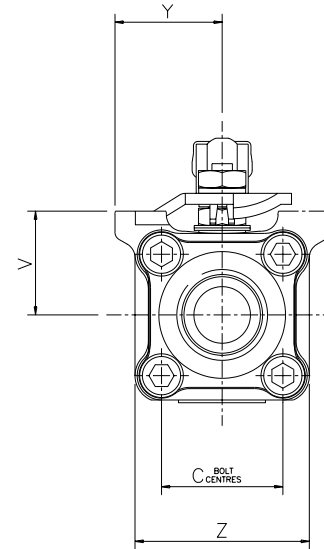
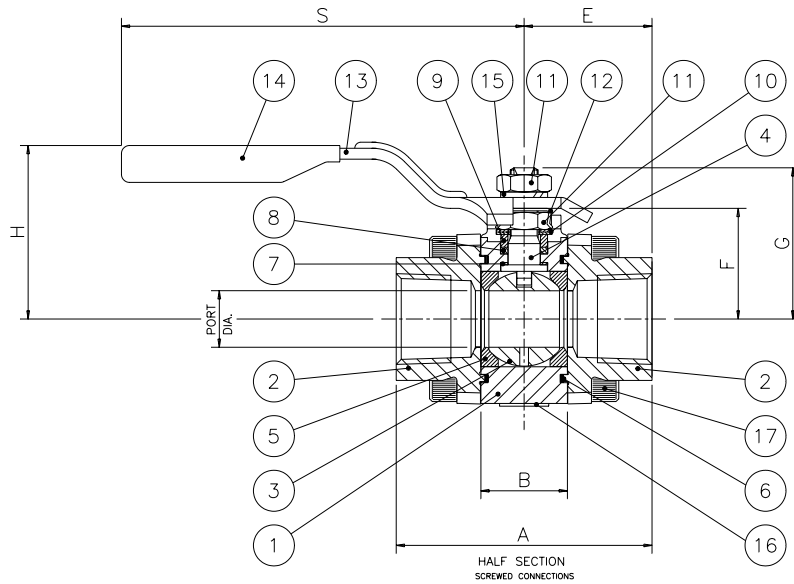
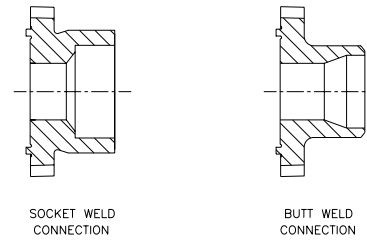
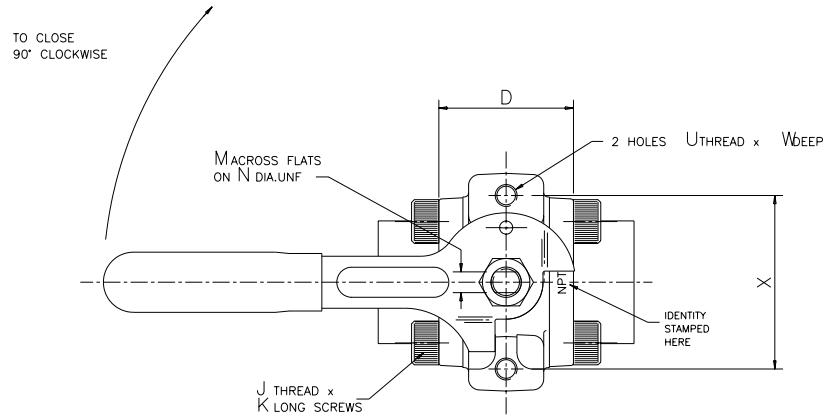


