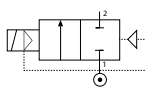




2/2 NC



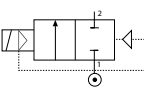
1/4" → 1"

Page 10.2

Ex



2/2 NC



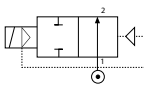
1 1/4" → 2"

Page 10.2

Ex



2/2 NO



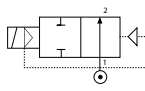
1/4" → 1"

Page 10.6

Ex



2/2 NO



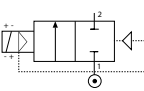
1 1/4" → 2"

Page 10.6

Ex



2/2 LATCHING



1/4" → 1"

Page 10.14

Ex

Series 04F

Coils & Connectors



22 mm

Series A

Page 17.2

UL US
CSA C22.2



30 mm

Series B

Page 17.3

UL US
CSA C22.2



30 mm

Series C

Page 17.4

UL US
CSA C22.2



30 mm

Series D

Page 17.5

UL US
CSA C22.2



36 mm

Series E

Page 17.6

UL US
CSA C22.2



Connectors

Page 17.8 - 17.10

UL US
CSA C22.2

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY



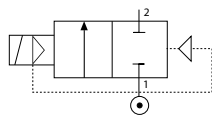
Series 04F

Series 04F

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY

2/2 NC

1/4" → 1"



Component Parts and Materials

- 1 Body: Brass CW617N
- 2 Seals: NBR - EPDM - FKM
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel



General features - 04F

- Recommended horizontal mounting position
- Operator kit Ø 10 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

363 psi (25 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

- Water, Neutral liquids, Oils
- Water management, Water treatment
- Agriculture, Irrigation, Zootechnics
- Car washes, Washing systems
- Industrial processes, Refrigeration
- Air, Inert gases, Vacuum
- Oxygen, Steam



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils
0 4 F	0 3	1	1 0	N	*	N	A A
	03 = 1/4"	1 = 2/2 NC	10 = 25/64 (10)	N = NBR	* = Select the version	N = NPTF	A = A series - SOL10 A = 12V DC
	04 = 3/8"		14 = 35/64 (14)	E = EPDM			B = B series - SOL11 B = 24V DC
	05 = 1/2"		18 = 45/64 (18)	V = FKM	2/2 NC → Page 8.3 / 8.4		1 = 24V AC
	07 = 3/4"		25 = 1 (25)				2 = 110V AC
	09 = 1"						3 = 220V AC
Ex: Version H → 04F 03 1 10 N H N Version 4 → 04F 07 1 18 N 4 N Version 0 → 04F 03 1 10 N 0 N Version 2 → 04F 07 1 18 N 2 N Version T → 04F 07 1 18 N T N Version 5 → 04F 07 1 18 N 5 N Version 1 → 04F 07 1 18 N 1 N Version 3 → 04F 07 1 18 N 3 N							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	
①	①	NPTF	inch (mm)	cSt	gpm (m³/h)	psi (bar)			DC	AC	Size	Series
						Min	Max DC	Max AC	W	VA	mm	A - Page 11.2 B - Page 11.3

Without manual override												
04F 03 1 10 _ H N	N = NBR +14°F +194°F (-10°C +90°C)	1/4"	25/64 (10)	25	2.19 (1.88)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 04 1 12 _ H N	V = FKM +14°F +284°F (-10°C +140°C)	3/8"	35/64 (14)	25	3.87 (2.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 05 1 12 _ H N	E = EPDM +14°F +284°F (-10°C +140°C)	1/2"	35/64 (14)	25	4.11 (3.53)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 07 1 18 _ H N		3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 09 1 25 _ H N		1"	1 (25)	25	12.78 (10.97)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11

Without manual override and with reinforced and guided diaphragm												
04F 07 1 18 _ 4 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 09 1 25 _ 4 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11

With manual override												
04F 03 1 10 _ 0 N	N = NBR +14°F +194°F (-10°C +90°C)	1/4"	25/64 (10)	25	2.19 (1.88)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 04 1 12 _ 0 N	V = FKM +14°F +284°F (-10°C +140°C)	3/8"	35/64 (14)	25	3.87 (2.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 05 1 12 _ 0 N	E = EPDM +14°F +284°F (-10°C +140°C)	1/2"	35/64 (14)	25	4.11 (3.53)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 07 1 18 _ 0 N		3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 09 1 25 _ 0 N		1"	1 (25)	25	12.78 (10.97)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11

With manual override and with reinforced and guided diaphragm												
04F 07 1 18 _ 2 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11
04F 09 1 25 _ 2 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
							261 (18)	261 (18)	8	11	30	B - SOL11

① Select seal material

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

Coil not included



With Speed regulator
Allow to adjust the opening
and closing diaphragm Speed.

