FSG-CRV-01494

NFPA 1901 RATING CHART CBP FLEX SERIES PTO PUMP

RATED 250 GPM @ 150 PSI

SINGLE STAGE PUMP- 165 mm (6.50 inch) DIAMETER IMPELLER

MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 10 FT LIFT, 20 FT OF SUCTION HOSE & STRAINER.

STANDARD TEST CONDITIONS AND MAXIMUM ELEVATION DO NOT INCLUDE TRUCK PIPING LOSSES.

CBP25 3 IN. HOSE, 3080 FEET (940 m)

CBP25 4 IN. HOSE, 6790 FEET (2060 m)

CBP25 4-1/2 IN. HOSE, 7140 FEET (2170 m)

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RATED CAPACITY (US GPM)	CAPACITY (US GPM)	PRESSURE (PSIG)	POWER REQUIRED (HP)	3.74	TORQUE (LBS-FT)	2.91	TORQUE (LBS-FT)	2.60	TORQUE (LBS-FT)	2.33	TORQUE (LBS-FT)	1.90	TORQUE (LBS-FT)	1.64	TORQUE (LBS-FT)	1.31	TORQUE (LBS-FT)	1.14	TORQUE (LBS-FT)
	Pl	JMP MC	DEL	CBP2	5-37F	CBP2	5-29F	CBP2	5-26F	CBP2	5-23F	CBP2	5-19F	CBP2	5-16F	CBP2	5-13F	CBP2	5-11F
	250	150	41	1510	143	1940	111	2170	100	2420	89	2970	73	3430	63	4320	50	4940	44
250	250	165	46	1580	153	2020	120	2270	107	2520	96	3090	78	3580	68	4500	54	5150	47
	175	200	43	1610	141	2060	110	2310	98	2570	88	3150	72	3640	62	4590	49	5250	43
	125	250	48	1740	145	2230	113	2500	101	2780	91	3410	74	3940	64	4970	51	5680	44
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NOTES:

- 1. GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
- 2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK'S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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4657	В	CHANGED RATIO FROM 1.65 TO 1.64 TO MATCH OTHER FLEX DOCUMENTS	DLM	16Nov2018	MAL			34475 US		HALE			
4656	Α	RELEASE TO PRODUCTION	DLM	31Oct2018	MAL			X Corpora					
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FSG-CRV-01494

NFPA 1901 METRIC RATING CHART CBP FLEX SERIES PTO PUMP

RATED 1000 LPM @ 1000 kPa

SINGLE STAGE PUMP- 165 mm (6.50 inch) DIAMETER IMPELLER

MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 3 m LIFT, 6 m OF SUCTION HOSE & STRAINER. STANDARD TEST CONDITIONS AND MAXIMUM ELEVATION DO NOT INCLUDE TRUCK PIPING LOSSES.

CBP100M 75 mm HOSE, 770 m (2530 ft.)

CBP100M 100 mm HOSE, 2060 m (6790 ft.)

CBP100M 110 mm HOSE, 2200 m (7220 ft.)

	GEARBOX INPUT DRIVE SHAFT (Rev/Min) ²																		
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RATED CAPACITY LPM)	CAPACITY (LPM)	PRESSURE (kPa)¹	POWER REQUIRED (KW)	3.74	TORQUE (N-m)	RATIO 2.91	TORQUE (N-m)	2.60	TORQUE (N-m)	2.33	TORQUE (N-m)	1.90	TORQUE (N-m)	1.64	TORQUE (N-m)	1.31	TORQUE (N-m)	1.14	TORQUE (N-m)
	PI	JMP MO	DEL	CBP10	0M-37F	CBP10	0M-29F	CBP10	0M-26F	CBP10	0M-23F	CBP10	0M-19F	CBP10	0M-16F	CBP10	0M-13F	CBP10	0M-11F
	1000	1000	31	1530	196	1960	153	2190	137	2440	123	3000	100	3460	87	4360	69	4990	60
1000	1000	1100	35	1590	211	2040	164	2290	146	2550	131	3130	107	3610	93	4550	74	5210	64
	700	1400	33	1620	194	2080	151	2330	135	2590	121	3180	99	3670	86	4620	68	5290	59
	500	1700	36	1750	195	2240	153	2510	136	2800	122	3430	100	3970	86	5000	68	5720	60
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NOTES:

- GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.
- 2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK'S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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GB6245 - 2006 RATING CHART CBP GB FLEX SERIES PTO PUMP

RATED 16 Liter/sec @ 1.03 MPa SINGLE STAGE PUMP- 165 mm (6.5 inch) DIAMETER IMPELLER

OPERATING CONDITIONS C1 & C2:

THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF SEA LEVEL ALTITUDE,

758.0 mm-Hg [29.84 in-Hg] ATMOSPHERIC PRESSURE, 20 °C [68 °F] WATER TEMPERATURE, 3 m [10 ft] LIFT, 6 m [20 ft] OF SUCTION HOSE & STRAINER¹.

OPERATING CONDITION C3:

THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF SEA LEVEL ALTITUDE,

758.0 mm-Hg [29.84 in-Hg] ATMOSPHERIC PRESSURE, 20 °C [68 °F] WATER TEMPERATURE, 7 m [23 ft] LIFT, 9 m [30 ft] OF SUCTION HOSE & STRAINER¹.

_ <u> </u>	D N	<u>≻</u> ∷	JE N	~ <u>C</u>	GEARBOX INPUT DRIVE SHAFT (Rev/Min) ²															
RATED CAPACITY (LITER/SEC)	OPERATING CONDITION	CAPACITY (LITER/SEC)	PRESSURE (MPa)	POWER REQUIRED (kW)	3.74	TORQUE (N-m)	RATIO 2.91	TORQUE (N-m)	2.60	TORQUE (N-m)	2.33	TORQUE (N-m)	1.90	TORQUE (N-m)	1.64	TORQUE (N-m)	1.31	TORQUE (N-m)	1.14	TORQUE (N-m)
		DIIMD	MODE	=1									0/16							
		r OWIF	WIODL		CBP16	GB-37F	CBP16GB-29F		CBP16GB-26F		CBP16GB-23F		CBP16GB-19F		CBP16	GB-16F	CBP16GB-13F		CBP16	GB-11F
16	C1	16	1.03	31	1490	196	1910	153	2140	136	2380	123	2920	100	3370	87	4250	69	4860	60
	C2	11	1.34	31	1600	187	2050	146	2290	131	2560	117	3130	96	3620	83	4560	66	5220	57
	C3	8	1.03	19	1390	133	1790	103	2000	93	2230	83	2740	68	3160	59	3980	47	4560	41
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NOTES:

- 1. SIZE OF SUCTION HOSE & STRAINER: 16 L/s: 75 mm (3 inch).
- 2. SPEED MUST NOT EXCEED ENGINE MANUFACTURER'S MAXIMUM NO-LOAD GOVERNED SPEED.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND POWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET POWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET POWER WHEN TOTALING ALL THE LOAD DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE RATING. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ALTITUDE, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET POWER CURVE.

THE PUMPING TORQUE REQUIREMENTS MIGHT EXCEED THE TRUCK'S TRANSMISSION CASE, POWER TAKE-OFF AND DRIVELINE COMPONENT LIMITS. CONTACT THE RESPECTIVE EQUIPMENT MANUFACTURER FOR THEIR APPROVAL OF THE PUMPING APPLICATION.

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