

series MEK

Spool compact valves pilot and solenoid actuated G 1/8 - G 1/4

DESCRIPTION

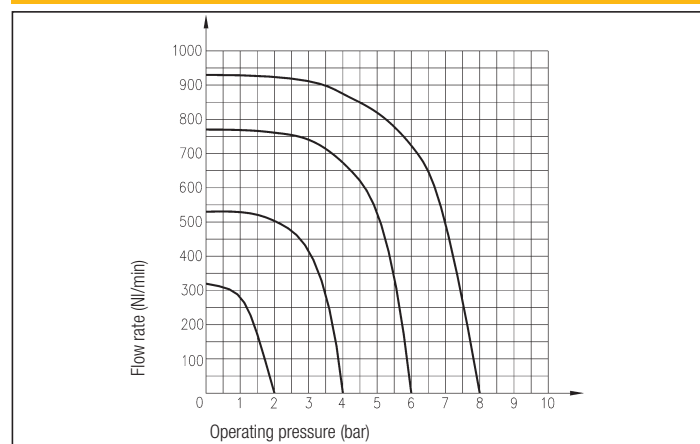
Valves series "MEK", in the 5/2 and 5/3 pneumatic functions, have been realized with compact overall dimensions yet assuring high flow. The kind of construction is based on a balanced spool with dynamic seal thanks to antiglueing mix seals positioned on the same spool. In the solenoid control version, size G 1/8 supports 15 mm low absorption direct acting solenoid valve type UMCSV, while size G 1/4 supports both 15 mm and 22 mm direct acting solenoid valve type C/USCSV with sleeve Ø 9 mm. This series of valves is prearranged for manifold mounting with fixed stations and with conveyed inlet and exhausts, by means of frontal screws. The bases are fit for mounting onto rails according to DIN 46277/3. Upon request they comply with ATEX directive: 3GD category for the version with the 15 mm piloting solenoid valve and 2GD for all the other ones.

TECHNICAL DATA

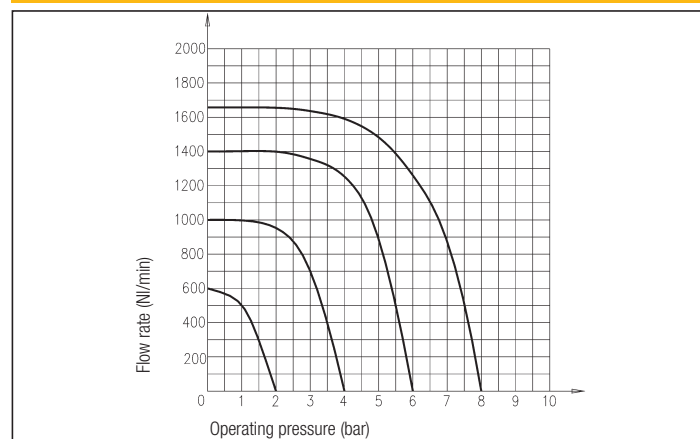
Operating pressure	Monostable: 2 ÷ 8 bar Bistable: 1,5 ÷ 8 bar
Working temperature	0 ÷ +60 °C (-10 °C with dry air)
Fluid	Compressed air, filtered, continuous lubricated, unlubricated or dry lubricated
Port size	G 1/8 - G 1/4
Pneumatic piloting port size	M5
Nominal diameter	G 1/8 = 5 mm; G 1/4 = 6,5 mm
Piloting solenoid valve	15 mm: UMCSV per G 1/8 and G 1/4 - see on page 2.5 22 mm: C/USCSV per G 1/4 - see on page 2.14
Coil	USB for G 1/4 - see chapter coils on page 2.17 USBG for G 1/4 - see chapter coils on page 2.17* USBG2 for G 1/4 - see chapter coils on page 2.17*
Electric connectors	MEK192/N for G 1/8 and G 1/4 with UMCSV; USR102/N9 for G 1/4 with C/USCSV ULR1B for G 1/4 with C/USCSV* See chapter connections on page 2.18

* Only for valve individually used (coil and connector protrude from the dimensions of the valves)

FLOW CHART - MEK G 1/8 5/2



FLOW CHART - MEK G 1/4 5/2



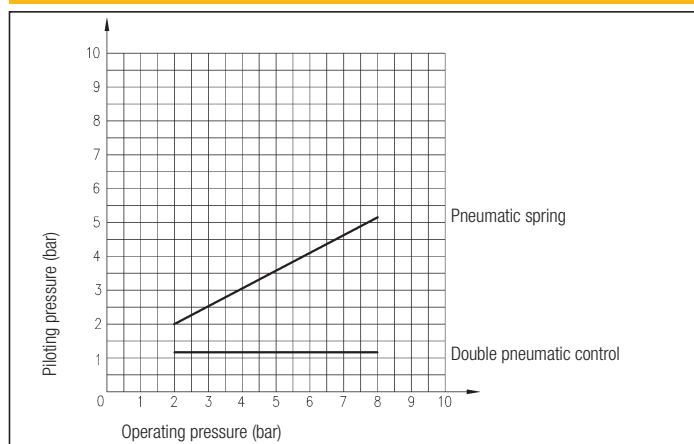
MATERIALS

Bottoms	Anodized aluminium alloy
Body	Anodized aluminium alloy
Springs	Stainless steel
Seals	NBR rubber
Spool	Anodized aluminium alloy
Piston	Anodized aluminium alloy

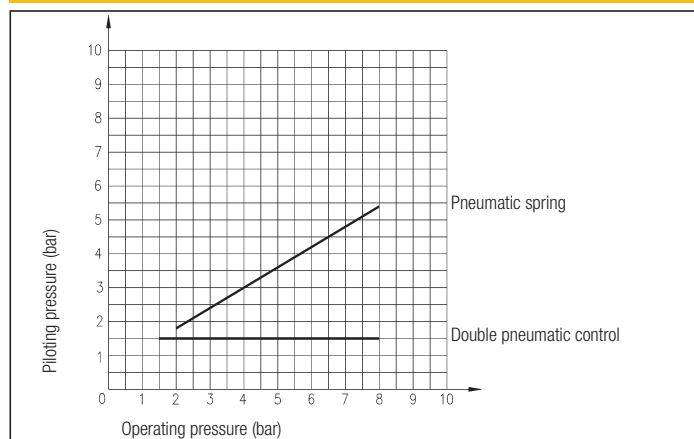
SPARE PARTS

SEALS KIT	
5/2 monstable and bistable - G1/8	MEK/SG/8
5/3 closed centre - G1/8	MEK/CC/SG/8
5/3 open centre - G1/8	MEK/CA/SG/8
5/3 pressure centre - G1/8	MEK/CP/SG/8
5/2 monstable e bistable - G1/4	MEK/SG/4
5/3 closed centre - G1/4	MEK/CC/SG/4
5/3 open centre - G1/4	MEK/CA/SG/4
5/3 pressure centre - G1/4	MEK/CP/SG/4

