PROGRESSIVE SYSTEM
PROGRESSIV SYSTEM

PROGRESSIVVERTEILER

BESCHREIBUNG

Ilclube vereinigt die Verteilung und Dosierung des Schmiermittels in einer progressiven Bewegung von Kolben, die nach einander alle mittels eines einzigen Versorgungsstroms gesteuert werden.
Dieses System eignet sich für die Dosierung von Öl und Schmierfett für eine oder mehrere Schmierstellen. Jeder Kolben ist in Serie mit dem vorigen montiert. Sollte einer der Kolben blockieren, so hört die Verteilung auf und blockiert das ganze System. Dasselbe passiert im Falle einer externen Verstopfung. Zur Überwachung des Betriebes des ganzen Systems genügt es auf nur einem Kolben ein visuelles oder elektrisches Kontrolleelement zu montieren. Bei den Systemen mit Schmiermittelverlust, die intermittierend funktionieren, gleicht die Fördermenge dem Ergebnis der verschiedenen Kolben. In diesen Systemen die Fördermenge in einer gewissen Zeit ist nicht so genau. Trotzdem sollte Überdruck so viel wie möglich verhindert werden. Der Hauptverteiler kann unterstehende Verteiler versorgen und diese können wiederum unterstehende Verteiler versorgen. Theoretisch kann man unendlich weitergehen, aber aus Gründen von Kompression und Ventilation der Schmiermittel empfehlen wir nicht mehr als 2 Verteiler nach dem Hauptverteiler zu montieren, denn bei mehr als 2 Verteilern kann der Betrieb unregelmäßig werden, vor allem bei Fett mit einer niedrigen Viskosität.

Ilclube hat drei Progressivverteilertypen: Monoblock **DPL** in Aluminium oder rostfrei Stahl, **DMX** und **DPX** Scheibenverteiler in Stahl verzinkt.

- *DMX: 0,04 – 0,65 cc/ per Impuls und Ausgang*
- *DPX: 0,025 – 0,105 cc/ per Impuls und Ausgang*
- *DPL: 0,10 – 0,20 cc/ per Impuls und Ausgang*

HAUPTVORTEILE DES ILCOLUBE PROGRESSIVSYSTEMS

GEWÄHRLEISTET POSITIVE ABGABE VON ABGEMESSENER MENGE SCHMIERSTOFF

ENTWICKELT FÜR DIE ANWENDUNG MIT EINER SYSTEMÜBERWACHUNGSFUNKTION

LANGE STANDZEIT VERSICHERT DURCH DIE WAHL VON QUALITÄTSVOLLEN MATERIALEN UND EINER GENAUEN QUALITÄTSKONTROLLE

VERFÖGBAR MIT VERSCHIEDENEN KONTROLLSYSTEMEN

DURCH DAS AUSGEBREITETE ANGEBOT GIBT ES VIELE MÖGLICHKEITEN

PROGRESSIVE DIVIDERS

DESCRIPTION

***Ilclube** is the lubrication system which identifies distribution and dosing with a progressive movement of pistons that are controlled one by the other in an interdependent sequence.
This is obtained by only one delivery flow. This system is highly qualified for dosing oil and grease to one or more journals or bearing. Each piston is in series with the component before or the one after it and therefore malfunctioning of one of these causes stopping of the sequence and consequently inhibiting of the system. This inhibition occurs also during any external clogging or when outlet not being utilized anymore might be plugged. The application of only one component, which is provided with visual or electrical control, is sufficient for an efficient and complete checking of the entire distribution. In system with off-flowing oil, which operates intermittently, the pump discharge is determined by the sum of the deliveries of all dosing elements. In circulation system, the quantity of delivery during a certain time is less strict. However in this case any overpressure, which is not justified for the pumps and components, shall be avoided. The rate of flow for the pump is fractionable when the doser blocks are arranged in cascade. Through a doser block, the so-called master**,** it is possible to supply another block of dosers by uniting one or more outlets and from there another and from there another. Theoretically this may be continued infinitely more, however for reasons of compressibility and aerations of lubricants, is not suitable to have more than two cascades after the master, since beyond this there might be irregular running especially with grease as lubricant or at minimum rates of flow.*

***Ilclube** system has three progressive dividers type: monoblock **DPL** in alloy or stainless steel, **DMX** and **DPX** are sector dividers in steel.*

- *DMX: 0,04 – 0,65 cc/ per impulse and outlet*
- *DPX: 0,025 – 0,105 cc/ per impulse and outlet*
- *DPL: 0,10 – 0,20 cc/ per impulse and outlet*

