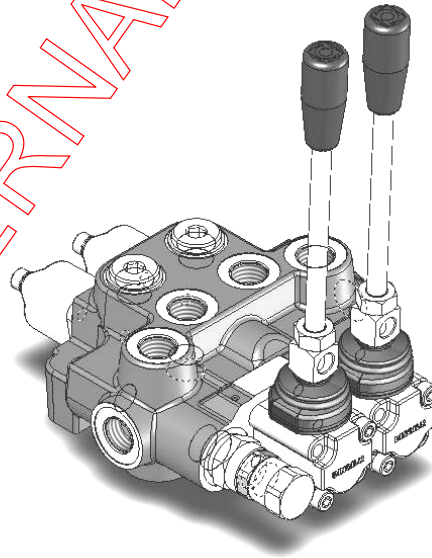


PRODUCT DATA SHEET
REV.6

Product: DN1 (DO6DV1---) Product: DN2 (DO6DV2---)

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This document has been drawn up with the greatest attention to precision and accuracy of all data herein contained.

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General features

Number of sections	<i>From 1 to 2</i>	
Circuit type	<i>Parallel</i>	
Spool diameter	<i>18 mm</i>	<i>0.71 in</i>
Spool O-Ring hardness	<i>60 sh</i>	
Port auxiliary valves	<i>Port relief (VL) and pilot operated (YBD-VBS)</i>	
Carry Over prearrangement (power beyond)	<i>Standard</i>	
Carry Over (power beyond)	<i>Optional</i>	

Working features

Following characteristics are influenced by testing conditions. Values are obtained with oil at viscosity of 21 cSt, temperature of 50°C and pressure of 100 bar, double acting spool (circuit 1) and are valid only for standard threads.

Nominal flow rate	<i>45 l/min</i>	<i>11.9 US gpm</i>
Maximum flow rate	<i>55 l/min</i>	<i>14.5 US gpm</i>
Maximum pressure	<i>300 bar</i>	<i>4350 psi</i>
Maximum tank pressure	<i>50 bar</i>	<i>730 psi</i>
Max. internal leakage (A or B => P and T)	<i>8 cm³/min</i>	<i>0.49 in³/min</i>

Fluid working range

Fluid	<i>Mineral based oil</i>
Working temperature (*)	<i>-20°C +80°C with NBR seals -20°C +120°C with HNBR seals</i>
Working oil viscosity	<i>From 10 cSt to 100 cSt</i>

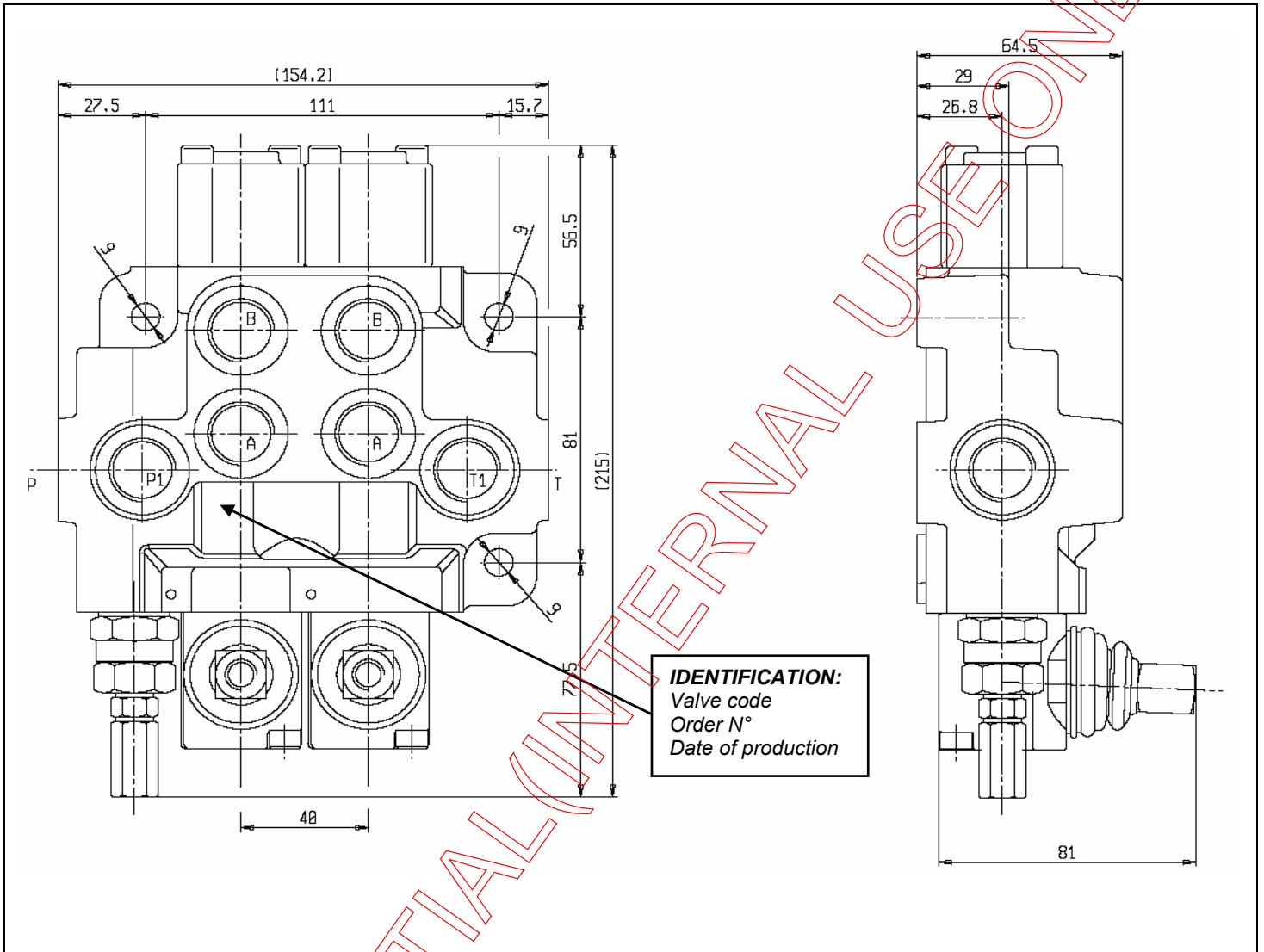
(*) For different working temperatures, fluid or viscosity, please contact our sales department.

NOTE: do not wash valve with direct water jet.

Units of measure – conversion factors

	METRIC	BSP
Length	<i>1 mm = 0,0394 in</i>	<i>1 in = 25,4 mm</i>
Mass	<i>1 kg = 2,205 lb</i>	<i>1 lb = 0,454 kg</i>
Force	<i>1 Nm = 0,102 kgf</i>	<i>1 kgf = 9,807 Nm</i>
Volume	<i>1 l = 0,2200 gal UK</i>	<i>1 gal UK = 4,546 l</i>
	<i>1 l = 0,2642 gal US</i>	<i>1 gal US = 3,785 l</i>
Pressure	<i>1 bar = 100000 Pa</i>	<i>1 Pa = 0,00001 bar</i>
	<i>1 bar = 14,5 psi</i>	<i>1 psi = 0,0689 bar</i>

Overall dimensions



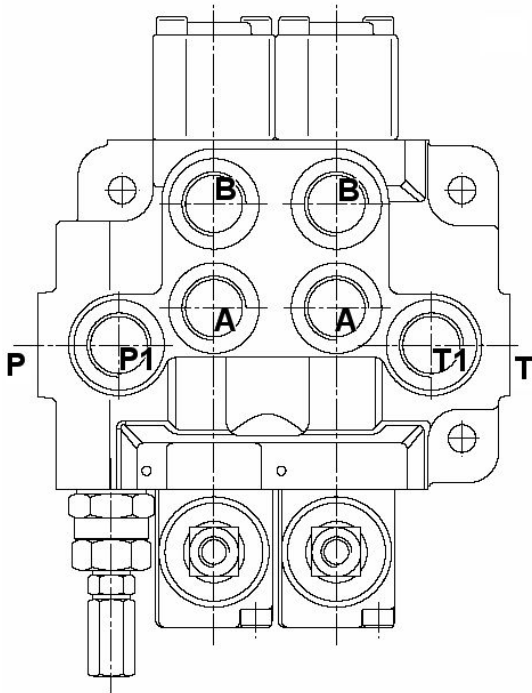
Weights

MOD.	L. mm (inch)	Weight Kg (lb)	MOD.	L. mm (inch)	Weight Kg (lb)
DN1	71 (2.8)	3.0 (6.6)	DN2	111 (4.37)	5.0 (11.0)

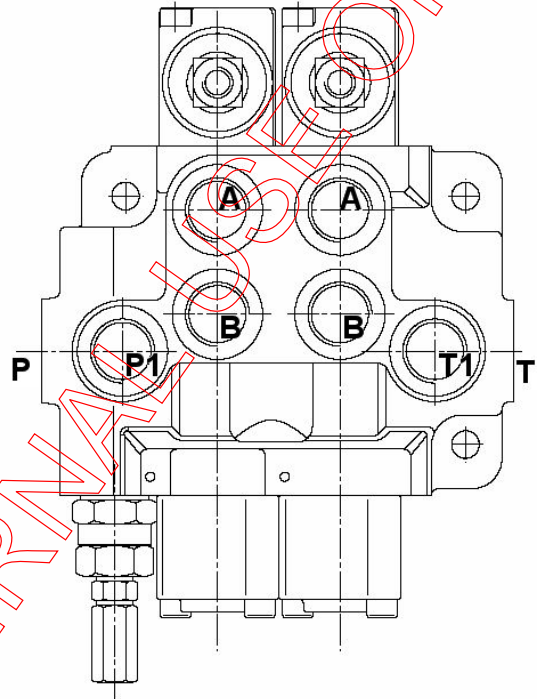
Inlet side – definition of port A - B

Port A is defined by the lever side. When valve is right inlet the position of the letter associated to the port is inverted.

Left inlet

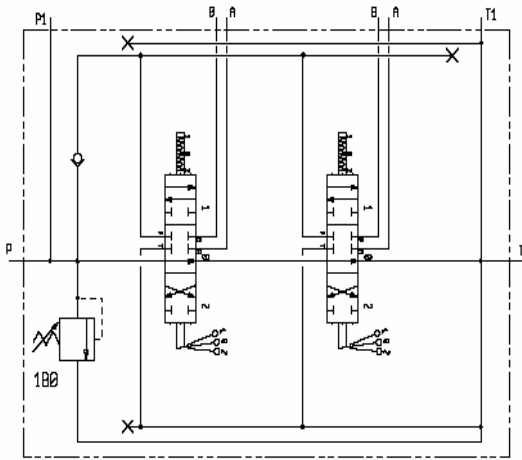


Right inlet

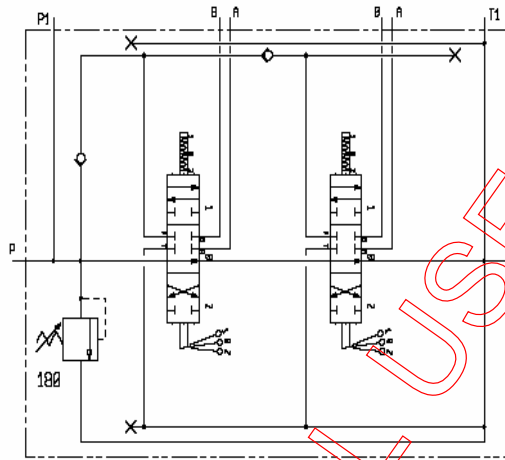


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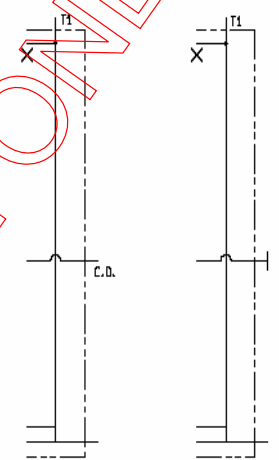
Hydraulic circuits



Standard Circuit
(es. DN/2 BZ A1x2 PP1TT1)



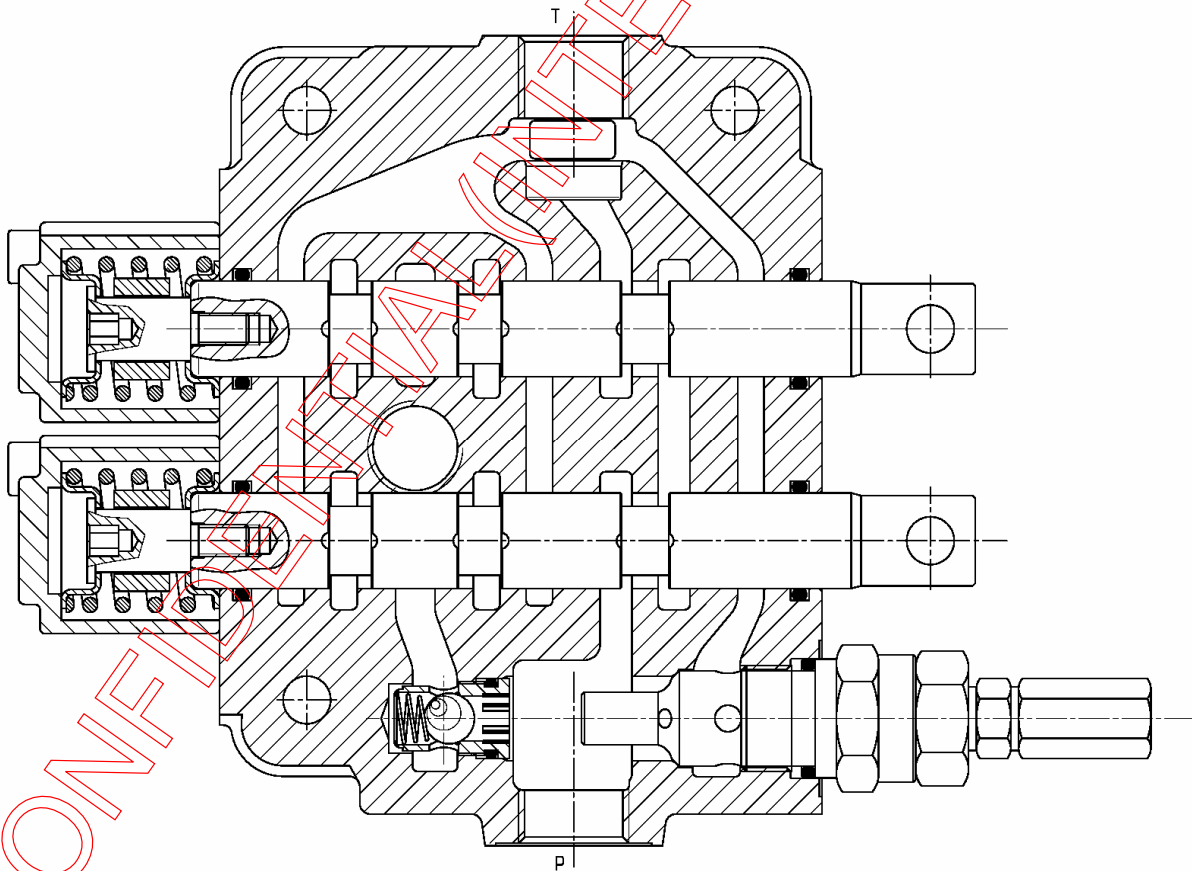
Intermediate check valve
(es. DN/2 BZ A1 VNR A1 PP1TT1)



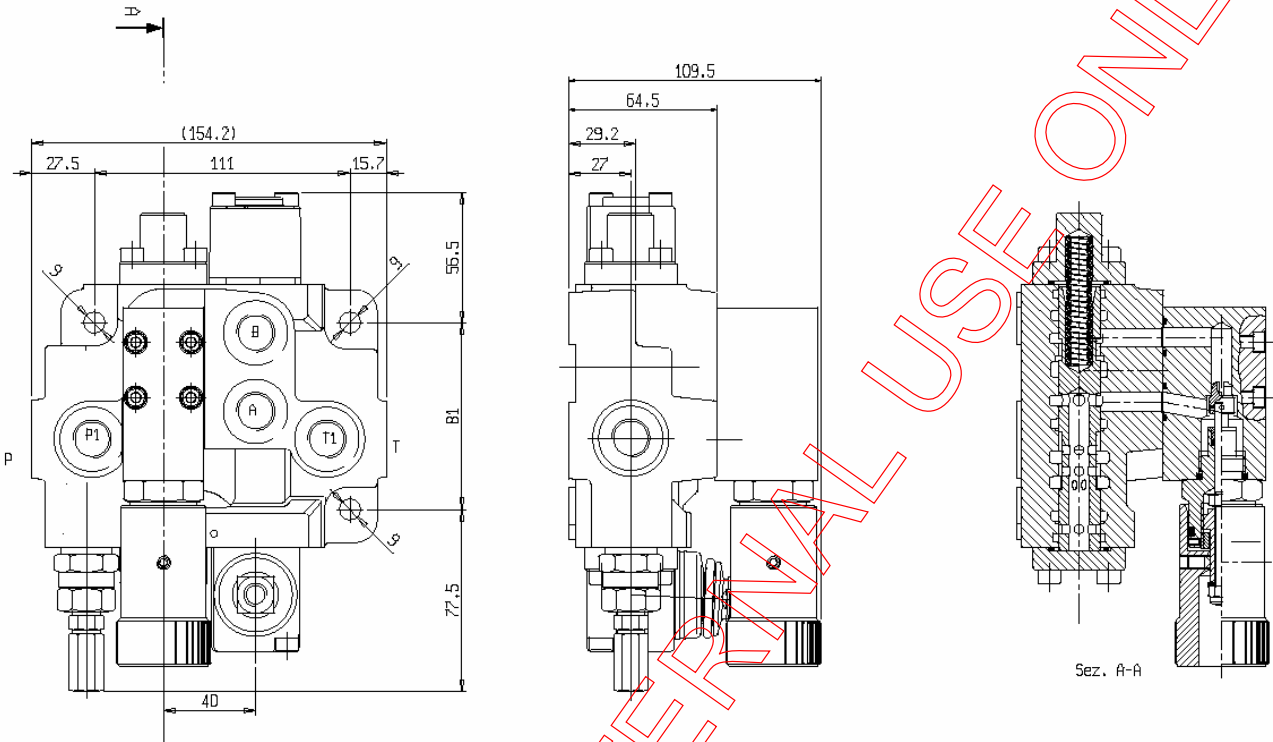
Carry over

Closed

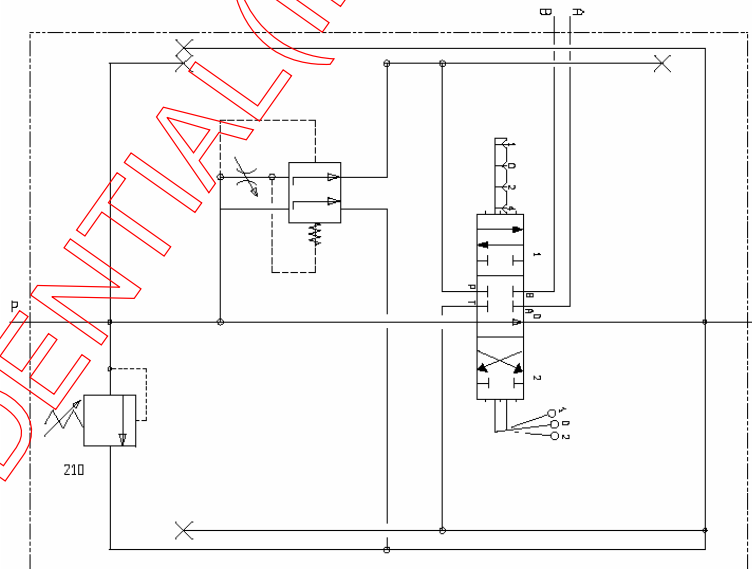
Section



Overall dimensions and section (erv)



Hydraulic circuits

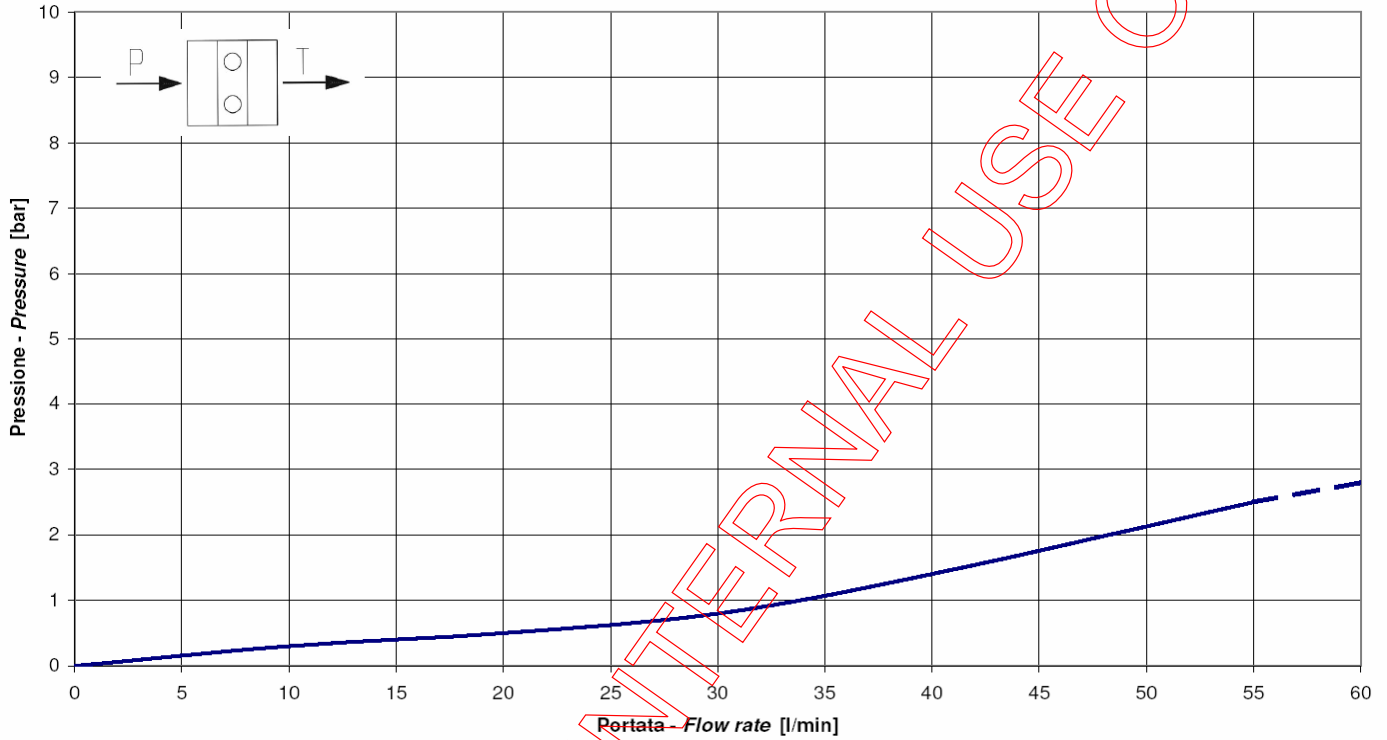


Circuit
(es. DN2 ERV A1 PP1TT1)

Pressure drop curves

All curves are obtained with oil at 21 cSt of viscosity (50°C) and with double acting spool (See test norm DSP01000B).

