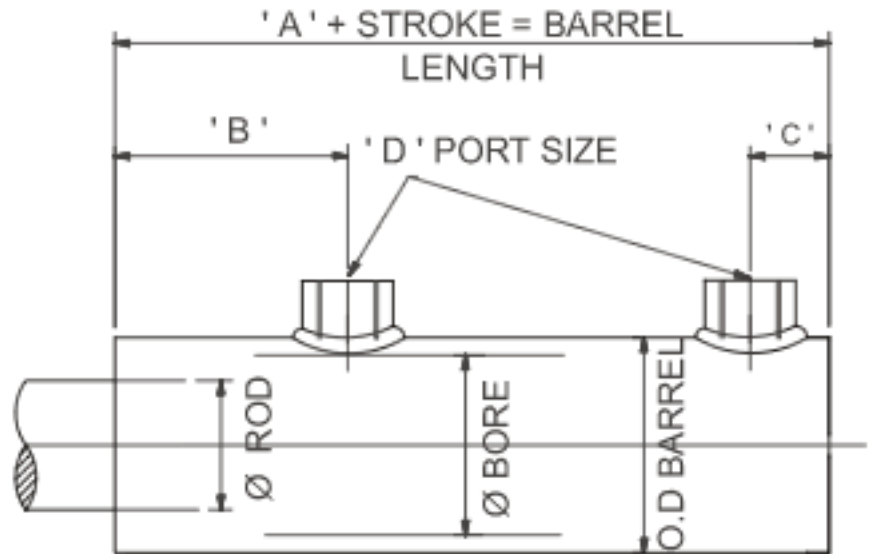


## FOX-VPS designed range of hydraulic cylinders

### Double Acting Cylinders - Basic Sizes

Type	Bore	O.D Barrel	Rod Dia	Max Stroke	A +1.5 - 1.5	B	C	D BSP
40M	40	50	22	360	122	55	19	1/4
50M	50	60	28	480	134	60	22	1/4
63M	63	73	36	650	146	65	27	3/8
70M	70	80	40	750	155	70	27	3/8
80M	80	92	45	820	177	82	32	3/8
90M	90	105	50	900	190	88	32	1/2
100M	100	115	56	1005	210	98	32	1/2
125M	125	145	70	1270	247	103	38	3/4
150M	150	170	80	1350	273	120	41	3/4
160M	160	190	90	1600	273	120	41	3/4
180M	180	210	100	1800	312	135	50	1
200M	200	230	110	2000	320	150	60	1

