VALVOLE CONTROLLO DI FLUSSO

FLOW CONTROL VALVES

STROMREGELVENTILE

VALVOLE A CARTUCCIA - CAVITÀ STANDARD
CARTRIDGE VALVES - STANDARD CAVITIES
CARTRIDGEVENTILE - STANDARDAUFNAHMEBOHRUNGEN

398SCV0033A00

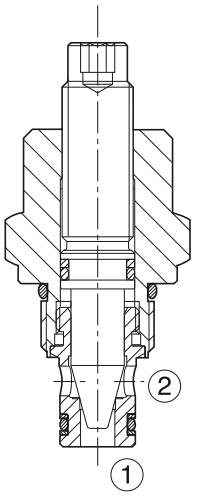
FCM 08220

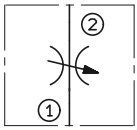
VALVOLA REGOLATRICE DI FLUSSO 2 VIE NON COMPENSATA
NEEDLE VALVE
2-WEGE-DROSSELVENTILE, NICHT KOMPENSIERT

La valvola permette di regolare l'apertura e il passaggio dell'olio tramite la vite di registro.

The valve allows the regulation of flow passage with a screw.

Bei diesem Ventil wird der Öffnungsquerschnitt für den Öldurchfluss mittels Verstellspindel eingestellt.



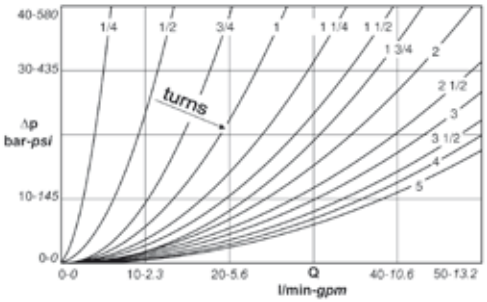


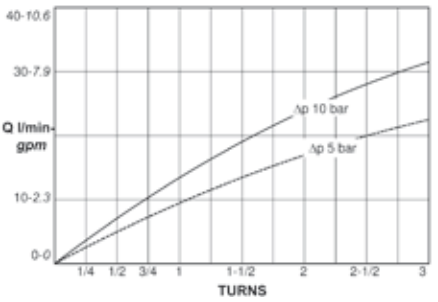
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**0 ÷ 30 (7.9)** **l/min (gpm)**
Trafile *Leakage* Leckage	**0.3 cc/min** **(50° C; 21 cSt; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS08201**

PRESTAZIONI
PERFORMANCE
LEISTUNG

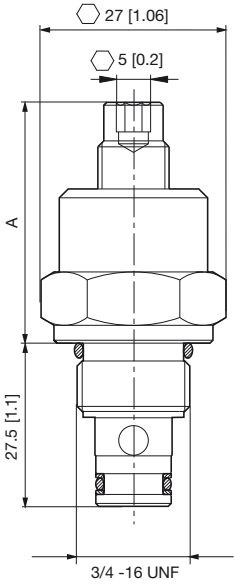
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt



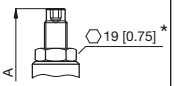
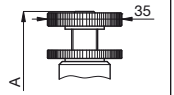
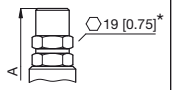


ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH08200**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 51.5 [2.03]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 51.5 [2.03]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 57.5 [2.26]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 56 [2.2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
27-30 Nm / 20-22 lb•ft

PESO
WEIGHT
GEWICHT
0.15 kg / 0.33 lb

ISTRUZIONI PER L'ORDINAZIONE ***ORDERING INSTRUCTIONS*** **BESTELLANLEITUNG**

FCM 08220 _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung
R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

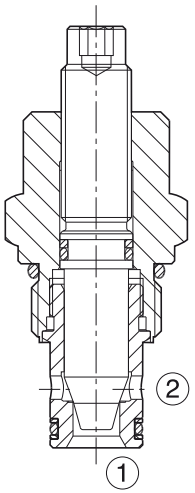
FCM 10220

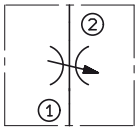
VALVOLA REGOLATRICE DI FLUSSO 2 VIE NON COMPENSATA
FLOW REGULATOR VALVE, 2 WAYS, PRESSURE COMPENSATED
2-WEGE-DROSSELVENTILE, NICHT KOMPENSIERT

La valvola permette di regolare l'apertura e il passaggio dell'olio tramite la vite di registro.

The valve allows the regulation of flow passage with a screw.

Bei diesem Ventil wird der Öffnungsquerschnitt für den Öldurchfluss mittels Verstellspindel eingestellt.



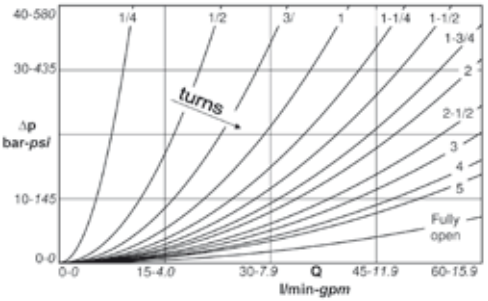


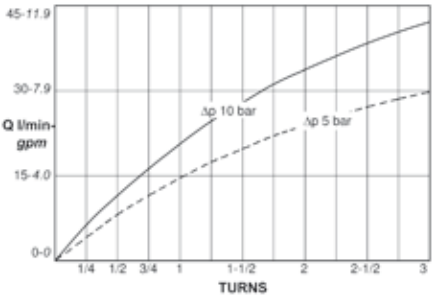
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625) bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**0 ÷ 60 (15.9) l/min (gpm)**
Trafile *Leakage* Leckage	**0.3 cc/min (50° C; 21 cSt; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10201**

PRESTAZIONI
PERFORMANCE
LEISTUNG

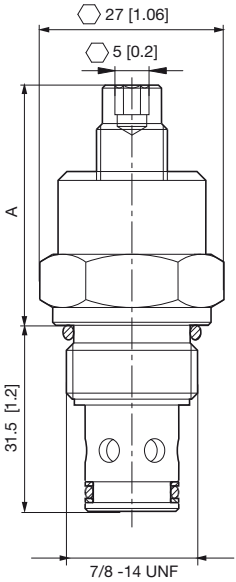
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt



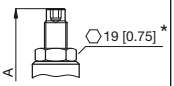
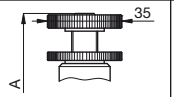
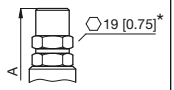


ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10200**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 51.5 [2.03]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 51.5 [2.03]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 57.5 [2.26]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 56 [2.2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
27-30 Nm / 20-22 lb•ft

PESO
WEIGHT
GEWICHT
0.17 kg / 0.37 lb

ISTRUZIONI PER L'ORDINAZIONE ***ORDERING INSTRUCTIONS*** **BESTELLANLEITUNG**

FCM 10220 _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung
R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp
N NBR
H HNBR

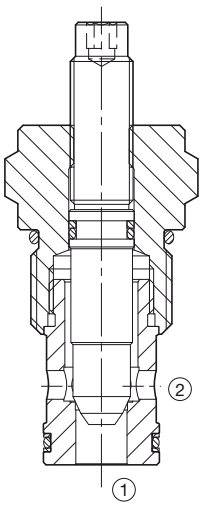
FCM 12220

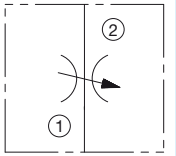
VALVOLA REGOLATRICE DI FLUSSO 2 VIE NON COMPENSATA
FLOW REGULATOR VALVE, 2 WAYS, PRESSURE COMPENSATED
2-WEGE-DROSSELVENTILE, NICHT KOMPENSIERT

La valvola permette di regolare l'apertura e il passaggio dell'olio tramite la vite di registro.