PILOTING CHART - MEK G 1/8



PILOTING CHART - MEK G 1/4

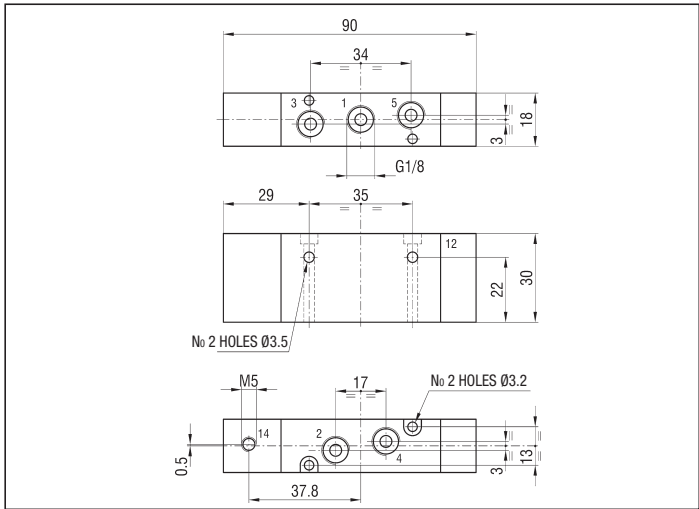


SOLENOID ACTUATED VALVES G 1/8

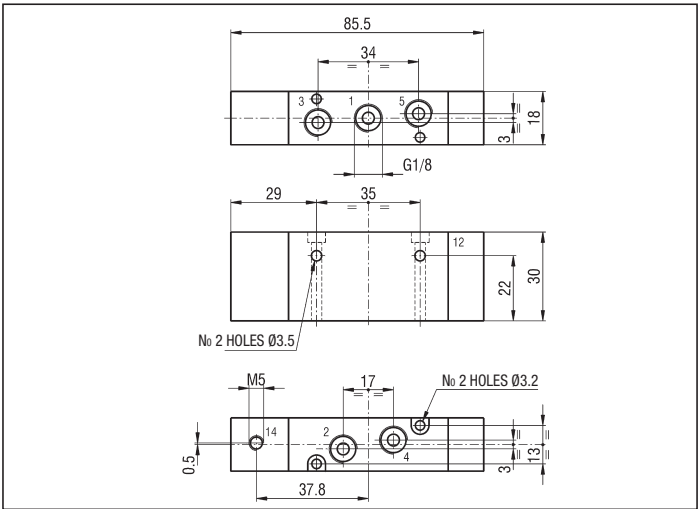
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	TYPE*
		Pilot	Return	Energized	De-energized			
	5/2 monostable	Pneumatic	Pneumomechanical spring	5	10	530	110	MEKCA8 KR/ZQ
		Pneumatic	Pneumatic spring	7	5	530	110	MEKCA8 KR/TQ
	5/2 bistable	Pneumatic	Pneumatic	3	3	530	120	MEKCA8 KR/KR
	5/3 closed centre	Pneumatic	Mechanical spring	4	8	450	135	MEKCA8 SR/SR
	5/3 open centre	Pneumatic	Mechanical spring	4	8	450	135	MEKCA8 AR/AR
	5/3 pressure centre	Pneumatic	Mechanical spring	4	8	450	135	MEKCA8 PR/PR

*/EX Consistent with the ATEX directive II 2GD c T5 T100°C - 10°C≤Ta≤60°C ES.: **MEKCA8 KR/ZQ/EX**

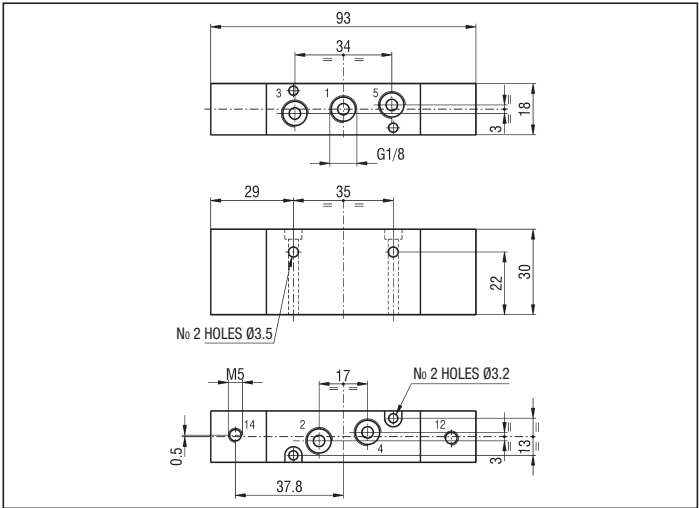
MEKCA8 KR/ZQ



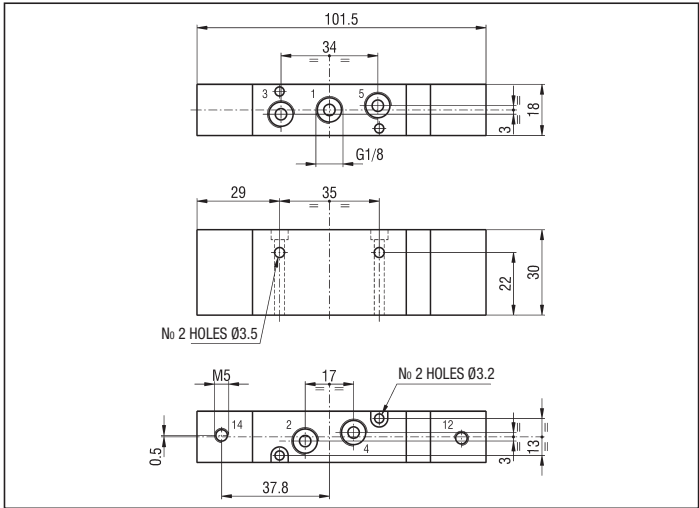
MEKCA8 KR/TQ



MEKCA8 KR/KR



MEKCA8 SR/SR - MEKCA8 AR/AR - MEKCA8 PR/PR



SOLENOID ACTUATED VALVES G 1/8

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			
	5/2 monostable	Solenoid	Pneumomechanical spring	12	15	530	150	MEKCA8 KUC/ZQ
		Solenoid	Pneumatic spring	12	15			MEKCA8 KUC/TQ
		Solenoid pilot assisted	Pneumomechanical spring	10	20			MEKCA8 KUR/ZQ
	5/2 bistable	Solenoid	Solenoid	9	9	530	195	MEKCA8 KUC/KUC
		Solenoid pilot assisted	Solenoid pilot assisted					MEKCA8 KUR/KUR
	5/3 closed centre	Solenoid	Mechanical spring	10	25	450	210	MEKCA8 SUC/SUC
		Solenoid pilot assisted	Mechanical spring					MEKCA8 SUR/SUR
	5/3 open centre	Solenoid	Mechanical spring	10	25	450	210	MEKCA8 AUC/AUC
		Solenoid pilot assisted	Mechanical spring					MEKCA8 AUR/AUR
	5/3 pressure centre	Solenoid	Mechanical spring	10	25	450	210	MEKCA8 PUC/PUC
		Solenoid pilot assisted	Mechanical spring					MEKCA8 PUR/PUR

* SPECIFY THE VOLTAGE IN THE ORDER - E.G.: **MEKCA8 KUC/ZQ 02400**

02400 = 24 V DC

$$11050-60 = 110 \text{ V AC}$$

/EX Consistent with the ATEX directive  II 3G c Ex nA IIC T5 Gc -5°C≤Ta≤50°C
II 3D c Ex tc IIIC T100°C IP65 Dc

