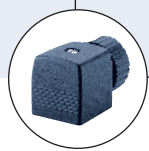


## 2/2-way solenoid valve for fluids



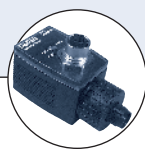
Type 6213 can be combined with...



**Type 2508**  
Cable plug








**Type 1078**  
Timer unit



**Type 2511**  
ASI cable plug



**Type 8600**  
Dosing control

- Compact body from brass or stainless steel
- Push-over coil
- Waterhammer-free, low noise
- Diaphragm materials NBR, EPDM, FKM
- Approvals:     

The Type 6213 is a 2/2-way normally closed solenoid valve with a forced coupled diaphragm system. It switches from 1.5 PSI and can be used universally for fluids. For complete opening, a differential pressure of at least 1.5 PSI is necessary.

| Power consumption     |                      |                      |           |
|-----------------------|----------------------|----------------------|-----------|
| Orifice<br>DN<br>[mm] | Inrush<br>AC<br>[VA] | Hold<br>AC<br>[VA/W] | DC<br>[W] |
| 10                    | 34                   | 14/8                 | 10        |
| 13                    | 36                   | 14/8                 | 10        |
| 20                    | 38                   | 14/8                 | 10        |
| 25                    | 160                  | 38/18                | –         |
| 40                    | 202                  | 38/18                | –         |

| Technical data                     |  |
|------------------------------------|--|
| <b>Orifice</b>                     | DN 10 – 40 mm  |
| <b>Body material</b>               | Brass, stainless steel 1.4404 (316L)   |
| <b>Inner part of valve</b>         | Brass body<br>Stainless steel body   |
| <b>Seal material</b>               | NBR, FKM, EPDM   |
| <b>Media</b>                       | NBR<br>FKM<br>EPDM   |
|                                    | Neutral fluids, water, hydraulic oil, oil without additives<br>Per-solutions, hot oils with additives<br>Oil and fat-free fluids |
| <b>Ambient temperature</b>         | Max. 131°F (+55°C)   |
| <b>Media temperature</b>           | NBR<br>FKM<br>EPDM   |
|                                    | 14°F to 176°F (-10°C to +80°C)<br>32°F to 194°F (0°C to +90°C)<br>-22°F to 248°F (-30°C to +120°C)                               |
| <b>Voltage tolerance</b>           | ±10%   |
| <b>Duty cycle</b>                  | 100% continuous rating   |
| <b>Electrical connection</b>       | Tag connector acc. to DIN 43650 Form A for cable plug<br>Type 2508 (see Accessories)   |
| <b>Protection class</b>            | IP 65 with cable plug  |
| <b>Installation</b>                | As required, preferably with actuator upright  |
| <b>Response times<sup>1)</sup></b> | 0.1 - 4 seconds<br>(depending on orifice size and differential pressure)   |

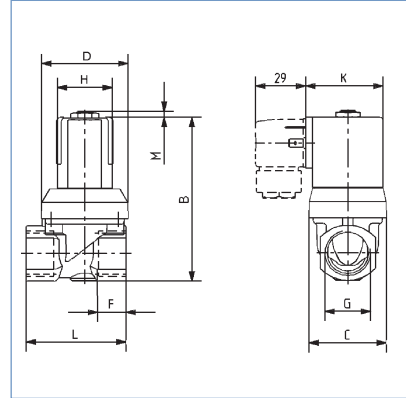
<sup>1)</sup> Measured at valve outlet at 87 PSI and 68°F (+20°C)

