

LSR Series Direct-Operated Regulators



Figure 1. LSR Series Direct-Operated Regulators

Features

- **Wide Pressure Range Capability with Single Regulator** – Up to 4.14 barg / 60 psig outlet pressure.
- **Suitable for Monitoring Applications** – Pair the LSR Series with pilot operated regulator in a monitor application for spring open and spring closed.
- **Excellent Shock Characteristics and Fast Speed of Response** – Due to two-way stabilizer vent valve, which vents the spring case more rapidly than conventional vents, lag in diaphragm and valve disk movement is minimized.
- **Suitable for Hydrogen Applications** – Contact your local sales channel or Emerson Impact Partner for more details on Hydrogen configurations.
- **Bubble-Tight Shutoff** – Single-port construction, large diaphragm area, light-rate springs along with ideal durometer disk material and seat design provide low lock-up pressures.
- **Change Elastomer Disk without Disassembling the Actuator** – Hex shaped stem allows for disk removal without holding the stem during maintenance. Eliminates the chance of damaging the diaphragms during maintenance.
- **No Seat-to-Seat Adjustment Required** – Balanced single-port design eliminates necessity for seat-to- seat adjustments to achieve bubble-tight shutoff.
- **Easy Access to Trim Parts** – Change the valve disk in 30 minutes or less. Valve seat, disk and cage easily removed with body remaining in line and without disassembly of actuator portion. Disk is accessible from bottom flange.
- **Reusable Pressure Seals** – O-rings used for pressure seals, unlike gaskets, are not ordinarily damaged by disassembling the regulator.
- **Resistance to Piping Stresses** – Steel constructions are available to help resist pipe stresses.

Outside North America Only

Specifications

The Specifications section lists the specifications for the LSR Series direct-operated regulators. Factory specification is stamped on the nameplate fastened on the regulator at the factory.

Actuator Sizes

475 mm / 18.7 in. Actuator: Low pressure construction for outlet pressure range of 17.2 to 138 mbarg / 0.25 to 2 psig. Maximum operating inlet pressure of 6.2 barg / 90 psig. Outlet pressure range of 138 to 340 mbarg / 2 to 5 psig has a maximum operating inlet up to 8.6 barg / 125 psig. The maximum emergency inlet pressure rating is 19.7 barg / 285 psig at 38°C / 100°F⁽¹⁾.

350 mm / 13.8 in. Actuator: Medium pressure construction for outlet pressure range of 0.3 to 0.69 barg / 4.35 to 10 psig. Maximum operating inlet pressure of 8.61 barg / 125 psig. Medium Pressure for outlet range of 0.69 to 1.5 barg / 10 to 21.75 psig has a maximum operating inlet up to 19.7 barg / 285 psig. The maximum emergency inlet pressure rating is 19.7 barg / 285 psig at 38°C / 100°F⁽¹⁾.

255 mm / 10.0 in. Actuator: High pressure construction for outlet pressure range of 1.38 to 4.14 barg / 20 to 60 psig. The maximum operating inlet pressure is 19.7 barg / 285 psig with a maximum emergency inlet pressure of 19.7 barg / 285 psig at 38°C / 100°F⁽¹⁾.

Outlet Pressure Ranges⁽¹⁾
See Table 2

Pressure Ratings⁽¹⁾
See Table 3

Maximum Outlet Pressure⁽¹⁾
See Table 3

Wide Open Flow Coefficients
See Table 4

Certifications
DVGW (EN334, EN14382)
Pressure Equipment Directive (PED)
Up to 25% Hydrogen Blend (Pending 100%)

Turndown Ratio:
1000:1

Pressure Registration
External; downstream control line is required

Temperature Capabilities⁽¹⁾⁽²⁾
-29 to 66°C / -20 to 150°F
-20 to 60°C / -4 to 140°F for PED
(DN 40 / 1.5 in. body size only)
-20 to 66°C / -4 to 150°F for PED
Lockup and Function Tested to -40°C / -40°F

Control Line Connection
Without Slam-Shut: 1/2 NPT (internal); connection will be positioned directly over body outlet (standard position) or 90 degrees right or left of standard position if specified.
With Slam-Shut: 1/2 NPT (internal) connection right or left directly over slam-shut. Can be selected or changed after shipment.
VSX8 Series Slam-Shut Controller:
1/4 NPT connection

Vent Connection
3/4 NPT (internal) vent assembly.

Approximate Weight
Body
1.5x1.5: 11.7 kg / 25.8 lbs
1.5x3: 14.5 kg / 31.9 lbs
2x2: 13.5 kg / 30.4 lbs
2x2 NPT: 10.9 kg / 24 lbs
2x4: 17.55 kg / 38.7 lbs
3x3: 48 kg / 105 lbs
3x6: 59 kg / 130 lbs
Slam-Shut Device: 7.45 kg / 16.4 lbs
475 mm / 18.7 in. Actuator:
39 kg / 86 lbs (Eye nuts included)
350 mm / 13.8 in. Actuator:
27.7 kg / 61.1 lbs (Eye nuts included)
255 mm / 10.0 in. Actuator:
20.35 kg / 44.9 lbs (Eye nuts included)

Construction Materials
Body: Gray iron (DN 50 / 2 in. body size only), Ductile iron and WCC Steel
Bonnet (top/bottom flanges): Carbon steel (LF2)
Cage: 1.4308 Stainless steel
Stem: S17400 H1075, SA479 S20910 (for LS1050 Series Hydrogen application only)
Orifice: 304 Stainless steel
Disk: Nitrile (NBR) Inside Steel Retainer
Actuator: S355ML Structural steel
Elastomers: Nitrile (NBR)
Diaphragm: Nylon-reinforced Nitrile (NBR)

1. The pressure/temperature limits in this Bulletin or any applicable standard limitation should not be exceeded.
2. Using optional restriction collar.

Table 1. Available Configurations

TYPE NUMBER						OPTION	
L	S						
						BODY SIZE	
	2					DN 50 x 50, 50 x 100 / 2 x 2, 2 x 4 in. or DN 40 x 40, 40 x 80 / 1.5 x 1.5, 1.5 x 3 in.	
	3					DN 80 x 80, 80 x 150 / 3 x 3, 3 x 6 in.	
						OUTLET PRESSURE CONSTRUCTION (FOR SIZE DN 50 / 2 IN.)	
	0					Low Pressure Applications (<i>Outlet Pressure: 17 to 340 mbar / 0.25 to 5 psig</i>)	
	2					Medium Pressure Applications (<i>Outlet Pressure: 0.1 to 1.53 bar / 1.5 to 22.4 psig</i>)	
	5					High Pressure Applications (<i>Outlet Pressure: 0.57 to 4.4 bar / 8.4 to 64 psig</i>)	
						OVERPRESSURE PROTECTION	
	0					Without Overpressure Protection Module	
	4					With Slam-shut Module ⁽¹⁾	
1. Reference Instruction Manual D103127X012 for VSX8 Series safety slam-shut module.							

Table 2. LSR Series Outlet Pressure Ranges, Control Springs⁽¹⁾

ACTUATOR DIAMETER SIZE mm / in.	TYPE	OUTLET PRESSURE RANGE		CONTROL SPRING			
		bar	psig	Part Number	Wire Diameter		Color
					mm	in.	
475 / 18.7	LS200 and LS204	0.017 to 0.022	0.25 to 0.32	ERAA07279A0	5.0	0.19	Light Blue
		0.02 to 0.05	0.30 to 0.70	ERAA07575A0	7.0	0.25	Yellow
		0.04 to 0.09	0.60 to 1.28	ERAA07577A0	7.0	0.25	Brown
		0.08 to 0.15	1.10 to 2.24	ERAA07585A0	8.0	0.31	Dark Grey
		0.14 to 0.35	2.00 to 5.00	ERAA07589A0	10.5	0.41	Pink
350 / 13.8	LS220 and LS224	0.03 to 0.09	0.49 to 1.34	ERAA07575A0	7.0	0.25	Yellow
		0.06 to 0.17	0.84 to 2.44	ERAA07577A0	7.0	0.25	Brown
		0.14 to 0.3	2 to 4.35	ERAA07586A0	8.0	0.31	Light Green
	LS220 and LS224 LS320 and LS324	0.3 to 0.35	4.35 to 5.1	ERAA07586A0	8.0	0.31	Light Green
		0.3 to 0.73	4.35 to 10.6	ERAA07589A0	10.0	0.41	Pink
		0.33 to 1.08	4.8 to 15.7	ERAA07592A0	11.0	0.44	Dark Blue
		0.57 to 1.5	8.3 to 21.75	ERAA07283A0	13.0	0.5	Orange
255 / 10.0	LS250 and LS254 LS350 and LS354	1.38 to 2.09	20.0 to 30.3	ERAA07589A0	10.5	0.41	Pink
		1.38 to 3.09	20.0 to 44.8	ERAA07592A0	11.0	0.44	Dark Blue
		1.72 to 4.14	25.0 to 60	ERAA07283A0	13.0	0.50	Orange

1. DN 40 and 50 / 1.5 and 2 in. LS200 Series

Table 3. Maximum Inlet and Outlet Pressures

PRESSURE		475 MM / 18.7 IN. ACTUATOR		350 MM / 13.8 IN. ACTUATOR		255 MM / 10.0 IN. ACTUATOR	
		barg	psig	barg	psig	barg	psig
Maximum Operating Inlet Pressure	17 to 138 mbarg / 0.25 to 2 psig maximum outlet pressure	6.2	90	8.6	125	19.7	285
	138 to 345 mbarg / 2 to 5 psig maximum outlet pressure	8.6	125				
	<0.69 barg / 10 psig maximum outlet pressure	N/A	N/A				
	>0.69 barg / 10 psig maximum outlet pressure						
Maximum Emergency Inlet Pressure		19.7	285	19.7	285		
Maximum Operating Outlet Pressure ⁽¹⁾		0.34	5.0	1.5	22	4.1	60
Maximum Outlet Pressure Over Outlet Pressure		0.8	11.6	2.0	29	5.8	84
Maximum Emergency Outlet (Casing) Pressure		5.6 ⁽²⁾	66.0 ⁽²⁾	7.9 ⁽³⁾	115 ⁽³⁾	10.3	150

1. With highest spring range available only.

2. 2.41 bar / 35 psi per PED.

3. 3.45 bar / 50 psi per PED.

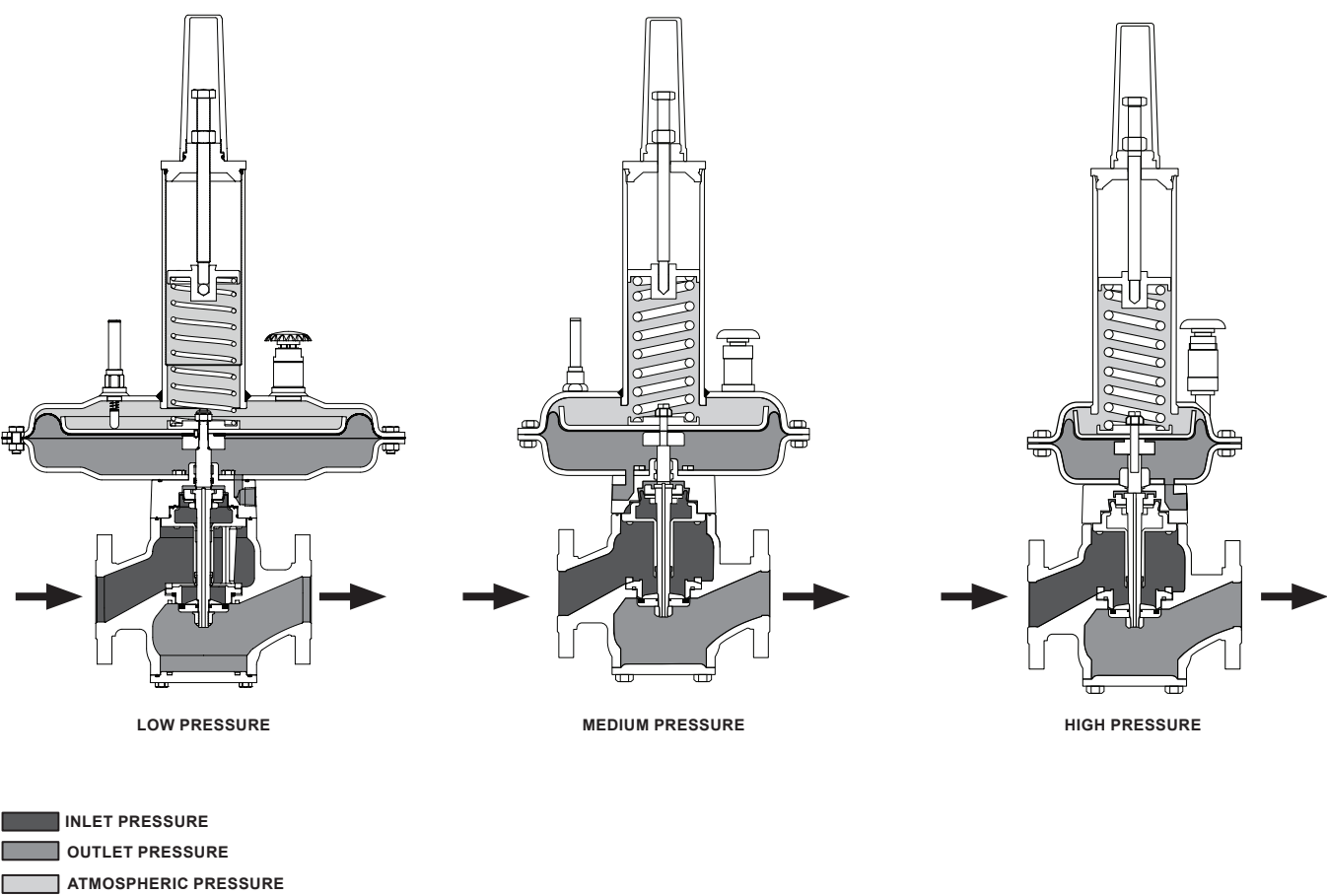


Figure 2. LSR Series Regulator Operational Schematic

Table 4. LSR Series Wide Open Flow Coefficients

Type	Size DN / in.	FLOW COEFFICIENTS		
		C _g	C _i	C _v
Without Slam-shut	40 x 40 / 1.5 x 1.5	1349	30	46
	40 x 80 / 1.5 x 3	1842	30	61
With Slam-shut	40 x 40 / 1.5 x 1.5	1312	30	44
	40 x 80 / 1.5 x 3	1821	31	59
Without Slam-shut	50 x 50 / 2 x 2	2083	33	72
	50 x 100 / 2 x 4	2461	29	74
With Slam-shut	50 x 50 / 2 x 2	2001	28	71
	50 x 100 / 2 x 4	2304	34	67
Without Slam-shut	80 x 80 / 3 x 3	4260	24	189
	80 x 150 / 3 x 6	4290	21	216
With Slam-shut	80 x 80 / 3 x 3	4240	28	160
	80 x 150 / 3 x 6	4280	26	175

Note: Multiply restricted trim % value by the C_g for the restricted C_g value.

