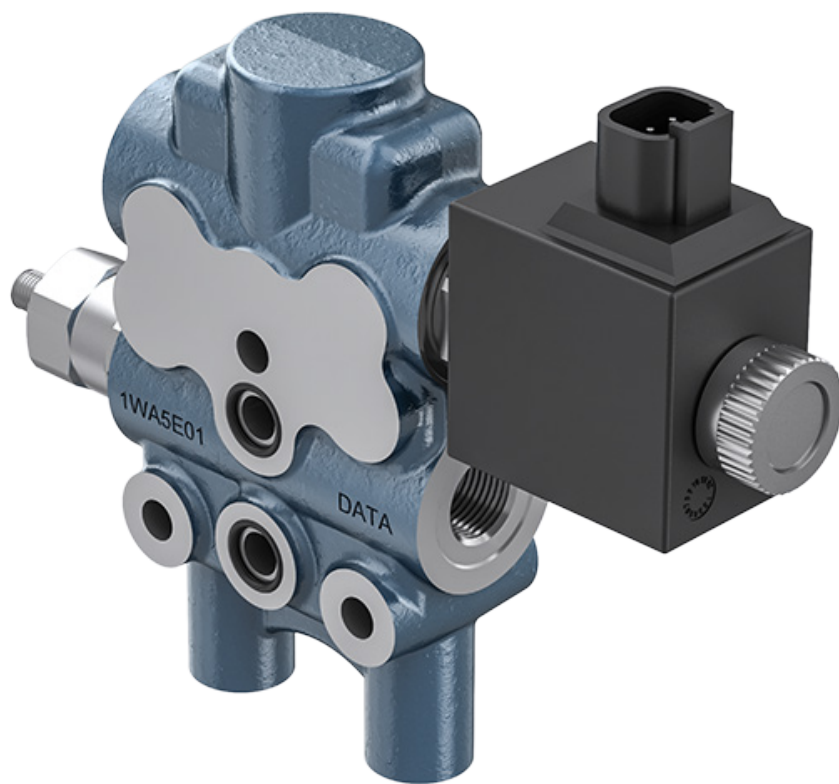


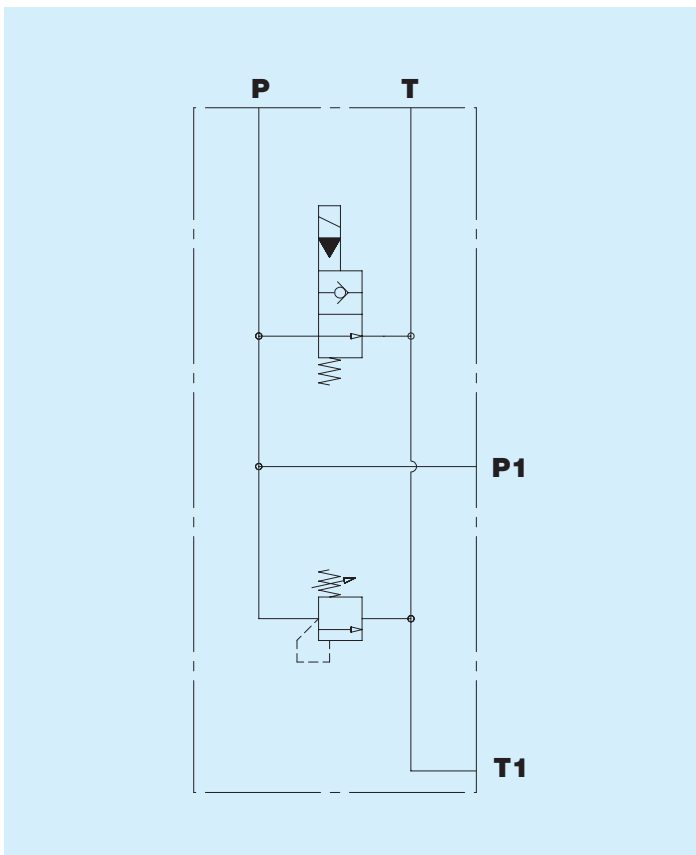
## TE050D Inlet cover with unloading valve and relief valve

