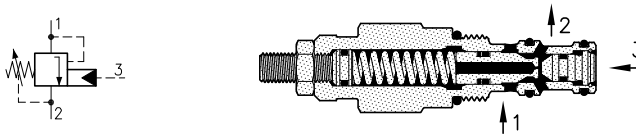
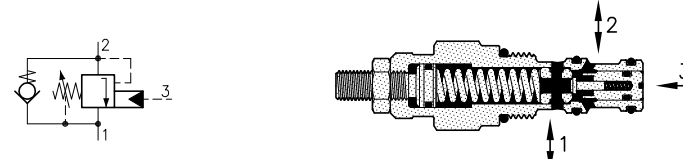
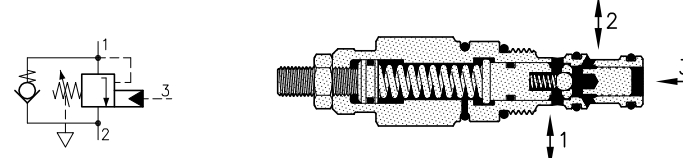
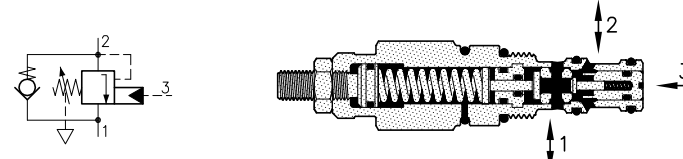


**Motion control or overcenter valves.**

As primary function these motion control or overcenter valves control the actuators' speed in relation to inlet flow, keep them blocked up, prevent pressure uncontrollable increases and avoid cavitation during movements. If placed directly on actuators they also guarantee the pipe's safety.

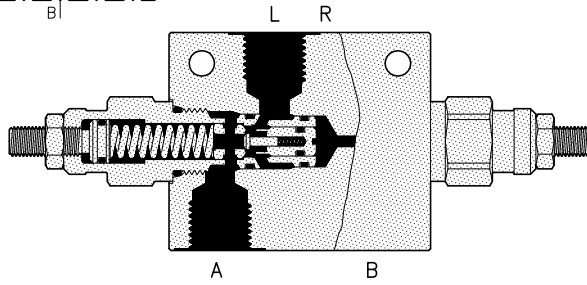
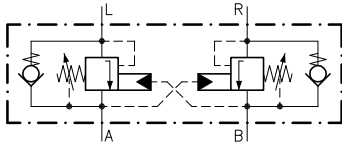
Main features	Type	Q max. (l/min.)	P max. (bar)	Technical schedule
<p><b>CMS</b> series – without by-pass valve. Are used in all circuits where in addition to overcenter function, is also required a control of load induced pressure. The by-pass valve must be externally set.</p> 	<b>CMS 20</b>	50	350	07.010
	<b>CMS 30</b>	90	350	07.020
	<b>CMS 50</b>	160	350	07.030
	<b>CMS 70</b>	360	350	07.040
<p><b>CMQ</b> series – with internal by-pass valve. Are used in all circuits where the only motion or overcenter function is required. The internal by-pass valve allows the free flow in direction from 1 to 2.</p> 	<b>CMQ 30</b>	50	350	07.060
	<b>CMQ 50</b>	90	350	07.070
<p><b>CMB</b> series – with internal by-pass valve. It is a version provided with an atmospheric pressure connected spring. The setting value remain unchanged also with back pressure in chamber 2. The internal by-pass valve allows the free flow in direction from 2 to 1.</p> 	<b>CMB 20</b>	20	350	07.090
<p><b>CMC</b> series – with internal by-pass valve. It is a version provided with an atmospheric pressure connected spring. The setting value remain unchanged also with back pressure in chamber 1. The internal by-pass valve allows the free flow in direction from 1 to 2.</p> 	<b>CMC 30</b>	50	350	07.100
	<b>CMC 50</b>	90	350	07.110

**07**

Main features

**CMQ-CMB series CSL 25 circuit**

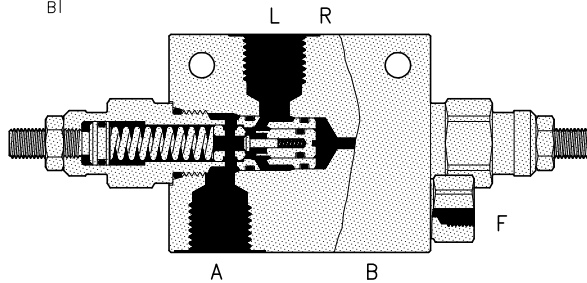
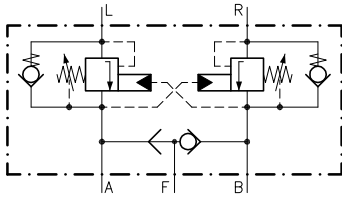
They are two overcenter valves combined in a special manifold for double acting function.



Type	Q max. (l/min.)	P max. (bar)	Technical schedule
<b>CMB 20/ CSL 25</b>	20	270	07.220
<b>CMQ 30/ CSL 25</b>	50	350	07.200
<b>CMQ 50/ CSL 25</b>	90	350	07.210

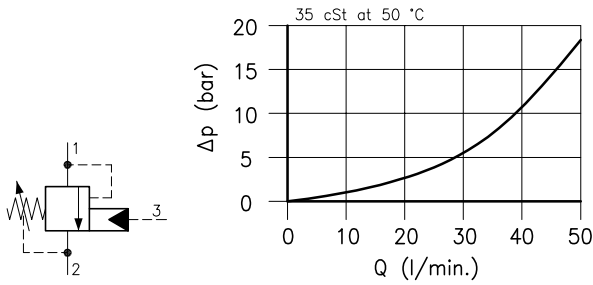
**CMQ series CSL 26 circuit**

They are two overcenter valves combined in a special manifold for double acting function; version with shuttle valve for hydraulic brakes automatic release system.



<b>CMQ 30/ CSL 26</b>	50	350	07.240
<b>CMQ 50/ CSL 26</b>	90	350	07.250

**Technical features**

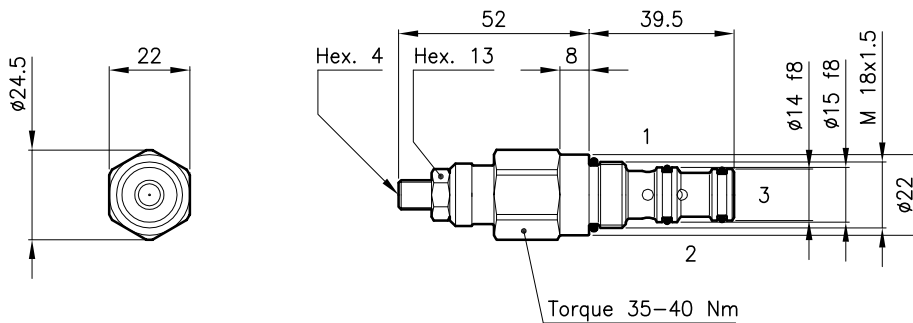


$$PP = \frac{(SP + BP) - LP}{2.9}$$

PP = Pilot pressure  
SP = Setting pressure  
BP = Backpressure port 2  
LP = Load induced pressure

