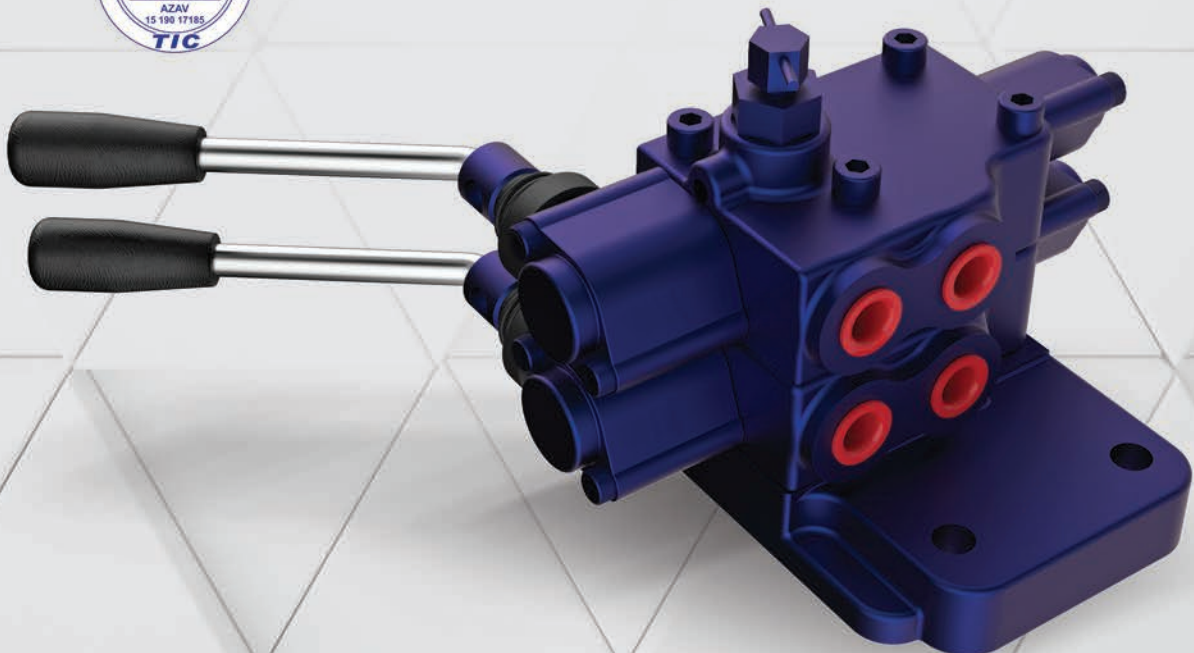


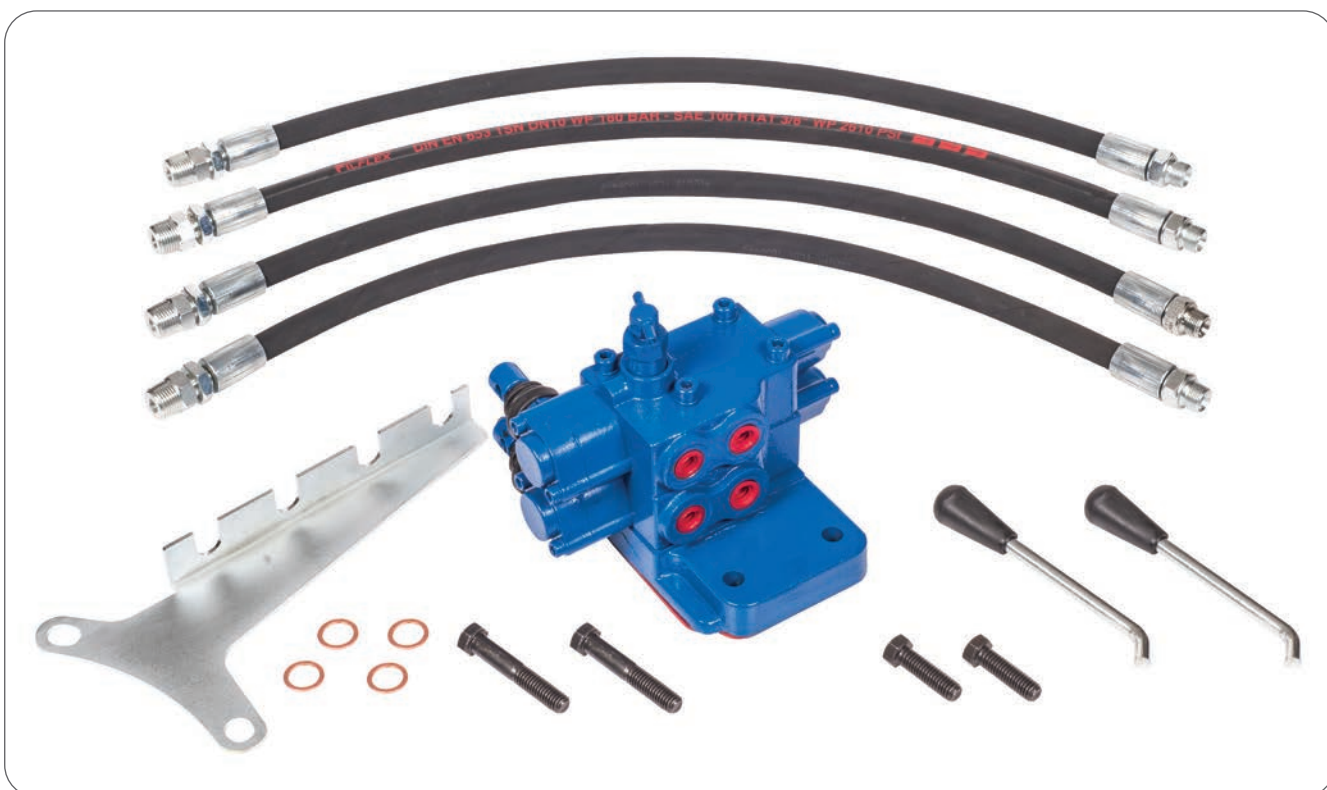


SPECIAL TRACTOR  
VALVES

**GMM-FRD3000**

CE





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### Additional Informations

**Note:** This catalog shows the product in the most standard configurations. For Other Configurations, more detailed information or special request, Please contact Customer Service Dpt.

**Warning!** :All specifications of this catalog refer to the standard product at this date (10/2019). GEMMA, oriented to a continuous improvement, reserves the right to discontinue, modify or revise the specifications, without notice.

GEMMA IS NOT RESPONSIBLE FOR ANY DAMAGE CAUSED BY AN INCORRECT USE OF THE PRODUCT.

