

PRIORITÄTSVENTIL FÜR HKUS .../5 - TYP: PR

PRIORITY VALVE FOR HKUS .../5 - TYPE: PR

ANWENDUNG

Die Prioritätsventile PR verteilen und verfolgen den Ölstrom von der Förderpumpe des Hydrauliksystems zu den Hydraulikkomponenten, die das Fahrzeug steuern und antreiben.

Die Prioritätsventile werden nur bei HKUS.../5 Lenkeinheiten verwendet. Im angeschlossenen Zustand stellen die Lenkeinheit und das Prioritätsventil eine ausgeklügelte Einheit dar, welche den Förderstrom in beiden Hauptleitungen (Arbeits- und Steuerleitung) des Systems jederzeit kontrolliert. Als statisches Signal kann das LS-Signal nur in Systemen mit stabilen Lenkkreisläufen Die Verbindung zwischen dem Prioritätsventil in Rohrleitungsbauweise und der Lenkeinheit muss so kurz wie möglich sein, sollte aber 1,5 m (bei Stahlrohr mit 4 mm Innendurchmesser) nicht überschreiten. Bei Verwendung eines Gummischlauches muss diese Länge noch kürzer und der Innendurchmesser darf nicht größer sein.

Prioritätsventile mit dynamischem Signal arbeiten in Systemen mit dynamischen hydrostatischen Lenkeinheiten Typ HKUS .../5D(T).

APPLICATION

The priority valves PR distribute and trace the hydraulic flow from the supply pump of the hydraulic system to the hydraulic components which control and run the vehicle.

The priority valves are used only with HKUS.../5 steering units. When connected, the steering unit and the priority valve represent so sophisticated hydraulic tracing system that controls the flow in both main pipelines of the hydraulic system (the working and the control one) at any time of its operation.

As a static signal, the LS-signal must be used in systems with circuit stability. The connection between pipe mounted priority valve and the steering unit have to be as short as possible, but should not exceed 1.5 m [4.92 ft] [for iron pipe with 4 mm [.157 in] internal diameter]. When a rubber hose is used this length has to be even shorter and the internal diameter not bigger.

Priority valves with dynamic signal works in a system with dynamic hydrostatic steering units type HKUS .../5D(T).

SCHALTZEICHEN

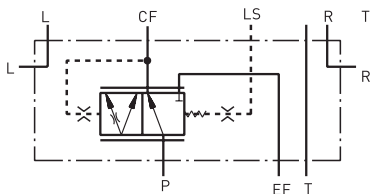
GRAPHIC SYMBOL

Modulareinbau

Modulary mounting

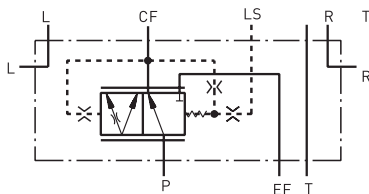
PRD 40, 80/ ...

Statisches Signal
Static Signal



PRDD 40, 80/ ...

Dynamisches Signal
Dynamic Signal



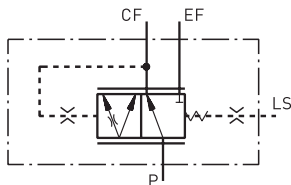
Rohrleitungseinbau

Pipe mounting

PRT 40, 80, 120/ ...

PRTA 40, 80/ ...

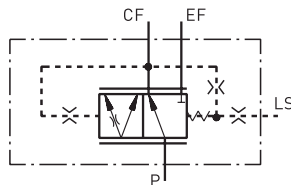
Statisches Signal
Static Signal



PRTD 40, 80, 120/ ...

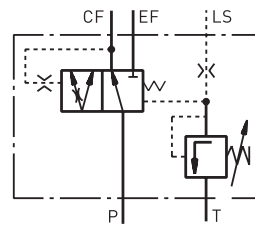
PRTAD 40, 80/ ...

Dynamisches Signal
Dynamic Signal



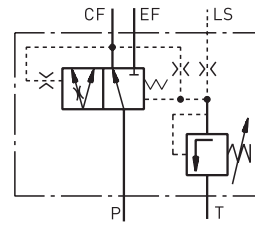
PRT 160/ ...

