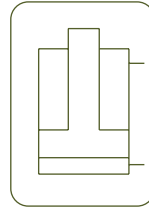


**DOUBLE ACTING CYLINDERS**

- ✓ Capacities from 10 to 550 ton, strokes up to 320 mm as standard.
- ✓ For push and pull applications.
- ✓ For heavy-duty applications, high precision and involving high-cycle life.
- ✓ Guide and sealing system of highest quality.
- ✓ Safety valve on the retract side to prevent accidental over-pressure.
- ✓ Collar threads, piston end threads and base mounting holes for easy fixing and pull operations.
- ✓ Compatible with SM accessories.
- ✓ Longer stroke models up to 1.500 mm upon request.



**DOUBLE ACTING CYLINDERS**



Type	<b>D</b>
Capacity	10 - 550 ton
Stroke	50 - 320 mm
Max. pressure	700 bar

**SM & D**  
Special attachments for SM and D models



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**DDA**  
Double Acting Aluminium Cylinders



P.48

**DDC**  
Double Acting High Tonnage Cylinders



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**AZ04**  
Optional Tilting Saddles available



P.90



**HBM / HBE**  
Powerpack



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**Z22107**  
Air Hydraulic Pump



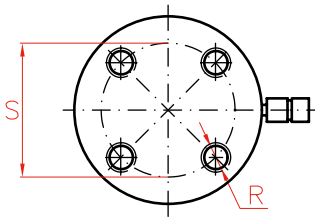
P.70

**X**  
Double Acting Hand Pumps

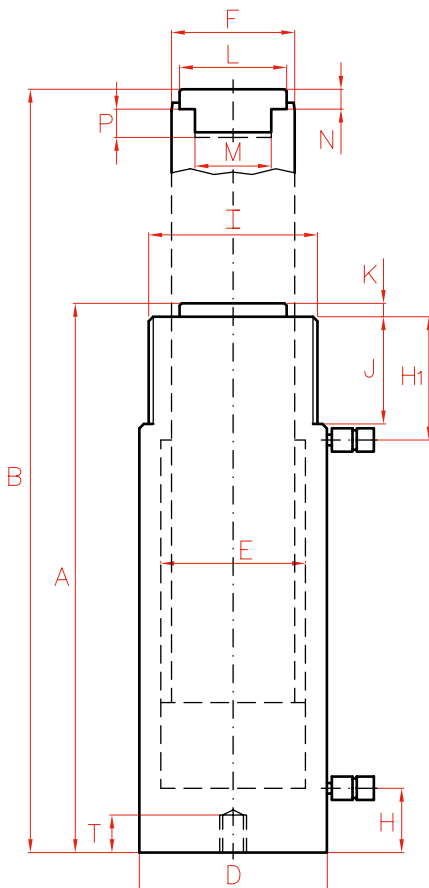
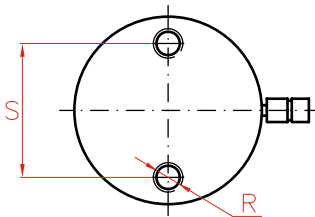


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**Models from 50 to 550 ton**



**Models up to 30 ton**

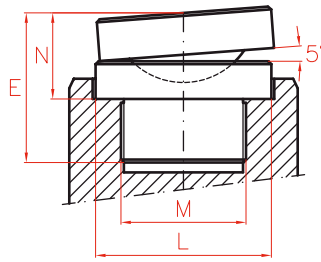


Capacity ton	Stroke mm	Model LARZEP	Capacity (kN)		Oil Cap. cm <sup>3</sup>	A mm	B mm	D mm	E mm	F mm
			Push	Pull						
10	160	D01016	109	20	255	310	470	60	45	36
	250	D01025	109	20	398	400	650	60	45	36
	320	D01032	109	20	509	470	790	60	45	36
20	160	D02016	214	53	499	320	480	83	63	45
	250	D02025	214	53	779	410	660	83	63	45
	320	D02032	214	53	997	480	800	83	63	45
30	160	D03016	303	68	707	335	495	100	75	56
	320	D03032	303	68	1.413	495	815	100	75	56
50	160	D05016	486	72	1.134	335	495	127	95	80
	320	D05032	486	72	2.267	510	830	127	95	80
75	160	D07516	712	140	1.661	338	498	150	115	90
	320	D07532	712	140	3.322	512	832	150	115	90
100	160	D10016	911	189	2.123	339	499	177	130	100
	320	D10032	911	189	4.245	509	829	177	130	100
150	50	D15005	1.380	370	1.005	258	308	215	160	110
	150	D15015	1.380	370	3.015	378	528	215	160	110
	300	D15030	1.380	370	6.029	528	828	215	160	110
200	50	D20005	2.156	560	1.570	274	324	265	200	140
	150	D20015	2.156	560	4.710	394	544	265	200	140
	300	D20030	2.156	560	9.420	544	844	265	200	140
350	50	D35005	3.368	1.014	2.454	299	349	330	250	160
	150	D35015	3.368	1.014	7.359	419	569	330	250	160
	300	D35030	3.368	1.014	14.718	569	869	330	250	160
550	50	D55005	5.519	1.714	4.020	383	433	430	320	200
	150	D55015	5.519	1.714	12.058	518	668	430	320	200
	300	D55030	5.519	1.714	24.116	668	968	430	320	200



