

TECNORD

SERVOCOMANDI E REGOLAZIONE

TDV 30 SERIES DIRECTIONAL PROPORTIONAL CONTROL VALVE SYSTEM

Stackable Directional Control Valve

- Size 6
- Load sensing pressure compensated
- Fixed or variable displacement configuration
- 1 to 8 working sections in the same valve bank

Electro-hydraulic controls

- **PMD** Multi-function/direct acting non feedback proportional solenoids
- **OMD** Multi-function/ON-OFF solenoids with individual adjustment of flow rate on A&B ports

Manual control options

- **LM** Manual control lever
- **MO** Push pin manual override

Principle of operation

The **TDV-PMD** is a closed center, load sensing, sectional valve with pressure compensation of each section assembly. Depending on the configuration of the inlet section, the TDV 30 valve system can be used with FIXED DISPLACEMENT pumps or with pressure/flow compensated load sensing VARIABLE DISPLACEMENT pumps.

When multiple functions are selected, the **TDV-30 valve** system will automatically resolve the highest function load pressure, which is then transmitted to the inlet unloader (by-pass pressure compensator) of a fixed displacement pump or to the pressure/flow compensator element of an automatic variable displacement pump.

TDV-30 valve banks come with a system relief valve and with a drain orifice to ensure LS pressure drains once all spools are returned to neutral.

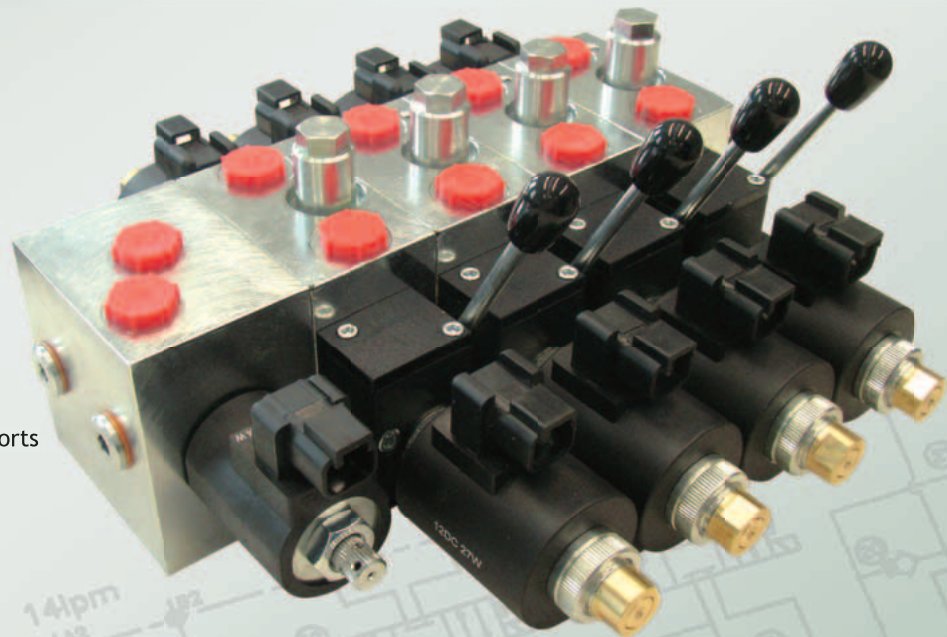
Work port pressure limiting is accomplished by using auxiliary anti-shock/anti-cavitation valves at each port.

Hydraulic Specifications

- | | |
|--|-------------------------------|
| • Max. operating flow: | 50 lt/min |
| • Max. flow per section: | 27 lt/min |
| • Max. work pressure: | 250 bar |
| • Inlet pressure compensator setting: | 16 bar |
| • Max. back pressure at T port: | 100 bar |
| • Max. static pressure at T port: | 250 bar |
| • Typical internal leakage (per path): | 25 cu cm/min @ 100 bar |
| • Media operating temperature range: | -15°C/+105°C |
| • Max. contamination level: | 19/16 (ISO 4406) |
| • Fluid viscosity range: | 20-480 cSt |
| • Seals: | Buna-N (Std.)
Viton (Opt.) |

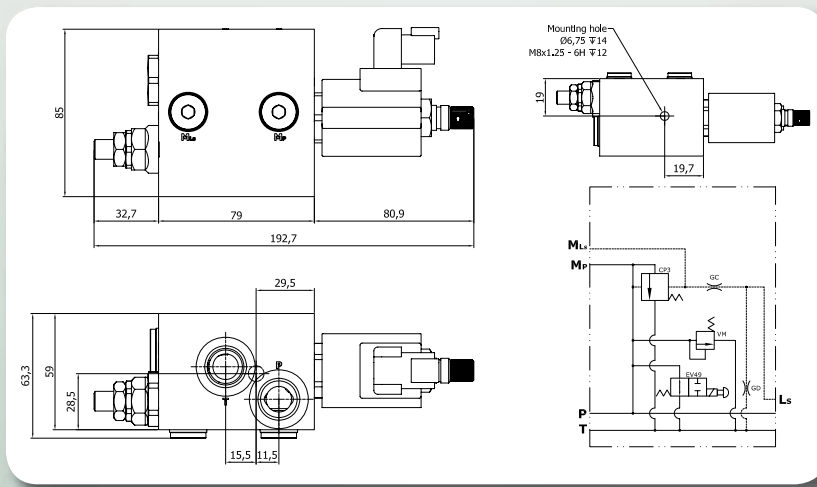
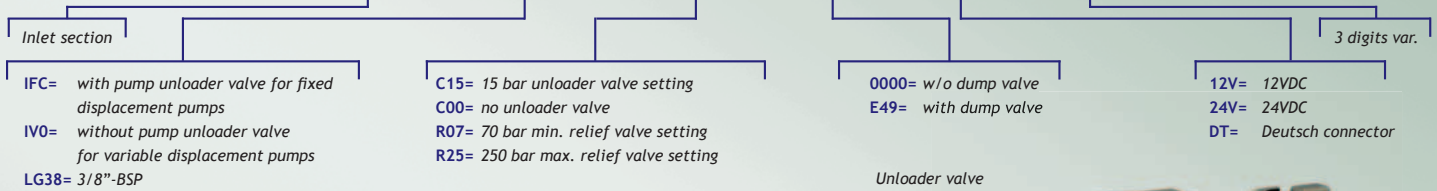
Electrical Specifications

- | | |
|------------------------------|---|
| • Nominal coil voltage: | 12/24 VDC |
| • Supply voltage tolerance: | ±15% of nominal |
| • Coil ohmic resistance: | 5/20 Ohm |
| • Max. control current: | 900/1800 mA |
| • C/current characteristic: | PWM (Pulse With Modulated) |
| • Optimum dither frequency: | 100-150 Hz |
| • Coil duty cycle: | 100% |
| • Ambient temperature range: | -15°C/+95°C |
| • Env. protection class: | IP 65 |
| • Coil termination: | DT= deutsch DT 04
AJ= AMP Junior Timer
HC= DIN 43650 (Hirschmann) |

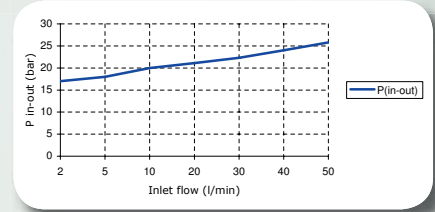
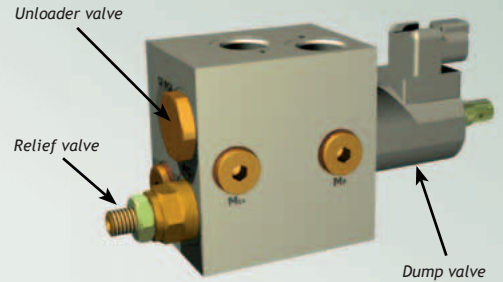


Inlet section designation

TDV 31 - IFCLG38 - C15R25 - E49 - 12VDT - NNN



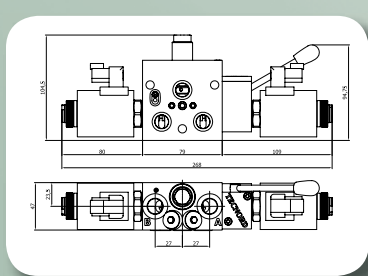
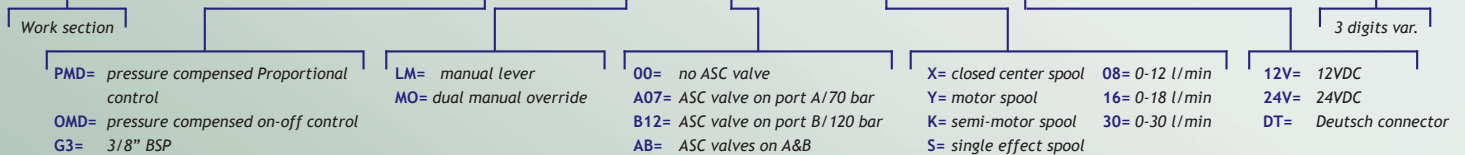
IFC/IV0 inlet section



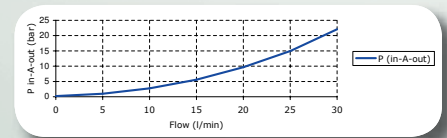
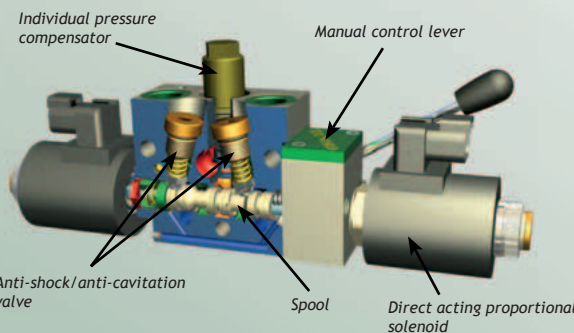
Inlet to outlet stand-by differential pressure (bar) vs. pump flow (l/min)

Work section designation

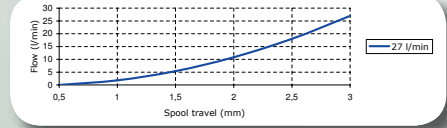
TDV 32 - PMDG38 - LM - A07B12 - Y30 - 12VDT - NNN



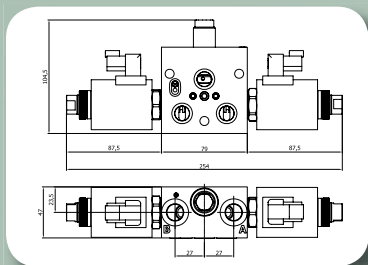
TDV 32 - PMD - LM - A07B12 - Y27 - 12DT



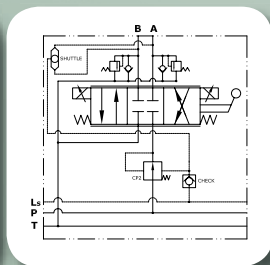
Work port flow (l/min) vs. spool travel (mm)



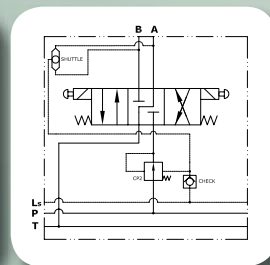
Inlet (P) to outlet (T) pressure drop (bar) @ full flow (l/min) through work ports A&B



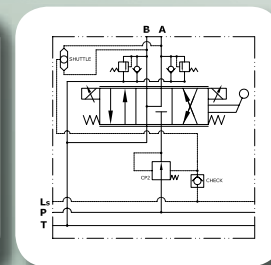
TDV 32 - PMD - MO - 00 - Y27 - 12DT



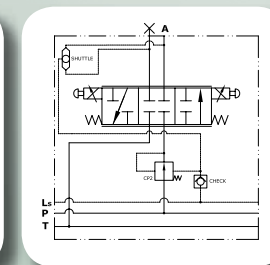
TDV 32-PMD-LM-A07B12-X27-12DT
Proportional/Closed center spool/ASC valves



TDV 32-OMD-MO-00-K27-12DT
On-off/Semi-motor spool/No aux. valves



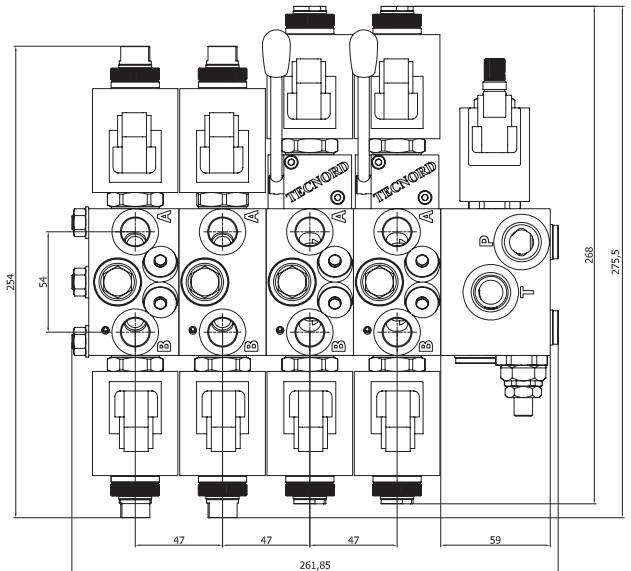
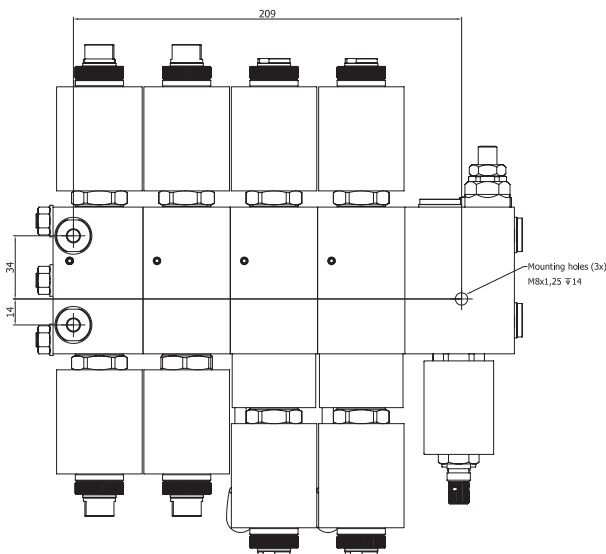
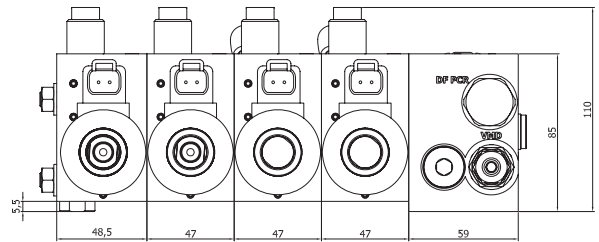
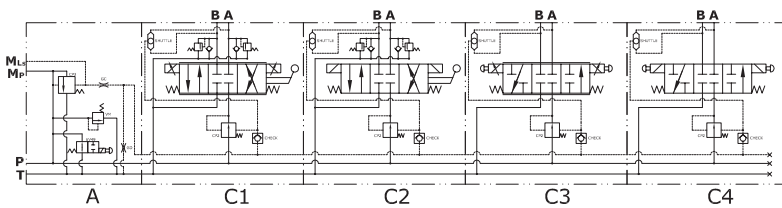
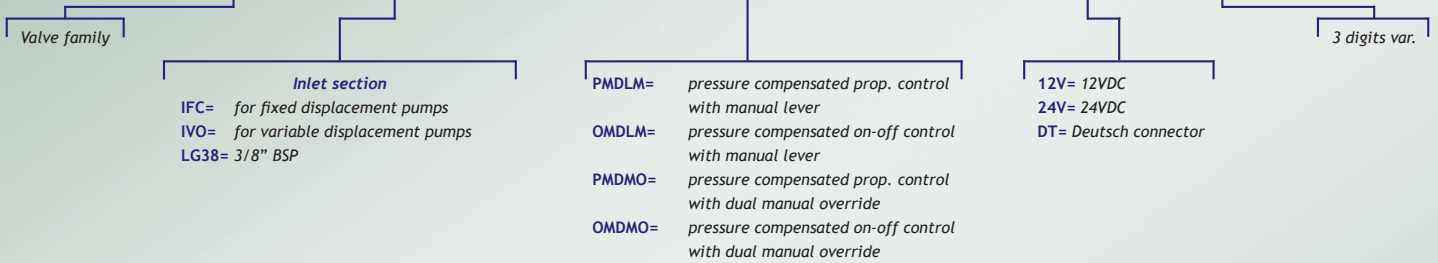
TDV 32-PMD-LM-A07B12-Y27-12DT
Proportional/Motor spool/ASC valves