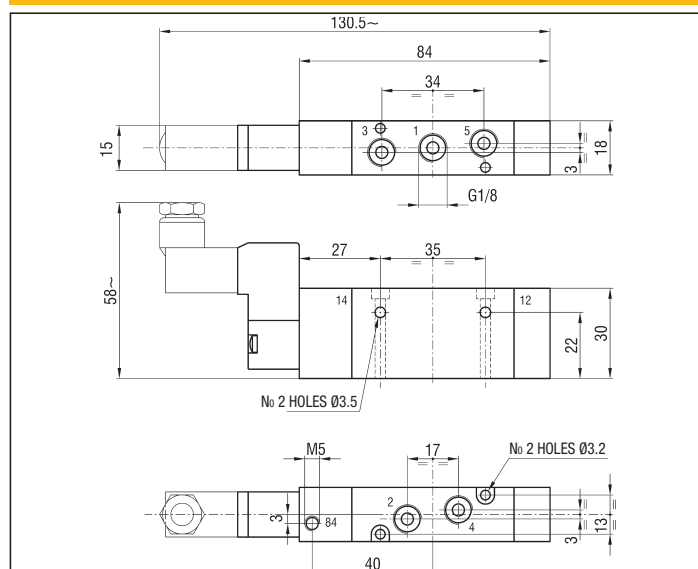
II 3G c Ex nA IIC T5 Gc -5°C≤Ta≤
II 3D c Ex tc IIC T100°C IP65 Dc

