



ATLANTIC
Fluid Tech

**SECTION
14**

Special
Valves

SECTION 14**SPECIAL VALVES**

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SECTION 14. 1

SPECIAL VALVES - FAN DRIVE BLOCKS

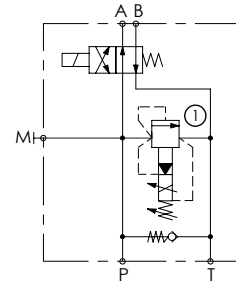
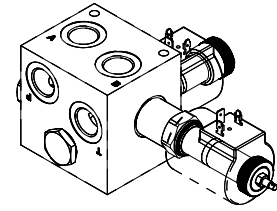
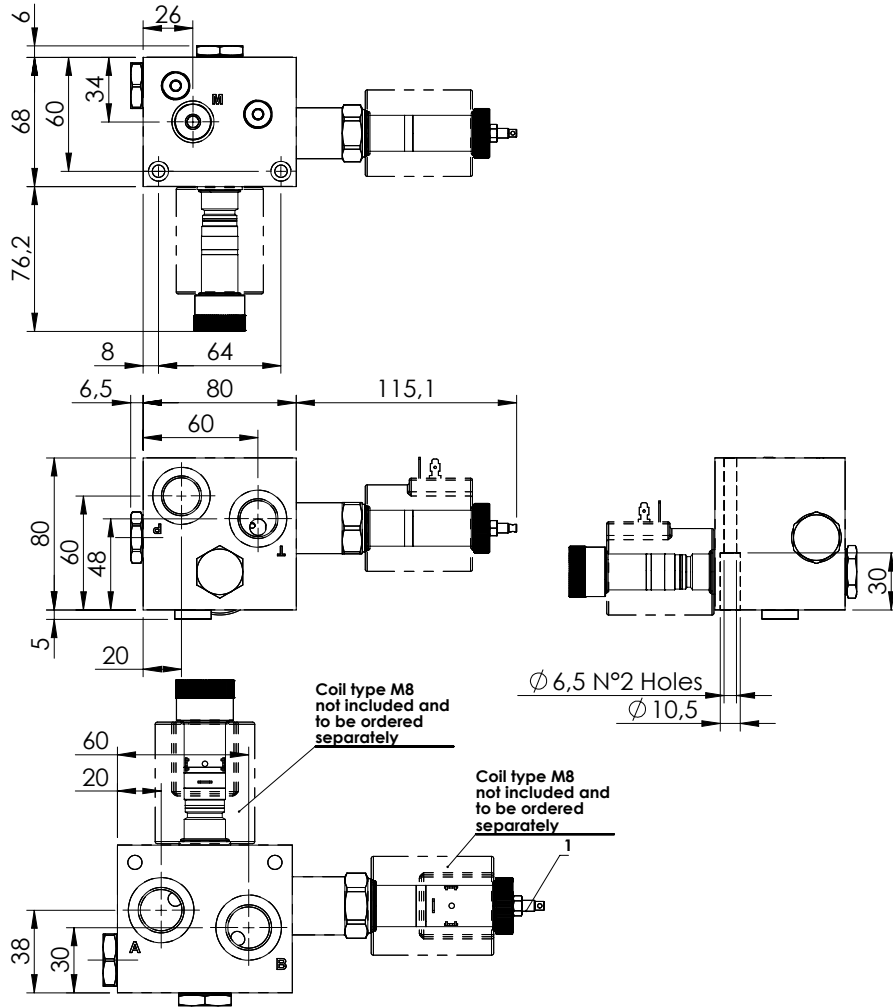


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	BNN0-045-GEC	With proportional pressure control	45	320	In line	G 1/2"	14.01.010

FAN DRIVE BLOCKS

BNND-045-GEC

PROPORTIONAL
PRESSURE CONTROL
WITH INVERSION

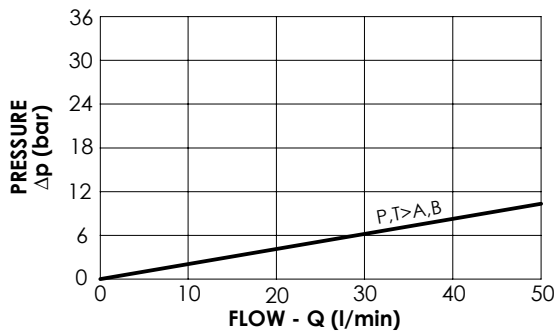


SPECIFICATIONS

Max. operating pressure:	320 bar
Rated flow:	45 l/min
Manifold:	Cast Iron
Weight:	3,28 kg
Coil:	M8

NOTES

- When valve ① is energized the pressure lowers from the setting to.
- See chapter 18.00.000 for coil.



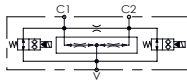
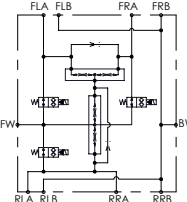
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar)	Setting range (bar)
BD000198	BNND-045-GEC-NP-G12-N320	P,T,A,B:G1/2" M:G1/4"	210	100-320

SECTION 14. 2

SPECIAL VALVES - DIFFERENTIAL LOCK VALVES

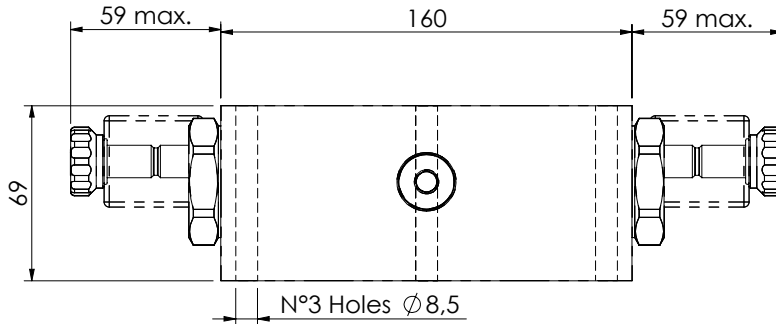


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	MFDT-150-BFAR-55 MFDT-150-BFAR-95	With electric bypass With electric bypass	150 150	350 350	In line In line	G 1/2" G 1/2"	14.02.010 14.02.010
	BNND-200-AED	With electric bypass for three motors transmission	200	500	In line	G 3/4"	14.02.020

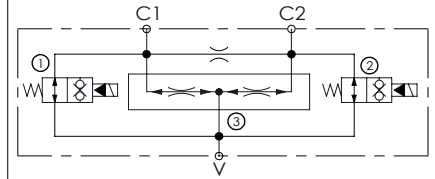
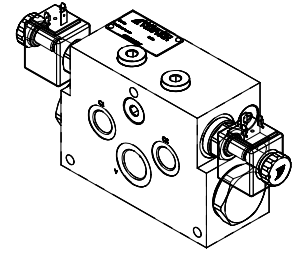
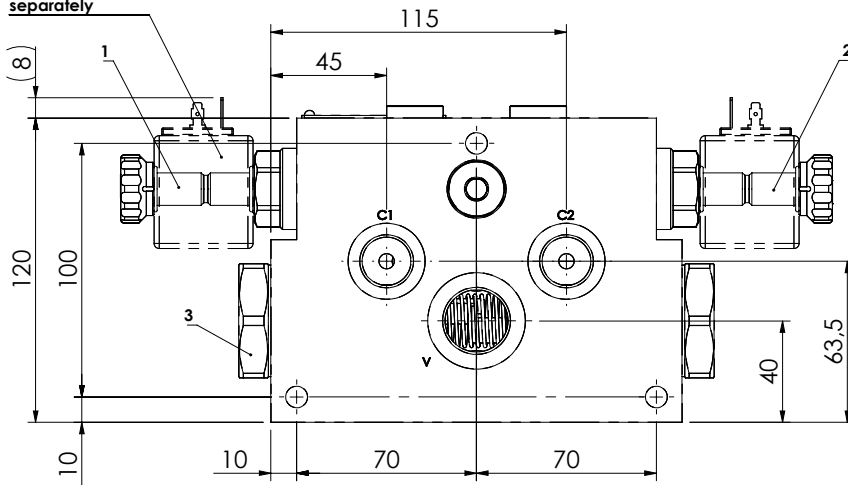
DIFFERENTIAL LOCK VALVE

MFDT-150-BFAR

WITH ELECTRIC BYPASS

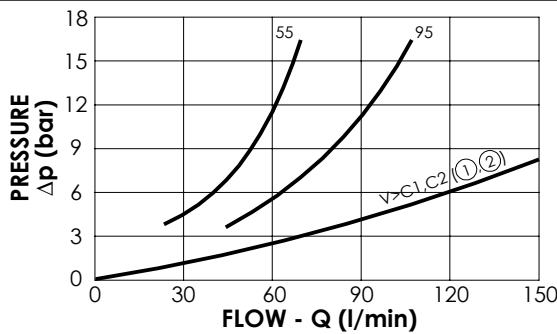


Coil type M7 not included and to be ordered separately



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	150 l/min
Regulated Flow:	See table
Manifold:	Steel
Weight:	9 kg
Coil:	M7



NOTES

- For other flow ranges contact AFT sales network.
- See chapter 18.00.000 for coil.

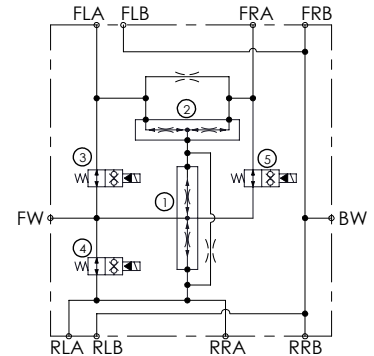
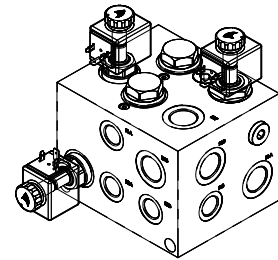
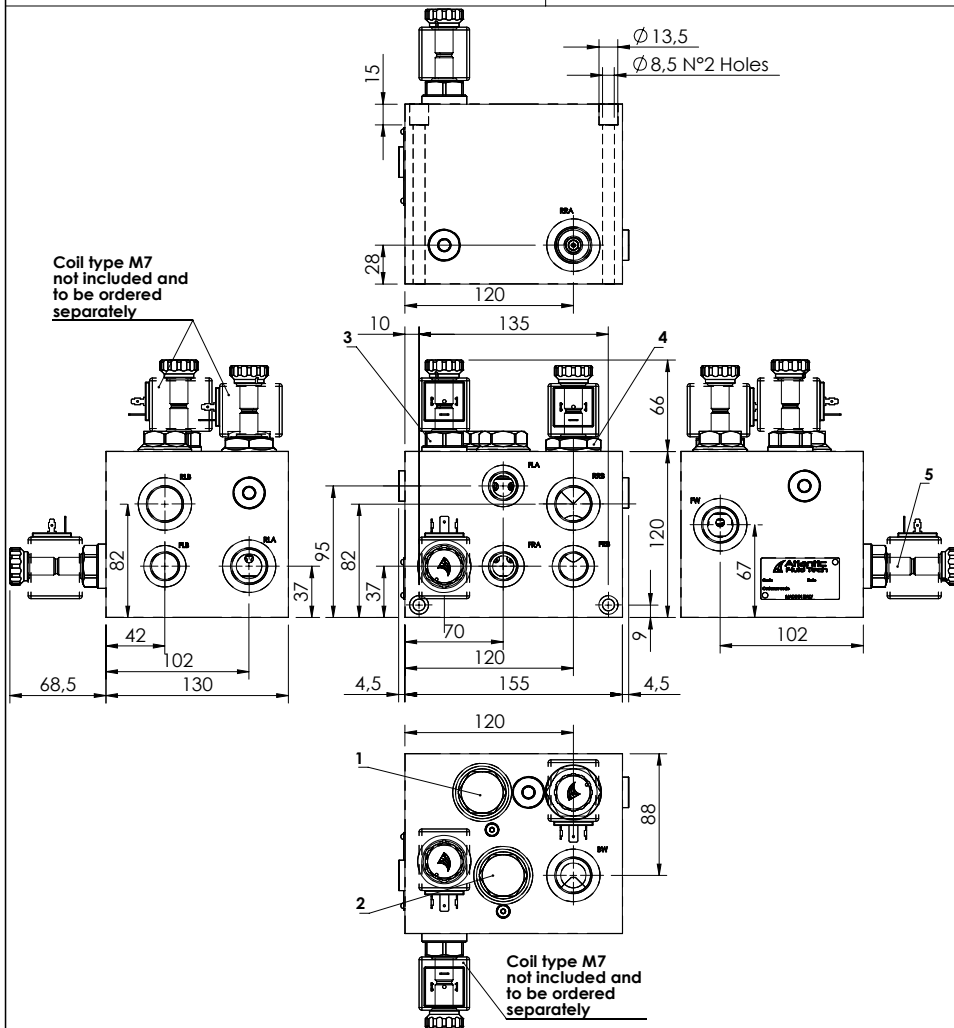
ORDERING CODES

Quick code	Description	Main ports size	Regulated flow range (l/min)
MF000347	MFDT-150-BFAR-55-G34-N350	C1,C2: G1/2" V: G3/4"	28-55
MF000348	MFDT-150-BFAR-95-G34-N350	C1,C2: G1/2" V: G3/4"	56-95

DIFFERENTIAL LOCK VALVE

BNND-200-AED

WITH ELECTRIC BYPASS FOR THREE MOTORS TRANSMISSION

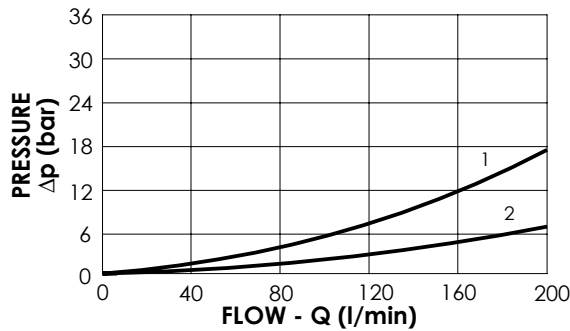


SPECIFICATIONS

Max. operating pressure:	500 bar
Rated flow:	200 l/min
Manifold:	Steel
Weight:	16,7 kg
Coil:	M7

NOTES

-For other flow ranges contact AFT sales network
-See chapter 18.00.000 for coil.



- 1: FW>FxA,RxA
① ②
- 2: FW>FxA,RxA
③ ④

ORDERING CODES

Quick code	Description	Main ports size	Flow diverter ratio:	Inlet range flow (l/min)
BD000199	BNND-200-AED-NP-G34-N500	FW,BW,RLA,RLB,RRA,RRB:G 3/4" FLA,FLB,FRA,FRB:G 1/2"	① 50%-50% ② 33%-66%	48 - 170

SECTION 14. 3

SPECIAL VALVES - UNLOADING/INLOADING VALVES

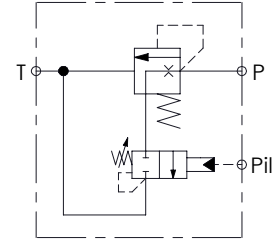
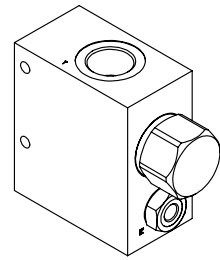
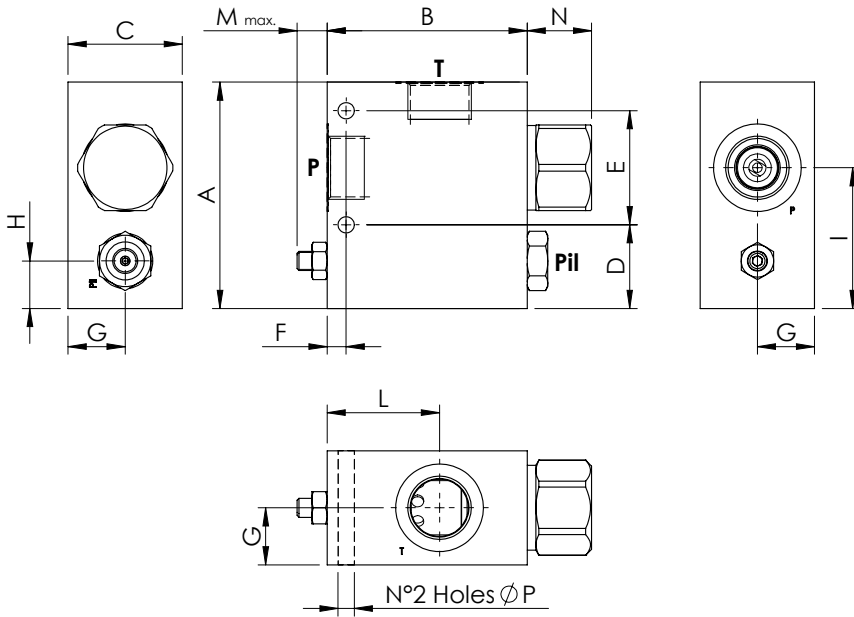


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	MTP-120-TLSN MTP-200-TLSN MTP-250-TLSN	Spool type, pump unloading, piloted	120 200 250	210 210 210	In line	G 1/2" G 3/4" G 1"	14.03.010 14.03.010 14.03.010
	MFTS-200-DHAN MFTS-200-DHAN MFTS-200-DHAN	Solenoid operated unloading valve, with relief	200 200 200	250 250 350	In line	G 3/4" G 1" G 1"	14.03.020 14.03.030 14.03.040
	BNND-040-LE		40	210	In line	G 1/2"	14.03.050
	MTTE-150-SLSN	Solenoid operated unloading valve, piloted	150	350	In line	1 1/16"-15 UNF	14.03.060
	MTSB-150-SDSN	For Cetop 5	150	350	Flanged	Cetop 5	14.03.070
	MFTS-150-EFCE		150	350	In line	1 1/16"-12 UNF	14.03.080
	MTSD-150-TLSN		150	300	In line	G 3/4"	14.03.090

UNLOADING VALVE

MTP-XXX-XLSN

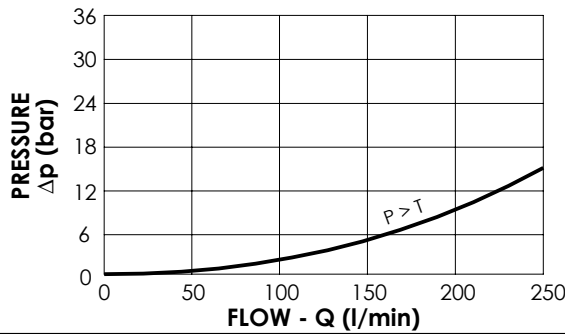
**PUMP UNLOADING
PILOTED**



SPECIFICATIONS

Max. operating pressure:	210/350 bar
Rated flow:	See table
Manifold:	See table
Weight:	Aluminium 2,49 kg; Steel 5,7 kg

A	B	C	D	E	F	G	H	I	L	M	N	P	CODE
119	105	60	44	60	10	30	25	74	59	15	33,8	8,5	MT000007 MT000022
105	100	40	35	45	15	20	16	56	52	19,5	18,8	8,5	MT000015
90	100	40	35	45	15	20	16	56	52	19,5	18,8	8,5	MT000014



