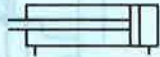
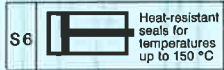


Double acting short stroke
cylinder
Type ADV-...



Special design



These short stroke piston cylinders are particularly suitable for clamping work requiring short movements e.g. in fixtures.

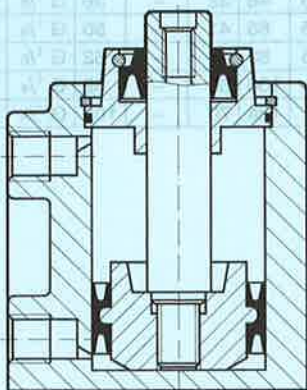
They are characterised by:

- rapid response when pressure is applied
- large clamping forces in relation to their size.

As a general rule, these cylinders should be run against an external stop.



4

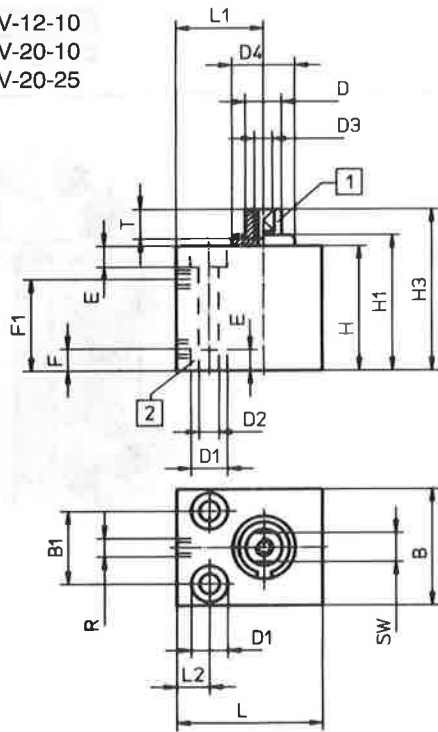


Permissible weight acting on piston rod

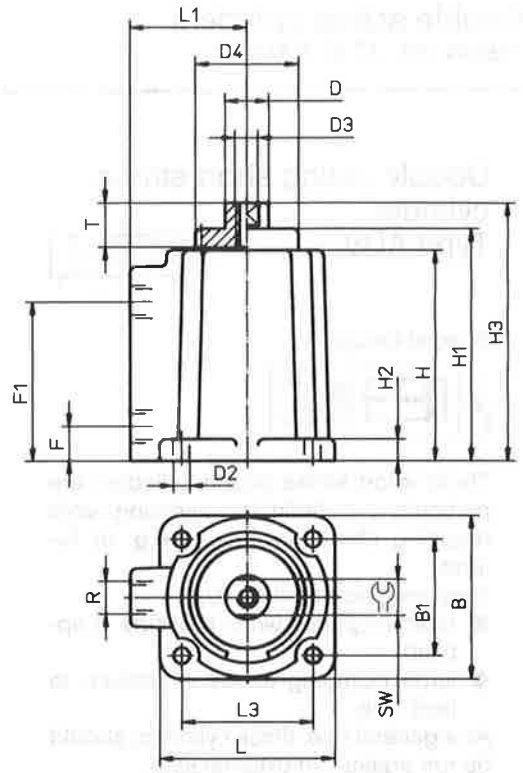
If the piston runs against a stop at full stroke, the weight acting on the piston rod must not exceed the values opposite.	Type	Weight
	ADV- 12-10	max. 25 g
	ADV- 20-10	max. 75 g
	ADV- 20-25	max. 75 g
	ADV- 32-25	max. 100 g
	ADV- 50-25	max. 200 g
	ADV- 63-25	max. 250 g
	ADV- 80-25	max. 300 g
	ADV-100-25	max. 600 g

