

# Series SH



## Series SH

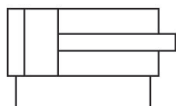
The AVENTICS Series SH guided linear slide is a motion device capable of heavy loads and moderately long strokes. It is interchangeable with competitive heavy-duty slides. The SH Series is suitable for analytical and diagnostic instrument, automotive, bottling, and commercial kitchen and laundry equipment applications.

- Stainless steel cylinder body and rods for corrosion resistance
- Alignment coupler with 360 degrees of float eliminates cylinder side loading
- Hardened steel guide shafts with large diameters for increased load capability
- Precision bearings sealed with rod wipers are maintenance free and provide self-alignment, self-lubrication, and low friction
- Clamp position of sensor



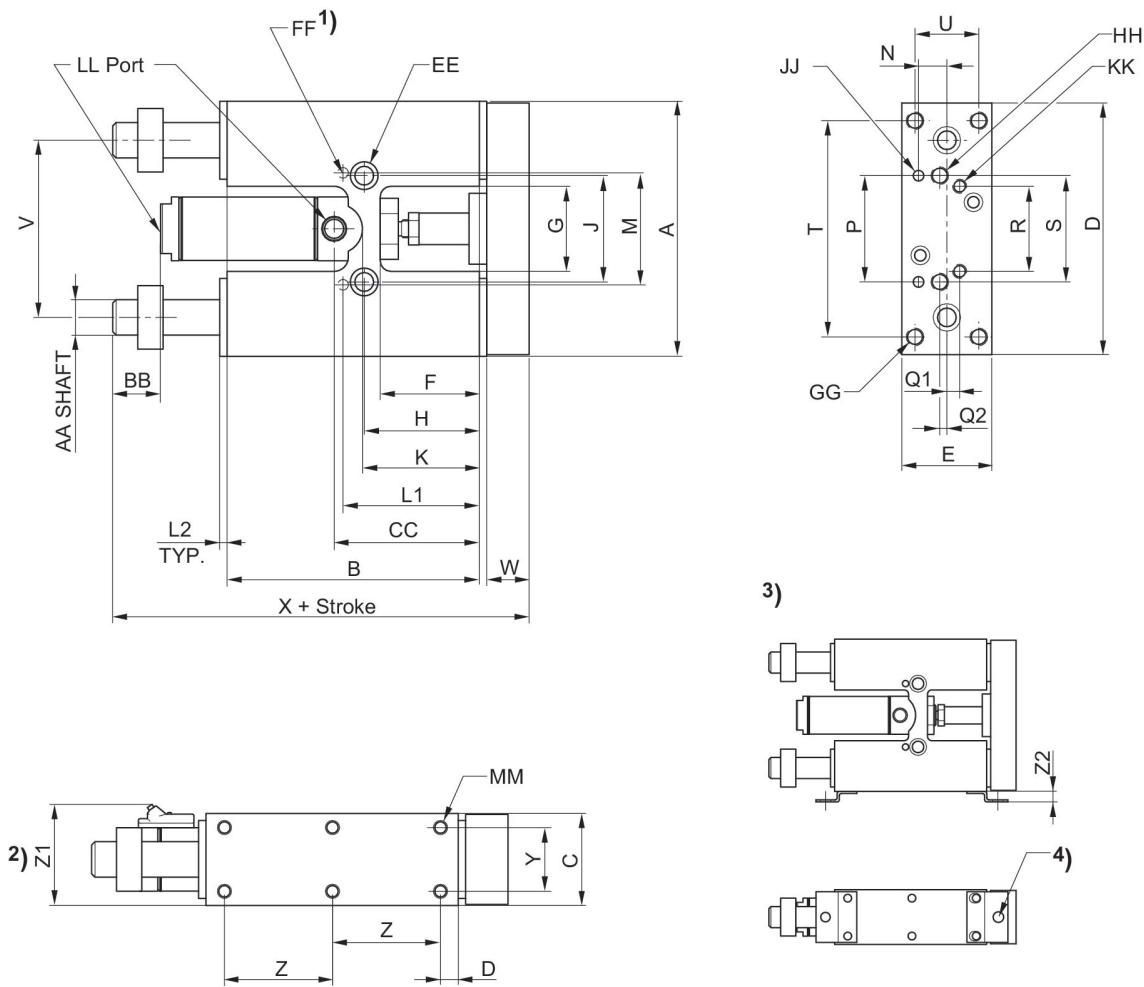
### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
5/16"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
5/16"	1"		Buna-N	w/o position inquiry	Std. mount	SH03101LB16DS4
5/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH03101TB16DS4
5/16"	2"		Buna-N	w/o position inquiry	Std. mount	SH03102LB16DS4
5/16"	2"		Buna-N	w/o position inquiry	Std. mount	SH03102LB16DS4X
5/16"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH03102TB16DS4
5/16"	3"		Buna-N	w/o position inquiry	Std. mount	SH03103LB16DS4
5/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH03103TB16DS4
5/16"	3"	PTFE	FKM	w/o position inquiry	Std. mount	SH03103TB26DS4
5/16"	4"		Buna-N	w/o position inquiry	Std. mount	SH03104LB16DS4
5/16"	5"		Buna-N	w/o position inquiry	Std. mount	SH03105LB16DS4
5/16"	6"		Buna-N	w/o position inquiry	Std. mount	SH03106LB16DS4
5/16"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH03106TB16DS4
5/16"	12"		Buna-N	w/o position inquiry	Std. mount	SH03112LB16DS4
5/16"	1/2"		Buna-N	w/o position inquiry	Std. mount	SH031X5LB16DS4
5/16"	1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH031X5TB16DS4
5/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH031X9LB16DS4
5/16"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH031X9TB16DS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

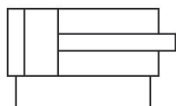
Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

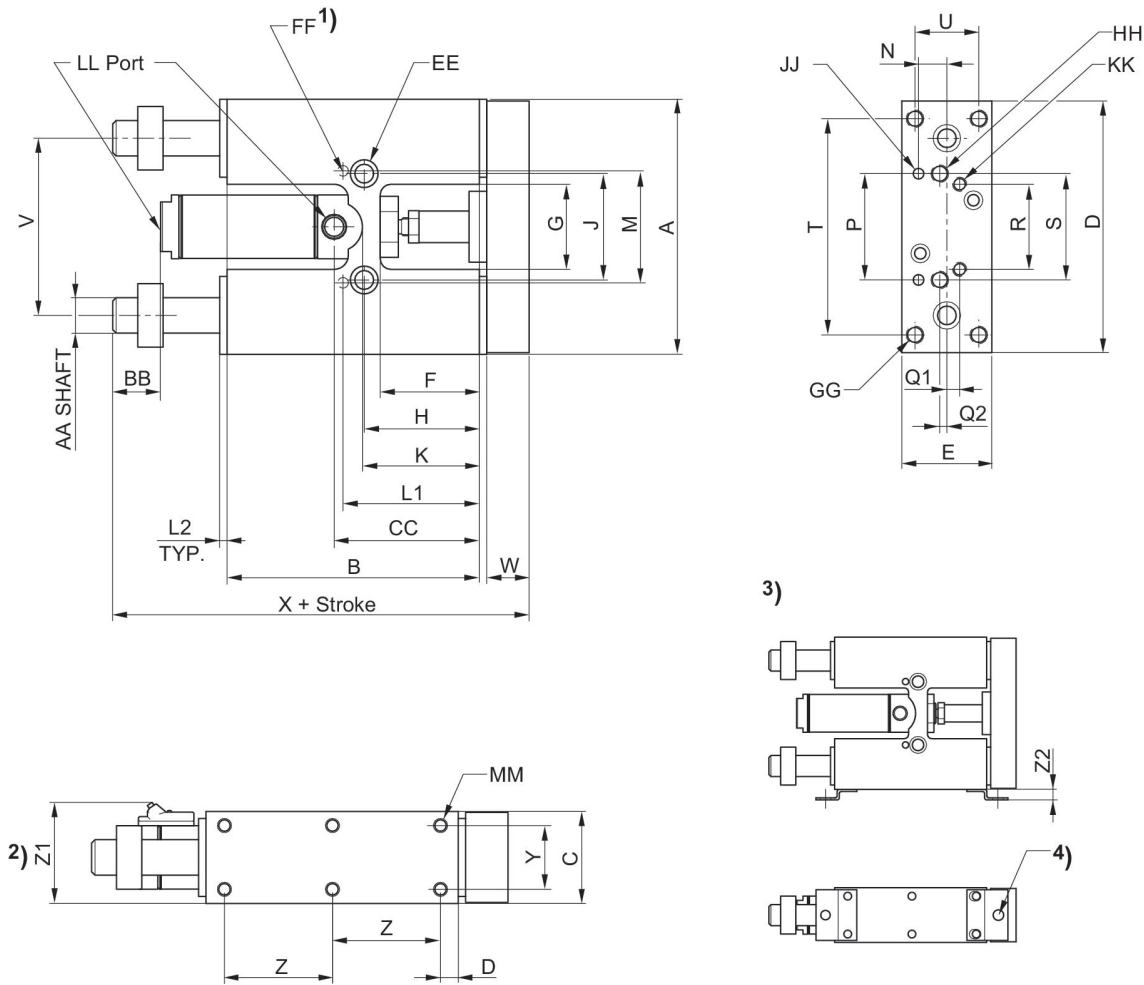
Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
9/16"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
9/16"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05601BB16DS4
9/16"	1"		Buna-N	w/o position inquiry	Base mount	SH05601LB16DB4
9/16"	1"		Buna-N	w/o position inquiry	Std. mount	SH05601LB16DS4
9/16"	1"		Buna-N	w/o position inquiry	Std. mount	SH05601L-B16DS4C
9/16"	1"		Buna-N	w/o position inquiry	Std. mount	SH05601LB16DS4X
9/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05601TB16DS4
9/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05601T-B16DS4X
9/16"	1"	PTFE	FKM	w/o position inquiry	Std. mount	SH05601TB26DS4
9/16"	1"	PTFE	FKM	w/o position inquiry	Std. mount	SH05601TB46DS4
9/16"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05602BB16DS4
9/16"	2"		Buna-N	w/o position inquiry	Std. mount	SH05602LB16DS4
9/16"	2"		Buna-N	w/o position inquiry	Std. mount	SH05602L-B16DS4C
9/16"	2"		Buna-N	w/o position inquiry	Std. mount	SH05602LB16DS4X
9/16"	2"		FKM	w/o position inquiry	Std. mount	SH05602LB46DS4X
9/16"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05602TB16DS4
9/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05603BB16DS4
9/16"	3"		Buna-N	w/o position inquiry	Base mount	SH05603LB16DB4
9/16"	3"		Buna-N	w/o position inquiry	Std. mount	SH05603LB16DS4
9/16"	3"		Buna-N	w/o position inquiry	Std. mount	SH05603L-B16DS4C
9/16"	3"		Buna-N	w/o position inquiry	Std. mount	SH05603LB16DS4X
9/16"	3"		FKM	w/o position inquiry	Std. mount	SH05603LB46DS4
9/16"	3"		FKM	w/o position inquiry	Std. mount	SH05603LB46DS4X
9/16"	4"		Buna-N	w/o position inquiry	Std. mount	SH05604LB16DS4
9/16"	4"		Buna-N	w/o position inquiry	Std. mount	SH05604LB16DS4X
9/16"	4"		FKM	w/o position inquiry	Std. mount	SH05604LB46DS4
9/16"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05604TB16DS4
9/16"	5"		Buna-N	w/o position inquiry	Base mount	SH05605LB16DB4
9/16"	5"		Buna-N	w/o position inquiry	Std. mount	SH05605LB16DS4
9/16"	5"		Buna-N	w/o position inquiry	Std. mount	SH05605LB16DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
9/16"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05605TB16DS4
9/16"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05606BB16DS4
9/16"	6"		Buna-N	w/o position inquiry	Std. mount	SH05606LB16DS4
9/16"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05607BB16DS4
9/16"	7"		Buna-N	w/o position inquiry	Std. mount	SH05607LB16DS4
9/16"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH05607TB16DS4
9/16"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05608BB16DS4
9/16"	8"		Buna-N	w/o position inquiry	Std. mount	SH05608LB16DS4
9/16"	8"	PTFE	FKM	w/o position inquiry	Std. mount	SH05608TB26DS4
9/16"	9"		Buna-N	w/o position inquiry	Std. mount	SH05609LB16DS4
9/16"	9"		Buna-N	w/o position inquiry	Std. mount	SH05609L-B16DS4C
9/16"	9"		FKM	w/o position inquiry	Std. mount	SH05609L-B46DS4C
9/16"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH05610BB16DS4
9/16"	10"		Buna-N	w/o position inquiry	Std. mount	SH05610LB16DS4
9/16"	11"		Buna-N	w/o position inquiry	Std. mount	SH05611LB16DS4
9/16"	12"		Buna-N	w/o position inquiry	Std. mount	SH05612LB16DS4
9/16"	16"		Buna-N	w/o position inquiry	Std. mount	SH05616LB16DS4
9/16"	1/2"		Buna-N	w/o position inquiry	Std. mount	SH056X5LB16DS4
9/16"	1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH056X5T-B16DS4C
9/16"	1-1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH056X9BB16DS4
9/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH056X9LB16DS4
9/16"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH056X9LB46DS4
9/16"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH056X9L-B46DS4X
9/16"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH056X9TB16DS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31



Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
3/4"



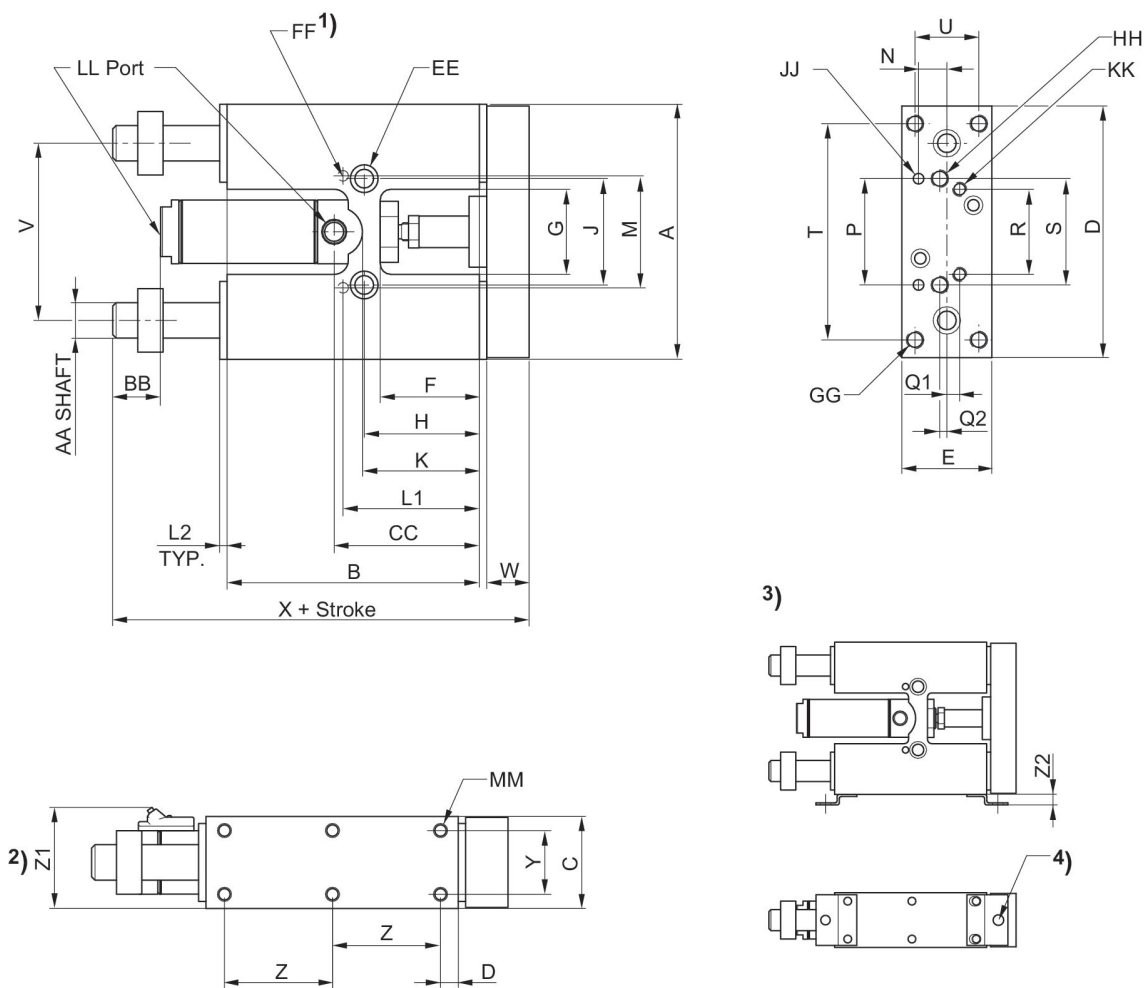
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3/4"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07501BB16DS4
3/4"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07501B-B16DS4C
3/4"	1"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH07501BB46DS4
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	SH07501LB16DS4
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	SH07501L-B16DS4C
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	SH07501LB16DS4X
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	SH07501LB16DS4Y
3/4"	1"		FKM	w/o position inquiry	Std. mount	SH07501LB46DS4
3/4"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07501TB16DS4
3/4"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07501T-B16DS4C
3/4"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07502BB16DS4
3/4"	2"		Buna-N	w/o position inquiry	Angle mount	SH07502LB16DA4
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	SH07502LB16DS4
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	SH07502L-B16DS4C
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	SH07502LB16DS4S
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	SH07502LB16DS4X
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	SH07502LB16DS4Y
3/4"	2"		FKM	w/o position inquiry	Std. mount	SH07502LB46DS4
3/4"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07502TB16DS4
3/4"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07502T-B16DS4C
3/4"	2"	PTFE	FKM	w/o position inquiry	Std. mount	SH07502TB46DS4
3/4"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07503BB16DS4
3/4"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07503B-B16DS4X
3/4"	3"		Buna-N	w/o position inquiry	Angle mount	SH07503L-B16DA4C
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	SH07503LB16DS4
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	SH07503L-B16DS4C
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	SH07503LB16DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	SH07503LB16DS4Y
3/4"	3"		FKM	w/o position inquiry	Std. mount	SH07503LB46DS4
3/4"	3"		FKM	w/o position inquiry	Std. mount	SH07503LB46DS4X
3/4"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07503TB16DS4
3/4"	3"	PTFE	FKM	w/o position inquiry	Std. mount	SH07503TB26DS4
3/4"	4"	Sintered bronze	Buna-N	w/o position inquiry	Base mount	SH07504BB16DB4
3/4"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07504BB16DS4
3/4"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07504B-B16DS4C
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	SH07504LB16DS4
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	SH07504L-B16DS4C
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	SH07504LB16DS4S
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	SH07504LB16DS4X
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	SH07504LB16DS4Y
3/4"	4"		FKM	w/o position inquiry	Std. mount	SH07504LB46DS4
3/4"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07504TB16DS4
3/4"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07504T-B16DS4C
3/4"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07504T-B16DS4S
3/4"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07505BB16DS4
3/4"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07505B-B16DS4X
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	SH07505LB16DS4
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	SH07505LB16DS4X
3/4"	5"		FKM	w/o position inquiry	Std. mount	SH07505LB46DS4
3/4"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07505TB16DS4
3/4"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07505T-B16DS4X
3/4"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07506BB16DS4
3/4"	6"		Buna-N	w/o position inquiry	Angle mount	SH07506LB16DA4
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	SH07506LB16DS4
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	SH07506LB16DS4X
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	SH07506LB16DS4Y
3/4"	6"		FKM	w/o position inquiry	Std. mount	SH07506LB46DS4X
3/4"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07506TB16DS4
3/4"	7"	Sintered bronze	Buna-N	w/o position inquiry	Base mount	SH07507BB16DB4
3/4"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07507BB16DS4
3/4"	7"		Buna-N	w/o position inquiry	Std. mount	SH07507LB16DS4
3/4"	7"		Buna-N	w/o position inquiry	Std. mount	SH07507LB16DS4X
3/4"	7"		FKM	w/o position inquiry	Std. mount	SH07507LB46DS4
3/4"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07507TB16DS4
3/4"	8"	Sintered bronze	Buna-N	w/o position inquiry	Base mount	SH07508BB16DB4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3/4"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07508BB16DS4
3/4"	8"		Buna-N	w/o position inquiry	Angle mount	SH07508LB16DA4
3/4"	8"		Buna-N	w/o position inquiry	Base mount	SH07508LB16DB4
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	SH07508LB16DS4
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	SH07508LB16DS4X
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	SH07508LB16DS4Y
3/4"	8"		FKM	w/o position inquiry	Std. mount	SH07508L-B46DS4C
3/4"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07508TB16DS4
3/4"	9"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07509BB16DS4
3/4"	9"		Buna-N	w/o position inquiry	Std. mount	SH07509LB16DS4
3/4"	9"		Buna-N	w/o position inquiry	Std. mount	SH07509L-B16DS4C
3/4"	9"		Buna-N	w/o position inquiry	Std. mount	SH07509LB16DS4X
3/4"	9"		Buna-N	w/o position inquiry	Std. mount	SH07509LB16DS4Y
3/4"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07509TB16DS4
3/4"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07509T-B16DS4C
3/4"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07510BB16DS4
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	SH07510LB16DS4
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	SH07510L-B16DS4C
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	SH07510LB16DS4X
3/4"	11"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07511BB16DS4
3/4"	11"		Buna-N	w/o position inquiry	Std. mount	SH07511LB16DS4
3/4"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07512BB16DS4
3/4"	12"		Buna-N	w/o position inquiry	Std. mount	SH07512LB16DS4
3/4"	12"		Buna-N	w/o position inquiry	Std. mount	SH07512LB16DS4X
3/4"	12"		Buna-N	w/o position inquiry	Std. mount	SH07512LB16DS4Y
3/4"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07514BB16DS4
3/4"	14"		Buna-N	w/o position inquiry	Std. mount	SH07514LB16DS4
3/4"	14"		Buna-N	w/o position inquiry	Std. mount	SH07514LB16DS4X
3/4"	15"		Buna-N	w/o position inquiry	Std. mount	SH07515LB16DS4
3/4"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07516BB16DS4
3/4"	16"		Buna-N	w/o position inquiry	Std. mount	SH07516LB16DS4
3/4"	16"		Buna-N	w/o position inquiry	Std. mount	SH07516LB16DS4X
3/4"	17"		Buna-N	w/o position inquiry	Std. mount	SH07517LB16DS4
3/4"	17"		Buna-N	w/o position inquiry	Std. mount	SH07517LB16DS4X
3/4"	18"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH07518BB16DS4
3/4"	18"		Buna-N	w/o position inquiry	Std. mount	SH07518LB16DS4
3/4"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH07518TB16DS4
3/4"	1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH075X5B-B16DS4C
3/4"	1/2"		Buna-N	w/o position inquiry	Std. mount	SH075X5LB16DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3/4"	1/2"		Buna-N	w/o position inquiry	Std. mount	SH075X5L-B16DS4X
3/4"	1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH075X5TB16DS4
3/4"	1-1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH075X9BB16DS4
3/4"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH075X9LB16DS4
3/4"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH075X9LB46DS4
3/4"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH075X9L-B46DS4X
3/4"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH075X9TB16DS4
3/4"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH075X9T-B16DS4C

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06

Ø [inch]	A	B	C	D	E	F	G	H	J	K
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
1 1/16"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10601BB16DS4
1-1/16"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10601BB36DS4
1-1/16"	1"	Sintered bronze	FKM	w/o position inquiry	Base mount		SH10601BB46DB4
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount		SH10601LB16DS4
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount		SH10601LB16DS4X
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount		SH10601LB36DS4
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount		SH10601LB36DS4X
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount		SH10601LB36DS4Y
1-1/16"	1"		FKM	w/o position inquiry	Std. mount		SH10601LB46DS4
1-1/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10601TB16DS4
1-1/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10601T-B16DS4X
1-1/16"	1"	PTFE	FKM	w/o position inquiry	Std. mount		SH10601TB26DS4
1-1/16"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10601TB36DS4
1-1/16"	2"	Sintered bronze	Buna-N	w/o position inquiry	Base mount		SH10602B-B16DB4C
1-1/16"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10602BB16DS4
1-1/16"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH10602BB46DS4
1-1/16"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH10602B-B46DS4X
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602LB16DS4
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602L-B16DS4C

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602LB16DS4X
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602LB36DS4
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602L-B36DS4C
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount		SH10602LB36DS4X
1-1/16"	2"		FKM	w/o position inquiry	Std. mount		SH10602LB46DS4
1-1/16"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10602TB16DS4
1-1/16"	2"	PTFE	FKM	w/o position inquiry	Std. mount		SH10602TB26DS4
1-1/16"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10602TB36DS4
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10603BB16DS4
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10603B-B16DS4X
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10603BB36DS4
1-1/16"	3"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH10603BB46DS4
1-1/16"	3"		Buna-N	w/o position inquiry	Angle mount		SH10603LB16DA4X
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount		SH10603LB16DS4
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount		SH10603LB16DS4X
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount		SH10603LB16DS4Y
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount		SH10603LB36DS4
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount		SH10603LB36DS4X
1-1/16"	3"		FKM	w/o position inquiry	Std. mount		SH10603LB46DS4
1-1/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10603TB16DS4
1-1/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10603T-B16DS4X
1-1/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10603TB36DS4
1-1/16"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10604BB16DS4
1-1/16"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10604B-B16DS4C
1-1/16"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10604BB36DS4
1-1/16"	4"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH10604BB46DS4



