

# ACCESSORIES

## RL20 AND RL20SH BSPP BALL VALVES

### RL20 RL20SH BSPP BALL VALVES



RL20SH shown above

#### RECOMMENDED FOR:

**RYCO RL20** and **RL20SH** Ball Valves are used to open or close flow. The Valve is delivered in the open position, with the handle aligned with the longitudinal axis of the body, permitting flow through the valve body. The Valve is closed, and flow is stopped when the handle is turned 90° clockwise from the open position (when viewed from above).

**NOTE:** Alloy handle of **RL20** has potential to spark if struck by steel and **RL20** is not suitable for use in underground coal mines. Use **RL20SH** instead.

#### FEATURES:

- Flow can be in either direction (two way).
- Eight sizes; from -0404 (1/4 inch) to -3232 (2 inch).
- Working pressures from 350 to 500 bar (5100 to 7250 psi), depending on size.
- Also suitable for suction and vacuum service.
- Special ball seal design ensures seal at both low and high pressure.
- Handle can be reoriented if required.
- RL20, and RL20SH-0404 to -0808 have two mounting holes in body, to allow Ball Valve to be bolted in place.

#### TECHNICAL DATA

##### PORTS:

BSPP Female.

##### BODY:

###### RL20 from -0404 to -1616 sizes:

Carbon Steel, zinc plated and passivated (CrVI free).

###### RL20SH from -0404 to -0808 sizes:

Carbon Steel, zinc plated and passivated (CrVI free).

###### RL20SH -1212 and -1616 sizes:

Carbon Steel, black finish.

###### RL20SH from -2020 to -3232 sizes:

Forged Steel, black finish.

##### BALL:

Nickel plated steel.

##### STEM:

Zinc plated steel.

##### HANDLE:

RL20 have alloy handle. RL20SH have steel handle, or alloy complying with underground coal mining specifications. Contact RYCO for more information.

##### BALL SEALING:

Polyamide.

##### STEM SEALING:

Nitrile (Buna N).

##### MAXIMUM WORKING PRESSURE:

See table on opposite page.

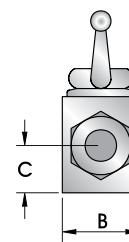
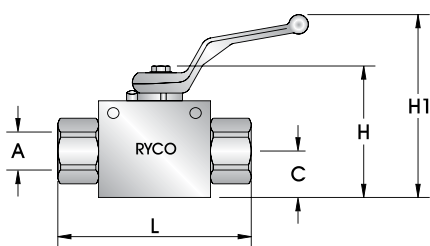
##### OPERATING TEMPERATURE:

From -10°C to +100°C (-14°C to +212°F).

##### FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

## PART NUMBERS AND SPECIFICATIONS



PART NO	PORT BSPP	MIN. BORE	MAXIMUM WORKING PRESSURE	
			bar	psi
	<b>A inch</b>	<b>mm</b>		
<b>RL20-0404</b>	1/4	6	500	7250
<b>RL20-0606</b>	3/8	10	500	7250
<b>RL20-0808</b>	1/2	13	500	7250
<b>RL20-1212</b>	3/4	20	400	5800
<b>RL20-1616</b>	1	24	350	5100
<b>RL20SH-0404</b>	1/4	6	500	7250
<b>RL20SH-0606</b>	3/8	10	500	7250
<b>RL20SH-0808</b>	1/2	13	500	7250
<b>RL20SH-1212</b>	3/4	20	400	5800
<b>RL20SH-1616</b>	1	24	350	5100
<b>RL20SH-2020</b>	1.1/4	32	350	5100
<b>RL20SH-2424</b>	1.1/2	38	350	5100
<b>RL20SH-3232</b>	2	48	350	5100

PART NO	DIMENSIONS					
	LENGTH OVERALL	WIDTH	HEIGHT TO LEVER	HEIGHT TO STEM	HEIGHT PORT	WEIGHT
	<b>L mm</b>	<b>B mm</b>	<b>H1 mm</b>	<b>H mm</b>	<b>C mm</b>	<b>kg</b>
<b>RL20-0404</b>	72	26	64	47	13	0,40
<b>RL20-0606</b>	75	32	69	52	16	0,55
<b>RL20-0808</b>	85	35	76	56	18	0,65
<b>RL20-1212</b>	93	50	96	75	23	1,45
<b>RL20-1616</b>	114	57	104	85	28	2,05
<b>RL20SH-0404</b>	72	26	64	47	13	0,45
<b>RL20SH-0606</b>	75	32	69	52	16	0,60
<b>RL20SH-0808</b>	85	35	76	56	18	0,70
<b>RL20SH-1212</b>	96	49	125	79	24,5	1,60
<b>RL20SH-1616</b>	113	60	130	83	26,5	2,20
<b>RL20SH-2020</b>	110	80	160	104	38	3,55
<b>RL20SH-2424</b>	120	84	185	120	42	4,10
<b>RL20SH-3232</b>	140	105	200	143	50	5,60

