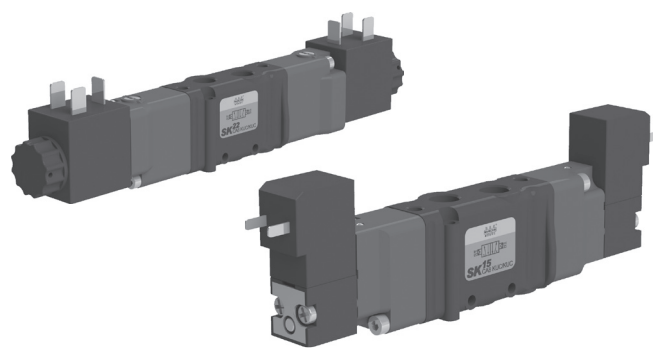


DESCRIPTION

Valves series "SK" are produced the size G1/8 in the following pneumatic functions: 3/2, 5/2, 5/3 and "3/2+3/2". The electrical version can mount two kinds of piloting solenoid valves: the 15 mm one (type "SK815") or the 22 mm integrated one (type "SK822"). Valves series "SK" can be used single or in manifold mounting, regardless the pneumatic functions: 5/3, 5/2 and 3/2, the last one using the adapter type "KIT/A/SK8". The version "3/2+3/2" includes No. 2-3/2 valves in a single body, so with a very compact overall dimensions compared to the No. 2 valves it's replacing in terms of pneumatic function, as well as compared to the pressure or open center versions. Upon request, they can be supplied in compliance with ATEX directive, category 3GD for electrical version with 15mm piloting solenoid valve and category 2GD for other versions.



TECHNICAL DATA

| | |
|-------------------------------|---|
| Operating pressure | Monostable: 2,5 ÷ 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 |
| Pneumating piloting port size | M5 |
| Nominal diameter | G 1/8 = 6 mm |
| Piloting solenoid valve | 15 mm: UMCSV - see on page 2.5 22 mm integrated in the bottom |
| Coils | 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 ULR1B with C/USCSVP* see chapter Connectors on page 2.18 |

* Just for the valve single used (coil and connector protrude from the dimension of the valves).

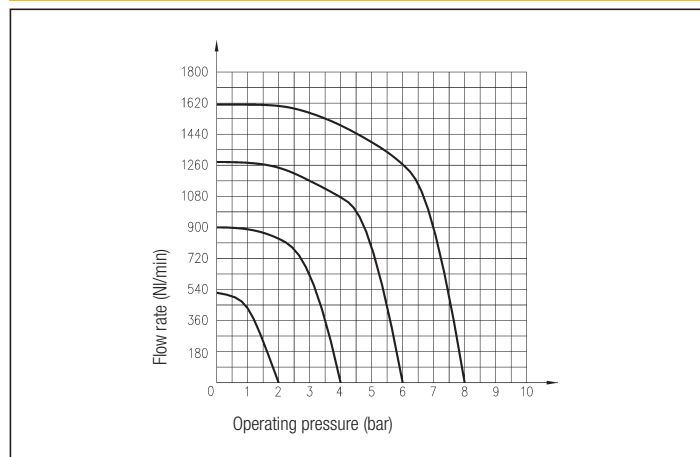
MATERIALS

| | |
|---------------|------------------------------|
| Bottoms | Technopolymer |
| Body | Cast painted aluminium alloy |
| Distance ring | Acetal resin-brass |
| Springs | Stainless steel |
| Seals | NBR rubber |
| Spools | Nickel-plated steel |
| Piston | Anodized aluminium alloy |

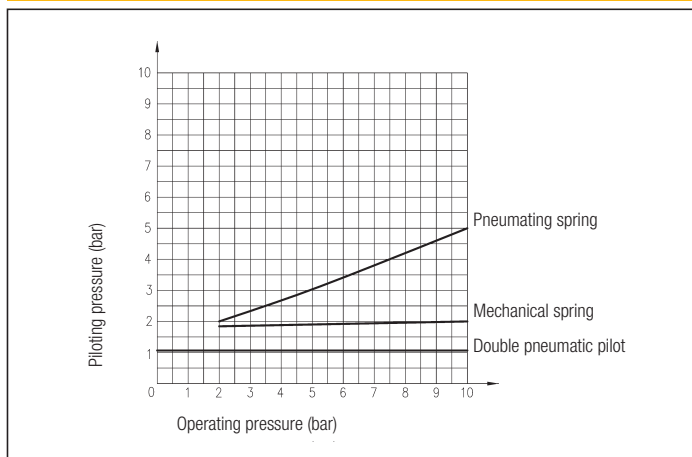
SPARE PARTS

| SEALS KIT | |
|-------------------|--------------------------|
| 3/2 - G 1/8 | SK/SG/8 |
| 5/2 - G 1/8 | SKCA/SG/8 |
| 5/3 - G 1/8 | SKCA/SG/8 - 5/3 |
| 3/2 + 3/2 - G 1/8 | SK/SG/8 - 2 x 3/2 |

