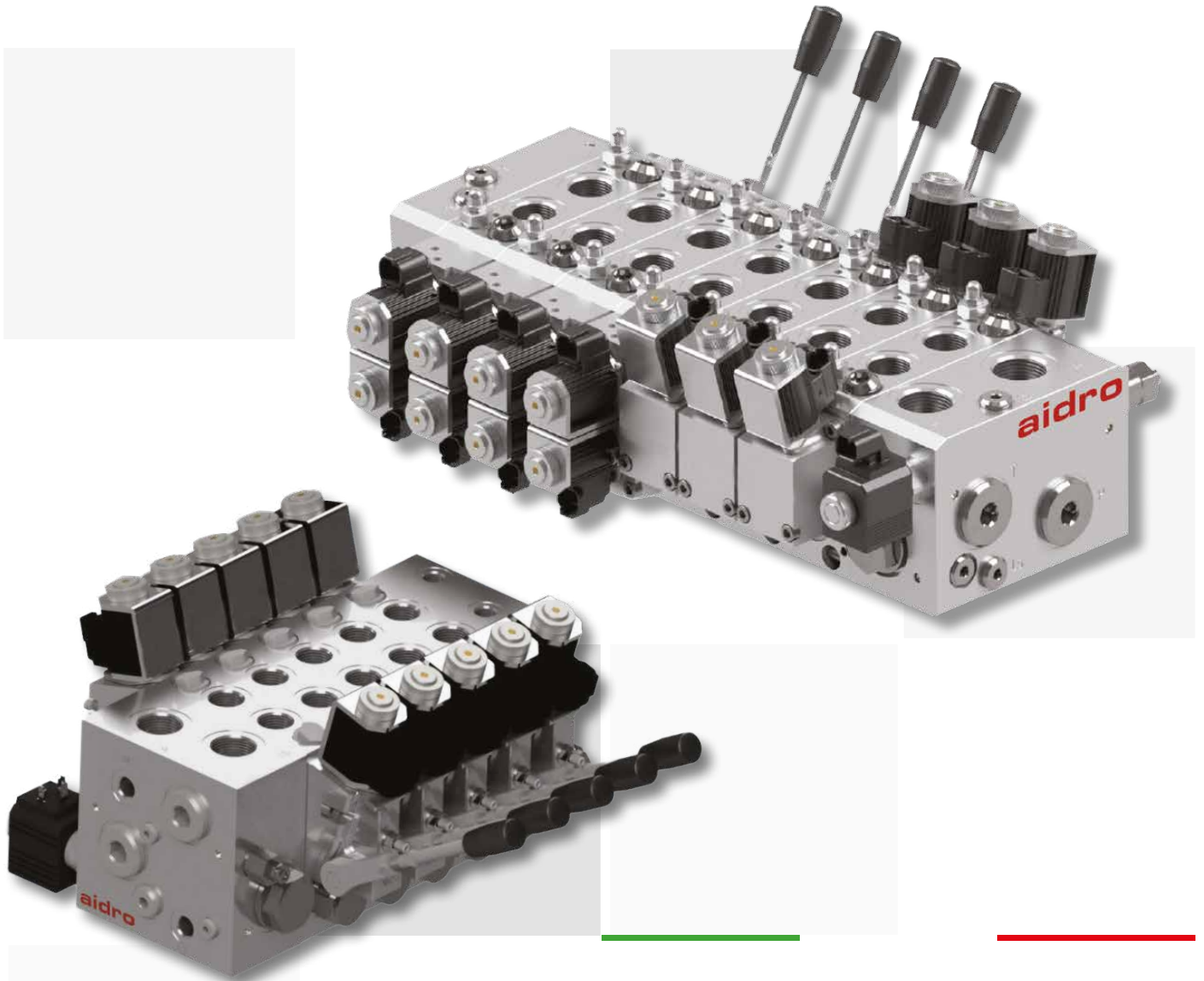


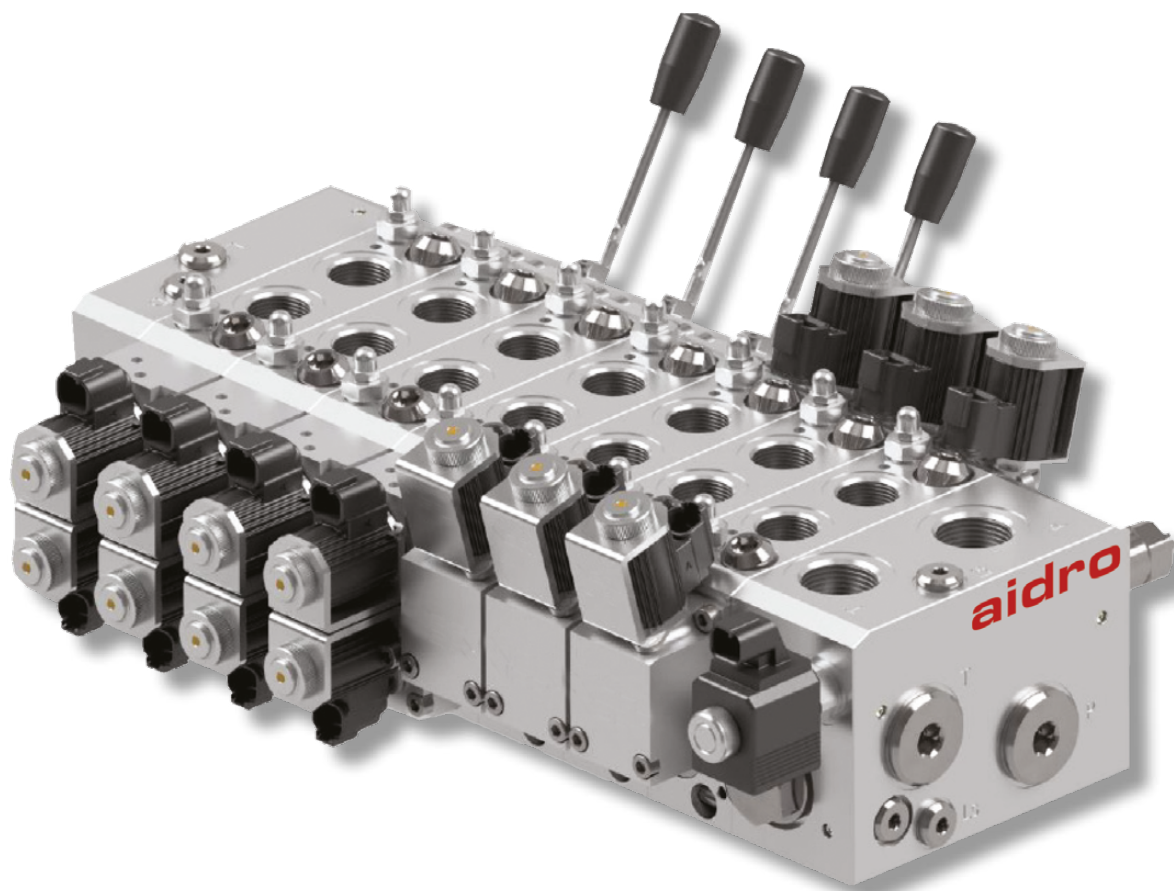
**PRE-COMPENSATED
PROPORTIONAL SECTIONAL VALVE
AP20 - AP14/AL14**



we create for you

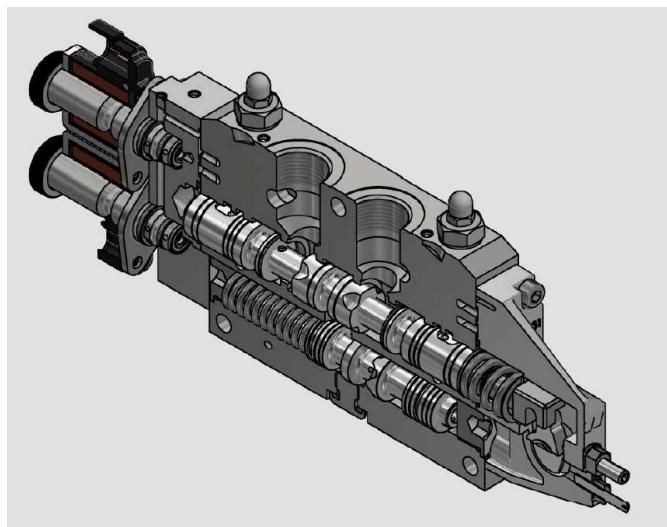


PRE-COMPENSATED ELECTRO-PROPORTIONAL SECTIONAL VALVES
AP20



1 DESCRIPTION

- Flow rating: up to 220 l/min (58 gpm)
- Supply pressure: max 400 bar (5800 psi)
- Load sensing Pressure Pre- Compensated
- Open / Closed center configuration user switchable
- Electro-hydraulic controls with or without manual lever
- LsA / LsB relief valves
- Auxiliary valves on A and B ports
- Spool position sensor
- Special spool for pressure control
- Available with or without local pressure compensators

