

Red Dragon

Measure | Monitor | Control



Pneumatic Solutions for Hazardous & Aggressive Process Environments





Introducing the Sitecna® range of high performance Air Preparation and Flow Control Valves designed and built in Italy by Sitecna® Srl with over 30 years experience in pneumatic component design and manufacturing.

Designed for Low Temperature
Operation down to -55°C



Optimised for Performance in
Demanding Applications



Robust and Dependable for Harsh Industrial Environments



ATEX Certified for Potential Explosion Hazard Areas



Red Dragon Valves® are the exclusive UK partner of Sitecna® Srl. We maintain stock of Sitecna® products in the UK and offer complete technical support using highly experienced dedicated engineers.

Filter Regulators - Model FR

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Relieving or non-relieving designs
- Manual or automatic condensate drains
- Maximum inlet pressure 30bar for stainless steel, 25bar for aluminium constructions



Construction Materials

316L stainless steel to NACE MR01-75 or Epoxy coated copper free aluminium alloy with 304 & 316L internals.

| Model | Size | Flow Coeff. |
|-------|----------|-------------|
| FR04 | 1/4" NPT | Cv = 0.9 |
| FR06 | 3/8" NPT | Cv = 4.0 |
| FR08 | 1/2" NPT | Cv = 4.5 |
| FR12 | 3/4" NPT | Cv = 11.0 |
| FR16 | 1" NPT | Cv = 11.5 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Non Coded Options

EN10204 3.1 material certificate

Threaded relief port

High Build offshore paint specification for AL or SS constructions

Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

Pressure Ranges

0.2 to 2 bar

0.2 to 4 bar

0.4 to 8 bar

0.4 to 10 bar

Filter Elements

5 Micron (316/316L)

25 Micron (316/316L)

40 Micron (316/316L)

Coded Options

316SS mounting bracket

Non relieving operation

Handwheel adjustment

1/8" or 1/4" NPT gauge ports

Manual or automatic drain (16bar max)

Pressure gauges

For part numbers and coding details see page 9

Regulator - Model R

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Relieving or non-relieving designs
- Maximum inlet pressure 30bar for stainless steel, 25bar for aluminium constructions



Construction Materials

316L stainless steel to NACE MR01-75 or Epoxy coated copper free aluminium alloy with 304 & 316L internals.

| Model | Size | Flow Coeff. |
|-------|----------|-------------|
| R04 | 1/4" NPT | Cv = 0.9 |
| R06 | 3/8" NPT | Cv = 4.0 |
| R08 | 1/2" NPT | Cv = 4.5 |
| R12 | 3/4" NPT | Cv = 11.0 |
| R16 | 1" NPT | Cv = 11.5 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Pressure Ranges

0.2 to 2 bar
0.2 to 4 bar
0.4 to 8 bar
0.4 to 10 bar

Coded Options

316SS mounting bracket
Non relieving operation
Handwheel adjustment
1/8" or 1/4" NPT gauge ports
Pressure gauges

Non Coded Options

EN10204 3.1 material certificate

Threaded relief port

High Build offshore paint specification for AL or SS constructions

Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

Filter - Model F

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Maximum inlet pressure 30bar for stainless steel (25bar above 1"), 25bar for aluminium constructions



Construction Materials

316L stainless steel to NACE MR01-75 or Epoxy coated copper free aluminium alloy with 304 & 316L internals.

| Model | Size | Flow Coeff. |
|-------|----------|-------------|
| F04 | 1/4" NPT | Cv = 1.0 |
| F06 | 3/8" NPT | Cv = 4.0 |
| F08 | 1/2" NPT | Cv = 4.8 |
| F12 | 3/4" NPT | Cv = 12.2 |
| F16 | 1" NPT | Cv = 16.3 |
| F24 | 1.5" NPT | Cv = 34.5 |
| F32 | 2" NPT | Cv = 46.5 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Filter Elements

- 5 Micron (316/316L)
- 25 Micron (316/316L)
- 40 Micron (316/316L)
- 0.01 Micron Coalescing (BMF)

Coded Options

- 316SS mounting bracket
- 1/8" or 1/4" NPT gauge ports
- Manual or automatic drain (16bar max)
- Pressure gauges

Non Coded Options

- EN10204 3.1 material certificate
- High Build offshore paint specification for AL or SS constructions
- Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

Back Pressure Regulator - Model BP

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Maximum inlet pressure 35bar



Construction Materials

316L stainless steel to NACE MR01-75

| Model | Size | Flow Coeff. |
|-------|----------|-------------|
| BP04 | 1/4" NPT | Cv = 1.6 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Pressure Ranges

