

**APPENDIX A: SCHEDULE A AND B (FOR SPARES AT LETHABO POWER STATION)**

**NOTE 1:** VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).

**NOTE 2:** CONTRACTOR TO ENSURE THAT DETAILS AND MANUFACTURE REQUIREMENTS FOR EACH SPARE ITEM ARE DISCUSSED WITH ESKOM ENGINEERING PRIOR TO MANUFACTURE AND/OR DELIVERY

**NOTE 3:** CONTRACTOR TO PROVIDE LEAD TIMES FOR DELIVERY FOR EACH ITEM AND THE MINIMUM ORDER QUANTITIES REQUIRED FOR DELIVERY EACH ITEM

|   |                                     |                                        |            |                                                                                                                                                                                                                                                                                                                              |
|---|-------------------------------------|----------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 63159                               |                                        |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                            |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)               | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 100 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: STL; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: AIR; STYLE: WEIR; HALAR LINED; SAUNDERS TYPE A; WITH INVAL MODEL SO20FAILSAFE SPRING OPEN PHNEUMATIC ACTUATOR; DRILLED SABS 1120 1000/3 |
|   | TYPE                                | PNEUMATIC ACTUATED DIAPHRAGM FAIL OPEN |            |                                                                                                                                                                                                                                                                                                                              |
|   | VALVE SIZE (NB)                     | 100                                    |            |                                                                                                                                                                                                                                                                                                                              |
|   | DESIGN PRESSURE (bar)               | 10                                     |            |                                                                                                                                                                                                                                                                                                                              |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                              |            |                                                                                                                                                                                                                                                                                                                              |
|   | FACE TO FACE (MM)                   | TBC                                    |            |                                                                                                                                                                                                                                                                                                                              |
|   | CONNECTION                          | FLANGED SABS 1120 1000/3 DRILLED       |            |                                                                                                                                                                                                                                                                                                                              |
|   | OPERATION                           | LINEAR ACTUATED WITH ACTUATOR          |            |                                                                                                                                                                                                                                                                                                                              |
|   | MATERIAL SPECIFICATIONS             |                                        |            |                                                                                                                                                                                                                                                                                                                              |
|   | BODY MATERIAL                       | CAST IRON, HALAR LINED                 |            |                                                                                                                                                                                                                                                                                                                              |
|   | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                            |            |                                                                                                                                                                                                                                                                                                                              |
|   | SEAT MATERIAL                       | HALAR LINED                            |            |                                                                                                                                                                                                                                                                                                                              |
|   | EXTRA INFORMATION                   |                                        |            |                                                                                                                                                                                                                                                                                                                              |
|   | EXTRA                               | MODEL NUMBER: S020                     |            |                                                                                                                                                                                                                                                                                                                              |
| 2 | 63162                               |                                        |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                            |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)               | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: STL; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: ACTUATOR; STYLE: WEIR; MODEL NO: ES70; HARD                                                                                              |
|   | TYPE                                | PNEUMATIC ACTUATED DIAPHRAGM FAIL OPEN |            |                                                                                                                                                                                                                                                                                                                              |
|   | VALVE SIZE (NB)                     | 80                                     |            |                                                                                                                                                                                                                                                                                                                              |

|   |                                     |                                        |            |                                                                                                                                                                                                                                                                    |
|---|-------------------------------------|----------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | DESIGN PRESSURE (bar)               | 10                                     |            | RUBBER LINED; FIAL SAVE SPRING OPEN; TYPE SAUNDERS                                                                                                                                                                                                                 |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                              |            |                                                                                                                                                                                                                                                                    |
|   | FACE TO FACE (MM)                   | TBC                                    |            |                                                                                                                                                                                                                                                                    |
|   | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT           |            |                                                                                                                                                                                                                                                                    |
|   | OPERATION                           | LINEAR ACTUATED WITH ACTUATOR          |            |                                                                                                                                                                                                                                                                    |
|   | MATERIAL SPECIFICATIONS             |                                        |            |                                                                                                                                                                                                                                                                    |
|   | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED           |            |                                                                                                                                                                                                                                                                    |
|   | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                            |            |                                                                                                                                                                                                                                                                    |
|   | SEAT MATERIAL                       | HARD RUBBER                            |            |                                                                                                                                                                                                                                                                    |
|   | EXTRA INFORMATION                   |                                        |            |                                                                                                                                                                                                                                                                    |
|   | EXTRA                               | MODEL NUMBER: ES70                     |            |                                                                                                                                                                                                                                                                    |
| 3 | 63164                               |                                        |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                  |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)               | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 50 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER; OPERATED: AIR; STYLE: WEIR; MODEL NO: ES69; HARD RUBBER LINED; FAIL SAVE SPRING OPEN; SAUNDERS |
|   | TYPE                                | PNEUMATIC ACTUATED DIAPHRAGM FAIL OPEN |            |                                                                                                                                                                                                                                                                    |
|   | VALVE SIZE (NB)                     | 50                                     |            |                                                                                                                                                                                                                                                                    |
|   | DESIGN PRESSURE (bar)               | 16                                     |            |                                                                                                                                                                                                                                                                    |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                              |            |                                                                                                                                                                                                                                                                    |
|   | FACE TO FACE (MM)                   | TBC                                    |            |                                                                                                                                                                                                                                                                    |

