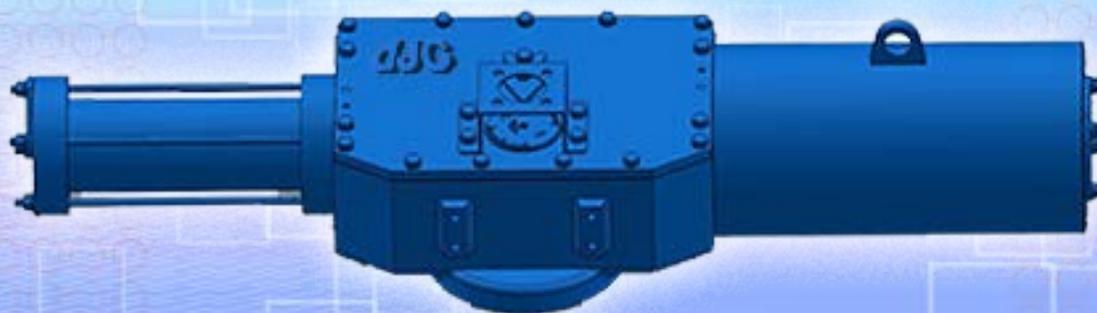


HYDRAULIC ACTUATORS

HEAVYDUTY QUARTER TURN-SPRING RETURN TYPE

RDJHH □SR □SERIES



Spring Return Hydraulic Actuator

Technical Data

Supply pressure :

- 105Bar g maximum

Ambient temperature :

- 20°C to +80°C

Angular stroke :

- Turn : 90° +/- 7°

Supply fluid :

- oil
- gas

Painting :

Standard execution has surface protection with :

- sandblasting
- 1 primer layer
- 1 epoxy finish layer

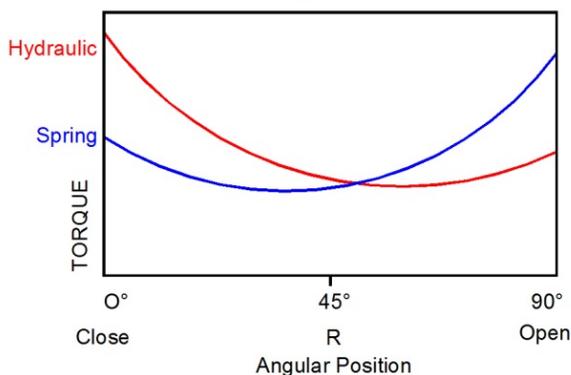
On request available other painting

Actuator seals gaskets :

- Standard : N.B.R. (-20°C + 80°C)
- low temp : fluorosilicone
- high temp : viton

