

3/2

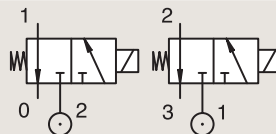
# VALVES FOR DRY OR LUBRICATED AIR, NEUTRAL GASES AND LIQUIDS

## DIRECT OPERATED

BRASS

PIPE MOUNTING

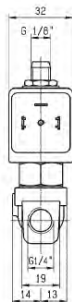
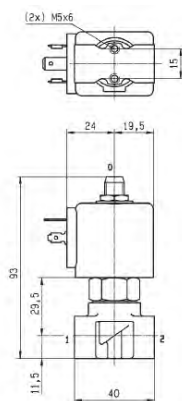
NORMALLY CLOSED



| Port size | Orifice Ø |     | Flow factors |     |         |      | Operating Pressure Differential |            |        | Fluid Temp. |     | Seat Seal | Valve Ref.            | Housing Ref. | Coil Ref. | IS | Power |          | Coil Group | Dwg. No. |
|-----------|-----------|-----|--------------|-----|---------|------|---------------------------------|------------|--------|-------------|-----|-----------|-----------------------|--------------|-----------|----|-------|----------|------------|----------|
|           | 1         | (2) | 1            | (2) | 1       | (2)  | Min                             | Max (MOPD) |        | Min         | Max |           |                       |              |           |    | AC W  | DC W     |            |          |
| BSP       | mm        |     | Kv l/min     |     | KV m³/h |      | bar                             | AC bar     | DC bar | °C          | °C  |           |                       |              |           |    |       |          |            |          |
| 1/8"      | 1.2       | 1.5 | 0.7          | 0.9 | 0.04    | 0.05 | 0                               | 10         | 10     | -10         | 75  | FKM       | 131M15                | 8993         | 488980    |    | 2     | 2.5      | 1.1        | 3382     |
|           | 1.2       | 1.5 | 0.7          | 0.9 | 0.04    | 0.05 | 0                               | 10         | 10     | -10         | 75  | FKM       | 131M1550 <sub>1</sub> | 8993         | 488980    |    | 2     | 2.5      | 1.1        | 3382     |
|           | 1.5       | 1.5 | 0.9          | 0.9 | 0.05    | 0.05 | 0                               | 7          | 7      | -10         | 75  | FKM       | 131M14                | 8993         | 488980    |    | 2     | 2.5      | 1.1        | 3382     |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 15         | 15     | -10         | 120 | FKM       | E131K14               | 4270         | 481000    |    | 8     | 8        | 2.1        | 3510     |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 15         | 15     | -10         | 100 | FKM       | E131K14               | 2995         | 481865    |    | 8     | 9        | 2.1        | 3510     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 120 | FKM       | 131K16                | 4270         | 481000    |    | 8     | 8        | 2.1        | 3510     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 100 | FKM       | 131K16                | 2995         | 481865    |    | 8     | 9        | 2.1        | 3510     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 120 | FKM       | 131K1650 <sub>1</sub> | 4270         | 481000    |    | 8     | 8        | 2.1        | 3510     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 100 | FKM       | 131K1650 <sub>1</sub> | 2995         | 481865    |    | 8     | 9        | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21 | 0                               | 7          | 7      | -10         | 120 | FKM       | E131K13               | 4270         | 481000    |    | 8     | 8        | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21 | 0                               | 7          | 7      | -10         | 100 | FKM       | E131K13               | 2995         | 481865    |    | 8     | 9        | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21 | 0                               | 7          | 7      | -10         | 100 | FKM       | E131K13               | 4270         | 486265    |    | 14    | 14       | 2.0        | 3510     |
| 1/8"-1/4" | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | -          | 2      | -20         | 75  | PUR       | 131K0397              | 2995         | 482740    |    | -     | 1.6      | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | 2          | 2      | -20         | 75  | PUR       | 131K0397              | -            | 495900    |    | 2.5   | 2        | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | -          | 2      | -20         | 75  | PUR       | 131K0397              | -            | 495910    | *  | -     | 0.3 to 3 | 6.0/8.0    | 8023     |
| 1/4"      | 1         | 1   | 0.6          | 0.6 | 0.03    | 0.03 | 0                               | -          | 10     | -10         | 55  | FKM       | 131K0490              | 2995         | 483580.01 | *  | -     | 0.5 to 3 | 7.0/8.0    | 7058     |
|           | 1         | 1   | 0.6          | 0.6 | 0.03    | 0.03 | 0                               | -          | 10     | -10         | 75  | FKM       | 131K0490              | -            | 48860.01  | *  | -     | 0.3 to 3 | 7.0/8.0    | 7058     |
|           | 1         | 1   | 0.6          | -   | 0.03    | -    | 0                               | -          | 10     | -10         | 75  | FKM       | 131K0490              | -            | 495910    | *  | -     | 0.3 to 3 | 7.0/8.0    | 7058     |