| VALVE SIZE | | VALVE DIMENSIONS (mm) | | | | | | | | | | | | | | | | | | | APPROX Kg | |
|------------|-------------|-----------------------|------|-------|------|------|------|-------|-------|------|-----|------|------|---------|-------|----|------|-----|------|------|-----------|-----|
| | | PORT DIA | A | B | C | D | E | F | G | H | J | K | M | N | S | U | V | W | X | Y | | Z |
| 8-10-15 | 1/4-3/8-1/2 | 11.1 | ±0.8 | ±0.07 | 31.8 | ±0.8 | ±0.4 | ±0.25 | ±0.25 | ±0.8 | M8 | 15.0 | 5.50 | 3/8 UNF | 136.0 | M6 | 26.6 | 9.5 | 48.0 | 30.4 | 47.6 | 0.7 |
| 20 | 3/4 | 14.3 | 71.0 | 24.55 | 38.1 | 37.4 | 35.5 | 29.93 | 40.38 | 60.3 | M8 | 15.0 | 5.50 | 3/8 UNF | 136.0 | M6 | 29.0 | 9.5 | 54.0 | 33.4 | 54.4 | 0.9 |
| 25 | 1 | 20.6 | 93.7 | 31.69 | 44.5 | 49.3 | 46.9 | 40.63 | 55.58 | 64.8 | M10 | 20.0 | 7.50 | 7/16UNF | 149.0 | M8 | 38.0 | 9.7 | 63.5 | 40.5 | 65.4 | 1.6 |

| ITEM No | DESCRIPTION | MATERIAL | QTY |
|---------|----------------------|--|-----|
| 1 | BODY | STAINLESS STEEL ASTM A182 F316 | 1 |
| 2 | BODY CONNECTOR | STAINLESS STEEL ASTM A182 F316L | 2 |
| 3 | BALL | STAINLESS STEEL 316 | 1 |
| 4 | STEM | STAINLESS STEEL 316 | 1 |
| 5 | SEAT RING | * T PTFE VIRGIN R PTFE 15% GLASS FILLED | 2 |
| 6 | CONNECTOR SEAL | * FLEXIBLE GRAPHITE | 2 |
| 7 | THRUST SEAL | * PTFE 35% CARBON FILLED | 1 |
| 8 | GLAND PACKING | * FLEXIBLE GRAPHITE | 1 |
| 9 | GLAND | STAINLESS STEEL 316 | 1 |
| 10 | DISC SPRING | * STAINLESS STEEL 302 | 2 |
| 11 | GLAND/WRENCH NUT | * STAINLESS STEEL 316 | 2 |
| 12 | LOCKING CLIP | * CARBON STEEL PLATED | 1 |
| 13 | WRENCH | STAINLESS STEEL 17% CHROMIUM | 1 |
| 14 | WRENCH SLEEVE | VINYL PLASTISOL | 1 |
| 15 | SPRING WASHER | * STAINLESS STEEL 316 | 1 |
| 16 | IDENTIFICATION PLATE | STAINLESS STEEL 304 | 1 |
| 17 | BODY CONNECTOR SCREW | STAINLESS STEEL BS 4882 M8BMX | 8 |



END CONNECTOR VARIANTS.

THREADED CONNECTIONS.
 BODY CONNECTORS SCREWED FEMALE TO THE FOLLOWING THREAD SPECIFICATIONS:-
 NPT ANSI B1.20.1 (NPT)
 BSPT ISO R/7.BS 21 (Rc)
 BSPP ISO R/7.BS 21 (Rp)

SOCKET WELD CONNECTIONS.
 BODY CONNECTORS BORED SUITABLE FOR ACCEPTING PLAIN END PIPE TO THE FOLLOWING SPECIFICATIONS:-
 BS 1600 API 5L BS 3600

