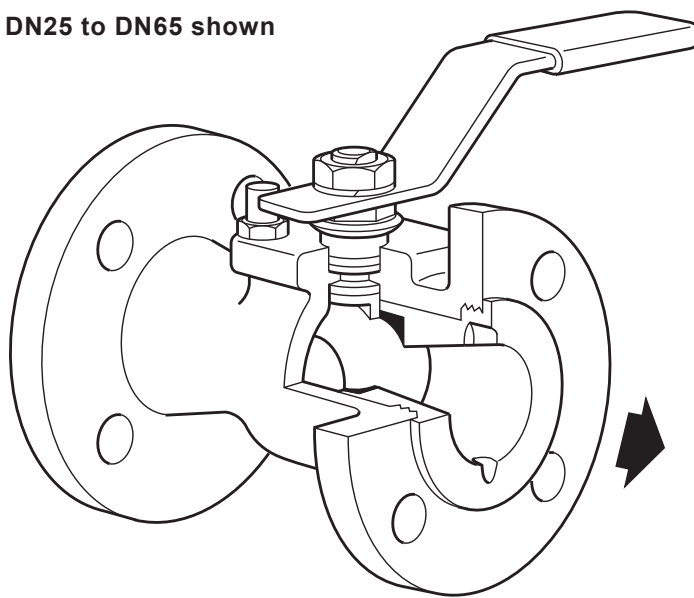




M40 ISO Reduced Bore Ball Valve DN25 to DN150 ANSI 150 and ANSI 300

DN25 to DN65 shown



Description

The M40 ISO is a reduced bore ball valve, with a single piece body, having ISO mounting as standard. It is an isolating valve, which can be used with the majority of industrial fluids, not a control valve.

Available types


M40V2 ISO Zinc plated carbon steel body, PTFE seats.

M40V3 ISO Stainless steel body, PTFE seats.

M40S2 ISO Zinc plated carbon steel body, PDR 0.8 seats.

M40S3 ISO Stainless steel body, PDR 0.8 seats.

Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED) and carries the  mark when so required.

Certification

This product is available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

DN25, DN40, DN50, DN65, DN80, DN100 and DN150.

Standard flanges ANSI Class 150 and ANSI Class 300.

Technical data

Flow characteristic Modified linear

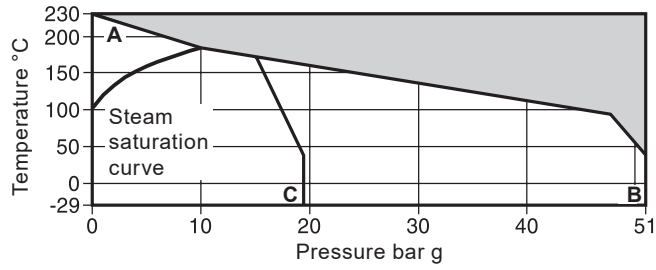
Port Reduced bore

Leakage test procedure to ISO 5208 (Rate A)/EN 12266-1 (Rate A)

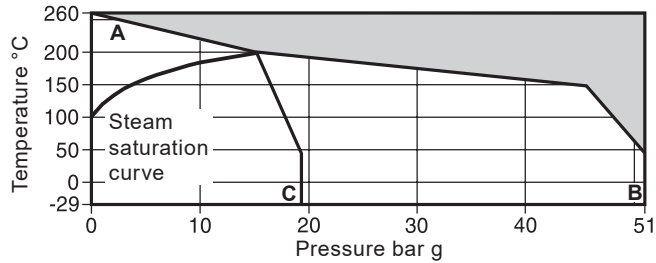
Antistatic device (optional) complies with ISO 7121 and BS 5351


