

**SERIES : 32D**

**3/2 DIRECT ACTING HIGH ORIFICE/ UNIVERSAL SOLENOID VALVE**

| TYPE  | PRESSURE   | 2X2NC |
|-------|------------|-------|
| 20106 | 0 - 10 bar |       |
| 20105 | 0 - 10 bar |       |

| TYPE  | PRESSURE   | 2X2NO |
|-------|------------|-------|
| 20206 | 0 - 10 bar |       |
| 20205 | 0 - 10 bar |       |

| TYPE  | PRESSURE   | UNI |
|-------|------------|-----|
| 30308 | 0 - 10 bar |     |
| 30309 | 0 - 10 bar |     |
| 30329 | 0 - 16 bar |     |
| 30333 | 0 - 10 bar |     |

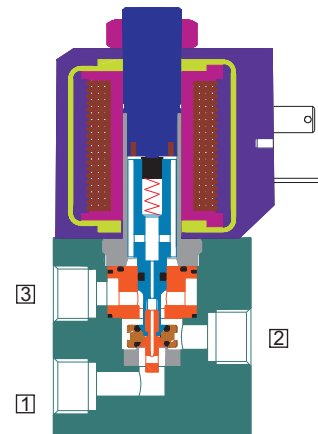
**FEATURES**

- Bubble tight shut off
- Mounts in any position
- Suitable for vacuum up to 10 torr
- Vibration resistant up to 9g
- Suitable for high speed cycling
- Speed up to 800 cycles/ min
- Life >10 million cycles
- Manual override optionally provided



**WETTED PARTS**

| Code            | ✕                                | B1                 | B2               | B5     |
|-----------------|----------------------------------|--------------------|------------------|--------|
| Body            | Anodized Aluminium               | Anodized Aluminium | Brass            | SS 316 |
| Internals       | Brass and SS                     | 316SS 316          | Brass and SS 316 | SS 316 |
| Guide Assembly  | SS 304                           |                    |                  |        |
| Shadow-Ring     | None                             |                    |                  |        |
| Plunger, Insert | SS 430                           |                    |                  |        |
| Spring          | SS 302                           |                    |                  |        |
| Seat, Seals     | NBR, Viton, Viton GLT, F.Silicon |                    |                  |        |
| Fasteners       | SS 304                           |                    |                  |        |



**AMBIENT AND FLUID TEMPERATURE**

-30 °C to 75 °C

**SPECIAL VERSIONS AND SUFFIX**

Suffix : (Valve) AM, WO  
Special versions : (Solenoid) CO, FR, SS, LC, III

**MEDIA**

Air, Inert Gases, Water, Vacuum Free Flowing Liquids, Oil, Diesel, Kerosene, LPG

**APPLICATION**

Single acting actuator/ Cylinder, control valve actuation. Diverting/ mixing of fluid, analyzer, ESD

**PORT CONNECTION**

| FUNCTION  | INLET   | OUTLET  | EXHAUST |
|-----------|---------|---------|---------|
| NC        | 1       |         |         |
| NO        | 3       |         |         |
| Mixing    | 1 and 3 | 2       |         |
| Diverting | 2       | 1 and 3 |         |

Contact Rotex for

- Any other ambient, fluid temperature, media and application
- UL listed (UL) Listed general purpose Valve

**SPARES**

(Refer page 25 for ordering code)

| SPARE KIT   | CODE |
|---|------|
| Seal Kit O-ring Set and Plunger Assembly  | 98   |
| Repair Kit O-ring Set, Plunger Assembly, Fastener, Springs, Manual Override, Guide Assembly | 99   |
| Solenoid Kit Solenoid, Gasket and Nut 34  |      |

**APPROVAL**

| Approval | TYPE 4X, 6F | IP67 | Ex d IIC T4 or T5 or T6 IP66 | Ex ia IIC T6 IP67 | DGMS | CCOE |
|----------|-------------|------|------------------------------|-------------------|------|------|
|          |             | ✓    | ✓                            |                   | ✓    | ✓    |
| CE       |             | ✓    | ✓                            |                   |      |      |
| UL       | ✓           |      | *                            |                   |      |      |
|          |             |      | ✓                            |                   |      |      |
| EAC      |             |      | ✓                            |                   |      |      |
|          |             |      | ✓                            |                   |      |      |

