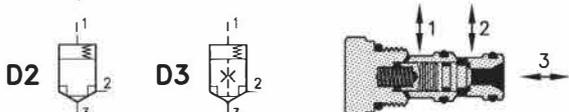
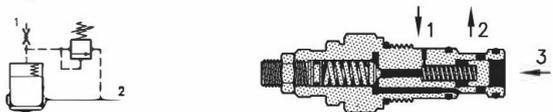


Pressure, flow and directional control logic valves.

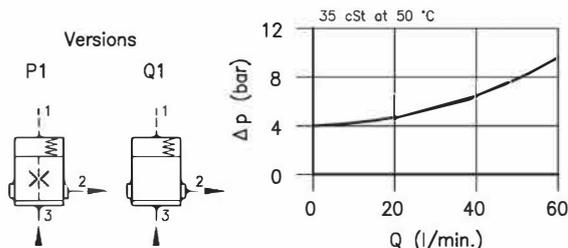
These are logic elements used to pressure, flow and oiltight directional control. They are divided into two categories: as pressure and flow control they have a ratio between areas of 1:1; as directional control they have a ratio of 1.8:1 or 1.2:1. They always need piloting valves which acting on chamber 1, besides made them functioning, allow their regulation. The version used to flow control must be combined with a needle valve in order to breed a pressure drop of about 7 bar.

Main features	Type	Q max. (l/min.)	P max. (bar)	Technical schedule
ELP ../P1 series – with area ratio 1:1 for pressure control. 	ELP 30/P1	80	350	11.010
	ELP 50/P1	160	350	11.020
	ELP 70/P1	320	350	11.030
ELP ../Q1 series – with area ratio 1:1 for flow control. 	ELP 30/Q1	80	350	11.010
	ELP 50/Q1	160	350	11.020
	ELP 70/Q1	320	350	11.030
ELP ../P3 series – with area ratio 1:1 to reduce pressure. 	ELP 30/P3	50	350	11.040
	ELP 50/P3	100	350	11.050
	ELP 70/P3	200	350	11.060
ELP ../Q3 series – with area ratio 1:1 for compensating flow control. 	ELP 30/Q3	50	350	11.040
	ELP 50/Q3	100	350	11.050
	ELP 70/Q3	200	350	11.060
ELP ../D2–D3 series – with area ratio 1.8:1 or 1.2:1 for directional control. 	ELP 30/D..	60	350	11.070
	ELP 50/D..	120	350	11.080
	ELP 70/D..	250	350	11.090
ELP ../Q2 series – with area ratio 1:1 pressure compensator for flow control. 	ELP 30/Q2	40	350	11.100
ELP ../Q4 series – with area ratio 1:1 pressure compensator for flow control. 	ELP 30/Q4	40	350	11.130
ELP ../Q1 series – flow control with relief valve. 	ELPS 30/Q1	60	420	11.140

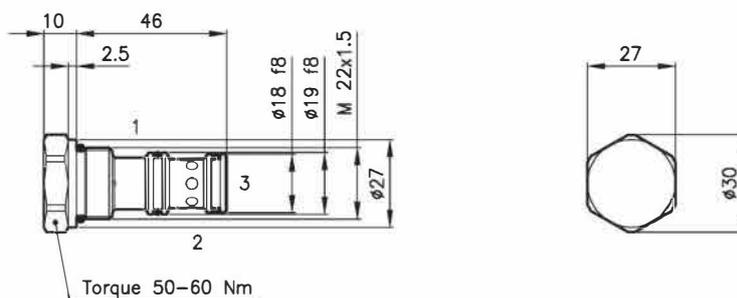
Technical features

Logic valves ELP 30/P1 series, with internal orifice, are used for pressure control, as sequence or by-pass valves.

The Q1 version without internal orifice, if combined with a needle valve, is a flow compensator which unload the excess flow in tank.



