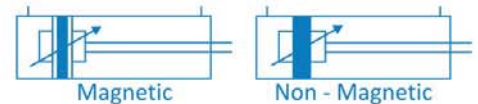


**Model : CCF / CCM**  
**Series : S-40 / S-30**

**Features**

- ▶▶ Hard Anodized Aluminium Profile (Square) Cylinder Barrel.
- ▶▶ Bore size  $\varnothing 32$  to  $\varnothing 100$ mm.
- ▶▶ Compact Design.
- ▶▶ Magnetic and Non Magnetic Cylinders.
- ▶▶ Wide Range Of Mounting.
- ▶▶ Magnetic Sensor Common For all sizes.
- ▶▶ 50% Less installation Space.
- ▶▶ Cost effective.
- ▶▶ High Performance.
- ▶▶ Safe & reliable.



**Technical Specification**

Bore Dia	32		40		50		63		80		100	
Standard Stroke (mm)	5	10	15	20	25	30	40	50	60	70	80	
Material of Construction	Aluminium											
Selas	Polyurethane, Nitrile (Viton seal available on request for high temperature)											
Pressure	0.5 ~ 10 Bar											
Temperature	5° ~ 60 °C max.											
Mountings	Std. Mounting available (for more details see dimension)											

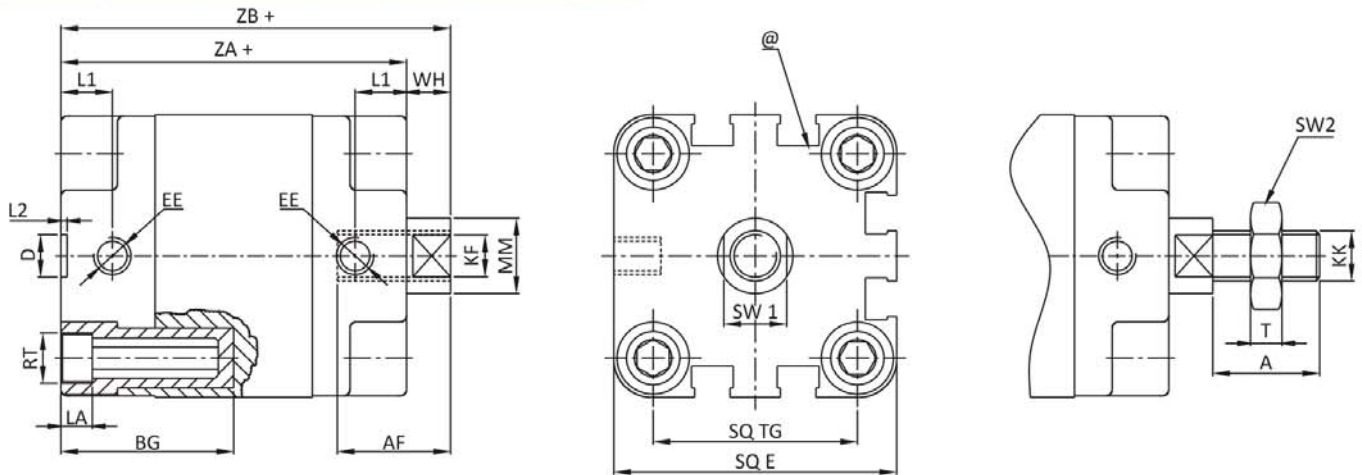
**Output Force**

( force in N : 1N = 0.1 kgf )

Bore die in mm	Rod dia in mm	Action	Working Pressure in Bar								
			2	3	4	5	6	7	8	9	10
32	12	Extend	145	217	289	362	434	507	579	651	724
		Retract	124	187	249	311	373	435	498	559	622
40	12	Extend	226	339	452	565	678	792	905	1018	1130
		Retract	206	309	411	514	617	720	823	926	1029
50	16	Extend	353	530	707	883	1060	1237	1413	1590	1767
		Retract	317	476	634	793	952	1110	1269	1427	1586
63	16	Extend	561	842	1122	1403	1683	1964	2244	2525	2805
		Retract	525	787	1050	1312	1575	1837	2099	2362	2624
80	20	Extend	905	1357	1809	2262	2714	3167	3619	4071	4524
		Retract	848	1272	1696	2120	2544	2969	3393	3817	4241
100	20	Extend	1414	2120	2827	3534	4241	4948	5655	6362	7068
		Retract	1357	2036	2714	3393	4071	4750	5429	6107	6786