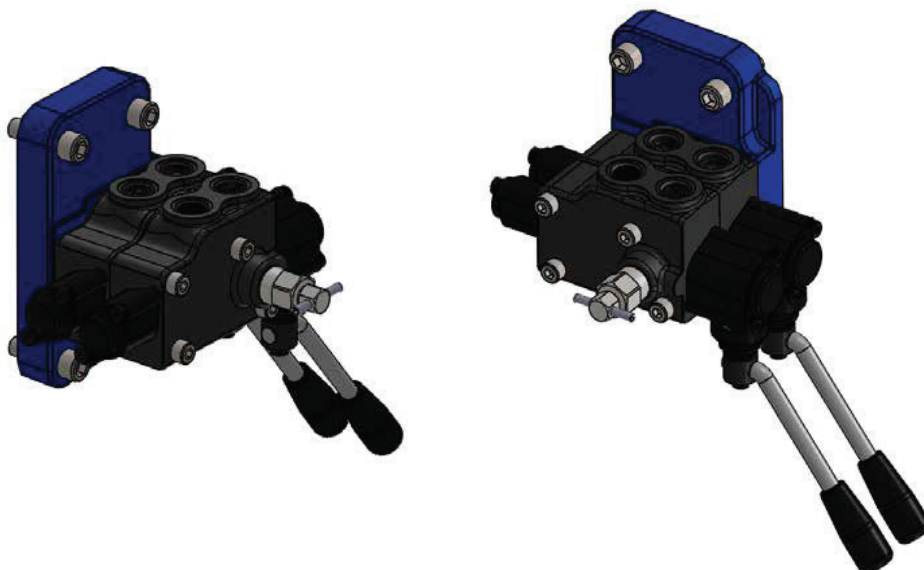
**WORKING CONDITIONS**

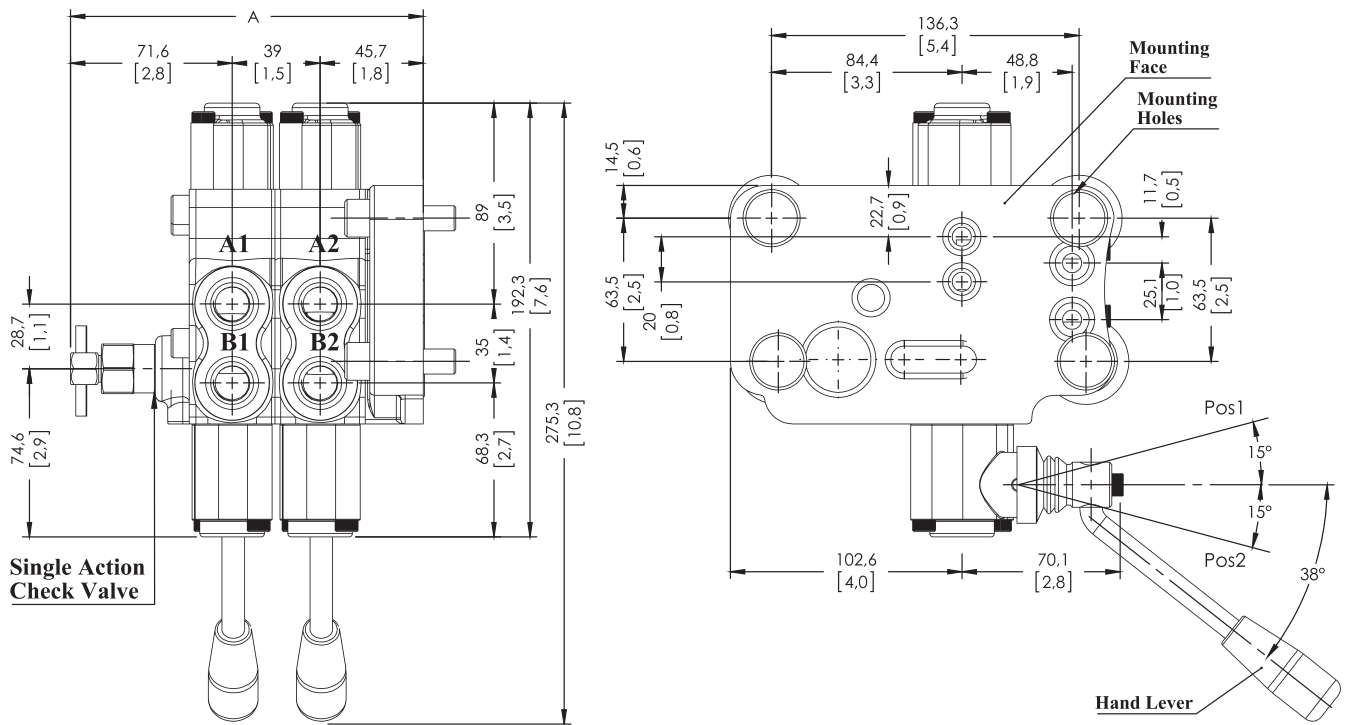
Nominal Flow Rating / Displacement	45 l/min	12 U.S.G.P.M
Maximum Working Pressure	315 Bar	4600 PSI
Max Back Pressure	25 Bar	360 PSI
Oil Temperature with NBR Seals	-20 to 80 C°	-4 to 176 F°
with FPM (Viton) Seals	-20 to 100 C°	-4 to 212 F°
Oil Viscosity – Operating Range	From 10 to 75 mm <sup>2</sup> /s	From 10 to 75 cSt
Minimum / Maximum	10 / 400 mm <sup>2</sup> /s	10 / 400 cSt
Oil Filtration	≤30 μ	
Ambiant Temperature Range	-35 to 60 C°	-31 to 140 F°
Number Of Spools	1 to 3	
Internal Leakage (at 100 bar (1450 PSI), 40C° (110 F°), 46 cSt – A(B)–T)	3 cm <sup>3</sup> /min	0,18 in <sup>3</sup> /min
Max. Level Of Contamination	19/16 – ISO 4406	

**Not:** This catalogue shows technical specifications measured with mineral oil of 46 mm<sup>2</sup>/s-46 cSt viscosity at 40 C° temperature.