Notes:

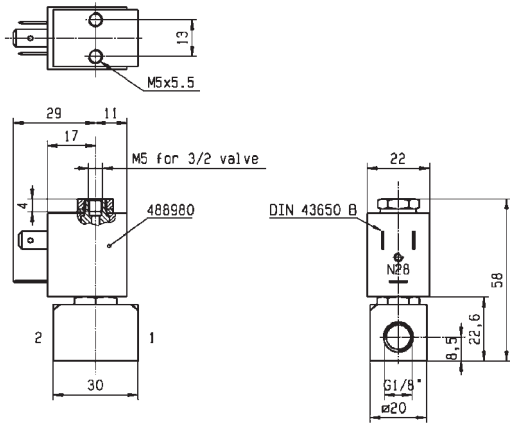
1. With manual override



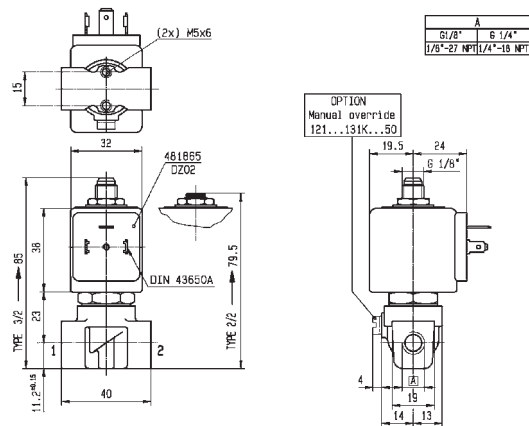
Drawing 7058



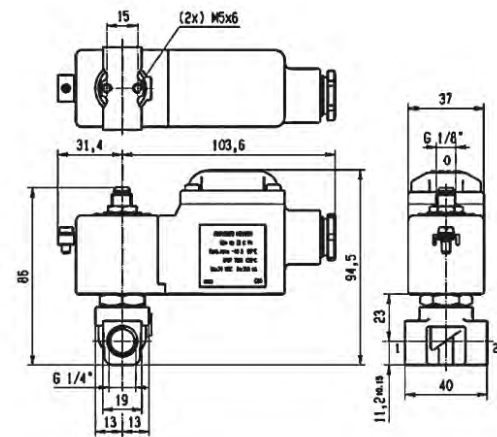
| For this page | Port size | Orifice (mm) | Kv (l/min) | MOPD (bar) | Fluid Temp (°C) |
|---------------|-----------|--------------|------------|------------|-----------------|
| From          | 1/8"      | 1.2          | 0.7        | 7          | -10             |
| To            | 1/8"      | 2.5          | 3.5        | 15         | 120             |



Drawing 3382



Drawing 3510



Drawing 8023

3/2

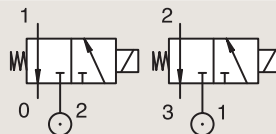
# VALVES FOR DRY OR LUBRICATED AIR, NEUTRAL GASES AND LIQUIDS

