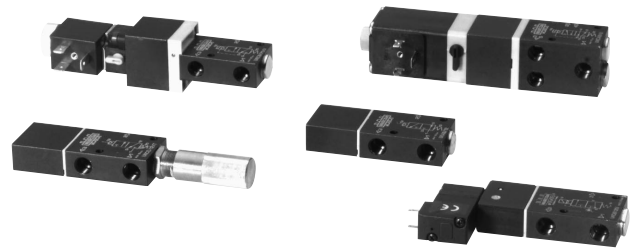


**DESCRIPTION**

Valves series "UK" are produced in the 2/2, 3/2 and 5/2 monostable pneumatic functions. In the 3 port solenoid control version with small pilot system, sizes G 1/8 and G 1/4 support the 15 mm direct acting solenoid valve (type UMCSV with fixed position); all the other versions can support both the 32 mm direct acting solenoid valve, type ULCSV/R with fixed position, than type C/USCSV with sleeve Ø 9 mm (with fixed position and rotatable coil) and with coil type USB or USBG. The 3/2 N.C. pilot actuated valves can also be used to switch vacuum thanks to a suitably reinforced spring. The poppet design assures high flow and high life. This series of valves, in the sizes G 1/8, G 1/4 and G 1/2, is prearranged for base mounting with conveyed inlet by means of rear notch screws.



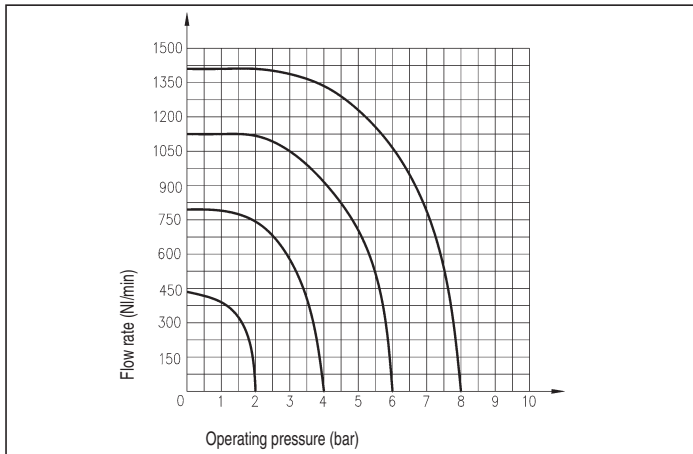
**TECHNICAL DATA**

Operating pressure	Solenoid actuated: 1,5 ÷ 10 bar Pilot actuated: 1,5 ÷ 12 bar
Working temperature	0 ÷ +70 °C (-20 °C with dry air)
Medium	Filtered, lubricated and unlubricated compressed air - vacuum
Life	50 million operations at 6 bar (in optimal use conditions)
Port size	G 1/8 - G 1/4 - G 1/2 - G 1
Pneumatic piloting port size	G 1/8
Nominal diameter	G 1/8 = 6 mm; G 1/4 = 8,5 mm; G 1/2 = 12 mm; G 1 = 23 mm
Piloting solenoid valve	UMCSV - see chapter Direct acting solenoid valves on page 2.2 ULCSV/R - see chapter Direct acting solenoid valves on page 2.5 C/USCSVG - see chapter Direct acting solenoid valves on page 2.11
Coil (only for C/USCSVG)	USB - see chapter Coils on page 2.12 USBG - see chapter Coils on page 2.12
Electric connector	USR 102/N9 - see chapter Connectors on page 2.13 ULR1B - see chapter Connectors on page 2.13 MEK 192/N - see chapter Connectors on page 2.13

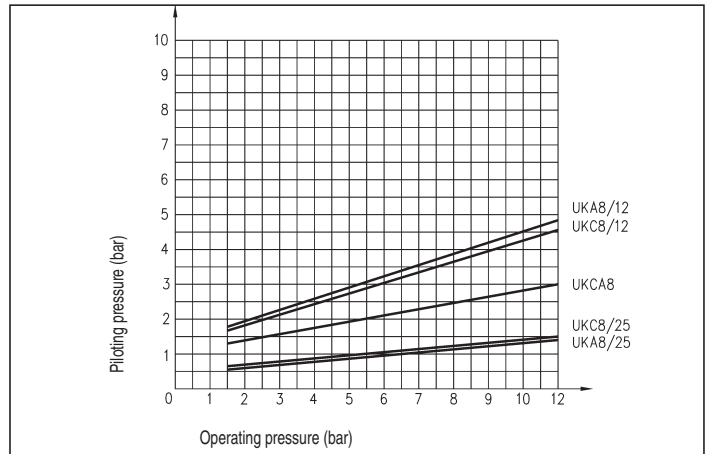
**MATERIALS**

Control rod	Hardened and nickel-plated steel
Body	Anodized aluminium alloy
Springs	Stainless steel
Seals	NBR rubber
Bush rod	Brass
Piston	Acetal resin
Terminal strip	Acetal resin
Washer	Brass
End plug	Nickel-plated brass
Clamping screws	Tropicalized steel