TDV 32-PMD-MO-00-S27-12DT
Proportional/Motor spool/No aux. valves

Stackable valve designation example (ordering code)

TDV 30 - IFCLG38 - 1PMDLM/10MDLM/1PMDMO/10MDMO - 12VDT - NNN



TDV 30 - IFCLG38 - 1PMDLM/10MDLM/1PMDMO/10MDMO - 12VDT

Hydraulic and electrical characteristics of operating parts

Position	A	C1	C2	C3	C4
Mnemonic code	IFC / IVO	PMDLM	OMDLM	PMDMO	OMDMO
Part description	Inlet section	Spool section	Spool section	Spool section	Spool section
Hydraulic configuration	Fixed or variable displacement pump	Manual lever control X/Y/K/S spool proportional actuator	Manual lever control X/Y/K/S spool on-off actuator	Dual manual override X/Y/K/S spool proportional actuator	Dual manual override X/Y/K/S spool on-off actuator
Typical flow rate	50 l/min	8/16/30 l/min	8/16/30 l/min	8/16/30 l/min	8/16/30 l/min
Max. work pressure	280 bar	280 bar	280 bar	280 bar	280 bar
Pressure compensator setting	16 bar	14 bar	14 bar	14 bar	14 bar
Port threads	3/8" BSP 9/16"-18 UNF (SAE6)	3/8" BSP 9/16"-18 UNF (SAE6)	3/8" BSP 9/16"-18 UNF (SAE6)	3/8" BSP 9/16"-18 UNF (SAE6)	3/8" BSP 9/16"-18 UNF (SAE6)
Number of sections in the assembly	1	1-8	1-8	1-8	1-8
Electrical configuration	Electro-hydraulic	Proportional control	On-off control	Proportional control	On-off control
Supply voltage	12-24 VDC	//	12-24 VDC	//	12-24 VDC
Max. current consumption	2A @ 12VDC 1A @ 24VDC	//	2,4A @ 12VDC 1,2A @ 24VDC	//	2,4A @ 12VDC 1,2A @ 24VDC
Ohmic resistance	//	5 Ohm (12VDC) 20 Ohm (24VDC)	5 Ohm (12VDC) 20 Ohm (24VDC)	5 Ohm (12VDC) 20 Ohm (24VDC)	5 Ohm (12VDC) 20 Ohm (24VDC)
Typical control current range	//	0-1,8A (12VDC) 0-0,9A (24VDC)	//	0-1,8A (12VDC) 0-0,9A (24VDC)	//
PWM dither	//	100-150Hz	//	100-150Hz	//

TECNORD comprehensive range of remote control electronics



EC - PWM - A1 - MPC1
Microprocessor - based PWM electronic driver



Fingertip proportional levers
Potentiometric and hall effect single-axis control levers and roller switches



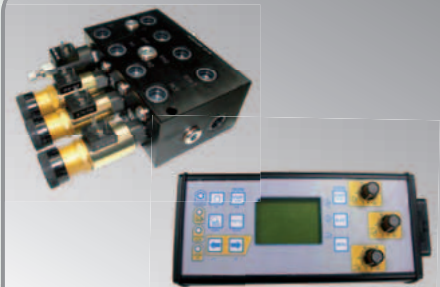
Ergonomic grips
Multi-function ergonomic grips with on-off and proportional switches



Heavy duty joysticks
Potentiometric and hall effect multi- axes control joysticks



EC MMS
Microprocessor-based Machine Management Systems for the integrated control of electro-hydraulic and safety functions



Ecomatic
GPS ground-speed oriented salt spreader control systems



RC - DBR
Combined on-off and proportional radio control system with single hand wander



RC - PCM
Multi-function proportional radio control system with shoulder-strap transmitter

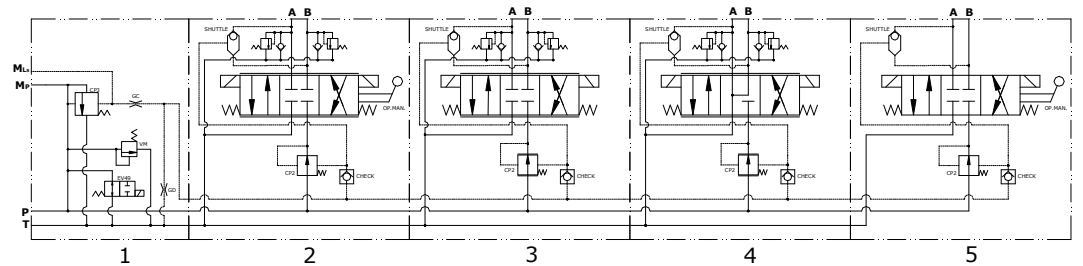
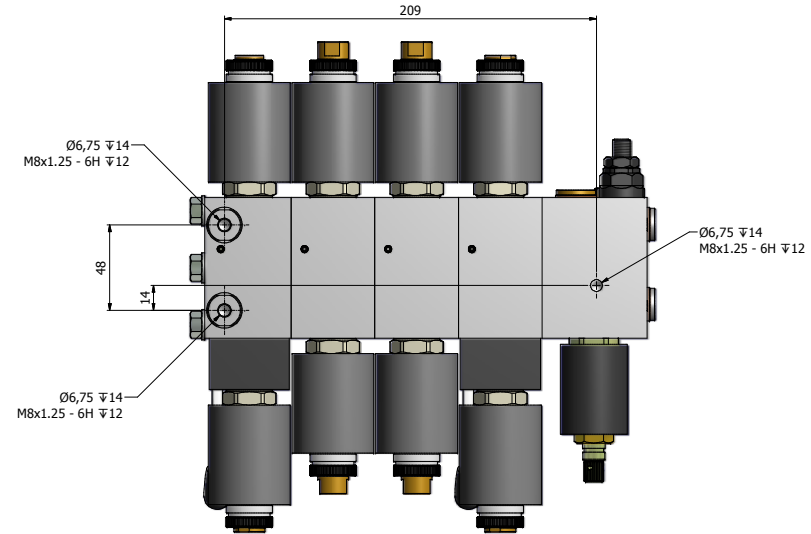
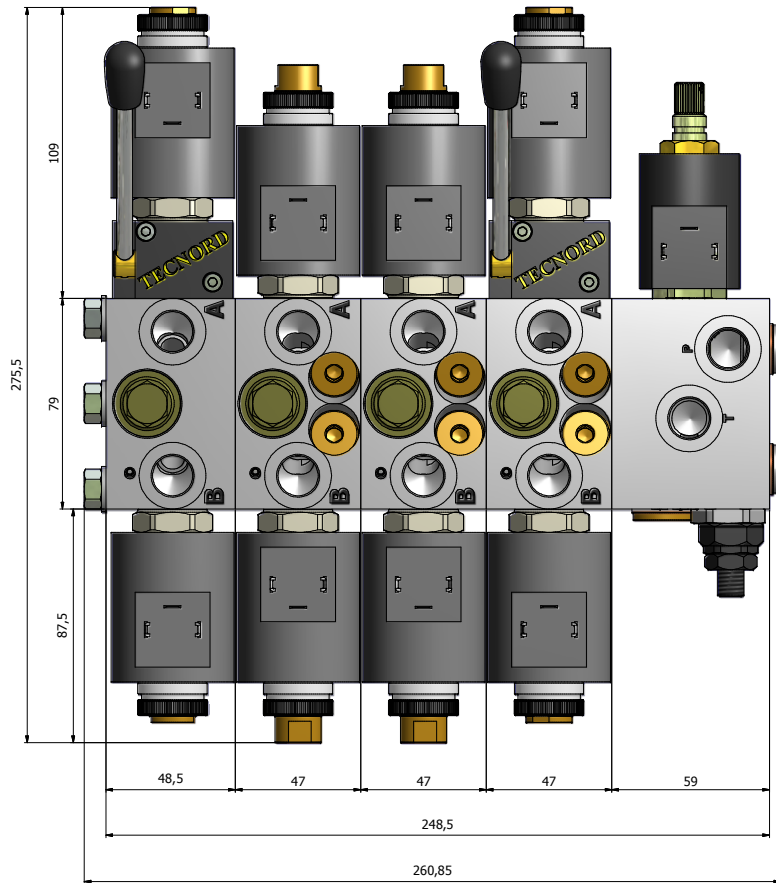
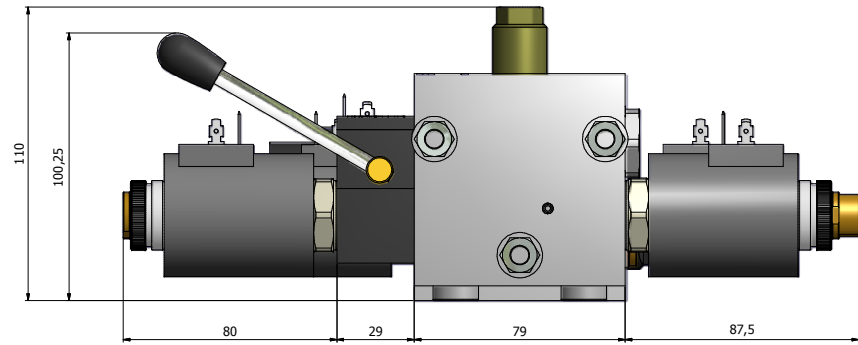
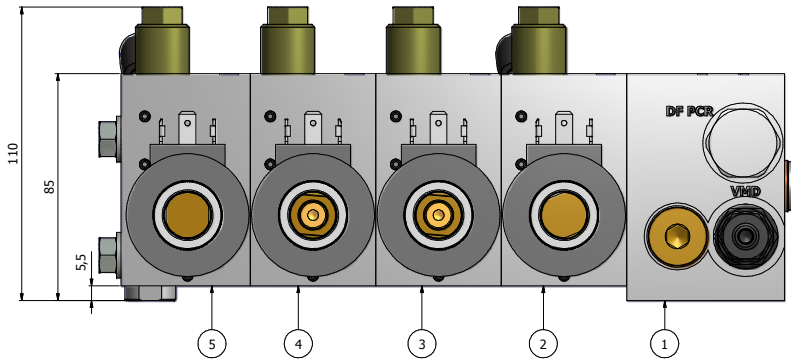


Customized control units
Customized microprocessor-based, multi-functions control units

TECNORD
SERVOCOMANDI E REGOLAZIONE

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Tel. +39-059-254895 - Fax +39-059-253512 - www.tecnord.com - e-mail: tecnord@tecnord.com



PORTE/PORTS	
P	G 3/8"
T	G 3/8"
A / B	G 3/8"
M _P	G 3/8"
M _S	G 3/8"