Statisches Signal
Static Signal



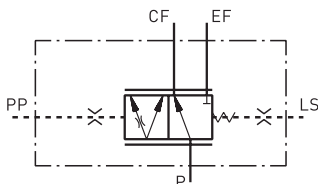
PRTD 160/ ...

Dynamisches Signal
Dynamic Signal



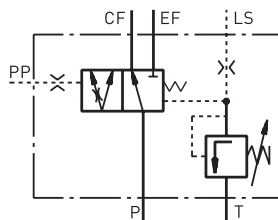
PRTE 120/ ...

Statisches Signal mit externem Anschluss
Static Signal with External Port



PRTE 160/ ...

Statisches Signal mit externem Anschluss
Static Signal with External Port



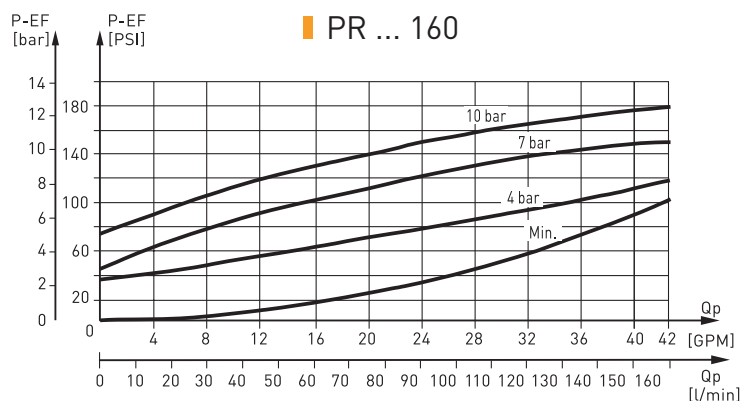
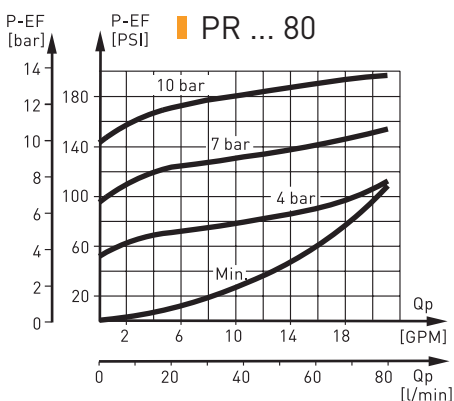
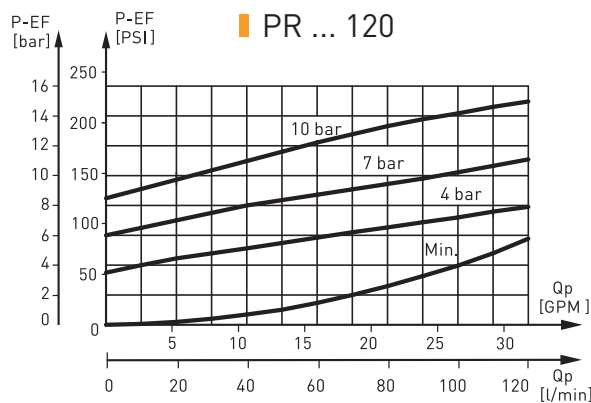
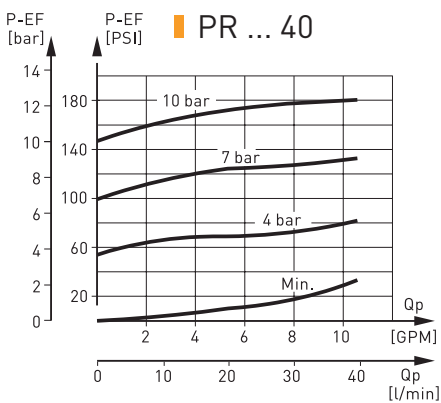
TECHNISCHE DATEN TECHNICAL DATA

