

- > Port size: DN 8, G1/4 ... 1/2
- > High pressure solenoid valves
- > Solenoid interchangeable without tools (*Click-on*<sup>®</sup>)
- > Further customized solutions available upon request, e.g. valve with integrated check valve
- > International approvals


**Technical features**
**Medium:**

For compressed natural gas (CNG), on request also for water

**Switching function:**

Normally closed

**Operation:**

Indirectly solenoid actuated

**Mounting position:**

Optional, preferably solenoid vertical on top

**Flow direction:**

Determined

**Port size:**

G1/4, G3/8, G1/2

**Operating pressure:**

10 ... 320 bar (145 ... 4640 psi)

**Leakage:**

Internal Leakage acc. to DIN EN 12266-1 Leakage "C"  
External Leakage acc. to DIN EN 12266-1 Leakage "A"

**Fluid temperature:**

Solenoid 984x: -20 ... +60°C (-4 ... +140°F)

Solenoid 6126: -20 ... +60°C (-4 ... +140°F)

Solenoid 428x: -40 ... +50°C (-40 ... +122°F)

Solenoid 468x: -40 ... +50°C (-40 ... +122°F)

Solenoid 382x: -20 ... +60°C (-4 ... +140°F)

**Ambient temperature:**

Solenoid 984x: -20 ... +50°C (-4 ... +122°F)

Solenoid 6126: -20 ... +40°C (-4 ... +104°F)

Solenoid 428x: -40 ... +50°C (-40 ... +122°F) T4; T5 see page 2

Solenoid 468x: -40 ... +50°C (-40 ... +122°F) T4; T5 see page 2

Solenoid 382x: -20 ... +60°C (-4 ... +140°F)

**Material:**

Body: Brass

Seat seal: Polymer

Internal parts: Brass, Stainless steel, Polymer

Installation of a 40 µm filter in front of the valve is required!

**Technical data – standard models**

Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) *3) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
G1/4	8	1,2	10 ... 320	145 ... 3626	2,2	8590371.984x.xxxxx
					2,3	8590371.6126.xxxxx
					-	8590371.428x.xxxxx
					-	8590371.468x.xxxxx
					-	8590371.382x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 3626	2,2	8590185.984x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 3626	2,3	8590178.6126.xxxxx
					2,3	8590178.428x.xxxxx
					2,5	8590178.468x.xxxxx
					2,2	8590178.382x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 3626	2,2	8590337.984x.xxxxx
					2,3	8590337.6126.xxxxx
					2,5	8590337.428x.xxxxx
					-	8590337.468x.xxxxx
					-	8590337.382x.xxxxx

xxxxx Please insert voltage and frequency codes

\*1) Cv-value (US) ≈ kv value x 1.2

\*2) Static test pressure PT = 480 bar

\*3) Max. Operating pressure = 320 bar

According to PED 2014/68/EU and ATEX 2014/34/EU!

Option selector

8590★★★★.★★★★.★★★★

Port size	Substitute
1/4	371
3/8	185 *4)
1/2	337

\*4) Only with Solenoid 9841.xxxxx

Frequency	Substitute
See table frequency codes	<b>xx</b>
Voltage	Substitute
See Voltage Codes	<b>xxx</b>
Solenoid options	Substitute
Solenoid with 10 m cable ends Protection class according to - II 2 G Ex mb IIC T4 Gb - II 2 D Ex mb tb IIIC T130°C Db	<b>9845</b>
For d.c. with 1/2 - 14 NPT female thread and 460 mm flying leads Protection class acc. to ANSI/NEMA USA: FM approved (File-No. 2Z2A6.AE) Canada: CSA certified (File-No. LR 57643-6) Solenoids in temperature class T3C (160°C) are useable in Ex-areas (see table Ex-areas)	<b>3826</b>
For a.c. with integrated rectifier with 1/2 - 14 NPT female thread and 460 mm flying leads Protection class acc. to ANSI/NEMA USA: FM approved (File-No. 2Z2A6.AE) Canada: CSA certified (File-No. LR 57643-6) Solenoids in temperature class T3C (160°C) are useable in Ex-areas (see table Ex-areas)	<b>3827</b>
Solenoid with terminal box cable Protection class according to - II 2 G Ex e mb IIC T4/T5 Gb - II 2 D Ex tb IIIC T 130°C Db IP66 <b>Ambient temperature:</b> T4 -40 ... +50°C (-40 ... +122°F) T5 -40 ... +40°C (-40 ... +104°F) No screwed cable gland included in scope of delivery! Explosion protection ensured only with Ex screwed cable gland made of plastic! Cable gland limits maximum & minimum ambient temperature.	<b>428x</b>
Solenoid with terminal box cable gland M20 x 1,5 (cabel clamp ø 10 ... 14 mm) 1/2 ... 1/4 NPT (cabel clamp ø 7,5 ... 11,9 mm) Protection class according to - II 2 G Ex d mb IIC T4/T5 Gb - II 2 D Ex tb IIIC T 130°C <b>Ambient temperature:</b> T4 -40 ... +50°C (-40 ... +122°F) T5 -40 ... +40°C (-40 ... +104°F)	<b>468x</b>

