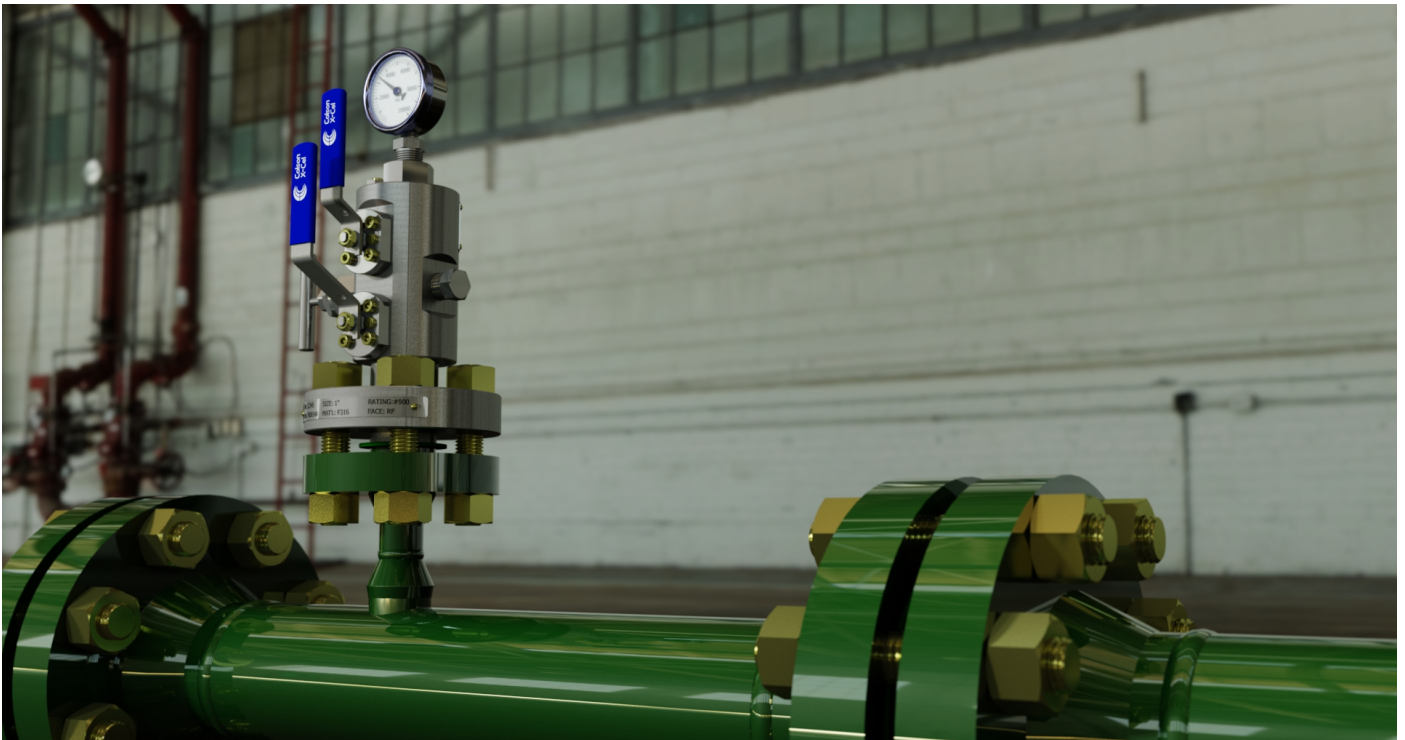


# CX14 Series Primary Isolation Valve



Developed specifically for the high performance, low emission requirements of SHELL Specification 77/300 / ISO 15848 Pt.1 The CX range of valves are the ideal solution for the demanding applications within the Oil & Gas Industries of today.

The CX 14 Primary Isolation valve is a one piece, integrally forged double block and bleed valve, comprising of two Isolation Ball valves and one Vent Isolation valve. Supplied in Flange x Thread configuration the CX14 is ideal for the primary isolation of pressure take-offs and can be mounted directly to vessels or pipework in any orientation required.