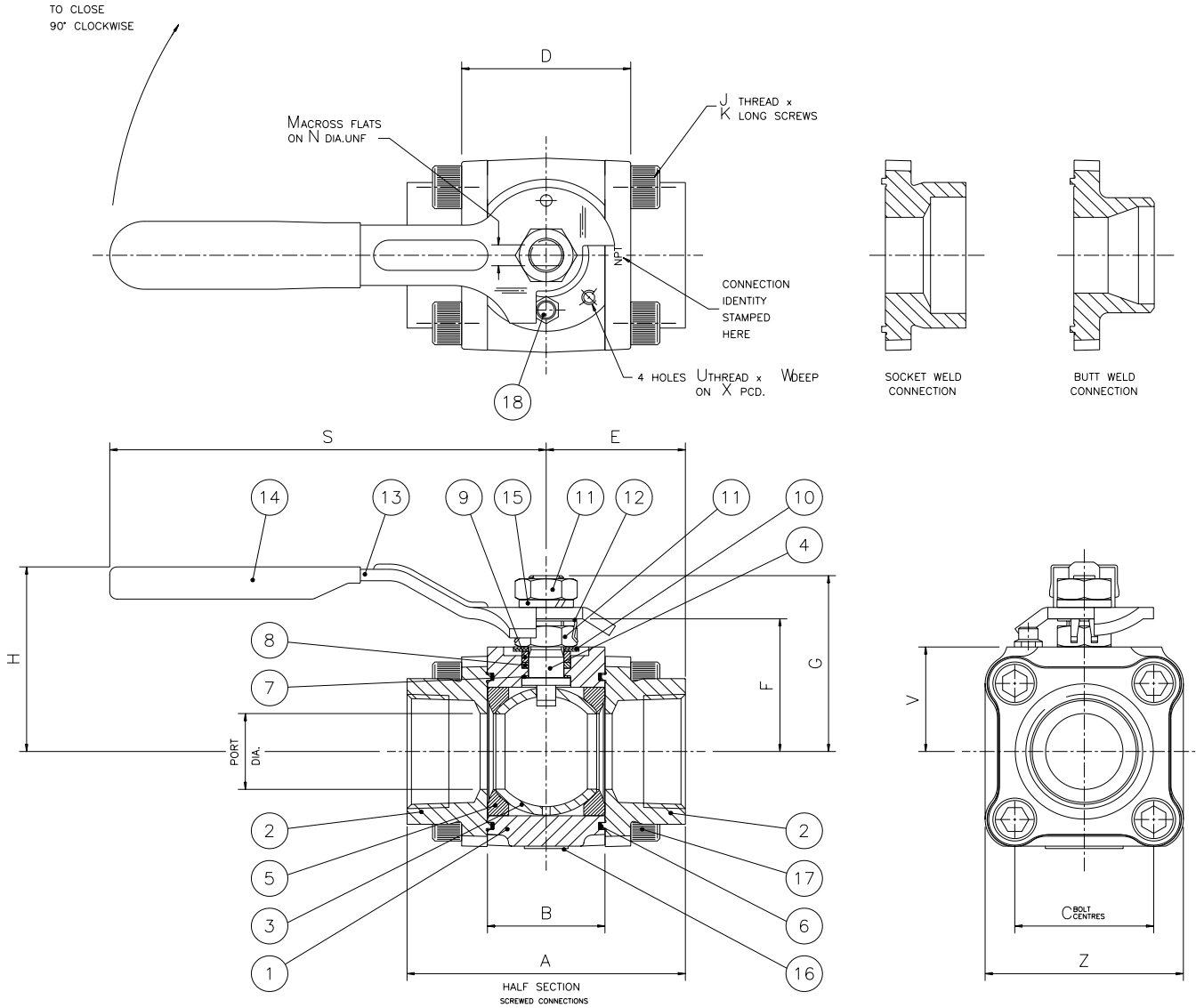
BUTT WELD CONNECTIONS.
 BODY CONNECTORS PREPARED IN ACCORDANCE WITH RELEVANT MATL.SPEC & ASME CODE SECTION IX. FOR BUTT WELDING PIPE TO THE FOLLOWING SPECIFICATIONS:-
 API 5L BS 1600 SCHEDULES 80/40/10/5

F44 8-25mm

NOTES:-

- DRAWING SHOWS 25mm VALVE WITH SCREWED NPT BODY CONNECTORS.
- FOR ACTUATED VALVES ITEMS 13,14,15 & 1 OFF ITEM 11 ARE OMITTED.
- ITEMS MARKED THUS * DENOTE COMPONENTS SUPPLIED IN REPAIR KIT.
- END TO END DIMENSION 'A' AND CENTRE TO END DIMENSION 'E' IS THE SAME FOR ALL TYPES OF END CONNECTION.