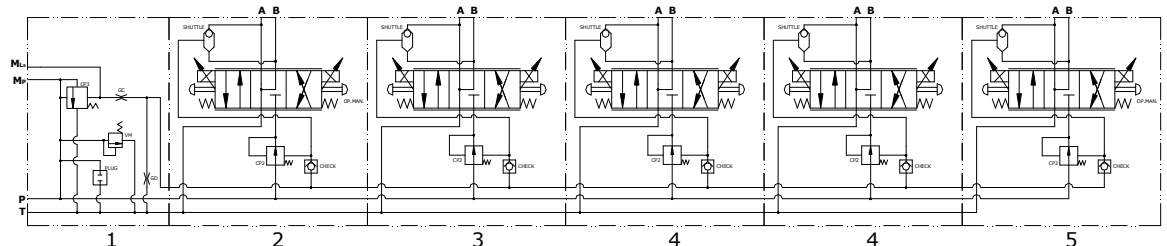
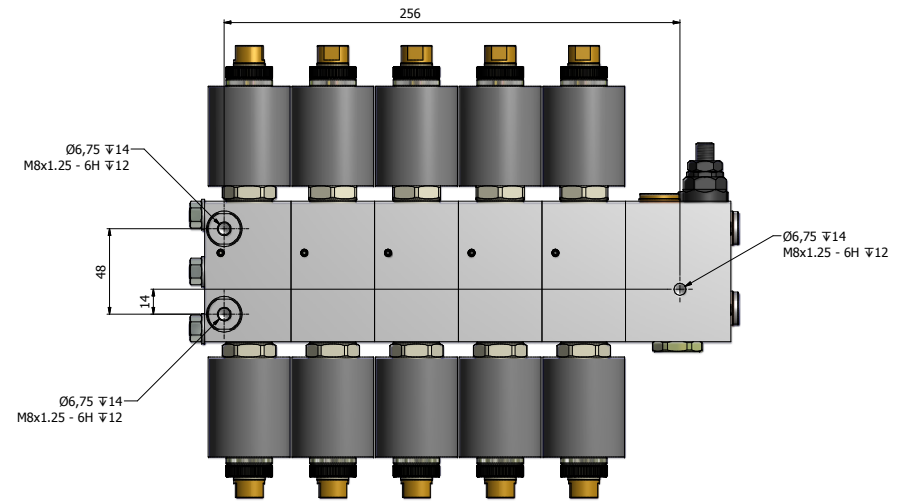
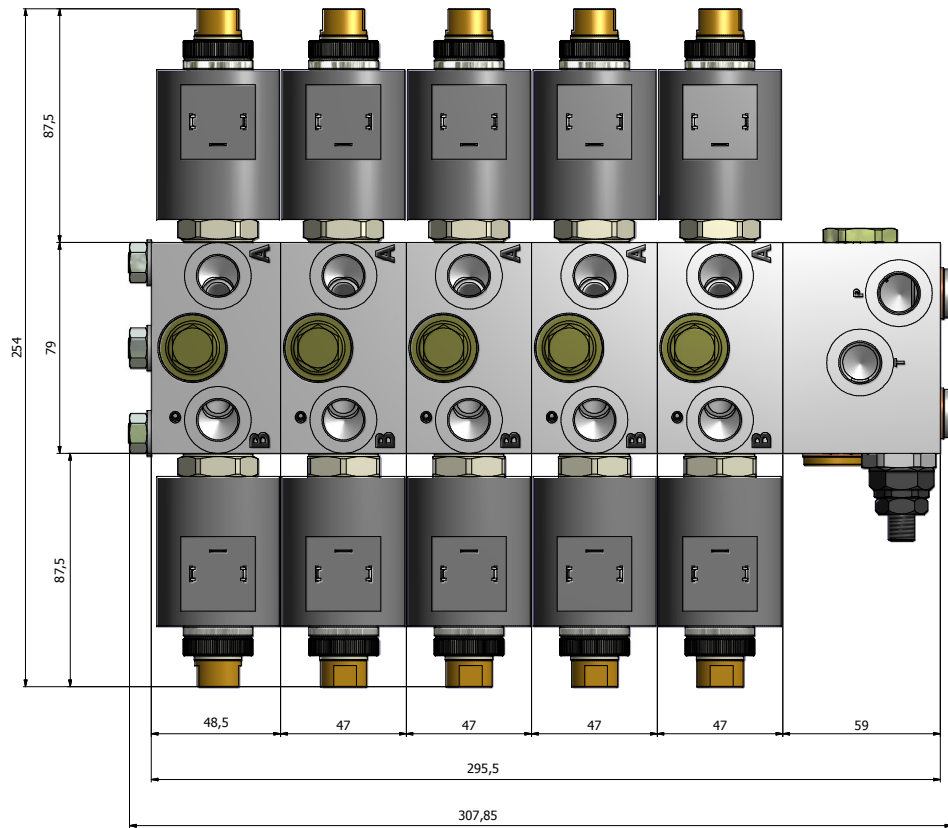
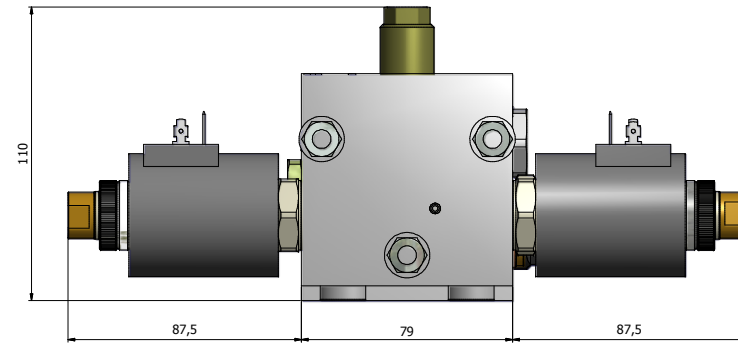
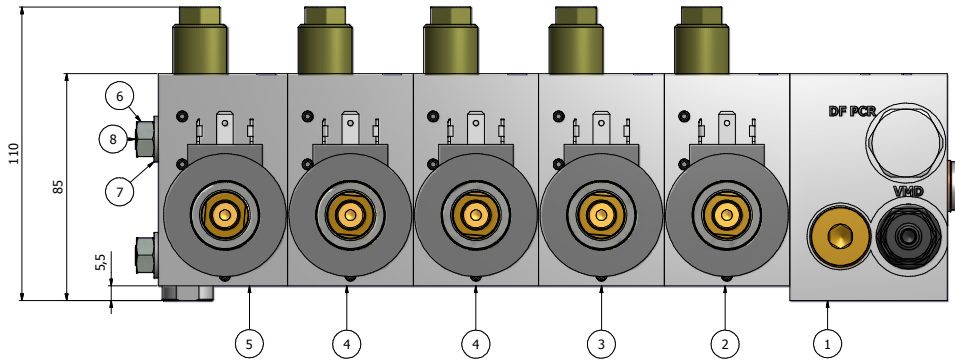
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ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3901.003_00	TDV 31-IFCLG38-C15R25-E49-12V
2	1	15.3910.001_00	TDV 32-PMDG38-LM-AB20-X08-12V
3	1	15.3909.001_00	TDV 32-PMDG38-OM-AB20-X16-12V
4	1	15.3909.002_00	TDV 32-PMDG38-OM-AB20-Y30-12V
5	1	15.3902.003_00	TDV 32-OMDG38-LM-00-X30-12V
6	3	60.1010.009	Dado M8 UNI 5588
7	3	60.1006.078	Rondella piana Ø8x17x1,6 UNI 6592 - Zn
8	3	13.9001.057	TIRANTE Ø8 L=209

DENOMINAZIONE: TDV30 45E2Z		SOSTITUISCE I/L: -	
15.3901.003+15.3910.002+15.3909.001 +15.3909.002+15.3902.003		SOSTITUITO DA: -	
TRATT. SUPERFICIALE: 15.4002.003.000		NOME FILE: 15.4002.003.000	
MATERIALE: -		SCALA: 1:1	
CONFEZIONATO	DISegnATO	CONTR. F.S.	APPROV. B.B.
15.41.80 - 01	15.41.80 - 01	15.41.80 - 01	15.41.80 - 01
CODICE			15.4002.003 / -



TECNORD
SERVIZIO MANUTENZIONE E RICERCA QUALITÀ

11/2006/2010



PORTE/PORTS	
P	G 3/8"
T	G 3/8"
A / B	G 3/8"
M _p	G 3/8"
M _s	G 3/8"

Elenco parti			
ELEMENTO	QTA	NUMERO PARTE	DESCRIZIONE
1	1	15.3901.004_00	TDV 31-IFCLG38-C15R25-12V
2	1	15.3903.008_00	TDV 32-PMDG38-OM-Y05-12V
3	1	15.3903.007_00	TDV 32-PMDG38-OM-Y10-12V
4	2	15.3903.006_00	TDV 32-PMDG38-OM-Y27-12V
5	1	15.3902.004_00	TDV 33-PMDG38-OM-Y27-12V
6	3	60.1010.008	Dado M8 UNI 5588
7	3	60.1006.078	Rondella piana Ø8x17x1,6 UNI 6592 - Zn
8	3	13.9001.075	Tirante M8x18 L=255 TDV30 5F

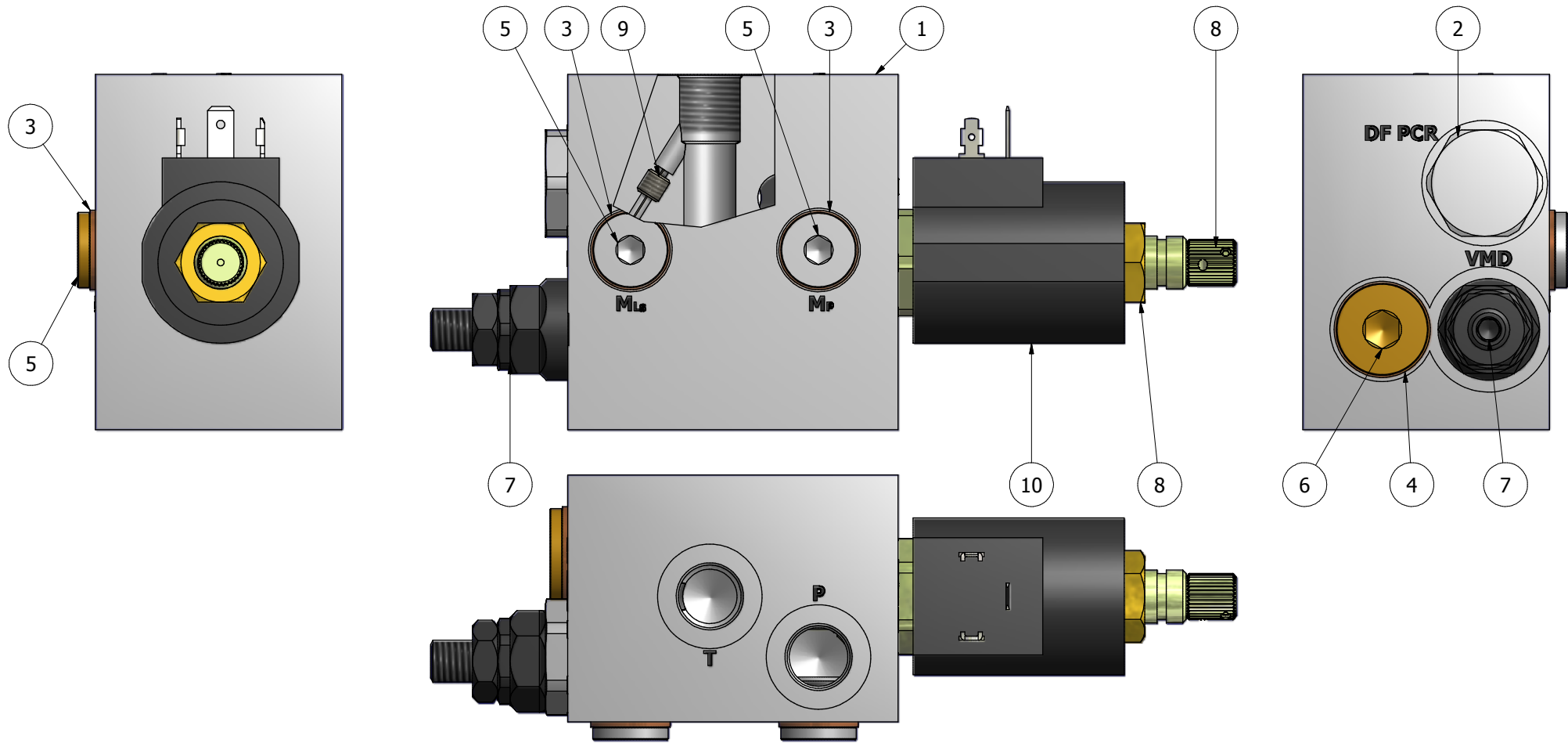
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TRATT. TERMICO: -		NOME FILE: 15.4002.004.tmx	
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0,0 ±1,00 ±0,15		0,0 ±0,100 ±0,2	0,0 ±0,100 ±0,2
15.4002.004 / -		15.4002.004 / -	



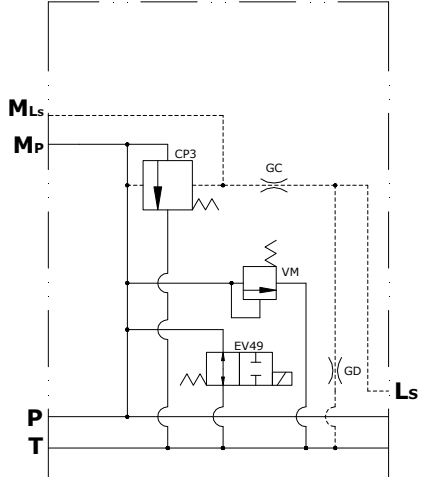
TECNORD
SERVIZIO CLIENTI E RICERCHE APPLICATIVE

SCALA: DATA: 1:1 28/06/2010

15.4002.004 / -

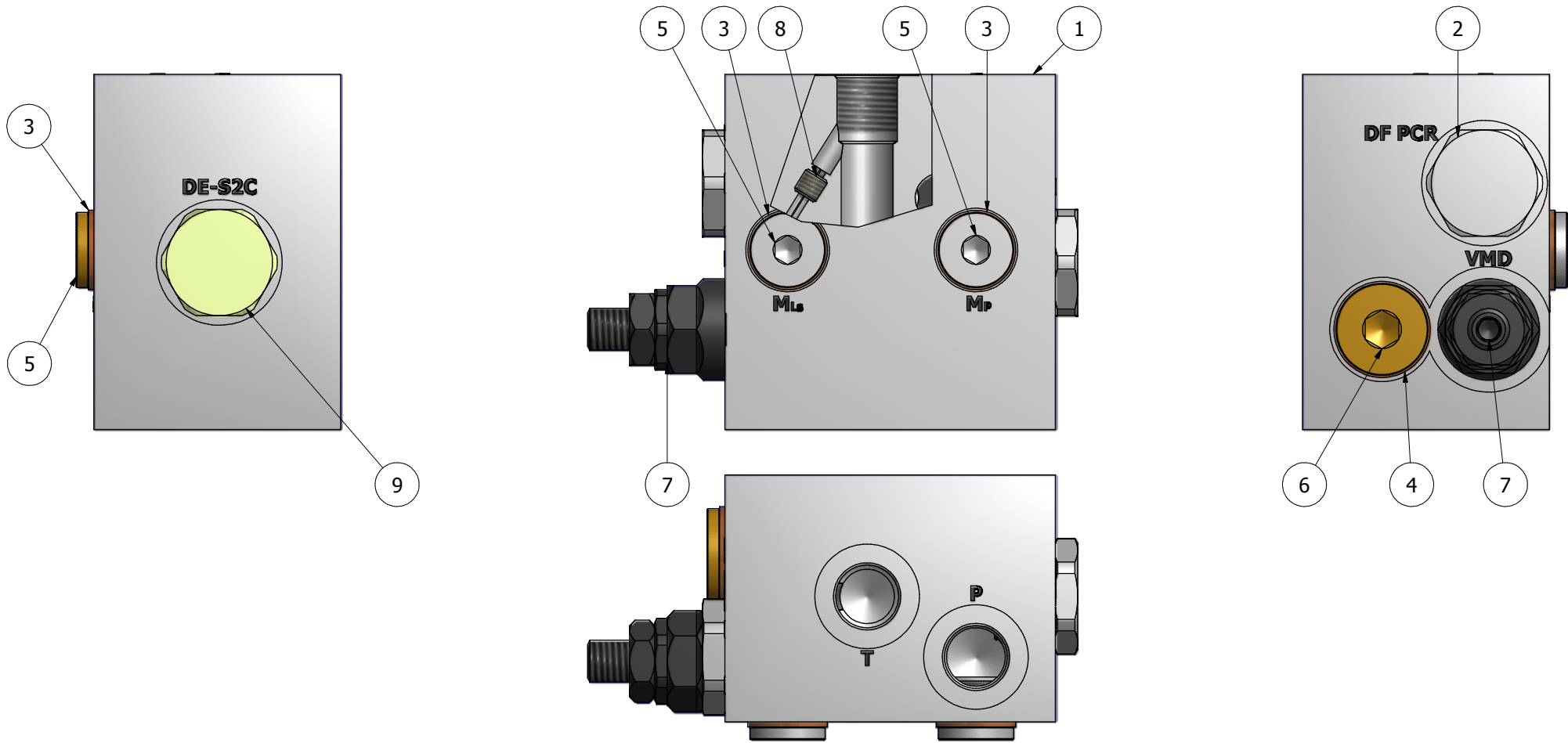


Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	13.1007.241_00	TDV30 SEZIONE INGRESSO
2	1	65.4406.017	DF-PCR 300 psi
3	2	60.1108.002	Rondella G 1/4" Rame
4	1	60.1108.003	Rondella G 3/8" Rame
5	2	60.1204.002	Tappo G 1/4" DIN 908
6	1	60.1204.003	Tappo G 3/8" DIN 908
7	1	60.0203.039	VMD1.010 270bar
8	1	14.0201.040	DE-S2C-OM
9	1	60.1005.408	GRANO M6x6 Foro 0.45+filo
10	1	60.0205.133	Magnete VHC 12V - 24W