02450-60 = 24 V AC

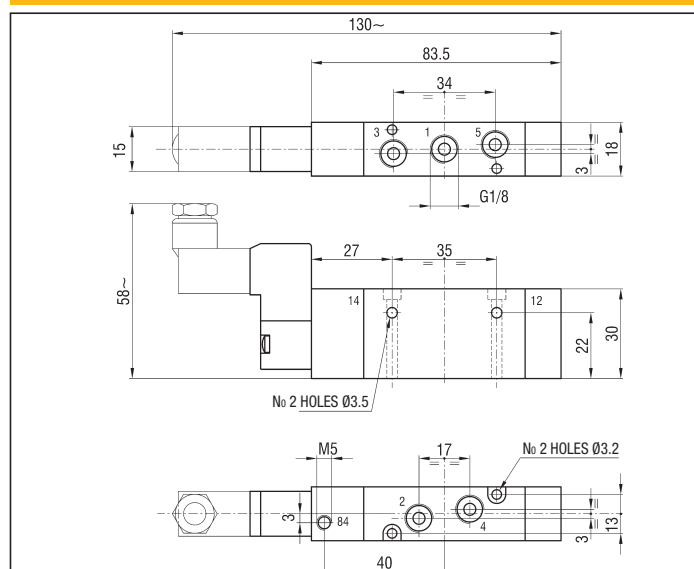
22050-60 = 220 V AC

E.G.: **MEKCA8 KUC/ZQ 02400/EX**

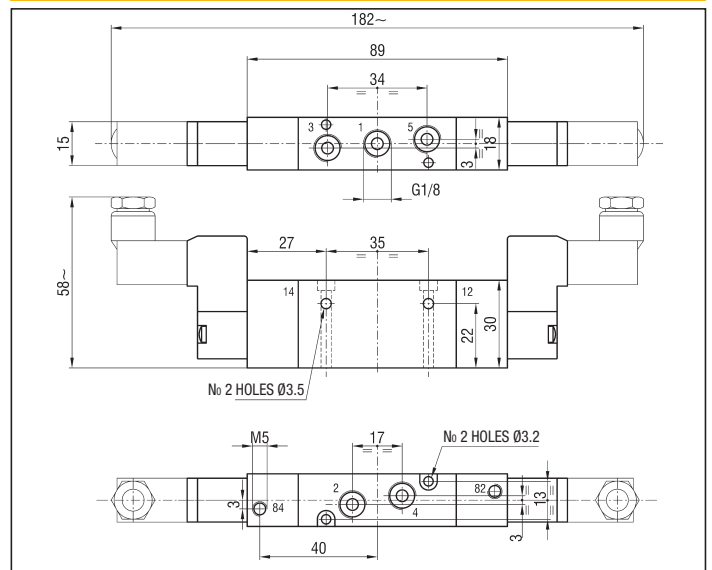
MEKCA8 KUC/ZQ



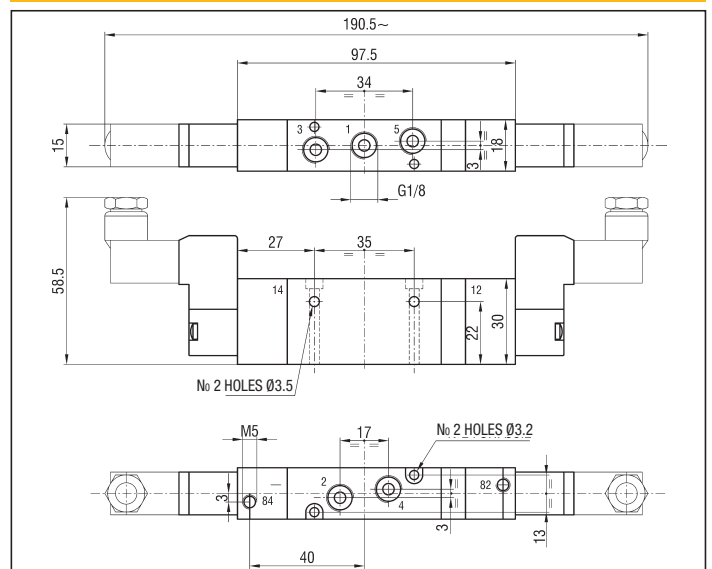
MEKCA8 KUC/TQ



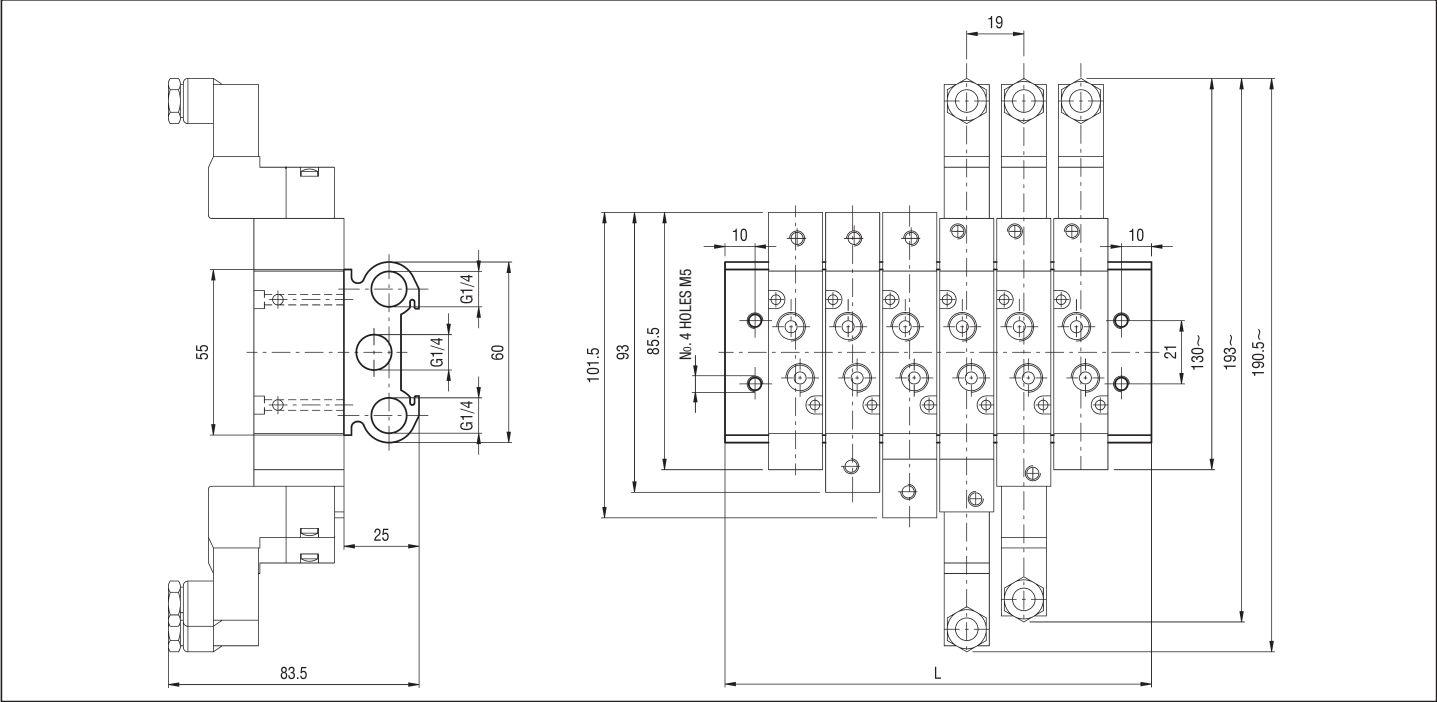
MEKCA8 KUC/KUC



MEKCA8 SUC/SUC - MEKCA8 AUC/AUC - MEKCA8 PUC/PUC

[illegible]

BASE FOR MANIFOLD MOUNTING OF VALVES G 1/8 - KB/MEK8 - Fit for mounting onto DIN 46277/3 rail



No of stations	2	3	4	5	6	8	10	12	14	16	18	20
L	66	85	104	123	142	180	218	256	294	332	370	408
Weight (g)	175	220	265	310	355	445	535	625	715	805	895	985
TYPE*	KB/MEK8/2	KB/MEK8/3	KB/MEK8/4	KB/MEK8/5	KB/MEK8/6	KB/MEK8/8	KB/MEK8/10	KB/MEK8/12	KB/MEK8/14	KB/MEK8/16	KB/MEK8/18	KB/MEK8/20

BLANKING PLATE - KIT/PC/MEK8

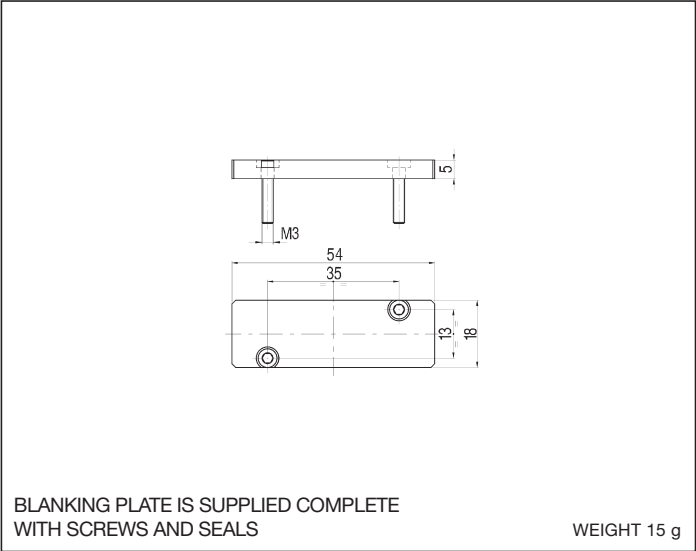
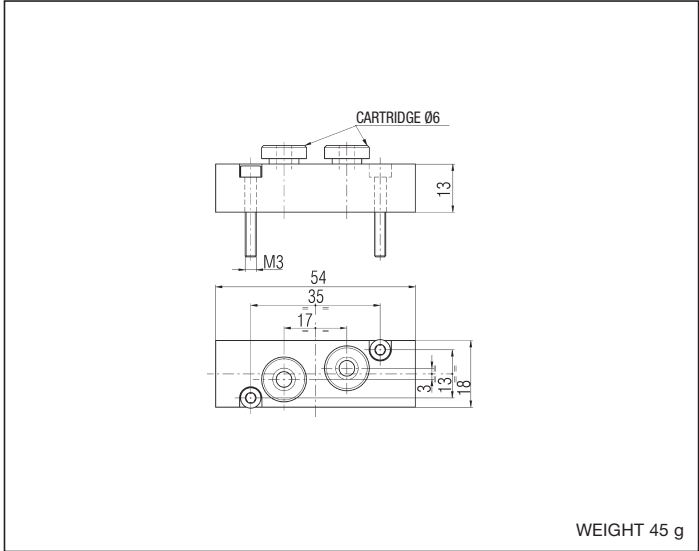