| VALVE SIZE | | VALVE DIMENSIONS (mm) | | | | | | | | | | | | | | | | | | | |
|------------|-------|-----------------------|--------|---------|--------|--------|---------|---------|--------|------|-----|------|---------|---------|-------|----|------|-----|------|--------|-----------|
| | | PORT DIA | A ±0.8 | B ±0.07 | C ±0.8 | D ±0.4 | E ±0.25 | F ±0.25 | G ±0.8 | H | J | K | M ±0.04 | N | S | U | V | W | X | Z ±0.8 | APPROX Kg |
| MM | INS | | | | | | | | | | | | | | | | | | | | |
| 32 | 1 1/4 | 25.4 | 106.0 | 41.24 | 50.8 | 60.4 | 53.0 | 45.38 | 60.33 | 69.6 | M10 | 20.0 | 7.50 | 7/16UNF | 149.0 | M5 | 37.1 | 7.5 | 42.0 | 72.5 | 2.1 |
| 40 | 1 1/2 | 31.8 | 114.6 | 48.35 | 57.2 | 69.6 | 57.3 | 54.89 | 73.04 | 77.9 | M12 | 25.0 | 8.67 | 9/16UNF | 181.0 | M6 | 44.0 | 8.7 | 50.0 | 84.5 | 3.1 |
| 50 | 2 | 38.1 | 127.1 | 56.28 | 66.7 | 79.1 | 63.6 | 59.64 | 77.79 | 82.6 | M12 | 25.0 | 8.67 | 9/16UNF | 181.0 | M6 | 48.7 | 8.7 | 50.0 | 94.8 | 4.0 |



| ITEM No | DESCRIPTION | MATERIAL | QTY |
|---------|----------------------|--|-----|
| 1 | BODY | STAINLESS STEEL ASTM ASTM A182 F316 | 1 |
| 2 | BODY CONNECTOR | STAINLESS STEEL ASTM ASTM A182 F316L | 2 |
| 3 | BALL | STAINLESS STEEL 316 | 1 |
| 4 | STEM | STAINLESS STEEL 316 | 1 |
| 5 | SEAT RING | * T PTFE VIRGIN R PTFE 15% GLASS FILLED | 2 |
| 6 | CONNECTOR SEAL | * FLEXIBLE GRAPHITE | 2 |
| 7 | THRUST SEAL | * PTFE 35% CARBON FILLED | 1 |
| 8 | GLAND PACKING | * FLEXIBLE GRAPHITE | 1 |
| 9 | GLAND | STAINLESS STEEL 316 | 1 |
| 10 | DISC SPRING | * STAINLESS STEEL 302 | 2 |
| 11 | GLAND/WRENCH NUT | * STAINLESS STEEL 316 | 2 |
| 12 | LOCKING CLIP | * CARBON STEEL PLATED | 1 |
| 13 | WRENCH | STAINLESS STEEL 17% CHROMIUM | 1 |
| 14 | WRENCH SLEEVE | VINYL PLASTISOL | 1 |
| 15 | SPRING WASHER | * STAINLESS STEEL 316 | 1 |
| 16 | IDENTIFICATION PLATE | STAINLESS STEEL 304 | 1 |
| 17 | BODY CONNECTOR SCREW | STAINLESS STEEL BS 4882 MB8MX | 8 |
| 18 | STOP SCREW | STAINLESS STEEL 316 | 1 |

END CONNECTOR VARIANTS.

THREADED CONNECTIONS.
 BODY CONNECTORS SCREWED FEMALE TO THE FOLLOWING THREAD SPECIFICATIONS:-
 NPT ANSI B1.20.1 (NPT)
 BSPT ISO R/7.BS 21 (Rc)
 BSPP ISO R/7.BS 21 (Rp)

SOCKET WELD CONNECTIONS.
 BODY CONNECTORS BORED SUITABLE FOR ACCEPTING PLAIN END PIPE TO THE FOLLOWING SPECIFICATIONS:-
 BS 1600 API 5L BS 3600
 BUTT WELD CONNECTIONS.
 BODY CONNECTORS PREPARED IN ACCORDANCE WITH RELEVANT MATL.SPEC & ASME CODE SECTION IX. FOR BUTT WELDING PIPE TO THE FOLLOWING SPECIFICATIONS:-
 API 5L BS 1600 SCHEDULES 80/40/10/5

