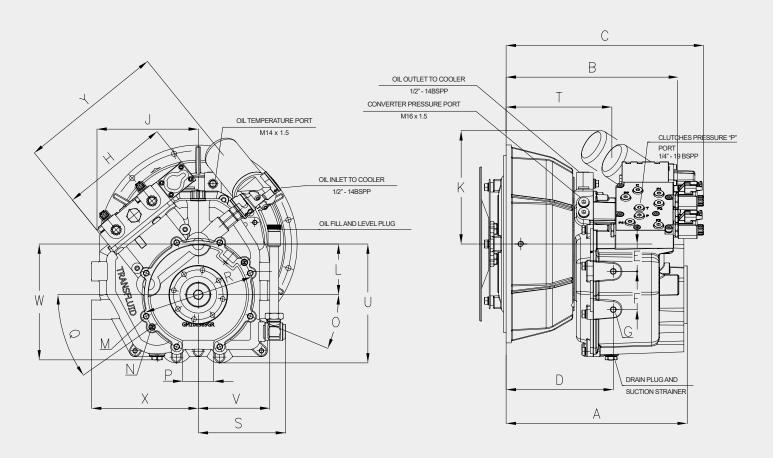


**POWER SHIFT TRANSMISSIONS** 

#### REVERMATIC 11-700 Power Shift with Torque Converter

The **REVERMATIC** is a power shift transmission specifically designed for industrial applications requiring quick directional reversing and smooth clutch engagement. It consists of an hydraulically activated gear unit, the forward and reverse multiple disc clutch assemblies are mounted on the lay shaft and input shaft respectively. They are operated by the hydraulic selector, electrically actuated, with a patented built-in "soft shift" device. The transmission input shaft is connected to the engine flywheel through a single stage torque converter which is selected according to the engine rating and required transmission vehicle performances, thanks to its characteristics it eliminates the mechanical connection between engine and driven machine allowing smooth power transfer.



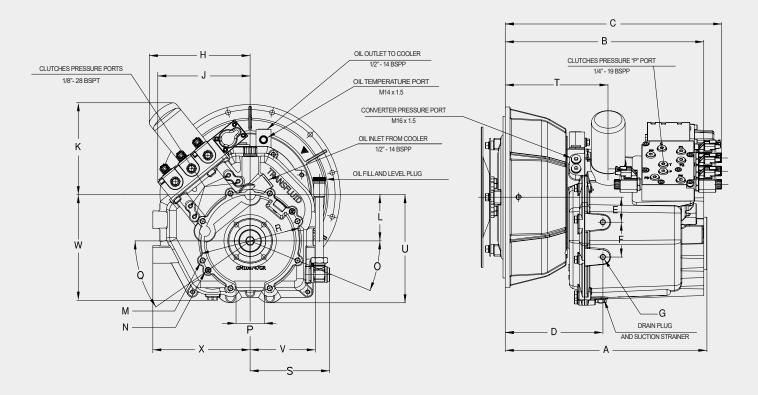
												DIME	NSIO	NS mm	(inc	:h)											
	FLANGE OUTPUT	А	В	С	D	Е	F	G dia x depth	Nr	Н	J	К	L	M dia x denth	Nr	N dia x depth N	0	Р	Q	R	S	Т	U	V	W	Х	Υ
									IVI						IVI												
3-10"	DIN 120	369.7	352	403	219	56	78	M12X25	,	222	207	231	104	M12X21	0	12X12	22.5°	63	35°	230	178	216	243	146	236.5	218	297
4-10"	SAE 1410	(14.555)	(13.858)	(15.866)	(8.622)	(2.205)	(3071)	(M12x0.98)	4	(8.74)	(8.15)	(9.094)	(4.094)	(M12x0.83)	0	(0.472x0.472) 2		(2.48)		(9.055)	(7.008)	(8.504)	(9.567)	(5.748)	(9.311)	(8.583)	