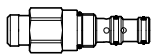
Cavity (For dimensions see catalogue 17.000)	S 20/3
Max. flow (l/min.)	50
Max. system pressure (bar)	270
Max. setting pressure (bar)	350
Pilot ratio	2.9:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Massa (kg)	0.160
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMS 20** = Valve type



Standard springs

Type	Setting range	Factory set
<b>U</b>	10 - 105 bar	70 bar
<b>D</b>	70 - 210 bar	140 bar
<b>T</b>	140 - 350 bar	280 bar

Adjustment type

**N** = Standard adjustment

**CMS 20/T-N**

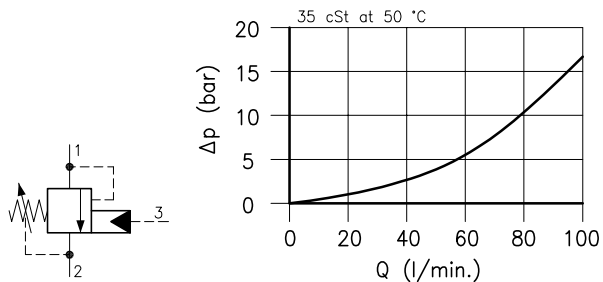


Codes:

CMS 20/U-N	24 011 100
CMS 20/D-N	24 011 101
CMS 20/T-N	24 011 102
External seals kit	90 620 101

CMS 20 valves can be assembled on standard bodies 20-C3 series; for dimensions see catalogue 16.010

**Technical features**

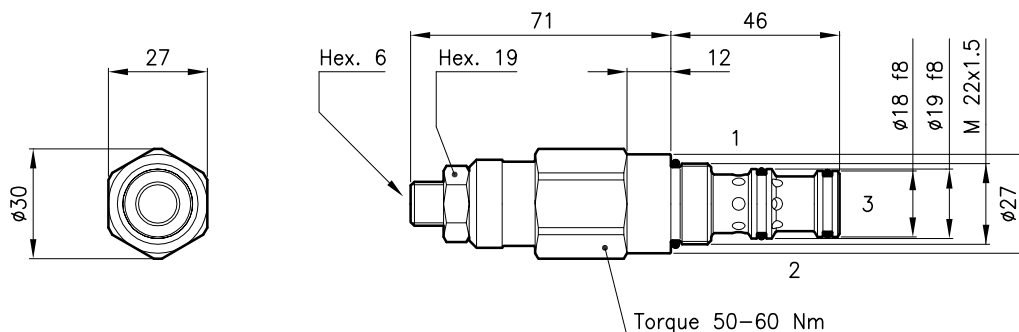


$$PP = \frac{(SP + BP) - LP}{2.7}$$

PP = Pilot pressure  
 SP = Setting pressure  
 BP = Backpressure port 2  
 LP = Load induced pressure

Cavity (For dimensions see catalogue 17.000)	S 30/3
Max. flow (l/min.)	90
Max. system pressure (bar)	270
Max. setting pressure (bar)	350
Pilot ratio	2,7:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.220
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMS 30** = Valve type



Standard springs

Type	Setting range	Factory set
<b>U</b>	10 - 105 bar	70 bar
<b>D</b>	70 - 210 bar	140 bar
<b>T</b>	140 - 350 bar	280 bar

Adjustment type

**N** = Standard adjustment

**CMS 30/T-N**

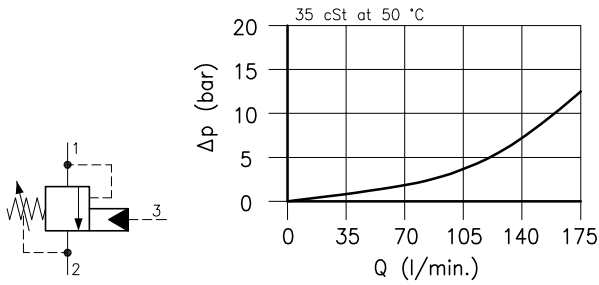


Codes:

CMS 30/U-N	34 011 103
CMS 30/D-N	34 011 104
CMS 30/T-N	34 011 105
External seals kit	90 620 104

CMS 30 valves can be assembled on standard bodies 30-C3 series; for dimensions see catalogue 16.010

**Technical features**

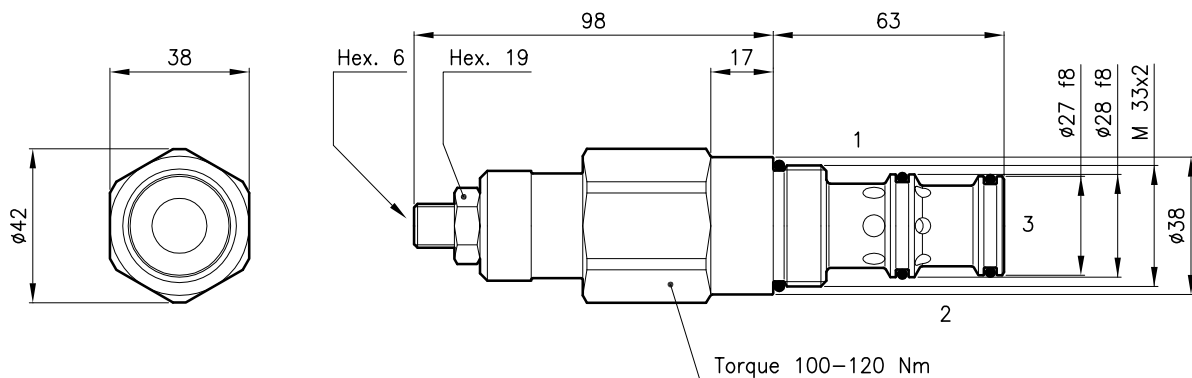


$$PP = \frac{(SP + BP) - LP}{3}$$

PP = Pilot pressure  
SP = Setting pressure  
BP = Backpressure port 2  
LP = Load induced pressure

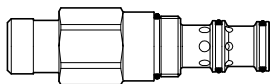
Cavity (For dimensions see catalogue 17.000)	S 50/3
Max. flow (l/min.)	160
Max. system pressure (bar)	270
Max. setting pressure (bar)	350
Pilot ratio	3:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.610
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMS 50** = Valve type



Standard springs

Type	Setting range	Factory set
<b>U</b>	10 - 105 bar	70 bar
<b>D</b>	70 - 210 bar	140 bar
<b>T</b>	140 - 350 bar	280 bar