Pressure/temperature limits

Version 'V' Virgin PTFE



Version 'S' Reinforced PTFE



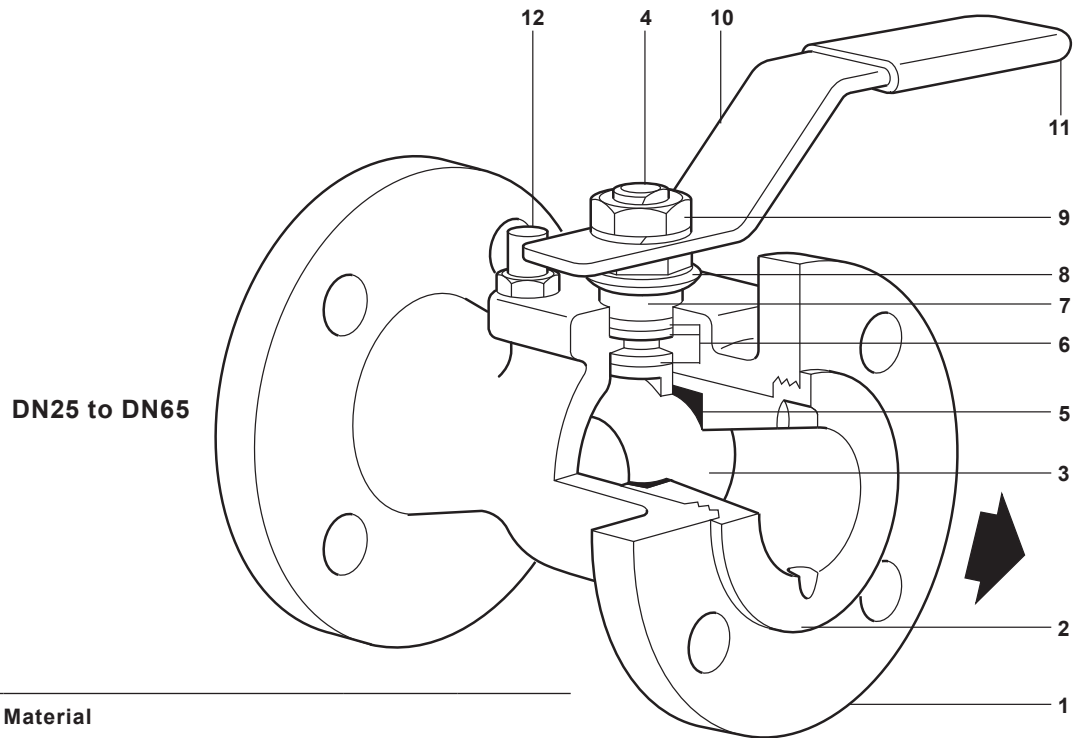
 The product **must not** be used in this region.

A - B Flanged ANSI 300.

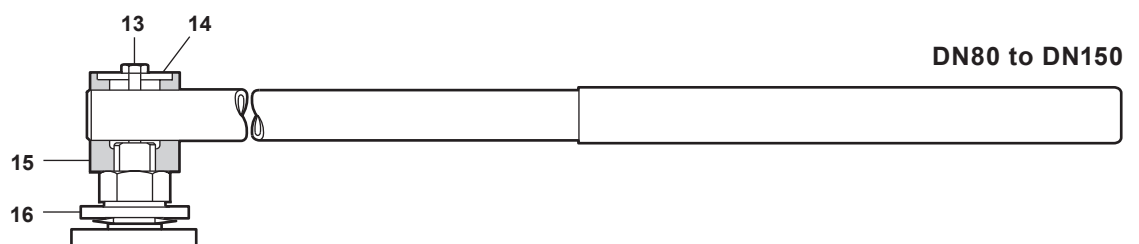
A - C Flanged ANSI 150.

Body design conditions		ANSI 150 and ANSI 300	
PMA	Maximum operating pressure	ANSI 150	19 bar g @ 38 °C
		ANSI 300	51 bar g @ 38 °C
TMA	Maximum allowable temperature	M40V	230 °C @ 0 bar g
		M40S	260 °C @ 0 bar g
Minimum allowable temperature		-29 °C	
PMO	Maximum operating pressure for saturated steam service	M40V	10.0 bar g
		M40S	17.5 bar g
TMO	Maximum operating temperature	M40V	230 °C @ 0 bar g
		M40S	260 °C @ 0 bar g
Minimum operating temperature		-29 °C	
Note: For lower operating temperatures consult Spirax Sarco			
ΔPMX	Maximum differential pressure is limited to the PMO		
Designed for a maximum cold hydraulic test pressure of:	ANSI 150	28.5 bar g	
	ANSI 300	76.5 bar g	