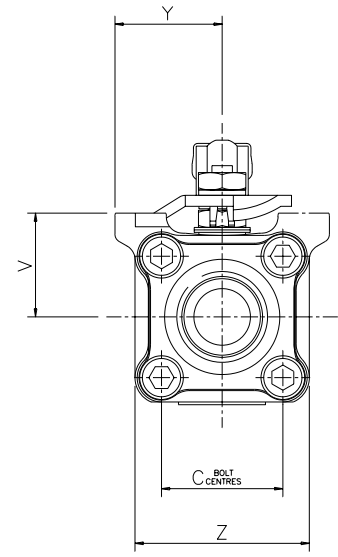
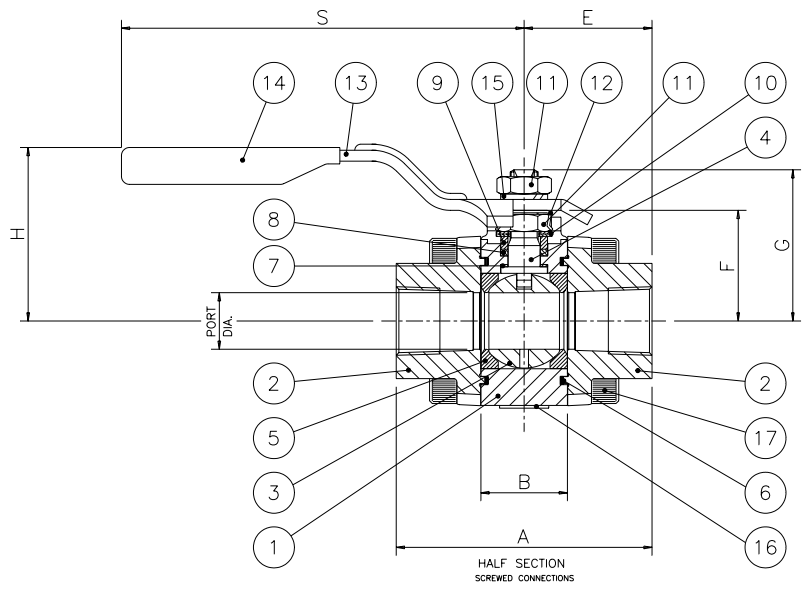
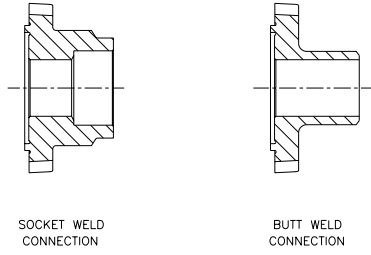
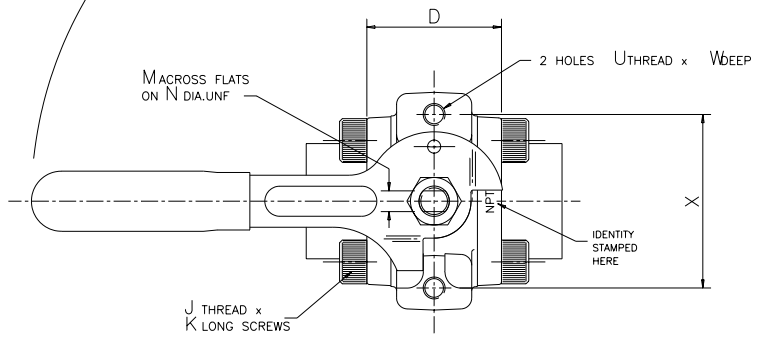
F44 32-50mm

- NOTES:-
- DRAWING SHOWS 40mm VALVE WITH SCREWED NPT BODY CONNECTORS.
 - FOR ACTUATED VALVES ITEMS 13,14,15,19 & 1 OFF ITEM 11 ARE OMITTED.
 - ITEMS MARKED THUS * DENOTE COMPONENTS SUPPLIED IN REPAIR KIT.
 - END TO END DIMENSION 'A' AND CENTRE TO END DIMENSION 'E' IS THE SAME FOR ALL TYPES OF END CONNECTION.