IBW0500 interface

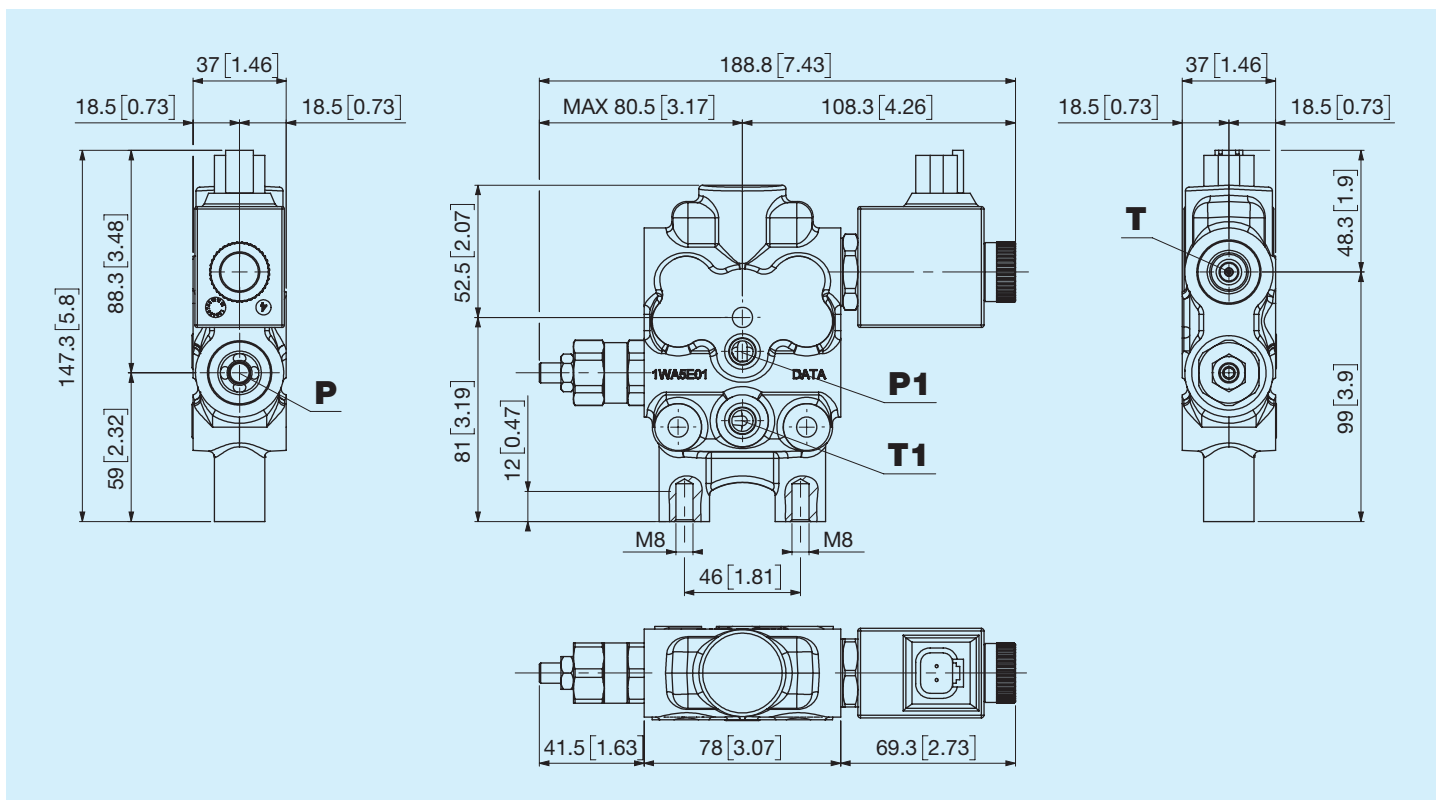


Prior to use, carefully read the document GENERAL USE INSTRUCTIONS FOR DIRECTIONAL CONTROL VALVES

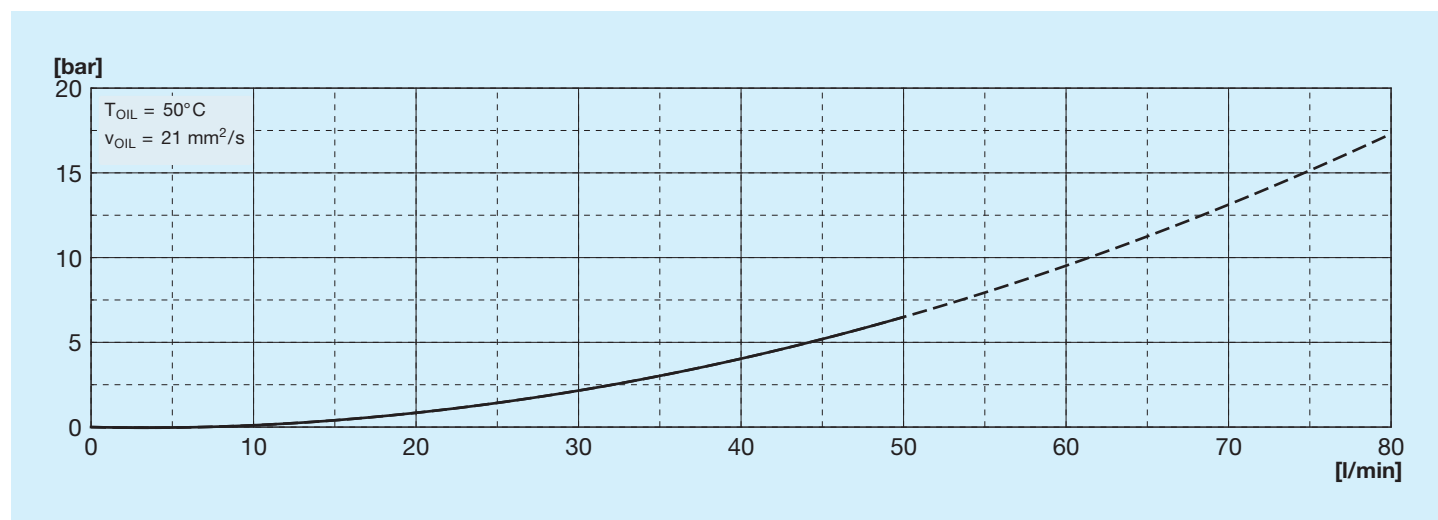
|                         |                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| Nominal flow rate       | <b>50 l/min</b><br><b>13.2 US gpm</b>                                                         |
| Nominal pressure        | <b>250 bar</b><br><b>3625 psi</b>                                                             |
| Maximum tank pressure   | <b>50 bar</b><br><b>725 psi</b>                                                               |
| Operating temperature   | <b>-20°C +85°C NBR seals</b><br><b>(max peak +100°C)</b><br><b>-20°C + 130°C HNBR seals</b>   |
| Operating oil viscosity | <b>from 15 mm<sup>2</sup>/s to 90</b><br><b>mm<sup>2</sup>/s</b><br><b>(15 cSt to 90 cSt)</b> |
| Fluid                   | <b>Hydraulic fluids defined</b><br><b>by the ISO 6743-4</b><br><b>standard</b>                |
| Weight                  | <b>1.6 Kg</b><br><b>3.5 lb</b>                                                                |
| Interface               | <b>IBW0500</b>                                                                                |



