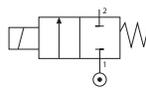




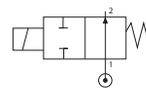
2/2 NC



1/4"
Pag. 6.3



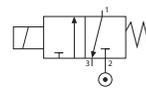

2/2 NO



1/4"
Pag. 6.5



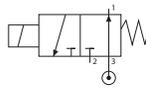

3/2 NC



1/4"
Pag. 6.7




3/2 NO



1/4"
Pag. 6.9




30 mm

Series C
Page 15.4




30 mm

Series D
Page 15.5




36 mm

Series E
Page 15.6




Connectors
Page 15.8 - 15.10



DIRECT ACTING SOLENOID VALVES IN STAINLESS STEEL 316L

Ex
II 2 G/D Ex h

C US
CSA C22.2

AISI 316L



Series X2F

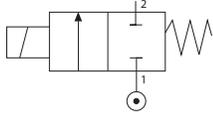
X2F

Series X2F

DIRECT ACTING SOLENOID VALVES WITH BODY IN STAINLESS STEEL AISI 316L

2/2 NC

1/4"



Component Parts and Materials

- 1 Body: Stainless steel AISI 316L
- 2 Seals: NBR - NBR - EPDM - FKM - PTFE - CR
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel
- 6 Shading ring: Copper



General features - X2F

- Universal mounting position
- Operator kit Ø 13 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

725 psi (50 bar)



Compatibility and materials table

Page 0.13 - 0.14



Room temperature with coil class H

+14°F +176°F
 -10°C +80°C



Applications

- Chemical and Petrochemical Industry
- Oil & Gas
- Oxygen and Hydrogen



Silver-plated shading ring on request



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils
X 2 F	0 3 03 = 1/4"	1 1 = 2/2 NC	1 5 15 = 1/16 (1.5) 02 = 5/64 (2) 25 = 3/32 (2.5) 03 = 1/8 (3) 04 = 5/32 (4) 05 = 13/64 (5)	N N = NBR F = NBR E = EPDM V = FKM P = PTFE C = CR	0 0 = Standard	N N = NPTF	C A C = C series - SOL20 A = 12V DC D = D series - SOL20 B = 24V DC E = E series - SOL21 1 = 24V AC 2 = 110V AC 3 = 220V AC

Valves and coils are supplied separately. Upon commercial agreements can be supplied assembled.

Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)					
						inch (mm)	cSt	gpm (m³/h)	psi (bar)		
									Min	Max DC	Max AC
X2F 03 1 15 _0 N	N = NBR +14°F +194°F (-10°C +90°C)	1/4"	1/16 (1.5)	25	0.07 (0.06)	0	725 (50)	725 (50)			
X2F 03 1 02 _0 N	F = NBR -40°F +194°F (-40°C +90°C)		5/64 (2)	37	0.12 (0.10)	0	508 (35)	725 (50)			
X2F 03 1 25 _0 N	V = FKM +14°F +284°F (-10°C +140°C)		3/32 (2.5)	53	0.17 (0.15)	0	305 (21)	508 (35)			
X2F 03 1 03 _0 N	E = EPDM +14°F +284°F (-10°C +140°C)		1/8 (3)	53	0.24 (0.21)	0	145 (10)	305 (21)			
X2F 03 1 04 _0 N	P = PTFE -40°F +356°F (-40°C +180°C)		5/32 (4)	53	0.41 (0.35)	0	44 (3)	145 (10)			
X2F 03 1 05 _0 N	C = CR -31°F +212°F (-35°C +100°C)		13/64 (5)	53	0.59 (0.51)	0	20 (1.4)	73 (5)			

