

EXPLOSION PROOF CHECK VALVE TYPE SEW6 SERIE 3X NEC STANDARD



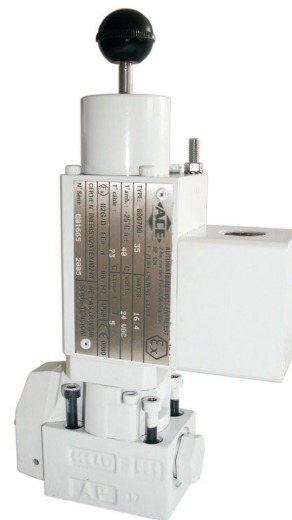
CARACTERISTICS

Hydraulic :

Cetop 3.
Maximum service pressure : 250 Bar.
Nominal flow max. : 11 l/mn.
4 hydraulic symbols : 4/2 et 3/2.
No leakage inside.
With or without pushbutton.

Electric :

Protection Index: IP 66.
Directive NEC 500 or NEC 505
(Batch certification by certified authority)
Protection mode :
Class I div 1 group C & D
Class I div 2 group C et D
Class I Zone 1 AExd IIB+H2



M-3 SEW6 C 3X-7 / 420 / US700 24-DC-T5 H1D

DESCRIPTION OF FUNCTION

Operated check valve type SEW6, are solenoid operated directional ball valves. They control start stop and direction of oil flow.

The valves basically consist of the housing (1), one solenoid (2) seat-valve unit (3), hardened steel ball (4). The force of the solenoid (2) acts via the lever (6) on the check (7) and on the control push (8) .

The filter in alimentation protect the check valve from too much clog.

The spring (9) lock the check on the valve seat in neutral position from the solenoid (2) in work position.

VALVE 3/2 :

Symbol U valve with 1 check :

- neutral position : flow from P to A, T locked without leakage.
- work position : flow from A to T, P locked without leakage.

Symbol C valve with 2 checks

- neutral position: flow from A to T, P locked without leakage
- work position: flow from P to A, T locked without leakage.

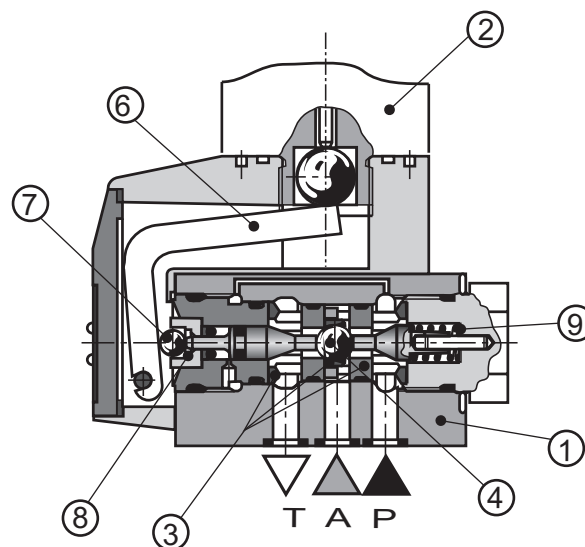
VALVE 4/2 :

Symbol D :

3/2 valve symbol U with 1 check and with 1 plate.

Symbol Y :

3/2 valve symbol C with 2 checks and with 1 plate.



GENERALITY

Direct current solenoid has the advantages of :

- slow movement of the control spool.
- energized maintenance of the control valve in intermediary position, is not detrimental to the solenoid.

The solenoid housing can be oriented in steps of 90° on hydraulic valve.

Insulation to IP 66, it can work in tropical climates.

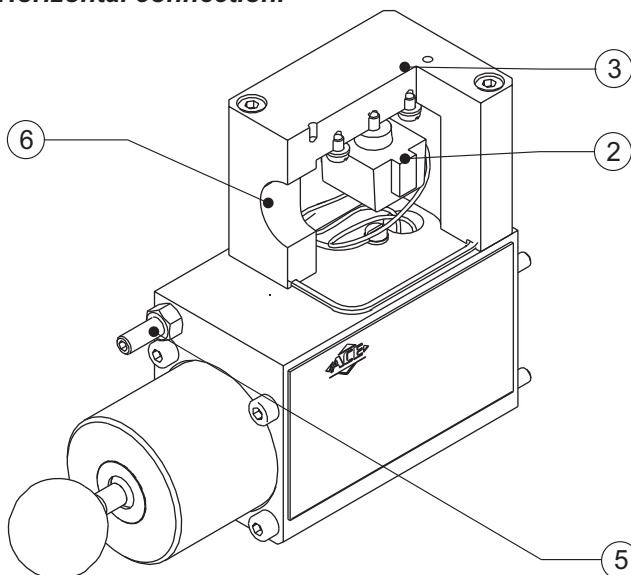
ELECTRIC CONNEXION For Class I Zone 1

The terminal box (3) can be oriented in steps of 90° on the solenoid housing (1).

