Working conditions

This catalogue shows technical specifications and diagrams measured with mineral oil of 46mm²/s *(46 cSt)* viscosity at 40°C *(104°F)* temperature.

Nominal flow rating		90 l/min	*24 US gpm*
Max. pressure		315 bar	*4600 psi*
Back pressure (max.)	on outlet T port	25 bar	*360 psi*
Internal leakage A(B)⇒T (standard)	Δp = 100 bar	3 cm³/min	*0.18 in³/min*
Fluid		Mineral base oil	
Fluid temperature	with NBR (BUNA-N) seals	from -20°C to 80°C	*from -4°F to 176°F*
	with FPM (VITON) seals	from -20°C to 100°C	*from -4°F to 212°F*
Viscosity	operating range	from 15 to 75 mm²/s	*from 15 to 75 cSt*
	min.	12 mm²s	*12 cSt*
	max.	400 mm²s	*400 cSt*
Max. contamination level		-/19/16 - ISO 4406	*NAS 1638 - class 10*
Environmental temperature for working conditions		from -40°C to 60°C	*from -40°F to 140°F*
Tie rod tightening torque (wrench 13)		30 Nm	*22 lbft*

NOTE - For different conditions please contact our Sales Dept.

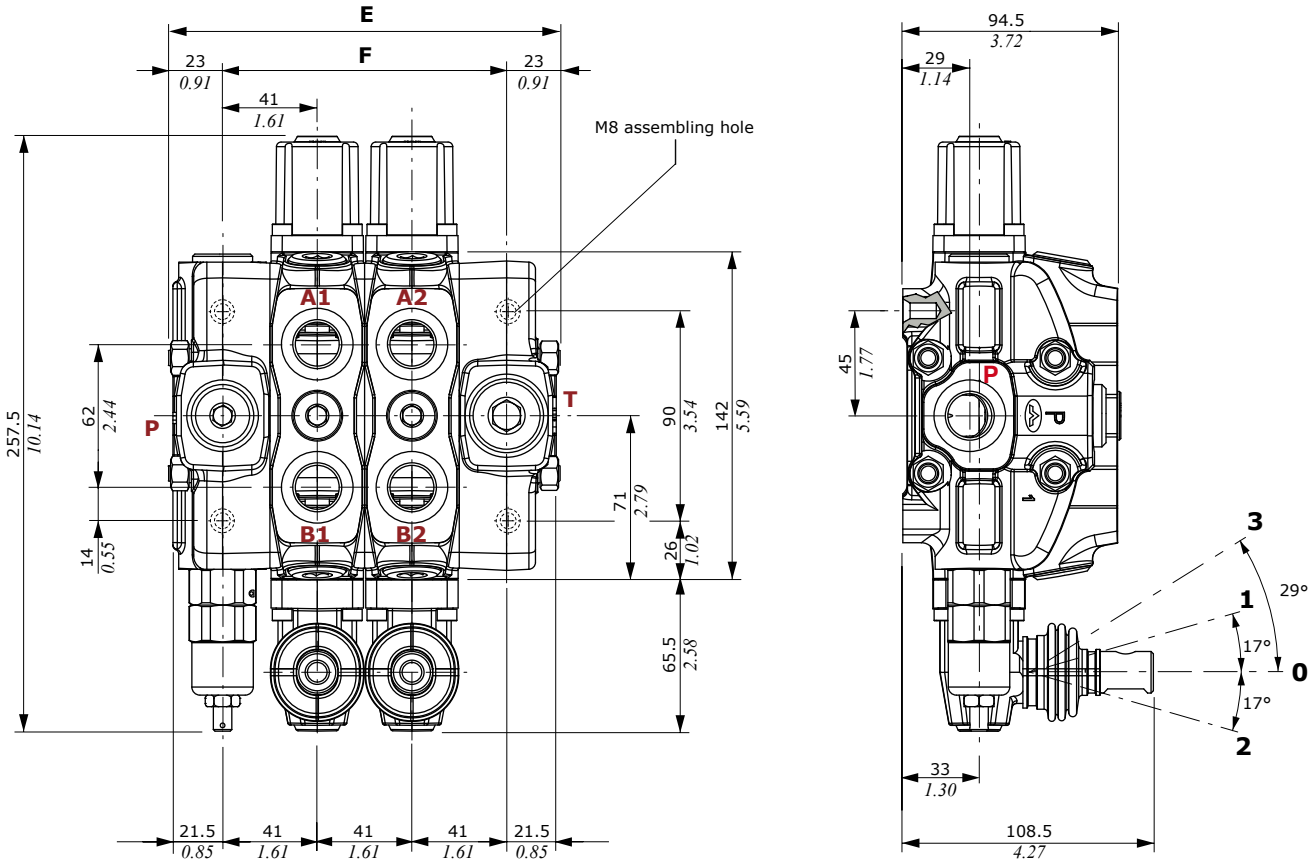
Standard threads

REFERENCE STANDARD					
		BSP	**UN-UNF**	**METRIC**	**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	1179-1	11926-1	9974-1	
	SAE		J1926-1	J2244	J476a
	DIN	3852-2, X or Y shape		3852-1, X or Y shape	

PORT THREADING			
MAIN PORTS	**BSP**	**UN-UNF**	**METRIC**
P inlet	G 1/2	7/8-14 (SAE 10)	M18x1.5
A and **B** ports	G 1/2	3/4-16 (SAE 8)	M18x1.5
T outlet and **C** carry-over	G 3/4	7/8-14 (SAE 10)	M22x1.5
PILOT PORTS			
Hydraulic	G 1/4	9/16-18 (SAE 6)	G 1/4
Pneumatic	NPTF 1/8-27	NPTF 1/8-27	NPTF 1/8-27

NOTES - AC/SN and AD/VP inlet sections and mid return manifold sections have different threads. See page 8 and page 44.

Dimensional data



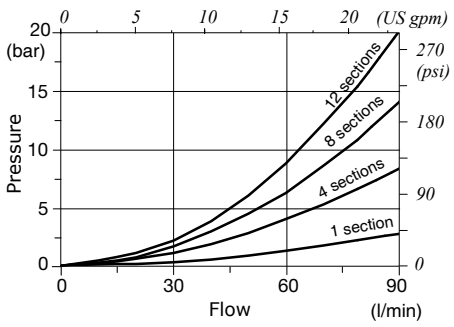
NOTE - Drawings and dimensions are referred to **BSP** thread configuration.

TYPE	E		F		Weight	
	mm	*in*	mm	*in*	Kg	*lb*
SD8/1	128	*5.04*	82	*3.23*	7.2	*15.9*
SD8/2	169	*6.65*	123	*4.84*	10.5	*23.1*
SD8/3	210	*8.27*	164	*6.46*	13.8	*30.4*
SD8/4	251	*9.88*	205	*8.07*	17.1	*37.7*
SD8/5	292	*11.5*	246	*9.69*	20.1	*44.3*
SD8/6	333	*13.11*	287	*11.3*	23.4	*51.6*
SD8/7	374	*14.72*	328	*12.91*	26.7	*58.9*

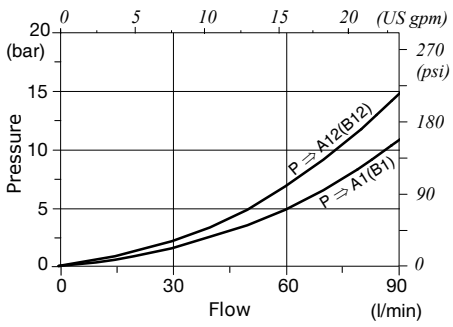
TYPE	E		F		Weight	
	mm	*in*	mm	*in*	Kg	*lb*
SD8/8	415	*16.34*	369	*14.53*	30	*66.1*
SD8/9	456	*17.95*	410	*16.14*	33.3	*73.4*
SD8/10	497	*19.57*	451	*17.74*	36.6	*80.7*
SD8/11	538	*21.18*	492	*19.37*	39.9	*88*
SD8/12	579	*22.79*	533	*20.98*	43.2	*95.3*
SD8/13	620	*24.41*	574	*22.60*	46.5	*102.5*
SD8/14	661	*26.02*	615	*24.21*	49.8	*109.8*

