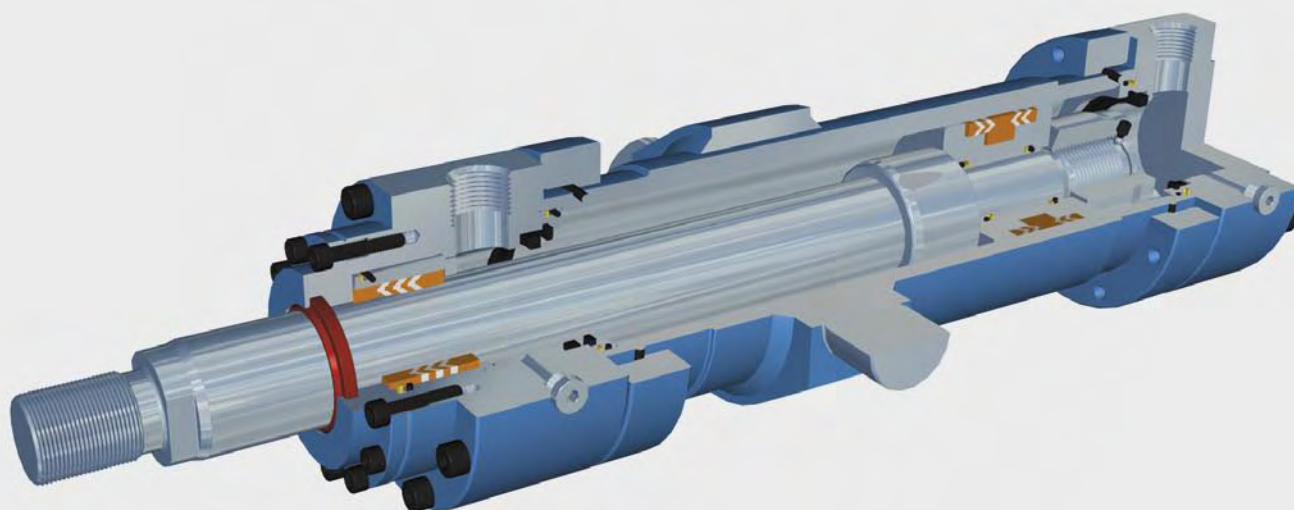


# HYDRAULIC CYLINDER SERIE S-161



# ARCOS STANDARD CYLINDER – S-161

The S-161 cylinder is designed for medium heavy industrial use and heavy mobile use. In close co-operation with our customers we have met the demands of optimal function and simplicity in maintenance, at a low cost.

The S-161 is manufactured in steel, stainless steel and acid-proof steel. The S-161 is painted as standard.

## S-161

- is a double acting cushioned or non-cushioned cylinder
- is designed according to ISO STANDARD 6020-1, CETOP RP 58, NF E 48-015, VW 39 D920.
- is available in seven standard dimensions. If other dimensions are required, contact ARCOS.
- has six different means of mounting...
- is a standard equipped with multi-lip seals that handles hydrolysis, temperatures from -55 to +155°C, water/glycol and most environmentally compatible oils.
- is available with custom adapted seal concepts.
- is designed to achieve maximum bearing.
- is as an option available with SAE flange connections according to ISO/DIS 6162.2
- is as an option available with position sensors.
- is designed to be a flexible choice for the customer both as an exchange cylinder and for new constructions.

### Hydraulic mediums

Mineral oil according to. DIN 51 524 HFC (water/glycol), most synthetic esters and environmentally compatible oils.

### Degree of purity

ISO 4406 Class 15/11 or better.

