

Options ⁽¹⁾

- Oxygen service pressure limited to 15 bar (220 psi), media temperature limited to +60°C (140°F)
- Explosive atmospheres, ATEX and IECEx compliant
- Medium vacuum service up to 10⁻³ mb (10⁻³ Torr)
- Visual position indicator for 32 mm and 50 mm actuators (standard position indicators for other actuator sizes)
- EN 161/EN 16678 compliant versions (see dedicated catalog pages)
- Pilots (see dedicated catalog pages)
- Large range of switch boxes and digital positioners (see dedicated catalog pages)
- Valve body material composition certificate 3.1

⁽¹⁾ See Choice of options and accessories (page 14)

Specifications (angle seat valves)

Piping (ISO 6708)		Flow coefficient		Pilot pressure		Operating pressure differential			Actuator diameter	Dimensions / Type ⁽¹⁾	Catalog number	
Pipe size	DN					bar (psi)					Thread type	
						Air, inert gas (*)	Water, oil, liquids (*)	Steam (*)			(G*)	(NPTF)
		m³/h (gal/min)	(l/min)	Min.	Max.				(mm)			
NC - Normally closed, entry under the disc												
3/8"	10	2.8 (3.2)	46	4.7 (75)	10 (150)	16 (240)	16 (240)	10 (150)	32	01	E290D0110SA0000	8290D0120SA0000
1/2"	15	4.1 (4.7)	68	4.7 (75)	10 (150)	10 (150)	10 (150)	10 (150)	32	01	E290D0210SA0000	8290D0220SA0000
		5.8 (6.7)	96	4.5 (70)	10 (150)	16 (240)	16 (240)	10 (150)	50	02	E290D0230SA0000	8290D0240SA0000
				5.5 (80)	10 (150)	25 (360)	25 (360)	10 (150)	50	02	E290D0230SP1600	8290D0240SP1600
				2.8 (45)		16 (240)	16 (240)	10 (150)	63	03	E290D0250SA0000	8290D0260SA0000
				4.5 (70)		25 (360)	25 (360)	10 (150)	63	03	E290D0250SP1600	8290D0260SP1600
3/4"	20	6.5 (7.5)	108	4.7 (75)	10 (150)	6 (90)	6 (90)	6 (90)	32	01	E290D0310SA0000	8290D0320SA0000
		10.7 (12.4)	178	4.5 (70)	10 (150)	10 (150)	10 (150)	10 (150)	50	02	E290D0330SA0000	8290D0340SA0000
				5.5 (80)	10 (150)	14 (210)	14 (210)	10 (150)	50	02	E290D0330SP1600	8290D0340SP1600
				4.5 (70)		16 (240)	16 (240)	10 (150)	63	03	E290D0350SA0000	8290D0360SA0000
				2.8 (45)		12 (180)	12 (180)	10 (150)	63	03	E290D7350SA0000	8290D7360SA0000
				4.5 (70)		20 (300)	20 (300)	10 (150)	63	03	E290D0350SP1600	8290D0360SP1600
1"	25	15.5 (18)	258	4.5 (70)	10 (150)	6 (90)	6 (90)	6 (90)	50	01	E290D0430SA0000	8290D0440SA0000
		17.7 (20.5)	295	5.5 (80)	10 (150)	9 (135)	9 (135)	9 (135)	50	01	E290D0430SP1600	8290D0440SP1600
				4.5 (70)		10 (150)	10 (150)	10 (150)	63	03	E290D0450SA0000	8290D0460SA0000
		17.8 (20.6)	296	4.5 (70)	10 (150)	16 (240)	16 (240)	10 (150)	90	04	E290D04B0SA0000	8290D04C0SA0000
		17.7 (20.5)	295	2.8 (45)	10 (150)	6 (90)	6 (90)	6 (90)	63	03	E290D7450SA0000	8290D7460SA0000
		17.8 (20.6)	296	2.8 (45)	10 (150)	12 (180)	12 (180)	10 (150)	90	04	E290D74B0SA0000	8290D74C0SA0000
				4.5 (70)		25 (360)	25 (360)	10 (150)	90	04	E290D04B0SP1600	8290D04C0SP1600

(*) Ensure that compatibility of materials in contact with fluids is verified.

⁽¹⁾ For dimensions, see drawing(s) for each construction type on the following page(s).

Product selection guide

Configurator - CAD Files

PRODUCT CODE
E 290 D 0 3 1 0 S A00 00

Connection type

E = ISO 228/1 & ISO 7/1
(combination thread, G*)
8 = NPTF (ANSI B 1.20.3)
T = Flange
J = ISO 7/1 «Rc»

Product series

290

Revision letter

D = Initial release

Function

0 = Normally Closed
1 = Normally Open
7 = Normally Closed - Low pilot pressure
3 = Normally Closed - Above the disc
4 = Double Acting (bistable)
P = Normally closed with profil disc

Nominal diameter

1 = DN10 - 3/8"
2 = DN15 - 1/2"
3 = DN20 - 3/4"
4 = DN25 - 1"
5 = DN32 - 1 1/4"
6 = DN40 - 1 1/2"
7 = DN50 - 2"
8 = DN65 - 2 1/2"

Actuator diameter - Piloting connections

1 = 32 mm plastic - G 1/8"
2 = 32 mm plastic - NPT 1/8"
3 = 50 mm plastic - G 1/8"
4 = 50 mm plastic - NPTF 1/8"
5 = 63 mm plastic - G 1/8"
6 = 63 mm plastic - NPTF 1/8"
B = 90 mm plastic - G 1/4"
C = 90 mm plastic - NPTF 1/4"
H = 125 mm plastic - G 1/4"
J = 125 mm plastic - NPTF 1/4"
9 = 63 mm plastic - NAMUR plate⁽³⁾
A = 90 mm plastic - NAMUR plate⁽³⁾
F = 125 mm plastic - NAMUR plate⁽³⁾

Options

A00 = Without
PFB = Prepared for signaling box
mounting⁽¹⁾
W0B = Without body⁽¹⁾
AT1 = ATEX/IECEX 1/21 zones⁽¹⁾
AT0 = ATEX/IECEX 0/20 zones⁽¹⁾
02S = Oxygen service 15 bar / 60°C
12S = CUTR certification
(EAC Ex 1/21 zones) for Product
STL = Stroke limiter for opening⁽¹⁾
TC6 = Test tightness class VI⁽¹⁾
VAC = Industrial vacuum 10⁻³ mbar⁽¹⁾
M31 = Stainless steel valve body material
certified 3.1
FBO = EC 1935-2004 and
FDA CFR 21 material
WSP = PTFE wiper seal
WSF = FPM piston seal
11B = Manual safety device⁽¹⁾
P16 = PS > 16 bar (240 psi)
V10 = Visual indicator⁽²⁾
SSF = Stainless steel insert for
plastic actuator

Valve body material

S = Stainless steel body
Y = All 316L

Port type 1-2

0 = Threaded port
D = Flange DIN EN 1092-1 (ISO 7005)
standard (2-way)
P = Flange ANSI standard 150 (2-way)

⁽¹⁾ See "Choice of options and accessories", pages 14 and 15

⁽²⁾ For 32 mm and 50 mm actuators (standard for 63 mm, 90 mm and 125 mm actuators)

⁽³⁾ Solenoid pilot valves, series 551, 3/2 NC:

- Aluminum body, catalog number **SCG551A001**
- AISI 316L stainless steel body, catalog number **SCG551A40**