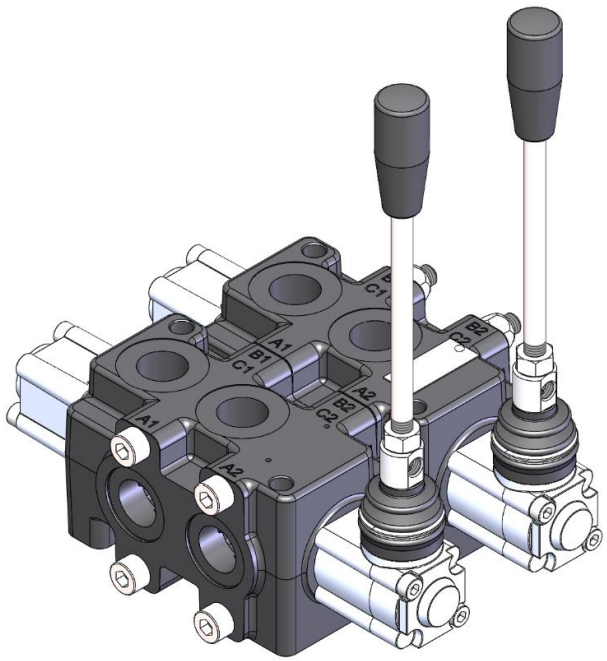
DV90

Stackable 6/2 selector valve manual control



Badestnost
hydraulic components

DV90:

- Simple compact and heavy duty designed with cast iron body and hard plated steel spool. 6/2 with two different options spool for open centre transition and closed centre transition. Flow rate up to 90 l/min, max pressure up to 315 bar and stackable up to 4 sections.

Additional information
This catalogue shows the product in the most standard configuration. For special requests please contact sales.

WARNING!
All specifications of this catalogue refer to the standard product at this date. Badestnost, oriented in continuous improvement, reserves the right to discontinue, modify or revise specifications, without notice.

First edition 01-2021

Working conditions

No. of available sections		up to 4	
Nominal flow rating		90 l/min	*23.8 US gpm*
Operating pressure (max.)		315 bar	*4500 psi*
Internal leakage (max.) A(B) to T	Δp = 100 bar (1450 psi) fluid and valve at 40 °C (104 °F)	5 cm^3/min	*0.31 in^3/min*
Fluid		Mineral based oil	
Fluid temperature	with NBR seals	from -20 °C to 80 °C	*from -4 °F to 176 °F*
	with FPM (Viton) seals	from -20 °C to 100 °C	*from -4 °F to 212 °F*
Viscosity	operating range	from 15 to 75 mm^2/s	*from 15 to 75 cSt*
	min.	12 mm^2/s	*12 cSt*
	max.	400 mm^2/s	*400 cSt*
Max contamination level		-/19/16 - ISO 4406	*NAS 1683 - class 10*
Ambient temperature	with mechanical devices	from -40 °C to 60 °C	*from -40 °F to 140 °F*
	with pneumatic and hydraulic devices devices	from -30 °C to 60 °C	*from -22 °F to 140 °F*
Tie rods tightening torque (wrench 13)		25 Nm	*18.4 lbft*

