



Order Code Matrix

EMICO uses a code matrix system to categorise the make-up of knife gate valves. Details are shown below.

Example: 0400,FIG EA-905,WLM,FE,CM,G2+HC,S1+S11,P1+P3,10B,M40,HRS,NP,E3,T1

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------|----------|--------------------|----------|---------------|---------------|---------------|---------------|-----------------|
| Size | Fig No. | Flange Ends | Drilling | Body Material | Gate Material | Seat Material | Gland Packing | Pressure Rating |
| 10 | 11 | 12 | 13 | 14 | 15 | | | |
| Seat Leakage | Actuator | Actuator Accessory | Painting | Extras | Testing | | | |

| Category | Description | Valve Code |
|---------------------|---|------------|
| 1 (Valve Size) | 2" (50mm) ~ 80" (1200mm) | 2 ~ 80 |
| 2 (Valve Fig) | Fig EA-904 semi-lugged Uni-directional knife gate valve, MSS SP81 face-to-face | EA-904 |
| | Fig EA-905 fully-lugged Uni-directional knife gate valve, MSS SP81 face-to-face | EA-905 |
| | Fig EA-906 semi-lugged Bi-directional knife gate valve, MSS SP81 face-to-face | EA-906 |
| | Fig EA-907 fully-lugged Bi-directional knife gate valve, MSS SP81 face-to-face | EA-907 |
| | Fig EA-EKGD Slurry Bi-directional knife gate valve, MSS SP81 face-to-face | EA-EKGD |
| | Fig EA- Through-going O-Port Dual gland, Bi-directional knife gate valve, MSS SP81 face-to-face | EA-OP |
| | Fig EA-PU Bi-directional Replaceable Polyurethane-Cartridge knife gate valve, MSS SP81 face-to-face | EA-PU |
| | Fig EA-F46 Bi-directional FEP (F46) Lined knife gate valve, MSS SP81 face-to-face | EA-F46 |
| 3 (Flange Ends) | Wafer semi-lugged Through holes in lugs & threaded holes in chest area (UNC) | WSU |
| | Wafer semi-lugged Through holes in lugs & threaded holes in chest area (Metric) | WSM |
| | Wafer fully-lugged threaded holes in lugs and chest area (UNC) | WLU |
| | Wafer fully-lugged threaded holes in lugs and chest area (Metric) | WLM |
| | Wafer threaded holes (UNC) | WU |
| | Wafer threaded holes (Metric) | WM |
| 4 (Flange Drilling) | To suit ASME 150 flanges | FA |
| | To suit AS2129/BS10 table D flanges | FD |
| | To suit AS2129/BS10 table E flanges | FE |
| | To suit SANS 1123 | FS |
| 5 (Body Material) | Cast iron A126 Gr.B | CI |
| | Ductile iron GGG40 | DI |
| | Cast Carbon Steel A216 WCB | W |
| | Cast 304 stainless steel / A351 CF8 | C |
| | Cast 316 stainless steel / A351 CF8M | CM |
| | Hastelloy-C276 / A494 CW12MW | HC |
| | Duplex stainless steel A890 Gr.4A (CD3MN) | D |
| | Super Duplex stainless steel A890 Gr.5A (CE3MN) | SD |

| | | |
|---------------------|--|---------|
| 6 (Gate Material) | 304 stainless steel | G1 |
| | 316 stainless steel | G2 |
| | SAF 2205 Duplex | G3 |
| | SAF 2507 Super Duplex | G4 |
| | Hastelloy-C276 | G5 |
| | 410 stainless steel | G7 |
| | + Hard Chrome Plating | +HC |
| | + Nitriding | +N |
| | + FEP(F46) | +FEP |
| | | |
| 7 (Seat Material) | Integral to body | No Code |
| | Metal Seat, Replaceable | S1 |
| | NBR, Replaceable | S2 |
| | EPDM, Replaceable | S3 |
| | Viton, Replaceable | S4 |
| | PTFE, Replaceable | S5 |
| | Polyurethane, Replaceable | S6 |
| | Natural Rubber Sleeves (set) – Natural Rubber | S7 |
| | Natural Rubber Sleeves (set) – EPDM | S8 |
| | Replaceable Polyurethane Cartridge Liner | S9 |
| | Lined/Bonded FEP/F46 | S10 |
| | + Stellite Face | S11 |
| | | |
| 8 (Gland Packing) | PTFE + Silicone Rubber | P1 |
| | PTFE | P2 |
| | PTFE Scraper, bottom layer | P3 |
| | EPDM | P4 |
| | | |
| 9 (Pressure Rating) | 10 bar Max. CWP | 10B |
| | 7 bar Max. CWP | 7B |
| | 2 bar Max. CWP | 2B |
| | | |
| 10 (Seat Leakage) | As per MSS SP-81 - Metal seated valves | M40 |
| | As per MSS SP-81 for soft seated valves | S0 |
| | Max leakage of 4cc/min/inch size of valve - for PTFE seat valves | S4 |
| | Zero leakage at 1.1 times CWP, both directions | Z0 |
| | | |
| 11 (Actuator) | Hand Wheel, Rising Stem | HRS |
| | Hand Wheel Non-Rising Stem | HNRS |
| | Bevel Gear Hand Wheel Operated, Rising Stem | GRS |
| | Double Acting Pneumatic Cylinder Actuator | DA |
| | Double Acting Pneumatic Cylinder Actuator with Fail Safe System (Fail Close/Fail Open) | FSS |
| | | |
| 12 (Act. Accessory) | Bellows / Dust Cover for stem protection – Composite Fabric | AA1 |
| | Gate Guard/Shroud, 316SS | AA2 |
| | Gate Guard/Shroud, Mild Steel | AA3 |
| | 3-Way Solenoid valve, fail close/fail open (specify coil voltage) | AA4 |
| | 4-Way Solenoid, open & close (specify coil voltage) | AA5 |
| | Mechanical Limit Switches | AA6 |
| | Proximity Limit Switches | AA7 |
| | Air Filter Regular & gauge | AA8 |
| | Lock-up valves | AA9 |
| | Stainless Steel Piping | AA10 |
| | | |

| | | |
|---------------|--|-----|
| 13 (Painting) | No painting, Stainless Steel & Alloy valves | NP |
| | Manufacturers standard painting, Steel or Iron Valves | MP |
| | | |
| 14 (Extras) | Stem / piston rod in 17-4pH material | E1 |
| | Stem / piston rod in 316SS material | E2 |
| | Mechanical Locking arrangement for manual & actuated valves (open & close) | E3 |
| | Deflection Cone 316SS | E4 |
| | Deflection Cone 304SS | E5 |
| | Deflection Cone Polyurethane | E6 |
| | Open/Close Position Indicator | E7 |
| | Purge Connections on uni-directional valves | E8 |
| | PMI testing of body, gate & stem | E9 |
| | Flange Face finish of 3.2~6.3ra | E10 |
| | | |
| 15-(Testing) | EMICO standard pre-dispatch inspection | T1 |