#### TECHNICAL DATA

**Materials:**

Carbon Steel, 316 Stainless Steel, Duplex and all other exotic materials used in the Oil & Gas Industry

**Inlet Connection:**

ASME B16.5 flanged 1/2" to 2"

**Outlet:**

1/2" NPT Female (As Std)

**Vent:**

1/2" NPT Female (As Std)

**Pressure Classes:**

ASME 150 - 2500

**Operating Temperature Range:**

-50°C to 200°C (-58°F to 392°F)

**Bore Sizes:**

10mm & 13mm

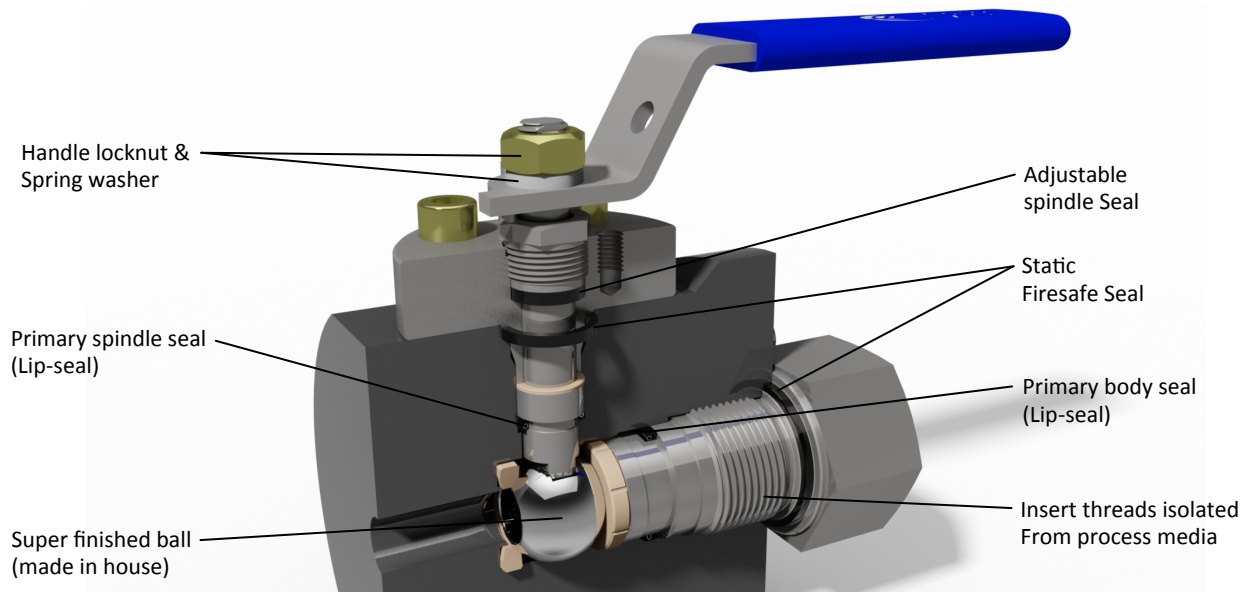
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# CX14 Series Primary Isolation Valve

## CX 10mm & 13mm Quarter Turn Ball Valve

The 10mm & 13mm bore versions of the CX series valves are supplied with a straight, through fully roddable bore. A low operating torque is achieved using a super finished (made in-house) ball and fully supported, cantilever PEEK seats. Insert threads are isolated from the process media by Lip-seals, which provide sealing capability across a wide range of pressures, temperatures and process media.