The electrical connector on the outlet terminal box (6) can be arranged horizontally (on terminal box 3) suitable for cable gland.

One earth connection (5) is available inside or outside the terminal box .

Model H1, H2, ... (Box) Horizontal connection.



Protection

On terminal strip (2) inside the explosion proof terminal (3) box suitable for 0.5 to 2.5 mm² (AWG20 to AWG14)

The terminal box is produced in aluminium as standard, but production in STEEL possible on request.

ELECTRIC CONNEXION For Class I div 1 and div 2

Seal integrated in the housing.

It is produced according to the explosion proof protection mode using a certified type of rigid conduit (threaded tube).

Seal integrated in the housing.

Available with either a horizontal (BH) or vertical (BI) electrical output .

Earth connexion (5).

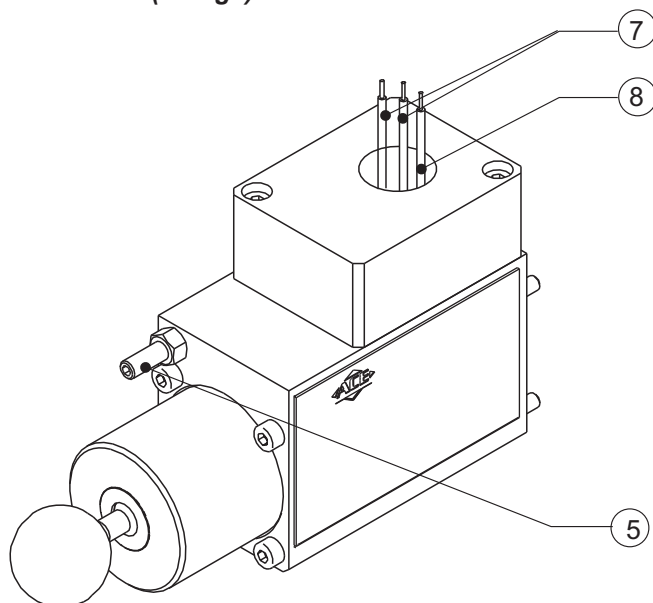
The lead wire length normally supplied is 1.5 meter.

Active lead wires (7).

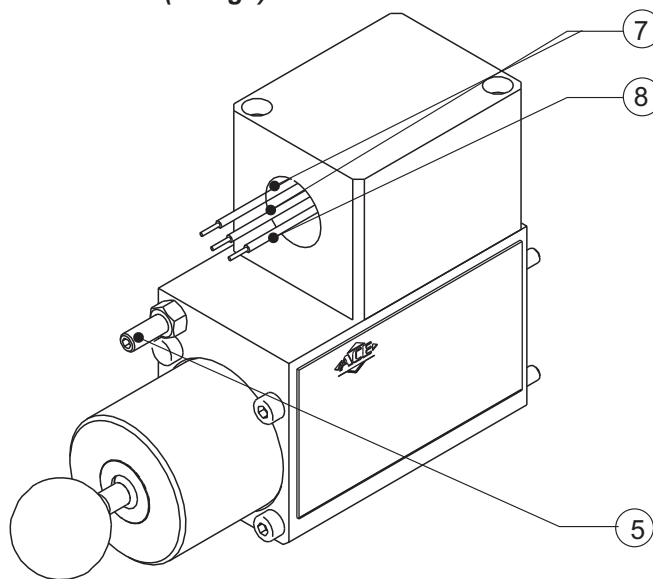
Earth lead wire (8).

Other lengths to order.

Model "BI" (Flange)



Model "BH" (Flange)



REFERENCES

- SEW6 3X-7/ 420

Mineral Oil **M**

2/2 switching position symbol P & N
3/2 switching position symbol C & U
4/2 switching position symbol D & Y
2
3
4



Serie number **3X-7**

Hydraulic Housing serie **420**

For use when the flow is greater than the valve capacity, fitted in P line.