|                                                                                                                                                                                                                                                                                      |                                     |                               |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------|------------|
|                                                                                                                                                                                                                                                                                      | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT  |            |
|                                                                                                                                                                                                                                                                                      | OPERATION                           | LINEAR ACTUATED WITH ACTUATOR |            |
|                                                                                                                                                                                                                                                                                      | MATERIAL SPECIFICATIONS             |                               |            |
|                                                                                                                                                                                                                                                                                      | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED  |            |
|                                                                                                                                                                                                                                                                                      | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                   |            |
|                                                                                                                                                                                                                                                                                      | SEAT MATERIAL                       | HARD RUBBER                   |            |
|                                                                                                                                                                                                                                                                                      | EXTRA INFORMATION                   |                               |            |
|                                                                                                                                                                                                                                                                                      | EXTRA                               | MODEL NUMBER: ES69            |            |
| 4                                                                                                                                                                                                                                                                                    | 66453                               |                               |            |
|                                                                                                                                                                                                                                                                                      | STOCK DESCRIPTION                   |                               |            |
|                                                                                                                                                                                                                                                                                      | CRITERIA                            | REQUIREMENT (SCHEDULE A)      | SCHEDULE B |
|                                                                                                                                                                                                                                                                                      | TYPE                                | MANUAL DIAPHRAGM              |            |
|                                                                                                                                                                                                                                                                                      | VALVE SIZE (NB)                     | 15                            |            |
|                                                                                                                                                                                                                                                                                      | DESIGN PRESSURE (bar)               | 16                            |            |
|                                                                                                                                                                                                                                                                                      | DESIGN TEMPERATURE (Degree Celcius) | -30 TO 130                    |            |
|                                                                                                                                                                                                                                                                                      | FACE TO FACE (MM)                   | 63                            |            |
|                                                                                                                                                                                                                                                                                      | CONNECTION                          | THREADED                      |            |
|                                                                                                                                                                                                                                                                                      | OPERATION                           | HANDWHEEL                     |            |
|                                                                                                                                                                                                                                                                                      | MATERIAL SPECIFICATIONS             |                               |            |
|                                                                                                                                                                                                                                                                                      | BODY MATERIAL                       | STAINLESS STEEL               |            |
|                                                                                                                                                                                                                                                                                      | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                   |            |
| VALVE, DIAPHRAGM: TYPE: A; VALVE SIZE: 15 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -30 TO 130 DEG C; CONNECTION: THD; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: GR 300; FACE TO FACE LENGTH: 63 MM; OPERATED: HANDWHEEL; STYLE: WEIR; GRADE: 316; REFERENCE NO: RHIV214; SAUNDERS |                                     |                               |            |

|   |                                     |                                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|---|-------------------------------------|--------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | SEAT MATERIAL                       | HARD RUBBER                          |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | EXTRA INFORMATION                   |                                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | EXTRA                               | REFERENCE NO: RHIV-214               |            |                                                                                                                                                                                                                                                                                                                                                  |
| 5 | 66474                               |                                      |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                                |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)             | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: PTFE 214/RUBBER GR 300; OPERATED: HANDWHEEL; STYLE: WEIR; SUPPL P/N: 3A80; REFERENCE NO: SV-UK; V403; DRILLED; SAUNDERS; HARD RUBBER LINED; BONNET; FOR USE ON WATER TREATMENT PLANT |
|   | TYPE                                | MANUAL DIAPHRAGM                     |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | VALVE SIZE (NB)                     | 80                                   |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | DESIGN PRESSURE (bar)               | 10                                   |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                            |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | FACE TO FACE (MM)                   | TBC                                  |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT         |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | OPERATION                           | HANDWHEEL                            |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | MATERIAL SPECIFICATIONS             |                                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | BODY MATERIAL                       | STAINLESS STEEL                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | DISC/WETTED SEAT MATERIAL           | PTFE 214/RUBBER GR 300               |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | SEAT MATERIAL                       | STAINLESS STEEL                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | EXTRA INFORMATION                   |                                      |            |                                                                                                                                                                                                                                                                                                                                                  |
|   | EXTRA                               | SUPPL P/N: 3A80; REFERENCE NO: SV-UK |            |                                                                                                                                                                                                                                                                                                                                                  |
| 6 | 66497                               |                                      |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                                |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)             | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: ACID LEAK; VALVE SIZE: 50 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING:                                                                                                                                                                                                                                                 |
|   | TYPE                                | MANUAL DIAPHRAGM                     |            |                                                                                                                                                                                                                                                                                                                                                  |

|   |                                     |                              |            |                                                                                                                                                                                                                                                   |
|---|-------------------------------------|------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | VALVE SIZE (NB)                     | 50                           |            | -10 TO 90 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR Q; FACE TO FACE LENGTH: 152 MM; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: V405; RHIV-STD; RUBBER LINED; SAUNDERS TYPE A; FLANGED DRILLED TO BS 4504 TABLE 10 |
|   | DESIGN PRESSURE (bar)               | 10                           |            |                                                                                                                                                                                                                                                   |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 90                    |            |                                                                                                                                                                                                                                                   |
|   | FACE TO FACE (MM)                   | 152                          |            |                                                                                                                                                                                                                                                   |
|   | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |            |                                                                                                                                                                                                                                                   |
|   | OPERATION                           | HANDWHEEL                    |            |                                                                                                                                                                                                                                                   |
|   | MATERIAL SPECIFICATIONS             |                              |            |                                                                                                                                                                                                                                                   |
|   | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |            |                                                                                                                                                                                                                                                   |
|   | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                  |            |                                                                                                                                                                                                                                                   |
|   | SEAT MATERIAL                       | HARD RUBBER                  |            |                                                                                                                                                                                                                                                   |
|   | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                   |
|   | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                   |
| 7 | 66501                               |                              |            |                                                                                                                                                                                                                                                   |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 20 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: THD; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR C; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: V404; TYPE SAUNDERS TYPE A |
|   | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                   |
|   | VALVE SIZE (NB)                     | 20                           |            |                                                                                                                                                                                                                                                   |
|   | DESIGN PRESSURE (bar)               | 16                           |            |                                                                                                                                                                                                                                                   |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100                   |            |                                                                                                                                                                                                                                                   |