0.2 to 2 bar
0.2 to 4 bar
0.4 to 8 bar
4.0 to 35 bar

Coded Options

316SS mounting bracket
Handwheel adjustment
1/8" or 1/4" NPT gauge ports
Pressure gauges

Non Coded Options

EN10204 3.1 material certificate
High Build offshore paint specification
Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

Volume Booster - Model VB

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- 1 : 1 with integral bypass valve
- Maximum inlet pressure 10 bar
- Linearity +/- 1% FS



Construction Materials

316L stainless steel to NACE MR01-75 or Epoxy coated copper free aluminium alloy with 304 & 316L internals.

| Model | Size | Flow Coeff. (In/Exh) |
|-------|----------|----------------------|
| VB04 | 1/4" NPT | Cv = 2.20/2.40 |
| VB08 | 1/2" NPT | Cv = 2.80/2.80 |
| VB12 | 3/4" NPT | Cv = 5.60/6.50 |
| VB16 | 1" NPT | Cv = 8.00/8.00 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Pressure Range

0 to 10 bar

Coded Options

316SS mounting bracket
Threaded exhaust port

Non Coded Options

EN10204 3.1 material certificate

High Build offshore paint specification for AL or SS constructions

Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

Part Number Coding Table

Covering products:

Filter Regulator, Regulator, Filter, Back Pressure Regulator, Volume Booster, Lock-Up Valve and Pressure Sensing Relays.

| Sample Part Number | | FR | 08 | 3 | 2 | 00 | 07 | SS | NB | 2 | | |
|--------------------|----------------------|----|----|---|---|----|----|----|----|---|-----------------------------------|----------------|
| Type | Filter Regulator | FR | | | | | | | | | EN10204 3.1 Material Certificate | Uncoded Option |
| | Regulator | R | | | | | | | | | Threaded Relief Port | |
| | Filter | F | | | | | | | | | Special Materials | |
| | Back Pressure Reg * | BP | | | | | | | | | Special Paint Finish | |
| | Volume Booster | VB | | | | | | | | 0 | None | Accessories |
| | Lock-Up Valve * | LK | | | | | | | | 2 | 316S Mounting Bracket | |
| | 2/2 Relay * | SV | | | | | | | | 3 | Panel Nut & Handwheel (<=1/2") | |
| | 3/2 Relay * | S3 | | | | | | | | | X | Special |
| Thread Size | 1/4" NPT *=1/4" only | | 04 | | | | | | NB | | NBR -20 to +80°C | Elastomer |
| | 3/8" NPT | | 06 | | | | | | FK | | FKM -25 to +90°C | |
| | 1/2" NPT | | 08 | | | | | | LT | | EPDM -40 to +80°C | |
| | 3/4" NPT | | 12 | | | | | | FL | | FVMQ -55 to +90°C | |
| | 1" NPT | | 16 | | | | | | AL | | Aluminium | |
| Pressure Range | F or VB only | | | 0 | | | | SS | | | Stainless Steel | Material |
| | 0.2-2.0 Bar | | | 1 | | | | SP | | | Special Material Requested | |
| | 0.2-4.0 Bar | | | 2 | | | 00 | | | | None | Variant |
| | 0.4-8 Bar | | | 3 | | | 05 | | | | Non-Relieving | |
| | 0.4-10 Bar | | | 4 | | | 06 | | | | 1/4" NPT Gauge Port | |
| 4-35 Bar (BP) | | | 7 | | | 07 | | | | | Automatic Drain | |
| Filtration | None | | | | 0 | | 08 | | | | Double Lock-Up (LK) | Variant |
| | 5 micron | | | | 1 | | 56 | | | | Non-Relieving & 1/4" Gauge Port | |
| | 25 micron | | | | 2 | | 57 | | | | Non-Relieving & Automatic Drain | |
| | 40 micron | | | | 3 | | 67 | | | | Automatic Drain & 1/4" Gauge Port | |
| | 0.01 micron | | | | 4 | | 88 | | | | Threaded Exhaust Port (VB) | |
| Pressure Gauge | None | | | | | 00 | | | | | None | Pressure Gauge |
| | 304SS/Brass | | | | | 1B | | | | | 304SS/Brass | |
| | 304SS/316SS | | | | | 1S | | | | | 304SS/316SS | |
| | 316SS/316SS | | | | | 1X | | | | | 316SS/316SS | |

Note that pressure gauges are frequently specified separately from the above coding scheme to allow for many variations of dial sizes, ranges and materials etc.