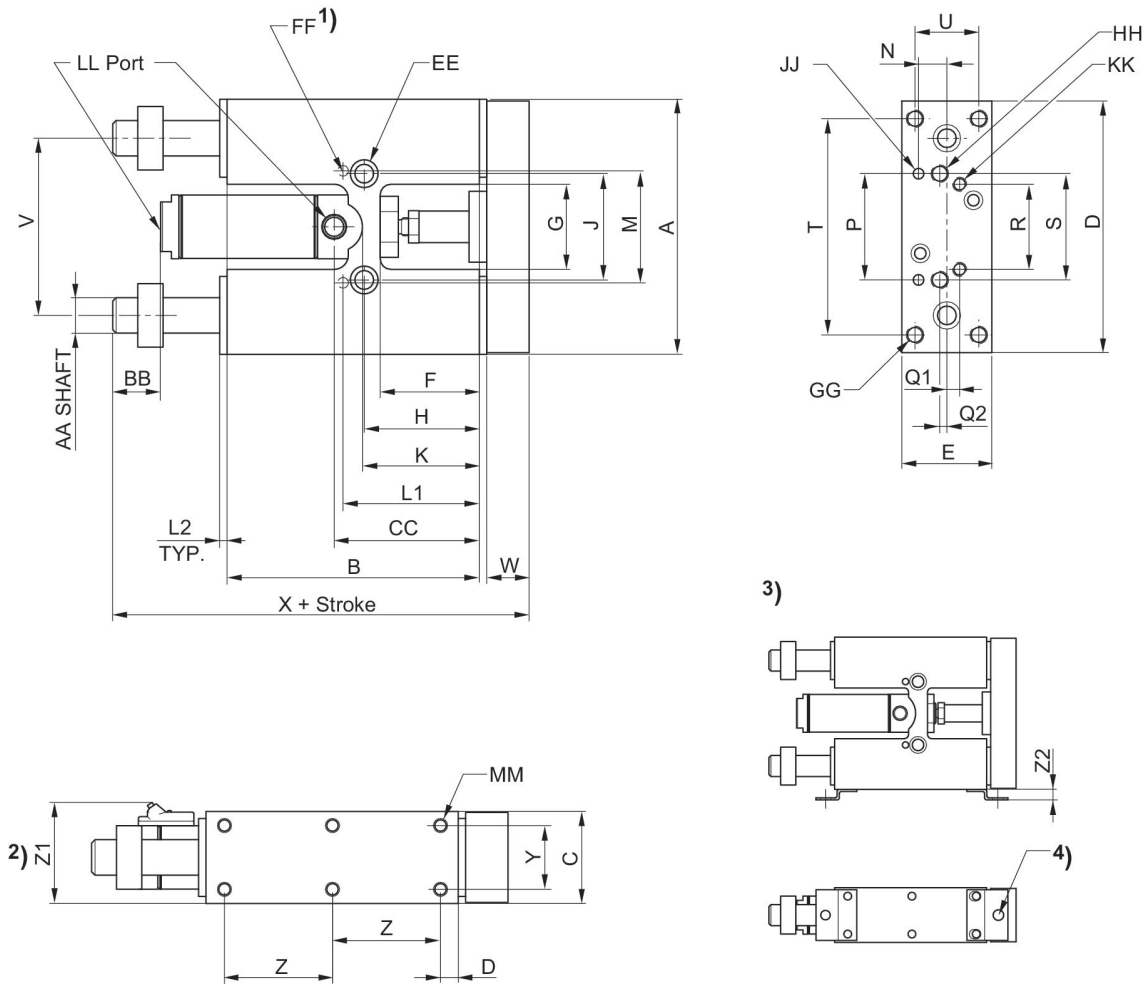
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	4"		Buna-N	w/o position inquiry	Base mount		SH10604L-B16DB4C
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount		SH10604LB16DS4
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount		SH10604LB16DS4X
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount		SH10604LB36DS4
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount		SH10604LB36DS4X
1-1/16"	4"		FKM	w/o position inquiry	Std. mount		SH10604LB46DS4
1-1/16"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10604TB16DS4
1-1/16"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10604TB36DS4
1-1/16"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10605BB16DS4
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount		SH10605LB16DS4
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount		SH10605LB16DS4X
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount		SH10605LB36DS4
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount		SH10605LB36DS4X
1-1/16"	5"		FKM	w/o position inquiry	Std. mount		SH10605LB46DS4
1-1/16"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10605TB16DS4
1-1/16"	5"	PTFE	FKM	w/o position inquiry	Std. mount		SH10605TB26DS4
1-1/16"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10605TB36DS4
1-1/16"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10606BB16DS4
1-1/16"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10606BB36DS4
1-1/16"	6"		Buna-N	w/o position inquiry	Base mount		SH10606LB16DB4
1-1/16"	6"		Buna-N	w/o position inquiry	Base mount		SH10606L-B16DB4C
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606LB16DS4
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606L-B16DS4C
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606LB16DS4X
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606LB36DS4
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606LB36DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount		SH10606LB36DS4Y
1-1/16"	6"		FKM	w/o position inquiry	Std. mount		SH10606LB46DS4
1-1/16"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10606TB16DS4
1-1/16"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10606TB36DS4
1-1/16"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10607BB16DS4
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount		SH10607LB16DS4
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount		SH10607LB16DS4S
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount		SH10607LB36DS4
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount		SH10607LB36DS4X
1-1/16"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10607TB16DS4
1-1/16"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10608BB16DS4
1-1/16"	8"		Buna-N	w/o position inquiry	Base mount		SH10608L-B16DB4C
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount		SH10608LB16DS4
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount		SH10608LB16DS4X
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount		SH10608LB36DS4
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount		SH10608LB36DS4X
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount		SH10608LB36DS4Y
1-1/16"	8"		FKM	w/o position inquiry	Std. mount		SH10608LB46DS4
1-1/16"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10608TB16DS4
1-1/16"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10608T-B36DS4C
1-1/16"	9"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10609BB16DS4
1-1/16"	9"		Buna-N	w/o position inquiry	Std. mount		SH10609LB16DS4
1-1/16"	9"		Buna-N	w/o position inquiry	Std. mount		SH10609LB16DS4Y
1-1/16"	9"		Buna-N	w/o position inquiry	Std. mount		SH10609LB36DS4
1-1/16"	9"		Buna-N	w/o position inquiry	Std. mount		SH10609LB36DS4X
1-1/16"	9"		FKM	w/o position inquiry	Std. mount		SH10609LB46DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	9"	PTFE	Buna-N	w/o position inquiry	Base mount		SH10609TB16DB4
1-1/16"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10609TB16DS4
1-1/16"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10610BB16DS4
1-1/16"	10"		Buna-N	w/o position inquiry	Std. mount		SH10610LB16DS4
1-1/16"	10"		Buna-N	w/o position inquiry	Std. mount		SH10610LB36DS4
1-1/16"	10"		Buna-N	w/o position inquiry	Std. mount		SH10610LB36DS4X
1-1/16"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10610TB16DS4
1-1/16"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10610TB16DSC
1-1/16"	11"		Buna-N	w/o position inquiry	Std. mount		SH10611LB16DS4
1-1/16"	11"		FKM	w/o position inquiry	Std. mount		SH10611L-B46DS4C
1-1/16"	11"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10611T-B16DS4C
1-1/16"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10612BB16DS4
1-1/16"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10612BB36DS4
1-1/16"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10612B-B36DS4C
1-1/16"	12"		Buna-N	w/o position inquiry	Base mount		SH10612LB16DB4
1-1/16"	12"		Buna-N	w/o position inquiry	Std. mount		SH10612LB16DS4
1-1/16"	12"		Buna-N	w/o position inquiry	Std. mount		SH10612L-B16DS4C
1-1/16"	12"		Buna-N	w/o position inquiry	Std. mount		SH10612LB36DS4
1-1/16"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10612TB16DS4
1-1/16"	13"		Buna-N	w/o position inquiry	Std. mount		SH10613LB16DS4
1-1/16"	14"		Buna-N	w/o position inquiry	Std. mount		SH10614LB16DS4
1-1/16"	14"		Buna-N	w/o position inquiry	Std. mount		SH10614LB36DS4
1-1/16"	15"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10615BB16DS4
1-1/16"	15"		Buna-N	w/o position inquiry	Std. mount		SH10615LB16DS4
1-1/16"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10616BB16DS4
1-1/16"	16"		Buna-N	w/o position inquiry	Std. mount		SH10616LB16DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	18"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH10618B-B16DS4C
1-1/16"	18"		Buna-N	w/o position inquiry	Base mount		SH10618LB16DB4
1-1/16"	18"		Buna-N	w/o position inquiry	Std. mount		SH10618LB16DS4
1-1/16"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH10618TB36DS4
1-1/16"	1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH106X5B-B16DS4C
1-1/16"	1/2"		Buna-N	w/o position inquiry	Std. mount		SH106X5LB16DS4
1-1/16"	1/2"		Buna-N	w/o position inquiry	Std. mount		SH106X5LB36DS4
1-1/16"	1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH106X5TB16DS4
1-1/16"	1-1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH106X9BB16DS4
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Base mount		SH106X9LB16DB4
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH106X9LB16DS4
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH106X9L-B16DS4X
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Base mount		SH106X9LB36DB4
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH106X9LB36DS4
1-1/16"	1-1/2"		FKM	w/o position inquiry	Std. mount		SH106X9LB46DS4
1-1/16"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH106X9TB16DS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
1 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15001BB16DS4
1-1/2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15001BB36DS4
1-1/2"	1"		Buna-N	w/o position inquiry	Std. mount		SH15001LB16DS4
1-1/2"	1"		Buna-N	w/o position inquiry	Std. mount		SH15001LB16DS4X
1-1/2"	1"		FKM	w/o position inquiry	Std. mount		SH15001LB46DS4
1-1/2"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15001TB16DS4
1-1/2"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15001TB36DS4
1-1/2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15002BB16DS4
1-1/2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15002B-B16DS4X
1-1/2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15002BB26DS4
1-1/2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15002BB36DS4
1-1/2"	2"		Buna-N	w/o position inquiry	Angle mount		SH15002LB16DA4
1-1/2"	2"		Buna-N	w/o position inquiry	Base mount		SH15002LB16DB4
1-1/2"	2"		Buna-N	w/o position inquiry	Base mount		SH15002LB16DB4X
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB16DS4
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB16DS4X
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB16DS4Y
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB36DS4
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB36DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount		SH15002LB36DS4Y
1-1/2"	2"		FKM	w/o position inquiry	Std. mount		SH15002LB46DS4
1-1/2"	2"	PTFE	Buna-N	w/o position inquiry	Base mount		SH15002TB16DB4
1-1/2"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15002TB16DS4
1-1/2"	2"	PTFE	FKM	w/o position inquiry	Std. mount		SH15002TB26DS4
1-1/2"	2"	PTFE	FKM	w/o position inquiry	Std. mount		SH15002T-B26DS4C
1-1/2"	2"	PTFE	FKM	w/o position inquiry	Std. mount		SH15002T-B26DS4X
1-1/2"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15002TB36DS4
1-1/2"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15003BB16DS4
1-1/2"	3"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15003BB26DS4
1-1/2"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15003BB36DS4
1-1/2"	3"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15003BB46DS4
1-1/2"	3"		Buna-N	w/o position inquiry	Angle mount		SH15003LB16DA4
1-1/2"	3"		Buna-N	w/o position inquiry	Base mount		SH15003LB16DB4X
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB16DS4
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB16DS4S
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB16DS4X
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB16DS4Y
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB36DS4
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB36DS4X
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount		SH15003LB36DS4Y
1-1/2"	3"		FKM	w/o position inquiry	Std. mount		SH15003LB46DS4
1-1/2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15003TB16DS4
1-1/2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15003T-B36DS4X
1-1/2"	3"	PTFE	FKM	w/o position inquiry	Std. mount		SH15003TB46DS4
1-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15004BB16DS4



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15004B-B16DSCX
1-1/2"	4"		Buna-N	w/o position inquiry	Angle mount		SH15004LB16DA4X
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount		SH15004LB16DS4
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount		SH15004LB16DS4X
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount		SH15004LB36DS4
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount		SH15004LB36DS4X
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount		SH15004LB36DS4Y
1-1/2"	4"		FKM	w/o position inquiry	Std. mount		SH15004LB46DS4
1-1/2"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15004TB16DS4
1-1/2"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15004T-B16DS4X
1-1/2"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15005BB16DS4
1-1/2"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15005B-B16DS4X
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount		SH15005LB16DS4
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount		SH15005LB16DS4X
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount		SH15005LB36DS4
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount		SH15005LB36DS4X
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount		SH15005LB36DS4Y
1-1/2"	5"		FKM	w/o position inquiry	Std. mount		SH15005LB46DS4
1-1/2"	5"		FKM	w/o position inquiry	Std. mount		SH15005L-B46DS4C
1-1/2"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15005TB16DS4
1-1/2"	5"	PTFE	FKM	w/o position inquiry	Std. mount		SH15005TB46DS4
1-1/2"	5"	PTFE	FKM	w/o position inquiry	Std. mount		SH15005T-B46DS4C
1-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15006BB16DS4
1-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15006BB36DS4
1-1/2"	6"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15006BB46DS4
1-1/2"	6"		Buna-N	w/o position inquiry	Angle mount		SH15006LB16DA4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount		SH15006LB16DS4
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount		SH15006LB16DS4Y
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount		SH15006LB36DS4
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount		SH15006LB36DS4X
1-1/2"	6"		FKM	w/o position inquiry	Std. mount		SH15006LB46DS4
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15006TB16DS4
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15006T-B16DS4X
1-1/2"	6"	PTFE	FKM	w/o position inquiry	Std. mount		SH15006T-B26DS4X
1-1/2"	6"	PTFE	FKM	w/o position inquiry	Std. mount		SH15006TB46DS4
1-1/2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15007BB16DS4
1-1/2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15007B-B16DS4S
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount		SH15007LB16DS4
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount		SH15007L-B16DS4C
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount		SH15007LB16DS4X
1-1/2"	7"		FKM	w/o position inquiry	Std. mount		SH15007LB46DS4
1-1/2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15007TB16DS4
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Base mount		SH15008BB16DB4
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15008BB16DS4
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15008B-B16DS4S
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15008B-B36DS4X
1-1/2"	8"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15008BB46DS4
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB16DS4
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008L-B16DS4C
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB16DS4S
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB16DS4X
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB16DS4Y

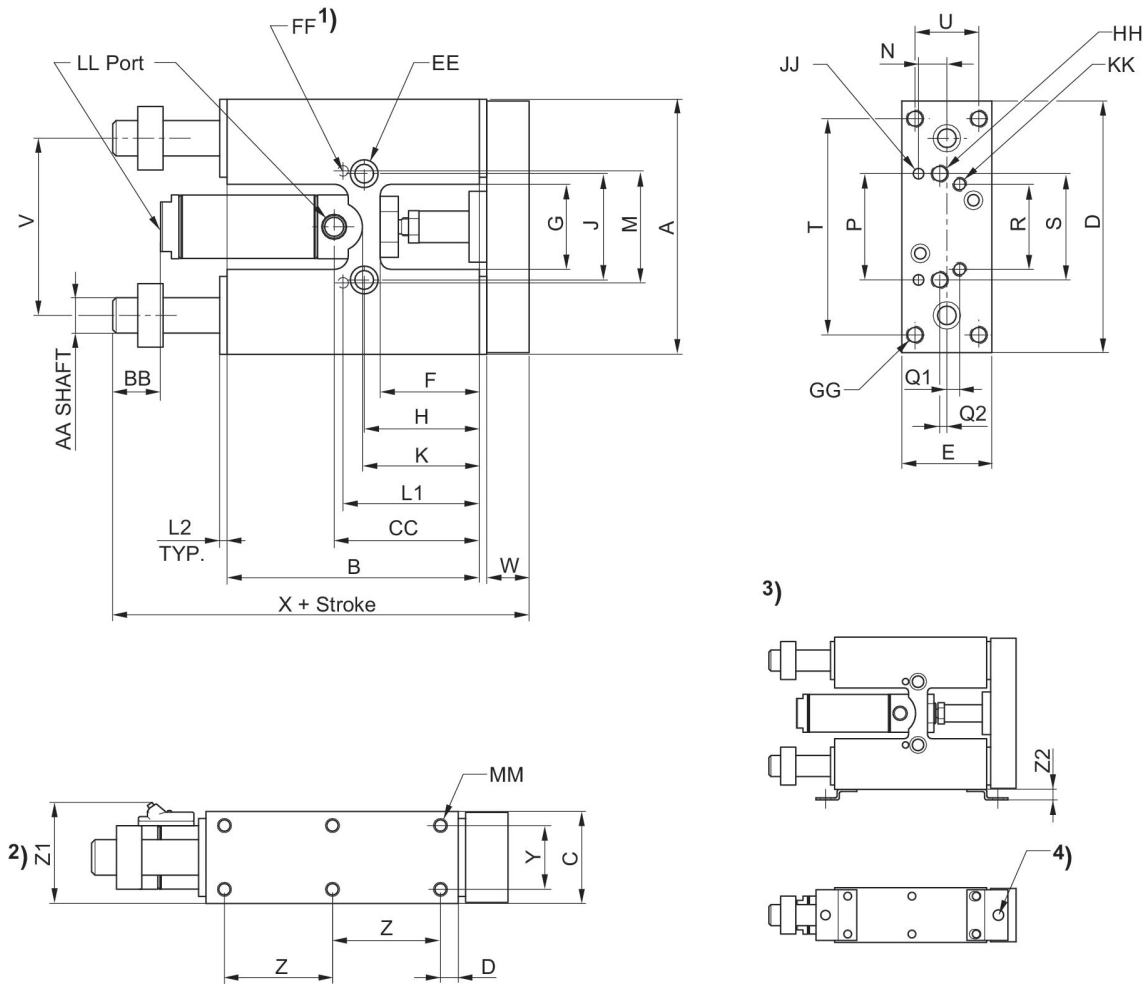
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB36DS4
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount		SH15008LB36DS4Y
1-1/2"	8"		FKM	w/o position inquiry	Std. mount		SH15008LB46DS4
1-1/2"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15008TB16DS4
1-1/2"	9"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15009BB16DS4
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount		SH15009LB16DS4
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount		SH15009LB16DS4X
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount		SH15009LB36DS4
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount		SH15009LB36DS4X
1-1/2"	9"		FKM	w/o position inquiry	Std. mount		SH15009LB46DS4
1-1/2"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15009T-B16DS4X
1-1/2"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15009TB36DS4
1-1/2"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15010BB16DS4
1-1/2"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15010BB36DS4
1-1/2"	10"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15010BB46DS4
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount		SH15010LB16DS4
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount		SH15010LB16DS4X
1-1/2"	10"		Buna-N	w/o position inquiry	Angle mount		SH15010LB36DA4Y
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount		SH15010LB36DS4
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount		SH15010LB36DS4X
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount		SH15010LB36DS4Y
1-1/2"	10"		FKM	w/o position inquiry	Std. mount		SH15010LB46DS4
1-1/2"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15010TB16DS4
1-1/2"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15010T-B16DS4X
1-1/2"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15010T-B36DS4X
1-1/2"	11"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15011BB16DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	11"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15011BB36DS4
1-1/2"	11"		Buna-N	w/o position inquiry	Std. mount		SH15011LB16DS4
1-1/2"	11"		Buna-N	w/o position inquiry	Std. mount		SH15011LB16DS4X
1-1/2"	11"		Buna-N	w/o position inquiry	Std. mount		SH15011LB36DS4
1-1/2"	11"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15011TB16DS4
1-1/2"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15012BB16DS4
1-1/2"	12"	Sintered bronze	FKM	w/o position inquiry	Std. mount		SH15012BB46DS4
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount		SH15012LB16DS4
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount		SH15012L-B16DS4C
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount		SH15012LB16DS4X
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount		SH15012LB36DS4
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount		SH15012LB36DS4Y
1-1/2"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15012TB16DS4
1-1/2"	12"	PTFE	FKM	w/o position inquiry	Std. mount		SH15012TB26DS4
1-1/2"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15012TB36DS4
1-1/2"	12"	PTFE	FKM	w/o position inquiry	Std. mount		SH15012TB46DS4
1-1/2"	12"	PTFE	FKM	w/o position inquiry	Std. mount		SH15012T-B46DS4C
1-1/2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Base mount		SH15013BB16DB4
1-1/2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15013BB16DS4
1-1/2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15013B-B16DS4C
1-1/2"	13"		Buna-N	w/o position inquiry	Std. mount		SH15013LB16DS4
1-1/2"	13"		Buna-N	w/o position inquiry	Std. mount		SH15013LB16DS4X
1-1/2"	13"		Buna-N	w/o position inquiry	Std. mount		SH15013LB36DS4Y
1-1/2"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15014BB16DS4
1-1/2"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15014BB36DS4
1-1/2"	14"		Buna-N	w/o position inquiry	Base mount		SH15014LB16DB4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	14"		Buna-N	w/o position inquiry	Std. mount		SH15014LB16DS4
1-1/2"	14"		Buna-N	w/o position inquiry	Std. mount		SH15014LB16DS4X
1-1/2"	14"		Buna-N	w/o position inquiry	Std. mount		SH15014LB36DS4
1-1/2"	14"		Buna-N	w/o position inquiry	Std. mount		SH15014LB36DS4X
1-1/2"	14"		Buna-N	w/o position inquiry	Std. mount		SH15014LB36DS4Y
1-1/2"	14"		FKM	w/o position inquiry	Std. mount		SH15014LB46DS4
1-1/2"	14"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15014TB16DS4
1-1/2"	15"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15015BB16DS4
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount		SH15015LB16DS4
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount		SH15015LB16DS4Y
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount		SH15015LB36DS4
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount		SH15015LB36DS4X
1-1/2"	15"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15015TB16DS4
1-1/2"	15"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15015T-B16DS4X
1-1/2"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15016BB16DS4
1-1/2"	16"		Buna-N	w/o position inquiry	Angle mount		SH15016LB16DA4
1-1/2"	16"		Buna-N	w/o position inquiry	Std. mount		SH15016LB16DS4
1-1/2"	16"		Buna-N	w/o position inquiry	Std. mount		SH15016LB16DS4X
1-1/2"	16"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15016TB16DS4
1-1/2"	16"	PTFE	FKM	w/o position inquiry	Std. mount		SH15016TB26DS4
1-1/2"	17"		Buna-N	w/o position inquiry	Std. mount		SH15017LB16DS4
1-1/2"	17"		FKM	w/o position inquiry	Std. mount		SH15017LB46DS4
1-1/2"	17"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15017TB36DS4
1-1/2"	18"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH15018BB16DS4
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount		SH15018LB16DS4
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount		SH15018LB16DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount		SH15018LB16DS4Y
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount		SH15018LB36DS4
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount		SH15018LB36DS4Y
1-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15018TB16DS4
1-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15018T-B16DS4X
1-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH15018TB36DS4
1-1/2"	1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount		SH150X5BB16DS4
1-1/2"	1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X5LB16DS4
1-1/2"	1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X5L-B16DS4X
1-1/2"	1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH150X5TB16DS4
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Angle mount		SH150X9LB16DA4
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X9LB16DS4
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X9L-B16DS4C
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X9L-B16DS4X
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount		SH150X9LB36DS4
1-1/2"	1-1/2"		FKM	w/o position inquiry	Std. mount		SH150X9LB46DS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP



### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
2"



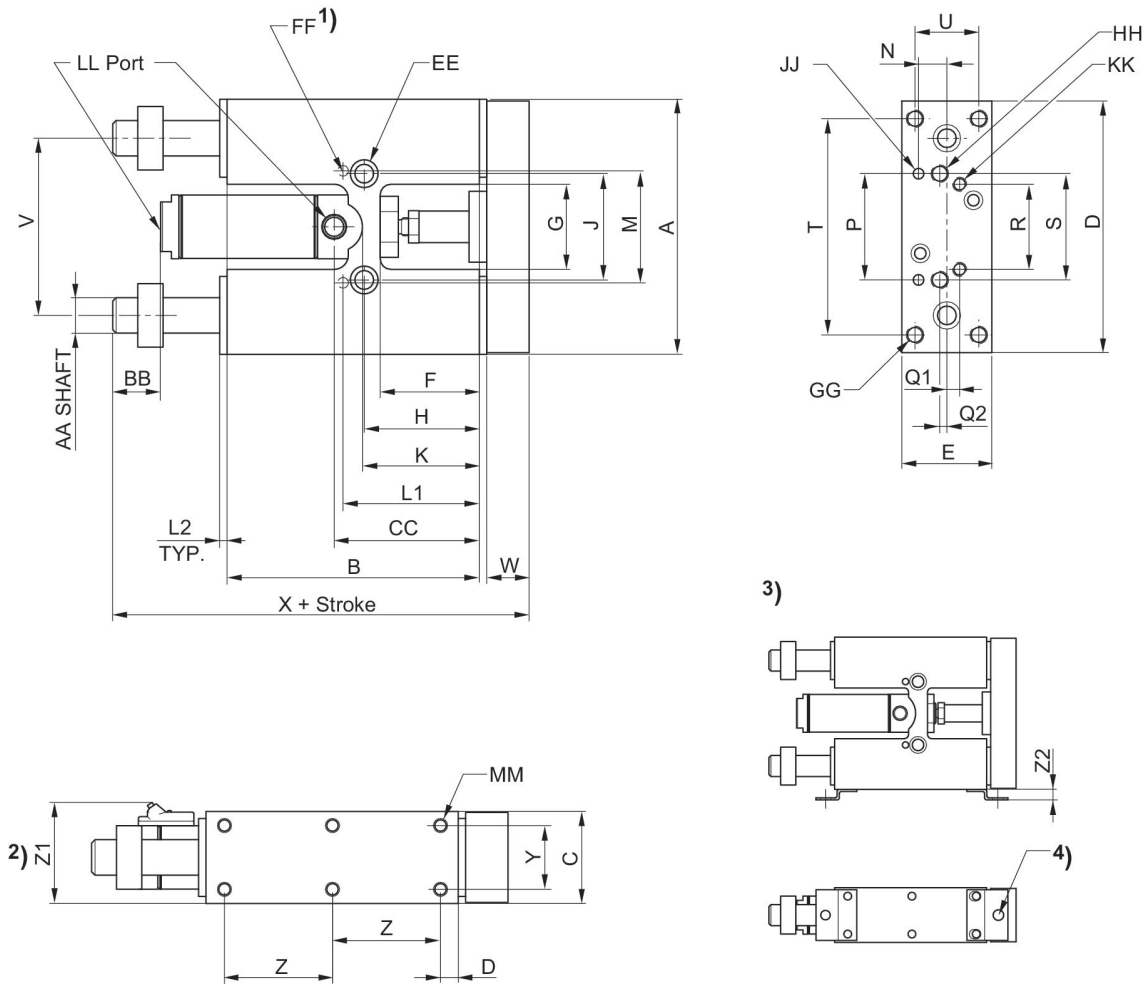
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Angle mount	SH20001BB16DA4
2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20001BB16DS4
2"	1"		Buna-N	w/o position inquiry	Angle mount	SH20001LB16DA4
2"	1"		Buna-N	w/o position inquiry	Base mount	SH20001LB16DB4
2"	1"		Buna-N	w/o position inquiry	Std. mount	SH20001LB16DS4
2"	1"		Buna-N	w/o position inquiry	Std. mount	SH20001LB36DS4
2"	1"		FKM	w/o position inquiry	Std. mount	SH20001LB46DS4
2"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20001TB36DS4
2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20002BB16DS4
2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20002B-B16DS4X
2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20002BB46DS4
2"	2"		Buna-N	w/o position inquiry	Angle mount	SH20002LB16DA4
2"	2"		Buna-N	w/o position inquiry	Std. mount	SH20002LB16DS4
2"	2"		Buna-N	w/o position inquiry	Std. mount	SH20002LB16DS4X
2"	2"		Buna-N	w/o position inquiry	Std. mount	SH20002LB36DS4
2"	2"		FKM	w/o position inquiry	Base mount	SH20002LB46DB4
2"	2"		FKM	w/o position inquiry	Std. mount	SH20002LB46DS4
2"	2"		FKM	w/o position inquiry	Std. mount	SH20002L-B46DS4C
2"	2"	PTFE	FKM	w/o position inquiry	Std. mount	SH20002TB26DS4
2"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20003BB16DS4
2"	3"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20003BB26DS4
2"	3"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20003BB46DS4
2"	3"		Buna-N	w/o position inquiry	Base mount	SH20003L-B16DB4C
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003LB16DS4
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003L-B16DS4C
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003LB16DS4X
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003LB36DS4
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003LB36DS4X
2"	3"		Buna-N	w/o position inquiry	Std. mount	SH20003LB36DS4Y

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2"	3"		FKM	w/o position inquiry	Std. mount	SH20003LB46DS4
2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20003TB16DS4
2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Base mount	SH20004BB16DB4
2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20004BB16DS4
2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20004B-B16DS4S
2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20004BB36DS4
2"	4"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20004BB46DS4
2"	4"		Buna-N	w/o position inquiry	Std. mount	SH20004LB16DS4
2"	4"		Buna-N	w/o position inquiry	Std. mount	SH20004L-B16DS4C
2"	4"		Buna-N	w/o position inquiry	Std. mount	SH20004LB16DS4X
2"	4"		Buna-N	w/o position inquiry	Std. mount	SH20004LB36DS4
2"	4"		Buna-N	w/o position inquiry	Std. mount	SH20004LB36DS4X
2"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20004TB16DS4
2"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20005BB16DS4
2"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20005B-B16DS4S
2"	5"		Buna-N	w/o position inquiry	Std. mount	SH20005LB16DS4
2"	5"		Buna-N	w/o position inquiry	Angle mount	SH20005LB36DA4
2"	5"		Buna-N	w/o position inquiry	Std. mount	SH20005LB36DS4
2"	5"		FKM	w/o position inquiry	Std. mount	SH20005LB46DS4
2"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20005TB16DS4
2"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20005TB36DS4
2"	5"	PTFE	FKM	w/o position inquiry	Std. mount	SH20005TB46DS4
2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Angle mount	SH20006BB16DA4
2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20006BB16DS4
2"	6"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20006BB46DS4
2"	6"		Buna-N	w/o position inquiry	Angle mount	SH20006LB16DA4
2"	6"		Buna-N	w/o position inquiry	Base mount	SH20006LB16DB4X
2"	6"		Buna-N	w/o position inquiry	Std. mount	SH20006LB16DS4
2"	6"		Buna-N	w/o position inquiry	Std. mount	SH20006LB16DS4X
2"	6"		Buna-N	w/o position inquiry	Std. mount	SH20006LB36DS4X
2"	6"		FKM	w/o position inquiry	Std. mount	SH20006LB46DS4
2"	6"	PTFE	Buna-N	w/o position inquiry	Base mount	SH20006T-B16DB4X
2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20006TB16DS4
2"	6"	PTFE	FKM	w/o position inquiry	Std. mount	SH20006TB26DS4
2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20007BB16DS4
2"	7"		Buna-N	w/o position inquiry	Std. mount	SH20007LB16DS4
2"	7"		Buna-N	w/o position inquiry	Std. mount	SH20007LB36DS4
2"	7"		Buna-N	w/o position inquiry	Std. mount	SH20007LB36DS4X
2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20007TB36DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20007T-B36DS4X
2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20008BB16DS4
2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20008B-B16DS4C
2"	8"		Buna-N	w/o position inquiry	Angle mount	SH20008LB16DA4X
2"	8"		Buna-N	w/o position inquiry	Std. mount	SH20008LB16DS4
2"	8"		Buna-N	w/o position inquiry	Std. mount	SH20008LB16DS4X
2"	8"		Buna-N	w/o position inquiry	Std. mount	SH20008LB36DS4
2"	8"		FKM	w/o position inquiry	Std. mount	SH20008LB46DS4
2"	8"		FKM	w/o position inquiry	Std. mount	SH20008L-B46DS4C
2"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20008TB16DS4
2"	8"	PTFE	FKM	w/o position inquiry	Std. mount	SH20008TB46DS4
2"	9"		Buna-N	w/o position inquiry	Std. mount	SH20009LB16DS4
2"	9"		Buna-N	w/o position inquiry	Std. mount	SH20009LB36DS4
2"	9"		FKM	w/o position inquiry	Std. mount	SH20009LB46DS4
2"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20009TB16DS4
2"	9"	PTFE	FKM	w/o position inquiry	Std. mount	SH20009TB26DS4
2"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20010BB16DS4
2"	10"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH20010B-B46DS4C
2"	10"		Buna-N	w/o position inquiry	Std. mount	SH20010LB16DS4
2"	10"		Buna-N	w/o position inquiry	Std. mount	SH20010LB16DS4X
2"	10"		Buna-N	w/o position inquiry	Std. mount	SH20010LB36DS4
2"	10"		Buna-N	w/o position inquiry	Std. mount	SH20010LB36DS4Y
2"	10"		FKM	w/o position inquiry	Std. mount	SH20010LB46DS4
2"	10"	PTFE	FKM	w/o position inquiry	Std. mount	SH20010TB26DS4
2"	11"		Buna-N	w/o position inquiry	Angle mount	SH20011LB16DA4
2"	11"		Buna-N	w/o position inquiry	Std. mount	SH20011LB16DS4
2"	11"		Buna-N	w/o position inquiry	Std. mount	SH20011LB16DS4Y
2"	11"		Buna-N	w/o position inquiry	Std. mount	SH20011LB36DS4
2"	11"		FKM	w/o position inquiry	Std. mount	SH20011LB46DS4
2"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20012BB16DS4
2"	12"		Buna-N	w/o position inquiry	Std. mount	SH20012LB16DS4
2"	12"		Buna-N	w/o position inquiry	Std. mount	SH20012L-B16DS4C
2"	12"		Buna-N	w/o position inquiry	Std. mount	SH20012LB36DS4
2"	12"		Buna-N	w/o position inquiry	Std. mount	SH20012LB36DS4X
2"	12"		Buna-N	w/o position inquiry	Std. mount	SH20012LB36DS4Y
2"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20012TB16DS4
2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20013BB16DS4
2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20013B-B16DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2"	13"		Buna-N	w/o position inquiry	Std. mount	SH20013LB16DS4
2"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20014BB16DS4
2"	14"		Buna-N	w/o position inquiry	Std. mount	SH20014LB16DS4
2"	14"		Buna-N	w/o position inquiry	Std. mount	SH20014LB36DS4
2"	14"		FKM	w/o position inquiry	Std. mount	SH20014LB46DS4
2"	15"		Buna-N	w/o position inquiry	Std. mount	SH20015LB16DS4
2"	15"		Buna-N	w/o position inquiry	Std. mount	SH20015LB36DS4
2"	15"		Buna-N	w/o position inquiry	Std. mount	SH20015LB36DS4X
2"	15"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20015TB16DS4
2"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH20016BB36DS4
2"	16"		Buna-N	w/o position inquiry	Std. mount	SH20016LB16DS4
2"	16"		Buna-N	w/o position inquiry	Std. mount	SH20016LB36DS4
2"	17"		Buna-N	w/o position inquiry	Std. mount	SH20017LB16DS4
2"	17"		Buna-N	w/o position inquiry	Std. mount	SH20017LB16DS4X
2"	18"		Buna-N	w/o position inquiry	Std. mount	SH20018LB16DS4
2"	18"		Buna-N	w/o position inquiry	Angle mount	SH20018LB36DA4Y
2"	18"		Buna-N	w/o position inquiry	Std. mount	SH20018LB36DS4
2"	18"		Buna-N	w/o position inquiry	Std. mount	SH20018LB36DS4X
2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20018TB16DS4
2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH20018T- B16DS4X
2"	1/2"		Buna-N	w/o position inquiry	Std. mount	SH200X5LB16DS4
2"	1-1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH200X9BB16DS4
2"	1-1/2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH200X9BB46DS4
2"	1-1/2"		Buna-N	w/o position inquiry	Angle mount	SH200X9LB16DA4
2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH200X9LB16DS4
2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH200X9LB36DS4
2"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH200X9LB46DS4
2"	1-1/2"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH200X9T- B36DS4C

