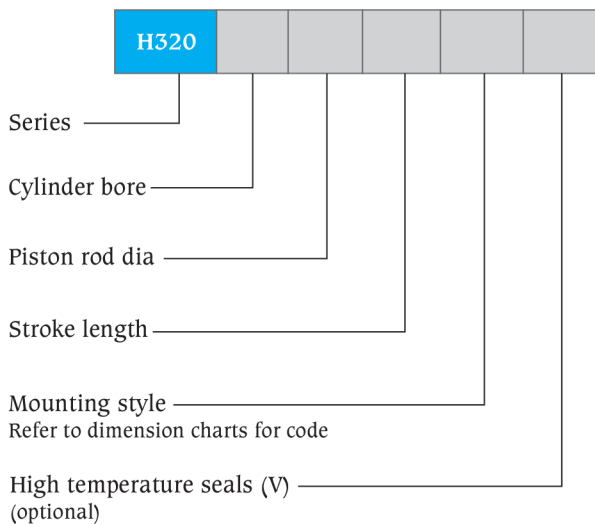




Cylinder selection guide

Operating pressure at kg/sq. cm				Theoretical forces (at mechanical efficiency =100%)							
				200		250		300		320	
Piston dia mm	Rod dia mm	Piston area sq. cm	Rod area sq. cm	Push kgf	Pull kgf	Push kgf	Pull kgf	Push kgf	Pull kgf	Push kgf	Pull kgf
80	45	50.27	15.91	10054.4	6873.13	12568	8591.41	15081.6	10309.69	16087.04	10997.00
	56		24.63		5127.74		6409.68		7691.62		8204.39
100	56	78.55	24.63	15710.00	10783.34	19637.5	13479.18	23565	16175.02	25136	17253.35
	70		38.49		8012.10		10015.13		12018.15		12819.36
125	70	122.73	38.49	245446.88	16848.98	30683.59	21061.22	36820.31	25273.46	39275.00	26958.36
	90		63.63		11821.78		14777.22		17732.66		18914.84
160	90	201.09	63.63	40217.6	27492.50	50272	34365.625	60326.4	41238.75	64348.16	43988
	110		95.05		21208.50		26510.63		31812.75		33933.60
200	110	314.20	95.05	62840	43830.90	78550	54788.63	94260	65746.35	100544	70129.44
	140		153.96		32048.40		40060.5		48072.6		51277.44
250	140	490.94	153.96	98187.50	67395.90	122734.375	84244.875	147281.25	101093.85	157100	107833.44
	180		254.50		47287.10		59108.875		70930.65		75659.36
300	180	706.95	254.50	141390	90489.60	176737.5	113112	212085	135734.4	226224	144783.36
	220		380.18		65353.60		81692		98030.4		104565.76

Ordering details for H320 series hydraulic cylinder



Example

H320 series hydraulic cylinder with bore 100mm, piston rod dia 70mm, stroke 500mm, mounting rear flange will be specified as

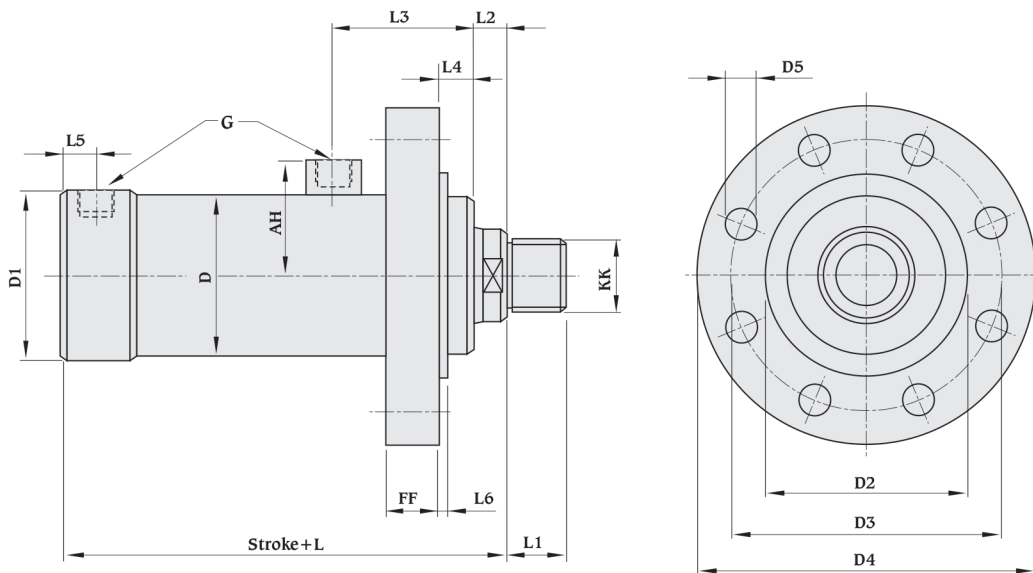
H320	100	70	500	RF	-
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All dimensions are in millimeters unless otherwise stated.