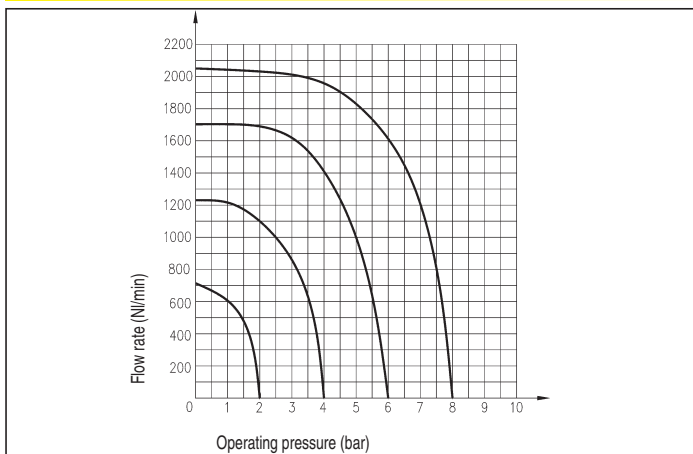
**FLOW CHART - UK G 1/8 - 5/2**



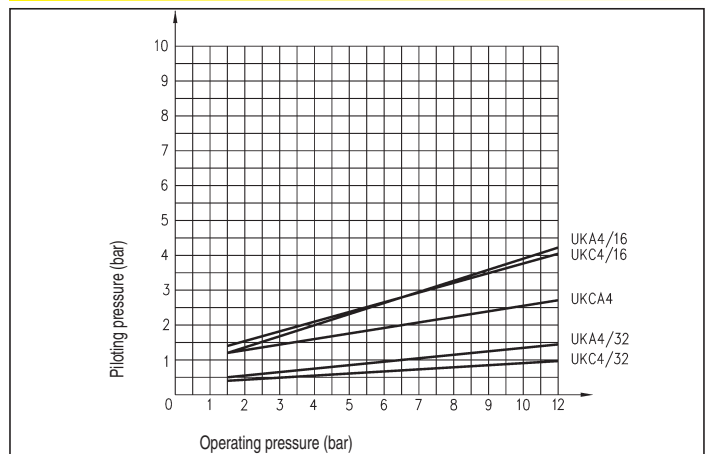
**PILOTING CHART - UK G 1/8**



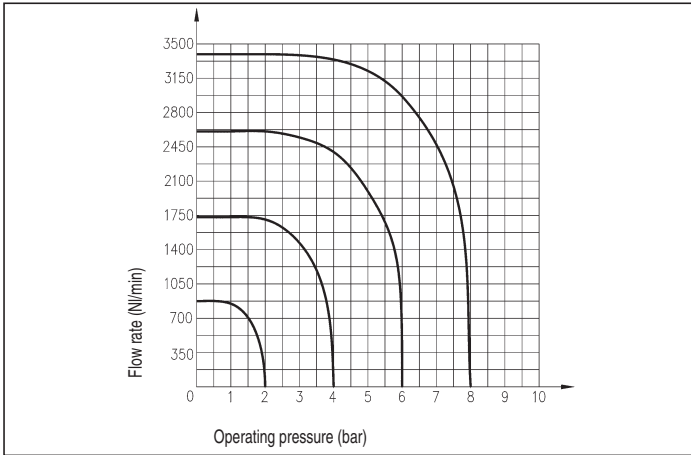
**FLOW CHART - UK G 1/4 - 5/2**



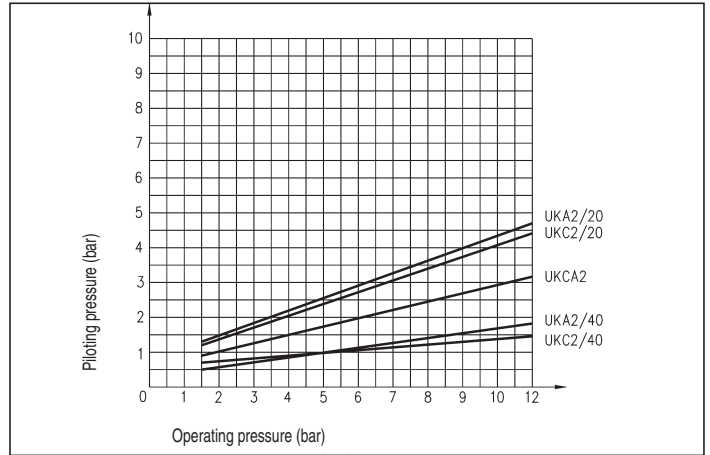
**PILOTING CHART - UK G 1/4**



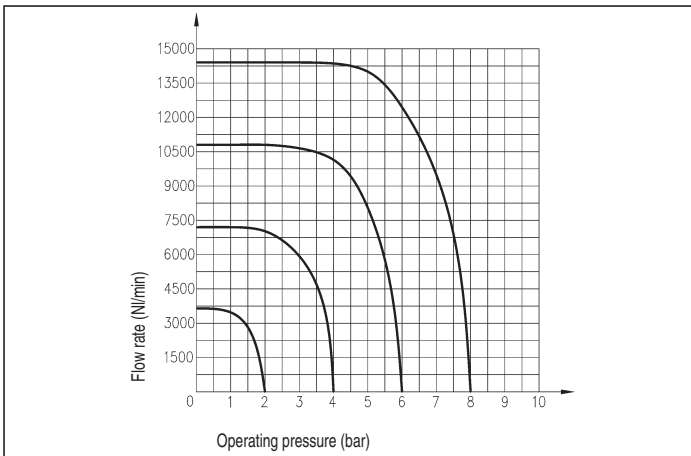
FLOW CHART - UK G 1/2 - 5/2



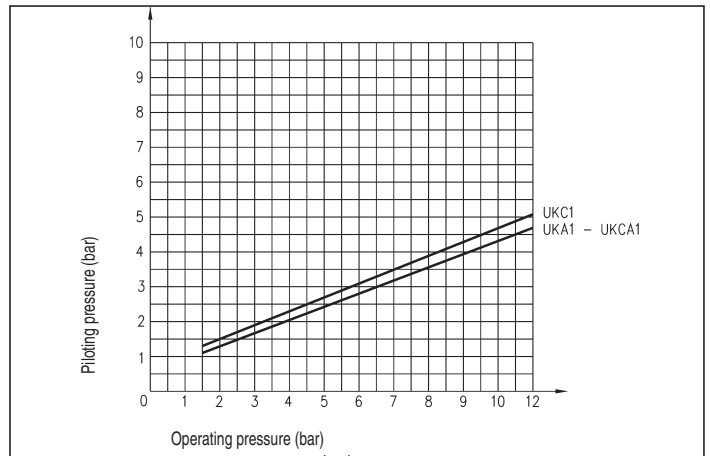
PILOTING CHART - UK G 1/2



FLOW CHART - UK G 1 - 5/2



PILOTING CHART - UK G 1



**SPARE PARTS**

SEALS KIT	
3/2 N.O. G 1/8 small pilot system	UKA/12/SG/8
3/2 N.C. G 1/8 small pilot system	UKC/12/SG/8
3/2 N.O. G 1/8 big pilot system	UKA/25/SG/8
3/2 N.C. G 1/8 big pilot system	UKC/25/SG/8
5/2 G 1/8	UKCA/SG/8
3/2 N.O. G 1/4 small pilot system	UKA/16/SG/4
3/2 N.C. G 1/4 small pilot system	UKC/16/SG/4
3/2 N.O. G 1/4 big pilot system	UKA/32/SG/4
3/2 N.C. G 1/4 big pilot system	UKC/32/SG/4
5/2 G 1/4	UKCA/SG/4
3/2 N.O. G 1/2 small pilot system	UKA/20/SG/2
3/2 N.C. G 1/2 small pilot system	UKC/20/SG/2
3/2 N.O. G 1/2 big pilot system	UKA/40/SG/2
3/2 N.C. G 1/2 big pilot system	UKC/40/SG/2
5/2 G 1/2	UKCA/SG/2
3/2 N.O. G 1	UKA/SG/1
3/2 N.C. G 1	UKC/SG/1

**PILOT ACTUATED VALVES G 1/8 - 3 AND 5 PORT**

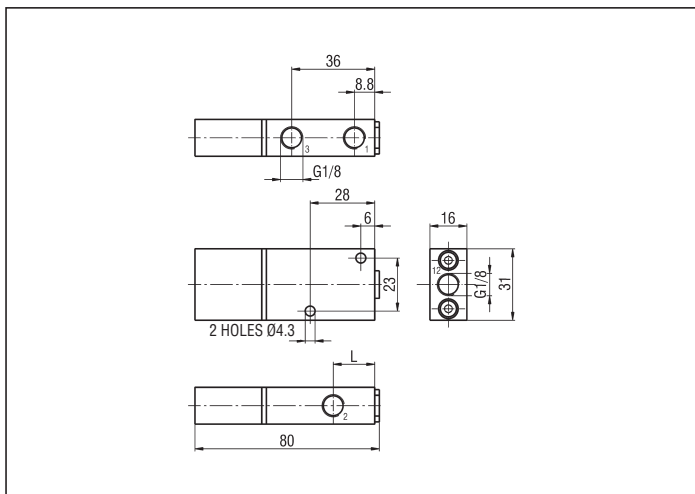
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small pneumatic	Mechanical spring	18	34	700	115	UKA 8/12
	3/2 N.C. monostable	Small pneumatic	Mechanical spring	20	29	700	115	UKC 8/12
		Servo fed small pneumatic	Mechanical spring	20	29	700	115	UKC 8/12/SA
		Adjustable small pneumatic	Mechanical spring	-	-	700	180	UKC 8/12/T
	3/2 N.O. monostable	Big pneumatic	Mechanical spring	18	38	700	135	UKA 8/25
	3/2 N.C. monostable	Big pneumatic	Mechanical spring	18	38	700	135	UKC 8/25*
		Servo fed big pneumatic	Mechanical spring	18	38	700	135	UKC 8/25/SA
		Adjustable big pneumatic	Mechanical spring	-	-	700	200	UKC 8/25/T
	5/2 monostable	Pneumatic	Mechanical spring	19	40	650	195	UKCA8
		Servo fed pneumatic	Mechanical spring	19	40	650	195	UKCA8/SA

P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.