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	Stainless steel AISI 316
4	Stem	Stainless steel AISI 316
5	Seat	M40V Virgin PTFE
		M40S PTFE reinforced (carbon and graphite) PDR 0.8
6	Stem seal	Reinforced PTFE
7	Separator	SAE 1010/1045
8	Belleville washer	Stainless steel 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
17	Name-plate *	Stainless steel AISI 430 * (Not shown)



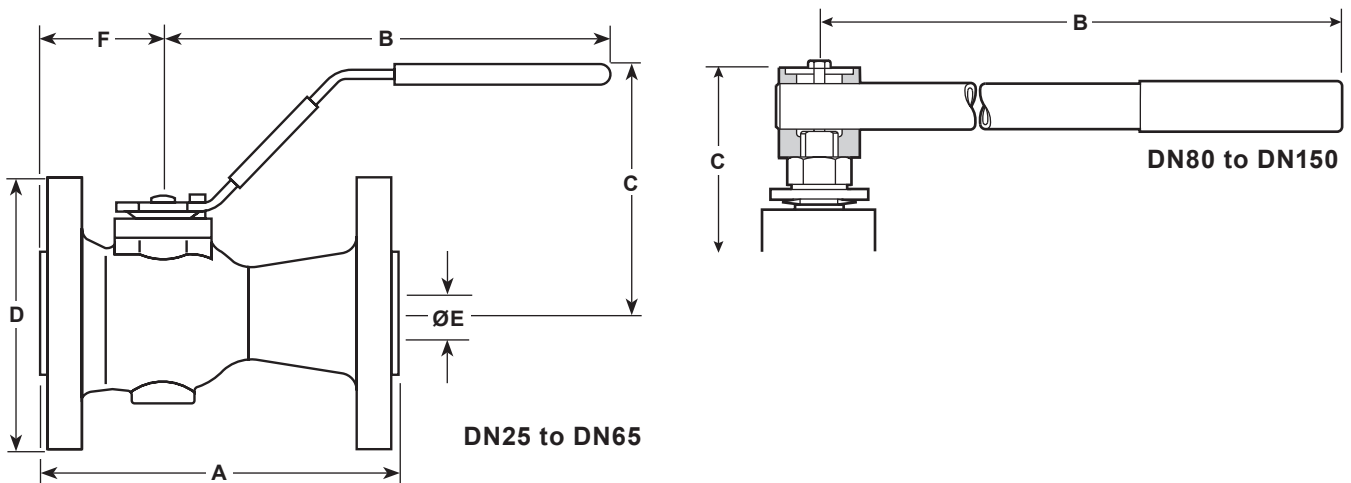
Dimensions/weights (approximate) in mm and kg

Flanged ANSI 150

Size	A	B	C	D	E	F	Weight
DN25	127	180	100	108	20	49	2.30
DN40	165	180	115	127	31	54	4.50
DN50	178	220	129	152	36	61	6.80
DN65	190	220	142	178	50	63	9.70
DN80	203	275	144	190	57	73	14.00
DN100	229	415	172	229	75	82	21.00
DN150	267	700	220	279	100	118	38.00

Flanged ANSI 300

Size	A	B	C	D	E	F	Weight
DN25	165	180	100	124	20	59	4.10
DN40	190	180	115	156	31	64	7.65
DN50	216	220	129	165	36	69	9.60
DN65	241	220	142	191	50	75	13.50
DN80	283	275	162	210	57	87	20.40
DN100	305	415	178	254	75	97	32.40
DN150	403	700	220	318	100	118	62.00



K_v values

DN	25	40	50	65	80	100	150	
K_v	21	81	94	197	248	581	730	For conversion: C_v (UK) = $K_v \times 0.963$ C_v (US) = $K_v \times 1.156$

Operating torques (Nm)

DN	25	40	50	65	80	100	150	
N m	12	18	23	40	50	65	200	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 greater break-out torque.

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions supplied with the product.

How to order

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

Example: 1 off Spirax Sarco DN50 M40V2 ISO ball valve having flanged ANSI 150 connections.

Optional extras:

- Self-venting ball.
- Extended stems 50 mm (2") and 100 mm (4") to allow full insulation.

Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

Available spares

Seat and stem seal set

5, 6

How to order spares

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

Example: 1 - Seat and stem seal set for a Spirax Sarco DN50 M40V2 ISO ball valve.