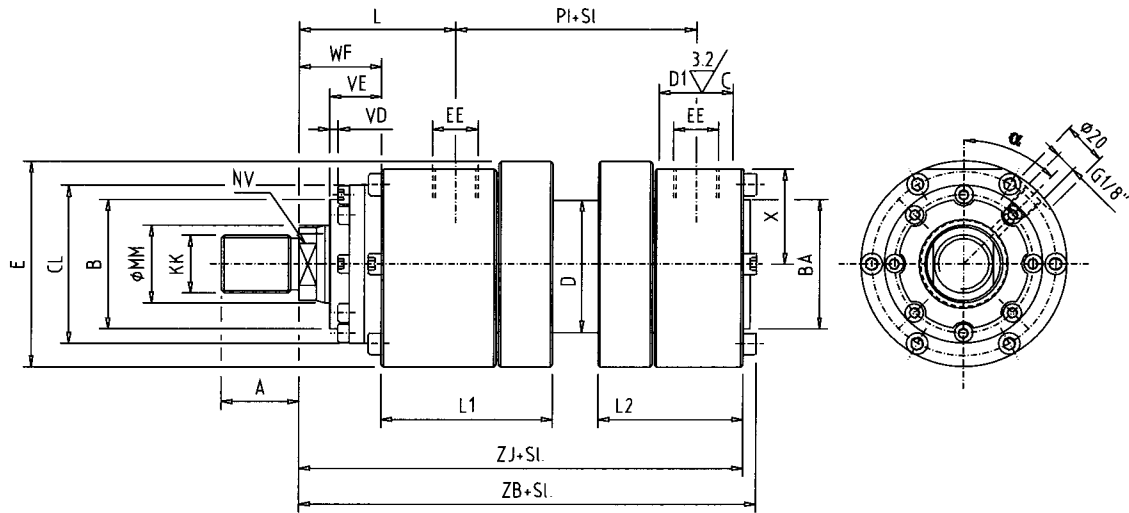
### Final delivery test

Every unit is tested according to ISO and our own testing program.

### Stroke speed

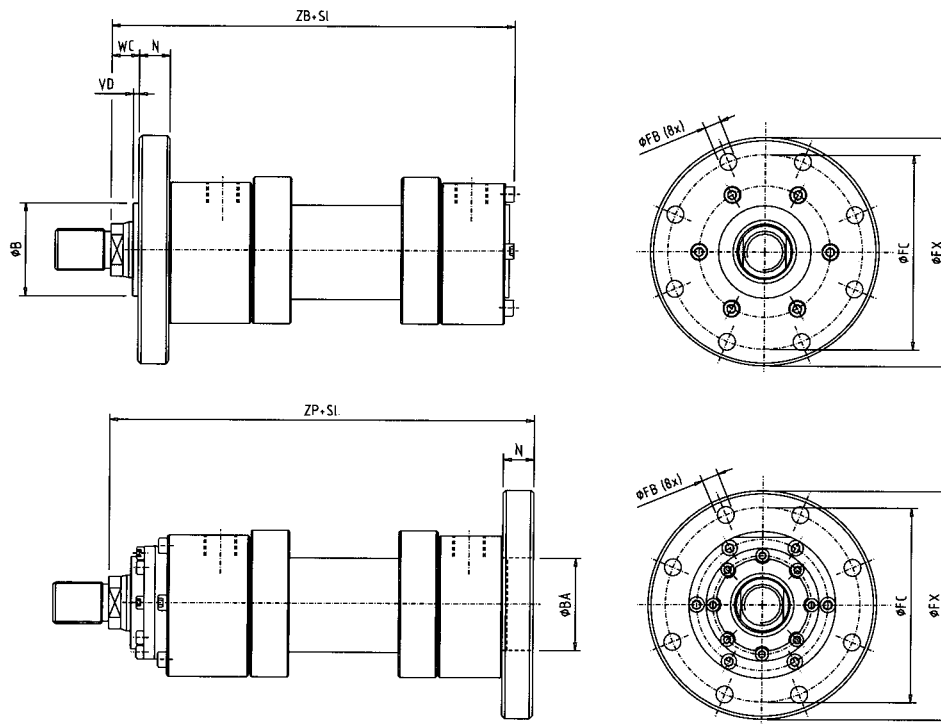
If stroke speed over 0,5 m/sec is required, contact Arcos.