| VALVE SIZE | | VALVE DIMENSIONS (mm) | | | | | | | | | | | | | | | | | | | APPROX Kg | |
|------------|-----|-----------------------|------|-------|------|------|------|-------|-------|------|-----|-------|------|---------|-------|----|------|-----|------|------|-----------|-----|
| | | PORT DIA | A | B | C | D | E | F | G | H | J | K | M | N | S | U | V | W | X | Y | | Z |
| MM | INS | | ±0.8 | ±0.07 | | ±0.8 | ±0.4 | ±0.25 | ±0.25 | ±0.8 | | ±0.04 | | | | | | | | | ±0.8 | |
| 15 | 1/2 | 14.3 | 71.0 | 24.55 | 38.1 | 37.4 | 35.5 | 29.93 | 40.38 | 60.3 | M8 | 15.0 | 5.50 | 3/8 UNF | 136.0 | M6 | 29.0 | 9.5 | 54.0 | 33.4 | 54.4 | 0.9 |
| 20 | 3/4 | 20.6 | 93.7 | 31.69 | 44.5 | 49.3 | 46.9 | 40.63 | 55.58 | 64.8 | M10 | 20.0 | 7.50 | 7/16UNF | 149.0 | M8 | 38.0 | 9.7 | 63.5 | 40.5 | 65.4 | 1.6 |

| ITEM No | DESCRIPTION | MATERIAL | QTY |
|---------|----------------------|--|-----|
| 1 | BODY | STAINLESS STEEL ASTM A182 F316 | 1 |
| 2 | BODY CONNECTOR | STAINLESS STEEL ASTM A182 F316 | 2 |
| 3 | BALL | STAINLESS STEEL 316 | 1 |
| 4 | STEM | STAINLESS STEEL 316 | 1 |
| 5 | SEAT RING | * T PTFE VIRGIN R PTFE 15% GLASS FILLED | 2 |
| 6 | CONNECTOR SEAL | * FLEXIBLE GRAPHITE | 2 |
| 7 | THRUST SEAL | * PTFE 35% CARBON FILLED | 1 |
| 8 | GLAND PACKING | * FLEXIBLE GRAPHITE | 1 |
| 9 | GLAND | STAINLESS STEEL 316 | 1 |
| 10 | DISC SPRING | * STAINLESS STEEL 302 | 2 |
| 11 | GLAND/WRENCH NUT | * STAINLESS STEEL 316 | 2 |
| 12 | LOCKING CLIP | * CARBON STEEL PLATED | 1 |
| 13 | WRENCH | STAINLESS STEEL 17% CHROMIUM | 1 |
| 14 | WRENCH SLEEVE | VINYL PLASTISOL | 1 |
| 15 | SPRING WASHER | * STAINLESS STEEL 316 | 1 |
| 16 | IDENTIFICATION PLATE | STAINLESS STEEL 304 | 1 |
| 17 | BODY CONNECTOR SCREW | STAINLESS STEEL BS 4882 M8BMX | 8 |

TO CLOSE
90° CLOCKWISE



END CONNECTOR VARIANTS.

THREADED CONNECTIONS.
 BODY CONNECTORS SCREWED FEMALE TO THE FOLLOWING THREAD SPECIFICATIONS:-
 NPT ANSI B1.20.1 (NPT)
 BSPT ISO R/7.BS 21 (Rc)
 BSPP ISO R/7.BS 21 (Rp)