Features and specifications

- 5 Standard mounting styles
- Provision for smaller as well as bigger rod diameter for each bore size
- Bore size - 80mm to 300 mm
- Strokes available in any practical stroke length
- Maximum working pressure - 320 bar
- Piston rods - 45 mm to 220 mm
- Single rod design
- Non-cushioned
- Temperature range : - 20°C to + 80°C (standard)
- 20° C to + 150°C (optional)
- Seal types to suit a wide variety of operating environments
- Standard fluid - Mineral oil DIN 51524 (HL, HLP)

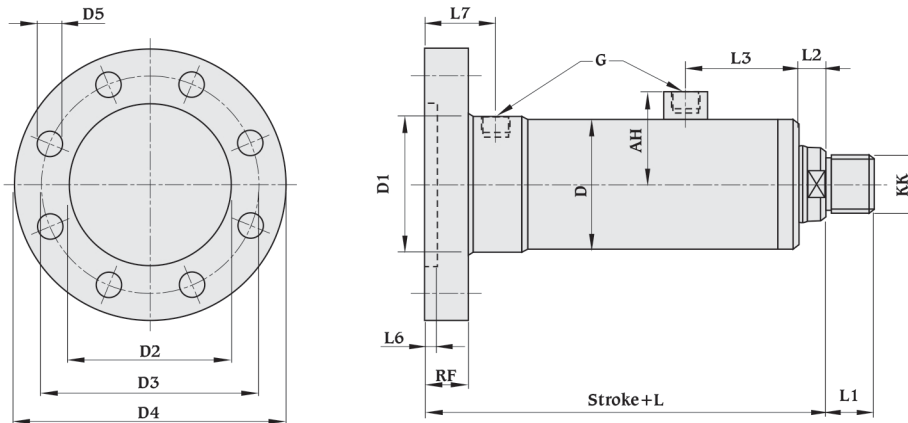
Mounting style Front flange (FF)



Piston Ø	Rod		AH	G	D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5 Ø	FF	KK		L	L1		L2	L3	L4	L5	L6
	Ø1	Ø2										Ø1	Ø2		Ø1	Ø2					
80	45	56	75	1/2"	105	105	120	160	200	18(x8)	31	M33x2P	M42x2P	213	35	45	20	83	19	15	4
100	56	70	90	3/4"	130	130	145	191	231	22(x8)	32	M42x2P	M48x2P	247	45	58	30	93	20	19	5
125	70	90	107	3/4"	163	163	180	215	255	22(x8)	40	M48x2P	M64x3P	277	58	65	30	98	20	19	5
160	90	110	130	1"	204	204	220	280	340	26(x8)	40	M64x3P	M80x3P	323	65	80	35	118	25	23	5
200	110	140	163	1"	262	262	290	350	410	33(x8)	50	M80x3P	M100x3P	370	80	100	35	130	30	23	5
250	140	180	197	1-1/4"	325	325	345	410	480	39(x8)	60	M100x3P	M125x3P	422	100	125	35	145	33	28	8
300	180	220	233	1-1/2"	390	390	420	500	580	39(x16)	85	M125x3P	M135x3P	535	125	135	40	205	38	40	8