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
2 1/2"

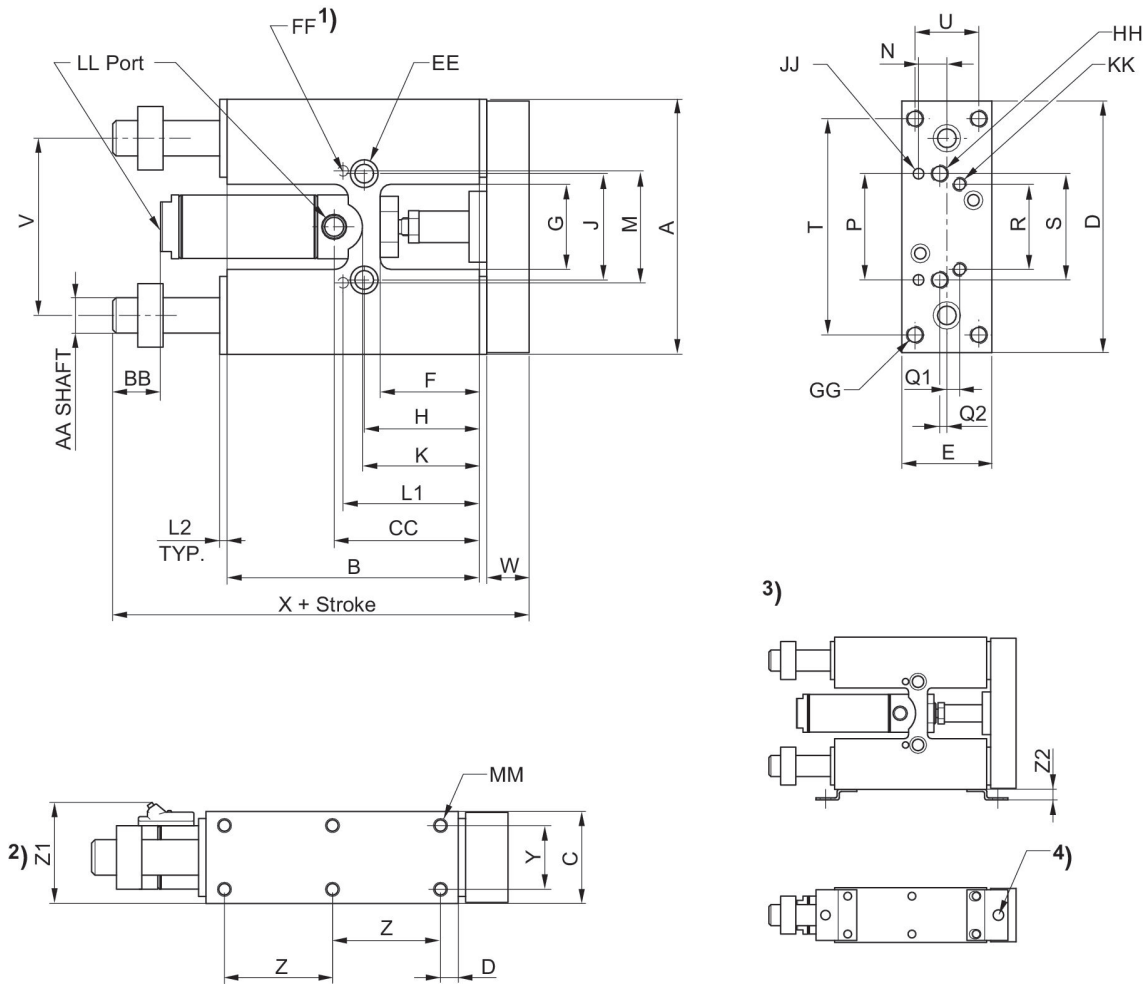


Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2-1/2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25001BB16DS4
2-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	SH25001LB16DS4
2-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	SH25001LB36DS4
2-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	SH25001LB36DS4X
2-1/2"	1"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25001TB16DS4
2-1/2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25002BB16DS4
2-1/2"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25002B-B16DS4X
2-1/2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH25002BB46DS4
2-1/2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH25002B-B46DS4C
2-1/2"	2"		Buna-N	w/o position inquiry	Std. mount	SH25002LB16DS4
2-1/2"	3"		Buna-N	w/o position inquiry	Angle mount	SH25003LB16DA4
2-1/2"	3"		Buna-N	w/o position inquiry	Std. mount	SH25003LB16DS4
2-1/2"	3"		Buna-N	w/o position inquiry	Std. mount	SH25003LB36DS4
2-1/2"	3"		FKM	w/o position inquiry	Std. mount	SH25003LB46DS4
2-1/2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25003TB16DS4
2-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25004BB16DS4
2-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25004B-B16DS4X
2-1/2"	4"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH25004BB26DS4
2-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	SH25004LB16DS4
2-1/2"	4"		Buna-N	w/o position inquiry	Angle mount	SH25004LB36DA4
2-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	SH25004LB36DS4
2-1/2"	4"		FKM	w/o position inquiry	Std. mount	SH25004LB46DS4
2-1/2"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25005BB16DS4
2-1/2"	5"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH25005BB46DS4
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	SH25005LB16DS4
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	SH25005LB16DS4X
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	SH25005LB36DS4
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	SH25005LB36DS4S
2-1/2"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25005TB16DS4
2-1/2"	5"	PTFE	FKM	w/o position inquiry	Std. mount	SH25005TB26DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
2-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25006BB16DS4
2-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	SH25006LB16DS4
2-1/2"	6"		Buna-N	w/o position inquiry	Angle mount	SH25006LB36DA4
2-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	SH25006LB36DS4
2-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	SH25006LB36DS4X
2-1/2"	6"		FKM	w/o position inquiry	Std. mount	SH25006LB46DS4
2-1/2"	6"	PTFE	FKM	w/o position inquiry	Std. mount	SH25006TB46DS4
2-1/2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25007BB16DS4
2-1/2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25007B-B16DS4X
2-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	SH25007LB16DS4
2-1/2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25007TB16DS4
2-1/2"	8"	Sintered bronze			Angle mount	SH25008BB36DA4
2-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	SH25008LB16DS4
2-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	SH25008LB36DS4
2-1/2"	9"		Buna-N	w/o position inquiry	Std. mount	SH25009LB16DS4
2-1/2"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25010BB16DS4
2-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	SH25010LB16DS4
2-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	SH25010LB36DS4X
2-1/2"	10"		FKM	w/o position inquiry	Std. mount	SH25010LB46DS4
2-1/2"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25010TB16DS4
2-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	SH25012LB16DS4
2-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	SH25012L-B16DS4C
2-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	SH25012LB36DS4
2-1/2"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25013BB16DS4
2-1/2"	13"		Buna-N	w/o position inquiry	Std. mount	SH25013LB16DS4
2-1/2"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH25014B-B16DS4S
2-1/2"	14"		Buna-N	w/o position inquiry	Std. mount	SH25014LB16DS4
2-1/2"	14"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25014TB36DS4
2-1/2"	15"		Buna-N	w/o position inquiry	Std. mount	SH25015LB36DS4
2-1/2"	16"		Buna-N	w/o position inquiry	Std. mount	SH25016LB16DS4
2-1/2"	16"		Buna-N	w/o position inquiry	Std. mount	SH25016LB36DS4
2-1/2"	18"		Buna-N	w/o position inquiry	Std. mount	SH25018LB16DS4
2-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH25018TB16DS4
2-1/2"	1-1/2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH250X9BB16DS4
2-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	SH250X9LB16DS4
2-1/2"	1-1/2"		FKM	w/o position inquiry	Std. mount	SH250X9LB46DS4



Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

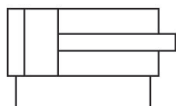
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

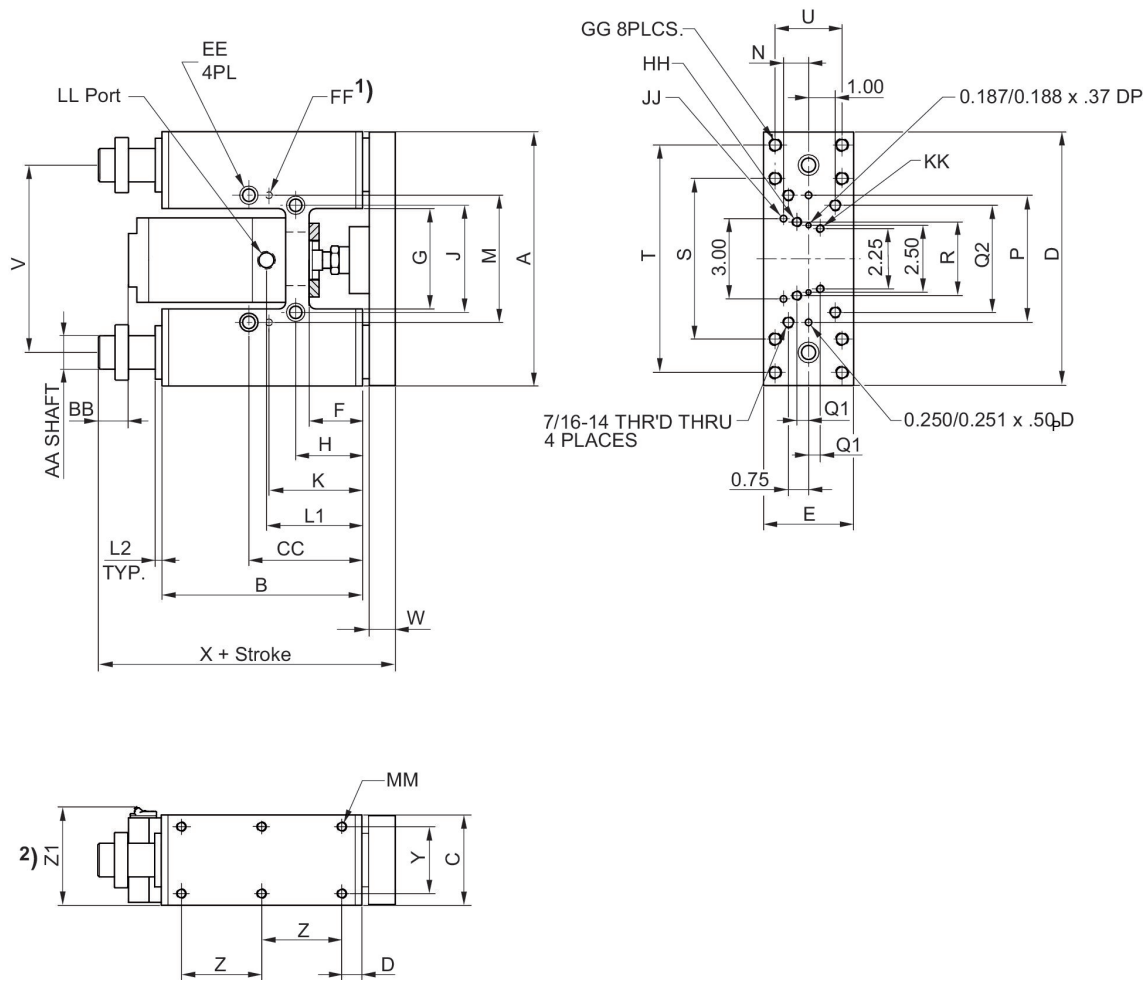
Guide cylinders  
Piston without magnet  
no cushioning  
Linear ball bearing  
3"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3"	1"		Buna-N	w/o position inquiry	Std. mount	SH30001LB16DS4
3"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH30002B-B46DS4X
3"	2"		Buna-N	w/o position inquiry	Std. mount	SH30002LB16DS4
3"	2"		Buna-N	w/o position inquiry	Std. mount	SH30002LB36DS4
3"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30003BB16DS4
3"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30003BB36DS4
3"	3"		Buna-N	w/o position inquiry	Std. mount	SH30003LB16DS4
3"	3"		Buna-N	w/o position inquiry	Std. mount	SH30003LB16DS4X
3"	3"		Buna-N	w/o position inquiry	Std. mount	SH30003LB36DS4
3"	3"		FKM	w/o position inquiry	Std. mount	SH30003LB46DS4
3"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30004BB16DS4
3"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30004B-B16DS4C
3"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30004BB36DS4
3"	4"		Buna-N	w/o position inquiry	Std. mount	SH30004LB16DS4
3"	4"		Buna-N	w/o position inquiry	Std. mount	SH30004LB36DS4
3"	4"		FKM	w/o position inquiry	Std. mount	SH30004LB46DS4
3"	4"		FKM	w/o position inquiry	Std. mount	SH30004L-B46DS4C
3"	5"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH30005B-B46DS4C
3"	5"		Buna-N	w/o position inquiry	Std. mount	SH30005LB16DS4
3"	5"		Buna-N	w/o position inquiry	Std. mount	SH30005LB36DS4
3"	5"		FKM	w/o position inquiry	Std. mount	SH30005LB46DS4
3"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30006BB16DS4
3"	6"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH30006BB26DS4
3"	6"		Buna-N	w/o position inquiry	Std. mount	SH30006LB16DS4
3"	6"		Buna-N	w/o position inquiry	Std. mount	SH30006L-B16DS4C
3"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH30006TB16DS4
3"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30007BB16DS4
3"	7"		Buna-N	w/o position inquiry	Std. mount	SH30007LB16DS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Part No.
3"	7"		FKM	w/o position inquiry	Std. mount	SH30007LB46DS4
3"	7"		FKM	w/o position inquiry	Std. mount	SH30007LB46DS4X
3"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30008BB16DS4
3"	8"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH30008BB46DS4
3"	8"		Buna-N	w/o position inquiry	Std. mount	SH30008LB16DS4
3"	8"		FKM	w/o position inquiry	Std. mount	SH30008LB46DS4
3"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH30008T-B16DS4X
3"	9"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30009BB16DS4
3"	9"		Buna-N	w/o position inquiry	Std. mount	SH30009LB16DS4X
3"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	SH30009TB16DS4
3"	10"	Sintered bronze	FKM	w/o position inquiry	Std. mount	SH30010BB26DS4
3"	10"		Buna-N	w/o position inquiry	Std. mount	SH30010LB16DS4
3"	10"		FKM	w/o position inquiry	Std. mount	SH30010L-B46DS4C
3"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30012BB16DS4
3"	12"		Buna-N	w/o position inquiry	Std. mount	SH30012LB16DS4
3"	12"		Buna-N	w/o position inquiry	Std. mount	SH30012LB36DS4
3"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30013B-B16DS4X
3"	16"		Buna-N	w/o position inquiry	Std. mount	SH30016LB16DS4
3"	18"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	SH30018BB16DS4

Dimensions in inches



Ø [inch]	A	B	C	D	E	F	G	H	J	K
3"	9.50	7.50	3.37	9.44	3.31	2.00	3.75	2.50	4.00	3.50

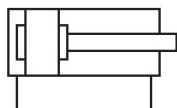
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
3"	3.59	0.25	4.749 / 4.751	0.94	4.749 / 4.751	0.43	4.00	2.75	6.00	8.50

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
3"	2.50	7.00	0.97	10.10	2.50	3.00	3.73	0.312	1.250	1.12

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
3"	4.25	0.75	C'Bored for 7/16 SHCS, Tapped 1/2-20 x 0.75 DP	0.250 / 0.251 x 0.50DP	1/2-13 thru, C'Bored for 3/8-16 SHCS	1/2-13 thru, C'Bored for 3/8-16 SHCS	0.250 / 0.251 x 0.50DP	5/16-18 x 0.50DP	3/8 NPTF	3/8-16 x 0.57 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
3/4"

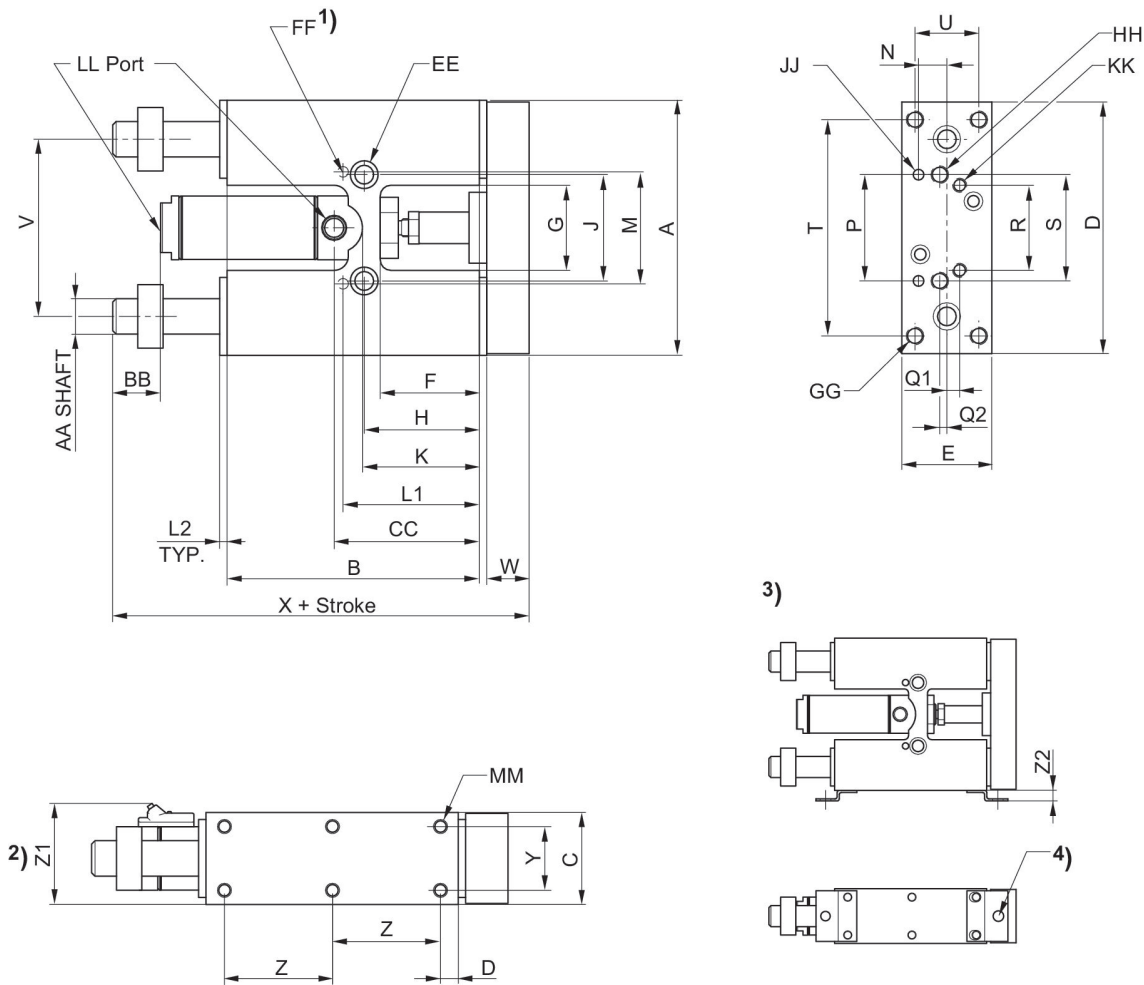


Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
3/4"	1"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH07501BB46DSC
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07501LB16DS3
3/4"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07501LB16DSC
3/4"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH07502BB16DSA
3/4"	2"		Buna-N	w/o position inquiry	Base mount	extended/retracted	SH07502LB16DBC
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07502LB16DS3
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	extended	SH07502LB16DSA
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07502LB16DSC
3/4"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07502L-B16DSCX
3/4"	2"		FKM	w/o position inquiry	Base mount	extended/retracted	SH07502LB46DB3
3/4"	2"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH07502LB46DSC
3/4"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07502T-B16DSCX
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07503LB16DS3
3/4"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07503LB16DSC
3/4"	3"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH07503LB46DSC
3/4"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07503TB16DS3
3/4"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07503T-B16DS3S
3/4"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07503TB16DSC
3/4"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07504LB16DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07505LB16DS3
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07505LB16DS3X
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	extended	SH07505LB16DSA
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	extended	SH07505L-B16DSAX
3/4"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07505LB16DSC
3/4"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07506BB16DSC
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07506LB16DS3
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	extended	SH07506LB16DSA
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	retracted	SH07506L-B16DSBX
3/4"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07506LB16DSC
3/4"	6"	PTFE	FKM	w/o position inquiry	Std. mount	extended/retracted	SH07506TB26DS3
3/4"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07508BB16DSC
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07508LB16DS3
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07508LB16DS3X
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	extended	SH07508LB16DSA
3/4"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07508LB16DSC
3/4"	9"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07509LB16DS3
3/4"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07509TB16DS3
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07510LB16DS3
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07510LB16DS3X
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	retracted	SH07510LB16DSB
3/4"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07510LB16DSC
3/4"	11"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07511LB16DS3
3/4"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH07512BB16DS1
3/4"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07512LB16DS3
3/4"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH07512LB16DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
3/4"	1/2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH075X5LB16DS3
3/4"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	extended	SH075X9LB16DSA
3/4"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH075X9LB16DSC

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31



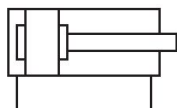
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
1 1/16"

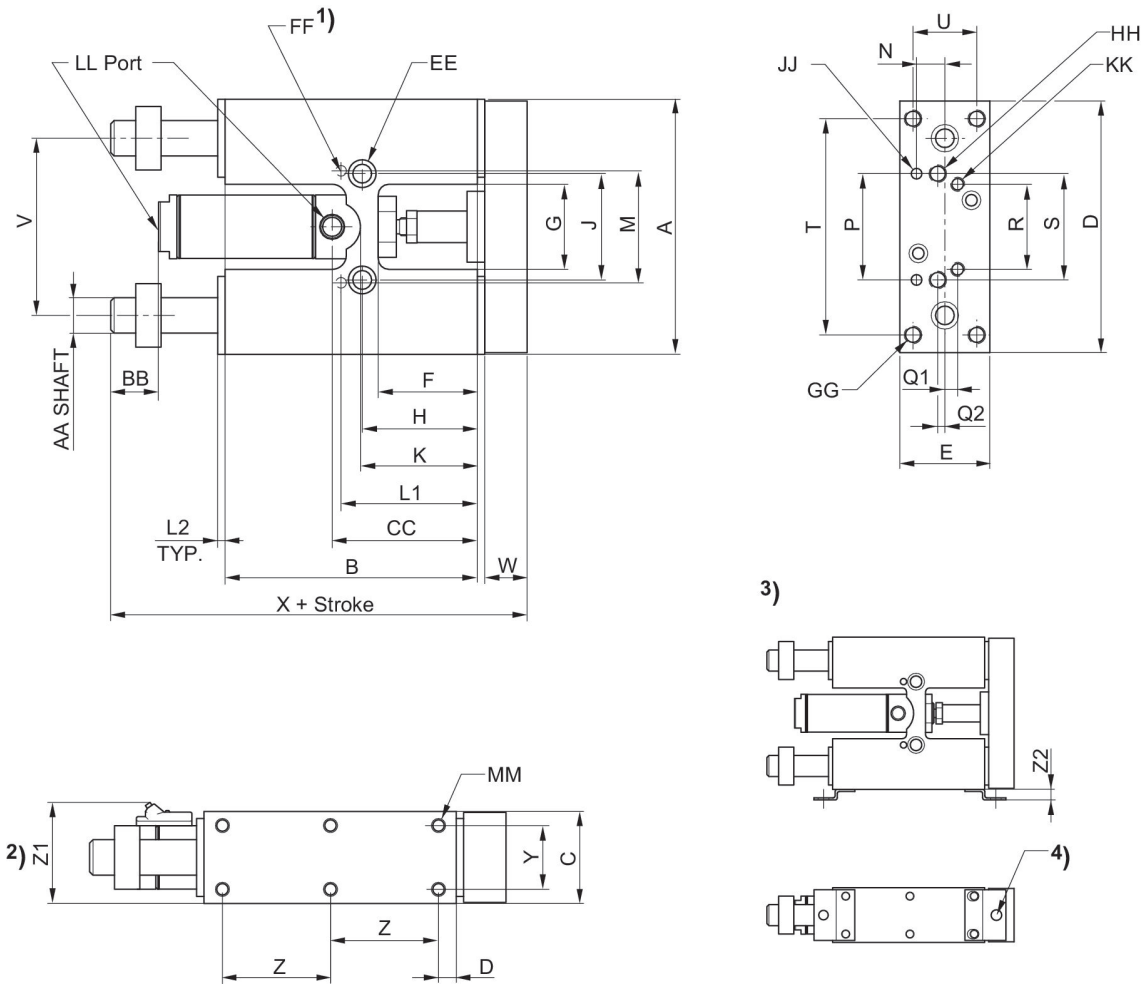


Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10601BB16DSC
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount	retracted	SH10601LB16DS2
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10601LB16DS3
1-1/16"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10601LB16DSC
1-1/16"	2"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10602BB16DSC
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10602LB16DS3
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10602LB16DS3X
1-1/16"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10602LB16DSC
1-1/16"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10602TB16DSC
1-1/16"	2"	PTFE	FKM	w/o position inquiry	Std. mount	extended/retracted	SH10602TB26DS3
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH10603BB16DS1
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603BB36DSC
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount	extended	SH10603LB16DS1
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603LB16DS3
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603LB16DSC
1-1/16"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603LB36DSC
1-1/16"	3"		FKM	w/o position inquiry	Std. mount	extended	SH10603LB46DS1
1-1/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603TB16DS3
1-1/16"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10603TB36DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10604LB16DS3
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10604LB16DSC
1-1/16"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10604LB36DSC
1-1/16"	4"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10604TB16DSC
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10605LB16DS3X
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount	retracted	SH10605LB16DSB
1-1/16"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10605LB16DSC
1-1/16"	5"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10605LB46DS3
1-1/16"	5"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10605LB46DSC
1-1/16"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10606BB16DSC
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10606LB16DS3X
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount	extended	SH10606LB16DSA
1-1/16"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10606LB16DSC
1-1/16"	6"		FKM	w/o position inquiry	Angle mount	extended/retracted	SH10606LB46DA3
1-1/16"	6"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10606LB46DSC
1-1/16"	6"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10606LB46DSCX
1-1/16"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH10607BB36DS1
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10607LB16DS3
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10607LB16DS3X
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount	retracted	SH10607LB16DSB
1-1/16"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10607LB16DSC
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount	extended	SH10608LB16DSA
1-1/16"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10608LB16DSC
1-1/16"	8"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10608LB46DSC
1-1/16"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended	SH10609TB16DSA
1-1/16"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10609TB16DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/16"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10610BB16DS3
1-1/16"	11"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10611L-B16DSCX
1-1/16"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10612LB16DSC
1-1/16"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10612LB36DS3
1-1/16"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10612TB16DS3
1-1/16"	14"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH10614LB46DSC
1-1/16"	16"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH10616TB16DS3
1-1/16"	18"	PTFE	FKM	w/o position inquiry	Std. mount	extended/retracted	SH10618TB46DSC
1-1/16"	1-1/2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH106X9BB46DSC
1-1/16"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH106X9LB16DS3