Throttle Ø 1.2 MM :	B12
Throttle Ø 1.5 MM :	B15
Throttle Ø 1.8 MM :	B18
Throttle Ø 2.0 MM :	B20
Throttle Ø 2.2 MM :	B22

Without check valve
With check valve **P**

- US700 - -

3 No code : Wires length 1.5 meter
Wires length 3 meters (only for taped flange)

No Code Standard temp +40°C
TX-60 Temp. Declas +60°C
TX-50 Temp. declas +50°C
See table page 6

***** Aluminium Box (Standard)
ST Steel Box

D With AEx"d" box .
No code. : Taped flange

1 : 1/2" NPT
:
:
7 : M 20 x 1.50

H Horizontal connection on the box. Only Class1 Zone1
BI For taped flange, wire lg1.5m (Vertical). Only Class1
BH For taped flange, wire lg1.5m (Horizontal). Div1&2

P Control pushbutton
V Screw Control
No code : Without control pushbutton

T5 Temperature range

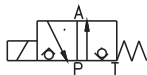
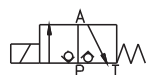
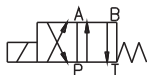
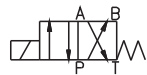
DC Solenoid energized in continous current.

24 Solenoid power supply in Volt. 24,48,96

US700 Explosion proof protection (Batch certification by certified authority)

CARACTERISTICS

HYDRAULIC

Maximum operating pressure : Ports A, B, P.	Bar	Up to ... 250
Maximum operating pressure : Port T.	Bar	Up to ... 100
Maximum flow	L/Mn	(see operating curves of pressure drop page 8)
Hydraulic fluid	.	Mineral oils
Viscosity range	mm ² /s	1380
Fluid temperature range	(°C)	-30°+70
Weight :	- valve without plate (Kg) - valve with plate (Kg)	4.0 4.4
Mounting position :	- 3 Positions - 2 Positions	Optional Optional
Standard symbol :	- 2 positions - 3 positions	 U  C  D  Y

