

# Ball Valves - Full Flow and Mini Design NPTF/Inch Series 2930N, 2935N, 2940, 2960

Nickel-Plated (2940), Chrome-Plated (2930N and 2935N) Plain Brass (2960)  
 Thread Type: 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2" NPTF



- Dual sealing system allows valves to be operated in either direction
- No metal-to-metal moving parts
- Maintenance-free design
- Silicone-free lubricant on all seals
- Chrome-plated brass ball for longer life
- Seats are self-lubricating PTFE with wear compensating lip design

## TECHNICAL SPECIFICATIONS - Check Individual Product Tables for Details

|                       |  |
|-----------------------|--|
| Valve group           | 2 way / 2 position; 3 way / 2 position (Series 2960)   |
| Construction          | Ball valve   |
| Mounting              | In-line  |
| Materials             | Brass body (2960), Nickel-Plated brass body (2940), Chrome-Plated Brass Body (2930N and 2935N) |
|                       | Zinc-plated steel handles (2940 and 2960), 2930N and 2935N in Nylon                            |
|                       | Hardened chrome-plated brass ball  |
|                       | Teflon seat (P.T.F.E.)   |
| Threaded port sizes   | 1/8", 1/4", 3/8", 1/2" NPTF (2930N ad 2935N)   |
|                       | 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2" NPTF (2940)   |
| Installation          | In-line  |
| Operating temperature | Series 2940 - 4°F to 340°F   |
|                       | Series 2960 - 4°F to 340°F   |
|                       | Series 2930N/2935N - 4°F to 200°F  |
| Fluid                 | Filtered air (for others, check with factory)  |

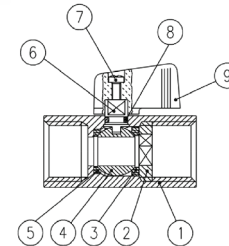
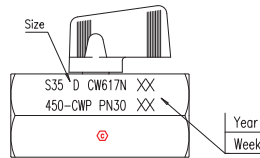
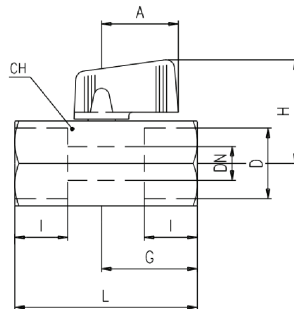
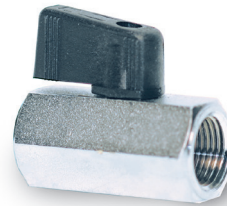
## PNEUMATIC DATA

|                  |   |
|------------------|---|
| Working pressure | Series 2940: 600 psi                                    |
|                  | Series 2930N/2935N: 1/8", 1/4", 3/8", 1/2" 450 psi      |
|                  | Series 2960: All sizes 450 psi                          |
| Nominal flow     | 2940 - Full flow design, Others see flow data in tables |

## Mini Ball Valve, Series 2930 N (Female-Female thread ports)

These valves are constructed of all chrome-plated, brass body, hardened chrome-plated brass ball, teflon seat, and light weight plastic handle.

Kv = Flow coefficient in M3/h → 100kPa differential pressure (DP 14.5 psi)



## DIMENSIONS (in inches)

Economical Ball Valves (chrome-plated, brass body)

| Mod.         | D (NPT) | DN    | I     | L     | G     | A     | H     | CH    | Kv  | Kg   | PSI |
|--------------|---------|-------|-------|-------|-------|-------|-------|-------|-----|------|-----|
| 2930 N-1/8PT | 1/8"    | 0.236 | 0.354 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 4.6 | 0.11 | 450 |
| 2930 N-1/4PT | 1/4"    | 0.314 | 0.472 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 5.7 | 0.11 | 450 |
| 2930 N-3/8PT | 3/8"    | 0.314 | 0.472 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 5.7 | 0.11 | 450 |
| 2930 N-1/2PT | 1/2"    | 0.393 | 0.610 | 2.106 | 1.102 | 0.885 | 1.299 | 0.984 | 9.4 | 0.11 | 450 |

