

A640

Ball Valve



APPLICATION

Ball valves A640, whether manually or automatically operated, are used mainly with viscous fluids containing solid particles, and, generally, in applications requiring an unobstructed flow.

Suitable for the food-processing, beverage, wine-making, oil-making, cosmetic and chemical industries.

The ball valve can be operated automatically with an actuator or manually with a handle.

The handle blocks the valve in the “open” or “closed” position. The actuator transforms the axial movement of the piston into a 90° rotary movement which it transmits to the ball.

DESIGN AND FEATURES

Compact and robust design.

Easily interchangeable manual handles and pneumatic or electrical actuators.

Low pressure losses.

Body halves interchangeable with any connection type.

TECHNICAL SPECIFICATIONS

Materials

Ball	1.4404 (AISI 316L)
Body halves	1.4307 (AISI 304L) or 1.4404 (AISI 316L)
Other St. St. parts	1.4307 (AISI 304L)
Ball guide	PTFE
Gasket	EPDM, NBR or FPM

Surface finish

Internal	Ra ≤ 0,8 µm
External	Mechanized

Available sizes

DIN EN 10357 series A (previously DIN 11850 series 2)	DN 25 - DN 100
ASTM A269/270 (corresponds to OD pipe)	OD 1” - OD 4”

Connections

Weld
Male
Nuts

Operating limits

Working temperature	-10°C to 120°C	14°F to 248°F
Temperature SIP	140°C (max. 30 min.)	284°F
Minimum working pressure	Vacuum	Vacuum
Maximum working pressure	1000 kPa (10 bar) DN 25 - DN 65 800 kPa (8 bar) DN 80 - DN 100	145 PSI OD 1" - OD 2½" 116 PSI OD 3" - OD 4"

DN	25	40	50	65	80	100
Dry torque ¹ [Nm]	10	12	18	20	25	35

DN	1"	1½"	2"	2½"	3"	4"
Dry torque ¹ [Nm]	10	12	18	20	25	35

1) For rotating the valve ball in a dry seal ring

DRIVE TECHNICAL SPECIFICATIONS**Handles**

Two positoin handle 1.4307 (AISI 304L) + plastic PF31

Actuator

Housing 1.4307 (AISI 304L)
Support 1.4301 (AISI 304)
Air pressure 600 - 800 kPa (6 - 8 bar)
Air connection G 1/8 (Ø6 pipe)

Air consumption

Actuator	Air to spring	Air to air
A940 - T1	1,3	3,4
A940 - T2	2,1	4,9
A940 - T3	6,3	15,5

Consumo aire comprimido a Prel = 600 kPa (6 bar) (litros N/ciclo)

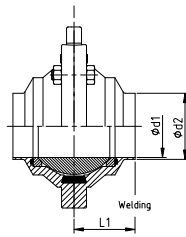
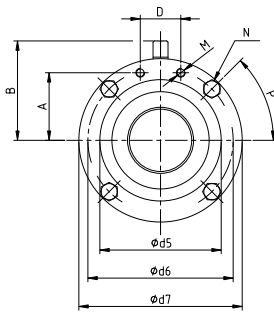
Standard assembly

Valve	A940 - T1	A940 - T2	A940 - T3
A640	DN 25	DN 40 to 65	DN 80 to 100
	OD 1"	OD 1½" to 2½"	OD 3" to 4"

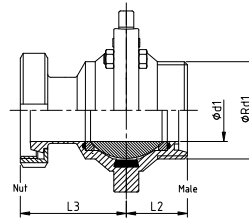
OPTIONS

Different handle types.
Single- or double-acting pneumatic actuator or electrical actuator.
Electropneumatic positioner.
Inductive position sensors.
C-TOP S control head.
Cleaning and drainage ports.
Third hole.
ATEX version available.

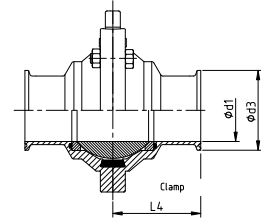
DIMENSIONS



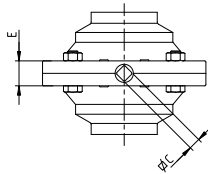
DIN 10357 Series A



DIN 11851



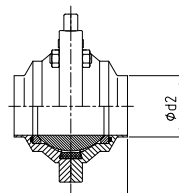
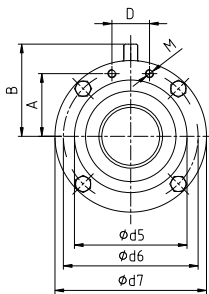
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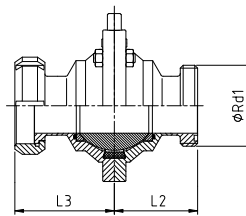
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DN	Valve										Connection						Weight [kg] ¹	
	ød5	ød6	ød7	A	B	C	D	E	M	ød1	ød2	øRd1	ød3	L1	L2	L3		L4
25	61	79,5	94	35,2	60,7	9,4	32,5	20	M5	26	29	Rd 52 x 1/6"	50,5	36	36	66	57,5	1,3
40	80	99	114	45,5	71	9,4	32,5	20	M5	38	41	Rd 65 x 1/6"	50,5	42	42	76	63,5	2,1
50	97,5	116,5	131	54,2	79,7	9,4	32,5	20	M5	50	53	Rd 78 x 1/6"	64	49	49	85	70,5	3,1
65	124,5	143,5	158	67,7	93,2	9,4	32,5	20	M5	66	70	Rd 95 x 1/6"	91	60	60	101	88	5,4
80	147	166	181	78,7	104,2	12	50	30	M6	81	85	Rd 110 x 1/4"	106	70	70	120	98	8,5
100	175	194	209	92,8	118,3	12	50	30	M6	100	104	Rd 130 x 1/4"	119	82	82	137	110	13,3

