

8/2 ways/positions flow diverters L765... (VS570-VS575)

RE 18302-13

Edition: 02.2016

Replaces: 05.2014



Size 2

Series 00

Maximum operating pressure 210 bar (3045 psi)

Maximum flow 10 l/min (2.6 gpm)

Ports G 1/4 - SAE 4

General specifications

- 8 way 2 position valve.
- Directional spool valve with direct solenoid control.
- Normally used to set up the remote control (ISO – SAE) in the earth moving machine.
- Control spool operated by solenoid, with easily removable coil fastened by a ring nut.
- Wet pin tube for DC coil, with push rod for mechanical override in case of voltage shortage- Unrestricted 360° orientation of DC coil.
- Control spool held in normal position by return spring.
- Connectors available: DIN 43650 – ISO 4400, AMP Junior, DT04-2P (Deutsch), Free leads.

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Ordering details

01	02	03	04	05	06	07	08
L	7	65		10		I	0

Family

01	Compact directional valve	L
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Type

02	Flow diverters	7
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Ports

03	G 1/4 DIN 3852	2
	7/16-20 UNF(SAE4)	A

Control type

04	Solenoid (coil C36)	10
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Configuration

05	8 ways / 2 positions	BY
	8 ways / 2 positions with detent	CY

Drain type

06	Internal drain	I
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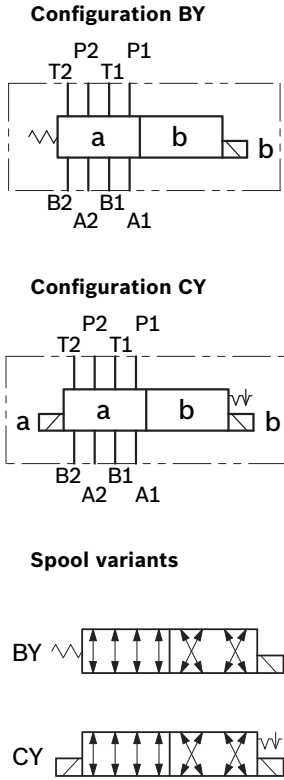
Voltage supply

		31	07	04	03	01	00
07	Without coil	-	-	-	-	-	• 00
	12 V DC	•	•	•	•	•	- OB
	13 V DC	-	•	-	-	•	- AD
	24 V DC	•	•	•	•	•	- OC
	27 V DC	-	•	-	-	•	- AC
	48 V DC	-	-	•	-	•	- OD
	110 V DC	-	-	-	-	•	- OE

Electric connections

08	Without coils	00
	With coils, without mating connector DIN EN 175301-803 ¹⁾	01
	With coils, with bi-directional diode, without mating connector vertical Amp-Junior	03
	With coils, with bi-directional diode, without mating connector horizontal Amp-Junior	04
	With coils, with bi-directional diode, without mating connector DT04-2P	07
	With coils and bipolar sheathed lead 350mm (13,8 in) long	31

