

SECTIONAL DIRECTIONAL
CONTROL VALVES

DS7

 **walvoil**
HYDRAULIC CONTROL SYSTEMS

valvoilgroup

DLS7

They are for systems with fixed displacement pumps (open centre version), or variable displacement pumps (closed centre version), with Load-Sensing signal on each working section to pump flow control valve control.

- Load-independent flow control.
- Ports valves and "B" side control kits are the same of SD6 directional valve.
- L.S. signal connections on every working section.

Additional information

This catalogue shows the product in the most standard configurations.
Please contact Sales Dpt. for more detailed information or special request.

WARNING!

All specifications of this catalogue refer to the standard product at this date.
Walvoil, oriented to a continuous improvement, reserves the right to discontinue, modify or revise the specifications, without notice.

WALVOIL IS NOT RESPONSIBLE FOR ANY DAMAGE CAUSED BY AN
INCORRECT USE OF THE PRODUCT.

2nd edition December 2006:

This edition supercedes all prior documents.

Working conditions

This catalogue shows technical specifications and diagrams measured with mineral oil of 46 mm²/s - 46 cSt viscosity at 40°C temperature.

DLS7

Nominal flow rating (with 14 bar / 200 psi stand-by)	<i>on inlet port P</i>	75 l/min	
	<i>on ports A and B</i>	60 l/min	
Operating pressure (max.)		315 bar	4600 psi
Back pressure (max.)	<i>on outlet port T</i>	25 bar	360 psi
Internal leakage A(B)→T	<i>Δp=100 bar - 1450 psi fluid and valve at 40°C</i>	3 cm ³ /min *	0.18 in ³ /min *

Fluid		Mineral based oil	
Fluid temperature	<i>with NBR (BUNA-N) seals</i>	from -20° to 80°C	
	<i>with FPM (VITON) seals</i>	from -20° to 100°C	
Viscosity	<i>operating range</i>	from 15 to 75 mm ² /s	<i>from 15 to 75 cSt</i>
	<i>min.</i>	12 mm ² /s	12 cSt
	<i>max.</i>	400 mm ² /s	400 cSt
Max level of contamination		-/19/16 - ISO 4406	
Ambient temperature	<i>with mechanical devices</i>	from -40° to 60°C	
	<i>with pneumatic and hydraulic devices</i>	from -30° to 60°C	
	<i>with electric devices</i>	from -20° to 50°C	
Tie rods tightening torque (wrench 13)		30 Nm	22 lbft

NOTE (*) - Except differently specified inside the catalogue.

NOTE - For different conditions please contact Sales Dept.

Standard threads

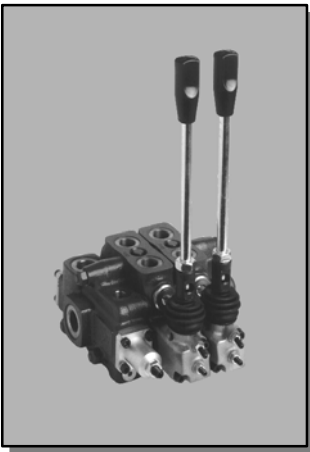
REFERENCE STANDARD

		BSP	UN-UNF	METRICA	NPTF
THREAD ACCORDING TO		ISO 228/1	ISO 263	ISO 262	ANSI B1.20.3
		BS 2779	ANSI B1.1 unified		
CAVITY DIMENSION ACCORDING TO	ISO	1179	11926	9974-1	
	SAE		J1926	J2244	J476a
	DIN	3852-2 shape X or Y		3852-1 shape X or Y	

PORTS THREADING

DLS7

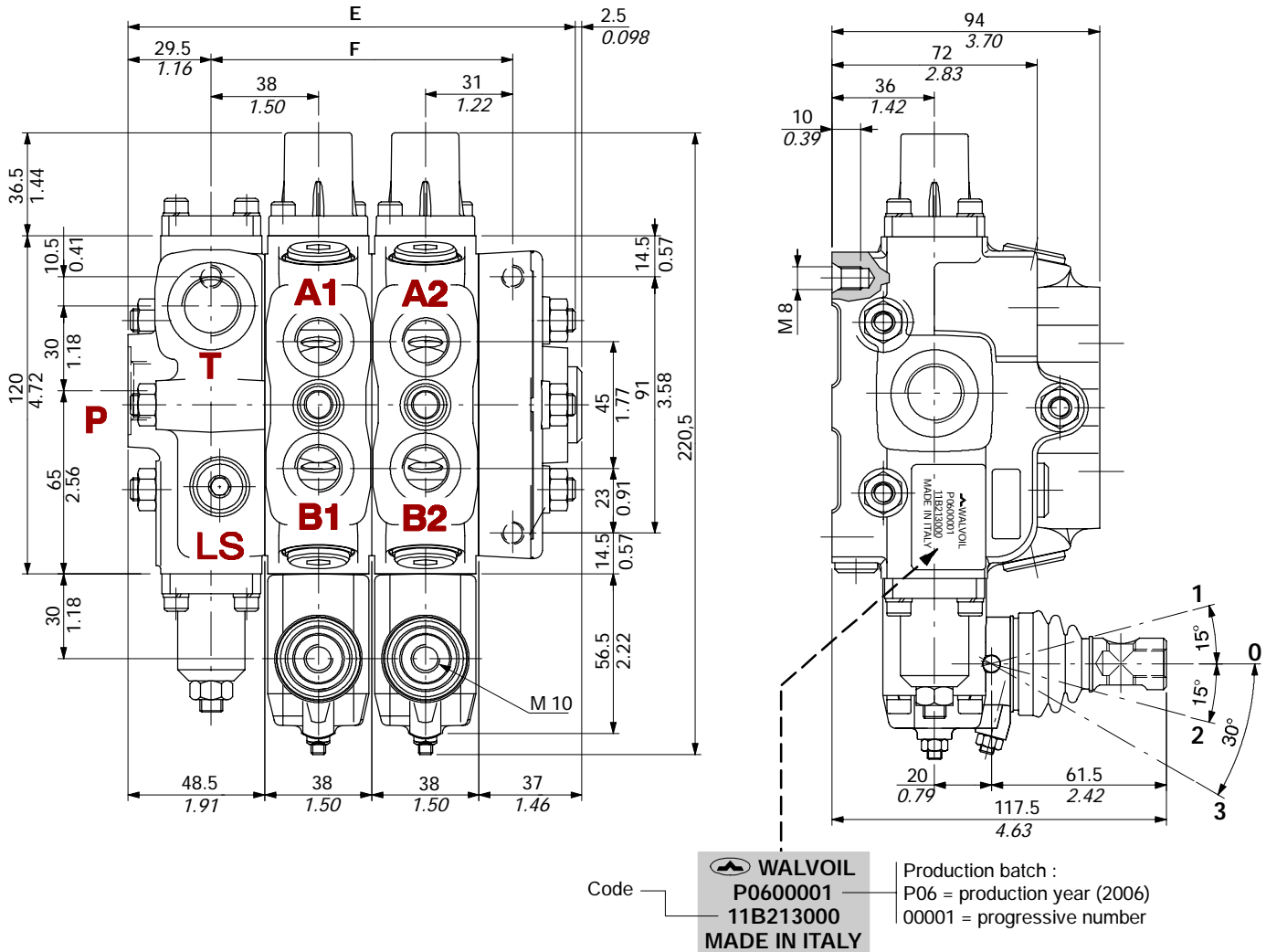
PORTS	BSP	UN-UNF
Inlet P and outlet T	G 1/2	3/4-16 (SAE 8)
Working ports A and B	G 3/8	9/16-18 (SAE 6)
Load Sensing signal LS	G 1/4	9/16-18 (SAE 6)
PILOT PORTS		
Hydraulic ports	G 1/4	9/16-18 (SAE 6)
Pneumatic ports	NPTF 1/8-27	NPTF 1/8-27



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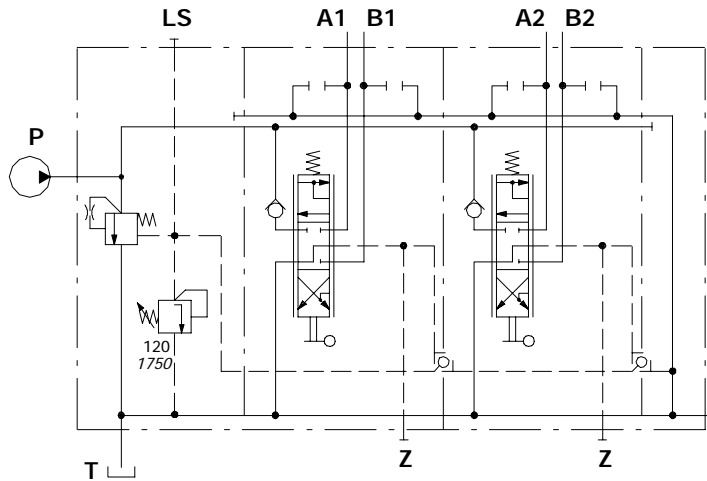
Dimensional data (with inlet flow control valve)



TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
DLS7/1	121	4.76	69	2.72	6.4	14.1
DLS7/2	159	6.26	107	4.21	8.9	19.6
DLS7/3	197	7.76	145	5.71	11.5	24.4
DLS7/4	235	9.25	183	7.2	14	30.9
DLS7/5	273	10.74	221	8.7	16.6	36.6

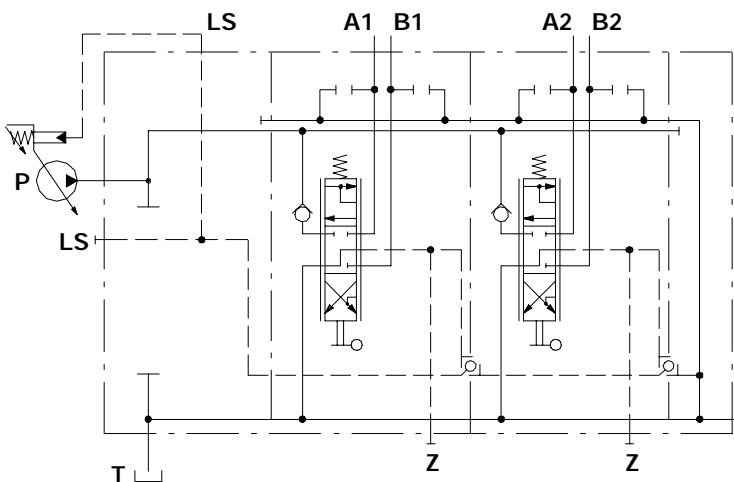
TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
DLS7/6	311	12.24	259	10.2	19.1	42.1
DLS7/7	349	13.74	297	11.7	21.7	47.8
DLS7/8	387	15.24	335	13.2	24.3	53.5
DLS7/9	425	16.73	373	14.7	26.9	59.2
DLS7/10	463	18.23	411	16.2	29.5	64.9

Fixed displacement pump (open centre)



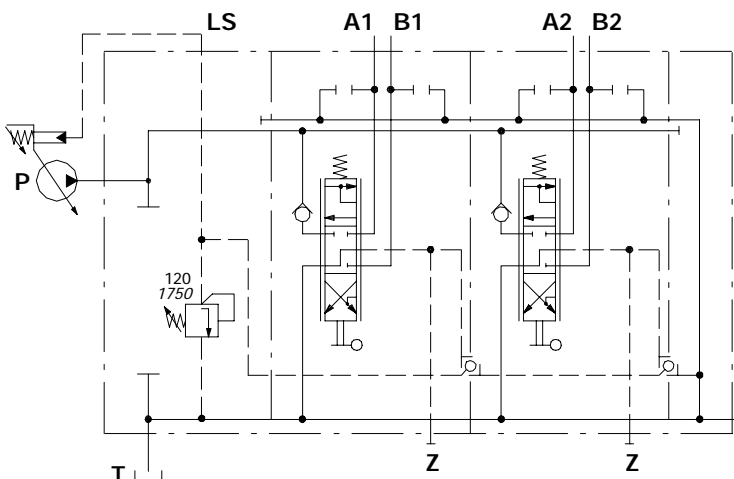
Description example:
DLS7/2/AM(G3-120)/6S8MCLFG/6S8MCLFG/RF

Variable displacement pump with load-sensing compensator (closed centre)



Description example:
DLS7/2/AP(SV)/6S8MCLFG/6S8MCLFG/RF

Configuration with L.S. relief valve is also available.

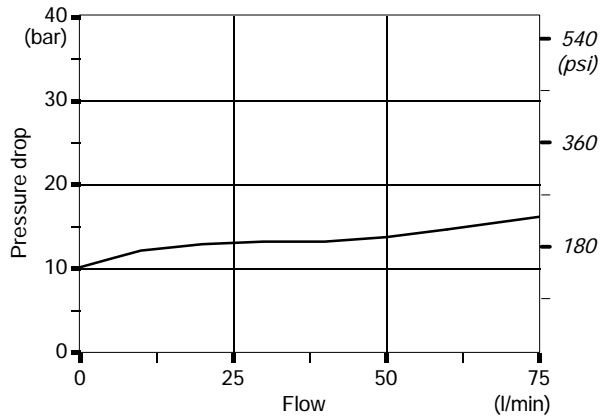
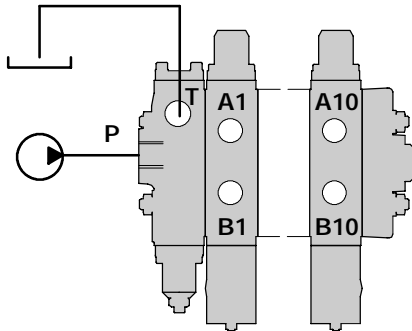


Description example:
DLS7/2/AN(G3-120)/6S8MCLFG/6S8MCLFG/RF

Performance data (pressure drop vs. flow)

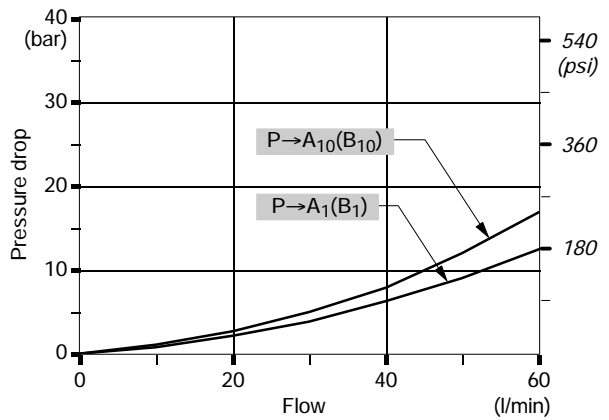
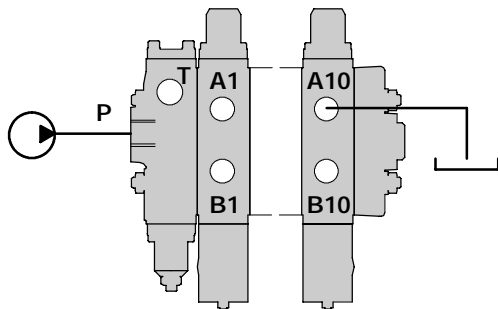
Open centre

From inlet to outlet.



