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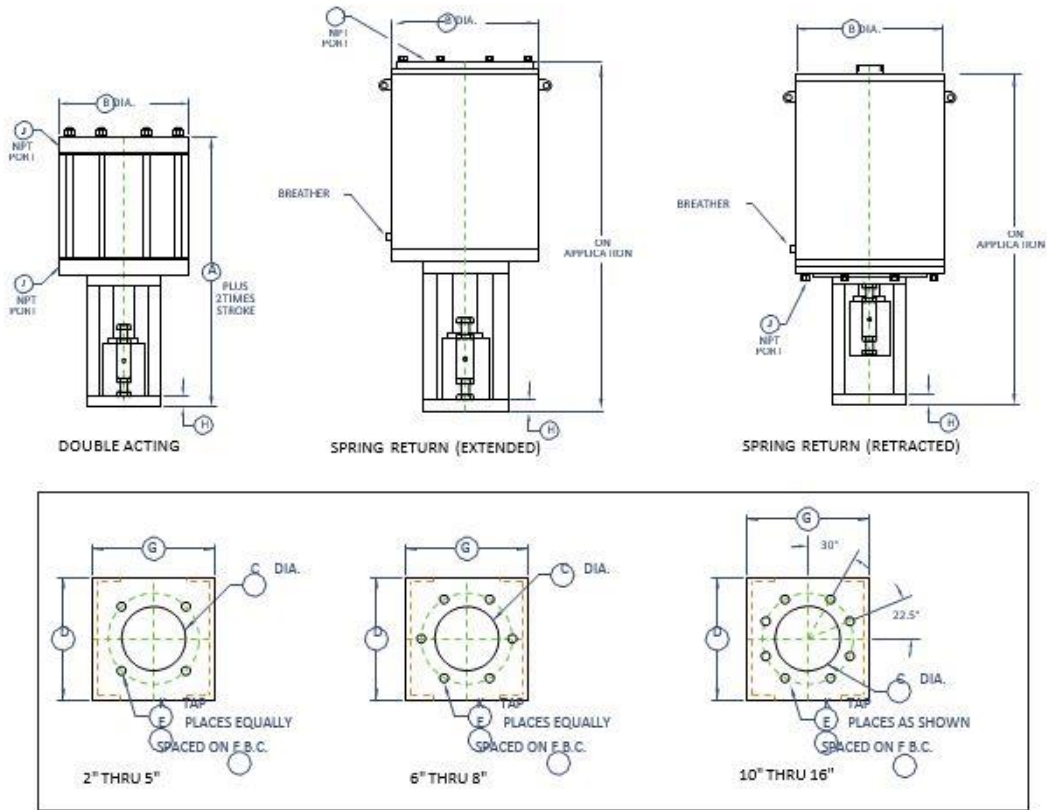
Thrust Chart Linear Hydraulic Actuator

| Actuator Model Number | 500 psi | | 750 psi | | 1000 psi | | 1500 psi | |
|-----------------------|---------|---------|---------|---------|----------|---------|----------|---------|
| | Extend | Retract | Extend | Retract | Extend | Retract | Extend | Retract |
| HDH2 (*) DA | 1492 | 1119 | 2238 | 1679 | 2985 | 2238 | 4477 | 3358 |
| HDH2.5 (*) DA | 2332 | 1959 | 3497 | 2938 | 4663 | 3917 | 6995 | 5876 |
| HDH3.2 (*) DA | 3940 | 3235 | 5911 | 4853 | 7881 | 6470 | 11821 | 9706 |
| HDH4 (*) DA | 5969 | 4827 | 8954 | 7240 | 11938 | 9653 | 17907 | 14480 |
| HDH5 (*) DA | 9327 | 7834 | 13990 | 11752 | 18653 | 15669 | 27980 | 23503 |
| HDH6 (*) DA | 13430 | 11099 | 20146 | 16648 | 26861 | 22197 | 40291 | 33296 |
| HDH7 (*) DA | 18280 | 14923 | 27420 | 22384 | 36560 | 29845 | 54841 | 44768 |
| HDH8 (*) DA | 23876 | 19306 | 35814 | 28959 | 47752 | 38612 | 71628 | 57918 |
| HDH10 (*) DA | 37307 | 29752 | 55960 | 44628 | 74613 | 59504 | 111920 | 89256 |
| HDH12 (*) DA | 53721 | 42436 | 80582 | 63654 | 107443 | 84872 | 161164 | 127308 |
| HDH14 (*) DA | 73121 | 61836 | 109681 | 92753 | 146241 | 123671 | 219362 | 185507 |
| HDH16 (*) DA | 95505 | 84219 | 143257 | 126329 | 191009 | 168439 | 286514 | 252658 |

