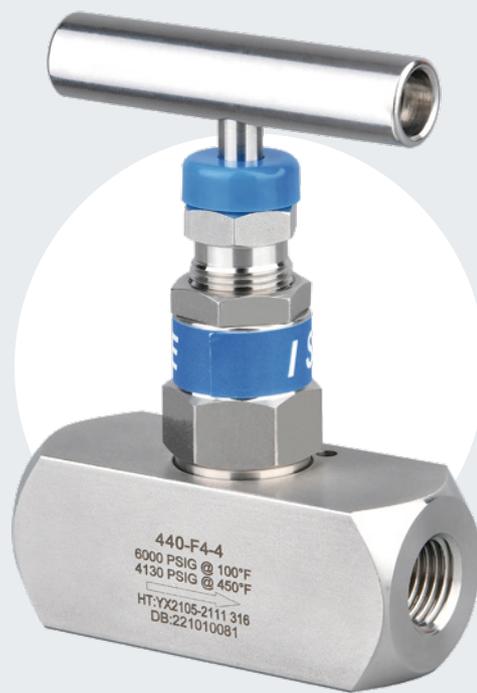
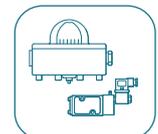
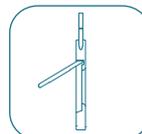
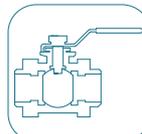
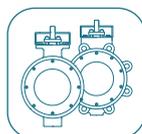


