

3, 4 and 5 – way Ball Valve - DN50 (2") – PPGF

Conform to the 2014/68/EU Directive



DN50 – 3-way
PPGF



DN50 – 5-way
PPGF

MAIN FEATURES

- Robust Valve by its Design and use of PPGF.
- Full Bore.
- Union connections allow the use of a wide range of fittings.
- Ball Available in L or T Port.

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SAFI

Av. Jacques Moison – BP 1
26770 TAULIGNAN
FRANCE
Tél.: (+33) 04 75 53 56 29
Fax : (+33) 04 75 53 62 78
info@safi-valves.com

SAFI Limited

35 Holton Road
Holton Heath Trading Park
POOLE Dorset - BH16 6LT
UNITED KINGDOM
Tél.: (+44) 1202 624618
Fax : (+44) 1202 628500
sales@safi-valves.com

SAFI Deutschland

Kunststoffarmaturen
Vertriebs GmbH
Jahnstrasse 29
64319 PFUNGSTADT
DEUTSCHLAND
Tél. : (+49) 61 57 81 919
Fax : (+49) 61 57 82 025
info-deutschland@safi-valves.com

SAFI Fabrica de Valvulas

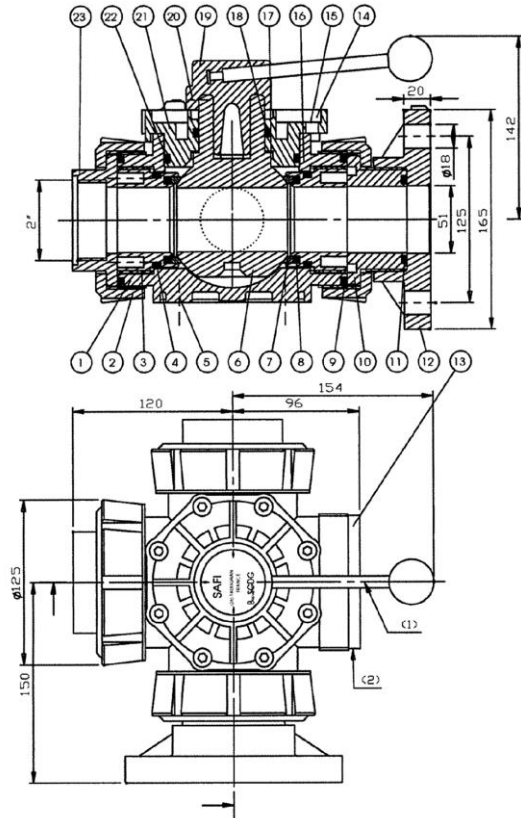
C/ Carboners, 35
Pol. Ind. La Cometa
43700 EL VENDRELL
TARRAGONA-ESPAÑA
Tél.: (+34) 977 665 147
Fax : (+34) 977 664 989
info@safi-valvulas.com

SAFI America

Las Garzas Trade Center
Las Garzas #950, B
Quilicura
SANTIAGO – CHILE
Tél.: (+56 2) 2 510 3500
Fax : (+56 2) 2 510 3507
info@safi-america.com

DIMENSIONS AND PARTS LIST

3 and 4 Way VERSION



N°	QTY	DESCRIPTION	MATERIAL
1	1	Body	PPGF
2	3 or 4	Castle nut	PPGF
3	4	Adjusting nut	PPGF
4	4	O-ring	EPDM/FPM
5	2	Fastening Insert M8	SS 303
6	1	T or L Port	PP-H
7	4	Ball Seat	PTFE
8	4	Seat O-ring	EPDM/FPM
9	4	O-ring	EPDM/FPM
10	1 to 4	Fitting "pas à gauche"	PPGF
11	1 to 4	O-ring	EPDM/FPM
12	1 to 4	Flange	PPGF
13	1	Cap nut	PPGF
14	8	TCHc Screw	SS 316
15	8	Washer W8	SS 316
16	8	Cap Insert	SS 303
17	1	Friction Washer	PTFE
18	1	O-ring	EPDM/FPM
19	1	Handle with metal insert	PP-H
20	1	Grub Screw	SS 316
21	1	Cap	PPGF
22	1	O-ring	EPDM/FPM

DIN = Drilling in accordance with EN 1092-1 PN10/PN16

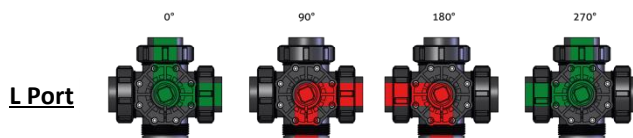
ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150

Flange N°12 is delivered as standard with oval drillings corresponding to DIN, ANSI and BS standards.