Introduction

Description

The LSR Series direct-operated gas regulators are primarily designed for low pressure natural gas distribution systems, industrial and commercial applications supplying gas to furnaces, burners and other appliances. The LSR Series balanced port design enables the regulator to provide accurate control of gas pressure for maximum combustion efficiency despite varying inlet pressure conditions. The single port construction provides bubble-tight shutoff. An external downstream control line is required for the operation of the regulator. Refer to Table 2 for outlet pressure ranges of each type. LSR Series regulators are available in a DN 40, 50 or 80 / 1.5, 2 or 3 in. body size with either NPT or flanged end connections.

An optional restriction collar can be installed if wide-open capacity is too high for applications using a relief valve as overpressure protection. The collar reduces wide-open capacity to 40%, 60% or 78% of wide open capacity. 78% is sized for replacing the legacy Type 133HP 100% units without needing to resize the relief valve.

Principle of Operation

In the LSR Series, downstream pressure is registered under the diaphragm via the external control line and is used as the operating medium. Increased demand lowers the downstream pressure and allows the spring to move the diaphragm and stem assembly down, opening the valve disk and supplying more gas to the downstream system. Decreased demand increases the downstream pressure and moves the diaphragm and stem assembly up, closing the valve disk and decreasing the gas supply to the downstream system.

Boosting System

The LSR Series incorporates a balancing diaphragm and a boosting system. When the regulator is locked up, inlet pressure is registered on the top of the valve disk and on the bottom of the balancing diaphragm through space between the stem and cage. Also, downstream pressure is registered on the bottom of the valve disk and on the top of the balancing diaphragm through a passage in the stem.

When the trim is open, gas flows from the inlet over the edge of the disk to the outlet. Under the disk, there is little gas flow. The gas pressure is higher than it is in the flow path where gas velocity tends to lower the pressure. The higher pressure near the disk is registered on the top of the balancing diaphragm

through the space between the stem and the stem sleeve.

This pressure registered on the top of the balancing diaphragm aids downward disk travel and compensates for spring and diaphragm effect. This improves regulator rangeability and performance.

Installation

The regulator may be installed with actuator above or below the body but is normally installed with the actuator portion above the body portion. Flow through the body must be in the direction indicated by the flow direction arrow cast on the body portion. A downstream control line is required for operation of the regulator.

A remote vent line may be required for some installations. Vent openings must be protected against the entrance of rain, snow, insects or any other foreign material that may plug the vent.

External dimensions are shown in Figure 3.

Integrated Slam-shut

The LSR Series is offered with an integral slam-shut device that will stop gas from flowing if an over pressure or under pressure condition occurs.

The slam-shut design is industry leading with only design allowing the choice of side of the body to install the slam-shut. This allows the slam-shut to always be on the outside of a parallel run or facing out if against a wall. Rearming, maintenance and testing is safe with enough room to work.

The slam-shut measuring element utilizes the VSX8 Series controller (see VSX8 Series literature, D103127X012 for more details and support). The VSX8 Series uses a positive latching mechanism instead of a ball bearing design which reduces false trips related to vibration or external factors. See Figure 3 for more information.

Overpressure Protection

As is the case with most regulators, the LSR Series regulators have outlet pressure ratings that are lower than the inlet pressure ratings. Some type of Overpressure Protection is needed if the actual inlet pressure ever exceeds the outlet pressure rating.

Maximum inlet and outlet pressures for the LSR Series are given in Table 3. All models must be protected against inlet pressure above the maximum emergency inlet pressure (refer to Table 3).

Capacity Data

Flow capacities for various inlet pressures and outlet pressure settings are shown in Tables 5 to 52. Capacities are in thousands of Nm³/hr and SCFH at 60°F and 14.7 psia and in Nm³/hr at 0°C and 1.01325 bar of 0.6 specific gravity gas. To convert to equivalent capacities of other gases, multiply the SCFH values shown by the appropriate factor: air—0.775; propane—0.628; butane—0.548; nitrogen—0.789. For gases of other specific gravities, multiply the given capacity by 0.775 and divide by the square root of the appropriate specific gravity. Then, if capacity is desired in Nm³/h at 0°C and 1.01325 bar, multiply SCFH by 0.0268.

Note

For optimum performance, select the lowest spring range that includes the desired outlet pressure setting.

For restricted-capacity constructions, determine flow capacities for outlet pressure settings of 0.14 barg / 2 psig or less by multiplying the values from Tables 5 to 52 by 40%, 60% or 78% (depending upon which restriction collar is selected). If flow capacities for inlet pressures lower than those shown are required, contact your local Sales Office. The representative regulating C_g of 2000 may be used for regulator sizing of full capacity constructions only if capacity table data is not available. The representative regulating C_g is an approximation only for pressure drops greater than 0.34 barg / 5 psig, because, at a given offset in controlled pressure, the regulating C_g varies with the spring being used with the pressure drop across the valve. To determine capacity using the flow coefficient C_g, use the appropriate procedure below.

Critical Pressure Drops

For critical pressure drops (absolute outlet pressure equal to or less than one-half of absolute inlet pressure), use the following formula:

$$Q = (P_1)(C_g)(1.29)$$

Non-Critical Pressure Drops

For pressure drops lower than critical (absolute outlet pressure greater than one-half of absolute inlet pressure).

$$Q = \sqrt{\frac{520}{GT}} C_g P_1 \sin \left(\frac{3417}{C_1} \sqrt{\frac{\Delta P}{P_1}} \right) \text{ DEG}$$

where,

- Q = gas flow rate, SCFH
- P₁ = absolute inlet pressure, psia (P₁ gauge + 14.7)
- C_g = regulating or wide-open gas sizing coefficient
- G = specific gravity of the gas
- T = absolute temperature of gas at inlet, °Rankine
- C₁ = flow coefficient
- ΔP = pressure drop across the regulator, psig

Table 5. Industrial Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 40 / 1.5 X 1.5 IN.																								
	INLET PRESSURE, barg																								
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19	
475 MM / 18.7 IN. ACTUATOR																									
0.02	165	236	303	436	616	713	822	1036	1122	1151	900	1139	1648	1710	2049	1680	2009	1355							
0.03	139	216	257	275	482	550	694	815	988	1079	1269	1385	1467	847	919	1400	2616	1858							
0.05		225	322	408	671	711	827	890	999	1085	1365	1374	1547	1975	1678	1447	1661	2056							
0.08		175	262	368	495	587	615	734	845	921	1126	1346	1416	1527	1802	2177	2893	2769							
0.1			283	317	479	591	667	791	861	914	1140	1325	1497	1620	1840	2030	2968	2916							
0.15					490	573	722	772	865	981	1198	1383	1338	1639	1938	3176	3196	4511	3128	3142					
0.3									796	884	1107	1295	1511	1766	2306	2963	3842	4559	4983	5710					
0.35									844	902	1114	1312	1529	1981	2344	2510	3844	4616	5120	2394					
350 MM / 13.8 IN. ACTUATOR																									
0.3									697	824	983	1141	1337	1551	2171	2708	3761	4473	4982	5602					
0.5									515	626	731	922	1015	1259	1746	2308	2685	3534	4475	5350					
0.75											778	1012	1234	1607	2293	2660	3343	3990	4705	6060	6962	7554	7647	7590	
1													911	1296	1949	2472	2830	3205	3826		5703	7076	8575	8630	
1.5														1190	2013	2650	3275	3611	4319		6412	7820	9412	10,584	
255 MM / 10.0 IN. ACTUATOR																									
1.5														938	1543	2121	2670	3259	3530		4125	4430	4173	4001	
2															1306	1760	2167	2541	3069		4204	4387	4828	4770	
3																1989	2723	3360	3932		5446	6197	7545	8779	
4																	2434	3133	3878		5526	6643	8124	9389	

Table 6. Industrial Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 40 / 1.5 X 1.5 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																								
0.29	6.2	8.3	10.7	15.4	21.8	25.2	29.0	36.6	39.6	40.6	31.8	40.2	58.2	60.4	72.4	59.3	70.9	47.8						
0.44	7.1	7.6	9.1	9.7	17.0	19.4	24.5	28.8	34.9	38.1	44.8	48.9	51.8	29.9	32.5	49.4	92.4	65.6						
0.73		8.0	11.4	14.4	23.7	25.1	29.2	31.4	35.3	38.3	48.2	48.5	54.6	69.8	59.3	51.1	58.6	72.6						
1.16		6.2	9.3	13.0	17.5	20.7	21.7	25.9	29.8	32.5	39.8	47.5	50.0	53.9	63.6	76.9	102	97.8						
1.45			10.0	11.2	16.9	20.9	23.6	27.9	30.4	32.3	40.2	46.8	52.9	57.2	65.0	71.7	105	103						
2.18					17.3	20.2	25.5	27.2	30.5	34.6	42.3	48.8	47.2	57.9	68.4	112	113	159	110	111				
4.35									28.1	31.2	39.1	45.7	53.3	62.4	81.4	105	136	161	176	202				
5.08									29.8	31.9	39.3	46.3	54.0	70.0	82.8	88.6	136	163	181	84.5				
350 MM / 13.8 IN. ACTUATOR																								
4.4									24.6	29.1	34.7	40.3	47.2	54.8	76.7	95.6	133	158	176	198				
7.3									18.2	22.1	25.8	32.6	35.8	44.5	61.7	81.5	94.8	125	158	189				
10.9											27.5	35.7	43.6	56.7	81.0	93.9	118	141	166	214	246	267	270	268
14.5													32.2	45.7	68.8	87.3	99.9	113	135		201	250	303	305
22														42.0	71.1	93.6	116	127	152		226	276	332	374
255 MM / 10.0 IN. ACTUATOR																								
22														33.1	54.5	74.9	94.3	115	125		146	156	147	141
29															46.1	62.2	76.5	89.7	108		148	155	170	168
44																70.2	96.1	119	139		192	219	266	310
58																	85.9	111	137		195	235	287	332

LSR Series

Table 7. Industrial Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 40 / 1.5 X 1.5 IN.																								
	INLET PRESSURE, barg																								
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19	
475 MM / 18.7 IN. ACTUATOR																									
0.02	198	331	456	544	763	836	954	1039	1122	1155	1389	1554	1720	2047	2791	3282	3557	3387							
0.03	180	306	407	512	700	771	950	1028	1144	1229	1344	1538	1669	2017	2517	3161	3716	3381							
0.05		278	412	526	836	861	949	1034	1123	1171	1346	1524	1688	2075	2781	3046	3972	3999							
0.08		234	450	495	660	748	899	991	1100	1153	1345	1485	1633	1956	2721	2975	3978	4395							
0.1			345	465	655	783	928	1020	1094	1190	1263	1489	1681	2048	2699	3047	4065	4577							
0.15					585	763	875	1000	1076	1190	1305	1524	1682	2023	2733	3403	4148	4696	4991	5017					
0.3									1020	1122	1324	1514	1693	2046	2741	3493	4186	4757	5572	5710					
0.35									1002	1121	1319	1529	1702	2054	2737	3442	4077	4832	5546	5786					
350 MM / 13.8 IN. ACTUATOR																									
0.3									986	1100	1302	1421	1658	1981	2693	3434	4143	4755	5566	5602					
0.5									805	927	1171	1362	1532	1913	2578	3230	3998	4733	5303	6271					
0.75											1036	1325	1593	2010	2725	3249	4076	4743	5179	6519	7439	7554	7647	7590	
1													1440	1916	2621	3319	3991	4662	5314		7099	8410	8575	8630	
1.5														1752	2690	3356	3864	4671	5405		7298	8399	10,479	10,584	
255 MM / 10.0 IN. ACTUATOR																									
1.5														1631	2550	3201	3836	4486	5082		6785	7551	10,181	10,391	
2															2283	3080	3705	4331	4875		6903	7918	9834	10,996	
3																3073	3958	4727	5347		7308	8613	10,975	12,362	
4																	3666	4666	5474		7213	8812	11,238	13,144	

Table 8. Industrial Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 40 / 1.5 X 1.5 IN.																								
	INLET PRESSURE, psig																								
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276	
475 MM / 18.7 IN. ACTUATOR																									
0.29	7.0	11.7	16.1	19.2	27.0	29.5	33.7	36.7	39.6	40.8	49.0	54.9	60.7	72.3	98.6	116	126	120							
0.44	6.3	10.8	14.4	18.1	24.7	27.2	33.5	36.3	40.4	43.4	47.5	54.3	58.9	71.2	88.9	112	131	119							
0.73		9.8	14.6	18.6	29.5	30.4	33.5	36.5	39.7	41.4	47.5	53.8	59.6	73.3	98.2	108	140	141							
1.16		8.3	15.9	17.5	23.3	26.4	31.7	35.0	38.8	40.7	47.5	52.4	57.7	69.1	96.1	105	140	155							
1.45			12.2	16.4	23.1	27.6	32.8	36.0	38.6	42.0	44.6	52.6	59.4	72.3	95.3	108	144	162							
2.18					20.6	26.9	30.9	35.3	38.0	42.0	46.1	53.8	59.4	71.4	96.5	120	146	166	176	177					
4.35									36.0	39.6	46.8	53.5	59.8	72.2	96.8	123	148	168	197	202					
5.08									35.4	39.6	46.6	54.0	60.1	72.5	96.6	122	144	171	196	204					
350 MM / 13.8 IN. ACTUATOR																									
4.4									34.8	38.9	46.0	50.2	58.5	70.0	95.1	121	146	168	197	198					
7.3									28.4	32.7	41.3	48.1	54.1	67.5	91.0	114	141	167	187	221					
10.9											36.6	46.8	56.3	71.0	96.2	115	144	167	183	230	263	267	270	268	
14.5													50.8	67.6	92.5	117	141	165	188		251	297	303	305	
22														61.9	95.0	119	136	165	191		258	297	370	374	
255 MM / 10.0 IN. ACTUATOR																									
22														57.6	90.1	113	135	158	179		240	267	359	367	
29															80.6	109	131	153	172		244	280	347	388	
44																109	140	167	189		258	304	388	437	
58																	129	165	193		255	311	397	464	