Performance data

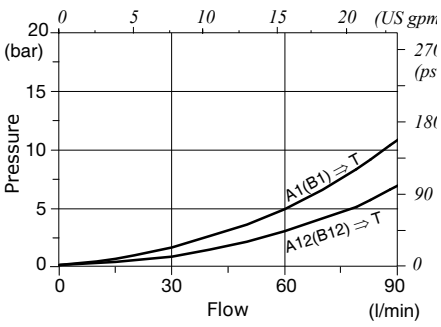
P ⇒ T pressure drop



P ⇒ A(B) pressure drop



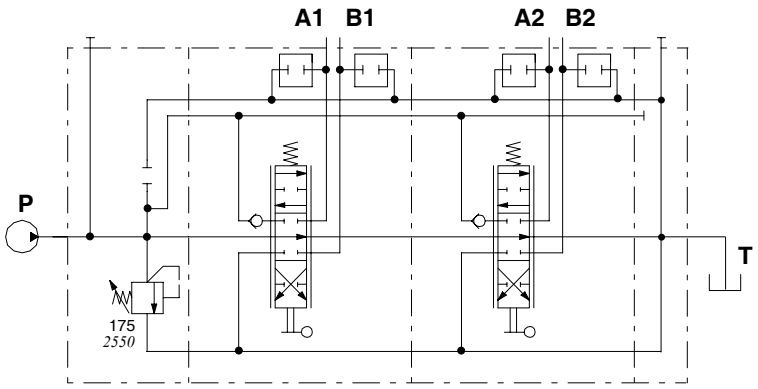
A(B) ⇒ T pressure drop



Hydraulic circuit

Parallel circuit

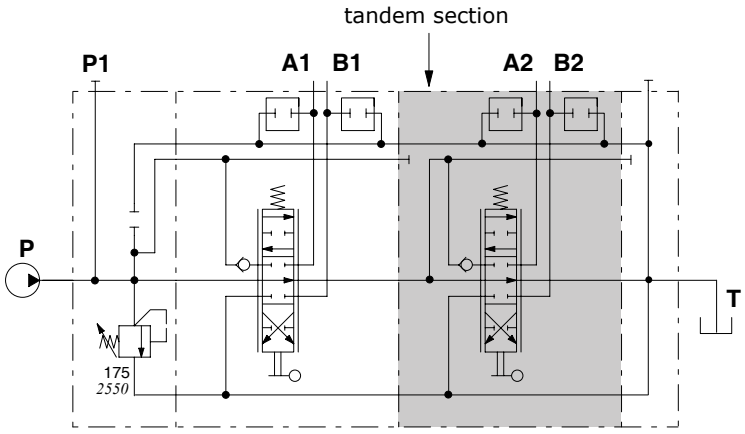
Standard configuration with open centre and side inlet and outlet.



Description example:
SD8/2/AC(YG3–175)/18L/18L/RC

Series-parallel (tandem) circuit

A special working section kit is required.
Tandem section is fed by the free flow pressure line; it is excluded when an upstream section is operated.



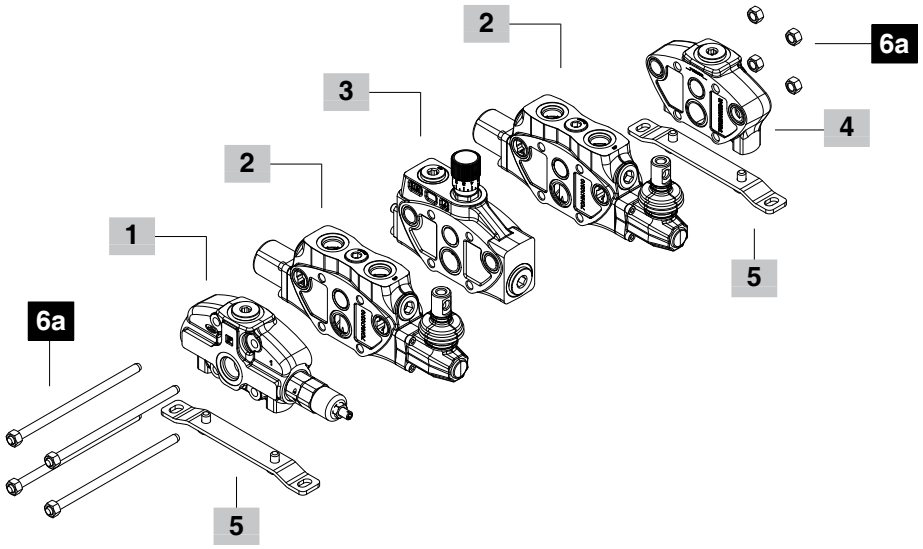
Description example:
SDS8/2/AC(YG3–175)/18L/**SP**-18L/RC

Complete section ordering codes

Standard configuration with side inlet and outlet

SD8 / 2 / AC(YG3-175) / 18L / DFG / 18L / RC - .... - STAF

Nr. of working sections: 2 | 1: AC(YG3-175) | 2: 18L | 3: DFG | 4: 18L | 10: RC | 5: STAF



1 Inlet section * page 12

TYPE	CODE	DESCRIPTION
AC(YG3-175)	613201007	Side inlet with direct pressure relief valve
AC(XG-120)	613201019	Side inlet with pilot operated pressure relief valve
AC(SV)	613201020	Side inlet with valve blanking plug
AC(YG3-120)SN	613201150	Side inlet with flow regulator, G3/4 P port
AD/VP(LSZ-230)ELN-12VDC	613201035	Upper inlet with priority valve, G3/4 P and T ports

For special configuration please see page 12

2 Working section * page 22

TYPE	CODE	DESCRIPTION
Q-18L	613151001	Parallel circuit, double acting spool with spring return, lever control
P-18L	613101001	As previous one, arranged for port valves ("P" omitted in description)
P-1S8L	613111001	As previous one, with series circuit spool ("P" omitted in description)
SP-18L	613121002	As previous one, with series-parallel (tandem) circuit
P-1M8IM	613101022	Parallel circuit, arranged for port valves, double acting spool, proportional hydraulic control

3 Intermediate section page 44

TYPE	CODE	DESCRIPTION
DFG	613410011	Pressure compensated flow divider section
EI1(YG2-125)	613421010*	With direct overpressure relief valve
EI2(YG3-175)	613421020*	With direct overpressure relief valve and auxiliary inlet

4 Outlet section * page 47

TYPE	CODE	DESCRIPTION
RC	613300110	With side outlet
RD	613300112	With upper outlet
RE	613300111	With upper outlet and side carry-over sleeve
RK	613300120	With upper outlet, closed centre
RV	613300122	With back pressure valve **the combination with electro-hydraulic control is required**

5 Fixing bracket page 64

TYPE	CODE	DESCRIPTION
STAF	5STA125190	Brackets with fixing screws

6a Assembling kit

CODE	DESCRIPTION
5TIR108128	Tie rod kit for 1 working section directional valve
5TIR108169	Tie rod kit for 2 working section directional valve
5TIR108210	Tie rod kit for 3 working section directional valve
5TIR108251	Tie rod kit for 4 working section directional valve
5TIR108292	Tie rod kit for 5 working section directional valve
5TIR108333	Tie rod kit for 6 working section directional valve
5TIR108374	Tie rod kit for 7 working section directional valve
5TIR108415	Tie rod kit for 8 working section directional valve
5TIR108456	Tie rod kit for 9 working section directional valve
5TIR108497	Tie rod kit for 10 working section directional valve
5TIR108538	Tie rod kit for 11 working section directional valve
5TIR108579	Tie rod kit for 12 working section directional valve
5TIR108620	Tie rod kit for 13 working section directional valve
5TIR108661	Tie rod kit for 14 working section directional valve
Assembling kit for VP inlet section	
5TIR108137	Tie rod kit for 2 working section directional valve
5TIR108179	Tie rod kit for 3 working section directional valve
5TIR108219	Tie rod kit for 4 working section directional valve

For different number of working section please contact our Sales Dept.

