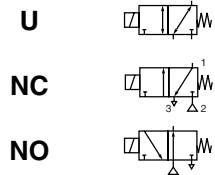




SOLENOID VALVES

direct operated, full flow
 flameproof enclosure
 II 2 G Ex d IIC T6 .. T3, II 2D Ex tD A21 IP66
 in-line, 1/4 to 1/2



3/2
 Series
307

FEATURES

- Brass and stainless steel pressure valves with full flow capacity (9 mm dia.)
- Valves are especially suited for heavy duty industrial applications
- Balanced poppet construction
- The solenoid valves do not require a minimum operating pressure
- Solenoid valves with explosionproof operator NA or NB type for use in potentially explosive atmospheres according to ATEX Directive 94/9/EC
 EC type examination certificate no : BAS 02 ATEX 2157
- Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with the European Standards EN 60079-0, EN 60079-1, EN 61241-0 and EN 61241-1

GENERAL

Differential pressure See "SPECIFICATIONS" [1 bar = 100 kPa]
 Maximum viscosity 65 cSt (mm²/s)
 Response time 75 - 100 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, water, oil	- 38°C to + 50°C	NBR (nitrile)

MATERIALS IN CONTACT WITH FLUID

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

	Brass body	Stainless steel body
Body and seat	Brass	AISI 316
Core tube	Stainless steel	Stainless steel
Core and plugnut	Stainless steel	Stainless steel
Springs	Stainless steel	Stainless steel
Seals and discs	NBR	NBR
Shading coil	-	-

OTHER MATERIALS

Electrical enclosure Cast iron (NB) Cast iron (NB) or stainless steel, AISI 316L (NA)

ELECTRICAL CHARACTERISTICS

Coil insulation class F
 Coil connection Screw terminals
 Electrical enclosure protection Moulded IP66 (EN 60529)
 Standard voltages DC (=) : 24V - 240V
 (Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V / 50 Hz

SAFETY CODE

II 2 G Ex d IIC T6..T3
 II 2 D Ex tD A21 IP66 T85°C-T200°C

prefix option	power ratings			operator ambient temperature range (TS) (C°)	safety code	replacement coil		type ⁽¹⁾	
	inrush	holding	hot/cold			~	=		
	(VA)	(VA)	(W)			230 V/50 Hz	24 V DC		
NB	17,05	17,05	17,05 ⁽²⁾	8,2 / 10	-38 to +40/50	II 2 GD Ex d IIC T5 / Ex tD A21	118227-007	108429-001	01
NA	17,05	17,05	17,05 ⁽²⁾	8,2 / 10	-38 to +40/50	II 2 GD Ex d IIC T5 / Ex tD A21	129243-007	108429-001	02

⁽¹⁾ Refer to the dimensional drawings on the following page.

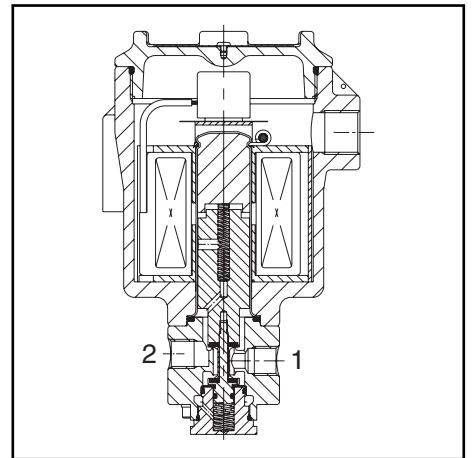
⁽²⁾ Rectified coil.

operator AC (~)				
Pn (W)		max. ambient temp. °C surface temperature		
		T5 100°C	T4 135°C	T3 200°C
17,05	NB	40	70	80
	NA	-	40	80

operator DC (=)				
Pn (W)		max. ambient temp. °C surface temperature		
		T6 85°C	T5 100°C	T4 135°C
10	NB	40	50	80
	NA	-	-	60

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)				power coil (W)		catalogue number			options			
				max. (PS)						brass cast iron enclosure (NB)	stainless steel		maintained man. operator	impulse man. operator	FPM	
				min.	air (*)	water, oil (*)	max. (PS)				cast iron enclosure (NB)	stainless steel enclosure (NA)				
NPT	(mm)	(m ³ /h)	(l/min)	~	=	~	=	~	=	~/=	~/=	~/=				
U - Universal (Suffix U)																
1/4	9	0,68	11,3	0	8	8	7	7	17,05	10	NBETB307C018U	NBETB307C008U	NAETB307C008U	MS	MO	V
3/8	9	0,68	11,3	0	8	8	7	7	17,05	10	NBETB307C048U	NBETB307C038U	NAETB307C038U	MS	MO	V
1/2	9	0,68	11,3	0	8	8	7	7	17,05	10	NBETB307C078U	NBETB307C068U	NAETB307C068U	MS	MO	V
NC - Normally closed (Suffix F)																
1/4	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C018F	NBETB307C008F	NAETB307C008F	MS	MO	V
3/8	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C048F	NBETB307C038F	NAETB307C038F	MS	MO	V
1/2	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C078F	NBETB307C068F	NAETB307C068F	MS	MO	V
NO - Normally open (Suffix G)																
1/4	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C018G	NBETB307C008G	NAETB307C008G	MS	MO	V
3/8	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C048G	NBETB307C038G	NAETB307C038G	MS	MO	V
1/2	9	0,68	11,3	0	10	10	9	9	17,05	10	NBETB307C078G	NBETB307C068G	NAETB307C068G	MS	MO	V