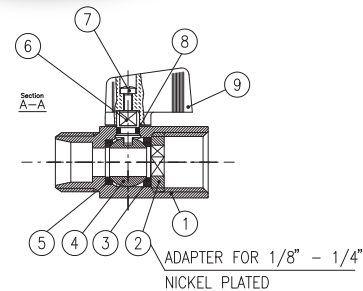
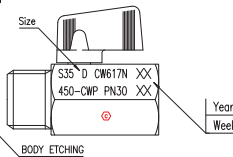
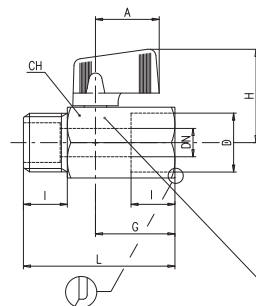
## MATERIALS

| Part Description                  | Qty | Material               | Standard  |
|-----------------------------------|-----|------------------------|-----------|
| 1 Sand blasted chrome-plated body | 1   | CW617N                 | EN12164   |
| 2 Unplated retainer nut           | 1   | CW617N                 | EN12164   |
| 3 Retainer seat                   | 1   | PTFE                   |           |
| 4 Chrome-plated ball              | 1   | CW617N                 | EN12164   |
| 5 Body Seat                       | 1   | PTFE                   |           |
| 6 Unplated stem                   | 1   | CW617N                 | EN12164   |
| 7 Zinc-plated screw               | 1   | CB4FF                  | EN10263/2 |
| 8 O-Ring                          | 1   | FPM                    |           |
| 9 Black Handle (RAL 9005)         | 1   | Nylon glass filled 30% |           |

## Mini Ball Valve, Series 2935 N (Male - Female thread ports)

These valves are constructed of all chrome-plated, brass body, hardened chrome-plated brass ball, teflon seat, and light weight plastic handle.

Kv = Flow coefficient in M3/h → 100kPa differential pressure (DP 14.5 psi)



## DIMENSIONS (in inches)

Economical Ball Valves (chrome-plated, brass body)

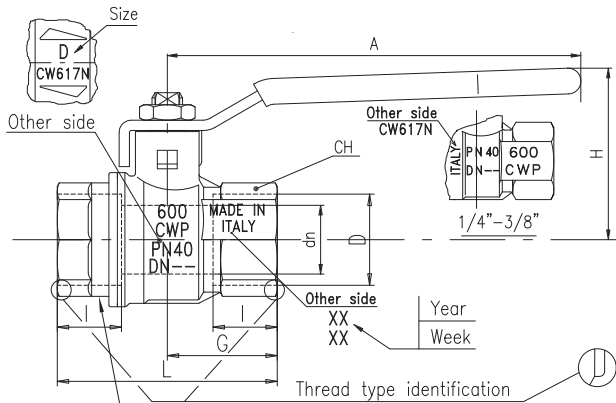
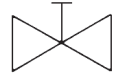
| Mod.         | D (NPT) | DN    | I     | L     | G     | A     | H     | CH    | Kv  | Kg   | PSI |
|--------------|---------|-------|-------|-------|-------|-------|-------|-------|-----|------|-----|
| 2935 N-1/8PT | 1/8"    | 0.197 | 0.354 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 4.6 | 0.11 | 450 |
| 2935 N-1/4PT | 1/4"    | 0.314 | 0.472 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 5.7 | 0.11 | 450 |
| 2935 N-3/8PT | 3/8"    | 0.314 | 0.472 | 1.712 | 0.905 | 0.885 | 1.220 | 0.826 | 5.7 | 0.11 | 450 |
| 2935 N-1/2PT | 1/2"    | 0.393 | 0.610 | 2.106 | 1.102 | 0.885 | 1.299 | 0.984 | 9.4 | 0.14 | 450 |

## MATERIALS

| Item # | Part Description                | Qty | Material               | Standard  |
|--------|---------------------------------|-----|------------------------|-----------|
| 1      | Sand blasted chrome-plated body | 1   | CW617N                 | EN12164   |
| 2      | Unplated retainer nut           | 1   | CW617N                 | EN12164   |
| 3      | Retainer seat                   | 1   | PTFE                   |           |
| 4      | Chrome-plated ball              | 1   | CW617N                 | EN12164   |
| 5      | Body Seat                       | 1   | PTFE                   |           |
| 6      | Unplated stem                   | 1   | CW617N                 | EN12164   |
| 7      | Zinc-plated screw               | 1   | CB4FF                  | EN10263/2 |
| 8      | O-Ring                          | 1   | FPM                    |           |
| 9      | Black Handle (RAL 9005)         | 1   | Nylon glass filled 30% |           |

