2/2 - 3/2 Series

290 - 390

Options / Accessories for Potentially Explosible Atmospheres

- 2/2 or 3/2 valves NC/NO designed for use in potentially explosive atmospheres in accordance with ATEX-Directive 2014/34/EU, category 2
- Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with European Standards EN ISO 80079-36 and EN ISO 80079-37
- Recommended for applications in the chemical, oil, gas and paint coating industries etc.

General / Construction / Specifications

Verify the compa	tibility of	see pa		classification (zones)											
the category/zon		Pressure Operated Valves					catagory 2								
selected valve.		(2/2)		(3/2)					category 2						
operator	DN	▼	▼	▼	sts		gas IIA IIB IIO								
diameter	DN	15, 19, 23, 25, 27, 31	35	1	dusts	IIA			IIA IIB IIC		safety code				
Ø 32 mm	10 → 20				21	1 1 1		1							
Ø 50 mm	15 → 25	 			21	1	1	1							
Ø 63 mm	15 → 50		=	***	21	1	1	1							
Ø 90 mm	25 → 65	m	_		21	1	1	1							
Ø 125 mm	32 → 65	<u> </u>	=		∠ I	'	ı	ı							

T*°C	T*	Ts amb	T fluid
200°C	T3	60°C	184°C
135°C	T4	60°C	130°C

 $\begin{array}{lll} T^{*\circ}C & = & Surface \ temperature \\ T^{*} & = & Temperature \ class \\ Ts \ amb & = & Ambient \ temperature \\ T \ fluid & = & Fluid \ temperature \end{array}$

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

Example (see page 15):

Valve E290, DN 35, operator dia. 63 mm designed for use in zones 1 and 21 (category 2),

catalogue number: E290B010GD2

Choi	ice of op	tions and accessories		catalogue page				catalogue page NC						NC						body							
construction type			page									/2 section)	υ'n	fluid entry under the disc	d entry we the disc	cc	operator dia. compatibility (mm) Ø				bronze	stainless steel					
			see	15	19	23	22	77	3	31	35	1 (3,	fluid unde	Ē	fluid er above	32	50	63	90	125	brc	sta		L			
01		Signaling box, intrinsically safe inductive contacts NAMUR	45					11	=	= : = :	: :	:	•	•	•		•	•	•	•	%,	<i>%</i> ,		3			
07	1 8	Adapter plate (stainless steel) for NAMUR pad-mount pilot	44	***	***			=	=	= =	: =	:	•	•	•			•	•	•	<i>'//.</i>	<i>'//,</i>					
08	ASUA MANAGEMENT OF THE PROPERTY OF THE PROPERT	Oxygen service (max. limits: 15 bar, +60°C)	44			1	OIN)	=	=	= =	: =		•	•	•	•	•	•	•	•	<i>'//.</i>	<i>'//,</i>					
09		Vacuum applications up to 1.33 10 ⁻³ mbar	44	***		=	ĎÍŇ.	=	=	= =	: -		•	•	•	•	•	•	•	•	<i>'//,</i>	·//,					
10		NET-INOX treatment	44			•			=	=	•		•	•	•	•	•	•	•	•		<i>'//,</i>					
11	57" EG 1935/2004	Conformity with Regulation (EC) 1935-2004	44			B		1	-	= =	•		•	•	•	•	•	•	•	•		<i>'//,</i>		-			
12	9	All stainless steel AISI 316L version (Recommended for aggressive environments) For valve catalogue numbers = contact us		-							1		ı	1		-		1	ı					_			

Valves with male threaded ports

Walves with male threaded ports DIN 11851

290 - 390

ASCO™ ATEX 2014/34/EU Options / Accessories



Construction 07

Adapter plate for NAMUR pad-mount pilot

- Adaptable on diameter Ø 63, 90 and 125 mm operators .
- Stainless steel AISI 316L
- Solenoid pilot valves, series 551, 3/2 NC:
- aluminium body, catalogue number SCG551A001
- St. steel body, ÁÍSI316L, catalogue number SCG551A409

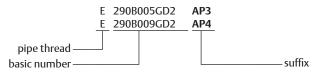
TO ORDER: (for compatibility: see page 43)