FLOW CHART SK G 1/8



PILOTING CHART SK G 1/8



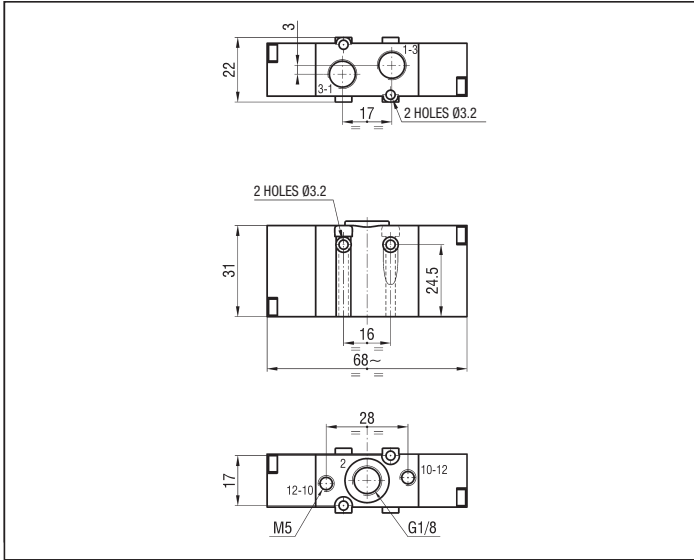
2

PILOT ACTUATED VALVE G 1/8 - 3 and 5 PORT

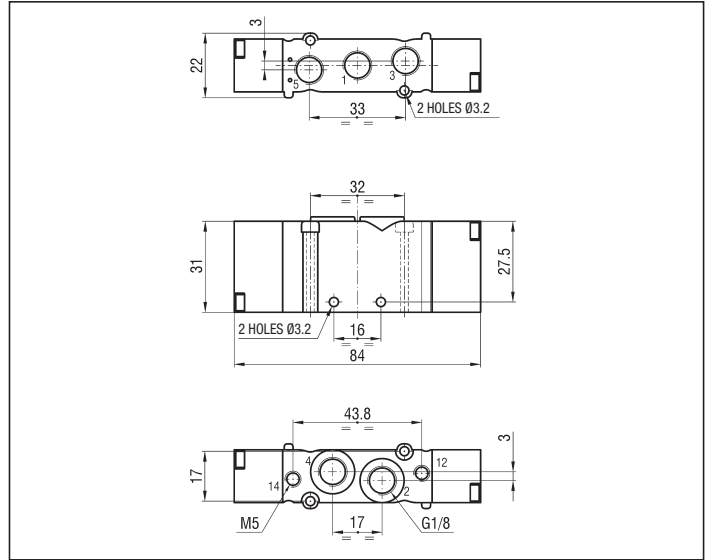
| Symbol | Function | Controls | | Response time at 6 bar (ms) | | Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$ | Weight (g) | TYPE* |
|--------|--------------------------------|---------------|-------------------------|-----------------------------|--------------|---|------------|--------------|
| | | Pilot | Return | Energized | De-energized | | | |
| | 3/2 N.O. monostable | Pneumatic | Pneumomechanical spring | 11 | 35 | 650 | 80 | SKA8 KR/ZQ |
| | | Pneumatic | Pneumatic spring | 11 | 35 | 650 | 80 | SKA8 KR/TQ |
| | 3/2 N.C. monostable | Pneumatic | Pneumomechanical spring | 11 | 35 | 650 | 80 | SKC8 KR/ZQ |
| | | Pneumatic | Pneumatic spring | 11 | 35 | 650 | 80 | SKC8 KR/TQ |
| | 3/2 bistable | Pneumatic | Pneumatic | 12 | 12 | 650 | 80 | SK8 KR/KR |
| | | Big pneumatic | Small pneumatic | 12 | 14 | 650 | 80 | SK8 KR/TR |
| | 5/2 monostable | Pneumatic | Pneumomechanical spring | 13 | 38 | 750 | 100 | SKCA8 KR/ZQ |
| | | Pneumatic | Pneumatic spring | 13 | 38 | 750 | 100 | SKCA8 KR/TQ |
| | 5/2 bistable | Pneumatic | Pneumatic | 11 | 11 | 750 | 100 | SKCA8 KR/KR |
| | | Big pneumatic | Small pneumatic | 11 | 15 | 750 | 100 | SKCA8 KR/TR |
| | 5/3 closed centre | Pneumatic | Pneumatic spring | 15 | 17 | 600 | 105 | SKCA8 SR/SR |
| | 3/2 N.O. + 3/2 N.O. monostable | Pneumatic | Pneumatic spring | 15 | 17 | 600 | 105 | SKA+A8 KR/ZR |
| | 3/2 N.O. + 3/2 N.C. monostable | Pneumatic | Pneumatic spring | 15 | 17 | 600 | 105 | SKA+C8 KR/ZR |
| | 3/2 N.C. + 3/2 N.O. monostable | Pneumatic | Pneumatic spring | 15 | 17 | 600 | 105 | SKC+A8 KR/ZR |
| | 3/2 N.C. + 3/2 N.C. monostable | Pneumatic | Pneumatic spring | 15 | 17 | 600 | 105 | SKC+C8 KR/ZR |