## Ball Valve, Series 2940

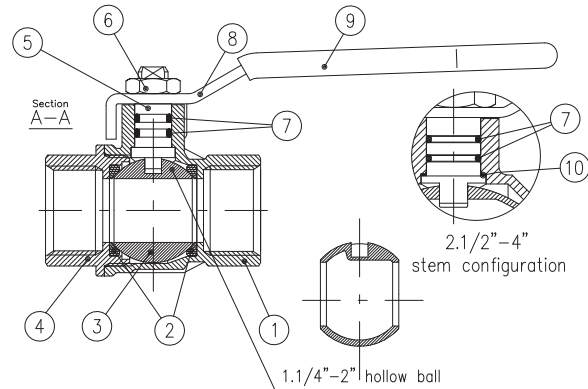
These valves are constructed of an electrolytic nickel-plated brass body, a steel handle, a hardened chrome-plated brass ball, and a teflon seat. These valves are suitable for industrial, pneumatic, hydraulic, and various domestic installations. Among the various types of compounds which can be transported through these valves are steam, gasoline, fuel, oils, kerosene, acids, and compressed air.



ETCHING:  
 1/4"–1/2" → S95 c<sub>us</sub> c<sub>us</sub> 5G <FMD>400WP Δ 1/2 PSI CGA3.16  
 3/4"–1" → S95 c<sub>us</sub> c<sub>us</sub> 5G <FMD>400WP Δ 1/2 PSI 125G CGA3.16  
 1.1/4"–2" → S95 c<sub>us</sub> c<sub>us</sub> 5G <FMD>400WP CGA3.16

Flow Rate (GPM) in gallons per minute of H<sub>2</sub>O determined with a pressure drop of 1 psi

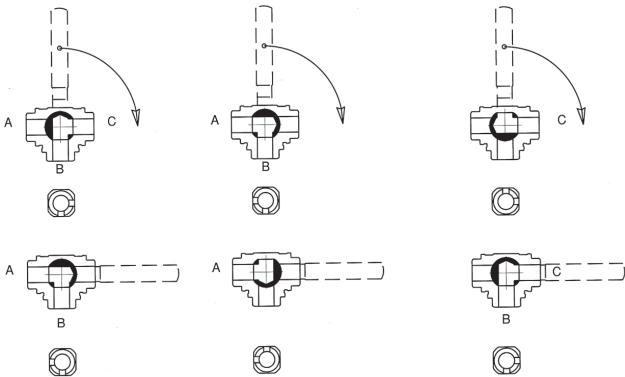
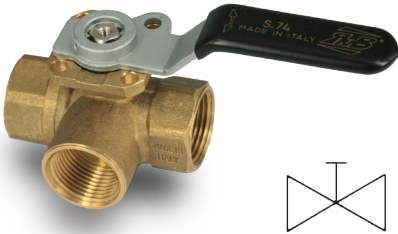
| DIMENSIONS (in inches) |            |       |       |       |       |       |       |       |                    |
|------------------------|------------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| Mod.                   | D<br>(NPT) | DN    | I     | L     | G     | A     | H     | CH    | Flow Rate<br>(GPM) |
| 2940 1/4PT             | 1/4"       | 0.314 | 0.472 | 1.771 | 0.885 | 3.228 | 1.563 | 0.787 | 4                  |
| 2940 3/8PT             | 3/8"       | 0.393 | 0.472 | 1.771 | 0.885 | 3.228 | 1.563 | 0.787 | 6                  |
| 2940 1/2PT             | 1/2"       | 0.590 | 0.610 | 2.322 | 1.161 | 3.937 | 1.695 | 0.984 | 18                 |
| 2940 3/4PT             | 3/4"       | 0.787 | 0.669 | 2.519 | 1.259 | 4.724 | 1.988 | 1.220 | 30                 |
| 2940 1PT               | 1"         | 0.984 | 0.826 | 3.188 | 1.594 | 4.724 | 2.153 | 1.574 | 50                 |
| 2940 1 1/4PT           | 1-1/4"     | 1.259 | 0.905 | 3.661 | 1.83  | 6.220 | 2.988 | 1.929 | 75                 |
| 2940 1 1/2PT           | 1-1/2"     | 1.574 | 0.905 | 4.015 | 2.007 | 6.220 | 3.236 | 2.125 | 110                |



