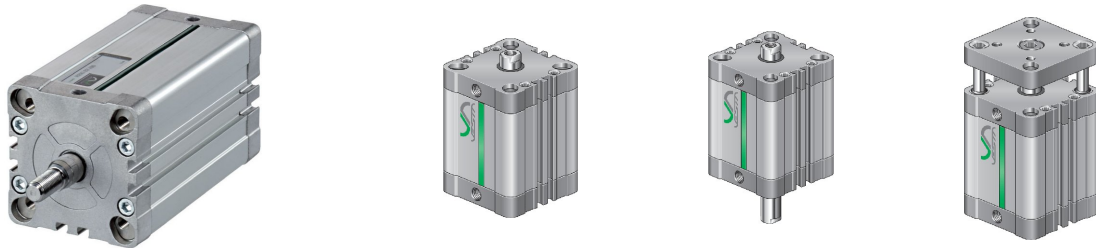


Compact solenoid cylinder with accessories Series NSK



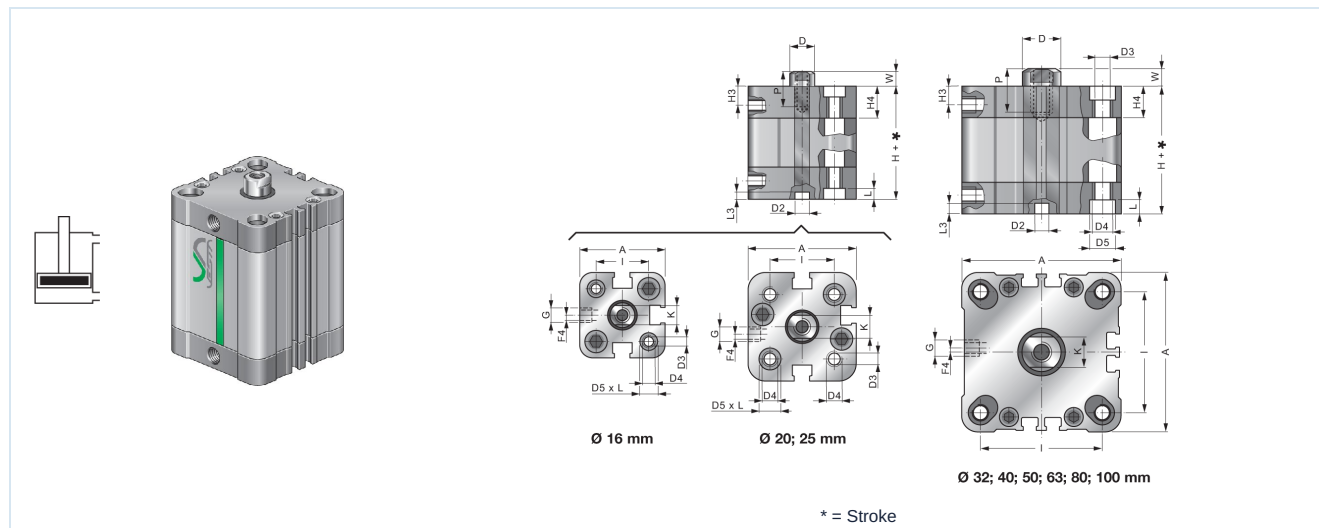
Design type	Compact solenoid cylinder optionally according to UNITOP standard or ISO 21287
Heads	High-pressure die casting Aluminium alloy
Piston rod	Ø16 ÷ 25 Stainless steel 1.4401, Ø32 ÷ 100 Stainless steel 1.4021
Cylinder tube	Aluminium profile hard anodized
Seals	Polyurethane
Stopper	mechanical
Ambient temperature	-20°C...+80°C (-25°C...+120°C for version High-temperature polyurethane complete)
Medium temperature	0°C...+30°C
Lubrication	not necessary
Medium	filtered compressed air
maximum operating pressure	10bar
Note	CAD files are available in the STASTO Store at www.stasto.eu Solenoid switch see separate data sheet

Type code

NSK	—	—	—	—	—
U	UNITOP	16 Ø16	Stroke [mm]	F	Female thread
I	ISO 21287	20 Ø20		M	Male thread
		25 Ø25			double-acting
		32 Ø32			SEA single-acting Front spring
		40 Ø40			SEP single-acting Spring rear
					P continuous piston rod
					AR anti-rotation secured
		50 Ø50			VS High-temperature polyurethane Piston rod seal
		63 Ø63			VV High-temperature polyurethane complete
		80 Ø80			
		100 Ø100			



