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 supports both 15 than 22 mm (low absorption direct acting solenoid valve type UMCSV, and direct acting solenoid valve type C/USCSVP 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 1/4
Pneumatic piloting port size	M5
Nominal diameter	G 1/4 = 6,5 mm
Piloting solenoid valve	15 mm: UMCSV - see on page 2.5 22 mm: C/USCSVP - see on page 2.14
Coil	USB - see chapter coils on page 2.17 USBG* - see chapter coils on page 2.17 USBG2* - see chapter coils on page 2.17
Electric connectors	MEK192/N with UMCSV; USR102/N9 with C/USCSVP and USB ULR1B* with C/USCSVP and USBG or USBG2 See chapter connectiors on page 2.18

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

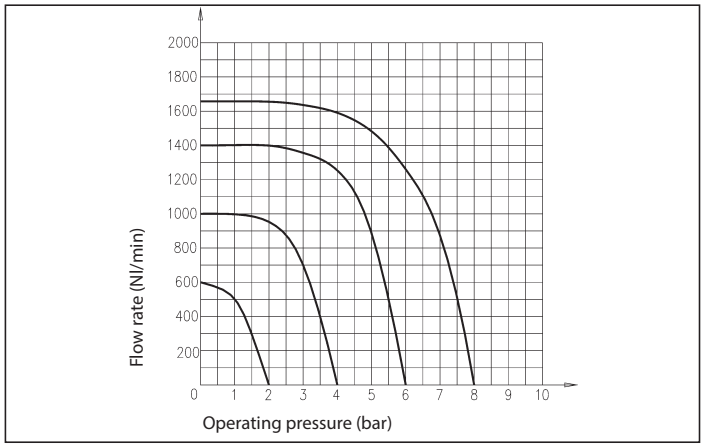
MATERIALS

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

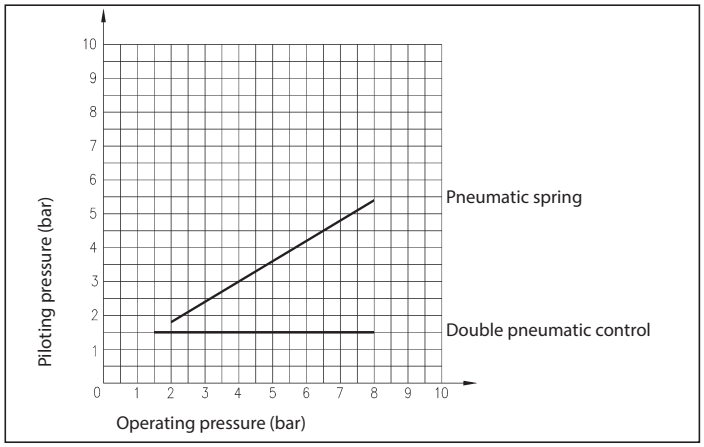
SPARE PARTS

SEALS KIT	
5/2 monstable 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**

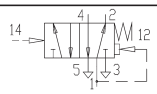
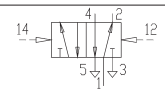
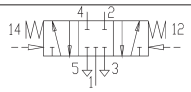
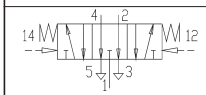
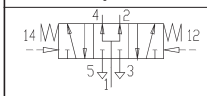
FLOW CHART - MEK G 1/4 5/2