Adjustment type

**N** = Standard adjustment

**CMS 50/T-N**

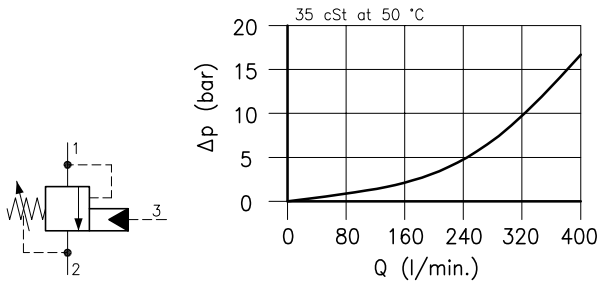


Codes:

CMS 50/U-N	54 011 104
CMS 50/D-N	54 011 105
CMS 50/T-N	54 011 106
External seals kit	90 620 107

CMS 50 valves can be assembled on standard bodies 50-C3 series; for dimensions see catalogue 16.010

**Technical features**

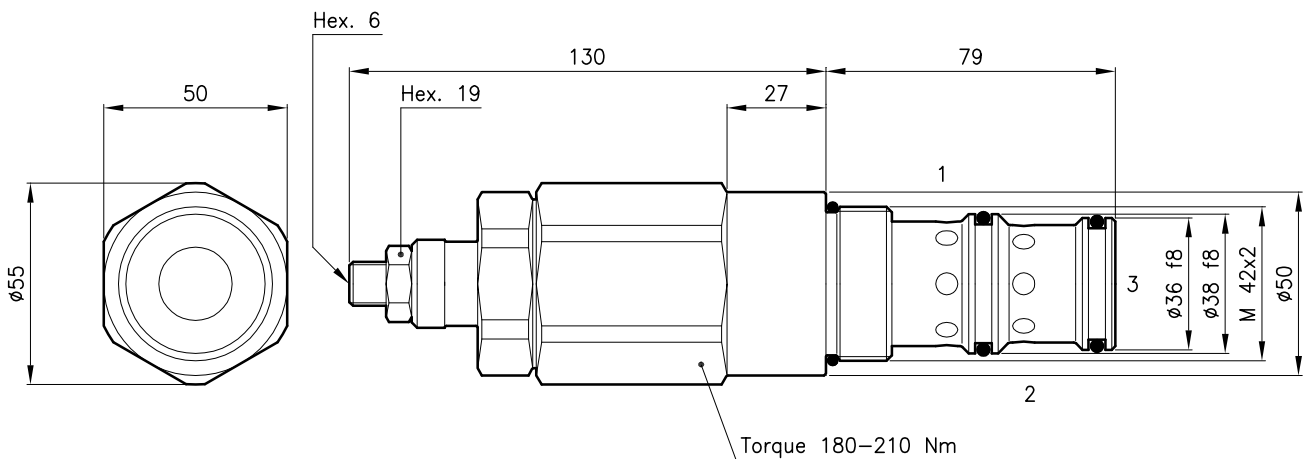


$$PP = \frac{(SP + BP) - LP}{3}$$

PP = Pilot pressure  
SP = Setting pressure  
BP = Backpressure port 2  
LP = Load induced pressure

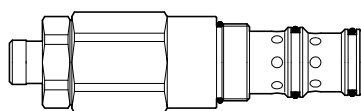
Cavity (For dimensions see catalogue 17.000)	S 70/3
Max. flow (l/min.)	360
Max. system pressure (bar)	270
Max. setting pressure (bar)	350
Pilot ratio	3:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.960
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 5 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMS 70** = Valve type



Standard springs

Type	Setting range	Factory set
<b>U</b>	10 - 105 bar	70 bar
<b>D</b>	70 - 210 bar	140 bar
<b>T</b>	140 - 350 bar	280 bar

Adjustment type

**N** = Standard adjustment

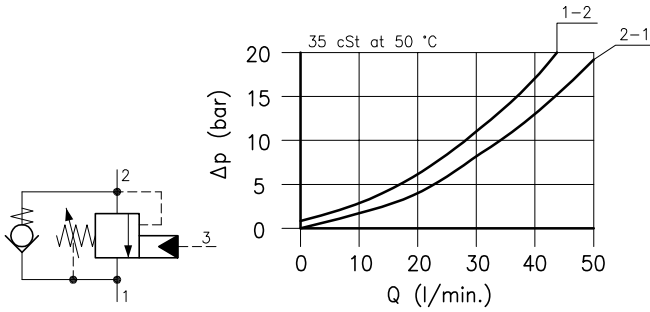


Codes:

CMS 70/U-N	74 011 101
CMS 70/D-N	74 011 102
CMS 70/T-N	74 011 100
External seals kit	90 620 120

CMS 70 valves can be assembled on standard bodies 70-C3 series; for dimensions see catalogue 16.010

**Technical features**

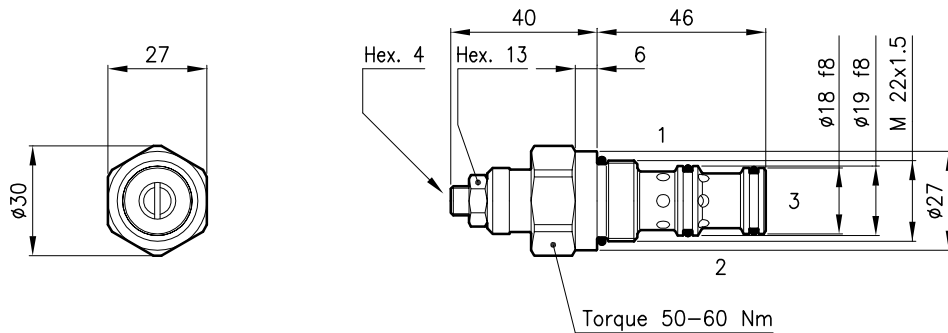


$$PP = \frac{(SP + BP) - LP}{8}$$

- PP = Pilot pressure
- SP = Setting pressure
- BP = Backpressure port 1
- LP = Load induced pressure

Cavity (For dimensions see catalogue 17.000)	S 30/3
Max. flow (l/min.)	50
Max. system pressure (bar)	315
Max. setting pressure (bar)	420
Pilot ratio	8:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.175
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

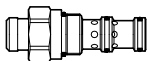
**Dimensions**



**Ordering informations**

**CMQ 30/T-L**

CMQ 30 = Valve type



Standard springs

Type	Setting range	Factory set
<b>D</b>	25 - 125 bar	105 bar
<b>T</b>	105 - 420 bar	280 bar

Adjustment type

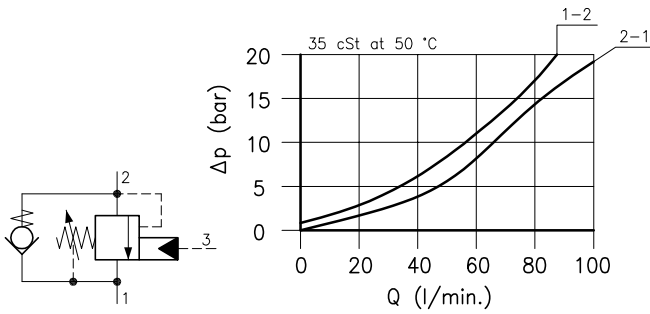
**L** = Adjustment with overset protection