PRINCIPAL ADVANTAGES FROM THE USE OF THE ILCOLUBE PROGRESSIVE SYSTEM

GUARANTEES POSITIVE DISCHARGE OF MEASURED QUANTITY OF LUBRICANT

DESIGNED FOR USE WITH A SYSTEM MONITORING FUNCTION

LONG OPERATIONAL LIFE ASSURED BY CAREFUL SELECTION OF HIGH GRADE MATERIAL AND STRICT QUALITY CONTROL

AVAILABLE WITH INDICATORS AND/OR CONTACT PLUGS WHICH GIVE CONFIRMATION OF OPERATION OR FAULT WARNING

LARGE RANGE AND COMBINATION OF SIZES GIVES FLEXIBILITY TO THE SYSTEM DESIGNER

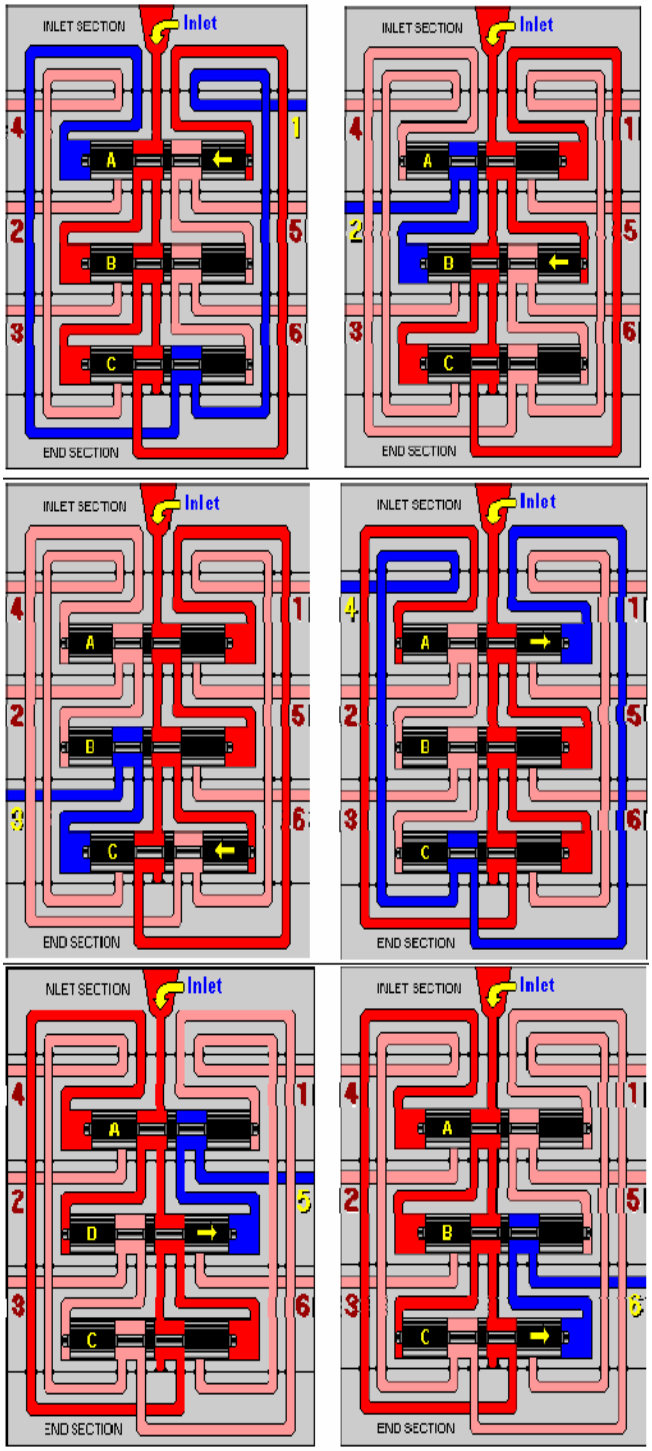
PROGRESSIVE DIVIDER DPX
OPERATING SEQUENCE

1. Supply pressure through internal passages moves piston “a” left while holding pistons “b” and “c” fixed. A measured dose of lube discharges from port 4.

2. Piston “a” bottoms. It opens internal passages directing supply pressure to right end of piston “b”. Lube discharges from port 1.

3. Piston “b” bottoms. It opens internal passages directing supply pressure to right end of piston “c”. Lube discharges from port 2.

4. Piston “c” bottoms. It opens internal passages directing supply pressure to left end of piston “a” which returns on its initial position as lube discharges from port 3.