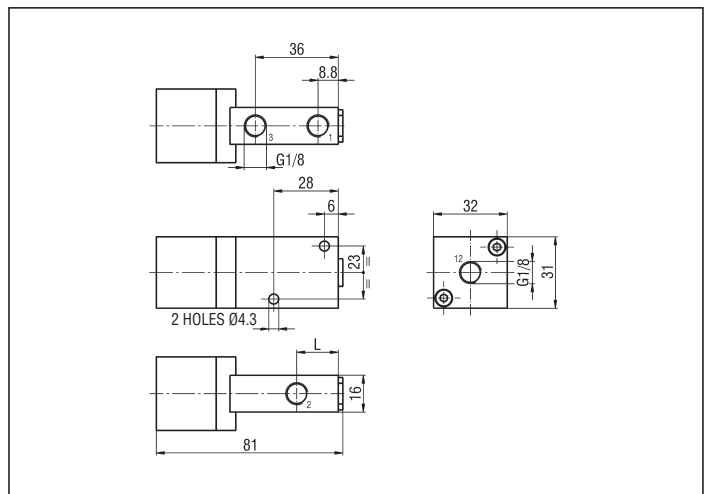
E.G.: UKHA 8/12; UKHC 8/25

\* IF THE TYPE INCLUDES THE SUFFIX "/MR," THIS VALVE CAN BE USED TO SWITCH VACUUM

**3 PORT SMALL PNEUMATIC**

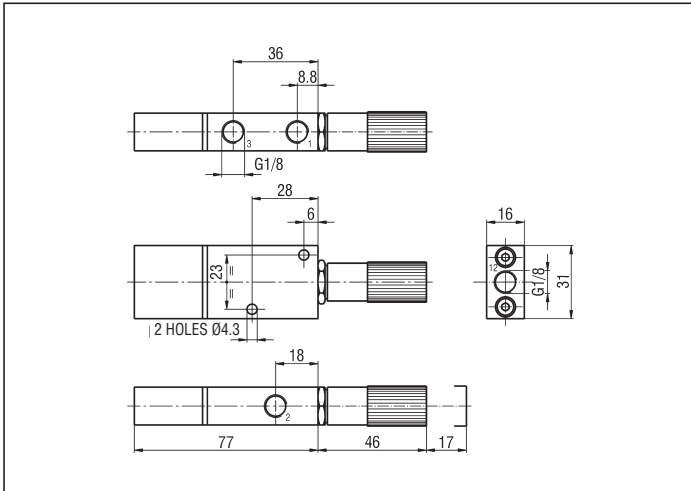


**3 PORT BIG PNEUMATIC**

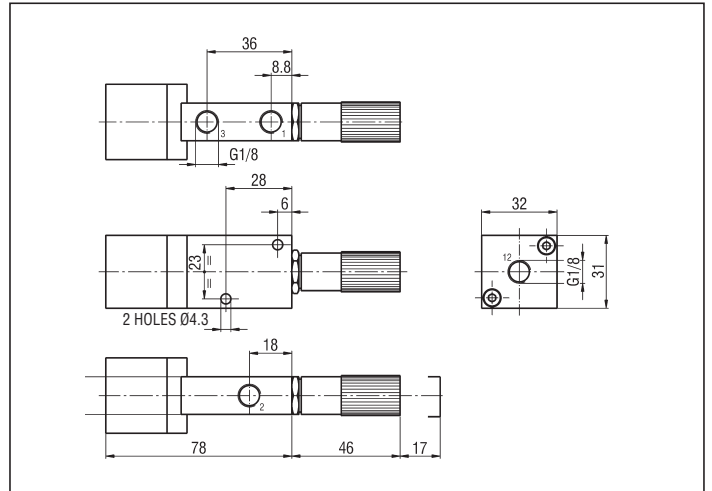


FUNCTION	L
3/2 N.O.	23
3/2 N.C.	18

UKC 8/12/T

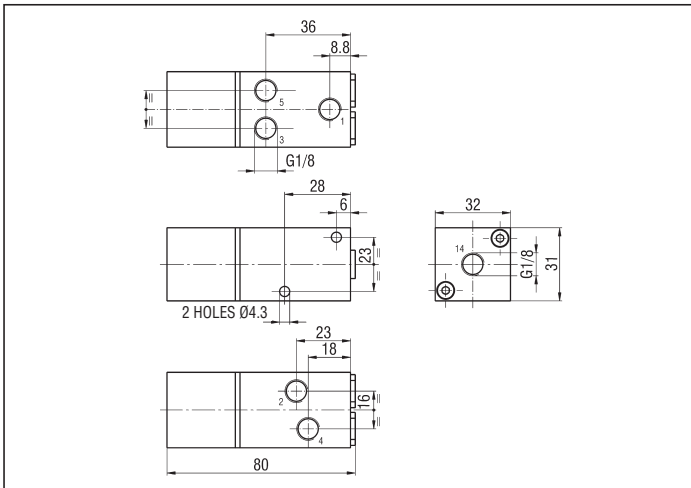


UKC 8/25/T



2

5 PORT



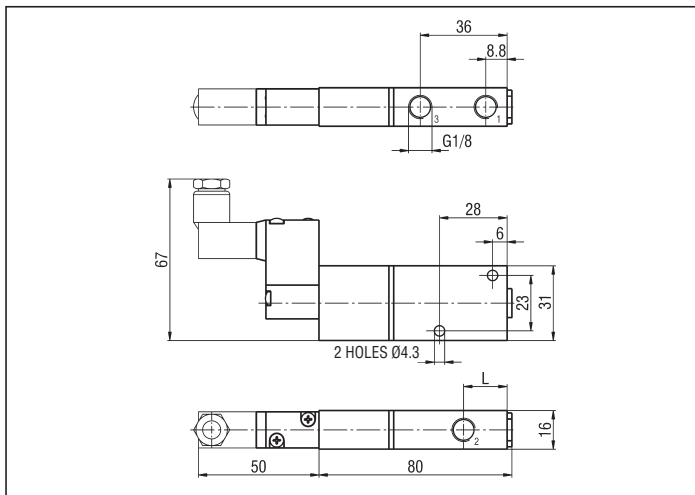
**SOLENOID ACTUATED VALVES G 1/8 - 3 AND 5 PORT**

Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min)	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small solenoid	Mechanical spring	10	28	700	108	UKA 8/12/U*
	3/2 N.C. monostable	Small solenoid	Mechanical spring	10	28	700	108	UKC 8/12/U*
	3/2 N.O. monostable	Big solenoid	Mechanical spring	18	38	700	135	UKA 8/25/U**
	3/2 N.C. monostable	Big solenoid	Mechanical spring	18	38	700	135	UKC 8/25/U**
	5/2 monostable	Solenoid	Mechanical spring	19	40	650	203	UKCA 8/U**

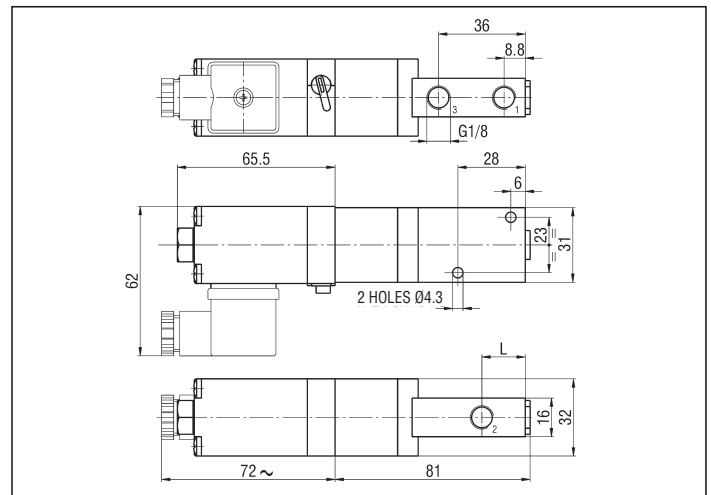
\* TYPES OF THESE SOLENOID VALVES INCLUDE THE PILOTING SOLENOID VALVES "UMCSV" - SEE ON PAGE 2.2 (SPECIFY THE VOLTAGE IN THE ORDER)

\*\* TYPES OF THESE SOLENOID VALVES DO NOT INCLUDE THE PILOTING SOLENOID VALVES (SEE ON PAGE 2.5 FOR "ULCSV/R" AND ON PAGE 2.11 FOR "C/USCSVG")  
 P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.  
 E.G.: UKHA 8/12/U; UKHC 8/25/U