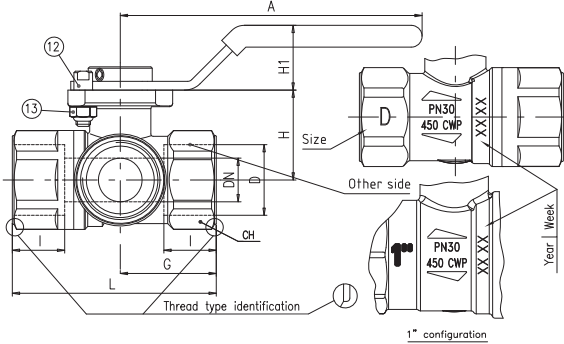
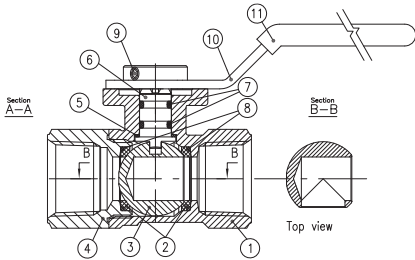
| MATERIALS                              |     |          |           |
|--|-----|----------|-----------|
| Part Description                       | Qty | Material | Standard  |
| 1 Sand blasted. nickel-plated body     | 1   | CW617N   | EN12165   |
| 2 Seat                                 | 2   | PTFE     |           |
| 3 Chrome-plated ball                   | 1   | CW617N   | EN12165   |
| 4 Sand blasted. nickel-plated end cap  | 1   | CW617N   | EN12165   |
| 5 Nickel-plated stem. O-rig design     | 1   | CW617N   | EN12164   |
| 6 Geomet® plated steel nut             | 1   | CB4FF    | EN10263/2 |
| 7 O-Ring                               | 2   | FPM      |           |
| 8 Geomet® plated steel handle up to 2" | 1   | DD11     | EN10111   |
| 9 Yellow dipped coating (RAL 1028)     | 1   | PVC      |           |
| 10 Washer                              | 1   | PTFE     |           |

Selector Ball Valve, Series 2960 L-Passage, 3-way/2-position, Lockable

These valves are constructed of a brass body, a steel handle, a hardened chrome-plated brass ball, and a teflon seat. These valves are suitable for industrial, pneumatic, hydraulic, and various domestic installations. Among the various types of compounds which can be transported through these valves are steam, gasoline, fuel, oils, kerosene, acids, and compressed air.



Ball bores position is by the stem's milling: A B C = outlets  
90° lever rotations  
To change outlets combination operation as follow:  
Remove the lever; turn the stem into the desired starting position); Reset the lever



| MATERIALS                          |     |                          |          |
|------------------------------------|-----|--------------------------|----------|
| Part Description                   | Qty | Material                 | Standard |
| 1 Sand blasted unplated body       | 1   | CW617N                   | EN12165  |
| 2 Seat                             | 2   | PTFE Graphite filled 15% |          |
| 3 Chrome-plated ball               | 1   | CW617N                   | EN12164  |
| 4 Sand blasted unplated end cap    | 1   | CW617N                   | EN12165  |
| 5 Washer                           | 1   | PTFE Carbon filled 25%   |          |
| 6 Nickel-plated stem O-ring design | 1   | CW617N                   | EN12164  |
| 7 Stem O-ring                      | 2   | FPM                      |          |
| 8 Seat O-ring                      | 2   | FPM                      |          |
| 9 Handle screw                     | 1   | Steel 4.8                | ISO 4026 |
| 10 Geomet® steel handle            | 1   | DD11                     | EN10111  |
| 11 Black dipped coating (RAL 9005) | 1   | PVC                      |          |
| 12 Unplated stop                   | 1   | CW617N                   | EN12164  |
| 13 Zinc-plated nut                 | 1   | Steel 8S                 | UNI 7474 |

| DIMENSIONS (in inches) |         |       |       |       |       |       |       |       |       |       |       |                 |       |      |     |
|------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|------|-----|
| Mod.                   | D (NPT) | DN    | I     | L     | G     | H     | H1    | CH    | □ B   | A     | R     | Flow rate (GPM) | Cv    | Kg   | PSI |
| 2960 1/2PT             | 1/2"    | 0.591 | 0.610 | 2.638 | 1.299 | 1.220 | 0.876 | 1.220 | 0.354 | 4.055 | 1.220 | 15              | 7.0   | 0.55 | 450 |
| 2960 3/4PT             | 3/4"    | 0.591 | 0.709 | 2.736 | 1.299 | 1.220 | 0.876 | 1.220 | 0.354 | 4.055 | 1.319 | 15              | 7.0   | 0.65 | 450 |
| 2960 1PT               | 1"      | 0.748 | 0.827 | 3.228 | 1.614 | 1.516 | 0.876 | 1.496 | 0.354 | 4.055 | 1.614 | 19              | 12.83 | 1.20 | 450 |

Flow Rate in GPM (gallons/ minute H2O) determined with a pressure drop of 1 psi