

5. Hallite Cylinder Head Wear Ring

Glass fiber reinforced nylon, improves rod and gland life by preventing side load induced metal to metal wear.

4. Hallite O-Ring

Buna-N, protects threads from moisture and corrosion.

3. Hallite Rod Seal

Polyurethane U-CUP, ensuring a positive seal even at high pressures and high temperatures.

2. Hallite Rod Wiper

Polyurethane, prevents contaminants from entering the cylinder, for maximum protection of internal components.

6. Ports

O-Ring Boss, for zero leakage at high pressure.

7. Hallite Piston Seal

Polyurethane, double acting seal ensures a positive seal in both directions. Designed for pressure spikes up to 5000 PSI, operating temperature range from -40° C to 110° C, and improved wear resistance.

8. Hallite Piston Wear Ring

Glass fiber reinforced nylon, improves tube and piston life by preventing side load induced metal to metal wear.

9. Lock Nut

Self-Locking, to enable easy removal for servicing.

10. Pins

45 Steel, zinc plated.

11. Hallite O-Ring

Buna-N, ensures a positive seal between rod and piston.

12. Piston

45 Steel, for increased durability.

13. Tube

20 Steel, with a micro-honed finish.

1. Pineye or Clevis Attachment

New FEM style clevis is now 5/8" thick on 3 1/2"; 3/4" thick on 4" and 1" thick on 5" bore models to allow for a wider range of mobile or industrial applications. Pineye # 20 Steel. Clevis ZG270-500 steel casting.

16. Cylinder Head

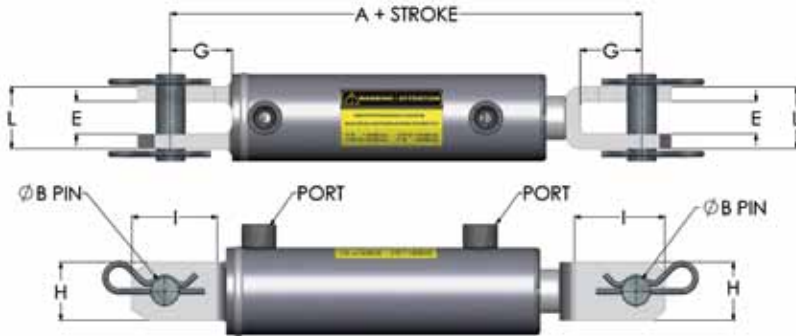
45 Steel, with 25% longer thread for increased strength. Threaded design ensures easy disassembly to allow for quick seal replacement.

15. FEM/MAL CYL.

Now Primed and Painted Gloss Black.

14. Rod

45 Steel, induction hardened to 45-50 Rockwell C and chrome plated 0.0008" to 0.001" thick for a final surface hardness of 69-71 Rockwell C.