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

Part ordering codes

1 Inlet cover body * page 13

TYPE	CODE	DESCRIPTION
AC	3FIA108301	Standard body
AC/SN	3FIA108375	Arranged for flow regulator
AC/R2	3FIA108312	Arranged for rotary commutation

2 Inlet relief valve options page 17

Standard setting is referred to 10 l/min *(2.6 US gpm)*.

TYPE	CODE	DESCRIPTION
SV	XTAP526340	Relief valve blanking plug
Type X pilot operated pressure relief valve		
(XGA-200)	X006211350	Fixed setting 200 bar *(2900 psi)*
Type Y pilot operated pressure relief valve (standard)		
(YG2-125)	3XCAR110212	Range 100-160 bar *(1450-2300 psi)* standard setting 125 bar *(1800 psi)*
(YG3-175)	3XCAR110213	Range 125-250 bar *(1800-3600 psi)* standard setting 175 bar *(2500)*
(YG4-220)	3XCAR110214	Range 200-315 bar *(2900-4600 psi)* standard setting 220 bar *(3200 psi)*

3 Inlet valve options page 20

TYPE	CODE	DESCRIPTION
-	XTAP526340	Relief valve blanking plug (omitted in description)
F	3XCAR410200	Inlet anti-cavitation valve
L	XCAR410311	Hydraulic operated unloader valve
Solenoid operated unloader valve		
ELTW	0EFW0062000	Push and twist type with detent emergency
ELNW	0EFW0062001	Without emergency
ELPW	0EFW0062002	Push-button emergency

4 Parts *

TYPE	CODE	DESCRIPTION
-	3XTAP727180	G1/2 plug
-	3XTAP732200	G3/4 plug for S inlet cover
MAN1/8-MAN1/2	5MAN625220	G1/8 pressure gauge arrangement
MAN1/4-MAN1/2	5MAN627240	G1/4 pressure gauge arrangement

5 Flow control valve page 21

TYPE	CODE	DESCRIPTION
N	1636040203	Flow control valve with handwheel **for S type inlet cover**

6 Commutator * page 14

TYPE	CODE	DESCRIPTION
R2	5COM406202	Rotary commutator **for arranged inlet cover**

7 Section threading

Specify only if it is different from BSP standard (see page 4)

8 Coils page 61

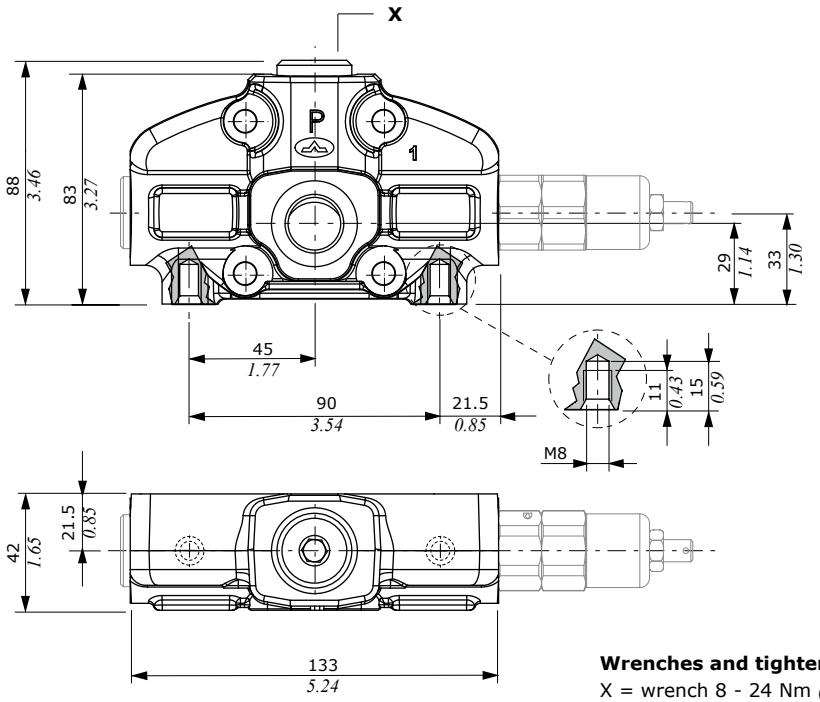
TYPE	CODE	DESCRIPTION
12VDC	4SLE001200A	**BER** type 12 VDC, ISO4400 connector

For complete available coil list please see page 61

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

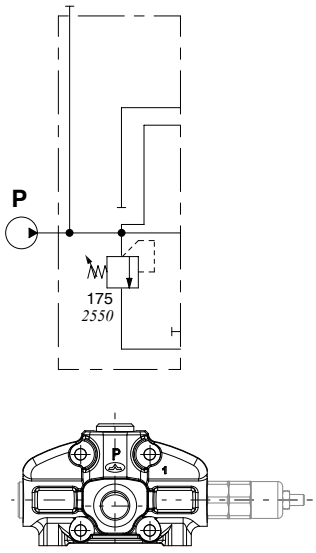
Dimensional data and hydraulic circuit

Standard inlet cover configuration



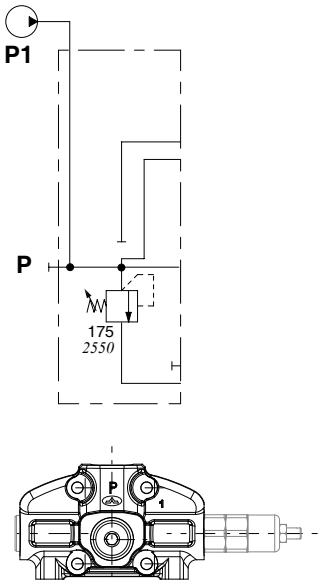
Wrenches and tightening torques
X = wrench 8 - 24 Nm *(17.7 lbft)*
NOTE - for wrenches and tightening torques about valves please see dedicated pages.

For left inlet directional valve, side port



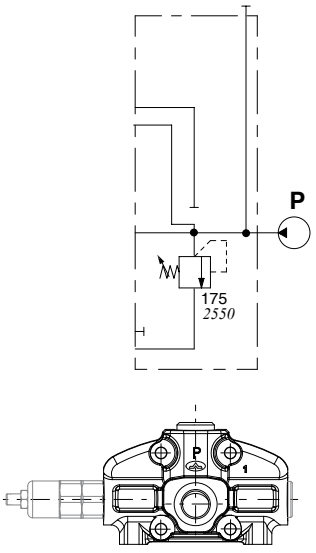
Description example:
AC(YG3–175)

For left inlet directional valve, upper port



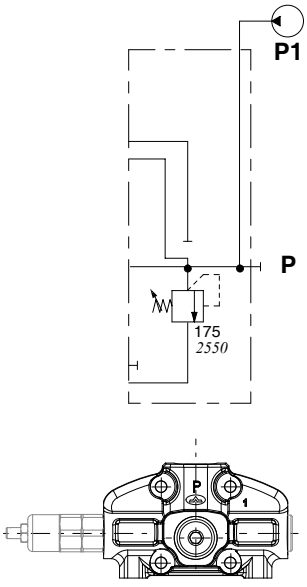
Description example:
AD(YG3–175)

For right inlet directional valve, side port



Description example:
BC(YG3–175)

For right inlet directional valve, upper port

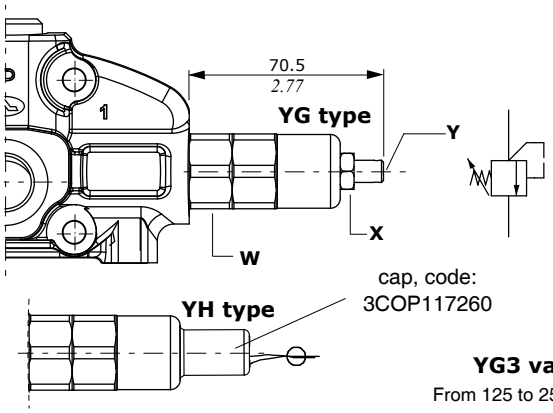


Description example:
BD(YG3–175)