Needle valves

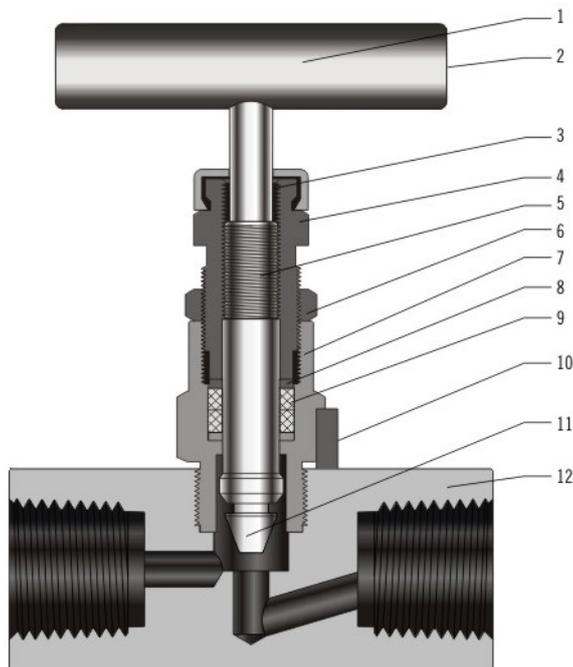
Fig.440



www.coreline.dk

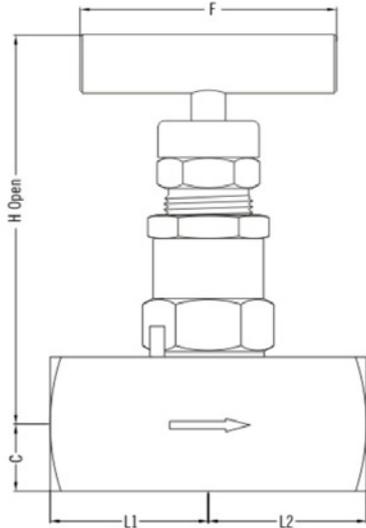


Material part list



| Item | Part name | Valve Body Materials | | | | |
|-----------|----------------|--|-------------------------------|------------------|---|---------------------------|
| | | 316 SS | Alloy 400 | Alloy C-276 | Titanium | Brass |
| 1 | Handle | Stainless steel/Anodized aluminum/Black knob | | | | |
| 2 | Set screw | Nickel cadmium-plated steel | | | | |
| 3 | Dust cap | Plastic | | | | |
| 4 | Gland | 316 SS/A276 | | | | Brass 360/B16 |
| 5 | Stem | Chrome-plated 316 SS/A276 | Alloy R-405/B164 | Alloy C-276/B574 | t84.8373; Titanium Gr 4/B348 | Chrome-plated 316 SS/A276 |
| 6 | Lock nut | 316 SS/B783 | | | | Brass 360/B16 |
| 7 | Bonnet | 316 SS/A479 | Alloy R-405/B164 | Alloy C-276/B574 | Titanium Gr 4/B348 | Brass 360/B16 |
| 8 | Packing washer | 316 SS/A276 | | | | |
| 9 | Packing | PTFE/PCTFE/PEEK/Grafoil | | | | |
| 10 | Lock pin | 304 SS/A276 | | | | |
| 11 | Stem tip | Chrome-plated 316 SS/A276 | Alloy R-405/B164 | Alloy C-276/B574 | t84.8373; Titanium Gr 4/B348 | Chrome-plated 316 SS/A276 |
| | | Different tips optional | | | | |
| 12 | Body | 316 SS/A479 316 SS/A182 | Alloy 400/B164, B127, B564 | Alloy C-276/B564 | Titanium Gr 4/B348 or Titanium Gr 4/B381 | Brass 360/B16 |
| | Seat | Weld stellite optional | | | | |
| Lubricant | | Molybdenum disulfide-based | | | | |