2/2 NC

1/4" → 1"

Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)			Power		Coils	
		NPTF	inch (mm)	cSt	gpm (m ³ /h)	psi (bar)			DC	AC	Size	Series
						Min	Max DC	Max AC	W	VA	mm	A - Page 17.2 B - Page 17.3

T													With Speed regulator and without manual override			
04F 07 1 18 _ T N	N = NBR +14°F +194°F (-10°C +90°C) V = FKM +14°F +284°F (-10°C +140°C)	3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10				
							261 (18)	261 (18)	8	11	30	B - SOL11				
04F 09 1 25 _ T N	E = EPDM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	12.78 (10.97)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10				
							261 (18)	261 (18)	8	11	30	B - SOL11				

5													With Speed regulator, without manual override and with reinforced and guided diaphragm			
04F 07 1 18 _ 5 N	N = NBR +14°F +194°F (-10°C +90°C) V = FKM +14°F +284°F (-10°C +140°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10				
							261 (18)	261 (18)	8	11	30	B - SOL11				
04F 09 1 25 _ 5 N	E = EPDM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10				
							261 (18)	261 (18)	8	11	30	B - SOL11				

1

With Speed regulator and with manual override

04F 07 1 18 _ 1 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
	261 (18)						261 (18)	8	11	30	B - SOL11	
04F 09 1 25 _ 1 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	12.78 (10.97)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
	E = EPDM +14°F +284°F (-10°C +140°C)						261 (18)	261 (18)	8	11	30	B - SOL11

3

With Speed regulator, with manual override and with reinforced and guided diaphragm

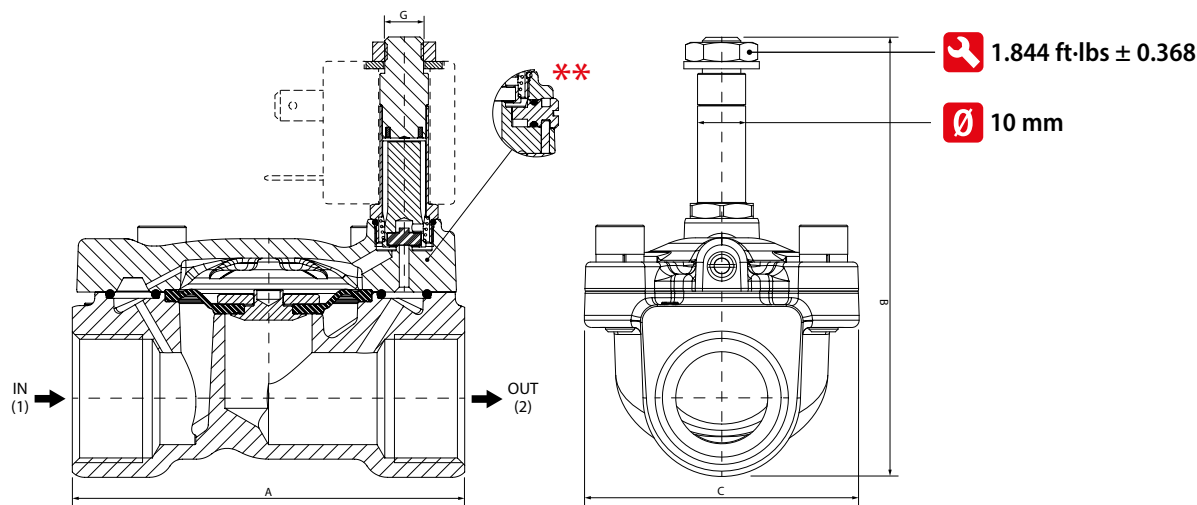
04F 07 1 18 _ 3 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
	261 (18)						261 (18)	8	11	30	B - SOL11	
04F 09 1 25 _ 3 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)	232 (16)	232 (16)	6.5	7.5	22	A - SOL10
	E = EPDM +14°F +284°F (-10°C +140°C)						261 (18)	261 (18)	8	11	30	B - SOL11

