

## **Tech Spec**

# **Quick-Coupling Valves**

Convenient water access in potable and non-potable systems

#### **Features**

- Industrial-strength brass quick-coupling valves for convenient water access in potable and non-potable systems.
- Rugged, red brass construction for long life and reliable performance.
- Reliable leak proof operation with strong corrosion-resistant stainless steel spring.
- Optional locking cover on models 33-DLRC, 44-LRC, 5-LRC, 33-DNP, 44-NP, and 5-NP (use \* 2049 key to unlock). Metal cover on model 7 only
- One-piece body design (models 3-RC, 5-RC and 7)
- Two-piece body design for easy servicing (models 33-DLRC, 33-DRC, 44-LRC, 44-RC, 33-DNP, and 44-NP)
- Thermoplastic rubber cover for durability
- 33-DNP, 44-NP, and 5-NP covers marked with "Do Not Drink!" warnings in English and Spanish
- Three-year trade warranty

#### **Specifications**

- Pressure: 5 to 125 psi (0.35 to 8.63 bar)
- Flow: 10 to 125 gpm (2.27 to 28.38 m<sup>3</sup>/h; 37.8 to 473 l/m)
- 33-DNP, 44-NP and 5-NP flow: 10 to 70 gpm (2.27 to 15.89 m<sup>3</sup>/h; 37.8 to 265 l/m)

#### **Models**

- 3-RC: 3/4" (20/27) Rubber Cover, 1-Piece Body
- 33-DRC: 3/4" (20/ 27) Double Track Key Lug, Rubber Cover, 2-Piece Body
- 33-DLRC: 3/4" (20/27) Double Track Key Lug, Locking Rubber Cover, 2-Piece Body
- 44-RC: 1" (26/34) Rubber Cover, 2-Piece Body
- 44-LRC: 1" (26/34) Locking Rubber Cover, 2-Piece Body
- 5-RC: 1" (26/34) Rubber Cover, 1-Piece Body
- 5-LRC: 1" (26/34) Locking Rubber Cover, 1-Piece Body
- 7: 11/2" (40/49) Metal Cover, 1-Piece Body
- 5-RC-BSP: 1" (26/34) Rubber Cover, 1-Piece Body, BSP threaded





- 5-LRC-BSP: 1" (26/34) Locking Rubber Cover, 1-Piece Body, BSP threaded
- 33-DNP: 3/4" (20/27) Non-potable, Purple Locking Rubber Cover, 2-Piece Body
- 44-NP: 1" (26/34) Non-potable, Purple Locking Rubber Cover, 2-Piece Body
- 5-NP: 1" (26/34) Non-potable, Purple Locking Rubber Cover, 1-Piece Body
  Note: For non-US applications, it is necessary to specify NPT or BSP thread type

#### **Dimensions (height)**

- 3-RC: 4<sup>1</sup>⁄<sub>4</sub>" (10.8 cm)
- 33-DRC: 43/8" (11.1 cm)
- 33-DLRC: 4<sup>5</sup>/<sub>8</sub>" (11.7 cm)
- 44-RC: 6" (15.2 cm)
- 44-LRC: 6" (15.2 cm)
- 5-RC: 5<sup>1</sup>/<sub>2</sub>" (14.0 cm)
- 5-LRC: 5<sup>1</sup>/2" (14.0 cm)

• 7: 5¾" (14.6 cm)

3-RC, 5-RC,

5-LRC

• 33-DNP: 43/8" (11.1 cm)

Quick-Coupling

Valve Cutaway

33-DRC, 33-DLRC,

44-RC, 44-LRC

- 44-NP: 6" (15.2 cm)
- 5-NP: 5<sup>1</sup>/2" (14.0 cm)

## **How To Specify**

33 -	OLRC	
Model	Cover	Thread
33	RC	Blank: NPT
44	DRC	BSP: 5-RC, 5-IRC only
5	DLRC	
7	LRC	
	DNP	
	NP	

**Note:** This specifies a 33-DLRC valve: 3/4" (20/27) quick coupling type; optional locking cover.



#### Specifications

**33-DNP, 44-NP -** Two Piece Quick Coupling Valve (Non-Potable)

The quick coupling valve shall be a two piece type capable of having a discharge rate of

\_\_\_\_units with a pressure loss not to exceed \_\_\_\_units.

The valve shall be constructed of red brass and shall have a purple, thermoplastic, locking rubber cover with molded-in warnings of "DO NOT DRINK" in English and Spanish, for use on systems using non-potable water.