PILOTING CHART - MEK G 1/4



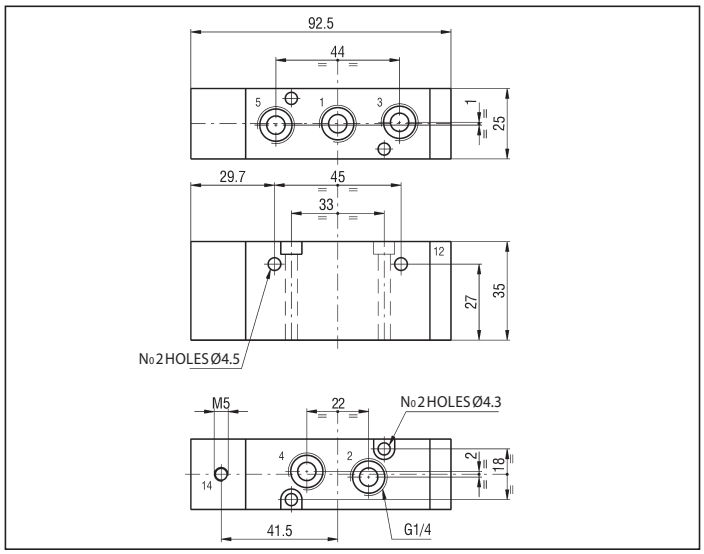
PILOT ACTUATED VALVES G 1/4

Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar ΔP = 1 bar (Nl/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

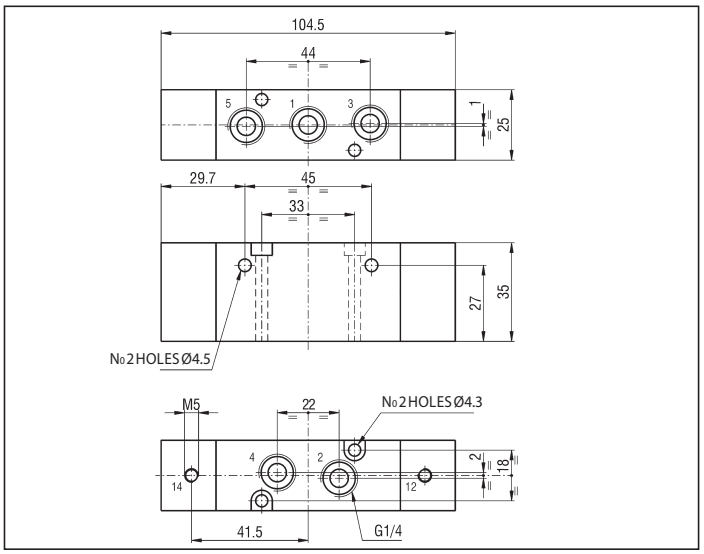
***/EX** Consistent with the ATEX directive ⟨Ex⟩ II 2G Ex h IIC T5 Gb -10°C≤Ta≤60°C
II 2D Ex h IIIC T100°C Db X

