

Unirain F40 - F40F

Full Circle Impact Sprinkler Low and Medium flow Brass



Application

Ideal for agricultural use, medium flows, and suitable for removable pipe systems. It can be assembled with one or two nozzles. Sturdy design confers resistance and a longer wear life. Suitable for farmers who look for a sturdy and durable product. Its angle water jet assures perfectly balanced performance of the sprinkler reducing evaporation losses and wind effect. It can be assembled with female base thread in order to avoid waste of material.

Advantages

- Made of brass, its arm and body share a wide impact area provides longer life.
- Its counterweighted arm provides a steady turn speed.
- It can be assembled with one or two nozzles.
- Three different vanes can be used to achieve the desired coverage and spray balance according to the available system pressure.

Technical specifications

- Full circle impact sprinkler
- 3/4" base thread male or female(F30F)
- Main and secondary nozzle
- 25° nozzle trajectory angle.
- Pressure range: 20-80 PSI
- Nozzle range: 9/64"-7/32"
- Body, arm and bearing assembly made of brass.
- Fulcrum pin and springs made of stainless steel.
- Color-coded anti abrasive acetal resin nozzles carved in millimetres and inches for a better identification (brass nozzles to be optionally assembled)
- Backturn lock between the sprinkler body and the bearing spring.



F40

F40F

| | Pressure (psi) | Nozzles | Vanes |
|----------|----------------|-------------|--------------|
| HIGH | 60 | 3PRN 6 3FCN | 30 V |
| MEDIUM | 40 | 3PRN 6 3FCN | WITHOUT VANE |
| LOW | 30 | 3PRN | 30RV |
| VERY LOW | 20 | 3PRN | 30BV |

