



Vibra-Ram Inc.

Vibra-Ram Inc.
18104—111 Avenue
Edmonton, AB T5S 2R1
sales@vibra-raminc.com
www.vibra-raminc.com



Mobile Scrap and Demolition Shears

XS Series

Speed Valve

The cycle time of the shear (open and closing of the jaw) depend only on the oil supply of the excavator.

If for example the oil supply from the excavator is not sufficient for the shear functions "open and close" and because of this the operating cycle is too slow, then the shear should be equipped with a speed valve. It is to be considered that maximum running speed of the cylinder seals is not exceeded.

The equipment of the shear including a speed valve is an additional service and will be charged separately.

Valve function

During the hydraulic cylinder of the shear is extending (jaw closing) the oil on the rod side will be feed on the piston side additional to the excavators oil supply. Thus the closing time of the jaw is up to 50% faster with a maximum working pressure of 270 bar (3,839 psi). If the working pressure rises over 270 bar (3,839 psi) the speed valve switches automatically and the additional oil of the rod side will be no more feed on piston side. The oil will be feed as a oil return to the excavators hydraulic tank.

The speed has no influence on the function "hydraulic cylinder retraction" (jaw opening) and therefore cannot modify the jaws opening time.

By the use of a speed valve the cycle time "open and close" can be reduced up to 33 %.

Technical Data

We reserve the right to make technical modifications/series and measurement changes

	XS 700	XS 2000	XS 3000	XS 4000	XS 4800
Service weight excluding (kg)	1.200	1.700	2.850	3.950	5.100
bracket, approx. (lbs)	2,640	3,744	6,277	8,700	11,230
Length excluding (mm)	2.600	3.125	3.725	3.790	4.220
mounting bracket (in)	102.4	126.6	146.6	149.2	166.1
Jaw opening (mm)	350	450	550	665	775
(in)	13.8	17.7	21.7	26.2	30.5
Jaw depth (mm)	360	480	530	665	760
(in)	14.2	18.9	20.9	26.2	29.9
Primary cutter length (mm)	200	250	300	350	400
(in)	7.9	9.8	11.8	13.8	15.8
Max. shear force throat / primary blade center (KN)	1.445 / 824	2.890 / 1.450	3.195 / 1.646	4.952 / 2.352	6.154 / 2.813
(short tons*)	162 / 92	324 / 163	360 / 185	558 / 265	693 / 317
Recommended oil flow (l/min)	100 - 160	120 - 200	140 - 220	300 - 400	350 - 450
hydraulic cylinder (gpm)	26 - 42	32 - 53	37 - 58	79 - 106	92 - 145
Max. working pressure (bar)	350	350	350	350	350
hydraulic cylinder (psi)	5,076	5,076	5,076	5,076	5,076
Recommended oil flow (l/min)	6 - 8	6 - 8	6 - 8	8 - 10	8 - 10
rotation system (gpm)	1.6 - 2.1	1.6 - 2.1	1.6 - 2.1	2.1 - 2.6	2.1 - 2.6
Max. working pressure (bar)	180	180	180	180	180
rotation system (psi)	2,610	2,610	2,610	2,610	2,610
Hydraulic rotation endlessly (Grad / Degree)	360	360	360	360	360
Slewing ring (mm)	545	745	845	955	1.055
Ø pitch circle (in)	21.5	29.3	33.3	37.6	41.5
Approx. excavator weight size**					
Boom (kg)	10.000 - 14.000	14.000 - 18.000	20.000 - 24.000	24.000 - 30.000	30.000 - 36.000
(lbs)	22,000 - 30,800	30,800 - 39,600	44,000 - 52,800	52,800 - 66,000	66,000 - 79,300
Dipper stick (kg)	14.000 - 18.000	20.000 - 24.000	26.000 - 30.000	32.000 - 40.000	36.000 - 45.000
(lbs)	30,800 - 39,600	44,000 - 52,800	57,300 - 66,000	70,500 - 88,100	79,300 - 99,100

* US tons

** Decisive for the choice of the shear is the payload of the excavator.