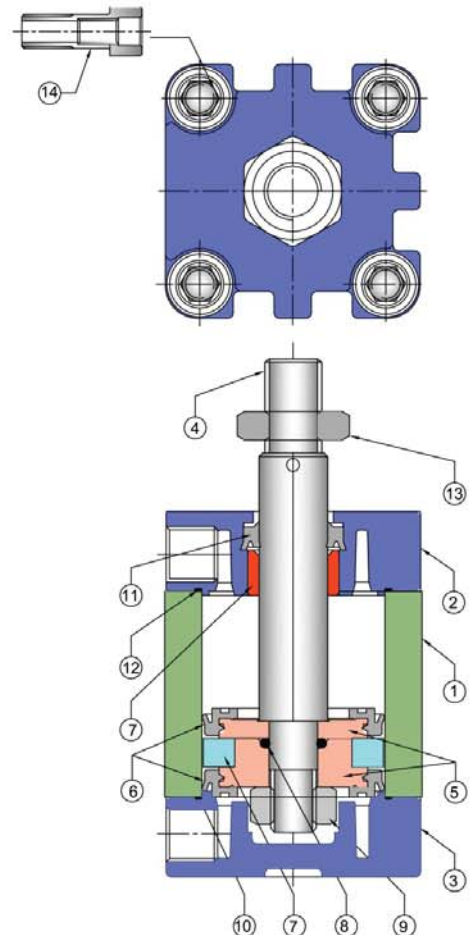
(Above values have been worked out taking frictional loss into consideration)

### Basic Cylinder Dimensions For Model : CCF / CCM



Bore die	KF	KK	MM	AF	RT	SW1	L1	LA	BG min	EE	TG	E max	D M10	L2	ZA	TOL	ZB	TOL	WH	TOL	A -0.5	SW2	T	STROKE TOL
32	M8X1.25P.	M10X1.25P.	12	12	M6	10	7.5	5.5	15	G1/8	32.5	45	10	2	44	±0.5	51	±1.6	7	±1.6	19	17	5	±2 0
40	M8X1.25P.	M10X1.25P.	12	12	M6	10	7.5	5.5	15	G1/8	38	51			45	±0.7	52		7		19	17	5	
50	M10X1.5P.	M12X1.25P.	16	16	M8	13	7.5	5.5	16	G1/8	46.5	64	12	3	45	±0.8	53	±2	8	±2	22	19	7	±2.5 0
63	M10X1.5P.	M12X1.25P.	16	16	M8	13	7.5	5.5	16	G1/8	56.5	74			49		57		8		22	19	7	
80	M12X1.75P.	M16X1.5P.	20	20	M10	17	8	5.5	17	G1/8	72	94	12	3	54	±1	64	±2	10	±2	28	24	8	±2.5 0
100	M12X1.75P.	M16X1.5P.	20	20	M10	17	12.5	5.5	17	G1/8	89	111			67		77		10		28	24	8	

