



TIPPING VALVES



OMFB Tipping Valves

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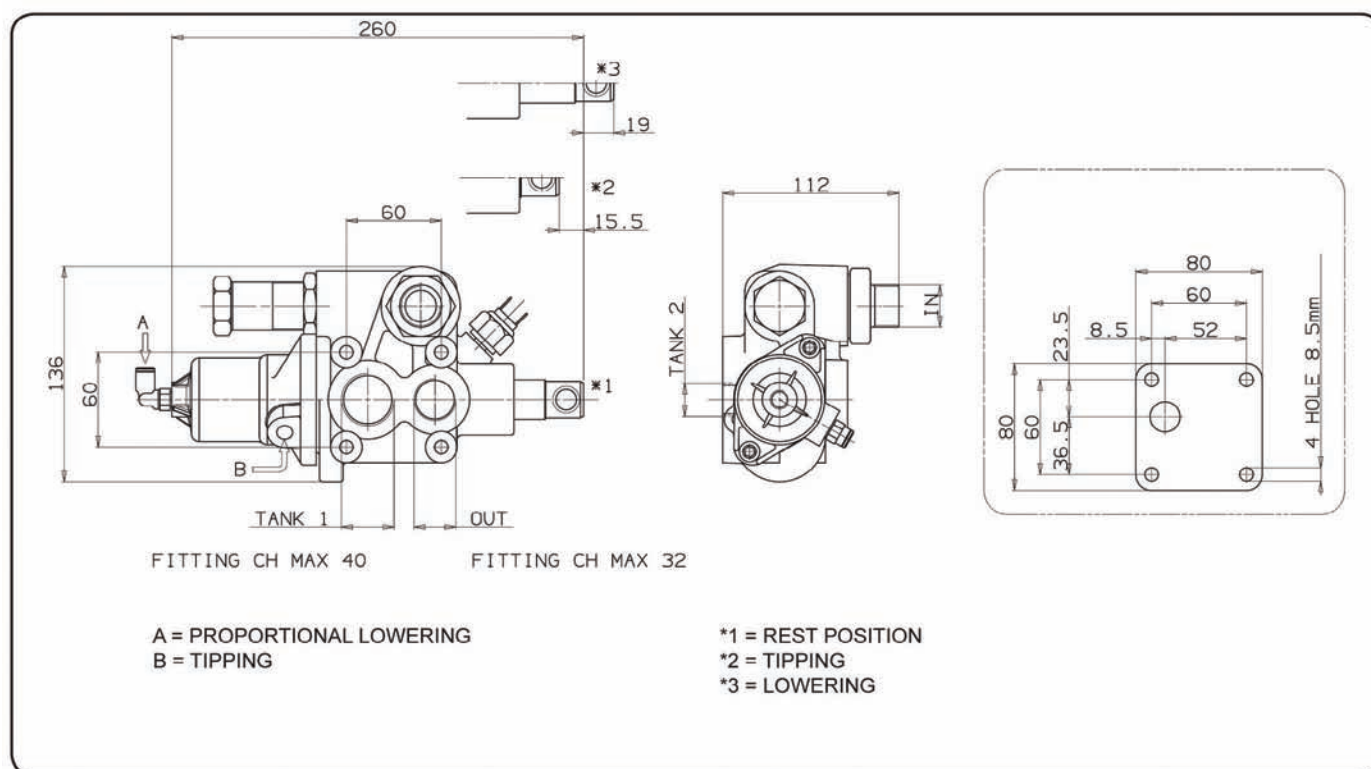


Optional



Proportional pneumatic tipping valve to suit medium-heavy duty tipper trucks. Operated by proportional cab control. Open center hydraulic scheme according to CE standards.

- Built-in check and adjustable safety valves (direct type).
- Nodular cast-iron body for pressure up to 400 bar.
- Either Chassis or tank (DSP kit) mounting options.
- Mechanical Direct End-of-stroke with anti-shock spring.
- Ready for pressure signal switch mounting.
- Cataphoresis coated body and nickel spool.
- Compact size thanks to front ports.
- Guaranteed for oil temperature range $-25 \div 80$ °C, viscosity range $12 \div 100$ cSt and oil filtering $25 \mu\text{m}$.



Tipping valve type	Order code	IN	TANK 1	TANK 2	OUT	Weight
		ISO 228	ISO 228	ISO 228	ISO 228	Kg
MODULAR 150 CE	121-008-00185	G 3/4	G 1	G 1/2	G 3/4	5,8

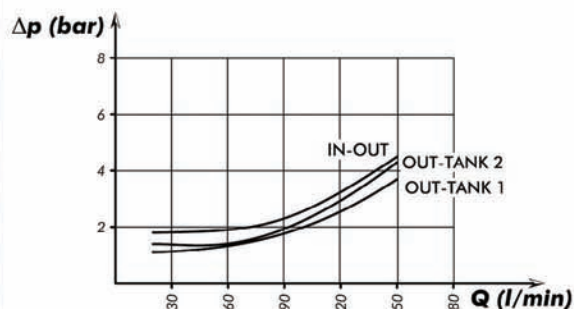


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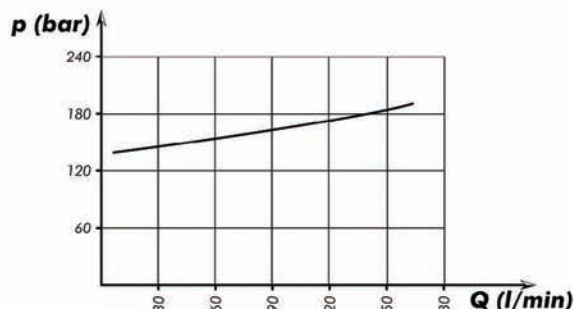


Tipping valve type	Order code	Pressure values		Flow l/min
		Standard pressure setting bar	Max. pressure setting bar	
MODULAR 150 CE	121-008-00185	160	280	150