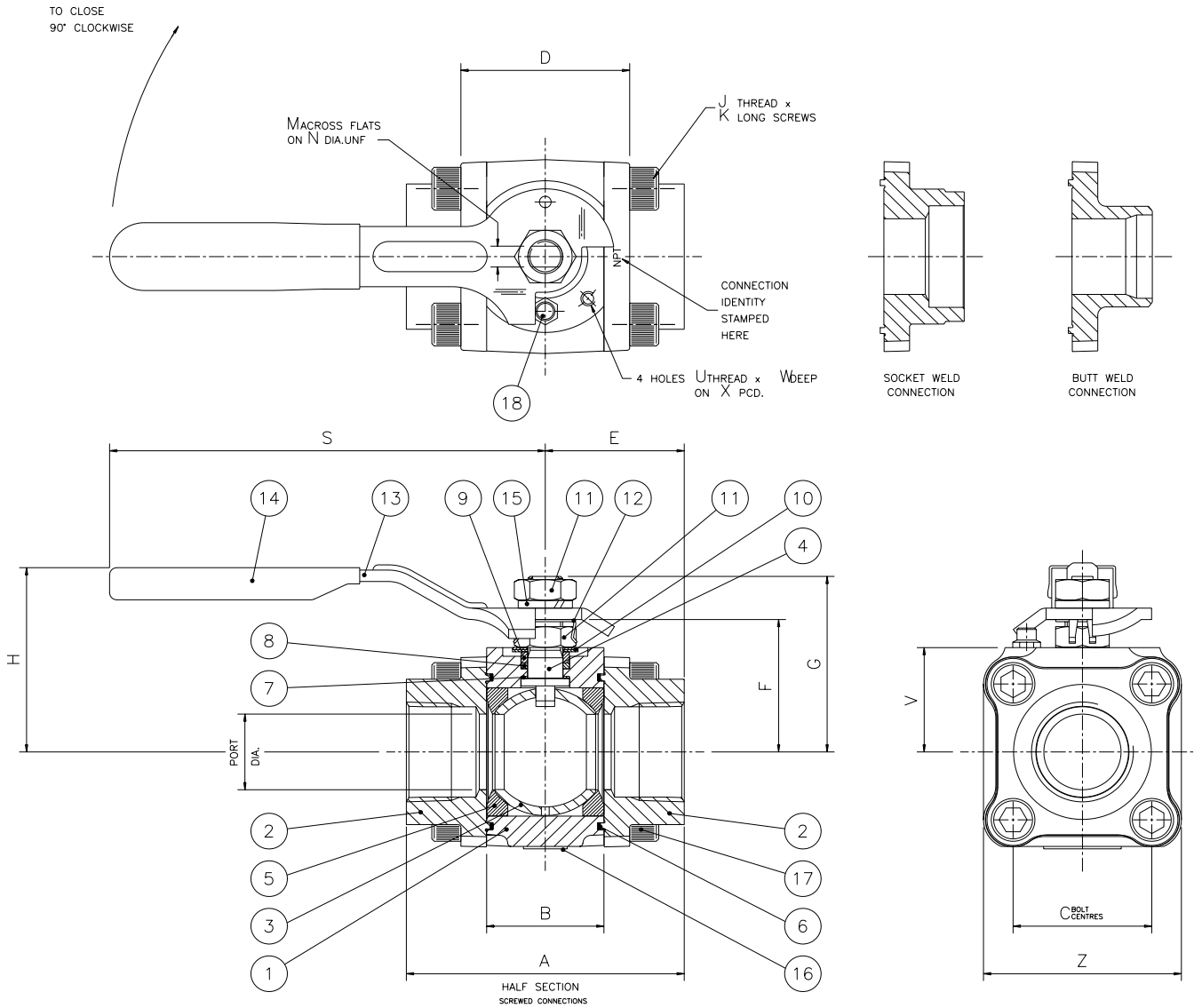
SOCKET WELD CONNECTIONS.
 BODY CONNECTORS BORED SUITABLE FOR ACCEPTING PLAIN END PIPE TO THE FOLLOWING SPECIFICATIONS:-
 BS 1600 API 5L BS 3600

BUTT WELD CONNECTIONS.
 BODY CONNECTORS PREPARED IN ACCORDANCE WITH RELEVANT MATL.SPEC & ASME CODE SECTION IX. FOR BUTT WELDING PIPE TO THE FOLLOWING SPECIFICATIONS:-
 API 5L BS 1600 SCHEDULES 80/40/10/5

F59 15-20mm

- NOTES:-
- DRAWING SHOWS 20mm VALVE WITH SCREWED NPT BODY CONNECTORS.
 - FOR ACTUATED VALVES ITEMS 13,14,15 & 1 OFF ITEM 11 ARE OMITTED.
 - ITEMS MARKED THUS * DENOTE COMPONENTS SUPPLIED IN REPAIR KIT.
 - END TO END DIMENSION 'A' AND CENTRE TO END DIMENSION 'E' IS THE SAM FOR ALL TYPES OF END CONNECTION.