| F40 | PRESSURE (PSI) | NOZZLES 5/32" + 3/32" | | NOZZLES 11/64" + 3/32" | | NOZZLES 3/16" + 3/32" | | NOZZLES 3/16" + 1/8" | | NOZZLES 13/64" + 1/8" | | NOZZLES 7/32" + 1/8" | | NOZZLES 15/64" + 1/8" | | NOZZLES 1/4" + 1/8" | | NOZZLES 17/64" + 1/8" | | NOZZLES 9/32" + 1/8" | |
|-------------|----------------|-----------------------|-------|------------------------|-------|-----------------------|-------|----------------------|-------|-----------------------|-------|----------------------|-------|-----------------------|-------|---------------------|-------|-----------------------|-------|----------------------|-------|
| | | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) |
| TWO NOZZLES | 20 | | | 4.95 | 41.3 | 5.66 | 42.0 | 6.66 | 42.0 | 7.47 | 42.3 | 8.33 | 43.0 | 9.12 | 43.3 | 10.10 | 44.0 | 11.18 | 44.3 | 12.17 | 44.6 |
| | 25 | 4.83 | 42.7 | 5.55 | 44.0 | 6.31 | 44.9 | 7.40 | 44.9 | 8.30 | 45.6 | 9.25 | 46.6 | 10.20 | 46.9 | 11.30 | 47.6 | 12.50 | 47.9 | 13.60 | 48.6 |
| | 30 | 5.28 | 44.6 | 6.07 | 45.9 | 6.93 | 47.6 | 8.15 | 47.6 | 9.15 | 48.9 | 10.20 | 49.9 | 11.20 | 50.5 | 12.40 | 50.9 | 13.70 | 51.5 | 14.90 | 51.8 |
| | 35 | 5.71 | 45.9 | 6.57 | 47.6 | 7.51 | 48.9 | 8.83 | 48.9 | 9.93 | 50.5 | 11.10 | 51.5 | 12.10 | 52.5 | 13.40 | 53.1 | 14.80 | 53.5 | 16.20 | 54.1 |
| | 40 | 6.11 | 46.9 | 7.03 | 48.6 | 8.03 | 49.9 | 9.46 | 49.9 | 10.65 | 51.5 | 11.90 | 53.1 | 13.00 | 53.5 | 14.40 | 54.5 | 15.90 | 55.4 | 17.40 | 56.1 |
| | 45 | 6.48 | 47.6 | 7.45 | 49.5 | 8.53 | 50.9 | 10.05 | 50.9 | 11.30 | 52.5 | 12.65 | 54.1 | 13.79 | 55.1 | 15.30 | 56.1 | 16.80 | 57.1 | 18.50 | 58.1 |
| | 50 | 6.82 | 47.9 | 7.87 | 49.9 | 9.00 | 51.8 | 10.60 | 51.8 | 11.90 | 53.5 | 13.35 | 55.1 | 14.60 | 56.1 | 16.10 | 57.1 | 17.70 | 58.1 | 19.50 | 59.4 |
| | 55 | 7.15 | 48.6 | 8.25 | 50.5 | 9.45 | 53.1 | 11.10 | 53.1 | 12.50 | 54.5 | 14.00 | 56.1 | 15.30 | 57.1 | 16.90 | 58.1 | 18.60 | 59.1 | 20.40 | 61.0 |
| | 60 | 7.47 | 48.9 | 8.60 | 50.9 | 9.86 | 53.5 | 11.60 | 53.5 | 13.00 | 55.1 | 14.50 | 56.4 | 16.00 | 58.1 | 17.70 | 59.1 | 19.40 | 60.0 | 21.30 | 62.0 |
| | 65 | 7.78 | 49.5 | 8.93 | 51.5 | 10.27 | 54.1 | 12.10 | 54.1 | 13.50 | 55.4 | 15.00 | 57.1 | 16.60 | 58.4 | 18.40 | 60.0 | 20.10 | 61.0 | 22.20 | 63.0 |
| | 70 | 8.08 | 49.9 | 9.25 | 51.8 | 10.66 | 54.5 | 12.50 | 54.5 | 14.00 | 56.1 | 15.45 | 57.4 | 17.20 | 59.1 | 19.00 | 60.4 | 20.80 | 62.0 | 22.90 | 64.0 |
| 75 | 8.37 | 50.5 | 9.56 | 52.5 | 11.02 | 55.1 | 12.90 | 55.1 | 14.40 | 56.4 | 15.90 | 58.1 | 17.70 | 59.4 | 19.60 | 61.0 | 21.50 | 62.7 | 23.60 | 64.6 | |
| 80 | 8.65 | 50.9 | 9.87 | 53.1 | 11.36 | 55.4 | 13.25 | 55.4 | 14.80 | 57.1 | 16.30 | 58.4 | 18.20 | 60.0 | 20.20 | 61.4 | 22.10 | 63.0 | 24.30 | 65.0 | |