① Select seal material

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

Coil not included

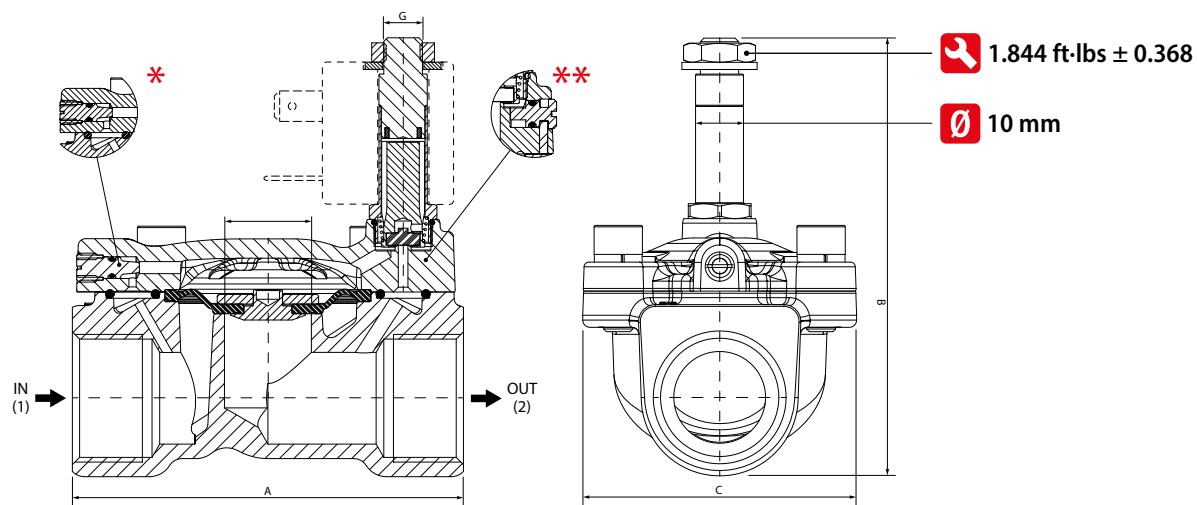
** Manual override



Size	A inch (mm)	B inch (mm)	C inch (mm)	G
1/4"	2.185 (55.5)	2.854 (72.5)	1.385 (35.2)	M8 x 0.75
3/8"	2.570 (65.3)	3.153 (80.1)	1.826 (46.4)	M8 x 0.75
1/2"	2.570 (65.3)	3.153 (80.1)	1.826 (46.4)	M8 x 0.75
3/4"	3.188 (81)	3.578 (90.9)	2.232 (56.7)	M8 x 0.75
1"	3.740 (95)	3.818 (97)	2.559 (65)	M8 x 0.75

* Spread regulator

** Manual override



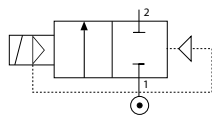
Size	A inch (mm)	B inch (mm)	C inch (mm)	G
3/4"	3.188 (81)	3.578 (90.9)	2.232 (56.7)	M8 x 0.75
1"	3.740 (95)	3.818 (97)	2.559 (65)	M8 x 0.75

Series 04F

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY

2/2 NC

1"1/4 → 2"



Component Parts and Materials

- 1 Body: Brass CW617N
- 2 Seals: NBR - EPDM - FKM
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel



General features - 04F

- Recommended horizontal mounting position
- Operator kit Ø 10 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

363 psi (25 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

- Water, Neutral liquids, Oils
- Water management, Water treatment
- Agriculture, Irrigation, Zootechnics
- Car washes, Washing systems
- Industrial processes, Refrigeration
- Air, Inert gases, Vacuum
- Oxygen, Steam



Ordering codes

Series	Port size	Functions	Orifice <i>inch (mm)</i>	Sealing materials	Version	Thread	Suitable coils	
0 4 F	0 3	1	1 0	N	T	N	C	A
	XF = 1"1/4	1 = 2/2 NC	40 = ____ (40)	N = NBR	T: Without manual override	N = NPTF	C = C series - SOL20	A = 12V DC
	XG = 1"1/2		50 = ____ (50)	E = EPDM	1: With manual override		D = D series - SOL20	B = 24V DC
	XH = 2"			V = FKM			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	
		NPTF	inch (mm)	cSt	gpm (m ³ /h)	psi (bar)			DC	AC	Size	Series
						Min	Max DC	Max AC	W	VA	mm	C - Page 17.4 D - Page 17.5 E - Page 17.6

T

With Speed regulator and without manual override

04F XF 1 40 _ TN	N = NBR +14°F +194°F (-10°C +90°C)	1"1/4	1" 9/16 (40)	25	27,74 (24)	2,9 (0,2)	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XG 1 40 _ TN	V = FKM +14°F +284°F (-10°C +140°C)	1"1/2	1" 9/16 (40)	25	29,2 (25,3)	2,9 (0,2)	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XH 1 50 _ TN	E = EPDM +14°F +284°F (-10°C +140°C)	2"	1" 61/64 (50)	25	47,39 (41)	2,9 (0,2)	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21

1

With Speed regulator and with manual override

04F XF 1 40 _ 1N	N = NBR +14°F +194°F (-10°C +90°C)	1"1/4	1" 9/16 (40)	25	27,74 (24)	0	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XG 1 40 _ 1N	V = FKM +14°F +284°F (-10°C +140°C)	1"1/2	1" 9/16 (40)	25	29,2 (25,3)	0	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XH 1 50 _ 1N	E = EPDM +14°F +284°F (-10°C +140°C)	2"	1" 61/64 (50)	25	47,39 (41)	0	145 (10)	145 (10)	8	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21