## DIRECT OPERATED

BRASS

PIPE MOUNTING

NORMALLY CLOSED



| Port size | Orifice Ø |     | Flow factors |     |         |      | Operating Pressure Differential |            |        | Fluid Temp. |            | Seat Seal |                        |           |        | IS  | Power |         | Coil Group | Dwg. No. |
|-----------|-----------|-----|--------------|-----|---------|------|---------------------------------|------------|--------|-------------|------------|-----------|------------------------|-----------|--------|-----|-------|---------|------------|----------|
|           | 1         | (2) | 1            | (2) | 1       | (2)  | Min                             | Max (MOPD) | Min    | Max         | Valve Ref. |           | Housing Ref.           | Coil Ref. | AC W   |     | DC W  |         |            |          |
| BSP       | mm        |     | Kv l/min     |     | KV m³/h |      | bar                             | AC bar     | DC bar | °C          | °C         |           |                        |           |        |     |       |         |            |          |
| 1/4"      | 1.2       | 1.5 | 0.8          | 1.5 | 0.05    | 0.09 | 0                               | 30         | -      | -30         | 130        | Ruby      | E131K64                | 4270      | 481000 | 8   | -     | 2.0     | 3510       |          |
|           | 1.2       | 1.5 | 0.8          | 1.5 | 0.05    | 0.09 | 0                               | 30         | 30     | -30         | 140        | Ruby      | E131K64                | 4270      | 486265 | 14  | 14    | 2.0     | 3510       |          |
|           | 1.2       | 1.5 | 0.8          | 1.5 | 0.05    | 0.09 | 0                               | 30         | -      | -30         | 130        | Ruby      | E131K6450 <sub>1</sub> | 4270      | 481000 | 8   | -     | 2.0     | 3510       |          |
|           | 1.2       | 1.5 | 0.8          | 1.5 | 0.05    | 0.09 | 0                               | 30         | 30     | -30         | 140        | Ruby      | E131K6450 <sub>1</sub> | 4270      | 486265 | 14  | 14    | 2.0     | 3510       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | -          | 7      | -20         | 75         | PUR       | 131K0497               | 2995      | 482740 | -   | 1.6   | 6.0/8.0 | 8023       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 7          | 7      | -20         | 75         | PUR       | 131K0497               | -         | 495900 | 2.5 | 2     | 6.0/8.0 | 8023       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | -          | 7      | -20         | 75         | PUR       | 131K0497               | -         | 495910 | *   | -     | 0.3-1.2 | 6.0/8.0    | 8023     |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | -          | 7      | -20         | 65         | PUR       | 131K0497               | 2995      | 496125 | -   | 1.6   | 6.0/8.0 | 8023       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 16         | 16     | -10         | 120        | FKM       | E131K04                | 4270      | 481000 | 8   | 8     | 2.0     | 3510       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 16         | 16     | -10         | 100        | FKM       | E131K04                | 2995      | 481865 | 8   | 9     | 2.0     | 3510       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 16         | 16     | -10         | 120        | FKM       | E131K04                | 4270      | 486265 | 14  | 14    | 2.0     | 3510       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 15         | 15     | -10         | 120        | FKM       | E131K0450 <sub>1</sub> | 4270      | 481000 | 8   | 8     | 2.1     | 3510       |          |
|           | 1.5       | 1.5 | 1.5          | 1.5 | 0.09    | 0.09 | 0                               | 15         | 15     | -10         | 100        | FKM       | E131K0450 <sub>1</sub> | 2995      | 481865 | 8   | 9     | 2.1     | 3510       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T23                 | 4270      | 481000 | 8   | 8     | 2.0     | 3223       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T23                 | 2995      | 481865 | 8   | 9     | 2.0     | 3223       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T23                 | 4270      | 486265 | 14  | 14    | 2.0     | 3223       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T2301 <sub>1</sub>  | 4270      | 481000 | 8   | 8     | 2.0     | 3223       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T2301 <sub>1</sub>  | 2995      | 481865 | 8   | 9     | 2.0     | 3223       |          |
|           | 2         | 3   | 2.5          | 4.5 | 0.15    | 0.27 | 0                               | 10         | 10     | -10         | 75         | FKM       | 131T2301 <sub>1</sub>  | 4270      | 486265 | 14  | 14    | 2.0     | 3223       |          |

