VALVES TO ATEX 94/9/EC
OPTIONS / ACCESSORIES

for potentially explosive atmospheres
series 298 and 398

2/2 - 3/2
Series
298 - 398

FEATURES

- *2/2 NC/NO or 3/2 U valves designed for use in potentially explosive atmospheres according to ATEX Directive 94/9/EC, category 2*
- *Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with European Standards EN 13463-1 and EN 13463-5*

GENERAL / CONSTRUCTION / SPECIFICATIONS

Verify the compatibility of the category/zone with the selected valve		catalogue page	classification (zones)				
			category 2				
operator diameter	DN	V451, V453,V455, V751, V753, V755	dusts	gas			safety code (c)
				IIA	IIB	IIC	
Ø 80 mm	15		21	1	1	1	II 2 GD c x°C (Tx)
Ø 100 mm	20 ➙ 25						
Ø 150 mm	32 ➙ 40						
Ø 200 mm	50						

x°C (c)	(Tx) (c)	Ts amb (c)	T fluid (c)
260°C	(T2)	180°C	250°C
200°C	(T3)	180°C	195°C
135°C	(T4)	130°C	130°C
100°C	(T5)	95°C	95°C
85°C	(T6)	80°C	80°C

(c) x°C = Surface temperature
(Tx) = Temperature class
Ts amb = Ambient temperature
T fluid = Fluid temperature

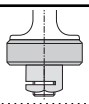
D

ORDERING

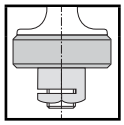
	suffix to be added to the valve's catalogue number (1)
	category 2
Verify the compatibility of the category/zone with the selected valve.	GD2

(1) Example: Valve E298, DN 20, solenoid operator Ø100 mm (page V451) for use in zones 1 and 21 (category 2), catalogue number E298A003GD2

CHOICE OF OPTIONS AND ACCESSORIES

construction type			see page	catalogue page						NC	NO	U	operator dia. compatibility (mm)				body
				V451	V453	V455	V751	V753	V755	fluid entry above/under disc	fluid entry above/under disc	fluid entry above/under disc	80	100	150	200	stainless steel
01		*Disc with metal/metal sealing*	**2**							•	•	•	•	•	•	•	▨
02		*Signaling box, intrinsically safe inductive contact NAMUR*								•	•	•	•	•	•	•	▨

 Valves with female threaded ports.  Valves with flange connection. Valves with socket welding ends.



CONSTRUCTION 01

Disc with metal/metal sealing
- Disc made of stainless steel 304 for high temperatures, contaminated water and variable temperature cycles

(all versions)

TO ORDER (for compatibility see page 1)
- Add suffix **L**

ORDERING EXAMPLES:

E 298A003 **L**
T 398A002 **L**

pipe thread
basic number
suffix

ORDERING EXAMPLES:
SUFFIX COMBINATIONS

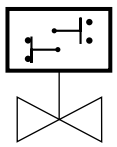
	construction
E 298 **A** 003 **GD2**	-
E 298 **A** 003 **GD2 L**	1
E 298 **A** 003 **GD2 L SH2**	1 + 2

pipe thread
basic number
suffix

SIGNALING BOX

for series 298 and 398 valves
with intrinsically safe inductive contacts
NAMUR, ATEX 94/9/EC

Series
885



FEATURES

- *The signaling box fits all series 298 (2/2) and 398 (3/2) valves to indicate whether the valve is open or closed*
- *The version with 2 intrinsically safe inductive NAMUR contacts is designed for use in potentially explosive atmospheres to ATEX-Directive 94/9/EC*
- *Compliance with the Essential Health and Safety Requirements has been assured by compliance with European Standards EN 50020, EN 50281-1-1 and EN 50284*
- *The signaling box is supplied pre-installed and pre-adjusted on the valve. It is rotatable through 360°*

GENERAL / OPERATION

At both end-of-travel positions (open and closed) of the valve stem, cams on the signaling box plunger operate contacts which provide an electrical signal indicating that the end position is reached.