Order code	Part No. + ADV + piston dia. + stroke length								
Medium	Compressed air, filtered (lubricated or unlubricated)								
Design	Piston cylinder								
Max. permissible operating pressure	8 bar								
Temperature range	- 20 to + 80 °C								
Materials	Housing: anodized aluminium (dia. 12 and 20); die-cast aluminium; brass (dia. 32 to 68); piston rod: stainless steel; seals: perbunan								
Order code				Piston dia. mm	Stroke length mm	Clamping force at 6 bar N (≈ kp)	Return force at 6 bar N (≈ kp)	Con- nection	Weight kg
Standard design	Special design S 6								
Part No.	Type	Part No.	Type						
9699	ADV-12-10	14774	ADV-12-10-S6	12	10	64 (6.4)	52 (5.2)	M 5	0.045
9701	ADV-20-10	14778	ADV-20-10-S6	20	10	175 (17.5)	128 (12.8)	M 5	0.140
13795	ADV-20-25	14779	ADV-20-25-S6	20	25	175 (17.5)	128 (12.8)	M 5	0.170
9703	ADV-32-25	14783	ADV-32-25-S6	32	25	460 (46)	390 (39)	G 1/8	0.245
9773	ADV-50-25	14787	ADV-50-25-S6	50	25	1100 (110)	980 (98)	G 1/8	0.400
9781	ADV-63-25	14791	ADV-63-25-S6	63	25	1760 (176)	1640 (164)	G 1/8	0.580
10053	ADV-80-25	14793	ADV-80-25-S6	80	25	2970 (297)	2780 (278)	G 1/4	0.955
10054	ADV-100-25	14795	ADV-100-25-S6	100	25	4630 (463)	4350 (435)	G 1/4	1.635

Type ADV-12-10
 ADV-20-10
 ADV-20-25



ADV- 32-25
 ADV- 50-25
 ADV- 63-25
 ADV- 80-25
 ADV-100-25

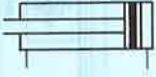


- 1 Male thread M 5 × 8 only on ADV-12-10
- 2 Lower counterbore only on ADV-20-25

Type	B	B ₁	D ∅	D ₁ ∅	D ₂ ∅	D ₃	D ₄	E	F	F ₁	H	H ₁	H ₂	H ₃	L	L ₁	L ₂	L ₃	R	T	
ADV-12-10	20	13	M 5	6	3.4	—	10.5	3.4	7	22.5	31	32	—	41	25	16	7	—	M 5	—	8
ADV-20-10	32	20	10	10	5.5	M 5	17.5	5.7	6	25	34	37	—	44	40	24	9	—	M 5	8	8
ADV-20-25	32	20	10	10	5.5	M 5	—	5.7	6	40	57	—	—	64	40	24	9	—	M 5	8	11
ADV-32-25	45	32	12	—	5.5	M 6	28.5	—	9.5	43.5	57.5	63.5	6	70.5	48	32	—	36	G 1/8	10	12
ADV-50-25	65	50	16	—	6.6	M 8	34	—	9	43.5	57.5	67	7.5	74.5	65	41	—	50	G 1/8	13	12
ADV-63-25	80	62	16	—	9	M 8	38.5	—	9.5	44.5	60.5	70	7.5	77.5	80	47	—	62	G 1/8	13	14
ADV-80-25	100	82	20	—	9	M 10	44	—	11	46	67	77	10	85	100	60	—	82	G 1/4	17	16
ADV-100-25	124	103	25	—	10.5	M 12	56	—	12	51	74.5	85	12	95	124	70	—	103	G 1/4	22	20

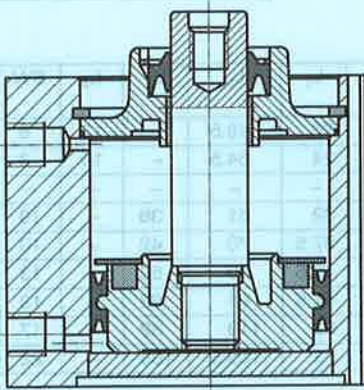
Short-stroke cylinder

Type ADV-...-A



These short-stroke piston cylinders are particularly suited for clamping work with short strokes, e.g. in fixtures. They are characterized by:

- Rapid response after application of pressure
- Large clamping forces in relation to their size.