|   |                                     |                              |                                                                                                                                                                                                                                                      |
|---|-------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | FACE TO FACE (MM)                   | TBC                          |                                                                                                                                                                                                                                                      |
|   | CONNECTION                          | THREADED                     |                                                                                                                                                                                                                                                      |
|   | OPERATION                           | HANDWHEEL                    |                                                                                                                                                                                                                                                      |
|   | MATERIAL SPECIFICATIONS             |                              |                                                                                                                                                                                                                                                      |
|   | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |                                                                                                                                                                                                                                                      |
|   | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                  |                                                                                                                                                                                                                                                      |
|   | SEAT MATERIAL                       | HARD RUBBER                  |                                                                                                                                                                                                                                                      |
|   | EXTRA INFORMATION                   |                              |                                                                                                                                                                                                                                                      |
|   | EXTRA                               | REFERENCE NO: RHIV-STD       |                                                                                                                                                                                                                                                      |
|   |                                     |                              |                                                                                                                                                                                                                                                      |
| 8 | 66502                               |                              | STOCK DESCRIPTION                                                                                                                                                                                                                                    |
|   | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B                                                                                                                                                                                                                                           |
|   | TYPE                                | MANUAL DIAPHRAGM             |                                                                                                                                                                                                                                                      |
|   | VALVE SIZE (NB)                     | 25                           |                                                                                                                                                                                                                                                      |
|   | DESIGN PRESSURE (bar)               | 16                           |                                                                                                                                                                                                                                                      |
|   | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100                   |                                                                                                                                                                                                                                                      |
|   | FACE TO FACE (MM)                   | TBC                          |                                                                                                                                                                                                                                                      |
|   | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |                                                                                                                                                                                                                                                      |
|   | OPERATION                           | HANDWHEEL                    |                                                                                                                                                                                                                                                      |
|   | MATERIAL SPECIFICATIONS             |                              |                                                                                                                                                                                                                                                      |
|   | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |                                                                                                                                                                                                                                                      |
|   |                                     |                              | VALVE, DIAPHRAGM: VALVE SIZE: 25 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: THD FEMALE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: V404; SAUNDERS; TYPE A |

|    |                                     |                              |            |                                                                                                                                                                                                                                                                 |
|----|-------------------------------------|------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                 |
|    | SEAT MATERIAL                       | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                 |
|    | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                 |
|    | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                                 |
| 9  | 66506                               |                              |            | STOCK DESCRIPTION                                                                                                                                                                                                                                               |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 100 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; HARD RUBBER LINED; DRILLED TO TABLE BS4504 TABLE 10 |
|    | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                                 |
|    | VALVE SIZE (NB)                     | 100                          |            |                                                                                                                                                                                                                                                                 |
|    | DESIGN PRESSURE (bar)               | 10                           |            |                                                                                                                                                                                                                                                                 |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                    |            |                                                                                                                                                                                                                                                                 |
|    | FACE TO FACE (MM)                   | TBC                          |            |                                                                                                                                                                                                                                                                 |
|    | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |            |                                                                                                                                                                                                                                                                 |
|    | OPERATION                           | HANDWHEEL                    |            |                                                                                                                                                                                                                                                                 |
|    | MATERIAL SPECIFICATIONS             |                              |            |                                                                                                                                                                                                                                                                 |
|    | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |            |                                                                                                                                                                                                                                                                 |
|    | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                 |
|    | SEAT MATERIAL                       | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                 |
|    | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                 |
|    | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                                 |
| 10 | 66565                               |                              |            | STOCK DESCRIPTION                                                                                                                                                                                                                                               |

| CRITERIA                                                                                                                                                                                                                                                                                                      |       | REQUIREMENT (SCHEDULE A) | SCHEDULE B |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------|------------|
| TYPE                                                                                                                                                                                                                                                                                                          |       | MANUAL DIAPHRAGM         |            |
| VALVE SIZE (NB)                                                                                                                                                                                                                                                                                               |       | 20                       |            |
| DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                         |       | 10                       |            |
| DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                                           |       | -10 TO 120               |            |
| FACE TO FACE (MM)                                                                                                                                                                                                                                                                                             |       | 83                       |            |
| CONNECTION                                                                                                                                                                                                                                                                                                    |       | THREADED                 |            |
| OPERATION                                                                                                                                                                                                                                                                                                     |       | HANDWHEEL                |            |
| MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                       |       |                          |            |
| BODY MATERIAL                                                                                                                                                                                                                                                                                                 |       | STAINLESS STEEL          |            |
| DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                                     |       | PTFE 214/RUBBER GR 300   |            |
| SEAT MATERIAL                                                                                                                                                                                                                                                                                                 |       | STAINLESS STEEL          |            |
| EXTRA INFORMATION                                                                                                                                                                                                                                                                                             |       |                          |            |
| EXTRA                                                                                                                                                                                                                                                                                                         |       | 0                        |            |
| 11                                                                                                                                                                                                                                                                                                            | 66575 |                          |            |
| CRITERIA                                                                                                                                                                                                                                                                                                      |       | REQUIREMENT (SCHEDULE A) | SCHEDULE B |
| TYPE                                                                                                                                                                                                                                                                                                          |       | MANUAL DIAPHRAGM         |            |
| VALVE SIZE (NB)                                                                                                                                                                                                                                                                                               |       | 150                      |            |
| DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                         |       | 10                       |            |
| STOCK DESCRIPTION                                                                                                                                                                                                                                                                                             |       |                          |            |
| VALVE, DIAPHRAGM: TYPE: A; VALVE SIZE: 20 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 120 DEG C; CONNECTION: SCREWED ENDS; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: PTFE 300/214; FACE TO FACE LENGTH: 83 MM; OPERATED: HANDWHEEL; STYLE: WEIR; GRADE: 316; SUPPL P/N: 405BS4504; SAUNDERS            |       |                          |            |
| VALVE, DIAPHRAGM: VALVE SIZE: 150 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: A6; RHIV-STD; HARD RUBBER LINED; TYPE SAUNDER; DRILLED TO BS4504 TABLE 10; SAUNDERS |       |                          |            |

