



## KEY FEATURES

- Operates up to 1480 psi
- Hydraulic drive
- Depth measurement
- Control bar mechanical lock

## DESCRIPTION

They utilize hydraulically operated cylinders with control bar with direct measurement reading for distance control, and a double lock for securing the line stop head in place. Industry standard connection flange adapter for existing equipment.

## APPLICATIONS

Mirage Line Stopping Actuators (LSA) are used in conjunction with the required line stop head and housings to carry out line stops in surface or subsea environments. The range is designed for easy use on pipelines in various materials and differing wall thickness. Their use provides temporary pipeline isolation, temporary or permanent bypass and no costly interruption of service.

## SPECIFICATIONS

	LSA412	LSA1420	LSA2234	LSA3648
<b>Diameter min</b>	102mm (4")	355mm (14")	588mm (22")	915mm (36")
<b>Diameter max</b>	305mm (12")	508mm (20")	864mm (34")	1219mm (48")
<b>Stroke</b>	1829mm (72")	2591mm (102")	3356mm (140")	4191mm (165")
<b>Drive Power Type</b>	Hydraulic	Hydraulic	Hydraulic	Hydraulic
<b>Standard Certified Pressure</b>	102bar (1480psi)	102bar (1480psi)	102bar (1480psi)	102bar (1480psi)
<b>Max Operating Pressure</b>	102bar (1480psi)	102bar (1480psi)	102bar (1480psi)	102bar (1480psi)
<b>Max Operating Temperature Continuous (Standard)</b>	83°C (181°F)	83°C (181°F)	83°C (181°F)	83°C (181°F)
<b>Hydraulic Supply Needed @ 70 bar</b>	Variable flow	Variable flow	Variable flow	Variable flow
<b>Weight</b>	135kg (297 lb)	450kg (990 lb)	740kg (1631 lb)	1550kg (3410 lb)
<b>Shipping Weight</b>	195kg (430 lb)	525kg (1155 lb)	840kg (1848 lb)	1675kg (3685 lb)
<b>Shipping Dimensions</b>	354cm x 50cm x 50cm 140" x 20" x 20"	354cm x 50cm x 50cm 140" x 20" x 20"	450cm x 50cm x 50cm 177" x 20" x 20"	525cm x 50cm x 50cm 177" x 20" x 20"

All weights and dimensions approximate and for guidance only. Weights vary depending upon options selected.

## INCLUDED AS STANDARD WITH EACH MACHINE

Each machine is supplied complete with actuator, hydraulic valve and pressure relief, control bar protector and pressure test end cap, certified lifting bracket, connection hoses, all required mounting studs and nuts and #600 connection spool, CE certificate, packing list and manual - pressure certificate for working pressure - 1480 psi (102 bar).

## STANDARD LINE STOPPING CUTTERS

Nominal Size		Actual Size		Standard Line Stop Cutters			Standard Line Stop Pilot Drills		
Inches	DN	Inches	mm	lbs	kg	Part no.	lbs	kg	Part no.
12	300	11.81	299.9	40.5	18	LSC12	2.5	1	LSPD12
14	350	13.06	332	49	22	LSC14	5.5	2.5	LSPD14
16	400	15.06	383	64	29	LSC16	6	2.7	LSPD16
18	450	17	432	84	38	LSC18	6	3	LSPD18
20	500	19	483	98	45	LSC20	6.5	2.9	LSPD20
22	550	21	533	125	57	LSC22	7.5	3.4	LSOD22
24	600	23	584	135	61	LSC24	8	3.6	LSPD24
26	650	25	635	156	71	LSC26	8.5	3.8	LSPD26
28	700	27	686	232	105	LSC28	10.5	4.7	LSPD28
30	750	29	737	275	125	LSC30	11	5	LSPD30
32	800	31	787	330	150	LSC32	15	6.8	LSPD32
34	850	33	838	395	179	LSC34	15	6.8	LSPD34
36	900	35	889	430	195	LSC36	18	8.1	LSPD36
38	950	36.87	937	450	204	LSC38	18	8.1	LSPD38
40	1000	38.87	987	523	238	LSC40	20	9	LSPD40
42	1050	40.87	1038	606	276	LSC42	20	9	LSPD42

## STANDARD LINE STOP HOUSINGS

Nominal Size		Part number		
In	DN	ASME Class 150	ASME Class 300	ASME Class 600
4	100	LSH4-150	LSH4-300	LSH4-600
6	150	LSH6-150	LSH6-300	LSH6-600
8	200	LSH8-150	LSH8-300	LSH8-600
10	250	LSH10-150	LSH10-300	LSH10-600
12	300	LSH12-150	LSH12-300	LSH12-600
14	100	LSH14-150	LSH14-300	LSH14-600
16	150	LSH16-150	LSH16-300	LSH16-600
18	200	LSH18-150	LSH18-300	LSH18-600
20	250	LSH20-150	LSH20-300	LSH20-600
22	550	LSH22-150	LSH22-300	LSH22-600
24	600	LSH24-150	LSH24-300	LSH24-600
26	650	LSH26-150	LSH26-300	LSH26-600
28	700	LSH28-150	LSH28-300	LSH28-600
30	750	LSH30-150	LSH30-300	LSH30-600
32	800	LSH32-150	LSH32-300	LSH32-600
34	850	LSH34-150	LSH34-300	LSH34-600
36	900	LSH36-150	LSH36-300	LSH36-600
38	950	LSH38-150	LSH38-300	LSH38-600
40	1000	LSH40-150	LSH40-300	LSH40-600
42	1050	LSH42-150	LSH42-300	LSH42-600
44	1100	LSH44-150	LSH44-300	LSH44-600
46	1150	LSH46-150	LSH46-300	LSH46-600
48	1200	LSH48-150	LSH48-300	LSH48-600

**STANDARD LINE STOP HEADS**

Nominal Size		Part number	
In	DN	Folding Head Class 600	Sealing Element Class 600
4	100	LSFH4	LSSE4-600
6	150	LSFH6	LSSE6-600
8	200	LSFH8	LSSE8-600
10	250	LSFH10	LSH10-600
12	300	LSFH12	LSH12-600
14	100	LSFH14	LSSE14-600
16	150	LSFH16	LSSE16-600
18	200	LSFH18	LSSE18-600
20	250	LSFH20	LSH20-600
22	550	LSFH22	LSSE22-600
24	600	LSFH34	LSSE24-600
26	650	LSFH26	LSSE26-600
28	700	LSFH28	LSH28-600
30	750	LSFH30	LSSE30-600
32	800	LSFH32	LSSE32-600
34	850	LSFH34	LSH34-600
36	900	LSFH36	LSSE36-600
38	950	LSFH38	LSSE38-600
40	1000	LSFH40	LSSE40-600
42	1050	LSFH42	LSH42-600
44	1100	LSFH44	LSSE44-600
46	1150	LSFH46	LSSE46-600
48	1200	LSFH48	LSH48-600