NSK . - .. double-acting



Ø	A	ØD	ØD2	ØD3	ØD4 UNITOP/ISO	ØD5 UNITOP/ISO	G	H3	H4	I UNITOP/ISO	K	L	L3	W UNITOP/ISO	F4	H UNITOP/ISO
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	38/37 (± 0,5)
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	4,5/6	4	38/37 (± 0,5)
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	5,5/6	3	39,5/39 (± 0,5)
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32/32,5	10	4,5	2	6/7	0	44,5/44 (± 0,5)
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	42/38	10	4,2	2	6,5/7	0	45,5/45 (± 0,7)
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	50/46,5	13	4,7	2,5	7,5/8	0	45,5/45 (± 0,7)
63	80	16	8	6,7	M10/M8	13,5/10,5	G1/8	8	15,5	62/56,5	13	5,2	2,5	7,5/8	0	50/49 (± 0,8)
80	102,6	20	8	8,5	M10	13,5	G1/8	9	17	82/72	17	5,2	2,5	8/10	0	56/54 (± 0,8)
100	124	25	8	8,5	M10	13,5	G1/4	10	20	103/89	22	5,2	3	10	0	66,5/67 (± 1)

NSK . - .. P continuous piston rod

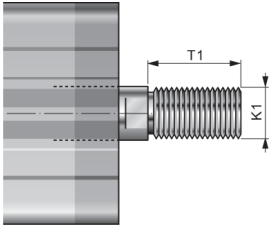
Ø	W UNITOP/ISO	H UNITOP/ISO
16	4,5	38/37 (± 0,5)
20	4,5/6	38/37 (± 0,5)
25	5,5/6	39,5/39 (± 0,5)
32	6/7	44,5/44 (± 0,5)
40	6,5/7	45,5/45 (± 0,7)
50	7,5/8	45,5/45 (± 0,7)
63	7,5/8	50/49 (± 0,8)
80	8/10	56/54 (± 0,8)
100	10	66,5/67 (± 1)

NSK . - F Piston rod with internal thread

Ø	ØD1 UNITOP/ISO	P UNITOP/ISO
16	M4	8
20	M5/M6	10
25	M5/M6	10
32	M6/M8	12
40	M6/M8	12
50	M8/M10	12/16
63	M8/M10	14/16
80	M10/M12	15/20
100	M12	20



NSK . - M Piston rod with external thread

	Ø	ØK1 UNITOP/ISO	T1 UNITOP/ISO
	16	M8x1,25/M6x1	20/12
	20	M10x1,25/M8x1,25	22/16
	25	M10x1,25/M8x1,25	22/16
	32	M10x1,25	22/19
	40	M10x1,25	22/19
	50	M12x1,25	24/22
	63	M12x1,25	24/22
	80	M16x1,5	32/28
	100	M20x1,5/M16x1,5	40/28

NSK . - ... SEA single-acting Front spring

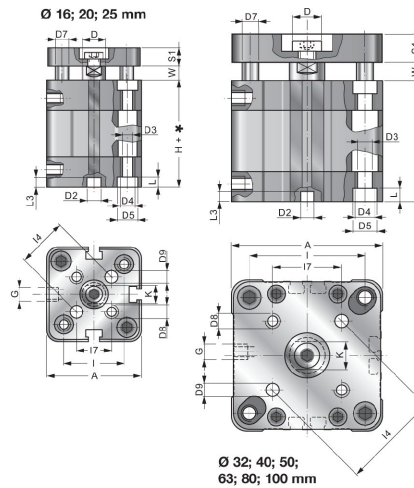
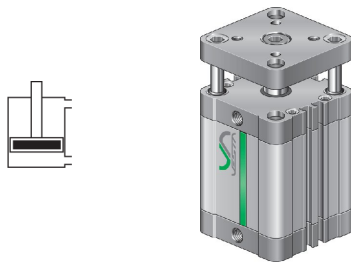
Ø	Spring force [N]		H (Stroke 0-25mm) UNITOP/ISO	H (Stroke 26-50mm) UNITOP/ISO	W UNITOP/ISO
	max.	min.			
16	21	12	38/37 (± 0,5)	48/47 (± 0,5)	4,5
20	39	22	38/37 (± 0,5)	48/47 (± 0,5)	4,5/6
25	45	28	39,5/39 (± 0,5)	59,5/59 (± 0,5)	5,5/6
32	45	28	44,5/44 (± 0,5)	64,5/64 (± 0,5)	6/7
40	61	39	45,5/45 (± 0,7)	65,5/65 (± 0,7)	6,5/7
50	90	58	45,5/45 (± 0,7)	65,5/65 (± 0,7)	7,5/8
63	95	62	50/49 (± 0,8)	70/69 (± 0,8)	7,5/8
80	150	115	56/54 (± 0,8)	86/84 (± 0,8)	8/10
100	160	125	66,5/67 (± 1)	96,5/97 (± 1)	10