The valve allows the regulation of flow passage with a screw.

Bei diesem Ventil wird der Öffnungsquerschnitt für den Öldurchfluss mittels Verstellspindel eingestellt.



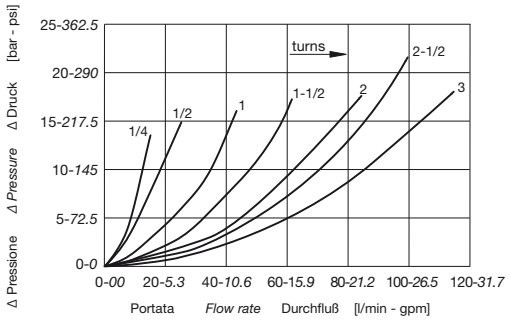


DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**0 ÷ 90 (23.8)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS12201**
Trafile *Leakage* Leckage	**3 cc/min** **(50° C; 21 cSt; 200 bar)**

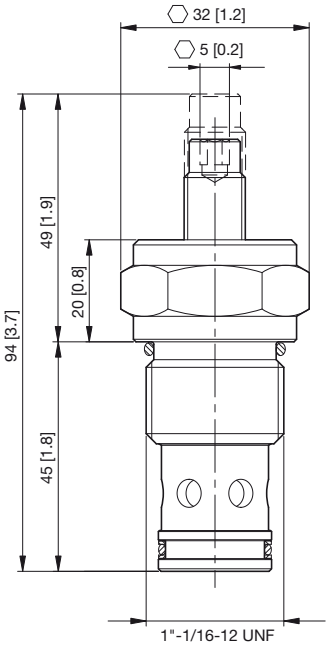
PRESTAZIONI
PERFORMANCE
LEISTUNG

Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

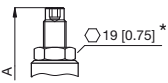
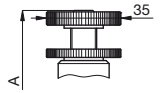
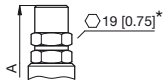


ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH12200**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 49 [1.9]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 49 [1.9]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 51 [2]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 50 [1.97]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
40-45 Nm / 30-33 lb•ft

PESO
WEIGHT
GEWICHT
0.25 kg / 0.55 lb

ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FCM 12220 _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R	Grano *Grain* Sechskant	**C**	Cappuccio *Cap* Kappe
V	Volantino *Handwheel* Handradeinstellung	**P**	Inviolabile *Non adjustable* Unveränderlich

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

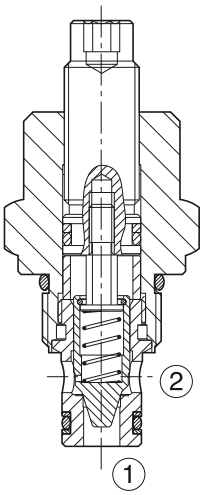
FCU 08220

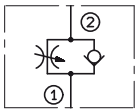
VALVOLA REGOLATRICE DI FLUSSO 2 VIE UNIDIREZIONALE
UNIDIRECTIONAL FLOW CONTROL VALVE
DROSSEL-RÜCKSCHLAGVENTIL

La valvola permette di regolare l'apertura e il passaggio dell'olio tramite la vite di registro nella direzione da 2 in 1. Nella direzione opposta il flusso è libero.

The valve allows the regulation of flow passage from 2 to 1 with a screw. In the opposite direction flow is free.

Bei diesem Ventil wird der Öffnungsquerschnitt für den Öldurchfluss mittels Verstellspindel eingestellt. In die andere Richtung ist der Durchfluß frei.

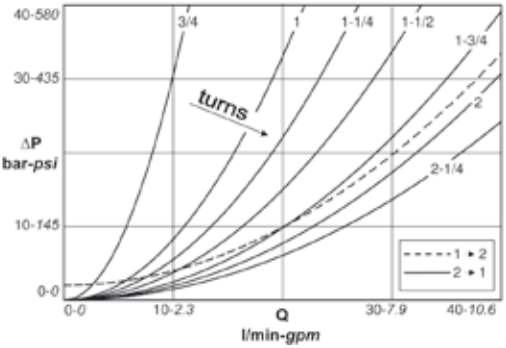




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**25 (6.6)** **l/min (gpm)**
Trafile *Leakage* Leckage	**0.3 cc/min** **(50° C; 21 cSt; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS08201**

PRESTAZIONI
PERFORMANCE
LEISTUNG

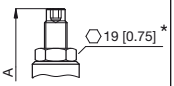
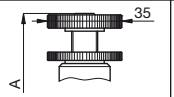
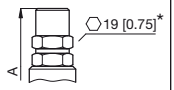


Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

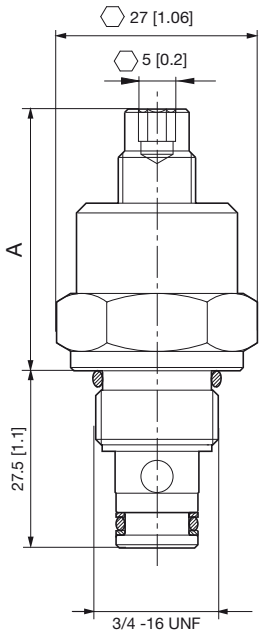
ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH08200**

TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 51.5 [2.03]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 51.5 [2.03]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 57.5 [2.26]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 56 [2.2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel



COPPIA
TORQUE
ANZUGSMOMENT
27-30 Nm / 20-22 lb•ft

PESO
WEIGHT
GEWICHT
0.15 kg / 0.33 lb

ISTRUZIONI PER L'ORDINAZIONE ***ORDERING INSTRUCTIONS*** **BESTELLANLEITUNG**

FCU 08220 _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

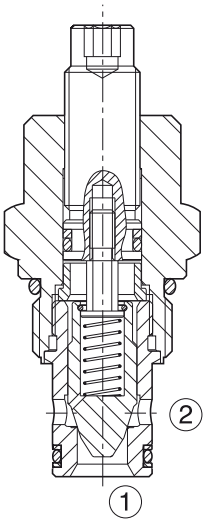
FCU 10220

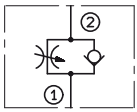
VALVOLA REGOLATRICE DI FLUSSO 2 VIE UNIDIREZIONALE
UNIDIRECTIONAL FLOW CONTROL VALVE
2-WEGE-DROSSELVENTILE, NICHT KOMPENSIERT

La valvola permette di regolare l'apertura e il passaggio dell'olio tramite la vite di registro nella direzione da 2 in 1. Nella direzione opposta il flusso è libero.