Operating pressure: 3000 PSI

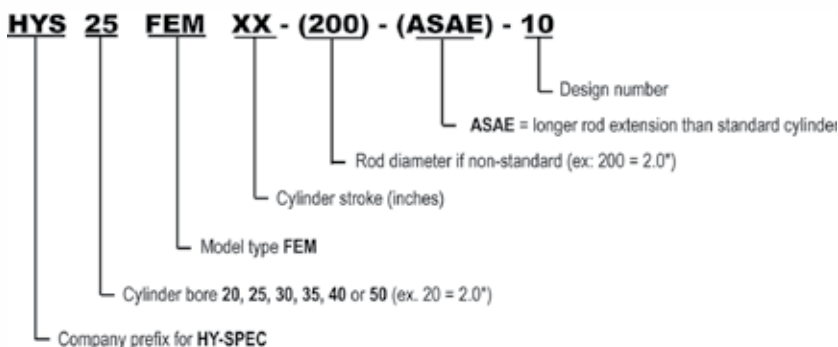
100% PRESSURE TESTED

FEM CYLINDER DIMENSIONS

	TUBE DIA.	A*	Ø B PIN	E	G	H	I	L	PORTS (SAE)
in.	2.000	10.250	1.000	1.125	2.125	2.000	3.125	2.125	6
mm	50.80	260.35	25.40	28.60	53.98	50.80	79.37	53.98	
in.	2.500	10.250	1.000	1.125	2.125	2.000	3.125	2.125	8
mm	63.50	260.35	25.40	28.60	53.98	50.80	79.37	53.98	
in.	3.000	10.250	1.000	1.125	2.125	2.000	3.125	2.125	8
mm	76.20	260.35	25.40	28.60	53.98	50.80	79.37	53.98	
in.	3.500	10.250	1.000 / 1.250	1.125	2.000	2.500	3.875	2.375	8
mm	88.90	260.35	25.40 / 31.75	28.60	50.80	63.50	98.42	60.33	
in.	4.000	10.250	1.000/ 1.500	1.625	1.750	3.000	4.000	3.125	8
mm	101.60	260.35	25.40 / 38.10	41.28	44.45	76.20	101.60	79.38	
in.	5.000	15.750	1.500 / 2.000	2.125	3.500	4.000	6.500	4.125	12
mm	127.00	400.10	38.10/ 50.80	53.98	88.90	101.60	165.10	104.78	

		A* STANDARD ASAE CYLINDERS								
		20FEM08-ASAE	20FEM16-ASAE	25FEM08-ASAE	25FEM16-ASAE	30FEM08-ASAE	30FEM16-ASAE	35FEM08-ASAE	35FEM16-ASAE	40FEM08-ASAE
in.		12.25	15.50	12.25	15.50	12.25	15.50	12.25	15.50	12.25
mm		311.15	393.70	311.15	393.70	311.15	393.70	311.15	393.70	311.15

MODEL NUMBER FOR FEM



WARNING / ATTENTION

PLEASE NOTE THAT THE MAXIMUM CAPACITY OF CLEVIS PINS ARE:

VEUILLEZ NOTER QUE LA CAPACITE MAXIMUM DES GOUPILLES D'ATTACHEMENT EST DE :