spring to close actuators with scotch yoke mechanism

Spring Return

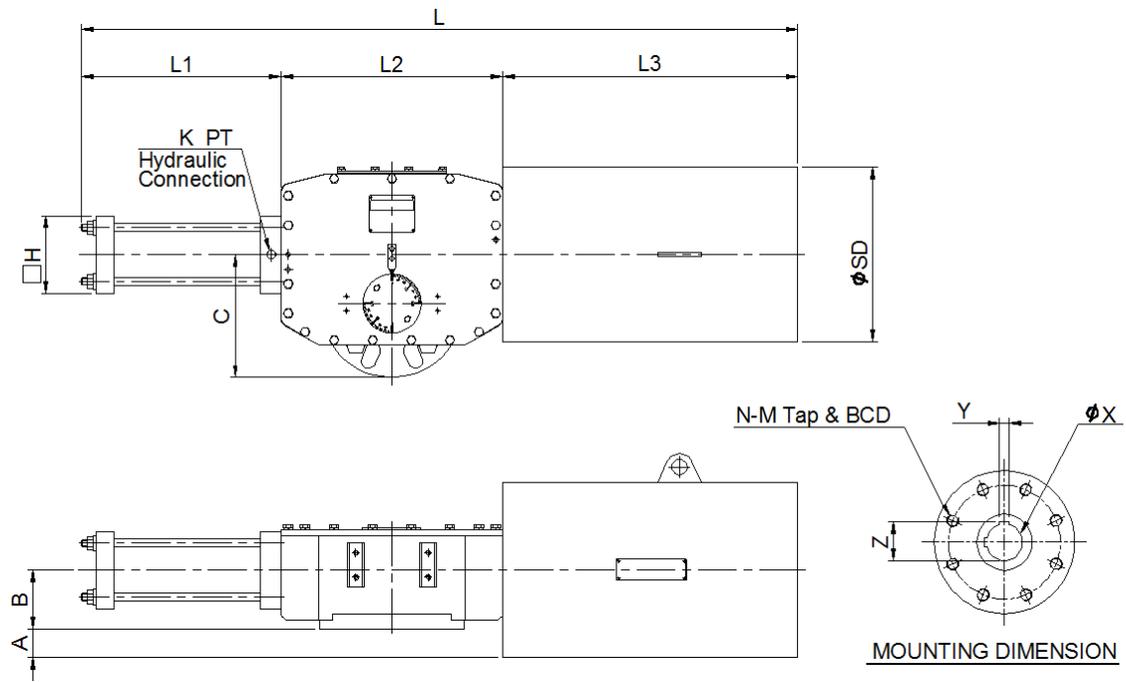


Features

- Power failure safety mechanism. (spring return)
- Fast valve shut-off time after power failure.
- All models available as double acting or spring return.
- Steel cylinder assembly provides robust pressure containment for all conditions.
- Bronze bushing interfaces provide low-friction support of sliding and rotating components.
- Piston seal configurations specifically designed for hydraulic applications.
- Scotch yoke mechanism generates powerful opening and closing torque outputs.
- Steel fabricated frame provides rugged foundation of modular assemblies.
- Chrome-plated side load bar with guide block for effective elimination of piston rod deflection.
- Steel spring cartridge is fully enclosed from environmental conditions.