**Features**

- Simple, compact and heavy duty designed sectional truck mounted valves from 1 to 3 sections for open center hydraulic systems.
- Interchangeable spool diameter is 16 mm – 0,63 in.
- It can be work working section and truck lift for some time.
- It has low tank pressure for additional tank line.
- It can be use single and double acting for only last working section.



**DIMENSIONAL DATA**


TYPE	A		WEIGHT	
	mm	in	Kg	lb
GMM-FRD3000-2	117,0	4,61	6,90	15,21
GMM-FRD3000-4	156,0	6,14	10,61	23,39
GMM-FRD3000-6	195,0	7,68	14,32	31,57

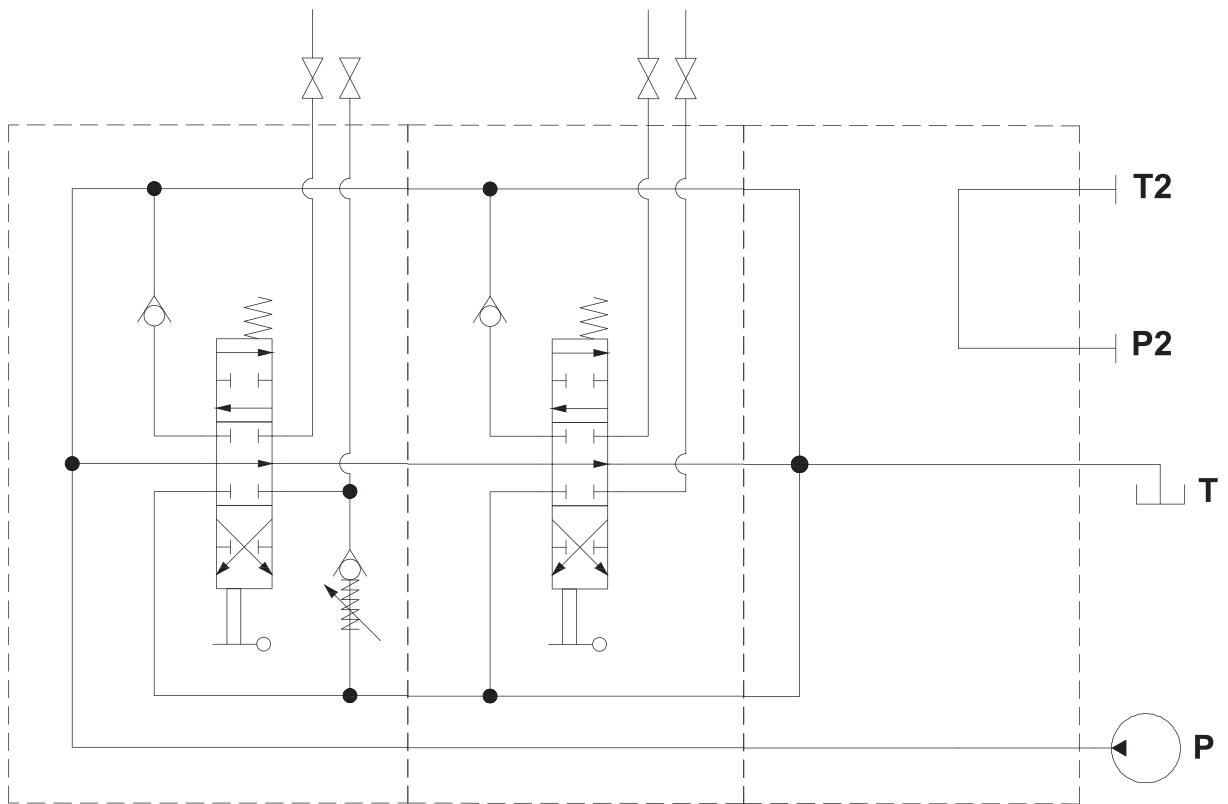
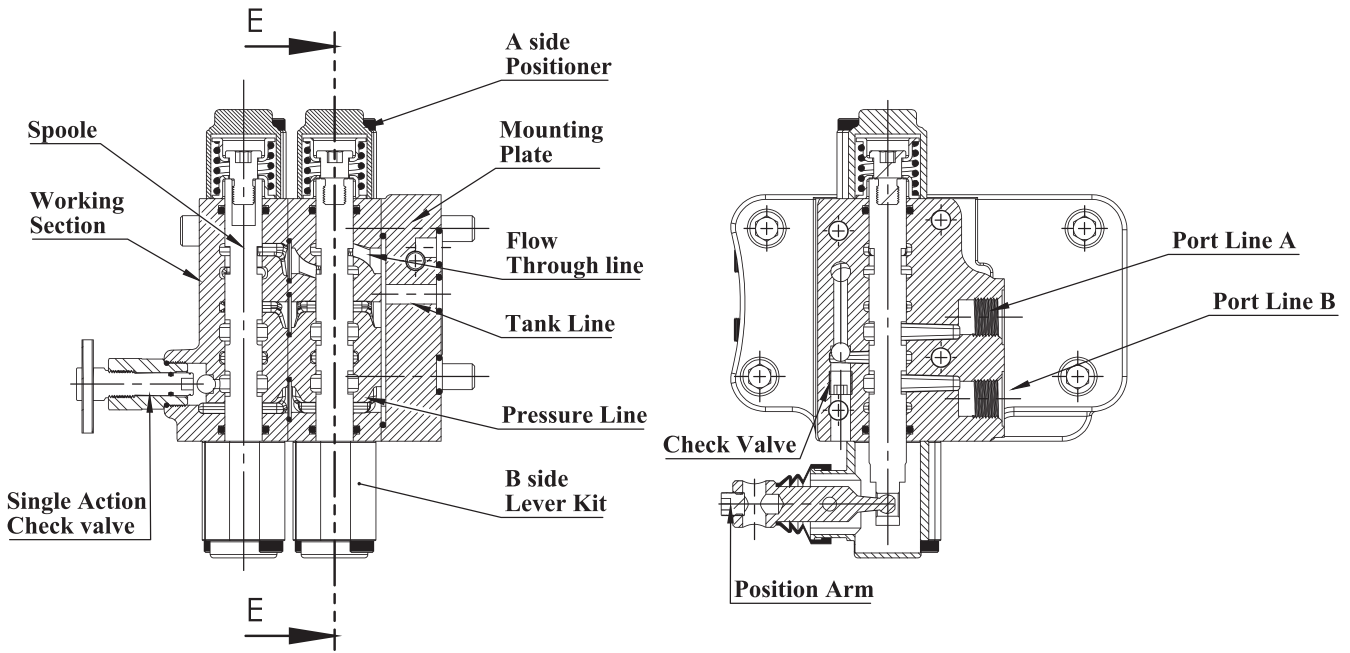
**STANDARD THREADS**