# ACCESSORIES

## RCV BSPP CHECK VALVES

### RCV BSPP CHECK VALVES



#### RECOMMENDED FOR:

RYCO RCV Check Valves permit free flow of fluid in one direction, and prevent flow in the reverse direction.

Not recommended for use checking high velocity reverse flow resulting in shock conditions.

#### FEATURES:

- Steel poppet valve with metal-to-metal seat.
- Seven sizes from -0404 (1/4 inch) to -2424 (1.1/2 inch).
- 200 bar/2900 psi working pressure for all sizes.
- Two Cracking pressures available:  
0,35 bar/5 psi standard.  
Optional 3,5 bar/50 psi Springs available.
- Flow direction shown by grooves and "IN" stamped at inlet end.

#### TECHNICAL DATA

##### PORTS:

BSPP Female.

##### BODY:

Carbon Steel, zinc plated and passivated.

##### POPPET SEAL:

Metal-to-metal seat.

##### SPRING:

Spring steel, chrome finish.

##### MAXIMUM WORKING PRESSURE:

200 bar/2900 psi in all sizes.

##### OPERATING TEMPERATURE:

From -10°C to +80°C (+14°F to +176°F).

##### FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

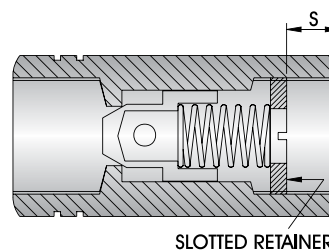
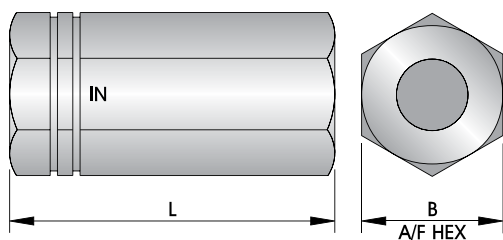
##### CRACKING PRESSURE:

0,35 bar/5 psi standard.

3,5 bar/50 psi optional. Order **RCVSH** Heavy Spring.

**To Fit RCVSH Heavy Spring:** Unscrew slotted retainer, remove standard spring and replace with heavy spring. Replace retainer, and screw in until it is distance "S" from end (see table on page opposite). Lock retainer in place with thread locking fluid.

## PART NUMBERS AND SPECIFICATIONS



PART NO	PORT BSPP	NOMINAL FLOW	MAXIMUM WORKING PRESSURE	
			bar	psi
	<b>inch</b>	<b>LPM</b>		
<b>RCV-0404</b>	1/4	20	200	2900
<b>RCV-0606</b>	3/8	30	200	2900
<b>RCV-0808</b>	1/2	50	200	2900
<b>RCV-1212</b>	3/4	80	200	2900
<b>RCV-1616</b>	1	150	200	2900
<b>RCV-2020</b>	1.1/4	200	200	2900
<b>RCV-2424</b>	1.1/2	270	200	2900

PART NO	DIMENSIONS			OPTIONAL SPRING 3,5 BAR	
	LENGTH OVERALL	A/F HEX	WEIGHT	PART NO	S FOR RCVSH
	L mm	B mm	kg		mm
<b>RCV-0404</b>	65	19	0,11	<b>RCVSH-04</b>	14,5
<b>RCV-0606</b>	75	25	0,25	<b>RCVSH-06</b>	15,2
<b>RCV-0808</b>	85	30	0,36	<b>RCVSH-08</b>	19,5
<b>RCV-1212</b>	100	38	0,68	<b>RCVSH-12</b>	21,5
<b>RCV-1616</b>	115	41	0,80	<b>RCVSH-16</b>	22,0
<b>RCV-2020</b>	130	55	1,65	<b>RCVSH-20</b>	27,0
<b>RCV-2424</b>	132	65	2,55	<b>RCVSH-24</b>	27,0