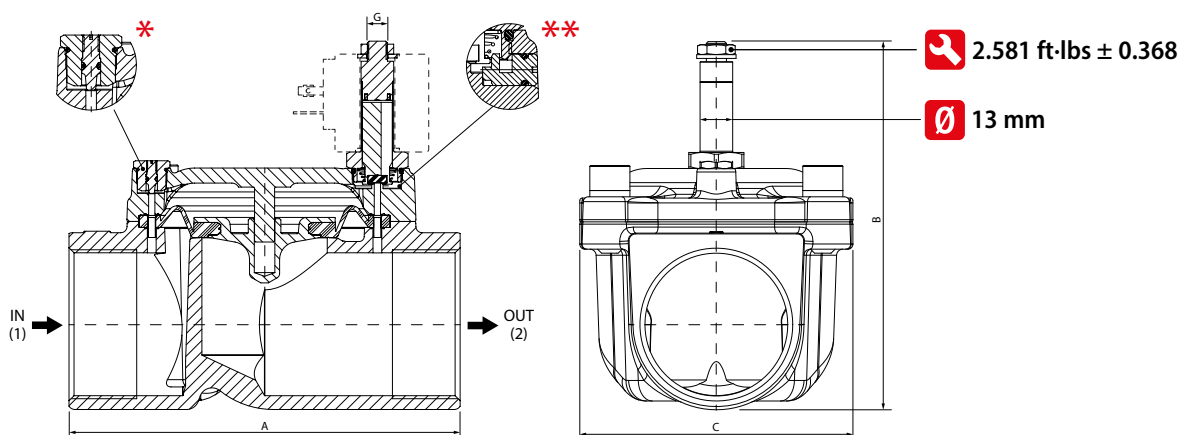
① Select seal material

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

Coil not included

* Speed regulator

** Manual override



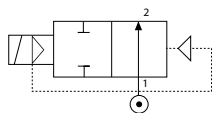
Size	A inch (mm)	B inch (mm)	C inch (mm)	G
1"1/4	5.51 (140)	5 (127)	3.85 (98)	M8 x 1
1"1/2	5.51 (140)	5 (127)	3.85 (98)	M8 x 1
2"	6.14 (156)	5.78 (147)	4.29 (109)	M8 x 1

Series 04F

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY

2/2 NO

1/4" → 1"



Component Parts and Materials

- 1 Body: Brass CW617N
- 2 Seals: NBR - EPDM - FKM
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel



General features - 04F

- Recommended horizontal mounting position
- Operator kit Ø 10 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

363 psi (25 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

- Water, Neutral liquids, Oils
- Water management, Water treatment
- Agriculture, Irrigation, Zootechnics
- Car washes, Washing systems
- Industrial processes, Refrigeration
- Air, Inert gases, Vacuum
- Oxygen, Steam



Ordering codes

Series	Port size	Functions	Orifice <i>inch (mm)</i>	Sealing materials	Version	Thread	Suitable coils	
0 4 F	0 3	2	1 0	N	*	N	A	A
	03 = 1/4"	2 = 2/2 NO	10 = 25/64 (10)	N = NBR	* = Select the version	N = NPTF	A = A series - SOL10	A = 12V DC
	04 = 3/8"		14 = 35/64 (14)	E = EPDM	↓		B = B series - SOL11	B = 24V DC
	05 = 1/2"		18 = 45/64 (18)	V = FKM	2/2 NO → Page 8.7 / 8.8			1 = 24V AC
	07 = 3/4"		25 = 1 (25)		↓			2 = 110V AC
	09 = 1"							3 = 220V AC
Ex: Version 0 → 04F 03 2 10 N 0 N							Valves and coils are supplied separately. Upon commercial agreements can be supplied assembled.	
Version 2 → 04F 07 2 18 N 2 N								
Version 1 → 04F 07 2 18 N 1 N								
Version 3 → 04F 07 2 18 N 3 N								

Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)			Power		Coils	
		NPTF	inch (mm)	cSt	gpm (m³/h)	psi (bar)			DC	AC	Size	Series
						Min	Max DC	Max AC	W	VA	mm	A - Page 17.2 B - Page 17.3

0

Without manual override												
04F 03 2 10 _ 0 N	N = NBR +14°F +194°F (-10°C +90°C)	1/4"	25/64 (10)	25	2.19 (1.88)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30	A - SOL10 B - SOL11
04F 04 2 12 _ 0 N		3/8"	35/64 (14)	25	3.87 (3.32)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30	A - SOL10 B - SOL11
04F 05 2 12 _ 0 N	V = FKM +14°F +284°F (-10°C +140°C)	1/2"	35/64 (14)	25	4.11 (3.53)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30	A - SOL10 B - SOL11
04F 07 2 18 _ 0 N		E = EPDM +14°F +284°F (-10°C +140°C)	3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30
04F 09 2 25 _ 0 N			1"	1 (25)	25	12.78 (10.97)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30

2

Without manual override and with reinforced and guided diaphragm												
04F 07 2 18 _ 2 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	- 145 (10)	145 (10)	- 8	7.5 11	22 30	A - SOL10 B - SOL11
04F 09 2 25 _ 2 N							V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)

① Select seal material

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

Coil not included



With Spread regulator
Allow to adjust the opening
and closing diaphragm Speed.