Tipping valve pressure drops



p-Q operating curve for pressure relief valves



The graph refers to oil type ISO VG 46 α 50°

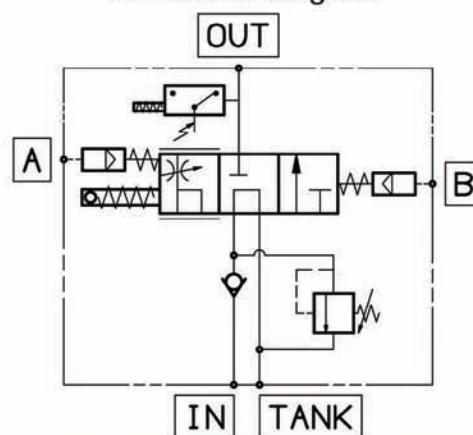
Mounting plate for tank
121-991-00112



Mounting plate for tank
121-991-00194



Functional diagram



SEAL KIT - 121 -900-01003

Bolt Kit - 121994404

Screw M8 TCE L=70

4

Washer M8

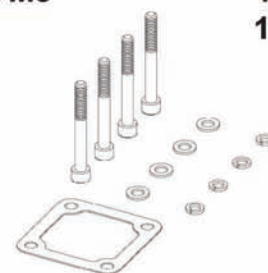
4

Spring washet M8

4

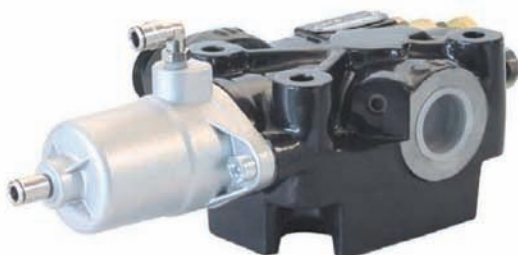
Gasket

1



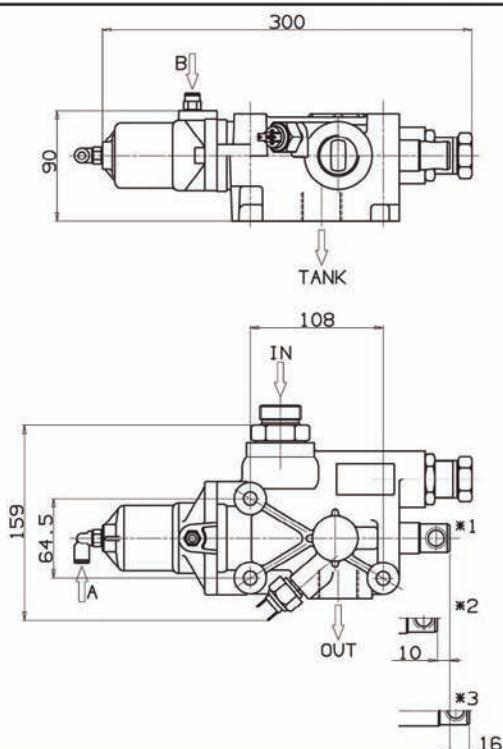


Optional



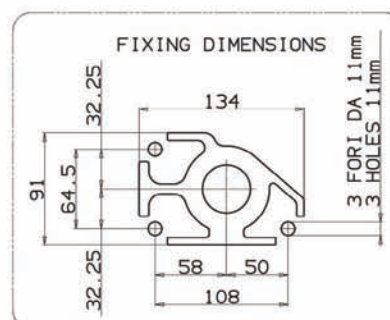
Proportional pneumatic tipping valve suitable for large oil flow applications especially designed for heavy-duty tipper bodies, off-road trucks and semi-trailers. Operated by proportional cab control. Open center hydraulic scheme according to CE standards.

- Built-in check and adjustable safety valves (direct type).
- Nodular cast-iron body for pressure up to 400 bar.
- Either Chassis or tank mounting options.
- Mechanical Direct End-of-stroke with anti-shock spring.
- Ready for pressure signal switch mounting.
- Cataphoresis coated body and nickel spool.
- Guaranteed for oil temperature range $-25 \div 80$ °C, viscosity range $12 \div 100$ cSt and oil filtering $25 \mu\text{m}$.



A = PROPORTIONAL LOWERING
B = TIPPING

*1 = REST POSITION
*2 = TIPPING
*3 = LOWERING



Tipping valve type	Order code	IN	TANK	OUT	Weight
		ISO 228	ISO 228	ISO 228	Kg
MODULAR 200 CE	121-008-00050	G 3/4	G 1	G 1	6,8
MODULAR 250 CE	121-008-00041	G 1			

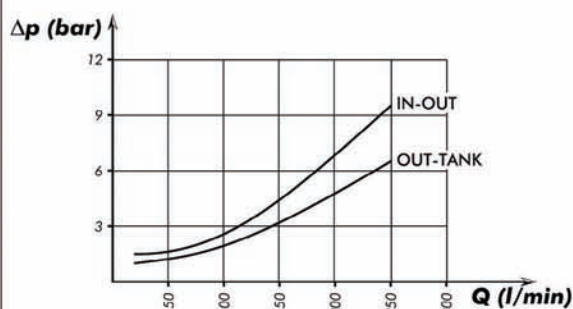


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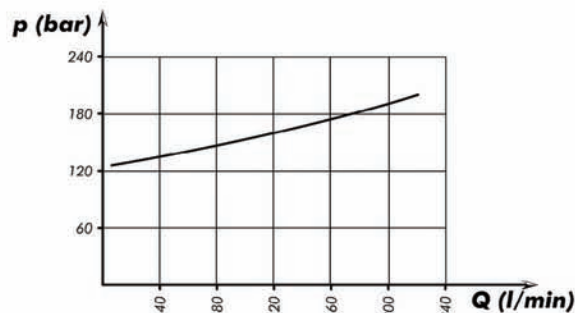


Tipping valve type	Order code	Pressure values		Flow l/min
		Standard pressure setting bar	Max. pressure setting bar	
MODULAR 200 CE	121-008-00050	160	280	200
MODULAR 250 CE	121-008-00041			250

Tipping valve pressure drops



p-Q operating curve for pressure relief valves



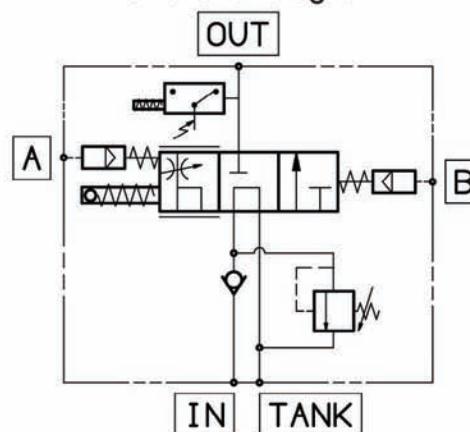
The graph refers to oil type ISO VG 46 α 50°

Mounting plate for tank
121-991-00194



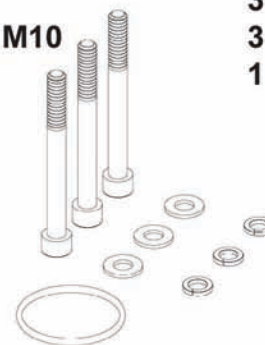
SEAL KIT - 121 -900-02002

Functional diagram



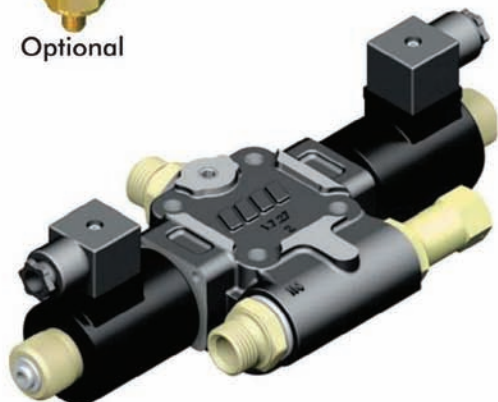
Bolt Kit - 121-994-00502

Screw M10 TCE L=100	3
Washer M8	3
Spring washet M10	3
O-ring	1



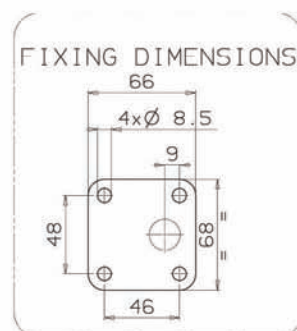
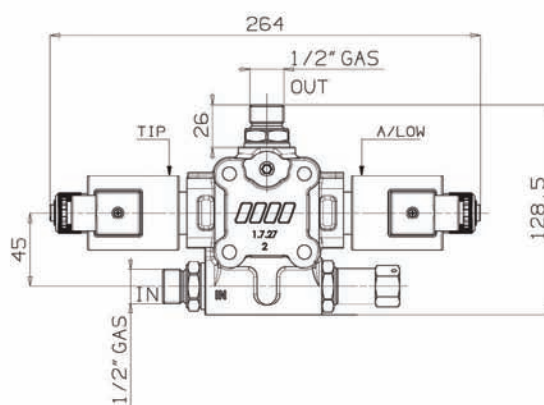
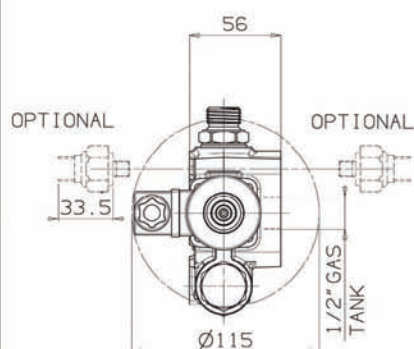


Optional



Electric tipping valve operated by switch to suit light duty tipper trucks. Open center hydraulic scheme according to CE standards.