4

There is a permanent magnet on the cylinder piston, the magnetic field of which is used to actuate reed or inductive type proximity switches. One or more proximity switches can be clamped in position in the longitudinal dovetail groove. These switches permit non-contact sensing of the end or intermediate positions of the cylinder.

For reed or inductive type proximity switches, see sheets 1.360, 1.362.

Max. permissible weight on piston rod

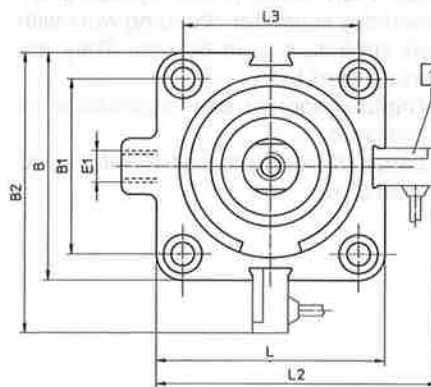
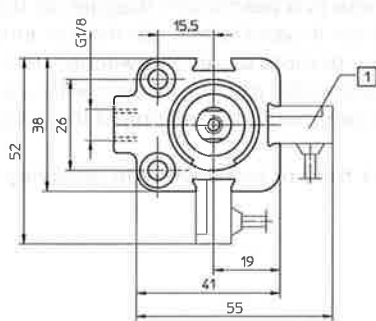
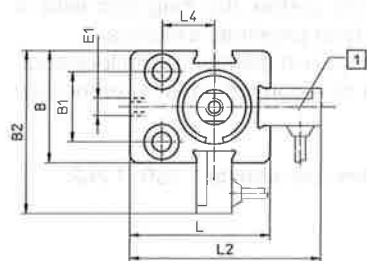
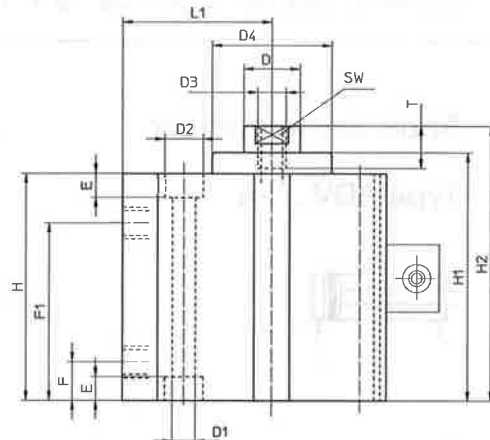
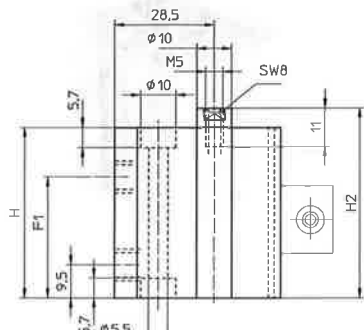
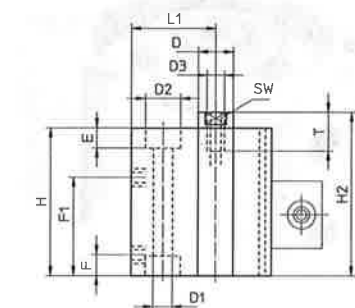
If the piston runs against the bearing cover at full stroke, the load attached to the piston rod must not exceed the following values.	Type	Weight
	ADV- 16-...-A	max. 50 g
	ADV- 20-...-A	max. 75 g
	ADV- 25-...-A	max. 75 g
	ADV- 32-...-A	max. 100 g
	ADV- 40-...-A	max. 150 g
	ADV- 50-...-A	max. 200 g
	ADV- 63-...-A	max. 250 g
	ADV- 80-...-A	max. 300 g
	ADV-100-...-A	max. 600 g