Table 9. Industrial Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 80 / 1.5 X 3 IN.																					
	INLET PRESSURE, barg																					
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12
475 MM / 18.7 IN. ACTUATOR																						
0.02	147	211	270	390	551	637	734	926	1002	1028	804	1018	1472	1527	2084	1709	2450	1652				
0.03	124	193	230	246	430	492	620	728	883	964	1134	1237	1311	1756	1753	1423	3190	2266				
0.05		201	288	364	599	635	739	795	892	969	1219	1227	1381	1764	1707	1472	2025	2507				
0.08		157	234	329	442	525	549	655	755	823	1006	1203	1265	1364	1833	2214	3528	3377				
0.1			253	283	428	528	596	707	769	816	1018	1184	1337	1447	1871	2064	3620	3556				
0.15					437	512	645	689	772	876	1070	1235	1195	1464	1971	3230	3897	5501	3814	3832		
0.3									798	955	1195	1398	1631	1907	2490	3471	4501	5340	5073	5814		
0.35									754	974	1203	1417	1651	2139	2530	2710	4503	5408	5213	2437		
350 MM / 13.8 IN. ACTUATOR																						
0.3									752	889	1061	1232	1444	1674	2344	3420	4406	5240	5836	2330		
0.5									557	676	790	996	1096	1359	1886	2492	2899	3816	4556	5447		
0.75											840	1092	1332	1735	2476	2872	3610	4308	4791	6170		
1													946	1346	2024	2568	2940	3329	3974		6743	7289
1.5														1312	2105	2772	3425	3776	4516		6897	8055
255 MM / 10.0 IN. ACTUATOR																						
1.5														981	1614	2218	2792	3409	3692		6436	4430
2																1841	2266	2657	3210		6558	4387
3																2632	3604	4448	5205		6313	8399
4																	2448	3152	3901		6053	8478

Table 10. Industrial Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 80 / 1.5 X 3 IN.																					
	INLET PRESSURE, psig																					
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174
475 MM / 18.7 IN. ACTUATOR																						
0.29	5.2	7.4	9.5	13.8	19.4	22.5	25.9	32.7	35.4	36.3	28.4	35.9	52.0	53.9	73.6	60.3	86.5	58.3				
0.44	4.4	6.8	8.1	8.7	15.2	17.4	21.9	25.7	31.2	34.0	40.0	43.7	46.3	62.0	61.9	50.3	113	80.0				
0.73		7.1	10.2	12.9	21.2	22.4	26.1	28.1	31.5	34.2	43.0	43.3	48.8	62.3	60.3	52.0	71.5	88.5				
1.16		5.5	8.3	11.6	15.6	18.5	19.4	23.1	26.7	29.0	35.5	42.5	44.7	48.2	64.7	78.2	125	119				
1.45			8.9	10.0	15.1	18.6	21.0	24.9	27.2	28.8	35.9	41.8	47.2	51.1	66.1	72.9	128	126				
2.18					15.4	18.1	22.8	24.3	27.3	30.9	37.8	43.6	42.2	51.7	69.6	114	138	194	135	135		
4.35									28.2	33.7	42.2	49.4	57.6	67.3	87.9	123	159	189	179	205		
5.08									26.6	34.4	42.5	50.0	58.3	75.5	89.4	95.7	159	191	184	86.1		
350 MM / 13.8 IN. ACTUATOR																						
4.4									26.6	31.4	37.5	43.5	51.0	59.1	82.8	121	156	185	206	82.3		
7.3									19.7	23.9	27.9	35.2	38.7	48.0	66.6	88.0	102	135	161	192		
10.9											29.7	38.6	47.0	61.3	87.4	101	127	152	169	218		
14.5													33.4	47.5	71.5	90.7	104	118	140		238	257
22														46.3	74.3	97.9	121	133	159		244	284
255 MM / 10.0 IN. ACTUATOR																						
22														34.6	57.0	78.3	98.6	120	130		227	156
29																65.0	80.0	93.8	113		232	155
44																92.9	127	157	184		223	297
58																	86.4	111	138		214	299

LSR Series

Table 11. Industrial Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 80 / 1.5 X 3 IN.																							
	INLET PRESSURE, barg																							
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19
475 MM / 18.7 IN. ACTUATOR																								
0.02	241	403	554	662	929	1018	1161	1264	1365	1405	1690	1891	2092	2490	3294	3873	3965	3777						
0.03	219	372	496	623	851	938	1155	1251	1392	1495	1635	1871	2030	2454	2970	3730	4143	3770						
0.05		338	502	640	1017	1047	1155	1258	1367	1425	1637	1855	2053	2524	3282	3594	4428	4458						
0.08		285	548	602	803	910	1094	1206	1338	1402	1636	1806	1986	2380	3210	3510	4435	4901						
0.1			420	565	797	952	1129	1240	1330	1448	1536	1812	2045	2491	3185	3596	4533	5103						
0.15					711	928	1064	1216	1308	1447	1587	1854	2047	2462	3225	4016	4625	5235	5564	5594				
0.3									1241	1365	1611	1842	2059	2488	3234	4122	4667	5303	6212	6366				
0.35									1056	1181	1390	1612	1794	2165	2885	3861	4572	5419	5573	5814				
350 MM / 13.8 IN. ACTUATOR																								
0.3									996	1112	1315	1436	1675	2001	2721	4220	5090	5843	5592	5708				
0.5									980	1127	1424	1657	1864	2327	3136	3263	4913	5816	5328	6991				
0.75											1260	1612	1938	2445	3315	3952	4118	5827	5204	7268	8294	8422	8526	8463
1													1445	1923	2630	3332	4006	4679	5333		8397	9947	8833	8890
1.5														1848	2837	3540	4076	4927	5701		9125	10,501	10,896	11,006
255 MM / 10.0 IN. ACTUATOR																								
1.5														1722	2693	3380	4051	4737	5367		8554	9519	10,181	10,391
2															2411	3253	3913	4574	5148		8703	9982	12,398	10,996
3																4285	5519	6591	7455		8878	10,464	13,883	15,637
4																	3693	4701	5515		8678	10,602	13,923	16,284

Table 12. Industrial Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 80 / 1.5 X 3 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																								
0.29	8.5	14.2	19.6	23.4	32.8	35.9	41.0	44.6	48.2	49.6	59.7	66.8	73.9	87.9	116	137	140	133						
0.44	7.7	13.1	17.5	22.0	30.1	33.1	40.8	44.2	49.1	52.8	57.7	66.1	71.7	86.6	105	132	146	133						
0.73		11.9	17.7	22.6	35.9	37.0	40.8	44.4	48.3	50.3	57.8	65.5	72.5	89.1	116	127	156	157						
1.16		10.1	19.3	21.3	28.4	32.1	38.6	42.6	47.2	49.5	57.8	63.8	70.1	84.0	113	124	157	173						
1.45			14.8	20.0	28.1	33.6	39.9	43.8	47.0	51.1	54.3	64.0	72.2	88.0	112	127	160	180						
2.18					25.1	32.8	37.6	43.0	46.2	51.1	56.0	65.5	72.3	86.9	114	142	163	185	196	198				
4.35									43.8	48.2	56.9	65.0	72.7	87.9	114	146	165	187	219	225				
5.08									37.3	41.7	49.1	56.9	63.3	76.5	102	136	161	191	197	205				
350 MM / 13.8 IN. ACTUATOR																								
4.4									35.2	39.3	46.4	50.7	59.1	70.7	96.1	149	180	206	197	202				
7.3									34.6	39.8	50.3	58.5	65.8	82.2	111	115	173	205	188	247				
10.9											44.5	56.9	68.4	86.3	117	140	145	206	184	257	293	297	301	299
14.5													51.0	67.9	92.9	118	141	165	188		297	351	312	314
22														65.3	100	125	144	174	201		322	371	385	389
255 MM / 10.0 IN. ACTUATOR																								
22														60.8	95.1	119	143	167	190		302	336	359	367
29															85.1	115	138	162	182		307	352	438	388
44																151	195	233	263		314	369	490	552
58																	130	166	195		306	374	492	575

Outside North America Only

Table 13. Industrial Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 50 / 2 X 2 IN.																							
	INLET PRESSURE, barg																							
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10	12	16	19	
475 MM / 18.7 IN. ACTUATOR																								
0.02	121	303	396	425	601	655	770	805	1022	875	901	1284	1445	1626	2150	1931	1561	1528						
0.03	140	213	289	367	527	587	691	818	714	908	1007	1204	1550	1905	1978	2222	2661	2083						
0.05		211	389	391	572	615	800	724	985	987	1123	1513	1646	2032	2737	2426	2686	2361						
0.08		202	313	386	433	728	867	858	1025	1189	1277	1418	1541	2352	2971	2895	2984	3094						
0.1			298	311	583	700	649	706	812	834	924	1431	1597	1709	2411	2908	2878	2918						
0.15					595	689	799	942	1030	1140	1373	1555	1834	2233	2969	3564	3695	4448	4938					
0.3									903	938	1157	1265	1636	2512	3299	3330	3909	4377	5089					
350 MM / 13.8 IN. ACTUATOR																								
0.3									923	1070	1286	1226	1515	2605	3823	4870	5947	6173	5805					
0.5									462	589	725	835	1002	1269	1982	2662	4219	5522	6626					
0.75											1051	1269	1390	2107	3483	4559	5975	5975	7362	9203	10,052	11,893	6400	
1													1167	1733	2597	3568	4757	5947	6683	9288	10,307	13,847	13,847	
1.5														1235	2282	3370	4219	5437	6173	8976	9713	14,470	17,047	
255 MM / 10.0 IN. ACTUATOR																								
1.5														1144	1931	2407	3002	3823	4248	5862	6626	8212	7985	
2															790	1124	1286	1846	2104	3087	3625	3964	4276	
3																1988	2701	3171	3823	5380	6315	7787	9146	
4																	2268	3285	3851	5890	7079	9005	10,675	

Table 14. Industrial Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 50 / 2 X 2 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																							
0.29	4.26	10.7	14.0	15.0	21.2	23.1	27.2	28.5	36.1	30.9	31.8	45.4	51.1	57.4	76.0	68.2	55.1	54.0					
0.44	4.93	7.53	10.2	13.0	18.6	20.7	24.4	28.9	25.2	32.1	35.6	42.5	54.8	67.3	69.9	78.5	94.0	73.6					
0.73		7.44	13.7	13.8	20.2	21.7	28.3	25.6	34.8	34.9	39.7	53.5	58.2	71.8	96.7	85.7	94.9	83.4					
1.16		7.15	11.1	13.6	15.3	25.7	30.7	30.3	36.2	42.0	45.1	50.1	54.5	83.1	105	102	105	109					
1.45			10.5	11.0	20.6	24.8	22.9	24.9	28.7	29.5	32.6	50.6	56.4	60.4	85.2	103	102	103					
2.18					21.0	24.4	28.2	33.3	36.4	40.3	48.5	54.9	64.8	78.9	105	126	131	157	175				
4.35									31.9	33.1	40.9	44.7	57.8	88.8	117	118	138	155	180				
350 MM / 13.8 IN. ACTUATOR																							
4.35									32.6	37.8	45.4	43.3	53.5	92	135	172	210	218	205				
7									16.3	20.8	25.6	29.5	35.4	44.8	70	94	149	195	234				
11											37.1	44.8	49.1	74.4	123	161	211	211	260	325	355	420	226
14.5													41.2	61.2	91.7	126	168	210	236	328	364	489	489
22														43.6	80.6	119	149	192	218	317	343	511	602
255 MM / 10.0 IN. ACTUATOR																							
22														40.4	68.2	85	106	135	150	207	234	290	282
29															27.9	39.7	45.4	65.2	74.3	109	128	140	151
44																70.2	95.4	112	135	190	223	275	323
58																	80.1	116	136	208	250	318	377

LSR Series

Table 15. Industrial Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 50 / 2 X 2 IN.																			
	INLET PRESSURE, barg																			
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10
475 MM / 18.7 IN. ACTUATOR																				
0.02	150	480	564	617	805	908	1085	1128	1277	1452	1614	1756	2020	2149	2749	2599	3889	3291		
0.03	322	311	422	523	687	801	960	1009	1063	1154	1481	1713	1834	2215	2578	2905	3369	3047		
0.05		366	532	647	867	1007	1112	1337	1427	1608	1764	2124	2376	2833	3559	3872	4602	4353		
0.08		286	456	618	873	977	1116	1305	1426	1572	1841	2098	2341	2809	3736	4519	4809	5986		
0.1			371	496	707	1043	1169	1190	1289	1147	1678	1985	2228	2598	3384	3974	4443	5167		
0.15					694	908	1113	1247	1384	1542	1811	2056	2340	2737	3499	4599	4648	5797	6290	
0.3									1296	1364	1635	1962	2235	2762	4266	4389	5511	5956	7137	
350 MM / 13.8 IN. ACTUATOR																				
0.3									1427	1606	1770	2277	2532	3228	3879	4984	6201	6853	8269	
0.5									1107	1427	1586	2073	2517	3058	3483	4531	5522	5890	7221	
0.75											1529	1937	2826	2973	4106	4814	6315	6315	7561	9826
1													2144	2806	4021	5097	6145	7249	7985	10336
1.5														2475	3993	4786	5663	6824	7702	9968
255 MM / 10.0 IN. ACTUATOR																				
1.5														2299	3455	4361	5125	6003	6654	8070
2															2667	3455	4106	5040	5522	7334
3																4304	5550	6258	7419	9968
4																	5012	6541	7561	10,732