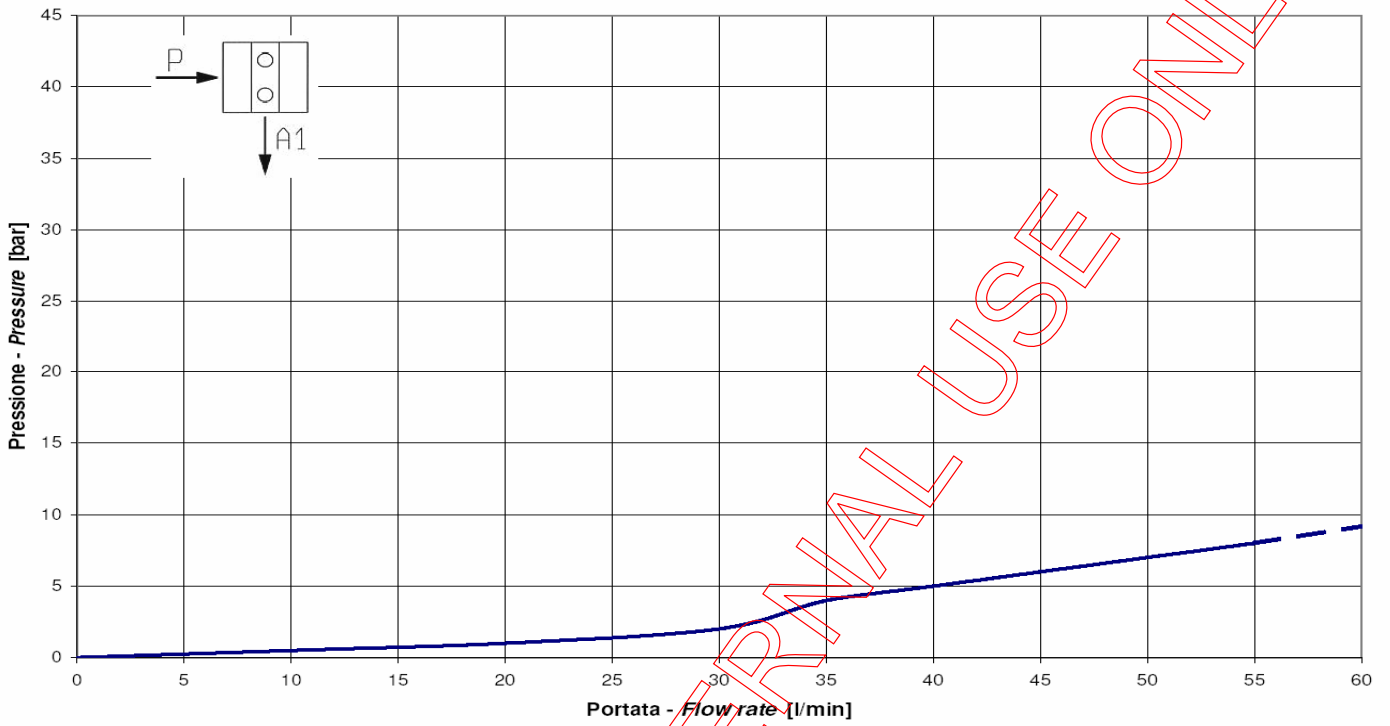
P-T DN/1 21cSt



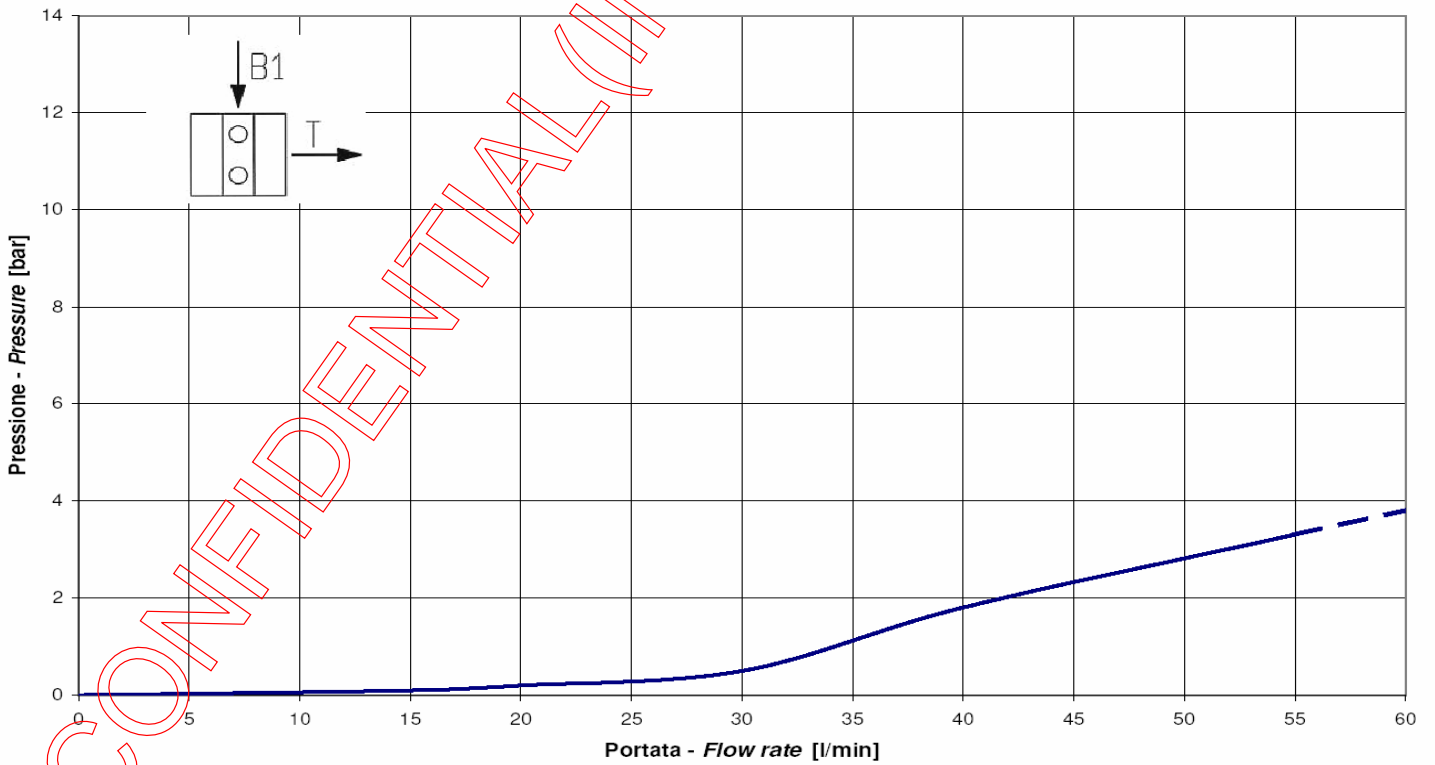
CONFIDENTIAL (INTERNAL USE ONLY)



P-A DN/1 21cSt

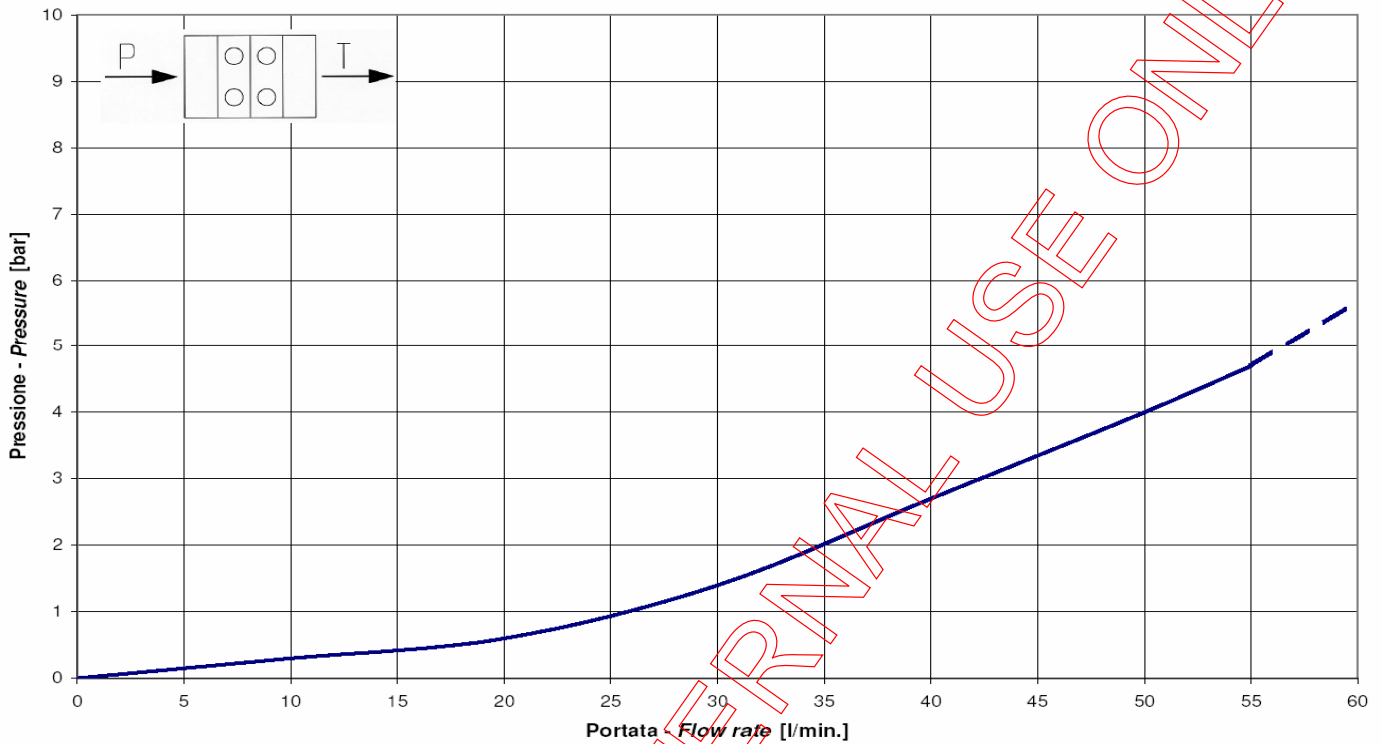


B-T DN/1 21cSt

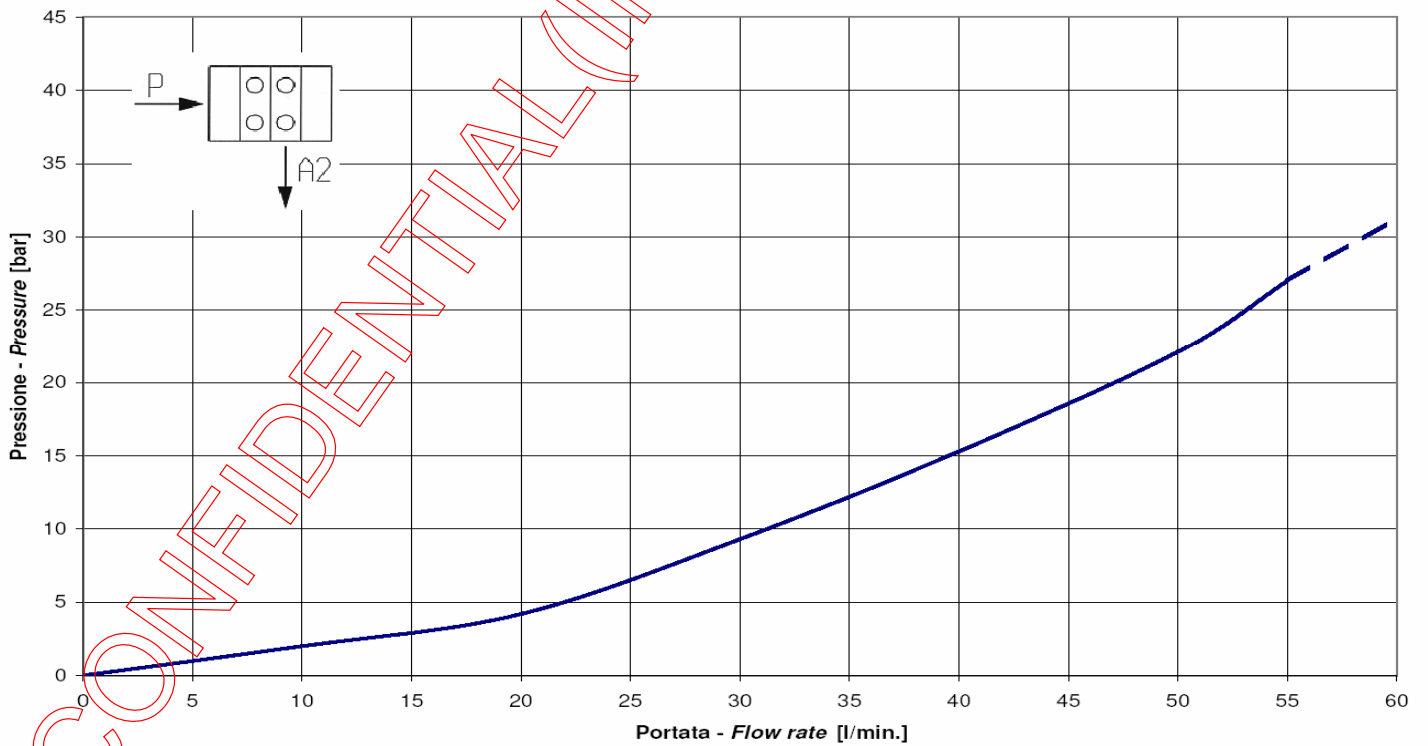




P-T DN/2 21cSt

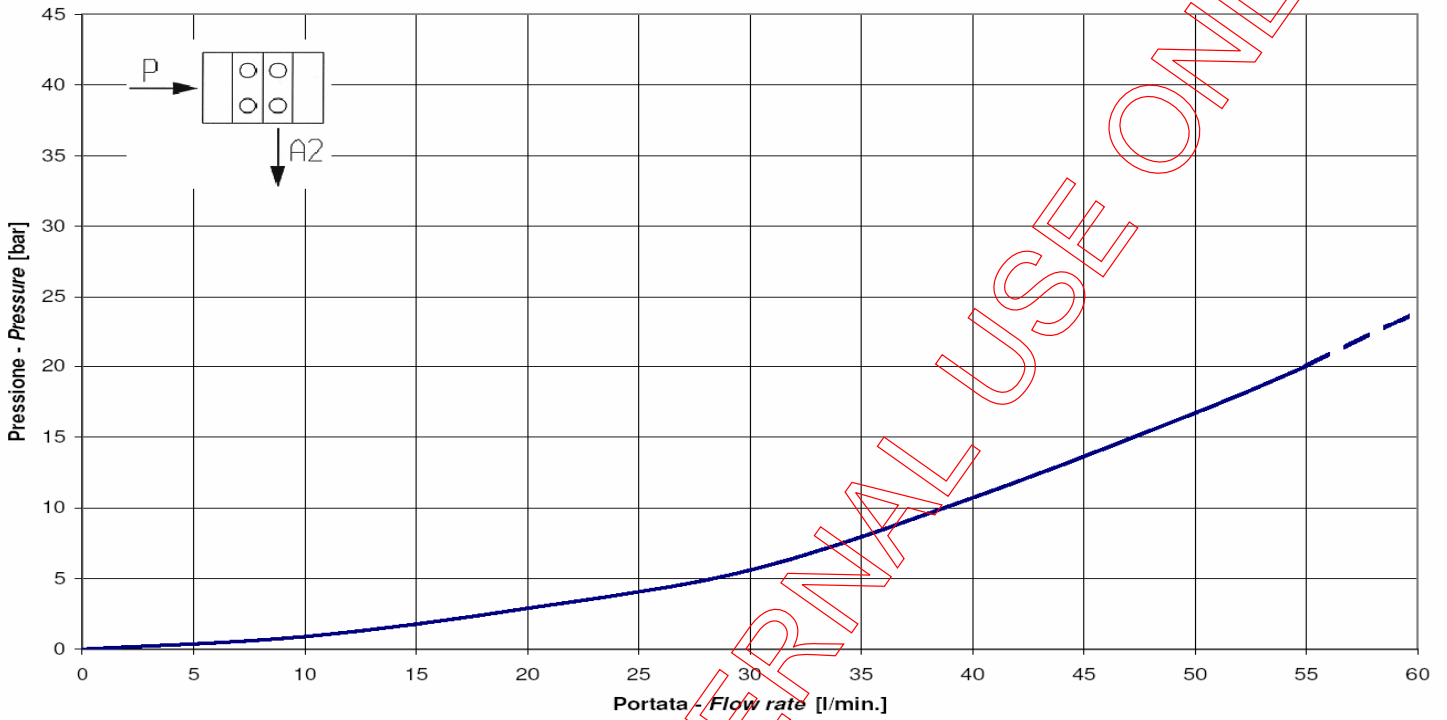


P-A DN/2 con VNR intermedia (with intermediate VNR) 21cSt

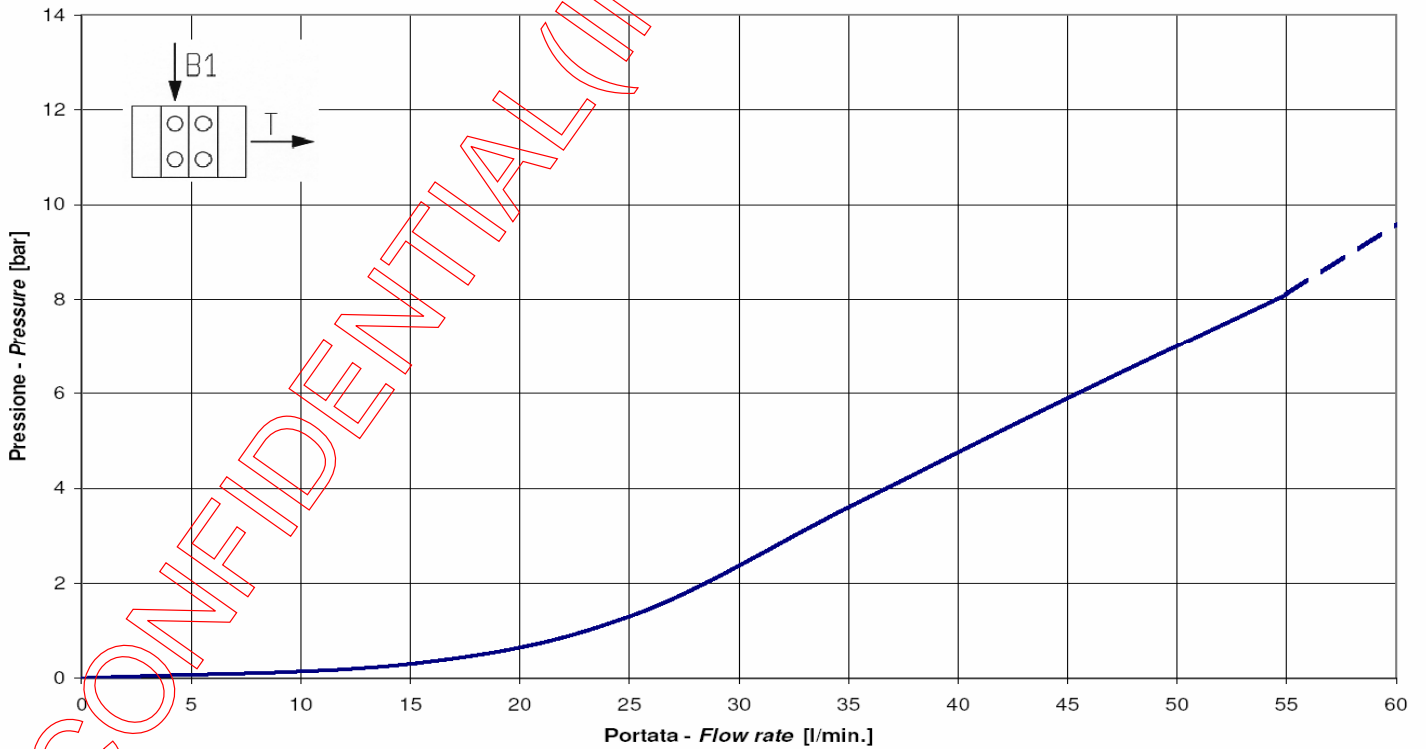




P-A DN/2 senza VNR intermedia (without intermediate VNR) 21cSt



B-T DN/2 21cSt



Ordering instructions

I	II	III	IV	V	VI	VII	VIII	IX	X	XI
---	----	-----	----	---	----	-----	------	----	---	----

I. Model / Number of sections	_____	page 11
II. Threads	_____	page 12
III. Main relief valve	_____	page 14
IV. Spool control	_____	page 16
V. Spools (circuits)	_____	page 25
VI. Actuators on lever side	_____	page 37
VII. Actuators on spool control side	_____	page 42
VIII. Port auxiliary valves	_____	page 45
IX. Following section	_____	page 46
X. Options on T	_____	page 47
XI. Type of inlet/outlet port	_____	page 48

IMPORTANT NOTE: grey colour codes are special configurations



I

Number of sections

Ordering instructions

DN1											
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	

Ordering code	Description
DN1	1 section
DN2	2 sections

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II

Threads
Ordering instructions

DN1	C									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

Threads admitted

Ports thread	Identification for code creation	P – P1– T1	A – B	T
BSP ("B")	B	1/2 G (*)	1/2 G (*)	1/2 G (*)
BSP ("A")	A	3/8 G	3/8 G	1/2 G
BSP ("L")	L	1/4 G	1/4 G	1/2 G
Metric ("C")	C	M18x1.5	M18x1.5	M22x1.5
Metric ("T")	T	M16x1.5	M16x1.5	M22x1.5
Metric ISO 6149 ("I")	I	M16x1.5	M16x1.5	M22x1.5
Metric ISO 6149 ("W")	W	M18x1.5	M18x1.5	M22x1.5
SAE ("E")	E	3/4 -16 SAE	3/4 -16 SAE	7/8 -14 SAE
SAE ("P")	P	9/16 -18 SAE	9/16 -18 SAE	7/8 -14 SAE

(*) Max pressure is reduced to 250 bar.

NOTE: with VL and VB predisposition, 1/2G and 3/4 -16 SAE threads on A-B-P1-T1 are not possible.

Recommended torques

Fittings

BSP thread	1/4" G	3/8" G	1/2" G
<i>Torque [Nm] ± 5%</i>	14	35	70
Metric thread	M16 x 1.5	M18 x 1.5	M22 x 1.5
<i>Torque [Nm] ± 5%</i>	24	40	78
Metric thread ISO 6149	M16 x 1.5	M18 x 1.5	-
<i>Torque [Nm] ± 5%</i>	24	40	
SAE thread	9/16-18 UNF	3/4-16 UNF	7/8-14 UNF
<i>Torque [Nm] ± 5%</i>	21	50	77

Note: With 35SMnPb10 (PR80) fittings the values of torque increase of about 50%.

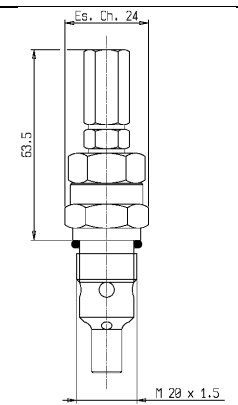
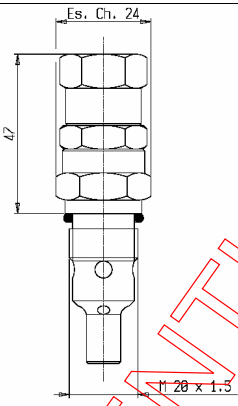
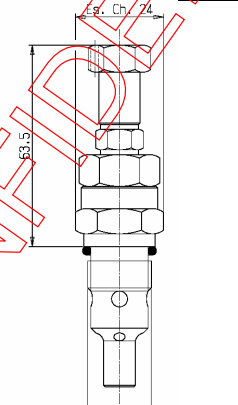
Lever and spool controls screws

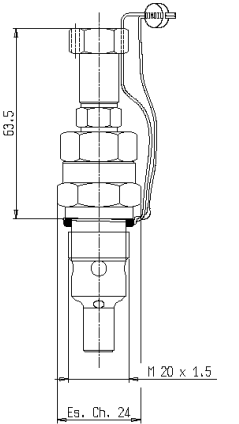
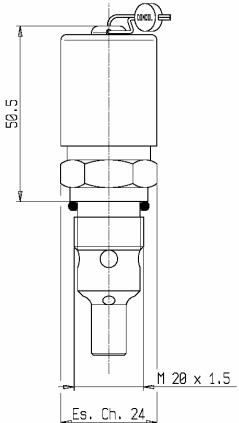
Metric thread	M6
<i>Torque [Nm] ± 1</i>	6

III
Main relief valve
Ordering instructions

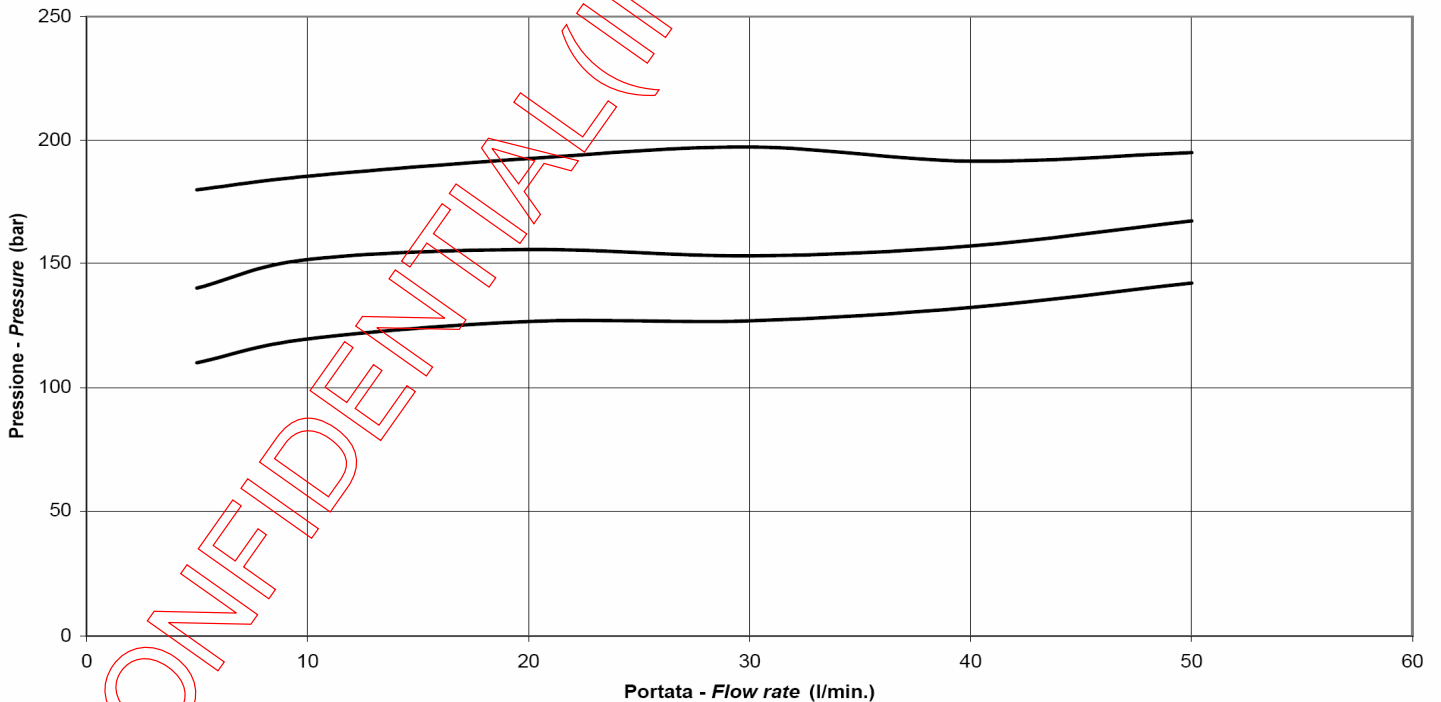
DN1	C	Z (180)								
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