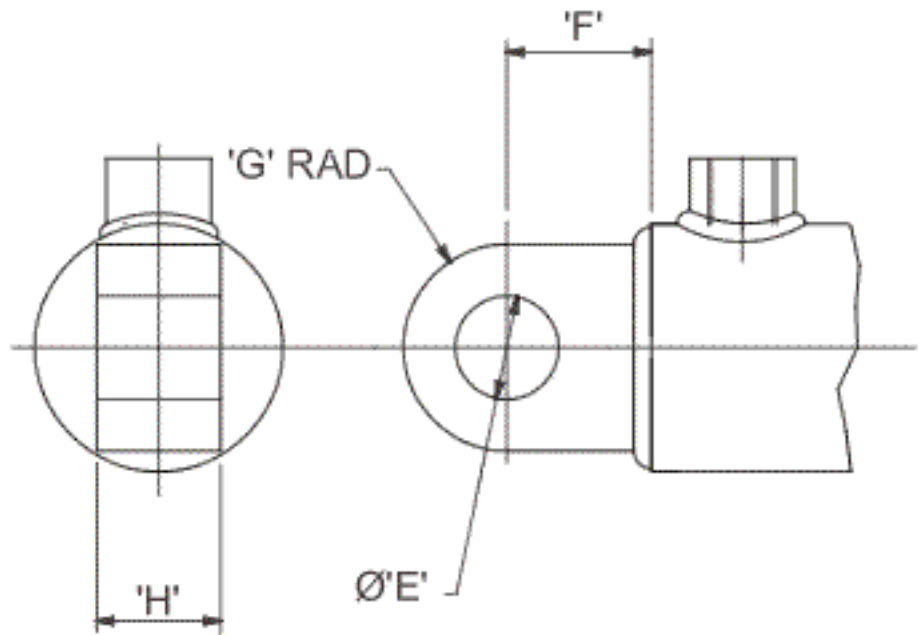
Double Acting Cylinders  
Basic Sizes



### Cylinder Body Mounting - Plain Pin Hole Type

Type	E H12	F +0.25 - 0.25	G	H +0.0 -1.0
40M	20	20	20	20
50M	22	32	22	32
63M	25	38	25	38
70M	25	40	25	40
80M	32	45	32	45
90M	40	50	40	50
100M	45	55	45	55
125M	50	65	50	65
150M	63	80	63	80
160M	70	90	70	90
180M	80	100	80	100
200M	100	125	100	125

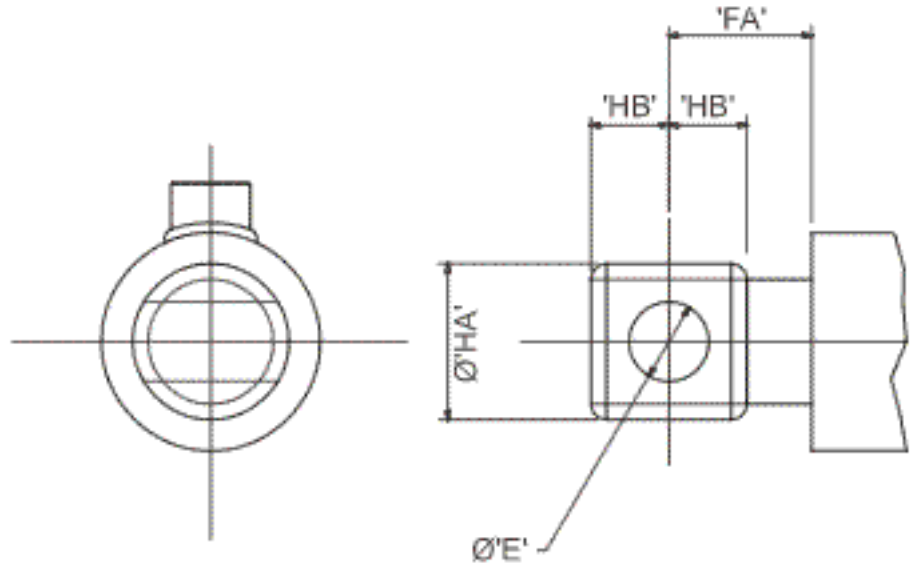
Cylinder Body Mounting  
Plain Pin Hole Type



### Cylinder Rod Mounting - Plain Pin Hole - Type 1

Type	E H12	FA +0.5 - 0.5	HA	HB	HC +0.0 - 0.5	HD +0.0 - 0.5
40M	20	32	-	-	30	40
50M	22	32	38	22	-	-
63M	25	38	50	25	-	-
70M	25	38	55	25	-	-
80M	32	45	60	32	-	-
90M	40	50	65	38	-	-
100M	45	50	70	38	-	-
125M	50	65	-	-	90	100
150M	63	80	-	-	100	126
160M	70	90	-	-	110	140
180M	80	100	-	-	110	160
200M	100	135	-	-	130	200

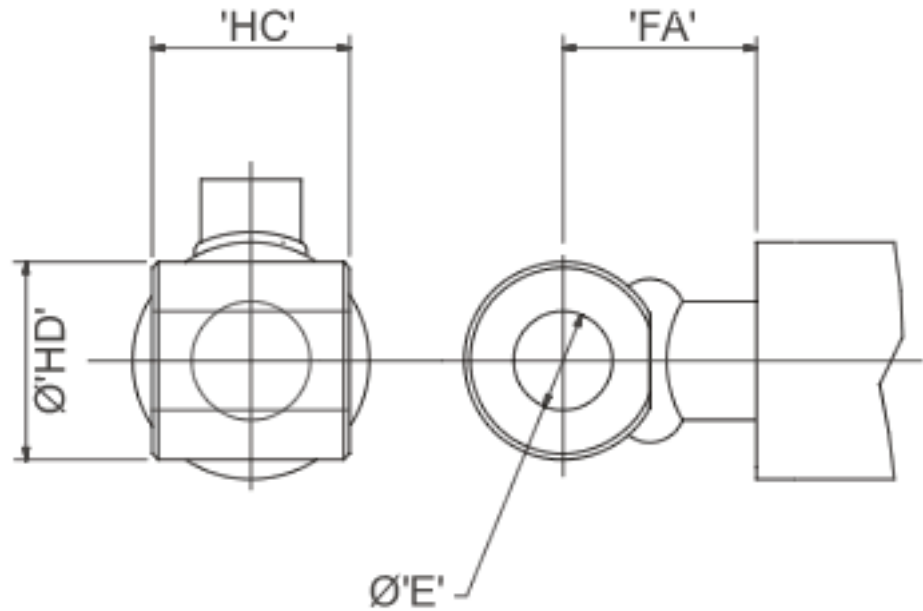
Cylinder Rod Mounting  
Plain Pin Hole - Type 1