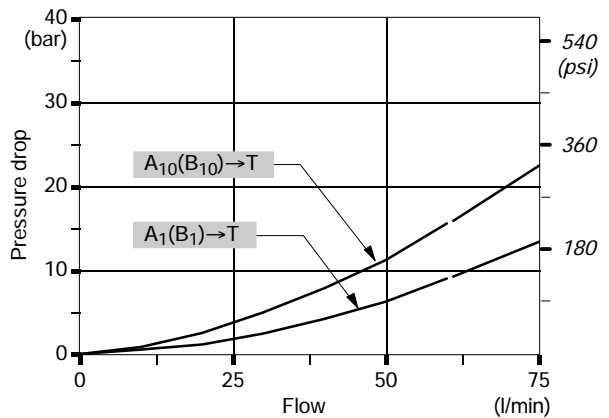
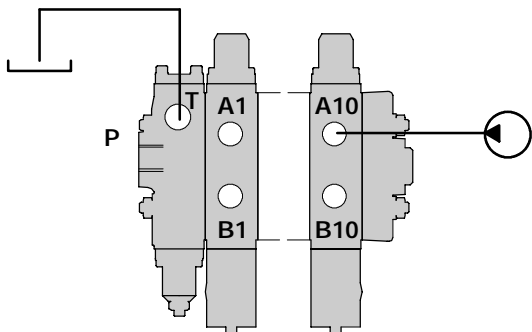
Inlet to work port

From inlet to A port (spool in position 1) or B port (spool in position 2).



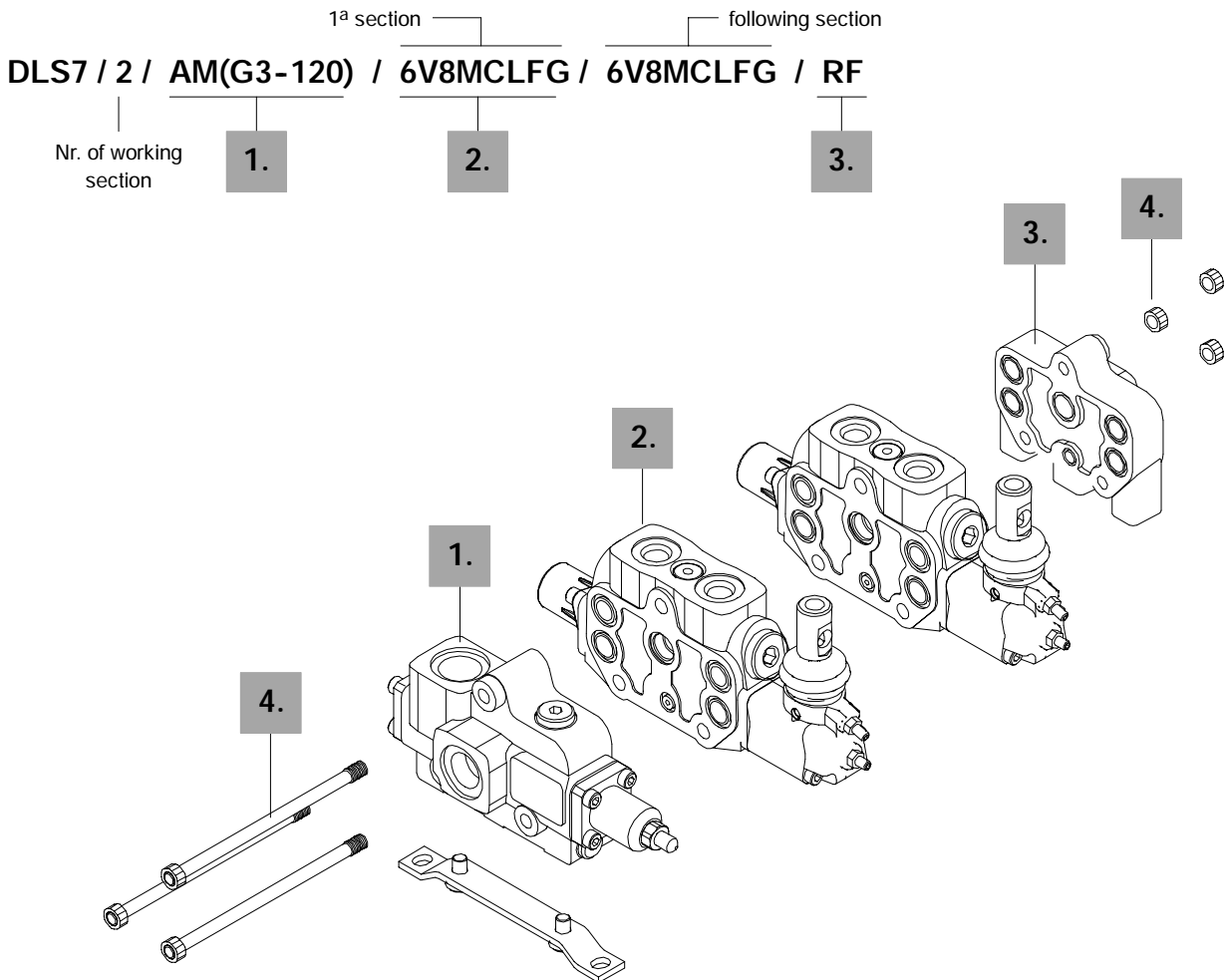
Work port to outlet

From A port (spool in position 2) or B port (spool in position 1) to outlet.



NOTE - Measured with spool type 6S.

Description example of standard configuration:



1. Complete inlet / outlet cover * page 78

TYPE	CODE	DESCRIPTION
AM(G3-125)	61B331000	With flow control valve and L.S. overpressure relief valve
AP(SV)	61B333000	Without flow control valve and L.S. overpressure relief valve
AN(G3-125)	61B332000	Without flow control valve, with L.S. overpressure relief valve

2. Complete working section * page 80

TYPE	CODE	DESCRIPTION
6V8MCLFG	61B131201	Parallel circuit, double acting spool with spring return, lever control
6V8IMF3	61B131221	Parallel circuit, double acting spool, proportional hydraulic control with spool stroke adjusting

NOTE (*) - Items are referred to **BSP** thread.

3. Return cover * page 93

TYPE	CODE	DESCRIPTION
RF	61B431000	Standard type
RH	61B433001	With L.S. signal carry-over

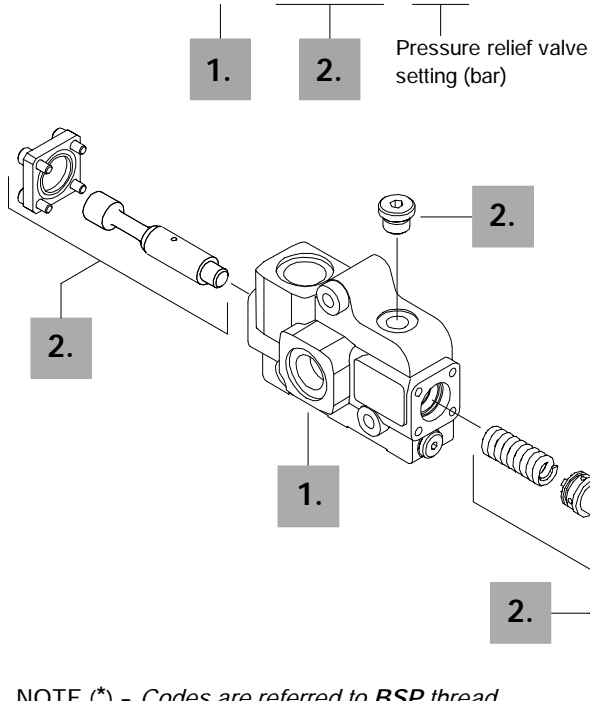
4. Assembling kit

CODE	DESCRIPTION
5TIR108126	tie rods with nuts for 1 sections
5TIR108166	tie rods with nuts for 2 sections
5TIR108204	tie rods with nuts for 3 sections
5TIR108242	tie rods with nuts for 4 sections
5TIR108280	tie rods with nuts for 5 sections
5TIR108318	tie rods with nuts for 6 sections
5TIR108356	tie rods with nuts for 7 sections
5TIR108394	tie rods with nuts for 8 sections
5TIR108432	tie rods with nuts for 9 sections
5TIR108470	tie rods with nuts for 10 sections
5TIR108508	tie rods with nuts for 11 sections
5TIR108546	tie rods with nuts for 12 sections

Ordering codes

Description example:

FE DLS7 / A M (G3 - 120)



1. Cover body kit *

CODE	DESCRIPTION
5FIA307320	A standard type

2. Inlet options

page 79

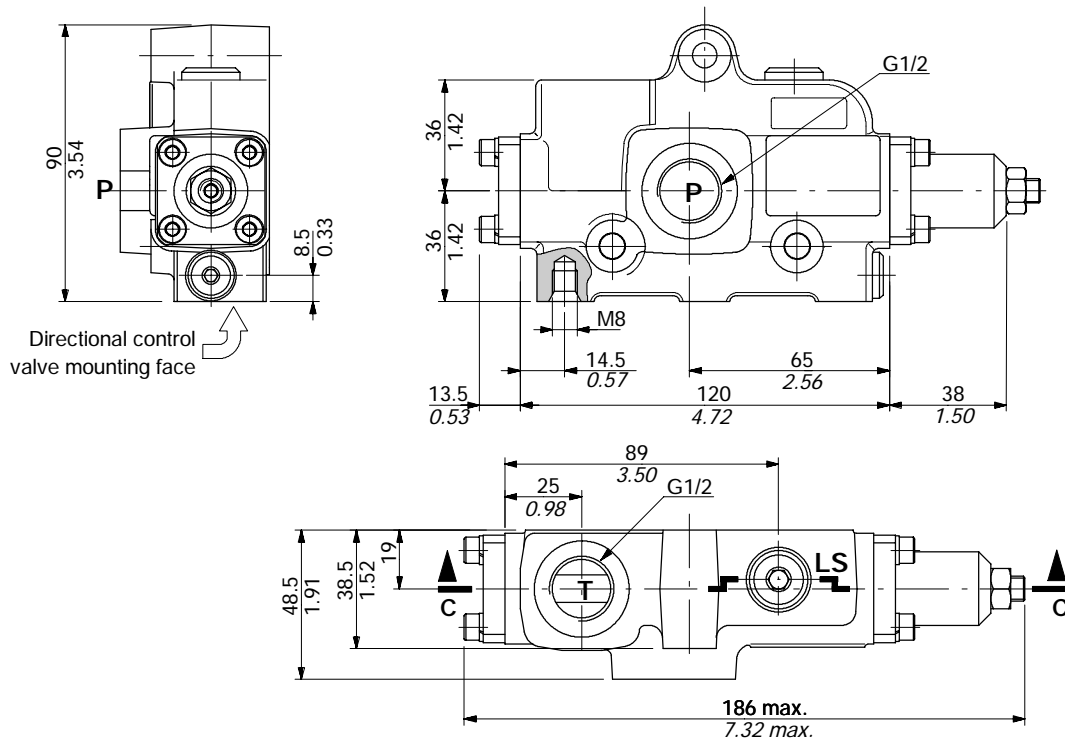
On Load-sensing signal

TIPO	CODICE	DESCRIZIONE
M(G3)	5KIT007300*	Compensator kit with overpressure valve (from 80 to 315 bar / 1150 to 4600 psi, standard setting 120 bar / 1750 psi)
P(SV)	5KIT007320	Compensator and overpressure valve blanking kit
N(G3)	5KIT007310	Compensator blanking kit with overpressure valve (from 80 to 315 bar / 1150 to 4600 psi, standard setting 120 bar / 1750 psi)

NOTE (*) - Codes are referred to BSP thread.

Dimensional data and hydraulic circuit

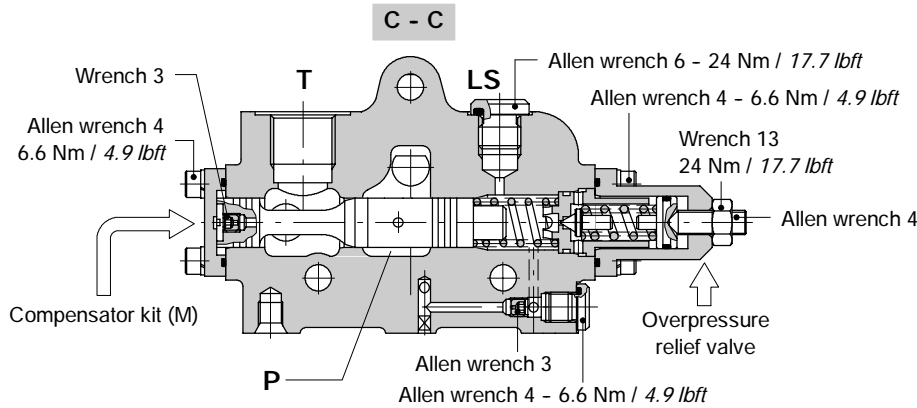
It's shown an AM inlet and outlet cover.



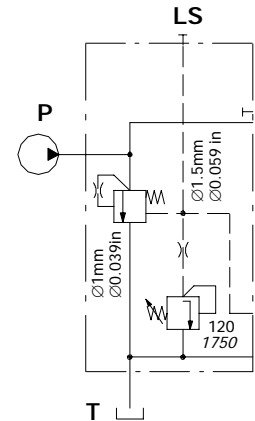
Dimensional data and hydraulic circuit

Type AM with flow control valve and L.S. overpressure relief valve

For systems with fixed displacement pumps (open centre version); see page 75.

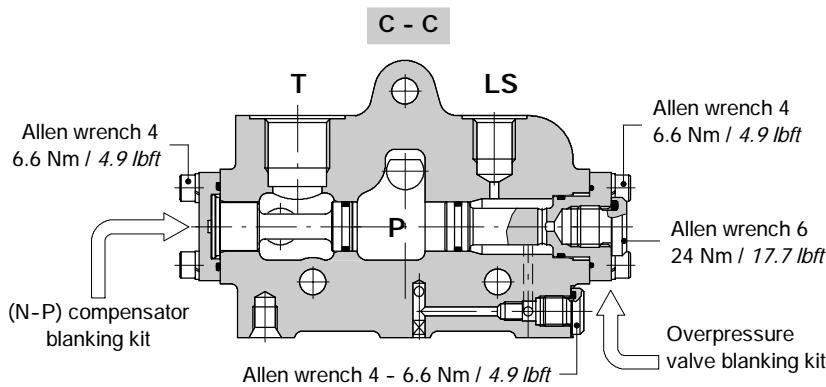


Hydraulic circuit

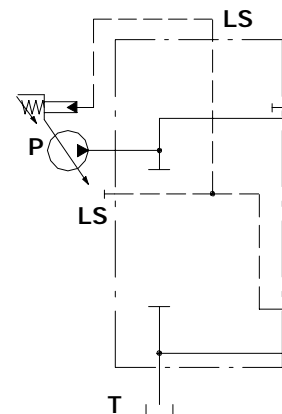


Type AP without flow control valve and L.S. overpressure relief valve

For systems with variable displacement pumps (closed centre version); see page 75.