|           |                                                                                                                                                                                                                                                                                               |                                 |                   |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------|
|           | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                           | -10 TO 85                       |                   |
|           | FACE TO FACE (MM)                                                                                                                                                                                                                                                                             | TBC                             |                   |
|           | CONNECTION                                                                                                                                                                                                                                                                                    | FLANGED BS4504 OR EQUIVALENT    |                   |
|           | OPERATION                                                                                                                                                                                                                                                                                     | HANDWHEEL                       |                   |
|           | <b>MATERIAL SPECIFICATIONS</b>                                                                                                                                                                                                                                                                |                                 |                   |
|           | BODY MATERIAL                                                                                                                                                                                                                                                                                 | CAST IRON, HARD RUBBER LINED    |                   |
|           | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                     | HARD RUBBER                     |                   |
|           | SEAT MATERIAL                                                                                                                                                                                                                                                                                 | HARD RUBBER                     |                   |
|           | <b>EXTRA INFORMATION</b>                                                                                                                                                                                                                                                                      |                                 |                   |
|           | EXTRA                                                                                                                                                                                                                                                                                         | REFERENCE NO: A6; RHIV-STD      |                   |
| <b>12</b> | <b>66577</b>                                                                                                                                                                                                                                                                                  |                                 |                   |
|           | <b>STOCK DESCRIPTION</b>                                                                                                                                                                                                                                                                      |                                 |                   |
|           | <b>CRITERIA</b>                                                                                                                                                                                                                                                                               | <b>REQUIREMENT (SCHEDULE A)</b> | <b>SCHEDULE B</b> |
|           | TYPE                                                                                                                                                                                                                                                                                          | MANUAL DIAPHRAGM                |                   |
|           | VALVE SIZE (NB)                                                                                                                                                                                                                                                                               | 80                              |                   |
|           | DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                         | 10                              |                   |
|           | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                           | -10 TO 85                       |                   |
|           | FACE TO FACE (MM)                                                                                                                                                                                                                                                                             | TBC                             |                   |
|           | CONNECTION                                                                                                                                                                                                                                                                                    | FLANGED BS4504 OR EQUIVALENT    |                   |
|           | OPERATION                                                                                                                                                                                                                                                                                     | HANDWHEEL                       |                   |
|           | VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: A3ND; HARD RUBBER LINED; SAUNDERS TYPE A; DRILLED TO BS4504 TABLE 10 |                                 |                   |

|    |                                                                                                                                                                                                                                                                                                                                                             |                              |            |                   |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|-------------------|
|    | MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                     |                              |            |                   |
|    | BODY MATERIAL                                                                                                                                                                                                                                                                                                                                               | CAST IRON, HARD RUBBER LINED |            |                   |
|    | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                   | HARD RUBBER                  |            |                   |
|    | SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                               | HARD RUBBER                  |            |                   |
|    | EXTRA INFORMATION                                                                                                                                                                                                                                                                                                                                           |                              |            |                   |
|    | EXTRA                                                                                                                                                                                                                                                                                                                                                       | REFERENCE NO: A3ND           |            |                   |
| 13 | 66582                                                                                                                                                                                                                                                                                                                                                       |                              |            | STOCK DESCRIPTION |
|    | CRITERIA                                                                                                                                                                                                                                                                                                                                                    | REQUIREMENT (SCHEDULE A)     | SCHEDULE B |                   |
|    | TYPE                                                                                                                                                                                                                                                                                                                                                        | MANUAL DIAPHRAGM             |            |                   |
|    | VALVE SIZE (NB)                                                                                                                                                                                                                                                                                                                                             | 40                           |            |                   |
|    | DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                                                                       | 16                           |            |                   |
|    | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                                                                                         | -10 TO 85                    |            |                   |
|    | FACE TO FACE (MM)                                                                                                                                                                                                                                                                                                                                           | 120                          |            |                   |
|    | CONNECTION                                                                                                                                                                                                                                                                                                                                                  | FLANGED BS4504 OR EQUIVALENT |            |                   |
|    | OPERATION                                                                                                                                                                                                                                                                                                                                                   | HANDWHEEL                    |            |                   |
|    | MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                     |                              |            |                   |
|    | BODY MATERIAL                                                                                                                                                                                                                                                                                                                                               | CAST IRON, HARD RUBBER LINED |            |                   |
|    | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                   | HARD RUBBER                  |            |                   |
|    | SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                               | HARD RUBBER                  |            |                   |
|    | EXTRA INFORMATION                                                                                                                                                                                                                                                                                                                                           |                              |            |                   |
|    | VALVE, DIAPHRAGM: TYPE: DISCHARGE PIPE; VALVE SIZE: 40 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE UNDRILLED; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR Q; FACE TO FACE LENGTH: 120 MM; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: V407; RUBBER LINED; TYPE SAUNDERS TYPE A RHIV-STD; FLANGE TO BS4504 TABLE 10 |                              |            |                   |

|    |                                     |                              |            |                                                                                                                                                                                                                                                                                                     |
|----|-------------------------------------|------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                                                                     |
| 14 | 66584                               |                              |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                   |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 120 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: PTFE/RUBBER; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RHIV-214 * V409; HALAR LINED; SAUNDERS TYPE A; DRILLED TO BS4504 TABLE 10 |
|    | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                                                                     |
|    | VALVE SIZE (NB)                     | 80                           |            |                                                                                                                                                                                                                                                                                                     |
|    | DESIGN PRESSURE (bar)               | 10                           |            |                                                                                                                                                                                                                                                                                                     |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 120                   |            |                                                                                                                                                                                                                                                                                                     |
|    | FACE TO FACE (MM)                   | TBC                          |            |                                                                                                                                                                                                                                                                                                     |
|    | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |            |                                                                                                                                                                                                                                                                                                     |
|    | OPERATION                           | HANDWHEEL                    |            |                                                                                                                                                                                                                                                                                                     |
|    | MATERIAL SPECIFICATIONS             |                              |            |                                                                                                                                                                                                                                                                                                     |
|    | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |            |                                                                                                                                                                                                                                                                                                     |
|    | DISC/WETTED SEAT MATERIAL           | PTFE 214/RUBBER GR 300       |            |                                                                                                                                                                                                                                                                                                     |
|    | SEAT MATERIAL                       | PTFE 214/HARD RUBBER         |            |                                                                                                                                                                                                                                                                                                     |
|    | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                                                     |
|    | EXTRA                               | REFERENCE NO: RHIV-214       |            |                                                                                                                                                                                                                                                                                                     |
|    | 15                                  | 66585                        |            |                                                                                                                                                                                                                                                                                                     |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: ISOLATING; VALVE SIZE: 50 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -30 TO 100 DEG C; CONNECTION: FLANGE; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: RUBBER GR                                                                                                             |
|    | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                                                                     |
|    | VALVE SIZE (NB)                     | 50                           |            |                                                                                                                                                                                                                                                                                                     |