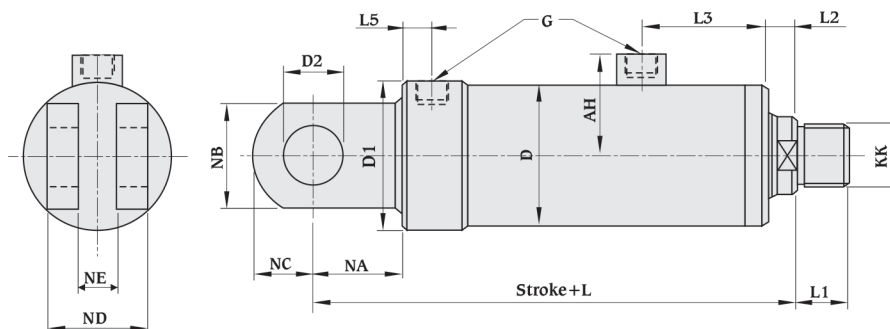
All dimensions are in mm unless otherwise stated.

Mounting style
Rear flange (RF)



Piston Ø	Rod		AH	G BSP	D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5 Ø	RF	KK		L	L1		L2	L3	L6	L7
	Ø1	Ø2										Ø1	Ø2		Ø1	Ø2				
80	45	56	75	1/2"	105	105	120	160	200	18(x8)	28	M33x2P	M42x2P	251	35	45	20	83	4	53
100	56	70	90	3/4"	130	130	145	191	231	22(x8)	32	M42x2P	M48x2P	289	45	58	30	93	5	61
125	70	90	107	3/4"	163	163	180	215	255	22(x8)	38	M48x2P	M64x3P	325	58	65	30	98	5	67
160	90	110	130	1"	204	204	220	280	340	26(x8)	38	M64x3P	M80x3P	371	65	80	35	118	5	71
200	110	140	163	1"	262	262	290	350	410	33(x8)	48	M80x3P	M100x3P	428	80	100	35	130	5	81
250	140	180	197	1-1/4"	325	325	345	410	480	39(x8)	58	M100x3P	M125x3P	490	100	125	35	145	8	96
300	180	220	233	1-1/2"	390	390	420	500	580	39(x12)	85	M125x3P	M135x3P	630	125	135	40	205	8	135

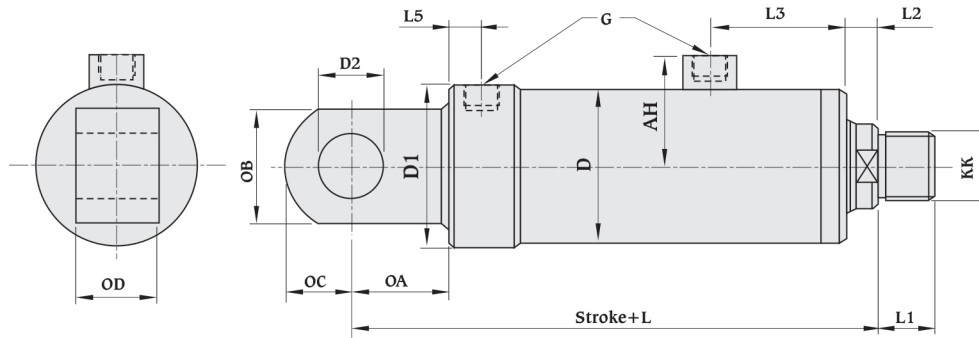
Mounting style
Rear clevis (RP 1)



Piston Ø	Rod		AH	G BSP	D Ø	D1 Ø	D2 Ø	KK		L	L1		L2	L3	L5	NA	NB	NC	ND	NE
	Ø1	Ø2						Ø1	Ø2		Ø1	Ø2								
80	45	56	75	1/2"	105	105	50	M33x2P	M42x2P	298	35	45	20	83	15	85	100	55	100	50
100	56	70	90	3/4"	130	130	60	M42x2P	M48x2P	352	45	58	30	93	19	105	120	70	120	60
125	70	90	107	3/4"	163	163	60	M48x2P	M64x3P	382	58	65	30	98	19	105	120	70	120	60
160	90	110	130	1"	204	204	80	M64x3P	M80x3P	468	65	80	35	118	23	145	160	95	140	70
200	110	140	163	1"	262	262	100	M80x3P	M100x3P	560	80	100	35	130	23	190	200	130	165	85
250	140	180	197	1-1/4"	325	325	120	M100x3P	M125x3P	637	100	125	35	145	28	240	240	145	215	110
300	180	220	233	1-1/2"	390	390	160	M125x3P	M135x3P	840	125	135	40	190	40	305	320	190	280	150

