

- > Port size: DN 8 ... 50,
1/4" ... 2" (ISO G/NPT)
- > Damped operation
- > Operation without differential pressure
- > Suitable for vacuum
- > High flow rate
- > For systems with low or fluctuating pressure
- > Brass body
- > Wide temperature range
- > Shock and vibration tested to EN 61373, Category 1, class A and B



Technical features

Medium:

Neutral gases and liquids
e. g. air, water, oil

Switching function:

Normally closed

Operation:

Solenoid actuated,
with forced lifting

Mounting position:

Optional, preferably solenoid
vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2, G3/4, G1,
G1 1/4, G1 1/2, G2 1/4 NPT,
3/8 NPT, 1/2 NPT, 3/4 NPT, 1 NPT,
1 1/4 NPT, 1 1/2 NPT, 2 NPT

Operating pressure:

See table

Fluid temperature:

-10° ... +90°C (+14° ... +194°F)

Ambient temperature:

-10° ... +50°C (+14° ... +122°F)

Storage temperature:

-40°C (-40°F)

Air supply must be dry enough
to avoid ice formation at
temperatures below +2°C (+35°F).

Material:

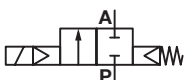
Body: Brass (CW617N)

Seat seal: NBR-K

Internal parts: Stainless steel,
PVDF, Brass

For contaminated fluids insertion of
a strainer is recommended.

2/2 way normally closed valves

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	G1/4	8	1,9	0 ... 10	0,8	8254000.9151.xxxxx	8254000.9154.xxxxx
	G1/4	8	1,9	0 ... 16 3*)	0,8	8254000.9301.xxxxx	8254000.9304.xxxxx
	1/4 NPT	8	1,9	0 ... 10	0,8	8264000.9151.xxxxx	8264000.9154.xxxxx
	1/4 NPT	8	1,9	0 ... 16 3*)	0,8	8264000.9301.xxxxx	8264000.9304.xxxxx
	G3/8	10	3	0 ... 10	0,8	8254100.9151.xxxxx	8254100.9154.xxxxx
	G3/8	10	3	0 ... 16 3*)	0,8	8254100.9301.xxxxx	8254100.9304.xxxxx
	3/8 NPT	10	3	0 ... 10	0,8	8264100.9151.xxxxx	8264100.9154.xxxxx
	3/8 NPT	10	3	0 ... 16 3*)	0,8	8264100.9301.xxxxx	8264100.9304.xxxxx
	G1/2	12	3,4	0 ... 10	0,9	8254200.9151.xxxxx	8254200.9154.xxxxx
	G1/2	12	3,4	0 ... 16 3*)	0,9	8254200.9301.xxxxx	8254200.9304.xxxxx
	1/2 NPT	12	3,4	0 ... 10	0,9	8264200.9151.xxxxx	8264200.9154.xxxxx
	1/2 NPT	12	3,4	0 ... 16 3*)	0,9	8264200.9301.xxxxx	8264200.9304.xxxxx
	G3/4	20	5,8	0 ... 10	1	8254300.9151.xxxxx	8254300.9154.xxxxx
	G3/4	20	5,8	0 ... 16 3*)	1	8254300.9301.xxxxx	8254300.9304.xxxxx
	3/4 NPT	20	5,8	0 ... 10	1	8264300.9151.xxxxx	8264300.9154.xxxxx
	3/4 NPT	20	5,8	0 ... 16 3*)	1	8264300.9301.xxxxx	8264300.9304.xxxxx
	G1	25	8	0 ... 10	1,3	8254400.9151.xxxxx	8254400.9154.xxxxx
	G1	25	8	0 ... 16 3*)	1,3	8254400.9301.xxxxx	8254400.9304.xxxxx
	1 NPT	25	8	0 ... 10	1,3	8264400.9151.xxxxx	8264400.9154.xxxxx
	1 NPT	25	8	0 ... 16 3*)	1,3	8264400.9301.xxxxx	8264400.9304.xxxxx
	G 1 1/4	32	23	0 ... 16	4,3	8254500.9401.xxxxx	8254500.9404.xxxxx
	1 1/4 NPT	32	23	0 ... 16	4,3	8264500.9401.xxxxx	8264500.9404.xxxxx
	G 1 1/2	40	25	0 ... 16	4,3	8254600.9401.xxxxx	8254600.9404.xxxxx
	1 1/2 NPT	40	25	0 ... 16	4,3	8264600.9401.xxxxx	8264600.9404.xxxxx
	G2	50	41	0 ... 16	5,4	8254700.9401.xxxxx	8254700.9404.xxxxx
	2 NPT	50	41	0 ... 16	5,4	8264700.9401.xxxxx	8264700.9404.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

*2) For gases and liquid fluids up to 25 mm²/s (cSt)

*3) For liquid mediums and an operating pressure > 10 bar is the maximum allowed differential pressure limited to 2 bar.