Main relief valve: Standard setting is referred to 5 l/min \pm 10% of flow rate, setting pressures are multiples of 10 bar

Type		Ordering code		Operating pressure
		Valve type code	Pressure code	
DOWPD02M20--- Main relief valve - grain		02	X (80)	30–80 bar (standard setting 80 bar)
			Y (130)	90–130 bar (standard setting 130 bar)
			Z (180)	140–180 bar (standard setting 180 bar)
			V (210)	190–210 bar (standard setting 210 bar)
			H (250)	220–300 bar (standard setting 250 bar)
DOWPD00M20--- Main relief valve - cap		00	X (80)	30–80 bar (standard setting 80 bar)
			Y (130)	90–130 bar (standard setting 130 bar)
			Z (180)	140–180 bar (standard setting 180 bar)
			V (210)	190–210 bar (standard setting 210 bar)
			H (250)	220–300 bar (standard setting 250 bar)
DOWPD08M20--- Main relief valve -lead predisposed		08	X (80)	30–80 bar (standard setting 80 bar)
			Y (130)	90–130 bar (standard setting 130 bar)
			Z (180)	140–180 bar (standard setting 180 bar)
			V (210)	190–210 bar (standard setting 210 bar)
			H (250)	220–300 bar (standard setting 250 bar)

<p>DOWPD10M20---</p> <p>Main relief valve – leaded grain</p>		<p style="text-align: center; font-size: 24pt;">10</p>	<p>X (80)</p> <p>Y (130)</p> <p>Z (180)</p> <p>V (210)</p> <p>H (250)</p>	<p>30–80 bar (standard setting 80 bar)</p> <p>90–130 bar (standard setting 130 bar)</p> <p>140–180 bar (standard setting 180 bar)</p> <p>190–210 bar (standard setting 210 bar)</p> <p>220–300 bar (standard setting 250 bar)</p>
<p>DOWPD20M20---</p> <p>Main relief valve – leaded cap</p>		<p style="text-align: center; font-size: 24pt;">20</p>	<p>X (80)</p> <p>Y (130)</p> <p>Z (180)</p> <p>V (210)</p> <p>H (250)</p>	<p>30–80 bar (standard setting 80 bar)</p> <p>90–130 bar (standard setting 130 bar)</p> <p>140–180 bar (standard setting 180 bar)</p> <p>190–210 bar (standard setting 210 bar)</p> <p>220–300 bar (standard setting 250 bar)</p>

Curva caratteristica valvole - Valves characteristic bend (21cSt)



IV

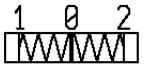
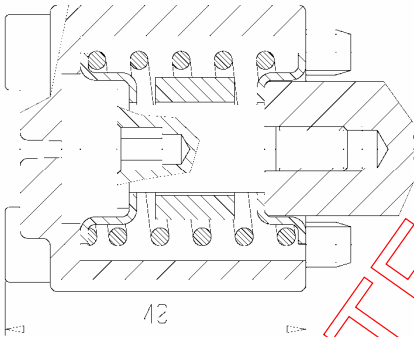
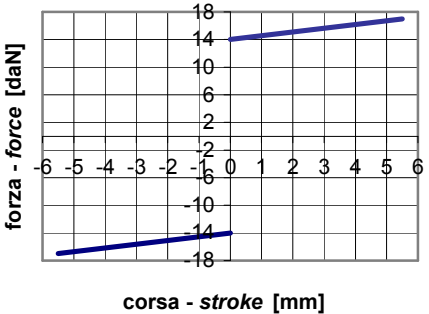

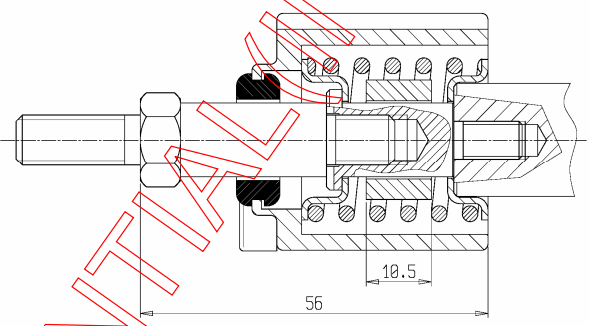
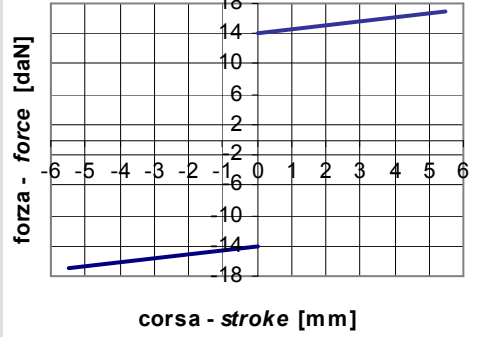

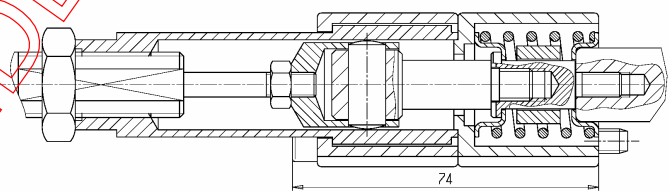
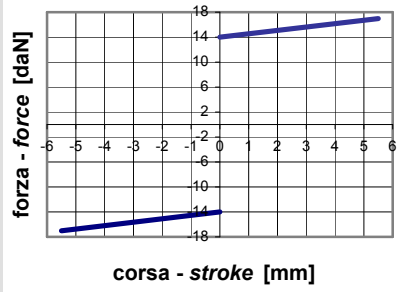
Spool control

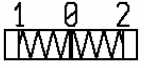
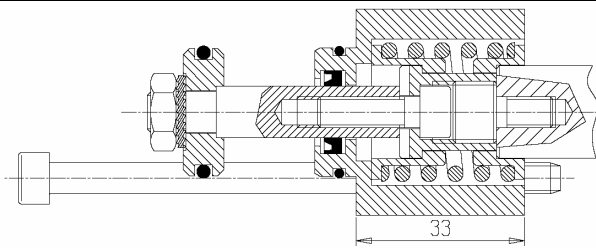
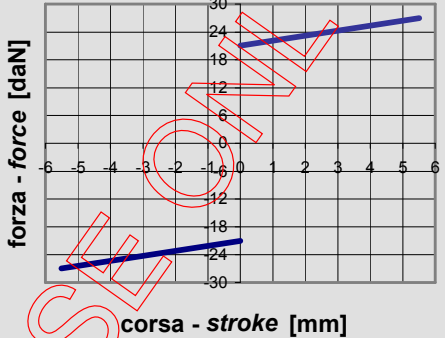

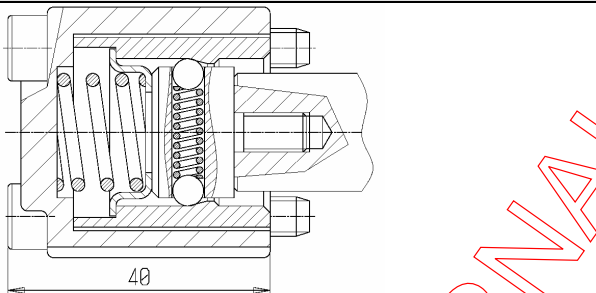
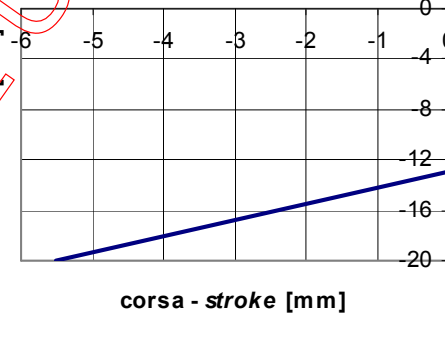
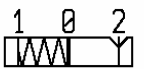
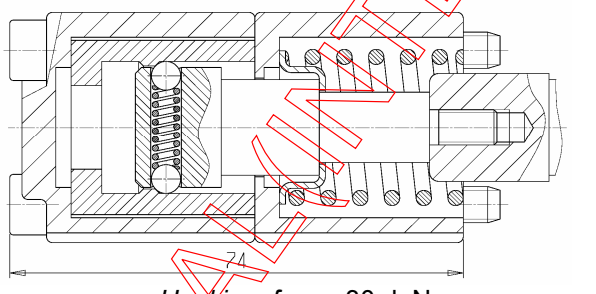
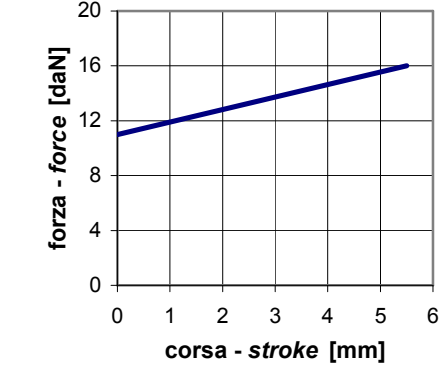
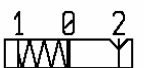
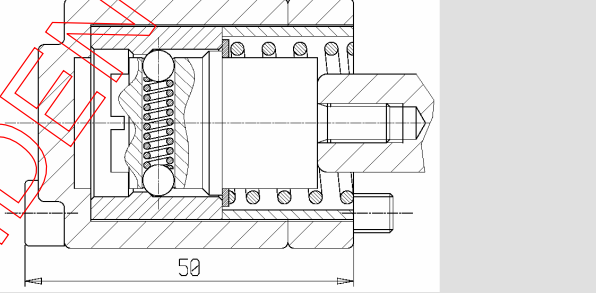
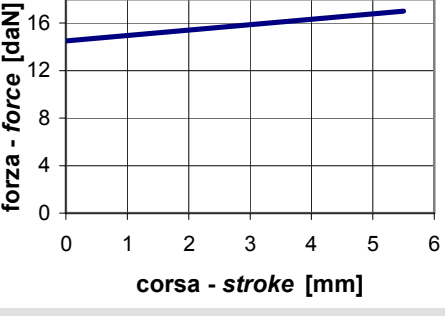
Ordering instructions

DN1	C	Z (180)	A							
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

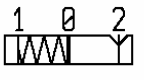
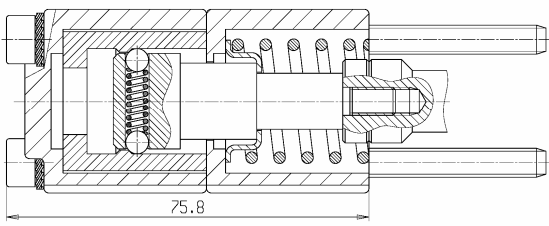
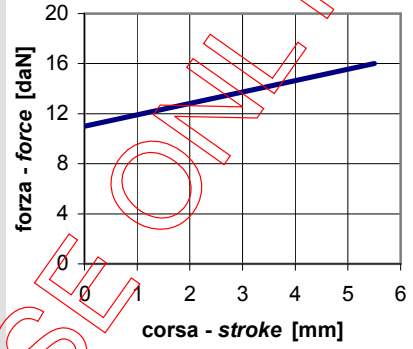
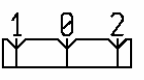
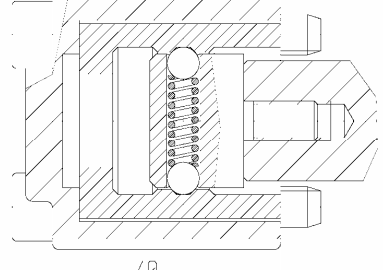
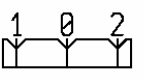
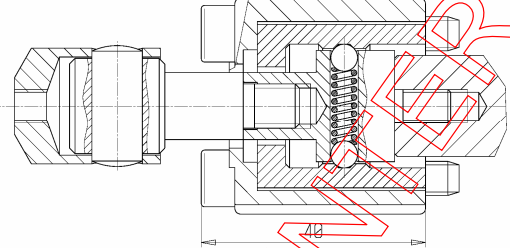
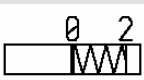
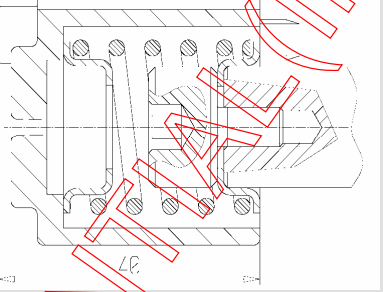
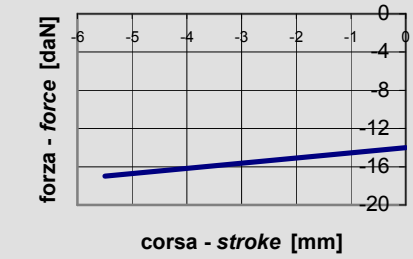
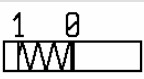
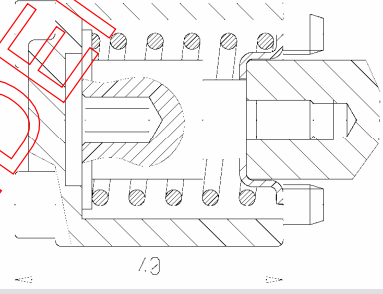
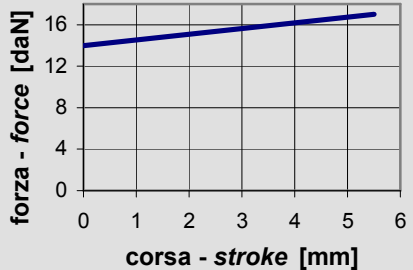
Actuator forces are measured on spool axis in working conditions, with no oil flow. Forces are inclusive of friction and have ± 10% tolerance (Test norms ref. DVCIPS09).

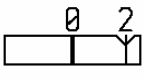
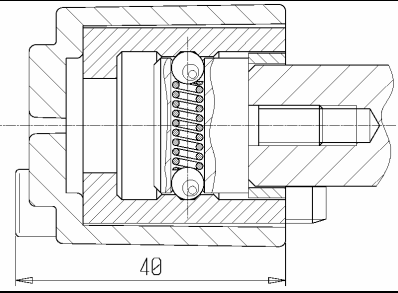
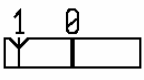
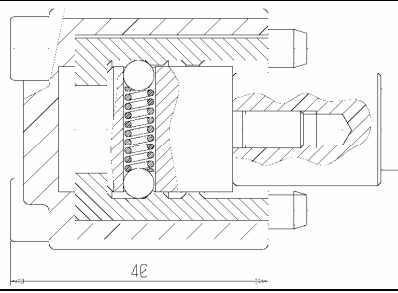

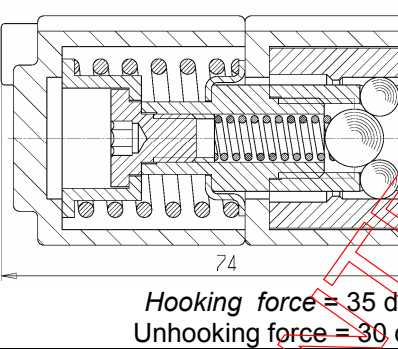
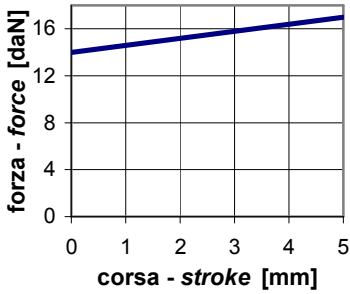
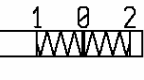
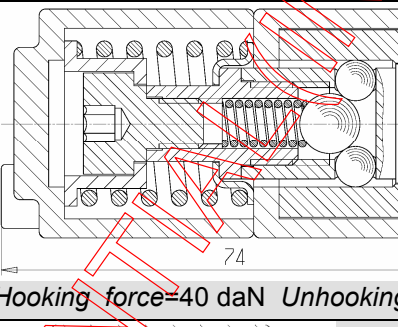
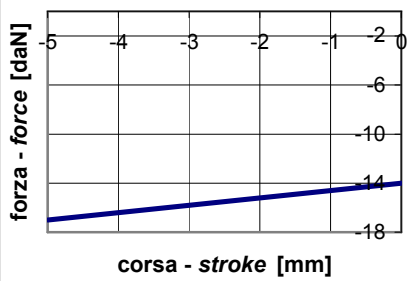
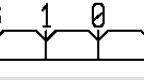
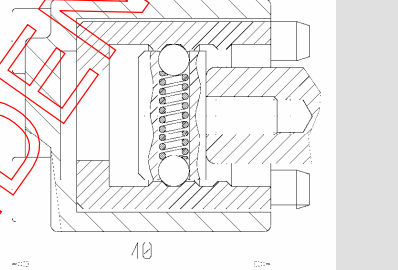
IMPORTANT NOTE: all configurations and codes in white are preferred types, all grey are specials.

Scheme	code	Section drawing
DO580550A39 Standard A-type spool control. 	A	 
DO580550A43 For double control M8 male 	A	 
DO580550A55 For flexible cable control 	A	 <p>Note: forces do not include cable contribution.</p> 

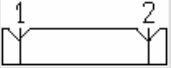
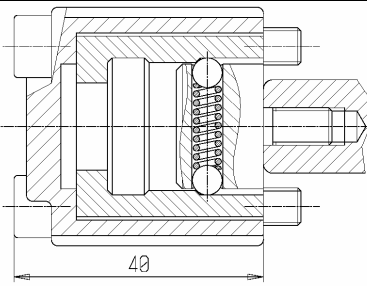

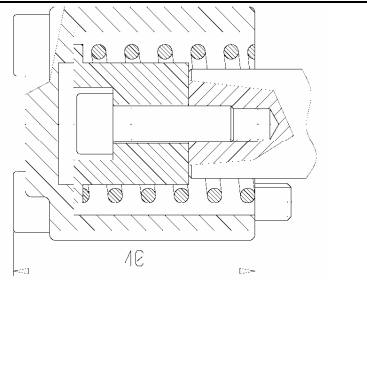
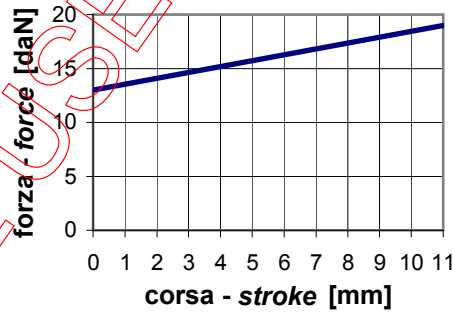

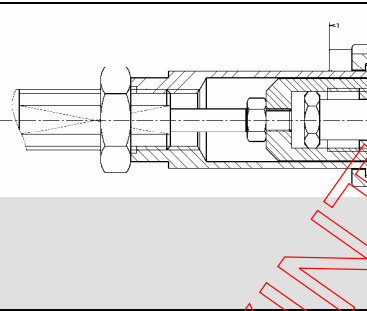
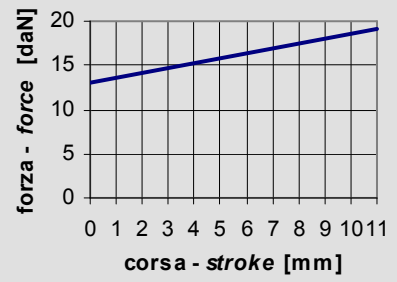

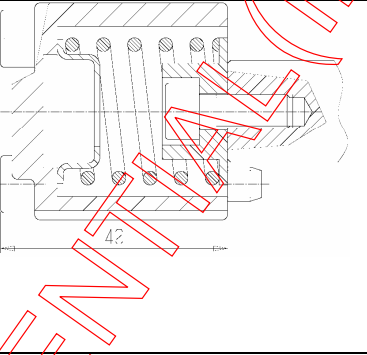
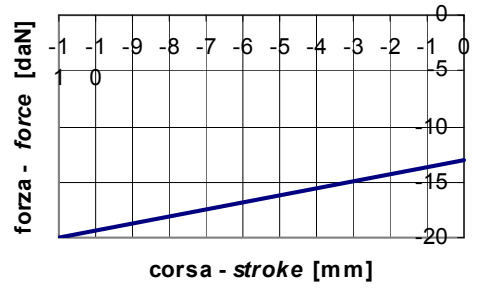

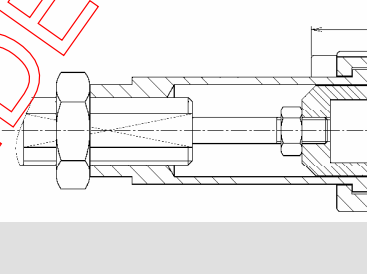
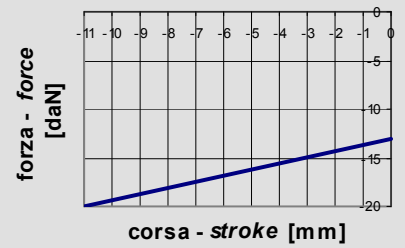
<p>DO580550A07</p> <p>For electro hydraulic control</p> 	<p>A</p>		 <p>forza - force [daN]</p> <p>corsa - stroke [mm]</p>
<p>DO580550B07</p> 	<p>B</p>	 <p>Hooking force 22 daN Unhooking force 27 daN</p>	 <p>forza - force [daN]</p> <p>corsa - stroke [mm]</p>
<p>DO580550C08</p> 	<p>C</p>	 <p>Hooking force 30 daN Unhooking force 20 daN</p>	 <p>forza - force [daN]</p> <p>corsa - stroke [mm]</p>
<p>DO580550C03</p> 	<p>C</p>	 <p>Hooking force 30 daN Unhooking force 20 daN</p>	 <p>forza - force [daN]</p> <p>corsa - stroke [mm]</p>



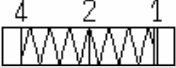
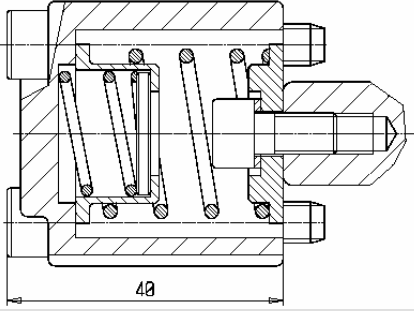
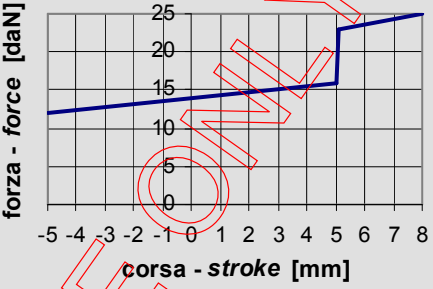
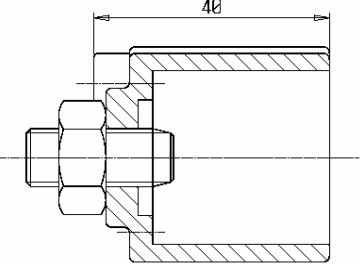
<p>DO580550C10</p> <p><i>For single section micro predisposition</i></p> 	<p>C</p>	 <p>Hooking force 30 daN Unhooking force 20 daN</p>	
<p>DO580550D01</p> 	<p>D</p>	 <p>Hooking force 27 daN Unhooking force 27 daN</p>	
<p>DO580550D08</p> <p><i>For flexible cable control</i></p> 	<p>D</p>	 <p>Hooking force = 27 daN Unhooking force = 27 daN</p>	
<p>DO580550E04</p> 	<p>E</p>		
<p>DO580550F04</p> 	<p>F</p>		

<p>DO580550H01</p> 	<p>H</p>		<p>Hooking force 27 daN Unhooking force 27 daN</p>
<p>DO580550L01</p> 	<p>L</p>		<p>Hooking force 27 daN Unhooking force 27 daN</p>
<p>DO580550N20</p> 	<p>NT</p>		 <p>Hooking force = 35 daN Unhooking force = 30 daN</p>
<p>DO580550N14</p> 	<p>NS</p>		 <p>Hooking force=40 daN Unhooking force=30daN</p>
<p>DO580550P01</p> 	<p>PS</p>		<p>Hooking force = 27 daN Unhooking force = 27 daN</p>