MODEL		SPRING TORQUE (Nm)			OIL & GAS TORQUE : OIL & GAS SUPPLY PRESSURE								
		START	R	END	50 BAR			70 BAR			90 BAR		
					START	R	END	START	R	END	START	R	END
RDJHH 05SR 50	S1	391	158	134	395	154	124	607	279	330	819	404	536
	S2	541	219	185				556	219	180	768	344	386
	S3	700	286	240							713	279	226
RDJHH 05R 60	S1	613	248	210	630	248	204	966	446	531	1,302	645	857
	S2	858	347	294				882	347	285	1,218	545	612
	S3	1,126	456	386							1,126	437	344
RDJHH 05SR 70	S1	819	332	281	849	335	279	1,300	602	718	1,752	869	1,157
	S2	1,144	463	392				1,189	470	393	1,641	737	832
	S3	1,487	602	510							1,523	598	490
RDJHH 08SR 70	S1	1,430	531	327	1,481	536	327	2,203	963	1,030	2,926	1,390	1,733
	S2	2,018	749	461				2,069	745	442	2,792	1,172	1,145
	S3	2,581	958	590							2,663	963	582
RDJHH 08SR 80	S1	1,844	684	421	1,917	696	429	2,852	1,248	1,339	3,787	1,800	2,248
	S2	2,612	969	597				2,677	963	571	3,612	1,515	1,480
	S3	3,353	1,244	766							3,442	1,240	739
RDJHH 08SR 90	S1	2,211	915	827	2,279	918	809	3,522	1,652	2,017	4,765	2,385	3,225
	S2	3,094	1,281	1,157				3,192	1,286	1,134	4,434	2,020	2,342
	S3	3,988	1,651	1,492							4,100	1,650	1,448
RDJHH 10SR 90	S1	3,648	1,142	1,145	2,738	1,151	1,128	4,292	2,067	2,638	5,845	2,984	4,148
	S2	3,740	1,613	1,617				3,819	1,596	1,545	5,373	2,513	3,055
	S3	4,754	2,062	2,096							4,894	2,064	2,041
RDJHH 10SR 100	S1	3,266	1,408	1,412	3,333	1,392	1,347	5,230	2,513	3,192	7,128	3,633	5,037
	S2	4,544	1,959	1,964				4,678	1,961	1,913	6,575	3,082	3,758
	S3	5,815	2,522	2,563							5,976	2,519	2,487
RDJHH 10SR 110	S1	3,879	1,673	1,677	4,013	1,686	1,653	6,290	3,030	3,866	8,566	4,374	6,079
	S2	5,445	2,348	2,354				5,613	2,355	2,300	7,889	3,698	4,513
	S3	7,015	3,025	3,033							7,210	3,022	2,943
RDJHH 13SR 110	S1	4,998	2,177	2,235	5,162	2,190	2,194	8,121	3,936	5,071	11,080	5,683	7,948
	S2	6,988	3,044	3,125				7,231	3,069	3,081	10,190	4,816	5,957
	S3	9,027	3,932	4,037							9,279	3,928	3,919
RDJHH 13SR 125	S1	6,546	2,851	2,927	6,710	2,837	2,823	10,564	5,113	6,571	14,419	7,388	10,319
	S2	9,133	3,978	4,084				9,407	3,986	3,984	13,262	6,261	7,731
	S3	11,659	5,078	5,214							12,132	5,161	5,205
RDJHH 13SR 140	S1	8,157	3,553	3,648	8,522	3,631	3,675	13,390	6,504	8,407	18,258	9,378	13,140
	S2	11,477	4,999	5,133				11,905	5,058	5,088	16,774	7,932	9,821
	S3	14,736	6,418	6,590							15,316	6,513	6,562
RDJHH 16SR 140	S1	8,973	4,375	5,593	9,385	4,467	5,590	15,377	8,004	11,415	21,368	11,540	17,240
	S2	12,647	6,166	7,884				13,086	6,212	7,741	19,078	9,749	13,566
	S3	16,207	7,902	10,103							16,858	8,013	10,005
RDJHH 16SR 150	S1	10,268	5,006	6,401	10,679	5,075	6,337	17,510	9,108	12,979	24,342	13,141	19,621
	S2	14,318	6,981	8,926				14,986	7,134	8,929	21,818	11,166	15,571
	S3	18,592	9,065	11,590							19,154	9,083	11,297
RDJHH 16SR 160	S1	11,599	5,655	7,231	12,085	5,747	7,180	19,812	10,307	14,692	27,538	14,868	22,204
	S2	15,947	7,934	10,480				16,563	8,029	10,344	24,290	12,590	17,856
	S3	20,555	10,227	13,508							21,262	10,297	13,248