Add suffix

stainless steel AISI 316L AP3 (dia. 63 mm operator)

stainless steel AISI 316L AP4 (dia. 90 and 125 mm operators)

ORDERING EXAMPLES:



OXYGEN

Construction 08

Oxygen service

- Special grease and cleaning
- Pressure limited to 15 bar/temperature limited to +60°C

TO ORDER: (for compatibility: see page 43)

Add suffix N

ORDERING EXAMPLES:





Construction 09

Vacuum applications up to 1,33 10⁻³ mbar

FPM disc for use with medium vacuum



Construction 10

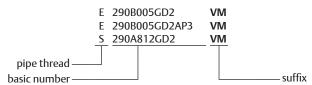
NET-INOX treatment

- Stainless steel valve body pickled in nitric hydrofluoric acid bath
- Treatment recommended for aggressive environments
- Standard on valves with CLAMP-type connections

TO ORDER: (for compatibility: see page 43)

Add suffix VM

ORDERING EXAMPLES:





Add suffix NI

ORDERING EXAMPLES:





Construction 11

Conformity with Regulation (EC) 1935-2004

The material of the wetted parts are listed in the chart of the Annex I of Regulation (EC) 1935/2004)

TO ORDER: (for compatibility: see page 43)

Add suffix FB

ORDERING EXAMPLES:



ASCO™ Signaling Box

For Series 290 and 390 Valves

With Intrinsically Safe Inductive NAMUR Contacts - ATEX 2014/34/EU

Series 885

- The signaling box fits all series 290 (2/2) and 390 (3/2) valves with 50 mm (NC) and 63 to 125 mm (NC/NO) operators 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 2014/34/EU
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN 60079-0, EN 60079-11 and EN 60076-26
- The signaling box is supplied pre-installed and pre-adjusted on the valve. It is rotatable through 360°
- The signaling box complies with the EMC Directive 2014/30/EU

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.

General

Ambient temperature range -10°C to +60°C

Construction

Body, cover PA **IP66** Degree of protection

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:

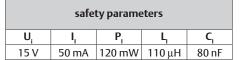
- Power supply: 8.2 V DC
- Switching frequency: 800 Hz

Protection rating of contacts:

🐼 II 2 G Ex ia IIB T6 Gb • EC type examination certificate no.: **BVS 04 ATEX E153** PTB 01 ATEX 2191

· 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

Max. grip

Cable entry

1 cable gland (cable Ø 5-10 mm)

2 terminal strips with 5 screw terminals 2.5 mm²

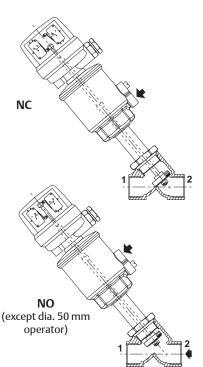
SPECIFICATIONS

operator	suffix (1) signaling box supplied installed on valve 2 intrinsically safe inductive contacts
dia. 50 mm (NC), dia. 63, 90, 125 mm (NC-NO)	SH2

- (1) Add the appropriate suffix after the catalogue number of the selected valve, example:
 - catalogue number of valve alone E290B010
 - catalogue number of valve + pre-installed intrinsically safe inductive contacts box = E290B010GD2SH2





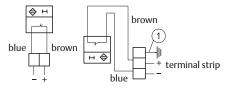


Options

• 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

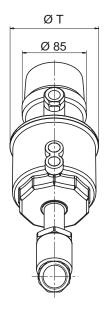
Dimensions (mm), Weight (kg)

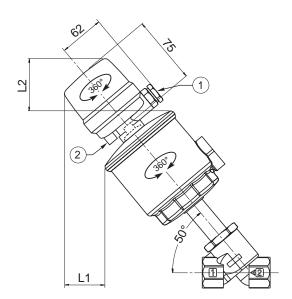


Weight of unit alone: 0.310

Installation on Series 290 and 390

with dia 50 (NC), 63, 90 or 125 mm operator





operator dia.	50 mm	63 mm	90 mm	125 mm
L1	53	46	35	32
L2	75	70	56	50
øΤ	65	85	118	156

- 1 1 cable gland (cable Ø 5-10 mm)
- 2 Unit rotation lock set screw (orientable through 360°)