| F40P | PRESSURE (PSI) | NOZZLES 5/32" | | NOZZLES 11/64" | | NOZZLES 3/16" | | NOZZLES 13/64" | | NOZZLES 7/32" | | NOZZLES 15/64" | | NOZZLES 1/4" | | NOZZLES 17/64" | | NOZZLES 9/32" | |
|---------------------|----------------|---------------|-------|----------------|-------|---------------|-------|----------------|-------|---------------|-------|----------------|-------|--------------|-------|----------------|-------|---------------|-------|
| | | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) |
| ONE NOZZLE AND PLUG | 20 | | | 3.79 | 41.3 | 4.49 | 42.0 | 5.31 | 42.3 | 6.16 | 43.0 | 6.98 | 43.3 | 7.96 | 44.0 | 8.94 | 44.3 | 10.02 | 44.6 |
| | 25 | 3.52 | 42.7 | 4.24 | 44.0 | 5.00 | 44.9 | 5.90 | 45.6 | 6.85 | 46.6 | 7.80 | 46.9 | 8.90 | 47.6 | 10.00 | 47.9 | 11.20 | 48.6 |
| | 30 | 3.85 | 44.6 | 4.64 | 45.9 | 5.50 | 47.6 | 6.50 | 48.9 | 7.55 | 49.9 | 8.60 | 50.5 | 9.80 | 50.9 | 11.00 | 51.5 | 12.30 | 51.8 |
| | 35 | 4.16 | 45.9 | 5.02 | 47.6 | 5.96 | 48.9 | 7.05 | 50.5 | 8.20 | 51.5 | 9.30 | 52.5 | 10.60 | 53.1 | 11.90 | 53.5 | 13.30 | 54.1 |
| | 40 | 4.45 | 46.9 | 5.37 | 48.6 | 6.38 | 49.9 | 7.55 | 51.5 | 8.80 | 53.1 | 10.00 | 53.5 | 11.40 | 54.5 | 12.80 | 55.4 | 14.30 | 56.1 |
| | 45 | 4.72 | 47.6 | 5.70 | 49.5 | 6.78 | 50.9 | 8.00 | 52.5 | 9.35 | 54.1 | 10.60 | 55.1 | 12.10 | 56.1 | 13.60 | 57.1 | 15.20 | 58.1 |
| | 50 | 4.98 | 47.9 | 6.01 | 49.9 | 7.16 | 51.8 | 8.45 | 53.5 | 9.90 | 55.1 | 11.20 | 56.1 | 12.80 | 57.1 | 14.30 | 58.1 | 16.00 | 59.4 |
| | 55 | 5.22 | 48.6 | 6.30 | 50.5 | 7.52 | 53.1 | 8.85 | 54.5 | 10.40 | 56.1 | 11.70 | 57.1 | 13.40 | 58.1 | 15.00 | 59.1 | 16.80 | 61.0 |
| | 60 | 5.45 | 48.9 | 6.57 | 50.9 | 7.85 | 53.5 | 9.25 | 55.1 | 10.75 | 56.4 | 12.20 | 58.1 | 13.90 | 59.1 | 15.60 | 60.0 | 17.50 | 62.0 |
| | 65 | 5.68 | 49.5 | 6.83 | 51.5 | 8.18 | 54.1 | 9.60 | 55.4 | 11.10 | 57.1 | 12.70 | 58.4 | 14.50 | 60.0 | 16.20 | 61.0 | 18.10 | 63.0 |
| | 70 | 5.90 | 49.9 | 7.09 | 51.8 | 8.50 | 54.5 | 9.95 | 56.1 | 11.40 | 57.4 | 13.20 | 59.1 | 15.00 | 60.4 | 16.80 | 62.0 | 18.70 | 64.0 |
| 75 | 6.11 | 50.5 | 7.34 | 52.5 | 8.80 | 55.1 | 10.25 | 56.4 | 11.70 | 58.1 | 13.60 | 59.4 | 15.50 | 61.0 | 17.30 | 62.7 | 19.20 | 64.6 | |
| 80 | 6.30 | 50.9 | 7.58 | 53.1 | 9.09 | 55.4 | 10.50 | 57.1 | 12.00 | 58.4 | 14.00 | 60.0 | 16.00 | 61.4 | 17.80 | 63.0 | 19.70 | 65.0 | |