PLATE WITH PUSH-IN FITTING FOR PIPE Ø 6 mm - KIT/IR/MEK8

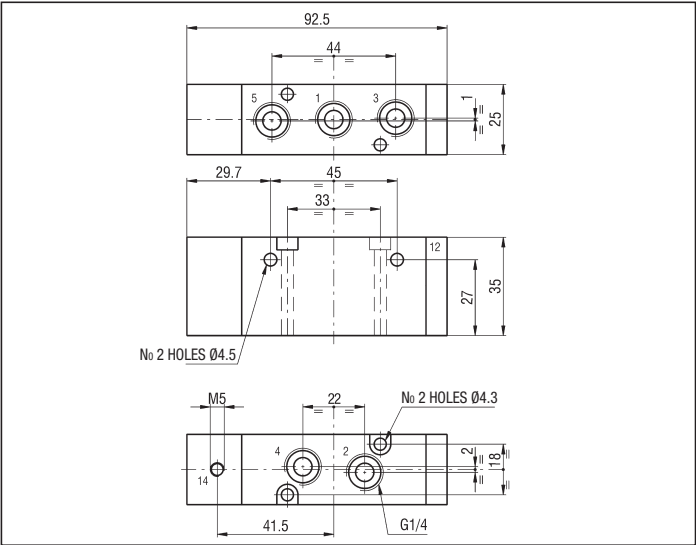


PILOT ACTUATED VALVES G 1/4

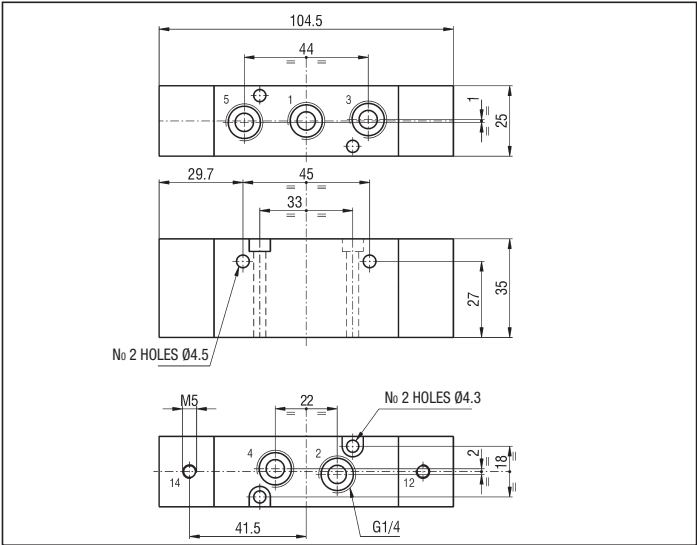
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar ΔP = 1 bar (l/min)	Weight (g)	TYPE*
		Pilot	Return	Energized	De-energized			
	5/2 monostable	Pneumatic	Pneumomechanical spring	7	3	900	190	MEKCA4 KR/ZQ
	5/2 bistable	Pneumatic	Pneumatic	5	5	900	215	MEKCA4 KR/KR
	5/3 closed centre	Pneumatic	Mechanical spring	5	15	600	240	MEKCA4 SR/SR
	5/3 open centre	Pneumatic	Mechanical spring	5	15	600	240	MEKCA4 AR/AR
	5/3 pressure centre	Pneumatic	Mechanical spring	5	15	600	240	MEKCA4 PR/PR

*/EX Consistent with the ATEX directive II 2GD c T5 T100°C -10°C≤T≤60°C E.G.: MEKCA4 KR/ZQ/EX

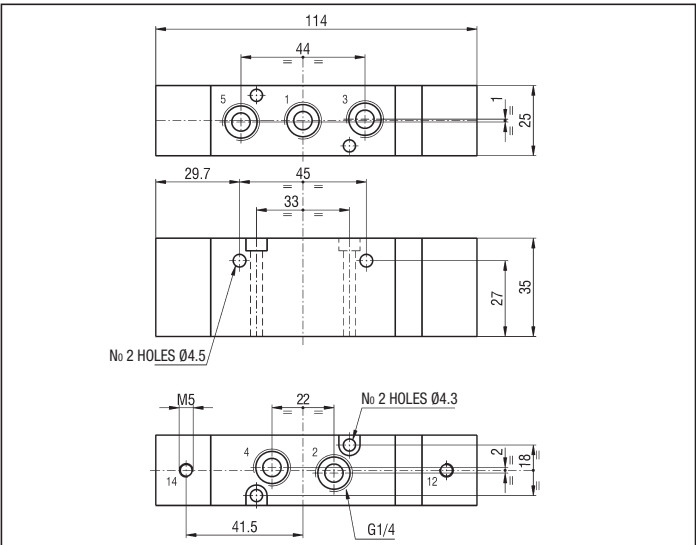
MEKCA4 KR/ZQ



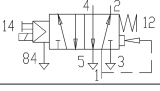
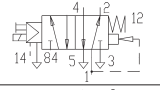
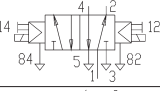
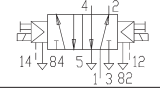
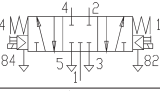
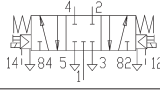
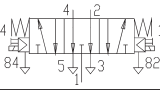
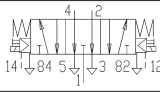
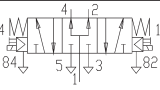
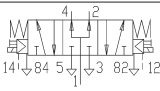
MEKCA4 KR/KR



MEKCA4 SR/SR - MEKCA4 AR/AR - MEKCA4 PR/PR



SOLENOID ACTUATED VALVES WITH COIL SIZE 15 mm G 1/4

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			
	5/2 monostable	Solenoid	Pneumomechanical spring	15	20	900	225	MEKCA4 KUC/ZQ
		Solenoid pilot assisted	Pneumomechanical spring					MEKCA4 KUR/ZQ
	5/2 bistable	Solenoid	Solenoid	10	10	900	290	MEKCA4 KUC/KUC
		Solenoid pilot assisted	Solenoid pilot assisted					MEKCA4 KUR/KUR
	5/3 closed centre	Solenoid	Mechanical spring	15	30	600	315	MEKCA4 SUC/SUC
		Solenoid pilot assisted	Mechanical spring					MEKCA4 SUR/SUR
	5/3 open centre	Solenoid	Mechanical spring	12	30	600	315	MEKCA4 AUC/AUC
		Solenoid pilot assisted	Mechanical spring					MEKCA4 AUR/AUR
	5/3 pressure centre	Solenoid	Mechanical spring	10	30	600	315	MEKCA4 PUC/PUC
		Solenoid pilot assisted	Mechanical spring					MEKCA4 PUR/PUR

* SPECIFY THE VOLTAGE IN THE ORDER - E.G.: **MEKCA4 KUC/ZQ 02450-60**

02400 = 24 V DC

11050-60 = 110 V AC

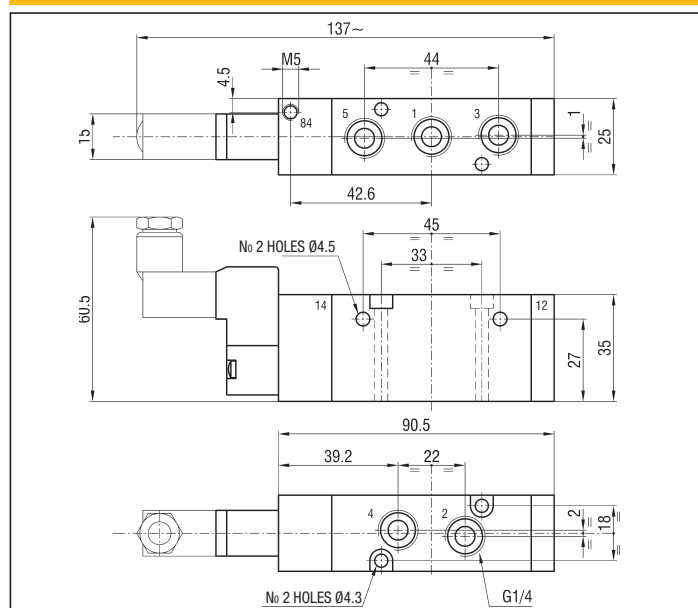
02450-60 = 24 V AC

22050-60 = 220 V AC

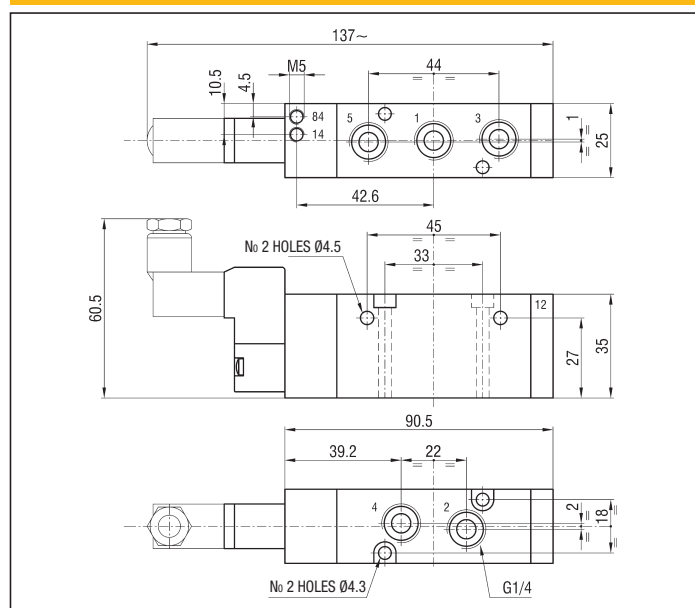
/EX Consistent with the ATEX directive  II 3G c Ex nA IIC T5 Gc -5°C ≤ Ta ≤ 50°C
II 3D c Ex tc IIIC T100°C IP65 Dc