## Overall dimensions



## Pressure drops P - T



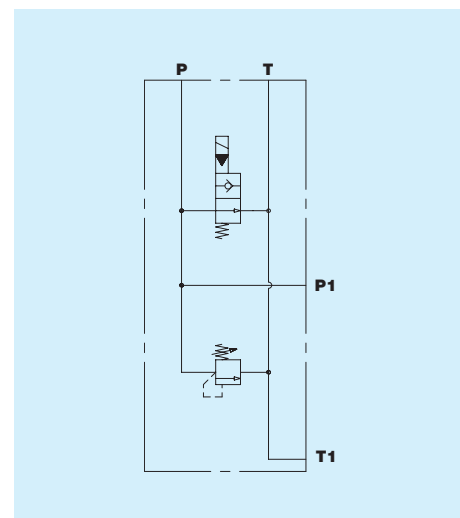
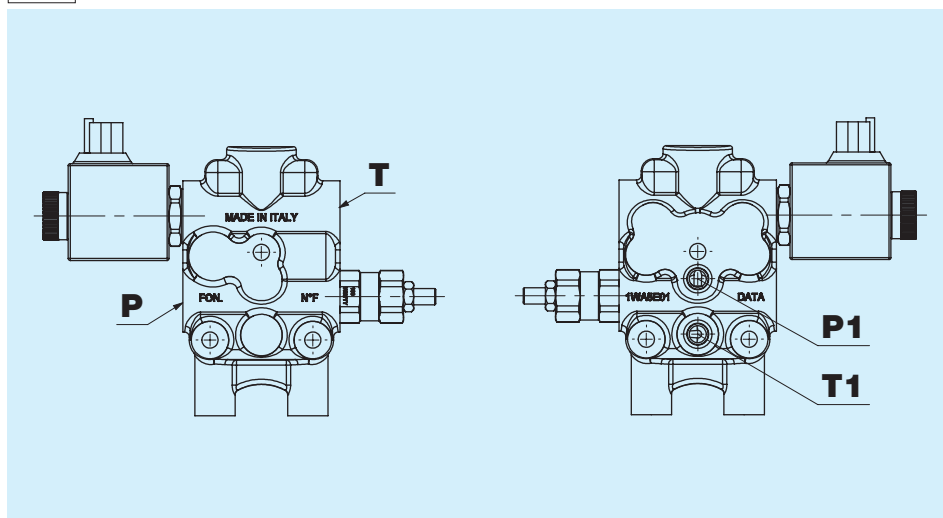
## Thread port P

| Code     | Type                    | Tightening $\pm 10\%$<br>Nm |
|----------|-------------------------|-----------------------------|
| <b>A</b> | 3/8" GAS ISO 1179       | 45                          |
| <b>B</b> | 1/2" GAS ISO 1179       | 70                          |
| <b>C</b> | M18x1.5 ISO 9974        | 45                          |
| <b>N</b> | M22x1.5 ISO 9974        | 70                          |
| <b>W</b> | M18x1.5 ISO 6149        | 45                          |
| <b>J</b> | M22x1.5 ISO 6149        | 70                          |
| <b>E</b> | 3/4" - 16 SAE ISO 11926 | 45                          |
| <b>R</b> | 7/8" - 14 SAE ISO 11926 | 70                          |

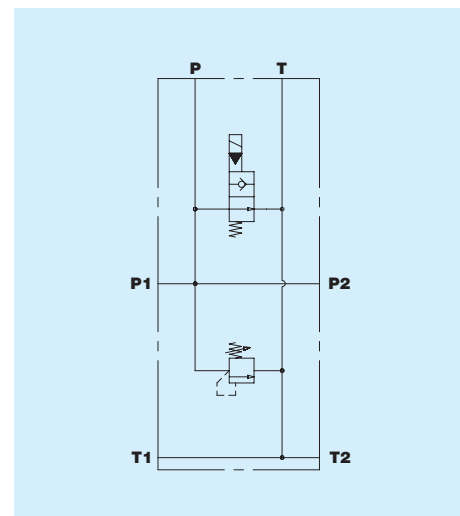
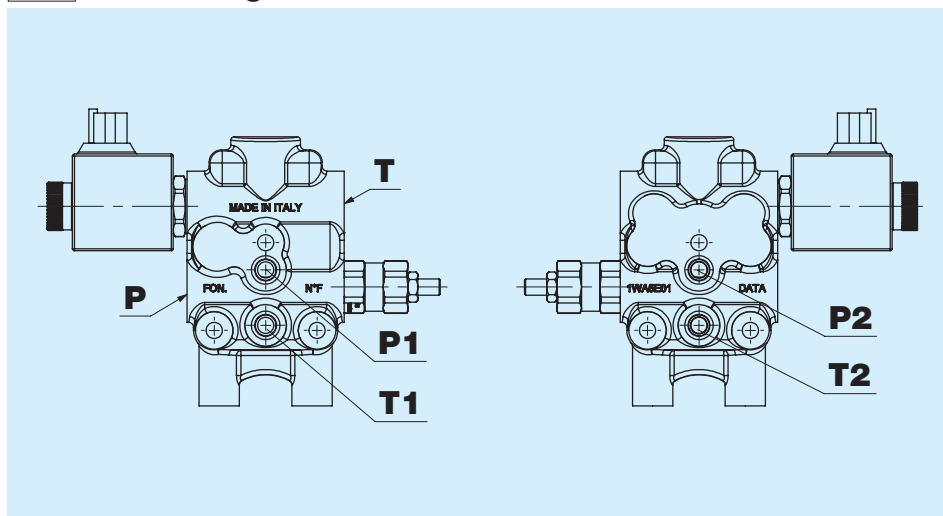
## Thread port T