| Typ Type | | PRD(D), PRT(D) | | | PRTA(D) | | | PRT(D)(E) | | | PRT(D)(E) | | |
|--|-----------------|----------------------------|--------------|---------------|----------------|--------------|---------------|----------------|--------------|---------------|----------------|--------------|---------------|
| Nennförderstrom Rated flow | l/min lpm [GPM] | 40 / 80 [10.6] / [21.1] | | | | | | 120 [31.7] | | | 160 [42.3] | | |
| Druck der Steuerfeder Control spring pressure | bar [PSI] | 4 [58.0] | 7 [101.5] | 10 [145.0] | 4 [58.0] | 7 [101.5] | 10 [145.0] | 4 [58.0] | 7 [101.5] | 10 [145.0] | 4 [58.0] | 7 [101.5] | 10 [145.0] |
| Max. Druck am Anschluss: Max. Pressure in oil port bar [PSI] | P, EF | 250 [3625] | | | | | | | | | 350 [5076] | | |
| | CF | 210 [3045] | | | | | | | | | | | |
| | R, L | 280 [4061] | | | | | | | | | | | |
| | LS | 210 [3045] | | | | | | | | | | | |
| | PP | | | | | | | 210 [3045] | | | | | |
| T | | 20 [290] | | | | | | | | | 15 [217] | | |
| Standard Druckeinstellung DBV* PRV Standard pressure setting* | bar [PSI] | | | | | | | | | | 175 [2540] | | |
| Gewicht Weight | kg [lb] | 2,25 [4.96] | | | 1,30 [2.87] | | | 2,10 [4.60] | | | 4,40 [9.70] | | |

* Der Druck kann gemäß Kundenwunsch zwischen 80 bar [1160 PSI] und 210 bar [3045 PSI].
* Adjusted valve pressure from 80 bar [1160 PSI] to 210 bar [3045 PSI] upon customer request.

P: Pumpe Pump
EF: Arbeitshydraulik Excess flow
CF: Lenkungseinheit (Prioritätsstrom) Control flow (priority oil flow)
L: Links Left
R: Rechts Right
LS: Last sensing Load sensing
T: Tank Tank
PP: Vorsteuerleitung Pilot pressure line

FLUSSDIAGRAMM FLOW DIAGRAM



BESTELLCODE ORDER CODE

| | | | | | | | | | |
|----|---|---|---|---|---|---|---|---|---|
| PR | 1 | 2 | 3 | / | 4 | - | 5 | 6 | 7 |
|----|---|---|---|---|---|---|---|---|---|