The valve allows the regulation of flow passage from 2 to 1 with a screw. In the opposite direction flow is free.

Bei diesem Ventil wird der Öffnungsquerschnitt für den Öldurchfluss mittels Verstellspindel eingestellt. In die andere Richtung ist der Durchfluß frei.

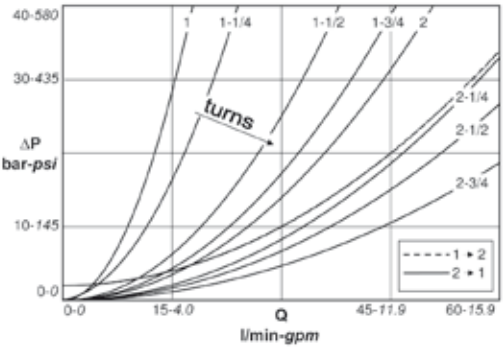




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**45 (11.9)** **l/min (gpm)**
Trafile *Leakage* Leckage	**0.3 cc/min** **(50° C; 21 cSt; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10201**

PRESTAZIONI
PERFORMANCE
LEISTUNG

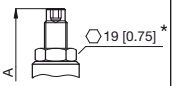
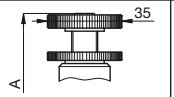
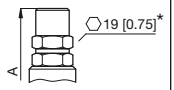


Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

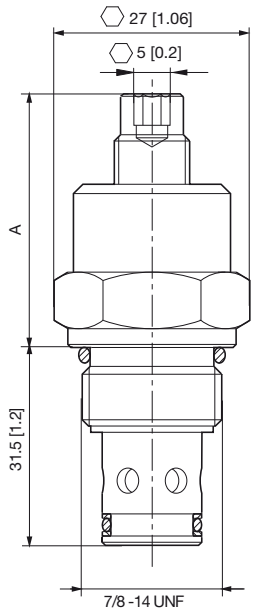
ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10200**

TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 51.5 [2.03]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 51.5 [2.03]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 57.5 [2.26]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 56 [2.2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel



COPPIA
TORQUE
ANZUGSMOMENT
27-30 Nm / 20-22 lb•ft

PESO
WEIGHT
GEWICHT
0.17 kg / 0.37 lb

ISTRUZIONI PER L'ORDINAZIONE ***ORDERING INSTRUCTIONS*** **BESTELLANLEITUNG**

FCU 10220 _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

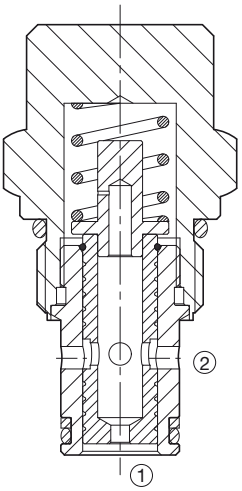
FSC 10220

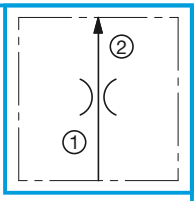
VALVOLA REGOLATRICE DI FLUSSO 2 VIE COMPENSATA
FLOW REGULATOR VALVE, 2 WAYS, PRESSURE COMPENSATED
2-WEGE-STROM-REGELVENTILE MIT DRUCKKOMPENSATION

La valvola mantiene costante il flusso in 2 indipendentemente dalle variazioni di pressione a valle. Il flusso è controllato dal foro calibrato e dalla differenza di pressione generata dalla molla.
Nel verso da 2 a 1 la valvola non è compensata.

The valve maintains a costant flow from port 1 to 2, regardless of load pressure variations. The flow depends upon control orifice and pressure drop from 1 to 2 (generated by spring).
Flow passage from 2 to 1 is non-compensated.

Dieses Ventil bewirkt einen konstanten Öldurchfluß von 1 nach 2 unabhängig von der Druckdifferenz.
Der Durchfluß wird von der kalibrierten Bohrung und von der Druckdifferenz über eine Feder geregelt.
Von 2 nach 1 ist das Ventil nicht kompensiert.

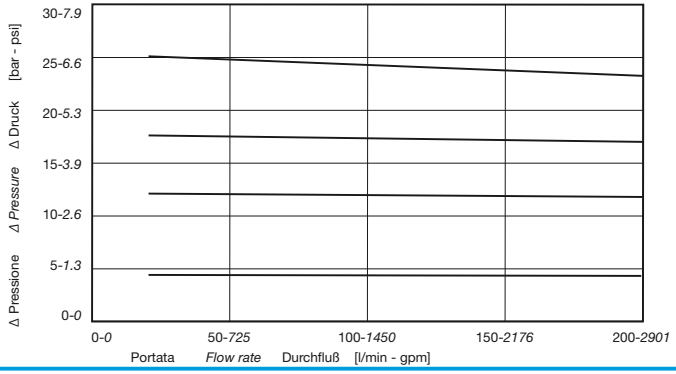




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**1 ÷ 20 (0.3 ÷ 5.3)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10201**

PRESTAZIONI
PERFORMANCE
LEISTUNG

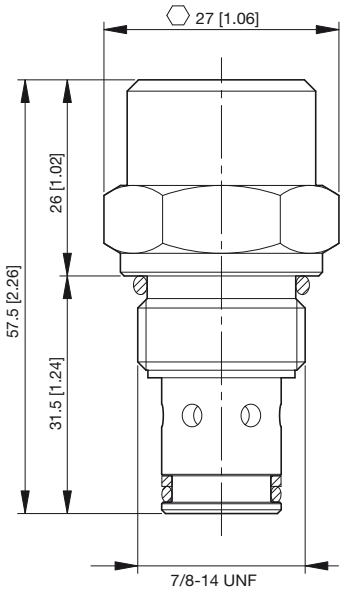


Parametri di prova
Testing parameters
Prüfparameter

50°C
21 cSt

ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10200**



COPPIA
TORQUE
ANZUGSMOMENT
35-38 Nm / 26-28 lb•ft

PESO
WEIGHT
GEWICHT
0.10 kg / 0.22 lb

ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FSC 10220 _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

