

# spirax sarco®

## M40 ISO Ball Valve 1" to 6"

### Description

M40 ISO is a reduced bore ball valve, with a single piece body design, having ISO mounting as standard.

M40 ISO can be used with the majority of industrial fluids.

### Available types

<b>M40V2 ISO</b>	Zinc plated carbon steel body, PTFE seats.
<b>M40V3 ISO</b>	Stainless steel body, PTFE seats.
<b>M40C2 ISO</b>	Zinc plated carbon steel body, R-PTFE seats.
<b>M40C3 ISO</b>	Stainless steel body, R-PTFE seats.

### Options

- Self-venting ball.

### Sizes and pipe connections

1", 1-1/2", 2", 2-1/2", 3", 4" and 6". Standard flange ANSI 150.

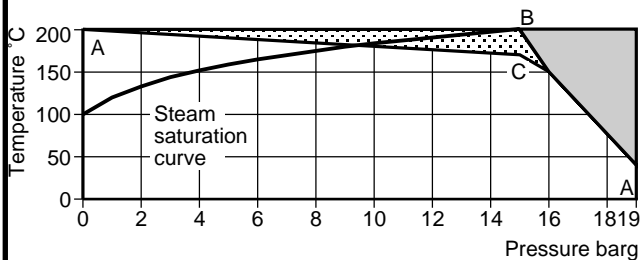
### Technical data

Flow characteristic	Modified linear
Port	Reduced bore
Leakage	Test procedure to ISO 5208 (rate A)
Antistatic (optional)	Complies with ISO 7121 and BS 5351

### Limiting conditions

Body design conditions	ANSI 150	
Maximum operating temperature	M40V 392°F@0 psig (200°C @ 0 barg)	
	M40C 392°F@215 psig (200°C @ 15 barg)	
Maximum operating pressure	275 psig@113°F (19 barg @ 45°C)	
Maximum saturation steam press	M40V 150 psig (10 barg)	
	M40C 220 psig (15 barg)	
Designed for a maximum cold hydraulic test pressure of	415 psig (28.5 barg)	

### Operating range

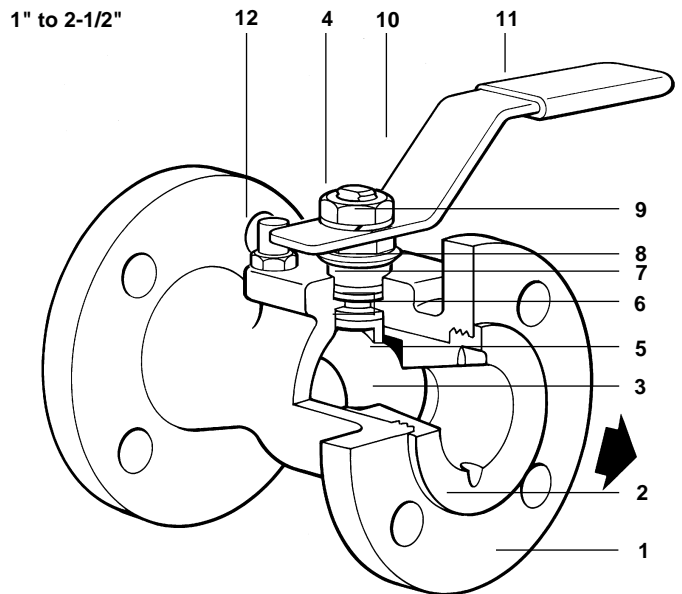


■ The products must not be used in this region.

▨ M40V must not be used in this region.

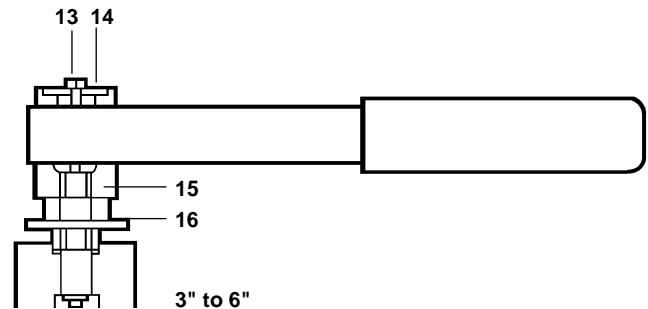
A-C-A M40V using virgin PTFE seats

A-B-A M40C using reinforced PTFE seats



### Materials

No.	Part	Material
1	Body	Zinc plated carbon steel ASTM A 216 WCB Stainless steel ASTM A 351 CF8M
2	Insert	SAE 1040 / AISI 316
3	Ball	AISI 316
4	Stem	AISI 316
5	Seat	M40V VirginPTFE M40C Reinforced PTFE
6	Stem seal	Reinforced PTFE
7	Separator	SAE 1010 / 1045
8	Belleville washer	AISI 301
9	Stem nut	Zinc plated carbon steel SAE 12L14
10	Lever	Zinc plated carbon steel SAE 1010
11	Grip	Vinyl
12	Stop screw	Zinc plated carbon steel
13	Fixing screw	Zinc plated carbon steel
14	Support washer	Zinc plated carbon steel SAE 1045
15	Stem adaptor	Zinc plated SG iron
16	Stop plate	Zinc plated carbon steel SAE 1010



Local regulations may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.  
In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-P133-09 US 05.01

**Dimensions/weights** (approximate) in mm and kg

Size	A2	B3	C3	E	D1	F	Weight
DN25	127	180	100	20	108	49	2.3
DN40	165	180	115	31	127	54	4.5
DN50	178	220	129	36	152	61	6.8
DN65	190	220	142	50	178	63	9.7
DN80	203	275	144	57	190	73	14.0
DN100	229	415	172	75	229	82	21.0
DN150	267	700	220	100	279	118	38.0

**Cv values**

1"	1-1/2"	2"	2-1/2"	3"	4"	6"
24	94	109	230	290	679	854

**Operating torques** (ft / lb)

1"	1-1/2"	2"	2-1/2"	3"	4"	6"
6	19	26	37	45	74	206

The torque figures shown are for a valve at maximum operating pressure that is operated frequently. Valves that are subject to long static periods may require at least 75% greater break out torque.