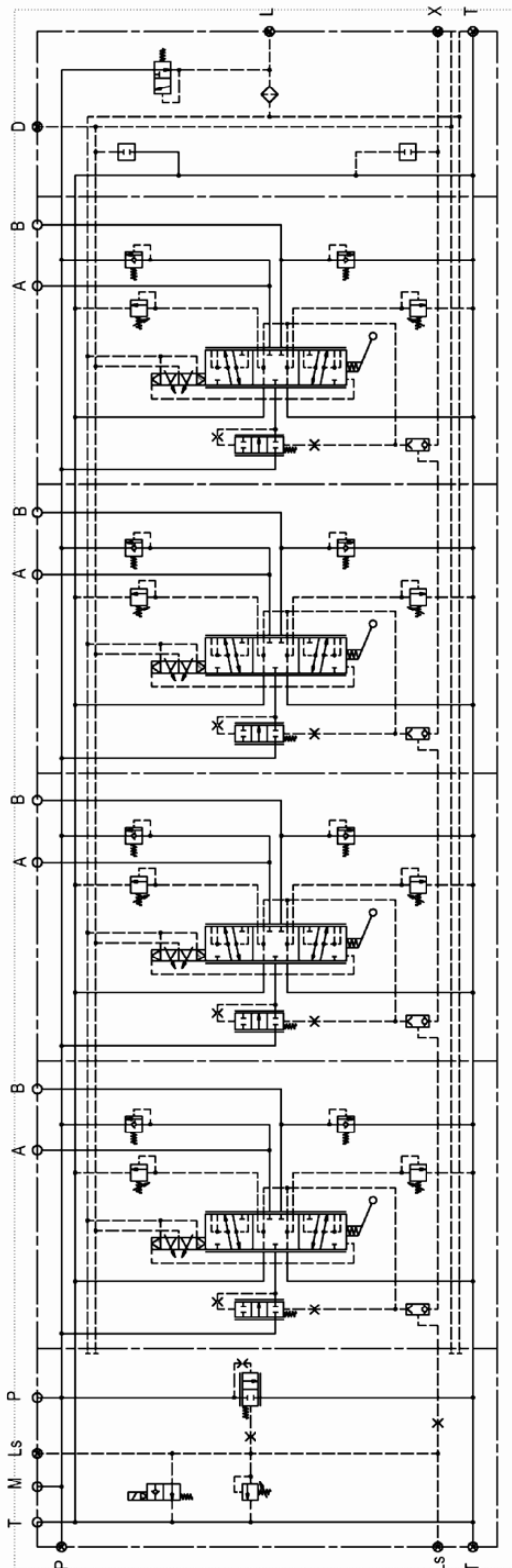


2 TECHNICAL DATA

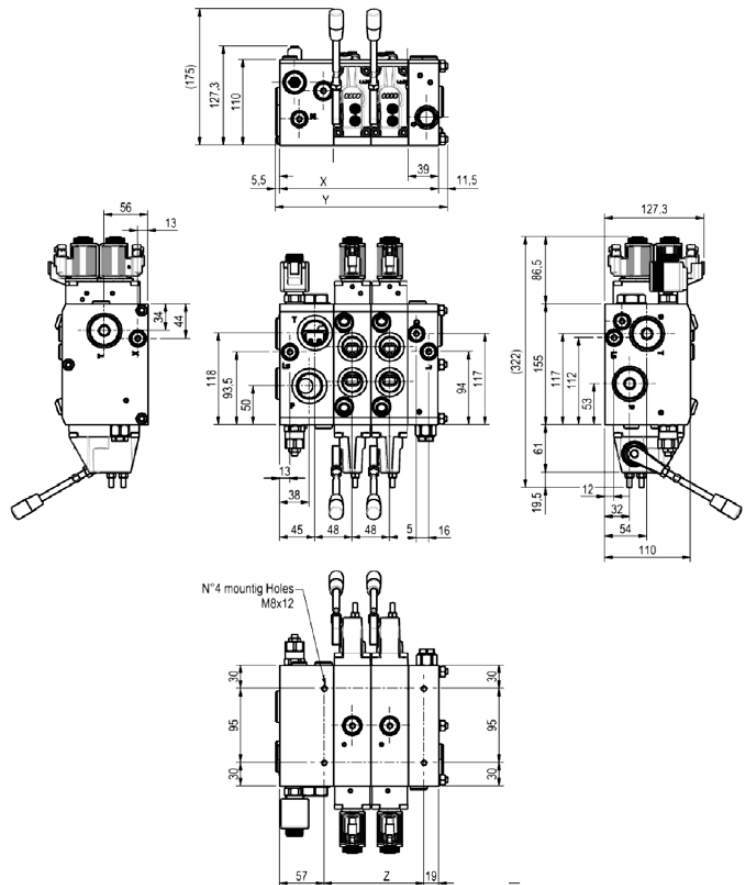
Nominal inlet flowrate	220 (58)	l/min (gpm)
Nominal flowrate on working port @ Stand-By 11 bar (160 psi)	160 (42)	l/min (gpm)
Max pressure on P and A, B port	400 (5800)	bar (psi)
Max back pressure on T port	30 (440)	bar (psi)
Internal leakages @ 100 bar (1450 psi) with port valves	23 (14) 29 (17,7)	cc/min (in ³ /min)
Fluid	Mineral oil	
Ambient temperature range	-20 ÷ +50 (-4 ÷ +122)	°C (F°)
Fluid viscosity range	10 ÷ 200	cSt
Fluid contamination degree	18/16/13	ISO4406
Materials	Steel Zinc plated	
Port dimensions	P, T: BSP G1" – SAE16 A, B: BSP G3/4 – SAE12; BSP G1" (without LsA, LsB and aux valves) LS, L, D, X: BSP G1/4 – SAE 06	
Nominal voltage	12 / 24	VDC
Coil power	19	W
Proportional control current	0-1500 (12V) / 0-750 (24V)	mA
Connector type	DT04-2P, AMP-JPT, DIN	