PROGRESSIVE DIVIDERS DPX OUTLETS USE

Each divider piston is arranged in order to feed 1 or 2 outlets. When the separation dowel is inserted (see Fig.1), the discharge is carried out in both sides. When the dowel is not inserted (see Fig. 2), the double discharge is carried out in one of the two available outlets. If it is necessary to use one outlet extract the sphere (A92.087015), besides the separation dowel (A92.089002) and insert a plug (A73.087010 + A73.127039) in the outlet no more used. The dividers are supplied with the separation dowel inserted and the two outlets open as standard.

IMPORTANT: IT IS NOT POSSIBLE TO CLOSE BOTH THE OUTLETS OF A SAME PISTON. ALL THE WORK HAVE TO BE MADE IN A CLEAN ENVIRONMENT

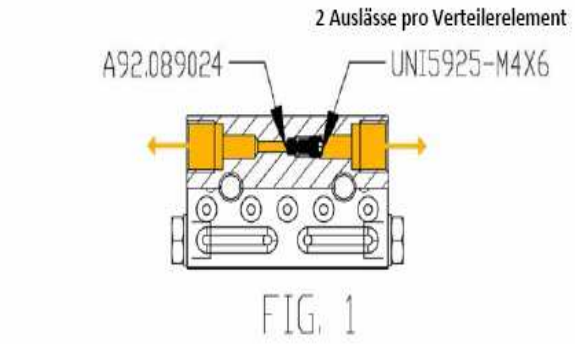


FIG. 1

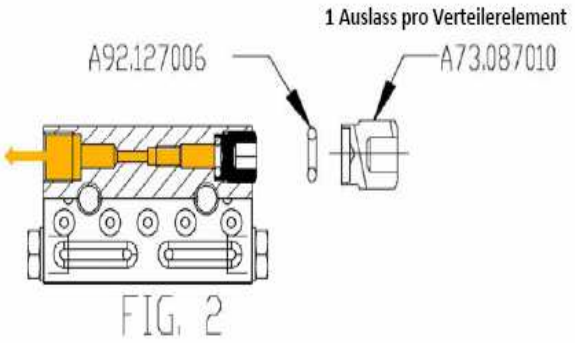
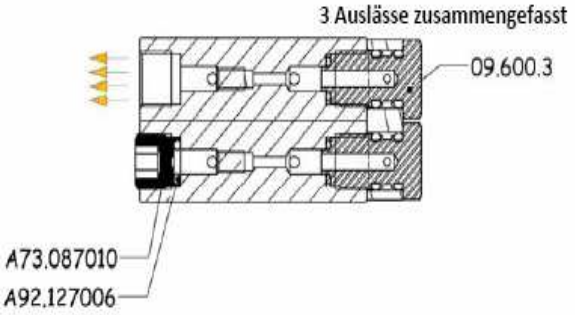
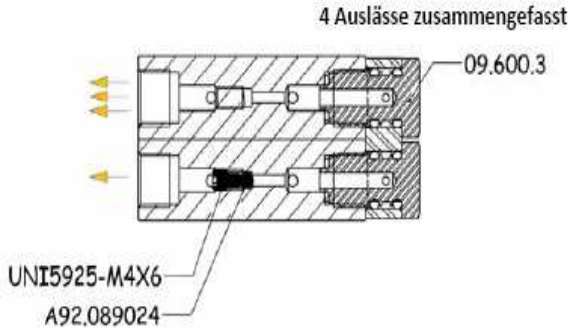