E.G.: **MEKCA4 KR/ZQ/EX**

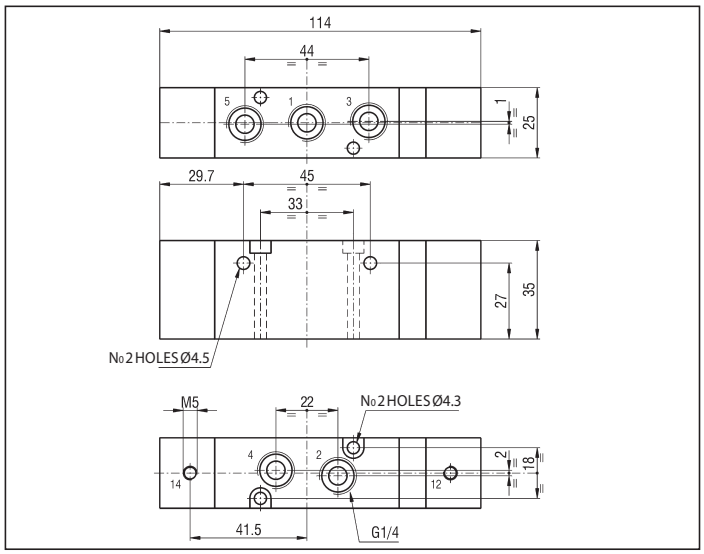
MEKCA4 KR/ZQ



MEKCA4 KR/KR

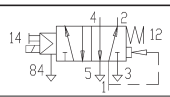
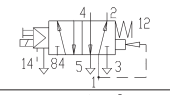
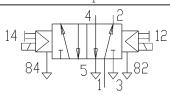
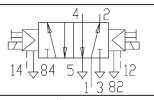
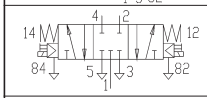
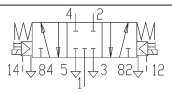
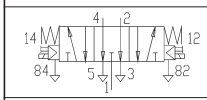
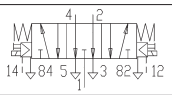
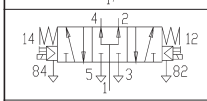
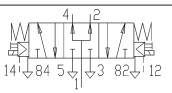


MEKCA4 SR/SR - MEKCA4 AR/AR - MEKCA4 PR/PR



2

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 ΔP = 1 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

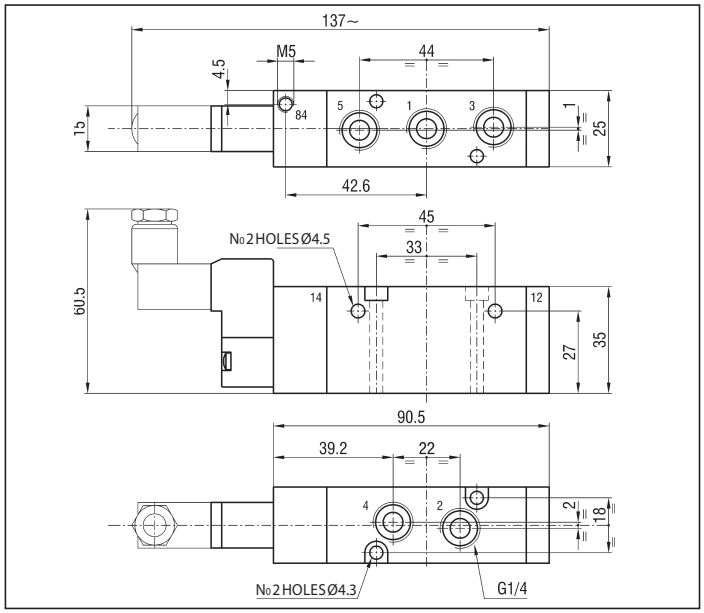
* SPECIFY THE VOLTAGE IN THE ORDER - E.G.: **MEKCA4 KUC/ZQ 02450-60**

02400 = 24 V DC
02450-60 = 24 V AC
11050-60 = 110 V AC
22050-60 = 220 V AC

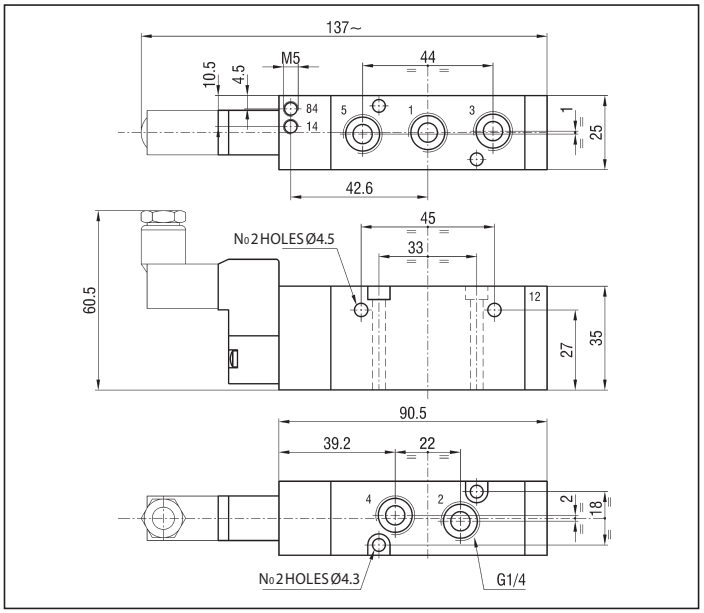
/EX Consistent with the ATEX directive II 3G h Ex nA IIC T5 Gc -5°C≤Ta≤50°C
II 3D h Ex tc IIIC T100°C IP65 Dc