OPTIONS

- Valves can also be supplied with FPM (fluorelastomer) seals and discs. Use the appropriate optional suffix letter for identification
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)
- Mounting brackets, suffix MB
- 1/2" NPT (prefix "T") conduit entry
- Voltage suppressors are available on DC constructions
- Other pipe connections are available on request

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 mounting holes in the solenoid housing
- Pipe connection identifier is B = NPT (ANSI 1.20.3)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KIT & ACCESSORIES

seal materials	function	spare parts kit no. ⁽¹⁾		mounting bracket n°.
		~	=	
NBR	U	C118258U	C118258U	115054-001
	NC	C118258F	C118258F	115054-001
	NO	C118258G	C118258G	115054-001
FPM (suffix V)	U	C142072U	C142072U	115054-001
	NC	C142072F	C142072F	115054-001
	NO	C142072G	C142072G	115054-001

ORDERING EXAMPLES:

NB	ET	B 307	C 018U	24V / CC
NA	ET	B 307	C 068U	MO 230V / 50 Hz
NB	ET	B 307	C 048G	MB 230V / 50 Hz
NA	ET	B 307	C 038	VG 230V / 50 Hz

prefix: NB, NA
 conduit thread: ET
 M20 x 1,5: B
 pipe thread: 307
 basic number: C 018U, C 068U, C 048G, C 038
 voltage: 24V, 230V
 suffix: CC, MO, MB, VG

ORDERING EXAMPLES KITS:

C118258	U
C142072	G

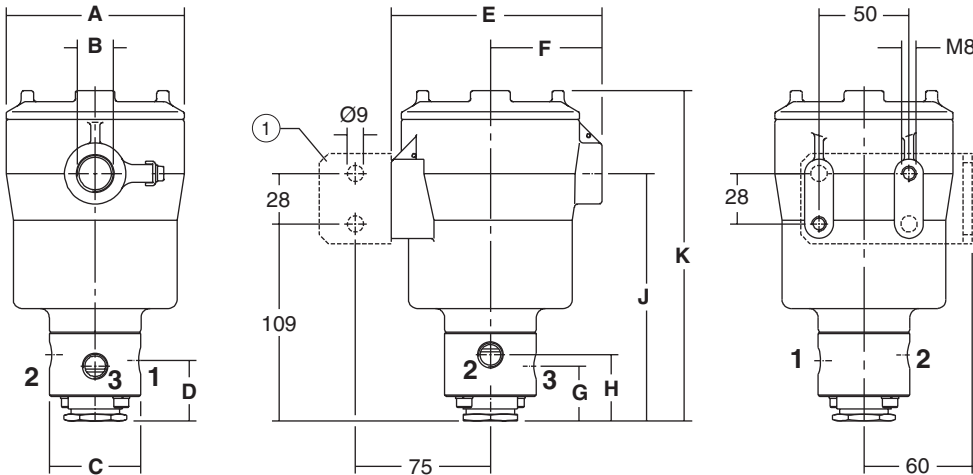
basic number: C118258, C142072
 suffix: U, G

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01-02

Prefix "NB" / "NA" Solenoid
 Cast iron / Stainless steel
 EN 60079-1 and EN 61241-1
 II 2 G Ex d IIC - II 2D Ex tD A21 IP66



type	prefix option	pipe size NPT	A	B	C	D	E	F	G	H	J	K	weight ⁽²⁾
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
01	NB	1/4	99	M20	51	33	117	62	30	37	137	185	4,75
		3/8	99	M20	51	33	117	62	30	37	137	185	4,75
		1/2	99	M20	64	33	117	62	33	33	137	185	4,75
02	NA	1/4	99	M20	51	33	117	62	30	37	137	185	4,9
		3/8	99	M20	51	33	117	62	30	37	137	185	4,9
		1/2	99	M20	64	33	117	62	33	33	137	185	4,9

⁽²⁾ including enclosure and coil.

① Mounting bracket, suffix MB