CONSTRUCTION

Body, cover PA
Degree of protection IP66
Unit can be rotated through 360° around the centreline of the valve operator (set screw)

ELECTRICAL CHARACTERISTICS

intrinsically safe inductive NAMUR contacts

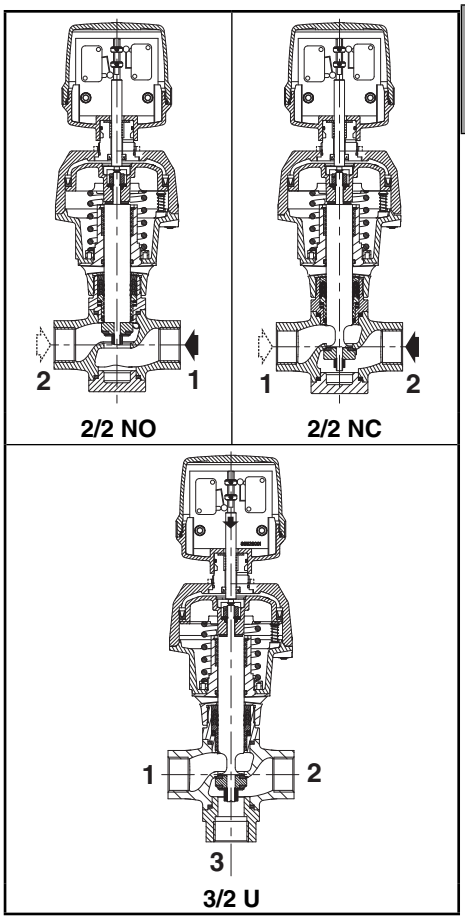
The protection rating of the installed signaling box depends on the type of selected valve (see page 1).

Contact characteristics:
- Power supply: 8 V DC nominal
- Switching frequency: 1 kHz

Protection rating of contacts:
Ⓔx II 1 G EEx **ia** IIC T6
II 1 D EEx ia D20 T 108°C

- Safety parameters:
  U_i = 16 V
  I_i = 25 mA
  P_i = 34 mW
  C_i = 40 nF
  L_i = 50 µH
- Recommended interfaces:
  galvanic barrier
  Pepperl & Fuchs type KFA6-SR2-EX1.W
  MTL instruments type MTL5011B
  ZENER barrier
  MTL instruments type MTL7742

Electrical connection
intrinsically safe inductive NAMUR contacts — 2 terminal strips with 5 screw terminals
Max. grip — 2,5 mm²
Cable entry — 1 cable gland (cable Ø 5-10 mm)



SPECIFICATIONS

operator	suffix (1) signaling box supplied installed on valve 2 intrinsically safe inductive contacts
Ø 80 mm, Ø 100 mm, Ø 150 mm, Ø 200 mm	**SH2**

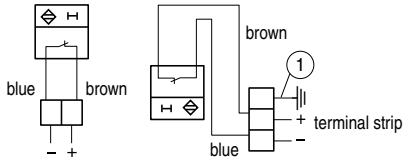
(1) Add the appropriate suffix after the catalogue number of the selected valve, example:
- catalogue number of valve alone **E298A003**
- catalogue number of valve + pre-installed intrinsically safe inductive contacts box = **E298A003SH2**

OPTIONS

- Other types of contacts: contact us

INSTALLATION

- The signaling box can be installed in any position
- Electrical connection:

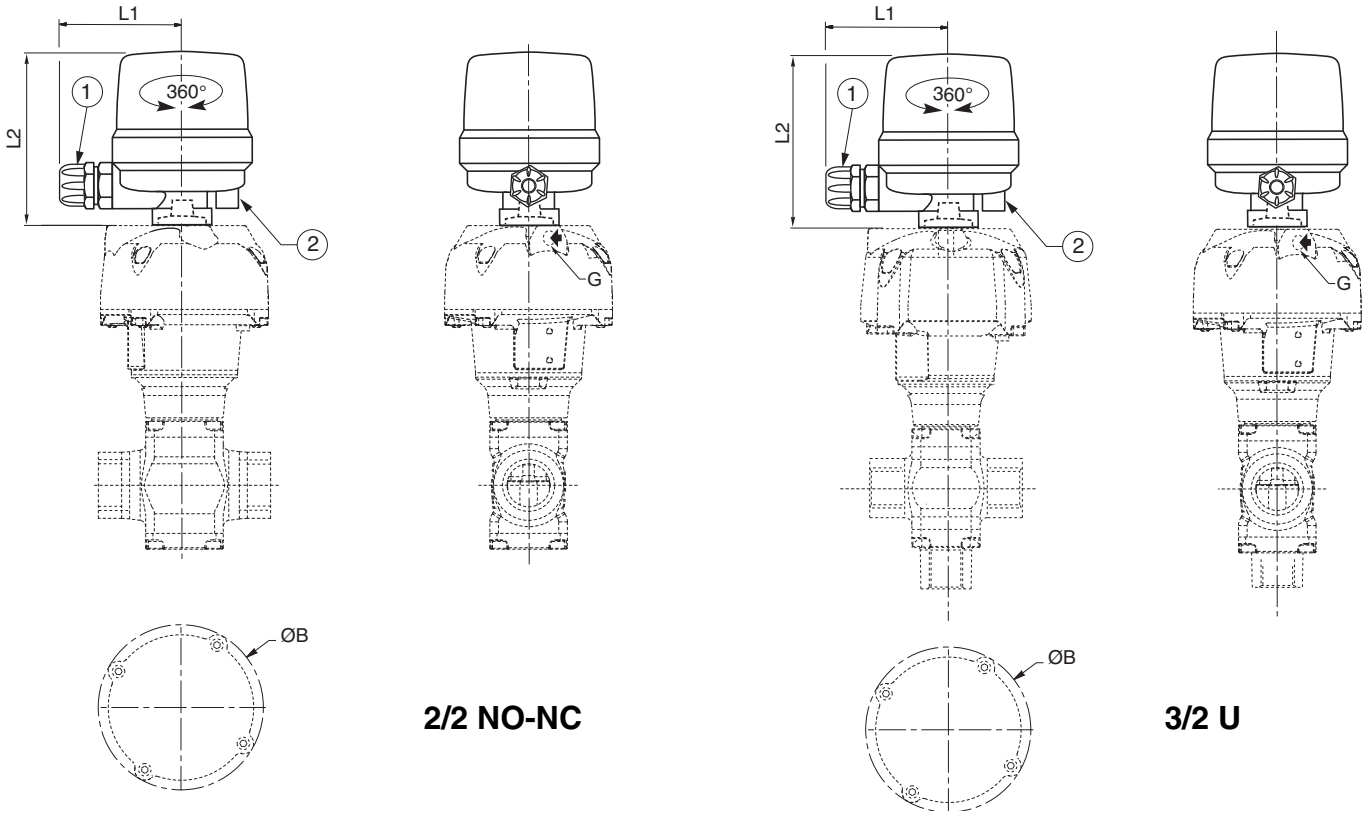


(1) Electrical continuity terminal

- Installation/maintenance instructions are included with each signaling box

DIMENSIONS (mm), WEIGHT (kg)

Weight of unit alone: 0,310



operator dia.	80 mm	100 mm	150 mm	200 mm
L1	68	68	68	68
L2	100	100	100	100
ø G	1/8	1/8	1/4	1/4
ø B	110	132,5	191	247

(1) 1 cable gland (cable Ø 5-10 mm)

(2) Unit rotation lock set screw (orientable through 360°)