

TECHNICAL DATA SHEETS
and
RECOMMENDATIONS

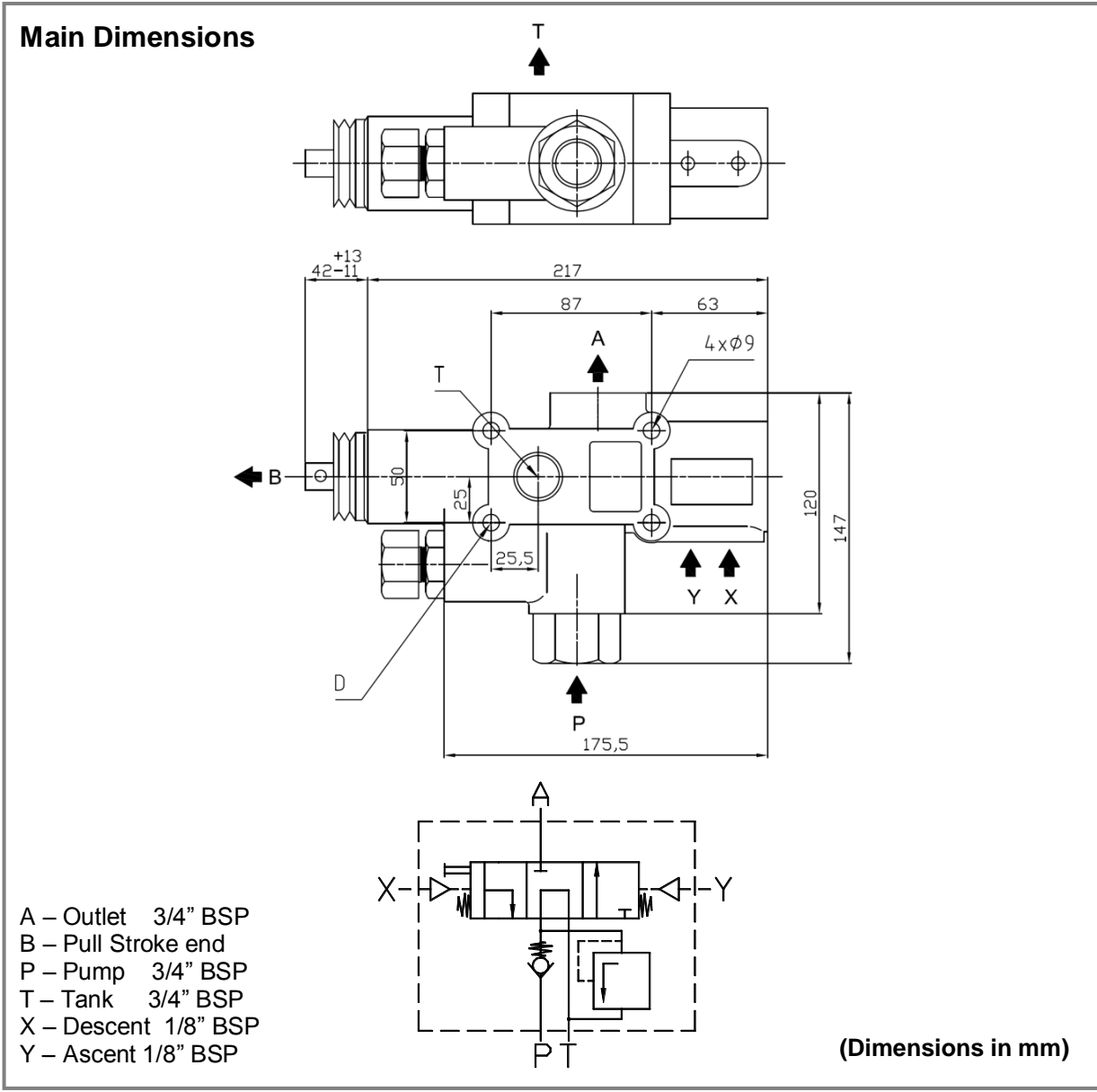
ABER

Manufacturing Hydraulic Excellence since 1972

www.ABER.pt



Tipping Valve		Ref. DTCA130
DT	Open Circuit 130 L	



Main Data

Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown



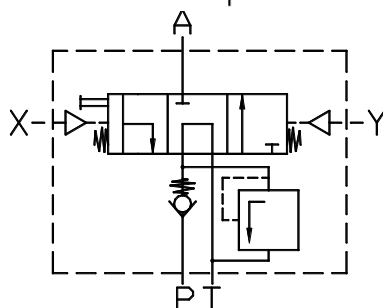
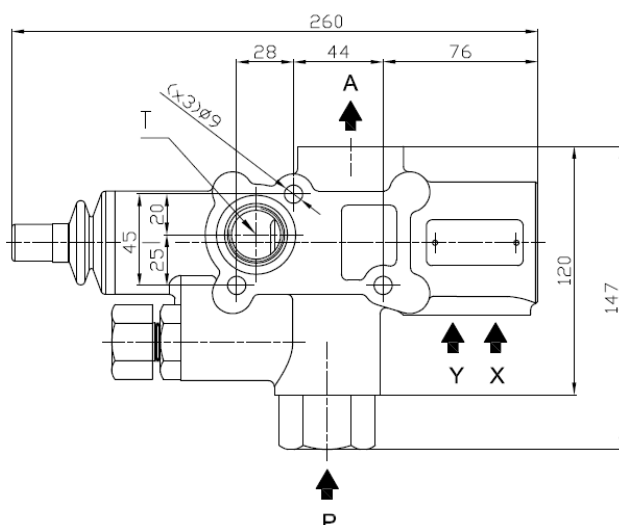
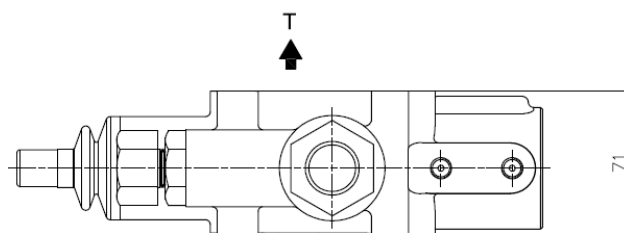
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CTI DTCA130 1504- 4



Tipping Valve		Ref. DTCA130H
DT	Open Circuit 130 l/min ; progressive descent, type H	

Main Dimensions



- A – Outlet 3/4" BSP
- P – Pump 3/4" BSP
- T – Tank 3/4" BSP
- X – Descent 1/8" BSP
- Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Approx. weight (kg)	5.2

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

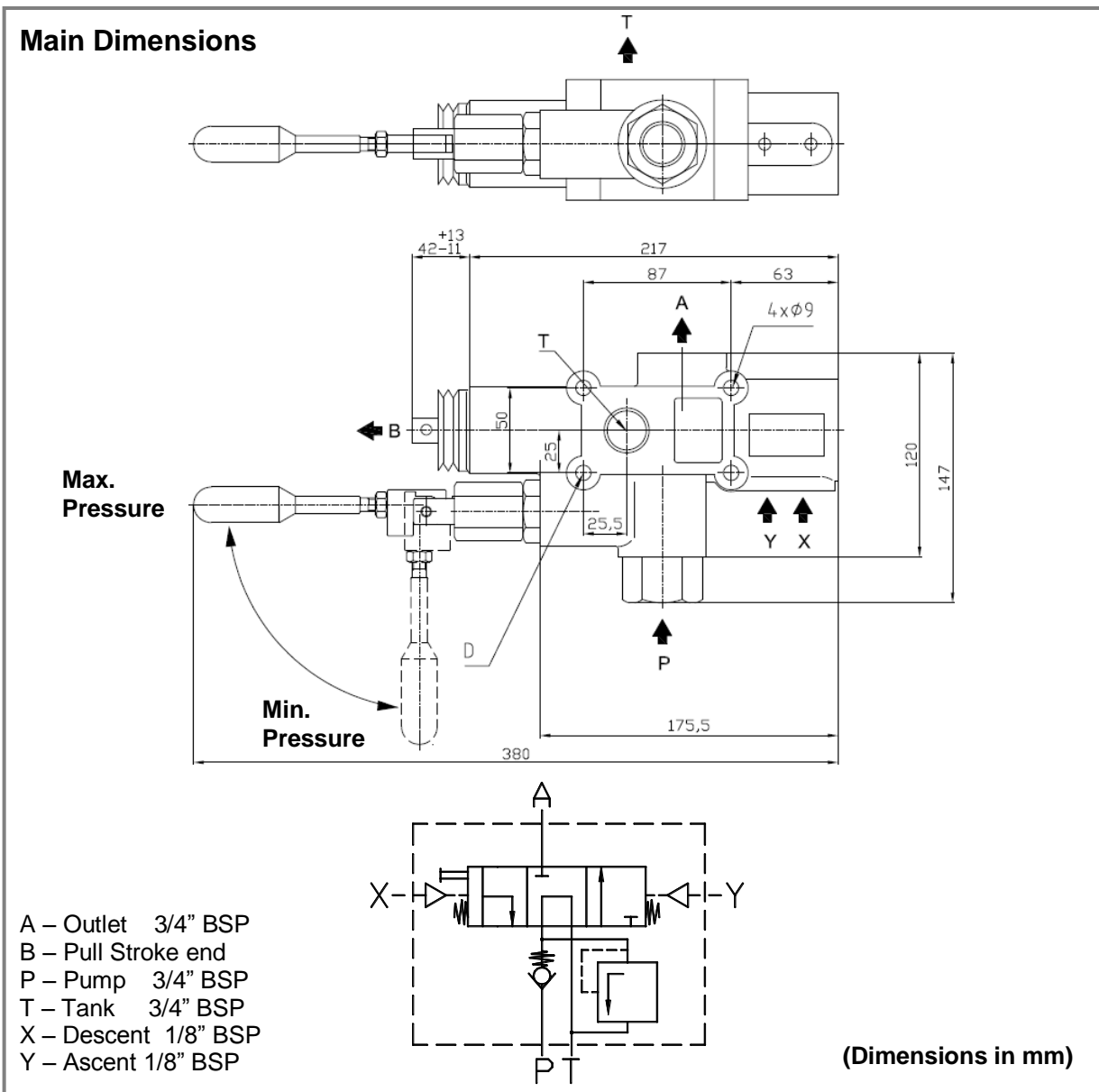
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Tipping Valve		Ref. DTCA1302P
DT	Open Circuit 130 L ; 2 Pressure Range	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.5

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

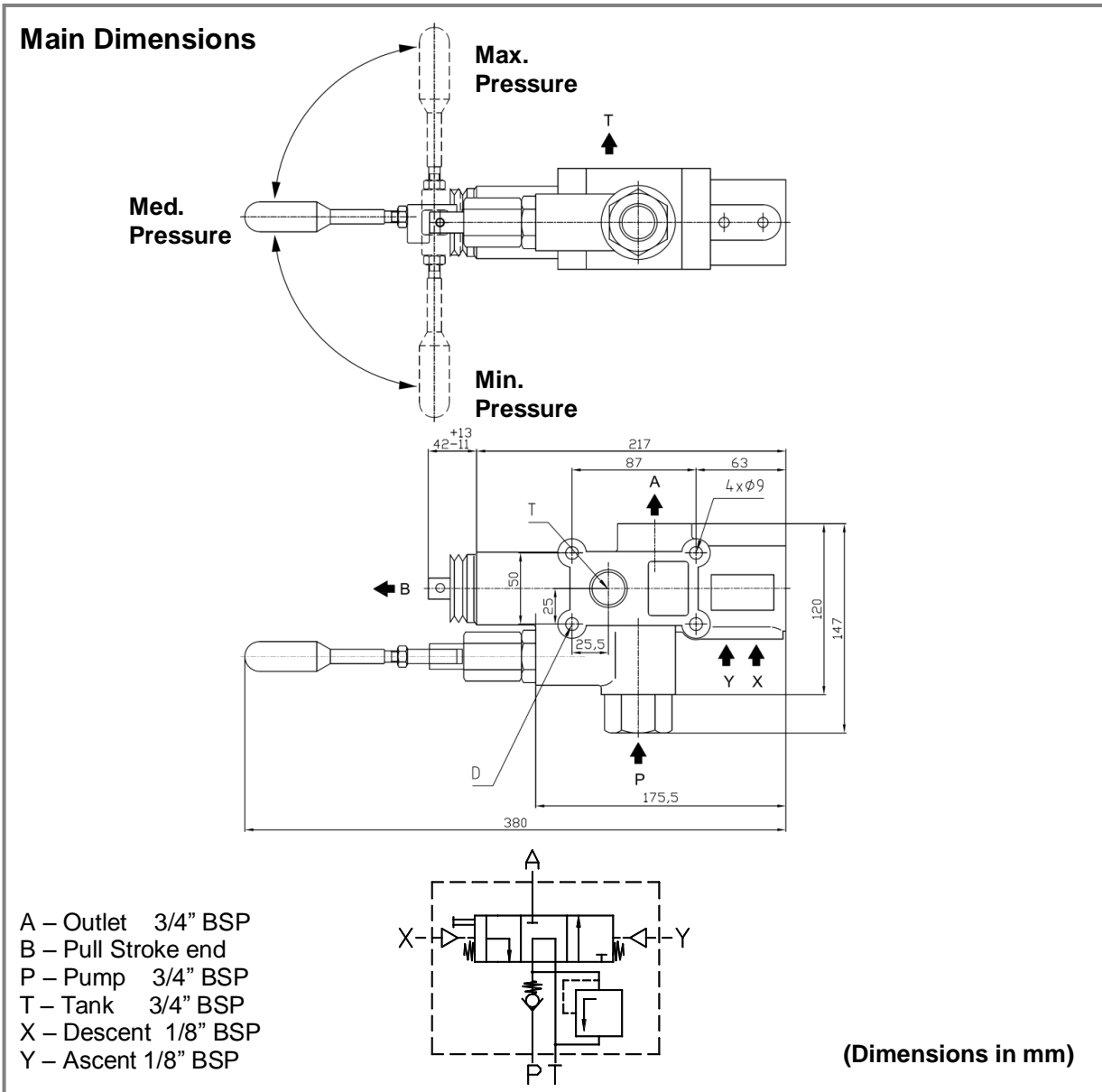
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Tipping Valve		Ref. DTCA1303P
DT	Open Circuit 130 L ; 3 Pressure Range	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.5

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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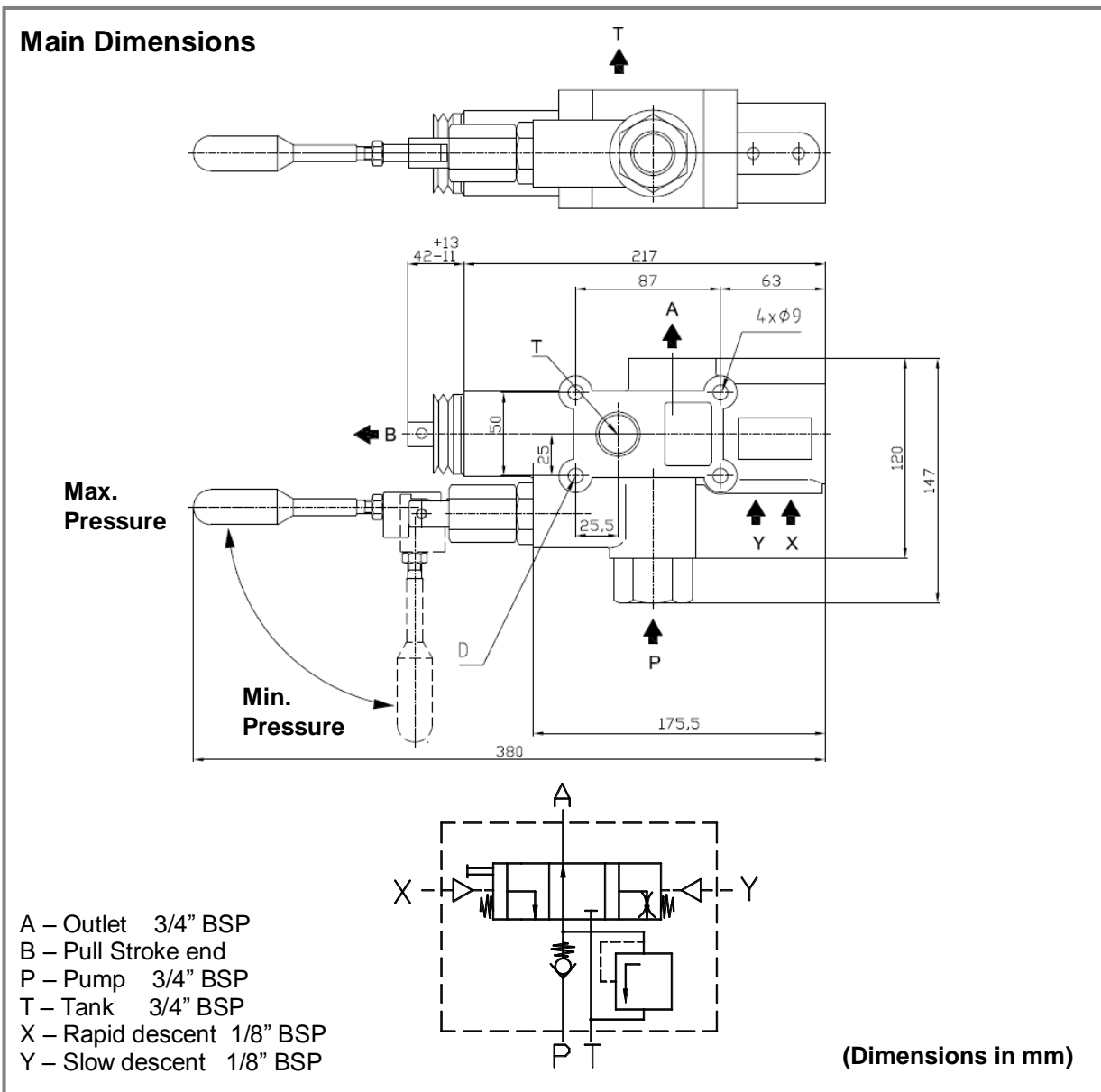


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CTI DTCA1303P 1504- 3



Tipping Valve		Ref. VVLR1302P
VV	Close Circuit 130 L ; 2 Pressure Range	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.5

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

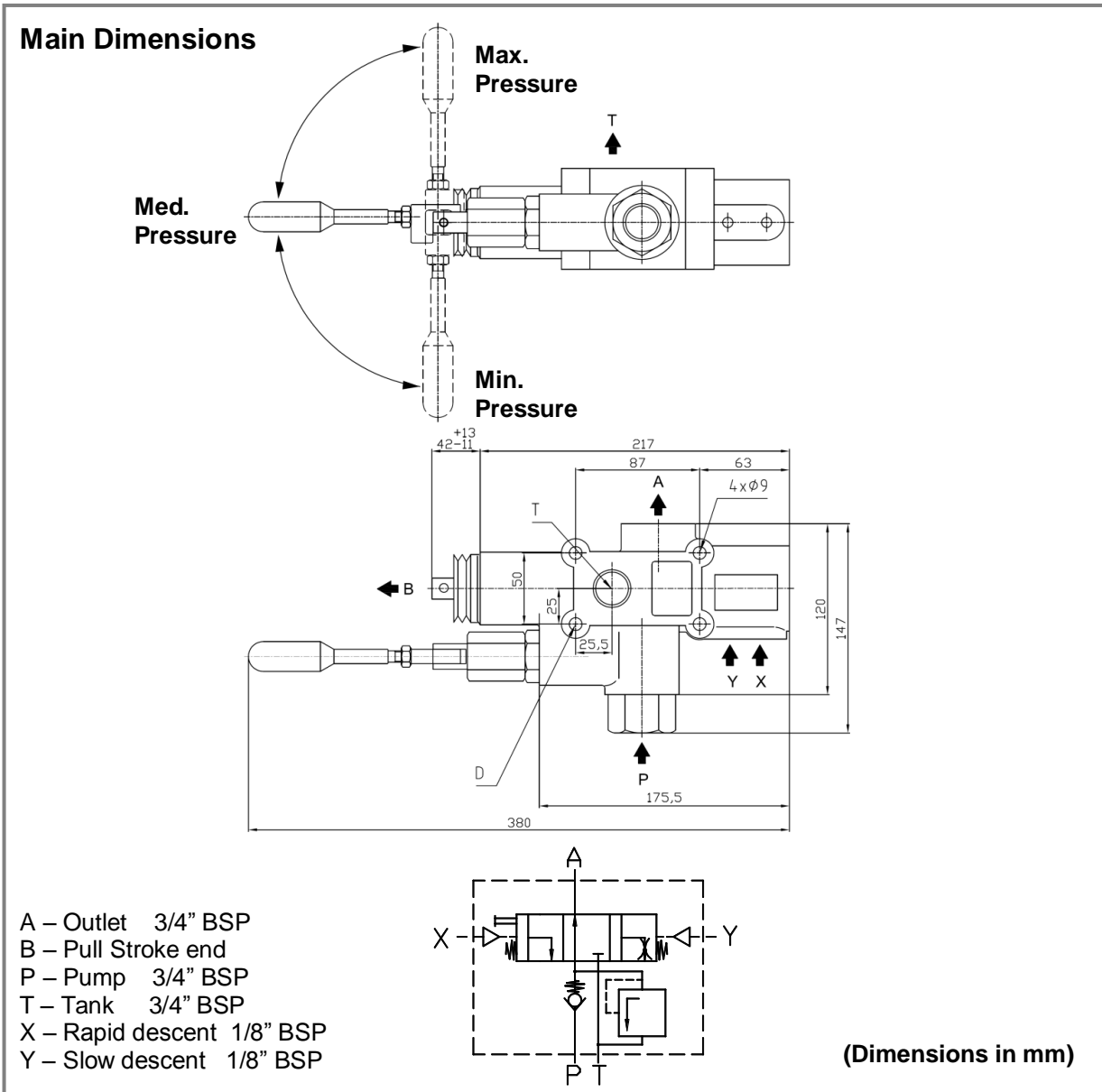
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Tipping Valve		Ref. VVLR1303P
VV	Close Circuit 130 L ; 3 Pressure Range	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.5

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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Tipping Valve		Ref. VVLR13001
VV	Close Circuit 130 L	

Main Dimensions

A – Outlet 1" BSP
 B – Pull Stroke end
 P – Pump 1" BSP
 T – Tank 1" BSP
 X – Rapid descent 1/8" BSP
 Y – Slow descent 1/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