FIG. 2





PROGRESSIVE DIVIDER DPX

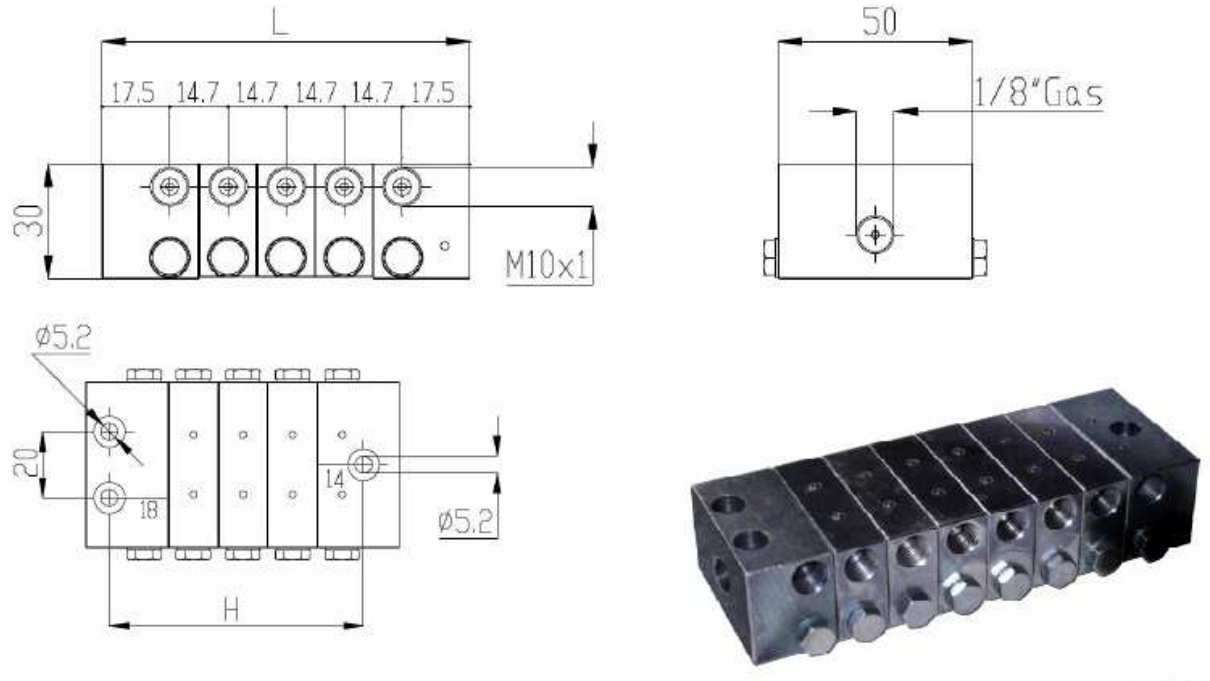
Progressive dividers care for distribution and dosing with a progressive movement of pistons that are controlled one by the other in an interdependent sequence.
This is obtained by only one delivery flow. This system is highly qualified for dosing oil and grease to one or more journals or bearing. Each piston is in series with the component before or the one after it and therefore malfunctioning of one of these causes stopping of the sequence and consequently inhibiting of the system. This inhibition occurs also during any external clogging or when outlet not being utilized anymore might be plugged. The application of only one component, which is provided with visual or electrical control, is sufficient for an efficient and complete checking of the entire distribution. In system with off-flowing oil, which operates intermittently, the pump discharge is determined by the sum of the deliveries of all dosing elements. In circulation system, the quantity of delivery during a certain time is less strict. However in this case any overpressure, which is not justified for the pumps and components, shall be avoided. The rate of flow for the pump is fractionable when the doser blocks are arranged in cascade. Through a doser block, the so-called master**,** it is possible to supply another block of dosers by uniting one or more outlets and from there another and from there another. Theoretically this may be continued infinitely more, however for reasons of compressibility and aerations of lubricants, is not suitable to have more than two cascades after the master, since beyond this there might be irregular running especially with grease as lubricant or at minimum rates of flow.

TECHNICAL DETAILS

Working pressure	= FROM 15 BAR TO 300 BAR
Temperature range	= FROM -20°C TO 100 °C
Lubricants	= OIL – SOFT GREASE – GREASE

Codes for order

Code		No. of outlets	H	L	Code		No. of outlets	H	L
2.1N.03	DPX-3	3	46.7	64.4	2.1N.08	DPX-8	8	120.2	137.9
2.1N.04	DPX-4	4	61.4	79.1	2.1N.09	DPX-9	9	134.9	152.6
2.1N.05	DPX-5	5	76.1	93.8	2.1N.10	DPX-10	10	149.6	167.3
2.1N.06	DPX-6	6	90.8	108.5	2.1N.11	DPX-11	11	164.3	182
2.1N.07	DPX-7	7	105.5	123.2	2.1N.12	DPX-11	12	179	196.7



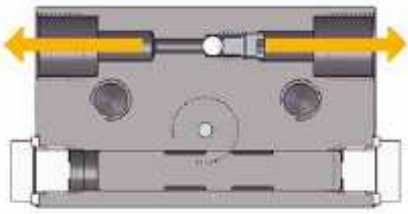
Subject to change

PROGRESSIVE DIVIDER DPX ELEMENTS

DPX progressive distributors consist of an inlet valve section, valve section and an outlet valve section

2 outlets per divider element

Discharge	Inlet valve section	Valve section	Outlet valve section
25 mm³/cycle	2.A.025.D.1N	2.B.025.D.1N	2.C.025.D.1N
45 mm³/cycle	2.A.045.D.1N	2.B.045.D.1N	2.C.045.D.1N
75 mm³/cycle	2.A.075.D.1N	2.B.075.D.1N	2.C.075.D.1N
105 mm³/cycle	2.A.105.D.1N	2.B.105.D.1N	2.C.105.D.1N