| F40V | PRESSURE (PSI) | NOZZLES 5/32" + 3/32" | | NOZZLES 11/64" + 3/32" | | NOZZLES 3/16" + 3/32" | | NOZZLES 3/16" + 1/8" | | NOZZLES 13/64" + 1/8" | | NOZZLES 7/32" + 1/8" | | NOZZLES 15/64" + 1/8" | | NOZZLES 1/4" + 1/8" | | NOZZLES 17/64" + 1/8" | | NOZZLES 9/32" + 1/8" | |
|------------------------------------|----------------|-----------------------|-------|------------------------|-------|-----------------------|-------|----------------------|-------|-----------------------|-------|----------------------|-------|-----------------------|-------|---------------------|-------|-----------------------|-------|----------------------|-------|
| | | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) |
| TWO NOZZLES AND VANE TO HIGH RANGE | 35 | 5.71 | 48.2 | 6.57 | 49.2 | 7.51 | 49.5 | 8.83 | 49.5 | 9.93 | 50.5 | 11.10 | 52.2 | 12.10 | 53.8 | 13.40 | 54.8 | 14.80 | 55.4 | 16.20 | 56.1 |
| | 40 | 6.11 | 49.5 | 7.03 | 51.5 | 8.03 | 51.8 | 9.46 | 51.8 | 10.65 | 53.5 | 11.90 | 55.4 | 13.00 | 57.1 | 14.40 | 58.4 | 15.90 | 59.1 | 17.40 | 60.0 |
| | 45 | 6.48 | 49.9 | 7.45 | 51.8 | 8.53 | 53.1 | 10.05 | 53.1 | 11.30 | 54.5 | 12.65 | 57.1 | 13.79 | 58.4 | 15.30 | 60.4 | 16.80 | 61.0 | 18.50 | 62.0 |
| | 50 | 6.82 | 50.5 | 7.87 | 52.5 | 9.00 | 53.5 | 10.60 | 53.5 | 11.90 | 55.4 | 13.35 | 58.4 | 14.60 | 60.0 | 16.10 | 62.0 | 17.70 | 63.0 | 19.50 | 64.0 |
| | 55 | 7.15 | 50.9 | 8.25 | 53.1 | 9.45 | 54.1 | 11.10 | 54.1 | 12.50 | 56.4 | 14.00 | 59.4 | 15.30 | 61.0 | 16.90 | 63.0 | 18.60 | 64.6 | 20.40 | 65.9 |
| | 60 | 7.47 | 51.5 | 8.60 | 53.5 | 9.86 | 54.5 | 11.60 | 54.5 | 13.00 | 57.1 | 14.50 | 60.4 | 16.00 | 62.0 | 17.70 | 64.0 | 19.40 | 65.9 | 21.30 | 67.9 |
| | 65 | 7.78 | 51.8 | 8.93 | 54.1 | 10.27 | 55.1 | 12.10 | 55.1 | 13.50 | 57.4 | 15.00 | 61.0 | 16.60 | 63.0 | 18.40 | 65.0 | 20.10 | 67.6 | 22.20 | 69.6 |
| | 70 | 8.08 | 52.5 | 9.25 | 54.5 | 10.66 | 55.4 | 12.50 | 55.4 | 14.00 | 58.1 | 15.45 | 61.4 | 17.20 | 64.0 | 19.00 | 65.9 | 20.80 | 68.6 | 22.90 | 70.9 |
| | 75 | 8.37 | 53.1 | 9.56 | 55.1 | 11.02 | 56.1 | 12.90 | 56.1 | 14.40 | 58.4 | 15.90 | 62.0 | 17.70 | 64.6 | 19.60 | 66.9 | 21.50 | 69.6 | 23.60 | 71.9 |
| | 80 | 8.65 | 53.5 | 9.87 | 55.4 | 11.36 | 56.4 | 13.25 | 56.4 | 14.80 | 59.1 | 16.30 | 62.7 | 18.20 | 65.0 | 20.20 | 67.9 | 22.10 | 70.5 | 24.30 | 73.2 |