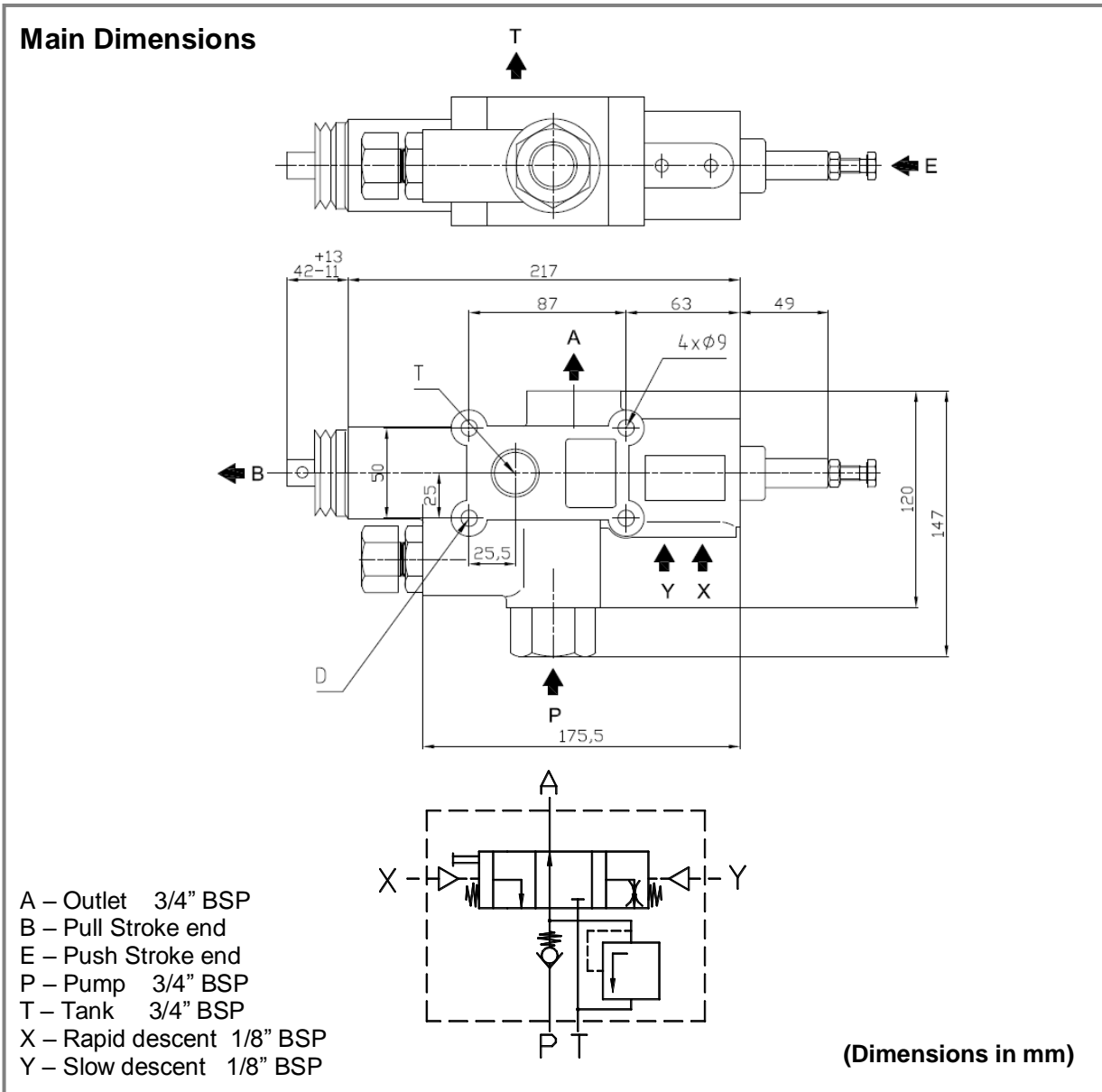
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Tipping Valve		Ref. VVLR130F VVP130F
VV	Close Circuit 130 L ; Push Stroke End	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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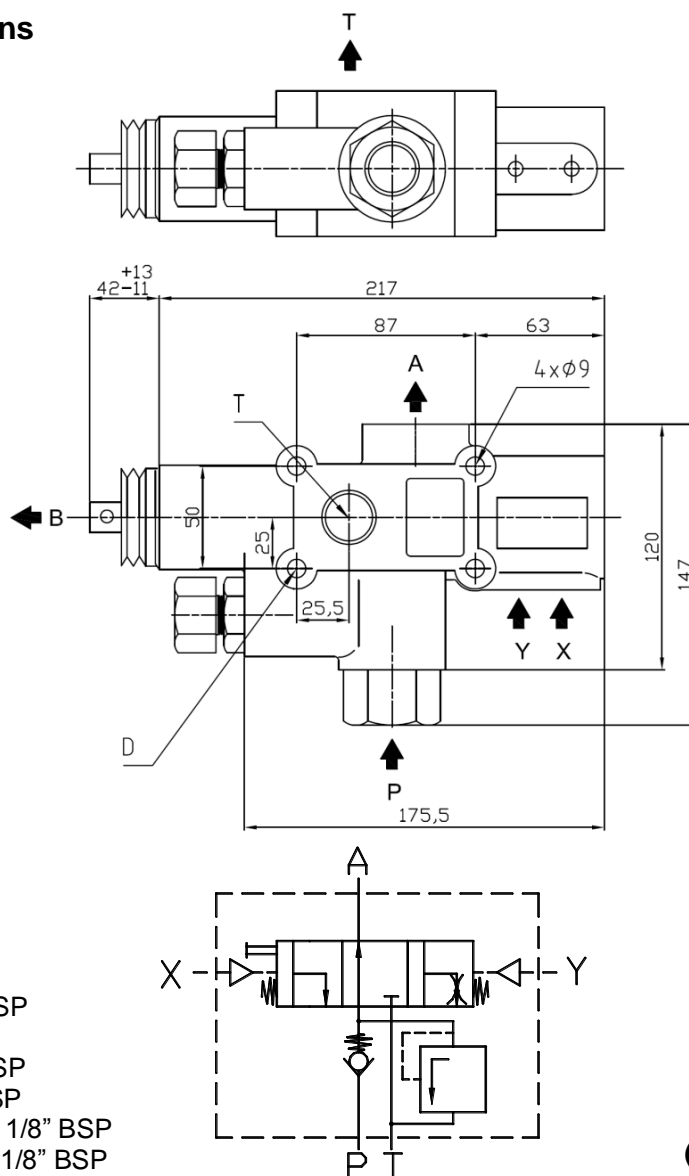
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CTI VV 130F 1504-3



Tipping Valve		Ref. VVLR130 VVP130
VV	Close Circuit 130 L	

Main Dimensions



- A – Outlet 3/4" BSP
- B – Pull Stroke end
- P – Pump 3/4" BSP
- T – Tank 3/4" BSP
- X – Rapid descent 1/8" BSP
- Y – Slow descent 1/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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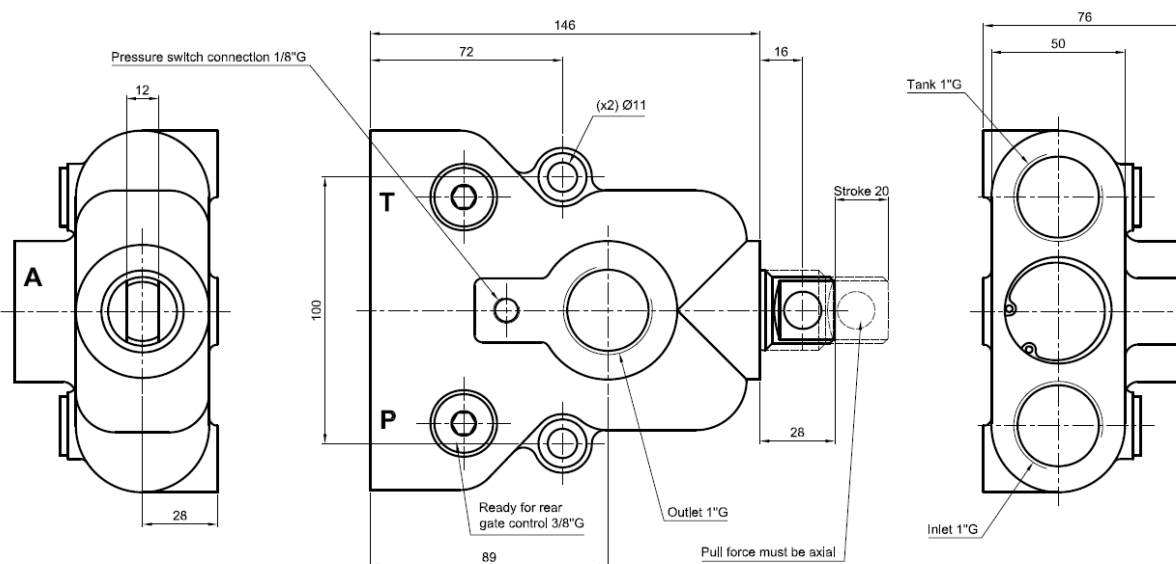


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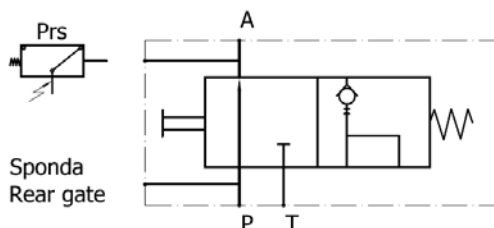


End of stroke valve		Ref. VFC100
VFC	Mechanical end of stroke valve	

Main Dimensions



A – Outlet 1" G
P – Inlet 1" G
T – Tank 1" G



(Dimensions in mm)

Main Data

Max working pressure (bar)	350
Max peak pressure (bar) (<0,1s)	400
Flow rate (l/min)	200
Weight (kg)	4,5

Fluids	mineral oils type ISO VG 46
Operating viscosity range	12 to 100 cSt (mm ² /s) at working temperature
Fluid temperature	-25°C + 80°C
Filtration	ISO 4406 - 25 µm

CTI VFC100 1210-0

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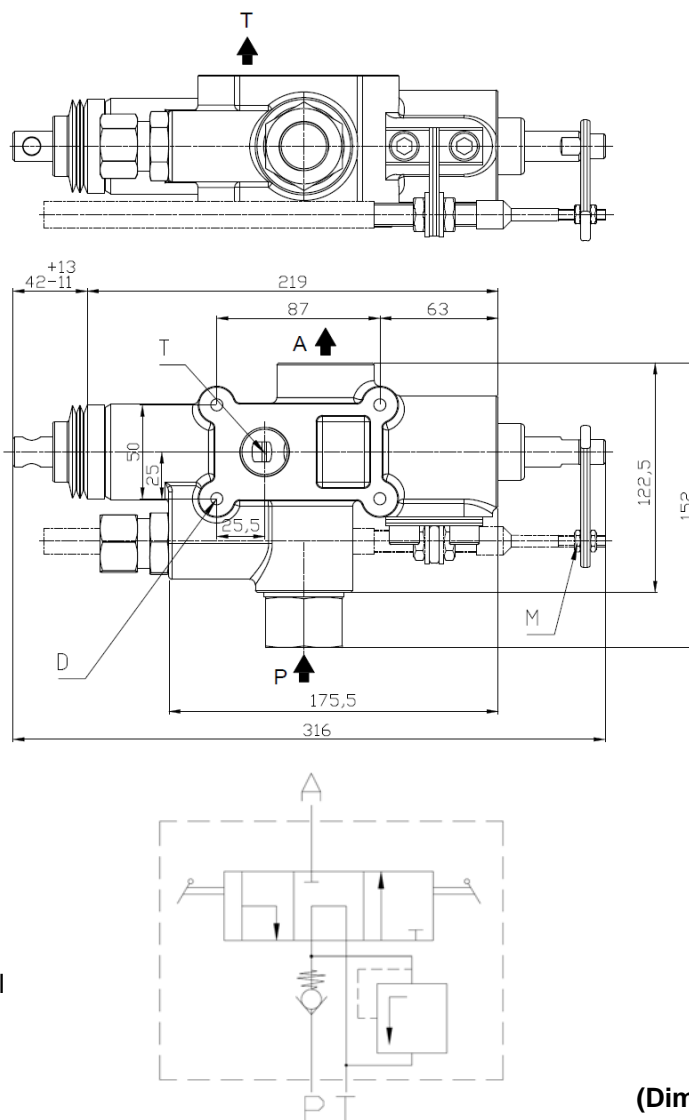


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Tipping Valve		Ref. DTCA130M
DT	Open Circuit 130 l/min.	

Main Dimensions



- A – Outlet 3/4" BSP
- M – Mechanical Control
- P – Pump 3/4" BSP
- T – Tank 3/4" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

Notes:

- ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

CTI DTCA130M 1508-0

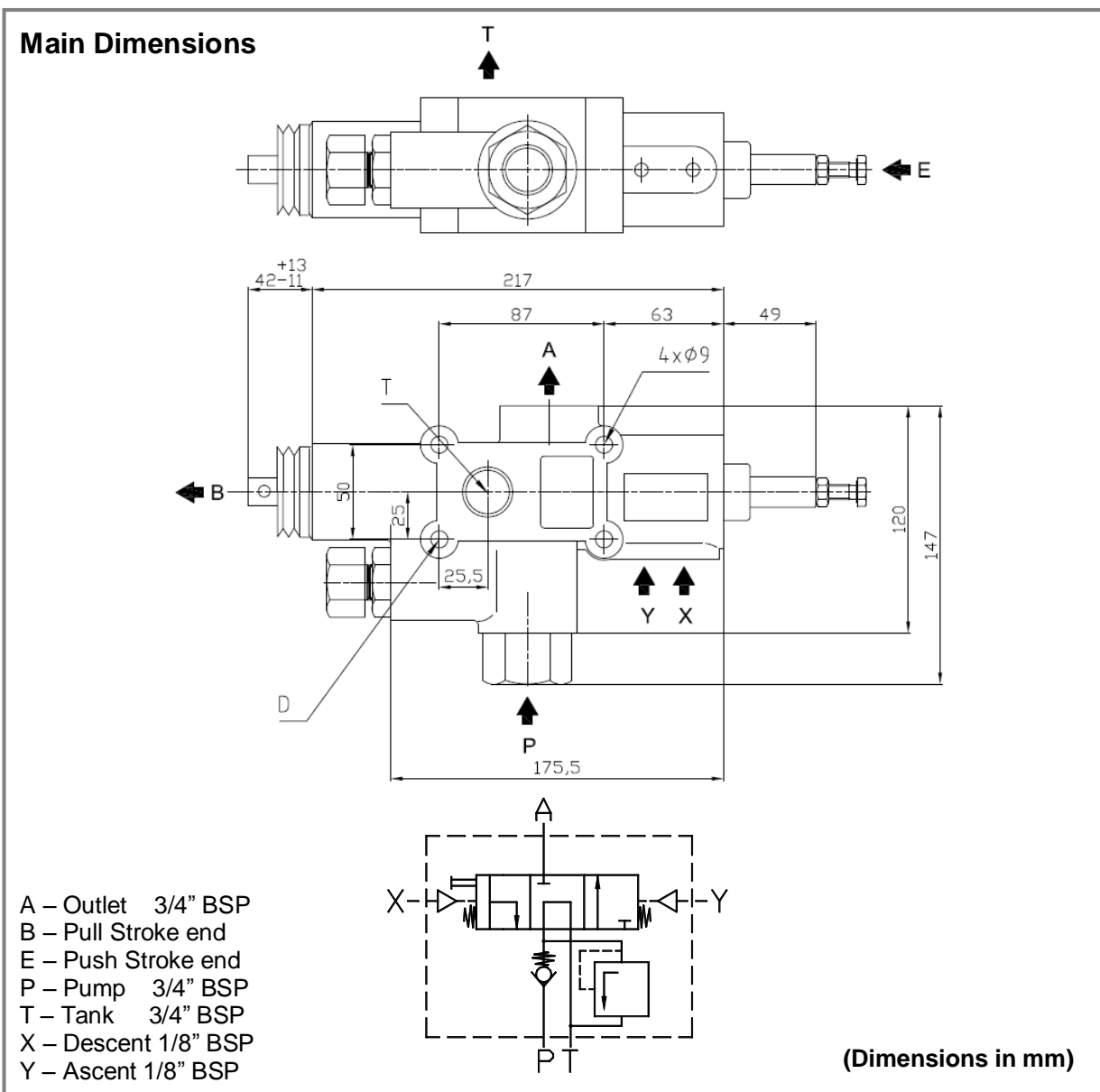
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Tipping Valve		Ref. DTCA130F
DT	Open Circuit 130 L ; Push Stroke End	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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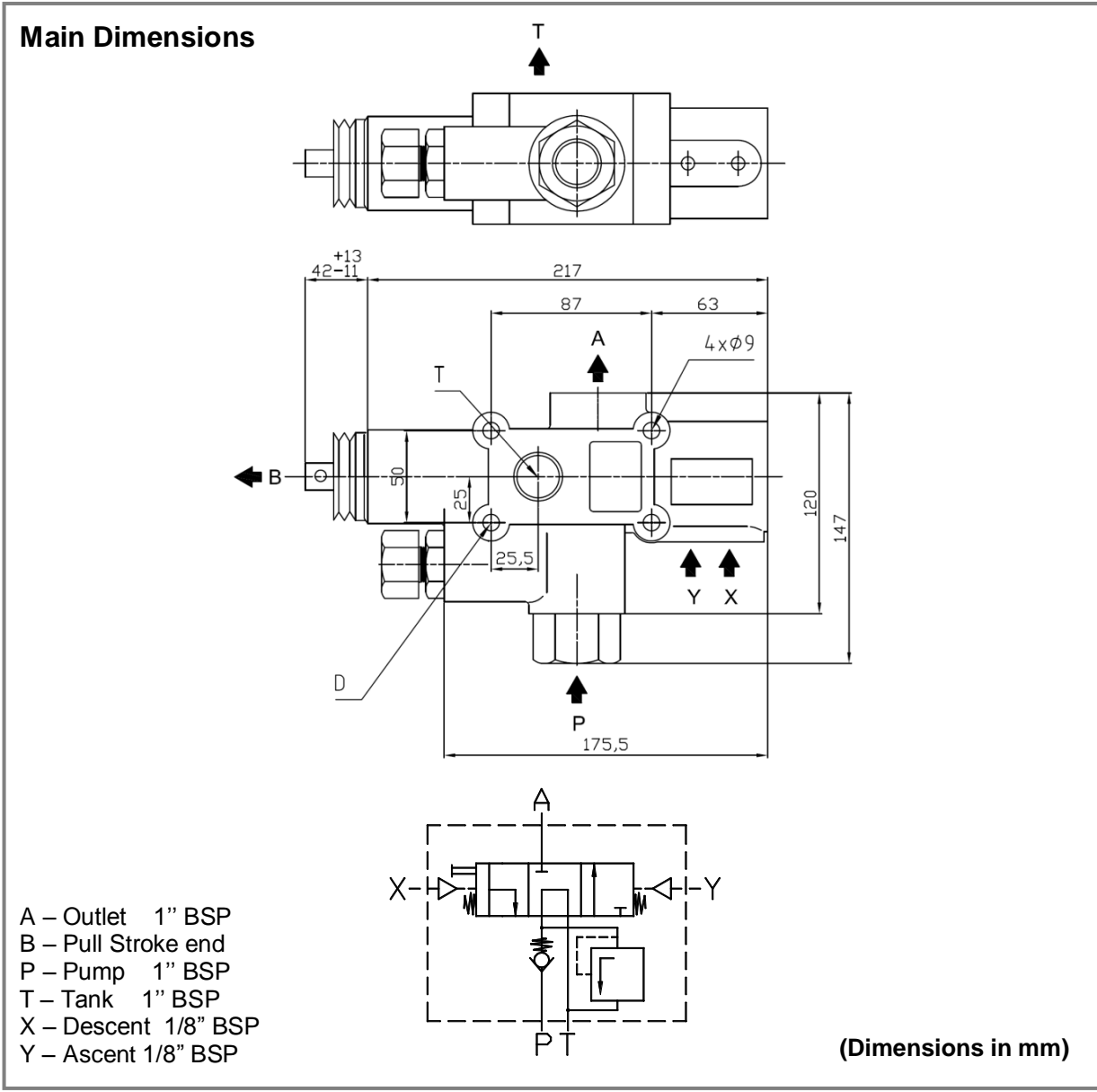


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CTI DTCA130F 1504- 4



Tipping Valve		Ref. DTCA13001
DT	Open Circuit 130 L	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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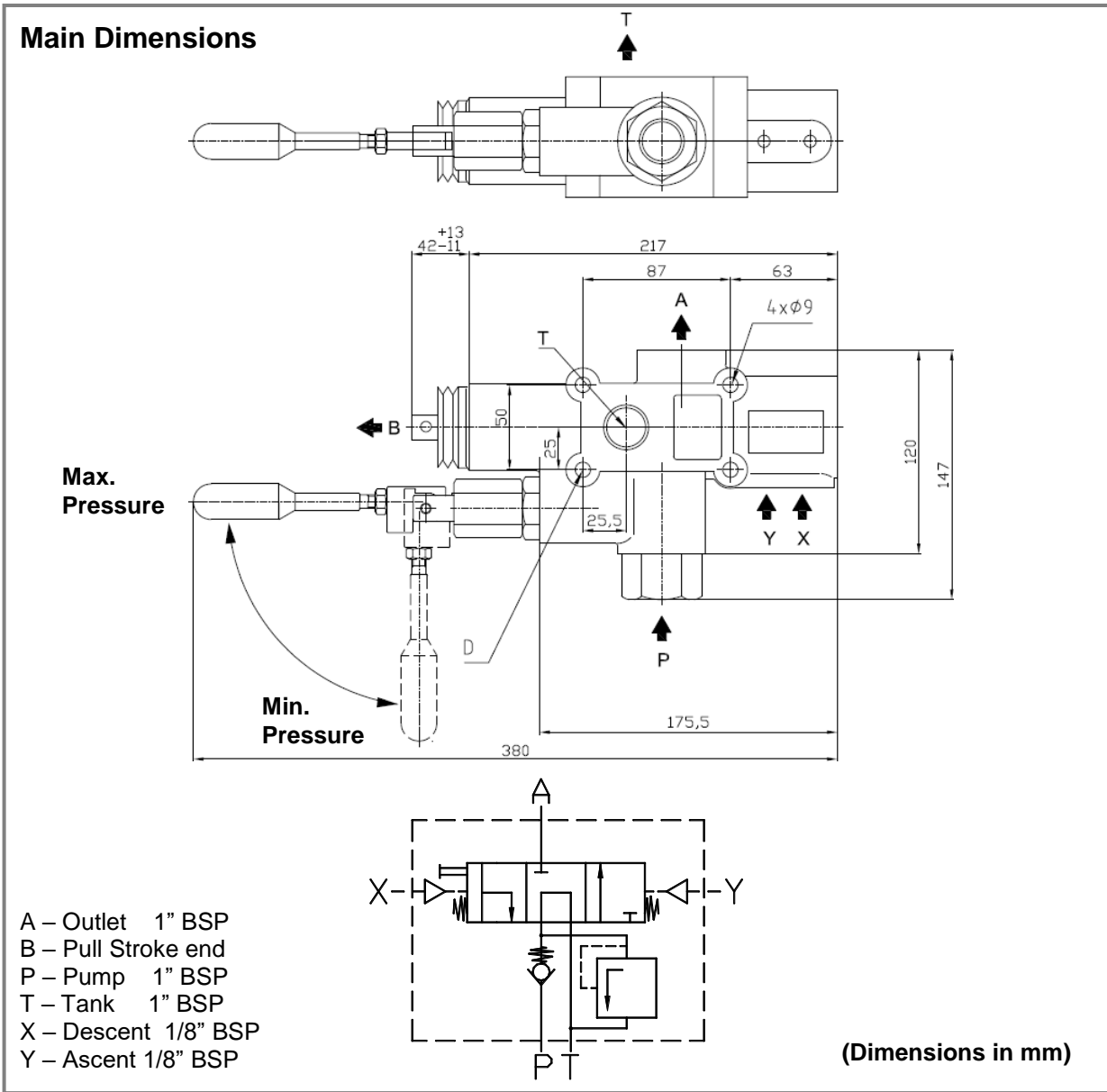


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CTI DTCA13001 1504- 3



Tipping Valve		Ref. DTCA130012P
DT	Open Circuit 130 L ; 1" BSP ; 2 Pressure Range	



Main Data	
Maximum pressure (Bar)	350
Flow rate (l/min)	130
Weight (kg)	5.5

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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Tipping Valve		Ref. DTCA1302V
DT	Open Circuit 130 L ; 2 Descent Speeds	

Main Dimensions

2 Descent speed

X – Fast Descent 1/8" BSP
 Z – Slow Descent 1/8" BSP
 Y – Ascent 1/8" BSP

A – Outlet 3/4" BSP
 B – Pull Stroke end
 P – Pump 3/4" BSP
 T – Tank 3/4" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate (l/min)	130
Weight (kg)	6

- Note:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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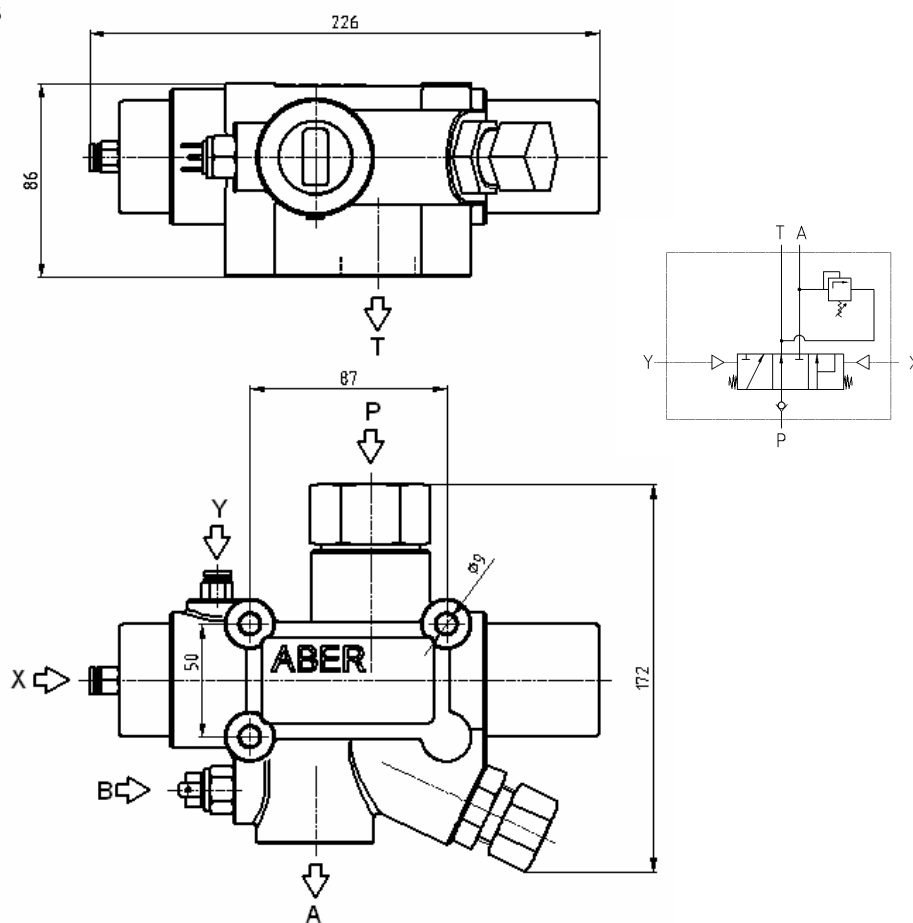
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CTI DTCA1302V 1504- 4



Tipping Valve		Ref. DTCA250
DT	Open Circuit 250 l/min	

Main Dimensions



- A – Outlet 1" BSP
- B – Pressure switch (option)
- P – Pump 1" BSP
- T – Tank 1" BSP
- X – Descent 1/8" BSP
- Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (bar)	350
Operating pressure (bar)	up to 300
Flow rate (l/min)	250
Weight (kg)	6

Note:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Tighten the tipping valve with three bolts. Screw the three bolts with a max. tightening torque of 20N.m (soft tightening).

