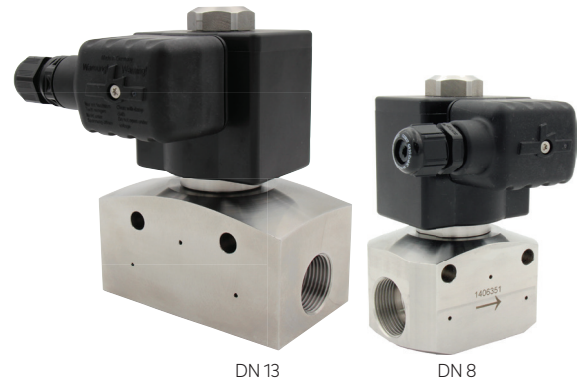


83830

1.050 bar Hydrogen Valve

- > Medium pressure cone thread connection
- > All fluid wetted, pressure retaining parts are made from 1.4435 / XM19
- > -50°C (-58°F) Fluid temp. fast fueling ready
- > No external soft sealings
- > Low maintenance / decreasing total cost of ownership
- > No pilot air required, no additional pilot valves
- > KV Value up to 1 m³/h (for 8 mm seat)
- > KV Value up to 2,2 m³/h (for 13 mm seat)
- > Minimum burst pressure of at least 3 times the working pressure



DN 13

DN 8



Technical features

Medium:

Hydrogen, neutral non-aggressive gases

Switching function:

Normally closed / Normally open *4)

Operation:

Servo operated

Mounting position:

Optional

Flow direction:

Determined

MP-Tubing System:

1/4", 3/8", 9/16", 3/4", 1"

Max. Operating pressure:

See table

Fluid temperature:

-50 ... +80°C (-58 ... +176°F)

Ambient temperature:

-40 ... +55°C (-40 ... +131°F)

Leakage:

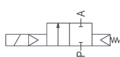
 Internal (he) < 1*10⁻⁴ mbar*l/s
 External (he) < 1*10⁻⁵ mbar*l/s

Material:

 Body: Stainless steel (1.4435)
 Seat seal: PEEK/PEKEKK

For contaminated fluids insertion of a strainer is recommended.

Technical data

Symbol	MP-Tubing System		Seat Orifice (mm)	Bore diameter *3) (mm)	Max. Operating pressure PS (Peak pressure)		Model *1) *2)
	Port size	Pressure rating tube (bar)			(bar)	(psi)	
	3/8"	1.550	8	5,1	10 ... 1.000 (1050)	145 ... 14.504 (15.228)	838311x.xxxx.xxxxx
	9/16"	1.050	8	9,1	10 ... 1.000 (1050)	145 ... 14.504 (15.228)	838321x.xxxx.xxxxx
	9/16"	1.550	8	7,8	10 ... 1.000 (1050)	145 ... 14.504 (15.228)	838331x.xxxx.xxxxx
	3/4"	1.050	13	13,1	10 ... 500 (550)	145 ... 7252 (7977)	838342x.xxxx.xxxxx
	3/4"	1.550	13	11,1	10 ... 500 (550)	145 ... 7252 (7977)	838352x.xxxx.xxxxx
	1"	1.050	13	17,1	10 ... 500 (550)	145 ... 7252 (7977)	838362x.xxxx.xxxxx
	1"	1.550	13	14,3	10 ... 500 (550)	145 ... 7252 (7977)	838372x.xxxx.xxxxx

*1) For ambient temperatures below -25°C the solenoid needs to be protected against mechanical shocks and impacts from the environment

*2) For Solenoid Option see page 2

*3) Please see page 4 (Dimensions)

Option selector
8383★★★★★★★★★★★★

MP-Tubing System		
Port size	Pressure rating	Substitute
3/8"	1.550 bar	1
9/16"	1.050 bar	2
9/16"	1.550 bar	3
3/4"	1.050 bar	4
3/4"	1.550 bar	5
1"	1.050 bar	6
1"	1.550 bar	7
Seat orifice (mm)	Substitute	
8	1	
13	2	
Valve options	Substitute	
Normally closed (NC)	0	
Normally open (NO) *4)	1	
Normally closed (NC), PT connection G1/4	4	
Normally open (NO), PT connection G1/4	5	



Frequency	Substitute
See table frequency codes	XX
Voltage	Substitute
See table voltage codes	XXX
Solenoid options	Substitute
Ex-Coil Solenoid in V. d.c. / a.c.	6236
Solenoid in V. d.c.	8365

*4) On request up to 500 bar (PS)

Standard solenoid systems

Voltage and Frequency Solenoid 6236					
Code Voltage	Code Frequency	Voltage	Frequency	Inrush	Holding
024	00	24 V d.c.	-	16 W	16 W
230	49	230 V a.c.	40-60 Hz	18 VA	18 VA
Voltage and Frequency Solenoid 8365					
024	00	24 V d.c.	-	16 W	16 W

Further versions on request!

