

Type OSE Slam-Shut Valve

CHARACTERISTICS

Operating Pressure:	Pu	100 bar max
Set Pressure Range:	Wdu-Wdo	0.010 to 100 bar
Sizes inlet/outlet :	DN	25, 50, 80, 100, 150, 200 and 250
Temperature Range: (depending on bolts material)	θ	- 20 to + 60 °C - 30 to + 71 °C
Accuracy:	AG	$\pm 2,5\%$ $\pm 5\%$ (piston)
Response Time:	ta	< 1 second

Flow Coefficient (ΔP max)

DN	Cg	C1	ΔP max (bar)	
			Valve open	Valve closed
25	505	35	> 25	100
50	2110	35	> 25	
80	4670	35	25	
100	7860	32	10	
150	14850	33	6	
200	28830	34.6	8.2	
250	42180	35.5	4.6	
Internal Bypass (DN 25 to 150)	25	35	100	
External Bypass (DN 200 to 250)	133	32.8		

Flow Coefficient (Cg)

Basis

Natural Gas
Density: 0.74 kg/m³
Temperature: 0 °C

Example

Pu : 50 bar
dP : 0.2 bar
Q : 10000 (m³/h(n))

Input

Pu : Inlet pressure (bar)
dP : Pressure drop (bar)
Q : Maximum flow (m³/h(n))

Result

Cg : 3300
DN : 80

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Set Pressure Ranges

Recommended Outlet Pressure Pd		BMS		SPRING	MAX ONLY			MIN INTERVAL Set Point Pd ⁽³⁾ (bar)
		Size ⁽¹⁾	PMS Box (bar)	Wire Diameter (mm)	Wdso Ranges (bar)			
					Max. low pt possible	Recommended Range ⁽²⁾		
					Max. low pt	Max. high pt		
0.011	0.027	162	5	2.0	0.010	0.015	0.035	0.004
0.027	0.062			2.5	0.025	0.040	0.080	0.005
0.062	0.108			3.0	0.045	0.080	0.140	0.010
0.108	0.185			3.5	0.070	0.070	0.240	0.014
0.185	0.292			4.0	0.115	0.140	0.380	0.018
0.292	0.577			5.0	0.140	0.300	0.750	0.050
0.577	1.083			5.5	0.250	0.600	1.3	0.080
1.083	1.917			6.5	0.450	1.2	2.3	0.170
1.917	4.250	071	16	4.5	1.0	2.0	5.1	0.350
4.250	9.167			5.5	2.1	4.0	11.0	0.700
9.167	13.333			6.5	4.0	8.0	16.0	1.6
13.333	18.333	027	100	5.5	16.0	16.0	22.0	3.0
18.333	33.333			6.5	22.0	22.0	40.0	6.5
33.333	45.833	017	100	5.5	40.0	40.0	55.0	7.0
45.833	83.333			6.5	55.0	55.0	100.0	12.0
13.333	18.333	236	35	5.5	5.5	11.0	22.0	1.0
18.333	29.167			6.5	8.3	16.0	35.0	2.5
29.167	60.000	315	72	5.0	17.5	35.0	72.0	5.0

This table is based on a setpoint equal to 1.3 Pd for a Pd up to 1 bar, and 1.2 Pd for a Pd from 1 bar.

(1) Boxes 162 and 071 are equipped with a diaphragm, 027 and 017 are equipped with a piston, and 236 and 315 are equipped with bellows.

(2) The recommended set point range permits a guarantee of the accuracy (AG).

(3) Respecting the minimum interval between the Wdso setting and the Pd permits a guarantee of resistance to shocks.
For max and min, or min only, contact FRANCEL.

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Type OSE Slam-Shut Valve

MATERIALS

Valve Assembly

Body	A 352 LCC Steel
Connecting Part	A 350 LF2 Zinc Plated Steel
Plug	Stainless Steel
Seat	Stainless Steel
Bypass	Stainless Steel
Spring	Zinc Plated Steel
O-rings	Nitrile
Stem	Stainless Steel
Packing Gland	Bronze