Table 16. Industrial Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 50 / 2 X 2 IN.																			
	INLET PRESSURE, psig																			
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145
475 MM / 18.7 IN. ACTUATOR																				
0.29	5.29	16.9	19.9	21.8	28.4	32.1	38.3	39.9	45.1	51.3	57.0	62.0	71.4	75.9	97.1	91.8	137	116		
0.44	11.4	11.0	14.9	18.5	24.3	28.3	33.9	35.6	37.5	40.8	52.3	60.5	64.8	78.3	91.1	103	119	108		
0.73		12.9	18.8	22.9	30.7	35.6	39.3	47.2	50.4	56.8	62.3	75.1	84.0	100	126	137	163	154		
1.16		10.1	16.1	21.8	30.8	34.5	39.5	46.1	50.4	55.6	65.0	74.1	82.7	99.2	132	160	170	212		
1.45			13.1	17.5	25.0	36.8	41.3	42.1	45.5	40.5	59.3	70.1	78.7	91.8	120	140	157	183		
2.18					24.5	32.1	39.3	44.1	48.9	54.5	64.0	72.7	82.7	96.7	124	162	164	205	222	
4.35									45.8	48.2	57.8	69.3	79.0	97.6	151	155	195	210	252	
350 MM / 13.8 IN. ACTUATOR																				
4.35									50.4	56.7	62.5	80.4	89.4	114	137	176	219	242	292	
7									39.1	50.4	56	73.2	88.9	108	123	160	195	208	255	
11											54	68.4	99.8	105	145	170	223	223	267	347
14.5													75.7	99.1	142	180	217	256	282	365
22														87.4	141	169	200	241	272	352
255 MM / 10.0 IN. ACTUATOR																				
22														81.2	122	154	181	212	235	285
29															94.2	122	145	178	195	259
44																152	196	221	262	352
58																	177	231	267	379

Table 17. Industrial Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 100 / 2 X 4 IN.																						
	INLET PRESSURE, barg																						
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10	12	16	19
475 MM / 18.7 IN. ACTUATOR																							
0.02	177	432	564	603	862	922	1085	1158	1441	1237	1283	1824	2067	2317	1759	2839	2207	2723					
0.03	201	302	407	525	749	831	992	1156	1023	1283	1423	1696	2211	2705	2909	3177	3902	3049					
0.05		300	554	549	817	876	1148	1014	1410	1383	1573	2152	2356	2870	3966	3411	3817	3407					
0.08		284	439	547	622	1036	1247	1231	1475	1669	179	2022	2202	3352	4335	4133	4393	4389					
0.1			419	438	823	1000	908	995	1167	1186	1308	2056	2267	2441	3386	4300	4125	4256					
0.15					840	967	1133	1331	1445	1622	1945	2182	2637	3162	4242	5064	5424	6272	7278				
0.3									972	1322	1633	1810	2339	3600	4641	5137	5499	6206	7288				
350 MM / 13.8 IN. ACTUATOR																							
0.3									1008	1169	1405	1339	1642	2860	4191	5324	6485	6739	6343				
0.5									507	643	793	912	1096	1388	2169	2888	4616	6031	7249				
0.75											1147	1388	1521	2305	3794	4984	6513	6513	8042	10,052	10,987	12,997	6994
1													1274	1894	2832	3908	5182	6485	7306	10,137	11,270	15,150	15,121
1.5														1348	2495	3681	4616	5918	6739	9798	10,619	15,801	18,604
255 MM / 10.0 IN. ACTUATOR																							
1.5														1249	2110	2631	3256	4191	4644	6400	7249	8976	8750
2															864	1229	1405	2019	2299	3370	3936	4332	4672
3																2175	2945	3455	4191	5862	6909	8495	9996
4																	2479	3568	4219	6456	7730	9826	11,667

Table 18. Industrial Flow Full-Capacity LS200 Series DN 50 x / 100 2 x 4 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 100 / 2 X 4 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																							
0.29	6.25	15.3	19.9	21.3	30.5	32.6	38.3	40.9	50.9	43.7	45.3	64.4	73.0	81.9	62.2	100.3	78.0	96.2					
0.44	7.11	10.7	14.4	18.6	26.5	29.4	35.1	40.9	36.1	45.3	50.3	59.9	78.1	95.6	103	112	138	108					
0.73		10.6	19.6	19.4	28.9	31.0	40.6	35.8	49.8	48.9	55.6	76.0	83.3	101	140	121	135	120					
1.16		10.0	15.5	19.3	22.0	36.6	44.1	43.5	52.1	59.0	6.3	71.4	77.8	118	153	146	155	155					
1.45			14.8	15.5	29.1	35.3	32.1	35.1	41.2	41.9	46.2	72.7	80.1	86.3	120	152	146	150					
2.18					29.7	34.2	40.0	47.0	51.0	57.3	68.7	77.1	93.2	112	150	179	192	222	257				
4.35									34.4	46.7	57.7	64.0	82.7	127	164	182	194	219	258				
350 MM / 13.8 IN. ACTUATOR																							
4.35									35.6	41.3	49.6	47.3	58	101	148	188	229	238	224				
7									17.9	22.7	28	32.2	38.7	49	77	102	163	213	256				
11											40.5	49	53.7	81.4	134	176	230	230	284	355	388	459	247
14.5													45	66.9	100	138	183	229	258	358	398	535	534
22														47.6	88.1	130	163	209	238	346	375	558	657
255 MM / 10.0 IN. ACTUATOR																							
22														44.1	74.5	92.9	115	148	164	226	256	317	309
29															30.5	43.4	49.6	71.3	81.2	119	139	153	165
44																76.8	104	122	148	207	244	300	353
58																	87.5	126	149	228	273	347	412

LSR Series

Table 19. Industrial Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 100 / 2 X 4 IN.																			
	INLET PRESSURE, barg																			
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10
475 MM / 18.7 IN. ACTUATOR																				
0.02	277	882	1034	1126	1456	1630	1931	1991	2234	2519	2751	2927	3291	3340	3862	3505	5027	4069		
0.03	595	574	774	954	1247	1430	1710	1783	1850	2002	2514	2849	2982	3426	3621	3889	4347	3790		
0.05		675	972	1182	1571	1800	1982	2352	2493	2788	3000	3533	3862	4403	5008	5185	5909	5406		
0.08		525	831	1129	1580	1762	1983	2308	2505	2742	3120	3497	3807	4351	5246	6101	6218	7387		
0.1			682	907	1281	1871	2071	2089	2247	1988	2845	3295	3652	4032	4772	5342	5780	6382		
0.15					1249	1621	1975	2202	2425	2682	3071	3415	3833	4247	4917	6231	6033	7177	6605	
0.3									1482	2369	2786	3269	3663	4290	6023	6026	7076	7350	7494	
350 MM / 13.8 IN. ACTUATOR																				
0.3									1518	1710	1886	2424	2696	3398	4106	5295	6598	7277	8778	
0.5									1178	1518	1688	2206	2679	3256	3681	4814	5862	6286	7674	
0.75											1628	2061	3002	3143	4361	5097	6711	6711	8042	10,449
1													2282	2973	4248	5409	6513	7702	8495	10,987
1.5														2636	4219	5097	6031	7277	8212	10,619
255 MM / 10.0 IN. ACTUATOR																				
1.5														2447	3653	4644	5437	6371	7079	8580
2															2832	3681	4361	5352	5890	7787
3																4559	5918	6654	7900	10,591
4																	5324	6938	8042	11,412

Table 20. Industrial Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 100 / 2 X 4																				
	INLET PRESSURE, psig																				
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174
475 MM / 18.7 IN. ACTUATOR																					
0.29	9.78	31.2	36.5	39.8	51.5	57.6	68.2	70.4	78.9	89.0	97.2	103	116	118	136	124	178	144			
0.44	21.0	20.3	27.4	33.7	44.1	50.5	60.4	63.0	65.4	70.7	88.8	101	105	121	128	137	154	134			
0.73		23.9	34.3	41.8	55.5	63.6	70.0	83.1	88.1	98.5	106	125	136	156	177	183	209	191			
1.16		18.6	29.4	39.9	55.8	62.3	70.1	81.6	88.5	96.9	110	124	135	154	185	216	220	261			
1.45			24.1	32.0	45.3	66.1	73.2	73.8	79.4	70.2	101	116	129	142	169	189	204	226			
2.18					44.1	57.3	69.8	77.8	85.7	94.8	109	121	135	150	174	220	213	254	233		
4.35									52.4	83.7	98.5	116	129	152	213	213	250	260	265		
350 MM / 13.8 IN. ACTUATOR																					
4.35									53.6	60.4	66.6	85.6	95.2	120	145	187	233	257	310		
7									41.6	53.6	59.6	77.9	94.6	115	130	170	207	222	271		
11											57.5	72.8	106	111	154	180	237	237	284	369	436
14.5													80.6	105	150	191	230	272	300	388	429
22														93.1	149	180	213	257	290	375	407
255 MM / 10.0 IN. ACTUATOR																					
22														86.4	129	164	192	225	250	303	345
29															100	130	154	189	208	275	314
44																161	209	235	279	374	419
58																	188	245	284	403	471

Outside North America Only

Table 21. Industrial Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
350 MM / 13.8 IN. ACTUATOR																					
0.3										3091	2140	2429	2485	2914	3054	3512	4391	4827	5628	6147	5683
0.5										2091	2154	2458	25633	2563	3080	3632	4661	5466	5871	6507	7588
0.75												2600	3439	3770	3864	4368	5716	6563	7220	7450	8748
1														3039	4162	4690	5403	5843	6744	8210	
1.5															2854	5632	6327	6855	8079	8918	
255 MM / 10.0 IN. ACTUATOR																					
1.5															2883	4390	6389	5564	6573	7579	
2																3199	4101	4596	6348	7394	
3																	4745	9036	7684	8716	
4																		5297	8432	9190	

Table 22. Industrial Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 80 / 3 X 3 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232
350 MM / 13.8 IN. ACTUATOR																							
4.35										109	75.6	85.8	87.8	103	108	124	155	170	199	217	201		
7										73.8	76.1	86.8	90.5	90.5	109	128	165	193	207	230	268		
11												91.8	121	133	136	154	202	232	255	263	309	354	375
14.5														107	147	166	191	206	238	290		384	388
22															101	199	223	242	285	315		440	496
255 MM / 10.0 IN. ACTUATOR																							
22															102	155	226	197	232	268		332	386
29																113	145	162	224	261		326	379
44																	168	319	271	308		403	454
58																		187	298	325		436	497

Table 23. Industrial Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
350 MM / 13.8 IN. ACTUATOR																					
0.3										4118	3395	4180	4521	5494	5636	5691	6176	6740	7529	8243	9691
0.5										3059	3292	3986	4270	4947	5035	5889	6980	7374	8277	9573	10,594
0.75												3847	4606	5375	6277	8647	10,750	11,452	12,291	13,520	12,734
1														4766	6099	7668	9302	10,453	11,902	14,137	
1.5															4488	8191	10,061	12,367	14,881	16,239	
255 MM / 10.0 IN. ACTUATOR																					
1.5															4195	7592	7986	9352	9317	10,249	
2																5840	7356	8367	9902	10,830	
3																	7024	11,611	13,737	15,669	
4																		10,699	13,600	17,898	

Table 24. Industrial Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 80 / 3 X 3 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232
350 MM / 13.8 IN. ACTUATOR																							
4.35										145	120	148	160	194	199	201	218	238	266	291	342		
7										108	116	141	151	175	178	208	246	260	292	338	374		
11												136	163	190	222	305	380	404	434	477	450	490	506
14.5														168	215	271	328	369	420	499		559	585
22															158	289	355	437	525	573		689	693
255 MM / 10.0 IN. ACTUATOR																							
22															148	268	282	330	329	362		444	518
29																206	260	295	350	382		492	532
44																	248	410	485	553		669	714
58																		378	480	632		721	801

Outside North America Only

Outside North America Only

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 150 / 3 X 6 IN.																							
	INLET PRESSURE, barg																							
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19
350 MM / 13.8 IN. ACTUATOR																								
0.3									2721	2400	2724	2786	3267	3424	3938	4923	6600	7694	8404	7770				
0.5								1841	2415		2756	2786	3267	3454	4072	5225	7473	8027	8896	10,374				
0.75											2915	3856	4226	4332	4897	6409	8973	9871	10,186	11,960	13,697	14,515	18,181	15,008
1													3076	4212	4746	5468	5913	6825	8,309		10,518	13,475	17,044	19,524
1.5														3985	7863	8833	9571	11,279	12,451		11,599	16,214	18,736	19,440
255 MM / 10.0 IN. ACTUATOR																								
1.5														3448	5249	7640	6653	7860	9063		10,028	11,650	15,727	14,070
2															3825	4904	5496	7590	8841		9841	11,444	17,373	18,780
3																5498	10,470	8903	10,099		11,816	13,308	16,939	13,388
4																	6125	9749	10,648		12,010	14,574	18,486	17,607

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 150 / 3 X 6 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276
350 MM / 13.8 IN. ACTUATOR																								
4.35									96	85	96	98	115	121	139	174	233	272	297	274				
7								65	85	97	1015	101	122	144	185	264	283	314	366					
11										103	136	149	153	173	226	317	349	360	422	484	513	642	530	
14.5												109	149	168	193	209	241	293		371	476	602	689	
22													141	278	312	338	398	440		410	573	662	686	
255 MM / 10.0 IN. ACTUATOR																								
22													122	185	270	235	278	320		354	411	555	497	
29														135	173	194	268	312		347	404	613	663	
44															194	370	314	357		417	470	598	473	
58																216	344	376		424	515	653	622	

OUTLET PRESSURE, bar	INDUSTRIAL FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 150 / 3 X 6 IN.																								
	INLET PRESSURE, barg																								
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19	
350 MM / 13.8 IN. ACTUATOR																									
0.3									3612	3674	4523	4893	5946	6100	6385	9294	10,142	8448	9248	10,873					
0.5									2684	3563	4313	4621	5353	5449	6608	10,503	11,096	9287	10,741	11,887					
0.75											4164	4985	5817	6793	9358	11,634	12,394	13,302	14,632	13,781	15,020	15,310	15,507	15,155	
1													5157	6601	8299	10,067	11,313	12,881	15,300		16,250	16,411	17,044	17,175	
1.5														6081	11,100	13,633	16,758	20,165	16,751		20,140	20,250	20,601	19,954	
255 MM / 10.0 IN. ACTUATOR																									
1.5														5774	10,451	10,993	12,874	12,825	14,108		16,734	19,527	20,613	21,588	
2															8039	10,126	11,517	13,630	14,907		18,533	20,026	22,376	25,039	
3																9690	16,019	18,953	21,619		19,777	21,110	31,493	28,811	
4																	12,134	15,424	20,299		22,702	25,215	35,886	40,040	