Option selector

82★4★ ★★. ★★ ★★. ★★ ★★

Thread form	Substitute
ISO G	5
NPT	6
Port size	Substitute
1/4"	0
3/8"	1
1/2"	2
3/4"	3
1"	4
1 1/4"	5
1 1/2"	6
2"	7
Valve options	Substitute
Normally closed (NC) Standard	00
Normally open (NO), up to G1 (1 NPT) with solenoid 9150 max. 10 bar, with solenoid 9300 max. 16 bar, from G1 1/4 (1 1/4 NPT) only with solenoid 8400 max. 16 bar	01
Manual override, from G1 1/4 (1 1/4 NPT)	02
Seat seal FPM, Fluid temperature -5 ... +110°C	03
Seat seal EPDM, for hot water, Fluid temperature -10 ... +110°C	14

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
G1/4 ... 1 Operating pressure 0 ... 10 bar Solenoid in V d.c.	9151
G1/4 ... 1 Operating pressure 0 ... 10 bar Solenoid in V a.c.	9154
G1/4 ... 1 Operating pressure 0 ... 16 bar *2) Solenoid in V d.c.	9301
G1/4 ... 1 Operating pressure 0 ... 16 bar *2) Solenoid in V a.c.	9304
G1 1/4 ... 2 Operating pressure 0 ... 16 bar Solenoid in V d.c.	9401
G1 1/4 ... 2 Operating pressure 0 ... 16 bar Solenoid in V a.c.	9404

*2) For liquid mediums and an operating pressure > 10 bar is the maximum allowed differential pressure limited to 2 bar

Electrical details for all solenoid systems

Design	DIN VDE 0580
Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65
Socket	Form A acc. to DIN EN 175301-803 (included)

According to DIN VDE 0580 at a solenoid temperature of +20°C. At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Standard solenoid systems

Voltage and Frequency Solenoid 9151 *1)					
Code	Code	Voltage	Frequency	Power consumption	
Voltage	Frequency			Inrush	Holding
024	00	24 V d.c.	-	18 W	18 W
036	00	36 V d.c.	-	18 W	18 W
110	00	110 V d.c.	-	18 W	18 W
024	49	24 V a.c.	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c.	40 ... 60 Hz	20 VA	20 VA
230	49	230 V a.c.	40 ... 60 Hz	20 VA	20 VA
120	49	120 V a.c.	40 ... 60 Hz	20 VA	20 VA
220	49	220 V a.c.	40 ... 60 Hz	20 VA	20 VA
Voltage and Frequency Solenoid 9154 *1)					
024	00	24 V d.c.	-	18 W	18 W
036	00	36 V d.c.	-	18 W	18 W
110	00	110 V d.c.	-	18 W	18 W
024	49	24 V a.c.	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c.	40 ... 60 Hz	20 VA	20 VA
230	49	230 V a.c.	40 ... 60 Hz	20 VA	20 VA
120	49	120 V a.c.	40 ... 60 Hz	20 VA	20 VA
220	49	220 V a.c.	40 ... 60 Hz	20 VA	20 VA

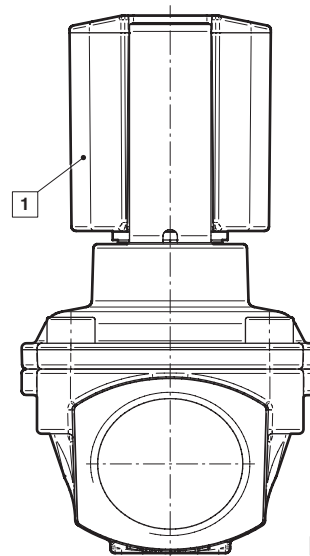
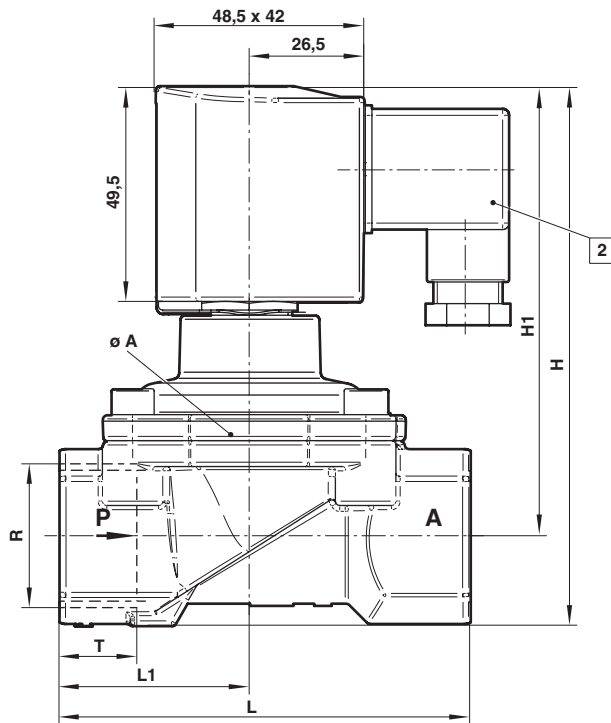
Note: a.c. achieved by using a rectifier in built with solenoid plug.