### Cylinder Rod Mounting - Plain Pin Hole - Type 2

Type	E H12	FA +0.5 - 0.5	HA	HB	HC +0.0 - 0.5	HD +0.0 - 0.5
40M	20	32	-	-	30	40
50M	22	32	38	22	-	-
63M	25	38	50	25	-	-
70M	25	38	55	25	-	-
80M	32	45	60	32	-	-
90M	40	50	65	38	-	-
100M	45	50	70	38	-	-
125M	50	65	-	-	90	100
150M	63	80	-	-	100	126
160M	70	90	-	-	110	140
180M	80	100	-	-	110	160
200M	100	135	-	-	130	200

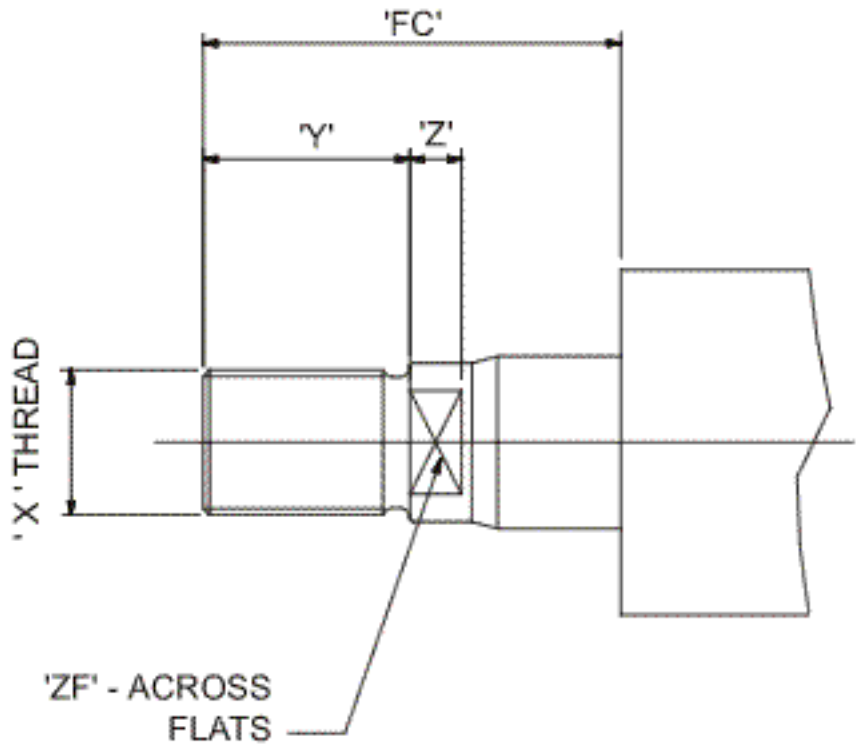
Cylinder Rod Mounting  
Plain Pin Hole - Type 2



### Cylinder Rod Mounting - Rod End Threads

Type	X THREAD	Y +1.5 - 0.0	Z	ZF	FC +0.5 - 0.5
40M	M16-1.5	22	6	17	38
50M	M20-1.5	28	6	22	44
63M	M27-2.0	36	6	28	54
70M	M27-2.0	36	6	28	54
80M	M33-2.0	45	8	36	68
90M	M42-2.0	56	10	46	81
100M	M42-2.0	56	10	46	81
125M	M48-2.0	63	12	60	95
150M	M64-3.0	85	15	70	120
160M	M72-3.0	85	20	75	130
180M	M80-3.0	95	20	80	145
200M	M90-3.0	106	20	100	156