NSK . - ... SEP single-acting Rear spring

Ø	Spring force [N]		H (Stroke 0-25mm) UNITOP/ISO	H (Stroke 26-50mm) UNITOP/ISO	W UNITOP/ISO
	max.	min.			
16	21	12	38/37 (± 0,5)	48/47 (± 0,5)	4,5
20	39	22	38/37 (± 0,5)	48/47 (± 0,5)	4,5/6
25	45	28	39,5/39 (± 0,5)	59,5/59 (± 0,5)	5,5/6
32	45	28	44,5/44 (± 0,5)	64,5/64 (± 0,5)	6/7
40	61	39	45,5/45 (± 0,7)	65,5/65 (± 0,7)	6,5/7
50	90	58	45,5/45 (± 0,7)	65,5/65 (± 0,7)	7,5/8
63	95	62	50/49 (± 0,8)	70/69 (± 0,8)	7,5/8
80	150	115	56/54 (± 0,8)	86/84 (± 0,8)	8/10
100	160	125	66,5/67 (± 1)	96,5/97 (± 1)	10



NSK . - .. AR double-acting anti-rotation secured



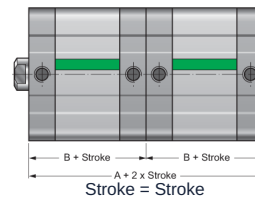
* = Stroke

Ø	A	ØD	ØD2	ØD3 UNITOP/ISO	ØD4 UNITOP/ISO	ØD5 UNITOP/ISO	ØD7	ØD8	ØD9	G	I UNITOP/ISO	I4	I7	K	L	L3	S1	W UNITOP/ISO	H UNITOP/ISO
16	29,2	8	6	3,3	M4	6	5	M3	3	M5	18	14	9,9	6	3,5	2,2	6	4,5	38/37 (± 0,5)
20	37	10	6	4,2	M5	7,5	5	M4	4	M5	22	17	12	8	4,2	2,5	8	4,5/6	38/37 (± 0,5)
25	41	10	6	4,2	M5	7,5	6	M5	5	M5	26	22	15,6	8	4,2	2,5	8	5,5/6	39,5/39 (± 0,5)
32	49,2	12	6	5,2	M6	9	8	M5	5	G1/8	32/32,5	28	19,8	10	4,5	2	10	6/7	44,5/44 (± 0,5)
40	57,2	12	6	5,2	M6	9	10	M5	5	G1/8	42/38	33	23,3	10	4,2	2	10	6,5/7	45,5/45 (± 0,7)
50	67	16	8	6,7	M8	10,5	10	M6	6	G1/8	50/46,5	42	29,7	13	4,7	2,5	12	7,58	45,5/45 (± 0,7)
63	80	16	8	8,5/6,7	M10/M8	13,5/10,5	10	M6	6	G1/8	62/56,5	50	35,4	13	5,2	2,5	12	7,58	50/49 (± 0,8)
80	102,6	20	8	8,5	M10	13,5	14	M8	8	G1/8	82/72	65	46	17	5,2	2,5	14	8/10	56/54 (± 0,8)
100	124	25	8	8,5	M10	13,5	14	M10	10	G1/4	103/89	80	56,6	22	5,2	3	14	10	66,5/67 (± 1)

NSK ... TN2 ... Tandem



NSK	_	_	/	_	_	_	TN2 P	M
	U	UNITOP	Ø		Stroke [mm]		F	Female thread
	I	ISO 21287					M	Male thread

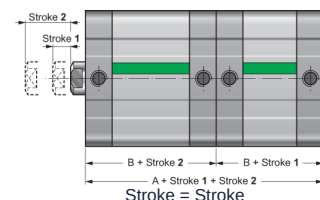


Ø	A	B
32	88,4	44,2
40	90,4	45,2
50	90,4	45,2
63	99	49,5
80	110	55
100	133,4	66,7

NSK ... BS ... Multi-position



NSK	_	_	/	_	_	_	BS	M
	U	UNITOP	Ø		Stroke1 [mm]		Stroke2 [mm]	F
	I	ISO 21287						M



Ø	A	B
32	88,4	44,2
40	90,4	45,2
50	90,4	45,2
63	99	49,5
80	110	55
100	133,4	66,7



NSK ... CNP ... Multi-position bottom side

NSK	_	_ / _	Stroke1 [mm]	Stroke2 [mm]	CNP	M
	U UNITOP	Ø			F Female thread	
	I ISO 21287				M Male thread	