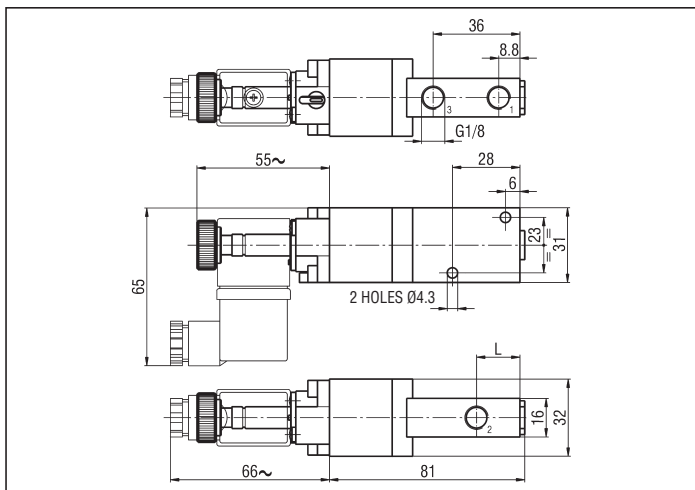
**3 PORT SMALL SOLENOID**



**3 PORT BIG SOLENOID WITH ULCSV/R**

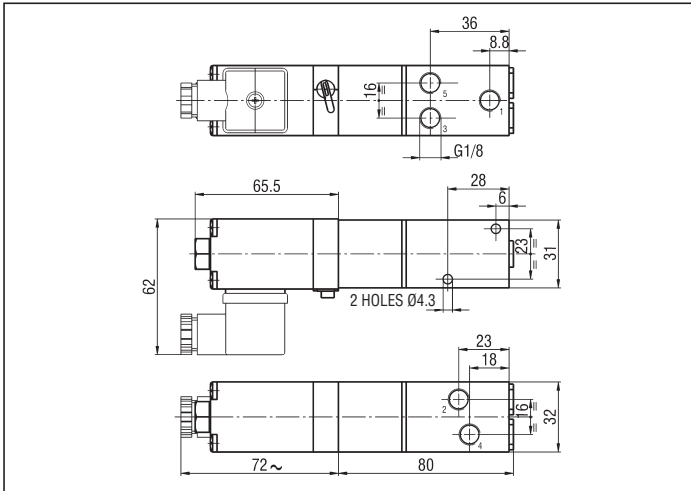


**3 PORT BIG SOLENOID WITH C/USCSVG**

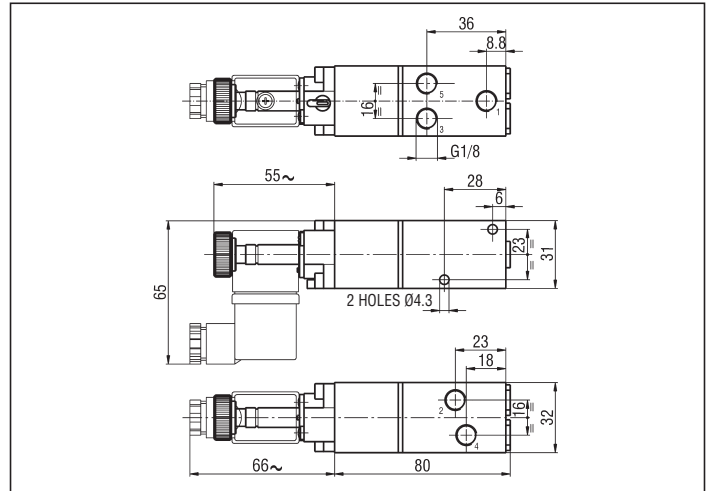


FUNCTION	L
3/2 N.O.	23
3/2 N.C.	18

## 5 PORT WITH ULCSV/R

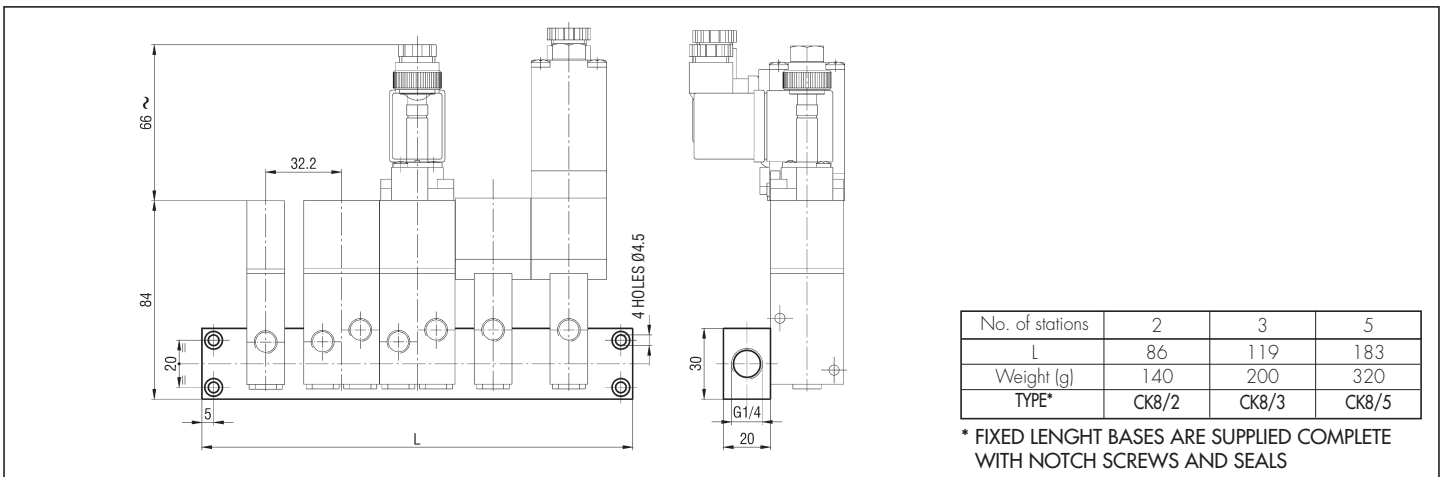


## 5 PORT WITH C/USCSVG



**2**

## FIXED LENGTH BASE FOR MOUNTING OF VALVES G 1/8 - CK8



No. of stations	2	3	5
L	86	119	183
Weight (g)	140	200	320
TYPE*	CK8/2	CK8/3	CK8/5

\* FIXED LENGTH BASES ARE SUPPLIED COMPLETE WITH NOTCH SCREWS AND SEALS

**PILOT ACTUATED VALVES G 1/4 - 3 AND 5 PORT**

**2**

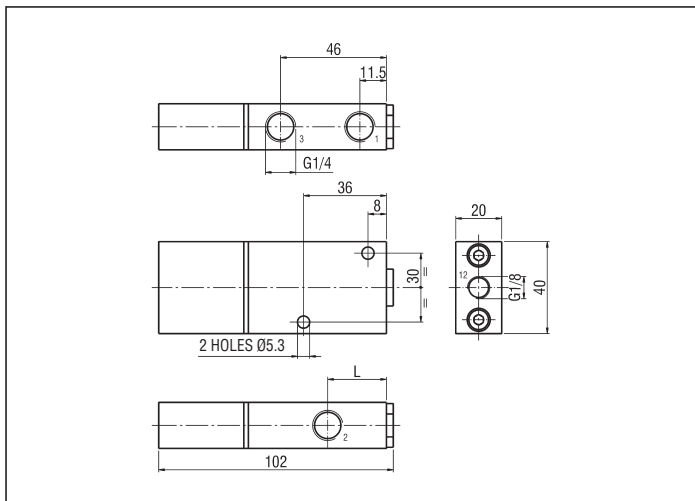
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small pneumatic	Mechanical spring	20	30	950	225	UKA 4/16
	3/2 N.C. monostable	Small pneumatic	Mechanical spring	20	30	1100	225	UKC 4/16
		Servo fed small pneumatic	Mechanical spring	16	30	1100	225	UKC 4/16/SA
	3/2 N.O. monostable	Big pneumatic	Mechanical spring	20	30	950	280	UKA 4/32
	3/2 N.C. monostable	Big pneumatic	Mechanical spring	20	30	1100	280	UKC 4/32*
		Servo fed big pneumatic	Mechanical spring	20	28	1100	280	UKC 4/32/SA
	5/2 monostable	Pneumatic	Mechanical spring	24	45	1000	415	UKCA 4
		Servo fed pneumatic	Mechanical spring	24	45	1000	415	UKCA 4/SA

P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.

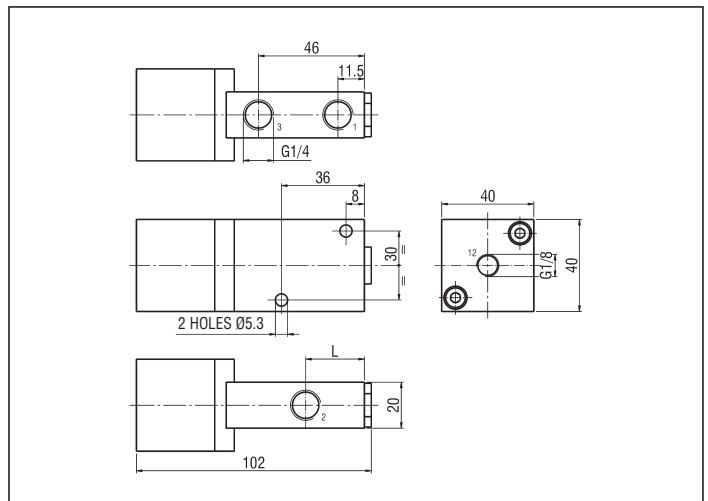
E.G.: UKHA 4/16; UKHC 4/32

\* IF THE TYPE INCLUDES THE SUFFIX "/MR," THIS VALVE CAN BE USED TO SWITCH VACUUM

**3 PORT SMALL PNEUMATIC**

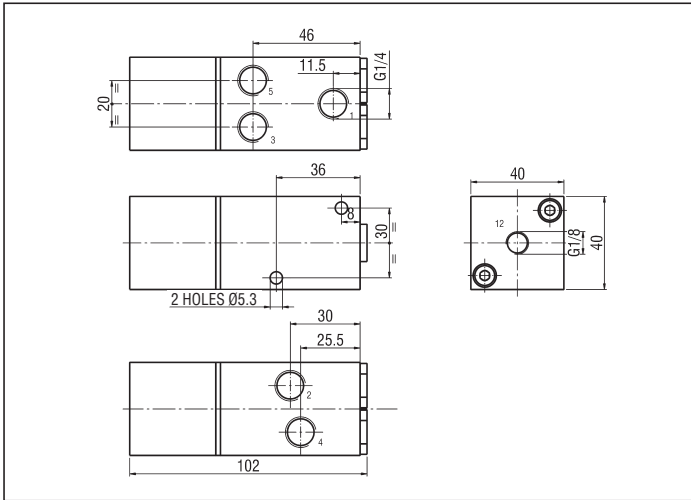


**3 PORT BIG PNEUMATIC**



FUNCTION	L
3/2 N.O.	30
3/2 N.C.	25,5

5 PORT



2

SOLENOID ACTUATED VALVES G 1/4 - 3 AND 5 PORT

Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min)	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small solenoid	Mechanical spring	10	28	950	225	UKA 4/16/U*
	3/2 N.C. monostable	Small solenoid	Mechanical spring	10	28	1100	230	UKC 4/16/U*
	3/2 N.O. monostable	Big solenoid	Mechanical spring	20	30	950	280	UKA 4/32/U**
	3/2 N.C. monostable	Big solenoid	Mechanical spring	20	30	1100	280	UKC 4/32/U**
	5/2 monostable	Solenoid	Mechanical spring	24	45	1000	415	UKCA 4/U**