*EX Consistent with the ATEX directive II 2GD c T5 T100°C -10°C ≤ T_a ≤ 60°C E.G.: SKA8 KR/ZQ/EX

3 PORT MONOSTABLE AND BISTABLE



3+3 AND 5 PORT MONOSTABLE AND BISTABLE



2

2

SOLENOID ACTUATED VALVES WITH 15 mm COIL G 1/8 - 3 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 | Solenoid | Pneumomechanical spring | 11 | 35 | 650 | 116 | SKA815 KUC/ZQ | |
| | | Solenoid | Pneumatic spring | 11 | 35 | | | | SKA815 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring | 11 | 35 | | | | |
| | 3/2 N.C. monostable | Solenoid | Pneumomechanical spring | 11 | 35 | 650 | 116 | SKC815 KUC/ZQ | |
| | | Solenoid | Pneumatic spring | 11 | 35 | | | | SKC815 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring | 11 | 35 | | | | |
| | 3/2 bistable | Solenoid | Solenoid | 12 | 12 | 650 | 150 | SK815 KUC/KUC | |
| | | Solenoid pilot assisted | Solenoid pilot assisted | 11 | 11 | | | | SK815 KUR/KUR |

* SPECIFY THE VOLTAGE IN THE ORDER - E.G.: **SKA815 KUC/ZQ 02450-60**

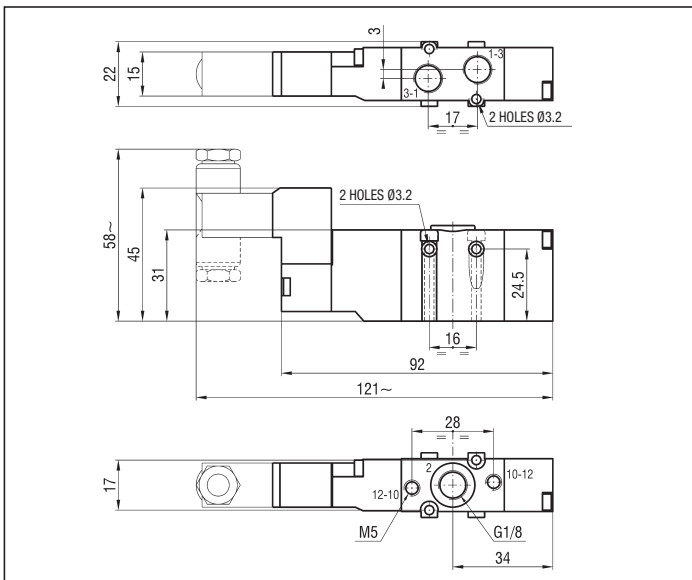
02400 = 24 V DC
02450-60 = 24 V AC

11050-60 = 110 V AC
22050-60 = 220 V AC

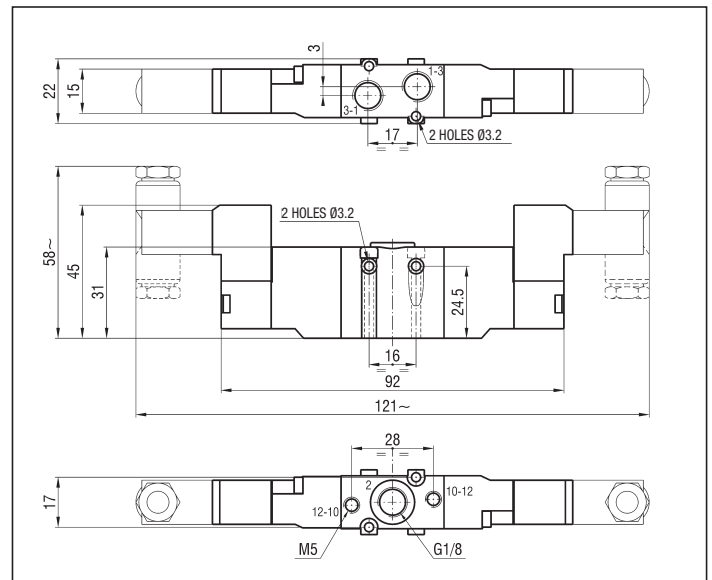
/EX Consistent with the ATEX directive II 3G c Ex nA IIC T5 Gc -5°C ≤ Ta ≤ 50°C
II 3D c Ex tc IIIC T100°C IP65 Dc