Voltage and Frequency Solenoid 9301 *1)					
Code	Code	Voltage	Frequency	Power consumption	
Voltage	Frequency			Inrush	Holding
024	00	24 V d.c.	-	18 W	18 W
036	00	36 V d.c.	-	18 W	18 W
110	00	110 V d.c.	-	18 W	18 W
024	49	24 V a.c.	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c.	40 ... 60 Hz	20 VA	20 VA
230	49	230 V a.c.	40 ... 60 Hz	20 VA	20 VA
120	49	120 V a.c.	40 ... 60 Hz	20 VA	20 VA
220	49	220 V a.c.	40 ... 60 Hz	20 VA	20 VA
Voltage and Frequency Solenoid 9304 *1)					
024	00	24 V d.c.	-	18 W	18 W
036	00	36 V d.c.	-	18 W	18 W
110	00	110 V d.c.	-	18 W	18 W
024	49	24 V a.c.	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c.	40 ... 60 Hz	20 VA	20 VA
230	49	230 V a.c.	40 ... 60 Hz	20 VA	20 VA
120	49	120 V a.c.	40 ... 60 Hz	20 VA	20 VA
220	49	220 V a.c.	40 ... 60 Hz	20 VA	20 VA

Note: a.c. achieved by using a rectifier in built with solenoid plug.

*1)  coil only (with the exception of solenoid 94xx up to 41 V a.c.)

Dimensions in mm
 Projection/First angle

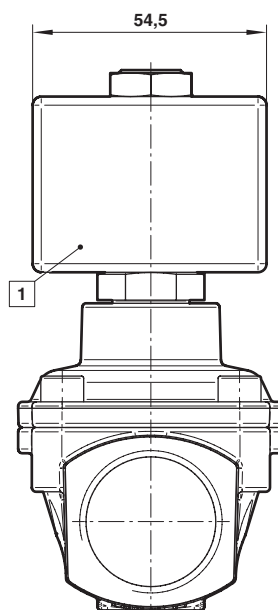
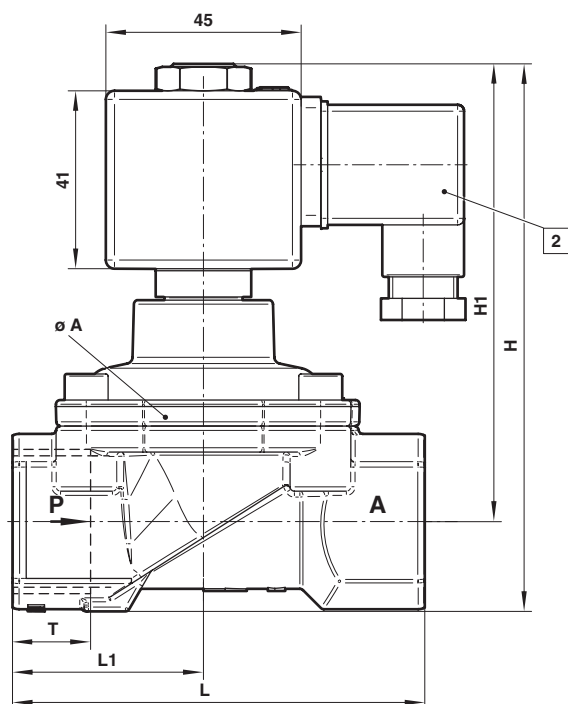


- 1 Solenoid rotatable 360°
- 2 Socket turnable 4 x 90°
(Socket included)