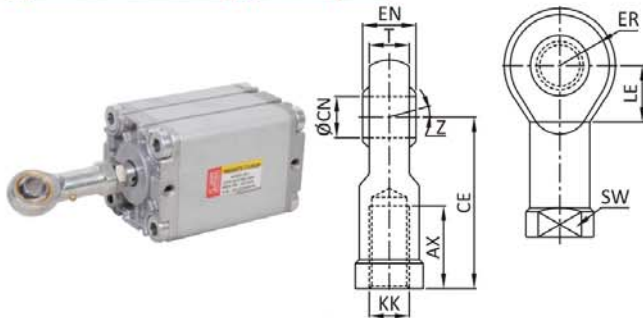
@ - T Groove for magnetic sensor



No.	Item Name	Material	Qty
1	SQ. Pipe	Aluminium Alloy HE9WP (6063-T6) (IS : 733)	01
2	Top Cover	Aluminium Alloy Alsi 132 (BS 1490)	01
3	Bottom Cover	Aluminium Alloy Alsi 132 (BS 1490)	01
4	Piston Rod	BS-970-90, EN-8, (080M40)	01
5	Piston - A	Aluminium Alloy Alsi 132 (BS 1490)	01
	Piston - B	Aluminium Alloy Alsi 132 (BS 1490)	01
6	V-Seal For Piston	P.U. Gr. 96	02
7	Delrin Ring	Delrin Acetal copolymer	01
8	O-Ring For Piston	Nitrile Buna-N Gr. 80	01
9	Piston Lock Nut	BS-970-90, EN-8, (080M40)	01
10	Diameter Ring	Nitrile Buna-N Gr. 80	02
11	V-Seal (Nut Ring)	Nitrile Buna-N Gr. 80	01
12	Bearing Bush	Brass (CZ 121)	01
13	Lock Nut	BS-970-90, EN-8, (080M40)	01
14	End Cover Bolt	BS-970-90, EN-8, (080M40)	08

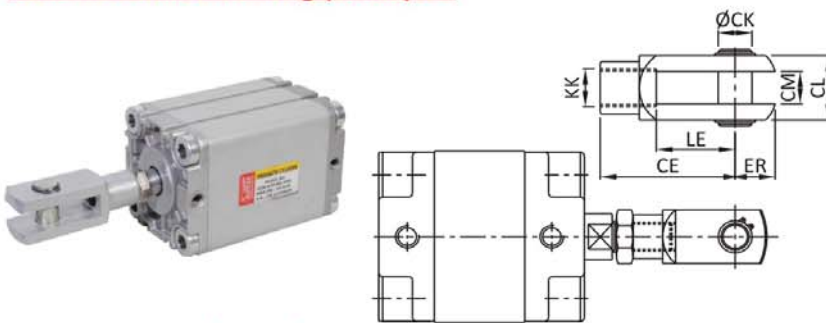
## Model : CCF / CCM Series : S-40 / S-30

### Eye Rod Mounting (NCAP) - G



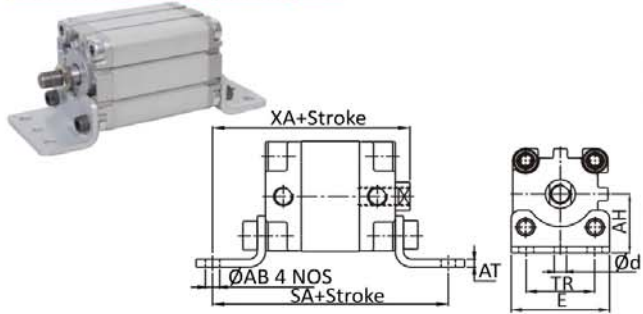
Bore die	KK	CN H9	T	EN h12	CE	LE min.	ER max.	AX	SW	Z
32 / 40	M10X1.25P	10	10.5	14	43	15	14	20	17	13°
50 / 63	M12X1.25P	12	12	16	50	17	16	22	19	
80 / 100	M16X1.5P	16	15	21	64	22	21	28	22	15°

### Rod End Fork Mounting (NCAF) - A



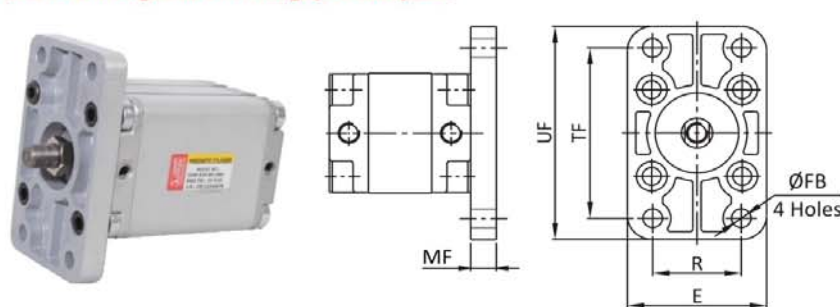
Bore die	KK	CE	CK f9	CM B12	LE	ER max.	CL
32	M10X1.25P	40	10	10	20	16	20
40	M10X1.25P	40	10	10	20	16	20
50	M12X1.25P	48	12	12	24	19	25
63	M12X1.25P	48	12	12	24	19	25
80	M16X1.5P	64	16	16	32	25	32
100	M16X1.5P	64	16	16	32	25	32