# Basic Design S-161



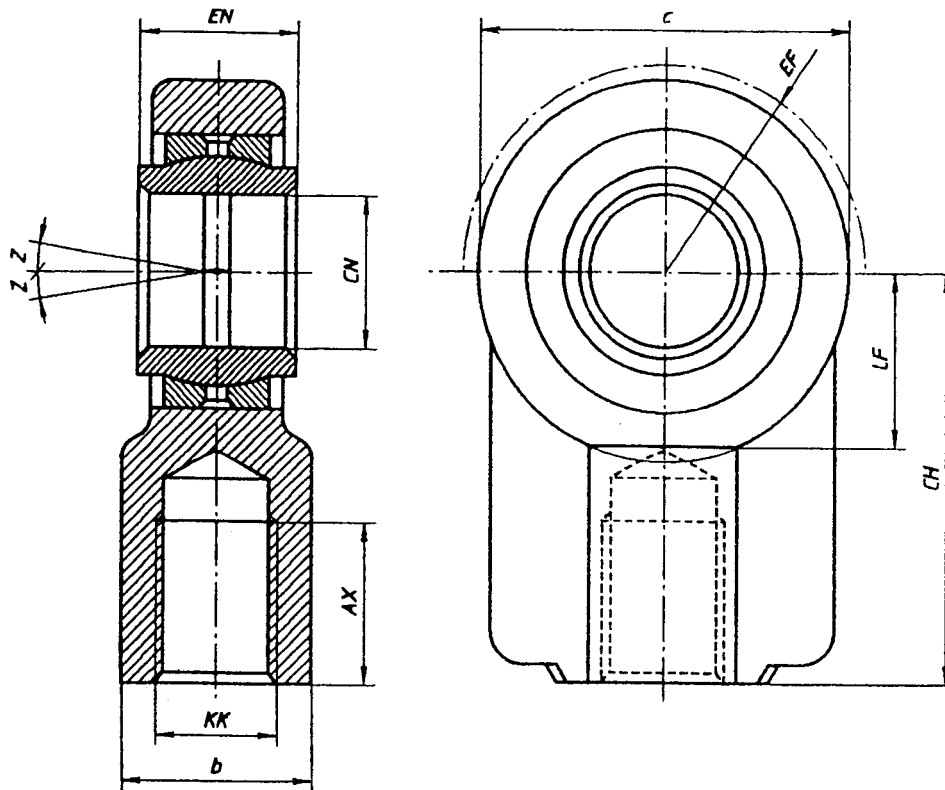
Cyl.dim. AL	Piston rod. MM	KK	A	NV	B/ BA	E	D	D1	EE	CC	L1 ±1	L2 ±1	P1	VE	WF	X	L	ZB	ZJ	CL
50	28	M20x1,5 *	28	22	60	95	60	34	G½	67°	74	62	111	24	38	44	72	211	205	73
50	36	M20x1,5**	28	22	60	95	60	34	G½	67°	74	62	111	24	38	44	72	211	205	73
50	36	M27x2*	36	28	60	95	60	34	G½	67°	74	62	111	24	38	44	72	211	205	73
63	36	M27x2 *	36	28	73	116	75	42	G¾	67°	82	70	117	29	45	54	82	230	224	88
63	45	M27x2 **	36	36	73	116	75	42	G¾	67°	82	70	117	29	45	54	82	230	224	88
63	45	M33x2 *	45	36	73	116	75	42	G¾	67°	82	70	117	29	45	54	82	230	224	88
80	45	M33x2 *	45	36	93	130	100	42	G¾	45°	89	77	134	36	54	62	91	258	250	98
80	56	M33x2 **	45	46	93	130	100	42	G¾	45°	89	77	134	36	54	62	91	258	250	98
80	56	M42x2 *	56	46	93	130	100	42	G¾	45°	89	77	134	36	54	62	91	258	250	98
100	56	M42x2 *	56	46	114	158	120	47	G1	45°	114	93	162	37	57	75	108	310	300	121
100	70	M42x2 **	56	60	114	158	120	47	G1	45°	114	93	162	37	57	75	108	310	300	121
100	70	M48x2 *	63	60	114	158	120	47	G1	45°	114	93	162	37	57	75	108	310	300	121
125	70	M48x2 *	63	60	140	192	145	47	G1	45°	127	96	174	37	60	92	121	337	325	150
125	90	M48x2 **	63	75	140	192	145	47	G1	45°	127	96	174	37	60	92	121	337	325	150
125	90	M64x3 *	85	75	140	192	145	47	G1	45°	127	96	174	37	60	92	121	337	325	150
160	90	M64x3 *	85	75	168	238	185	58	G1¼	38°	155	114	191	41	66	115	143	386	370	189
160	110	M64x3 **	85	90	168	238	185	58	G1¼	38°	155	114	191	41	66	115	143	386	370	189
160	110	M80x3 *	95	90	168	238	185	58	G1¼	38°	155	114	191	41	66	115	143	386	370	189
200	110	M80x3 *	95	90	200	285	230	58	G1¼	38°	209	130	224	45	75	138	190	466	450	230
200	140	M80x3 **	95	120	200	285	230	58	G1¼	38°	209	130	224	45	75	138	190	466	450	230
200	140	M100x3 *	112	120	200	285	230	58	G1¼	38°	209	130	224	45	75	138	190	466	450	230