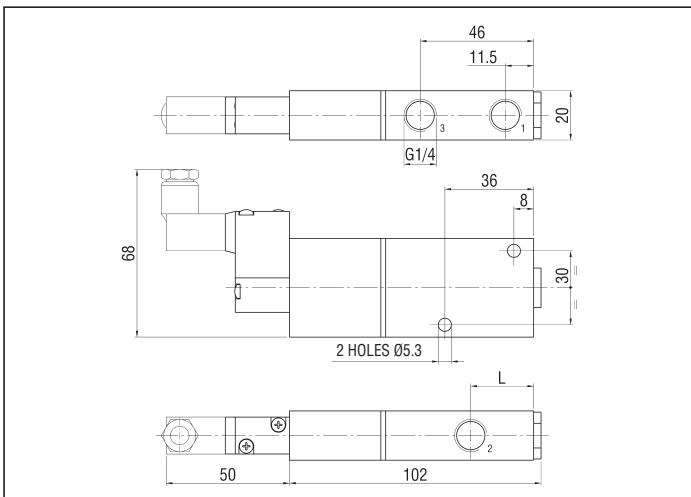
\* TYPES OF THESE SOLENOID VALVES INCLUDE THE PILOTING SOLENOID VALVES "UMCSV" – SEE ON PAGE 2.2 (SPECIFY THE VOLTAGE IN THE ORDER)

\*\* TYPES OF THESE SOLENOID VALVES DO NOT INCLUDE THE PILOTING SOLENOID VALVES (SEE ON PAGE 2.5 FOR "ULCSV/R" AND ON PAGE 2.11 FOR "C/USCSVG")

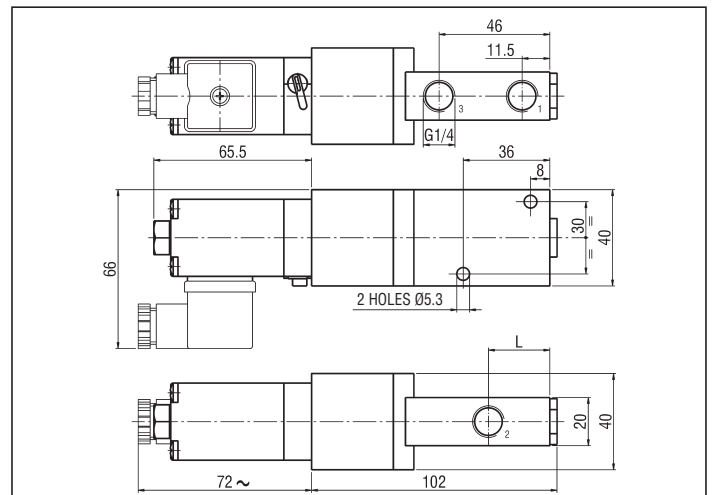
P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.