Notes:

1. With manual override



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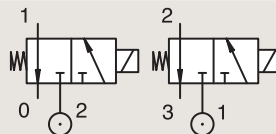
# VALVES FOR DRY OR LUBRICATED AIR, NEUTRAL GASES AND LIQUIDS

## DIRECT OPERATED

BRASS

PIPE MOUNTING

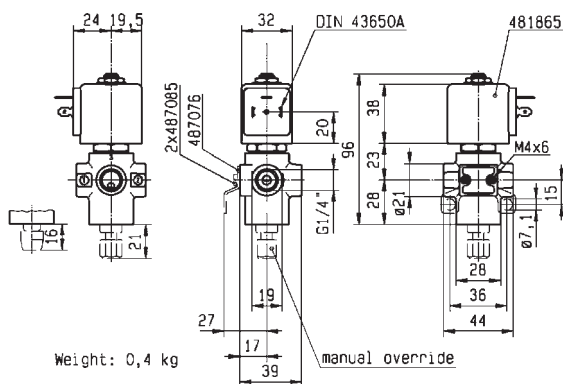
NORMALLY CLOSED



| Port size | Orifice Ø |     | Flow factors |     |         |      | Operating Pressure Differential |            |        | Fluid Temp. |     | Seat Seal |            |              |           | IS | Power |         | Coil Group | Dwg. No. |
|-----------|-----------|-----|--------------|-----|---------|------|---------------------------------|------------|--------|-------------|-----|-----------|------------|--------------|-----------|----|-------|---------|------------|----------|
|           |           |     |              |     |         |      |                                 |            |        |             |     |           |            |              |           |    |       |         |            |          |
| BSP       | 1         | (2) | 1            | (2) | 1       | (2)  | Min                             | Max (MOPD) |        | Min         | Max |           | Valve Ref. | Housing Ref. | Coil Ref. |    | AC W  | DC W    |            |          |
|           | mm        |     | Kv l/min     |     | KV m³/h |      | bar                             | AC bar     | DC bar | °C          | °C  |           |            |              |           |    |       |         |            |          |
| 1/4"      | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 120 | FKM       | E131K06    | 4270         | 481000    |    | 8     | 8       | 2.0        | 8119     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 100 | FKM       | E131K06    | 2995         | 481865    |    | 8     | 9       | 2.0        | 8119     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 120 | FKM       | E131K06    | 4270         | 486265    |    | 14    | 14      | 2.0        | 8119     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 120 | FKM       | E131K0650  | 4270         | 481000    |    | 8     | 8       | 2.1        | 3510     |
|           | 2         | 2.5 | 2.5          | 3.5 | 0.15    | 0.21 | 0                               | 10         | 10     | -10         | 100 | FKM       | E131K0650  | 2995         | 481865    |    | 8     | 9       | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | -          | 2      | -20         | 75  | PUR       | 131K0397   | 2995         | 482740    |    | -     | 1.6     | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | -          | 2      | -20         | 65  | PUR       | 131K0397   | 2995         | 496125    |    | -     | 1.6     | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | 2          | 2      | -20         | 75  | PUR       | 131K0397   | -            | 495900    |    | 2.5   | 2       | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3            | 3   | 0.18    | 0.18 | 0                               | -          | 2      | -20         | 75  | PUR       | 131K0397   | -            | 495910    | *  | -     | 0.3-1.2 | 6.0/8.0    | 8023     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21 | 0                               | 7          | 7      | -40         | 75  | PUR       | E131K0358  | 4270         | 481000    |    | 8     | 8       | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21 | 0                               | 7          | 7      | -40         | 75  | PUR       | E131K0358  | 2995         | 481865    |    | 8     | 9       | 2.1        | 3510     |
|           | 2.5       | 3.5 | 3.5          | 5.5 | 0.21    | 0.33 | 0                               | 7          | 7      | -10         | 75  | FKM       | 131T29     | 4270         | 481000    |    | 8     | 8       | 2.1        | 3223     |
|           | 2.5       | 3.5 | 3.5          | 5.5 | 0.21    | 0.33 | 0                               | 7          | 7      | -10         | 75  | FKM       | 131T29     | 2995         | 481865    |    | 8     | 9       | 2.1        | 3223     |
|           | 2.5       | 3.5 | 3.5          | 5.5 | 0.21    | 0.33 | 0                               | 7          | 7      | -10         | 75  | FKM       | 131T2901   | 4270         | 481000    |    | 8     | 8       | 2.1        | 3223     |
|           | 2.5       | 3.5 | 3.5          | 5.5 | 0.21    | 0.33 | 0                               | 7          | 7      | -10         | 75  | FKM       | 131T2901   | 2995         | 481865    |    | 8     | 9       | 2.1        | 3223     |