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

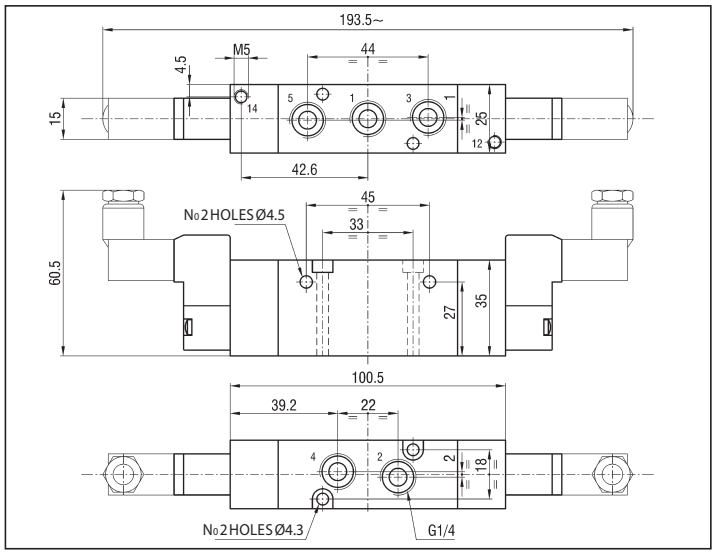
MEKCA4 KUC/ZQ



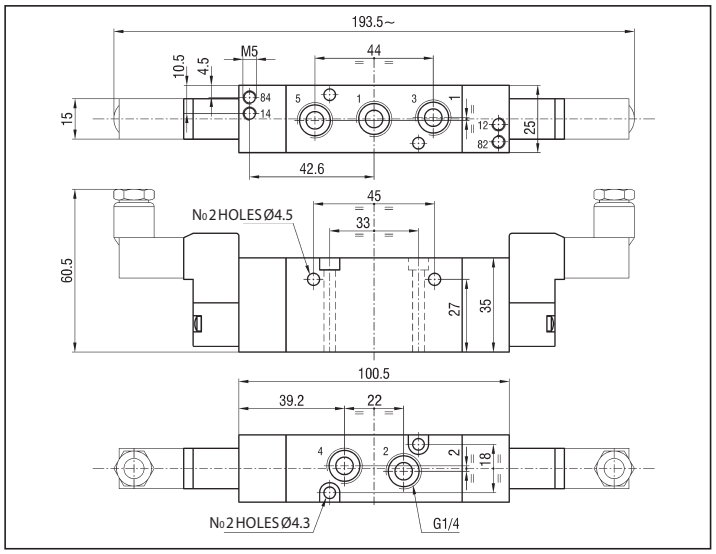
MEKCA4 KUR/ZQ



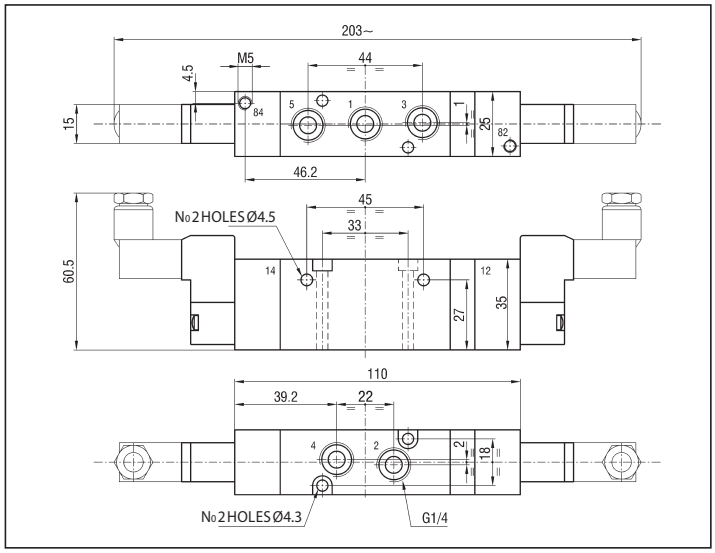
MEKCA4 KUC/KUC



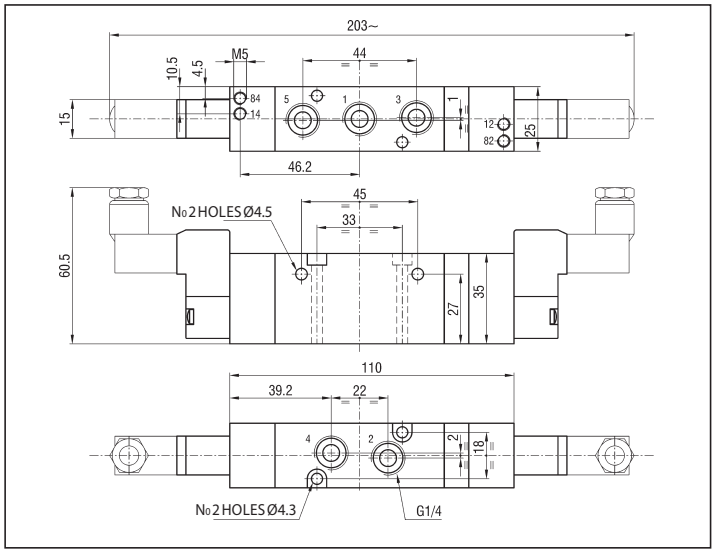
MEKCA4 KUR/KUR



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

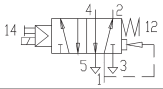
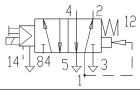
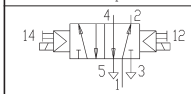
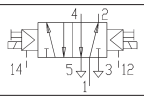
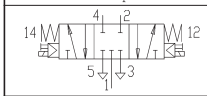
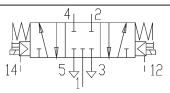
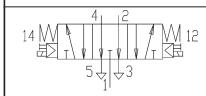