| Code     | Type                    | Tightening $\pm 10\%$<br>Nm |
|----------|-------------------------|-----------------------------|
| <b>A</b> | 3/8" GAS ISO 1179       | 45                          |
| <b>B</b> | 1/2" GAS ISO 1179       | 70                          |
| <b>C</b> | M18x1.5 ISO 9974        | 45                          |
| <b>N</b> | M22x1.5 ISO 9974        | 70                          |
| <b>W</b> | M18x1.5 ISO 6149        | 45                          |
| <b>J</b> | M22x1.5 ISO 6149        | 70                          |
| <b>E</b> | 3/4" - 16 SAE ISO 11926 | 45                          |
| <b>R</b> | 7/8" - 14 SAE ISO 11926 | 70                          |

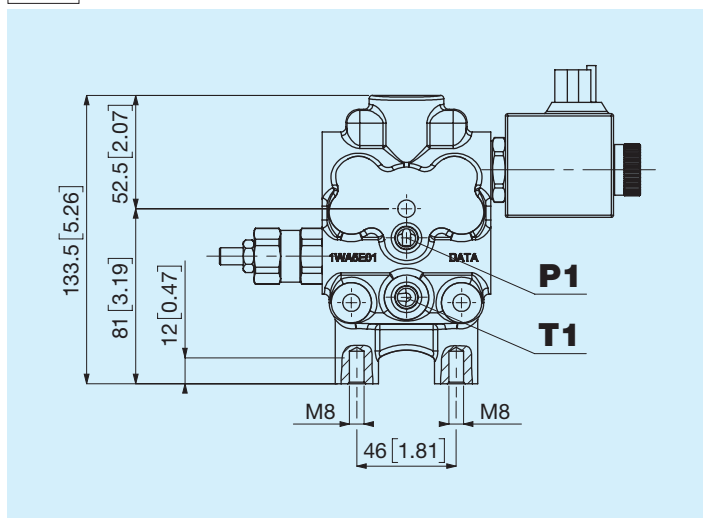
## S Standard



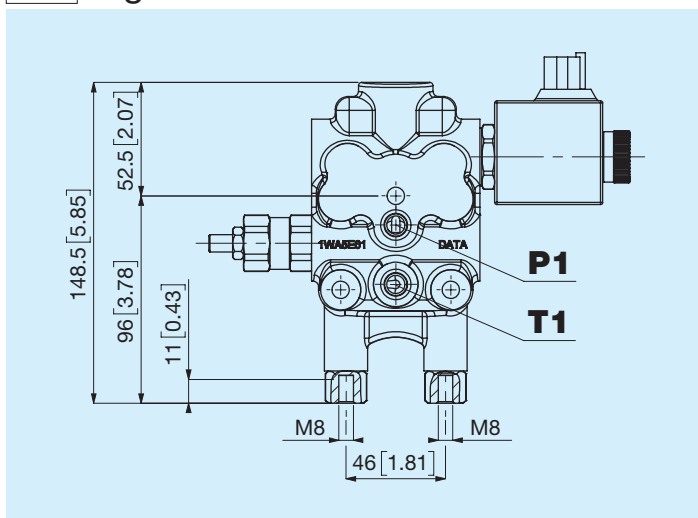