The valve shall be opened and closed by a brass key of the same manufacturer having a \_\_\_\_" (MNPT) and \_\_\_\_" (FNPT) outlet. The valve throat shall have a key-way with detent positions for regulating water flow.

QUICK COUPLING VALVES - 3-RC, 5-RC, 5-LRC, 7 - One Piece Quick Coupling Valve

The quick coupling valve shall be a one-piece type capable of having a discharge rate of \_\_\_\_\_ units with a pressure loss not to exceed \_\_\_\_\_ units.

The valve body shall be constructed of red brass. The cover shall be a durable, protective self-closing rubber cover. When so specified, the cover shall be a locking rubber cover (LRC).

The valve shall be opened and closed by a brass key of the same manufacturer having a \_\_\_\_" (MNPT) and \_\_\_\_" (FNPT) outlet. The valve throat shall have a key-way with detent positions for regulating water flow.

#### \* Cover Key - Model 2049

- Locks and unlocks the optional locking cover (LRC) on quick coupling valves.
- Operates the valve marker compression lock.

#### **33-DRC, 33-DLRC, 44-RC, 44-LRC**- Two Piece Quick Coupling Valve

The quick coupling valve shall be a two piece type capable of having a discharge rate of \_\_\_\_\_units with a pressure loss not to exceed \_\_\_\_\_units.

The valve body shall be constructed of red brass. The cover shall be a durable, protective self-closing rubber cover. When so specified, the cover shall be a locking rubber cover (LRC).

The valve shall be opened and closed by a brass key of the same manufacturer having a \_\_\_\_" (MNPT) and \_\_\_\_" (FNPT) outlet. The valve throat shall have a key-way with detent positions for regulating water flow.

Quick Coupling Valve Keys						
TOP PIPE THREADS						
VALVE	KEY		MALE	FEMALE		
3-RC	33DK	3⁄4"	19 mm	1⁄2"	13 mm	
33-DRC	33DK	3⁄4"	19 mm	1⁄2"	13 mm	
33-NP	33DK	3⁄4"	19 mm	1⁄2"	13 mm	
44-NP	44K	1"	25 mm	3⁄4"	19 mm	
44-RC	44K	1"	25 mm	3⁄4"	19 mm	
5-RC	55K1	1"	25 mm	—	_	
5-NP	55K1	1"	25 mm	—	_	
7	7K	1½"	38 mm	—	_	



Quick	Quick-Coupling Valves Pressure Loss (psi)						
Flow	3-RC	33-DRC 33-DLRC 33-DNP	44-RC 44-LRC 44-NP	5-RC 5-LRC 5-NP	7		
gpm	3⁄4"	3/4"	1"	1"	1½"		
10	1.8	2	-	-	-		
15	4.7	4.3	2.2	-	-		
20	7.2	7.6	4.4	-	-		
30	-	-	11.5	4.1	-		
40	-	-	-	7.3	-		
50	-	-	-	11	1.7		
60	-	-	-	15.7	2.5		
70	-	-	-	21.5	3.6		
80	-	-	-	-	4.9		
100	-	-	-	-	8.4		
125	-	-	-	-	14		

Quick	-Cou	pling Va	alves Pre	ssure Loss (b	ar) M	ETRIC
Flow		3-RC	33-DRC 33-DLRC 33-DNP	44-RC 44-LRC 44-NP	5-RC 5-LRC 5-NP	7
m³∕h	l/m	1.9 cm	1.9 cm	2.5 cm	2.5 cm	3.8 cm
2.3	38	0.12	0.12	-	-	-
4	67	0.41	0.42	0.23	-	-
5	83	0.57	0.62	0.40	-	-
6	100	-	-	0.62	-	-
7	117	-	-	0.83	0.30	-
8	133	-	-	-	0.40	-
9	150	-	-	-	0.50	-
10	167	-	-	-	0.61	-
12	200	-	-	-	0.85	0.13
14	233	-	-	-	1.15	0.18
16	267	-	-	-	1.50	0.25
22	367	-	-	-	-	0.54
28	473	-	-	-	-	0.97

\*Loss values are with flow control fully open.

Rain Bird recommends flow rates in the supply line not to exceed 7.5 ft/sec (2,3 m/s) in order to reduce the effects of water hammer.
For flows below 5 gpm (1 m3/h; 32 l/s) Rain Bird recommends use of upstream filtration to prevent debris from collecting below the diaphragm.
For flows below 10 gpm (2 m3/h; 63 l/s) Rain Bird recommends that the flow control stem be turned down two full turns from the fully open position.
PRS-B module is recommended for use only at flow rates in areas below solid line.

## **Rain Bird Corporation**

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