E.G.: **MEKCA4 KUC/ZQ 02400/EX**

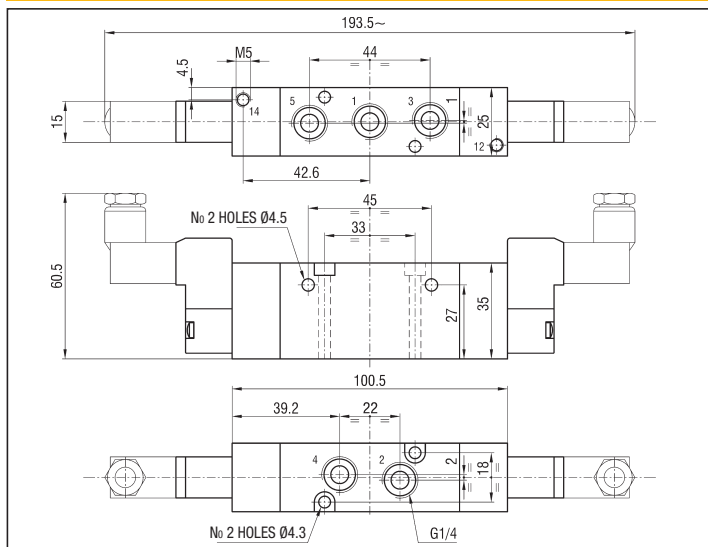
MEKCA4 KUC/ZQ



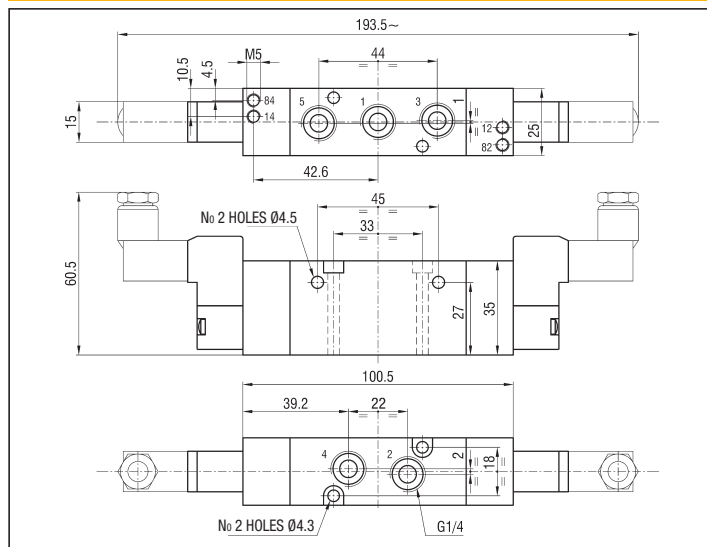
MEKCA4 KUR/ZQ



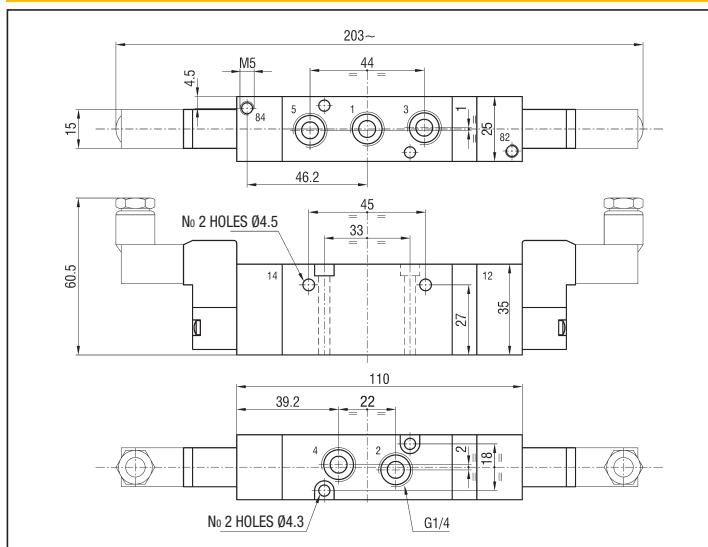
MEKCA4 KUC/KUC



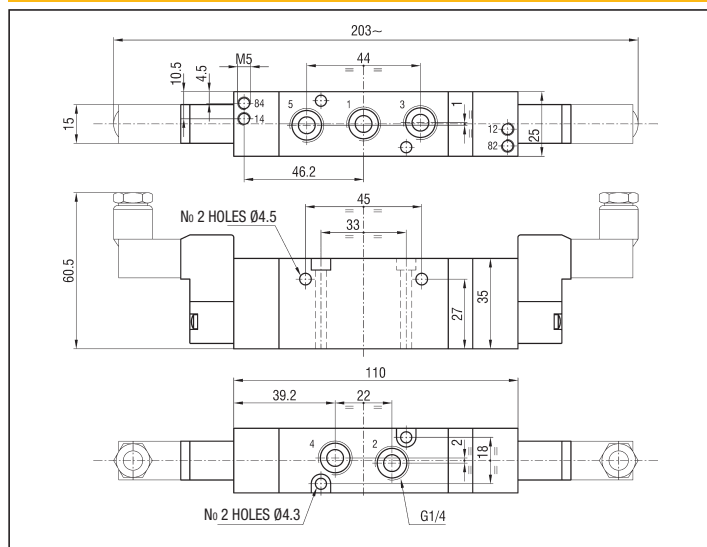
MEKCA4 KUR/KUR



MEKCA4 SUC/SUC - MEKCA4 PUC/PUC - MEKCA4 AUC/AUC



MEKCA4 SUR/SUR - MEKCA4 PUR/PUR - MEKCA4 AUR/AUR



SOLENOID ACTUATED VALVES WITH SLEEVE Ø 9 mm G 1/4

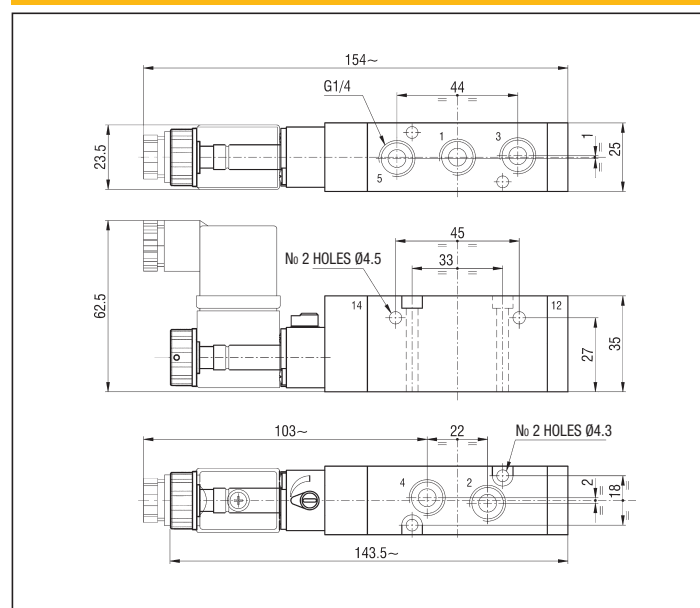
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar $\Delta P = 1 \text{ bar (l/min)}$	Weight (g)	TYPE*
		Pilot	Return	Energized	De-energized			
	5/2 monostable	Solenoid	Pneumomechanical spring	22	24	900	210	MEKCA4 KUCG/ZQ
		Solenoid pilot assisted	Pneumomechanical spring					MEKCA4 KURG/ZQ
	5/2 bistable	Solenoid	Solenoid	16	16	900	260	MEKCA4 KUCG/KUCG
		Solenoid pilot assisted	Solenoid pilot assisted					MEKCA4 KURG/KURG
	5/3 closed centre	Solenoid	Mechanical spring	21	30	600	280	MEKCA4 SUCG/SUCG
		Solenoid pilot assisted	Mechanical spring					MEKCA4 SURG/SURG
	5/3 open centre	Solenoid	Mechanical spring	18	30	600	280	MEKCA4 AUCG/AUCG
		Solenoid pilot assisted	Mechanical spring					MEKCA4 AURG/AURG
	5/3 pressure centre	Solenoid	Mechanical spring	15	30	600	280	MEKCA4 PUCG/PUCG
		Solenoid pilot assisted	Mechanical spring					MEKCA4 PURG/PURG

* THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS

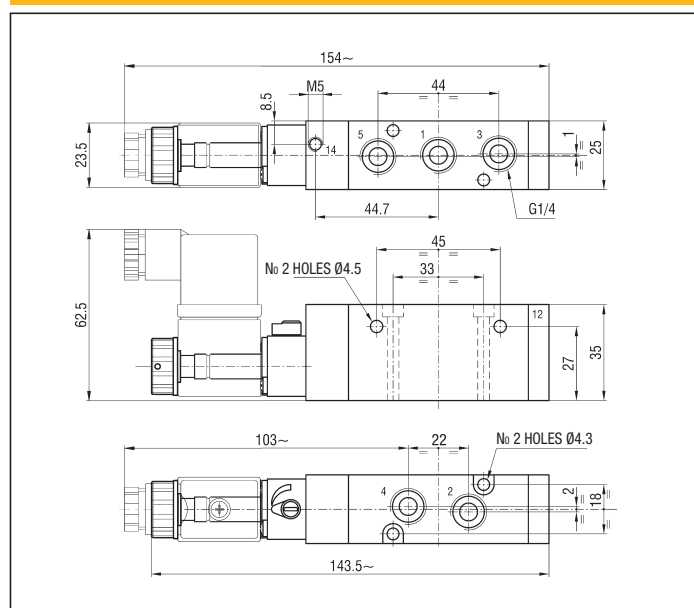
/EX Consistent with the ATEX directive II 2GD c T5 T100°C -10°C ≤ Ta ≤ 60°C