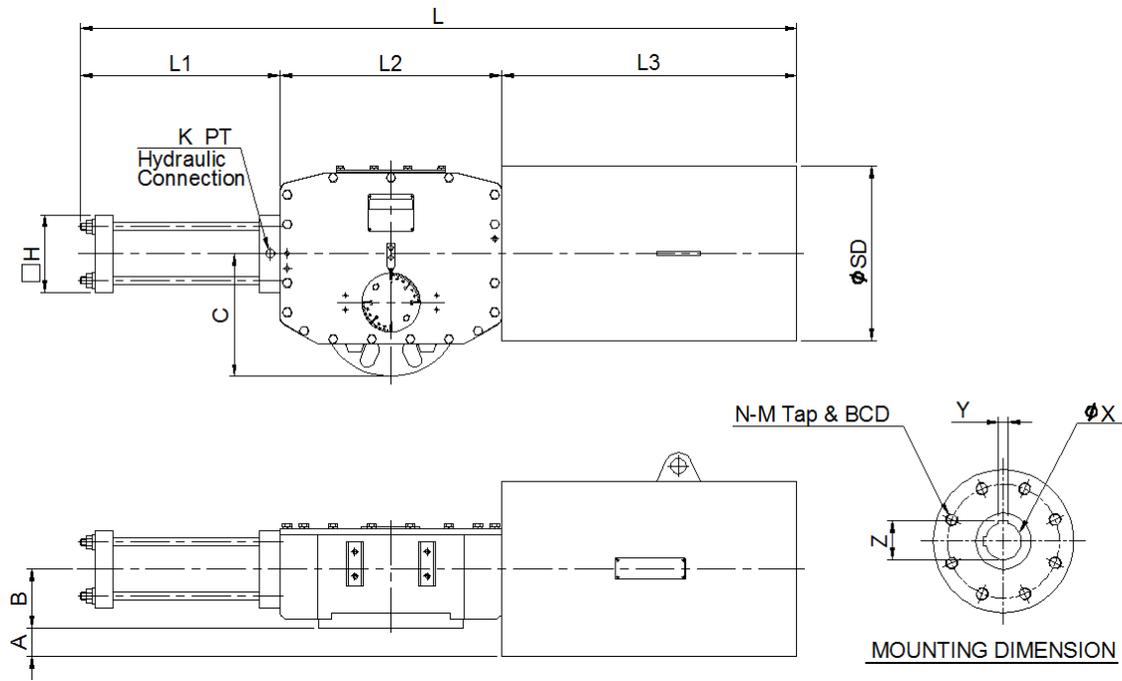
Dimensions



(Unit : mm)

Model	A	B	C	L1	L2	L3	L	H	SD	N	M	BCD	X	Y	Z	K
05SR 50-S1	50	62	125	305	278	330	913	76	220	4	10	102	25	8	28.3	3/8"
05SR 50-S2	50	62	125	305	278	330	913	76	220	4	10	102	25	8	28.3	3/8"
05SR 50-S3	50	62	125	305	278	330	913	76	220	4	10	102	25	8	28.3	3/8"
05SR 60-S1	50	62	125	313	278	330	921	90	220	4	10	102	25	8	28.3	3/8"
05SR 60-S2	50	62	125	313	278	360	951	90	220	4	10	102	25	8	28.3	3/8"
05SR 60-S3	50	62	125	313	278	360	951	90	220	4	10	102	25	8	28.3	3/8"
05SR 70-S1	50	62	125	325	278	360	963	100	220	4	10	102	25	8	28.3	3/8"
05SR 70-S2	50	62	125	325	278	360	963	100	220	4	10	102	25	8	28.3	3/8"
05SR 70-S3	50	62	125	326	278	360	964	100	220	4	10	102	25	8	28.3	3/8"
08SR 70-S1	55	88	190	409	406	480	1295	100	280	4	20	165	50	14	53.8	3/8"
08SR 70-S2	55	88	190	409	406	480	1295	100	280	4	20	165	50	14	53.8	3/8"
08SR 70-S3	55	88	190	409	406	500	1315	100	280	4	20	165	50	14	53.8	3/8"
08SR 80-S1	55	88	190	418	406	480	1304	110	280	4	20	165	50	14	53.8	3/8"
08SR 80-S2	55	88	190	418	406	510	1334	110	280	4	20	165	50	14	53.8	3/8"
08SR 80-S3	55	88	190	418	406	530	1354	110	280	4	20	165	50	14	53.8	3/8"
08SR 90-S1	55	88	190	431	406	530	1367	125	280	4	20	165	50	14	53.8	3/8"
08SR 90-S2	55	88	190	431	406	530	1367	125	280	4	20	165	50	14	53.8	3/8"
08SR 90-S3	75	88	190	431	406	550	1387	125	320	4	20	165	50	14	53.8	3/8"