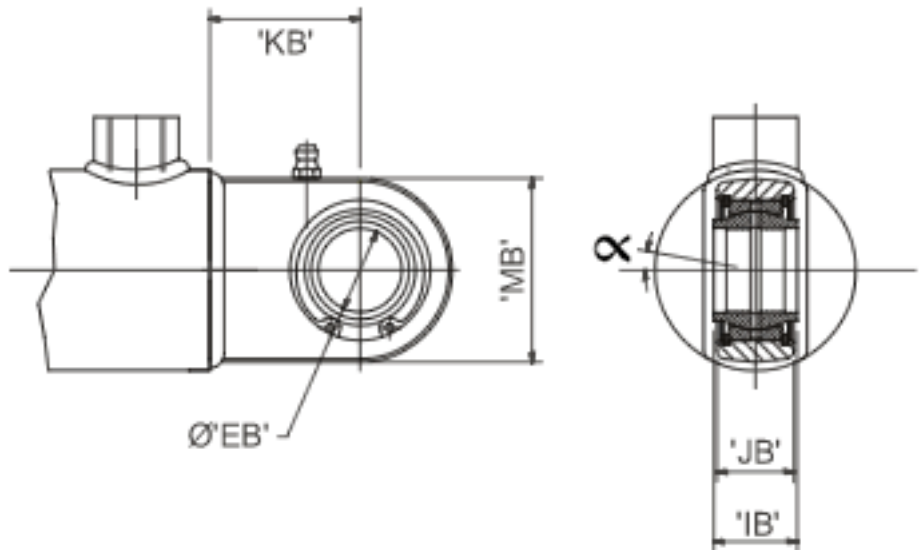
Cylinder Rod Mounting  
Rod End Threads



### Cylinder Body Mounting - Rear Ball Joint Heavy Duty

Type	EB		KB	IB		JB	MB	$\alpha$
40M	20	+0.021 (-0.0)	38	20	+0.021 (-0.0)	19	50	4
50M	25	+0.021 (-0.0)	45	25	+0.021 (-0.0)	23	55	4
63M	32	+0.025 (-0.0)	65	32	+0.025 (-0.0)	27	70	4
70M	32	+0.025 (-0.0)	65	32	+0.025 (-0.0)	27	70	4
80M	40	+0.025 (-0.0)	69	40	+0.025 (-0.0)	35	100	4
90M	50	+0.025 (-0.0)	88	50	+0.025 (-0.0)	40	123	4
100M	50	+0.025 (-0.0)	88	50	+0.025 (-0.0)	40	123	4
125M	63	+0.030 (-0.0)	107	63	+0.030 (-0.0)	50	145	4
150M	80	+0.030 (-0.0)	141	80	+0.030 (-0.0)	60	180	4
160M	90	+0.035 (-0.0)	150	90	+0.035 (-0.0)	65	226	4
180M	100	+0.035 (-0.0)	170	100	+0.035 (-0.0)	70	250	4
200M	110	+0.035 (-0.0)	185	110	+0.035 (-0.0)	80	295	4