- Built-in check and adjustable safety valves.
- Either Chassis or tank (DSE kit) mounting options.
- Ready for pressure signal switch mounting.
- Cataphoresis coated body and nickel spool.
- Compact size.
- Guaranteed for oil temperature range $-25 \div 80$ °C, viscosity range $12 \div 100$ cSt and oil filtering $25 \mu\text{m}$.



Tipping valve type	Order code	IN ISO 228	TANK ISO 228	OUT ISO 228	Weight Kg
FE-40 CE 12V	121-004-00572	G 1/2	G 1/2	G 1/2	
FE-40 CE 24V	121-004-00581				
WIRING KIT 12V	30100001019				
WIRING KIT 24V	30100002018				

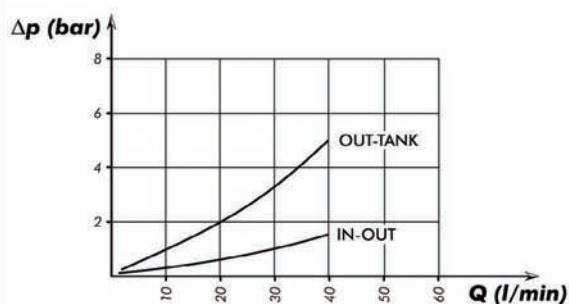


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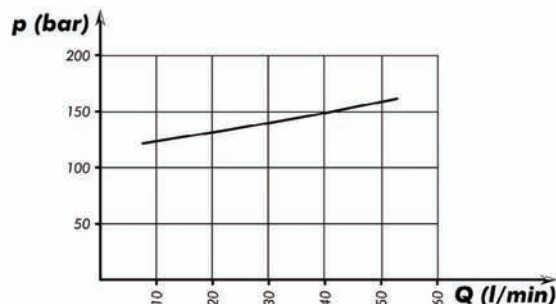


Tipping valve type	Order code	Pressure values		Flow l/min
		Standard pressure setting bar	Max. pressure setting bar	
FE-40 CE 12V	121-004-00572	140	240	40
FE-40 CE 24V	121-004-00581			

Tipping valve pressure drops



p-Q operating curve for pressure relief valves



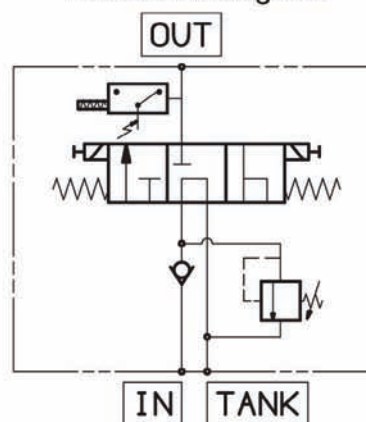
The graph refers to oil type ISO VG 46 a 50°

Mounting plate for tank
121-991-00112



SEAL KIT - 121 -900-00577

Functional diagram



Bolt Kit - 121994306

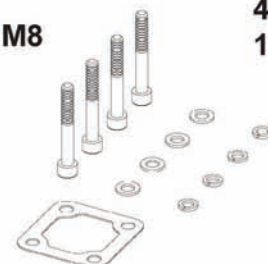
Screw M8 TCE L=60

Washer M8

Spring washet M8

GASKET

4
4
4
1



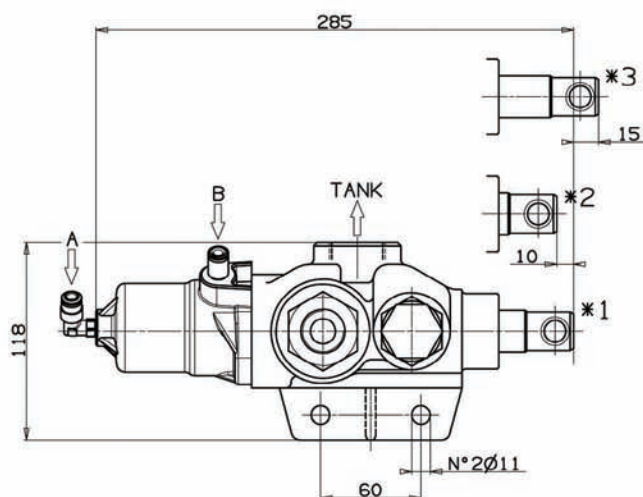
MR 200 DLV PNEUMATIC VALVE FOR DUAL APPLICATION

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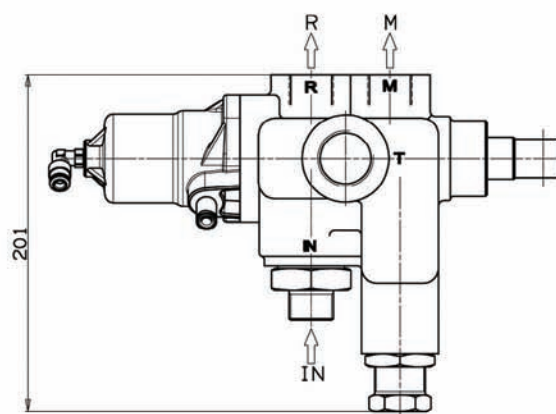
7-07



Hydraulic tipping valve, pneumatically controlled, closed center configuration (**not** in accordance with CE standards) especially designed for truck and trailer applications.
Slow lowering function available for both truck and trailer tipper bodies.
It can be operated either by 2 levers (NO PTO) or 3 levers pneumatic switch series LAM.
- Built-in check and adjustable safety valves (direct type).
- Mechanical direct end-of-stroke.
- Nichel-plated spool.



A = FLOW SWITCH TO R
B = SLOW LOWERING



*1 = M TIPPING / R LOWERING
*2 = M AND R SLOW LOWERING
*3 = M LOWERING / R TIPPING

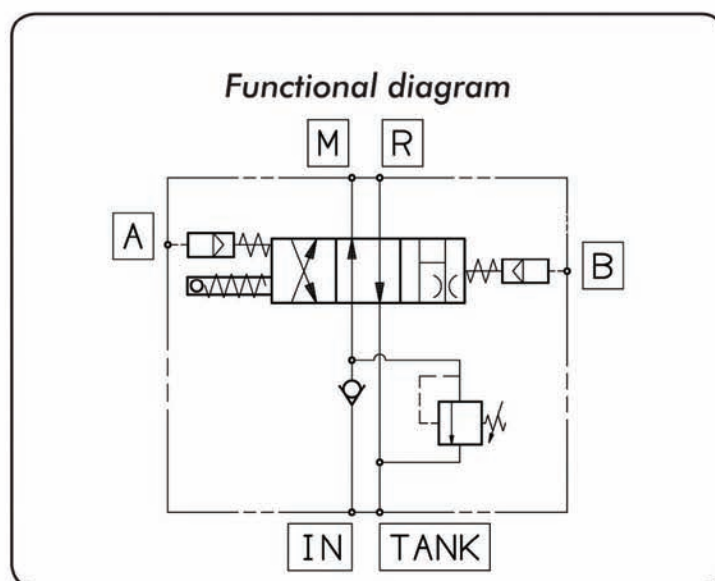
Tipping valve type	Order code	IN	TANK	R	M	Weight
		ISO 228	ISO 228	ISO 228	ISO 228	Kg
MR 200 DLV	121-009-02002	G 3/4	G 1	G 3/4	G 3/4	6



We reserve the right to make changes without notice.