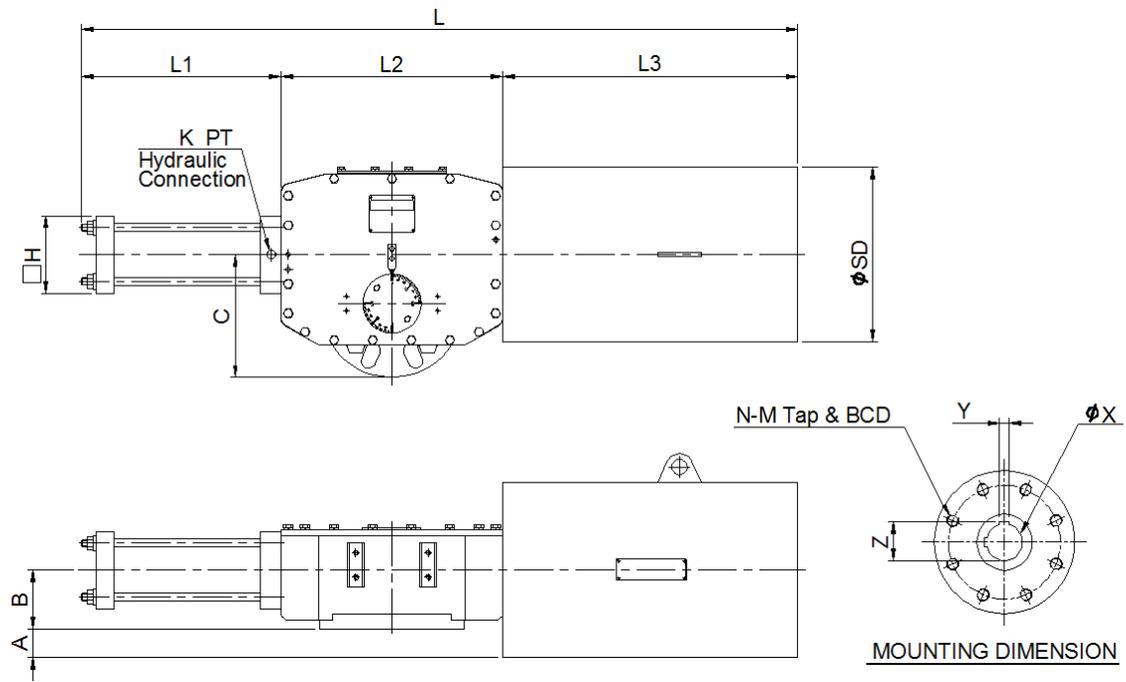
Dimensions



(Unit : mm)

Model	A	B	C	L1	L2	L3	L	H	SD	N	M	BCD	X	Y	Z	K
10SR 90-S1	40	120	251	467	467	530	1464	125	320	8	16	254	75	20	79.9	1/2"
10SR 90-S2	40	120	251	467	467	530	1464	125	320	8	16	254	75	20	79.9	1/2"
10SR 90-S3	40	120	251	467	467	580	1514	125	320	8	16	254	75	20	79.9	1/2"
10SR100-S1	40	120	251	472	472	530	1474	135	320	8	16	254	75	20	79.9	1/2"
10SR100-S2	40	120	251	472	472	530	1474	135	320	8	16	254	75	20	79.9	1/2"
10SR100-S3	40	120	251	472	472	580	1524	135	320	8	16	254	75	20	79.9	1/2"
10SR110-S1	40	120	251	485	472	530	1487	150	320	8	16	254	75	20	79.9	1/2"
10SR110-S2	45	120	251	485	472	580	1537	150	330	8	16	254	75	20	79.9	1/2"
10SR110-S3	45	120	251	485	472	580	1537	150	330	8	16	254	75	20	79.9	1/2"
13SR110-S1	25	141	305	555	608	630	1793	150	330	8	20	298	90	22	95.4	1/2"
13SR110-S2	65	141	305	555	608	680	1843	150	410	8	20	298	90	22	95.4	1/2"
13SR110-S3	65	141	305	555	608	680	1843	150	410	8	20	298	90	22	95.4	1/2"
13SR125-S1	65	141	305	570	608	680	1858	165	410	8	20	298	90	22	95.4	1/2"
13SR125-S2	65	141	305	570	608	680	1858	165	410	8	20	298	90	22	95.4	1/2"
13SR125-S3	65	141	305	570	608	730	1908	165	410	8	20	298	90	22	95.4	1/2"
13SR140-S1	65	141	305	585	608	730	1923	185	410	8	20	298	90	22	95.4	1/2"
13SR140-S2	65	141	305	585	608	730	1923	185	410	8	20	298	90	22	95.4	1/2"
13SR140-S3	65	141	305	585	608	730	1923	185	410	8	20	298	90	22	95.4	1/2"