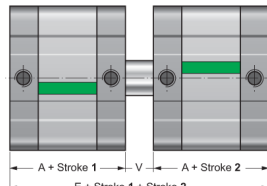
Stroke = Stroke

Ø	A	B
16	76	38
20	76	38
25	79	39,5
32	88,4	44,2
40	90,4	45,2
50	90,4	45,2
63	99	49,5
80	110	55
100	133,4	66,7

NSK ... CNF ... Multi-position piston rod side



NSK	_	_ / _	Stroke1 [mm]	Stroke2 [mm]	CNF
	U UNITOP	Ø			
	I ISO 21287				

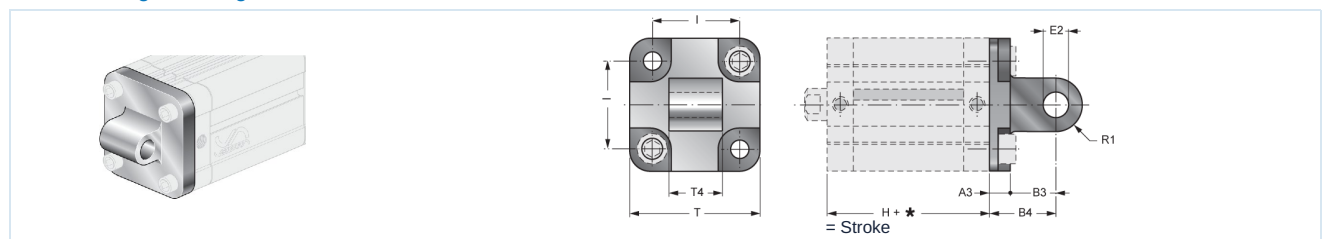


Stroke = Stroke

Ø	E	A	V
16	85	38	9
20	85	38	9
25	90	39,5	11
32	100,4	44,2	12
40	103,4	45,2	13
50	104,4	45,2	15
63	114	49,5	15
80	126	55	16
100	153,4	66,7	20

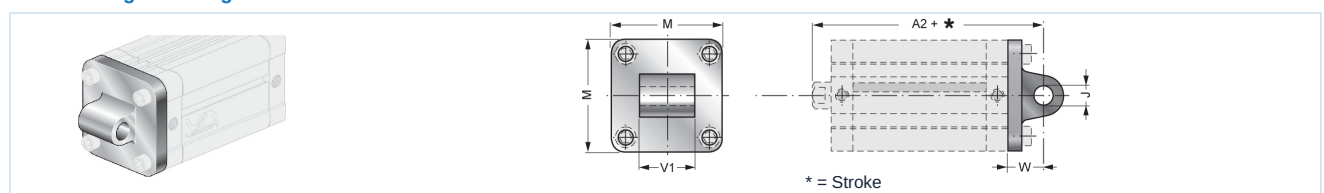
Accessories

SKCM / .. Lug mounting UNITOP



Ø	A3	B3	B4	E2	H	I	R1	T	T4	Type
16	6	10	16	6	38	18	6	27	12	SKCM/16
20	6	14	20	8	38	22	8	34	16	SKCM/20
25	6	14	20	8	39,5	26	8	638	16	SKCM/25

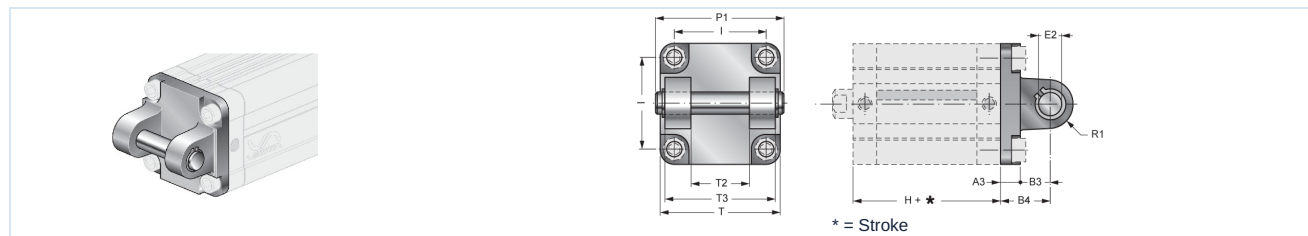
XCM / .. Lug mounting ISO 15552



Ø	A2	ØJ	M	V1	W	Type
32	73	10	47	26	22	XCM/32
40	77	12	54	28	25	XCM/40
50	80	12	66	32	27	XCM/50
63	89	16	78	40	32	XCM/63
80	100	16	98	50	36	XCM/80
100	118	20	115	60	41	XCM/100