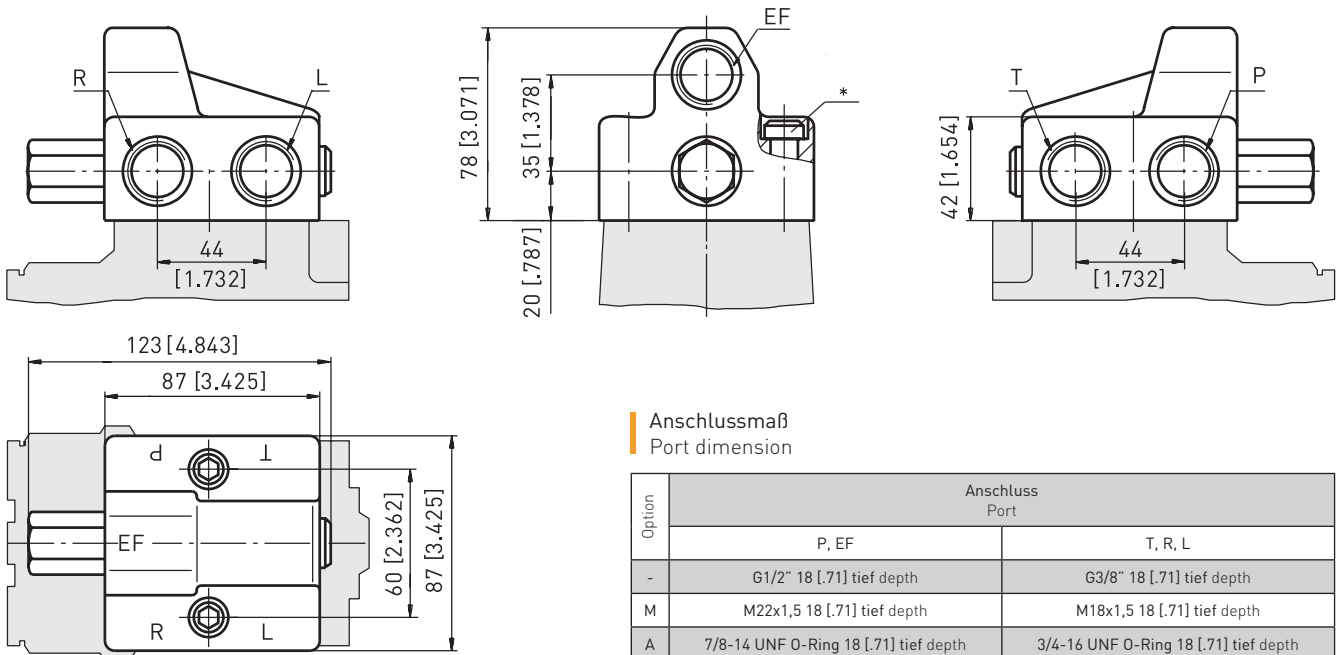
| | |
|--------------|---|
| 1. | Montage Mounting |
| D | Modulareinbau Modularity mounting |
| T | Rohrleitungseinbau (Design 1) Pipe mounting (Design 1) |
| TA* | Rohrleitungseinbau (Design 2) Pipe mounting (Design 2) |
| 2. | Signal Typ Signal type |
| frei omit | Statisches Signal Static signal |
| D | Dynamisches Signal Dynamic signal |
| E ** | Dynamisches Signal and external pilot Dynamic signal und Anschluss für externe Steuerleitung |
| 3. | Druck der Steuerfeder Control spring pressure |
| 4 / 7 / 10 | |

| | |
|---------------------------|--|
| 4. | Nennförderstrom Rated flow |
| 40 / 80 / 120 ** / 160 ** | |
| 5. | Anschlüsse Ports |
| frei omit | BSPP (ISO295) |
| M | Metrisch (ISO262) Metric (ISO 262) |
| A | SAE (ANSI B 1.1 -1982) |
| 6. | Lackierung Paint |
| P | Lackiert (Farbe auf Anfrage) Paint (colour on request) |
| PC | Korrosionsschutzfarbe (Farbe auf Anfrage) Corrosion protected paint (colour on request) |
| 7. | Design Serie Design series |
| frei omit | Betriebsspezifisch Factory specified |

- * Nur für PRT 40/ ... und PRT 80/ ... erhältlich
- ** Nur für PRT 120/ ... und PRT 160/ ... erhältlich
- *** Nur für PRT 120 / erhältlich
- * Only available for PRT 40/ ... and PRT 80/ ...
- ** Only available for PRT 120/ ... and PRT 160/ ...
- *** Only available for PRT 120/ ...