### Foot Mounting (NCML) - L



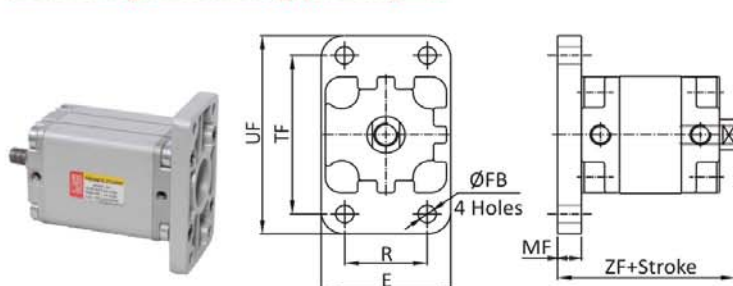
Bore die	AB H14	AT	AH Js16	d*	TR Js14	E	SA	TOL	XA	TOL	Recommended Bolt Size
32	6.5	3.5	32	5.8	32	46	92	±1.25	75	±1.25	M6
40	9	4	36	7.8	36	55	99		79		M6
50	9	6	45	7.8	45	65	109	±1.6	85	±1.5	M8
63	9	5	50	7.8	50	80	125		95		M10
80	12	5	63	9.8	63	95	136		105		M10
100	14	7	71	11.8	75	126	149	118	118	M12	

### Front Flange Mounting (NCMF) - F



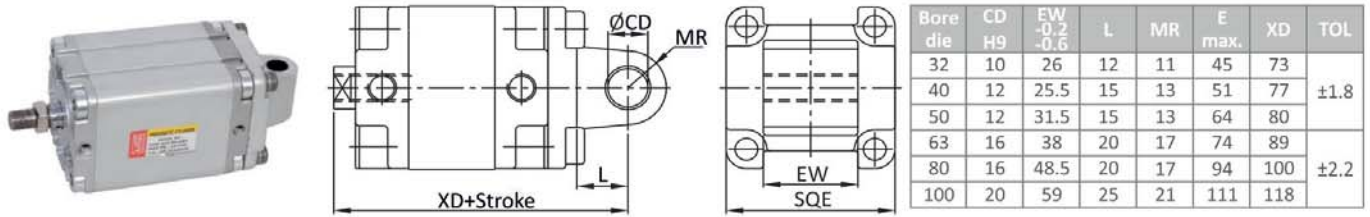
Bore die	TF ±0.3	R ±0.3	FB H13	MF	UF	E	Recommended Bolt Size
32	64	32	7	10	80	50	M6
40	72	36	9	10	90	53	M8
50	90	45	9	12	110	64	M8
63	100	50	9	12	125	80	M8
80	126	63	12	16	155	95	M10
100	150	75	14	16	185	120	M12

### Rear Flange Mounting (NCMF) - R

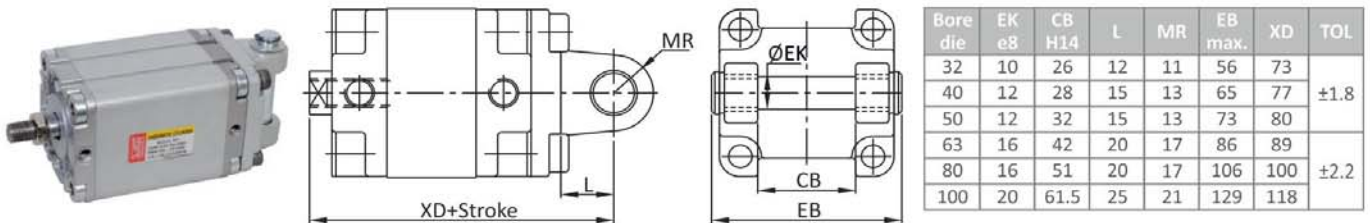


Bore die	TF ±0.3	R ±0.3	FB H13	MF	UF	E	ZF	TOL	Recommended Bolt Size
32	64	32	7	10	80	50	61	±1.8	M6
40	72	36	9	10	90	53	62		M8
50	90	45	9	12	110	64	65		M8
63	100	50	9	12	125	80	69	±2.2	M8
80	126	63	12	16	155	95	80		M10
100	150	75	14	16	185	120	93		M12