Tipping valve type	Order code	Pressure		Flow l /min
		In service bar	Max peak pressure bar	
MR 200 DLV	121-009-02002	180	250	200



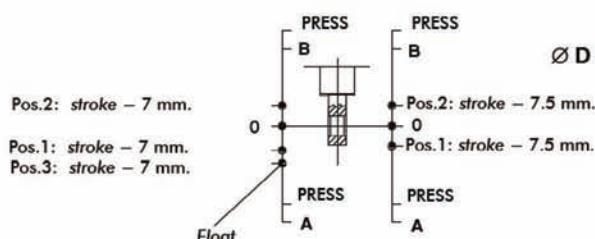


Material specification:

Body: High strength cast-iron
Spool: Hardened steel and chrome plated
Seals: Buna "N".

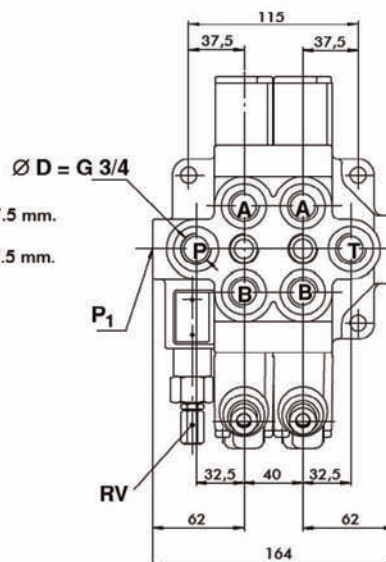
Standard feature:

- 1) Internal load holding check valves (prevent reverse flow through valve when two spools are operated)
- 2) Parallel circuit
- 3) Balanced interchangeable spools (provides minimum leakage, smooth operation)
- 4) Wide selection inlets, work ports, and outlets threaded ports
- 5) Negative overlapping of the spool



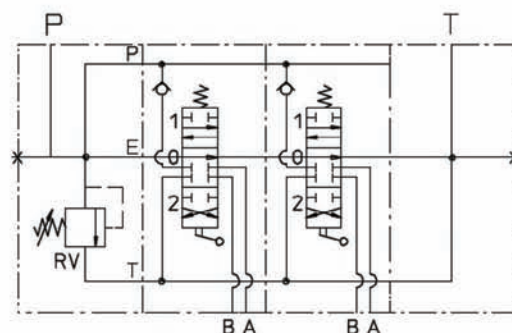
P: inlet port
T: outlet port
A/B: work ports
H.R.C.O.: carry-over
RV: relief valve
P₁T₁: side inlet and outlet ports

3.1.0.2: spool position
P: pressure line
T: exhaust line
E: centre line (by-pass)



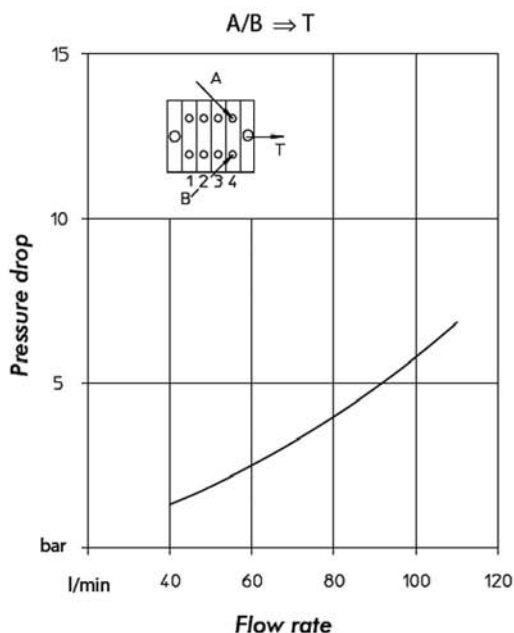
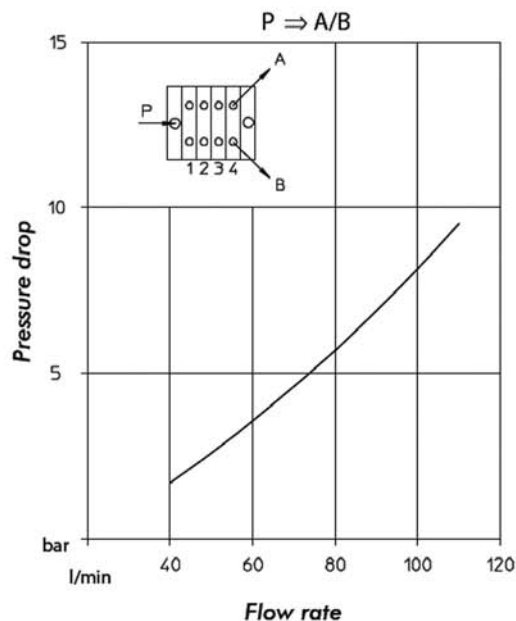
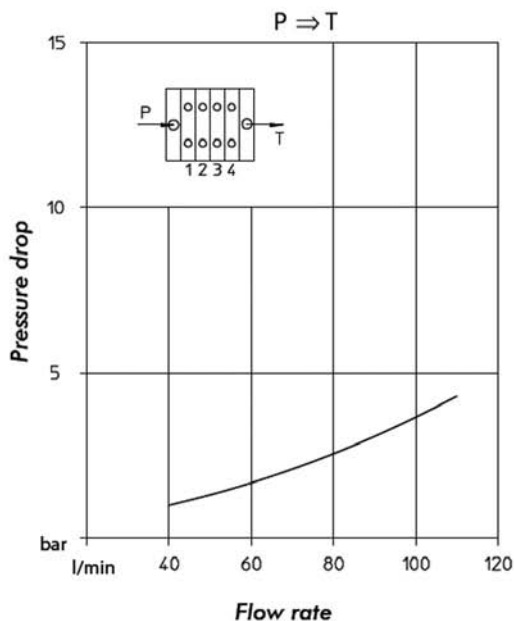
TECHNICAL FEATURES

Max Flow rate	100 l/min
Max continuous operating pressure supply port P	250 bar
Max intermittent peak pressure Work port A/B	320 bar
Max back pressure tank port T	30 bar
Oil temperature	-10 to 80 °C
Oil viscosity cSt	16 to 75 (mm ² /s)
Oil filtration	≤ 30 μ
Weight	9 kg