National code in last digit	2nd label with
DC XXX01 = CCC Certification	
AC XXX41 = CCC Certification	
DC XXX03 = KOSHA Certification	
AC XXX43 = KOSHA Certification	

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)

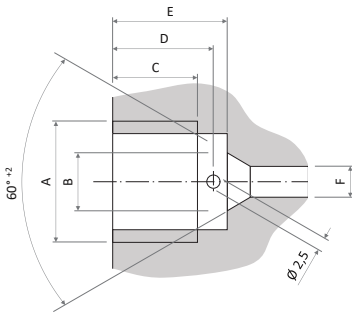
According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Additional solenoid systems for hazardous areas

ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6236	24 V d.c., 110 V a.c., 230 V a.c.

Attention!

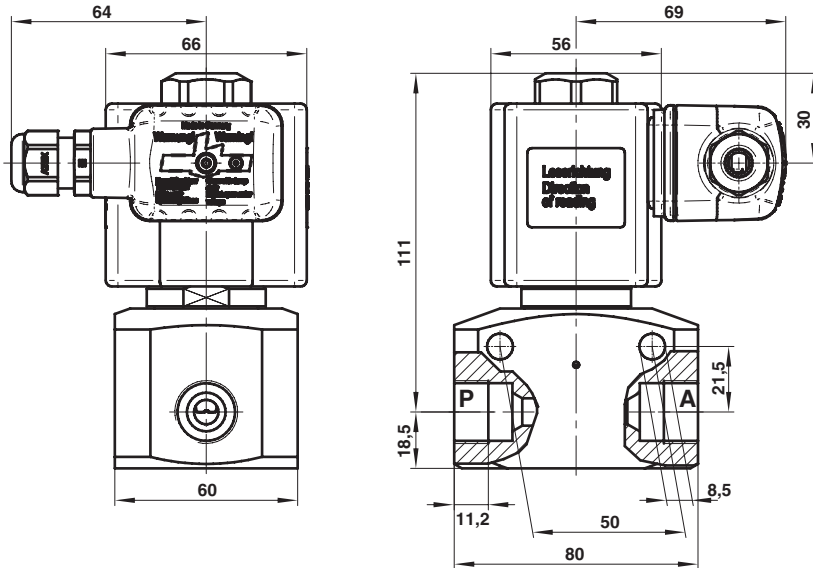
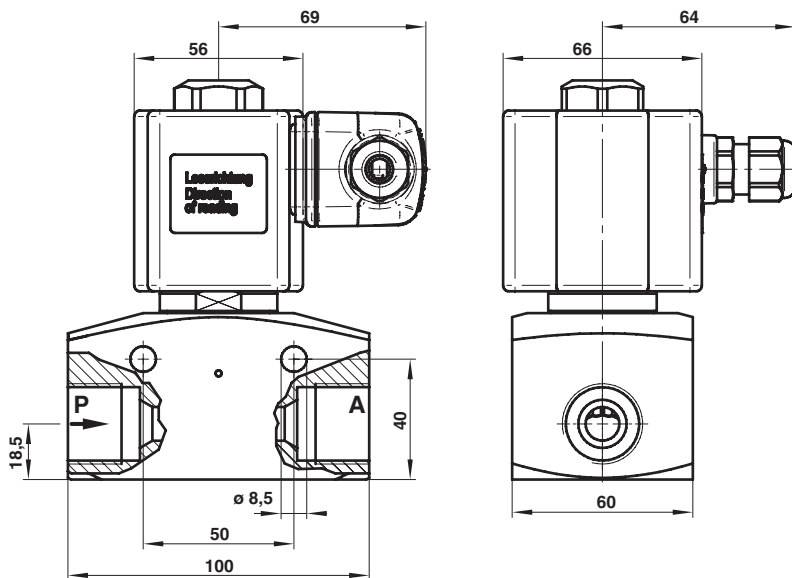
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Dimensions