Codes:

CMQ 30/D-L	34 011 101
CMQ 30/T-L	34 011 102
External seals kit	90 620 104

CMQ 30 valves can be assembled on standard bodies 30-C3 series; for dimensions see catalogue 16.010

**Technical features**

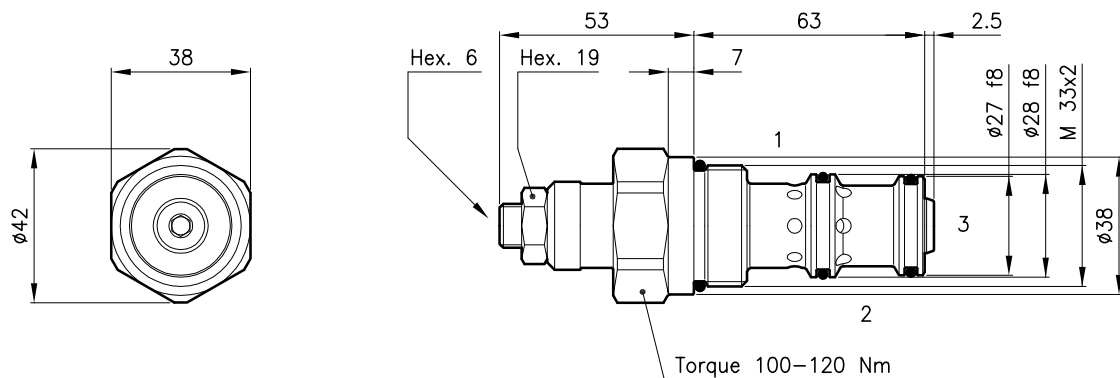


$$PP = \frac{(SP + BP) - LP}{8}$$

- PP = Pilot pressure
- SP = Setting pressure
- BP = Backpressure port 1
- LP = Load induced pressure

Cavity (For dimensions see catalogue 17.000)	S 50/3
Max. flow (l/min.)	90
Max. system pressure (bar)	315
Max. setting pressure (bar)	420
Pilot ratio	8:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.520
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

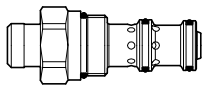
**Dimensions**



**Ordering informations**

**CMQ 50/T-L**

CMQ 50 = Valve type



Standard springs

Type	Setting range	Factory set
<b>D</b>	25 - 125 bar	105 bar
<b>T</b>	105 - 420 bar	280 bar

Adjustment type

**L** = Adjustment with overset protection

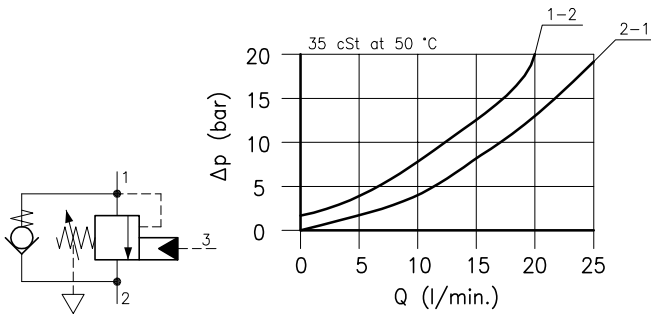
Codes:

CMQ 50/D-L	54 011 100
CMQ 50/T-L	54 011 101
External seals kit	90 620 107

CMQ 50 valves can be assembled on standard bodies 50-C3 series; for dimensions see catalogue 16.010



**Technical features**

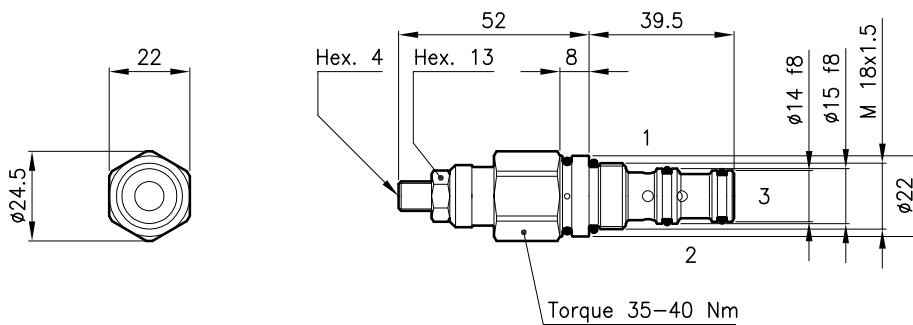


$$PP = \frac{SP - LP}{3.75}$$

PP = Pilot pressure  
SP = Setting pressure  
LP = Load induced pressure

Cavity (For dimensions see catalogue 17.000)	S 20/3
Max. flow (l/min.)	20
Max. system pressure (bar)	270
Max. setting pressure (bar)	320
Pilot ratio	3.75:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.170
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMB 20/T-N**

**CMB 20** = Valve type



Standard springs

Type	Setting range	Factory set
<b>U</b>	25 - 125 bar	70 bar
<b>D</b>	50 - 205 bar	140 bar
<b>T</b>	105 - 320 bar	280 bar

Adjustment type

**N** = Standard adjustment

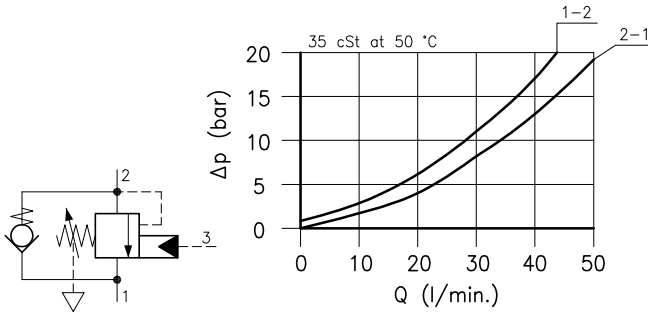


Codes:

CMB 20/U-N	24 011 105
CMB 20/D-N	24 011 106
CMB 20/T-N	24 011 107
External seals kit	90 620 101

CMB 20 valves can be assembled on standard bodies 20-C3 series; for dimensions see catalogue 16.010

**Technical features**

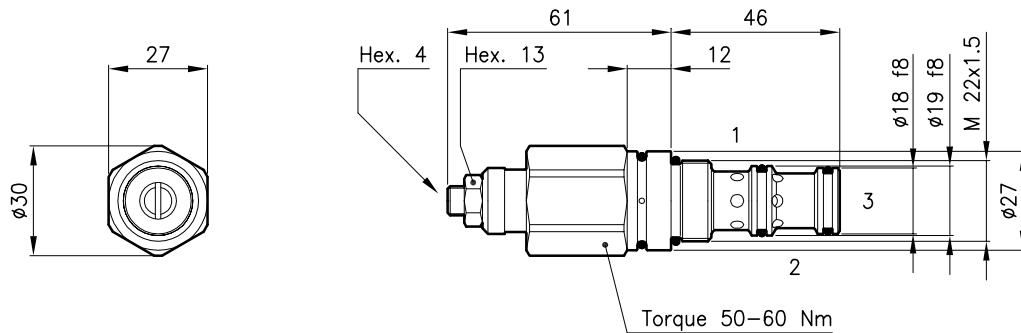


$$PP = \frac{SP - LP}{8}$$

PP = Pilot pressure  
SP = Setting pressure  
LP = Load induced pressure

Cavity (For dimensions see catalogue 17.000)	S 30/3
Max. flow (l/min.)	50
Max. system pressure (bar)	315
Max. setting pressure (bar)	420
Pilot ratio	8:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.210
Cracking pressure 95% of setting value	
Reseat pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