Opening: pressure build-up 0 to 90%

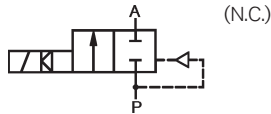
Closing: pressure decay 100 to 10%

## Dimensions [mm]

| G Thread |           |    | AC coil |    |    | DC coil |    |    | DC and AC coil |              |     |
|----------|-----------|----|---------|----|----|---------|----|----|----------------|--------------|-----|
| DN       | G         | F  | B       | H  | K  | B       | H  | K  | C              | L (Brass/SS) | M   |
| 10       | NPT 1/4   | 12 | 82.0    | 32 | 45 | 82.5    | 40 | 51 | 37.5           | 50/55        | 3.5 |
|          | NPT 3/8   | 12 |         |    |    |         |    |    |                |              |     |
|          | NPT 1/2   | 14 |         |    |    |         |    |    |                |              |     |
| 13       | NPT 1/2   | 14 | 95.5    | 32 | 45 | 96.0    | 40 | 51 | 45.0           | 58/65        | 3.5 |
|          | NPT 3/4   | 16 |         |    |    |         |    |    |                |              |     |
| 20       | NPT 3/4   | 16 | 115.5   | 32 | 45 | 116.0   | 40 | 51 | 66.0           | 80/100       | 3.5 |
|          | NPT 1     | 18 |         |    |    |         |    |    |                |              |     |
| 25       | NPT 1     | 18 | 158.5   | 49 | 53 | 158.5   | 49 | 53 | 104.5          | 95/-         | 7.0 |
|          | NPT 1 1/4 | 20 |         |    |    |         |    |    |                |              |     |
| 40       | NPT 1 1/2 | 22 | 179.5   | 49 | 53 | 179.5   | 49 | 53 | 104.5          | 132/-        | 7.0 |
|          | NPT 2     | 24 |         |    |    |         |    |    |                |              |     |



## Specifications - ordering chart (other versions on request)



Brass body, NBR seal

U.L. Listed   
with 1/2" conduit plug Type 2509  
0-250 V AC/DC

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 456 534                      | 456 535 | 456 536 | 456 537 |
| 1/2                    | 3/8            | 2.4            | 1.5 - 145            | 1.2           | 456 546                      | 456 547 | 456 548 | 456 549 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 456 538                      | 456 539 | 456 540 | 456 541 |
| 3/4                    | 1/2            | 4.2            | 1.5 - 145            | 2.2           | 456 550                      | 456 551 | 456 552 | 456 553 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 456 542                      | 456 543 | 456 544 | 456 545 |
| 1                      | 3/4            | 10.5           | 1.5 - 145            | 3.7           | 456 554                      | 456 555 | 456 556 | 456 557 |
| 1                      | 1              | 12.9           | 1.5 - 145            | 3.7           | -                            | 457 339 | 457 340 | 457 341 |
| 1 1/4                  | 1              | 12.9           | 1.5 - 145            | 3.7           | -                            | 457 342 | 457 343 | 457 344 |
| 1 1/2                  | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | -                            | 457 345 | 457 346 | 457 347 |
| 2                      | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | -                            | 457 348 | 457 349 | 457 350 |

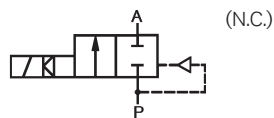
Brass body, FKM seal


| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 456 558                      | 456 559 | 456 560 | 456 561 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 456 562                      | 456 563 | 456 564 | 456 565 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 456 566                      | 456 567 | 456 568 | 456 569 |

Stainless steel body, FKM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 796                      | 458 797 | 458 798 | 458 799 |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 800                      | 458 801 | 458 802 | 458 803 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 458 804                      | 458 805 | 458 806 | 458 807 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 458 808                      | 458 809 | 458 810 | 458 811 |
| 1                      | 3/4            | 10.5           | 1.5 - 145            | 3.7           | 458 812                      | 458 813 | 458 814 | 458 815 |

## Specifications – ordering chart (other versions on request) (continued)



U.L. Recognized   
with standard-cable plug, Type 2508  
0–250 V AC/DC

## Brass body, NBR seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 458 078                      | 458 079 | 458 080 | 458 081 |
| 3/8                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 456 439                      | 456 440 | 456 441 | 456 442 |
| 1/2                    | 3/8            | 2.4            | 1.5 – 145            | 1.2           | 456 449                      | 456 450 | 456 451 | 456 452 |
| 1/2                    | 1/2            | 4.2            | 1.5 – 145            | 1.2           | 458 443                      | 456 444 | 456 300 | 456 445 |
| 3/4                    | 1/2            | 4.2            | 1.5 – 145            | 2.2           | 456 453                      | 456 454 | 456 455 | 456 456 |
| 3/4                    | 3/4            | 10.5           | 1.5 – 145            | 2.2           | 456 446                      | 456 447 | 456 301 | 456 448 |
| 1                      | 3/4            | 10.5           | 1.5 – 145            | 3.7           | 456 457                      | 456 458 | 456 302 | 456 659 |
| 1                      | 1              | 12.9           | 1.5 – 145            | 3.7           | –                            | 457 163 | 457 164 | 457 165 |
| 1 1/4                  | 1              | 12.9           | 1.5 – 145            | 3.7           | –                            | 457 166 | 457 167 | 457 168 |
| 1 1/2                  | 1 1/2          | 35.1           | 1.5 – 145            | 7.9           | –                            | 457 169 | 457 170 | 457 171 |
| 2                      | 1 1/2          | 35.1           | 1.5 – 145            | 7.9           | –                            | 457 172 | 457 173 | 457 174 |