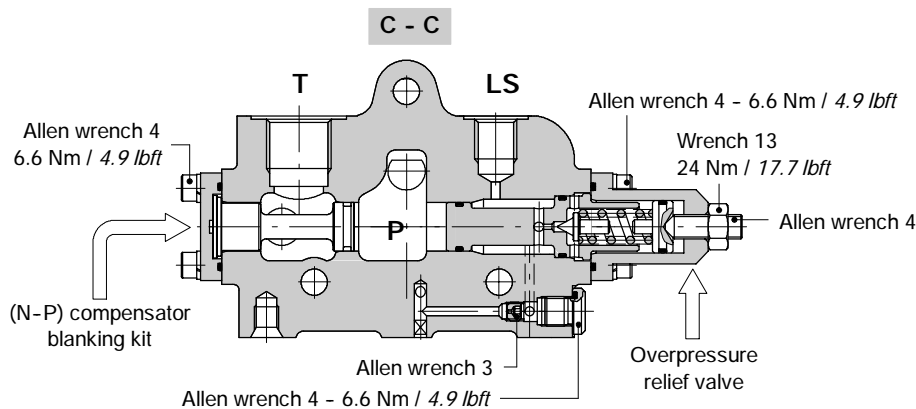


Hydraulic circuit

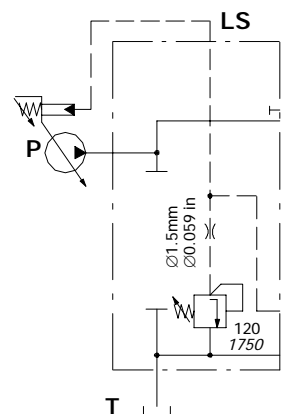


Type AN without flow control valve, with L.S. overpressure relief valve

For systems with variable displacement pumps (closed centre version); see page 75.

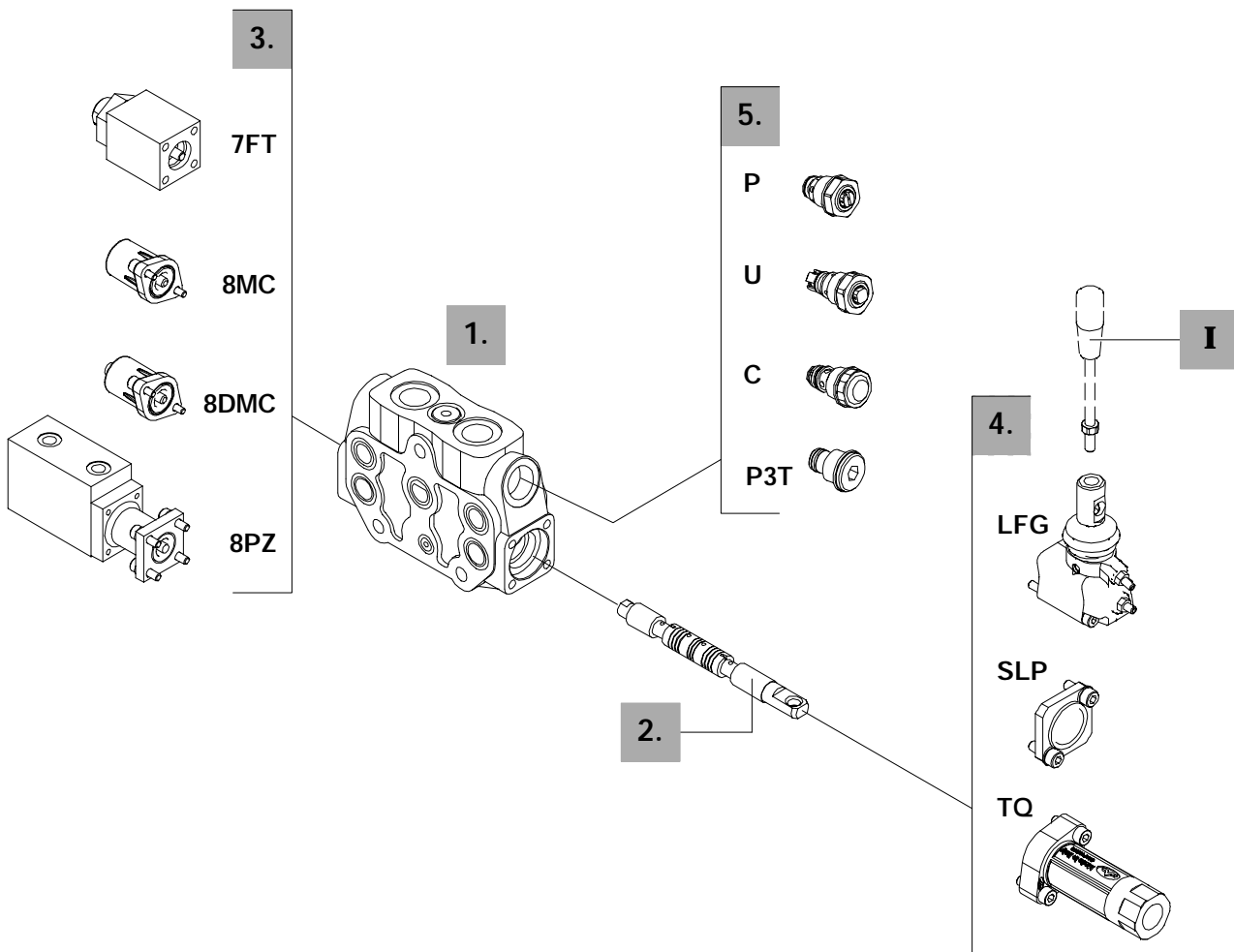
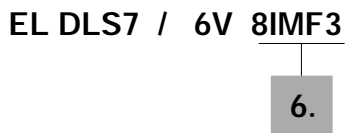
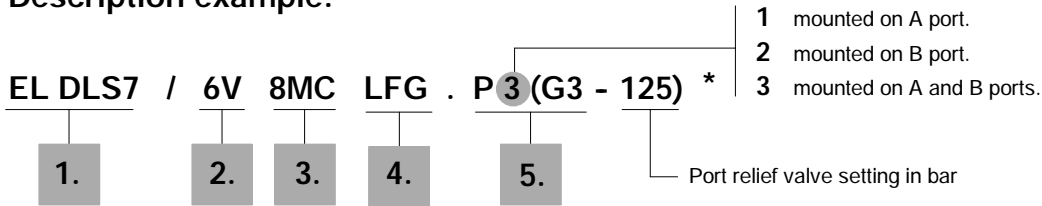


Hydraulic circuit



Ordering codes

Description example:



1. Working section kits * *page 82*

TYPE	CODE	DESCRIPTION
-	5EL5073000	Parallel circuit with port valves prearrangement

Include body, seals, rings and load check valve.

2. Spools *page 83*

TYPE	CODE						DESCRIPTION
	10 l/min	20 l/min	30 l/min	40 l/min	50 l/min	60 l/min	
	D	V	T	Q	C	S	Nominal flow with 14 bar / 203 psi stand-by
6	3CU3110010	3CU3110020	3CU3110030	3CU3110040	3CU3110050	3CU3110060	Double acting, 3 position, with A and B closed in neutral position
7	3CU3125010	3CU3125020	3CU3125030	3CU3125040	3CU3125050	3CU3125060	Double acting, 3 position, with A and B to tank in neutral position

3. "A" side spool positioners *page 85*

TYPE	CODE	DESCRIPTION
7FT	5V07405000	With friction
8MC	5V08205000	With spring return in neutral position
8DMC	5V08205200	As type 8 and pin with M8 female thread for dual control
8PZ	5V08105709	Proportional pneumatic kit
8IZ	5V08106800	Proportional hydraulic kit

4. "B" side options *page 87*

TYPE	CODE	DESCRIPTION
LFG	5LEV107800	Zama (zic alloy) lever with with adjustable flow limiters
SL	-	Without leve box
SLP	5COP107000	Without lever box, with dust-proof plate
SLCZ	5COP205030	Without lever box, with endcap.
TQ	5TEL107110	Flexible cable connection; for CD cables
LCB	5CLO202000	Joystick lever for 2 sections operation

6. Complete controls * *page 90*

8IMF3 proportional hydraulic control kit with flow limiter.

I Optional handlevers

TYPE	CODE	DESCRIPTION
AL01/M10x150	170012015	For LFG lever box, L = 150mm / 5.91 in
AL08/M12x200	170013120	For LCB joystick, L = 200 mm / 7.87 in

5. Port valves *page 59*

TYPE	CODE	DESCRIPTION
Assembled on section		
P3T	XTAP524280	A and B ports valve blanking plugs
C	5KIT406100	Anti-cavitation
<u>Anti-shock valve</u>		
P(G2)	5KIT206112	From 50 to 125 bar / 725 to 1800 psi standard setting 63 bar / 900 psi
P(G3)	5KIT206113	From 100 to 200 bar / 1450 to 2900 psi standard setting 100 bar / 1450 psi
P(G4)	5KIT206114	From 160 to 315 bar / 2300 to 4600 psi standard setting 200 bar / 2900 psi
<u>Anti-shock and anti-cavitation valve</u>		
U(G2)	5KIT306112	From 50 to 125 bar / 725 to 1800 psi standard setting 63 bar / 900 psi
U(G3)	5KIT306113	From 100 to 250 bar / 1450 to 3600 psi standard setting 100 bar / 1800 psi
U(G4)	5KIT306114	From 160 to 315 bar / 2300 to 4600 psi standard setting 200 bar / 2900 psi

Standard setting is referred to 10 l/min flow.

Flange mounted type

BPT	XTAP627300	BP and BPS valves blanking plug
<u>Direct type</u>		
BP1	612002000*	Block with valve on port A
BP2	612002000*	Block with valve on port B
BP3	612002100*	Block with valves on ports A and B
BP	XCAR605110	Single valve
<u>With Pre-opening</u>		
BPS1	612003000*	Block with valve on port A
BPS2	612003000*	Block with valve on port B
BPS3	612003100*	Block with valves on ports A and B
BPS	XCAR605210	Single valve

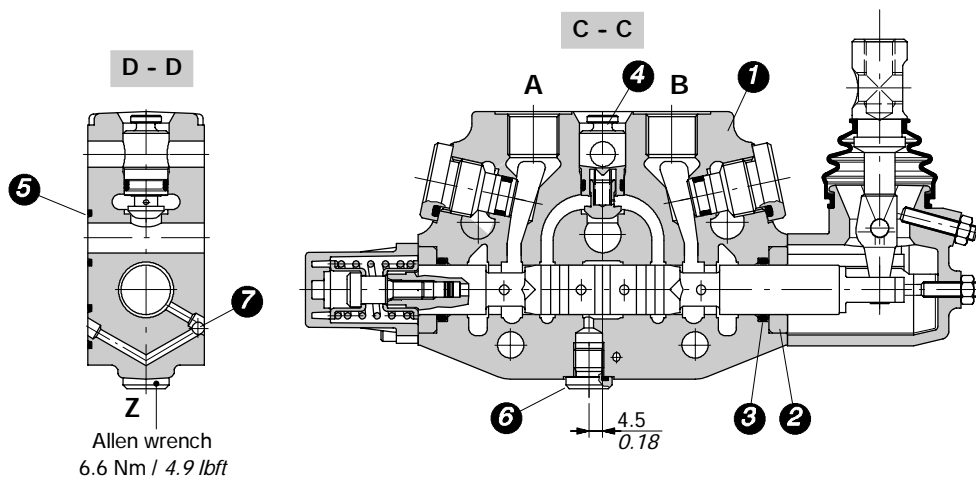
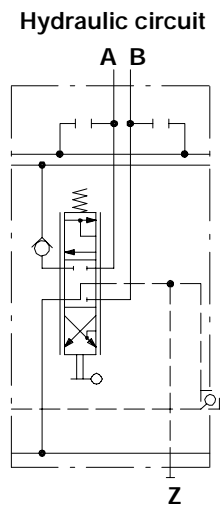
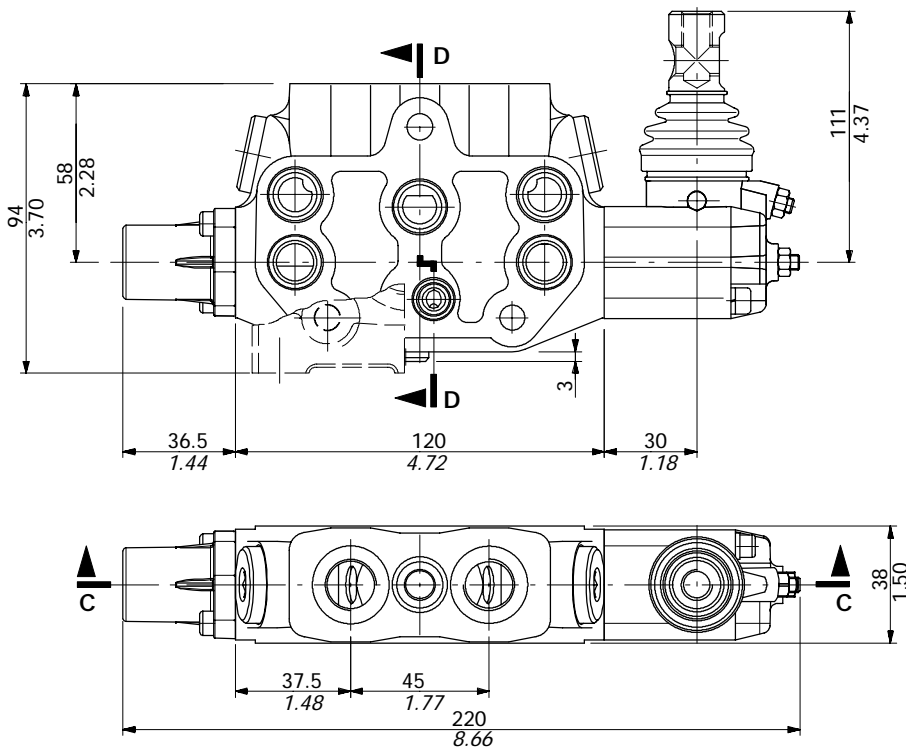
NOTE (*) - Items are referred to **BSP** thread.

Dimensional data and hydraulic circuit

Working section kit is fitted with body (1), washer (2), spool O-ring seals (3), load check valve (4), assembling O-ring seals (5), plug on L.S. signal (6) and ball on shuttle valve (7).