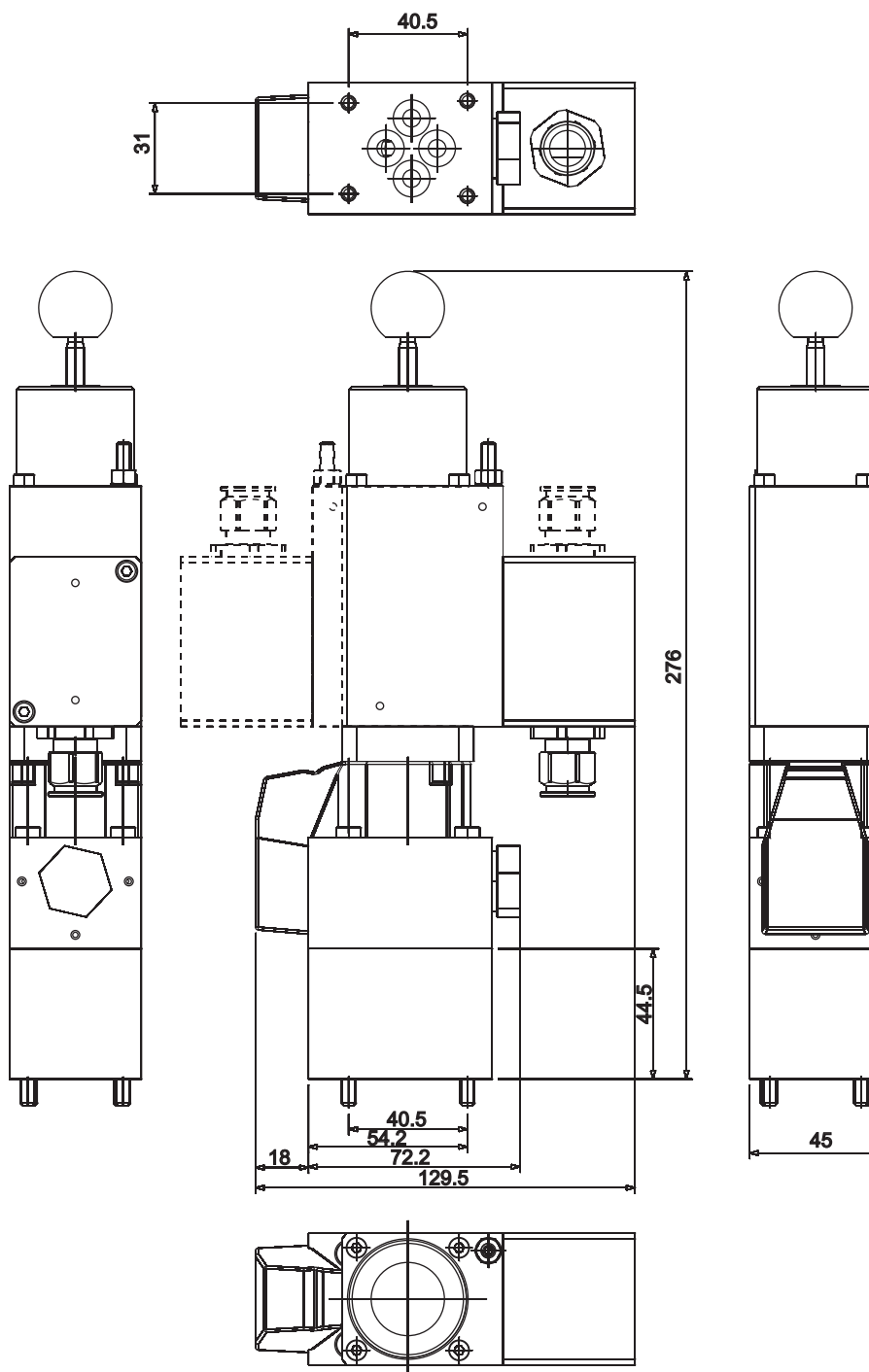
ELECTRICAL

Continous voltages available.	V/DC					24	48	96					
								110					
Temperature range with ambiente 40°C.	T					T5	T6	T6					
Temperature range with ambiente 50°C	T					T4	T5	T5					
Power requirement.	VA					16.4	13.2	13.6					
Protection index.		IP 66 / Tropicalised											
Duty cycle.		100 %											
Maximum coil temperature.	(°C).	130°C											
Outlet connection on terminal box or taped flange		1/2"NPT, M20 x1.5											

HOMOLOGATIONS

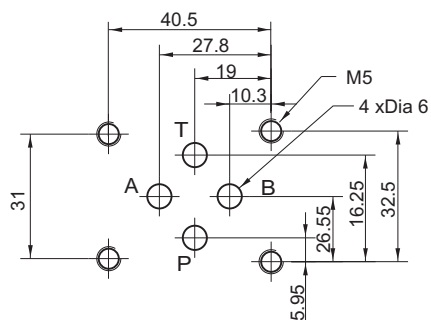
classification code	<p>Class I div 1 & div 2 group C & D or Class I Zone 1</p> <p>Batch certification by certified authority</p>
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DIMENSIONS



HYDRAULIC VALVE CONNECTION

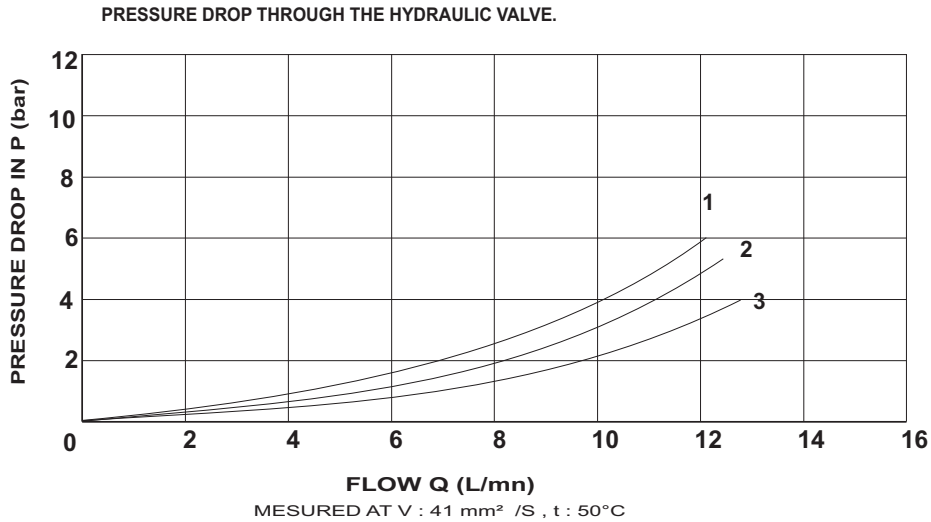
HYDRAULIC VALVE
CONNECTION
SIZE 6 TYPE CETOP 3