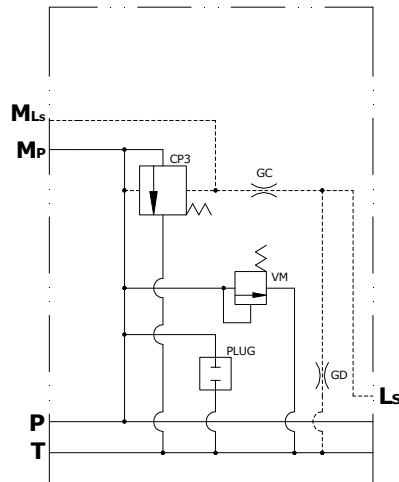


DENOMINAZIONE: TDV31-IFCLG38-C15R25-E49-12V HIRSCHMANN GD Ø0,45+FILO Ø0,3		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -		NOME FILE: 15.3901.003_00.idw			
MATERIALE: -		-		N° FOGLIO 1/1	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. B.B.	APPROV. -	SF .1029.TCN
CODICE 15.3901.003 / 00					

QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3

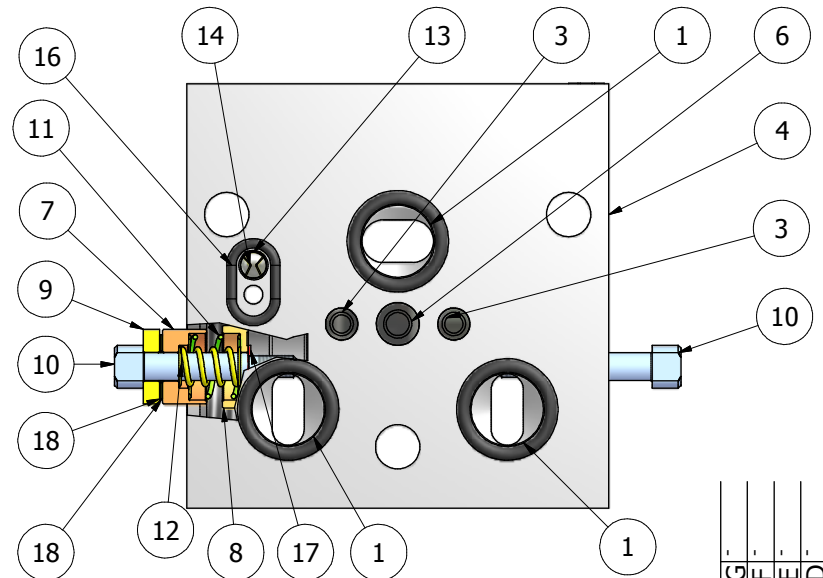
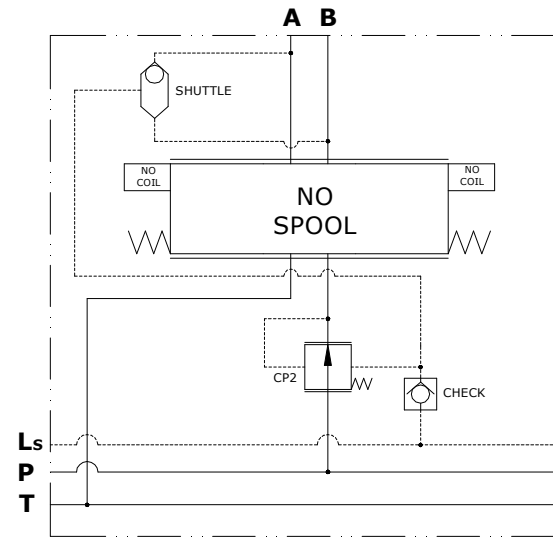
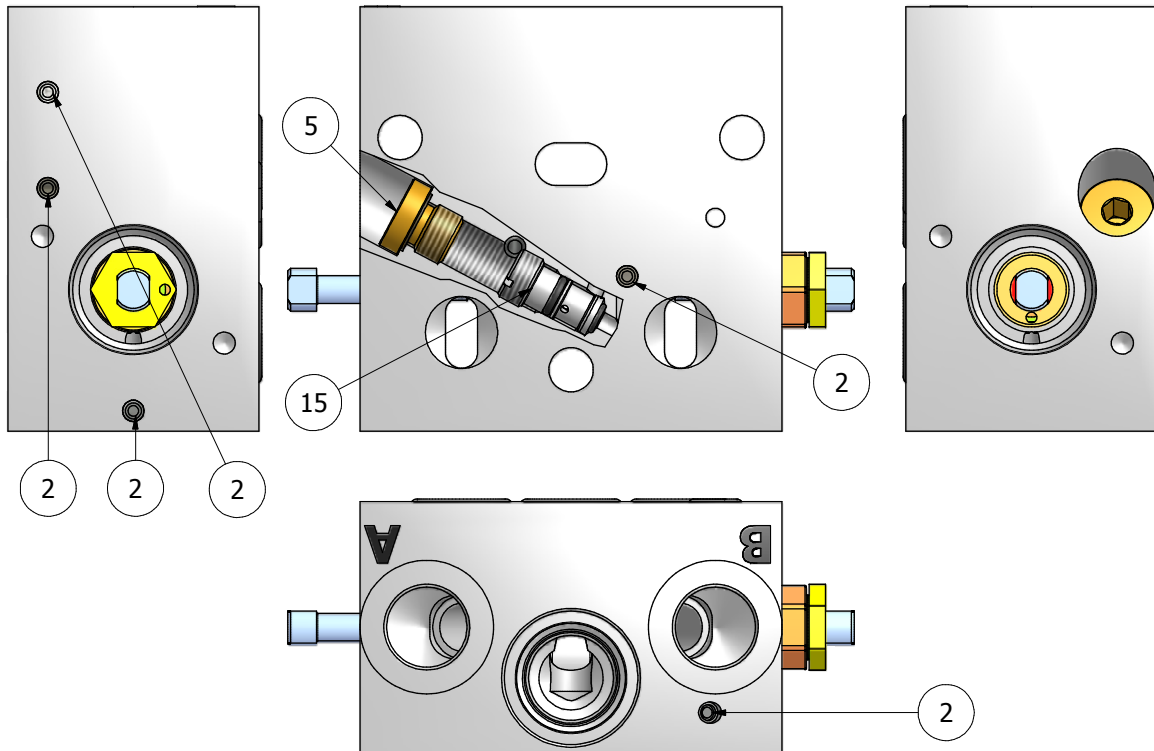


Elenco parti			
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1	1	13.1007.241_00	TDV30 SEZIONE INGRESSO
2	1	65.4406.015	DF-PCR 200 psi
3	2	60.1108.002	Rondella G 1/4" Rame
4	1	60.1108.003	Rondella G 3/8" Rame
5	2	60.1204.002	Tappo G 1/4" DIN 908
6	1	60.1204.003	Tappo G 3/8" DIN 908
7	1	60.0203.039	VMD1.010 270bar
8	1	60.1005.408	GRANO M6x6 Foro 0.45+filo
9	1	65.5908.006	Tappo DE-00



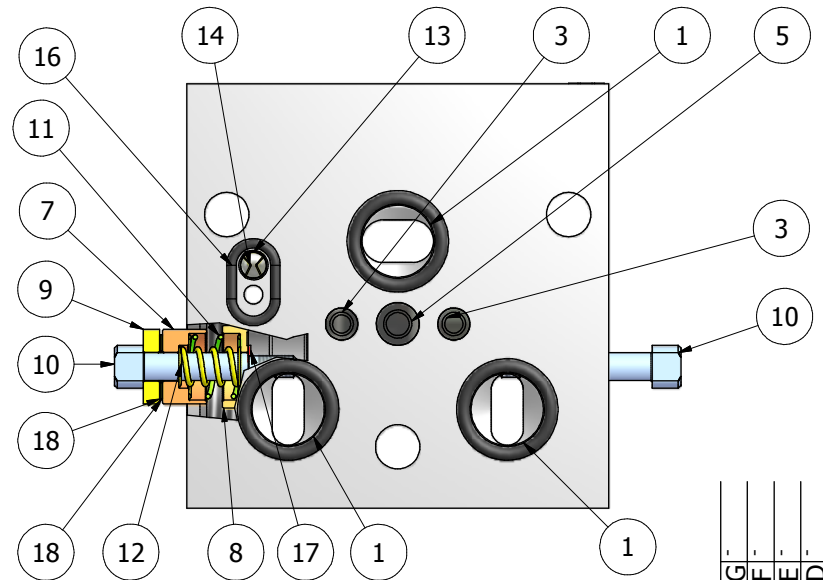
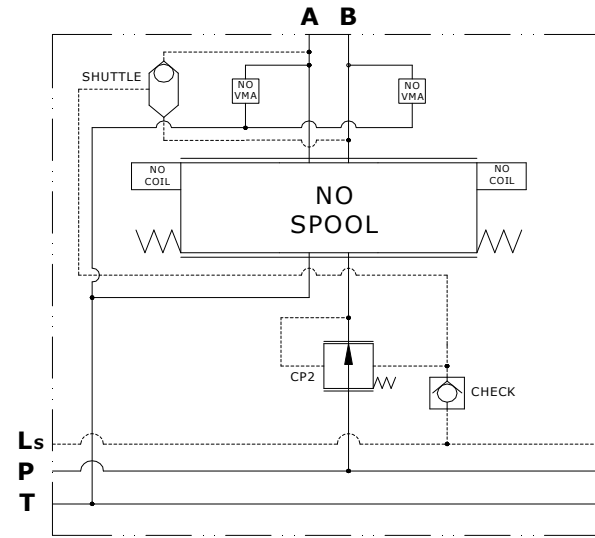
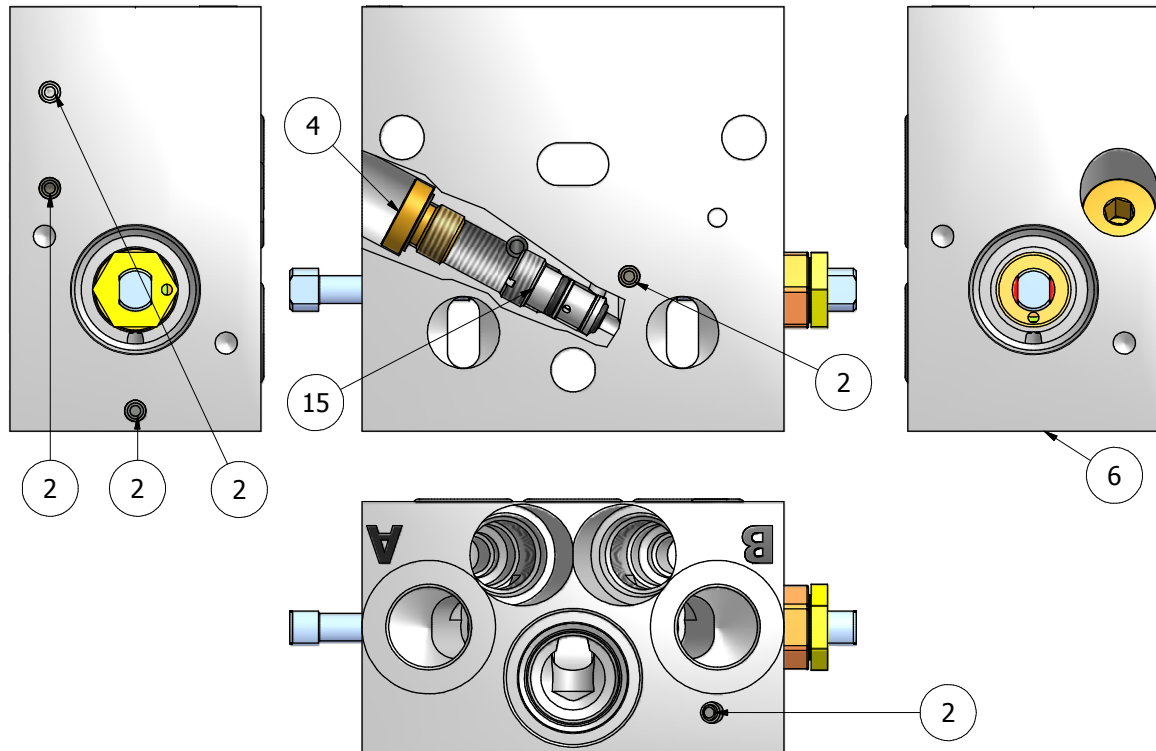
DENOMINAZIONE: TDV31-IFCLG38-C15R25 GD Ø0,45+FILO Ø0,3		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
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TRATT. TERMICO: -		NOME FILE: 15.3901.004_00.idw			
MATERIALE: -		SF -		N° FOGLIO 1/1	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. B.B.	APPROV. -	CODICE 15.3901.004 / 00
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3					

Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	3	60.0102.035	OR 2-113
2	6	60.1207.010	AVD Ø4 Acciaio
3	2	60.1207.011	Tappo UNIFAST Ø6 acciaio
4	1	13.1012.004_00	TDV-32-A00B00
5	1	60.1204.212	Tappo M10x1 TCEI+OR
6	1	60.1207.012	AVD 8 Acciaio
7	1	13.6101.226	Perno guida molla spola
8	1	13.7701.023	Spingimolla lato spola
9	1	13.7701.022	Spingimolla
10	2	13.6101.227	Perno azionamento spola
11	1	13.4501.093	Molla
12	1	13.4501.036	Molla TPB-S2I
13	1	60.1015.004	SFERA Ø4,76 (3/16)
14	1	13.4501.117	MOLLA
15	1	14.2403.011	Shuttle valve T075
16	1	60.0102.027	OR 2-013
17	2	60.1006.350	Rondella Ø8x4x0,5
18	2	60.1006.355	Rondella Ø12x6x0,3