Cavity	(For dimensions see catalogue 17.000)	S 30/3
Nominal flow	(l/min.)	60
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Cracking pressure	(bar)	4
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (P1 version)	(mm)	0.75
Mass	(kg)	0.130
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
ELP 30/P1

ELP 30 = Valve type



Version

P1 = pressure control

Q1 = flow compensator

Codes:

ELP 30/P1 36 011 100

ELP 30/Q1 36 011 101

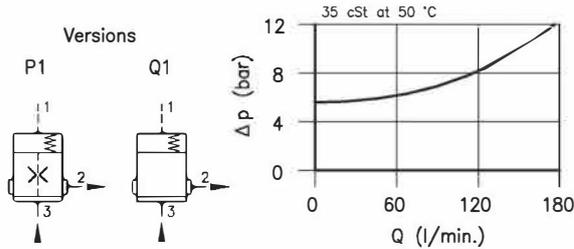
External seals kit 90 620 104

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

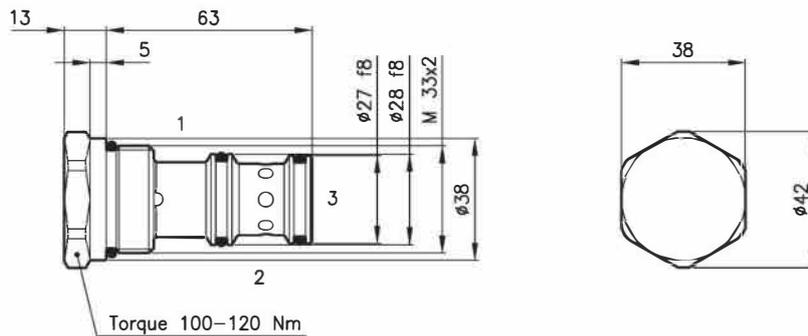
Technical features

Logic valves ELP 50/P1 series, with internal orifice, are used for pressure control, as sequence or by-pass valves.

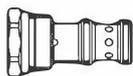
The Q1 version without internal orifice, if combined with a needle valve, is a flow compensator which unload the excess flow in tank.



Cavity	(For dimensions see catalogue 17.000)	S 50/3
Nominal flow	(l/min.)	160
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Cracking pressure	(bar)	6
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (P1 version)	(mm)	0.75
Mass	(kg)	0.260
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
ELP 50/P1

ELP 50 = Valve type



Version

P1 = pressure control

Q1 = flow compensator

Codes:

ELP 50/P1 56 011 102

ELP 50/Q1 56 011 101

External seals kit 90 620 107

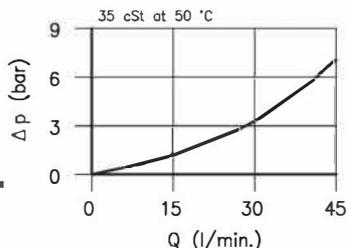
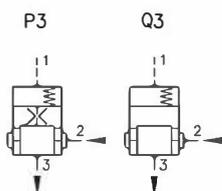
ELP 50 valves can be assembled on standard bodies 50-C3 valves; for dimensions see catalogue 16.010

Technical features

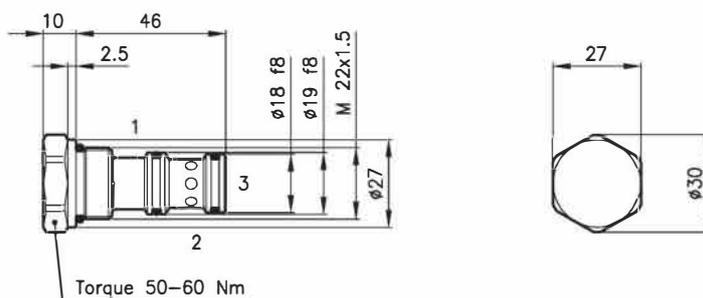
Logic valves ELP 30/P3 series, with internal orifice, are used as pressure reducing with remote pilot.