E.G.: **SKA815 KUC/ZQ 02450-60/EX**

3 PORT MONOSTABLE



3 PORT BISTABLE



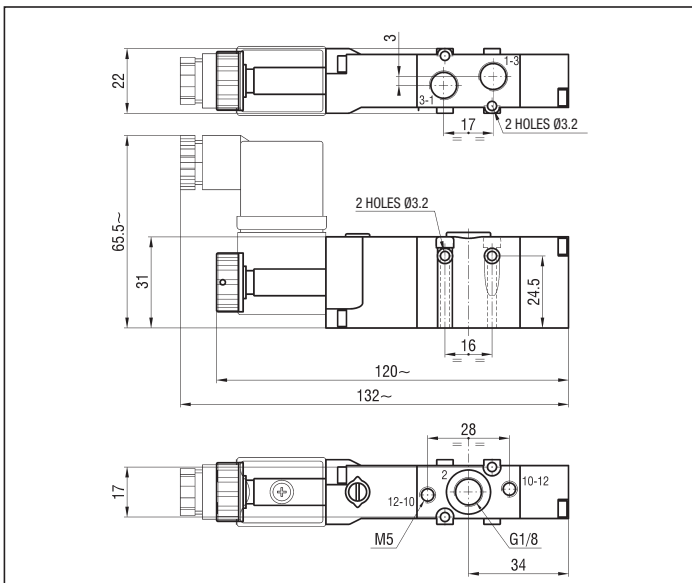
SOLENOID ACTUATED VALVES WITH Ø 9 mm SLEEVE G 1/8 - 3 PORT

| Symbol | Function | Controls | | Response time at 6 bar (ms) | | Flow rate at 6 bar ΔP = 1 bar (NI/min) | Weight (g) | TYPE* |
|--------|---------------------|-------------------------|-------------------------|-----------------------------|--------------|---|------------|---------------|
| | | Pilot | Return | Energized | De-energized | | | |
| | 3/2 N.O. monostable | Solenoid | Pneumomechanical spring | 11 | 35 | 650 | 110 | SKA822 KUC/ZQ |
| | | Solenoid | Pneumatic spring | 11 | 35 | 650 | 110 | SKA822 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring | 11 | 35 | 650 | 110 | SKA822 KUR/ZQ |
| | 3/2 N.C. monostable | Solenoid | Pneumomechanical spring | 11 | 35 | 650 | 110 | SKC822 KUC/ZQ |
| | | Solenoid | Pneumatic spring | 11 | 35 | 650 | 110 | SKC822 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring | 11 | 35 | 650 | 110 | SKC822 KUR/ZQ |
| | 3/2 bistable | Solenoid | Solenoid | 12 | 12 | 650 | 140 | SK822 KUC/KUC |
| | | Solenoid pilot assisted | Solenoid pilot assisted | 12 | 12 | 650 | 140 | SK822 KUR/KUR |

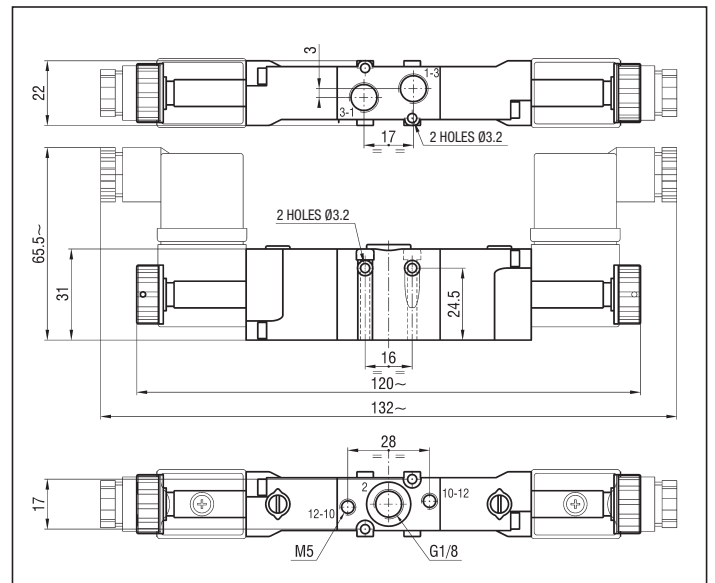
*THE TYPES OF THE SOLENOID VALVE DO NOT INCLUDE COILS