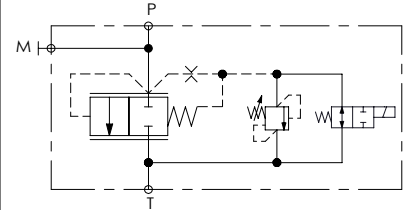
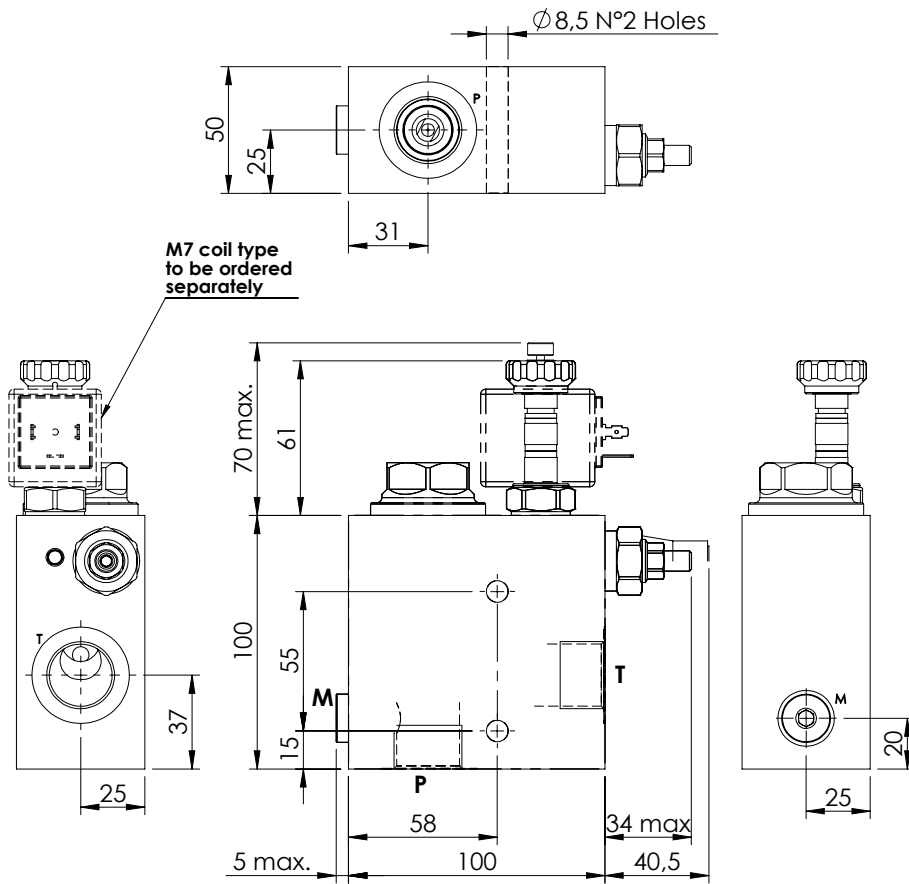
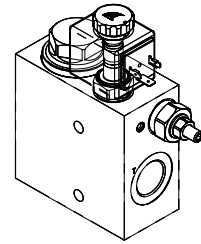
ORDERING CODES

Quick code	Description	Manifold material	Main ports size	Nominal flow (l/min)	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000007	MTP-250-TLSN-NP-G10-N210	Aluminium	P,T:G 1" Pil:G 1/4"	250	200	70 -210	49
MT000015	MTP-200-TLSN-NP-G34-N210	Aluminium	P,T:G 3/4" Pil:G 1/4"	200	200	70 -210	49
MT000014	MTP-120-TLSN-NP-G12-N210	Aluminium	P,T:G 1/2" Pil:G 1/4"	120	130	70 -210	49
MT000022	MTP-250-SLSN-NP-G10-N350	Steel	P,T:G 1" Pil:G 1/4"	250	200	70 -210	49

UNLOADING VALVE

MFTS-200-DHAN

**SOLENOID OPERATED
UNLOADING VALVE
WITH RELIEF**

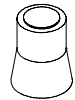


SPECIFICATIONS

Max. operating pressure:	250 bar
Rated flow:	200 l/min
Manifold:	Aluminium
Weight:	1,69 kg
Coil type:	M7

SEALING CAP

Ordering code:
AT000020



NOTES

Internal leakage: 80 cc/min
Available in steel version for 350 bar
maximum operating pressure
See chapter 18.00.000 for coil.

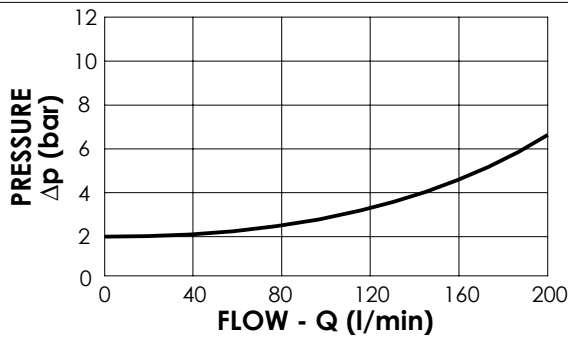
OPTIONS



Standard



Push style
override



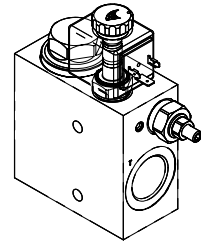
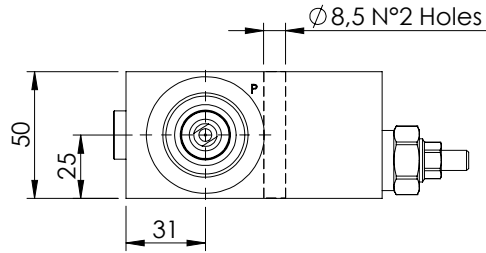
ORDERING CODES

Quick code	Description	Ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)	Options
MF000038	MFTS-200-DHAN-NP-G34-N250	P,T:G 3/4" M:G 1/4"	200	140-350	142	Standard
MF000044	MFTS-200-DHAE-NP-G34-N250	P,T:G 3/4" M:G 1/4"	200	140-350	142	Push style override

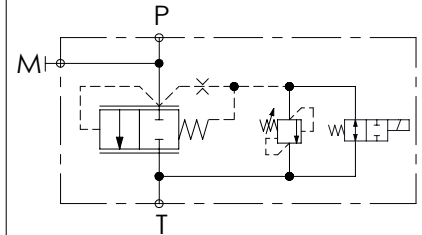
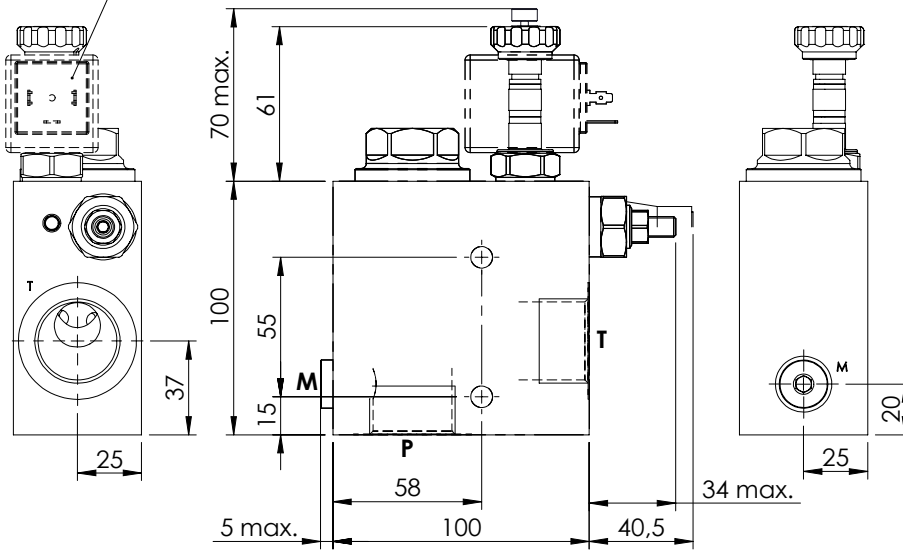
UNLOADING VALVE

MFTS-200-DHAN

**SOLENOID OPERATED
UNLOADING VALVE
WITH RELIEF**



M7 coil type to be ordered separately

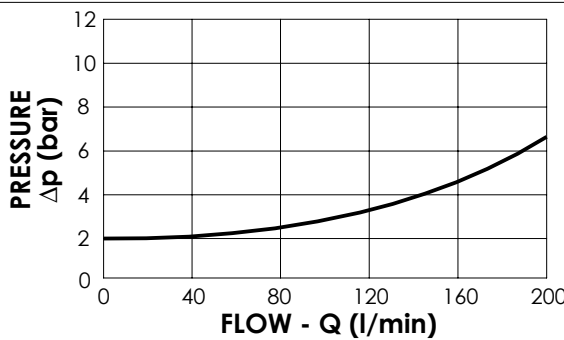
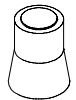


SPECIFICATIONS

Max. operating pressure:	250 bar
Rated flow:	200 l/min
Manifold:	Aluminium
Weight:	1,65 kg
Coil type:	M7

SEALING CAP

Ordering code:
AT000020



NOTES

Internal leakage: 80 cc/min
Available in steel version for 350 bar maximum operating pressure
See chapter 18.00.000 for coil.

OPTIONS



Standard



Push style override

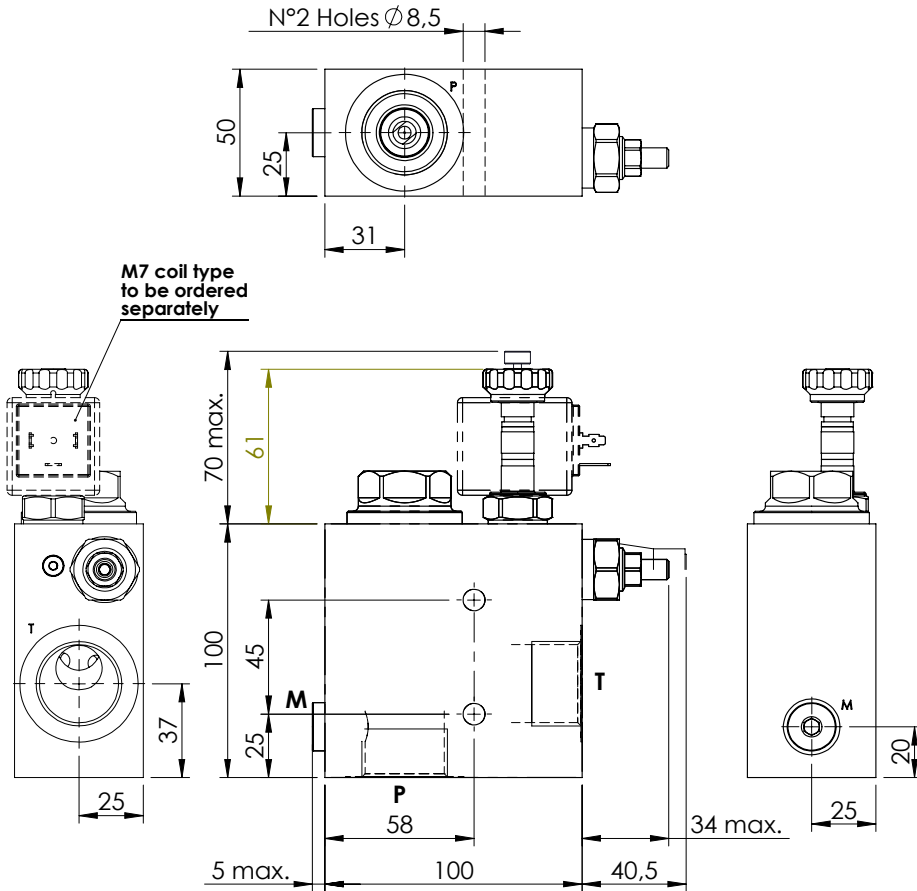
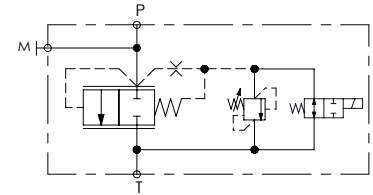
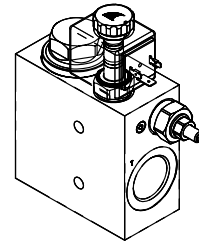
ORDERING CODES

Quick code	Description	Ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)	Options
MF000039	MFTS-200-DHAN-NP-G10-N250	P,T:G 1" M:G 1/4"	200	140-350	142	Standard
MF000043	MFTS-200-DHAE-NP-G10-N250	P,T:G 1" M:G 1/4"	200	140-350	142	Push style override

UNLOADING VALVE

MFTS-200-DHAN

**SOLENOID OPERATED
UNLOADING VALVE
WITH RELIEF**

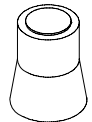


SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	200 l/min
Manifold:	Steel
Weight:	3,57 kg

SEALING CAP

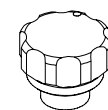
Ordering code:
AT000020



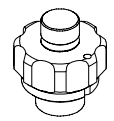
NOTES

See chapter 18.00.000 for coil.

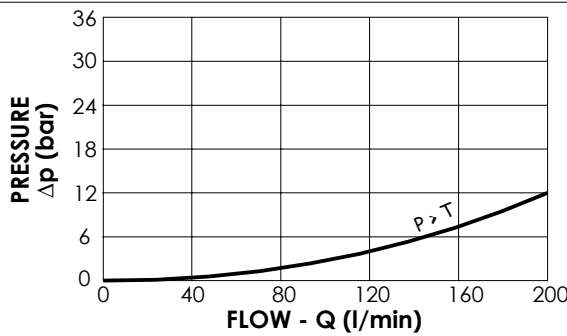
OPTIONS



Standard



Push style
override

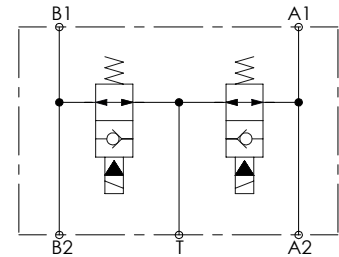
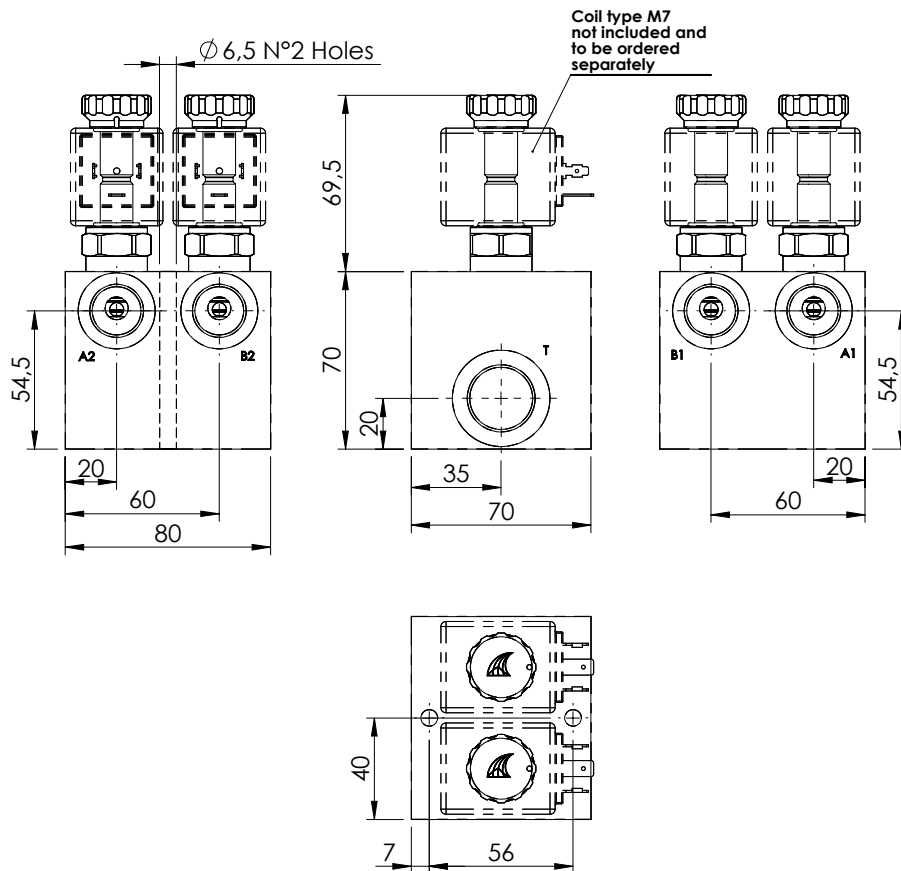
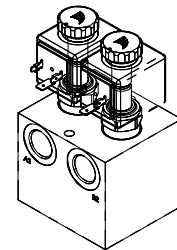


ORDERING CODES

Quick code	Description	Ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)	Options
MF000083	MFTS-200-DHAN-NP-G10-N350	P,T:G 1" M:G 1/4"	350	140-350	142	Standard
MF000103	MFTS-200-DHAE-NP-G10-N350	P,T:G 1" M:G 1/4"	350	140-350	142	Push style override

UNLOADING VALVE

BNND-040-LE

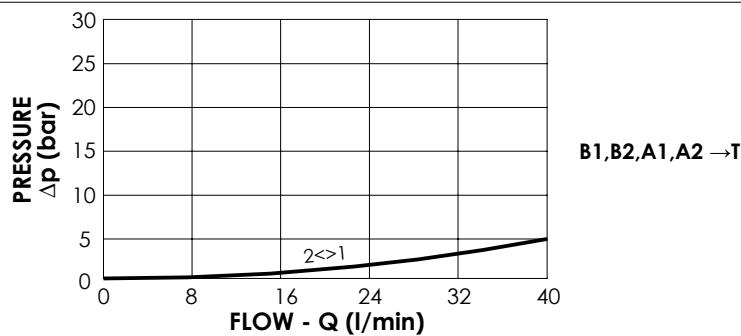


SPECIFICATIONS

Max. operating pressure:	210 bar
Rated flow:	40 l/min
Manifold:	Aluminium
Weight:	1,1 kg
Coil:	M7

NOTES

See chapter 18.00.000 for coil.



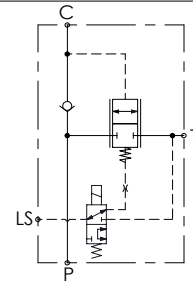
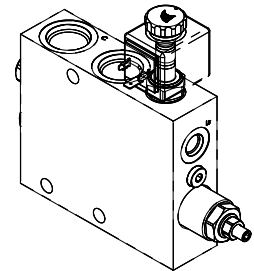
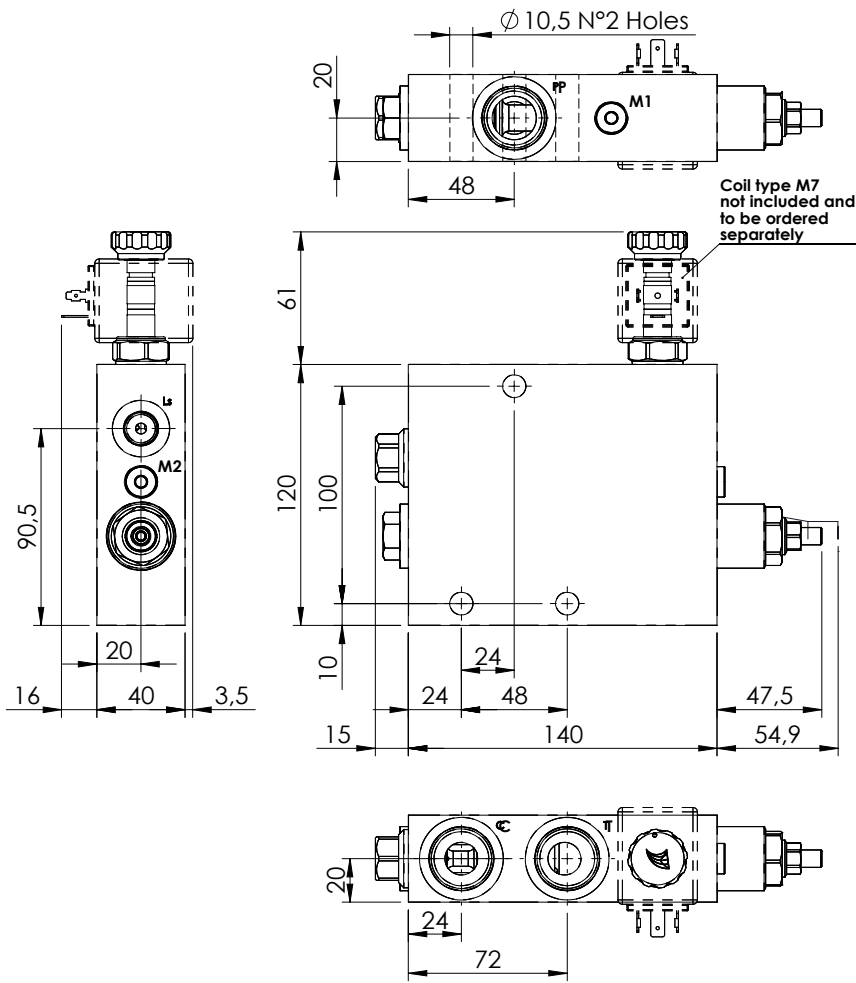
ORDERING CODES

Quick code	Description	Main ports size
BD000200	BNND-040-LE-NP-G12-N210	A1, A2, B1, B2: G1/2" T: G3/4"

UNLOADING VALVE

MTTE-150-SLSN

PUMP UNLOADING PILOTED

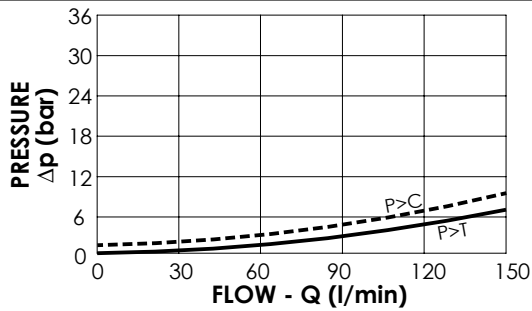
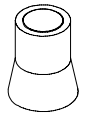


SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	150 l/min
Manifold:	Steel
Weight:	4,69 Kg
Coil:	M7

SEALING CAP

Ordering code:
AT000020



NOTES

See chapter 18.00.000 for coil.