1" Ø = 26 000 Lbs	1-1/2" Ø = 56 000 Lbs
1-1/4" Ø = 39 000 Lbs	2" Ø = 96 000 Lbs

MODEL	BORE X STROKE (in.)	ROD DIA. (in.)	PIN DIA. (in.)	CENTER TO CENTER OF PIN (in.)		PORTS	MAX EXTENSION PRESSURE (PSI)	WEIGHT (lb)	SEAL KIT PART #
				Retracted	Extended				
HYS 20FEM04-10	2 X 4	1-1/4		14 1/4	18 1/4	SAE-6	3000	14	HYS MF 201250-10
HYS 20FEM06-10	2 X 6			16 1/4	22 1/4			16	
HYS 20FEM08-10	2 X 8			18 1/4	26 1/4			18	
HYS 20FEM08-ASAE-10	2 X 8			20 1/4	28 1/4			19	
HYS 20FEM10-10	2 X 10			20 1/4	30 1/4			20	
HYS 20FEM12-10	2 X 12			22 1/4	34 1/4			21	
HYS 20FEM14-10	2 X 14			24 1/4	38 1/4			23	
HYS 20FEM16-10	2 X 16			26 1/4	42 1/4			25	
* HYS 20FEM16-ASAE-10	2 X 16			31 1/2	47 1/2			27	
HYS 20FEM18-10	2 X 18			28 1/4	46 1/4			26	
HYS 20FEM20-10	2 X 20			30 1/4	50 1/4			28	
HYS 20FEM24-10	2 X 24			34 1/4	58 1/4			31	
HYS 20FEM28-10	2 X 28			38 1/4	66 1/4			35	
HYS 20FEM30-10	2 X 30			40 1/4	70 1/4			37	
HYS 20FEM32-10	2 X 32			42 1/4	74 1/4			38	
* HYS 20FEM34-10	2 X 34			44 1/4	78 1/4			40	
HYS 20FEM36-10	2 X 36			46 1/4	82 1/4			42	
HYS 25FEM04-10	2 1/2 X 4			1-1/2	1			14 1/4	
HYS 25FEM06-10	2 1/2 X 6	16 1/4	22 1/4			20			
HYS 25FEM08-10	2 1/2 X 8	18 1/4	26 1/4			22			
HYS 25FEM08-ASAE-10	2 1/2 X 8	20 1/4	28 1/4			23			
HYS 25FEM10-10	2 1/2 X 10	20 1/4	30 1/4			25			
HYS 25FEM12-10	2 1/2 X 12	22 1/4	34 1/4			27			
HYS 25FEM14-10	2 1/2 X 14	24 1/4	38 1/4			29			
HYS 25FEM16-10	2 1/2 X 16	26 1/4	42 1/4			31			
* HYS 25FEM16-ASAE-10	2 1/2 X 16	31 1/2	47 1/2			34			
HYS 25FEM18-10	2 1/2 X 18	28 1/4	46 1/4			34			
HYS 25FEM20-10	2 1/2 X 20	30 1/4	50 1/4			36			
HYS 25FEM24-10	2 1/2 X 24	34 1/4	58 1/4			40			
HYS 25FEM28-10	2 1/2 X 28	38 1/4	66 1/4			45			
HYS 25FEM30-10	2 1/2 X 30	40 1/4	70 1/4			47			
* HYS 25FEM32-10	2 1/2 X 32	42 1/4	74 1/4			49			
HYS 25FEM34-10	2 1/2 X 34	44 1/4	78 1/4			51			
HYS 25FEM36-10	2 1/2 X 36	46 1/4	82 1/4			54			
HYS 30FEM04-10	3 X 4	1-1/2	1			14 1/4	18 1/4	SAE-8	3000
HYS 30FEM06-10	3 X 6			16 1/4	22 1/4	24			
HYS 30FEM08-10	3 X 8			18 1/4	26 1/4	26			
HYS 30FEM08-ASAE-10	3 X 8			20 1/4	28 1/4	27			
HYS 30FEM10-10	3 X 10			20 1/4	30 1/4	29			
HYS 30FEM12-10	3 X 12			22 1/4	34 1/4	31			
HYS 30FEM14-10	3 X 14			24 1/4	38 1/4	34			
HYS 30FEM16-10	3 X 16			26 1/4	42 1/4	36			
* HYS 30FEM16-ASAE-10	3 X 16			31 1/2	47 1/2	39			
HYS 30FEM18-10	3 X 18			28 1/4	46 1/4	39			
HYS 30FEM20-10	3 X 20			30 1/4	50 1/4	41			
HYS 30FEM24-10	3 X 24			34 1/4	58 1/4	46			
HYS 30FEM28-10	3 X 28			38 1/4	66 1/4	51			
HYS 30FEM30-10	3 X 30			40 1/4	70 1/4	53			
HYS 30FEM32-10	3 X 32			42 1/4	74 1/4	56			
HYS 30FEM34-10	3 X 34			44 1/4	78 1/4	58			
HYS 30FEM36-10	3 X 36			46 1/4	82 1/4	61			

*Stocked in limited quantity.