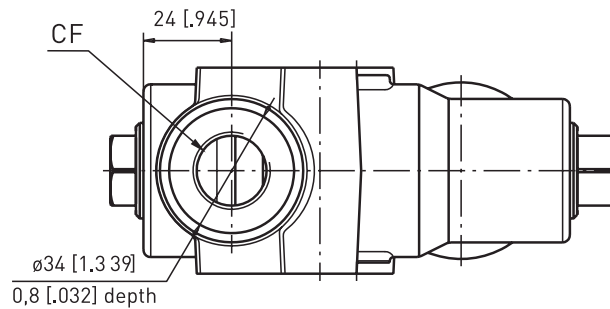
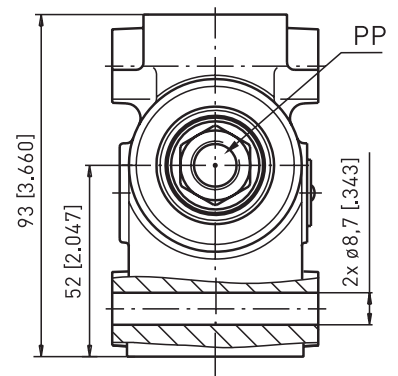
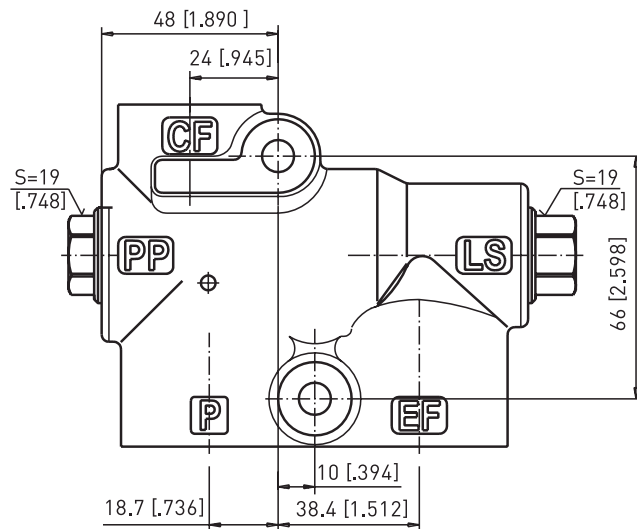
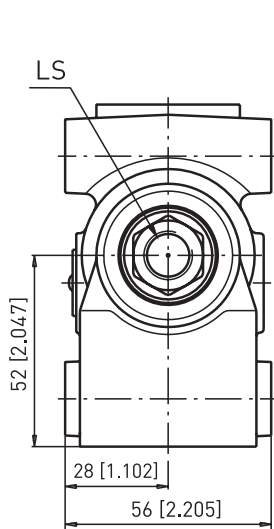
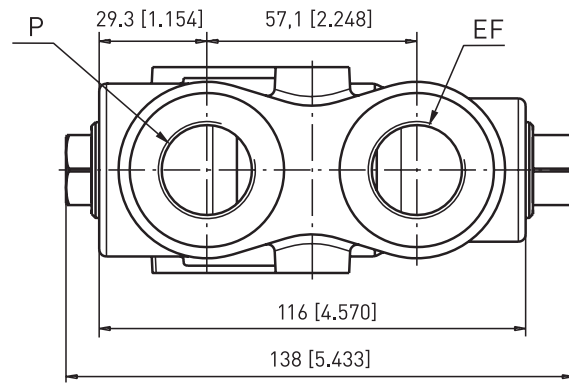
EINBAUMAß DIMENSION

PRD(D) 40, 80/ ...



- Montage
Mounting** Montage mit zwei Schrauben M10x1x45 - 10.9 DIN 912 oder 3/8-24 1.75" lang ANSI B18.3-76
Anzugsmoment: 45±5 Nm [360±440 lb-in]
Mounting with two screws M10x1x45 - 10.9 DIN 912 or 3/8-24 1.75" long ANSI B18.3-76.
Tightening torque: 45±5 Nm [360±440 lb-in]