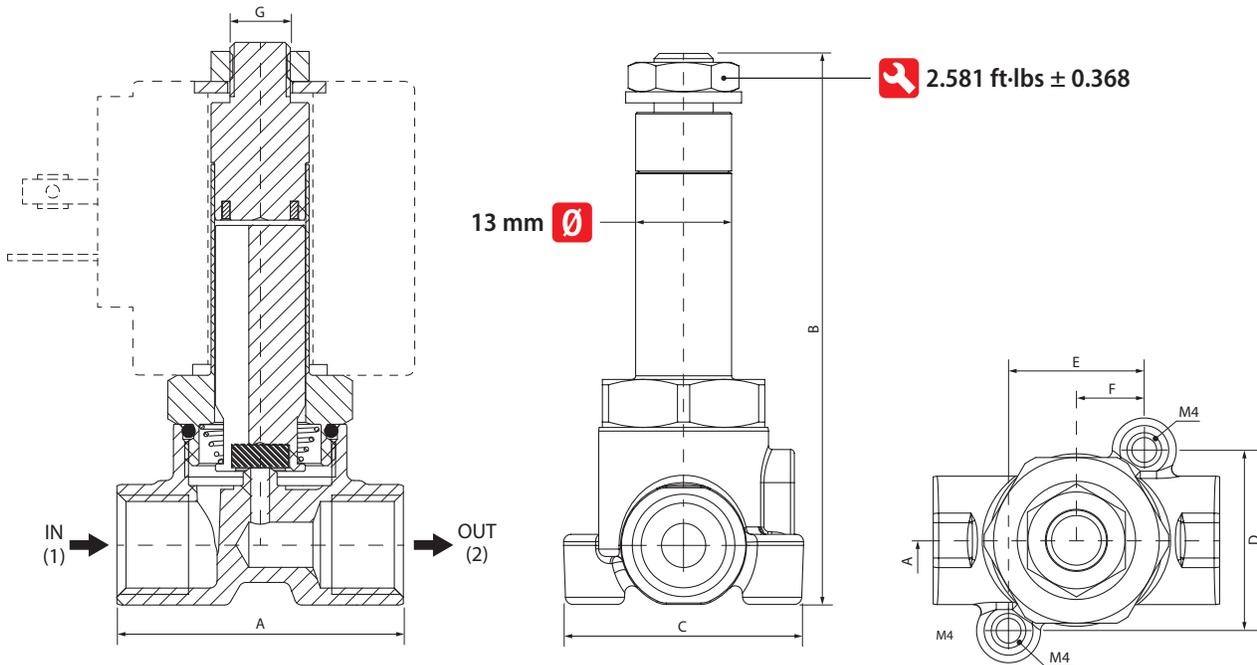
Power		Coils	
DC	AC	Size	Series
W	VA	mm	C - Page 15.4 D - Page 15.5 E - Page 15.6
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21

① Select seal material

With steam: EPDM - P max = 36 psi (2.5 bar) / PTFE - P max = 145 psi (10 bar)

Allowable leakage: PTFE = max 0.08 gph (300 cm³/h)

Coil not included



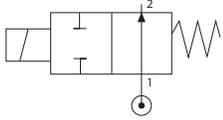
Size	A	B	C	D	E	F	G
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	
1/4"	1.496 (38)	2.940 (74.7)	1.279 (32.5)	0.944 (24)	0.708 (18)	0.354 (9)	M8 x 1

Series X2F

DIRECT ACTING SOLENOID VALVES WITH BODY IN STAINLESS STEEL AISI 316L

2/2 NO

1/4"



Component Parts and Materials

- 1 Body: Stainless steel AISI 316L
- 2 Seals: NBR - EPDM - FKM - CR
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel
- 6 Shading ring: Copper



General features - X2F

- Universal mounting position
- Operator kit Ø 13 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

725 psi (50 bar)



Compatibility and materials table

Page 0.13 - 0.14



Room temperature with coil class H

+14°F +176°F
 -10°C +80°C



Applications

- Chemical and Petrochemical Industry
- Oil & Gas
- Oxygen and Hydrogen



Silver-plated shading ring on request



Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils
X 2 F	0 3 03 = 1/4"	2 2 = 2/2 NO	1 5 15 = 1/16 (1.5) 02 = 5/64 (2) 25 = 3/32 (2.5) 03 = 1/8 (3) 04 = 5/32 (4) 05 = 13/64 (5)	N N = NBR E = EPDM V = FKM C = CR	0 0 = Standard	N N = NPTF	C A C = C series - SOL20 A = 12V DC D = D series - SOL20 B = 24V DC E = E series - SOL21 1 = 24V AC 2 = 110V AC 3 = 220V AC

Valves and coils are supplied separately. Upon commercial agreements can be supplied assembled.