## A P-T through



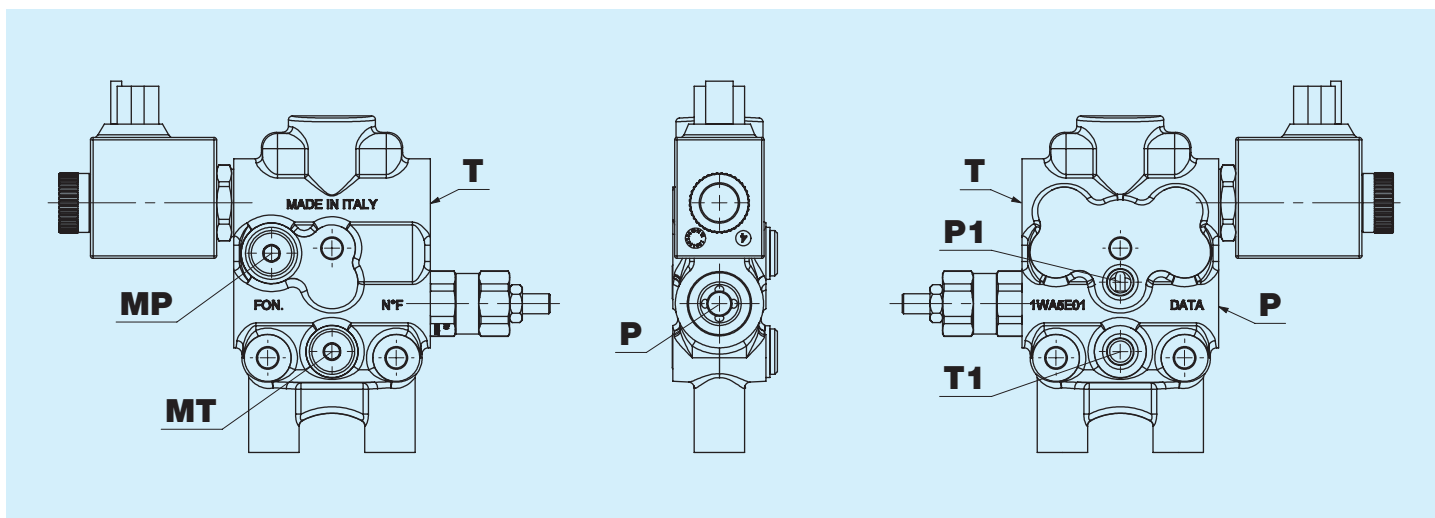
## H2 Standard



## H3 High



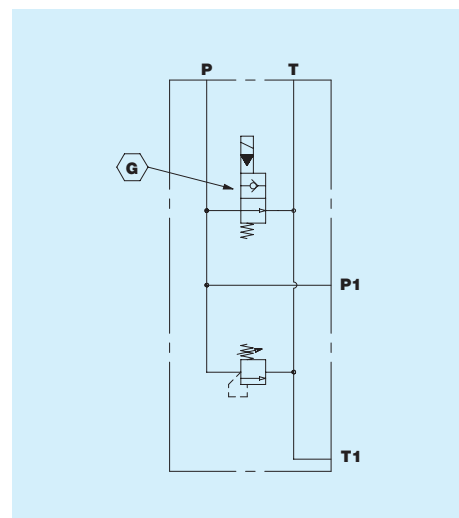
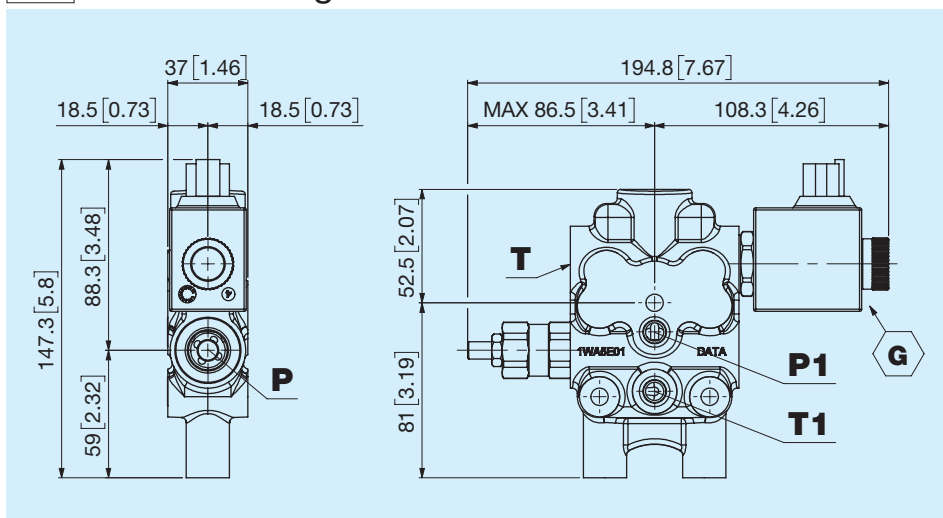
## MP and MT - Gauge ports



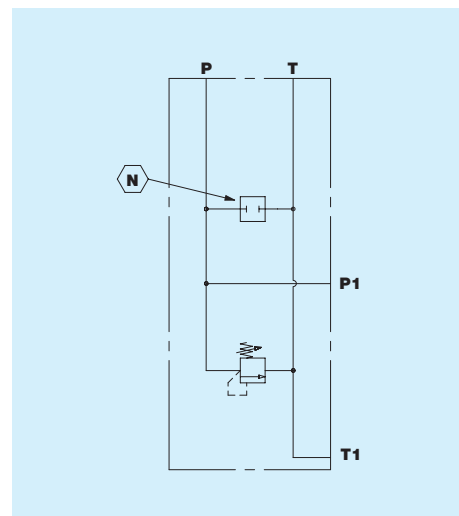
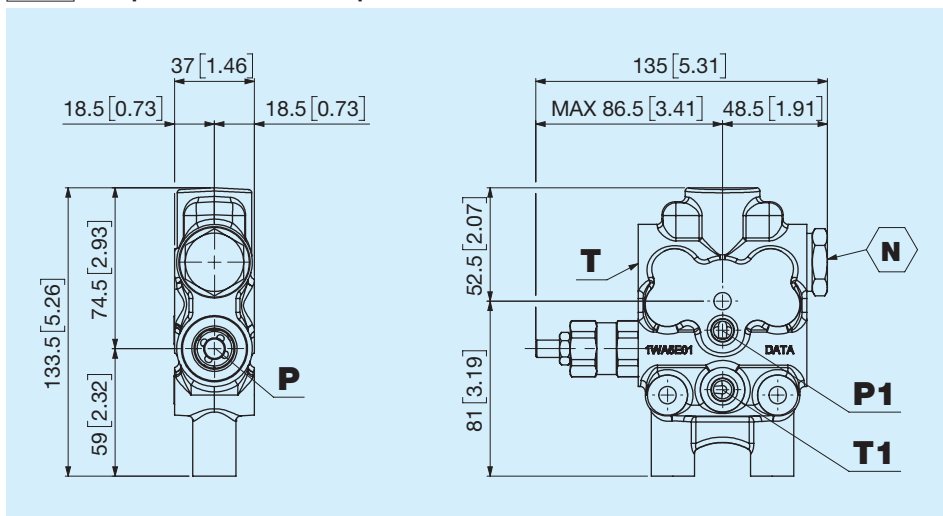
## Thread ports MP and MT

| Code     | Type                     | Tightening $\pm 10\%$<br>Nm |
|----------|--------------------------|-----------------------------|
| <b>N</b> | None                     |                             |
| <b>L</b> | 1/4" GAS ISO 1179        | 27                          |
| <b>3</b> | M14x1.5 ISO 9974         | 27                          |
| <b>K</b> | M14x1.5 ISO 6149         | 27                          |
| <b>P</b> | 9/16" - 18 SAE ISO 11926 | 27                          |