Dimensions

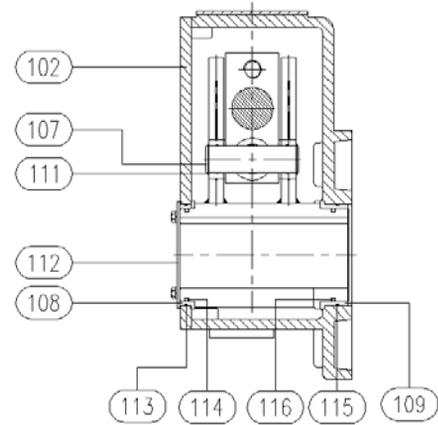
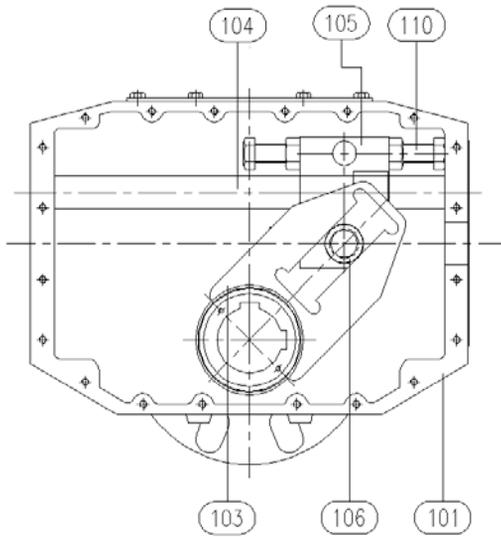


(Unit : mm)

Model	A	B	C	L1	L2	L3	L	H	SD	N	M	BCD	X	Y	Z	K
16SR140-S1	35	170	368	655	740	1010	2405	185	410	8	30	356	110	32	117.4	3/4"
16SR140-S2	35	170	368	655	740	1010	2405	185	410	8	30	356	110	32	117.4	3/4"
16SR140-S3	35	170	368	655	740	1010	2405	185	410	8	30	356	110	32	117.4	3/4"
16SR150-S1	35	170	368	665	740	1010	2415	196	410	8	30	356	110	32	117.4	3/4"
16SR150-S2	35	170	368	665	740	1010	2415	196	410	8	30	356	110	32	117.4	3/4"
16SR150-S3	35	170	368	665	740	1070	2475	196	410	8	30	356	110	32	117.4	3/4"
16SR160-S1	35	170	368	678	740	1010	2428	210	410	8	30	356	110	32	117.4	3/4"
16SR160-S2	60	170	368	678	740	1070	2488	210	460	8	30	356	110	32	117.4	3/4"
16SR160-S3	60	170	368	678	740	1110	2528	210	460	8	30	356	110	32	117.4	3/4"