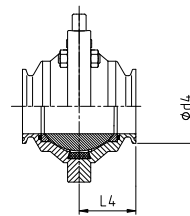
1) Weld connection



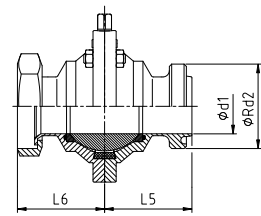
ASTM A269/270



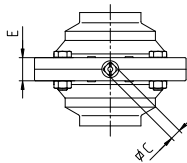
SMS



ASME OD



RJT



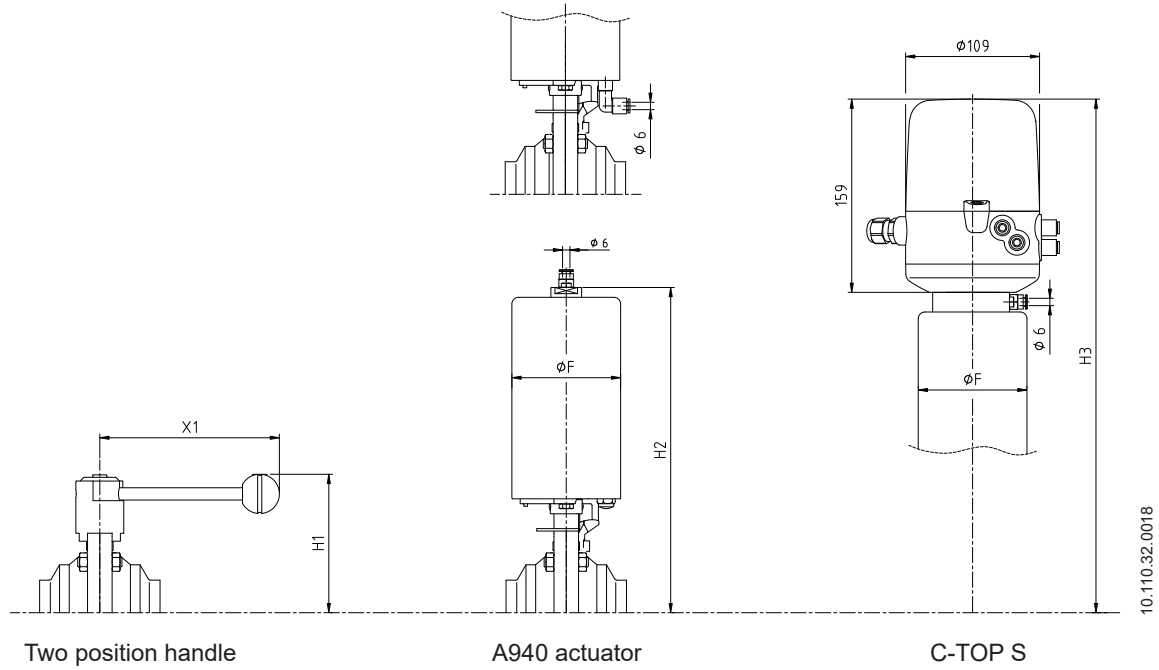
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OD	Valve										Connection						Weight [kg] ¹	
	ød5	ød6	ød7	A	B	C	D	E	M	ød1	ød2	ød4	øRd2	L1	L4	L5		L6
1"	61	79,5	94	35,2	60,7	9,4	32,5	20	M5	22,1	25,4	50,5	Rd 45,72 x 1/8"	36	36	62,5	61,5	1,4
1½"	80	99	114	45,5	71	9,4	32,5	20	M5	34,8	38,1	50,5	Rd 58,42 x 1/8"	42	42	68,5	69	2,2
2"	97,5	116,5	131	54,2	79,7	9,4	32,5	20	M5	47,5	50,8	64	Rd 72,72 x 1/6"	49	49	75,5	75,4	3,3
2½"	124,5	143,5	158	67,7	93,2	9,4	32,5	20	M5	60,2	63,5	77,5	Rd 85,42 x 1/6"	60	60	86,5	88	5,8
3"	147	166	181	78,7	104,2	12	50	30	M6	72,9	76,2	90,9	Rd 98,12 x 1/6"	70	70	96,5	98,5	9,4
4"	175	194	209	92,8	118,3	12	50	30	M6	97,4	101,6	119	Rd 123,52 x 1/6"	82	82	109	112	13,9

1) Weld connection

SMS	Connection				Weight [kg] ¹⁾
	Ød3	ØRd1	L2	L3	
25	22,5	Rd 40 x 1/6"	55	63,5	1,5
38	35,5	Rd 60 x 1/6"	65	79	2,6
51	48,5	Rd 70 x 1/6"	72	86	3,7
63,5	60,5	Rd 85 x 1/6"	87	105	6,5
76	72,9	Rd 98 x 1/6"	97	115	10,3
101,6	97,6	Rd 132 x 1/6"	117	144	16,5
104	100	Rd 125 x 1/4"	112	132	14,4

1) Weld connection



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DN / OD	Drive							
	H1	X1	T1 (ØF = 76)		T2 (ØF = 88,5)		T3 (ØF = 135)	
			H2	H3	H2	H3	H2	H3
25 / 1"	94	146	224	391	-	-	-	-
40 / 1½"	104	146	-	-	256	423	-	-
50 / 2"	113	146	-	-	265	432	-	-
65 / 2½"	126	175	-	-	278	445	-	-
80 / 3"	142	242	-	-	-	-	345	512
100 / 4"	158	242	-	-	-	-	359	526