|  |                                     |                              |            |                                                                                                                                                                                                                                                                                   |
|--|-------------------------------------|------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | DESIGN PRESSURE (bar)               | 16                           |            | QV; FACE TO FACE LENGTH: 200 MM; OPERATED: HANDWHEEL; STYLE: WEIR; SOFTGOODS: PTFE; GRADE: 316; REFERENCE NO: RHIV-STD; V407; SAUNDERS; TYPE A; FLANGED TO BS 4504 TABLE 10                                                                                                       |
|  | DESIGN TEMPERATURE (Degree Celcius) | -30 TO 100                   |            |                                                                                                                                                                                                                                                                                   |
|  | FACE TO FACE (MM)                   | 200                          |            |                                                                                                                                                                                                                                                                                   |
|  | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |            |                                                                                                                                                                                                                                                                                   |
|  | OPERATION                           | HANDWHEEL                    |            |                                                                                                                                                                                                                                                                                   |
|  | MATERIAL SPECIFICATIONS             |                              |            |                                                                                                                                                                                                                                                                                   |
|  | BODY MATERIAL                       | STAINLESS STEEL              |            |                                                                                                                                                                                                                                                                                   |
|  | DISC/WETTED SEAT MATERIAL           | PTFE 214/RUBBER GR 300       |            |                                                                                                                                                                                                                                                                                   |
|  | SEAT MATERIAL                       | STAINLESS STEEL              |            |                                                                                                                                                                                                                                                                                   |
|  | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                                   |
|  | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                                                   |
|  | 16                                  | 67119                        |            |                                                                                                                                                                                                                                                                                   |
|  | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: WATER USE; VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: FLANGED RUBBER LINED; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; FACE TO FACE LENGTH: 258 MM; OPERATED: HANDWHEEL; STYLE: WEIR; UNDRILLED |
|  | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                                                   |
|  | VALVE SIZE (NB)                     | 80                           |            |                                                                                                                                                                                                                                                                                   |
|  | DESIGN PRESSURE (bar)               | 10                           |            |                                                                                                                                                                                                                                                                                   |
|  | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100                   |            |                                                                                                                                                                                                                                                                                   |
|  | FACE TO FACE (MM)                   | 258                          |            |                                                                                                                                                                                                                                                                                   |

|           |                                                                                                                                                                                                                                                                                          |                                 |                          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------|
|           | CONNECTION                                                                                                                                                                                                                                                                               | FLANGED BS4504 OR<br>EQUIVALENT |                          |
|           | OPERATION                                                                                                                                                                                                                                                                                | HANDWHEEL                       |                          |
|           | <b>MATERIAL SPECIFICATIONS</b>                                                                                                                                                                                                                                                           |                                 |                          |
|           | BODY MATERIAL                                                                                                                                                                                                                                                                            | CAST IRON, HARD RUBBER LINED    |                          |
|           | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                | HARD RUBBER                     |                          |
|           | SEAT MATERIAL                                                                                                                                                                                                                                                                            | HARD RUBBER                     |                          |
|           | <b>EXTRA INFORMATION</b>                                                                                                                                                                                                                                                                 |                                 |                          |
|           | EXTRA                                                                                                                                                                                                                                                                                    | 0                               |                          |
| <b>17</b> | <b>66455</b>                                                                                                                                                                                                                                                                             |                                 | <b>STOCK DESCRIPTION</b> |
|           | <b>CRITERIA</b>                                                                                                                                                                                                                                                                          | <b>REQUIREMENT (SCHEDULE A)</b> | <b>SCHEDULE B</b>        |
|           | TYPE                                                                                                                                                                                                                                                                                     | MANUAL DIAPHRAGM                |                          |
|           | VALVE SIZE (NB)                                                                                                                                                                                                                                                                          | 20                              |                          |
|           | DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                    | 10                              |                          |
|           | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                      | -10 TO 120                      |                          |
|           | FACE TO FACE (MM)                                                                                                                                                                                                                                                                        | TBC                             |                          |
|           | CONNECTION                                                                                                                                                                                                                                                                               | THREADED                        |                          |
|           | OPERATION                                                                                                                                                                                                                                                                                | HANDWHEEL                       |                          |
|           | <b>MATERIAL SPECIFICATIONS</b>                                                                                                                                                                                                                                                           |                                 |                          |
|           | BODY MATERIAL                                                                                                                                                                                                                                                                            | STAINLESS STEEL                 |                          |
|           | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                | PTFE 214/RUBBER GR 300          |                          |
|           | VALVE, DIAPHRAGM: VALVE SIZE: 20 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 120 DEG C; CONNECTION: THD; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: PTFE GR 300/214/RUBBER; OPERATED: HANDWHEEL; STYLE: WEIR; GRADE: 316; SUPPL P/N: RHIV214; REFERENCE NO: V401; SAUNDERS; TYPE A |                                 |                          |

|    |                                     |                              |            |                                                                                                                                                                                                                                                                                                         |
|----|-------------------------------------|------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | SEAT MATERIAL                       | SS316                        |            |                                                                                                                                                                                                                                                                                                         |
|    | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                                                         |
|    | EXTRA                               | REFERENCE NO: RHIV-214       |            |                                                                                                                                                                                                                                                                                                         |
| 18 | 66496                               |                              |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                       |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 25 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RHIV-STD; V407; HALAR LINED; TYPE SAUNDERS TYPE A; FLANGED TO BS4504 TABLE 10 |
|    | TYPE                                | MANUAL DIAPHRAGM             |            |                                                                                                                                                                                                                                                                                                         |
|    | VALVE SIZE (NB)                     | 25                           |            |                                                                                                                                                                                                                                                                                                         |
|    | DESIGN PRESSURE (bar)               | 16                           |            |                                                                                                                                                                                                                                                                                                         |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100                   |            |                                                                                                                                                                                                                                                                                                         |
|    | FACE TO FACE (MM)                   | TBC                          |            |                                                                                                                                                                                                                                                                                                         |
|    | CONNECTION                          | FLANGED BS4504 OR EQUIVALENT |            |                                                                                                                                                                                                                                                                                                         |
|    | OPERATION                           | HANDWHEEL                    |            |                                                                                                                                                                                                                                                                                                         |
|    | MATERIAL SPECIFICATIONS             |                              |            |                                                                                                                                                                                                                                                                                                         |
|    | BODY MATERIAL                       | CAST IRON, HARD RUBBER LINED |            |                                                                                                                                                                                                                                                                                                         |
|    | DISC/WETTED SEAT MATERIAL           | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                                                         |
|    | SEAT MATERIAL                       | HARD RUBBER                  |            |                                                                                                                                                                                                                                                                                                         |
|    | EXTRA INFORMATION                   |                              |            |                                                                                                                                                                                                                                                                                                         |
|    | EXTRA                               | REFERENCE NO: RHIV-STD       |            |                                                                                                                                                                                                                                                                                                         |
| 19 | 675877                              |                              |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                       |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)     | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: KB RISING HAND WHEEL INDICATOR; VALVE SIZE: 65 X 65 MM; DESIGN RATING:                                                                                                                                                                                                          |
|    | TYPE                                | DIAPHRAGM                    |            |                                                                                                                                                                                                                                                                                                         |