The Q3 version, without orifice, if combined with a needle valve is a pressure compensated flow regulator at two way.

Versions



Cavity	(For dimensions see catalogue 17.000)	S 30/3
Nominal flow	(l/min.)	40
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Min. pressure difference	(bar)	7
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (P3 version)	(mm)	0.75
Mass	(kg)	0.130
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
ELP 30/P3

ELP 30 = Valve type



Version

P3 = pressure reducing

Q3 = flow regulator

Codes:

ELP 30/P3 36 011 103

ELP 30/Q3 36 011 104

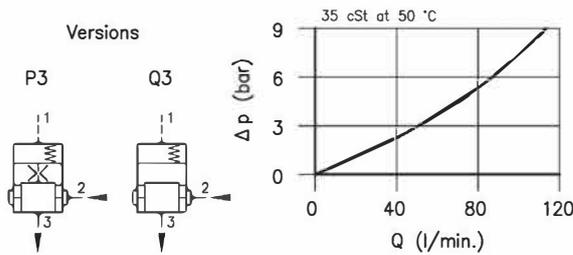
External seals kit 90 620 104

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

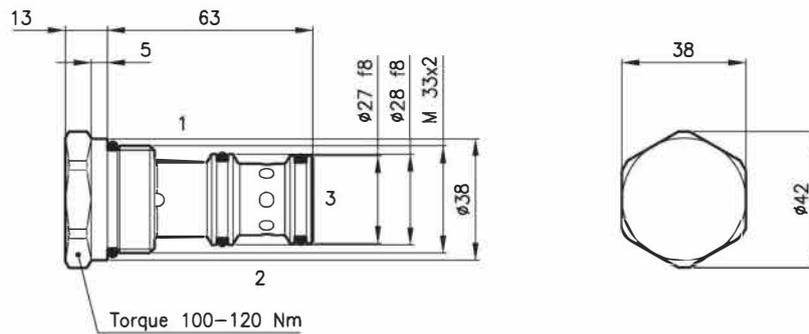
Technical features

Logic valves ELP 50/P3 series, with internal orifice, are used as pressure reducing with remote pilot.

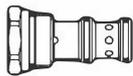
The Q3 version, without orifice, if combined with a needle valve is a pressure compensated flow regulator at two way.



Cavity	(For dimensions see catalogue 17.000)	S 50/3
Nominal flow	(l/min.)	100
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Min. pressure difference	(bar)	7
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (P3 version)	(mm)	0.75
Mass	(kg)	0.260
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

ELP 50 = Valve type



Version

P3 = pressure reducing

Q3 = flow regulator

ELP 50/P3

Codes:

ELP 50/P3 56 011 105

ELP 50/Q3 56 011 106

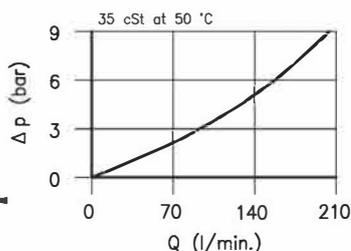
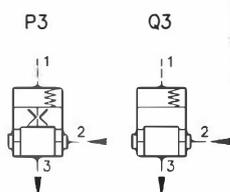
External seals kit 90 620 107