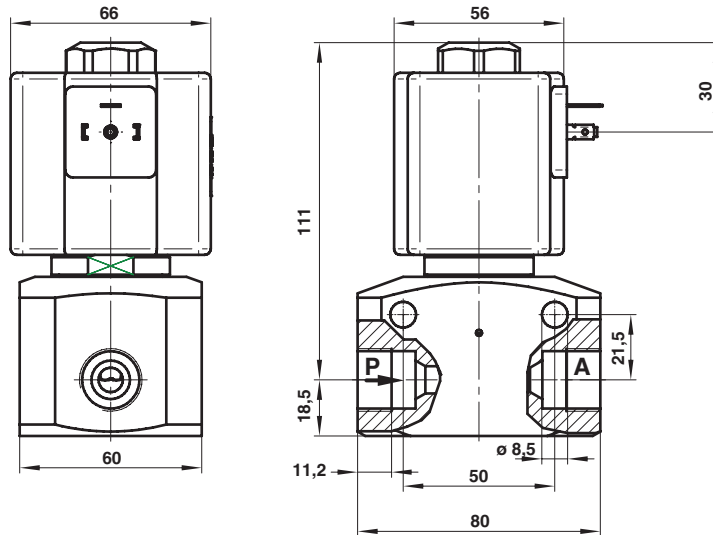
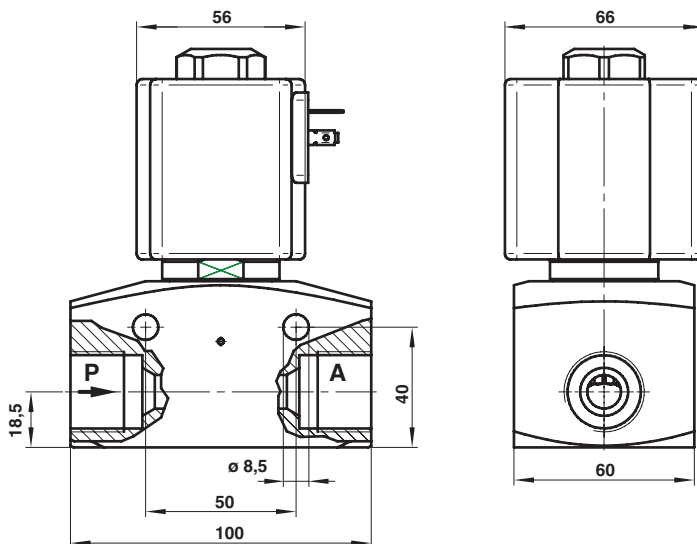
	MP-Tubing System		Tubing size O.D. x I.D. (mm)	Dimensions						Tubing Engagement Allowance
	Port size	Tubing pressure (bar)		A *4) (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	
838311x.xxxx.xxxxx	3/8"	1.550	9,53 x 5,17	9/16-18	7,7	9,6	12,7	15,7	5,1	17,5
838321x.xxxx.xxxxx	9/16"	1.050	14,29 x 9,13	13/16-16	12,7	11,2	15,1	19,1	9,1	21,1
838331x.xxxx.xxxxx	9/16"	1.550	14,29 x 7,93	13/16-16	12,7	11,2	15,1	19,1	7,8	21,3
838342x.xxxx.xxxxx	3/4"	1.050	19,05 x 13,1	3/4-14 NPS	15,7	12,7	18,3	23,9	13,1	25,1
838352x.xxxx.xxxxx	3/4"	1.550	19,05 x 11,12	3/4-14 NPS	15,7	12,7	18,3	23,9	11,1	25,4
838362x.xxxx.xxxxx	1"	1.050	25,4 x 17,47	1-3/8-12	22,4	20,6	27	33,3	17,5	35,1
838372x.xxxx.xxxxx	1"	1.550	25,4 x 14,27	1-3/8-12	22,4	20,6	27	33,3	14,3	36,3

*5) Unified National Fine thread, Class 25 All dimensions are for references only and are subject to change

Dimensions
DN 8 with solenoid 6236

 Dimensions in mm
 Projection/First angle

DN 13 with solenoid 6236


Dimensions
DN 8 with solenoid 8365

 Dimensions in mm
 Projection/First angle

DN 13 with solenoid 8365

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.