04	3.8 ÷ 4.8	**17**	16 ÷ 19
07	7 ÷ 8	**24**	22 ÷ 26
11	10.5 ÷ 12.5		

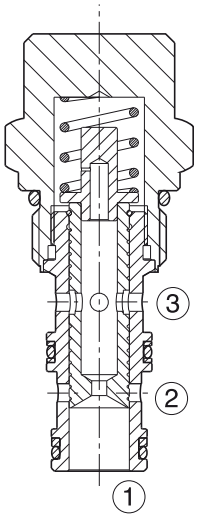
FSC 10320

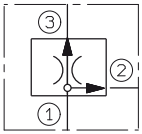
VALVOLA REGOLATRICE DI FLUSSO COMPENSATA A TARATURA FISSA
FLOW REGOLATOR PRESSURE COMPENSATED VALVE
3-WEGE-STROM-REGELVENTILE MIT DRUCKKOMPENSATION

Questa valvola mantiene costante il flusso in 3 indipendentemente dalle variazioni di pressione.
I campi di portata dipendono dalla dimensione del foro di controllo.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve maintains a constant flow from port 1 to 3, regardless of pressure variations.
Flow ranges are dependent upon the diameter of the control orifice.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil hält den Öldurchfluß konstant in 3, unabhängig von den Druckänderungen.
Die Durchflußbereiche hängen von der Bohrungsgröße ab.
Der Weg 2 sollte einen Gegendruck von 5 Bar haben, um eine bessere Regulierung zu ermöglichen.



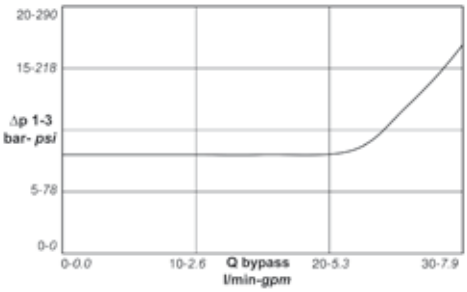


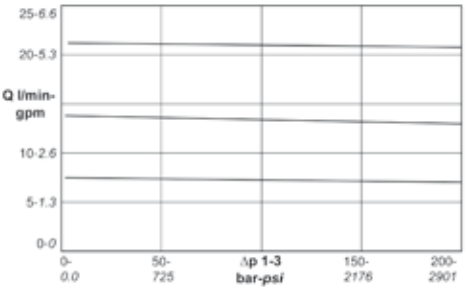
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**30 (7.9)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10301**

PRESTAZIONI
PERFORMANCE
LEISTUNG

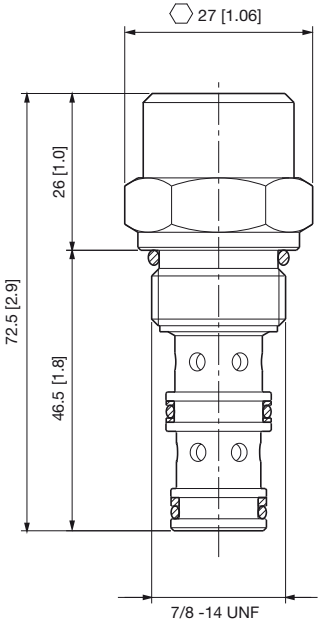
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt





ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10300**



COPPIA
TORQUE
ANZUGSMOMENT
35-38 Nm / 26-28 lb•ft

PESO
WEIGHT
GEWICHT
0.16 kg / 0.35 lb

ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FSC 10320 — _ — _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

01	1	**12**	12.9
03	3	**20**	17.5
06	4.3	**30**	27
08	7.5		

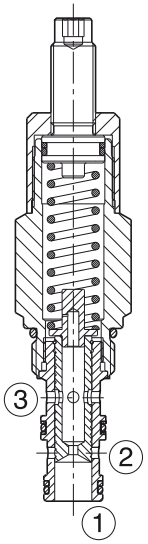
FSC 10321

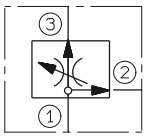
VALVOLA REGOLATRICE DI FLUSSO PRIORITARIA
PRIORITY FLOW REGOLATOR PRESSURE COMPENSATED VALVE
3-WEGE-STROM-REGELVENTILE MIT DRUCKKOMPENSATION

La valvola mantiene costante i flusso in 3 indipendentemente dalle variazioni di pressione.
E' possibile regolare il flusso in 3 agendo sulla vite di regolazione
La perdita di carico del compensatore e' 9 bar.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve maintains a constant flow at 3, regardless of pressure variations. Flow adjustment at 3 is an hexagonal allen head screw type. Compensator unloading value is equal to 9 bar.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil hält den Öldurchfluß in 3 konstant, unabhängig von den Druckänderungen.
Es ist möglich, den Öldurchfluß in 3 mittels der Justierschraube einzustellen.
Der Ladungsverlust beträgt 9 bar.
Der Weg 2 sollte einen Gegendruck von 5 Bar haben, um eine bessere Regulierung zu ermöglichen.



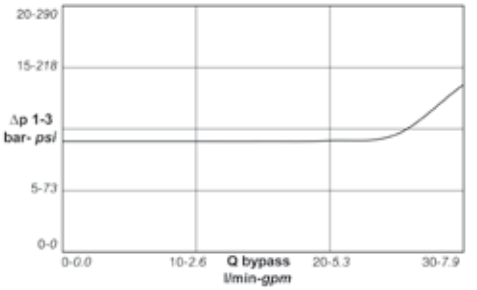


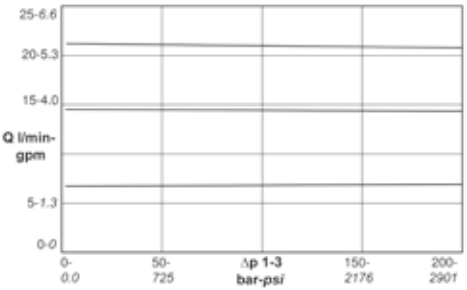
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**30 (7.9)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10301**

PRESTAZIONI
PERFORMANCE
LEISTUNG

Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

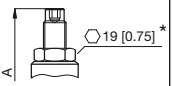
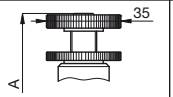
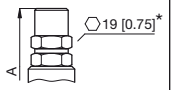




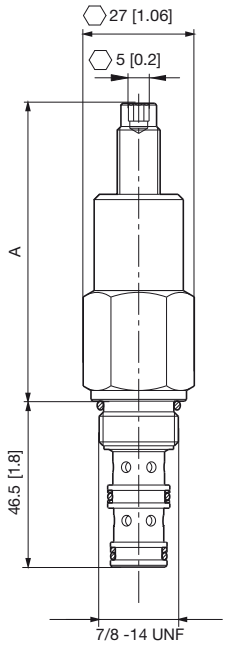
ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10300**

TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 83.5 [3.3]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 83.5 [3.3]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 89.5 [3.5]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 88 [3.4]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel



COPPIA
TORQUE
ANZUGSMOMENT
35-38 Nm / 26-28 lb•ft

PESO
WEIGHT
GEWICHT
0.27 kg / 0.60 lb

ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

FSC 10321 _ _ _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

01	0.4-0.6	**12**	13.5-18
03	2.0-2.9	**20**	22-29
06	5.1-7.3	**30**	
08	9.3-13.3		

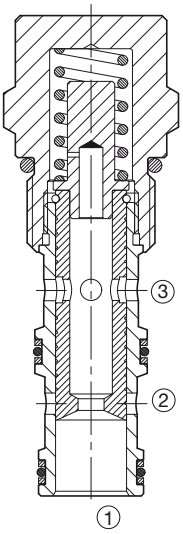
FSC 12320

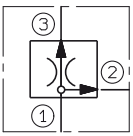
VALVOLA REGOLATRICE DI FLUSSO COMPENSATA A TARATURA FISSA
FLOW REGULATOR PRESSURE COMPENSATED VALVE
3-WEGE-STROMREGELVENTIL, VORZUGSSTROM FEST EINGESTELLT

Questa valvola mantiene costante il flusso in 3 indipendentemente dalle variazioni di pressione.
I campi di portata dipendono dalla dimensione del foro di controllo.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve mantains a constant flow from port 1 to 3, regardless of pressure variations.
Flow ranges are dependent upon the diameter of the control orifice.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil hält den Öldurchfluß konstant in 3, unabhänging von den Druckänderungen.
Die Durchflussmenge hängt von dem Bohrungsdruchmesser der Messblende im Kolben ab.
Am Anschluss 2 sollte ein Gegendruck von >5 bar anstehen, um eine bessere Regelung zu erzielen.



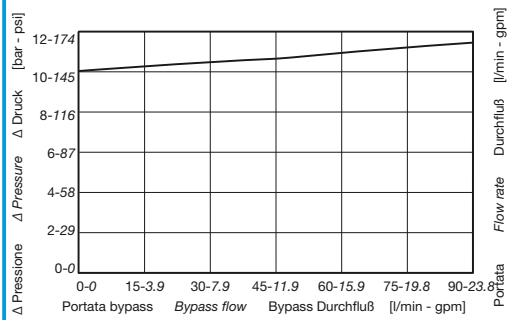


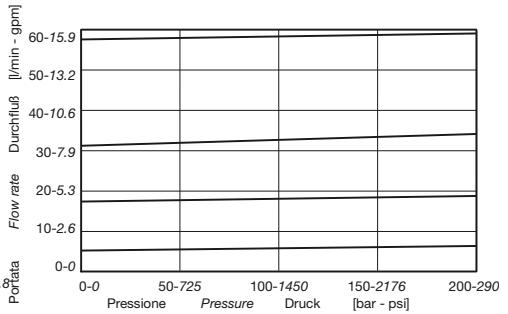
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**60 (15.9)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS12301**

PRESTAZIONI
PERFORMANCE
LEISTUNG

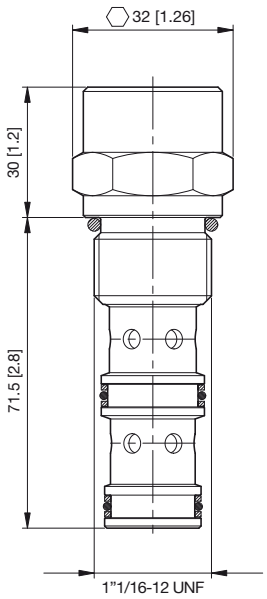
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt





ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH12300**



COPPIA
TORQUE
ANZUGSMOMENT
40-45 Nm / 30-33 lb•ft

PESO
WEIGHT
GEWICHT
0.3 kg / 0.66 lb

ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FSC 12320 _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

10	5.5	**50**	59
20	18		
30	34		

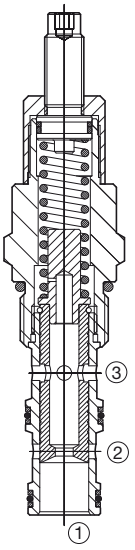
FSC 12321

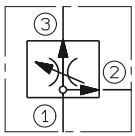
VALVOLA REGOLATRICE DI FLUSSO PRIORITARIA
PRIORITY FLOW REGOLATOR PRESSURE COMPENSATED VALVE
3-WEGE-PRIORITÄTS-STROMREGELVENTIL MIT DRUCKKOMPENSATION

Questa valvola mantiene costante il flusso in 3 indipendentemente dalle variazioni di pressione.
È possibile regolare il flusso in 3 agendo sulla vite di regolazione.
La perdita di carico è 9 bar.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve mantains a constant flow from port 1 to 3, regardless of pressure variations.
Flow adjustment at 3 is an hexagonal allen head screw type.
Unloading value is equal to 9 bar.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil hält den Öldurchfluß konstant in 3, unabhänging von den Druckänderungen.
Es ist möglich, den Öldurchfluß in 3 mittels der Justierschraube einzustellen.
Der beträgt 9 bar. Der Weg 2 sollte einen Gegendruck von 5 Bar haben, um eine bessere Regulierung zu ermöglichen.



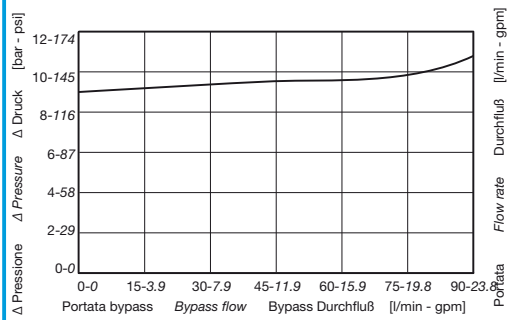


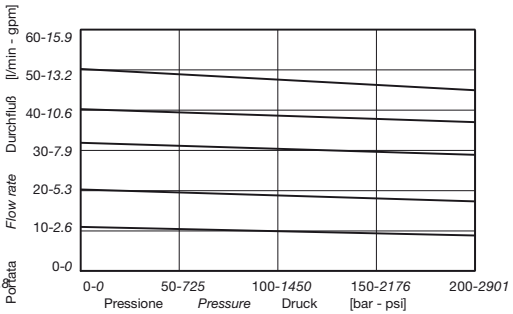
DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata massima *Max flow* Max Durchfluß	**60 (15.9)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS12301**

PRESTAZIONI
PERFORMANCE
LEISTUNG

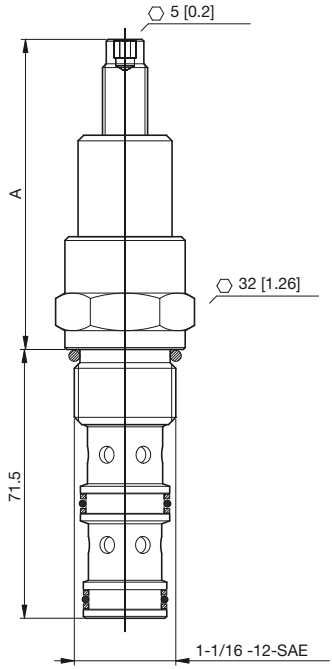
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt



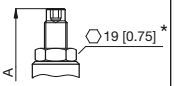
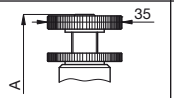
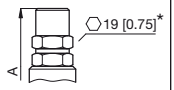


ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH12300**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 82.5 [3.2]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 82.5 [3.2]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 88.5 [3.5]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 87 [3.4]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
40-45 Nm / 30-33 lb•ft

PESO
WEIGHT
GEWICHT
0.4 kg / 0.9 lb

ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

FSC 12321 _ _ _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R	Grano *Grain* Sechskant	**C**	Cappuccio *Cap* Kappe
V	Volantino *Handwheel* Handradeinstellung	**P**	Inviolabile *Non adjustable* Unveränderlich

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

10	4.5÷6.5	**40**	36÷59
20	12÷20		
30	24÷37		

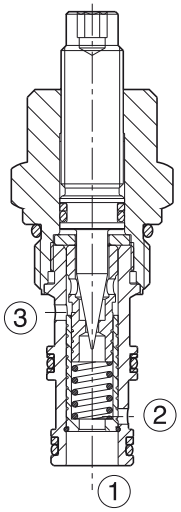
FCC 10320

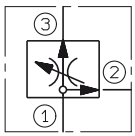
VALVOLA REGOLATRICE DI FLUSSO COMPENSATA
FLOW REGOLATOR PRESSURE COMPENSATED VALVE
3-WEGE-STROM-REGELVENTILE MIT DRUCKKOMPENSATION

La valvola mantiene costante il flusso in 3 indipendentemente dalle variazioni di pressione.
L'inversione del flusso è libera e bypassa il foro di controllo.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve maintains a constant flow at 3, regardless of pressure variations. Flow reverse passage is free and bypasses the control orifice.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil ermöglicht einen konstanten Öldurchfluß der 3 Wege, unabhängig von den Druckänderungen.
Die Umkehrung der Durchflussrichtung erfolgt nicht kompensiert über die Kontrollbohrung.
Der Weg 2 sollte einen Gegendruck von 5 Bar haben, um eine bessere Regulierung zu ermöglichen.

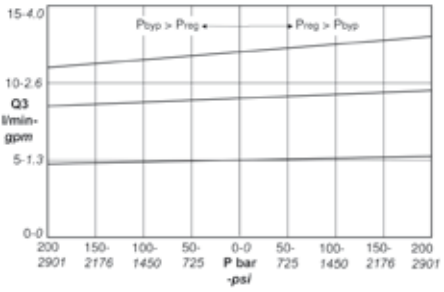




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625) bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**0 ÷ 25 (5.3) l/min (gpm)**
Trafile *Leakage* Leckage	**50 cc/min (50° C; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10301**

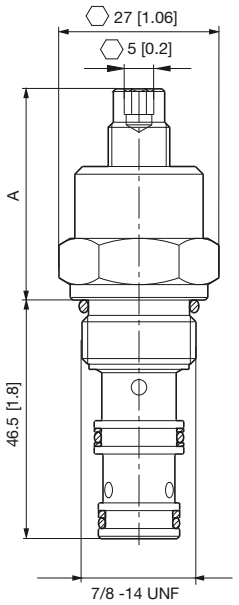
PRESTAZIONI
PERFORMANCE
LEISTUNG



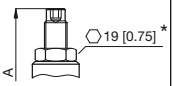
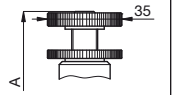
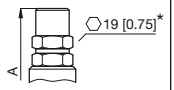
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10300**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 51.5 [2]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 51.5 [2]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 57.5 [2.3]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 56 [2.2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
35-38 Nm / 26-28 lb•ft

PESO
WEIGHT
GEWICHT
0.18 kg / 0.40 lb

ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

FCC 10320 _ _ _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung
R
V
C
P

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

15	0 ÷15
25	0 ÷ 25

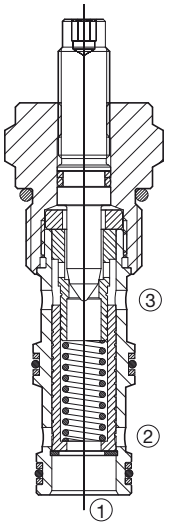
FCC 12320

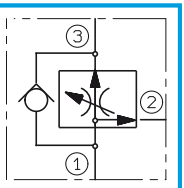
VALVOLA REGOLATRICE DI FLUSSO COMPENSATA
FLOW REGULATOR PRESSURE COMPENSATED VALVE
3-WEGE-STROM-REGELVENTILE MIT DRUCKKOMPESATION

Questa valvola mantiene costante il flusso in 3 indipendentemente dalle variazioni di pressione.
L'inversione del flusso è libera e bypassa il foro di controllo.
Per una migliore regolazione, la via 2 deve avere una contropressione minima di 5 bar.

The valve mantains a constant flow from port 1 to 3, regardless of pressure variations.
Flow reverse passage is free and bypasses the control orifice.
To optimizing regulation, the way 2 must have minimum 5 bar of back pressure.

Dieses Ventil hält den Öldurchfluß konstant in 3, unabhänging von den Druckänderungen.
Die Umkehrung der Durchflussrichtung erfolgt nicht kompensiert über die Kontrolllbohrung.
Der Weg 2 sollte einen Gegendruck von 5 Bar haben, um eine bessere Regulierung zu ermöglichen.



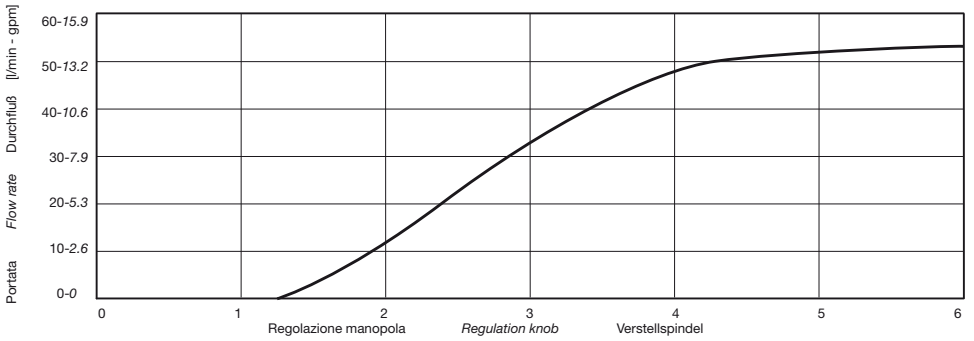


DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625) bar (psi)**
Campo di portata regolata *Flow setting* Geregelter Durchfluß	**0 ÷ 50 (13.2) l/min (gpm)**
Trafile *Leakage* Leckage	**60 cc/min (50° C; 250 bar)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals (max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS12301**

