

For nearly 40 years the 690 Series has set the standard for durability and reliability in professional turf applications. Extremely rugged, the 690 Series is constructed of brass, stainless steel and engineering plastics for unmatched performance in the most demanding environments. The purpose built gear drive mechanism provides durability without heads losing arc alignment. Top of head access saves time and money

# FEATURES & BENEFITS

# Long Life Gear Drive

Rotation drive gears are vacuum-packed with grease and isolated from water stream for long, trouble-free life.

#### **Manual Override**

Allows electric valve-in-head models to be turned on manually or be cancelled out of automatic program.

#### **Positive Spring Retraction**

Minimises tampering and accidents by pulling nozzle and cap down out of the way of horses, people and mowers when watering is done. Strong spring discourages vandals.

#### Rugged Cycloac® Case

Almost indestructible engineering plastic has tremendous impact resistance, won't rust, corrode or disintegrate because of time or water-carried minerals.

#### **Pressure Regulation**

For more equal water distribution over large areas. Compensates for large pressure differentials. Regulates pressure to nozzles on electric valve-in-head models.



# **Check-O-Matic Models**

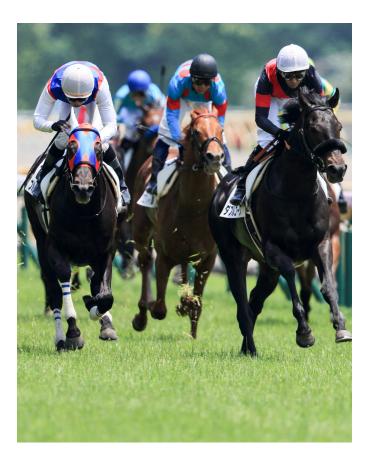
Stops low head drainage in block systems with spring loaded check valve in base of sprinkler.

#### Valve-in-Head Models

All the advantages of head-by-head control at a much lower cost than valve-under-head installations. Customise watering to fit turf use, topography and soil. Multi-cycle for wind or run-off problems, frost control, dew removal without lowhead drainage. Available for hydraulic normally open or 24 volt electric systems. Valve accessible through top of head.

# **Additional Features**

- Manual control at the sprinkler, On-Off-Auto (electric)
- Time-proven, gear-drive design
- All internal components serviceable from the top of the sprinkler
- Durable engineering plastic and stainless steel construction
- Nine arc selections
- Rubber cover kit option: Part No. 690-01



# SPECIFICATIONS

#### Operational

- Nine arc selections:
  - 90°, 150°, 165°, 180°, 195°, 210°, 360°, fixed arcs
  - 60°/120° full circle, two speed
    180°/180° full circle, two speed (Two speed models run at half speed in non-overlap areas to provide balanced water application.)
- Radius: 26.5 m 32.9 m
- Flow rate: 193.0 311.1 L/m
- Recommended Operating Pressure Range: 550 690 kPa
- Maximum pressure: 1035 kPa
- Trajectory: 25°
- 40 mm female threaded inlet

#### Dimensions

- Pop-up height: 25 mm
- Pop-up height to nozzle: 13 mm
- Body height: 406 mmWeight: 2.5 kg

# 9 Fixed Arc Selections





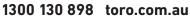


**Count on it.** 

TORO

Nozzle Performance										
<b>Base Pressure</b>		Nozzle Set 90			Nozzle Set 91			Nozzle Set 92		
kPa	psi	Radius (m)	l/m	m3/hr	Radius (m)	l/m	m3/hr	Radius (m)	l/m	m3/hr
550	80	26.5	193.0	11.6	29.3	231.3	13.9	30.5	28.1	16.8
690	100	27.4	216.1	13.0	30.5	278.2	16.7	32.9	311.2	18.7

69X-0X-XXX									
Arc		Valve Type	Nozzle	Pressure Regulation* X					
69X		0X	XX						
1-90°	A-150º	1-Normally Open Hydraulic	90	8-550kPa (80 psi)					
2-180º	B-165º	2-Check-O-Matic	91	1-690kPa (100 psi)					
4-Full Circle (60º/120º)	C-195º	6-Electric	92						
8-Full Circle, 2-Speed (180º/180º)	D-210º								



Company policy is one of constant improvement and therefore changes in specifications may be made without notice and without incurring liability.