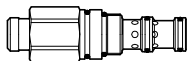
**Dimensions**



**Ordering informations**

**CMC 30/T-L**

**CMC 30** = Valve type



Standard springs

Type	Setting range	Factory set
<b>D</b>	25 - 125 bar	105 bar
<b>T</b>	105 - 420 bar	280 bar

Adjustment type

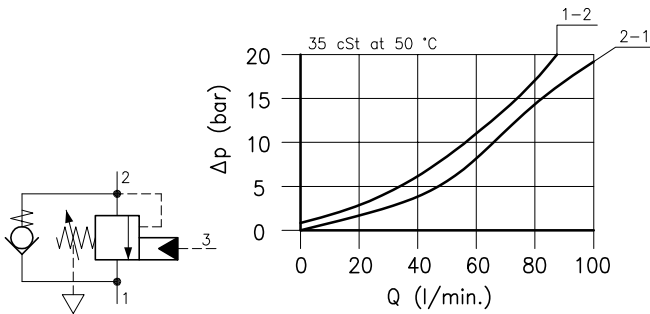
**L** = Adjustment with oversight protection

Codes:

CMC 30/D-L	34 011 122
CMC 30/T-L	34 011 123
External seals kit	90 620 104

CMC 30 valves can be assembled on standard bodies 30-C3 series; for dimensions see catalogue 16.010

**Technical features**

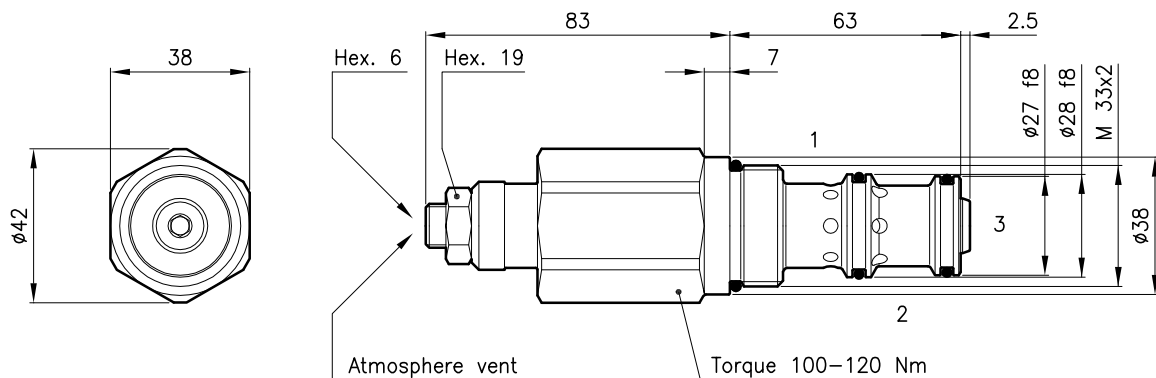


$$PP = \frac{SP - LP}{8}$$

PP = Pilot pressure  
SP = Setting pressure  
LP = Load induced pressure

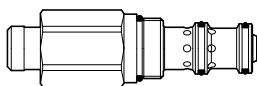
Cavity (For dimensions see catalogue 17.000)	S 50/3
Max. flow (l/min.)	90
Max. system pressure (bar)	315
Max. setting pressure (bar)	420
Pilot ratio	8:1
Fluid viscosity range (cSt)	2.8 - 380
Fluid temperature range (°C)	-20 +80
Mass (kg)	0.730
Cracking pressure 95% of setting value	
reset pressure 75% of setting value	
Standard setting obtained with 1 l/min.	
Hydraulic fluid; mineral oil HM and HV ISO 6074	
Recommended filtration; 19/15 ISO 4466 (25 μ absolutes)	
Standard seals in Polyurethane and Buna N	

**Dimensions**



**Ordering informations**

**CMC 50** = Valve type



Standard springs

Type	Setting range	Factory set
<b>D</b>	25 - 125 bar	105 bar
<b>T</b>	105 - 420 bar	280 bar

Adjustment type

**L** = Adjustment with overset protection

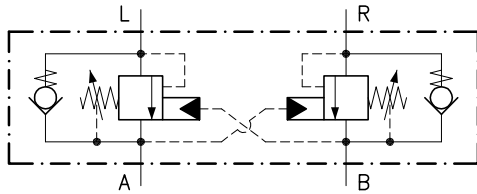


Codes:

CMC 50/D-L	54 011 102
CMC 50/T-L	54 011 103
External seals kit	90 620 107

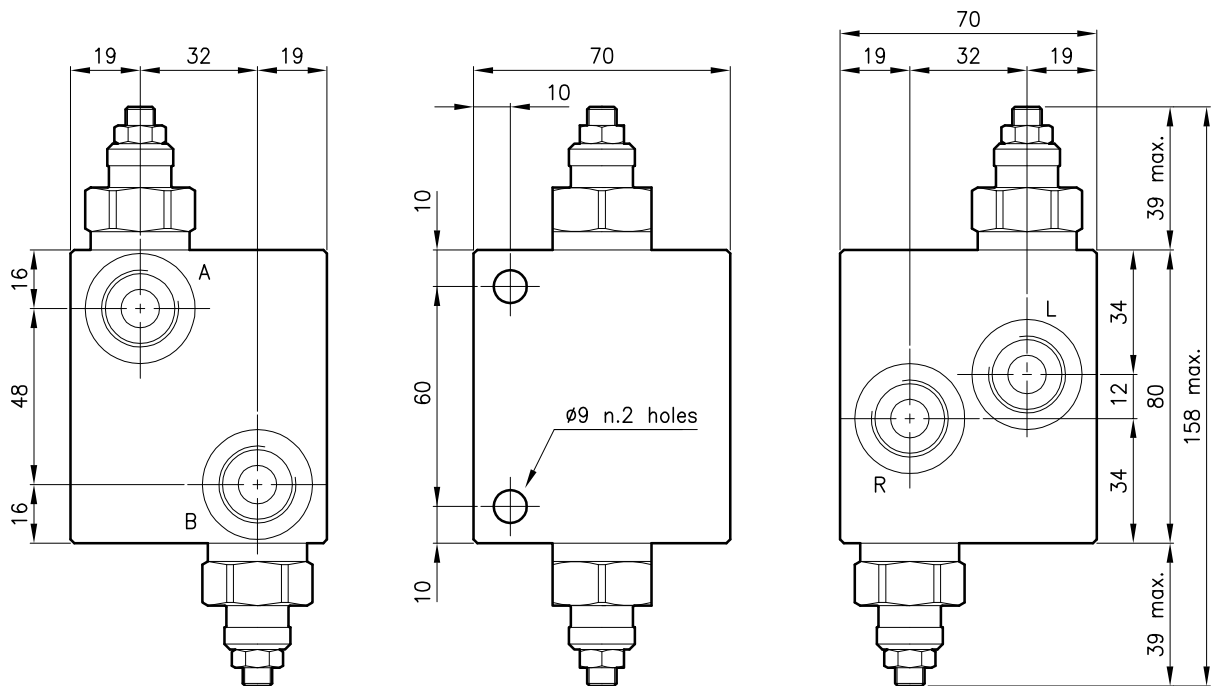
CMC 50 valves can be assembled on standard bodies 50-C3 series; for dimensions see catalogue 16.010