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Tipping Valve		Ref. DTCA2502P
DT	Open Circuit 250 l/min ; 2 Pressure Range	

Main Dimensions

A – Outlet 1" BSP
 B – Pressure switch (option)
 P – Pump 1" BSP
 T – Tank 1" BSP
 X – Descent 1/8" BSP
 Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (bar)	350
Operating pressure (bar)	up to 300
Flow rate (l/min)	250
Weight (kg)	6.5

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with three bolts. Screw the three bolts with a max. tightening torque of 20N.m (soft tightening).

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CTI DTCA2502P 1504-3



Tipping Valve		Ref. DTCA2503P
DT	Open Circuit 250 l/min ; 3 Pressure Range	

Main Dimensions

A – Outlet 1" BSP
 B – Pressure switch (option)
 P – Pump 1" BSP
 T – Tank 1" BSP
 X – Descent 1/8" BSP
 Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (bar)	350
Operating pressure (bar)	up to 300
Flow rate (l/min)	250
Weight (kg)	6.5

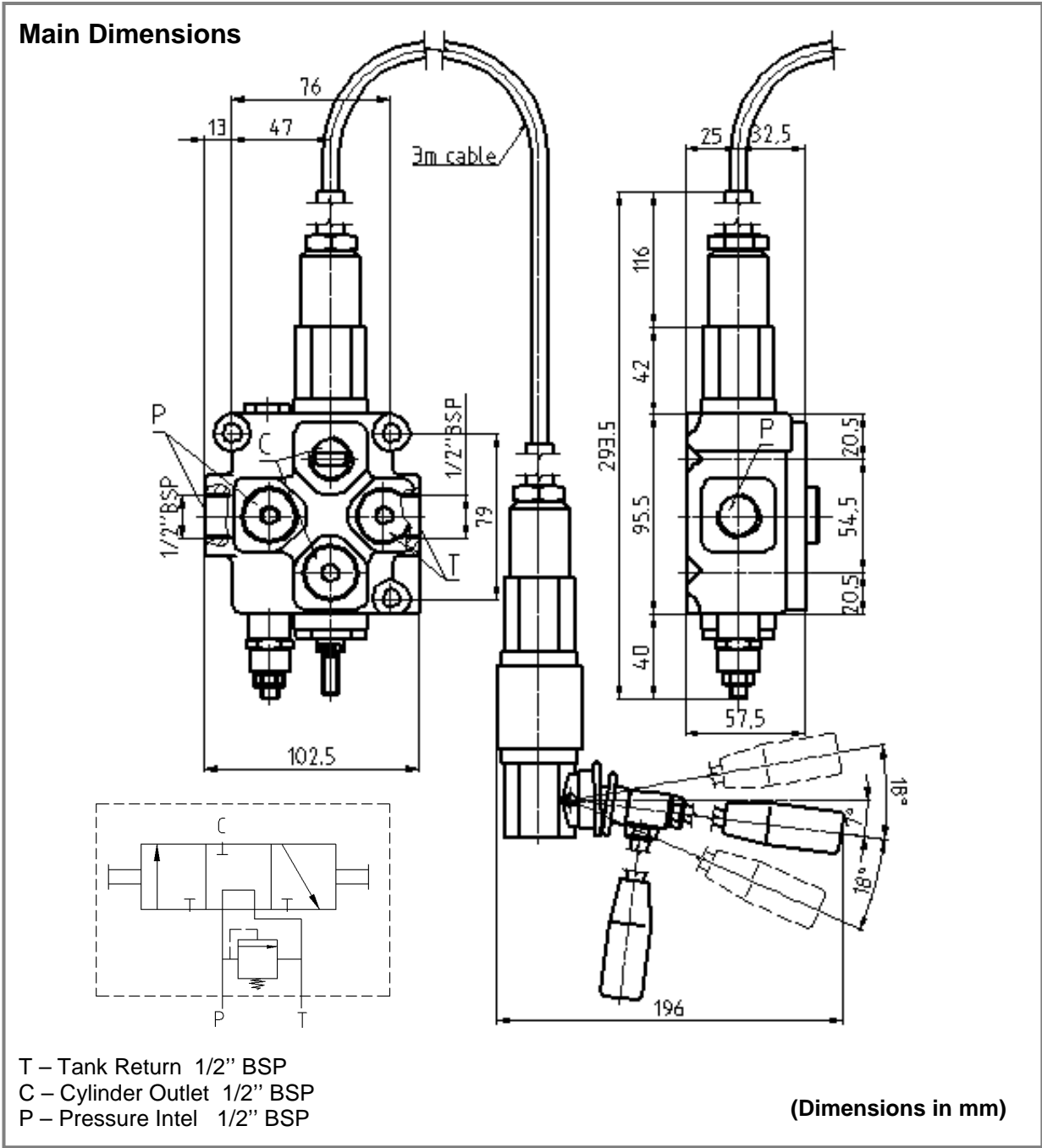
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 - ✓ Tighten the tipping valve with three bolts. Screw the three bolts with a max. tightening torque of 20N.m (soft tightening).

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CTI DTCA2503P 1504-3



Tipping Valve		Ref. DT50C3C0
DT	Tipping Valve up to 50L + cable for mechanical operation 3.0m	



Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate	50 L/min
Weight (kg)	5

CTI DT50C3C0 0901-1

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Tipping Valve		Ref. VVP150
VV	Close Circuit 150 L	

Main Dimensions

A – Outlet 1" BSP
 P – Pump 3/4" BSP
 C – Progressive descent 1/8" BSP
 T – Tank 3/4" BSP
 E – Pull Stroke end

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 200
Flow rate	150 L/min
Weight (kg)	4.6

Note:
 ✓ This distributor can be used in progressive descent with our air command AOHCDC2 or AOHCDC3

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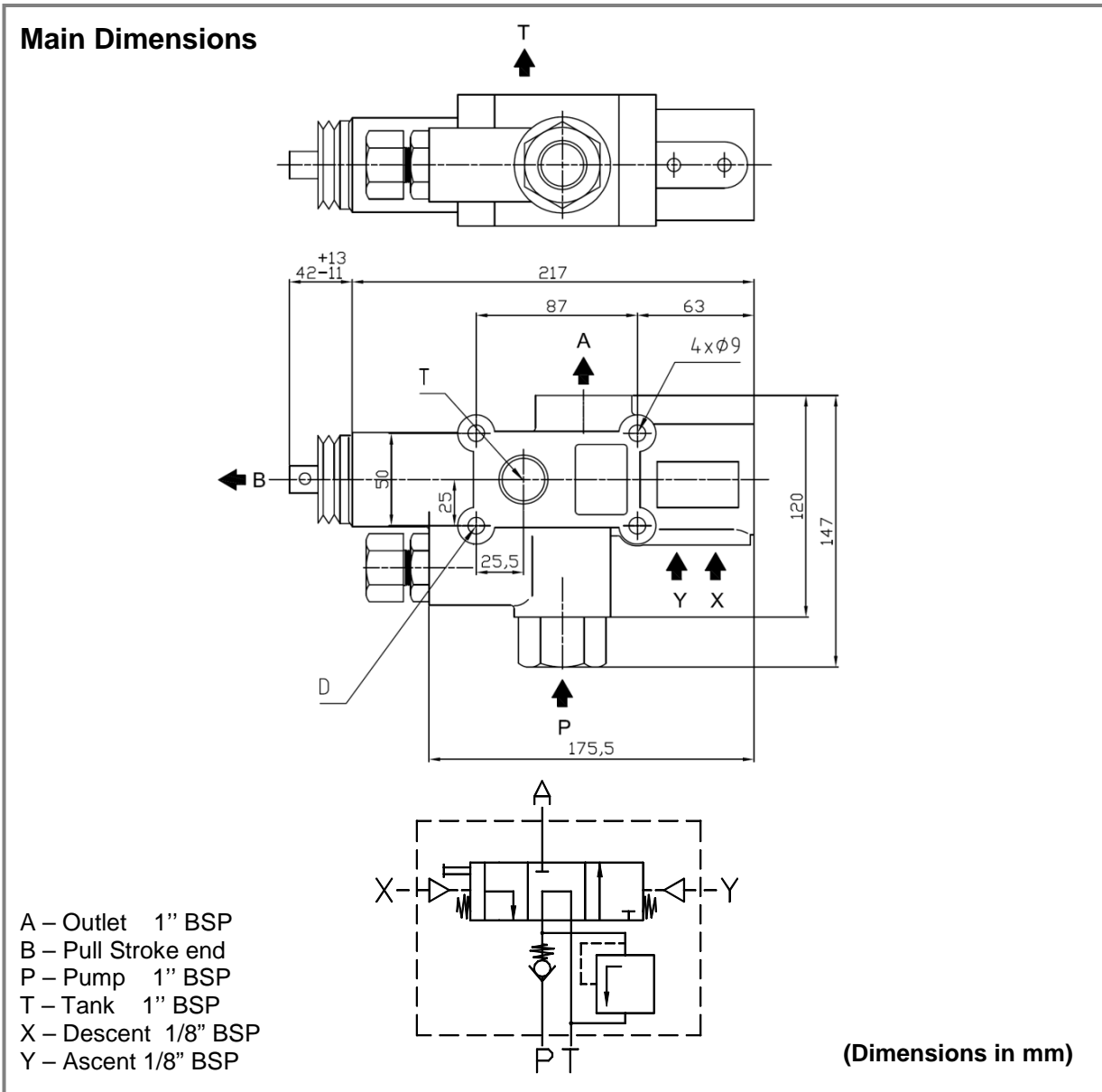


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CTI VVP150 1106-3



Tipping Valve		Ref. DTCA200
DT	Open Circuit 200 l/min	



Main Data	
Maximum pressure (Bar)	300
Operating pressure (Bar)	up to 250
Flow rate (l/min)	200
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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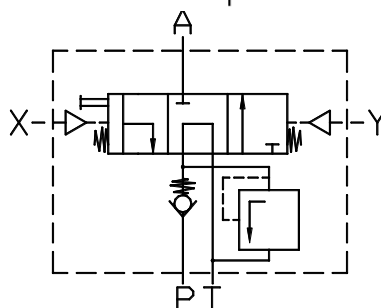
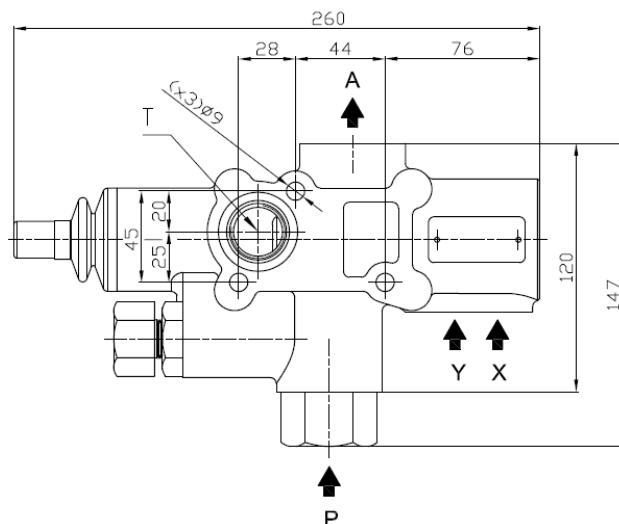
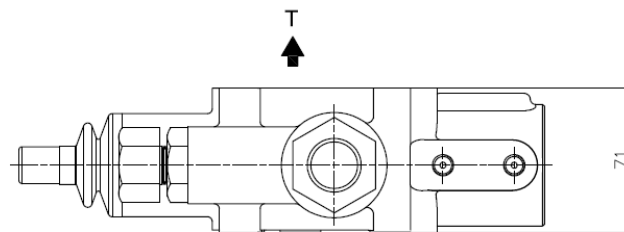
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CTI DTCA200 1606-0



Tipping Valve		Ref. DTCA200H
DT	Open Circuit 200 l/min ; progressive descent, type H	

Main Dimensions



- A – Outlet 1" BSP
- P – Pump 1" BSP
- T – Tank 3/4" BSP
- X – Descent 1/8" BSP
- Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	300
Operating pressure (Bar)	up to 250
Flow rate (l/min)	200
Approx. weight (kg)	5.2

Notes:

- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
- ✓ Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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Tipping Valve		Ref. DTCA200H2V
DT	Open Circuit 200 L ; type H ; 2 Descent Speeds	

Main Dimensions

2 Descent speed

X – Fast Descent 1/8" BSP
 Z – Slow Descent 1/8" BSP
 Y – Ascent 1/8" BSP

A – Outlet 1" BSP
 P – Pump 1" BSP
 T – Tank 1" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	300
Operating pressure (Bar)	up to 250
Flow rate (l/min)	200
Weight (kg)	6

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

CTI DTCA200H2V 1610- 0

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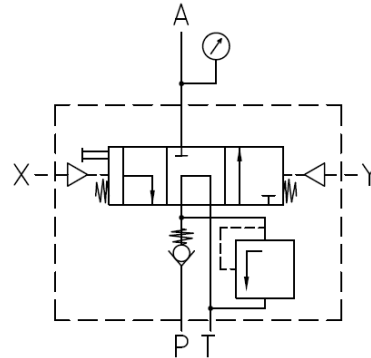
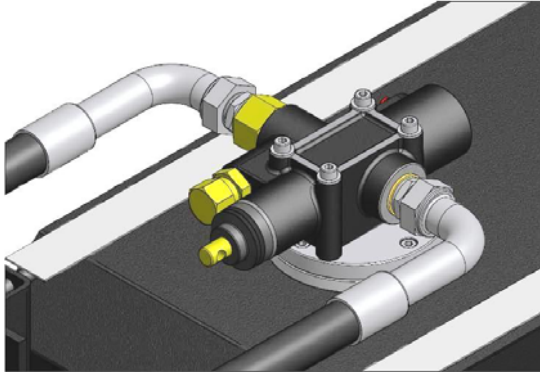


INSTRUCTION TO ADJUST RELIEF VALVE UP TO 250bar DTCA130

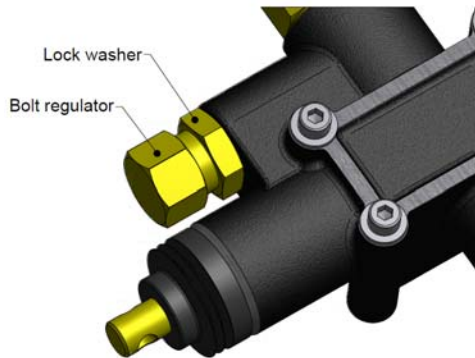
Procedure:

A pressure relief valve is a safety device that relieves overpressure in a hydraulic circuit. When a relief valve is working properly, it protects all the system components against overpressures. To adjust a relief valve, the operator must respect and follow the next steps.

1st- Turn off the whall system and relieve all the pressure in the circuit. Put the air control in the descent position and install a manometer in line "A", please see picture.

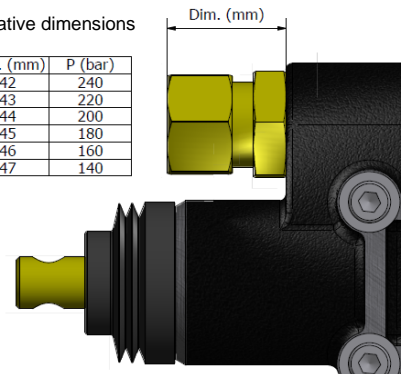


2nd- Unscrew the lock washer and tighten the bolt regulator to the correct pressure, following the dimensions in the drawing.



Indicative dimensions

Dim. (mm)	P (bar)
42	240
43	220
44	200
45	180
46	160
47	140



3rd- Tighten the lock washer, put the air control in the neutral position, turn on the system and work with it. Verify if the correct pressure is on manometer.

4th- With the correct pressure in the manometer, turn off the whall the system and relieve all the pressure in the circuit. Put the air control in the descent position and uninstall the manometer.

5th- Tighten everything well again. Put the air control in the neutral position, and your system is ready to work with the new pressure.

Note : ABER's pressure relief valves have different springs, lock washers and bolt regulators. The different working pressures are up to 250bar and higher than 250bar. A valve controlled to work at 160bar never can be adjusted for a pressure higher than 250bar, and a controlled valve to work at 300bar never can be adjusted to work up to 250bar.

CTI Instruction to adjust relief valve 1105- 0

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Tipping Valve		Ref. DTCA200F
DT	Open Circuit 200 l/min ; Push Stroke End	

Main Dimensions

A – Outlet 1" BSP
 B – Pull Stroke end
 E – Push Stroke end
 P – Pump 1" BSP
 T – Tank 1" BSP
 X – Descent 1/8" BSP
 Y – Ascent 1/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	300
Operating pressure (Bar)	up to 250
Flow rate (l/min)	200
Weight (kg)	5.2

- Notes:**
- ✓ This tipping valve can be used in progressive descent with our air commands ABCD.
 - ✓ Tighten the tipping valve with only three bolts. Do not use the "D" hole. Screw the three bolts with a max. tightening torque of 20 N.m (soft tightening).

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CTI DTCA200F 1606-0



SECTIONAL DIRECTIONAL CONTROL VALVES		Ref. DTS10020
DT	Open Circuit 100L	

Main Dimensions

Legend:
 A – Outlet G3/4”
 B – Pull Stroke End G3/4”
 P – Pump G3/4”
 T– Descent G1”

(Dimensions in mm)

- High strength cast iron
- Hard chrome plated interchangeable
- Steel spring caps
- Aluminium lever caps
- NBR seals
- Parallel circuit
- Adjustable main relief valve
- Load hold check valve in each section
- Double action

Main Data	
A1 / B1 Operating pressure (bar)	up to 350
A2 / B2 Operating pressure (bar)	up to 130
A1 Flow rate (l/min)	100
A2 / B2 Flow rate (l/min)	20
Weight (kg)	20

CTI DTS10020 1105-0

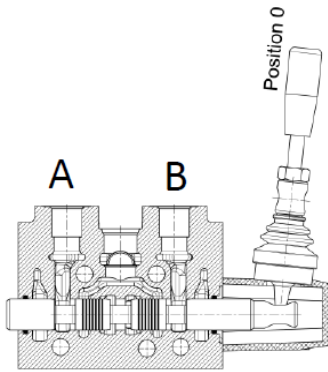
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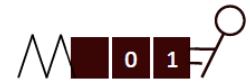
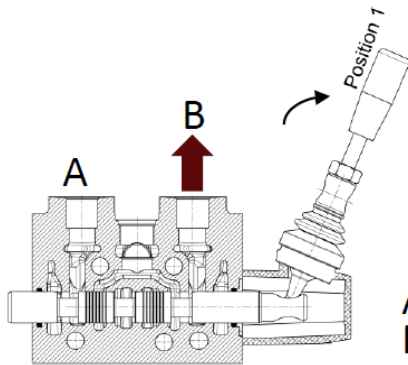
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Spool Control Positions

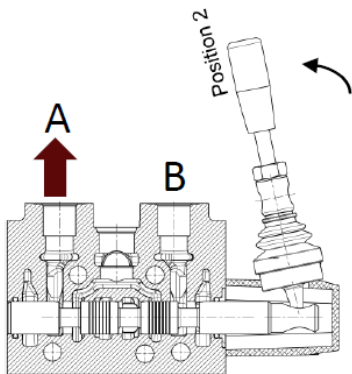


Spool-neutral position;
POSITION 0



Spool-out position;
POSITION 1

A → T
P → B



Spool-in position;
POSITION 2

B → T
P → A

CTI DTS10020 1105-0

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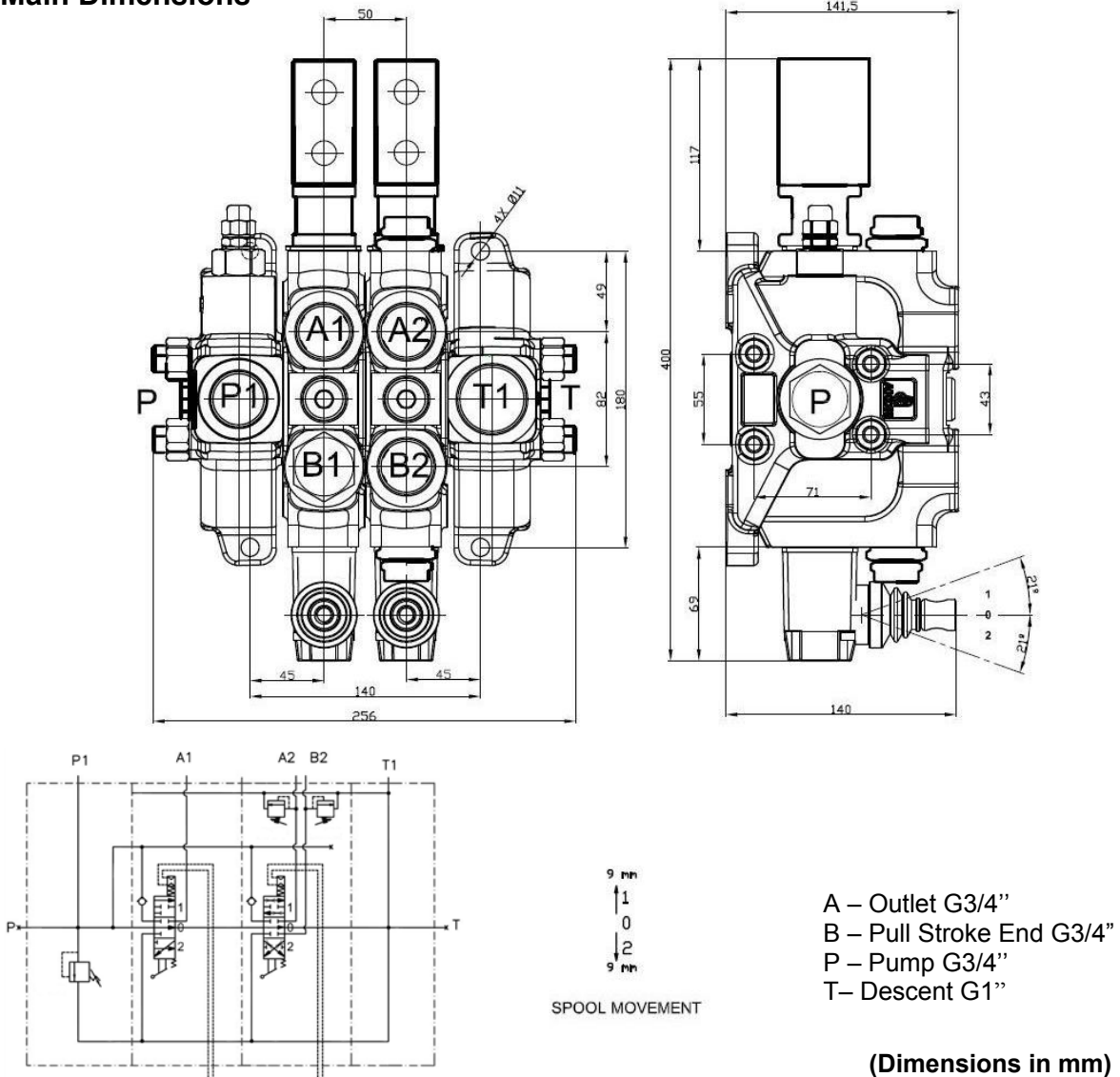
SECTIONAL DIRECTIONAL CONTROL VALVES

Ref. DTS25060

DT

Open Circuit 250l/min

Main Dimensions



(Dimensions in mm)

- High strength cast iron
- Hard chrome plated interchangeable
- Steel spring caps
- Aluminium lever caps
- NBR seals
- Parallel circuit
- Adjustable main relief valve
- Load hold check valve in each section
- Double action

Main Data

Operating pressure (bar)	up to 320
A1 Flow rate (l/min)	250
A2 / B2 Flow rate (l/min)	60
Weight (kg)	21,8

