

# 2/2-Way Pilot Operated, High Pressure Solenoid Valves.

9100H- Normally Closed, Energised To Open,  
9120H- Normally Open, Energised To Close.

DATA SHEET  
9100H  
9120H

## SPECIFICATIONS

|                    |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Sizes              | : 3/8" (10 mm) to 3" (75 mm).                                                                                                      |
| End Connections    | : Standard-G-ISO-228 (BSP-F),<br>Optional-NPT.                                                                                     |
| Body Material      | : Standard-SS ASTM A351 Gr.CF8.<br>Optional-SS ASTM A351 Gr.CF8M.                                                                  |
| Body Test Pressure | : 40 Bar (Refer to table below).                                                                                                   |
| Max.Wkg.Pressure   | : 12 Bar (Refer to table below).                                                                                                   |
| Seat Material      | : Std.:PTFE, Optional - Viton.                                                                                                     |
| Core Tube Nut      | : St.St.304 / St.St.316.                                                                                                           |
| Plunger/Stopper    | : St.St.430FR.                                                                                                                     |
| Spring             | : St.St.302.                                                                                                                       |
| Shading Ring       | : Std.: Copper.                                                                                                                    |
| Temp.(ambient)     | : 42Deg.C.                                                                                                                         |
| Max.Wkg.Temp.      | : (-)5 to 120 Deg.C.                                                                                                               |
| Voltage (AC)       | : 230, 110, 48, 24 V - 50/60 Hz.                                                                                                   |
| (DC)               | : 24, 110, 240 V.                                                                                                                  |
| Enclosures         | : General Purpose (IP20).<br>Weatherproof-RD-WP-67.<br>Flameproof-RD-FLP-IIC+WP67.                                                 |
| Approvals          | : KLPL/PESO/CE/ATEX/BIS.                                                                                                           |
| Differential Pr.   | : 2 to 24 bar. (Refer to table below).                                                                                             |
| Coil Insulation    | : Class 'H' upto 155Deg.C.                                                                                                         |
| Fluids             | : Air,Water,Gas, Light Oil, Heavy oil.                                                                                             |
| Manual Override    | : Only for 9100H-Normally Closed Valve.<br>Not available for 9120H-Normally Open Valve.                                            |
| Optional           | : Mounting Bracket.                                                                                                                |
| Sales Point        | : Most reliable, maintenance free, on-off valve in our range.                                                                      |
| Application        | : Chemical, Textile, Cement Machinery, Combustion equipments, Air dryer, Cleaning equipment and others.<br>Not suitable for Steam. |
| Mounting           | : In horizontal pipeline, keeping solenoid upright and vertical.                                                                   |
| Note               | : 1) Use of Filter in the inlet side is highly recommended.<br>2) Not suitable for back pressure from outlet side.                 |