Inlet relief valve options

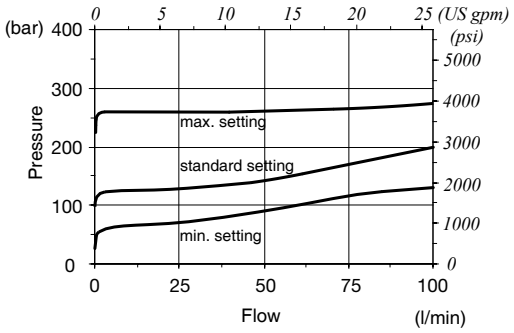
Y type direct overpressure relief valve

Configuration type:



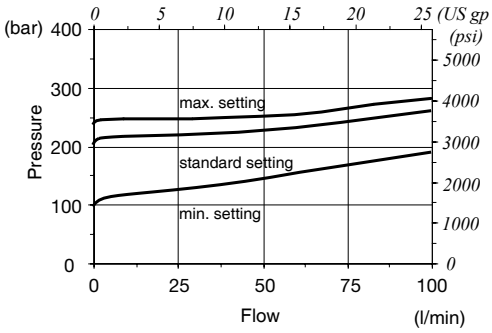
YG2 valve setting range

From 100 to 160 bar *(from 1450 to 2300 psi)*



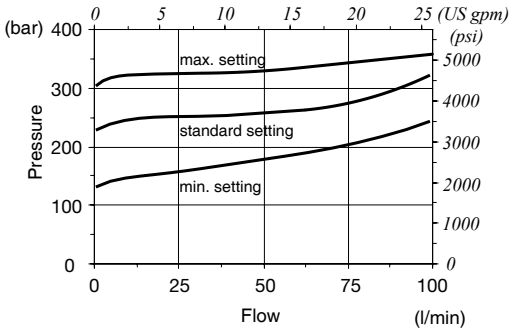
YG3 valve setting range

From 125 to 250 bar *(from 1800 to 3600 psi)*



YG4 valve setting range

From 200 to 315 bar *(from 2900 to 4600 psi)*

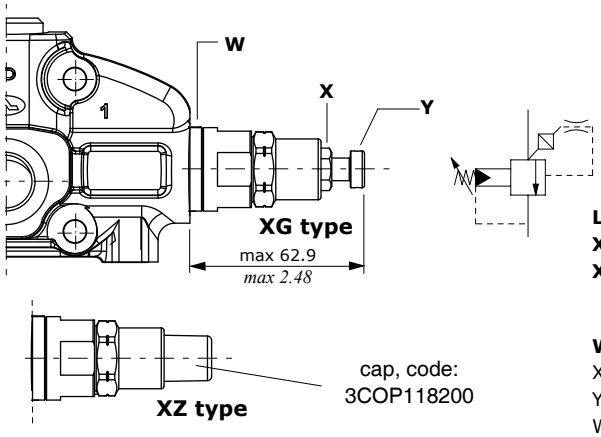


Legenda
YG: adjustable with screw
YH: valve set and locked

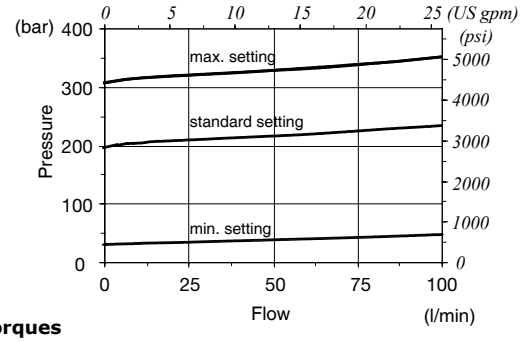
Wrenches and tightening torques
X = wrench 13 - 24 Nm *(17.7 lbft)*
Y = allen wrench 4
W = wrench 27 - 42 Nm *(31 lbft)*

X type pilot operated pressure relief valve

Configuration type:



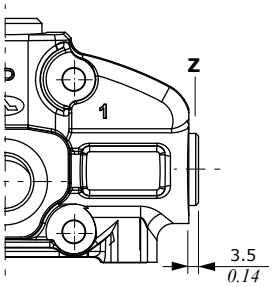
XGA valve setting range



Legenda
XG: adjustable with screw
XZ: valve set and locked with tamper proof cap

Wrenches and tightening torques
X = wrench 13 - 24 Nm *(17.7 lbft)*
Y = allen wrench 6
W = wrench 27 - 42 Nm *(31 lbft)*

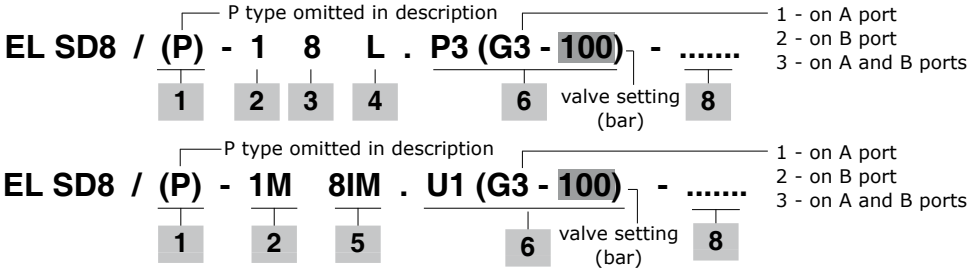
SV relief valve blanking plug

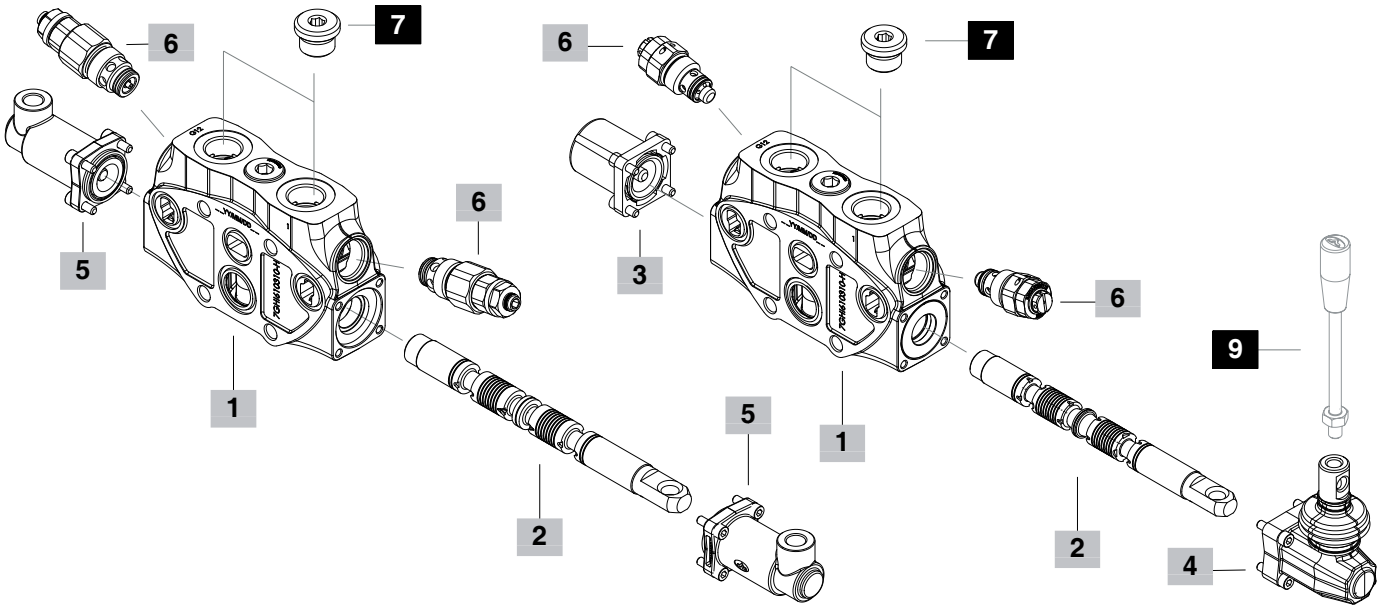




Wrenches and tightening torques
Z = allen wrench 10 - 24 Nm *(17.7 lbft)*

Part ordering codes





1 Working section kit * page 24

TYPE	CODE	DESCRIPTION
For mechanical control		
P	5EL1083000	For parallel circuit (omitted in description)
SP	5EL3083010	For series-parallel (tandem) circuit
Q	5EL1083010	For parallel circuit without arrangement for port valves
SPQ	5EL3083020	For series-parallel (tandem) circuit without arrangement for port valves
P5	5EL108320A	As P type: **for 5B spool with floating circuit** (P omitted in description)
P5(14A)	5EL1083201	As P type: **for 5(14A) spool with floating circuit** (P omitted in description)
For proportional hydraulic circuit		
P/IM	5EL108300A	For parallel circuit (omitted in description)
SP/IM	5EL308300A	For series-parallel (tandem) circuit
Q/IM	5EL1083010A	For parallel circuit without arrangement for port valves