OUTLET PRESSURE, psig	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 150 / 3 X 6 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276
350 MM / 13.8 IN. ACTUATOR																								
4.35									128	130	160	173	210	215	225	328	358	298	327	384				
7								95	126	152	163	189	192	233	371	392	328	379	420					
11										147	176	205	240	330	411	438	470	517	487	530	541	548	535	
14.5												182	233	293	355	399	455	540		574	579	602	606	
22													215	392	481	592	712	591		711	715	727	705	
255 MM / 10.0 IN. ACTUATOR																								
22													204	369	388	455	453	498		591	690	728	762	
29														284	358	407	481	526		654	707	790	884	
44															342	566	669	763		698	745	1112	1017	
58																428	545	717		802	890	1267	1414	

Table 29. Utility Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 40 / 1.5 X 1.5 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
475 MM / 18.7 IN. ACTUATOR																					
0.02	153	229	234	259	429	613	721	1036	1122	1151	900	1139	1080	926	800	1680	2009	1287			
0.03	139	216	257	275	482	550	694	815	988	1079	1269	1385	1467	847	919	1029	1060	1662			
0.05		242	252	306	460	711	782	890	924	1059	1108	1374	1547	1975	1678	1447	1661	2056			
0.08		109	245	275	382	436	491	613	845	560	908	1090	1147	2078	1800	1147	2893	2769			
0.1			230	317	427	550	634	641	817	914	1063	1143	1429	1620	1840	2030	2881	2799			
0.15					441	516	722	768	835	906	1127	1387	1338	1639	1938	3176	3196	4511	3128	3142	
0.3									713	798	1033	1205	1392	1712	2306	2845	3796	4559	4983	5710	
0.35									686	808	953	1138	1313	1660	2147	2510	3817	4548	4991	2394	
350 MM / 13.8 IN. ACTUATOR																					
0.3									697	824	983	1141	1332	1524	1953	2705	3743	3155	3839	5140	
0.5									515	626	731	922	1015	1259	1746	2207	2512	3152	3545	3778	
0.75										753	964	1234	1607	2250	2590	3167	3764	4672	5741	6387	7554
1													911	1296	1949	2472	2830	3205	3826	5703	6578
1.5														1190	2013	2650	3275	3611	4319	6412	7820
255 MM / 10.0 IN. ACTUATOR																					
1.5														897	1543	2121	2670	3628	3728	4125	4430
2															1079	1513	1895	2242	2585	3584	3818
3																1989	2723	3360	3932	5446	5991
4																	2389	3133	3878	5526	6643

Table 30. Utility Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, barg	INDUSTRIAL FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 40 / 1.5 X 1.5 IN.																				
	INLET PRESSURE, psig																				
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145
475 MM / 18.7 IN. ACTUATOR																					
0.29	5.4	8.1	8.3	9.2	15.1	21.6	25.4	36.6	39.6	40.6	31.8	40.2	38.1	32.7	28.2	59.3	70.9	45.4			
0.44	4.9	7.6	9.1	9.7	17.0	19.4	24.5	28.8	34.9	38.1	44.8	48.9	51.8	29.9	32.5	36.3	37.4	58.7			
0.73		8.5	8.9	10.8	16.3	25.1	27.6	31.4	32.6	37.4	39.1	48.5	54.6	69.8	59.3	51.1	58.6	72.6			
1.16		3.9	8.7	9.7	13.5	15.4	17.3	21.7	29.8	19.8	32.1	38.5	40.5	73.4	63.5	40.5	102	97.8			
1.45			8.1	11.2	15.1	19.4	22.4	22.6	28.8	32.3	37.5	40.3	50.5	57.2	65.0	71.7	102	98.8			
2.18					15.6	18.2	25.5	27.1	29.5	32.0	39.8	49.0	47.2	57.9	68.4	112	113	159	110	111	
4.35									25.2	28.2	36.5	42.5	49.1	60.5	81.4	100	134	161	176	202	
5.08									24.2	28.5	33.7	40.2	46.3	58.6	75.8	88.6	135	161	176	85	
350 MM / 13.8 IN. ACTUATOR																					
4.4									24.6	29.1	34.7	40.3	47.0	53.8	69.0	95.5	132	111	136	182	
7.3									18.2	22.1	25.8	32.6	35.8	44.5	61.7	77.9	88.7	111	125	133	
10.9											26.6	34.1	43.6	56.7	79.5	91.4	112	133	165	203	226
14.5													32.2	45.7	68.8	87.3	100	113	135		201
22														42.0	71.1	93.6	116	127	152		226
255 MM / 10.0 IN. ACTUATOR																					
22														31.7	54.5	74.9	94.3	128	132		146
29															38.1	53.4	66.9	79.2	91.3		127
44																70.2	96.1	119	139		192
58																	84.4	111	137		195

LSR Series

Table 31. Utility Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 40 / 1.5 X 1.5 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
475 MM / 18.7 IN. ACTUATOR																					
0.02	198	331	390	544	728	783	954	1039	1122	1155	1389	1554	1704	2047	917	3282	3557	3387			
0.03	139	216	257	512	700	771	950	1028	1144	1229	1344	1538	1669	2017	2517	3161	3716	3381			
0.05		278	412	526	836	861	924	1034	1123	1171	1343	1524	1684	2075	2781	3046	3972	3999			
0.08		177	322	412	547	627	703	837	874	926	1120	1339	1453	2156	1835	1453	3978	4395			
0.1			299	427	603	722	857	945	1016	1190	1262	1475	1606	1949	2653	3032	2935	2880			
0.15					569	683	804	966	1024	1155	1291	1492	1682	2023	2733	3403	4148	4696	4991	5017	
0.3									987	1110	1315	1508	1688	2046	2741	3510	4186	4757	5572	5710	
0.35									974	1117	1290	1500	1691	2000	2689	3442	4073	4771	5546	5786	
350 MM / 13.8 IN. ACTUATOR																					
0.3									986	1100	1302	1421	1658	1981	2538	3430	4117	4740	5566	5602	
0.5									805	927	1171	1362	1532	1913	2530	3132	3929	4663	5295	6271	
0.75											1036	1325	1593	2010	2725	3249	4076	4743	5179	6519	
1													1440	1296	1949	3319	3991	4662	3826		
1.5														1752	2690	3356	3864	4671	5405		
255 MM / 10.0 IN. ACTUATOR																					
1.5														1631	2550	3201	3836	4486	5082		
2															2216	3006	3655	4188	4806		
3																3073	3958	4727	5347		
4																	3666	4666	5474		

Table 32. Utility Flow Full-Capacity LS200 Series DN 40 x 40 / 1.5 x 1.5 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 40 / 1.5 X 1.5 IN.																				
	INLET PRESSURE, psig																				
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145
475 MM / 18.7 IN. ACTUATOR																					
0.29	7.0	11.7	13.8	19.2	25.7	27.6	33.7	36.7	39.6	40.8	49.0	54.9	60.2	72.3	32.4	116	126	120			
0.44	4.9	7.6	9.1	18.1	24.7	27.2	33.5	36.3	40.4	43.4	47.5	54.3	58.9	71.2	88.9	112	131	119			
0.73		9.8	14.6	18.6	29.5	30.4	32.6	36.5	39.7	41.4	47.4	53.8	59.5	73.3	98.2	108	140	141			
1.16		6.2	11.4	14.6	19.3	22.1	24.8	29.5	30.9	32.7	39.5	47.3	51.3	76.1	64.8	51.3	140	155			
1.45			10.6	15.1	21.3	25.5	30.3	33.4	35.9	42.0	44.6	52.1	56.7	68.8	93.7	107	104	102			
2.18					20.1	24.1	28.4	34.1	36.2	40.8	45.6	52.7	59.4	71.4	96.5	120	146	166	176	177	
4.35									34.9	39.2	46.4	53.3	59.6	72.2	96.8	124	148	168	197	202	
5.08									34.4	39.4	45.6	53.0	59.7	70.6	94.9	122	144	168	196	204	
350 MM / 13.8 IN. ACTUATOR																					
4.4									34.8	38.9	46.0	50.2	58.5	70.0	89.6	121	145	167	197	198	
7.3									28.4	32.7	41.3	48.1	54.1	67.5	89.3	111	139	165	187	221	
10.9											36.6	46.8	56.3	71.0	96.2	115	144	167	183	230	
14.5													50.8	45.7	68.8	117	141	165	135		
22														61.9	95.0	119	136	165	191		
255 MM / 10.0 IN. ACTUATOR																					
22														57.6	90.1	113	135	158	179		
29															78.2	106	129	148	170		
44																109	140	167	189		
58																	129	165	193		

Outside North America Only

Table 33. Utility Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 80 / 1.5 X 3 IN.																			
	INLET PRESSURE, barg																			
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6
475 MM / 18.7 IN. ACTUATOR																				
0.02	147	219	224	249	411	588	691	994	1077	1104	863	1093	1035	888	761	1598	1364	874		
0.03	133	207	247	264	462	528	666	782	948	1035	1218	1328	1407	812	874	979	720	1128		
0.05		232	242	293	442	682	750	854	886	1016	1063	1318	1484	1895	1596	1376	1128	1396		
0.08		105	235	264	366	418	471	588	811	537	871	1046	1100	1993	1711	1091	1965	1881		
0.1			221	304	409	527	608	615	783	876	1020	1096	1371	1554	1749	1930	1956	1901		
0.15					423	495	6922	736	801	869	1081	1330	1283	1573	1843	3020	2171	3064	2124	2134
0.3									632	765	991	1156	1335	1642	2212	3471	4323	5192	5675	5814
0.35									658	775	914	1091	1259	1592	2059	2859	4347	5180	5684	2726
350 MM / 13.8 IN. ACTUATOR																				
0.3									752	790	943	1095	1278	1462	1873	3090	3311	2791	2252	2330
0.5										600	702	885	973	1208	1675	1952	2222	2788	2080	
0.75											722	925	1183	1541	2158	2291	2802	3330	2741	3747
1													946	1541	2158	2187	2503	2835	2245	6743
1.5														1312	1931	2344	2897	3194	2534	6897
255 MM / 10.0 IN. ACTUATOR																				
1.5														981	1480	1876	2362	3209	2187	6436
2																1339	1677	1984	1516	3249
3																2632	2408	2972	2307	6266
4																	2272	2772	2275	6053

Table 34. Utility Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 40 X 80 / 1.5 X 3 IN.																			
	INLET PRESSURE, psig																			
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125
475 MM / 18.7 IN. ACTUATOR																				
0.29	5.2	7.7	7.9	8.8	14.5	20.8	24.4	35.1	38.0	39.0	30.5	38.6	36.6	31.4	26.9	56.4	48.2	30.9		
0.44	4.7	7.3	8.7	9.3	16.3	18.6	23.5	27.6	33.5	36.5	43.0	46.9	49.7	28.7	30.9	34.6	25.4	39.8		
0.73		8.2	8.5	10.4	15.6	24.1	26.5	30.1	31.3	35.9	37.5	46.5	52.4	66.9	56.4	48.6	39.8	49.3		
1.16		3.7	8.3	9.3	12.9	14.8	16.6	20.8	28.6	19.0	30.7	36.9	38.8	70.4	60.4	38.5	69.4	66.4		
1.45			7.8	10.7	14.5	18.6	21.5	21.7	27.7	30.9	36.0	38.7	48.4	54.9	61.8	68.2	69.1	67.1		
2.18					14.9	17.5	244.4	26.0	28.3	30.7	38.2	47.0	45.3	55.5	65.1	107	76.6	108	75.0	75.4
4.35									22.3	27.0	35.0	40.8	47.1	58.0	78.1	123	153	183	200	205
5.08									23.2	27.3	32.3	38.5	44.5	56.2	72.7	101	153	183	201	96.3
350 MM / 13.8 IN. ACTUATOR																				
4.4									26.6	27.9	33.3	38.7	45.1	51.6	66.1	109	117	98.5	79.5	82.3
7.3										21.2	24.8	31.2	34.4	42.6	59.2	68.9	78.5	98.4	73.4	
10.9											25.5	32.7	41.8	54.4	76.2	80.9	98.9	118	96.8	133
14.5													33.4	54.4	76.2	77.2	88.4	100	79.3	238
22														46.3	68.2	82.8	102	113	89.5	244
255 MM / 10.0 IN. ACTUATOR																				
22														981	1480	1876	2362	3209	2187	6436
29																1339	1677	1984	1516	3249
44																2632	2408	2972	2307	6266
58																	2272	2772	2275	6053

LSR Series

Table 35. Utility Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 80 / 1.5 X 3 IN.																								
	INLET PRESSURE, barg																								
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10	12	16	19	
475 MM / 18.7 IN. ACTUATOR																									
0.02	241	403	474	662	885	952	1161	1264	1365	1405	1690	1891	2073	2490	2009	3993	1502	1431							
0.03	169	263	313	623	851	938	1155	1251	1392	1495	1635	1871	2030	2454	3062	3846	4521	4113							
0.05		338	502	640	1017	1047	1125	1258	1367	1425	1634	1855	2048	2524	3383	3705	4832	4864							
0.08		215	392	502	665	763	855	1018	1064	1127	1362	1629	1768	2623	2233	1768	4839	5347							
0.1			364	519	733	879	1043	1150	1236	1448	1536	1794	1954	2371	3227	3689	3571	3503							
0.15					693	830	978	1175	1246	1405	1570	1815	2047	2462	3325	4140	5047	5713	6071	6103					
0.3									893	1004	1189	1364	1527	1850	2479	3861	3786	4302	5039	5814					
0.35									881	1010	1167	1357	1529	1809	2432	3113	3684	4315	5016	5233					
350 MM / 13.8 IN. ACTUATOR																									
0.3									971	1084	1282	1400	1633	1951	2499	4205	4054	4668	5481	5708					
0.5									793	913	1153	1341	1509	1884	2491	3085	3869	4592	5214	6175					
0.75										1020	1305	1569	1979	2683	3199	4014	4671	5100	6419	9050	9189	9303	9234		
1													1445	1300	1956	3332	4006	4679	3840		8397	9989	8833	8890	
1.5														1848	2837	3540	4076	4927	5701		6897	7937	10,896	11,006	
255 MM / 10.0 IN. ACTUATOR																									
1.5														1689	2642	3315	3974	4647	5264		8554	9519	12,835	10,391	
2																3114	3786	4338	4978		8175	9970	12,151	13,615	
3																3183	4100	4896	5538		8878	10,464	13,883	15,637	
4																	3693	5627	6601		8698	10,627	13,923	16,284	