2/2 NO

1/4" → 1"

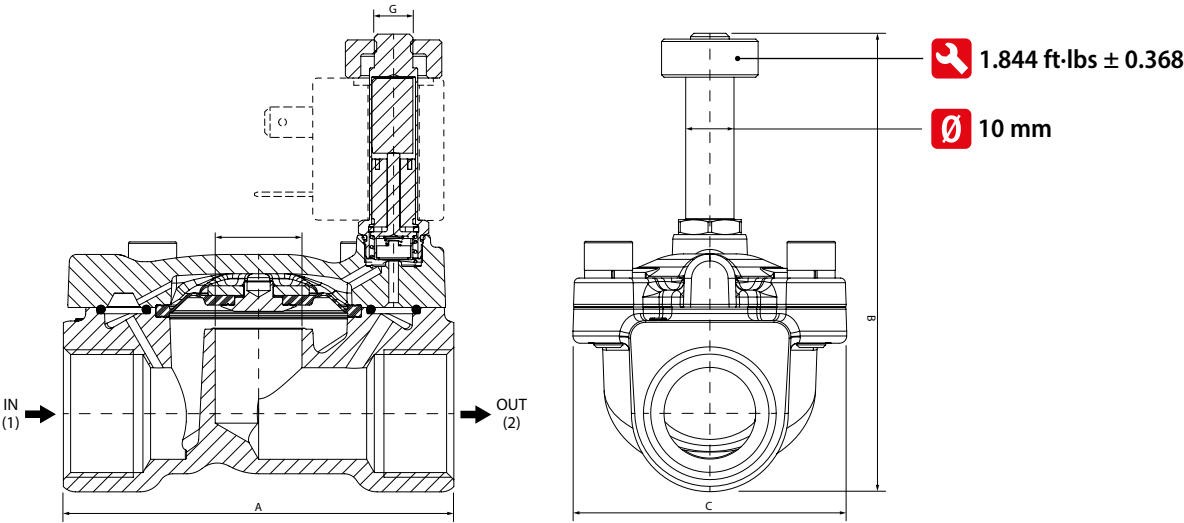
Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)			Power		Coils	
						psi (bar)			DC	AC	Size	Series
		NPTF	inch (mm)	cSt	gpm (m ³ /h)	Min	Max DC	Max AC	W	VA	mm	A - Page 17.2 B - Page 17.3

1With Speed regulator and without manual override												
04F 07 2 18 _ 1 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	-	145 (10)	-	7.5	22	A - SOL10
	145 (10)						145 (10)	8	11	30	B - SOL11	
04F 09 2 25 _ 1 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	12.78 (10.97)	2 (0.15)	-	145 (10)	-	7.5	22	A - SOL10
	E = EPDM +14°F +284°F (-10°C +140°C)						145 (10)	145 (10)	8	11	30	B - SOL11
3With Speed regulator, without manual override and with reinforced and guided diaphragm												
04F 07 2 18 _ 3 N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	5.72 (4.91)	2 (0.15)	-	145 (10)	-	7.5	22	A - SOL10
	145 (10)						145 (10)	8	11	30	B - SOL11	
04F 09 2 25 _ 3 N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	10.86 (9.32)	2 (0.15)	-	145 (10)	-	7.5	22	A - SOL10
	E = EPDM +14°F +284°F (-10°C +140°C)						145 (10)	145 (10)	8	11	30	B - SOL11

① Select seal material

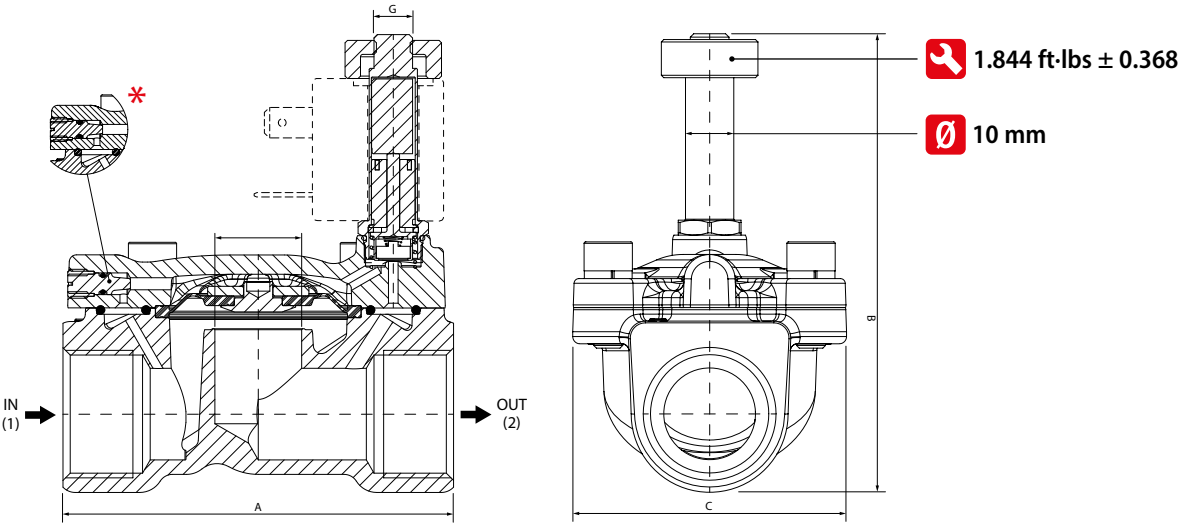
With steam: EPDM - P max = 36 psi (2.5 bar)