## Ball Valve Components—Body & Trim Materials

Item	Description	L / QN	S	D
1	Body	A350 LF2 / A105N	A182 F316	A182 F51
2	Handle	UNS S31600	UNS S31600	UNS S31600
3	Stop pin	UNS S31600	UNS S31600	UNS S31600
4	Stem Seal	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited
5	Bonnet Seal	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited
6	Insert Seal	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited	Graphite - Corrosion Inhibited
7	Spindle Seal	PTFE - Elgiloy	PTFE - Elgiloy	PTFE - Elgiloy
8	Insert Seal	PTFE - Elgiloy	PTFE - Elgiloy	PTFE - Elgiloy
9	Seat	PEEK - 450G	PEEK - 450G	PEEK - 450G
10	Ball	A479 - UNS S31600	A479 - UNS S31600	A479 - UNS S31803
11	Spindle	A479 - UNS S31600	A479 - UNS S31600	A479 - UNS S31803
12	Insert	A479 - UNS S31600	A479 - UNS S31600	A479 - UNS S31803
13	Bonnet	A479 - UNS S31600	A479 - UNS S31600	A479 - UNS S31803
14	Thrust Washer	PEEK - 450G	PEEK - 450G	PEEK - 450G

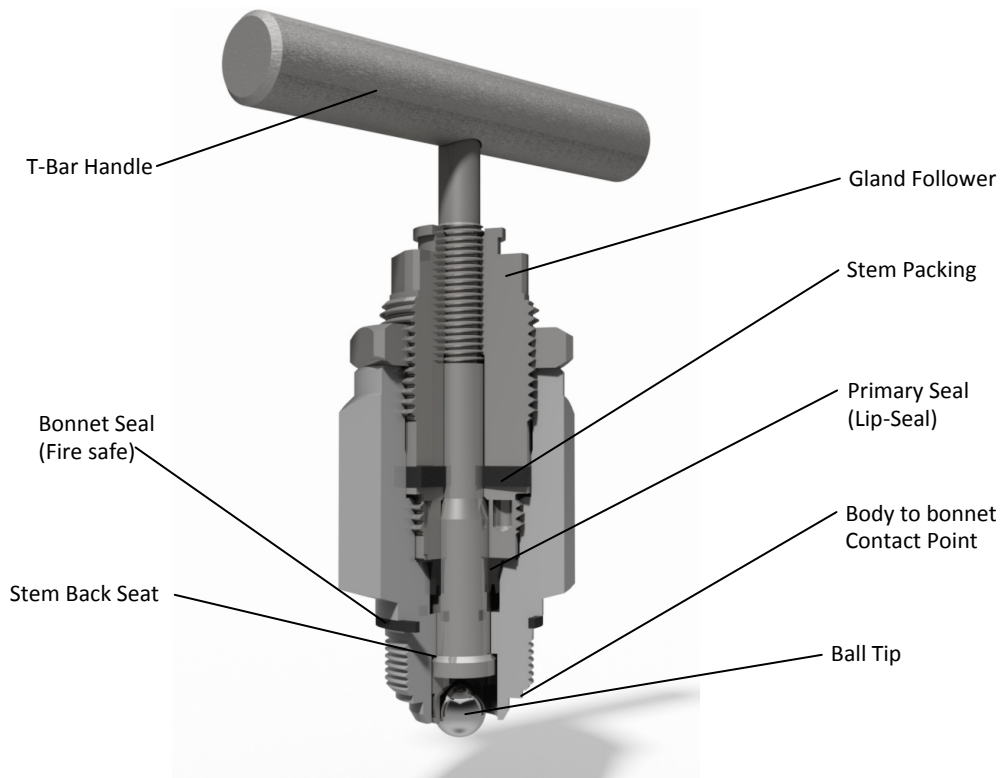
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# CX14 Series Primary Isolation Valve

## CX Low Emission Needle Valve

The low emission needle valve supplied as standard across the CX range has a working bore size of 6mm, and has a freely rotating ball tip which allows a repeatable bubble tight shut off during operation. The rolled spindle threads are non-wetted, isolated from the process media via the primary (Lip-seal) and secondary (Adjustable, Graphite) seal.