Type OS2 Release Relay

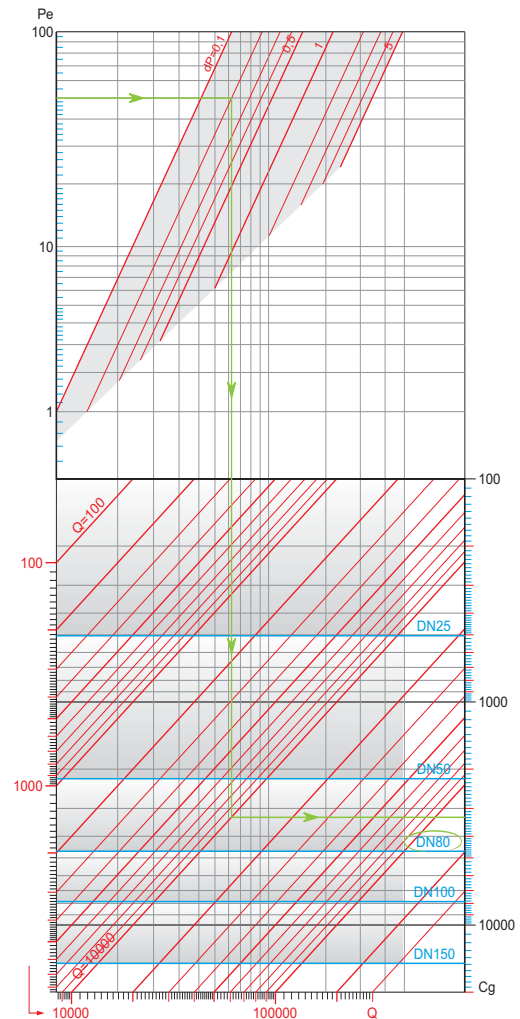
Mechanism Box

Box	Chromium Plated Aluminium
Cover	Chromium Plated Aluminium
Mechanism	Stainless Steel / Brass
Flat rings	Propylene
Truarc rings	Nitrile

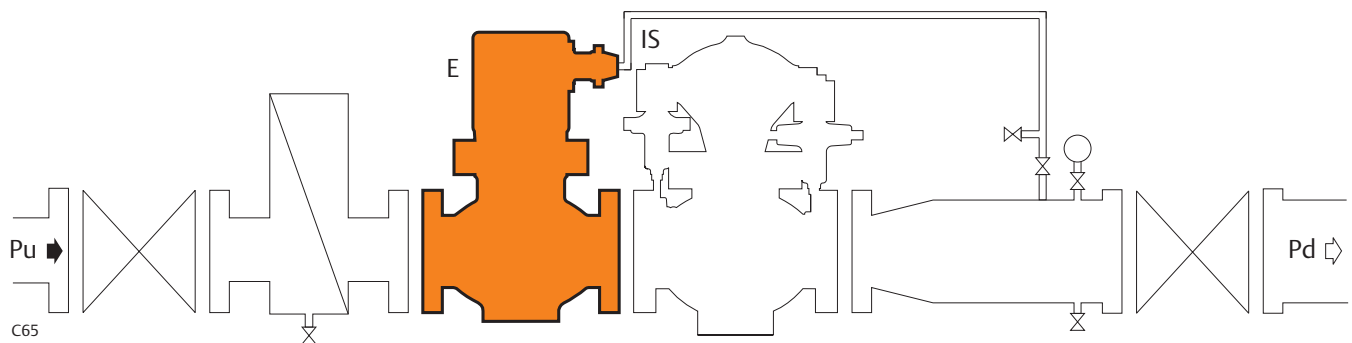
Manometric Box

Spring Case	Stainless Steel
Spring Box	Chromium Plated Aluminium
Diaphragm	Nitrile mesh
Piston	Stainless Steel
Bellows	Stainless Steel
Spring	Zinc Plated Steel
Adjustment screw	Zinc Plated Steel