Table 36. Utility Flow Full-Capacity LS200 Series DN 40 x 80 / 1.5 x 3 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 40 X 80 / 1.5 X 3 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10.2	11.6	14.5	18	22	29	44	58	73	87	102	125	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																								
0.29	8.5	14.2	16.7	23.4	31.3	33.6	41.0	44.6	48.2	49.6	59.7	66.8	73.2	87.9	70.9	141	53.1	50.5						
0.44	6.0	9.3	11.1	22.0	30.1	33.1	40.8	44.2	49.1	52.8	57.7	66.1	71.7	86.6	108	136	160	145						
0.73		11.9	17.7	22.6	35.9	37.0	39.7	44.4	48.3	50.3	57.7	65.5	72.3	89.1	119	131	171	172						
1.16		7.6	13.8	17.7	23.5	26.9	30.2	35.9	37.6	39.8	48.1	57.5	62.4	92.6	78.8	62.4	171	189						
1.45			12.9	18.3	25.9	31.0	36.8	40.6	43.6	51.1	54.2	63.4	69.0	83.7	114	130	126	124						
2.18					24.5	29.3	34.5	41.5	44.0	49.6	55.5	64.1	72.3	86.9	117	146	178	202	214	216				
4.35									31.5	35.5	42.0	48.2	53.9	65.3	87.5	136	134	152	178	205				
5.08									31.1	35.7	41.2	47.9	54.0	63.9	85.9	110	130	152	177	185				
255 MM / 10.0 IN. ACTUATOR																								
4.4									34.3	38.3	45.3	49.4	57.7	68.9	88.3	148	143	165	194	202				
7.3									28.0	32.2	40.7	47.4	53.3	66.5	88.0	109	137	162	184	218				
10.9											36.0	46.1	55.4	69.9	94.7	113	142	165	180	227	320	324	328	326
14.5													51.0	65.3	69.1	118	141	165	136		297	353	312	314
22														65.3	100	125	144	174	201		244	280	385	389
255 MM / 10.0 IN. ACTUATOR																								
22														59.7	93.3	117	140	164	186		302	336	453	367
29																110	134	153	176		289	352	429	481
44																112	145	173	196		314	369	490	552
58																	130	199	233		307	375	492	575

Outside North America Only

Table 37. Utility Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 50 / 2 X 2 IN.																						
	INLET PRESSURE, barg																						
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10	12	16	19
475 MM / 18.7 IN. ACTUATOR																							
0.02	92	287	382	399	595	639	770	750	934	811	856	1284	1427	1382	1886	1912	1644	1500					
0.03	109	175	260	341	369	575	606	683	655	738	895	1154	1173	1417	1855	2129	2661	2083					
0.05		183	285	346	549	519	769	715	893	909	1044	1209	1405	1715	2737	2207	2177	2361					
0.08		128	288	385	419	419	867	875	978	1003	1008	1385	1498	2018	2610	2918	2747	3094					
0.1			175	265	500	689	708	654	768	792	1036	1291	1314	1624	2419	2419	2878	2918					
0.15					514	689	807	942	1030	1140	1366	1536	1768	2190	2822	3301	3695	4202	4913				
0.3									875	1168	1087	1395	1523	1830	3270	3179	3707	4191	4810				
350 MM / 13.8 IN. ACTUATOR																							
0.3									807	869	1104	1526	1979	2500	3540	4502	3087	2775	3002				
0.5									462	589	725	835	1002	1269	1792	2441	3285	4474	5805				
0.75											631	920	1390	1555	2393	3455	5125	5947	7532	9061	8297	12,290	6938
1													1206	1368	1764	2789	3002	4870	5493	9175	10,081	11,638	11,610
1.5														1252	2180	3171	4021	5012	5918	8920	9543	13,705	15,659
255 MM / 10.0 IN. ACTUATOR																							
1.5														745	1549	2019	2464	3030	3710	5409	6343	6909	6711
2															759	1082	1235	1600	1838	3087	2699	3455	4276
3																1937	2582	3030	3681	5267	6060	7476	8778
4																	2178	3143	4078	5663	6799	8637	10,251

Table 38. Utility Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 50 / 2 X 2 IN.																							
	INLET PRESSURE, psig																							
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276	
475 MM / 18.7 IN. ACTUATOR																								
0.29	3.26	10.2	13.5	14.1	21.0	22.6	27.2	26.5	33.0	28.7	30.3	45.4	50.4	48.8	66.6	67.6	58.1	53.0						
0.44	3.87	6.19	9.18	12.1	13.0	20.3	21.4	24.1	23.1	26.1	31.6	40.8	41.5	50.1	65.5	75.2	94.0	73.6						
0.73		6.46	10.1	12.2	19.4	18.3	27.2	25.3	31.6	32.1	36.9	42.7	49.7	60.6	96.7	78.0	76.9	83.4						
1.16		4.52	10.2	13.6	14.8	14.8	30.7	30.9	34.6	35.5	35.6	48.9	52.9	71.3	92.2	103	97.1	109						
1.45			6.18	9.38	17.7	24.4	25.0	23.1	27.1	28.0	36.6	45.6	46.4	57.4	85.5	85.5	102	103						
2.18					18.2	24.4	28.5	33.3	36.4	40.3	48.3	54.3	62.5	77.4	99.7	117	131	148	174					
4.35									30.9	41.3	38.4	49.3	53.8	64.7	116	112	131	148	170					
350 MM / 13.8 IN. ACTUATOR																								
4.35									28.5	30.7	39	53.9	69.9	88.3	125	159	109	98	106					
7									16.3	20.8	25.6	29.5	35.4	44.8	63.3	86.2	116	158	205					
11											22.3	32.5	49.1	54.9	84.5	122	181	210	266	320	293	434	245	
14.5												42.6	48.3	62.3	98.5	106	172	194	324	356	411	410		
22														44.2	77	112	142	177	209	315	337	484	553	
255 MM / 10.0 IN. ACTUATOR																								
22														26.3	54.7	71.3	87	107	131	191	224	244	237	
29															26.8	38.2	43.6	56.5	64.9	109	95.3	122	151	
44																68.4	91.2	107	130	186	214	264	310	
58																	76.9	111	144	200	240	305	362	

LSR Series

Table 39. Utility Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 50 / 2 X 2 IN.																		
	INLET PRESSURE, barg																		
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7
475 MM / 18.7 IN. ACTUATOR																			
0.02	150	434	564	617	793	908	1085	1113	1277	1397	1586	1756	1932	2089	2783	2511	3889	3291	
0.03	159	235	380	512	636	788	836	886	1008	1089	1259	1667	1649	1983	2562	2791	3136	3047	
0.05		347	527	636	825	996	1102	1337	1421	1559	1749	2096	2293	2733	3559	3534	4071	4353	
0.08		282	456	617	873	977	1116	1305	1426	1572	1841	2098	2341	2806	3736	4377	4685	5986	
0.1			344	488	718	1043	1127	1161	1269	1411	1574	1932	2144	2422	3744	3885	4242	5167	
0.15					698	899	1112	1245	1384	1529	1805	2011	2311	2727	3487	4375	4628	5797	6290
0.3									1296	1344	1601	1925	2194	2652	4266	4366	5511	5956	7137
350 MM / 13.8 IN. ACTUATOR																			
0.3									1362	1501	1708	2223	2432	3200	3851	4955	6201	6796	8184
0.5									1036	1317	1546	2044	2396	3030	3766	4955	5465	5833	7136
0.75											1436	1764	2769	2917	3964	4814	5975	6145	7532
1													1937	2662	3766	4870	5805	7249	7787
1.5														2452	3964	4616	5635	7051	7589
255 MM / 10.0 IN. ACTUATOR																			
1.5														2291	3483	4502	5182	6003	6485
2															2537	3483	4021	4729	5352
3																4276	5522	6654	7362
4																	4984	6711	7702

Table 40. Utility Flow Full-Capacity LS200 Series DN 50 x 50 / 2 x 2 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 50 / 2 X 2 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																							
0.29	5.29	15.3	19.9	21.8	28.0	32.1	38.3	39.3	45.1	49.4	56.0	62.0	68.3	73.8	98.4	88.7	137	116					
0.44	5.61	8.31	13.4	18.1	22.5	27.8	29.5	31.3	35.6	38.5	44.5	58.9	58.3	70.1	90.5	98.6	111	108					
0.73		12.3	18.6	22.5	29.1	35.2	38.9	47.2	50.2	55.1	61.8	74.1	81.0	96.6	126	125	144	154					
1.16		9.97	16.1	21.8	30.8	34.5	39.5	46.1	50.4	55.6	65.0	74.1	82.7	99.2	132	155	166	212					
1.45			12.2	17.2	25.4	36.8	39.8	41.0	44.8	49.8	55.6	68.3	75.8	85.6	132	137	150	183					
2.18					24.7	31.7	39.3	44.0	48.9	54.0	63.8	71.1	81.7	96.4	123	155	164	205	222				
4.35									45.8	47.5	56.6	68.0	77.5	93.7	151	154	195	210	252				
350 MM / 13.8 IN. ACTUATOR																							
4.35									48.1	53	60.3	78.5	85.9	113	136	175	219	240	289				
7									36.6	46.5	54.6	72.2	84.6	107	133	175	193	206	252				
11											50.7	62.3	97.8	103	140	170	211	217	266	342	410	434	436
14.5													68.4	94	133	172	205	256	275	362	400	472	486
22														86.6	140	163	199	249	268	349	380	596	607
255 MM / 10.0 IN. ACTUATOR																							
22														80.9	123	159	183	212	229	275	322	402	446
29															89.6	123	142	167	189	267	298	342	376
44																151	195	235	260	355	387	437	514
58																	176	237	272	376	441	560	615

Outside North America Only

Table 41. Utility Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 100 / 2 X 4 IN.																		
	INLET PRESSURE, barg																		
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7
475 MM / 18.7 IN. ACTUATOR																			
0.02	174	537	708	732	1071	1128	1334	1273	1555	1321	1337	1896	1984	1686	1656	2277	2471	2723	
0.03	207	328	479	624	664	1020	1057	1161	1093	1204	1397	1702	1625	1735	1634	2537	3978	3793	
0.05		340	526	638	984	917	1340	1219	1490	1490	1638	1786	1945	2099	2379	2608	3292	4294	
0.08		240	533	706	754	737	1511	1483	1634	1625	1579	2044	2084	2458	2307	3452	4107	5625	
0.1			325	485	905	1213	1222	1114	1277	1295	1626	1903	1836	1975	2102	2883	4314	5317	
0.15					929	1212	1398	1608	1710	1847	2141	2268	2468	2656	2486	3939	5572	7618	5404
0.3									788	1894	1705	2054	2115	2223	2888	5529	5609	7635	5291
350 MM / 13.8 IN. ACTUATOR																			
0.3									869	937	1192	1645	2138	2699	3823	4842	3313	3002	3200
0.5									498	634	782	900	1082	1368	1934	2636	3540	4814	6258
0.75											680	991	1501	1676	2582	3738	5522	6400	8099
1													1303	1475	1903	3002	3228	5239	5918
1.5														1348	2464	3398	4332	5409	6654
255 MM / 10.0 IN. ACTUATOR																			
1.5														801	1674	2178	2662	3256	3993
2															852	1215	1388	1727	1982
3																2090	2888	3398	4106
4																	2449	3511	4389

Table 42. Utility Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 50 X 100 / 2 X 4 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																							
0.29	6.16	19.0	25.0	25.9	37.8	39.9	47.2	45.0	54.9	46.7	47.2	67.0	70.1	59.6	58.5	80.4	87.3	96.2					
0.44	7.31	11.6	16.9	22.1	23.5	36.0	37.3	41.0	38.6	42.5	49.3	60.2	57.4	61.3	57.7	89.7	141	134					
0.73		12.0	18.6	22.5	34.8	32.4	47.4	43.1	52.6	52.6	57.9	63.1	68.7	74.2	84.1	92.2	116	152					
1.16		8.49	18.8	25.0	26.6	26.0	53.4	52.4	57.8	57.4	55.8	72.2	73.6	86.8	81.5	122	145	199					
1.45			11.5	17.1	32.0	42.9	43.2	39.4	45.1	45.8	57.4	67.3	64.9	69.8	74.3	102	152	188					
2.18					32.8	42.8	49.4	56.8	60.4	65.3	75.7	80.2	87.2	93.9	87.9	139	197	269	191				
4.35									27.8	66.9	60.2	72.6	74.7	78.6	102	195	198	270	187				
350 MM / 13.8 IN. ACTUATOR																							
4.35									30.7	33.1	42.1	58.1	75.5	95.3	135	171	117	106	113				
7									17.6	22.4	27.6	31.8	38.2	48.3	68.3	93.1	125	170	221				
11											24	35	53	59.2	91.2	132	195	226	286	345	315	469	264
14.5													46	52.1	67.2	106	114	185	209	349	384	528	527
22														47.6	87	120	153	191	235	340	363	522	596
255 MM / 10.0 IN. ACTUATOR																							
22														28.3	59.1	76.9	94	115	141	206	242	313	304
29															30.1	42.9	49	61	70	117	102	131	163
44																73.8	102	120	145	201	241	296	348
58																	86.5	124	155	224	270	343	407