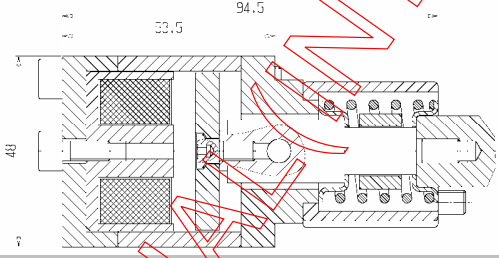

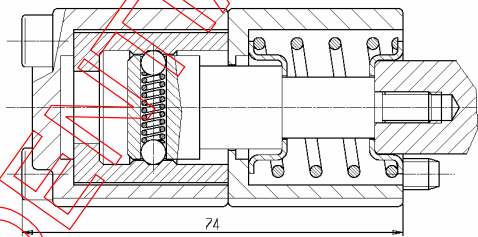

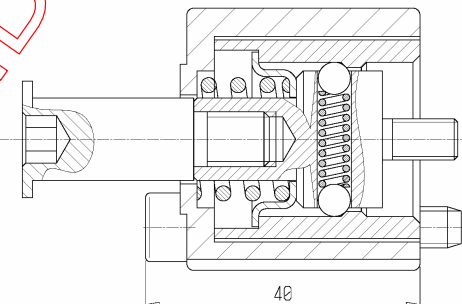


<p>DO580550Q01</p> 	<p>Q</p>		<p>Unhooking force = 23 daN</p>
<p>DO580550R10</p> 	<p>R</p>		
<p>DO580550R12</p> <p><i>For flexible cable control</i></p> 	<p>R</p>		
<p>DO580550S10</p> 	<p>S</p>		
<p>DO580550S13</p> <p><i>For flexible cable control</i></p> 	<p>S</p>		

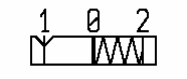
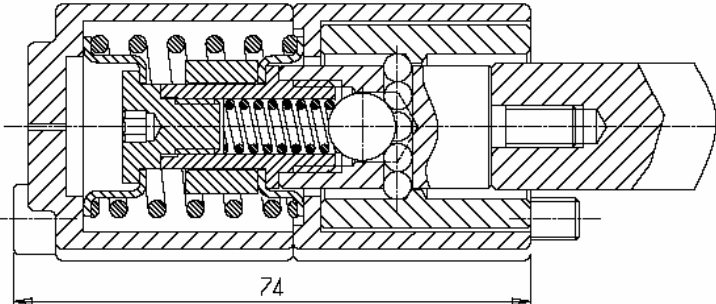
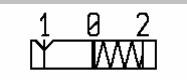
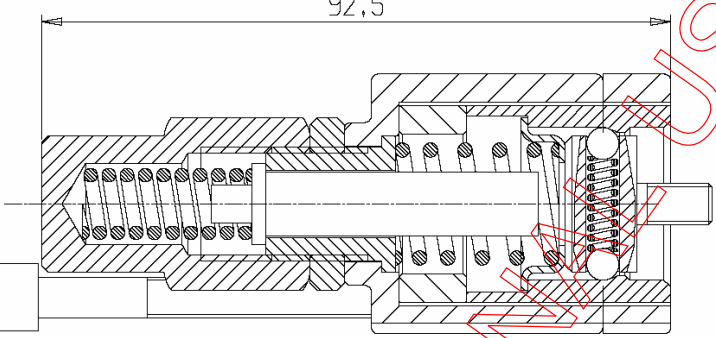
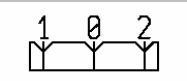
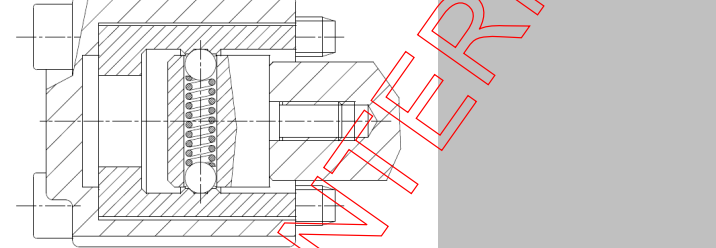
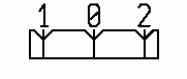
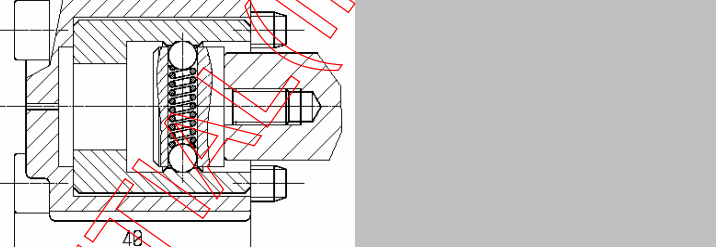
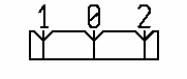
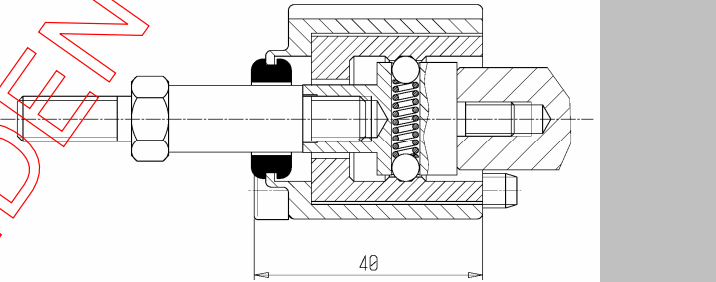


<p>DO58055TR09</p> <p>For regenerative circuit 23</p> 	<p>TR</p>		 <p>forza - force [daN]</p> <p>corsa - stroke [mm]</p>
<p>DO5753703</p> <p>Kit stroke limiter on spool control side</p>			

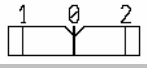
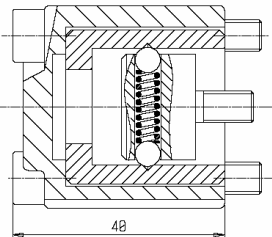

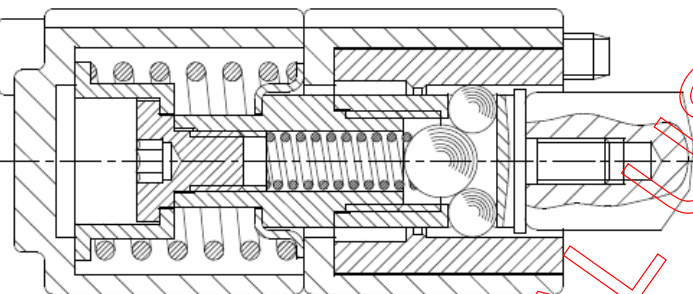
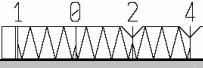
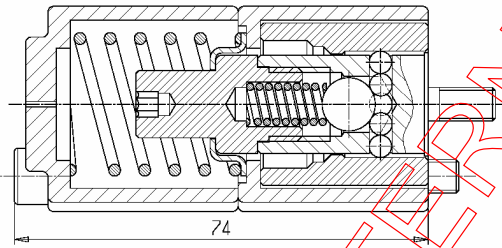
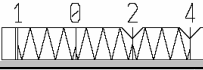
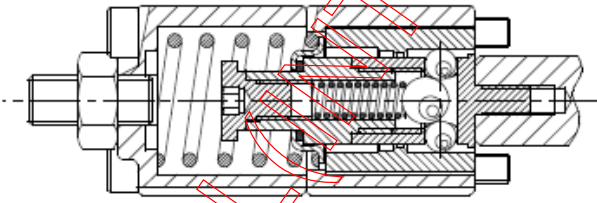
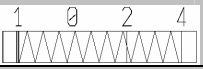
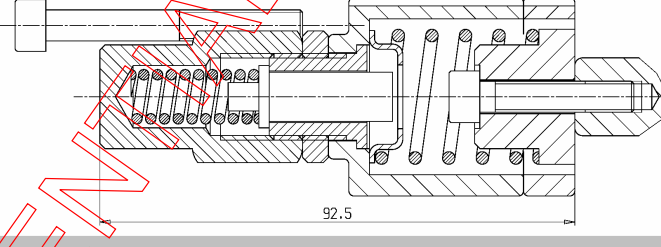

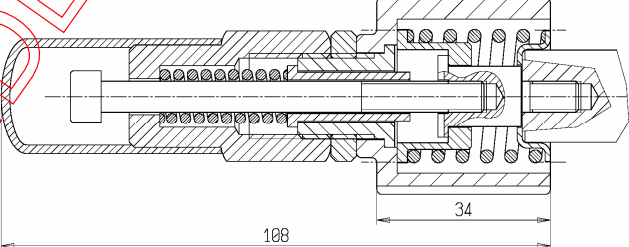
Special spool controls

<p>DO580550A56</p> <p>With electromagnetic control</p> 	<p>A</p>		
<p>DO58055AD02</p> <p>With detent</p> 	<p>AD</p>		
<p>DO580550B09</p> <p>With extension RABAUD</p> 	<p>B</p>		

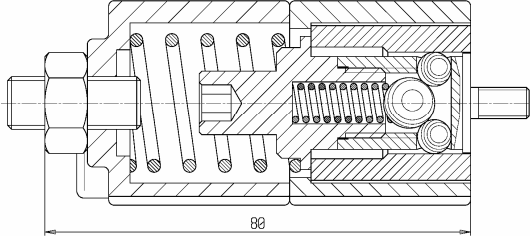
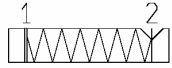
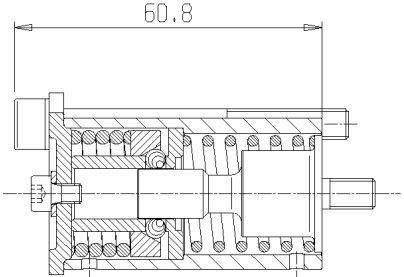
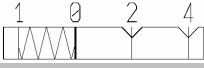
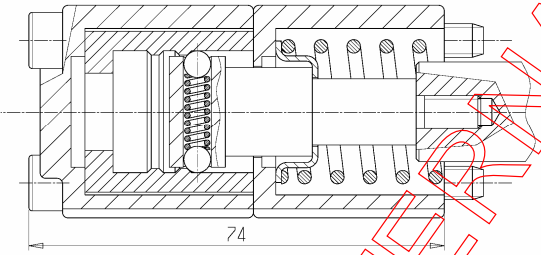
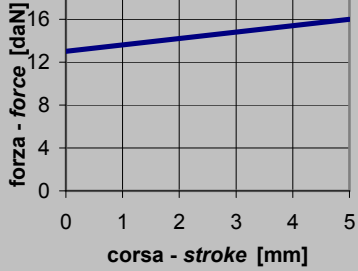


<p>DO580550B17</p> <p>High force</p> 	<p>B</p>		
<p>DO58054TB01</p> 	<p>TB</p>		
<p>DO580400D01</p> <p>Stroke 4_4</p> 	<p>D</p>		
<p>DO580450D02</p> <p>With detent Stroke 4.5_4.5</p> 	<p>D</p>		
<p>DO580450D03</p> <p>With detent Stroke 4.5_4.5</p> 	<p>D</p>		



<p>DO58055DF01</p> <p><i>Frictioned spool control</i></p> 	<p>DF</p>		
<p>DO58055N13</p> 	<p>N</p>		
<p>DO58055PN03</p> <p><i>For regenerative circuit 17</i></p> 	<p>PN</p>		<p>Hooking force = 27 daN Unhooking force = 27 daN</p>
<p>DO58055PN04</p> 	<p>PN</p>		
<p>DO58055TR07</p> <p><i>For regenerative circuit 17</i></p> 	<p>TR</p>		
<p>DO58055T03</p> <p><i>For regenerative circuit 17</i></p> 	<p>T</p>		



<p>For two aluminum died casting spool control caps</p> <p>DO58055SQ10</p>	<p>SQ</p>		
<p>DO58055SQ14</p> 	<p>SQ</p>		
<p>DO58055CP02</p> <p>For two aluminum died casting spool control caps</p> 	<p>CPT</p>	 <p>Hooking force = 40 daN Unhooking force = 20 daN</p>	

CONFIDENTIAL (INTERNAL USE ONLY)



V

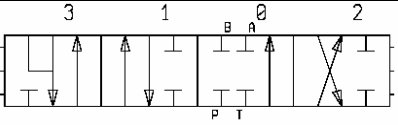
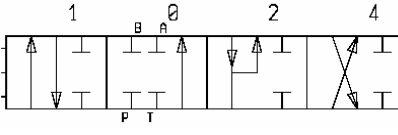
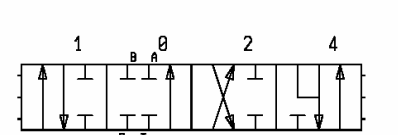
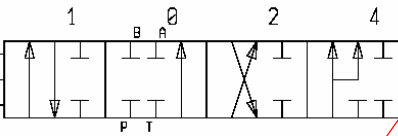
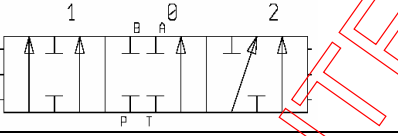
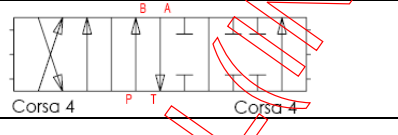
Circuit

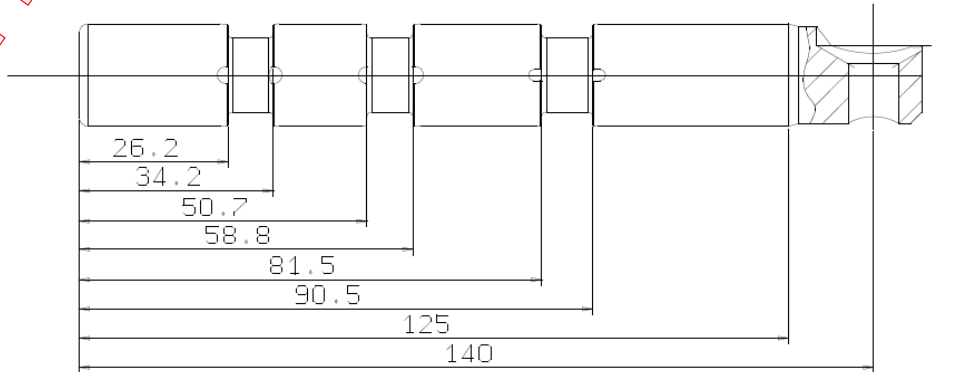
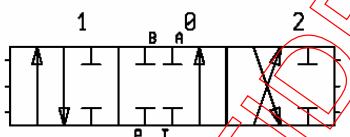
Ordering instructions

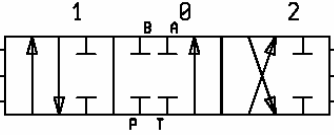
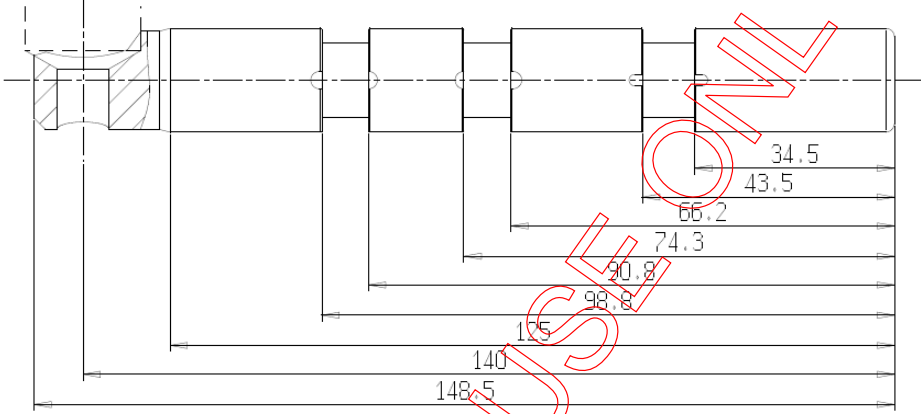
DN1	C	Z (180)	A	1						
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

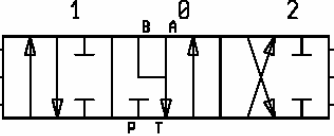
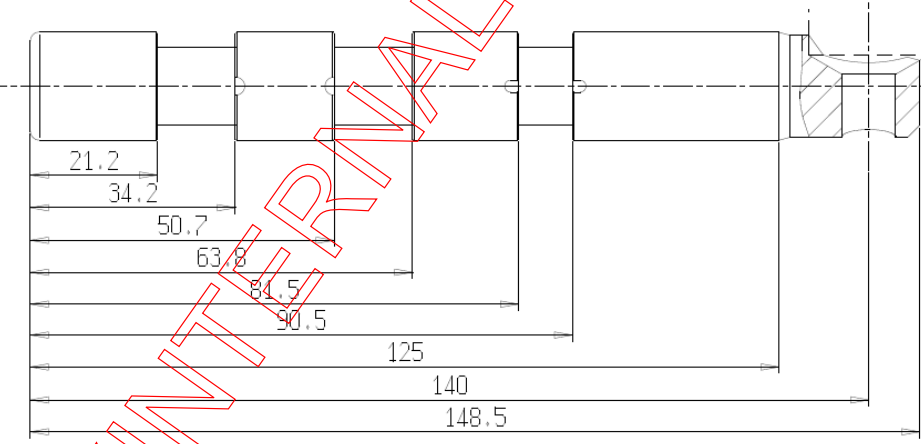
Available circuits

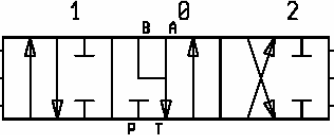
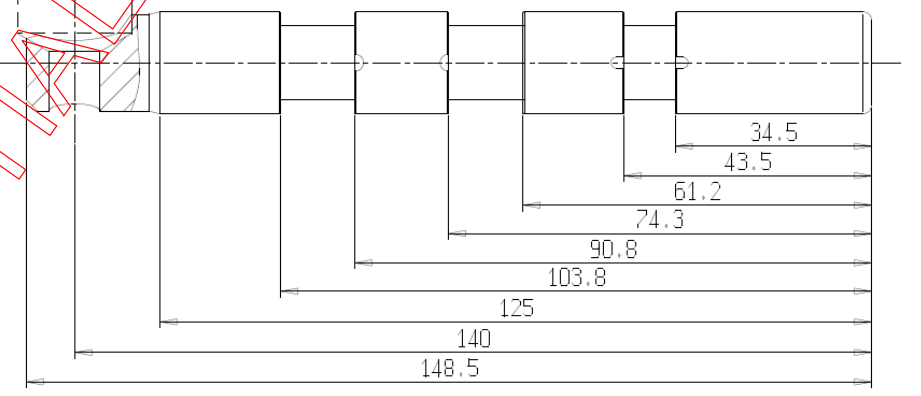
CIRCUIT 1		Double acting with 3 positions, A and B closed in central position.
CIRCUIT 3		Double acting with 3 positions, A and B connected to the tank in central position.
CIRCUIT 4		Simple acting in A and port B plugged.
CIRCUIT 5		Simple acting in B and port A plugged.
CIRCUIT 8		Double acting with 3 positions, A connected to the tank in neutral position.
CIRCUIT 10		Double acting with 3 positions, B connected to the tank in neutral position.

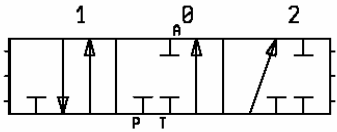
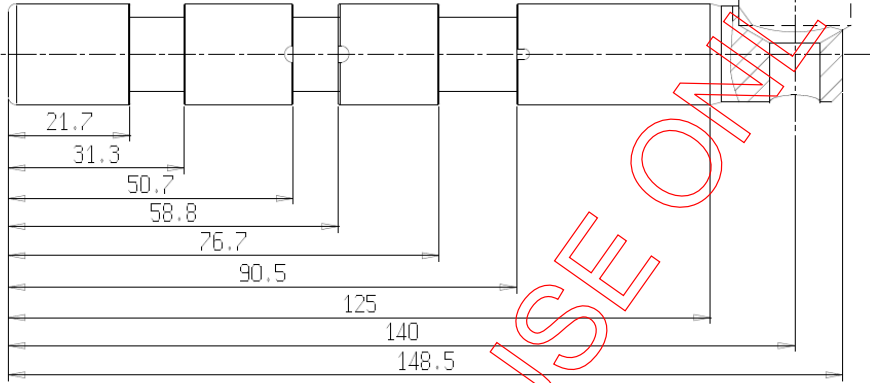
<p>CIRCUIT 7</p>		<p>Double acting, with positions 1, central, 2 and 3; with A and B closed in central position and floating position in 3. (Pushing the lever)</p>
<p>CIRCUIT 23</p>		<p>Double acting, with positions 1, central, 2 and 4; with A and B closed in central position and regenerative position in 2.</p>
<p>CIRCUIT 70</p>		<p>Double acting, with positions 1, central, 2 and 4; with A and B closed in central position and floating position in 4. (Pulling the lever)</p>
<p>CIRCUIT 17</p>		<p>Double acting, with positions 1, central and 2; with A and B closed in central position and floating position in 3. (Pushing the lever)</p>
<p>CIRCUIT 25</p>		<p>Diverter function with 3 positions, A and B closed in central position</p>
<p>CIRCUIT 33</p>	 <p>Corsa 4 Corsa 4</p>	

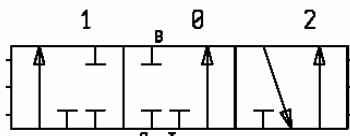
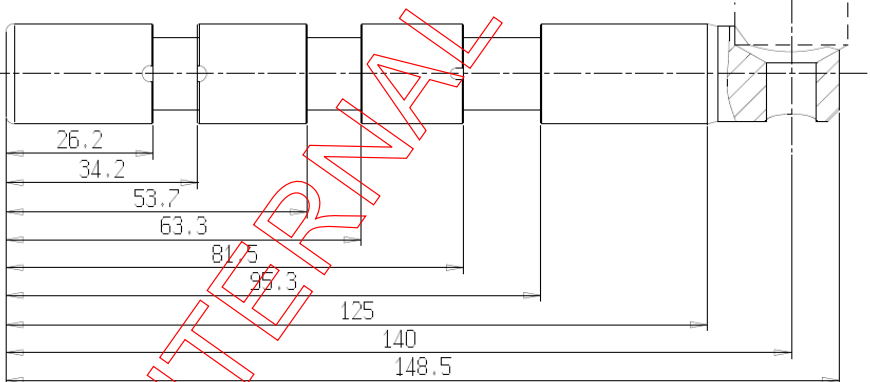
<p>1</p>	<p>DO2921XX01000</p>	
 <p>Circuit 1 spool – 25-50 l/min left inlet – stroke 5.5_5.5</p>		