## Brass body, FKM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 458 082                      | 458 083 | 458 084 | 458 085 |
| 3/8                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 456 460                      | 456 461 | 456 462 | 456 463 |
| 1/2                    | 1/2            | 4.2            | 1.5 – 145            | 1.2           | 456 464                      | 456 465 | 456 466 | 456 467 |
| 3/4                    | 3/4            | 10.5           | 1.5 – 145            | 2.2           | 456 468                      | 456 469 | 456 470 | 456 471 |

## Stainless steel body, FKM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 458 732                      | 458 733 | 458 734 | 458 735 |
| 3/8                    | 3/8            | 2.4            | 1.5 – 145            | 0.9           | 458 736                      | 458 737 | 458 738 | 458 739 |
| 1/2                    | 1/2            | 4.2            | 1.5 – 145            | 1.2           | 458 740                      | 458 741 | 458 742 | 458 743 |
| 3/4                    | 3/4            | 10.5           | 1.5 – 145            | 2.2           | 458 744                      | 458 745 | 458 746 | 458 747 |
| 1                      | 3/4            | 10.5           | 1.5 – 145            | 3.7           | 458 748                      | 458 749 | 458 750 | 458 751 |

## Specifications - ordering chart (other versions on request)


U.L. Listed   
with 1/2" conduit plug Type 2509  
0-250 V AC/DC

## Brass body, EPDM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 457 187                      | 457 188 | 457 189 | 457 190 |
| 1/2                    | 1/2            | 2.4            | 1.5 - 145            | 1.2           | 457 191                      | 457 192 | 457 193 | 457 194 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 457 195                      | 457 196 | 457 197 | 457 198 |
| 1                      | 1              | 12.9           | 1.5 - 145            | 3.7           | -                            | 457 351 | 457 352 | 457 353 |
| 1 1/4                  | 1              | 12.9           | 1.5 - 145            | 3.7           | -                            | 457 354 | 457 355 | 457 356 |
| 1 1/2                  | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | -                            | 457 357 | 457 358 | 457 359 |
| 2                      | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | -                            | 457 360 | 457 361 | 457 362 |

## Stainless steel body, EPDM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 776                      | 458 777 | 458 778 | 458 779 |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 780                      | 458 781 | 458 782 | 458 783 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 458 784                      | 458 785 | 458 786 | 458 787 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 458 788                      | 458 789 | 458 790 | 458 791 |
| 1                      | 3/4            | 10.5           | 1.5 - 145            | 3.7           | 458 792                      | 458 792 | 458 794 | 458 795 |

U.L. Recognized   
with standard-cable plug, Type 2508  
0-250 V AC/DC

## Brass body, EPDM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 086                      | 458 087 | 458 088 | 458 089 |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 457 175                      | 457 176 | 457 177 | 457 178 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 457 179                      | 457 180 | 457 181 | 457 182 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 457 183                      | 457 184 | 457 185 | 457 186 |
| 1                      | 1              | 12.9           | 1.5 - 145            | 3.7           | 457 984                      | 457 234 | 457 235 | 457 236 |
| 1 1/4                  | 1              | 12.9           | 1.5 - 145            | 3.7           | 457 985                      | 457 237 | 457 238 | 457 239 |
| 1 1/2                  | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | 457 986                      | 457 240 | 457 241 | 457 242 |
| 2                      | 1 1/2          | 35.1           | 1.5 - 145            | 7.9           | 457 987                      | 457 243 | 457 244 | 457 245 |

## Stainless steel body, EPDM seal

| Port Connections [NPT] | Orifice [inch] | C <sub>v</sub> | Pressure range [PSI] | Weight [lbs.] | Item no. Voltage / Frequency |         |         |         |
|------------------------|----------------|----------------|----------------------|---------------|------------------------------|---------|---------|---------|
|                        |                |                |                      |               | 24/DC                        | 24/60   | 120/60  | 240/60  |
| 1/4                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 712                      | 458 713 | 458 714 | 458 715 |
| 3/8                    | 3/8            | 2.4            | 1.5 - 145            | 0.9           | 458 716                      | 458 717 | 458 718 | 458 719 |
| 1/2                    | 1/2            | 4.2            | 1.5 - 145            | 1.2           | 458 720                      | 458 721 | 458 722 | 458 723 |
| 3/4                    | 3/4            | 10.5           | 1.5 - 145            | 2.2           | 458 724                      | 458 725 | 458 726 | 458 727 |
| 1                      | 3/4            | 10.5           | 1.5 - 145            | 3.7           | 458 728                      | 458 729 | 458 730 | 458 731 |