/EX Consistent with the ATEX directive II 2GD c T5 T100°C -10°C ≤ Ta ≤ 60°C E.G.: SKA822 KUC/ZQ

3 PORT MONOSTABLE



3 PORT BISTABLE



2

SOLENOID ACTUATED VALVES WITH 15 mm COIL G 1/8 - 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 | Returns | Energized | De-energized | | | |
| | 5/2 monostable | Solenoid | Pneumomechanical spring | 13 | 38 | 750 | 140 | SKCA815 KUC/ZQ |
| | | Solenoid | Pneumatic spring | | | | | SKCA815 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring pilot assisted | | | | | SKCA815 KUR/ZQ |
| | 5/2 bistable | Solenoid | Solenoid | 11 | 11 | 750 | 170 | SKCA815 KUC/KUC |
| | | Solenoid pilot assisted | Solenoid pilot assisted | | | | | SKCA815 KUR/KUR |
| | 5/3 closed centre | Solenoid | Mechanical spring | 15 | 17 | 600 | 184 | SKCA815 SUC/SUC |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKCA815 SUR/SUR |
| | 3/2 N.O. + 3/2 N.O. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 184 | SKA+A815 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKA+A815 KUR/ZR |
| | 3/2 N.O. + 3/2 N.C. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 184 | SKA+C815 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKA+C815 KUR/ZR |
| | 3/2 N.C. + 3/2 N.O. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 184 | SKC+A815 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKC+A815 KUR/ZR |
| | 3/2 N.C. + 3/2 N.C. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 184 | SKC+C815 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKC+C815 KUR/ZR |

* SPECIFY THE VOLTAGE IN THE ORDER - E.G.: **SKCA815 KUC/ZQ 02450-60**

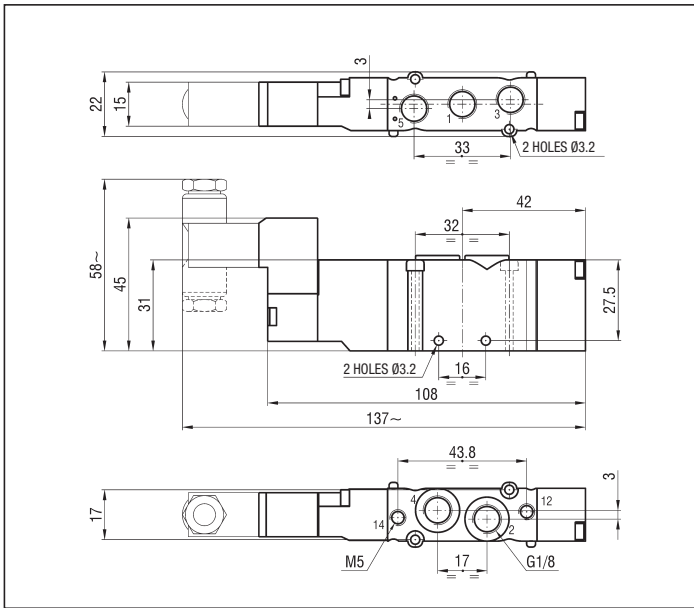
02400 = 24 V DC
02450-60 = 24 V AC

11050-60 = 110 V AC
22050-60 = 220 V AC

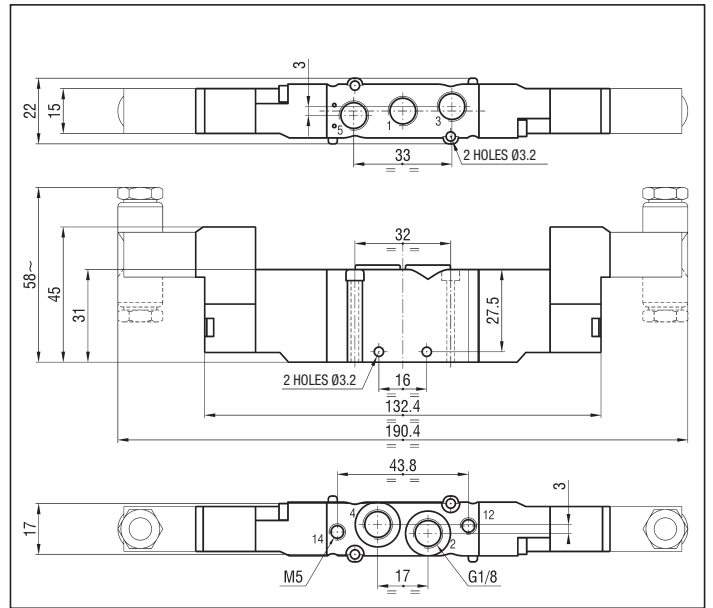
/EX Consistent with the ATEX directive II 3G c Ex nA IIC T5 Gc -5°C ≤ Ta ≤ 50°C
II 3D c Ex tc IIC T100°C IP65 Dc