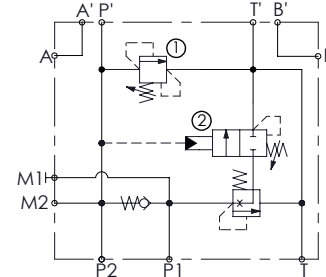
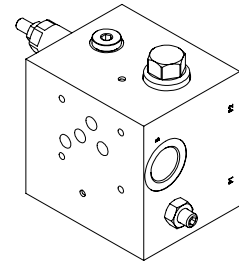
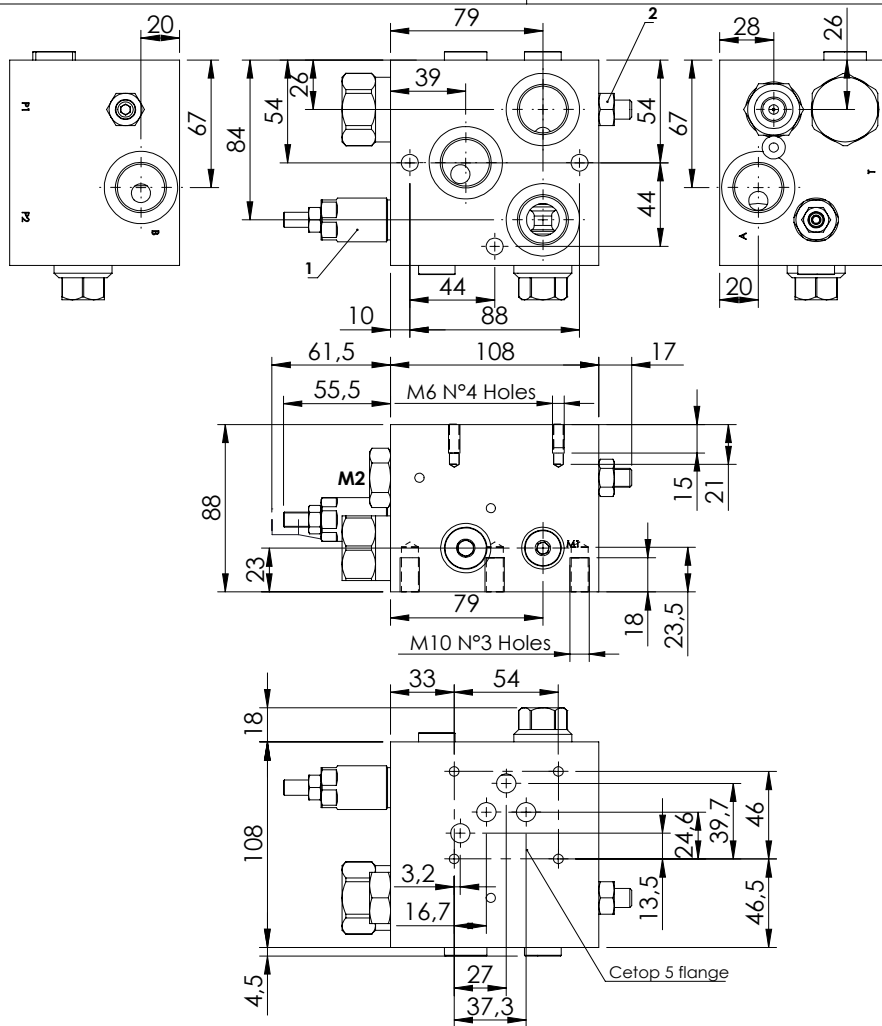
ORDERING CODES

Quick code	Description	Main ports size
MT000028	MTTE-150-SLSN-NP-U11-N350	P,C,T:1 1/16" UNF-2B LS: 9/16" UNF-2B

UNLOADING VALVE

MTSB-150-SDSN

CETOP 5

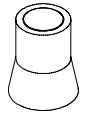


SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	150 l/min
Manifold:	Steel
Weight:	7,25 kg

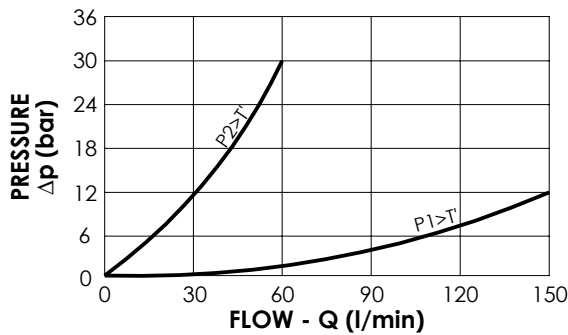
SEALING CAP

Ordering code:
AT000020



NOTES

- P2 > P' : 50 l/min
- P1 > P' : 100 l/min
- Max flow ① : 30 l/min



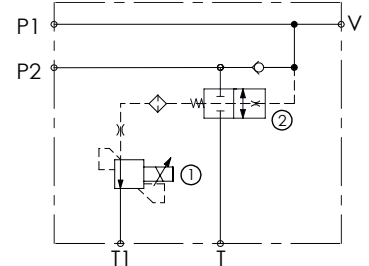
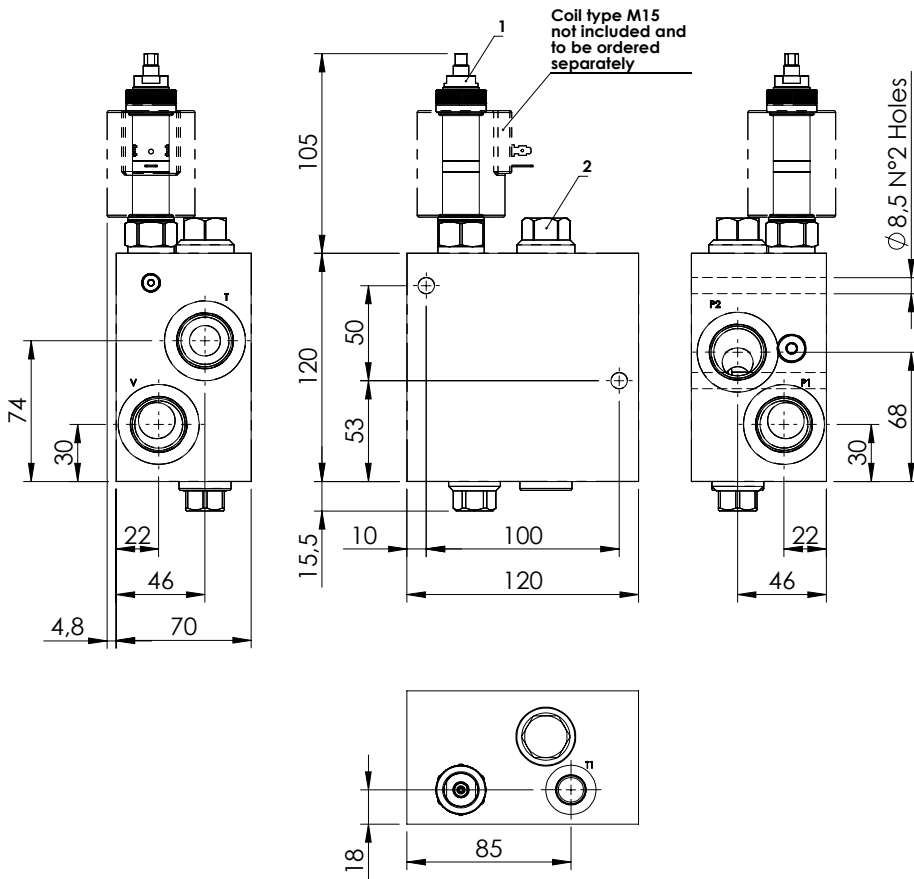
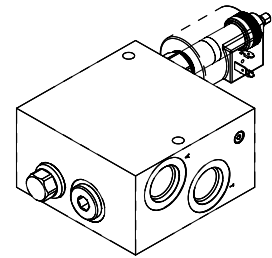
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000029	MTSB-150-SDSN-NP-G34-N350	A,B,P1,P2,T: G3/4" A',B',P',T': Cetop 5 M1,M2: G1/4"	① 200 ② 50	① 50-210 ② 20-100	① 42 ② 23

UNLOADING VALVE

MFTS-150-EFCE

SOLENOID OPERATED

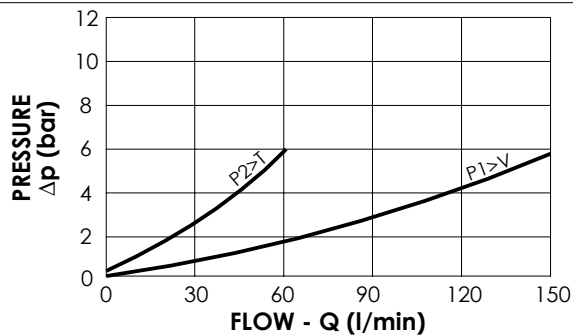


SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	150 l/min
Manifold:	Steel
Weight:	7,1 kg
Coil type:	M5

NOTES

-See chapter 18.00.000 for coil.

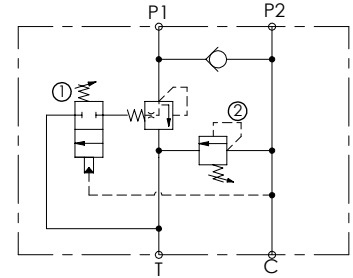
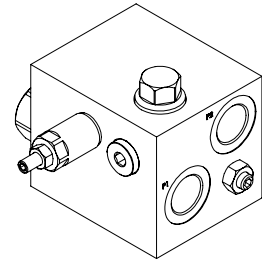
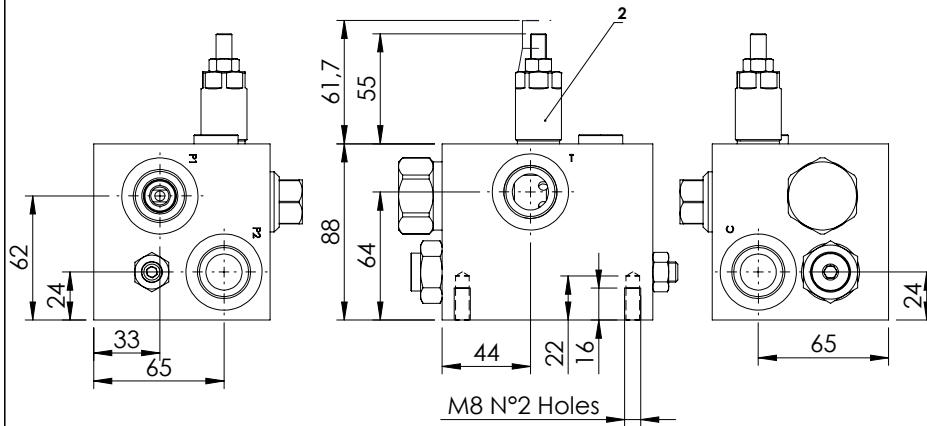
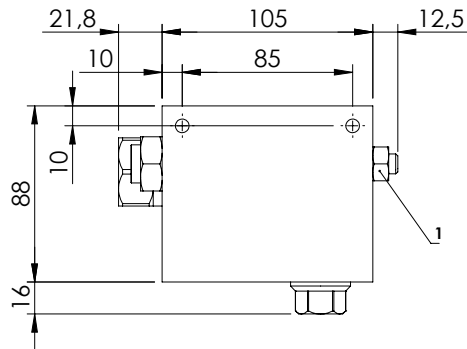


ORDERING CODES

Quick code	Description	Main Ports Size	Standard setting (bar)	Setting range (bar)
MF000345	MFTS-150-EFCE-NP-U11-N350	V,P1,P2,T:1" 1/16-12 UNF T1:9/16-18 UNF	30	30-350

UNLOADING VALVE

MTSD-150-TLSN

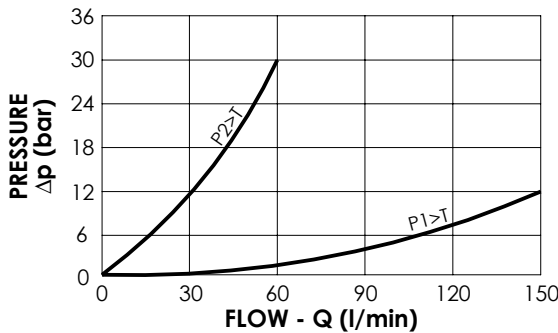
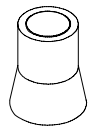


SPECIFICATIONS

Max. operating pressure:	300 bar
Rated flow:	150 l/min
Manifold:	See table
Weight:	Aluminium 2,54 kg; Steel 5,9 kg

SEALING CAP

Ordering code:
AT000020



NOTES

ORDERING CODES

Quick code	Description	Manifold material	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000012	MTSD-150-TLSN-00-G34-N300	Aluminium	P1,P2,C,T: G3/4"	① 50 ② 300	① 15-100 ② 100-350	① 23 ② 91
MT000016	MTSD-150-SLSN-00-G34-N300	Steel	P1,P2,C,T: G3/4"	① 50 ② 300	① 15-100 ② 100-350	① 23 ② 91

SECTION 14. 4

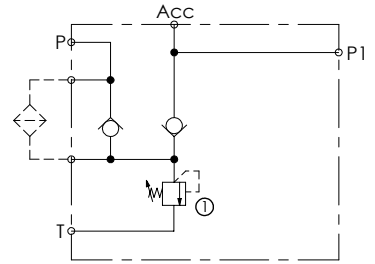
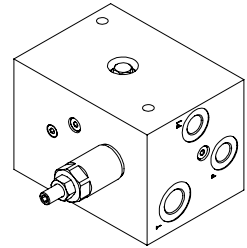
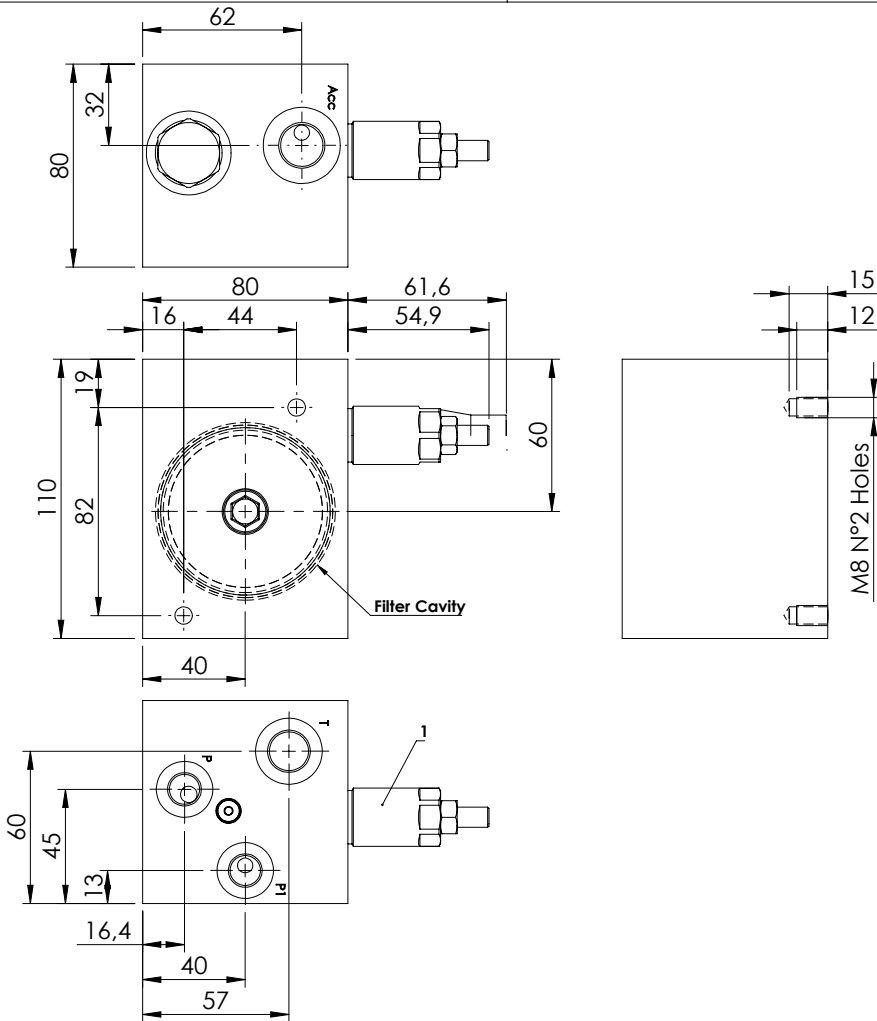
SPECIAL VALVES - FILTER BLOCKS



Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	BPNN-025-LLU		25	100	In line	G 1/4"	14.04.010
	BPNN-025-LLEU		25	100	In line	JIS 1/4"	14.04.020

FILTER VALVE

BPNN-025-LLU

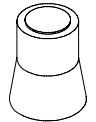


SPECIFICATIONS

Max. operating pressure:	100 bar
Rated flow:	25 l/min
Manifold:	Aluminium
Weight:	1,7 kg

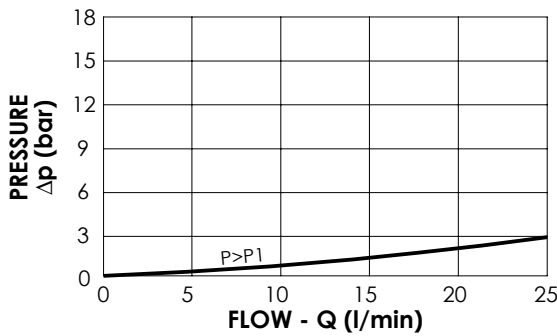
SEALING CAP

Ordering code:
AT000020



NOTES

-For filter cavity information or special version ask AFT sales network.