Note: technical specification measured with mineral oil 46cSt @ 40°C

3 HYDRAULIC DIAGRAM EXAMPLES



4 INSTALLATION DIMENSIONS



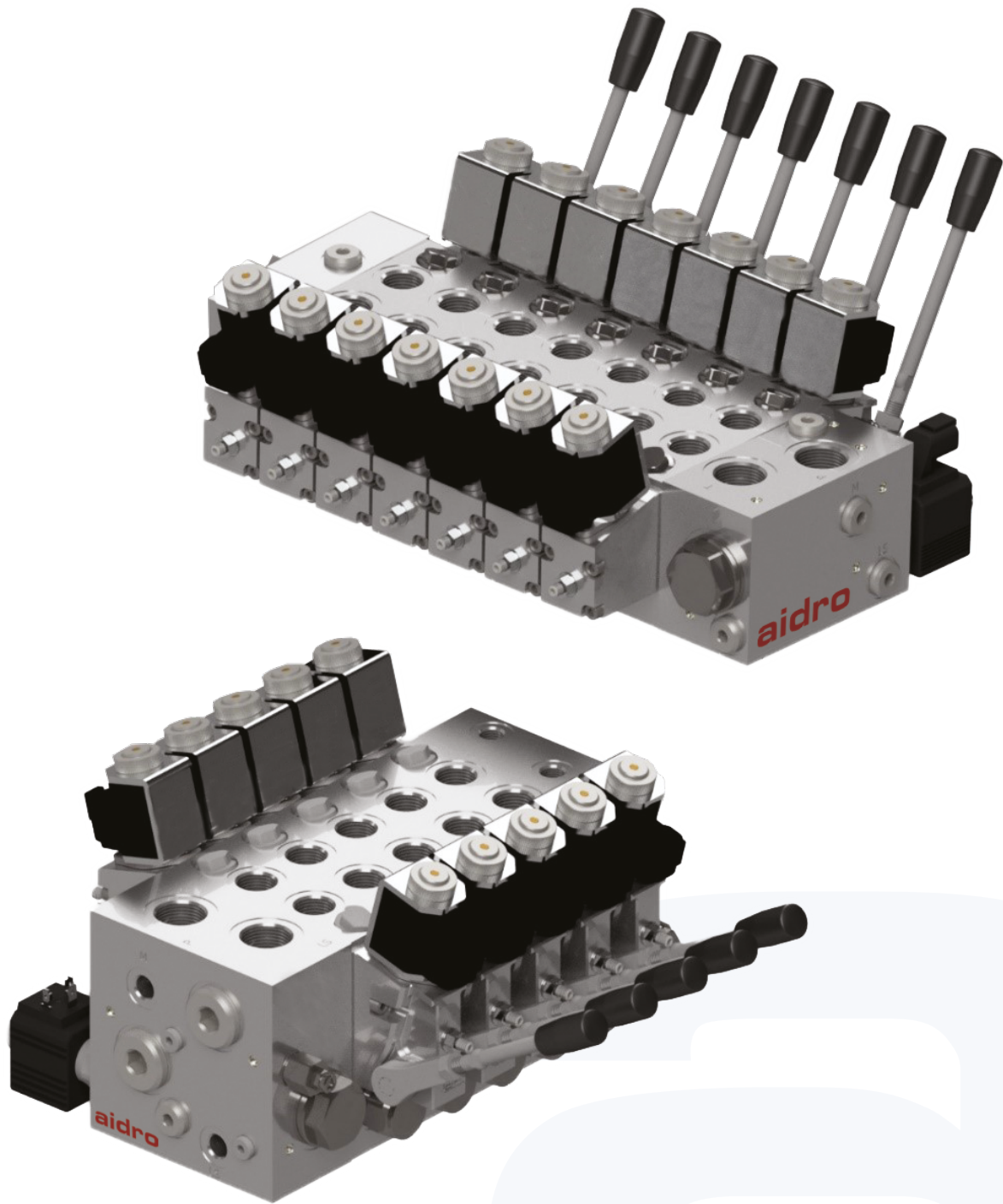
Working Section	X (mm)	Y (mm)	Z (mm)
\2	204	221	128
\3	252	269	176
\4	300	317	224
\5	348	365	272
\6	396	413	320
\7	444	461	368
\8	492	509	461

5 APPLICATIONS

- Telehandlers
- Hook lift truck
- Drilling machinery
- Concrete pump
- Garbage compactors
- Fork lift



PRE-COMPENSATED ELECTRO-PROPORTIONAL SECTIONAL VALVE
AP14/AL14



1 DESCRIPTION

- Load sensing with pressure compensation
- Open/closed center configuration user switchable
- Electro-hydraulic controls with or without manual lever
- Flow rating on A and B ports up to 80 l/min (21 gpm)
- Supply pressure: up to 250 bar (3600 psi) aluminium up to 350 bar (5000 psi) zinc plated steel body
- Available with local pre-compensator (AP14) or without (AL14)
- Auxiliary valves on A and B ports
- Spool position sensor
- Special spool for pressure control
- Electro-hydraulic pilot valves with manual override