| VALVE SIZE | | VALVE DIMENSIONS (mm) | | | | | | | | | | | | | | | | | | | |
|------------|-------|-----------------------|-------|-------|------|------|------|-------|-------|------|-----|------|------|---------|-------|----|------|-----|------|------|-----------|
| | | PORT DIA | A | B | C | D | E | F | G | H | J | K | M | N | S | U | V | W | X | Z | APPROX Kg |
| MM | INS | | | | | | | | | | | | | | | | | | | | |
| 25 | 1 | 25.4 | 106.0 | 41.24 | 50.8 | 60.4 | 53.0 | 45.38 | 60.33 | 69.6 | M10 | 20.0 | 7.50 | 7/16UNF | 149.0 | M5 | 37.1 | 7.5 | 42.0 | 72.5 | 2.1 |
| 32 | 1 1/4 | 31.8 | 114.6 | 48.35 | 57.2 | 69.6 | 57.3 | 54.89 | 73.04 | 77.9 | M12 | 25.0 | 8.67 | 9/16UNF | 181.0 | M6 | 44.0 | 8.7 | 50.0 | 84.5 | 3.1 |
| 40 | 1 1/2 | 38.1 | 127.1 | 56.28 | 66.7 | 79.1 | 63.6 | 59.64 | 77.79 | 82.6 | M12 | 25.0 | 8.67 | 9/16UNF | 181.0 | M6 | 48.7 | 8.7 | 50.0 | 94.8 | 4.0 |



| ITEM No | DESCRIPTION | MATERIAL | QTY |
|---------|----------------------|--|-----|
| 1 | BODY | STAINLESS STEEL ASTM ASTM A182 F316 | 1 |
| 2 | BODY CONNECTOR | STAINLESS STEEL ASTM ASTM A182 F316L | 2 |
| 3 | BALL | STAINLESS STEEL 316 | 1 |
| 4 | STEM | STAINLESS STEEL 316 | 1 |
| 5 | SEAT RING | * PTFE VIRGIN * PTFE 15% GLASS FILLED | 2 |
| 6 | CONNECTOR SEAL | * FLEXIBLE GRAPHITE | 2 |
| 7 | THRUST SEAL | * PTFE 35% CARBON FILLED | 1 |
| 8 | GLAND PACKING | * FLEXIBLE GRAPHITE | 1 |
| 9 | GLAND | STAINLESS STEEL 316 | 1 |
| 10 | DISC SPRING | * STAINLESS STEEL 302 | 2 |
| 11 | GLAND/WRENCH NUT | * STAINLESS STEEL 316 | 2 |
| 12 | LOCKING CLIP | * CARBON STEEL PLATED | 1 |
| 13 | WRENCH | STAINLESS STEEL 17% CHROMIUM | 1 |
| 14 | WRENCH SLEEVE | VINYL PLASTISOL | 1 |
| 15 | SPRING WASHER | * STAINLESS STEEL 316 | 1 |
| 16 | IDENTIFICATION PLATE | STAINLESS STEEL 304 | 1 |
| 17 | BODY CONNECTOR SCREW | STAINLESS STEEL BS 4882 MB8MX | 8 |
| 18 | STOP SCREW | STAINLESS STEEL 316 | 1 |

END CONNECTOR VARIANTS.

THREADED CONNECTIONS.
 BODY CONNECTORS SCREWED FEMALE TO THE FOLLOWING THREAD SPECIFICATIONS:-
 NPT ANSI B1.20.1 (NPT)
 BSPT ISO R/7.BS 21 (Rc)
 BSPP ISO R/7.BS 21 (Rp)

SOCKET WELD CONNECTIONS.
 BODY CONNECTORS BORED SUITABLE FOR ACCEPTING PLAIN END PIPE TO THE FOLLOWING SPECIFICATIONS:-
 BS 1600 API 5L BS 3600

BUTT WELD CONNECTIONS.
 BODY CONNECTORS PREPARED IN ACCORDANCE WITH RELEVANT MATL SPEC & ASME CODE SECTION IX. FOR BUTT WELDING PIPE TO THE FOLLOWING SPECIFICATIONS:-
 API 5L BS 1600 SCHEDULES 80/40/10/5

F59 25-40mm

- NOTES:-
- DRAWING SHOWS 32mm VALVE WITH SCREWED NPT BODY CONNECTORS.
 - FOR ACTUATED VALVES ITEMS 13,14,15,19 & 1 OFF ITEM 11 ARE OMITTED.
 - ITEMS MARKED THUS * DENOTE COMPONENTS SUPPLIED IN REPAIR KIT.
 - END TO END DIMENSION 'A' AND CENTRE TO END DIMENSION 'E' IS THE SAME FOR ALL TYPES OF END CONNECTION.