For more details on mounting dimensions, available options or help with part numbers, prices or lead times, please contact Red Dragon directly on +44 (0) 1443 772500 or visit the website below for more downloadable datasheets.

Lock-Up Valve - Model LK

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Single or dual circuit lock-up
- Maximum inlet pressure 10 bar
- Sensitivity 0.1 bar



Construction Materials

316L stainless steel to NACE MR01-75 or Epoxy coated copper free aluminium alloy with 304 & 316L internals.

| Model | Size | Flow Coeff. |
|-------|----------|-------------|
| LK04 | 1/4" NPT | Cv = 0.9 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Pressure Range

0 to 7 bar

Coded Options

Single or dual circuit function
316SS mounting bracket

Non Coded Options

EN10204 3.1 material certificate

High Build offshore paint specification for AL or SS constructions

Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

Pressure Sensing Relay - Models SV & S3

- All metal construction
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- 2/2 or 3/2 switching



Construction Materials

316L stainless steel to NACE MR01-75

| Model | Size | Flow Coeff. |
|-------------------|----------|-------------|
| S ³ 04 | 1/4" NPT | Cv = 0.9 |

Sealing Options

| | |
|------|-----------------|
| NBR | -20 to 80 deg C |
| FKM | -25 to 90 deg C |
| EPDM | -40 to 80 deg C |
| FVMQ | -55 to 90 deg C |

Pressure Ranges

0.2 to 2 bar
0.2 to 4 bar
0.4 to 8 bar

Coded Options

316SS mounting bracket
2/2 or 3/2 operation
Handwheel adjustment
1/8" or 1/4" NPT signal port

Non Coded Options

EN10204 3.1 material certificate
High Build offshore paint specification
Construction in exotic alloy (Monel, Super Duplex, Hastelloy, 6MO etc)

For part numbers and coding details see page 9

3/2 & 5/2 Spool Valves - Model DP

- Manual or pilot operated
- 316L stainless steel to NACE MR01-75
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl
- Manual reset option
- Suitable for dual pressure operation



Details

Minimum Pilot Pressure 2.5 bar
Orifice 1/4" = 8mm, 1/2" = 12mm

Options

EN10204 3.1 material certificate
FKM Seals (Add suffix FK after N in P/N)

| Size NPT | Flow Coef. Cv | Function | Pressure Range (bar) | | Body | Seals | Amb. Temperature °C | | Part Number |
|--|------------------|----------|----------------------|-----|--------|-------|---------------------|-----|--------------|
| | | | Min | Max | | | Min | Max | |
| AIR PILOT - SPRING RETURN SPOOL VALVE | | | | | | | | | |
| 1/4" | 2.2 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS04N |
| 1/4" | 2.2 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS04N |
| 1/2" | 4.0 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS08N |
| 1/2" | 4.0 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS08N |
| AIR PILOT - SPRING RETURN SPOOL VALVE WITH MANUAL RESET | | | | | | | | | |
| 1/4" | 2.2 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS04N-RM |
| 1/4" | 2.2 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS04N-RM |
| PUSH BUTTON - SPRING RETURN SPOOL VALVE | | | | | | | | | |
| 1/4" | 2.2 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS04N-M1 |
| 1/4" | 2.2 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS04N-M1 |
| 1/2" | 4.0 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS08N-M1 |
| 1/2" | 4.0 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS08N-M1 |
| PUSH BUTTON - DETENTED SPOOL VALVE | | | | | | | | | |
| 1/4" | 2.2 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS04N-M2 |
| 1/4" | 2.2 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS04N-M2 |
| 1/2" | 4.0 | 3/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP32SS08N-M2 |
| 1/2" | 4.0 | 5/2 | -0.9 | 10 | SS316L | NBR | -20 | 90 | DP52SS08N-M2 |

Quick Exhaust Valves - Model VSR

- 316L stainless steel to NACE MR01-75
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl



Details

High Flow design

Minimum Pilot Pressure 2 bar

| Size NPT | Pressure Range (Bar) | | Body | Seals | Amb. Temperature °C | | Part Number |
|----------|----------------------|-----|--------|-------|---------------------|-----|-------------|
| | Min | Max | | | Min | Max | |
| 1/4" | 2 | 12 | SS316L | PU | -20 | 80 | VSR04NSS |
| 1/2" | 2 | 12 | SS316L | PU | -20 | 80 | VSR08NSS |
| 3/4" | 2 | 12 | SS316L | PU | -20 | 80 | VSR12NSS |
| 1" | 2 | 12 | SS316L | PU | -20 | 80 | VSR16NSS |