|    |                                     |                                                |            |                                                                                                                                                                                                                                                                                                              |
|----|-------------------------------------|------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | VALVE SIZE (NB)                     | 65                                             |            | PN10; TEMPERATURE RATING: -10 TO 110 DEG C;<br>CONNECTION: FLANGE (4) HOLES, PCD 145 MM; BODY MATERIAL: CAST IRON BUTYL LINED; DIAPHRAGM MATERIAL: GR 300 OR BUTYL; FACE TO FACE LENGTH: 222 MM; OPERATED: MANUAL; APPLICATION: COOLING WATER SYSTEM; FACE TO FACE INCLUDED THAT OF THE BUTYL LINING         |
|    | DESIGN PRESSURE (bar)               | 10                                             |            |                                                                                                                                                                                                                                                                                                              |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100                                     |            |                                                                                                                                                                                                                                                                                                              |
|    | FACE TO FACE (MM)                   | 222                                            |            |                                                                                                                                                                                                                                                                                                              |
|    | CONNECTION                          | FLANGED: PCD 145MM                             |            |                                                                                                                                                                                                                                                                                                              |
|    | OPERATION                           | MANUAL - HANDWHEEL                             |            |                                                                                                                                                                                                                                                                                                              |
|    | MATERIAL SPECIFICATIONS             |                                                |            |                                                                                                                                                                                                                                                                                                              |
|    | BODY MATERIAL                       | CAST IRON                                      |            |                                                                                                                                                                                                                                                                                                              |
|    | DISC/WETTED SEAT MATERIAL           | GR300 OR BUTYL                                 |            |                                                                                                                                                                                                                                                                                                              |
|    | SEAT MATERIAL                       | BUTYL RUBBER                                   |            |                                                                                                                                                                                                                                                                                                              |
|    | EXTRA INFORMATION                   |                                                |            |                                                                                                                                                                                                                                                                                                              |
|    | EXTRA                               | FACE TO FACE INCLUDED THAT OF THE BUTYL LINING |            |                                                                                                                                                                                                                                                                                                              |
| 20 | 66443                               |                                                |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                            |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)                       | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: WEIR; VALVE SIZE: 40 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 150 DEG C; CONNECTION: THD; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: PTFE GR 214/RUBBER GR 300; OPERATED: HANDWHEEL; STYLE: 1 WAY; SOFTGOODS: SS; GRADE: 316; REFERENCE NO: V401; COMPLETE, SAUNDERS TYPE A |
|    | TYPE                                | DIAPHRAGM                                      |            |                                                                                                                                                                                                                                                                                                              |
|    | VALVE SIZE (NB)                     | 40                                             |            |                                                                                                                                                                                                                                                                                                              |
|    | DESIGN PRESSURE (bar)               | 10                                             |            |                                                                                                                                                                                                                                                                                                              |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 150                                     |            |                                                                                                                                                                                                                                                                                                              |

|                                                                                                                                                                                                                                                                         |                                     |                           |                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------|-------------------|
|                                                                                                                                                                                                                                                                         | FACE TO FACE (MM)                   | TBC                       |                   |
|                                                                                                                                                                                                                                                                         | CONNECTION                          | THREAD                    |                   |
|                                                                                                                                                                                                                                                                         | OPERATION                           | MANUAL - HANDWHEEL        |                   |
|                                                                                                                                                                                                                                                                         | MATERIAL SPECIFICATIONS             |                           |                   |
|                                                                                                                                                                                                                                                                         | BODY MATERIAL                       | STAINLESS STEEL           |                   |
|                                                                                                                                                                                                                                                                         | DISC/WETTED SEAT MATERIAL           | PTFE GR 214/RUBBER GR 300 |                   |
|                                                                                                                                                                                                                                                                         | SEAT MATERIAL                       | STAINLESS STEEL           |                   |
|                                                                                                                                                                                                                                                                         | EXTRA INFORMATION                   |                           |                   |
|                                                                                                                                                                                                                                                                         | EXTRA                               | SAUNDERS TYPE A           |                   |
|                                                                                                                                                                                                                                                                         |                                     |                           |                   |
| 21                                                                                                                                                                                                                                                                      | 66465                               |                           | STOCK DESCRIPTION |
|                                                                                                                                                                                                                                                                         | CRITERIA                            | REQUIREMENT (SCHEDULE A)  | SCHEDULE B        |
|                                                                                                                                                                                                                                                                         | TYPE                                | DIAPHRAGM                 |                   |
|                                                                                                                                                                                                                                                                         | VALVE SIZE (NB)                     | 15                        |                   |
|                                                                                                                                                                                                                                                                         | DESIGN PRESSURE (bar)               | 16                        |                   |
|                                                                                                                                                                                                                                                                         | DESIGN TEMPERATURE (Degree Celcius) | -30 TO 100                |                   |
|                                                                                                                                                                                                                                                                         | FACE TO FACE (MM)                   | TBC                       |                   |
|                                                                                                                                                                                                                                                                         | CONNECTION                          | THREAD                    |                   |
|                                                                                                                                                                                                                                                                         | OPERATION                           | MANUAL - HANDWHEEL        |                   |
|                                                                                                                                                                                                                                                                         | MATERIAL SPECIFICATIONS             |                           |                   |
|                                                                                                                                                                                                                                                                         | BODY MATERIAL                       | STAINLESS STEEL 316       |                   |
| VALVE, DIAPHRAGM: TYPE: TYPE A; VALVE SIZE: 15 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -30 TO 100 DEG C; CONNECTION: THD; BODY MATERIAL: SS; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; GRADE: 316; REFERENCE NO: V402; SAUNDERS; TYPE A |                                     |                           |                   |