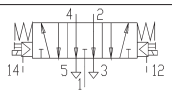
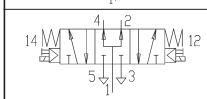
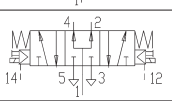


MEKCA4 SUR/SUR - MEKCA4 PUR/PUR - MEKCA4 AUR/AUR



2

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

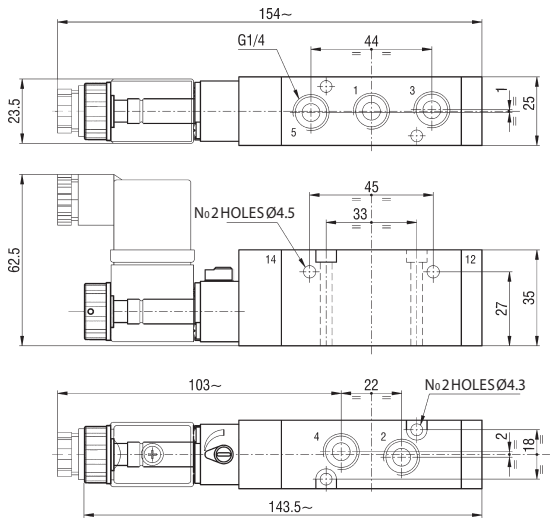
Symbol	Function	Controls		Response time at 6 bar (ms)		Flow rate at 6 bar ΔP = 1 bar (Nl/min)	Weight (g)	TYPE*
		Pilot	Return	Energized	De-energized			
	5/2 monostable	Solenoid	Pneumomechanical spring	22	24	900	210	MEKCA4 KUCG/ZQ
		Solenoid pilot assisted	Pneumomechanical spring					MEKCA4 KURG/ZQ
	5/2 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