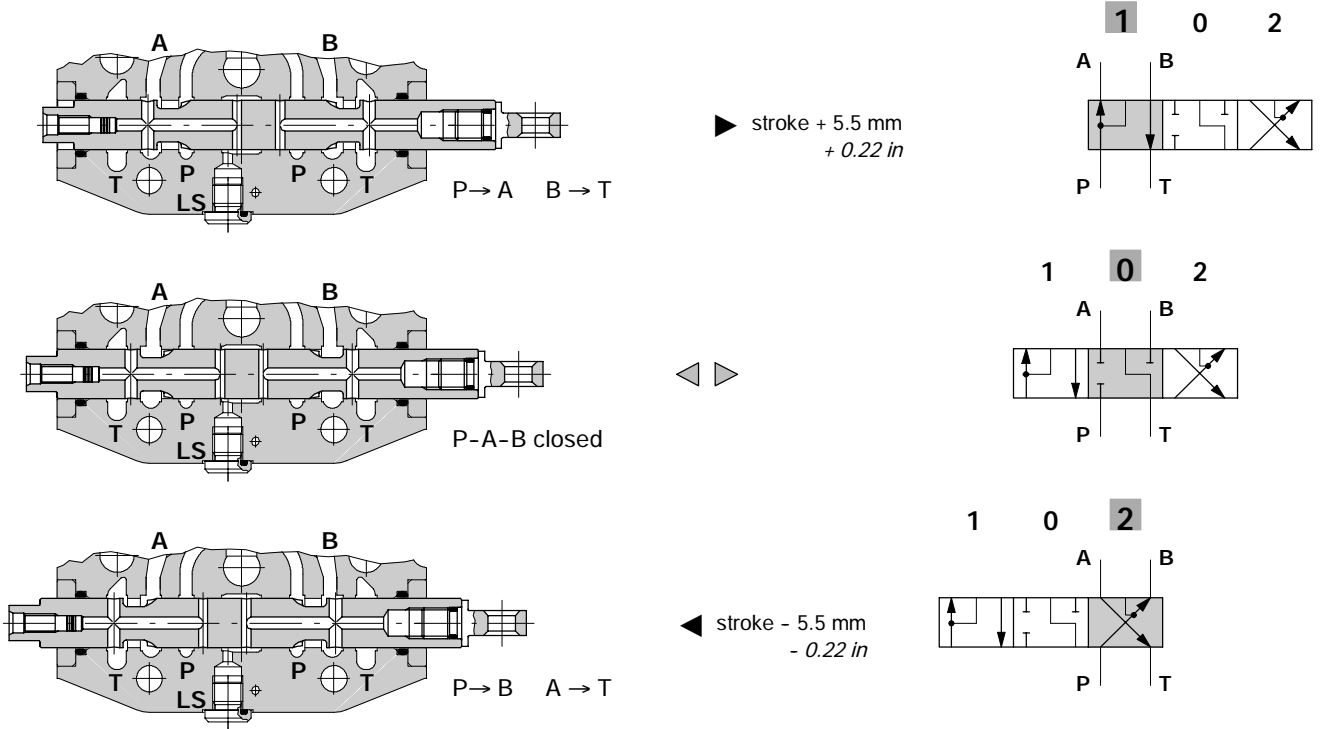
Working sections are supplied with port valve prearrangement.

Drawing shows a complete working section, type DLS7/P-7S8MCLFG.

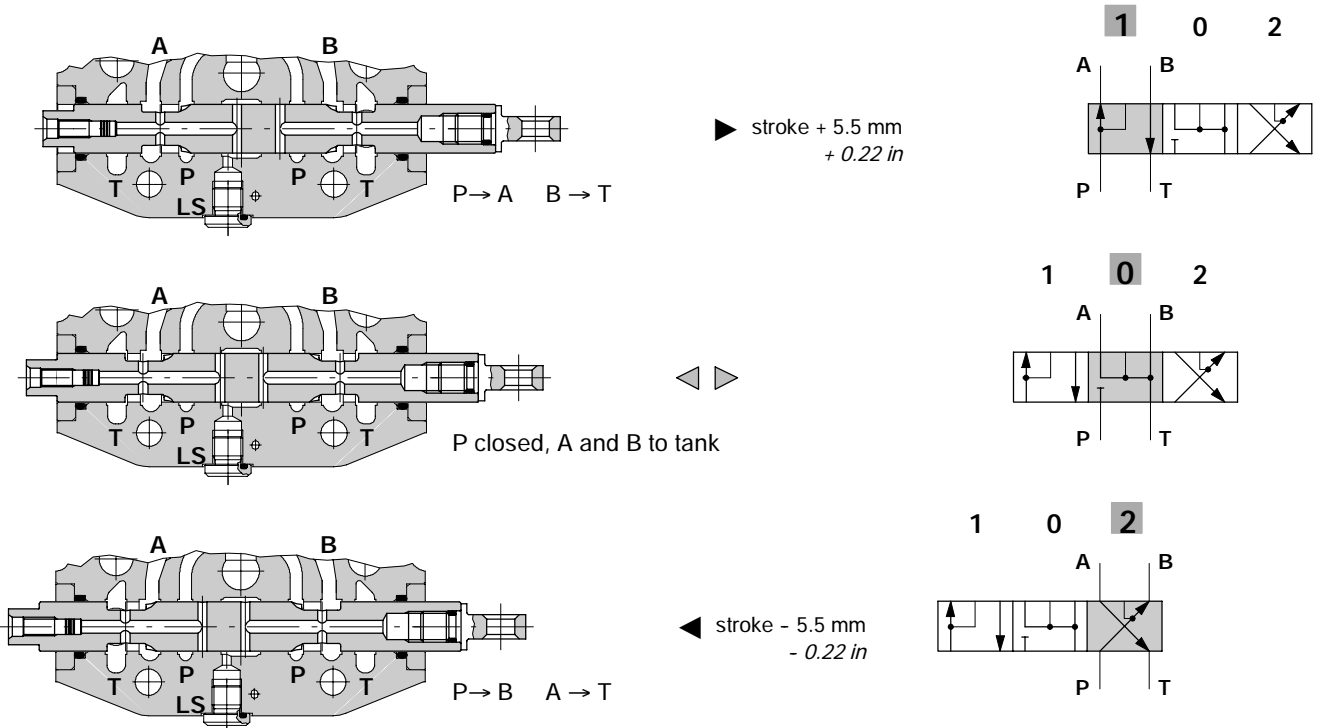


Allen wrench
6.6 Nm / 4.9 lbf

Type 6S

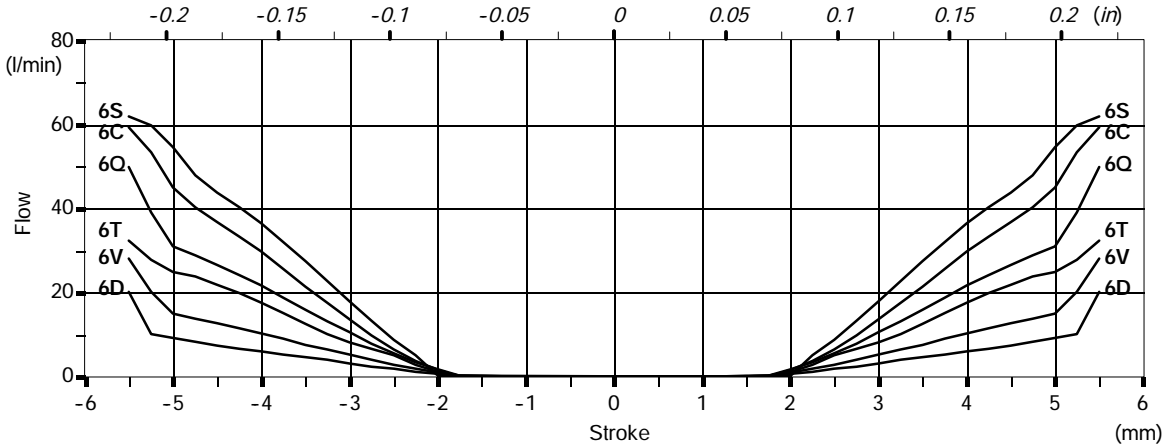


Type 7S



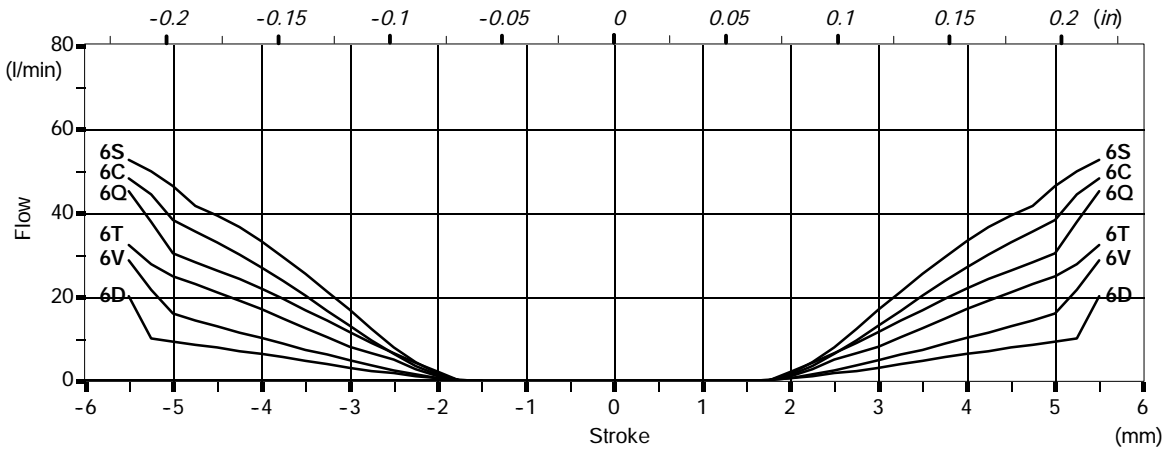
Spools

Spool metering with AM inlet cover and 14 bar / 203 psi standard stand-by

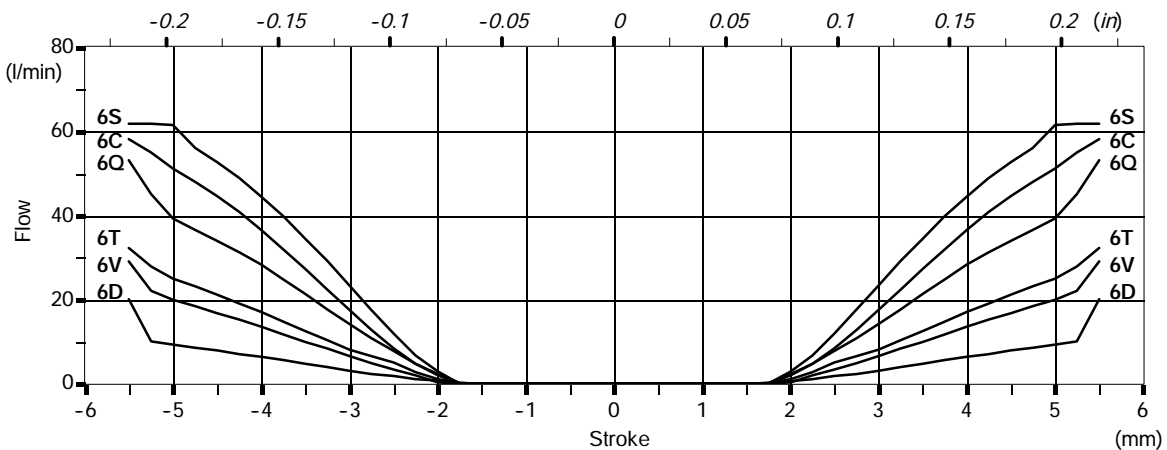


Spool metering with AN inlet cover

With 10 bar / 145 psi L.S. pump stand-by



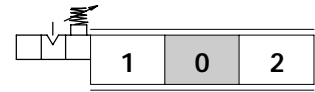
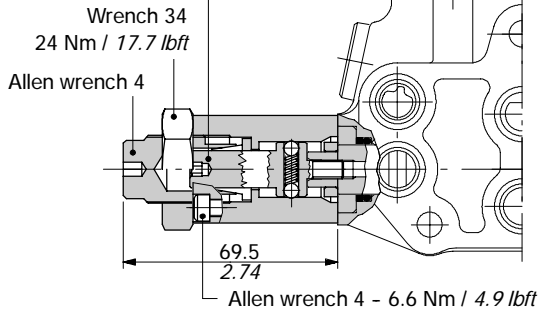
With 20 bar / 290 psi L.S. pump stand-by



"A" side spool positioners

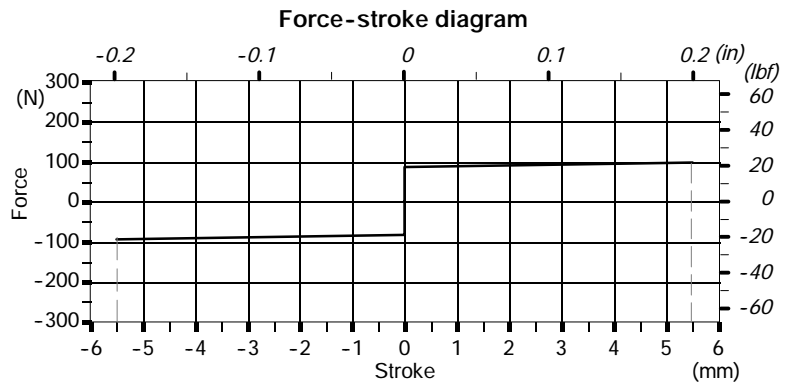
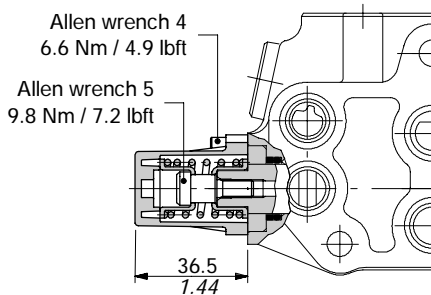
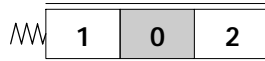
With friction type 7FT

Allen wrench 4 - 9.8 Nm / 7.2 lbf



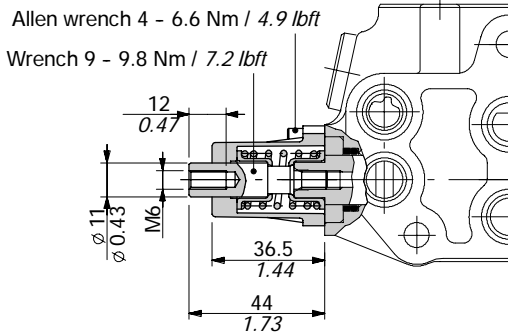
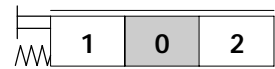
With spring return

8MC kit

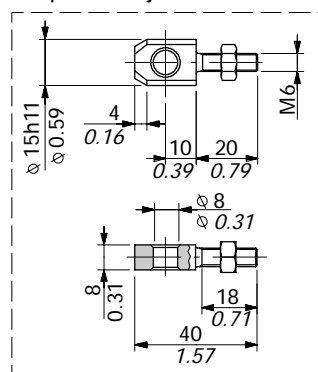


8DMC kit

Spool end joint code XPER315400 is available on request in order to screw onto pin.