|    |                                     |                          |            |                                                                                                                                                                                                                                                                                                                                               |
|----|-------------------------------------|--------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | DISC/WETTED SEAT MATERIAL           | GR Q - RUBBER            |            |                                                                                                                                                                                                                                                                                                                                               |
|    | SEAT MATERIAL                       | STAINLESS STEEL 316      |            |                                                                                                                                                                                                                                                                                                                                               |
|    | EXTRA INFORMATION                   |                          |            |                                                                                                                                                                                                                                                                                                                                               |
|    | EXTRA                               | 0                        |            |                                                                                                                                                                                                                                                                                                                                               |
| 22 | 66469                               |                          |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                             |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A) | SCHEDULE B | VALVE, DIAPHRAGM: TYPE: WATER PLANT; VALVE SIZE: 25 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; FACE TO FACE LENGTH: 130 MM; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RHI-STD; 4 HOLES 14 MM; SOFT RUBBER LINED; SAUNDERS; TYPE A; SCREWED |
|    | TYPE                                | DIAPHRAGM                |            |                                                                                                                                                                                                                                                                                                                                               |
|    | VALVE SIZE (NB)                     | 25                       |            |                                                                                                                                                                                                                                                                                                                                               |
|    | DESIGN PRESSURE (bar)               | 16                       |            |                                                                                                                                                                                                                                                                                                                                               |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 85                |            |                                                                                                                                                                                                                                                                                                                                               |
|    | FACE TO FACE (MM)                   | 130                      |            |                                                                                                                                                                                                                                                                                                                                               |
|    | CONNECTION                          | FLANGED                  |            |                                                                                                                                                                                                                                                                                                                                               |
|    | OPERATION                           | MANUAL - HANDWHEEL       |            |                                                                                                                                                                                                                                                                                                                                               |
|    | MATERIAL SPECIFICATIONS             |                          |            |                                                                                                                                                                                                                                                                                                                                               |
|    | BODY MATERIAL                       | CAST IRON                |            |                                                                                                                                                                                                                                                                                                                                               |
|    | DISC/WETTED SEAT MATERIAL           | GR Q - RUBBER            |            |                                                                                                                                                                                                                                                                                                                                               |
|    | SEAT MATERIAL                       | SOFT RUBBER LINED        |            |                                                                                                                                                                                                                                                                                                                                               |
|    | EXTRA INFORMATION                   |                          |            |                                                                                                                                                                                                                                                                                                                                               |
|    | EXTRA                               | REFERENCE NO: RHI-STD    |            |                                                                                                                                                                                                                                                                                                                                               |
| 23 | 66475                               |                          |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                             |

| CRITERIA                                                                                                                                                                                                                                                                                                                                      |       | REQUIREMENT (SCHEDULE A) | SCHEDULE B |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------|------------|
| TYPE                                                                                                                                                                                                                                                                                                                                          |       | DIAPHRAGM                |            |
| VALVE SIZE (NB)                                                                                                                                                                                                                                                                                                                               |       | 50                       |            |
| DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                                                         |       | 16                       |            |
| DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                                                                           |       | -10 TO 100               |            |
| FACE TO FACE (MM)                                                                                                                                                                                                                                                                                                                             |       | 147                      |            |
| CONNECTION                                                                                                                                                                                                                                                                                                                                    |       | FLANGED - BS4504 T10     |            |
| OPERATION                                                                                                                                                                                                                                                                                                                                     |       | MANUAL - HANDWHEEL       |            |
| MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                       |       |                          |            |
| BODY MATERIAL                                                                                                                                                                                                                                                                                                                                 |       | CAST IRON                |            |
| DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                                                                     |       | GR Q - RUBBER            |            |
| SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                 |       | SOFT RUBBER LINED        |            |
| EXTRA INFORMATION                                                                                                                                                                                                                                                                                                                             |       |                          |            |
| EXTRA                                                                                                                                                                                                                                                                                                                                         |       | REFERENCE NO: RHI-STD    |            |
| 24                                                                                                                                                                                                                                                                                                                                            | 66500 |                          |            |
| STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                             |       |                          |            |
| CRITERIA                                                                                                                                                                                                                                                                                                                                      |       | REQUIREMENT (SCHEDULE A) | SCHEDULE B |
| TYPE                                                                                                                                                                                                                                                                                                                                          |       | DIAPHRAGM                |            |
| VALVE SIZE (NB)                                                                                                                                                                                                                                                                                                                               |       | 15                       |            |
| DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                                                         |       | 16                       |            |
| VALVE, DIAPHRAGM: TYPE: 147 MM; VALVE SIZE: 50 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; FACE TO FACE LENGTH: BYPASS DRAIN; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RHI-STD; V403; TYPE SAUNDERS TYPE A; FLANGED TO BS4504<br>TABLE 10 |       |                          |            |
| VALVE, DIAPHRAGM: VALVE SIZE: 15 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: THD FEMALE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RHI-STD; TYPE SAUNDERS; TYPE A                                                                                  |       |                          |            |

