2/2-way valves DN 20 to DN 65

for air
Indirectly solenoid actuated
Diaphragm valves
Internal threads G 3/4 up to G 2 1/2 or 3/4" NPT up to 2 1/2" NPT
Operating pressure 0.4 to 8 bar

82960
82970

Twist-on®

Description (standard valve)

Switching function:	Normally closed
Flow direction:	determined
Fluid temperature:	–40°C to max. +85°C
Ambient temperature:	–20°C to max. +85°C
Mounting position:	optional, preferably solenoid vertical on top

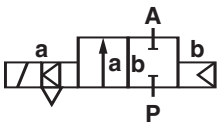
Material

Body:	Aluminium
Seat seal:	TPE
Internal parts:	TPU

Features

- High flow rate
- All internal components captive
- Simple compact design
- Solenoid interchangeable without tools
- Integrated silencer
- One-piece diaphragm

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8296300.8171 for a G 3/4 valve with standard solenoid.

Characteristic data

See page 2 valve and solenoid informations

Detmolder Strasse 256
D-32545 Bad Oeynhausen

PO Box 10 02 52-53
D-32502 Bad Oeynhausen

Phone ++49 5731 / 7 91-0
Fax ++49 5731 / 791-179

http://www.buschjost.com
mail@buschjost.de

Characteristic data

Valves

Part Number	Nominal diameter (mm)	Port size	Valve length mm	Operating pressure min max (bar)	kv-value* (Base m^3/h)	Weight (kg)
8296300.8171 8297300.8171	20	G 3/4 3/4" NPT	95	0.4 8	18	0.50
8296400.8171 8297400.8171	25	G 1 1" NPT	95	0.4 8	22	0.47
8296600.8171 8297600.8171	40	G 1 1/2 1 1/2" NPT	135	0.4 8	59	1.18
8296700.8171 8297700.8171	50	G 2 2" NPT	169	0.4 8	80	2.02
8296800.8171 8297800.8171	65	G 2 1/2 2 1/2" NPT	169	0.4 8	93	2.30

State voltage [V] and frequency [Hz]

*C_V-value (US) ≈ k_V-value x 1.2

8171 Solenoid

Standard voltages

DC	AC 50 Hz	AC 60 Hz
24 V	24 V	–
–	110 V	120 V
–	230 V	220 V

Design acc. to DIN VDE 0580
Voltage range ±10 %
100 % duty cycle
Protection class acc. to EN 60529 IP65
Socket acc. to DIN EN 175301-803A

Power Consumption

According to DIN VDE 0580 at coil temperature +20 °C. In operating the solenoid coil decrease the power consumption appr. 30 %.

DC	AC Inrush	AC Holding
12 W	23 VA	16 VA / 8 W

For technical details see catalogue-register "Solenoids"

Options (Valves)

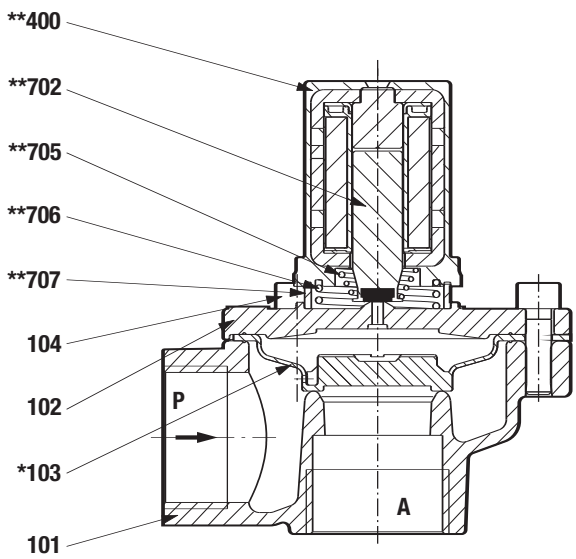
XXXXX**60.**XXXX	Crude gas temperature version -10 up to +140° C; Ambient and coil gas temperature -10 up to +85° C; Seat seal ECO/FPM temperatur DN 25 + DN 40)
XXXXX**90.**XXXX	single-level; up to 4.5 bar (only DN 40)
On request	Further versions