Coil not included



Size	A inch (mm)	B inch (mm)	C inch (mm)	G
1/4"	2.185 (55.5)	3.015 (76.6)	1.385 (35.2)	M8 x 1
3/8"	2.570 (65.3)	3.314 (84.2)	1.826 (46.4)	M8 x 1
1/2"	2.570 (65.3)	3.314 (84.2)	1.826 (46.4)	M8 x 1
3/4"	3.188 (81)	3.740 (95)	2.232 (56.7)	M8 x 1
1"	3.740 (95)	3.980 (101.1)	2.559 (65)	M8 x 1

* Spread regulator



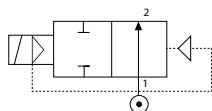
Size	A inch (mm)	B inch (mm)	C inch (mm)	G
3/4"	3.188 (81)	3.740 (95)	2.232 (56.7)	M8 x 1
1"	3.740 (95)	3.980 (101.1)	2.559 (65)	M8 x 1

Series 04F

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY

2/2 NO

1"1/4 → 2"



Component Parts and Materials

- 1 Body: Brass CW617N
- 2 Seals: NBR - EPDM - FKM
- 3 Armature tube: Brass
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel



General features - 04F

- Recommended horizontal mounting position
- Operator kit Ø 10 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

363 psi (25 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

- Water, Neutral liquids, Oils
- Water management, Water treatment
- Agriculture, Irrigation, Zootechnics
- Car washes, Washing systems
- Industrial processes, Refrigeration
- Air, Inert gases, Vacuum
- Oxygen, Steam



Stainless Steel armature tube on request



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils	
0 4 F	0 3	1	1 0	N	1	N	C	A
	XF = 1"1/4	2 = 2/2 NO	40 = ____ (40)	N = NBR	1 = Without manual override	N = NPTF	C = C series - SOL20	A = 12V DC
	XG = 1"1/2		50 = ____ (50)	E = EPDM			D = D series - SOL20	B = 24V DC
	XH = 2"			V = FKM			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	
		NPTF	inch (mm)	cSt	gpm (m³/h)	psi (bar)			DC	AC	Size	Series
						Min	Max DC	Max AC	W	VA	mm	C - Page 17.4 D - Page 17.5 E - Page 17.6

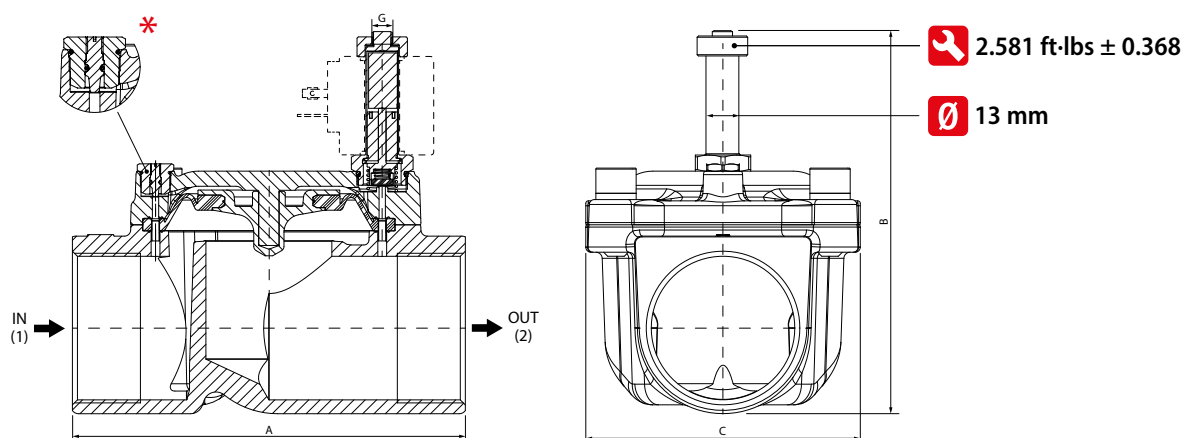
1 With Speed regulator and without manual override												
04F XF 2 40 _ 1N	N = NBR -10°C +90°C	1"1/4	1" 9/16 (40)	25	27.74 (24)	2.9 (0.2)	-	145 (10)	-	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XG 2 40 _ 1N	V = FKM -10°C +140°C	1"1/2	1" 9/16 (40)	25	29.2 (25.3)	2.9 (0.2)	-	145 (10)	-	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21
04F XH 2 50 _ 1N	E = EPDM -10°C +140°C	2"	1" 61/64 (50)	25	47.39 (41)	2.9 (0.2)	-	145 (10)	-	14	30	C - SOL20
							145 (10)	145 (10)	14	21	30	D - SOL20
							145 (10)	145 (10)	22	31	36	E - SOL21