2 TECHNICAL DATA

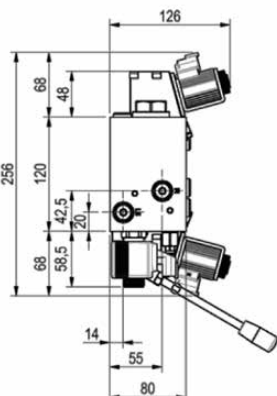
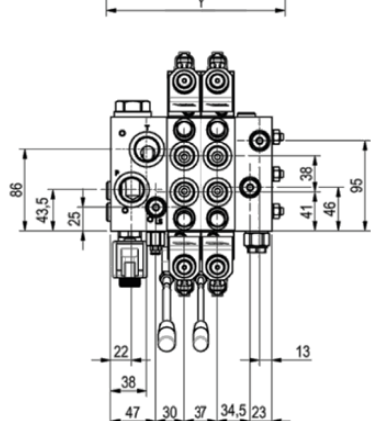
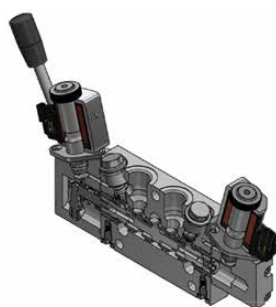
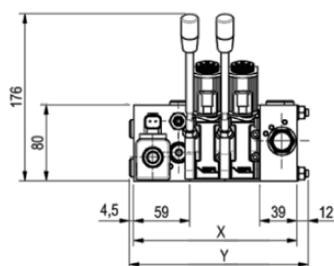
Nominal inlet flowrate	120 (32)	l/min (gpm)
Nominal flowrate on working port @ Stand-By 11 bar (160 psi)	80 (21)	l/min (gpm)
Max pressure on P and A, B port	250 (3600) - 350 (5000)	bar (psi)
Max back pressure on T port	30 (440)	bar (psi)
Internal leakages @ 100 bar (1450 psi) with port valves	18 (11) 24 (14,5)	cc/min (in ³ /min)
Fluid	Mineral oil	
Ambient temperature range	-20 ÷ +50 (-4 ÷ +122)	°C (F°)
Fluid viscosity range	10 ÷ 200	cSt
Fluid contamination degree	18/16/13	ISO4406
Materials	Aluminium or Steel Zinc plated	
Port dimensions	P, T: BSP G3/4" – SAE12 A, B: BSP G1/2 – SAE10; LS, L, D, X: BSP G1/4 – SAE 06	
Nominal voltage	12 / 24	VDC
Coil power	19	W
Proportional control current	0-1500 (12V) / 0-750 (24V)	mA
Connector type	DT04-2P, AMP-JPT, DIN	

Note: technical specification measured with mineral oil 46cSt @ 40°C

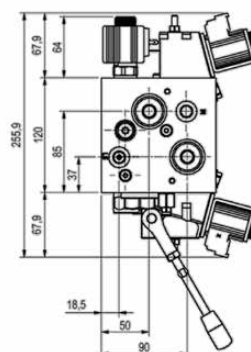
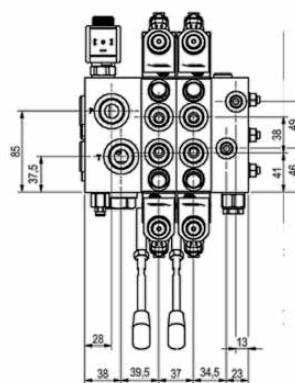
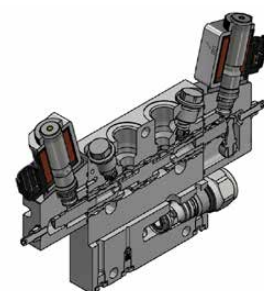
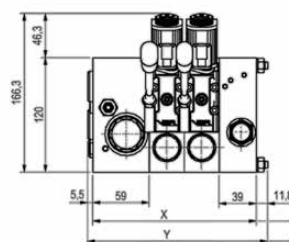
3 INSTALLATION DIMENSIONS

Working Section	X (mm)	Y (mm)
\2	172	188,5
\3	209	225,5
\4	246	262,5
\5	283	299,5
\6	320	336,5
\7	357	37,5
\8	394	410,5