					TECHI	NICAL DATA				
RATIO FWD = REV	WEIGHT w/o oil	OIL QTY.	POWER	MAX TORQUE (TURBINE)	MAX SPEED		OPERATING PRESSURE OIL	FILTER	OIL COOLER	MAX OPERATING TEMP.
0.85 : 1 1.04 : 1 1.40 : 1 1.88 : 1 2.25 : 1	108 kg (2238 lb)	7 I (1.85 gal)	OFF ROAD 75 kW (100 hp) ON ROAD 95 kW (125 hp)	700 Nm (516 ft/lbs)	3000 rpm	12/24 Vdc 27 W	14 bar (203 psi)	25 micron	max 24 kW (32 hp) 3 bar (43 psi) 1.5 l (0.4 gal) /min/100 rpm	100° C (212° F)



#### RANGERMATIC 700 Power Shift with Torque Converter

The **RANGERMATIC** is a multi-speed power shift transmission available in one, two or three speeds forward and one or two speeds reverse. Designed for industrial applications it provides quick and smooth reversing and easy gear selection on the go. Consisting of a double gear train, actuated by self-contained hydraulic clutches, it connects to the engine through a wide range of hydrodynamic single stage torque converters. The torque converter is selected to optimize the driven machine performances. Additionally, it eliminates the mechanical connection between the engine and the driven machine allowing smooth power transfer. The hydraulic clutches are operated by a hydraulic selector, electrically actuated, with built-in patented "soft shift" device.



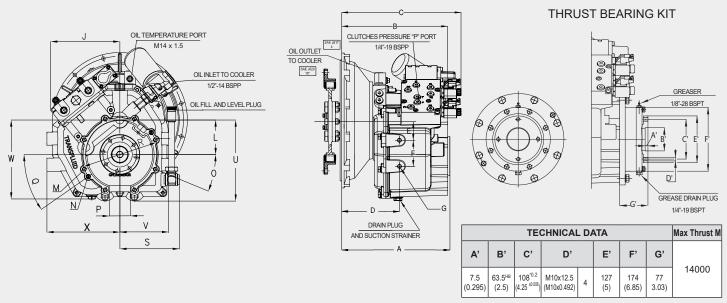
												DIMEN	ISION	S mm (ii	nch	1)											
	FLANGE OUTPUT		В	С	D	E	F	G		Н	J	К	L	М		N		0	Р	Q	R	S	Т	U	V	W	Х
								dia x depth	Nr					dia x depth	Nr	dia x depth	Nr										
	DIN 120					56		M12x25	1	229	207			M12x21	at.		2 at	22.5°		35°	230	178	230	243	146	237	218
4-10	' SAE 1410	(17.784)	(17.508)	(19.094)	(8.610)	(2.205)	(3.071)	(M12x0.98)	4	(9.016)	(8.150)	(8.110)	(4.075)	(M12x0.83)	45°	(0.472x0.472)	180°		(2.480)		(9.055)	(7.008)	(9.055)	(9.567)	(5.748)	(9.331)	(8.583)

		TECHINIC	CAL DATA		
	RATIO			WEIGHT w/o oil	
31-700 Version	21-700 Version	22-700 Version	31-700 Version	21-700 Version	22-700 Version
2.75-1.882-0.865 FWD 1.882 REVERSE	2.75-1.882 FWD 1.882-0.865 FWD 1.882 REVERSE	1.882-0.865 FWD 1.882-0.865 REVERSE	123 kg (271 LB)	123 kg (258 LB)	120 kg (265 LB)

				TEC	HNICAL DATA			
OIL QTY.	POWER	MAX TORQUE (TURBINE)	MAX SPEED	SOLENOIDS	OIL OPERATING PRESSURE	FILTER	OIL COOLER	MAX OPERATING TEMP.
8 I (2.11 gal)	OFF ROAD 75 kW (100 hp) ON ROAD 95 kW (125 hp)	700 Nm (516 ft/lbs)	3000 rpm	12/24 Vdc 27 W	14 bar (203 psi)	25 micron	max 24 kW (32 hp) 3 bar (43 psi) 1.5 l (0.4 gal) /min/100 rpm	100° C (212° F)

## REVERMATIC 11-700 RBD SPD11S "PTO" for Revermatic & Rangermatic

**REVERMATIC 11-700 RBD:** Suitable for industrial applications and as marine transmission when combined with the thrust bearing kit mounted on the output shaft assembly and suitable marine oil cooler. It can be installed on engines with flywheel and flywheel housing according to SAE J 617, J 620 standard. The use of a patented built-in soft shift device allows smooth shifting from forward to reverse rotation for comfortable docking and maneuvering. The RBD elastic coupling dampens torsional vibration and compensates for radial and angular misalignments.