E.G.: UKHA 4/16/U; UKHC 4/32/U

3 PORT SMALL SOLENOID

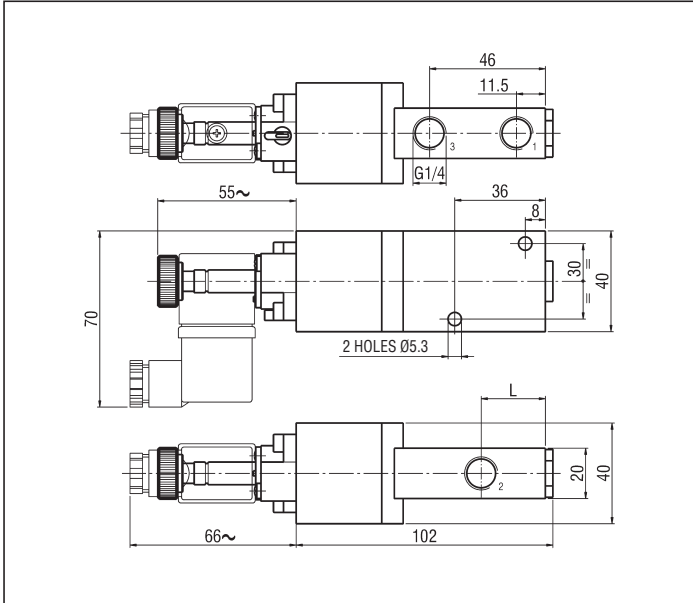


3 PORT WITH ULCSV/R

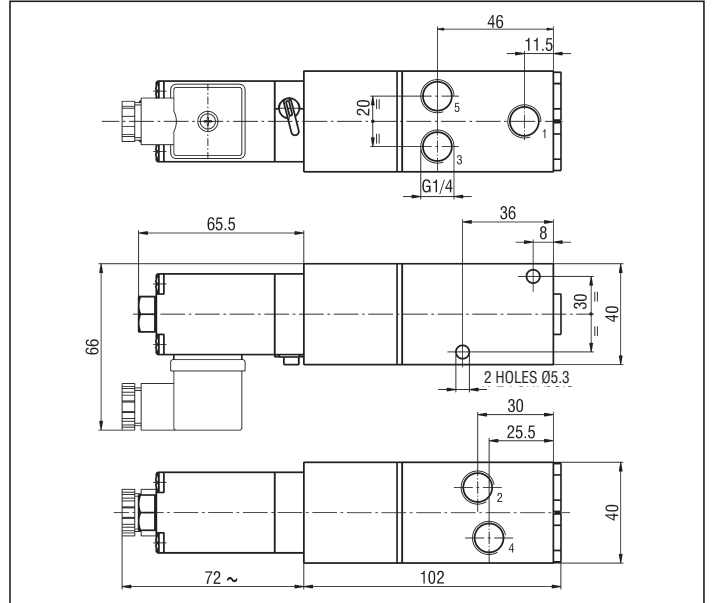




**3 PORT BIG SOLENOID WITH C/USCSVG**

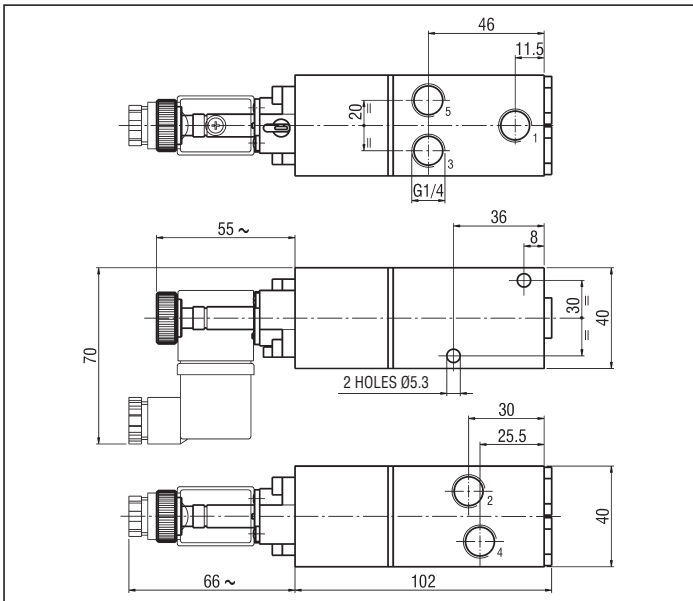


**5 PORT WITH ULCSV/R**

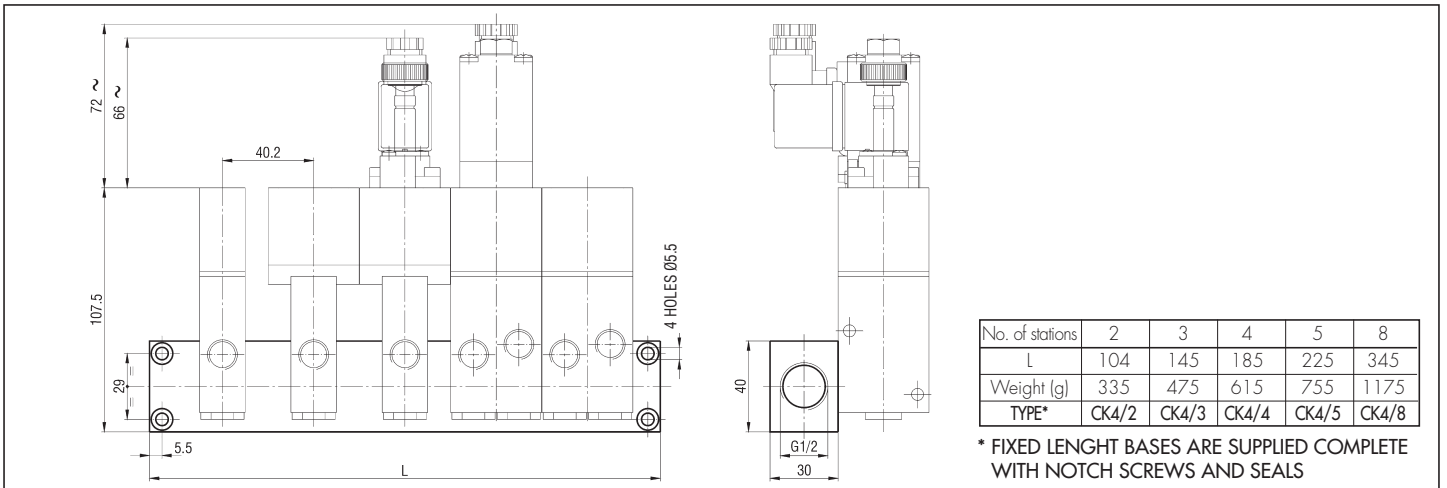


FUNCTION	L
3/2 N.O.	30
3/2 N.C.	25,5

**5 PORT WITH C/USCSVG**



**FIXED LENGTH BASE MOUNTING VALVES G 1/4 - CK4**



No. of stations	2	3	4	5	8
L	104	145	185	225	345
Weight (g)	335	475	615	755	1175
TYPE*	CK4/2	CK4/3	CK4/4	CK4/5	CK4/8

\* FIXED LENGTH BASES ARE SUPPLIED COMPLETE WITH NOTCH SCREWS AND SEALS

## PILOT ACTUATED VALVES G 1/2 - 3 AND 5 PORT

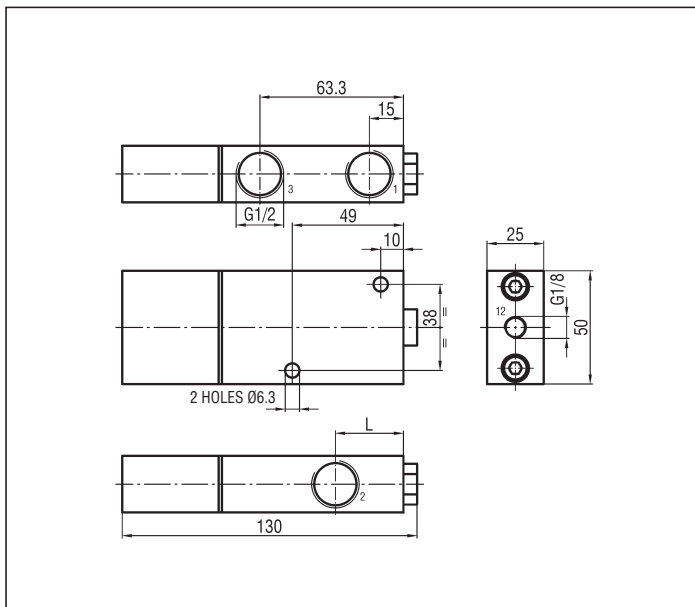
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small pneumatic	Mechanical spring	24	32	1900	420	UKA 2/20
	3/2 N.C. monostable	Small pneumatic	Mechanical spring	24	32	2100	420	UKC 2/20
		Servo fed small pneumatic	Mechanical spring	25	32	2100	520	UKC 2/20/SA
	3/2 N.O. monostable	Big pneumatic	Mechanical spring	24	32	1900	520	UKA 2/40
	3/2 N.C. monostable	Big pneumatic	Mechanical spring	24	32	2100	520	UKC 2/40*
		Servo fed big pneumatic	Mechanical spring	20	30	2100	520	UKC 2/40/SA
	5/2 monostable	Pneumatic	Mechanical spring	24	40	2000	800	UKCA 2
		Servo fed pneumatic	Mechanical spring	24	40	2000	800	UKCA 2/SA

P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.

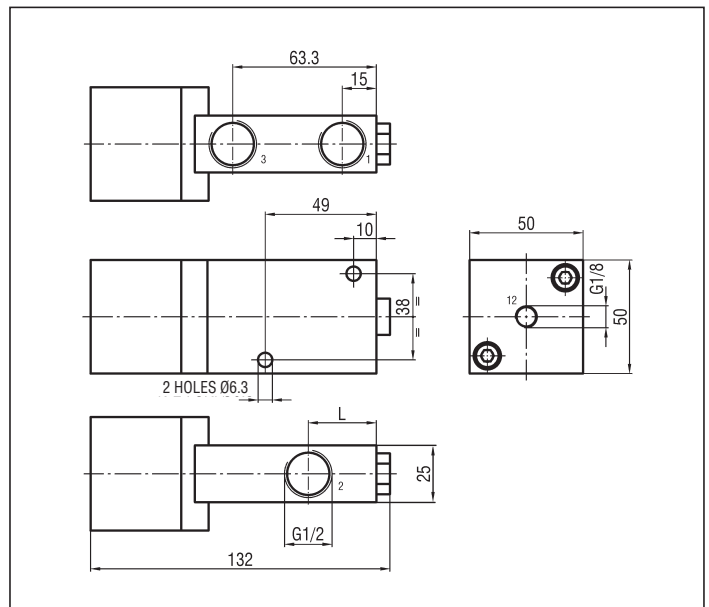
E.G.: UKHA 2/20; UKHC 2/20

\* IF THE TYPE INCLUDES THE SUFFIX "/MR," THIS VALVE CAN BE USED TO SWITCH VACUUM

### 3 PORT SMALL PNEUMATIC

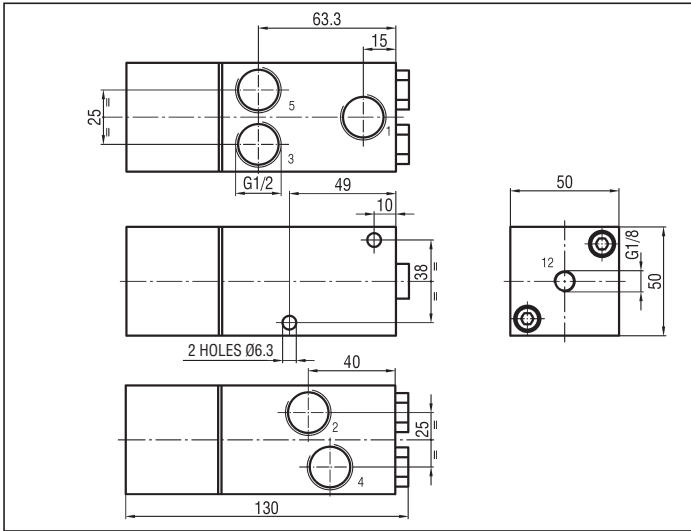


### 3 PORT BIG PNEUMATIC



FUNCTION	L
3/2 N.O.	40
3/2 N.C.	30

5 PORT



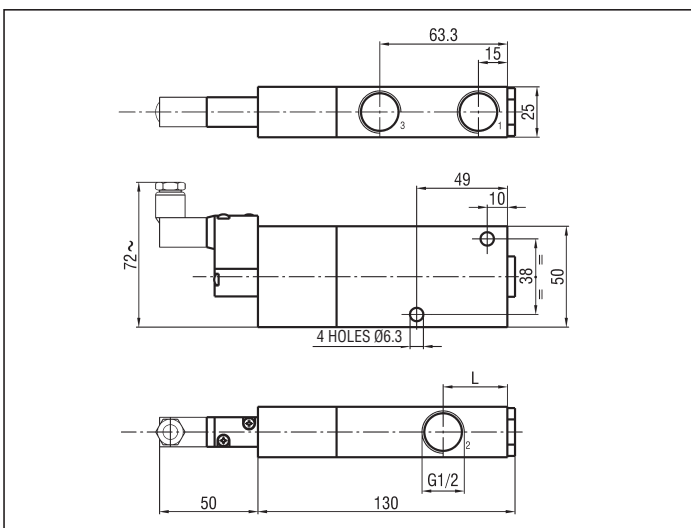
**SOLENOID ACTUATED VALVES G 1/2 - 3 AND 5 PORT**

Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small solenoid	Mechanical spring	24	32	1900	430	UKA 2/20/U*
	3/2 N.C. monostable	Small solenoid	Mechanical spring	24	32	2100	440	UKC 2/20/U*
	3/2 N.O. monostable	Big solenoid	Mechanical spring	24	32	1900	530	UKA 2/40/U**
	3/2 N.C. monostable	Big solenoid	Mechanical spring	24	32	2100	540	UKC 2/40/U**
	5/2 monostable	Solenoid	Mechanical spring	24	32	2000	810	UKCA 2/U**