E.G.: **SKCA815 KUC/ZQ 02450-60/EX**

5 PORT MONOSTABLE



3+3 AND 5 PORT 2 AND 3 POSITIONS



2

2

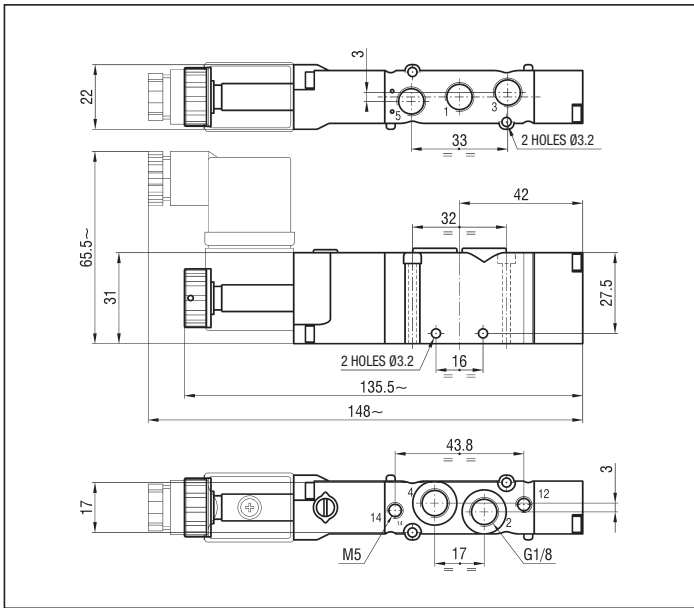
SOLENOID ACTUATED VALVES WITH Ø 9 mm SLEEVE G 1/8 - 5 PORT

| Symbol | Function | Controls | | Response time at 6 bar (ms) | | Flow rate at 6 bar ΔP = 1 bar (Nl/min) | Weight (g) | TYPE* |
|--------|--------------------------------|-------------------------|-------------------------|-----------------------------|--------------|---|------------|-----------------|
| | | Pilot | Returns | Energized | De-energized | | | |
| | 5/2 monostable | Solenoid | Pneumomechanical spring | 13 | 38 | 750 | 130 | SKCA822 KUC/ZQ |
| | | Solenoid | Pneumatic spring | | | | | SKCA822 KUC/TQ |
| | | Solenoid pilot assisted | Pneumomechanical spring | | | | | SKCA822 KUR/ZQ |
| | 5/2 bistable | Solenoid | Solenoid | 11 | 11 | 750 | 160 | SKCA822 KUC/KUC |
| | | Solenoid pilot assisted | Solenoid pilot assisted | | | | | SKCA822 KUR/KUR |
| | 5/3 closed centre | Solenoid | Mechanical spring | 15 | 17 | 600 | 170 | SKCA822 SUC/SUC |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKCA822 SUR/SUR |
| | 3/2 N.O. + 3/2 N.O. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 170 | SKA+A822 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKA+A822 KUR/ZR |
| | 3/2 N.O. + 3/2 N.C. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 170 | SKA+C822 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKA+C822 KUR/ZR |
| | 3/2 N.C. + 3/2 N.O. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 170 | SKC+A822 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKC+A822 KUR/ZR |
| | 3/2 N.C. + 3/2 N.C. monostable | Solenoid | Mechanical spring | 15 | 17 | 600 | 170 | SKC+C822 KUC/ZR |
| | | Solenoid pilot assisted | Mechanical spring | | | | | SKC+C822 KUR/ZR |