# S-161 MF3/MF4



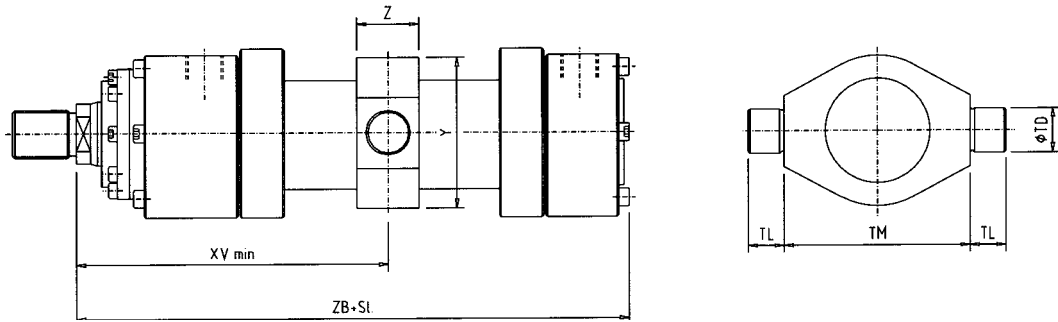
Cyl.dim. AL	Kolvst. MM	B/BA f8/E9	FB H13	FC js13	N	FX	VD	WC	ZB	ZP
50	28	60	11	126	20	148	4	18	211	225
50	36	60	11	126	20	148	4	18	211	225
63	36	70	13,5	145	25	170	4	20	230	249
63	45	70	13,5	145	25	170	4	20	230	249
80	45	85	17,5	165	32	195	4	22	258	282
80	56	85	17,5	165	32	195	4	22	258	282
100	56	106	22	200	32	238	5	25	310	332
100	70	106	22	200	32	238	5	25	310	232
125	70	132	22	235	32	272	5	28	337	357
125	90	132	22	235	32	272	5	28	337	357
160	90	160	22	280	36	316	5	30	386	406
160	110	160	22	280	36	316	5	30	386	406
200	110	200	26	340	40	385	5	35	466	490
200	140	200	26	340	40	385	5	35	466	490