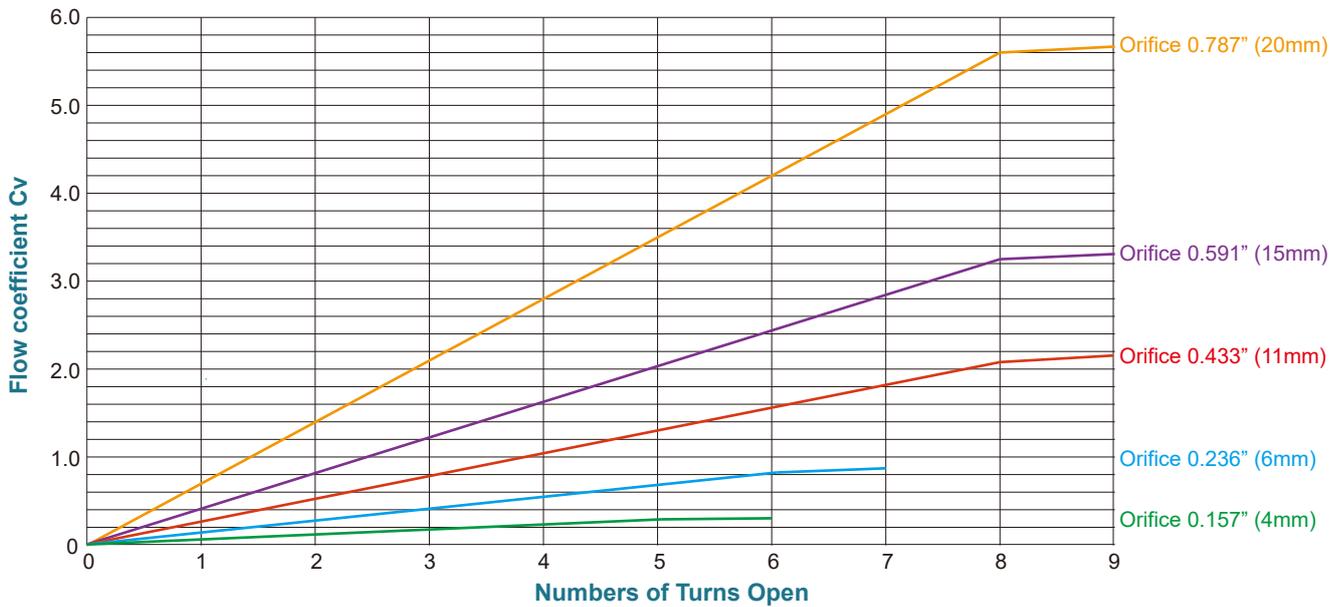
Dimensions



| Model | End Connection | | Orifice in. (mm) | Cv | L1 | L2 | H | F | C |
|-------------|--------------------------|--------------------------|------------------|-------------|-------------|-------------|--------------|------------|--------------|
| | Inlet | Outlet | | | | | | | |
| 440-F2-4 | 1/8" Female | 1/8" Female | 0.157 (4.0) | 0.35 | 1.00 (25.4) | 1.00 (25.4) | 2.85 (72.4) | 2.17 (55) | 0.5 (12.7) |
| 440-F4-4 | 1/4" Female | 1/4" Female | | | 1.06 (26.9) | 1.06 (26.9) | | | |
| 440-M4-4 | 1/4" Male | 1/4" Male | | | 1.03 (26.2) | 1.03 (26.2) | | | |
| 440-M6-4 | 3/8" Male | 3/8" Male | | | 1.19 (30.2) | 1.19 (30.2) | | | |
| 440-S4-4 | 1/4" Double ferrule tube | 1/4" Double ferrule tube | | | 1.20 (30.5) | 1.20 (30.5) | | | |
| 440-SM6-4 | 6mm Double ferrule tube | 6mm Double ferrule tube | | | | | | | |
| 440-SM8-4 | 8mm Double ferrule tube | 8mm Double ferrule tube | 0.197 (5.0) | 0.73 | 1.1228 (6) | 1.12 (28.6) | 3.5 (88.9) | 2.5 (63.5) | 0.563 (14.3) |
| 440-F4-5 | 1/4" Female | 1/4" Female | | | 1.41 (35.8) | 1.41 (35.8) | | | |
| 440-F6-5 | 3/8" Female | 3/8" Female | | | | | | | |
| 440-M6-5 | 3/8" Male | 3/8" Male | | | 1.42 (36.1) | 1.42 (36.1) | | | |
| 440-S6-5 | 3/8" Double ferrule tube | 3/8" Double ferrule tube | | | 1.52 (38.6) | 1.52 (38.6) | | | |
| 440-S8-5 | 1/2" Double ferrule tube | 1/2" Double ferrule tube | | | 1.56 (39.7) | 1.56 (39.7) | | | |
| 440-SM10-5 | 10mm Double ferrule tube | 10mm Double ferrule tube | 1.13 (28.6) | 1.13 (28.6) | | | | | |
| 440-SM12-5 | 12mm Double ferrule tube | 12mm Double ferrule tube | | | | | | | |
| 440-SM14-5 | 14mm Double ferrule tube | 14mm Double ferrule tube | 1.50 (38.1) | 1.50 (38.1) | | | | | |
| 440-SW6-5 | 3/8" Tube socket weld | 3/8" Tube socket weld | | | | | | | |
| 440-SW8-5 | 1/2" Tube socket weld | 1/2" Tube socket weld | | | | | | | |
| 440-MS12-5 | 12mm Tube socket weld | 12mm Tube socket weld | | | | | | | |
| 440-MS14-5 | 14mm Tube socket weld | 14mm Tube socket weld | | | | | | | |
| 440-MS16-5 | 16mm Tube socket weld | 16mm Tube socket weld | | | | | | | |
| 440-MB14-5 | 14mm Tube butt weld | 14mm Tube butt weld | 2.92 (74.1) | 2.92 (74.1) | | | | | |
| 440-MB16-5 | 16mm Tube butt weld | 16mm Tube butt weld | | | | | | | |
| 440-MJ14-5 | 14mm MJ | 14mm MJ | 1.50 (38.1) | 1.50 (38.1) | | | | | |
| 440-MJ16-5 | 16mm MJ | 16mm MJ | | | | | | | |
| 440-MM20-5 | M20x1.5 Mae ISO | M20x1.5 Male ISO | 0.433 (11.0) | 2.18 | 1.56 (39.6) | 1.56 (39.6) | 4.12 (104.8) | 3.5 (88.9) | 0.875 (222) |