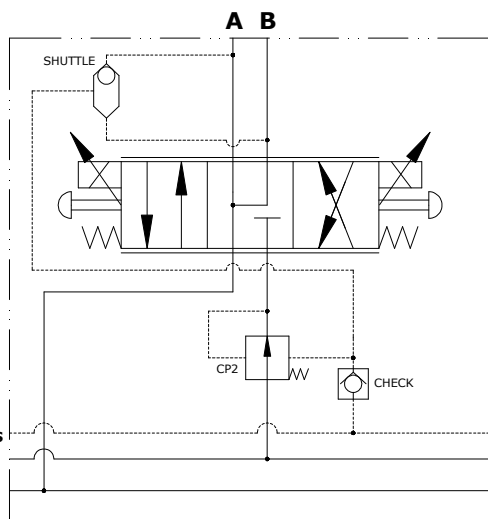
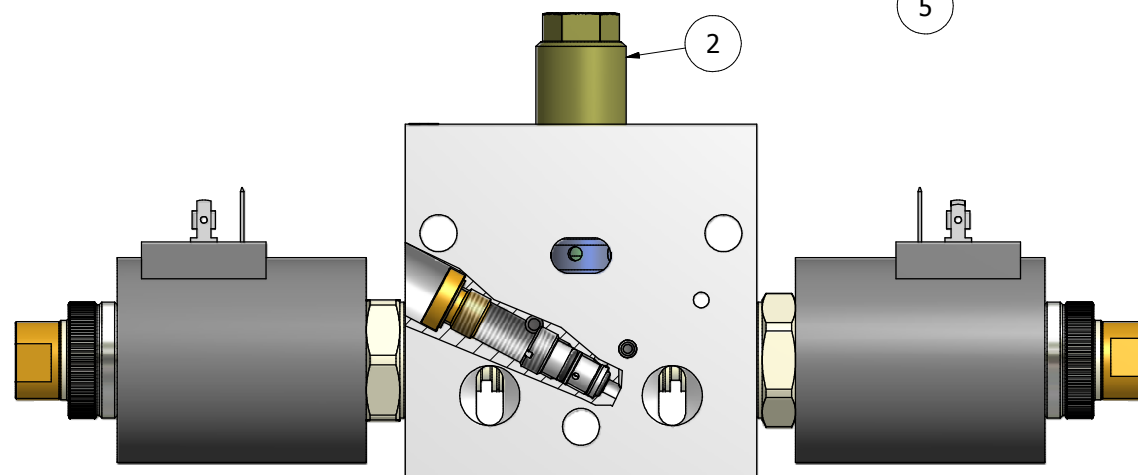
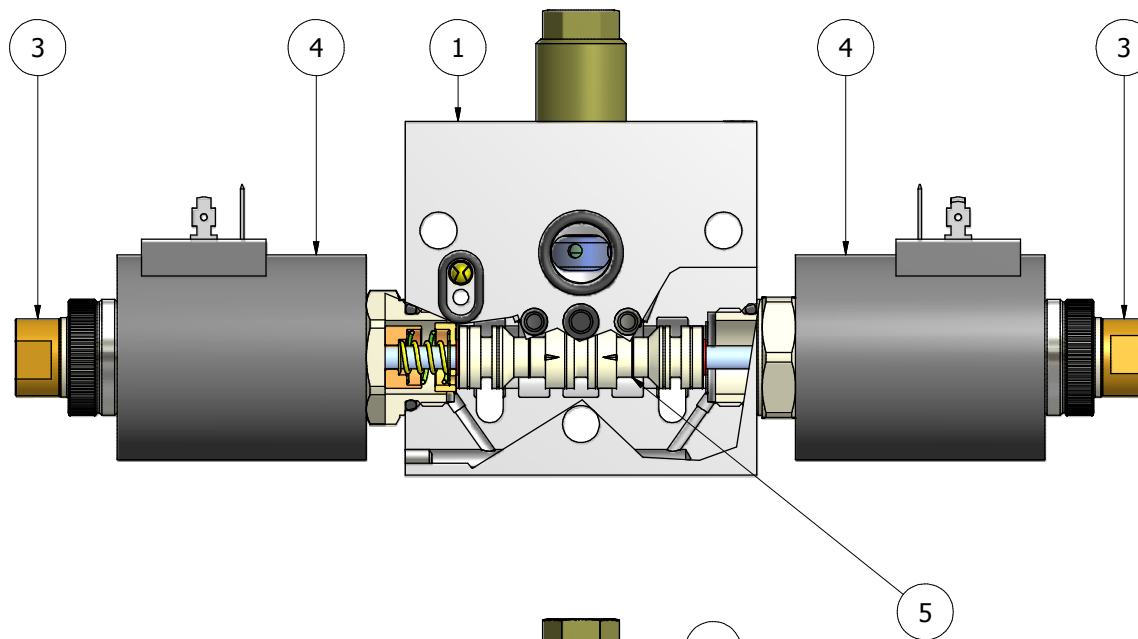
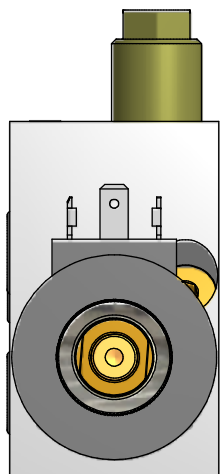


DENOMINAZIONE: SEZIONE BASE ELETTRODISTRIBUTORE 30L NO VMA NO LEVA		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -		NOME FILE: 15.3903.000_01.idw			
MATERIALE: -		SCALA: 1:1		DATA: 12/10/2009	
CLIENTE: -		COMPLESSIVO: -		N° FOGLIO: 1/1	
DISEGNATO: F.S.		CONTR.: -		APPROV.: -	
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05		da 1 a 80: ±0.1		da 80 a 200: ±0.15	
		da 200 a 300: ±0.2		da 300 a 600: ±0.3	
				SF .1029.TCN	
				CODICE	
				15.3903.000 / 01	

Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	3	60.0102.035	OR 2-113
2	6	60.1207.010	AVD Ø4 Acciaio
3	2	60.1207.011	Tappo UNIFAST Ø6 acciaio
4	1	60.1204.212	Tappo M10x1 TCEI+OR
5	1	60.1207.012	AVD 8 Acciaio
6	1	13.1003.245_00	TDV-32-AxxByy
7	1	13.6101.226	Perno guida molla spola
8	1	13.7701.023	Spingimolla lato spola
9	1	13.7701.022	Spingimolla
10	2	13.6101.227	Perno azionamento spola
11	1	13.4501.093	Molla
12	1	13.4501.036	Molla TPB-S2I
13	1	60.1015.004	SFERA Ø4,76 (3/16)
14	1	13.4501.117	
15	1	14.2403.011	Shuttle valve T075
16	1	60.0102.027	OR 2-013
17	2	60.1006.350	Rondella Ø8x4x0,5
18	2	60.1006.355	Rondella Ø12x6x0,3



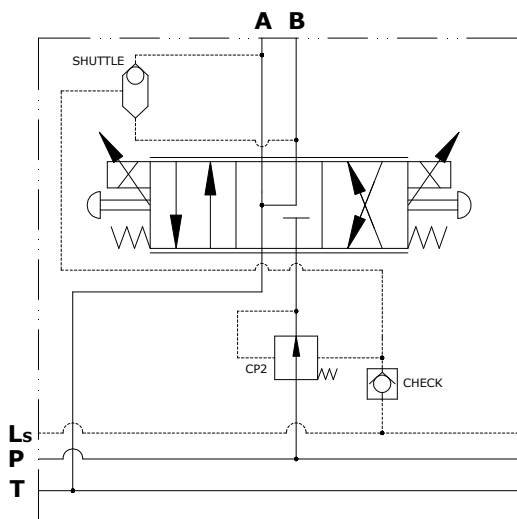
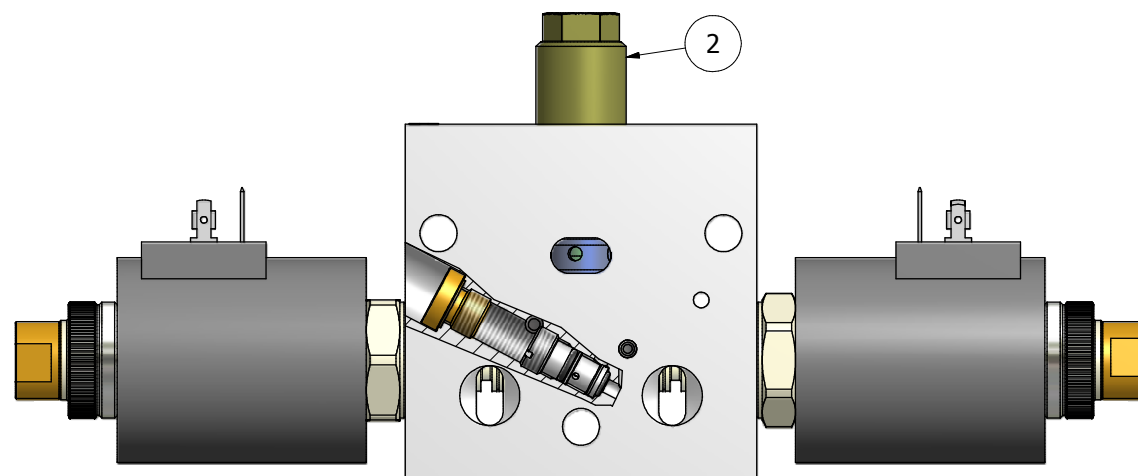
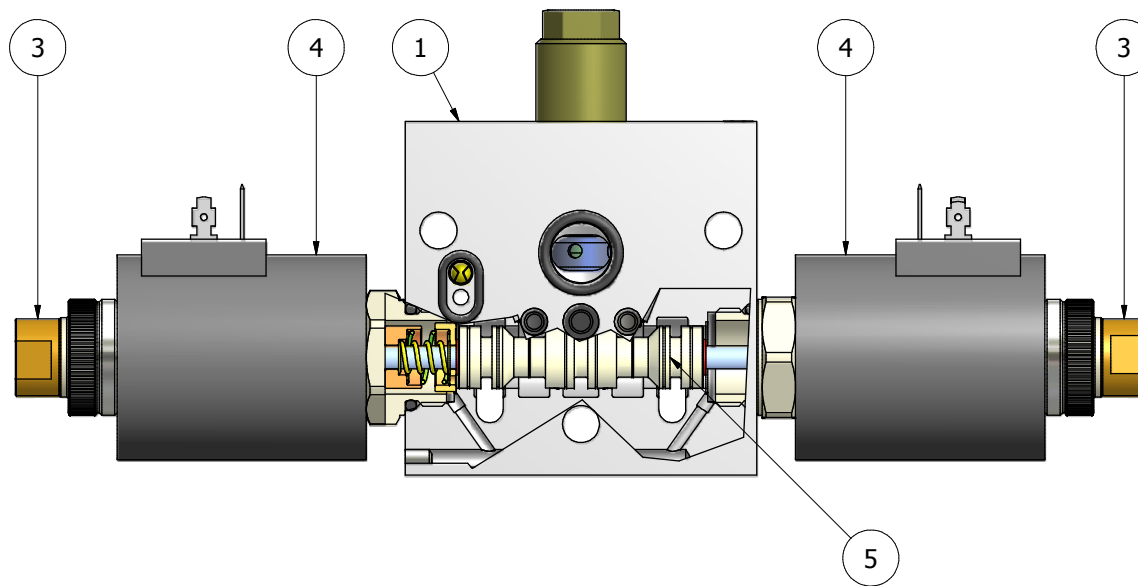
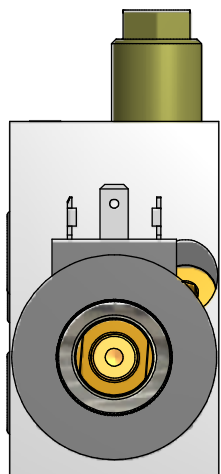
DENOMINAZIONE: SEZIONE PREALLESTITA TDV30 CON VMA SU A e B SENZA LEVA		SOSTITUISCE IL: -	MODIFICHE APPROVATE		
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -	TECNORD SERVOCOMANDI E REGOLAZIONE		
TRATT. TERMICO: -		NOME FILE: 15.3909.000_00.idw			SCALA 1:1
MATERIALE: -		SF .1029.TCN		N° FOGLIO 1/1	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	CODICE 15.3909.000 / 00
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05					
da 1 a 80: ±0.1					
da 80 a 200: ±0.15					
da 200 a 300: ±0.2					
da 300 a 600: ±0.3					



Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3903.000/01	ALLESTIMENTO BASE NO VMA NO LEVA
2	1	14.2202.031	CP2 RPM M22x1,5 18 bar
3	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
4	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
5	1	13.1407.085	Motor Spool 8 Lt

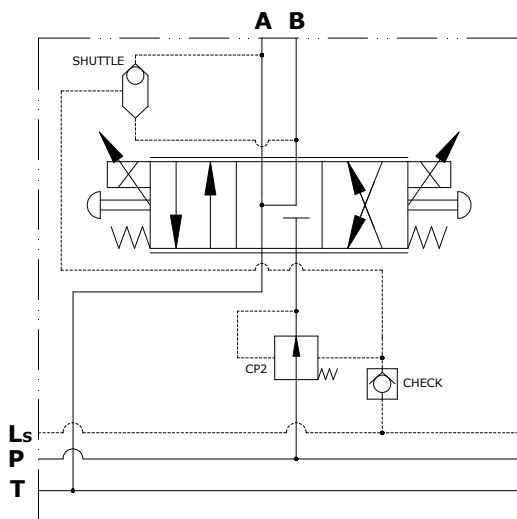
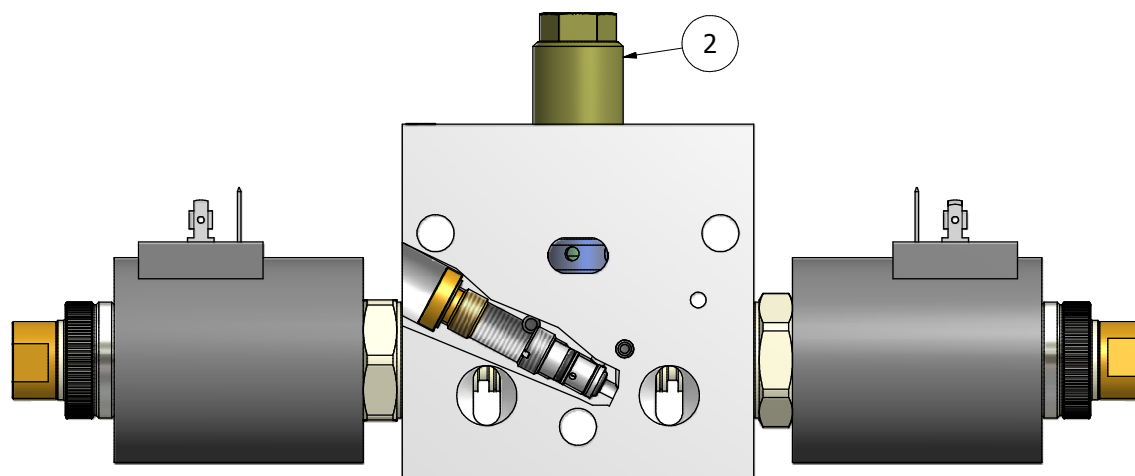
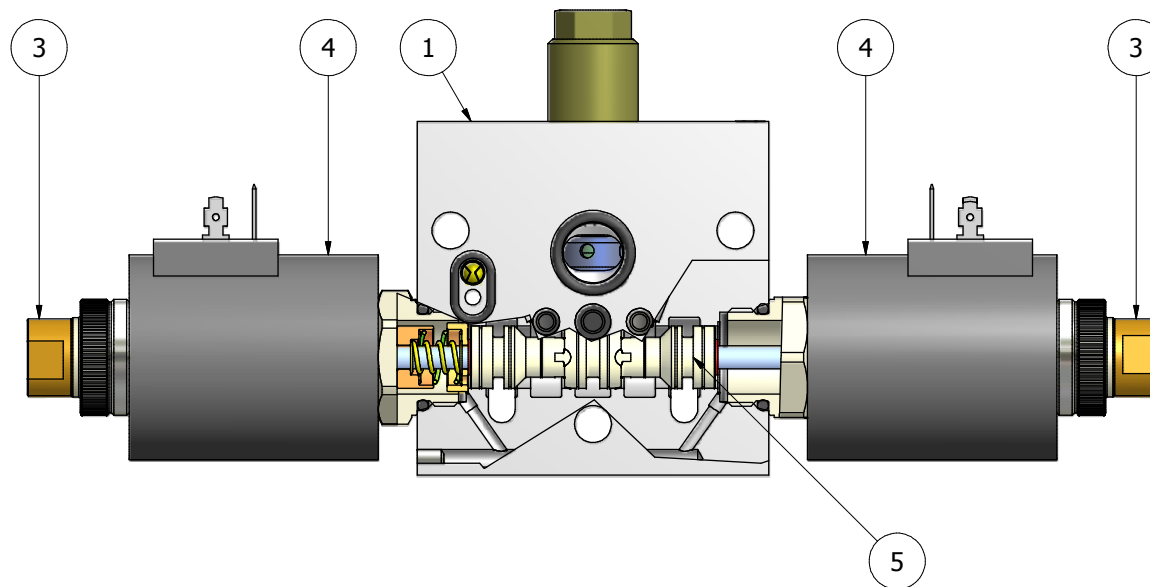
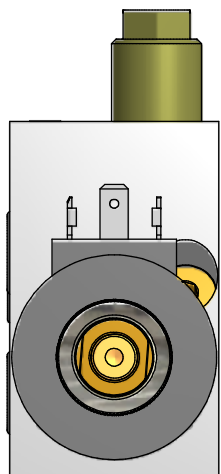
DENOMINAZIONE: TDV32-PMDG38-OM-Y05-12V		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. SUPERFICIALE: -		NOME FILE: 15.3903.008_00.idw		SCALA 1:1.2	DATA 12/10/2009
TRATT. TERMICO: -				N° FOGLIO 1/1	
MATERIALE: -				SF -	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	CODICE 15.3903.008 / 00
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3					



Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3903.000/01	ALLESTIMENTO BASE NO VMA NO LEVA
2	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
3	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
4	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
5	1	13.1407.115_00	Motor Spool 10 Lt

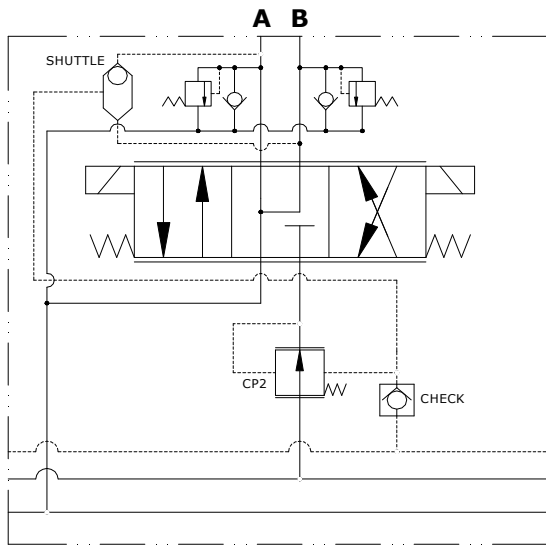
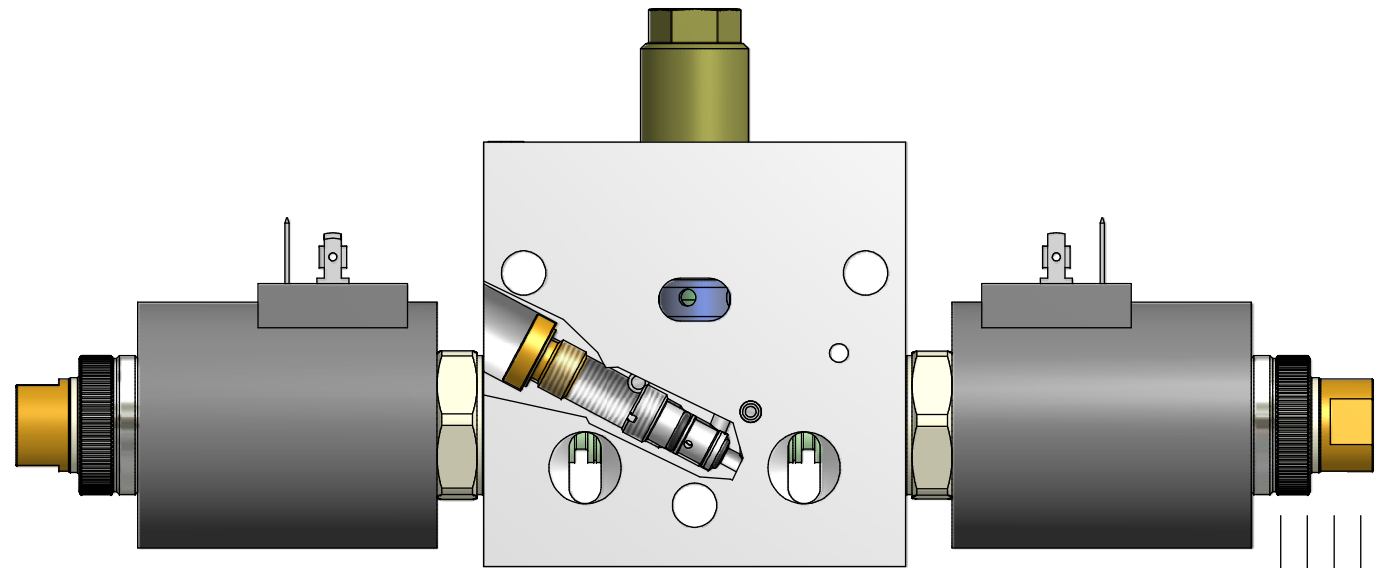
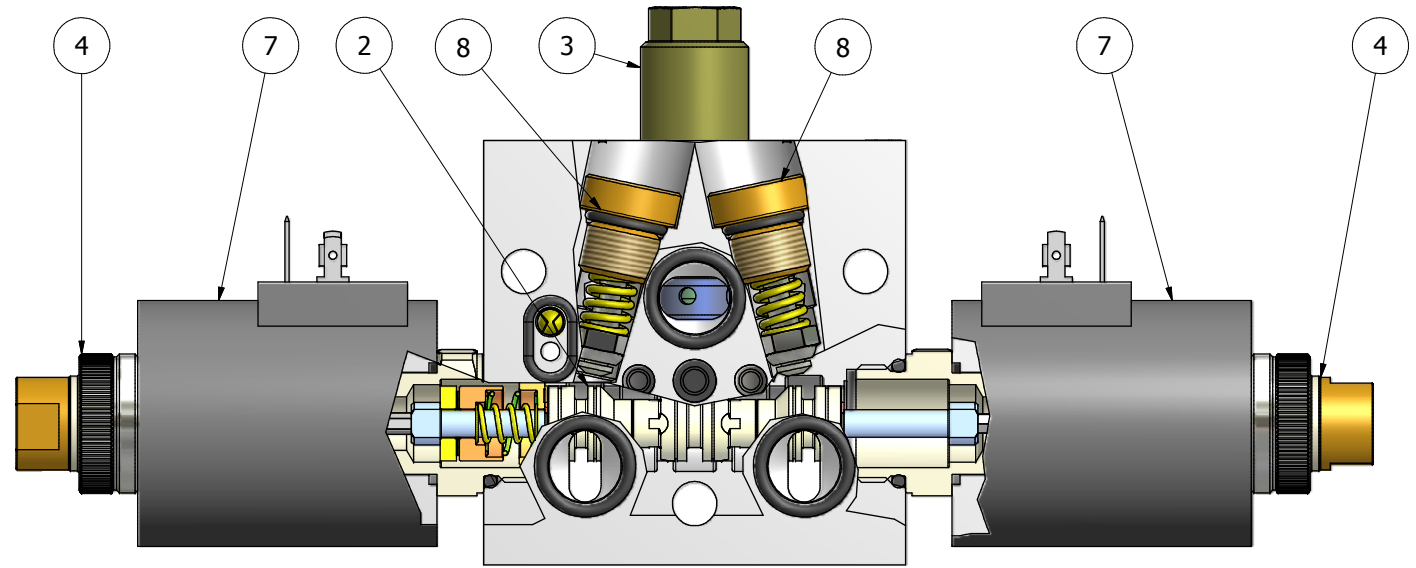
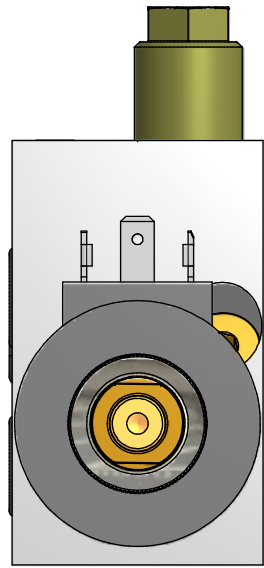
DENOMINAZIONE: TDV32-PMDG38-OM-Y10-12V		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. SUPERFICIALE: - TRATT. TERMICO: -		NOME FILE: 15.3903.007_00.idw		SCALA 1:1.2	DATA 12/10/2009
MATERIALE: -		CONTR. APPROV.:		N° FOGLIO 1/1	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	SF -
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3					CODICE 15.3903.007 / 00



Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3903.000/01	ALLESTIMENTO BASE NO VMA NO LEVA
2	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
3	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
4	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
5	1	13.1407.083	MOTOR SPOOL 30l/min

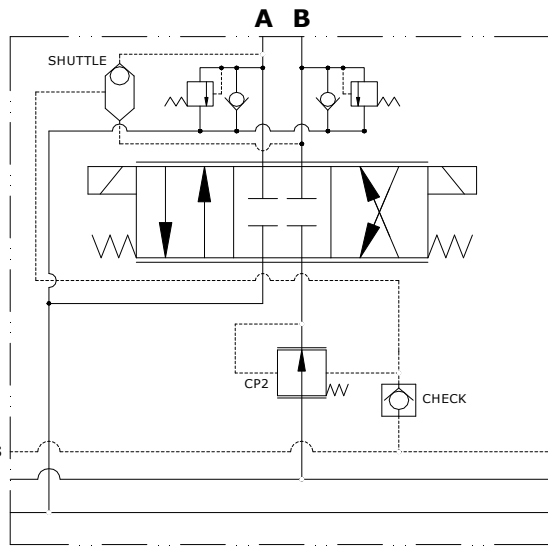
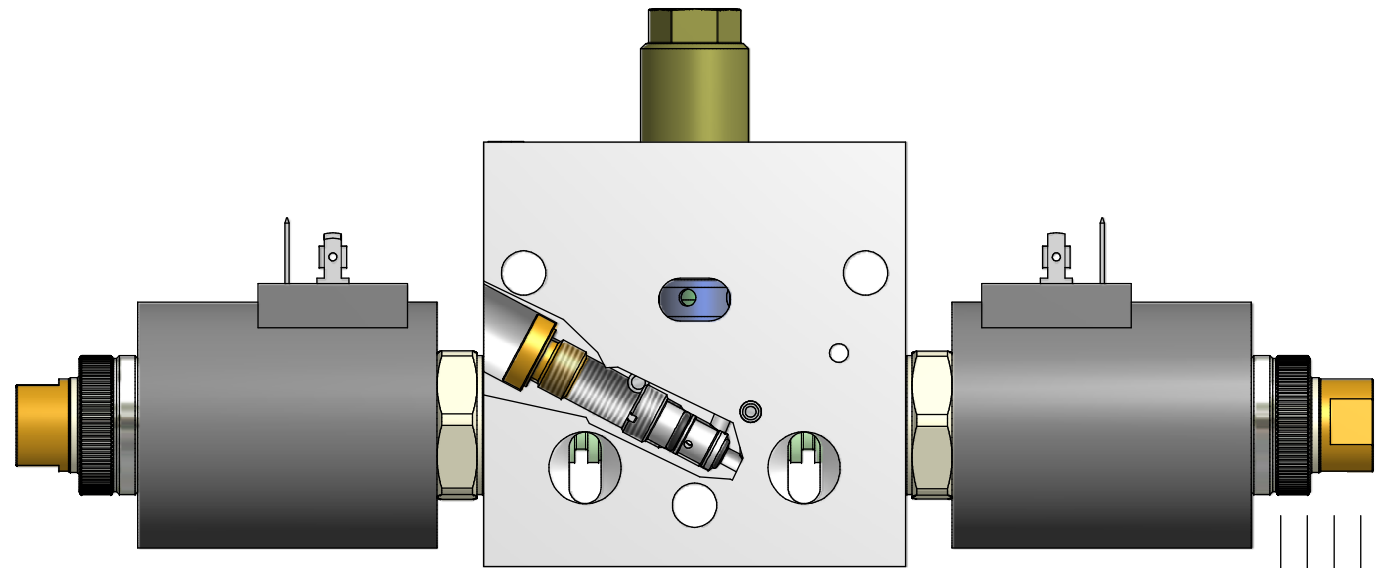
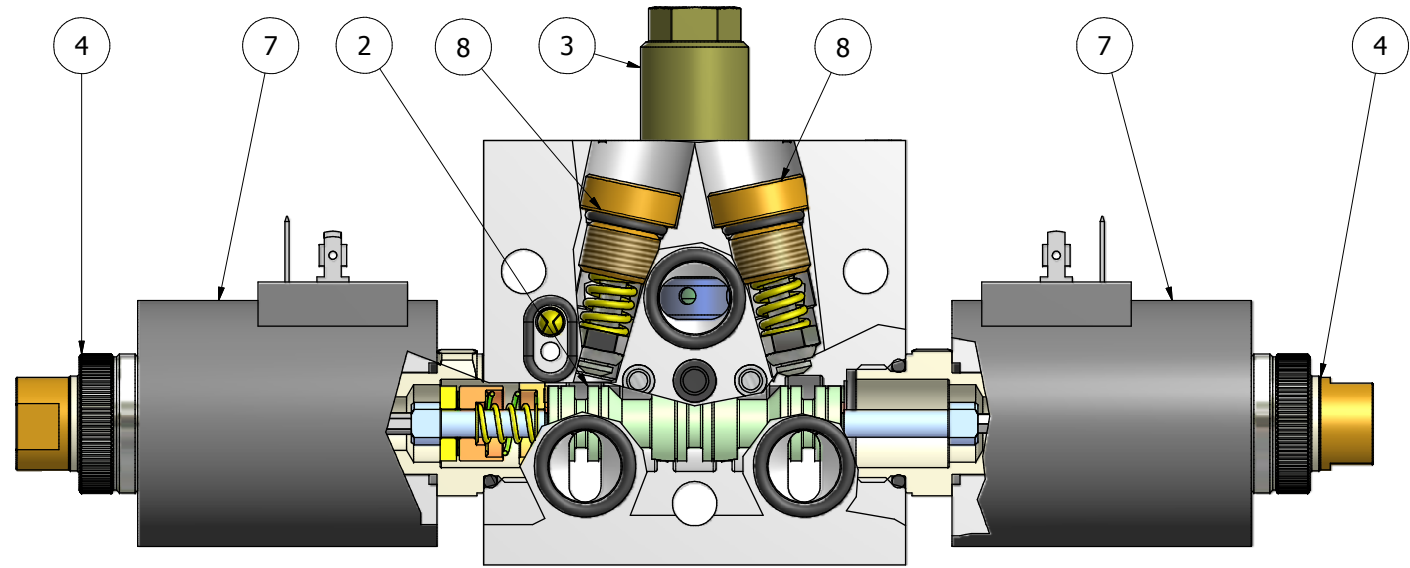
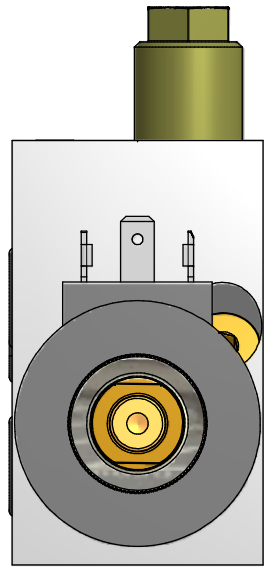
DENOMINAZIONE: TDV32-PMDG38-OM-Y27-12V		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. SUPERFICIALE: -		NOME FILE: 15.3903.006_00.idw		SCALA 1:1.2	DATA 09/12/2010
TRATT. TERMICO: -				N° FOGLIO 1/1	
MATERIALE: -				SF .1029.TCN	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	CODICE 15.3903.006 / 00
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3					



Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3909.000	ALLESTIMENTO BASE CON VMA SU A E B NO LEVA
2	1	13.1407.083	MOTOR SPOOL 30l/min
3	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
4	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
7	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
8	2	60.0203.561	TARP VMA1.025 200 bar

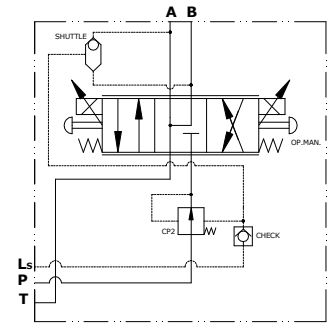
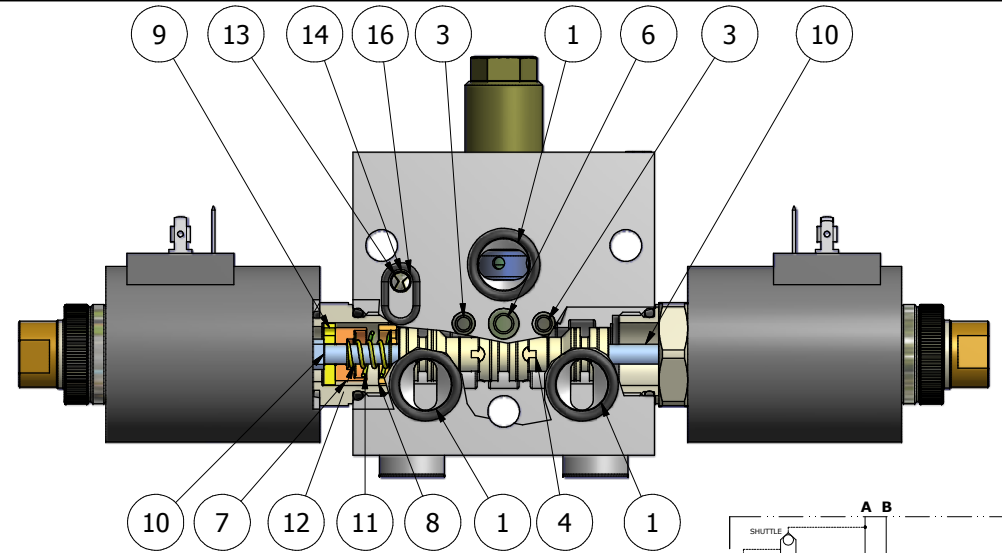
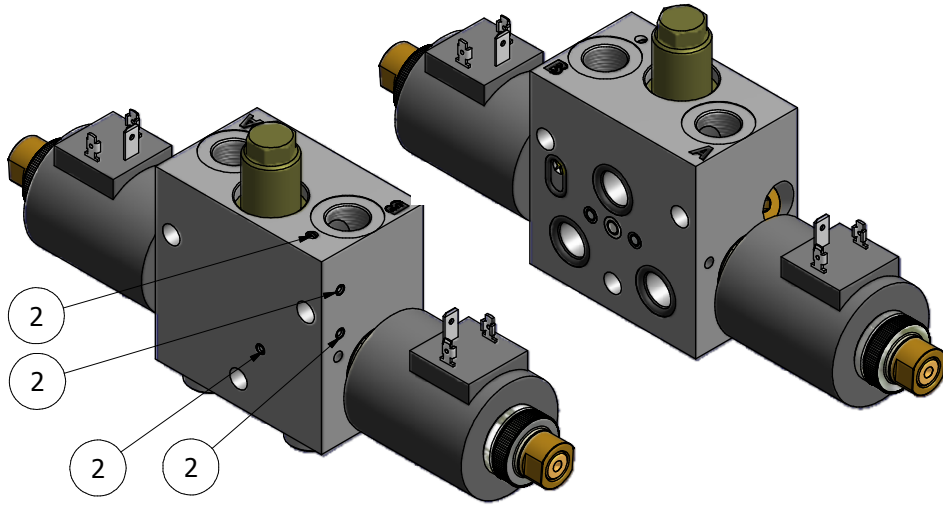
DENOMINAZIONE: TDV32-PMDG38-OM-AB20-Y30-12VHC				SOSTITUISCE IL: -		MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -				SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -				NOME FILE: 15.3909.002_00.idw		SCALA 1:1	DATA 12/10/2009
MATERIALE: -				SF .1029.TCN		N° FOGLIO 1/1	
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	CODICE 15.3909.002 / 00		
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3							



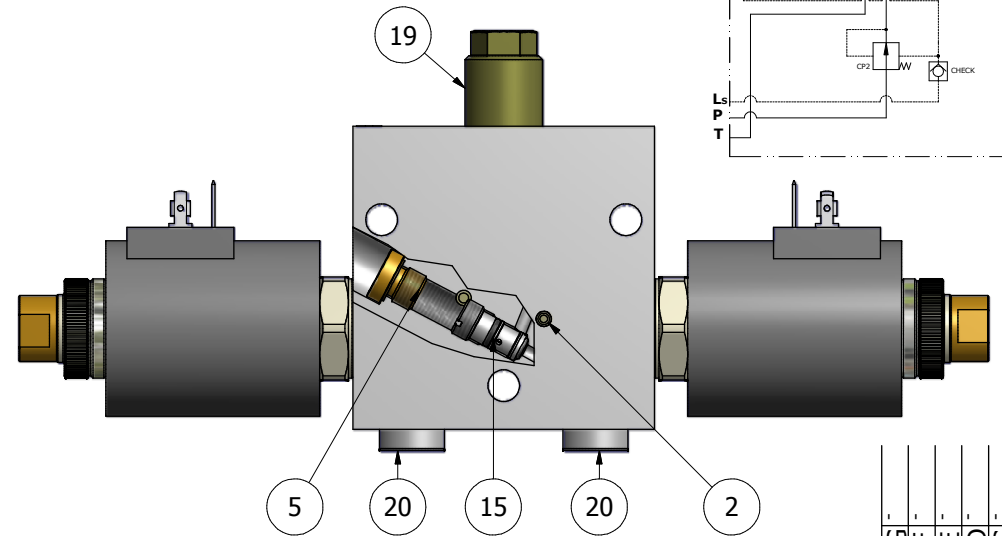
Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3909.000	ALLESTIMENTO BASE CON VMA SU A E B NO LEVA
2	1	13.1407.086	Spola C.C. 15 Lt
3	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
4	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
7	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
8	2	60.0203.561	TARP VMA1.025 200 bar

DENOMINAZIONE: TDV32-PMDG38-OM-AB20-X16-12VHC				SOSTITUISCE IL: -		MODIFICHE APPROVATE	
				SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. SUPERFICIALE: -				NOME FILE: 15.3909.001_00.idw		SCALA 1:1	DATA 12/10/2009
TRATT. TERMICO: -				MATERIALE: -		N° FOGLIO 1/1	
CLIENTE -		COMPLESSIVO -		DISEGNATO F.S.	CONTR. -	APPROV. -	SF .1029.TCN
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05				da 1 a 80: ±0.1	da 80 a 200: ±0.15	da 200 a 300: ±0.2	da 300 a 600: ±0.3
						CODICE 15.3909.001 / 00	

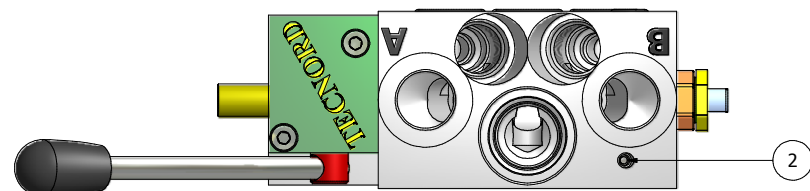
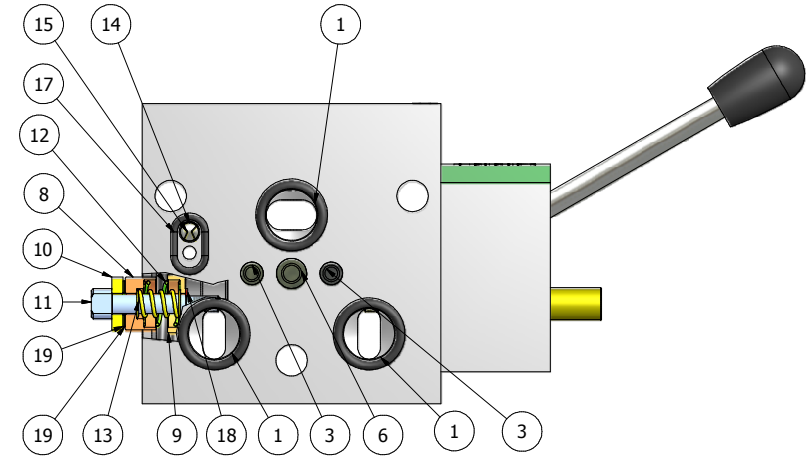
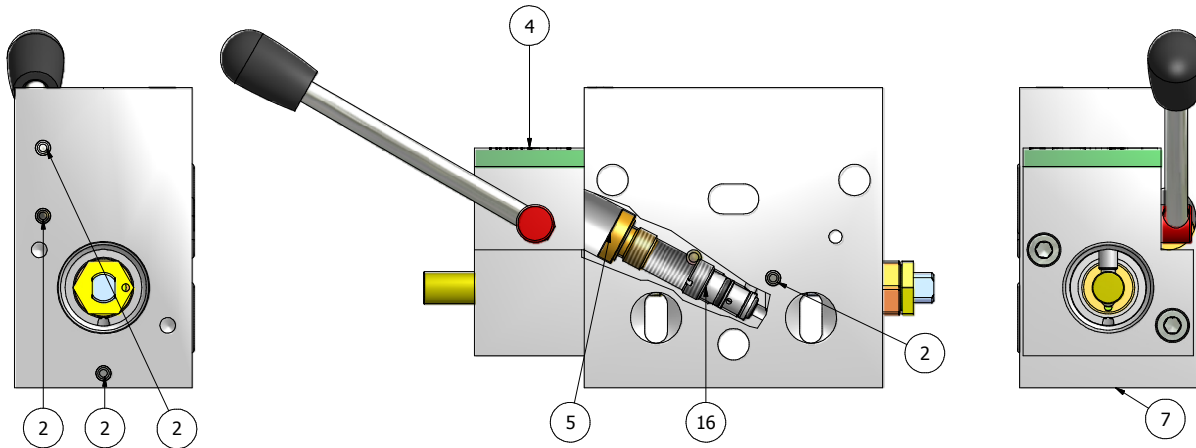
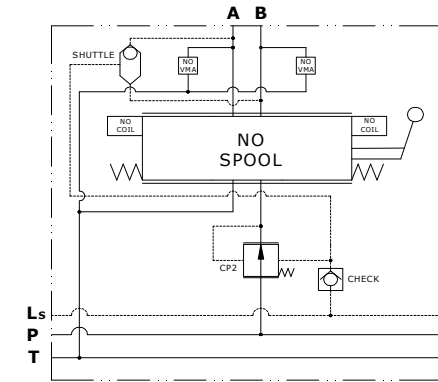


Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	3	60.0102.035	OR 2-113
2	6	60.1207.010	AVD Ø4 Acciaio
3	2	60.1207.011	Tappo UNIFAST Ø6 acciaio
4	1	13.1407.083	MOTOR SPOOL 30l/min
5	1	60.1204.212	Tappo M10x1 TCEI+OR
6	1	60.1207.012	AVD 8 Acciaio
7	1	13.6101.226	Perno guida molla spola
8	1	13.7701.023	Spingimolla lato spola
9	1	13.7701.022	Spingimolla
10	2	13.6101.227	Perno azionamento spola
11	1	13.4501.079	Molla Leggera Delta Power
12	1	13.4501.036	Molla TPB-S2I
13	1	60.1015.004	SFERA Ø4,76 (3/16)
14	1	13.4501.117	
15	1	14.2403.011	Shuttle valve T075
16	1	60.0102.027	OR 2-013
17	1	13.1003.253_00	TDV-33-A00B00
18	2	13.0311.008	ASSIEME ATTUATORE MONOLITICO CON OM
19	1	14.2202.031	CP2 RPM M22x1,5 18 bar
20	2	13.1701.059	Distanziale
21	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann

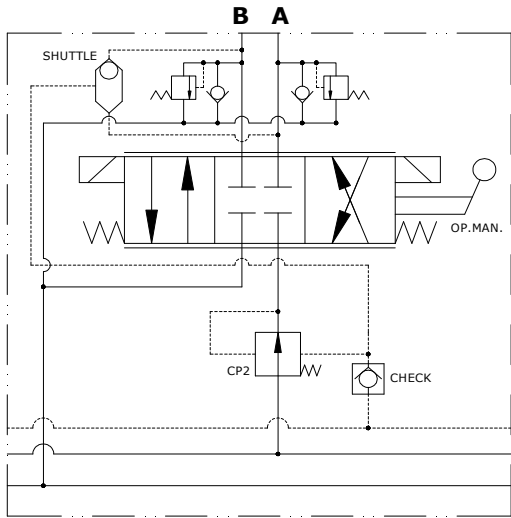
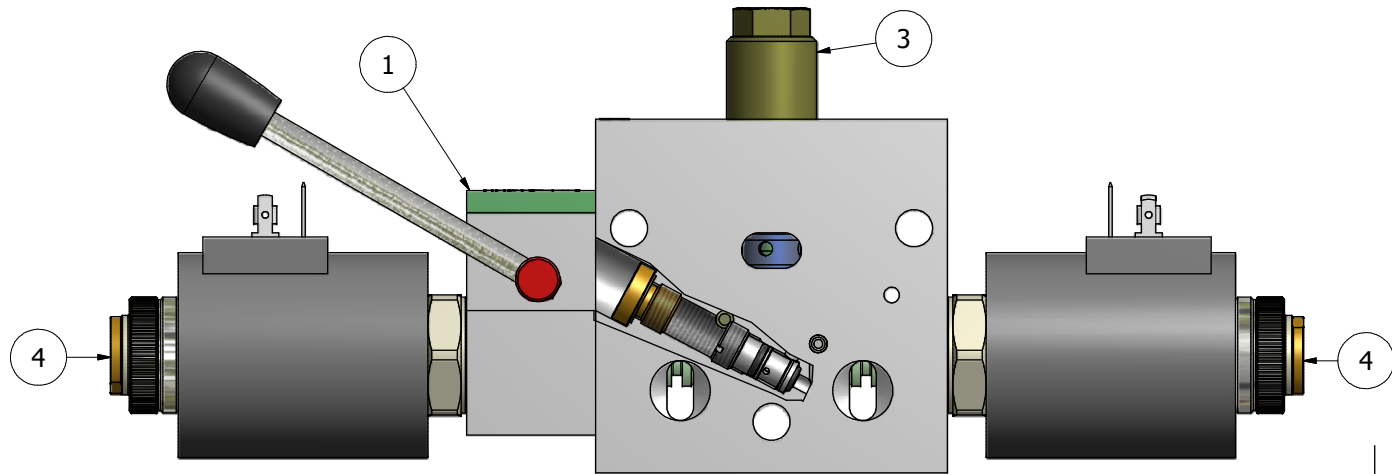
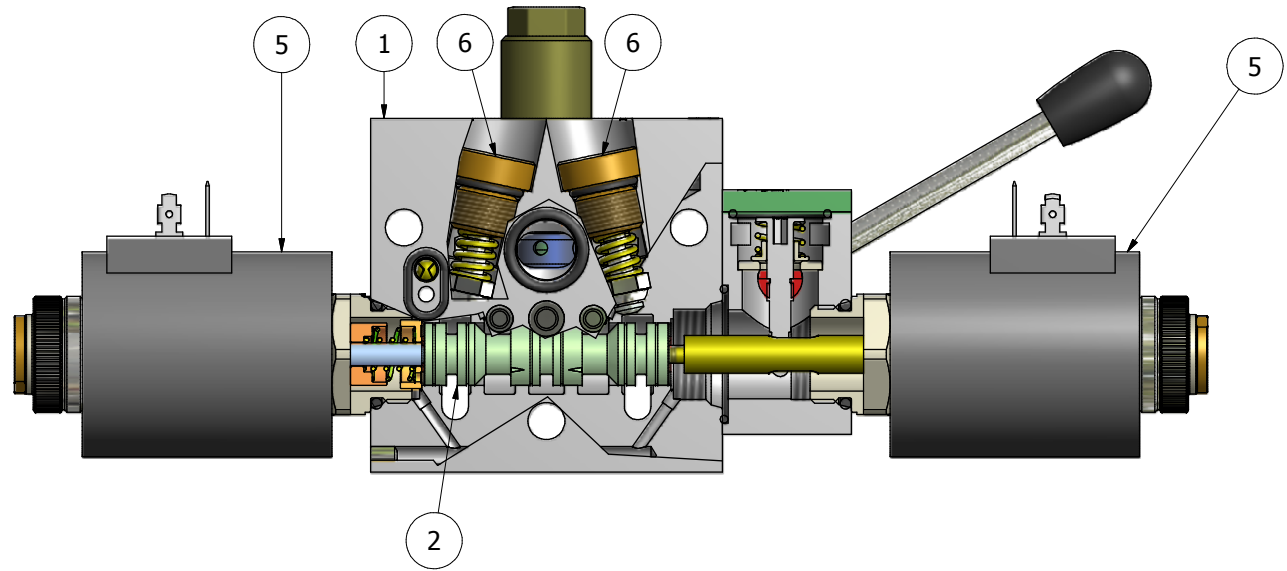
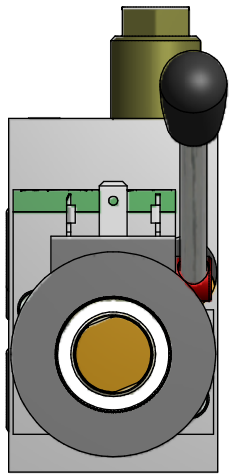


DENOMINAZIONE: TDV-32-PMDG38-OM-Y27-12V		SOSTITUISCE IL: -	MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -	TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -		NOME FILE: 15.3902.004_00.idw		
MATERIALE: -		SF .1029.TCN		CODICE 15.3902.004 / 00
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.15 da 80 a 200: ±0.2 da 200 a 300: ±0.2 da 300 a 600: ±0.3				

Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	3	60.0102.035	OR 2-113
2	6	60.1207.010	AVD Ø4 Acciaio
3	2	60.1207.011	Tappo UNIFAST Ø6 acciaio
4	1	13.0303.097	Leva emergenza TDV 30
5	1	60.1204.212	Tappo M10x1 TCEI+OR
6	1	60.1207.012	AVD 8 Acciaio
7	1	13.1003.245_00	TDV-32-AxxByy
8	1	13.6101.226	Perno guida molla spola
9	1	13.7701.023	Spingimolla lato spola
10	1	13.7701.022	Spingimolla
11	1	13.6101.227	Perno azionamento spola
12	1	13.4501.093	Molla
13	1	13.4501.036	Molla TPB-S2I
14	1	60.1015.004	SFERA Ø4,76 (3/16)
15	1	13.4501.117	
16	1	14.2403.011	Shuttle valve T075
17	1	60.0102.027	OR 2-013
18	2	60.1006.350	Rondella Ø8x4x0,5
19	2	60.1006.355	Rondella Ø12x6x0,3



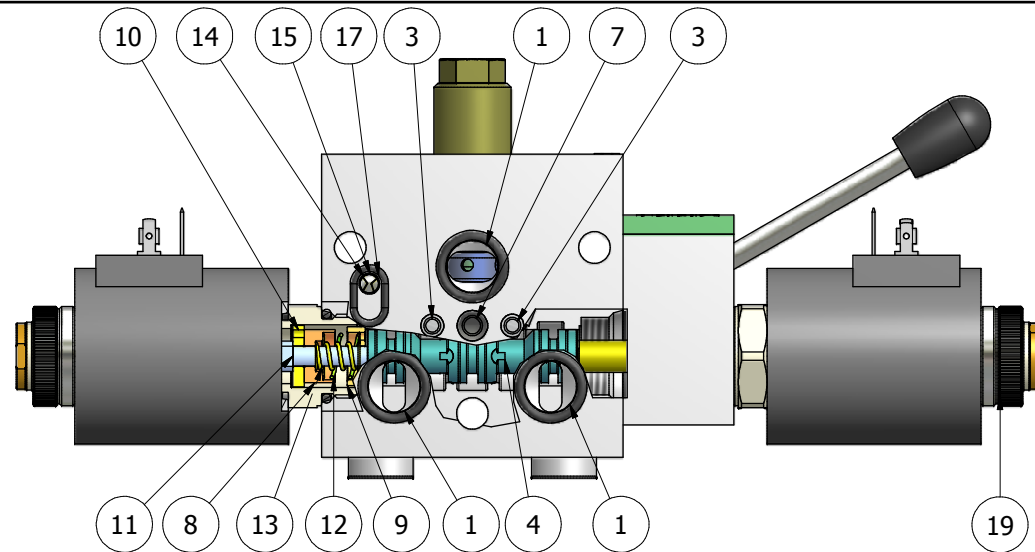
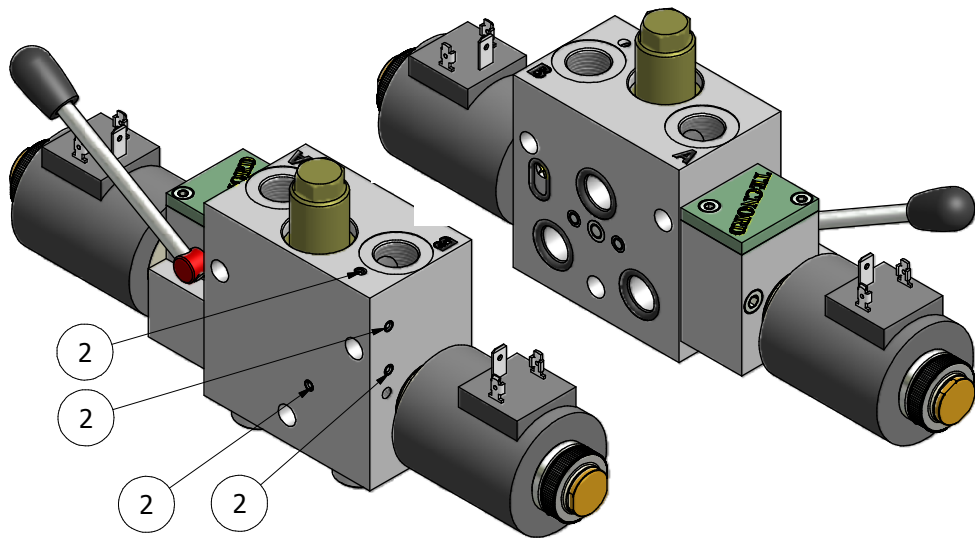
DENOMINAZIONE: SEZIONE PREALLESTITA TDV30 CON VMA SU A e B CON LEVA DI EMERGENZA		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -		NOME FILE: 15.3910.000_00.idw		SCALA 1:1	DATA 12/10/2009
MATERIALE: -		APPROV.: F.S.		N° FOGLIO 1/1	
CLIENTE	COMPLESSIVO	DISEGNATO	CONTR.	SF .1029.TCN	
-	-	F.S.	-	CODICE	
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05 da 1 a 80: ±0.1 da 80 a 200: ±0.15 da 200 a 300: ±0.2 da 300 a 600: ±0.3				15.3910.000 / 00	



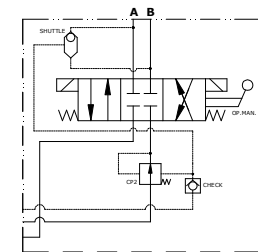
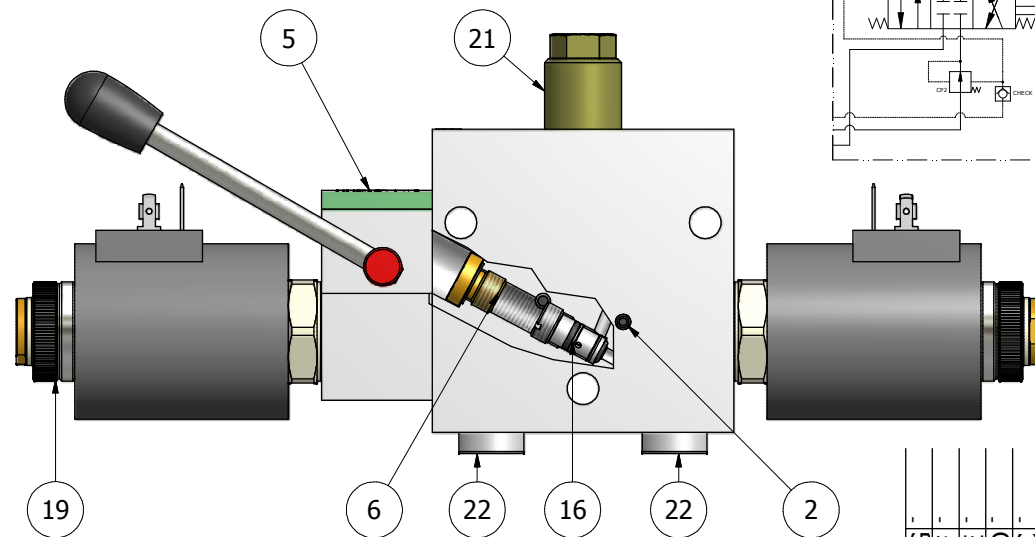
Elenco parti

ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	1	15.3910.000/00	ALLESTIMENTO BASE CON VMA SU A E B CON LEVA
2	1	13.1407.084	SPOLA C.C. 8 l/min
3	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
4	2	13.0311.009	ASSIEME ATTUATORE MONOLITICO SENZA OM
5	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann
6	2	60.0203.561	TARP VMA1.025 200 bar

DENOMINAZIONE: TDV32-PMDG38-LM-AB20-X08-12V		SOSTITUISCE IL: -		MODIFICHE APPROVATE		
		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE		
TRATT. SUPERFICIALE: - TRATT. TERMICO: -		NOME FILE: 15.3910.001_00.idw		SCALA 1:1.2	DATA 12/10/2009	N° FOGLIO 1/1
MATERIALE: -		SF .1029.TCN		CODICE		
CLIENTE -	COMPLESSIVO -	DISEGNATO F.S.	CONTR. -	APPROV. -	15.3910.001 / 00	
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05		da 1 a 80: ±0.1	da 80 a 200: ±0.15	da 200 a 300: ±0.2	da 300 a 600: ±0.3	



Elenco parti			
ELEMENTO	QTÀ	NUMERO PARTE	DESCRIZIONE
1	3	60.0102.035	OR 2-113
2	6	60.1207.010	AVD Ø4 Acciaio
3	2	60.1207.011	Tappo UNIFAST Ø6 acciaio
4	1	13.1407.082	SPOLA C.C. 27L
5	1	13.0303.097	Leva emergenza TDV 30
6	1	60.1204.212	Tappo M10x1 TCEI+OR
7	1	60.1207.012	AVD 8 Acciaio
8	1	13.6101.226	Perno guida molla spola
9	1	13.7701.023	Spingimolla lato spola
10	1	13.7701.022	Spingimolla
11	1	13.6101.227	Perno azionamento spola
12	1	13.4501.079	Molla Leggera Delta Power
13	1	13.4501.036	Molla TPB-S2I
14	1	60.1015.004	SFERA Ø4,76 (3/16)
15	1	13.4501.117	
16	1	14.2403.011	Shuttle valve T075
17	1	60.0102.027	OR 2-013
18	1	13.1003.253_00	TDV-33-A00B00
19	2	13.0311.009	ASSIEME ATTUATORE MONOLITICO SENZA OM
20	1	60.0205.302	MAGNETE TDT 12V 27W DEUTSCH
21	1	14.2202.010_C	CP2 RPM M22x1,5 14 bar
22	2	13.1701.059	Distanziale
23	2	60.0205.183	Magnete ZHC 12V 27W Hirschmann



DENOMINAZIONE: TDV-32-OMDG38-LM-00-X30-12V		SOSTITUISCE IL: -		MODIFICHE APPROVATE	
TRATT. SUPERFICIALE: -		SOSTITUITO DA: -		TECNORD SERVOCOMANDI E REGOLAZIONE	
TRATT. TERMICO: -		NOME FILE: 15.3902.003_00.idw			
MATERIALE: -		SCALA: 1:1		DATA: 12/10/2009	
CLIENTE: -		DISEGNATO: F.S.		N° FOGLIO: 1/1	
COMPLESSIVO: -		CONTR.: -		APPROV.: -	
DISTRIBUZIONE: -		CONTR. APPROV.: -		SF .1029.TCN	
QUOTE SENZA TOLLERANZA: da 0 a 1: ±0.05		da 1 a 80: ±0.1		da 80 a 200: ±0.15	
		da 200 a 300: ±0.2		da 300 a 600: ±0.3	
				CODICE 15.3902.003 / 00	