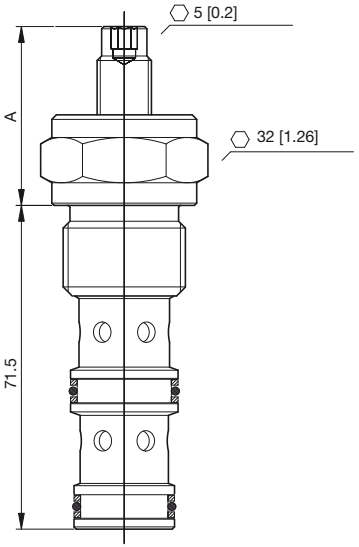
PRESTAZIONI
PERFORMANCE
LEISTUNG

Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

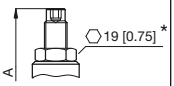
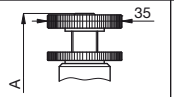
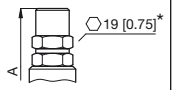


ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH12300**



TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

Regolazione a vite con chiave esagonale *With hexagonal allen head* Schraubeneinstellung mit Sechskantschlüssel A max = 46 [1.81]		**R**
Regolazione con volantino *With handwheel* Handradeinstellung A max = 46 [1.81]		**V**
Regolazione fissa con cappuccio *Set-adjustment, with cover cap* Feste Einstellung mit Kappe A max = 51.5 [2]		**C**
Regolazione inviolabile *Factory pre-set, non adjustable* Unveränderliche Einstellung A max = 50 [2]		**P**

* Chiave esagonale
* *Hex head*
* Sechskantschlüssel

COPPIA
TORQUE
ANZUGSMOMENT
40-45 Nm / 30-33 lb•ft

PESO
WEIGHT
GEWICHT
0.3 kg / 0.66 lb

ISTRUZIONI PER L'ORDINAZIONE *ORDERING INSTRUCTIONS* BESTELLANLEITUNG

FCC 12320 _ _ _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

R	Grano *Grain* Sechskant	**C**	Cappuccio *Cap* Kappe
V	Volantino *Handwheel* Handradeinstellung	**P**	Inviolabile *Non adjustable* Unveränderlich

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Campo di regolazione (±10%) (l/min.)
Adjustment range (±10%) (l/min.)
Regelbereiche (±10%) (l/min.)

50	0÷50

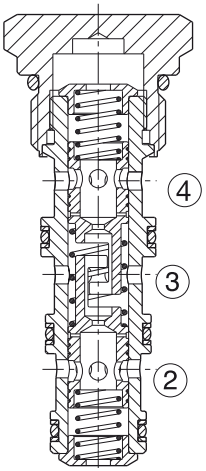
FSC 10430

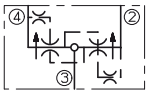
DIVISORE-RIUNIFICATORE DI FLUSSO
FLOW DIVIDER-COMBINER
STROMTEILER UND VEREINIGER

La valvola funziona come divisore di flusso ripartendo in 1 e 3 la portata in ingresso da 2.
Il rapporto standard è 50:50; possono essere eseguiti anche altri valori.
Invertendo i flussi la valvola funziona come riunificatore di flusso.

As a divider the valve diverts input flow (from 2) to 1 and 3 (50:50).
Other values can also be setted.
With reverse flow the valve acts as a combiner.

Dieses Ventil funktioniert als Stromteiler; es teilt zwischen 1 und 3 den Eingangsvolumenstrom von 2 (Verhältnis 50:50).
Andere Verhältnisse sind möglich.
Bei Umkehrung der Durchflussrichtung funktioniert das Ventil als Stromvereiniger.

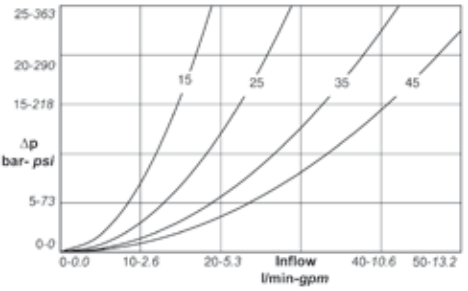




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**45 (11.9)** **l/min (gpm)**
Tolleranza sulla divisione *Divider flow tolerance* Teilungsabweichung	**+ - 10%**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS10401**

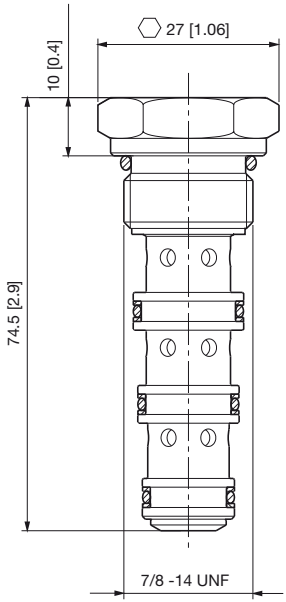
PRESTAZIONI
PERFORMANCE
LEISTUNG



Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH10400**



COPPIA
TORQUE
ANZUGSMOMENT
35-38 Nm / 26-28 lb•ft

PESO
WEIGHT
GEWICHT
0.13 kg / 0.28 lb

ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FSC 10430 _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Portata nominale (l/min)
Nominal flow (l/min)
Volumenstrom (l/min)

10	15
20	25
30	35
40	45

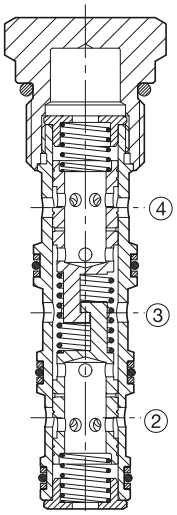
FSC 12430

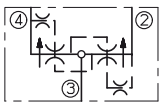
DIVISORE-RIUNIFICATORE DI FLUSSO
FLOW DIVIDER-COMBINER
STROMTEILER UND VEREINIGER

La valvola funziona come divisore di flusso ripartendo in 2 e 4 la portata in ingresso da 3.
I rapporto standard è 50:50; possono essere eseguiti anche altri valori.
Invertendo i flussi la valvola funziona come riunificatore di flusso.

As a divider the valve diverts imput flow (from 3) to 2 and 4 (50:50).
Other values can also be setted.
With reverse flow the valve acts as a combiner.

Dieses Ventil funktioniert als Stromteiler; es teilt zwischen 2 und 4 den Eingangsvolumenstrom von 3 (Verhältnis 50%).
Andere Verhältnisse sind möglich.
Bei Umkehrung der Durchflussrichtung funktioniert das Ventil als Stromvereiniger.