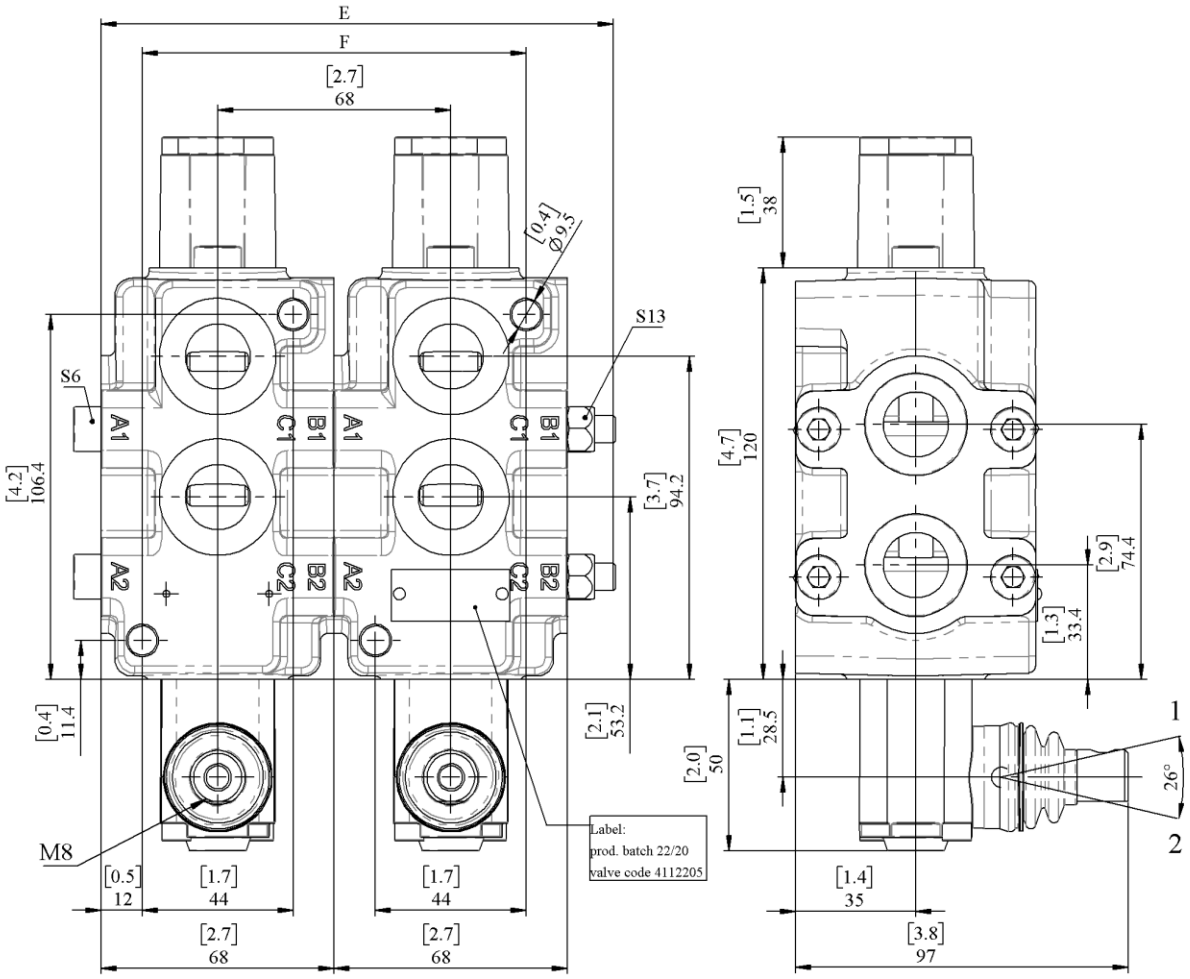
Standard threads

		Refernce standard			
		BSP	UN-UNF	Metric	NPTF
Thread according to		ISO 228/1	ISO 263	ISO 262	Ansi B1.20.3
		BS 2779	ANSI B1.1 unified		
Cavity dimension according to	ISO	1179	11926	9974-1	
	SAE		J1926	J2244	J476a
	DIN 3852-2 (Shape X or Y)			3852-1 (Shape X or Y)	

