socket	Form A acc. to DIN EN 175301-803 (included)
Technical data	See publication en 5.8.640

Further versions on request!

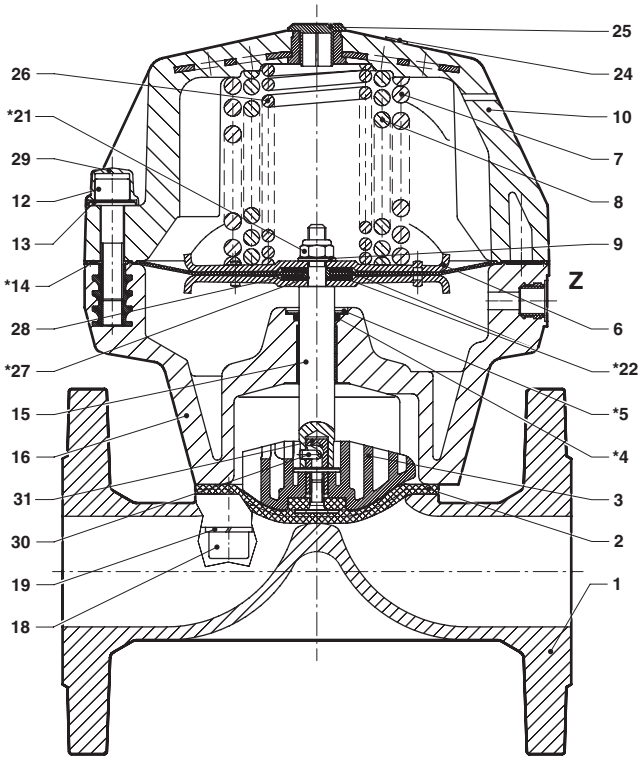
An electrical solenoid valve can be attach at the pilot connection Z.

Required Parts DN 15 ... 50	Model
1 pcs. 3/2-way solenoid valve	8466000.9101.xxxxx Please insert voltage and frequency codes

Required Parts DN 65 ... 100	Model
1 pcs. 3/2-way solenoid valve for gases fluids	8020750.0246.xxxxx Please insert voltage and frequency codes
1 pcs. 3/2-way solenoid valve for liquid fluids	2401103.0801.xxxxx Please insert voltage and frequency codes

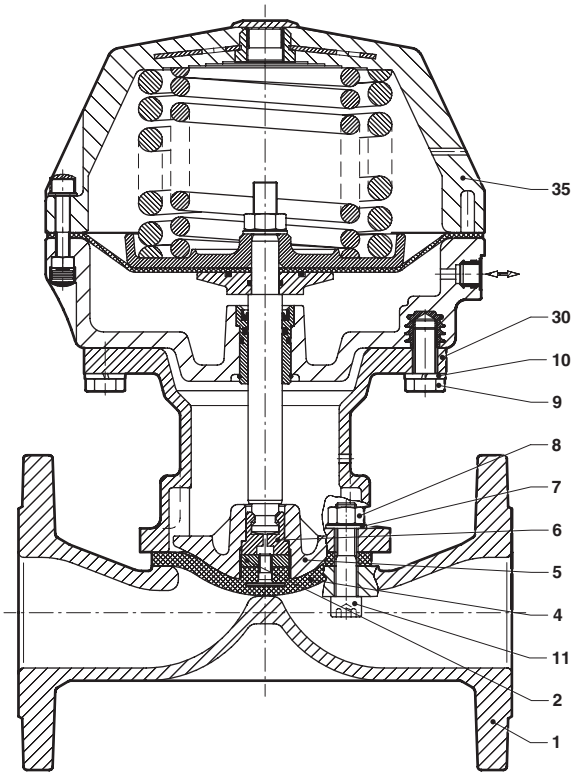
Section View

up to DN 50



No.	Description
1	Valve body
2	Shut diaphragm
3	Thrust collar
*4	Quad-seal-ring
*5	Lock washer
6	Diaphragm disk
7	Pressure spring
8	Pressure spring
9	Washer
10	Upper part
12	Screw
13	Washer
*14	Diaphragm
15	Spindle
16	Base, complete
18	Screw
19	Spring washer
*21	Uni-Stop-nut
*22	Gasket
24	Material plate
25	Sealing cap
26	Pressure spring
*27	O-ring
28	Distance ring
29	Cover
30	Straight pin
31	Tappet

from DN 65



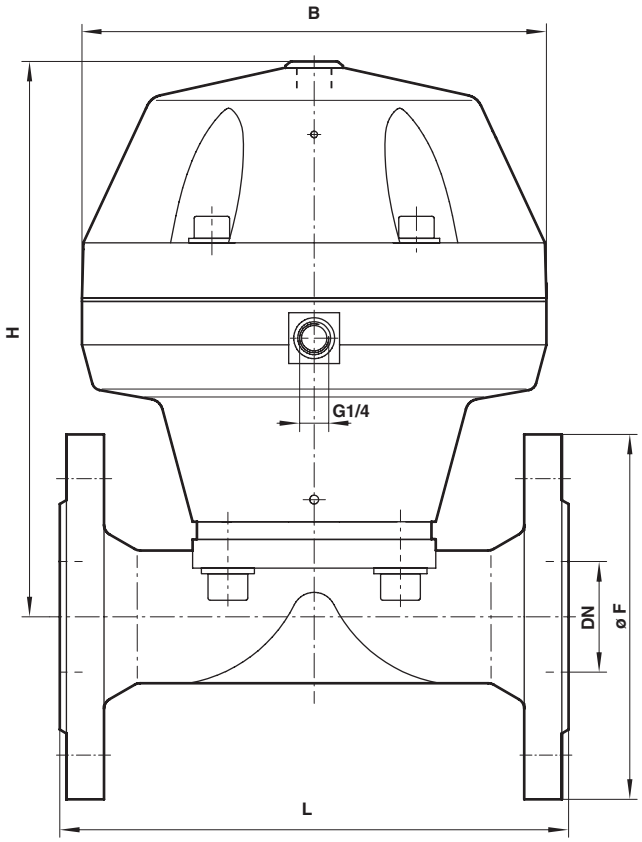
No.	Description
1	Valve body
2	Clamping nut
4	Diaphragm
5	Compression piece
6	Half-shell
7	Spring washer
8	Nut
9	Hexagon screw
10	Spring washer
11	Allen head screw
30	Adapter
35	Valve head assembly, complete

* These individual parts form a complete wearing unit.
When ordering spare parts please state Model No. and Series No.

Dimensions

DN 15 ... 150

Dimensions in mm
Projection/First angle



Orifice (mm)	B *4)	ø F	H	L	Model
15	130	95	148	130	8338200.0000.00000
20	150	105	148	150	8338300.0000.00000
25	160	115	148	160	8338400.0000.00000
32	180	140	203	180	8338500.0000.00000
40	200	150	203	200	8338600.0000.00000
50	230	165	248	230	8338700.0000.00000
65	290	185	329	290	8338800.0000.00000
80	310	200	339	310	8338900.0000.00000
100	350	220	354	350	8339000.0000.00000
125	400	250	519	400	8339100.0000.00000
150	480	285	514	480	8339200.0000.00000

*4) B = max. depth

Note to Pressure Equipment Directive (PED):

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

For valves > DN 25 (G1) Art. 4 § (1) Letter d) applies:

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfied.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.