AL14



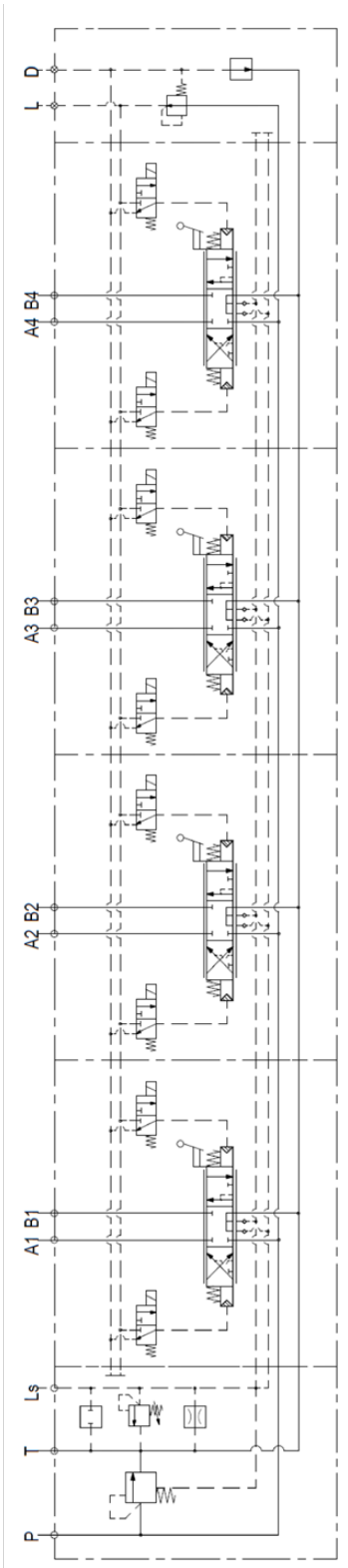
AP14



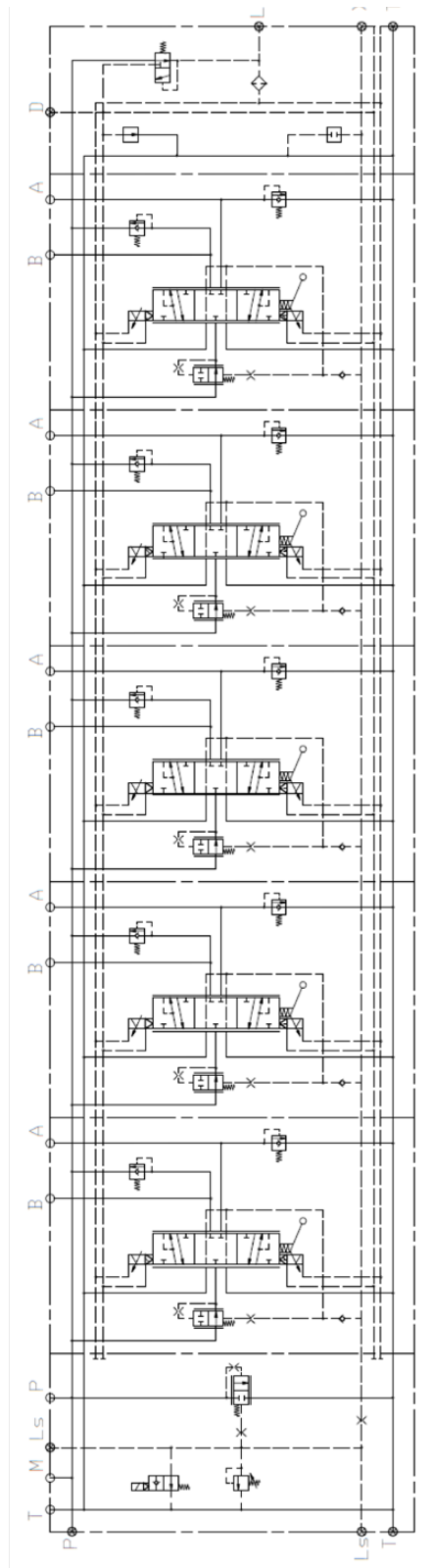
4 HYDRAULIC DIAGRAMS

Working examples

AL 14

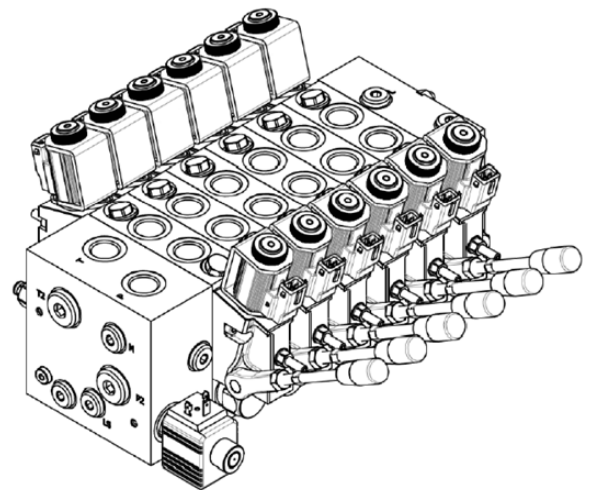
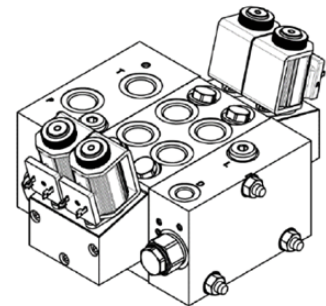


AP 14



5 APPLICATIONS

- Aerial platforms
- Forestry machines
- Agricultural machines
- Garbage compactors
- Forklifts
- Earth moving machines



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