**Acc. to ATEX 2014/34/EU!**
**Actuation solenoids – Technical data and connection type**

Solenoid	Code Voltage	Code Frequency	Voltage	Frequency	Power consumption		Connection
					Inrush	Holding	
3826	024	00	24 V DC	-	13,6 VA	13,6 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
3827	230	49	230 V AC	40 ... 60 Hz	15,4 VA	15,4 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
4280	024	00	24 V DC	-	11,4 W	11,4 W	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4281	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4680	024	00	24 V DC	-	11,4 W	11,4 W	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4681	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4682	024	00	24 V DC	-	11,4 W	11,4 W	connection housing for cables 10-14 mm cable gland M20 x 1,5
4683	230	49	230 V AC	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 10-14 mm cable gland M20 x 1,5
6126	024	00	24 V DC	-	14 W	14 W	connection housing for cables 7-9 mm cable gland M16 x 1,5
6126	230	49	230 V AC	40 ... 60 Hz	16 VA	16 VA	connection housing for cables 7-9 mm cable gland M16 x 1,5
9841	024	00	24 V DC	-	10,1 W	10,1 W	with 3 m connection cable
9844	024	00	24 V DC	-	10,1 W	10,1 W	with 5 m connection cable
9845	024	00	24 V DC	-	10,1 W	10,1 W	with 10 m connection cable
9845	230	59	230 V AC	50 ... 60 Hz	9,2 VA	9,2 VA	with 10 m connection cable

**Electrical details for all solenoid systems**

<b>Voltage range</b>	±10%
<b>Duty cycle</b>	100% ED
<b>Protection class</b>	EN 60529 IP65 (exception 428x: IP66)

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..

**ATEX-Identification for solenoid systems**

Solenoid	ATEX category	Ex-protection class
428x	II 2G II 2D	Ex eb mb IIC T4/T5 Gb Ex tb IIIC T 130 °C D IP66
468x	II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/T95°C Db
984x	II 2G II 2D	Ex mb IIC T4 Gb Ex mb tb IIIC T130°C Db
6126	II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db IP66

**Solenoid systems with FM approval (USA)**

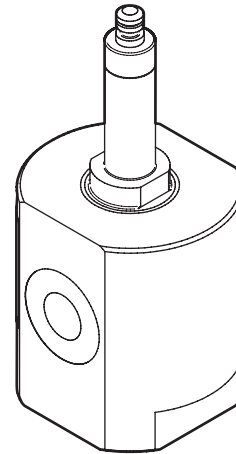
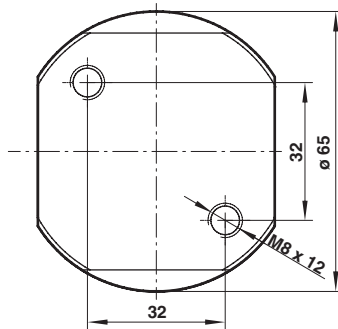
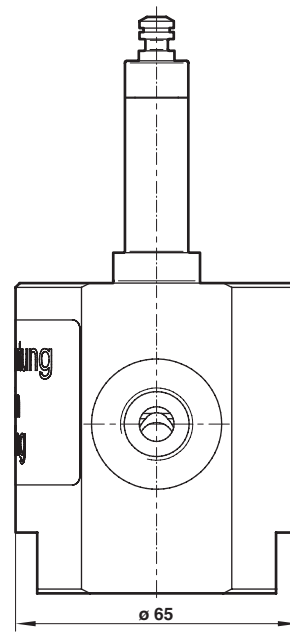
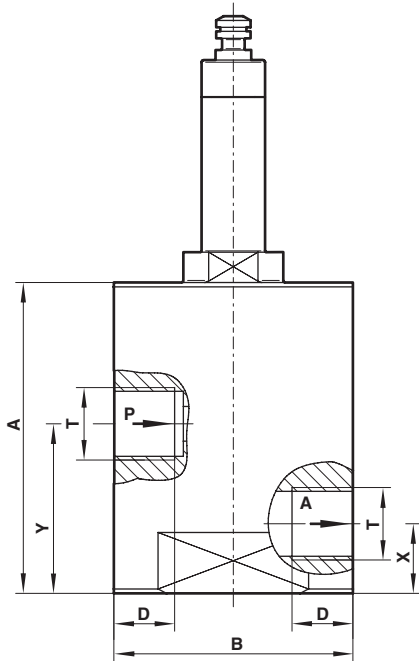
Solenoid	FM approval
382x	1,3,4,4X,6,6P,7 und 9 FM approved (File Nr. 2Z2A6.AE)

**Admissible Ex areas (USA)**

Solenoid 382x	Class	Divison	Groups
Gases + fumes	I	1 and 2	A ... D
Dusts	II	1 and 2	E ... G
Fibres + fluffs	III	1 and 2	-