Part List & Material

Scotch Yoke

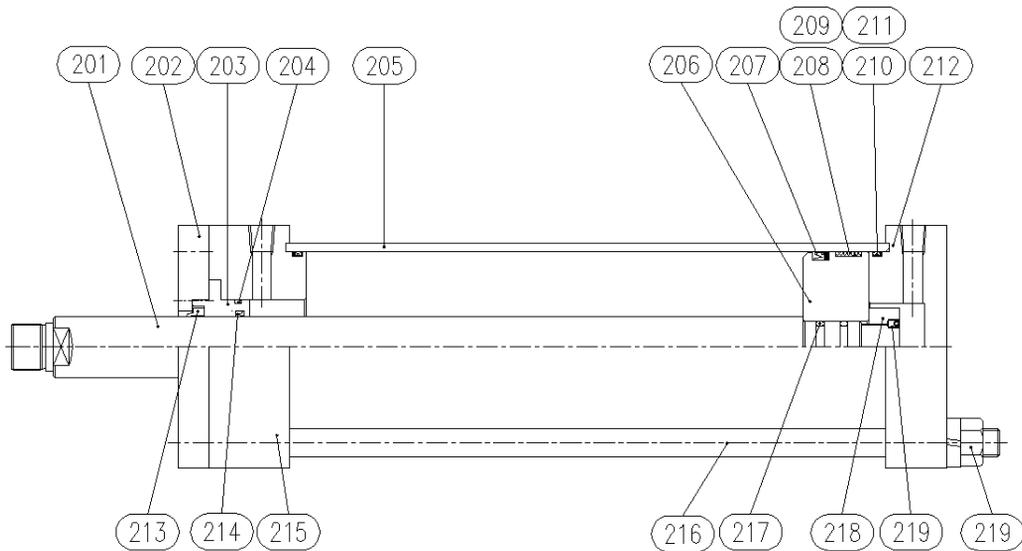


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No	Description	Material	No	Description	Material
101	Housing	Casting	109	Bottom Yoke Bearing	Brass
102	Housing Cover	Casting	110	Stopper Bolt & Nut	Carbon Steel
103	Yoke	Carbon Steel	111	Snap Ring	Carbon Steel
104	Guide Rod	Carbon Steel	112	Indicator	Carbon Steel
105	Sliding Block	Carbon Steel	113	O-Ring(Top Yoke Bearing)	NBR
106	Sliding Block Bearing	Carbon Steel	114	O-Ring(Top Yoke)	NBR
107	Yoke Pin	Carbon Steel	115	O-Ring(Bottom Yoke Bearing)	PTFE
108	Top Yoke Bearing	Brass	116	O-Ring(Bottom Yoke)	NBR

Part List & Material

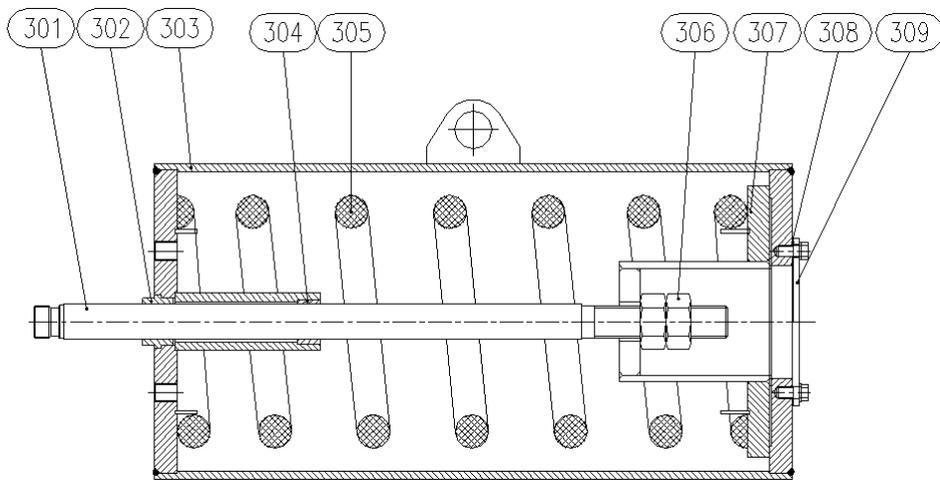
Hydraulic Cylinder



No	Description	Material	No	Description	Material
201	Rod	Carbon Steel	211	Back-up Ring	PTFE
202	Flange	Carbon Steel	212	Head Cover	Carbon Steel
203	Boss	Brass	213	Dust Seal	Urethane
204	Boss O-Ring	NBR	214	Road U-Packing	Urethane
205	Cylinder	Carbon Steel	215	Rod Cover	Carbon Steel
206	Piston	Carbon Steel	216	Tie Rod	Carbon Steel
207	Wear-Ring	PTFE	217	Rod O-Ring	NBR
208	Piston U-Packing	Urethane	218	Rod Nut	Carbon Steel
209	Back-up Ring	PTFE	219	Set Screw	SS
210	Head/Cover O-Ring	NBR	220	Tie Nut	Carbon Steel

Part List & Material

Spring Cartridge



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No	Description	Material	No	Description	Material
301	Spring Rod	Carbon Steel	306	Bolt	Carbon Steel
302	Center Ring	Brass	307	Spring Guide	Carbon Steel
303	Spring Housing	Carbon Steel	308	Gasket	NBR
304	Guide Bush	Oilless b/r	309	Cover	Carbon Steel
305	Spring	Carbon Steel			



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