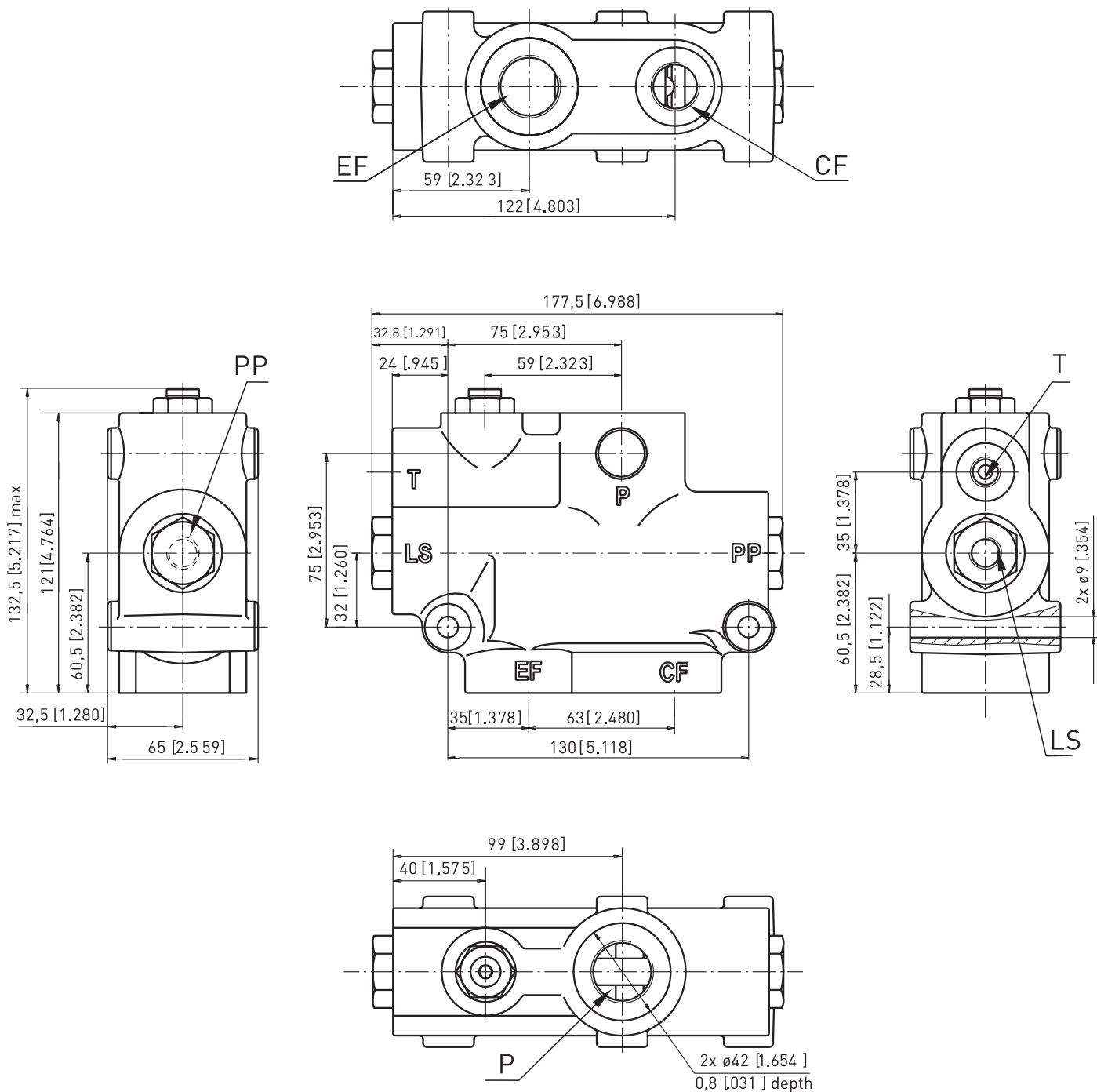
■ PRT ... 120/ ...



■ Anschlussmaß
Port dimension

| Option | Anschluss Port | | |
|--------|---|---|--|
| | P, EF | CF | LS, PP |
| - | G3/4" 20,5 [0.81] tief depth | G1/2" 18,5 [0.73] tief depth | M12x1,5 12,5 [0.49] tief depth |
| M | M27x2 20,5 [0.81] tief depth | M22x1,5 18,5 [0.73] tief depth | G1/4" 12,5 [0.49] tief depth |
| A | 1 1/16-12 UN O-Ring 20,5 [0.81] tief depth | 3/4-16 UNF O-Ring 18,5 [0.73] tief depth | 7/16-20 UNF O-Ring 12,5 [0.49] tief depth |

■ PRT ... 160/ ...



■ Anschlussmaß
Port dimension

| Option | Anschluss Port | | |
|--------|---|---|--|
| | P, EF | CF | LS, PP, T |
| - | G3/4" 20,5 [0.81] tief depth | G1/2" 18,5 [0.73] tief depth | G1/4" 12,5 [0.49] tief depth |
| M | M27x2 20,5 [0.81] tief depth | M18x1,5 18,5 [0.73] tief depth | M12x1,5 12,5 [0.49] tief depth |
| A | 1 1/16-12 UN O-Ring 20,5 [0.81] tief depth | 3/4-16 UNF O-Ring 18,5 [0.73] tief depth | 7/16-20 UNF O-Ring 12,5 [0.49] tief depth |