Options (Solenoids)

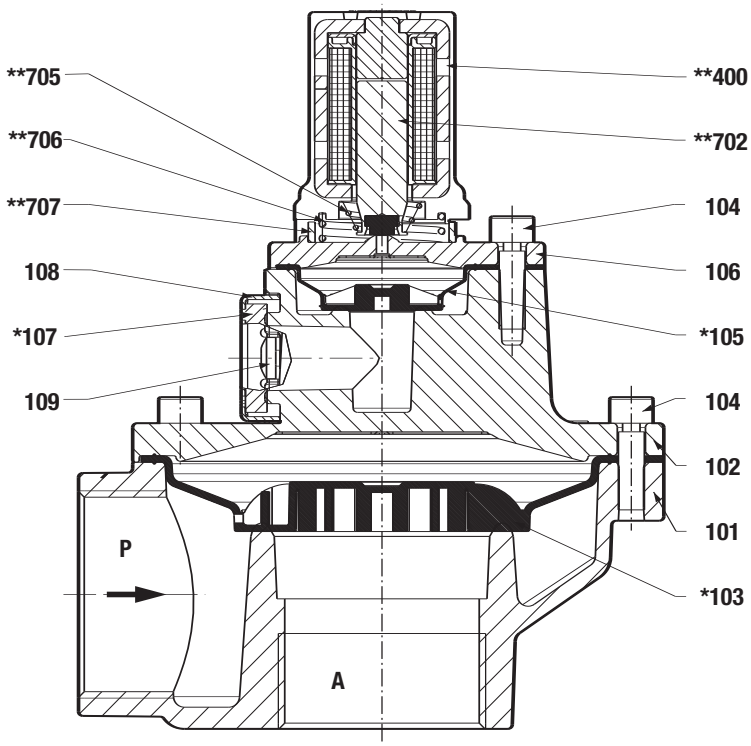
xxxxxxx.8176	Solenoid in protection class Ex II 3 GD T 135 °C EEx nA II T4
xxxxxxx.8186	Solenoid in protection class Ex II 2 GD EEx me II T4 T 140°C
On request	Further versions

Section View

G 3/4 / 1 and 3/4" / 1" NPT



G 1 1/2 and 1 1/2" NPT
G 2 and 2" NPT
G 2 1/2 and 2 1/2" NPT



101 Valve body
102 Valve cover
*103 Diaphragm
104 Socket head cap screw
*105 Diaphragm
106 Valve cover
*107 Silencer
108 Silencer housing
109 Socket head cap screw
** Solenoid complete 8298000.8170.XXXXX or 8298000.8171.XXXXX
- 400 Solenoid
- 702 Core
- 705 Pressure spring
- 706 Pressure spring
- 707 Silencer

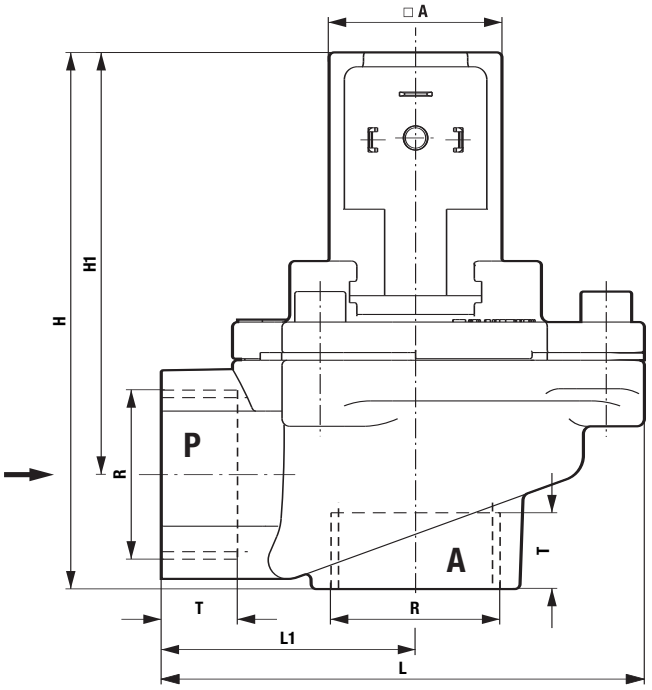
1400 Socket (included)