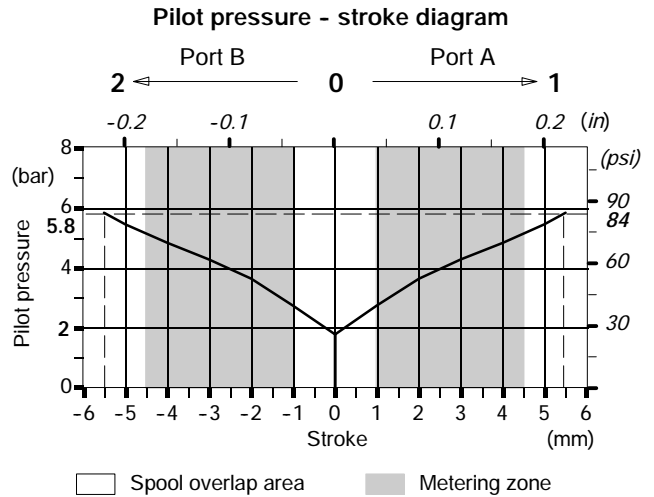
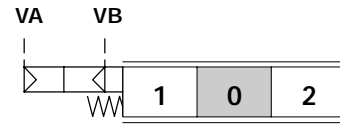
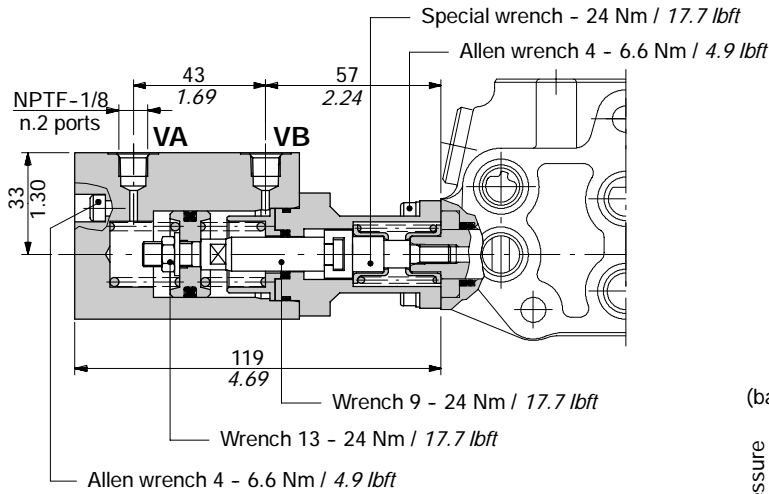


Spool end joint dimension



"A" side spool positioners

8PZ proportional pneumatic control

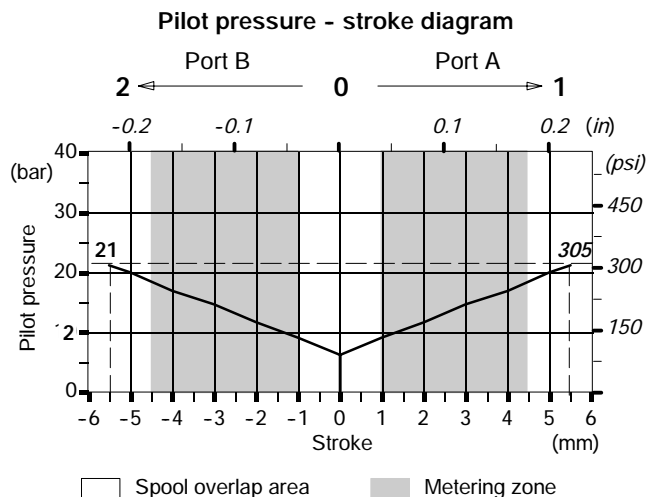
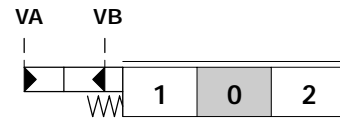
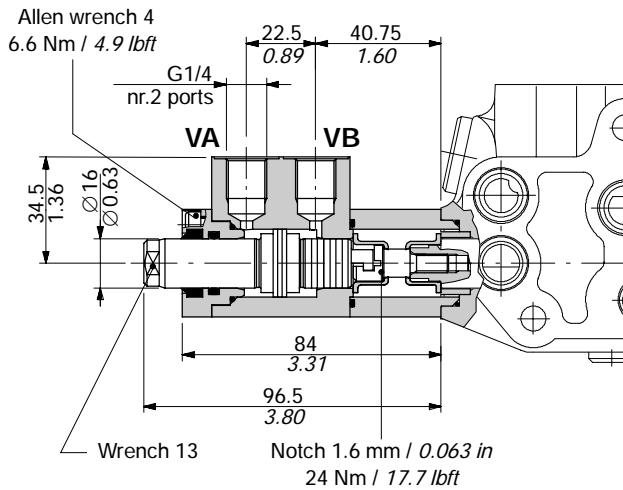


Operating features

Max. pilot pressure : 10 bar / 145 psi

8IZ proportional hydraulic control

It can be used with body kit without seals and ring on spool (standard body) on side "A" code: 5EL507300B.



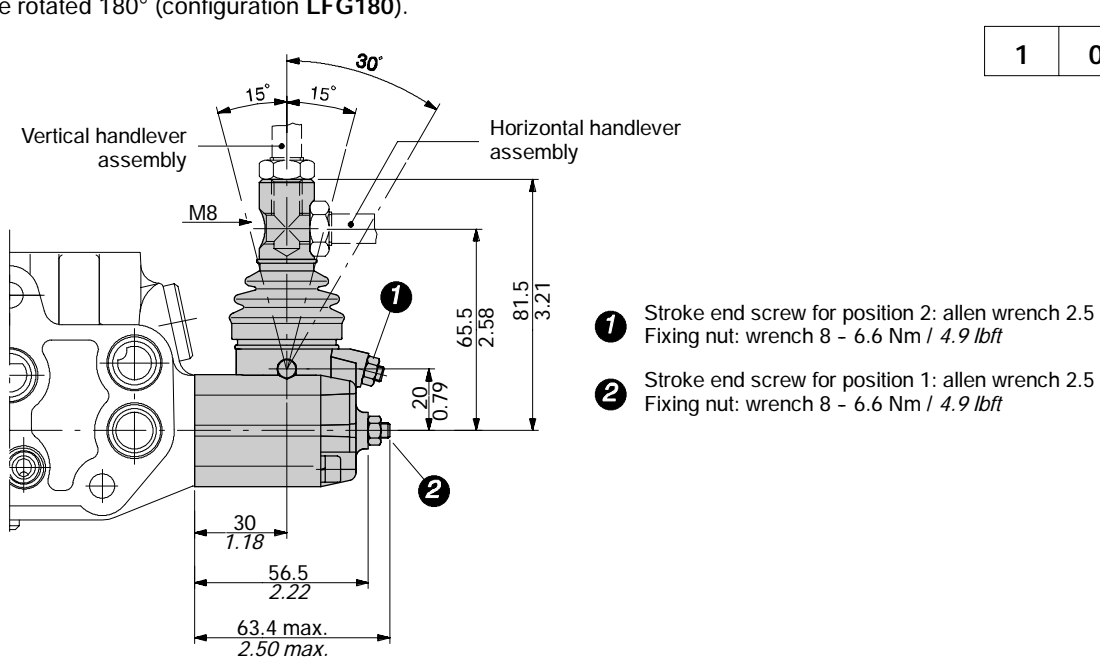
Operating features

Max. pilot pressure : 50 bar / 725 psi

Lever controls

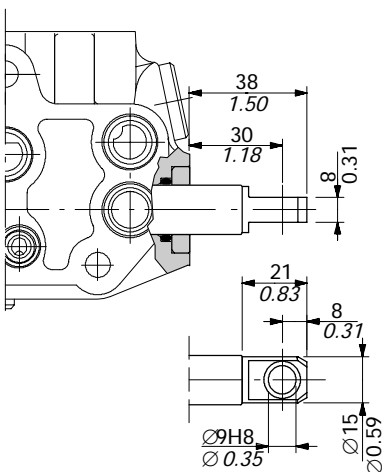
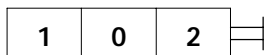
LFG type

Cast iron lever pivot box with protective rubber bellow; it's complete of two screws for spool stroke adjusting in both directions. It can be rotated 180° (configuration LFG180).

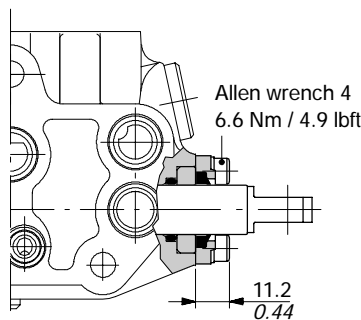
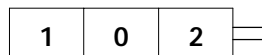


Controls prearrangement

SL type

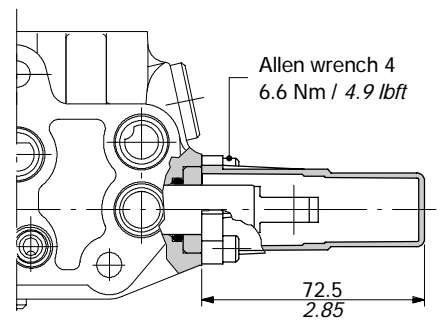
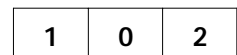


SLP type



Mechanical control with dust-proof plate kit.

SLCZ type

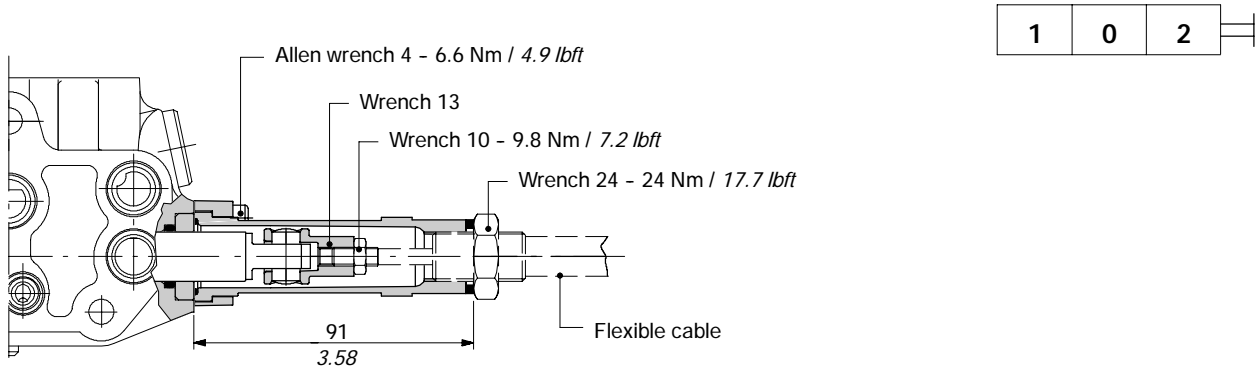


Protection cap usable with pneumatic 8P, electro-pneumatic 8EP3, and electro-hydraulic 8ED3 spool positioners.

"B" side options

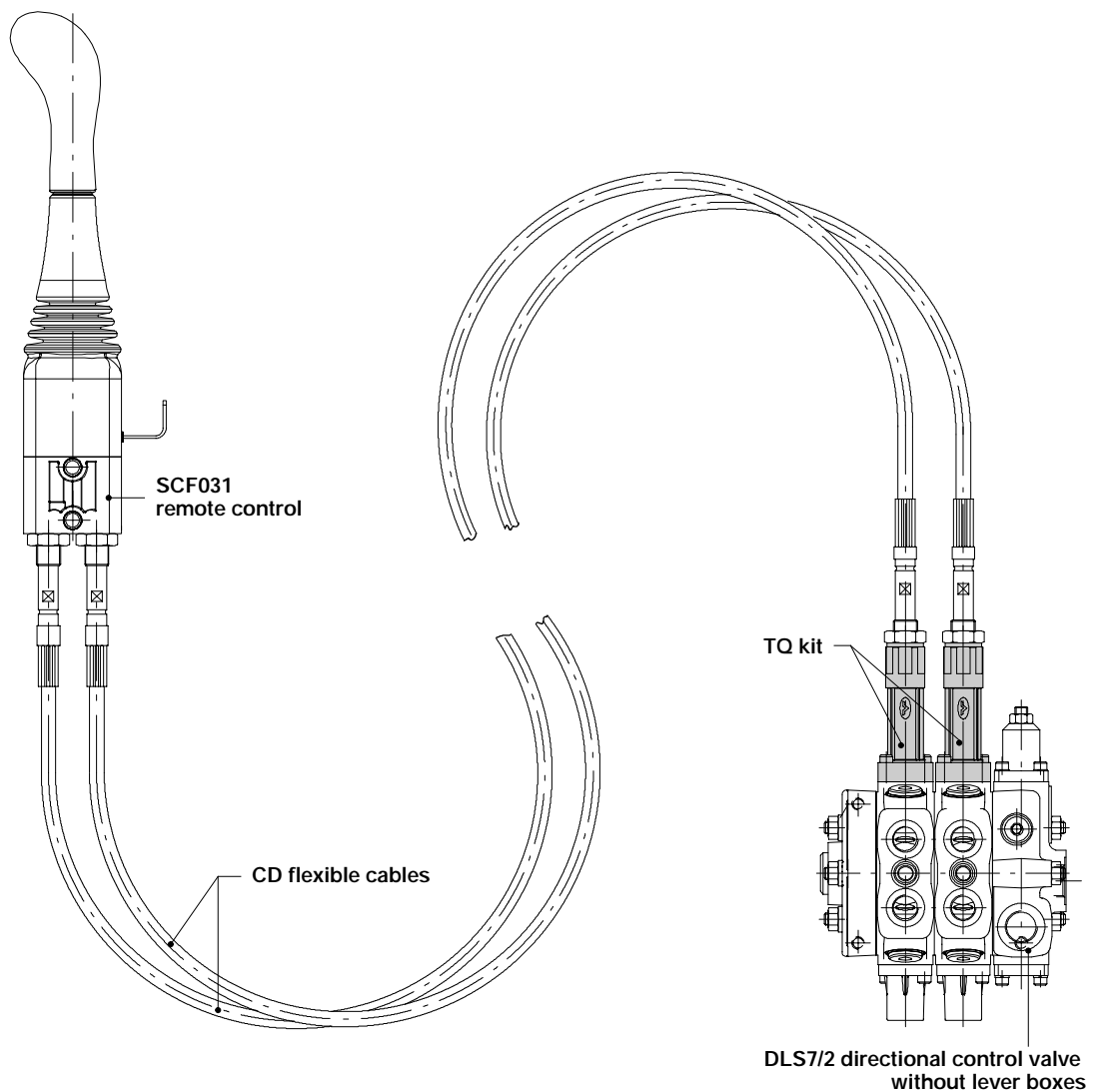
TQ cable remote control kit

Waterproof cap prearranged for remote control with flexible cable.

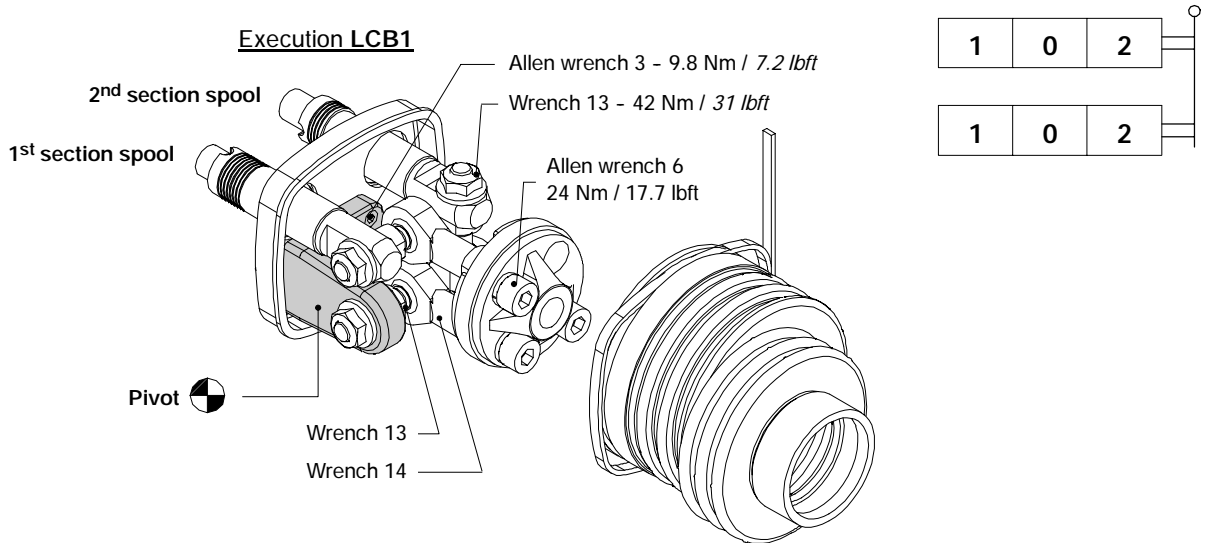


NOTE - For further information about remote cable control, require related documentation.