### Needle Valve Components—Trim Codes & Materials

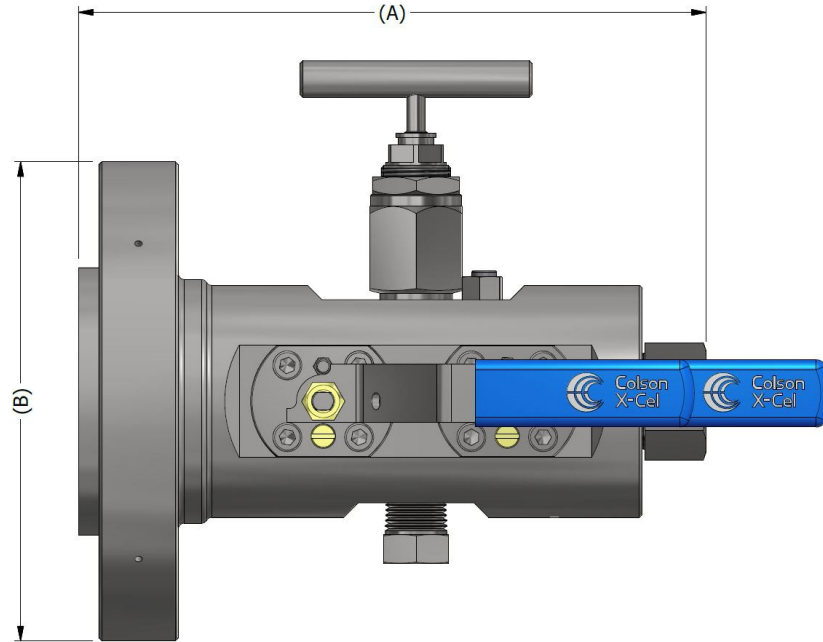
Item	Description	S	D
1	Handle	UNS S31600	UNS S31600
2	Half Nut	UNS S31600	UNS S31600
3	Gland Adjuster	A479 - UNS S31600	A479 - UNS S31600
4	Lip-seal Gland Ring	A479 - UNS S31600	A479 - UNS S31600
5	Packing Gland Ring	A479 - UNS S31600	A479 - UNS S31600
6	Lip-Seal	PTFE - Elgiloy	PTFE - Elgiloy
7	Seal	Graphite Corrosion Inhibited	Graphite Corrosion Inhibited
8	Stem Assembly	UNS S31600 / Stellite	UNS S31803 / Stellite
9	Bonnet Housing	A479 - UNS S31600	A479 - UNS S31803
10	Seal	Graphite Corrosion Inhibited	Graphite Corrosion Inhibited

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# CX14 Series Primary Isolation Valve

CX14 Weights and Dimensions



## Note

- Metric Calculations:  
mm = in x 25.4  
lb = kg x 0.4536

## CX14 Series Flanged x Threaded

Size In	Rating lb	Dimensions, inches [mm]				Weight			
		A - RF		A - RJ		ØB	lb [Kg]		
1/2	150	7.9	[201]	-	-	3.5	[90]	15.2	[6.9]
1/2	300	8.0	[204]	8.3	[210]	3.75	[95]	16.3	[7.4]
1/2	600	8.1	[206]	8.3	[211]	3.75	[95]	16.5	[7.5]
1/2	900/1500	8.4	[213]	8.7	[220]	4.75	[120]	19.2	[8.7]
1/2	2500	8.7	[221]	8.9	[227]	5.25	[135]	22.5	[10.2]
3/4	150	8.0	[202]	-	-	3.88	[100]	15.9	[7.2]
3/4	300	8.1	[206]	8.3	[211]	4.62	[115]	17.9	[8.1]
3/4	600	8.1	[207]	8.4	[213]	4.62	[115]	18.1	[8.2]
3/4	900/1500	8.5	[216]	8.8	[223]	5.12	[130]	20.9	[9.5]
3/4	2500	8.8	[223]	9.0	[229]	5.50	[140]	24.0	[10.9]
1	150	7.8	[199]	8.0	[204]	4.25	[110]	16.5	[7.5]
1	300	8.0	[202]	8.1	[207]	4.88	[125]	17.9	[8.1]
1	600	8.2	[209]	8.2	[209]	4.88	[125]	18.1	[8.2]
1	900/1500	8.7	[220]	8.7	[220]	5.88	[150]	22.5	[10.2]
1	2500	8.9	[226]	8.9	[226]	6.25	[205]	26.0	[11.8]
1 1/2	150	8.0	[202]	8.1	[207]	5.00	[125]	18.7	[8.5]
1 1/2	300	8.1	[205]	8.3	[210]	6.12	[155]	21.6	[9.8]
1 1/2	600	8.4	[213]	9.1	[231]	6.12	[155]	22.5	[10.2]
1 1/2	900/1500	8.8	[223]	8.8	[223]	7.00	[180]	28.4	[12.9]
1 1/2	2500	9.3	[236]	9.3	[237]	8.00	[205]	39.9	[18.1]
2	150	8.0	[204]	8.2	[209]	6.00	[150]	21.4	[9.7]
2	300	8.1	[207]	8.4	[213]	6.50	[165]	23.6	[10.7]
2	600	8.5	[216]	8.5	[217]	6.50	[165]	25.1	[11.4]
2	900/1500	9.1	[230]	9.1	[230]	8.50	[215]	39.2	[17.8]
2	2500	9.5	[242]	9.6	[243]	9.25	[235]	51.6	[23.4]