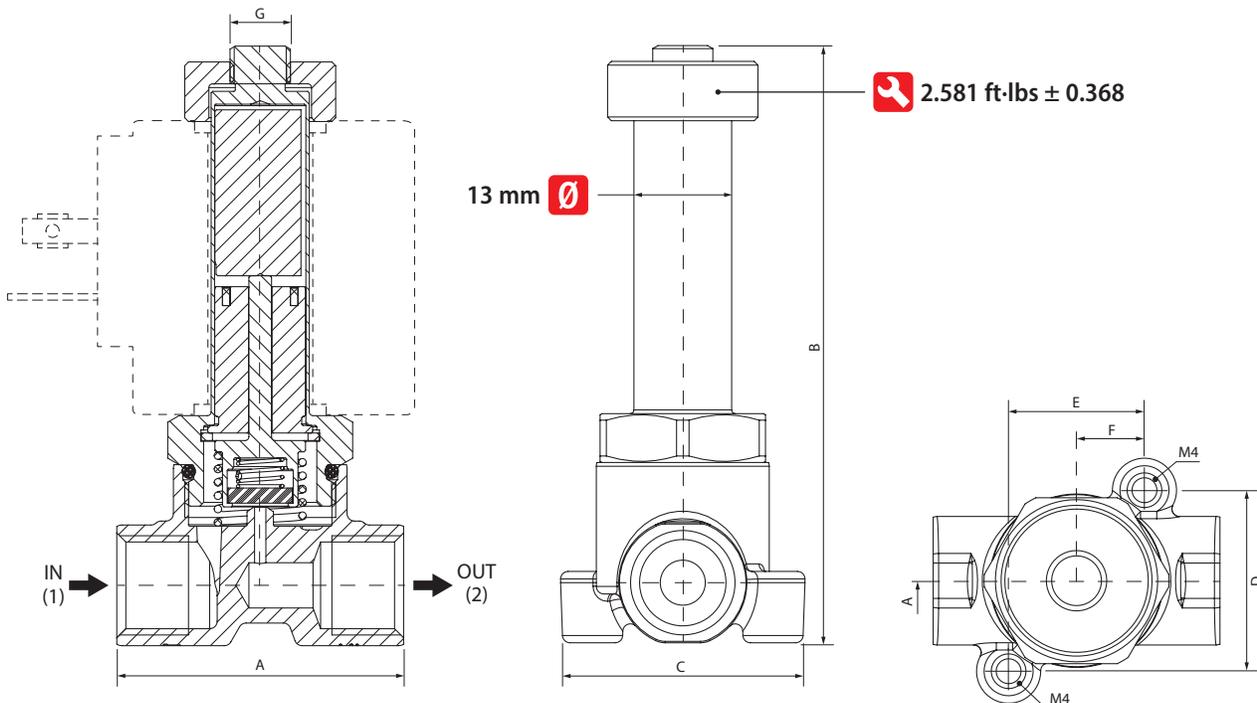
Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)							
						gpm (m³/h)	psi (bar)						
							Min	Max DC	Max AC				
X2F 03 2 15 _ 0 N	N = NBR +14°F +194°F (-10°C +90°C) V = FKM +14°F +284°F (-10°C +140°C) E = EPDM +14°F +284°F (-10°C +140°C) C = CR -31°F +212°F (-35°C +100°C)	NPTF	1/16 (1.5)	25	0.07 (0.06)	0	-	363 (25)	363 (25)				
X2F 03 2 02 _ 0 N							5/64 (2)	37	0.12 (0.10)	0	-	261 (18)	261 (18)
X2F 03 2 25 _ 0 N											3/32 (2.5)	53	0.17 (0.15)
X2F 03 2 03 _ 0 N							1/8 (3)	53	0.24 (0.21)	0			
X2F 03 2 04 _ 0 N											5/32 (4)	53	0.41 (0.35)
X2F 03 2 05 _ 0 N							13/64 (5)	53	0.59 (0.51)	0			

Power		Coils	
DC	AC	Size	Series
W	VA	mm	C - Page 15.4 D - Page 15.5 E - Page 15.6
-	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
-	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
-	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
-	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
-	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21

① Select seal material

With steam: EPDM - P max = 36 psi (2.5 bar)

Coil not included



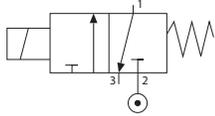
Size	A	B	C	D	E	F	G
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	
1/4"	1.496 (38)	3.129 (79.5)	1.279 (32.5)	0.944 (24)	0.708 (18)	0.354 (9)	M8 x 1

Series X2F

DIRECT ACTING SOLENOID VALVES WITH BODY IN STAINLESS STEEL AISI 316L

3/2 NC

1/4"