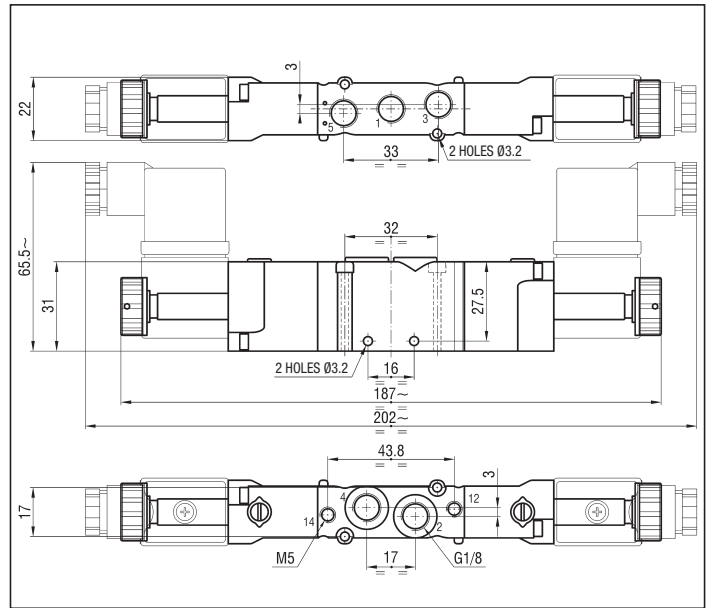
* THE TYPES OF THE SOLENOID VALVE DO NOT INCLUDE COILS

/EX Consistent with the ATEX directive II 2GD c T5 T100°C -10°C ≤ Ta ≤ 60°C E.G.: SKCA822 KUC/ZQ