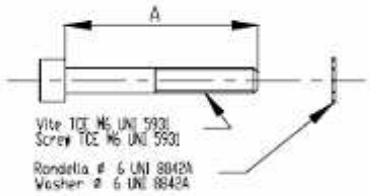


1 outlet per divider element

Discharge	Inlet valve section	Valve section	Outlet valve section
50 mm³	2.A.025.S.1N	2.B.025.S.1N	2.C.025.S.1N
90 mm³	2.A.045.S.1N	2.B.045.S.1N	2.C.045.S.1N
150 mm³	2.A.075.S.1N	2.B.075.S.1N	2.C.075.S.1N
210 mm³	2.A.105.S.1N	2.B.105.S.1N	2.C.105.S.1N

Tie rods

No. of elements	A (mm)	Code
3	45	2.TR.03
4	60	2.TR.04
5	75	2.TR.05
6	90	2.TR.06
7	105	2.TR.07
8	120	2.TR.08
9	135	2.TR.09
10	150	2.TR.10
11	165	2.TR.11
12	180	2.TR.12

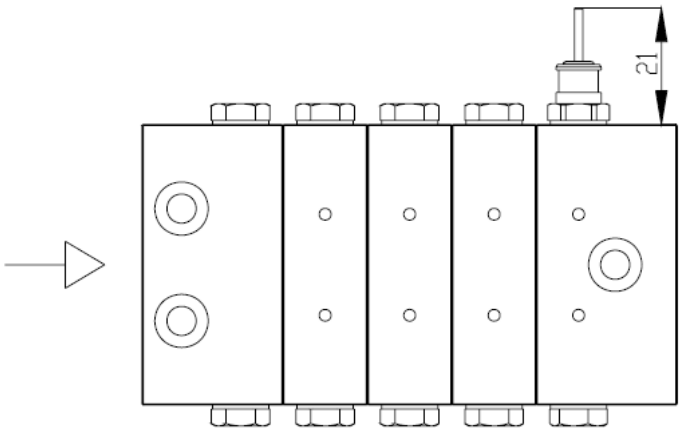


Every divider uses No. 2 as tie rod!

DPX PROGRESSIVE DIVIDER WITH VISUAL INDICATOR

CODES TO ORDER COMPLETE DISTRIBUTORS WITH VISUAL INDICATOR

CODICE *CODE*	SIGLA *TYPE*	NUMERO DI PISTONI *PISTON NUMBERS*	CODICE *CODE*	SIGLA *TYPE*	NUMERO DI PISTONI *PISTON NUMBERS*
2.2V.03	DPX-3 V	3	2.2V.08	DPX-8 V	8
2.2V.04	DPX-4 V	4	2.2V.09	DPX-9 V	9
2.2V.05	DPX-5 V	5	2.2V.10	DPX-10 V	10
2.2V.06	DPX-6 V	6	2.2V.11	DPX-11 V	11
2.2V.07	DPX-7 V	7	2.2V.12	DPX-12 V	12

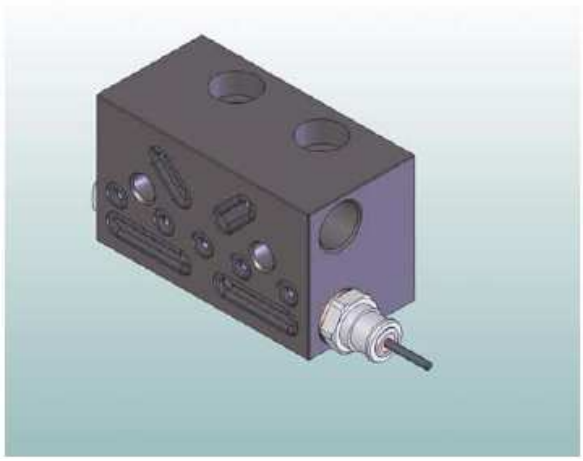


CODES TO ORDER SINGLE BLOCKS WITH VISUAL INDICATOR
2 OUTLETS

ELEMENTO INTERMEDIO *VALVE SECTION*	ELEMENTO FINALE *END VALVE SECTION*
2.B.075.D.2V	2.C.075.D.2V
2.B.105.D.2V	2.C.105.D.2V

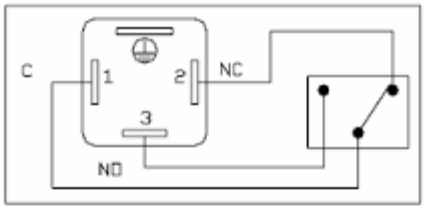
CODES TO ORDER SINGE BLOCKS WITH VISUAL INDICATOR
1 OUTLET