Port size R	ø A *1)	H	H1	L	L1	T	Model
G1/4	44	104	92,5	60	27,5	12	8254000.915x.xxxxx
1/4 NPT	44	104	92,5	60	27,5	10	8264000.915x.xxxxx
G3/8	44	104	92,5	60	27,5	12	8254100.915x.xxxxx
3/8 NPT	44	104	92,5	60	27,5	10,5	8264100.915x.xxxxx
G1/2	44	108	94,5	67	31	14	8254200.915x.xxxxx
1/2 NPT	44	108	94,5	67	31	13,5	8264200.915x.xxxxx
G3/4	50	115	99	80	36,5	16	8254300.915x.xxxxx
3/4 NPT	50	115	99	80	36,5	14	8264300.915x.xxxxx
G1	62	124	103,5	95	44	18	8254400.915x.xxxxx
1 NPT	62	124	103,5	95	44	17	8264400.915x.xxxxx

*1) ø A = max. depth

Dimensions in mm
Projection/First angle



- 1 Solenoid rotatable 360°
2 Socket turnable 4 x 90°
(Socket included)

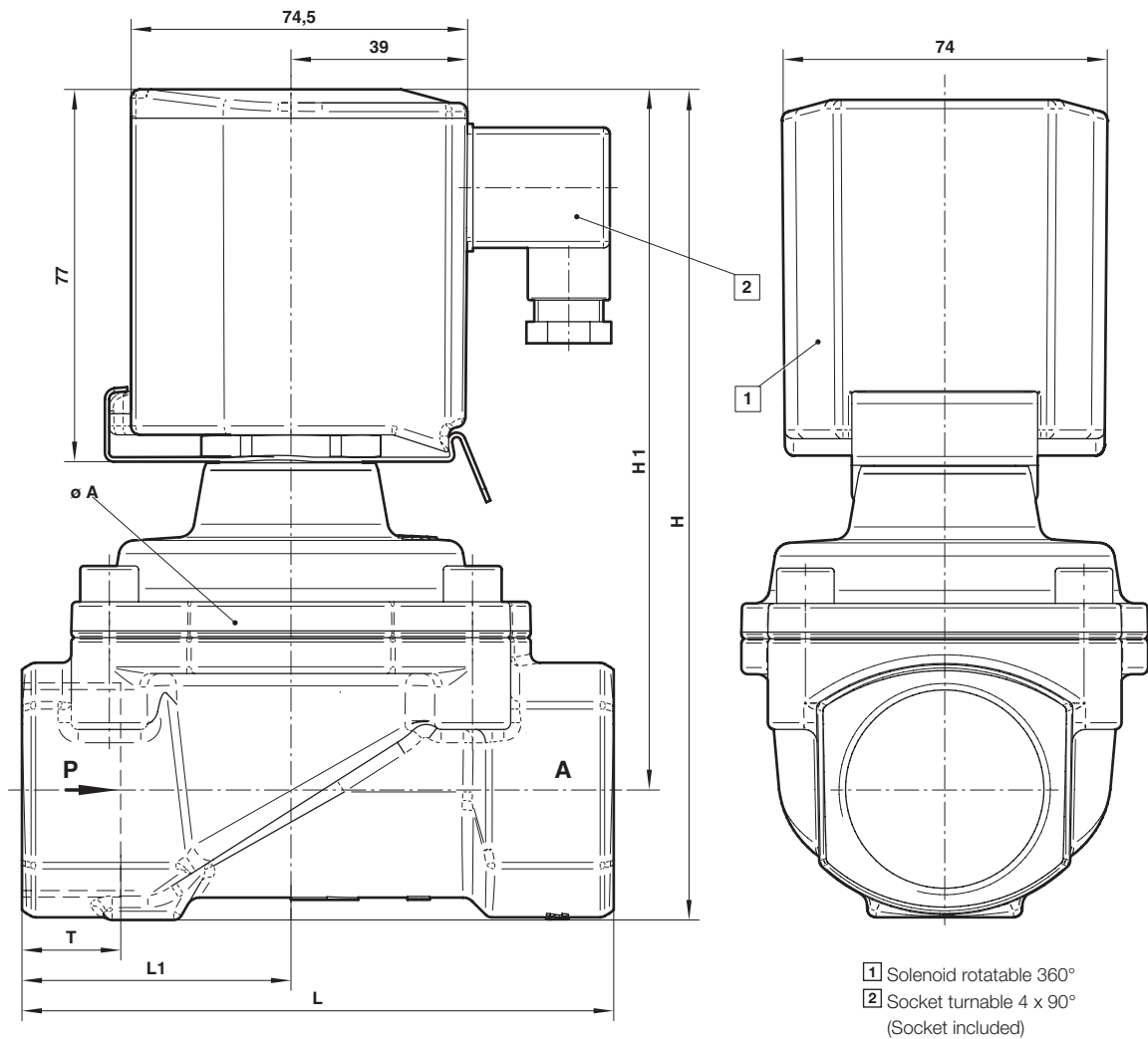
Port size R	ø A *1)	H	H1	L	L1	T	Model
G1/4	44	104	92,5	60	27,5	12	8254000.930x.xxxx
1/4 NPT	44	104	92,5	60	27,5	10	8264000.930x.xxxx
G3/8	44	104	92,5	60	27,5	12	8254100.930x.xxxx
3/8 NPT	44	104	92,5	60	27,5	10,5	8264100.930x.xxxx
G1/2	44	108	94,5	67	31	14	8254200.930x.xxxx
1/2 NPT	44	108	94,5	67	31	13,5	8264200.930x.xxxx
G3/4	50	115	99	80	36,5	16	8254300.930x.xxxx
3/4 NPT	50	115	99	80	36,5	14	8264300.930x.xxxx
G1	62	124	103,5	95	44	18	8254400.930x.xxxx
1 NPT	62	124	103,5	95	44	17	8264400.930x.xxxx