| 440-MM22-5 | M22x1.5 Male ISO | M22x1.5 Male ISO | | | 1.63 (41.3) | 1.63 (41.3) | | | |
| 440-F8-11 | 1/2" Female | 1/2" Female | 0.591 (15.0) | 3.27 | 1.97 (50.0) | 1.97 (50.0) | 5.0 (127) | 5.0 (127) | 1.14 (29.0) |
| 440-F12-11 | 3/4" Female | 3/4" Female | | | 1.75 (44.5) | 1.75 (44.5) | | | |
| 440-M12-11 | 3/4" Male | 3/4" Male | | | | | | | |
| 440-S12-11 | 3/4" Double ferrule tube | 3/4" Double ferrule tube | | | 2.98 (75.7) | 2.98 (75.7) | | | |
| 440-SM14-11 | 14mm Double ferrule tube | 14mm Double ferrule tube | | | 1.75 (44.5) | 1.75 (44.5) | | | |
| 440-SM16-11 | 16mm Double ferrule tube | 16mm Double ferrule tube | | | | | | | |
| 440-SM18-11 | 18mm Double ferrule tube | 18mm Double ferrule tube | 1.56 (39.7) | 1.56 (39.7) | | | | | |
| 440-MS14-11 | 14mm Tube socket weld | 14mm Tube socket weld | | | | | | | |
| 440-MS16-11 | 16mm Tube socket weld | 16mm Tube socket weld | 0.787 (20.0) | 5.85 | 1.75 (44.5) | 1.75 (44.5) | 5.2 (132) | 5.5 (140) | 1.25 (31.75) |
| 440-SW12-11 | 3/4" Tube socket weld | 3/4" Tube socket weld | | | 2.35 (59.7) | 2.35 (59.7) | | | |
| 440-MB14-11 | 14mm Tube butt weld | 14mm Tube butt weld | | | | | | | |
| 440-MB16-11 | 16mm Tube butt weld | 16mm Tube butt weld | | | | | | | |
| 440-MJ14-11 | 14mm UMB | 14mm UMB | | | | | | | |
| 440-MM27-11 | M27x2 Male ISO | M27x2 Male ISO | | | | | | | |
| 440-F12-15 | 3/4" Female | 3/4" Female | 0.787 (20.0) | 5.85 | 1.97 (50.0) | 1.97 (50.0) | 5.2 (132) | 5.5 (140) | 1.25 (31.75) |
| 440-SW16-15 | 1" Tube socket weld | 1" Tube socket weld | | | 2.35 (59.7) | 2.35 (59.7) | | | |
| 440-MS25-15 | 25mm Tube socket weld | 25mm Tube socket weld | | | | | | | |
| 440-MS28-15 | 28mm Tube socket weld | 28mm Tube socket weld | | | 1.97 (50.0) | 1.97 (50.0) | | | |
| 440-PS12-15 | 3/4" Pipe socket weld | 3/4" Pipe socket weld | | | | | | | |
| 440-SM20-15 | 20mm Double ferrule tube | 20mm Double ferrule tube | | | | | | | |
| 440-SM22-15 | 22mm Double ferrule tube | 22mm Double ferrule tube | 1.97 (50.0) | 1.97 (50.0) | | | | | |
| 440-F16-20 | 1" Female | 1" Female | | | | | | | |
| 440-MS25-20 | 25mm Tube socket weld | 25mm Tube socket weld | 0.787 (20.0) | 5.85 | 1.97 (50.0) | 1.97 (50.0) | 5.2 (132) | 5.5 (140) | 1.25 (31.75) |
| 440-SW16-25 | 1" Tube socket weld | 1" Tube socket weld | | | | | | | |
| 440-MS28-20 | 28mm Tube socket weld | 28mm Tube socket weld | | | | | | | |
| 440-PS12-20 | 3/4" Pipe socket weld | 3/4" Pipe socket weld | | | | | | | |
| 440-PS16-20 | 1" Pipe socket weld | 1" Pipe socket weld | | | | | | | |