Order code	Part No. + ADV + piston dia. + stroke length + proximity sensing				
Medium	Compressed air, filtered (lubricated or unlubricated)				
Design	Piston cylinder				
Max. permissible operating pressure	8 bar				
Temperature range	- 20 to + 60 °C (observe range of application of proximity switch)				
Materials	Housing: anodized aluminium; Bearing cap: plastic (dia. 50, 63, 80, 100 mm: die-cast aluminium); Piston rod: stainless steel (dia. 16, 20, 25 mm: Al); Seals: perbunan				
Weights	see overleaf				
Piston dia. mm	Standard stroke lengths mm	Stroke lengths min. – max. mm	Clamping force at 6 bar N (≈ kp)	Return force at 6 bar N (≈ kp)	Connection
16	5, 10, 15, 20, 25, 30, 40	5 to 40	113 (11.3)	83 (8.3)	M5
20	5, 10, 15, 20, 25, 30, 40, 50	5 to 50	175 (17.5)	128 (12.8)	M5
25			275 (27.5)	228 (22.8)	G ¹ / ₈
32	5, 10, 15, 20, 25, 30, 40, 50, 60, 80	5 to 80	460 (46)	390 (39)	G ¹ / ₈
40			730 (73)	660 (66)	G ¹ / ₈
50	10, 15, 20, 25, 30, 40, 50, 60, 80	10 to 80	1100 (110)	980 (98)	G ¹ / ₈
63			1760 (176)	1640 (164)	G ¹ / ₈
80			2970 (297)	2780 (278)	G ¹ / ₄
100			4630 (463)	4350 (435)	G ¹ / ₄

Type ADV-16-...-A
ADV-20-...-A

Type ADV-25-...-A

Type ADV-...-A



[1] Reed switch Type SME-3-...

Type	B	B ₁	B ₂	D ∅	D ₁ ∅	D ₂ ∅	D ₃	D ₄	E	F	L	L ₁	L ₂	L ₃	L ₄	SW	T
ADV- 16-...-A	28	18	42,5	8	4,5	8	M4	—	4,6	6	34	20	48,5	—	12	6	8
ADV- 20-...-A	32	20	46,5	10	5,5	10	M5	—	5,7	6	40	24	54,5	—	15	8	11
ADV- 25-...-A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ADV- 32-...-A	45	32	59,5	12	5,5	10	M6	28,5	5,7	9,5	48	32	61	36	—	10	12
ADV- 40-...-A	55	42	70	12	5,5	10	M6	28	5,7	11	55	37,5	70	42	—	10	12
ADV- 50-...-A	65	50	80	16	6,6	11	M8	34	6,8	11	65	42,5	80	50	—	13	12
ADV- 63-...-A	80	62	94	16	9	15	M8	38,5	9	11	80	47,5	94	62	—	13	14
ADV- 80-...-A	100	82	113	20	9	15	M10	44	9	12,5	100	62	113	82	—	17	16
ADV-100-...-A	124	103	135,5	25	11	18	M12	56	11	12,5	124	72	135,5	103	—	22	20

Type	F ₁	H	H ₁	H ₂
ADV-16-5-A	23	37	—	41.5
ADV-16-10-A	28	42	—	46.5
ADV-16-15-A	33	47	—	51.5
ADV-16-20-A	38	52	—	56.5
ADV-16-25-A	43	63	—	67.5
ADV-16-30-A	48	68	—	72.5
ADV-16-40-A	58	78	—	82.5

Type	F ₁	H	H ₁	H ₂
ADV-20-5-A	23	37	—	41.5
ADV-20-10-A	28	42	—	46.5
ADV-20-15-A	33	47	—	51.5
ADV-20-20-A	38	52	—	56.5
ADV-20-25-A	43	63	—	67.5
ADV-20-30-A	48	68	—	72.5
ADV-20-40-A	58	78	—	82.5
ADV-20-50-A	68	88	—	92.5

Type	F ₁	H	H ₁	H ₂
ADV-25-5-A	29.5	43.5	—	49
ADV-25-10-A	34.5	48.5	—	54
ADV-25-15-A	39.5	53.5	—	59
ADV-25-20-A	44.5	58.5	—	64
ADV-25-25-A	49.5	64.5	—	70
ADV-25-30-A	54.5	69.5	—	75
ADV-25-40-A	64.5	79.5	—	85
ADV-25-50-A	74.5	89.5	—	95