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

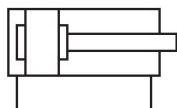
Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
1 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	1"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH15001B-B16DS1X
1-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15001LB16DS3
1-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15001LB16DSC
1-1/2"	1"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH15001LB46DSC
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15002LB16DSC
1-1/2"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15002LB36DSC
1-1/2"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH15003B-B16DS1X
1-1/2"	3"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH15003BB16DSA
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15003LB16DS3
1-1/2"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15003LB36DSC
1-1/2"	3"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH15003LB46DSC
1-1/2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15003TB16DSC
1-1/2"	3"	PTFE	FKM	w/o position inquiry	Std. mount	extended/retracted	SH15003TB46DSC
1-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	retracted	SH15004BB16DS2
1-1/2"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15004BB16DSC
1-1/2"	4"		Buna-N	w/o position inquiry	Base mount	extended/retracted	SH15004LB16DBC
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15004LB16DSC
1-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15004LB36DSC
1-1/2"	4"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH15004LB46DSC

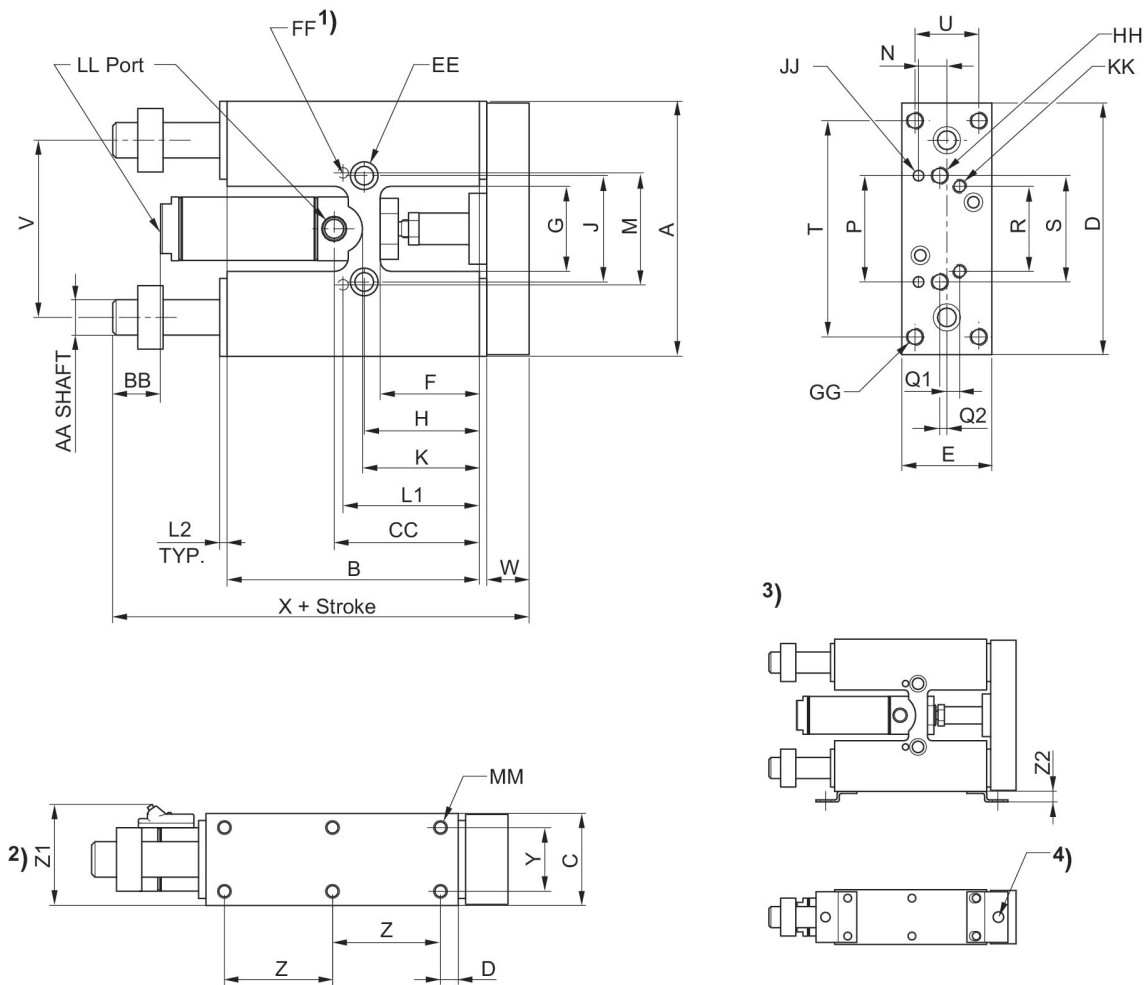
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	5"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH15005BB46DSC
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended	SH15005LB16DS1
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15005LB16DS3
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15005LB16DS3X
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15005LB16DSC
1-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15005LB36DSC
1-1/2"	5"		FKM	w/o position inquiry	Std. mount	retracted	SH15005LB46DS2
1-1/2"	5"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15005TB16DSC
1-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH15006BB16DSA
1-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15006BB16DSC
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	extended	SH15006LB16DSA
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15006LB16DSC
1-1/2"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15006L-B16DSCX
1-1/2"	6"		FKM	w/o position inquiry	Std. mount	extended	SH15006LB46DSA
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15006TB16DS3
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	retracted	SH15006TB16DSB
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15006TB16DSC
1-1/2"	7"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15007BB16DSC
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15007LB16DS3X
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	extended	SH15007L-B16DSAC
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15007LB16DSC
1-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15007L-B16DSCX
1-1/2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15007TB16DSC
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended	SH15008BB16DSA
1-1/2"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15008BB16DSC
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended	SH15008LB16DS1



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	retracted	SH15008LB16DS2
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15008LB16DS3
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15008LB16DS3X
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15008LB16DSC
1-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15008L-B16DSCX
1-1/2"	8"	PTFE	FKM	w/o position inquiry	Std. mount	retracted	SH15008TB46DSB
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount	extended	SH15009LB16DS1
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount	retracted	SH15009LB16DS2
1-1/2"	9"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15009LB16DS3
1-1/2"	10"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15010BB16DSC
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15010LB16DS3
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15010LB16DS3X
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended	SH15010LB16DSA
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15010LB16DSC
1-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15010L-B16DSCX
1-1/2"	11"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH15011LB46DSC
1-1/2"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15012BB16DSC
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15012LB16DS3
1-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15012LB16DSC
1-1/2"	12"		Buna-N	w/o position inquiry	Base mount	extended/retracted	SH15012LB36DBC
1-1/2"	13"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15013LB16DSC
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount	extended	SH15015LB16DSA
1-1/2"	15"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15015LB36DSC
1-1/2"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15016BB16DSC
1-1/2"	16"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15016LB16DSC
1-1/2"	16"		Buna-N	w/o position inquiry	Std. mount	retracted	SH15016LB36DS2

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15018LB16DS3
1-1/2"	18"		Buna-N	w/o position inquiry	Std. mount	extended	SH15018LB16DSA
1-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH15018TB16DSC
1-1/2"	1-1/2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH150X9LB16DS3
1-1/2"	1-1/2"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH150X9LB46DS3

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37

Ø [inch]	A	B	C	D	E	F	G	H	J	K
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

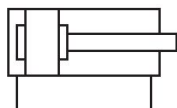
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

## Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
2"



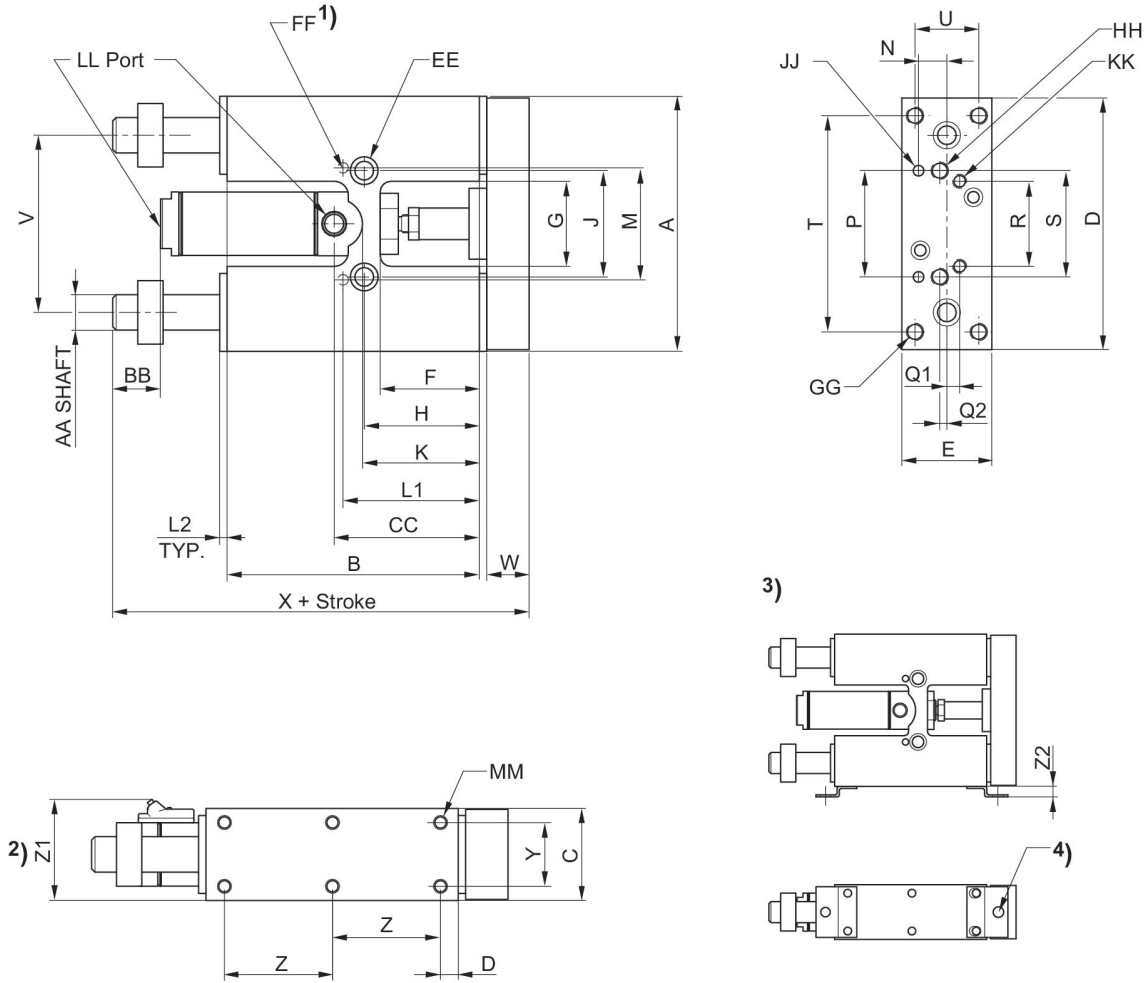
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2"	1"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20001LB16DSC
2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH20002BB46DSC
2"	2"		Buna-N	w/o position inquiry	Std. mount	extended	SH20002L-B16DSAC
2"	2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20002LB16DSC
2"	3"		Buna-N	w/o position inquiry	Std. mount	extended	SH20003LB16DS1
2"	3"		Buna-N	w/o position inquiry	Std. mount	extended	SH20003L-B16DSAX
2"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20003LB36DSC
2"	3"		FKM	w/o position inquiry	Std. mount	extended	SH20003LB46DS1
2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20003TB16DS3
2"	3"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20003TB16DSC
2"	4"		Buna-N	w/o position inquiry	Base mount	extended/retracted	SH20004LB16DB3
2"	4"		Buna-N	w/o position inquiry	Std. mount	extended	SH20004LB16DS1
2"	4"		Buna-N	w/o position inquiry	Std. mount	retracted	SH20004LB16DS2
2"	4"		Buna-N	w/o position inquiry	Std. mount	extended	SH20004LB16DSA
2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20004LB16DSC
2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20004L-B16DSCX
2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20004LB16DS-CY
2"	4"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH20004LB46DSC
2"	4"	PTFE	FKM	w/o position inquiry	Std. mount	retracted	SH20004TB26DS2

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20005LB16DS3
2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20005LB16DSC
2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20005L-B16DSCX
2"	5"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH20005LB46DSC
2"	6"		Buna-N	w/o position inquiry	Std. mount	extended	SH20006LB16DSA
2"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20006LB16DSC
2"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20006L-B16DSCX
2"	6"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20006LB36DSC
2"	6"		FKM	w/o position inquiry	Std. mount	retracted	SH20006LB46DS2
2"	6"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH20006LB46DSC
2"	7"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH20007BB46DSC
2"	7"		Buna-N	w/o position inquiry	Std. mount	extended	SH20007LB16DS1
2"	7"		Buna-N	w/o position inquiry	Std. mount	extended	SH20007LB16DSA
2"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20007LB16DSC
2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended	SH20007TB16DS1
2"	7"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20007TB16DSC
2"	8"		Buna-N	w/o position inquiry	Std. mount	extended	SH20008LB16DS1
2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20008LB16DS3
2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20008LB16DSC
2"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20008TB16DS3
2"	8"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20008TB16DSC
2"	9"		Buna-N	w/o position inquiry	Std. mount	extended	SH20009LB16DSA
2"	9"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20009L-B16DSCX
2"	9"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH20009LB46DS3
2"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20009TB16DS3
2"	9"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20009TB16DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2"	10"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH20010BB46DSC
2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20010LB16DS3
2"	10"		Buna-N	w/o position inquiry	Std. mount	extended	SH20010LB16DSA
2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20010LB16DSC
2"	10"		Buna-N	w/o position inquiry	Angle mount	extended/retracted	SH20010LB36DAC
2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20010LB36DSC
2"	10"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20010TB36DS3
2"	11"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20011LB16DSC
2"	11"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20011TB16DSC
2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20012LB16DS3
2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20012LB16DSC
2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20012L-B16DSCX
2"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20012TB16DS3
2"	12"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20012TB16DSC
2"	13"		Buna-N	w/o position inquiry	Std. mount	extended	SH20013LB16DSA
2"	13"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20013LB36DSC
2"	14"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20014LB16DS3
2"	14"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20014LB16DSC
2"	15"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20015TB36DSC
2"	16"		Buna-N	w/o position inquiry	Std. mount	extended	SH20016LB16DS1
2"	16"		Buna-N	w/o position inquiry	Std. mount	extended	SH20016LB16DSA
2"	16"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20016LB16DSC
2"	16"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20016L-B16DSCX
2"	16"		Buna-N	w/o position inquiry	Std. mount	extended	SH20016LB36DSA
2"	17"		Buna-N	w/o position inquiry	Std. mount	extended	SH20017LB16DSA
2"	18"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20018LB16DS3

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2"	18"		Buna-N	w/o position inquiry	Std. mount	retracted	SH20018LB16DSB
2"	18"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20018LB36DSC
2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH20018TB36DSC
2"	1/2"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH200X5LB16DS3

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [Inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

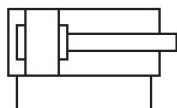
Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP



### Guide cylinders, Series SH

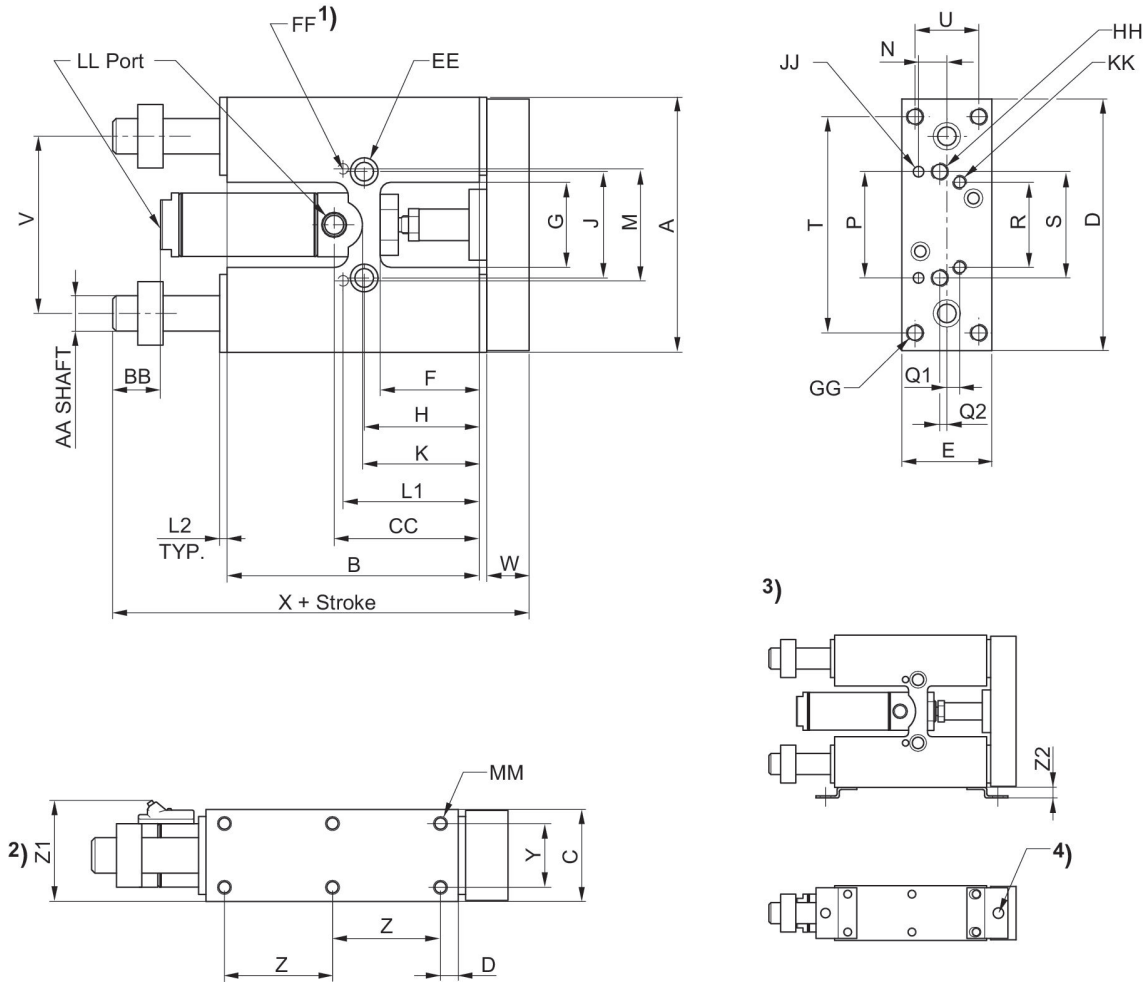
Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
2 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2-1/2"	1"		Buna-N	w/o position inquiry	Std. mount	extended	SH25001LB16DS1
2-1/2"	2"	Sintered bronze	FKM	w/o position inquiry	Std. mount	extended/retracted	SH25002BB46DSC
2-1/2"	2"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH25002LB46DSC
2-1/2"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25002TB16DS3
2-1/2"	2"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25002TB16DSC
2-1/2"	3"		Buna-N	w/o position inquiry	Std. mount	extended	SH25003LB16DSA
2-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	retracted	SH25004LB16DS2
2-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25004LB16DS3
2-1/2"	4"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25004LB16DSC
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25005LB16DS3
2-1/2"	5"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25005LB16DSC
2-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25006BB16DSC
2-1/2"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25007LB36DSC
2-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	retracted	SH25008LB16DSB
2-1/2"	8"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25008LB16DSC
2-1/2"	10"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25010L-B36DSCX
2-1/2"	12"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25012LB16DSC
2-1/2"	16"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25016BB16DSC
2-1/2"	18"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH25018LB16DS3

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
2-1/2"	18"	PTFE	Buna-N	w/o position inquiry	Std. mount		SH25018T-B16DSCX

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

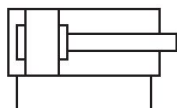
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

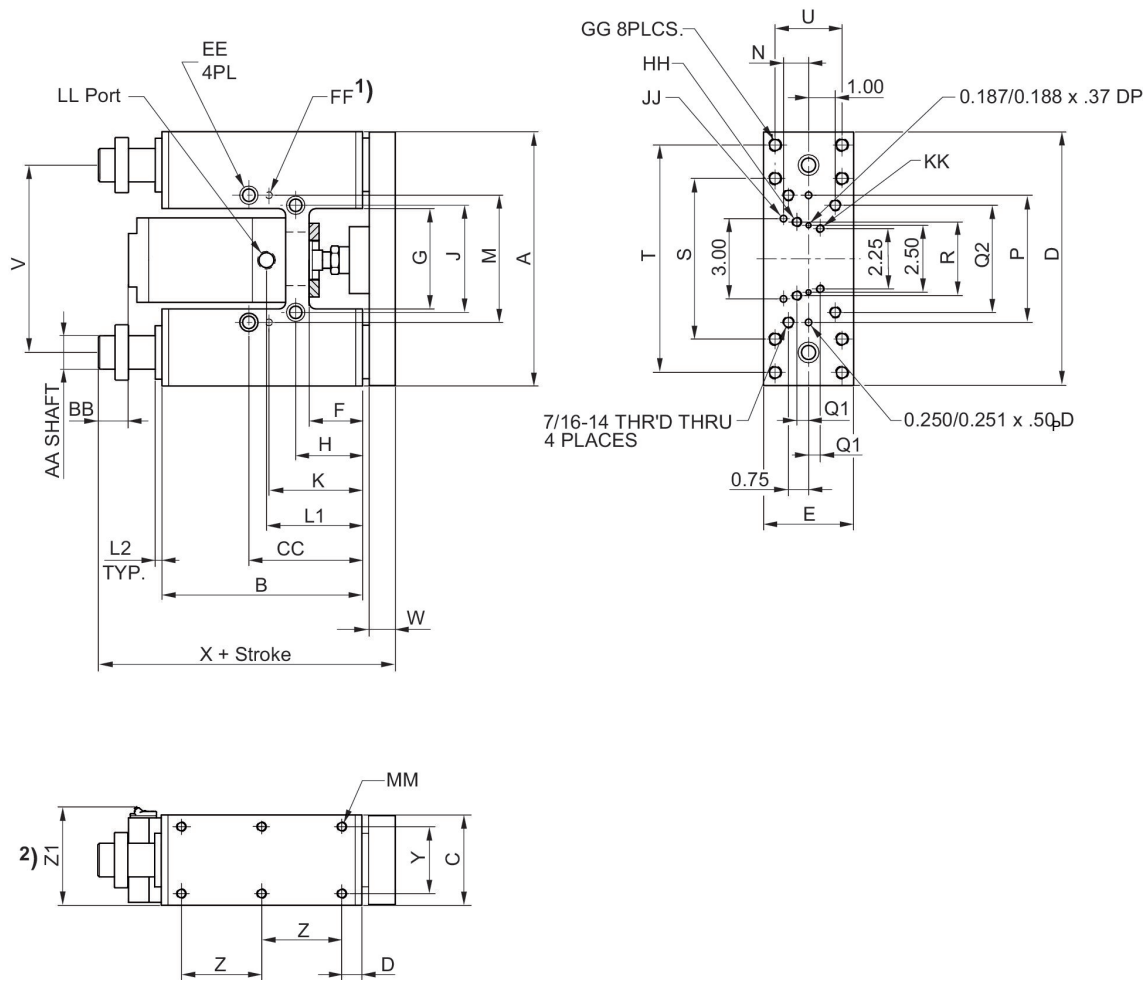
### Guide cylinders, Series SH

Guide cylinders  
Piston without magnet  
Elastic cushioning  
Linear ball bearing  
3"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Mounting type	Hardware & Shocks	Part No.
3"	3"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30003LB36DSC
3"	4"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30004BB16DSC
3"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30005B-B16DSCX
3"	5"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30005BB36DSC
3"	6"		FKM	w/o position inquiry	Std. mount	retracted	SH30006LB46DSB
3"	7"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30007LB16DSC
3"	8"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30008BB16DSC
3"	11"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30011LB16DSC
3"	12"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30012BB16DSC
3"	12"		Buna-N	w/o position inquiry	Std. mount	retracted	SH30012LB16DS2
3"	13"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30013BB16DSC
3"	13"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30013LB16DSC
3"	14"	Sintered bronze	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30014B-B16DSCX
3"	15"		Buna-N	w/o position inquiry	Std. mount	retracted	SH30015LB16DS2
3"	15"		Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30015LB36DSC
3"	15"	PTFE	Buna-N	w/o position inquiry	Std. mount	extended/retracted	SH30015T-B16DSCX
3"	17"		Buna-N	w/o position inquiry	Std. mount	retracted	SH30017LB16DSB
3"	18"		Buna-N	w/o position inquiry	Std. mount	retracted	SH30018LB16DSB
3"	18"		FKM	w/o position inquiry	Std. mount	extended/retracted	SH30018LB46DS3

Dimensions in inches



Ø [inch]	A	B	C	D	E	F	G	H	J	K
3"	9.50	7.50	3.37	9.44	3.31	2.00	3.75	2.50	4.00	3.50

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
3"	3.59	0.25	4.749 / 4.751	0.94	4.749 / 4.751	0.43	4.00	2.75	6.00	8.50

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
3"	2.50	7.00	0.97	10.10	2.50	3.00	3.73	0.312	1.250	1.12

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
3"	4.25	0.75	C'Bored for 7/16 SHCS, Tapped 1/2-20 x 0.75 DP	0.250 / 0.251 x 0.50DP	1/2-13 thru, C'Bored for 3/8-16 SHCS	1/2-13 thru, C'Bored for 3/8-16 SHCS	0.250 / 0.251 x 0.50DP	5/16-18 x 0.50DP	3/8 NPTF	3/8-16 x 0.57 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
9/16"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
9/16"	1"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05601BB11CS4
9/16"	1"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05601BB13CS4
9/16"	1"	Sintered bronze	Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05601BB1YCS4
9/16"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05601LB11CS4
9/16"	1"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05601LB12CS4
9/16"	1"		Buna-N	Reed	extended	Standard	Std. mount	SH05601LB13AS4
9/16"	1"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05601LB13CS4
9/16"	1"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH05601LB17CS4
9/16"	1"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05601LB1XCS4
9/16"	1"		Buna-N	NPN	retracted	Quick disconnect	Std. mount	SH05601LB1YBS4
9/16"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount	SH05601LB1ZCB4
9/16"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05601LB1ZCS4
9/16"	1"		FKM	NPN	extended/retracted	Standard	Std. mount	SH05601LB42CS4
9/16"	1"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05601TB13CS4
9/16"	1"	PTFE	FKM	NPN	extended/retracted	Standard	Std. mount	SH05601TB42CS4
9/16"	1"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH05601TB4ZCS4
9/16"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05602BB11CS4
9/16"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05602BB13CS4
9/16"	2"	Sintered bronze	Buna-N		extended/retracted	via mounting bracket	Std. mount	SH05602BB17CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
9/16"	2"		Buna-N	Reed	extended	Standard	Std. mount	SH05602LB13AS4
9/16"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05602LB13CS4
9/16"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH05602LB17CS4
9/16"	2"		Buna-N	Reed	extended	Quick disconnect	Std. mount	SH05602LB1X-AS4X
9/16"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05602LB1XCS4
9/16"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05602LB1YCS4
9/16"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05602LB1Y-CS4C
9/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05602LB1ZCS4
9/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05602L-B1ZCS4C
9/16"	2"		FKM	NPN	extended/retracted	Standard	Std. mount	SH05602LB42CS4
9/16"	2"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH05602LB4XCS4
9/16"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH05602LB4ZCS4
9/16"	2"	PTFE	Buna-N	Reed	retracted	Quick disconnect	Std. mount	SH05602T-B1XBS4C
9/16"	2"	PTFE	FKM	Reed	extended/retracted	Standard	Std. mount	SH05602TB43CS4
9/16"	3"	Sintered bronze	Buna-N	NPN	retracted	Standard	Std. mount	SH05603BB12BS4
9/16"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05603BB1ZCS4
9/16"	3"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH05603BB4ZCS4
9/16"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05603LB11CS4
9/16"	3"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05603LB12CS4
9/16"	3"		Buna-N	Reed	extended	Standard	Angle mount	SH05603LB13AA4
9/16"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05603LB13CS4
9/16"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH05603LB17CS4
9/16"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05603LB1XCS4
9/16"	3"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05603LB1YCS4
9/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05603LB1ZCS4
9/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05603L-B1ZCS4X