2 Spools page 25

TYPE	CODE	DESCRIPTION
1	3CU2310100	Double acting, 3 positions, with A and B closed in neutral position
1CEX	3CU2310230	As type 1, with fine metering
1CSG	3CU2310250	As type 1, with metering suggested for flow up to 70 l/min *(18.5 US gpm)*
1M	3CU2310130	As type 1 with metering suggested for flow rates above to 70 l/min *(18.5 US gpm)*
1S	3CU2311102	As type 1, for series circuit
1A	3CU2321100	Double acting, 3 positions, with A open to tank in neutral position

2 Spools (continue) page 25

TYPE	CODE	DESCRIPTION
1B	3CU2322100	Double acting, 3 positions, with B open to tank in neutral position
2	3CU2325100	Double acting, with A and B open to tank in neutral position
2CEX	3CU2325230	As type 2, with fine metering
2CSG	3CU2325255	As type 2, with metering suggested for flow up to 70 l/min *(18.5 US gpm)*
2H	3CU2325225	Double acting, with A and B partially open to tank in neutral position
2S	3CU2327100	As type 2, for series circuit
3	3CU2331110	Single acting on A, 3 positions, B plugged, **G1/2 plug is required**
4	3CU2335100	Single acting on B, 3 positions, A plugged, **G1/2 plug is required**
4M	3CU2335110	As type 4 with metering suggested for flow rates above to 70 l/min *(18.5 US gpm)*, **G1/2 plug is required**
Spools for dedicated controls		
5B	3CU2343100	Double acting, 4 positions, float in position 3 with spool out, **13C type positioner kit is required**
5(14A)	3CU2345101	Double acting, 4 positions, float in position 3 with spool in, **14A type positioner kit is required**
8F	3CU2361100	Double acting, 3 positions, regenerative in position 1, **8CR type positioner kit is required**

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

Part ordering codes

3 "A" side spool positioners page 27

TYPE	CODE	DESCRIPTION
7FT	5V07208100	With friction and neutral position notch
8	5V08108010	With spring return in neutral position
8NA	5V08108001	As type 8, with steel cap
8WP	5V08108011	As type 8, with water proof type
8MA	5V08108240	As type 8, type A lighter spring
8MC	5V08208000	As type 8, type C heavier spring
8MD	5V08408000	As type 8, type D heavier spring
8D	5V08108202	As type 8, M8 female threaded pin extension for dual control
8D1	5V08108210	As type 8, pin with Ø 8 mm *(0.31 in)* radial hole
8D2	5V08108220	As type 8, M8 male threaded pin extension for dual control
8TL	5V08108310	As type 8 with pin control with flexible cable
8TLWP	5V08108320	As type 8, water proof type
8ED3	5V08108360	ON-OFF 12VDC electro-hydraulic kit
	5V08108361	ON-OFF 24VDC electro-hydraulic kit
8EPG3	5V08108737	ON-OFF 12VDC electro-pneumatic kit
	5V08108742	ON-OFF 24VDC electro-pneumatic kit
8IJ1	5V08108871(*)	With external hydraulic pilot to return from position 1 to neutral
8IJ2	5V08108861(*)	With external hydraulic pilot to return from position 2 to neutral
8IJ3	5V08108851(*)	With external hydraulic pilot to return from positions 1 and 2 to neutral
8IZ	5V08108800(*)	Proportional hydraulic control
8PG	5V08108708	ON-OFF pneumatic kit
8MG3	5V08108150	As type 8 with microswitch in position 1 and 2 (for other configuration please see page 29)
8MG39	5V08108101	As type 8 with double microswitch in position 1 and 2 (for other configuration please see page 30)
8SPSL-4.5(A)-0.5(B)		
	5V08108101	As type 8 with analog sensor for spool position
8SPSD		
	5V08108---	As type 8 with digital sensor for spool position
9B	5V09108040	With detent in position 1 and spring return in neutral position
9BWP	5V09108041	As 9B type, waterproof type
10B	5V10108040	With detent in position 2 and spring return in neutral position
11	5V11108000	With detent in position 1, neutral and 2
11B	5V11108040	With detent in position 1, 2 and spring return in neutral position
11WP	5V11108001	Waterproof type
15	5V15108000	2 positions, detent in pos. 1 and neutral
16	5V16108010	2 positions, detent in pos. 2 and neutral
19	5V19108000	2 positions, with spring return in neutral position from position 1
20	5V19108000	2 positions, with spring return in neutral position from position 2
Controls for dedicated spools		
8CR	5V08108022	3 positions with spring return in neutral and reduced spool stroke: **for 8F spool**
13C	5V13208020	4 positions with spring return in neutral position and detent in pos.3: **for 5B spool**
14A	5V14108000	Detent in positions 1, 2 and 3, kick-out in position 0: **for 5(14A) spool**

4 "B" side options page 38

TYPE	CODE	DESCRIPTION
L	5LEV108000	Standard lever box
LSG	5LEV108000S	Lever box, waterproof type
LF3	5LEV108710	Lever box with spool stroke limiter
LB	5LEV308000	Steel lever kit
SLP	5COP108000	Without lever box, with dust-proof plate
SLCY	5COP208060	Without lever box, with endcap
LCB	5CLO208000	Joystick lever for 2 section operation
LCE	5CLO208050	As previous one with bronze support
TQ	5TEL108110	Flexible cable connection

5 Complete controls * page 41

TYPE	CODE	DESCRIPTION
8IM	5IDR208300	Proportional hydraulic control
8IMF3	5IDR208220	Proportional hydraulic control with stroke limiter

6 Port valves page 42

Standard setting is referred to 10 l/min *(2.6 US gpm)*

TYPE	CODE	DESCRIPTION
-	3XTAP524290	Valve blanking plug (omitted in description)
C	XCAR408110	Anti-cavitation valve
DST	3XTAP624180	Valve blanking plug with connection to tank
Anti-shock valve		
P(G2)	3XCAR208112	Range 55-140 bar *(790-2050 psi)* standard setting 60 bar *(870 psi)*
P(G3)	3XCAR208113	Range 63-220 bar *(900-3200 psi)* standard setting 100 bar *(1450 psi)*
P(G4)	3XCAR208114	Range 180-350 bar *(2600-5100 psi)* standard setting 200 bar *(2900 psi)*
Anti-shock and anti-cavitation valve		
U(G2)	XCAR308112	Range 63-125 bar *(900-1800 psi)* standard setting 63 bar *(900 psi)*
U(G3)	XCAR308115	Range 100-250 bar *(1450-3600 psi)* standard setting 100 bar *(1450 psi)*
U(G4)	XCAR308114	Range 200-315 bar *(2900-4600 psi)* standard setting 200 bar *(2900 psi)*
Piot operated anti-shock and anti-cavitation valve		
UXW(G-200)	X005421200	Range 30-435 bar *(435-4600 psi)* standard setting 200 bar *(2900 psi)*

7 Port plugs*

CODE	DESCRIPTION
3XTAP727180	G1/2 plug for single acting spool

8 Section threading

Specify only if it is different from BSP standard (see page 4)