Dimensions

Dimensions in mm  
Projection/First angle



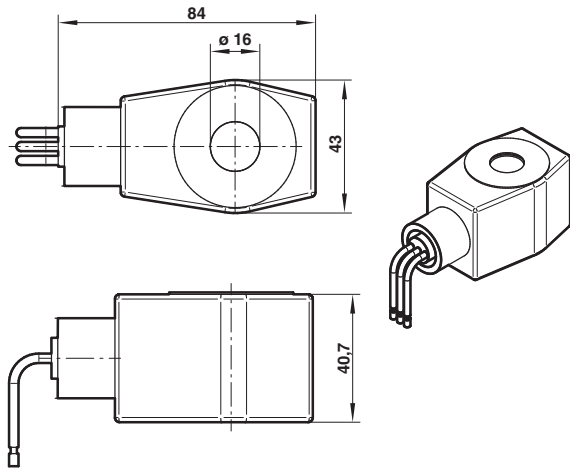
Port size T	A (Block size)	B (Footage)	D (Depth of thread)	X (Distance from the bottom port A)	Y (Distance from the bottom port P)	Model
G1/4	74,5	55	13	16	42	8590371.xxxx.xxxxx
G3/8	71,5	55	14	16	39	8590178.6126.xxxxx
G3/8	71,5	55	14	16	39	8590185.9841.xxxxx
G1/2	74,5	57	15	16	42	8590337.xxxx.xxxxx

**Dimensions Solenoids**

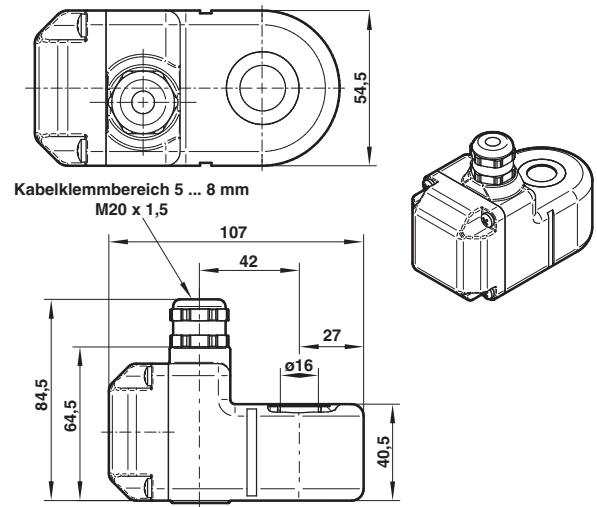
Dimensions in mm  
Projection/First angle



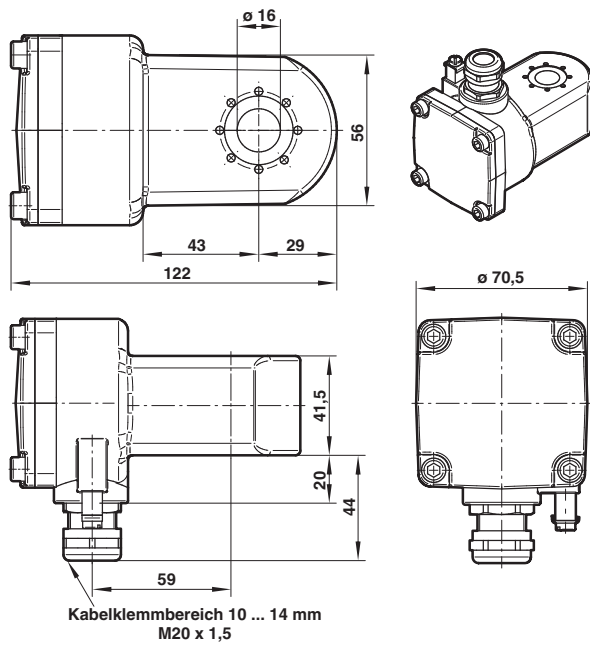
**38xx**



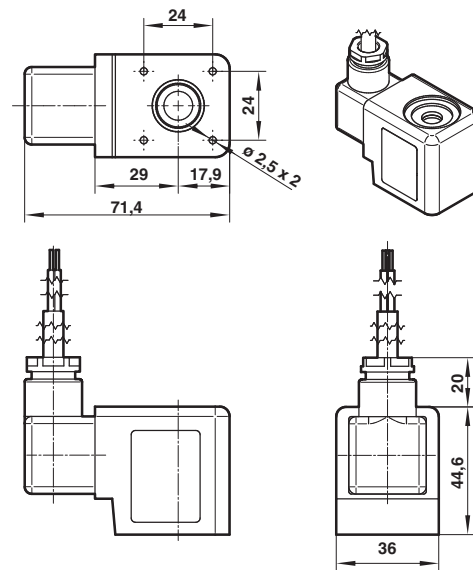
**42xx**



**46xx**



**98xx**



**6126**