Type	F ₁	H	H ₁	H ₂
ADV-32-5-A	27	44.5	49.5	55.5
ADV-32-10-A	32	49.5	54.5	60.5
ADV-32-15-A	37	54.5	59.5	65.5
ADV-32-20-A	42	59.5	64.5	70.5
ADV-32-25-A	47	64.5	69.5	75.5
ADV-32-30-A	52	69.5	74.5	80.5
ADV-32-40-A	62	79.5	84.5	90.5
ADV-32-50-A	72	89.5	94.5	100.5
ADV-32-60-A	82	99.5	104.5	110.5
ADV-32-80-A	102	119.5	124.5	130.5

Type	F ₁	H	H ₁	H ₂
ADV-40-5-A	30.5	44.5	50.5	57
ADV-40-10-A	35.5	49.5	55.5	62
ADV-40-15-A	40.5	54.5	60.5	67
ADV-40-20-A	45.5	59.5	65.5	72
ADV-40-25-A	50.5	64.5	70.5	77
ADV-40-30-A	55.5	69.5	75.5	82
ADV-40-40-A	65.5	79.5	85.5	92
ADV-40-50-A	75.5	89.5	95.5	102
ADV-40-60-A	85.5	99.5	105.5	112
ADV-40-80-A	105.5	119.5	125.5	132

Type	F ₁	H	H ₁	H ₂
ADV-50-10-A	35.5	49.5	55.5	63
ADV-50-15-A	40.5	54.5	60.5	68
ADV-50-20-A	45.5	59.5	65.5	73
ADV-50-25-A	50.5	64.5	70.5	78
ADV-50-30-A	55.5	69.5	75.5	83
ADV-50-40-A	65.5	79.5	85.5	93
ADV-50-50-A	75.5	89.5	95.5	103
ADV-50-60-A	85.5	99.5	105.5	113
ADV-50-80-A	105.5	119.5	125.5	133

Type	F ₁	H	H ₁	H ₂
ADV-63-10-A	37.3	52	60	67
ADV-63-15-A	42.3	57	65	72
ADV-63-20-A	47.3	62	70	77
ADV-63-25-A	52.3	67	75	82
ADV-63-30-A	57.3	72	80	87
ADV-63-40-A	67.3	82	90	97
ADV-63-50-A	77.3	92	100	107
ADV-63-60-A	87.3	102	110	117
ADV-63-80-A	107.3	122	130	137

Type	F ₁	H	H ₁	H ₂
ADV-80-10-A	39.5	56	66	74
ADV-80-15-A	44.3	61	71	79
ADV-80-20-A	49.3	66	76	84
ADV-80-25-A	54.3	71	81	89
ADV-80-30-A	59.3	76	86	94
ADV-80-40-A	69.3	86	96	104
ADV-80-50-A	79.3	96	106	114
ADV-80-60-A	89.3	106	116	124
ADV-80-80-A	109.3	126	136	144

Type	F ₁	H	H ₁	H ₂
ADV-100-10-A	45.5	66	76.5	86.5
ADV-100-15-A	50.8	71	81.5	91.5
ADV-100-20-A	55.8	76	86.5	96.5
ADV-100-25-A	60.8	81	91.5	101.5
ADV-100-30-A	65.5	86	96.5	106.5
ADV-100-40-A	75.8	96	106.5	116.5
ADV-100-50-A	85.5	106	116.5	126.5
ADV-100-60-A	95.5	116	126.5	136.5
ADV-100-80-A	115.8	136	146.5	156.5