Options

| Suffix | Amb. Temperature °C | |
|--------|---------------------|-----|
| | Min | Max |
| FK | -25 | 90 |
| | | |
| | | |

EN10204 3.1 material certificate

Flow Regulators - Models RFB & RFU

- 316L stainless steel to NACE MR01-75
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- Full material traceability
- 100% manufactured in Italy by Sitecna® Srl



Details

RFU = Unidirectional flow regulator

RFB = Bidirectional flow regulator

| Size NPT | Pressure Range (Bar) | | Body | Seals | Amb. Temperature °C | | Part Number |
|----------|----------------------|-----|--------|-------|---------------------|-----|-------------|
| | Min | Max | | | Min | Max | |
| 1/4" | 0 | 12 | SS316L | NBR | -20 | 80 | RFU04NSSNB |
| 1/2" | 0 | 12 | SS316L | NBR | -20 | 80 | RFU08NSSNB |
| 1/4" | 0 | 12 | SS316L | NBR | -20 | 80 | RFB04NSSNB |
| 1/2" | 0 | 12 | SS316L | NBR | -20 | 80 | RFB08NSSNB |

Options

| Suffix (NB) | Amb. Temperature °C | |
|-------------|---------------------|-----|
| | Min | Max |
| FK | -25 | 90 |
| LT | -40 | 80 |
| FL | -55 | 90 |

EN10204 3.1 material certificate

PM suffix adds panel mounting nut (as pictured)

High Flow Silencers - Model SLHF

- 316L stainless steel to NACE MR01-75
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- 100% manufactured in Italy by Sitecna® Srl



Details

High Flow Design

70% Noise Reduction

| Size NPT | Pressure Range (Bar) | | Body | Amb. Temperature °C | | Part Number |
|-------------|----------------------|-----|--------|---------------------|-----|-------------|
| | Min | Max | | Min | Max | |
| 1/8" | 0 | 12 | SS316L | -55 | 150 | SLHF02NSS |
| 1/4" | 0 | 12 | SS316L | -55 | 150 | SLHF04NSS |
| 3/8" | 0 | 12 | SS316L | -55 | 150 | SLHF06NSS |
| 1/2" | 0 | 12 | SS316L | -55 | 150 | SLHF08NSS |
| 3/4" | 0 | 12 | SS316L | -55 | 150 | SLHF12NSS |
| 1" | 0 | 12 | SS316L | -55 | 150 | SLHF16NSS |

Bug Screens - Models SLVP

- 316L stainless steel to NACE MR01-75
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- 100% manufactured in Italy by Sitecna® Srl



Details

Compact Design

| Size NPT | Pressure Range (Bar) | | Body | Amb. Temperature °C | | Part Number |
|-------------|----------------------|-----|--------|---------------------|-----|-------------|
| | Min | Max | | Min | Max | |
| 1/4" | 0 | 12 | SS316L | -55 | 150 | SLVP04NSS |
| 3/8" | 0 | 12 | SS316L | -55 | 150 | SLVP06NSS |
| 1/2" | 0 | 12 | SS316L | -55 | 150 | SLVP08NSS |
| 3/4" | 0 | 12 | SS316L | -55 | 150 | SLVP12NSS |

Variable Flow Vacuum Pump (Eductor) - Model VP

- Non clogging straight through design
- Low air consumption ratio
- Field adjustable
- ATEX 94/9CE II2GD c IICT6 X certified as standard & GOST EAC on request
- 100% manufactured in Italy by Sitecna® Srl

Details

316L Stainless Steel or Aluminium Alloy Construction
1/4"NPT Main Ports with 1/8"NPT Signal Port
Vacuum Level -15"Hg @ 80psi inlet
Max Vacuum Flow 10SCFM
Air Consumption 6SCFM
Max Inlet Pressure 10 bar
Temperature Range 0 to 90°C



Part Number VP0204N4P in 316LSS
or VP0204N4P-AL in aluminium

Also available from Red Dragon Valves®:

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Red Dragon
Measure | Monitor | Control



Red Dragon Limited, Unit 15 Abergorki Industrial Estate, Treorchy, Rhondda Cynon Taf, South Wales CF42 6DL
T: +44 (0) 1443 772500 UK Freephone: 0800 0234119 Fax: +44 (0) 1443 775426
E: sales@reddragonvalves.co.uk W: sitecna.co.uk reddragonvalves.co.uk



Supplier Number: 054785