CTI DTS25060 1504-0

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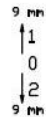
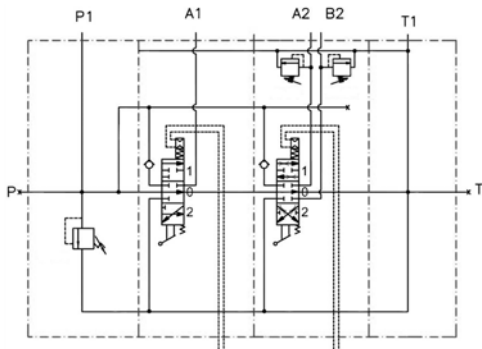
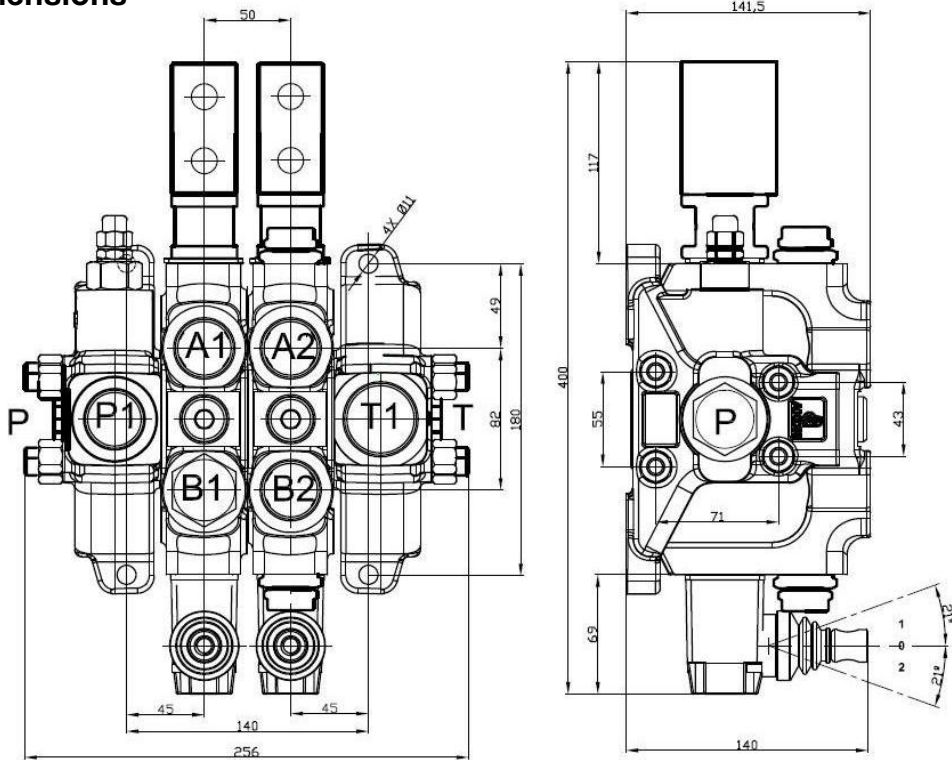
SECTIONAL DIRECTIONAL CONTROL VALVES

Ref. DTS15020

DT

Open Circuit 150L

Main Dimensions



SPOOL MOVEMENT

A – Outlet G3/4”
 B – Pull Stroke End G3/4”
 P – Pump G3/4”
 T– Descent G1”

(Dimensions in mm)

- High strength cast iron
- Hard chrome plated interchangeable
- Steel spring caps
- Aluminium lever caps
- NBR seals
- Parallel circuit
- Adjustable main relief valve
- Load hold check valve in each section
- Double action

Main Data

A1 Operating pressure (bar)	up to 180
A2 / B2 Operating pressure (bar)	up to 130
A1 Flow rate (l/min)	150
A2 / B2 Flow rate (l/min)	20
Weight (kg)	21,8

CTI DTS15020 1105-0

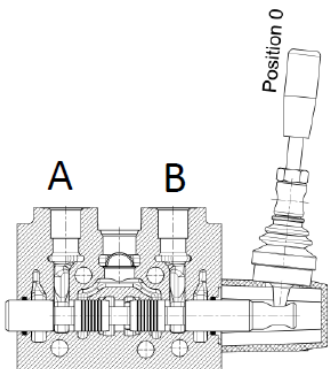
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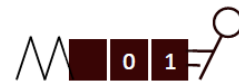
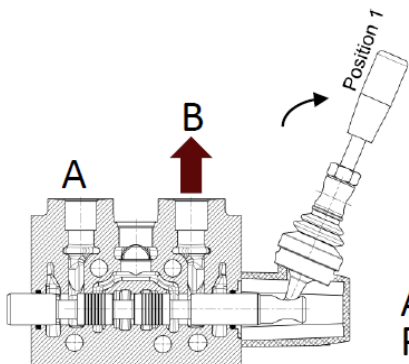
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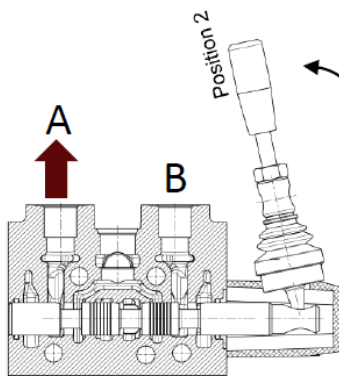
Spool Control Positions



Spool-neutral position;
POSITION 0



Spool-out position;
POSITION 1



Spool-in position;
POSITION 2

CTI DTS15020 1105-0

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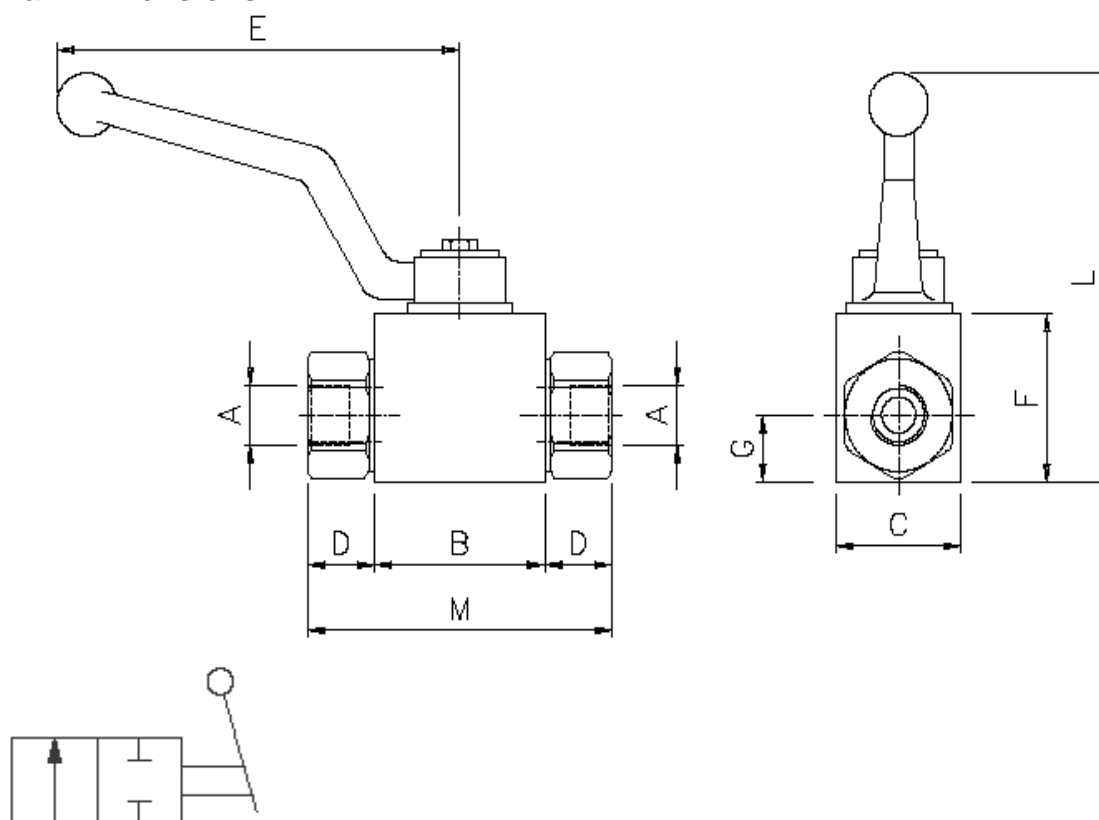




BALL VALVE

2 WAYS

Main Dimensions



(Dimensions in mm)

Ref	Description	Max Flow (l/min)	Max Pressure (bar)	Weight (Kg)	A	B	C	D	E	F	G	L	M
VD2V38C1	2 Ways Ball Valve 3/8	35	500	0,65	3/8" BSP	44	30	15	105	40	18	94	72
VD2V12C1	2 Ways Ball Valve 1/2	60	500	0,75	1/2" BSP	48	37	17,5	108	43	18	96	83
VD2V34C1	2 Ways Ball Valve 3/4	100	315	1,4	3/4" BSP	62	45	16	180	55	23	105	95
VD2V10C1	2 Ways Ball Valve 1	150	315	2,15	1" BSP	66	55	23,5	180	65	30	115	113

CTI/VD2V 0901-1

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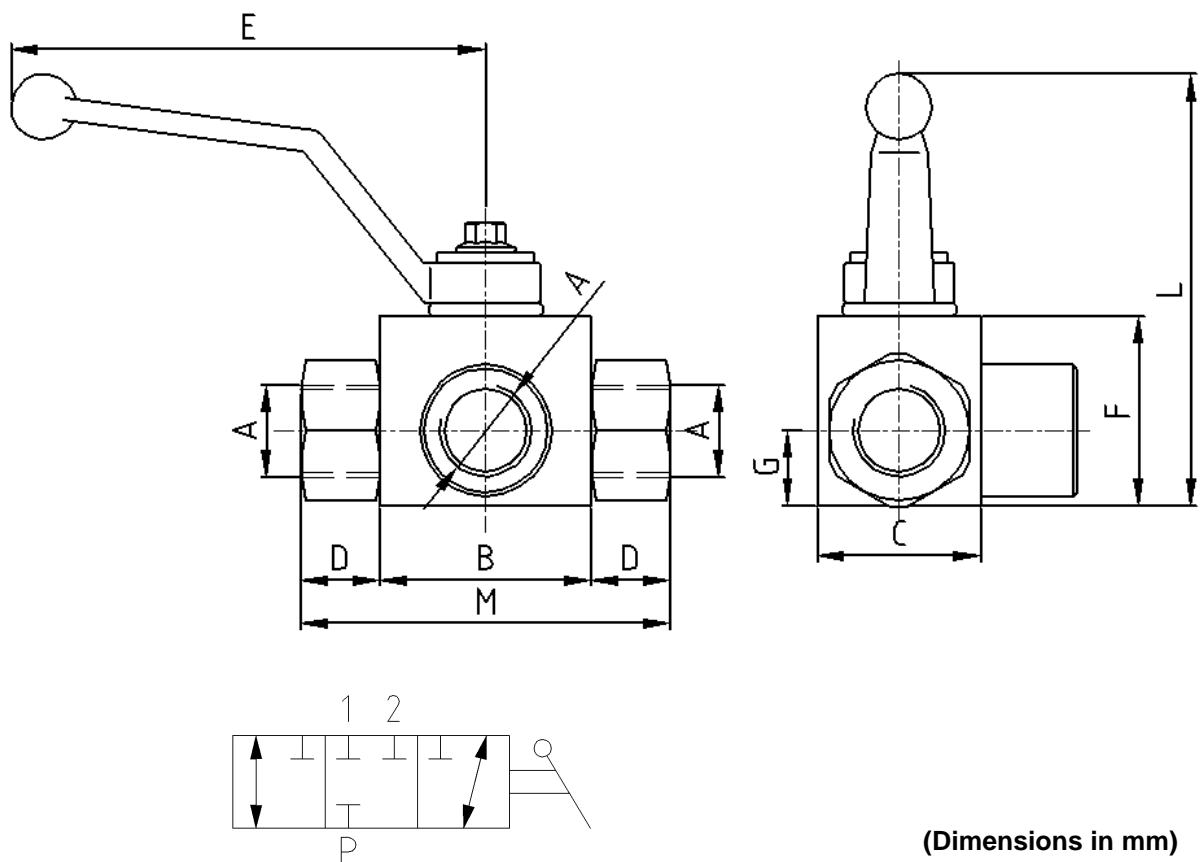
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BALL VALVE

3 WAYS

Main Dimensions



Ref	Description	Max Flow (l/min)	Max Pressure (bar)	Weight (Kg)	A	B	C	D	E	F	G	L	M
VD3V38C1	3 Ways Ball Valve 3/8"	35	315	0.70	3/8" BSP	44	30	15	105	40	18	94	72
VD3V12C1	3 Ways Ball Valve 1/2"	60	315	0.8	1/2" BSP	48	37	17.5	106	43	18	96	83
VD3V34C1	3 Ways Ball Valve 3/4"	100	250	1.60	3/4" BSP	62	45	16	180	55	23	105	95
VD3V10C1	3 Ways Ball Valve 1"	150	250	2.35	1" BSP	68	55	23.5	180	65	30	115	113

CTI/VD3V_0901-1

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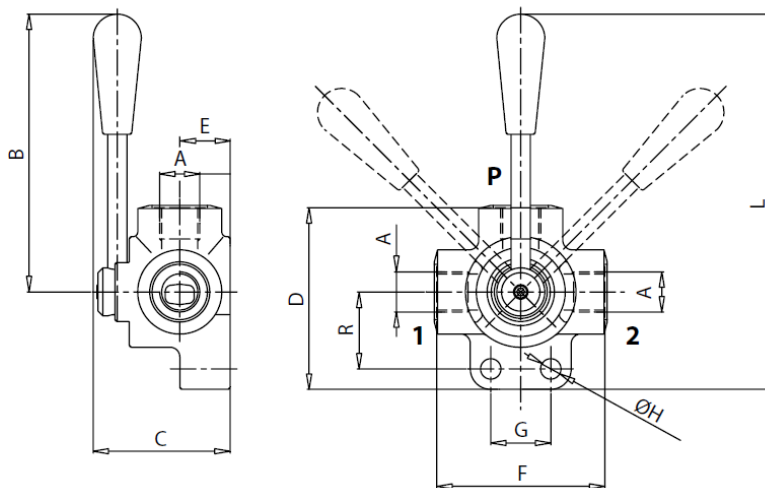
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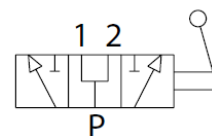
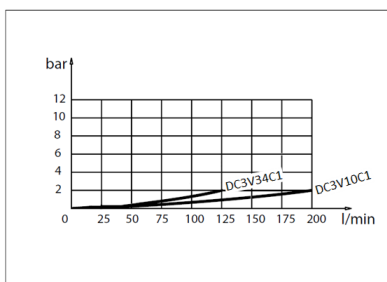
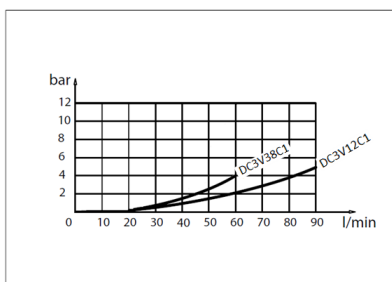
FLOW DIVIDERS

HIGH PRESSURE 3 WAYS

Main Dimensions



Pressure Drops



(Dimensions in mm)

Ref	Description	Max Flow (l/min)	Max Pressure (bar)	Weight (Kg)	A	B	C	D	E	F	G	H	L	R
DC3V38C1	3 Ways Flow Divider 3/8	60	350	0,8	3/8" BSP	115	57	75,5	21	70	25	8,5	155,5	32
DC3V12C1	3 Ways Flow Divider 1/2	90	350	1,2	1/2" BSP	115	63	86	24	80	32	8,5	161	36
DC3V34C1	3 Ways Flow Divider 3/4	120	350	1,8	3/4" BSP	125	67	98,5	26	90	32	10,5	168,5	42
DC3V10C1	3 Ways Flow Divider 1	200	300	2,7	1" BSP	140	77	110	31	98	32	10,5	176,5	150

CTI VD3V 1211- 2

Operating fluid viscosity range	10 to 500 cSt
Filtration	ISO code 16/13 - SAE class 4 or better

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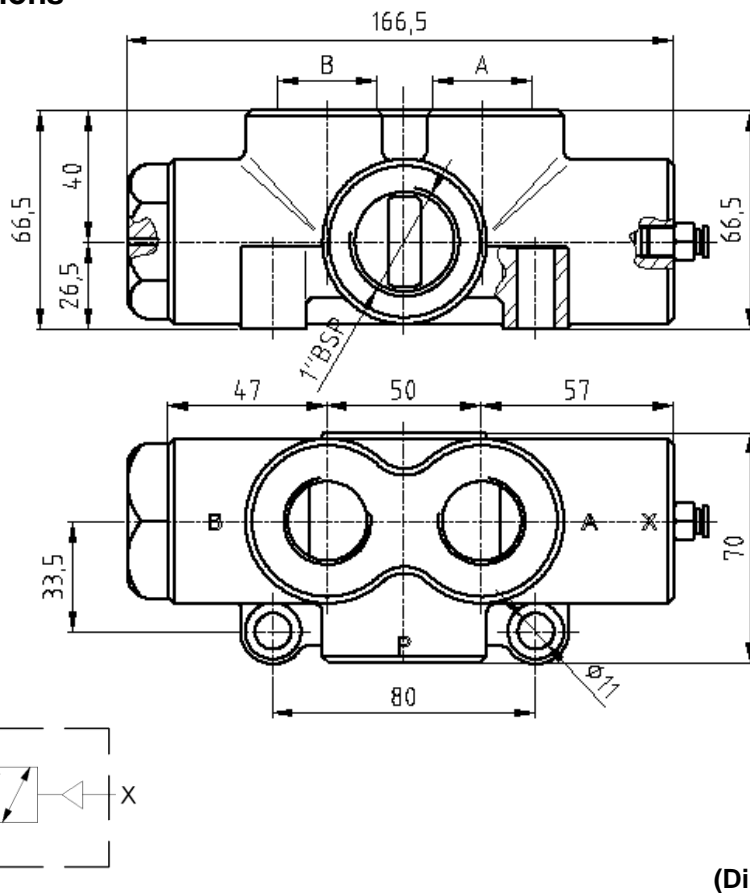
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FLOW DIVIDERS

HIGH PRESSURE 3 WAYS; PNEUMATIC C. SELECTOR

Main Dimensions



Main Data

Maximum pressure (bar)	400
Maximum peak pressure (bar)	430
Flow rate	250 l/min
Air Pressure (bar)	4.5 - 12
Weight (kg)	2.7

Ref.	A (Outlet)	B (Outlet)	P (Pressure)	X (Air connection)
DC3V34AP	3/4" BSP	3/4" BSP	1" BSP	R1/8"
DC3V10AP	1" BSP	1" BSP	1" BSP	R1/8"

Fluids	mineral oils type ISO HM or DIN 51524-2 HLP
Fluid temperature range	-25°C +80°C
Recommended viscosity range	12 to 100 cSt (mm ² /s) at working temperature
Filtration	25µm ISO 4406 20/17

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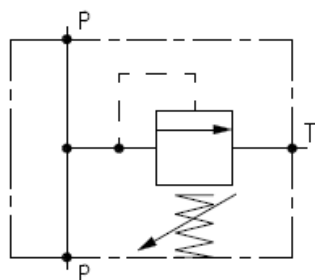
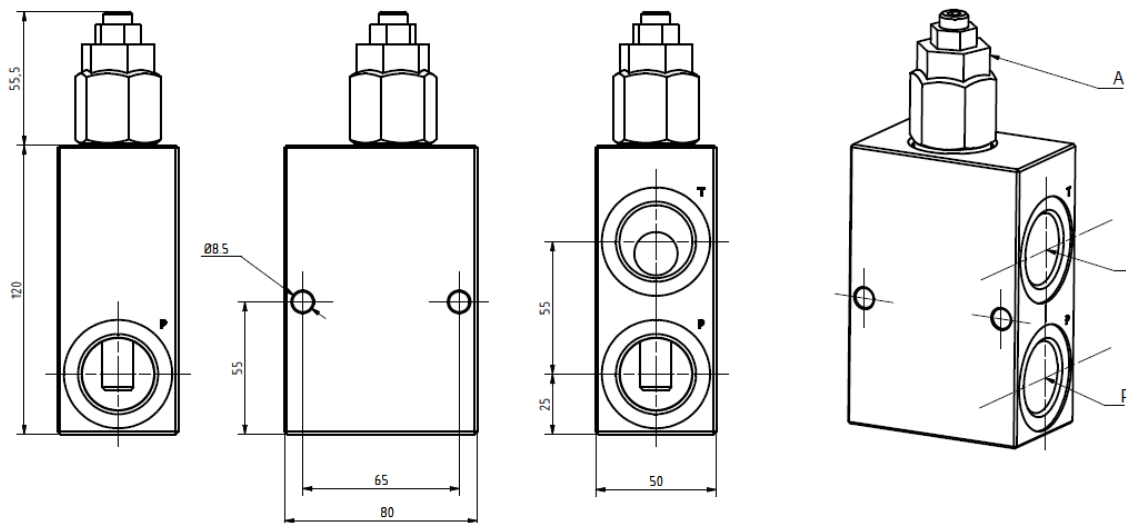
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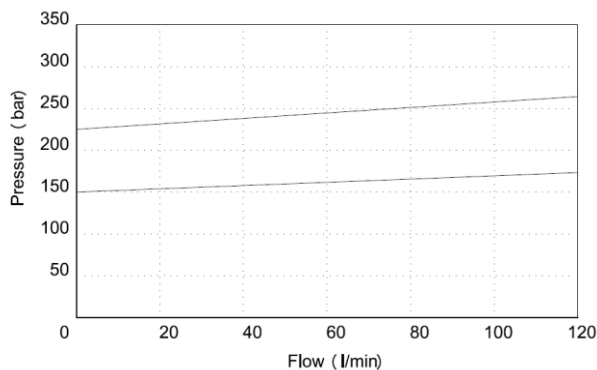
Pressure Relief Valve		Ref. LP120
LP	Pressure Relief Valve 120L	

Main Dimensions



A – Cartridge relief valve
P – Pump connection 1" BSP
T – Tank connection 1" BSP

Pressure relief valve characteristic



(Dimensions in mm)

Main Data

Maximum working pressure (bar)	350
Maximum advised flow (l/min)	120
Weight (kg)	3,1
Body	Steel
Internal leakage (ml/min)	≤ 3
Type	Directly operated pressure adjustable

Fluids	mineral oils type ISO HM or DIN 51524/51525
Operating viscosity range	10 to 200 cSt (mm ² /s)
Filtration	≤25 μm
Temperature range	-30°C +110°C

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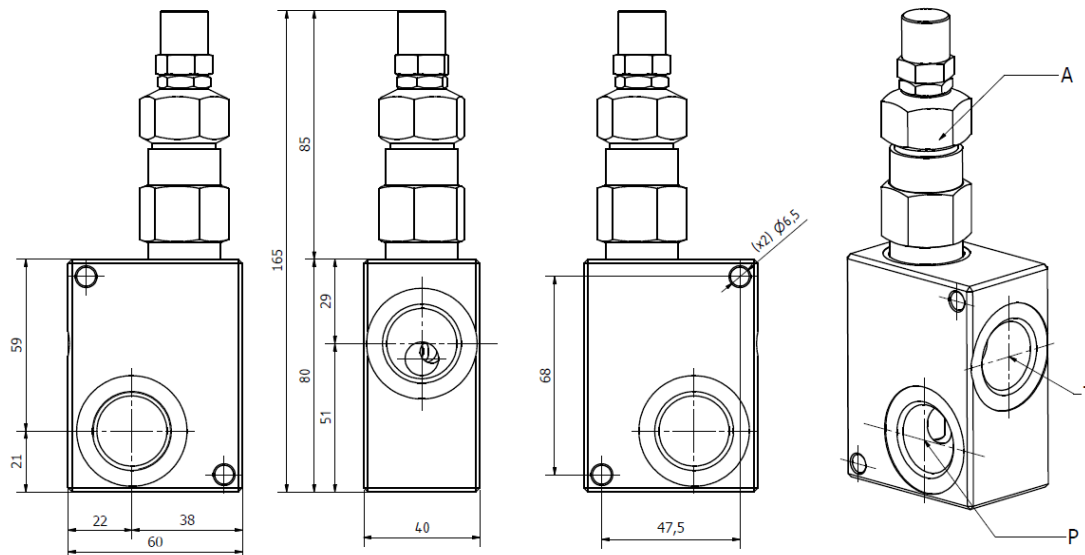


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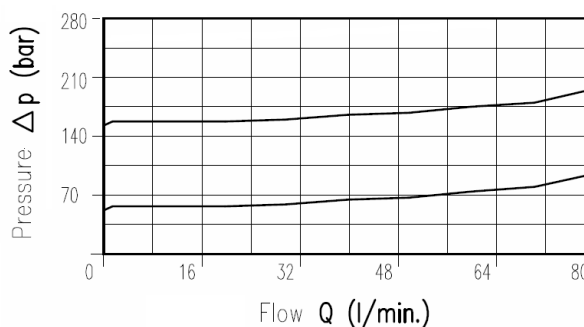


Pressure Relief Valve		Ref. LP80
LP	Pressure Relief Valve 80 l/min	

Main Dimensions



Pressure relief valve characteristic
(Oil Viscosity: 46 cSt at 50°C)



- A – Cartridge relief valve
- P – Pump connection 3/4" BSP
- T – Tank connection 3/4" BSP

(Dimensions in mm)

Main Data

Maximum working pressure (bar)	250
Maximum advised flow (l/min)	80
Weight (approx.) (kg)	0,7
Body	Aluminium
Type	Directly operated pressure adjustable

Filtration	30-50 μm
Temperature range	-30°C +80°C

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Pressure Relief Valve		Ref. LP150
LP	Pressure Relief Valve 150 l/min	

Main Dimensions

A – Cartridge relief valve
P – Pump connection 1" BSP
T – Tank connection 1" BSP

(Dimensions in mm)

Main Data	
Maximum working pressure (bar)	220
Maximum advised flow (l/min)	150
Weight (approx.) (kg)	1,8
Body	Aluminum
Type	Directly operated pressure adjustable

Filtration	30-50 μ m
Temperature range	-30°C +80°C

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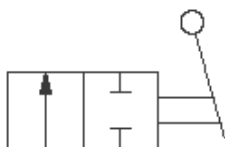
CTI LP150 1602-0