9 Optional handlevers

TYPE	CODE	DESCRIPTION
AL01/M10x200	170012020	For L, lever box, 200 mm *(7.87 in)*
AL08/M12x200	170013120	For LCB joystick, 200 mm *(7.87 in)*

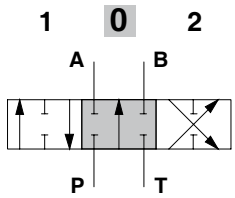
For handlevers features please see dedicated catalogue cod. D1WWEH01E

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

Spools

1 (1CEX/1CSG/1M) type spool

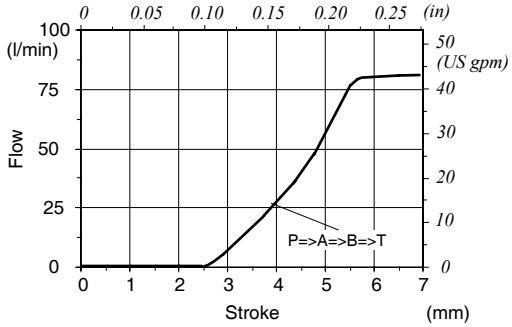
Double acting, 3 positions, with A and B closed in neutral position



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

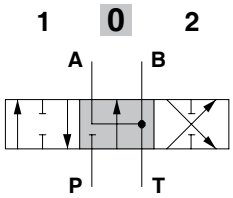
1 type spool metering

Q_{in} = 80 l/min *(42 US gpm)*
$P_{(on\ ports)}$ = 100 bar *(1450 psi)*



2 (2CEX/2CSG) type spool

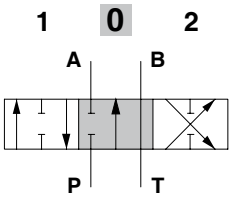
Double acting, 3 positions, with A and B open to tank in neutral position



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

1B type spool

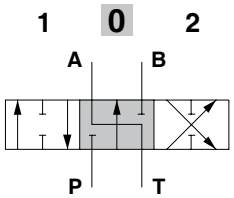
Double acting, 3 positions, with B open to tank in neutral position



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

1A type spool

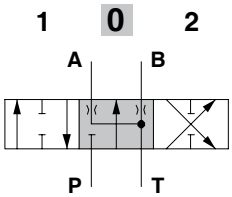
Double acting, 3 positions, with A open to tank in neutral position



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

2H type spool

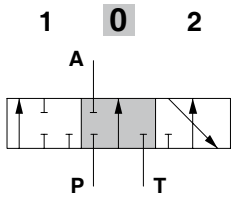
Double acting, 3 positions, with A and B partially open to tank in neutral position



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

3 type spool

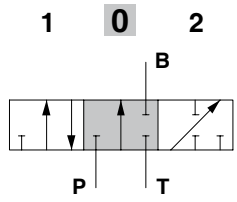
Single acting on A, 3 positions, B plugged, G1/2 plug is required



Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

4 (4M) type spool

Single acting on B, 3 positions, A plugged, G1/2 plug is required

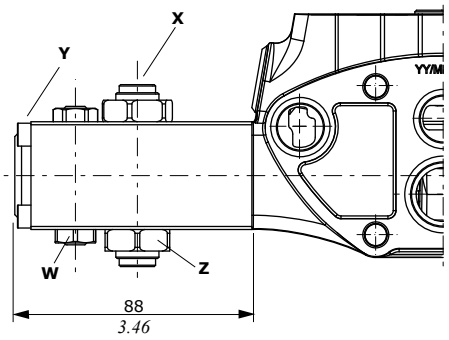


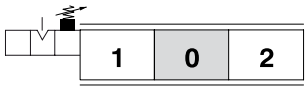
Spool stroke
position 1: + 7 mm *(+ 0.28 in)*
position 2: - 7 mm *(- 0.28 in)*

"A" side spool positioners

7FT type with friction

With neutral position notch.



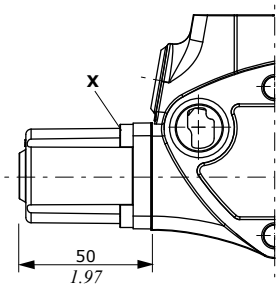


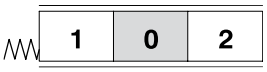
Wrenches and tightening torques
X = allen wrench 4
Y = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
W = wrench 15 - 9.8 Nm *(7.2 lbft)*
Z = wrench 24 - Manual tightening

With spring return

8 - 8MA - 8MC - 8MD - 8WP type

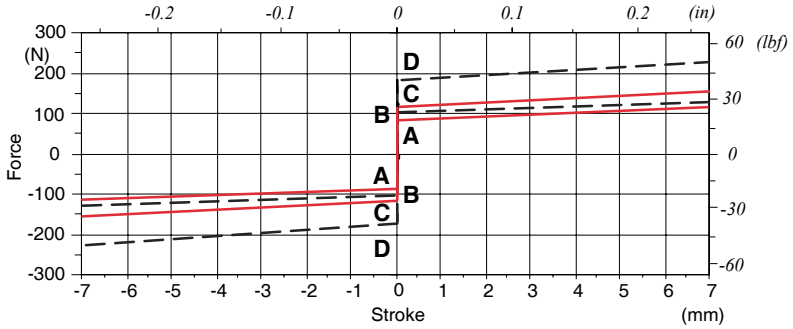
It is supplied with **B** type standard spring (see force-stroke diagram) and it is available with A type (**8MA**) lighter spring or with C-D type (**8MC-8MD**) heavier spring. **8WP** waterproof type is available.





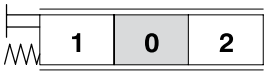
Wrenches and tightening torques
X = allen wrench 4
6.6 Nm *(4.9 lbft)*

Force-stroke diagram

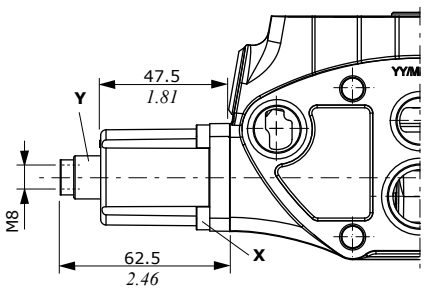


8D type

With M8 female threaded pin extension for dual control.

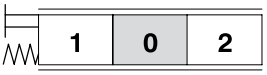


Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
Y = wrench 13 - 24 Nm *(17.7 lbft)*

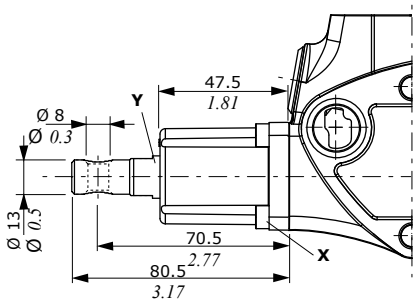


8D1 type

With Ø 8 hollow pin extension.

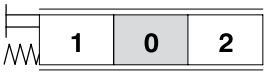


Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
Y = wrench 14 - 24 Nm *(17.7 lbft)*

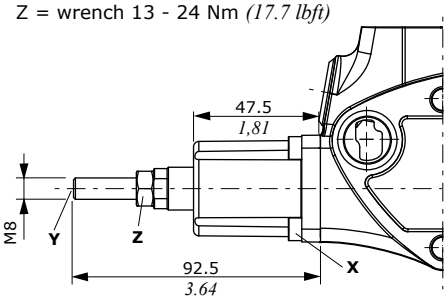


8D2 type

With M8 male threaded pin extension for dual control.



Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
Y = allen wrench 4 - 24 Nm *(17.7 lbft)*
Z = wrench 13 - 24 Nm *(17.7 lbft)*

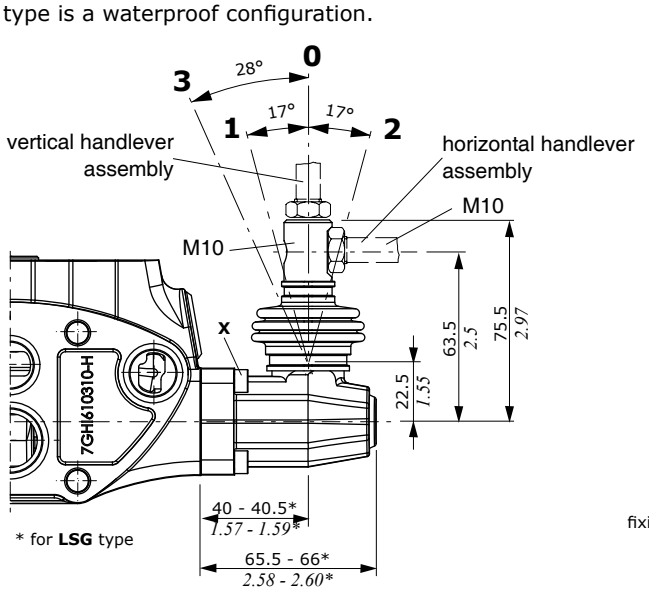


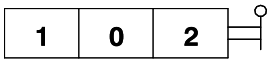
"B" side option

Lever control

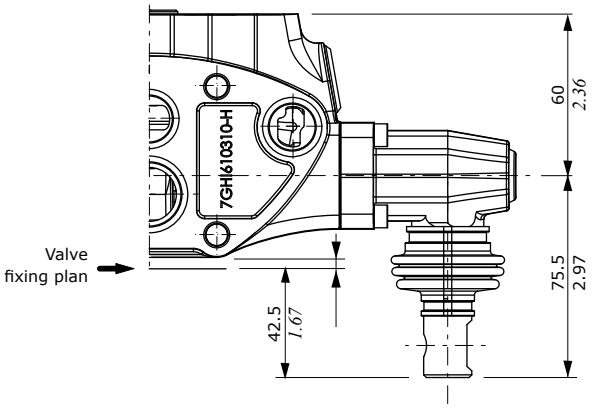
L - LSG types

Aluminium lever pivot box with protective rubber bellow; it can be rotated 180° (configuration **L180**).
LSG type is a waterproof configuration.





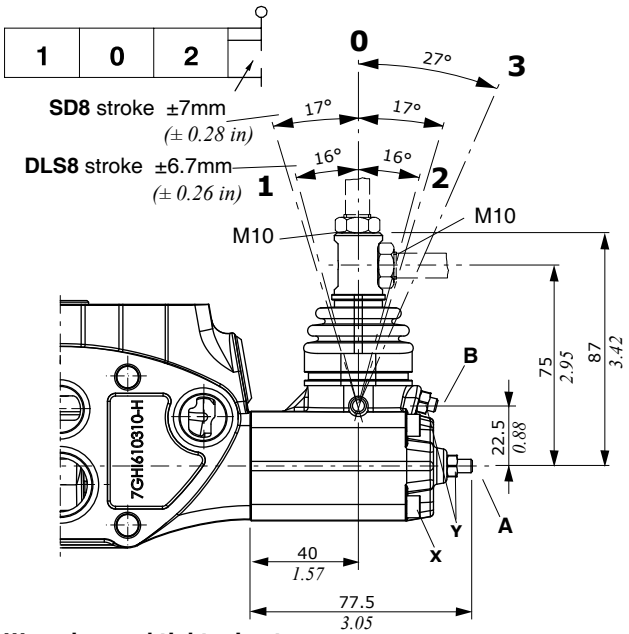
L180 - LSG180 configurations



Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*

LF3 type

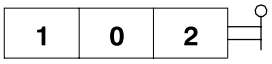
Zama lever pivot box with protective rubber bellow; it is equipped with two screws for spool stroke adjusting. It can be rotated 180° (**LF3180** configuration).



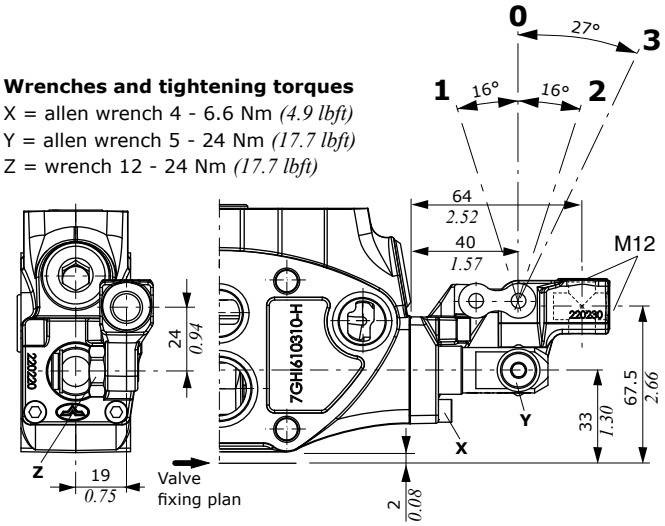
Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
Y = allen wrench 8 - 6.6 Nm *(4.9 lbft)*
A - Screw for stroke limiter on position 1: wrench 2.5
B - Screw for stroke limiter on position 2: wrench 2.5

LB type

Steel and cast iron construction.
The drawing represents **LB4** configuration with pivot placed above on the right.



Wrenches and tightening torques
X = allen wrench 4 - 6.6 Nm *(4.9 lbft)*
Y = allen wrench 5 - 24 Nm *(17.7 lbft)*
Z = wrench 12 - 24 Nm *(17.7 lbft)*



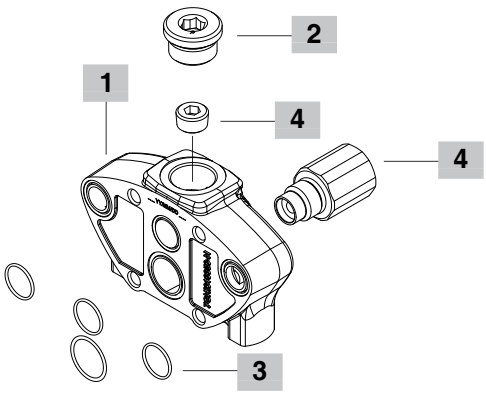
NOTES – The pivot can be assembled placed down on the left (**LB1** execution), or it can be rotated 90°; in this case, the interference with other lever controls has to be checked. For further information please contact our Sales Dpt.

Part ordering codes

FS SD80 / RC - .....

5

RC With side outlet
RD With upper outlet
RE With upper outlet and side carry-over sleeve
RK With upper outlet and closed centre
RV With backpressure valve: **to be used together with the electro-hydraulic control**



1 Outlet section *

CODE	DESCRIPTION
3FIA208300-H	Outlet section body

2 Plug *

CODE	DESCRIPTION
3XTAP732200	G 3/4 plug

3 O-ring seals

CODE	DESCRIPTION
4GUA118818	O-ring 18.77x1.78 NBR 70 SH (3 pieces)
4GUA125118	O-ring 25.12x1.78 NBR 70 SH

4 Circuit option

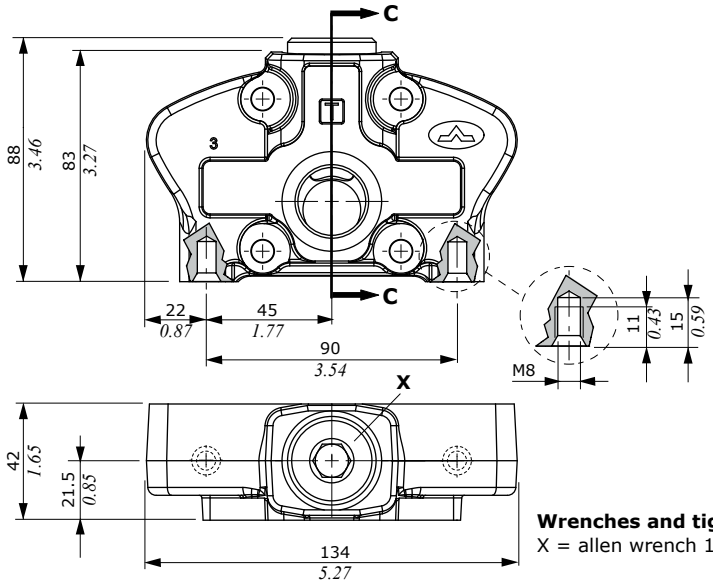
CODE	DESCRIPTION
4TAP318010	M18x1.5 plug for carry-over (RE) and closed centre (RK) options
X047710010(*)	VRE backpressure valve for RV configuration (see page 36)

5 Section threading

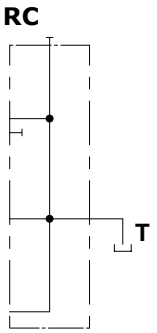
Specify only if it is different from BSP standard (see page 4)

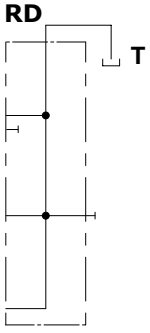
NOTE (*) – Codes are referred to **BSP** thread.