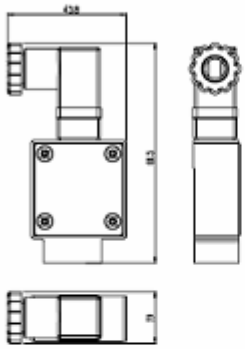
ELEMENTO INTERMEDIO *VALVE SECTION*	ELEMENTO FINALE *END VALVE SECTION*
2.B.075.S.2V	2.C.075.S.2V
2.B.105.S.2V	2.C.105.S.2V



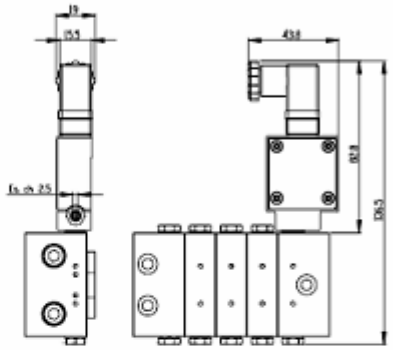
DPX PROGRESSIVE DIVIDER
WITH MICROSWITCH
CODE. 49.050.2

Voltage	5A 250 V AC / 0.4A 125 V DC
Cable	3P
Isolation	IP65
Temp. range	From -25°C to 80°C





Code	Article	Outlets
2.4M.03	DPX-3 M	3
2.4M.04	DPX-4 M	4
2.4M.05	DPX-5 M	5
2.4M.06	DPX-6 M	6
2.4M.07	DPX-7 M	7
2.4M.08	DPX- 8 M	8
2.4M.09	DPX- 9 M	9
2.4M.10	DPX-10 M	10
2.4M.11	DPX-11 M	11
2.4M.12	DPX-12 M	12

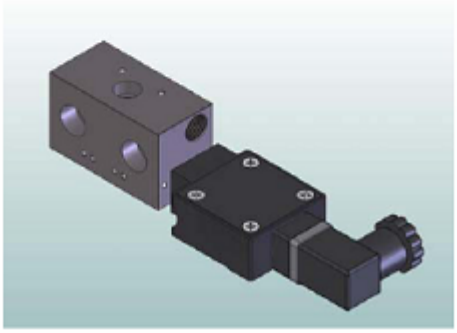


2 OUTLETS PER DIVIDER

Discharge	Inlet section	Valve section	Outlet section
75 mm³/cycle	2.A.075.D.4M	2.B.075.D.4M	2.C.075.D.4M
105 mm³/cycle	2.A.105.D.4M	2.B.105.D.4M	2.C.105.D.4M

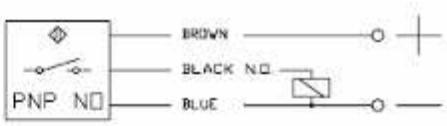
1 OUTLET PER DIVIDER

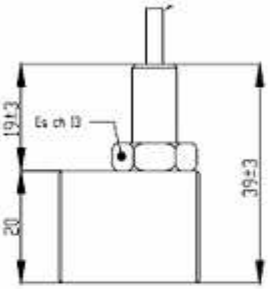
Discharge	Inlet section	Valve section	Outlet section
150 mm³	2.A.075.S.4M	2.B.075.S.4M	2.C.075.S.4M
210 mm³	2.A.105.S.4M	2.B.105.S.4M	2.C.105.S.4M



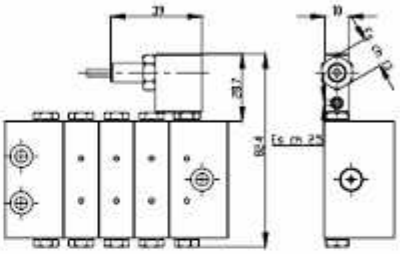
DPX PROGRESSIVE DIVIDER WITH PROXIMITY SWITCH CODE. 49.052.5 PNP

Voltage	6-30 V DC
Cable	3x0.14 mm² PVC
Isolation	IP-67
Temp. Range	From -25°C to 70°C



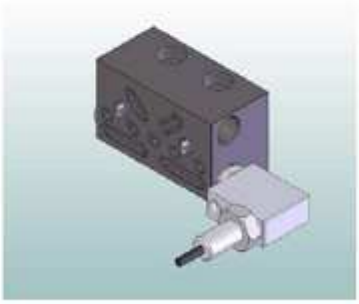


Code	Article	Outlets
2.3I.03	DPX-3 I	3
2.3I.04	DPX-4 I	4
2.3I.05	DPX-5 I	5
2.3I.06	DPX-6 I	6
2.3I.07	DPX-7 I	7
2.3I.08	DPX- 8 I	8
2.3I.09	DPX- 9 I	9
2.3I.10	DPX-10 I	10
2.3I.11	DPX-11 I	11
2.3I.12	DPX-12 I	12