BALL VALVE

1 1/2" BSP ; Male-Female

Main Dimensions



(Dimensions in mm)

Main Data

Material	Brass
Threads	1" 1/2 BSP

CTI Ball valve 1" 1/2 BSP 1503-0

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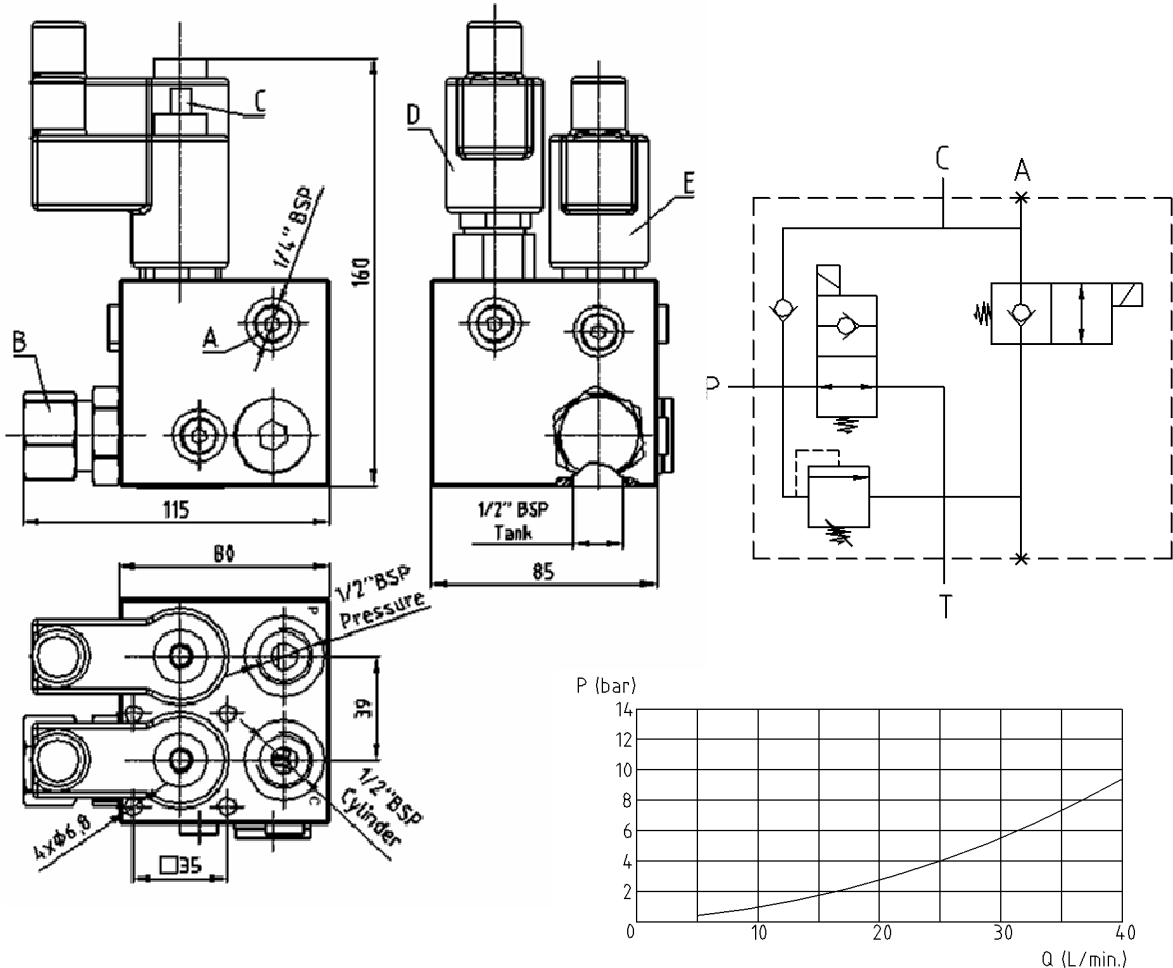
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Electrical Distributor		Ref. DTE4012
DT	Electrical Distributor 3 Ways 40L 12V	

Main Dimensions



- A – Option: Passing contact switch Ref. DTE4012S
- B – Relief Valve
- C – Option: Low screen emergency Ref. DTE4012DE
- D – Tip spool
- E – Low spool

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate	40 L/min
Weight (kg)	2.3
Electrovalve Supply (V)	12 DC

CTI DTE4012 0901-1

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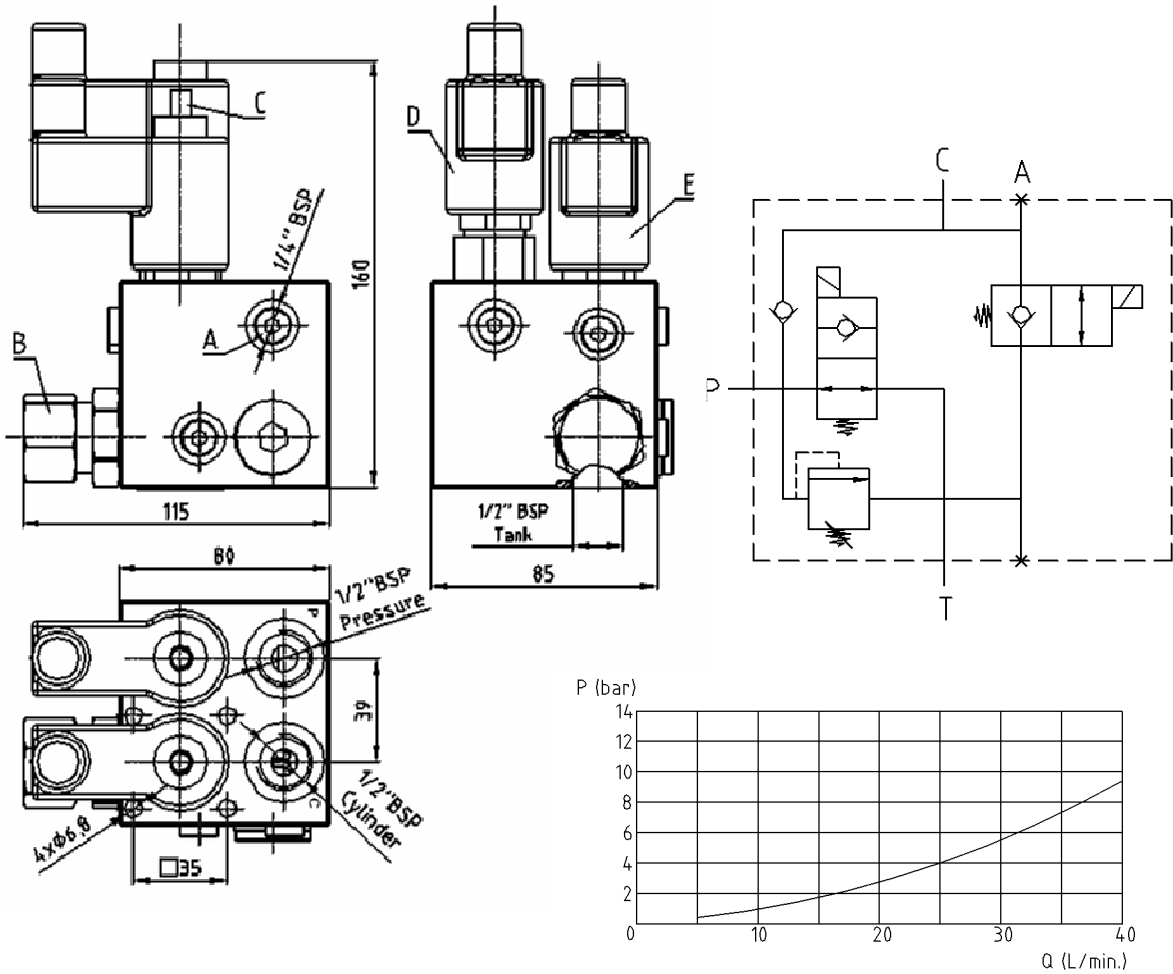


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Electrical Distributor		Ref. DTE4024
DT	Electrical Distributor 3 Ways 40L 24V	

Main Dimensions



- A – Option: Passing contact switch Ref. DTE4024S
- B – Relief Valve
- C – Option: Low screen emergency Ref. DTE4024DE
- D – Tip spool
- E – Low spool

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	350
Operating pressure (Bar)	up to 300
Flow rate	40 L/min
Weight (kg)	2.3
Electrovalve Supply (V)	24 DC

CTI DTE4024 0901-1

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Electrical Distributor		Ref. DTE8012
DT	Electrical Distributor 3 Ways, 80 l/min ; 12 VDC	

Main Dimensions

A – Option: Passing contact switch Ref. DTE8012S
 B – Relief Valve
 C – Option: Low screen emergency Ref. DTE8012DE
 D – Tip spool
 E – Low spool

(Dimensions in mm)

Main Data	
Maximum pressure (bar)	300
Flow rate (l/min)	80
Weight (kg)	2
Electrovalve Supply (VDC)	12

CTIDTE8012 1015- 0

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Electrical Distributor		Ref. DTE8024
DT	Electrical Distributor 3 Ways, 80 l/min ; 24 VDC	

Main Dimensions

A – Option: Passing contact switch Ref. DTE8024S
 B – Relief Valve
 C – Option: Low screen emergency Ref. DTE8024DE
 D – Tip spool
 E – Low spool

(Dimensions in mm)

Main Data	
Maximum pressure (bar)	300
Flow rate (l/min)	80
Weight (kg)	2
Electrovalve Supply (VDC)	24

CTI DTE8024 1015- 0

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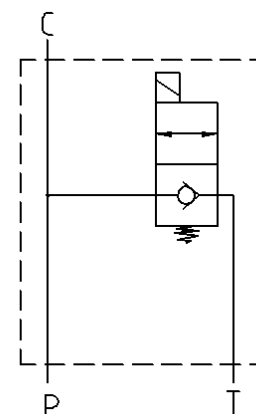
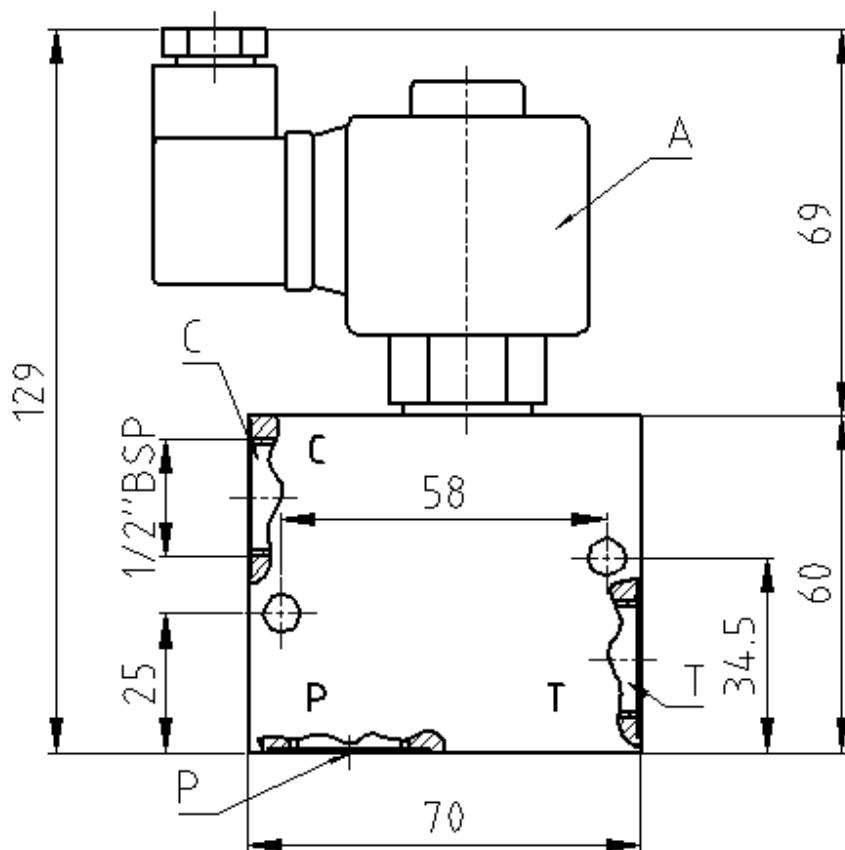


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Electrovalves		Ref.EVNC01
EV	Electrovalve , normally close ; 40L/Min ; 1/2" : 12V	

Main Dimensions



- A – Solenoid
- T – Tank Return 1/2" BSP
- C – Cylinder Outlet 1/2" BSP
- P – Pressure Intel 1/2" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	12 DC

CTI EVNC01 0901 - 2

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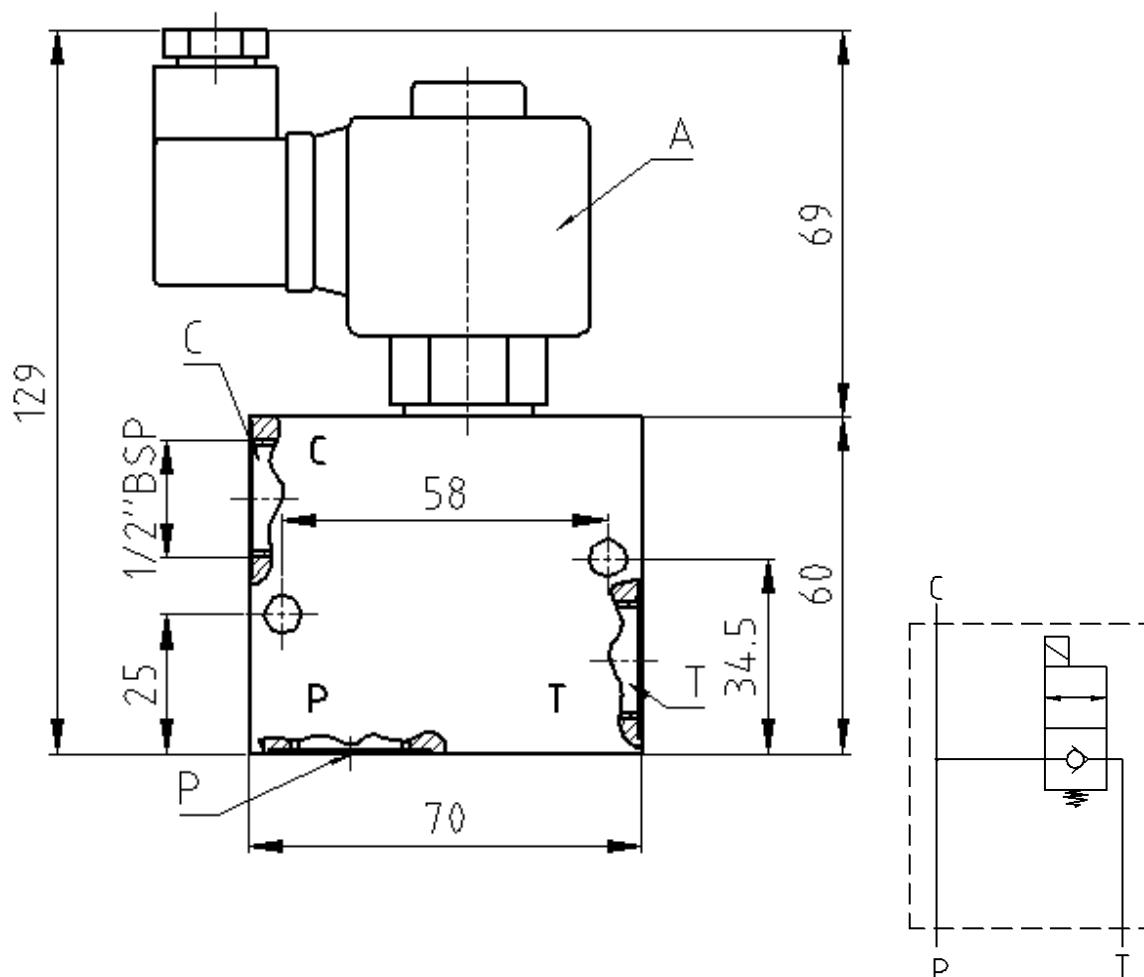


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Electrovalves		Ref.EVNC02
EV	Electrovalve , normally close ; 40L/Min ; 1/2" : 24V	

Main Dimensions



- A – Solenoid
- T – Tank Return 1/2" BSP
- C – Cylinder Outlet 1/2" BSP
- P – Pressure Intel 1/2" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	24 DC

CTI EVNC02 0901 - 2

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Electrovalves		Ref.EVNC0C1
EV	Electrovalve , normally close ; 40L/Min ; 1/2" : 12V with anti return valve + press limit	

Main Dimensions

A – Solenoid
 C – Cylinder Outlet 1/2" BSP
 T – Tank Return 1/2" BSP
 P – Pressure Intel with anti return valve 1/2" BSP
 E – Press Limit

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	40 L/min
Weight (kg)	1.4
Electrovalve Supply (V)	12 DC

CTI EVNC0C1 0901 - 1

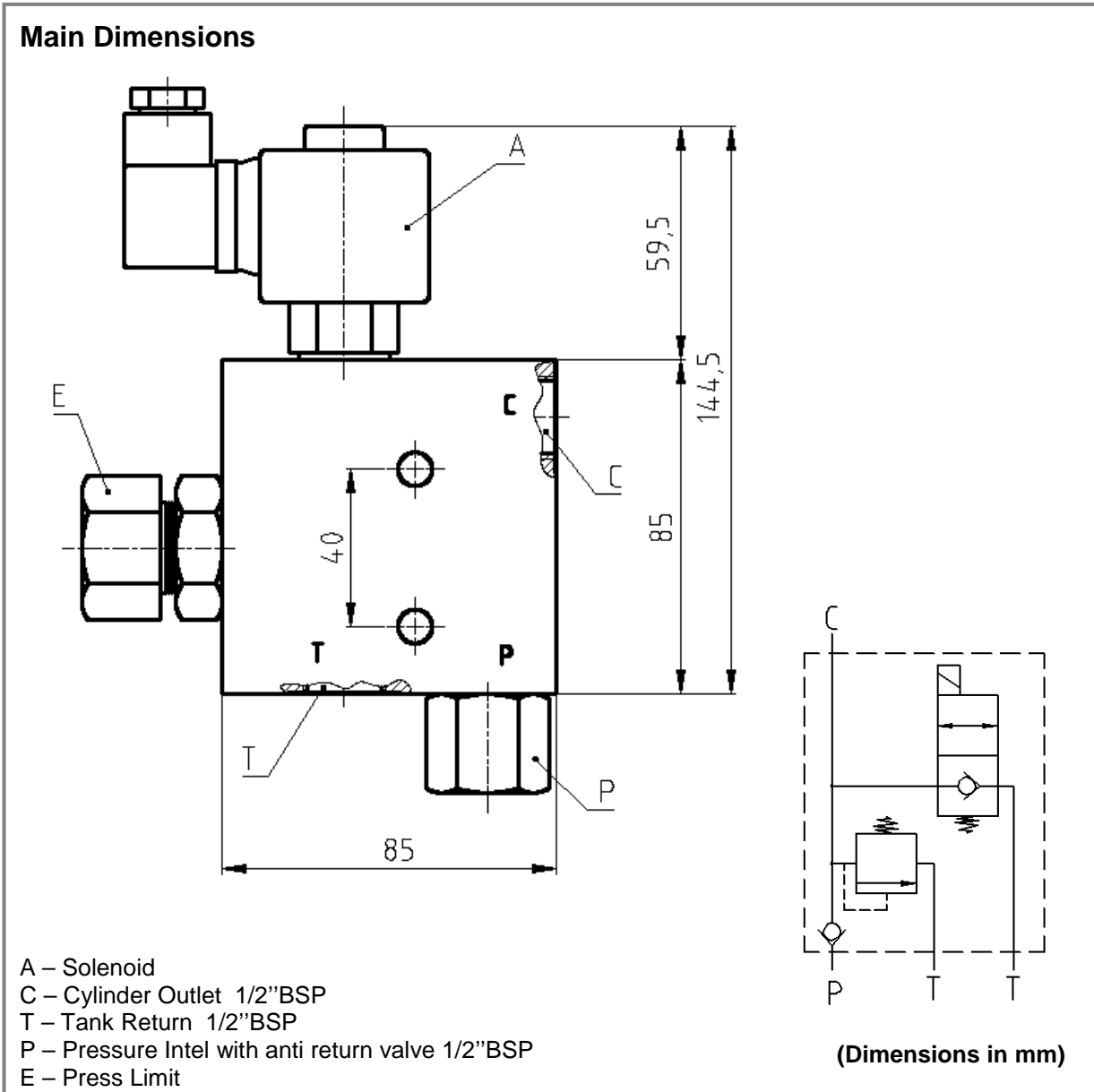
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Electrovalves		Ref.EVNC0C2
EV	Electrovalve , normally close ; 40L/Min ; 1/2" : 24V with anti return valve + press limit	



Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	40 L/min
Weight (kg)	1.4
Electrovalve Supply (V)	24 DC

CTI EVNC0C2 0901-1

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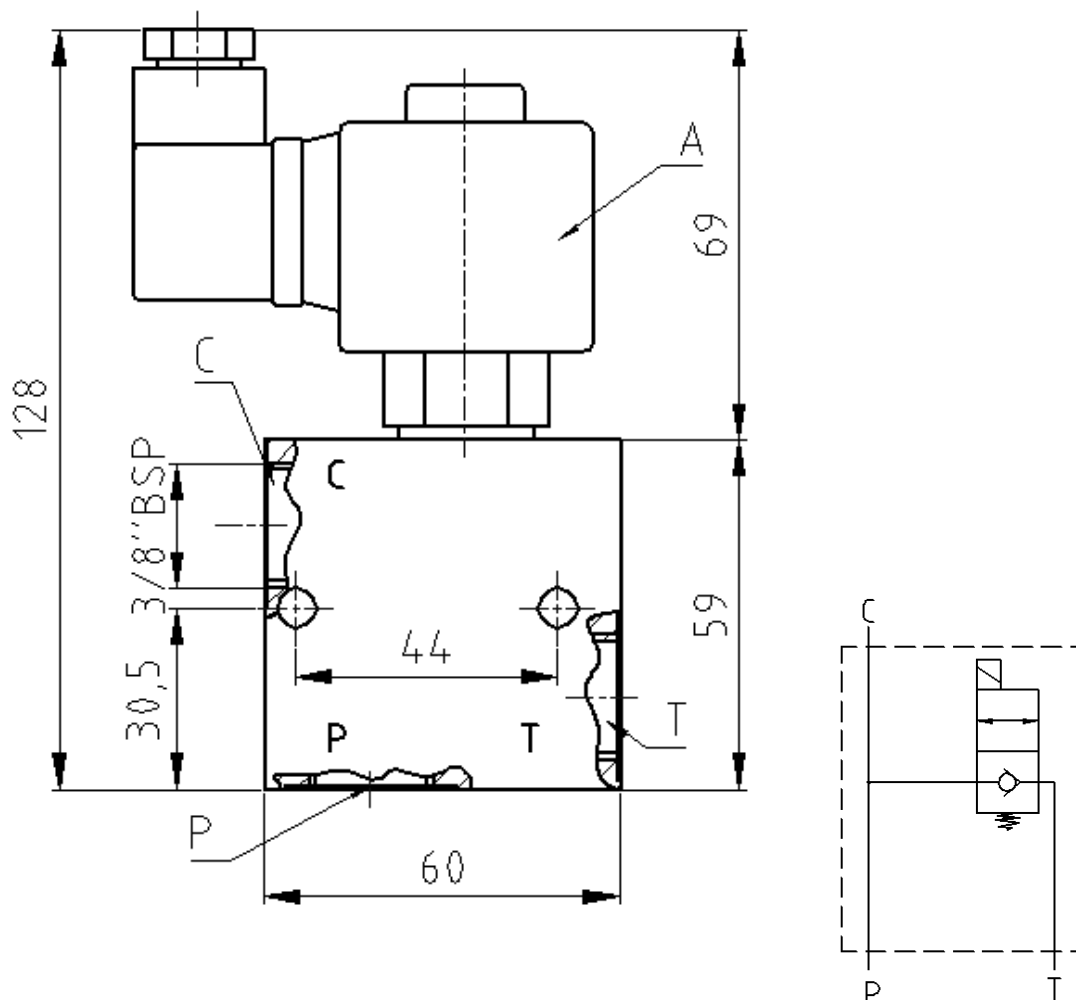


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Electrovalves		Ref.EVNC03
EV	Electrovalve , normally close; 40L/Min ; 3/8" : 12V	

Main Dimensions



- A – Solenoid
- T – Tank Return 3/8" BSP
- C – Cylinder Outlet 3/8" BSP
- P – Pressure Intel 3/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.5
Electrovalve Supply (V)	12 DC