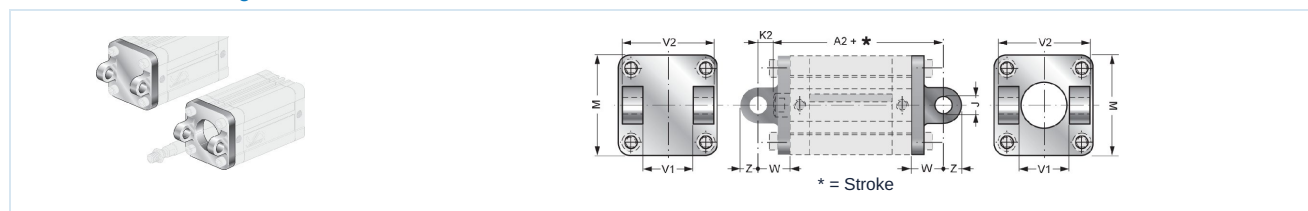


SKCF / .. Clevis mounting UNITOP



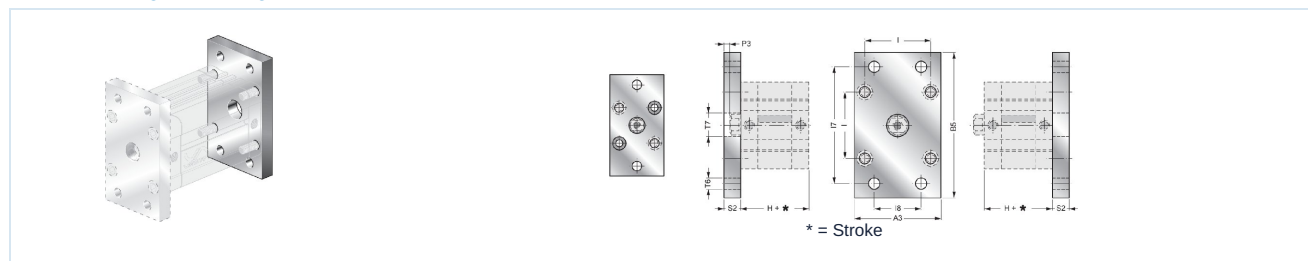
Ø	A3	B3	B4	E2	H	I	P1	R1	T	T2	T3	Type
32	9	13	22	10	44,5	32	53	10	48	26	45	SKCF/32
40	9	16	25	12	45,5	42	60	12,5	58	28	52	SKCF/40
50	11	16	27	12	45,5	50	68	12,5	66	32	60	SKCF/50
63	11	21	32	16	50	62	78	15	83	40	70	SKCF/63
80	13	23	36	16	56	82	98	15	102	50	90	SKCF/80
100	15	26	41	20	66,5	103	118	20	123	60	110	SKCF/100

XCF / .. Clevis mounting front and rear ISO 15552



Ø	A2	ØJ	K2	M	V1	V2	W	Z	Type front	Type rear
32	73	10	15	45	26	45	22	11	XCFA/32	XCF/32
40	77	12	18	52	28	52	25	13	XCFA/40	XCF/40
50	80	12	19	65	32	60	27	13	XCFA/50	XCF/50
63	89	16	24	75	40	70	32	17	XCFA/63	XCF/63
80	100	16	26	95	50	90	36	17	XCFA/80	XCF/80
100	118	20	31	115	60	110	41	21	XCFA/100	XCF/100

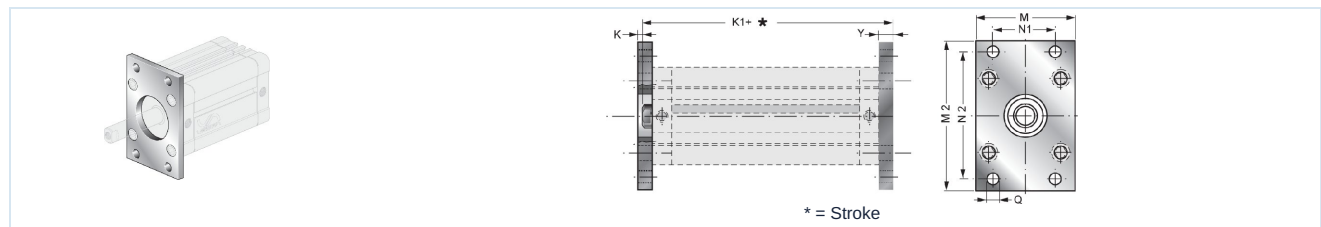
SKFL / .. Flange mounting UNITOP



Ø	A3	B5	H	I	I7	I8	P3	S2	T6	T7	Type
16	29	55	38	18	43	-	5,5	10	5,5	10	SKFL/16
20	36	70	38	22	55	-	5,5	10	6,5	12	SKFL/20
25	40	76	39,5	26	60	-	4,5	10	6,5	12	SKFL/25
32	50	80	44,5	32	65	32	4	10	7	14	SKFL/32
40	60	102	45,5	42	82	36	3,5	10	9	14	SKFL/40
50	68	110	45,5	50	90	45	4,5	12	9	18	SKFL/50
63	87	130	50	62	110	50	7,5	15	9	18	SKFL/63
80	107	160	56	82	135	63	7	15	12	23	SKFL/80
100	128	190	66,5	103	163	75	5	15	14	28	SKFL/100