Port threadings, codes and seals when stacked

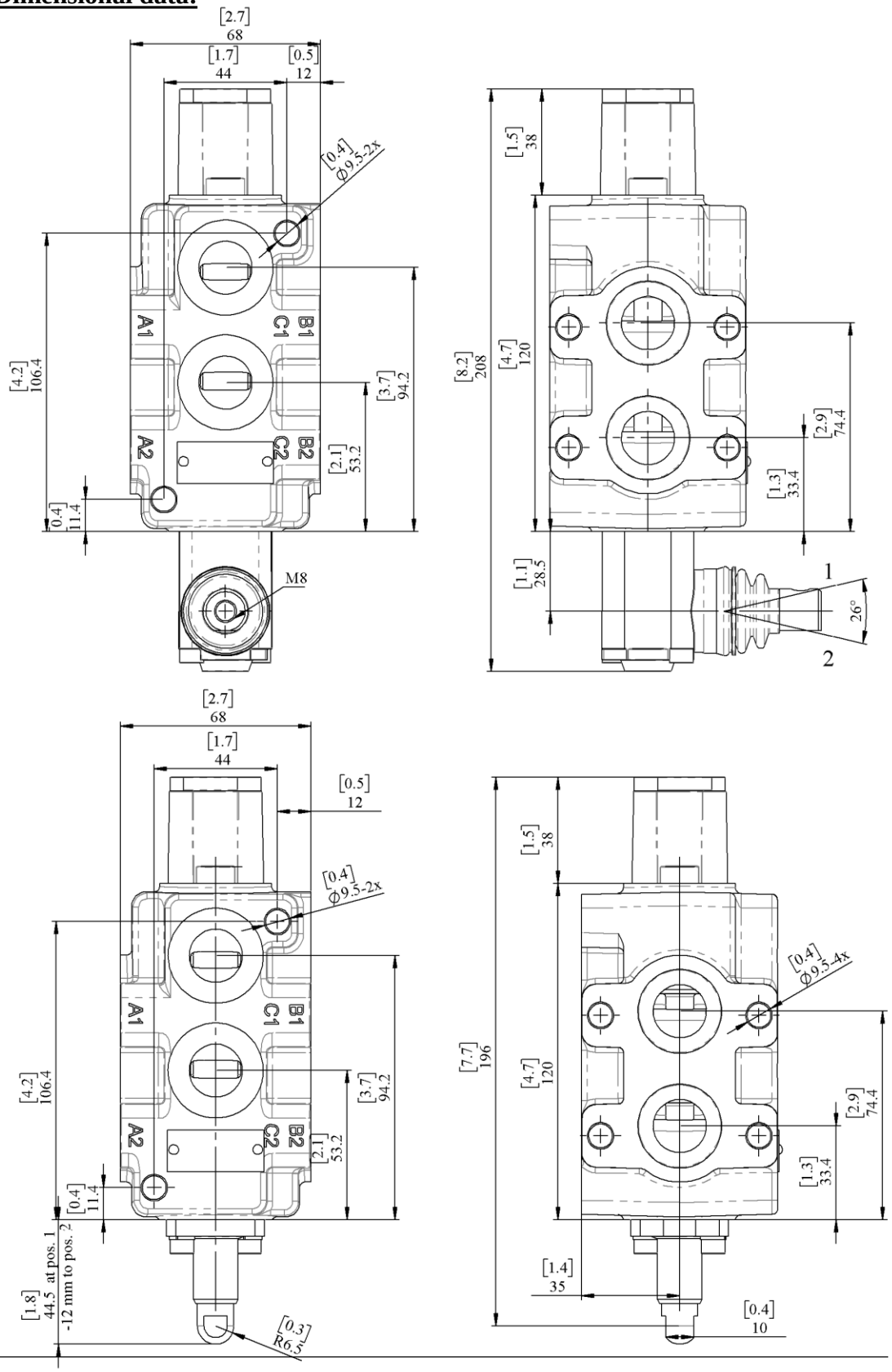
Ports "codes"	BSP "G"	UN-UNF "S8"	UN-UNF "S10"
Inlet P1, P2	G1/2	3/4-16 (SAE8)	7/8-14 (SAE10)
Working ports A, B, C, D	G1/2	3/4-16 (SAE8)	7/8-14 (SAE10)
Seals between sections	*OR 26,7x1,78 NBR90*	*OR 26,7x1,78 NBR90*	*OR 33,05x1,78 NBR90*
Pneumatic pilot ports	1/8-27 NPTF		
Hydraulic pilot ports	G1/4		

Dimensional data:



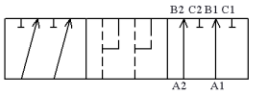
TYPE	E		F		Weight	
	mm	*in*	mm	*in*	kg	*lb*
DV90	68	*2.7*	44	*1.7*	3	*6.6*
2DV90	136	*5.4*	112	*4.4*	6.5	*14.3*
3DV90	204	*8.0*	180	*7.1*	10	*22.0*
4DV90	272	*10.7*	272	*10.7*	13.5	*29.8*