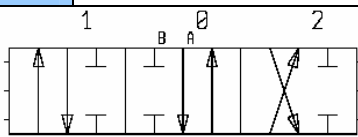
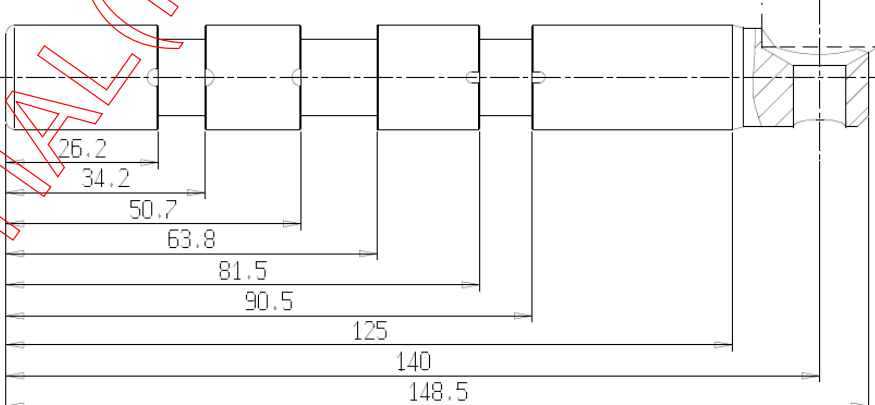
1	DO2921XX01003	 <p>Circuit 1 spool – 25-50 l/min right inlet – stroke 5.5_5.5</p>	
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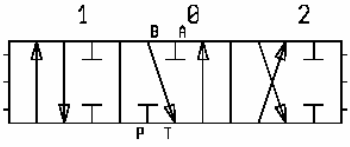
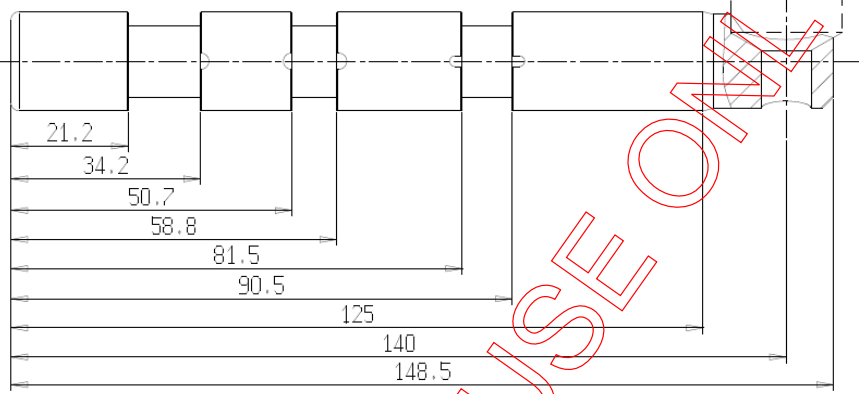
3	DO2921XX03000	 <p>Circuit 3 spool – 25-50 l/min left inlet – stroke 5.5_5.5</p>	
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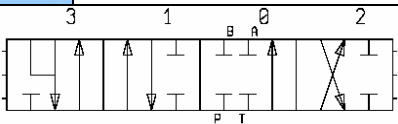
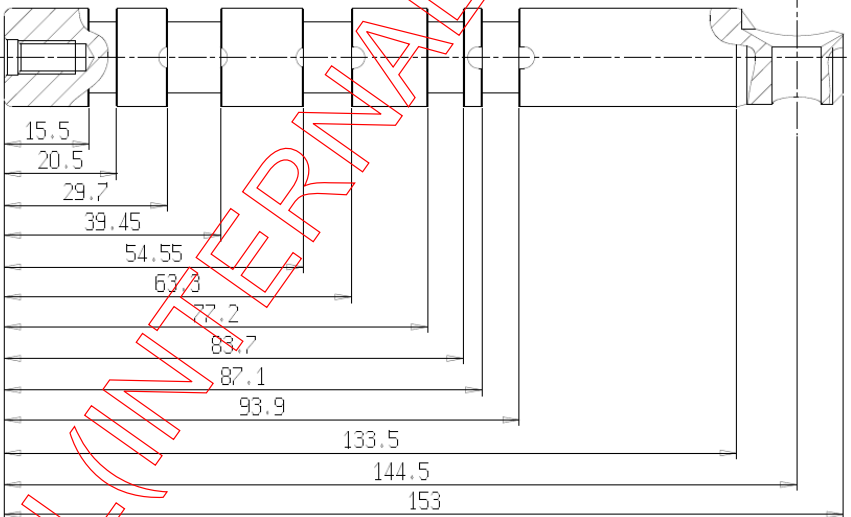
3	DO2921XX03003	 <p>Circuit 3 spool – 25-50 l/min right inlet – stroke 5.5_5.5</p>	
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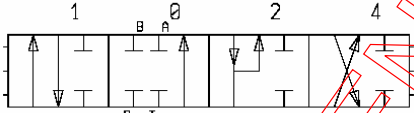
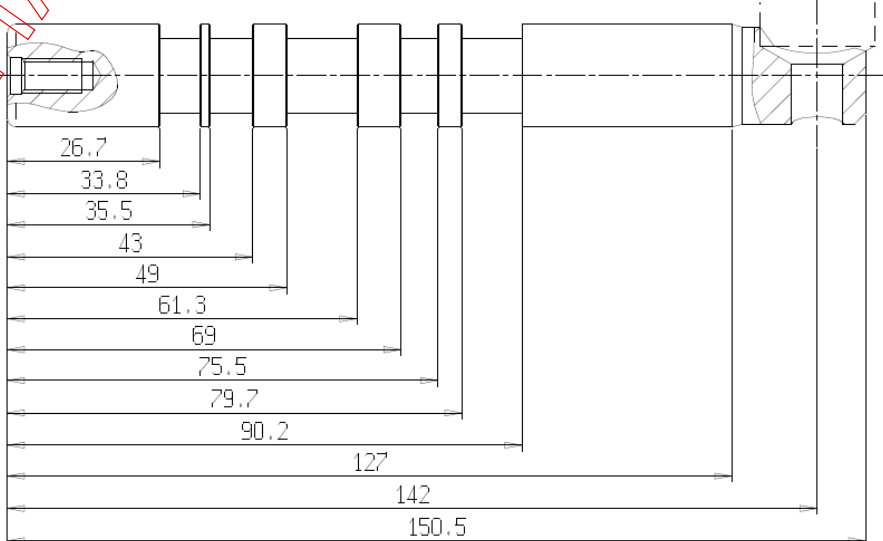
4	DO2921XX04000	 <p>Circuit 4 spool – 25-50 l/min left inlet – stroke 5.5_5.5</p>	
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5	DO2921XX05000	 <p>Spool circuit 5 – 25-50 l/min left inlet – stroke 5.5_5.5</p>	
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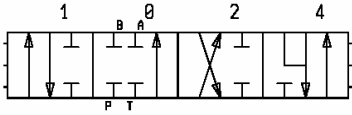
8	DO2921XX08000	 <p>Circuit 8 spool – 25-50 l/min left inlet – stroke 5.5_5.5</p>	
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10	DO2921XX10000		
<p>Circuit 10 spool – 25-50 l/min left inlet – stroke 5.5_5.5</p>			

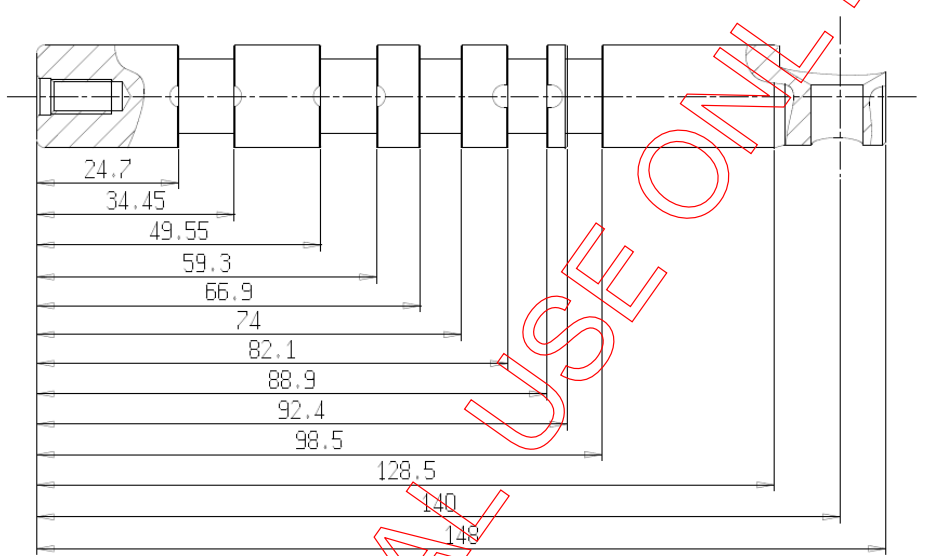
7	DO2921XX07000		
<p>Circuit 7 spool – 25-50 l/min left inlet – stroke 5_5_0_5</p>			

23	DO2921XX23000		
<p>Circuit 23 spool – 25-50 l/min left inlet – stroke 5_4_0_4</p>			

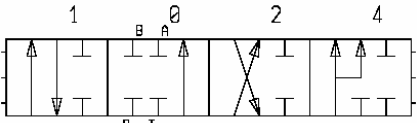
70 DO2921XX70001



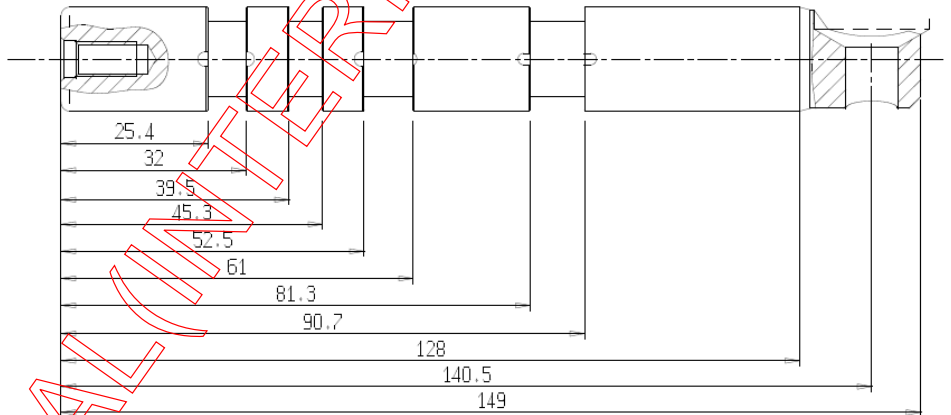
Circuit 70 spool – 25-50 l/min
left inlet – stroke 5_5_0_5



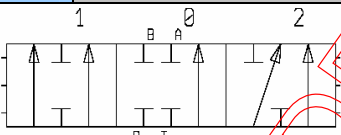
17 DO2921XX17001



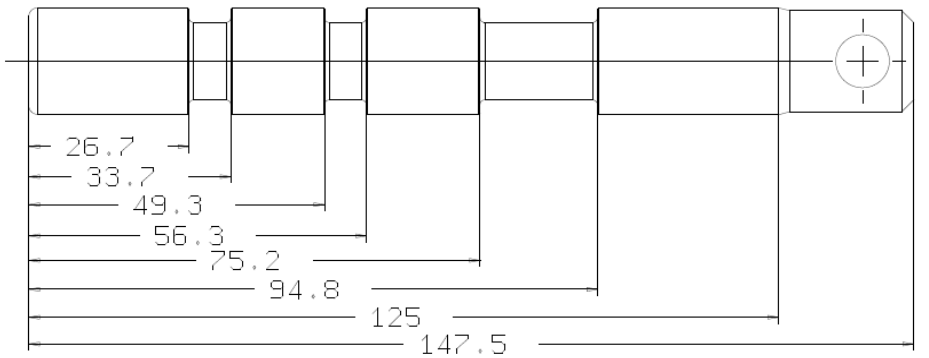
Circuit 17 spool – 25-50 l/min
left inlet – stroke 5.5_0_5.5_3

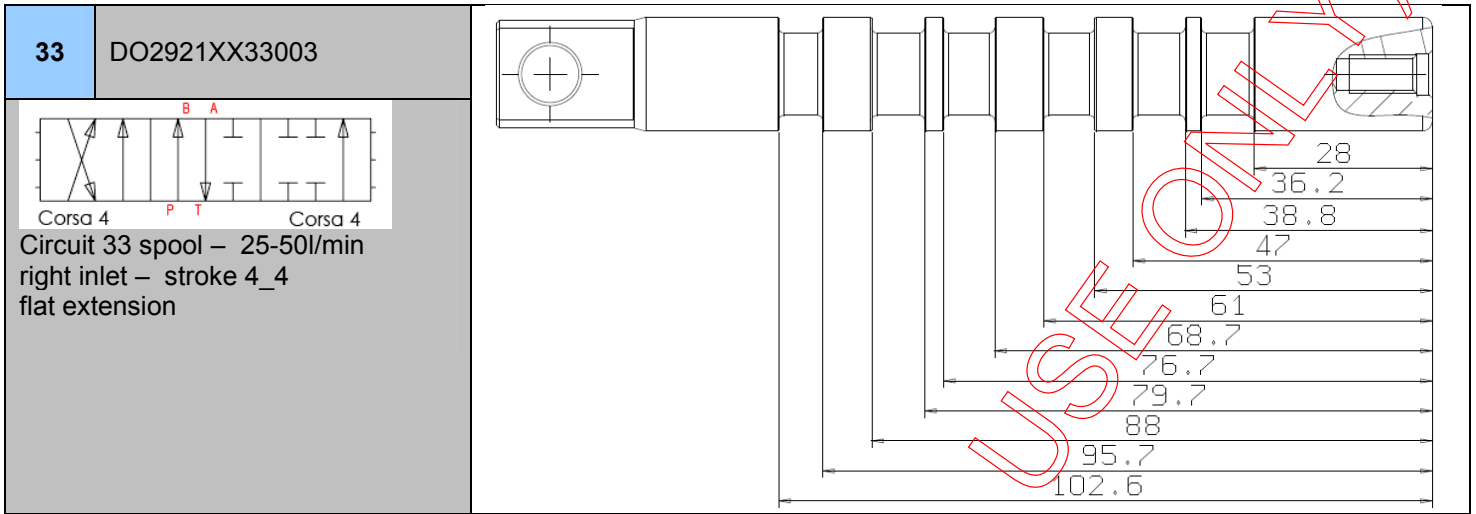


25 DO2921XX25000



Circuit 25 spool
left inlet – stroke 4.5_4.5





Spools

Circuit	Code	Inlet type	Type of extension	Flow rate
1	DO2921XX01000	Left	With extension	25-50 l/min
1	DO2921XX01002	Left	With extension	10-25 l/min
1	DO2921XX01001	Left	Without extension	25-50 l/min
1	DO2921XX01003	Right	With extension	25-50 l/min
1	DO2921XX01005	Right	With extension	10-25 l/min
1	DO2921XX01010	Left	With extension	25-50 l/min with open by-pass
1	DO2921XX01012		Without extension	25-50 l/min M8 thread on actuator side
1	DO2921XX01013		Without extension	10-25 l/min M8 thread on actuator side
3	DO2921XX03000	Left	With extension	25-50 l/min
3	DO2921XX03002	Left	With extension	10-25 l/min
3	DO2921XX03001	Left	Without extension	25-50 l/min
3	DO2921XX03003	Right	With extension	25-50 l/min
3	DO2921XX03005	Right	With extension	10-25 l/min
3	DO2921XX03006	Left	Without extension	For follower
4	DO2921XX04000	Left	With extension	25-50 l/min
4	DO2921XX04003	Right	With extension	25-50 l/min

4	DO2921XX04002	Left	With extension	10-25 l/min
4	DO2921XX04005	Right	With extension	10-25 l/min
4	DO2921XX04001		Without extension	25-50 l/min
5	DO2921XX05000	Left	With extension	25-50 l/min
5	DO2921XX05003	Right	With extension	25-50 l/min
5	DO2921XX05002	Left	With extension	10-25 l/min
5	DO2921XX05005	Right	With extension	10-25 l/min
7	DO2921XX07000	Left	With extension	25-50 l/min
8	DO2921XX08002	Left	With extension	10-25 l/min
8	DO2921XX08000	Left	With extension	25-50 l/min
8	DO2921XX08003	Right	With extension	25-50 l/min
8	DO2921XX08005	Right	With extension	10-25 l/min
10	DO2921XX10002	Left	With extension	10-25 l/min
10	DO2921XX10000	Left	With extension	25-50 l/min
10	DO2921XX10003	Right	With extension	25-50 l/min
10	DO2921XX10005	Right	With extension	10-25 l/min
23	DO2921XX23000	Left	With extension	25-50 l/min
70	DO2921XX70001	Left	With extension	25-50 l/min
17	DO2921XX17001	Left	With extension	25-50 l/min
1	DO2921XX01007	Left	With extension	25-50 l/min with open By-pass
1	DO2921XX01008	Left	With extension	25 l/min
1	DO2921XX01006	Left	With extension	10-25 l/min controlled dump BYPY INC.
1	DO2921XX01011	Left	With extension	25-50 l/min toll. +0.000/-0.002
3	DO2921XX03007	Right	Without extension	M10-M8 follower FALCONERO
RF	DO2929999149	Left	With extension	For RF ICAR MAFIX BYPY GmbH
25	DO2921XX25000	Left	With extension	Always open by-pass BYPY CHINA
33	DO2921XX33003	Right	With flat extension	25-50l/min, stroke 4_4, DANI –TECH A/S

Spool characteristics

Spools for circuit 1, 3, 4, 5, 8 and 10 are metering optimized for flow ranges of 10-25 l/min and 25-50 l/min. If 20-45 l/min nominal flow spools are used with a higher flow, main relief valve will open during the exchange step. Opposite, using a 45-70 l/min nominal flow spool with a lower flow rate can lead to a compromised metering bend.

NOTE: Spools are designed in order to optimize metering bend, and generate an increase of pressure during the exchange step.

Peak of pressure produced is approximately 120-130 bar at 25 l/min for a 10-25 l/min spool and at 50 l/min for a 25-50 l/min spool.

Note: characteristic bends of spools circuit 3-4-5-8-10 are the same as circuit 1 for respective flow ranges.

Main difference between circuit 1 and 3 spool is in neutral position. While circuit 1 has the user port closed, circuit 3 has user port connected to the tank line.

Circuits 4 and 5, called "simple acting", work respectively only with port A (circ 4) and port B (circ 5).

Circuits 8 and 10 have, in neutral position, respectively port A and port B connected to the tank line.

Circuits 7 and 7 have a fourth position where by-pass is opened and ports A and B are connected to the tank line. This position is obtained pulling the actuator lever with circuit 70 and pushing the lever with circuit 7.

Circuit 23, called "regenerative", differs from circuit 1 for an intermediate position, where users A and B are simultaneously connected to the P line.

Circuit 17 has the same functionality as circuit 1, but with a fourth position called "regenerative" where the two ports are connected to the P and by-pass is closed.

Spools / spool controls compatibility chart

Circuit	A	B	C	D	E	F	H	L	NT	NS	PS	Q	R	S	SQ	TR
1	■	■	■	■	□	□	□	□	x	x	x	■	■	■	■	x
3	■	■	■	■	■	■	■	■	x	x	x	□	■	■	■	x
4	■	■	□	■	□	□	□	□	x	x	x	□	□	□	■	x
5	■	□	■	■	□	□	□	□	x	x	x	□	□	□	■	x
8	■	■	■	■	■	□	■	x	x	x	x	□	□	□	□	x
10	■	■	■	■	□	■	x	■	x	x	x	□	□	□	□	x
7	x	x	x	x	x	x	x	x	x	■	■	x	x	x	x	x
23	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	■
70	x	x	x	x	x	x	x	x	■	x	x	x	x	x	x	x

Legend: ■ = available □ = not advised x = not available

Special circuits / spool controls compatibility chart

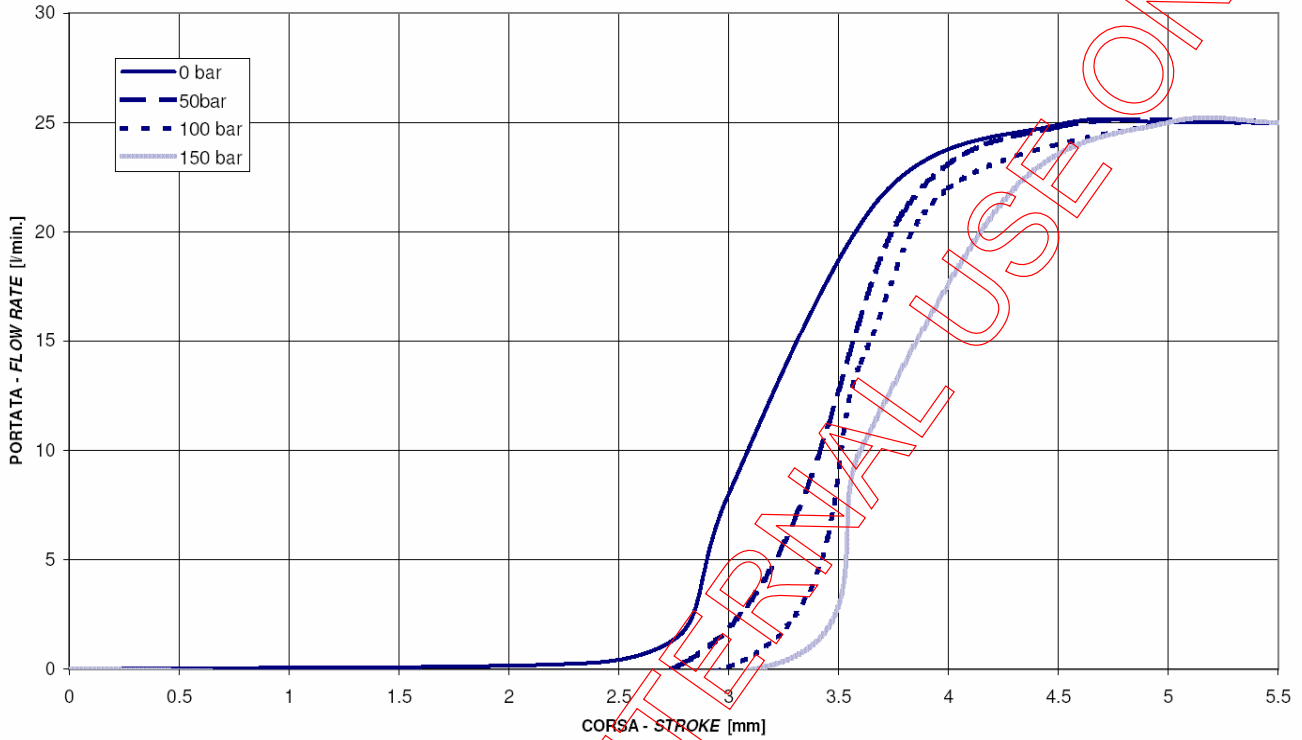
Circuit	A	AD	B	C	D	E	F	H	L	NT	NS	PS	PN	Q	R	S	CPT	SQ	TR	T	D 4.5mm
17	x	x	x	x	x	x	x	x	x	x	x	x	■	x	x	x	x	x	■	■	x
25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	■