# S-161 KG



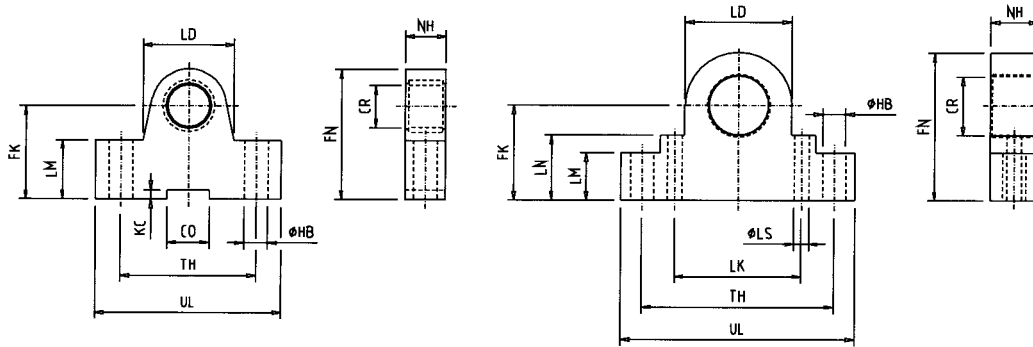
Cyl. dim. AL	Piston rod. MM	Ord. no.	KK	AX	b	C	CH	CN H7	EN h12	LF	Ma Nm	M kg
50	28*	-	M20x1,5	29	30	62	65	25	25	27	10	0,7
50	36**	-	M20x1,5	29	30	62	65	25	25	27	10	0,7
50	36*	-	M27x2	37	38	76	80	32	32	32	25	1,1
63	36*/45**	-	M27x2	37	38	76	80	32	32	32	25	1,1
63	45*	-	M33x2	46	47	97	97	40	40	41	25	2,1
80	45*/56**	-	M33x2	46	47	97	97	40	40	41	25	2,1
80	56*	-	M42x2	57	58	118	120	50	50	50	49	4,5
100	56*/70**	-	M42x2	57	58	118	120	50	50	50	49	4,5
100	70*	-	M48x2	64	70	142	140	63	63	62	86	7,6
125	70*/90**	-	M48x2	64	70	142	140	63	63	62	86	7,6
125	90*	-	M64x3	86	90	180	180	80	80	78	210	15
160	90*/110**	-	M64x3	86	90	180	180	80	80	78	210	15
160	110*	-	M80x3	96	110	224	210	100	100	98	410	28
200	10*/140**	-	M80x3	96	110	224	210	100	100	98	410	28
200	140*	-	M100x3	113	135	290	260	125	125	120	410	55

# S-161 MT4



Cyl.dim. AL	Piston rod. MM	Z	TD f8	TL js16	TM h12	Y	XV min	ZB	Sl. min
50	28	35	25	20	105	85	152,5	211	60
50	36	35	25	20	105	85	152,5	211	60
63	36	40	32	25	120	95	166	230	59
63	45	40	32	25	120	95	166	230	59
80	45	50	40	32	135	120	190	258	74
80	56	50	40	32	135	120	190	258	74
100	56	70	50	40	160	150	237	310	106
100	70	70	50	40	160	150	237	310	106
125	70	80	63	50	195	180	245	337	84
125	90	80	63	50	195	180	245	337	84
160	90	100	80	63	240	217	305	386	143
160	110	100	80	63	240	217	305	386	143
200	110	125	100	80	295	270	385,5	466	177
200	140	125	100	80	295	270	385,5	466	177

# Bearing Brackets



Cyl. dim. AL	Piston rod. MM	Cyl. dim. AL	Piston rod. MM	Ord. no.	CO N9	CR H7	LD	LM	LN	FK Js12	FN	LS	HB H13	KC +0,3	NH	LK	TH Js14	UL	m kg
50	28/36	50	28*	-	25	25	54	35	-	55	77	-	14	5,4	24	-	80	110	1,8
50	28/36	50	36**	-	25	25	54	35	-	55	77	-	14	5,4	24	-	80	110	1,8
63	36/45	50	36*	-	25	32	65	40	-	65	92	-	18	5,4	30	-	110	150	3,4
63	36/45	63	36*/45**	-	25	32	65	40	-	65	92	-	18	5,4	30	-	110	150	3,4
80	45/56	63	45	-	36	40	82	45	-	76	112	-	22	8,4	32	-	125	170	5,0
80	45/56	80	45*/56**	-	36	40	82	45	-	76	112	-	22	8,4	32	-	125	170	5,0
100	56/70	80	56	-	36	50	106	60	-	95	138	-	27	8,4	40	-	160	210	9,6
100	56/70	100	56*/70**	-	36	50	106	60	-	95	138	-	27	8,4	40	-	160	210	9,6
125	70/90	100	70*	-	50	63	140	70	-	112	168	-	33	11,4	50	-	200	260	19
125	70/90	125	70*/90**	-	50	63	140	70	-	112	168	-	33	11,4	50	-	200	260	19
160	90/110	125	90*	-	50	80	175	85	-	140	215	-	39	11,4	62	-	250	322	31
160	90/110	160	90*/110**	-	50	80	175	85	-	140	215	-	39	11,4	62	-	250	322	31
200	110/140	160	110*	-	-	100	180	80	110	160	250	24,8 <sup>1)</sup>	39	-	80	214	324	394	65
200	110/140	200	110*/140**	-	-	100	180	80	110	160	250	24,8 <sup>1)</sup>	39	-	80	214	324	394	65
-	-	200	140*	-	-	125	224	90	120	170	282	29,8 <sup>2)</sup>	42	-	100	264	394	490	98