**Technical features**



Valve	(For features see catalogue 07.060)	CMQ 30
Max. flow	(l/min.)	50
Max. system pressure	(bar)	315
Max. setting pressure	(bar)	420
Pilot ratio		8:1
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	1.210

**Dimensions**



**Ordering informations**

**CMQ 30/T-L-CSL 25-B08**

CMQ 30 = Valve type

Standard springs

Type	Setting range	Factory set
<b>D</b>	25 - 125 bar	105 bar
<b>T</b>	105 - 420 bar	280 bar

Adjustment type

**L** = Adjustment with overset protection

Version

Standard ports

**B06** = G 3/8 ISO 228

**B08** = G 1/2 ISO 228

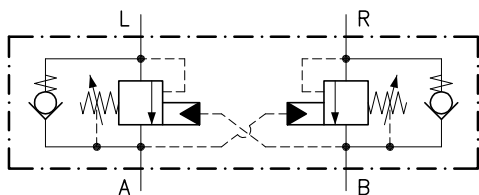
Codes:

CMQ 30/D-L-CSL 25-B06	34 011 106
CMQ 30/T-L-CSL 25-B06	34 011 107
CMQ 30/D-L-CSL 25-B08	34 011 108
CMQ 30/T-L-CSL 25-B08	34 011 109

Only bodies code:

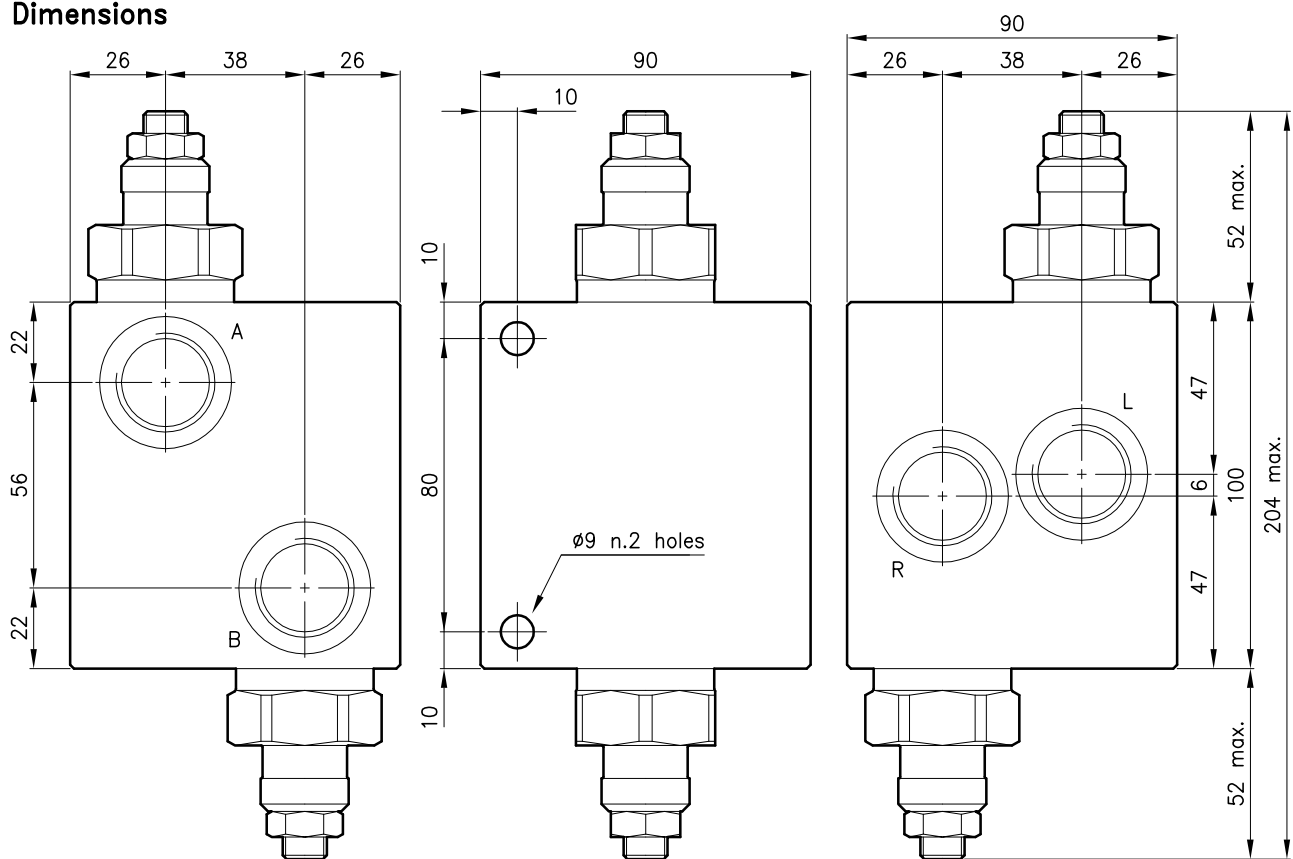
Body type 30-CSL 25-B06	38 144 117
Body type 30-CSL 25-B08	38 144 118

**Technical features**



Valve	(For features see catalogue 07.070)	CMQ 50
Max. flow	(l/min.)	90
Max. system pressure	(bar)	315
Max. setting pressure	(bar)	420
Pilot ratio		8:1
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	3.300

**Dimensions**



**Ordering informations**

**CMQ 50/T-L-CSL 25-B08**

CMQ 50 = Valve type

Standard springs

Type Setting range Factory set

**D** = 25 - 125 bar 105 bar

**T** = 105 - 420 bar 280 bar

Adjustment type

**L** = Adjustment with oversight protection

Version

Standard ports

**B08** = G 1/2 ISO 228

**B12** = G 3/4 ISO 228

Codes:

CMQ 50/D-L-CSL 25-B08 54 011 107

CMQ 50/T-L-CSL 25-B08 54 011 108

CMQ 50/D-L-CSL 25-B12 54 011 109

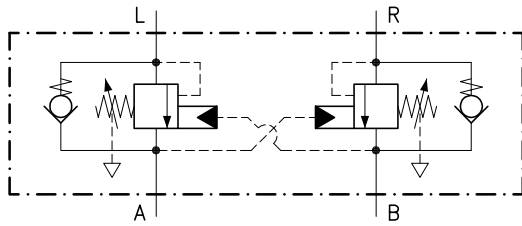
CMQ 50/T-L-CSL 25-B12 54 011 110

Only bodies code:

Body type 50-CSL 25-B08 58 144 134

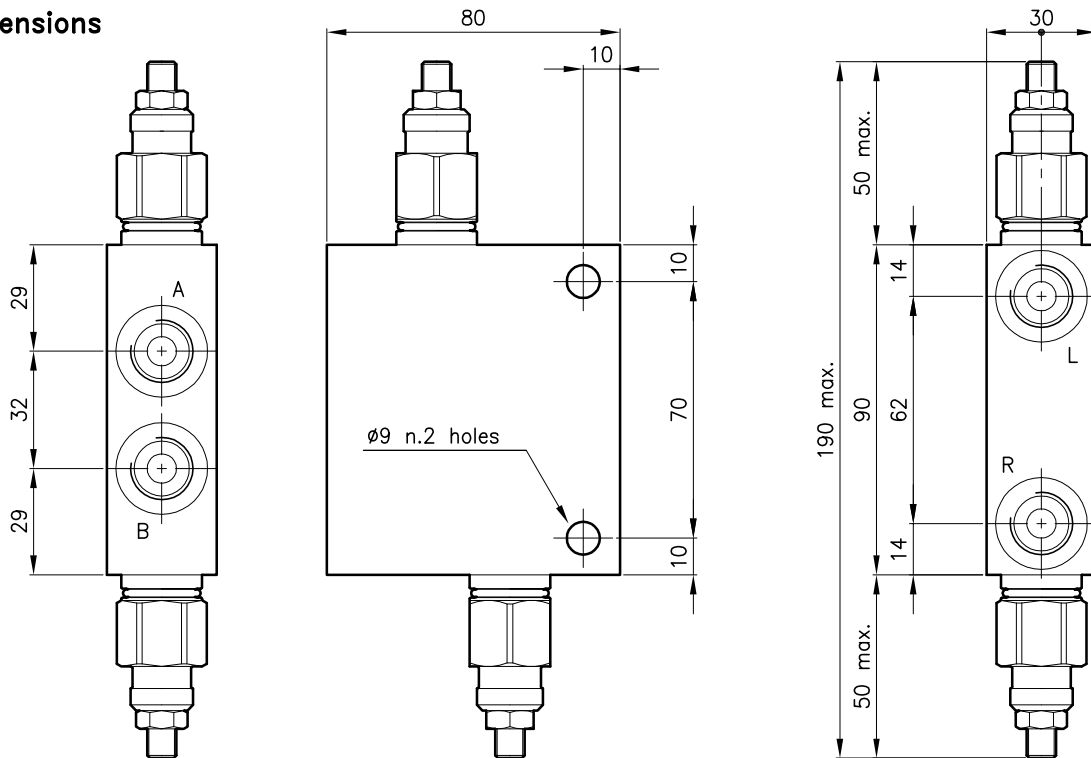
Body type 50-CSL 25-B12 58 144 135

**Technical features**



Valve	(For features see catalogue 07.090)	CMB 20
Max. flow	(l/min.)	20
Max. system pressure	(bar)	270
Max. setting pressure	(bar)	320
Pilot ratio		3.75:1
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	0.900

**Dimensions**



**Ordering informations**

**CMB 20/D-N-CSL 25-B06**

**CMB 20** = Valve type

Standard springs

Type Setting range

**U** = 25 - 125 bar

**D** = 50 - 205 bar

**T** = 105 - 320 bar

Factory set

70 bar

140 bar

280 bar

Adjustment type

**N** = Standard adjustment



Version

Standard ports

**B05** = G 1/4 ISO 228

**B06** = G 3/8 ISO 228

Codes:

CMB 20/U-N-CSL 25-B05 24 011 108

CMB 20/D-N-CSL 25-B05 24 011 109

CMB 20/T-N-CSL 25-B05 24 011 110

CMB 20/U-N-CSL 25-B06 24 011 111

CMB 20/D-N-CSL 25-B06 24 011 112

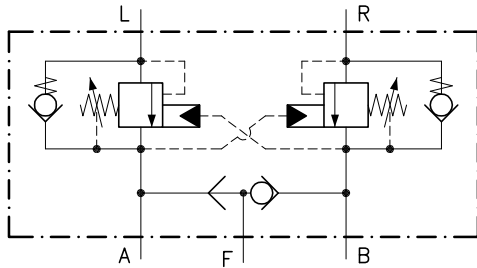
CMB 20/T-N-CSL 25-B06 24 011 113

Only bodies code:

Body type 20-CSL 25-B05 28 144 138

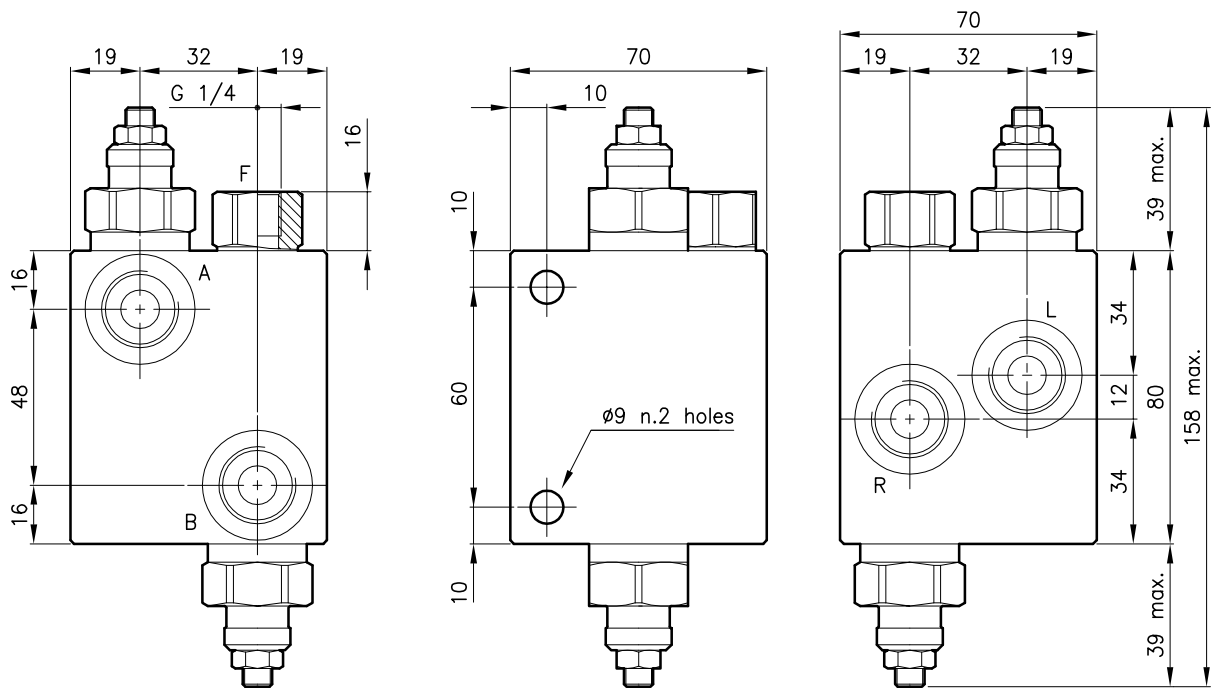
Body type 20-CSL 25-B06 28 144 139

**Technical features**



Valve	(For features see catalogue 07.060)	CMQ 30
Valve	(For features see catalogue 05.320)	CCE 20
Max. flow	(l/min.)	50
Max. system pressure	(bar)	315
Max. setting pressure	(bar)	420
Pilot ratio		8:1
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	1.210