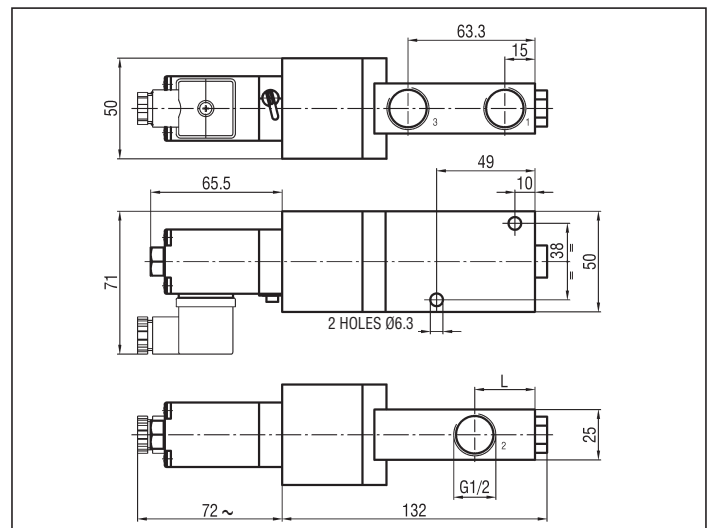
\* TYPES OF THESE SOLENOID VALVES INCLUDE THE PILOTING SOLENOID VALVES "UMCSV" - SEE ON PAGE 2.2 (SPECIFY THE VOLTAGE IN THE ORDER)

\*\* TYPES OF THESE SOLENOID VALVES DO NOT INCLUDE THE PILOTING SOLENOID VALVES (SEE ON PAGE 2.5 FOR "ULCSV/R" AND ON PAGE 2.11 FOR "C/USCSVG")  
P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES. - E.G.: UKHA 2/40/U; UKHC 2/40/U