OPTIONAL TILTING SADDLES

Model	L	M	N	E	Weight
LARZEP	mm	UN	mm	mm	kg
AZ0420	28	1"-8	29	43	0,2
AZ0423	35	1"-8	29	49	0,3
AZ0421	45	1 1/2"-16	28	50	0,4
AZ0422	61	1 3/4"-12	38	58	0,7
AZ0424	88	2 1/2"-12	47	82	2,5
AZ0425	111	2 1/2"-12	52	107	4,5



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DOUBLE ACTING CYLINDERS



Type

D

Capacity

10 - 550 ton

Stroke

50 - 320 mm

Max. pressure

700 bar

D CYLINDERS

H	H1	I	J	K	L	M	N	P	R	S	T	Area	Weight	Model	With tilting saddle	
mm	mm	UN	mm	mm	mm	UN	mm	mm	UN	mm	mm	cm <sup>2</sup>	kg	LARZEP	A	Model
20	53,5	2 1/4"-14	32	7	28	1"-8	10	24	5/16"-18	39	12	16	6,4	D01016	329	AZ0420
20	53,5	2 1/4"-14	32	7	28	1"-8	10	24	5/16"-18	39	12	16	8,0	D01025	419	AZ0420
20	53,5	2 1/4"-14	32	7	28	1"-8	10	24	5/16"-18	39	12	16	9,5	D01032	489	AZ0420
20	60	3 1/4"-12	40	8	35	1"-8	8	24	1/2"-13	58	15	31	11,7	D02016	341	AZ0423
20	60	3 1/4"-12	40	8	35	1"-8	8	24	1/2"-13	58	15	31	14,5	D02025	431	AZ0423
20	60	3 1/4"-12	40	8	35	1"-8	8	24	1/2"-13	58	15	31	16,8	D02032	501	AZ0423
26	77	3 7/8"-12	48	10	45	1 1/2"-16	10	25	1/2"-13	66	15	44	18,9	D03016	353	AZ0421
26	77	3 7/8"-12	48	10	45	1 1/2"-16	10	25	1/2"-13	66	15	44	26,6	D03032	513	AZ0421
28	70	5"-12	50	10	61	1 3/4"-12	10	25	1/2"-13	95	15	71	30,8	D05016	363	AZ0422
28	85	5"-12	50	10	61	1 3/4"-12	10	25	1/2"-13	95	15	71	44,8	D05032	538	AZ0422
30	70	5 3/4"-12	50	10	61	1 3/4"-12	10	25	1/2"-13	100	18	104	42,0	D07516	366	AZ0422
30	80	5 3/4"-12	50	10	61	1 3/4"-12	10	25	1/2"-13	100	18	104	60,6	D07532	540	AZ0422
38	70	6 7/8"-12	50	10	88	1 3/4"-12	16	30	3/4"-10	139	18	133	51,8	D10016	361	AZ0422
38	84	6 7/8"-12	50	10	88	1 3/4"-12	16	30	3/4"-10	139	18	133	84,1	D10032	531	AZ0422
49	85	8"-12	55	10	88	2 1/2"-12	15	40	3/4"-16	158	25	201	66,0	D15005	279	AZ0424
49	85	8"-12	55	10	88	2 1/2"-12	15	40	3/4"-16	158	25	201	90,0	D15015	410	AZ0424
49	85	8"-12	55	10	88	2 1/2"-12	15	40	3/4"-16	158	25	201	119,0	D15030	560	AZ0424
65	85	9 3/4"-12	55	10	111	2 1/2"-12	19	60	1"-8	127	25	314	105,0	D20005	307	AZ0425
65	85	9 3/4"-12	55	10	111	2 1/2"-12	19	60	1"-8	127	25	314	151,0	D20015	427	AZ0425
65	85	9 3/4"-12	55	10	111	2 1/2"-12	19	60	1"-8	127	25	314	191,0	D20030	577	AZ0425
85	90	12 1/4"-12	60	10	131	3"-12	15	70	1 1/4"-7	158	40	491	189,0	D35005	-	-
85	90	12 1/4"-12	60	10	131	3"-12	15	70	1 1/4"-7	158	40	491	247,0	D35015	-	-
85	90	12 1/4"-12	60	10	131	3"-12	15	70	1 1/4"-7	158	40	491	346,0	D35030	-	-
110	120	15 5/8"-8	80	15	178	4"-12	26	85	1 3/4"-5	203	55	804	396,0	D55005	-	-
110	120	15 5/8"-8	80	15	178	4"-12	26	85	1 3/4"-5	203	55	804	504,0	D55015	-	-
110	120	15 5/8"-8	80	15	178	4"-12	26	85	1 3/4"-5	203	55	804	625,0	D55030	-	-