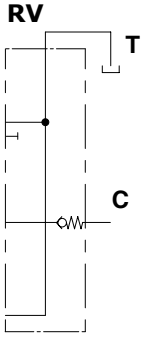
Dimensional data and hydraulic circuit

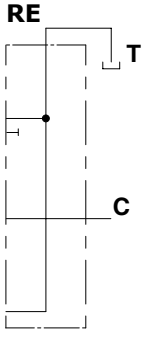


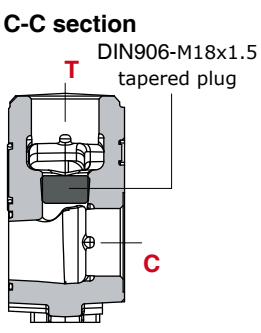
Wrenches and tightening torques
X = allen wrench 12 - 42 Nm *(31 lbft)*

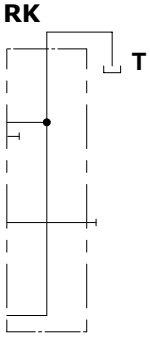


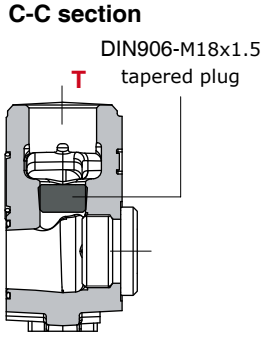












Part ordering codes

1 Inlet section body kit* page 12

TYPE: **SDS140/C-D** CODE: 5FIA113300
DESCRIPTION: With side and upper inlet ports, V pilot and L drain ports, arranged for pressure relief valve, unloading valve, pressure reducing valve
TYPE: **SDS140/DT** CODE: 5FIA113301
DESCRIPTION: As previous one, with upper inlet and side outlet ports
TYPE: **SDS140/P** CODE: 5FIA113302
DESCRIPTION: With upper inlet port, V pilot, L drain and LS ports, arranged for priority valve, pressure relief valve, unloading valve, pressure reducing valve
TYPE: **SDS140/M-N** CODE: 5FIA1133A0
DESCRIPTION: With upper inlet and outlet port, V pilot, L drain and LS ports, arranged for LS pressure relief valve, unloading valve, pressure reducing valve

2 Main pressure relief valve page 15

For C, D, DT inlet sections
Standard setting is referred to 10 l/min *(2.6 US gpm)*.

TYPE	CODE	DESCRIPTION
SV	XTAP526340	Relief valve blanking plug
Y type direct operated		
(YG2-125)	3XCAR110212	Range 80-160 bar *(1160-2300 psi)* standard setting 125 bar *(1800 psi)*
(YG3-175)	3XCAR110213	Range 100-250 bar *(1450-3600 psi)* standard setting 175 bar *(2500)*
(YG4-250)	3XCAR110214	Range 200-315 bar *(2900-4600 psi)* standard setting 250 bar *(3600 psi)*
X type pilot operated		
(XGA-200)	X006211350	Range 20-315 bar *(290-4600 psi)* standard setting 200 bar *(2900 psi)*

For M, N inlet sections
Valves standard setting is referred to 5 l/min *(1.3 US gpm)* flow.

TYPE	CODE	DESCRIPTION
SV	XTAP526340	Relief valve blanking plug
Pilot operated type		
(TGW2-80)	0MC09002000	Range 10-120 bar *(145-1750 psi)* std setting 80 bar *(1160 psi)*
(TGW3-175)	0MC09002001	Range 40-220 bar *(580-3200 psi)* std setting 175 bar *(2550 psi)*
(TGW4-250)	0MC09002002	Range 200-350 bar *(2900-5100 psi)* std setting 250 bar *(3600 psi)*
(TGW5-300)	0MC09002003	Range 290-385 bar *(4200-5600 psi)* std setting 300 bar *(4350 psi)*

7 Plug*

CODE	DESCRIPTION
3XTAP732200	G3/4 plug for C, D and DT section

8 Plug*

CODE	DESCRIPTION
3XTAP719150	G1/4 plug for V, L and LS ports

For V pilot and L drain ports description are:

TYPE	DESCRIPTION
TAP(VL)	Plugs (2 pieces), standard: omitted in description
NOTAP(L)	Plug (1 piece)
NOTAP(V)	Plug (1 piece)
NOTAP(VL)	Without plugs

12 Circuit conversion kit

CODE	DESCRIPTION
5KIT530000	Circuit conversion from closed center to open center
5KIT530001	Circuit conversion from open center to closed center

3 Inlet valve options page 18

For C, D, DT inlet sections

TYPE	CODE	DESCRIPTION
LT	XTAP526340	Valve blanking plug
F	3XCAR410200	Inlet anti-cavitation valve
L	XCAR410311	Hydraulic operated unloader valve
Solenoid operated unloading valve		
ELNW	0EFW0062001	Without emergency
ELTW	0EFW0062000	Push & twist type with detent emergency
ELPW	0EFW0062002	Push-button emergency

For P inlet section

TYPE	CODE	DESCRIPTION
Solenoid operated unloading valve		
ELNW	0EFW0062001	Without emergency
ELTW	0EFW0062000	Push & twist type with detent emergency
ELPW	0EFW0062002	With push-button emergency

For N and M inlet section

TYPE	CODE	DESCRIPTION
LT	3XTAP826160	Valve blanking plug for M type with external pilot source or N type
Solenoid operated unloading valve (NC)		
ESFNW(NC)	0EF10002011	Without emergency
ESFTW(NC)	0EF10002013	Pull & twist with detent emergency
ESFVW(NC)	0EF10002012	With screw emergency
ESFPW(NC)	0EF10002010	With pull-button emergency

4 Pressure reducing valve page 17

TYPE	CODE	DESCRIPTION
R(32)	4AC9539900A	Valve with standard setting @ 32 bar *(464 psi)*. Type omitted in description; specify only if it different from standard
(RT)	XTAP324541	Valve blanking plug (SAE 8/3)

5 Priority valve kit

TYPE: **D(0.7)-SB8-Q40** CODE: 5KIT440370
DESCRIPTION: Stand-by 8 bar *(116 psi)*, regulated flow = 40 l/min *(10.5 US gpm)*

6 Compensator kit

TYPE	CODE	DESCRIPTION
SB4	5CAS318083	Standard 4 bar *(58 psi)* for M inlet section
SB25	5CAS318084	Standard 25 bar *(362 psi)*. for N inlet section

Specify in description when it is different from standard.

9 Section threading

Specify threading always when it is different from BSP standard (see page 4).

10 Coils page 40

TYPE	CODE	DESCRIPTION
12VDC	4SLE001200A	**BER type,** 12 VDC, ISO4400 connector

For complete available coil list please see page 33.

11 Metering hole

TYPE	CODE	DESCRIPTION
FC3.9	3VT2710108	Standard for N inlet section
FC5	3VT2710106	Standard for M inlet section

Specify in description when it is different from standard.

13 LS restrictor

TYPE	CODE	DESCRIPTION
NFC	-	Without restrictor (omitted in description)
LS(1)	3VT2700065	Restrictor 1 mm diameter on LS port

Specify in description when it is different from standard. Different diameter are available, please contact our Sales Dpt.
NOTE (*) – Codes are referred to **BSP** thread.