**Dimensions**



**Ordering informations**

**CMQ 30/T-L-CSL 26-B08**

CMQ 30 = Valve type

Standard springs

Type	Setting range	Factory set
D	25 - 125 bar	105 bar
T	105 - 420 bar	280 bar

Adjustment type

L = Adjustment with overset protection

Version with shuttle valve

Standard ports

**B06** = G 3/8 ISO 228

**B08** = G 1/2 ISO 228

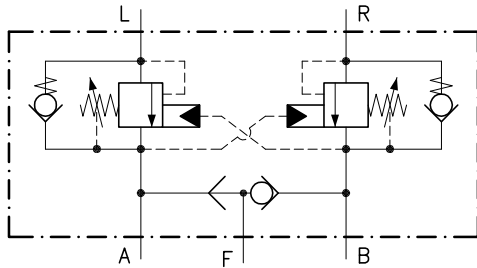
Codes:

CMQ 30/D-L-CSL 26-B06	34 011 143
CMQ 30/T-L-CSL 26-B06	34 011 144
CMQ 30/D-L-CSL 26-B08	34 011 145
CMQ 30/T-L-CSL 26-B08	34 011 146

Only bodies code:

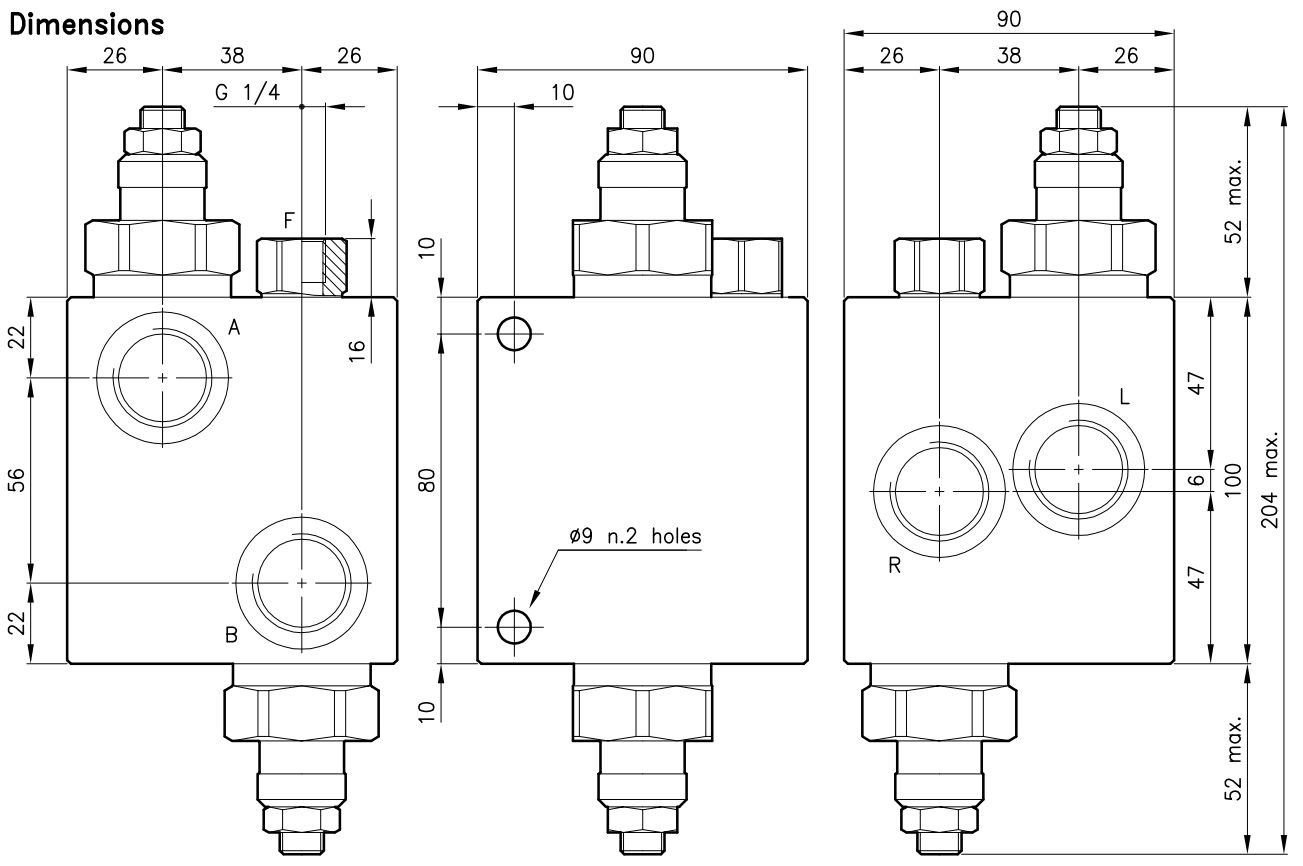
Body type 30-CSL 26-B06	38 144 197
Body type 30-CSL 26-B08	38 144 198

**Technical features**



Valve	(For features see catalogue 07.070)	CMQ 50
Valve	(For features see catalogue 05.320)	CCE 20
Max. flow	(l/min.)	90
Max. system pressure	(bar)	315
Max. setting pressure	(bar)	420
Pilot ratio		8:1
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	3.300

**Dimensions**



**Ordering informations**

**CMQ 50/T-L-CSL 26-B08**

**CMQ 50** = Valve type

Standard springs

Type Setting range Factory set

**D** = 25 - 125 bar 105 bar

**T** = 105 - 420 bar 280 bar

Adjustment type

**L** = Adjustment with oversight protection

Version with shuttle valve

Standard ports

**B08** = G 1/2 ISO 228

**B12** = G 3/4 ISO 228

Codes:

CMQ 50/D-L-CSL 26-B08 54 011 111

CMQ 50/T-L-CSL 26-B08 54 011 112

CMQ 50/D-L-CSL 26-B12 54 011 113

CMQ 50/T-L-CSL 26-B12 54 011 114

Only bodies code:

Body type 50-CSL 26-B08 58 144 138

Body type 50-CSL 26-B12 58 144 139