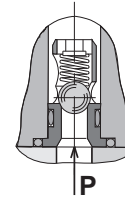
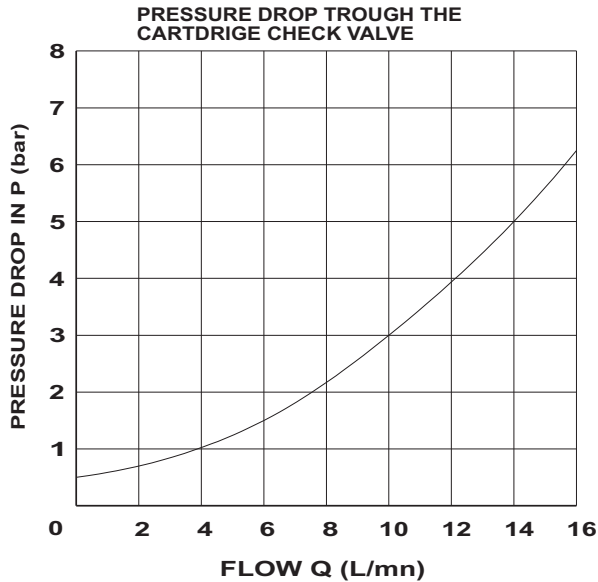
CURVES OF PRESSURE DROP

VALVES 3 And 4 PORTS - 2 POSITIONS

- 1 : M-3SEW6 U or C , A to T
- 2 : M-3SEW6 U , P to A
- 3 : M-3SEW6 C , P to A



CARTDRIGE CHECK VALVE



CARTDRIGE CHECK VALVE

For the valves 3/2 the cartridge is inserted in port P of the check valve.

For the valves 4/2 the cartridge is inserted in port P of the plate N+1.

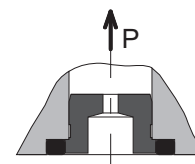
CARTRIDGE THROTTLE

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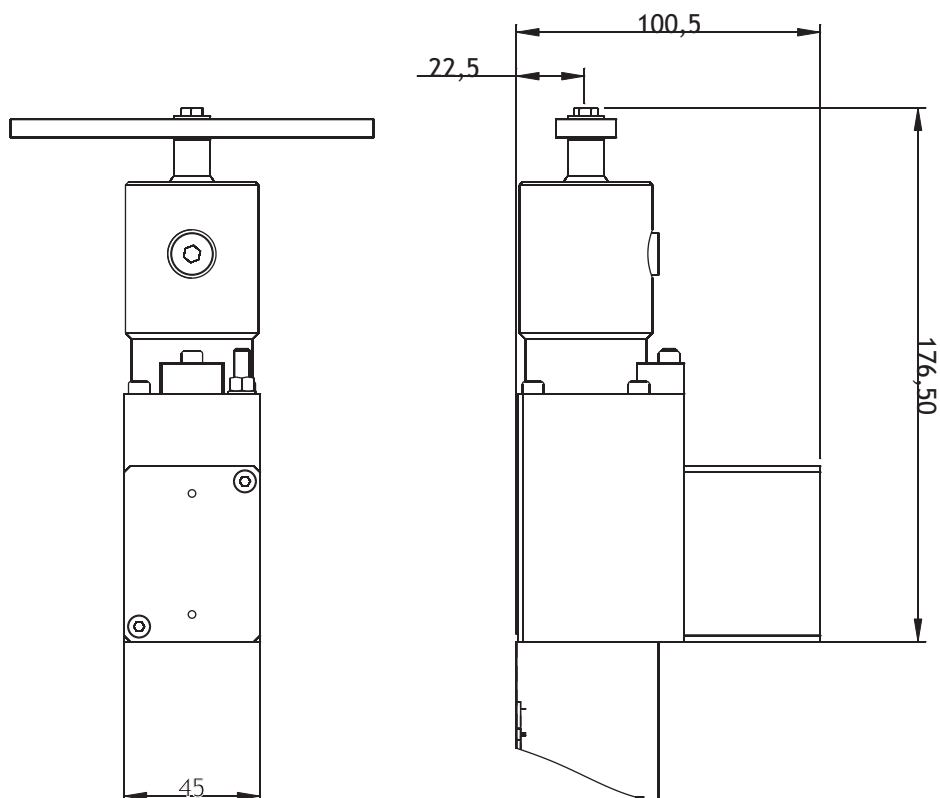
For use when the flow is greater than the valve capacity, fitted in P line.

For the valves 3/2 the cartridge is inserted in port P of the check valve.

For the valves 4/2 the cartridge is inserted in port P of the plate N+1.



SCREW CONTROL



ONE HALF TURN TO ACTIVED THE SOLENOID