- Valve type 30309 and 30329 does not have shadowring
- Plugging exhaust port, Can be used as bi directional, 2/2 NC type 20105, 20106, 30308TC, 30333TC, 30309TC, 30329TC OR 2/2 NO type 20205, 20206, 30308TO, 30308TO, 30333TO, 30329TO
- For Valve type 30308 and 30333 operated with AC voltage select in built full rectifier 'FR' option
- Add Suffix SL for Ordering SIL capable Certified valve.



## 3/2 DIRECT ACTING HIGH ORIFICE/ UNIVERSAL SOLENOID VALVE

### SPECIFICATION

| SIZE                 | PORT CONNECTION | PRE-SSURE bar |         | ORIFICE (mm) | FLOW FACTOR Kv (LPM OF WATER @ 1/2bar) | VALVE TYPE | PILOT PRESSURE |                | BODY MATERIAL AND INTERNALS |                            |     |       | SEALS |           |           | MANUAL OVERRIDE |                       | SOLENOID WEATHER PROOF |             | ENCLOSURE EXPLOSION PROOF |                 | SUFFIX           |                           | POWER VA        |               | CONSTRUCTION REFERENCE NUMBER |        |        |           |            |     |
|----------------------|-----------------|---------------|---------|--------------|--|------------|----------------|----------------|-----------------------------|----------------------------|-----|-------|-------|-----------|-----------|-----------------|-----------------------|------------------------|-------------|---------------------------|-----------------|------------------|---------------------------|-----------------|---------------|-------------------------------|--------|--------|-----------|------------|-----|
|                      |                 | MINIMUM       | MAXIMUM |              |  |            | ALUMINIUM      | ALUMINIUM + SS | BRASS (STD. PORT NPT)       | SS 316/CF8 (STD. PORT NPT) | NBR | Viton | EPDM  | Viton GLT | F.Silicon | NIL             | STAYPUT_CUM MOMENTARY | MOMENTARY              | FLYING LEAD | PLUG IN IP67              | SQ. PLUG IN, II | TERMINAL BOX IP6 | EXPLOSION PROOF IIC, IP67 | LARGE ENCLOSURE | SOLENOID SIZE |                               | OXYGEN | AMONIA | AC INRUSH | AC HOLDING | DC  |
| <b>3/2 UNIVERSAL</b> |                 |               |         |              |  |            |                |                |                             |                            |     |       |       |           |           |                 |                       |                        |             |                           |                 |                  |                           |                 |               |                               |        |        |           |            |     |
| 1/4"                 | 2G              | 2R            | 0       | 10           | 5                                      | 5          | 30308          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         | III             | 14            | ✓                             | ✓      | 8      | 8         | 8          | 323 |
|                      |                 |               | 0       | 10           | 7                                      | 14         | 30309          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 324 |
|                      |                 |               | 0       | 16           | 7                                      | 14         | 30329          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 324 |
| 3/8"                 | 3G              | 3R            | 0       | 10           | 10                                     | 30         | 30309          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 325 |
|                      |                 |               | 0       | 10           | 7                                      | 14         | 30309          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 324 |
|                      |                 |               | 0       | 10           | 5                                      | 5          | 30333          |                |                             |                            | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 14            | ✓                             | ✓      | 8      | 8         | 8          | 223 |
|                      |                 |               | 0       | 16           | 7                                      | 14         | 30329          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 324 |
|                      |                 |               | 0       | 16           | 10                                     | 25         | 30329          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 325 |
| 1/2"                 | 4G              | 4R            | 0       | 10           | 5                                      | 10         | 30333          |                |                             |                            | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 14            | ✓                             | ✓      | 8      | 8         | 8          | 223 |
|                      |                 |               | 0       | 10           | 10                                     | 30         | 30309          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 325 |
|                      |                 |               | 0       | 16           | 10                                     | 25         | 30329          |                | *                           | B1                         | B2  | B5    | *     | S2        | S2G       | S19             | *                     | M6                     | M8          |                           | 25              | T                | E                         |                 | 18            |                               | ✓      | 15     | 15        | 15         | 325 |

| Cable Entry | T  | Ex d | E    | Ex emb      |
|-------------|----|------|------|-------------|
| M20 x 1.5   | 19 | 39   | 87MS | 58MS 58LTMS |
| M25 x 1.5   |    | 87   |      | 58 58LT     |
| 1/2" NPT    | 16 | 37   | 87NS | 58NS 58LTNS |