**Maintenance**

Full Installation and Maintenance Instructions are provided with the product.

**How to order**

Specify:	Size	Model	Seats	Body material	V = Virgin PTFE C = Reinforced PTFE
					2 = Carbon steel 3 = Stainless steel

**Example:** Spirax Sarco 2" flanged ANSI 150 M40V2 ISO ball valve.

**Spare parts**

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

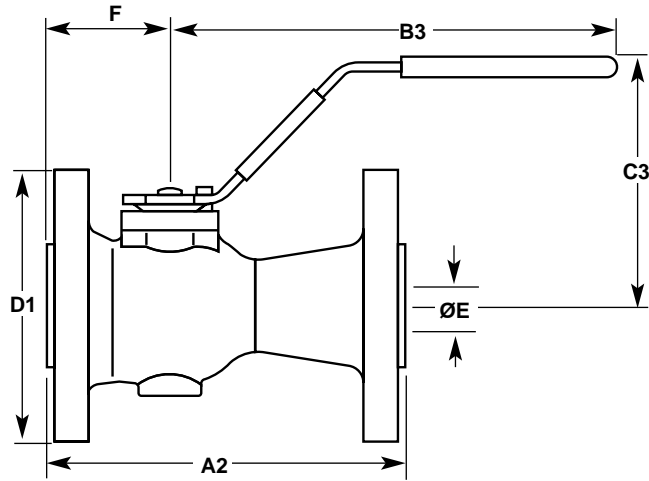
**Available spare**

Seat and stem seal set 5, 6

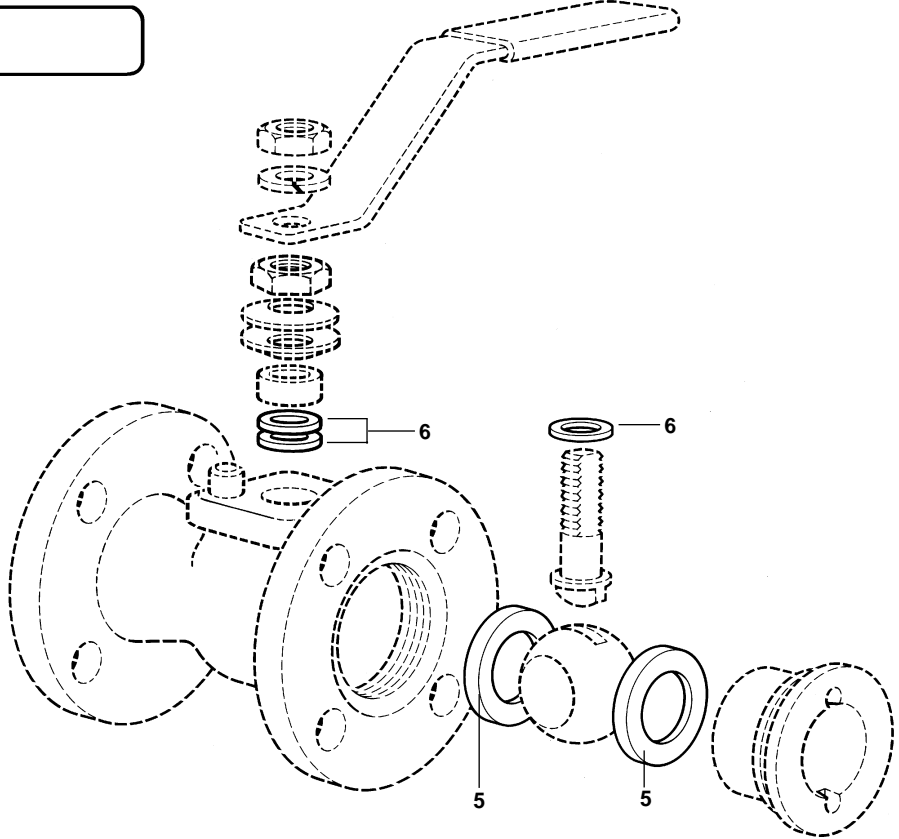
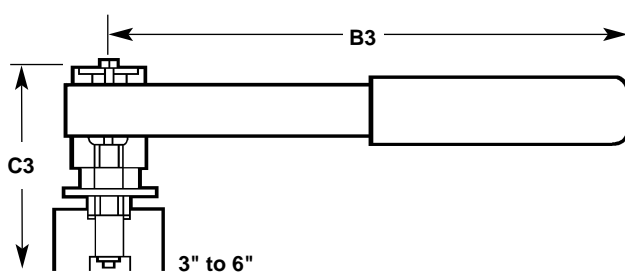
**How to order spares**

Always order spares by using the description given in the column headed 'Available spare' stating the size and type of ball valve.

**Example:** 1-Seat and stem seal set for 2" M40V2 ISO ball valve.



1" to 2-1/2"



© Spirax Sarco, Inc. 2001

TI-P133-09 US 05.0