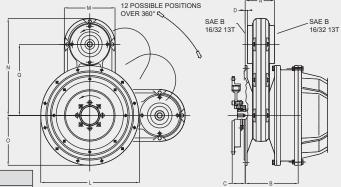


										DIMEN	SIONS	mm (incl	h)											
SAE INPUT	FLANGE OUTPUT	А	В	O	D	Ш	H	G dia x depth	Nr	J	L	M dia x depth	Nr	N dia x depth	Nr	0	Р	Q	R	S	U	٧	W	х
4-10"	DIN 120 SAE 1410	323.8 (12.748)		357 (14.055)	172.8 (6.803)	56 (2.205)	78 (3.071)	M12x25 (M12x0.98)	4	207 (8.150)	103.5 (4.075)	M12x21 (M12x0.83)	8 at 45°	12x12 (0.472x0.472)	at	22.5°	63 (2.480)	35°	230 (9.055)	178 (7.008)	243 (9.567)	146 (5.748	236.5 (9.311)	218 (8.583)

					TE	CHNICAL DATA				
RATIO FWD = REV	WEIGHT w/o oil	OIL QTY.	POWER	MAX TORQUE	MAX SPEED	SOLENOIDS	OPERATING PRESSURE OIL	FILTER	OIL COOLER MARINE <sup>(1)</sup>	MAX OPERATING TEMP.
0.85 : 1 1.04 : 1 1.40 : 1 1.88 : 1 2.25 : 1	INDUSTRIAL 85 kg (187 lb) MARINE 100 kg (220 lb)	3 I (0.8 gal)	INDUSTRIAL 130 kW (175 hp) MARINE 140 kW (188 hp)	560 Nm (442 ft/lbs)	INDUSTRIAL 3000 rpm MARINE 3500 rpm	12/24 Vdc 27 W	12 bar (174 psi)	25 micron	max 10 kW (13 hp) 3 bar (43 psi) 1.5 l (0.4 gal) /min/100 rpm	100° C (248° F)

<sup>(1)</sup> For industrial application see page 1

**SPD11:** high capacity pump drive installed between the engine flywheel housing and Revermatic or Rangermatic transmission (with torque converter). Compact in length, the SPD11 can be rotated 360° to provide the user the best pump pad position for the application.



			DIMI	ENSION	S mm (ı	nch)				
SAE INPUT	SAE OUTPUT FOR TRANSMISSION	А	В	С	D	L	М	N	0	Q
4-10"	4.40"	120.5	218.5	54 (2.126)	9.5	404	210	393	202	288
3-11"½	4-10"	(4.744)	(8.6)	39.6 (1.559)	(0.374)	(15.91)	(8.268)	(15.472)	(7.952)	(11.339)

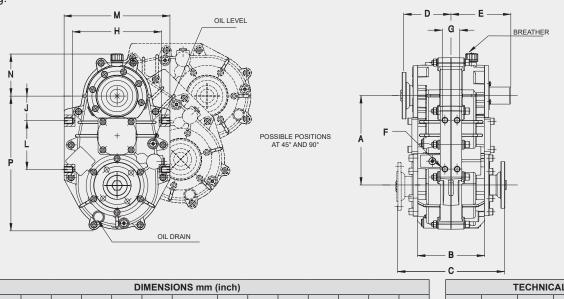
	IE	CHNICAL DA	AIA	
MAX WEIGHT	MAX INPUT TORQUE	HEAD TORQUE	MAX SPEED	GEAR RATIO
50 kg (110 lb)	560 Nm (413 ft/lbs)	170 Nm (125 ft/lbs)	3000 rpm	1