MODEL	BORE X STROKE (in.)	ROD DIA. (in.)	PIN DIA. (in.)	CENTER TO CENTER OF PIN (in.)		PORTS	MAX EXTENSION PRESSURE (PSI)	WEIGHT (lb)	SEAL KIT PART #					
				Retracted	Extended									
* HYS 35FEM04-10	3 1/2 X 4	1-3/4	1 & 1-1/4	14 1/4	18 1/4	SAE-8	3000	31	HYS MF 351750-10					
* HYS 35FEM06-10	3 1/2 X 6			16 1/4	22 1/4			34						
HYS 35FEM08-10	3 1/2 X 8			18 1/4	26 1/4			37						
* HYS 35FEM08-ASAE-10	3 1/2 X 8			20 1/4	28 1/4			39						
HYS 35FEM10-10	3 1/2 X 10			20 1/4	30 1/4			40						
HYS 35FEM12-10	3 1/2 X 12			22 1/4	34 1/4			43						
HYS 35FEM14-10	3 1/2 X 14			24 1/4	38 1/4			46						
HYS 35FEM16-10	3 1/2 X 16			26 1/4	42 1/4			49						
* HYS 35FEM16-ASAE-10	3 1/2 X 16			31 1/2	47 1/2			53						
HYS 35FEM18-10	3 1/2 X 18			28 1/4	46 1/4			52						
HYS 35FEM20-10	3 1/2 X 20			30 1/4	50 1/4			55						
HYS 35FEM24-10	3 1/2 X 24			34 1/4	58 1/4			61						
HYS 35FEM24-200-10	3 1/2 X 24			2	34 1/4			58 1/4		66	HYS MF 352000-10			
HYS 35FEM28-10	3 1/2 X 28			1-3/4	38 1/4			66 1/4		68	SAE-8	2900	71	HYS MF 351750-10
* HYS 35FEM30-10	3 1/2 X 30				40 1/4			70 1/4		74				
* HYS 35FEM32-10	3 1/2 X 32				42 1/4			74 1/4		77				
* HYS 35FEM34-10	3 1/2 X 34	44 1/4	78 1/4		80									
HYS 35FEM36-10	3 1/2 X 36	46 1/4	82 1/4		80									
HYS 40FEM04-10	4 X 4	2	1 & 1-1/2	14 1/4	18 1/4	SAE-8	3000	46	HYS MF 402000-10					
HYS 40FEM06-10	4 X 6			16 1/4	22 1/4			51						
HYS 40FEM08-10	4 X 8			18 1/4	26 1/4			55						
* HYS 40FEM08-ASAE-10	4 X 8			20 1/4	28 1/4			57						
HYS 40FEM10-10	4 X 10			20 1/4	30 1/4			59						
HYS 40FEM12-10	4 X 12			22 1/4	34 1/4			63						
HYS 40FEM14-10	4 X 14			24 1/4	38 1/4			67						
HYS 40FEM16-10	4 X 16			26 1/4	42 1/4			72						
* HYS 40FEM16-ASAE-10	4 X 16			31 1/2	47 1/2			76						
HYS 40FEM18-10	4 X 18			28 1/4	46 1/4			76						
HYS 40FEM20-10	4 X 20			30 1/4	50 1/4			80						
HYS 40FEM24-10	4 X 24			34 1/4	58 1/4			88						
HYS 40FEM28-10	4 X 28			38 1/4	66 1/4			97						
HYS 40FEM30-10	4 X 30			40 1/4	70 1/4			101						
HYS 40FEM32-10	4 X 32			42 1/4	74 1/4			105						
* HYS 40FEM34-10	4 X 34			44 1/4	78 1/4			109						
HYS 40FEM36-10	4 X 36			46 1/4	82 1/4			113						
* HYS 50FEM04-10	5 X 4			2-1/2	1-1/2 & 2			19 3/4		23 3/4	SAE-12	3000	95	HYS MF 502500-10
HYS 50FEM06-10	5 X 6							21 3/4		27 3/4			102	
HYS 50FEM08-10	5 X 8							23 3/4		31 3/4			108	
* HYS 50FEM10-10	5 X 10	25 3/4	35 3/4			114								
HYS 50FEM12-10	5 X 12	27 3/4	39 3/4			121								
* HYS 50FEM14-10	5 X 14	29 3/4	43 3/4			127								
* HYS 50FEM16-10	5 X 16	31 3/4	47 3/4			134								
HYS 50FEM18-10	5 X 18	33 3/4	51 3/4			140								
HYS 50FEM20-10	5 X 20	35 3/4	55 3/4			146								
HYS 50FEM24-10	5 X 24	39 3/4	63 3/4			159								
HYS 50FEM28-10	5 X 28	43 3/4	71 3/4			172								
HYS 50FEM30-10	5 X 30	45 3/4	75 3/4			178								
HYS 50FEM32-10	5 X 32	47 3/4	79 3/4			185								
* HYS 50FEM36-10	5 X 36	51 3/4	87 3/4			197								

*Stocked in limited quantity.

ASK FOR HY-SPEC QUALITY

Note actual products may differ from photos shown in this brochure.
Product availability and specifications are subject to change without notice.