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

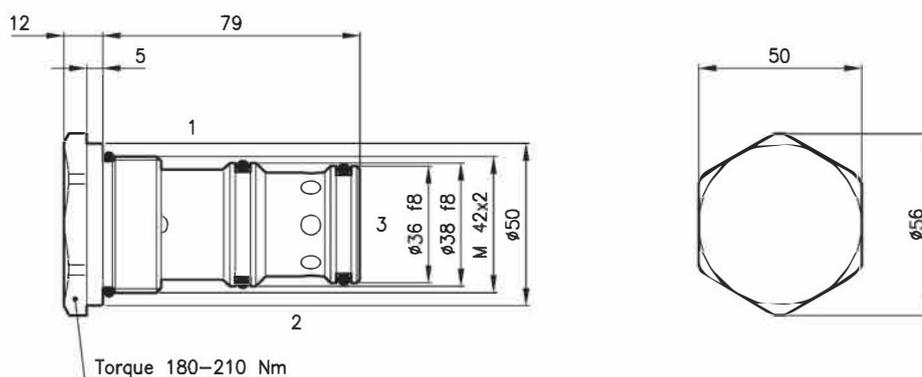
Technical features

Logic valves ELP 70/P3 series, with internal orifice, are used as pressure reducing with remote pilot.

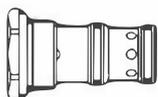
The Q3 version, without orifice, if combined with a needle valve is a pressure compensated flow regulator at two way.

Versions


Cavity	(For dimensions see catalogue 17.000)	S 70/3
Nominal flow	(l/min.)	200
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Min. pressure difference	(bar)	4
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (P3 version)	(mm)	0.75
Mass	(kg)	0.660
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

ELP 70 = Valve type



Version

P3 = pressure reducing

Q3 = flow regulator

ELP 70/P3

Codes:

ELP 70/P3 76 011 102

ELP 70/Q3 76 011 103

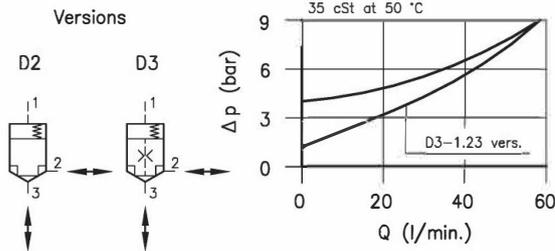
External seals kit 90 620 120

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

Technical features

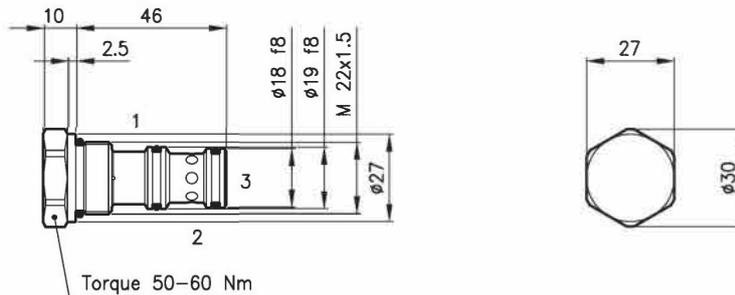
Logic valves ELP 30/D2 series, without internal orifice, allows the free flow from 2 to 3 and from 3 to 2, they stop it in both directions when in chamber 1 enough pressure is used. The D3 version are used as unloading shut-off with flow coming from 3.

The D3-1.23 version, combined with LCS 20, are used to charge accumulators.



Cavity	(For dimensions see catalogue 17.000)	S 30/3
Nominal flow	(l/min.)	60
Max. pressure	(bar)	350
Ratio between areas A1/A3		1.8:1
		1.23:1
Cracking pressure	(bar)	4
		2
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (D3 version)	(mm)	0.75
Mass	(kg)	0.130
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		

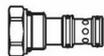
Dimensions



Ordering informations

ELP 30/D3-1.23

ELP 30 = Valve type



Version

D2 = directional control

D3 = directional control

1.23 = ratio between A1/A3 (D3-1.23 vers.)