Dimensional data:



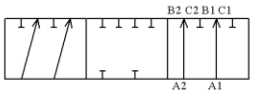
Spool types and hydraulic schemes

Spool A



2 1

Spool B



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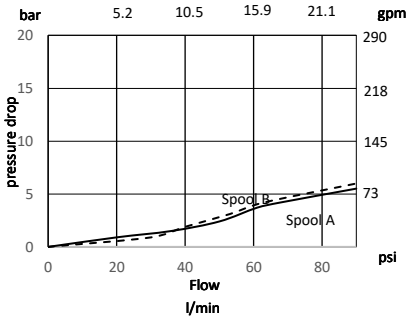
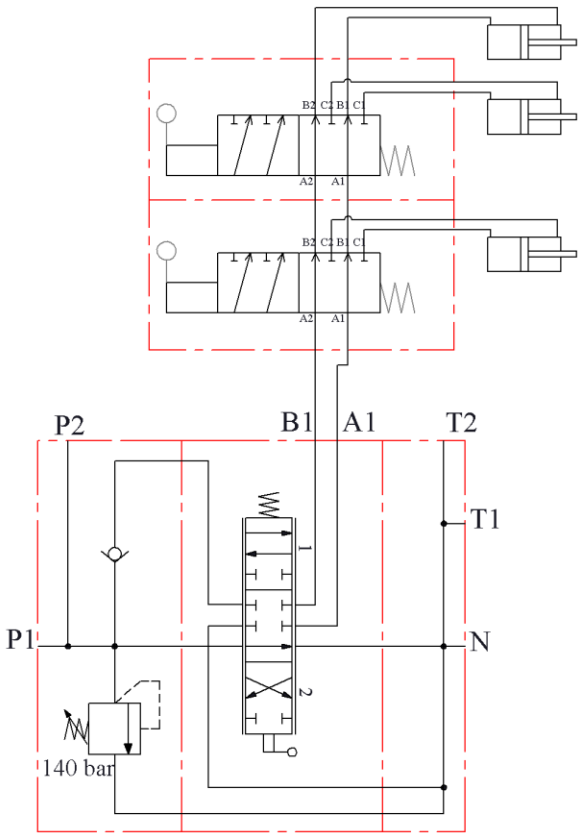
Pressure drop between spools A and B