\* = Do not specify when opted for. Refer Page # 22 for Value of  
 ✓ = Options available

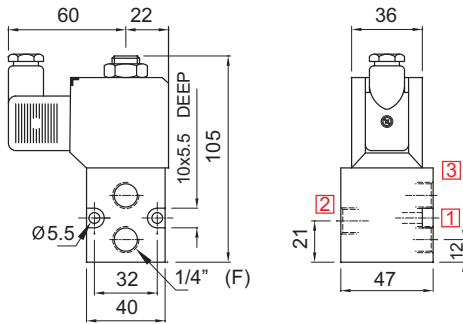
### ORDERING CODE AND EXAMP VALVE + SOLENOID

TYPE - SUFFIX - ORIFICE - PORT CONNECTION - BODY AND INTERNALS - MANUAL OVERRIDE - SEAL + SIZE - VOLTAGE - CURRENT - SOLENOID ENCLOSURE - APPROVAL - INSULATION - SPECIAL VERSION  
 e.g. 30309-7-2G+110V DC; 30308-5-2R-B5-S2+220V 50Hz-37-III-FR

### DIMENSIONS

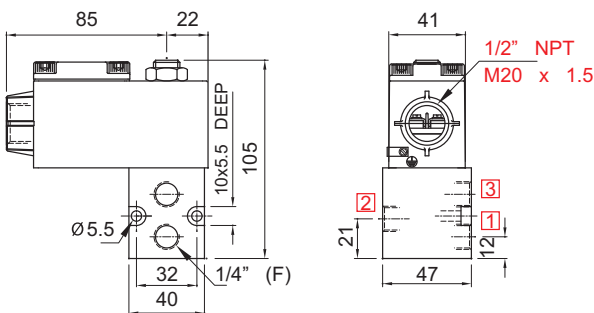
All Dimensions are in mm

#### CONSTRUCTION REFERENCE : 3



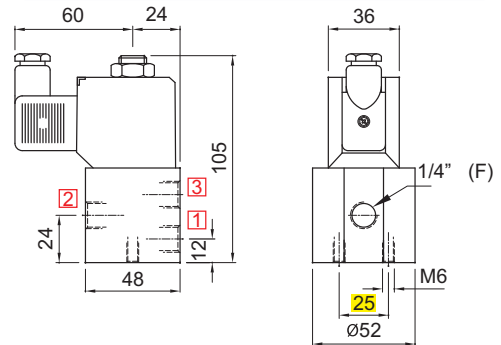
PLUG IN SOLENOID TYPE 22

#### CONSTRUCTION REFERENCE : 3



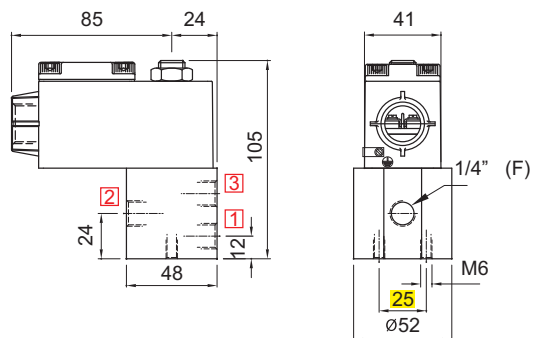
TERMINAL BOX/ Ex d/ TYPE 16, 19, 37, 39, 58, 58LT

#### VALVE TYPE : 30308 WITH SS BODY



PLUG IN SOLENOID TYPE 22

#### VALVE TYPE : 30308 WITH SS BODY



TERMINAL BOX/ Ex d/ TYPE 16, 19, 37, 39, 58, 58LT