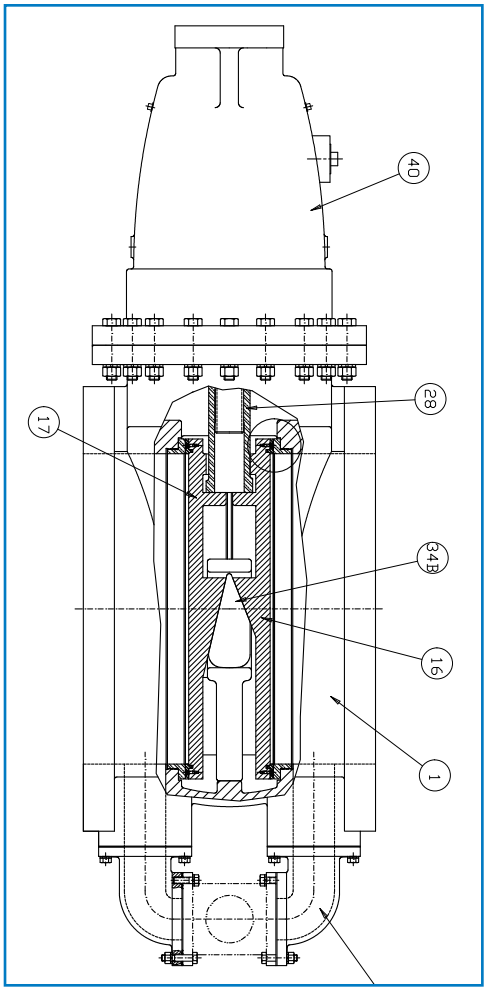
L14 SERIES Double Disc Gate Valve Sizes 14”-108”

List 14 Double Disc Gate Valves continue to be the most rugged commonly used control mechanisms for on/off service. They are used in the general waterworks service; water pollution control; the chemical process industry; iron and steel mills, particularly blast furnace pipelines; in coke oven and by-product plant pipelines.



When fully opened, double-disc gate valves offer unobstructed passage, straight-through flow that is equivalent to the inside diameter of the associated piping. The result is a lower pressure drop. Double-disc gate valves also utilize the contained pressures for tight shut-off. The internal forces of the medium work with the seating mechanisms. Double-disc gate valves manufactured by Ludlow-Rensselaer utilize a bottom wedging principle, avoiding jamming or scoring due to premature wedging in the partially open position.

Further, double-disc gate valves offer a forgiving mechanism for durable long life, and will function for decades with low maintenance. The manufacturing tolerances and simple design, along with rugged construction, allow for easy installation and external stress and corrosion, while maintaining operating effectiveness. Double-disc gate valves lend themselves to part replacement and repair without removal from the pipeline. The Ludlow- Rensselaer type can be repacked under pressure.

THE LUDLOW-RENSSELAER VALVE uses a double wedging principle, so that by placing the gate which has the short or abrupt wedge on the upstream side, advantage can be taken of the pressure or power contained within the water mains to assist in unlocking the wedges, thus allowing the water pressure to become equalized at once within the valve, producing bypass effects by means of this internal mechanism within the valve itself - an advantage attained by no others.

These results are accomplished as follows: The short side of the wedge is used only in the opening operation, and is made so abrupt or blunt that the greater the pressure of the stem-nut holding the gate in position is withdrawn. Then the thick side of the stem-nut, always acting independtly upon the short wedge gate, completes the releasing of the entire wedging mechanism at the first movement of opening. This is usually accomplished without the aid of the lifting motion of the stem. The stem, therefore, has only to overcome the friction of the water in the mains, and as it can never be forced out of alignment nor bound in the stem-nut, which occurs when the stem-nut is attached to the wedges, very little power is required to be applied to the handwheel or nut. For convenience in setting, the gate which has the short or abrupt wedge is always painted red, and we recommend that the valve be placed with the red gate towards the pressure.

MATERIALS

SIZES
14” Thru 108” in AWWA Class 150, 250 (meets AWWA C500)

BODY
Ductile Iron (ASTM A536, Grade 65-45-12)
Optional Cast Iron (ASTM A126, Class B)

STEM
ASTM A276, Grade 304 Stainless Steel

SEATS
Aluminum Bronze C954

GATES
Ductile Iron (ASTM A536, Grade 65-45-12)

COATING
TNEMEC N141 2-Part Epoxy In/Out

BOLTS AND NUTS
304 Stainless Steel Standard