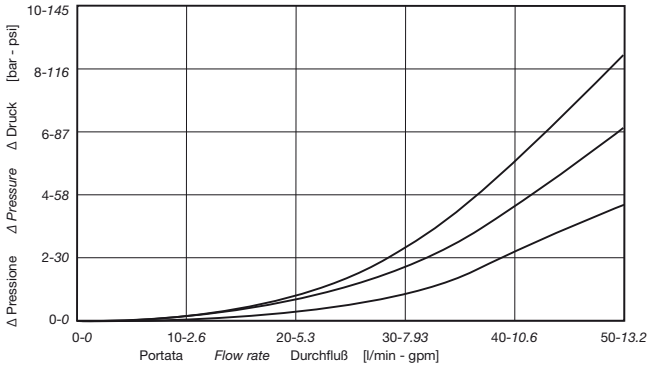




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**90 (23.8)** **l/min (gpm)**
Tolleranza sulla divisione *Divider flow tolerance* Teilungsabweichung	**+ - 10%**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVS12401**

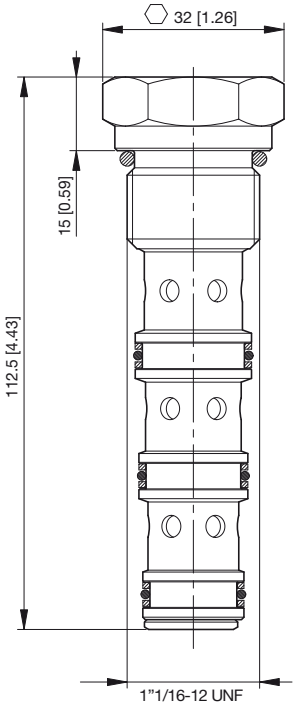
PRESTAZIONI
PERFORMANCE
LEISTUNG



Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

ACCESSORI
ACCESSORIES
ZUBEHÖR

Blocco porta valvola *Valve housing* Gehäuse	**SVH12400**



COPPIA
TORQUE
ANZUGSMOMENT
150 Nm / 110.5 lb•ft

PESO
WEIGHT
GEWICHT
0.25 kg / 0.55 lb

ISTRUZIONI PER L’ORDINAZIONE ***ORDERING INSTRUCTIONS*** **BESTELLANLEITUNG**

FSC 12430 _ _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di guarnizione
Seal type
Dichtungstyp

N	NBR
H	HNBR

Portata nominale (l/min)
Nominal flow (l/min)
Volumenstrom (l/min)

60	60
75	75
90	90

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VALVOLE CONTROLLO DI FLUSSO

FLOW CONTROL VALVES

STROMREGELVENTILE

VALVOLE A CARTUCCIA - CAVITÀ SPECIALI

CARTRIDGE VALVES - SPECIAL CAVITIES

CARTRIDGEVENTILE - SPEZIELLE AUFNAHMEBOHRUNGEN

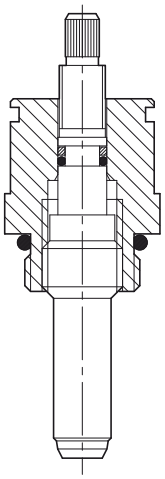
FCMB 2220

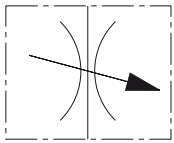
VALVOLA REGOLATRICE DI FLUSSO (PER TERV)
FLOW REGULATOR (FOR TERV)
KARTUSCHE FÜR STROMREGELVENTIL IN EINGANSPLATTE (TERV)

La valvola permette di regolare l'apertura ed il passaggio dell'olio tramite la vite di registro.

The valve allows the regulation of flow passage with a screw.

Bei diesem Ventil wird der Öldurchfluss mittels der Justierschraube verstellt.

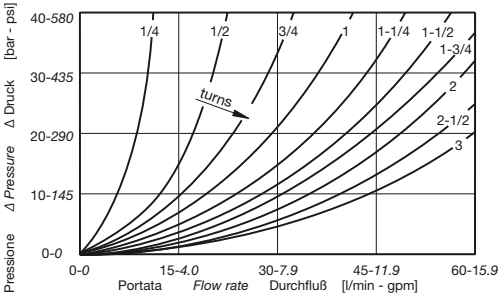




DATI TECNICI
TECHNICAL DATA
TECHNISCHE ANGABEN

Pressione Max di funzionamento *Max operating pressure* Maximaler Betriebsdruck	**250 (3625)** **bar (psi)**
Portata nominale *Nominal flow* Volumenstrom	**0 ÷ 50 (0 ÷ 13.2)** **l/min (gpm)**
Temperatura di utilizzo *Operating temperature* Betriebstemperatur	**-20°C + 85°C NBR seals** **(max peak +100°C)** **-20°C + 130°C HNBR seals**
Cavità *Cavity* Aufnahmebohrung	**CVSB2201**
Coppia *Torque* Anzugsmoment	**30-38 Nm** **22.1-28 lb•ft**
Peso *Weight* Gewicht	**0.16 kg / 0.35 lb**

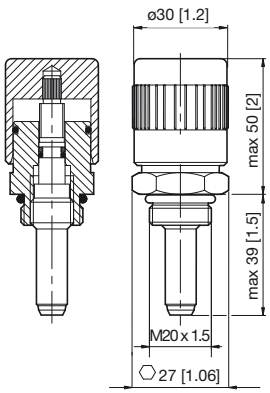
PRESTAZIONI
PERFORMANCE
LEISTUNG

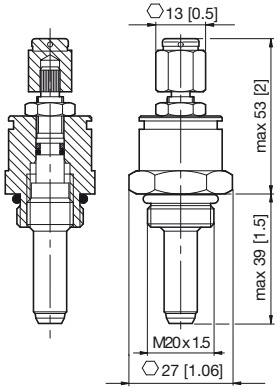


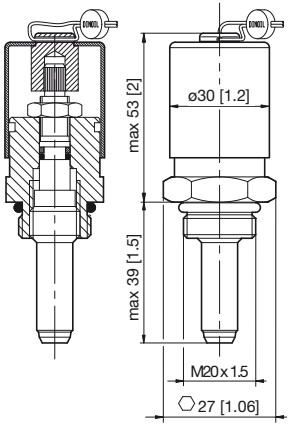
Parametri di prova
Testing parameters
Prüfparameter
50°C
21 cSt

TIPO DI REGOLAZIONE
REGULATION TYPE
VERSTELLUNG

M	D	P
Manopola *Knob* Handrad	Dado *Nut* Spindel	Piombata *Leaded* Plombiert







ISTRUZIONI PER L'ORDINAZIONE — *ORDERING INSTRUCTIONS* — BESTELLANLEITUNG

FCMB 2220 | _ | _ _ _

Codice valvola
Valve code
Ventil-Bestellnummer

Tipo di regolazione
Regulation type
Verstellung

M	Manopola *Knob* Handrad	**P**	Piombata *Leaded* Plombiert
D	Dado *Nut* Spindel		

Portata
Flow
Durchfluß

050	0-50 l/min.	0-13.2 gpm