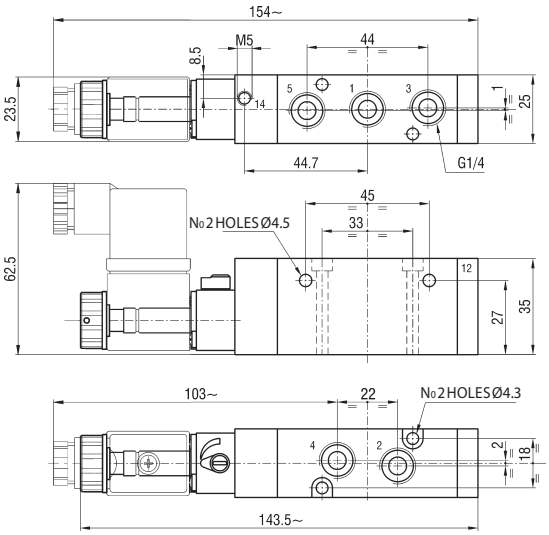
/EX Consistent with the ATEX directive Ⓔx II 2G Ex h IIC T5 Gb -10°C≤Ta≤60°C II 2D Ex h IIIC T100°C Db X

E.G.: **MEKCA4 KUCG/ZQ/EX**

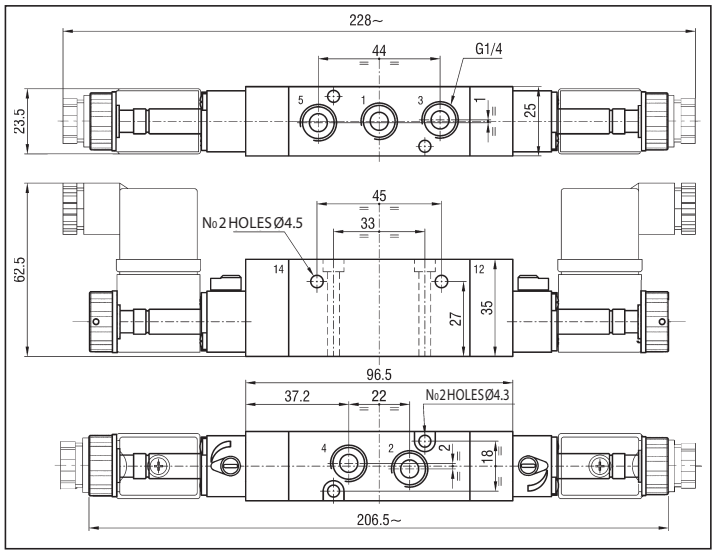
MEKCA4 KUCG/ZQ



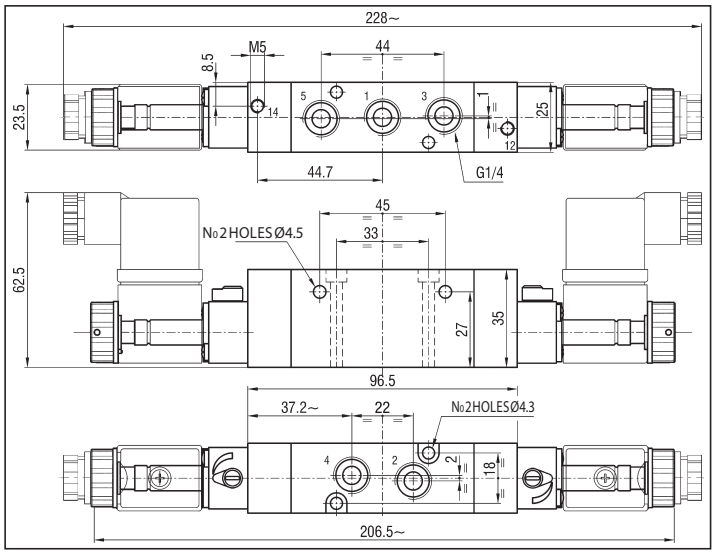
MEKCA4 KURG/ZQ



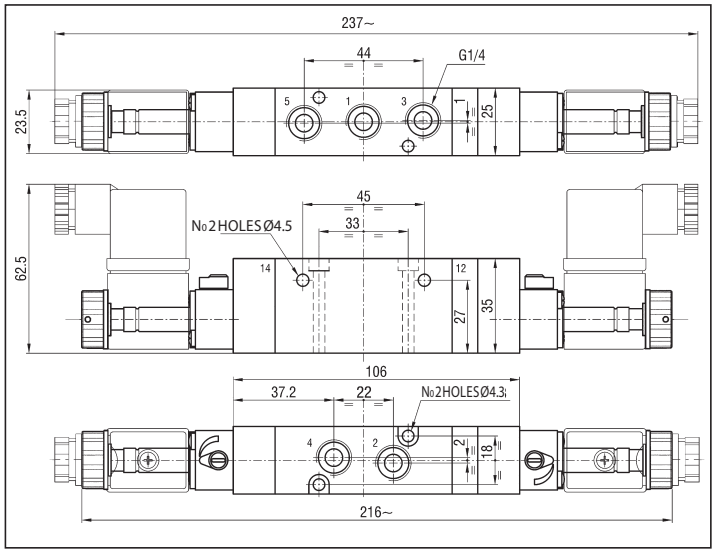