Weight with 4 Fittings: 3, 2 Kg

Weight with 4 Flanges: 5, 0 Kg

Different types of fittings are available; consult our TDS-FITTING-0001 product sheet



Operation Possibilities :

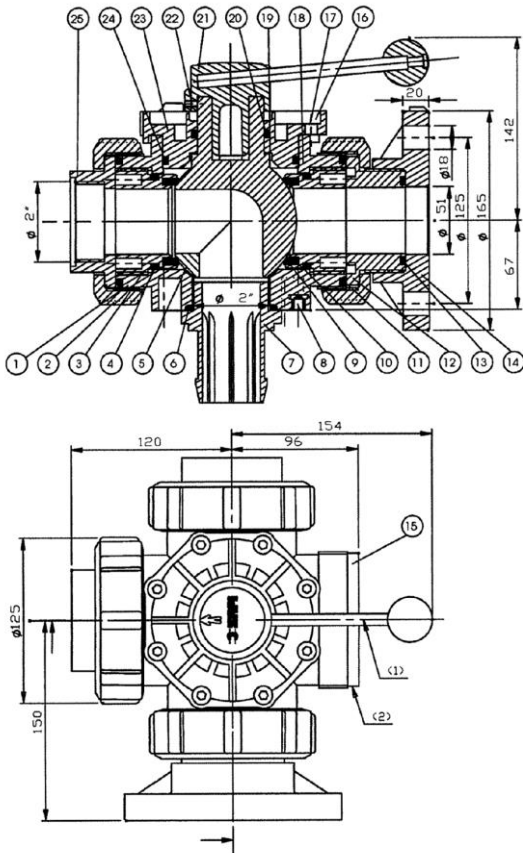
- 2 by 2 Way communication
- Multi-way inlet fluid possible
- rotation of ball to the right or left
- Flow direction marked on handle (The position of the handle can be modified upon request)



Operation Possibilities :

- 3 by 3 Way communication
- With 1 Inlet, 2 Outlets obtained
- Multi-way inlet fluid possible
- Rotation of ball to the right or left
- Flow direction marked on handle (The position of the handle can be modified upon request)

5-Way VERSION



N°	QTY	DESCRIPTION	MATERIAL
1	1	Body	PPGF
2	3 ou 4	Castle nut	PPGF
3	4	Adjusting nut	PPGF
4	4	O-ring	EPDM/FPM
5	1	L Port	PP-H
6	1	O-ring	EPDM/FPM
7	1	Hose tail fitting	PPGF
8	2	Fastening Insert M8	Stainless Steel 303
9	4	Ball Seat	PTFE
10	4	Seat O-ring	EPDM/FPM
11	4	O-ring	EPDM/FPM
12	1 à 4	Fitting "pas à gauche"	PPGF
13	1 à 4	O-ring	EPDM/FPM
14	1 à 4	Flange	PPGF
15	1	Cap nut	PPGF
16	8	TCHC Screw	Stainless Steel 316
17	8	Washer W8	Stainless Steel 316
18	8	Cap insert	Stainless Steel 303
19	1	Friction Washer	PTFE
20	1	O-ring	EPDM/FPM
21	1	Handle with metal insert	PP-H
22	1	Grub Screw	Stainless Steel 316
23	1	Cap	PPGF
24	1	O-ring	EPDM/FPM

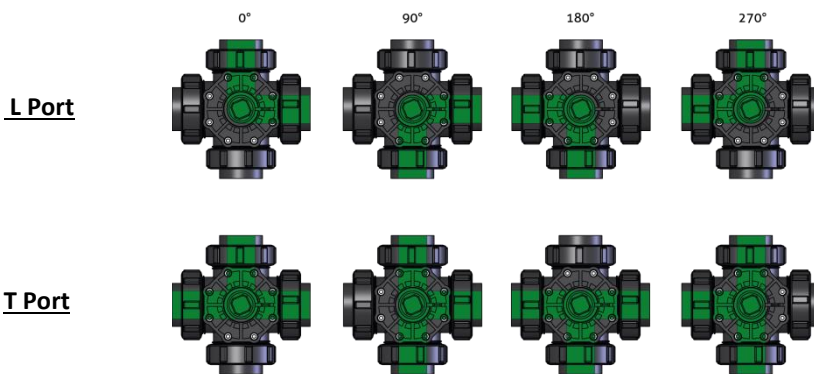
DIN = Drilling in accordance with EN 1092-1 PN10/PN16

ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150

Flange N°12 is delivered as standard with oval drillings corresponding to DIN, ANSI and BS standards.