E.G.: MEKCA4 KUCG/ZQ/EX

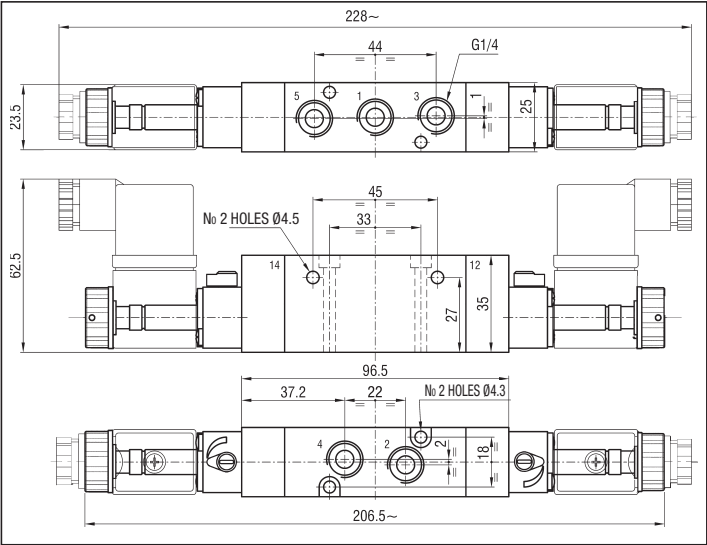
MEKCA4 KUCG/ZQ



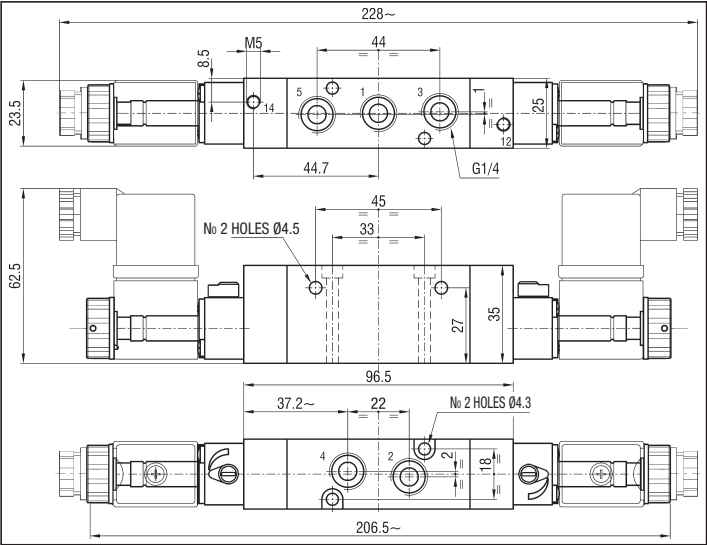
MEKCA4 KURG/ZQ



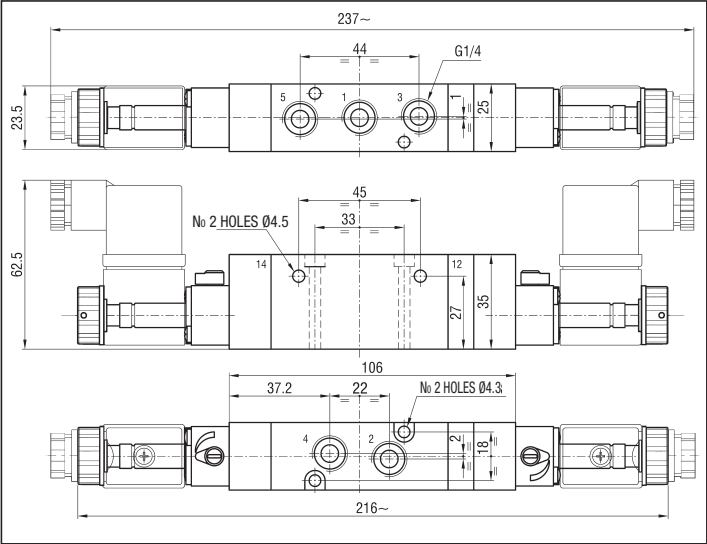
MEKCA4 KUCG/KUCG



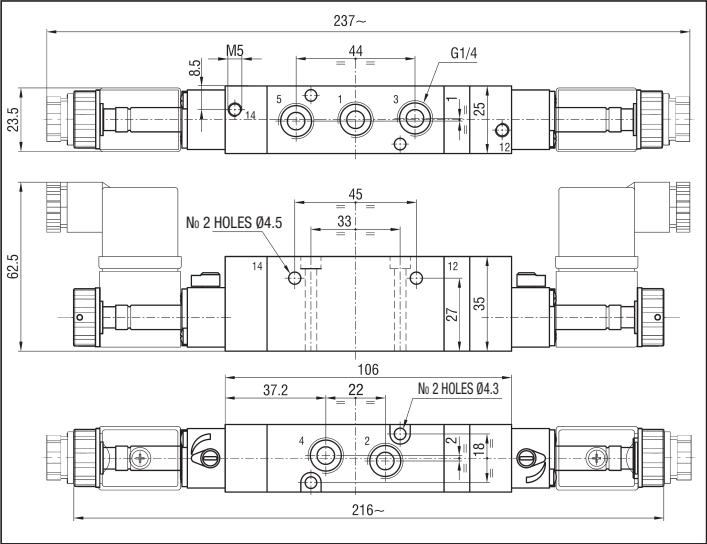
MEKCA4 KURG/KURG



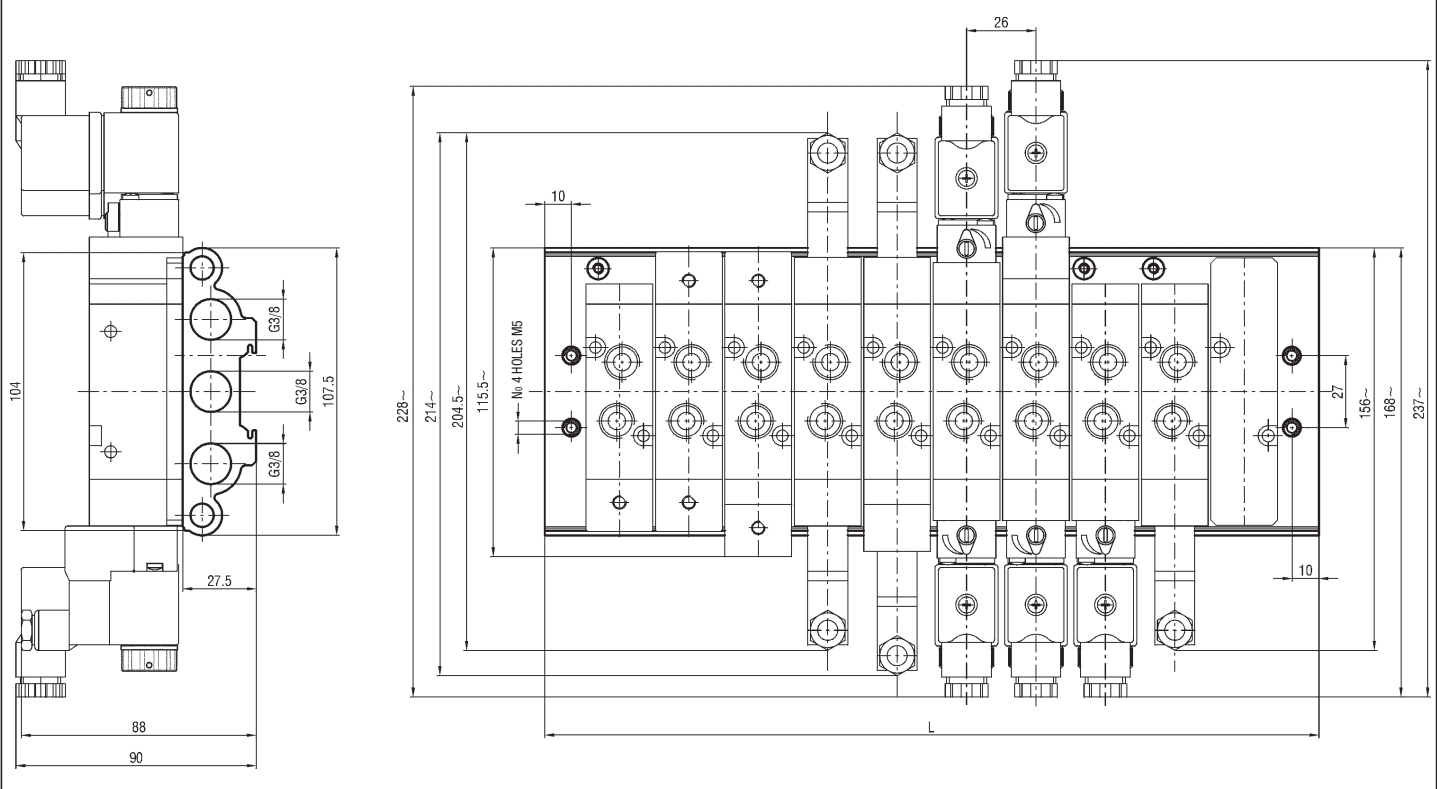
MEKCA4 SUCG/SUCG - MEKCA4 PUCG/PUCG - MEKCA4 AUCG/AUCG



MEKCA4 SURG/SURG - MEKCA4 PURG/PURG - MEKCA4 AURG/AURG



BASE FOR MANIFOLD MOUNTING OF VALVES G 1/4 - KB/MEK4 - Fit for mounting onto DIN 46277/3 rail