MEKCA4 KUCG/KUCG



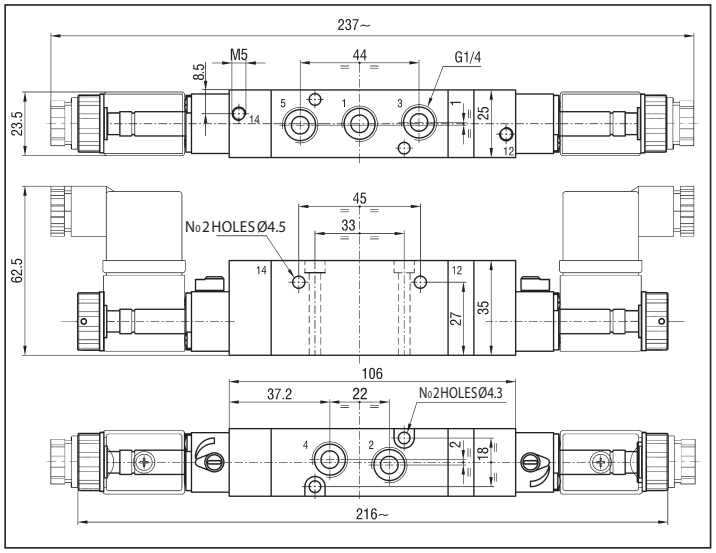
MEKCA4 KURG/KURG



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

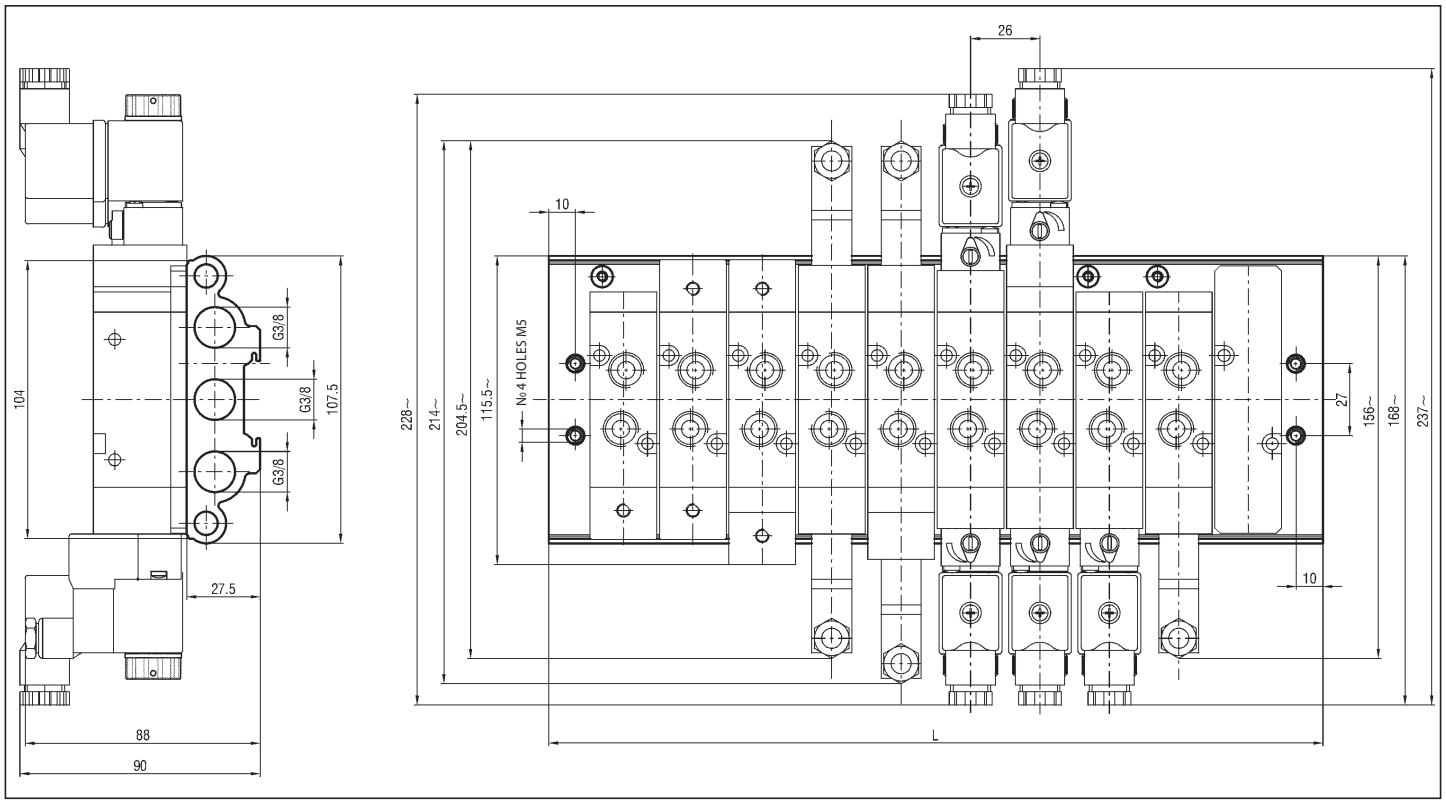


MEKCA4 SURG/SURG - MEKCA4 PURG/PURG - MEKCA4 AURG/AURG



2

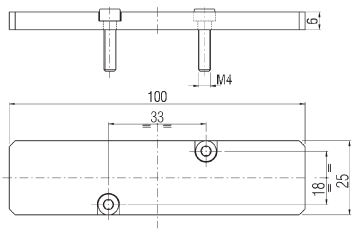
BASE FOR MANIFOLD MOUNTING OF VALVES G 1/4 - KB/MEK4 - Fit for mounting onto DIN 46277/3 rail



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

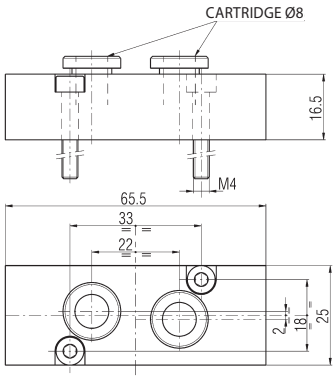
BLANKING PLATE - KIT/PC/MEK4



BLANKING PLATE IS SUPPLIED COMPLETE WITH SCREWS AND SEALS

WEIGHT 50 g

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



WEIGHT 90 g