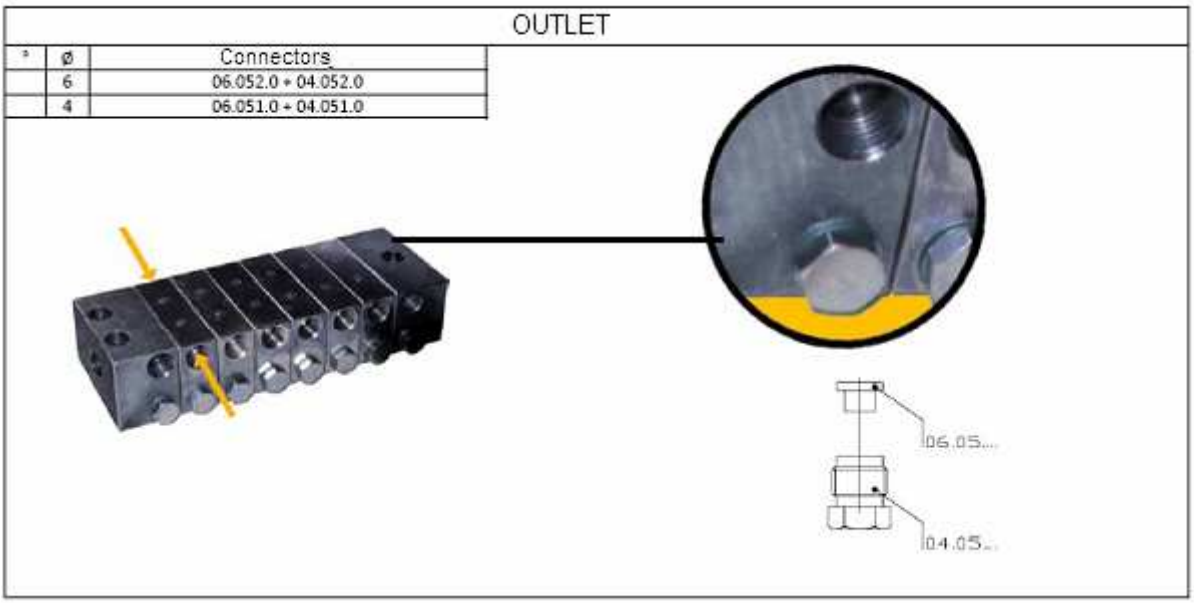


Discharge	Inlet section :	Valve section	Outlet section
75 mm³/Hub	2.A.075.D.3I	2.B.075.D.3I	2.C.075.D.3I
105 mm³/Hub	2.A.105.D.3I	2.B.105.D.3I	2.C.105.D.3I

Discharge	Inlet section :	Valve section	Outlet section
150 mm³	2.A.075.S.3I	2.B.075.S.3I	2.C.075.S.3I
210 mm³	2.A.105.S.3I	2.B.105.S.3I	2.C.105.S.3I



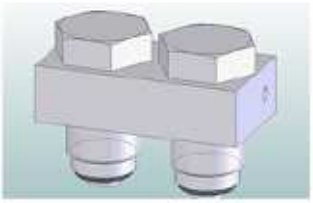
PROGRESSIVE DIVIDER DPX
CONNECTORS
PLUG-IN FOR NYLON TUBE

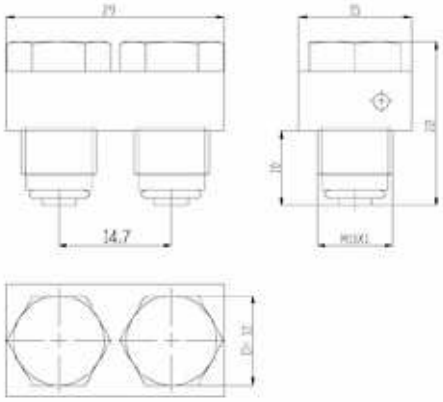


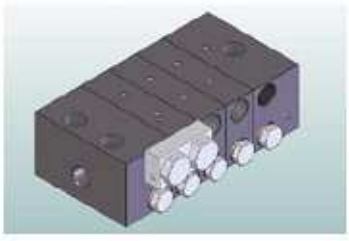
PROGRESSIVE DIVIDERS DPX
CONNECTING SEVERAL OUTLETS – BRIDGE CONNECTORS

If necessary, the fat yield for one point can be increased by using a bridge connector.