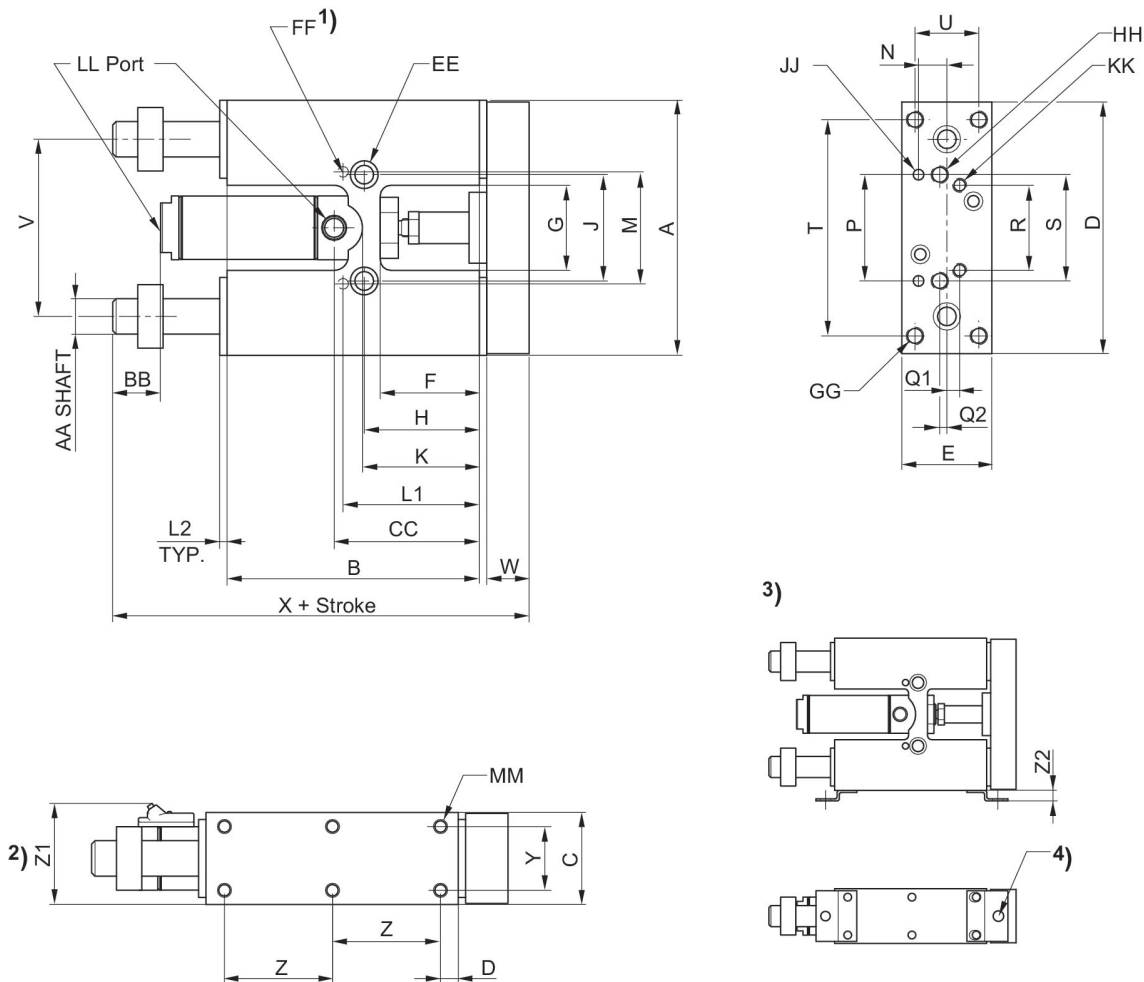
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
9/16"	3"	PTFE	Buna-N	NPN	retracted	Standard	Std. mount	SH05603TB12BS4
9/16"	3"	PTFE	Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05603TB1YCS4
9/16"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05604BB11CS4
9/16"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Base mount	SH05604BB1ZCB4
9/16"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05604BB1ZCS4
9/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05604LB11CS4
9/16"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05604LB12CS4
9/16"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05604LB13CS4
9/16"	4"		Buna-N	NPN	retracted	Quick disconnect	Std. mount	SH05604LB1YBS4
9/16"	4"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05604LB1YCS4
9/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05604LB1ZCS4
9/16"	4"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05604TB11CS4
9/16"	4"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05604TB1ZCS4
9/16"	5"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05605BB12CS4
9/16"	5"		Buna-N	PNP	extended/retracted	Standard	Base mount	SH05605LB11CB4
9/16"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05605LB13CS4
9/16"	5"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05605LB1YCS4
9/16"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05605LB1ZCS4
9/16"	5"	PTFE	Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05605TB1YCS4
9/16"	6"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05606BB12CS4
9/16"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05606BB13CS4
9/16"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05606BB1ZCS4
9/16"	6"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05606LB12CS4
9/16"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05606LB13CS4
9/16"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05606LB1XCS4
9/16"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05606LB1XCS4C



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
9/16"	6"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05606LB1YCS4
9/16"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05606LB1ZCS4
9/16"	6"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH05606LB4XCS4
9/16"	6"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05606TB1XCS4
9/16"	6"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH05606TB4ZCS4
9/16"	7"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH05607BB17CS4
9/16"	7"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05607LB12CS4
9/16"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05607L-B13CS4C
9/16"	7"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05607LB1XCS4
9/16"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05607LB1ZCS4
9/16"	7"	PTFE	FKM	NPN	extended/retracted	Quick disconnect	Std. mount	SH05607TB4Y-CS4C
9/16"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05608BB1ZCS4
9/16"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH05608LB12CS4
9/16"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH05608LB1XCS4
9/16"	9"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05609LB11CS4
9/16"	9"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH05609LB13CS4X
9/16"	10"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH05610LB1YCS4
9/16"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05610LB1ZCS4
9/16"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH05612LB11CS4
9/16"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH05612LB1ZCS4
9/16"	1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH056X5BB11CS4
9/16"	1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH056X5LB13CS4
9/16"	1/2"		FKM	Reed	extended/retracted	Standard	Base mount	SH056X5LB43CB4
9/16"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH056X9BB11CS4
9/16"	1-1/2"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH056X9BB13CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
9/16"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Base mount	SH056X9BB1ZCB4
9/16"	1-1/2"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH056X9LB12CS4
9/16"	1-1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH056X9LB17CS4
9/16"	1-1/2"		Buna-N	Reed	extended	Quick disconnect	Std. mount	SH056X9LB1XAS4
9/16"	1-1/2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH056X9LB1XCS4
9/16"	1-1/2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH056X9LB1YCS4
9/16"	1-1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH056X9LB1ZCS4
9/16"	1-1/2"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	SH056X9LB4YCS4Q

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
3/4"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	1"	Sintered bronze	Buna-N	Reed	extended	Standard	Std. mount		SH07501BB13AS4
3/4"	1"	Sintered bronze	Buna-N	PNP	extended	Quick disconnect	Std. mount		SH07501BB1ZAS4
3/4"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07501LB11CS4
3/4"	1"		Buna-N	Reed	extended	Standard	Std. mount		SH07501LB13AS4X
3/4"	1"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07501LB13CS4
3/4"	1"		Buna-N			via mounting bracket	Std. mount		SH07501LB17CS4
3/4"	1"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07501LB1XCS4
3/4"	1"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07501LB1YCS4
3/4"	1"		Buna-N	PNP	extended	Quick disconnect	Std. mount		SH07501LB1ZAS4
3/4"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07501LB1ZCS4
3/4"	1"		FKM	PNP	extended/retracted	Standard	Std. mount		SH07501LB41CS4
3/4"	1"		FKM			via mounting bracket	Std. mount		SH07501LB47CS4
3/4"	1"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07501TB13CS4
3/4"	1"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07501TB1XCS4
3/4"	1"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07501TB1XCS4C
3/4"	1"	PTFE	FKM	NPN	extended/retracted	Standard	Std. mount		SH07501TB42CS4
3/4"	1"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH07501TB4ZCS4
3/4"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07502BB11CS4
3/4"	2"	Sintered bronze	Buna-N	Reed	retracted	Standard	Std. mount		SH07502BB13BS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07502BB1XCS4
3/4"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07502BB1ZCS4
3/4"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07502B-B1ZCS4Q
3/4"	2"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07502LB11CS4
3/4"	2"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07502LB12CS4
3/4"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07502LB13CS4
3/4"	2"		Buna-N			via mounting bracket	Std. mount		SH07502LB17CS4
3/4"	2"		Buna-N	Reed	extended	Quick disconnect	Std. mount		SH07502LB1XAS4
3/4"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07502LB1XCS4
3/4"	2"		Buna-N	NPN	retracted	Quick disconnect	Std. mount		SH07502LB1YBS4
3/4"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07502LB1YCS4
3/4"	2"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH07502LB1ZBS4
3/4"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07502LB1ZCS4
3/4"	2"		FKM	PNP	extended/retracted	Standard	Std. mount		SH07502LB41CS4
3/4"	2"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount		SH07502LB4YCS4
3/4"	2"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount		SH07502LB4Y-CS4C
3/4"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH07502LB4ZCS4
3/4"	2"	PTFE	Buna-N	Reed	extended	Quick disconnect	Std. mount		SH07502TB1XAS4
3/4"	2"	PTFE	FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH07502TB4XCS4
3/4"	3"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07503BB12CS4
3/4"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07503BB13CS4
3/4"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503BB1ZCS4
3/4"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503B-B1ZCS4C
3/4"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07503LB11CS4
3/4"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07503L-B11CS4C

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07503LB11CS4X
3/4"	3"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07503LB12CS4
3/4"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07503LB13CS4
3/4"	3"		Buna-N	w/o position inquiry		via mounting bracket	Angle mount		SH07503LB17CA4
3/4"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07503LB17CS4
3/4"	3"		Buna-N	Reed	retracted	Quick disconnect	Angle mount		SH07503LB1XBA4
3/4"	3"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH07503LB1ZBS4
3/4"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503LB1ZCS4
3/4"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503LB1ZCS4C
3/4"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503LB1ZCS4X
3/4"	3"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07503TB1ZCS4
3/4"	3"	PTFE	FKM	w/o position inquiry		via mounting bracket	Std. mount		SH07503TB27CS4
3/4"	3"	PTFE	FKM	PNP	extended/retracted	Standard	Std. mount		SH07503TB41CS4
3/4"	4"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07504BB13CS4
3/4"	4"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended	SH07504BB17CSA
3/4"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07504BB1ZCS4
3/4"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07504BB1ZCS4X
3/4"	4"		Buna-N	PNP	extended	Standard	Std. mount		SH07504LB11AS4X
3/4"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07504LB11CS4
3/4"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07504LB12CS4
3/4"	4"		Buna-N	Reed	extended	Standard	Std. mount		SH07504LB13AS4
3/4"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07504LB13CS4
3/4"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07504LB13CS4X
3/4"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07504LB17CS4
3/4"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07504LB1XCS4
3/4"	4"		Buna-N	NPN	retracted	Quick disconnect	Std. mount		SH07504LB1YBS4

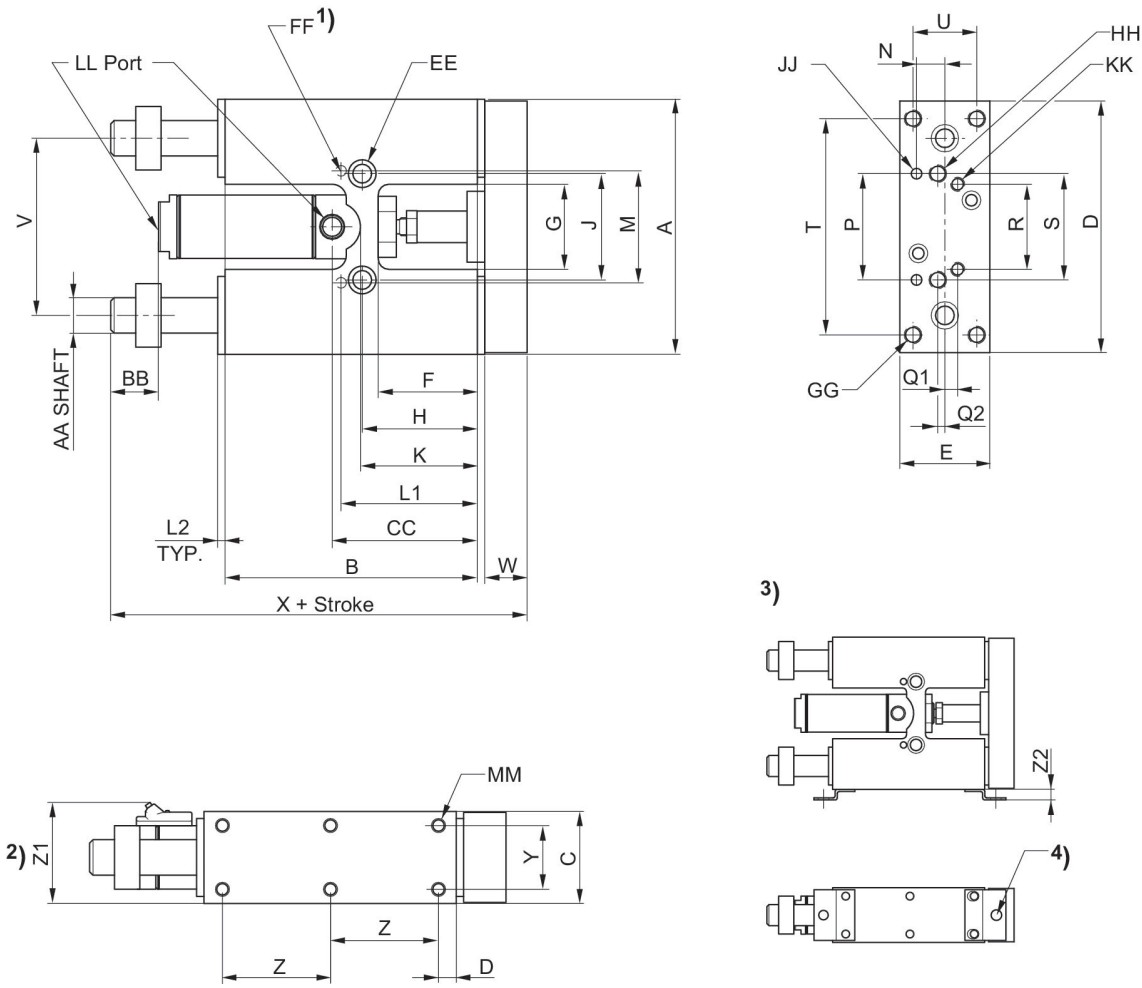
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	4"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07504LB1YCS4
3/4"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH07504LB1ZCB4
3/4"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07504LB1ZCS4
3/4"	4"		FKM	PNP	extended/retracted	Standard	Base mount		SH07504LB41CB4
3/4"	4"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07504TB1X-CS4C
3/4"	4"	PTFE	FKM	PNP	extended/retracted	Standard	Std. mount		SH07504TB41CS4
3/4"	5"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07505LB11CS4
3/4"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07505LB13CS4
3/4"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07505LB17CS4
3/4"	5"		Buna-N	PNP	extended	Quick disconnect	Std. mount		SH07505LB1ZAS4
3/4"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07505LB1ZCS4
3/4"	6"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07506BB12CS4
3/4"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07506BB1XCS4
3/4"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH07506BB1ZCB4
3/4"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07506BB1ZCS4
3/4"	6"	Sintered bronze	FKM	NPN	extended/retracted	Quick disconnect	Std. mount		SH07506BB4YCS4
3/4"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07506LB11CS4
3/4"	6"		Buna-N	NPN	retracted	Standard	Std. mount		SH07506LB12BS4
3/4"	6"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07506LB12CS4
3/4"	6"		Buna-N	Reed	retracted	Standard	Std. mount		SH07506LB13BS4
3/4"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07506LB13CS4
3/4"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07506LB17CS4
3/4"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07506LB1XCS4
3/4"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07506LB1X-CS4X
3/4"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07506LB1ZCS4
3/4"	6"		FKM	PNP	extended/retracted	Standard	Std. mount		SH07506L-B41CS4C

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	6"		FKM	NPN	extended/retracted	Standard	Std. mount		SH07506LB42CS4
3/4"	6"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07506TB13CS4
3/4"	6"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07506TB1ZCS4
3/4"	7"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07507B-B17CS4X
3/4"	7"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07507BB1ZCS4
3/4"	7"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH07507BB4ZCS4
3/4"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07507LB13CS4
3/4"	7"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07507LB17CS4
3/4"	7"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07507LB1Y-CS4C
3/4"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07507LB1ZCS4
3/4"	8"		Buna-N	Reed	extended/retracted	Standard	Base mount		SH07508LB13CB4
3/4"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07508LB17BS4
3/4"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07508LB17CS4
3/4"	8"		Buna-N	NPN	retracted	Quick disconnect	Std. mount		SH07508LB1YBS4
3/4"	8"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07508LB1YCS4
3/4"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07508LB1ZCS4
3/4"	8"		FKM	Reed	extended	Standard	Std. mount		SH07508LB43AS4
3/4"	9"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07509BB11CS4
3/4"	9"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07509LB17CS4
3/4"	9"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH07509LB1XCS4
3/4"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07509LB1ZCS4
3/4"	9"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH07509LB4ZCS4
3/4"	10"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Base mount		SH07510BB11CB4
3/4"	10"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH07510BB12CS4
3/4"	10"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH07510BB17CS4
3/4"	10"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07510LB11CS4



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	10"		Buna-N	Reed	retracted	Standard	Std. mount		SH07510LB13BS4
3/4"	10"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07510LB1YCS4
3/4"	10"		Buna-N	PNP	extended	Quick disconnect	Std. mount		SH07510LB1ZAS4
3/4"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07510LB1ZCS4Q
3/4"	11"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH07511LB1YCS4
3/4"	11"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH07511LB1ZCB4
3/4"	11"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07511TB1ZCS4
3/4"	12"	Sintered bronze	Buna-N	Reed	retracted	Standard	Std. mount		SH07512BB13BS4
3/4"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH07512LB11CS4
3/4"	12"		Buna-N	Reed	extended/retracted	Standard	Base mount		SH07512LB13CB4
3/4"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH07512LB13CS4
3/4"	12"	PTFE	FKM	w/o position inquiry		via mounting bracket	Std. mount		SH07512TB47CS4
3/4"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH07514LB1ZCS4
3/4"	17"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH07517LB1ZCB4X
3/4"	1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH075X5LB13CS4X
3/4"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH075X9BB11CS4
3/4"	1-1/2"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH075X9BB12CS4
3/4"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH075X9BB1ZCS4
3/4"	1-1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH075X9LB13CS4
3/4"	1-1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH075X9LB17CS4
3/4"	1-1/2"		Buna-N	Reed	retracted	Quick disconnect	Std. mount		SH075X9LB1XBS4
3/4"	1-1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH075X9LB1ZCS4
3/4"	1-1/2"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH075X9TB1XCS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
1 1/16"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	1"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10601BB13CS4
1-1/16"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10601LB11CS4
1-1/16"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10601LB11CS4X
1-1/16"	1"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10601LB17CS4
1-1/16"	1"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH10601LB1YCS4
1-1/16"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10601LB1ZCS4
1-1/16"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10601LB31CS4
1-1/16"	1"		FKM	Reed	extended/retracted	Standard	Std. mount		SH10601LB43CS4
1-1/16"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10602BB1XCS4
1-1/16"	2"	Sintered bronze	Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH10602BB1YCS4
1-1/16"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10602BB1ZCS4
1-1/16"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10602BB33CS4
1-1/16"	2"	Sintered bronze	FKM	PNP	extended/retracted	Standard	Std. mount		SH10602BB41CS4
1-1/16"	2"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10602LB11CS4X
1-1/16"	2"		Buna-N	Reed	retracted	Standard	Std. mount		SH10602LB13BS4
1-1/16"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10602LB13CS4
1-1/16"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10602LB13CS4X
1-1/16"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10602LB17CS4
1-1/16"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10602LB17CS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10602LB1XCS4
1-1/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10602LB1ZCS4
1-1/16"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10602LB3XCS4
1-1/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10602LB3ZCS4
1-1/16"	2"		FKM	NPN	extended/retracted	Standard	Std. mount		SH10602LB42CS4
1-1/16"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH10602LB4ZCS4
1-1/16"	2"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount		SH10602TB13BS4
1-1/16"	2"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10602TB13CS4
1-1/16"	2"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10602TB1ZCS4
1-1/16"	2"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10602TB37CS4
1-1/16"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603BB1ZCS4
1-1/16"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10603BB33CS4
1-1/16"	3"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10603BB37CS4
1-1/16"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10603LB11CS4
1-1/16"	3"		Buna-N	Reed	retracted	Standard	Std. mount		SH10603LB13BS4
1-1/16"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10603LB13CS4
1-1/16"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10603LB13CS4X
1-1/16"	3"		Buna-N	Reed	extended	Quick disconnect	Std. mount		SH10603LB1XAS4
1-1/16"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10603LB1XCS4
1-1/16"	3"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH10603LB1ZBS4
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603LB1ZCS4
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603LB1ZCS4C
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603LB1ZCS4X
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603LB3ZCS4
1-1/16"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603LB4ZCS4
1-1/16"	3"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10603TB11CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	3"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10603TB1ZCS4
1-1/16"	3"	PTFE	FKM	PNP	extended/retracted	Standard	Std. mount		SH10603TB41CS4
1-1/16"	4"	Sintered bronze	Buna-N	Reed	retracted	Standard	Std. mount		SH10604BB13BS4
1-1/16"	4"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10604BB17CS4
1-1/16"	4"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10604BB17CSC
1-1/16"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604BB1ZCS4
1-1/16"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604BB3ZCS4
1-1/16"	4"		Buna-N	PNP	extended	Standard	Std. mount		SH10604LB11AS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10604LB11CS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10604LB11CS4X
1-1/16"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH10604LB12CS4
1-1/16"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10604LB13CS4
1-1/16"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10604LB13CS4C
1-1/16"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10604LB1XCS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount		SH10604LB1ZCA4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604LB1ZCS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10604LB31CS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604LB3ZCS4
1-1/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10604LB3ZCSCX
1-1/16"	4"		FKM	Reed	extended/retracted	Standard	Std. mount		SH10604LB43CS4
1-1/16"	4"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH10604LB4XCS4
1-1/16"	4"		FKM	PNP	extended/retracted	Quick disconnect	Base mount		SH10604LB4ZCB4
1-1/16"	4"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604LB4ZCS4
1-1/16"	4"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10604TB1ZCS4
1-1/16"	5"	Sintered bronze	Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH10605BB1ZBS4
1-1/16"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10605BB1ZCS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10605BB3ZCS4
1-1/16"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10605LB17CS4
1-1/16"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10605LB1XCS4
1-1/16"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH10605LB1ZCB4
1-1/16"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10605LB1ZCS4
1-1/16"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10605LB33CS4
1-1/16"	5"		FKM	PNP	extended/retracted	Standard	Std. mount		SH10605LB41CS4
1-1/16"	5"		FKM	PNP	extended/retracted	Quick disconnect	Base mount		SH10605LB4ZCB4
1-1/16"	5"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10605TB3ZCS4
1-1/16"	5"	PTFE	FKM		extended/retracted	via mounting bracket	Std. mount		SH10605TB47CS4
1-1/16"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10606BB11CS4
1-1/16"	6"	Sintered bronze	Buna-N	Reed	retracted	Standard	Base mount		SH10606BB13BB4
1-1/16"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10606BB1XCS4
1-1/16"	6"	Sintered bronze	Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH10606BB1ZBS4
1-1/16"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10606BB1ZCS4
1-1/16"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10606BB3XCS4
1-1/16"	6"	Sintered bronze	FKM	PNP	extended/retracted	Standard	Std. mount		SH10606BB41CS4
1-1/16"	6"		Buna-N	Reed	extended	Standard	Std. mount		SH10606LB13AS4
1-1/16"	6"		Buna-N	Reed	retracted	Standard	Base mount		SH10606LB13BB4
1-1/16"	6"		Buna-N	Reed	retracted	Standard	Std. mount		SH10606LB13BS4
1-1/16"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10606LB13CS4
1-1/16"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10606LB17CS4
1-1/16"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10606LB1XCS4
1-1/16"	6"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH10606LB1YCS4
1-1/16"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10606LB1ZCS4
1-1/16"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10606LB1ZCS4X

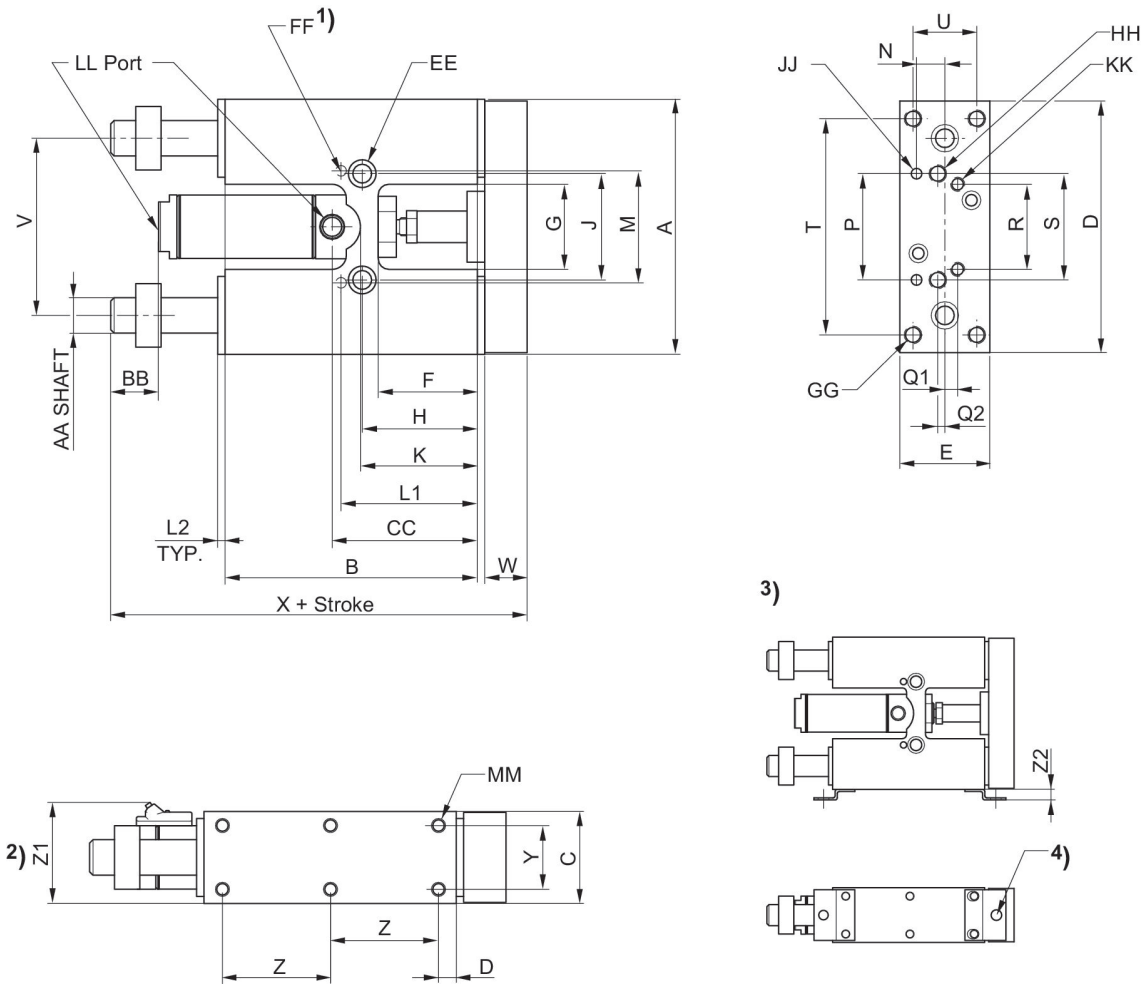
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10606LB3ZCS4
1-1/16"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10606L-B3ZCS4X
1-1/16"	6"		FKM	Reed	retracted	Standard	Std. mount		SH10606LB43BS4
1-1/16"	6"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount		SH10606TB13BS4
1-1/16"	6"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10606TB37CS4
1-1/16"	6"	PTFE	FKM	Reed	extended/retracted	Standard	Std. mount		SH10606T-B43CS4C
1-1/16"	7"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10607BB3ZCS4
1-1/16"	7"		Buna-N	NPN	extended/retracted		Std. mount		SH10607LB12CS4
1-1/16"	7"		Buna-N	Reed	extended	Standard	Std. mount		SH10607LB13AS4
1-1/16"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10607LB13CS4
1-1/16"	7"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10607LB1XCS4
1-1/16"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10607LB1ZCS4
1-1/16"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10607LB3ZCS4
1-1/16"	7"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH10607LB4ZCS4
1-1/16"	7"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10607TB17AS4
1-1/16"	8"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Base mount		SH10608BB13CB4
1-1/16"	8"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10608BB13CS4
1-1/16"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10608BB1ZCS4
1-1/16"	8"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10608LB11CS4
1-1/16"	8"		Buna-N	NPN	retracted	Standard	Std. mount		SH10608LB12BS4
1-1/16"	8"		Buna-N	Reed	retracted	Quick disconnect	Std. mount		SH10608LB1XBS4
1-1/16"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10608LB1XCS4
1-1/16"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10608LB1ZCS4
1-1/16"	8"		Buna-N	PNP	retracted	Standard	Std. mount		SH10608LB31BS4
1-1/16"	8"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH10608TB37CS4
1-1/16"	9"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10609B-B13CS4C
1-1/16"	9"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10609LB13CS4