Legend: ■ = available □ = not advised x = not available

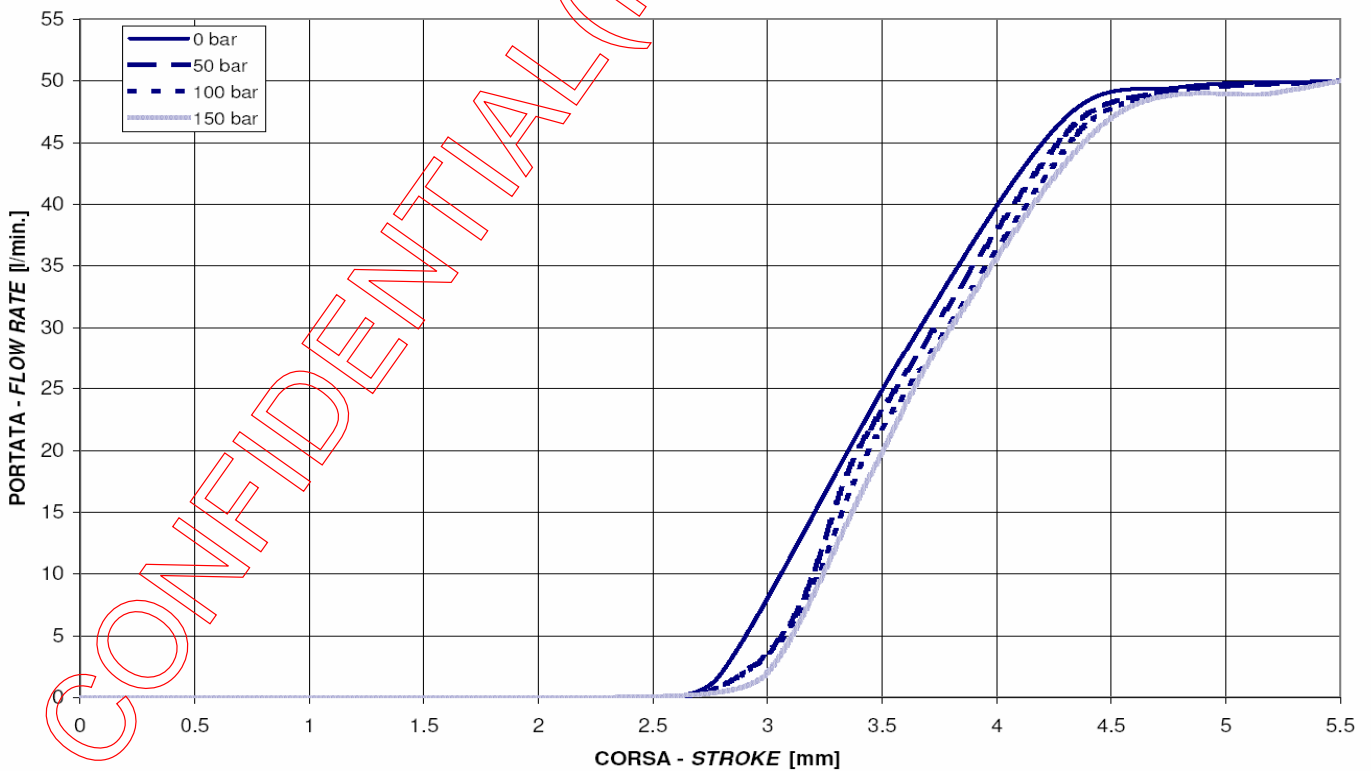


Spool features

CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX01000) - 21cSt

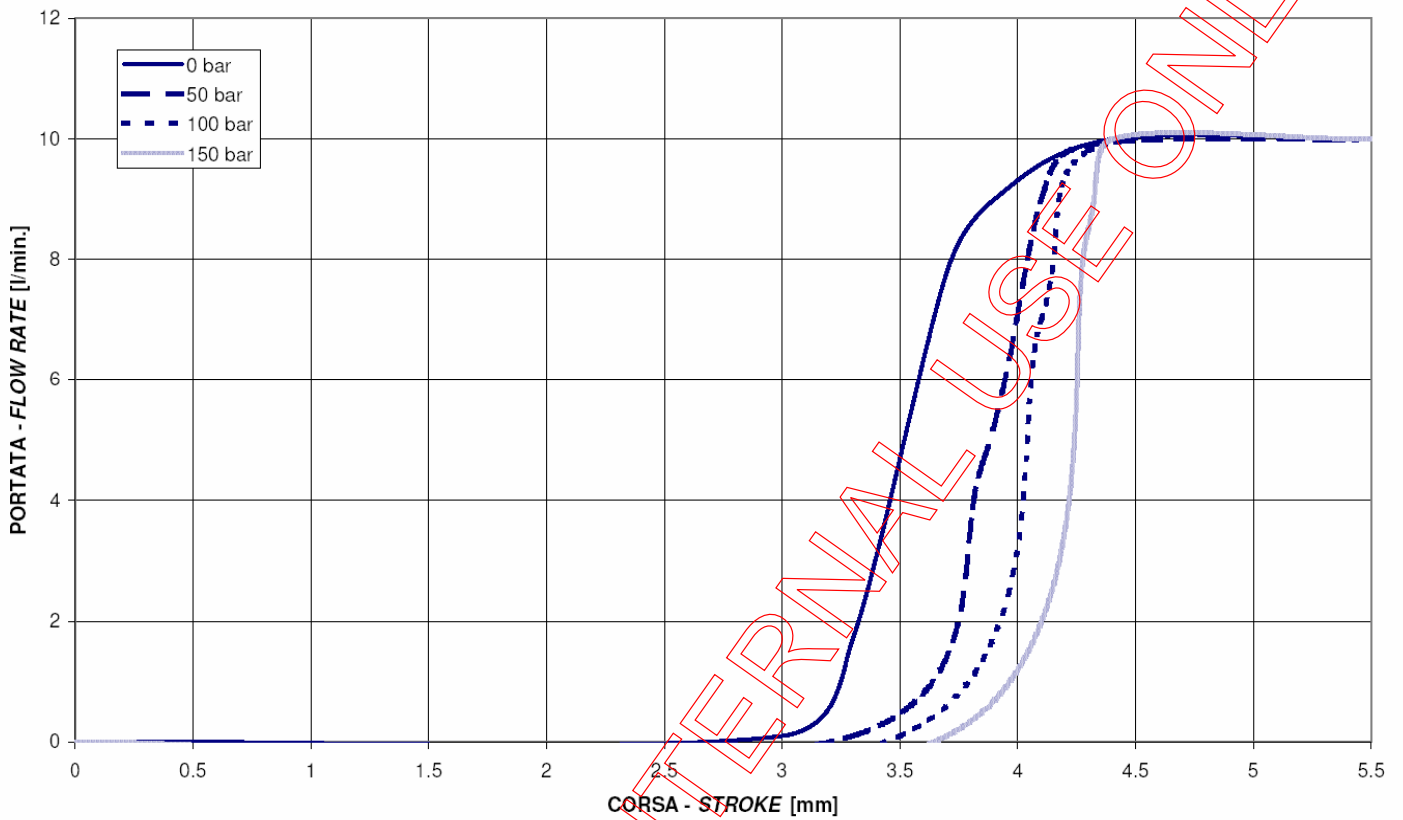


CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX01000) - 21 cSt

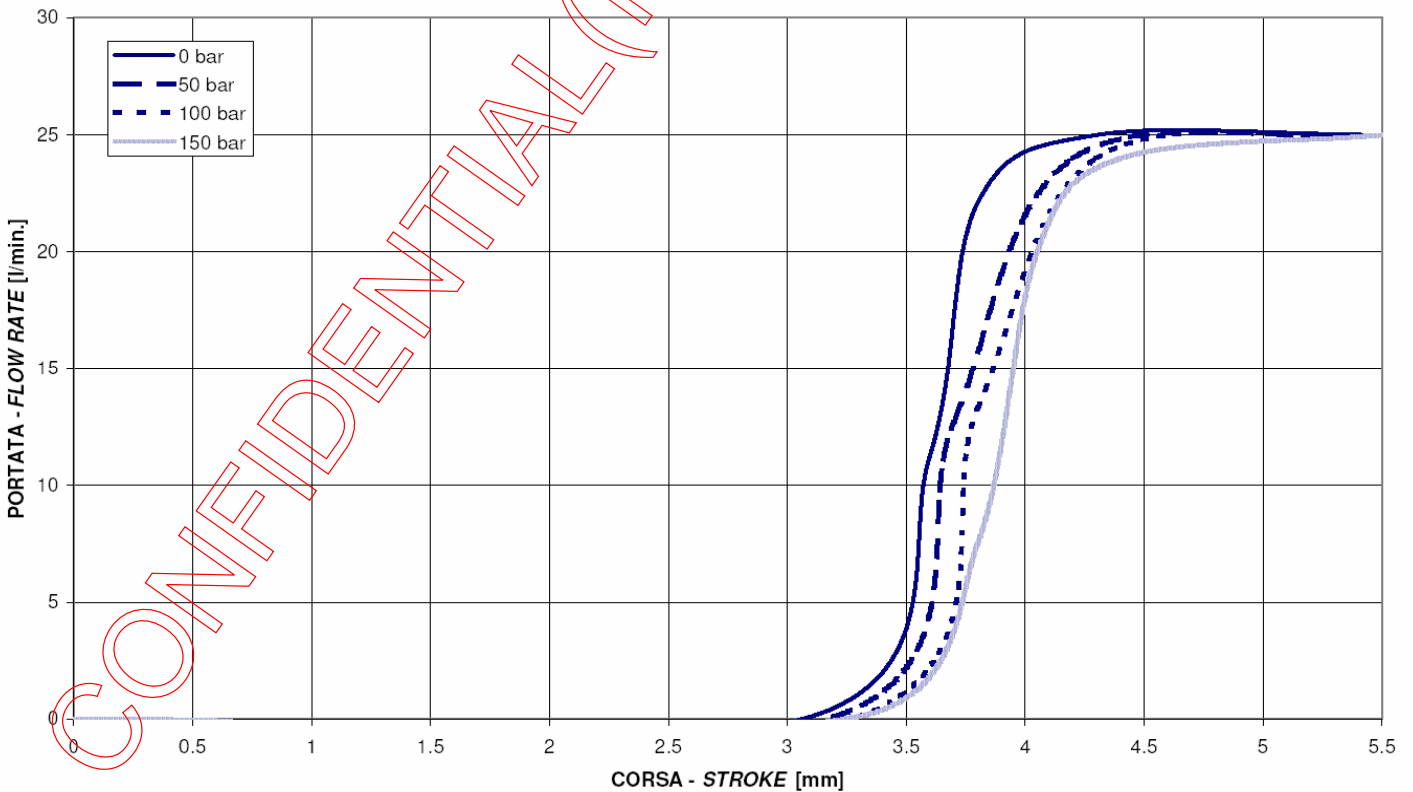




CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX01002) - 21cSt

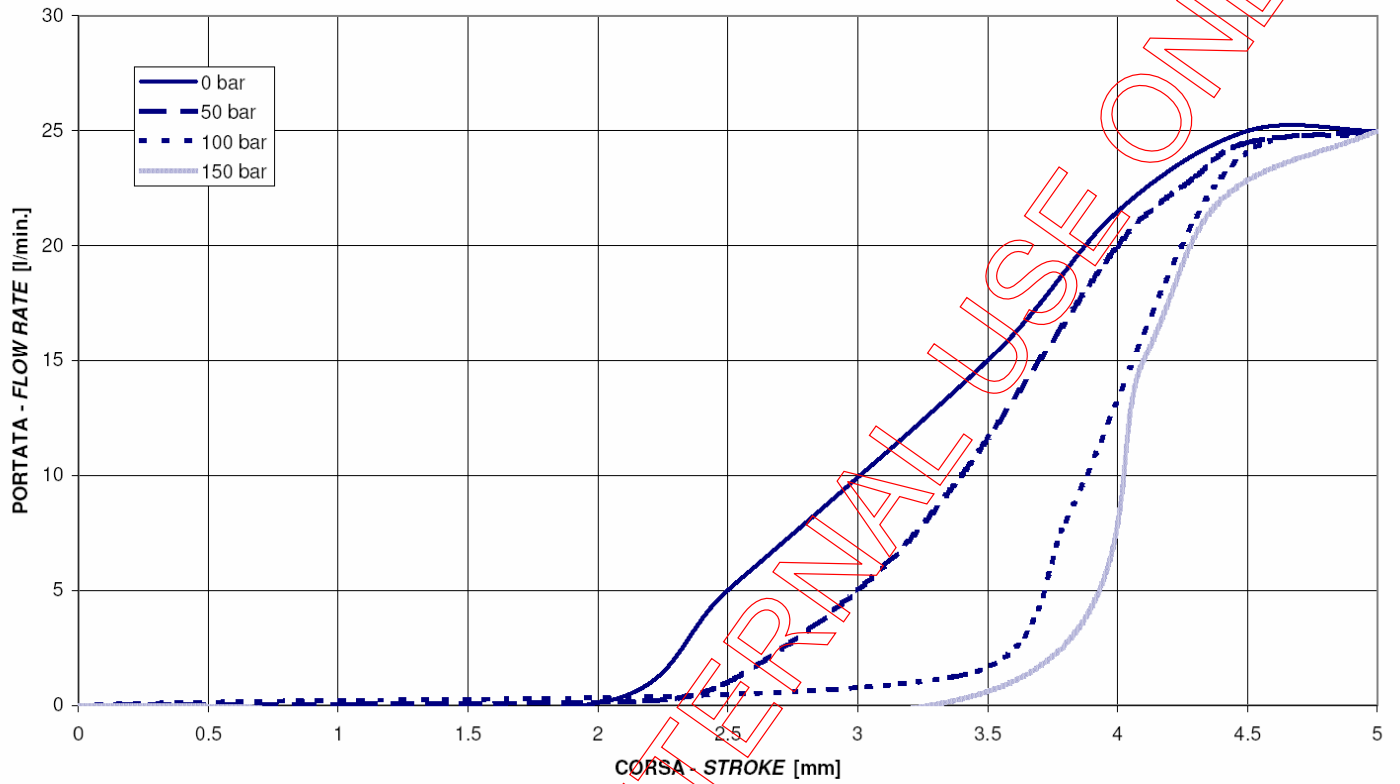


CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX01002) - 21cSt

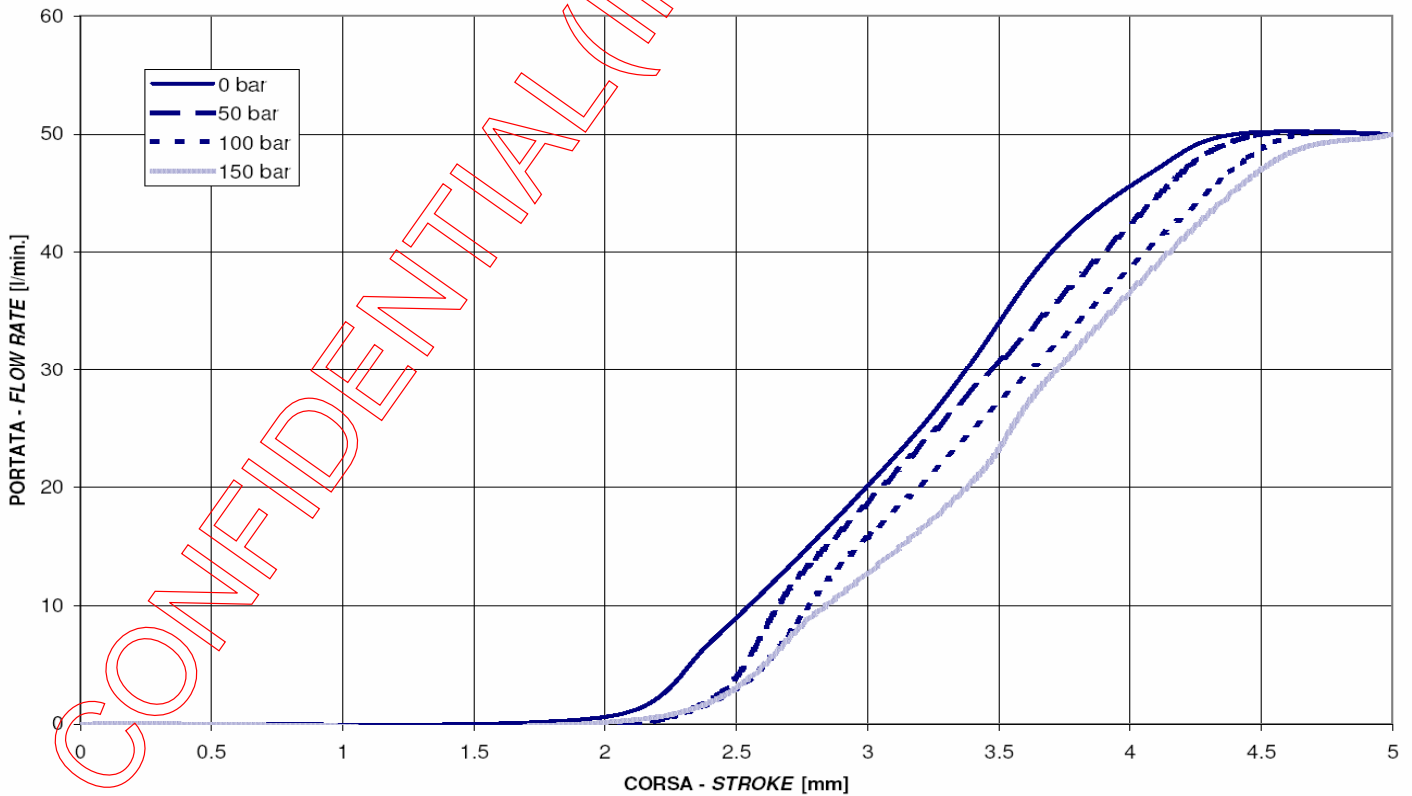




CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX70001) - 21 cSt



CORSA-PORTATA - STROKE-FLOW RATE (SPOLA-SPOOL 2921XX70001) - 21 cSt



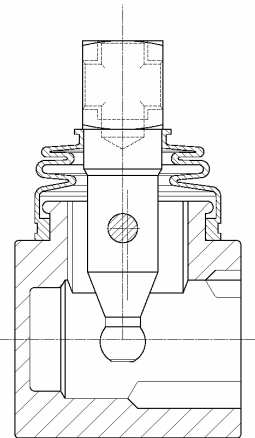


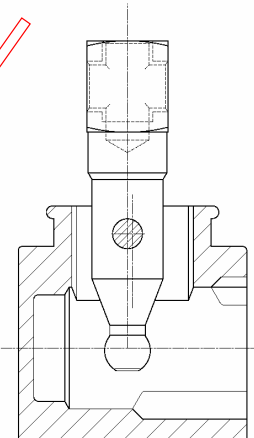
VI

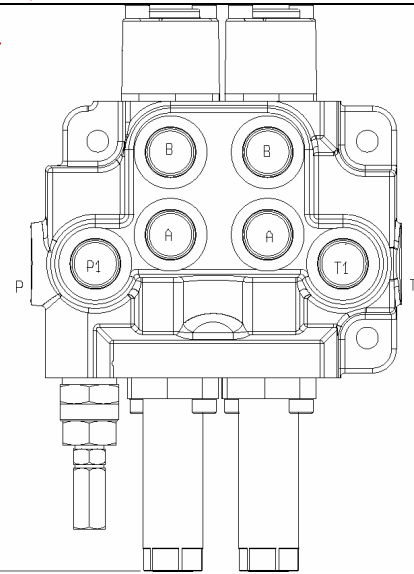
Actuators on lever side

Ordering instructions

DN1	C	Z (180)	A	1	L					
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

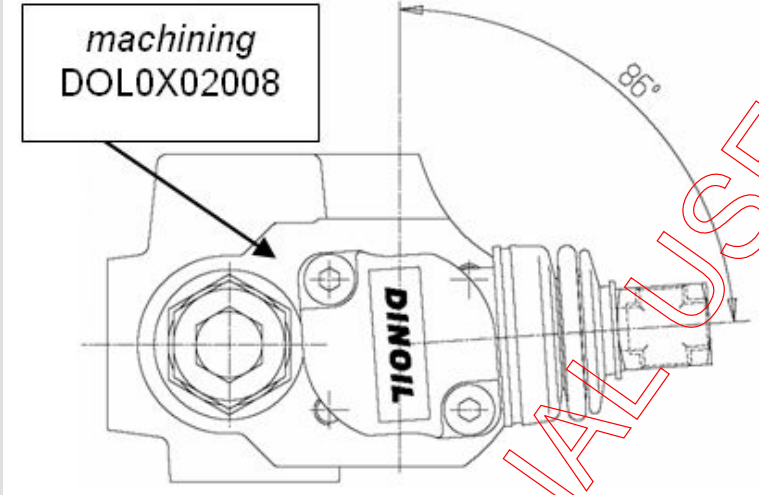
L	DO57010223 <i>Standard lever kit</i>
	

	DO57010240 <i>Lever kit without rubber boot</i>
	

TCF	DO74508212050 <i>Kit for cable control on lever side</i>
 <p style="text-align: left; margin-left: 100px;">233.6</p>	

T side rotated lever

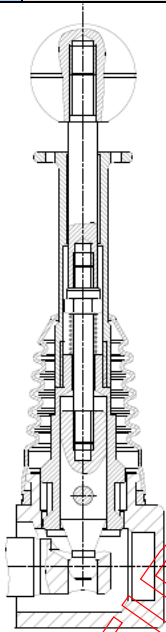
machining
DOL0X02008



LI

DO54040002

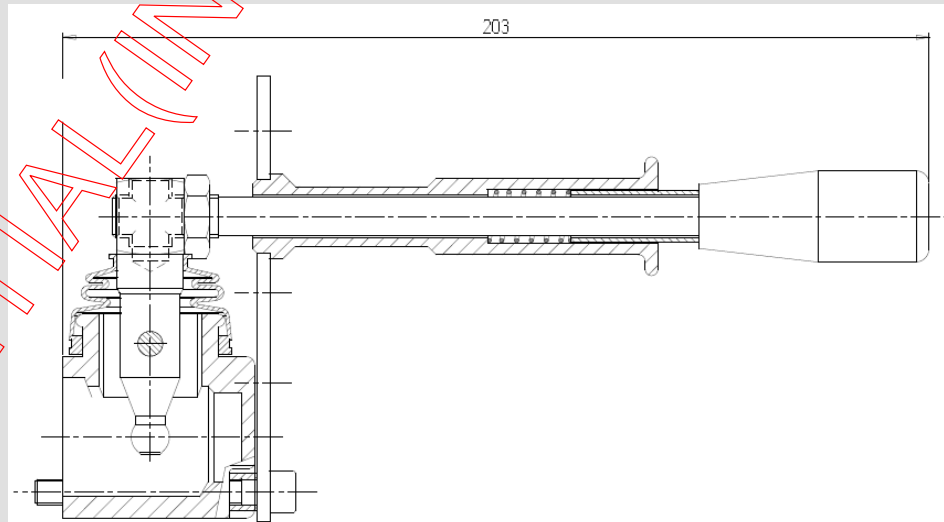
Vertical intentional lever



LIPO

DO54040003

Horizontal intentional lever

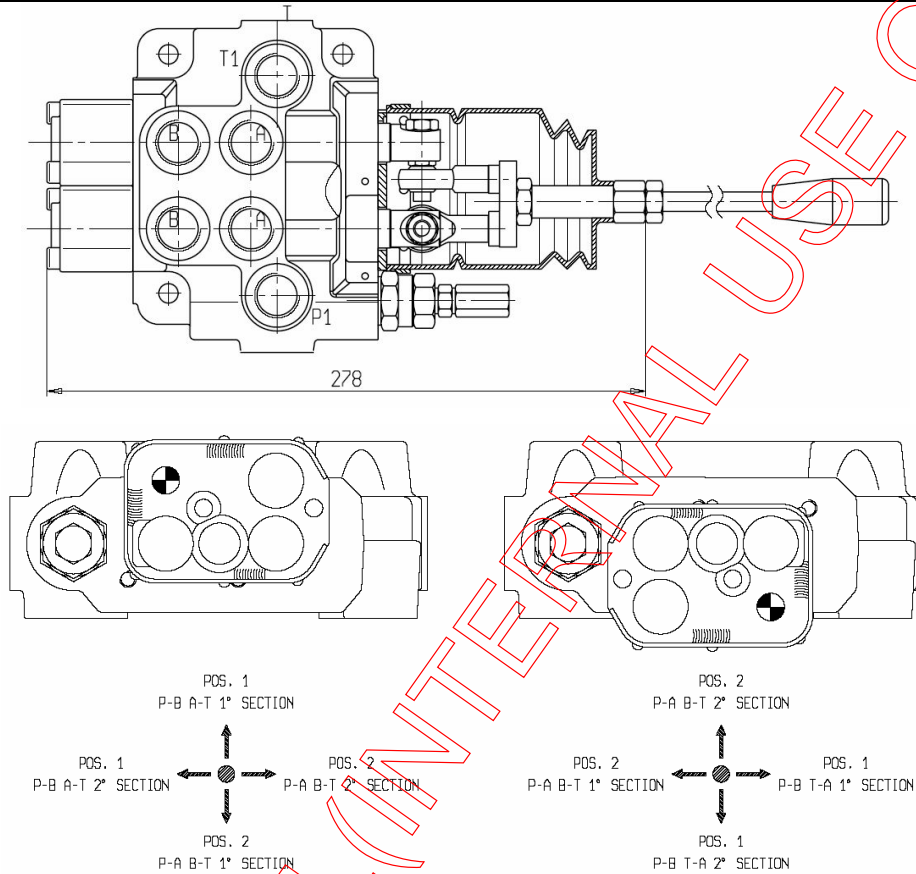




MAN (+)

DO55514008

Joystick (+)

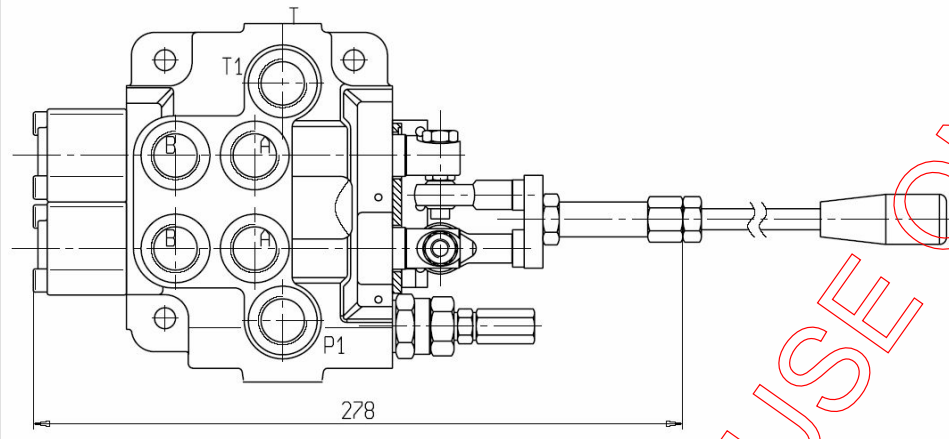


Note: Joystick “+” can move only one section at a time, moving the lever along the axis. It can be used with every available circuit, as it’s predisposed for floating position.