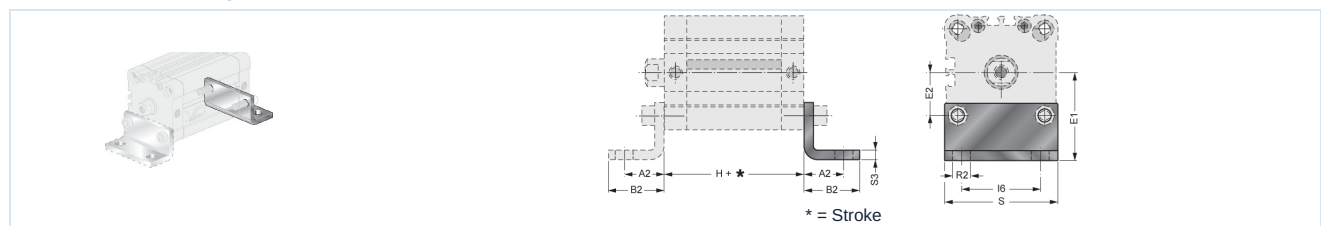


XFL / .. Flange mounting ISO 15552



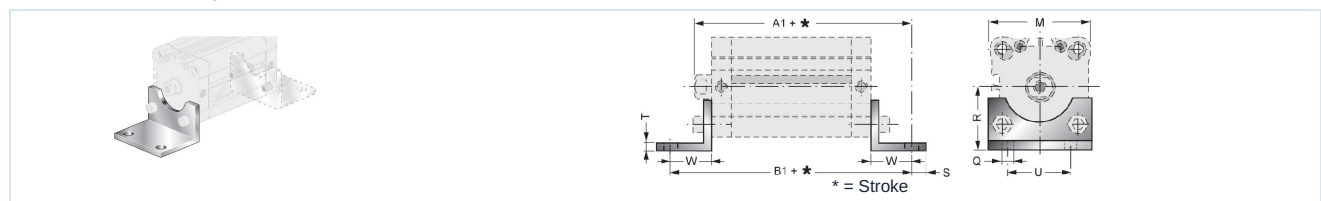
Ø	K	K1	M	M2	N1	N2	ØQ	Y	Type
32	3	61	45	80	32	64	7	10	XFL/32
40	3	62	52	90	36	72	9	10	XFL/40
50	4	65	65	110	45	90	9	12	XFL/50
63	4	69	75	120	50	100	9	12	XFL/63
80	6	80	95	150	63	126	12	16	XFL/80
100	6	93	115	170	75	150	14	16	XFL/100

SKP / .. Foot mounting UNITOP



Ø	A2	B2	E1	E2	H	I6	R2	S	S3	Type
16	13	17,5	22	9	38	18	5,5	30	3	SKP/16
20	16	22	27	11	38	22	6,5	36	4	SKP/20
25	16	22	30	13	39,5	26	6,5	40	4	SKP/25
32	18	26	32	16	44,5	32	6,5	50	5	SKP/32
40	20	28	42,5	21	45,5	42	9	60	5	SKP/40
50	24	32	47	25	45,5	50	9	68	6	SKP/50
63	27	39	59,5	31	50	62	11	84	6	SKP/63
80	30	42	65,5	41	56	82	11	102	8	SKP/80
100	33	45	78	51,5	66,5	103	13,5	123	8	SKP/100

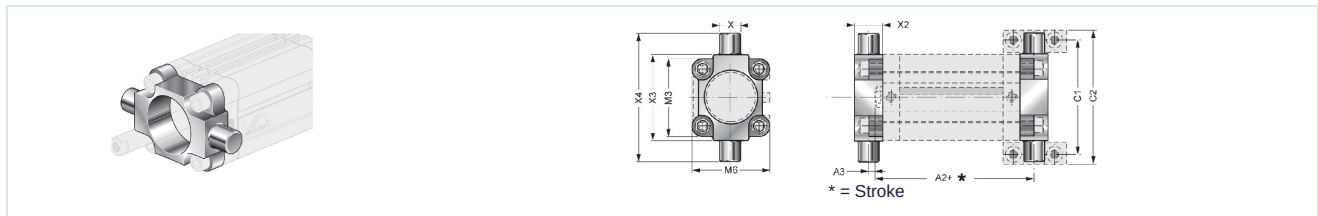
XP / .. Foot mounting ISO 15552



Ø	A1	B1	M	ØQ	R	S	T	U	W	Type
32	75	92	45	7	32	11	4	32	24	XP/32
40	80	101	52	9	36	15	4	36	28	XP/40
50	85	109	65	9	45	15	5	45	32	XP/50
63	89	113	75	9	50	15	5	50	32	XP/63
80	105	136	95	12	63	20	6	63	41	XP/80
100	118	149	115	14	71	25	6	75	41	XP/100