LSR Series

Table 43. Utility Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, barg	UTILITY FLOW CAPACITIES IN Nm³/hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 100 / 2 X 4 IN.																							
	INLET PRESSURE, barg																							
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	10	12	16	19	
475 MM / 18.7 IN. ACTUATOR																								
0.02	277	799	1034	1125	1434	1628	1928	1961	2229	2417	2694	2915	3132	3224	3862	3357	5004	4069						
0.03	293	433	700	935	1154	1408	1486	1552	1750	1892	2131	2753	2666	3049	3564	3713	4021	3781						
0.05		637	966	1166	1496	1785	1962	2363	2477	2684	2970	3496	3724	4203	4926	4736	5218	5362						
0.08		522	839	1123	1583	1745	1981	2305	2479	2706	3144	3464	3809	4316	5149	5821	6020	7399						
0.1			629	889	1295	1867	2010	2045	2216	2444	2688	3195	3490	3728	5193	5167	5434	6371						
0.15					1268	1610	1972	2192	2428	2653	3054	3344	3754	4218	4853	6091	6220	7200	6919					
0.3									1342	2321	2706	3184	3540	4118	5942	6051	7637	7367	8829					
350 MM / 13.8 IN. ACTUATOR																								
0.3									1433	1580	1798	2342	2563	3341	4049	5239	6541	7221	8608					
0.5									1164	1385	1671	2152	2526	3200	3936	5210	5720	6145	7504					
0.75											1512	1858	2917	3087	4163	5040	6286	6485	7900	10,166	12,205	12,941	12,997	
1													2042	2806	3936	5125	6088	7617	8184	10,789	11,921	14,583	14,555	
1.5														2585	4163	5040	5975	7447	8127	10,307	11,185	17,188	17,953	
255 MM / 10.0 IN. ACTUATOR																								
1.5														2421	3625	4729	5380	6315	6853	8495	9656	11,610	13,507	
2															2670	3625	4332	4955	5805	7702	8297	10,194	11,468	
3																4474	5862	6994	7815	10,449	11,751	13,875	15,772	
4																	5210	6881	8099	11,270	13,224	15,688	18,491	

Table 44. Utility Flow Full-Capacity LS200 Series DN 50 x 100 / 2 x 4 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 50 X 100 / 2 X 4 IN.																						
	INLET PRESSURE, psig																						
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	145	174	232	276
475 MM / 18.7 IN. ACTUATOR																							
0.29	9.78	28.2	36.5	39.8	50.7	57.5	68.1	69.3	78.8	85.4	95.2	103	111	114	136	119	177	144					
0.44	10.3	15.3	24.7	33.0	40.8	49.8	52.5	54.9	61.9	66.9	75.3	97.3	94	108	126	131	142	134					
0.73		22.5	34.1	41.2	52.9	63.1	69.3	83.5	87.5	94.8	105	124	132	149	174	167	184	189					
1.16		18.4	29.6	39.7	55.9	61.7	70.0	81.5	87.6	95.6	111	122	135	153	182	206	213	261					
1.45			22.2	31.4	45.8	66.0	71.0	72.3	78.3	86.4	95.0	113	123	132	183	183	192	225					
2.18					44.8	56.9	69.7	77.4	85.8	93.8	108	118	133	149	171	215	220	254	244				
4.35									47.4	82.0	95.6	113	125	146	210	214	270	260	312				
350 MM / 13.8 IN. ACTUATOR																							
4.35									50.6	55.8	63.5	82.7	90.5	118	143	185	231	255	304				
7									41.1	48.9	59	76	89.2	113	139	184	202	217	265				
11											53.4	65.6	103	109	147	178	222	229	279	359	431	457	459
14.5													72.1	99.1	139	181	215	269	289	381	421	515	514
22														91.3	147	178	211	263	287	364	395	607	634
255 MM / 10.0 IN. ACTUATOR																							
22														85.5	128	167	190	223	242	300	341	410	477
29															94.3	128	153	175	205	272	293	360	405
44																158	207	247	276	369	415	490	557
58																	184	243	286	398	467	554	653

Outside North America Only

Table 45. Utility Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, bar	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
350 MM / 13.8 IN. ACTUATOR																					
0.3									2930	1961	2321	2485	2133	2439	3290	4391	4827	5628	6147	5683	
0.5									1639	1690	1770	1870	2042	2453	3255	4199	4821	5588	6151	7293	
0.75											2034	1984	2224	2839	3875	4784	6036	6489	8022	8424	9285
1													2286	3064	3890	4734	5657	6556	8092		10,888
1.5														28060	5056	5662	6744	7732	8476		11,418
255 MM / 10.0 IN. ACTUATOR																					
1.5														2883	3597	4645	7087	6267	7460		9000
2															2853	3594	5096	5494	6464		8771
3																4745	9036	7158	8118		10,644
4																	4774	7586	9173		11,179

Table 46. Utility Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in SCFH at AC5 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, psig																				
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145
350 MM / 13.8 IN. ACTUATOR																					
4.35									103	69.2	81.9	87.8	75.3	86.1	116	155	170	199	217	201	
7									57.9	59.7	62.5	66.0	72.1	86.6	115	148	170	197	217	258	
11											71.8	70.1	78.5	100	137	169	213	229	283	297	328
14.5													80.7	108	137	167	200	231	286		384
22														991	179	200	238	273	299		403
255 MM / 10.0 IN. ACTUATOR																					
22														102	127	164	250	221	263		318
29															101	127	180	194	228		310
44																168	319	253	287		376
58																	169	268	324		395

Table 47. Utility Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, bar	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, barg																				
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6	10
350 MM / 13.8 IN. ACTUATOR																					
0.3									3727	3167	3622	3953	4610	4630	5043	6176	6535	7483	8243	9691	
0.5									1821	2223	2752	3481	3600	4214	5060	6006	6928	7668	8649	9874	
0.75											3847	4209	5038	6038	7590	9243	10,888	10,897	11,785	12,734	13,879
1													4039	5807	7457	9034	10,453	11,442	12,477		15,838
1.5														4176	8159	9964	12,340	13,709	13,006		15,625
255 MM / 10.0 IN. ACTUATOR																					
1.5														4195	6397	7505	8402	8817	9501		12,259
2															5211	7103	8064	9426	9992		13,936
3																6695	11,153	12,698	13,955		17,491
4																	10,362	12,931	16,010		19,182

Table 48. Utility Flow Full-Capacity LS300 Series DN 80 x 80 / 3 x 3 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 80 / 3 X 3 IN.																				
	INLET PRESSURE, psig																				
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125	145
350 MM / 13.8 IN. ACTUATOR																					
4.35									132	112	128	140	163	163	178	218	231	264	291	342	
7									64.3	78.5	123	127	149	179	212	245	271	305	349		
11											136	149	178	213	268	326	384	385	416	450	490
14.5													143	205	263	319	369	404	441		559
22														147	288	352	436	484	459		552
255 MM / 10.0 IN. ACTUATOR																					
22														148	226	265	297	311	335		433
29															184	251	285	333	353		492
44																236	394	448	493		618
58																	366	457	565		677

LSR Series

Table 49. Utility Flow Full-Capacity LS300 Series DN 80 x 150 / 3 x 6 in. Body in Nm³/hr at AC5 Accuracy

OUTLET PRESSURE, bar	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 150 / 3 X 6 IN.																			
	INLET PRESSURE, barg																			
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6
350 MM / 13.8 IN. ACTUATOR																				
0.3									1876	1968	2328	2494	2140	2447	3301	3628	4843	5647	6168	7770
0.5									1645	1696	1776	1876	2049	2461	3266	4213	4837	5607	6172	7317
0.75											2041	1991	2232	2848	3888	4800	6056	6511	8049	8452
1												2294		3074	3903	4750	5676	6578	8119	
1.5													2752	496	555	662	758	17,211		
255 MM / 10.0 IN. ACTUATOR																				
1.5														2459	3627	4684	7148	6320	7523	9076
2															2877	3625	5139	5541	6519	8845
3																4072	10,031	7946	9012	11,816
4																	5059	8040	9722	12,010

Table 50. Utility Flow Full-Capacity LS300 Series DN 80 x 150 / 3 x 6 in. Body in SCFH at AC5 Accuracy

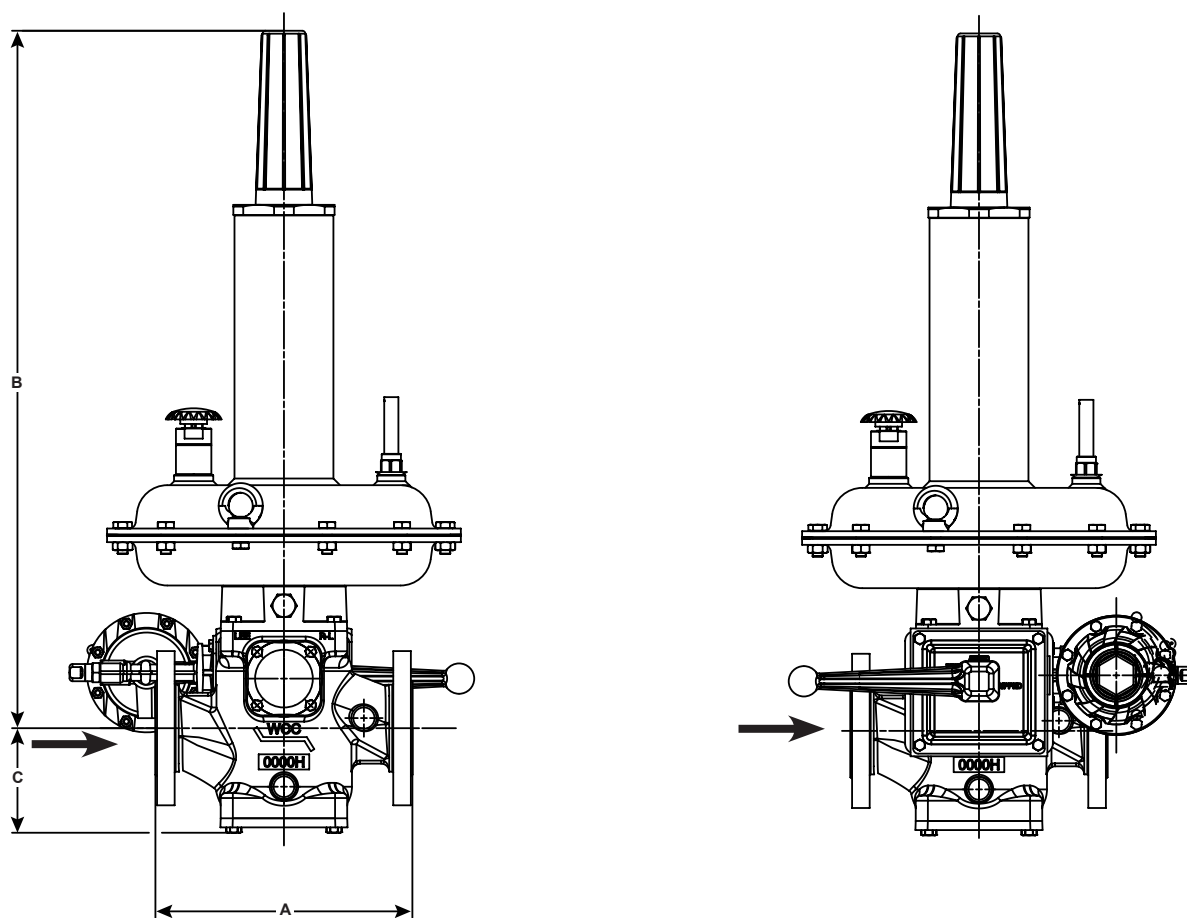
OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC5 FOR DN 80 X 150 / 3 X 6 IN.																			
	INLET PRESSURE, psig																			
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125
350 MM / 13.8 IN. ACTUATOR																				
4.35									66	69	82	88	76	86	117	128	171	199	218	274
7									58	60	63	66	72	87	115	149	171	198	218	258
11											72	70	79	101	137	169	214	230	284	298
14.5												81	109	138	168	200	232	287		371
22													97	18	20	23	27	608		652
255 MM / 10.0 IN. ACTUATOR																				
22														87	128	165	252	223	266	320
29															102	128	181	196	230	312
44																144	354	281	318	417
58																	179	284	343	424

Table 51. Utility Flow Full-Capacity LS300 Series DN 80 x 150 / 3 x 6 in. Body in Nm³/hr at AC10 Accuracy

OUTLET PRESSURE, bar	UTILITY FLOW CAPACITIES IN Nm ³ /hr AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 150 / 3 X 6 IN.																			
	INLET PRESSURE, barg																			
	0.05	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.25	1.5	2	3	4	5	6	7	8.6
350 MM / 13.8 IN. ACTUATOR																				
0.3									5258	4045	4626	5048	5887	5912	6440	7887	8345	8396	9248	10,873
0.5									3906	2839	3514	4445	4597	5380	6461	7670	8846	9792	11,044	12,608
0.75											4913	5882	6864	8015	11,042	13,728	14,623	15,695	17,264	16,260
1												5157	7415	9522	11,536	13,348	14,610	15,933		16,250
1.5													6081	11,881	14,510	17,969	19,963	18,940		20,140
255 MM / 10.0 IN. ACTUATOR																				
1.5														5774	8806	10,331	11,566	12,137	13,079	16,734
2															7173	9777	11,100	12,976	13,754	19,184
3																9690	16,142	18,379	20,199	19,777
4																	12,134	15,142	18,748	22,702

Table 52. Utility Flow Full-Capacity LS300 Series DN 80 x 150 / 3 x 6 in. Body in SCFH at AC10 Accuracy

OUTLET PRESSURE, psig	UTILITY FLOW CAPACITIES IN THOUSANDS OF SCFH AT 0.6 SPECIFIC GRAVITY NATURAL GAS AT AC10 FOR DN 80 X 150 / 3 X 6 IN.																			
	INLET PRESSURE, psig																			
	0.7	1.5	2.2	2.9	4.4	5.8	7.3	8.7	10	11.6	14.5	18	22	29	44	58	73	87	102	125
350 MM / 13.8 IN. ACTUATOR																				
4.35									186	143	163	178	208	209	227	278	295	296	327	384
7									138	100	124	157	162	190	228	271	312	346	390	445
11											173	208	242	283	390	485	516	554	610	574
14.5												182	262	336	407	471	516	563		574
22													215	420	512	635	705	669		711
255 MM / 10.0 IN. ACTUATOR																				
22														204	311	365	408	429	462	591
29															253	345	392	458	486	677
44																342	570	649	713	698
58																	428	535	662	802