*1) ø A = max. depth

Dimensions

G1 1/4 ... 1 with solenoid 940x (16 bar)
1 1/4 ... 1 NPT with solenoid 940x (16 bar)

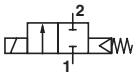
Dimensions in mm
 Projection/First angle

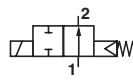


Port size R	ø A *1)	H	H1	L	L1	T	Model
G1 1/4	92	186	157	132	60	20	8254500.940x.xxxxx
1 1/4 NPT	92	186	157	132	60	17	8264500.940x.xxxxx
G1 1/2	92	186	157	132	60	22	8254600.940x.xxxxx
1 1/2 NPT	92	186	157	132	60	17	8264600.940x.xxxxx
G2	109	201,5	167	160	74	24	8254700.940x.xxxxx
2 NPT	109	201,5	167	160	74	17,5	8264700.940x.xxxxx

*1) ø A = max. depth

Special applications

Symbol	Application	Port size	Orifice (mm)	Flow kv value (m³/h)	Operating pressure (bar)	Fluid temperature	Ambient/ Pilot temperature	Sealing	Voltage (V d.c.)	Model
	Draining of water tanks	G1/2	10	2,1	0 ... 5	0 ... +50°C	-30 ... +50°C	EPDM	24	8493747.8484.02400
	Draining of water tanks	G1/2	10	2,1	0 ... 5	0 ... +50°C	-30 ... +50°C	EPDM	110	8493747.8484.11000
	Draining of water tanks	G3/4	20	6,5	0 ... 0,1	0 ... +50°C	-30 ... +50°C	EPDM	24	8493469.8476.02400
	Draining of water tanks	G3/4	20	6,5	0 ... 0,1	0 ... +50°C	-30 ... +50°C	EPDM	110	8493469.8476.11000
	Water supply	G3/4	20	6,5	0 ... 0,1	0 ... +50°C	-30 ... +50°C	EPDM	110	8495908.9785.11000
	Draining of water tanks	G1	25	11	0 ... 0,3	0 ... +50°C	0 ... +50°C	EPDM	24	8496733.9785.02400
	Draining of water tanks	G1	25	11	0 ... 0,3	0 ... +50°C	0 ... +50°C	EPDM	110	8496733.9785.11000
	Valve with manual override	G1	25	10	0 ... 0,3	0 ... +50°C	0 ... +50°C	EPDM	110	8496680.9785.11000

Symbol	Application	Port size	Orifice (mm)	Flow kv value (m³/h)	Operating pressure (bar)	Fluid temperature	Ambient/ Pilot temperature	Sealing	Voltage (V d.c.)	Model
	Warm water heating /NO	G1/2	12	3,6	0 ... 16	0 ... +90°C	0 ... +50°C	NBR	101,5 ... 147,5	8496864.9785.12000
	Warm water heating /NO	G3/4	20	10	0 ... 16	0 ... +90°C	0 ... +50°C	NBR	101,5 ... 147,5	8496865.9785.12000
	Warm water heating /NO	G1	25	12,5	0 ... 16	0 ... +90°C	0 ... +50°C	NBR	101,5 ... 147,5	8496866.9785.12000

Warning

These products are intended for use in industrial compressed air and rail transport systems only. Do not use these products where pressures and temperatures can exceed those listed under

»Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI BUSCHJOST.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.