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# CX14 Series Primary Isolation Valve

## CX14 CODING AND ORDERING INFORMATION

CX14 / 3 / 10 / 25 CA / 15 NF / 15 NF / S / S / SBH / BCR / LK / BP

### Design & Configuration

CX14 - Flanged x Thread - DB&B - Ball / Needle / Ball

### NV Type (Vent Only)

- 1 - OS & Y
- 2 - Bolted Bonnet
- 3 - Screwed Bonnet

### Bore (mm)

10 - 10mm (3/8")      13 - 12.7mm (1/2")

### Inlet

15 - 1/2"	40 - 1-1/2"	A - 150lb	E - 900lb	A - RF
20 - 3/4"	50 - 2"	B - 300lb	F - 1500lb	C - RJ
25 - 1"	75 - 3"	C - 600lb	G - 2500lb	Z - FF

### Outlet

15 - 1/2"	40 - 1-1/2"	NF - NPT Female	PM - BSPP Male
20 - 3/4"	50 - 2"	NM - NPT Male	TF - BSPT Female
25 - 1"		PF - BSPP Female	

### Vent

15 - 1/2"	40 - 1-1/2"	NF - NPT Female	PM - BSPP Male
20 - 3/4"	50 - 2"	NM - NPT Male	TF - BSPT Female
25 - 1"		PF - BSPP Female	

### Body Material

A - NES 833	J - F44 / UNS S31254	Q - A105	U - F55 / UNS S32760
D - F51 / UNS S31803	L - A350 LF2	QN - A105N	V - Inconel 625
H - Hastelloy C276	M - Monel 400	S - A182 F316 / F316L	Y - F53 / UNS S32750
I - Incoloy 825	N - Inconel 600	T - Titanium	X - Alloy 20

### Trim Material

A - NES 833	J - UNS S31254	T - Titanium	X - Alloy 20
D - UNS S31803	M - Monel 400	U - UNS S31803	N50 - Nitronic 50
H - Hastelloy C276	N - Inconel 600	V - Inconel 625	
I - Incoloy 825	S - A479 316 / 316L	Y - UNS S32750	

### Options

SBH - Slotted bolt holes (77/170)	LHW - Handwheel lock (NV only)	VP - Plugged Vent
BCR - Upstream cavity relief (77/170)	LK - Locking handle (BV only)	BP - Plugged Outlet
AT - Anti-Tamper (NV only)	Ca6 - 6mm Corrosion allowance	BPC - Chained blank plug