Weight with 4 Fittings: 3, 2 Kg
Weight with 4 Flanges: 5, 0 Kg

Different types of fittings are available, consult our TDS-EQUIP-1003 product sheet



Operation Possibilities :

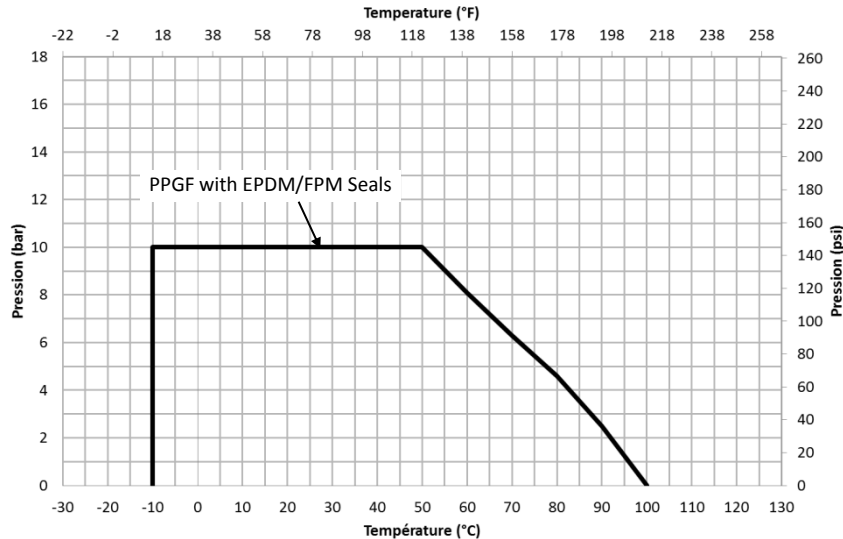
- Rotation of ball to the right or left
- Flow direction marked on handle (The position of the handle can be modified upon request)

Contact us, for other possible connections between ports.

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PRESSURE / TEMPERATURE CURVES



PPGF

Pressure/Temperature Summary

Type of Seals	Working Pressure	Working Temperature
		PPGF
EPDM / FPM	10 bars at 20°C	- 10°C to +100°C

The mechanical characteristics of the FPM and FFPM seals subjected to an ambient temperature below -5°C require the implementation of proper insulation on the valves equipped with such seals. Contact us for more information.

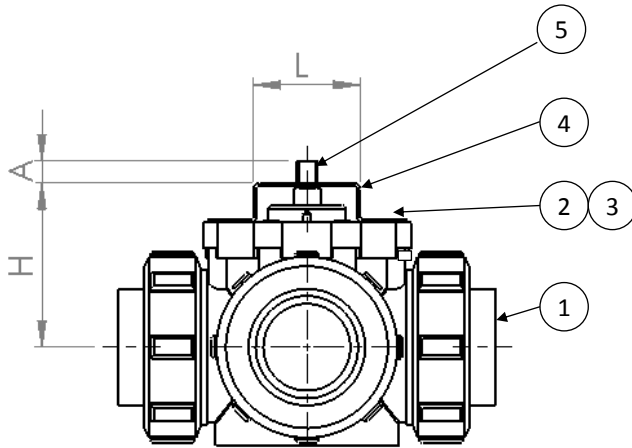
CHEMICAL RESISTANCE

The chemical resistance of the valve is subject to the type of fluid, the temperature, the pressure, as well as the materials and seals of the valve.