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10609LB1ZCS4
1-1/16"	10"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10610BB13CS4
1-1/16"	10"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10610BB1ZCS4
1-1/16"	10"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10610LB11CS4
1-1/16"	10"		Buna-N	Reed	retracted	Standard	Std. mount		SH10610LB13BS4
1-1/16"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10610LB1XCS4
1-1/16"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH10610LB1X-CS4X
1-1/16"	10"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH10610LB1ZBS4
1-1/16"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10610LB1ZCS4
1-1/16"	10"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10610LB33CS4
1-1/16"	10"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10610TB33CS4
1-1/16"	11"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10611L-B1ZCS4X
1-1/16"	12"	Sintered bronze	Buna-N	Reed	extended	Standard	Std. mount		SH10612BB13AS4
1-1/16"	12"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10612BB1ZCS4
1-1/16"	12"	Sintered bronze	FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH10612BB4XCS4
1-1/16"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10612LB13CS4
1-1/16"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10612LB1ZCS4
1-1/16"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10612L-B1ZCS4X
1-1/16"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10612LB33CS4
1-1/16"	12"		Buna-N	w/o position inquiry		Standard	Std. mount		SH10612LB36DS4X
1-1/16"	14"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10614LB13CS4
1-1/16"	14"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH10614LB1ZBS4
1-1/16"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10614LB1ZCS4
1-1/16"	14"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10614LB33CS4
1-1/16"	14"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount		SH10614LB4YCS4
1-1/16"	14"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH10614TB33CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	14"	PTFE	Buna-N	w/o position inquiry		Standard	Std. mount		SH10614TB36DS4
1-1/16"	14"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10614TB3ZCS4
1-1/16"	16"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount		SH10616LB1ZCB4
1-1/16"	16"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10616LB1ZCS4
1-1/16"	18"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH10618BB3ZCS4
1-1/16"	18"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH10618BB3ZCS4
1-1/16"	18"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH10618LB11CS4
1-1/16"	1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X5LB1ZCS4
1-1/16"	1/2"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH106X5T-B17CS4X
1-1/16"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH106X9B-B1ZCSAX
1-1/16"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X9BB3ZCS4
1-1/16"	1-1/2"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH106X9LB12CS4
1-1/16"	1-1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH106X9LB13CS4
1-1/16"	1-1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X9LB1ZCS4
1-1/16"	1-1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH106X9LB37CS4
1-1/16"	1-1/2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X9LB4ZCS4
1-1/16"	1-1/2"	PTFE	Buna-N	PNP	extended/retracted	Standard	Angle mount		SH106X9TB11CA4
1-1/16"	1-1/2"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X9TB4ZCS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
1 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	1"		Buna-N	PNP	extended	Standard	Std. mount		SH15001LB11AS4
1-1/2"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15001LB11CS4
1-1/2"	1"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15001LB13CS4
1-1/2"	1"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15001LB13CS4X
1-1/2"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount		SH15001LB1ZCA4
1-1/2"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15001LB1ZCS4
1-1/2"	1"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15001LB4ZCS4
1-1/2"	1"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15001TB13CS4
1-1/2"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15002BB1XCS4
1-1/2"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15002BB1ZCS4
1-1/2"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15002LB13CS4
1-1/2"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15002LB1XCS4
1-1/2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15002LB1ZCS4
1-1/2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15002LB-B1ZCS4Q
1-1/2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15002LB3ZCS4
1-1/2"	2"		FKM	NPN	extended/retracted	Standard	Std. mount		SH15002LB42CS4
1-1/2"	2"		FKM	Reed	extended/retracted	Standard	Std. mount		SH15002LB43CS4X
1-1/2"	2"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH15002LB4XCS4
1-1/2"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15002LB4ZCS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15003BB13CS4
1-1/2"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15003BB1ZCS4
1-1/2"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15003B-B1ZCSCX
1-1/2"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15003BB3XCS4
1-1/2"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15003LB11CS4
1-1/2"	3"		Buna-N	Reed	extended	Standard	Std. mount		SH15003LB13AS4
1-1/2"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15003LB13CS4
1-1/2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15003LB17CS4
1-1/2"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15003LB1XCS4
1-1/2"	3"		Buna-N	PNP	extended	Quick disconnect	Std. mount		SH15003LB1ZAS4
1-1/2"	3"		Buna-N	PNP	retracted	Quick disconnect	Std. mount		SH15003LB1ZBS4
1-1/2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15003LB1ZCS4
1-1/2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15003L-B1ZCS4X
1-1/2"	3"		FKM	PNP	extended/retracted	Standard	Std. mount		SH15003LB41CS4
1-1/2"	3"		FKM	Reed	extended	Quick disconnect	Std. mount		SH15003LB4X-AS4C
1-1/2"	3"		FKM	NPN	retracted	Quick disconnect	Std. mount		SH15003LB4YBS4
1-1/2"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15003LB4ZCS4
1-1/2"	3"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15003TB11CS4
1-1/2"	3"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15003T-B11CS4C
1-1/2"	3"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15003TB13CS4
1-1/2"	3"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15003TB1ZCS4
1-1/2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004BB1ZCS4
1-1/2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004B-B1ZCS4C
1-1/2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004B-B1ZCS4X
1-1/2"	4"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15004BB33CS4
1-1/2"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15004LB11CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15004L-B11CS4C
1-1/2"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15004LB12CS4
1-1/2"	4"		Buna-N	Reed	retracted	Standard	Std. mount		SH15004LB13BS4
1-1/2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15004LB13CS4
1-1/2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15004L-B13CS4C
1-1/2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15004LB17CS4
1-1/2"	4"		Buna-N	Reed	retracted	Quick disconnect	Std. mount		SH15004LB1XBS4
1-1/2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15004LB1XCS4
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount		SH15004LB1ZCA4
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004LB1ZCS4
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004L-B1ZCS4X
1-1/2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15004LB3XCS4
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004LB3ZCS4
1-1/2"	4"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH15004LB4XCS4
1-1/2"	4"		FKM	PNP	extended/retracted	Quick disconnect	Base mount		SH15004LB4ZCB4
1-1/2"	4"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount		SH15004TB13BS4
1-1/2"	4"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15004TB1ZCS4
1-1/2"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005B-B1ZCS4X
1-1/2"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005BB3ZCS4
1-1/2"	5"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15005LB12CS4
1-1/2"	5"		Buna-N	Reed	retracted	Standard	Std. mount		SH15005LB13BS4
1-1/2"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15005LB13CS4
1-1/2"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15005LB17CS4
1-1/2"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15005LB1XCS4
1-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005LB1ZCS4
1-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005L-B1ZCS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005LB3ZCS4
1-1/2"	5"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15005TB1ZCS4
1-1/2"	6"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15006BB17CS4
1-1/2"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Base mount	extended/retracted	SH15006BB1XCBC
1-1/2"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15006BB1ZCS4
1-1/2"	6"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15006BB1ZCSA
1-1/2"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15006BB3XCS4
1-1/2"	6"		Buna-N	PNP	retracted	Standard	Base mount		SH15006LB11BB4
1-1/2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15006LB11CS4
1-1/2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15006LB11CS4C
1-1/2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15006LB11CS4X
1-1/2"	6"		Buna-N	Reed	retracted	Standard	Std. mount		SH15006LB13BS4
1-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15006LB13CS4
1-1/2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15006LB17BS4
1-1/2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15006LB17CS4
1-1/2"	6"		Buna-N	Reed	extended	Quick disconnect	Std. mount		SH15006LB1XAS4
1-1/2"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15006LB1XCS4
1-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15006LB1ZCS4
1-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15006LB33CS4C
1-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15006LB3ZCS4
1-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15006LB3ZCS4X
1-1/2"	6"		FKM	NPN	retracted	Quick disconnect	Std. mount		SH15006LB4YBS4
1-1/2"	6"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount		SH15006TB13BS4
1-1/2"	6"	PTFE	Buna-N	Reed	extended	Quick disconnect	Std. mount		SH15006TB1XAS4
1-1/2"	6"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Base mount		SH15006TB1XCB4
1-1/2"	6"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15006TB1XCS4



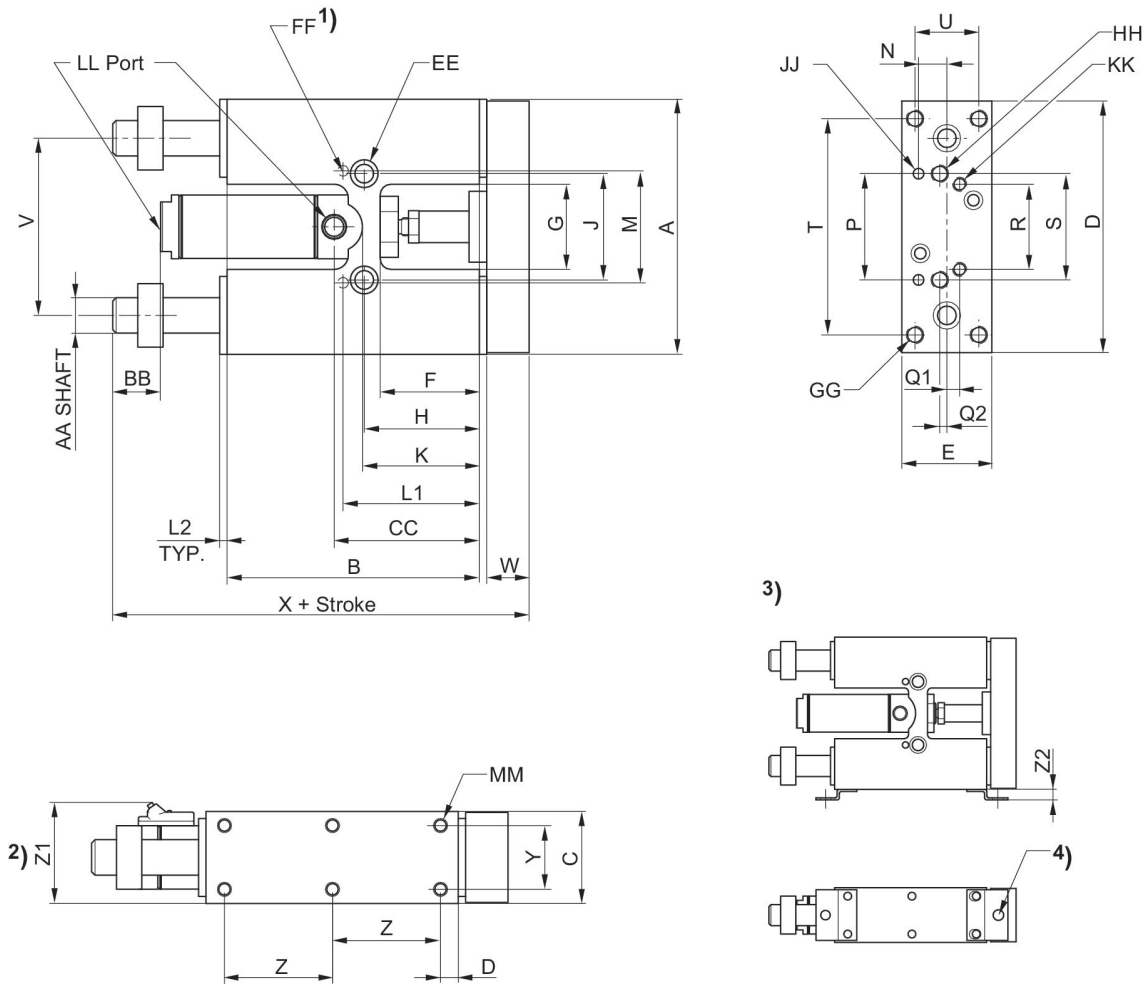
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	6"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15006TB1ZCS4
1-1/2"	6"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15006TB3XCS4
1-1/2"	6"	PTFE	FKM	Reed	extended	Standard	Std. mount		SH15006TB43AS4
1-1/2"	7"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15007BB11CS4
1-1/2"	7"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15007B-B13CS4S
1-1/2"	7"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15007B-B1ZCS4C
1-1/2"	7"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15007BB33CS4
1-1/2"	7"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15007LB11CS4
1-1/2"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15007LB13CS4
1-1/2"	7"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15007LB17CS4
1-1/2"	7"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15007LB1XCS4
1-1/2"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15007LB1ZCS4
1-1/2"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15007L-B33CS4C
1-1/2"	7"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15007L-B37CS4C
1-1/2"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15007LB3ZCS4
1-1/2"	7"	PTFE	Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15007TB12CS4
1-1/2"	7"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15007TB4ZCS4
1-1/2"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008BB1ZCS4
1-1/2"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15008LB12CS4
1-1/2"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15008LB12CS4X
1-1/2"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15008LB1XCS4
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008LB1ZCS4
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008L-B1ZCS4C
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008L-B1ZCS4X
1-1/2"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15008LB32CS4
1-1/2"	8"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15008L-B33CS4C

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15008LB3XCS4
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008LB3ZCS4
1-1/2"	8"		FKM	Reed	retracted	Quick disconnect	Std. mount		SH15008LB4XBS4
1-1/2"	8"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15008TB3ZCS4
1-1/2"	9"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15009BB4ZCS4
1-1/2"	9"		Buna-N	Reed	extended/retracted		Std. mount		SH15009LB13CS4
1-1/2"	9"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15009LB1XCS4
1-1/2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15009LB1ZCS4
1-1/2"	9"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15009LB33CS4
1-1/2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15009LB3ZCS4
1-1/2"	10"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15010BB1ZCS4
1-1/2"	10"	Sintered bronze	FKM	Reed	retracted	Standard	Std. mount		SH15010BB43BS4
1-1/2"	10"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15010B-B4ZCS4C
1-1/2"	10"		Buna-N	NPN	extended/retracted	Standard	Std. mount		SH15010LB12CS4
1-1/2"	10"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15010LB13CS4
1-1/2"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15010LB17CS4
1-1/2"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15010LB1XCS4
1-1/2"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15010LB1ZCS4
1-1/2"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15010LB3XCS4
1-1/2"	11"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15011LB17CS4
1-1/2"	11"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15011LB1ZCS4
1-1/2"	11"	PTFE	FKM	PNP	extended/retracted	Standard	Std. mount		SH15011TB41CS4
1-1/2"	12"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15012BB13CS4
1-1/2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15012LB11CS4
1-1/2"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15012LB13CS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15012LB17CS4
1-1/2"	12"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15012LB1XCS4
1-1/2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15012LB1ZCS4
1-1/2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15012LB1ZCS4X
1-1/2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15012LB31CS4
1-1/2"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15012LB33CS4
1-1/2"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15012LB33CS4C
1-1/2"	12"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount		SH15012LB3YCS4
1-1/2"	12"		FKM	PNP	extended/retracted	Standard	Std. mount		SH15012LB41CS4
1-1/2"	12"		FKM	Reed	extended/retracted	Standard	Std. mount		SH15012LB43CS4
1-1/2"	13"		Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15013LB13CS4
1-1/2"	13"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15013LB1ZCS4
1-1/2"	14"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15014BB13CS4
1-1/2"	14"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Angle mount		SH15014BB17CA4
1-1/2"	14"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15014BB37BS4
1-1/2"	14"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15014LB11CS4
1-1/2"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15014LB1ZCS4
1-1/2"	14"		FKM	PNP	extended/retracted	Standard	Std. mount		SH15014LB41CS4
1-1/2"	14"		FKM	Reed	extended/retracted	Standard	Std. mount		SH15014LB43CS4
1-1/2"	14"		FKM	Reed	extended/retracted	Quick disconnect	Base mount		SH15014LB4XCB4
1-1/2"	14"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15014LB4ZCS4C
1-1/2"	14"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15014TB11CS4
1-1/2"	15"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15015LB11CS4
1-1/2"	15"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15015LB1ZCS4X
1-1/2"	15"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15015LB4ZCS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	15"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15015L-B4ZCS4C
1-1/2"	16"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15016BB11CS4
1-1/2"	16"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15016BB37BS4
1-1/2"	16"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15016LB17CS4
1-1/2"	16"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15016LB1ZCS4
1-1/2"	16"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15016TB3ZCS4
1-1/2"	16"	PTFE	FKM	Reed	extended/retracted	Quick disconnect	Std. mount		SH15016TB4XCS4
1-1/2"	17"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH15017LB17CS4
1-1/2"	17"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH15017TB13CS4
1-1/2"	18"	Sintered bronze	FKM	PNP	extended/retracted	Standard	Std. mount		SH15018BB41CS4
1-1/2"	18"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH15018BB4ZCS4
1-1/2"	18"		Buna-N	PNP	extended/retracted	Standard	Std. mount		SH15018LB11CS4X
1-1/2"	18"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount		SH15018LB1XCS4
1-1/2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15018LB1ZCS4
1-1/2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH15018L-B1ZCS4C
1-1/2"	18"		Buna-N	Reed	retracted	Quick disconnect	Std. mount		SH15018LB3XBS4
1-1/2"	18"		FKM	PNP	extended/retracted	Standard	Std. mount		SH15018LB41CS4
1-1/2"	18"		FKM	Reed	retracted	Standard	Std. mount		SH15018LB43BS4
1-1/2"	18"		FKM	Reed	extended/retracted	Standard	Std. mount		SH15018LB43CS4
1-1/2"	1/2"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount		SH150X5TB13CS4
1-1/2"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH150X9BB1ZCS4
1-1/2"	1-1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount		SH150X9LB17CS4
1-1/2"	1-1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH150X9LB1ZCS4
1-1/2"	1-1/2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH150X9L-B1ZCS4X
1-1/2"	1-1/2"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount		SH150X9LB4YCS4
1-1/2"	1-1/2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount		SH150X9LB4ZCS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	1"	Sintered bronze	Buna-N	PNP	extended	Quick disconnect	Std. mount	SH20001BB1ZAS4
2"	1"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20001LB11CS4
2"	1"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20001LB17CS4X
2"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20001L-B1ZCS4X
2"	1"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20001TB1ZCS4
2"	2"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20002BB13CS4
2"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20002LB13CS4
2"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20002LB17CS4
2"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20002LB1XCS4
2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002LB1ZCS4
2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002L-B1ZCS4C
2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002L-B1ZCS4X
2"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20002LB3XCS4
2"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH20002LB3YCS4
2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002LB3ZCS4
2"	2"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20002LB4X-CS4X
2"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002LB4ZCS4
2"	2"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002T-B1ZCS4Q
2"	2"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20002TB4ZCS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20003BB1XCS4
2"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20003BB1ZCS4
2"	3"	Sintered bronze	Buna-N	PNP	retracted	Quick disconnect	Std. mount	SH20003BB3ZBS4
2"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20003LB11CS4X
2"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20003LB13CS4
2"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20003LB13CS4X
2"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20003LB1XCS4
2"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20003LB1XCS4X
2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH20003LB1ZCA4X
2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20003LB1ZCS4
2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH20003LB3ZCA4X
2"	3"	PTFE	Buna-N	PNP	retracted	Quick disconnect	Std. mount	SH20003TB3ZBS4X
2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20004BB11CS4X
2"	4"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20004BB1XCS4
2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20004BB1ZCS4
2"	4"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20004BB1ZCS4X
2"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20004LB11CS4
2"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH20004LB12CS4
2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20004LB13CS4
2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20004LB13CS4X
2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20004LB17CS4
2"	4"		Buna-N	Reed	retracted	Quick disconnect	Std. mount	SH20004LB1XBS4
2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20004LB1XCS4
2"	4"		Buna-N	PNP	retracted	Quick disconnect	Std. mount	SH20004LB1ZBS4
2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20004LB1ZCS4



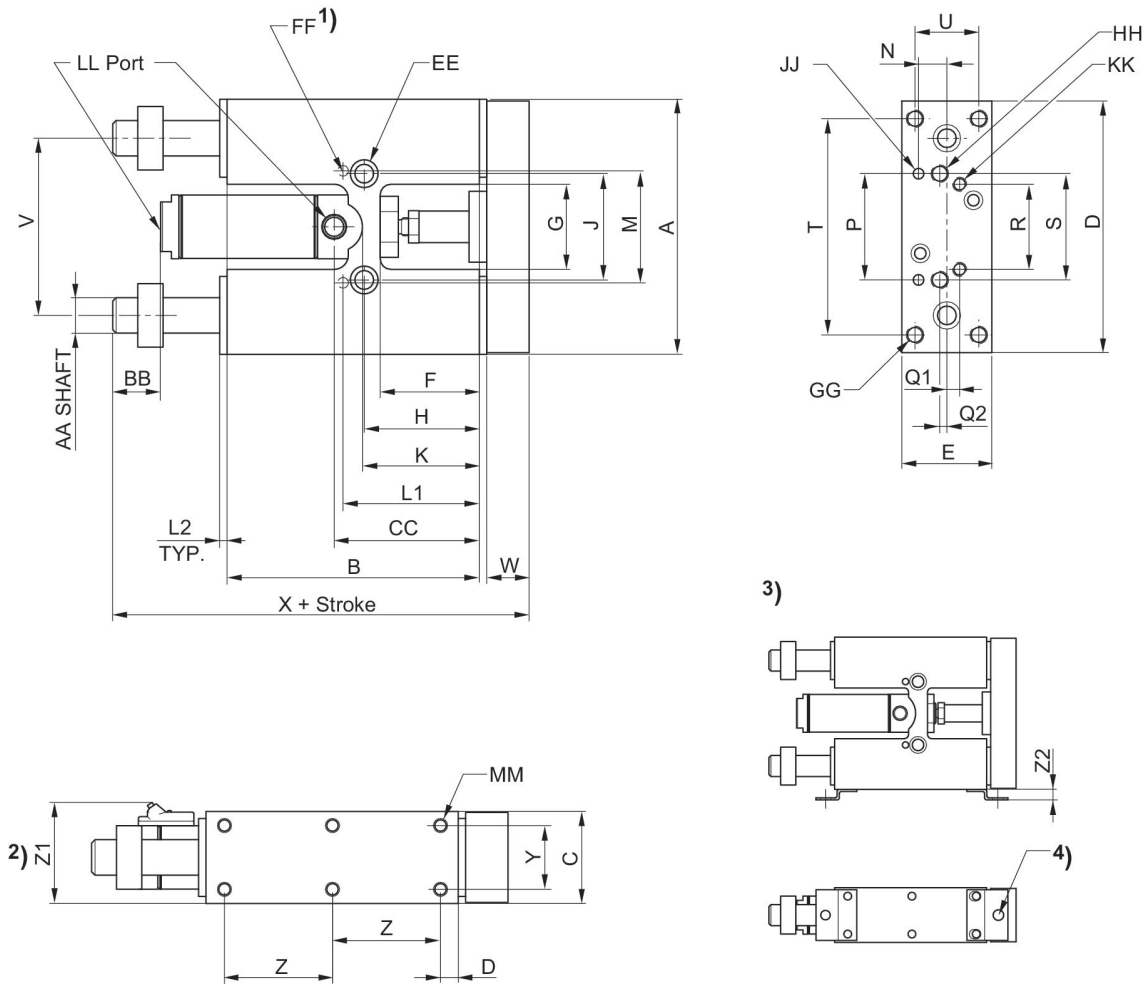
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20004L-B1ZCS4X
2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20004LB37CS4X
2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20004LB3XCS4
2"	4"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH20004LB3Y-CS4X
2"	4"		FKM	Reed	extended/retracted	Standard	Std. mount	SH20004LB43CS4
2"	4"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20004LB4XCS4
2"	4"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20004LB4ZCS4
2"	4"	PTFE	Buna-N	NPN	extended/retracted	Standard	Std. mount	SH20004TB12CS4
2"	4"	PTFE	FKM	PNP	extended/retracted	Standard	Std. mount	SH20004TB41CS4
2"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20005BB1ZCS4
2"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20005LB13CS4X
2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20005LB1ZCS4
2"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20005LB3XCS4
2"	5"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20005LB4X-CS4X
2"	6"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20006BB17CS4
2"	6"		Buna-N	PNP	extended/retracted	Standard	Angle mount	SH20006LB11CA4
2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20006LB11CS4
2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20006LB13CS4
2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20006LB17CS4
2"	6"		Buna-N	Reed	extended	Quick disconnect	Std. mount	SH20006LB1X-AS4S
2"	6"		Buna-N	Reed	retracted	Quick disconnect	Std. mount	SH20006L-B1XBS4X
2"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20006LB1XCS4
2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20006LB1ZCS4
2"	6"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20006LB4XCS4
2"	6"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20006LB4ZCS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	6"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH20006TB1Z-CA4X
2"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20007LB1ZCS4
2"	7"		Buna-N	Reed	retracted	Standard	Std. mount	SH20007LB33BS4
2"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH20007LB3Z-CA4X
2"	7"		FKM	Reed	extended/retracted	Standard	Std. mount	SH20007LB43CS4
2"	7"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20007LB4XCS4
2"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008BB1ZCS4
2"	8"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20008LB13CS4
2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008LB1ZCS4
2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008LB1ZCS4X
2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008LB3ZCS4
2"	8"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20008LB4XCS4
2"	8"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20008LB4X-CS4X
2"	8"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008LB4ZCS4
2"	8"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20008TB13CS4
2"	8"	PTFE	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH20008TB4ZCS4X
2"	9"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20009LB11CS4C
2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20009LB1ZCS4
2"	10"		Buna-N	NPN	extended/retracted	Standard	Std. mount	SH20010LB12CS4
2"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20010LB17BS4
2"	10"		Buna-N	Reed	retracted	Quick disconnect	Std. mount	SH20010LB1XBS4
2"	10"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH20010LB1YCS4
2"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20010LB1ZCS4X
2"	10"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20010LB4XCS4
2"	10"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20010LB4X-CS4X
2"	10"	PTFE	FKM	w/o position inquiry		Standard	Std. mount	SH20010TB46DS4X

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	11"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20011LB13CS4X
2"	11"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20011LB1XCS4
2"	12"	Sintered bronze	Buna-N	PNP	extended	Standard	Std. mount	SH20012BB11AS4
2"	12"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20012BB1ZCS4
2"	12"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20012BB3ZCS4
2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20012LB11CS4
2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20012LB11CS4X
2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Angle mount	SH20012LB17CA4
2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH20012LB17CS4
2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Base mount	SH20012LB1ZCB4
2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20012LB1ZCS4
2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20012LB1ZCS4X
2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20012LB31CS4
2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20012LB3ZCS4
2"	12"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20012LB4XCS4
2"	13"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20013LB1ZCS4
2"	14"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20014LB13CS4
2"	14"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH20014LB1XCS4
2"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20014LB1ZCS4
2"	14"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20014LB33CS4
2"	14"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20014LB4XCS4
2"	15"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20015LB11CS4
2"	15"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20015TB1ZCS4
2"	16"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20016LB13CS4
2"	16"		FKM	PNP	extended/retracted	Standard	Std. mount	SH20016LB41CS4
2"	16"	PTFE	Buna-N	Reed	extended	Standard	Std. mount	SH20016TB13AS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2"	16"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH20016TB31CS4
2"	16"	PTFE	Buna-N	NPN	extended/retracted	Standard	Std. mount	SH20016TB32CS4
2"	18"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20018B-B1ZCSAX
2"	18"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH20018LB13CS4
2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20018LB1ZCS4
2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20018L-B1ZCS4X
2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH20018LB3ZCS4
2"	18"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH20018LB4XCS4
2"	18"	PTFE	FKM	w/o position inquiry		via mounting bracket	Std. mount	SH20018TB47CS4
2"	1 1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH200X5LB17CS4
2"	1 1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH200X5LB37CS4
2"	1-1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH200X9L-B13CS4X
2"	1-1/2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH200X9L-B17AS4X

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
2 1/2"



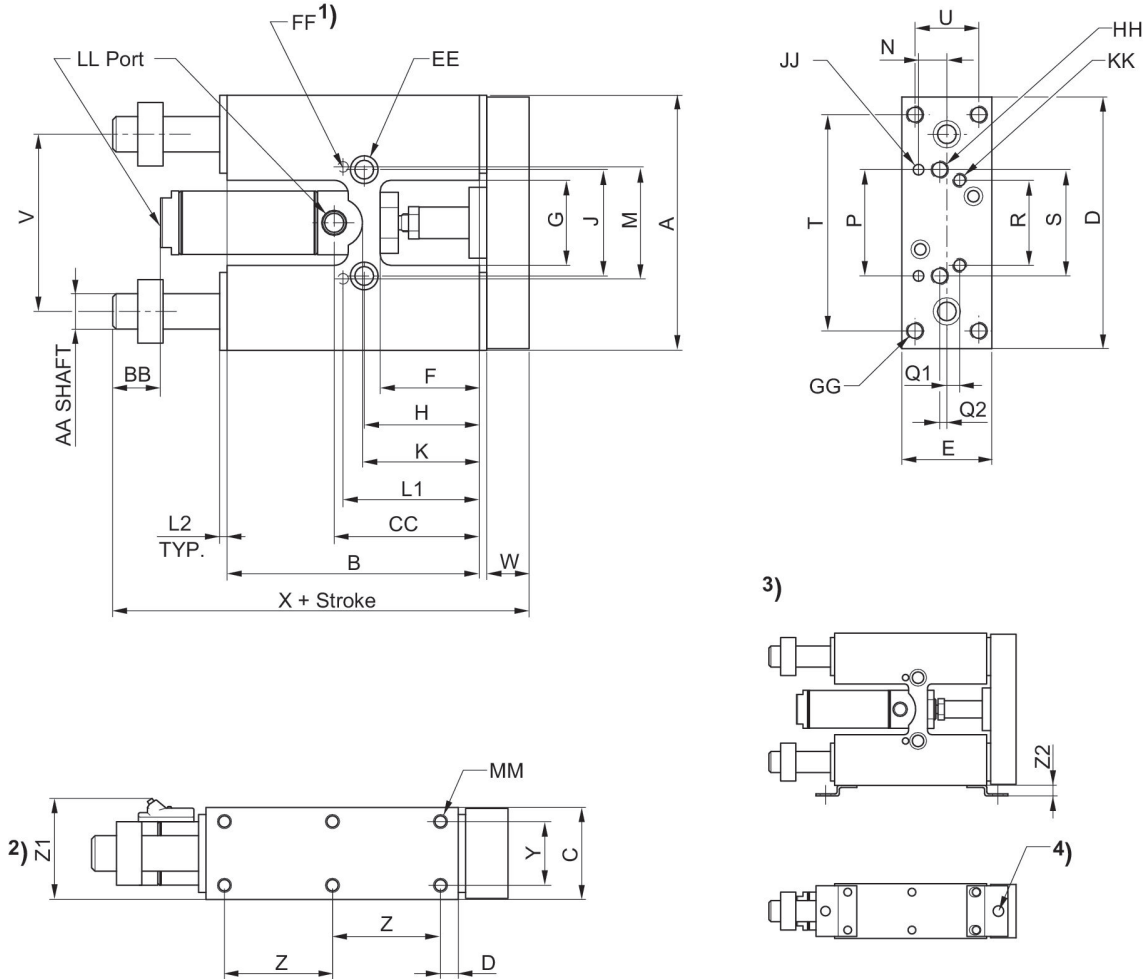
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2-1/2"	1"		Buna-N	w/o position inquiry		Quick disconnect	Std. mount	SH25001LB1ZCS4
2-1/2"	1"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25001TB37CS4
2-1/2"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25002BB1ZCS4
2-1/2"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25002B-B1ZCS4C
2-1/2"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25002LB13CS4
2-1/2"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25002LB17CS4
2-1/2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25002LB1ZCS4
2-1/2"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25003LB13CS4
2-1/2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25003LB17CS4
2-1/2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25003LB1ZCS4
2-1/2"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25003LB3ZCS4
2-1/2"	4"	Sintered bronze	Buna-N	PNP	retracted	Quick disconnect	Std. mount	SH25004B-B3ZBS4X
2-1/2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25004LB13CS4
2-1/2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25004LB17CS4
2-1/2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25004LB37CS4
2-1/2"	5"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25005BB1XCS4
2-1/2"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25005LB13CS4
2-1/2"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25005LB1XCS4
2-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25005L-B1ZCS4Q