Component Parts and Materials

- 1 Body: Stainless steel AISI 316L
- 2 Seals: NBR - EPDM - FKM - CR
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel
- 6 Shading ring: Copper



General features - X2F

- Universal mounting position
- Operator kit Ø 13 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

725 psi (50 bar)



Compatibility and materials table

Page 0.13 - 0.14



Room temperature with coil class H

+14°F +176°F
-10°C +80°C



Applications

- Chemical and Petrochemical Industry
- Oil & Gas
- Oxygen and Hydrogen



Silver-plated shading ring on request



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils
X 2 F	0 3 03 = 1/4"	3 3 = 3/2 NC	1 5 15 = 1/16 (1.5) 02 = 5/64 (2) 25 = 3/32 (2.5) 03 = 1/8 (3) 04 = 5/32 (4) 05 = 13/64 (5)	N N = NBR E = EPDM V = FKM C = CR	0 0 = Standard	N N = NPTF	C A C = C series - SOL20 A = 12V DC D = D series - SOL20 B = 24V DC E = E series - SOL21 1 = 24V AC 2 = 110V AC 3 = 220V AC

Valves and coils are supplied separately. Upon commercial agreements can be supplied assembled.

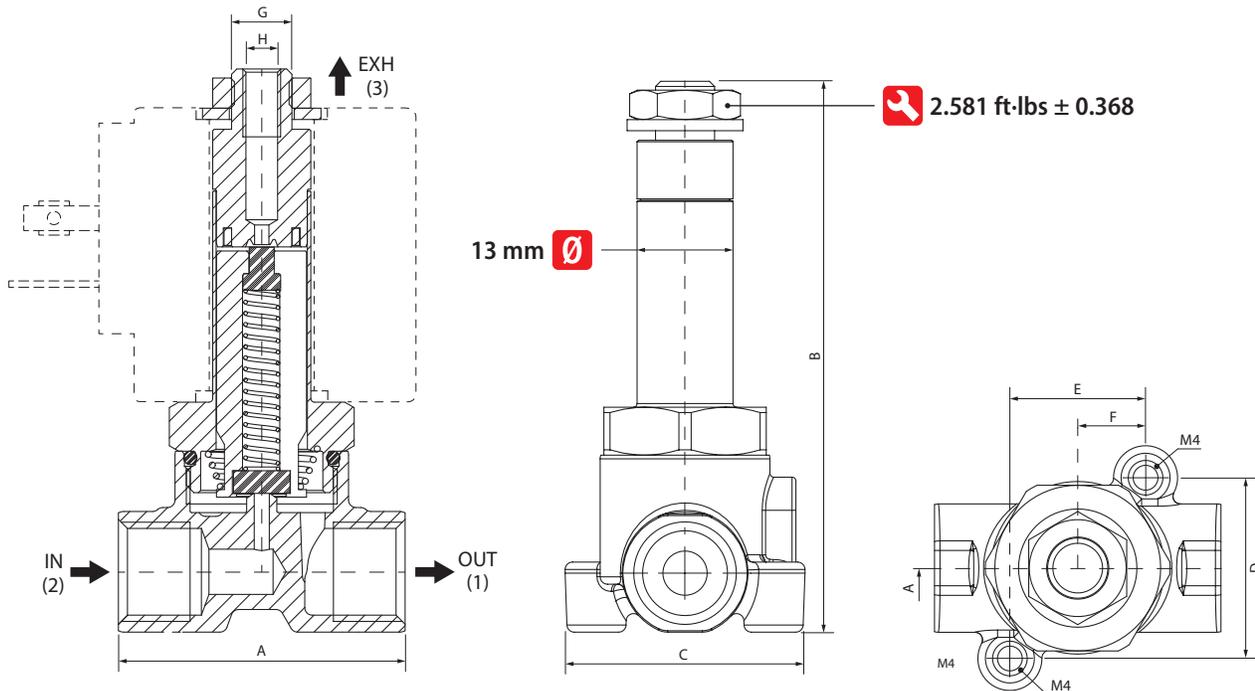
Code	Sealing materials	Port size	Ø Orifice		Viscosity	Cv (Kv)		Differential pressure (OPD)			Power		Coils				
			inch (mm)			cSt	gpm (m³/h)		psi (bar)			DC	AC	Size	Series		
			IN	EXH			IN	EXH	Min	Max DC	Max AC	W	VA			mm	
X2F 03 3 15 _0 N	N = NBR +14°F +194°F (-10°C +90°C) V = FKM +14°F +284°F (-10°C +140°C) E = EPDM +14°F +284°F (-10°C +140°C) C = CR -31°F +212°F (-35°C +100°C)	1/4"	1/16 (1.5)	5/64 (1.9)	25	0.07 (0.06)	0.12 (0.10)	0	363 (25)	363 (25)	363 (25)	363 (25)	8	14	30	C - SOL20	
X2F 03 3 02 _0 N			5/64 (2)	5/64 (1.9)	37	0.12 (0.10)	0.12 (0.10)	0	261 (18)	261 (18)	261 (18)	261 (18)	261 (18)	8	14	30	C - SOL20
X2F 03 3 25 _0 N			3/32 (2.5)	5/64 (1.9)	37	0.17 (0.15)	0.12 (0.10)	0	189 (13)	189 (13)	189 (13)	189 (13)	189 (13)	8	14	30	C - SOL20
X2F 03 3 03 _0 N			1/8 (3)	5/64 (1.9)	37	0.24 (0.21)	0.12 (0.10)	0	145 (10)	145 (10)	145 (10)	145 (10)	145 (10)	8	14	30	C - SOL20
X2F 03 3 04 _0 N			5/32 (4)	5/64 (1.9)	37	0.41 (0.35)	0.12 (0.10)	0	87 (6)	87 (6)	87 (6)	87 (6)	87 (6)	8	14	30	C - SOL20
X2F 03 3 05 _0 N			13/64 (5)	5/64 (1.9)	37	0.59 (0.51)	0.12 (0.10)	0	44 (3)	44 (3)	44 (3)	44 (3)	44 (3)	8	14	30	C - SOL20