Example of cable control

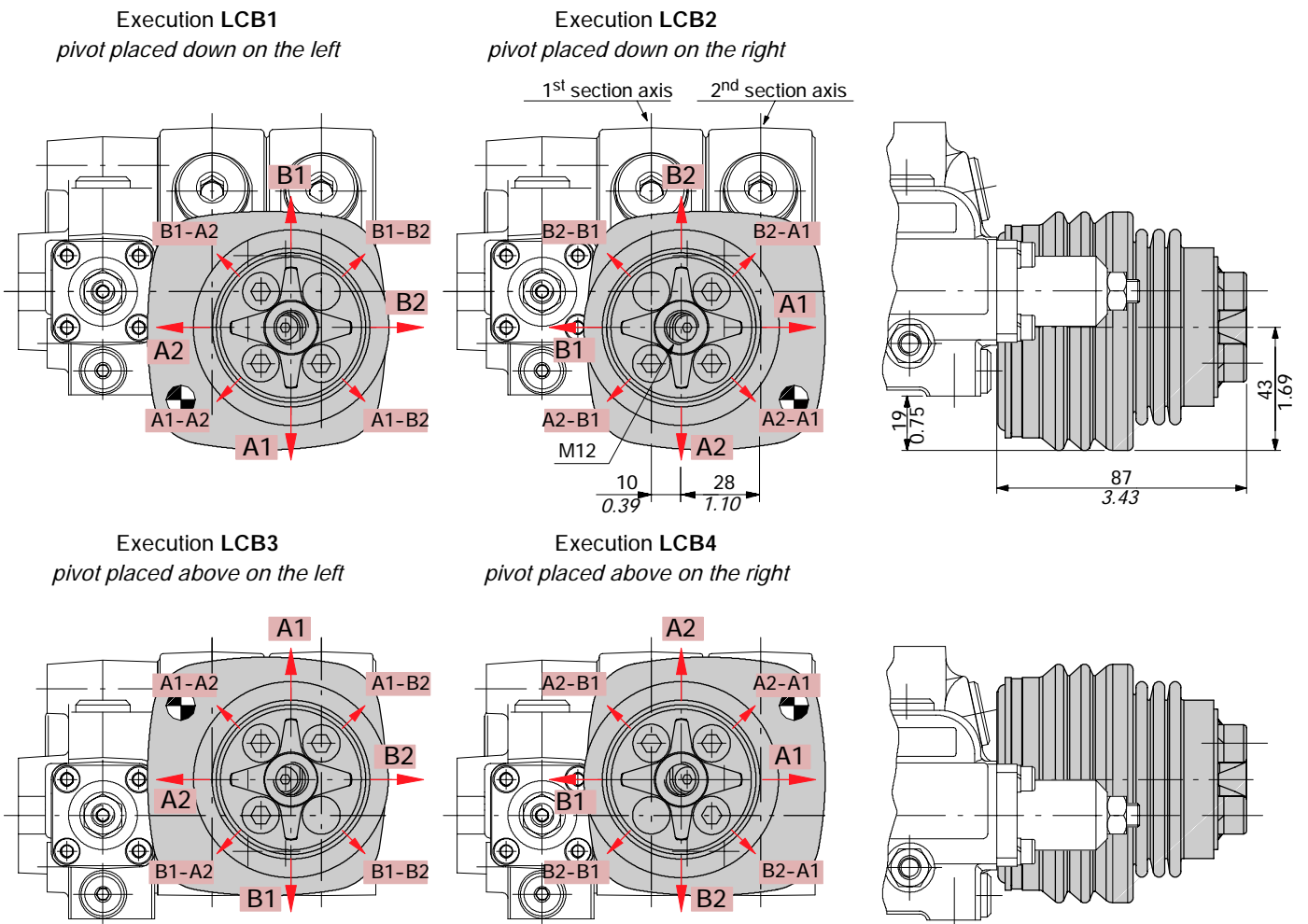


LCB joystick



NOTE - The handlever must be ordered separately (see page 81).

Dimensions and movement scheme



NOTE - Due to limited space in case of LCB3 or LCB4 configuration the assembly of ports service relief valves is not possible.

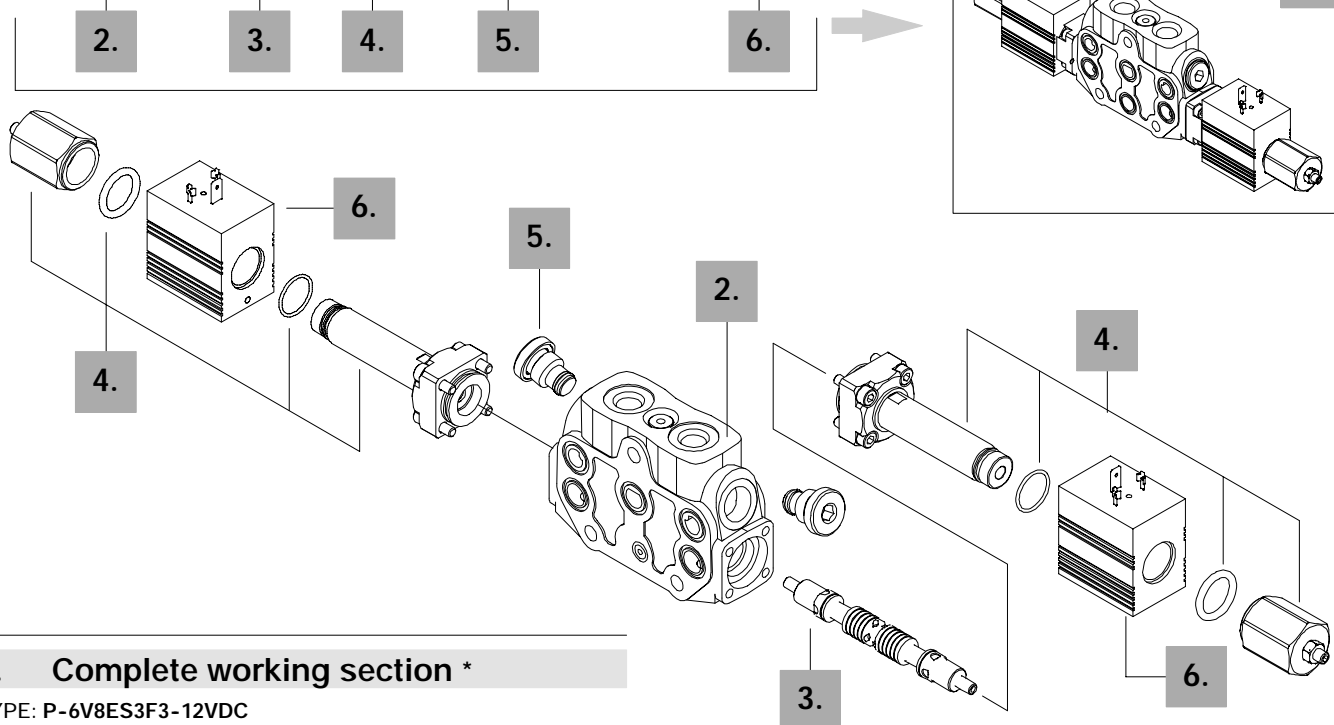
Complete controls

8ESF solenoid control

Solenoid direct control with spring return to neutral position; it needs special spools and standard working section body (body kit without seals on spool); fitted with screws for spool stroke adjusting in booth directions.

Description example:

EL DLS7 / P - 6V 8ES3F3 P1(G3 - 125) - 12VDC



1. Complete working section *

TYPE: P-6V8ES3F3-12VDC
 CODE: 61B131000
 DESCRIPTION: Parallel circuit, double acting spool, double acting ON/OFF solenoid control

2. Working section kit *

TYPE	CODE	DESCRIPTION
P/ES	5EL5073800	Parallel circuit

NOTE (*) - Codes are referred to **BSP** thread.

3. Spools

TYPE	CODICE			DESCRIPTION
	from 5 to 20 l/min	from 21 to 40 l/min	from 41 to 60 l/mi	
	V	Q	S	
6	3CU3110120	3CU3110140	3CU3110160	Double acting, 3 pos., with A and B closed in neutral pos.
7	3CU3125120	3CU3125140	3CU3125160	Double acting, 3 pos., with A and B to tank in neutral pos.

4. Control kit

TYPE	CODE	DESCRIPTION
8ES3F3	5CAN08021	Double acting with spring return to neutral position

5. Port valves

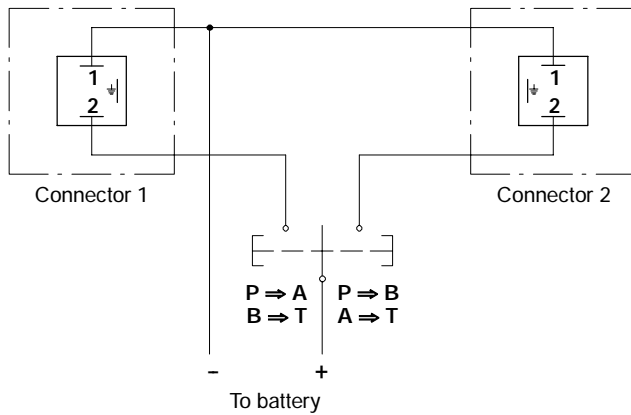
For codes please refer to page 81.

6. Coils

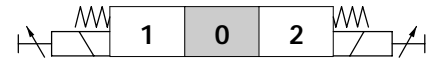
TYPE	CODE	DESCRIPTION
<u>With ISO4400 connector</u>		
10.5VDC	4SOL412011	Nominal voltage 10.5VDC
12VDC	4SOL412012	Nominal voltage 12VDC
24VDC	4SOL412024	Nominal voltage 24VDC
<u>With Deutsch series DT connector</u>		
4-10.5VDC	4SOL412111	Nominal voltage 10.5VDC
4-12VDC	4SOL412112	Nominal voltage 12VDC

8ESF solenoid control

Electric wiring example



8ES3F3 kit
double acting



Operating features

CONTROL

Internal leakage A(B)→T

($\Delta p = 100 \text{ bar} - 1450 \text{ psi} / T = 40^\circ\text{C}$) : $15 \text{ cm}^3/\text{min} - 0.91 \text{ in}^3/\text{min}$

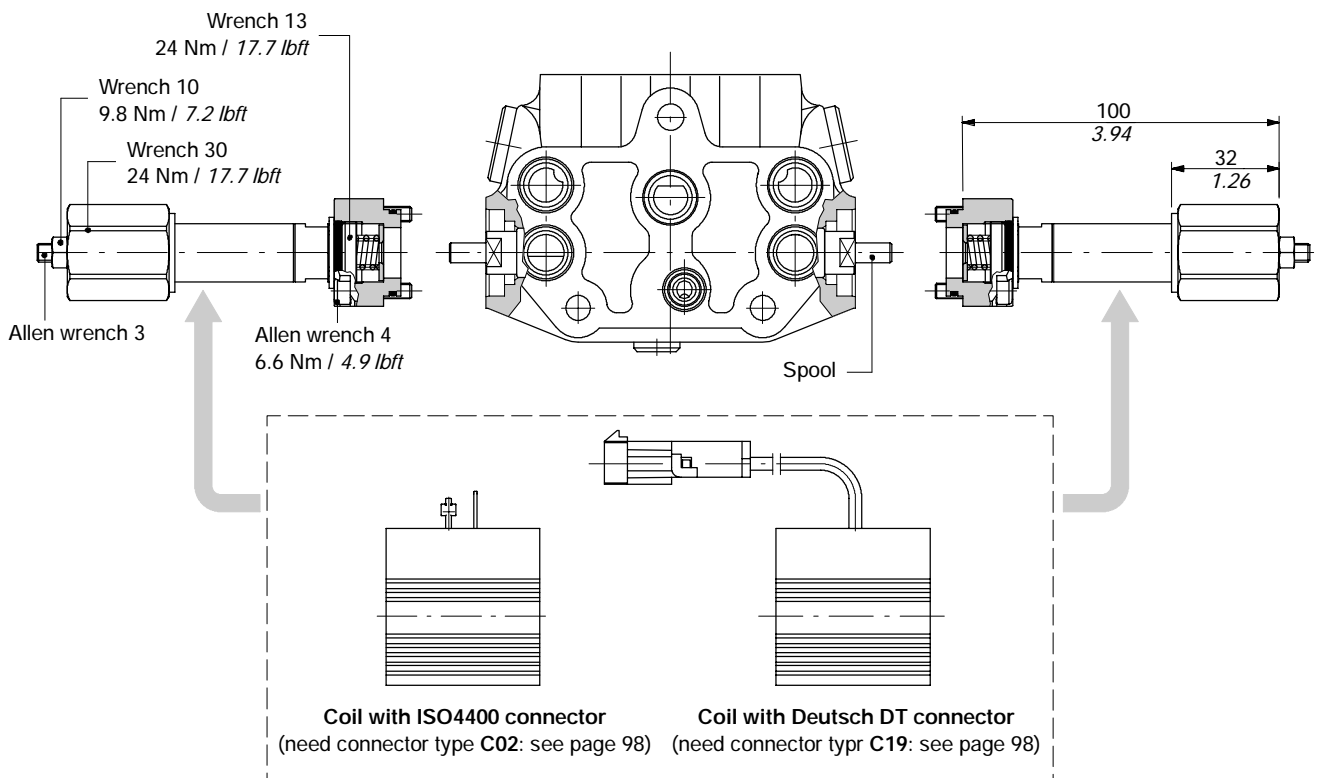
COIL

Nominal voltage tolerance : $\pm 10\%$

Power rating : 36 W

Coil insulation : class H

Duty cycle : 100%

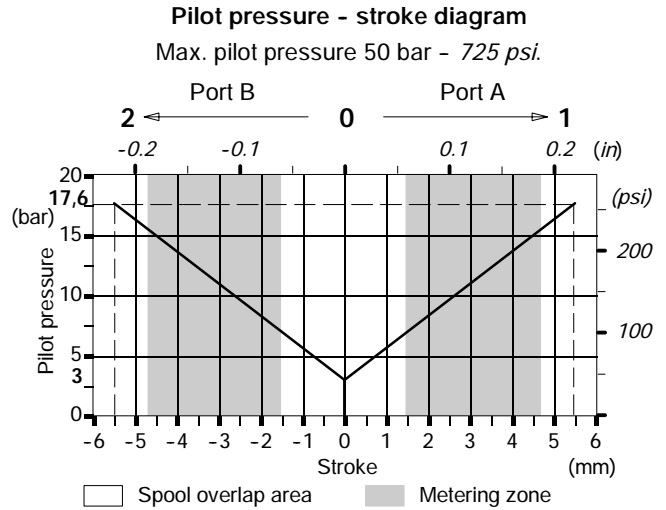
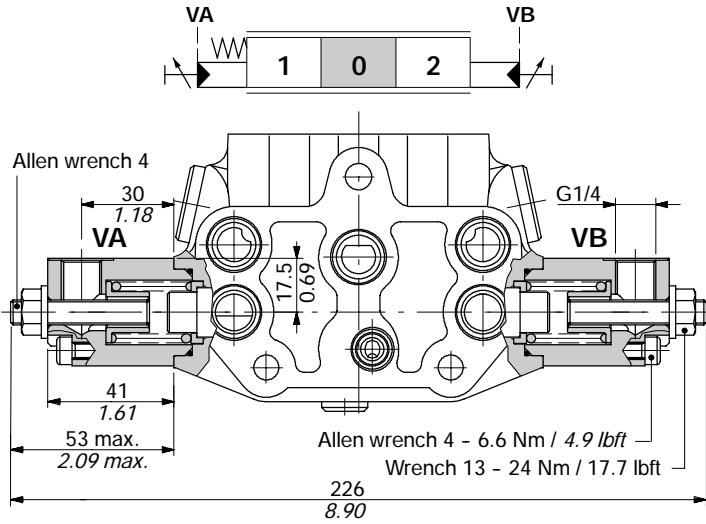


Complete controls

8IMF3 proportional hydraulic kit

With screws for spool stroke adjusting in both directions, code 5IDR207000.