Symbols



Configuration CY

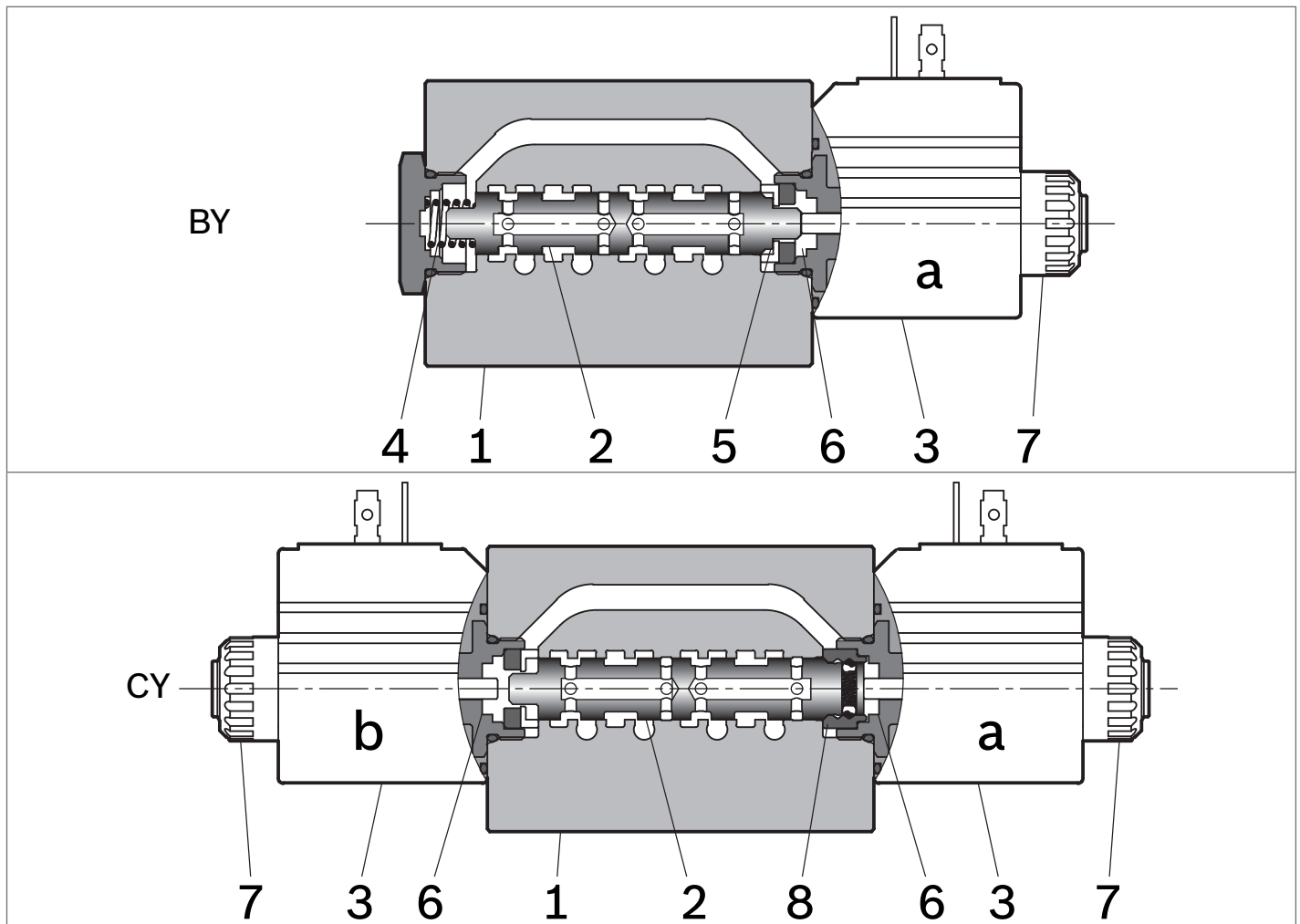
Spool variants

BY

CY

1) For connectors ordering code see data sheet RE 18325-90.

Functional description



A valve basically consists of a housing (1), a control spool (2), one or two solenoid (3), and a return spring (4).

L76510BY..

If the solenoid is energized, the spool goes from position "0" to position "b".

With the coil de-energized, the return spring (3) pushes back the spool (2) and holds it in position "0".

The coil (6) is fastened to the tube by the ring nut (7).

L76510CY..

If the solenoid "a" is energized, the spool goes from position "a" to position "b". The position "b" is held by the detent (8).

The return to position "a" is obtained energising the solenoid "b".

The coil (6) is fastened to the tube by the ring nut (7).