CTI EVNC03 0901 - 2

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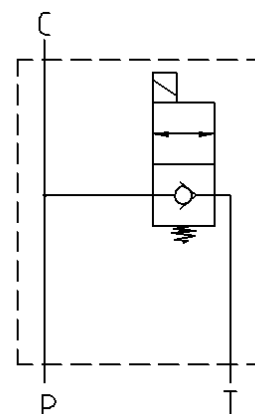
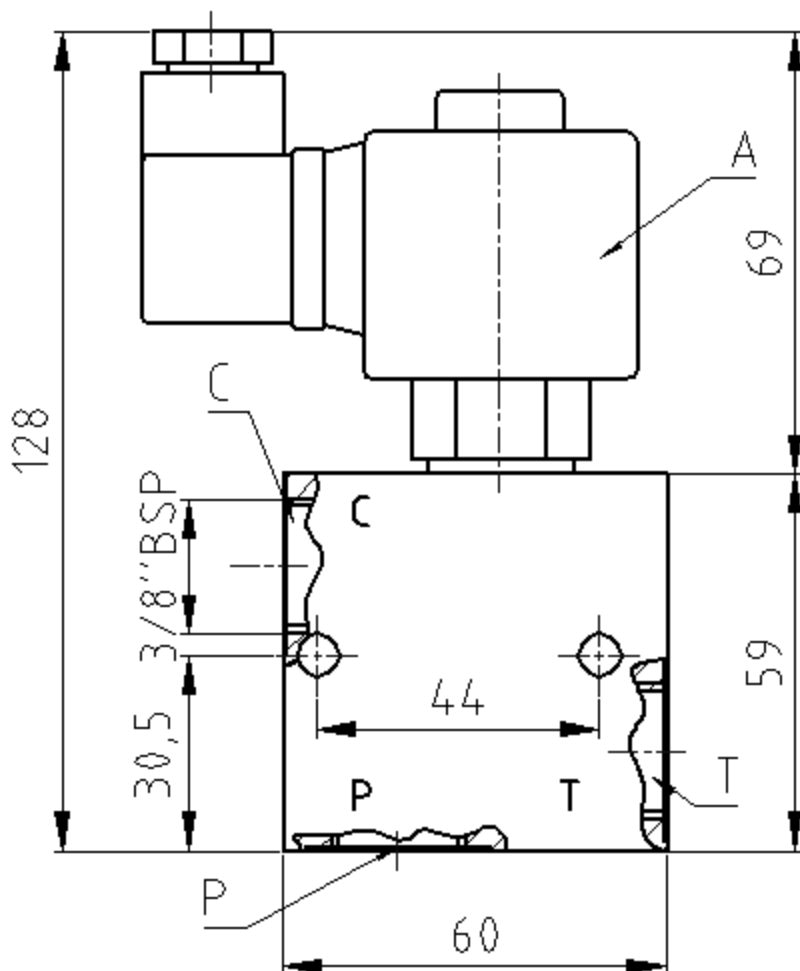


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Electrovalves		Ref.EVNC04
EV	Electrovalve , normally close; 40L/Min ; 3/8" : 24V	

Main Dimensions



- A – Solenoid
- T – Tank Return 3/8" BSP
- C – Cylinder Outlet 3/8" BSP
- P – Pressure Intel 3/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.5
Electrovalve Supply (V)	24 DC

CTI EVNC04 0901 - 2

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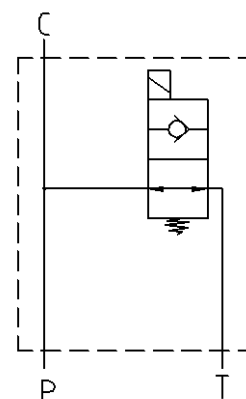
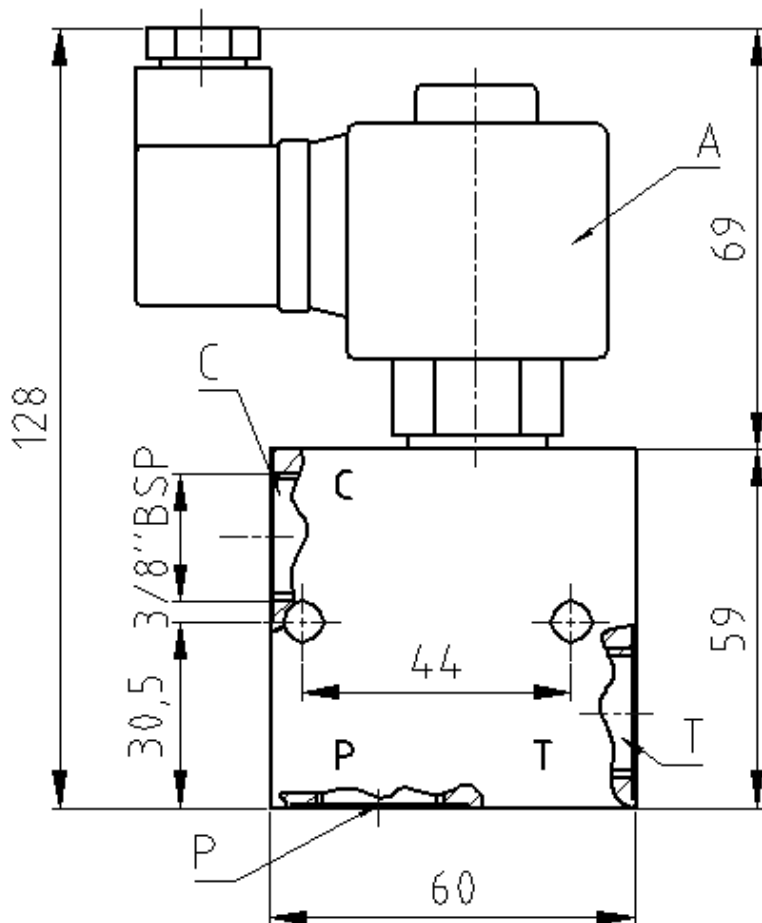


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Electrovalves		Ref. EVNO03
EV	Electrovalve , normally open ; 40L/Min ; 3/8" : 12V	

Main Dimensions



- A – Solenoid
- T – Tank Return 3/8" BSP
- C – Cylinder Outlet 3/8" BSP
- P – Pressure Intel 3/8" BSP

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	12 DC

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Electrovalves		Ref. EVNO04
EV	Electrovalve , normally open ; 40L/Min ; 3/8" : 24V	

Main Dimensions

A – Solenoid
 T – Tank Return 3/8" BSP
 C – Cylinder Outlet 3/8" BSP
 P – Pressure Intel 3/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.5
Electrovalve Supply (V)	24 DC

CTI EVNO04 0901 - 3

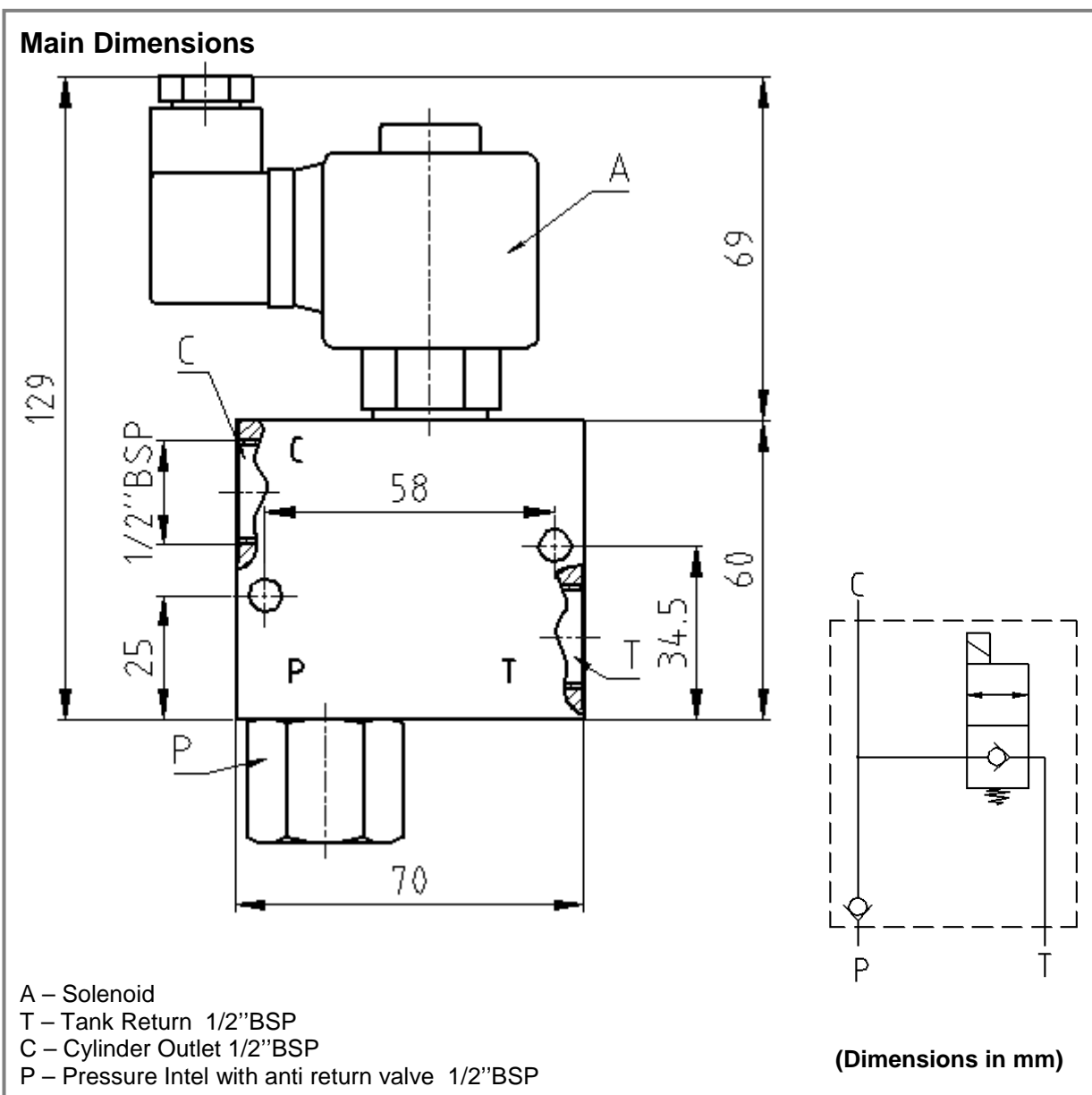
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Electrovalves		Ref.EVNCAR01
EV	Electrovalve , normaly close; 40L/Min ; 1/2" : 12V with anti return valve	



Main Data	
Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.7
Electrovalve Supply (V)	12 DC

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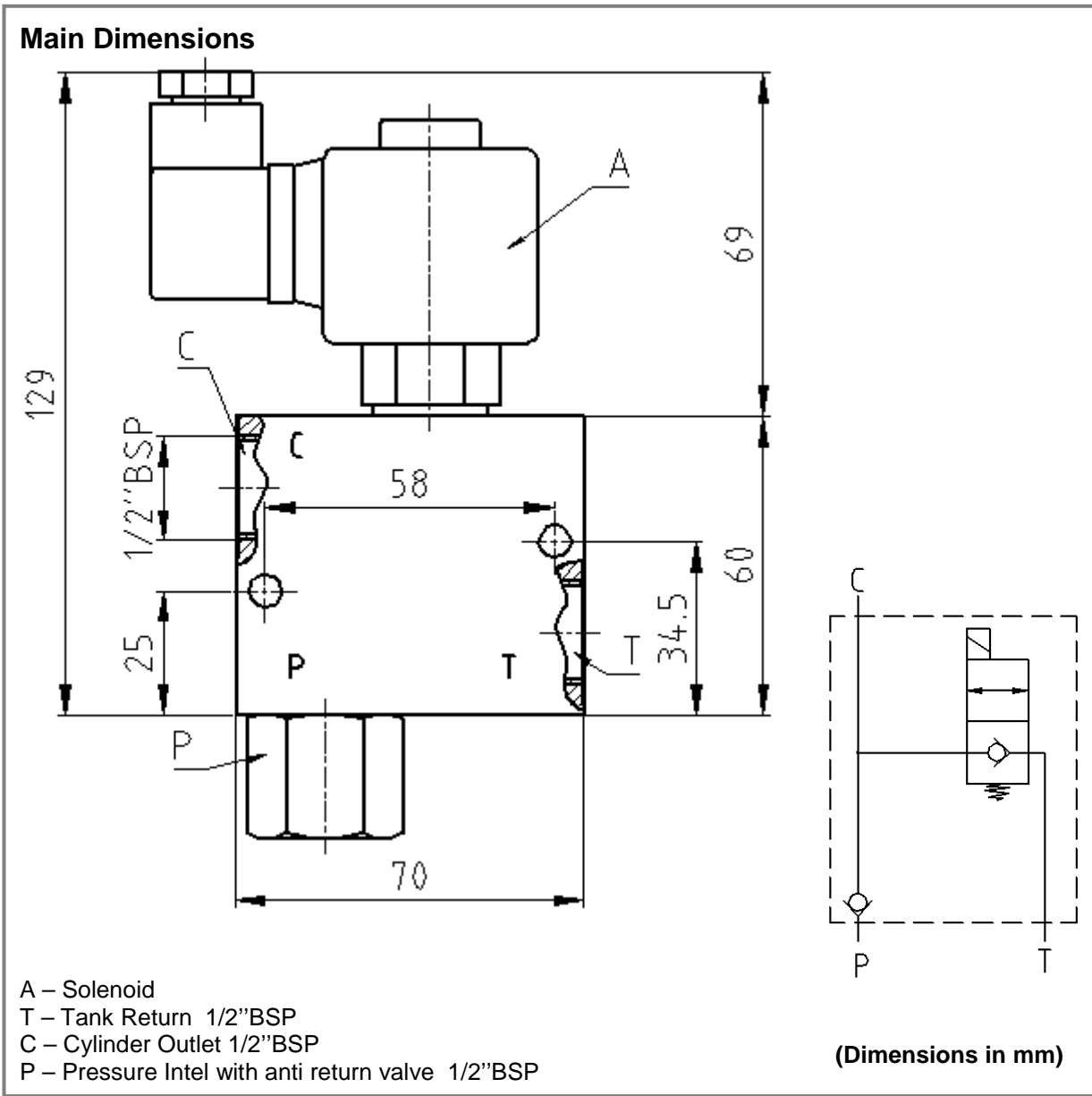
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Electrovalves		Ref.EVNCAR02
EV	Electrovalve , normally close ; 40L/Min ; 1/2" : 24V with anti return valve	



Main Data	
Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.7
Electrovalve Supply (V)	24 DC

CTI EVNCAR02 0901 - 2

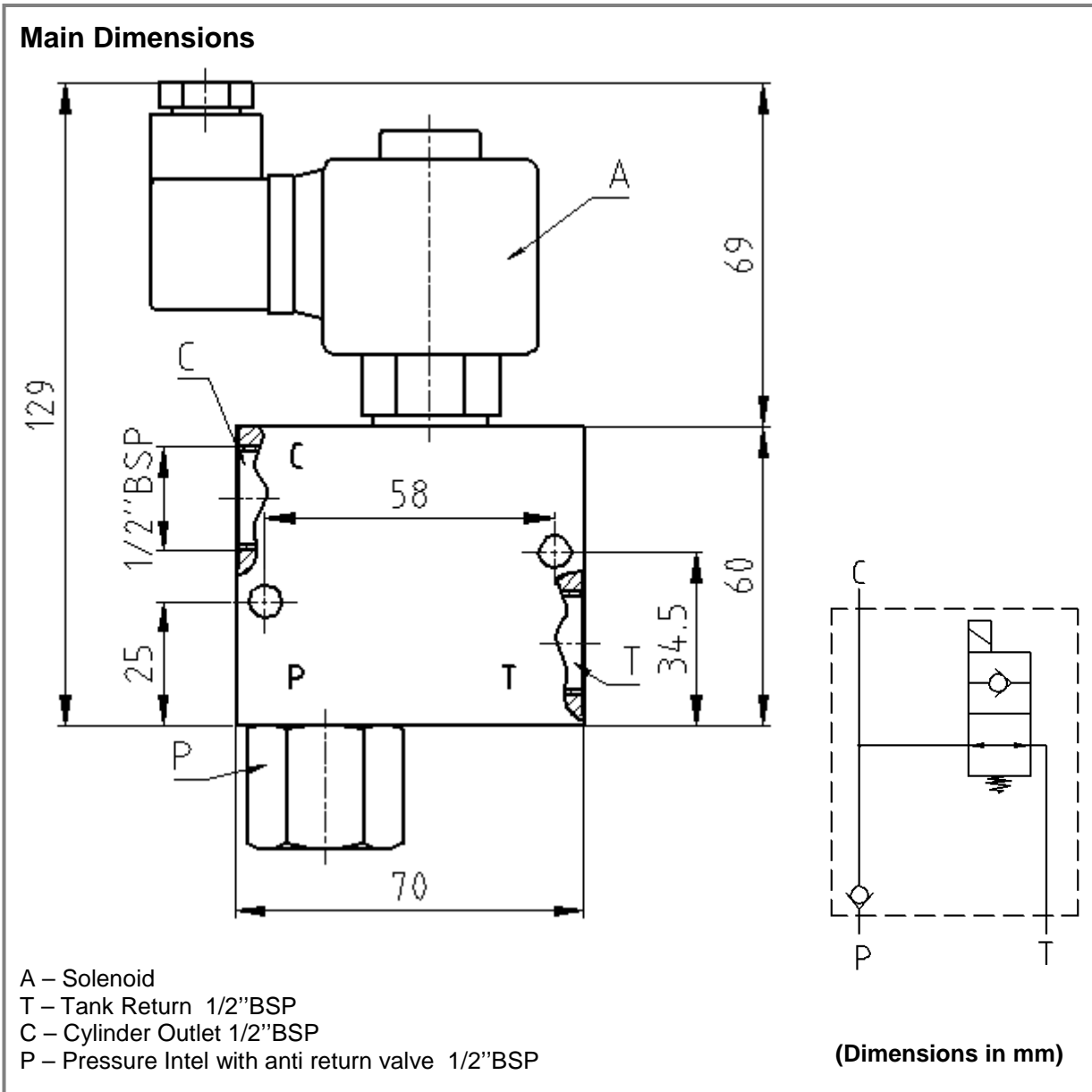
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Electrovalves		Ref. EVNOAR01
EV	Electrovalve , normally open ; 40L/Min ; 1/2" : 12V with anti return valve	



Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.7
Electrovalve Supply (V)	12 DC

CTI EVNOAR01 0901 - 3

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Electrovalves		Ref. EVNOAR02
EV	Electrovalve , normally open ; 40L/Min ; 1/2" : 24V with anti return valve	

Main Dimensions

A – Solenoid
 T – Tank Return 1/2" BSP
 C – Cylinder Outlet 1/2" BSP
 P – Pressure Intel with anti return valve 1/2" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.7
Electrovalve Supply (V)	24 DC

CTI EVNOAR02 0901 - 3

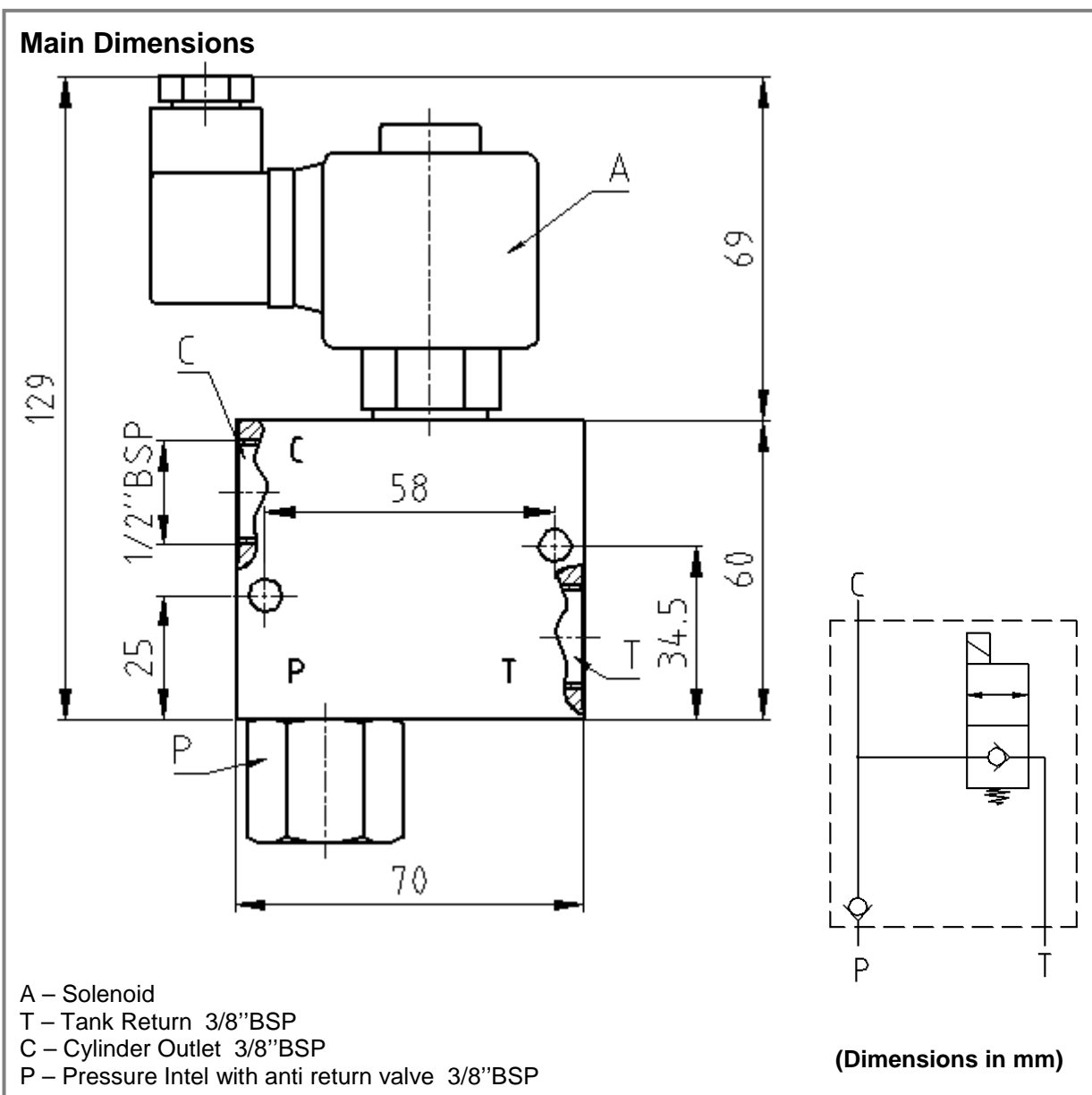
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Electrovalves		Ref.EVNCAR03
EV	Electrovalve , normally close ; 40L/Min ; 3/8" : 12V with anti return valve	



Main Data	
Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.7
Electrovalve Supply (V)	12 DC

CTI EVNCAR03 0901 - 2

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Electrovalves		Ref.EVNCAR04
EV	Electrovalve , normally close ; 40L/Min ; 3/8" : 24V with anti return valve	

Main Dimensions

A – Solenoid
 T – Tank Return 3/8" BSP
 C – Cylinder Outlet 3/8" BSP
 P – Pressure Intel with anti return valve 3/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	250
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	24 DC

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Electrovalves		Ref. EVNOAR03
EV	Electrovalve , normally open ; 40L/Min ; 3/8" : 12V with anti return valve	

Main Dimensions

A – Solenoid
 T – Tank Return 3/8" BSP
 C – Cylinder Outlet 3/8" BSP
 P – Pressure Intel with anti return valve 3/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	12 DC

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Electrovalves		Ref. EVNOAR04
EV	Electrovalve , normally open ; 40L/Min ; 3/8" : 24V with anti return valve	

Main Dimensions

A – Solenoid
 T – Tank Return 3/8" BSP
 C – Cylinder Outlet 3/8" BSP
 P – Pressure Intel with anti return valve 3/8" BSP

(Dimensions in mm)

Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	24 DC

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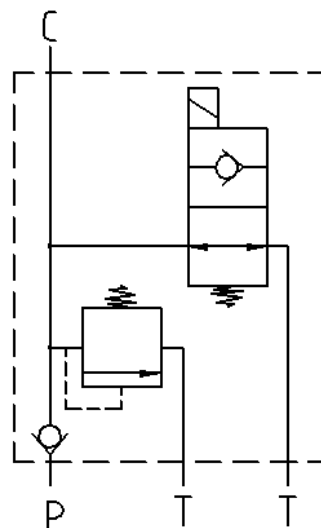
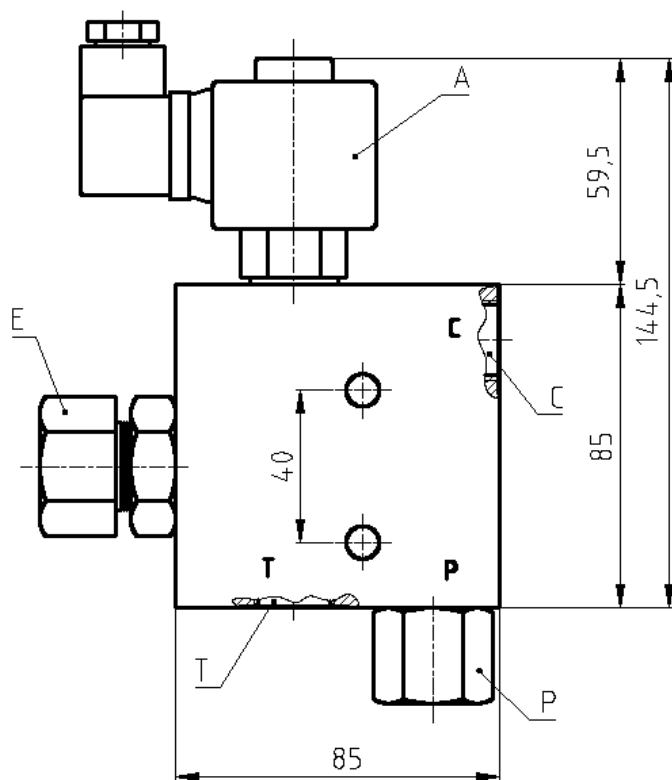


