

▼ Shown from left to right: BRD-2510, BRD-96, BRD-256, BRD-41, BRD-166



## High Precision and High Cycle Performance



### Speed Chart

See the Enerpac Cylinder Speed Chart in our 'Yellow Pages' to determine your approximate cylinder speed.

Page: **249**



### Golden Ring Design

Enerpac BRD-Cylinders are provided with the Golden Ring Design, for long, trouble-free performance.

- The exclusive Golden Ring Design absorbs eccentric loading without galling cylinder parts
- Designed for long life, the best choice for production applications
- Unique mounting configurations simplify fixturing
- Baked enamel finish for increased corrosion resistance
- Double-acting operation develops force in both directions, providing maximum versatility
- Plunger wiper reduces contamination, extending cylinder life
- Imperial models (RD-series) available on request.

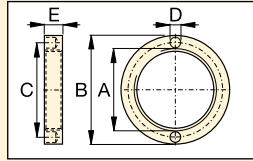
▼ Clamping application using Enerpac BRD cylinders (with clevis eye attachments on both ends) for their high pressure capability and mounting flexibility.



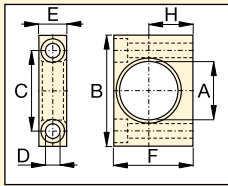
Cylinder Capacity (ton)	Stroke (mm)	Model Number	Max. Cylinder Capacity (kN)		Cylinder Effective Area (cm <sup>2</sup> )		Oil Capacity (cm <sup>3</sup> )		Coll. Height A (mm)	Ext. Height B (mm)	Body Length C (mm)	Out. Dia. D (mm)	Cyl. Bore Dia. E (mm)	Plgr. Dia. F (mm)
			Advance	Retract	Advance	Retract	Advance	Retract						
4	28	<b>BRD-41</b>	35	16	5,1	2,2	14	6	186	214	162	50	25,4	19,0
	79	<b>BRD-43</b>	35	16	5,1	2,2	40	17	237	316	213	50	25,4	19,0
	155	<b>BRD-46</b>	35	16	5,1	2,2	79	34	313	468	289	50	25,4	19,0
8	28	<b>BRD-91</b>	80	44	11,4	6,3	32	18	223	251	198	65	38,1	25,4
	79	<b>BRD-93</b>	80	44	11,4	6,3	90	50	274	353	249	65	38,1	25,4
	155	<b>BRD-96</b>	80	44	11,4	6,3	177	98	350	505	325	65	38,1	25,4
	257	<b>BRD-910</b>	80	44	11,4	6,3	293	162	452	709	427	65	38,1	25,4
15	159	<b>BRD-166</b>	142	77	20,3	10,6	323	169	389	548	359	80	50,8	35,0
	260	<b>BRD-1610</b>	142	77	20,3	10,6	528	276	491	751	461	80	50,8	35,0
23	159	<b>BRD-256</b>	222	98	31,7	13,7	504	218	424	583	397	92	63,5	47,8
	260	<b>BRD-2510</b>	222	98	31,7	13,7	824	356	526	786	499	92	63,5	47,8

# Double-Acting, Precision Production Cylinders

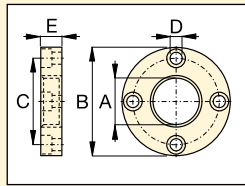
## ▼ BRD CYLINDER ATTACHMENTS



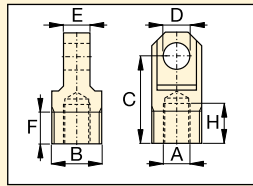
**Retainer Nut**  
For locking foot or flange mountings. Tightens onto cylinder collar threads (Included with foot and flange mounting kits).