Technical data

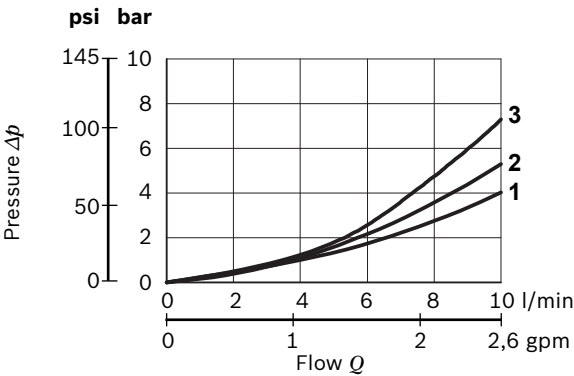
General							
Valve weight CY	kg (lbs)	1.88 (4.15)					
Valve weight BY	kg (lbs)	2.18 (4.8)					
Mounting position		unrestricted					
Ambient Temperature	°C (°F)	−20....+50 (−4....+122) (NBR seals)					
Hydraulic							
Maximum pressure	bar (psi)	210 (3045)					
Maximum flow	l/min (gpm)	10 (2.64)					
Hydraulic fluid							
General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:		Mineral oil based hydraulic fluids HL (DIN 51524 part 1). Mineral oil based hydraulic fluids HLP (DIN 51524 part 2). For use of environmentally acceptable fluids (vegetable or polyglycol base) please consult us.					
Fluid Temperature	°C (°F)	−20....+80 (−4....+176) (NBR seals)					
Permissible degree of fluid contamination		ISO 4572: $\beta_x \geq 75$ X = 12...15 ISO 4406: class 20/18/15 NAS 1638: class 9					
Viscosity range	mm²/s	5....420					
Internal leakage with 100 bar (1450 psi)	cc/min (in³/min)	min.10 (0.61) max. 20 (1.2)					
Electrical							
Voltage type		DC					
Voltage tolerance (nominal voltage)		−10 +10					
Duty		Continuous (100%), with ambient temperature ≤ 50°C (122°F)					
Coil wire temperature not to be exceeded		150 (302)					
Insulation class		H					
Compliance with		Low Voltage Directive LVD 73/23/EC (2006/95/EC), 2004/108/EC					
Coil weight with connection EN 175301-803		kg (lbs) 0.215 (0.44)					
Voltage	V	12	13	24	27	48	110
Voltage type		DC	DC	DC	DC	DC	DC
Power consumption	W	26	26	26	26	26	26
Current (nominal at 20 °C (68 °F))	A	2.15	2.00	1.10	1.00	0.54	0.27
Resistance (nominal at 20 °C (68 °F))	Ω	5.5	6.5	22	28	89	413

Note

For applications with different specifications consult us

Code	Voltage [V]	Connector type	Coil description	Marking	Coil Mat no.
OB 01	12 DC	EN 175301- 803 (Ex. DIN 43650)	C3601 12DC	12 DC	R933000044
OB 03	12 DC	AMP JUNIOR	C3603 12DC	12 DC	R933000047
OB 04	12 DC	AMP JUNIOR Horizontal	C3604 12DC	12 DC	R933002913
OB 07	12 DC	DEUTSCH DT 04-2P	C3607 12DC	12 DC	R933000048
OB 31	12 DC	Cable 350 mm long	C3631 12DC	12 DC	R933000045
AD 01	13 DC	EN 175301-803 (Ex. DIN 43650)	C3601 13DC	13 DC	R933000051
AD 07	13 DC	DEUTSCH DT 04-2P	C3607 13DC	13 DC	R933000049
OC 01	24 DC	EN 175301-803 (Ex. DIN 43650)	C3601 24DC	24 DC	R933000053
OC 03	24 DC	AMP JUNIOR	C3603 24DC	24 DC	R933000057
OC 04	24 DC	AMP JUNIOR Horizontal	C3604 24DC	24 DC	R933002914
OC 07	24 DC	DEUTSCH DT 04-2P	C3607 24DC	24 DC	R933000058
OC 31	24 DC	Cable 350 mm long	C3637 24DC	24 DC	R933000055
AC 01	27 DC	EN 175301-803 (Ex. DIN 43650)	C3601 27DC	27 DC	R933000056
AC 07	27 DC	DEUTSCH DT 04-2P	C3607 27DC	27 DC	R933000050
OD 01	48 DC	EN 175301-803 (Ex. DIN 43650)	C3601 48DC	48 DC	R933000059
OD 04	48 DC	AMP JUNIOR Horizontal	C3604 48DC	48 DC	R933002915
OE 01	110 DC	EN 175301-803 (Ex. DIN 43650)	C3601 110DC	110 DC	R933000061