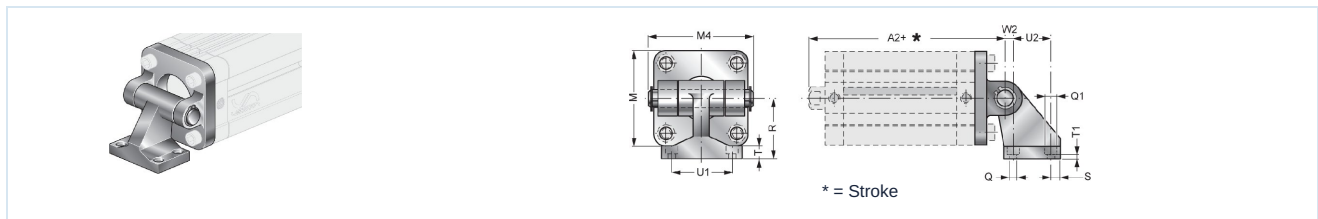


XCBF/ .. Swivel mounting ISO 15552



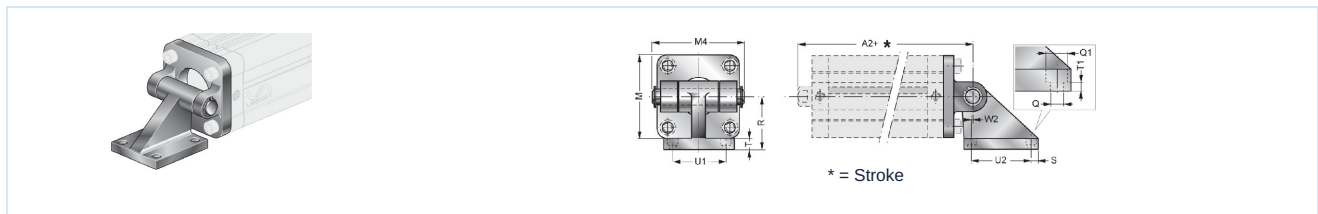
Ø	A2	A3	C1	C2	M3	M6	X e9	X2	X3	X4	Type
32	58,5	0,5	71	86	45	45	12	15	50	74	XCBF/32
40	62	3	87	105	54	54	16	20	63	95	XCBF/40
50	63	2	99	117	64	64	16	20	75	107	XCBF/50
63	69,5	4,5	16	136	75	75	20	25	90	130	XCBF/63
80	76,5	2,5	36	156	93	93	20	25	110	150	XCBF/80
100	92	5	64	189	110	110	25	30	132	182	XCBF/100

XAS/ .. Angle swivel mounting lightweight CETOP RP107P ISO



Ø	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Type
32	73	45	54	7	11	32	6,5	8	6,5	38	18	3	XAS/32
40	77	52	63	7	11	36	6,5	10	8,5	41	22	2	XAS/40
50	80	65	71	9	15	45	7,5	12	10,5	50	30	3	XAS/50
63	89	75	81	9	15	50	7,5	14	12,5	52	35	2	XAS/63
80	100	95	101	11	18	63	10	14	11,5	66	40	7	XAS/80
100	118	115	123	11	18	71	10	17	14,5	76	50	5	XAS/100

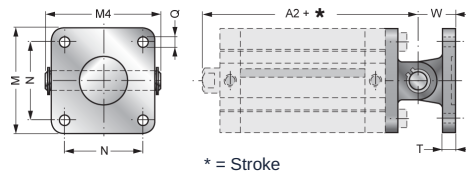
XASV/ .. Angle swivel mounting heavy ISO



Ø	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Type
32	73	45	54	7	11	32	8	10	5	32,5	32,5	0	XASV/32
40	77	52	63	7	11	36	8,5	10	5	38	38	0	XASV/40
50	80	65	71	9	15	45	10	12	5	46,5	46,5	0	XASV/50
63	89	75	81	9	15	50	10	12	5	56,5	56,5	0	XASV/63
80	100	95	101	11	18	63	12,5	14	6	72	72	0	XASV/80
100	118	115	123	11	18	73	13	16	6	89	89	0	XASV/100

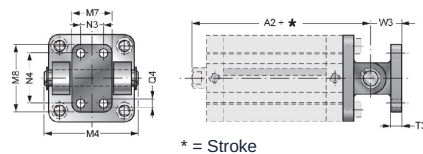
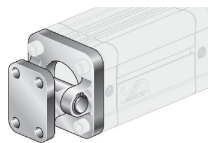


XANL/ .. Swivel mounting ISO



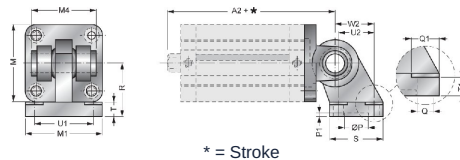
Ø	A2	M	M4	N	ØQ	T	W	Type
32	73	45	54	32,5	7	10	22	XANL/32
40	77	52	63	38	7	10	25	XANL/40
50	80	65	71	46,5	9	12	27	XANL/50
63	89	75	81	56,5	9	12	32	XANL/63
80	100	95	101	72	11	16	36	XANL/80
100	118	115	123	89	11	16	41	XANL/100