Notes:

1. With manual override

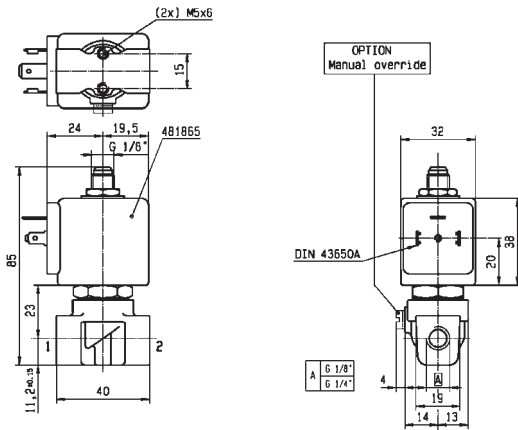


Drawing 3223

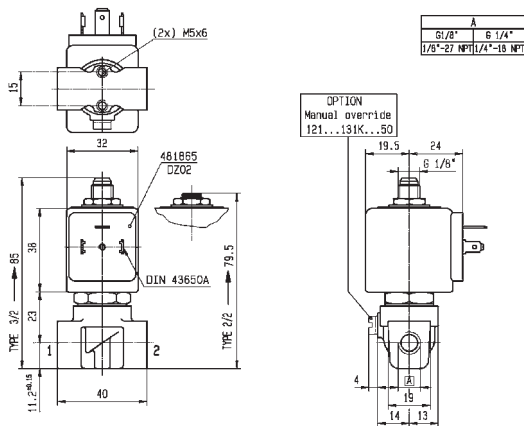
# 3 WAY VALVES



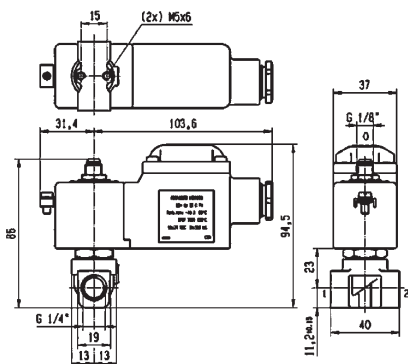
| For this page | Port size | Orifice (mm) | Kv (l/min) | MOPD (bar) | Fluid Temp (°C) |
|---------------|-----------|--------------|------------|------------|-----------------|
| From          | 1/4"      | 2            | 2.5        | 2          | -40             |
| To            | 1/4"      | 2.5          | 3.5        | 10         | 120             |