① Select seal material

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

Coil not included

* Speed regulator



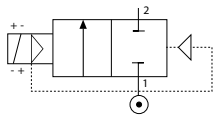
Size	A inch (mm)	B inch (mm)	C inch (mm)	G
1"1/4	5.51 (140)	5.18 (131.7)	3.85 (98)	M8 x 1
1"1/2	5.51 (140)	5.18 (131.7)	3.85 (98)	M8 x 1
2"	6.14 (156)	5.97 (151.7)	4.29 (109)	M8 x 1

Series 04F

SERVO-ASSISTED SOLENOID VALVES WITH BRASS BODY

2/2 LATCHING

1/4" → 1"



Pulse switching ≥20 ms, polarity reversed



Component Parts and Materials

- 1 Body: Brass CW617N
- 2 Seals: NBR - EPDM - FKM
- 3 Armature tube: Stainless steel
- 4 Fixed and mobile core: Stainless steel AISI 430FR
- 5 Springs: Stainless steel



General features - 04F

- Recommended horizontal mounting position
- Operator kit Ø 10 mm
- ATEX II 2G/D Ex h certification
- Coils: Class H - - CSA C22.2



Maximum allowable pressure

363 psi (25 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

- Water, Neutral liquids, Oils
- Water management, Water treatment
- Agriculture, Irrigation, Zootechnics
- Car washes, Washing systems
- Industrial processes, Refrigeration
- Air, Inert gases, Vacuum
- Oxygen, Steam



Ordering codes

Series	Port size	Functions	Orifice inch (mm)	Sealing materials	Version	Thread	Suitable coils	
0 4 F	0 3	B	1 0	N	*	N	A	A
	03 = 1/4"	B = 2/2 Latching	10 = 25/64 (10)	N = NBR	* = Select the version	N = NPTF	A = A series - SOL10	A = 12V DC
	04 = 3/8"		14 = 35/64 (14)	E = EPDM			B = B series - SOL11	B = 24V DC
	05 = 1/2"		18 = 45/64 (18)	V = FKM	2/2 NC → Page 8.3 / 8.4			F = 3V DC
	07 = 3/4"		25 = 1 (25)					H = 9V DC
	09 = 1"							
Ex: Version H → 04F 03 1 10 N H N Version 4 → 04F 07 1 18 N 4 N Version 0 → 04F 03 1 10 N 0 N Version 2 → 04F 07 1 18 N 2 N Version T → 04F 07 1 18 N T N Version 5 → 04F 07 1 18 N 5 N Version 1 → 04F 07 1 18 N 1 N Version 3 → 04F 07 1 18 N 3 N							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	
①	①	NPTF	inch (mm)	cSt	gpm (m³/h)	psi (bar)		DC	Size	Series
						Min	Max DC	W	mm	A - Page 11.2 B - Page 11.3

Without manual override															
04F 03 B 10 _ H 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)	1/4"	25/64 (10)	25	2.19 (1.88)	2 (0.15)	94 (6.5)	2	22	A - SOL10					
04F 04 B 12 _ H N							3/8"	35/64 (14)	25	3.87 (2.32)	2 (0.15)	188 (13)	3	22	A - SOL10
												261 (18)	4	30	B - SOL11
		04F 05 B 12 _ H N	1/2"	35/64 (14)	25	4.11 (3.53)						2 (0.15)	87 (6)	2	22
174 (12)							3	22	A - SOL10						
261 (18)							4	30	B - SOL11						
04F 07 B 18 _ H N		3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	87 (6)	2	22	A - SOL10					
							174 (12)	3	22	A - SOL10					
							261 (18)	4	30	B - SOL11					
04F 09 B 25 _ H N		1"	1 (25)	25	12.78 (10.97)	2 (0.15)	79 (5.5)	2	22	A - SOL10					
							123 (8.5)	3	22	A - SOL10					
							261 (18)	4	30	B - SOL11					

① Select seal material

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

Coil not included



With Speed regulator
Allow to adjust the opening
and closing diaphragm Speed.

2/2 LATCHING
1/4" → 1"