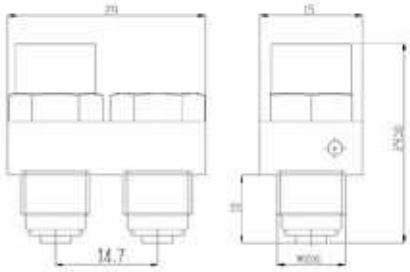
Bridge connector without outlet
Code: 09.600.3

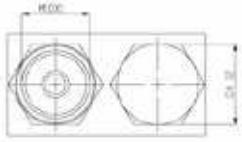


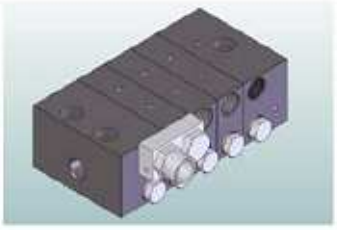




Bridge connector with outlet
Code: 09.600.4





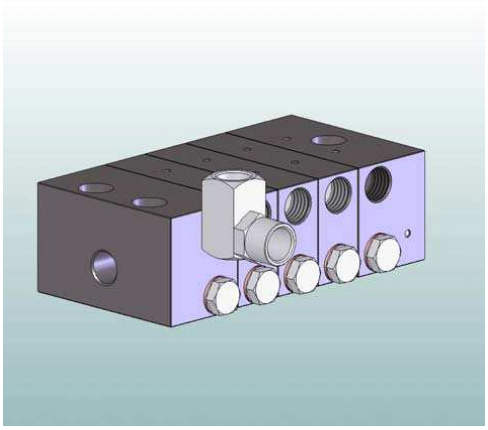


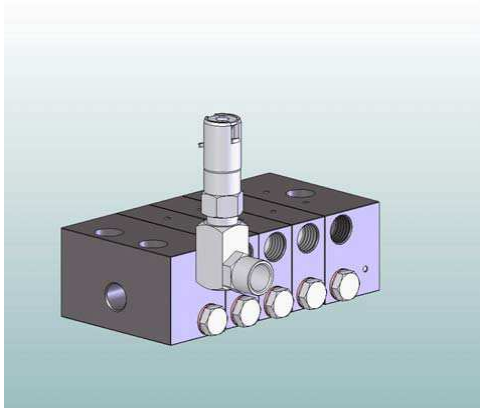
SYSTEME PROGRESSIF
PROGRESSIEF SYSTEEM

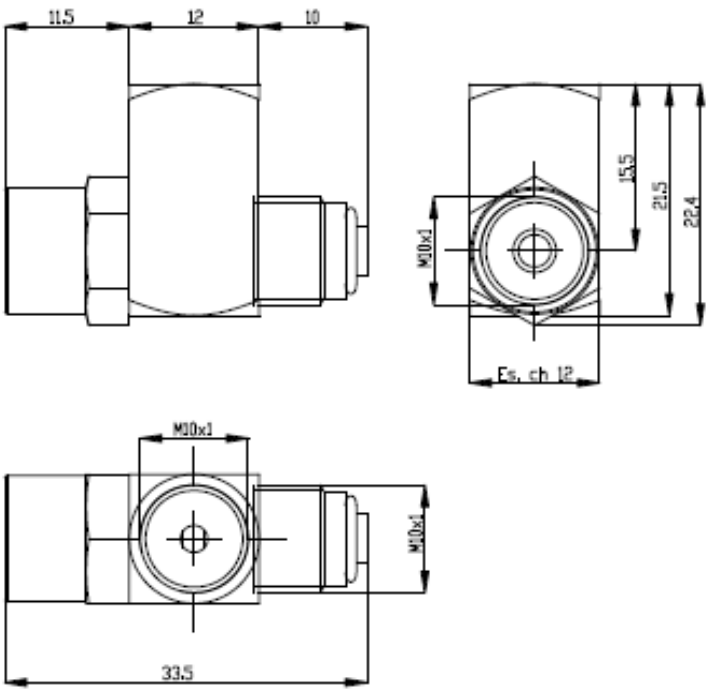
PROGRESSIVE DIVIDERS TYPE DPX

T-connector for mounting
Pressure gauge

Tis connector is used to mount the pressure gauge on the manifold.







SYSTEME PROGRESSIF
PROGRESSIEF SYSTEEM

PROGRESSIVE DIVIDERS DPX

Pressure indicator

Pressure indicators are used to control the pressure in the primary and secondary pipes. When there is overpressure, the pen moves out of the indicator and remains in this position until it is pushed back manually. We suggest to do this after discovering the cause and location of the error.

Code	Max. mass
09.710.2	50
09.710.3	75
09.710.4	100
09.710.5	150
09.710.6	200
09.710.7	250