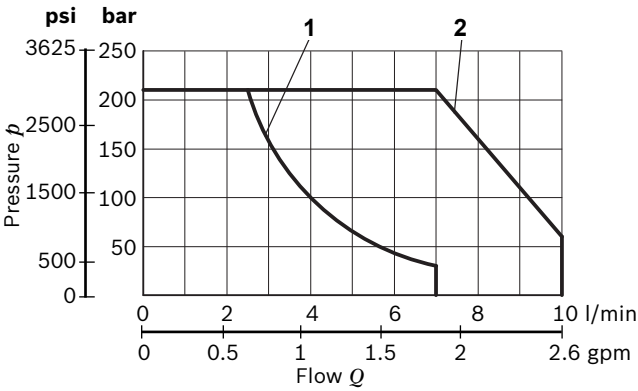
Characteristic curves



Scheme	Curve n.							
	A1>P1	B1>T1	A2>P2	B2>T2	A1>T1	B1>P1	A2>T2	B2>P2
BY - CY	2	1	2	1	2	3	2	3

Measured with hydraulic fluid ISO-VG32 at 45° ±5 °C (113° ±9 °F); ambient temperature 20 °C (68 °F).

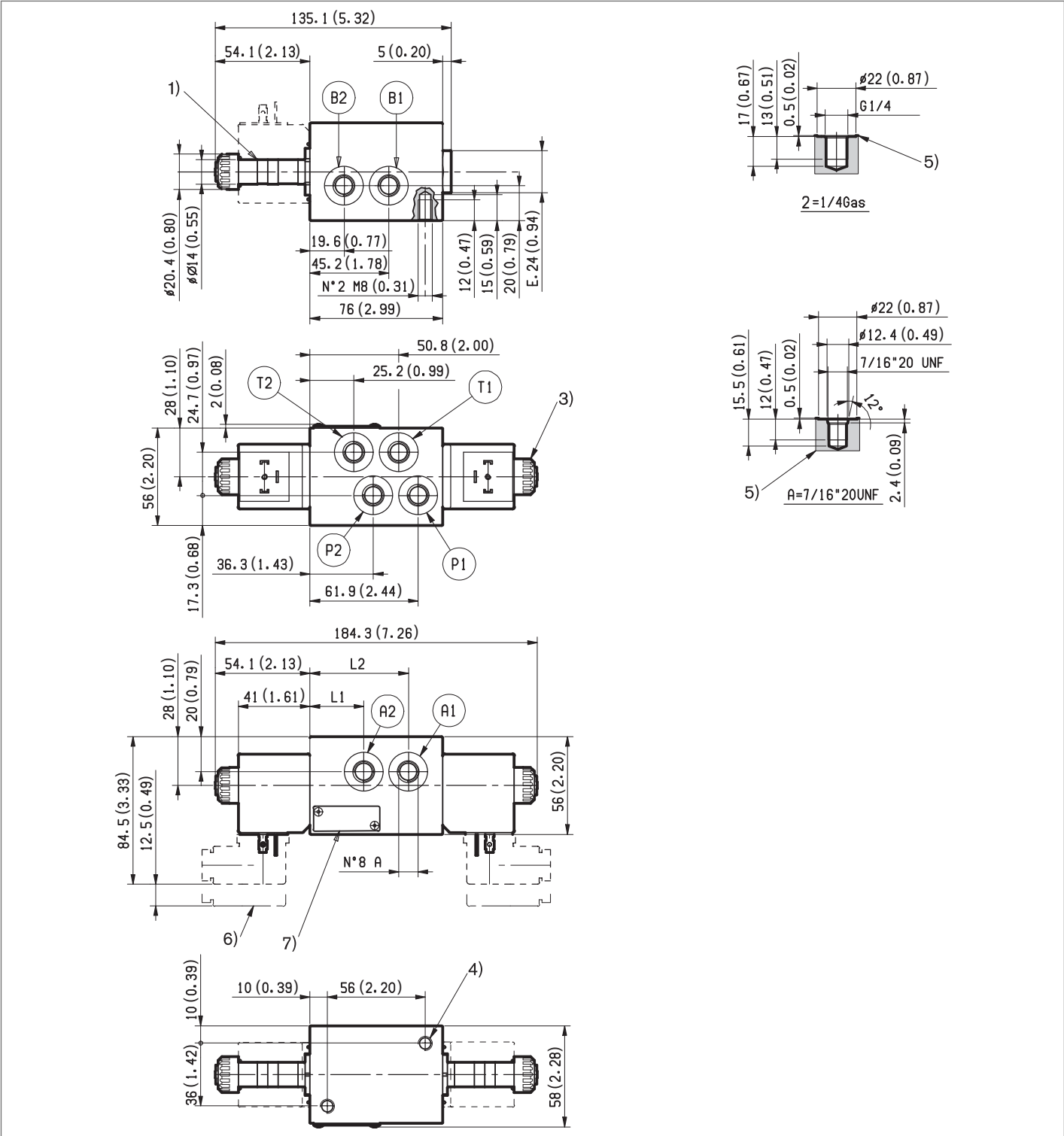
Performance limits



Scheme	Curve No.
BY	1
CY	2

The performance curves are measured with flow going across and coming back.

External dimensions and fittings

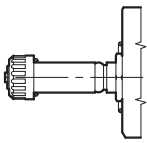
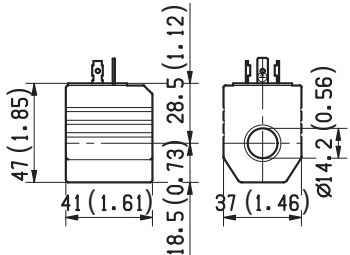
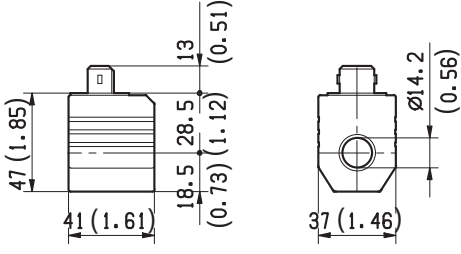
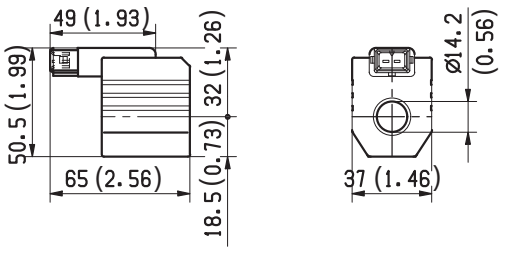
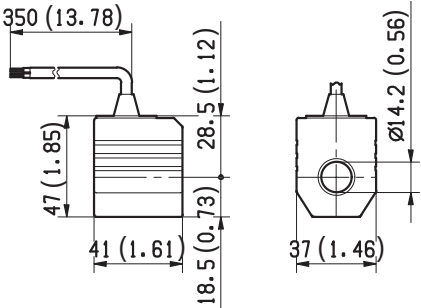
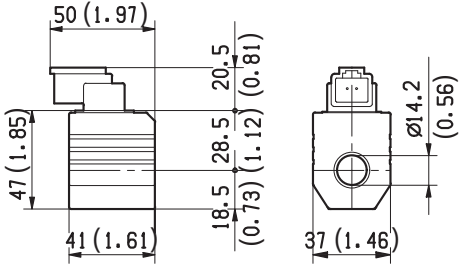


- 1 Solenoid tube \varnothing 14 mm (0,55 inch).
- 3 Ring nut for coil locking \varnothing 20,4 mm (0.8 inch).
Torque 3 – 4 Nm (2.2 – 3.0 ft-lb).
- 4 Two through holes for installation. Recommended screws M8 with strength class DIN 8.8.
- 5 Hydraulic Ports (G1/4- SAE4).
- 6 Minimum clearance needed for connector removal.

7 Identification label.

Measure	VS570	VS575
L1	33.8 (1.33)	30.8 (1.21)
L2	59.4 (2.33)	56.4 (2.22)

Electric connection

<p>00</p> 	<p>01</p> 
<p>03 Protection class: IP 65 with female connector properly fitted (see drawing).</p> 	<p>04 Protection class: IP 65 with female connector properly fitted (see drawing).</p> 
<p>31</p> 	<p>07 Protection class: IP 69 K with female connector properly fitted (see drawing).</p> 

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