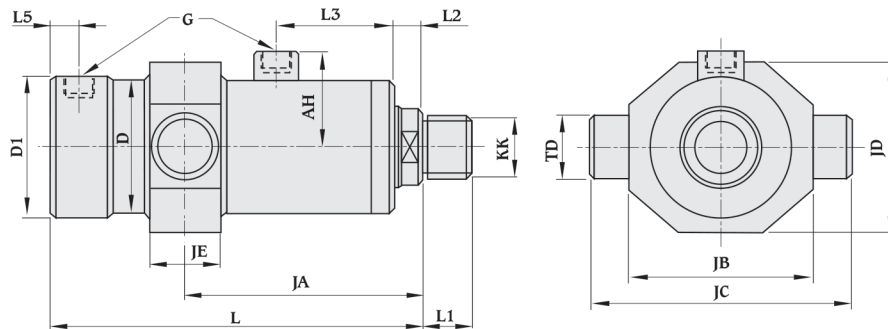
All dimensions are in millimeters unless otherwise stated.

**Mounting style
Rear eye (RP 3)**



Piston Ø	Rod		AH	G BSP	D Ø	D1 Ø	D2 Ø	KK		L	L1		L2	L3	L5	OA	OB	OC	OD
	Ø1	Ø2						Ø1	Ø2		Ø1	Ø2							
80	45	56	75	1/2"	105	105	50	M33x2P	M42x2P	283	35	45	20	83	15	70	80	45	50
100	56	70	90	3/4"	130	130	60	M42x2P	M48x2P	327	45	58	30	93	19	80	100	55	70
125	70	90	107	3/4"	163	163	70	M48x2P	M64x3P	382	58	65	30	98	19	105	120	65	80
160	90	110	130	1"	204	204	90	M64x3P	M80x3P	458	65	80	35	118	23	135	160	85	108
200	110	140	163	1"	262	262	120	M80x3P	M100x3P	530	80	100	35	130	23	160	200	110	138
250	140	180	197	1-1/4"	325	325	150	M100x3P	M125x3P	612	100	125	35	145	28	190	230	135	176
300	180	220	233	1-1/2"	390	390	190	M125x3P	M135x3P	795	125	135	40	205	40	260	300	190	216

**Mounting style
Intermediate trunnion (TR 4)**



Piston Ø	Rod		AH	G BSP	D Ø	D1 Ø	KK		L	L1		L2	L3	L5	JA	JB	JC	JD	JE	TD
	Ø1	Ø2					Ø1	Ø2		Ø1	Ø2									
80	45	56	75	1/2"	105	105	M33x2P	M42x2P	213	35	45	20	83	15	To be specified by Customer	130	184	120	50	45
100	56	70	90	3/4"	130	130	M42x2P	M48x2P	247	45	58	30	93	19		165	230	140	60	55
125	70	90	107	3/4"	163	163	M48x2P	M64x3P	277	58	65	30	98	19		185	280	180	80	65
160	90	110	130	1"	204	204	M64x3P	M80x3P	323	65	80	35	118	23		235	360	220	100	85
200	110	140	163	1"	262	262	M80x3P	M100 x3P	370	80	100	35	130	23		320	460	300	130	110
250	140	180	197	1-1/4"	325	325	M100x3P	M125 x 3P	422	100	125	35	145	28		390	590	370	150	130
300	180	220	233	1-1/2"	390	390	M125x3P	M 135 X 3P	535	125	135	40	205	40		500	730	450	200	180

All dimensions are in millimeters unless otherwise stated.