Flow and pressure drop

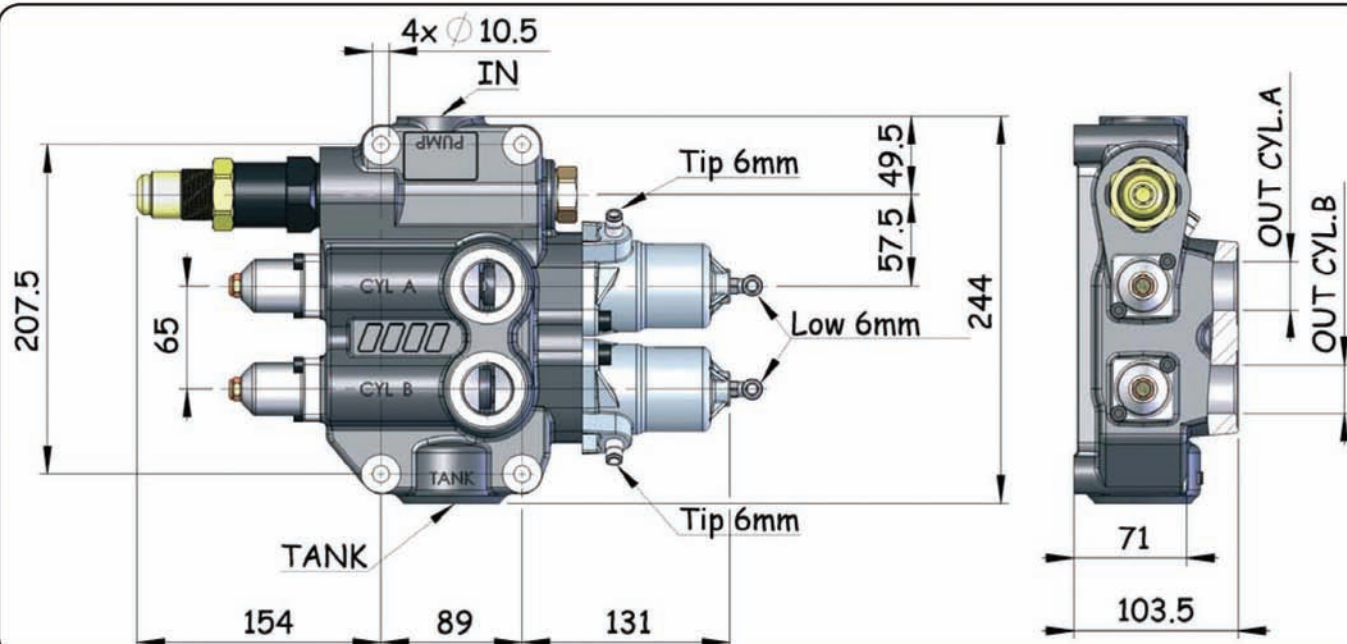
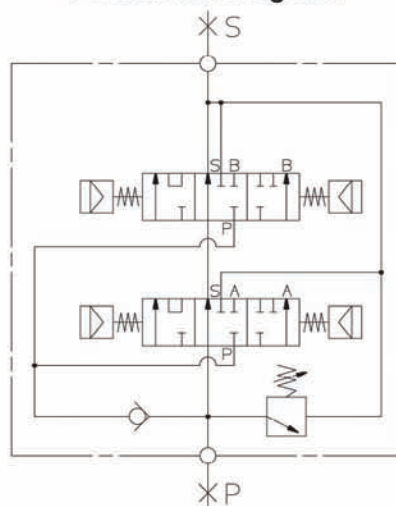
Oil: Shell Tellus T37
Temperature: 50° C
Viscosity: 27 mm²/s



- Built-in check valve and safety valve (DIRECT type).
- Nodular cast-iron body for pressure up to 400 bar.
- Guaranteed for oil temperature range -25÷80 °C, viscosity range 12÷100 cSt and oil filtering 25 µm.
- Cathaphoresis coated body and nickel spool.



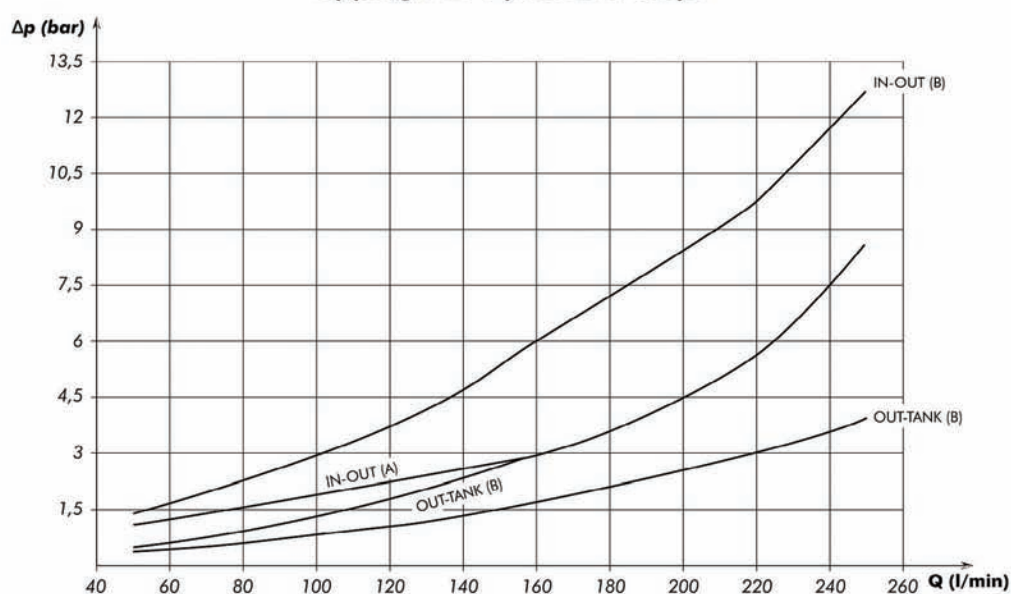
Functional diagram



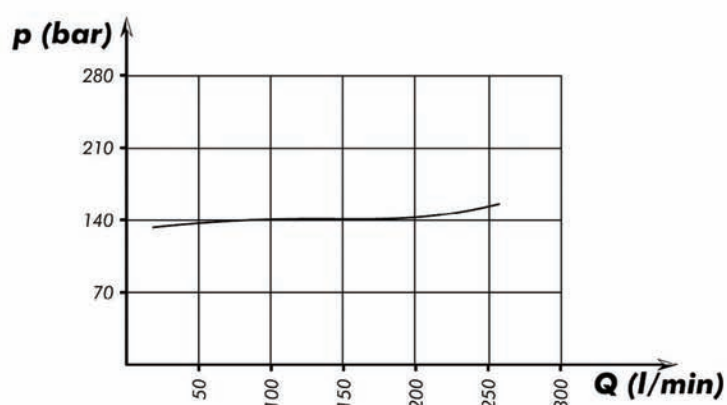
Tipping valve type	Order code	IN	TANK	OUT A/B	Weight
DM 250 CE	121-015-00051	ISO 228 G 1	ISO 228 G 1-1/4	ISO 228 G 1	Kg 25

Tipping valve type	Order code	Pressure values		Flow l/min
		Standard pressure setting bar	Max. pressure setting bar	
DM 250 CE	121-015-00051	140	300	250