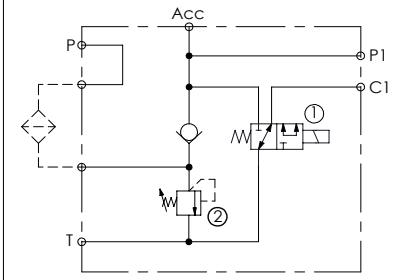
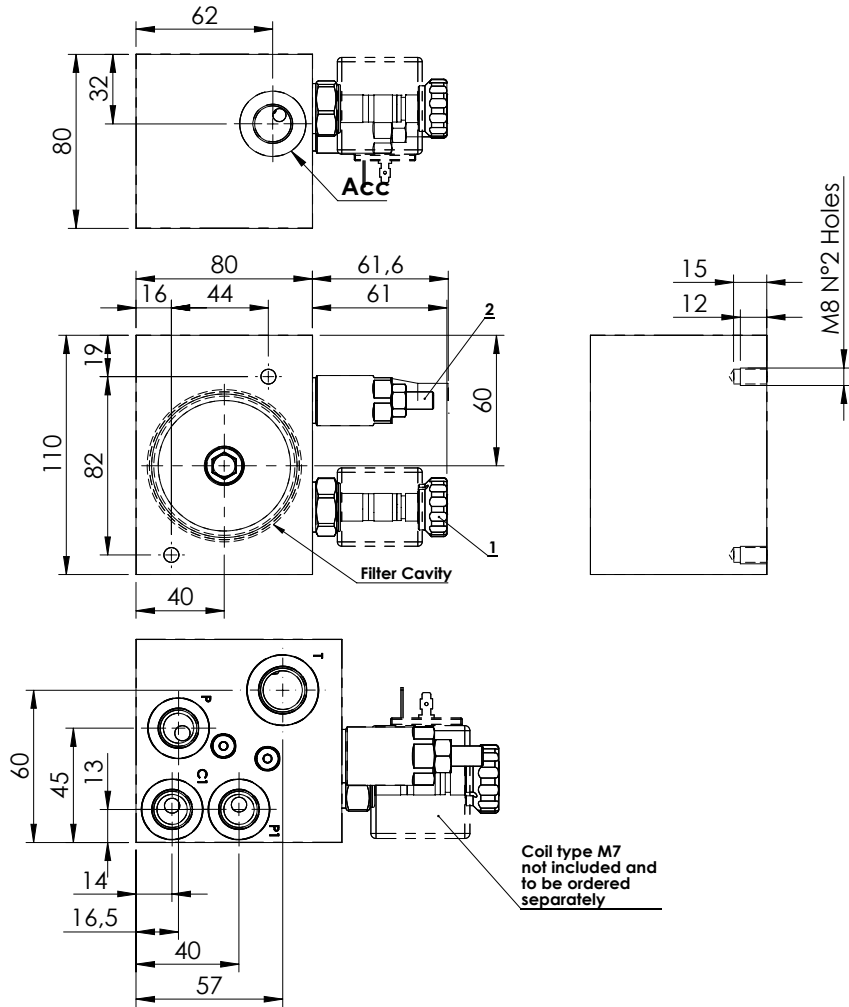
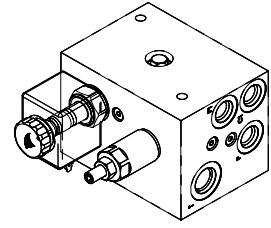


ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
BP000109	BPNN-025-LLU-NP-G38-N100	P1,P: G 1/4" T: G 3/8" Acc: M18x1,5	25	10-50	10

FILTER VALVES

BPNN-025-LLEU

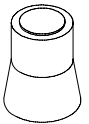


SPECIFICATIONS

Max. operating pressure:	100 bar
Rated flow:	25 l/min
Manifold:	Aluminium
Weight:	1,1 kg

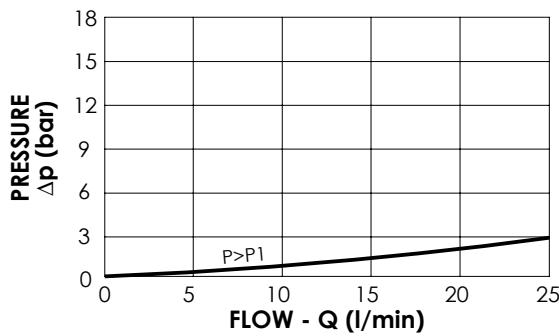
SEALING CAP

Ordering code:
AT000020



NOTES

- For filter cavity information or special version ask AFT sales network.
- See chapter 18.00.000 for coil.



ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
BP000108	BPNN-025-LLEU-NP-J38-N100	C1,P1,P:1/4" JIS T:3/8" JIS	25	10-50	10

SECTION 14. 5

SPECIAL VALVES - END OF STROKE VALVES

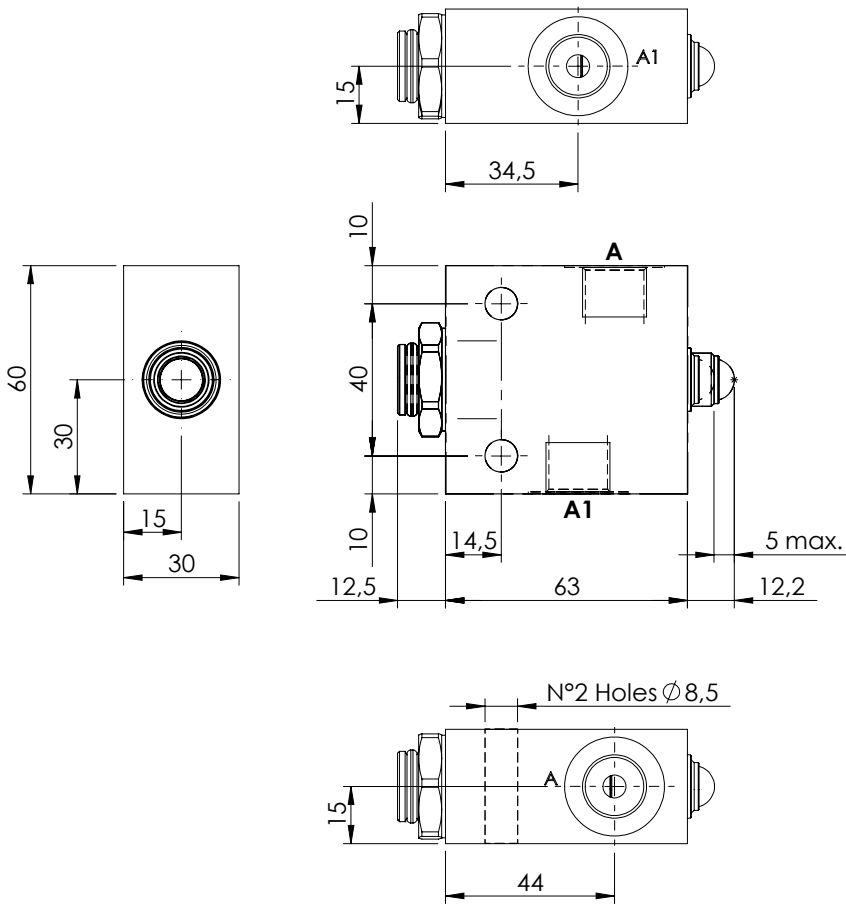
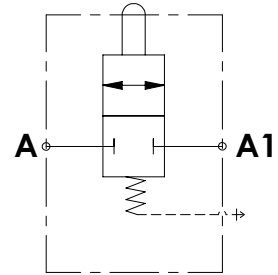
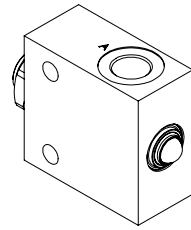


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	MDTC-060-ABNR	End of stroke, normally open, compensated	60	350	In line	G 3/8"	14.05.010
	MDTC-100-AVNR	End of stroke, normally closed	100	350	In line	G 1/2"	14.05.020
	MDTA-060-ABNR	End of stroke, normally open, compensated	60	350	In line	G 3/8"	14.05.030
	MDTA-100-AVNR	End of stroke, normally open, compensated	100	350	In line	G 1/2"	14.05.040
	MDTC-030-ABNR	End of stroke, normally closed	30	350	In line	G 3/8"	14.05.050
	MDTC-080-ABNR	End of stroke, normally closed	80	350	In line	G 3/8"	14.07.060

END OF STROKE VALVE

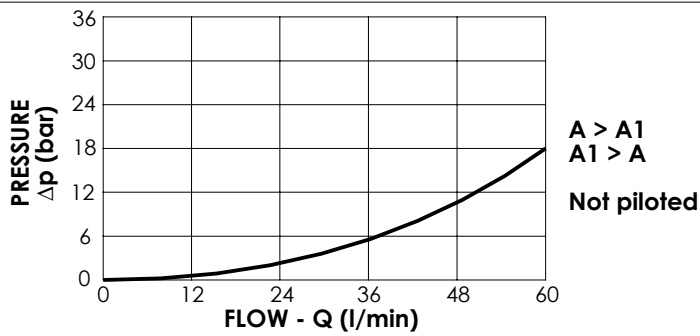
MDTC-060-ABNR

**NORMALLY CLOSED
COMPENSATED**



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	60 l/min
Manifold:	Steel
Weight:	0,82 kg
Maximum stroke:	5 mm
Max. leakage at 150 bar when fully closed:	200 cc/min



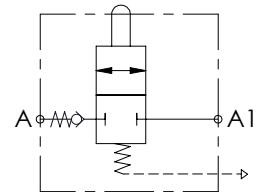
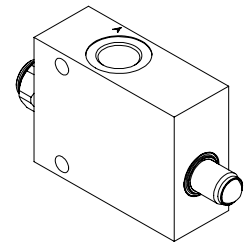
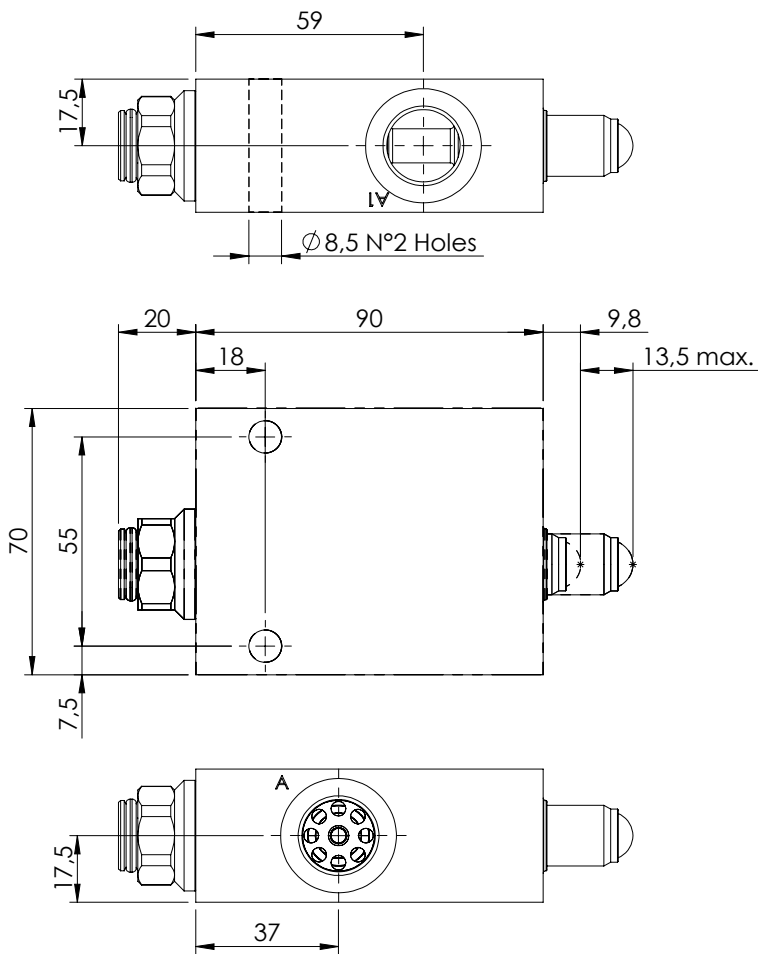
ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully open (Kg)
MD000090	MDTC-060-ABNR-NP-G38-N350	G 3/8"	4	13

END OF STROKE VALVE

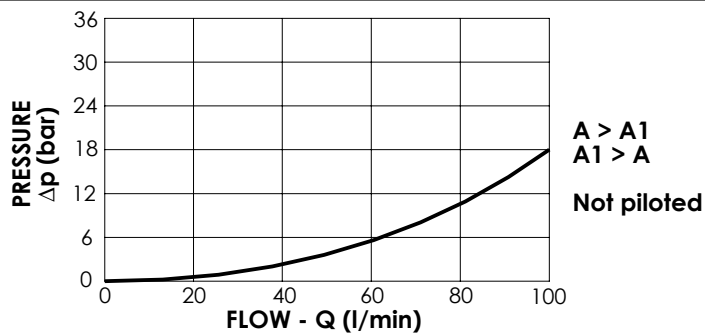
MDTC-100-AVNR

**NORMALLY CLOSED
AIR VENTED**



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	100 l/min
Manifold:	Steel
Weight:	1,59 kg
Maximum stroke:	13,5 mm



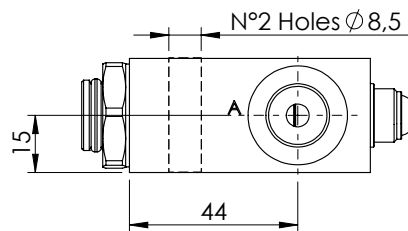
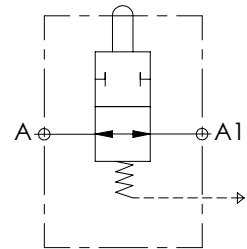
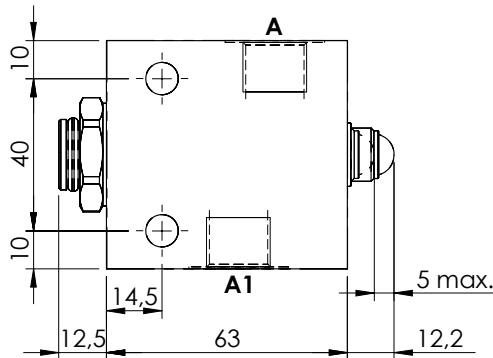
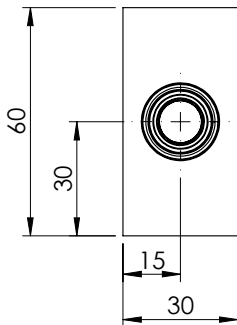
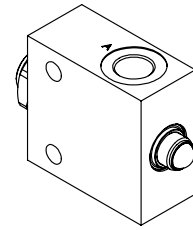
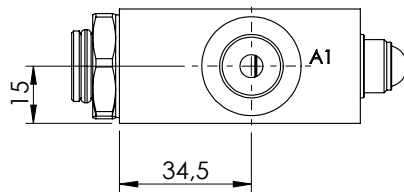
ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully open (Kg)
MD000091	MDTC-100-AVNR-NP-G12-N350	G 1/2"	5,3	14

END OF STROKE VALVE

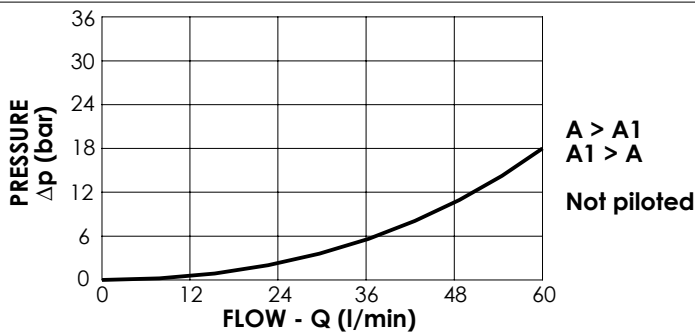
MDTA-060-ABNR

**NORMALLY OPEN
COMPENSATED**



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	60 l/min
Manifold:	Steel
Weight:	0,82 kg
Maximum stroke:	5 mm
Max. leakage at 150 bar when fully closed:	200 cc/min



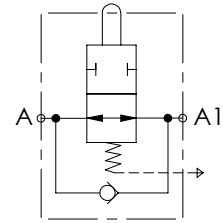
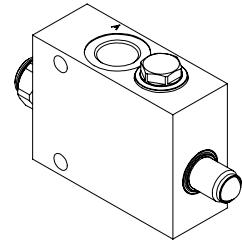
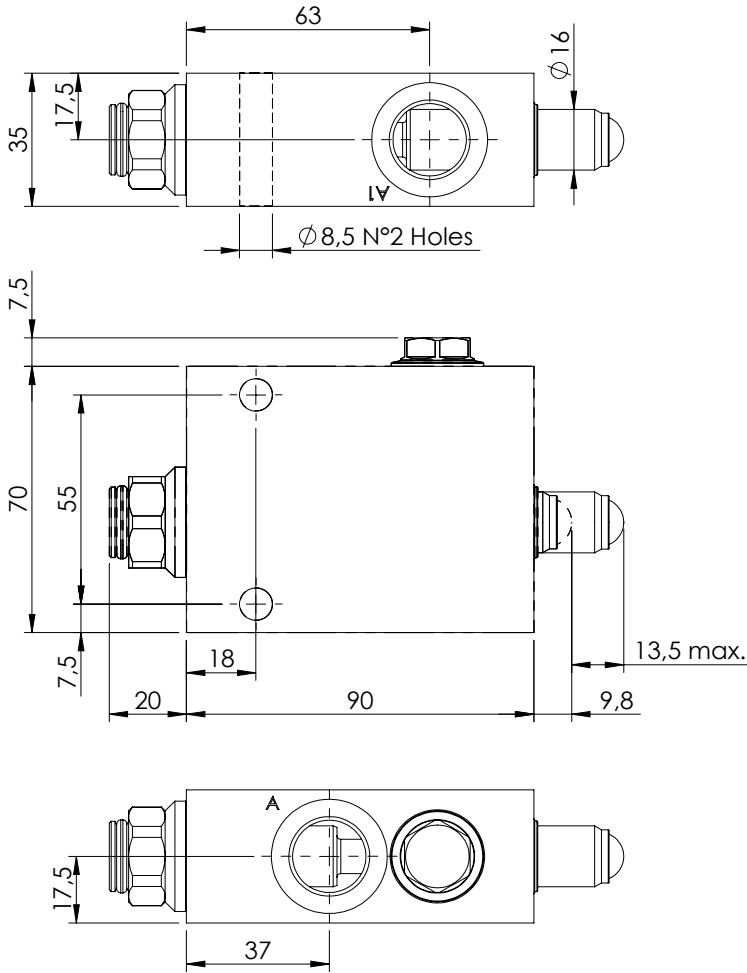
ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully closed (Kg)
MD000043	MDTA-060-ABNR-NP-G38-N350	G 3/8"	4	13

END OF STROKE VALVE

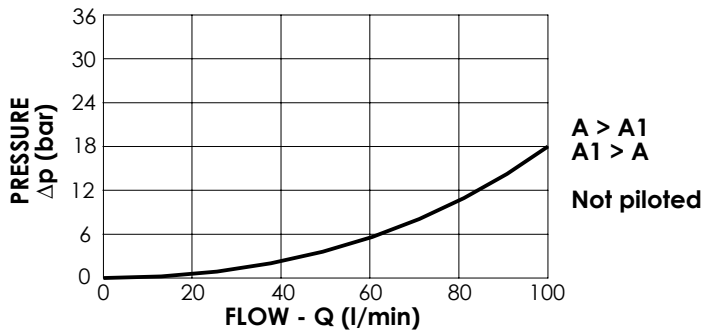
MDTA-100-AVNR

**NORMALLY OPEN
AIR VENTED**



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	100 l/min
Manifold:	Steel
Weight:	1,54 kg
Maximum stroke:	13,5 mm



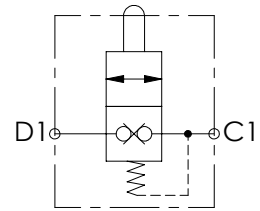
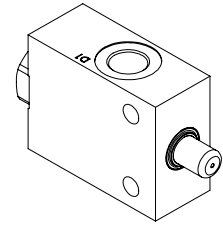
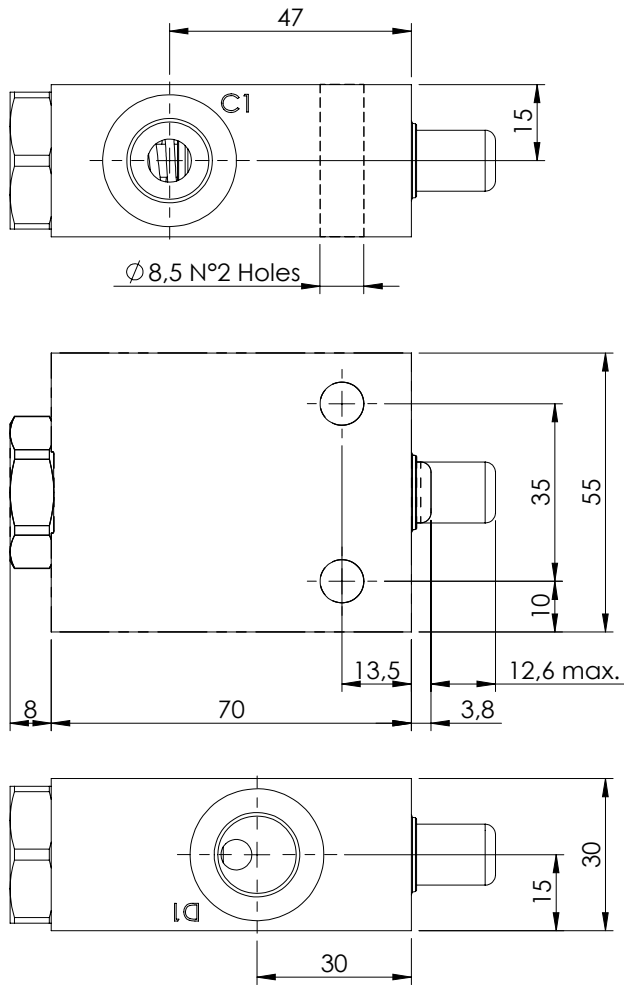
ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully closed (Kg)
MD000032	MDTA-100-AVNR-NP-G12-N350	G 1/2"	5,3	14