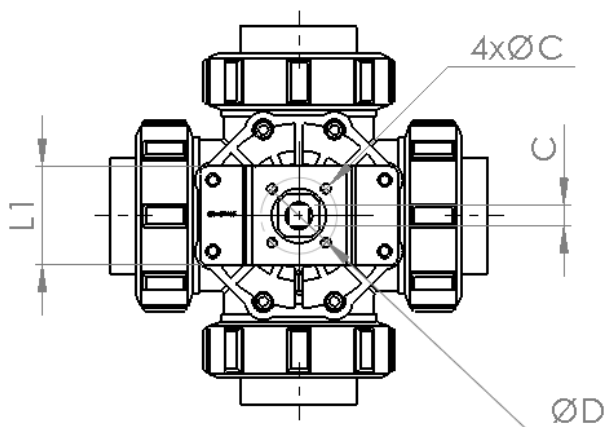
Please contact us to have a personalized analysis of the resistance of one of our products to a given fluid

You can also consult, for information only, the table given in ISO 10358. However, this table cannot be considered as a recommendation by SAFI who could not be held liable for the use of this document.

OPTION: MOUNTING KIT (ISO 5211)



N°	QTY	DESCRIPTION	MATERIAL
1	1	Ball Valve DN50 -3, 4 or 5-WAY	PPGF
2	4	Screw TCHC	SS 316
3	4	Washer	SS 316
4	1	Bracket F05	SS 304+Epoxy
5	1	Square Drive of 14	SS 304



DN	A	H	L	L1	ISO 5211 FIXINGS			
						C	ØC	ØD
50	14,3	108	70	65	F05	14	Ø6,5	Ø50
					F07	22	Ø8,5	Ø70

Other Dimensions : On Request

VALVE TORQUE FOR ACTUATION

DN	3 / 4 / 5 Way
DN50	28 N.m

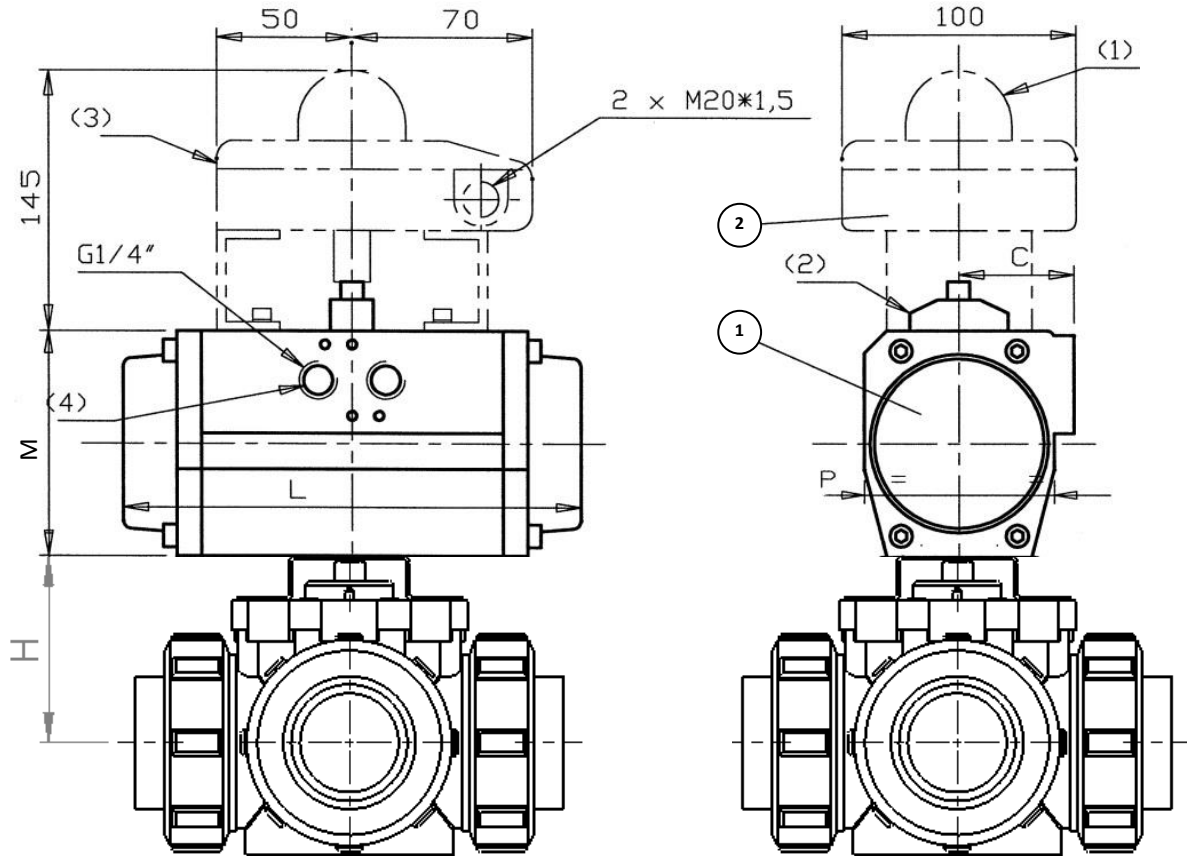
The « valve torque for actuation » is the required torque to open the valve when $dP=P_N$ and including a safety coefficient.