Tipping valve pressure drops



p-Q operating curve for pressure relief valves



RUNSTOP 200 MECHANICAL HYDRAULIC END-OF-STROKE VALVE

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7-13

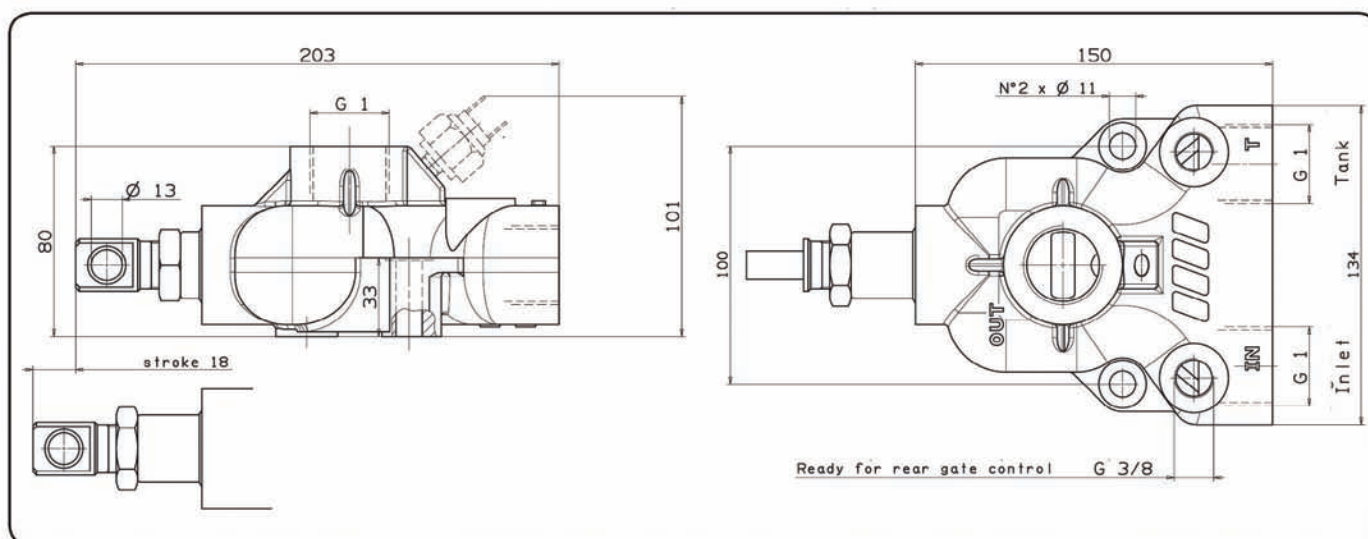


Optional

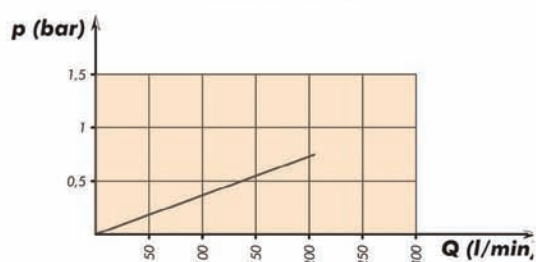
End of stroke valve especially designed for trailers and semi-trailers either with 1 pipe or 2 pipes configurations. The special hydraulic scheme allows the valve to be used for either open or closed center circuits. Furthermore it prevents the cylinder from any pressure peaks.

The innovative and compact design makes the fitting easier and cost effective.

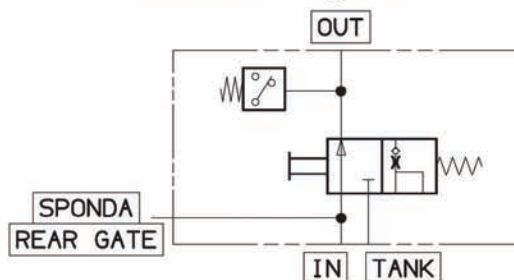
- Mechanical runstop valve.
- Flow up to 200 l/min.
- Cast iron body resistant to pressure up to 400 bar.
- Body c/w anti-corrosion coating and Nickel spool.
- Pressure switch option.
- High-resistance anti-shock spring.



Pressure drops



Functional diagram



Tipping valve type	Order code	Pressure Max Max pressure bar	Flow l/min	Weight kg
RUNSTOP 200	121-035-00200	350	200	4,8

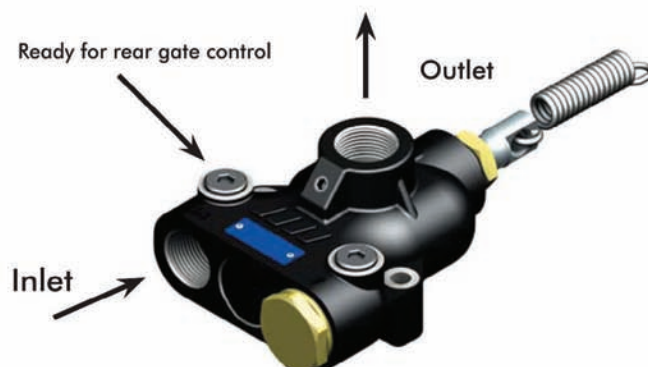


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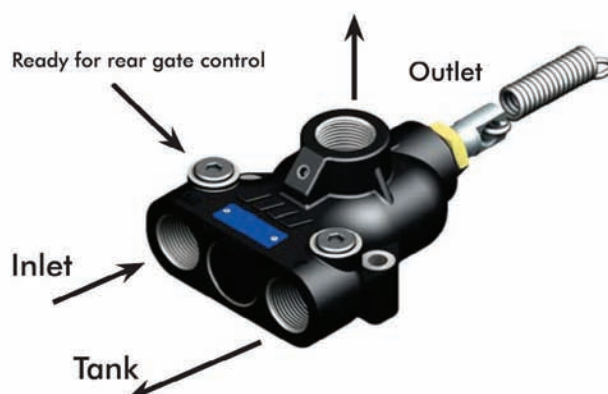
1 PIPE CONFIGURATION

By this configuration the RUNSTOP valve interrupts the oil flow to the cylinder and the delivery is diverted to the outlet through the safety valve of the main tipping valve. In this case we recommend to use tipping valves c/w piloted safety valves like our modular pilot valve series.



2 PIPE CONFIGURATION

By this configuration the RUNSTOP valve interrupts the oil flow to the cylinder and the delivery is diverted to the outlet through the second pipe connected to the oil tank.



SEL 250-2 PNEUMATIC DIVERTER VALVE 3-WAY 2-POSITION

7-15

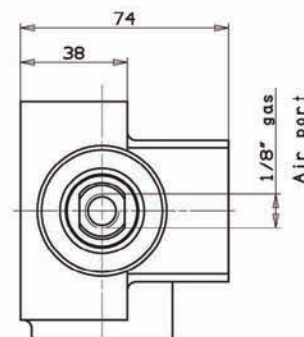
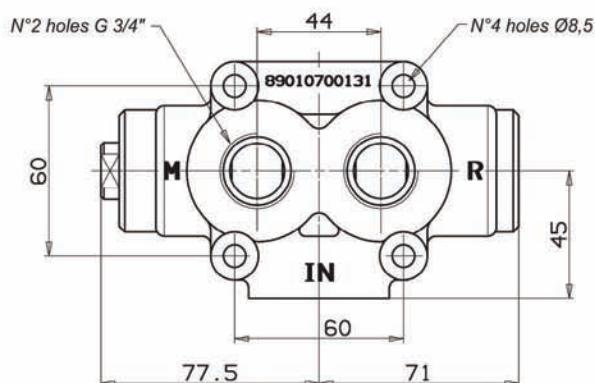
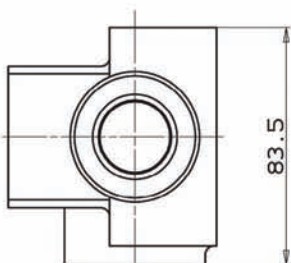
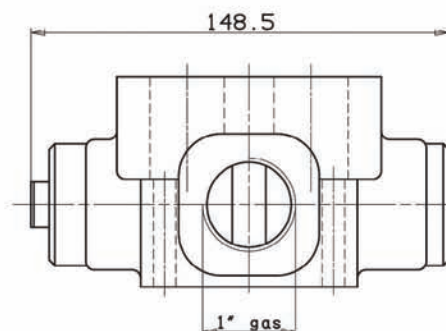
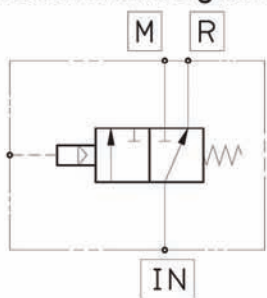


Pneumatic 3-way high pressure diverter valve to control 2 pressure lines separately. Especially designed for applications like Tipper/Crane or Truck/Trailer.