## ATTACHMENTS FOR SM AND D MODELS

### Base Plate



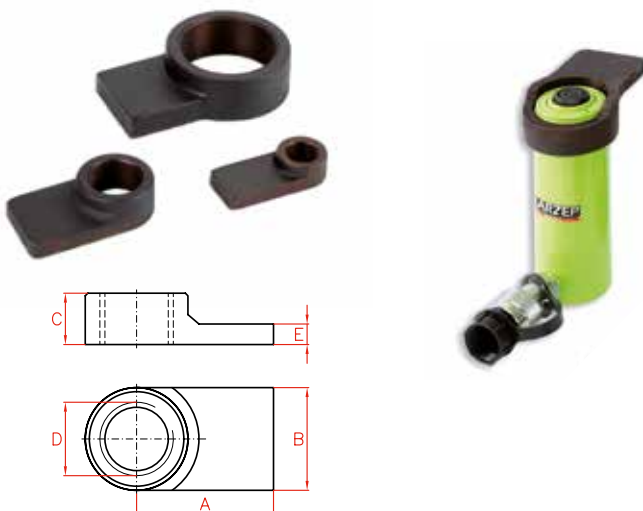
Capacity (ton)		Model	A	B	C	D	Weight
SM	D	LARZEP	mm	mm	mm	mm	kg
5	-	SM005P	150	15	25	7,0	2,2
10	10	SM010P	180	15	39	8,5	2,7
15	-	SM015P	180	15	47	10,0	2,7
23	20	SM023P	215	17	58	13,5	4,9
30	30	SM030P	215	17	66	13,5	4,9

### Mounting Block



Capacity (ton)		Model	A	B	C	D
SM	D	LARZEP	mm	mm	mm	UN
5	-	SM005B	76	90	25	1 1/2" - 16
10	10	SM010B	90	114	30	2 1/4" - 14
15	-	SM015B	100	114	30	2 3/4" - 16
23	-	SM023B	127	127	45	3 5/16" - 12
30	30	SM030B	135	135	45	3 7/8" - 12

### Collar Toe



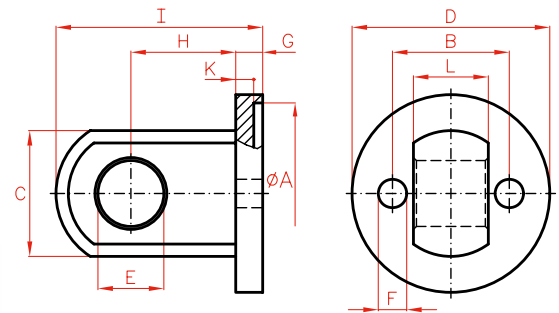
### WARNING

When using this accessory do not exceed 350 bar.

Capacity (ton)		Model	A	B	C	D	E
SM	D	LARZEP	mm	mm	mm	UN	mm
5	-	SM005U	54	31	25	1 1/2" - 16	11
10	10	SM010U	79	60	37	2 1/4" - 14	12
23	-	SM023U	105	80	40	3 5/16" - 12	20

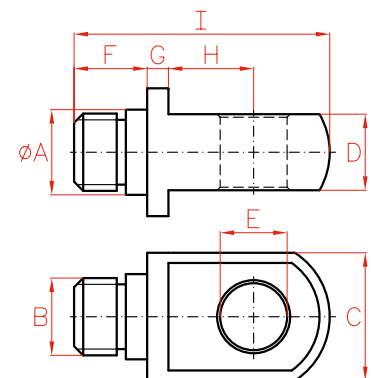


Clevis Eye Body



Capacity (ton)		Model	A	B	C	D	E	F	G	H	I	K	L
SM	D	LARZEP	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
5	-	SM005RB	41	25	28	46	16	8	9	25	50	6	14
10	10	SM010RB	61	39	42	66	22	10	9	35	69	6	25
15	-	SM015RB	76	47	42	82	22	11	9	35	69	6	25
23	20	SM023RB	86	58	57	95	31	14	12	41	84	7	38

Clevis Eye Piston



Capacity (ton)		Model	A	B	C	D	E	F	G	H	I
SM	D	LARZEP	mm	UN	mm	mm	mm	mm	mm	mm	mm
5	-	SM005RP	25	3/4"-16	28	14	16	15	5	19	55
10	10-20	SM010-15RP	28	1"-8	42	25	22	24	7	28	84
23	30	SM023RP	45	1 1/2"-16	57	38	31	27	8	35	101