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Electrovalves		Ref.EVNO0C1
EV	Electrovalve , normaly open ; 40L/Min ; 1/2" : 12V with anti return valve + press limit	

Main Dimensions



- A – Solenoid
- C – Cylinder Outlet 1/2" BSP
- T – Tank Return 1/2" BSP
- P – Pressure Intel with anti return valve 1/2" BSP 1/2" BSP
- E – Press Limit

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	40 L/min
Weight (kg)	1.4
Electrovalve Supply (V)	12 DC

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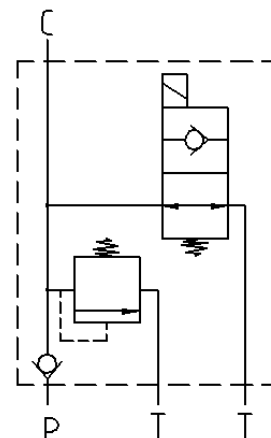
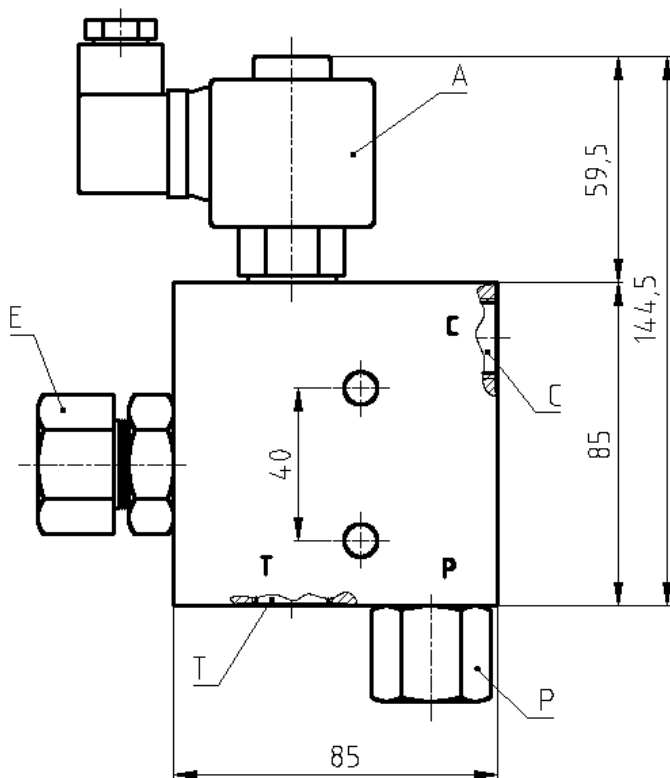
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Electrovalves		Ref.EVNO0C2
EV	Electrovalve , normally open ; 40L/Min ; 1/2" : 24V with anti return valve + press limit	

Main Dimensions



- A – Solenoid
- C – Cylinder Outlet 1/2" BSP
- T – Tank Return 1/2" BSP
- P – Pressure Intel with anti return valve 1/2" BSP 1/2" BSP
- E – Press Limit

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	40 L/min
Weight (kg)	1.4
Electrovalve Supply (V)	24 DC

CTI EVNO0C2 0901-1

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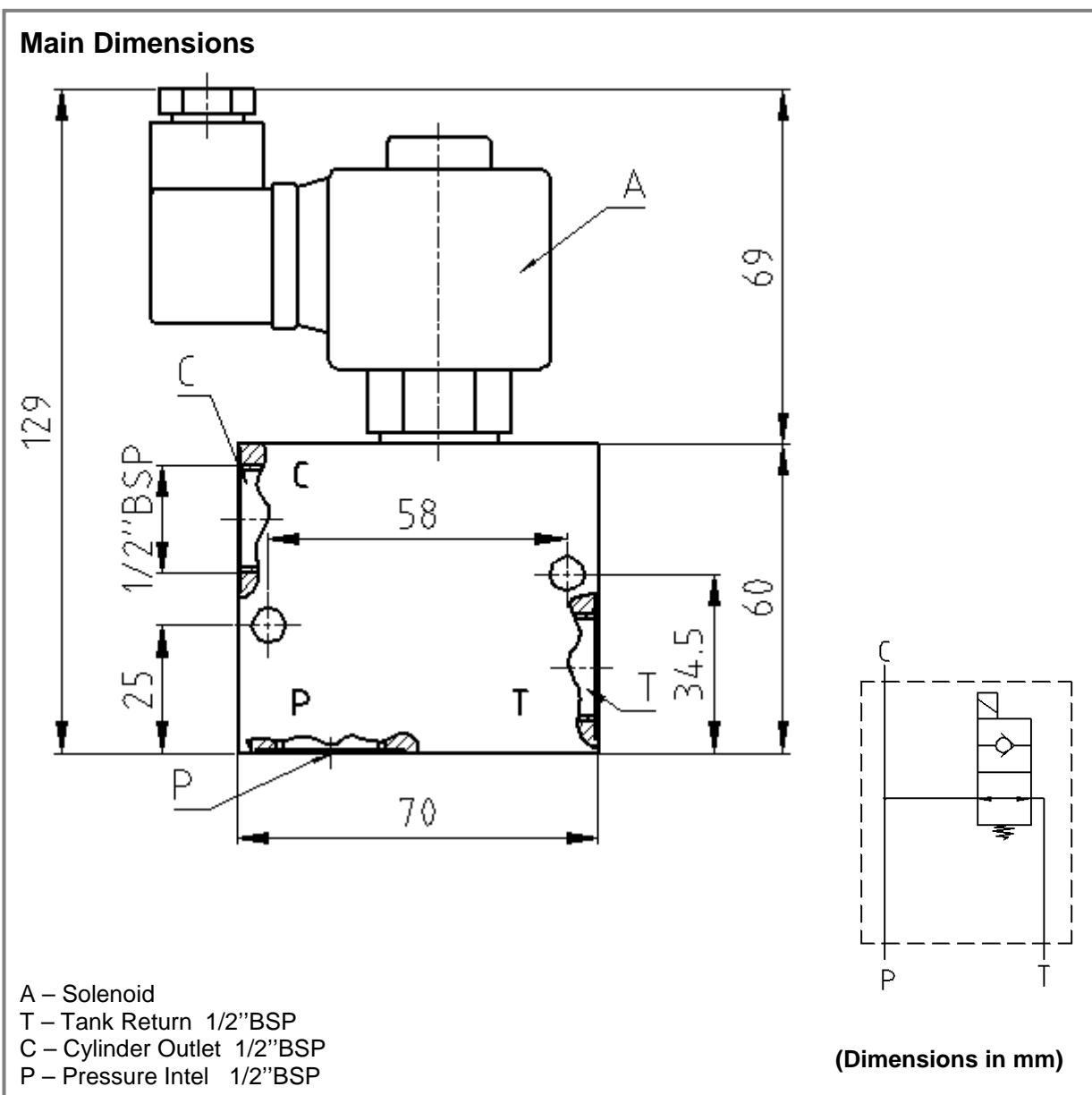
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Electrovalves		Ref. EVNO01
EV	Electrovalve , normally open ; 40L/Min ; 1/2" : 12V	



Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	12 DC

CTI EVNO01 0901 - 3

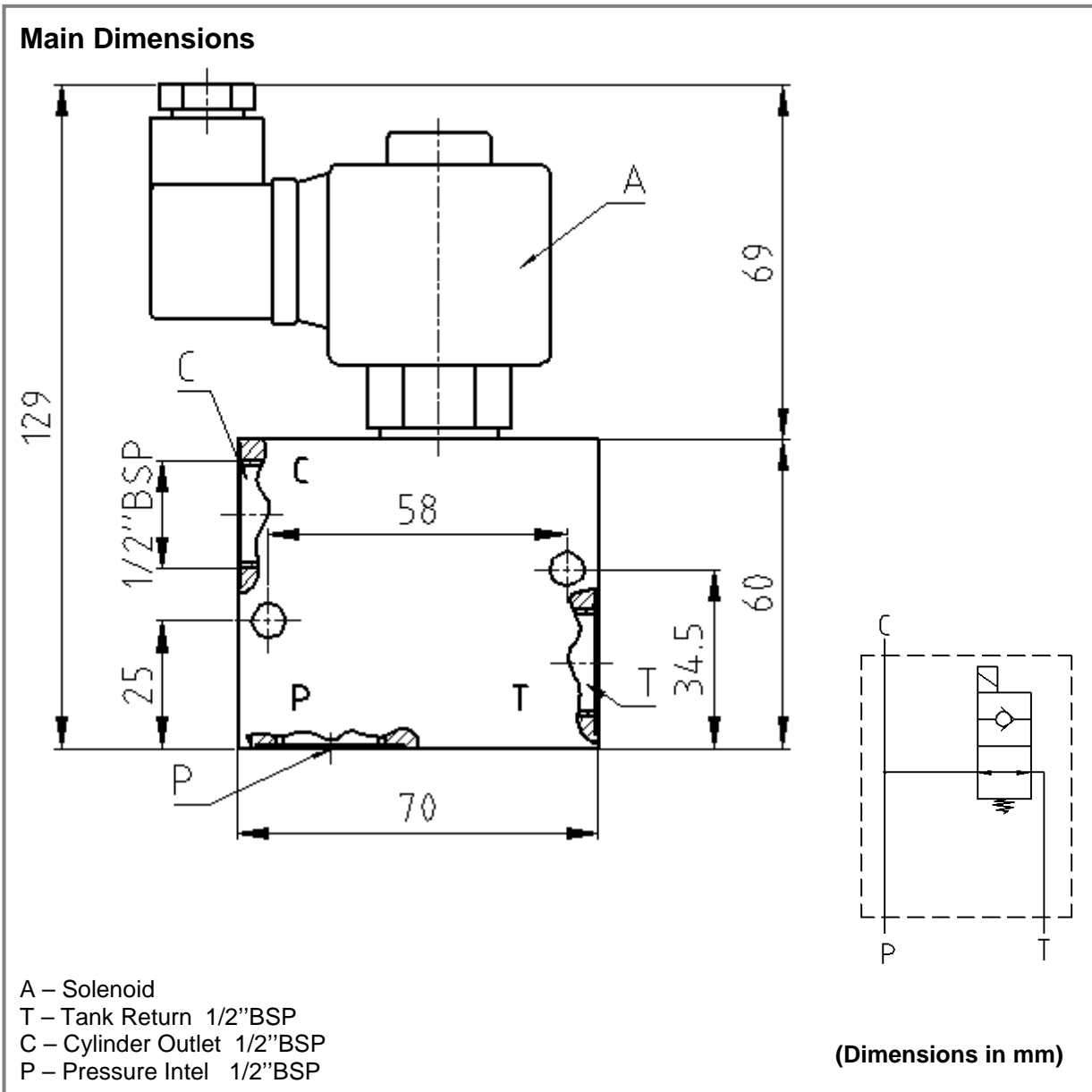
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Electrovalves		Ref. EVNO02
EV	Electrovalve , normally open ; 40L/Min ; 1/2" : 24V	



Main Data	
Maximum pressure (Bar)	210
Flow rate	40 L/min
Weight (kg)	0.6
Electrovalve Supply (V)	24 DC

CTI EVNO02 0901 - 3

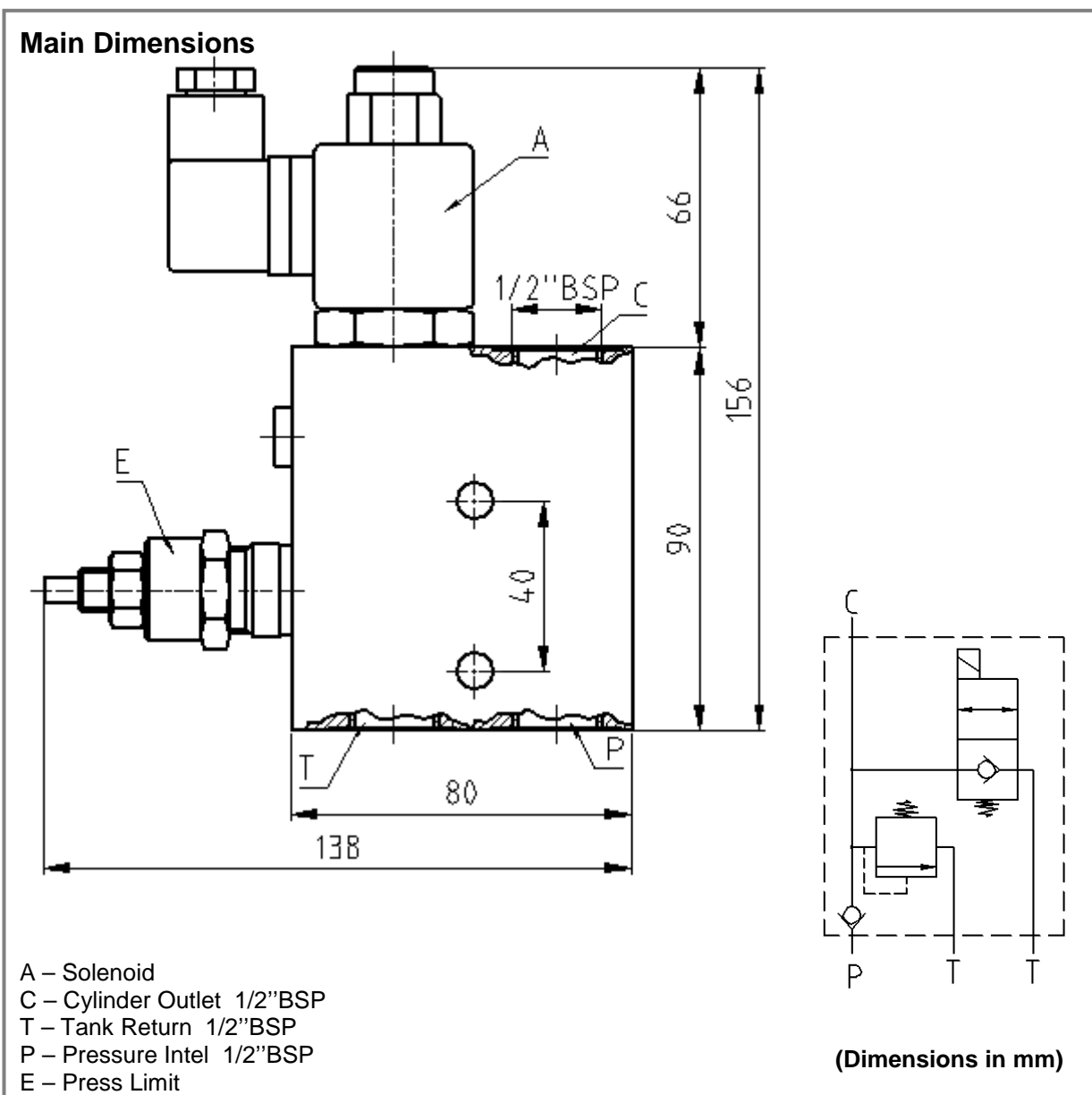
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Electrovalves		Ref. EVNC8012
EV	Electrovalve , normally close ; 80L/Min ; 1/2" : 12V with anti return valve + press limit	



Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	80 L/min
Weight (kg)	2.2
Electrovalve Supply (V)	12 DC

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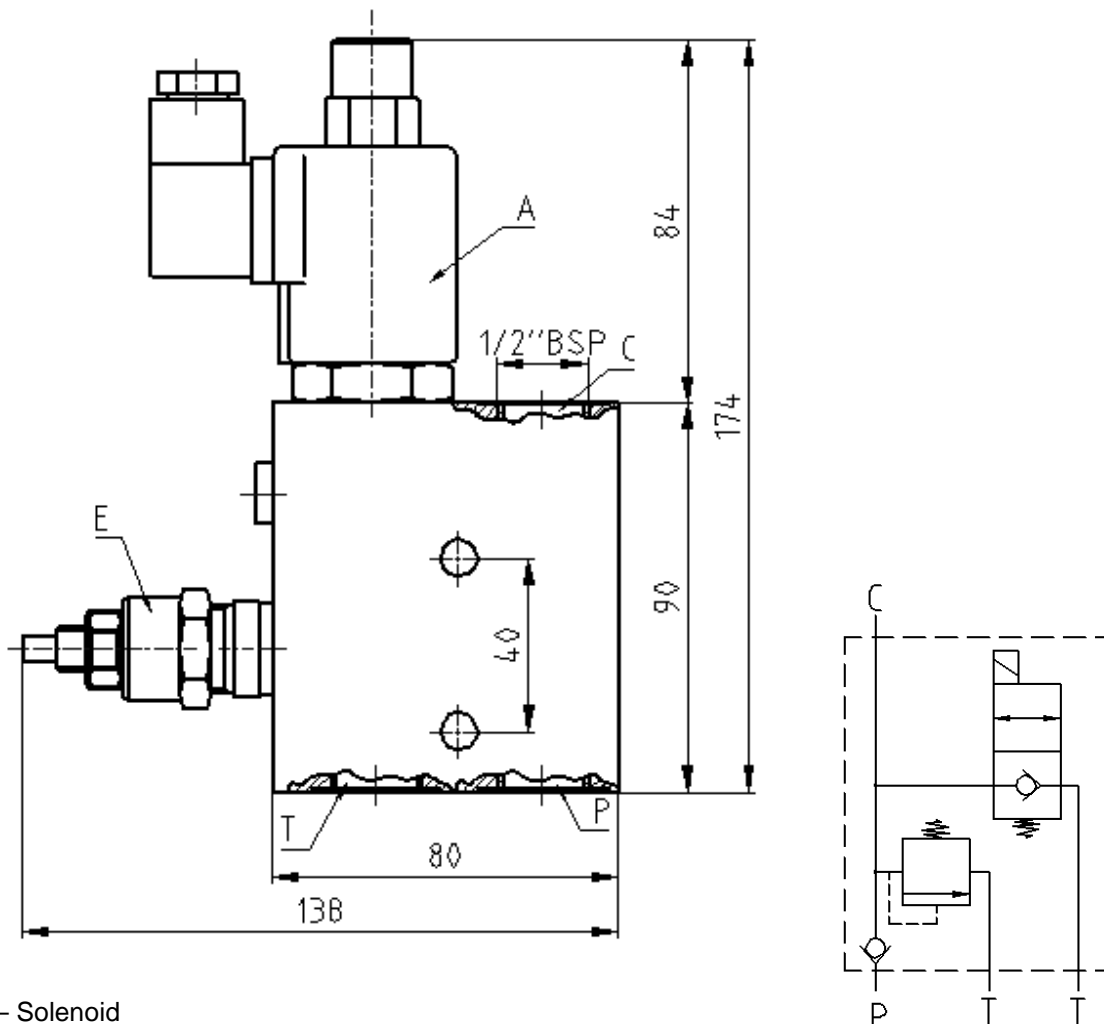


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Electrovalves		Ref. EVNC8024
EV	Electrovalve , normally close ; 80L/Min ; 1/2" : 24V with anti return valve + press limit	

Main Dimensions



- A – Solenoid
- C – Cylinder Outlet 1/2" BSP
- T – Tank Return 1/2" BSP
- P – Pressure Intel 1/2" BSP
- E – Press Limit

(Dimensions in mm)

Main Data

Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	80 L/min
Weight (kg)	2.4
Electrovalve Supply (V)	24 DC

CTI EVNC8024 0901-1

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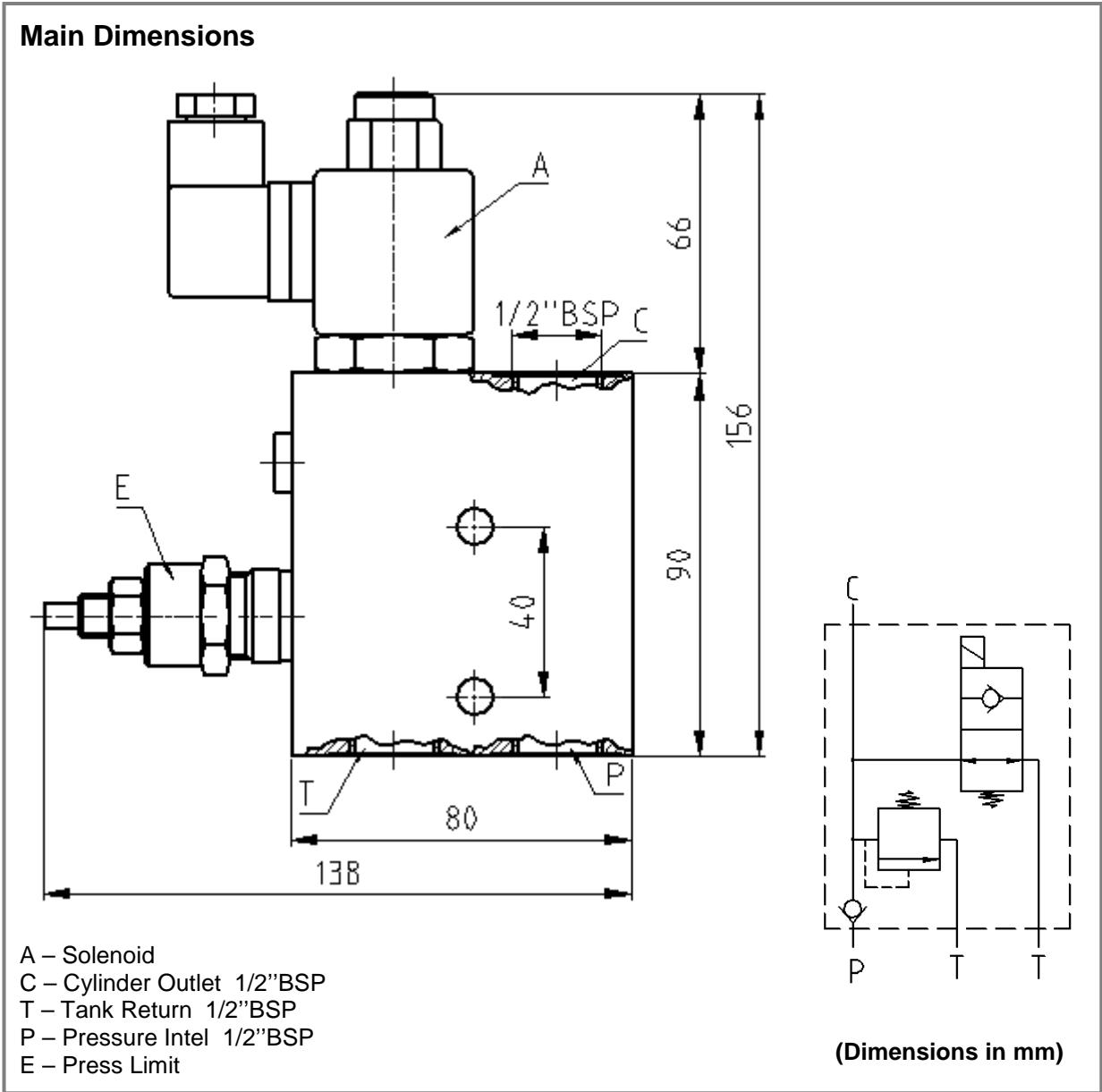
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Electrovalves		Ref. EVNO8012
EV	Electrovalve , normally open ; 80L/Min ; 1/2" : 12V with anti return valve + press limit	



Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	80 L/min
Weight (kg)	2.2
Electrovalve Supply (V)	12 DC