Codes:

ELP 30/D2 36 011 105

ELP 30/D3 36 011 106

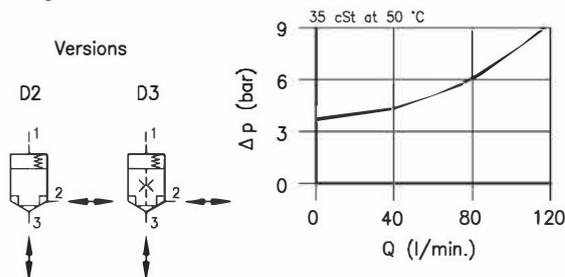
ELP 30/D3-1.23 36 011 118

External seals kit 90 620 104

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

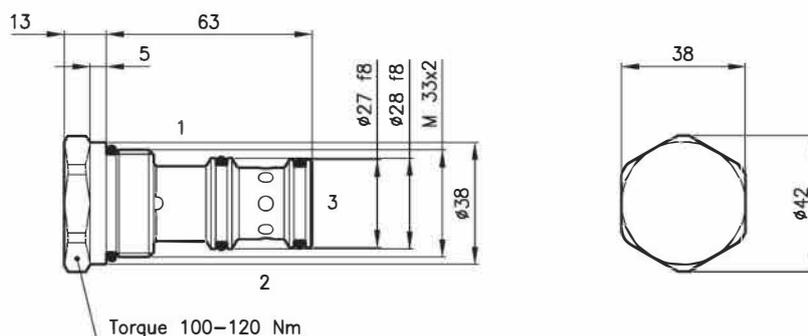
Technical features

Logic valves ELP 50/D2 series, without internal orifice, allows the free flow from 2 to 3 and from 3 to 2, they stop it in both directions when in chamber 1 enough pressure is used. The D3 version are used as unloading shut-off with flow coming from 3.



Cavity	(For dimensions see catalogue 17.000)	S 50/3
Nominal flow	(l/min.)	120
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1.8
Crackin pressure	(bar)	3.5
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (D3 version)	(mm)	0.75
Mass	(kg)	0.260
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		

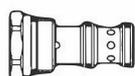
Dimensions



Ordering informations

ELP 50/D2

ELP 50 = Valve type



Version

D2 = directional control

D3 = directional control

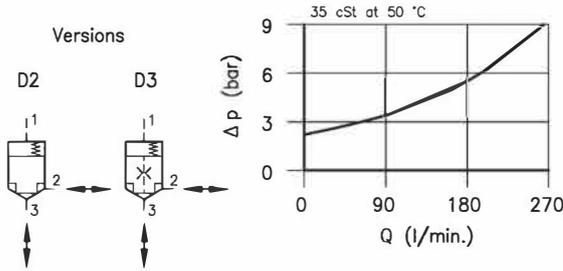
Codes:

ELP 50/D2	56 011 103
ELP 50/D3	56 011 107
External seals kit	90 620 107

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

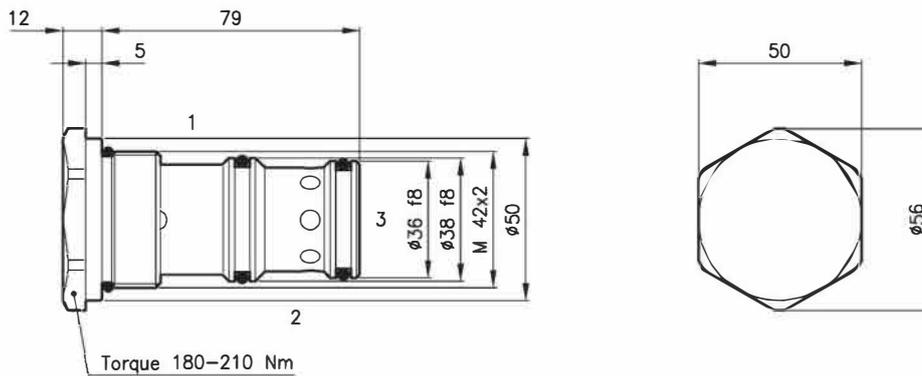
Technical features

Logic valves ELP 70/D2 series, without internal orifice, allows the free flow from 2 to 3 and from 3 to 2, they stop it in both directions when in chamber 1 enough pressure is used. The D3 version are used as unloading shut-off with flow coming from 3.