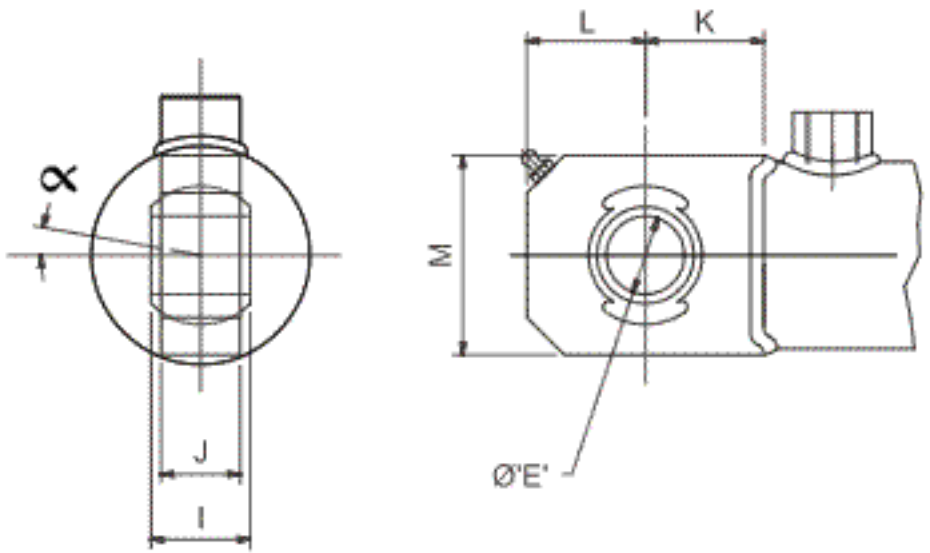
Cylinder Body Mounting  
Rear Ball Joint Heavy Duty



### Cylinder Body Mounting - Rear Ball Joint Type - Light Duty

Type	E +0.05 - 0.00	I	J	K +0.25 - 0.25	L	M	$\alpha$
40M	20	22.23	19	32	32	51	10
50M	22	25.40	22.23	32	32	57	10
63M	25	31.75	25.40	38	38	64	10
70M	25	31.75	25.40	38	38	64	10
80M	32	38.10	28.58	45	45	76	10
90M	40	41.28	31.75	50	55	100	10
100M	50	48.25	38.10	63	63	115	10
125M	50	50.10	44.45	63	63	115	10

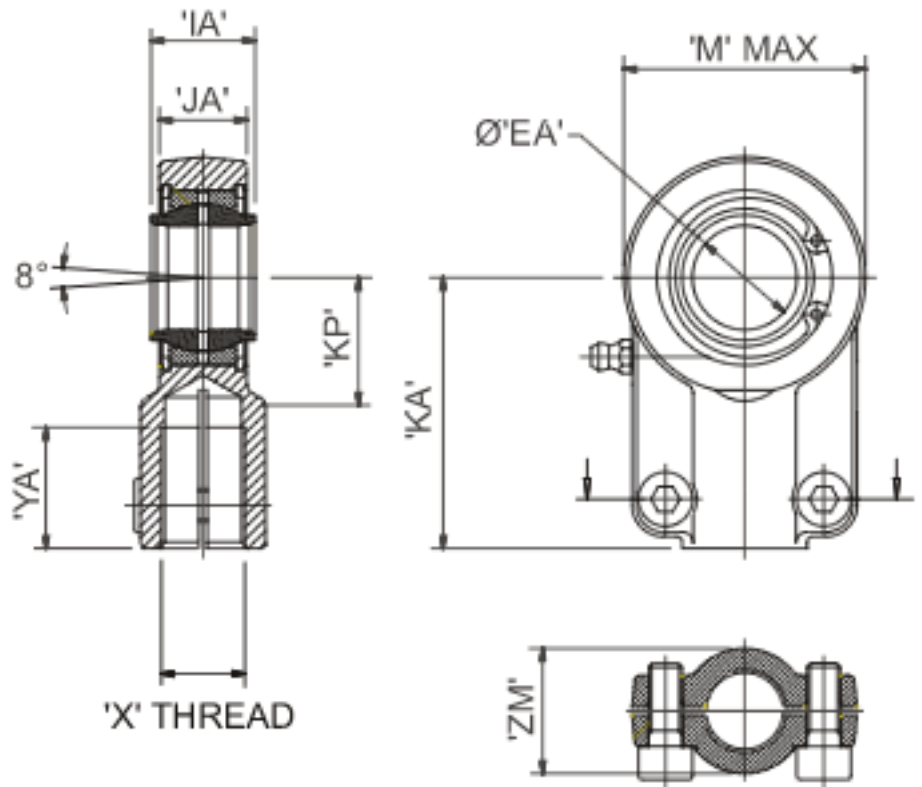
Cylinder Body Mounting  
Rear Ball Joint Type - Light Duty