# DROP BOX DP280 (w/o differential) PARKING BRAKE SL750 spring loaded



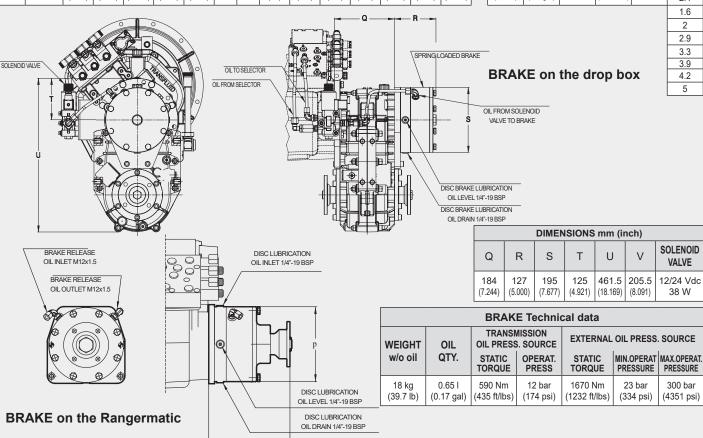
**DROP BOX:** Can be **flange mounted or remote mounted** to Revermatic or Rangermatic. Drop box can be rotated 360° to allow the user the optimal positioning of the output flanges available for 2WD or 4WD. The optional **SL750 PARKING BRAKE** is spring loaded, oil pressure released. It is operated by transmission oil pressure through a dedicated solenoid valve.

The SL750 doesn't require a dedicated oil source or specific control, but it can also be operated from an external source. When equipped with the Rangermatic or Revermatic, the SL750 is installed with steel pipes for flange mounting and rubber hoses for remote mounting.



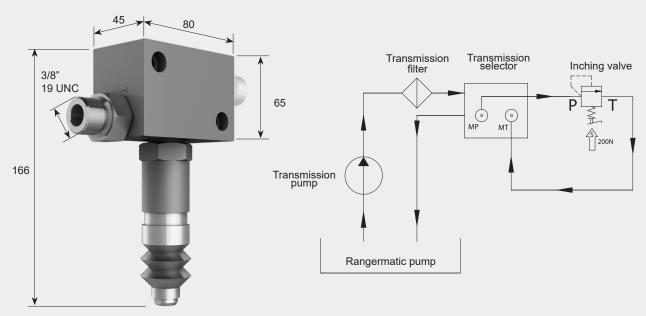
					D	IMENS	IONS	mm (	inch)						
FLANGE INPUT	FLANGE OUTPUT	Α	В	О	D	Е	F	= 	G	Н	J	L	М	N	Р
DIN 120 SAE 1410	DIN 120 SAE 1410	225 (8.858)	168 (6.614)	268 (10.551)	120 (4.016)	144.5 (5.689)	M12	4+4	30.5 (1.2)	223 (8.78)	62 (2.44)	123 (4.84)	265 (10.43)	107 (4.213)	339 (13.346)

	T	ECHNIC	AL DAT	4	
WEIGHT w/o oil	OIL QTY.	OUTPUT ROTATION	MAX TORQUE	MAX INPUT SPEED	GEAR RATIO
30 kg	31	=INPUT	1700 Nm	3500 rpm	1.15
(66 lb)	(0.8 gal)	-IINPUT	(1480 ft/lbs)	JJUU IPIII	2.4
					4.0

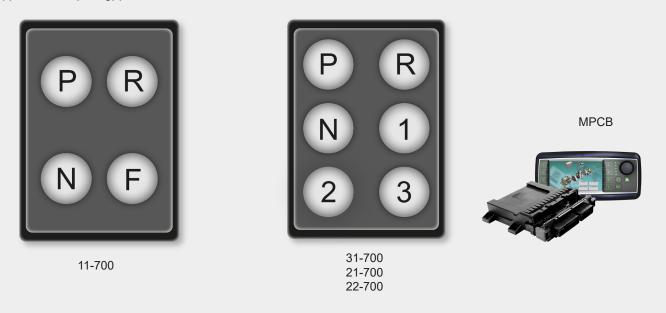


### INCHING CONTROL - Remote Mounting SHIFTER

**INCHING CONTROL:** Designed for quick and easy installation, Transfluid's inching control manifold can be installed next to the brake pedal eliminating cables and levers or the most suitable remote location. The connection with transmission is with simple hydraulic hoses.