Available Kits

DN	ISO 5211 FIXINGS (CONNECTION/SQ* 45°)		WEIGHT OF KIT	PRODUCT CODE
DN50	F04	14	Consult us	KIT0186
	F05	22		KIT0103
	F07	17		KIT0145
	F07	22		KIT0170

*SQ = Square Drive 45°

OPTION: PNEUMATIC ACTUATION



N°	QTY	DESCRIPTION	MATERIAL
1	1	Actuator Double Acting or Failsafe	Polyamide or Aluminium or Stainless Steel
2	1	Limit Switch Box (option)	Aluminium or Stainless Steel

- (1) Visual position indicator of Limit Switch Box.
- (2) Visual position indicator of Actuator.
- (3) Limit Switch Box (option).
- (4) NAMUR mounting pattern for electro pneumatic control

Pneumatic Actuators recommendation according to DN and Material of the Valves

POLYAMIDE Actuator

DN	N° of Ways	ACTUATOR	ISO 5211 FIXINGS		H	C	L	M	P	WEIGHT of Actuator In Kg	PRODUCT CODE	MATERIAL
			F04	EF11								
DN15-50 in PPGF	2 & 3	Double Acting (DA)	F04	EF11	See dimensions for each DN on page 5	41	119	70	67	0,57	2007-73A	Actuator in Polyamide
		Fail Safe	F05	EF14		51	160	90	86	1,39	2007-73N (NF) 2007-75N (NO)	

ALUMINUM Actuator

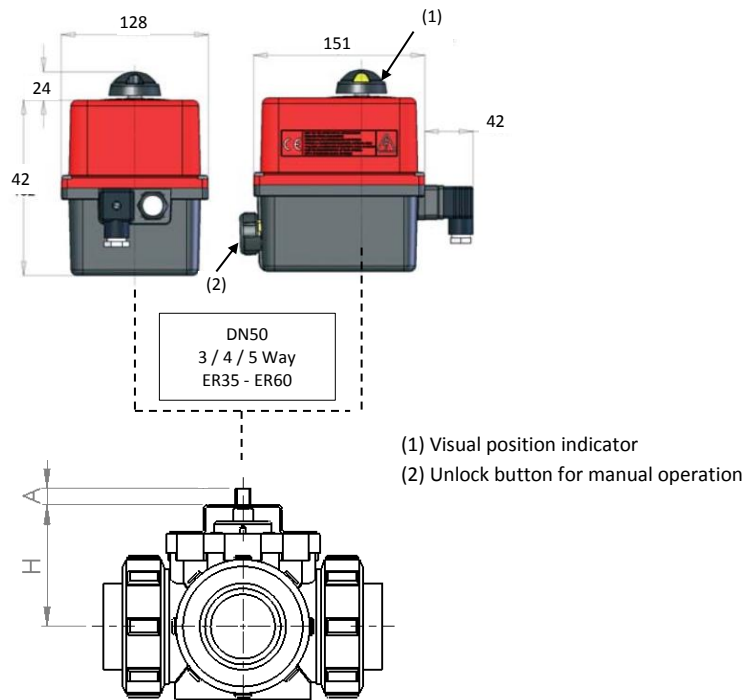
DN	N° of Ways	ACTUATOR	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	C	L	M	P	WEIGHT of Actuator In Kg	PRODUCT CODE	MATERIAL
			F04	EF11								
DN15-50 in PPGF	2 & 3	Double Acting (DA)	F04	EF11	See dimensions for each DN on page 5	40	119	71	67	0,91	2007-83A	Actuator in Aluminum
		Fail Safe	F05	EF14		47	175	81	81	1,69	2007-84E (NC) 2007-85E (NO)	

*DSS = Double Square Socket NC= Normally Closed – NO = Normally Open
(Actuator model for a recommended air supply of 5.6 Bars)

Find all the information concerning these actuators by consulting our TDS-ACTPN-0001 product sheet.