SIZING



INSTALLATION



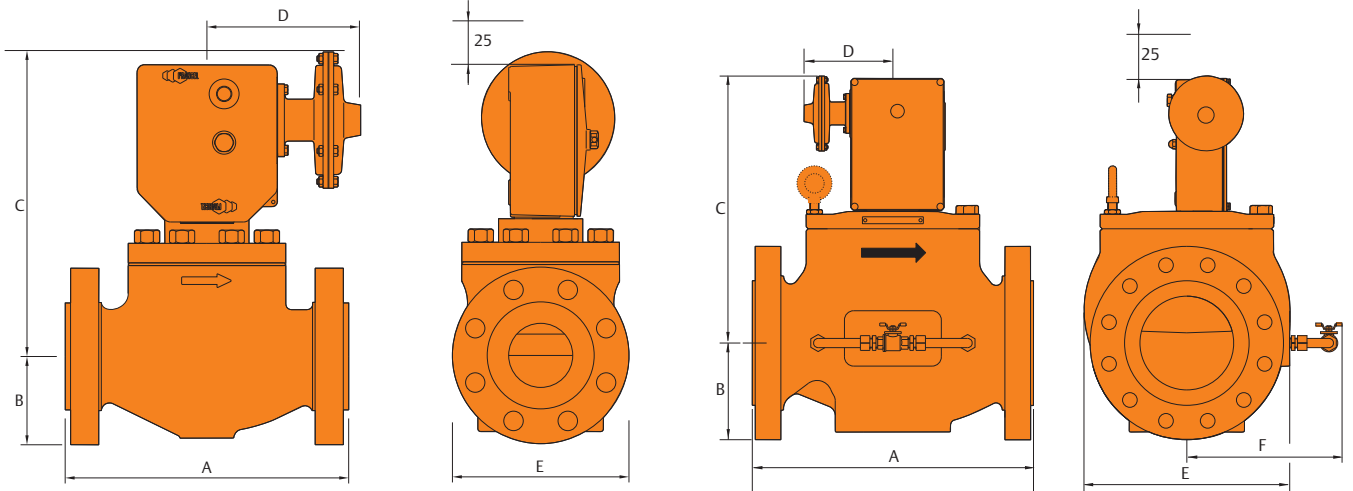
Install the slam-shut valve on horizontal pipeline.

The safety manometric box impulse should be connected before the outlet valve on the on the straight run of pipeline.

If the remote alert option is applicable it must be electrically connected

Type OSE Slam-Shut Valve

DIMENSIONS & WEIGHTS



Type OSE DN 25 through DN 150

Type OSE DN 200 and DN 250

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DN	ANSI	DIMENSIONS						WEIGHTS (kg)
		A	B	C Max	D	E	F	
25	150	185	54	334	220	116		14.0
	300	197	62			124		16.0
	600	210				17.0		
50	150	254	76	346		152		26.0
	300	267	83			165		29.0
	600	287				32.0		
80	150	298	95	380		190		43.0
	300	318	105			210		48.0
	600	337				55.0		
100	150	353	114	420		229		74.0
	300	368	127		154	82.0		
	600	394	137		273	98.0		
150	150	451	140	424	357	150.0		
	300	473	159			166.0		
	600	508	178			202.0		
200	150	543	171.5	579	446	336	294	
	300	568	190.5				321	
	600	610	209.5				356	
250	150	673	203	667	498	363	469	
	300	708	222				504	
	600	752	254				577	

Europe, Middle East, Africa and Asia Pacific Documents Only

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Industrial Regulators

Emerson Process Management Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872, USA
Tel: +1 800 558 5853
Outside U.S. +1 972 548 3574

Asia-Pacific
Shanghai 201206, China
Tel: +86 21 2892 9000

Europe
Bologna 40013, Italy
Tel: +39 051 419 0611

Middle East and Africa
Dubai, United Arab Emirates
Tel: +971 4811 8100

Natural Gas Technologies

Emerson Process Management Regulator Technologies, Inc.

USA - Headquarters
McKinney, Texas 75069-1872, USA
Tel: +1 800 558 5853
Outside U.S. +1 972 548 3574

Asia-Pacific
Singapore 128461, Singapore
Tel: +65 6777 8337

Europe
O.M.T. Tartarini s.r.l. Via P. Fabbri 1,
I-40013 Castel Maggiore (Bologna), Italy
Tel: +39 051 419 0611
Francel SAS, 3 ave Victor Hugo, CS 80125
Chartres 28008, France
Tel: +33 2 37 33 47 00

TESCOM

Emerson Process Management Tescom Corporation

USA - Headquarters
Elk River, Minnesota 55330-2445, USA
Tels: +1 763 241 3238
+1 800 447 1250

Asia-Pacific
Shanghai 201206, China
Tel: +86 21 2892 9499

Europe
Selmsdorf 23923, Germany
Tel: +49 38823 31 287

For further information visit www.Francel.com

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