### Cylinder Rod Mounting - Rod End Screw-On Type - Heavy Duty

Type	EA	KA	KP	IA	JA	M	X Thread	YA	ZM		
40M	20	+0.02	52	22	20	+0.021	17	47	M16-1.5	23	25
50M	25	+0.02	65	27	25	+0.021	21	58	M20-1.5	29	30
63M	32	+0.025	80	32	32	+0.025	27	70	M27-2.0	37	38
70M	32	+0.025	80	32	32	+0.025	27	70	M27-2.0	37	38
80M	40	+0.025	97	41	40	+0.025	32	89	M33-2.0	46	47
90M	50	+0.025	120	50	50	+0.025	40	108	M42-2.0	57	58
100M	50	+0.025	120	50	50	+0.025	40	108	M42-2.0	57	58
125M	63	+0.030	140	62	63	+0.030	52	132	M48-2.0	64	70
150M	80	+0.030	180	78	80	+0.030	66	168	M64-3.0	86	90
160M	90	+0.035	195	85	90	+0.035	72	185	M72-3.0	91	100
180M	100	+0.035	210	98	100	+0.035	84	210	M80-3.0	96	110
200M	110	+0.035	235	105	110	+0.035	88	235	M90-3.0	106	125

Cylinder Rod Mounting  
Rod End Screw-On Type -  
Heavy Duty

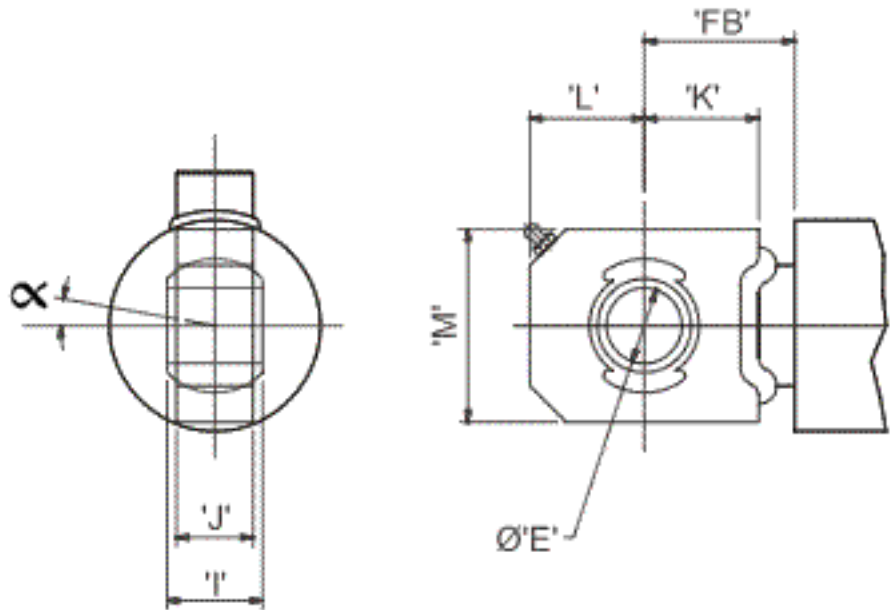




### Cylinder Rod Mounting - Rod Ball Joint - Light Duty

Type	E +0.05 - 0.00	FB +0.5 - 0.5	I	J	K	L	M	$\alpha$
40M	20	45	22.23	19	32	32	51	10
50M	22	45	25.40	22.23	32	32	57	10
63M	25	50	31.75	25.40	38	38	64	10
70M	25	50	31.75	25.40	38	38	64	10
80M	32	58	38.10	28.58	45	45	76	10
90M	40	63	41.28	31.75	50	55	100	10
100M	45	80	48.25	37.10	63	63	115	10
125M	50	80	50.10	49.45	63	63	115	10