DC	AC	Size	Series
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21
8	14	30	C - SOL20
14	21	30	D - SOL20
22	31	36	E - SOL21

① Select seal material

With steam: EPDM - P max = 36 psi (2.5 bar)

Coil not included



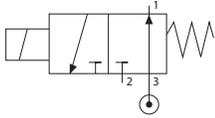
Size	A	B	C	D	E	F	G	H
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		
1/4"	1.496 (38)	2.940 (74.7)	1.279 (32.5)	0.944 (24)	0.708 (18)	0.354 (9)	M8 x 1	M5

Series X2F

DIRECT ACTING SOLENOID VALVES WITH BODY IN STAINLESS STEEL AISI 316L

3/2 NO

1/4"



Component Parts and Materials

- 1 Body: Stainless steel AISI 316L
- 2 Seals: NBR - EPDM - FKM - CR
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel
- 6 Shading ring: Copper



General features - X2F

- Universal mounting position
- Operator kit Ø 13 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

725 psi (50 bar)



Compatibility and materials table

Page 0.13 - 0.14



Room temperature with coil class H

+14°F +176°F
 -10°C +80°C



Applications

- Chemical and Petrochemical Industry
- Oil & Gas
- Oxygen and Hydrogen



Silver-plated shading ring on request



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils
X 2 F	0 3 03 = 1/4"	4 4 = 3/2 NO	1 5 15 = 1/16 (1.5) 02 = 5/64 (2) 25 = 3/32 (2.5) 03 = 1/8 (3) 04 = 5/32 (4) 05 = 13/64 (5)	N N = NBR E = EPDM V = FKM C = CR	0 0 = Standard	N N = NPTF	C A C = C series - SOL20 A = 12V DC D = D series - SOL20 B = 24V DC E = E series - SOL21 1 = 24V AC 2 = 110V AC 3 = 220V AC