5 PORT MONOSTABLE



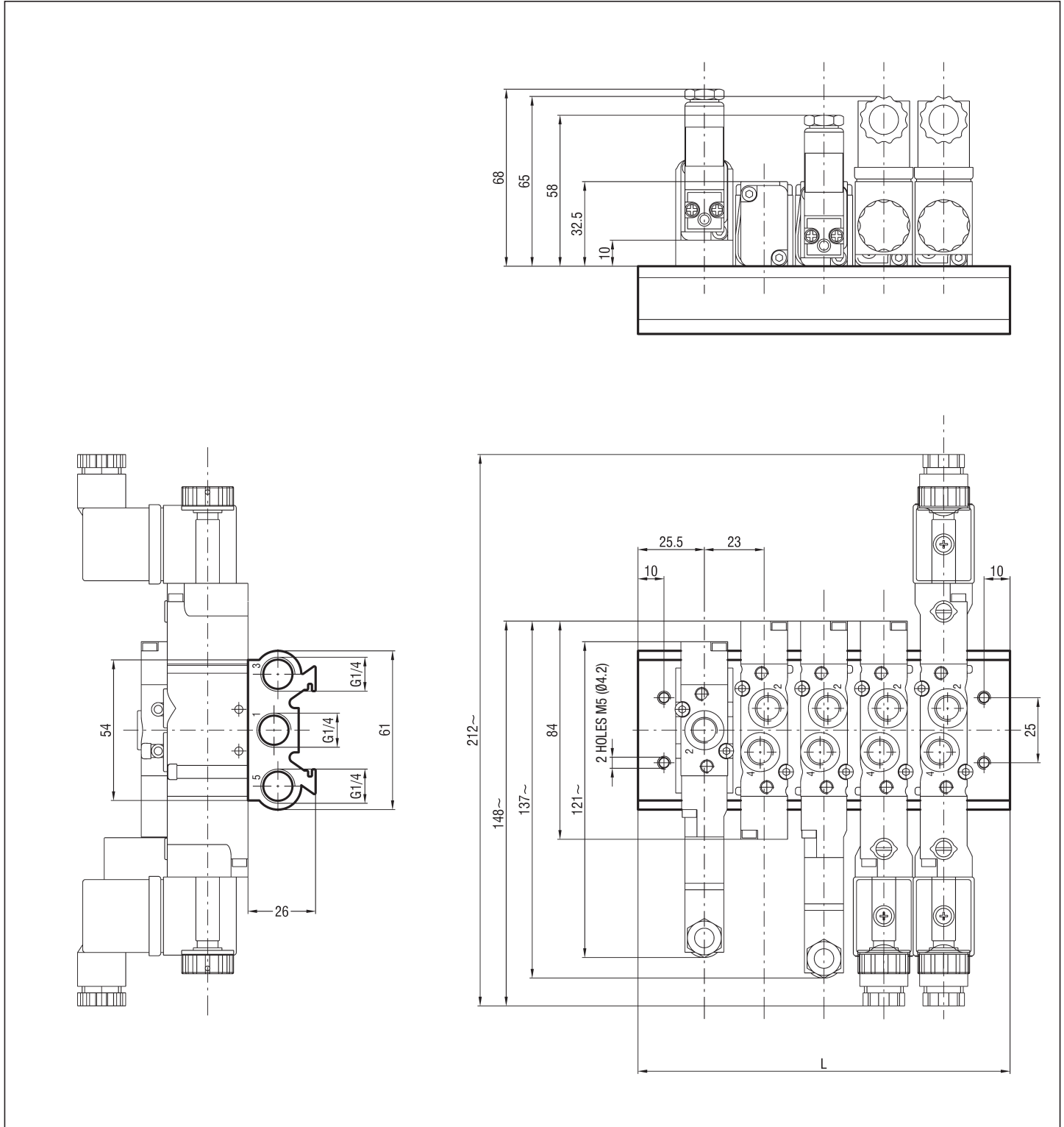
3+3 PORT, 5 PORT BISTABLE 3 POSITIONS



2

BASE FOR MANIFOLD MOUNTING OF VALVES G 1/8 - KB/SK8

2

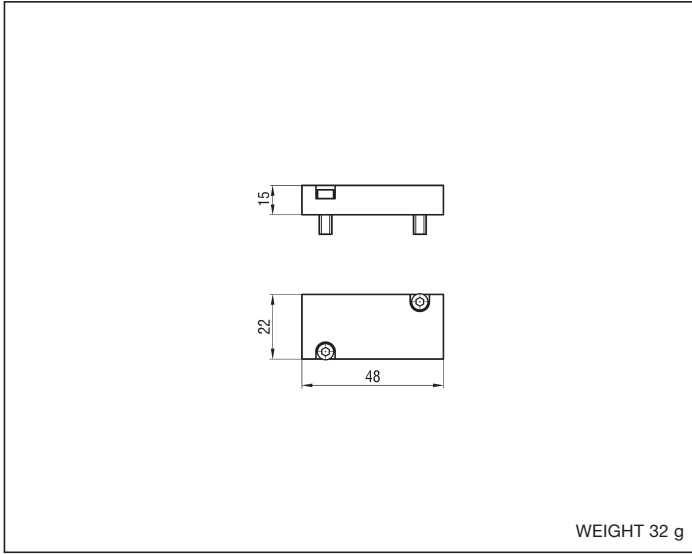


| No of stations | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
|----------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| L | 74 | 97 | 120 | 143 | 166 | 212 | 258 | 304 | 350 | 396 | 442 | 488 |
| Weight (g) | 170 | 221 | 272 | 323 | 374 | 476 | 578 | 680 | 782 | 884 | 986 | 1088 |
| TYPE* | KB/SK8/2 | KB/SK8/3 | KB/SK8/4 | KB/SK8/5 | KB/SK8/6 | KB/SK8/8 | KB/SK8/10 | KB/SK8/12 | KB/SK8/14 | KB/SK8/16 | KB/SK8/18 | KB/SK8/20 |

*BASES ARE SUPPLIED COMPLETE WITH SCREWS AND SEALS

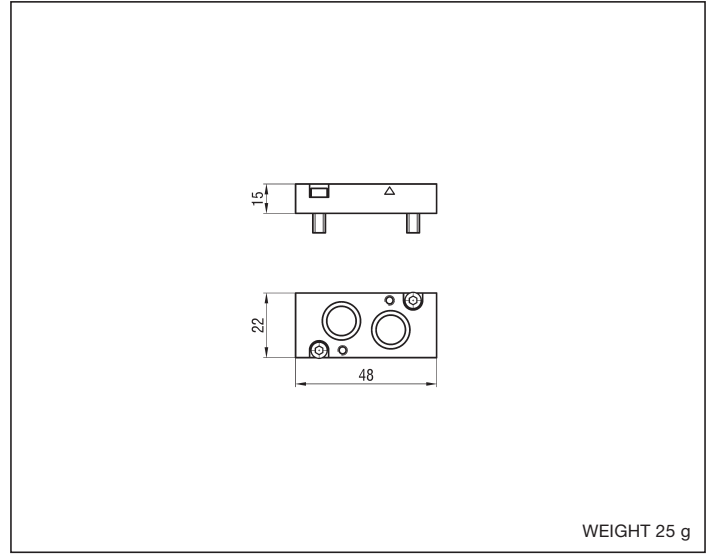
P.S.: ALSO 3 PORT VALVES ON THIS BASE CAN BE MOUNTED USING THE ADAPTER "KIT/A/SK8"

BLANKING PLATE - KIT/PC/SK8



BLANKING PLATE IS SUPPLIED COMPLETE WITH SCREWS AND SEALS

ADAPTER FOR MOUNTING SK 3 PORT - KIT/A/SK8



ADAPTER IS SUPPLIED COMPLETE WITH SCREWS AND SEALS

2