MAN (+)

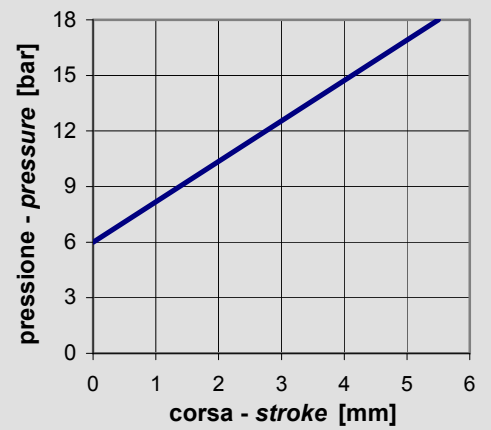
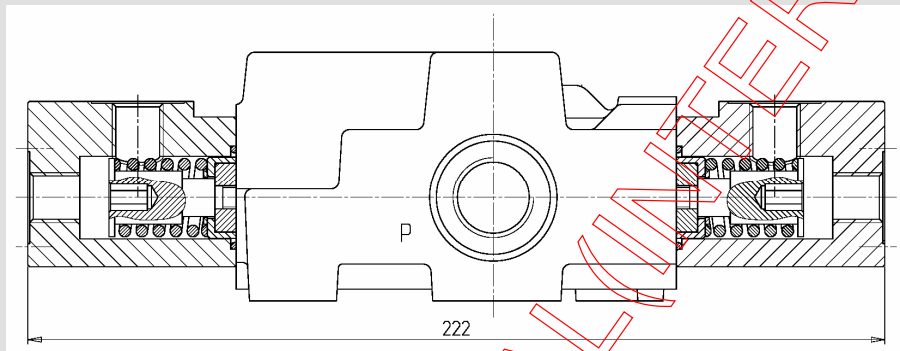
DO55514012

Joystick without hood (+)



K

DO5XH15540001
Hydraulic actuators

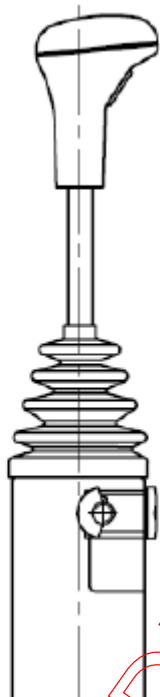


Special actuators on lever side

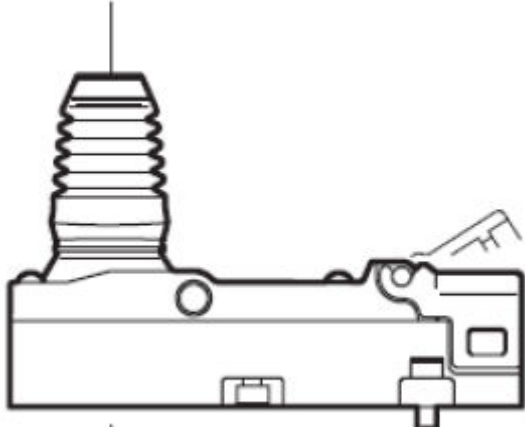
Joystick (+) with upper right fulcrum (BYPY FRANZIA, CERMAG)	DO55514001
Joystick (+) with upper right fulcrum, without rubber boot and column (BYPY FRANZIA, CERMAG)	DO55514015
Lever kit for front extension (BYPY FRANZIA, BALLARIO)	DO57012703
Lever kit anonymous (AMA)	DO57010224
Lever kit Vapormatic (MHS)	DO57010226
Lever kit 4 holes out of centre	DO57010117
Spool actuator cap with front extension (AMA)	DO5753702
Spool actuator cap with plugged hole (BYPY FRANZIA)	DO27711020117

Actuators for cable control

DO775---
Dual axis joystick for cable control



DO790---
Single axis joystick for cable control



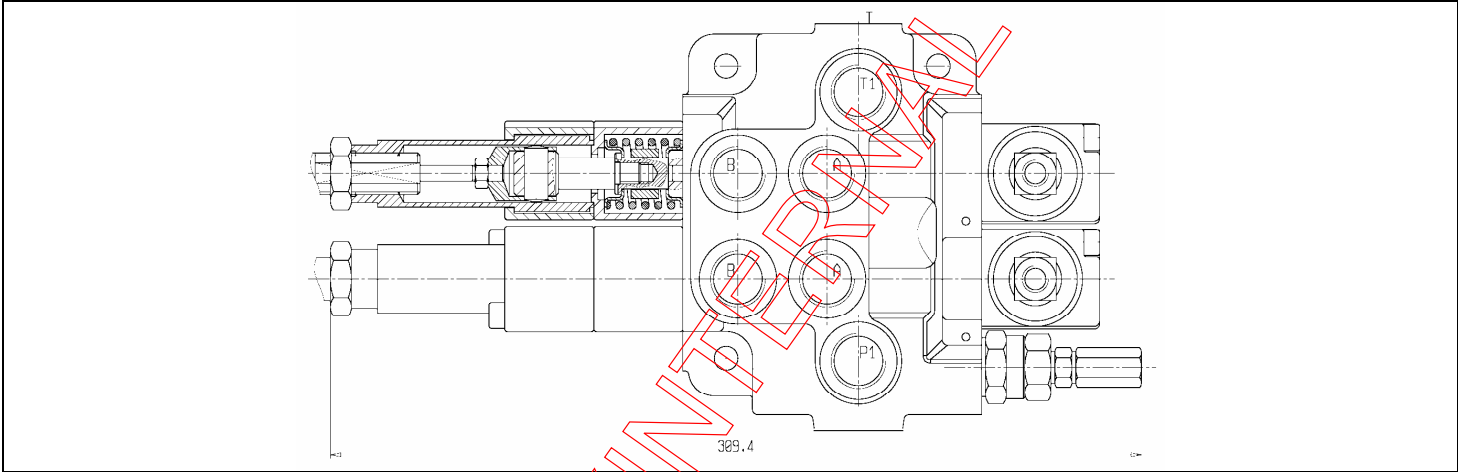
VII

Actuators on spool control side

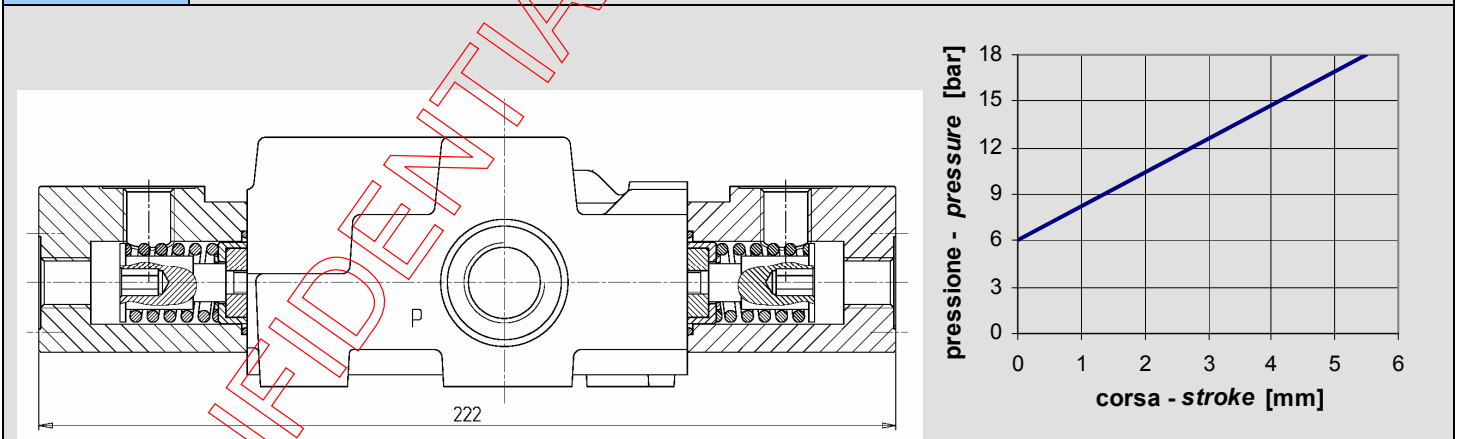
Ordering instructions

DN1	C	Z (180)	A	1	L	TCF				
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

TCF	DO580550A55 <i>Cable control on spool control side</i>
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K	DO5XH15540001 <i>Hydraulic actuator</i>
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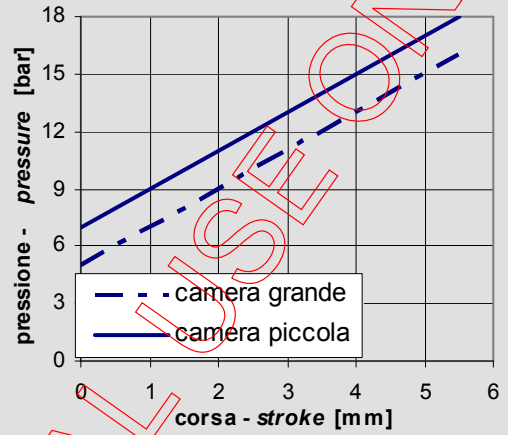
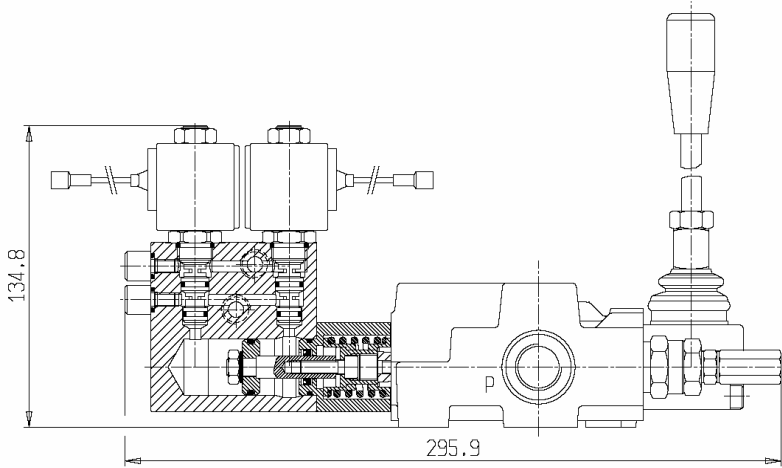




EH

DO51540010-10 (DO580550A07 spool control)

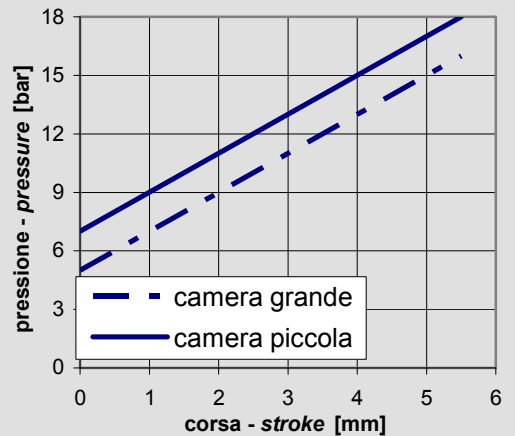
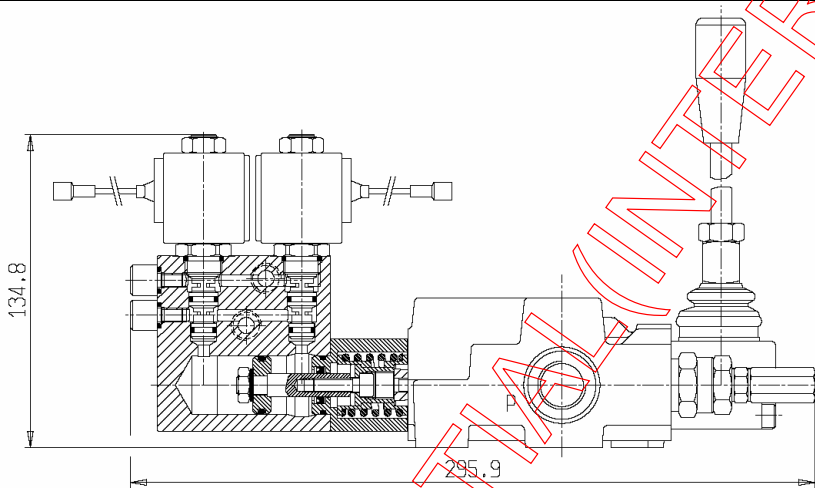
For single section electro hydraulic actuators



EH

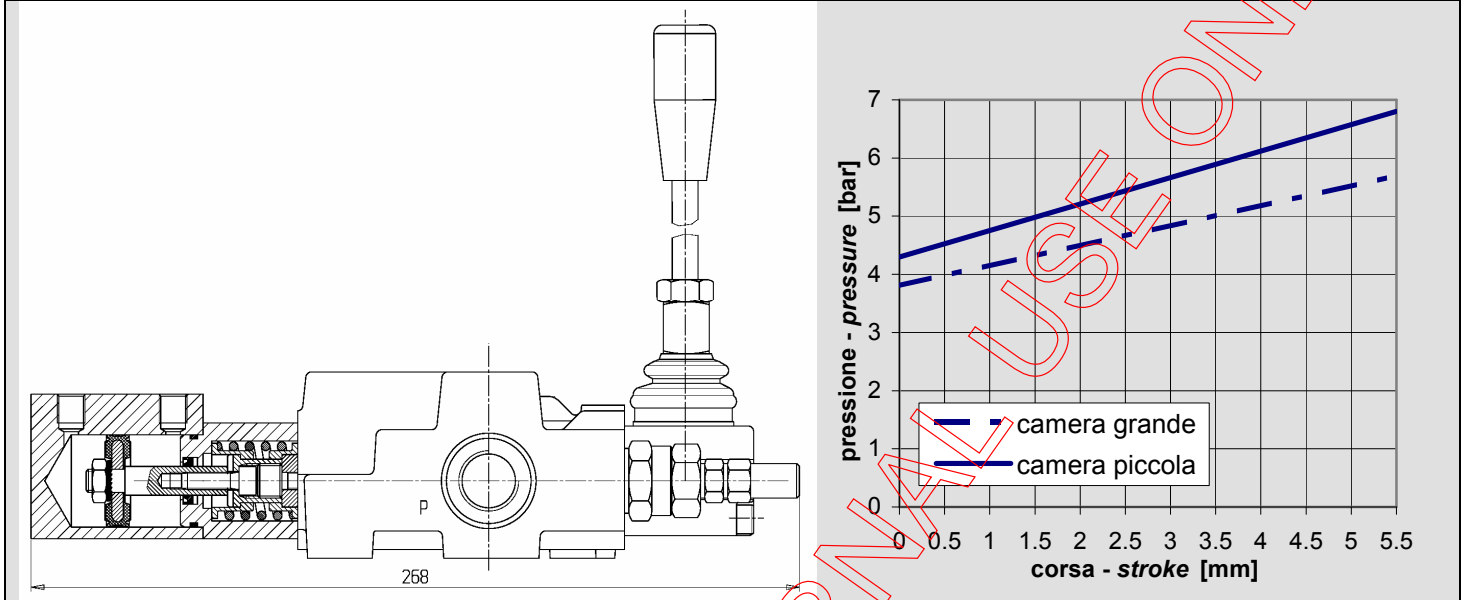
DO51540020-10 (DO580550A07 spool control)

For double section electro hydraulic actuators

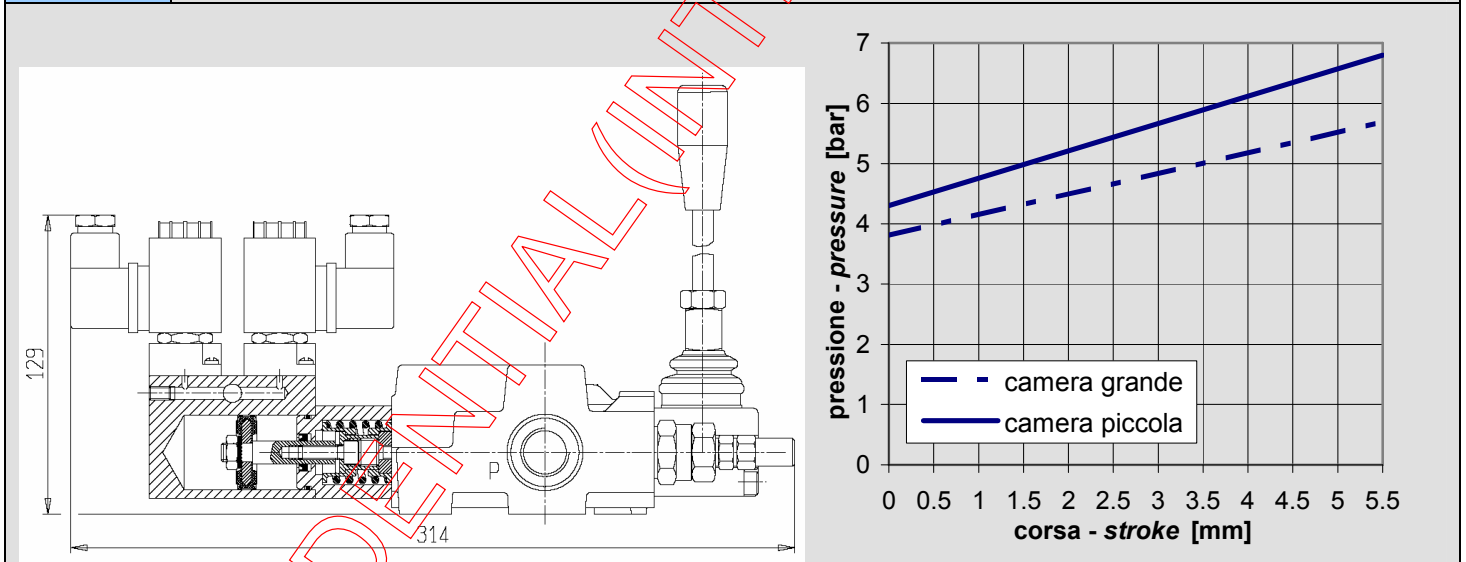




P	DO5XG55402001 <i>Pneumatic actuator</i>
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EP	DO5XG55404--- <i>Electro pneumatic actuator</i>
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Special actuators on spool control side

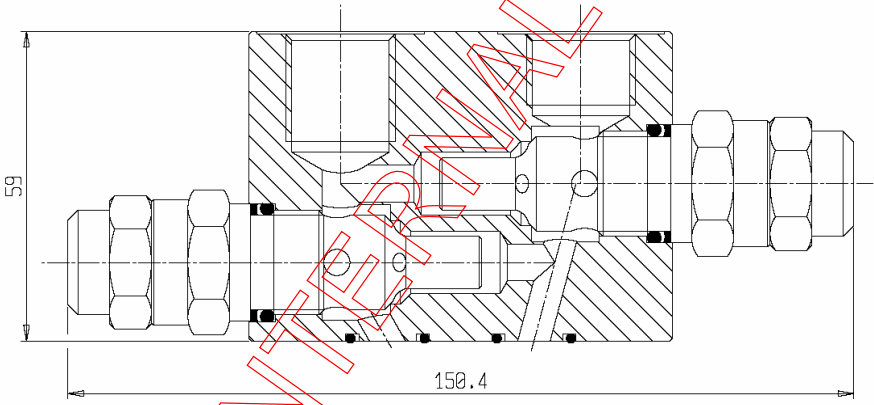
<i>Pneumatic actuator for micro kit</i>	DO5XG55402002
<i>Hydraulic proportional control</i>	DO5XH15540001

VIII

Port auxiliary valves

Ordering instructions

DN1	C	Z (180)	A	1	L	TCF	VLAB			
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

Ordering code	DOVBHLP--- <i>Upper-located block with port relief valve</i>
VLA	
VLB	
VLAB	

NOTE: with VL and VB predisposition, 1/2G and 3/4 -16 SAE threads on A-B-P1-T1 are not possible.



IX

Following section

Ordering instructions

DN1	C	Z (180)	A	1	L	TCF	VLAB	A1L		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

Repeat ordering instruction IV, V, VI for each section.

IV	V	VI
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CONFIDENTIAL (INTERNAL USE ONLY)

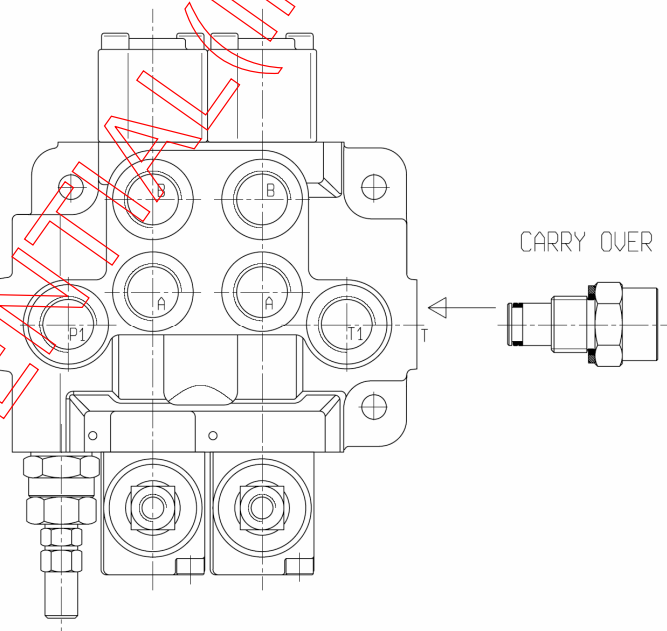
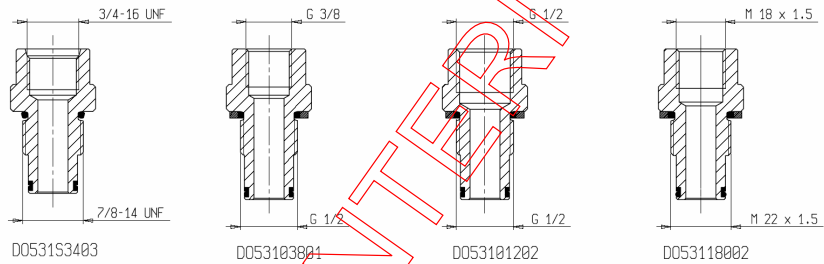
X

Options on the T line

Ordering instructions

DN1	C	Z (180)	A	1	L	TCF	VLAB	A1L	C.O.	
I	II	III	IV	V	VI	VII	VIII	IX	X	XI

C.O. (power beyond) All DN valves are carry over predisposed.



Note: Carry over bushing is NOT interchangeable with previous versions.



XI

Type of P – T


Ordering instructions

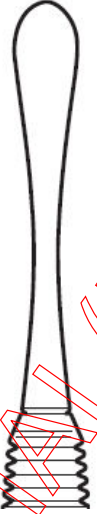
DN1	C	Z (180)	A	1	L	TCF	VLAB	A1L	C.O.	PT
I	II	III	IV	V	VI	VII	VIII	IX	X	XI


PT	Port P and T open, port P1, T1 plugged
P1T1	Port P1 and T1 open, port P and T plugged
PP1TT1	Port P, P1, T, T1 open


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Levers

DO5351--- <i>M10 Lever kit</i>		L (mm)	Lever code	254	535125002
		184	535118002	304	535130002
		84	535108002	354	535135002
		104	535110002	404	535140002
		109	535110502	454	535145002
		134	535113002	504	535150002
		154	535115002	604	535160002
		214	535121002	674	535167002

DO535199901	
<i>Ergonomic straight lever</i>	

DO535199912	
<i>Ergonomic 90° rotated straight lever</i>	

DO535199902	
<i>Ergonomic 15° bent lever</i>	

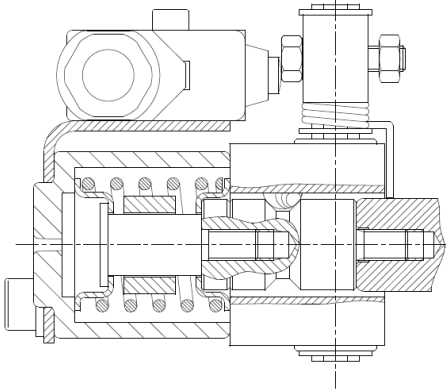
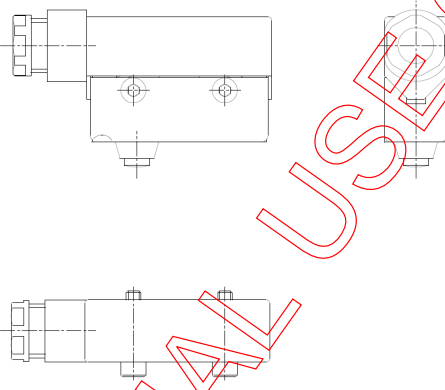
DO535199903	
<i>Ergonomic 30° bent lever</i>	

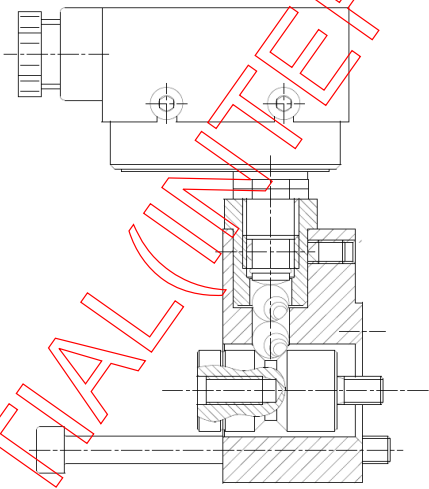
Accessories

Cap for standard main relief valve sealing	DO23101002
Handweel 1050 with 6 lobes (STROMAB)	DO392010040
RF cartridge	DOWSR00M20010
VNR check valve	DOWUS00140000
Replacement screw plug for check valve	DO58854
60° bent lever at 40 mm (OILTEK)	DO535118009
250 mm lever with knob	DO535125006
Lever kit vapomatic (MHS)	DO535418002
Spherical actuator	DO5XA1055008
RF cartridge for TERV	DO5KFARFT050M0001

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Centralized micro kit

<i>for one section</i>	5604001-- + 56102
<i>for two sections</i>	5604002-- + 56102
 <p>DO5604001--</p>	 <p>DO56102</p>

<i>Single section micro kit, p. 40 mm , stroke 5,5 mm</i>	561--02
	

Standard machining

Code	Description
L0X01001	Standard circuit machining
L0V01005	Machining for VL upper located
L0X02008	4 holes machining
L0X02006	Machining for carry over 1/2 G
L0X02009	Machining for carry over 7/8-14 SAE
L0X02012	Machining for carry over M22 x 1.5
L0X01003	Machining for circuit 17
L0X02010 (*)	Machining for P3T3
L0X02004 (**)(***)	Machining for RF for 1 st section