CTI EVNO8012 0901-1

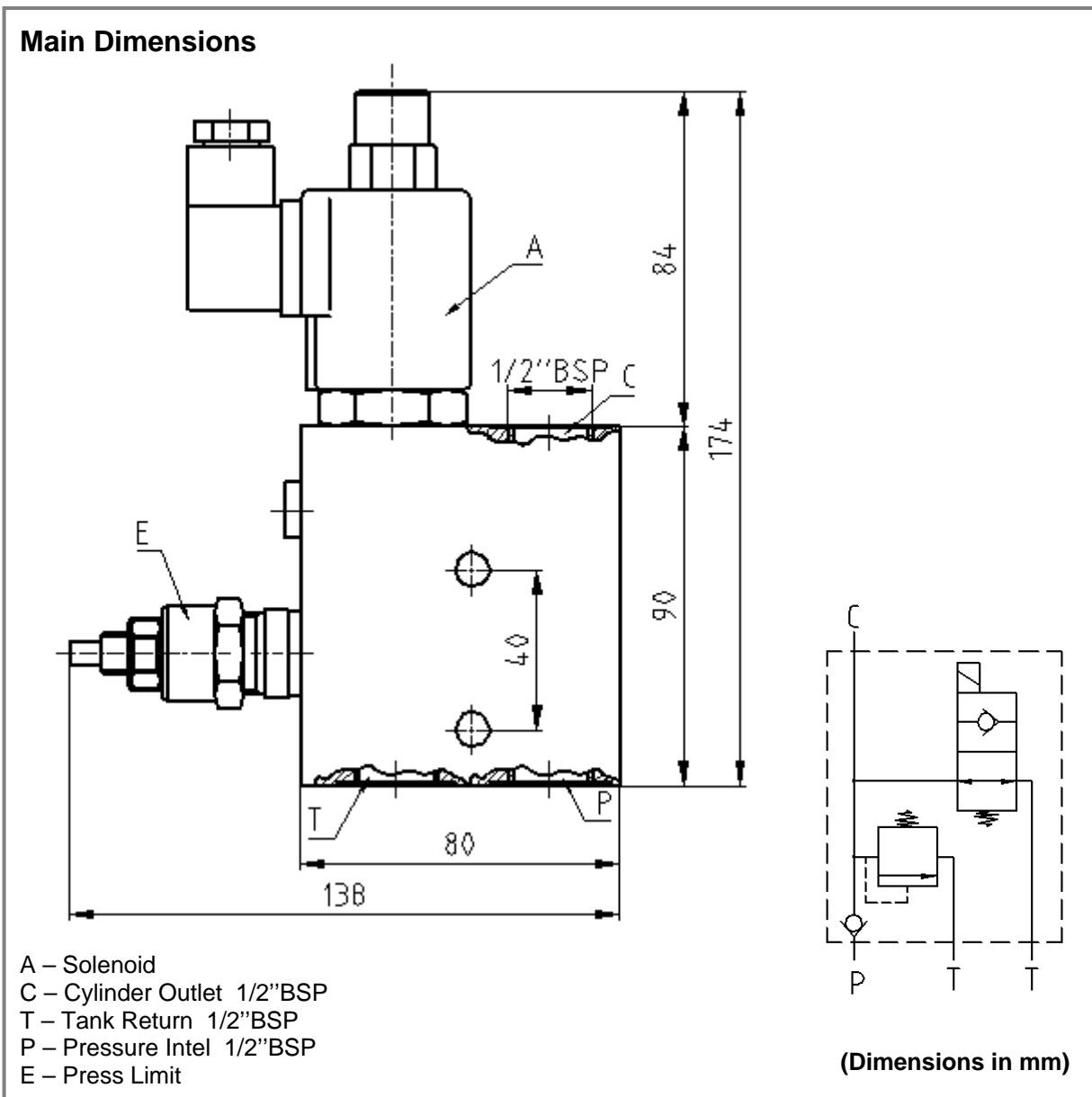
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Electrovalves		Ref. EVNO8024
EV	Electrovalve , normally open ; 80L/Min ; 1/2" : 24V with anti return valve + press limit	



Main Data	
Maximum pressure (Bar)	250
Operating pressure (Bar)	up to 150
Flow rate	80 L/min
Weight (kg)	2.4
Electrovalve Supply (V)	24 DC

CTI EVNO8024 1008-2

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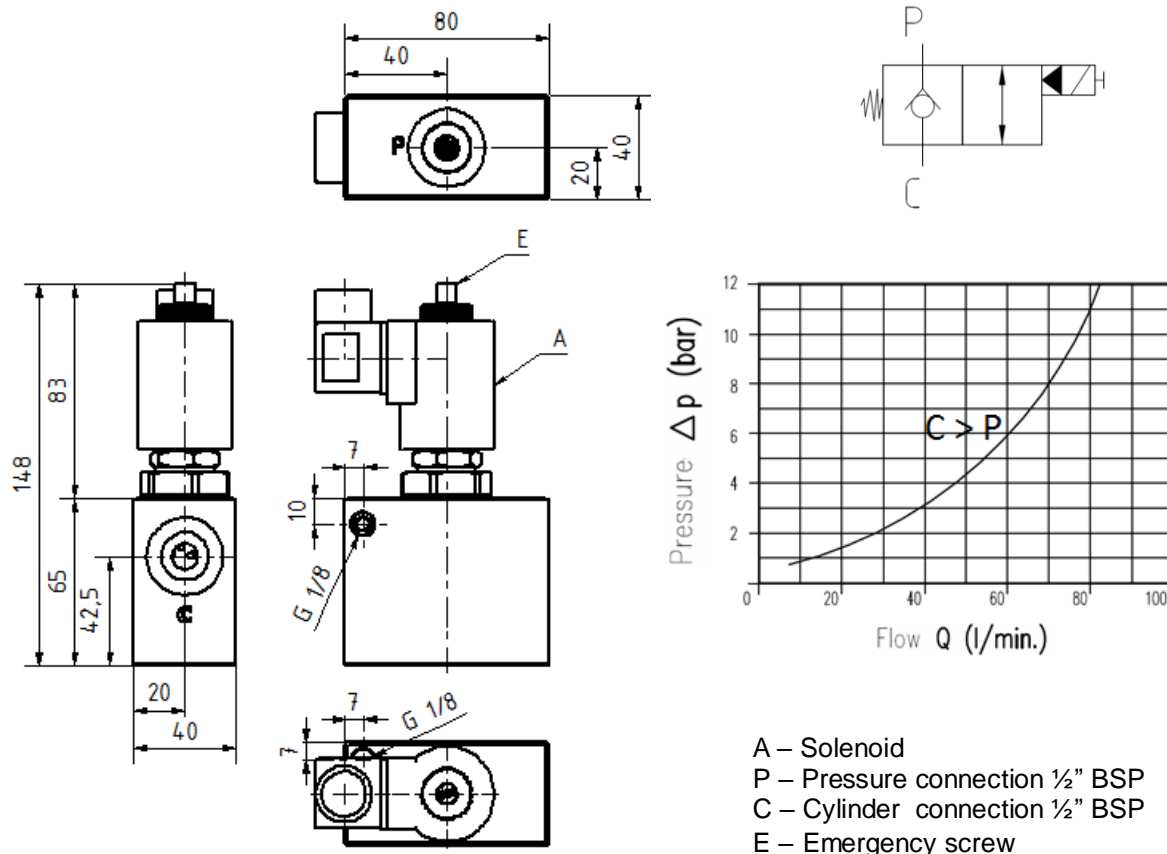
HOSE BURST PROTECTION

Ref. HBP80_E

HBP

Hose Burst Protection Valve ; 80l/min ; Electric Control

Main Dimensions



(Dimensions in mm)

- A – Solenoid
- P – Pressure connection 1/2" BSP
- C – Cylinder connection 1/2" BSP
- E – Emergency screw

Main Data

Reference	HBP8012E	HBP8024E
Maximum working pressure (bar)	250	
Maximum advised flow (l/min)	80	
Weight (approx.) (kg)	0.7	
Solenoid Voltage (VDC)	12	24

How to order:

Example: Hose Burst protection valve, 80l/min; electric control; 24VDC, ref. HBP80_E → HBP8024E

- Notes:**
1. The installation of this valve will increase the lowering time due to the pressure drop caused.
 2. The addition of this valve does not avoid the need for regular hose checkups and substitution in accordance with the hoses conditions.

Fluids	mineral oils type ISO HM or DIN 51524-2 HLP
Recommended filtration	25 μm

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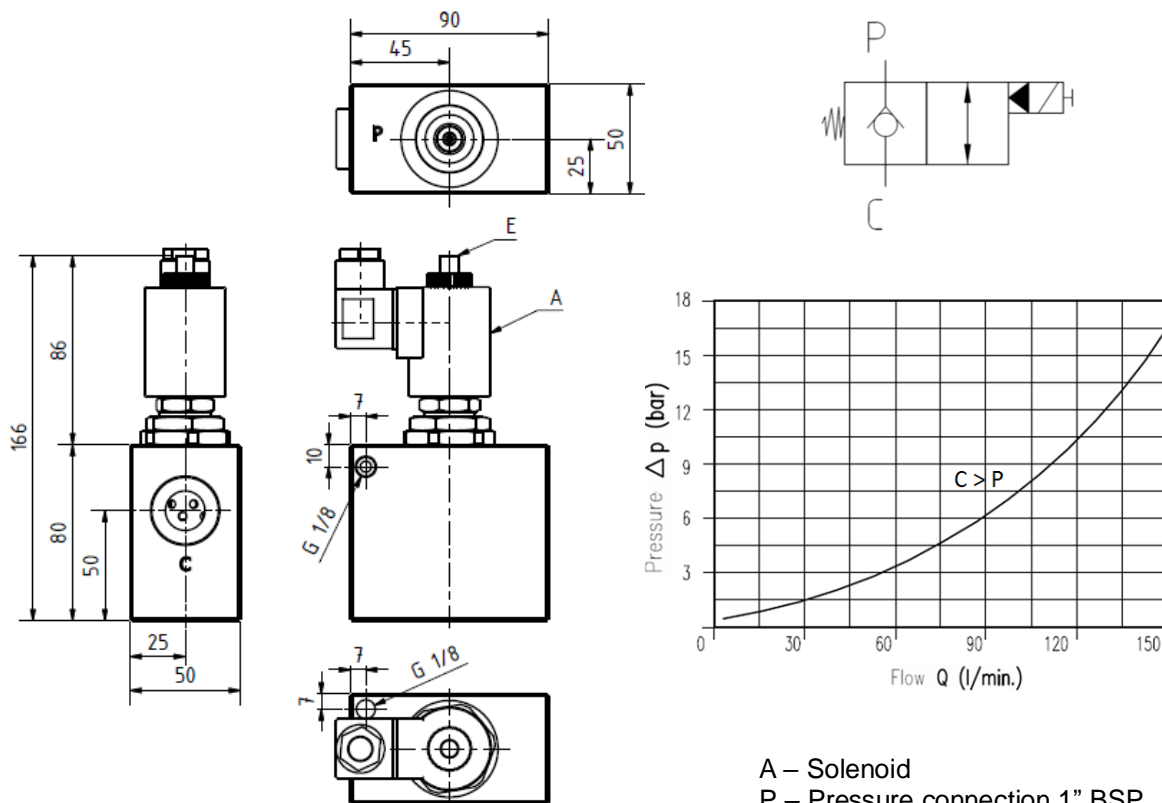
HOSE BURST PROTECTION

Ref. HBP150_E

HBP

Hose Burst Protection Valve ; 150l/min ; Electric Control

Main Dimensions



(Dimensions in mm)

- A – Solenoid
- P – Pressure connection 1" BSP
- C – Cylinder connection 1" BSP
- E – Emergency screw

Main Data

Reference	HBP15012E	HBP15024E
Maximum working pressure (bar)	250	
Maximum advised flow (l/min)	150	
Weight (approx.) (kg)	1	
Solenoid Voltage (VDC)	12	24

How to order:

Example: Hose Burst protection valve, 150l/min; electric control; 24VDC, ref. HBP150_E → HBP15024E

- Notes:**
1. The installation of this valve will increase the lowering time due to the pressure drop caused.
 2. The addition of this valve does not avoid the need for regular hose checkups and substitution in accordance with the hoses conditions.

Fluids	mineral oils type ISO HM or DIN 51524-2 HLP
Recommended filtration	25 μm

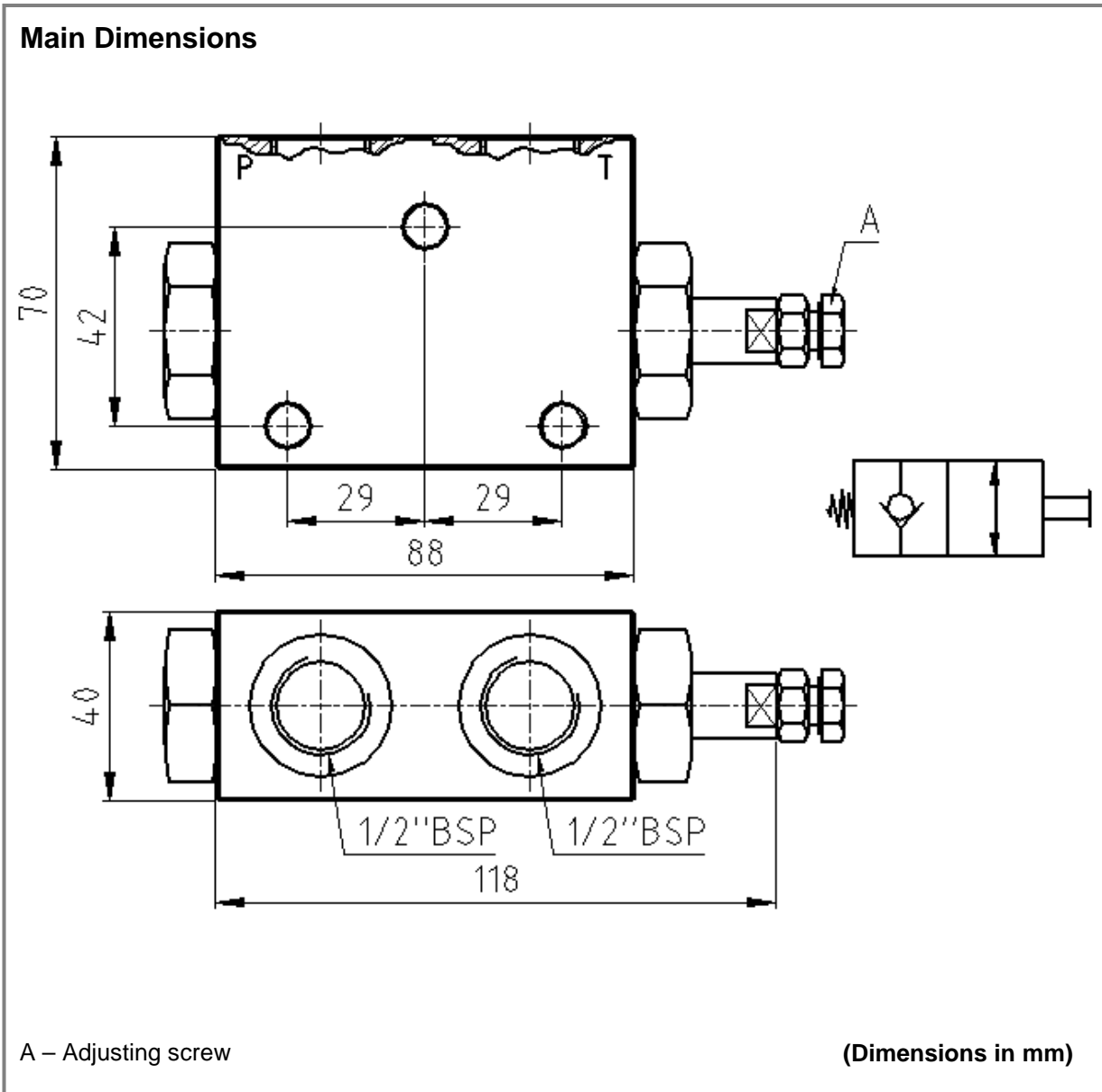
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End of Stroke Valves		Ref. AOHVFC12
AO	End of stroke Valve 1/2	



Main Data	
Weight (kg)	1.8

CT1 AOHVFC12 0901-1

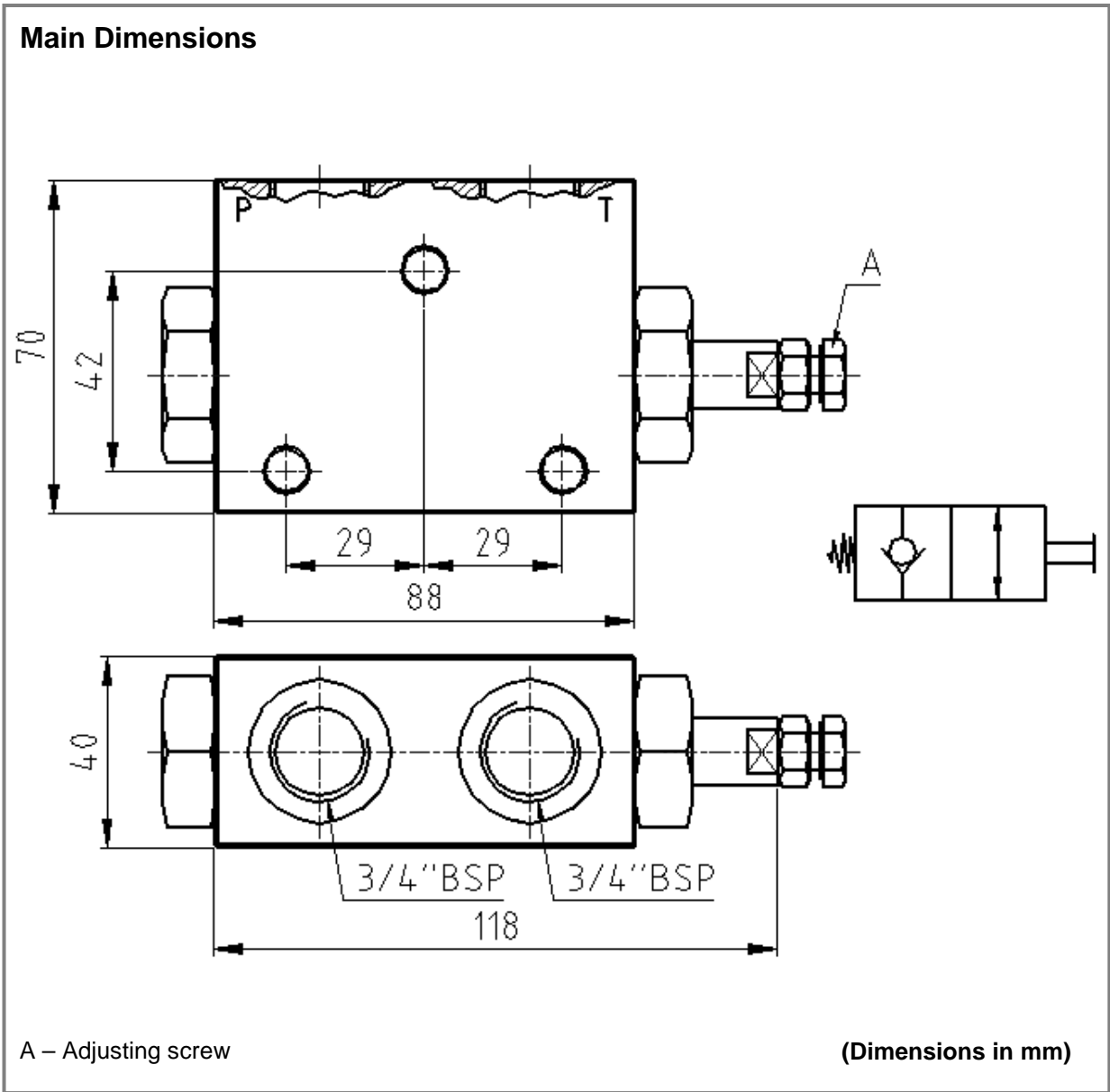
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End of Stroke Valves		Ref. AOHVFC34
AO	End of stroke Valve 3/4	



Main Data	
Weight (kg)	1.7

CTI AOHVFC34 0901-1

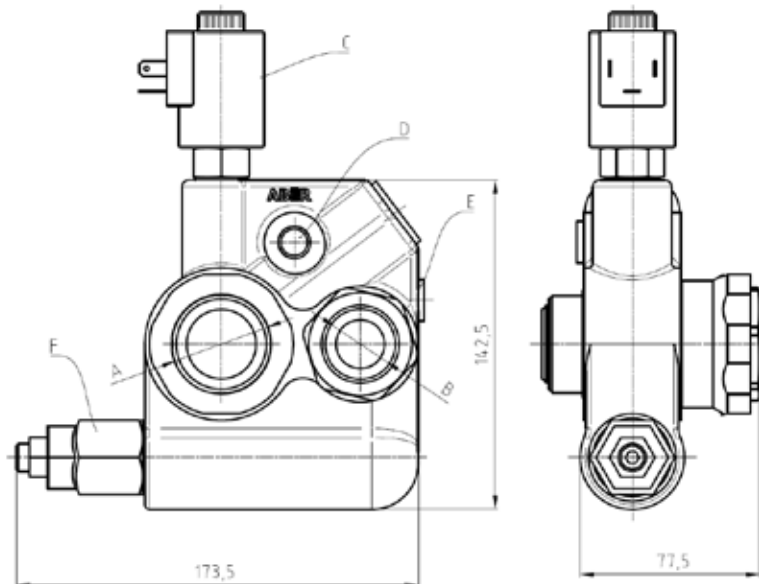
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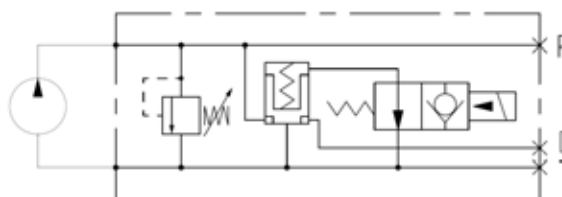
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Main Dimensions



- C – Solenoid 24VDC
- D – Drain plug 1/4”G
- E – Manometer plug 1/4”G
- F – Relief valve



(Dimensions in mm)

Main Data

Bypass	BPR3060	BPR80	BPR110	BPR3060	BPR80	BPR110
	L	L	L	H	H	H
Max continuous pressure (bar)	210	210	210	350	350	350
Max intermittent pressure (bar)	250	250	250	400	400	400
Solenoid voltage (VDC)	24	24	24	24	24	24
Weight (kg)	5	5	5	5	5	5
A – Admission thread (G)	1”	1-1/4”	1-1/2”	1”	1-1/4”	1-1/2”
B – Pressure thread (G)	3/4”	1”	1”	3/4”	1”	1”

How to order:

Example: Bypass with relief valve to work in pumps from 110cc to 135cc; pressures 350/400 bar → BPR110H

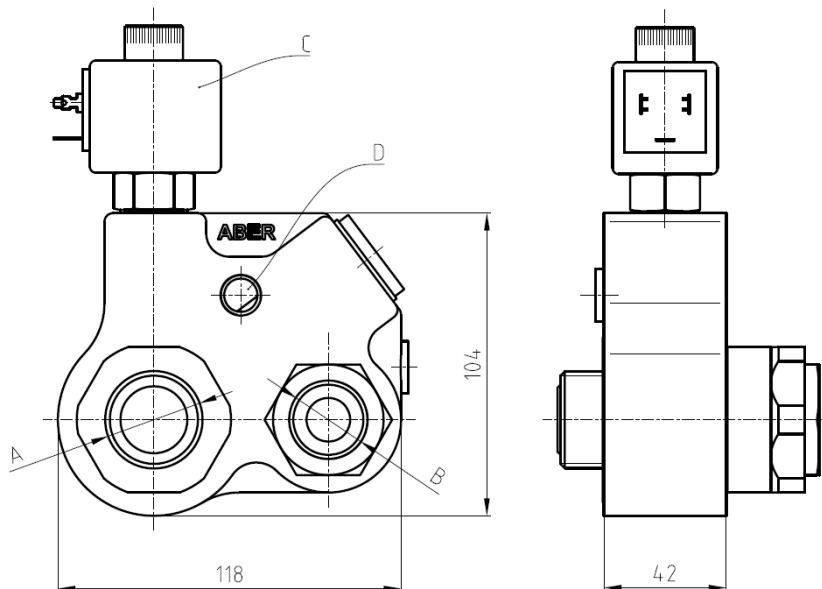
Important notes:

- Every time the vehicle is in motion; the solenoid should be off, this way allowing the bypass to work correctly.
- The drain line must always be installed directly from the bypass valve to the oil tank below the oil level. In installations where the drain line is not submerging (inside tank) in the oil, it is necessary to install a spring load check valve.
- When the solenoid valve is off, at least 12% of the theoretical pump flow should come out from the drain line directly to the tank. This procedure will prevent the hydraulic system from overheating while the vehicle is working.
- If these instructions aren't followed, the system will overheat and cause its rupture.
- Also available in 12VDC.
- ABER shall not, under any circumstances be liable by the adjustment of the relief valve pressure and their sealing. This procedure is costumer responsibility.

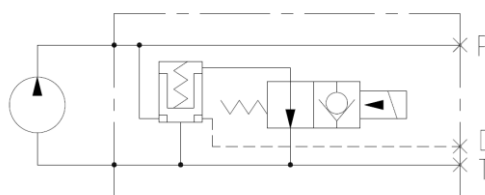
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Main Dimensions



C – Solenoid 24VDC
D – Drain plug 1/4”G



(Dimensions in mm)

Main Data

Bypass	BP3060	BP80	BP110	BP3060	BP80	BP110
	L	L	L	H	H	H
Max continuous pressure (bar)	210	210	210	350	350	350
Max intermittent pressure (bar)	250	250	250	400	400	400
Solenoid voltage (VDC)	24	24	24	24	24	24
Weight (kg)	3,5	3,5	3,5	3,5	3,5	3,5
A – Admission thread (G)	1”	1-1/4”	1-1/2”	1”	1-1/4”	1-1/2”
B – Pressure thread (G)	3/4”	1”	1”	3/4”	1”	1”

How to order:

Example: Bypass valve to work in pumps from 110cc to 135cc; pressures 350/400 bar → BP110H

Important notes:

- Every time the vehicle is in motion; the solenoid should be off, this way allowing the bypass to work correctly.
- The drain line must always be installed directly from the bypass valve to the oil tank below the oil level. In installations where the drain line is not submerging (inside tank) in the oil, it is necessary to install a spring load check valve.
- When the solenoid valve is off, at least 12% of the theoretical pump flow should come out from the drain line directly to the tank. This procedure will prevent the hydraulic system from overheating while the vehicle is working.
- If these instructions aren't followed, the system will overheat and cause its rupture.
- Also available in 12VDC.

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