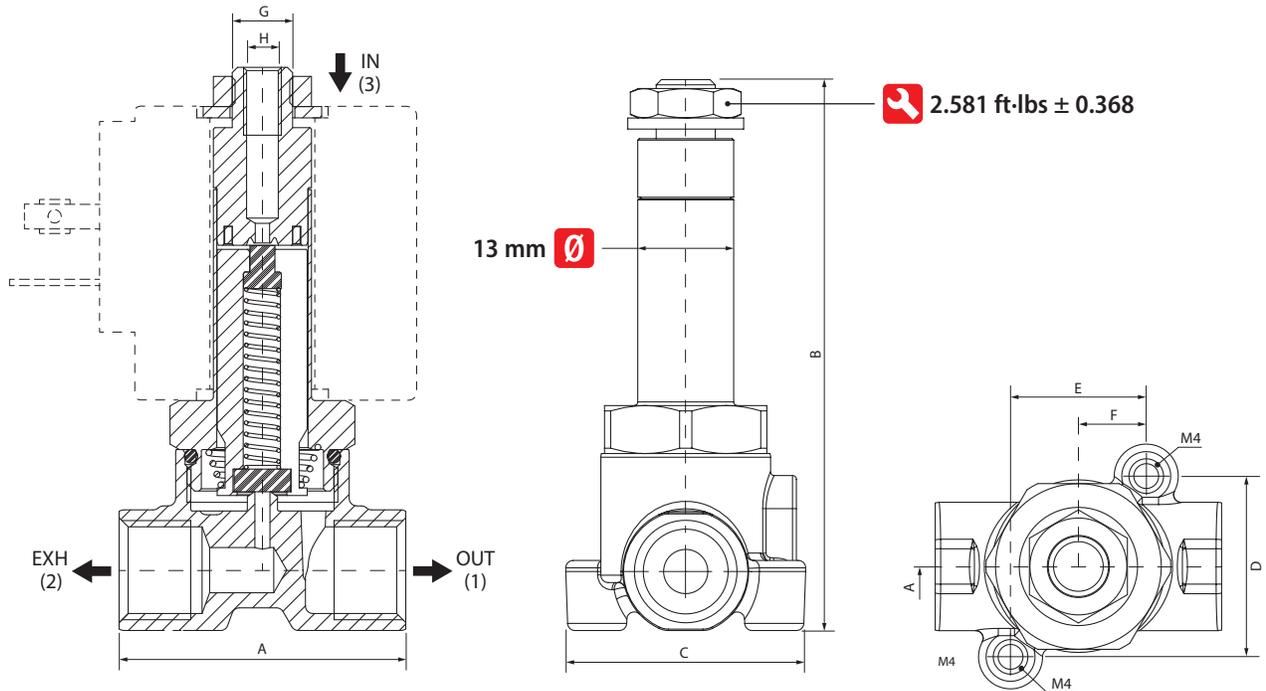
Valves and coils are supplied separately. Upon commercial agreements can be supplied assembled.

Code	Sealing materials	Port size	Ø Orifice		Viscosity	Cv (Kv)		Differential pressure (OPD)			Power		Coils			
			inch (mm)			cSt	gpm (m³/h)		psi (bar)			DC	AC	Size	Series	
			IN	EXH			IN	EXH	Min	Max DC	Max AC	W	VA			mm
X2F 03 4 15 _0 N	N = NBR +14°F +194°F (-10°C +90°C) V = FKM +14°F +284°F (-10°C +140°C) E = EPDM +14°F +284°F (-10°C +140°C) C = CR -31°F +212°F (-35°C +100°C)	1/4"	5/64	1/16	25	0.12	0.07	0	218 (15)	218 (15)	8	14	30	C - SOL20		
X2F 03 4 02 _0 N			5/64	5/64		37	0.12		0.12	0	218 (15)	218 (15)	14	21	30	D - SOL20
X2F 03 4 25 _0 N			5/64	3/32			37		0.12		0.17	0	218 (15)	218 (15)	22	31
X2F 03 4 03 _0 N			5/64	1/8	37			0.12	0.24		0		145 (10)	218 (15)	8	14
X2F 03 4 04 _0 N			5/64	5/32		37		0.12	0.41	0			58 (4)	145 (10)	14	21
X2F 03 4 05 _0 N			5/64	13/64			37	0.12	0.59			0	102 (7)	218 (15)	22	31
									189 (13)		218 (15)		8	14	30	C - SOL20
								29 (2)	87 (6)	14	21		30	D - SOL20		
							44 (3)	138 (9.5)	22	31	36	E - SOL21				
							116 (8)	174 (12)	8	14	30	C - SOL20				
									14	21	30	D - SOL20				
									22	31	36	E - SOL21				

① Select seal material

With steam: EPDM - P max = 36 psi (2.5 bar)

Coil not included



Size	A	B	C	D	E	F	G	H
	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)		
1/4"	1.496 (38)	2.940 (74.7)	1.279 (32.5)	0.944 (24)	0.708 (18)	0.354 (9)	M8 x 1	M5