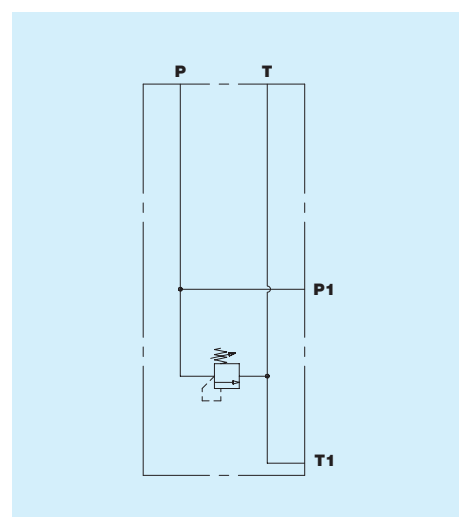
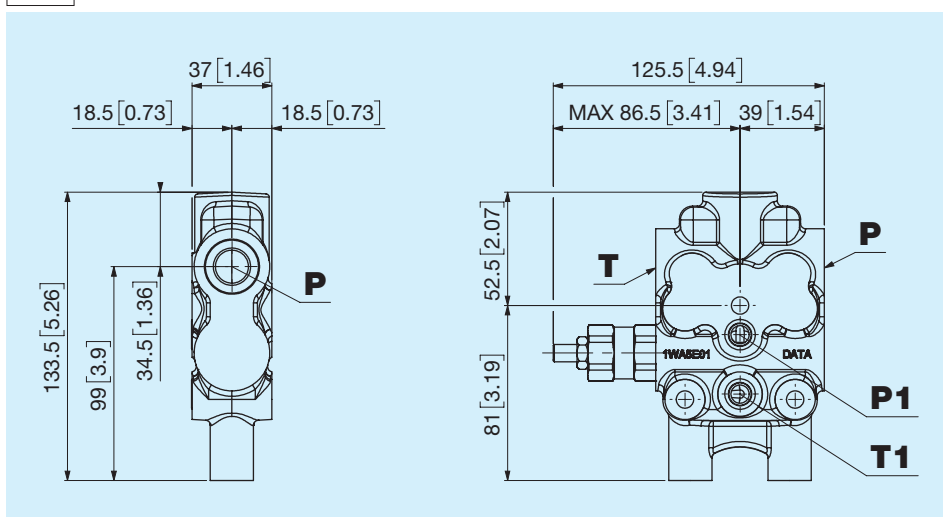
## G With unloading valve