XANN/ .. Swivel mounting ISO



Ø	A2	M4	M7	M8	N3	N4	ØQ4	T3	W3	Type
32	73	54	25	40	-	28	7	8	18	XANN/32
40	77	63	28	52	16	38	9	10	26	XANN/40
50	80	71	32	52	16	38	9	10	26	XANN/50
63	89	81	40	75	25	54	11	12	34	XANN/63
80	100	101	50	75	25	54	11	12	34	XANN/80
100	118	123	60	115	32	90	14	16	41	XANN/100

XAS-SN/ .. Angle swivel mounting spherical ISO



Ø	A2	M	M1	41	ØP	P1	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Type
32	73	45	51	41	20	3	6,6	11	32	31	10	8,5	38	18	21	XAS-SN/32
40	77	52	54	48	20	3	6,6	11	26	35	10	8,5	41	22	24	XAS-SN/40
50	80	65	65	54	20	3	9	15	45	45	12	10,5	50	30	33	XAS-SN/50
63	89	75	67	69	20	3	9	15	50	50	12	10,5	52	35	37	XAS-SN/63
80	100	95	86	75	20	3	11	18	63	60	14	11,5	66	40	47	XAS-SN/80
100	118	115	96	85	20	3	11	18	71	70	15	12,5	76	50	55	XAS-SN/100



Technical drawing of a 3000 Series Hydraulic Cylinder. The drawing includes a perspective view of the cylinder and two detailed cross-sectional views. The perspective view shows the cylinder with a 3/4 inch NPT port and a 1.5 inch diameter rod. The cross-sectional views show the internal components, including the piston, rod, and seals. Dimensions are provided for the cylinder body, rod, and mounting bracket. The mounting bracket is shown in two configurations: a standard configuration and a configuration with a 1.5 inch diameter rod. The standard configuration has a mounting bracket width of 1.5 inches and a mounting bracket height of 1.5 inches. The configuration with a 1.5 inch diameter rod has a mounting bracket width of 1.5 inches and a mounting bracket height of 1.5 inches. The dimensions are: L=1.5, A=1.5, B=1.5, E=1.5, M=1.5, EN=1.5, A2=1.5, C=1.5, ER=1.5, P=1.5, G=1.5, N=1.5, D=1.5. The asterisk (*) indicates the stroke length.

Ø	A2	A	B	C	D	EN	ER	F	G	E	L	M	N	P	Type
32	73	32,5	10,5	22	10	14	15	30	10	6,6	45	10,5	5,5	5	XCM-SN-AC/32
40	77	38	12	25	12	16	18	35	10	6,6	55	11	5,5	5	XCM-SN-AC/40
50	80	46,5	15	27	16	21	20	40	10	9	65	15	6,5	5	XCM-SN-AC/50
63	89	56,5	15	32	16	21	23	45	12	9	75	15	6,5	5	XCM-SN-AC/63
80	100	72	18	36	20	25	27	45	14	11	95	18	10	5	XCM-SN-AC/80
100	118	89	18	41	20	25	30	55	16	11	115	18	10	5	XCM-SN-AC/100

The technical drawing illustrates a double-acting hydraulic cylinder with the following dimensions:

- Perspective View:** Shows the cylinder body with a single rod end visible.
- Front View:** Shows the cylinder's profile with dimensions A (total width), B (rod diameter), D (rod length), and N (mounting flange thickness).
- Side View:** Shows the cylinder's internal components and mounting details with dimensions L (stroke), E (rod end flange thickness), F (rod end flange outer diameter), G (rod end flange inner diameter), H (rod end flange height), M (rod end flange width), and A2+ (stroke length).

* = Stroke

Ø	A2	A	B	C	D	E	F	G	H	L	ØM	N	Type
32	73	45	32,5	30	10	22	16	22	10	7	10	14	XCM-SN-AL/32
40	77	52	38	35	12	25	19	26	10	7	12	16	XCM-SN-AL/40
50	80	65	46,5	40	12	27	19	26	12	7	16	21	XCM-SN-AL/50
63	89	75	56,5	45	15	32	24	32	12	7	16	21	XCM-SN-AL/63
80	100	95	72	45	15	36	24	32	16	9	20	25	XCM-SN-AL/80
100	118	115	89	55	18	41	30	40	16	9	20	25	XCM-SN-AL/100

		Ø	A	B f7	Type
		32	54	10	USC/32
		40	63	12	USC/40
		50	71	12	USC/50
		63	81	16	USC/63
		80	101	16	USC/80
		100	123	20	USC/100

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