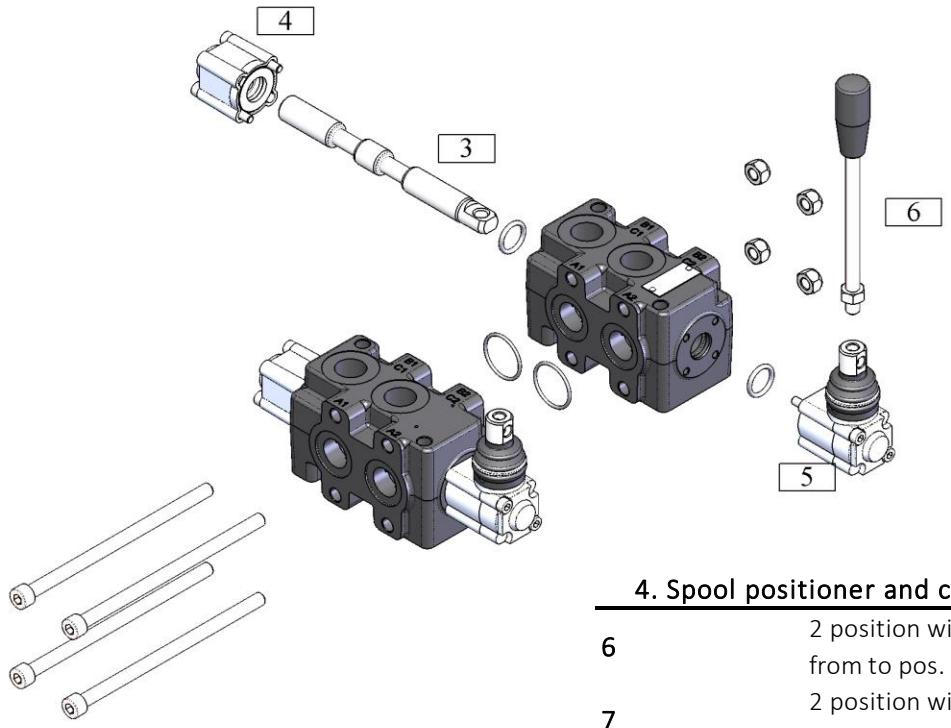
Mounting example



Order codes, complete:

2 DV90/A 11 KZ 1 / B11KZ1 - G

1 3 4 5 6



1. No. of sections

up to 4	Qnt of sections, stacked together

2. Position of control

-	Standard, control next to A2 port
(R)	Right, control next to A1 port; *no special spool is required*

3. Spool

A	6/2 spool with all ports connected in transition
B	6/2 spool with all ports closed in transition
AT	As type A with spherical end
BT	As type B with spherical end

4. Spool positioner and control (Side B)

6	2 position with spring return from to pos. 1
7	2 position with spring return to pos .2
11	Detent in position 1 and 2
0	Friction detent
7P	Pneumatic kit with return to pos. 2

5. Lever control (Side A)

SL	Without lever box
KZ	Lever box with lever M8
KZ0	Lever box, rotated 180° with lever M8
SLP	Dust proof plate
SLC	End cap for pneumatic control

6. Handle

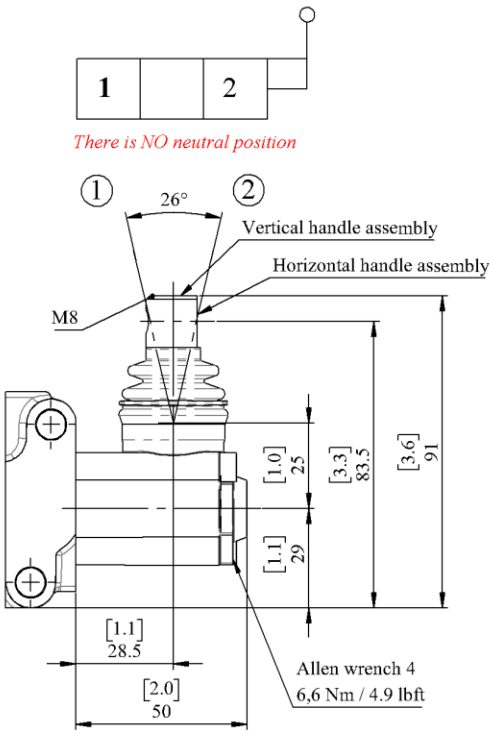
1	Handle M8x120 mm

7. Assembly kit (tie rod kits)

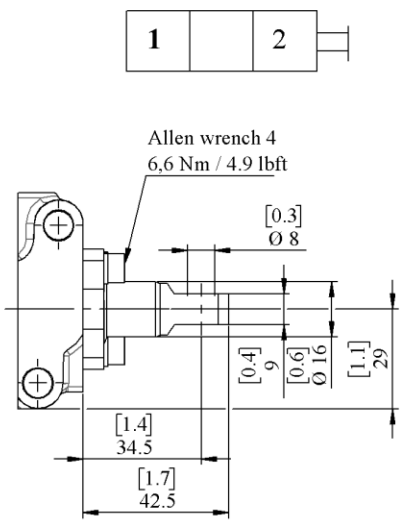
2S	Tie rod kit 2 sections
3S	Tie rod kit 3 sections
4S	Tie rod kit 4 sections

Spool controls (Side A)