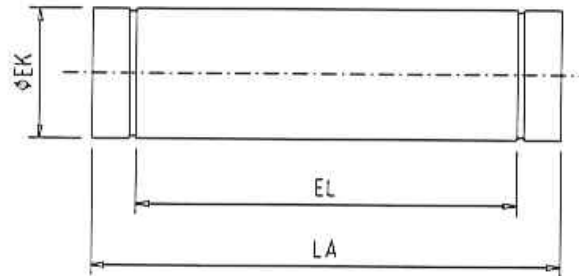
\*) Piston rod thread according to ISO 6020/1

\*\*) Piston rod thread according to IVW 39 D 920

1) Cylindrical pin D25x150 included

2) Cylindrical pole D30x160 included

## S-161 Axis

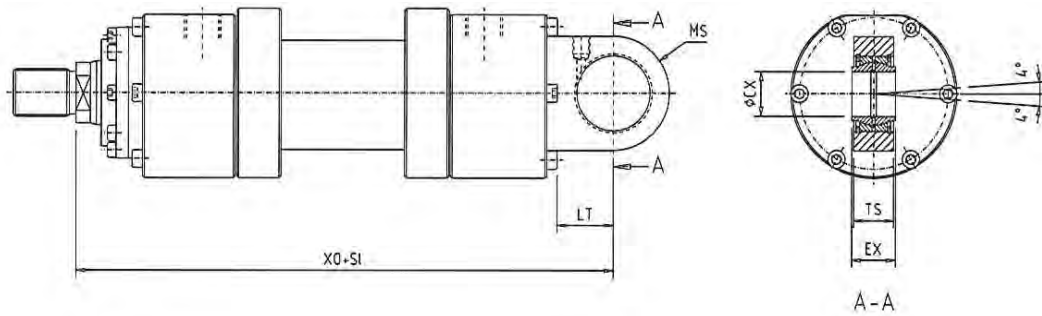


Cyl.dim. AL	Pistonrod. MM	EL	EK f8	LA	m Kg
50	28	73	25	90	0,4
50	36	73	25	90	0,4
63	36	92	32	110	0,8
63	45	92	32	110	0,8
80	45	104	40	124	1,3
80	56	104	40	124	1,3
100	56	130	50	154	2,5
100	70	130	50	154	2,5
125	70	163	63	190	5
125	90	163	63	190	5
160	90	204	80	240	10
160	110	204	80	240	90
200	110	260	100	304	20
200	140	260	100	304	112
-	-	325	125	375	38

Piston rod threads according to ISO 6020/1 or to IVW 39 D 920  
 Shaft kit including circlips