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2-1/2"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25005LB3XCS4
2-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25005LB3ZCS4
2-1/2"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25006BB1XCS4Q
2-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25006LB13CS4
2-1/2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH25006LB17CS4
2-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25006LB1ZCS4C
2-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25006LB1ZCS4Q
2-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH25006LB3ZCA4
2-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25006LB3ZCS4C
2-1/2"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25008BB1ZCS4
2-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25008LB1ZCS4
2-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25008LB3ZCS4
2-1/2"	9"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH25009BB11CS4
2-1/2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	SH25009LB1ZCA4X
2-1/2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25009LB1ZCS4
2-1/2"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25010LB1ZCS4
2-1/2"	10"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH25010LB31CS4
2-1/2"	10"		FKM	Reed	extended/retracted	Standard	Std. mount	SH25010LB43CS4
2-1/2"	10"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH25010LB4ZCS4
2-1/2"	11"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH25011LB13CS4
2-1/2"	12"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25012LB1XCS4
2-1/2"	14"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH25014LB1XCS4
2-1/2"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25014LB1ZCS4
2-1/2"	16"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25016LB1ZCS4
2-1/2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH25018LB1ZCS4



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
2-1/2"	1/2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH250X5LB13CS4

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C Bored for 1/4 SHCS	5/16-18 thru, C Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C Bored for 5/16 SHCS	3/8-24 thru, C Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C Bored for 5/16 SHCS	3/8-24 thru, C Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

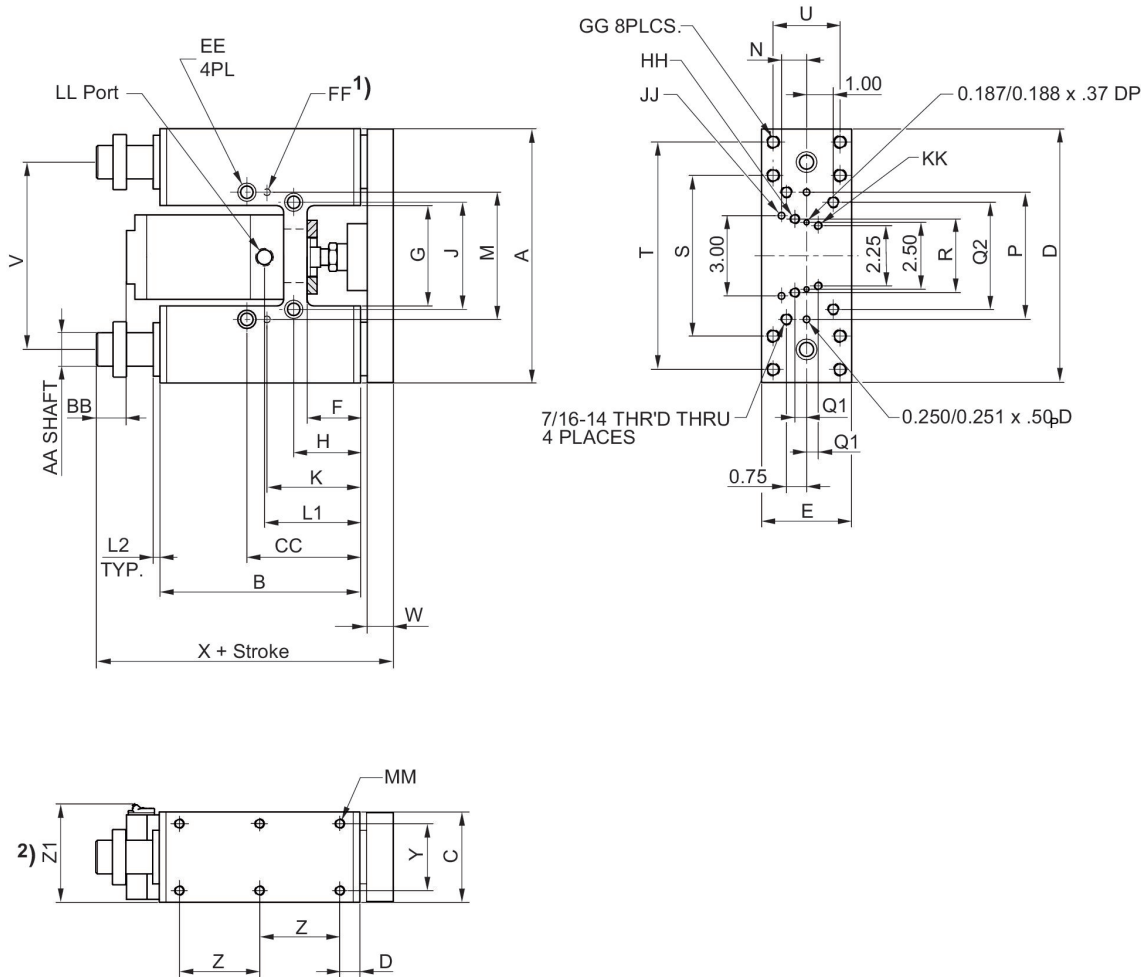
Guide cylinders  
Piston with magnet  
no cushioning  
Linear ball bearing  
3"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
3"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30001LB1ZCS4
3"	1"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH30001LB3X-CS4X
3"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30002BB1ZCS4
3"	2"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH30002LB-B1CS4C
3"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH30002LB1XCS4
3"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30002LB1ZCS4
3"	2"		FKM	Reed	extended	Standard	Std. mount	SH30002LB43AS4
3"	3"	Sintered bronze	FKM	w/o position inquiry		via mounting bracket	Std. mount	SH30003BB47CS4
3"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH30003LB17CS4
3"	3"		Buna-N	PNP	extended	Quick disconnect	Std. mount	SH30003LB1ZAS4
3"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH30003LB4ZCS4
3"	4"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH30004BB1XCS4
3"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH30004LB13CS4X
3"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH30004LB17CS4
3"	4"		Buna-N	PNP	extended	Quick disconnect	Std. mount	SH30004LB1ZAS4
3"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30004LB1ZCS4
3"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30004LB3ZCS4
3"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30005BB1ZCS4
3"	5"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount	SH30005TB13BS4

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Part No.
3"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	SH30006LB13CS4X
3"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30006L-B3ZCS4X
3"	6"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH30006LB4XCS4
3"	6"	PTFE	FKM	Reed	extended/retracted	Quick disconnect	Std. mount	SH30006TB4XCS4
3"	7"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH30007B-B31CS4X
3"	7"		Buna-N	Reed	retracted	Standard	Std. mount	SH30007LB13BS4
3"	7"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH30007L-B4ZCS4X
3"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30008LB1ZCS4
3"	8"		FKM	Reed	extended/retracted	Standard	Std. mount	SH30008LB43CS4
3"	8"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH30008LB4ZCS4
3"	8"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount	SH30008TB13BS4
3"	9"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	SH30009BB11CS4
3"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30009LB1ZCS4
3"	9"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	SH30009LB4ZCS4
3"	10"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	SH30010BB17CS4
3"	11"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH30011LB11CS4X
3"	12"	Sintered bronze	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	SH30012BB1X-CS4X
3"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	SH30012LB11CS4
3"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	SH30012LB3ZCS4
3"	14"	Sintered bronze	Buna-N	PNP	extended/retracted		Std. mount	SH30014B-B3ZCS4X
3"	16"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	SH30016LB3YCS4
3"	18"		Buna-N	Reed	retracted	Quick disconnect	Std. mount	SH30018LB1XBS4

Dimensions in inches



Ø [inch]	A	B	C	D	E	F	G	H	J	K
3"	9.50	7.50	3.37	9.44	3.31	2.00	3.75	2.50	4.00	3.50

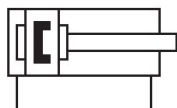
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
3"	3.59	0.25	4.749 / 4.751	0.94	4.749 / 4.751	0.43	4.00	2.75	6.00	8.50

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
3"	2.50	7.00	0.97	10.10	2.50	3.00	3.73	0.312	1.250	1.12

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
3"	4.25	0.75	C'Bored for 7/16 SHCS, Tapped 1/2-20 x 0.75 DP	0.250 / 0.251 x 0.50DP	1/2-13 thru, C'Bored for 3/8-16 SHCS	1/2-13 thru, C'Bored for 3/8-16 SHCS	0.250 / 0.251 x 0.50DP	5/16-18 x 0.50DP	3/8 NPTF	3/8-16 x 0.57 DP

## Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
3/4"



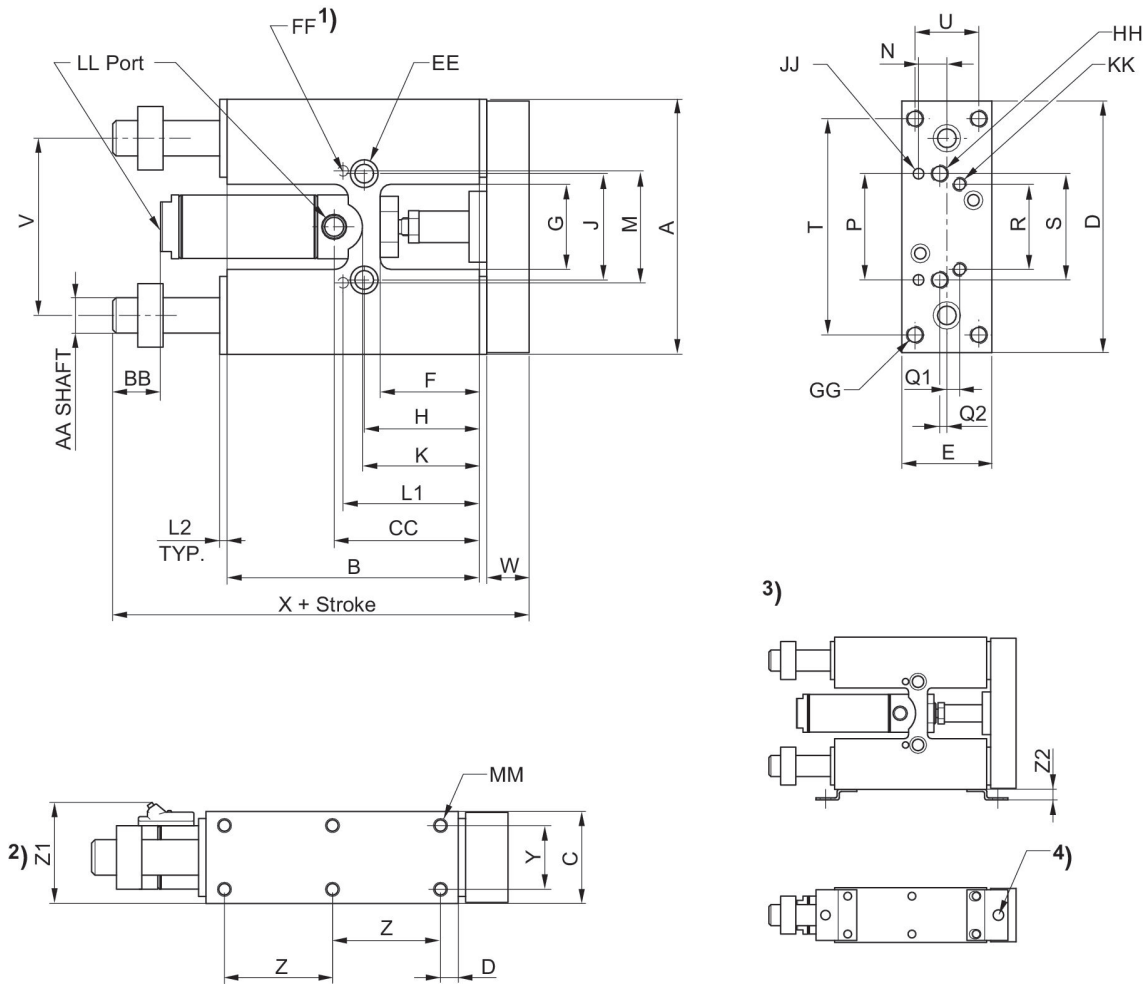
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	1"		Buna-N			via mounting bracket	Std. mount	extended/retracted	SH07501LB17CSC
3/4"	1"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07501LB1YCSC
3/4"	1"		FKM	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH07501LB41CSC
3/4"	2"	Sintered bronze	Buna-N			via mounting bracket	Std. mount	extended	SH07502BB17CSA
3/4"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07502LB13CSC
3/4"	2"		Buna-N			via mounting bracket	Std. mount	retracted	SH07502LB17BSB
3/4"	2"		Buna-N			via mounting bracket	Std. mount	extended/retracted	SH07502LB17CS3
3/4"	2"		Buna-N			via mounting bracket	Std. mount	extended/retracted	SH07502LB17CSC
3/4"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB1XCSC
3/4"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Base mount	extended/retracted	SH07502LB1YCBC
3/4"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB1YCSC
3/4"	2"		Buna-N	PNP	retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB1ZBSC
3/4"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB1ZCS3
3/4"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH07502LB1ZCSA
3/4"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB1ZCSC
3/4"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07502LB4ZCSC
3/4"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH07503BB11CSC
3/4"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503BB1ZCSC
3/4"	3"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503B-B1ZCSCX

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended	SH07503LB11CSA
3/4"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH07503LB11CSC
3/4"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	retracted	SH07503LB13CS2
3/4"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07503LB13CS3
3/4"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07503LB13CSC
3/4"	3"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503LB1YCS3
3/4"	3"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503LB1YCSC
3/4"	3"		FKM	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07503LB43CSC
3/4"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503LB4ZCSC
3/4"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07503LB4ZCSCX
3/4"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07504LB13CSC
3/4"	4"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07504LB1YCSC
3/4"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH07504LB1ZCSA
3/4"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07504LB1ZCSC
3/4"	4"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07504LB4YCSC
3/4"	4"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07504LB4ZCSC
3/4"	4"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07504LB4ZCSCX
3/4"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07505LB13CS3
3/4"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH07505LB13CSC
3/4"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH07505LB17CSC
3/4"	5"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07505LB1XCS3
3/4"	5"		FKM	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH07505LB41CSC
3/4"	5"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07505LB4YCSC
3/4"	5"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH07505LB4ZCSC
3/4"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH07506LB11CSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3/4"	6"		Buna-N	Reed	retracted	Standard	Std. mount	extend- ed/retracted	SH07506LB13BS3
3/4"	6"		Buna-N	Reed	retracted	Standard	Std. mount	extend- ed/retracted	SH07506LB13BSC
3/4"	6"		Buna-N	PNP	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07506LB1ZCSC
3/4"	6"		FKM	Reed	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07506LB4XCS3
3/4"	7"		Buna-N	w/o position inquiry		via mount- ing bracket	Std. mount	extend- ed/retracted	SH07507LB17CSC
3/4"	7"	PTFE	Buna-N	PNP	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH07507TB11CS3
3/4"	8"		Buna-N	PNP	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH07508LB11CS3
3/4"	8"		Buna-N	NPN	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH07508LB12CSC
3/4"	8"		Buna-N	w/o position inquiry		via mount- ing bracket	Std. mount	extend- ed/retracted	SH07508LB17CSC
3/4"	8"		Buna-N	Reed	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07508LB1XCSC
3/4"	8"		Buna-N	NPN	retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07508LB1YBSC
3/4"	8"		Buna-N	PNP	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07508LB1ZCSC
3/4"	9"		Buna-N	w/o position inquiry		via mount- ing bracket	Std. mount	extend- ed/retracted	SH07509LB17CS3
3/4"	10"		Buna-N	Reed	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH07510LB13CSC
3/4"	12"		Buna-N	PNP	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH07512LB11CSC
3/4"	12"		Buna-N	Reed	extend- ed/retracted	Standard	Base mount	extend- ed/retracted	SH07512LB13CBC
3/4"	12"		Buna-N	Reed	extend- ed/retracted	Quick dis- connect	Std. mount		SH07512LB1XCS4
3/4"	12"		Buna-N	PNP	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07512LB1ZCSC
3/4"	14"		Buna-N	NPN	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH07514LB1YCSC
3/4"	15"	PTFE	FKM	w/o position inquiry		via mount- ing bracket	Base mount	extend- ed/retracted	SH07515TB47CBC
3/4"	16"		Buna-N	w/o position inquiry		via mount- ing bracket	Std. mount	extend- ed/retracted	SH07516LB17CS3
3/4"	16"		Buna-N	PNP	retracted	Quick dis- connect	Std. mount	retracted	SH07516LB1ZBSB
3/4"	1/2"		FKM	NPN	extend- ed/retracted	Standard	Std. mount	extend- ed/retracted	SH075X5LB42CS3
3/4"	1-1/2"		Buna-N	w/o position inquiry		via mount- ing bracket	Std. mount	extend- ed/retracted	SH075X9LB17CSC
3/4"	1-1/2"		Buna-N	NPN	extend- ed/retracted	Quick dis- connect	Std. mount	extend- ed/retracted	SH075X9LB1YCSC



Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

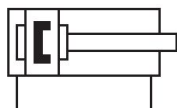
Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
1 1/16"

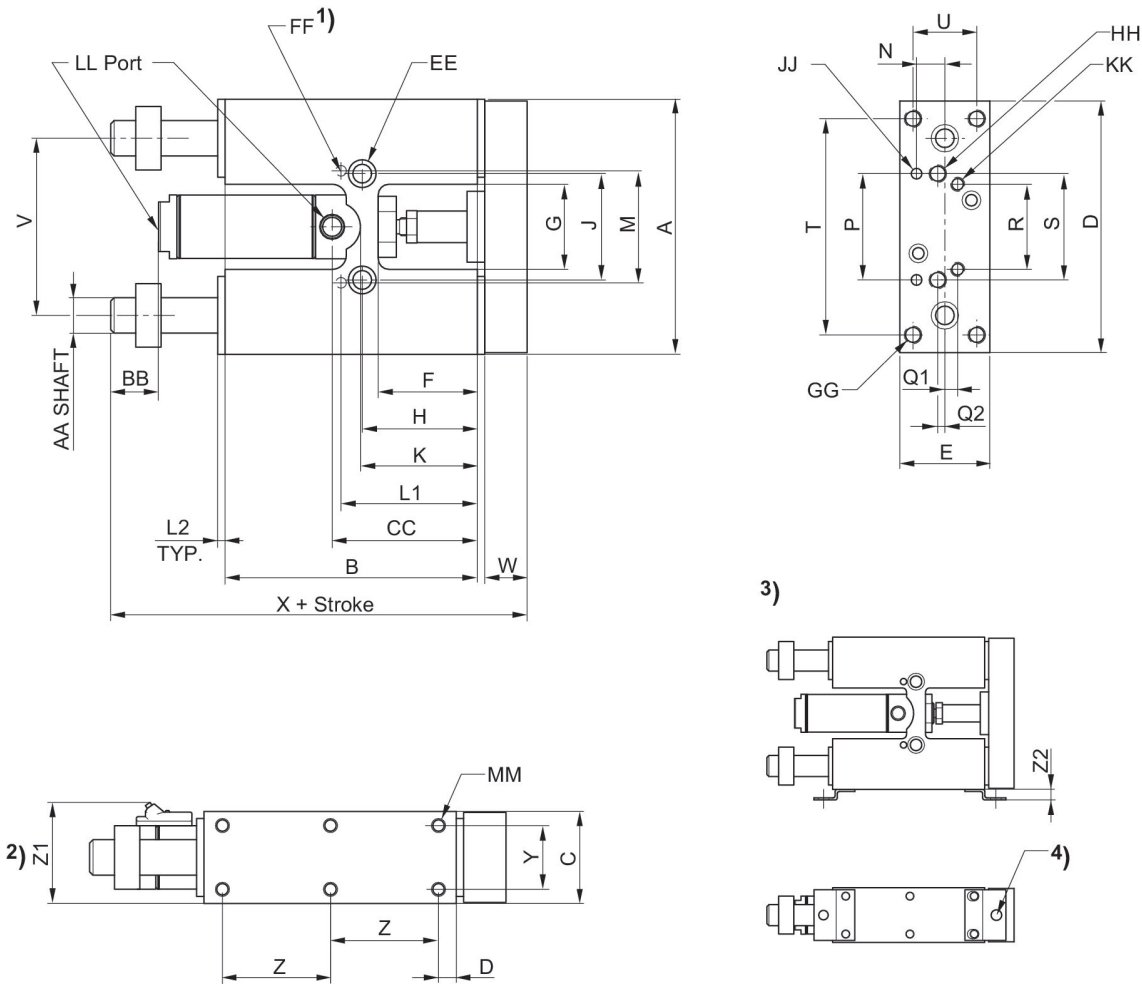


Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	1"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH10601LB12CS3
1-1/16"	1"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10601LB1XCSC
1-1/16"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10601LB1ZCS3
1-1/16"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10601L-B1ZCSCQ
1-1/16"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10602LB17CSC
1-1/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10602LB1ZCSC
1-1/16"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10602L-B1ZCSCX
1-1/16"	2"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH10602LB42CSC
1-1/16"	2"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10602LB4XCS3
1-1/16"	3"	Sintered bronze	Buna-N	Reed	retracted	Standard	Std. mount	retracted	SH10603BB13BS2
1-1/16"	3"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH10603BB4ZCSA
1-1/16"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10603LB11CS3
1-1/16"	3"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10603LB11CSC
1-1/16"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	retracted	SH10603LB1XCSCB
1-1/16"	3"		Buna-N	PNP	retracted	Quick disconnect	Std. mount	retracted	SH10603LB1ZBSB
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10603LB1ZCS3
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10603LB1ZCSC
1-1/16"	3"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10603L-B1ZCSCQ
1-1/16"	3"		FKM	w/o position inquiry		Standard	Std. mount	extended/retracted	SH10603LB46DSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	3"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	extended	SH10603LB4XCSA
1-1/16"	3"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10603LB4ZCSC
1-1/16"	3"	PTFE	Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10603TB1XCS3
1-1/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10604LB11CS3
1-1/16"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10604LB11CSC
1-1/16"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH10604LB13CSC
1-1/16"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended	SH10604LB17CS1
1-1/16"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10604LB17CSC
1-1/16"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH10604LB1ZCSA
1-1/16"	4"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10604LB4YCSC
1-1/16"	5"	Sintered bronze	Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH10605BB12CSC
1-1/16"	5"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10605BB1ZCSC
1-1/16"	5"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10605LB1YCSC
1-1/16"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10605LB1ZCS3
1-1/16"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10605LB1ZCSC
1-1/16"	5"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH10605TB13CSC
1-1/16"	5"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Base mount	extended/retracted	SH10605T-B17CBCX
1-1/16"	6"	Sintered bronze	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10606BB17CSC
1-1/16"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10606LB11CSC
1-1/16"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10606LB1XCS3
1-1/16"	6"		FKM	PNP	extended/retracted	Standard	Std. mount	extended	SH10606LB41CS1
1-1/16"	6"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10606LB4YCSC
1-1/16"	6"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10606LB4ZCSC
1-1/16"	6"	PTFE	Buna-N	Reed	retracted	Standard	Std. mount	extended/retracted	SH10606TB33BS3
1-1/16"	7"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH10607LB13CB3

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/16"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH10608LB12CSC
1-1/16"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10608LB17CSC
1-1/16"	8"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	retracted	SH10608LB4X-CSBX
1-1/16"	8"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10608LB4ZCSC
1-1/16"	9"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	retracted	SH10609LB17CSB
1-1/16"	9"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10609LB4ZCSC
1-1/16"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10610LB17CSC
1-1/16"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10610LB1XCSC
1-1/16"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10610LB1ZCSC
1-1/16"	11"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10611LB11CSC
1-1/16"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH10612LB13CSC
1-1/16"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10612LB17CSC
1-1/16"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10612LB1ZCSC
1-1/16"	12"		FKM	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10612LB41CS3
1-1/16"	12"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10612LB4ZCSC
1-1/16"	13"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10613LB17CSC
1-1/16"	14"		Buna-N	PNP	extended	Quick disconnect	Std. mount	extended	SH10614LB1ZASA
1-1/16"	15"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH10615LB11CS3
1-1/16"	16"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH10616LB3ZCSC
1-1/16"	18"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH10618L-B37CSCX
1-1/16"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount		SH106X9B-B1ZCSCX

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
5/16"	2.00	2.00	0.62	1.95	0.58	0.75	0.75	0.90	1.00	1.06
9/16"	2.87	3.00	1.00	2.81	0.95	1.00	1.00	1.25	1.25	1.50
3/4"	4.12	3.97	1.25	4.06	1.19	1.31	1.25	1.59	1.50	1.66
1 1/16"	4.50	4.45	1.62	4.44	1.58	1.75	1.50	2.03	1.87	2.31

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
5/16"	1.12	0.06	0.999/1.001	0.21	0.999/1.001	-	Center Line	-	1.00	-
9/16"	1.56	0.12	1.373/1.375	0.31	1.373/1.375	0.18	Center Line	1.00	1.25	2.37
3/4"	1.96	0.12	1.881/1.813	0.37	1.881/1.813	0.31	Center Line	1.25	1.50	3.37
1 1/16"	2.40	0.12	1.873/1.875	0.50	1.873/1.875	0.22	0.12	1.50	1.87	3.81

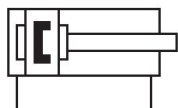
Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
5/16"	-	1.56	0.31	3.06	0.43	0.50	-	-	0.250	0.31

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
9/16"	0.62	2.00	0.50	4.44	0.62	1.18	1.32	0.31	0.375	0.50
3/4"	0.81	2.75	0.62	5.68	0.81	1.68	1.53	0.31	0.500	0.62
1 1/16"	1.12	3.12	0.75	6.31	1.12	1.90	1.88	0.31	0.625	0.81

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
5/16"	1.06	0.50	C'Bored for #6 SHCS, Tapped # 10-32 x .28 DP	0.0937/0.0947 x 0.18DP	-	#6-32 thru	0.0937/0.0947 x 0.18DP	-	#10-32	#5-40 x .18 DP
9/16"	1.68	0.31	C'Bored for #10 SHCS, Tapped 1/4-28 x .50 DP	0.125/0.126 x 0.25DP	#10-32 thru, C'Bored for #6 SHCS	#10-32 thru, C'Bored for #6 SHCS	0.125/0.126 x 0.25DP	#6-32 x .25DP	#10-32	#6-32 x .20 DP
3/4"	2.03	0.31	C'Bored for 1/4 SHCS, Tapped 5/16-24 x .62 DP	0.1875/0.1885 x .37DP	1/4-20 thru, C'Bored for #10 SHCS	1/4-20 thru, C'Bored for #10 SHCS	0.1875/0.1885 x .37DP	#10-32 x .37DP	1/8 NPTF	#10-32 x .28 DP
1 1/16"	2.50	0.31	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	1/4-20 x .50DP	1/8 NPTF	1/4-20 x .37 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
1 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	1"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15001LB13CSC
1-1/2"	1"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15001LB1ZCSC
1-1/2"	1"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH15001LB4ZCSB
1-1/2"	2"	Sintered bronze	FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15002BB4ZCS3
1-1/2"	2"		Buna-N	Reed	extended	Standard	Std. mount	extended/retracted	SH15002LB13ASC
1-1/2"	2"		Buna-N	Reed	extended/retracted	Standard	Base mount	extended/retracted	SH15002LB13CB3
1-1/2"	2"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15002LB1YCSC
1-1/2"	2"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15002LB1ZCS1
1-1/2"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15002LB3XCSC
1-1/2"	2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15002LB4ZCSA
1-1/2"	3"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15003BB13CSC
1-1/2"	3"	Sintered bronze	FKM	Reed	extended	Standard	Std. mount	extended/retracted	SH15003BB43ASC
1-1/2"	3"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15003LB13CS3
1-1/2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15003LB17CSC
1-1/2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15003LB17CSCX
1-1/2"	3"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15003LB1XCSC
1-1/2"	3"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15003LB1YCSC
1-1/2"	3"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15003LB1Y-CSCX
1-1/2"	3"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15003TB11CS3