Order code					Order code					Order code				
Part No.	Type	Piston dia.	Stroke	Weights kg	Part No.	Type	Piston dia.	Stroke	Weights kg	Part No.	Type	Piston dia.	Stroke	Weights kg
19351	ADV-16-	16-	5-A	0.075	19352	ADV-20-	20-	5-A	0.100	19353	ADV-25-	25-	5-A	1.145
14907	ADV-16-	16-	10-A	0.085	12491	ADV-20-	20-	10-A	0.115	14912	ADV-25-	25-	10-A	0.165
19295	ADV-16-	16-	15-A	0.092	19299	ADV-20-	20-	15-A	0.120	19303	ADV-25-	25-	15-A	0.180
19296	ADV-16-	16-	20-A	0.100	19300	ADV-20-	20-	20-A	0.145	19304	ADV-25-	25-	20-A	0.195
14908	ADV-16-	16-	25-A	0.120	13681	ADV-20-	20-	25-A	0.170	14913	ADV-25-	25-	25-A	0.210
19297	ADV-16-	16-	30-A	0.130	19301	ADV-20-	20-	30-A	0.190	19305	ADV-25-	25-	30-A	0.230
19298	ADV-16-	16-	40-A	0.148	19302	ADV-20-	20-	40-A	0.250	19306	ADV-25-	25-	40-A	0.255
					14029	ADV-20-	20-	50-A	0.225	14914	ADV-25-	25-	50-A	0.280
19354	ADV-32-	32-	5-A	0.234	19355	ADV-40-	40-	5-A	0.322	19321	ADV-50-	50-	10-A	0.492
19307	ADV-32-	32-	10-A	0.255	19314	ADV-40-	40-	10-A	0.347	19322	ADV-50-	50-	15-A	0.530
19308	ADV-32-	32-	15-A	0.278	19315	ADV-40-	40-	15-A	0.373	19323	ADV-50-	50-	20-A	0.562
19309	ADV-32-	32-	20-A	0.297	19316	ADV-40-	40-	20-A	0.400	12492	ADV-50-	50-	25-A	0.610
13277	ADV-32-	32-	25-A	0.324	14917	ADV-40-	40-	25-A	0.426	19324	ADV-50-	50-	30-A	0.653
19310	ADV-32-	32-	30-A	0.341	19317	ADV-40-	40-	30-A	0.457	19325	ADV-50-	50-	40-A	0.712
19311	ADV-32-	32-	40-A	0.383	19318	ADV-40-	40-	40-A	0.513	14033	ADV-50-	50-	50-A	0.785
14031	ADV-32-	32-	50-A	0.421	14918	ADV-40-	40-	50-A	0.562	19326	ADV-50-	50-	60-A	0.865
19312	ADV-32-	32-	60-A	0.466	19319	ADV-40-	40-	60-A	0.622	19327	ADV-50-	50-	80-A	1.000
19313	ADV-32-	32-	80-A	0.553	19320	ADV-40-	40-	80-A	0.731					
19328	ADV-63-	63-	10-A	0.720	19335	ADV-80-	80-	10-A	1.000	19342	ADV-100-	100-	10-A	2.130
19329	ADV-63-	63-	15-A	0.760	19336	ADV-80-	80-	15-A	1.160	19343	ADV-100-	100-	15-A	2.235
19330	ADV-63-	63-	20-A	0.814	19337	ADV-80-	80-	20-A	1.305	19344	ADV-100-	100-	20-A	2.340
13278	ADV-63-	63-	25-A	0.880	12493	ADV-80-	80-	25-A	1.434	13279	ADV-100-	100-	25-A	2.510
19331	ADV-63-	63-	30-A	0.925	19338	ADV-80-	80-	30-A	1.500	19345	ADV-100-	100-	30-A	2.780
19332	ADV-63-	63-	40-A	1.000	19339	ADV-80-	80-	40-A	1.674	19346	ADV-100-	100-	40-A	2.950
14035	ADV-63-	63-	50-A	1.100	14037	ADV-80-	80-	50-A	1.826	14039	ADV-100-	100-	50-A	3.080
19333	ADV-63-	63-	60-A	1.190	19340	ADV-80-	80-	60-A	2.050	19347	ADV-100-	100-	60-A	3.380
19334	ADV-63-	63-	80-A	1.385	19341	ADV-83-	83-	80-A	2.296	19348	ADV-100-	100-	80-A	3.703