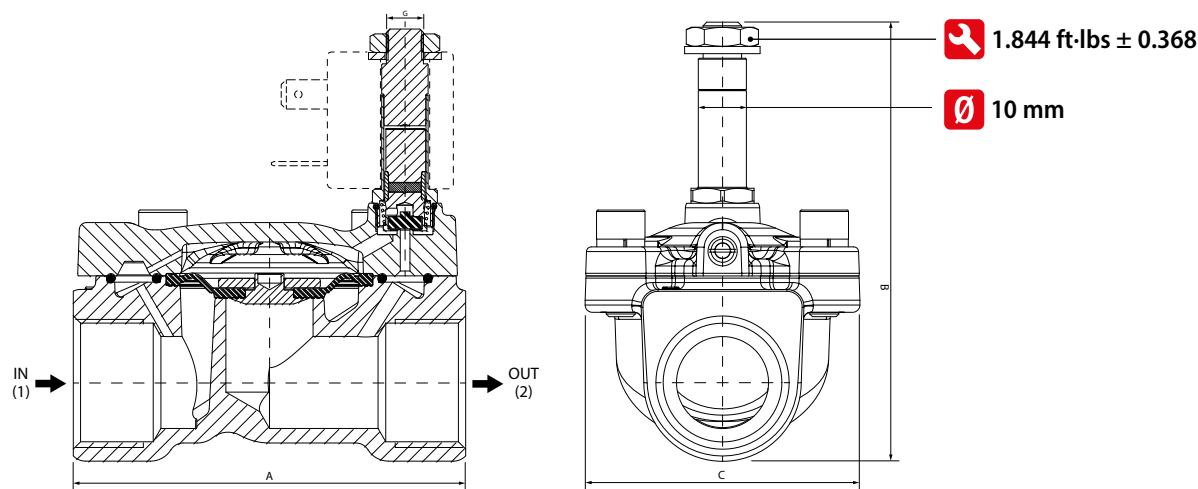
Code	Sealing materials	Port size	Ø Orifice	Viscosity	Cv (Kv)	Differential pressure (OPD)		Power	Coils	
①	①	NPTF	inch (mm)	cSt	gpm (m³/h)	psi (bar)		DC	Size	Series
						Min	Max DC	W	mm	A - Page 17.2 B - Page 17.3

T With Speed regulator and without manual override										
04F 07 B 18 _ T N	N = NBR +14°F +194°F (-10°C +90°C)	3/4"	45/64 (18)	25	6.48 (5.56)	2 (0.15)	87 (6)	2	22	A - SOL10
							174 (12)	3	22	A - SOL10
							261 (18)	4	30	B - SOL11
04F 09 B 25 _ T N	V = FKM +14°F +284°F (-10°C +140°C)	1"	1 (25)	25	12.78 (10.97)	2 (0.15)	79 (5.5)	2	22	A - SOL10
							123 (8.5)	3	22	A - SOL10
							261 (18)	4	30	B - SOL11

① Select seal material

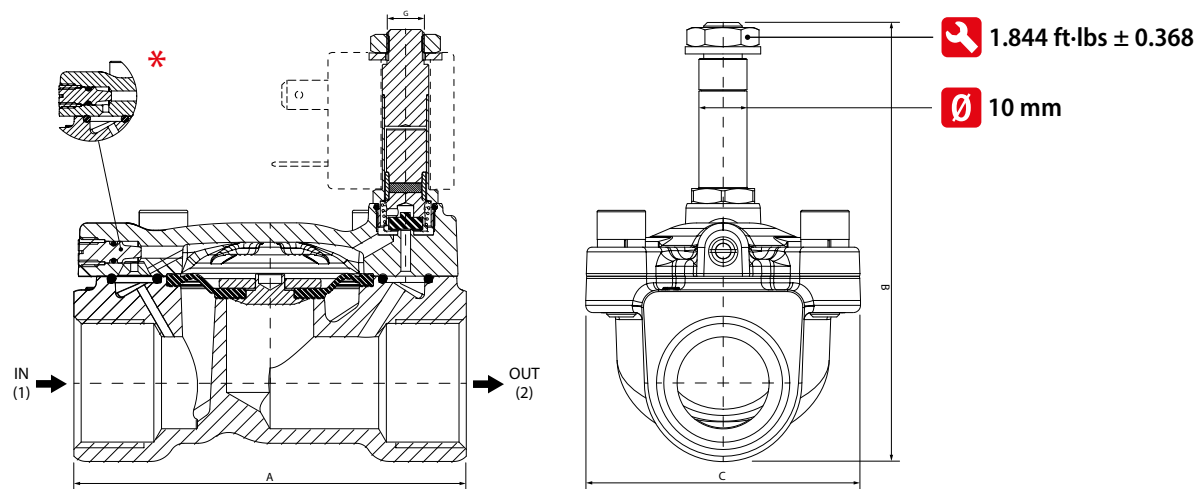
With steam: **EPDM - P max = 36 psi (2.5 bar)**

Coil not included



Size	A inch (mm)	B inch (mm)	C inch (mm)	G
1/4"	2.185 (55.5)	2.854 (72.5)	1.385 (35.2)	M8 x 0.75
3/8"	2.570 (65.3)	3.153 (80.1)	1.826 (46.4)	M8 x 0.75
1/2"	2.570 (65.3)	3.153 (80.1)	1.826 (46.4)	M8 x 0.75
3/4"	3.188 (81)	3.578 (90.9)	2.232 (56.7)	M8 x 0.75
1"	3.740 (95)	3.818 (97)	2.559 (65)	M8 x 0.75

* Spread regulator



Size	A inch (mm)	B inch (mm)	C inch (mm)	G
3/4"	3.188 (81)	3.578 (90.9)	2.232 (56.7)	M8 x 0.75
1"	3.740 (95)	3.818 (97)	2.559 (65)	M8 x 0.75