- Flow up to 250 l/min.
- Pressure up to 400 bar.
- Open center scheme to prevent dangerous shocks while switching.
- Body c/w anti-corrosion coating and Nickel spool.

Seal Kit - 121 925 502

Functional diagram



Tipping valve type	Order code	Pressure		Flow l/min	Weight kg
		In service bar	Max Max peak pressure bar		
SEL 250-2	121-022-00132	350	400	250	2,5



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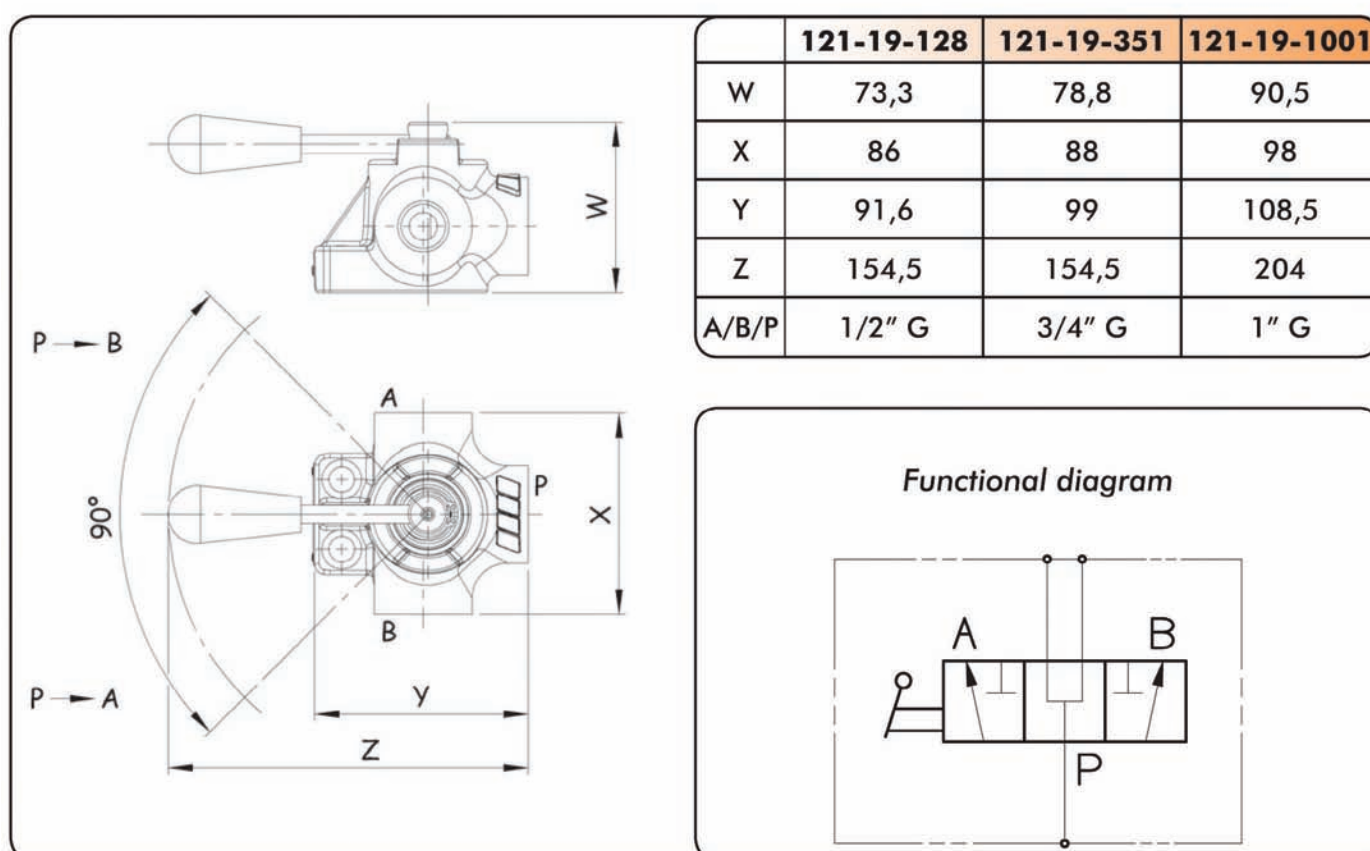
DVT VLV 3 WAYS MANUAL DIVERTER VALVE

7-16



Manual 3-way high pressure diverter valve to control 2 pressure lines separately.
Especially designed to afford pressure peaks of applications like Tipper/crane or hook-loader/crane.

- 3/4" thread for flow up to 100 l/min.
- Pressure up to 400 bar.
- Open center scheme to prevent dangerous shocks while switching.
- Body c/w anti-corrosion coating and Nickel spool.

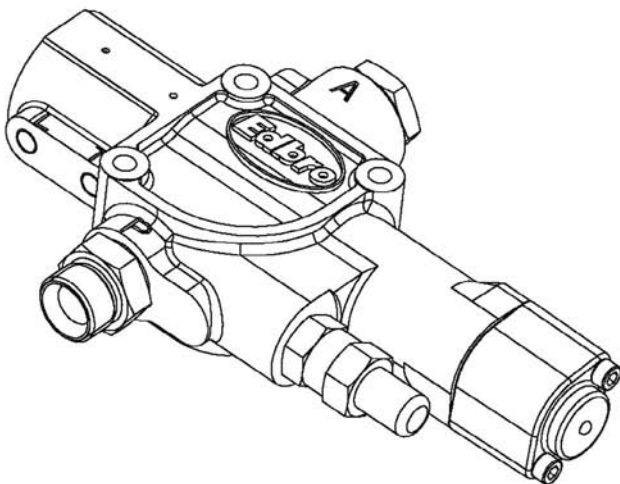


Tipping valve type	Order code	Port	Pressure		Flow l/min	Weight kg
			In service bar	Max peak pressure bar		
DVT VLV 3 WAYS	121-019-00128	1/2"	380	400	110	1,8
	121-019-00351	3/4"				2,15
	121-019-01001	1"			150	3,7