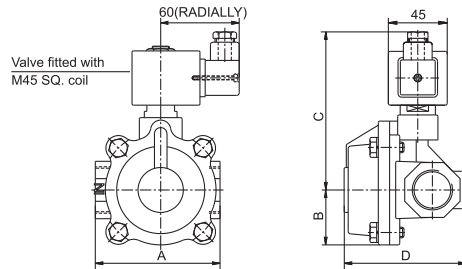


## SPECIFICATION TABLE 2/2 WAY NORMALLY CLOSED

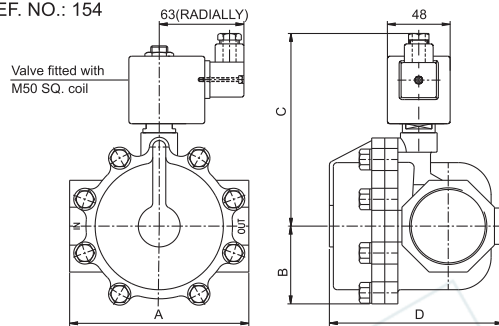
| Catalogue Number | Pipe Size | Orifice Size | Flow Factor Kv | Minimum Pressure | Maximum Operating Pressure (bar) |       |           |         |       |           | BTP | Material |      | Constr. Ref. | VA Rating | Watt Rating | Coil  | Housing |
|------------------|-----------|--------------|----------------|------------------|----------------------------------|-------|-----------|---------|-------|-----------|-----|----------|------|--------------|-----------|-------------|-------|---------|
|                  | Inch      | mm           | M³/hr.         | bar              | AC                               |       |           | DC      |       |           |     |          |      |              | AC        | DC          | Type  |         |
|                  |           |              |                |                  | Air/Gas                          | Water | Light Oil | Air/Gas | Water | Light Oil | bar | Body     | Seat |              |           |             |       |         |
| 9100H104         | 3/8       | 16           | 2.6            | 2                | 20                               | 16    | 7         | 24      | 24    | 20        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H154         | 1/2       | 16           | 3.4            | 2                | 20                               | 16    | 7         | 24      | 24    | 20        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H204         | 3/4       | 20           | 5.2            | 2                | 20                               | 16    | 7         | 24      | 24    | 20        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H254         | 1         | 25           | 8.6            | 2                | 18                               | 16    | 7         | 24      | 24    | 20        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H304         | 1 1/4     | 28           | 14.0           | 2                | 18                               | 16    | 7         | 24      | 24    | 20        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H354         | 1 1/2     | 34           | 17.3           | 2                | 18                               | 16    | 7         | 24      | 20    | 10        | 40  | CF8      | PTFE | 9.1          | 18        | 12          | M45.1 | SQ      |
| 9100H504         | 2         | 45           | 30.5           | 2                | 18                               | 14    | 7         | 22      | 16    | 10        | 40  | CF8      | PTFE | 154          | 18        | 12          | M45.1 | SQ      |
| 9100H654         | 2 1/2     | 60           | 45             | 2                | 14                               | 10    | 7         | 14      | 14    | 10        | 40  | CF8      | PTFE | 154          | 36        | 22          | M50   | SQ      |
| 9100H754         | 3         | 72           | 66             | 2                | 14                               | 9     | 6         | 14      | 12    | 8         | 40  | CF8      | PTFE | 154          | 36        | 22          | M50   | SQ      |

## 2/2 WAY NORMALLY OPEN (NEW MAGNETIC CONSTRUCTION TYPE)

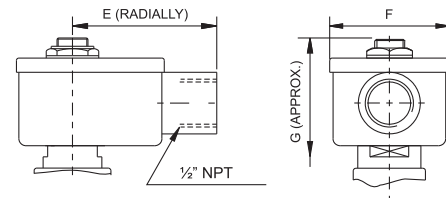
|          |       |    |      |   |    |    |   |    |    |   |    |     |      |     |    |    |       |    |
|----------|-------|----|------|---|----|----|---|----|----|---|----|-----|------|-----|----|----|-------|----|
| 9120H104 | 3/8   | 16 | 2.6  | 2 | 12 | 12 | 7 | 12 | 12 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H154 | 1/2   | 16 | 3.4  | 2 | 12 | 12 | 7 | 12 | 12 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H204 | 3/4   | 20 | 5.2  | 2 | 12 | 12 | 7 | 12 | 12 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H254 | 1     | 25 | 8.6  | 2 | 10 | 10 | 7 | 10 | 12 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H304 | 1 1/4 | 28 | 14.0 | 2 | 10 | 10 | 7 | 10 | 10 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H354 | 1 1/2 | 34 | 17.3 | 2 | 10 | 10 | 7 | 10 | 10 | 7 | 40 | CF8 | PTFE | 9.1 | 18 | 12 | M45.1 | SQ |
| 9120H504 | 2     | 45 | 30.5 | 2 | 10 | 10 | 7 | 10 | 10 | 7 | 40 | CF8 | PTFE | 154 | 18 | 12 | M45.1 | SQ |
| 9120H654 | 2 1/2 | 60 | 45   | 2 | 6  | 7  | 5 | 6  | 7  | 5 | 40 | CF8 | PTFE | 154 | 36 | 22 | M50   | SQ |
| 9120H754 | 3     | 72 | 66   | 2 | 5  | 6  | 5 | 5  | 6  | 5 | 40 | CF8 | PTFE | 154 | 36 | 22 | M50   | SQ |



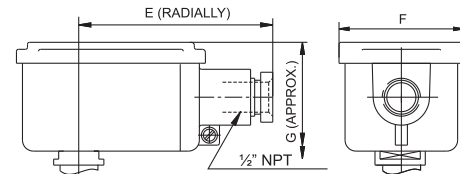
CONSTRUCTION REF. NO.: 154



Valve fitted with M45 / M50 RD GP coil -  
General purpose enclosure as per IP-20



Valve fitted with M45 / M50 RD coil -  
Waterproof metallic enclosure as per IS/IEC 60529-2001 IP-67



Valve fitted with M45 / M50 FLP IIC coil - Flameproof  
metallic enclosure as per IS/IEC 60079-1-2014 IP-67.