**Foot Mounting**  
Mounts onto cylinder collar.



**Flange Mounting**  
Mounts onto cylinder collar.



**Clevis Eye**  
Threads onto plunger or into cylinder base.

Model Number	BRD-Cyl. (ton)	Dimensions (mm)						
		A	B	C	D	E	F	H
<b>Foot Mounting with Retainer Nut</b>								
BAD-141	4	42,1	80	58,0	10,5	20,0	57,0	31,8
BAD-171	8	56,1	105	78,0	13,5	25,0	82,5	44,5
BAD-181	15	70,1	127	95,2	20,0	35,0	100,0	52,4
BAD-191	23	85,1	159	117,5	26,5	45,0	125,0	63,5
<b>Flange Mounting with Retainer Nut</b>								
BAD-142	4	42,1	98,4	78,6	11,0	19,0	-	-
BAD-172	8	56,1	121	98,4	11,0	25,4	-	-
BAD-182	15	70,1	143	115,9	16,0	35,0	-	-
BAD-192	23	85,1	159	135,7	17,0	44,5	-	-
<b>Retainer Nut</b>								
BAD-143	4	M42 x 1,5	57	49,5	6,3	9,5	-	-
BAD-173	8	M56 x 2	75	65,5	6,7	12,7	-	-
BAD-183	15	M70 x 2	92	81,0	6,7	19,0	-	-
BAD-193	23	M85 x 2	108	96,5	6,7	25,4	-	-
<b>Clevis Eye (See chart below for mounting dimensions L, L1 and M)</b>								
BAD-150	4	M16 x 1,5	M30 x 1,5	52,4	16,0	15,9	19,1	23,8
BAD-151	8	M22 x 1,5	M42 x 1,5	57,1	20,0	25,4	25,4	23,8
BAD-152	15	M30 x 1,5	M56 x 2	77,8	25,0	31,8	25,4	30,2
BAD-153	23	M42 x 1,5	M70 x 2	77,8	32,0	38,2	25,4	27,0

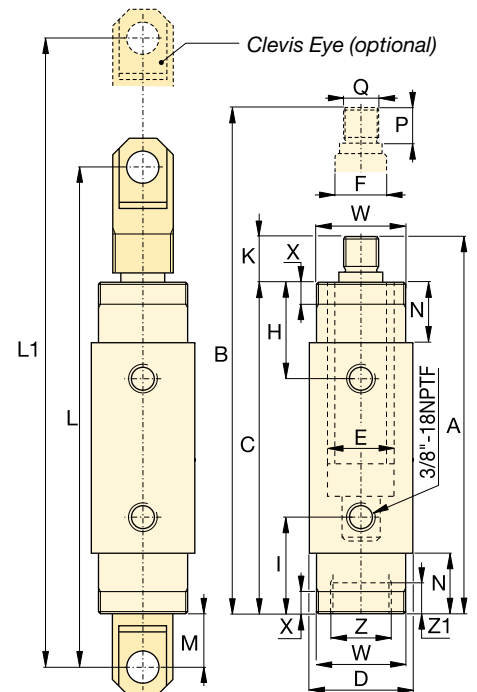
## BRD Series



Capacity:  
**4 - 23 ton**

Stroke:  
**28 - 260 mm**

Maximum Operating Pressure:  
**700 bar**



Top to Retract Port H (mm)	Bottom to Advance Port I (mm)	Plunger Protrusion K (mm)	Clevis Eye Mounting Dimensions			Neck Length N (mm)	Plunger Thread Length P (mm)	Plunger External Thread Q (mm)	Cylinder Mounting Dimensions (mm)				Model Number	
			L (mm)	L1 (mm)	M (mm)				Collar Thread W	Collar Thread Length X	Int. Base Thread Z	Int. Base Thread Length Z1		
47	47	24	258	286	41	29	22	M16 x 1,5	M42 x 1,5	11	M30 x 1,5	9	2,0	BRD-41
47	47	24	308	387	41	29	22	M16 x 1,5	M42 x 1,5	11	M30 x 1,5	9	2,6	BRD-43
47	47	24	385	540	41	29	22	M16 x 1,5	M42 x 1,5	11	M30 x 1,5	9	3,6	BRD-46
57	57	25	295	323	38	38	22	M22 x 1,5	M56 x 2	14	M42 x 1,5	14	3,0	BRD-91
57	57	25	346	425	38	38	22	M22 x 1,5	M56 x 2	14	M42 x 1,5	14	4,2	BRD-93
57	57	25	422	577	38	38	22	M22 x 1,5	M56 x 2	14	M42 x 1,5	14	5,6	BRD-96
57	57	25	524	781	38	38	22	M22 x 1,5	M56 x 2	14	M42 x 1,5	14	7,3	BRD-910
73	73	30	492	651	52	54	28	M30 x 1,5	M70 x 2	22	M56 x 2	24	10,2	BRD-166
73	73	30	593	853	52	54	28	M30 x 1,5	M70 x 2	22	M56 x 2	24	14,5	BRD-1610
89	89	27	524	683	53	70	25	M42 x 1,5	M85 x 2	29	M70 x 2	26	16,0	BRD-256
89	89	27	626	886	53	70	25	M42 x 1,5	M85 x 2	29	M70 x 2	26	20,3	BRD-2510