PORT	BSP (Iso 228)		UN-UNF (Iso 11926-1)	Metric (Iso 262)
	3/8" Series	1/2" Series		
P Inlet			Plate Mounted	
A-B Ports	G 3/8	G 1/2	9/16-18 UNF	M18x1.5
T Outlet			Plate Mounted	

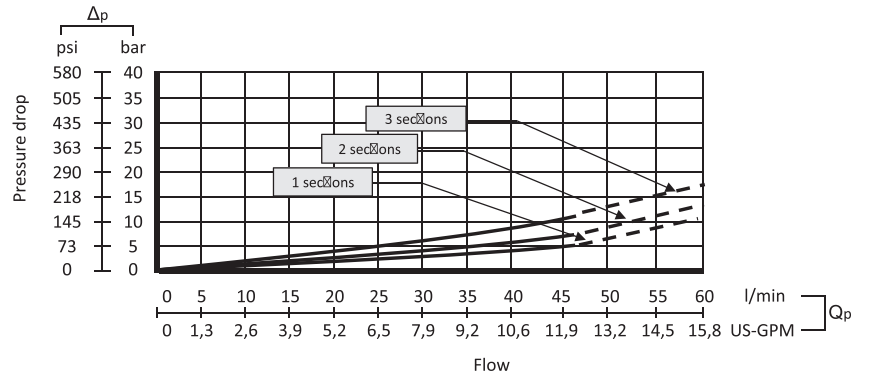
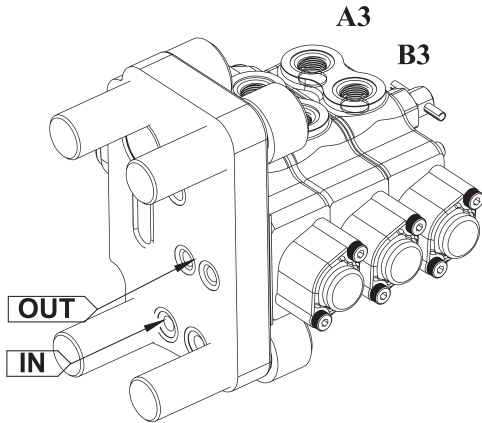
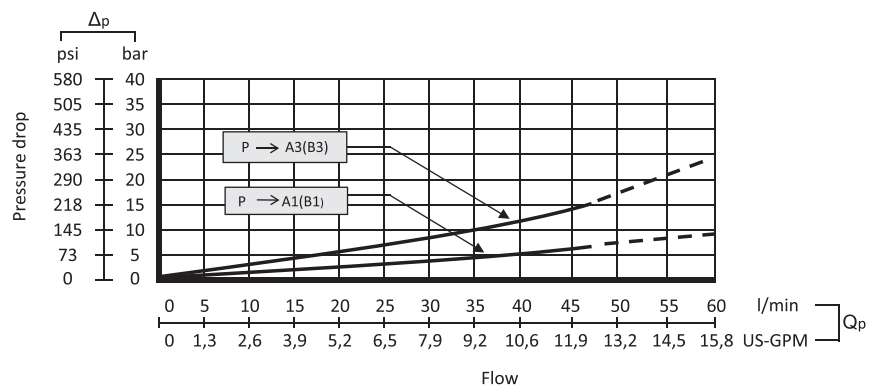
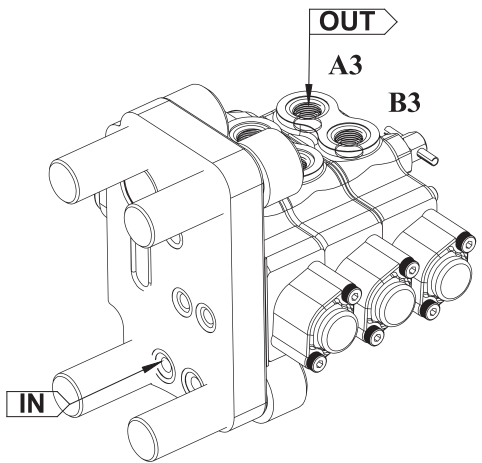
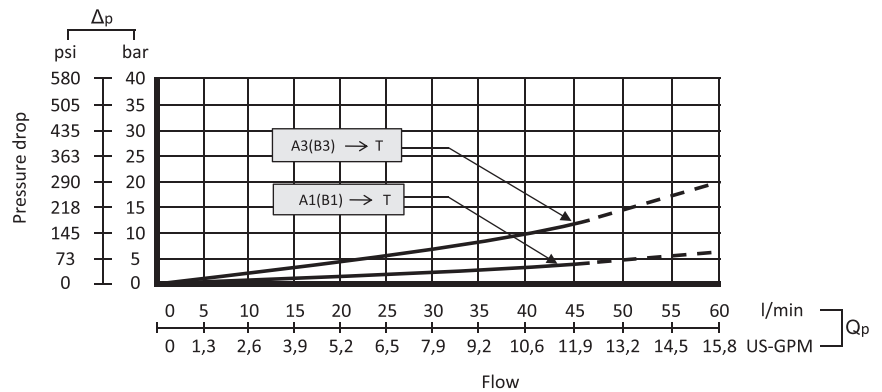
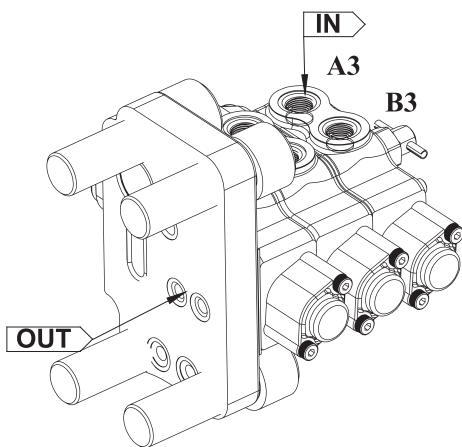
**Compatible Models**