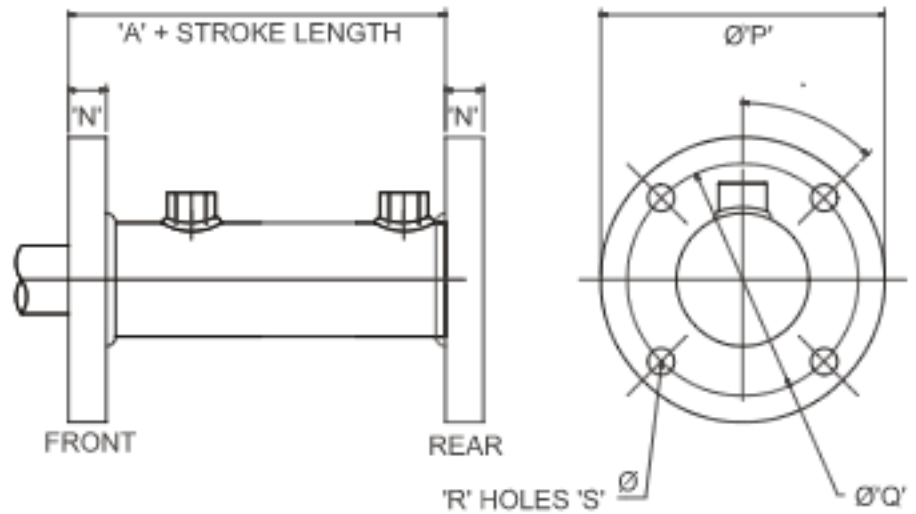
Cylinder Rod Mounting  
Rod Ball Joint - Light Duty



### Cylinder Body Mounting - Flange Type

Type	N +0 - 1	P +3 - 3	Q +0.25 - 0.25	R - Qty	S H12	∝
40M	16	125	97	4	14	45
50M	20	150	122	4	14	45
63M	25	175	139	4	18	45
70M	32	200	165	6	18	45
80M	32	200	165	6	18	45
90M	32	235	198	6	18	30
100M	32	245	200	6	22	30
125M	32	280	235	8	22	22.5
150M	36	320	270	8	22	22.5
160M	36	330	280	8	22	22.5
180M	40	360	310	8	22	22.5
200M	40	390	340	8	26	22.5

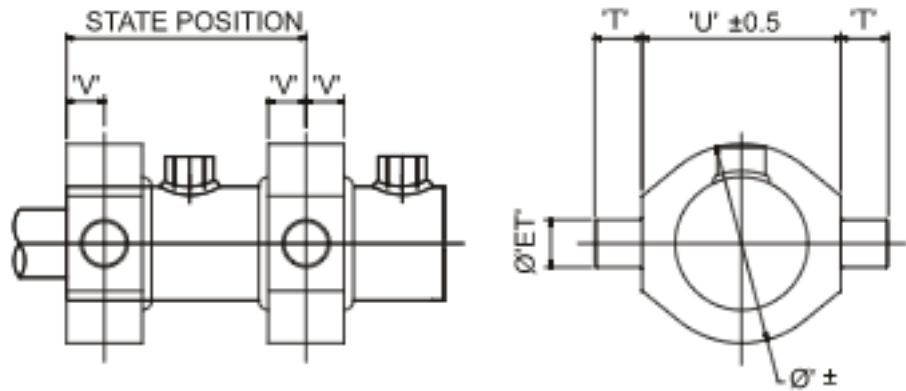
Cylinder Body Mounting  
Flange Type



## Cylinder Body Mounting - Trunnion Mounting Type

Type	ET 'e9'	T +0.5 - 0.0	U	V
40M	20	20	90	17.5
50M	25	25	105	20.0
63M	32	32	120	25.0
70M	32	32	130	25.0
80M	40	40	135	32.5
90M	40	40	145	32.5
100M	50	50	160	40.0
125M	63	63	195	50
150M	63	63	220	50
160M	80	80	240	50
180M	80	80	270	55
200M	100	100	300	60

Cylinder Body Mounting  
Trunnion Mounting Type



## Stainless Steel Hydraulic - Cylinders Basic Sizes

Type	Bore	O.D Barrel	Rod Dia	Max Stroke	A +1.5 - 1.5	B	C	D BSP	E H12	F +0.25 - 0.25	FA +0.5 - 0.5	G	H +0.0 - 1.0	HA	HB
40M	40	50	22	360	122	55	19	1/4	20	20	32	20	20	35	18
50M	50	60	28	480	134	60	22	1/4	22	32	32	22	32	38	22
60M	60	70	36	650	146	65	27	3/8	25	38	38	25	38	50	25
70M	70	80	40	750	155	70	27	3/8	25	40	38	25	40	55	32

Stainless Steel Hydraulic  
Cylinders Basic Sizes