| F40PV | PRESSURE (PSI) | NOZZLES 5/32" | | NOZZLES 11/64" | | NOZZLES 3/16" | | NOZZLES 13/64" | | NOZZLES 7/32" | | NOZZLES 15/64" | | NOZZLES 1/4" | | NOZZLES 17/64" | | NOZZLES 9/32" | |
|---|----------------|---------------|-------|----------------|-------|---------------|-------|----------------|-------|---------------|-------|----------------|-------|--------------|-------|----------------|-------|---------------|-------|
| | | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) | GPM | R(ft) |
| ONE NOZZLE, PLUG AND VANE TO HIGH RANGE | 35 | 4.16 | 48.2 | 5.02 | 49.2 | 5.96 | 49.5 | 7.05 | 50.5 | 8.20 | 52.2 | 9.30 | 53.8 | 10.60 | 54.8 | 11.90 | 55.4 | 13.30 | 56.1 |
| | 40 | 4.45 | 49.7 | 5.37 | 51.5 | 6.38 | 52.5 | 7.55 | 54.5 | 8.80 | 56.1 | 10.00 | 57.4 | 11.40 | 59.4 | 12.80 | 60.0 | 14.30 | 61.0 |
| | 45 | 4.72 | 50.5 | 5.70 | 52.5 | 6.78 | 53.5 | 8.00 | 55.4 | 9.35 | 58.1 | 10.60 | 59.4 | 12.10 | 61.4 | 13.60 | 62.0 | 15.20 | 63.0 |
| | 50 | 4.98 | 50.9 | 6.01 | 53.1 | 7.16 | 54.5 | 8.45 | 56.4 | 9.90 | 59.4 | 11.20 | 61.0 | 12.80 | 63.0 | 14.30 | 64.0 | 16.00 | 65.0 |
| | 55 | 5.22 | 51.5 | 6.30 | 53.5 | 7.52 | 55.1 | 8.85 | 57.4 | 10.40 | 60.4 | 11.70 | 62.0 | 13.40 | 64.0 | 15.00 | 65.6 | 16.80 | 66.9 |
| | 60 | 5.45 | 51.8 | 6.57 | 54.1 | 7.85 | 55.4 | 9.25 | 58.1 | 10.75 | 61.4 | 12.20 | 63.0 | 13.90 | 65.0 | 15.60 | 66.9 | 17.50 | 68.9 |
| | 65 | 5.68 | 52.5 | 6.83 | 54.5 | 8.18 | 56.1 | 9.60 | 58.4 | 11.10 | 62.0 | 12.70 | 64.0 | 14.50 | 65.9 | 16.20 | 68.6 | 18.10 | 70.5 |
| | 70 | 5.90 | 53.1 | 7.09 | 55.1 | 8.50 | 56.4 | 9.95 | 59.1 | 11.40 | 62.7 | 13.20 | 65.0 | 15.00 | 66.9 | 16.80 | 69.6 | 18.70 | 71.9 |
| | 75 | 6.11 | 53.5 | 7.34 | 55.4 | 8.80 | 57.1 | 10.25 | 59.4 | 11.70 | 63.0 | 13.60 | 65.6 | 15.50 | 67.9 | 17.30 | 70.5 | 19.20 | 73.2 |
| | 80 | 6.30 | 54.1 | 7.58 | 56.1 | 9.09 | 57.4 | 10.50 | 60.0 | 12.00 | 63.6 | 14.00 | 65.9 | 16.00 | 68.9 | 17.80 | 71.5 | 19.70 | 74.1 |

Data obtained under ideal test conditions. It can be affected by wind, bad hydraulic conditions or other adverse factors.
Highest point of the jet above the nozzle: 3 m (using standard nozzle 3/16" to 35.2 MCA)
Throw radius jets achieved with the 0.9m lift. Shaded areas not recommended.
(* Standard Nozzle.