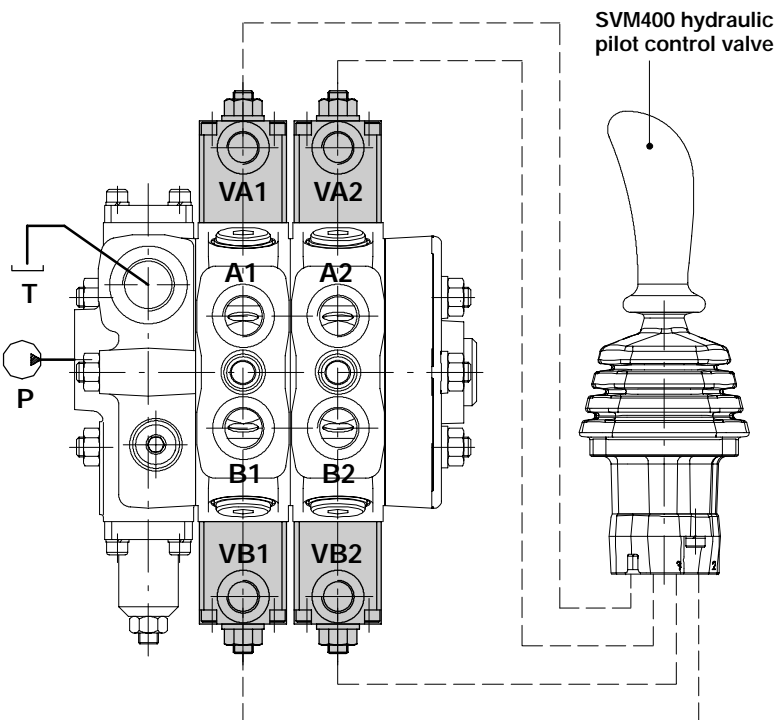
It can be used with special spools and body kit without seals and ring on spool (standard body) code: 5EL507300A.



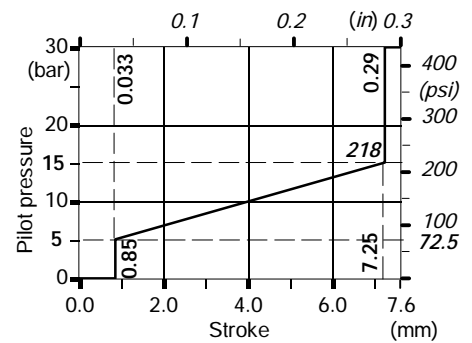
Available double acting spools

TYPE	CODES						DESCRIPTION
	10 l/min	20 l/min	30 l/min	40 l/min	50 l/min	60 l/min	
	D	V	T	Q	C	S	Nominal flow with 14 bar / 203 psi stand-by
6	3CU3310010	3CU3310020	3CU3310030	3CU3310040	3CU3310050	3CU3310060	3 pos., with A and B closed in neutral pos.
7	3CU3325010	3CU3325020	3CU3325030	3CU3325040	3CU3325050	3CU3325060	3 pos., with A and B to tank in neutral pos.

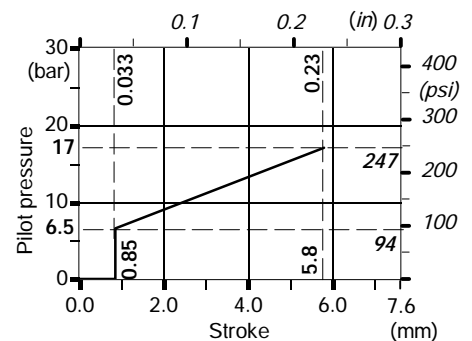
Connection example



8IMF3 control kit: curve 075 with step

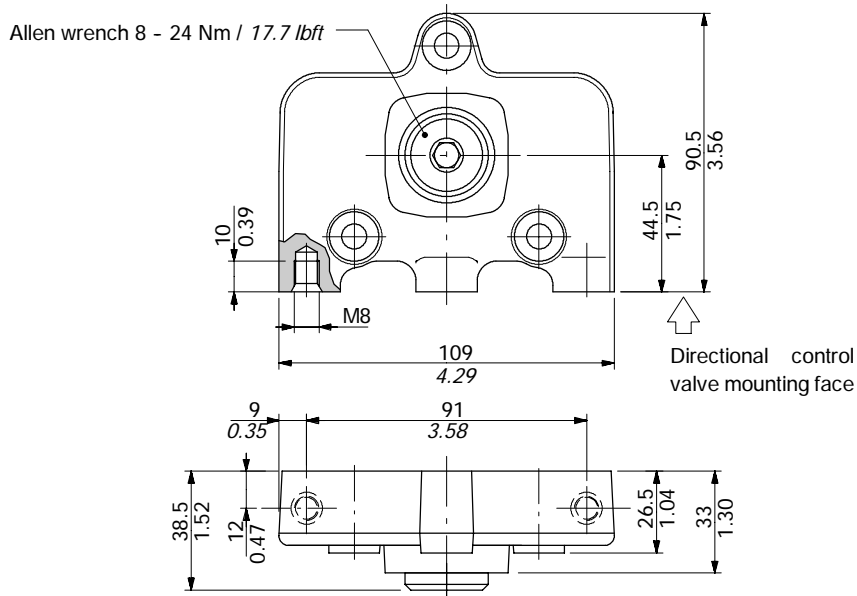


8IMF3 control kit: curve 178 without step



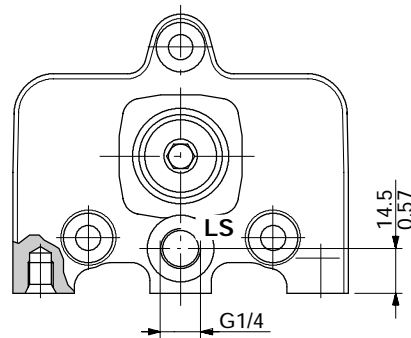
Dimensional data and hydraulic circuit

Type RF standard

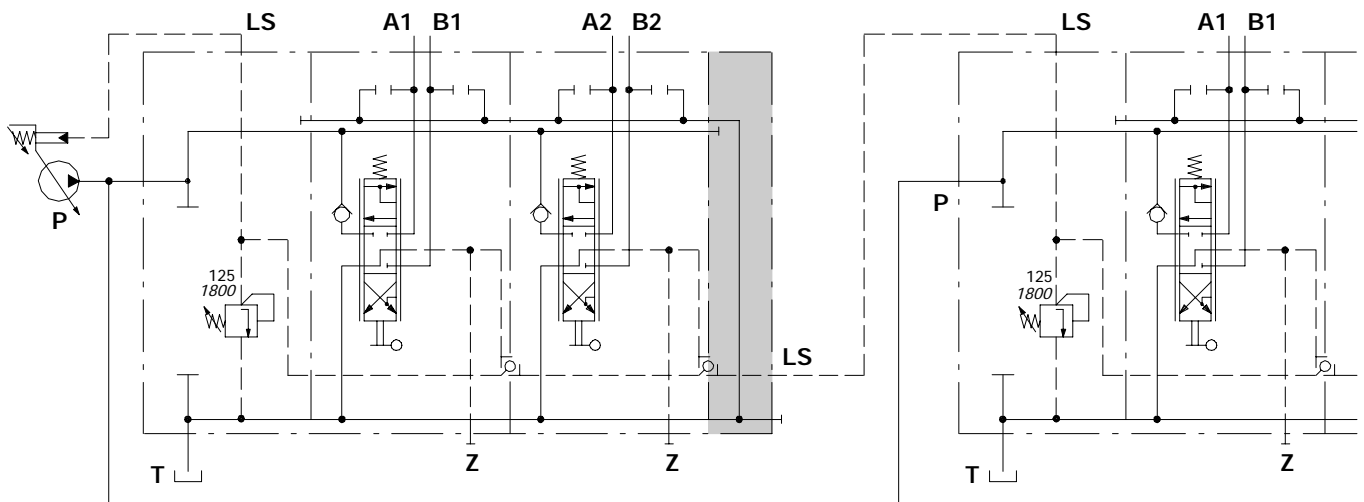


Type RH

With L.S. signal carry-over, for two DLS7 directional valve connection: dimensions are the same of RF return cover.



Hydraulic circuit example



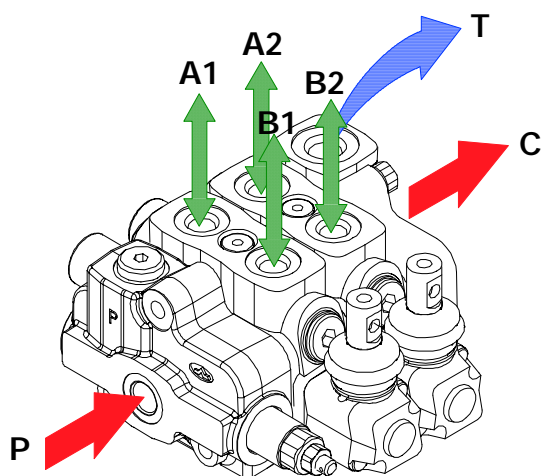
Installation and maintenance

The SD6 and DLS7 valves are assembled and tested as per the technical specification of this catalogue.

Before the final installation on your equipment, follow the below recommendations:

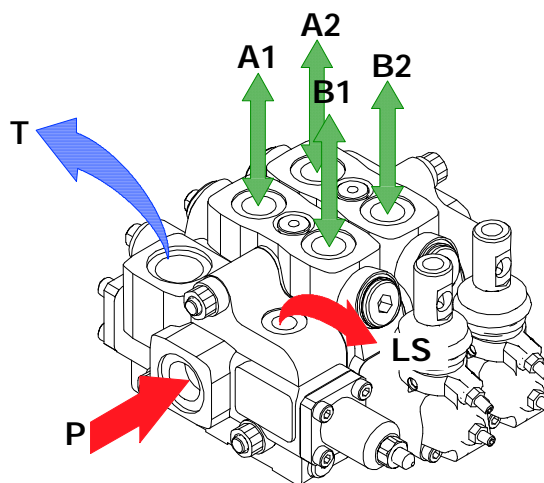
- the valve can be assembled in any position; in order to prevent working section deformation and spool sticking mount the product on a flat surface;
- in order to prevent the possibility of water entering the lever box and spool control kit, do not use high pressure wash down directly on the valve;
- prior to painting, ensure plastic port plugs are tightly in place.

SD6



Configuration with carry-over

DLS7



Configuration with AN inlet cover

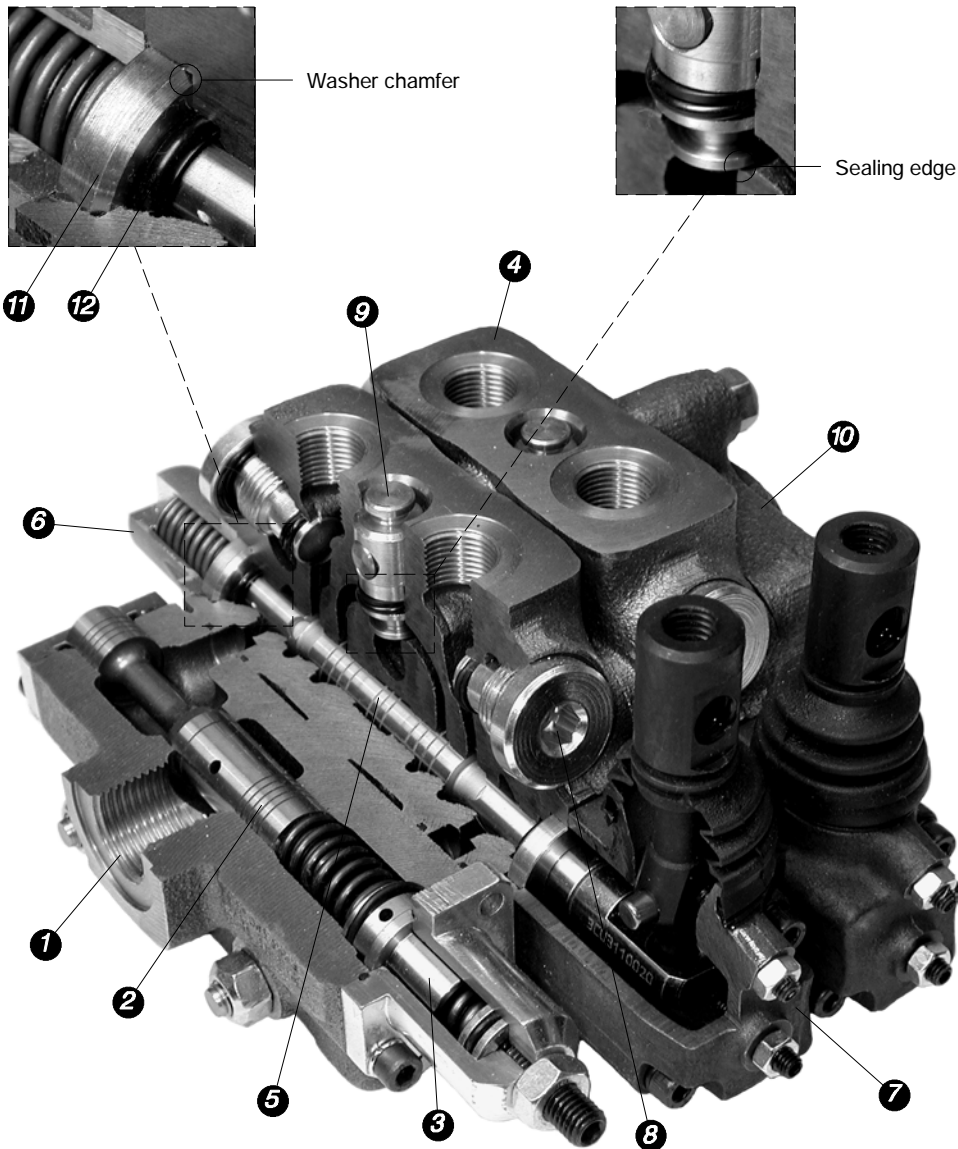
Fitting tightening torque - Nm / lbf

THREAD TYPE	SD6			DLS7		
	port P	ports A, B	ports C, T	ports P, T	ports A, B	LS signal
BSP	G 3/8	G 3/8	G 1/2	G 1/2	G 3/8	G 1/4
With O-Ring seal	35 / 25.8	35 / 25.8	50 / 36.9	50 / 36.9	35 / 25.8	20 / 15.7
With copper washer	40 / 29.5	40 / 29.5	60 / 44.3	60 / 44.3	40 / 29.5	25 / 18.4
With steel and rubber washer	30 / 22.1	30 / 22.1	60 / 44.3	60 / 44.3	30 / 22.1	16 / 11.8
UN-UNF	3/4-16 (SAE 8)	9/16-18 (SAE 6)	3/4-16 (SAE 8)	3/4-16 (SAE 8)	9/16-18 (SAE 6)	9/16-18 (SAE 6)
With O-Ring seal	50 / 36.9	30 / 22.1	50 / 36.9	50 / 36.9	30 / 22.1	30 / 22.1
METRIC	M18x1.5	M18x1.5	M22x1.5			
With O-Ring seal	35 / 25.8	35 / 25.8	50 / 36.9			
With copper washer	40 / 29.5	40 / 29.5	60 / 44			
With steel and rubber washer	40 / 29.5	40 / 29.5	60 / 44.3			

NOTE - These torque are recommended. Assembly tightening torque depends on many factors, including lubrication, coating and surface finish. The manufacturer shall be consulted.