Cavity	(For dimensions see catalogue 17.000)	S 70/3
Nominal flow	(l/min.)	250
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1.8
Cracking pressure	(bar)	2.5
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Orifice diameter (D3 version)	(mm)	0.75
Mass	(kg)	0.660
Hydraulic flow; mineral oil HM and HV	ISO 6074	
Recommended filtration; 19/15 ISO 4466	(25 μ absolutes)	
Standard seals in Polyurethane and Buna N		

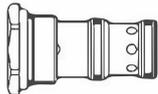
Dimensions



Ordering informations

ELP 70/D2

ELP 70 = Valve type



Version

D2 = directional control

D3 = directional control

Codes:

ELP 70/D2 76 011 104

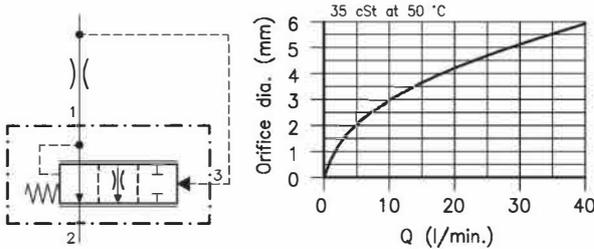
ELP 70/D3 76 011 105

External seals kit 90 620 120

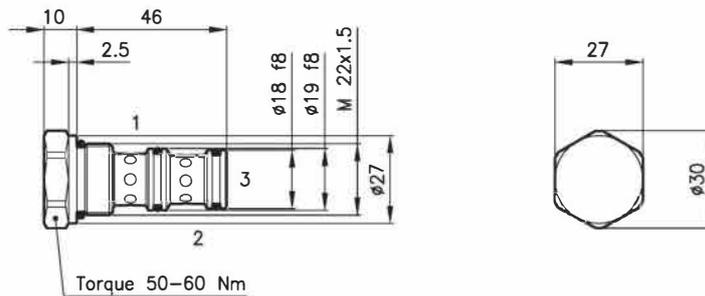
ELP 70 valves can be assembled on standard bodies 70-C3 series; for dimensions see catalogue 16.010

Technical features

The ELP 30/Q2 cartridge is a pressure compensated element, intended for use with a remote fixed or variable orifice to yield a two port type, pressure compensated, flow regulating hydraulic valve.



Cavity	(For dimensions see catalogue 17.000)	S 30/3
Max. flow	(l/min.)	40
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Min. pressure difference	(bar)	5
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Max. orifice diameter	(mm)	6.5
Mass	(kg)	0.130
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
ELP 30/Q2

ELP 30 = Valve type



Version

Q2 = pressure compensator

Codes:

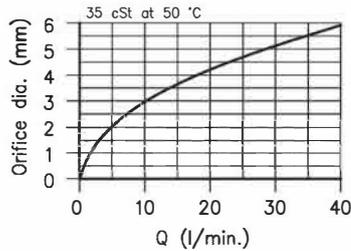
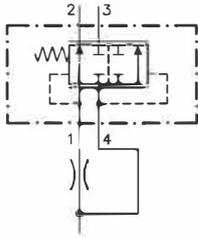
ELP 30/Q2 36 011 102

External seals kit 90 620 104

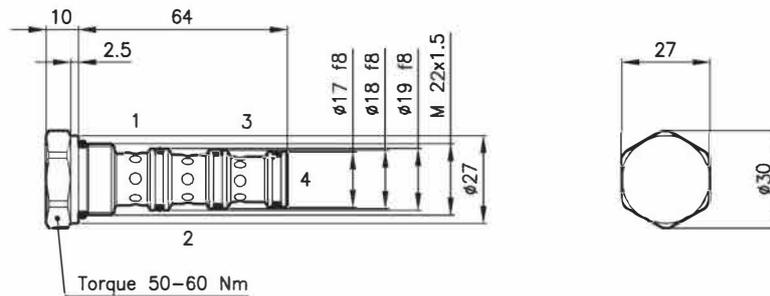
ELP 30 valves can be assembled on standard bodies 30-C3 series; for dimensions see catalogue 16.010

Technical features

The ELP 30/Q4 cartridge is a pressure compensated element, intended for use with a remote fixed or variable orifice to yield a three way type, pressure compensated, flow regulating hydraulic valve with priority flow.