Technical specifications

Flow Data at 100°F (37°C)



Standard pressure series

| Temperature | | Valve body material | | | | |
|-------------|--------|----------------------------|-----------|-------------|-----------|-----------|
| | | 316 SS | Alloy 400 | Alloy C-276 | Titanium | Brass |
| F | °C | Working pressure, psi(bar) | | | | |
| -65~100 | -54~38 | 6000(414) | 5000(344) | 6000(414) | 3570(245) | 3000(207) |
| 200 | 93 | 5160(356) | 4400(303) | 6000(414) | 3110(214) | 2350(162) |
| 250 | 121 | 4910(338) | 4260(293) | 6000(414) | 2840(195) | 2200(151) |
| 300 | 148 | 4660(321) | 4120(283) | 6000(414) | 2570(177) | 2050(141) |
| 350 | 176 | 4470(307) | 4050(279) | 5975(411) | 2385(164) | 1470(101) |
| 400 | 204 | 4280(295) | 3980(274) | 5880(405) | 2200(151) | 390(27) |
| 450 | 232 | 4130(285) | 3970(273) | 5710(393) | 2055(141) | |
| 500 | 260 | 3980(274) | 3960(272) | 5540(381) | 1885(129) | |
| 600 | 315 | 3760(259) | | 5040(347) | 1625(111) | |
| 650 | 343 | 3690(254) | | 4905(337) | | |
| 700 | 371 | 3600(248) | | 4730(325) | | |
| 750 | 399 | 3510(242) | | 4430(305) | | |
| 800 | 426 | 3460(238) | | 4230(291) | | |
| 850 | 454 | 3380(232) | | 4060(279) | | |
| 900 | 482 | 3280(225) | | 3745(258) | | |
| 950 | 510 | 3220(221) | | 3220(221) | | |
| 1000 | 538 | 3030(208) | | 3030(208) | | |
| 1050 | 566 | 3000(207) | | 3000(207) | | |
| 1100 | 593 | 2685(184) | | 2685(184) | | |
| 1150 | 621 | 2285(157) | | 2285(157) | | |
| 1200 | 649 | 1715(118) | | 1545(106) | | |

High pressure series

| Temperature | | Valve body material |
|-------------|--------|----------------------------|
| | | 316 SS |
| F | °C | Working pressure, psi(bar) |
| -65~100 | -54~38 | 10000(689) |
| 200 | 93 | 9290(640) |
| 250 | 121 | 8840(609) |
| 300 | 148 | 8390(578) |
| 350 | 176 | 8045(554) |
| 400 | 204 | 7705(530) |
| 450 | 232 | 7435(512) |
| 500 | 260 | 7165(493) |
| 600 | 315 | 6770(466) |
| 650 | 343 | 6660(458) |
| 700 | 371 | 6480(446) |
| 750 | 399 | 6335(436) |
| 800 | 426 | 6230(429) |
| 850 | 454 | 6085(419) |
| 900 | 482 | 5905(406) |
| 950 | 510 | 5795(399) |
| 1000 | 538 | 5450(375) |
| 1050 | 566 | 5400(372) |
| 1100 | 593 | 4835(333) |
| 1150 | 621 | 4115(283) |
| 1200 | 649 | 3085(212) |

Coreline

The contents of this catalogue are confidential and proprietary to Coreline, we reserve the right to change the specifications without any notice.

CORELINE LTD.

Add: No.4 Wangjiang Road, Muqiao Town, Zhengpugang New District, 238200 Hexian, Ma'anshan City, Anhui Province, China

Http: // www.coreline.dk

E-mail : mail@coreline.cn