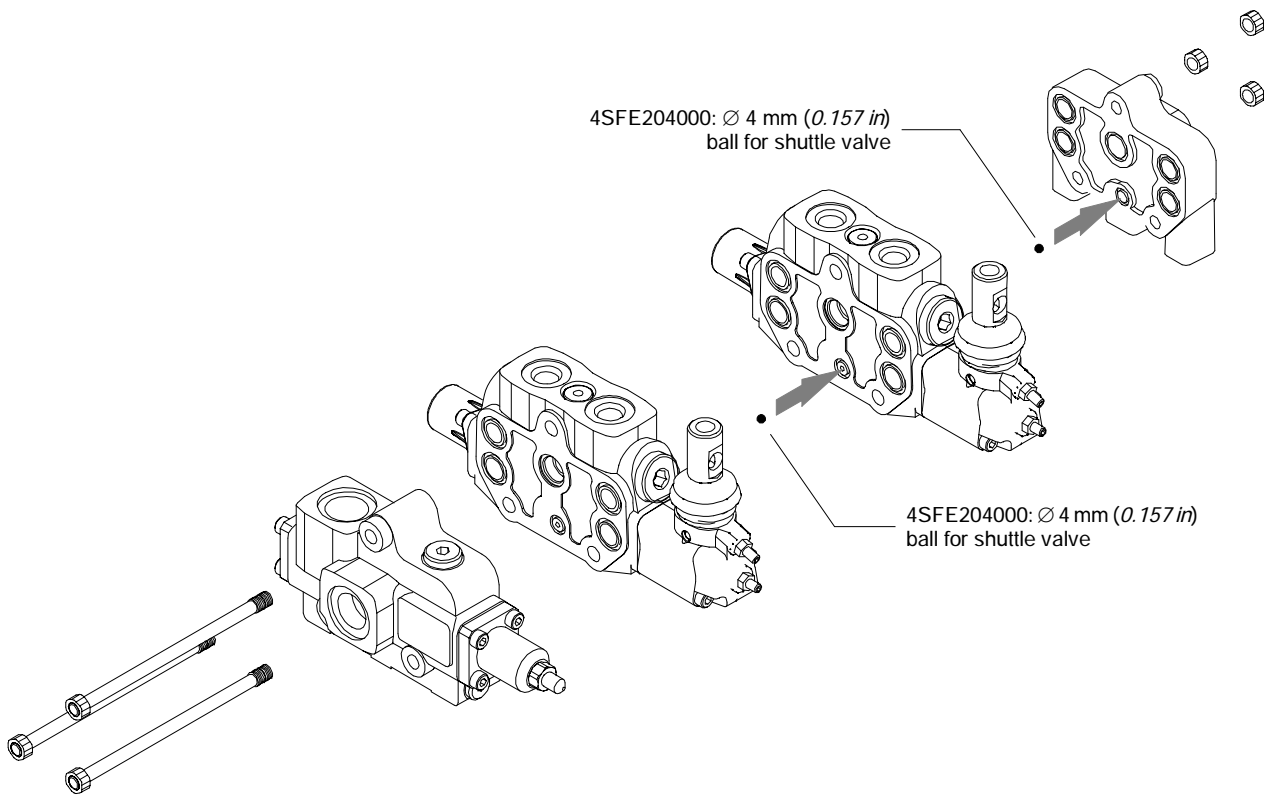
Installation and maintenance

It's shown a section of DLS7/2/AM(G3-120)/6V8MCLFG/6V8MCLFG/RF valve.



Callout	
1)	Inlet and outlet cover
2)	Compensator kit
3)	L.S. overpressure relief valve
4)	Working section
5)	Spool: <i>normally spools are interchangeable, verify the smoothness during the assembly</i>
6)	"A" side spool positioner
7)	Lever pivot box
8)	Port relief valve prearrangement
9)	Load check valve
10)	Return cover
11)	Holding O-Ring washer
12)	15.88x2.62 O-ring seal code: 4GUA115926

NOTE - All moving parts inside cap, lever box and mechanical joystick are lubricated with synthetic base grease grade NLGI2



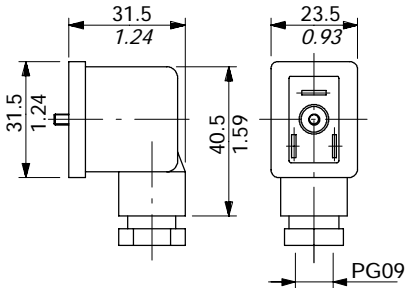
Malfunction	Cause	Remedy
External leakage pivot box lever or control kit side.	Worn spool seal due to mechanical actuation or high back pressure.	Locate the leakage and replace the seal. Check back pressure level.
Excessive internal leakage on A and B ports.	Increase clearance between spools and body due to high wear.	Replace the working section and check the oil contamination level
Dropping load during transition while raising.	High leakage on the load check valve.	Remove the load check valve and clean the seat, verifying it's not dented.
	L.S. overpressure valve blocked open.	Remove and clean or replace the valve.
	Low pump pressure and flow.	Check the pump and circuit.
Inability to build pressure on A and B ports out of stand-by value.	Flow compensator blocked open (only for AM configuration)	Remove and clean or replace the compensator.
	Shuttle valve on working section blocked	Disassembling directional valve and clean the seat, verifying it's not dented

Accessories

Connectors

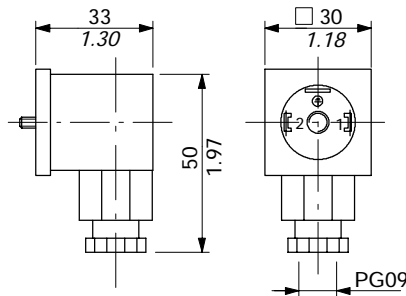
Type C01 code: 2X1001020

2P+T, according to EN175301-803



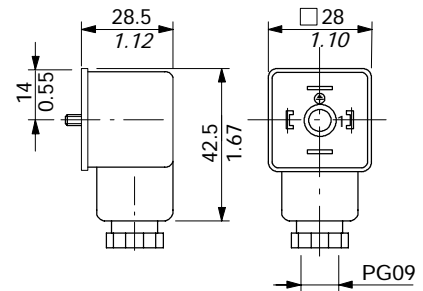
Type C02 code: 2X1001010

2P+T according to ISO4400 / EN175301-803



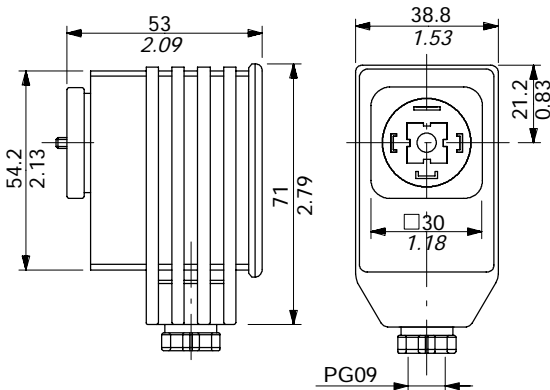
Type C03 code: 2X1001030

3P+T according to ISO4400 / EN175301-803



Type C05 code: 2X1001080

3P+T according to ISO4400 / EN175301-803.
With bridge rectifier, to use with VAC supply.

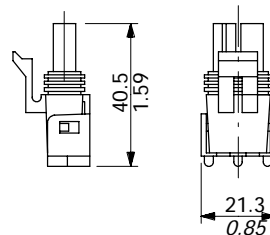


Type C07 code: 5CON001

2 Poles, type Packard male case with female contact

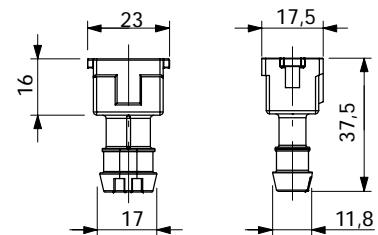
Type C40 code: 5CON140047

2 Poles, type Packard male case with male contact



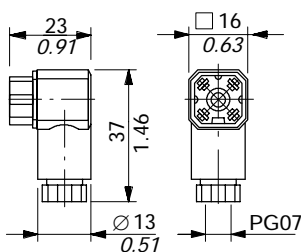
Tipò C08 codice: 5CON003

2P tipo AMP "Junior-Power-Timer" femmina con terminale femmina



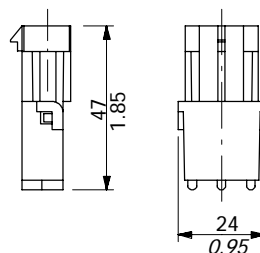
Type C11 code: 5CON006

4P according to VDE0660-0110



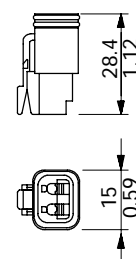
Type C17 code: 5CON005

2 Poles, type Packard female case with male contact



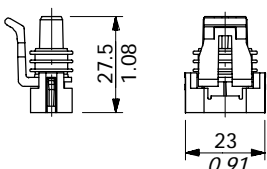
Type C19 code: 5CON130030

2 Poles, type Deutsch DT06-2S male case with female contact



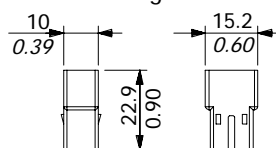
Type C20 code: 5CON017

2 pole, type "PACKARD Metri-Pack" male housing with female ends



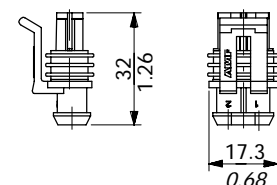
Type C21 code: 5CON018

2 poles, type "AMP Fastin-Faston" female housing with male ends



Type C24 code: 5CON0031

2 poles, type "AMP Superseal" male housing with female ends

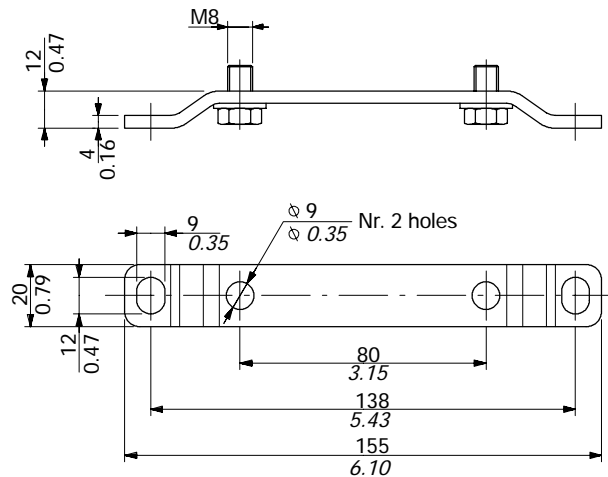
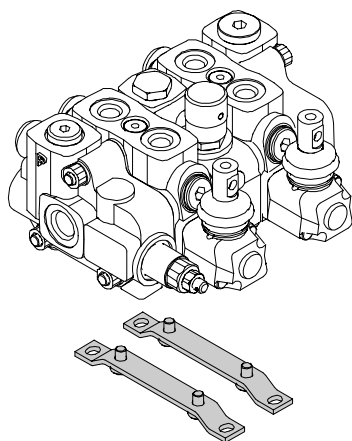


Connectors

Type	Poles	Nominal voltage	Nominal current	Permitted conductor section range	Permitted cable diameter range	Weather protection
C01	2P + T	250 VAC / 300 VDC	10 A	max.1.5 mm ² / max.0.0023 in ²	6 to 8 mm / 0.24 to 0.31 in	IP65
C02	2P + T	250 VAC / 300 VDC	10 A	max.1.5 mm ² / max.0.0023 in ²	6 to 8 mm / 0.24 to 0.31 in	IP65
C03	3P + T	250 VAC / 300 VDC	10 A	max.1.5 mm ² / max.0.0023 in ²	6 to 8 mm / 0.24 to 0.31 in	IP65
C05	3P + T	230 VAC	1.5 A	max.1.5 mm ² / max.0.0023 in ²	6 to 8 mm / 0.24 to 0.31 in	IP65
C06	3P + T	250 VAC / 300 VDC	6 A	max.0.75 mm ² / max.0.00116 in ²	3.5 to 6 mm / 0.14 to 0.24 in	IP65
C07	2P	/	20 A	1 to 2 mm ² / 0.00155 to 0.0031 in ²	2.8 to 3.5 mm / 0.11 to 0.14 in	IP67
C08	2P	250 VAC	12 A	0.5 to 1 mm ² / 0.00077 to 0.00155 in ²	1.3 to 1.6 mm / 0.05 to 0.063 in	IP65
C11	4P	50 VAC / 120 VDC	6 A	0.14 to 0.5 mm ² / 0.00022 to 0.00077 in ²	4 to 7.5 mm / 0.16 to 0.29 in	IP65
C17	2P	/	20 A	1 to 2 mm ² / 0.00155 to 0.0031 in ²	1.3 to 1.4 mm / 0.05 to 0.067 in	IP67
C19	2P	/	13 A	1 to 1.2 mm ² / 0.00155 to 0.00186 in ²	2.2 to 3.5 mm / 0.088 to 0.14 in	IP67
C20	2P	/	14 A	0.8 to 1 mm ² / 0.00124 to 0.00155 in ²	1.3 to 1.7 mm / 0.05 to 0.067 in	/
C21	2P	/	7A	0.3 to 0.8 mm ² / 0.00046 to 0.0012 in ²	2.2 to 3 mm / 0.087 to 0.118 in	/
C24	2P	/	14 A	0.3 to 5 mm ² / 0.00046 to 0.00077 in ²	1.4 to 1.7 mm / 0.055 to 0.067 in	IP67
C40	2P	/	20 A	1 to 2 mm ² / 0.00155 to 0.0031 in ²	2.8 to 3.5 mm / 0.11 to 0.14 in	IP67

Fixing brackets

They are available for SD6 and DLS7 directional valves and they are zinc plated steel, complete with mounting screws.



Note

SD6 and DLS7 valves can be supplied with one coat of black paint (CVN configuration).

Description example: SD6/2/AC(YG3-175)/18L/18L/RC-<CVN>

Description example: DLS7/2/AM(G3-120)/6V8MCLFG/6V8MCLFG/RF-<CVN>

NOTE - For different colour consult Sales Dept.



WALVOIL S.P.A.

42100 REGGIO EMILIA • ITALY • VIA ADIGE, 13/D
TEL. +39.0522.932411 • FAX +39.0522.300984
E-MAIL: INFO@WALVOIL.COM • HTTP: //WWW.WALVOIL.COM

SALES DEPARTMENT

TEL. +39.0522.932555 • FAX +39.0522.932455

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