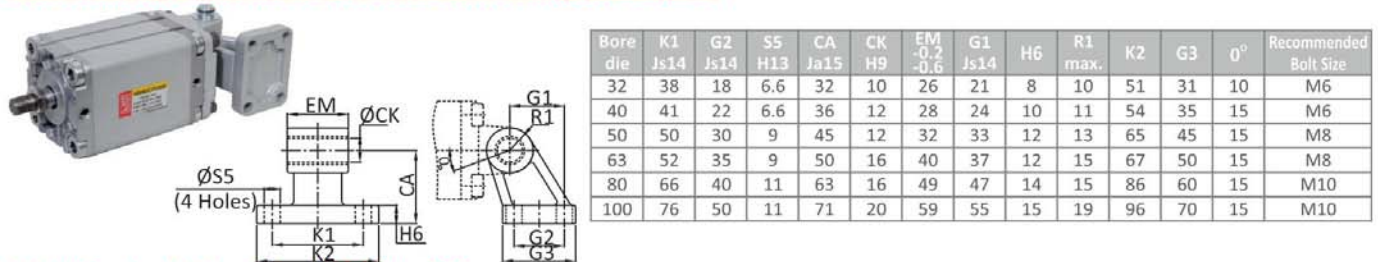
### Male Clevis Mounting (NCMS) - S



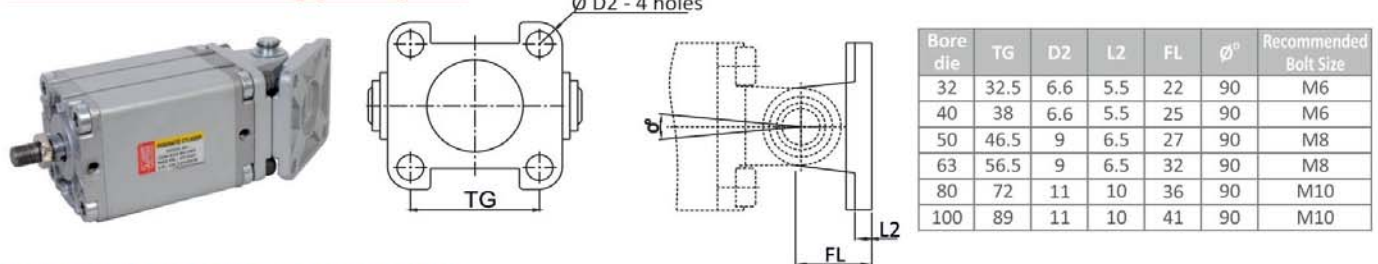
### Female Clevis Mounting (NCMS) - D



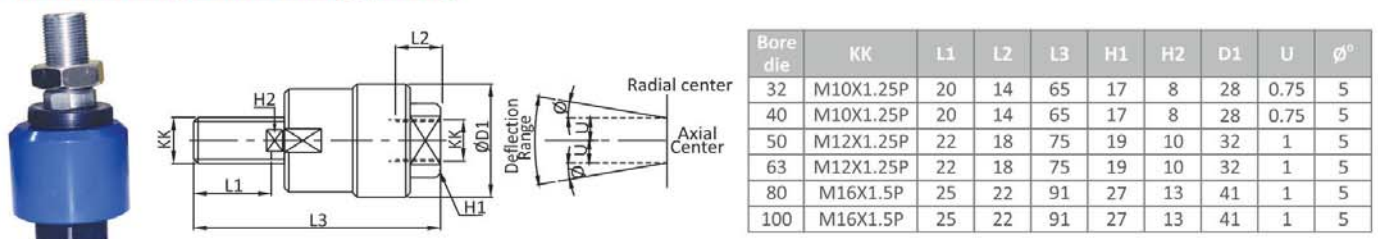
### Swivel Flange Clevis Foot Bracket Mounting (NCAA) - C



### Wall Bracket Mounting (NCAV) - DS



### Rod End Alinger Mounting (NCRA)



### Adjustable Center Trunnion Mounting (NCTM) - T