Drawing 8119



Drawing 3510



Drawing 8023

3/2

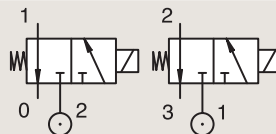
# VALVES FOR DRY OR LUBRICATED AIR, NEUTRAL GASES AND LIQUIDS

## DIRECT OPERATED

BRASS

PIPE MOUNTING

NORMALLY CLOSED



| Port size | Orifice Ø |     | Flow factors |     |         | Operating Pressure Differential |     |            | Fluid Temp. |     | Seat Seal | Valve Ref. | Housing Ref.           | Coil Ref. | IS     | Power |      | Coil Group | Dwg. No. |
|-----------|-----------|-----|--------------|-----|---------|---------------------------------|-----|------------|-------------|-----|-----------|------------|------------------------|-----------|--------|-------|------|------------|----------|
|           | 1         | (2) | 1            | (2) | 1       | (2)                             | Min | Max (MOPD) | Min         | Max |           |            |                        |           |        | AC W  | DC W |            |          |
| BSP       | mm        |     | Kv l/min     |     | KV m³/h |                                 | bar | AC bar     | DC bar      | °C  | °C        |            |                        |           |        |       |      |            |          |
| 1/4"      | 2.5       | 6   | 2.7          | 15  | 0.16    | 0.9                             | 0.1 | 7          | 7           | -10 | 75        | FKM        | E131E03                | 4270      | 481000 | 8     | 8    | 2.0        | 3525     |
|           | 2.5       | 6   | 2.7          | 15  | 0.16    | 0.9                             | 0.1 | 7          | 7           | -10 | 75        | FKM        | E131E03                | 2995      | 481865 | 8     | 9    | 2.0        | 3525     |
|           | 2.5       | 6   | 2.7          | 15  | 0.16    | 0.9                             | 0.1 | 7          | 7           | -10 | 75        | FKM        | E131E03                | 4270      | 486265 | 14    | 14   | 2.0        | 3525     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -10 | 100       | FKM        | E131K03                | 4270      | 481000 | 8     | 8    | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -10 | 100       | FKM        | E131K03                | 2995      | 481865 | 8     | 9    | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -40 | 75        | PUR        | E131K0308              | 4270      | 481000 | 8     | 8    | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -40 | 75        | PUR        | E131K0308              | 2995      | 481865 | 8     | 9    | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -10 | 120       | FKM        | E131K0350 <sub>1</sub> | 4270      | 481000 | 8     | 8    | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -10 | 100       | FKM        | E131K0350 <sub>1</sub> | 2995      | 481865 | 8     | 9    | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -30 | 130       | Ruby       | E131K63                | 4270      | 481000 | 8     | 8    | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -30 | 100       | Ruby       | E131K63                | 2995      | 481865 | 8     | 9    | 2.0        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -30 | 130       | Ruby       | E131K6350 <sub>1</sub> | 4270      | 481000 | 8     | 8    | 2.1        | 3510     |
|           | 2.5       | 2.5 | 3.5          | 3.5 | 0.21    | 0.21                            | 0   | 7          | 7           | -30 | 100       | Ruby       | E131K6350 <sub>1</sub> | 2995      | 481865 | 8     | 9    | 2.1        | 3510     |
|           | 3         | 4   | 4.5          | 6   | 0.27    | 0.36                            | 0   | 10         | -           | -10 | 75        | FKM        | 131T22                 | 4270      | 481044 | 14    | -    | 2.2        | 3223     |
|           | 3         | 4   | 4.5          | 6   | 0.27    | 0.36                            | 0   | 10         | -           | -10 | 75        | FKM        | 131T22                 | 2995      | 492425 | 14    | -    | 2.2        | 3223     |
|           | 4.5       | 6   | 7            | 9   | 0.42    | 0.54                            | 0   | 2          | 2           | -10 | 75        | FKM        | 131T21                 | 4270      | 481000 | 8     | 8    | 2.0        | 3223     |
|           | 4.5       | 6   | 7            | 9   | 0.42    | 0.54                            | 0   | 2          | 2           | -10 | 75        | FKM        | 131T21                 | 2995      | 481865 | 8     | 9    | 2.0        | 3223     |
|           | 4.5       | 6   | 7            | 9   | 0.42    | 0.54                            | 0   | 2          | 2           | -10 | 75        | FKM        | 131T21                 | 4270      | 486265 | 14    | 14   | 2.0        | 3223     |

Notes:

1. With manual override