**SHIFTER:** The **Shifter** is designed to integrate the transmission controls with the electrically actuated hydraulic selectors on Rangermatic and Revermatic transmissions. Providing ease of use and quick installation the Shifter contains the required CANbus signals corresponding with each available gear. Additionally in applications where the SL750 parking brake is used, the shifter comes equipped with a P(arking) position.



Model	31-700	21-700	22-700	11-700
Manual	PRN123	PRN12	PR <sub>2</sub> R <sub>1</sub> N12	PRNF

5

402 US - 2505

<sup>-</sup> w/ or w/o SL brake

### TSC Transmission Shifting Control DOCUMENTATION



**TSC:** Transmission Shifting Control only for 31-700 is a Transfluid's hardware and software original design, specifically made for easy and smooth automatic gear shifting of the three speed Rangermatic transmission. It is supplied with throttle pedal and speed sensors integrated on the transmission casing.









Shifter

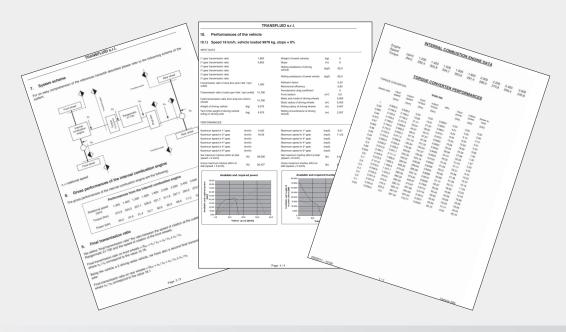
Throttle pedal

Display TFEasy

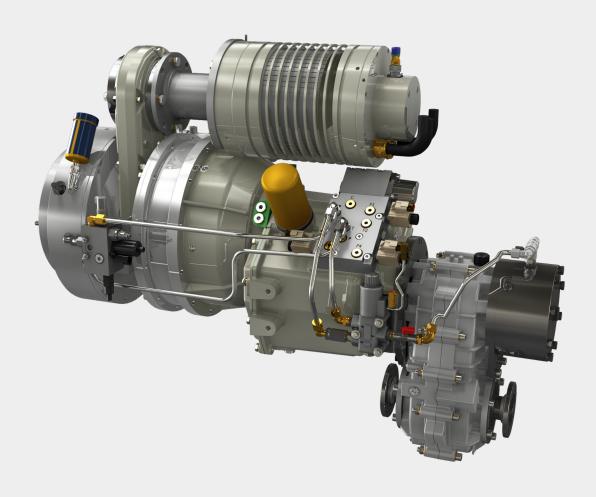
2x speed sensors

Technical data							
PRODUCT	DIMENSIONS mm	SUPPLY VOLTAGE Vdc	BUS communication	OPERATING TEMPERATURE C°	CONNECTOR TYPE	IP RATING	WEIGHT gr
SHIFTER	95 x 70 x 16	12 - 24	CAN Open	- 40° to + 70°	Deutsch DT04-4P	IP67 / IP69K	140
PEDAL	79 x 95 x 240	12 - 24	SAE J1939	- 40° to + 80°	Deutsch DT04-4P	IP67	80
DISPLAY	117 x 110 x 55	12 - 24	CAN Open	- 40° to + 85°	Deutsch DT series 6 pin	IP67	280
PROXIMITY	66 x 12	12 - 24	PNP	- 25° to + 70°	M12 4 pin male	IP67	20

Predictable performance has been achieved by dedicated development of a comprehensive Power Shift Transmission family. All new applications of Transfluid Power Shift Transmissions are supported by in-depth performance calculations. Transmission and vehicle performances are known before the machine is placed in the field.







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