Contact us, for other type of Actuators or Limit Switch Boxes

OPTION: ELECTRIC ACTUATION

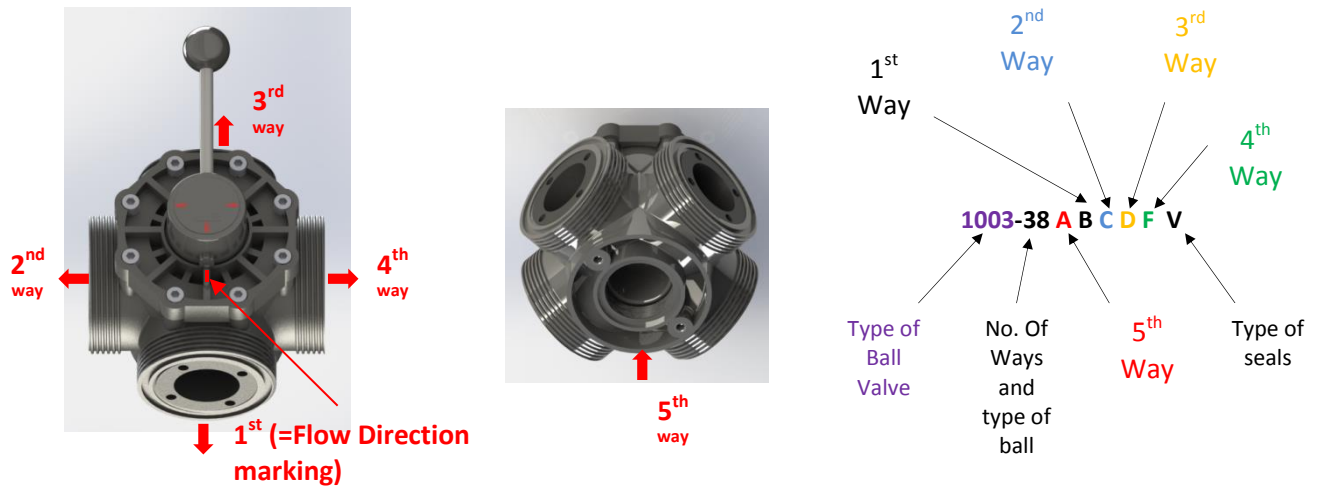


DN	MODEL	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	WEIGHT KG	PRODUCT CODE	MATERIAL	ROTATION 90°
DN 50	ER35 (15-30VAC 12-48VDC)	F03-F05	EF14	See dimensions for each DN on page 5	1 to 2,1	2907-41N	PA6	7s
	ER35 (90-240VAC 90-350VDC)	F03-F05	EF14		1 to 2,1	2907-41I	PA6	7s
	ER60 (15-30VAC 12-48VDC)	F05-F07	EF22		2,1 to 2,3	2907-43F	PA6	12s
	ER60 (90-240VAC 90-350VDC)	F05-F07	EF22		2,1 to 2,3	2907-43B	PA6	12s

*DSS = Double Square Socket

Find all the information concerning these actuators by consulting our TDS-ACTEL-0001 product sheet

DETERMINING A PRODUCT CODE



TYPE	SPECIFICATION	DN	FITTING (Inlet)	FITTING (Outlet)	Seals
1003 = PPGF 2-Way	- = Standard Ball Valve	29 = DN50 – 3 - way L Port 30 = DN50 – 3 - way T Port 31 = DN50 – 4 - way L Port 32 = DN50 – 4 - way T Port 38 = DN50 – 5 voies L Port	A = BSP threaded socket F = Flange DIN/ANSI/BS X = with union nuts and o-rings, without sockets Different types of fittings are available, consult the TDS-EQUIP-1003 product sheet	A = BSP threaded socket F = Flange DIN/ANSI/BS X = with union nuts and o-rings, without sockets - = Cap Different types of fittings are available, consult the TDS-EQUIP-1003 product sheet	E = EPDM V = FPM type SAFKM5

DIN = Drilling in accordance with EN 1092-1 PN10/PN16 - ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150 - BS = Drilling in accordance with BS10 Table D (BS)

Example: 1003-38AFAAAE

1003	-	38	A	F	A	A	A	E
PPGF Ball Valve	Standard	DN50 5-Way L Port	BSP threaded socket (5 th way) inlet	Flange Multi-standard DIN/ANSI/BS (1 st way)	BSP threaded socket (2 nd way)	BSP threaded socket (3 rd way)	BSP threaded socket (4 th way)	EPDM Seals