No of stations	2	3	4	5	6	8	10	12	14	16	18	20
L	82	108	134	160	186	238	290	342	394	446	498	550
Weight (g)	370	475	580	685	790	1000	1210	1220	1630	1840	2050	2260
TYPE*	KB/MEK4/2	KB/MEK4/3	KB/MEK4/4	KB/MEK4/5	KB/MEK4/6	KB/MEK4/8	KB/MEK4/10	KB/MEK4/12	KB/MEK4/14	KB/MEK4/16	KB/MEK4/18	KB/MEK4/20

*BASES ARE SUPPLIED COMPLETE WITH SCREWS AND SEALS

BLANKING PLATE - KIT/PC/MEK4

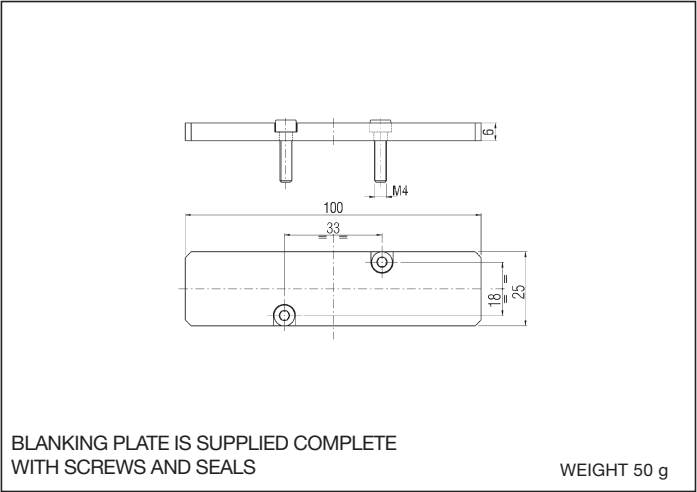


PLATE WITH PUSH-IN FITTING FOR PIPE Ø 8 mm - KIT/IR/MEK4

