

# 5/3-directional valve, Series 581, size 3

- ISO 5599-1
- ISO 3
- 5/3
- $Q_n = 4100$  l/min
- Compressed air connection output Base plate ISO 5599-1
- Electrical connection Plug, EN 175301-803, form A
- Manual override without detent



|                                  |                             |
|----------------------------------|-----------------------------|
| Version                          | Spool valve                 |
| Sealing principle                | Soft sealing                |
| Blocking principle               | Single base plate principle |
| Connection type                  | Plate connection            |
| Standards                        | ISO 5599-1, ISO 3           |
| Working pressure min./max.       | See table below             |
| Control pressure min./max.       | 3 ... 10 bar                |
| Ambient temperature min./max.    | -15 ... 50 °C               |
| Medium temperature min./max.     | -15 ... 50 °C               |
| Medium                           | Compressed air              |
| Max. particle size               | 50 µm                       |
| Oil content of compressed air    | 0 ... 5 mg/m <sup>3</sup>   |
| Nominal flow $Q_n$               | 4100 l/min                  |
| Flow conductance C               | 14,1 l/(s*bar)              |
| Protection class with connection | IP65                        |
| Duty cycle                       | 100 %                       |
| Typ. switch-on time              | 22 ms                       |
| Typ. switch-off time             | 61 ms                       |
| Mounting screw                   | with hexagon socket         |
| Mounting screw tightening torque | 10 Nm                       |
| Weight                           | 1,22 kg                     |

## Technical data

| Part No.   |  | MO | Operational voltage<br>DC | Voltage tolerance<br>DC | Power consumption<br>DC |
|------------|--|----|---------------------------|-------------------------|-------------------------|
| 5813490190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813491190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813492190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813493190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813590190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813591190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813592190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813593190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813790190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813791190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813792190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |
| 5813793190 |  |    | 24 V                      | -10% / +10%             | 6 W                     |

| Part No.   | Pilot    | Working pressure min./max. | Electrical connection<br>Pilot valve | Throttle      |
|------------|----------|----------------------------|--------------------------------------|---------------|
| 5813490190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | -             |
| 5813491190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | with throttle |
| 5813492190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | -             |
| 5813493190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | with throttle |
| 5813590190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | -             |
| 5813591190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | with throttle |
| 5813592190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | -             |
| 5813593190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | with throttle |
| 5813790190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | -             |
| 5813791190 | internal | 3 ... 10 bar               | Plug EN 175301-803, form A           | with throttle |
| 5813792190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | -             |
| 5813793190 | external | -0,95 ... 10 bar           | Plug EN 175301-803, form A           | with throttle |

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

|         |                                |
|---------|--------------------------------|
| Housing | Aluminum                       |
| Seals   | Acrylonitrile butadiene rubber |

# Dimensions

## Dimensions