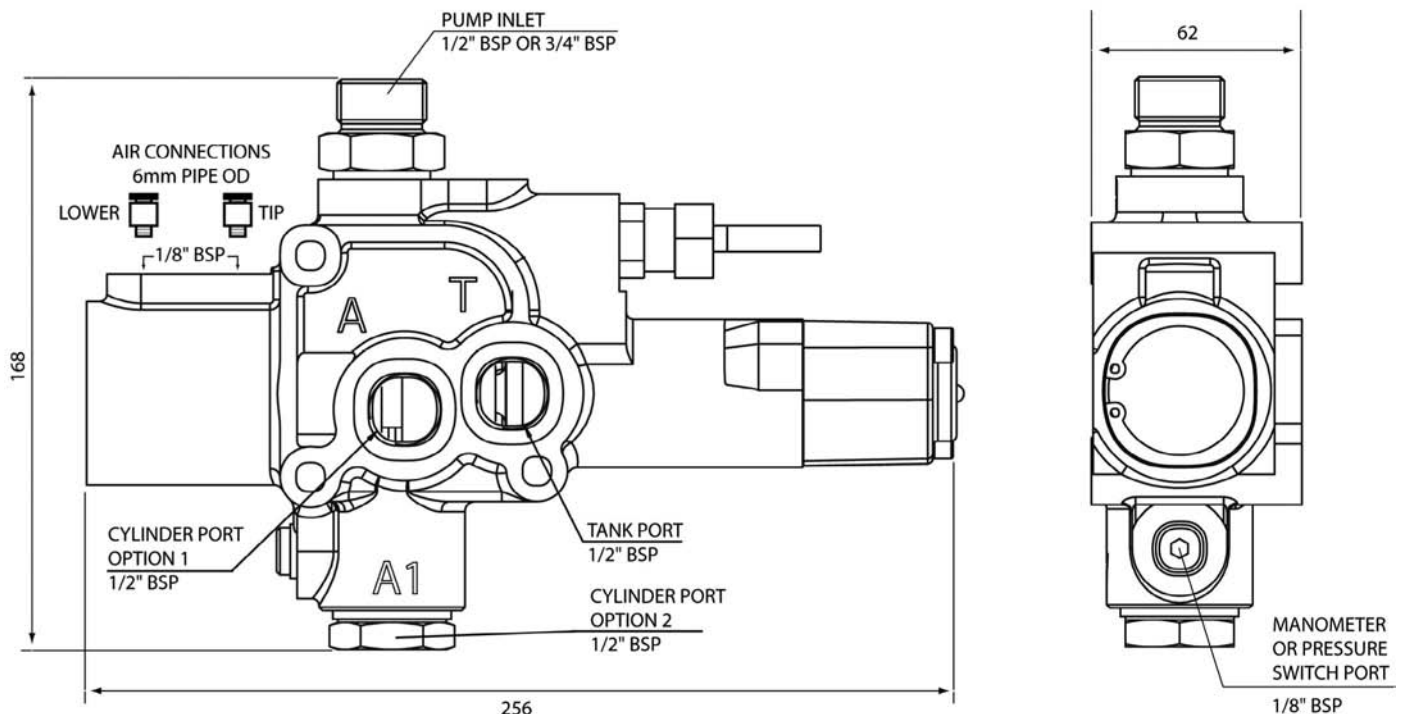


We reserve the right to make changes without notice.





- Fully proportional—excellent lowering control when loaded
- No system filtration required
- Compact and lightweight
- Interchangeable with previous VT valve range
- Multiple mounting options
- Pressure switch point provided
- Single pressure relief cartridges available in a variety of pressure ratings



Part Number	Pump Inlet	Pressure (Bar)
<div style="border: 1px solid black; padding: 5px; display: inline-block;">CT070</div> <div style="display: inline-block; vertical-align: middle; margin-left: 20px;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">M</div> <div style="margin-top: 10px;">M = 6mm air fitting</div> </div>	<div style="display: inline-block; vertical-align: middle;"> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">0</div> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">7</div> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">5</div> </div> <div style="margin-top: 10px;">075 = 3/4" BSP</div>	<div style="display: inline-block; vertical-align: middle;"> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">P</div> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">1</div> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">5</div> <div style="border: 1px solid black; padding: 2px; text-align: center; width: 30px;">0</div> </div> <div style="margin-top: 10px;">150</div>

Mounting bolts and face O-rings supplied with each valve

Edbro

SETTING THE INDUSTRY STANDARD

We reserve the right to make changes without notice.

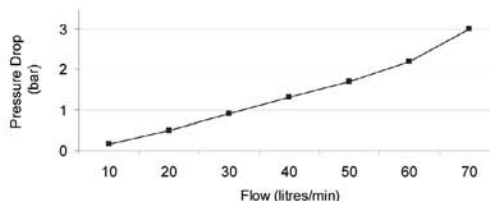
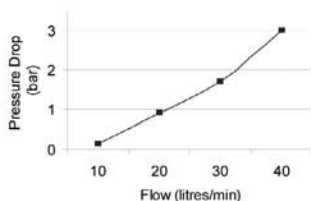
Transpecs
QUALITY ON THE MOVE

OPTIONS

Relief Valves	VC117 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H 120, 135, 150, 175, 200		
Independent Mounting Kit	Port A1 Pipe Connection	Port T Pipe Connection	Kit Part Number
	3/4" BSP	3/4" BSP	AK94
	1/2" BSP	1/2" BSP	AK95
Pressure Switch	1/8" BSP Body Raised Warning Kit (switch + washer + cover + light + buzzer + wiring)	SA2924	
Port P	1/2" BSP	NR633	
Pump Inlet Elbow Adaptor	3/4" BSP	NR627	
Port A1	Pipe Connection	Straight	Elbow
Outlet Adaptors for Tank Mounting	1/2" BSP	NR1700	NR633
	3/4" BSP	NR1675	NR627

PERFORMANCE

	CT070	CT040
Max. flow from pump	90l/min	90l/min
Rated return flow to tank (see graphs)	70 l/min	40 l/min
Maximum relief valve pressure	200 bar	200 bar
Maximum peak pressure	200 bar	200 bar
Minimum air pressure	6 bar	6 bar
Mass (including relief valve)	4.2kg	4.2kg

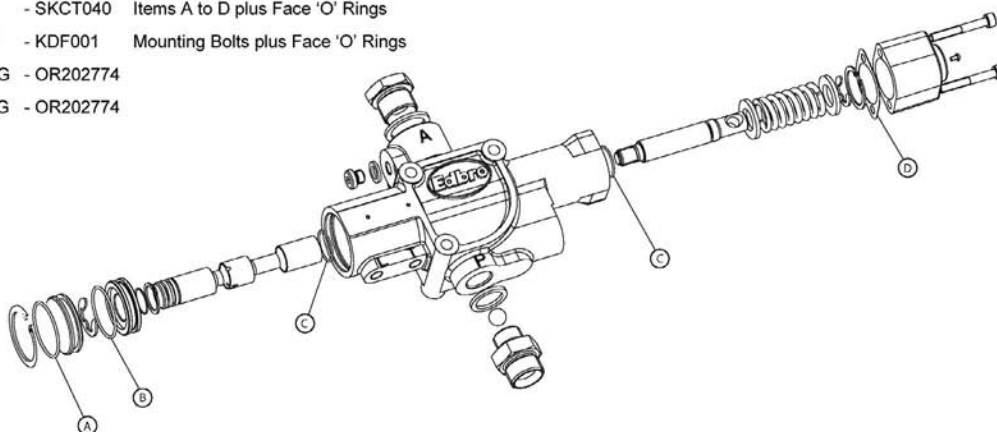


OIL & FILTRATION

- This valve is designed for tipper systems without filtration.
- The oil should be a good quality hydraulic oil to ISO 6743/4 HM2 for -15°C to +27°C working temperature.
- For extended life or for higher duty applications, 25µm absolute return line filtration is recommended.
- Oil Cleanliness to be maintained to ISO 4406 class 19/16.
- Oil should be replaced annually.

SPARES

- 1 SEAL KIT - SKCT040 Items A to D plus Face 'O' Rings
- 2 MOUNTING KIT - KDF001 Mounting Bolts plus Face 'O' Rings
- 3 PORT 'A' O RING - OR202774
- 4 PORT 'T' O RING - OR202774



Edbro

SETTING THE INDUSTRY STANDARD

We reserve the right to make changes without notice.

Transpecs

QUALITY ON THE MOVE