END OF STROKE VALVE

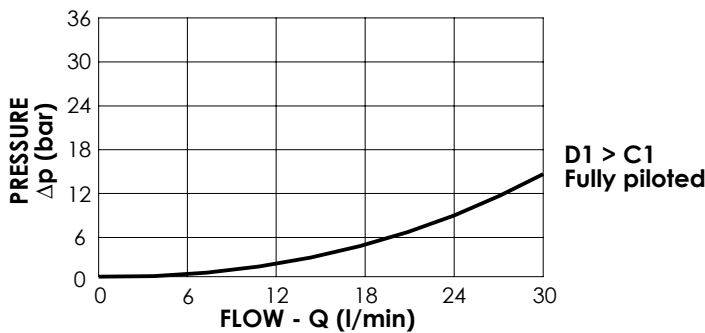
MDTC-030-ABNR

NORMALLY CLOSED



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	30 l/min
Manifold:	Steel
Weight:	0,78 kg
Maximum stroke:	12,6 mm



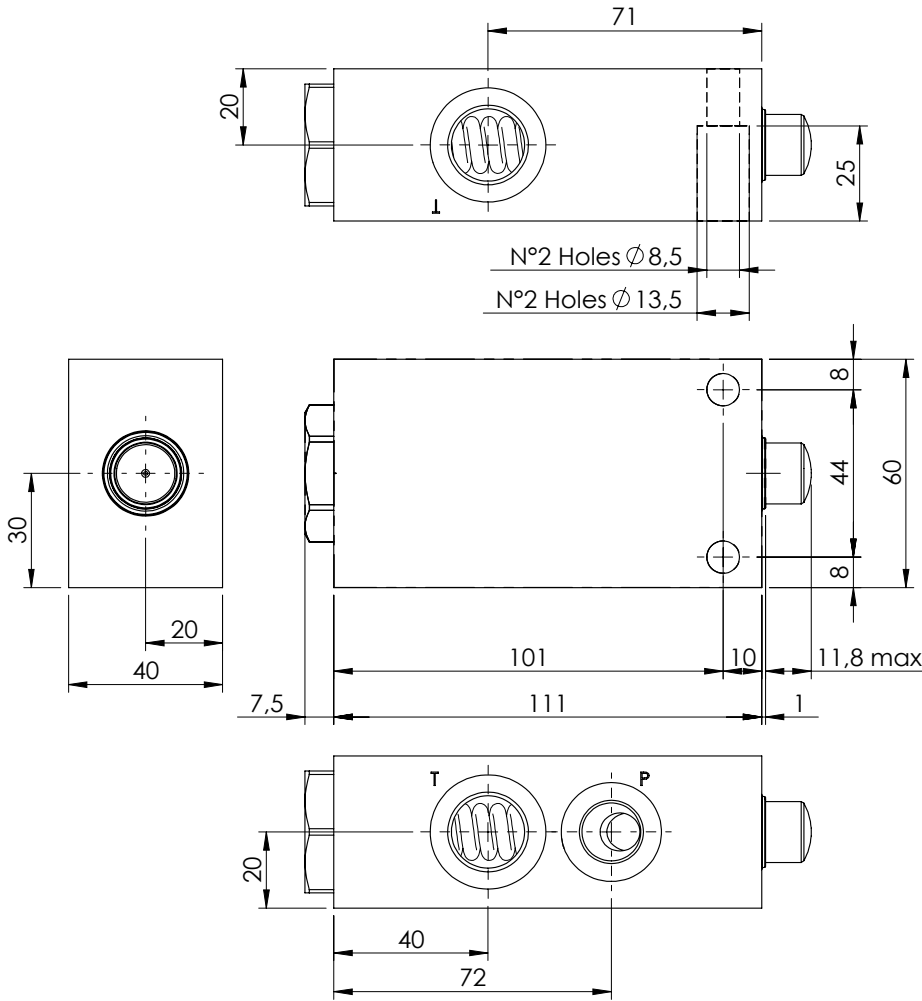
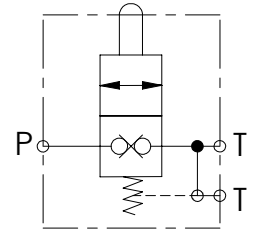
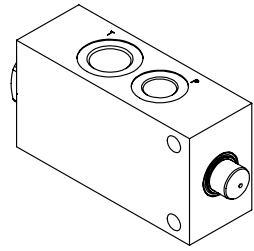
ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully open (Kg)
MD000064	MDTC-030-ABNR-NP-G38-N350	G 3/8"	9	19,7

END OF STROKE VALVE

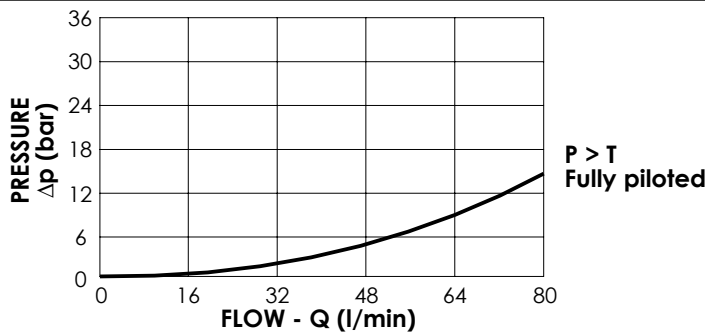
MDTC-080-ABNR

NORMALLY CLOSED



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	80 l/min
Manifold:	Steel
Weight:	1,71 kg
Maximum stroke:	11,8 mm



ORDERING CODES

Quick code	Description	Main ports size	Cracking pressure (Kg)	Fully open (Kg)
MD000044	MDTC-080-ABNR-NP-G38-N350	P: G 3/8" T: G 1/2"	36	119

SECTION 14. 6

SPECIAL VALVES - PILOT BLOCKS

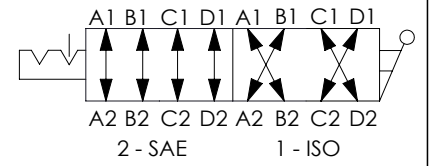
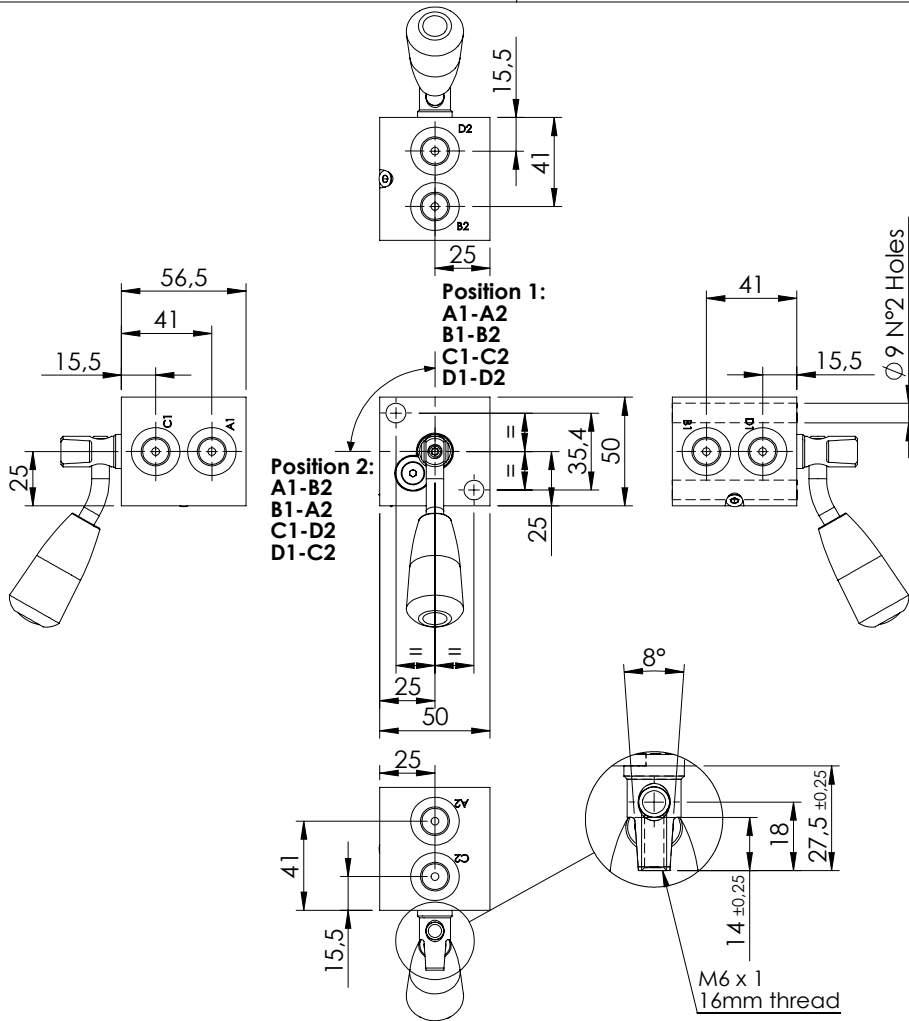
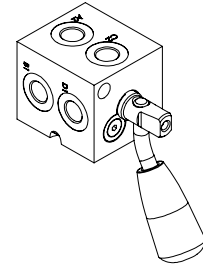


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	MDRD-020-SLN	ISO-SAE, Changeover valve	15	210/350	In line	G 1/2"	14.06.010
	BPRD-010-ALLS	Pilot manifold	10	350	In line	G 1/4"	14.06.020
	BNNR-015-AER	Pilot manifold	20	50	In line	G 1/4"	14.06.030
	BNND-010-LRE	Joystick safety stop	10	210	In line	G 3/8"	14.06.040
	BNND-003-LNQ-02	Proportional pressure reducing, pilot manifold	3	50	In line	G 1/4"	14.06.050
	BNND-003-LNQ-06	Proportional pressure reducing, pilot manifold	3	50	In line	G 1/4"	14.06.060
	BNND-003-LNQ-08	Proportional pressure reducing, pilot manifold	3	50	In line	G 1/4"	14.06.070
	BNND-003-LNQ-14	Proportional pressure reducing, pilot manifold	3	50	In line	G 1/4"	14.06.080

PILOT BLOCK

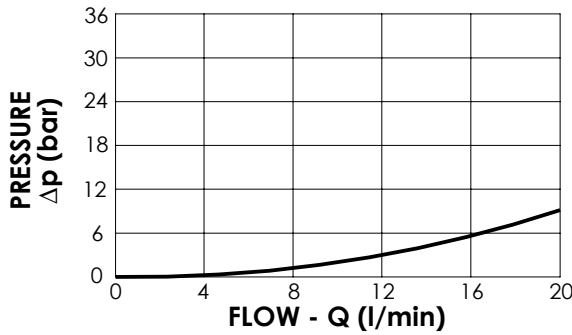
MDRD-020-SLN

ISO-SAE
CHANGEOVER VALVE



SPECIFICATIONS

Max. operating pressure:	50 bar
Rated flow:	20 l/min
Body:	Steel
Weight:	1 kg
Position shown:	1 - ISO position

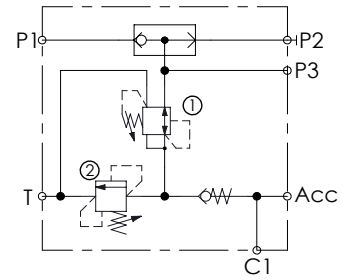
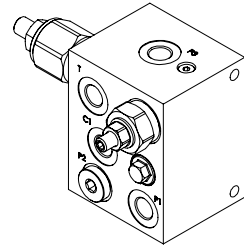
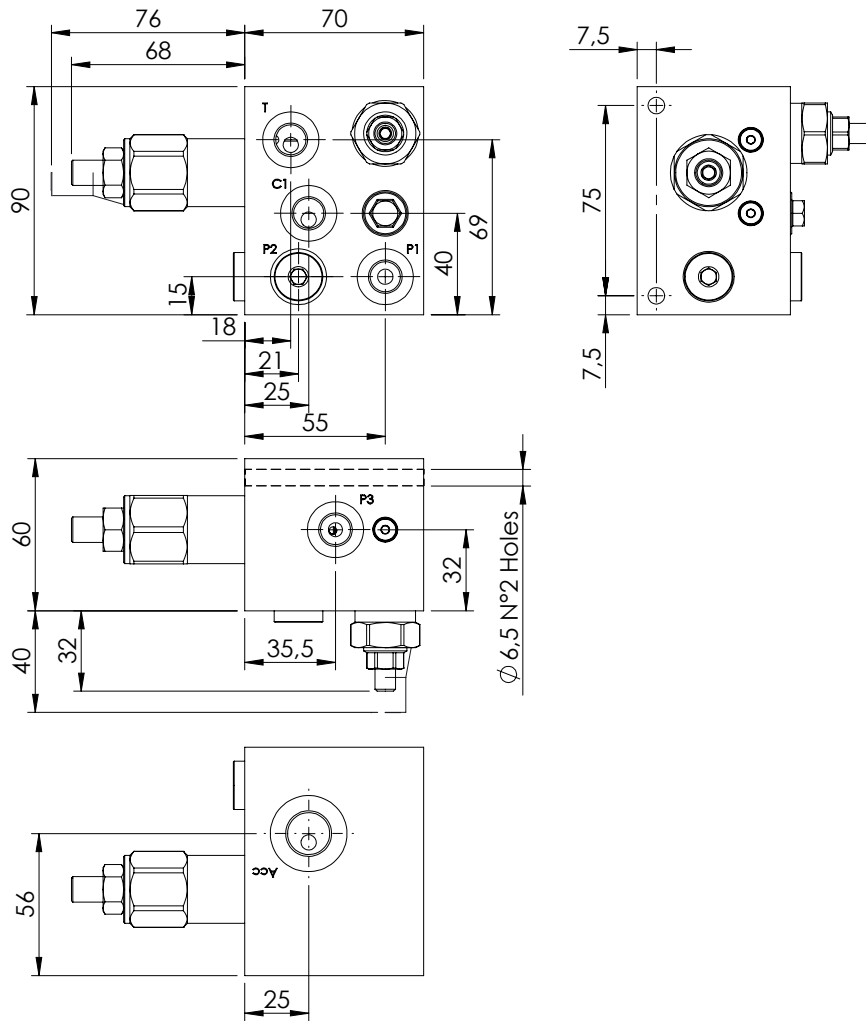


ORDERING CODES

Quick code	Description	Ports size	
MD000071	MDRD-020-SLN-NP-G14-N350	G 1/4"	

PILOT BLOCK

BPRD-010-ALLS



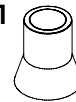
SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	10 l/min
Weight:	3 kg
Coil type:	Steel

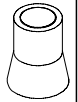
SEALING CAP

Ordering codes:

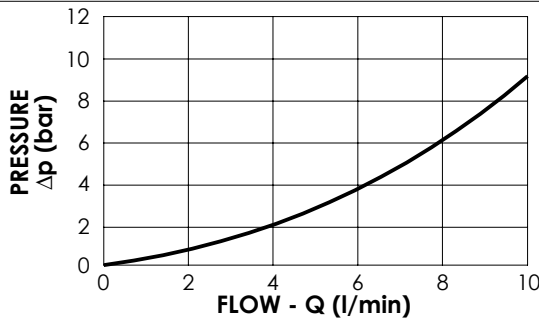
AT00021
(Valve n°1)



AT00020
(Valve n°2)



NOTE



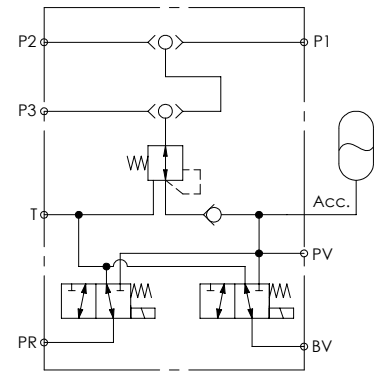
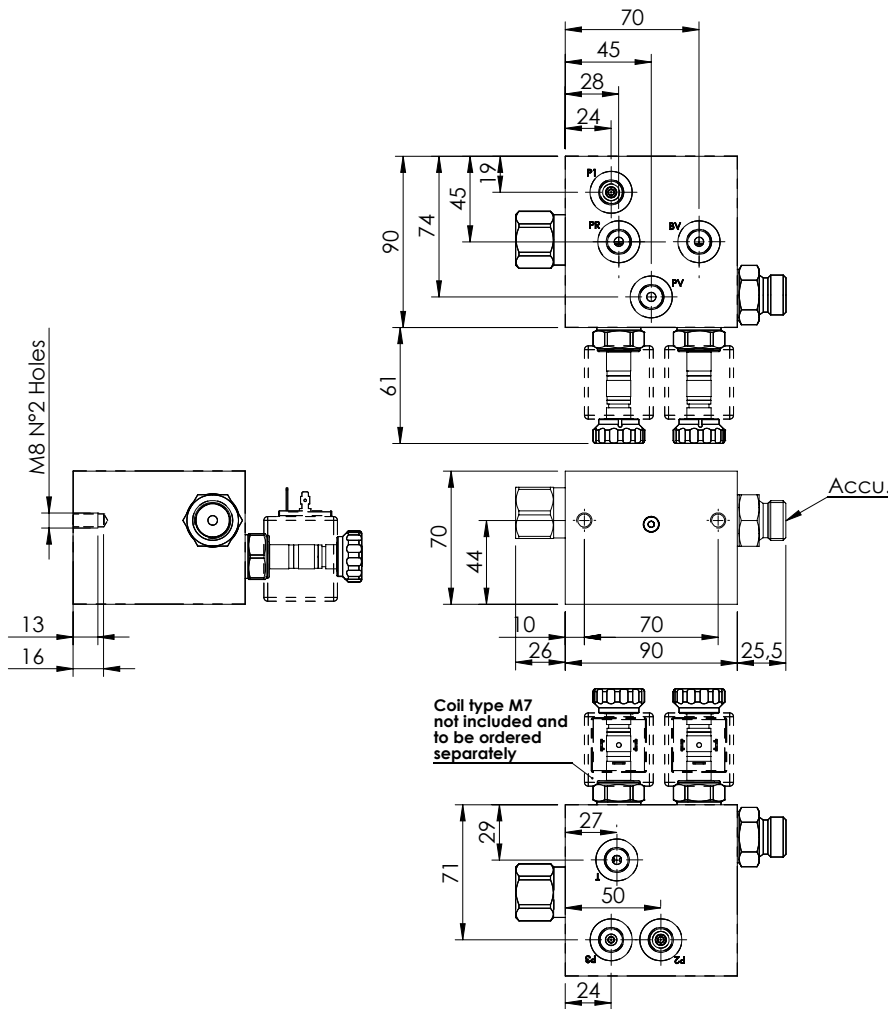
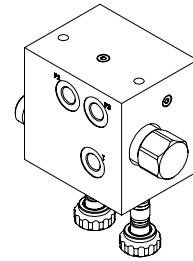
ORDERING CODES

Quick code	Description	Port size	Standard setting (bar)	Adjust. range (bar)	Pressure increase (bar/turn)
BP000113	BPRD-010-ALLS-NP-G14-N350	P1,P2,P3,C1,T: G 1/4" Acc: M18x1,5	① 35 bar ② 50 bar @ 5 l/min	① 10 - 50 ② 10 - 70	① 7 ② 26

PILOT BLOCK

BNND-015-AER

PILOT MANIFOLD

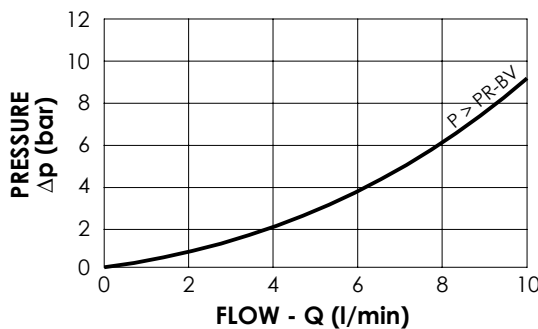


SPECIFICATIONS

Max. operating pressure:	350/210 bar
Rated flow:	15 l/min
Weight:	Steel 4,5 kg; Aluminium 1,9 kg
Coil type:	M7

NOTES

Rated flow in inlet: 15 l/min
 Rated flow from accumulator: 45 l/min
 Pressure reducing valve with stabilization system
 Othercoil/voltage available on request
 See chapter 18.00.000 for coil.