## N Replacement cap

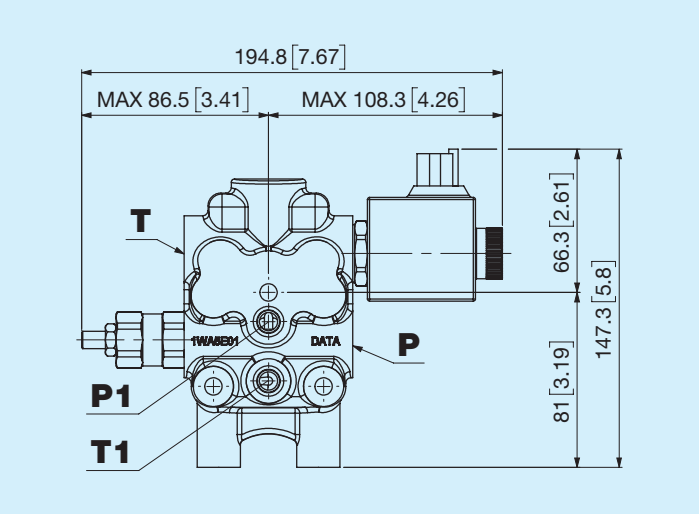


## X Not machined

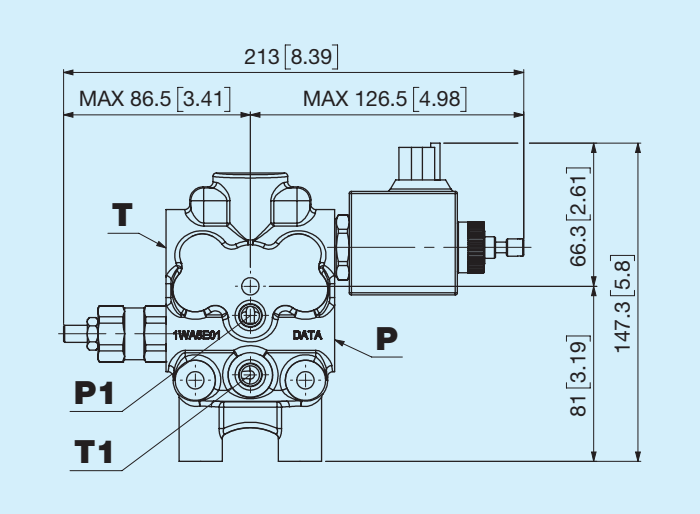




**O** Standard terminal



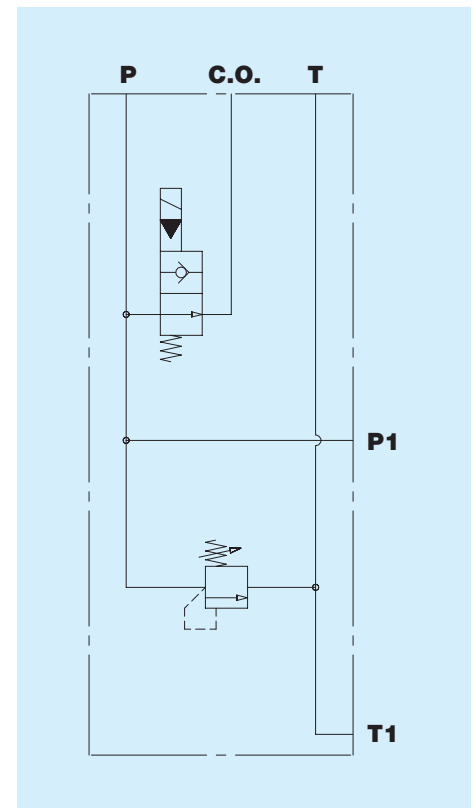
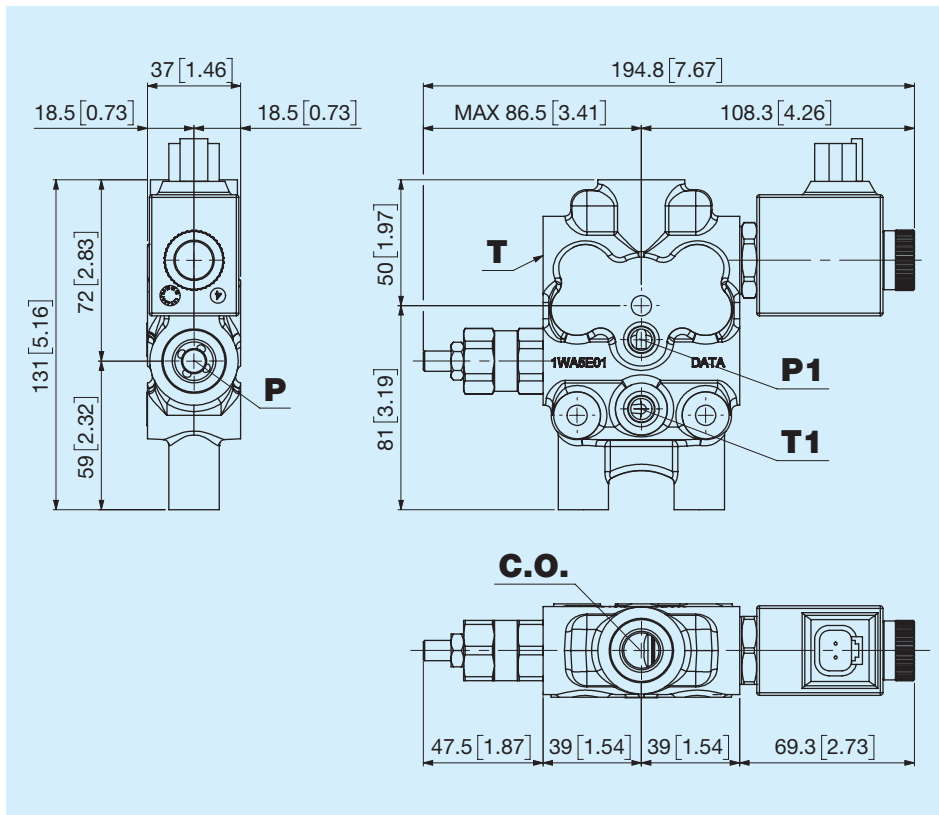
**S** Manual override with screw



Electrical characteristics of the unloading valve coil

| Voltage            | 12  | 24   | V (± 10%) |
|--------------------|-----|------|-----------|
| Resistance at 20°C | 4,8 | 19,3 | Ω (± 7%)  |
| Rated current      | 2,5 | 1,2  | A         |
| Power              | 30  | 30   | W         |

## C.O. - Carry Over



## Thread port Carry over

| Code                 | Type                    | Tightening $\pm 10\%$<br>Nm |
|----------------------|-------------------------|-----------------------------|
| 3/8" GAS<br>ISO 1179 | 45                      | <b>A</b>                    |
| <b>B</b>             | 1/2" GAS ISO 1179       | 70                          |
| <b>C</b>             | M18x1.5 ISO 9974        | 45                          |
| <b>N</b>             | M22x1.5 ISO 9974        | 70                          |
| <b>W</b>             | M18x1.5 ISO 6149        | 45                          |
| <b>J</b>             | M22x1.5 ISO 6149        | 70                          |
| <b>E</b>             | 3/4" - 16 SAE ISO 11926 | 45                          |
| <b>R</b>             | 7/8" - 14 SAE ISO 11926 | 70                          |
| <b>O</b>             | Not machined            |                             |