Ford All Old Models  
3000 Series – 2000, 2600, 3000, 3600, 4000, 4600

**HYDRAULIC CIRCUIT**



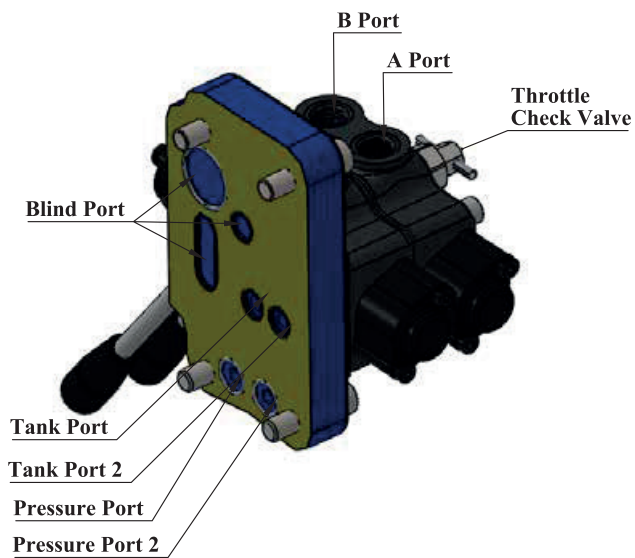
Order Code GMM - FRD3000 - 4

**PERFORMANCE DATA AND CURVE**
**Open Center - Pressure Drop (P-T)**

**Inlet to Work Port - Pressure Drop (P-A/B)**

**Work Port to Outlet - Pressure Drop (A/B-T)**


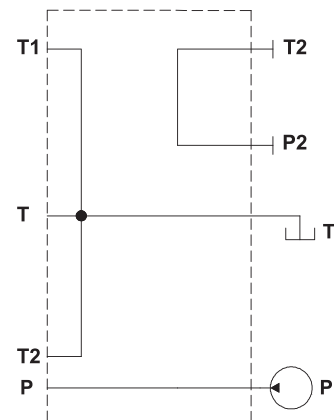
## PORTS AND MOUNTING FACE

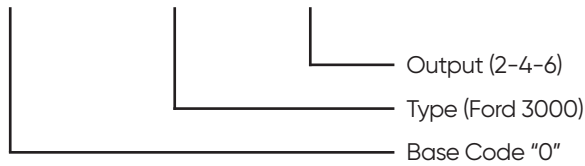
### Port Directional And Type

#### Port Appearance



#### Diagram



**ORDERING CODES AND INSTALLATION**
**Order Code**
**GMM – FRD 3000 - 4**


FRD3000 - 2 (1 section - 2 Output)

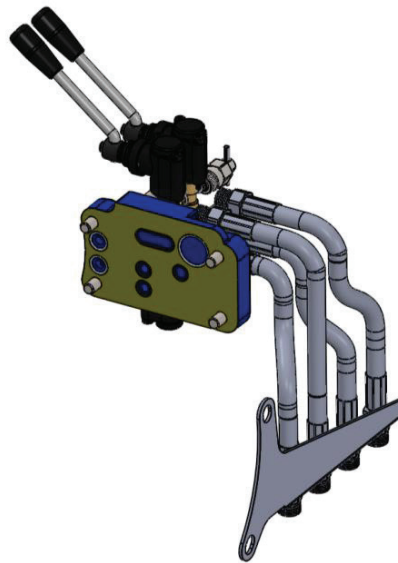
FRD3000 - 4 (2 section - 4 Output)







FRD3000 - 6 (3 section - 6 Output)

**Installation**

The GMM FRD3000 valve is assembled and tested as per the technical specification of this catalog. Before the final installation on your equipment, follow the below recommendation:

- The valve can be assembled in any position, in order to prevent body deformation and spool sticking mount the product on a flat surface;
- In order to prevent the possibility of water entering the lever box and spool control kit, do not use high pressure wash down directly on the valve;
- Before painting, ensure plastic port plugs are tightly in place.



MODEL	HOSE	COPPER WASHER 3/8"	SHEET CONNECTION	CONNECTION BOLT	LEVER COUNT
GMM - FRD3000-2	 63 cm - 2 Pcs	2 pcs		UNC-7/16-1 1/2"-2 Pcs UNC 7/16-2 1/2"-2 Pcs	1 pcs
GMM - FRD3000-4	 63 cm - 4 Pcs	4 pcs		UNC-7/16-1 1/2"-2 Pcs UNC 7/16-2 1/2"-2 Pcs	2 pcs
GMM - FRD3000-6	 63 cm - 6 Pcs	6 pcs		UNC-7/16-1 1/2"-2 Pcs UNC 7/16-2 1/2"-2 Pcs	3 pcs