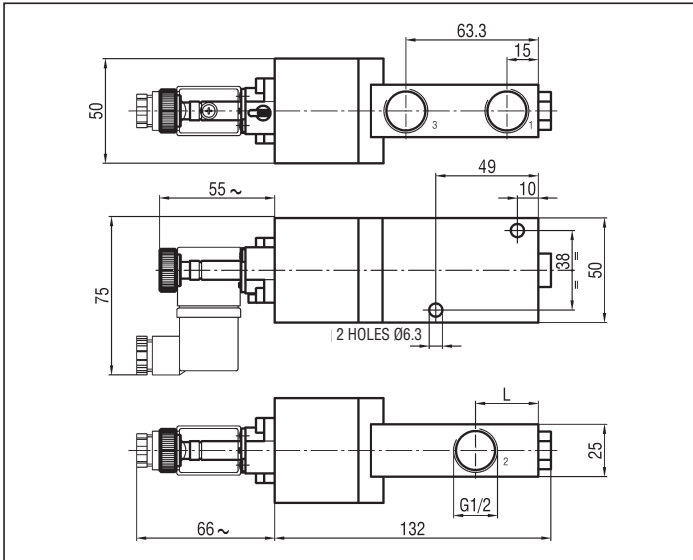
3 PORT SMALL SOLENOID



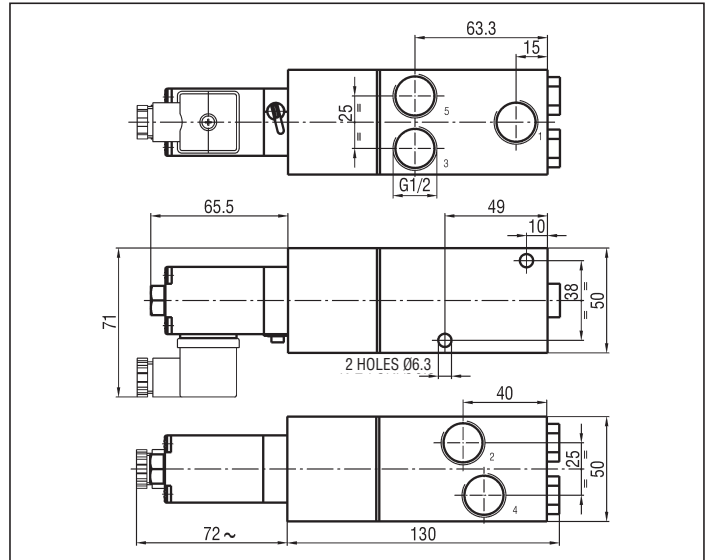
3 PORT BIG SOLENOID WITH ULCSV/R



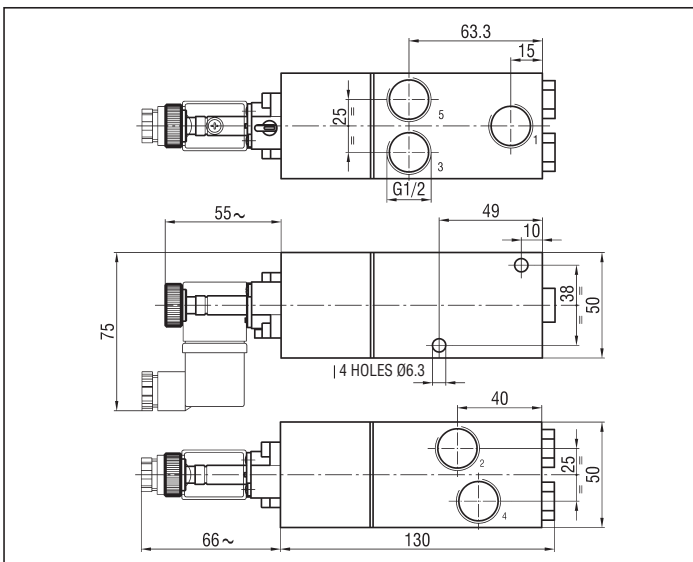
### 3 PORT BIG SOLENOID WITH C/USCSVG



### 5 PORT WITH ULCSV/R

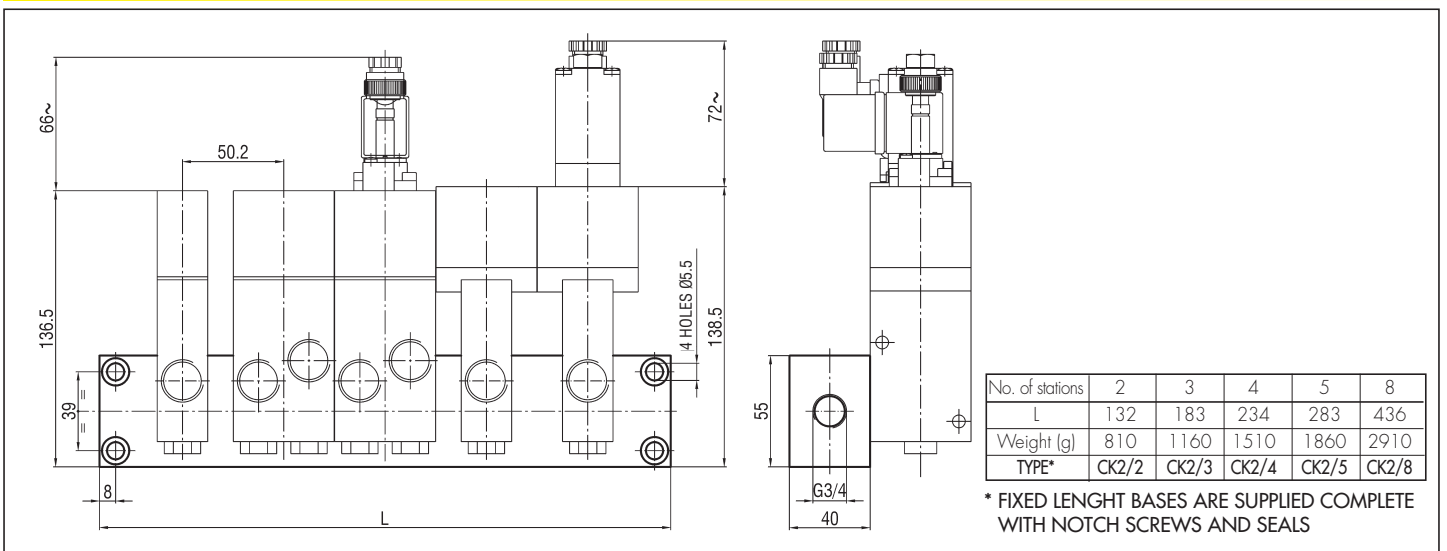


### 5 PORT WITH C/USCSVG



FUNCTION	L
3/2 N.O.	40
3/2 N.C.	30

### FIXED LENGTH BASE MOUNTING OF VALVES G 1/2 - CK2



**PILOT ACTUATED VALVES G 1 - 3 AND 5 PORT**

**2**

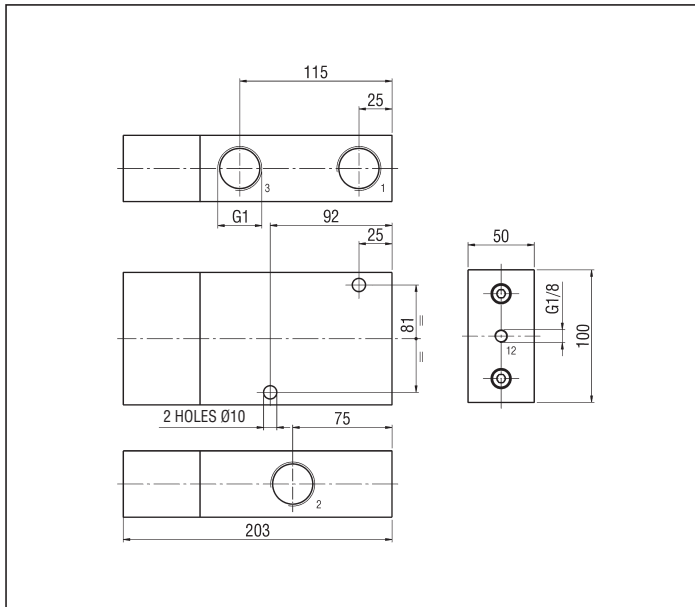
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min)	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small pneumatic	Mechanical spring	40	65	11300	2550	UKA 1
	3/2 N.C. monostable	Small pneumatic	Mechanical spring	40	65	7800	2550	UKC 1*
	5/2 monostable	Pneumatic	Mechanical spring	40	70	8050	5160	UKCA 1

P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.

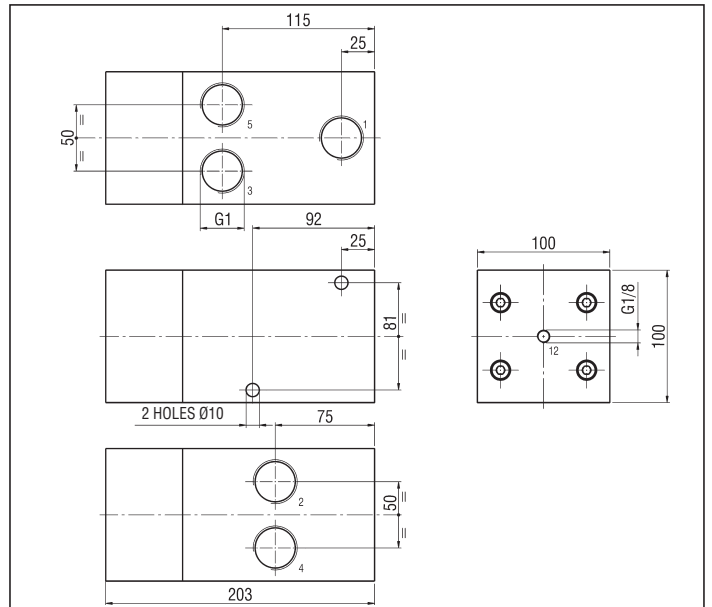
E.G.: UKHA 1; UKHC 1

\* IF THE TYPE INCLUDES THE SUFFIX "/MR," THIS VALVE CAN BE USED TO SWITCH VACUUM

**UKA 1 - UKC 1**



**UKCA 1**

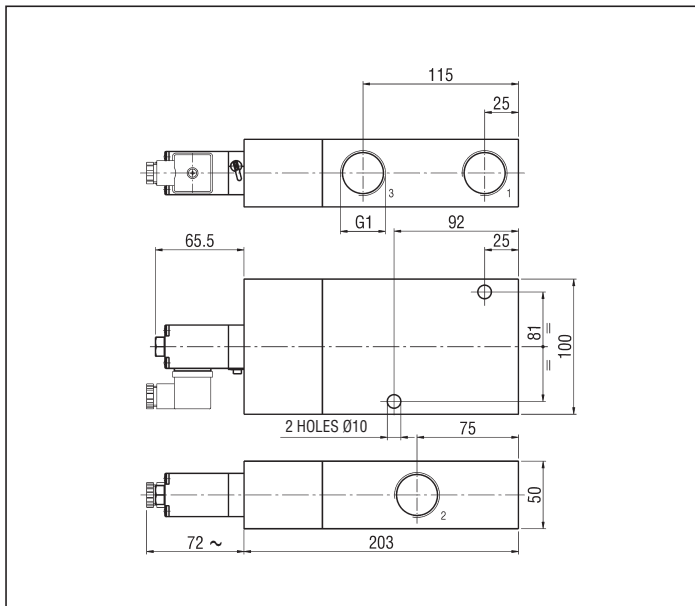


## SOLENOID ACTUATED VALVES G 1 - 3 AND 5 PORT

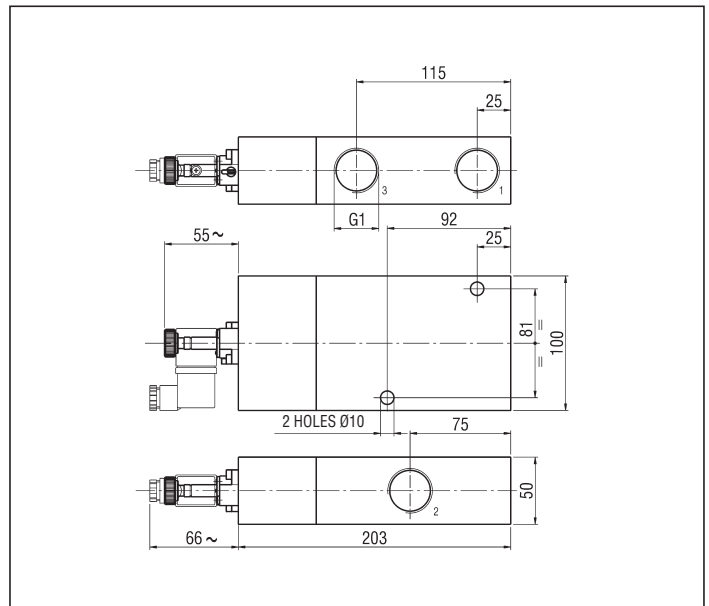
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min)	Weight (g)	TYPE
		Pilot	Return	Energized	De-energized			
	3/2 N.O. monostable	Small solenoid	Mechanical spring	40	65	11300	2600	UKA 1/U*
	3/2 N.C. monostable	Small solenoid	Mechanical spring	40	65	7800	2550	UKC 1/U*
	5/2 monostable	Solenoid	Mechanical spring	40	70	8050	5100	UKCA 1/U*

\* THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE THE PILOTING SOLENOID VALVES (SEE ON PAGE 2.5 FOR "ULCSV/R" AND ON PAGE 2.11 FOR "C/USCSVG")  
 P.S.: ADD THE LETTER "H" BETWEEN THE LETTERS "K" AND "A" (OR "C") TO ORDER 2/2 N.O. (OR 2/2 N.C.) VALVES.  
 E.G.: UKHA 1/U; UKHC 1/U

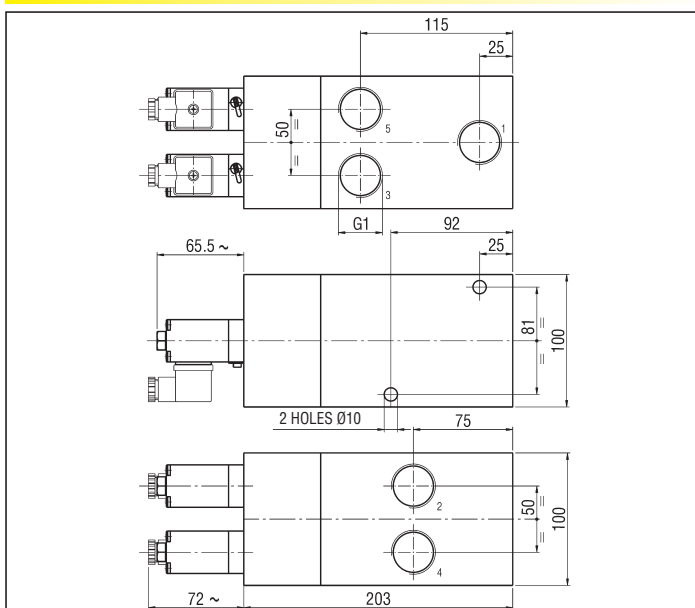
### 3 PORT WITH ULCSV/R



### 3 PORT WITH C/USCSVG



### 5 PORT WITH ULCSV/R



### 5 PORT WITH C/USCSVG