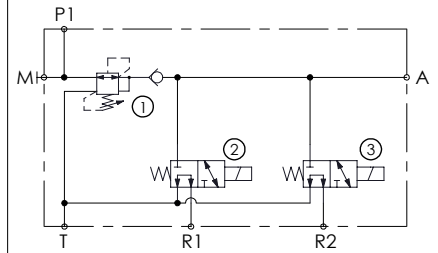
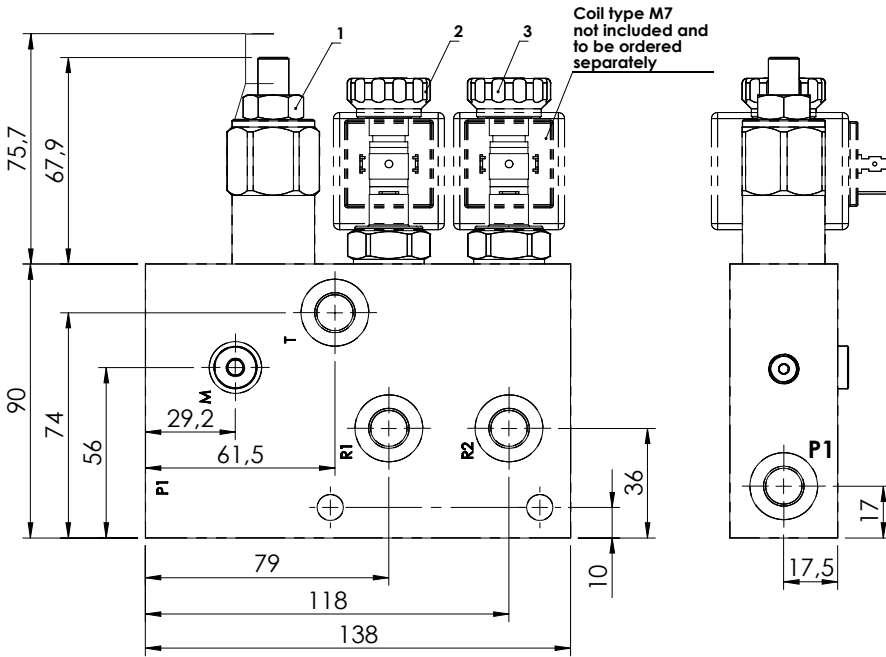
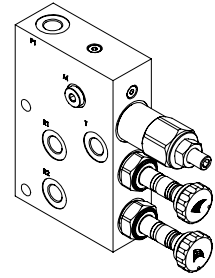
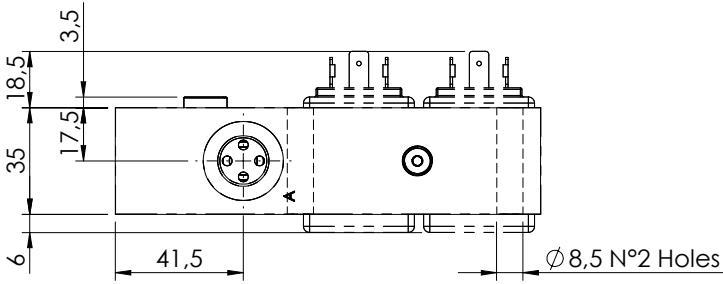
ORDERING CODES

Quick code	Description	Port size	Manifold material	Standard setting (bar)	
BD000205	BNND-015-AER-G14-N350	P1, P2, P3, PR, PV,BV, T: G 1/4" Acc: G 1/2"	Steel	35	
BD000087	BNND-015-LER-G14-N210	P1, P2, P3, PR, PV,BV, T: G 1/4" Acc: G 1/2"	Aluminium	35	

PILOT BLOCK

BNND-010-LRE

**JOYSTICK SAFETY STOP
SOLENOID OPERATED**

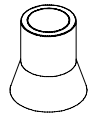


SPECIFICATIONS

Max. operating pressure:	210 bar
Rated flow:	10 l/min
Manifold:	Steel
Weight:	3,2 kg
Coil type:	M7

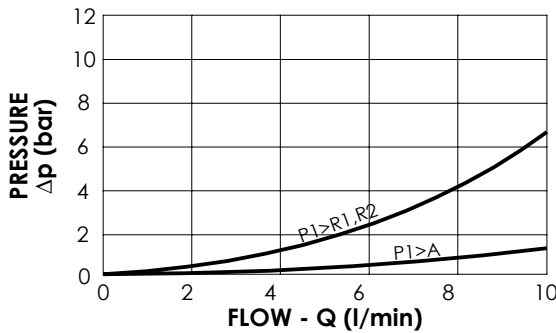
SEALING CAP

Ordering code:
AT000021



NOTES

-See chapter 18.00.000 for coil.



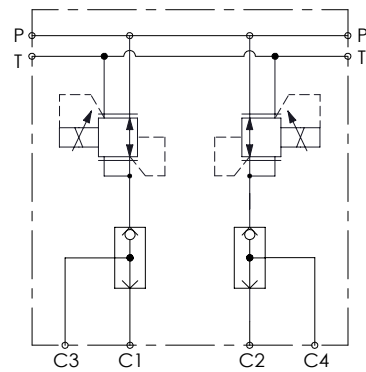
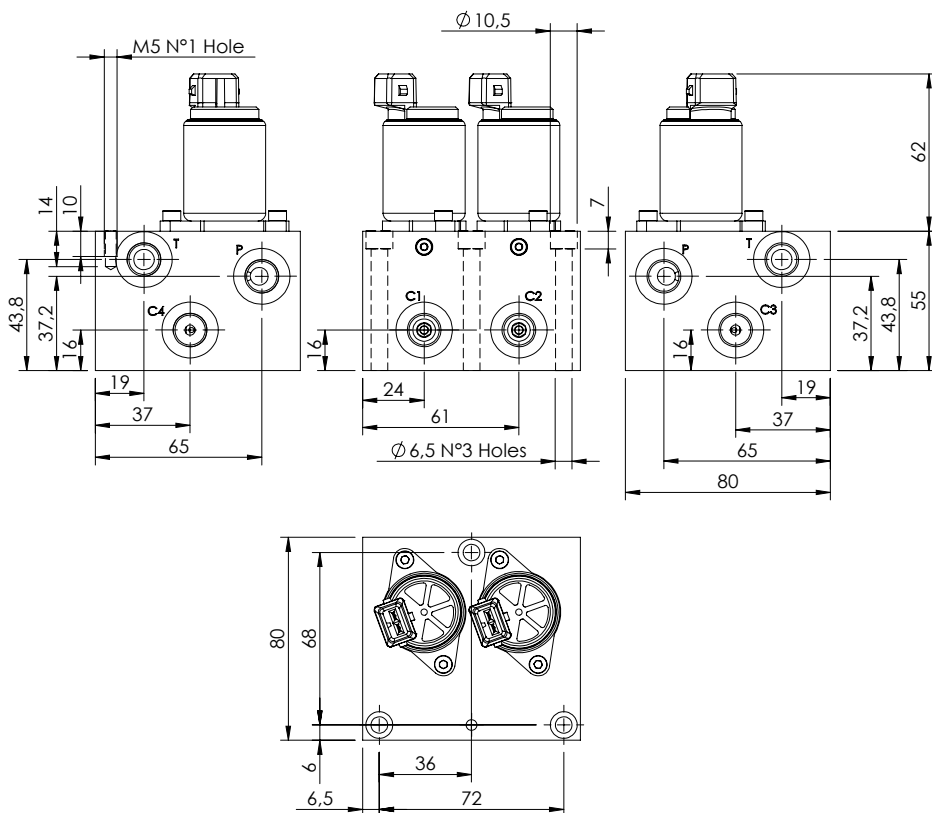
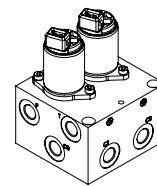
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar)	Adjustm. range (bar)	Pressure increase (bar/turn)
BD000197	BNND-010-LRE-NP-G38-N210	R1,R2,T,P1: G1/4" A: G3/8" M: G1/8"	35	10-50	7

PILOT BLOCK

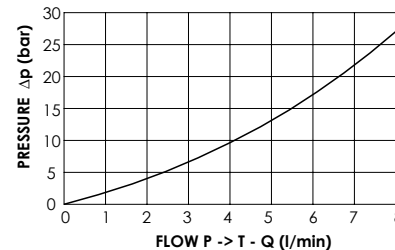
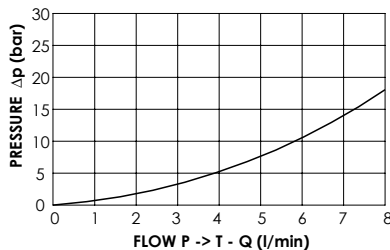
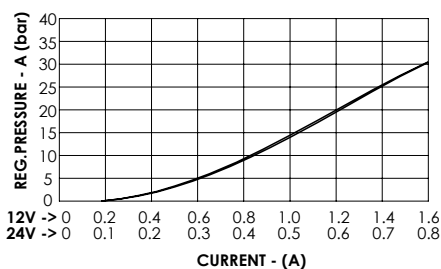
BNND-003-LNQ

**PROPORTIONAL
PRESSURE REDUCING
PILOT MANIFOLD**



SPECIFICATIONS

Max. operating pressure:	50 bar
Rated flow:	3 l/min
Manifold:	Aluminium
Weight:	0,9 kg



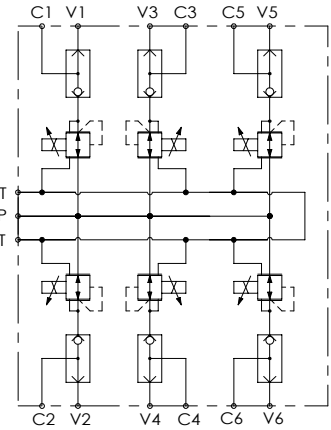
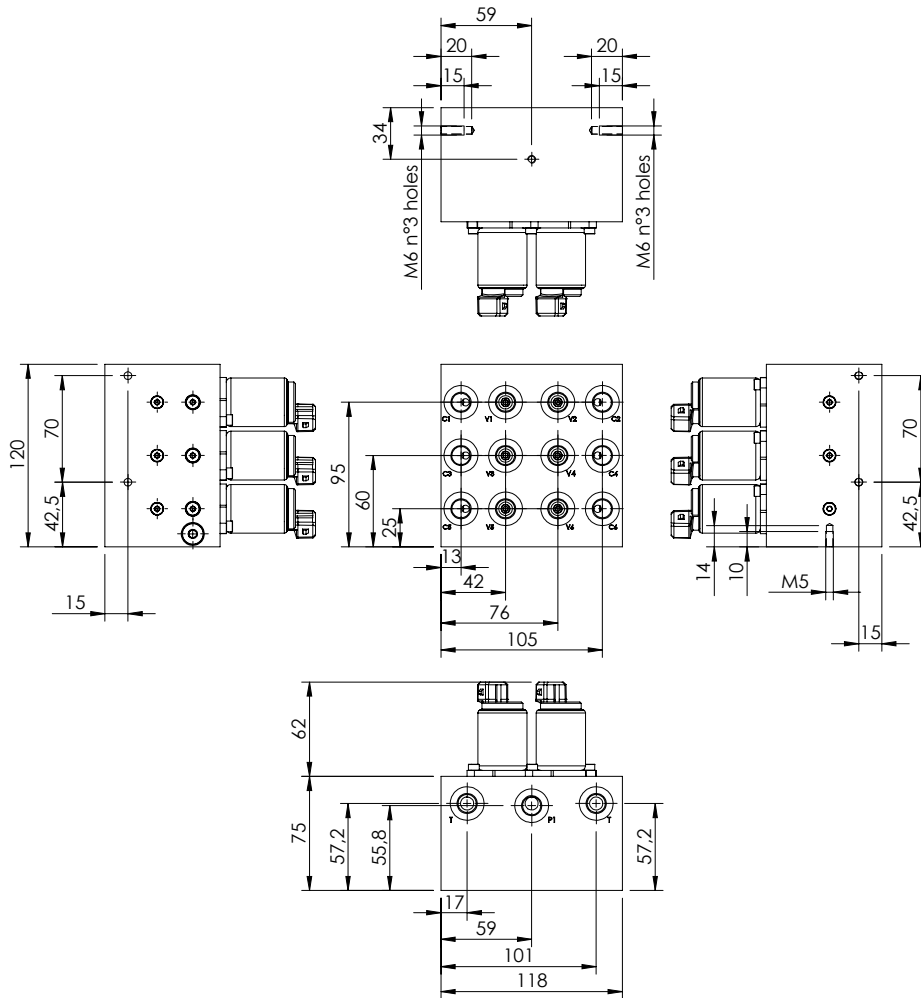
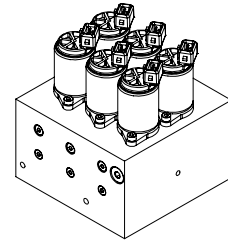
ORDERING CODES

Quick code	Description	Main ports size	Regulated pressure range (bar)	Voltage (V)	Connector type
BD000142	BNND-003-LNQ-02-G14-NBAJ	G 1/4"	0-25	24 DC	AMP JUNIOR
BD000127	BNND-003-LNQ-02-G14-NAAJ	G 1/4"	0-25	12 DC	AMP JUNIOR

PILOT BLOCK

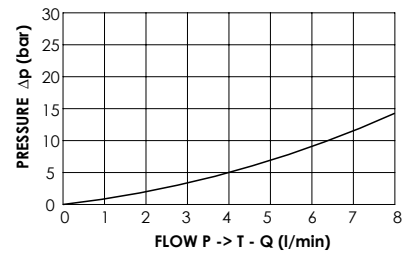
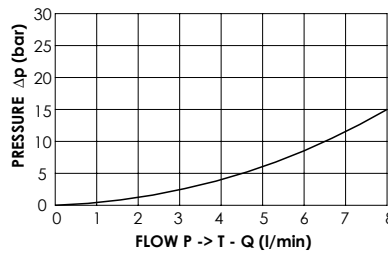
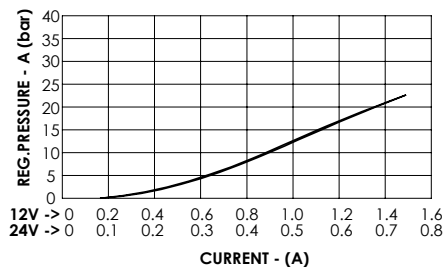
BNND-003-LNQ

**PROPORTIONAL
PRESSURE REDUCING
PILOT MANIFOLD**



SPECIFICATIONS

Max. operating pressure:	50 bar
Rated flow:	3 l/min
Manifold:	Aluminium
Weight:	2,6 kg



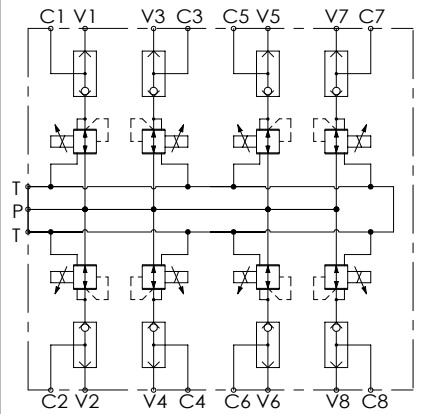
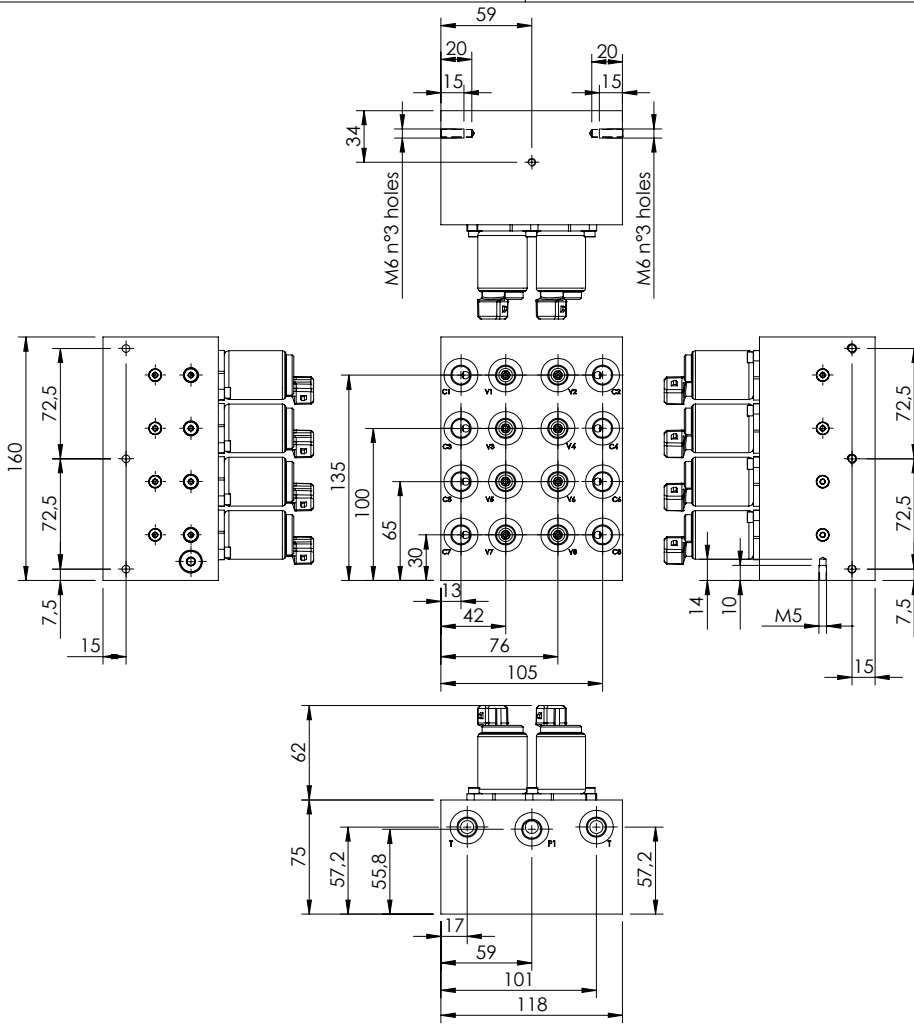
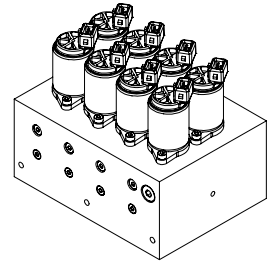
ORDERING CODES

Quick code	Description	Main ports size	Regulated pressure range (bar)	Voltage (V)	Connector type
BD000084	BNND-003-LNQ-06-G14-NBAJ	G 1/4"	0-20	24 DC	AMP JUNIOR
BD000202	BNND-003-LNQ-06-G14-NAAJ	G 1/4"	0-20	12 DC	AMP JUNIOR

PILOT BLOCK

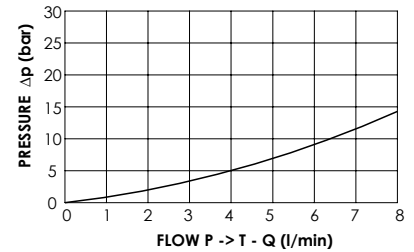
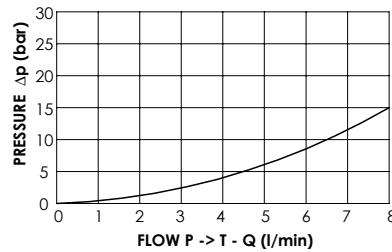
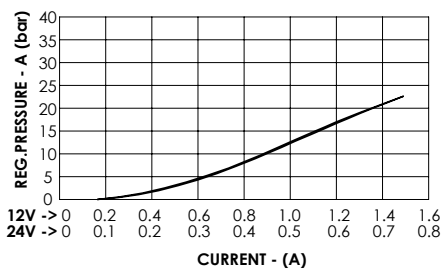
BNND-003-LNQ

**PROPORTIONAL
PRESSURE REDUCING
PILOT MANIFOLD**



SPECIFICATIONS

Max. operating pressure:	50 bar
Rated flow:	3 l/min
Manifold:	Aluminium
Weight:	3,6 kg