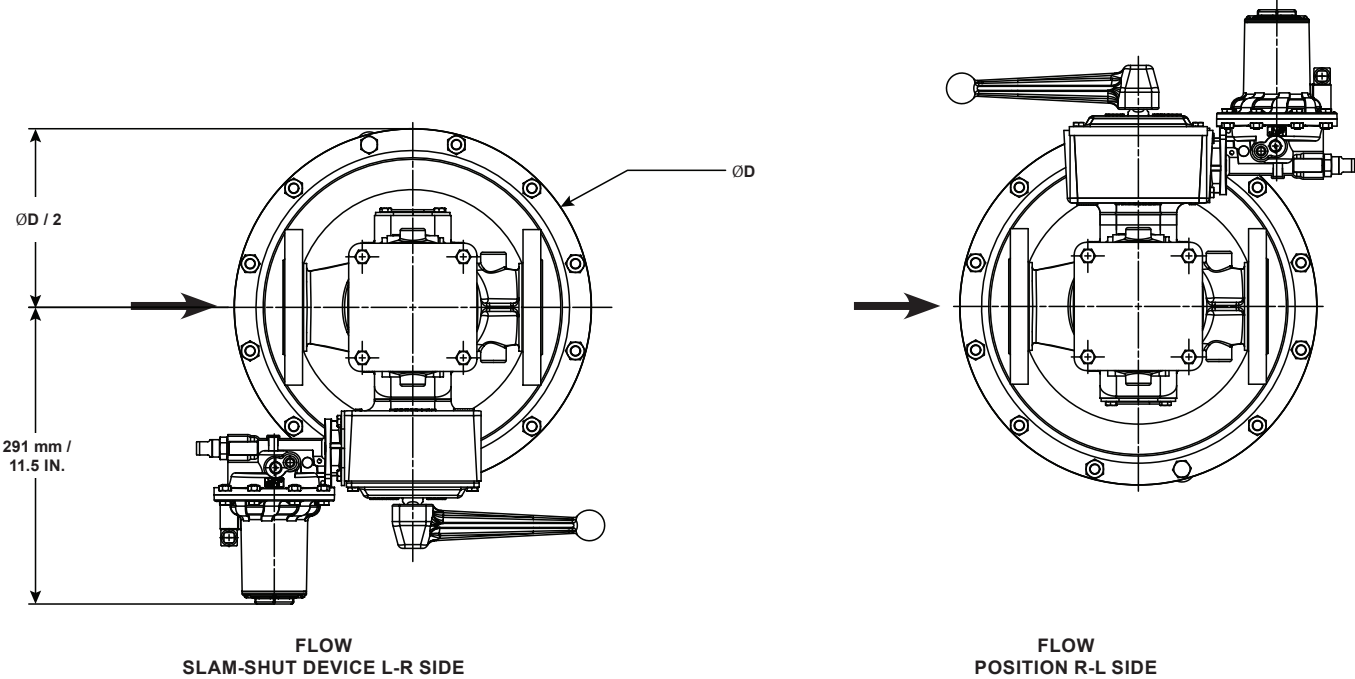


SLAM-SHUT DEVICE POSITIONS

Figure 3A. LS200 Series with Slam-Shut Device Assembly Positions and Dimensions

Table 53. LS200 Series with Slam-Shut Device Assembly Positions and Dimensions

BODY SIZE DN / in.	ACTUATOR DIAMETER SIZE mm / in.	DIMENSION, mm / in.		
		A	B	C
40 / 1.5	475 / 18.7	219 / 8.6	689 / 27.1	103 / 4.1
	350 / 13.8	219 / 8.6	689 / 27.1	103 / 4.1
	255 / 10.0	222 / 8.7	689 / 27.1	103 / 4.1
50 / 2	475 / 18.7	254 / 10.0	689 / 27.1	103 / 4.1
	350 / 13.8	254 / 10.0	689 / 27.1	103 / 4.1
	255 / 10.0	254 / 10.0	689 / 27.1	103 / 4.1



ACTUATOR DIAMETER SIZE	
mm	in.
475	18.7
350	13.8
255	10

Figure 3B. LS200 Series with Slam-Shut Device Assembly Positions and Dimensions (continued)

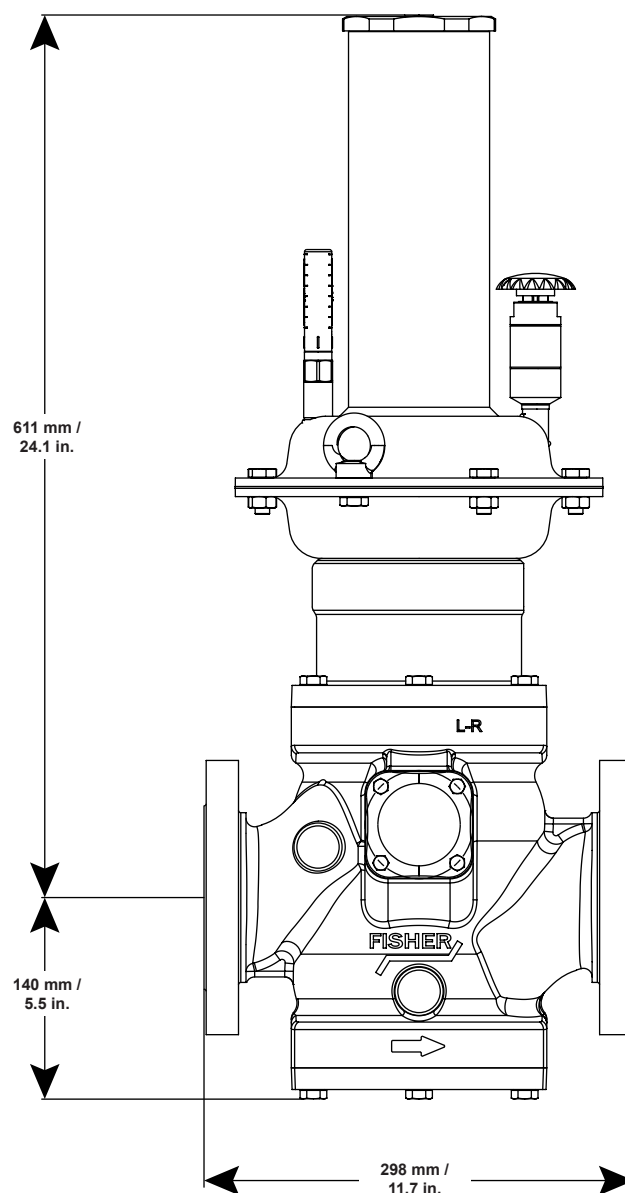


Figure 4. LS300 Series with 255 mm / 10 in. Actuator Dimensions

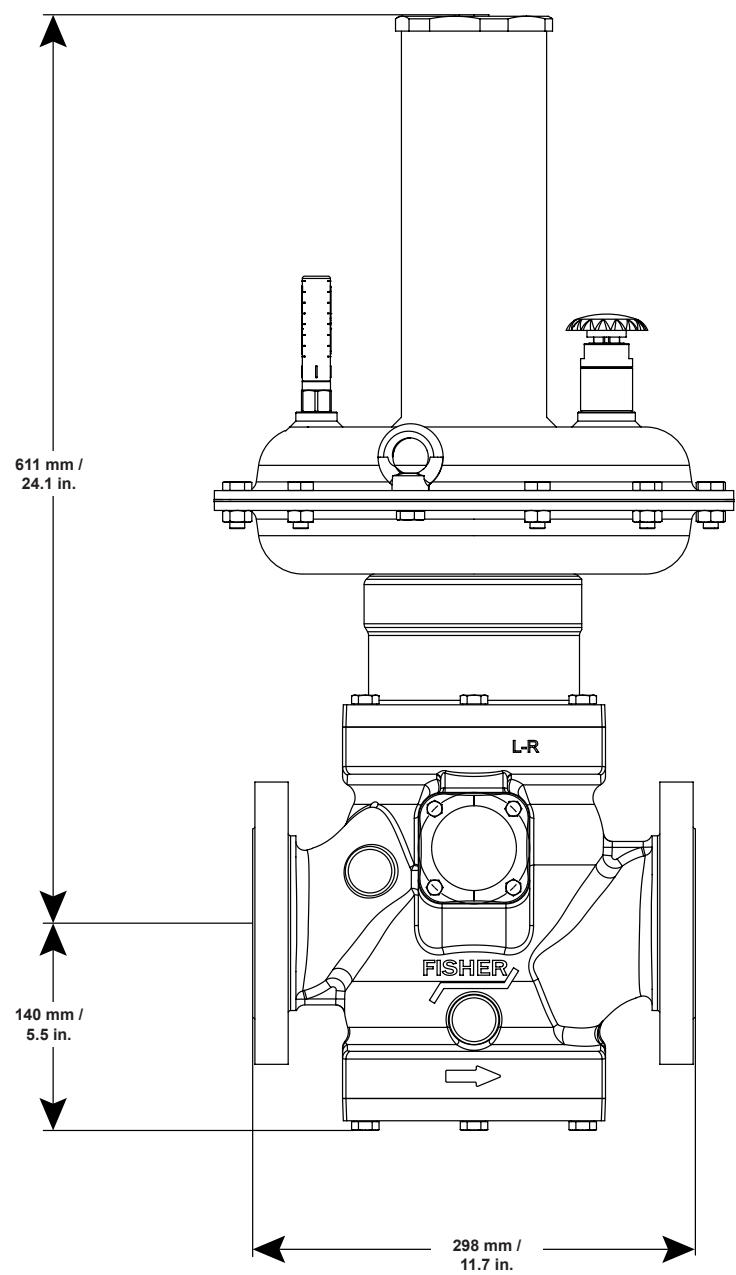


Figure 5. LS300 Series with 350 mm / 13.8 in. Actuator Dimensions

Outside North America Only

Ordering Information

Use the Specifications section on page 2 and carefully review the description to the right of each specification. Use this information to complete the

Ordering Guide on the following page. Specify the desired selection wherever there is a choice to be made. Then send the Ordering Guide to your local Sales Office.

Ordering Guide

Size (Select One)

- ☐ DN 40 / 1.5 in.
- ☐ DN 40 x 80 / 1.5 x 3 in.
- ☐ DN 50 / 2 in.
- ☐ DN 50 x 100 / 2 x 4 in.

Actuator Type (Select One)

- ☐ Low Pressure, 455 mm / 18.7 in.
- ☐ Medium Pressure, 350 mm / 13.8 in.
- ☐ High Pressure, 255 mm / 10.0 in.

Body Material and End Connection Style (Select One)

Ductile Iron

- ☐ PN16
- ☐ CL150 RF
- ☐ PN16 with expanded outlet
- ☐ CL150 RF with expanded outlet

Steel

- ☐ NPT
- ☐ PN16
- ☐ CL150 RF
- ☐ PN16 with expanded outlet
- ☐ CL150 RF with expanded outlet

Outlet Pressure Range (Select One)

Type LS200

- ☐ 0.017 to 0.022 barg / 0.25 to 0.32 psig, Light Blue
- ☐ 0.02 to 0.05 barg / 0.30 to 0.70 psig, Yellow
- ☐ 0.04 to 0.09 barg / 0.60 to 1.28 psig, Brown
- ☐ 0.08 to 0.15 barg / 1.10 to 2.24 psig, Dark Grey
- ☐ 0.14 to 0.35 barg / 2 to 5 psig, Pink

Type LS220

- ☐ 0.03 to 0.09 barg / 0.49 to 1.34 psig, Yellow
- ☐ 0.06 to 0.17 barg / 0.84 to 2.44 psig, Brown
- ☐ 0.14 to 0.3 barg / 2.0 to 4.35 psig, Light Green
- ☐ 0.3 to 0.35 barg / 4.35 to 5.1 psig, Light Green
- ☐ 0.3 to 0.73 barg / 4.35 to 10.6 psig, Pink
- ☐ 0.33 to 1.08 barg / 4.8 to 15.7 psig, Dark Blue
- ☐ 0.57 to 1.5 barg / 8.3 to 21.75 psig, Orange

Type LS250

- ☐ 1.38 to 2.09 barg / 20 to 30.3 psig, Pink
- ☐ 1.38 to 3.09 barg / 20 to 44.8 psig, Dark Blue
- ☐ 1.72 to 4.14 barg / 25 to 60 psig, Orange

Type LS320

- ☐ 0.3 to 0.35 barg / 4.35 to 5.1 psig, Light Green
- ☐ 0.3 to 0.73 barg / 4.35 to 10.6 psig, Pink
- ☐ 0.33 to 1.08 barg / 4.8 to 15.7 psig, Dark Blue
- ☐ 0.57 to 1.5 barg / 8.3 to 21.75 psig, Orange

Type LS350

- ☐ 1.38 to 2.09 barg / 20 to 30.3 psig, Pink
- ☐ 1.38 to 3.09 barg / 20 to 44.8 psig, Dark Blue
- ☐ 1.72 to 4.14 barg / 25 to 60 psig, Orange

Trim, Percent of Full Capacity (Select One)

- ☐ 100% (standard)
- ☐ 78%
- ☐ 60%
- ☐ 40%

Elastomers

- ☐ Nitrile (NBR) (standard)

Slam-Shut Position (refer to Figure 3) (Select One)

- ☐ L-R
- ☐ R-L
- ☐ L-R with Field Conversion Option
- ☐ R-L with Field Conversion Option

Regulators Quick Order Guide	
***	Readily Available for Shipment
**	Allow Additional Time for Shipment
*	Special Order, Constructed from Non-Stocked Parts. Consult your local Sales Office for Availability.
Availability of the product being ordered is determined by the component with the longest shipping time for the requested construction.	

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Specification Worksheet

Application:

Specific Use _____

Line Size _____

Fluid Type _____

Specific Gravity _____

Temperature _____

Does the Application Require Overpressure Protection?

☐ Yes ☐ No

Pressure:

Maximum Inlet Pressure (P_{1max}) _____

Minimum Inlet Pressure (P_{1min}) _____

Downstream Pressure Setting(s) (P₂) _____

Set Pressure _____

Maximum Flow (Q_{max}) _____

Accuracy Requirements:

Less Than or Equal To:

☐ 5% ☐ 10% ☐ 20% ☐ 40%

Construction Material Requirements (if known):

Outside North America Only

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