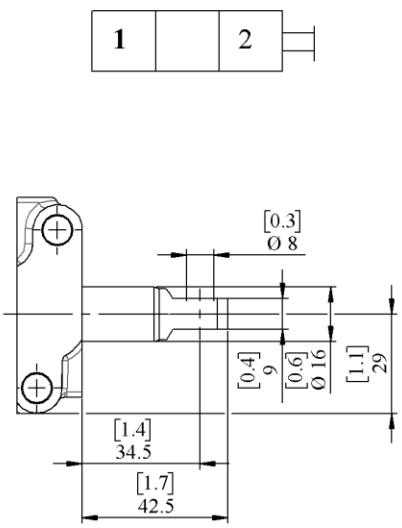
Type KZ:
Aluminum with protection booth lever pivot box; can be rotated 180 °(code KZ0)



Type SLP:
Mechanical control with dustproof plate

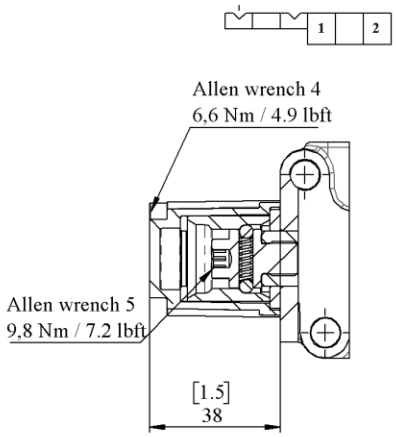


Type SL:
Mechanical control

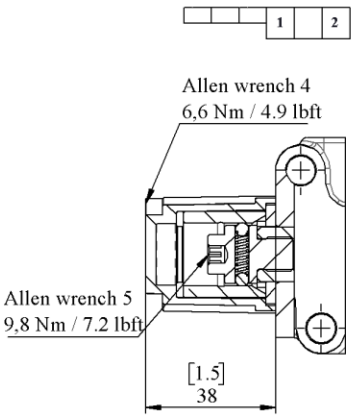


Spool positioners (Side B)

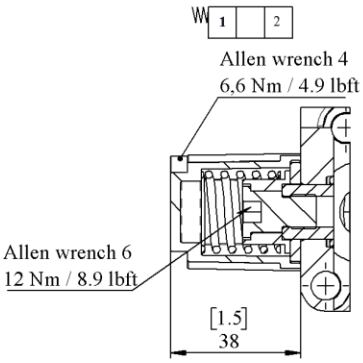
Type 11



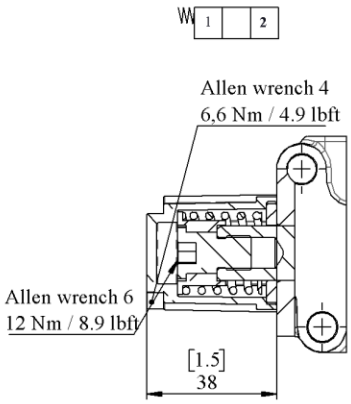
Type 0



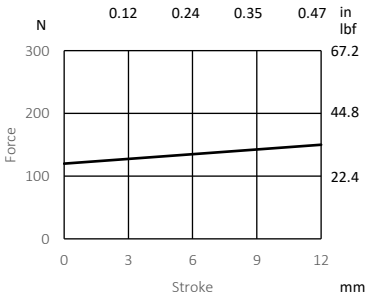
Type 6



Type 7

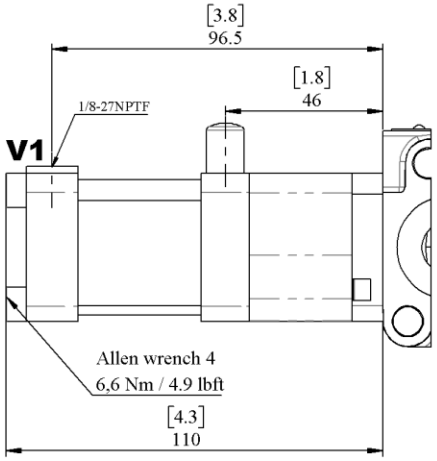


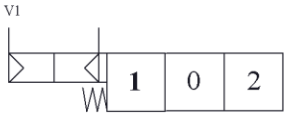
Force-stroke diagram



Pneumatic control (side B)

Type 7P (spring return to pos. 1)





Pilot, min = 5 bar
Pilot, max = 10 bar