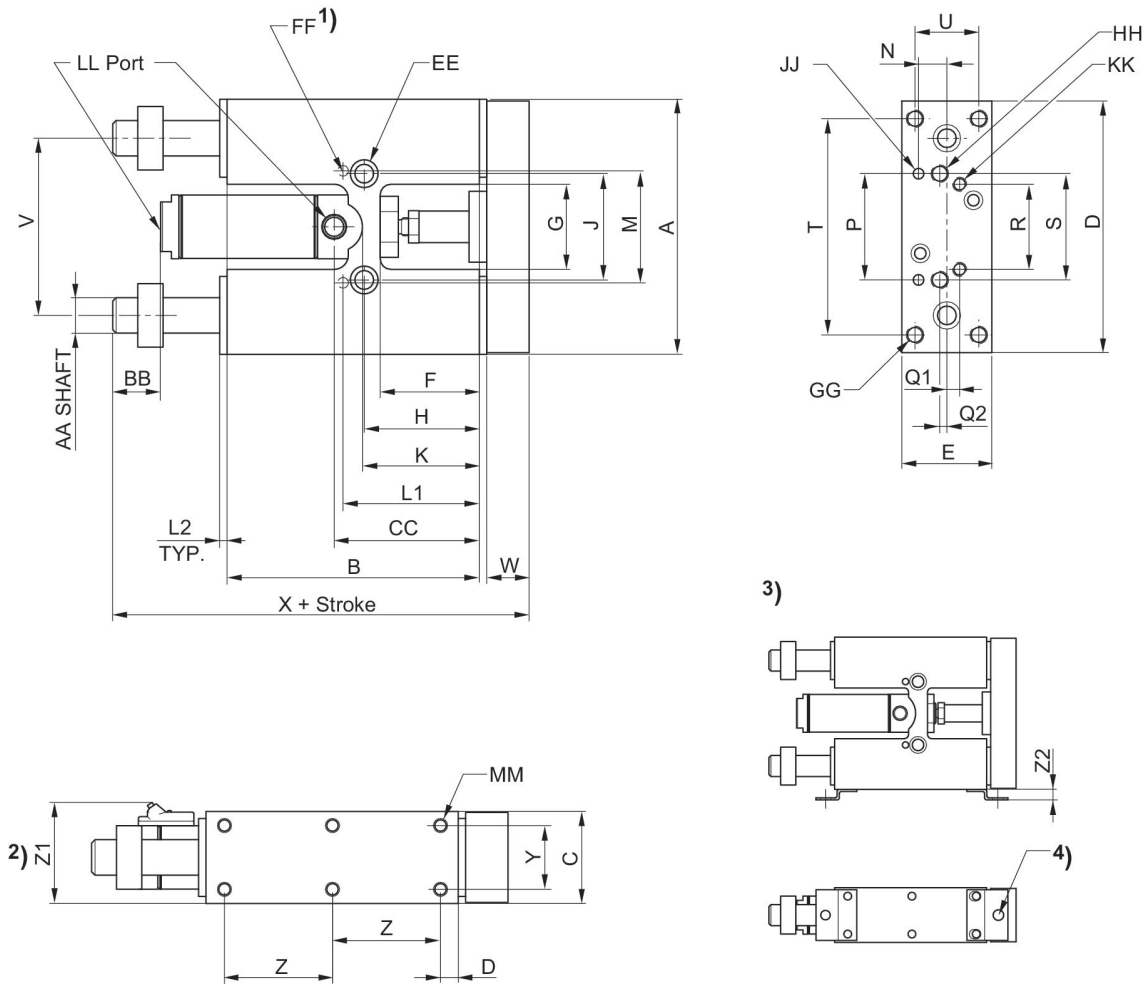
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	4"	Sintered bronze	FKM	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15004BB43CSC
1-1/2"	4"		Buna-N	PNP	extended/retracted	Standard	Angle mount	extended/retracted	SH15004LB11CAC
1-1/2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15004LB13CSC
1-1/2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15004LB17CSC
1-1/2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15004LB1XCSC
1-1/2"	4"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15004LB1YCSC
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15004LB1ZCSA
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15004LB1ZCSC
1-1/2"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15004LB3ZCS3
1-1/2"	4"		FKM	PNP	extended/retracted	Standard	Std. mount	retracted	SH15004LB41CSB
1-1/2"	4"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15004L-B42CSCX
1-1/2"	5"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15005LB11CS3
1-1/2"	5"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15005LB12CSC
1-1/2"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15005LB13CSC
1-1/2"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15005LB17CSC
1-1/2"	5"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15005L-B17CSCX
1-1/2"	5"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15005LB1YCSC
1-1/2"	5"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15005LB1Y-CSCX
1-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15005LB1ZCS3
1-1/2"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15005LB1ZCSA
1-1/2"	5"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15005T-B11CSCX
1-1/2"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15006BB13CSC
1-1/2"	6"	Sintered bronze	FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15006BB4Y-CSCX
1-1/2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15006L-B11CSCX
1-1/2"	6"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15006LB12CSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	6"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15006LB1XCSC
1-1/2"	6"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended	SH15006LB1YCS1
1-1/2"	6"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15006LB1YCSC
1-1/2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15006LB1ZCSC
1-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15006LB33CSC
1-1/2"	6"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15006TB17CSC
1-1/2"	6"	PTFE	FKM	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15006TB47CSC
1-1/2"	7"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15007L-B12CSCX
1-1/2"	7"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15007LB17CS3
1-1/2"	7"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15007LB17CSC
1-1/2"	7"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH15007LB3ZCS1
1-1/2"	8"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH15008BB1ZCSB
1-1/2"	8"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15008L-B12CSCX
1-1/2"	8"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15008LB13CS3
1-1/2"	8"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15008LB1YCSC
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	extended/retracted	SH15008LB1ZCA3
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH15008LB1ZCSB
1-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15008LB1ZCSC
1-1/2"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15008LB37CS3X
1-1/2"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15008LB37CSC
1-1/2"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15008LB3XCSC
1-1/2"	8"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15008LB4ZCSC
1-1/2"	8"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15008TB11CSC
1-1/2"	9"		Buna-N	NPN	extended/retracted	Standard	Base mount	extended	SH15009LB12CB1X
1-1/2"	9"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15009LB1YCSC

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15009LB1ZCSC
1-1/2"	10"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH15010B-B1ZCSBX
1-1/2"	10"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15010L-B11CSCX
1-1/2"	10"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15010LB12CSC
1-1/2"	10"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15010L-B12CSCX
1-1/2"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15010LB17CSC
1-1/2"	10"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB1XCS3
1-1/2"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB1ZCS3
1-1/2"	10"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB3Y-CSCQ
1-1/2"	10"		FKM	Reed	extended/retracted	Standard	Angle mount	extended/retracted	SH15010LB43CAC
1-1/2"	10"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB4XCS3
1-1/2"	10"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB4ZCS3
1-1/2"	10"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15010LB4ZCSC
1-1/2"	11"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15011LB1ZCSC
1-1/2"	11"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15011L-B42CSCX
1-1/2"	11"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15011TB1ZCSC
1-1/2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15012LB11CSC
1-1/2"	12"		Buna-N	NPN	extended/retracted	Standard	Std. mount	retracted	SH15012LB12CSB
1-1/2"	12"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15012LB12CSC
1-1/2"	12"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15012LB13CSC
1-1/2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15012LB17CSC
1-1/2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15012LB1ZCS3
1-1/2"	12"		FKM	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15012LB41CSC
1-1/2"	12"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15012LB4XCSC
1-1/2"	13"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15013LB1Y-CSCX

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
1-1/2"	13"		FKM	Reed	extended/retracted	Standard	Angle mount	extended/retracted	SH15013L-B43CACX
1-1/2"	14"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15014LB13CSC
1-1/2"	14"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH15014LB17CSC
1-1/2"	14"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15014LB1XCS3
1-1/2"	14"		FKM	Reed	extended/retracted	Standard	Angle mount	extended/retracted	SH15014L-B43CACX
1-1/2"	15"		Buna-N	NPN	extended/retracted	Standard	Std. mount	retracted	SH15015LB12CSB
1-1/2"	15"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH15015LB3ZCS3
1-1/2"	15"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15015LB42CSC
1-1/2"	15"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15015L-B42CSCX
1-1/2"	16"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH15016L-B12CSCX
1-1/2"	16"	PTFE	Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15016TB11CSC
1-1/2"	17"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH15017LB13CS3
1-1/2"	18"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH15018LB11CS3
1-1/2"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH15018L-B3ZCSBX
1-1/2"	18"		FKM	Reed	extended/retracted	Quick disconnect	Std. mount	extended	SH15018LB4X-CSAC
1-1/2"	1/2"		FKM	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH150X5LB4YCSC
1-1/2"	1-1/2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	retracted	SH150X9B-B1ZCSBX
1-1/2"	1-1/2"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH150X9LB11CSC

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

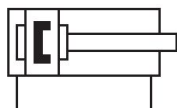
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
2"



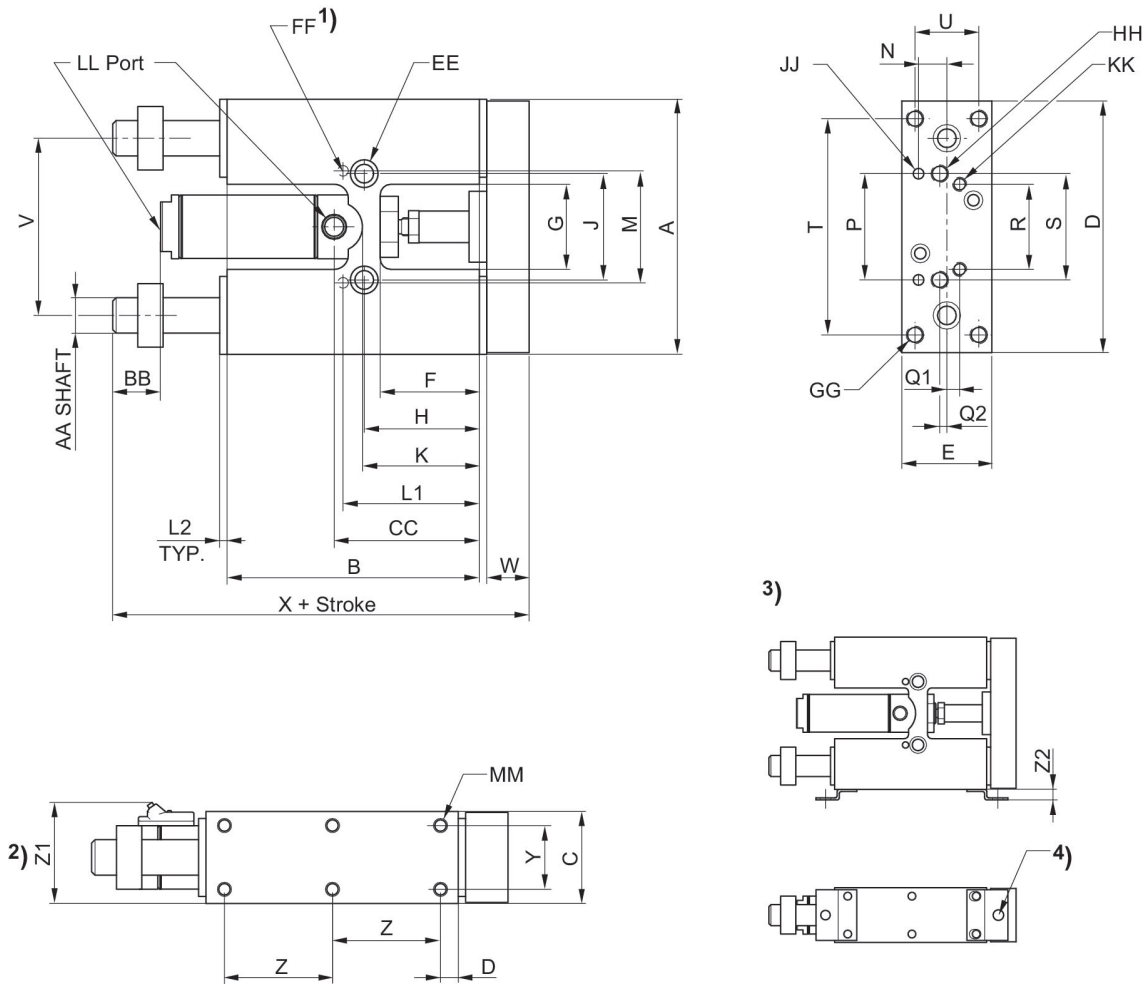
Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
2"	1"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH20001LB12CS3
2"	1"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20001LB37CSC
2"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20002LB13CSC
2"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20002LB17CSC
2"	2"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20002LB1XCS3
2"	3"	Sintered bronze	Buna-N	Reed	retracted	Standard	Std. mount	extended/retracted	SH20003BB33BS3
2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20003LB17CS3
2"	3"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20003LB17CSC
2"	4"	Sintered bronze	FKM	Reed	extended/retracted	Standard	Std. mount	extended	SH20004BB43CSA
2"	4"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH20004LB11CSC
2"	4"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH20004LB12CSC
2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20004LB13CS3
2"	4"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20004LB13CSC
2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20004LB17CSC
2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20004LB37CSC
2"	4"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Base mount	extended	SH20004T-B1ZCBAX
2"	5"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20005LB13CSC
2"	5"		FKM	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20005LB47CSC
2"	5"		FKM	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20005L-B47CSCX

Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
2"	5"	PTFE	FKM	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20005TB43CSC
2"	6"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20006BB13CSC
2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20006LB17CSC
2"	6"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20006LB1ZCSC
2"	6"		Buna-N	PNP	extended/retracted	Standard	Std. mount	retracted	SH20006LB31CSB
2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	retracted	SH20006LB33CSB
2"	6"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20006LB3YCSC
2"	6"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH20006TB1ZCS1
2"	6"	PTFE	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended	SH20006TB33CS1
2"	7"	Sintered bronze	Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20007B-B33CS3X
2"	7"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH20007LB11CSC
2"	7"		FKM	Reed	extended/retracted	Standard	Std. mount	retracted	SH20007LB43CSB
2"	8"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20008LB4ZCSC
2"	8"	PTFE	Buna-N	PNP	extended/retracted	Quick disconnect	Angle mount	extended/retracted	SH20008TB1ZCAC
2"	9"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20009LB17CSC
2"	9"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20009LB1ZCSC
2"	9"		FKM	Reed	retracted	Standard	Std. mount	extended/retracted	SH20009LB43BSC
2"	9"	PTFE	Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20009TB17CSC
2"	10"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended	SH20010L-B11CSAC
2"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20010LB17CSC
2"	10"		Buna-N	NPN	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20010LB1YCS3
2"	10"		FKM	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH20010L-B42CSCX
2"	10"		FKM	Reed	extended/retracted	Standard	Std. mount	retracted	SH20010LB43CSB
2"	10"		FKM	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20010LB43CSC
2"	11"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended	SH20011LB11CSA



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
2"	11"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH20011L-B32CSCX
2"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH20012LB11CSC
2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20012LB17CSC
2"	12"		Buna-N	PNP	extended	Quick disconnect	Std. mount	extended	SH20012LB1ZASA
2"	12"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20012LB1ZCSC
2"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20012LB37CSC
2"	13"		Buna-N	w/o position inquiry		Standard	Std. mount	retracted	SH20013LB16DSB
2"	13"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH20013LB1ZCSA
2"	14"	Sintered bronze	FKM	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20014BB47CSC
2"	14"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20014LB1XCSC
2"	14"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH20014LB1ZCSC
2"	15"		Buna-N	Reed	extended	Standard	Std. mount	extended/retracted	SH20015LB33ASC
2"	18"	Sintered bronze	FKM	NPN	retracted	Quick disconnect	Std. mount		SH20018BB4YBSB
2"	18"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH20018LB13CSC
2"	18"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH20018LB17CSC
2"	18"		FKM	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH20018LB41CSC
2"	1-1/2"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH200X9LB4ZCSC

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

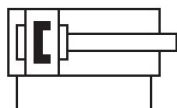
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

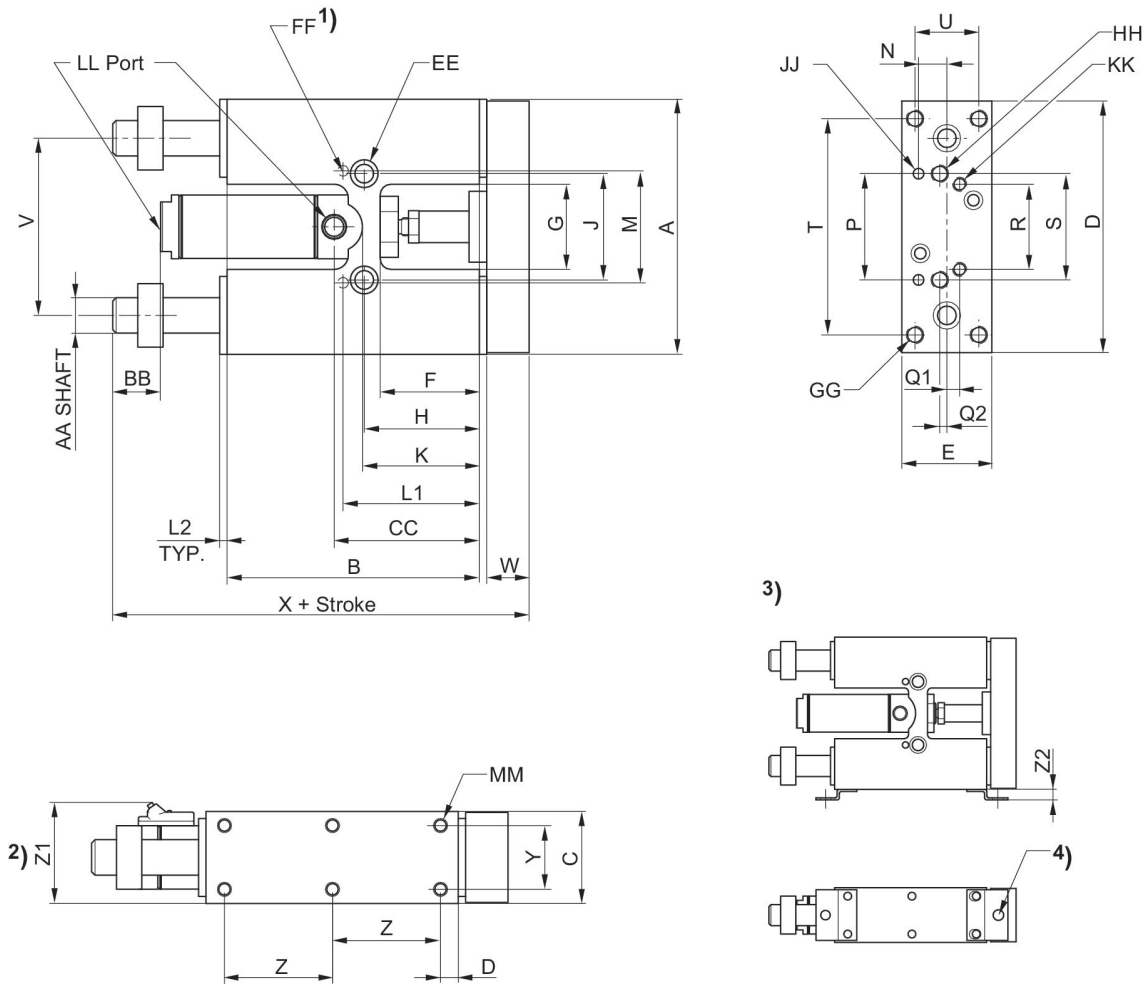
### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
2 1/2"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
2-1/2"	2"	Sintered bronze	Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH25002BB1ZCSC
2-1/2"	2"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH25002LB13CSC
2-1/2"	2"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH25002LB17CSC
2-1/2"	2"		FKM	Reed	extended/retracted		Std. mount	extended/retracted	SH25002LB4XCSC
2-1/2"	3"		FKM	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH25003LB43CSC
2-1/2"	4"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH25004LB17CSC
2-1/2"	4"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	retracted	SH25004LB3XCSB
2-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	retracted	SH25006L-B13CSBX
2-1/2"	6"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH25006LB17CSC
2-1/2"	6"		Buna-N	Reed	extended/retracted	Standard	Std. mount	extended/retracted	SH25006LB33CSC
2-1/2"	6"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH25006LB4ZCS3
2-1/2"	7"		Buna-N	w/o position inquiry			Std. mount	extended/retracted	SH25007LB17CSC
2-1/2"	8"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended/retracted	SH25008LB11CS3
2-1/2"	8"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH25008LB17CSC
2-1/2"	8"		Buna-N	Reed	extended/retracted	Quick disconnect	Std. mount	retracted	SH25008LB1X-CSBX
2-1/2"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH25008L-B3ZCSCX
2-1/2"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH25010LB17CSC
2-1/2"	10"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH25010LB1ZCSC
2-1/2"	12"		Buna-N	NPN	extended/retracted	Standard	Std. mount	retracted	SH25012LB12CS2

Dimensions in inches



- 1) is located on the bottom
- 2) Optional Hall effect and reed sensors
- 3) Retaining bracket for proximity sensor
- 4) Hole for proximity sensor, M8

Ø [inch]	A	B	C	D	E	F	G	H	J	K
1 1/2"	5.25	4.95	2.00	5.18	1.93	1.93	2.00	2.25	2.25	2.68
2"	6.50	6.50	2.50	6.44	2.44	2.50	2.50	2.87	2.75	3.37
2 1/2"	6.50	6.50	2.87	6.44	2.44	2.50	2.50	2.81	2.75	3.37

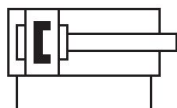
Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
1 1/2"	2.68	0.18	2.499/2.501	0.56	2.499/2.501	0.31	0.12	1.87	2.25	4.25
2"	3.37	0.25	2.99/3.001	0.62	2.99/3.001	0.37	0.12	2.25	2.75	5.25
2 1/2"	3.31	0.25	2.499/2.501	0.62	2.499/2.501	0.37	0.12	2.25	2.75	5.25

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
1 1/2"	1.43	3.75	0.81	7.16	1.43	2.12	2.25	0.31	0.750	0.87
2"	1.87	4.56	0.87	8.75	1.87	2.62	2.75	0.31	1.000	1.00
2 1/2"	1.87	4.56	0.87	8.75	1.87	2.62	3.21	0.31	1.000	1.00

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
1 1/2"	3.00	0.37	C'Bored for 5/16 SHCS, Tapped 3/8-24 x .75 DP	0.1875/0.1885 x .37DP	5/16-18 thru, C'Bored for 1/4 SHCS	5/16-18 thru, C'Bored for 1/4 SHCS	0.1875/0.1885 x .37DP	5/16-18 x 062DP	1/8 NPTF	1/4-20 x .37 DP
2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP
2 1/2"	3.71	0.62	C'Bored for 3/8 SHCS, Tapped 7/16-20 x 0.875 DP	0.250/0.251 x 0.50DP	3/8-24 thru, C'Bored for 5/16 SHCS	3/8-24 thru, C'Bored For 5/16 SHCS	0.250/0.251 x 0.50DP	5/16-18 x 062DP	1/4 NPTF	5/16-18 x 0.50 DP

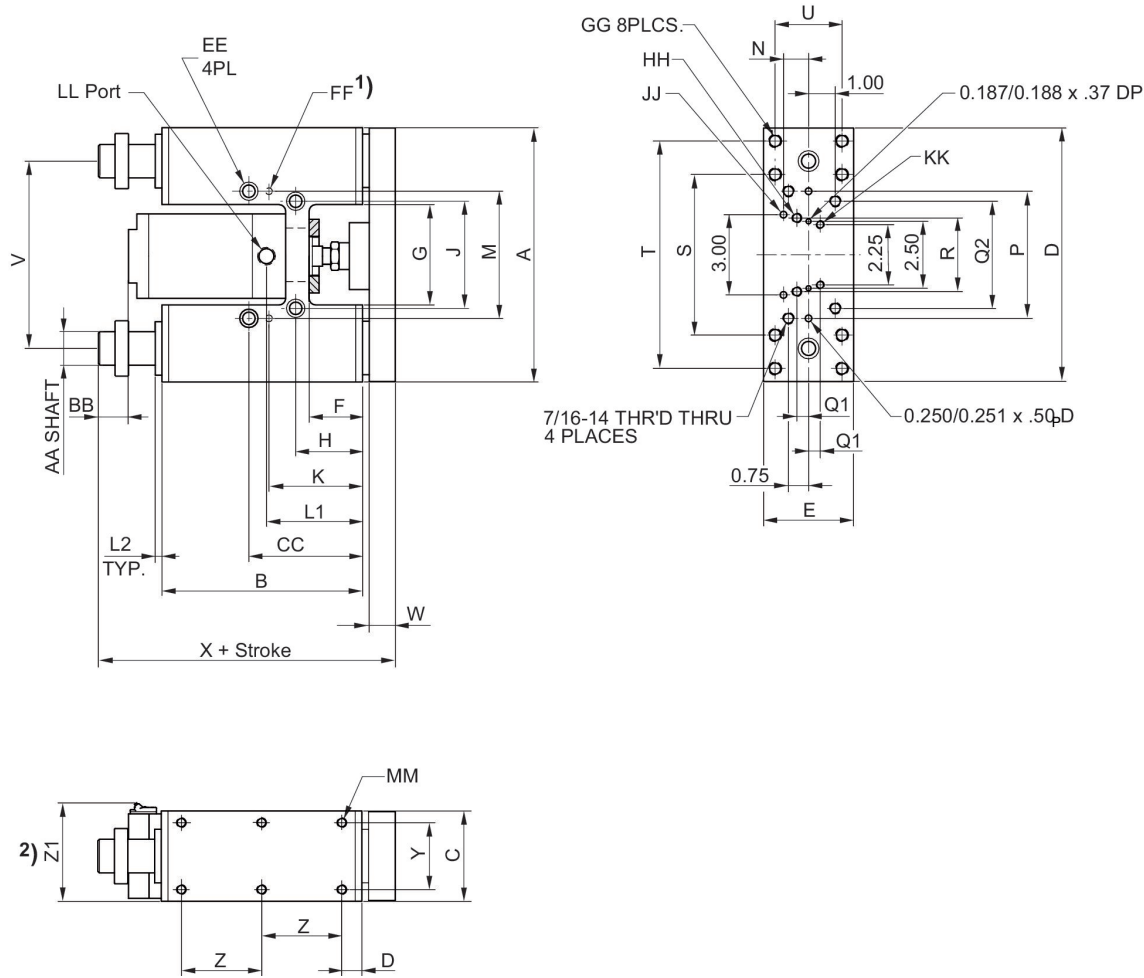
### Guide cylinders, Series SH

Guide cylinders  
Piston with magnet  
Elastic cushioning  
Linear ball bearing  
3"



Bore Size	Stroke	Bearing material	Seal material	Switch descr.	Clamp position of sensor	Cable set	Mounting type	Hardware & Shocks	Part No.
3"	4"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH30004LB1ZCS1
3"	4"		FKM	PNP	extended/retracted	Quick disconnect	Std. mount	extended	SH30004LB4ZCSA
3"	5"	Sintered bronze	Buna-N	PNP	retracted	Standard	Std. mount	retracted	SH30005BB11BSB
3"	5"	Sintered bronze	FKM	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH30005BB47CS3
3"	5"		Buna-N	NPN	extended/retracted	Standard	Std. mount	extended/retracted	SH30005LB12CSC
3"	5"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH30005LB1ZCSC
3"	8"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH30008LB1ZCSC
3"	10"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH30010LB17CSC
3"	12"		Buna-N	PNP	extended/retracted	Standard	Std. mount	extended	SH30012LB11CSAC
3"	12"		Buna-N	NPN	extended/retracted	Standard	Std. mount	retracted	SH30012LB12CS2
3"	12"		Buna-N	w/o position inquiry		via mounting bracket	Std. mount	extended/retracted	SH30012LB17CSC
3"	18"		Buna-N	PNP	extended/retracted	Quick disconnect	Std. mount	extended/retracted	SH30018LB1ZCSC

Dimensions in inches



Ø [inch]	A	B	C	D	E	F	G	H	J	K
3"	9.50	7.50	3.37	9.44	3.31	2.00	3.75	2.50	4.00	3.50

Ø [inch]	L1	L2	M	N	P	Q1	Q2	R	S	T
3"	3.59	0.25	4.749 / 4.751	0.94	4.749 / 4.751	0.43	4.00	2.75	6.00	8.50

Ø [inch]	U	V	W	X	Y	Z	Z1	Z2	AA	BB
3"	2.50	7.00	0.97	10.10	2.50	3.00	3.73	0.312	1.250	1.12

Ø [inch]	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
3"	4.25	0.75	C'Bored for 7/16 SHCS, Tapped 1/2-20 x 0.75 DP	0.250 / 0.251 x 0.50DP	1/2-13 thru, C'Bored for 3/8-16 SHCS	1/2-13 thru, C'Bored for 3/8-16 SHCS	0.250 / 0.251 x 0.50DP	5/16-18 x 0.50DP	3/8 NPTF	3/8-16 x 0.57 DP



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