(*) Incompatible with carry over machining

(**) Only for 4V2--- casting

(***) 1/2G threads not possible on A-B-P-P1-T1

INCOMPATIBILE DN MACHINING

	L0X01001	L0X02001	L0X02008	L0X02006	L0X02009	L0X02012	L0V01001
L0X01001	-	■	■	■	■	■	■
L0X02001	■	-	■	■	■	■	x
L0X02008	■	■	-	■	■	■	x
L0X02006	■	■	■	-	x	x	■
L0X02009	■	■	■	x	-	x	■
L0X02012	■	■	■	x	x	-	■
L0V01001	■	x	x	■	■	■	-

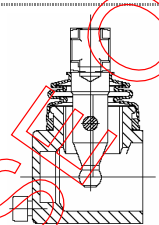
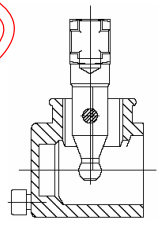
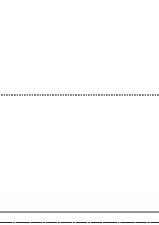
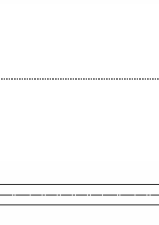






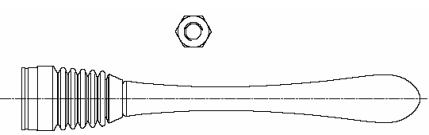
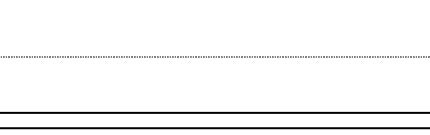
Legend: ■ = available x = not available

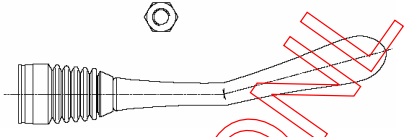
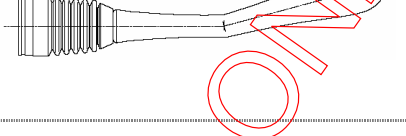
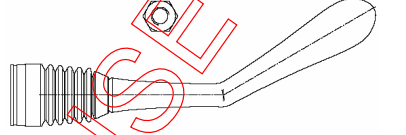
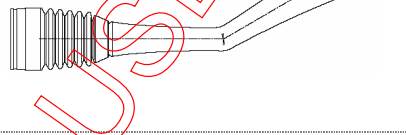
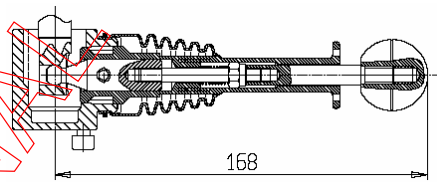
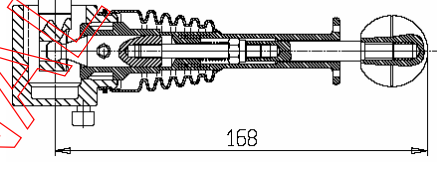
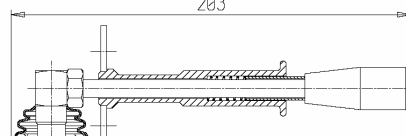
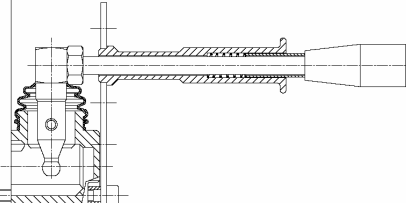
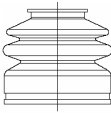
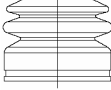
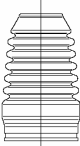
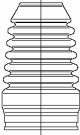
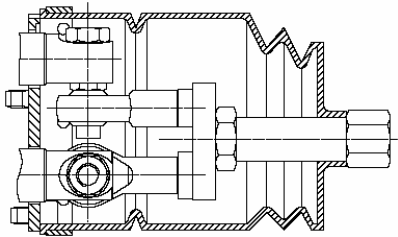
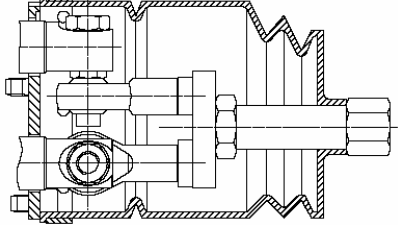
Note: above incompatibilities are meant for each section

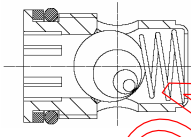
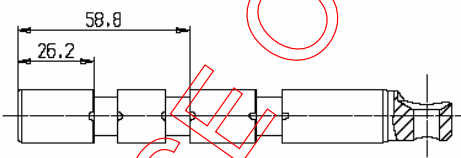
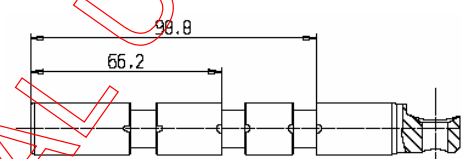
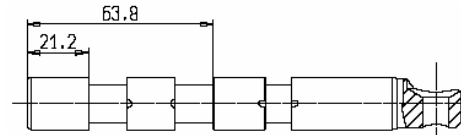
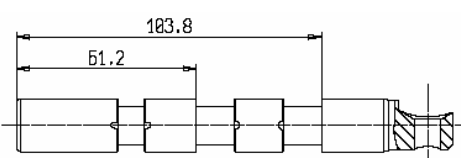
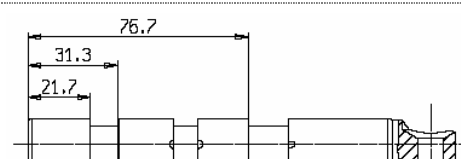
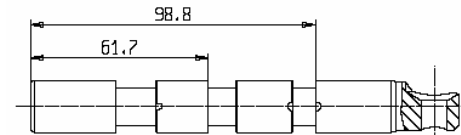
Semi-finished products

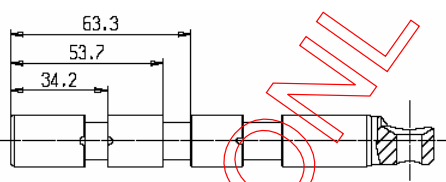
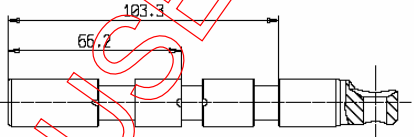
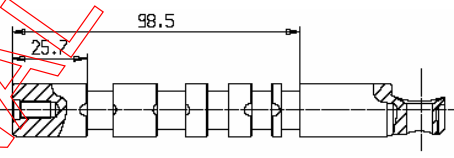
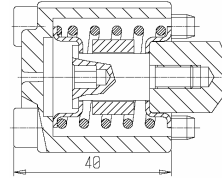
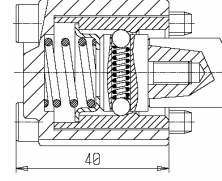
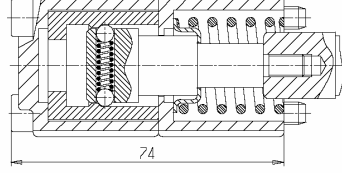
Codice - Code	Description
4V1---	Machined DN1
4V2---	Machined DN2
4V2BAAABBNNT002	DN/2 3/8G 1 [^] RF - 2 [^] C.33 Pred.C.O.
4V1NNNNNNNNN001	DN/1 M22x1.5 (UT LTD-India)

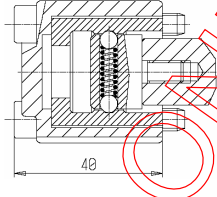
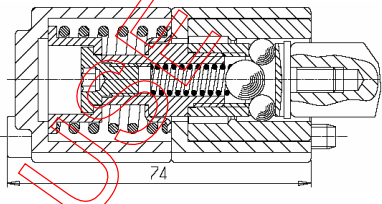
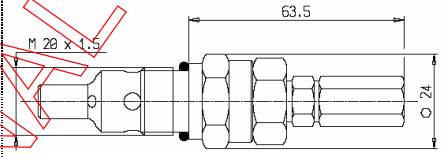
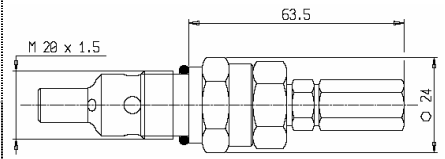
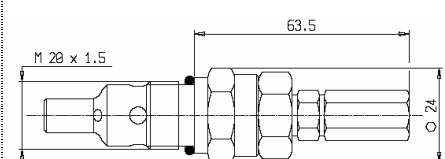
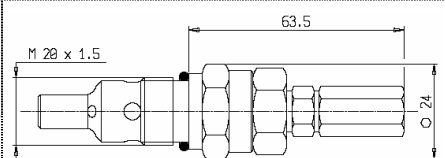
Spare part list

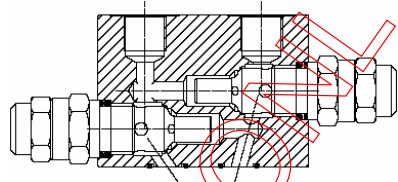
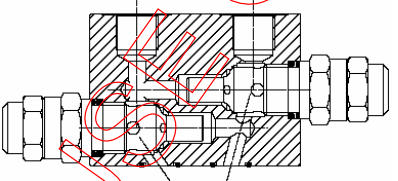
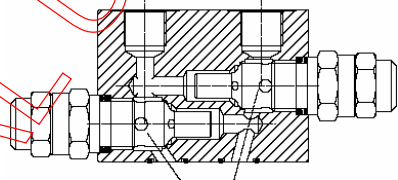
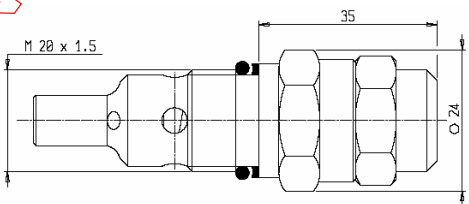
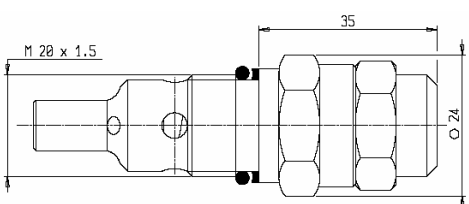
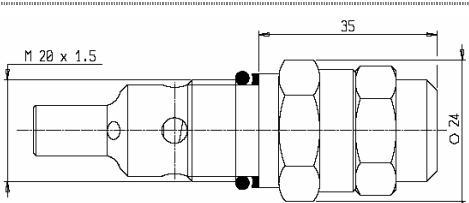
Codice Code	Descrizione Description	Disegno sezione Sectional view
DO57010223R	Kit N° 1 Portaleva con viti cod. DO57010223 Kit N°1 Housing lever with screws cod. DO57010223	
DO57010223R10	Kit N°10 Portaleva con viti cod. DO57010223 Kit N°10 Housing levers with screws cod. DO57010223	
DO57010240R	Kit N°1 Portaleva per leve ergonomiche con viti cod. DO57010240 Kit N°1 Housing lever with screws for ergonomic levers cod. DO57010240	
DO57010240R10	Kit N°10 Portaleva per leve ergonomiche con viti cod. DO57010240 Kit N°10 Housing levers with screws for ergonomic levers cod. DO57010240	
DO535118002R	N° 1 Leva M10 x 180 mm cod. DO535118002 N° 1 Lever M10 x 180 mm cod. DO535118002	
DO535118002R20	Kit N°20 Leve M10 x 180 mm cod. DO535118002 Kit N°20 Levers M10 x 180 mm cod. DO535118002	
DO535113002R	N° 1 Leva M10 x 130 mm cod. DO535113002 N° 1 Levers M10 x 130 mm cod. DO535113002	
DO535113002R20	Kit N°20 Leve M10 x 130 mm cod. DO535113002 Kit N°20 Levers M10 x 130 mm cod. DO535113002	
DO535125002R	N° 1 Leva M10 x 250 mm cod. DO535125002 N° 1 Lever M10 x 250 mm cod. DO535125002	
DO535125002R20	Kit N°20 Leve M10 x 250 mm cod. DO535125002 Kit N°20 Levers M10 x 250 mm cod. DO535125002	
DO535199901R20	N° 1 Leva erg. Dritta cod. DO535199901 N° 1 Erg. Straight lever cod. DO535199901	
DO535199901R20	Kit N°20 Leve erg. Dritte cod. DO535199901 Kit N°20 Erg. Straight levers cod. DO535199901	

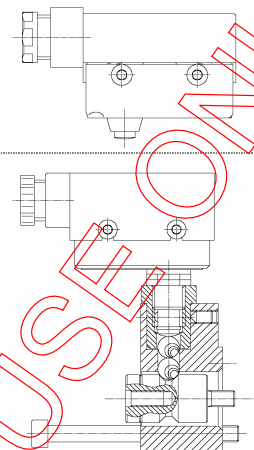
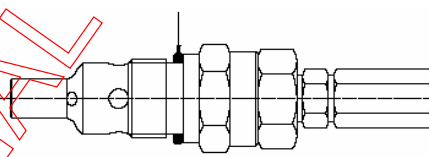
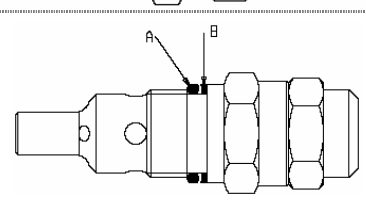
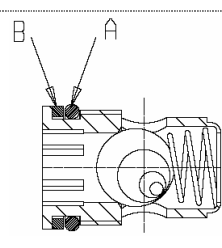
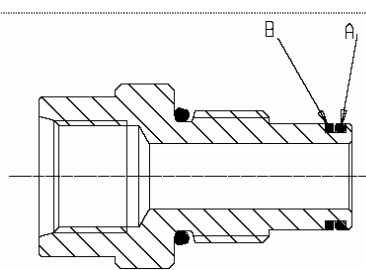
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DO535199902R20	Kit N°20 Leve erg. Piegate 15° cod. DO535199902 Kit N°20 Erg. 15° bent levers cod. DO535199902	
DO535199903R	N° 1 Leva erg. Piegata 30° cod. DO535199903 N° 1 Erg. 30° bent lever cod. DO535199903	
DO535199903R20	Kit N°20 Leve erg. Piegate 30° cod. DO535199903 Kit N°20 Erg. 30° bent levers cod. DO535199903	
DO54040002R10	N° 1 Leva intenzionale con viti cod. DO54040002 N° 1 Intentional lever with screws cod. DO54040002	
DO54040002R10	Kit N°10 Leve intenzionali con viti cod. DO54040002 Kit N°10 Intentional levers with screws cod. DO54040002	
DO54040003R	N° 1 Leva intenzionale con viti cod. DO54040003 N° 1 Intentional lever with screws cod. DO54040003	
DO54040003R10	Kit N°10 Leve intenzionali con viti cod. DO54040003 Kit N°10 Intentional levers with screws cod. DO54040003	
DO28602001R	N° 1 Soffietto per leva standard N° 1 Hood for standard lever	
DO28602001R20	Kit N° 20 Soffietti per leva standard Kit N° 20 Hoods for standard lever	
DO28602002R	N° 1 Soffietto per leva ergonomia N° 1 Hood for ergonomic lever	
DO28602002R20	Kit N° 20 Soffietti per leva ergonomia Kit N° 20 Hoods for ergonomic lever	
DO55514008R	N° 1 Manipolatore cod. DO55514008 (da montare) N° 1 Joystick cod. DO55514008 (to assemble)	
DO55514008R05	Kit N°5 Manipolatori cod. DO55514008 (da montare) Kit N°5 Joysticks cod. DO55514008 (to assemble)	

DOWUS00140000R	N° 1 VNR cod. DOWUS00140000	
DOWUS00140000R10	Kit N°10 VNR cod. DOWUS00140000	
DO2921XX01000R	N° 1 Spola d. 18 mm DN c.1 Entrata sinistra N° 1 Spool d.18 mm DN c.1 left inlet	
DO2921XX01000R05	Kit N°5 Spole d. 18 mm DN c.1 Entrata sinistra Kit N°5 Spools d.18 mm DN c.1 left inlet	
DO2921XX01003R	N° 1 Spola d. 18 mm DN c.1 Entrata destra Nà 1 Spool d.18 mm DN c.1 right inlet	
DO2921XX01003R05	Kit N°5 Spole d. 18 mm DN c.1 Entrata destra Kit N°5 Spools d.18 mm DN c.1 right inlet	
DO2921XX03000R	N° 1 Spola d. 18 mm DN c.3 Entrata sinistra N° 1 Spool d.18 mm DN c.3 left inlet	
DO2921XX03000R05	Kit N°5 Spole d. 18 mm DN c.3 Entrata sinistra Kit N°5 Spools d.18 mm DN c.3 left inlet	
DO2921XX03003R	N° 1 Spola d. 18 mm DN c.3 Entrata destra N° 1 Spool d.18 mm DN c.3 right inlet	
DO2921XX03003R05	Kit N°5 Spole d. 18 mm DN c.3 Entrata destra Kit N°5 Spools d.18 mm DN c.3 right inlet	
DO2921XX04000R0	N° 1 Spola d. 18 mm DN c.4 Entrata sinistra N° 1 Spool d.18 mm DN c.4 left inlet	
DO2921XX04000R05	Kit N°5 Spole d. 18 mm DN c.4 Entrata sinistra Kit N°5 Spools d.18 mm DN c.4 left inlet	
DO2921XX04003R	N° 1 Spola d. 18 mm DN c.4 Entrata destra N° 1 Spool d.18 mm DN c.4 right inlet	
DO2921XX04003R05	Kit N°5 Spole d. 18 mm DN c.4 Entrata destra Kit N°5 Spools d.18 mm DN c.4 right inlet	

DO2921XX05000R	N° 1 Spola d. 18 mm DN c.5 Entrata sinistra N° 1 Spool d.18 mm DN c.5 left inlet	
DO2921XX05000R05	Kit N°5 Spole d. 18 mm DN c.5 Entrata sinistra Kit N°5 Spools d.18 mm DN c.5 left inlet	
DO2921XX05003R	N° 1 Spola d. 18 mm DN c.5 entr. Dx N° 1 Spool d.18 mm DN c.5 right inlet	
DO2921XX05003R05	Kit N°5 Spole d. 18 mm DN c.5 entr. Dx Kit N°5 Spools d.18 mm DN c.5 right inlet	
DO2921XX70001R	N° 1 Spola d. 18 mm DN c.70 entr. Sx N° 1 Spool d.18 mm DN c.70 left inlet	
DO2921XX70001R05	Kit N°5 Spole d. 18 mm DN c.70 entr. Sx Kit N°5 Spools d.18 mm DN c.70 left inlet	
DO580550A39R	Kit N°1 Posizionatore cod. DO580550A39 Kit N°1 spool control cod. DO580550A39	
DO580550A39R10	Kit N°10 Posizionatori cod. DO580550A39 Kit N°10 spool controls cod. DO580550A39	
DO580550B07R	Kit N°1 Posizionatore cod. DO580550B07 Kit N°1 Spool control cod. DO580550B07	
DO580550B07R10	Kit N°10 Posizionatori cod. DO580550B07 Kit N°10 Spool controls cod. DO580550B07	
DO580550C08R	Kit N°1 Posizionatore cod. DO580550C08 Kit N°1 Spool control cod. DO580550C08	
DO580550C08R10	Kit N°10 Posizionatori cod. DO580550C08 Kit N°10 Spool controls cod. DO580550C08	

DO580550D01R10	Kit N°1 Posizionatore cod. DO580550D01 Kit N°1 Spool control cod. DO580550D01	
DO580550D01R10	Kit N°10 Posizionatori cod. DO580550D01 Kit N°10 Spool controls cod. DO580550D01	
DO580550N20R	Kit N°1 Posizionatore cod. DO580550N20 Kit N°1 Spool control cod. DO580550N20	
DO580550N20R10	Kit N°10 Posizionatori cod. DO580550N20 Kit N°10 Spool controls cod. DO580550N20	
DOWPD02M20080R	N° 1 Cartuccia VMP dir. A grano X 80 bar N° 1 Dir. Cartridge VMP grain X 80 bar	
DOWPD02M20080R05	Kit N°5 Cartucce VMP dir. A grano X 80 bar Kit N°5 Dir. Cartridges VMP grain X 80 bar	
DOWPD02M20130R	N° 1 Cartuccia VMP dir. A grano Y 130 bar N° 1 Dir. Cartridge VMP grain Y 130 bar	
DOWPD02M20130R05	Kit N°5 Cartucce VMP dir. A grano Y 130 bar Kit N°5 Dir. Cartridges VMP grain Y 130 bar	
DOWPD02M20180R	N° 1 Cartuccia VMP dir. A grano Z 180 bar N° 1 Dir. Cartridge VMP grain Z 180 bar	
DOWPD02M20180R05	Kit N°5 Cartucce VMP dir. A grano Z 180 bar Kit N°5 Dir. Cartridges VMP grain Z 180 bar	
DOWPD02M20210APR	N° 1 Cartuccia VMP dir. A grano K 210 bar N° 1 Dir. Cartridge VMP grain K 210 bar	
DOWPD02M20210APR05	Kit N°5 Cartucce VMP dir. A grano K 210 bar Kit N°5 Dir. Cartridges VMP grain K 210 bar	

DOVBHLP038080R	N° 1 VL tar. 80 bar 3/8G N° 1 VL set. 80 bar 3/8G	
DOVBHLP038080R10	Kit N°10 VL tar. 80 bar 3/8G Kit N°10 VL set. 80 bar 3/8G	
DOVBHLP038130R	N° 1 VL tar. 130 bar 3/8G N° 1 VL set. 130 bar 3/8G	
DOVBHLP038130R10	Kit N°10 VL tar. 130 bar 3/8G Kit N°10 VL set. 130 bar 3/8G	
DOVBHLP038180R	N° 1 VL tar. 180 bar 3/8G N° 1 VL set. 180 bar 3/8G	
DOVBHLP038180R10	Kit N°10 VL tar. 180 bar 3/8G Kit N°10 VL set. 180 bar 3/8G	
DOWPD12M20080R	N° 1 VL sovraubicata tar. 80 N° 1 VL upper located set. 80 bar	
DOWPD12M20080R10	Kit N°10 VL sovraubicata tar. 80 Kit N°10 VL upper located set. 80 bar	
DOWPD12M20130R	N° 1 VL sovraubicata tar. 130 N° 1 VL upper located set. 130 bar	
DOWPD12M20130R10	Kit N°10 VL sovraubicata tar. 130 Kit N°10 VL upper located set. 130 bar	
DOWPD12M20180R	N° 1 VL sovraubicata tar. 180 N° 1 VL upper located set. 180 bar	
DOWPD12M20180R10	Kit N°10 VL sovraubicata tar. 180 Kit N°10 VL upper located set. 180 bar	

DO56102R	N° 1 Micro cod. DO56102	
DO56102R10	N° 1 Micro cod. DO56102	
DO56112R	N° 1 Micro per singola sezione cod. DO56112 N° 1 Micro for single section cod. DO56112	
DO56112R10	Kit N°10 Micro per singola sezione cod. DO56112 Kit N°10 Micro for single section cod. DO56112	
DO526A05NN001R	Kit N°50 OR cod. DO350B17086NBR90 per VMP Kit N°50 OR cod. DO350B17086NBR90 for VMP	
DO526B05NN001R	Kit N°50 BR cod. DO315617 per VMP Kit N°50 BR cod. DO315617 for VMP	
DO526C06NN001R	Kit N°50 OR DO350B17086NBR90 (rif. A) + N°50 BR DO315617 (rif. B) per VL sovraubicata DN Kit N°50 OR DO350B17086NBR90 (ref. A) + N°50 BR DO315617 (ref. B) for VL upper located for DN	
DO526C10NN001R	Kit N°50 OR DO350A11011NBR90 (rif. A) + N°50 BR DO315806 (rif. B) per VNR cod. DOWUS00140000 Kit N°50 OR DO350A11011NBR90 (ref. A) + N°50 BR DO315806 (ref. B) for VNR cod. DOWUS00140000	
DO526C11NN001R	Kit N°50 OR DO350A14000NBR70 (rif. A) + N°50 BR DO3188015 (rif. B) per kit C.O. DN Kit N°50 OR DO350A14000NBR70 (ref. A) + N°50 BR DO3188015 (ref. B) for DN C.O. kit	



DO531S3403R	N° 1 Kit C.O. DO531S3403 N° 1 C.O. kit DO531S3403	
DO531S3403R05	Kit N°5 Kit C.O. DO531S3403 Kit N°5 C.O. kit DO531S3403	
DO53101202R	N° 1 Kit C.O. DO53101202 N° 1 C.O. kit DO53101202	
DO53101202R05	Kit N°5 Kit C.O. DO53101202 Kit N°5 C.O. kit DO53101202	
DO53118002R	N° 1 Kit C.O. DO53118002 N° 1 C.O. kit DO53118002	
DO53118002R05	Kit N°5 Kit C.O. DO53118002 Kit N°5 C.O. kit DO53118002	
DO526A03NN001R	Kit N°50 OR cod. DO350B17086NBR60 per spole D. 18 mm Kit N°50 OR cod. DO350B17086NBR60 for D. 18 mm spools	-