Cavity	(For dimensions see catalogue 17.000)	S 30/4
Max. flow	(l/min.)	40
Max. pressure	(bar)	350
Ratio between areas A1/A3		1:1
Min. pressure difference	(bar)	5
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Max. orifice diameter	(mm)	6.5
Mass	(kg)	0.150
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
ELP 30/Q4
ELP 30 = Valve type


Version

Q4 = pressure compensator

Codes:

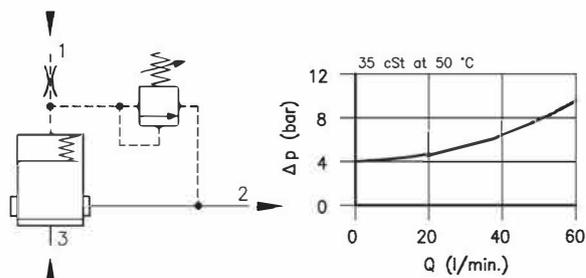
ELP 30/Q4 36 011 107

External seals kit 90 620 105

ELP 30 valves can be assembled on standard bodies 30-C4 series; for dimensions see catalogue 16.011

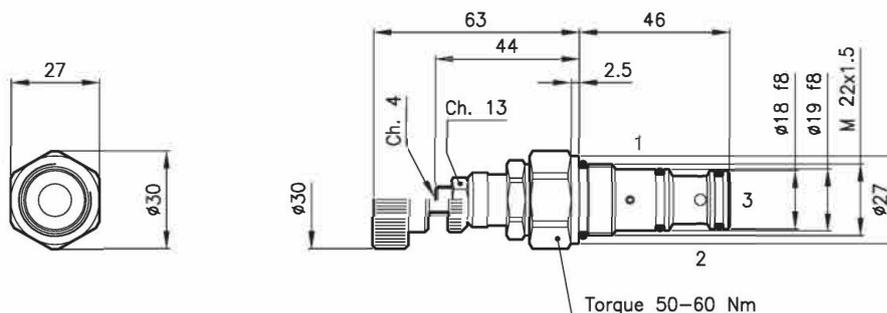
Technical features

Logic valves ELPS 30/Q1 series, with internal orifice, are used for flow control. They are also able to limit the maximum system pressure downstream of the valve



Cavity	(For dimensions see catalogue 17.000)	S 30/3
Nominal flow	(l/min.)	60
Max. pressure	(bar)	420
Ratio between areas A1/A3		1:1
Cracking pressure	(bar)	6
Fluid viscosity range	(cSt)	2.8 - 380
Fluid temperature range	(°C)	-20 +80
Mass	(kg)	0.200
Cracking pressure 95% of setting value		
Reset pressure 90% of setting value		
Cracking pressure defined with 1 l/min.		
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		

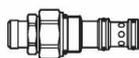
Dimensions



Ordering informations

ELPS 30/Q1-D-N

ELPS 30 = Valve type



Version

Q1 = flow compensator

Standard springs for relief valve

Type	Setting range	Factory set
D	7 - 210 bar	140 bar
Q	105 - 420 bar	315 bar

Adjustment type

N = Standard adjustment

V = Handknob adjustment



Codes:

ELPS 30/Q1-D-N	36 011 127
ELPS 30/Q1-Q-N	36 011 128
ELPS 30/Q1-D-V	36 011 129
ELPS 30/Q1-Q-V	36 011 130
External seals kit	90 620 104

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