(*) Denotes actuator stroke (See explanation of model number). Consult factory for supply pressure under 500 psi and over 1500 psi. Maximum Allowable Working Pressure is 3000 psi. Larger bore sizes, longer strokes and higher pressure (up to 5000 psi) are available. For thrust at other than charted pressure use the following formula: $(\text{Supply pressure} / 1000) \times (\text{Thrust at 1000 psi}) = \text{Thrust}$

Example: HDH2.5 (*) DA with 600 psi supply pressure, extend direction $(600 / 1000) \times 4663 = 2798$ lbs. Thrust

Consult factory for higher thrust or longer strokes. All models accommodate multiple valve stems.



| Actuator Model Number | A | B | | C | D | E | F | G | H | J | K | DA ONLY | | Vol / inch of stroke retracted | Vol / inch of stroke extended |
|-----------------------|-------|-------|-------|------|-------|---|-------|-------|------|-----|----------|--------------------------|---------------------|--------------------------------|-------------------------------|
| | | DA | SR | | | | | | | | | Basic weight zero stroke | Wt / inch of stroke | | |
| HDH2 (*) DA or SR | 11.56 | 4.38 | 10.75 | 2.50 | 7.00 | 4 | 4.13 | 7.00 | 0.56 | 1/4 | 7/16-14 | 44 | 2.82 | 2.35 | 3.14 |
| HDH2.5 (*) DA or SR | 11.56 | 4.88 | 12.75 | 2.50 | 7.00 | 4 | 4.13 | 7.00 | 0.56 | 1/4 | 1/2-13 | 49 | 2.93 | 4.12 | 4.91 |
| HDH3.2 (*) DA or SR | 13.69 | 6.44 | 16.00 | 3.25 | 8.00 | 4 | 5.25 | 9.00 | 0.69 | 3/8 | 5/8-11 | 81 | 4.65 | 6.81 | 8.30 |
| HDH4 (*) DA or SR | 14.81 | 7.19 | 18.00 | 3.75 | 10.00 | 4 | 6.00 | 10.00 | 0.69 | 3/8 | 3/4-10 | 124 | 7.04 | 10.16 | 12.57 |
| HDH5 (*) DA or SR | 15.06 | 8.75 | 20.00 | 4.00 | 12.00 | 4 | 7.00 | 12.00 | 0.94 | 3/8 | 1"-8 | 201 | 8.47 | 16.49 | 19.64 |
| HDH6 (*) DA or SR | 19.94 | 11.50 | 24.00 | 4.75 | 12.00 | 6 | 8.00 | 12.00 | 0.94 | 1/2 | 1"-8 | 305 | 10.00 | 23.37 | 28.27 |
| HDH7 (*) DA or SR | 24.44 | 12.00 | 28.00 | 6.00 | 15.00 | 6 | 9.00 | 15.00 | 1.44 | 3/4 | 1"-8 | 556 | 14.39 | 31.42 | 38.48 |
| HDH8 (*) DA or SR | 26.56 | 13.50 | 32.00 | 6.75 | 18.00 | 6 | 10.00 | 18.00 | 1.69 | 3/4 | 1 1/8-12 | 827 | 17.59 | 40.64 | 50.27 |
| HDH10 (*) DA or SR | 32.31 | 15.63 | O/A | 8.75 | 18.00 | 8 | 12.00 | 18.00 | 1.94 | 3/4 | 1 1/8-12 | 1254 | 22.57 | 62.64 | 78.54 |
| HDH12 (*) DA or SR | 37.75 | 18.38 | O/A | 9.75 | 18.00 | 8 | 13.00 | 18.00 | 1.69 | 3/4 | 1 1/4-12 | 1756 | 31.67 | 97.19 | 113.10 |
| HDH14 (*) DA or SR | 40.69 | 20.38 | O/A | 9.75 | 18.00 | 8 | 14.00 | 19.00 | 1.94 | 3/4 | 1 1/2-12 | 2262 | 42.08 | 130.18 | 153.94 |
| HDH16 (*) DA or SR | 41.63 | 23.88 | O/A | 9.75 | 18.00 | 8 | 14.00 | 19.00 | 1.94 | 3/4 | 1 1/2-12 | 2908 | 44.23 | 177.3 | 201.06 |

(*) Denotes actuator stroke

(O/A) Denotes On Application

Consult factory for overall length and weights for spring return models. Volume is in cubic inches, dimensions are in inches, weights are in pounds (lbs). Lifting eyes are available for double acting models 10 thru 16. Lifting eyes are standard for spring return models.