### Sampling & Injection

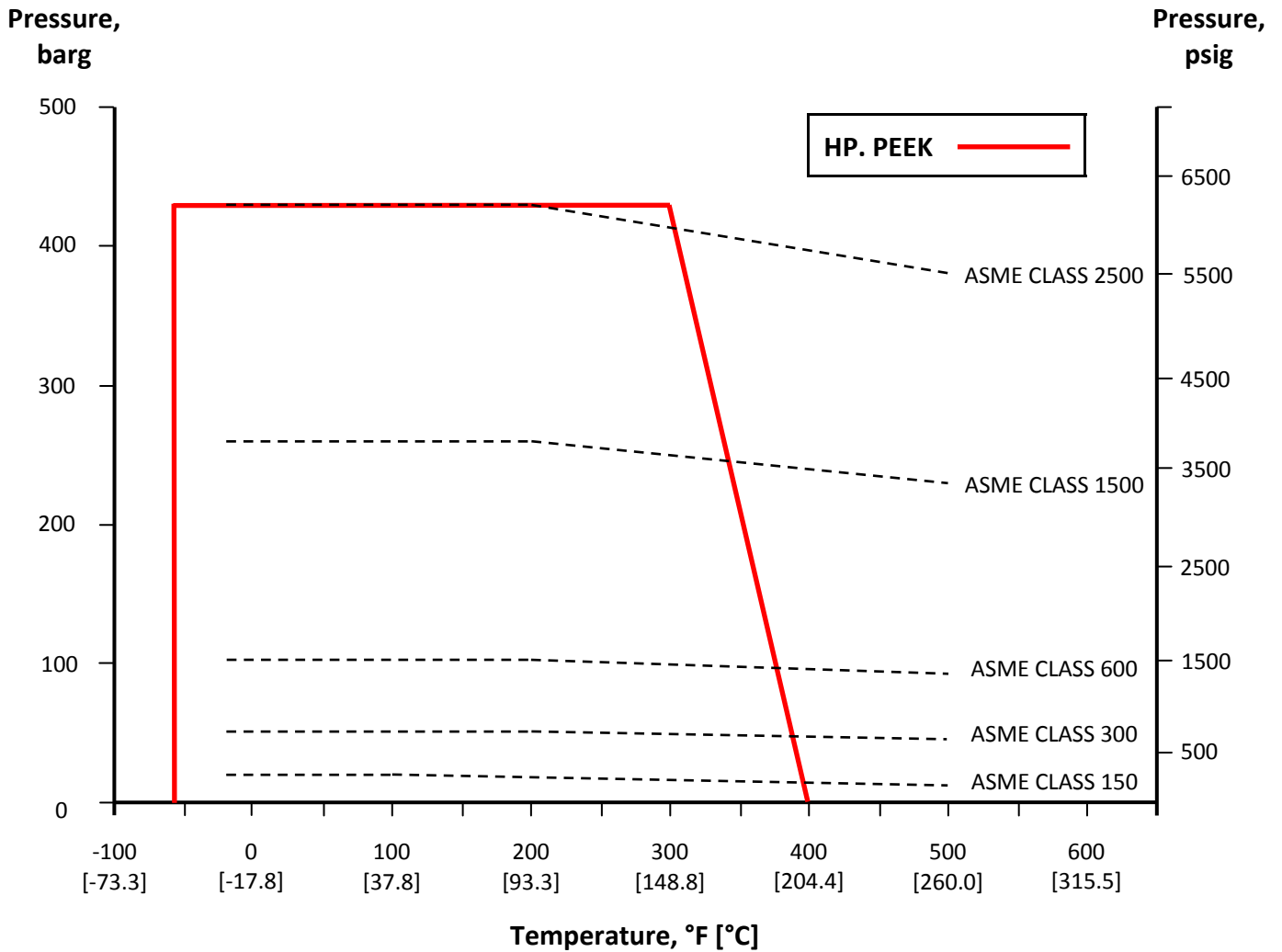
DOR - Double Oring (NPT Vnt)	Q1XXX - Quill Straight cut
TS - Stellite tip (NV only)	Q2XXX - Quill Scarf cut (45°)
EL50 - Extended levers (50mm)	Q3XXX - Quill c/w nozzle (Nozzle to be stated)
NORSOK - Material to Norsok MDS	CV - Check Valve

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# CX14 Series Primary Isolation Valve

## CX14 Pressure and Temperature Rating



Note:  
 ASME Class ratings based on ASME B16.5 Table A-2 - Rated Ceiling Pressure (psi)  
 For material specific pressure rating - see relevant tables in ASME B16.5

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