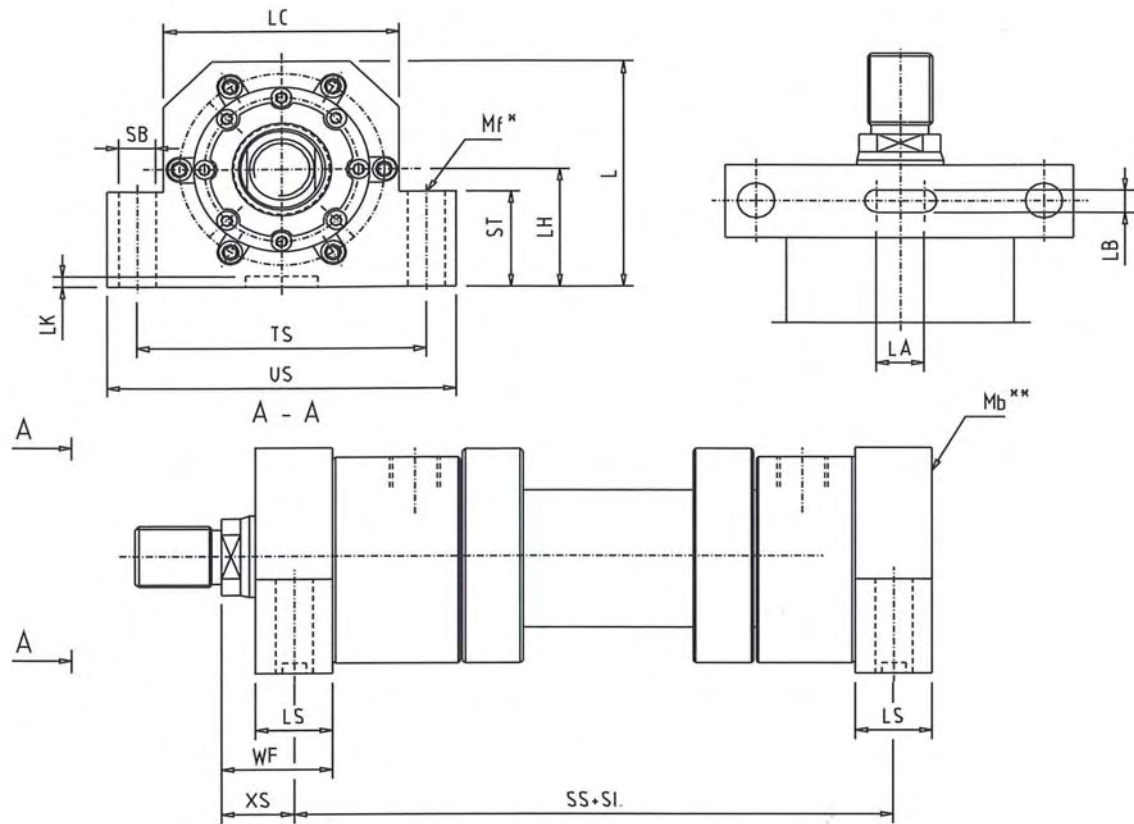


# S-161 MP5



Cyl.dim. AL	Pistonrod · MM	CX H7	TS	EX h12	LT	MS	XO
50	28	25	23	25	32	32	257
50	36	25	23	25	32	32	257
63	36	32	27	32	40	40	289
63	45	32	27	32	40	40	289
80	45	40	32	40	50	48	332
80	56	40	32	40	50	48	332
100	56	50	40	50	63	59	395
100	70	50	40	50	63	59	395
125	70	63	52	63	71	71	428
125	90	63	52	63	71	71	428
160	90	80	66	80	90	90	505
160	110	80	66	80	90	90	505
200	110	100	84	100	112	112	615
200	140	100	84	100	112	112	615

# S-161 MS2



Cyl.dim. AL	Pistonrod. MM	LA 1)	LB D10	LK	L	LH h10	LS	SB H13	SS ±2	ST	LC	TS js13	US	WF	XS ±2	Mb Nm	Mf Nm
50	28	20	10	4,5	100	52	32	15,5	199	52	97,5	120	145	38	22	17	80
50	36	20	10	4,5	100	52	32	15,5	199	52	97,5	120	145	38	22	17	80
63	36	20	10	4,5	122	62	32	17,5	211	62	120	150	180	45	29	17	195
63	45	20	10	4,5	122	62	32	17,5	211	62	120	150	180	45	29	17	195
80	45	28	14	5	135	70	40	22	236	70	130	170	210	54	34	41	385
80	56	28	14	5	135	70	40	22	236	70	130	170	210	54	34	41	385
100	56	34	16	6	163	82	50	26	293	82	158	205	250	57	32	87	660
100	70	34	16	6	163	82	50	26	293	82	158	205	250	57	32	87	660
125	70	37	18	6	198	100	56	33	321	100	192	245	300	60	32	149	1300
125	90	37	18	6	198	100	56	33	321	100	192	245	300	60	32	149	1300
160	90	45	22	8	242	119	60	33	364	119	248	295	350	66	36	353	1300
160	110	45	22	8	242	119	60	33	364	119	248	295	350	66	36	353	1300
200	110	122	28	9	290	145	72	39	447	145	285	350	415	75	39	353	2280
200	140	122	28	9	290	145	72	39	447	145	285	350	415	75	39	353	2280



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