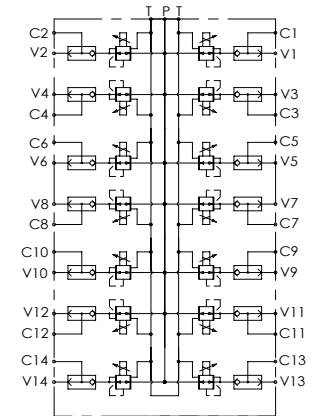
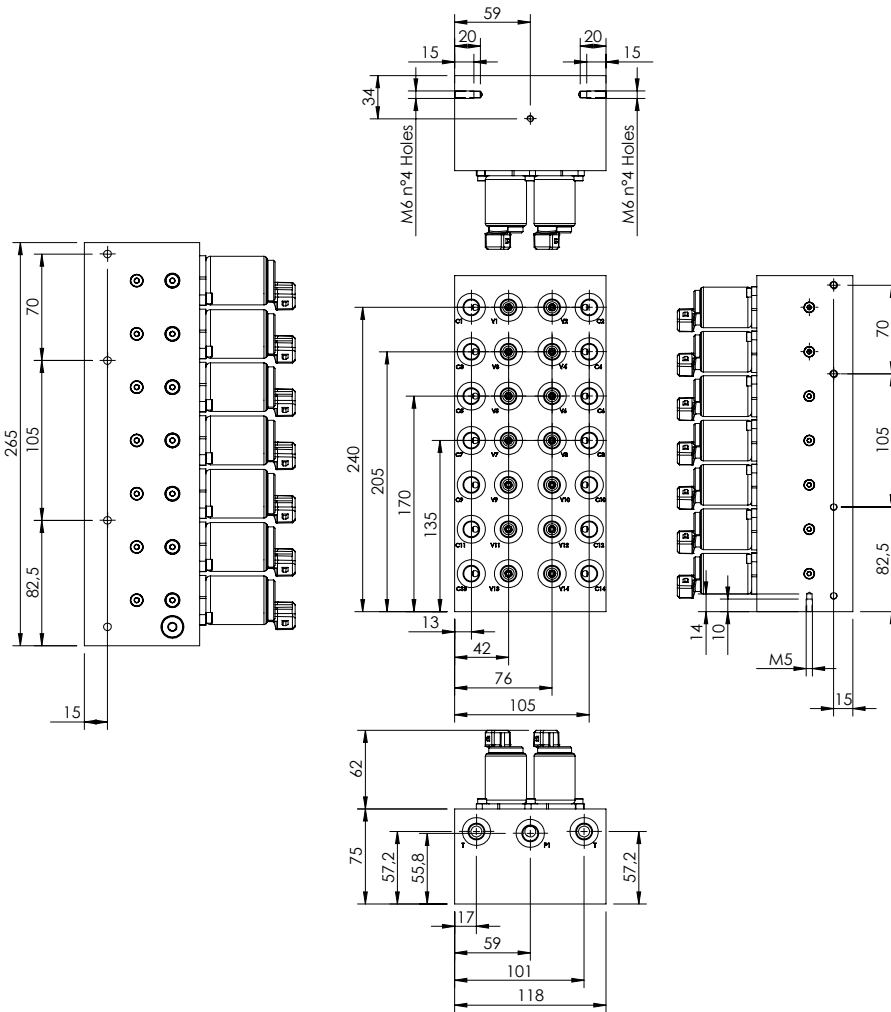
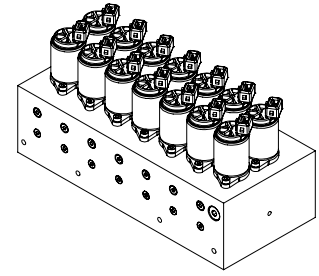
ORDERING CODES

Quick code	Description	Main ports size	Regulated pressure range (bar)	Voltage (V)	Connector type
BD000088	BNND-003-LNQ-08-G14-NBAJ	G 1/4"	0-20	24 DC	AMP JUNIOR
BD000201	BNND-003-LNQ-08-G14-NAAJ	G 1/4"	0-20	12 DC	AMP JUNIOR

PILOT BLOCK

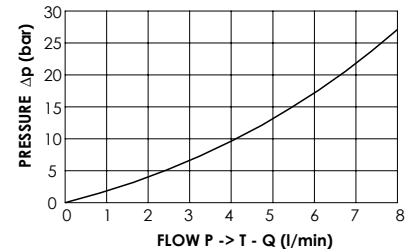
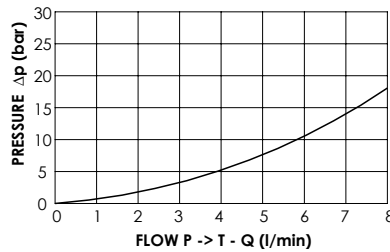
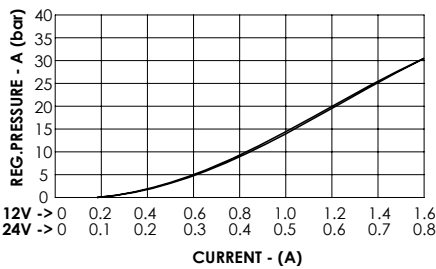
BDEZ-005-LLSN

**PROPORTIONAL
PRESSURE REDUCING
PILOT MANIFOLD**



SPECIFICATIONS

Max. operating pressure:	50 bar
Rated flow:	3 l/min
Manifold:	Aluminium
Weight:	5,8 kg



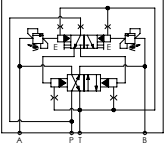
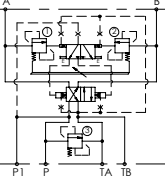
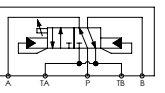
ORDERING CODES

Quick code	Description	Main ports size	Regulated pressure range (bar)	Voltage (V)	Connector type
BD000203	BDEZ-005-LLSN-14-G14-N050-NBAJ	G 1/4"	0-25	24 DC	AMP JUNIOR
BD000204	BDEZ-005-LLSN-14-G14-N050-NAAJ	G 1/4"	0-25	12 DC	AMP JUNIOR

SECTION 14. 7

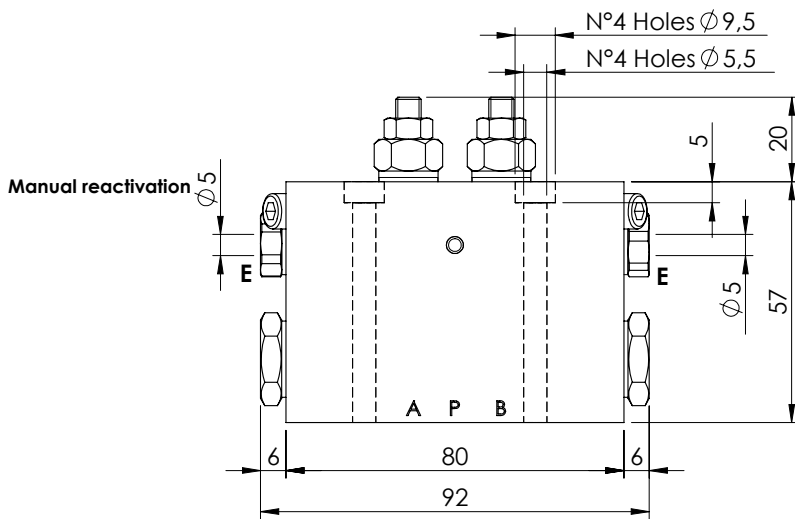
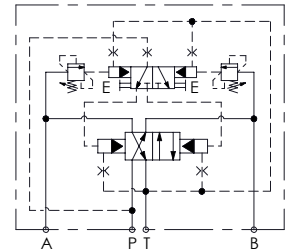
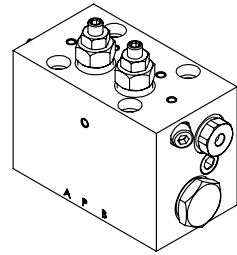
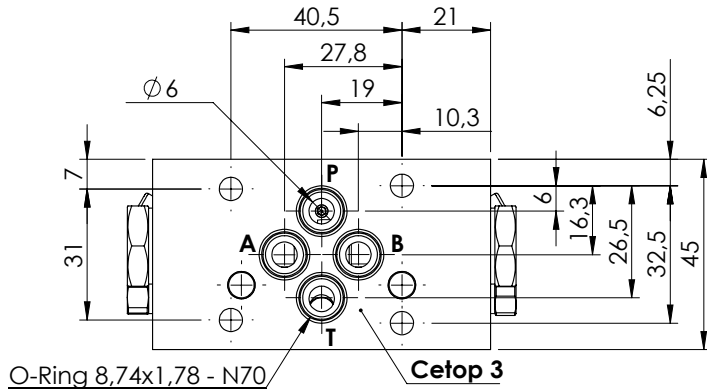
SPECIAL VALVES - AUTOMATIC SWITCHING VALVES



Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	MDAP-040-NNNR MDAP-090-NNNR	Spool type, pressure switching Spool type, pressure switching	40 90	350 350	Flanged Flanged	Cetop 3 Cetop 5	14.07.010 14.07.020
	MDAP-090-NNNR	Spool type, pressure switching	90	250	Flanged	Cetop 5	14.07.030
	MDAF-080-ANNR	Spool type, flow switching, P in A start	80	350	Flanged	Cetop 5	14.07.040

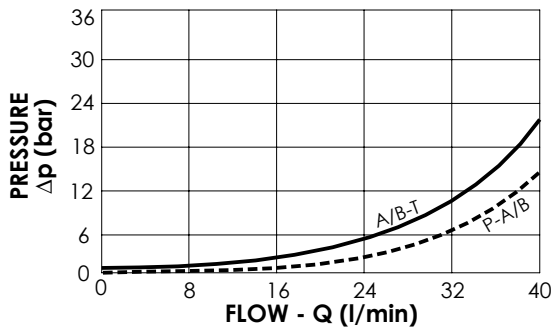
AUTOMATIC DIRECTIONAL VALVE

MDAP-040-NNNR PRESSURE SWITCHING



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	40 l/min
Manifold:	Black galvanized cast iron
Weight:	1,48 kg



NOTES

- Minimum required flow: 3 l/min
- Actuator working pressure should always be lower than the automatic switching valve relief setting.
- Automatic switching valve relief setting should always be lower than pump relief valve setting.

ORDERING CODES

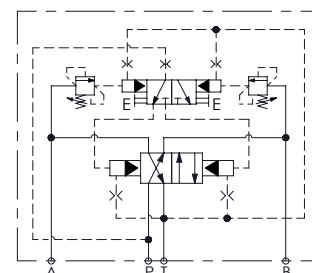
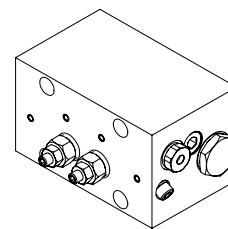
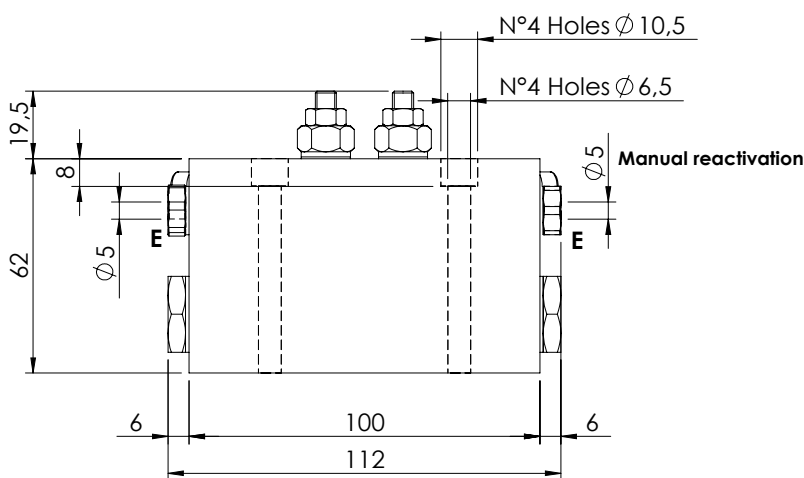
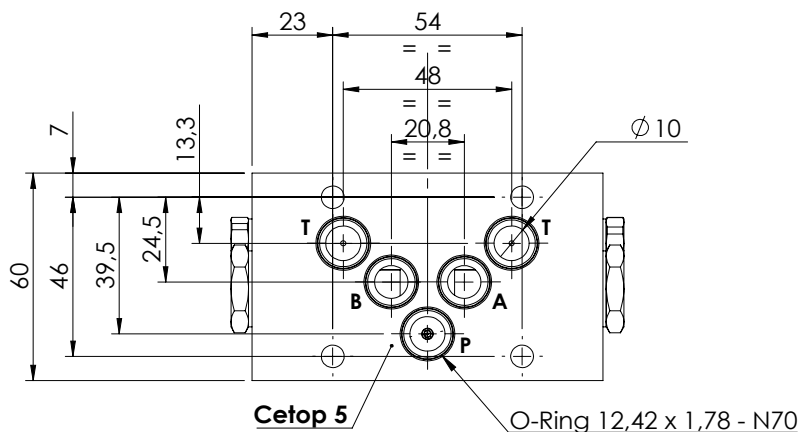
Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MD000027	MDAP-040-NNNR-NP-N06-N350	A,B,P,T : CETOP 3	350	100-350	95
MD000026	MDAP-040-NNNR-NP-N06-N200	A,B,P,T : CETOP 3	200	50-210	51
MD000025	MDAP-040-NNNR-NP-N06-N100	A,B,P,T : CETOP 3	100	15-100	26

AUTOMATIC DIRECTIONAL VALVE



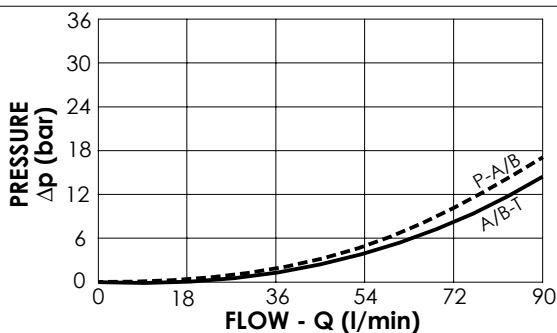
MDAP-090-NNNR

PRESSURE SWITCHING



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	90 l/min
Manifold:	Cast iron
Weight:	2,64 kg



NOTES

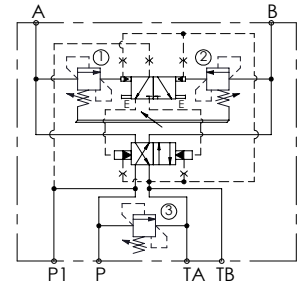
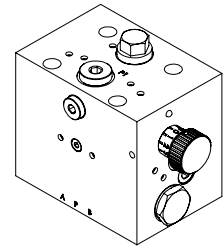
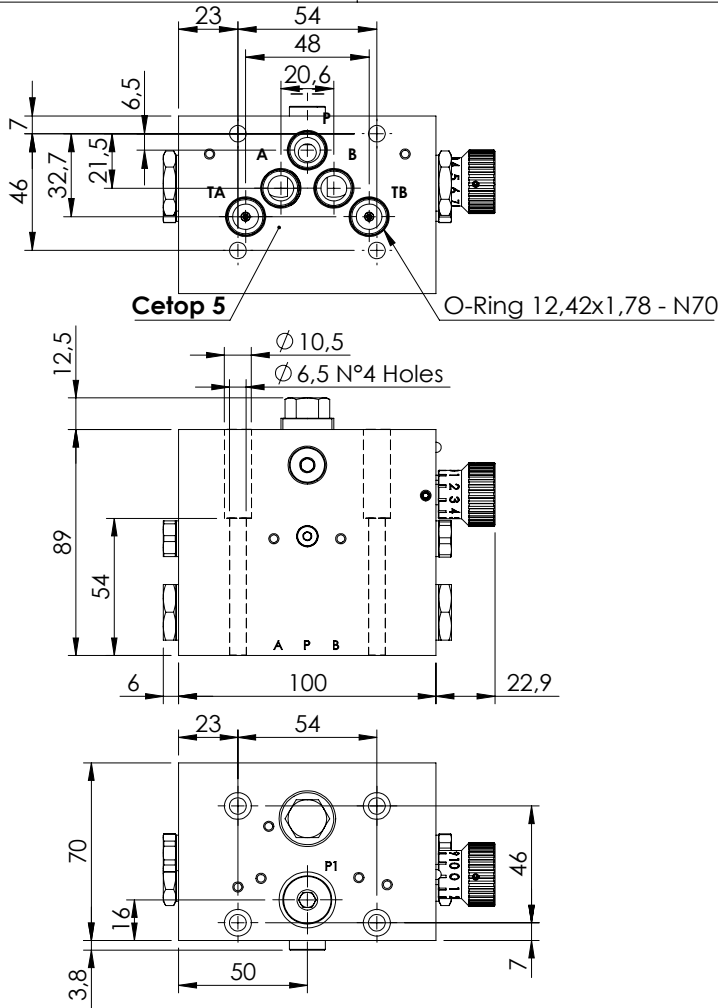
Minimum required flow: 3 l/min

ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MD000030	MDAP-090-NNNR-NP-N10-N350	A,B,P,T: CETOP 5	350	100-350	95
MD000029	MDAP-090-NNNR-NP-N10-N200	A,B,P,T: CETOP 5	200	50-210	51
MD000028	MDAP-090-NNNR-NP-N10-N100	A,B,P,T: CETOP 5	100	15-100	26

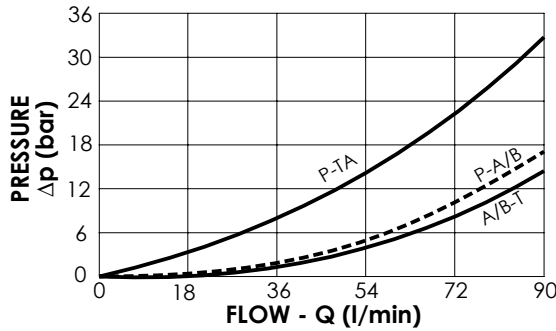
AUTOMATIC DIRECTIONAL VALVE

MDAP-090-NNNR PRESSURE SWITCHING



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	90 l/min
Manifold:	Cast Iron
Weight:	4,45 kg



NOTES

Minimum required flow: 3 l/min

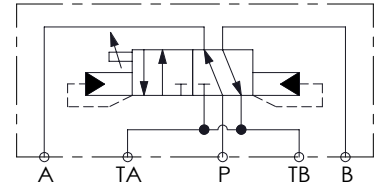
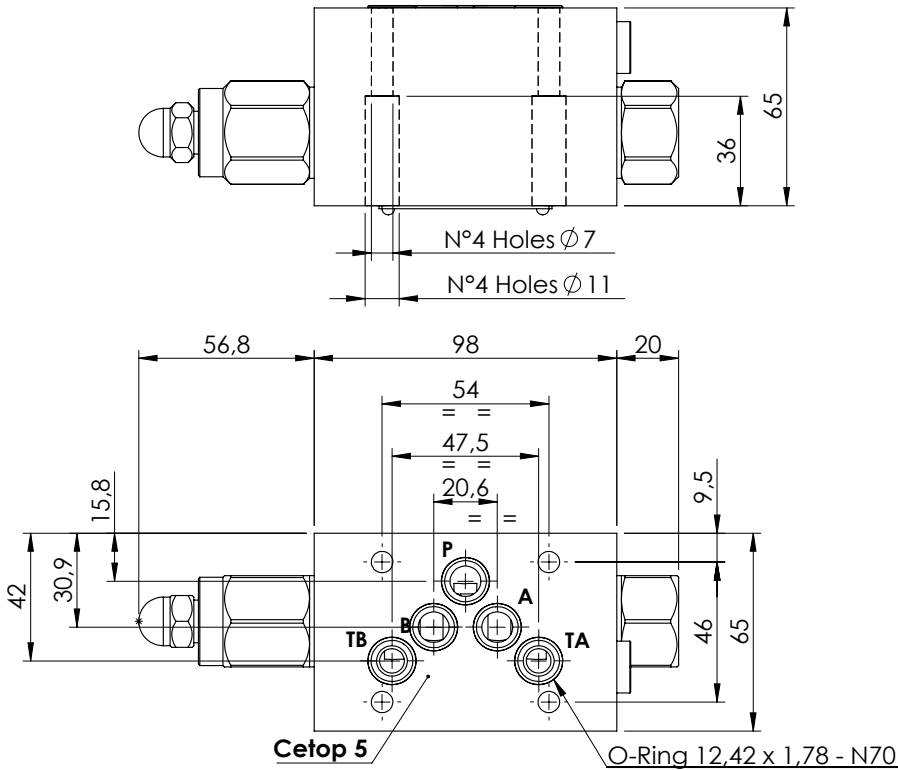
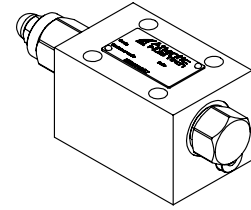
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MD000119	MDAP-090-NNNR-NP-N10-N350	A,B,P,TA,TB: CETOP 5 P1: G 1/4"	① ② 180 ③ 200	① ② 140-350	① ② 146
				Fix setting	