|    |                                                                                                                                                                                                                                                                                                                                                         |                                          |            |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------|
|    | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                                                                                     | -10 TO 100                               |            |
|    | FACE TO FACE (MM)                                                                                                                                                                                                                                                                                                                                       | TBC                                      |            |
|    | CONNECTION                                                                                                                                                                                                                                                                                                                                              | THREAD - FEMALE                          |            |
|    | OPERATION                                                                                                                                                                                                                                                                                                                                               | MANUAL - HANDWHEEL                       |            |
|    | MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                 |                                          |            |
|    | BODY MATERIAL                                                                                                                                                                                                                                                                                                                                           | CAST IRON                                |            |
|    | DISC/WETTED SEAT MATERIAL                                                                                                                                                                                                                                                                                                                               | GR Q - RUBBER                            |            |
|    | SEAT MATERIAL                                                                                                                                                                                                                                                                                                                                           | TBC                                      |            |
|    | EXTRA INFORMATION                                                                                                                                                                                                                                                                                                                                       |                                          |            |
|    | EXTRA                                                                                                                                                                                                                                                                                                                                                   | REFERENCE NO: RHI-STD                    |            |
| 25 | 66583                                                                                                                                                                                                                                                                                                                                                   |                                          |            |
|    | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                                       |                                          |            |
|    | CRITERIA                                                                                                                                                                                                                                                                                                                                                | REQUIREMENT (SCHEDULE A)                 | SCHEDULE B |
|    | TYPE                                                                                                                                                                                                                                                                                                                                                    | DIAPHRAGM                                |            |
|    | VALVE SIZE (NB)                                                                                                                                                                                                                                                                                                                                         | 25                                       |            |
|    | DESIGN PRESSURE (bar)                                                                                                                                                                                                                                                                                                                                   | 16                                       |            |
|    | DESIGN TEMPERATURE (Degree Celcius)                                                                                                                                                                                                                                                                                                                     | -10 TO 85                                |            |
|    | FACE TO FACE (MM)                                                                                                                                                                                                                                                                                                                                       | 96                                       |            |
|    | CONNECTION                                                                                                                                                                                                                                                                                                                                              | FLANGED: PCD 145MM, FLANGED - BS4504 T10 |            |
|    | OPERATION                                                                                                                                                                                                                                                                                                                                               | MANUAL - HANDWHEEL                       |            |
|    | MATERIAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                 |                                          |            |
|    | VALVE, DIAPHRAGM: TYPE: ACID DRAIN LEAKING;<br>VALVE SIZE: 25 MM; DESIGN RATING: 16 BAR;<br>TEMPERATURE RATING: -10 TO 85 DEG C;<br>CONNECTION: FLANGE; BODY MATERIAL: CI/STL;<br>DIAPHRAGM MATERIAL: RUBBER GR Q; FACE TO FACE LENGTH: 96 MM; OPERATED: HANDWHEEL; STYLE: WEIR; REFERENCE NO: RLTIV-STD; RUBBER LINED; FLANGED BS 4504 / T10; TYPE: KB |                                          |            |

|    |                                     |                          |            |                                                                                                                                                                                                                                     |
|----|-------------------------------------|--------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | BODY MATERIAL                       | CAST IRON                |            |                                                                                                                                                                                                                                     |
|    | DISC/WETTED SEAT MATERIAL           | GR Q - RUBBER            |            |                                                                                                                                                                                                                                     |
|    | SEAT MATERIAL                       | RUBBER LINED             |            |                                                                                                                                                                                                                                     |
|    | EXTRA INFORMATION                   |                          |            |                                                                                                                                                                                                                                     |
|    | EXTRA                               | TYPE: KB                 |            |                                                                                                                                                                                                                                     |
| 26 | 66707                               |                          |            | STOCK DESCRIPTION                                                                                                                                                                                                                   |
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A) | SCHEDULE B | VALVE, DIAPHRAGM: VALVE SIZE: 1/2 IN; DESIGN RATING: 16 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: THD; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: RUBBER GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; SUPPL P/N: V404; SAUNDERS |
|    | TYPE                                | DIAPHRAGM                |            |                                                                                                                                                                                                                                     |
|    | VALVE SIZE (NB)                     | 1/2"                     |            |                                                                                                                                                                                                                                     |
|    | DESIGN PRESSURE (bar)               | 16                       |            |                                                                                                                                                                                                                                     |
|    | DESIGN TEMPERATURE (Degree Celcius) | -10 TO 100               |            |                                                                                                                                                                                                                                     |
|    | FACE TO FACE (MM)                   | TBC                      |            |                                                                                                                                                                                                                                     |
|    | CONNECTION                          | THREAD                   |            |                                                                                                                                                                                                                                     |
|    | OPERATION                           | MANUAL - HANDWHEEL       |            |                                                                                                                                                                                                                                     |
|    | MATERIAL SPECIFICATIONS             |                          |            |                                                                                                                                                                                                                                     |
|    | BODY MATERIAL                       | CAST IRON                |            |                                                                                                                                                                                                                                     |
|    | DISC/WETTED SEAT MATERIAL           | GR Q - RUBBER            |            |                                                                                                                                                                                                                                     |
|    | SEAT MATERIAL                       | TBC                      |            |                                                                                                                                                                                                                                     |
|    | EXTRA INFORMATION                   |                          |            |                                                                                                                                                                                                                                     |
|    | EXTRA                               | 0                        |            |                                                                                                                                                                                                                                     |

| 27 | 251049                              |                                                                                                               |            | STOCK DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|-------------------------------------|---------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | CRITERIA                            | REQUIREMENT (SCHEDULE A)                                                                                      | SCHEDULE B |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | TYPE                                | DIAPHRAGM                                                                                                     |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | VALVE SIZE (NB)                     | 300                                                                                                           |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | DESIGN PRESSURE (bar)               | 10                                                                                                            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | DESIGN TEMPERATURE (Degree Celcius) | 100                                                                                                           |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | FACE TO FACE (MM)                   | 850                                                                                                           |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | CONNECTION                          | FALNAGED RF DIN 2501 DIMENSIONS TO DIN 3202 WITH ACME THREAD 40 X 7 LEFT; WITH ADAPTOR FLANGE TO DIN 3210-A 0 |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | OPERATION                           | ACTUATED                                                                                                      |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | MATERIAL SPECIFICATIONS             |                                                                                                               |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | BODY MATERIAL                       | GGG 40                                                                                                        |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | DISC/WETTED SEAT MATERIAL           | BUTYL IIR REINFORCED                                                                                          |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | SEAT MATERIAL                       | TBC                                                                                                           |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | EXTRA INFORMATION                   |                                                                                                               |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | EXTRA                               | REFERENCE NO: 11043169; A12A; WITHOUT STUFFING BOX; SPINDLE EXCLOSED; ENTIRELY PROTECTED AGAINST MEDIUM       |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    |                                     |                                                                                                               |            | VALVE, DIAPHRAGM: TYPE: MAIN TURBINE; VALVE SIZE: 300 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: 100 DEG C; CONNECTION: FLANGE RF DIN 2501; BODY MATERIAL: GGG 40; DIAPHRAGM MATERIAL: BUTYL IIR REINFORCED; FACE TO FACE LENGTH: 850 MM; OPERATED: ACTUATOR; REFERENCE NO: 11043169; A12A; WITHOUT STUFFING BOX; SPINDLE EXCLOSED; ENTIRELY PROTECTED AGAINST MEDIUM; FACE TO FACE DIMENSIONS TO DIN 3202 WITH ACME THREAD 40 X 7 LEFT; WITH ADAPTOR FLANGE TO DIN 3210-A 0 |