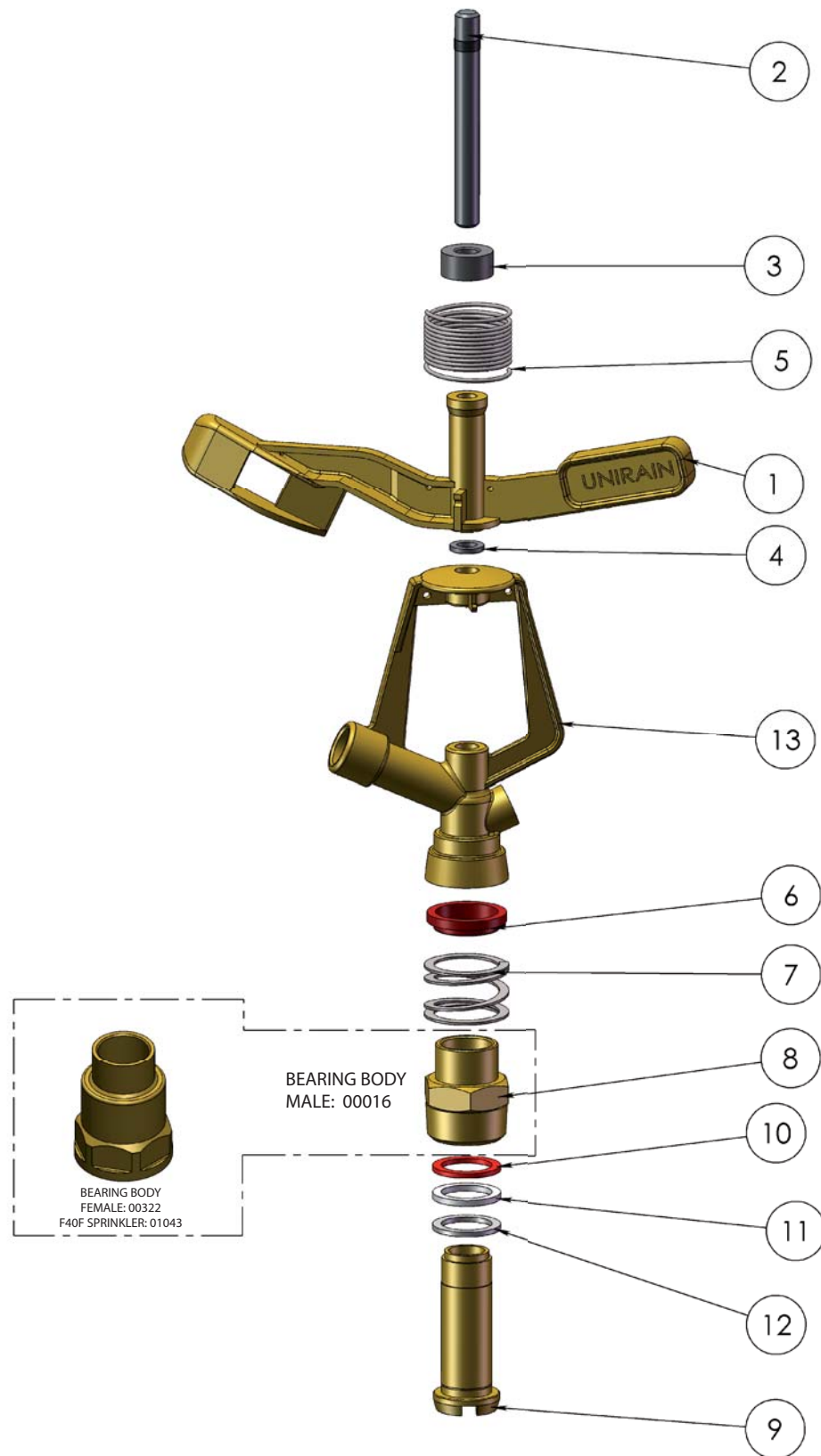
PSI: Pounds per Square Inch
GPM: Gallons Per Minute
R(ft): Throw Radius in feet

WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorised personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.



| COMPONENT NUMBER | PART NUMBER | DESCRIPTION | MATERIAL | QUANTITY |
|------------------|-------------|-----------------------------|--------------------|----------|
| 1 | 00036 | F40 Sprinkler Arm | Brass | 1 |
| 2 | 06496 | Arm Shaft | Stainless Steel | 1 |
| 3 | 06494 | Arm Hat | PE | 1 |
| 4 | 06162 | Arm Support Washer | NBR | 1 |
| 5 | 06493 | F40 Arm Spring | Satinless Steel. | 1 |
| 6 | 00255 | Bearing Body Lock | High Density PE | 1 |
| 7 | 06151 | Bearing Spring | Stainless Steel. | 1 |
| 8 | 00016 | F40 Bearing Body | Brass | 1 |
| 9 | 00017 | F40 Bearing Shaft | Brass | 1 |
| 10 | 00252 | Bearing Upper Washer | Anti Hydrolysis PU | 1 |
| 11 | 06736 | Bearing Intermediate Washer | High Density PE | 1 |
| 12 | 07459 | Bearing Lower Washer | NBR | 1 |
| 13 | 00034 | F40 Sprinkler Body | Brass | 1 |

Notes

| | | | |
|---|--------------------|-----------------------|---------------|
| Process/Manufacturer Unirain | Size A3 | Material | Code 00151 |
| ASSEMBLY | Scale 1:2 | Name F40 Sprinkler | |
| PRIVATE AND CONFIDENTIAL THE INFORMATION CONTAINED ON THIS PLAN IS FOR UNIRAIN USE ONLY. FORBIDDEN CHANGE OR AMENDMENT OF VALUES OF THE PLAN WITHOUT A CONSENT IN WRITING. | 24/06/09 M.R.M. | | |