*/** These individual parts form a complete wearing unit.
When ordering spare parts please state Cat no and series no.

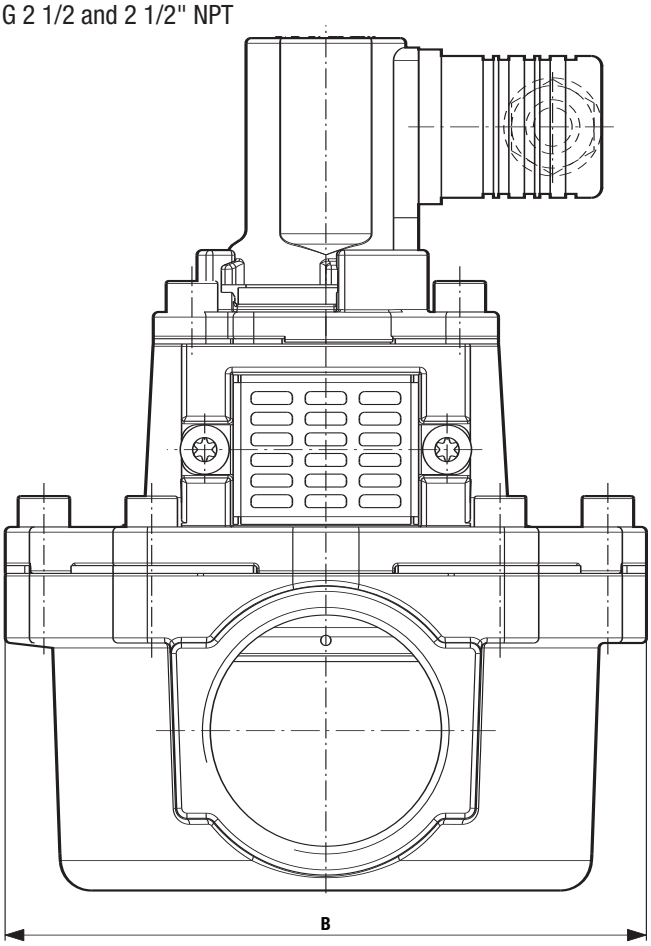
General Dimensions

Solenoid rotatable 3x 120°
Socket turnable 4 x 90°
(Socket included)

G ¾ / 1 and ¾" / 1" NPT



G 1 1/2 and 1 1/2" NPT
G 2 and 2" NPT
G 2 1/2 and 2 1/2" NPT



Part Number.	A	B	H	H1	L	L1	R	T
8296300.8171 8997300.8171	34	80	105.5	83	95	50	G 3/4 3/4" NPT	16 14
8296400.8171 8297400.8171	34	80	105.5	83	95	50	G 1 1" NPT	18 17
8296600.8171 8297600.8171	34	124.5	166.0	136	135	70	G 1 1/2 1 1/2" NPT	22 18
8296700.8171 8297700.8171	34	140	190.5	149	170	95	G 2 2" NPT	25 18
8296800.8171 8297800.8171	34	140	205.5	160	170	95	G 2 1/2 2 1/2" NPT	25 24

Note to Pressure Equipment Directive (PED):
The valves of this series are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG.
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.

Note to Electromagnetic Compatibility Guideline (EEC):
The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 50081-1 and EN 50082-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (89/336/EEC) satisfield.