|               | 1                                 | 2 | 3 | 4 | 5                                    | 6 | 7 | 8 | 9                                   | 10 | 11 | 12 | 13                               | 14 | 15 |
|---------------|-----------------------------------|---|---|---|--------------------------------------|---|---|---|-------------------------------------|----|----|----|----------------------------------|----|----|
| <b>TE050D</b> |                                   |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
| 1             | Thread type                       |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>F</b> Female                   |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
| 2             | Thread port P                     |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>A</b> 3/8" GAS ISO 1179        |   |   |   | <b>C</b> tM18x1.5 ISO 9974           |   |   |   | <b>W</b> M18x1.5 ISO 6149           |    |    |    | <b>E</b> 3/4" - 16 SAE ISO 11926 |    |    |
|               | <b>B</b> 1/2" GAS ISO 1179        |   |   |   | <b>N</b> M22x1.5 ISO 9974            |   |   |   | <b>J</b> M22x1.5 ISO 6149           |    |    |    | <b>R</b> 7/8" - 14 SAE ISO 11926 |    |    |
| 3             | Thread port T                     |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>A</b> 3/8" GAS ISO 1179        |   |   |   | <b>C</b> M18x1.5 ISO 9974            |   |   |   | <b>W</b> M18x1.5 ISO 6149           |    |    |    | <b>E</b> 3/4" - 16 SAE ISO 11926 |    |    |
|               | <b>B</b> 1/2" GAS ISO 1179        |   |   |   | <b>N</b> M22x1.5 ISO 9974            |   |   |   | <b>J</b> M22x1.5 ISO 6149           |    |    |    | <b>R</b> 7/8" - 14 SAE ISO 11926 |    |    |
| 4             | Options on ports P-T              |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>A</b> P plugged                |   |   |   | <b>B</b> T plugged                   |   |   |   | <b>N</b> None                       |    |    |    |                                  |    |    |
| 5             | Options P-line and T-line         |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>S</b> Standard                 |   |   |   | <b>A</b> P-T through                 |   |   |   |                                     |    |    |    |                                  |    |    |
| 6 7           | Cover height                      |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>H2</b> Standard                |   |   |   | <b>H3</b> High                       |   |   |   |                                     |    |    |    |                                  |    |    |
| 8             | Thread port MP                    |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>N</b> None                     |   |   |   | <b>3</b> M14x1.5 ISO 9974            |   |   |   | <b>P</b> 9/16" - 18 SAE ISO 11926   |    |    |    |                                  |    |    |
|               | <b>L</b> 1/4" GAS ISO 1179        |   |   |   | <b>K</b> M14x1.5 ISO 6149            |   |   |   |                                     |    |    |    |                                  |    |    |
| 9             | Thread port MT                    |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>N</b> None                     |   |   |   | <b>3</b> M14x1.5 ISO 9974            |   |   |   | <b>P</b> 9/16" - 18 SAE ISO 11926   |    |    |    |                                  |    |    |
|               | <b>L</b> 1/4" GAS ISO 1179        |   |   |   | <b>K</b> M14x1.5 ISO 6149            |   |   |   |                                     |    |    |    |                                  |    |    |
| 10            | Options on ports MP - MT          |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>N</b> None                     |   |   |   | <b>B</b> MP plugged, MT not machined |   |   |   | <b>F</b> MP and MT plugged          |    |    |    |                                  |    |    |
|               | <b>A</b> MP open, MT not machined |   |   |   | <b>E</b> MP and MT open              |   |   |   |                                     |    |    |    |                                  |    |    |
| 11            | Type of unloading valve           |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>N</b> Replacement cap          |   |   |   | <b>A</b> 12V DIN 43650               |   |   |   | <b>G</b> 12V DEUTSCH DT04-2P        |    |    |    |                                  |    |    |
|               | <b>X</b> Not machined             |   |   |   | <b>B</b> 24V DIN 43650               |   |   |   | <b>H</b> 24V DEUTSCH DT04-2P        |    |    |    |                                  |    |    |
| 12            | Type of emergency unloading valve |   |   |   |                                      |   |   |   |                                     |    |    |    |                                  |    |    |
|               | <b>N</b> None                     |   |   |   | <b>O</b> Standard terminal           |   |   |   | <b>S</b> Manual override with screw |    |    |    |                                  |    |    |

16 17

13 14

## Type of pressure relief valve

|                               |                   |                   |                   |
|-------------------------------|-------------------|-------------------|-------------------|
| <b>00</b> Replacement cap VMP | <b>08</b> 80 bar  | <b>14</b> 140 bar | <b>20</b> 200 bar |
| <b>03</b> 30 bar              | <b>09</b> 90 bar  | <b>15</b> 150 bar | <b>21</b> 210 bar |
| <b>04</b> 40 bar              | <b>10</b> 100 bar | <b>16</b> 160 bar | <b>22</b> 220 bar |
| <b>05</b> 50 bar              | <b>11</b> 110 bar | <b>17</b> 170 bar | <b>23</b> 230 bar |
| <b>06</b> 60 bar              | <b>12</b> 120 bar | <b>18</b> 180 bar | <b>24</b> 240 bar |
| <b>07</b> 70 bar              | <b>13</b> 130 bar | <b>19</b> 190 bar | <b>25</b> 250 bar |

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## Sealing type pressure relief valve

|                     |                 |               |
|---------------------|-----------------|---------------|
| <b>R</b> Grub screw | <b>P</b> Sealed | <b>N</b> None |
|---------------------|-----------------|---------------|

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## Thread port Carry over

|                            |                           |                                  |
|----------------------------|---------------------------|----------------------------------|
| <b>O</b> Not machined      | <b>C</b> M18x1.5 ISO 9974 | <b>J</b> M22x1.5 ISO 6149        |
| <b>A</b> 3/8" GAS ISO 1179 | <b>N</b> M22x1.5 ISO 9974 | <b>E</b> 3/4" - 16 SAE ISO 11926 |
| <b>B</b> 1/2" GAS ISO 1179 | <b>W</b> M18x1.5 ISO 6149 | <b>R</b> 7/8" - 14 SAE ISO 11926 |

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## External treatment

|               |                       |
|---------------|-----------------------|
| <b>N</b> None | <b>Z</b> Zinc plating |
|---------------|-----------------------|