AUTOMATIC DIRECTIONAL VALVE

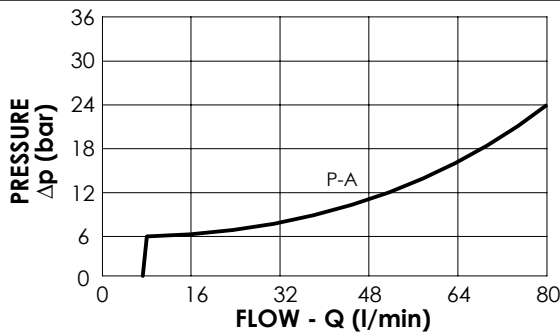
MDAF-080-ANNR

FLOW SWITCHING



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	80 l/min
Manifold:	Cast iron
Weight:	3,12 kg



NOTES

- Minimum required flow: 6 l/min
- Flexible pipe should be placed between valve and cylinder rod side
- No suitable motor

ORDERING CODES

Quick code	Description	Main ports size	
MD000034	MDAF-080-ANNR-NP-N10-N350	A,P,B,TA,TB : CETOP 5	

SECTION 14. 8

SPECIAL VALVES - LOAD LIMITING DEVICE VALVES

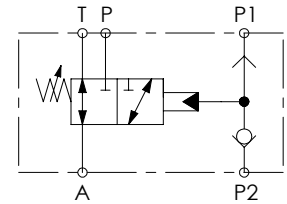
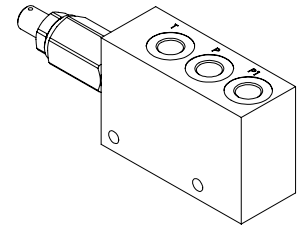
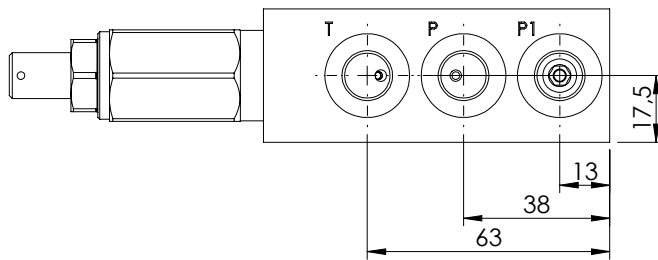
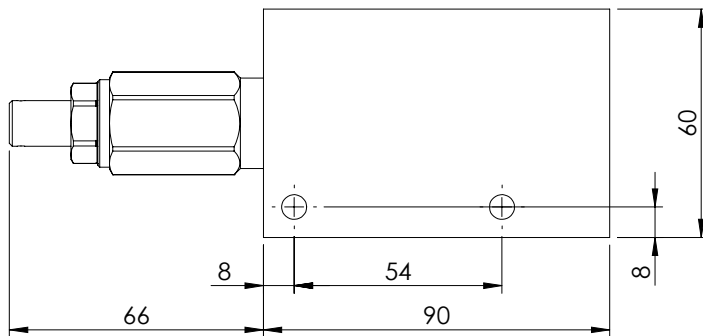
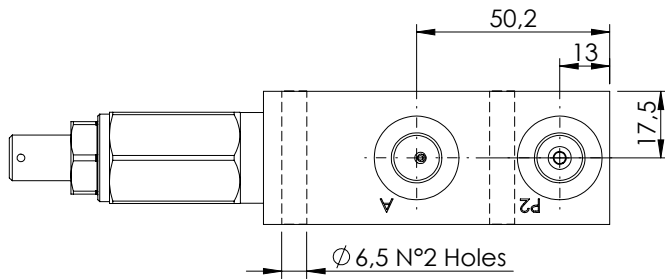


Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	BDMM-010-LLCI	Hydraulic pressure, unloading, 3 ways	10	210	In line	G 1/4"	14.08.010
	MTP-003-TLSN	Hydraulic pressure, unloading, 2 ways	3	350	In line	G 1/4"	14.08.020
	MTSN-120-TLNR	Hydraulic pressure, unloading, kick down system	120	350	In line	G 1/4"	14.08.030
	MTL-005-TLSR	Pilot pressure, unloading	5	350	In line	G 1/4"	14.08.040
	MTR-005-TLSN	Pilot pressure, unloading, flange for pressure switch	5	350	In line	G 1/4"	14.08.050

LOAD LIMITING DEVICE

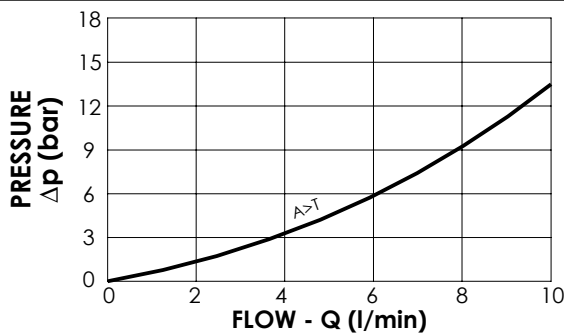
BDMN-010-LLCS

HYDRAULIC PRESSURE
UNLOADING
3 WAYS



SPECIFICATIONS

Max. operating pressure:	210 bar
Rated flow:	8 l/min
Manifold:	Aluminium
Weight:	0,7 kg



NOTES

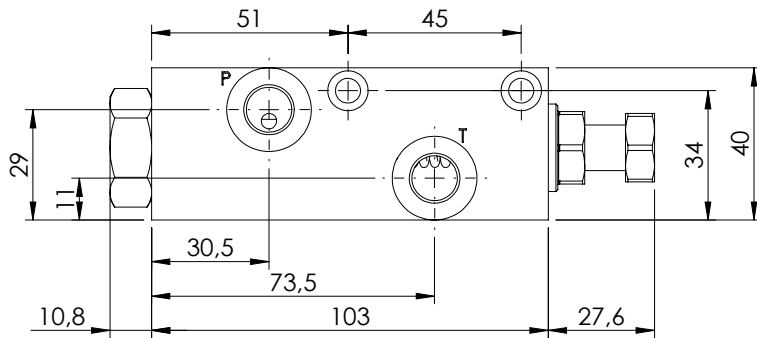
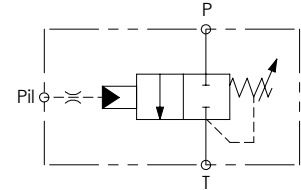
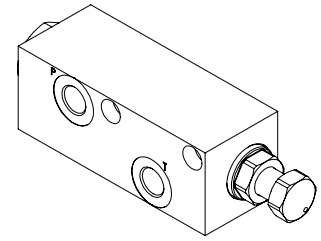
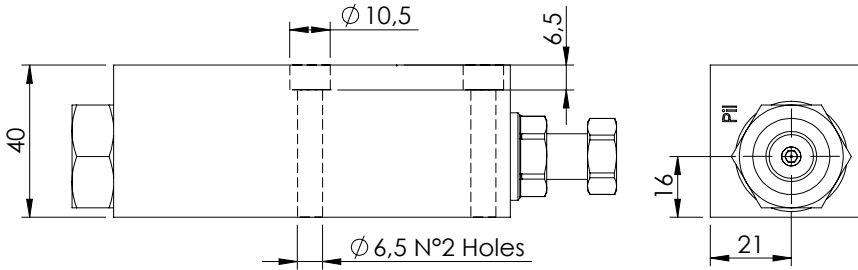
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Cracking Pr.)	Adjust. range (bar)	Pressure increase (bar/turn)
BD000104	BDMN-010-LLCS-NP-G14-N210	T,P,P1,A:G 1/4"	5	4-40	3

LOAD LIMITING DEVICE

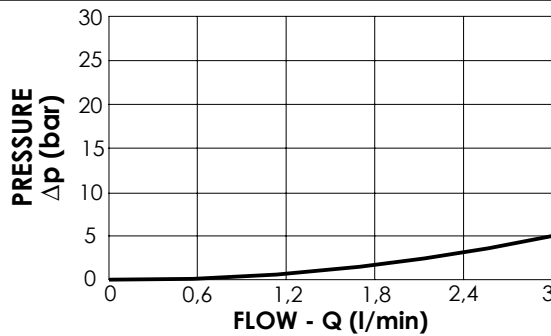
MTTP-003-TLSN

**HYDRAULIC PRESSURE
UNLOADING
2 WAYS**



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	3 l/min
Manifold:	Aluminium
Weight:	0,55 kg



NOTES

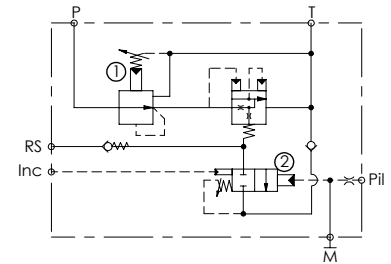
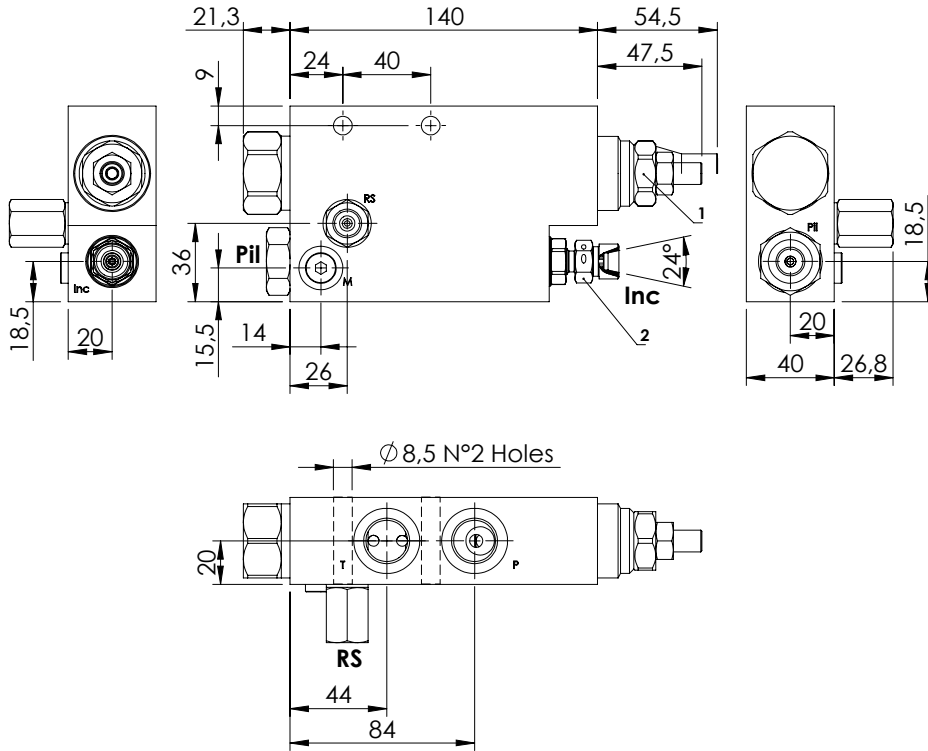
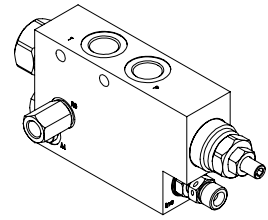
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000011	MTTP-003-TLSN-01-G14-N006	P, Pii, T: G1/4"	6	6-55	12

LOAD LIMITING DEVICE

MTSN-120-TLNR

**HYDRAULIC PRESSURE
UNLOADING
KICK DOWN SYSTEM**

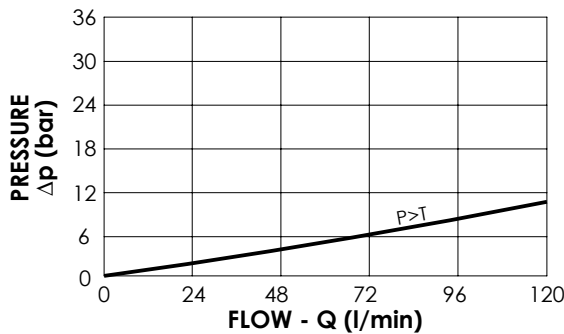
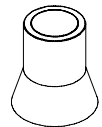


SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	120 l/min
Manifold:	Aluminium
Weight:	1,91 kg

SEALING CAP

Ordering cose:
AT000021



NOTES

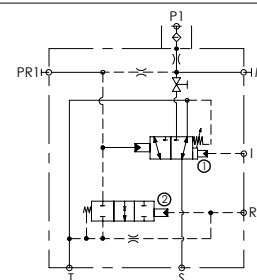
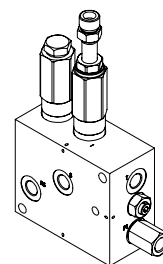
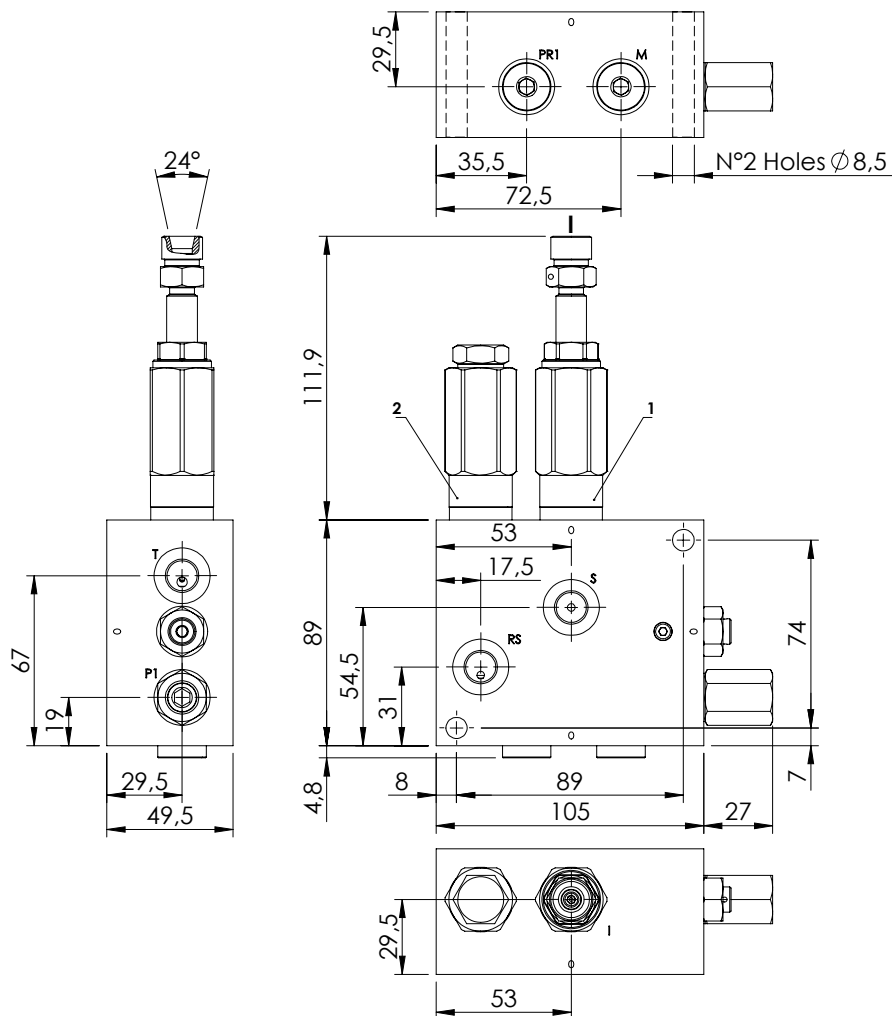
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000010	MTSN-120-TLNR-NP-G12-N350	P,T:G 1/2" RS,Pii:G 1/4" Inc:M16x1,5 M:M10x1	① 35 ② 350	① 10-120 ② 70-210	① 37 ② 92

LOAD LIMITING DEVICE

MTTL-005-TLSN

PILOT PRESSURE UNLOADING



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	5 l/min
Manifold:	Aluminium
Weight:	1,85 kg

NOTES

For info or special versions contact AFT sales network.

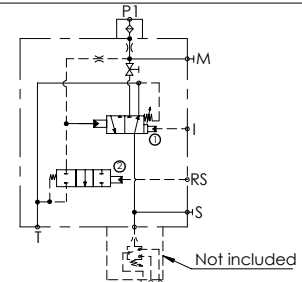
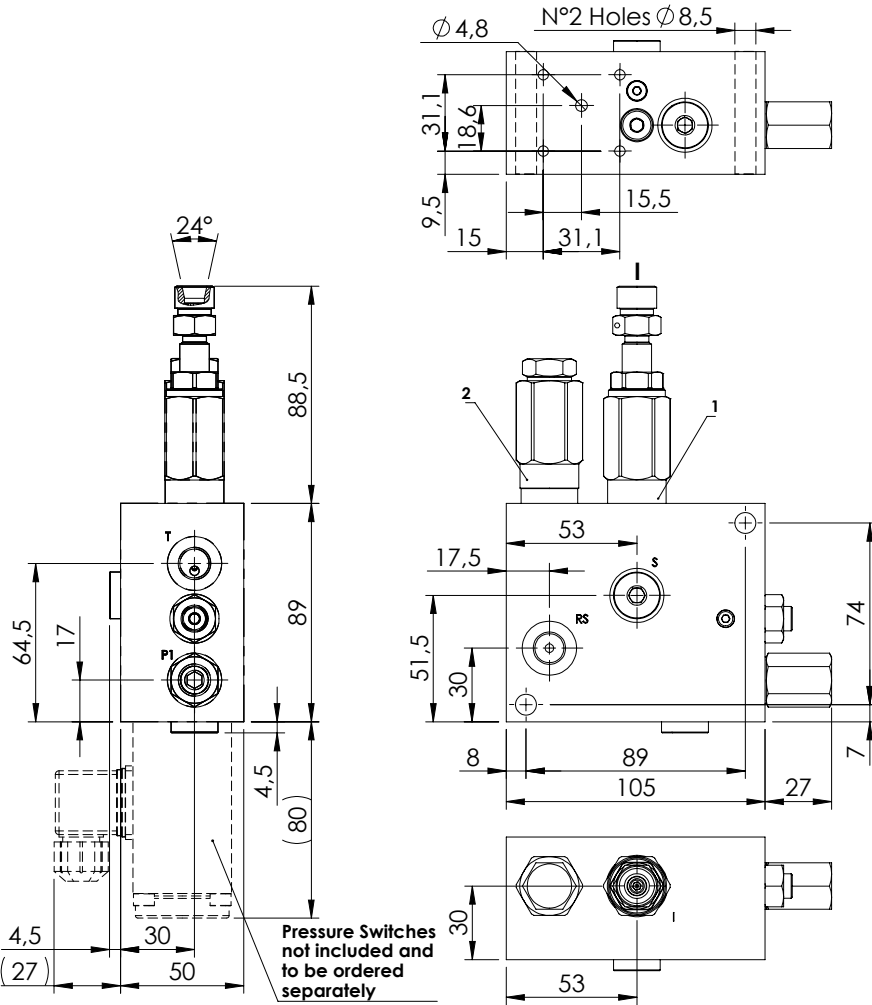
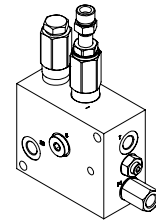
ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000026	MTTL-005-TLSN-NP-G14-N350	P1,M,PR1,RS,T,S:G 1/4" I:M16x1,5	200	50-300	23

LOAD LIMITING DEVICE

MTR-005-TLSN

PILOT PRESSURE UNLOADING FLANGE FOR PRESSURE SWITCH



SPECIFICATIONS

Max. operating pressure:	350 bar
Rated flow:	5 l/min
Manifold:	Aluminium
Weight:	1,78 kg

NOTES

For info or special versions contact AFT sales network.

ORDERING CODES

Quick code	Description	Main ports size	Standard setting (bar, Q=5 l/min)	Adjust. range (bar)	Pressure increase (bar/turn)
MT000031	MTR-005-TLSN-NP-G14-N350	P1,M,PR1,RS,T,S:G 1/4" I:M16x1,5	280	100-350	109